City Council Study Session

Monday, November 4, 2024
6:00 p.m.

Chandler City Council Chambers
88 E. Chicago St., Chandler, AZ

CHANDLER
arizona
Community of Innovation

Our Vision

We are a world class City that provides an exceptional quality of life.

Our Brand

A safe, diverse, equitable and inclusive community that connects people, chooses innovation and inspires excellence.

Innovative Focus

Innovation is the lifeblood of our community. The introduction of new ideas and methods is rooted in Chandler's culture and heritage. This thread of innovation embodies how we connect, plan and serve our city to be a contemporary, financially responsible and safe place to live and work.

Pursuant to Resolution No. 4464 of the City of Chandler and to A.R.S. 38-431.02, notice is hereby given to the members of the Chandler City Council and to the general public that the Chandler City Council will hold a STUDY SESSION open to the public on Monday, November 4, 2024, immediately following the Regular meeting which begins at 6:00 p.m., in the Chandler City Council Chambers, 88 E. Chicago Street, Chandler, Arizona. One or more members of the Chandler City Council may attend this meeting by telephone.

Persons with disabilities may request a reasonable modification or communication aids and services by contacting the City Clerk’s office at 480-782-2181 (711 via AZRS). Please make requests in advance as it affords the City time to accommodate the request.

Agendas are available in the Office of the City Clerk, 175 S. Arizona Avenue.

Study Session Agenda

Call to Order

Roll Call

Consent Agenda

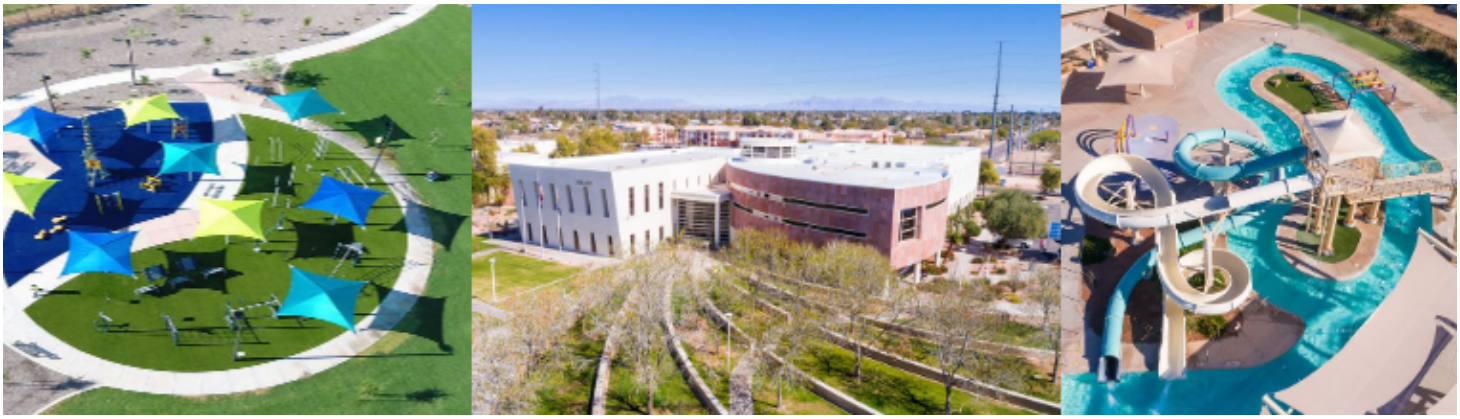
Items listed on the Consent Agenda may be enacted by one motion and one vote. If a discussion is required by members of the governing body, the item will be removed from the Consent Agenda for discussion and determination will be made if the item will be considered separately.

City Manager

1. **Agreement No. CM4-920-4664, Multi-Language Translation Technology, Services, and Support**

   Move City Council approve Agreement No. CM4-920-4664, with TranslateLive, LLC, for multi-language translation technology, services, and support, in an amount not to exceed $85,000, for the period of one year, beginning November 1, 2024, through October 31, 2025, with the option of up to four one-year extensions.

   Council Focus Area(s):



Community Services

2. **Job Order Project Agreement No. PR2501.401 with DNG Construction, LLC, Pursuant to Job Order Master Agreement No. JOC2403.401, for the Apache Park Restroom Replacement**

   Move City Council award Job Order Project Agreement No. PR2501.401 to DNG Construction, LLC, pursuant to Job Order Master Agreement No. JOC2403.401, for the Apache Park Restroom Replacement, in an amount not to exceed $445,248.

   Council Focus Area(s):

3. **Purchase of Tree Care and Maintenance Services**

   Move City Council approve the purchase of tree care and maintenance services from West Coast Arborists, Inc., utilizing Maricopa County Contract No. 220273-S and City of Tempe Contract No. T24-087-01, in an amount not to exceed $100,000, for a one-year period, November 8, 2024, through November 7, 2025.

   Council Focus Area(s):

4. **Purchase of Chippers**

   Move City Council approve the purchase of three chippers, from Global Machinery, LTD, utilizing the Sourcewell Contract No.050119-BAN, in the amount of $177,089.40.

   Council Focus Area(s):

Cultural Development

5. **Purchase of Electronic Messaging Monument Sign and Display, from Airpark Signs & Graphics, Inc., for the Center for the Arts**

   Move City Council approve the purchase of an electronic messaging monument sign from Airpark Signs & Graphics, Inc., utilizing the City of Peoria Contract No. ACON23619F, in an amount not to exceed $178,420.92.

   Council Focus Area(s):

Development Services

6. **Introduction and Tentative Adoption of Ordinance No. 5108, 2024 International Building Code and 2023 National Electrical Code**

   Move City Council introduce and tentatively adopt Ordinance No. 5108, adopting the 2024 editions of the International Building, Plumbing, Mechanical, Residential, Fuel Gas, Energy Conservation, Existing Building, and Swimming Pool and Spa Codes, and the 2023 edition of the National Electrical Code, with local amendments.

   Council Focus Area(s):

7. **Introduction and Tentative Adoption of Ordinance No. 5113, City Code Amendments, PLH24-0025 City Code Amendments-State Housing Mandates, amending Chapter 14 Animals, Chapter 35 Land Use and Zoning, and Chapter 48 Subdivisions, Pertaining to State Bills Signed Within the 2024 Legislative Session**

Move City Council introduce and tentatively adopt Ordinance No. 5113 approving PLH24-0025 City Code Amendments-State Housing Mandates,
text amendments pertaining to backyard chickens, accessory dwelling units, final plats, and establishing review timelines for residential zoning applications, as recommended by Planning and Zoning Commission.

Council Focus Area(s):

8. **Resolution No. 5847, Authorizing an Amended and Restated License Agreement Between Zayo Group, LLC, and the City of Chandler for Use of Public Property for the Establishment of Class 4 and Class 5 Telecommunications Systems**

Move City Council pass and adopt Resolution No. 5847, authorizing the Mayor to execute the amended and restated license agreement between Zayo Group, LLC, and the City of Chandler for the use of facilities in the city's rights-of-way and public places to establish Class 4 and Class 5 Telecommunications Systems.

Council Focus Area(s):

9. **Resolution No. 5848, adopting PLH24-0036 Commercial Building Adaptive Reuse Policy, State Mandate Pertaining to House Bill 2297 Adopted During the 2024 Legislative Session, Establishing Objective Standards to Allow Multi-family Residential Development or Adaptive Reuse of Existing Commercial, Office, or Mixed-use Buildings Without Requiring a Public Hearing**

Move City Council pass and adopt Resolution No. 5848 approving PLH24-0036 Commercial Building Adaptive Reuse Policy, city policy establishing objective standards to allow multi-family residential development or adaptive reuse of existing commercial, office, or mixed-use buildings on parcels at least one (1) acre in size but not larger than twenty (20) acres without requiring a public hearing, if the developer provides ten (10) percent of the total dwelling units for either moderate-income or low-income housing for at least twenty (20) years, as recommended by Planning and Zoning Commission.

Council Focus Area(s):

10. **Use Permit and Entertainment Use Permit, PLH24-0031 Sneakerheadz Restaurant and Lounge, Located at 3002 N Arizona Avenue, Suites 18 and 19, Generally Located at the Northwest Corner of Arizona Avenue and Elliot Road**

Move City Council approve Use Permit and Entertainment Use Permit PLH24-0031 Sneakerheadz Restaurant and Lounge, for a Series 6 Bar Liquor License and for an Entertainment Use Permit to allow outdoor patio speakers and televisions for sporting events and live indoor entertainment including disc jockeys, live musical performances, karaoke, and comedy, subject to the conditions recommended by the Planning and Zoning Commission.

Council Focus Area(s):

11. **Final Plat PLT24-0009 Viviendo, Located at the Southeast Corner of Ocotillo Road and McQueen Road**

Move City Council approve Final Plat PLT24-0009, Viviendo, as recommended by staff.

Council Focus Area(s):

Facilities and Fleet

12. **Purchase of Doors, Locking Systems, Door Hardware and Operable Walls from C & I Show Hardware & Security Systems, Inc.**

Move City Council approve the purchase of doors, locking systems, door hardware and operable walls from C & I Show Hardware & Security Systems, Inc., utilizing the City of Peoria Contract No. ACON23822, in an amount not to exceed $200,000.

Council Focus Area(s):

13. **Purchase of Painting and Related Services**

Move City Council approve the purchase of painting and related services, from Ghaster Painting & Coatings, Inc., utilizing the 1GPA Contract No. 23-11PV-04, in an amount not to exceed $500,000.

Council Focus Area(s):

Fire Department

14. **Introduction and Tentative Adoption of Ordinance No. 5111 Amending the Code of the City of Chandler, Chapter 28, Fire Prevention, by Repealing the International Fire Code, 2021 Edition, and by Adopting the 2024 International Fire Code and by Amending the Exception Provisions to the Code**

    Move that City Council introduce and tentatively adopt Ordinance No. 5111; Declaring the documents known as the “International Fire Code, 2024 Edition” and “2024 Amendments to Chapter 28, Fire Prevention,” as Public Records; Amending the Code of the City of Chandler, Chapter 28, Fire Prevention, by Repealing the International Fire Code, 2021 Edition, by Adopting the 2024 International Fire Code, and by Amending and Clarifying the Exception Provisions to the Code; Providing for Repeal of Conflicting Ordinances; Providing for Penalties; Providing for Severability; and Establishing an Effective Date.

    Council Focus Area(s):

15. **Agreement No. FD3-200-4486, Amendment No. 2, with 030530 Uniforms, LLC, dba Ace Uniforms of Phoenix, for Fire Uniforms**

    Move City Council approve Agreement No. FD3-200-4486, Amendment No. 2, with 030530 Uniforms, LLC, dba Ace Uniforms of Phoenix, for fire uniforms, in an amount not to exceed $125,000, for the period of six months, November 15, 2024, through May 14, 2025.

    Council Focus Area(s):

Human Resources

16. **Agreement No. HR2-948-4453, Amendment No. 1, with Blue Cross Blue Shield of Arizona, for Group Medical and Pharmacy Program Administration**

    Move City Council approve Agreement No. HR2-948-4453, Amendment No. 1, with Blue Cross Blue Shield of Arizona, for Group Medical and Pharmacy Program Administration, in an amount not to exceed $2,190,000 per year, for the period of two years, beginning January 1, 2025, through December 31, 2026.

    Council Focus Area(s):

17. **Agreement No. HR2-948-4496, Amendment No. 1, with ReliaStar Life Insurance Company, for Basic and Voluntary Life and Accidental Death and Dismemberment Insurance**

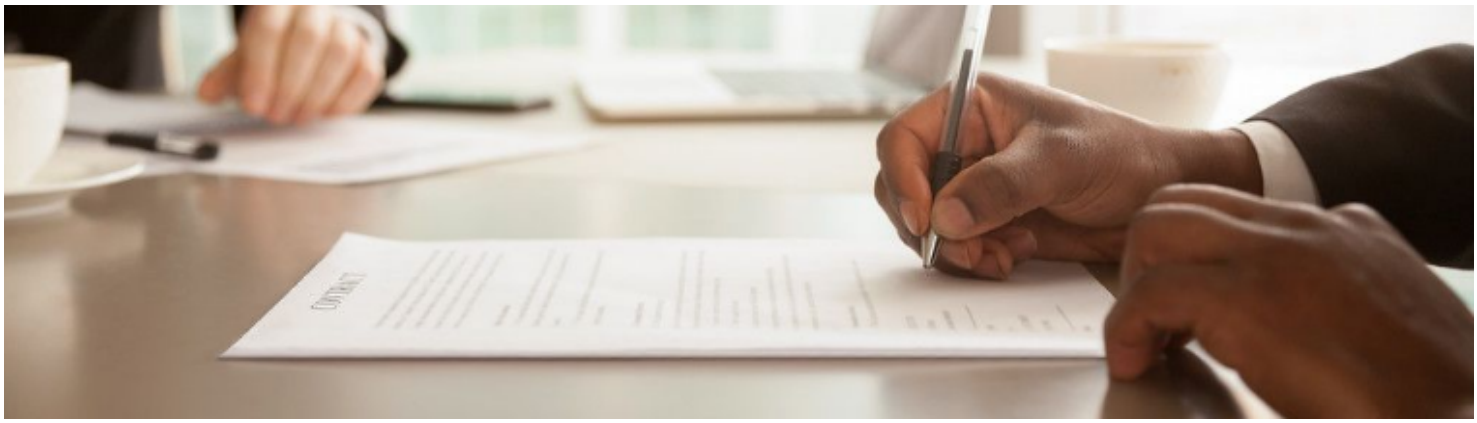
    Move City Council approve Agreement No. HR2-948-4496, Amendment No. 1, with ReliaStar Life Insurance Company, for basic and voluntary life and accidental death and dismemberment insurance, in an amount not to exceed $960,000, for the period of one year, beginning January 1, 2025, through December 31, 2025.

Information Technology

18. **Agreement No. IT9-208-4034, Amendment No. 5, Fleet Management System**

Move City Council approve Agreement No. IT9-208-4034, Amendment No. 5, with CCG Systems, Inc., dba FASTER Asset Solutions, for the fleet management system, in an amount not to exceed $163,479, for the period of one year, beginning September 30, 2024, through September 29, 2025.

Council Focus Area(s):



Management Services

19. **Agreement No. WH4-801-4646, Amendment No. 1, for Traffic Signs and Related Items**

Move City Council approve Agreement No. WH4-801-4646, Amendment No. 1, for traffic signs and related items, with Interwest Safety Supply, LLC, in an amount not to exceed $150,000, for the period of November 1, 2024, through October 31, 2025.

Council Focus Area(s):

20. **License Series 6, Bar Liquor License Application for Juanita Alicia Esparza, Agent, Sneaker Heads Sports Bar, LLC, DBA Snkrheadz Restaurant and Lounge**

Move for recommendation to the State Department of Liquor Licenses and Control for approval of the State Liquor Job No. 308204, a Series 6, Bar Liquor License, for Juanita Alicia Esparza, Agent, Sneaker Heads Sports Bar, LLC, DBA Snkrheadz Restaurant and Lounge, located at 3002 N. Arizona Avenue, Suite 18, and approval of the City of Chandler, Series 6, Bar Liquor License No. 308148.

Council Focus Area(s):

21. **License Series 12, Restaurant Liquor License Application for Theresa June Morse, Agent, The Original Fish Taco Arizona, LLC, DBA Rubio's Baja Grill #50**

Move for recommendation to the State Department of Liquor Licenses and Control for approval of the State Liquor Job No. 308171, a Series 12, Restaurant Liquor License, for Theresa June Morse, Agent, The Original Fish Taco Arizona, LLC, DBA Rubio's Baja Grill #50, located at 5055 W. Ray Road, Suite 3, and approval of the City of Chandler, Series 12, Restaurant Liquor License No. 308206.

Council Focus Area(s):

22. **License Series 12, Restaurant Liquor License Application for Theresa June Morse, Agent, The Original Fish Taco Arizona, LLC, DBA Rubio's Fresh Mexican Grill #197**

Move for recommendation to the State Department of Liquor Licenses and Control for approval of the State Liquor Job No. 308179, a Series 12, Restaurant Liquor License, for Theresa June Morse, Agent, The Original Fish Taco Arizona, LLC, DBA Rubio's Fresh Mexican Grill #197, located at 2970 E. Germann Road, Suite 6, and approval of the City of Chandler, Series 12, Restaurant Liquor License No. 308258.

Council Focus Area(s):

23. **License Series 12, Restaurant Liquor License Application for Jay Guohong Deng, Agent, Two Pot Brother, LLC, DBA Top One Hot Pot and Asian Cuisine**

Move for recommendation to the State Department of Liquor Licenses and Control for approval of the State Liquor Job No. 306756, a Series 12, Restaurant Liquor License, for Jay Guohong Deng, Agent, Two Pot Brother, LLC, DBA Top One Hot Pot and Asian Cuisine, located at 4990 S. Gilbert Road, Suite 8, and approval of the City of Chandler, Series 12, Restaurant Liquor License No. 307887.

Council Focus Area(s):

24. **License Series 12, Restaurant Liquor License Application for Andrea Dahlman Lewkowitz, Agent, Harkins Chandler Crossroads, LLC, DBA Harkins Theater at Chandler Crossroads**

Move for recommendation to the State Department of Liquor Licenses and Control for approval of the State Liquor Job No. 307410, a Series 12, Restaurant Liquor License, for Andrea Dahlman Lewkowitz, Agent, Harkins Chandler Crossroads, LLC, DBA Harkins Theater at Chandler Crossroads, located at 2980 E. Germann Road, and approval of the City of Chandler, Series 12, Restaurant Liquor License No. 113895.

Council Focus Area(s):

25. **License Series 12, Restaurant Liquor License Application for Andrea Dahlman Lewkowitz, Agent, Harkins Chandler Fashion Center Cinemas, LLC, DBA Harkins Chandler Fashion Center**

Move for recommendation to the State Department of Liquor Licenses and Control for approval of the State Liquor Job No. 307527, a Series 12, Restaurant Liquor License, for Andrea Dahlman Lewkowitz, Agent, Harkins Chandler Fashion Center Cinemas, LLC, DBA Harkins Chandler Fashion Center, located at 3159 W. Chandler Boulevard, and approval of the City of Chandler, Series 12, Restaurant Liquor License No. 41704.

Council Focus Area(s):

Police Department

26. **Agreement No. PD5-968-4833, with ACT Towing, Inc., dba All City Towing, for Police Towing Services**

Move City Council approve Agreement No. PD5-968-4833, with ACT Towing, Inc., dba All City Towing, for police towing services, for a period of two years, January 1, 2025, through December 31, 2026, with the option of up to two additional two-year extensions.

Council Focus Area(s):

27. **Purchase of BriefCam Analytics Protect Software and Equipment**

Move City Council approve the purchase of BriefCam Analytics Protect software and equipment, utilizing the Maricopa County Contract No. 210237-C, with Safeware, Inc., in an amount not to exceed $198,465.

Council Focus Area(s):

Public Works and Utilities

28. **Resolution No. 5812 Authorizing the Acquisition of Approximately 0.9197 Acres (40,062 Square Feet) of Vacant Land Located East of the Northeast Corner of Cooper Road and Hunt Highway at Market Value, Plus Closing Costs and Escrow Fees**

    Move City Council pass and adopt Resolution No. 5812 authorizing the acquisition of approximately 0.9197 acres (40,062 square feet) of vacant land located east of the northeast corner of Cooper Road and Hunt Highway at market value, plus closing costs and escrow fees; authorizing the city's real estate administrator to sign, on behalf of the city, the purchase agreement, and any other documents necessary to facilitate these acquisitions; authorizing eminent domain proceedings as needed to acquire said real property and obtain immediate possession thereof; and authorizing relocation assistance as may be required by law.

    Council Focus Area(s):

29. **Agreement No. PW4-920-4773, Utility Services Customer Portal**

    Move City Council approve Agreement No. PW4-920-4773, with i3-Milestone, LLC, a subsidiary of i3 Verticals, LLC, for the utility services customer portal, in an amount not to exceed $640,200.

    Council Focus Area(s):

30. **Agreement No. PW3-925-4631, Amendment No. 4, with Hazen and Sawyer, P.C., for the Water System Upgrades Program Consultant Services**

    Move City Council approve Agreement No. PW3-925-4631, Amendment No. 4, with Hazen and Sawyer, P.C., for the Water System Upgrades Program Consultant Services, increasing the agreement amount by $11,598,345.

    Council Focus Area(s):

31. **Construction Manager at Risk Pre-Construction Services Agreement No. WA2100.251, with Archer Western Construction, LLC, for the Water System Upgrades Program**

Move City Council award CMAR Pre-Construction Services Agreement No. WA2100.251, to Archer Western Constuction, LLC, for the Water System Upgrades Program, in an amount not to exceed $913,965.

Council Focus Area(s):

32. **Construction Manager at Risk Construction Services Agreement No. WA2100.401, with Archer Western Construction, LLC, for the Water System Upgrades Program**

Move City Council award CMAR Construction Services Agreement No. WA2100.401, to Archer Western Construction, LLC, for the Water System Upgrades Program, in an amount not to exceed $2,094,455.

Council Focus Area(s):

33. **Professional Services Agreement No. WW2501.451, with Consultant Engineering, Inc., for the Sewer Rehabilitation for Frye Road Bike Lanes Construction Management Services**

Move City Council award Professional Services Agreement No. WW2501.451, to Consultant Engineering, Inc., for the Sewer Rehabilitation for Frye Road Bike Lanes Construction Management Services, in an amount not to exceed $183,895.

Council Focus Area(s):

34. **Job Order Project Agreement No. WW2501.402, with Archer Western Construction, LLC, Pursuant to Job Order Master Agreement No. JOC2415.401, for the Sewer Rehabilitation for Frye Road Bike Lanes**

Move City Council award Job Order Project Agreement No. WW2501.402, to Archer Western Construction, LLC, Pursuant to Job Order Master Agreement No. JOC2415.401, for the Sewer Rehabilitation for Frye Road Bike Lanes, in an amount not to exceed $1,106,391.09.

Council Focus Area(s):

35. **Professional Services Agreement No. SW2102.451, with Sunrise Engineering, LLC, for the Solid Waste Complex Recycle Collection Area Relocation Construction Management Services**

Move City Council award Professional Services Agreement No.SW2102.451, to Sunrise Engineering, LLC, for the Solid Waste Complex Recycle Collection Area Relocation Construction Management Services, in an amount not to exceed $123,640.

Council Focus Area(s):

36. **Job Order Project Agreement No. SW2102.401, with SDB, Inc., Pursuant to Job Order Master Agreement No. JOC2402.401, for the Solid Waste Complex Recycle Collection Area Relocation**

Move City Council award Job Order Project Agreement No. SW2102.401, to SDB, Inc., Pursuant to Job Order Master Agreement No. JOC2402.401, for the Solid Waste Complex Recycle Collection Area Relocation, in an amount not to exceed $1,928,681.32.

Council Focus Area(s):

37. **Professional Services Agreement No. WW2206.453, with Wilson Engineers, LLC, for the Hamilton Street Reclaimed Water Transmission Main (Queen Creek Road to Ryan Road) Construction Management Services**

Move City Council award Professional Services Agreement No. WW2206.453, to Wilson Engineers, LLC, for the Hamilton Street Reclaimed Water Transmission Main (Queen Creek Road to Ryan Road) Construction Management Services, in an amount not to exceed $910,840.

Council Focus Area(s):

38. **Construction Agreement No. WW2206.403, with Revolution Industrial, LLC, for the Hamilton Street Reclaimed Water Transmission Main (Queen Creek Road to Ryan Road)**

Move City Council award Construction Agreement No. WW2206.403, to Revolution Industrial, LLC, for the Hamilton Street Reclaimed Water Transmission Main (Queen Creek Road to Ryan Road), in an amount not to exceed $5,900,084.73.

Council Focus Area(s):

39. **Construction Manager at Risk Pre-Construction Services Agreement No. WW2402.251, with B&F Contracting, Inc., for the Loop 101/202 Redundant 66-inch Sewer Line**

Move City Council award CMAR Pre-Construction Services Agreement No. WW2402.251, to B&F Contracting, Inc., for the Loop 101/202 Redundant 66-inch Sewer Line, in an amount not to exceed $504,949.47.

Council Focus Area(s):

Action Agenda

40. **Resolution No. 5846 Amending the Citywide Fee Schedule relating to the Community Services, Cultural Development, Development Services, Fire, and Public Works & Utilities Departments**

    Move City Council pass and adopt Resolution No. 5846 amending the Citywide Fee Schedule relating to the Community Services, Cultural Development, Development Services, Fire, and Public Works & Utilities Departments, with fee changes effective January 1, 2025.

    Council Focus Area(s):

Informational

41. **Claims Report for the Quarter Ended September 30, 2024**

42. **Contracts and Agreements Administratively Approved, Month of October 2024**

43. **Special Event Liquor Licenses and Temporary and Permanent Extensions of Liquor License Premises Administratively Approved**

Adjourn

City Council Memorandum Information Technology Memo No. N/A

Date: November 04, 2024
To: Mayor and Council
Thru: Joshua H. Wright, City Manager
Tadd Wille, Assistant City Manager
Dawn Lang, Deputy City Manager - CFO
Sandip Dholakia, Chief Information Officer
Niki Tapia, Diversity, Equity and Inclusion Officer
From: Kerstin Nold, IT Chief Technology Officer
Subject: Agreement No. CM4-920-4664, Multi-Language Translation Technology, Services, and Support

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Proposed Motion:

Move City Council approve Agreement No. CM4-920-4664, with TranslateLive, LLC, for multi-language translation technology, services, and support, in an amount not to exceed $85,000, for the period of one year, beginning November 1, 2024, through October 31, 2025, with the option of up to four one-year extensions.

Background/Discussion:

The City of Chandler works to promote proactive citizen engagement through digital services. The Diversity, Equity, and Inclusion (DEI) Division emphasizes using modern technology to continuously elevate Chandler to be a more inclusive and equitable city to live, work and thrive.

In September 2023, Chandler launched a six-month pilot program offering instant language translation (ILA) device services in more than ten (10) city departments and more than twenty (20) divisions throughout the city. Real-time language translation enabled city staff to easily have immediate conversations and on-demand engagement with residents and the public, regardless of language or disability. The instant language translation technology pilot was intended to enhance communication and service levels for residents, ensuring the overall customer experience was inclusive, useful, and engaging.

Impact from the pilot program demonstrated a total of more than 560 face-to-face communications, spanning 2,269 minutes of real-time conversation, making the average communication exchange around four minutes, 15 seconds (4:15). The greatest takeaway from the pilot was the enhanced customer experience for the city. Feedback collected from residents/participants showed the ILA service was easy and useful.

The city has invested funding for FY 2024-25 to launch year one of the enhanced communication technologies program, which will continue to elevate a culture of inclusivity, respect, and diversity for years to come.

Evaluation:

On May 8, 2024, staff issued Request for Proposal No. CM4-920-4664, for multi-language translation technology, services, and support. Notification was sent to all registered vendors. Three proposals were received from the following offerors:

Contenda
TranslateLive, LLC
TransLinguist, Inc.

The Evaluation Committee evaluated the proposals and recommends awarding to TranslateLive, LLC, which submitted the most advantageous offer to the city in accordance with the evaluation criteria.

Fiscal Impact

Account No.	Fund Name	Program Name	Dollar Amount	CIP Funded Y/N
401.1285.5219.0.6IC145.0	General Government Capital Projects	Instant Language Assistant (ILA)	$ 60,000	Y
101.1286.5419.0.6IC145.0	General Fund	Instant Language Assistance (ILA)	$ 25,000	Y

Attachments

Agreement

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City Clerk Document No. _____

City Council Meeting Date: November 7, 2024

CITY OF CHANDLER SOFTWARE AS A SERVICE AGREEMENT
MULTI-LANGUAGE TRANSLATION TECHNOLOGY, SERVICES, AND SUPPORT
CITY OF CHANDLER AGREEMENT NO. CM4-920-4664

THIS AGREEMENT (Agreement) is made and entered into by and between the City of Chandler, an Arizona municipal corporation (City), and TranslateLive, LLC, a Delaware corporation (Contractor), (City and Contractor may individually be referred to as Party and collectively referred to as Parties) and made _____ _____ , 2024 (Effective Date).

RECITALS

A. City proposes to enter an agreement for multi-language translation technology, services, and support as more fully described in Exhibit A, which is attached to and made a part of this Agreement by this reference.

B. Contractor is ready, willing, and able to provide the services described in Exhibit A for the compensation and fees set forth therein.

C. City desires to contract with the Contractor to provide these services under the terms and conditions set forth in this Agreement.

AGREEMENT

NOW, THEREFORE, in consideration of the mutual agreements below, and intending to be legally bound, the Parties agree:

1.0 DEFINITIONS.

The following definitions apply to the parties' Services Agreement.

A.R.S. means Arizona Revised Statutes, as amended.

Access Information means any information relating to City, its Resellers and/or End Users' use of the Services, including without limitation, (a) navigational information, including usage of hyperlinks within or available through the Services; (b) transactional or processing information, including billing information and method of payment; and/or (c) Internet or I/P addresses, demographic information (like age, profession, or gender), domain names, computer type, browser types, and other anonymous statistical

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data arising from such use of the Services and access to the Facilities.

Agreement means this legal agreement executed between the City and the Contractor

Affiliate means with respect to any person or entity, any other person or entity that directly or indirectly controls, is controlled by, or is under common control with the specified person or entity, and for the purposes of this definition "control" of an entity means the ownership of 50% of the outstanding shares or other equity interests in such entity, or the right to elect or appoint a majority of the board of directors or governing body of such entity.

Base Programs means each version of a computer program used by Contractor to perform the Services, including the object code and source code, and all Upgrades, Documentation, workarounds, error-corrections, patches, and bug fixes.

City means the City of Chandler, Arizona.

City Confidential Information means: (a) all information related to the business of City and any of its City's and other third parties, to which Contractor has access, whether in oral, written, graphic or machine-readable form, in the course of or in connection with this Agreement; (b) all notes, analyses and studies prepared by Contractor or any of its Representatives, during the term of this Agreement or anytime thereafter, incorporating any of the information described in this Section 3; (c) the Access Information; and (d) the City Data.

City Data means all Confidential Information, all personal data and any other information relating to the employees, City or customers of City, or End Users or relating to the businesses of City or its Affiliates, including third party information, operations, facilities, products, services and markets, all as and to the extent provided to or obtained by Contractor or its Representatives from City, Resellers, or End Users, or derived from any of the foregoing. Usage data of End Users who are customers of City shall be considered City Data. City Data includes any such information in any form (tangible or electronic), regardless of the form or method by which such information is created, stored, maintained or communicated, and includes all data maintained by Contractor for City. Unless otherwise indicated, City Data includes all Access Information.

Contractor means the person or business organization named in the Agreement.

Crisis means an extraordinary event affecting Contractor that requires emergency response measures to be taken, including any event that may result in the Services, Software or Facilities becoming unavailable for a significant amount of time.

Confidential Information means City Confidential Information and/or Contractor Confidential Information, as the context may require.

Custom Software means the modifications and enhancements to the Software Programs and new computer programs, including application program interfaces, developed from time to time by Contractor for the exclusive use of City.

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Days means calendar days.

Documentation means the user, operations and training manuals, marketing materials, proposals, and responses to requests for information or proposals pertaining to the Services or the Software Programs, as well as any specifications reviewed by City, concerning the relevant Software licensed hereunder.

End User means any person or entity that receives and uses the Services.

Error means any error in the code of any Software Programs which prevents such Software Programs from operating in accordance with the relevant Documentation.

Exit Plan means the plan set forth in Exhibit F hereto.

Facilities means the hardware, application software, operating system software, firmware, networks, communication devices and lines and all other equipment, software, devices and related materials provided by or used by Contractor to host the Software Programs and provide the Services. Unless otherwise indicated, the Facilities shall be construed to include the Software Programs.

Implementation Date means the implementation date set forth in an applicable Schedule for the respective Services.

Intellectual Property Rights means all: (a) patents, patent applications, patent disclosures and inventions (whether patentable or not), (b) copyrights and copyrightable works (including computer programs) and registrations and applications therefor, (c) semiconductor chip "mask" works, and registrations and applications for registration thereof, (d) trade secrets, know-how and other confidential information, (e) unregistered and registered design rights and any applications for registration thereof, (f) database rights, and (g) all other forms of intellectual property, including waivable or assignable rights of publicity or moral rights, and any right to bring suit or collect damages for the infringement, misappropriation or violation of the foregoing, anywhere in the world. For purposes of the IP License, the Intellectual Property Rights shall be construed to include all Intellectual Property Rights of Contractor and its Affiliates existing on the date of grant of the IP License, plus all Intellectual Property Rights of Contractor and its Affiliates subsequently developed or acquired by Contractor or its Affiliates through the time of the occurrence of an Interruption.

Interruption means any material, or continuing, or repeated suspension or interruption in the supply of the Services by or on behalf of Contractor to City, the Resellers, or End Users, or any other material, or continuing, or repeated failure of Contractor to meet its obligations under this Agreement in regard to the Services, whether resulting from breach, termination, partial or complete cessation of business, disruption of business, bankruptcy or other insolvency proceedings, or otherwise, or termination of this Agreement.

Licensed Materials means all engineering, testing and design documentation, schematics, source code, and other materials necessary for City or its Representatives to exercise the IP License.

May or Should means something that is not mandatory but is permissible.

On Premises Equipment means Facilities provided by Contractor to City, Resellers, or End Users of the Services for receiving, managing, maintaining or using the Services.

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Contractor Confidential Information means Contractor nonpublic financial information.

Reseller(s) means one or more independent sales or support companies engaged to sell, support or implement the Services to End Users.

Representatives means each party's officers, directors, employees, consultants, attorneys, accountants, agents and independent subcontractors (and their employees) and other representatives.

Shall, Will, or Must means a mandatory requirement.

Software Programs means the Base Programs and Custom Programs.

Upgrades has the meaning stated in Exhibit A.

2.0 SERVICES

2.1 Services under Schedules. Contractor will perform and deliver Services described in this Agreement and any Schedules hereto, in accordance with the milestones, delivery dates, specifications and requirements as set forth herein.

2.2 Grant of License, On Premises Equipment. Contractor hereby grants City and its respective Representatives a nonexclusive, paid-up, worldwide license to install, access and use the On Premises Equipment in order to receive, manage, maintain and use the Services.

2.3 Reports. On a quarterly basis or more frequently as may be specified in a Schedule, Contractor will provide to City a written report summarizing Contractor's performance of the Services with respect to all metrics and categories of description set forth in an applicable Schedule, and any other information reasonably requested by City.

2.4 Services Audit. City may on 30 days' notice conduct audits and reviews of the Facilities on Contractor's premises with respect to the Services.

2.5 Activation and Installation. Unless otherwise stated in the applicable Schedule, construction, maintenance and operation of the Facilities, and activation and performance of the Services are and shall be the responsibility of Contractor.

2.6 City Data. Notwithstanding any other provision in this Agreement or Schedules, Contractor shall make all City Data (complete and unaltered) available at any time to City, in a format reasonably requested by City, at no additional charge. As between the parties, City Data shall be and remain the property of City. Contractor shall use the City Data solely to perform Contractor's obligations under the Services Agreement and this Agreement. Except as expressly permitted in this Agreement, Contractor shall not sell, assign, lease, disseminate, or otherwise dispose of the City Data or any part thereof to any other person, nor shall Contractor commercially exploit any part of the City Data. Contractor shall not possess or assert any property interest in or any lien or other right against or to any City Data.

2.7 City Affiliates. City's rights under the Services Agreement and this Agreement may be exercised by and for the benefit of City and, as applicable, End Users, and their respective Affiliates. For this purpose, "Affiliates" may include any person or organization that is party to any Business Collaboration with City or its other Affiliates. "Business Collaboration" means any strategic alliance, partnership, joint venture, broker-dealer, sales representative, investment advisor, or other marketing or business arrangement between City or its other Affiliates and any such person or organization through which City or such Affiliates derive revenue or profit or conduct business involving financial services.

2.8 Offshore Performance of Work Prohibited. Due to security and identification protection concerns, direct Services under this Agreement must be performed within the borders of the United States. Any Services that are described in the scope of work that directly serve the City and may involve access to secure or sensitive data or personal client data or development or modification of software for the City must be performed within the borders of the United States. Notwithstanding anything to the contrary, and unless stated otherwise in the scope of work, this definition does not apply to indirect or "overhead" services, redundant back-up services, or services that are incidental to the performance of this Agreement.

2.9 Compliance with WCAG Version 2.1 Level AA. Contractor represents and warrants that the software provided hereunder is in compliance with the Web Content Accessibility Guidelines (WCAG) Version 2.1, Level AA.

3. BACKUP IP LICENSE

3.1 Sufficiency of Intellectual Property; Further Assurances. Contractor represents and warrants that the IP License and the Intellectual Property Rights licensed to City thereunder are and will be sufficient for City or its Representatives to manage, maintain, perform and deliver the Services for present and future End Users, to produce, copy, install, operate, manage, maintain, and improve the Services or the Software Programs and Facilities of City's own choosing in order to do so, without infringement of Intellectual Property Rights owned or held by others. Promptly upon request by City, Contractor shall, at its expense, sign and deliver such further agreements, certificates and other documents and give City such other assistance as City may reasonably require to evidence more fully and give full and proper effect to the IP License. To the extent that Contractor or its Affiliates' Intellectual Property Rights include any U.S. patents or copyrights that are owned by third-party licensors, Contractor will at City's request, provide City with written confirmation from such third-party owner that such owner will give effect to the terms of Section 3.1 without any further condition, payment or other obligation. The IP License and the terms of Section 3.1 shall not be impaired or diminished by the occurrence or continuance of any breach of this or any other agreement between the Parties, any lack of capacity or authority, any reorganization, liquidation, dissolution, merger, or consolidation of either Party, or any other change of circumstances of either Party.

4. NON-DISCLOSURE

4.1 Restrictions. Each party, as recipient of the other party's Confidential Information, will receive, hold and protect in confidence the Confidential Information of the other party. The receiving party may disclose the Confidential Information of the disclosing party to its Representatives who have a need to know such Confidential Information solely in connection with this Agreement. The receiving party will cause such Representatives to comply with this Agreement and will assume full responsibility for any breach of this Agreement by any such Representatives. The receiving party will not transfer or disclose any Confidential

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Information of the disclosing party to any third party without the disclosing party's prior written permission and without such third party having a contractual obligation (consistent with this Section 4 ("Non-Disclosure") to keep such Confidential Information confidential. The receiving party will not use any Confidential Information of the disclosing party for any purpose other than in connection with this Agreement. Notwithstanding any confidentiality restrictions set forth herein, City may disclose Contractor Confidential Information to third parties in connection with such third party's provision of software or services to City. Such disclosures will be made under an obligation of confidentiality limiting the use of such Confidential Information by such third parties to the provision of services to City.

4.2 Exclusions. Confidential Information will not include information that: (i) is in the public domain at the time of disclosure; (ii) was in the possession of or demonstrably known by the receiving party prior to its receipt from the disclosing party without restriction on its use or disclosure; (iii) is independently developed by the receiving party without use of or reference to or reliance on the disclosing party's Confidential Information; or (iv) becomes known by the receiving party from a source other than the disclosing party without breach of this Agreement and is not subject to an obligation of confidentiality. Notwithstanding anything to the contrary, City may disclose Contractor Confidential Information as required to satisfy any request by any governmental or regulatory body.

4.3 Legal Requirements. If the receiving party is requested or required to disclose any of the disclosing party's Confidential Information under a subpoena, court order, statute, law, rule, regulation or other similar requirement (a "Legal Requirement"), the receiving party will, to the extent not precluded by law, provide prompt notice of such Legal Requirement to the disclosing party so the disclosing party may seek an appropriate protective order or other appropriate remedy or waive compliance with the provisions of this Agreement. If the disclosing party is not successful in obtaining a protective order or other appropriate remedy and the receiving party is, in the reasonable opinion of its counsel, legally compelled to disclose such Confidential Information, or if the disclosing party waives compliance with the provisions of this Agreement in writing, the receiving party may disclose, without liability hereunder, such Confidential Information in accordance with, but solely to the extent necessary, in the reasonable opinion of its counsel, to comply with the Legal Requirement.

4.4 Disposition of Confidential Information on Termination or Expiration. Upon termination or expiration of the Services Agreement and this Agreement or upon the disclosing party's written request and where practicable, the receiving party will return to the disclosing party all copies of Confidential Information already in the receiving party's possession or within its control. Following its return, and upon notice from the disclosing party, and unless otherwise required by law, the receiving party must destroy such Confidential Information using means to protect against unauthorized access to or use of the information, including, where appropriate, burning, shredding, or pulverizing such information, or by taking such other means as to assure that such information will not be recoverable following its disposal. In such case an officer of the receiving party will certify in writing to the disclosing party that all such Confidential Information has been so destroyed. Notwithstanding the foregoing, the receiving party may retain copies of such Confidential Information as required by applicable law, and, to the extent such copies are electronically stored in accordance with the receiving party's retention or back-up policies or procedures (including, without limitation, those regarding electronic communication), so long as such Confidential Information is kept confidential as required under this Agreement.

4.5 Privacy. For all City Information collected, stored or processed by Contractor, Contractor shall: (a)

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maintain safeguards against destruction, loss, alteration of or unauthorized access to such City Information; and (b) not, without City's prior approval, modify or discontinue any such safeguards without comparable or better replacement safeguards. Contractor acknowledges the sensitivity and confidentiality of personally identified information which may be contained in the City Information and the applicability of the Gramm-Leach-Bliley Act and/or other applicable privacy laws, regulations and guidelines ("Privacy Laws"). Contractor agrees to comply with all applicable legal and contractual requirements relating to the privacy and confidentiality of personally identified information applicable to Contractor in the performance of its obligations under this Agreement.

5. SECURITY

5.1 Security. Contractor represents and warrants that it shall at all times adhere to and comply with, in all material respects, the minimum security standards to ensure that there is no unauthorized access to or use of City information described in this Section, which security standards may be mutually amended by the parties from time to time (the "Security Standards").

5.2 Security Standards. Contractor will use reasonable efforts to prevent unauthorized access to restricted areas of its servers and any databases or other material generated from or used in conjunction with the Service. Contractor will respond immediately to remedy any known security incidents or breaches.

(a) External Segment Security. Contractor's external connections to the Internet will have appropriate security measures and controls applied to its systems and will include an Intrusion Detection System (IDS) that will monitor all inbound and outbound communications and information. The IDS is intended to detect, record, alert, and terminate unauthorized activity.

(b) Web Site Segment Security. All Internet accessible systems will reside behind Firewalls. The Firewalls will enforce secure access between all Web servers and the Internet. The Firewalls will allow only specific types of data to pass from the Internet to the systems on the Web Segment. An IDS device is used to scan all data that passes within the Web Server segment and will detect, report and terminate any unauthorized activity prior to it reaching the Web Servers.

(c) Internal Network Segment Security. All data entering the Service's internal data network from any external source (Web Segment and Internet) must pass through Firewalls. The Firewalls will enforce secure connections between internal and external systems and will only allow specific types of data to pass through. Access to customer data by Contractor employees will be limited to authorized personnel only. All Contractor employees will follow the security policies regarding access and use of internal systems.

(d) Physical Site Security. All systems containing customer or company related data will be contained in locked data cabinets and will reside in a secure Data Center. Only authorized personnel will have access to the Data Center and/or Operations area via an internal security system. The entire physical facility, internal and external, will be monitored 24/7/365.

(e) General Data Security and Network Monitoring. All printed documents containing customer, confidential, financial, or sensitive information that is no longer needed will be shredded. Any printed material of this nature that is retained will be secured in cabinets. All data backups will be locked and secure both on-site and off-site as documented in the Security Policy Document and the Backup/Disaster Recovery

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Guide. Contractor will actively monitor the IDS systems, Local Area Network/Wide Area Network, (LAN/WAN) equipment and all critical servers. Encryption techniques will be used for data transmissions where applicable.

(f) Assessments. City reserves the right to conduct risk assessments, vulnerability assessments, black box penetration tests or hire a third party to conduct risk assessments, vulnerability assessments, and black-box penetration tests of the Contractor's environment. Contractor will be alerted in advance and arrangements made for an agreeable time. Contractor shall respond to all Critical, High, and Medium severity vulnerabilities discovered by providing an acceptable timeframe to resolve the issue and/or implement compensating control(s).

(g) Audit Logging. Contractor will provide to the City system, audit, and other logs required by the City from the Contractor's environment and service offering upon request.

(h) StateRAMP Authorization. Contractors who will be storing, processing, and/or transmitting City data in external, non-City environments (Cloud), are required to attain verified StateRAMP (www.stateramp.org) Ready status for the cloud products the City will be utilizing in order to be considered for contract award. Contractors will be required to attain verified StateRAMP Authorized or City approved StateRAMP Provisional status, at the security category level required by the City, before receiving production City data. Contractor will be required to maintain StateRAMP authorization at the required category level throughout the contract term and partnership with the City. The City will provide StateRAMP sponsorship to Contractor for the purpose of this contract engagement.

5.3 Updates to Security Standards. If a change or addition to the Security Standards is required by law, rule, regulation, order, judgment or decree, Contractor shall comply with such amended Security Standards as soon as possible but in no event later than the time period for compliance indicated in such law, rule, regulation, order, judgment or decree. If the event Contractor adopts changes to the Security Standards, Contractor will provide the Services in accordance with such new Security Standards; provided that if such new Security Standards are of a level which is less than the level of the Security Standards previously required by this Agreement, and if City does not agree with such new Security Standards, City may terminate and this Agreement upon written notice to Contractor. If City accepts such new security standards, such new security standards shall be deemed to be "Security Standards" for purposes of this Agreement.

5.4 Security and Supervision. Contractor's personnel, when on City's premises or accessing City's networks or providing maintenance services hereunder, will comply with all of City's security, supervision, and other standard procedures applicable to such personnel, including, if applicable, City's Internet and Electronic Communications Usage Policy.

5.5 Audit. City reserves the right to conduct, either itself or through a third-party independent contractor selected by City at City's expense, an on-site audit and review of Contractor's architecture, systems and procedures used in connection with the Services and the Software Programs. Such audit and review shall be conducted upon City's reasonable request. After conducting an audit, City shall be entitled to notify Contractor of the manner in which Contractor does not comply with any of the security, confidentiality or privacy obligations herein, if applicable. Upon such notice, Contractor shall use commercially reasonable efforts to make any necessary changes to ensure compliance with such obligations. If Contractor is unable

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to remedy the defects or deficiencies causing its noncompliance with any obligation, City may terminate this Agreement upon written notice to Contractor. Any audits described in this Section shall be conducted during reasonable times and upon reasonable advance notice to Contractor and shall be of reasonable duration and shall not unreasonably interfere with Contractor's day-to-day operations. Further, City shall not conduct an audit more than twice per year unless City determines in its reasonable discretion that additional audits are necessary. In the event that City conducts an audit through a third-party independent contractor, such independent contractor shall be required to enter into a non-disclosure agreement containing confidentiality provisions substantially similar to those set forth herein to protect Contractor's proprietary information. In addition to and not in lieu of City's rights to conduct an audit as described in this Section, once per year during the term of this Agreement, Contractor will provide City with a written certification that Contractor has tested its architecture, systems and procedures and that it is in full compliance with the security, confidentiality and privacy obligations herein. Such certification shall be signed by an officer of Contractor.

5.6 Information Security Incident Management. Contractor must adhere to a formally documented incident management process, must cooperate with City personnel in the diagnosis, investigation and response of any security incidents or faults that impact City data. Contractor must notify the City within 24 hours of suspicion, detection or confirmation of a breach or unauthorized access to City information that is hosted, stored, processed, or transmitted by the Contractor. Notification will be made using City provided email and phone as identified in the Notices section of this contract.

5.7 Business Continuity and Disaster Recovery Management. Contractor must have business continuity and disaster recovery plans and processes in place to ensure the service for the City is adequately maintained in the event of any negative impact on the Contractor´s service. Contractor will regularly backup City data and retain such City backup data copies according to City data retention requirements or otherwise provide backup data to the City. Backups will be maintained offline, encrypted, and regularly tested for availability and integrity for disaster recovery scenarios, including ransomware.

5.8 Applicable Laws and Regulations. Contractor will comply, and assist City to comply with, all applicable State and Federal laws and regulations including, but not limited to:
Federal Information Security Modernization Act of 2014 (FISMA):
https://csrc.nist.gov/topics/laws-and-regulations/laws/fisma

- OMB Circular A-130:
  https://www.federalregister.gov/documents/2016/07/28/2016-17872/revision-of-omb-circular-no-a-130-managing-information-as-a-strategic-resource
- National Cyber Strategy of the United States of America:
  https://www.cisa.gov/executive-order-strengthening-cybersecurity-federal-networks-and-critical-infrastructure
- Application/websites will meet WCAG (Web Content Accessibility Guidelines) Level 2.1 AA requirements for government accessibility.
- Health Insurance Portability and Accountability Act (HIPAA) including Business Associate Agreement/ Health Information Technology for Economic and Clinical Health Act (HITECH):
  https://www.hhs.gov/hipaa/index.html
- Tax Information Security Guidelines For Federal, State and Local Agencies: Safeguards for Protecting Federal Tax Returns and Return Information (IRS Publication 1075):
  https://www.irs.gov/pub/irs-pdf/p1075.pdf

- Criminal Justice Information Services Security Policy (CJIS) https://www.fbi.gov/services/cjis/cjis-security-policy-resource-center
- Centers for Medicare & Medicaid Services (CMS), Minimum Acceptable Risk Standards for Exchanges (MARS-E) https://www.cms.gov/CCIIO/Resources/Regulations-and-Guidance/Downloads/2-MARS-E-v2-0-Minimum-Acceptable-Risk-Standards-for-Exchanges-11102015.pdf
- A.R.S. 18-551 - Definitions Information Security Including PII: https://www.azleg.gov/ars/18/00551.htm
- A.R.S. 18-552 - Notification of security system breaches; requirements; enforcement; civil penalty; preemption; exceptions: https://www.azleg.gov/ars/18/00552.htm
- State of Arizona statewide policies, standards and procedures: https://aset.az.gov/resources/policies-standards-and-procedures
- SIPC Memorandum of Understanding (MOU): https://www.sipc.org/about-sipc/
- State Environmental policies: https://azdeq.gov/LawsAndRules
- Family Education Rights Privacy Act (FERPA): https://www2.ed.gov/policy/gen/guid/fpco/ferpa/students.html
- Driver's Privacy Protection Act (DPPA): https://azdot.gov/motor-vehicles/driver-services/driver-license-information/motor-vehicle-records
- State of Arizona Library, Archives and Public Records, Records Management Division, General Retention Schedules https://azlibrary.gov/arm/policies
- Payment Card Industry (PCI) Security Standards including but not limited to Supplemental Documents, Information Supplements and Validation Requirements: https://www.pcisecuritystandards.org/

6. FEES AND OTHER PAYMENTS

6.1 Fees. Notwithstanding anything to the contrary in any Schedule, no Fees will be due or owed, with respect to any Services unless and until: (i) the parties agree to a Schedule covering such Services, and (ii) City receives an invoice for the relevant Fees.

6.2 Price Protection. Fees for recurring Services, if any, may be increased only on an annual basis upon at least sixty (60) days written notice before any annual renewal of such Services. The percentage of any such increase will not exceed three percent (3%) per such increase per annum.

6.3 Applicable Taxes. The Contractor will pay all applicable taxes. The City is subject to all applicable state and local transaction privilege taxes. To the extent any state and local transaction privilege taxes apply to sales made under the terms of this Agreement, it is the responsibility of the Contractor to collect and remit all applicable taxes to the proper taxing jurisdiction of authority.

6.4 Tax Indemnification. The Contractor and all subcontractors will pay all Federal, state, and local taxes applicable to its operation and any persons employed by the Contractor. The Contractor will and require all subcontractors to hold the City harmless from any responsibility for taxes, damages, and interest, if applicable, contributions required under Federal, state, and local laws and regulations and any other costs including transaction privilege taxes, unemployment compensation insurance, Social Security, and Worker's Compensation.

6.4 Invoices. Contractor will provide City with an itemized invoice for all Fees that become due hereunder. Each valid and undisputed invoice will be due and payable within thirty (30) days after City's receipt of such invoice.

6.5 Most Favored Terms. Contractor represents and warrants that the terms and conditions (including the pricing terms) of this Agreement and any Schedule hereunder are and will be comparable to or better than the terms and conditions offered to any other reseller or user of the Services. Upon request, an officer of Contractor will certify in writing Contractor's compliance with this Section within thirty (30) days.

7. REPRESENTATIONS, WARRANTIES, COVENANTS AND LIMITATION OF LIABILITY

7.1 Compliance with Laws. Contractor shall and shall use its best efforts to cause its suppliers to, comply with all applicable United States and foreign, federal, state, and local laws, rules, and regulations, with respect to the performance of the Services.

7.2 No Infringement. Contractor represents and warrants that the Services, Facilities and Software to be performed, operated or used under this Agreement do not and will not, infringe any third-party patent, trade secret, copyright, trademark or other intellectual property rights in the United States or any other country or jurisdiction to which Contractor provides the Services for use by City, the Resellers, or End Users.

7.3 Encryption. Contractor will identify in the applicable Schedule any encryption used in the Services and Software and the Commodity Classification, Export License or License Exceptions, and Import License granted with respect thereto. Contractor represents that it has complied with, and will continue to comply with, all applicable laws, rules and regulations of the United States or any foreign country with respect to the export or importation of the Services and Software, any modifications, enhancements or updates thereto, and any technical data derived therefrom.

7.4 Services. Contractor represents, warrants and covenants that: (a) it shall perform the Services in conformance with the levels of service, quality control, and other performance standards described in this Agreement; (b) all Services provided in connection with this Agreement are and will be performed to the best of Contractor's ability and in an effective, timely, professional and workmanlike manner in accordance with the highest applicable industry standards and practices; and (c) Contractor personnel performing any Services hereunder will be appropriately trained and have a level of skill commensurate with the requirements of this Agreement, and Contractor will promptly replace any person who is performing Services under this Agreement upon City's reasonable request.

7.6 Services Not to be Withheld. Contractor represents, warrants, and agrees that during the term of this Agreement it will not withhold Services under this Agreement (including, without limitation, implementation, termination transition assistance services) or access to the Facilities for any reason, including, but not limited to, a dispute between the parties arising under this Agreement, another agreement between the parties, or any unrelated dispute between the parties.

7.7 Viruses. Contractor represents, warrants, and covenants that the Software does not and will not contain any computer code designed to disrupt, disable, harm, or otherwise impede in any manner, including aesthetic disruptions or distortions, the operation of the Software or any System (referred to as

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"viruses" or "worms").

7.8 Other Code. Contractor represents, warrants, and covenants that the Software Programs, if and when released to City or deposited in escrow pursuant to Section 3.3, does not and will not contain any computer code that: (a) would disable the Software or any System or impair in any way their operation based on the elapsing of a period of time, the exceeding of an authorized number of copies or scope of use, or the advancement to a particular date or other numeral (referred to as "time bombs," "time locks," "license keys," or "drop dead" devices); (b) would permit Contractor or any third party to access the Software or any System (referred to as "traps," "access codes," or "trap door" devices); or (c) would permit Contractor or any third party to track, monitor or otherwise report the operation and use of the Software by City or any of its customers or clients.

7.9 Documentation. Contractor represents, warrants and covenants that the Documentation: (a) does and will accurately and completely describe the relevant Software Programs; (b) is and will be complete, free of errors and sufficiently detailed to allow City's personnel to operate and use such Software Programs; and (c) will be updated as and when any Upgrade is provided for such Software Programs and such updated Documentation will be delivered by Contractor to City promptly upon any such update.

7.11 Disclaimer. EXCEPT AS EXPRESSLY SET FORTH IN THIS AGREEMENT, NEITHER PARTY MAKES ANY OTHER WARRANTY, EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

7.12 Limitation of Liability. NOTWITHSTANDING ANYTHING TO THE CONTRARY IN THIS AGREEMENT OR ANY SCHEDULE, IN NO EVENT WILL CONTRACTOR OR CITY OR ITS RESELLERS BE LIABLE FOR ANY OF THE FOLLOWING: LOST PROFITS, LOST REVENUE, INDIRECT, INCIDENTAL, CONSEQUENTIAL, SPECIAL OR PUNITIVE DAMAGES EVEN IF IT HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. NOTWITHSTANDING THE FOREGOING, NO LIMITATION OR EXCLUSION OF CONTRACTOR'S LIABILITY WILL APPLY WITH RESPECT TO ANY CLAIMS ARISING OUT OF OR RELATING TO SECTIONS 3 ("IP LICENSE"), 4 ("NON-DISCLOSURE"), 7.6 ("VIRUSES"), 7.7 ("OTHER CODE") AND 8 ("INTELLECTUAL PROPERTY INDEMNIFICATION") OF THIS AGREEMENT, AN "ABANDONMENT" BY CONTRACTOR OF ITS OBLIGATIONS UNDER THIS AGREEMENT AS DESCRIBED HEREIN, OR ITS WILLFUL MISCONDUCT OR NEGLIGENCE, OR ANY CLAIMS FOR PERSONAL INJURY OR PROPERTY DAMAGE (INCLUDING WITHOUT LIMITATION ALL COSTS ASSOCIATED WITH THE RECOVERY OR REPLACEMENT OF LOST OR DAMAGED DATA). For the avoidance of doubt, any fines or penalties assessed on a party under applicable law arising out of the other party's breach of this Agreement are direct damages.

8. INTELLECTUAL PROPERTY INDEMNIFICATION

8.1 Indemnification by Contractor. Contractor, at its expense, will indemnify, defend and hold harmless City, the End Users and any of its or their officers, directors, employees, agents, consultants, other representatives, and any third parties permitted to use the Facilities, Software, or Services (collectively, the "Indemnified Parties") from all liabilities, costs, losses, damages and expenses (including reasonable attorneys' and experts' fees and expenses as well as interparty damages caused by Contractor or third parties) and will reimburse such fees and expenses as they are incurred, including in connection with any claim or action threatened or brought against the Indemnified Parties, arising out of or relating to any claim that any of the Facilities, Software or Services or any portion or use thereof constitutes an infringement,

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violation, trespass, contravention or breach of any patent, copyright, trademark, license, or other property or proprietary right of any third party, or constitutes the unauthorized use or misappropriation of any trade secret of any third party. City will promptly notify Contractor of any such claim or action and will reasonably cooperate with Contractor in the defense of such claim or action, at Contractor's expense.

8.2 City's Right to Participate. Contractor will have the right to conduct the defense of any such claim or action and all negotiations for its settlement or compromise except that City may in its sole discretion participate in the defense of any such claim or action at City's expense. Without limiting the foregoing, Contractor may not, without City's prior written consent, settle, compromise, or consent to the entry of any judgment in any such commenced or threatened claim or action, unless such settlement, compromise or consent: (i) includes an unconditional release of the relevant Indemnified Parties from all liability arising out of such commenced or threatened claim or action; and (ii) is solely monetary in nature and does not include a statement as to, or an admission of fault, culpability or failure to act by or on behalf of, any Indemnified Party or otherwise adversely affect any Indemnified Party. If Contractor fails to appoint an attorney within ten (10) calendar days after City has notified Contractor of any such claim or action, or after Contractor becomes aware of such claim or action, whichever is earlier, City will have the right to select and appoint an alternative attorney and the reasonable cost and expense thereof will be paid by Contractor.

8.3 Election of Remedy. If the Facilities, Software or Services or any portion thereof becomes, or in Contractor's or City's reasonable opinion is likely to become, the subject of any such claim or action, then City may terminate the relevant Schedule with respect to the affected Services and cease to receive the benefit, directly or indirectly, of the affected Facilities or Software or require Contractor to either: (i) procure for City the right to continue using the Services and Software, or such portion thereof, as contemplated hereunder; (ii) modify the Services and Software, or such portion thereof, to render same non-infringing (provided such modification does not adversely affect the use of such Services and Software, or such portion thereof, as reasonably determined by City); or (iii) replace same with an equally suitable, functionally equivalent, compatible, non-infringing services and software, as reasonably determined by City. If none of the foregoing is possible and if such Services and Software, is found to infringe by a court, Contractor or City will have the right to terminate the relevant Schedule with respect to such Services and Software and Contractor will refund to City all amounts paid by City for such Services and Software. Any termination of any Schedule(s) by City under this Section will be without prejudice to any other rights and remedies which City may have under this Agreement or at law or in equity.

9. SERVICE LEVELS; SUPPORT SERVICES

9.1 Service Levels. Contractor shall provide the Services in accordance with the Service Levels set forth in Exhibit C hereto.

9.2 Support Services. Contractor shall provide the Support Services set forth in Exhibit D hereto.

10. TERM

10.1 Agreement Term. This Agreement is effective as of the Effective Date and will continue for a period of one year or until the Agreement is terminated as provided for herein. The City and the Contractor may mutually agree to extend the Agreement for up to four additional terms of one year each, or portions

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thereof.

10.2 Schedule Term. Each Schedule will commence on the date first set forth in such Schedule and will continue until the terms of such Schedule or this Agreement expire or are terminated in accordance with Section 11.

11. TERMINATION

11.1 Termination for Breach.

(a) If Contractor materially breaches this Agreement or any Schedule, and such breach is incapable of cure, or such breach is capable of cure but Contractor does not cure such breach within twenty (20) days after written notice of material breach, City may terminate the relevant Schedule upon written notice to Contractor. To the extent that Contractor commits a material breach of a nature which goes beyond the relevant Schedule, City may terminate: (a) this Agreement (in which event all of the other Schedules will terminate concurrently therewith); or (b) all affected Schedules. Termination of a Schedule or this Agreement will be without prejudice to any other rights and remedies that the non-defaulting party may have under this Agreement or at law or in equity.

(b) Contractor may terminate this Agreement if City materially breaches the payment or license terms of this Agreement and (i) such breach is incapable of cure, or (ii) such breach is capable of cure and City fails to pay undisputed amounts under a particular invoice within three (3) months after such amounts are due, and Contractor has notified City of its intent to terminate this Agreement and City has not cured such breach within thirty (30) days of receipt of such notice.

11.2 Termination for Convenience by Client; No "Abandonment".

(a) City may terminate this Agreement or any Schedule hereunder at any time upon written notice to Contractor. Notwithstanding anything to the contrary in this Agreement or any Schedule, in the event of any termination under this Section, City will only be liable to make any payments which are due hereunder to Contractor for work performed in accordance with the terms and conditions herein up to the date of such termination.

(b) This Agreement shall automatically expire or terminate upon expiration or termination of this Agreement, unless such termination occurs in conjunction with an Interruption.

(c) Notwithstanding any other provision in this Agreement to the contrary, Contractor agrees that it will not "abandon" its obligations under this Agreement, unless and until this Agreement is terminated and the requirements of Section 3 and 11.3–11.4 hereof have been carried out in full. For purposes hereof, "abandon" means the threatened or actual intentional refusal by Contractor to provide or perform any of the Services required of Contractor under this Agreement, regardless of the reason. If Contractor breaches or threatens to breach this Section, Contractor agrees that City will be irreparably harmed, and, without any additional findings of irreparable injury or harm or other considerations of public policy, City shall be entitled to apply to a court or tribunal of competent jurisdiction for and, provided City follows the appropriate procedural requirements (e.g., notice), Contractor shall not oppose the granting of an injunction compelling specific performance by Contractor of Contractor's obligations under this Agreement without the necessity of posting any bond or other security. Contractor further agrees not to oppose any

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such application for injunctive relief by City except to require that City shall establish that Contractor has committed abandonment.

11.3 Exit Plan. In the event of any expiration or termination of this Agreement, the Parties shall prepare and carry out an Exit Plan on the terms set forth in Exhibit F hereto.

11.4 Services Wind Down Period. Any expiration or termination of this Agreement or any of the Schedules, Client shall be entitled to continued provision of the Services by the Provider and access to the Facilities for a period of time determined by Client, not to exceed ninety (90) days, required for Client to wind down its current use of the Services or to make a transition to alternate services providers or facilities.

12. INSURANCE

(a) Insurance Coverage. Contractor will, during the term of this Agreement, at its sole cost and expense, obtain and maintain in full force and effect, subject to City's reasonable approval, the insurance coverage in the minimum amounts and on the terms set forth in Exhibit G hereto or such other amounts as may be set forth in a Schedule. All insurance required hereunder to be carried by Contractor (as well as any approved subcontractors or agents) will be with sound and reputable insurers and on forms as both are reasonably satisfactory to City.

(b) Insurance Certificates. Contractor will provide City with a copy of all relevant certificates of insurance upon City's request including those evidencing that City has been added as an additional insured. Certificates are to be delivered to City at the address set forth in the applicable Schedule prior to delivery of any Software Program(s) hereunder, and annually thereafter, and at least thirty (30) days prior to any expiration of each insurance policy.

(c) Waiver of Rights of Recovery. Contractor waives all rights of recovery against City and its subcontractors or agents that Contractor may have or acquire because of deductible clauses in or inadequacy of limits of any policies of insurance that are secured and maintained by Contractor. Contractor will require its approved subcontractors and agents to waive the rights of recovery (as the aforesaid waiver by Contractor) against City, Contractor and their other subcontractors or agents and deliver evidence of such waiver to City before such subcontractors or agents perform any Services.

(d) No Limitation. Nothing in this Section will be construed as limiting Contractor's (or any subcontractor's or agent's) liability to City or any third party. The mere purchase and existence of insurance does not reduce or release Contractor from liability incurred or assumed within the scope of this Agreement. Contractor's failure to maintain insurance will not relieve it of liability under this Agreement.

(e) Claims. Contractor will promptly make a full written report to City as to all accidents or claims for damage arising from or in connection with: (i) this Agreement; (ii) the discharge of Contractor's duties under this Agreement or any Schedule; or (iii) the presence of Contractor or Contractor's Representatives on City's premises. Contractor will cooperate fully with City and with any insurance carrier in the investigation and defense of all such accidents and claims, such obligation to survive the termination or expiration of this Agreement.

13. DISASTER RECOVERY

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An outline and executive summary of Contractor's business continuity and disaster recovery plan is attached as Exhibit E hereto (such outline and summary plus all of Contractor's supporting detailed documentation and plans as contemplated by the provisions of this Section, the "Disaster Recovery Plan"). The Disaster Recovery Plan for all Services shall: (a) be designed to continue all Contractor business operations that are critical to the overall operation and functionality of the Services notwithstanding the occurrence of a Crisis; (b) specify procedures and frequency of testing; and (c) shall be, and shall be maintained consistent with, then-current generally accepted industry standards. The Disaster Recovery Plan shall specifically address the ability of Contractor to provide each of the Services in the event of a Crisis. The Disaster Recovery Plan shall provide, among other things, a mechanism for the redundancy or back-up of business operations designed to keep the Services from becoming unavailable as Unscheduled Downtime as defined in the Service Level Agreement due to a Crisis and to permit the related business operations of City to be re-instituted in a time period that permits the ongoing operation and functionality of City's business to which the Services relate. Without limiting the generality of the foregoing, the Disaster Recovery Plan shall address all of the computer software, computer hardware (whether general or special purpose), telecommunications capabilities (including all voice, data and video networks) and other similar or related items of automated, computerized, and/or software system(s) and any other network(s) or system(s) that are used by or relied on by Contractor in the provision of the Services and the manner in which Contractor will re-institute the processing of relevant information in a time period that permits the ongoing operation and functionality of City's business to which the Services relate. Notwithstanding the foregoing, if a Crisis prevents Contractor from providing the Services to City, Contractor shall allocate its efforts and resources to restoring City's Services no less favorably to City than it allocates to any of its other Clients affected by the Crisis.

14. GENERAL

14.1 Force Majeure.

(a) For purposes of this Agreement "*Force Majeure*" means an event that is outside the reasonable control of a Party, or that with the exercise of due diligence or reasonable business practices could not reasonably have been prevented, avoided or removed by that Party, and that prevents that Party from performing its obligations under this Agreement and does not result from such Party's negligence or the negligence of its agents, employees or subcontractors, including unforeseeable events such as acts of God, earthquakes, storms, floods, natural events, wars, court order, rebellions, riots, strikes, civil disturbances, acts of foreign and/or domestic governmental authorities, labor strikes and lockouts, but excluding any failure by a third party to supply any materials or components to Contractor unless such failure is itself the result of Force Majeure affecting such third party.

(b) Upon the occurrence of an event of Force Majeure with respect to a Party, its obligations under this Agreement will, to the extent that they are affected by the event of Force Majeure, be suspended; provided, however, that under no circumstances will a Party's obligations to pay any amounts due under this Agreement be suspended nor Contractor's disaster recovery obligations under sections 5.7 and 13. Any Party affected by an event of Force Majeure will promptly inform the other Party and will use commercially reasonable efforts to fulfill its obligations under this Agreement and to remove or avoid any disability and mitigate any damages caused by such event of Force Majeure at the earliest practicable time and to the greatest extent possible.

14.2 License of Intellectual Property; 365(n). The Software is "intellectual property" as defined in 11 U.S.C.A. 101(35A) which has been licensed hereunder in a contemporaneous exchange for value and this Agreement will be governed by 11 U.S.C.A. 365(n), as the same may be amended or supplemented from time to time, if Contractor files for bankruptcy.

14.3 UCITA Not Applicable. This Agreement and the transactions contemplated herein are not and will never be subject to the Uniform Computer Information Transactions Act (prepared by the National Conference of Commissioners on Uniform State Laws) as currently enacted by any jurisdiction or as may be codified or amended from time to time by any jurisdiction.

14.4 Contractor Financial Assurances. Upon City's request (to be made not more than once per year) Contractor will provide City with financial information of Contractor which will allow City to adequately assess Contractor's creditworthiness. Contractor will not provide City with any nonpublic financial information unless it is requested by the City Manager or City Manager's designee of City in writing under this Section.

14.5 Assignment. Neither party will assign its rights or obligations under this Agreement without the prior written consent of the other party which shall not be unreasonably delayed or withheld, and any purported assignment without required consent shall be void; provided, that: (a) either Party may collaterally assign this Agreement in connection with any financing or an acquisition of all or substantially all of such Party's assets and business, and (b) City may assign this Agreement to one or more Affiliates or Resellers (but any payment obligations shall remain the primary obligation of the City). Subject to the foregoing limitations, this Agreement will be binding upon the parties and their respective legal successors and permitted assigns.

14.6 Notices. Unless otherwise provided, notice under this Agreement must be in writing and will be deemed to have been duly given and received either (a) on the date of service if personally served on the party to whom notice is to be given, or (b) on the date notice is sent if by electronic mail, or (c) on the third day after the date of the postmark of deposit by first class United States mail, registered or certified, postage prepaid and properly addressed as follows:

For the City
Name: Christina Pryor
Title: Procurement and Supply Senior Manager
Address: 175 S. Arizona Avenue, 3rd Floor
Chandler, AZ 85225
Phone: 480-782-2403
Email: christina.pryor@chandleraz.gov

For the Contractor
Name: Jennifer Quigley
Title: VP of Business Development
Address: 6531 Central Avenue
St. Petersburg, FL 33710
Phone: 973-879-9466
Email: Jennifer.quigley@translatelive.com

14.7 Remedies. Each party acknowledges that a breach of certain of its obligations under this Agreement each party's confidentiality obligations set forth in this Agreement) other than any payment obligations hereunder, may result in irreparable and continuing damage to the other party for which monetary damages may not be sufficient, and agrees that the other party will be entitled to seek, in addition to its other rights and remedies hereunder or at law, injunctive or all other equitable relief, and such further relief as may be proper from a court of competent jurisdiction.

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14.8 Interpretation. The terms and conditions of this Agreement are the result of negotiations between the parties. The parties intend that this Agreement should not be construed in favor of or against any party by reason of the extent to which any party or its professional advisors participated in the preparation or drafting of the Agreement. Unless the context of this Agreement otherwise indicates when used in a series of items the word "or" will be construed such that the series may include any of the items, all of the items, or any combination of the items.

14.9 Entire Agreement. This Agreement and all exhibits and schedules attached constitute the complete agreement and understanding between the parties with respect to the subject matter hereof and supersede all prior agreements and understandings between the parties.

14.10 Time of the Essence. Contractor acknowledges that time is of the essence with respect to Contractor's obligations hereunder and that prompt and timely performance of all such obligations, including all timetables, milestones and other requirements in this Agreement and any Schedule, is strictly required for City in light of its schedules and commitments.

14.11 No Waiver by Conduct. No waiver of any of the terms of this Agreement or any Schedule will be valid unless in writing and designated as such. Any forbearance or delay on the part of either party in enforcing any of its rights under this Agreement will not be construed as a waiver of such right to enforce the same for such occurrence or any other occurrence.

14.12 Independent Contractor. Contractor acknowledges that it is acting as an independent contractor, that Contractor is solely responsible for its actions or inactions, and that nothing in this Agreement will be construed to create an agency or employment relationship between City and Contractor or its Representatives. Contractor is not authorized to enter into contracts or agreements on behalf of City or to otherwise create obligations of City to third parties. Neither Contractor nor any of its Representatives are City employees for any purpose, including for: (i) federal, state or local tax, employment, withholding or reporting purposes; or (ii) eligibility or entitlement to any benefit under any of the City's employee benefit plans (including those that are subject to the Employee Retirement Income Security Act of 1974, as amended), incentive, compensation or other employee programs or policies (collectively, "Benefit Plans"). Contractor agrees that all such Representatives will be informed that they are employees solely of Contractor, or its agent or subcontractor if applicable, and not eligible to participate in any Benefit Plan. Contractor agrees that Contractor is solely responsible for payment of all applicable workers' compensation, disability benefits and unemployment insurance, and for withholding and paying such employment taxes and income withholding taxes as required.

14.13 Non-exclusivity. Contractor acknowledges that City may from time to time enter into other transactions with companies that may be competitors, suppliers or customers of Contractor. No such activities will be affected by City's agreement to enter into this Agreement.

14.14 No Publicity. Contractor agrees not to disclose the identity of City or its End Users or any of their directors, officers, managers, employees, consultants or agents as a customer or prospective customer of Contractor or the existence or nature of this Agreement without the City's prior written consent. Without limiting the generality of the foregoing, Contractor will not use, in advertising. publicity or otherwise, the name of City or its End Users or any of their directors, officers, managers, employees, consultants or agents or any trade name, trademark, service mark, logo, or symbol of City or its End Users.

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14.15 Severability. If any one or more of the provisions of this Agreement are for any reason held to be invalid, illegal or unenforceable by a court of competent jurisdiction, the remaining provisions of this Agreement will be unimpaired and will remain in full force and effect, and the invalid, illegal or unenforceable provision will be replaced by a valid, legal and enforceable provision that comes closest to the intent of the parties underlying the invalid, illegal or unenforceable provision.

14.16 Survival. Any provision of this Agreement which, by its nature, would survive termination or expiration of this Agreement will survive any such termination or expiration of this Agreement, including Sections 2.3 ("Grant of License"), 3 ("IP License"), 4 ("Non-Disclosure"), 7 ("Representations, Warranties, Covenants and Limitation of Liability"), 8 ("Intellectual Property Indemnification"), 11 ("Termination"), 14 ("General") and corresponding Exhibits and Schedules.

14.17 Governing Law. This Agreement will be governed by, and construed in accordance with, the internal laws of the State of Arizona, without regard to its choice of laws principles. Notwithstanding the fact that some of the Products may be manufactured outside the United States, the Parties hereby expressly disclaim the application of the United Nations Convention on the Sale of Goods.

14.18 Counterparts; Method of Amendment. This Agreement, each Schedule and any amendments thereto may be executed in counterparts and will not be effective or enforceable unless and until it is executed with the handwritten signature of an authorized representative of each of the relevant entities. Without limiting the foregoing, none of the following will amend or modify this Agreement or result in the execution of a Schedule: (i) terms and conditions which are displayed or conveyed electronically or are associated with, or are responded to by the operation of a mouse or other pointing device, typing on a keyboard, "virtual" actions, an automated computer program, the removal of shrinkwrap, the opening of a package, the loading or use of software or other goods or services, or any other action other than such a handwritten signature as described in the previous sentence; or (ii) payment by City of any License Fees, Maintenance Fees or other consideration to Contractor or use of or any other action with respect to the Software Programs or Maintenance Services.

14.19 Disputes. In any dispute arising out of an interpretation of this Agreement or the duties required not disposed of by agreement between Contractor and City, the final determination at the administrative level will be made by the City Purchasing and Materials Manager.

14.20 City's Right of Cancellation. The parties acknowledge that this Agreement is subject to cancellation by City under the provisions of A.R.S. § 38-511.

14.21 No Israel Boycott. By entering into this Agreement, Contractor certifies that Contractor is not currently engaged in, and agrees for the duration of the Services Agreement and this Agreement, not to engage in a boycott of Israel as defined by state statute.

14.22 Legal Worker Requirements. A.R.S. § 41-4401 prohibits the City from awarding a contract to any contractor (as defined under A.R.S.) who fails, or whose subcontractors fail, to comply with A.R.S. § 23-214(A). Therefore, Contractor agrees Contractor and each subcontractor it uses warrants their compliance with all federal immigration laws and regulations that relate to their employees and their compliance with§ 23-214, subsection A. A breach of this warranty will be deemed a material breach

of the parties' agreement and may be subject to penalties up to and including termination of the parties' agreement. City retains the legal right to inspect the papers of any Contractor's or subcontractor's employee who provides services under this Agreement to ensure that the Contractor and subcontractors comply with the warranty under this provision.

14.23 Lawful Presence Requirement. A.R.S. §§ 1-501 and 1-502 prohibit the City from awarding a contract to any natural person who cannot establish that such person is lawfully present in the United States. To establish lawful presence, a person must produce qualifying identification and sign a City-provided affidavit affirming that the identification provided is genuine. This requirement will be imposed at the time of contract award. This requirement does not apply to business organizations such as corporations, partnerships, or limited liability companies.

14.24 Forced Labor of Ethnic Uyghurs Prohibited. By entering into this Agreement, Contractor certifies and agrees Contractor does not currently use and will not use for the term of this Agreement: (i) the forced labor of ethnic Uyghurs in the People's Republic of China; or (ii) any goods or services produced by the forced labor of ethnic Uyghurs in the People's Republic of China; or (iii) any contractors, subcontractors or suppliers that use the forced labor or any goods or services produced by the forced labor of ethnic Uyghurs in the People's Republic of China.

14.25 Covenant Against Contingent Fees. Contractor warrants that no person has been employed or retained to solicit or secure this Agreement upon an agreement or understanding for a commission, percentage, brokerage, or contingent fee, and that no member of the Chandler City Council, or any City employee has any interest, financially, or otherwise, in Contractor's firm. For breach or violation of this warrant, City may annul this Agreement without liability or, at its discretion, to deduct from the Services Agreement price or consideration, the full amount of such commission, percentage, brokerage, or contingent fee.

14.26 Non-Waiver Provision. The failure of either party to enforce any of the provisions of this Agreement or to require performance of the other party of any of the provisions hereof must not be construed to be a waiver of such provisions, nor must it affect the validity of this Agreement or any part thereof, or the right of either Party to thereafter enforce each and every provision.

14.27 Disclosure of Information Adverse to the City's Interests. To evaluate and avoid potential conflicts of interest, Contractor must provide written notice to City, as set forth in this Agreement, of any work or services performed by Contractor for third parties that may involve or be associated with any real property or personal property owned or leased by City. Such notice must be given 7 business days prior to commencement of the services by Contractor for a third party, or 7 business days prior to an adverse action as defined below. Written notice and disclosure must be sent to the City's Purchasing and Materials Manager. An adverse action under this Agreement includes, but is not limited to: (a) using data as defined in this Agreement acquired in connection with this Agreement to assist a third party in pursuing administrative or judicial action against City; or (b) testifying or providing evidence on behalf of any person in connection with an administrative or judicial action against the City; or (c) using data to produce income for Contractor or its employees independently of performing the services under this Agreement, without the prior written consent of the City. Contractor represents that except for those persons, entities, and projects identified to the City, the services performed by Contractor under this Agreement are not expected to create an interest with

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any person, entity, or third-party project that is or may be adverse to the City's interests. Contractor's failure to provide a written notice and disclosure of the information as set forth in this Section constitute a material breach of the parties' agreement.

14.28 Jurisdiction and Venue. Any action to enforce any provision of this Agreement or to obtain any remedy with respect hereto must be brought in the courts located in Maricopa County, Arizona, and for this purpose, each party hereby expressly and irrevocably consents to the jurisdiction and venue of such court.

14.29 Budget Approval Into Next Fiscal Year. This Agreement will commence on the Effective Date and continue in full force and effect until it is terminated or expires in accordance with the provisions of this Agreement. The parties recognize that the continuation of this Agreement after the close of the City's fiscal year, which ends on June 30 of each year, is subject to the City Council's approval of a budget that includes an appropriation for this item as an expenditure. The City does not represent that this budget item will be actually adopted. This determination is solely made by the City Council at the time Council adopts the budget.

14.30 Cooperative Use of Agreement. In addition to the City of Chandler and with approval of the Contractor, this Agreement may be extended for use by other municipalities, school districts and government agencies of the State. Any such usage by other entities must be in accordance with the ordinance, charter and/or procurement rules and regulations of the respective political entity.

Orders placed by other agencies and payment thereof will be the sole responsibility of that agency. The City will not be responsible for any disputes arising out of transactions made by other agencies who utilize this Agreement.

14.31 Exhibits, Precedence of Documents. The following exhibits are made a part of this Agreement and are incorporated by reference:

Exhibit A – Scope of Services
Exhibit B – Fee Schedule
Exhibit C – Service Level Requirements
Exhibit D – Support Services Requirements
Exhibit E – Disaster Recovery Plan
Exhibit F – Exit Plan
Exhibit G – Insurance Requirements

In the event of a conflict in the terms and conditions or a legal ambiguity arises among this Agreement and the attached exhibits, the documents in the following order prevail and control: (1) this Agreement; (2) Exhibit A – Scope of Services; (3) Exhibit B – Fee Schedule; (4) Exhibit C – Service Level Requirements; (5) Exhibit D – Support Services Requirements; (6) Exhibit E – Disaster Recovery Plan; (7) Exhibit F – Exit Plan; and (8) Exhibit G – Insurance Requirements.

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IN WITNESS WHEREOF, the parties have caused this Agreement to be executed by their duly authorized representatives. This Agreement shall be in full force and effect only when it has been approved and executed by the duly authorized City officials.

FOR THE CITY

By: _____

Its: Mayor

APPROVED AS TO FORM:

By: _____
City Attorney

ATTEST:

By: _____
City Clerk

FOR THE CONTRACTOR

By: Becky Copeland

Its: COO

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EXHIBIT A
SCOPE OF SERVICES

The Contractor will provide translation technology products and services as described in its response to the Request for Proposal, included as Attachment 1 to this Scope of Services.

The scope of services presents language translation background information, provides a technology overview, outlines the detailed requirements, technical specifications and project approach, which serve as a guide for the successful implementation of Translate Live's Instant Language Assistant (ILA) device.

Background

The Diversity, Equity and Inclusion Office emphasizes using technology to continue creating the City of Chandler to be a more inclusive and equitable place to live, work and thrive. With that in mind, language translation technologies will enable city staff to easily have a real-time conversation with customers and the public, regardless of the language or disability. The intent is for language translation technologies and services to be viewed as additional communication tools, that support staff communication efforts. But, in no way, is to be used to eliminate any human interaction with our most important Team Chandler staff that provide language translation when delivering essential services to the community.

Technology Overview: Instant Language Assistant (ILA)

Translate Live created the Instant Language Assistant (ILA) as an application to provide communication for Deaf, hard of hearing, and Deaf Blind individuals when interacting with a government agency or business. The ILA is a purpose-driven device that is always ready, easy to use, and is accessible to individuals with communication challenges. ILA provides translation in over 130 Languages and dialects. And, in most cases, languages and dialects can be translated via text to speech and/or speech to text. ILA is the only solution to combine HIPAA complaint and private AI, organization specific processes pre-loaded for 100% accuracy, backed with the ability to access liver interpreters. The city's implementation of the ILA device and services will help to:

- Provide real-time two-way conversation for individuals to speak, spell out loud, or type an entire conversation no matter the language or disability, that is immediately communicated to the other party in their language of choice
- Communicate with community members who are deaf, or hard of hearing, or blind by:
  - Connecting accessories such as keyboards (including brail) or use of the electronic keyboard on the ILA device in the language of choice
  - Using a headset/phone receiver
  - Accessing trained American Sign Language (ASL) personnel (in 250 languages) using on demand video and use of audio from the ASL personnel, so that staff know what is being communicated
- Broadcast one-way communication for use at events, that the public can join using an ILA device's room code for translation in their chosen language
- Present pre-spoken phrases that will be pre-loaded into ILA devices for translation into the language of choice. This will support ease of providing common information, assist with completing forms and to pre-load and present frequently asked questions in language of choice.

Goals and Objectives

The goals and objectives of the ILA translation technology is to facilitate real-time conversations, regardless of language or communication differences.

Goal(s)	Objective(s)
• Leverage technology to remove communication barriers	• Deploy ILA devices to identified departments that are customer facing • 20 devices to be deployed each fiscal year for the next three years (FY 24/25, FY 25/26, FY 26/27) for a total of 60 devices to be implemented
• Support Team Chandler's ability to effectively communicate with the City's diverse community when delivering essential services	• Enhance and improve the customer service experience; meet and exceed expectations
• Increase productivity; continuity of service	• When a Team Chandler human translator is unavailable, the utilization of a translation device will ensure continuity of services can be provide at all times; thereby increasing productivity and enhancing the customer service experience • Work can occur that may not otherwise be possible without the ILA device for language translation
• Align to the DEI Strategic Plan	• Promote using innovative language translation technology as a resource for department staff when delivering essential services
• Community Outreach and Inclusion Opportunity	• Increase interaction with community members that may not otherwise interact with the City, due to language challenges or due to a disability

Attachment 1 to Scope of Services

The Contractor's detailed requirements and technical specifications responses follow:

DETAILED BUSINESS REQUIREMENTS

Category	Requirement Description	Response Code	Modifications
Language Coverage	The tool and services must have native language support for a wide range of languages and dialects including but not limited to English, Spanish, Chinese dialects, Persian (Farsi), French, Korean, German, Vietnamese, languages of India, etc. Provide a complete list of languages and dialects.	F	https://www.translatelive.com/ila-language-list
Translation Accuracy	The tool and services must provide accurate translation that preserve the meaning of the original spoken words, phrases and text. Detail the means and methodology of assessing translation accuracy and how it is determined for the translation tools and services.	F	This happens on a per language instance and it is separate for Speech to text and translation. Industry standards include Word Error rate % and Bleu Scores. As new engines for each come out and are tested by the industry, the ILA allows us to easily integrate any new engine and switch to it for higher accuracy.
Contextual Understanding	The tool and services must be able to understand the context of city ordinances, administrative regulations, administrative orders, policies, procedures and rules, in which words and phrases are used to provide accurate translation	F	
Contextual Understanding	Capability of a deny list of words or phrases to mitigate contextual, word, or phrase	F	

	misunderstanding. (Including filters for hate, abuse and profanity)		
Real-Time Translation	The tool should be capable of providing real-time translation for live in-person conversations using City-approved devices (such as, Android, iOS, WIN laptops), and one-way real-time translation when delivering presentations, during in-person speaker events and meetings with live interpretation and captioning in multiple languages.	F	
Multi-channel Support	The tool and services must be accessible on various digital channels including but limited to web, native mobile applications (Android and/or iOS), and QR capability, etc.	F	
User-Friendly Interface	The tool and services must have an intuitive and easy-to-use interface for staff and customers; and are ADA compliant, and aligns with DEI's strategic plan for inclusion, and with the City's brand standards.	F	
Data Privacy	The tool and services must ensure the privacy and security of the user's conversation and PII data and must be HIPPA compliant. Language translation is for conversation only and text should ideally not be retained or stored. Describe how this is accomplished. (Implement	F	Everything is encrypted and no conversation data is saved anywhere. Any saved data like Call detail records are encrypted at rest and contain no PEI.

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	redaction/encryption of personally identifiable info contained in any public records, prior to translation.)		
Customizability	The tool must allow customization of settings; including, but not limited to: Using passwords, locking down specific settings, displaying city languages/dialects most commonly used first, the ability to pre-enter customized phrases that are frequently used, pre-enter document and form information; that can all be selected for translation. This will improve efficiency and increase productivity by having repeatable information easily selected to translate	F	
Specialized Terminology Translation	The tool and services must be able to handle translation of specialized city services related to but not limited to passport services, housing and redevelopment services, utility services, code enforcement services, court records information, law enforcement records information, human resources information, museum information, event information, performance arts information, legal information, water conservation information, parks information, recreation services, library services, and future City	F	This is all supported out of the box. However, if the city has a large number of processes required or vocabulary needs they wish us to help with there may be an additional cost to help build glossaries, break out and rewrite processes and load them all for the several different agencies.

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	services; as well as, US Federal/State regulations		
Human Translation Services	Provide the capability to use America Sign Language (ASL) interpreters via video for the customers and includes speech to text of information for staff to participate in real-time conversation and clarity of conversation being interpreted. Detail the turnaround time to secure a ASL translator.	F	
Connectivity Capabilities	Technology, tools and services must include one or all connectivity options, but is not limited to; wireless, LAN, cellular, etc. and connectivity state should be visible to staff to determine connectivity status. Describe connectivity options.	F	
Integration Capabilities	The tool and services should be able to integrate with other city interpreter services.	F	
Types of Language Translation tools and Services	The tools and services should leverage one or all the following but is not limited to: Artificial Intelligence, neural networks, advanced algorithms, Machine Translation tools, Human Translation Services, Post-Edited Machine Translation, and Video Translation Services that adapt video content (subtitles, voiceovers) for different languages. Describe the approach for the types of language	F	Whatever is available on the market today or tomorrow, including engines for new languages, can easily be added, integrated and then instantly updated on any single, group or all ILA's instances.

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	translation utilized.		
Customer Support: Citizens and Public	Provide the capability to collect qualitative feedback via a customer service survey at the end of one-way communication and two-way conversation.	F	An exit URL can be created which can be routed to any survey created by the city.
Customer Support: Citizens and Public	Present a welcome message and disclaimer in the chosen output language prior to conversation.	F	
Customer Support: Internal staff	Provide training and onboarding support information to City of Chandler users via the tool and services.	F	
Tool and Services Hardware and Software setup options	Describe the software, hardware, setup via cloud, on-premise, hybrid options.	F	See Technical Specifications and Approach. All 3 are available.
Tool: Functionality	Describe functionality for access and use by staff and customers.	F	It can be accessed by anyone on any device or browser or can come with our hardware. Functionality is extensive. It supports deaf, hard of hearing, deafblind, low vision, languages, TTS, Translation, STT, Speech to speech, hailing, and admin interface, customization, phrases, word weighting and many more. https://www.translatelive.com/
Tool: Support	Provide remote mobile device management (MDM) services to address and resolve issues, install security updates, etc.	F	
Tool: Durability	Any device hardware will be primarily used at city front-counters and will be handled by customers and the	F	

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	public; therefore, must be durable to ensure long-term use.		
Tool: Inclusion	Take advantage of leveraging technology to increase interaction with community members that are deaf, hard of hearing, and blind by use of keyboard functionality in chosen language, connecting external keyboards including braille, and headset use. Provide any pertinent information.	F	The device works with Braille displays, hearing aids, loop systems and can utilize any common device that uses bluetooth or a 3.5mm headphone jack.
Reporting	Report on but not limited to; device location and the number of interactions, language and dialect used, length of conversation, issues, and resolution times.	F	

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TECHNICAL SPECIFICATIONS AND APPROACH

The following cloud services information is a subset of the technical specifications the Contractor provided in their RFP response. Additional security and technical information not contained herein was assessed and approved as acceptable as required.

CLOUD SERVICES (XaaS)

Requirement	Description	Response
6.1 Policy, Controls, and Compliance	1) Does your company have a written controls plan, policy, standards that contains the administrative, technical, and physical safeguards you use to collect, process, protect, store, transmit, dispose, or otherwise handle our data	1. TranslateLive is ISO 27001 certified and has information security plans, system security plans and multiple other plans including Disaster Recovery data retention and many more available to the customer via our Sprinto security portal.
	at rest where technically possible and legally permissible? a. Is your product capable of FIPS 140-2 compliant encryption? 9) Are files and records reviewed, retained, and purged in accordance with legal requirements, contractual obligations, and service level agreements? 10) What is your process for purging all files and records and removing access upon completion of the service, task, or contract? 11) Does your company have written business continuity/disaster recovery plans, which are tested on a periodic basis? Please elaborate. 12) Is your environment high availability? Please describe. 13) Describe your backup frequency and process, and are backups stored offline? 14) What are your recovery time objective (RTO) and recovery point objective (RPO)? 15) Does your company maintain up-to-date versions of anti-virus software, anti-malware, antispyware, and operating systems security patches? Please elaborate. 16) What will your company actively do to prevent security incidents or breaches, and how often do you plan to check for vulnerabilities? Please elaborate. 17) Does your company practice continuous vulnerability management? Please elaborate. 18) Does your system's external DNS solution support DNS Security (DNSSEC) to provide origin	city's own servers or its own individual managed server in the cloud by Translate live. 8. All information traveling over a network is fully encrypted with the translate live solution and all data is encrypted at rest in the translate live cloud. the product would be capable of passing FIPS 140-2 compliance. 9. All files and records and other customer data are purged in accordance with translate live data retention policy but these can be adjusted to fit contractual service level agreements if required. 10. 10. The process for purging all files and records and removing access is dependent on contractual obligations or follows the TranslateLive data retention policy which can be made available.11. 11. TranslateLive does have written business continuity and Disaster Recovery plans that are tested regularly to ensure compliance with our ISO certification. 12. TranslateLive public Cloud platform is set up with both microservices and kubernetes allowing multiple parts and instances of the platform to be high availability and easily fail over or be deployed instantaneously in the event of a failure. 13. The entire system is backed up using Snapshots nightly and stored in multiple cloud locations encrypted at rest. 14. Using Snapshots, the entire system can be rebuilt

EXHIBIT B
FEE SCHEDULE

Section 1: Itemized Pricing

All-inclusive pricing for hardware, software, and services.

Description	Price
ILA PRO Device Pricing	
1 ILA PRO dual sided tablet with stand, MDM included	$999.00 each
1 ILA Host with Guest including 1 to 1 rooms (App or Web)	
1 Unlimited Broadcast Room	Included with device
3-year ILA license including free ILA PRO hardware device	$2,499.00 each
White Glove, 24-hour, 365-day, 1-hour response, full SLA	$300 per license per year
Basic training per 25 licenses	Included
ILA Roam Device Pricing	
1 ILA Roam dual sided device, MDM included	$999.00 each
1 ILA Host with Guest including 1 to 1 rooms (App or Web)	$999.00 per year
1 Unlimited Broadcast Room	Included with device
3-year ILA license including free ILA Roam hardware device	$2,499.00 each
3-year cellular service	$599.00 per device
Basic training per 25 licenses	Included
Other Software and Services	
ASL translation services (300 minute block)	$975.00 each
Up to 5 processes and word helpers/replacements	Included
Additional training, customizations, processes	$175.00 per hour
Bluetooth keyboard	$20.00 each
Phone Receiver Handset	$23.00 each
Cable Lock for device	$42.00 each

Section 2: Annual Fees

Year 1

Description	Quantity	Fee
3-year ILA license including free ILA PRO hardware device	20	$49,980.00
1 Unlimited Broadcast Room	20	Included
White Glove, 24-hour, 365-day, 1-hour response, full SLA	20	$6,000.00
Basic Training	20	Included
3-year ILA license including free ILA Roam hardware device	5	$12,495.00
1 Unlimited Broadcast Room	5	Included
White Glove, 24-hour, 365-day, 1-hour response, full SLA	5	$1,500.00
Basic Training	5	Included
3-Year Cellular Service	5	$2,995.00

ASL translation services (300 minute block) all devices will share the minutes	1	$975.00
Bluetooth keyboard	20	$400.00
Phone Receiver Handset	20	$460.00
Cable Lock for ILA Pro	20	$840.00
	Year 1 Total	**$75,645.00**

Year 2

Description	Quantity	Fee
3-year ILA license including free ILA PRO hardware device	20	$49,980.00
1 Unlimited Broadcast Room	20	Included
White Glove, 24-hour, 365-day, 1-hour response, full SLA	40	$12,000.00
Basic Training	20	Included
ASL translation services (300 minute block) all devices will share the minutes	1	$975.00
Bluetooth Keyboard	20	$400.00
Phone Receiver Handset	20	$460.00
Cable Lock for ILA Pro	20	$840.00
	Year 2 Total	**$64,655.00**

Year 3

Description	Quantity	Fee
3-year ILA license including free ILA PRO hardware device	20	$49,980.00
1 Unlimited Broadcast Room	20	Included
White Glove, 24-hour, 365-day, 1-hour response, full SLA	60	$18,000.00
Basic Training	20	Included
ASL translation services (300 minute block) all devices will share the minutes	1	$975.00
Bluetooth Keyboard	20	$400.00
Phone Receiver Handset	20	$460.00
Cable Lock for ILA Pro	20	$840.00
	Year 3 Total	**$70,655.00**

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EXHIBIT C
SERVICE LEVEL REQUIREMENTS

As part of the project management process, in coordination with the City, the Contractor must develop detailed roles and responsibilities and needed operational processes for support and services included in this agreement including, but not limited to:

White Glove Service: Contractor must provide 24-hour, 365-day, 1-hour response support to issues and outages. Based on the issue or outage, an estimated resolution time will be provided.

Monthly Data Report. By the 10th of each month, Contractor will provide a comprehensive data report to the Chandler DEI Division that details for each device; the department location and time device deployed, the total of communication interactions including conversation length and chosen language. Required monthly reporting data must be backed up accordingly to ensure available to report on monthly and annually.

Scheduled Downtime. Contractor's standard maintenance window is _____ a.m./p.m. to _____a.m./p.m. at which time the Language Translation services may be unavailable for use. Contractor will notify City for any maintenance expected to prevent access to the Language Translation Support or Services for more than 15 minutes. The notification will include the reason and the procedure for implementing the change. Email notification will be sent to City email address 30 days in advance and again the week of implementation.

Unscheduled Downtime. Any unplanned time the Language Translation services are not available that was not scheduled prior to outage. Email notification will be sent to City email address as soon as outage is identified.

Authorized Contacts. Within 30 days of the execution of the Agreement, each Party will provide to the other a list of its authorized contact people. Each Party must give to the other 30 days' prior notice of any proposed changes to the list of authorized contact people.

Issue Monitoring and Reporting. Contractor will provide to City email address monthly report that includes

- Number of support tickets Open and Closed within the Month
- Number of overall Open and Closed tickets Annually
- Average Length to close a ticket
- Number of new features requested
- Number of security patches deployed
- Number of new features deployed

Hourly Support Service. Support Services that are performed at the written request of the City that are outside the scope of, or in addition to, the Support Services detailed herein, will be deemed hourly service, and City will be billed in accordance with Contractor's then current time and materials support policy. Upon City's request, Contractor will provide a written estimate of the cost to perform the work prior to beginning work on any task that is being billed in accordance with Contractor's time and materials support policy.

Product and Technology Services information

The following information is a subset of the technical specifications the Contractor provided in their RFP response. Additional product and technical services information not contained herein was assessed and approved as acceptable as required.

PRODUCT INFORMATION

Requirement	Description	Response
1.1 Product Description	Overview of your solution	TranslateLive's ILA solves language and disability communication challenges by allowing people to have real-time conversations in their native language. ILA is the only solution to combine HIPAA compliant and private AI, organization specific processes pre-loaded for 100% accuracy, backed with the ability to access live interpreters via audio or video.
1.2 Product Customer Base	Overview of key clients using your solution: in production, beta-testing, consideration	We currently have thousands of customers using our product which include multiple Fortune 500 companies, schools, counties, major cities including Boston, Denver, Philadelphia, NYC and many more. We are testing and considering new features for uploading phrases easier, we are looking at new engines and looking at AI/Interpreter at the same time.
1.3 Product Direction	Summary of product "future state" direction	To be the market leader in secure, accurate, inclusive communication for interactions with citizens around the world and to work out of the box for as many different needs as possible.
1.4 Product Differentiation	Describe how your product is different from other products on the market today	Translate lives product provides the highest level of security and customization on the market. We have the ability to connect to multiple different types of engines and we allow communication to be set up using almost any device or web browser. The TranslateLive administrative interface also provides the level of Enterprise control that is unmatched in the industry. Most of all the product allows you to be extremely accurate and it is very easy to use due to its two-sided nature making natural conversations easy and instant.

PRODUCT ACCESSIBILITY

Requirement	Description	Response
2.1 Product Integration	Describe the APIs or integration methods available along with a summary of each	The entire system is composed of mirco-services but any API integration is custom and would need to be defined by the customer.
2.2 Product 3rd Party Products	List any required third party software or service required to facilitate your product application functionality	No third party software is required to facilitate our product except for a web browser In the event someone is connecting remotely and potentially Microsoft Excel to be able to view usage reports. If using the web version you would need Chrome, Safari, or Firefox.
2.3 Product UI Platforms	Describe your product's portability to mobile devices, tablet PCs, smart phones, etc.	The product can be used on any modern mobile device, tablet, PC or smartphone via an installable app or using the existing web browser such as Firefox, Chrome and Safari.
2.4 Product Reporting Capabilities	Summary of product reporting methods (e.g., built-in, custom, ad hoc capabilities, data mining/data warehouse generation, formatting supported (pdf, excel, csv, etc.)	By default the only information recorded is a call detail record of an interaction which includes a timestamp language accent and duration. These are provided to the customer via a Microsoft Excel spreadsheet and in the future the customer will be able to directly access reports through the administration portal. TranslateLive also retains connection records and IP addresses as required by law. There is also the option when running on your own servers to enable database access login as well as the ability to record conversations which creates a wave file for each instance someone is speaking with a text file transcription of what was returned and a text file of the translation of what was returned. Again this is only available if the system is set up on your own cloud.
2.5 Product Data Archiving	Overview of product strategy for data archiving and data purging	We don't save any conversational data. The only data saved is CDR which is purged at the customer's request.

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PRODUCT PERFORMANCE/MAINTENANCE

Requirement	Description	Response
3.2 Performance and Latency	List the minimal required bandwidth and maximum latency to achieve acceptable performance	For the use of AI the minimal required bandwidth is 64k per second. If accessing live interpreters via video such as American Sign Language then 384k per second is required. The ILA product will buffer speech and text so it will still work even up to a latency of 15 seconds with no communication.
3.3 Monitoring	Does your system include real time performance network monitoring? Please elaborate.	Our system does include real-time performance network monitoring CPU monitoring memory monitoring and storage monitoring as well as database monitoring but this is not available directly to the customer it's only available to translate live operational staff.
3.4 Product Maintenance (Releases & Patches)	1) Overview and cycle time interval timelines for standard release updates maintenance functionality. 2) Process for installing new and updated versions or patches. 3) Provide the number releases planned per year. 4) Provide the number of times updates were released in the past year for your software. 5) Describe support which is provided for updates	1. TranslateLive releases updates for the server and the application for both feature updates and security updates. The cycle will not exceed four times per year. 2. The process for installing new versions and patches begins with informing the customer that it will be released. Changes to the server side depending on need may happen more frequently but do not affect the user interface or functionality. Updates can be installed through the application by the end user or updates can be automatically installed Via mobile device management upon the customer's request. 3. So far in 2024 there has been one release and there are two more planned application releases. 4. In the last year the product was updated four times. 5. Support for updates are included in the manual update through the "what's new" button as well as the translate live.com help page. For major UI changes and releases, retraining for end users is an option.

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EXHIBIT D
SUPPORT SERVICES REQUIREMENTS

SUPPORT SERVICES

Contractor will perform the following Software, Hardware, and Implementation Support Services that will serve as a guide for creating operational service level proceeses including defined roles and responsibilities required for supporting City staff, Chandler residents, and the public to efficiently and effectively use the language translation device and services.

Language Translation Software and Hardware Support

- Contractor will install prior to delivering device, MDM solution needed to remotely diagnose reported issues
- Provide technical services to City to attempt to correct diagnosed issues
- A support incident may require multiple interactions and off-line research to resolve issues in coordination with City
- Report translation issue (e.g., incorrect translations, technical problems with the translation software or hardware device). Include relevant details such as department, location and how the issue occurred
  - Contractor support should respond promptly with any follow-up questions to facilitate quicker diagnosis and resolution
  - City will adhere to any troubleshooting steps or instructions given by Contractor support
  - Verification that the translation issue has been resolved or identified next steps to find a resolution were provided (e.g., replace hardware device or issue may require additional research/development)
  - Once the issue is resolved; and satisfied with solution, Contractor support can close ticket

Support Services as outlined in Contractor's RFP response include:

Product Support

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Requirement	Description	Response
4.1 Product Support Model	1) Overview of product generic support model (e.g., general SLAs, customer support, critical issue support, outages, availability of application) 2) Provide the hours of operation for technical support and escalation for emergencies. 3) Describe your service/support call procedures. 4) Describe specific technical support and account management people to be assigned to our account and where they are located. 5) Describe how you prioritize customers for support. 6) Describe the General Support SLA severity and priority. 7) Location of technical support resources	1. Generic support model includes basic training and adding a few processes, includes email support, 24 hour response time, and no 99.9% uptime. 2. 8 a.m. to 5pm CST 3. End User emails support, we then diagnose and send resolution steps or reach out for further troubleshooting 4. General support via Support@translatelive.com email box as well as an account manager located in United States 5. First Come First Serve, with exceptions for SLA requirements 6. There is no priority que for issues at this time 7. https://www.translatelive.com/help
4.2 Product Problem Support	1) Describe the processes available for customers to report bugs and receive software fixes. 2) Describe the guarantees for turnaround time on problems	1. Email support@translatelive.com 2. Varies based on issue and resolution but normally within 24 hours unless an update to the software is required to fix
4.3 Product Enhancements	Describe product enhancement request process and product enhancement release cycle time frequencies to the market	Translate live is always looking for feedback and product enhancement requests. The process for implementing these enhancements starts with a discussion of timeline cost scheduling and roadmap. These can be greatly influenced by the customer's willingness to pay for specific enhancements. Once it's decided that an enhancement is going to be developed it is developed, tested and then becomes part of one of the scheduled releases again.

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IMPLEMENTATION

Requirement	Description	Response
8.1 Product Implementation Timeline	1) Overview of product implementation model (e.g., planning, average implementation timeline). 2) Provide the risks associated with these timeframes, and best practices applied to achieve expected outcomes.	1. Time frame depends on type of implementation and number of locations as well as speed with which the customer provides and responds to TranslateLive information requests. Basic: Receive PO, work with customers during logistics to pre-load anything and meet security requirements, ship, connect to network, provide training and work with support to customize processes or wording. For basic installation this is 2 to 4 weeks. 2. Potential risks include: being overwhelmed with large orders leading to a delay in

		delivery. Not receiving shipping information or IT information when required. There being an issue with network connectivity at a location where the customer wants to use the ILA. Best practices for avoiding these risks is constant communication and a weekly review with the customer to ensure open lines of communication.
8.2 Product Implementation Planning/Resourcing	1) Describe what you provide to the city of Chandler in reviewing and approving the resources that you will assign to the city. 2) Describe external business partners utilized for implementation services.	1. Translate live uses a Phase approach. In the review process translate live will provide multiple documents over viewing security privacy terms and conditions possible solutions Etc during implementation we take a phased approach phrase one would be it security and network configuration provide documentation on the steps necessary to incorporate network settings MDM configuration Network certificates firewall ports and any other security Phase 2 would be training translate live provides multiple resources in the form of live Human 1-hour training where we record the sessions a resource library and videos for deployment support in ongoing support is provided via email and additional trainings when necessary account management with translate live will check in with end user teams on an ongoing basis updates to any parts of the system will be provided to Chandler and the way of documentation.

		2. No external business partners are utilized for implementation of the service. Direct employees of TranslatLive will provide all associated implementation services.

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PRODUCT USER ADOPTION

Requirement	Description	Response
5.1 Product Documentation	1) Overview of standard product documentation access (e.g., online documentation, help access, etc.) 2) Provide how and when this documentation is updated. 3) Describe documentation updates that accompany any new software releases	1. TranslateLive provides multiple forms of documentation for its products including user guides, videos, frequently asked questions as well as email support. 2. Documentation is updated as part of the process of new releases to ensure that when a new release comes out all documents and videos have been updated to include the new release as part of a release cycle. 3. Document updates are done as part of the software release process. Frequently asked questions and knowledge bases can be updated at any time when new or relevant information becomes available.
5.2 Product Training	Describe product training mediums available for the end user community	TranslateLive provides training videos as well as live training for end users done by the translate live training team. Depending on the size and number of devices ordered multiple trainings can be included. For large customers retraining due to turn over or significant changes in the application and also be provided.

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EXHIBIT E
DISASTER RECOVERY PLAN

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EXHIBIT F
EXIT PLAN

For purposes of this Exit Plan, the following terms shall bear the meanings set out below:
"**Replacement Services**" means any services which are substantially similar to the Services and which Client or one of its Affiliates procures in substitution for the Services following the termination of this Agreement, whether those services are provided internally and/or by any third party.
"**Replacement Supplier**" means any third party service provider of Replacement Services appointed by Client or one of its Affiliates from time to time.
"**Termination Assistance Fees**" means the charges payable by the Licensee for the Termination Services as shall be set out in the Exit Plan.
"**Termination Period**" means the period of 12 months (which may be reduced at the Licensee's discretion by giving Licensor 60 days' written notice) commencing on the date of service of any notice of termination of this Agreement.
"**Termination Services**" means the termination transition services to be provided under the Exit Plan. In addition, Services under this Agreement shall be provided in accordance with the terms of this Agreement during the Termination Period.

1. Provided that Client and its Affiliates are in compliance in all material respects with their obligations under this Agreement, for the Termination Period, Provider shall provide all reasonable and necessary transition assistance to Client and its Affiliates to allow, as chosen by Client, the orderly transfer and replacement of the Services by Client or a Replacement Supplier, or their respective Representatives. Such transition may entail the substitution of Web sites, communication networks, software, servers, and reports, and/or the termination or modification of the Services in whole or in part. Provider and Client shall cooperate with each other in the production of the Exit Plan in accordance with this Schedule with a view to completing the Exit Plan in a timely manner.
2. As soon as reasonably practicable after any notice of termination is served in accordance with this Agreement, the Parties shall:
   (a) Agree upon a date (which shall be no later than 14 calendar days after the date of such meeting) for the joint production and circulation of a first draft of the Exit Plan; and
   (b) Appoint a senior management individual of each of the Parties, each of whom shall act as a point of contact for the Termination Period and to deal with all matters relating to termination of both the Services and/or any license relating to the Licensed Materials granted under this Agreement.
3. The Exit Plan shall:
   (a) Address the scope of the Termination Services, Termination Assistance Fees and the service levels applying to the Termination Services. Unless otherwise agreed by the parties, each party shall continue to meet its respective obligations under this Agreement during the Termination Period. Provider acknowledges that it is important to Client to effect an orderly transition in-house or to a Replacement Supplier of the Replacement Services and, in this respect, it is also important that there is no degradation in the provision of the Services. All Termination Assistance Fees shall be chargeable as stated in the Exit Plan; and
   (b) Describe more particularly the process by which the parties shall return or cease to use each other's Confidential Information; and
   (c) Address the project management of the Termination Services and identify relevant individuals who shall manage the provision and implementation of the Termination Services.
4. Upon request by Client during the Termination Period, Provider shall provide to Client any reasonable documentation describing, explaining or which would otherwise assist Client in inviting third party

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service providers to supply the same or similar software and/or services (or any part of the same) and negotiating alternate arrangements with those third parties with regard to the provision of Replacement Services. Any such provision shall be made subject to reasonable licensing and/or confidentiality obligations which shall be agreed by the parties.

5. Provider shall provide or make available to Client detailed information, data, and records reasonably necessary for the provision of services similar to the Services and/or any software which may be used by Client or a Replacement Provider in lieu of the Software post termination of this Agreement. Any such availability shall be made subject to reasonable licensing or confidentiality obligations which shall be agreed by the parties.
6. The Parties shall agree any other reasonably necessary provisions to facilitate a smooth and orderly transition from Provider to Client or the Client's nominated Replacement Supplier.

Notes

All schedules referred to in this form must be drafted by the user and are not supplied.

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EXHIBIT F
INSURANCE REQUIREMENTS

A. <u>Minimum Scope and Limits of Insurance</u>: Contractor must provide coverage with limits of liability not less than those stated below.

1. <u>Commercial General Liability – Occurrence Form</u>
   Said insurance must also include coverage for products completed operations, independent contractors, personal injury, property damage, and advertising injury.

Products – Completed Operations Aggregate	$4,000,000
Each Occurrence	$2,000,000

   The policy must be endorsed to include the following additional insured language: "The City of Chandler, its agents, representatives, officers, directors, officials, employees, and volunteers shall be named as an additional insured with respect to liability arising out of the activities performed by Contractor." This endorsement may not contain an exclusion or limitation of completed operations coverage as regards the additional insured except with respect to the stated aggregate limits of liability.

   The policy may not exclude the explosion/collapse/underground ("xcu") hazard.

2. <u>Worker's Compensation and Employers' Liability</u>

Workers' Compensation	Statutory
Employers' Liability	
Each Accident	$1,000,000
Disease – Each Employee	$1,000,000
Disease – Policy Limit	$1,000,000

   Policy shall contain a waiver of subrogation against the City of Chandler.

3. <u>Tech E&O and Network Security & Privacy Liability Insurance (Cyber)</u>
   In addition to the insurance requirements set forth in the Agreement, Contractor agrees to provide the following insurance coverage and limits of coverage as part of this Agreement.

Per Loss	$2,000,000
Aggregate	$2,000,000

   The policy shall cover professional misconduct or lack of ordinary skill for those positions defined in the Scope of Services of this Agreement. In the event that the professional liability insurance required by this Agreement is written on a claims-made basis, Contractor warrants that any retroactive date under the policy shall precede the effective date of this Agreement; and that either continuous coverage will be maintained for an extended discovery period will be exercised for a period of two (2) years beginning at the time work under this Agreement is completed. If such insurance is maintained on an occurrence form basis, Contractor shall maintain such insurance for an additional period of one (1) year following termination of Agreement. If such insurance is

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maintained on a claims-made basis, Contractor shall maintain such insurance for an additional period of three (3) years following termination of the Agreement. If Contractor contends that any of the insurance it maintains pursuant to other sections of this clause satisfies this requirement (or otherwise insures the risks described in this section), then Contractor shall provide proof of same. The insurance shall provide coverage for the following risks:

3.1 Liability arising from theft, dissemination and / or use of confidential information (a defined term including but not limited to bank account, credit card account, personal information such as name, address, social security numbers, etc. information) stored or transmitted in electronic form.

3.2 Network Security Liability arising from the unauthorized access to, use of or tampering with computer systems including hacker attacks, inability of an authorized third party, to gain access to your services including denial of service, unless caused by a mechanical or electrical failure.

3.3 Liability arising from the introduction of a computer virus into, or otherwise causing damage to, a customer's or third person's computer, computer system, network or similar computer related property and the data, software, and programs thereon.

3.4 Additional Requirements: The policy shall provide a waiver of subrogation.

B. **Additional Insurance Requirements**: The policies must contain, or be endorsed to contain, the following provisions: Contractor's insurance coverage must be primary insurance and non-contributory with respect to the obligations that Contractor has undertaken under this Agreement. The policies must contain a severability of interest clause and waiver of subrogation against the City, its officers, officials, agents, volunteers, and employees, for losses arising from work performed by the Contractor under this Agreement.

C. **Notice of Cancellation**: Each insurance policy required by the insurance provisions of this Agreement must provide the required coverage and must provider thirty (30) days prior written notice of cancellation to the City except for non-payment of premium for which a ten (10) day notice will be provided. Such notice must be sent directly to the addresses listed below and must be sent by certified mail, return receipt requested:

City of Chandler
Attention: Purchasing Division
P.O. Box 4008, Mail Stop 901
Chandler, Arizona 85244-4008
Phone: (480) 782-2400
Email: purchasing@chandleraz.gov

With a copy to: Office of the City Attorney
Attention: Risk Management
175 South Arizona Avenue
P.O. Box 4008 Mail Stop 602
Chandler, Arizona 85244-4008

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Phone: (480) 782-4640
Fax: (480) 782-4652
Email: legal.notices@chandleraz.gov

D. **Acceptability of Insurers**: Insurance is to be placed with insurers duly licensed or approved unlicensed companies in the State of Arizona and with an "A.M. Best" rating of not less than A- VII. City in no way warrants that the above-required minimum insurer rating is sufficient to protect Contractor from potential insurer insolvency.

E. **Verification of Coverage**: Contractor must furnish City with certificates of insurance (ACORD form or equivalent approved by City) as required by this Agreement. The certificates for each insurance policy are to be signed by a person authorized by that insurer to bind coverage on its behalf. All certificates and endorsements are to be received and approved by City before work commences. Each insurance policy required by this Agreement must be in effect at or prior to commencement of work under this Agreement and remain in effect for the duration of the Agreement. Failure to maintain the insurance policies as required by this Agreement or to reasonably provide evidence of renewal is a material breach of this Agreement. All certificates required by this Agreement must be sent directly to the City of Chandler Information Technology Department with a copy to Risk Management as the addresses listed in Section C. The Agreement number and description are to be noted on the certificate of insurance. At City's request, Contractor must make certified copies of all insurance policies required by this Agreement available for City's review through a representative and at Contractor's most proximate business location.

F. **Approval**: Any modification or variation from the insurance requirements in this Agreement must have prior approval from the Office of the City Attorney, whose decision will be final. Such action will not require a formal contract amendment but may be made by administrative action.

City Council Memorandum Community Services Memo No. CP25-049

Date: November 04, 2024
To: Mayor and Council
Thru: Joshua H. Wright, City Manager
Dawn Lang, Deputy City Manager - CFO
John Sefton, Community Services Director
Daniel Haskins, Capital Projects Division Manager
From: Rachel Marx, Engineer
Subject: Job Order Project Agreement No. PR2501.401 with DNG Construction LLC, Pursuant to Job Order Master Agreement No. JOC2403.401, for the Apache Park Restroom Replacement

---

Proposed Motion:

Move City Council award Job Order Project Agreement No. PR2501.401 to DNG Construction, LLC, pursuant to Job Order Master Agreement No. JOC2403.401, for the Apache Park Restroom Replacement, in an amount not to exceed $445,248.

Background/Discussion:

Apache Park is a 9.47-acre Neighborhood Park located at 1300 N. Hartford Street that was originally constructed in 1977. The park offers numerous recreational opportunities including lighted tennis courts, shaded playground, outdoor racquetball courts, sand volleyball courts, basketball court, restroom, and lighted pathways.

The existing restroom building within the park has deteriorated due to use, time, weather conditions, and the materials used. Over the years, staff has made various repairs to the structure to keep it usable. Unfortunately, this restroom has become nonfunctional and is closed to the public. Each year, funds are allocated to maintain and improve Chandler's existing Neighborhood Parks. During the FY 2023-24 budget process, funding was allocated to remove and replace this restroom with an updated restroom similar in size.

This project scope of work consists of design plans and installation of a

new prefabricated restroom building, state permitting, demolition of the existing restroom building, site preparation, preparation of existing utility service connections, and the repair/replacement of hardscape and landscape directly adjacent to the restroom. The new restroom doors will be automated to lock at 10:30 p.m. and unlock at 6:00 a.m. using the city control system. The agreement completion time is 170 calendar days following Notice to Proceed.

Evaluation:

The selection process was conducted in accordance with city policy and procedure and state law. The costs proposed for this project have been evaluated by staff and determined to be reasonable.

Fiscal Impact

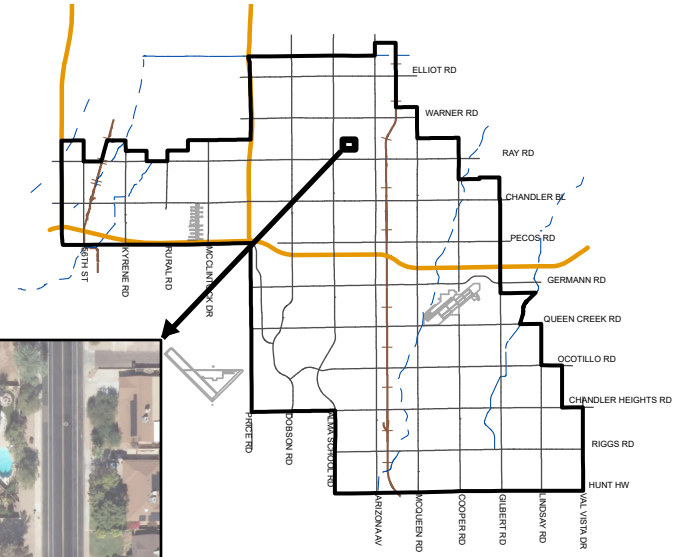
Account No.	Fund Name	Program Name	Dollar Amount	CIP Funded Y/N
420.4580.6210.6PR049	Park General Obligation Bonds	Existing Neighborhood Park Improvem	$445,248	Y

Attachments

Location Map

Agreement

PR2501.401 APACHE PARK RESTROOM REPLACEMENT - LOCATION MAP



MEMO NO. CP25-055

PROJECT AREA

NTS

ChanGIS

F:\ENGINEER\GENSERV_ArcGISPro_Shared\Map Requests\Capital Projects\2025\CP25-055\CP25-055\CP25-055.aprx 9/26/2024 JulietteC

CITY OF CHANDLER
JOB ORDER PROJECT AGREEMENT

APACHE PARK RESTROOM REPLACEMENT

Project No. PR2501.401
Council Date: November 7, 2024

This JOB ORDER PROJECT AGREEMENT ("Job Order") is made this _____ day of _____ 202____ ("Effective Date"), by and between the City of Chandler, an Arizona municipal corporation, ("City") and **DNG Construction, LLC**, an Arizona Corporation, ("JOC Contractor") and is entered into pursuant to Job Order Master Agreement No. **JOC2403.401** ("JOC Master Agreement"). City and JOC Contractor may be referred to individually as "Party" or collectively as "Parties").

City and JOC Contractor, in consideration of the mutual covenants herein set forth, agree as follows:

RECITALS

A. On or about **February 16, 2024**, the Parties entered into the JOC Master Agreement, which terms and conditions are made a part of and incorporated into this Job Order Project Agreement by this reference.

B. City proposes to engage JOC Contractor for construction services as more fully described in Article 1 and **Exhibit "A"**, which is attached to and made a part of this Job Order by this reference.

C. JOC Contractor is ready, willing, and able to provide the services described in **Exhibit "A"** for the compensation and fees set forth and as described in **Exhibit "B"**, which is attached to and made a part of this Agreement by this reference.

ARTICLE 1. DESCRIPTION OF WORK

The Parties enter into this Job Order Project Agreement for the **APACHE PARK RESTROOM REPLACEMENT**, Project Number **PR2501.401**. The scope of work consists of **the design of a prefabricated restroom building and accompanying demo, utility, and hardscape/landscape plans, State permitting, demolition, and construction for the prefabricated building and accompanying utility connections, landscape, and hardscape**, all as more particularly set forth in **Exhibit "A"** attached hereto and incorporated herein by reference.

The JOC Contractor will not accept any change of scope, or change in Agreement provisions, unless issued in writing, as a Agreement amendment or change order and signed by the authorized signatories for each party.

Performance and Payment Bonds, as set forth in **Exhibit "C"** and **Exhibit "D"** respectively attached hereto and incorporated herein by reference, will be due prior to execution of each Job Order Project Agreement in the full amount of each Job Order.

At project completion, JOC Contractor must complete Contractor's Affidavit Regarding Settlement of Claims and Certificate of Completion, as set forth in **Exhibit "E"** and **Exhibit "F"** respectively attached hereto and incorporated herein by reference.

ARTICLE 2. PROJECT PRICE

City will pay JOC Contractor for completion of the Work in accordance with the JOC Master Agreement a fee not to exceed the Guaranteed Maximum Price of **$445,248** Dollars determined and payable as set forth in JOC Master Agreement and **Exhibit "B"** attached hereto and made a part hereof by reference.

ARTICLE 3. AGREEMENT TIME & SCHEDULE

JOC Contractor agrees to complete all Construction within **240** calendar days from the Notice to Proceed (NTP) Date.

ARTICLE 4. JOB ORDER CONTACTS

The following parties serve in the capacity below for this Job Order Project.

CITY:	Construction Project Manager: Jason Garcia	
	Phone:	480-782-3453
	Email:	Jason.Garcia@chandleraz.gov
JOC CONTRACTOR:	DNG Construction, LLC	
	3933 E. La Salle St. Phoenix, AZ 85040	
	JOC Contractor Representative: Dominic DeMark	
	Phone:	480-361-9137
	Email:	ddemark@dngllc.com

ARTICLE 5. FORCED LABOR OF ETHNIC UYGHURS PROHIBITED

By entering into this Agreement, Contractor certifies and agrees Contractor does not currently use and will not use for the term of this Agreement: (i) the forced labor of ethnic Uyghurs in the People's Republic of China; or (ii) any goods or services produced by the forced labor of ethnic Uyghurs in the People's Republic of China; or (iii) any contractors, subcontractors or suppliers that use the forced labor or any goods or services produced by the forced labor of ethnic Uyghurs in the People's Republic of China

SIGNATURE PAGE TO FOLLOW

IN WITNESS WHEREOF, the Parties have executed this Job Order as of the Effective Date.

"CITY" CITY OF CHANDLER

MAYOR

RECOMMENDED BY:

Daniel Haskins

Daniel Haskins, P.E.
CIP City Engineer

APPROVED AS TO FORM:

City Attorney

ATTEST:

City Clerk Seal

"JOC CONTRACTOR"
DNG Construction, LLC

10/9/24

Signature Date

Dominic DeMark
Print Name

President
Title

ddemark@dngllc.com
Signer Email Address

EXHIBIT A
SCOPE OF WORK

DNG CONSTRUCTION, LLC
DESIGN/BUILD - CONSTRUCTION MANAGEMENT - GENERAL CONSTRUCTION

3933 E. La Salle St.
Phoenix, AZ 85040
Phone- 480-361-9137
AZ ROC- 282951, 288968
dngcontruction.com

EXHIBIT "A"

JOB ORDER COST PROPOSAL
COVER SHEET
APACHE PARK RESTROOM

09/20/24

Rachel Marx
Engineer
City of Chandler/Capital Project Divisions

Dear Rachel,

DNG Construction, LLC submits our proposal for the Apache Park Restroom.

Our proposal includes the design/engineering plans for placement of a prefabricated restroom. J2 Engineering (along with their engineering subs) will prepare a site plan amendment, electrical one-line and submit to Chandler for review and permitting. Public Restroom Company (prefabricated restroom sub) will prepare construction set of plans for State permitting and a copy to J2 for their City of Chandler submittal package. Upon obtaining permits from both the City and State, DNG will demo the existing restroom and prepare the existing utilities (water/sewer) to be placed in the new modular restroom. DNG will also prepare the building pad as outlined in the construction documents. Hardscape and landscaping will be repaired and tied in to the building.
Our proposal includes general conditions, overhead & fee, sales tax and insurances and all related constructions costs. Our total proposal amount is **$445,248** which includes **$40,415** in owners allowance and our project fee is **$30,666.** We anticipate the project to last about **8 months.**

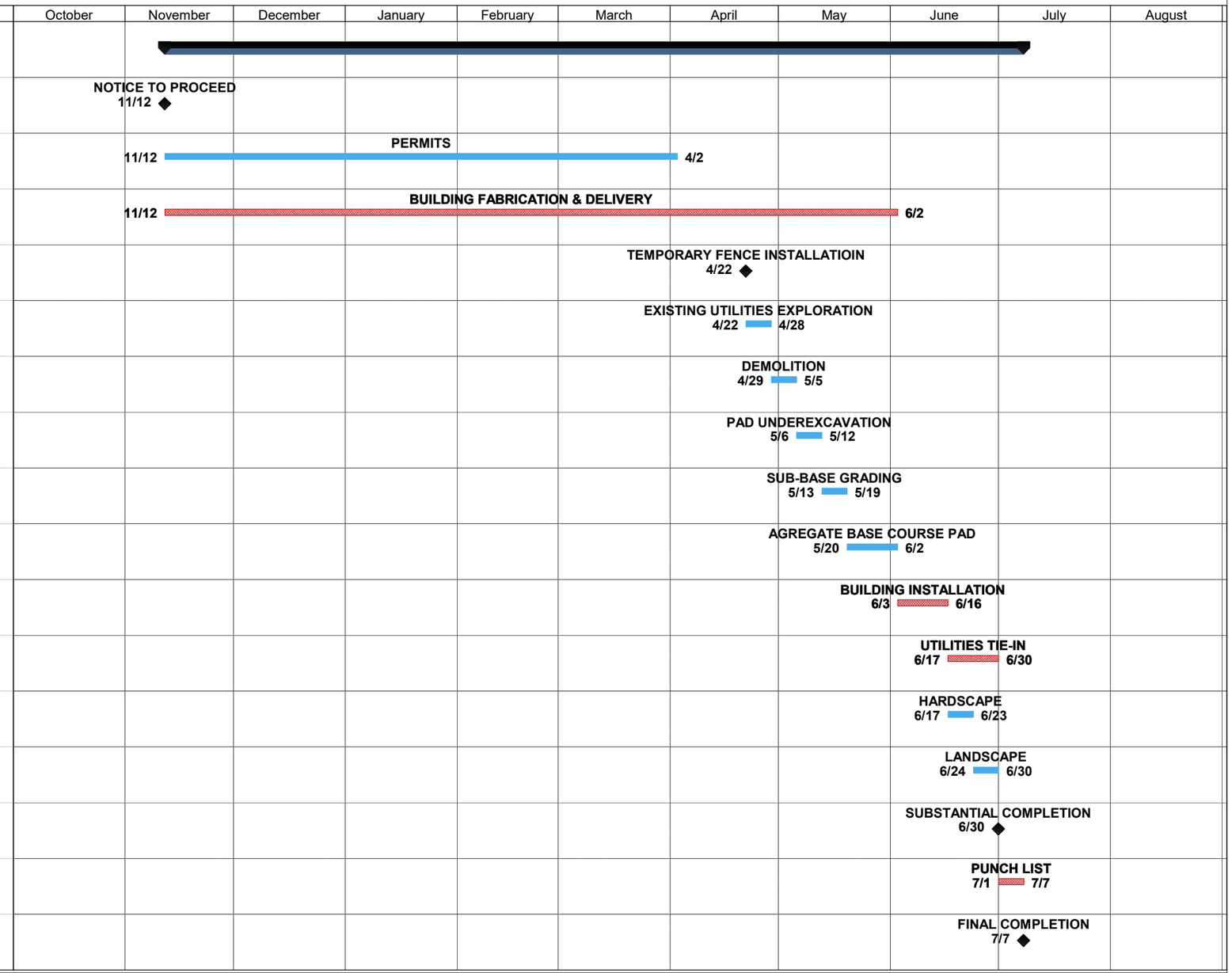
Please let us know if you have any concerns or comments relating to our proposal and look forward to commencing work.

Sincerely,

Dominic DeMark
President

APACHE PARK RESTROOM RENOVATION

ID	Task Name	Days	Start	Finish	Predecessors
1	**APACHE PARK RESTROOM RENOVATION**	**170 d**	**Tue 11/12/24**	**Mon 7/7/25**	
2	NOTICE TO PROCEED	0 d	Tue 11/12/24	Tue 11/12/24	
3	PERMITS	102 d	Tue 11/12/24	Wed 4/2/25	2
4	BUILDING FABRICATION & DELIVERY	145 d	Tue 11/12/24	Mon 6/2/25	2
5	TEMPORARY FENCE INSTALLATIOIN	0 d	Tue 4/22/25	Tue 4/22/25	4FS-30 d
6	EXISTING UTILITIES EXPLORATION	5 d	Tue 4/22/25	Mon 4/28/25	5
7	DEMOLITION	5 d	Tue 4/29/25	Mon 5/5/25	6
8	PAD UNDEREXCAVATION	5 d	Tue 5/6/25	Mon 5/12/25	7
9	SUB-BASE GRADING	5 d	Tue 5/13/25	Mon 5/19/25	8
10	AGREGATE BASE COURSE PAD	10 d	Tue 5/20/25	Mon 6/2/25	9
11	BUILDING INSTALLATION	10 d	Tue 6/3/25	Mon 6/16/25	4
12	UTILITIES TIE-IN	10 d	Tue 6/17/25	Mon 6/30/25	11
13	HARDSCAPE	5 d	Tue 6/17/25	Mon 6/23/25	11
14	LANDSCAPE	5 d	Tue 6/24/25	Mon 6/30/25	13
15	SUBSTANTIAL COMPLETION	0 d	Mon 6/30/25	Mon 6/30/25	12
16	PUNCH LIST	5 d	Tue 7/1/25	Mon 7/7/25	15
17	FINAL COMPLETION	0 d	Mon 7/7/25	Mon 7/7/25	16



Project: APACHE PARK SEPT 20, 2024
Project Manager: JOSE TORRES
Site Superintendent: DOUGLAS MACY

Task Critical Milestone Summary Progress

DNG CONSTRUCTION, LLC
DESIGN/BUILD - CONSTRUCTION MANAGEMENT - GENERAL CONSTRUCTION

EXHIBIT B
FEE SCHEDULE

DNG CONSTRUCTION, LLC
DESIGN/BUILD - CONSTRUCTION MANAGEMENT - GENERAL CONSTRUCTION

3933 E. La Salle St.
Phoenix, AZ 85040
Phone- 480-361-9137
AZ ROC- 282951, 288968
dngcontruction.com

EXHIBIT "B"

JOB ORDER COST PROPOSAL
SUMMARY SHEET
APACHE PARK RESTROOM

Negotiated Prices			
Price of Subcontractor(s)		$	283,271
Price of Subconsultant(s)		$	16,291
General Conditions		$	41,175
Preconstruction Labor (if applicable)		$	-
Construction Labor (if applicable)		$	-
SUBTOTAL (NEGOTIATED PRICES):		**$**	**340,737**
Overhead and Profit (Coefficient per Job Order Master Agreement)	**9%**	**$**	**30,666**
TOTAL (NEGOTIATED PRICES + OVERHEAD & PROFIT):		**$**	**371,403**
Insurance, Bonds, & Taxes			
Sales Tax, Material Only (Current Tax Rate) **ENTER TAX % HERE:**	**5.07%**	$	19,502
General Liability Insurance Percentage (Actual Cost per Job Order)		$	4,547
Builder's Risk Insurance Percentage (Actual Cost per Job Order)		$	2,021
Payment/Payment Bond (Actual Cost per Job Order)		$	6,679
SUBTOTAL (INSURANCE, BONDS, & TAXES):		**$**	**32,748**
COMBINED TOTAL (TOTAL + INSURANCE, BONDS, & TAXES):		**$**	**404,151**
City's Allowance	**10.00%**	**$**	**40,415**
TOTAL JOB ORDER:		**$**	**445,248**

Per the Job Order Master Agreement - This Fee Table includes all fees, costs, insurance and bond premiums, allowances, construction contingency, and taxes of any type necessary to fully, propertly and timely perform and construct the Work. Also per the Job Order Master Agreement - For any portion of the Work which, either through this Contract, Change Order or otherwise, is performed and paid for on a cost, or time and materials basis, the costs may be reimbursed to JOC Contractor and chargeable against the Contract Price will be determined as set forth in MAG 109.5.

DNG CONSTRUCTION, LLC

DATE: 04/05/24

GENERAL REQUIREMENTS ESTIMATE

PROJECT: APACHE PARK RESTROOM
LOCATION: CHANDLER, AZ

PREP. BY: DD/JT
CHK'D BY:

DESCRIPTION	QTY.	UNITS	UNIT COST	TOTAL COST
PROJECT MANAGER- DESIGN/PERMITTING	24	HRLY	$ 102.50	$ 2,460
PROJECT MANAGER	60	HRLY	$ 102.50	6,150
PROJECT SUPERINTENDENT	240	HRLY	95.25	22,860
FIELD ENGINEER	0	HRLY	76.50	-
LABORER	0	HRLY	42.25	-
CARPENTER	0	HRLY	56.50	-
BUILDING PERMIT (State)	1	LS	3,050.00	3,050
DUST CONTROL / ENVIRONMENTAL PERMIT	1	LS	1,500.00	1,500
BLUEPRINTS, COPIES AND REPRODUCTION	0	SETS	75.00	-
POSTAGE & DELIVERY SEVICE	0	EA	125.00	-
FIELD COMPUTER SERVICE	1	MONTHS	125.00	125
SITE COMPUTER - HARDWARE / SOFTWARE	0	LS	-	-
DESIGN & ENGINEERING SERVICES	0	LS	-	-
PROJECT FIELD OFFICE/STORGAE CONTAINTER	0	MONTHS	875.00	-
FIELD OFFICE SET-UP / REMOVAL	0	EA	500.00	-
DRINKING WATER	1	MONTHS	150.00	150
TEMPORARY TOILETS / SANITARY FACILITIES	1	MONTHS	525.00	525
TEMPORARY POWER	0	MONTHS	-	-
TEMPORARY WATER - HYDRANT METER FEES	0	EA	-	-
WATER CONSUMED	0	MONTHS	-	-
POWER CONSUMED	0	MONTHS	-	-
MOBILE PHONE USAGE	1	MONTHS	125.00	125
PROJECT SECURITY / WATCHMAN	0	WKS	-	-
TEMPORARY FENCE	200	LF	5.75	1,150
TEMPORARY ROADS AND ENTRANCES	0	EA	-	-
DUST CONTROL / PALLIATION	1	LS	1,250.00	1,250
STREET SWEEPER	0	EA	-	-
PROJECT SIGNAGE AND BARRICADES	0	LS	625.00	-
FIRE PROTECTION AND SAFETY SUPPLIES	0	MONTHS	-	-
PROGRESSSIVE CLEAN UP	0	MHRS	-	-
CONCRETE WASH OUT	0	LS	450.00	-
FINAL CLEANING	0	LS	-	-
TRASH DISPOSAL	0	TRIPS	525.00	-
PROJECT PICKUP TRUCK	1	MONTHS	875.00	875
MISC. SMALL TOOLS AND SUPPLIES	0	LS	-	-
EQUIPMENT / TOOL RENTAL	0	LS	-	-
EQUIPMENT FUEL	0	MONTHS	-	-
PROJECT SAFETY	1	MONTHS	955.00	955
TOTAL GENERAL REQUIREMENTS				**$ 41,175**

DNG CONSTRUCTION, LLC
DESIGN/BUILD - CONSTRUCTION MANAGEMENT - GENERAL CONSTRUCTION

SCHEDULE OF VALUES

APACHE PARK RESTROOM

Bid Item	Bid Item Description	Qty	Unit	Labor			Equipment/Tools			Tools & Supplies			Materials/DISPOSAL			Subcontractors			Subcontractor, Supplier, SBE
				MH	Unit	Cost	QTY	Unit	Cost	QTY	Unit	Cost	QTY	Unit	Cost	MH	Unit	Cost	
2.10	Survey																	$ 750	
2.12	Demo/Earthwork																	$ 7,025	
2.20	Site Pad																	$ 4,070	
2.30	Underground Utilities																	$ 4,120	
2.50	Landscape																	$ 2,640	
3.10	Concerte- Sidewalk																	$ 2,945	
5.10	Prefab- Restrooms																	$ 249,471	
15.10	Plumbing																	$ 4,750	
16.10	Electrical																	$ 7,500	
																		$ 283,271	

EXHIBIT C

PERFORMANCE BOND

ARIZONA STATUTORY PERFORMANCE BOND
PURSUANT TO TITLES 28, 34, AND 41, ARIZONA REVISED STATUTES
(Penalty of this bond must be 100% of the Agreement amount)

KNOW ALL MEN BY THESE PRESENTS THAT:_____

(hereinafter "Principal"), and _____ (hereinafter "Surety"), a corporation organized and existing under the laws of the State of _____ with its principal office in the City of _____, holding a certificate of authority to transact surety business in Arizona issued by the Director of Insurance pursuant to Title 20, Chapter 2, Article 1, as Surety, are held and firmly bound unto _____(hereinafter "Obligee") in the amount of _____ (Dollars) ($_____), for the payment whereof, Principal and Surety bind themselves, and their heirs, administrators, executors, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, the Principal has entered into a certain written Agreement with the Obligee, dated

the _____ day of _____, 20___ for construction of **APACHE PARK RESTROOM REPLACEMENT**, **PR2501.401** which Agreement is hereby referred to and made a part hereof as fully and to the same extent as if copies at length herein.

NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION IS SUCH, that if the Principal faithfully performs and fulfills all the undertakings, covenants, terms, conditions and agreements of the Agreement during the original term of the Agreement and any extension of the Agreement, with or without notice of the Surety, and during the life of any guaranty required under the Agreement, and also performs and fulfills all the undertakings, covenants, terms, conditions, and agreements of all duly authorized modifications of the Agreement that may hereafter be made, notice of which modifications to the Surety being hereby waived, the above obligation is void. Otherwise it remains in full force and effect.

PROVIDED, HOWEVER that this bond is executed pursuant to the provisions of Title 34, Chapter 2, Article 2, Arizona Revised Statutes, and all liabilities on this bond will be determined in accordance with the provisions of Title 34, Chapter 2, Article 2, Arizona Revised Statutes, to the same extent as if it were copied at length in this Agreement.

The prevailing party in a suit on this bond may recover as part of the judgment reasonable attorney fees that may be fixed by a judge of the court.

Witness our hands this _____ day of _____, 20__.

_____
PRINCIPAL SEAL

_____
AGENT OF RECORD

By _____

_____
SURETY SEAL

EXHIBIT D

PAYMENT BOND

ARIZONA STATUTORY PAYMENT BOND
PURSUANT TO TITLES 28, 34, AND 41, OF THE ARIZONA REVISED STATUTES
(Penalty of this Bond must be 100% of the Agreement amount)

KNOW ALL MEN BY THESE PRESENTS THAT:_____

(hereinafter "Principal"), as Principal, and _____(hereinafter "Surety"), a corporation organized and existing under the laws of the State of _____ with its principal office in the City of _____, holding a certificate of authority to transact surety business in Arizona issued by the Director of the Department of Insurance pursuant to Title 20, Chapter 2, Article 1, as Surety, are held and firmly bound unto _____ (hereinafter "Obligee") in the amount of _____ (Dollars) ($_____), for the payment whereof, the Principal and Surety bind themselves, and their heirs, administrators, executors, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, the Principal has entered into a certain written Agreement with the Obligee, dated the _____ day of _____, 20___ for construction of **APACHE PARK RESTROOM REPLACEMENT**, **PR2501.401** which Amendment is hereby referred to and made a part hereof as fully and to the same extent as if copied at length herein.

NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION IS SUCH, that if the Principal promptly pays all moneys due to all persons supplying labor or materials to the Principal or the Principal's subcontractors in the prosecution of the work provided for in said Agreement, this obligation is void. Otherwise it remains in full force and effect.

PROVIDED, HOWEVER that this bond is executed pursuant to the provisions of Title 34, Chapter 2, Article 2 Arizona Revised Statutes, and all liabilities on this bond will be determined in accordance with the provisions, conditions and limitations of Title 34, Chapter 2, Article 2, Arizona Revised Statutes, to the same extent as if it were copied at length in this Agreement.

The prevailing party in a suit on this bond may recover as part of the judgment reasonable attorney fees that may be fixed by a judge of the court.

Witness our hands this _____ day of _____, 20__.

_____
PRINCIPAL SEAL

_____
AGENT OF RECORD

By _____

_____
SURETY SEAL

_____
AGENT ADDRESS

EXHIBIT E

CONTRACTOR'S AFFIDAVIT REGARDING SETTLEMENT OF CLAIMS

_____, Arizona

Date _____

Project Name: **APACHE PARK RESTROOM REPLACEMENT**
Project No.: **PR2501.401**

To the City of Chandler, Arizona

Gentlemen:

This is to certify that all lawful claims for materials, rental of equipment and labor used in connection with the construction of the above project, whether by subcontractor or claimant in person, have been duly discharged.

The undersigned, for the consideration of $_____, as set out in the final pay estimate, as full and complete payment under the terms of the Agreement, hereby waives and relinquishes any and all further claims or right of lien under, in connection with, or as a result of the above described project. The undersigned further agrees to indemnify and save harmless the City of Chandler against any and all liens, claims or liens, suits, actions, damages, charges and expenses whatsoever, which said City may suffer arising out of the failure of the undersigned to pay for all labor performances and materials furnished for the performance of said installation.

Signed and dated at _____, this _____ day of _____ 20_____.

_____
CONTRACTOR

By _____

STATE OF ARIZONA)
) SS
COUNTY OF MARICOPA)

The foregoing instrument was subscribed and sworn to before me this _____ day of _____ 20 _____.

_____
Notary Public

_____
My Commission Expires

EXHIBIT F

CERTIFICATE OF COMPLETION

Project: **APACHE PARK RESTROOM REPLACEMENT**
Project No.: **PR2501.401**

(TO BE COMPLETED BY CONTRACTOR)

I HEREBY CERTIFY THAT ALL GOODS AND/OR SERVICES REQUIRED BY CITY OF CHANDLER PROJECT NO. **PR2501.401** HAVE BEEN DELIVERED IN ACCORDANCE WITH THE AGREEMENT DOCUMENTS AND BID SPECIFICATIONS AND ALL ACTIVITIES REQUIRED BY THE CONTRACTOR UNDER THE AGREEMENT HAVE BEEN COMPLETED AS OF _____.
(Date)

FIRM NAME: _____

PRINCIPAL: _____
(Name)

_____
(Signature)

_____ DATE: _____
(Title)

CERTIFIED BY ENGINEER/CONSULTANT (*IF APPLICABLE*):

_____ DATE: _____
(Signature)

_____
(Firm Name)

PROJECT ACCEPTED BY USER DEPARTMENT

_____ DATE: _____
(Signature)

_____
(Dept. /Div.)

_____ Date of Final Walk-Through

_____ Date As-Built Received

_____ City As-Built Number

EXHIBIT G

SUBCONTRACTOR DOCUMENTS WITH JOC CONTRACTOR

Any subcontractor assumptions, clarifications, exclusions, terms & conditions, signature blocks, etc. included are strictly between the JOC Contractor and their subcontractors, and do not apply to the Agreement between the JOC Contractor and the City.

J2 Engineering and Environmental Design, LLC
4649 E. Cotton Gin Loop, B2 Phoenix, AZ 85040
602.438.2221 www.j2design.us

September 5, 2024

Dominic DeMark
President
DNG Construction, LLC
3933 E. La Salle Street
Phoenix, AZ 85040

Re: Apache Park Restroom Replacement

Dear Dominic,

J2 Engineering and Environmental Design, LLC (J2 Design) is pleased to provide professional design services for the Apache Park Restroom Replacement project. This scope of services is based upon our understanding of the project from our email correspondence and site visit to the project area.

Project Understanding: The City of Chandler is replacing an existing restroom facility with a new prefabricated restroom at Apache Park. New restroom will utilize existing utility lines (water, sewer, electric). New restroom is approximately the same size as the existing and minimal hardscape or landscape disturbance expected. Our estimated Lump Sum fee for this project are as follows (see attached fee sheet for break down):

J2 Design:	$8,531.00
Wright Engineering:	$5,760.00
Speedie & Associates:	$2,000.00
Total Fee:	**$16,291.00**

Thank you for the opportunity to provide professional services on this exciting project and serve the Town of Gilbert. Please contact me if you have any questions.

Sincerely,

Aaron Allan, PLA, ASLA
Principal
aallan@j2design.us
m 480.720.0522

J2 Engineering and Environmental Design, LLC
4649 E. Cotton Gin Loop, B2 Phoenix, AZ 85040
602.438.2221 www.j2design.us

Location:

Scope of Services:

Task 100: Site Investigation
J2 will review as-builts associated with the site.

J2 will attend a kick-off meeting with key stakeholders on the project as well as perform a site visit with the team.

Meetings:

- Kick-off Meeting/Site Visit - One (1) meeting. This meeting is anticipated to be two (2) hours in duration. J2 will have three (3) representatives at this meeting.

Task 200 – Construction Documents (90% and Final)
J2 will develop plans and details and provide staged submittals at the 90%, and Final levels of completion. J2 will submit one (1) full-size PDF set of plans at each stage to DNG for review and distribution.

The Design plans are anticipated to include, but not limited to, the following:

1. Cover Sheet
2. Demolition plan
3. Site plan (to show restroom, FFE, landscape restoration areas, water and sewer connections, and hardscape restoration)
4. General Notes and Details as neede.

Construction document sheets will utilize the City of Chandler standard border and at full-size will be 22"x34". Plan view sheets will be at 1"=10' scale. It is assumed that the site will be covered by one (1) plan view sheet. The construction document set, including cover sheets, plan sheets, and detail sheets, is anticipated to contain four (4) sheets. J2 will place multiple plan views on the same plan view sheet to minimize the overall sheet count if possible.

Deliverables:

- Design Plans (90%, Final), one (1) Full-size PDF set

Meetings:

- Comment Resolution Meeting: one (1) Meeting: This meeting is anticipated to be virtual. This meeting is anticipated to be one (1) hour in duration and J2 will have two (2) representatives at the meeting.

General Project Understanding

DNG shall designate a person for the project to act as the Client's representative with respect to the services to be performed or furnished by the Design Team under this agreement. Such person, department, or committee shall have complete authority to transmit instructions, receive information, interpret, and define the Client's policies and decisions with respect to the Design Team's services for the Project. DNG shall also provide key team personnel to be available in coordination meetings including operations and plan review representatives.

DNG shall make available to the Design Team all existing available data and records relevant to the site.

DNG shall approve in a timely manner all criteria and information as to Client's requirements for the Project including planning objectives and constraints, performance requirements, any budgetary limitations, and the submittal by the Design Team at the various phases of the projects.

DNG shall furnish to the Design Team, upon the request of the Design Team for performing the services, any existing pertinent data prepared by or services of others, including electronic base maps, drawings of physical conditions in or relating to existing surface or subsurface utilities or structures within the planning area, hydrographic surveys, environmental or cultural assessments, impact statements, and other relevant environmental or cultural studies pertaining to the project.

DNG shall give prompt notice to Design Team whenever Client observes or otherwise becomes aware of any development that affects the scope of services or the time schedule of the Design Team.

DNG warrants and represents that members of the Design Team have the right to enter upon the real property involved herein, and extends this right to J2. The Design Team agrees to exercise due care in the performance of all services pursuant hereto.

The Design Team has provided no environmental or cultural investigations on this site/project, has no knowledge of any adverse environmental or cultural conditions on the site/project, and is not responsible for and has no liability for any such environmental or cultural condition should one be found. It is the responsibility of the DNG to investigate and make these environmental or cultural determinations based on the best knowledge and information available at the time of this project. Clearance to begin work shall be given prior to directing or ordering the preparation of any engineering documents.

The Design Team provides construction documents in full or in part freehand drafting and electronic CAD format. Any electronic files provided are for information and convenience purposes only and the final approved/sealed hard copy plans shall prevail. All construction documents will be developed to the City of Chandler and Maricopa Association of Governments (MAG) design and construction standards and specifications.

Assumptions and Exclusions:

1. No survey of any kind has been included. It is assumed that DNG will provide a topographic survey for construction document development.
2. No legal descriptions or exhibits are included.
3. DNG will provide all as-built information to J2. It is assumed that DNG will locate all on site utilities (water, sewer, electric) and provide this information to J2 for development of construction documents. Utility potholing has not been included in this scope of services. Utility coordination is not included, it is assumed that DNG will route all plans for utility conflict review.
4. The Design Team is not providing any traffic analysis, traffic study, or traffic engineering.
5. The Design Team has not included any re-platting, or rezoning efforts in this scope of services.
6. The Design Team is not providing any environmental, cultural, or biological investigations or clearances.

7. No new landscape or irrigation design is included. It is assumed that landscape and irrigation improvements will be limited to restoration of existing improvements.
8. No new hardscape design is included. It is assumed that adjacent hardscape will be removed and replaced in kind to provide access to the restroom.
9. Hard copy sets have not been included in this scope or proposal.
10. The Design Team is not providing any permitting fees, it is assumed these costs will be paid by others.
11. Erosion Control/Storm Water Pollution Prevention Plans are not included in this scope of services.
12. Geotechnical Investigation or agronomy testing has not been included in this scope and fee.
13. Drafting or certification of any contractor asbuilts is not included in this scope of services.
14. Drainage engineering is not included in this scope of services.
15. Post design services is not included.
16. Public involvement is not included.
17. Meeting attendance beyond what is stated in the scope is not included.
18. No new utility design has been included. It is assumed that all existing utilities will be utilized for the new restroom.
19. New restroom is assumed to be a prefabricated restroom from CXT. Permitting for the restroom building through the State of Arizona and the City of Chandler is not included in this scope of services.
20. No opinion of probable construction cost or project specifications are included.
21. Meeting minutes are not included.

We would expect to start our services promptly after receipt of your acceptance and complete our services in a timely manner. This Exhibit represents the entire understanding of the Scope of Work as set out herein and may only be modified in writing signed by both parties.

Apache Park Restroom Replacement
Design Phase Services
DNG Construction, LLC

J2 Engineering and Environmental Design, LLC

9/5/2024

	Labor Category:	Project Manager Sr.	Project Engineer Sr.	Project Engineer	Engineer	Landscape Architect Sr.	Landscape Architect	Designer Sr.	Designer	
	Rate:	$ 215.27	$ 188.67	$ 144.35	$ 116.50	$ 195.00	$ 137.71	$ 125.36	$ 89.61	
Task #	**Task Description:**									**Hours Total**
100	**Site Investigation**									
101	Kick-off Meeting/Site Visit (1)	0	0	2	2	0	0	2	0	6
102	Utility and Asbuilt Review and Base Map Development	0	0	2	2	0	0	2	2	8
103	Subconsultant Coordination	0	0	1	0	0	0	0	0	1
200	**Construction Documents (95%, Final)**									
201	Develop Plans (4 Sheets)	0	0	4	24	0	2	8	12	50
202	Comment Resolution Meetings (1)	0	0	1	0	0	0	1	0	2
203	QA/QC	0	2	0	0	0	0	0	0	2
204	Subconsultant Coordination	0	0	2	0	0	0	0	0	2
	J2 Hours per Labor Category:	**0**	**2**	**12**	**28**	**0**	**2**	**13**	**14**	**71**
	J2 Fee per Labor Category (Rounded to Nearst Whole Dollar):	$ -	$ 377.00	$ 1,732.00	$ 3,262.00	$ -	$ 275.00	$ 1,630.00	$ 1,255.00	$ 8,531.00

Subconsultants:	**Fee Amount**
Speedie &. Associates (Geotechnical Inspection)	$ 2,000.00
Wright (Electrical)	$ 5,760.00
	$ -
	$ -
	$ -
	$ -
Total Subconsultants:	$ 7,760.00

Allowances:	**Fee Amount**
	$ -
	$ -
	$ -
	$ -
	$ -
Total Allowances:	$ -

Total Fee J2, Subconsultants, and Allowances: $ 16,291.00

J2 Engineering and Environmental Design, LLC

Aaron Allan, PLA, ASLA

Principal

September 5, 2024

Date

AUTHORIZATION TO PROCEED

We acknowledge your authorization to proceed with the testing services outlined for this project. We appreciate the opportunity to provide you with the testing services that your firm has requested. Thank you for choosing Speedie & Associates, LLC.

This letter is in response to your authorization to proceed with initiating and providing construction materials testing services for the above project. We present the following for your information and use.

1. We understand that your firm will be our client and are responsible for payment of invoices.
2. All scheduling of testing services must be accomplished by calling our office in advance.
3. Please understand that **you or your authorized representative must contact us as least twenty-four (24) hours in advance of your need for testing** so that we can schedule our personnel**. If you call with less than 24-hour notice,** we will attempt to schedule our personnel for the date and time you need **but we cannot guarantee their on-site presence at the time requested.**
4. When you call, please be prepared to give us an approximated time of arrival and location on site for our technician's information.
5. When your requirements or schedule change, **if you do not cancel the scheduled technician, you will be charged for the trip charges to and from the project site.**
6. Our **FEE SCHEDULE** and **TERMS AND CONDITIONS are attached hereto for your review.** Since no formal proposal or contract has been developed for your project, the services requested by you will be billed at these prevailing unit rates. If you have any questions please call.
7. **Our services and fees** are controlled by the number of times we are called out by your on-site representative. Charges for our services will be made on a unit rate basis. Unit rates for technician and inspector time will be invoiced portal to portal from our Phoenix office with a two hour minimum. Your on-site representative should be made aware of how we charge our fees.
8. Invoices will be submitted on a monthly basis, to be paid within 30 days**. We reserve the right to stop work in progress if we do not receive timely payment.**
9. **Work will not commence until this AUTHORIZATION TO PROCEED is received back at our office prior to start of work.**

Project Name: _____

Project Location: _____

Accepted by: _____
Type or Print Name

Signature: _____ _____
Date

Company: _____

SSN/EIN: _____

Please fax back to: 602.943.5508
Or email to: tcharney@speedie.net

SPEEDIE AND ASSOCIATES
A UES Company

FEE AND RATE SCHEDULE

DESCRIPTION OF SERVICE

1. Observation and Testing	
a. Observation & Testing of earthwork, concrete, masonry and paving operations by Engineering Technician (2 Hour Minimum)	$70.00/hr
b. Trip charges	$70.00/tr
2. Special Inspection	
a. Observation of geotechnical/structural elements (4 hour minimum)	100.00/hr
b. Trip charges	70.00/tr
3. Office Support - If Required	
a. Principal	150.00/hr
b. Project Manager/Engineer	130.00/hr
4. Laboratory Fees	
a. Soils	
Moisture Density Relations	
ASTM D 698 A	130.00/ea
Sieve Analysis	70.00/ea
Plasticity Index (Dry Prep)	70.00/ea
Plasticity Index (Wet Prep)	180.00/ea
Swell	120.00/ea
b. Concrete, Mortar or Grout	
Compressive Strength (including molds)	20.00/ea
c. Asphaltic Concrete	
Extraction/Gradation	165.00/ea
Marshall Density	150.00/ea
Maximum Theoretical Density (Rice)	180.00/ea
Gyratory Unit Weight (Set of Two)	240.00/ea
Thickness/Density of Cores (Not Including Coring Sub)	30.00/ea
Moisture Content	25.00/ea

PROJECT ESTIMATE

We have provided a **budget estimate of $2,000.00** for the amount of work required for this project based on our experience on similar projects. Unit rates will be invoiced portal to portal from our Phoenix office. It should be noted, however, that we have no control over the contractor's construction methods and work schedule, and actual charges may vary.

GENERAL CONDITIONS

SECTION 1: RESPONSIBILITIES

1.1 SPEEDIE & ASSOCIATES, LLC a UES Company (S&A/UES) is responsible for providing the services described under the Scope of Services.

1.2 The Client is responsible for providing S&A/UES with a clear understanding of the project's nature and scope. The Client shall supply S&A/UES with sufficient and adequate information, including, but not limited to, maps, site plans, reports, surveys, plans and specifications, and designs, to allow S&A/UES to properly complete the specified services. The Client shall also communicate changes in the nature and scope of the project as soon as possible during performance of the work so that the changes can be incorporated into the work product.

1.3 The Client acknowledges that S&A/UES's responsibilities in providing the services described under the Scope of Services section is limited to those services described therein, and the Client hereby assumes any collateral or affiliated duties necessitated by or for those services. Such duties may include, but are not limited to, reporting requirements imposed by any third party such as federal, state, or local entities, the provision of any required notices to any third party, or the securing of necessary permits or permissions from any third parties required for S&A/UES's provision of the services so described, unless otherwise agreed upon by both parties in writing.

SECTION 2: STANDARD OF CARE

2.1 Services performed by S&A/UES under this Agreement will be conducted in a manner consistent with the level of care and skill ordinarily exercised by members of S&A/UES's profession practicing contemporaneously under similar conditions in the locality of the project. No other warranty, express or implied, is made by S&A/UES hereunder.

2.2 Execution and delivery of this Agreement by S&A/UES is not a representation that S&A/UES has visited the site, become generally familiar with local conditions under which the work is to be performed, or correlated personal observations with the requirements of the Scope of Services. It is the Client's responsibility to provide S&A/UES with all information necessary for S&A/UES to provide the services described under the Scope of Services, and the Client assumes all liability for information not provided to S&A/UES that may affect the quality or sufficiency of the services so described.

SECTION 3: SITE ACCESS AND SITE CONDITIONS

3.1 Client will grant or obtain free access to the site for all equipment and personnel necessary for S&A/UES to perform the work set forth in this Agreement. The Client will notify any possessors of the project site that Client has granted S&A/UES free access to the site. S&A/UES will take reasonable precautions to minimize damage to the site, but it is understood by Client that, in the normal course of work, some damage may occur, and the correction of such damage is not part of this Agreement unless so specified in the Scope of Services.

3.2 The Client is responsible for the accuracy of locations for all subterranean structures and utilities. S&A/UES will take reasonable precautions to avoid known subterranean structures, and the Client waives any claim against S&A/UES, and agrees to defend, indemnify, and hold S&A/UES harmless from any claim or liability for injury or loss, including costs of defense, arising from damage done to subterranean structures and utilities not identified or accurately located. In addition, Client agrees to compensate S&A/UES for any time spent or expenses incurred by S&A/UES in defense of any such claim with compensation to be based upon S&A/UES's prevailing fee schedule and expense reimbursement policy.

SECTION 4: BILLING AND PAYMENT

4.1 S&A/UES will submit invoices to Client monthly or upon completion of services. Invoices will show charges for different personnel and expense classifications.

4.2 Payment is due 30 days after presentation of invoice and is past due 31 days from invoice date. Client agrees to pay a finance charge of one and one-half percent (1 ½ %) per month, or the maximum rate allowed by law, on past due accounts.

4.3 If S&A/UES incurs any expenses to collect overdue billings on invoices, the sums paid by S&A/UES for reasonable attorneys' fees, court costs, S&A/UES's time, S&A/UES's expenses, and interest will be due and owing by the Client.

SECTION 5: OWNERSHIP AND USE OF DOCUMENTS

5.1 All reports, boring logs, field data, field notes, laboratory test data, calculations, estimates, and other documents prepared by S&A/UES, as instruments of service, shall remain the property of S&A/UES. Neither Client nor any other entity shall change or modify S&A/UES's instruments of service.

5.2 Client agrees that all reports and other work furnished to the Client or his agents, which are not paid for, will be returned upon demand and will not be used by the Client for any purpose.

5.3 S&A/UES will retain all pertinent records relating to the services performed for a period of "five years or such longer period" of time required by applicable accrediting agency, unless specified in the scope of services following submission of the report or completion of the Scope of Services, during which period the records will be made available to the Client in a reasonable time and manner.

5.4 All reports, boring logs, field data, field notes, laboratory test data, calculations, estimates, and other documents prepared by S&A/UES, are prepared for the sole and exclusive use of Client, and may not be given to any other entity, or used or relied upon by any other entity, without the express written consent of S&A/UES. Client is the only entity to which S&A/UES owes any duty or duties, in contract or tort, pursuant to or under this Agreement.

SECTION 6: DISCOVERY OF UNANTICIPATED HAZARDOUS MATERIALS

6.1 Client represents that a reasonable effort has been made to inform S&A/UES of known or suspected hazardous materials on or near the project site.

6.2 Under this agreement, the term hazardous materials includes hazardous materials, hazardous wastes, hazardous substances (40 CFR 261.31, 261.32, 261.33), petroleum products, polychlorinated biphenyls, asbestos, and any other material defined by the U.S. EPA as a hazardous material.

6.3 Hazardous materials may exist at a site where there is no reason to believe they are present. The discovery of unanticipated hazardous materials constitutes a changed condition mandating a renegotiation of the scope of work. The discovery of unanticipated hazardous materials may make it necessary for S&A/UES to take immediate measures to protect health and safety. Client agrees to compensate S&A/UES for any equipment decontamination or other costs incident to the discovery of unanticipated hazardous materials.

6.4 S&A/UES will notify Client when unanticipated hazardous materials or suspected hazardous materials are encountered. Client will make any disclosures required by law to the appropriate governing agencies. Client will hold S&A/UES harmless for all consequences of disclosures made by S&A/UES which are required by governing law. In the event the project site is not owned by Client, it is the Client's responsibility to inform the property owner of the discovery of unanticipated hazardous materials or suspected hazardous materials.

6.5 Notwithstanding any other provision of this Agreement to the contrary, Client waives any claim against S&A/UES, and to the maximum extent permitted by law, agrees to defend, indemnify, and save S&A/UES harmless from any claim, liability, and/or defense costs for injury or loss arising from S&A/UES's discovery of unanticipated hazardous materials or suspected hazardous materials including any costs created by delay of the project and any cost associated with possible reduction of the property's value. Client will be responsible for ultimate disposal of any samples secured by S&A/UES which are found to be contaminated.

SECTION 7: RISK ALLOCATION

7.1 Subject to the balance of this Section 7.1, Client agrees that S&A/UES's liabilities, losses, damages, fees, costs and expenses (including attorneys' fees)(collectively, "**Liability**") arising from any claim on account of any breach of contract, error, omission, or professional negligence will be limited to a sum not to exceed $50,000 or S&A/UES's fee, whichever is greater (the "**Liability Cap**"). If Client prefers to have a higher Liability Cap, S&A/UES agrees to increase the Liability Cap to $1,000,000.00 upon Client's written

request at the time of accepting S&A/UES's proposal, provided that Client agrees to pay an additional consideration of one percent of the total fee, or $1,000.00, whichever is greater. If Client prefers a $2,000,000.00 Liability Cap, S&A/UES agrees to increase the Liability Cap to $2,000,000.00 upon Client's written request at the time of accepting S&A/UES's proposal, provided that Client agrees to pay an additional consideration of one percent of the total fee, or $2,000.00, whichever is greater. The additional charge for the higher Liability Cap is because of the greater risk assumed and is not strictly a charge for additional professional liability insurance.

7.2 Client shall not be liable to S&A/UES, and S&A/UES shall not be liable to Client for any punitive, incidental, special, or consequential damages (including lost profits, loss of use, and lost savings) incurred by either party due to the fault of the other, regardless of the nature of the fault, or whether it was committed by Client or S&A/UES, their employees, agents, or subcontractors; or whether such liability arises in breach of contract or warranty, tort (including intentional torts and negligence), statutory, or any other cause of action.

7.3 As used in this Agreement, the terms "claim" or "claims" mean any claim in contract, tort, or statute alleging negligence, errors, omissions, strict liability, statutory liability, breach of contract, breach of warranty, negligent misrepresentation, or any other act giving rise to Liability.

SECTION 8: INSURANCE

8.1 S&A/UES represents that it and its agents, staff, and consultants employed or retained by S&A/UES, is and are protected by workers' compensation insurance, and that S&A/UES has such coverage under public liability and property damage insurance policies which S&A/UES deems to be adequate. Certificates for all such policies of insurance shall be provided to Client upon request in writing. Within the limits and conditions of such insurance, S&A/UES agrees to indemnify and save Client harmless from and all Liabilities arising from negligent acts by S&A/UES, its agents, staff, and consultants employed by it. S&A/UES shall not be responsible for Liabilities beyond the amounts, limits, and conditions of such insurance or the limits described in Section 7, whichever is less. The Client agrees to defend, indemnify, and save S&A/UES harmless from all Liabilities arising from acts by Client, Client's agents, staff, and others employed by Client.

8.2 Under no circumstances will S&A/UES indemnify Client from or for Client's own actions, negligence, or breaches of contract.

8.3 To the extent that damages are covered by property insurance, Client and S&A/UES waive all rights against each other and against the contractors, consultants, agents, and employees of the other for damages, except such rights as they may have to the proceeds of such insurance.

SECTION 9: DISPUTE RESOLUTION

9.1 All claims, disputes, and other matters in controversy between S&A/UES and Client arising out of or in any way related to this Agreement shall be submitted to mediation before and as a condition precedent to seeking other remedies provided by law.

9.2 If a dispute arises and that dispute is not resolved by mediation, then: (a) the claim will be brought in the state or federal courts having jurisdiction where the S&A/UES office which provided the service is located; and (b) the prevailing party will be entitled to recovery of all reasonable out of pocket fees, costs and expenses incurred by such party, including court costs, attorneys' fees, expert witness fees, and other claim related expenses.

SECTION 10: TERMINATION

10.1 This Agreement may be terminated by either party upon seven (7) days written notice in the event of substantial failure by the other party to perform in accordance with the terms hereof, or in the case of a force majeure event such as terrorism, act of war, public health or other emergency. Such termination shall not be effective if such substantial failure or force majeure has been remedied before expiration of the period specified in the written notice. In the event of termination, S&A/UES shall be paid for services performed to the termination notice date plus reasonable out of pocket termination expenses incurred or paid by S&A/UES in connection with such termination and the winding down of its operations.

10.2 In the event of termination, or suspension for more than three (3) months, prior to completion of all reports contemplated by this Agreement, S&A/UES may complete such analyses and records as are necessary to complete its files and may also complete a report on the services performed to the date of notice of termination or suspension. The expense of termination or suspension shall include all direct out of pocket costs incurred or paid by S&A/UES in completing such analyses, records, and reports.

SECTION 11: REVIEWS, SPECIAL INSPECTIONS, TESTING AND OBSERVATIONS

11.1 Plan review and building inspections are performed for the purpose of observing compliance with applicable building codes. Construction materials testing ("CMT") and Special Inspections are performed to document compliance of certain materials or components with applicable testing standards. S&A/UES's performance of plan reviews, Special inspections, building inspections, or CMT, or S&A/UES's presence on the site of Client's project while performing any of the foregoing activities, is not a representation or warranty by S&A/UES that Client's project is free of errors in either design or construction.

11.2 If S&A/UES is retained to provide construction monitoring or observation, S&A/UES will report to Client any observed work which, in S&A/UES's opinion, does not conform to the plans and specifications provided to S&A/UES. S&A/UES shall have no authority to reject or terminate the work of any agent or contractor of Client. No action, statements, or communications of S&A/UES, or S&A/UES's site representative, can be construed as modifying any agreement between Client and others. Client acknowledges that S&A/UES's performance of construction monitoring or observation is not a representation or warranty by S&A/UES that Client's project is free of errors in either design or construction.

11.3 Neither the activities of S&A/UES pursuant to this Agreement, nor the presence of S&A/UES or its employees, representatives, or subcontractors on the project site, shall be construed to impose upon S&A/UES any responsibility for means or methods of work performance, superintendence, sequencing of

construction, or safety conditions at the project site. Client acknowledges that Client or its contractor is solely responsible for project jobsite safety.

11.4 Client is responsible for scheduling all inspections and CMT activities of S&A/UES. All testing and inspection services will be performed on a will-call basis. S&A/UES will not be responsible for tests and inspections that are not performed due to Client's failure to schedule S&A/UES's services on the project, or for any claims or damages arising from tests and inspections that are not scheduled or performed.

11.5 If the Client desires more extensive or full-time project observation to help reduce the risk of problems arising during construction, the Client shall request such services as "Additional Services" in accordance with the terms of this agreement. Should the Client, for any reason, choose not to have S&A/UES provide construction or field observation during the implementation of S&A/UES's specifications or recommendations, or should the Client unduly restrict S&A/UES's assignment of observation personnel, Client shall, to the fullest extent permitted by law, waive any claim against S&A/UES, and indemnify, defend, and hold S&A/UES harmless from any claim or liability for injury or loss arising from field problems allegedly caused by findings, conclusions, recommendations, plans or specifications developed by S&A/UES. The Client also shall compensate S&A/UES for any time spent or expenses incurred by S&A/UES in defense of any such claim. Such compensation shall be based upon S&A/UES's standard fee and rate schedule.

SECTION 12: ENVIRONMENTAL ASSESSMENTS

12.1 Client acknowledges that an Environmental Site Assessment ("ESA") is conducted solely to permit S&A/UES to render a professional opinion about the likelihood or extent of regulated contaminants being present on, in, or beneath the site in question at the time services were conducted. No matter how thorough an ESA study may be, findings derived from the study are limited and S&A/UES cannot know or state for a fact that a site is unaffected by reportable quantities of regulated contaminants as a result of conducting the ESA study. Even if S&A/UES states that reportable quantities of regulated contaminants are not present, Client acknowledges that it still bears the risk that such contaminants may be present or may migrate to the site after the ESA study is complete.

SECTION 13: SAMPLE DISPOSAL

13.1 Non-Hazardous Samples — Test samples are substantially altered during testing and disposed of immediately upon completion. Drilling samples are disposed of thirty (30) days after submission of our report. If requested in writing, samples can be held after thirty (30) days for an additional storage fee or returned to the Client.

13.2 Hazardous Samples — If toxic or hazardous substances are involved, S&A/UES will return such samples to the Client. Or using a manifest signed by the Client, S&A/UES will have such samples transported to a location selected by the Client for final disposal. The Client agrees to pay all costs for storage, transport, and disposal of samples. The Client recognizes and agrees that S&A/UES is acting as a bailee and at no time assumes title to samples involving hazardous or toxic materials.

SECTION 14: SUBSURFACE EXPLORATIONS

14.1 Client acknowledges that subsurface conditions may vary from those observed at locations where borings, surveys, samples, or other explorations are made, and that site conditions may change with time. Data, interpretations, and recommendations by S&A/UES will be based solely on information available to S&A/UES at the time of service. S&A/UES is responsible for those data, interpretations, and recommendations but will not be responsible for other parties' interpretations or use of the information developed or provided by S&A/UES.

14.2 Subsurface explorations may result in unavoidable cross-contamination of certain subsurface areas, as when a probe or boring device moves through a contaminated zone and links it to an aquifer, underground stream, or other hydrous body not previously contaminated. S&A/UES is unable to eliminate totally cross-contamination risk despite use of due care. Since subsurface explorations may be an essential element of S&A/UES's services indicated herein, Client shall, to the fullest extent permitted by law, waive any claim against S&A/UES, and indemnify, defend, and hold S&A/UES harmless from any claim or Liability arising from cross-contamination allegedly caused by S&A/UES's subsurface explorations. In addition, Client agrees to compensate S&A/UES for any time spent or expenses incurred

by S&A/UES in defense of any such claim with compensation to be based upon S&A/UES's prevailing fee schedule and expense reimbursement policy.

SECTION 15: SOLICITATION OF EMPLOYEES

15.1 Client agrees not to solicit for hire any of S&A/UES's employees with which Client had contact during the term of this Agreement for a one-year period following the expiration date or termination date of this Agreement (the "Post-Term Period") except through S&A/UES. If Client hires any such S&A/UES employee during the Post-Term Period, Client shall within five business days following written demand therefore from S&A/UES, pay S&A/UES an amount equal to one-half of the employee's then effective annualized salary, as liquidated damages. Further, Client acknowledges that the liquidated damages, stated above, are reasonable under the circumstances.

SECTION 16: ASSIGNS

16.1 Neither Client nor S&A/UES may assign this Agreement or assign or delegate any of its rights or obligations hereunder without the prior written consent of the other party.

SECTION 17: GOVERNING LAW AND SURVIVAL

17.1 This Agreement shall be governed by and construed in accordance with the laws of the jurisdiction in which the S&A/UES office performing the services hereunder is located.

17.2 If any of the provisions of this Agreement is held by a court of competent jurisdiction to be illegal, invalid, or unenforceable, the enforceability of the remaining provisions will not be impaired and will survive. Limitations of liability and indemnities will survive termination of this Agreement for any cause.

SECTION 18: INTEGRATION CLAUSE

18.1 This Agreement represents and contains the entire and only agreement and understanding among the parties with respect to the subject matter of this Agreement and supersedes any and all prior and contemporaneous oral and written agreements, understandings, representations, inducements, promises, warranties, and conditions among the parties. No agreement, understanding, representation, inducement, promise, warranty, or condition of any kind with respect to the subject matter of this Agreement shall be relied upon by the parties unless expressly set forth herein.

18.2 This Agreement may not be amended or modified except by an agreement in writing signed by the party against whom the enforcement of any modification or amendment is sought.

SECTION 19: WAIVER OF JURY TRIAL

19.1 To the extent permitted by applicable law, Client and S&A/UES hereby waive trial by jury in any action arising out of or related to this Agreement.

CLIENT APPROVAL

S&A/UES offers the Client the Proposal as listed above. Client may accept S&A/UES's offer by signing in the space provided below and returning a signed copy to S&A/UES. Such notification may be faxed or by emailing the signed general conditions. In the event the Client authorizes work without returning a signed copy, the Client agrees to be bound by the general conditions as stated herein. The proposal presented has been read, understood, and accepted by the Client effective as of the date that the executed proposal is returned to S&A/UES.

EXECUTED BY CLIENT'S AUTHORIZED REPRESENTATIVE:_____
(signature)

Printed Name:_____ Title:_____

Date Accepted:_____

Client Business Name:_____

Billing Address:_____

Telephone:_____ E-mail:_____

ACCOUNTS PAYABLE INFORMATION

A/P Contact Name:_____

A/P Contact Telephone: _____ *A/P Contact E-Mail:_____

* A/P Contact E-Mail must be provided before the S&A/UES can proceed with its proposed services.

SPEEDIE AND ASSOCIATES
A UES Company

WRIGHT engineering corporation
ELECTRICAL ENGINEERING & LIGHTING DESIGN

September 5, 2024

J2 Engineering & Environmental Design
4649 E Cotton Gin Loop, Suite B2
Phoenix, AZ 85040

Re: **Apache Park Restroom Building Electrical**

Attn: Aaron Allan

Wright Engineering appreciates this opportunity to submit a proposal for electrical engineering services on the above referenced project. The following services will be performed in a professional manner to meet City of Chandler requirements:

Electrical Design Scope of Services:

1. Coordinate design with owner, power company, civil engineer, and/or architect/landscape architect as required.
    a. Project coordination will be performed via email, telephone calls, and virtual meetings. Up to (1) one in-person design coordination meeting is included in this scope.
2. Visit the site to determine existing conditions and electrical configuration. Up to (1) one visit.
3. Review existing electrical drawings and load calculations for site.
4. Determine existing peak demand loads and coordinate proposed electrical loads.
5. Design the electrical power system to meet local codes and requirements.
6. Prepare 24” X 36” electrical construction drawings showing all new equipment to include the following:
    a. Existing electrical service entrance section and distribution equipment
    b. Power to prefabricated restroom building sub-panel
    c. Grounding at new restroom building sub-panel
7. Prepare necessary elevation view and installation details of the equipment listed above to help determine layout and size.
8. Prepare load calculations and single line diagram.
9. Prepare panel schedule and other electrical installation details as required.
10. Prepare a conduit and wire table showing all power conduits and wire for equipment listed above.
11. Prepare system fault current and voltage drop calculations as required.
12. Prepare an engineer’s opinion of probable electrical construction costs and project specific electrical specifications document upon request.
13. Perform in-house QAQC review and modifications.

14. The above plans will be provided to client at 90% and 100% levels for submittal review and comment. Submittals will be made via email in digital PDF format. Client will print, copy and submit to the City and owner as needed.
15. Up to one set of base drawing changes or updates will be included in this engineering cost proposal. Incorporating any additional base drawing changes will incur additional cost at the rates noted under additional services.
16. Municipal review comments will be responded to and addressed.

Responsibilities of Others:

1. Provide Wright Engineering Corp. electronic base files in an AutoCAD format which includes all proposed and existing utilities, all proposed improvements, and any existing conditions that affect this scope.
2. Wright Engineering will submit plans to the civil engineer or landscape architect for submittal to the local government agencies for approval and permits.
3. It is anticipated that the electrical service for this project is existing, in the case that it does not exist; Designation of location of electrical service will be determined by the local utility company. The owner is responsible for coordination of the design of all electrical utility power services during the design process.

Final Deliverables:

1. Upon completion of the design, we will provide final sealed documents bearing the signature of a registered electrical engineer in the State of Arizona.

Engineering Fee:

The above services will be provided as follows:
1. Electrical Design Services: **$5,760.00** (Lump Sum)

Hourly Rate Schedule:

Any services listed as billed hourly or not specifically included in the Scope of Services section shall be payable at the following rates:

Principal	$210/hour	Designer	$130/hour
Senior Engineer	$180/hour	Drafter	$110/hour
Engineer	$150/hour	Admin	$80/hour

Printing Charges:

Although not anticipated, any printing and delivery requested will be charged at cost.

Billing:

We will bill you on a monthly basis for these services. Payment terms are Net 30 days. This proposal will be valid for the next 90 days. If you have any questions, please contact us at your earliest convenience.

I look forward to working with you on this project.

Sincerely,

Clifford Tolman, P.E.
Wright Engineering Corporation

Wright Engineering Corporation
Electrical Engineering Services Fee Schedule

Apache Park
City of Chandler
September 5, 2024

TASK NUMBER	TASK DESCRIPTION	Pincipal	Senior Engineer	Engineer	Designer	Drafter	Admin	TOTAL
	Hourly Rate	$210.00	$180.00	$150.00	$130.00	$110.00	$80.00	
Electrical Design Services								
100	Project Coordination/Management	0.00	1.00	0.00	0.00	0.00	1.00	2.00
101	Visit Site	0.00	0.00	4.00	0.00	0.00	0.00	4.00
102	Team Meetings	0.00	0.00	2.00	0.00	0.00	0.00	2.00
103	Plan Development	0.00	1.00	2.00	8.00	0.00	0.00	11.00
104	Details, Power & Voltage Drop Calculations	0.00	1.00	4.00	8.00	0.00	0.00	13.00
105	Specifications & OPC	0.00	0.00	1.00	1.00	0.00	0.00	2.00
106	QAQC	0.00	1.00	1.00	2.00	0.00	0.00	4.00
107	Plan Submittal	0.00	0.00	0.00	1.00	0.00	0.00	1.00
108	Comment Resolution Meetings/Address Redlines	0.00	0.00	0.00	2.00	0.00	0.00	2.00
	SUB TASK HOURS PER CATEGORY	0.00	4.00	14.00	22.00	0.00	1.00	41.00
	SUB TASK FEE PER CATEGORY	$0.00	$720.00	$2,100.00	$2,860.00	$0.00	$80.00	$5,760.00
							TOTAL FEE	**$5,760.00**

Price Proposal: **Apache Park - Chandler, AZ**
Date: **July 9, 2024**
Reference: **11982-7/01/2024-0**
Sourcewell: **Contract # 081721-PRM**

Our Offer to Sell:

1. **Prefabricated Restroom Building delivered to site @ $ 220,848**
   Public Restroom Company (PRC) herein bids to *furnish (building only per plans and specifications, delivered to site with all costs except installation including applicable taxes excluding retention.* (Retention is not allowed as this is materials or a product fully assembled before shipment to the site and therefore not subject to retention.)

2. **Installation: Turnkey Installation of the Building above @ $ 28,623 with retention allowed.**
   Public Restroom Company also includes in this two-part quotation our turnkey installation package for this building. Our national factory authorized installation team will:
   a. Arrive onsite to confirm and verify the Owner/General Contractor provided scope of work in preparation for installation including access to the site.
   b. Verify the building pad size, building corners, finished slab elevation, utility depth and location, meter size and distance from building, and compaction compliance.
   c. Excavate the utility trenches for placement of our prefabricated underground piping tree for the buildings plumbing and electrical, set the kit in place, provide the water test for inspection before backfilling, and then place the site adjacent coarse sand you provide to us alongside the building pad and screed it level for final building placement. We will need onsite water availability for wetting the sand bed before building placement to consolidate the pad.
   d. Set the building on the site pad.
   e. Connect the utility piping stub ups to the building piping stub down building points of connection for water, sewer, and electrical conduit to the building internal electrical panel.

3. **Owner/General Contractor Final Tie In of Utilities and other site work:**
   a. The Owner/Contractor is responsible for making all **final plumbing connections** at the 6' POC locations.
   b. The Owner/Contractor is responsible for pulling wire and completing all final tie-ins to the electrical panel from the 6' POC location.
   c. The Owner/Contractor is responsible for preparing the pad/foundation. PRC will trench through provided pad/foundation to run utilities to 6' POC locations.

4. **Total Cost of building and installation @ $ 249,471**

OWNER/GENERAL CONTRACTOR SCOPE OF WORK WITH/WITHOUT FOOTINGS:

Scope of Work Background:
Owner/General Contractor shall survey the site, establish survey for the building pad and prefabricated building slab elevation and front corners, excavate for building footings (if required), locate footing sleeves for electrical, waste, and water, pour the footings (if required), furnish sand base adjacent to subgrade pad, and provide location for utility POC's nominally 6' outside the foundation.

Preparation of Building Pad:
Owner/General Contractor is responsible for providing the building subgrade pad or when required footings to frost depth per Public Restroom Company design specifications. PRC will provide detailed drawings for the subgrade building pad, utilities POC's, and if required the footings, attached to this scope of work.

Subgrade Pad/Foundation Requirements:

1. Owner/General Contractor shall survey the building site and provide a finished slab elevation for the prefabricated building. The building pad size we require is larger than the final actual building footprint. Provide building front corner stakes with 10' offsets.
2. Excavate the existing site to the depth of the required footings to local code if required.
3. Furnish coarse concrete sand adjacent to subgrade pad so PRC can cut the utility trenches, install underground utilities, and screed sand.
4. If determined that under slab vapor barrier and or insulation is required, Owner/General Contractor shall provide materials and installation.

Owner/General Contractor verification of site access to allow Building Delivery:

1. You certify to PRC that suitable delivery access to the proposed building site is available. Suitable access is defined as 14' minimum width, 16' minimum height, and sufficient turning radius for a crane and 70' tractor-trailer.
2. Our cost is based upon the crane we provide being able to get within 35' from the building center and for the delivery truck to be no more than 35' from the crane center picking point.
3. If the path to the building site traverses curbs, underground utilities, landscaping, sidewalks, or other obstacles that could be damaged, it is the Owner/General Contractor 's responsibility for repair and all costs, if damage occurs.
4. If trench plating is required, it shall be the cost responsibility of the Owner/General Contractor.
5. If unseen obstacles are present when site installation begins, it is the Owner/General Contractor responsibility to properly mark them and verbally notify PRC before installation.
6. If weather becomes an issue for safety or site installation delays due to weather, Owner/General Contractor or PRC with General Contractor's confirmation may call-off set. If building set is stopped, relocation of the building modules to an onsite or offsite location may incur additional costs to Owner/General Contractor.

Installation Notice and Site Availability:
PRC will provide sufficient notice of delivery of the prefabricated building. The Owner/General Contractor shall make the site available during the delivery period. During the delivery period, on an improved site, Owner should stop site watering several days before delivery to minimize the impact on the soils for the heavy equipment needed for installation.

Caution: ***If site is not ready for our field crew to perform their installation and if no notice of delay in readiness from Owner/General Contractor is received, PRC will provide a change order for re-mobilization on a daily basis until the site is ready for us. Ready means that the site pad is completed, the corner required survey stakes are in place, the slab elevation stakes are in place, the location of the front of the building is confirmed on site, and access to the site is available from an improved roadway. Owner/General Contractor shall sign the change order before we will continue delivery.***

Public Restroom Company will "turn-key" set the buildings including the hook up of utilities inside the building (only) when they are available. PRC will use its own factory trained staff for the installation.

Utility Connections:

1. PRC to complete all internal building plumbing connections and connections from the electrical panel to building's fixtures. The Owner/ Contractor is responsible for making the **final plumbing connections** at the 6' POC locations.
2. The Owner/Contractor is responsible for pulling the wire and completing the final tie-in to the electrical panel from the 6' POC location.
3. The Owner/Contractor is responsible for commissioning the building once final utility connections are made. This includes flushing & testing all water service lines before final startup.

Special Conditions, Permits, and Inspection Fees:
Follow any published specifications governing local building procedures for applicable building permit fees, health department fees, all inspection fees, site concrete testing fees, and compaction tests, if required by Owner. PRC is responsible for all required State inspections and final State insignia certification of the building, if applicable.

Jurisdiction for Off-site Work:
Jurisdiction, for permitting and inspection of this building shall be either the State agency who manages prefabricated building compliance in the state or the local CBO (when the State does not provide certification.) If the responsibility for building inspection is the local CBO, we will provide a certified plan set, calculations, and a third-party engineer inspection report for any and all closed work the local official cannot see.

PUBLIC RESTROOM COMPANY SCOPE OF WORK:

Our In Plant/Off-Site Construction Scheduling System:
PRC has several off-site manufacturing centers in the United States, strategically located, with the proper equipment and trained staff to fabricate our custom buildings to our high-quality fit and finish standards. PRC manages quality control in our off-site production facility to comply with the approved drawings and provides an inspection certification and photos as required. When proprietary materials, which we have designed and fabricated, are part of the project, PRC supplies the manufacturing centers with these proprietary PRC components. We then schedule the in-plant construction process to coordinate with your delivery date through our Operations Division field staff. We guaranty on time at cost delivery weather permitting.

Special Payment and Progress Billing Terms:
Invoicing begins on the 30th of the month following an order and/or the acceptance of the proposal/contract. The first progress billing invoice will be issued for the commencement of design and engineering of architectural plans. This will be 10% of the contracted amount. Once construction begins invoicing will commence monthly based on plant percentage of completion, supported by photographs.

In the event of project stoppage, additional fees may be assessed for re-mobilization, storage, crane costs, etc. ***Our discounted project costs are based upon timely payments. Delays in payment could change delivery schedules and project costs.***

Delivery and Installation:

Site Inspection:
PRC staff, upon site arrival, will verify the required dimensions of the building pad and the corner locations/elevation. We will also verify the delivery path from an accessible road or street and install the underground utilities to the point of connection nominally 6' from the exterior of the building.

Installation:
PRC will install the building turn-key, except for any exclusion (listed under "Exclusions," herein.)

Installation of Utilities under the Prefabricated Building:
We fabricate off-site an underground utilities (water, and DWV piping and fittings) preassembled plumbing and electrical tree. Our site staff will set the underground tree into code depth excavated trenches and our staff will install the coarse concrete sand to bed the piping per our submitted drawing.

We provide all the buildings under-slab piping including the driven electrical ground rod. The Owner/General Contractor brings utility services to within 6' of the pad and are responsible for final connections at that point.
Connection of Utilities Post Building Placement:

After placement of the building on the pad by PRC, our field staff will tie in the water and sewer connection "inside" the building only and terminate at a point of connection (POC) outside the building clearly marked for each utility service. The Owner/General Contractor is responsible for final utility point of service connections at the nominal 6' from building locations.

Electrical:
PRC provides the electrical conduit to the POC 6' from the building. The Owner/General Contractor pulls the wire and ties it off on the electrical panel.

Plumbing:
PRC provides the POC up to 6' from the building footprint and the Owner/General Contractor connects the water to our stub out location.

Sewer:
Some sites depending on the local jurisdiction will require an outside house trap which Owner/General Contractor shall install if needed. PRC will provide you with a sewer point of connection including a clean out to which Owner/General Contractor will terminate the site sewer service.

Testing of Water, Sewer, and Electrical in Plant and Final Site Utility Connection:
Before the building leaves the manufacturing center, PRC certifies a pressure water piping test, DWV, and the electrical connections for compliance with code. While the building is fully tested for leaks at the plant before shipment, road vibration may loosen some plumbing slip fittings and require tightening once the building services (water) is completed. Owner/General Contractor is responsible for minor fitting tightening to handle small slip fitting leaks caused by transportation.

Time of Completion:
PRC estimates a 240 calendar day schedule to complete our scope of work from receipt of written notice to proceed together with signed approved architectural submittals; including final construction documents and structural calculations from all authorities required to approve them.

<u>Exclusions/Exceptions</u>:

1. **Access issues for delivery of the building by a clear unobstructed path of travel from an improved roadway to the final installation pad or foundation may cause site delays and extra cost at each site. This exclusion covers sites whose access is limited by trees, inaccessible roadways, overhead power lines at location where crane will lift building, grade changes disallowing our delivery trailers with only 4" of clearance to grade, berms, or uneven site grades, or when the path of travel is over improvements such as sidewalks, all of which are not within the scope of work by PRC. On some sites without on-site storage availability for buildings that cannot be set, relocation to a proximal crane yard and later relocated to the site for installation, will incur additional fees at rates that vary depending on local rates. PRC will provide written costs for this additional work by change order.**

2. **If weather on site causes site delivery issues, the delivery may have to be diverted to an off-site location and the additional costs will be a change order to the bid. Our staff works with the Owner/General Contractor in advance to make sure sound decisions for delivery are made to avoid this issue. But sometimes Owner/General Contractor take risks for weather, but this risk is clearly at the Owner/General Contractor risk, not PRC.**
3. **Sidewalks outside the building footprint.**
4. **Trench plates or matting needed for protection of site soils, sidewalks, hardscaping, or site utilities shall be the responsibility of the Owner/General Contractor. Any site soils damage or other site improvements if damaged during installation shall be the responsibility of the Owner/General Contractor.**
5. **Not responsible for removing any soil, sand, or other debris as a result of trenching or installation.**
6. **Survey, location of building corners, finish floor elevation, excavation, and construction of subgrade building pad and footings (if required) per PRC plans.**
7. **Soil conditions not suitable for bearing a minimum of 1500 PSF with compaction to 90% maximum dry density shall require Owner/General Contractor correction before building placement. If no soils testing report is available before bid, Owner/General Contractor must verify site supporting soils at a minimum of 1500 PSF because that is the least we can place our structures on or Owner/General Contractor or engineer of record must design a foundation system to meet the imposed loads of site placement.**
8. **Improper water pressure, an undersized meter, or improper water volume flow to the building may necessitate a change order for installation of a building internal diaphragm tank to provide the minimum flow rate and static pressure of up to 60 PSI and a minimum of 40 PSI to properly flush the fixtures. Building water service chlorination, post installation, shall be by Owner/General Contractor.**
9. **Our bid included crane costs are based on a maximum 35’ radius from the center pin of the crane (10’ back from the rear of the crane) to the building center point of the furthest building module roof. If additional distance requires a larger crane, additional costs will be assessed by change order to the Owner/General Contractor.**
10. **Bonds, building permits, a site survey, special inspection fees, minor trash removal (nominally one pickup truck of shipping materials), final utility connections to the on-site water, sewer and electrical are by the Owner/General Contractor. Since the building is fully inspected and tested in plant, minor plumbing leaks (if water is not available when building site work installation is completed) is by the Owner/ General Contractor.**
11. **Site Traffic Control, if applicable, shall be by Owner/ General Contractor, not PRC.**
12. **Any equipment installation, site work or special inspections other than described within this proposal, shall be by Owner/General Contractor.**
13. **Backflow certification if applicable by Owner/ General Contractor.**
14. **Any Fire Suppression Systems by others, not by PRC.**
15. **Any future transformers, related shut offs, and disconnects for electrical is by others, not by PRC.**

16. **If determined that under slab vapor barrier and or insulation is required, Owner/General Contractor shall provide materials and installation.**

Insurance and Prevailing Wage Certification:
PRC shall comply with the required insurance requirements, wage reports, and safety requirements for the project, including OSHA regulations.

Special Insurance to protect the Building before acceptance:
As PRC requires payment for each month of off-site construction, and since the building is not on owner property where their insurance will cover the building, we maintain a special policy that insures the property even when paid for off-site until the building is finally accepted by the owner. This special policy protects the Owner's custom ordered materials to be used in the fabrication of the building during this period. PRC provides this Stock Throughput Policy to cover the building materials from supplier to manufacturer, while it is being built off-site, while in transit to the job site, during and after it is installed on-site until final acceptance. This special policy has a $1,000,000 coverage limit. This exceeds the cost of any single building we have offered for sale herein.

Errors and Omissions Insurance:
Our firm employs licensed architects, engineers, and drafting staff to provide design of our buildings. Since these buildings are required to meet accessibility standards and building codes on site, and since we are the designer, we carry Errors and Omissions Insurance (E & O) to protect our clients from any errors. The policy covers a limit of up to $2,000,000 per occurrence and is more clearly explained in the insurance certificates we provide after receipt of a purchase order.

WARRANTY:
All work performed by PUBLIC RESTROOM COMPANY (called "Company") shall be warranted to the Owner to be of good quality, free of faults and defects in material, workmanship, and title for 5 years from last date of installation if building is installed by Company or 1 year if building is installed by Owner or Owner's agent without on-site supervision by Company. Company warranty on building shell including exterior walls, concrete 8" slab/foundation, and roof system is warranted for 20 years structurally. The Company will repair or replace at their sole option any defects in work upon proper notice to the below stated address below.

Owner/General Contractor selected parts and materials that are not PRC approved will not be covered under PRC's 5 year component warranty. These selections will be covered only by any available manufacturer warranty.

Our Company extended warranties shall be Company only and shall have no effect on any required Performance, Payment, or Warranty Bonds where Surety shall assume no liability to the Company, the Owner, or any third parties should the Company fail for any reason to deliver acceptable maintenance warranties beyond the one year period. The warranty extension is solely between the owner and PRC and not the general contractor, bonding company, or architect/engineer of record.

This warranty applies only if all work performed by Company has been fully paid for, including change orders if applicable. Company has no responsibility for any neglect, abuse, or improper handling of building product.

The warranties expressed herein are exclusive, and are in lieu of all other warranties expressed or implied, including those of merchantability and fitness.

There are no warranties which extend beyond those described on the face of this Warranty. The foregoing shall constitute the full liability of the Company and be the sole remedy to the Owner.

Term of Offer to Sell and Owner/General Contractor Acceptance:
This offer is valid for acceptance within 90 days or when a part of a public bid for the applicable duration imposed within the Owner's bid documents. Acceptance is by approving our post bid preliminary notice to begin drawings subject to final Owner/General Contractor approval of our submittals and receipt of a contract or a purchase order/contract.

Special Notice of Possible Project Cost Increases as a Result of Late Payments:
In the event of delayed or late payment, PRC shall have the right to remedies including late charges, overall project total cost increases, and other damages as allowed by applicable law. The contract price quoted herein is a discounted price based upon our receipt of progress payments as invoiced on the agreed billing schedule of PRC. In the event of non-payment, PRC will provide a 5 day written notice to cure and if payment is still not received, the discounted price for the payment due may increase, to an undetermined amount, to cover work stoppage, remobilization, cancellation of materials and subsequent restocking charges, resale of the contracted building to another party, storage fees, additional crane fees, travel and per diem costs for field crews, and any other cost applicable to the project, as allowed by law. Interest if applicable to non-payment will be assessed at the maximum amount allowed by law or 18% whichever is greater.

Termination:
Upon Termination for any reason, Owner/General Contractor shall be liable for the cost of all work performed up to the date of termination. Additionally, Owner/General Contractor shall pay for off-site demolition and disposal of the partially or fully fabricated building as well as any non-returnable materials which were custom-ordered to complete fabrication in PRC's factory location. Any returned materials are subject to return and restocking fees at the Owner/General Contractor expense.

Venue for Contract Jurisdiction:
Public Restroom Company requires all contracts accepted by our firm to hold that the venue for legal jurisdiction for this contract offer and acceptance shall be Douglas County, Nevada. In the event of your default, PRC shall be entitled to the full amount due including reasonable attorney fees, costs, storage, expenses of physical recovery, and statutory interest, as allowed by law.

No modifications to this offer shall be authorized unless confirmed in writing by the President of Public Restroom Company.

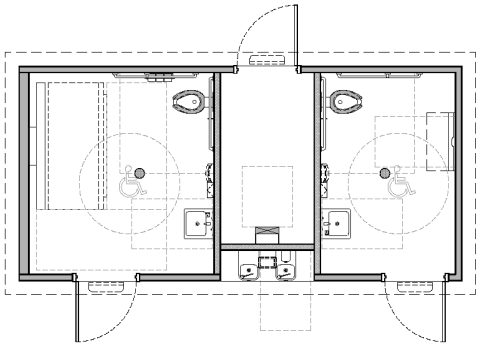
Offered by: Public Restroom Company by _____
Charles E. Kaufman IV, President

This provides conditional acceptance of this preliminary purchase order for this building subject to acceptance of the submittals, furnished by Public Restroom Company. Once you accept the preliminary submittals, this shall become a final purchase agreement or at your discretion the final purchase order or a contract may be substituted with this attached.

Accepted by:

_____	_____
Authorized Signature	**Date Signed**
_____	_____
Printed Name	**Legal Entity Name and Address**

PROJECT REF#: 11982-7/01/2024-0



FLOOR PLAN

SCALE: NOT TO SCALE

THIS CONCEPTUAL/ PRELIMINARY DESIGN AND THE 3D RENDERING IS AN ARTISTIC INTERPRETATION OF THE DESIGN. IT IS NOT MEANT TO BE AN EXACT RENDITION OF THE FINISH PRODUCT. SOME ITEMS MAY NOT BE STANDARD AND/OR SUBJECT TO CHANGE DURING PROJECT DEVELOPMENT

APPACHE PARK

RESTROOM BUILDING
CHANDLER, ARIZONA

PUBLIC RESTROOM COMPANY
Building Better Places To Go.℠

www.PublicRestroomCompany.com
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MINDEN NEVADA 89423
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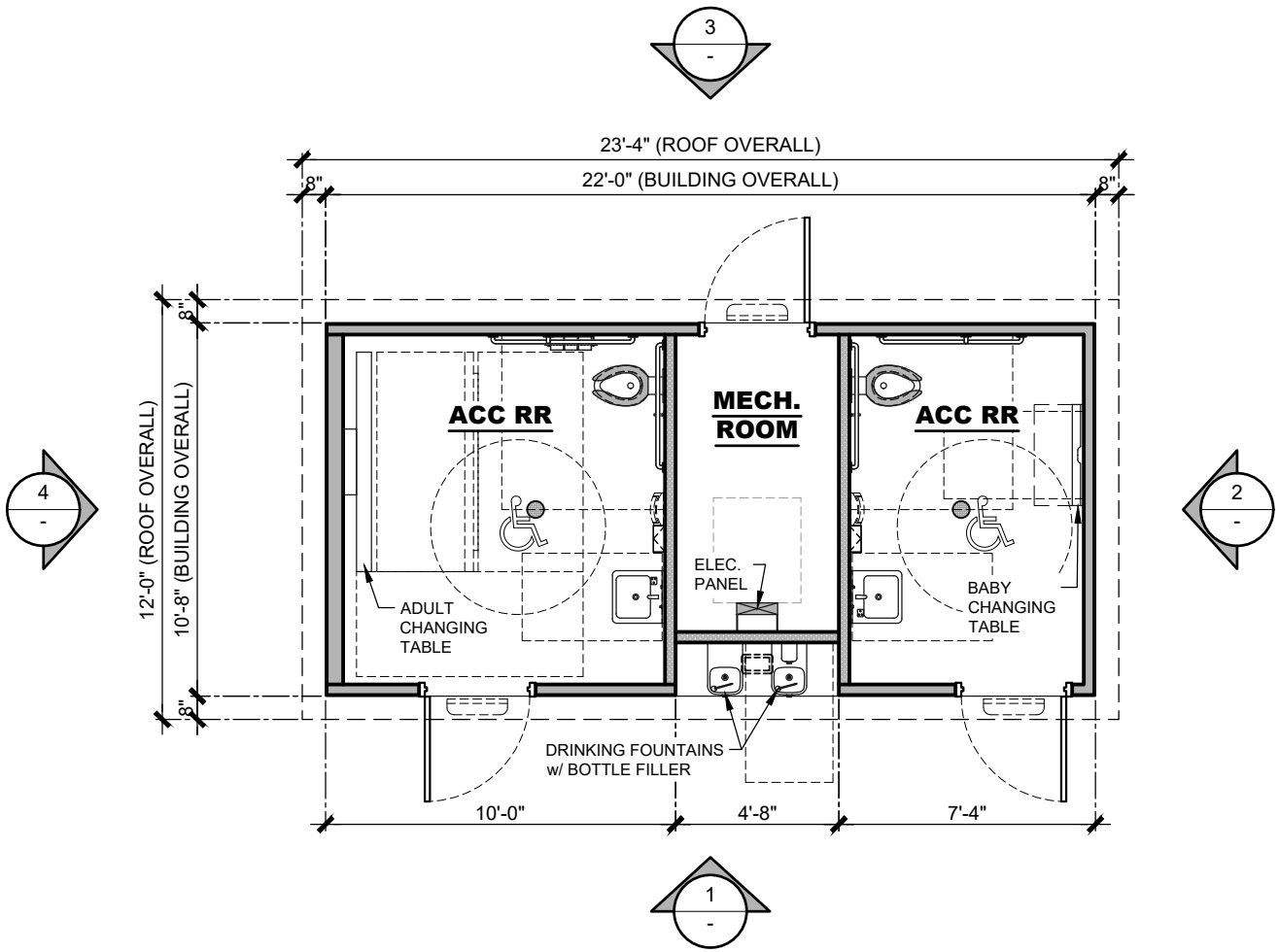
PROJECT REF#: *11982-7/01/2024-0*



FLOOR PLAN

SCALE: 3/16"=1'0"

PUBLIC RESTROOM COMPANY
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Ph: 888-888-2060 | Fax: 888-888-1448

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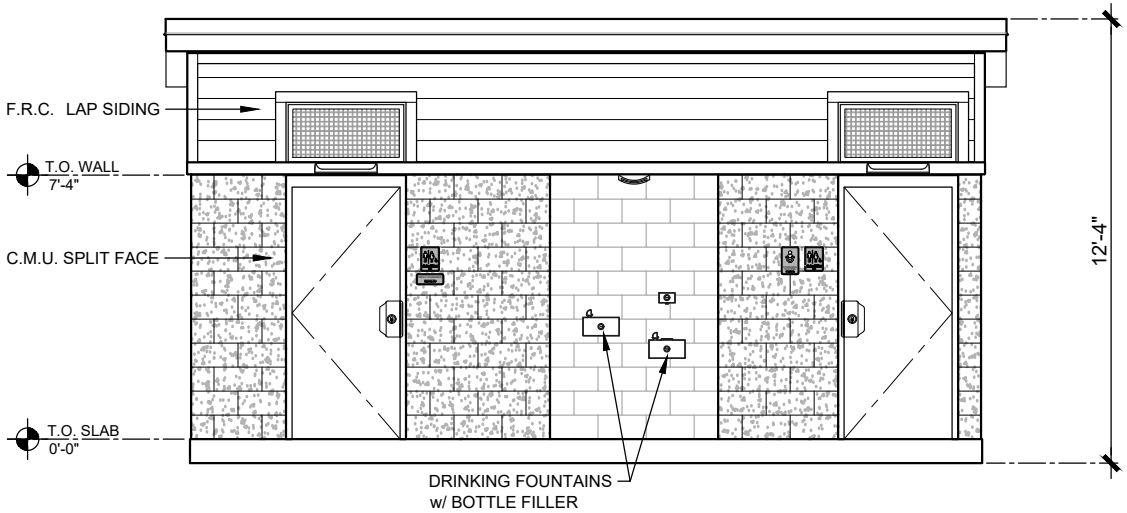
BUILDING TYPE:	**RESTROOM BUILDING**	**REVISION #**	**REVISION DATE:** / DRAWN BY:
PROJECT:	**APPACHE PARK CHANDLER, AZ**	**PROJECT #: 11982**	**START DATE: 7/01/2024** / DRAWN BY: NS

SHEET# **A-1**

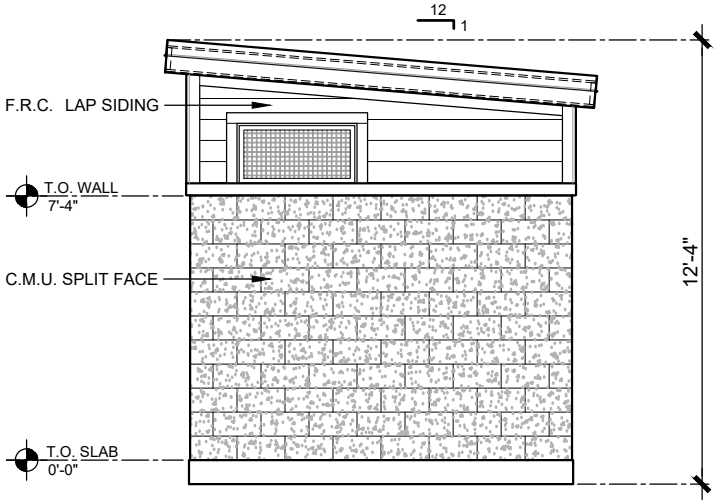
MAX. PERSON / HOUR: **90 S**

~NOT FOR CONSTRUCTION ~ PRELIMINARY DESIGN DRAWING ONLY ~ DO NOT SCALE, DIMENSIONS PRESIDE



ELEVATION 1

SCALE:3/16"=1'-0"



ELEVATION 2

SCALE:3/16"=1'-0"

PUBLIC RESTROOM COMPANY
Building Better Places To Go.℠

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Ph: 888-888-2060 | Fax: 888-888-1448

BUILDING TYPE:	**RESTROOM BUILDING**	**REVISION #**	**REVISION DATE:**	SHEET#
			DRAWN BY:	**A-2**
PROJECT:	**APPACHE PARK CHANDLER, AZ**	**PROJECT #: 11982**	**START DATE: 7/01/2024**	MAX. PERSON / HOUR:
			DRAWN BY: NS	**90 S**

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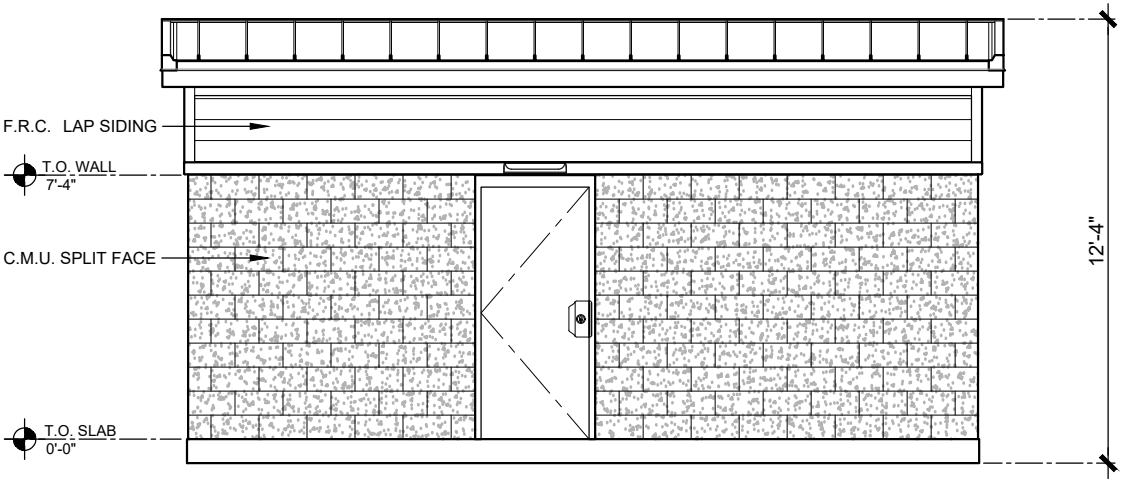
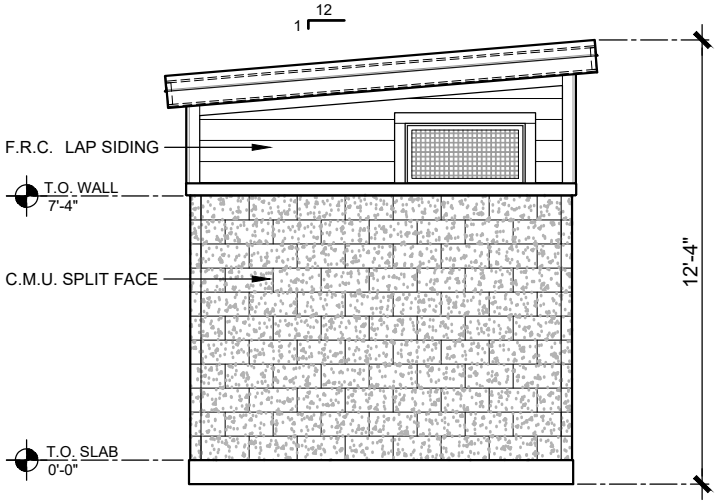


ELEVATION 3

SCALE:3/16"=1'-0"



ELEVATION 4

SCALE:3/16"=1'-0"

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Building Better Places To Go.℠

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Ph: 888-888-2060 | Fax: 888-888-1448

BUILDING TYPE:	**RESTROOM BUILDING**	**REVISION #**	**REVISION DATE:**	SHEET#
			DRAWN BY:	**A-3**
PROJECT:	**APPACHE PARK CHANDLER, AZ**	**PROJECT #: 11982**	**START DATE: 7/01/2024**	MAX. PERSON / HOUR:
			DRAWN BY: NS	**90 S**

~NOT FOR CONSTRUCTION ~ PRELIMINARY DESIGN DRAWING ONLY ~ DO NOT SCALE, DIMENSIONS PRESIDE

EXHIBIT H

BUILDERS RISK INSURANCE

City Council Memorandum Community Services Memo No. N/A

Date:	November 04, 2024
To:	Mayor and Council
Thru:	Joshua H. Wright, City Manager Dawn Lang, Deputy City Manager - CFO John Sefton, Community Services Director
From:	Corey Povar, Assistant Director
Subject:	Purchase of Tree Care and Maintenance Services

Proposed Motion:

Move City Council approve the purchase of tree care and maintenance services from West Coast Arborists, Inc., utilizing Maricopa County Contract No. 220273-S and City of Tempe Contract No. T24-087-01, in an amount not to exceed $100,000, for a one-year period, November 8, 2024, through November 7, 2025.

Background/Discussion:

This agreement provides for the city's continued use of tree care contractors to remove and prune trees in the park system. The Parks Division recently completed a comprehensive tree inventory project and is nearing completion of the Urban Forest Management Plan (UFMP), which details the number of trees and the recommended maintenance needs within the Parks Division's maintenance responsibility.

West Coast Arborists provides a high level of professional expertise, dedication to safety, and competitive pricing to support park maintenance needs. The ongoing use of the listed cooperative contracts with West Coast Arborists allows the Parks Division to complete a high number of tasks with the goal of reaching a proactive maintenance state for tree care in Chandler. The UFMP includes a prioritized maintenance schedule to systematically reduce risk while improving the overall health of the 15,612 trees that are inventoried.

Based on the UFMP’s 5-year recommended maintenance cycle, the city

anticipates the removal of 586 and pruning of 874 “Priority 1 & 2” trees within two years and the pruning of over 3,890 trees in the following three years.

Evaluation:

Maricopa County and the City of Tempe competitively solicited and awarded contracts for tree care and maintenance services. The City has current agreements with both government agencies allowing for the cooperative use of its contracts. The utilization of both of these contracts will allow for the purchase of tree care and maintenance services at competitive pricing.

Fiscal Impact

Account No.	Fund Name	Program Name	Dollar Amount	CIP Funded Y/N
101.4530.5219	General Fund	N/A	$100,000	N

City Council Memorandum Community Services Memo No. N/A

Date:	November 04, 2024
To:	Mayor and Council
Thru:	Joshua H. Wright, City Manager Dawn Lang, Deputy City Manager - CFO John Sefton, Community Services Director
From:	Corey Povar, Assistant Director
Subject:	Purchase of Chippers

Proposed Motion:

Move City Council approve the purchase of three chippers, from Global Machinery, LTD, utilizing the Sourcewell Contract No.050119-BAN, in the amount of $177,089.40.

Background/Discussion:

The Parks division is seeking approval to purchase three (3) new chippers to replace three units that are between 17 and 23 years old and have reached the end of their useful lives. Over $30,000 has been spent on repairs for persistent mechanical problems in recent years. The new chippers will enhance efficiency in trimming, responding to storm damage, and tree removal.

During the FY 24/25 budget process, City Council approved funding for the purchase of three (3) chippers to support the Parks division's ongoing landscape maintenance efforts. Fleet Services has reviewed and supports this purchase.

The Community Services Department is currently finalizing the Urban Forest Management Plan (UFMP), which details the number of trees and the recommended maintenance needs within the city's maintenance responsibility. A prioritized maintenance schedule was created to systematically reduce risk while improving the overall health of the 15,612 trees that are inventoried. Based on the UFMP's 5-year recommended maintenance cycle, these chippers will be utilized to remove 586 and prune 874 "Priority 1 & 2" trees within two years and prune

over 3,890 trees in the following three years.

Evaluation:

Sourcewell competitively solicited and awarded a contract for recycling and repurposing equipment, including chippers and grinders, to Global Machinery, LTD. The city has a current agreement with Sourcewell allowing for the cooperative use of its contracts. Staff recommends cooperative use of this contract for replacement due to age, maintenance history, and costs to operate the current chippers. The Sourcewell contract is valid through July 15, 2025.

Fiscal Impact

Account No.	Fund Name	Program Name	Dollar Amount	CIP Funded Y/N
401.4580.6311.6PR660	General Government Capital Fund	Parks Maintenance Equipment Replc.	$177,089.40	Y

City Council Memorandum Cultural Development Memo No. N/A

Date: November 04, 2024
To: Mayor and Council
Thru: Joshua H. Wright, City Manager
Andy Bass, Deputy City Manager
Kim Moyers, Cultural Development Director
From: Michelle MacLennan, Cultural Arts Manager
Subject: Purchase of Electronic Messaging Monument Sign and Display, from Airpark Signs & Graphics, Inc., for the Center for the Arts

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Proposed Motion:

Move City Council approve the purchase of an electronic messaging monument sign from Airpark Signs & Graphics, Inc., utilizing the City of Peoria Contract No. ACON23619F, in an amount not to exceed $178,420.92.

Background/Discussion:

The Chandler Center for the Arts (CCA) monument signage and electronic messaging display located on the northwest corner of Arizona Avenue and Chandler Boulevard were last updated in 2016. In 2018, the CCA completed an extensive strategic marketing plan that included a new logo and brand identity. The proposed monument signage incorporates goals set within the marketing plan utilizing current brand standards and updating the electronic messaging display technology for higher visibility. The quote of $178,420.92 includes demolition of the existing monument sign, landscape wall and installation of a 64" x 146" display, permit fees, and tax.

Evaluation:

The City of Peoria competitively solicited and awarded a contract to Airpark Signs & Graphics, Inc., for fixed building, monument, and site wayfinding signage. The city has an agreement with the City of Peoria that permits the cooperative use of its contracts. The term of this City of Peoria contract is valid through December 30, 2024.

Fiscal Impact

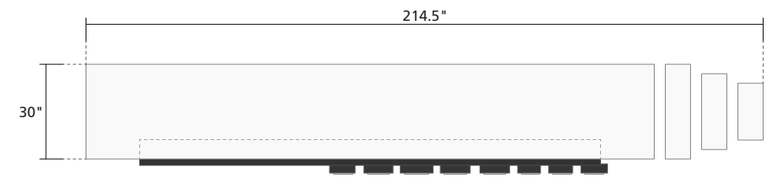
Account No.	Fund Name	Program Name	Dollar Amount	CIP Funded Y/N
401.4320.6212.6CA551	General Gov't Capital Projects	Center for the Arts Facilities Impr	$178,420.92	Y

Attachments

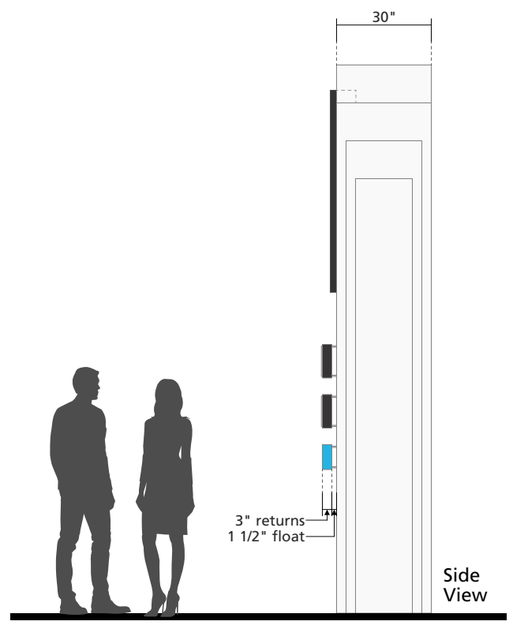
Design

Final Quote

Illuminated Sign at Night



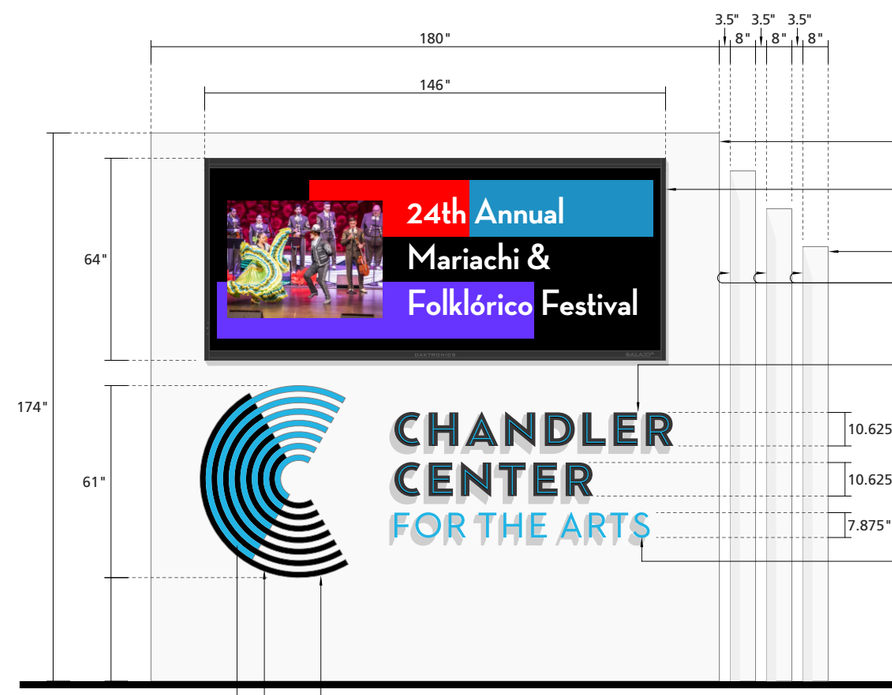
Top View



Side View

Electronic Message Monument

scale: 1/4" = 1'-0"



Fabricated aluminum sign cabinet painted White.

Full color Galaxy GT6x 8mm Daktronics message display.

Individual columns.

Blue LED lighting to shine inward.

2" deep, halo illuminated, RPC lettering. Faces and returns painted Black. Halo illuminated with White LED's. Mechanically fastened with 1 1/2" spacers.

*Line detail in face to be routed out of letter face with 1/2" acrylic push thru with translucent blue vinyl overlay.

2" deep, halo illuminated, RPC lettering. Faces and returns painted to match pantone 198c 'Lt. Blue'. Halo illuminated with White LED's. Mechanically fastened with 1 1/2" spacers.

pantone 198c 'Blue'.

Logo to be routed out of cabinet face and backed in white acrylic. Translucent vinyl overlay to match noted colors.

3M dual color perforated 'Black'.

Gretchen Wilde, owner / designer
1205 N. Miller Road
Tempe, AZ 85281
480.966.6565 / 480.966.5668 (f)
signs@airparksigns.com

250 N. Arizona Avenue,
Chandler, AZ 85225

NOTES:

Approved By: Date:

trc
th

Chandler Center for the Arts

Monument Sign

09.09.24

1
PAGE

All specified details on these drawings are subject to change due to the availability of materials and/or changes in the method of fabrication. Airpark signs & graphics will do their best to maintain the designs intent of these drawings at all times. If the owner or owners' s representative wishes to receive detail drawings on all changes during the fabrication process, airpark signs & graphics must be Advised in writing prior to the start of fabrication. This is an original unpublished drawing created by airpark signs and graphics. It is submitted for your personal use in connection with a proposed project being planned for you by airpark signs and graphics. It is not to be reproduced, copied, photographed, exhibited or used in any fashion without expressed written approval of airpark signs and graphics.

Sign during the Day

Illuminated Sign at Night

Gretchen Wilde, owner / designer
1205 N. Miller Road
Tempe, AZ 85281
480.966.6565 / 480.966.5668 (f)
signs@airparksigns.com

250 N. Arizona Avenue,
Chandler, AZ 85225

NOTES:

Approved By: Date:

trc
th

Chandler Center for the Arts

Monument Sign

09.09.24

2
PAGE

All specified details on these drawings are subject to change due to the availability of materials and/or changes in the method of fabrication. Airpark signs & graphics will do their best to maintain the designs intent of these drawings at all times. If the owner or owners' s representative wishes to receive detail drawings on all changes during the fabrication process, airpark signs & graphics must be Advised in writing prior to the start of fabrication. This is an original unpublished drawing created by airpark signs and graphics. It is submitted for your personal use in connection with a proposed project being planned for you by airpark signs and graphics. It is not to be reproduced, copied, photographed, exhibited or used in any fashion without expressed written approval of airpark signs and graphics.

Airpark Signs & Graphics Inc.
1205 N. Miller Road
Tempe, AZ 85288
480.966.6565
www.airparksigns.com

PROPOSAL

231342-02

Date: 10/15/2024
Expires:
Drawing Numbers:

Project: Chandler Center for the Arts -...
250 N Arizona Ave
Chandler, AZ 85225

Client: Chandler Center for the Arts
P.O. Box 4008
Chandler, AZ 85244

Contact: Dean Hannula 4807822687 Dean.Hannula@chandleraz.gov

We are pleased to offer this proposal for the following services at the above location.

Project Description:	**Item Total:**
New Electronic Messaging Monument Sign With New Daktronics Messaging Display. Includes demolition of existing monument sign the demolition of the landscape wall. Increase the size of Daktronics Display center from 49.125"H x 146W" to 64"H x 146" Per Design Proof.	$165,140.00
Permit Submittal Fees:	$400.00

Permits & Engineering: ***(If applicable) Airpark Signs & Graphics to obtain permit and Engineering***
City and Engineering Fees to be added to final invoice, no mark-up.

Deposit Rate: 50%
Deposit: $89,210.46

Subtotal:	**$165,540.00**
Tax:	**$12,880.92**
Total:	**$178,420.92**

Permits & Engineering: *(If applicable) Airpark Signs & Graphics to obtain permit. City Fees to be added to final invoice, no mark-up.*
Notes: *All prices are subject to applicable sales tax. Prices are based on available information given at the time and are subject to change.*
Exclusions: *Sign permits, structural engineering, traffic control equipment and permits are not included in the above quotations and if required shall be invoiced on a time and material basis. Electrical services to the proposed sign(s), unless specifically quoted above, is assumed to be existing or provided by others.*
Warranty: *12 months against defective materials and 12 month unconditional guarantee on parts and labor.*
Terms: *50% advanced deposit with balance due upon completion of project. Exact sales tax and permit fees will be added to final invoice as applicable. Proposal valid for 30 days.*

Salesperson: Tim Herzer

Buyer's Acceptance _____ Title _____ Date _____

Seller's Acceptance _____ Title _____ Date _____

www.squarecoil.com

City Council Memorandum **Development Services** **Memo No.** DS24-018

Date: November 04, 2024
To: Mayor and Council
Thru: Joshua H. Wright, City Manager
Andy Bass, Deputy City Manager
Kevin Snyder, Development Services Director
Shicheng Tao, Chief Building Official
From: Catherine Flores, Senior Management Analyst
Subject: Introduction and Tentative Adoption of Ordinance No. 5108 adopting the 2024 Editions of the International Building, Residential, Energy Conservation, Plumbing, Mechanical, Fuel Gas, Existing Building, and Swimming Pool and Spa Codes, and the 2023 Edition of the National Electrical Code, with local amendments

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Proposed Motion:

Move City Council introduce and tentatively adopt Ordinance No. 5108, adopting the 2024 editions of the International Building, Plumbing, Mechanical, Residential, Fuel Gas, Energy Conservation, Existing Building, and Swimming Pool and Spa Codes, and the 2023 edition of the National Electrical Code, with local amendments.

Background:

The City of Chandler adopts model construction codes, with some local amendments, to govern construction, remodeling, and renovation of structures within the City. These codes provide a base level of safety for the occupants of buildings constructed in Chandler and offer consistency for builders and developers across jurisdictions in Maricopa County.

The model codes are developed and published by the International Code Council (ICC) and the National Fire Protection Association (NFPA) and are adopted by most jurisdictions in the United States and in some other countries. These codes are developed in a public process that includes the participation of many technical experts, regulators, and affected organizations. The codes are

updated through committee and public hearings on a continuous basis to keep abreast of research on building performance and advances in technology. New editions are published on a three-year cycle; the City previously adopted its current version of the ICC and NFPA codes in February 2022, with an effective date of July 2022.

The Chandler Board of Appeals, an appointed citizen advisory commission of the Mayor and City Council, held five meetings this fall during which staff presented the significant changes to each code along with any proposed local amendments and/or changes from past amendments. The City also engaged with construction industry stakeholders in the review process, inviting representatives from the Home Builders Association of Central Arizona (HBACA) and the Arizona Multi-housing Association (AMHA), and had an open discussion about the proposed amendments to the codes. Representatives from the HBACA and AMHA were provided with meeting agendas and copies of proposed amendments. The representatives also attended the Board meetings and introduced proposed amendments on behalf of their organizations, several of which are included in the submitted ordinance.

Proposed Amendments:
The local amendments proposed by staff and supported by the Board of Appeals are minimal in comparison to some jurisdictions, as the model codes are well-vetted through the national hearing processes and few amendments are needed. The amendments that are recommended are primarily to align the codes with state statutes, local zoning regulations, and long-standing local fire sprinkler requirements for consistency. Staff have also proposed minor changes to the energy conservation code to address concerns of the HBACA.

A summary of notable proposed changes is attached to this memorandum. For the purpose of regional comparison, the cities of Phoenix, Scottsdale, Tempe, Peoria, Surprise, and Goodyear, the Town of Gilbert, and Maricopa County are currently working on adopting the 2024 codes. In addition to ensuring the safety of the built environment, the 2024 codes serve an important secondary purpose of promoting nationally recognized construction and public safety codes and regional consistency for builders who do work in multiple jurisdictions throughout the valley.

A related item for adoption of the 2024 International Fire Code was reviewed by the Board of Appeals concurrently with these proposed codes and also appears on this City Council agenda.

Public Review/Stakeholder Outreach:

The proposed amendments were presented, reviewed, and recommended by the City of Chandler Board of Appeals in public meetings held during August and September 2024. The Board made its recommendation to City Council to adopt the 2024 codes with amendments as proposed by staff during the September 12, 2024, Board of Appeals meeting. Staff met with representatives of the HBACA and the AMA to discuss the code changes and invited their participation in the review process. Several recommendations proposed by the HBACA are incorporated into the recommended code updates. Links to the draft code amendments addressed in the Board of Appeals meeting minutes were posted on the City's website.

As of the writing of this memo, Development Services staff are not aware of any opposition to the proposal.

Discussion:

Board of Appeals Meeting of September 12, 2024
Motion to Recommend City Council adopt the 2024 codes with amendments, as proposed by staff

In Favor: 4 Opposed: 0 Absent: 1 (Cullumber)

Attachments

Ordinance 5108
2024 Construction Code Highlights
Letter of Support HBACA
Letter of Support ICC
Letter of Support NBI

ORDINANCE NO. 5108

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF CHANDLER, ARIZONA, DECLARING THE DOCUMENTS KNOWN AS THE "INTERNATIONAL BUILDING CODE, 2024 EDITION," "NATIONAL ELECTRICAL CODE, 2023 EDITION," "INTERNATIONAL PLUMBING CODE, 2024 EDITION," "INTERNATIONAL MECHANICAL CODE, 2024 EDITION," "INTERNATIONAL RESIDENTIAL CODE, 2024 EDITION," "INTERNATIONAL FUEL GAS CODE, 2024 EDITION," "INTERNATIONAL ENERGY CONSERVATION CODE, 2024 EDITION," "INTERNATIONAL EXISTING BUILDING CODE, 2024 EDITION," "INTERNATIONAL SWIMMING POOL AND SPA CODE, 2024 EDITION," AND "2024 AMENDMENTS TO CHAPTER 29, BUILDING REGULATIONS," AS PUBLIC RECORDS; AMENDING THE CODE OF THE CITY OF CHANDLER, CHAPTER 29, BUILDING REGULATIONS, BY REPEALING THE INTERNATIONAL BUILDING CODE, 2021 EDITION, NATIONAL ELECTRICAL CODE, 2020 EDITION, INTERNATIONAL PLUMBING CODE, 2021 EDITION, INTERNATIONAL MECHANICAL CODE, 2021 EDITION, INTERNATIONAL RESIDENTIAL CODE, 2021 EDITION, INTERNATIONAL FUEL GAS CODE, 2021 EDITION, INTERNATIONAL ENERGY CONSERVATION CODE, 2021 EDITION, BY ADOPTING THE 2024 INTERNATIONAL BUILDING CODE, 2023 NATIONAL ELECTRICAL CODE, 2024 INTERNATIONAL PLUMBING CODE, 2024 INTERNATIONAL MECHANICAL CODE, 2024 INTERNATIONAL RESIDENTIAL CODE, 2024 INTERNATIONAL FUEL GAS CODE, 2024 INTERNATIONAL ENERGY CONSERVATION CODE, 2024 INTERNATIONAL EXISTING BUILDING CODE, 2024 INTERNATIONAL SWIMMING POOL AND SPA CODE, AND BY AMENDING AND CLARIFYING THE EXCEPTION PROVISIONS TO THE CODES; PROVIDING FOR REPEAL OF CONFLICTING ORDINANCES; PROVIDING FOR PENALTIES; PROVIDING FOR SEVERABILITY AND ESTABLISHING AN EFFECTIVE DATE.

WHEREAS, Chapter 29 of the Code of the City of Chandler provides that the City of Chandler, Arizona has adopted the 2021 edition of the International Building Code, subject to specified amendments thereto as set forth in Chapter 29 of the Code of the City of Chandler; and

WHEREAS, the City of Chandler Development Services Department believes it to be prudent to adopt the 2024 edition of the International Building Code and to clarify and amend the provisions to the International Building Code that are presently set forth in Chapter 29 of the Code of the City of Chandler; and

WHEREAS, the City of Chandler believes it to be prudent to adopt the updated editions of certain codes related to building regulations previously adopted by reference and to otherwise update the provisions set forth in Chapter 29, Code of the City of Chandler; and

WHEREAS, the City of Chandler recognizes the importance of the International Energy Conservation Code to promote sustainable and affordable development within the City of Chandler and to preserve and protect the best interests of City of Chandler residents. The City of Chandler also seeks to promote innovative strategies and technologies that use alternative materials, designs, or methods to achieve sustainable and affordable development within the City of Chandler.

NOW, THEREFORE, BE IT ORDAINED by the City Council of the City of Chandler, Arizona as follows:

Section 1. That those documents identified below, one (1) paper copy and one (1) electronic copy of each which are to remain on file in the office of the City Clerk, each are hereby adopted by reference, with the additions, insertions, deletions, and changes set forth herein and each are hereby declared to be a public record.

A. International Building Code, 2024 edition.
B. National Electrical Code, 2023 edition.
C. International Plumbing Code, 2024 edition.
D. International Mechanical Code, 2024 edition.
E. International Residential Code, 2024 edition.
F. International Fuel Gas Code, 2024 edition.
G. International Energy Conservation Code, 2024 edition.
H. International Existing Building Code, 2024 edition.
I. International Swimming Pool and Spa Code, 2024 edition.

Section 2. That certain document known as the "2024 Amendments to Chapter 29, Building Regulations," one (1) paper copy and (1) electronic copy which shall remain on file in the office of the City Clerk, is hereby adopted by reference with the additions, insertions, deletions, and changes set forth herein and is hereby declared to be a public record.

Section 3. That Chapter 29, Building Regulations, is hereby amended by repealing the 2021 International Building Code, 2020 National Electrical Code, 2021 International Plumbing Code, 2021 International Mechanical Code, 2021 International Residential Code, 2021 International Fuel Gas Code, 2021 International Energy Conservation Code, 2021 International Existing Building Code, 2021 International Swimming Pool and Spa Code, and by adopting the 2024 International Building Code, 2023 National Electrical Code, 2024 International Plumbing Code, 2024 International Mechanical Code, 2024 International Residential Code, 2024 International Fuel Gas Code, 2024 International Energy Conservation Code, 2024 International Existing Building Code, 2024 International Swimming Pool and Spa Code, and by adopting the "2024 Amendments to Chapter 29, Building Regulations".

Section 4. Providing for Repeal of Conflicting Ordinances. All ordinances or parts of ordinances in conflict with the provisions of this ordinance, or any parts hereof, are hereby repealed.

Section 5. Providing for Severability. If any section, subsection, sentence, clause, phrase, or portion of this ordinance is for any reason held to be invalid or unconstitutional by the decision of any court of competent jurisdiction, such decision shall not affect the validity of the remaining portions thereof.

Section 6. Providing for an Effective Date. That the 2024 International Building Code, 2023 National Electrical Code, 2024 International Plumbing Code, 2024 International Mechanical Code, 2024 International Residential Code, 2024 International Fuel Gas Code, 2024 International Energy Conservation Code, 2024 International Existing Building Code, 2024 International Swimming Pool and Spa Code, and the 2024 Amendments to Chapter 29, Building Regulations of the Code of the City of Chandler as adopted herein are effective July 1, 2025.

Section 7. Providing for Penalties. A violation of this ordinance shall be a Class 1 misdemeanor subject to the enforcement and penalty provisions set forth in Section 1-8 of the Chandler City Code.

INTRODUCED AND TENTATIVELY APPROVED by the City Council of the City of Chandler, Arizona, this ___ day of _____, 2024.

ATTEST:

_____ _____
CITY CLERK MAYOR

PASSED AND ADOPTED by the City Council of the City of Chandler, Arizona this _____ day of _____, 2024.

ATTEST:

_____ _____
CITY CLERK MAYOR

CERTIFICATION

I HEREBY CERTIFY that the above and foregoing Ordinance No. 5108 duly passed and adopted by the City Council of the City of Chandler, Arizona, at a regular meeting held on the _____ day of _____, 2024, and that a quorum was present thereat.

_____
CITY CLERK

APPROVED AS TO FORM:

_____
CITY ATTORNEY JMB

Published in the Arizona Republic on:

2024 Amendments to Chapter 29, Building Regulations
{Public Record for Ordinance No. 5108}

The Chandler City Code Chapter 29, Building Regulations, is hereby amended to read as follows (additions in ALL CAPS, deletions in ~~strikeout~~):

Chapter 29 - BUILDING REGULATIONS

ARTICLE I. - CODE ENFORCEMENT

29-1. - Code enforcement.

29-1.1. Application. This article applies to the administration of the codes adopted by reference and amended in Articles II through X of this Chapter 29. In the event of a conflict between the provisions of this Article I and the provisions set forth in, or codes as amended in Articles II through X of this Chapter 29, the provisions of this Article I shall be controlling.

29-1.2. Designation of building official. The City Development Services Department Building Official is hereby designated as the building official, or such other official designated as the applicable code official in any code adopted by reference in this chapter, for purposes of this article and the codes adopted by reference in this chapter.

29-1.3. Violations.

A. *Unlawful acts.* It shall be unlawful for any person to erect, construct, alter, extend, repair, move, remove, demolish, or occupy any building, structure or equipment regulated by any code amended and/or adopted by reference in this Chapter 29, or violate any order or decision by the *building official* pursuant such code, or caused same to be done, in conflict with or in violation of any of the provisions of this code. Each day that a violation continues after notice of violation, in accordance with Section 29-11, has been served shall be deemed a separate offense.

B. *Penalties.* Unlawful acts, as defined in Subsection 29-1.3(A), constitute a violation of the Chandler City Code and shall be subject to enforcement pursuant to Subsections 29-1.3(B) and 29-1.3(C).

1. *Criminal penalties.* Persons (or legal entities included in the definitions of "person" in Section 202) who shall violate a provision of the codes amended or adopted by this Chapter 29 shall be guilty of a Class 1 misdemeanor punishable by a fine not exceeding two thousand five hundred dollars ($2,500.00) or twenty thousand dollars ($20,000.00) if a legal entity, by imprisonment for a term not exceeding six (6) months, or by probation for a term not exceeding three (3) years, or by any combination thereof.

a. The imposition of a criminal penalty does not prevent suspension or revocation of a license, permit or franchise or other administrative sanctions.

b. The imposition of criminal penalties does not prevent enforcement and any relief available under Subsections 29-1.3(B)(2) and (B)(3) or Subsection 29-1.3(C).

2. *Abatement.* In addition to the imposition of the penalties described in Subsection 29-1.3(B), the *building official* is authorized to institute appropriate action by injunctive or other equitable remedies as set forth in Chapter 26 of the Chandler Code or state law, to prevent unlawful construction or to restrain, correct or abate a violation; or to prevent illegal occupancy of a structure or premises; or to stop an illegal act, conduct of business or occupancy of a structure on or about any premises. Imposition of any of the remedies outlined in this Subsection 29-1.3(C) does not prevent criminal enforcement.

a. The imposition of any remedy detailed in Subsections 29-1.3(B)(2). 29-1.3(B)(3). or 29-1.3(C) does not prevent suspension or revocation of a license, permit or franchise or other administrative sanctions.

b. The imposition of any remedy detailed in Subsections 29-1.3(B)(2). 29-1.3(B)(3). or 29-1.3(C) does not prevent criminal enforcement options.

3. *Abatement expenses.* To the extent that the responsible person does not comply with the terms of any abatement order received, the City may seek recovery of its expenses in abating the violation cited, including, without limitation, those expenses associated with orders issued pursuant to this code or the procedures set forth in state law or Chapter 26 of the Chandler City Code.

C. *Stop work order.* Whenever the building official finds any work regulated by a code adopted by reference in this chapter being performed in a manner contrary to the provisions of a code adopted by reference in this chapter or in a dangerous or unsafe manner, the building official is authorized to issue a stop work order. Absent an emergency, a stop work order shall be in writing and shall be given to the owner of the property, or to the owner's agent, or to the person doing the work. Upon issuance of a stop work order, the cited work shall immediately cease. The stop work order shall state the reason for the order, and the conditions under which the cited work is authorized to resume. Where an emergency exists, the building official shall not be required to give a written notice prior to stopping the work.

D. *Notice of violation.* Upon finding a building, premises, vehicle, storage facility or outdoor area that is in violation of a code adopted by reference in this chapter, the *building official* may prepare, at his or her sole discretion, a written notice of violation prior to initiation of any penalties or enforcement set forth in this Article I of Chapter 29 of the Chandler City Code describing the violations and, when compliance is not immediate, specifying a time for such compliance and re-inspection. A notice of violation issued pursuant to this Subsection 29-1.3(B) shall be served upon the owner, operator, occupant, or other person responsible for the condition or violation, either by personal service, mail, or by delivering the same to, and leaving it with, some person of responsibility upon the premises. For unattended or abandoned locations, a copy of such notice of violation shall be posted on the premises in a conspicuous place at or near the entrance to such premises

and the notice of violation shall be mailed with return receipt requested or a certificate of mailing, to the last known address of the owner, occupant, or both. A notice of violation issued or served as provided by this Subsection 29-1.3(D) shall be complied with by the owner, operator, occupant, or other person responsible for the condition or violation to which the notice of violation pertains.

29-1.4. Board of appeals established; procedural rules. A board of appeals is hereby established to provide a means by which persons may (a) appeal interpretations of Chapter 28 and this Chapter 29 made by the *fire code official* or *building official*, or (b) seek a determination of the suitability of alternate materials and methods of construction or (c) appeal a designation of slum property or (d) appeal abatement orders issued pursuant to Chapter 26 of the Chandler City Code. The board of appeals may also evaluate model codes, or any amendments associated with any such codes, for recommendations of adoption by the City. The following rules and regulations governing the establishment and procedures of the board of appeals are hereby adopted. The procedures set forth herein shall supersede any previous rules and procedures. Whenever this Article 1 of Chapter 29 of the Chandler City Code makes use of the term "*building official,"* it shall mean the "*fire code official"* if the action of the Board or official pertains to the International Fire Code as adopted in Chapter 28 of the Chandler City Code.

A. *Creation and appointment.* The board of appeals shall consist of five (5) members who are qualified by experience and training to pass upon matters pertaining to building construction and who are not employees of the City. Members of such board shall be appointed as set forth in section 6.01 of the City Charter. Only one (1) member may be appointed from any single company, corporation, business, or organization concurrently. The secretary of the board shall be an ex officio member and shall be the building official or his authorized representative. Members shall serve without compensation.

B. *Term of office.* The term of the members shall be as set forth in Section 6.01 of the City Charter, except that the expiration dates of members' terms shall be so scheduled to provide the continuity of at least two (2) members with a minimum of one (1) year of previous board experience.

C. *Meetings.*

1. The board shall meet monthly, unless otherwise rescheduled by a majority vote of the members when no appeals are pending. Meeting locations and times may be set at the discretion of the board. All such meetings shall be open to the public.

2. Notice of the time and place of any regular or special meeting, including an agenda of the matter(s) to be discussed, shall be given at least ten (10) days prior to the meeting.

3. The board shall elect a chairman in May of each year who shall have the power to administer oaths and take evidence and appoint any such officers deemed desirable. The chairman will serve for a term of one (1) year~~,~~ and may serve as chairman for a successive year if elected by a majority of the other board members. The secretary of the board shall keep a record of its actions and render a report to the

mayor and council of each meeting. Any finding, ruling or decision of said board shall be fully reported in the minutes of City Council. Written minutes of board proceedings showing the vote of each member and all actions taken shall be kept.

D. *Powers.*

1. The board shall reasonably interpret this Chapter, and the codes adopted by reference in this Chapter, when the meaning of any word or phrase of a section is in doubt; when there is a dispute as to such meaning between the appellant and the enforcing officer; or when it is alleged that there is error in any order, requirement, decision, or determination made by the building official in the enforcement of this Chapter.

2. The board may approve alternate materials, design, or methods of construction, provided it finds that the proposed alternate is suitable for the intended application, and complies with the intent of this Chapter, and is, for the purposes intended, at least the equivalent of that prescribed in the International Building Code adopted by reference in this Chapter in quality, strength, effectiveness, fire resistance, durability, and safety.

3. The board shall hear and determine appeals regarding the designation of slum property and code enforcement and nuisance abatement orders pursuant to Chapter 26 of the Code.

E. *Quorum and voting.* Three (3) members of the board shall constitute a quorum. In recommending the approval of an appeal or alternate materials or methods of construction, the affirmative vote of three (3) members shall be required. If recommending amendments to this Chapter or new legislation, the affirmative vote of four (4) members is required.

F. *Appeals.*

1. An appeal to the board may be initiated by any property owner, or an authorized representative of such property owner, who disputes a decision of the building official relating to that person's property. A written notice of appeal must be filed with the City Clerk within thirty (30) days after the property owner, or the authorized representative of such property owner, receives notice of such decision. Self-imposed hardships shall not be grounds for an appeal. The City Clerk shall cause to be transmitted to the board all records pertaining to the appealed action.

2. An appeal to the board of slum property designations and code enforcement or nuisance abatement orders may be filed by the owner or other responsible party in accordance with the provisions of Chapter 30 and/or Chapter 26 of the Code.

3. Upon receipt of the notice of appeal in proper form, and upon proper public notice, the board shall proceed to hold a public hearing of the appeal at their next regular meeting. The board, however, may refuse to grant a hearing of any case in which the notice of appeal requests a waiver of any provisions of this chapter.

4. A timely filed notice of appeal stays all proceedings against the appellant in the matter appealed, unless the building official certifies to the board that, in his opinion and by the facts stated, a stay would cause imminent peril to life or property. Upon such certification, proceedings shall not be stayed, except by restraining order to the building official by a court having jurisdiction or as may be determined by the board in a special meeting which may be held after twenty-four (24) hours' posting for public notification.

G. *Board decision; time limit.* The board shall decide on any matter within fifteen (15) days after the date of said hearing unless a specified extension of time for deliberation is agreed upon by the appellant. The failure to issue a decision within fifteen (15) days after the date of the hearing shall be deemed to constitute a decision adverse to the appellant. A decision in favor of the appellant shall be implemented by the building official in accordance with the terms and conditions set forth in that decision.

H. *Court review.* Appeal from the decision of the board of appeals shall be to a court having jurisdiction in the matter under consideration and shall proceed in the manner prescribed by law.

I. *Reapplication.* If an appeal is denied (or technically denied) by the board, the board shall reserve the right to refuse to consider another appeal on the same subject matter under like circumstances within one (1) year from the date of hearing on the previous appeal.

J. *Executive sessions.* Executive sessions of the board of appeals may be held for only those reasons and pursuant to those conditions authorized by state law or the City Charter. Executive sessions may be held upon twenty-four (24) hours' posting and notification of the board.

K. *Financial.* The board of appeals shall not incur debts, nor make any purchases or enter any contracts binding upon the City.

L. *Conflict of interest.* Any member of the board who has a conflict of interest in any matter brought before this board of appeals shall make known such interest in the minutes of the board and shall refrain from voting upon or otherwise participating in any manner in such matter. The existence of a conflict of interest shall be determined by reference to state law.

M. *Amendments of procedural rules.* Any proposed amendments of these procedural rules shall be considered at a public meeting of the board for which notice has been given.

29-1.5. Provisions deemed continuation of existing ordinances. The provisions of this code, insofar as they are substantially the same as legislation previously adopted by the City relating to the same subject matter, shall be construed as restatements and continuations thereof and not as new enactments.

ARTICLE II. - INTERNATIONAL BUILDING CODE

29-2. - International Building Code adopted.

The City Council of Chandler adopts by reference the International Building Code, ~~2021~~ 2024 edition, ("IBC") and incorporates it herein as if fully set out in this Article II of Chapter 29 with the additions, insertions, deletions, and changes set forth herein. The term "code" or "IBC" without further description when used in the portions of the IBC which are not amended and in this Article II of Chapter 29 shall mean the IBC as amended herein by the additions, insertions, deletions, and changes set forth and adopted herein. Whenever the code refers to other publications of the International Code Council, which have been adopted by the City, such references shall be to the version of the publications as amended by the City.

29-2.1. Subsection 101.1 "Title" is hereby amended by inserting The City of Chandler, Arizona as Name of Jurisdiction.

29-2.2. Subsection 101.4.4 "Property Maintenance" is deleted in its entirety.

29-2.3. Subsection 102.2 "Other laws" is hereby amended by adding the following provisions to the end thereof:

> Additionally, the building official will enforce the provisions of such other laws when mandated by state or federal law.

29-2.4. Subsection 102.6 "Existing Structures" is hereby amended by deleting reference to the International Property Maintenance Code.

29-2.5. Subsection 102.6.2 "Buildings previously occupied" is hereby amended by deleting reference to the International Property Maintenance Code.

29-2.6. Subsection 103.1 "Creation of Enforcement Agency" is hereby amended by inserting Development Services Department as name of department.

29-2.7. SUBSECTION 104.2.3 "ALTERNATIVE MATERIALS, DESIGN AND METHODS OF CONSTRUCTION AND EQUIPMENT" IS HEREBY AMENDED BY DELETING THE EXTIRE EXCEPTION TO THIS SUBSECTION.

~~*29-2.7.*~~ *29-2.8.* Subsection 105.1.1 "Annual permit" is hereby deleted in its entirety and replaced with a new subsection 105.1.1 as follows:

> *105.1.1 Annual permit.* The building official is authorized to establish a policy outlining the scope of work and other restrictions for issuing an annual permit for alterations to a previously approved premise in lieu of requiring individual permits for each alteration.

~~*29-2.8.*~~ *29-2.9.* Subsection 105.2 "Work exempt from permit" "Building" is hereby amended by deleting item 1 in its entirety and replacing it with a new item 1 as follows:

> 1. One-story detached accessory structures, provided that the floor area does not exceed 120 square feet (11.15 m^2) and the height measured at the highest point does

not exceed 7 feet (2134 mm) with option up to a maximum of 9 feet (2743 mm) with setbacks at a ratio of 2 additional feet of setback for each additional 1 foot of building height.

~~*29-2.9*~~. *29-2.10.* Subsection 105.2 "Work exempt from permit" "Building" item 9 is hereby amended by replacing "24 inches (610mm)" with "18 inches (457mm)".

~~*29.2.10*~~. *29-2.11.* Subsection 105.2 "Work exempt from permit" is hereby amended by adding items to each work category as follows:

Building:

14. Replacement of a roof cover on Group R-3 or U occupancies where the replacement roof covering classification is equal to or greater than the existing roof covering classification and does not increase the loads upon the structural frame.

15. Special cases as allowed by the Building Official for work of a similar nature and complexity as those items listed above.

Electrical:

4. Repair or replacement of motors, transformers, overcurrent devices or equipment affixed to a Group R-3 occupancy where the replaced or repaired equipment is of the same rating as the existing equipment, is placed in the same location as the existing equipment and is labeled as defined in this code.

5. Special cases as allowed by the Building Official for work of a similar nature and complexity as those items listed above.

Gas:

3. Replacement of gas water heating equipment affixed to a Group R-3 occupancy where the replacement equipment is of equal or lesser BTU capacity and is placed in the same location as the existing equipment.

4. Replacement of gas pool or spa heating equipment serving a Group R-3 occupancy where the replacement equipment is of equal or lesser BTU capacity and is placed in the same location as the existing equipment.

5. Replacement of gas air-conditioning equipment, direct vent equipment, furnaces and log lighters affixed to a Group R-3 occupancy where the replacement equipment is of equal or lesser BTU capacity and is placed in the same location as existing equipment.

6. Special cases as allowed by the Building Official for work of a similar nature and complexity as those items listed above.

Mechanical:

8. Replacement of evaporative coolers affixed to a Group R-3 occupancy where the replacement equipment is of equal or lesser airflow (cfm) and is placed in the same location as the existing evaporative cooler.

9. Special cases as allowed by the Building Official, for work of a similar nature and complexity as those items listed above.

Plumbing:

3. Replacement of water conditioning or treating equipment affixed to Group R-3 occupancy where the replacement equipment is of equal or lesser treatment capacity and is placed in the same location as the existing equipment.

4. Replacement of solar pool and spa heating equipment serving a Group R-3 occupancy where the replacement equipment is of equal or lesser heating capacity and is placed in the same location as the existing equipment.

5. Replacement of electric water heating equipment affixed to a Group R-3 occupancy where the replacement equipment is of equal or lesser amperage rating and is placed in the same location as the existing equipment.

6. Special cases as allowed by the Building Official for work of a similar nature and complexity as those items listed above.

~~*29-2.11*~~. *29-2.12.* Subsection 105.3.1 "Action on application" is hereby amended by adding the following provisions to the end thereof:

A permit may be issued solely after applicant has satisfied all applicable City of Chandler ordinances and requirements.

~~*29-2.12*~~. *29-2.13.* Subsection 105.5 "Expiration" is hereby amended by adding a new Subsection 105.5.1 to read as follows:

105.5.1 Reinstatement. The Building Official is authorized to reinstate a permit that has expired upon payment of a reinstatement fee provided:

1. The permit has not been expired for more than one year and,

2. Code requirements that would affect the project have not changed.

~~*29-2.13*~~. *29-2.14.* Subsection 109.2 "Schedule of Permit Fees" is hereby deleted in its entirety and replaced with a new Subsection 109.2 to read as follows:

109.2. Schedule of Permit Fees. Permit fees, if any, shall be adopted by the City by resolution.

~~29-2.14. Subsection 111.1 "Change of Occupancy", subsection 111.2 "Certificate Issued" and Subsection 111.3 "Temporary Occupancy" are hereby amended by replacing~~

~~"Building Official" with "City of Chandler Development Services Department Director or Director's designee".~~

29-2.15. Section 111 "Certificate of Occupancy" is hereby amended by adding a new Subsection 111.5 to read as follows:

111.5 Certificate of Completion. A Certificate of Completion may be issued at completion of permitted work when:

a. The work authorized does not change the scope of an existing certificate of occupancy or;

b. the work authorized does not result in a building ready for occupancy.

A Certificate of Completion alone shall not authorize occupancy of a building.

29-2.16. Section 116 "Unsafe Structures and Equipment", is hereby amended by deleting Subsection 116.5 "Restoration OR ABATEMENT" in its entirety and adding new subsections 116.5 through 116.11 to read as follows:

116.5. Recordation of Notice. If compliance with the notice is not satisfied within the time specified therein, and no appeal has been properly and timely filed, the building official shall file in the office of the county recorder a certificate describing the property and certifying (i) that the building is a dangerous building and (ii) that the owner has been so notified. Whenever the corrections ordered shall thereafter have been completed, or the building demolished so that it no longer exists as an unsafe building on the property described in the certificate, the building official shall file a new certificate with the county recorder certifying that the building has been demolished or all required corrections have been made so that the building is no longer unsafe, whichever is appropriate.

116.6 Repair, Vacation and Demolition. The following standards shall be followed by the building official (and by the board of appeals if an appeal is taken) in ordering the repair, vacation or demolition of any unsafe building or structure:

1. Any building declared as an unsafe building under this code shall be made to comply with one (1) of the following:

(a) The building shall be repaired in accordance with this code; or

(b) The building shall be demolished at the option of the building owner; or

(c) If the building does not constitute an immediate danger to the life, limb, property or safety of the public it may be vacated, secured and maintained against entry.

2. The structure or equipment determined to be unsafe by the building official is permitted to be restored to a safe condition. To the extent that repairs, alterations, or additions are made, or a change of occupancy occurs during the restoration of the structure, such repairs, alterations, additions or change of occupancy shall

comply with the requirements of Section 105.2.2 in the existing International Building Code and Chapter 34.

3. If the building or structure is in such condition as to make it immediately dangerous to the life, limb, property, or safety of the public or its occupants, it shall be ordered to be vacated.

116.7. Notice to Vacate. Every notice to vacate shall, in addition to being served as provided in subsection 116.3, be posted at or upon each exit of the building and shall be in substantially the following form:

DO NOT ENTER
UNSAFE TO OCCUPY

It is a misdemeanor to occupy this building, or to remove or deface this notice.

Building Official

. . . . . of . . . . . .

Whenever such notice is posted, the building official shall include a notification thereof in the notice issued under subsection 116.3, reciting the emergency and specifying the conditions which necessitate the posting. No person shall remain in or enter any building which has been posted, except that entry may be made to repair, demolish or remove such building under permit. No person shall remove or deface any such notice after it is posted until the required repairs, demolition or removal have been completed and a certificate of occupancy issued pursuant to the provisions of this code.

116.8. Failure to Commence Work. Whenever the repair or demolition is not commenced within thirty (30) days after any final notice or order issued under this code becomes effective:

1. The building official shall cause the building described in such notice and order to be vacated by posting at each entrance thereto a notice reading:

DANGEROUS BUILDING
DO NOT OCCUPY

It is a misdemeanor to occupy this building, or to remove or deface this notice.

Building Official

. . . . . of . . . . . .

2. No person shall occupy any building which has been posted as specified in this section. No person shall remove or deface any such notice so posted until the repairs, demolition or removal ordered by the building official have been

completed and a Certificate of Occupancy issued pursuant to the provisions of this code.

3. The building official may, in addition to any other remedy herein provided, cause the building to be repaired to the extent necessary to correct the conditions which render the building unsafe as set forth in the notice; or, if the notice required demolition, to cause the building to be sold and demolished or demolished and the materials, rubble and debris therefrom removed, and the lot cleaned. Any such repair or demolition work shall be accomplished, and the cost thereof paid and recovered in the manner hereinafter provided in this code. Any surplus realized from the sale of any such building, or from the demolition thereof, over and above the cost of demolition and of cleaning the lot, shall be paid over to the person or persons lawfully entitled thereto.

116.9. Extension of Time to Perform Work. Upon receipt of an application from the person required to conform to the notice and by agreement of such person to comply with the notice if allowed additional time, the building official may grant an extension of time, not to exceed an additional one hundred twenty (120) days, within which to complete said repair, rehabilitation or demolition, if the building official determines that such an extension of time will not create or perpetuate a situation imminently dangerous to life or property. The building official's authority to extend time is limited to the physical repair, rehabilitation or demolition of the premises and will not in any way affect the time to appeal the notice.

116.10 Interference with Repair or Demolition Work Prohibited. No person shall obstruct, impede or interfere with any officer, employee, contractor or authorized representative of this jurisdiction or with any person who owns or hold any estate or interest in any building which has been ordered repaired, vacated or demolished under the provisions of this code; or with any person to whom such building has been lawfully sold pursuant to the provisions of this code, whenever such officer, employee, contractor or authorized representative of this jurisdiction, person having an interest or estate in such building or structure, or purchaser is engaged in the work of repairing, vacating and repairing, or demolishing any such building, pursuant to the provisions of this code, or in performing any necessary act preliminary to or incidental to such work or authorized or directed pursuant to this code.

116.11. Abatement and Cost Recovery. Unless timely appealed to the board of appeals, a notice issued pursuant to subsection 116.3 shall constitute a final abatement order. The failure to comply with the terms of such notice, in addition to constituting a violation of the Code of the City of Chandler, shall permit the City to institute the abatement and cost recovery provisions set forth in Section 26-11, Code of the City of Chandler.

29-2.17. Subsection 308.2 “Institutional Group I-1” and subsection 308.2.3 “Six to 16 persons receiving custodial care” are hereby amended by replacing “16 persons” with “10 persons”.

29-2.18. Subsection 310.5 "Residential Group R-4" is hereby amended by replacing "16 persons" with "10 persons" in the first sentence.

29-2.19. SUBSECTION 412.4.5 "HEIGHT AND AREA LIMITS" IS AMENDED BY DELETING THE ENTIRE PARAGRAPH AND REPLACING IT WITH THE FOLLOWING ALONG WITH AN ADDITIONAL NOTE "D" TO TABLE 412.3.6:

> *412.4.5 HEIGHT AND AREA LIMITS.* RESIDENTIAL AIRCRAFT HANGARS (THOSE PRIVATE HANGARS ASSOCIATED AND ATTACHED TO SINGLE FAMILY RESIDENTIAL DWELLING UNITS) SHALL MEET THE CITY OF CHANDLER FIRE SUPPRESSION REQUIREMENTS AS AMENDED IN TABLE 412.3.6 "HANGAR FIRE SUPPRESSION REQUIREMENTS".
>
> > D. RESIDENTIAL AIRCRAFT HANGARS SHALL BE PROVIDED WITH A GROUP 13R FIRE SUPPRESSION SYSTEM OR THE HANGAR AND DWELLING MAY BE PROVIDED WITH A GROUP 13D FIRE SUPPRESSION SYSTEM.

~~*29-2.19.*~~ *29-2.20.* Section 903 "Automatic Sprinkler Systems" is hereby amended by deleting Sections 903.2 through 903.2.10 in their entirety, reserving Section Number 903.2.10 and adding new Sections 903.2 through 903.2.9 to read as follows:

> *903.2 Where required.* Subject to the exceptions set forth herein, approved automatic sprinkler systems shall be provided in the locations within the City described in this Section. Installation of fire sprinkler systems shall be performed by an Arizona licensed fire protection contractor.
>
> *Exceptions:*
>
> > 1) An automatic sprinkler system is not required for spaces or areas in telecommunications buildings used exclusively for telecommunications equipment, associated electrical power distribution equipment, batteries and standby engines, provided those spaces or areas are equipped throughout with an automatic smoke detection system in accordance with Section 907.2 and are separated from the remainder of the building by not less than 1-hour fire barriers constructed in accordance with Section 707 of the International Building Code or not less than 2-hour horizontal assemblies constructed in accordance with Section 711 of the International Building Code, or both.
> >
> > 2) An automatic sprinkler system is not required for buildings or structures which were constructed and in use prior to September 11, 1996, and for which a change in use or occupancy of any structure has not occurred as set forth in Section 102.6. Any change in use or occupancy of these buildings shall refer to the ~~2018~~ International Existing Building Code to determine if fire sprinklers will be required with the change.
> >
> > 3) In addition to the general authority granted to the fire code official pursuant to Sections 104.9 and 104.10 of the International Fire Code, the fire code official shall have discretion to exempt other facilities from automatic sprinkler system

requirements where the size, intended use, and extent of use of the facility does not warrant the installation of fire sprinklers and alternate methods to secure public safety are provided. Such other facilities may include, but are not limited to:

(1) Enclosed structures which are less than three thousand (3,000) square feet in size, at least fifty (50) percent open on the sides and used to protect humans, animals, or property from the sun or elements.

(2) Structures which are less than three hundred (300) square feet in size used to monitor access to a larger facility, site, or area.

(3) Structures temporarily used for a period not to exceed two (2) years for onsite storage or maintenance purposes provided that the structure is not used for Group A, E, F, H or I occupancies.

903.2.1 Group A. An automatic sprinkler system shall be provided throughout all buildings and all portions of all Group A occupancies.

903.2.2 Group B. An automatic sprinkler system shall be provided throughout all buildings and all portions of all Group B occupancies.

903.2.3 Group E. An automatic sprinkler system shall be provided throughout all buildings and all portions of all Group E occupancies.

903.2.4 Group F. An automatic sprinkler system shall be provided throughout all buildings and all portions of all Group F occupancies.

903.2.5 Group H. An automatic sprinkler system shall be provided throughout all buildings and all portions of all Group H occupancies.

903.2.6 Group I. An automatic sprinkler system shall be provided throughout all buildings and all portions of all Group I occupancies.

903.2.7 Group M. An automatic sprinkler system shall be provided throughout all buildings and all portions of all Group M occupancies.

903.2.8 Group R. Subject to the exceptions set forth herein, an automatic sprinkler system shall be provided throughout all buildings and all portions of all Group R occupancies.

Exceptions:

1. An automatic sprinkler system is not required for Group R-3 detached one- or two-family dwellings.

903.2.9 Group S. An automatic sprinkler system shall be provided throughout all buildings and all portions of all Group S occupancies.

Exception: S-2, one story, grade level, open parking structures that are entirely open, except for structural columns, on all four sides.

~~*29-2.20.*~~ *29-2.21.* Subsection 903.2.11 "Specific building areas and hazards" is hereby amended to read as follows:

In all occupancies, including all Group U occupancies larger than three thousand (3,000) square feet, an automatic sprinkler system shall be installed for building design or hazards in the locations set forth in sections 903.2.11.1 through 903.2.11.6.

~~*29-2.21.*~~ *29-2.22.* Subsection 912.2 "Location" is hereby amended to read as follows:

912.2 Location. With respect to hydrants, driveways, buildings and landscaping, fire department connections shall be so located that fire apparatus and hose connected to supply the system will not obstruct access to the buildings for other apparatus. The location of fire department connections shall be located on private property six (6) to ten (10) feet behind curb (of street) at a permanent entrance to site or as otherwise approved by the fire code official.

~~*29-2.22.*~~ *29-2.23.* SUBSECTION 1612.3 "ESTABLISHMENT OF FLOOD HAZARD AREAS" IS HEREBY AMENDED BY INSERTING THE CITY OF CHANDLER, ARIZONA AS NAME OF JURISDICTION AND THE LATEST EFFECTIVE DATE AS DATE OF ISSUANCE.

ARTICLE III. - NATIONAL ELECTRICAL CODE

29-3. - National Electrical Code adopted.

The City Council of Chandler adopts by reference the National Electrical Code, ~~2020~~ 2023 edition, ("NEC") and incorporates it herein as if fully set out in this Article III of Chapter 29 with the additions, insertions, deletions, and changes set forth herein. The term "code" or "NEC" without further description when used in the portions of the NEC which are not amended and in this Article III of Chapter 29 shall mean the NEC as amended herein by the additions, insertions, deletions, and changes set forth and adopted herein. Whenever the code refers to publications of the International Code Council, which have been adopted by the City, such references shall be to the version of the publications as amended by the City.

29-3.1. Subsection 110.3(C) "Listing" is ~~deleted in its entirety~~ AMENDED TO READ AS FOLLOWS:

(C) LISTING. PRODUCT TESTING, EVALUATION, AND LISTING (PRODUCT CERTIFICATION) SHALL BE PERFORMED BY RECOGNIZED QUALIFIED ELECTRICAL TESTING LABORATORIES, OR OTHER AGENCIES APPROVED BY THE CITY OF CHANDLER BUILDING OFFICIAL AND SHALL BE IN ACCORDANCE WITH APPLICABLE PRODUCT STANDARDS RECOGNIZED AS ACHIEVING EQUIVALENT AND EFFECTIVE SAFETY FOR EQUIPMENT INSTALLED TO COMPLY WITH THIS CODE.

29-3.2. Subsection 210.8(A)(~~2~~) "Dwelling Units" ITEM (2) is hereby amended by adding an exception as follows:

Exception: receptacles that are not readily accessible.

29-3.3. SUBSECTION 210.8(A) "DWELLING UNITS" ITEM (3) IS HEREBY AMENDED BY ADDING AN EXCEPTION AS FOLLOWS:

EXCEPTION: PLUG RECEPTACLES THAT ARE DESIGNED TO BE USED FOR POWERING LISTED AIR CONDITIONING, HEATING OR COOLING EQUIPMENT.

~~*29-3.3.*~~ *29-3.4.* Subsection 210.8(F) "Outdoor Outlets" ~~is deleted in its entirety~~ EXCEPTION NO. 2 IS HEREBY AMENDED TO DELETE THE SECOND SENTENCE AND READ AS FOLLOWS:

EXCEPTION NO. 2: GFCI PROTECTION SHALL NOT BE REQUIRED FOR LISTED HVAC EQUIPMENT.

~~*29-3.4.* Subsection 230.67 "surge protection" is deleted in its entirety.~~

~~*29-3.5*~~. *29-3.5.* Subsection 406.12 "Tamper-Resistant Receptacles" is amended by deleting items (10) ~~(1) and (8) in their entirety and item numbers (1) and (8) are hereby reserved.~~

ARTICLE IV. - INTERNATIONAL PLUMBING CODE

29-4. - International Plumbing Code adopted.

The City Council of Chandler adopts by reference the International Plumbing Code, ~~2021~~ 2024 edition, ("IPC") and incorporates it herein as if fully set out in this Article IV of Chapter 29 with the additions, insertions, deletions, and changes set forth herein. The term "code" or "IPC" without further description when used in the portions of the IPC which are not amended and in this Article IV of Chapter 29 shall mean the IPC as amended herein by the additions, insertions, deletions, and changes set forth and adopted herein. Whenever the code refers to publications of the International Code Council, which have been adopted by the City, such references shall be to the version of the publications as amended by the City.

29-4.1. CHAPTER 1 "SCOPE AND ADMINISTRATION" IS HEREBY AMENDED BY DELETING IN ITS ENTIRETY.

29-4.2. CHAPTER 1 "SCOPE AND ADMINISTRATION" IS HEREBY AMENDED TO COMPLY WITH THE PROVISIONS ALONG WITH THE AMENDMENTS AS DESCRIBED IN THE CHAPTER 1 SCOPE AND ADMINISTRATION OF THE 2024 INTERNATIONAL BUILDING CODE.

~~*29-4.1.* Subsection 101.1 "Title" is hereby amended by inserting The City of Chandler, Arizona as Name of Jurisdiction.~~

~~*29-4.2.* Subsection 103.1 "Creation of Agency" is hereby amended by inserting "Development Services Department" as name of department.~~

~~*29-4.3.* Subsection 106.1.1 "Annual Permit" and subsection 106.1.2 "Annual Permit Records" are hereby deleted in their entirety.~~

~~*29-4.4.* Subsection 106.2 “Exempt Work” is hereby amended by adding the additional exempt work sections as follows:~~

~~3. Replacement of water conditioning or treating equipment affixed to Group R-3 occupancy where the replacement equipment is of equal or lesser treatment capacity and is placed in the same location as the existing equipment.~~

~~4. Replacement of solar pool and spa heating equipment serving a Group R-3 occupancy where the replacement equipment is of equal or lesser heating capacity and is placed in the same location as the existing equipment~~

~~5. Replacement of electric water heating equipment affixed to a Group R-3 occupancy where the replacement equipment is of equal or lesser amperage rating and is placed in the same location as the existing equipment.~~

~~6. Special cases as allowed by the Building Official for work of a similar nature and complexity as those items listed above.~~

~~*29-4.5.* Subsections 109.2 and 109.5 entitled "Schedule of Permit Fees" and "Refunds”, respectively, are hereby deleted in their entirety and replaced with new Subsections 109.2 and 109.5 to read as follows:~~

> ~~*109.2 Schedule of Permit Fees.* Permit fees, if any, shall be adopted by the City by resolution.~~
>
> ~~*109.5 Refunds.* The building official is authorized to establish a refund policy.~~

~~*29-4.6.* Section 115 “Violations” and Section 109 “Means of Appeal” is hereby deleted in its entirety and Section number115 is hereby reserved.~~

~~*29-4.7*~~ *29-4.3.* Subsection 410.4 "Substitution~~s~~" is amended by deleting the second sentence and replacing it with the following:

> In all other occupancies where drinking fountains are required, water dispensers connected to the potable water system shall be permitted to be substituted for the first required fountain and any water dispenser shall be permitted to be substituted for not more than 50 percent of the required number of drinking fountains.

~~*29-4.8*~~ *29-4.4.* Subsection 1003.3.7 "Gravity grease interceptors and gravity grease interceptors with fats, oils, and greases disposal systems" is amended by deleting the first sentence and replacing it with the following:

> ~~All gravity grease interceptors shall be designed and installed in accordance with the City of Chandler Gravity Grease Interceptor Sizing Worksheet.~~
>
> THE REQUIRED CAPACITY OF GRAVITY GREASE INTERCEPTORS AND GRAVITY GREASE INTERCEPTORS WITH FATS, OILS, AND GREASES DISPOSAL SYSTEMS SHALL BE SIZED PER THE CITY OF CHANDLER DFU CONVERSION CHART:

TOTAL DFU CONVERSION TO GREASE INTERCEPTOR SIZE

Total DFUs*	Interceptor Volume
	(Gallons)
0 to 21	750
22 to 35	1,000
36 to 90	1,250
91 to 172	1,500
173 to 216	2,000
217 to 307	2,500
308 to 342	3,000

*ESTABLISHMENTS RESULTING IN TOTAL DFU's > 342 SHALL BE DESIGNED BY A PROFESSIONAL ENGINEER, REGISTERED IN THE STATE OF ARIZONA.

ARTICLE V. - INTERNATIONAL MECHANICAL CODE

29-5. - International Mechanical Code adopted.

The City Council of Chandler adopts by reference the International Mechanical Code, ~~2021~~ 2024 edition, ("IMC") and incorporates it herein as if fully set out in this Article V of Chapter 29 with the additions, insertions, deletions, and changes set forth herein. The term "code" or "IMC" without further description when used in the portions of the IMC which are not amended and in this Article V of Chapter 29 shall mean the IMC as amended herein by the additions, insertions, deletions, and changes set forth and adopted herein. Whenever the code refers to publications of the International Code Council, which have been adopted by the City, such references shall be to the version of the publications as amended by the City.

29-5.1. CHAPTER 1 “SCOPE AND ADMINISTRATION” IS HEREBY AMENDED BY DELETING IN ITS ENTIRETY.

29-5.2. CHAPTER 1 “SCOPE AND ADMINISTRATION” IS HEREBY AMENDED TO COMPLY WITH THE PROVISIONS ALONG WITH THE AMENDMENTS AS DESCRIBED IN THE CHAPTER 1 SCOPE AND ADMINISTRATION OF THE 2024 INTERNATIONAL BUILDING CODE.

~~*29-5.1.* Subsection 101.1 "Title" is hereby amended by inserting The City of Chandler, Arizona as Name of Jurisdiction.~~

~~*29-5.2.* Subsection 103.1 "Creation of Agency" is hereby amended by inserting Development Services Department as name of department.~~

~~*29-5.3.* Subsection 106.1.1 "Annual Permit" and Subsection 106.1.2 "Annual Permit Records" are hereby deleted in their entirety.~~

~~*29-5.4.* Subsection 106.2 "Permits Not Required" is hereby amended by adding the additional exempt work sections as follows:~~

~~9. Replacement of evaporative coolers where the replacement equipment is of equal or lesser airflow (cfm) and is placed in the same location as the existing evaporative cooler.~~

~~10. Special cases as allowed by the Building Official for work of a similar nature and complexity as those items listed above.~~

~~*29-5.5.* Subsections 109.2 "Schedule of Permit Fees" and 109.6 "Refunds" respectively are hereby deleted in their entirety and replaced with new Subsections 109.2 and 109.6 to read as follows:~~

~~*109.2. Schedule of Permit Fees.* Permit fees, if any, shall be adopted by the City by resolution.~~

~~*109.6. Refunds.* The Building Official is authorized to establish a refund policy.~~

~~*29-5.6.* Section 115 "Violations" is hereby deleted in its entirety and Section numbers 115 is hereby reserved.~~

ARTICLE VI. - INTERNATIONAL RESIDENTIAL CODE

29-6. - International Residential Code adopted.

The City Council of Chandler adopts by reference the International Residential Code, ~~2021~~ 2024 edition, ("IRC") and incorporates it herein as if fully set out in this Article VI of Chapter 29 with the additions, insertions, deletions, and changes set forth herein. The term "code" or "IRC" without further description when used in the portions of the IRC which are not amended and in this Article VI of Chapter 29 shall mean the IRC as amended herein by the additions, insertions, deletions, and changes set forth and adopted herein. Whenever the code refers to other publications of the International Code Council, which have been adopted by the City, such references shall be to the version of the publications as amended by the City.

29-6.1. Subsection R101.1 "Title" is hereby amended by inserting The City of Chandler, Arizona as Name of Jurisdiction.

29-6.2. SUBSECTION R102.2 "OTHER LAWS" IS HEREBY AMENDED BY ADDING THE FOLLOWING PROVISIONS TO THE END THEREOF:

ADDITIONALLY, THE BUILDING OFFICIAL WILL ENFORCE THE PROVISIONS OF SUCH OTHER LAWS WHEN MANDATED BY STATE OR FEDERAL LAW.

~~29-6.2~~. *29-6.3.* Subsection ~~R102.7~~ R102.6 "Existing structures" is hereby amended by deleting reference to the International Property Maintenance Code.

29-6.4. SUBSECTION R103.1 "CREATION OF AGENCY" IS HEREBY AMENDED BY INSERTING DEVELOPMENT SERVICES DEPARTMENT AS NAME OF DEPARTMENT.

~~29-6.3~~. *29-6.5.* Subsection R105.2 "Work exempt from permit" "Building" is hereby amended by deleting item 1 in its entirety and replacing it with a new item 1 as follows:

1. One-story detached accessory structures, provided that the floor area does not exceed 120 square feet (11.15 m2) and the height measured at the highest point does not exceed 7 feet (2134 mm) with option up to a maximum of 9 feet (2743 mm) with setbacks at a ratio of 2 additional feet of setback for each additional 1 foot of building height.

~~29-6.4~~. *29-6.6*. Subsection R105.2 "Work exempt from permit" "Building" is hereby amended by deleting item 7 in its entirety and replacing it with a new item 7 as follows:

7. Prefabricated swimming pools that are less than 18 inches (457 mm) deep.

~~*29-6.5*~~. *29-6.7*. Subsection R105.2 "Work exempt from permit" is hereby amended by adding items to each work category as follows:

Building:

11. Replacement of a roof cover where the replacement roof covering classification is equal to or greater than the existing roof covering classification and does not increase the loads upon the structural frame.

12. Special cases allowed by the Building Official for work of a similar nature and complexity as those items listed above.

ELECTRICAL:

6. REPAIR OR REPLACEMENT OF MOTORS, TRANSFORMERS, OVERCURRENT DEVICES OR EQUIPMENT AFFIXED TO A GROUP R-3 OCCUPANCY WHERE THE REPLACED OR REPAIRED EQUIPMENT IS OF THE SAME RATING AS THE EXISTING EQUIPMENT, IS PLACED IN THE SAME LOCATION AS THE EXISTING EQUIPMENT AND IS LABELED AS DEFINED IN THIS CODE.

7. SPECIAL CASES AS ALLOWED BY THE BUILDING OFFICIAL FOR WORK OF A SIMILAR NATURE AND COMPLEXITY AS THOSE ITEMS LISTED ABOVE.

Gas:

4. Replacement of gas water heating equipment where the replacement equipment is of equal or lesser BTU capacity and is placed in the same location as the existing equipment.

5. Replacement of gas pool or spa heating equipment where the replacement equipment is of equal or lesser BTU capacity and is placed in the same location as the existing equipment.

6. Replacement of gas air-conditioning equipment, direct vent equipment, furnaces, and log lighters where the replacement equipment is of equal or lesser BTU capacity and is placed in the same location as existing equipment.

7. Special cases as allowed by the Building Official for work of a similar nature and complexity as those items listed above.

Mechanical:

9. Replacement of evaporative coolers where the replacement equipment is of equal or lesser airflow (cfm) and is placed in the same location as the existing evaporative cooler.

10. Special cases as allowed by the Building Official, for work of a similar nature and complexity as those items listed above.

Plumbing:

3. Replacement of water conditioning or treating equipment where the replacement equipment is of equal or lesser treatment capacity and is placed in the same location as the existing equipment.

4. Replacement of solar pool and spa heating equipment where the replacement equipment is of equal or lesser heating capacity and is placed in the same location as the existing equipment.

5. Replacement of electric water heating equipment where the replacement equipment is of equal or lesser amperage rating and is placed in the same location as the existing equipment.

6. Special cases as allowed by the Building Official for work of a similar nature and complexity as those items listed above.

~~*29-6.6*~~. *29-6.8.* Subsection R105.3.1 "Action on application" is hereby amended by adding the following provisions to the end of the first paragraph thereof:

A permit may be issued solely after applicant has satisfied all applicable City of Chandler ordinances and requirements.

~~*29-6.7.*~~ *29-6.9.* Subsection R105.5 "Expiration" is hereby amended by adding a new Subsection R105.5.1 to read as follows:

R105.5.1 Reinstatement. The Building Official is authorized to reinstate a permit that has expired upon payment of a reinstatement fee provided:

1. The permit has not been expired for more than one year and,

2. Code requirements that would affect the project have not changed.

~~*29-6.8*~~. *29-6.10.* Subsection R108.2 "Schedule of Permit Fees" is hereby deleted in its entirety and replaced with a new Subsection R108.2 to read as follows:

R108.2. Schedule of Permit Fees. Permit fees, if any, shall be adopted by the City by resolution.

~~*29-6.9.* Subsection R110.1 "Use and change of occupancy", Subsection R110.3 "Certificate issued" and Subsection R110.4 "Temporary occupancy" are hereby amended by replacing~~

~~"Building Official" with "City of Chandler Development Services Department Director or Director's Designee".~~

~~*29-6.10*~~. *29-6.11.* Subsection ~~R313.2~~ R309.2 "One- and two-family dwellings automatic ~~fire~~ SPRINKLER systems" is hereby deleted in its entirety.

~~*29-6.11*~~. *29-6.12.* Subsection N1101.4 (~~R102.1.1~~ R104.1.1) "Above code programs" is hereby amended by adding a new Subsection N1101.4.1 as follows:

N1101.4.1 RESNET testing & inspection protocol. The Residential Energy Services Network (RESNET) Mortgage Industry National Home Energy Rating System Standards Protocol for third party testing and inspections, shall be deemed to meet the requirements of sections ~~N1102.4.1.1~~ N1102.5.1, ~~N1102.4.1.2~~ N1102.5.1.2 and ~~N1103.3.4~~ N1103.3.5 and shall meet the following conditions:

1. Third party testing and inspections shall be completed by RESNET certified raters or rating field inspectors and shall be subject to RESNET quality assurance field review procedures.

2. Sampling in accordance with chapter 6 of the RESNET standards shall be performed by raters or rating field inspectors working under a RESNET accredited sampling provider.

3. Third party testing is required for the following items:

a. ~~N1102.4.1.1~~ N1102.5.1 — Building Envelope - Thermal and air barrier checklist

b. ~~N1102.4.1.2~~ N1102.5.1.2 — Testing - Air leakage rate

c. ~~N1103.3.4~~ N1103.3.5 — Sealing - Duct tightness

4. The other requirements identified as "mandatory" in Chapter 11 shall be met.

5. Alternate testing and inspection programs and protocols shall be allowed when approved by the Building official.

~~*29-6.12.* Subsection N1101.13 (R401.2) "Application" is hereby amended by deleting "Section N1101.13.5 and" in the first paragraph.~~

~~*29-6.13.* Subsection N1101.13.5 (R401.2.5) "Additional Energy Efficiency" is hereby deleted in its entirety.~~

~~*29-6.14.* Table N1102.1.3 (R402.1.3) "Insulation Minimum R-values and Fenestration Requirements by Component" is hereby amended by replacing ceiling R-value of "49" with "38" in climate zone 2.~~

29-6.13. SUBSECTION ~~N1103.3.6~~ N1103.3.7 (~~R403.3.5~~ R403.3.7) "DUCT SYSTEM TESTING" IS HEREBY AMENDED BY ADDING ONE NEW EXCEPTION TO READ AS FOLLOWS:

EXCEPTIONS:

~~5~~4. A DUCT AIR-LEAKAGE TEST SHALL NOT BE REQUIRED WHERE THE DUCTS AND AIR HANDLERS ARE ENTIRELY WITHIN THE BUILDING THERMAL ENVELOPE.

~~*29-6.15*~~. *29-6.14*. Subsection N1105.3~~.2~~ (R405.3~~.2~~) "Compliance DOCUMENTATION ~~Report~~" is hereby amended by replacing "~~Code Official~~ before a certificate of occupancy is issued" in the end of the ~~first paragraph~~ ITEM 2 with "TO THE building owner".

~~*29-6.16*~~. *29-6.15*. Table N1106.5 (R406.5) "Maximum Energy Rating Index" is hereby amended by replacing energy rating index of "51~~2~~" with "57" in the climate zone 2.

~~*29-6.17*~~. *29-6.16*. Section N1108 (R408) "Additional Efficiency REQUIREMENTS ~~Package Options~~" is hereby deleted in its entirety and Section N1108 (R408) is hereby reserved.

29-6.17. SUBSECTION N1110.2.5 (R502.2.5) "ADDITIONAL EFFICIENCY CREDIT REQUIREMENTS FOR ADDITIONS" IS HEREBY DELETED IN ITS ENTIRETY.

29-6.18. SUBSECTION N1111.1.5 (R503.1.5) "ADDITIONAL EFFICIENCY CREDIT REQUIREMENTS FOR SUBSTANTIAL IMPROVEMENTS" IS HEREBY DELETED IN ITS ENTIRETY.

~~*29-6.18*~~. *29-6.19.* Subsection E3902.2 "Garage and Accessory Building Receptacles" is hereby amended by adding an exception as follows:

Exception: Receptacles that are not readily accessible.

29-6.20. SUBSECTION E3902.3 "OUTDOOR RECEPTACLES" IS HEREBY AMENDED BY ADDING AN EXCEPTION AS FOLLOWS:

EXCEPTION: PLUG RECEPTACLES THAT ARE DESIGNED TO BE USED FOR POWERING LISTED AIR CONDITIONING, HEATING OR COOLING EQUIPMENT.

~~*29-6.20.*~~ *29-6.21.* SUBSECTION E3902.14 "OUTDOOR OUTLETS" EXCEPTIONS: 3. IS HEREBY AMENDED TO DELETE THE SECOND SENTENCE AND READ AS FOLLOWS:

EXCEPTIONS: 3. GFCI PROTECTION SHALL NOT BE REQUIRED FOR LISTED HVAC EQUIPMENT.

ARTICLE VII. - INTERNATIONAL FUEL GAS CODE

29-7. - International Fuel Gas Code adopted.

The City Council of Chandler adopts by reference the International Fuel Gas Code, ~~2021~~ 2024 edition, ("IFGC") and incorporates it herein as if fully set out in this Article VII of Chapter 29 with the additions, insertions, deletions, and changes set forth herein. The term "code" or "IFGC" without further description when used in the portions of the IFGC which are not amended and in this Article VII of Chapter 29 shall mean the IFGC as amended herein by the additions, insertions, deletions, and changes set forth and adopted herein. Whenever the code refers to other publications of the International Code Council, which have been adopted by the City, such references shall be to the version of the publications as amended by the City.

29-7.1. CHAPTER 1 “SCOPE AND ADMINISTRATION” IS HEREBY AMENDED BY DELETING IN ITS ENTIRETY.

29-7.2. CHAPTER 1 “SCOPE AND ADMINISTRATION” IS HEREBY AMENDED TO COMPLY WITH THE PROVISIONS ALONG WITH THE AMENDMENTS AS DESCRIBED IN THE CHAPTER 1 SCOPE AND ADMINISTRATION OF THE 2024 INTERNATIONAL BUILDING CODE.

~~*29-7.1.* Subsection 101.1 "Title" is hereby amended by inserting The City of Chandler, Arizona as Name of Jurisdiction.~~

~~*29-7.2.* Subsection 103.1 "Creation of Agency" is hereby amended by inserting Development Services Department as name of department.~~

~~*29-7.3.* Subsection 106.1.1 "Annual Permit" and Subsection 106.1.2 "Annual Permit Records" are hereby deleted in their entirety.~~

~~*29-7.4.* Subsection 106.2 "Permits Not Required" is hereby amended by adding the additional exempt work sections as follows:~~

> ~~3. Replacement of gas water heating equipment where the replacement equipment is of equal or lesser BTU capacity and is placed in the same location as the existing equipment.~~
>
> ~~4. Replacement of gas pool or spa heating equipment where the replacement equipment is of equal or lesser BTU capacity and is placed in the same location as the existing equipment.~~
>
> ~~5. Replacement of gas air-conditioning equipment, direct vent equipment, furnaces and log lighters where the replacement equipment is of equal or lesser BTU capacity and is placed in the same location as existing equipment.~~
>
> ~~6. Special cases as allowed by the building official for work of a similar nature and complexity as those items listed above.~~

~~*29-7.5.* Subsections 109.2 and 109.6 entitled "Schedule of Permit Fees" and "Refunds", respectively, are hereby deleted in their entirety and replaced with new Subsections 109.2 and 109.6 to read as follows:~~

> ~~*109.2 Schedule of Permit Fees.* Permit fees, if any, shall be adopted by the City by resolution.~~
>
> ~~*109.6 Refunds.* The Building Official is authorized to establish a refund policy.~~

~~*29-7.6.* Section 114 "Board of Appeals" and Section 115 "Violations" are hereby deleted in their entirety and Section numbers 114 and 115 are hereby reserved.~~

ARTICLE VIII. - INTERNATIONAL ENERGY CONSERVATION CODE

29-8. - International Energy Conservation Code adopted.
The City Council of Chandler adopts by reference the International Energy Conservation Code, ~~2021~~ 2024 edition, ("IECC") and incorporates it herein as if fully set out in this Article VIII of Chapter 29 with the additions, insertions, deletions, and changes set forth herein. The term "code"

or "IECC" without further description when used in the portions of the IECC which are not amended and in this Article VIII of Chapter 29 shall mean the IECC as amended herein by the additions, insertions, deletions, and changes set forth and adopted herein. Whenever the code refers to other publications of the International Code Council, which have been adopted by the City, such references shall be to the version of the publications as amended by the City.

29-8.1. Subsection C101.1 "Title" is hereby amended by inserting The City of Chandler, Arizona as Name of Jurisdiction

29-8.2. Subsection ~~C101.5~~ C101.4 **"**Compliance" is hereby amended by adding the following ~~sentence~~ EXCEPTION:

Group R-2, when defined as a Commercial Building by section C202, shall have the option of complying under the Residential Provisions of this code, regardless of height. Once defined as such on the submittal documents, all components of the Residential Provisions shall be followed.

29-8.3. SUBSECTION C102.2 "OTHER LAWS" IS HEREBY AMENDED BY ADDING THE FOLLOWING PROVISIONS TO THE END THEREOF:

ADDITIONALLY, THE BUILDING OFFICIAL WILL ENFORCE THE PROVISIONS OF SUCH OTHER LAWS WHEN MANDATED BY STATE OR FEDERAL LAW.

29-8.4. SUBSECTION C104.1 "CREATION OF ENFORCEMENT AGENCY" IS HEREBY AMENDED BY INSERTING DEVELOPMENT SERVICES DEPARTMENT AS NAME OF DEPARTMENT.

~~*29-8.3.*~~ *29-8.5*. Subsection ~~C104.2~~ C106.2 "Schedule of Permit Fees" is hereby deleted in its entirety and replaced with a new SUBSection ~~C104.2~~ C106.2 to read as follows:

C106.2. ~~C104.2~~ *Schedule of Permit Fees*. Permit fees, if any, shall be adopted by the City by resolution.

~~*29-8.4.*~~ *29-8.6*. Subsection ~~C405.11~~ C405.12 "Automatic Receptacle Control" and Subsection C405.121.1 "Automatic Receptacle Control Function" are deleted in their entirety.

29-8.7. SUBSECTION C405.15 "RENEWAL ENERGY SYSTEMS" IS DELETED IN ITS ENTIRETY.

~~*29-8.5*~~. *29-8.8.* Subsection C501.2 "Compliance" is hereby amended by deleting reference to the International Property Maintenance and International Private Sewage Disposal Codes.

~~*29-8.6*~~. *29-8.9*. Subsection R101.1 "Title" is hereby amended by inserting The City of Chandler, Arizona as Name of Jurisdiction.

~~*29-8.7*~~. *29-8.10.* Subsection R101.4~~2~~ "COMPLIANCE ~~Scope~~" is hereby amended by adding the following EXCEPTION ~~sentence~~:

Group R-2, when defined as a Commercial Building by section C202, shall have the option of complying under the Residential Provisions of this code, regardless of height. Once defined as such on the submittal documents, all components of the Residential Provisions shall be followed.

~~*29-8.10.*~~ *29-8.11.* SUBSECTION R102.2 "OTHER LAWS" IS HEREBY AMENDED BY ADDING THE FOLLOWING PROVISIONS TO THE END THEREOF:

ADDITIONALLY, THE BUILDING OFFICIAL WILL ENFORCE THE PROVISIONS OF SUCH OTHER LAWS WHEN MANDATED BY STATE OR FEDERAL LAW.

~~*29-8.11.*~~ *29-8.12.* SUBSECTION R103.1 "CREATION OF ENFORCEMENT AGENCY" IS HEREBY AMENDED BY INSERTING DEVELOPMENT SERVICES DEPARTMENT AS NAME OF DEPARTMENT.

~~*29-8.8*~~. *29-8.13.* Subsection ~~R102.1.1~~ R104.1.1 "Above code programs" is hereby amended by adding a new Subsection ~~R102.1.2~~ R104.1.2 as follows:

~~*R102.1.2*~~ *R104.1.2 RESNET testing & inspection protocol.* The Residential Energy Services Network (RESNET) Mortgage Industry National Home Energy Rating System Standards Protocol for third party testing and inspections shall be deemed to meet the requirements of sections ~~R402.4.1~~ R402.5.1, ~~R402.4.1.2~~ R402.5.1.2 and ~~R403.3.4~~ R403.3.6 and shall meet the following conditions:

1. Third party testing and inspections shall be completed by RESNET certified raters or rating field inspectors and shall be subject to RESNET quality assurance field review procedures.

2. Sampling in accordance with Chapter 6 of the RESNET standards shall be performed by raters or rating field inspectors working under a RESNET accredited sampling provider.

3. Third party testing is required for the following items:

a. ~~R402.4.1.~~ R402.5.1 — Building Envelope - Thermal and air barrier checklist.

b. ~~R402.4.1.2~~ R402.5.1.2 — Testing - Air leakage rate

c. ~~R403.3.4~~ R403.3.6 — Sealing - Duct tightness

4. The other requirements identified as "mandatory" in Chapter 4 shall be met.

5. Alternate testing and inspection programs and protocols shall be allowed when approved by the Building Official.

~~*29-8.19*~~. *29-8.14.* Subsection ~~R104.2~~ R106.2 "Schedule of Permit Fees" is hereby deleted in its entirety and replaced with a new SUBSection ~~R104.2~~ R106.2 to read as follows:

~~*R104.2*~~ *R106.2. Schedule of Permit Fees.* Permit fees, if any, shall be adopted by the City by resolution.

~~*29-8.10.* Subsection R401.2 "Application" is hereby amended by deleting "Section R401.2.5 and" In the first paragraph.~~

~~*29-8.11*. Subsection R401.2.5 "Additional Energy Efficiency" is hereby deleted in its entirety.~~

~~*29-8.12*. Table R402.1.3 "Insulation Minimum R-values and Fenestration Requirements by Component" is hereby amended by replacing ceiling R-value of "49" with "38" in climate zone 2.~~

~~*29-8.13*~~. *29-8.15*. Subsection ~~R403.3.5~~ R403.3.7 "Duct SYSTEM Testing" is hereby amended by adding one new exception to read as follows:

Exceptions:

5~~1~~. A duct air-leakage test shall not be required where the ducts and air handlers are located entirely within the building thermal envelope.

~~2. A duct air-leakage test shall not be required for ducts serving heating, cooling or ventilation systems that are not integrated with ducts serving heating or cooling systems.~~

~~*29-8.14*~~. *29-8.16*. Subsection N1105.3~~.2~~ (R405.3~~.2~~) "Compliance DOCUMENTATION ~~Report~~" is hereby amended by replacing "~~Code Official~~ before a certificate of occupancy is issued" in the end of the ~~first paragraph~~ ITEM 2 with "TO THE building owner".

~~*29-8.15*~~. *29-8.17*. Table R406.5 "Maximum Energy Rating Index" is hereby amended by replacing energy rating index of "51" ~~52~~ with "57" in the climate zone 2.

~~*29-8.16*~~. *29-8.18*. Section R408 "Additional Efficiency REQUIREMENTS ~~Package Options~~" is hereby deleted in its entirety.

~~*29-8.17*~~. *29-8.19*. Subsection R501.2 ~~R501.4~~ "Compliance" is hereby amended by deleting reference to the International Property Maintenance and International Private Sewage Disposal Codes.

~~*29-8.19*.~~ *29-8.20*. SUBSECTION R502.2.5 “ADDITIONAL EFFICIENCY CREDIT REQUIREMENTS FOR ADDITIONS” IS HEREBY DELETED IN ITS ENTIRETY.

~~*29-8.20*.~~ *29-8.21*. SUBSECTION R503.1.5 “ADDITIONAL EFFICIENCY CREDIT REQUIREMENTS FOR SUBSTANTIAL IMPROVEMENTS” IS HEREBY DELETED IN ITS ENTIRETY.

ARTICLE IX. - INTERNATIONAL EXISTING BUILDING CODE

29-9. - International Existing Building Code adopted.

The City Council of Chandler adopts by reference the International Existing Building Code, ~~2021~~ 2024 edition, ("IEBC") and incorporates it herein as if fully set out in this Article IX of Chapter 29 with the additions, insertions, deletions, and changes set forth herein. The term "code" or "IEBC" without further description when used in the portions of the IEBC which are not amended and in this Article IX of Chapter 29 shall mean the IEBC as amended herein by the additions, insertions, deletions, and changes set forth and adopted herein. Whenever the code refers to other publications of the International Code Council, which have been adopted by the City, such references shall be to the version of the publications as amended by the City.

29-9.1. CHAPTER 1 “SCOPE AND ADMINISTRATION” IS HEREBY AMENDED BY DELETING IN ITS ENTIRETY.

29-9.2. CHAPTER 1 “SCOPE AND ADMINISTRATION” IS HEREBY AMENDED TO COMPLY WITH THE PROVISIONS ALONG WITH THE AMENDMENTS AS DESCRIBED IN THE CHAPTER 1 SCOPE AND ADMINISTRATION OF THE 2024 INTERNATIONAL BUILDING CODE.

~~*29-9.1.* Subsection 101.1 "Title" is hereby amended by inserting The City of Chandler, Arizona as Name of Jurisdiction~~

~~*29-9.2.* Subsection 101.4.2 "Buildings previously occupied" is hereby amended by deleting reference to the International Property Maintenance Code.~~

~~*29-9.3.* Subsection 103.1 "Creation of Agency" is hereby amended by inserting Development Services Department as name of department.~~

~~*29-9.4.* Subsection 105.1.1 "Annual Permit" and Subsection 105.1.2 "Annual Permit Records" are hereby deleted in their entirety.~~

~~*29-9.5.* Subsection 105.2 "Work exempt from permit" is hereby amended by adding items to each work category as follows:~~

~~*Building:*~~

~~7. Replacement of a roof cover of a R-3 occupancy where the replacement roof covering classification is equal to or greater than the existing roof covering classification and does not increase the loads upon the structural frame.~~

~~8. Special cases allowed by the Building Official for work of a similar nature and complexity as those items listed above.~~

~~*Electrical:*~~

~~4. Repair or replacement of motors, transformers, overcurrent devices or equipment affixed to a Group R-3 occupancy where the replaced or repaired equipment is of the same rating as the existing equipment, is placed in the same location as the existing equipment and is labeled as defined in this code.~~

~~5. Special cases as allowed by the Building Official for work of a similar nature and complexity as those items listed above.~~

~~*Gas:*~~

~~3. Replacement of gas water heating equipment affixed to a Group R-3 or IRC occupancy where the replacement equipment is of equal or lesser BTU capacity and is placed in the same location as the existing equipment.~~

~~4. Replacement of gas pool or spa heating equipment serving a Group R-3 or IRC occupancy where the replacement equipment is of equal or lesser BTU capacity and is placed in the same location as the existing equipment.~~

~~5. Replacement of gas air-conditioning equipment, direct vent equipment, furnaces and log lighters affixed to a Group R-3 or IRC occupancy where the replacement equipment is of equal or lesser BTU capacity and is placed in the same location as existing equipment.~~

~~6. Special cases as allowed by the Building Official for work of a similar nature and complexity as those items listed above.~~

~~*Mechanical:*~~

~~8. Replacement of evaporative coolers affixed to a Group R-3 or IRC occupancy where the replacement equipment is of equal or lesser airflow (cfm) and is placed in the same location as the existing evaporative cooler.~~

~~9. Special cases as allowed by the Building Official, for work of a similar nature and complexity as those items listed above.~~

~~*Plumbing:*~~

~~3. Replacement of water conditioning or treating equipment affixed to Group R-3 or IRC occupancy where the replacement equipment is of equal or lesser treatment capacity and is placed in the same location as the existing equipment.~~

~~4. Replacement of solar pool and spa heating equipment serving a Group R-3 or IRC occupancy where the replacement equipment is of equal or lesser heating capacity and is placed in the same location as the existing equipment.~~

~~5. Replacement of electric water heating equipment affixed to a Group R-3 or IRC occupancy where the replacement equipment is of equal or lesser amperage rating and is placed in the same location as the existing equipment.~~

~~6. Special cases as allowed by the Building Official for work of a similar nature and complexity as those items listed above.~~

~~*29-9.6* Subsection 108.2 "Schedule of Permit Fees" is hereby deleted in its entirety and replaced with a new Subsection 108.2 to read as follows:~~

~~*108.2. Schedule of Permit Fees.* Permit fees, if any, shall be adopted by the City by resolution.~~

~~*29-9.7* Section 113 "Violations", Section 116 "Emergency Measures" and Section 117 "Demolition" are hereby deleted in their entirety and Sections 113, 116, and 117 are hereby reserved.~~

~~*29-9.8* Section 115 "Unsafe Structures and Equipment", is hereby amended by deleting subsection 115.5 entitled "Restoration" in its entirety and adding new subsections 115.5 through 115.11 to read as follows:~~

~~*115.5. Recordation of Notice.* If compliance with the notice is not satisfied within the time specified therein, and no appeal has been properly and timely filed, the building official shall file in the office of the county recorder a certificate describing the property and certifying (i) that the building is a dangerous building and (ii) that the owner has been so notified. Whenever the corrections ordered shall thereafter have been completed, or the building demolished so that it no longer exists as an unsafe building on the property described in the certificate, the building official shall file a new certificate with the county recorder certifying that the building has been demolished or all required corrections have been made so that the building is no longer unsafe, whichever is appropriate.~~

~~*115.6 Repair, Vacation and Demolition.* The following standards shall be followed by the building official (and by the board of appeals if an appeal is taken) in ordering the repair, vacation or demolition of any unsafe building or structure:~~

~~1. Any building declared as an unsafe building under this code shall be made to comply with one (1) of the following:~~

~~(a) The building shall be repaired in accordance with this code; or~~

~~(b) The building shall be demolished at the option of the building owner; or~~

~~(c) If the building does not constitute an immediate danger to the life, limb, property or safety of the public it may be vacated, secured and maintained against entry.~~

~~2. The structure or equipment determined to be unsafe by the building official is permitted to be restored to a safe condition. To the extent that repairs, alterations or additions are made, or a change of occupancy occurs during the restoration of the structure, such repairs, alterations, additions or change of occupancy shall comply with the requirements of subsection 105.2.2.~~

~~3. If the building or structure is in such condition as to make it immediately dangerous to the life, limb, property, or safety of the public or its occupants, it shall be ordered to be vacated.~~

~~*115.7. Notice to Vacate.* Every notice to vacate shall, in addition to being served as provided in subsection 115.3 be posted at or upon each exit of the building and shall be in substantially the following form:~~

~~DO NOT ENTER~~
~~UNSAFE TO OCCUPY~~

~~It is a misdemeanor to occupy this building, or to remove or deface this notice.~~

~~Building Official~~

~~. . . . . of . . . . . .~~

~~Whenever such notice is posted, the building official shall include a notification thereof in the notice issued under subsection 115.3, reciting the emergency and specifying the conditions which necessitate the posting. No person shall remain in or enter any building which has been posted, except that entry may be made to repair, demolish or remove such building under permit. No person shall remove or deface any such notice after it is posted until the required repairs, demolition or removal have been completed and a certificate of occupancy issued pursuant to the provisions of this code.~~

~~*115.8. Failure to Commence Work.* Whenever the repair or demolition is not commenced within thirty (30) days after any final notice or order issued under this code becomes effective:~~

~~1. The building official shall cause the building described in such notice and order to be vacated by posting at each entrance thereto a notice reading:~~

~~DANGEROUS BUILDING~~
~~DO NOT OCCUPY~~

~~It is a misdemeanor to occupy this building, or to remove or deface this notice.~~

~~Building Official~~

~~. . . . . of . . . . . .~~

~~2. No person shall occupy any building which has been posted as specified in this section. No person shall remove or deface any such notice so posted until the repairs, demolition or removal ordered by the building official have been completed and a Certificate of Occupancy issued pursuant to the provisions of this code.~~

~~3. The building official may, in addition to any other remedy herein provided, cause the building to be repaired to the extent necessary to correct the conditions which render the building unsafe as set forth in the notice; or, if the notice required demolition, to cause the building to be sold and demolished or demolished and the materials, rubble and debris therefrom removed, and the lot cleaned. Any such repair or demolition work shall be accomplished, and the cost thereof paid and recovered in the manner hereinafter provided in this code. Any surplus realized from the sale of any such building, or from the demolition thereof, over and above the cost of demolition and of cleaning the lot, shall be paid over to the person or persons lawfully entitled thereto.~~

~~*115.9. Extension of Time to Perform Work.* Upon receipt of an application from the person required to conform to the notice and by agreement of such person to comply with the notice if allowed additional time, the building official may grant an extension of time, not to exceed an additional one hundred twenty (120) days, within which to complete said repair, rehabilitation or demolition, if the building official determines that such an extension of time will not create or perpetuate a situation imminently dangerous to life or property. The building official's authority to extend time is limited to the physical repair, rehabilitation or demolition of the premises and will not in any way affect the time to appeal the notice.~~

~~*115.10. Interference with Repair or Demolition Work Prohibited.* No person shall obstruct, impede or interfere with any officer, employee, contractor or authorized representative of this jurisdiction or with any person who owns or hold any estate or interest in any building which has been ordered repaired, vacated or demolished under the provisions of this code; or with any person to whom such building has been lawfully sold pursuant to the provisions of this code, whenever such officer, employee, contractor or authorized representative of this jurisdiction, person having an interest or estate in such building or structure, or purchaser is engaged in the work of repairing, vacating and repairing, or demolishing any such building, pursuant to the provisions of this code, or in performing any necessary act preliminary to or incidental to such work or authorized or directed pursuant to this code.~~

~~*115.11. Abatement and Cost Recovery.* Unless timely appealed to the board of appeals, a notice issued pursuant to subsection 115.3 shall constitute a final abatement order. The failure to comply with the terms of such notice, in addition to constituting a violation of~~

~~the Code of the City of Chandler, shall permit the City to institute the abatement and cost recovery provisions set forth in Section 26-11, Code of the City of Chandler.~~

~~*29-9.9.* Section 116 "Emergency Measures" is hereby deleted in its entirety and Section 116 is hereby reserved.~~

~~*29-9.10.* Section 117 "Demolition" is hereby deleted in its entirety and Section 117 is hereby reserved.~~

~~*29-9.11.*~~ *29-9.3.* Subsection 302.2 "Additional codes" is hereby amended by deleting reference to the International Property Maintenance and International Private Sewage Disposal Codes.

~~*29-9. 12*~~ *29-9.4.* Subsections ~~1301.3.2~~ 1303.1.2 "Compliance with other codes" and 1401.2 "Conformance" are hereby amended by deleting reference to the International Property Maintenance Code.

ARTICLE X. - INTERNATIONAL SWIMMING POOL AND SPA CODE

29-10. - International Swimming Pool and Spa Code adopted.

The City Council of Chandler adopts by reference the International Swimming Pool and Spa Code, ~~2021~~ 2024 edition, ("ISPSC") and incorporates it herein as if fully set out in this Article X of Chapter 29 with the additions, insertions, deletions, and changes set forth herein. The term "code" or "ISPSC" without further description when used in the portions of the ISPSC which are not amended and in this Article X of Chapter 29 shall mean the ISPSC as amended herein by the additions, insertions, deletions, and changes set forth and adopted herein. Whenever the code refers to publications of the International Code Council, which have been adopted by the City, such references shall be to the version of the publications as amended by the City.

29-10.1. CHAPTER 1 “SCOPE AND ADMINISTRATION” IS HEREBY AMENDED BY DELETING IN ITS ENTIRETY.

29-10.2. CHAPTER 1 “SCOPE AND ADMINISTRATION” IS HEREBY AMENDED TO COMPLY WITH THE PROVISIONS ALONG WITH THE AMENDMENTS AS DESCRIBED IN THE CHAPTER 1 SCOPE AND ADMINISTRATION OF THE 2024 INTERNATIONAL BUILDING CODE.

~~*29-10.1.* Subsection 101.1 "Title" is hereby amended by inserting The City of Chandler, Arizona as Name of Jurisdiction.~~

~~*29-10.2.* Subsection 103.1 "Creation of Agency" is hereby amended by inserting Development Services Department as name of department.~~

~~*29-10.3.* Section 112 "Board of Appeals" and Section 113 "Violations" are hereby deleted in their entirety and Sections 112 and 113 are hereby reserved.~~

~~*29-10.4*~~ *29-10.3.* Subsection 305.2.1 "Barrier height and clearances" is hereby amended by deleting paragraph 1 in its entirety and replacing it with a new paragraph 1 and adding an exception to read as follows:

1. The top of the barrier shall be not less than 72" (1829 mm) above grade where measured on the side of the barrier that faces away from the pool or spa. Such height shall exist around the entire perimeter of the barrier.

Exception: If the barrier is used solely as the barrier between the pool or spa and a one- or two-family dwelling then the top of the barrier shall not be less than 48" (1219 mm). Such height shall exist around the entire perimeter of the barrier and for a distance of 3 feet (914 mm) measured horizontally from the outside of the required barrier.

~~*29-10.5*~~*. 29-10.4.* Subsection 305.4 "Structure wall as a barrier" is hereby amended by adding new paragraphs 7 and 8 to read as follows:

7. Emergency escape or rescue windows from sleeping rooms which face within a swimming pool enclosure shall be equipped with a latching device located not less than fifty-four (54) inches above the floor. All other openable dwelling unit or guest room windows facing within a swimming pool enclosure shall be equipped with a screwed-in-place wire mesh screen, a keyed lock that prevents opening the window more than four (4) inches, or a latching device located not less than fifty-four (54) inches above the floor.

8. Pet doors shall be able to be rendered inoperable and impassable with a latching device inoperable by young children.

ARTICLE XI. - PENALTY FOR VIOLATION OF CHAPTER

~~[~~29-11. - Chapter 29 violation—Penalty.~~]~~

Except as otherwise provided by law or ordinance, a person convicted of a violation of a code adopted by reference in Chapter 29, Code of the City of Chandler shall be guilty of a Class 1 misdemeanor. A Class 1 misdemeanor is punishable by a fine not exceeding two thousand five hundred dollars ($2,500.00), by imprisonment for a term not exceeding six (6) months, by probation for a term not exceeding three (3) years, or by any combination thereof. A Class 2 misdemeanor is punishable by a fine not exceeding seven hundred fifty dollars ($750.00), by imprisonment for a term not exceeding four (4) months, by probation for a term not exceeding two (2) years, or by any combination thereof. A Class 3 misdemeanor is punishable by a fine not exceeding five hundred dollars ($500.00), by imprisonment for a term not exceeding thirty (30) days, by probation for a term not exceeding one (1) year, or by any combination thereof. Except as otherwise provided by law or ordinance, with respect to violations of this Code that are continuous with respect to time, each day that the violation continues is a separate offense.

2024 Construction Codes Adoption Highlights		
International Building Code	**Local Amendments:**	**Notes:**
	Subsection 104.2.3 "Alternative materials, design and methods of construction and equipment" is hereby amended by deleting the entire exception to this subsection.	The International Code Council Performance Code is not adopted in the City of Chandler.
	Subsection 111.1 "Change of occupancy", Subsection 111.2 "Certificate Issued" and Subsection 111.3 "Temporary occupancy". The city has no proposed amendment to these subsections. When the new code is adopted then it will go into the City Code as written.	Ensure the essential safety features such as required fire sprinkler systems and design occupant load on the issued certificate of occupancy to meet the building and fire safety standards accurately and consistently.
	Subsection 412.4.5 "Height and area limits" is hereby amended by deleting the entire paragraph and reword it along with an additional note “d” to TABLE 412.3.6 as follows: Residential aircraft hangars shall be provided with a group 13R fire suppression system OR the hangar and dwelling may be provided with a group 13D fire suppression system.	For the sake of consistence, Chandler would provide a clear guidance for all residential aircraft hangars to comply with the fire suppression requirements, instead of case-by-case basis.
	Subsection 1612.3 "Establishment of flood hazard areas" is hereby amended by inserting The City of Chandler, Arizona as Name of Jurisdiction and the latest effective date as Date of Issuance.	Provide specific information about name of jurisdiction and date of issuance.
	Model Code Changes:	**Notes:**
	Chapter 9 has added many sections for fire protection requirements associated with lithium-ion battery manufacturing, storage, use, repair, charging and research.	Provides more fire protection requirements for the ever-growing lithium-ion battery applications.
	SECTION 907.10.1 – SMOKE ALARM REPLACEMENT was added requiring the replacement of smoke detectors.	Specify smoke alarm replacement in certain situations.

	SECTIONS 912.5.1 – 912.5.4 - SIGNS were added dictating signage for sprinkler system fire department connections on multiple buildings or with combined systems.	FDC signage in Chandler is dictated by Fire Department detail FD104 and requires 2” letters.
	SECTION 915 – CARBON MONOXIDE DETECTION is now applied in any occupancy with a CO source requires detection and/or alarm. CO detectors are required to be tied into the fire alarm and activate notification alarm.	Provides CO detection in many more occupancies with a CO source.
	SECTION 917.2 – MASS NOTIFICATION was added into all Group E occupancies in addition to college and university campuses that were previously in this section.	Currently only applied in college and university campuses. Not, it applies for all Group E occupancies.
National Electrical Code	**Local Amendments:**	Notes:
	Subsection 110.3 "Examination, Identification, Installation, Use, and Listing (Product Certification) of Equipment" is hereby amended by adding language "or other agencies approved by the City of Chandler building official" into body of code to simplify the listing requirement.	Chandler allows for equipment evaluation to be done by a wider range of qualified personnel including nationally recognized testing labs, qualified engineers, and sometimes by qualified staff.
	Subsection 210.8 "Ground-Fault Circuit-Interrupter Protection for Personnel" is hereby amended by adding an exception at the end of 210.8(A)(3) as follows. Exception: Plug receptacles that are designed to be used for powering listed air conditioning, heating or cooling equipment.	Protect Chandler residents from suffering heat related health injuries due to HVAC shut down since the variable speed motors used to gain higher efficiencies in HVAC would almost certainly trip the GFCI breakers.
	Subsection 210.8 (F) "Outdoor Outlets" is amended by deleting its expiration date from the exception to read as follows. Exception No. 2: GFCI protection shall not be required for listed HVAC equipment.	The variable speed motors would likely trip the GFCI breakers and cause HVAC equipment shut-downs.

Subsection 230.67 “Surge Protection". The city has no proposed amendment to this subsection. When the new code is adopted then it will go into the City Code as written.	The surge protection not only provides the protection for the equipment, but also prevents the potential fire hazards from happening as well. This is coordinated with the surge protection application as described in the International Residential Code.
Subsection 406.12 “Tamper-Resistant Receptacles” is amended by deleting its use in the item 10 for areas of agricultural buildings.	Tamper-resistant receptacles are an important next step to make the home a safer place for children and are becoming the industry standard.
Model Code Changes:	**Notes:**
SECTION 210.8(A)(6) Dwelling Units now require all kitchen receptacles to have GFCI protection.	Additional GFCI locations are now required in kitchen area.
SECTION 210.8(D) – GFCI is required to be installed for drinking water cooler, electric ranges, wall mounted ovens, counter mounted cooking units and microwaves.	Adds GFCI protection to several more appliances both in single family and multi-family structures.
SECTION 210.23(A) – TEN-AMPERE BRANCH CIRCUIT was added to supply lighting outlets, exhaust fans or a gas fireplace.	Ten-ampere circuits are only applied for a limited applications.
SECTIONS 220.5(C) / 220.41 – LIGHTING LOADS FOR DWELLING UNITS was a new section. It now requires the floor area of garages to be included when calculating the minimum lighting load for dwelling units.	A garage is in a trend of becoming adaptable for future use as a habitable room or occupiable space.

	SECTION 225.41(A)(B)(C) – EMERGENCY DISCONNECTS requires that the marking must be on the outside of the front of the enclosure, must have red background with white text and lettering must at least ½" high.	First responders can easily identify the location of Emergency Disconnect installed at a readily accessible outdoor location on or within site of the dwelling unit.
	SECTION 630.8 – GFCI PROTECTION FOR PERSONNEL now requires GFCI protection for all 125v, single-phase, 15 and 20-amp receptacles for hand tools or portable lighting equipment in areas where welders are operated.	Provide GFCI for safety protection.
International Plumbing Code	**Local Amendments:**	**Notes:**
	CHAPTER 1 "SCOPE AND ADMINISTRATION" is amended by deleting in its entirety to comply with the provisions along with the amendments as described in the CHAPTER 1 SCOPE AND ADMINISTRATION of the 2024 International Building Code.	Eliminate the duplication and redundancy, we update only one administration chapter in the IBC and apply it for the other related codes.
	Model Code Changes:	**Notes:**
	SECTION 419.6 – SOAP DISPENSERS shall be provided for public lavatories.	For the sake of public health.
	SECTION 504.7 – Required Pan now allows a plastic pan installed beneath a gas-fired water heater and shall be constructed of material having a flame spread index of 25 or less and a smoked-developed index of 450 or less.	Currently not allow use of a plastic pan installed beneath a gas fired water heater.
International Mechanical Code	**Local Amendments:**	**Notes:**
	CHAPTER 1 "SCOPE AND ADMINISTRATION" is amended by deleting in its entirety to comply with the provisions along with the amendments as described in the CHAPTER 1 SCOPE AND ADMINISTRATION of the 2024 International Building Code.	Eliminate the duplication and redundancy, we update only one administration chapter in the IBC and apply it for the other related codes.

	Model Code Changes:	**Notes:**
	SECTION 306.5 - Equipment or Appliances on Roofs or Elevated Structures now requires a top landing. The ladder shall be provided with a clear and unobstructed landing on the exit side of the roof hatch, having a minimum space of 30 inches deep and being the same width as the hatch.	Provide a safety measure for workers and inspectors working in the roof top.
International Residential Code	**Local Amendments:**	**Notes:**
	Subsection R102.2 "Other laws" is amended by adding the following provisions to the end thereof: Additionally, the building official will enforce the provisions of such other laws when mandated by state or federal law.	Align with the amendment to the International Building Code.
	Subsection 103.1 "Creation of agency" is hereby amended by inserting Development Services Department as Name of Department.	Align with the amendment to the International Building Code.
	Subsection R105.2 "Work exempt from permit" is amended by adding items 6 and 7 into the electrical items exempt from permit.	Add those missed electrical items exempt from permit back into the city code.
	Subsection R110.1 "Use and change of occupancy", Subsection R110.2 "Certificate Issued" and Subsection R110.3 "Temporary occupancy". The city has no proposed amendment to these subsections. When the new code is adopted then it will go into the City Code as written.	Ensure the essential safety features such as required fire sprinkler systems and design occupant load on the issued certificate of occupancy to meet the building and fire safety standards accurately and consistently.
	Subsection N1101.13 (R401.2) "Application" is amended by deleting this amendment from the city code.	Section N1101.13.5 has been deleted from the 2024 IRC Chapter 11.

	Subsection N1101.13.5 (R401.2.5) "Additional energy efficiency" is amended by deleting this amendment from the city code.	Section N1101.13.5 has been deleted from the 2024 IRC Chapter 11. The additional energy efficiency requirements will increase additional costs that are far exceed the negligible energy savings.
	TABLE N1102.1.3 (R402.1.3) “INSULATION MINIMUM R-VALUES AND FENESTRATION REQUIREMENTS BY COMPONENT” is hereby amended by deleting this amendment from the city code.	The ceiling R-value has been changed back from “49” to “38” in the 2024 IRC Chapter 11. The increase in ceiling R-value does not contribute substantial energy savings, but it would add substantial costs to builders and homeowners.
	Subsection N1103.3.7 (R403.3.7) "Duct system testing" is amended by adding one new exception to read as follows: 4. A duct air-leakage test shall not be required where the ducts and air handlers are located entirely within the building thermal envelop.	Align with the amendment to the International Energy Conservation Code. It could encourage more home builders to design homes with all ducts and air handlers within the thermal envelop.
	Subsection N1110.2.5 (R502.2.5) "Additional efficiency credit requirements for additions" is amended by deleting the subsection in its entirety.	The additional energy efficiency requirements will increase additional costs that are far exceed the negligible energy savings.

Subsection N1111.1.5 (R503.1.5) "Additional efficiency credit requirements for substantial improvements" is amended by deleting the subsection in its entirety.	The additional energy efficiency requirements will increase additional costs that are far exceed the negligible energy savings.
Subsection E3902.3 "Outdoor receptacles" is hereby amended by adding an exception to read as follows. Exception: Plug receptacles that are designed to be used for powering listed air conditioning, heating or cooling equipment.	Protect Chandler residents from suffering heat related health injuries due to HVAC shut down since the variable speed motors used to gain higher efficiencies in HVAC would almost certainly trip the GFCI breakers.
Subsection E3902.14 "Outdoor outlets" is amended by deleting its expiration date from the exception to read as follows. Exception No. 2: GFCI protection shall not be required for listed HVAC equipment.	The variable speed motors would likely trip the GFCI breakers and cause HVAC equipment shut-downs.
Model Code Changes:	**Notes:**
SECTION R315 – SLEEPING LOFTS was added addressing spaces designated for sleeping on an intermediate level or levels between the floor and ceiling of a story.	Provide more allowance for sleeping spaces.
SECTION R330.8.1 – ESS VEHICLE IMPACT PROTECTION was added addressing the protection of Energy Storage Systems installed in garages.	Provides a safety measure addressing location, construction, size and height of these barriers.
SECTION N1103.13/R403.13 – GAS FIREPLACES was added to remove the option for installation of a gas fireplace that utilizes a continuous pilot light. Gas fireplaces need to be the ones with electronic ignition.	Provide extra safety for home owners who have gas fireplaces.

	SECTION E3601.8 – EMERGENCY DISCONNECTS requires the marking must be on the outside of the front of the enclosure, must have red background with white text and lettering must at least ½" high.	First responders can easily identify the location of Emergency Disconnect installed at a readily accessible outdoor location on or within site of the dwelling unit.
	SECTION – E3702.3 – TEN-AMPERE BRANCH CIRCUIT was added to supply lighting outlets, exhaust fans or a gas fireplace.	This ten-ampere circuits only applies for a limited applications.
	SECTION – E3706.2 – PANELBOARD CIRCUIT IDENTIFICATION was added requiring a directory that clearly explains abbreviations and symbols if abbreviations and symbols are used.	Owners and techanicens can easily identify the specific use.
International Fuel Gas Code	**Local Amendments:**	**Notes:**
	CHAPTER 1 "SCOPE AND ADMINISTRATION" is amended by deleting in its entirety to comply with the provisions along with the amendments as described in the CHAPTER 1 SCOPE AND ADMINISTRATION of the 2024 International Building Code.	Eliminate the duplication and redundancy, we update only one administration chapter in the IBC and apply it for the other related codes.
	Model Code Changes:	**Notes:**
	No significant changes.	No significant changes.
International Energy Conservation Code	**Local Amendments:**	**Notes:**
	Subsection C102.2 "Other laws" is amended by adding the following provisions to the end thereof: Additionally, the building official will enforce the provisions of such other laws when mandated by state or federal law.	Align with the amendment to the International Building Code.
	Subsection C104.1 "Creation of enforcement agency" is hereby amended by inserting Development Services Department as Name of Department.	Align with the amendment to the International Building Code.

Subsection C405.15 "Renewable energy systems" is hereby to delete in its entirety.	The renewable energy systems will increase additional costs that are far exceed the negligible energy savings.
Subsection R102.2 "Other laws" is amended by adding the following provisions to the end thereof: Additionally, the building official will enforce the provisions of such other laws when mandated by state or federal law.	Align with the amendment to the International Building Code.
Subsection R103.1 "Creation of enforcement agency" is hereby amended by inserting Development Services Department as Name of Department.	Align with the amendment to the International Building Code.
Subsection R401.2 "Application" is amended by deleting this amendment from the city code.	Section R401.2.5 has been deleted from the 2024 IECC.
Subsection R401.2.5 "Additional energy efficiency" is amended by deleting this amendment from the city code.	Subsection R401.2.5 has been deleted from the 2024 IECC. The additional energy efficiency requirements will increase additional costs that are far exceed the negligible energy savings.
TABLE R402.1.3 "INSULATION MINIMUM R-VALUES AND FENESTRATION REQUIREMENTS BY COMPONENT" is hereby amended by deleting this amendment from the city code.	The ceiling R-value has been changed back from "49" to "38" in the 2024 IECC. The increase in ceiling R-value does not contribute substantial energy savings, but it would add substantial costs to builders and homeowners.

	Subsection R502.2.5 "Additional efficiency credit requirements for additions" is amended by deleting the subsection in its entirety.	The additional energy efficiency requirements will increase additional costs that are far exceed the negligible energy savings.
	Subsection R503.1.5 "Additional efficiency credit requirements for substantial improvements" is amended by deleting the subsection in its entirety.	The additional energy efficiency requirements will increase additional costs that are far exceed the negligible energy savings.
	Model Code Changes:	**Notes:**
	SECTION C403.7.8 – OCCUPANT SENSORS FOR VENTILATION was added to address that occupied-standby controls shall be required for each of the multipurpose rooms, office areas, break rooms, etc. and the ventilation air is allowed to be reduced to zero when the space is not occupied.	Reduce energy consumption when the space is unoccupied.
International Existing Building Code	**Local Amendments:**	**Notes:**
	CHAPTER 1 "SCOPE AND ADMINISTRATION" is amended by deleting in its entirety to comply with the provisions along with the amendments as described in the CHAPTER 1 SCOPE AND ADMINISTRATION of the 2024 International Building Code.	Eliminate the duplication and redundancy, we update only one administration chapter in the IBC and apply it for the other related codes.
	Model Code Changes:	**Notes:**
	No significant changes.	No significant changes.
International Swimming Pool and Spa Code	**Local Amendments:**	**Notes:**
	CHAPTER 1 "SCOPE AND ADMINISTRATION" is amended by deleting in its entirety to comply with the provisions along with the amendments as described in the CHAPTER 1 SCOPE AND ADMINISTRATION of the 2024 International Building Code.	Eliminate the duplication and redundancy, we update only one administration chapter in the IBC and apply it for the other related codes.
	Model Code Changes:	**Notes:**
	No significant changes.	No significant changes.

HBACA

Home Builders Association of Central Arizona

September 17, 2024

SENT VIA EMAIL

Mr. Shicheng Tao
Chief Building Official
City of Chandler
Development Services Department
215 E Buffalo St
Chandler, AZ 85225

Re: 2024 Building Code Update

Dear Chief Building Official Tao:

Thank you for the opportunity to comment on the 2024 building codes and the City of Chandler's proposed amendments. The Home Builders Association of Central Arizona (HBACA) is very appreciative of the City's willingness to work with us throughout the code adoption process.

Whenever the HBACA reviews a proposed code update, our primary concern is unnecessary increases in the cost of construction. In those areas where there may potentially be increased costs, we believe that the City's proposed amendments will mitigate many of those concerns. Therefore, the HBACA supports the amendments as proposed in the adoption package.

On behalf of the home builders investing in Chandler, thank you again for the opportunity to meet and discuss the code adoption package. Please feel free to contact me directly with any questions or concerns.

Sincerely,

James Ashley
Director of Municipal Affairs
Home Builders Association of Central Arizona

CC: Kevin Snyder, Development Services Director, City of Chandler

7310 N. 16th St., Suite 305, Phoenix, AZ 85020 602.274.6545 fax 602.325.0353 www.hbaca.org

ICC INTERNATIONAL CODE COUNCIL®

September 19, 2024

Mr. Shicheng Tao
Chief Building Official, City of Chandler
Development Services Department
215 E. Buffalo Street, Chandler, AZ 85225

Dear Tao:

Subject: Support for the Adoption of the 2024 I-Codes

I hope this message finds you well. On behalf of the International Code Council (ICC), I am writing to express our strong support for the adoption of the 2024 International Codes (I-Codes) as proposed by the Board of Appeals in the City of Chandler.

The adoption of the 2024 I-Codes represents a significant and forward-thinking step toward ensuring the safety, sustainability, and efficiency of our built environment. These codes have been meticulously developed through a comprehensive process involving extensive research, stakeholder input, and expert review. They incorporate the latest advancements in building technology and safety practices, and address critical areas such as energy efficiency, accessibility, and disaster resilience.

By embracing the 2024 I-Codes, you are not only prioritizing the well-being of your citizens, builders, and customers, but also mitigating unnecessary increases in construction costs. The commitment to adopting these codes reflects a proactive approach to modernizing the regulatory framework and enhancing the quality of construction within your jurisdiction.

We fully support the recommendation to move forward with the adoption process and urge the City Council to review and approve the proposed adoption of the 2024 I-Codes.

Thank you for your attention to this matter and for your ongoing commitment to building safety and sustainability.

Sincerely,

Rick Bluntzer
Regional Manager for Government Relations

New Buildings Institute
151 S. 1st Ave, Suite 300
Portland OR, 97204

9/25/2024

Dear Chief Building Official Shicheng Tao,

On behalf of the *Resilient Southwest Building Code Collaborative*, New Buildings Institute (NBI) wishes to express the Collaborative's strong support for the City of Chandler's adoption of the 2024 I-Codes, including the 2024 International Energy Conservation Code (IECC). This code package, which was recently approved by the City of Chandler Board of Appeals on 9/12/2024, is a testament to the collaborative efforts of the Board, stakeholders, and city staff. The adoption of the 2024 IECC represents a significant step forward in enhancing the quality of life for Arizona citizens while addressing the needs of builders and customers alike; a commitment fully shared and supported by the Collaborative.

The Collaborative believes that adoption of the 2024 IECC not only prioritizes the best interests of all parties involved but also strategically mitigates unnecessary increases in construction costs. This alignment with the Collaborative's mutual goals is commendable and reflects the thoughtful consideration given to both current and future impacts, not just on your community, but also for the collective health and prosperity of our state. As part of our grant-funded work, the Collaborative will be offering free IECC training and energy specialist certification opportunities that can support your staff in implementing the 2024 IECC once adopted.

We fully encourage the adoption of the 2024 I-Codes, including the 2024 IECC, per the accompanying documentation being provided to the City of Chandler Council for review and approval. The Collaborative feels the goal having the ordinance passed by December 2024 is both ambitious and achievable, especially as members of the Collaborative are also working toward local 2024 IECC adoption.

Thank you for the continued commitment to improving your community, which benefits all of us in Arizona. We look forward to the positive outcomes these amendments will bring and remain available to assist in any way necessary to facilitate their approval.

Sincerely,

Ben Rabe
Associate Director, NBI
Resilient Southwest Building Code Collaborative

City Council Memorandum **Development Services Memo No.** 24-059

Date: November 04, 2024
To: Mayor and Council
Thru: Joshua H. Wright, City Manager
Andy Bass, Deputy City Manager
Kevin Snyder, Development Services Director
From: Lauren Schumann, Planning Senior Program Manager
Subject: PLH24-0025 City Code Amendments-State Housing Mandates
Introduction and Tentative Adoption of Ordinance No. 5113

Proposed Motion:

Move City Council introduce and tentatively adopt Ordinance No. 5113 approving PLH24-0025 City Code Amendments-State Housing Mandates, text amendments pertaining to backyard chickens, accessory dwelling units, final plats, and establishing review timelines for residential zoning applications, as recommended by Planning and Zoning Commission.

Background:

- In May 2024, Governor Hobbs signed a series of house and state bills with hopes to "expand housing options and help mitigate the effects of rising costs to make life more affordable for everyday Arizonans”
- The bills are mandated for municipalities with populations exceeding 75,000 and municipalities must adopt their provisions by January 1, 2025
- On September 9, 2024, the City Council reviewed the adopted bills in a work session and provided direction to staff to move forward with the proposed amendments listed below

HB 2720 Accessory Dwelling Units (ADUs)

	Current Code - Adopted March 2024	Proposed Code Amendment - State Mandate

# of ADUs Permitted	1 on each single-family lot; may be detached or attached to the main house. 1 accessory structure is permitted for each lot. ADUs are classified as the property's one permitted accessory structure (additional accessory structures such as a detached garage or workshop are not allowed).	1 detached ADU and 1 ADU attached to the main house, for a potential total of 2 ADUs on each single-family lot *A 3rd ADU can be added if the lot is larger than 1 acre and it is rented as a "restricted-affordable dwelling unit" (deed restriction required) In order to comply with state mandates, ADUs will be removed from the accessory structure classification in the Zoning Code and re-classified as their own category, thus allowing a detached garage or workshop on the same lot as an ADU providing that setbacks and other standards are met. In order to be classified as an ADU, it must contain all the following: sanitation facilities, kitchen facilities, and a separate, independent entrance from the primary residence.
Max. Size	Cannot occupy more than 30% of rear yard	Limited to 75% gross floor area of the main house or 1,000 square feet interior habitable area, whichever is less
Setbacks	Same as main dwelling unit and cannot be located anterior to the main house	Rear and side yards reduced to 5 feet. Can be located anterior to the main home if front yard setbacks (same that apply to the main home) are met. Any uninhabitable space (i.e., a garage attached to an ADU) shall comply with the property's setbacks for the main dwelling.
Max. Height	15 feet to top of structure or the mid-point of pitched/sloped roof	Same as max. height permitted of main house (i.e. if zoning allows for 2-story house, then an ADU can also be 2-stories)

Design	Must architecturally match the main house in style, materials and colors.	Cannot be required to match house, therefore, the proposal is to allow an ADU to comply with either of 2 options: (1) minimum objective design standards (i.e., stucco, tile roof with a 4 to 12 slope), or (2) match the main house.
Parking	1 space required (either uncovered or covered) on the property (cannot count street parking) in addition to the 2 covered parking spaces required for the main home.	No additional space required (state law prohibits cities from requiring additional parking for ADUs)
Short-term Rental Restrictions	Prohibited	Cannot prohibit short-term rentals

HB 2325 Backyard Fowl

	Current Code - Adopted January 2023	**Proposed Code Amendment - State Mandate**
# of Chickens Permitted	5 hens, no roosters	6 hens, no roosters
Coop Requirements	120 square feet, limited to height of property's perimeter fence, setback five (5) feet from side and rear yards	No Change

SB 1162 Zoning Shot Clock-Housing Assessment

- Establishes timelines for residential rezoning cases
- City currently has policies in place regarding review timelines; 20 business days to deem approved/disapproved if all documents have been submitted for initial review
- The mandate will codify review timelines for all residential rezonings
    - Determine if application is complete within 30 days of submittal
    - Next, the City has a 180-day deadline to schedule for City Council for vote
    - The applicant can request one 30-day extension
- Bill also requires cities to conduct a housing needs study and publish every

five years; in October, City Council approved consultant contract to conduct housing study in conjunction with General Plan, with anticipated completion in summer 2025

SB 1103 Administrative review; approvals; developments

- Authorizing administrative personnel to review and approve plats without public hearing in order to expedite the development process
- Since Preliminary Plats are typically are tied to rezoning cases, staff proposes to only remove Final Plats from the public hearing process, thus allowing them to be reviewed and approved administratively by the City Engineer
- The Planning & Zoning Commission and the City Council will continue to review and vote on Preliminary Plats, as requested by City Council during a work session on September 9, 2024
- City Code Chapter 48 Subdivisions will be amended, transferring City Council's review and approval of final plats to the Development Services Director or designee

Public Outreach

- This request was noticed in accordance with the requirements of the Chandler Zoning Code.
- Staff have received multiple phone calls from supportive residents inquiring when the new ADU's rules will be in place.
- Staff has also received input from residents concerned about the Governor's reduction in building setbacks for ADU's.

Housing Impact Statement:

Pursuant to A.R.S. § 9-462.01 (J), staff has considered the impact this ordinance will have on the cost of constructing housing for sale or rent. Based on limited information known at this time, staff believes that the impact will be minimal considering the many economic factors that determine the cost of constructing housing. This ordinance was drafted as a result of state legislation that requires cities to adopt code amendments, and the state legislature did not provide any additional data or reference material to indicate how this ordinance may impact the cost of constructing housing for sale or rent. Staff does not believe that there is a less costly or less restrictive alternative method of achieving the purpose of the code amendments.

Planning and Zoning Commission Vote Report

Planning and Zoning Commission meeting October 16, 2024
Motion to approve

In Favor: 6 Opposed: 0 Absent 1 (Lopez)

Attachments

Ordinance No. 5113

HB 2720 Accessory Dwelling Units

HB 2325 Backyard Fowl

SB 1162 Shot Clock- Housing Assessment

SB 1103 Administrative review; approvals; developments

ORDINANCE NO. 5113

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF CHANDLER, ARIZONA, DECLARING THAT DOCUMENT ENTITLED "2024 AMENDMENTS TO CHANDLER CITY CODE CHAPTERS 14, 35, AND 48" TO BE A PUBLIC RECORD; AMENDING CHAPTER 14 RELATED TO THE REGULATION OF BACKYARD CHICKENS AS REQUIRED BY STATE LAW; AMENDING CHAPTER 35 LAND USE AND ZONING, RELATING TO THE REGULATION OF ACCESSORY DWELLING UNITS AND APPROVALS OF RESIDENTIAL ZONING APPLICATIONS AS REQUIRED BY STATE LAW; AMENDING CHAPTER 48 RELATED TO APROVALS FOR FINAL PLATS; PROVIDING FOR THE REPEAL OF CONFLICTING ORDINANCES; AND PROVIDING FOR SEVERABILITY.

WHEREAS, in accordance with Ariz. Rev. Stat. § 9-240, the City Council may adopt by ordinance any change or amendment to the regulations and provisions set forth in the Chandler City Code; and

WHEREAS, in 2024, the Arizona Legislature adopted H.B. 2325, codified as Ariz. Rev. Stat. §9-461.10, prohibiting a municipality from adopting rules that would prohibit a resident of a single-family home from keeping up to six chickens in the backyard of the property; and

WHEREAS, in 2024, the Arizona Legislature also adopted H.B. 2720, codified as Ariz. Rev. Stat. §9-461.18, to mandate certain zoning code amendments relating to the construction of accessory dwelling units in municipalities with a population greater than 75,000; and

WHEREAS, Ariz. Rev. Stat. §9-461.18 mandates that these code amendments be adopted on or before January 1, 2025, and also places strict limitations on the types of regulations that a city is allowed to impose on the construction of accessory dwelling units; and

WHEREAS, in 2024, the Arizona Legislature also adopted S.B. 1162, codified as Ariz. Rev. Stat. §9-462.10, to mandate that municipalities adopt an amendment to their zoning ordinances by January 1, 2025, setting deadlines for approval of residential zoning applications; and

WHEREAS, this ordinance is being adopted to comply with these three bills that were adopted by the Arizona Legislature in 2024; and

WHEREAS, notice of this amendment has been published in a local newspaper with general circulation in the City of Chandler, giving fifteen (15) days' notice of the time, place, and date of public hearing; and

WHEREAS, the City Council has considered the probable impact of this ordinance on the cost to construct housing for sale or rent; and

WHEREAS, a public hearing was held by the Planning and Zoning Commission on October 16, 2024.

NOW, THEREFORE, BE IT ORDAINED by the City Council of the City of Chandler, Arizona, as follows:

Section 1. That certain document known as the "2024 Amendments to Chandler City Code Chapters 14, 35, and 48," one paper copy and one electronic copy of which shall remain on file in the Office of the City Clerk, a copy of which is attached to this Ordinance as Exhibit A, is hereby declared to be a public record.

Section 2. That the Chandler City Code is hereby amended by adoption of the amendments contained in the "2024 Amendments to Chandler City Code Chapters 14, 35, and 48."

Section 3. All ordinances or parts of ordinances in conflict with the provisions of this ordinance, or any parts hereof, are hereby repealed.

Section 4. In any case, where any building, structure, or land is used in violation of the amendments to Chapter 35 of this ordinance, the Planning Division of the City of Chandler may institute an injunction or any other appropriate action in proceeding to prevent the use of such building, structure, or land.

Section 5. If any section, subsection, sentence, clause, phrase, or portion of this ordinance is for any reason held to be invalid or unconstitutional by the decision of any court of competent jurisdiction, such decision shall not affect the validity of the remaining portions thereof.

Section 6. A violation of the amendments to Chapter 35 of this ordinance shall be a Class 1 misdemeanor subject to the enforcement and penalty provisions set forth in Section 1-8.3 of the Chandler City Code. Each day a violation continues, or the failure to perform any act or duty required by this ordinance or the Zoning Code, shall constitute a separate offense.

INTRODUCED AND TENTATIVELY APPROVED by the City Council of the City of Chandler, Arizona, this ____ day of _____, 2024.

ATTEST:

_____ _____

CITY CLERK MAYOR

PASSED AND ADOPTED by the City Council of the City of Chandler, Arizona, this _____ day of _____, 2024.

ATTEST:

_____ _____
CITY CLERK MAYOR

CERTIFICATION

I HEREBY CERTIFY that the above and foregoing Ordinance No. 5113 was duly passed and adopted by the City Council of the City of Chandler, Arizona, at a regular meeting held on the ____ day of _____, 2024, and that a quorum was present thereat.

_____
CITY CLERK

APPROVED AS TO FORM:

_____
CITY ATTORNEY TA

Published:

EXHIBIT A to Ordinance 5113

"2024 Amendments to Chandler City Code Chapters 14, 35, and 48"

The Chandler City Code is hereby amended to read as follows (additions in ALL CAPS, deletions in ~~strikethrough~~, omitted text indicated by ellipses as ". . ."):

Chapter 14 - ANIMALS

. . .

14-33. Backyard chickens.
Chickens may be kept for personal use only on any lot that is located within a residential district, the principal use of which is a single-family residential home, subject to the following requirements:
A. No more than ~~five (5)~~ SIX (6~~)~~chickens may be kept on an individual lot.

. . .

Chapter 35 - LAND USE AND ZONING

. . .

35-200 DEFINITIONS

. . .

Accessory building: One (1) detached building which is subordinate and customarily incidental to and on the same lot with a main building, accessory buildings may include structures such as but not limited to a private garage, workshop, ~~accessory dwelling unit,~~ or guest quarter. Greenhouses and/or hydroponic houses for hobby purposes shall be excluded for this definition.

Accessory dwelling unit: ~~A secondary dwelling unit sharing the lot of a larger, primary single-family home.~~ A SELF-CONTAINED LIVING UNIT THAT IS ON THE SAME LOT OR PARCEL AS A SINGLE-FAMILY DWELLING OF GREATER SQUARE FOOTAGE THAN THE ACCESSORY DWELLING UNIT, THAT INCLUDES ITS OWN SLEEPING, SANITATION, AND KITCHEN FACILITIES.

. . .

Guest quarters: A detached building THAT IS ON THE SAME LOT OR PARCEL AS A SINGLE-FAMILY DWELLING OF GREATER SQUARE FOOTAGE THAN THE GUEST QUARTERS ~~used to house non-paying persons~~, WHICH MAY INCLUDE ITS OWN SLEEPING AND SANITATION FACILITIES.

. . .

ARTICLE IV. AG-1—AGRICULTURAL DISTRICT

. . .

35-401. Uses permitted.

[The following are uses permitted in this district:]

(1) Single-family dwellings.

(2) Field crops such as cotton, grain, vegetables, fruit trees, flowers.

(3) Raising and marketing of poultry, rabbits and other small domesticated animals provided they are contained within a fence or cage. No slaughtering of animals for commercial purposes.

(4) Agrarian subdivisions, subject to:

(a) Livestock raising and grazing is permitted for a maximum of one (1) livestock animal per seven thousand (7,000) square feet of lot area.

(b) No more than one (1) hog, weighing more than fifty (50) pounds, may be kept per thirty-five thousand (35,000) square feet of lot area.

(c) All animals must be contained in a stock-tight fence and/or corral. Such fence or corral shall not be permitted closer than one hundred (100) feet to the front property line. For corner lots, no such fence or corral shall be located closer to the side right-of-way line than the principal building.

(d) Accessory buildings used specifically for animals and fowl, provided they are located within the area fenced for animals and maintain the same front yard requirements as provided for the principal building.

(5) Farm roadside stand.

(6) Riding stables (minimum area, ten (10) acres).

(7) Home occupations, in accordance with Article XXII, section 35-2215 of this Code.

(8) Fences, walls, landscape screens not exceeding seven (7) feet in height adjacent to rear and side property lines and not to exceed three (3) feet in height adjacent to front yard.

(9) Swimming pools, private, in accordance with Article XXII, section 35-2205 of this Code.

(10) One (1) accessory building, In accordance with Article XXII, section 35-2202 of this Code.

(11) Signs are permitted in accordance with the Chandler Sign Code [Chapter 39].

(12) Storage shed, In accordance with Article XXII, section 35-2203 of this Code.

(13) ACCESSORY DWELLING UNITS, IN ACCORDANCE WITH ARTICLE XXII, SECTION 35-2202.2 OF THIS CODE.

. . .

ARTICLE V. SF-33—SINGLE-FAMILY DISTRICT

. . .

35-501. Uses permitted.

[The following uses are permitted in this district:]

(1) Single-family dwellings.

(2) One (1) accessory building, in accordance with Article XXII, section 35-2202 of this Code.

(3) Home occupations, in accordance with Article XXII, section 35-2215 of this Code.

(4) Storage shed, in accordance with Article XXII, section 35-2203 of this Code.

(5) Signs in accordance with the Chandler Sign Code [Chapter 39].

(6) Fences, walls, landscape screens not exceeding seven (7) feet in height adjacent to rear and side property lines and not to exceed three (3) feet in height adjacent to front yard.

(7) Swimming pools, private, in accordance with Article XXII, section 35-2205 of this Code.

(8) Agrarian subdivisions, subject to:

(a) Livestock raising and grazing, excluding hogs, pigs, burros, donkeys or roosters, is permitted for a maximum of one (1) animal per ten thousand (10,000) square feet of lot area.

(b) Excluding household pets, the raising of poultry, rabbits and other small domesticated animals provided they are contained within a fence or cage.

(c) All animals must be contained in a stock-tight fence and/or corral. Such fence or corral shall not be permitted closer than one hundred (100) feet to the front property line. For corner lots, no such fence or corral shall be located closer to the side right-of-way line than the principal building.

(d) Field crops, including vegetables and fruit trees.

(e) Accessory buildings used specifically for animals and fowl authorized under paragraphs a. and b. above, provided they are located within the area fenced for animals and maintain the same front, side and rear yard requirements as provided for the principal building.

(9) ACCESSORY DWELLING UNITS, IN ACCORDANCE WITH ARTICLE XXII, SECTION 35-2202.2 OF THIS CODE.

. . .

ARTICLE VI. SF-18—SINGLE-FAMILY DISTRICT

. . .

35-601. Uses permitted.

[The following uses are permitted in this district:]

(1) Single-family dwellings.

(2) One (1) accessory building, in accordance with Article XXII, section 35-2202 of this Code.

(3) Home occupations in accordance with Article XXII, section 35-2215 of this Code.

(4) Storage shed, in accordance with Article XXII, section 35-2203 of this Code.

(5) Signs in accordance with Chandler Sign Code [Chapter 39].

(6) Fences, walls and landscape screens not exceeding seven (7) feet in height adjacent or contiguous to rear and side yard lines and not to exceed three (3) feet in height adjacent or contiguous to the front yard lines.

(7) Swimming pools, private, in accordance with Article XXII, section 35-2205 of this Code.

(8) ACCESSORY DWELLING UNITS, IN ACCORDANCE WITH ARTICLE XXII, SECTION 35-2202.2 OF THIS CODE.

. . .

ARTICLE VI.1. SF-10—SINGLE-FAMILY DISTRICT

. . .

35-601.1. Uses permitted.

[The following uses are permitted in this district:]

(1) Single-family dwellings.

(2) One (1) accessory building, in accordance with Article XXII, section 35-2202 of this Code.

(3) Home occupations as defined in accordance with Article XXII, section 35-2215 of this Code.

(4) Storage shed, in accordance with Article XXII, section 35-2203 of this Code.

(5) Signs in accordance with the Chandler Sign Code [Chapter 39].

(6) Fences, walls and landscape screens not exceeding seven (7) feet in height adjacent or contiguous to rear and side yard lines and not to exceed three (3) feet in height adjacent or contiguous to the front yard lines.

(7) Swimming pools, private, in accordance with Article XXII, section 35-2205 of this Code.

(8) ACCESSORY DWELLING UNITS, IN ACCORDANCE WITH ARTICLE XXII, SECTION 35-2202.2 OF THIS CODE.

. . .

ARTICLE VIII. MF-1—MEDIUM-DENSITY RESIDENTIAL DISTRICT

. . .

35-801. Uses permitted.

All buildings are subject to approval of site development plan in accordance with Article XIX of this Code.

(1) Two-family dwellings.

(2) Multi-family dwellings (subject to site development plan).

(3) Home occupations, in accordance with Article XXII, section 35-2215 of this Code.

(4) Signs in accordance with the Chandler Sign Code [Chapter 39].

(5) Storage shed, in accordance with Article XXII, section 35-2203 of this Code.

(6) One (1) accessory building, in accordance with Article XXII, section 35-2202 of this Code, excluding accessory dwelling unit.

(7) Fences, walls and landscape screens not exceeding seven (7) feet in height adjacent or contiguous to side or rear yard lines and not [more than] three (3) feet in height adjacent or contiguous to front yard lines.

(8) Swimming pools, private, in accordance with Article XXII [section 35-2205] of this Code.

(9) Single-family dwelling on existing lots that are less than twelve thousand (12,000) square feet as of February 8, 2024. Lots less than twelve thousand (12,000) square feet that were first subdivided on or after February 8, 2024 are not eligible for a single-family dwelling unless a use permit is granted pursuant to this chapter. ACCESSORY DWELLING UNITS SHALL BE PERMITTED IF THE PRINCIPAL USE IS A SINGLE-FAMILY RESIDENTIAL HOME, IN ACCORDANCE WITH ARTICLE XXII, SECTION 35-2202.2 OF THIS CODE.

. . .

ARTICLE IX. MF-2—MULTIPLE-FAMILY RESIDENTIAL DISTRICT

. . .

35-901. Uses permitted.

All buildings are subject to approval of site development plan in accordance with Article XIX of this Code.

(1) Multiple-family dwellings.

(2) Home occupations, in accordance with Article XXII, section 35-2215 of this Code.

(3) Signs in accordance with the Chandler Sign Code [Chapter 39].

(4) Storage shed, in accordance with Article XXII, section 35-2203 of this Code.

(5) Fences, walls and landscape screens not exceeding seven (7) feet in height adjacent or contiguous to side or rear yard lines and not exceeding three (3) feet in height adjacent or contiguous to front yard lines.

(6) Swimming pools, private, in accordance with Article XXII [section 35-2205] of this Code.

(7) One (1) accessory building, in accordance with Article XXII, section 35-2202 of this Code, excluding accessory dwelling unit.

(8) Churches, schools, public buildings and facilities.

(9) Single-family dwelling on existing lots that are less than twelve thousand (12,000) square feet as of February 8, 2024. Lots less than twelve thousand (12,000) square feet that were first subdivided on or after February 8, 2024 are not eligible for a single-family dwelling unless a use permit is granted pursuant to this chapter. ACCESSORY DWELLING UNITS SHALL BE PERMITTED IF THE PRINCIPAL USE IS A SINGLE-FAMILY RESIDENTIAL HOME, IN ACCORDANCE WITH ARTICLE XXII, SECTION 35-2202.2 OF THIS CODE.

. . .

ARTICLE X. MF-3—HIGH-DENSITY RESIDENTIAL DISTRICT

. . .

35-1001. Uses permitted.

All buildings are subject to an approved site development plan in accordance with Article XIX of this Code.

(1) Multiple-family buildings.

(2) Elevator multiple-family buildings, including accessory business uses which are primarily for the convenience of the tenants.

(3) Churches, schools, public buildings and facilities.

(4) Offices and office buildings.

(5) Home occupations, in accordance with Article XXII, section 35-2215 of this Code.

(6) Signs in accordance with the Chandler Sign Code [Chapter 39].

(7) Fences, walls and landscape screens not exceeding seven (7) feet in height when adjacent or contiguous to side or rear lot lines and not more than three (3) feet in height when adjacent or contiguous to front yard lines.

(8) Swimming pools, private, in accordance with Article XXII [section 35-2205] of this Code.

(9) One (1) accessory building, in accordance with Article XXII, section 35-2202 of this Code.

(10) Storage shed in accordance with Article XXII, section 35-2203 of this Code.

(11) Single-family dwelling on existing lots that are less than twelve thousand (12,000) square feet as of February 8, 2024. Lots less than twelve thousand (12,000) square feet that were first subdivided on or after February 8, 2024 are not eligible for a single-family dwelling unless a use permit is granted pursuant to this chapter. ACCESSORY DWELLING UNITS SHALL BE PERMITTED IF THE PRINCIPAL USE IS A SINGLE-FAMILY RESIDENTIAL HOME, IN ACCORDANCE WITH ARTICLE XXII, SECTION 35-2202.2 OF THIS CODE.

. . .

35-1707. - Final development plan approval.

(1) It is the intent of this section that subdivision review under the City Subdivision Regulations, Chapter 48, be carried out simultaneously as an integral part of the PAD review. The plans required under this section must be submitted in a form which substantially satisfies the requirements of the Subdivision Regulations for ~~final~~ plat approval.

. . .

35-2202. Accessory buildings. THE FOLLOWING STANDARDS SHALL APPLY TO ALL ACCESSORY BUILDINGS EXCEPT FOR ACCESSORY DWELLING UNITS.

(1) Accessory buildings such as but not limited to ~~accessory dwelling units~~ guest quarters, garages, and workshops shall be located behind the front wall plane of the home and in the side yard or in the rear yard of the ~~principal building~~PRIMARY RESIDENCE and shall not occupy more than thirty (30) percent of the rear area.

(2) Accessory buildings shall meet the minimum side and rear yard setbacks for the district in which it is located. Any accessory buildings within a Planned Area Development (PAD) zoning designation shall be subject to the applicable provisions of the adopted preliminary development plan.

(3) Accessory buildings shall not exceed fifteen (15) feet in height.

(4) No carport or garage entered from an alley shall be located closer than ten (10) feet to a rear lot line.

(5) No accessory building shall be constructed prior to the construction of a principal building.

(6) Guest quarters are permitted subject to the following:

(a) Guest quarters shall utilize the same utility services provided to the principal building (i.e. separate utility meters directly serving the guest quarters shall not be permitted).

(b) No ovens, ranges, or built-in cooking facilities shall be permitted.

~~(c) Notwithstanding any other provision, using the guest quarters for an activity requiring a license under Chapter 22 (short-term rentals) of the City Code shall be prohibited, except for short-term rentals registered prior to February 8, 2024.~~

(7) A maximum of one accessory building (e.g. ~~accessory dwelling unit,~~ guest quarters, garage, workshop) is permitted on a lot.

(8) The exterior design of any accessory building shall be commensurate with the exterior design of the ~~principal building~~ PRIMARY RESIDENCE AND CONSISTENT in materials, colors and architectural style OR SHALL COMPLY WITH THE FOLLOWING STANDARDS:

a) EXTERIOR WALL CLADDING CONSTRUCTED OF STUCCO OR EXTERIOR INSULATION AND FINISH SYSTEM (EIFS).
b) CONCRETE TILE ROOF WITH A 4:12 SLOPE.
c) ADDITIONAL ACCENT MATERIAL MAY BE ADDED IF THE MATERIALS ARE CONSISTENT WITH THE ARCHITECTURAL STYLE OF THE PRIMARY RESIDENCE.

~~(9) Accessory dwelling units are permitted subject to the following:~~

~~(a) An accessory dwelling unit shall only be permitted in a residential district, the principal use of which is a single-family residential home.~~

~~(b) Accessory dwelling units shall utilize the same utility services provided to the principal building (i.e., separate utility meters directly serving the accessory dwelling unit shall not be permitted).~~

~~(c) One (1) uncovered or covered off-street parking space shall be required in addition to the covered parking spaces required for the principal use. Said additional parking space shall not obstruct any required off-street parking (i.e., it is prohibited to utilize the driveway leading to the required off-street parking spaces for the principal use as parking for the accessory dwelling unit).~~

~~(d) Notwithstanding any other provision, using the accessory dwelling unit for an activity requiring a license under Chapter 22 (short term rentals) of the City Code shall be prohibited.~~

. . .

35-2202.2 ACCESSORY DWELLING UNITS

(1) ACCESSORY DWELLING UNITS ARE PERMITTED ON ANY LOT OR PARCEL WHERE A SINGLE-FAMILY DWELLING IS THE PRINCIPAL USE, SUBJECT TO THE FOLLOWING:

(A) A MAXIMUM OF ONE ATTACHED AND ONE DETACHED ACCESSORY DWELLING UNIT SHALL BE PERMITTED. AN ACCESSORY DWELLING UNIT SHALL NOT EXCEED SEVENTY-FIVE (75) PERCENT OF THE GROSS FLOOR AREA OF THE EXISTING SINGLE-FAMILY DWELLING OR ONE THOUSAND (1,000) SQUARE FEET, WHICHEVER IS LESS. FOR THE PURPOSES OF THIS SUBSECTION, GROSS FLOOR AREA MEANS THE INTERIOR HABITABLE AREA OF THE SINGLE-FAMILY DWELLING.

(B) ONE ADDITIONAL DETACHED ACCESSORY DWELLING UNIT SHALL BE PERMITTED ON A LOT OR PARCEL THAT IS ONE ACRE OR MORE IN SIZE IF AT LEAST ONE ACCESSORY DWELLING UNIT ON THE LOT OR PARCEL IS A RESTRICTED-AFFORDABLE DWELLING UNIT. FOR PURPOSES OF THIS SECTION, A RESTRICTED-AFFORDABLE DWELLING UNIT MEANS A DWELLING UNIT THAT MAY ONLY BE RENTED TO HOUSEHOLDS EARNING EIGHTY (80) PERCENT OR LESS OF AREA MEDIAN INCOME, WHICH LIMITATION HAS BEEN ESTABLISHED THROUGH A RECORDED DEED RESTRICTION OR DEVELOPMENT AGREEMENT GIVING THE CITY THE AUTHORITY TO ENFORCE THE LIMITATION.

(C) AN ACCESSORY DWELLING UNIT SHALL COMPLY WITH ALL LIMITATIONS ON BUILDING HEIGHT, INTENSITY OF LOT USE, AND FRONT YARD SETBACKS FOR THE ZONING DISTRICT IN WHICH IT IS LOCATED; EXCEPT REAR AND SIDE YARD SETBACKS SHALL BE NO LESS THAN FIVE (5) FEET.

(D) ANY UNINHABITABLE SPACE (E.G., A GARAGE) ATTACHED TO AN ACCESSORY DWELLING UNIT SHALL COMPLY WITH THE MINIMUM SIDE AND REAR YARD SETBACKS FOR THE DISTRICT IN WHICH IT IS LOCATED.

(E) ACCESSORY DWELLING UNITS SHALL BE SERVED BY THE SAME WATER, SEWER, AND ELECTRIC-UTILITY PROVIDERS AND METERS AS THE PRIMARY RESIDENCE.

(F) THE EXTERIOR DESIGN OF AN ACCESSORY DWELLING UNIT MUST COMPLY WITH THE FOLLOWING STANDARDS:

1. EXTERIOR WALL CLADDING CONSTRUCTED OF STUCCO OR EXTERIOR INSULATION AND FINISH SYSTEM (EIFS).
2. CONCRETE TILE ROOF WITH A 4:12 SLOPE.
3. ADDITIONAL ACCENT MATERIAL MAY BE ADDED IF THE MATERIALS ARE CONSISTENT WITH THE ARCHITECTURAL STYLE OF THE PRIMARY RESIDENCE.

ALTERNATIVELY, AT THE ELECTION OF THE PROPERTY OWNER, THE EXTERIOR DESIGN MAY BE COMMENSURATE WITH THE EXTERIOR DESIGN OF THE PRIMARY RESIDENCE AND CONSISTENT IN MATERIALS, COLORS AND ARCHITECTURAL STYLE.

(G) AN ACCESSORY DWELLING UNIT SHALL HAVE A SEPARATE AND INDEPENDENT ENTRANCE FROM THE PRIMARY RESIDENCE.

(H) A LOT OR PARCEL CONTAINING AN ACCESSORY DWELLING UNIT SHALL NOT BE SUBDIVIDED OR SPLIT INTO TWO OR MORE LOTS OR PARCELS UNLESS:

1. EACH LOT OR PARCEL COMPLIES WITH MINIMUM LOT SIZE REQUIREMENT OF THE ZONING DISTRICT IN WHICH IT IS LOCATED;
2. SEPARATE UTILITY CONNECTIONS ARE PROVIDED TO EACH DWELLING UNIT;
3. LEGAL INGRESS AND EGRESS IS PROVIDED TO EACH LOT; AND
4. ALL LOTS AND DWELLING UNITS COMPLY WITH ALL CITY CODE REQUIREMENTS.

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35-2605. – APPROVAL OF RESIDENTIAL ZONING APPLICATIONS.

(1) ADMINISTRATIVE COMPLETENESS REVIEW TIME FRAME.

FOR EACH APPLICATION FOR A ZONING AMENDMENT RELATED TO RESIDENTIAL ZONING, THE ZONING ADMINISTRATOR SHALL DESIGNATE A STAFF MEMBER TO REVIEW THE APPLICATION. CITY STAFF REVIEWING THE APPLICATION SHALL DETERMINE WHETHER THE APPLICATION IS ADMINISTRATIVELY COMPLETE WITHIN THIRTY (30) DAYS AFTER RECEIVING THE APPLICATION. IF STAFF DETERMINES THAT THE APPLICATION IS NOT ADMINISTRATIVELY COMPLETE, STAFF SHALL PROVIDE THE APPLICANT WITH A COMPREHENSIVE LIST OF THE SPECIFIC DEFICIENCIES IN A WRITTEN NOTICE TO THE APPLICANT. UPON ISSUANCE OF THE NOTICE, THE ADMINISTRATIVE COMPLETENESS REVIEW TIME FRAME AND OVERALL TIME FRAME CONTAINED IN THIS SECTION ARE SUSPENDED UNTIL STAFF RECEIVES THE MISSING INFORMATION FROM THE APPLICANT. STAFF SHALL DETERMINE WHETHER A RESUBMITTED APPLICATION IS ADMINISTRATIVELY COMPLETE WITHIN FIFTEEN (15) DAYS AFTER RECEIVING THE RESUBMITTED APPLICATION.

(2) APPROVAL OR DENIAL OF RESIDENTIAL ZONING APPLICATIONS.

AFTER DETERMINING THAT A RESIDENTIAL ZONING APPLICATION IS ADMINISTRATIVELY COMPLETE, THE CHANDLER CITY COUNCIL SHALL APPROVE OR DENY THE APPLICATION WITHIN ONE HUNDRED EIGHTY (180) DAYS. THE CITY MAY EXTEND THE TIME FRAME TO APPROVE OR DENY THE REQUEST BEYOND ONE HUNDRED EIGHTY (180) DAYS FOR EITHER OF THE FOLLOWING REASONS:

A) FOR EXTENUATING CIRCUMSTANCES, STAFF MAY GRANT A ONE-TIME EXTENSION OF NOT MORE THAN THIRTY (30) DAYS.

B) IF AN APPLICANT REQUESTS AN EXTENSION, THE CITY MAY GRANT EXTENSIONS OF THIRTY (30) DAYS FOR EACH EXTENSION REQUESTED.

(3) EXCEPTIONS.

THIS SECTION DOES NOT APPLY TO LAND THAT IS DESIGNATED AS A DISTRICT OF HISTORICAL SIGNIFICANCE PURSUANT TO ARIZ. REV. STAT. § 9-462.01(A) OR AN AREA THAT IS DESIGNATED AS HISTORIC ON THE NATIONAL REGISTER OF HISTORIC PLACES. THIS SECTION ALSO DOES NOT APPLY TO PARCELS THAT ARE ALREADY ZONED AS A PLANNED AREA DEVELOPMENT (PAD).

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Chapter 48 - SUBDIVISIONS

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48-7. Stage II: Preliminary plat.

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48-7.4. Significance of preliminary plat approval. Preliminary plat approval constitutes authorization for the subdivider to proceed with preparation of the final plat and the engineering plans and specifications for public improvements. Preliminary plat approval is based upon the following terms:

A. The preliminary plat as conditionally approved shall not be substantially changed prior to the expiration date.

~~B. Approval is valid for a period of twelve (12) months from date of City Council approval. A six (6) month extension of the preliminary plat approval may be granted by the City Council upon receipt of a letter, indicating proper cause, from the subdivider prior to expiration date.~~

~~C~~ B. Preliminary plat approval, in itself, does not assure final acceptance of streets for dedication nor does it assure continuation of existing zoning requirements for the tract or its environs.

48-7.5. Information required for preliminary plat submittal.

A. The information hereinafter required as part of the preliminary plat submittal shall be shown graphically, by note on plans, or by letter, and may comprise several sheets showing various elements of required data. All mapped data for the same plat shall be drawn at the same standard engineering scale, said scale having not more than one hundred (100) feet to an inch. Whenever practical, scale shall be adjusted to produce an overall drawing measuring twenty-four (24) by thirty-six (36) inches.

B. The subdivider shall also file one (1) photo mechanical transfer print (PMT) of the preliminary plat. The PMT's shall be eight and one-half (8½) inches by eleven (11) inches in size and so arranged that each may be bound as a right-hand page in a book with a blank

margin not less than one and one-half (1½) inches wide along the left, the margin being included in the eight and one-half (8½) inch dimension.

C. The subdivider shall file one (1) Mylar each of the subdivision at a true scale of one (1) inch to two hundred (200) feet. The Mylars shall contain lot layout, street configuration, and street names.

~~D. The subdivider shall file one (1) computer disk containing the final plat and all required submittals in a format suitable for computer generation of stored information.~~

. . .

48-8. Stage III: Final plat.

This stage includes the final design of the subdivision, engineering of public improvements and submittal of the final plat and plans by the subdivider, for review and ~~action~~ APPROVAL by the ~~Council.~~ DIRECTOR OF DEVELOPMENT SERVICES OR DESIGNEE.

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48-8.4. Final plat submission.

A. UPON APPROVAL OF THE PRELIMINARY PLAT, THE SUBDIVIDER MAY SUBMIT THE FINAL PLAT FOR APPROVAL. The subdivider shall file with the Department the final plat ~~and eight (8) true copies thereof~~, together with a letter of transmittal ~~at least twenty-one (21) days prior to the Council meeting at which staff has calendared for consideration of the final plat.~~ ELECTRONICALLY USING THE ONLINE DEVELOPMENT SERVICES SUBMISSION PORTAL.

~~B. The subdivider shall also file one (1) photo mechanical transfer print (PMT) of the final plat after all certificates have been signed. The PMT's shall be eight and one-half (8½) inches by eleven (11) inches in size and so arranged that each may be bound as a right-hand page in a book with a blank margin not less than one and one-half (1½) inches wide along the left, the margin being included in the eight and one-half (8½) inch dimension.~~

~~C.~~ B. ONCE APPROVED BY STAFF, the subdivider shall file ~~one (1) Mylar~~ TWO (2) MYLARS AND ONE (1) PAPER BOND each of the subdivision at a true scale of one (1) inch to two hundred (200) feet~~.~~ FOR SIGNATURE BY THE DIRECTOR OF DEVELOPMENT SERVICES OR DESIGNEE, AND THE CITY ENGINEER. The Mylars shall contain lot layout, street configuration, and street names.

C.~~D.~~ The subdivider shall file ~~one (1) computer disk containing~~ the final plat and all required submittals in a format suitable for computer generation of stored information.

48-8.5. Final plat review.

A. The DEVELOPMENT SERVICES Department, upon receipt of the final plat submittal, shall immediately record the receipt and date of filing and check it for completeness. If incomplete, the date of filing shall be voided and the submittal shall be returned to the subdivider. If complete, the Department shall review the plat for substantial conformity to the approved preliminary plat WITHIN 20 BUSINESS DAYS~~.~~ and refer copies of the submittal to ~~the following~~ OTHER RELEVANT reviewing offices, which shall make known their recommendations to the Department. ~~for its report to the City Council:~~

~~1. Director of Public Works and Utilities and the designated City Engineer for approval of proposed street system, for examination of survey computations of the plat, and for approval of sewer, water, reclaimed water system, stormwater retention and other public works issues.~~

~~2. Community Services Director, when applicable.~~

B. The Department shall assemble the requirements and recommendations of the various reviewing offices, prepare a concise summary of recommendations, and submit said summary together with the reviewer's requirements and recommendations to the ~~City Council~~ DIRECTOR OF DEVELOPMENT SERVICES OR DESIGNEE. In the event that the Department finds that the final plat does not conform essentially to the preliminary plat, as approved by the Council, then the final plat shall be rejected by the Department and shall not be APPROVED ~~considered by the City Council~~. If the developer desires to substantially modify the preliminary plat, an application to amend the preliminary plat may be filed to be considered by the Commission and the City Council in the same manner and with the same requirements as the original preliminary plat.

48-8.6. Final plat approval.

~~A. Upon receipt of a request for Council action from the Department, the Clerk shall place the case on the agenda of the next regular City Council meeting, whereupon the Council shall approve or deny the plat.~~

~~B. If the Council rejects the plat, the Council shall make findings indicating in what manner the final plat substantially differs from the approved preliminary plat.~~

~~C. If the Council approves the plat, the Clerk shall transcribe a certificate of approval upon the plat, first making sure that the other required certifications have been duly signed, and that engineering plans have been approved by the designated City Engineer.~~

~~D. When the certificate of approval by the Council has been transcribed on the plat, the Clerk shall cause the approved final plat to be recorded in the Office of the County Recorder of Maricopa County and distribute originals of the recorded plat to the Public Works and Utilities Department, the County Recorder, and a print of the recorded plat to the County Assessor, all at the expense of the subdivider.~~

A. THE FINAL PLAT MUST BE APPROVED PRIOR TO ISSUANCE OF A CERTIFICATE OF OCCUPANCY OR COMPLETION, OR TEMPORARY CERTIFICATE OF OCCUPANCY OR COMPLETION.

B. WHEN THE DEVELOPMENT SERVICES DIRECTOR OR DESIGNEE HAS APPROVED THE FINAL PLAT, THE CITY CLERK SHALL CAUSE THE APPROVED PLAT TO BE RECORDED IN THE OFFICE OF THE COUNTY RECORDER OF MARICOPA COUNTY AND DISTRIBUTE ORIGINALS OF THE RECORDED PLAT TO THE DEVELOPMENT SERVICES DEPARTMENT, THE COUNTY RECORDER, AND A PRINT OF THE RECORDED PLAT TO THE COUNTY ASSESSOR, ALL AT THE EXPENSE OF THE SUBDIVIDER.

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48-8.12. Required certifications. The following certifications are required:

A. Certification by the registered land surveyor making the plat that the final plat is correct and accurate and that the monuments described in it have either been set or located as described. The signature of such surveyor shall be accompanied by seal.

B. Certification by the Director of Development Services that the final plat is in essential conformance with the approved preliminary plat.

C. Certification by the designated City Engineer that all engineering conditions and requirements of this chapter and imposed by the City Council as conditions of approval have been complied with.

~~D. Certification by the City Clerk of the date the map was approved by the City Council.~~

~~E~~D. Certificate of recordation by the County Recorder.

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48-10. Subdivision design principles and standards.

Every subdivision shall conform to the goals and objectives adopted and contained in the Chandler General Plan. The subdivision shall also conform to the Chapter 35 Zoning and other applicable codes and ordinances of the City and the Arizona Revised Statutes, where applicable.

Where a tract of land to be subdivided contains all or any part of an area for a park, school, flood control facility or area shown on the general plan or recommended by the Commission, such site shall be platted showing streets and lots with the area delineated by a bold line and the purpose of the site designated. An agreement shall be reached between the subdivider and the public agency relative to date, method and cost of such acquisition within one (1) year or such extensions of time as may be mutually agreed upon, from recording of the final plat. If such agreement cannot be reached between the subdivider and the public agency relative to date, method and cost of such acquisition in such time period, the ~~City Council~~ DIRECTOR OF DEVELOPMENT SERVICES OR DESIGNEE shall make a determination relative to the compliance with the requirements of this section.

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Senate Engrossed House Bill

accessory dwelling units; requirements.

State of Arizona
House of Representatives
Fifty-sixth Legislature
Second Regular Session
2024

HOUSE BILL 2720

AN ACT

AMENDING TITLE 9, CHAPTER 4, ARTICLE 6, ARIZONA REVISED STATUTES, BY ADDING SECTION 9-461.18; AMENDING SECTION 9-500.39, ARIZONA REVISED STATUTES; RELATING TO MUNICIPAL PLANNING.

(TEXT OF BILL BEGINS ON NEXT PAGE)

Be it enacted by the Legislature of the State of Arizona:

Section 1. Title 9, chapter 4, article 6, Arizona Revised Statutes, is amended by adding section 9-461.18, to read:

9-461.18. Accessory dwelling units; regulation; applicability; definitions

A. A MUNICIPALITY WITH A POPULATION OF MORE THAN SEVENTY-FIVE THOUSAND PERSONS SHALL ADOPT REGULATIONS THAT ALLOW ON ANY LOT OR PARCEL WHERE A SINGLE-FAMILY DWELLING IS ALLOWED ALL OF THE FOLLOWING:

1. AT LEAST ONE ATTACHED AND ONE DETACHED ACCESSORY DWELLING UNIT AS A PERMITTED USE.

2. A MINIMUM OF ONE ADDITIONAL DETACHED ACCESSORY DWELLING UNIT AS A PERMITTED USE ON A LOT OR PARCEL THAT IS ONE ACRE OR MORE IN SIZE IF AT LEAST ONE ACCESSORY DWELLING UNIT ON THE LOT OR PARCEL IS A RESTRICTED-AFFORDABLE DWELLING UNIT.

3. AN ACCESSORY DWELLING UNIT THAT IS SEVENTY-FIVE PERCENT OF THE GROSS FLOOR AREA OF THE SINGLE-FAMILY DWELLING ON THE SAME LOT OR PARCEL OR ONE THOUSAND SQUARE FEET, WHICHEVER IS LESS.

B. A MUNICIPALITY MAY NOT DO ANY OF THE FOLLOWING:

1. PROHIBIT THE USE OR ADVERTISEMENT OF EITHER THE SINGLE-FAMILY DWELLING OR ANY ACCESSORY DWELLING UNIT LOCATED ON THE SAME LOT OR PARCEL AS SEPARATELY LEASED LONG-TERM RENTAL HOUSING.

2. REQUIRE A FAMILIAL, MARITAL, EMPLOYMENT OR OTHER PREEXISTING RELATIONSHIP BETWEEN THE OWNER OR OCCUPANT OF A SINGLE-FAMILY DWELLING AND THE OCCUPANT OF AN ACCESSORY DWELLING UNIT LOCATED ON THE SAME LOT OR PARCEL.

3. REQUIRE THAT A LOT OR PARCEL HAVE ADDITIONAL PARKING TO ACCOMMODATE AN ACCESSORY DWELLING UNIT OR REQUIRE PAYMENT OF FEES INSTEAD OF ADDITIONAL PARKING.

4. REQUIRE THAT AN ACCESSORY DWELLING UNIT MATCH THE EXTERIOR DESIGN, ROOF PITCH OR FINISHING MATERIALS OF THE SINGLE-FAMILY DWELLING THAT IS LOCATED ON THE SAME LOT AS THE ACCESSORY DWELLING UNIT.

5. SET RESTRICTIONS FOR ACCESSORY DWELLING UNITS THAT ARE MORE RESTRICTIVE THAN THOSE FOR SINGLE-FAMILY DWELLINGS WITHIN THE SAME ZONING AREA WITH REGARD TO HEIGHT, SETBACKS, LOT SIZE OR COVERAGE OR BUILDING FRONTAGE.

6. SET REAR OR SIDE SETBACKS FOR ACCESSORY DWELLING UNITS THAT ARE MORE THAN FIVE FEET FROM THE PROPERTY LINE.

7. REQUIRE IMPROVEMENTS TO PUBLIC STREETS AS A CONDITION OF ALLOWING AN ACCESSORY DWELLING UNIT, EXCEPT AS NECESSARY TO RECONSTRUCT OR REPAIR A PUBLIC STREET THAT IS DISTURBED AS A RESULT OF THE CONSTRUCTION OF THE ACCESSORY DWELLING UNIT.

8. REQUIRE A RESTRICTIVE COVENANT CONCERNING AN ACCESSORY DWELLING UNIT ON A LOT OR PARCEL ZONED FOR RESIDENTIAL USE BY A SINGLE-FAMILY DWELLING.

C. THIS SECTION DOES NOT PROHIBIT RESTRICTIVE COVENANTS CONCERNING ACCESSORY DWELLING UNITS ENTERED INTO BETWEEN PRIVATE PARTIES. THE MUNICIPALITY MAY NOT CONDITION A PERMIT, LICENSE OR USE OF AN ACCESSORY DWELLING UNIT ON ADOPTING OR IMPLEMENTING A RESTRICTIVE COVENANT BETWEEN PRIVATE PARTIES.

D. THIS SECTION DOES NOT SUPERSEDE APPLICABLE BUILDING CODES, FIRE CODES OR PUBLIC HEALTH AND SAFETY REGULATIONS, EXCEPT THAT A MUNICIPALITY MAY NOT REQUIRE AN ACCESSORY DWELLING UNIT TO COMPLY WITH A COMMERCIAL BUILDING CODE OR CONTAIN A FIRE SPRINKLER.

E. AN ACCESSORY DWELLING UNIT MAY NOT BE BUILT ON TOP OF A CURRENT OR PLANNED PUBLIC UTILITY EASEMENT UNLESS THE PROPERTY OWNER RECEIVES WRITTEN CONSENT FROM ANY UTILITY THAT IS CURRENTLY USING THE PUBLIC UTILITY EASEMENT OR THAT MAY USE THE PUBLIC UTILITY EASEMENT IN THE FUTURE.

F. IF A MUNICIPALITY FAILS TO ADOPT DEVELOPMENT REGULATIONS AS REQUIRED BY THIS SECTION ON OR BEFORE JANUARY 1, 2025, ACCESSORY DWELLING UNITS SHALL BE ALLOWED ON ALL LOTS OR PARCELS ZONED FOR RESIDENTIAL USE IN THE MUNICIPALITY WITHOUT LIMITS.

G. THIS SECTION DOES NOT APPLY TO LOTS OR PARCELS THAT ARE LOCATED ON TRIBAL LAND, ON LAND IN THE TERRITORY IN THE VICINITY OF A MILITARY AIRPORT OR ANCILLARY MILITARY FACILITY AS DEFINED IN SECTION 28-8461, ON LAND IN THE TERRITORY IN THE VICINITY OF A FEDERAL AVIATION ADMINISTRATION COMMERCIALLY LICENSED AIRPORT OR A GENERAL AVIATION AIRPORT OR ON LAND IN THE TERRITORY IN THE VICINITY OF A PUBLIC AIRPORT AS DEFINED IN SECTION 28-8486.

H. FOR THE PURPOSES OF THIS SECTION:

1. "ACCESSORY DWELLING UNIT" MEANS A SELF-CONTAINED LIVING UNIT THAT IS ON THE SAME LOT OR PARCEL AS A SINGLE-FAMILY DWELLING OF GREATER SQUARE FOOTAGE THAN THE ACCESSORY DWELLING UNIT, THAT INCLUDES ITS OWN SLEEPING AND SANITATION FACILITIES AND THAT MAY INCLUDE ITS OWN KITCHEN FACILITIES.

2. "GROSS FLOOR AREA" MEANS THE INTERIOR HABITABLE AREA OF A SINGLE-FAMILY DWELLING OR AN ACCESSORY DWELLING UNIT.

3. "LONG-TERM RENTAL" MEANS RENTAL USE IN WHICH THE TENANT HOLDS A LEASE OF NINETY DAYS OR LONGER OR ON A MONTH-BY-MONTH BASIS.

4. "MUNICIPALITY" MEANS A CITY OR TOWN THAT EXERCISES ZONING POWERS UNDER THIS TITLE.

5. "PERMITTED USE" MEANS THE ABILITY FOR A DEVELOPMENT TO BE APPROVED WITHOUT REQUIRING A PUBLIC HEARING, VARIANCE, CONDITIONAL USE PERMIT, SPECIAL PERMIT OR SPECIAL EXCEPTION, OTHER THAN A DISCRETIONARY ZONING ACTION TO DETERMINATION THAT A SITE PLAN CONFORMS WITH APPLICABLE ZONING REGULATIONS.

6. "RESTRICTED-AFFORDABLE DWELLING UNIT" MEANS A DWELLING UNIT THAT, EITHER THROUGH A DEED RESTRICTION OR A DEVELOPMENT AGREEMENT WITH THE MUNICIPALITY, SHALL BE RENTED TO HOUSEHOLDS EARNING UP TO EIGHTY PERCENT OF AREA MEDIAN INCOME.

Sec. 2. Section 9-500.39, Arizona Revised Statutes, is amended to read:

9-500.39. Limits on regulation of vacation rentals and short-term rentals; state preemption; civil penalties; transaction privilege tax license suspension; definitions

A. A city or town may not prohibit vacation rentals or short-term rentals.

B. A city or town may not restrict the use of or regulate vacation rentals or short-term rentals based on their classification, use or occupancy except as provided in this section. A city or town may regulate vacation rentals or short-term rentals as follows:

1. To protect the public's health and safety, including rules and regulations related to fire and building codes, health and sanitation, transportation or traffic control and solid or hazardous waste and pollution control, if the city or town demonstrates that the rule or regulation is for the primary purpose of protecting the public's health and safety.

2. To adopt and enforce use and zoning ordinances, including ordinances related to noise, protection of welfare, property maintenance and other nuisance issues, if the ordinance is applied in the same manner as other property classified under sections 42-12003 and 42-12004.

3. To limit or prohibit the use of a vacation rental or short-term rental for the purposes of housing sex offenders, operating or maintaining a sober living home, selling illegal drugs, liquor control or pornography, obscenity, nude or topless dancing and other adult-oriented businesses.

4. To require the owner of a vacation rental or short-term rental to provide the city or town ~~an~~ WITH emergency ~~point of~~ contact information for the owner or the owner's designee who is responsible for responding to complaints or emergencies in a timely manner in person if required by public safety personnel, over the phone or by email at any time of day before offering for rent or renting the vacation rental or short-term rental. In addition to any other penalty IMPOSED pursuant to this section, the city or town may impose a civil penalty of up to $1,000 against the owner for every thirty days the owner fails to provide contact information as prescribed by this paragraph. The city or town shall provide thirty days' notice to the owner before imposing the initial civil penalty.

5. To require ~~an~~ THE owner of a vacation rental or short-term rental to obtain and maintain a local regulatory permit or license ~~pursuant to title 9, chapter 7, article 4~~. As a condition of issuance of

a permit or license, the application for the permit or license may require an applicant to provide only the following:

(a) THE name, address, ~~phone~~ TELEPHONE number and email address for the owner or owner's agent.

(b) THE address of the vacation rental or short-term rental.

(c) Proof of compliance with section 42-5005.

(d) Contact information required pursuant to paragraph 4 of this subsection.

(e) Acknowledgment of an agreement to comply with all applicable laws, regulations and ordinances.

(f) A fee not to exceed the actual cost of issuing the permit or license or $250, whichever is less.

6. To require, before offering a vacation rental or short-term rental for rent for the first time, the owner or the owner's designee of a vacation rental or short-term rental to notify all single-family residential properties adjacent to~~,~~ AND directly and diagonally across the street from the vacation rental or short-term rental. Notice shall be deemed sufficient in a multifamily residential building if given to residents on the same building floor. A city or town may require additional notification pursuant to this paragraph if the contact information previously provided changes. Notification provided in compliance with this paragraph shall include the permit or license number if required by the city or town, the address~~,~~ OF THE VACATION RENTAL OR SHORT-TERM RENTAL and the information required pursuant to paragraph 4 of this subsection. The owner or the owner's designee shall demonstrate compliance with this paragraph by providing the city or town with an attestation of notification compliance that consists of the following information:

(a) The permit or license number of the vacation rental or short-term rental, if required by the city or town.

(b) The address of each property notified.

(c) A description of the manner in which the owner or owner's designee chose to provide notification to each property subject to notification.

(d) The name and contact information of the person attesting to compliance with this paragraph.

7. To require the owner or owner's designee of a vacation rental or short-term rental to display the local regulatory permit number or license number, if any, on each advertisement for a vacation rental or short-term rental that the owner or owner's designee maintains. A city or town that does not require a local regulatory permit or license may require the owner or owner's designee of a vacation rental or short-term rental to display the transaction privilege tax license NUMBER required by section 42-5042 on each advertisement for a vacation rental or short-term rental that the owner or owner's designee maintains.

8. To require the vacation rental or short-term rental to maintain liability insurance appropriate to cover the vacation rental or short-term rental in the aggregate of at least $500,000 or to advertise and offer each vacation rental or short-term rental through an online lodging marketplace that provides equal or greater coverage.

9. TO REQUIRE THE OWNER OF A VACATION RENTAL OR SHORT-TERM RENTAL TO RESIDE ON THE PROPERTY IF THE PROPERTY CONTAINS AN ACCESSORY DWELLING UNIT THAT WAS CONSTRUCTED ON OR AFTER THE EFFECTIVE DATE OF THIS AMENDMENT TO THIS SECTION AND THAT IS BEING USED AS A VACATION RENTAL OR SHORT-TERM RENTAL. UNLESS THE TIME PERIOD SPECIFIED IN SECTION 12-1134, SUBSECTION G HAS EXPIRED, THIS PARAGRAPH DOES NOT APPLY TO A PROPERTY OWNER WHO HAS THE RIGHT TO BUILD AN ACCESSORY DWELLING UNIT ON THE PROPERTY OWNER'S PROPERTY BEFORE THE EFFECTIVE DATE OF THIS AMENDMENT TO THIS SECTION WHETHER OR NOT THE ACCESSORY DWELLING UNIT HAS BEEN BUILT.

C. A city or town that requires a local regulatory permit or license pursuant to this section shall issue or deny the permit or license within seven business days of receipt of the information required by subsection B, paragraph 5 of this section and otherwise in accordance with section 9-835, except that a city or town may deny issuance of a permit or license only for any of the following:

1. Failure to provide the information required by subsection B, paragraph 5, subdivisions (a) through (e) of this section.

2. Failure to pay the required permit or license fee.

3. At the time of application the owner has a suspended permit or license for the same vacation rental or short-term rental.

4. The applicant provides false information.

5. The owner or owner's designee of a vacation rental or short-term rental is a registered sex offender or has been convicted of any felony ~~act~~ OFFENSE that resulted in death or serious physical injury or any felony use of a deadly weapon within the past five years.

D. A city or town that requires a local regulatory permit or license pursuant to this section shall adopt an ordinance to allow the city or town to initiate an administrative process to suspend a local regulatory permit or license for a period of up to twelve months for the following verified violations associated with a property:

1. Three verified violations within a twelve-month period, not including any verified violation based on an aesthetic, solid waste disposal or vehicle parking violation that is not also a serious threat to public health and safety.

2. One verified violation that results in or constitutes any of the following:

(a) A felony offense committed at or in the vicinity of a vacation rental or short-term rental by the vacation rental or short-term rental owner or owner's designee.

(b) A serious physical injury or wrongful death at or related to a vacation rental or short-term rental resulting from the knowing, intentional or reckless conduct of the vacation rental or short-term rental owner or owner's designee.

(c) An owner or owner's designee knowingly or intentionally housing a sex offender, allowing offenses related to adult-oriented businesses, sexual offenses or prostitution, or operating or maintaining a sober living home, in violation of a regulation or ordinance adopted pursuant to subsection B, paragraph 3 of this section.

(d) An owner or owner's designee knowingly or intentionally allowing the use of a vacation rental or short-term rental for a special event that would otherwise require a permit or license pursuant to a city or town ordinance or a state law or rule or for a retail, restaurant, banquet space or other similar use.

3. Notwithstanding paragraphs 1 and 2 of this subsection, any attempted or completed felony ~~act~~ OFFENSE, arising from the occupancy or use of a vacation rental or short-term rental, that results in a death, or actual or attempted serious physical injury, shall be grounds for judicial relief in the form of a suspension of the property's use as a vacation rental or short-term rental for a period of time that shall not exceed twelve months.

E. A city or town that requires sex offender background checks on a vacation rental or short-term rental guest shall waive the requirement if an online lodging marketplace performs a sex offender background check of the booking guest.

F. Notwithstanding any other law, a city or town may impose a civil penalty of the following amounts against an owner of a vacation rental or short-term rental if the owner receives one or more verified violations related to the same vacation rental or short-term rental property within the same twelve-month period:

1. Up to $500 or up to an amount equal to one night's rent for the vacation rental or short-term rental as advertised, whichever is greater, for the first verified violation.

2. Up to $1,000 or up to an amount equal to two nights' rent for the vacation rental or short-term rental as advertised, whichever is greater, for the second verified violation.

3. Up to $3,500 or up to an amount equal to three nights' rent for the vacation rental or short-term rental as advertised, whichever is greater, for a third and any subsequent verified violation.

G. A vacation rental or short-term rental that fails to apply for a local regulatory permit or license in accordance with subsection B, paragraph 5 of this section, within thirty days of the local regulatory permit or license application process being made available by the city or town issuing such permits or licenses, must cease operations. In addition to any ~~fines~~ CIVIL PENALTIES imposed pursuant to subsection F of this

section, a city or town may impose a civil penalty of up to $1,000 per month against the owner if the owner or owner's designee fails to apply for a regulatory permit or license within thirty days after receiving written notice of the failure to comply with subsection B, paragraph 5 of this section.

H. If multiple verified violations arise out of the same response to an incident at a vacation rental or short-term rental, those verified violations are considered one verified violation for the purpose of assessing civil penalties or suspending the regulatory permit or license of the owner ~~or owner's designee~~ pursuant to this section.

I. If the owner of a vacation rental or short-term rental has provided contact information to a city or town pursuant to subsection B, paragraph 4 of this section and if the city or town issues a citation for a violation of the city's or town's applicable laws, regulations or ordinances or a state law that occurred on the owner's vacation rental or short-term rental property, the city or town shall make a reasonable attempt to notify the owner or the owner's designee of the citation within seven business days after the citation is issued using the contact information provided pursuant to subsection B, paragraph 4 of this section. If the owner of a vacation rental or short-term rental has not provided contact information pursuant to subsection B, paragraph 4 of this section, the city or town is not required to provide such notice.

J. This section does not exempt an owner of a residential rental property, as defined in section 33-1901, from maintaining with the assessor of the county in which the property is located information required under title 33, chapter 17, article 1.

K. A vacation rental or short-term rental may not be used for nonresidential uses, including for a special event that would otherwise require a permit or license pursuant to a city or town ordinance or a state law or rule or for a retail, restaurant, banquet space or other similar use.

L. For the purposes of this section:

1. "ACCESSORY DWELLING UNIT" HAS THE SAME MEANING PRESCRIBED IN SECTION 9-461.18.

~~1.~~ 2. "Online lodging marketplace" has the same meaning prescribed in section 42-5076.

~~2.~~ 3. "Transient" has the same meaning prescribed in section 42-5070.

~~3.~~ 4. "Vacation rental" or "short-term rental":

(a) Means any individually or collectively owned single-family or one-to-four-family house or dwelling unit or any unit or group of units in a condominium or cooperative that is also a transient public lodging establishment or owner-occupied residential home offered for transient use if the accommodations are not classified for property taxation under section 42-12001.

(b) Does not include a unit that is used for any nonresidential use, including retail, restaurant, banquet space, event center or another similar use.

~~4.~~ 5. "Verified violation" means a finding of guilt or civil responsibility for violating any state law or local ordinance relating to a purpose prescribed in subsection B, D, F or K of this section that has been finally adjudicated.

Conference Engrossed

backyard fowl; regulation; prohibition

State of Arizona
House of Representatives
Fifty-sixth Legislature
Second Regular Session
2024

HOUSE BILL 2325

AN ACT

AMENDING TITLE 9, CHAPTER 4, ARTICLE 6.1, ARIZONA REVISED STATUTES, BY ADDING SECTION 9-462.10; AMENDING TITLE 11, CHAPTER 6, ARTICLE 2, ARIZONA REVISED STATUTES, BY ADDING SECTION 11-820.04; RELATING TO MUNICIPAL AND COUNTY ZONING.

(TEXT OF BILL BEGINS ON NEXT PAGE)

Be it enacted by the Legislature of the State of Arizona:

Section 1. Title 9, chapter 4, article 6.1, Arizona Revised Statutes, is amended by adding section 9-462.10, to read:

9-462.10. Backyard fowl regulation; prohibition; exceptions; state preemption; definition

A. A MUNICIPALITY MAY NOT ADOPT ANY LAW, ORDINANCE OR OTHER REGULATION THAT PROHIBITS A RESIDENT OF A SINGLE-FAMILY DETACHED RESIDENCE ON A LOT THAT IS ONE-HALF ACRE OR LESS IN SIZE FROM KEEPING UP TO SIX FOWL IN THE BACKYARD OF THE PROPERTY. A MUNICIPALITY MAY:

1. PROHIBIT A RESIDENT FROM KEEPING MALE FOWL, INCLUDING ROOSTERS.

2. REQUIRE FOWL TO BE KEPT IN AN ENCLOSURE LOCATED IN THE REAR OR SIDE YARD OF THE PROPERTY AT LEAST TWENTY FEET FROM A NEIGHBORING PROPERTY AND RESTRICT THE SIZE OF THE ENCLOSURE TO A MAXIMUM OF TWO HUNDRED SQUARE FEET WITH A MAXIMUM HEIGHT OF EIGHT FEET.

3. REQUIRE THE ENCLOSURE TO BE MAINTAINED AND MANURE PICKED UP AND DISPOSED OF OR COMPOSTED AT LEAST TWICE WEEKLY.

4. REQUIRE THAT COMPOSTED MANURE BE KEPT IN A WAY THAT PREVENTS MIGRATION OF INSECTS.

5. REQUIRE WATER SOURCES WITH ADEQUATE OVERFLOW DRAINAGE.

6. REQUIRE THAT FEED BE STORED IN INSECT-PROOF AND RODENT-PROOF CONTAINERS.

7. PROHIBIT FOWL FROM RUNNING AT LARGE.

B. NOTWITHSTANDING SUBSECTION A OF THIS SECTION, A MUNICIPALITY SHALL ENACT AN ORDINANCE THAT REQUIRES AN ENCLOSURE LOCATED IN A RESIDENTIAL COMMUNITY ON A LOT LESS THAN ONE ACRE IN SIZE TO BE SHORTER THAN THE FENCE LINE OF THE PROPERTY.

C. AN ORDINANCE THAT IS ENACTED AFTER THE EFFECTIVE DATE OF THIS SECTION DOES NOT APPLY TO AN ENCLOSURE THAT WAS CONSTRUCTED ON OR BEFORE THE EFFECTIVE DATE OF THIS SECTION.

D. THE PROPERTY RIGHTS OF PROPERTY OWNERS IN THIS STATE OUTLINED IN THIS SECTION ARE OF STATEWIDE CONCERN. THIS SECTION PREEMPTS ALL LOCAL LAWS, ORDINANCES AND CHARTER PROVISIONS TO THE CONTRARY.

E. FOR THE PURPOSES OF THIS SECTION, "FOWL" MEANS A COCK OR HEN OF THE DOMESTIC CHICKEN.

Sec. 2. Title 11, chapter 6, article 2, Arizona Revised Statutes, is amended by adding section 11-820.04, to read:

11-820.04. Backyard fowl regulation; prohibition; exceptions; state preemption; definition

A. A COUNTY MAY NOT ADOPT ANY LAW, ORDINANCE OR OTHER REGULATION THAT PROHIBITS A RESIDENT OF A SINGLE-FAMILY DETACHED RESIDENCE ON A LOT THAT IS ONE-HALF ACRE OR LESS IN SIZE FROM KEEPING UP TO SIX FOWL IN THE BACKYARD OF THE PROPERTY. A COUNTY MAY:

1. PROHIBIT A RESIDENT FROM KEEPING MALE FOWL, INCLUDING ROOSTERS.

2. REQUIRE FOWL TO BE KEPT IN AN ENCLOSURE LOCATED IN THE REAR OR SIDE YARD OF THE PROPERTY AT LEAST TWENTY FEET FROM A NEIGHBORING PROPERTY

AND RESTRICT THE SIZE OF THE ENCLOSURE TO A MAXIMUM OF TWO HUNDRED SQUARE FEET WITH A MAXIMUM HEIGHT OF EIGHT FEET.

3. REQUIRE THE ENCLOSURE TO BE MAINTAINED AND MANURE PICKED UP AND DISPOSED OF OR COMPOSTED AT LEAST TWICE WEEKLY.

4. REQUIRE THAT COMPOSTED MANURE BE KEPT IN A WAY THAT PREVENTS MIGRATION OF INSECTS.

5. REQUIRE WATER SOURCES WITH ADEQUATE OVERFLOW DRAINAGE.

6. REQUIRE THAT FEED BE STORED IN INSECT-PROOF AND RODENT-PROOF CONTAINERS.

7. PROHIBIT FOWL FROM RUNNING AT LARGE.

B. NOTWITHSTANDING SUBSECTION A OF THIS SECTION, A COUNTY SHALL ENACT AN ORDINANCE THAT REQUIRES AN ENCLOSURE LOCATED IN A RESIDENTIAL COMMUNITY ON A LOT LESS THAN ONE ACRE IN SIZE TO BE SHORTER THAN THE FENCE LINE OF THE PROPERTY.

C. AN ORDINANCE THAT IS ENACTED AFTER THE EFFECTIVE DATE OF THIS SECTION DOES NOT APPLY TO AN ENCLOSURE THAT WAS CONSTRUCTED ON OR BEFORE THE EFFECTIVE DATE OF THIS SECTION.

D. THE PROPERTY RIGHTS OF PROPERTY OWNERS IN THIS STATE OUTLINED IN THIS SECTION ARE OF STATEWIDE CONCERN. THIS SECTION PREEMPTS ALL LOCAL LAWS AND ORDINANCES TO THE CONTRARY.

E. FOR THE PURPOSES OF THIS SECTION, "FOWL" MEANS A COCK OR HEN OF THE DOMESTIC CHICKEN.

House Engrossed Senate Bill

~~telecommunications fund; report; posting~~
(now: residential zoning; housing; assessment; hearings)

State of Arizona
Senate
Fifty-sixth Legislature
Second Regular Session
2024

CHAPTER 172

SENATE BILL 1162

AN ACT

AMENDING SECTION 9-462.04, ARIZONA REVISED STATUTES; AMENDING TITLE 9, CHAPTER 4, ARTICLE 6.1, ARIZONA REVISED STATUTES, BY ADDING SECTION 9-462.10; AMENDING TITLE 9, CHAPTER 4, ARTICLE 6.4, ARIZONA REVISED STATUTES, BY ADDING SECTION 9-469; RELATING TO MUNICIPALITIES.

(TEXT OF BILL BEGINS ON NEXT PAGE)

Be it enacted by the Legislature of the State of Arizona:

Section 1. Section 9-462.04, Arizona Revised Statutes, is amended to read:

9-462.04. Public hearing required; definition

A. If the municipality has a planning commission or a hearing officer, the planning commission or hearing officer shall hold a public hearing on any zoning ordinance. Notice of the time and place of the hearing including a general explanation of the matter to be considered and including a general description of the area affected shall be given at least fifteen days before the hearing in the following manner:

1. The notice shall be published at least once in a newspaper of general circulation published or circulated in the municipality, or if there is none, it shall be posted on the affected property in such a manner as to be legible from the public right-of-way and in at least ten public places in the municipality. A posted notice shall be printed so that the following are visible from a distance of one hundred feet: the word "zoning", the present zoning district classification, the proposed zoning district classification and the date and time of the hearing.

2. In proceedings involving rezoning of land that abuts other municipalities or unincorporated areas of the county or a combination of a municipality and an unincorporated area, copies of the notice of public hearing shall be transmitted to the planning agency of the governmental unit abutting such land. In proceedings involving rezoning of land that is located within the territory in the vicinity of a military airport or ancillary military facility as defined in section 28-8461, the municipality shall send copies of the notice of public hearing by first class mail to the military airport. In addition to notice by publication, a municipality may give notice of the hearing in any other manner that the municipality deems necessary or desirable.

3. In proceedings that are not initiated by the property owner involving rezoning of land that may change the zoning classification, notice by first class mail shall be sent to each real property owner, as shown on the last assessment of the property, of the area to be rezoned and all property owners, as shown on the last assessment of the property, within three hundred feet of the property to be rezoned.

4. In proceedings involving one or more of the following proposed changes or related series of changes in the standards governing land uses, notice shall be provided in the manner prescribed by paragraph 5 of this subsection:

(a) A ten percent or more increase or decrease in the number of square feet or units that may be developed.

(b) A ten percent or more increase or reduction in the allowable height of buildings.

(c) An increase or reduction in the allowable number of stories of buildings.

(d) A ten percent or more increase or decrease in setback or open space requirements.

(e) An increase or reduction in permitted uses.

5. In proceedings governed by paragraph 4 of this subsection, the municipality shall provide notice to real property owners pursuant to at least one of the following notification procedures:

(a) Notice shall be sent by first class mail to each real property owner, as shown on the last assessment, whose real property is directly governed by the changes.

(b) If the municipality issues utility bills or other mass mailings that periodically include notices or other informational or advertising materials, the municipality shall include notice of the changes with such utility bills or other mailings.

(c) The municipality shall publish the changes before the first hearing on such changes in a newspaper of general circulation in the municipality. The changes shall be published in a "display ad" covering not less than one-eighth of a full page.

6. If notice is provided pursuant to paragraph 5, subdivision (b) or (c) of this subsection, the municipality shall also send notice by first class mail to persons who register their names and addresses with the municipality as being interested in receiving such notice. The municipality may charge a fee not to exceed $5 per year for providing this service and may adopt procedures to implement this paragraph.

7. Notwithstanding the notice requirements in paragraph 4 of this subsection, the failure of any person or entity to receive notice does not constitute grounds for any court to invalidate the actions of a municipality for which the notice was given.

B. If the matter to be considered applies to territory in a high noise or accident potential zone as defined in section 28-8461, the notice prescribed in subsection A of this section shall include a general statement that the matter applies to property located in the high noise or accident potential zone.

C. After the hearing, the planning commission or hearing officer shall render a decision in the form of a written recommendation to the governing body. The recommendation shall include the reasons for the recommendation and be transmitted to the governing body in the form and manner prescribed by the governing body.

D. If the planning commission or hearing officer has held a public hearing, the governing body may adopt the recommendations of the planning commission or hearing officer without holding a second public hearing if there is no objection, request for public hearing or other protest. The governing body shall hold a public hearing if requested by the party aggrieved or any member of the public or of the governing body, or, in any

case, if a public hearing has not been held by the planning commission or hearing officer. The governing body may consider the testimony of any party aggrieved when making its decision. In municipalities with territory in the vicinity of a military airport or ancillary military facility as defined in section 28-8461, the governing body shall hold a public hearing if, after notice is transmitted to the military airport pursuant to subsection A of this section and before the public hearing, the military airport provides comments or analysis concerning the compatibility of the proposed rezoning with the high noise or accident potential generated by military airport or ancillary military facility operations that may have an adverse impact on public health and safety, and the governing body shall consider and analyze the comments or analysis before making a final determination. Notice of the time and place of the hearing shall be given in the time and manner provided for the giving of notice of the hearing by the planning commission as specified in subsection A of this section. A municipality may give additional notice of the hearing in any other manner as the municipality deems necessary or desirable. For the purposes of this subsection, "party aggrieved" means any property owner within the notification area prescribed by subsection A, paragraph 3 of this section.

E. A municipality may enact an ordinance authorizing county zoning to continue in effect until municipal zoning is applied to land previously zoned by the county and annexed by the municipality, but not longer than six months after the annexation.

F. A municipality is not required to adopt a general plan before the adoption of a zoning ordinance.

G. If there is no planning commission or hearing officer, the governing body of the municipality shall perform the functions assigned to the planning commission or hearing officer.

H. If the owners of twenty percent or more of the property by area and number of lots, tracts and condominium units within the zoning area of the affected property, EXCLUDING GOVERNMENT OWNED PROPERTY, file a protest in writing against a proposed amendment, the change shall not become effective except by the favorable vote of three-fourths of all members of the governing body of the municipality. If any members of the governing body are unable to vote on such a question because of a conflict of interest, then the required number of votes for passage of the question shall be three-fourths of the remaining membership of the governing body, provided that such required number of votes shall not be less than a majority of the full membership of the legally established governing body. For the purposes of this subsection, the vote shall be rounded to the nearest whole number. A protest filed pursuant to this subsection shall be signed by the property owners, EXCLUDING GOVERNMENT OWNED PROPERTY, opposing the proposed amendment and filed in the office of the clerk of the municipality not later than 12:00 noon one business day before the

date on which the governing body will vote on the proposed amendment or on an earlier time and date established by the governing body.

I. In applying an open space element or a growth element of a general plan, a parcel of land shall not be rezoned for open space, recreation, conservation or agriculture unless the owner of the land consents to the rezoning in writing.

J. Notwithstanding section 19-142, subsection B, a decision by the governing body involving rezoning of land that is not owned by the municipality and that changes the zoning classification of such land may not be enacted as an emergency measure and the change shall not be effective for at least thirty days after final approval of the change in classification by the governing body.

K. For the purposes of this section, "zoning area" means both of the following:

1. The area within one hundred fifty feet, including all rights-of-way, of the affected property subject to the proposed amendment or change.

2. The area of the proposed amendment or change.

Sec. 2. Title 9, chapter 4, article 6.1, Arizona Revised Statutes, is amended by adding section 9-462.10, to read:

9-462.10. Residential zoning; amendment; applications; deadline; extensions; applicability

A. ON OR BEFORE JANUARY 1, 2025, A MUNICIPALITY SHALL ADOPT AN AMENDMENT TO THE MUNICIPALITY'S ZONING ORDINANCE THAT REQUIRES THE MUNICIPALITY TO DETERMINE WHETHER A ZONING APPLICATION IS ADMINISTRATIVELY COMPLETE WITHIN THIRTY DAYS AFTER RECEIVING THE APPLICATION. IF THE MUNICIPALITY DETERMINES THAT THE APPLICATION IS NOT ADMINISTRATIVELY COMPLETE, THE MUNICIPALITY SHALL FOLLOW THE PROCEDURES PRESCRIBED IN SECTION 9-835, SUBSECTION E UNTIL THE APPLICATION IS ADMINISTRATIVELY COMPLETE. THE MUNICIPALITY SHALL DETERMINE WHETHER A RESUBMITTED APPLICATION IS ADMINISTRATIVELY COMPLETE WITHIN FIFTEEN DAYS AFTER RECEIVING THE RESUBMITTED APPLICATION. AFTER DETERMINING THAT THE APPLICATION IS ADMINISTRATIVELY COMPLETE, THE MUNICIPALITY SHALL APPROVE OR DENY THE APPLICATION WITHIN ONE HUNDRED EIGHTY DAYS.

B. NOTWITHSTANDING SUBSECTION A OF THIS SECTION, THE MUNICIPALITY MAY EXTEND THE TIME FRAME TO APPROVE OR DENY THE REQUEST BEYOND ONE HUNDRED EIGHTY DAYS FOR EITHER OF THE FOLLOWING REASONS:

1. FOR EXTENUATING CIRCUMSTANCES, THE MUNICIPALITY MAY GRANT A ONETIME EXTENSION OF NOT MORE THAN THIRTY DAYS.

2. IF AN APPLICANT REQUESTS AN EXTENSION, THE MUNICIPALITY MAY GRANT EXTENSIONS OF THIRTY DAYS FOR EACH EXTENSION GRANTED.

C. THIS SECTION DOES NOT APPLY TO LAND THAT IS DESIGNATED AS A DISTRICT OF HISTORICAL SIGNIFICANCE PURSUANT TO SECTION 9-462.01, SUBSECTION A, PARAGRAPH 10 OR AN AREA THAT IS DESIGNATED AS HISTORIC ON THE NATIONAL REGISTER OF HISTORIC PLACES OR PLANNED AREA DEVELOPMENTS.

Sec. 3. Title 9, chapter 4, article 6.4, Arizona Revised Statutes, is amended by adding section 9-469, to read:

9-469. Municipal housing needs assessment; annual report; applicability

A. BEGINNING JANUARY 1, 2025 AND EVERY FIVE YEARS THEREAFTER, A MUNICIPALITY SHALL PUBLISH A HOUSING NEEDS ASSESSMENT THAT INCLUDES THE FOLLOWING:

1. THE TOTAL POPULATION GROWTH PROJECTED FOR THE SUBSEQUENT FIVE-YEAR PERIOD.

2. THE TOTAL JOB GROWTH PROJECTED FOR THE SUBSEQUENT FIVE-YEAR PERIOD.

3. THE TOTAL AMOUNT OF RESIDENTIALLY ZONED LAND WITH DETAIL ON LAND ZONED AS SINGLE-FAMILY AND MULTIFAMILY.

4. THE TOTAL NEED FOR ADDITIONAL RESIDENTIAL HOUSING UNITS FOR RENT AND FOR SALE IN THE MUNICIPALITY TO MEET:

(a) ANY DEFICIENCIES IN HOUSING THE EXISTING POPULATION.

(b) ANY DEFICIENCIES IN HOUSING THE EXISTING WORKFORCE.

(c) POPULATION GROWTH PROJECTIONS.

(d) JOB GROWTH PROJECTIONS.

(e) HOUSING NEEDS ACROSS ALL VARIOUS INCOME LEVELS.

B. BEGINNING JANUARY 1, 2025 AND EVERY YEAR THEREAFTER, EACH MUNICIPALITY SHALL SUBMIT AN ANNUAL REPORT TO THE ARIZONA DEPARTMENT OF HOUSING ACCOUNTING FOR THE TOTAL NUMBER OF PROPOSED RESIDENTIAL HOUSING UNITS SUBMITTED TO THE MUNICIPALITY, THE TOTAL NUMBER OF NET NEW RESIDENTIAL HOUSING UNITS SUBMITTED TO THE MUNICIPALITY AND THE TOTAL NUMBER OF NEW RESIDENTIAL HOUSING UNITS THAT ARE ENTITLED, HAVE BEEN PLATTED, HAVE BEEN ISSUED A BUILDING PERMIT AND HAVE RECEIVED A CERTIFICATE OF OCCUPANCY BY THE MUNICIPALITY. THE ANNUAL REPORT SHALL INCLUDE ALL OF THE FOLLOWING:

1. THE NUMBER OF HOUSING DEVELOPMENT APPLICATIONS RECEIVED IN THE PRIOR YEAR.

2. THE NUMBER OF LOTS AND MULTIFAMILY UNITS INCLUDED IN ALL DEVELOPMENT APPLICATIONS IN THE PRIOR YEAR.

3. THE NUMBER OF LOTS AND MULTIFAMILY UNITS APPROVED AND DISAPPROVED OR OTHERWISE NOT APPROVED IN THE PRIOR YEAR.

4. A THRESHOLD PERCENTAGE REQUIREMENT OF MULTIFAMILY ZONED LAND VERSUS SINGLE-FAMILY ZONED LAND NEEDED TO MEET POPULATION DEMAND IN EACH MUNICIPALITY.

5. THE STATUS AND PROGRESS IN MEETING THE MUNICIPALITY'S HOUSING NEEDS.

6. A PLAN THAT SPECIFIES HOW THE MUNICIPALITY INTENDS TO SATISFY THE IDENTIFIED NEED FOR ADDITIONAL HOUSING UNITS WITHIN THE MUNICIPALITY.

C. A MUNICIPALITY THAT HAS CONDUCTED A HOUSING NEEDS ASSESSMENT REPORT AS OF JANUARY 1, 2021 SHALL AMEND ALL EXISTING REPORTS TO INCLUDE THE INFORMATION REQUIRED IN SUBSECTION A OF THIS SECTION.

D. THE ARIZONA DEPARTMENT OF HOUSING SHALL COMPILE THE REPORTS RECEIVED PURSUANT TO SUBSECTION B OF THIS SECTION AND SUBMIT THE REPORTS TO THE GOVERNOR, THE PRESIDENT OF THE SENATE AND THE SPEAKER OF THE HOUSE OF REPRESENTATIVES.

E. THIS SECTION DOES NOT REQUIRE A MUNICIPALITY TO FULFILL THE PROJECTIONS IN THE HOUSING NEEDS ASSESSMENT REQUIRED BY SUBSECTION A OF THIS SECTION.

F. THIS SECTION DOES NOT APPLY TO A MUNICIPALITY THAT IS LOCATED ON TRIBAL LAND OR A MUNICIPALITY WITH A POPULATION OF LESS THAN THIRTY THOUSAND PERSONS.

APPROVED BY THE GOVERNOR APRIL 23, 2024.

FILED IN THE OFFICE OF THE SECRETARY OF STATE APRIL 23, 2024.

Senate Engrossed

administrative review; approvals; developments

State of Arizona
Senate
Fifty-sixth Legislature
First Regular Session
2023

SENATE BILL 1103

AN ACT

AMENDING TITLE 9, CHAPTER 4, ARTICLE 8, ARIZONA REVISED STATUTES, BY ADDING SECTION 9-500.49; AMENDING TITLE 11, CHAPTER 2, ARTICLE 4, ARIZONA REVISED STATUTES, BY ADDING SECTION 11-269.27; RELATING TO MUNICIPAL POWERS.

(TEXT OF BILL BEGINS ON NEXT PAGE)

Be it enacted by the Legislature of the State of Arizona:

Section 1. Title 9, chapter 4, article 8, Arizona Revised Statutes, is amended by adding section 9-500.49, to read:

9-500.49. Administrative review and approval; self-certification program; expedited approval

A. NOTWITHSTANDING ANY OTHER LAW, THE LEGISLATIVE BODY OF A CITY OR TOWN MAY BY ORDINANCE DO THE FOLLOWING:

1. AUTHORIZE ADMINISTRATIVE PERSONNEL TO REVIEW AND APPROVE SITE PLANS, DEVELOPMENT PLANS, LAND DIVISIONS, LOT LINE ADJUSTMENTS, LOT TIES, PRELIMINARY PLATS, FINAL PLATS AND PLAT AMENDMENTS WITHOUT A PUBLIC HEARING.

2. AUTHORIZE ADMINISTRATIVE PERSONNEL TO REVIEW AND APPROVE DESIGN REVIEW PLANS BASED ON OBJECTIVE STANDARDS WITHOUT A PUBLIC HEARING.

3. ADOPT A SELF-CERTIFICATION PROGRAM ALLOWING REGISTERED ARCHITECTS AND PROFESSIONAL ENGINEERS TO CERTIFY AND BE RESPONSIBLE FOR COMPLIANCE WITH ALL APPLICABLE ORDINANCES AND CONSTRUCTION STANDARDS FOR PROJECTS THAT THE ORDINANCE IDENTIFIES AS BEING QUALIFIED FOR SELF-CERTIFICATION.

4. ALLOW AT-RISK SUBMITTALS FOR CERTAIN ON-SITE PRELIMINARY GRADING AND DRAINAGE WORK OR INFRASTRUCTURE.

5. ALLOW APPLICANTS WITH A HISTORY OF COMPLIANCE WITH BUILDING CODES AND REGULATIONS TO BE ELIGIBLE FOR EXPEDITED PERMIT REVIEW.

B. APPLICATIONS FOR A LICENSE PURSUANT TO THIS SECTION ARE SUBJECT TO CHAPTER 7, ARTICLE 4 OF THIS TITLE.

C. FOR THE PURPOSES OF THIS SECTION, "OBJECTIVE" MEANS NOT INFLUENCED BY PERSONAL INTERPRETATION, TASTE OR FEELINGS OF A MUNICIPAL EMPLOYEE AND VERIFIABLE BY REFERENCE TO AN ADOPTED BENCHMARK, STANDARD OR CRITERION AVAILABLE AND KNOWABLE BY THE APPLICANT OR PROPONENT.

Sec. 2. Title 11, chapter 2, article 4, Arizona Revised Statutes, is amended by adding section 11-269.27, to read:

11-269.27. Administrative review and approval; self-certification program; expedited approval

A. NOTWITHSTANDING ANY OTHER LAW, THE BOARD OF SUPERVISORS OF A COUNTY MAY BY ORDINANCE DO THE FOLLOWING:

1. AUTHORIZE ADMINISTRATIVE PERSONNEL TO REVIEW AND APPROVE SITE PLANS, DEVELOPMENT PLANS, LAND DIVISIONS, LOT LINE ADJUSTMENTS, LOT TIES, PRELIMINARY PLATS, FINAL PLATS AND PLAT AMENDMENTS WITHOUT A PUBLIC HEARING.

2. AUTHORIZE ADMINISTRATIVE PERSONNEL TO REVIEW AND APPROVE DESIGN PLANS BASED ON OBJECTIVE STANDARDS WITHOUT A PUBLIC HEARING.

3. ADOPT A SELF-CERTIFICATION PROGRAM ALLOWING REGISTERED ARCHITECTS AND PROFESSIONAL ENGINEERS TO CERTIFY AND BE RESPONSIBLE FOR COMPLIANCE WITH ALL APPLICABLE ORDINANCES AND CONSTRUCTION STANDARDS FOR PROJECTS THAT THE ORDINANCE IDENTIFIES AS BEING QUALIFIED FOR SELF-CERTIFICATION.

4. ALLOW AT-RISK SUBMITTALS FOR CERTAIN ON-SITE PRELIMINARY GRADING AND DRAINAGE WORK OR INFRASTRUCTURE.

5. ALLOW APPLICANTS WITH A HISTORY OF COMPLIANCE WITH BUILDING CODES AND REGULATIONS TO BE ELIGIBLE FOR EXPEDITED PERMIT REVIEW.

B. APPLICATIONS FOR A LICENSE PURSUANT TO THIS SECTION ARE SUBJECT TO CHAPTER 11, ARTICLE 1 OF THIS TITLE.

C. FOR THE PURPOSES OF THIS SECTION, "OBJECTIVE" MEANS NOT INFLUENCED BY PERSONAL INTERPRETATION, TASTE OR FEELINGS OF A MUNICIPAL EMPLOYEE AND VERIFIABLE BY REFERENCE TO AN ADOPTED BENCHMARK, STANDARD OR CRITERION AVAILABLE AND KNOWABLE BY THE APPLICANT OR PROPONENT.

City Council Memorandum Development Services Memo No.

Date: November 04, 2024
To: Mayor and Council
Thru: Joshua H. Wright, City Manager
Andy Bass, Deputy City Manager
Kevin Snyder, Development Services Director
Ryan Peters, Strategic Initiatives Director
From: Louis Kneip, Engineering Senior Manager
Subject: Resolution 5847, Authorizing an Amended and Restated License Agreement Between Zayo Group LLC and the City of Chandler for Use of Public Property for the Establishment of Class 4 and Class 5 Telecommunications Systems

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Proposed Motion:

Move City Council pass and adopt Resolution No. 5847, authorizing the Mayor to execute the amended and restated license agreement between Zayo Group, LLC, and the City of Chandler for the use of facilities in the city's rights-of-way and public places to establish Class 4 and Class 5 Telecommunications Systems.

Background:

Zayo Group, LLC, has filed an application with the city to renew, with modified terms, its license to install, operate and maintain an underground communications system for either or both Class 4 telecommunications services (lit fiber/active services) and Class 5 non-telecommunications services (dark fiber/internet services). The agreement provides terms for both services and is similar to agreements the city has with other providers.

Zayo Group has been a provider of fiber service in Chandler since 2007 (previously as Abovenet Communications, Inc., and ATL Communications) and seeks to expand its network in the coming years, which may include providing fiber connections within the terms of this agreement. This item is for a five-year nonexclusive agreement with options to renew up to a maximum of 20 years.

To date in calendar year 2024, Zayo Group has paid the City approximately $47,000 for its current license. As part of the modified terms of this renewal agreement, Zayo Group estimates it will pay the City approximately $5,000 for the remainder of the 2024 calendar year.

Financial Implications:

A transaction privilege tax of 2.75% will be paid on any non-interstate telecommunications services (Class 4). Fiber that is not exempted by federal or state law and is used for non-telecommunications services (Class 5) is subject to an annual $2.65 per linear foot fee as prescribed by the city's fee schedule, or 2% of Zayo Group's gross revenues for services provided within the City of Chandler, whichever is less. The company will also pay permit, inspection and pavement damage fees.

Attachments

Resolution 5847 and Agreement for Use of Public Property

RESOLUTION NO. 5847

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF CHANDLER, ARIZONA, APPROVING AN AMENDED AND RESTATED LICENSE TO ZAYO GROUP, LLC TO CONSTRUCT, INSTALL, OPERATE, MAINTAIN, AND USE THE PUBLIC RIGHTS OF WAY WITHIN THE CITY TO PROVIDE TELECOMMUNICATIONS SERVICES (CLASS 4 LICENSE) AND FIBER OPTIC CABLE, INTERSTATE SERVICES, AND OTHER COMMUNICATION FACILITIES (COLLECTIVELY "INTERSTATE TELECOMMUNICATION SERVICES") (CLASS 5 LICENSE) AS APPROPRIATE.

WHEREAS the City of Chandler believes that it is in the City's best interest to issue a license agreement for such purpose.

NOW, THEREFORE, BE IT RESOLVED that the City Council of the City of Chandler, Arizona, as follows:

Section 1. Approving the Amended and Restated City of Chandler Telecommunication Services (Class 4) and Interstate Telecommunication Services (Class 5) License Issued to Zayo Group, LLC in the form attached hereto as Exhibit "A" and incorporated herein by reference.

Section 2. Authorizing the Mayor of the City of Chandler to execute the Agreement on behalf of the City of Chandler.

PASSED AND ADOPTED by the City Council of the City of Chandler, Arizona, this ____ day of _____ 2024.

ATTEST:

_____ _____

CITY CLERK MAYOR

CERTIFICATION

I HEREBY CERTIFY that the above and foregoing Resolution No. 5847 was duly passed and adopted by the City Council of the City of Chandler, Arizona, at a regular meeting held on the ____ day of _____ 2024, and that a quorum was present thereat.

_____

CITY CLERK

APPROVED AS TO FORM:

_____

CITY ATTORNEY JMB

EXHIBIT “A”

AMENDED AND RESTATED CITY OF CHANDLER TELECOMMUNICATION SERVICES (CLASS 4) AND INTERSTATE TELECOMMUNICATION SERVICES (CLASS 5) LICENSE ISSUED TO ZAYO GROUP, LLC

City of Chandler Document No. _____
City Council Meeting Date: _____

THIS AMENDED AND RESTATED LICENSE ("License") is issued by the City of Chandler, an Arizona municipal corporation ("City") to Zayo Group, LLC ("Licensee"). (The City and Licensee are each a "Party" and collectively the "Parties") effective _____ ("Effective Date").

RECITALS

A. On or about May 15, 2007, City and AGL Networks, LLC ("AGL") entered an agreement with a five-year term to permit AGL to install, operate, and maintain fiber optic cable in public right of way located in City. On or about May 17, 2011, City and AGL entered Amendment No. 1 that named Licensee as successor to AGL. On or about March 27, 2012, City and Licensee entered Amendment No. 2 that extended the agreement term from May 15, 2012, to May 14, 2017, with an automatic renewal (unless either party requests a change) for two additional five-year terms. Therefore, the original AGL agreement expires May 14, 2027.

B. On or about June 30, 2007, City and AboveNet Communications, Inc. ("AboveNet") entered an agreement to permit AboveNet to install, operate, and maintain fiber optic cable in public right of way located in City. On or about July 2, 2012, Licensee acquired AboveNet. The Parties proposed, but did not formally sign, Amendment No. 3 to the AGL agreement to incorporate the AboveNet facilities into the AGL agreement. The original AboveNet agreement includes a five-year term with an automatic renewal (unless either party requests a change) for three additional five-year terms. Therefore, the original AboveNet agreement expires June 29, 2027.

C. On or about _____ Licensee applied to the City for permission to: (i) construct, install, operate, maintain, and use the Public Rights of Way within the City to provide Telecommunications Services (Class 4 License) and Fiber Optic Cable, Interstate Services, and Other Communication Facilities (collectively "Interstate Telecommunication Services") (Class 5 License) as appropriate; and (ii) amend and restate the original AGL and AboveNet license agreements to permit Licensee to install, operate, and maintain all of Licensee's System located in Public Rights of Way (including all original AGL and AboveNet Systems) under the same terms and conditions and to align the agreement term.

D. By the authority conferred by A.R.S. §§ 9-581-583, the Chandler City Charter, and Chandler City Code Chapter 46, the City is authorized to grant this License; and

E. The City Council has authorized the Mayor or his designee to execute a license with Licensee to construct, install, operate, maintain, and use a System (defined hereinafter) in, along, under, over, and across certain Public Rights-of-Way within the City or on other City-owned property to provide Telecommunications Services and Interstate Telecommunications Services as appropriate.

LICENSE

NOW, THEREFORE, City hereby grants Licensee this License under the following terms and conditions:

SECTION 1. DEFINITIONS

For this License, unless the context otherwise requires, the following terms, phrases, words, and their derivatives have

these meanings. When not inconsistent with the context, words in the present tense include the future tense, words in the plural include the singular, and words in the singular include the plural. The word "shall" is always mandatory and not merely directory. The terms, phrases, words, and their derivatives used in this License have the meanings given in Chapter 46 of the Chandler City Code as amended. If a conflict or ambiguity exists among the definitions in Arizona Revised Statutes, the Chandler City Code, and this License, the definitions in the following order prevail and control: (1) Arizona Revised Statutes; (2) Chandler City Code; (3) this License. Additional definitions for this License include:

“ACC" means the Arizona Corporation Commission.

“A.R.S." means Arizona Revised Statutes, as amended.

"Cable Services", "Cable System", “Video Services”, and “Video Services Network” have the same meaning as defined in Chapter 46 of the Chandler City Code.

“City” means the City of Chandler, Arizona.

"City Council" means the Council of the City of Chandler.

"Commercial Mobile Radio Services" means two-way voice commercial mobile radio services as defined by the Federal Communications Commission in 47 United States Code § 157.

“Day” means calendar day unless noted otherwise.

“Encroachment Permit” means the nonexclusive permission granted by the City to Licensee within the Public Rights-of-Way for the specific location of Licensee’s System and includes fees (if any) for the specific location, and other terms and conditions in accordance with the City Code, applicable Rights-of-Way construction regulations, and other applicable law.

"Environmental Laws" means all federal, state, and local laws, ordinances, rules, regulations, statutes, and judicial decisions now or subsequently in effect, in any way relating to or regulating human health, or safety, or industrial hygiene, or environmental conditions, or protection of the environment, or prevention or cleanup of pollution or contamination of the air, soil, surface water, or ground water.

"FCC" means the Federal Communications Commission.

"Gross Revenue" means: (i) all cash, credits, property of any kind or nature or other consideration that is received directly or indirectly by Licensee, its affiliates, or any person, firm, or corporation in which Licensee has a financial interest or that has a financial interest in Licensee and that is derived from Licensee’s operation of its System to provide Telecommunication Services in the Service Area; and (ii) includes all revenue from charges for Telecommunications Services to subscribers and all charges for installation, removal, connection or reinstatement of equipment necessary for a subscriber to receive Telecommunication Services and any other receipts from subscribers derived from Licensee’s operation of the System to provide Telecommunications Services, including receipts from forfeited deposits, sale or rental of equipment to provide Telecommunications Services, late charges, interest and sale of program guides; and (iii) the use or lease, in whole or in part, of Licensee’s System located in Public Right-of-Way. Gross Revenue does not include: (i) any revenue not received by Licensee, even if billed, such as bad debt net of any recoveries of bad debt or any refunds, credits, allowances or discounts to subscribers to the extent that the refund, rebate, credit, allowance or discount is attributed to Telecommunication Services; and (ii), license fees, taxes or other fees or charges that Licensee collects and pays to any governmental authority; and (iii) any increase in the value of any stock, security or asset, or any dividends or other distributions made from any stock or securities.

"Hazardous Substances" means those substances defined as toxic or hazardous substances, pollutants, or wastes by Environmental Laws and the following substances: gasoline, kerosene, or other petroleum products, toxic pesticides and herbicides, volatile solvents, materials containing asbestos or formaldehyde, and radioactive materials.

"Interstate Telecommunications Services" means a telecommunications corporation that places underground or above

ground facilities in the Public Rights-of-Way.

"License" means this non-exclusive authorization granted by the City to construct, operate, maintain, reconstruct, repair, and remove the System.

"Licensee" means Zayo Group, LLC to which this License is granted.

"Licensor" means the City of Chandler, Arizona, a municipal corporation of the State of Arizona as represented by the City Council and acting through the City Manager or the City Manager's designee.

"Pre-existing Environmental Condition" means the presence, emission, disposal, discharge, or release of any Hazardous Substance at, in, on, under, or about the System, however caused, existing prior to the placement of the System within the Public Rights-of-Way, whether the nature and extent of such contamination is known or unknown at the time.

"Provider" means a broadband internet access service provider that constructs, installs, operates, or maintains communications facilities in the Public Rights-of-Way.

"Public Rights-of-Way" means all roads, streets, alleys, and all other dedicated public rights-of-way and public utility easements located within the City's corporate boundaries.

"System" means Licensee's infrastructure and communications facilities and equipment including, but not limited to, conduit, fiber optic cables, splice cases, manholes, hand holes, power pedestals and other related and associated facilities installed in the Public Rights-of-Way, and when specifically authorized by the City on other City-owned property, and which are used to provide Telecommunication Services and Interstate Telecommunication Services.

"Telecommunications" has the same meaning as defined in A.R.S. § 9-581(4), as amended.

"Telecommunications Corporation" has the same meaning as defined in A.R.S. § 9-581(5), as amended.

"Telecommunications Services" has the same meaning as defined in A.R.S. § 9-581(6), as amended.

SECTION 2. PERMISSION GRANTED

2.1. Grant. Subject to the provisions of this License, the Chandler City Charter, the Chandler City Code, and Arizona and federal law, the City grants to Licensee nonexclusive and revocable rights and nonexclusive and revocable privileges as set forth in this License to construct, install, operate, and maintain its System in the Public Rights-of-Way and on other City-owned property.

2.1.1 At any time during the term of this License, Licensee may apply to the City for encroachment permits that set forth the specific location of Licensee's System, fees (if any) for the specific location, and other terms and conditions. The City may approve, deny, or conditionally approve Licensee's encroachment permit application based on the following but not exclusive reasons: (i) availability of space at the location sought by Licensee; (ii) public health, safety, and welfare; and (iii) other considerations in accordance with the City Code, applicable construction regulations, and other applicable law.

2.1.2 Subject to the permission of the affected property owner, this License also authorizes Licensee to place its System on property owned by third parties, such as an electric utility company or other private property owners. Provided; however, the System installed or constructed by Licensee on the private property satisfies applicable Rights-of-Way Construction regulations and is installed underground in accordance with applicable law including Section 47-4 of the Chandler City Code. Upon request from the City, Licensee must promptly furnish to the City documentation of the third party's permission. By executing this License, the City does not waive any rights that City may have against any public utility or other third party to require such owners to obtain the City's prior approval for such uses of their property or facilities, or that revenues received by any public utility or other property owner from Licensee be included in the computation of the use fees owed by such

parties to the City. Nothing contained in this paragraph or in this License authorizes Licensee to enter into an agreement with any third party that results in new aerial attachments or aerial overlash of existing plant whether owned or leased from a third party. Licensee's attachment of facilities or equipment must be accomplished through existing infrastructure and which results in no aerial overlash of existing infrastructure.

2.1.3 No component or part of Licensee's System may be installed, constructed, located on, or attached to any property within the City until Licensee has applied for and received approval for an encroachment permit under Chapter 46 of the Chandler City Code. Additionally, Licensee must comply with all other provisions of the Chandler City Code including, but not limited to, Chapter 35 related to zoning, Chapter 47 related to off-site construction, and other applicable City regulations.

Any right or privilege claimed under this License by Licensee for any use in the Public Rights-of-Way and on other City-owned property is subordinate to any City prior or subsequent lawful occupancy or use or any other governmental entity and is subordinate to any prior easements. Provided; however, nothing in this License extinguishes or otherwise interferes with the Parties' property rights established independently of this License.

2.1.4 Nothing in this License will be construed to prevent the City from abandoning, altering, improving, repairing, or maintaining the City's facilities in the Public Rights-of-Way, and for any or more of such purposes or any other lawful purpose requiring Licensee, at Licensee's expense and no expense to the City, to remove, relocate, or abandon in place Licensee's System to accommodate the City's projects and activities. The City will not be liable for Licensee's lost revenues, however caused, due to any City activity or project in the Public Rights-of-Way, when such costs or lost revenues result from the construction, operation, or maintenance of City facilities and any other lawful project or activity in the Public Rights-of-Way. Provided; however, the City's activities and projects that result in such costs or lost revenues to Licensee are conducted in accordance with applicable laws and regulations.

2.2 Description of the Services, System, and its Construction.

2.2.1 Licensee uses its System to provide Communication Services, including a high-speed fiber-to-the-home ("FTTH") network offering broadband internet to residential and commercial customers throughout the City of Chandler. Licensee represents and warrants that Licensee does not provide services that are considered multichannel video programming services, video services provided by an open video system, cable television, or video services.

2.2.2 Licensee acknowledges, represents, warrants, and agrees that: (i) if a CC&N or other authorization is required by law for certain services, Licensee agrees that it will not provide these services under this License until Licensee receives the proper authorization; (ii) if Licensee obtains a CC&N or other legal authorization during the term of this License, Licensee will furnish a copy of any legal authorization to City as provided in this License within 30 days of receipt; and (iii) Licensee will indemnify, defend, save, and hold harmless the City as provided in this License and assume all liability and risk for Licensee's failure to possess the proper legal authorization to provide some or all of the services under this License.

2.2.3 As part of Licensee's authorized System, Licensee may install empty conduit and dark fiber within the Public Rights-of-Way or on other City-owned property.

2.2.4 Licensee must obtain the proper and necessary encroachment permit before Licensee begins any work or construction in the Public Rights-of-Way or on other City-owned property.

2.2.5 Unless otherwise required by applicable law, Licensee must install and construct Licensee's System underground by trenching or boring conduit along with surface mounted hand holes for access to the fiber for splicing. This license permits Licensee's construction of its System within the Public Rights-of-Way or on other City-owned property. It is the Parties' intent that the Parties

will work to minimize inconvenience to Chandler residents other Public Rights-of-Way users. Before Licensee installs the System, Licensee must submit specifications for proposed manholes and pull boxes to the City for approval, which approval the City will not unreasonably delay or withhold. All work on Licensee's System must comply with the Uniform Standard Specifications for Public Works Construction sponsored and distributed by the Maricopa Association of Governments as amended (hereinafter referred to as "MAG Specs"), the City supplements to MAG Specs, all lawful and reasonable requirements of the City Utility Manual and must follow and comply with industry best practices and standards. Except as otherwise provided above and as required by City specifications, all of Licensee's conduits must be placed outside of the Public Rights-of-Way or on other City-owned property wherever and whenever possible except as otherwise allowed by Microtrenching (defined below) standards approved by the City. Provided; however, Licensee must build the System in accordance with plans approved by the City.

2.2.6 Any changes to the System must be approved in writing by the City Engineer's designee, which approval will not be unreasonably withheld or delayed.

2.2.7 Licensee shall retain an independent testing company, approved by City in its reasonable discretion without undue condition or delay, to test all materials that will be used to remediate City and third-party facilities, and which are subject to materials testing pursuant to MAG Specs and the City supplements to MAG Specs. All testing results must be sent to the City within 3 business days of Licensee's possession or knowledge of the results.

2.2.8 Licensee's installation of the System must be reasonably coordinated with other utilities and the City to accommodate opportunities for common installation along with Licensee's project as set forth in this License. In accordance with applicable law, all installations must be located underground and in conduit as reasonably approved by the City Engineer. Provided; however, nothing in this License requires Licensee to incur any material additional expense to accommodate common installations. The provisions relating to material additional expense in the foregoing sentence relate only to coordinated common installations and are not applicable to any other section of this License.

2.2.9 Licensee must install the System according to City approved details, standards, and requirements. Licensee may install portions of the System in trenches that are shallower or narrower than the City's preferred standards in areas of the City as allowed by the City Engineer and if Licensee's installation complies with City-approved microtrenching details, standards, and requirements (collectively "Microtrenching"). Licensee acknowledges, accepts, and agrees that the City will not be liable for any damage or harm caused by the City, its employees, officers, officials, agents, representatives, and contractors to any portion of Licensee's System installed using Microtrenching.

2.3 Location of the System.

2.3.1 At the time of proposed construction, Licensee must submit an encroachment permit application(s) together with the details, plans, and specifications for the City's review and approval, and pay all applicable application, review, and inspection fees before all construction work is performed under the rights and privileges granted under this License. This work includes but is not limited to the installation, operation, maintenance, and location of all the System. The proposed locations of Licensee's planned installation of its System including related facilities or equipment is depicted on the map attached and made a part of this License as Exhibit A ("Service Area"). The System must be depicted more specifically on engineering drawings provided to the City as part of the encroachment permit process and must be updated annually on the anniversary date of this License in accordance with section 4.2.5. Proposed locations of the System that are part of any encroachment permit(s) must also be made a part of a general depiction of Licensee's System in Exhibit A and must be updated at the time of License renewal or amendment.

2.3.2 Although the exact placement and location of Licensee's System will be determined by the City through the Encroachment Permit process, Licensee has expressed its intent and the City has expressed its desire to have the System installed outside of the paved street areas whenever such location is feasible and reasonable. Further, it is the intent and desire of both Parties that when it is necessary for the System to intersect City streets or be placed under paved areas, Licensee must use directional boring unless a deviation is authorized by the City Engineer.

2.3.3 If Licensee desires to change the location of any of the System, including any related facilities or equipment, from the location depicted in initial encroachment permit application(s), Licensee must submit revised plans to apply for and obtain approval for an amendment to the encroachment permit, prior to installation and construction of the facilities or equipment.

2.4 Original AGL and AboveNet Agreements Amended and Restated. The original AGL and AboveNet agreements, as amended, are hereby incorporated into, made a part of, and amended and restated as set forth in this License.

SECTION 3. SCOPE

3.1 Licensing Requirements. This License satisfies the licensing requirements of, and is in accordance with, the provisions of Chapter 46 of the Chandler City Code.

3.2 Use of Licensee's System by Others. This License authorizes Licensee in its ordinary course of business: (i) to lease to or contract with others for use of all or part of the System, except to aerial overlash, attach to poles and/or store aerial fiber for purposes of leasing or contracting with others for use of all or part of the system, and (ii) to sell dark fibers, conduit, or any other facilities that are parts of the System to others that have an agreement, franchise, or other licenses with the City to use the Public Rights-of-Way and on other City-owned property. Under this section, Licensee must first provide written notice to the City of the identity of the proposed user or purchaser and a description of the proposed use or sale arrangement as provided in A.R.S. § 9-583(D). In the event the lease or agreement provides for the other entity to construct, install, operate, or maintain any of Licensee's System, no such arrangement may proceed until the other entity enters a License with the City for use of the Public Rights-of-Way.

3.2.1 Licensee may not allow third parties to use its System for any use that Licensee itself does not have the authority under this License.

3.2.2 Licensee may enter into agreements with third-party Communications Corporations in the ordinary course of business for the resale of Communications Services. Such Agreements ("User Contracts") are subject to all requirements and provisions of this License.

3.2.3 Section 3.2 does not apply if: (i) Licensee pays annual fees as a percentage of gross revenue as set forth in this License; and (ii) Licensee's client, lessee, sub-lessee, or other entity (collectively "Other Entity") is solely using Licensee's bandwidth or fiber capacity (whether lit or dark) and does not physically occupy space within the Licensee's System; and (iii) Licensee remains legally liable and responsible for the Other Entity's acts, errors, or omissions that arise out of or are related to Licensee's System. Section 3.2 applies if: (iv) the Other Entity physically occupies space within the Licensee's System; or (v) the Other Entity has the authority to physically operate, control, or access Licensee's System; or (vi) any one of subsections 3.2.3(i) through (iii) is not satisfied.

3.3 Co-location. Licensee's installation of the System must be reasonably coordinated with other utilities and the City to accommodate opportunities for common installation along with Licensee's project as set forth in this License. All installations must be located as approved by the City Engineer.

3.4 Compliance with Laws.

3.4.1 Licensee must comply with all applicable laws as amended from time to time including but not limited to, the Chandler City Code, the Chandler Charter, and Arizona and federal law in the exercise and performance of its rights and obligations under this License. If it is necessary for Licensee to comply

with any law or regulation of the FCC or the Arizona Corporation Commission ("ACC") to engage in the business activities anticipated by this License, Licensee must comply with such laws or regulations as a condition precedent to exercising any rights granted by this License. Provided; however, no such law or regulation of the FCC or ACC may enlarge or modify any of the rights or duties granted by this License without a written modification to this License.

3.4.2 To the extent that Licensee uses the Public Rights-of-Way or other City-owned property to provide services other than intrastate calls through System, the use of the Public Rights-of-Way or other City-owned property is subject to the terms and conditions of this License and any applicable permits and laws.

3.5 Reports.

3.5.1 Upon request, Licensee will provide to City copies of any non-confidential communications and reports submitted by Licensee to the FCC or any other federal or state regulatory commission or agency with jurisdiction into any matters that directly affect this License.

3.5.2 In addition to the reports required in Section 4.2.3 of this License, upon City's request, Licensee will provide City with regular reports, as needed, to establish Licensee's compliance with the various requirements, fees, and other provisions of this License.

3.6 Non-Interference.

3.6.1 Licensee's System must be constructed, installed, operated, and maintained to interfere as little as possible with traffic or other authorized uses over, under, or through the Public Rights-of-Way and on other City-owned property. All phases of permitting, construction, traffic control, backfilling, compaction and paving, and the location or relocation of the System are subject to the City's jurisdiction as described in MAG, City supplements to MAG, and the City of Chandler Utility Manual. Licensee must keep accurate construction and installation records of the location of all its System and facilities, both aboveground and underground within the City and furnish them to City within sixty (60) days of installation. Licensee must furnish such information in an electronic format compatible with the then current City electronic format.

3.6.2 Licensee must locate and relocate, at its own expense, any facilities, equipment, or other encroachment installed or maintained in, on, or under the Public Rights-of-Way and on other City-owned Property as may be necessary to facilitate any public purpose or any City project or activity whenever directed to do so by City in writing on a non-discriminatory basis. Such relocations must be accomplished in accordance with the directions from City including the City's construction schedule and made under the same terms and conditions as the initial installation allowed pursuant to this License and encroachment permit. Licensee must reimburse the City for any direct or indirect damages incurred by the City because of delays in locations or relocations as required by this paragraph if caused by Licensee's negligence, willful misconduct, or undue delay.

3.6.3 Licensee agrees to obtain permits as required by this License prior to removing, abandoning, relocating, or repair of any portion of its System in the Public Rights-of-Way and on other City-owned property. Notwithstanding the foregoing, City understands and acknowledges there may be instances when Licensee is required to make repairs that are of an emergency nature or in connection with an unscheduled disruption of the System. Licensee will maintain any annual permits required by the City for such repairs. Licensee will notify City, if practicable, before the repairs and will apply for and obtain the necessary permits the next business day after the repairs are initiated.

SECTION 4. FEES, CHARGES, LETTER OF CREDIT, SECURITY FUND, DAMAGE TO THE PUBLIC RIGHTS-OF-WAY AND OTHER CITY-OWNED PROPERTY

Licensee will be solely responsible for the payment of all fees and charges in connection with Licensee's performance under this License, including those set forth below.

4.1 Application Fee. Not applicable.

4.2 Annual Fee. Licensee must pay an annual fee to use the Public Rights-of-Way and other City-owned property under the terms and conditions of this License and as calculated under this section (collectively "Annual Fee").

4.2.1 The City will assess, and Licensee must pay, any Annual Fee in accordance with A.R.S. §§ 9-582-583. Licensee bears the burden to show Licensee's payment of any Annual Fee is not required under A.R.S. §§ 9-582-583. Licensee must pay all taxes on intrastate telecommunications services as provided by applicable law and Licensee must pay any Annual Fee as provided in this License for the portions of Licensee's System that are not excluded under A.R.S. §§ 9-582-583.

4.2.2 If Licensee's System carries interstate traffic between and among Licensee's interstate points of presence or leases its dark fiber to another carrier for purposes of carrying interstate traffic between and among that telecommunications corporation's interstate points of presence, Licensee must pay the lesser amount of: (i) $2.65 (for calendar year 2024) per linear foot for trench located in the Public Rights-of-Way or on other City-owned property; or (ii) two percent (2%) of Gross Revenue for such use. City may, but is not obliged to, accept in-kind consideration in lieu of the Annual Fee if offered by Licensee.

4.2.3 If Licensee's System carries interstate traffic between and among Licensee's interstate points of presence or leases its dark fiber to any entity not included in Section 4.2.2 of this License, Licensee must pay the lesser amount of: (i) $2.65 (for calendar year 2024) per linear foot for trench located in the Public Rights-of-Way or on other City-owned property; or (ii) two percent (2%) of Gross Revenue for such use.

4.2.4 If Licensee places empty conduit in the Public Rights-of-Way or on other City-owned property for services other than those listed in Section 4.2.1, Licensee must pay the lesser amount of: (i) $2.65 (for calendar year 2024) per linear foot for trench located in the Public Rights-of-Way or on other City-owned property; or (ii) two percent (2%) of Gross Revenue for such use.

4.2.5 On or before March 31 of each calendar year, Licensee will report to the City the amount of linear feet of trench, if any, or the amount of Gross Revenue, if any, subject to the Annual Fee under Sections 4.2.2, 4.2.3, or 4.2.4 permitted and installed in the Public Rights-of-Way or on other City-owned property. The Annual Fee for the coming year will be adopted as part of the annual fee schedule adopted by the City Council. If the Annual Fee is based on the amount of linear feet of trench located in Public Rights-of-Way or on City-owned property, the Annual Fee is calculated by multiplying the current annual per linear foot fee, as adjusted by annual CPI under section 4.2.7 for the year of payment, by the linear footage of trench permitted or installed in the Public Rights-of-Way or on other City-owned property. If the Annual Fee is based on Gross Revenue, Licensee will report the amount of Gross Revenue generated during the prior calendar year and multiply this amount by two percent (2%). The Licensee must pay, and the City must receive, any Annual Fee that is due before the City will issue any new encroachment permits for additional facilities or equipment in the Public Rights-of-Way or other City-owned property.

4.2.6 In the event Licensee cancels or returns a permit and does not construct or install the System approved by such a permit, the fees Licensee previously paid for the respective permit may be applied as a credit to a future Annual License Fee or may be refunded to Licensee by City.

4.2.7 The Annual License Fee will be adjusted based on the percentage of change in the consumer price index ("CPI") for the previous twelve-month period. Any increase in the Annual License Fee will be referred to herein as the "Adjusted Fee." In no event may the Adjusted Fee be less than the Annual License Fee for the prior year. For purposes of this License, CPI is defined as the Western Region Consumer Price Index for All Urban Customers, All Items, as published by the Bureau of Labor Statistics (BLS), United States Department of Labor. Base period 1982-84 = 100. Adjusted Fees will be effective upon the next subsequent anniversary of the Effective Date. The change in CPI will be

calculated based on the change in the CPI for the previous twelve-month period. The City will compute the Adjusted Fee as follows. The following example illustrates calculation of the change factor for a twelve-month period ending in January 2018.

CPI January 2018	258.638
CPI January 2017 (prior year)	250.814
Calculated change in CPI	258.638/250.814
Change in CPI	1.031 (rounded to nearest tenth) = 3.1%

If the BLS ceases publication of the specified CPI, City and Licensee may determine an agreeable inflation index that most clearly approximates the Western Region CPI for the remaining term of the License.

4.3 License to Use City's Freeway Ducts and Conduit. If Licensee wishes to occupy one (1) four-inch (4") conduit owned by the City within the duct bank underneath a freeway located within the City and which City controls, Licensee must pay the City $18,000 per year for the term of this License for this use. Licensee may use the conduit solely to install and operate the System authorized under the terms and conditions of this License. Licensee's payment for use of the duct is due on or before the Effective Date and each annual anniversary thereafter. Licensee's use of the City's Freeway conduit(s) must be reflected in Exhibit A.

4.4 In Kind. This License does not currently require any in-kind payment to City by Licensee. However, if Licensee has not paid any fees required under Section 4, the Parties may agree in writing to new in-kind payments to offset to any fees not paid by Licensee. This subsection imposes no obligation on the City to agree to offset any fees in this License or in any future License.

4.5 Failure to Pay. Licensee agrees that if it fails to pay the Annual Fee owed to the City by the time prescribed for payment, Licensee must pay interest on the amounts owed, at the rate of one percent (1%) per month.

4.6 Invoice and Payment Information:

4.6.1 The City will send invoices for fees and charges under this License to Licensee at the following address:

Zayo Group, LLC
Attn: Accounts Payable
1821 30th Street, Unit A
Boulder CO 80301

NEW INVOICE SUBMISSIONS: zayoap@zayo.com
AP-RELATED INQUIRIES ON PAST-DUES: askap@zayo.com

4.6.2 Licensee will send payment to the City under this License made payable to the "City of Chandler" at the following address:

City of Chandler
ATTN: Development
Services Mail Stop 403
P.O. Box 4008
Chandler, AZ 85244-4008
Phone: 480-782-3000
Email: tuf@chandleraz.gov

4.7 Taxes. Licensee must obtain any required business/sales tax licenses and pay any applicable City, county, and state transaction privilege and use tax. The Annual Fee must not be an offset to the transaction privilege tax due and owing by Licensee.

4.8 Permit Fees and Construction Costs. In addition to the fees and taxes set forth herein above, Licensee must pay those fees and charges for encroachment permit applications, inspection, testing, plan review, pavement damage fees, and any other fees adopted by City and applicable to persons doing work in the Public Rights-of-Way or on City-owned property. Additionally, if the City reasonably requires retaining outside inspectors or other persons to review and inspect Licensee's plans, specifications and construction of the System, Licensee must reimburse the City for its actual and documented costs incurred in connection therewith.

4.9 Letter of Credit or Cash Bond.

4.9.1 Amount; Purpose. Within thirty (30) Days after the Effective Date of this License, Licensee must deposit with the City one of the following: (i) an irrevocable letter of credit ("LOC") in the amount of $50,000 ("LOC"); or (ii) a cash bond in the amount of $50,000 ("Bond"). The form and substance of the LOC or Bond must comply with the form, terms, and conditions as attached in Exhibit "B". The LOC or Bond will be used to assure: (a) the faithful performance by Licensee of all provisions of this License; (b) compliance with all orders, permits, and directions of any City department having jurisdiction over Licensee's acts or defaults under this License; and (c) Licensee's payment of any penalties, liquidated damages, claims, liens, and taxes due to the City that arise by reason of the construction, operation, or maintenance of the System, including cost of removal or abandonment of any of Licensee's property. Licensee will be required to replenish any draw down of the LOC or Bond within thirty (30) days of notice by City, unless by mutual written agreement of the Parties.

4.9.2 Drawing on Letter of Credit. The LOC may be drawn upon by the City by presentation of a draft at sight on the lending institution, accompanied by a written certificate signed by the City Manager certifying that Licensee has failed to comply with this License, stating the nature of noncompliance, and stating the amount being drawn. The rights reserved to the City with respect to the letter of credit are in addition to all other rights of the City, whether reserved by this License or authorized by law, and no action proceeding against a letter of credit will affect any other right the City may have.

4.9.3 Drawing on Cash Bond. The Bond may be drawn upon by the City by presentation of written notice to Licensee as provided in this License, signed by the City Engineer certifying that Licensee has failed to comply with this License, stating the nature of noncompliance, and stating the amount being drawn. The rights reserved to the City with respect to the Bond are in addition to all other rights of the City, whether reserved by this License or authorized by law, and no action proceeding against the Bond will affect any other right the City may have.

4.10 Damage to Public Property. Whenever the installation, removal, or relocation of any of Licensee's System is required or permitted under this License, and such installation, removal, or relocation causes damage to Public Rights of Way or other City-owned property, Licensee at its sole cost and expense must promptly repair and return Public Property in which the System components are located to a safe and satisfactory condition in accordance with applicable laws, with provisions in the City of Chandler Utility Manual and the Maricopa Association of Governments (hereinafter referred to as "MAG") and the City's supplements to MAG, reasonably satisfactory to the City Engineer. If Licensee does not repair the Public Property as just described in a reasonable amount of time, then City shall have the option, upon fifteen (15) days prior written notice to Licensee, to perform or cause to be performed such reasonable and necessary work on behalf of Licensee and to charge Licensee for the actual documented costs incurred by the City at City's standard rates, plus an administrative fee of fifteen percent (15%). Upon the receipt of a demand for payment accompanied by explanation of cost and fees incurred by City, Licensee must, within forty-five (45) days, reimburse City for such costs. For any pavement cuts by Licensee, Licensee agrees to restore the pavement and to reimburse the City for all costs arising from the reduction in the service life of any public road, in accordance with the provisions of Chapter 46 of the Chandler City Code and the fees established by the City pursuant thereto. Licensee agrees to pay within forty-five (45) days from the date of issuance of an invoice and explanation of costs and fees from City.

SECTION 5. TERM OF LICENSE

The term of this License and duration of the rights, privileges, and authorizations granted hereunder will be for five

(5) years from the Effective Date. The term will automatically renew for three (3) additional five-year terms for a total term of twenty (20) years unless either Party provides the other Party with prior written notice of its intent not to renew no less than six (6) months prior to the end of the then current term.

SECTION 6. ACCEPTANCE AND EFFECTIVE DATE

6.1 Written Acceptance. Licensee's execution of this License constitutes Licensee's acceptance of the License as granted and Licensee's agreement to be bound by and to comply with and to do everything, which is required of the Licensee by this License. Licensee's signature must be acknowledged before a notary public. This License is effective upon execution by both Parties.

6.2 Validity of License. Licensee must acknowledge that as a condition of acceptance of this License, Licensee was required to be represented throughout the negotiations of the License by its own attorneys and Licensee had the opportunity to consult with its own attorneys about its rights and obligations regarding the License. Licensee has reviewed City's authority to execute and enforce this License and has reviewed all applicable law, both federal and state, and, after considering same, Licensee acknowledges and accepts the right and authority of City to execute this License, to issue this License and to enforce the terms herein.

SECTION 7. INSURANCE AND INDEMNITY

7.1 Insurance Responsibility. During the entire term of this License, Licensee must insure its property and activities and must provide insurance and indemnification as follows. Licensee must procure and maintain, and must cause its contractors to procure and maintain as provided in Section 7.7 below, until all their respective obligations have been discharged, insurance against claims for injury to persons or damage to property that may arise from or in connection with Licensee's obligations under this License and Licensee's activities including, but not limited to, the installation, construction, relocation, removal, repair, operation, and maintenance of the System by Licensee, its agents, representatives, employees, or contractors. The insurance requirements herein are minimum requirements for this License and in no way limit the indemnity covenants contained in this License. The City in no way warrants that the minimum limits contained herein are sufficient to protect Licensee from liabilities that might arise out of this License by Licensee, its agents, representatives, employees or contractors, and Licensee is free to purchase such additional insurance as may be determined necessary.

7.2 Minimum Scope and Limits of Insurance: Licensee must provide coverage with limits of liability not less than those stated below.

7.2.1 Commercial General Liability – Occurrence Form

Said insurance must also include coverage for products completed operations, independent contractors, personal injury, property damage, and advertising injury.

Products – Completed Operations Aggregate	$10,000,000
Each Occurrence	$10,000,000

The policy must be endorsed to include the following additional insured language: "The City of Chandler, its agents, representatives, officers, directors, officials, employees, and volunteers must be named as an additional insured with respect to liability arising out of the activities performed by Licensee." This endorsement may not contain an exclusion or limitation of completed operations coverage as regards the additional insured except with respect to the stated aggregate limits of liability. The policy may not exclude the explosion/collapse/underground ("xcu") hazard.

7.2.2 Automobile Liability – Bodily Injury and Property Damage for any owned, hired, and non-owned vehicles used in the performance of work under this Agreement.

Combined Single Limit (CSL)	$1,000,000

The policy must contain an “MCS-90” endorsement providing for clean-up of pollution conditions arising from transported product, if the work performed under the Agreement requires the transportation of any Hazardous Substances by motor vehicle. The policy must also be endorsed to include the following additional insured language: "The City of Chandler its agents, representatives, officers, directors, officials, employees, and volunteers must be named as an additional insured with respect to liability arising out of the activities performed by Licensee, including automobiles owned, leased, hired, or borrowed by Licensee ".

7.2.3 Worker’s Compensation and Employers' Liability

Workers' Compensation	Statutory
Employers' Liability	
Each Accident	$1,000,000
Disease – Each Employee	$1,000,000
Disease – Policy Limit	$1,000,000

Policy must contain a waiver of subrogation against the City of Chandler.

7.2.4. Pollution Liability:

Per Occurrence	$5,000,000
Annual Aggregate	$5,000,000

The policy must be endorsed to include the following additional insured language: "The City of Chandler its agents, representatives, officers, directors, officials, employees, and volunteers must be named as an additional insured with respect to liability arising out of the activities performed by Licensee."

The policy must include coverage for: (a) cleanup of sudden or accidental pollution conditions arising from the System, as defined in the License; (b) cleanup of new conditions arising from Licensee’s operations and use of Public Rights-of-Way or City-owned property under this License and third-party claims for on and off-site bodily injury and property damage.

Licensee warrants that any retroactive date under the policy must precede the Effective Date of this License; and that either continuous coverage will be maintained, or an extended discovery period will be exercised for a period of two (2) years beginning at the time work under this License is completed.

7.2.5. Tech E&O, Network Security and Privacy Liability Insurance (Cyber):

Per Loss	$10,000,000
Annual Aggregate	$10,000,000

(a) In the event that the professional liability insurance required by this License is written on a claims-made basis, Licensee warrants that any retroactive date under the policy will precede the Effective Date of this License; and that either continuous coverage will be maintained, or an extended discovery period will be exercised for a period of two (2) years beginning at the Effective Date of this License. If such insurance is maintained on an occurrence form basis, Licensee must maintain such insurance for an additional period of one (1) year following termination or expiration of this License. If such insurance is maintained on a claims-made basis, Licensee must maintain such insurance for an additional period of three (3) years following termination or expiration of this Licensee. If Licensee contends that any of the insurance it maintains pursuant to other sections of this clause satisfies this requirement (or otherwise insures the risks described in this section), Licensee must provide proof of same.
(b) The insurance must provide coverage for the following risks: (i) Liability arising from theft, dissemination and / or use of confidential information (a defined term including but not limited to

bank account, credit card account, personal information such as name, address, social security numbers, etc. information) stored or transmitted in electronic form; (ii) Network security liability arising from the unauthorized access to, use of or tampering with the System including hacker attacks, inability of an authorized third party, to gain access to your services including denial of service, unless caused by a mechanical or electrical failure; (iii) Liability arising from the introduction of a computer virus into, or otherwise causing damage to, a customer's or third person's computer, the System, network or similar computer related property and the data, software, and programs thereon.

(c) The policy must provide a waiver of subrogation.

7.3 Additional Insurance Requirements: The policies must contain, or be endorsed to contain, the following provisions: Licensee's insurance coverage must be primary insurance and non-contributory with respect to the obligations that Licensee has undertaken under this License. The policies must contain a severability of interest clause and waiver of subrogation against the City, its officers, officials, agents, volunteers, and employees, for losses arising from work performed by the Licensee under this License.

7.4 Notice of Cancellation: Each insurance policy required by the insurance provisions of this License must provide the required coverage and must not be canceled or materially changed except after thirty (30) days prior written notice has been given to the City. Such notice must be sent directly to the addresses listed below and must be sent by certified mail, return receipt requested:

City of Chandler
Attention: Development Services Department
P.O. Box 4008, Mail Stop 405
Chandler, Arizona 85244-4008
Phone: (480) 782-3000
Email: tuf@chandleraz.gov

With a copy to:

Office of the City Attorney
Attention: Risk Management
175 South Arizona Avenue
P.O. Box 4008 Mail Stop 602
Chandler, Arizona 85244-4008
Phone: (480) 782-4640
Fax: (480) 782-4652
Email: legal.notices@chandleraz.gov

7.5 Acceptability of Insurers: Insurance is to be placed with insurers duly licensed or approved unlicensed companies in the State of Arizona and with an "A.M. Best" rating of not less than A- VII. City in no way warrants that the above-required minimum insurer rating is sufficient to protect Licensee from potential insurer insolvency.

7.6 Verification of Coverage: Licensee must furnish City with certificates of insurance (ACORD form or equivalent approved by City) as required by this License. The certificates for each insurance policy are to be signed by a person authorized by that insurer to bind coverage on its behalf. All certificates and endorsements are to be received and approved by City before work commences. Each insurance policy required by this License must be in effect at or prior to commencement of work under this License and remain in effect for the duration of the License. Failure to maintain the insurance policies as required by this License or to provide evidence of renewal is a material breach of this License. All certificates required by this License must be sent directly to the City of Chandler Development Services Department with a copy to Risk Management as the addresses listed in Section 7.4. The License number and description are to be noted on the certificate of insurance. At City's request, Licensee must make certified copies of all insurance policies required by this Licensee available for City's review through a representative and at a location within Maricopa County, Arizona designated by Licensee.

7.7 Contractors: Licensee's certificate(s) must include all contractors as additional insureds under its policies or contractors must maintain separate insurance as determined by Licensee and contractors must name City of Chandler as an additional insured, however, contractor's limits of liability must not be less than $1,000,000 per occurrence, $2,000,000 aggregate.

7.8 Approval: Any modification or variation from the insurance requirements in this License must have prior approval from the Office of the City Attorney, whose decision will be final. Such action will not require a formal contract amendment but may be made by administrative action.

7.9 Indemnity**.** In addition to all other indemnities and other obligations hereunder, to the fullest extent permitted by law, throughout the term of this License or any and all permits and until all obligations and performances under or related to this License are satisfied and all matters described in this paragraph are completely resolved, Licensee and all other persons using, acting, working, or claiming through or for Licensee (if they or their subcontractor, employee, or other person or entity hired or directed by them participated in any way in causing the claim in question) must jointly and severally indemnify, defend, and hold harmless City and all other Additional Insureds for, from, and against any and all claims or harm related to Licensee's use of the Public Rights-of-Way or other City-owned property or the rights granted to Licensee with respect to the Public Rights-of-Way or City-owned property or Licensee's exercise of its rights under this License (the "Indemnity"). Without limitation, the Indemnity must include and apply to any and all allegations, demands, judgments, assessments, taxes, impositions, expenses, proceedings, liabilities, obligations, suits, actions, claims (including without limitation claims of personal injury, bodily injury, sickness, disease, death, property damage, destruction, loss of use, financial harm, or other impairment), damages, losses, expenses, penalties, fines, or other matters (together with all reasonable attorney fees, court costs, and the cost of appellate proceedings and all other costs and expenses of litigation or resolving the claim) that may arise in any manner out of Licensee's use of the Public Rights-of-Way or other City-owned property pursuant to this License or any and all Permits, or any actions, acts, errors, mistakes or omissions relating to work or services in the performance of or related to this License by Licensee, including without limitation any injury or damages or cause of action claimed or caused by any employees, contractors, subcontractors, tenants, subtenants, agents, or other persons upon or using the Public Rights-of-Way or other City-owned property or surrounding areas related to Licensee's exercise of its rights under this License, except to the extent caused by City or any other Additional Insured or anyone for whose mistakes, errors, omissions, or negligence City may be liable. Notwithstanding the foregoing, the Indemnity does not apply to: (i) Claims arising from the sole negligence or intentionally wrongful acts of City; or (ii) Claims that the law prohibits from being imposed upon the indemnitor.

7.10 Risk of Loss. Licensee assumes the risk of all loss, damage or claims related to Licensee's use of the Public Rights-of-Way or other City-owned property, Licensee or third parties throughout the term of this License and the term(s) of all permits. Licensee must be responsible for all damage to its property and equipment related to this License unless caused by the negligence of the City or its agents or contractors.

7.11 Insurance to be Provided by Others**.** Licensee must cause its contractors or other persons occupying, working on or about, or using the Public rights-of-Way or City-owned property under this License to be covered by their own or Licensee's insurance as required by this License. The required policy limits for commercial general liability insurance provided by such persons must be $1,000,000 for each occurrence, $1,000,000 for products and completed operations annual aggregate, and $2,000,000 general aggregate limit per policy year. This paragraph does not apply to persons who do not actually perform physical labor in the Public Rights-of-Way or on other City-owned property (such as Licensee's consulting design engineers).

SECTION 8. TRANSFER OF LICENSE

8.1 No Assignment Without Consent. This License and the related rights and privileges may not be assigned or otherwise transferred without the express written consent of the City by an ordinance or resolution passed by the Chandler City Council, which consent will not be unreasonably withheld or delayed. Any license that is assigned or otherwise transferred pursuant to this Section must be equally subject to all the obligations and privileges of this License including any amendments, which will remain in effect, as if the assigned License was the original License.

8.2 No Lease Without Consent. The License must not be sublet or assigned, nor must any of the related rights or privileges be leased, assigned, sold, or transferred, either in whole or in part, nor must title, either legal or equitable,

or any right, or property interest pass to or vest in any person other than Licensee, by act of the Licensee or operation of law, without the written consent of City, which consent will not be unreasonably withheld or delayed. Prior to any proposed assignment becoming final, Licensee must seek the City's consent.

8.3 Notice to City. The approval of any change in ownership interest must include an assignment agreement signed by the assignee, Licensee, and City. Licensee must provide City a copy of the deed, license, mortgage, lease, or other written instrument evidencing such sale, transfer, or lease, certified, and sworn to as correct by the Licensee. Licensee must notify the City within 60 days of any change in mailing address.

8.4 Binding on Assignee. After assignment, this License, including any amendments, shall be binding on the assignee to the full extent that is binding upon Licensee.

8.5 Conditional Ownership. Nothing in this Section prohibits a pledge, hypothecation, mortgage, or similar instrument transferring conditional ownership of all or part of Licensee's assets to a lender or creditor in the ordinary course of business. In the event a lender assumes control of the assets and operation of Licensee, the lender may assume the rights and obligations of the Licensee. The Lender may not transfer or change control of the License without submitting the change to the City for approval. If the lender does continue operation on any basis at any time, the lender shall be subject to all provisions of the License. No later than three years after assumption of control by the lender, the lender must apply to the City for the right to continue assumption of control or to transfer the License. Application by the Lender for approval of assumption of control or transfer must be subject to consent by the Chandler City Council that may not be unreasonably denied or withheld. A "Lender" for the purposes of this License does not include a Licensee, person, or corporation, or other entities that operate cable television systems or fiber optics Communications systems as a principal or important business. This paragraph is intended to prohibit the intentional use of lending and/or foreclosure as a method for effecting change of control or transfer of the License without City Council review and approval.

8.6 Assignment Exceptions. Notwithstanding the foregoing, prior consent will not be required for transfer to (1) any company which owns or controls, is owned or controlled by, or under common control with the Licensee; (2) to any successor in interest of Licensee's business operations in City in connection with any merger, acquisition, or similar transaction if Licensee determines after a reasonable investigation that the successor in interest has the resources and ability to fulfill the obligations of this Agreement; or (3) to any purchaser of all or substantially all of Licensee's Network Facilities in City if the purchaser has the resources and ability to fulfill the obligations of this Agreement. Provided that, no such transfer will be valid unless:

8.6.1 The proposed transferee has read, accepts, and agrees to be bound by the terms of the License.

8.6.2 The proposed transferee assumes all obligations, liabilities, and responsibility pursuant to the License for the acts and omissions of Licensee, known and unknown, for all purposes, and agrees that the transfer will not permit it to take any position or exercise any right which Licensee could not have exercised; and

8.6.3 The transfer will not substantially diminish the financial resources available to the Licensee.

8.7 Transfer Description. Prior to executing such transfer described in this Section, Licensee and the proposed transferee must submit to the City a description of the nature of the transfer and submit complete information regarding the effect of the transfer on the direct and indirect ownership and control of the Licensee. Licensee may be required to pay a new application fee of $3,000 to cover the legal, administrative, and other expenses related to every transfer (other than the sale of publicly traded stock) or to any request for a consent to transfer.

SECTION 9. NON-EXCLUSIVE RIGHTS

9.1 Non-Exclusive Rights. This grant is not exclusive, and nothing herein contained may be construed to prevent City from granting other like or similar grants or privileges to any other person, firm, or corporation, or to deny to or lessen the powers and privileges granted City under the Constitution and laws of the State of Arizona.

9.2 Priority Rights. Any and all rights granted to Licensee under this License must be exercised at Licensee's sole cost and expense and are subject to the prior and continuing right of City to use all the Public Rights-of-Way and other

City-owned property concurrently, with any other person or persons, and further will be subject to all deeds, easements, dedications, conditions, covenants, restrictions, encumbrances, and claims of title that may affect the Public Rights-of-Way and on other City-owned property. Nothing in this License will be construed to grant, convey, create, or vest a perpetual real property interest in land to Licensee, including any fee or leasehold interest, easement, or any City franchise rights.

SECTION 10. PUBLIC SAFETY

10.1 Public Safety Violation. Licensee, its affiliates, agents, employees, contractors, successors, assigns, and representatives must comply with and perform each obligation required of Licensee as set forth in this License. Licensee's failure to cure a public safety event of default as described in this Section within five (5) business days from the date of notice from the City constitutes a public safety violation by Licensee.

10.2 Public Safety Events of Default. All agreements and permits issued to Licensee under this License are approved upon the condition that each of the following events will be deemed a "Public Safety Event of Default" for Licensee's failure to perform or satisfy the following material obligations:

10.2.1 Licensee's failure to comply with the traffic barricade manual or any other public health, safety, or welfare law or regulation authorized by or located in the Chandler City Code and that applies to Public Property.

10.2.2 Licensee's acts, errors, or omissions violate any term or condition of an encroachment permit issued to Licensee.

10.2.3 Licensee's failure to obtain the appropriate encroachment permit to perform work on Public Property.

10.3 City's Remedies for Licensee's Public Safety Violations. Upon the occurrence of any public safety violation or at any time thereafter, City may, at its option, exercise at Licensee's expense any or all or any combination of the following cumulative remedies in any order and repetitively at City's option: (i) revoke any or all encroachment permits due to Licensee's failure to cure a Public Safety Event of Default as set forth in Section 10.1. The City's revocation does not terminate Licensee's obligations arising during the time simultaneous with or prior to the revocation, and in no way terminates any of Licensee's liability related to any breach of this License; (ii) pay or perform, for Licensee's account, in Licensee's name, and at Licensee's expense, any or all payments or performances required to be paid or performed by Licensee (iii) abate at Licensee's expense any violation of the encroachment permit; (iv) notwithstanding anything under this License to the contrary, unilaterally and without Licensee's or any other person's consent or approval, draw upon, withdraw or otherwise realize upon or obtain the value of any letter of credit, escrowed funds, insurance policies, or other deposits, sureties, bonds, or other funds or security held by City or pledged or otherwise obligated to City by Licensee or by any third party (whether or not specifically mentioned herein) and use the proceeds for any remedy permitted by this License; (v) assert, exercise, or otherwise pursue at Licensee's expense, any and all other rights or remedies, legal or equitable, to which City may be entitled, subject only to the limitation set out below on City's ability to collect money damages in light of the Violation Use Fee; and (vii) impose civil sanctions for public safety violations as provided in this License.

10.4 Violation Use Fee. In lieu of certain money damages (the "Inconvenience Costs") set out below, the following use fees apply to Licensee's public safety violation (the "Violation Fee Provisions"): (i) The Inconvenience Costs are the money damages that City suffers in the form of administrative cost and inconvenience, disharmony among competing users, and general inconvenience in the use of Public Rights-of-Way by City, competing users, and the public when Licensee fails to comply with the Violation Fee Provisions; and (ii) Licensee's failure to comply with Violation Fee Provisions will result in Inconvenience Costs in an amount that is and will be impracticable to determine. Therefore, the Parties have agreed that, in lieu of Licensee paying to City as damages the actual amount of the Inconvenience Costs for violating the Violation Fee Provisions, Licensee must pay the following Violation Use Fees. The City may elect to draw upon the letter of credit or cash bond (as appropriate) to collect the Violation Use Fee. For continuing violations within a 24-hour period, each calendar day is considered a separate period for purposes of recovery of violation use fees. The Violation Fee Provisions and the amount of the Violation Use Fee per day or part thereof are as follows:

Use fee per day	Violation Use Fee Description
$600	Licensee's failure to properly restore Public Property within five (5) business days after notice, or timely perform work within five (5) business days after notice, or to correct related violations of specifications, code, ordinance, or standards within five (5) business days after notice.
$500	Three or more public safety violations by Licensee within 90 consecutive days.
$250	Licensee's failure to make Licensee's books and records available as required by this License or one or more public safety violations by Licensee within 30 consecutive days.

A Violation Use Fee is only intended to remedy inconvenience costs that City suffers because of Licensee's public safety violations. Licensee's payment of Violation Use Fee does not in any way excuse any breach by Licensee of this License or limit in any way City's rights and interests in any other legal or equitable remedy provided by this License or otherwise for such public safety violation. For example, Licensee's obligation to pay Violation Use Fee does not in any way satisfy Licensee's indemnity and insurance obligations under this License, which apply according to their terms in addition to Licensee's obligation to pay Violation Use Fee.

10.5 Enforcement of Violation Use Fees: Appeal. The City Manager is authorized to issue notices of violation of this License and may take those measures necessary to promote, preserve, and protect public health, safety, and welfare within the Public Rights-of-Way and City-owned property through Violation Use Fees. The City Manager will issue a warning for the first violation by a Licensee under this section. The City Manager will issue notice to the Licensee as listed in Section 14.16. If the City determines that Licensee is liable for a Violation Use Fee, the City will issue to Licensee a notice of City's assessment of a Violation Use Fee to Licensee as provided in Section 14.16. The notice will set forth the nature of the violation and the amount of the assessment. Licensee must pay the Violation Use Fee within ten days of the date of the City's notice or may appeal the notice of violation as provided in Chandler City Code § 1-7.

10.6 Public Safety Violations; Civil Sanctions. In addition to imposing a Violation Use Fee, the City Manager is authorized to issue notices of violation of this License, prosecute such violations as provided in Chandler City Code sec.1-8, and may take those measures necessary to promote, preserve, and protect public health, safety, and welfare within the Public Rights-of-Way and City-owned property. The City Manager will issue a warning for the first violation by a Licensee under this section. The City Manager will issue notice to the Licensee as listed in Section 14.16.

10.7 Failure to Pay Civil Sanction. Failure of a party to pay a civil sanction upon final adjudication of the civil action as provided by law may result in the automatic termination of this License and any such party may be prohibited from obtaining additional licenses or permits until all outstanding civil sanctions have been dismissed or paid in full.

10.8 Non-waiver. Licensee acknowledges Licensee's unconditional obligation to comply with this License. No failure by City to demand any performance required of Licensee under this License, and no acceptance by City of any imperfect or partial performances under this License, will excuse such performance or impair in any way City's ability to insist, prospectively and retroactively, upon full compliance with these terms and conditions. No acceptance by City of payments or other performances hereunder will be deemed a compromise or settlement of any right City may have for additional, different, or further payments or performances as provided for in these terms and conditions. Any waiver by City of any breach of condition or covenant herein contained to be kept and performed by Licensee will not be deemed or considered as a continuing waiver and will not operate to bar or otherwise prevent City from declaring a default for any breach or succeeding or continuing breach either of the same condition or covenant or otherwise. No statement, bill, or notice by City or Licensee concerning payments or other performances due hereunder, or failure by City to demand any performance hereunder, will excuse Licensee from compliance with its obligations nor estop City (or otherwise impair City's ability) to, at any time, correct such notice and/or insist

prospectively and retroactively upon full compliance with this License. No waiver of any description (including any waiver of this sentence or paragraph) will be effective against City unless made in writing by a duly authorized representative of City specifically identifying the particular provision being waived and specifically stating the scope of the waiver.

10.9 Reimbursement of City's Expenses. Licensee must pay to City within 45 days after City's demand all amounts expended or incurred by City in performing Licensee's obligations (upon Licensee's failure to perform the same after notice from City) together with interest thereon at the rate of 1% per annum from the date expended or incurred by City.

SECTION 11. ABANDONMENT

11.1 Abandonment; Removal of Facilities. In the event that the use of a substantial part of any of the System is discontinued for any reason for a continuous period of two (2) years for reasons other than Force Majeure, or in the event such System or property has been installed in any Public Rights-of-Way or other City-owned property without complying with the requirements of this License, or this License has terminated or been revoked, Licensee must promptly, upon being given 60 days' notice from the City, begin removal of the System and related appurtenances from the Public Rights-of-Way and other City-owned property other than such underground facilities which the City may permit to be abandoned in place. In the event of such removal, Licensee must promptly restore the Public Rights-of-Way and other City-owned property or other area from which such property has been removed to a condition satisfactory to the City subject to the City's customary practice to review upon request of Licensee. As a minimum, Licensee must restore the Public Rights-of-Way and other City-owned property to a condition as existed prior to the removal of the structure or property.

11.2 Permanent Abandonment. The System and any other property of Licensee remaining in the Public Rights-of-Way and other City-owned property without the consent of the City 180 days after the revocation of the License will be at the option of the City considered permanently abandoned. Any Licensee property permitted to be abandoned in place will be abandoned consistent with C.C.C. §§ 46-2.9, 46-8.12(K), the Utility Permit Manual, Transportation and Development Policy TDP-275, and any other applicable law.

SECTION 12. LICENSE REVOCATION, ALTERATION, SUSPENSION

In addition to the remedies set forth in Section 10, the City may revoke, alter, or suspend this License as follows.

12.1 License Events of Default. In addition to the remedies listed in C.C.C. chapter 46 and subject to these terms and conditions, this License may, after City Council consideration, be revoked, altered, or suspended by the City as the City deems necessary for any of the following events of default following the cure period specified in Section 12.2: (i) Licensee's failure to maintain any faithful insurance coverage, or pay any fees or taxes due and owing as required under this License; (ii) Licensee's failure to comply with an applicable law, rule, or regulation related to the System, this License, or as required by the appropriate regulatory authority; (iii) fraud by Licensee, in its conduct or relations under this License; (iv) Licensee's willful or grossly negligent violation of this License; (v) Licensee's failure to comply with any federal, state, local, or administrative order, law, permit, regulation, or consent decree as such may apply to Licensee's activities and services as contemplated in this License; (vi) permanent or temporary suspension of Licensee's services for a period of 180 or greater consecutive calendar days by the United States or the State of Arizona for any authorizations legally required for Licensee to own, operate, maintain, or construct the System; (vii) If Licensee is the subject of a voluntary or involuntary bankruptcy, receivership, insolvency, or similar proceeding or if any assignment of any of Licensee's property is made for the benefit of creditors or if Licensee is not regularly paying its debts as they come due; (viii) If City incurs any liability, obligation, damage, cost, expense, or other claim of any description for which is not liable and for which Licensee is obligated pursuant to this License to indemnify, defend, and hold harmless the City, unless Licensee gives prompt statement or notice to City of Licensee's commitment to indemnify, defend, and hold City harmless against such claim and Licensee does in fact promptly commence and continue to indemnify, defend, and hold City harmless against such claim to the extent required under this License, unless Licensee believes in good faith that it is not obligated to indemnify, defend and hold the City harmless; and (ix) Licensee is found liable under Section 10 for five

(5) public safety violations within a period of twelve (12) consecutive months.

12.2 Additional Cure Period. Due to the gravity of the license events of default listed in Section "12.1", Licensee is provided additional time (when compared to Section 10) to cure these events of default. If any of the foregoing events in Section "12.1" occur, Licensee must cure the default within 60 days after receipt of notice from the City. Licensee will be held in material breach under this Section "12": (i) if Licensee fails to cure the license event of default listed in Section "12.1" within 60 days after notice from the City; or (ii) if a license event of a default listed in Section "12.1" cannot be cured within 60 days after notice from the City and Licensee fails to begin and diligently pursue to cure the default.

12.3 City Determination; City Council Consideration. If Licensee is held in material breach as provided in Section "12.2", the City will notify Licensee as provided in Section 14.16 of the City's determination to terminate, postpone for a period, or proceed with the revocation, alteration, or suspension of this License. As part of this determination, the City will state the principal reasons that support the City's determination. Licensee may appeal the City's determination as provided in Chandler City Code sec.1-7 within (10) ten business days from the date of the determination. If Licensee fails to timely appeal the City's determination or if Licensee's appeal fails, the City may proceed to terminate, postpone for a period, or proceed with the revocation, alteration, or suspension of this Agreement by presenting this matter to the Chandler City Council for consideration at the Council's next regularly scheduled Council meeting. The City will send a written statement of proposed action by certified U.S. mail, return receipt requested, to Licensee as provided in Section 14.16. The written statement of proposed action must include the date and time of the City Council meeting and the principal reasons for the proposed action. The City Council may take any final action the Council deems necessary and prudent related to this License. Licensee will retain all legal remedies should it choose to contest the City's proposed action.

12.4 Removal of Facilities. Upon revocation of this License, the City may declare a forfeiture, whereupon all rights and privileges of Licensee under this License will immediately be divested without a further act upon the part of Licensee, and Licensee must remove its structures or property from the Public Rights-of-Way and other City-owned property and restore the Public Rights-of-Way and other City-owned property to the condition as existed prior to the removal of the structure or property. Upon Licensee's failure to do so within six months of revocation, the City may perform the work and collect the City's cost from Licensee. At the City's option, Licensee may abandon structures or property in place as provided in this License. At a minimum, the Public Rights-of- Way and other City-owned property must be restored to a condition as existed before the removal of the structures or property.

SECTION 13. EFFECT OF EXPIRATION, REVOCATION, OR TERMINATION OF LICENSE

13.1 Services. Upon expiration, revocation, or termination of this License for any reason, Licensee may enter good-faith negotiations with the City or other governmental authority for a period of 180 days from the date of expiration, revocation, or termination to obtain a license, permit, or other approval or agreement that may be lawfully required to allow Licensee to continue use of the Public Rights-of-Way and other City-owned property.

13.2 Holding Over. In any circumstance whereby Licensee continues to occupy the Public Rights-of-Way and other City-owned property after the expiration of this License, the Licensee's hold over operates as a renewal or extension of this License on a month-to-month basis that may be terminated at any time by the City upon 60 days' written notice to Licensee, or by Licensee upon 60 days' written notice to the City.

SECTION 14. GENERAL CONDITIONS

14.1 License Administrator and Enforcement. In all matters of License administration, the City Manager has authority to determine Licensee's compliance with the terms and provisions of the License, and in the event of non-compliance, to exercise any or all the remedies included in this License.

14.2 Right of Inspection of Construction. The City may inspect all construction or installation work performed subject to the provisions of this License and to make such tests as it deems necessary to ensure compliance with the terms of this License and other pertinent provisions of law.

14.3 Right of Intervention. The City may intervene in any suit or proceeding related to or arising out of this License to which Licensee is party, and Licensee may not oppose such intervention by the City.

14.4 Public Records Acknowledgment. Notwithstanding any provision in this License, Licensee acknowledges and understands that the City is a political subdivision of the State of Arizona and is subject to the disclosure requirements of Arizona's Public Records Law (A.R.S. §§ 39-121 et seq.).

14.5 Permission of Property Owner Required. This License does not convey the right to install any part of Licensee's System on private property.

14.6 Compliance With Laws. Licensee must comply with all federal, state, and City ordinances, resolutions, rules, and regulations related to the rights and duties granted Licensee under this License.

14.7 Reserved.

14.8 Non-Enforcement by the City. Licensee will not be relieved of its obligation to comply with any of the provisions of this License by reason of the City's failure to insist upon or to seek compliance with any term and condition.

14.9 License Documents. Licensee must submit to the City the letter of credit and insurance certificates as required by the License within 90 days of the Effective Date. The License granted is not legally operative until all of Licensee's requirements in this Section are completed. In the event Licensee does not timely satisfy these, this License will be deemed null and void unless Licensee's period to comply is extended by the Council.

14.10 Survival of Warranties. Licensee's representations and warranties made as part of the grant of this License, or any permit issued under this License survive termination or revocation of this License.

14.11 Hazardous Substances. Licensee will, at its own cost, be responsible for proper investigation and management of all Hazardous Substances under its control, including Hazardous Substances Licensee uses, generates, or disposes of, and must comply with all Environmental Laws to carry out its obligations under this License. In the event Licensee releases to the environment Hazardous Substances under its control, to the extent that a governmental agency with jurisdiction requires reporting, investigation, cleanup, or remedial measures to be taken, Licensee must, at its sole cost and expense, promptly undertake such required actions. If Licensee discovers a Pre-existing Environmental Condition, Licensee will immediately notify the City in writing as provided in Section 14.16.

14.12 Right of Cancellation. Licensee acknowledges that this License is subject to cancellation by the City under A.R.S. § 38-511.

14.13 Covenant Against Contingent Fees. Licensee warrants that no person has been employed or retained to solicit or secure this License upon an agreement or understanding for a commission, percentage, brokerage, or contingent fee; and that no member of the City Council, or any employee of the City has any interest, financially or otherwise, in this License. For breach or violation of this warranty, the City has the right to annul this License without liability or at its discretion to deduct from the License price or consideration, the full amount of such commission, percentage, brokerage, or contingent fee.

14.14 Independent Contractor. Any provision in this License that may appear to give the City the right to direct Licensee or Licensee the right to direct the City as to the details of accomplishing the work or to exercise a measure of control over the work means that the party will follow the wishes of the other party as to the results of the work only.

14.15 Jurisdiction; Governing Law; Venue. As a condition of the grant of this License, Licensee acknowledges and accepts that Licensee is subject to personal and subject matter jurisdiction of Arizona state courts. Arizona law governs this License, both as to interpretation and performance. Any action at law, suit in equity, or judicial

proceeding to enforce this License must be instituted in a court located in Maricopa County, Arizona.

14.16 Delivery, Procedure of Notices and Communications. All notices, consent, or other communication under this License must be in writing and: (i) delivered in person; or (ii) sent by electronic mail and deposited in the United States mail, postage prepaid, certified mail, return receipt requested; or (iii) deposited with any commercial air courier or express service and addressed as follows:

To Licensee:

Zayo Group, LLC
Attn: Underlying Rights/Legal
1401 Wynkoop Street, Suite 500
Denver, CO 80202
legal@zayo.com

With a copy to:

Zayo Group, LLC
Attn: Underlying Rights/Legal
1821 30th Street, Unit A
Boulder, CO 80301
legal@zayo.com

To the City:

City of Chandler
Attention: Development Services Department
P.O. Box 4008, Mail Stop 405
Chandler, Arizona 85244-4008
Phone: (480) 782-3000
Email: tuf@chandleraz.gov

With a copy to:

Office of the City Attorney
175 South Arizona Avenue
P.O. Box 4008 Mail Stop 602
Chandler, Arizona 85244-4008
Phone: (480) 782-4640
Fax: (480) 782-4652
Email: legal.notices@chandleraz.gov

Notice will be deemed received at the time it is personally served on the second day after its deposit with any commercial air courier or express service or, if mailed, three (3) calendar days after the notice is deposited in the United States mail as evidenced by the certified mail receipt. Any period stated in a notice will be computed from the time the notice is deemed received unless noted otherwise. Any party may change its mailing address, phone number, email address or the person to receive notice by notifying the other party as provided in this Section. Notices sent by electronic mail must also be sent by certified mail to the recipient at the above address.

14.17 Organization/Employment Disclaimer. This License is not intended to constitute, create, give rise to, or otherwise recognize a joint venture, agreement, or relationship, partnership, or formal business organization of any kind, and the rights and obligations of the Parties will be only those expressly set forth in this License.

14.18 Entire Agreement; Amendment; Waivers. This License, and the below listed exhibits which are incorporated herein by this reference and are attached and/or on file at the City and available for inspection, constitute the entire agreement between the City and Licensee with respect to the transactions contemplated therein and supersede all prior negotiations, communications, discussions, and correspondence, whether written or oral, concerning the subject matter hereof. No supplement, modification, or amendment of any term of this License will be deemed binding or effective unless executed in writing by the Parties. No waiver of any of the provisions of this License will be deemed, or will constitute, a waiver of any other provisions, whether similar, nor will any waiver constitute a continuing waiver. No waiver is binding unless expressly executed in writing by the Party making the waiver.

Exhibit A – Service Area
Exhibit B – Form Letter of Credit

14.19 Right of Parties. Nothing in this License, whether express or implied, is intended to confer any right or remedies under or by reason of this License on any persons other than the Parties to this License and their respective successors and permitted assigns, nor is anything in this License intended to relieve or discharge any obligation or liability of any person who is not a party to this License, nor will any provisions in this License give any persons not a party to this License any right of subrogation or action over or against any Party to this License.

14.20 Construction. This License is the result of negotiations between the Parties, none of whom has acted under any duress or compulsion, whether legal, economic, or otherwise. Accordingly, the terms and provisions of this License will be construed in accordance with their usual and customary meanings. The Parties hereby waive the application of any rule of law that otherwise would be applicable in connection with the construction of this License that ambiguous or conflicting terms or provisions should be construed against the party who (or whose attorney) prepared the executed License or any earlier draft of the same. Unless the context of this License otherwise clearly requires, references to the plural include the singular and the singular the plural. The words "hereof," "herein," "hereunder" and similar terms in this License refer to this License as a whole and not to any particular provision of this License. All references to "Sections" herein refer to the sections and paragraphs of this License unless specifically stated otherwise. The section and other headings contained in this License are inserted for convenience of reference only, and they neither form a part of this License nor are they to be used in the construction or interpretation of this License.

14.21 Severability. If any covenant, condition, term, or provision of this License is held to be illegal, or if the application of this License to any person or in any circumstances to any extent be judicially determined to be invalid or unenforceable, the remainder of this License or the application of such covenant, condition, term, or provision to persons or in circumstances other than those to which it is held invalid or unenforceable, must not be affected, and each covenant, term, and condition of this License is valid and enforceable to the fullest extent permitted by law.

14.22 Cooperation and Further Documentation. Each of the Parties agree to provide the other with such additional and other duly executed documents as are reasonably requested to fulfill the intent of this License.

14.23 Force Majeure. For the purpose of any of the provisions of this License, neither Licensee nor the City, as the case may be, will be considered in breach of or in default of their obligations under this License as a result of the enforced delay in performance of such obligations due to unforeseeable causes beyond its control and without its fault or negligence, including, but not limited to: acts of God, acts of the public enemy, acts of the Federal Government, acts of the Salt River Project, acts of Maricopa County, acts of the State of Arizona or any of its departments, acts of any railroad, fire, floods, epidemics, pandemics, strikes, lock outs, freight embargoes, and unusually severe weather; it being the purpose and intent of this provision that in the occurrence of any such enforced delay, the time for performance of Licensee's and the City's obligations, as the case may be, will be extended for the period of the enforced delay, provided that the party seeking the benefit of this provision will have notified the other party in writing of the cause or causes, and requested an extension for the period of the enforced delay. If notice by the party claiming such extension is sent to the other party more than 30 days after commencement of the cause, the period of delay will be deemed to commence 30 days prior to the giving of such notice.

14.24 On-Call Assistance. Licensee or its agents must be available 24 hours a day, seven days a week to City staff of any City department with jurisdiction over Licensee's activities related to problems or complaints resulting from the installation, operation, maintenance, or removal of the System.

14.25 Legal Worker Requirements. A.R.S. § 41-4401 prohibits the City from awarding a contract to any party who fails, or whose contractors fail, to comply with A.R.S. § 23-214(A). Therefore, Licensee and each contractor it uses warrants their compliance with all federal immigration laws and regulations that relate to their employees and their compliance with§ 23-214, subsection A. A breach of this warranty will be deemed a material breach of this License and may be subject to penalties up to and including revocation of the License. City retains the legal right to inspect the papers of

Licensee's or contractor's employees who provide services under this License to ensure that Licensee and its contractors comply with this warranty.

14.26 Lawful Presence Requirement. A.R.S. §§ 1-501-502 prohibit the City from awarding a contract to any natural person who cannot establish that such person is lawfully present in the United States. To establish lawful presence, a person must produce qualifying identification and sign a City-provided affidavit affirming that the identification provided is genuine. This requirement will be imposed at the time of contract award. This requirement does not apply to business organizations such as corporations, partnerships, or limited liability companies.

14.27 Written Acceptance. Licensee's execution of this License constitutes Licensee's acceptance of this License as granted and its agreement to be bound by and to comply with the terms and conditions of this License. Licensee's signature must be acknowledged by Licensee before a notary public.

14.28 Data Confidentiality and Data Security. As used in this License, data means all information, whether written or verbal, including plans, photographs, studies, investigations, audits, analyses, samples, reports, calculations, internal memos, meeting minutes, data field notes, work product, proposals, correspondence and any other similar documents or information prepared by, obtained by, or transmitted to Licensee as part of the terms and conditions of this License. Except as specifically provided in this License, the Parties must not divulge data to any third party without the other Party's prior written consent. These prohibitions do not apply to the following data: (i) data which was known to the receiving Party prior to the Effective Date; or (ii) data which was acquired by the receiving Party in its performance under this License and which was disclosed to the receiving Party by a third party, who to the best of the receiving Party's knowledge and belief, had the legal right to make such disclosure and the receiving Party is not otherwise required to hold such data in confidence; or (iii) data which is required to be disclosed by virtue of law, regulation, or court order, to which the Parties are subject. Each Party assumes all liability to maintain the confidentiality of the data in its possession and agrees to compensate the other Party if any of the provisions of this Section are violated by the receiving Party, its employees, agents, or subcontractors. Solely for the purposes of seeking injunctive relief, it is agreed that a breach of this Section must be deemed to cause irreparable harm that justifies injunctive relief in court.

14.29 Personal Identifying Information-Data Security. Personal identifying information, financial account information, or restricted City information, whether electronic format or hard copy, must be secured and always protected by Licensee. At a minimum, Licensee must encrypt or password-protect electronic files. This includes data saved to laptop computers, computerized devices, or removable storage devices. When personal identifying information, financial account information, or restricted City information, regardless of its format, is no longer necessary, the information must be redacted or destroyed through appropriate and secure methods that ensure the information cannot be viewed, accessed, or reconstructed. If data collected or obtained by Licensee or its agents in connection with this License is believed to have been compromised, Licensee or its agents must immediately notify the City contact. Licensee agrees to reimburse the City for any costs incurred by the City to investigate potential breaches of this data and, where applicable, the cost of notifying individuals who may be impacted by the breach. It is further agreed that a violation of this Section must be deemed to cause irreparable harm that justifies injunctive relief in court. The obligations of Holder under this Section must survive the termination of this License.

14.30 Public Emergency. City shall have the right, because of a public emergency, to sever, disrupt, dig-up or otherwise destroy facilities of Licensee without any prior notice to Licensee, if the action is deemed reasonably necessary by the City Manager, Fire Chief, Police Chief, City Street Transportation Director, Public Works Director or Water Services Director. A public emergency may be any condition which, in the opinion of any of the officials named, poses an immediate threat to the lives or property of the residents of the City or others caused by any natural or man-made disaster, including but not limited to, storms, floods, fire, accidents, explosions, major water main breaks, hazardous material spills, etc. Licensee will be notified by the City of the public emergency and the action taken by the City as soon as reasonably possible. Licensee shall be responsible for repair at its sole expense of any of its facilities damaged pursuant to any such action taken by City.

14.31 Blue Stake. Licensee must comply with A.R.S. §§ 40-360.21-360.32 by participating as a member of the Arizona Blue Stake Center with the necessary records and persons to provide location service of Licensees facilities upon receipt of a locate call or as promptly as possible, but in no event later than two (2) working days. A copy of the License or proof of membership must be filed with the City.

14.32 Inspection and Audit of License Provisions. All books, accounts, reports, files, and other records related to or arising out Licensee's payment obligations under this License (collectively "Records") are subject at all reasonable times to inspection and audit by the City including for three years after the expiration or termination of this License. Licensee must produce the Records at a mutually agreed to time and location within Maricopa County, Arizona.

14.33 Authority. Each party represents to the other that the person signing on its behalf has the legal right and authority to execute, enter, and bind such party to the commitments and obligations set forth herein.

IN WITNESS WHEREOF, the Parties duly execute and agree to be bound by this License as of the Effective Date.

CITY OF CHANDLER, an Arizona municipal corporation

_____
Mayor

APPROVED AS TO FORM:

_____
City Attorney

ATTEST:

_____
City Clerk

ZAYO GROUP, LLC

By: DocuSigned by: Gillian Leytham 20F4A14AB9A54B2...

Gillian Leytham
Name of Authorized Signer

Title: Vice President, Underlying Rights

ATTEST: DocuSigned by: David Urbach F32B2F19EF4E4BE...

David Urbach Director, Underlying Rights
Name and Title

EXHIBIT A
SERVICE AREA

EXHIBIT B
STANDARDS FOR LETTER OF CREDIT

In addition to any other requirements imposed upon a letter of credit (the "Letter of Credit") issued pursuant to this Agreement, the Letter of Credit shall meet and be governed by the following additional standards and requirements:

1. **Letter of Credit Requirements.** The Letter of Credit shall be printed on Bank Safety Paper. The following terms and no others shall be stated on the face of the Letter of Credit:

1.1 The Letter of Credit is clean, unconditional, irrevocable, independent, and standby.
1.2 The Letter of Credit is payable to City upon presentation of City's draft.
1.3 City may make partial draws upon the Letter of Credit.
1.4 The Letter of Credit is for payment solely upon presentation of a sight draft and a copy of the Letter of Credit.
1.5 Within ten (10) days after City's draft on the Letter of Credit is honored, City must make the original of the Letter of Credit available to the issuer in Maricopa County, Arizona upon which the issuer may endorse its payments.
1.6 The issuer specifies a telefax number, email address, and street address at which City may present drafts on the Letter of Credit.
1.7 The Letter of Credit is valid until a specified date.
1.8 The Letter of Credit will be automatically renewed for successive one (1) year periods, unless at least 30 days prior to expiration the issuer notifies City in writing, by either registered or certified mail, that issuer elects not to renew the Letter of Credit for the additional period. In the event of such notification, any then unused portion of the Letter of Credit shall be available by draft on or before the then current expiration date.
1.9 The Letter of Credit is otherwise subject to the most recent edition of the Uniform Customs and Practices for Documentary Credits, published by the International Chamber of Commerce including, but not limited to, International Standby Practices 1998 (ISP98) (International Chamber of Commerce Publication No. 590; ISP98 Model Government Standby (U.S.) Form 11.1 and annexes (2017)).
1.10 The Letter of Credit need not be transferable.

2. **Approved Forms.** The form of the Letter of Credit and of drafts upon the Letter of Credit shall be as follows:

2.1 Except as approved in writing by City's Development Services Department, the form of the Letter of Credit shall be in the form set out below.
2.2 Except as approved in writing by City's Development Services Department, the form of drafts upon the Letter of Credit shall be in the form set out below.

3. **Issuer Requirements.** The issuer of the Letter of Credit shall meet all of the following requirements:

3.1 The issuer shall be a federally insured financial institution with offices in Maricopa County, Arizona, at which drafts upon the Letter of Credit may be presented.
3.2 The issuer shall be a member of the New York Clearing House Association or a commercial bank or trust Company satisfactory to City.
3.3 The issuer shall have a net worth of not less than $1 billion.

FORM OF LETTER OF CREDIT
(ISP98 Model Government Standby (U.S.) Form 11.1)

Date _____, 20_

Letter of Credit No.:_____

Development Services Department
City of Chandler
P.O. Box 4008
Mail Stop 405
Chandler, AZ 85244-4008

Dear Sir or Madam:

Issuance. At the request and for the account of [*name and address of applicant*] ("Applicant"), we [*name and address of issuer at place of issuance*] ("Issuer") issue the irrevocable independent standby letter of credit number [*reference number*] ("Standby") in favor of [*name and address of beneficiary*] ("Beneficiary") in the maximum aggregate amount of USD [*amount*].

Undertaking. Issuer undertakes to Beneficiary to pay Beneficiary's demand for payment for an amount available under the Standby and in the form of Annex A (Payment Demand) [or *Annex B (Payment Demand after Notice of Non-Extension)*] completed as indicated and presented to Issuer at the following place for presentation: in Maricopa County, Arizona at or before the close of business on the expiration date.

Overdrawing. If a demand exceeds the amount available, but the presentation otherwise complies, Issuer undertakes to pay the amount available.

Expiration. The expiration date of this Standby is valid until _____ 20__.

Automatic Extension. The expiration date of this Standby shall be automatically extended for successive one-year periods, unless [30] or more calendar days before the then current expiration date Issuer gives written notice to Beneficiary that Issuer elects not to extend the expiration date. Issuer's written notice must be sent by *registered, certified, or priority express mail or nationally recognized overnight courier* to Beneficiary's above-stated address [*and to the attention of [office, officer, or other attention party] or, alternatively, be received by Beneficiary's attention party*] [30] or more calendar days before the then current expiration date.

Payment. Payment against a complying presentation shall be made within three business days after presentation at the place for presentation or by wire transfer to a duly requested account of Beneficiary.

ISP98. This Standby is issued subject to the International Standby Practices 1998 (ISP98) (International Chamber of Commerce Publication No. 590). This Letter of Credit is not assignable.

Issuer's Charges and Fees. Issuer's charges and fees for issuing, amending, or honoring this Standby are for Applicant's account and shall not be deducted from any payment Issuer makes under this Standby. [*Issuer undertakes to Beneficiary to pay the charges and fees of any bank nominated in this Standby to advise [and confirm] this Standby for acting on such nomination.*]

[*Communications. Communications other than demands may be made to Issuer in the manner and at the place for presentation and also as follows:* ***[address for mailed, couriered, telephone, telefax, or electronic communications].*** *Communications other than for notices of non-extension may be made to Beneficiary at Beneficiary's above-stated address and also as follows:* ***addresses for mailed, couriered, telephone, telefax, or electronic communications]****.]*

[*Issuer's name*]
[*signature*]

_____

Authorized Signature

_____ [bank name] _____, a _____

By _____ [bank officer's signature] _____

_____ [bank officer's name printed] _____

Its _____ [bank officer's title] _____

Phone: ___ [bank officer's phone number] _____

ANNEX A: PAYMENT DEMAND
(ISP98 Model Government Standby (U.S.) Form 11.1

To: [*Issuer name and address*]

From: Development Services Department
City of Chandler
P.O. Box 4008
Mail Stop 405
Chandler, AZ 85244-4008

Date: _____, 20_____

Re: Standby Letter of Credit No. [*reference number*], dated [*date*], issued by [*issuers name*] ("Standby").

Ladies and Gentlemen:

The undersigned beneficiary demands payment of USD [*insert amount*] under the Standby. Beneficiary states that Applicant is obligated to pay to Beneficiary the amount demanded as provided in [*the contract, regulation, or other document that identifies the underlying obligations to the government beneficiary*]. Beneficiary requests that payment be made by wire transfer to an account of Beneficiary as follows: [*Insert name, address, and routing number of beneficiary's bank, and name and number of beneficiary's account*].

[*Beneficiary's name and address*]
By its authorized officer:
[*Insert original signature*]
[*Insert typed/printed name and title*]

If such deposit cannot be accomplished immediately for any reason, please make your payment in the form of a cashier's check issued by your institution and delivered to me at the address listed above.

I certify that I am the Development Services Director of the City of Chandler.

If there is any imperfection or defect in this draft or its presentation, please inform me immediately at (480) 782-3410 so that I can correct it. Also, please immediately notify the City Attorney at (480) 782-4656.

Thank you.

_____
City of Chandler, Development Services Director

City Council Memorandum **Development Services Memo No.** 24-060

Date: November 04, 2024
To: Mayor and Council
Thru: Joshua H. Wright, City Manager
Andy Bass, Deputy City Manager
Kevin Snyder, Development Services Director
From: Lauren Schumann, Planning Senior Program Manager
Subject: PLH24-0036 Commercial Building Adaptive Reuse Policy
Adoption of Resolution No. 5848

Proposed Motion:

Move City Council pass and adopt Resolution No. 5848 approving PLH24-0036 Commercial Building Adaptive Reuse Policy, city policy establishing objective standards to allow multi-family residential development or adaptive reuse of existing commercial, office, or mixed-use buildings on parcels at least one (1) acre in size but not larger than twenty (20) acres without requiring a public hearing, if the developer provides ten (10) percent of the total dwelling units for either moderate-income or low-income housing for at least twenty (20) years, as recommended by Planning and Zoning Commission.

Background:

- In May 2024, Governor Hobbs signed and authorized House Bill 2297 Commercial Building; Adaptive Reuse
- The bill is mandated for municipalities with populations exceeding 150,000, which must comply by January 1, 2025
- Under HB 2297, municipalities may identify or exclude ten percent of existing commercial, office, or mixed-use developments that would allow redevelopment into residential uses without a public hearing (i.e., the Rezoning/Preliminary Development Plan process)
- The proposal is to exempt areas where the policy could not occur to protect employment corridors and the historic downtown district; lands within the Federal Aviation Administration (FAA) airspace traffic patterns and in vicinity of airports are exempt from adaptive reuse per the bill.

- Eligible properties must have existing commercial, office, or mixed-use buildings on parcels at least one (1) acre in size but not larger than twenty (20) acres.
- Per state law, eligible non-residential properties can develop as residential uses with no public hearing if a minimum of 10% of the total number of units is reserved for moderate-income or low-income housing for at least twenty years.
- Development standards including parking and building setbacks must comply with multi-family requirements within the zoning code.
- The maximum permitted density of a redeveloped property shall be equal to any multi-family development within one mile of the building to be redeveloped.
- The height of a redeveloped property may not exceed five stories. When located within 100 feet of single-family residential uses, height is limited to two stories.

Methodology

- Utilizing the City of Chandler's Geographic Information System (GIS) database, staff identified all commercial, employment, office and mixed use buildings within Chandler; 4,271 buildings were identified
- Unincorporated parcels were not included in the total, as these are outside the city limits
- Per HB 2297, lands in the vicinity of Federal Aviation Administration (FAA) licensed general aviation or public airports were excluded (i.e., FAA Traffic Pattern Airspace for the Chandler Municipal Airport and Stellar Airpark)
- City staff identified the following areas to protect (collectively 128, or 2.99%, of existing buildings):
    - Price Road Corridor from the Loop 202 Santan Freeway to Chandler Heights Road
    - Southeast corner of Arizona Avenue and Loop 202 Santan Freeway due to its location within the Chandler Airpark Area Plan, which prohibits new residential uses to protect future operations of the airport
    - Historic Downtown colonnade buildings
- The remaining buildings, a total of 2,721 or 63.7% of existing commercial, office, or mixed use buildings, would be eligible under the policy
- HB 2297 allows modification or re-classification of the policy every ten years

Public Outreach

This request was noticed in accordance with the requirements of the Chandler Zoning Code

Discussion:

On September 9, 2024, City Council held a work session to discuss the requirements of HB 2297, as well as other policies and programs related to housing. The attached resolution incorporates City Council direction provided during the work session.

Attachments

Resolution

Building Analysis

HB 2297 Commercial Building Adaptive Reuse

RESOLUTION NO. 5848

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF CHANDLER, ARIZONA, ADOPTING A POLICY FOR ADAPTIVE REUSE AND MULTI-FAMILY DEVELOPMENT OF CERTAIN COMMERCIAL BUILDINGS IN THE CITY OF CHANDLER PURSUANT TO ARIZ. REV. STAT. § 9-462.10.

WHEREAS Arizona Laws 2024 Chapter 141 (H.B. 2297), codified as Ariz. Rev. Stat. § 9-462.10, requires the governing body of a city or town with a population of 150,000 or more to establish objective standards to allow multifamily residential development or adaptive reuse development on not more than ten percent of the total existing commercial, office, or mixed-use buildings within its jurisdictional boundaries without requiring a public hearing; and

WHEREAS Ariz. Rev. Stat. § 9-462.10 identifies objective standards that the city is required to follow when reviewing applications for redevelopment pursuant to the statute; and

WHEREAS, Ariz. Rev. Stat. § 9-462.10 authorizes the city to identify those buildings that are not eligible to be redeveloped without a public hearing pursuant to the statute; and

WHEREAS, the City Council of the City of Chandler intends to comply with H.B. 2297 by adoption of this policy.

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Chandler, Arizona, as follows:

Section 1**.** Pursuant to the requirements of Ariz. Rev. Stat. §9-462.10, the policy document titled "Adaptive Reuse and Multi-family Development of Commercial Buildings Pursuant to Ariz. Rev. Stat. § 9-462.10," attached as Exhibit A, is adopted as the policy of the City of Chandler.

Section 2**.** Those buildings that are contained within the exclusion zones depicted in the map titled "HB 2297 Building Analysis," attached as Exhibit B, are not eligible for redevelopment without a public hearing pursuant to Ariz. Rev. Stat. §9-462.10. The Planning Division will maintain a digital geographic information system ("GIS") map that is consistent with Exhibit B for staff verification of which buildings are eligible under this resolution.

PASSED AND ADOPTED by the City Council of the City of Chandler, Arizona, this ___ day of _____, 2024.

ATTEST:

_____ _____

CITY CLERK MAYOR

CERTIFICATION

I HEREBY CERTIFY that the above and foregoing Resolution No. 5848 was duly passed and adopted by the City Council of the City of Chandler, Arizona, at a regular meeting held on the _____ day of _____, 2024, and that a quorum was present thereat.

_____
CITY CLERK

APPROVED AS TO FORM:

_____
CITY ATTORNEY TA

Adaptive Reuse and Multi-Family Development of Commercial Buildings

Pursuant to Ariz. Rev. Stat. § 9-462.10

The City of Chandler is committed to fostering a safe, vibrant, and sustainable community for all residents through the adoption of programs and policies that promote smart growth and redevelopment. In 2024, the Arizona Legislature adopted HB 2297, codified as Ariz. Rev. Stat. § 9-462.10, which mandates that cities allow adaptive reuse and multi-family development of up to ten percent of the existing commercial buildings within the city without requiring a public hearing. This policy is adopted to establish the objective standards required by that statute.

Objective Standards:

1. Up to ten percent of the existing commercial, office, employment, or mixed-use buildings within the City of Chandler are eligible to be developed pursuant to Ariz. Rev. Stat. § 9- 462.10, with the exception of those buildings in areas designated by the City Council to be excluded under § 9-462.10(B).[1] Eligibility under this program is determined on a first-come, first-served basis. Upon redevelopment of ten percent of the existing commercial, office, employment, or mixed-use buildings in the city pursuant to Ariz. Rev. Stat. § 9-462.10, this program will cease, and future buildings will not be approved for redevelopment.

2. All proposed developments must undergo a comprehensive site plan review and approval process by Development Services staff. The site plan review may include evaluation by any utility provider impacted by the proposed development.

3. The site must have adequate sewer and water service for the entire proposed development.

4. The development must comply with all building and fire codes adopted by the City of Chandler.

5. The developer applying for eligibility under this program must show that the existing building proposed to be redeveloped is economically or functionally obsolete as defined in Ariz. Rev. Stat. § 9-462.10.

[1] Concurrent with the adoption of this policy, the City Council has adopted by resolution a map titled "HB 2297 Building Analysis" that shows those portions of the city that are not eligible for redevelopment under this policy and Ariz. Rev. Stat. § 9-462.10.

6. The existing building proposed to be redeveloped must be located on a parcel that is at least one acre in size but not more than 20 acres in size.

7. The developer must set aside at least ten percent of the total dwelling units for either low-income[2] or moderate-income housing,[3] or a combination of the two, for at least twenty years after issuance of a certificate of occupancy for the building.

8. *Density*: The maximum density shall be equal to the highest constructed multi-family density within one mile of the building to be redeveloped.

   If no multi-family development exists within one mile, then the maximum density shall be limited to the density of the next closest multifamily zoning district.

9. *Height*: Height shall be limited to five-stories. Any part of a proposed development within one hundred feet of a single-family residential is limited to two stories.

   Height exemption: If the maximum allowable height applicable to the existing commercial, office, or mixed-use building exceeds the maximum allowable height for the proposed use, the existing height may remain and shall be considered nonconforming for height purposes and the existing building may be expanded to the maximum allowable density for the proposed use. Any rooftop appurtenances shall be included within the height exemption.[4]

10. *Setbacks*: The proposed development shall comply with building setbacks required under Chandler Zoning Code for the multi-family residential zoning district if the building is redeveloped into multi-family residential.

    If the building is redeveloped into an adaptive reuse building as defined in Ariz. Rev. Stat. § 9-462.10, the minimum building setback requirement that applies to existing commercial, office or mixed-use building shall be required. If the building setback for the existing building is less than the required setback, the existing building shall be considered legal non-conforming for setbacks purposes.

11. *Parking*: The proposed development must provide minimum parking spaces required under the Chandler Zoning Code for multi-family residential if the building is

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[2] Low-income housing means housing for a person or persons whose household income does not exceed eighty percent of the Area Median Income; the occupant pays not more than thirty percent of the occupant's gross income for the occupant's rent or mortgage, as determined by the Arizona Department of Housing and adjusted for household size based on the United States Department of Housing and Urban Development. Ariz. Rev. Stat. § 9-462.10(H)(4).

[3] Moderate-income housing means housing for a person or persons whose household income does not exceed one hundred twenty percent of the Area Median Income; the occupant pays not more than thirty percent of the occupant's gross income for the occupant's rent or mortgage, as determined by the Arizona Department of Housing and adjusted for household size based on the United States Department of Housing and Urban Development. Ariz. Rev. Stat. § 9-462.10(H)(4).

[4] For purposes of this policy, "rooftop appurtenances" has the meaning contained in Ariz. Rev. Stat. § 9-462.10(H)(8).

redeveloped into multi-family housing.

If the building redevelops as adaptive reuse building as defined in Ariz. Rev. Stat. § 9-462.10, the parking requirement must meet the minimum standards contained in the Chandler Zoning Code for similar adaptive reuse buildings.

12. Not more than 10% of the total 2,721 existing commercial, office, or mixed-use buildings in existence when this policy is first adopted may be redeveloped for multifamily residential development or adaptive reuse under Ariz. Rev. Stat. § 9-462.10. The Chandler Planning Department shall keep track of the number of buildings redeveloped under this policy and shall stop accepting applications when the total maximum number has been constructed.

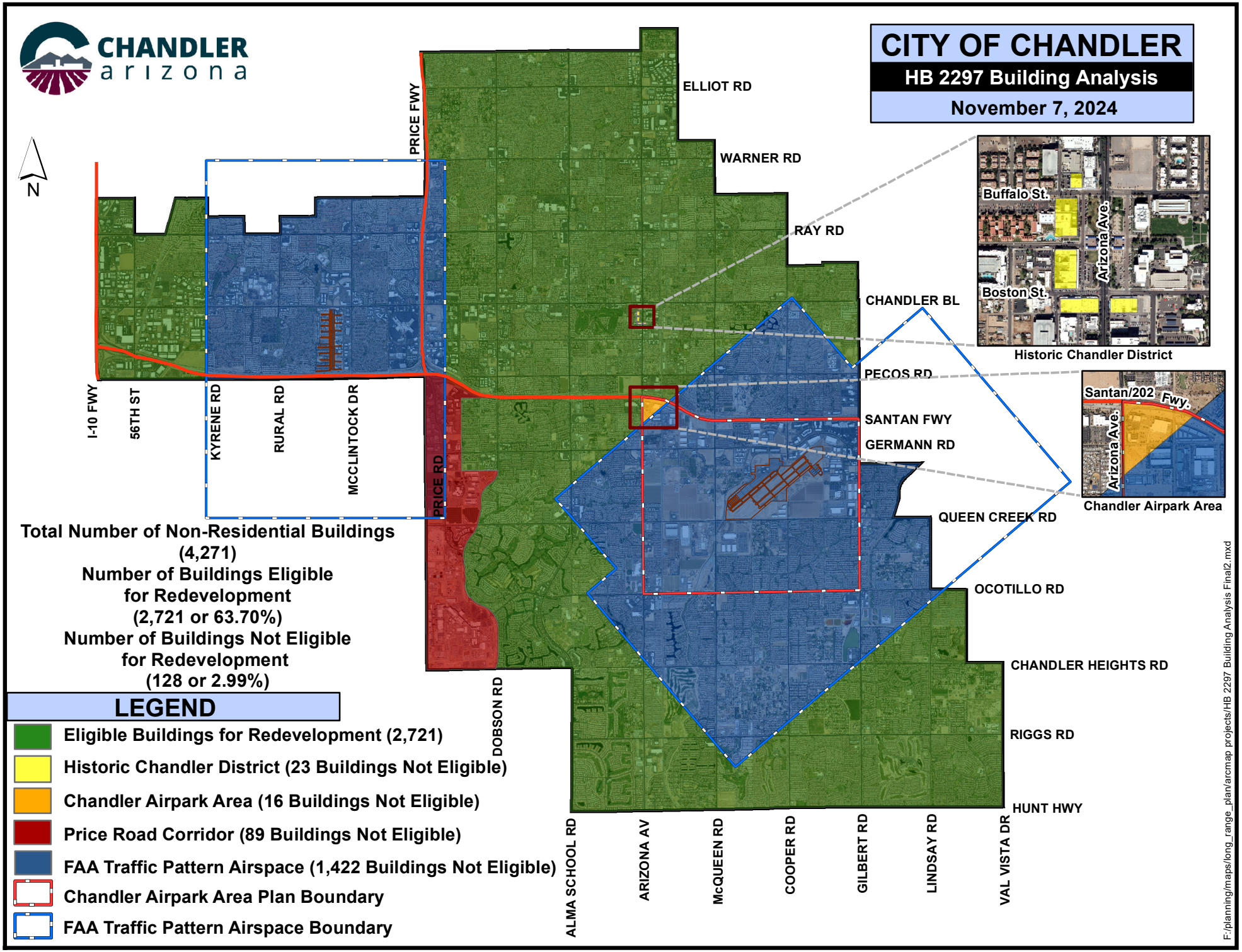
13. This policy does not apply to:

    A. Land in an area that is designated as a district of historical significance pursuant to Ariz. Rev. Stat. § 9-462.01, subsection A, paragraph 10.
    B. Land in an area that has been designated historic by the City Council.
    C. Land in an area that is designated as historic on the national register of historic places.
    D. Land in the territory in the vicinity of a military airport or ancillary military facility as defined in Ariz. Rev. Stat. § 28-8461.
    E. Land in the territory in the vicinity of a federal aviation administration commercially licensed airport or a general aviation or public airport as defined in Ariz. Rev. Stat. § 28-8486.

14. The eligible properties considered under this policy may be modified by the City Council every ten years until a total of ten percent of the buildings have been redeveloped under this policy, or until the Arizona legislature revokes the authority granted in Ariz. Rev. Stat. § 9-462.10, whichever is sooner.

15. This policy is intended to comply with the requirements of Ariz. Rev. Stat. § 9-462.10. Any conflict found between this policy and Ariz. Rev. Stat. § 9-462.10 will be construed in favor of compliance with Ariz. Rev. Stat. § 9-462.10.

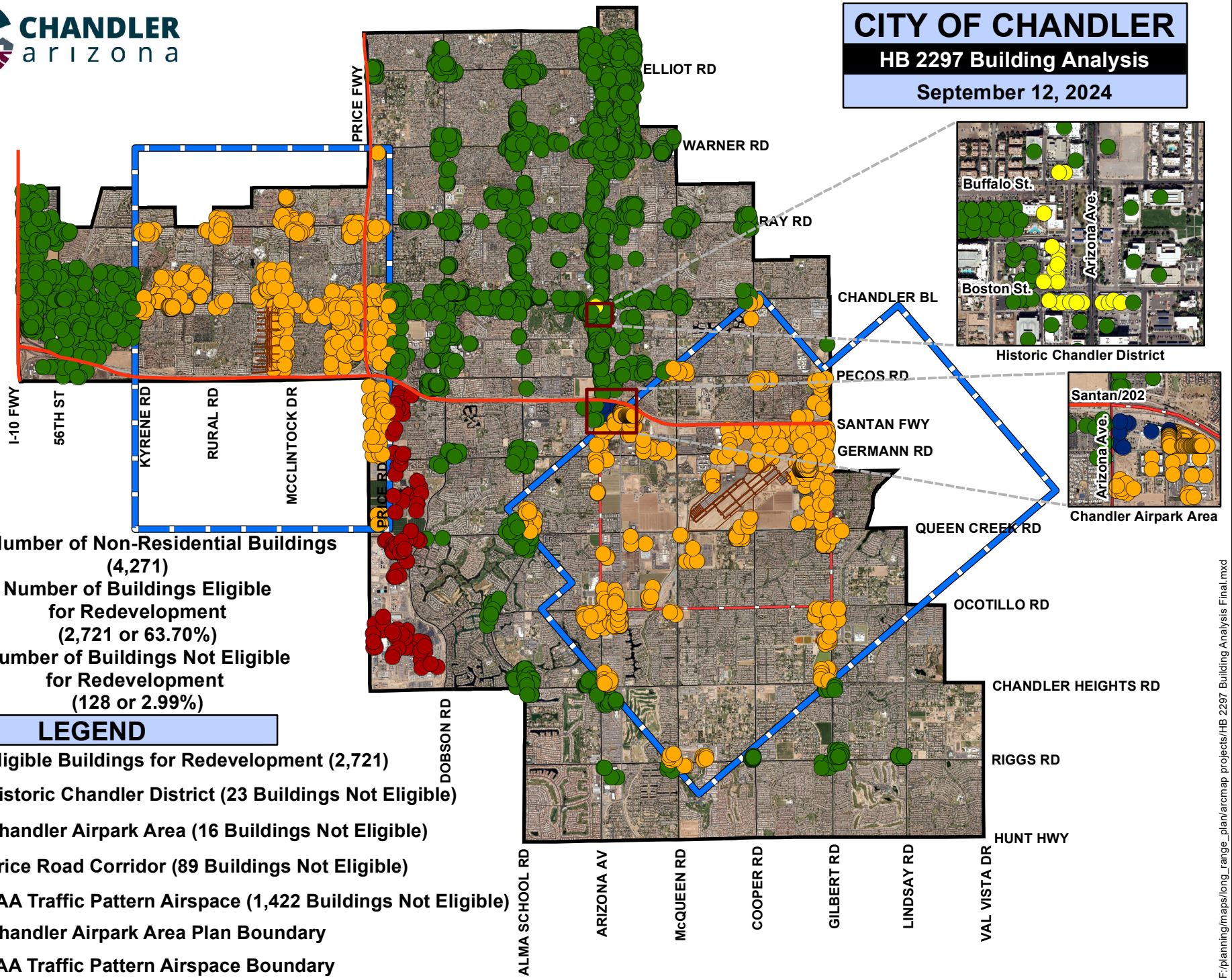
Exhibit B to Resolution 5848



CITY OF CHANDLER

HB 2297 Building Analysis

September 12, 2024



Total Number of Non-Residential Buildings (4,271)

Number of Buildings Eligible for Redevelopment (2,721 or 63.70%)

Number of Buildings Not Eligible for Redevelopment (128 or 2.99%)

LEGEND

- Eligible Buildings for Redevelopment (2,721)
- Historic Chandler District (23 Buildings Not Eligible)
- Chandler Airpark Area (16 Buildings Not Eligible)
- Price Road Corridor (89 Buildings Not Eligible)
- FAA Traffic Pattern Airspace (1,422 Buildings Not Eligible)
- Chandler Airpark Area Plan Boundary
- FAA Traffic Pattern Airspace Boundary

F:/planning/maps/long_range_plan/arcmap projects/HB 2297 Building Analysis Final.mxd

Senate Engrossed House Bill

~~adaptive reuse; commercial buildings; zoning~~
~~(now: zoning; adaptive reuse; commercial buildings)~~
(now: commercial buildings; adaptive reuse)

State of Arizona
House of Representatives
Fifty-sixth Legislature
Second Regular Session
2024

CHAPTER 141

HOUSE BILL 2297

AN ACT

AMENDING TITLE 9, CHAPTER 4, ARTICLE 6.1, ARIZONA REVISED STATUTES, BY ADDING SECTION 9-462.10; RELATING TO MUNICIPAL ZONING.

(TEXT OF BILL BEGINS ON NEXT PAGE)

Be it enacted by the Legislature of the State of Arizona:

Section 1. Title 9, chapter 4, article 6.1, Arizona Revised Statutes, is amended by adding section 9-462.10, to read:

9-462.10. Commercial buildings; multifamily development; adaptive reuse; prohibition on rezoning or municipal review; objective standards; applicability; definitions

A. ON OR BEFORE JANUARY 1, 2025, THE GOVERNING BODY OF A MUNICIPALITY WITH A POPULATION OF ONE HUNDRED FIFTY THOUSAND OR MORE PERSONS SHALL ESTABLISH OBJECTIVE STANDARDS TO ALLOW MULTIFAMILY RESIDENTIAL DEVELOPMENT OR ADAPTIVE REUSE ON NOT MORE THAN TEN PERCENT OF THE TOTAL EXISTING COMMERCIAL, OFFICE OR MIXED USE BUILDINGS WITHIN THE MUNICIPALITY WITHOUT REQUIRING A CONDITIONAL USE PERMIT, A PLANNED UNIT DEVELOPMENT OR REZONING APPLICATION OR ANY OTHER APPLICATION THAT WOULD REQUIRE A PUBLIC HEARING. THE GOVERNING BODY OF THE MUNICIPALITY MAY MODIFY THE PERCENTAGE OF EXISTING COMMERCIAL, OFFICE OR MIXED USE BUILDINGS WITHIN THE MUNICIPALITY AVAILABLE FOR MULTIFAMILY RESIDENTIAL DEVELOPMENT OR ADAPTIVE REUSE EVERY TEN YEARS.

B. A MUNICIPALITY MAY DESIGNATE COMMERCIAL OR EMPLOYMENT HUBS AND OTHER ESSENTIAL COMMERCIAL OR EMPLOYMENT USE AREAS WHERE EXISTING COMMERCIAL, OFFICE, EMPLOYMENT OR MIXED USE BUILDINGS ARE EXCLUDED FROM THE PROVISIONS OF THIS SECTION. THE DESIGNATIONS MADE PURSUANT TO THIS SUBSECTION MAY NOT EXCEED TEN PERCENT OF THE EXISTING COMMERCIAL, OFFICE, EMPLOYMENT OR MIXED USE BUILDINGS WITHIN THE MUNICIPALITY. A MUNICIPALITY MAY MODIFY THE COMMERCIAL OR EMPLOYMENT HUBS THAT ARE EXCLUDED FROM THE PROVISIONS OF THIS SECTION ONCE EVERY TEN YEARS.

C. FOR MULTIFAMILY RESIDENTIAL DEVELOPMENT OR ADAPTIVE REUSE, THE OBJECTIVE STANDARDS ESTABLISHED BY A MUNICIPALITY SHALL REQUIRE BUT MAY NOT REQUIRE MORE THAN THE FOLLOWING:

1. A MUNICIPAL SITE PLAN REVIEW AND APPROVAL PROCESS REQUIREMENT, INCLUDING SITE PLAN REVIEW BY ANY UTILITY PROVIDER IMPACTED BY THE PROPOSED DEVELOPMENT.

2. ADEQUATE PUBLIC SEWER AND WATER SERVICE FOR THE ENTIRE PROPOSED DEVELOPMENT.

3. COMPLIANCE WITH ALL APPLICABLE BUILDING AND FIRE CODES.

4. THAT THE EXISTING BUILDINGS ARE ECONOMICALLY OR FUNCTIONALLY OBSOLETE.

5. THAT THE EXISTING BUILDINGS ARE LOCATED ON A PARCEL OR PARCELS THAT ARE AT LEAST ONE ACRE IN SIZE BUT NOT MORE THAN TWENTY ACRES IN SIZE.

6. A SET ASIDE OF TEN PERCENT OF THE TOTAL DWELLING UNITS FOR EITHER MODERATE-INCOME HOUSING OR LOW-INCOME HOUSING OR ANY COMBINATION OF THE TWO FOR AT LEAST TWENTY YEARS AFTER THE INITIAL OCCUPATION OF THE PROPOSED DEVELOPMENT. THE DEVELOPER MAY SET ASIDE MORE THAN TEN PERCENT AT THE DEVELOPER'S SOLE DISCRETION.

D. THE OBJECTIVE STANDARDS MAY NOT CONTAIN PARKING SPACE REQUIREMENTS THAT EXCEED THE PARKING REQUIREMENTS THAT APPLY TO MULTIFAMILY RESIDENTIAL BUILDINGS OR ADAPTIVE REUSE BUILDINGS UNDER THE EXISTING ZONING CODE UNLESS THE PROPOSED MULTIFAMILY RESIDENTIAL DEVELOPMENT OR ADAPTIVE REUSE ALSO QUALIFIES AS A MIXED USE DEVELOPMENT.

E. A MUNICIPALITY MAY NOT WITHHOLD A DEMOLITION PERMIT IF A MULTIFAMILY RESIDENTIAL DEVELOPMENT MEETS THE REQUIREMENTS OF THIS SECTION. FOR A MULTIFAMILY RESIDENTIAL DEVELOPMENT, ALL OF THE FOLLOWING APPLY:

1. THE DEMOLITION OF ALL OR A PORTION OF THE EXISTING COMMERCIAL, OFFICE OR MIXED USE BUILDINGS SHALL BE ALLOWED.

2. SETBACK REQUIREMENTS MAY NOT EXCEED WHAT IS REQUIRED IN THE EXISTING ZONING CODE FOR MULTIFAMILY RESIDENTIAL BUILDINGS.

3. NOTWITHSTANDING SECTION 9-462.01, SUBSECTION C, THE MAXIMUM HEIGHT AND DENSITY SHALL BE EQUAL TO THE HIGHEST ALLOWABLE MULTIFAMILY HEIGHT AND DENSITY FOR A MULTIFAMILY ZONING DISTRICT IN THE MUNICIPALITY WITHIN ONE MILE OF THE BUILDING TO BE REDEVELOPED. IF THERE IS NO MULTIFAMILY ZONING DISTRICT IN THE MUNICIPALITY WITHIN ONE MILE OF THE BUILDING TO BE REDEVELOPED, THE MAXIMUM HEIGHT AND DENSITY SHALL BE EQUIVALENT TO THE NEXT CLOSEST MULTIFAMILY ZONING DISTRICT.

4. THE ALLOWABLE HEIGHT MAY NOT EXCEED FIVE STORIES AND A MUNICIPALITY MAY LIMIT THE HEIGHT TO TWO STORIES IN THE AREAS OF A SITE WITHIN ONE HUNDRED FEET OF SINGLE-FAMILY RESIDENTIAL ZONES. MULTIFAMILY RESIDENTIAL DEVELOPMENT THAT IS CONSTRUCTED PURSUANT TO THIS SECTION DOES NOT QUALIFY AS BEING WITHIN ONE MILE OF THE BUILDING BEING REDEVELOPED OR THE NEXT CLOSEST MULTIFAMILY BUILDING.

F. A MUNICIPALITY MAY NOT WITHHOLD A DEMOLITION PERMIT IF AN ADAPTIVE REUSE PROJECT MEETS THE REQUIREMENTS OF THIS SECTION. FOR ADAPTIVE REUSE, ALL OF THE FOLLOWING APPLY:

1. THE DEMOLITION OF A PORTION OF THE EXISTING COMMERCIAL, OFFICE OR MIXED USE BUILDING OR BUILDINGS SHALL BE ALLOWED.

2. THE SETBACK REQUIREMENTS FOR THE PROPOSED USE SHALL APPLY. IF THE MINIMUM SETBACK REQUIREMENT THAT APPLIES TO THE EXISTING COMMERCIAL, OFFICE OR MIXED USE BUILDING IS LESS THAN THE MINIMUM SETBACK REQUIREMENT THAT APPLIES TO THE PROPOSED USE, THE EXISTING BUILDING SHALL BE CONSIDERED NONCONFORMING FOR SETBACK PURPOSES UNLESS EASEMENTS, INCLUDING PUBLIC UTILITY EASEMENTS, ARE LOCATED WITHIN SETBACK AREAS.

3. IF THE MAXIMUM ALLOWABLE HEIGHT THAT APPLIES TO THE EXISTING COMMERCIAL, OFFICE OR MIXED USE BUILDING EXCEEDS THE MAXIMUM ALLOWABLE HEIGHT FOR THE PROPOSED USE, THE EXISTING HEIGHT MAY REMAIN AND SHALL BE CONSIDERED NONCONFORMING FOR HEIGHT PURPOSES AND THE EXISTING BUILDING MAY BE EXPANDED TO THE MAXIMUM ALLOWABLE DENSITY FOR THE PROPOSED USE. ANY ROOFTOP APPURTENANCES SHALL BE INCLUDED WITHIN THE HEIGHT EXEMPTION.

G. THIS SECTION DOES NOT APPLY TO ANY OF THE FOLLOWING:

1. LAND IN AN AREA THAT IS DESIGNATED AS A DISTRICT OF HISTORICAL SIGNIFICANCE PURSUANT TO SECTION 9-462.01, SUBSECTION A, PARAGRAPH 10.

2. LAND IN AN AREA THAT IS DESIGNATED HISTORIC BY A LOCAL GOVERNMENT.

3. LAND IN AN AREA THAT IS DESIGNATED AS HISTORIC ON THE NATIONAL REGISTER OF HISTORIC PLACES.

4. LAND IN THE TERRITORY IN THE VICINITY OF A MILITARY AIRPORT OR ANCILLARY MILITARY FACILITY AS DEFINED IN SECTION 28-8461.

5. LAND IN THE TERRITORY IN THE VICINITY OF A FEDERAL AVIATION ADMINISTRATION COMMERCIALLY LICENSED AIRPORT OR A GENERAL AVIATION OR PUBLIC AIRPORT AS DEFINED IN SECTION 28-8486.

6. LAND IN A MUNICIPALITY THAT IS LOCATED ON TRIBAL LAND.

H. FOR THE PURPOSES OF THIS SECTION:

1. "ADAPTIVE REUSE" MEANS CONVERTING AN EXISTING BUILDING FROM THE USE FOR WHICH IT WAS CONSTRUCTED TO A NEW USE BY MAINTAINING SOME OR ALL OF THE ELEMENTS OF THE BUILDING.

2. "BUILDING CODE" HAS THE SAME MEANING PRESCRIBED IN SECTION 9-1301.

3. "ECONOMICALLY OR FUNCTIONALLY OBSOLETE" MEANS THE COMMERCIAL, OFFICE OR MIXED USE BUILDING IS IN A STATE OF DISREPAIR OR HAS A FIFTY PERCENT VACANCY IN THE TOTAL LEASABLE SQUARE FOOTAGE.

4. "LOW-INCOME HOUSING" MEANS HOUSING:

(a) FOR A PERSON OR PERSONS WHOSE HOUSEHOLD INCOME DOES NOT EXCEED EIGHTY PERCENT OF THE AREA MEDIAN INCOME.

(b) FOR WHICH THE OCCUPANT PAYS NOT MORE THAN THIRTY PERCENT OF THE OCCUPANT'S GROSS INCOME FOR THE OCCUPANT'S RENT OR MORTGAGE, AS DETERMINED BY THE ARIZONA DEPARTMENT OF HOUSING AND ADJUSTED FOR HOUSEHOLD SIZE BASED ON THE UNITED STATES DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT.

5. "MODERATE-INCOME HOUSING" MEANS HOUSING:

(a) FOR A PERSON OR PERSONS WHOSE HOUSEHOLD INCOME DOES NOT EXCEED ONE HUNDRED TWENTY PERCENT OF THE AREA MEDIAN INCOME.

(b) FOR WHICH THE OCCUPANT PAYS NOT MORE THAN THIRTY PERCENT OF THE OCCUPANT'S GROSS INCOME FOR THE OCCUPANT'S RENT OR MORTGAGE, AS DETERMINED BY THE ARIZONA DEPARTMENT OF HOUSING AND ADJUSTED FOR HOUSEHOLD SIZE BASED ON THE UNITED STATES DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT.

6. "MULTIFAMILY RESIDENTIAL DEVELOPMENT" MEANS A BUILDING OR BUILDINGS THAT ARE DESIGNED AND USED FOR RESIDENTIAL PURPOSES AND THAT CONTAIN MORE THAN ONE APARTMENT OR DWELLING UNIT FOR SALE OR FOR RENT BUT THAT ARE NOT ADAPTIVE REUSE.

7. "NONCONFORMING" MEANS STRUCTURES THAT HAVE RECEIVED BUILDING AND ZONING PERMITS UNDER THE REGULATIONS IN PLACE AT THE TIME OF CONSTRUCTION.

8. "ROOFTOP APPURTENANCES":

(a) MEANS ROOFTOP STRUCTURES THAT PRINCIPALLY HOUSE AIR CONDITIONING EQUIPMENT, SOLAR PANELS, UTILITIES, ELEVATORS, OTHER ENERGY PRODUCTION FACILITIES AND OTHER NONHABITABLE STRUCTURES.

(b) INCLUDES OPEN SPACE FEATURES, SWIMMING POOLS, SPACE FOR USE BY RESIDENTS AND LANDSCAPING.

(c) DOES NOT INCLUDE ENCLOSED AREAS, SPIRES, BELL TOWERS, DOMES, CUPOLAS, PEDIMENTS, OBELISKS OR MONUMENTS.

APPROVED BY THE GOVERNOR APRIL 10, 2024.

FILED IN THE OFFICE OF THE SECRETARY OF STATE APRIL 10, 2024.

City Council Memorandum Development Services Memo No. 24-058

Date: November 04, 2024
To: Mayor and Council
Thru: Joshua H. Wright, City Manager
Andy Bass, Deputy City Manager
Kevin Snyder, Development Services Director
From: Taylor Manemann, Associate Planner
Subject: PLH24-0031 Sneakerheadz Restaurant and Lounge
Request: Use Permit approval for a Series 6 Bar Liquor License and for an Entertainment Use Permit to allow outdoor patio speakers and televisions for sporting events and live indoor entertainment including DJs, live musical performances, karaoke, and comedy.
Location: 3002 N Arizona Ave, Suites 18 and 19, at the northwest corner of Arizona Avenue and Elliot Road
Applicant: Akeem Prince and Carlos Howard, Sneakerheadz Restaurant and Lounge

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Proposed Motion:

Move City Council approve Use Permit and Entertainment Use Permit PLH24-0031 Sneakerheadz Restaurant and Lounge, for a Series 6 Bar Liquor License and for an Entertainment Use Permit to allow outdoor patio speakers and televisions for sporting events and live indoor entertainment including disc jockeys, live musical performances, karaoke, and comedy, subject to the conditions recommended by the Planning and Zoning Commission.

Background Data:

- Subject site is zoned Community Commercial District (C-2)
- The C-2 zoning for the subject site was approved in 1985 under Zoning Case No. Z85-053
- The in-line shops in which the subject site is located were constructed in 1986
- Zoning code requires Use Permit approval for a bar license
- Live indoor entertainment and outdoor patio speakers within 600' of residential properties requires an Entertainment Use Permit

Surrounding Land Use Data:

North	Industrial Development (I-1/PAD)	South	Abutting Daycare tenant (Kids R' Our Future)
East	Abutting Daycare tenant (Kids R' Our Future), then parcel across Arizona Ave zoned for a multifamily development (under construction)	West	San Marcos Pl, then Industrial Development (I-1/PAD)

Proposed Development:

Size of Business (Indoors)	6,700 square feet
Size of Patio	3,700 square feet
Number of Employees	10 employees
Hours of Business Operation	Monday-Friday: 10am – 2am Saturday-Sunday: 11am – 2am
Type of Live Entertainment	Disc Jockeys (DJs), karaoke, live bands, performers, comedians, and dancing Outdoor patio speakers and TVs for sporting events
Hours of Live Entertainment	Indoors: Monday-Friday: 7pm – 2am Saturday-Sunday: 11am – 2am Outdoor Patio Speakers: Monday-Friday: 7pm – 9pm Saturday-Sunday: 11am – 11pm

Review and Recommendation:

Zoning Code Requirements

Per Zoning Code Section 35-305(4), an Entertainment Use Permit is required when alcoholic beverages are sold or served and if there is entertainment provided indoors with the property being located 600 feet or less from a residentially zoned property. The distance is measured from the closest exterior wall or fence of any indoor or outdoor space occupied by the subject establishment to the closest property line of a residentially zoned property. The nearest residentially zoned property to this project is located approximately 415 feet to the east, across Arizona Avenue. The property is zoned Planned Area

Development (PAD) for a multifamily development that is presently under construction. The nearest single-family zoned property is located approximately 515 feet to the west.

A Use Permit is also required for a Series 6 liquor license for bars to operate within a commercially zoned district. With the Use Permit approval for Series 6 Bar License and an Entertainment Use Permit for live entertainment, Sneakerheadz will operate as a Restaurant and Lounge with live entertainment indoors and speakers/TVs on the outdoor patio. The indoor live entertainment will include disc jockeys (DJs), karaoke, live bands, performers, comedians, and dancing. The outdoor patio will have speakers and four TVs for sporting events.

Sneakerheadz Opening

The subject suite has been previously occupied by multiple other restaurants, most recently Rosa's Mexican Grill, and has operated under a Series 12 Restaurant liquor license. Due to the subject suite recently operating under a previous Series 12 license, Sneakerheadz was able to begin operating and have a soft opening in early August using an interim Series 12 license. Following this event, City staff began receiving complaints from the adjacent daycare (Kids R' Our Future), which occupies suites on either side of the Sneakerheadz suite. The daycare owner expressed concerns regarding the nightclub environment, safety, and trash being left in the parking lot. The daycare had no issue with the restaurant portion of the business but was concerned that Sneakerheadz was operating more as a nightclub.

Arizona Department of Liquor License and Control

Sneakerheadz applied to the Arizona Department of Liquor License and Control (AZ DLLC) for conversion of the interim Series 12 license to a permanent license. After further review, the AZ DLLC determined that the Series 12 license was not appropriate for Sneakerheadz, as they were operating as a bar and not as a restaurant. Therefore, Sneakerheadz withdrew its Series 12 restaurant license application. Sneakerheadz is currently operating as a restaurant only, with a full food menu. There is currently no alcohol being sold in the restaurant.

Planning staff conducted research regarding legal separation requirements between licensed bars and schools/daycares. Arizona Revised Statutes (A.R.S.) § 4-207 restricts bar licenses from being located within three hundred (300) horizontal feet from a school. Planning staff has confirmed with the AZ DLLC that since the daycare does not offer an accredited K-12 program, the separation requirement does not apply. The City of Chandler Zoning Code does not currently have minimum separation requirements between businesses with a bar license and other surrounding uses and therefore does not regulate the separation

between such uses. Approval of a Use Permit for a Series 6 bar license does not override any state liquor licensing requirements. The applicant must comply with all state regulations that pertain to the liquor license.

Staff Recommendation

Staff is aware of opposition to this request, mostly from the adjacent daycare. The applicant has agreed to take additional measures, listed in the section below, to ensure compatibility with the surrounding businesses and neighbors. With these measures in place, staff finds the proposed use can be compatible within the commercial development. The request is consistent with the General Plan and eligible for consideration within the property's C-2 zoning. As such, staff recommends a one (1) year time condition from the date of City Council approval to review the effectiveness of the conditions of approval and reassess its compatibility with adjacent businesses and neighbors.

Public / Neighborhood Notification

- This request was noticed in accordance with the requirements of the Chandler Zoning Code.
- A neighborhood meeting sign was posted on the site and on social media via NextDoor. A neighborhood meeting was held on September 17, 2024. Planning staff, four (4) adjacent neighbors, and six (6) people associated with the daycare were in attendance. The attendees' concerns included the following:
    - Required separation from daycare/schools
    - Types of live entertainment
    - Security measures
    - Parking lot and patio cleaning
    - Smoking on the patio near the daycare
    - Server attire and seeing the servers enter the restaurant
    - Not wanting to see inside the suite from the parking lot
    - Overall "nightclub" operations in the evening

- In response to the neighbors' concerns, the applicant plans to implement the following measures to ensure compatibility with the daycare and surrounding businesses:
    - Hire security for planned events at night
    - Hire a maintenance crew to clean up the parking lot and patio areas
    - Limit cigarette smoking on the patio to designated areas away from the daycare playground
    - Have servers enter through the rear of the building
    - Add curtains and window film to the front windows to limit visibility into

the suite
- Adjust live entertainment hours to begin after the daycare closes on weekdays

- Additionally, the applicant clarified that the types of live entertainment offered will be limited to disc jockeys (DJs), karaoke, live bands, performers, comedians, and dancing.

- As of the writing of this memo, Planning staff has received two letters from adjacent neighbors. One letter is from a resident south of Elliot Road with concerns and the second is a letter of opposition from the adjacent daycare. Additionally, Planning staff has received phone calls from the adjacent daycare owner and two other neighbors. Staff has spoken to the daycare owner on multiple occasions throughout the application process to address their questions and concerns.

Planning and Zoning Commission Vote Report

Planning and Zoning Commission meeting, October 16, 2024
Motion to Approve

In Favor: 5 Opposed: 1 (Golla) Absent: 1 (Lopez)

Planning and Zoning Commission amended stipulation number 5 to clarify the portions of the site that are to be maintained in a clean and orderly manner and amended stipulation number 11 to revise an error in the outdoor patio speaker hours. Planning and Zoning Commission also added stipulation number 13 to prohibit smoking on the outdoor patio until after 7pm on weekdays to make sure there will be no smoking during the daycare operating hours. Stipulation number 14 was also added requiring the applicant provide onsite security during all events. Commissioner Golla dissented, stating her opinion that bars and nightclubs should be separated from preschools and child daycare facilities just as they are required by the state to be separated from schools.

Recommended Conditions of Approval

Planning and Zoning Commission recommends City Council approve the Use Permit and Entertainment Use Permit, subject to the following conditions:

1. The Use Permit and Entertainment Use Permit shall remain in effect for one (1) year from the date of City Council approval. Continuation of the Use Permit and Entertainment Use Permit beyond the expiration date shall require

re-application to and approval by the City of Chandler.

2. Substantial expansion or modification beyond the approved exhibits (Site Plan, Floor Plan and Narrative) shall void the Use Permit and Entertainment Use Permit and require a new Use Permit and Entertainment Use Permit application and approval.

3. The Use Permit and Entertainment Use Permit are non-transferable to other locations.

4. All pedestrian walkways shall be A.D.A. accessible and shall not be interrupted by any obstacles preventing circulation (i.e. persons with disabilities shall have direct access to all indoor and outdoor pedestrian spaces).

5. The site including the pedestrian walkway in front of the shops, the patio and area surrounding the patio and the parking lot, shall be maintained in a clean and orderly manner.

6. No noise shall be emitted from outdoor speakers or live entertainment on the patio(s) in such a manner that exceeds the general level of noise emitted by uses outside the premises of the business and disturbs adjacent businesses and/or residential areas.

7. Music shall be controlled so as to not unreasonably disturb area residents and shall not exceed the ambient noise level as measured at the commercial property line.

8. The establishment shall provide a contact phone number of a responsible person (i.e., bar owner and/or manager) to interested neighbors to resolve noise complaints quickly and directly.

9. The Use Permit does not override any State liquor licensing requirements. The applicant must comply with all regulations that pertain to the liquor license.

10. Live entertainment indoors may occur Monday through Friday from 7pm to 2am and Saturday through Sunday 11am to 2am. Speakers may be used on the outdoor patio Monday through Friday from 7pm to 9pm and Saturday and Sunday from 11am to 11pm.

11. Live entertainment shall be limited indoors to include disc jockeys (DJs),

karaoke, live bands, performers, comedians, and dancing. The outdoor patio shall be limited to speakers and TVs for sporting events.

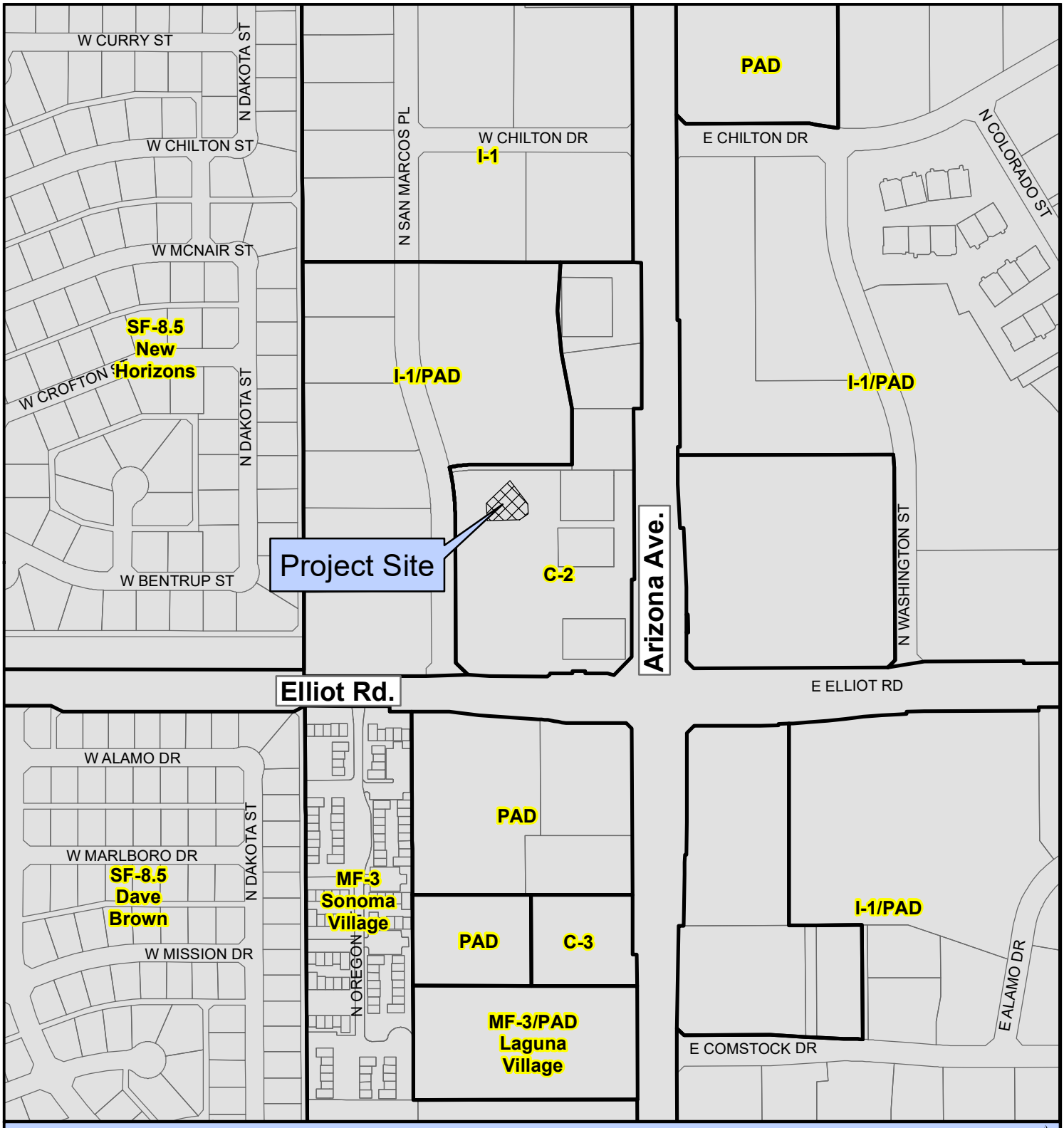
12. All exterior doors on the outdoor patio and the front of the suite shall remain closed and not be kept open except for when being passed through.

13. Smoking shall be prohibited on the outdoor patio prior to 7pm on weekdays.

14. Security personnel shall be provided onsite during all events.

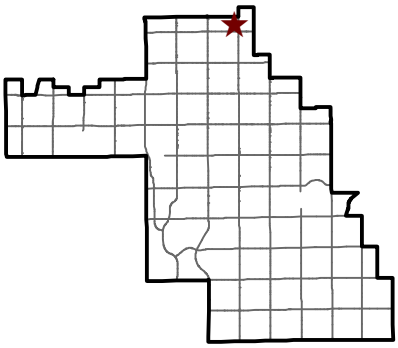
Attachments

Vicinity Maps
Exhibits
Letters of Concern



PLH24-0031 Sneakerheadz Restaurant and Lounge

Proposed Project Details
3002 N Arizona Avenue, Suites 18 and 19
Use Permit approval for a Series 6 Bar License and Entertainment Use Permit approval for live indoor entertainment and outdoor patio speakers/TVs



City of Chandler Planning Division
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PLH24-0031 Sneakerheadz Restaurant and Lounge

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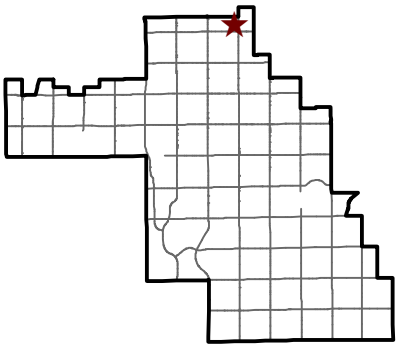

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https://gis.chandleraz.gov/planning

PLH24-0031

Sneakerheadz Restaurant and Lounge

Location:

3002 N Arizona Avenue, Suites 18 and 19

Northwest corner of Arizona Avenue and Elliot Road

SneakerHeadz Restaurant and Lounge
3002 North Arizona Ave, Suites 18 and 19, Chandler, AZ 85225

1. **Business Name and Contact Information**
   To resolve noise complaints quickly and directly, please reach out to the SneakerHeadz Restaurant and Lounge management team using the below contact information:
   - **Carlos Howard:** 602-487-8280
   - **Akeem Prince:** 832-707-5907

2. **Hours of Operation**
   We are open 7 days a week:
   - **Monday-Friday:** 10 AM – 2 AM
   - **Saturday-Sunday:** 11 AM – 2 AM
     We have a full menu, which includes a variety of Caribbean dishes.

3. **Live Entertainment**
   SneakerHeadz will offer a variety of live entertainment options, including DJs, karaoke, live bands, performers, comedy shows, and dancing.
   - **Live entertainment hours inside the restaurant** will be:
     - **Monday-Friday:** 7 PM – 2 AM
     - **Saturday-Sunday:** 11 AM – 2 AM
   - **Outdoor Patio speaker hours** will be:
     - **Monday-Friday:** 7 PM – 9 PM
     - **Saturday-Sunday:** 11 AM – 11 PM
       For outdoor entertainment, we will have four televisions and small speakers for sports games on the patio, but **there will be no loud music or live entertainment outside. Outside speakers will only be used during the times specified above.**

4. **Building and Patio Size**
   The restaurant/tenant space is 6,700 square feet, and the patio is approximately 3,700 square feet.

5. **Access to Patio**
   Patio access for patrons is through the back of the restaurant, and servers can access it from the kitchen. The indoor seating capacity is approximately 180 seats with 45 tables. The outdoor seating includes about 35 tables with around 120 seats.

6. **Smoke-Free Arizona Act**
   We will comply with the Arizona Smoke-Free Act by not permitting smoking within 20 feet of the restaurant entrance or the exit of the patio. Smoking is allowed on the patio, as it is exempt from the Act. We will make efforts to prevent smoke from entering the restricted zone.

7. **Site Improvements**
   No additional site improvements are required for the entertainment use permit. The landlord has already made improvements to the front of the restaurant, including the addition of a new door and windows, which have been approved by the City of Chandler.

8. **Building and Monument Signage**
   The building and monument signage have not yet been installed, as we are still in the preparation stages before opening.

9. **Unique Concept**
   SneakerHeadz will offer a brand-new concept for sneaker collectors. Patrons will have opportunities to showcase their latest footwear and participate in classes where they can customize their own sneakers using materials like paint, colorful shoelaces, flowers, glitter, and animal prints.

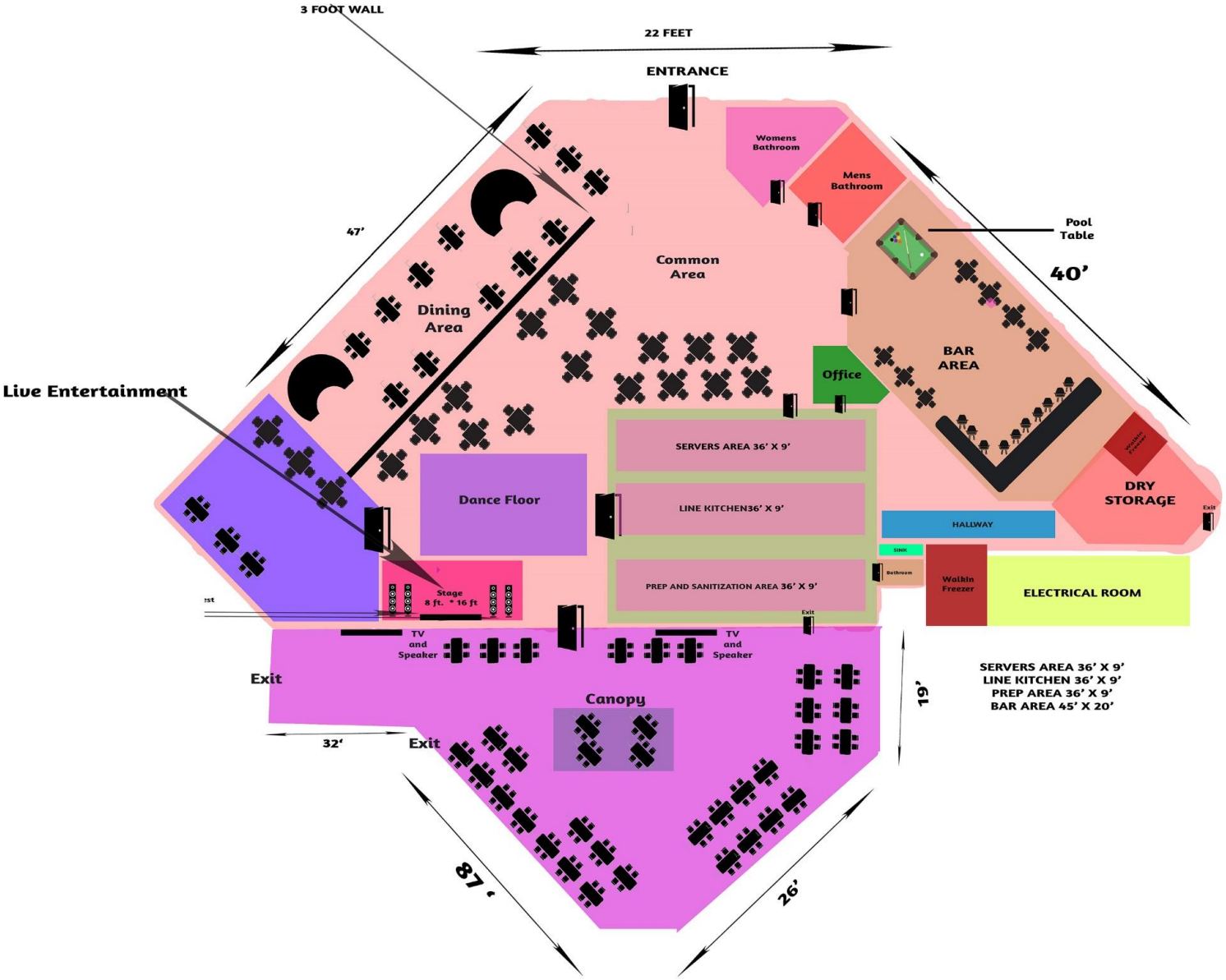
We will also offer ceramics for customers to paint and design at their tables while enjoying their meals, drinks, and live entertainment. Additionally, we will invite some of the biggest sneaker collectors to speak about their favorite shoes, creating a unique experience for the Chandler community.

10. **Use Permits**
    This narrative will be used for both a **Live Entertainment Use Permit** and a **Use Permit for a Series 6 Liquor License.**

11. **Liquor License Application**
    SneakerHeadz is in the process of applying for a Series 6 Liquor License.

12. **For Questions or Concerns**
    For any questions, concerns, or noise complaints, please contact:
    - **Akeem Prince:** 832-707-5907
    - **Carlos Howard:** 602-487-8280

SNKRHEADZ
RESTAURANT AND LOUNGE



Patio Area is Approx :
3654 square feet

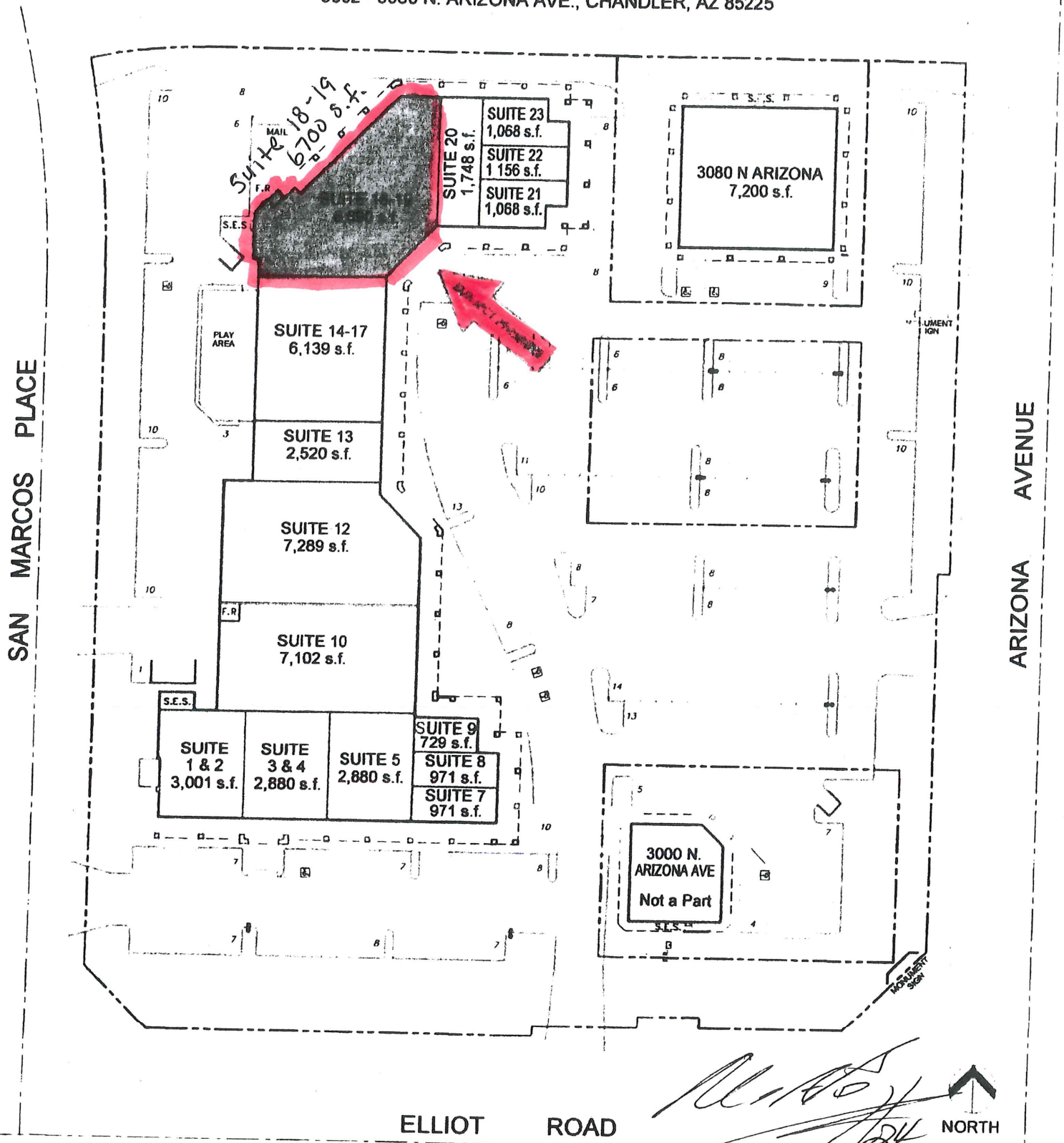
EXHIBIT "A"

POLLACK PLAZA

LEASING PLAN

NWC ARIZONA AVE. & ELLIOT RD.

3002 - 3080 N. ARIZONA AVE., CHANDLER, AZ 85225



This center has approximately 53,412 s.f. (Pollack Plaza) 2,973 s.f. (PP AZ Annex) and approximately 329 parking spaces. Any plan or exhibit attached to this property is intended to show only the general layout of the property or part thereof. Landlord reserves the right to alter, add to or omit in whole or in part the structures and/or common areas currently existing or hereafter constructed on the property or shown on any plan. The property is subject to change or modification as may be made by the landlord in its sole discretion or required by any authority having jurisdiction. Any and all measurements, distances or square footage are approximate. Landlord does not covenant or represent that any occupant currently or hereafter located at the property will remain a tenant. Landlord makes no representations, either expressed or implied as to the current or future addition or subtraction of tenants or occupancy of the property or any surrounding properties. 8.28.17 (14-91)

Taylor Manemann

From: K@kidsrourfuture.net
Sent: Tuesday, October 8, 2024 1:17 PM
To: Rachelle Rasmussen; 'Haley Garcia'
Cc: Taylor Manemann; Lynda Ruiz
Subject: KROF Protest Revision

Follow Up Flag: Follow up
Flag Status: Completed

To whom this may concern: “Tax and License” “Planning and Zoning “ “Chandler City Counsel” ”Arizona State Liquor Board”

Re: Letter of Complaint or Protest

My name is Holbert Magitt. Owner of Kids R Our Future Preschool / Childcare located at 3002 N. Arizona Ave. Ste.16 & 20 Chandler, AZ. 85225. The Preschool facility has been in the community a little over 18 years, providing an educational service to families with children from ages Infants through 5 years of age as well as a program for kindergarten through 6th grade from ages 5 -12 years of age.

Currently we have concerns about a new company named SNKRHEADZ who is requesting to be a restaurant /Bar / Night Club that will be adjacent to both sides of our facility in the same business park. We are concerned about smoking during the daytime as parents and children pass through the walkway. We are also concerned that children can quite possibly encounter other inappropriate/ illegal things and items on the property left over from night parties. Also were concerned about possible violence due to disputes. SNKRHEADZ LLC is currently seeking a series 6 liquor license for Bar and Entertainment and night club. Over the past 18 years there have been several restaurants at this location that only had a series 12 liquor license, and we’ve had no problems or complaints. However, SNKRHEADZ has and will be advertising as a nightclub environment with explicit pictures and video with sexual gestures, hard liquor and other. Due to the health and safety of the kids we don’t believe that a series 6 license Bar and Entertainment liquor license for the nightclub component would be a good fit or influence near or next to an educational facility.

However, we do believe that a SNKRHEADZ restaurant series 12 liquor license would be more environmentally friendly, as we’ve had several family friendly restaurants at this location over the years that had a series 12 liquor license only.

On August 04, 2024, SNKRHEADZ had a soft opening advertising sexually explicit picture and video, after parties and more. During this event there were girls twerking on cars, wearing G-strings and bikini tops in the parking lot. There were also two security guards with bullet proof vests on at the front entrance who were frisking for weapons and asking for proof of identification upon entering. We also found paraphernalia such as a liquor bottle, hookah wrappers and half smoked cigar in the parking lot when the children arrived for school. Please see attached photos.

Arizona Revised Statute (A.R.S.) § 4-207(A) is a law that restricts the licensing of premises near schools and churches within a 300-foot radius: State of Arizona statute restricts the licensing for a series 6 liquor

license within 300 feet of a school. We are a state funded school that has ages from infants to 5 years old and a program for kindergarten through 6th grade. We also have an outdoor playground next door as well, and we're concerned for the safety of our children. There are also two religions institutions that are within 300 feet of SNKRHEADS LLC as well. We don't believe that the nightclub component would be a good fit nor good influence near or next to an educational facility with children.

Separate from the Arizona Revision Statue of the liquor board. As an environmental concern for placement and planning businesses within the chandler community, we also look to the city of chandler for assistance with the concerns for a Bar/Entertainment/ Nightclub being adjacent to both sides of our school. Health, safety, and security of the kids are the general concern.

We would like to thank you for your consideration,

Holbert Magitt

Administration
Kids R' Our Future
Preschool/Child Care
3002 N. Arizona Ave.
Chandler, Az. 85225
Ph:480-632-2353
Fax:480-632-0781

Taylor Manemann

From: Jana Moto <Tzwadr11@outlook.com>
Sent: Sunday, September 1, 2024 4:04 PM
To: Taylor Manemann
Subject: Case No PHL24-0031 Sneakerheadz Restaurant and Lounge

Follow Up Flag: Follow up
Flag Status: Flagged

This Message Is From an Untrusted Sender
You have not previously corresponded with this sender.

Report Suspicious

Dear Mr. Manemann

I am an owner of a townhouse across the street from the proposed establishment.

Unfortunately, I more likely will not be able to attend the notice of the neighborhood meeting on September 17.

I am not familiar with the noise ordinances in the City of Chandler, but I remember living about 3 blocks away from a bar that had live, outdoor music. The heavy bass was not managed at the source and there was absolutely no way to filter it or mute it. Heavy bass can cause cardiac arrest or heart attacks. Loss of sleep due to noise can cause impaired glucose tolerance, cognitive impairment, depression, and anxiety. The notice indicated that live music would be playing until 2am. Many individuals still need to wake up early on the weekends. I am not comfortable with an establishment having no curfew when people live close by.

There are ways to use soundproofing so that the music does not bleed into the neighboring areas, although the effectiveness may be limited when the sound is outdoors. If this business truly wants to be a good neighbor, some consideration should be made to turn down the volume after 10pm.

Thank you for your consideration.

Janice

Dr. Janice Motoike PhD

Office:
428 S. Gilbert Rd. Ste 109-M
Gilbert AZ 85296

Mail:
1955 W Baseline Rd Ste 113-520
Mesa AZ 85202-9016

Taylor Manemann

From: K@kidsrourfuture.net
Sent: Tuesday, October 15, 2024 2:31 PM
To: Taylor Manemann; 'Haley Garcia'
Cc: Bonnie Boddy; Rachelle Rasmussen
Subject: Protest
Attachments: Two dead.docx; 2 killed.docx; The Lounge SOHO LLC Articles of Organization.pdf; Sneaker Heads Reasurant and Lounge LLC.pdf; Sneaker Heads Sport Bar LLC.pdf; 20240924_155147.jpg; 20240924_155154.jpg

Please attach these documents to our protest. One of the members of **The lounge SOHO LLC** who is **Jermaine A. Prince** is also a member of **SNKRHEADZ LLC**. This information is on record to illustrates some of the issues that comes along with this type of business concept being next to a Preschool/Childcare Facility.
SNEAKER HEADS SPORTS BAR LLC also known as **SNEAKER HEADS REASURANT AND LOUNGE LLC** has currently applied for series 6 liquor license, however the person **Juanita Alicia Esparza** states that she is the owner, and she is **not** an owner or member of the LLC according to the attached articles. And as well she is **not** listed on the lease to occupy the building space.

Thanks, Holbert

Administration
Kids R' Our Future
Preschool/Child Care
3002 N. Arizona Ave.
Chandler, Az. 85225
Ph:480-632-2353
Fax:480-632-0781

Two dead, two injured in Mesa bar shooting

Two people are dead and two others are injured after a shooting outside a Mesa bar Sunday morning.

By: Hector Gonzales
Posted 5:58 AM, Jun 05, 2022

and last updated 4:16 AM, Jun 08, 2022

MESA, AZ — Two people are dead and two more are injured after a shooting outside a Mesa bar.

Just before 2:30 a.m. Sunday, Mesa police were called to The Lounge Soho, near Southern Avenue and Alma School Road, for reports of a shooting

Two men were found lying in the parking lot area with obvious gunshot wounds and were pronounced dead at the scene, according to Mesa Police Sergeant Chuck Trapani.

While searching the area, police found two more victims who had non-life-threatening injuries. Both were taken to a hospital for treatment.

Police have identified the two victims who died as Willie D'Angelo Love, 23, of Maricopa, and Curtis Eugene West Jr., 25, of Phoenix.

When the first officers arrived at the scene, they saw a silver passenger car leaving the area at a high rate of speed.

Officers followed that vehicle and were able to stop it down the street.

Sgt. Trapani tells ABC15 there were no weapons located inside the car but while retracing the route, they located a weapon along the roadway.

Three people inside the vehicle were detained. One person was released shortly after being detained and two others were arrested on charges unrelated to the shooting.

Officials say the shooting happened in the parking lot of the business and several witnesses were questioned.

It's unknown if the people involved knew each other or what led up to the shooting.

2 killed, 2 hurt in Mesa nightclub shooting; 3 detained after pursuit

It started around 2:20 a.m. as officers responded to a shooting at the Lounge Soho near Southern Avenue and Longmore.

By Peter Valencia

Published: Jun. 5, 2022 at 6:24 AM MST|Updated: Jun. 5, 2022 at 3:27 PM MST

MESA, AZ (3TV/CBS 5) -- Mesa police say three people have been detained after a shooting that left two men dead and 2 others hurt outside of a nightclub early Sunday morning.

It started around 2:20 a.m. as officers responded to a shooting at the Lounge Soho near Southern Avenue and Longmore. As police showed up, they saw someone speeding off from the nightclub. Officers pursued the car, which ended six miles away at Southern Avenue and Hardy Drive. Authorities detained three people. Police say two men were found lying in the nightclub's parking lot. Sgt. Chuck Trapani says the men died at the scene, and detectives are working on identifying them. Police also said two other people, including a security guard, were taken to the hospital but are expected to be okay.

TRENDING: Young girl, 3 others hospitalized after rollover crash near Phoenix Sky Harbor

Detectives are still working to piece together what led up to the shooting. Video from the scene showed much of the plaza blocked off with crime scene tape. Officers say they found a handgun close to the nightclub as they retraced the path of the vehicle pursuit.

Sunday's shooting comes just 24 hours after a shooting at a north Phoenix strip mall left a 14-year-old girl dead and eight others seriously hurt. Less than a mile away from that shooting, a teenage boy was shot and killed outside his home. Detectives ask anyone with information, including those who might have heard or seen something, to come forward and help the police.

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Arizona Corporation Commission - RECEIVED: 9/23/2021
Arizona Corporation Commission - FILED: 9/23/2021

21092311221966

ARTICLES OF ORGANIZATION

OF LIMITED LIABILITY COMPANY

ENTITY INFORMATION

ENTITY NAME:	THE LOUNGE SOHO LLC
ENTITY ID:	23275444
ENTITY TYPE:	Domestic LLC
EFFECTIVE DATE:	09/23/2021
CHARACTER OF BUSINESS:	Lounge/bar
MANAGEMENT STRUCTURE:	Manager-Managed
PERIOD OF DURATION:	Perpetual
PROFESSIONAL SERVICES:	N/A

STATUTORY AGENT INFORMATION

STATUTORY AGENT NAME:	ROD SMITH
PHYSICAL ADDRESS:	1955 W BASELINE RD, STE 113-183, STE 113-183, MESA, AZ 85202
MAILING ADDRESS:	1955 W BASELINE RD, STE 113-183, STE 113-183, MESA, AZ 85202

PRINCIPAL ADDRESS

1457 W Baseline Rd, Unit 108, MESA, AZ 85202

PRINCIPALS

Manager: ROD SMITH - 1955 W BASELINE RD, STE 113-183, STE 113-183, MESA, AZ, 85202, USA - bmwentinfo@gmail.com - Date of Taking Office: 09/23/2021

Member: Jermaine Akeem Prince - 2746 W McDowell Rd, PHOENIX, AZ, 85009, USA - Info@thebluegeckoprinting.com - Date of Taking Office: 09/23/2021

ORGANIZERS

Jermaine A Prince: 2746 W McDowell Rd, PHOENIX, AZ, 85009, USA, Info@thebluegeckoprinting.com

ROD SMITH: 1955 W BASELINE RD, STE 113-183, MESA, AZ, 85202, USA, bmwentinfo@gmail.com

SIGNATURES

Organizer: Jermaine A Prince - 09/23/2021

Organizer: ROD SMITH - 09/23/2021

Arizona Corporation Commission - RECEIVED: 4/30/2024
Arizona Corporation Commission - FILED: 4/30/2024 24043016225014

ARTICLES OF ORGANIZATION

OF LIMITED LIABILITY COMPANY

ENTITY INFORMATION

ENTITY NAME: SNEAKER HEADS RESTAURANT AND LOUNGE LLC

ENTITY ID: 23675258
ENTITY TYPE: Domestic LLC
EFFECTIVE DATE: 04/30/2024
CHARACTER OF BUSINESS: Accommodation and Food Services
MANAGEMENT STRUCTURE: Member-Managed
PERIOD OF DURATION: Perpetual
PROFESSIONAL SERVICES: N/A

STATUTORY AGENT INFORMATION

STATUTORY AGENT NAME: Carlos Howard

PHYSICAL ADDRESS: Attn: Sneaker Heads , 3002 N Arizona Ave , CHANDLER, AZ 85225

MAILING ADDRESS: Attn: Sneaker Heads , 3428 E Derringer Way, GILBERT, AZ 85297

PRINCIPAL ADDRESS

Att: Sneaker Heads , 3002 N Arizona Ave , CHANDLER, AZ 85225

PRINCIPALS

Member: Carlos Howard - 3002 N Arizona Ave, CHANDLER, AZ, 85225, USA - carhoward1973@yahoo.com - Date of Taking Office: 04/30/2024

Member: Jermaine Prince - Sneaker Heads, 3002 N Arizona Ave, CHANDLER, AZ, 85225, USA - info@thebluegecko.com - Date of Taking Office: 04/30/2024

ORGANIZERS

Carlos Howard: 3428 E Derringer Way, GILBERT, AZ, 85297, USA, carhoward1973@yahoo.com

Jermaine Prince: 10644 N Arista Lane, AZ, 85268, USA, info@thebluegecko.com

SIGNATURES

Organizer: Carlos Howard - 04/30/2024

Organizer: Jermaine Prince - 04/30/2024

Arizona Corporation Commission - RECEIVED: 4/21/2024
Arizona Corporation Commission - FILED: 4/21/2024 24042121270276

ARTICLES OF ORGANIZATION

OF LIMITED LIABILITY COMPANY

ENTITY INFORMATION

ENTITY NAME: SNEAKER HEADS SPORTS BAR LLC

ENTITY ID: 23671282
ENTITY TYPE: Domestic LLC
EFFECTIVE DATE: 04/21/2024
CHARACTER OF BUSINESS: Accommodation and Food Services
MANAGEMENT STRUCTURE: Member-Managed
PERIOD OF DURATION: Perpetual
PROFESSIONAL SERVICES: N/A

STATUTORY AGENT INFORMATION

STATUTORY AGENT NAME: Carlos Howard

PHYSICAL ADDRESS: Attn: Sneaker Heads , 3002 N Arizona Ave , CHANDLER, AZ 85225

MAILING ADDRESS: Attn: Sneaker Heads , 3428 E Derringer Way, GILBERT, AZ 85297

PRINCIPAL ADDRESS

Att: Carlos Howard, 3002 N Arizona Ave , CHANDLER, AZ 85225

PRINCIPALS

Member: Akeem Prince - Carlos Howard, 3002 N Arizona Ave, CHANDLER, AZ, 85225, USA - Carhoward1973@yahoo.com - Date of Taking Office: 05/01/2024

Member: Carlos Howard - Carlos Howard, 3002 N Arizona Ave, CHANDLER, AZ, 85225, USA - Carhoward1973@yahoo.com - Date of Taking Office: 05/01/2024

ORGANIZERS

Akeem Prince: 3002 N Arizona Ave, Suite 18-19, AZ, 85225, USA,

Carlos Howard: 3428 E Derringer Way, 3428 E Derringer Way, GILBERT, AZ, 85297, USA, Carlos@Sneakerheadssportsbar.com

SIGNATURES

Organizer: Akeem Prince - 04/21/2024

Organizer: Carlos Howard - 04/21/2024

City Council Memorandum Development Services Memo No. DS24-057

Date:	November 04, 2024
To:	Mayor and Council
Thru:	Joshua Wright, City Manager Andy Bass, Deputy City Manager Kevin Snyder, Development Services Director Louis Kneip, Development Engineering Manager
From:	Jason Richardson, Civil Plan Examiner Administrator
Subject:	PLT24-0009 Viviendo Final Plat
Request:	Final Plat approval for PLT24-0009 Viviendo, Located at the Southeast corner of Ocotillo Road and McQueen Road
Location:	Southeast corner of Ocotillo Road and McQueen Road
Applicant:	K. Hovnanian At Viviendo, LLC

Proposed Motion:

Move City Council approve Final Plat PLT24-0009, Viviendo, as recommended by staff.

Background Data:

- Subject site is 15.405 Acres (Net)
- Zoned Planned Area Development District
- Creates 76 single family residential lots

Purpose:

The subject site received PAD zoning for residential use on May 23, 2024. The property is bounded by McQueen Road to the west, Alamosa Drive to the south, Ocotillo Road to the north and the Geneva Estates subdivision to the east.

The final plat will create 76 single family residential lots and seven (7) tracts. The final plat establishes the lots, tracts, easements, and rights of way to be conveyed or dedicated as part of developing the site in substantial conformance with the Council-approved zoning and PDP. The Final Plat is a necessary component of

the entitlement and permitting process for the proposed development.

Recommended Conditions of Approval

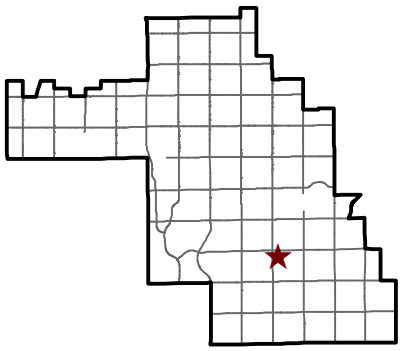
None

Attachments

Aerial Map
Vicinity Map
Final Plat

PLT24-0009 Viviendo (Final Plat)

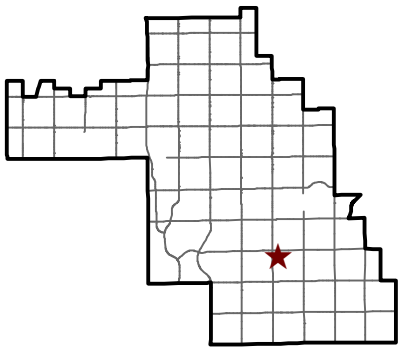
Project Details
Zoning Case-PLH23-0056 Viviendo
15.405 Acres (Net)
76 Unit Single Family Subdivision



City of Chandler Planning Division
chandleraz.gov/planning
For more information visit:
https://gis.chandleraz.gov/planning

PLT24-0009 Viviendo (Final Plat)

Project Details
Zoning Case-PLH23-0056 Viviendo
15.405 Acres (Net)
76 Unit Single Family Subdivision



City of Chandler Planning Division
chandleraz.gov/planning
For more information visit:
https://gis.chandleraz.gov/planning

VIVIENDO

A FINAL PLAT OF VIVIENDO SUBDIVISION

LOCATED IN A PORTION SECTION 23, TOWNSHIP 2 SOUTH, RANGE 5 EAST
OF THE GILA AND SALT RIVER MERIDIAN, MARICOPA COUNTY, ARIZONA

DEDICATION:

STATE OF ARIZONA)
)SS.
COUNTY OF MARICOPA)

KNOW ALL MEN BY THESE PRESENTS:

THAT K. HOVNANIAN AT VIVIENDO, L.L.C., AN ARIZONA LIMITED LIABILITY COMPANY, AS OWNER, HAS SUBDIVIDED UNDER THE NAME OF "VIVIENCO", AS SHOWN AND SUBDIVIDED HEREON AND HEREBY PUBLISHES THIS PLAT AS AND SETS FORTH THE LOCATION AND GIVES THE DIMENSIONS OF THE LOTS, STREET, TRACTS AND EASEMENTS CONSTITUTING SAME, AND THAT EACH LOT, TRACT AND STREET SHALL BE KNOWN BY THE NUMBER, LETTER OR NAME GIVEN EACH RESPECTIVELY ON SAID PLAT. K. HOVNANIAN AT VIVIENDO, L.L.C., AN ARIZONA LIMITED LIABILITY COMPANY, AS OWNER, HEREBY DEDICATES TO THE PUBLIC, FOR USE AS SUCH, THE STREETS AND EASEMENTS AS SHOWN ON SAID PLAT AND INCLUDED IN THE ABOVE DESCRIBED PREMISES.

ALL RIGHT OF WAY SHOWN IS DEDICATED TO THE CITY OF CHANDLER.

TRACTS A, B, C, D, E, F, & G ARE NOT DEDICATED TO THE PUBLIC, BUT ARE PLATTED AS COMMON PROPERTY FOR THE USE AND ENJOYMENT OF HONEYSUCKLE TRAIL HOMEOWNERS' ASSOCIATION AS MORE FULLY SET FORTH IN THE DECLARATION OF COVENANTS, CONDITIONS AND RESTRICTIONS.

EASEMENTS ARE DEDICATED TO THE CITY OF CHANDLER AS SHOWN ON THIS PLAT.

AN EMERGENCY VEHICULAR ACCESS EASEMENT ACROSS THE PROPERTY IS DEDICATED TO THE CITY OF CHANDLER.

DRAINAGE & FLOOD CONTROL EASEMENTS ARE DEDICATED ACROSS TRACTS A, B, D, F & G SHOWN HEREON, AND ARE DEDICATED TO THE CITY OF CHANDLER.

EASEMENTS FOR THE INSTALLATION, OPERATION AND FURNISHING OF MAINTENANCE OF PUBLIC UTILITY LINES AND FACILITIES, INCLUDING THE RIGHT OF INGRESS AND EGRESS FOR THE OPERATION AND MAINTENANCE OF SUCH UTILITY LINES AND FACILITIES, ARE DEDICATED AS SHOWN ON THIS PLAT. UTILITY PROVIDERS SHALL COMPLY WITH ANY APPLICABLE CODES, REGULATIONS, AND FRANCHISES OF THE CITY OF CHANDLER BEFORE ENTERING AN EASEMENT AND SHALL ASSUME FULL RESPONSIBILITY FOR THE CONSTRUCTION, OPERATION, MAINTENANCE AND REPAIR OF THEIR UTILITY LINES AND FACILITIES.

THE MAINTENANCE OF LANDSCAPING WITHIN THE PUBLIC RIGHT-OF-WAY TO BACK OF CURB SHALL BE THE RESPONSIBILITY OF THE HOMEOWNERS' ASSOCIATION OR THE ABUTTING PROPERTY OWNER.

IN WITNESS WHEREOF, THAT K. HOVNANIAN AT VIVIENDO, L.L.C., AN ARIZONA LIMITED LIABILITY COMPANY, AS OWNER, HAS HEREUNDER CAUSED ITS NAME TO BE SIGNED AND THE SAME TO BE ATTESTED BY THE SIGNATURE OF _____, ITS _____ THEREUNTO DULY AUTHORIZED THIS _____ DAY OF _____, 2024

_____
OWNER/AUTHORIZED SIGNER

ACKNOWLEDGEMENT:

STATE OF ARIZONA)
) SS.
COUNTY OF MARICOPA)

ON THIS _____ DAY OF _____, 20____ BEFORE ME, THE UNDERSIGNED, PERSONALY APPEARED , WHO ACKNOWLEDGED SELF TO BE THE PERSON WHOSE NAME IS SUBSCRIBED TO THE INSTRUMENT WITHIN, AND WHO EXECUTED THE FOREGOING INSTRUMENT FOR THE PURPOSES THEREIN CONTAINED.

IN WITNESS WHEREOF, I HAVE HEREUNTO SET MY HAND AND OFFICIAL SEAL.

_____
NOTARY PUBLIC DATE

MY COMMISSION EXPIRES: _____, 20____

HOMEOWNERS' ASSOCIATION RATIFICATION:

BY THIS RATIFICATION _____ DULY ELECTED _____
OF THE VIVIENDO COMMUNITY ASSOCIATION ACKNOWLEDGES THE RESPONSIBILITIES IDENTIFIED HEREON

_____
SIGNATURE DATE

ACKNOWLEDGEMENT:

STATE OF ARIZONA)
) SS.
COUNTY OF MARICOPA)

ON THIS _____ DAY OF _____, 20____ BEFORE ME, THE UNDERSIGNED, PERSONALY APPEARED , WHO ACKNOWLEDGED SELF TO BE THE PERSON WHOSE NAME IS SUBSCRIBED TO THE INSTRUMENT WITHIN, AND WHO EXECUTED THE FOREGOING INSTRUMENT FOR THE PURPOSES THEREIN CONTAINED.

IN WITNESS WHEREOF, I HAVE HEREUNTO SET MY HAND AND OFFICIAL SEAL.

_____
NOTARY PUBLIC DATE

MY COMMISSION EXPIRES: _____, 20____

NOTES:

1. CONSTRUCTION WITHIN UTILITY EASEMENTS SHALL BE LIMITED TO UTILITIES, FENCES AND DRIVEWAYS.

2. NO STRUCTURES OR VEGETATION OF ANY KIND THAT WOULD IMPEDE THE FLOW OF WATER THROUGH THE EASEMENTS MAY BE CONSTRUCTED, PLANTED OR ALLOWED TO GROW WITHIN DRAINAGE EASEMENTS.

3. THIS PROPERTY IS SUBJECT TO THE DECLARATION OF COVENANTS, CONDITIONS, AND RESTRICTIONS FOR HONEYSUCKLE TRAIL HOMEOWNERS' ASSOCIATION.

4. VISIBILITY EASEMENTS RESTRICTIONS: ANY OBJECT, WALL, STRUCTURE, MOUND OR LANDSCAPING (MATURE) OVER 24" IN HEIGHT IS NOT ALLOWED WITHIN THE EASEMENT EXCEPT TREES TRIMMED TO NOT LESS THAN 6' ABOVE GROUND. TREES SHALL BE SPACED NOT LESS THAN 8' APART.

5. IN EASEMENTS FOR THE EXCLUSIVE USE OF WATER, SANITARY SEWER OR BOTH, ONLY GROUND COVER AND BUSHES ARE ALLOWED TO BE PLANTED WITHIN THE EASEMENT AREA. NO TREES ARE ALLOWED.

6. ALL LOT MONUMENTS TO BE SET AT COMPLETION OF MASS GRADING.

7. ALL TRACTS THAT WILL NOT BE CONVEYED TO THE CITY OF CHANDLER AND ALL COMMON PROPERTY SHALL BE IMPROVED IN ACCORDANCE WITH PLANS APPROVED BY THE CITY OF CHANDLER AND SHALL BE CONVEYED BY WARRANTY (OR SPECIAL WARRANTY) DEED TO THE HOMEOWNERS' ASSOCIATION. THE HOMEOWNERS ASSOCIATION SHALL BE RESPONSIBLE FOR THE MAINTENANCE OF THE COMMON PROPERTY.

8. ALL TEMPORARY DRAINAGE EASEMENTS LOCATED WITHIN THE BOUNDARIES OF THIS PLAT, ARE HEREBY ABANDONED VIA THIS PLAT.

9. AREA NOTE: REFER TO SHEET 2 FOR ALL LOT, TRACT, R/W AND PLAT AREAS.

LEGEND:

- ⊠ SECTION MONUMENTATION - AS NOTED
- △ SUBDIVISION CORNER - TO BE SET AFTER MASS GRADING - SET PER MAG 120-B, UNLESS NOTED OTHERWISE
- SUBDIVISION BOUNDARY
- PARCEL/TRACT/RIGHT OF WAY LINE
- CENTERLINE
- EASEMENT LINE
- ADJACENT R/W LINE
- ADJACENT PARCEL LINE
- SECTION LINE
- EX. EASEMENT LINE
- PUE PUBLIC UTILITY EASEMENT
- ESMT. EASEMENT
- BK. & PG. BOOK & PAGE
- SWE SIDEWALK EASEMENT
- R/W RIGHT-OF-WAY
- VNAE VEHICULAR NON-ACCESS EASEMENT
- C1 CURVE NUMBER
- ● STREET MONUMENT - BRASS CAP PER MAG 120-1 TYPE B - UNLESS OTHERWISE NOTED. TO BE SET AT COMPLETION OF CONSTRUCTION
- M.C.R. MARICOPA COUNTY RECORDS
- MAG MARICOPA ASSOCIATION OF GOVERNMENTS
- A.P.N. ASSESSOR'S PARCEL NUMBER
- ESMT. EASEMENT
- WSE PUBLIC WATER/SEWER EASEMENT
- FBCFL FOUND BRASS CAP FLUSH
- SVE SIGHT VISIBILITY EASEMENT
- (1) SVE 30'x30' SIGHT VISIBILITY EASEMENT
- (2) 4'x4' WATER EASEMENT (PARALLEL) (UNLESS NOTED OTHERWISE)
- (3) 4'x8' WATER EASMENT (PARALLEL). (UNLESS NOTED OTHERWISE). IF EASEMENTS STRADDLES LOT LINE, EASEMENT IS CENTERED ON LOT LINE.

NOTE:

LOT AND TRACT MONUMENTATION SHALL BE SET AFTER MASS GRADING, AND SHALL BE SET VIA A 1/2" REBAR BY A REGISTERED LAND SURVEYOR.

LEGAL DESCRIPTION:

THAT PORTION OF THE NORTHWEST QUARTER OF THE NORTHWEST QUARTER OF SECTION 23, TOWNSHIP 2 SOUTH, RANGE 5 EAST OF THE GILA AND SALT RIVER BASE AND MERIDIAN, MARICOPA COUNTY, ARIZONA, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE NORTHWEST CORNER OF SAID SECTION 23,

THENCE SOUTH 00 DEGREES 47 MINUTES 15 SECONDS WEST, ALONG THE WEST LINE OF SAID SECTION 23, A DISTANCE OF 1270.75 FEET;

THEN LEAVING SAID WESTERLY LINE SOUTH 89 DESGREES 12 MINUTES 45 SECONDS EAST, A DISTANCE OF 65.00 FEET, TO THE POINT OF BEGINNING;

THENCE NORTH 00 DEGREES 47 MINUTES 15 SECONDS EAST, A DISTANCE OF 655.69 FEET TO A POINT ON A CURVE WHOSE CENTER BEARS SOUTH 89 DEGREES 13 MINUTES 08 SECONDS EAST A DISTANCE OF 1,735.00 FEET;

THENCE NORTHEASTERLY ALONG SAID CURVE A DISTANCE 116.59 FEET AND A CENTRAL ANGLE OF 03 DEGREES 51 MINUTES 01 SECONDS;

THENCE NORTH 04 DEGREES 37 MINUTES 53 SECONDS EAST, A DISTANCE OF 83.26 FEET;

THENCE SOUTH 85 DEGREES 24 MINUTES 24 SECONDS EAST, A DISTANCE OF 10.00 FEET;

THENCE NORTH 04 DEGREES 37 MINUTES 53 SECONDS EAST, A DISTANCE OF 182.60 FEET TO A POINT ON A CURVE WHOSE CENTER BEARS NORTH 85 DEGREES 22 MINUTES 07 SECONDS WEST A DISTANCE OF 1,875.00 FEET;

THENCE NORTHWESTERLY ALONG SAID CURVE A DISTANCE 124.23 FEET AND A CENTRAL ANGLE OF 03 DEGREES 47 MINUTES 47 SECONDS;

THENCE NORTH 45 DEGREES 01 MINUTES 01 SECONDS EAST, A DISTANCE OF 28.54 FEET;

THENCE NORTH 89 DEGREES 30 MINUTES 16 SECONDS EAST, A DISTANCE OF 179.92 FEET;

THENCE NORTH 00 DEGREES 35 MINUTES 29 SECONDS WEST, A DISTANCE OF 10.00 FEET;

THENCE NORTH 89 DEGREES 30 MINUTES 16 SECONDS EAST, A DISTANCE OF 530.67 FEET;

THENCE SOUTH 00 DEGREES 00 MINUTES 00 SECONDS EAST, A DISTANCE OF 655.06 FEET;

THENCE SOUTH 00 DEGREES 00 MINUTES 00 SECONDS WEST, A DISTANCE OF 455.04 FEET;

THENCE SOUTH 00 DEGREES 00 MINUTES 00 SECONDS EAST, A DISTANCE OF 561.82 FEET;

THENCE NORTH 89 DEGREES 57 MINUTES 36 SECONDS WEST, A DISTANCE OF 307.75 FEET;

THENCE NORTH 44 DEGREES 35 MINUTES 11 SECONDS WEST, A DISTANCE OF 28.10 FEET, TO THE POINT OF BEGINNING;

DEVELOPMENT SERVICE DIRECTOR CERTIFICATION:

THIS IS TO CERTIFY THAT IN MY OPINION ALL LOTS, PARCELS AND TRACTS SHOWN ON THIS PLAT CONFORMS TO GOOD LAND PLANNING POLICIES AND ARE SUITABLE FOR THE PURPOSE FOR WHICH THEY ARE PLATTED.

_____
DEVELOPMENT SERVICES DIRECTOR DATE

CITY ENGINEER CERTIFICATION:

THIS IS TO CERTIFY THAT ALL ENGINEERING CONDITIONS AND REQUIREMENTS OF THE CITY CODE HAVE BEEN COMPLIED WITH AND THAT THIS SUBDIVISION IS LOCATED WITHIN AN AREA DESIGNATED AS HAVING AN ASSURED WATER SUPPLY PURSUANT TO SECTION 45-576, ARIZONA REVISED STATUES.

_____
CITY ENGINEER DATE

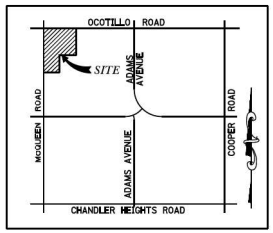
COUNCIL APPROVAL:

APPROVED BY THE COUNCIL OF THE CITY OF CHANDLER, ARIZONA THIS _____ DAY OF _____, 20____

_____
MAYOR DATE

ATTEST:

_____
CITY CLERK DATE



VICINITY MAP
N.T.S.

SUBDIVIDER:

K. HOVNANIAN AT VIVIENDO, L.L.C.
8800 E. RAINTREE DRIVE, SUITE 300
SCOTTSDALE, ARIZONA 85256

CONTACT: CHUCK CHISHOLM
EMAIL: CCHISHOLM@KHOV.COM
PHONE: (480) 824-4175

ENGINEER:

3 ENGINEERING
6370 E. THOMAS ROAD, SUITE 200
SCOTTSDALE, ARIZONA 85251

CONTACT: MATTHEW J. MANCINI, P.E.
PHONE: (602) 334-4387
EMAIL: MATT@3ENGINEERING.COM

SURVEYOR:

3 ENGINEERING
6370 E. THOMAS ROAD, SUITE 200
SCOTTSDALE, ARIZONA 85251

CONTACT: JIM LOFTIS, RLS
PHONE: (602) 334-4387

BENCHMARK:

BENCHMARK CITY OF CHANDLER BM CNCN 47B
SECTION 23, T2S, R5E, 3" CITY OF CHANDLER BRASS CAP IN CONCRETE, FLUSH, AT THE INTERSECTION OF LANTANA RANCH BLVD AND YELLOWSTONE PLACE; 1320' EAST OF MCQUEEN RD AND 280' SOUTH OF OCOTILLO RD. (NORTHING, 817577.585, EASTING, 729757.926)
ELEV.=1232.50 NAVD '88

BASIS OF BEARING:

THE BASIS OF BEARING IS THE WEST LINE OF SECTION 23: BEARS SOUTH 00 DEGREES 47 MINUTES 15 SECONDS WEST (MEASURED) AND BEARS SOUTH SOUTH 00 DEGREES 47 MINUTES 15 SECONDS WEST (RECORDED PER BK. 761 OF MAPS, PAGE 9 M.C.R.)

FEMA NOTE:

THE CURRENT FEMA FLOOD INSURANCE RATE MAP (FIRM) FOR THIS AREA, MAP NUMBER 04013C3102M, DATED NOVEMBER 4, 2015 DESIGNATES THE PROPERTY WITHIN FLOOD HAZARD ZONE X (DOTTED).

ZONE "X" (DOTTED) IS DEFINED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY AS: "AREAS OF 0.2% ANNUAL CHANCE FLOOD; AREAS OF 1% ANNUAL CHANCE FLOOD WITH AVERAGE DEPTHS OF LESS THAN 1 FOOT OR WITH DRAINAGE AREAS LESS THAN 1 SQUARE MILE; AND AREAS PROTECTED BY LEVEES FROM 1% ANNUAL CHANCE FLOOD."

INDEX OF SHEETS

	DESCRIPTION
PT01	COVER SHEET
PT02	KEY MAP & TABLES
PT03-04	FINAL PLAT SHEETS

SURVEY CERTIFICATION:

THIS IS TO CERTFY THAT THIS PLAT IS CORRECT AND ACCURATE AND THE MONUMENTS DESCRIBED HEREIN HAVE EITHER BEEN SET OR LOCATED AS DESCRIBED TO THE BEST OF MY KNOWLEDGE AND BELIEF.

JAMES A. LOFTIS
REGISTERED LAND SURVEYOR
NUMBER 26404
6370 E. THOMAS ROAD, SUITE 200
SCOTTSDALE, ARIZONA 85251

REGISTERED LAND SURVEYOR
CERTIFICATE NO.
26404
JAMES A.
LOFTIS
EXPIRES 12/31
ARIZONA U.S.A.

COUNTY RECORDER:

COVER SHEET
A FINAL PLAT
FOR
VIVIENDO

3 engineering
planning civil engineering surveying

3 ENGINEERING, LLC
6370 E. THOMAS ROAD
SUITE # 200
SCOTTSDALE, ARIZONA 85251
PHONE: (602) 334-4387
FAX: (602) 490-0330
WWW.3ENGINEERING.COM
DRAWN BY: MATTHEW M.

PROJECT NO. 5287
DATE: 9/9/24
SHEET NO. PT01
1 of 4

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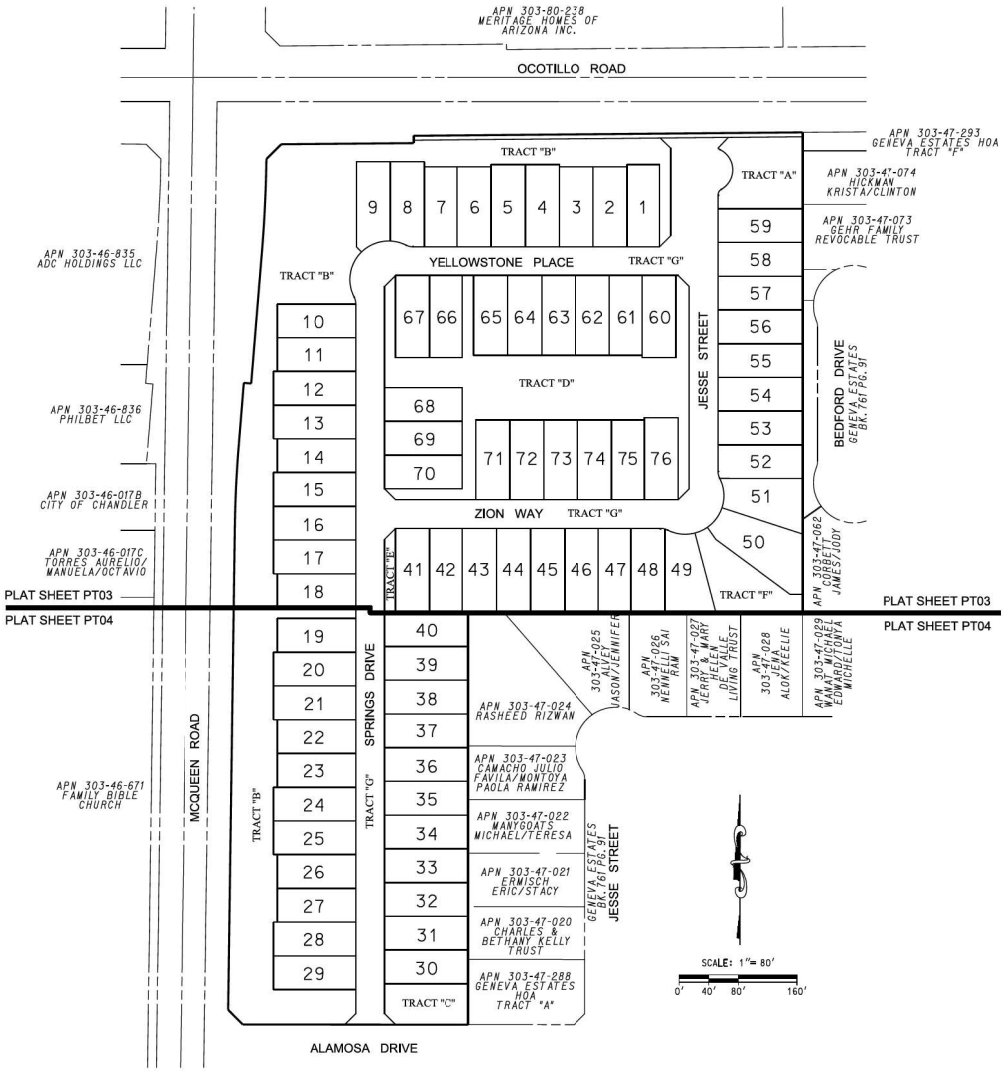
C.O.C. LOG NO. PLT24-0009



AREA TABLE	
LOT AREA	9.084 AC
TRACT AREA	6.248 AC
R/W AREA	0.073 AC
TOTAL AREA	15.405 AC

LOT TABLE					
LOT#	AREA (SF)	AREA (ACRES)	LOT#	AREA (SF)	AREA (ACRES)
1	5,152	0.12	39	5,290	0.12
2	5,014	0.12	40	5,290	0.12
3	5,014	0.12	41	5,290	0.12
4	5,152	0.12	42	5,290	0.12
5	5,152	0.12	43	5,290	0.12
6	5,014	0.12	44	5,290	0.12
7	5,014	0.12	45	5,290	0.12
8	5,202	0.12	46	5,290	0.12
9	5,219	0.12	47	5,290	0.12
10	4,922	0.11	48	5,288	0.12
11	4,922	0.11	49	5,992	0.14
12	5,152	0.12	50	8,266	0.19
13	5,152	0.12	51	6,294	0.14
14	4,922	0.11	52	5,264	0.12
15	5,152	0.12	53	5,290	0.12
16	5,152	0.12	54	5,290	0.12
17	5,152	0.12	55	5,290	0.12
18	4,922	0.11	56	5,290	0.12
19	4,922	0.11	57	5,290	0.12
20	5,152	0.12	58	5,290	0.12
21	5,152	0.12	59	5,290	0.12
22	4,922	0.11	60	5,152	0.12
23	4,922	0.11	61	5,014	0.12
24	5,152	0.12	62	5,014	0.12
25	5,152	0.12	63	5,014	0.12
26	4,922	0.11	64	5,014	0.12
27	4,922	0.11	65	5,014	0.12
28	5,152	0.12	66	5,152	0.12
29	5,152	0.12	67	5,152	0.12
30	5,290	0.12	68	4,922	0.11
31	5,290	0.12	69	4,922	0.11
32	5,290	0.12	70	4,922	0.11
33	5,290	0.12	71	5,014	0.12
34	5,290	0.12	72	5,014	0.12
35	5,290	0.12	73	5,014	0.12
36	5,290	0.12	74	5,014	0.12
37	5,290	0.12	75	5,014	0.12
38	5,290	0.12	76	5,152	0.12

TRACT AREA AND USAGE TABLE		
TRACT	AREA (ACRES)	DESCRIPTION OF USE
A	0.236 AC	OPEN SPACE, LANDSCAPE, DRAINAGE, PUE, SWE
B	2.365 AC	OPEN SPACE, LANDSCAPE, DRAINAGE, PUE, SWE
C	0.145 AC	OPEN SPACE, LANDSCAPE, DRAINAGE, PUE, SWE
D	0.949 AC	OPEN SPACE, LANDSCAPE, DRAINAGE, PUE, SWE
E	0.037 AC	OPEN SPACE, LANDSCAPE, PUE, SWE
F	0.191 AC	OPEN SPACE, LANDSCAPE, DRAINAGE, PUE, SWE
G	2.325 AC	PRIVATE ACCESS WAY OVER WHICH IS HEREBY DEDICATED TO THE PUBLIC AN EASEMENT FOR UTILITIES, DRAINAGE, REFUSE COLLECTION, EMERGENCY AND SERVICE TYPE VEHICLES, SEWER EASEMENT, WATER EASEMENT
TOTAL	6.248 AC	

CURVE TABLE					
NO.	RADIUS	ARC	DELTA	CHORD-BEARING	CHORD
1	1735.00	116.59	003°51'01'	N02°42'22.5"E	116.57
2	1875.00	124.23	003°47'47'	N02°43'59.5"E	124.21
3	1800.00	120.57	003°50'16'	N02°42'45.0"E	120.55
4	1800.00	119.28	003°47'49'	N02°43'58.5"E	119.26
5	21.00	9.89	026°58'52'	N76°30'34.0"W	9.80
6	52.50	131.92	143°57'44'	S45°00'00.0"W	99.85
7	21.00	9.89	026°58'52'	S13°29'26.0"E	9.80
8	21.00	9.89	026°58'52'	S76°30'34.0"E	9.80
9	52.50	131.92	143°57'44'	N45°00'00.0"E	99.85
10	21.00	9.89	026°58'52'	N13°29'26.0"W	9.80
11	9.42	9.86	060°00'00'	N30°00'00.0"E	9.42
12	30.58	66.21	124°03'20'	N02°01'40.0"W	54.01
13	9.42	3.51	021°19'47'	N53°23'26.5"W	3.49

LEGEND:

- SECTION MONUMENTATION - AS NOTED
- SUBDIVISION CORNER - TO BE SET AFTER MASS GRADING - SET PER MAG 120-B, UNLESS NOTED OTHERWISE
- SUBDIVISION BOUNDARY
- PARCEL/TRACT/RIGHT OF WAY LINE
- CENTERLINE
- EASEMENT LINE
- ADJACENT R/W LINE
- ADJACENT PARCEL LINE
- SECTION LINE
- EX. EASEMENT LINE

PUE	PUBLIC UTILITY EASEMENT
ESMT.	EASEMENT
BK. & PG.	BOOK & PAGE
SWE	SIDEWALK EASEMENT
R/W	RIGHT-OF-WAY
VNAE	VEHICULAR NON-ACCESS EASEMENT
C1	CURVE NUMBER
●	STREET MONUMENT - BRASS CAP PER MAG 120-1 TYPE B - UNLESS OTHERWISE NOTED. TO BE SET AT COMPLETION OF CONSTRUCTION
M.C.R.	MARICOPA COUNTY RECORDS
MAG	MARICOPA ASSOCIATION OF GOVERNMENTS
A.P.N.	ASSESSOR'S PARCEL NUMBER
ESMT.	EASEMENT
WSE	PUBLIC WATER/SEWER EASEMENT
SVE	SIGHT VISIBILITY EASEMENT
(1) SVE	30'x30' SIGHT VISIBILITY EASEMENT
(2)	4'x4' WATER EASEMENT(PARALLEL) (UNLESS NOTED OTHERWISE)
(3)	4'x8' WATER EASMENT (PARALLEL). (UNLESS NOTED OTHERWISE). IF EASEMENTS STRADDLES LOT LINE, EASEMENT IS CENTERED ON LOT LINE.

NOTE:

LOT AND TRACT MONUMENTATION SHALL BE SET AFTER MASS GRADING, AND SHALL BE SET VIA A 1/2" REBAR BY A REGISTERED LAND SURVEYOR.

COUNTY RECORDER:

REGISTERED LAND SURVEYOR
CERTIFICATE NO.
26404
JAMES A. COFFIS
9/9/24
ARIZONA U.S.A.

KEY MAP & TABLES
FINAL PLAT
FOR
VIVIENDO

3 engineering
planning civil engineering surveying

3 ENGINEERING, LLC
4070 E. THOMAS ROAD
SUITE # 200
SCOTTSDALE, ARIZONA 85251
PHONE: (602) 334-4387
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WWW.3ENGINEERING.COM
DRAWN BY: MATTHEW W.

PROJECT NO. 5287
DATE: 9/9/24
SHEET NO. PT02
2 of 4

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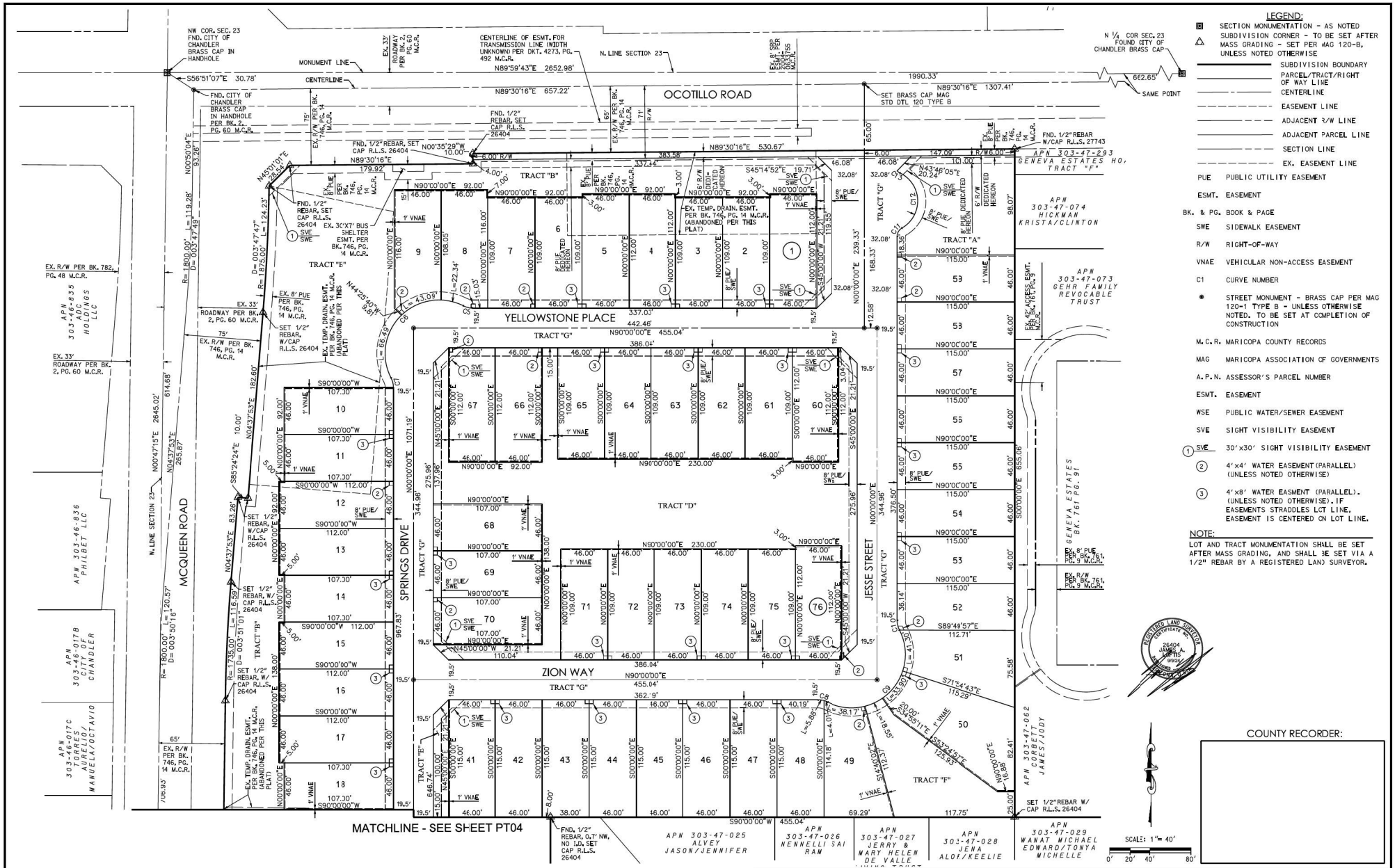
C.O.C. LOG NO. PLT24-0009



LEGEND:

- SECTION MONUMENTATION - AS NOTED
- SUBDIVISION CORNER - TO BE SET AFTER MASS GRADING - SET PER MAG 120-B, UNLESS NOTED OTHERWISE
- SUBDIVISION BOUNDARY
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PUE	PUBLIC UTILITY EASEMENT
ESMT.	EASEMENT
BK. & PG.	BOOK & PAGE
SWE	SIDEWALK EASEMENT
R/W	RIGHT-OF-WAY
VNAE	VEHICULAR NON-ACCESS EASEMENT
C1	CURVE NUMBER
●	STREET MONUMENT - BRASS CAP PER MAG 120-1 TYPE B - UNLESS OTHERWISE NOTED. TO BE SET AT COMPLETION OF CONSTRUCTION
M.C.R.	MARICOPA COUNTY RECORDS
MAG	MARICOPA ASSOCIATION OF GOVERNMENTS
A.P.N.	ASSESSOR'S PARCEL NUMBER
ESMT.	EASEMENT
WSE	PUBLIC WATER/SEWER EASEMENT
SVE	SIGHT VISIBILITY EASEMENT
(1) SVE	30'x30' SIGHT VISIBILITY EASEMENT
(2)	4'x4' WATER EASEMENT (PARALLEL) (UNLESS NOTED OTHERWISE)
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NOTE:
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COUNTY RECORDER:

PLAT SHEET
A FINAL PLAT FOR VIVIENDO

3 engineering
planning civil engineering surveying

3 ENGINEERING, LLC
4070 E. McDOWELL ROAD
SUITE # 250
SCOTTSDALE, ARIZONA 85251
PHONE: (602) 334-4387
FAX: (602) 490-0330
WWW.3ENGINEERING.COM

DRAWN BY: MATTHEW W.

PROJECT NO. 5287
DATE: 9/9/24
SHEET NO. PT03
3 of 4

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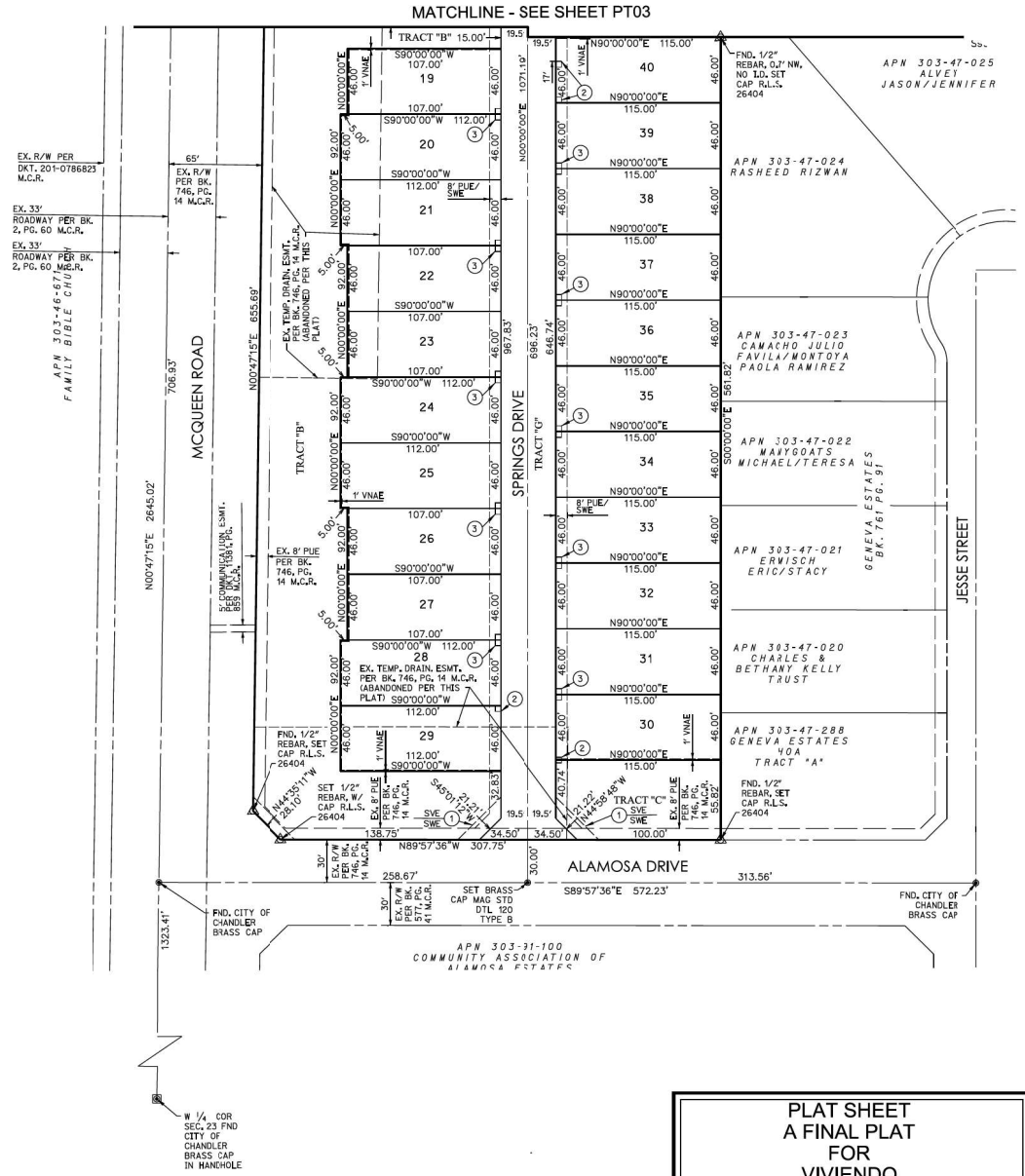

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- SECTION MONUMENTATION - AS NOTED
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- SECTION LINE
- EX. EASEMENT LINE

PUE	PUBLIC UTILITY EASEMENT
ESMT.	EASEMENT
BK. & PG.	BOOK & PAGE
SWE	SIDEWALK EASEMENT
R/W	RIGHT-OF-WAY
VNAE	VEHICULAR NON-ACCESS EASEMENT
C1	CURVE NUMBER
●	STREET MONUMENT - BRASS CAP PER MAG 120-1 TYPE B - UNLESS OTHERWISE NOTED. TO BE SET AT COMPLETION OF CONSTRUCTION
M.C.R.	MARICOPA COUNTY RECORDS
MAG	MARICOPA ASSOCIATION OF GOVERNMENTS
A.P.N.	ASSESSOR'S PARCEL NUMBER
ESMT.	EASEMENT
WSE	PUBLIC WATER/SEWER EASEMENT
SVE	SIGHT VISIBILITY EASEMENT
(1) SVE	30'x30' SIGHT VISIBILITY EASEMENT
(2)	4'x4' WATER EASEMENT(PARALLEL) (UNLESS NOTED OTHERWISE)
(3)	4'x8' WATER EASMENT (PARALLEL). (UNLESS NOTED OTHERWISE). IF EASEMENTS STRADDLES LOT LINE, EASEMENT IS CENTERED ON LOT LINE.

NOTE:

LOT AND TRACT MONUMENTATION SHALL BE SET AFTER MASS GRADING, AND SHALL BE SET VIA A 1/2" REBAR BY A REGISTERED LAND SURVEYOR.

SCALE: 1"= 40'

0' 20' 40' 80'

REGISTERED LAND SURVEYOR CERTIFICATE NO. 26404 JAMES A. LOFTIS 9/9/24 ARIZONA U.S.A.

COUNTY RECORDER:

PLAT SHEET
A FINAL PLAT
FOR
VIVIENDO

3 engineering
planning civil engineering surveying

3 ENGINEERING, LLC
4070 E. McDOWELL ROAD SUITE # 200
SCOTTSDALE, ARIZONA 85251
PHONE: (602) 334-4387
FAX: (602) 490-0330
WWW.3ENGINEERING.COM

DRAWN BY: MATTHEW W.

PROJECT NO. 5287

DATE: 9/9/24

SHEET NO. PT04 4 of 4

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C.O.C. LOG NO. PLT24-0009

City Council Memorandum Facilities and Fleet Memo No. N/A

Date: November 04, 2024
To: Mayor and Council
Thru: Joshua H. Wright, City Manager
Dawn Lang, Deputy City Manager - CFO
From: Mike Hollingsworth, Facility & Fleet Services Senior Manager
Subject: Purchase of Doors, Locking Systems, Door Hardware and Operable Walls from C & I Show Hardware & Security Systems, Inc.

Proposed Motion:

Move City Council approve the purchase of doors, locking systems, door hardware and operable walls from C & I Show Hardware & Security Systems, Inc., utilizing the City of Peoria Contract No. ACON23822, in an amount not to exceed $200,000.

Background/Discussion:

The city maintains numerous doors with access control. This agreement will allow C & I Show Hardware & Security Systems, Inc., to provide maintenance, repairs, installation and hardware for various access-controlled doors including, but not limited to, access card readers, door position switches, proximity sensors, electrified lock sets, door control pads, and operators, as needed in city facilities.

Evaluation:

The City of Peoria competitively solicited and awarded a contract for the purchase of doors, locking systems, door hardware and operable walls. The city has an agreement with the City of Peoria that permits the cooperative use of its contracts. The term of the City of Peoria contract is valid through June 30, 2025.

Fiscal Impact

Account No.	Fund Name	Program Name	Dollar Amount	CIP Funded Y/N
401.3210.6210.6BF628	General Govt Capital Projects Fund	Existing City Buildings Reno/Repair	$200,000	Y

City Council Memorandum **Facilities and Fleet** **Memo No. N/A**

Date: November 04, 2024
To: Mayor and Council
Thru: Joshua H. Wright, City Manager
Dawn Lang, Deputy City Manager - CFO
From: Mike Hollingsworth, Facility & Fleet Services Senior Manager
Subject: Purchase of Painting and Related Services

Proposed Motion:

Move City Council approve the purchase of painting and related services, from Ghaster Painting & Coatings, Inc., utilizing the 1GPA Contract No. 23-11PV-04, in an amount not to exceed $500,000.

Background/Discussion:

The city uses paint and drywall services to maintain its buildings. This agreement provides the city with a contractor that will be on call to accommodate various painting, drywall, and texturing services, as needed. By using this agreement, the city will eliminate the need to acquire written quotes each time a service is required. The Buildings and Facilities Division and the Public Works and Utilities Department will utilize the services outlined in this agreement.

Evaluation:

1GPA competitively solicited and awarded a contract for painting and related services. The City of Chandler has an agreement with 1GPA that allows for the cooperative use of its contracts. The term of the 1GPA contract is valid through February 8, 2025.

Fiscal Impact

Account No.	Fund Name	Program Name	Dollar Amount	CIP Funded Y/N

615.3970.5327	Wastewater Operating	N/A	$75,000	N
616.3930.5410	WW Indust Process Treatment	N/A	$25,000	N
615.3900.5219	Wastewater Operating	N/A	$25,000	N
101.4530.5219	General Fund	N/A	$50,000	N
401.3210.6210.6BF628	General Govt Capital Projects	Existing City Bldg Renov/Repairs	$200,000	Y
615.3960.5219	Wastewater Operating	N/A	$100,000	N
615.3940.5309	Wastewater Operating	N/A	$25,000	N

City Council Memorandum Fire Memo No.

Date: November 04, 2024
To: Mayor and Council
Thru: Joshua H. Wright, City Manager
Tadd Wille, Assistant City Manager
Thomas Dwiggins, Fire Chief
From: Haley Bartosik, Senior Management Analyst
Subject: Introduction and Tentative Adoption of Ordinance No. 5111 Amending the Code of the City of Chandler, Chapter 28, Fire Prevention, by Repealing the International Fire Code, 2021 Edition, and by Adopting the 2024 International Fire Code and by Amending the Exception Provisions to the Code; Providing for the Repeal of Conflicting Ordinances; and Providing for Severability and Establishing an Effective Date

---

Proposed Motion:

Move that City Council introduce and tentatively adopt Ordinance No. 5111; Declaring the documents known as the “International Fire Code, 2024 Edition” and “2024 Amendments to Chapter 28, Fire Prevention,” as Public Records; Amending the Code of the City of Chandler, Chapter 28, Fire Prevention, by Repealing the International Fire Code, 2021 Edition, by Adopting the 2024 International Fire Code, and by Amending and Clarifying the Exception Provisions to the Code; Providing for Repeal of Conflicting Ordinances; Providing for Penalties; Providing for Severability; and Establishing an Effective Date.

Background:

The City of Chandler adopts model codes, with some local amendments, to govern construction, remodeling, renovation and maintenance of structures within the City. These codes provide a base level of safety for the occupants of buildings constructed in the City of Chandler.

The model codes are developed and published by the International Code Council (ICC) and the National Fire Protection Association (NFPA) and are adopted by most jurisdictions in the United States of America and internationally. These

codes are developed in a public process that includes the participation of many technical experts, regulators, and affected organizations. The codes are updated continuously through committees and public hearings to keep abreast of research on building performance and advances in technology. New editions are published on a three-year cycle and the City previously adopted its current versions of the ICC and NFPA codes in 2021.

The attached change summary outlines the proposed amendments to the 2024 International Fire Code Chapter 28, Fire Prevention, for consideration and adoption by City Council.

Attachments

Ordinance No. 5111

Reason for Changes

ORDINANCE NO. 5111

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF CHANDLER, ARIZONA, DECLARING THE DOCUMENTS KNOWN AS THE "INTERNATIONAL FIRE CODE, 2024 EDITION," AND "2024 AMENDMENTS TO CHAPTER 28, FIRE PREVENTION," AS PUBLIC RECORDS; AMENDING THE CODE OF THE CITY OF CHANDLER, CHAPTER 28, FIRE PREVENTION, BY REPEALING THE INTERNATIONAL FIRE CODE, 2021 EDITION, BY ADOPTING THE 2024 INTERNATIONAL FIRE CODE, AND BY AMENDING AND CLARIFYING THE EXCEPTION PROVISIONS TO THE CODE; PROVIDING FOR REPEAL OF CONFLICTING ORDINANCES; PROVIDING FOR PENALTIES; PROVIDING FOR SEVERABILITY; AND ESTABLISHING AN EFFECTIVE DATE.

WHEREAS, Chapter 28 of the Code of the City of Chandler provides that the City of Chandler, Arizona has adopted the 2021 edition of the International Fire Code, subject to specified amendments thereto as set forth in Chapter 28 of the Code of the City of Chandler; and

WHEREAS, the City of Chandler Fire Department believes it to be prudent to repeal the 2021 edition and adopt the 2024 edition of the International Fire Code and to clarify and amend the exception provisions of the International Fire Code that are presently set forth in Chapter 28 of the Code of the City of Chandler and to otherwise update the provisions set forth in Chapter 28.

NOW, THEREFORE, BE IT ORDAINED by the City Council of the City of Chandler, Arizona as follows:

Section 1. That certain document known as the "International Fire Code, 2024 edition," one (1) paper copy and one (1) electronic copy, which shall remain on file in the office of the City Clerk, and is hereby adopted by reference, with the additions, insertions, deletions, and changes set forth herein and is hereby declared to be a public record.

Section 2. That certain document known as the "2024 Amendments to Chapter 28, Fire Prevention," one (1) paper copy and (1) electronic copy, which shall remain on file in the office of the City Clerk, is hereby adopted by reference with the additions, insertions, deletions, and changes set forth herein and is hereby declared to be a public record.

Section 3. That Chapter 28, Fire Prevention, is hereby amended by repealing the 2021 International Fire Code, and by adopting the 2024 International Fire Code, and by adopting the "2024 Amendments to Chapter 28, Fire Prevention."

Section 4. Providing for Repeal of Conflicting Ordinances. All ordinances or parts of ordinances in conflict with the provisions of this ordinance, or any parts hereof, are hereby repealed.

Section 5. Providing for Penalties. A violation of this ordinance shall be a Class 1 misdemeanor subject to the enforcement and penalty provisions set forth in Sections 1-8, 28-24, and 28-26 of the Chandler City Code.

Section 6. Providing for Severability. If any section, subsection, sentence, clause, phrase, or portion of this ordinance is for any reason held to be invalid or unconstitutional by the decision of any court of competent jurisdiction, such decision shall not affect the validity of the remaining portions thereof.

Section 7. Providing for an Effective Date. That the 2024 International Fire Code, and the 2024 Amendments to Chapter 28, Fire Prevention of the Code of the City of Chandler as adopted herein are effective July 1, 2025.

INTRODUCED AND TENTATIVELY APPROVED by the City Council of the City of Chandler, Arizona, this ____ day of _____, 2024.

ATTEST:

_____ _____
CITY CLERK MAYOR

PASSED AND ADOPTED by the City Council of the City of Chandler, Arizona, this _____ day of _____, 2024.

ATTEST:

_____ _____
CITY CLERK MAYOR

CERTIFICATION

I HEREBY CERTIFY that the above and foregoing Ordinance No. 5111 was duly passed and adopted by the City Council of the City of Chandler, Arizona, at a regular meeting held on the ____ day of _____, 2024, and that a quorum was present thereat.

_____
CITY CLERK

APPROVED AS TO FORM:

_____
CITY ATTORNEY

Published in the Arizona Republic on:

2024 Amendments to Chapter 28, Fire Prevention
{Public Record for Ordinance No. 5111}

The Chandler City Code Chapter 28, Fire Prevention, is hereby amended to read as follows (additions in ALL CAPS, deletions in ~~strikeout~~):

Chapter 28 – FIRE PREVENTION

28-1. - International Fire Code adopted.

The City Council of Chandler adopts by reference the International Fire Code, ~~2021~~ 2024 edition and incorporates it herein as if fully set out in this Chapter 28 with the additions, insertions, deletions, and changes set forth herein. The term "code" without further description when used in the portions of the International Fire Code which are not amended and in this Chapter 28 shall mean the ~~2021~~ 2024 edition of the International Fire Code as amended herein by the additions, insertions, deletions, and changes set forth and adopted herein. Whenever the code refers to other publications of the International Code Council, including, but not limited to, the International Building Code, which have been adopted by the City, such references shall be to the version of the publications as amended by the City.

28-2. – Jurisdiction.

Section 101.1 of the code is hereby deleted in its entirety and replaced by a new Section 101.1 and Section 101.1.1 to read as follows:

> 101.1 *Title*. These regulations shall be known as the City of Chandler Fire Code, hereinafter referred as this or the "code." The terms "City" and "City of Chandler" are used interchangeably in this code.
>
> 101.1.1 *Assuming jurisdiction of fire prevention standards*. Pursuant to Arizona Revised Statutes (A.R.S.) § ~~37.1383~~ 37-1383(A)(5), the City of Chandler, having in effect a nationally recognized Fire Code, does hereby assume jurisdiction from the State Fire Safety Committee for prescribing and enforcing fire prevention standards throughout the City of Chandler. Such standards shall not supersede or exempt state or county owned and operated buildings and public schools from the State Fire Safety Committee's established fire prevention standards.

28-3. – Appointment of fire code official.

Section 103.2 of the code is hereby deleted in its entirety and replaced with a new Section 103.2 to read as follows:

> 103.2 *Appointment*. The City Fire Chief has designated and appointed the City Fire Marshal to act as the fire code official.

28-4. – Permits required.

Section 105.1.1 of the code is hereby deleted in its entirety and replaced with a new Section 105.1.1 to read as follows:

> 105.1.1 *Permits required*. Permits required by this code shall be obtained from the fire code official prior to engaging in any of the activities, operations, practices, or functions requiring a permit. Permit fees, if any, shall be adopted by the City by resolution and shall be paid prior to issuance of the permit.

28-5. – Hazardous materials.

Section 105.5.22 of the code is hereby deleted in its entirety and replaced with a new Section 105.5.22 to read as follows:

> 105.5.22 *Hazardous materials*. An operational permit is required to store, transport on site, dispense, use, or handle hazardous materials more than the amounts listed in Table 105.5.22. The Hazardous Materials Management Plan (HMMP) and Hazardous Materials Inventory Statement (HMIS) to be submitted in conjunction with the operating permit shall be updated and submitted to the fire code official for approval annually.

28-6. – Open burning.

Section ~~105.5.34~~ 105.5.36 of the code is hereby deleted in its entirety and replaced with a new Section ~~105.5.34~~ 105.5.36 to read as follows:

> ~~105.5.34~~ 105.5.36 *Open burning*. An operational permit is required for the kindling or maintenance of an open fire or a fire on any public street, alley, road or other public or private ground. Instructions and stipulations of the permit shall be adhered to.

Exception: Recreational fires.

28-7. – Fire protection equipment.

Section 105.5 of the code is hereby further amended by adding a new section ~~105.5.53~~ 105.5.58 entitled "Fire protection equipment" to read as follows:

> ~~105.5.53~~. 105.5.58 *Fire protection equipment*. An operational permit is required for any person, corporation, partnership, or other entity engaged in the primary business of selling, servicing, or installing portable fire extinguishers, fire alarms and fire detection equipment or fixed fire-extinguishing equipment within the City of Chandler.

28-8 – Fire re-inspection fee and Council action.

Section ~~107~~ 108 of the code is hereby amended by adding a new Section ~~107.1~~ 108.7 entitled “Fire re-inspection fee” and a new Section ~~107.8~~ 108.8 entitled “Council action” to read as follows:

> ~~107.7~~ 108.7 *Fire re-inspection fee*. Facilities that are re-inspected to ensure that a code violation has been properly addressed may be assessed a re-inspection fee. A re-inspection fee may be assessed for the second ~~re-inspection~~ AND ONGOING RE-INSPECTIONS for the same violation.
>
> ~~107.8~~ 108.8 *Council action*. All fees identified in this code shall be adopted by the City Council by resolution.

28-9. – Self-inspection.

Section ~~108~~ 109 of the code is hereby amended by adding a new Section ~~108.5~~ 109.5 entitled "Self-inspection" to read as follows:

> ~~108.5~~ 109.5 *Self-inspection*. The fire code official is hereby authorized to establish procedures regarding inspections of business, commercial and industrial facilities within the City. Any owner or occupant of a business, commercial or industrial facility who fails to perform a self-inspection as requested by the fire code official in accordance with the procedures established may be charged the cost for the fire code official, or his/her designee, to perform such inspection.

28-10. – Means of appeal~~s~~.

Section~~s 111.1 and 111.3~~ 112.1 of the Code ~~are~~ IS hereby deleted in ~~their~~ ITS entirety. Section ~~111.1~~ 112.1 is replaced with a new Section ~~111.1~~ 112.1 entitled "Appeals to Chandler Board of Appeals" to read as follows:

> ~~111.1~~ 112.1 *Appeals to Chandler Board of Appeals*. The Chandler Board of Appeals shall hear and decide appeals of orders, decisions, or determination made by the fire code official relative to the application and interpretation of this code.

28-11. – Violations.

Section ~~112.1~~ 113.1 of the code, shall be deleted in its entirety and replaced with a new Section ~~112.1~~ 113.1 to read as follows:

> ~~112.1~~ 113.1 *Unlawful acts*. It shall be unlawful for a person, firm, or corporation to erect, construct, alter, repair, remove, demolish, or utilize a building, occupancy, premises, or system regulated by this code, or cause same to be done, in conflict with or in violation of any of the provisions of this code. Each day that a violation continues after notice of violation, in accordance with Section ~~112.3~~ 113.3**,** has been served shall be deemed a separate offense.

28-12. – Civil and criminal penalties.

Sections ~~112.4~~ 113.4 and ~~112.4.1~~ 113.4.1 of the code are hereby deleted in their entirety and the penalties and civil remedies are set forth below in Sections ~~28-24~~ 28-26 ~~and~~ THROUGH ~~28-27~~ 28-28 of this Chapter.

28-13. – Definitions.

Section 202 General definitions of the code is hereby amended to read as follows:

> *Group I, Institutional*. Six to 10 persons receiving custodial care. A facility housing not fewer than six (6) and not more than ten (10) persons receiving custodial care shall be classified as Group R-4.
>
> *Residential Group R-4*. Residential Group R-4 shall include buildings, structures, or portions ~~thereof~~ THEREOF for more than five (5) but not more than ten (10) persons, excluding staff, who reside on a 24-hour basis in a supervised residential environment and receive custodial care.

28-14. – Expense recovery.

Section 304 of the code is hereby amended by adding A new ~~Sections~~ SECTION 304.4 entitled "Expense recovery" to read as follows:

> 304.4 *Expense recovery*. Any owner, operator, occupant, or other person responsible for property, who fails to correct a violation of Section 304 within fifteen (15) days of the fire code official issuing an order or notice which is served pursuant to the provisions of Section ~~112.3~~ 113.3, shall be charged for any costs incurred by the City of Chandler in responding to any fire at the subject property while the violation continues to exist. The provisions of this Section are for the purpose of reimbursing the City of Chandler's costs and shall be in addition to any penalties that may apply. The fire code official shall keep or cause to be kept an itemized account of the expenses involved in responding to each fire, including personnel, equipment, and administrative costs, as well as the costs incurred by other fire departments responding to calls within the City of Chandler, due to City of Chandler fire crews being unavailable for service because of said fire. The collection and appeal provisions set forth in Section ~~108~~ 112 and Chapter 26 of the Code of the City of Chandler, shall apply to this Section 304.4.

28-15. – Dimensions.

Section 503.2.1 of the code is hereby amended to read as follows:

503.2.1 *Dimensions*. Fire apparatus access roads shall have an unobstructed width of not less than 20 feet (6096 mm), exclusive of shoulders, except for approved security gates in accordance with Section 503.6, and an unobstructed vertical clearance of not less than 15 feet (4572 mm).

28-16. – Premises identification.

Section 505.1 of the code is hereby deleted in its entirety and replaced with a new Section 505.1 to read as follows:

505.1 *Address numbers*. Approved numbers or addresses shall be placed on all new or existing buildings within the City in accordance with criteria specified in the latest version of the Street Naming and Addressing Procedures adopted by the City of Chandler. Properties annexed into the City shall display only a city-assigned premises identification number. Said number shall be permanently affixed to all premises within thirty (30) days of notification of the City of the new address. No building address shall be changed except in the manner prescribed in the City of Chandler Street Naming and Addressing Procedures.

28-17. – Emergency Responder ~~radio communication~~ COMMUNICATIONS ENHANCEMENT SYSTEMS (ERCES).

Section 510.1 and 510.4.1.2 of the code are hereby amended to read as follows:

510.1 *Emergency responder radio communications*. Buildings shall have approved radio coverage for emergency responders within the building based upon the existing coverage levels of the public safety communication systems of the jurisdiction at the exterior of the building. The requirements of this Section 510.1 shall apply to all buildings and structures located in the City that satisfy any of the following characteristics:

1. Buildings or structures that are more than three (3) stories above ground level;

2. Buildings or structures totaling forty-five thousand (45,000) square feet or more on any single floor;

3. Buildings or structures that include a basement or other subterranean space totaling two hundred fifty (250) square feet or more; or

4. Buildings or structures that the fire code official has determined to have been constructed in a manner or with materials likely to limit the ability of emergency response personnel to effectively use radio communication while within that building or structure.

~~Exception~~ EXCEPTIONS. The requirements set forth in this Section 510.1 shall not apply to the following:

1. U occupancies and R3 occupancies that are single family detached residences;

2. Buildings and structures utilizing only wood framing; and

3. Buildings and structures that are less than thirty-five (35) feet above ground level and do not utilize any metal framing or metal roofing.

510.4.1.2 *Minimum signal strength out of the building*. In keeping with applicable engineering practice specific to the architecture of the regional digital radio communications network, standardized Delivered Audio Quality (DAQ) measurements are specified to verify acceptable

levels of signal strength exiting the building. Minimum signal strength out of the building must meet the requirements of the RWC (Regional Wireless Cooperative) working group.

28-18. – Fire extinguishing system installations.

Section 903 of the code is hereby amended by deleting Sections 903.2 through 903.2.10 in their entirety, reserving Section Number 903.2.10 and adding new Sections 903.2 through 903.2.9 to read as follows:

903.2 *Where required*. Subject to the exceptions set forth herein, approved automatic sprinkler systems shall be provided in the locations within the City described in this Section. Installation of fire sprinkler systems shall be performed by an Arizona licensed fire protection contractor.

Exceptions:

1) An automatic sprinkler system is not required for spaces or areas in telecommunications buildings used exclusively for telecommunications equipment, associated electrical power distribution equipment, batteries and standby engines, provided those spaces or areas are equipped throughout with an automatic smoke detection system in accordance with Section 907.2 and are separated from the remainder of the building by not less than 1-hour fire barriers constructed in accordance with Section 707, Fire Barriers, of the International Building Code or not less than 2-hour horizontal assemblies constructed in accordance with Section 711, Floor and Roof Assemblies, of the International Building Code, or both.

2) An automatic sprinkler system is not required for buildings or structures which were constructed and in use prior to September 11, 1996, and for which a change in use or occupancy of any structure has not occurred as set forth in Section 102.3. Any change in use or occupancy of these buildings shall refer to the ~~2021~~ 2024 International Existing Building Code to determine if fire sprinklers will be required with the change.

3) In addition to the general authority granted to the fire code official pursuant to Section 104.9, the fire code official shall have discretion to exempt other facilities from automatic sprinkler system requirements where the size, intended use, and extent of use of the facility does not warrant the installation of fire sprinklers and alternate methods to secure public safety are provided. Such other facilities may include, but are not limited to:

(1) Enclosed structures which are less than three thousand (3,000) square feet in size, at least fifty (50) percent open on the sides and used to protect humans, animals, or property from the sun or elements.

(2) Structures which are less than three hundred (300) square feet in size used to monitor access to a larger facility, site, or area.

(3) Structures temporarily used for a period not to exceed two (2) years for onsite storage or maintenance purposes provided that the structure is not used for Group A, E, F, H or I occupancies.

903.2.1 *Group A*. An automatic sprinkler system shall be provided throughout all buildings and all portions of all Group A occupancies.

903.2.2 *Group B*. An automatic sprinkler system shall be provided throughout all buildings and all portions of all Group B occupancies.

903.2.3 *Group E*. An automatic sprinkler system shall be provided throughout all buildings and all portions of all Group E occupancies.

903.2.4 *Group F*. An automatic sprinkler system shall be provided throughout all buildings and all portions of all Group F occupancies.

903.2.5 *Group H*. An automatic sprinkler system shall be provided throughout all buildings and all portions of all Group H occupancies.

903.2.6 *Group I*. An automatic sprinkler system shall be provided throughout all buildings and all portions of all Group I occupancies.

903.2.7 *Group M*. An automatic sprinkler system shall be provided throughout all buildings and all portions of all Group M occupancies.

903.2.8 *Group R*. Subject to the exceptions set forth herein, an automatic sprinkler system shall be provided throughout all buildings and all portions of all Group R occupancies.

Exceptions:

1. An automatic sprinkler system is not required for Group R-3, detached one- or two-family dwellings.

903.2.9. *Group S*. An automatic sprinkler system shall be provided throughout all buildings and all portions of all Group S occupancies.

Exception: S-2, one story, grade level, open parking structures that are entirely open, except for structural columns, on all four sides.

28-19. – Specific building area hazards.

Section 903.2.11 of the code is hereby amended to read as follows:

Section 903.2.11 In all occupancies, including all Group U occupancies larger than three thousand (3,000) square feet, an automatic sprinkler system shall be installed for building design or hazards in the locations set forth in sections 903.2.11.1 through 903.2.11.6.

28-20. – Fire department connections.

Section 912.2 of the code is hereby amended to read as follows:

Section 912.2 *Location*. With respect to hydrants, driveways, buildings and landscaping, fire department connections shall be so located that fire apparatus and hoses connected to supply the system will not obstruct access to the buildings for other apparatus. The location of fire department connections shall be located on private property six (6) to ten (10) feet behind curb (of street) at a permanent entrance to site or as otherwise approved by the fire chief.

28-21. – CONSTRUCTION REQUIREMENTS FOR EXISTING BUILDINGS

SECTION 1103.8 OF THE CODE IS HEREBY AMENDED BY ADDING A NEW SECTION 1103.8.2.1 ENTITLED “INTERCONNECTION FOR R-3 AND R-4 GROUP HOMES” TO READ AS FOLLOWS:

1103.8.2.1 *INTERCONNECTION FOR R-3 AND R-4 GROUP HOMES*. ALL SMOKE DETECTORS LOCATED IN R-3 AND R-4 GROUP OCCUPANCY TYPES SHALL BE INTERCONNECTED IN SUCH A MANNER THAT THE ACTIVATIONS OF ONE ALARM WILL ACTIVATE ALL OF THE ALARMS IN THE INDIVIDUAL UNIT. PHYSICAL INTERCONNECTION OF SMOKE ALARMS SHALL NOT BE REQUIRED WHERE LISTED WIRELESS ALARMS ARE INSTALLED AND ALL ALARMS SOUND UPON ACTIVATION OF ONE ALARM. THE ALARM SHALL BE CLEARLY AUDIBLE IN ALL BEDROOMS OVER BACKGROUND NOISE LEVELS WITH ALL INTERVENING DOORS CLOSED. THE EXCEPTIONS IN SECTION 1103.8.2 DO NOT APPLY.

~~28-21~~ 28-22. – Electronic filing.

Section 5001.5 of the code is hereby amended by adding a new Section 5001.5.3 entitled "Electronic filing" to read as follows:

> 5001.5.3. *Electronic filing*. The fire code official is hereby authorized to establish procedures requiring the electronic filing of HMMP and HMIS. An approved HMMP and/or HMIS must remain on site.

~~28-22~~ 28-23. – Fireworks preemption.

Section 5601.1 of the code is hereby amended by deleting Exception 9 in its entirety and adding new Exceptions 9 and 10 to read as follows:

> *Exception 9*. Items preempted by federal or state regulations.
>
> *Exception 10*. The possession, manufacture, storage, handling, sale, and use of fireworks in accordance with other City ordinances.

~~28-23~~ 28-24. – Explosives and fireworks.

Section 5601.1.3 of the code is hereby amended by repealing Exception 4 in its entirety and replacing it with a new Exception 4 to read as follows:

> *Exception 4*. The possession, storage, sale, handling and use of specific types of Division 1.4G fireworks where allowed by applicable laws, ordinances, and regulations, provided that such fireworks and facilities comply with NFPA 1124, CPSC 16 CFR Parts 1500 and 1507, DOTN 49 CFR Parts 100-185 (2006 edition), and Arizona Revised Statutes (A.R.S.) Sections 36-1601, et seq., as applicable for consumer fireworks. The sale of permissible consumer fireworks as defined under A.R.S. Sections 36-1601, et seq., is only allowed April 25th through May 6th, May 20th through July 6th**,** December 10th through January 3rd, and two days before the first day of Diwali through the third day of Diwali each year. The use of permissible consumer fireworks as defined under A.R.S. Sections 36-1601, et seq., is only allowed between 8:00 a.m. to 11:00 p.m. every day May 4th through May 6th, June 24th through July 6th (extended on July 4th from 11:00 p.m. to 1:00 a.m. on July 5th), December 24th through January ~~3rd~~ 4TH (extended on December 31st from 11:00 p.m. to 1:00 a.m. on January 1st), and the second and third days of Diwali of each year; provided that use is on private property with the permission of the property owner or the property owner's duly appointed agent. Except as authorized by a permit issued by the Fire Chief or Fire ~~Chiefs~~ CHIEF'S designee, the use~~, discharge, or ignition~~ of permissible consumer fireworks is prohibited ~~in all public parks, public retention basins, and public facilities~~ ON ALL PUBLICLY OWNED OR MANAGED LAND, BUILDINGS, AND FACILITIES INCLUDING, BUT NOT LIMITED TO, CITY OFFICES AND FACILITIES, PUBLIC PARKS, PUBLIC SCHOOL BUILDINGS AND FACILITIES, AND PUBLIC RETENTION BASINS.
>
> A VIOLATION OF THIS SECTION IS A CLASS 1 MISDEMEANOR AND SHALL BE PUNISHABLE IN ACCORDANCE WITH SECTION 28-26.

~~28-24~~ 28-25. – Appendices.

This code is hereby further amended by deleting Appendix A, J and M in their entirety and specifying that Appendix E, F, G and H are included for informational purposes only and ARE not adopted by the City as part of this code. All other Appendices set forth in this code are hereby adopted as part of this code.

SECTION L101 OF Appendix L of the code is hereby deleted in its entirety and replaced with a new SECTION L101 ~~Appendix L~~ to read as follows: ~~Requirements for firefighter air replenishment systems.~~

~~"Firefighter Air Replenishment System (FARS)" to read as follows:~~

> L101. *Fire fighter air replenishment systems*.

~~L101.1 *General*. A breathing air replenishment system (FAR System) is a complete, self-contained high pressure breathing air replenishment system consisting of a fire department air connection panel, remote air fill panels and high pressure interconnected piping, permanently installed within a structure, allowing fire department personnel to replenish empty self-contained breathing apparatus cylinders within close proximity to the location of the incident requiring emergency response, thus reducing the amount of travel distance, time and support personnel needed at an emergency incident.~~

~~L101.2.~~ L101.1 *Applicability*. The requirements of this Section shall apply to all buildings and structures to include expansions, alterations, and modifications meeting the specifications set forth in Section ~~L101.3~~ L101.2.

~~L101.3~~ L101.2. *Buildings and structures requiring FAR System*. A FAR System shall be installed in buildings and structures located in the City meeting either of the following criteria:

1. Buildings and structures seventy-five (75) feet in height or more above grade or which are otherwise characterized as high-rise buildings; and

2. Underground buildings and structures, or components thereof, totaling ten thousand (10,000) square feet or more that are either more than two (2) floors below grade or more than thirty (30) feet below grade.

~~L101.4.~~ L101.3 *Plans*. Engineered stamped design drawings of the FAR System shall be submitted to the City building official and the fire code official. The plans shall include equipment/component drawings, system calculations, and manufacturer's technical product data, to include all piping, fittings, valves, gauges, cabinets, locking devices, hangers, supports and all other system components as may be necessary to install the FAR System. The installation of the FAR System shall not commence until the plans therefore have been approved. A fee for plan review and inspection shall be adopted by the City by resolution and shall be paid prior to plan review.

~~L101.5.~~ L101.4 *Contractor qualifications*. The FAR system shall be installed, tested and maintained by a contractor with the appropriate Arizona Registrar of Contractors license classification.

~~Any contractor responsible for installation, testing, or maintenance of a FAR system shall also have a Chandler Fire Department operational permit for Fire Protection Contractors pursuant to Section 105.6.51.~~

~~L101.6. *FAR System requirements*. The FAR System shall allow fire department personnel to simultaneously replenish four (4), forty-five (45) cubic foot self-contained breathing apparatus cylinders at any one (1) time; two (2) at three thousand (3,000) psi and two (2) at four thousand five hundred (4,500) psi. Fire department personnel shall be able to connect into the FAR System's fire department air connection panel from a mobile air support apparatus thereby providing a constant source of breathing air supplied directly from the air support apparatus to the system's remote air fill panels.~~

~~L101.7. *FAR System components*. The FAR System shall consist of the following minimum components:~~

~~1. Fire department air connection panel;~~

~~2. Remote air fill panels;~~

~~3. Interconnected piping; and~~

~~4. Low pressure monitoring switches and alarm.~~

~~L101.8. *Fire department air connection panel*. A fire department air connection panel shall be installed on the exterior of the building or within a remote monument at a location approved by the fire code official and shall be interconnected to the building's interior remote air fill panels. The fill inlet and associated components of the air connection panel shall be contained in a lockable, weather tight enclosure.~~

~~The exterior fire department connection panel shall contain all of the necessary gauges, isolation valves, pressure relief valves, pressure regulating valves, check valves, tubing, fittings, supports, connectors, adapters and other necessary components as may be required to allow the fire departments mobile air unit to connect and augment the system with a constant source of breathing air.~~

~~The fire department air connection panel shall be installed in an area protected from physical damage. The panel shall be always locked, unless in use by fire department personnel. The locking mechanism for the panel cover shall be contained in an approved key box installed at a location approved by the fire code official. The key to unlocking the cover shall be stored in the approved key box.~~

~~L101.9. *Remote air fill panels*. Unless otherwise approved by the fire code official, the remote air fill panels shall be installed in the above grade portion of applicable structures in stairwells commencing on the third floor above grade level and every other floor above grade level thereafter. Unless otherwise approved by the fire code official, the remote air fill panels shall be installed in the below grade portion of applicable structures in stairwells, or other areas of ingress or egress approved by the fire code official, commencing on the third floor below ground level and every other floor below grade level thereafter or, if there are less than three (3) floors below ground level, the lowest floor.~~

~~The remote air fill panels shall contain all of the necessary gauges, isolation valves, pressure relief valves, pressure regulating valves, check valves, tubing, fittings, supports, connectors, adapters and other necessary components as may be required to allow firefighters and other first responders to safely and reliably replenish a minimum of two (2) forty-five (45) cubic feet breathing air cylinders simultaneously.~~

~~L101.10. *Piping, valves and fittings*. Unless otherwise approved by the fire code official, all piping, valves and fitting shall be compatible and support a minimum working pressure of five thousand (5,000) psi with a safety factor of 4 to 1.~~

~~Piping shall be supported at not less than five-foot intervals. The entire system shall be protected by a minimum of two-hour rated fire wall that protects the system from possible damage.~~

~~When piping must pass through a fire rated or solid material, the piping shall be protected by a sleeve that is at least three (3) times the pipe diameter. Both ends of the sleeve shall be filled with an approved fire stop.~~

~~L101.11. *Low pressure monitoring and alarm*. When not being utilized by fire department personnel, the FAR System shall maintain a constant pressure of at least four thousand five hundred (4,500) psi. An alarm or monitoring system capable of detecting, and that is set to detect, a pressure drop of one thousand (1,000) psi shall be included and maintained with the FAR System. A building or structure owner, or his or her designee, shall notify the fire department of any alarm signaling a loss of pressure to the system and of any scheduled test of the system to be conducted by the owner of the building or structure. Unless otherwise approved by the fire code official, the low-pressure alarm shall be tied into the fire and smoke alarm system for the building or structure.~~

~~L101.12~~ L101.5 *Markings and record keeping*. The fire department air connection panel and the remote air fill panels shall be clearly identified by means of permanently installed

signage stating firefighter air system in minimum one and one-half (1½) inch letters and be located where plainly visible. The owner and/or occupant of the building or structure shall keep the area in and around the fire department air connection panel and the remote air fill panels free of objects that may block use of these panels.

~~L101.13. *Initial testing requirements*. When fabrication, assembly and installation of the FAR System is complete, the entire system shall be tested in accordance with the following:~~

~~1. The system shall be inspected for leaks by pneumatically pressure testing the system to five thousand (5,000) psi using oil-free, dry air. An approved solution shall be used on each joint and fitting in the system. All leaks or failure to maintain five thousand (5,000) psi pneumatic pressure shall be documented by the system installer and forwarded to the system manufacturer for inspection, repair and/or replacement.~~

~~2. Upon successful completion of the five thousand (5,000) psi pressure testing, the entire system shall be pneumatically pressure tested to one and one-half (1½) times the working pressure (seven thousand five hundred (7,500) psi) using oil free, dry air for at least one (1) hour. All leaks or failure to maintain seven thousand five hundred (7,500) psi pneumatic pressure shall be documented by the system installer and forwarded to the system manufacturer for inspection, repair and/or replacement.~~

~~3. Upon successful completion of the seven thousand five hundred (7,500) psi pressure testing, the entire system shall be retested for a period of twenty-four (24) hours. All leaks or failure to maintain five thousand (5,000) psi pneumatic pressure shall be documented by the system installer and forwarded to the system manufacturer for inspection, repair and/or replacement.~~

~~L010.14. *On-going testing and maintenance requirements*. Breathing air samples from the FAR System shall be taken by an independent, qualified entity on an annual basis and shall be analyzed by an accredited testing laboratory in the manner specified in NFPA 1989, Section 5.3. Testing pursuant to this Section shall also be required after the FAR System is utilized or upon determination by the fire code official that contamination of the air in the FAR System may be contaminated. The FAR System shall otherwise be tested and maintained in accordance with NFPA Standards and manufacturer specifications.~~

~~L101.15. *Inspection and record keeping*. Records of all maintenance and testing of the FAR System shall be kept on-site for a minimum of three (3) years and be available to fire department personnel upon request. Fire department personnel shall either in conjunction with a fire inspection of the building or structure or, after providing reasonable notice to the owner or occupant of the building or structure, or his or her designee, have the right to enter onto the property to inspect the FAR System and the records relating to the maintenance and testing of that system.~~

~~28-25~~ 28-26. – Criminal penalties.

Except violations of IFC Subsections 503.4 and 507.5.4, persons (or legal entities included in the definitions of "person" in Section 202) who shall violate a provision of this code or shall fail to comply with any of the requirements thereof or who shall erect, install, alter, repair or do work in violation of the approved construction documents or directive of the fire code official, or of a permit or certificate used under provisions of this code, shall be guilty of a Class 1 misdemeanor punishable by a fine not exceeding two thousand five hundred dollars ($2,500.00) or twenty thousand dollars ($20,000.00) if a legal entity, by imprisonment for a term not exceeding six (6) months, or by probation for a term not exceeding three (3) years, or by any combination thereof. Violations of IFC Subsections 503.4 and 507.5.4 shall be punishable as civil infractions under the Chandler City Code Subsection 1-8.7.

a. The imposition of a criminal penalty does not prevent suspension or revocation of a license, permit or franchise or other administrative sanctions.

b. The imposition of criminal penalties does not prevent enforcement and any enforcement available under Section ~~28-26~~ 28-27.

~~28-26~~ 28-27. – Abatement of violations.

In addition to the imposition of the penalties herein described, the fire code official is authorized to institute appropriate action by injunctive or other equitable remedies, including pursuant to Section ~~110~~ 113 of this code, Chapter 26 of the Chandler Code, or state law, to prevent unlawful construction or to restrain, correct or abate a violation; or to prevent illegal occupancy of a structure or premises; or to stop an illegal act, conduct of business or occupancy of a structure on or about any premises.

a. The imposition of any remedy in Section ~~28-25~~ 28-26 does not prevent suspension or revocation of a license, permit or franchise or other administrative sanctions.

b. The imposition of any remedy in Section ~~28-25~~ 28-26 does not prevent criminal enforcement options.

~~28-27~~ 28-28. – Abatement Expenses.

To the extent that the responsible person does not comply with the terms of any abatement order received, the City may seek recovery of its expenses in abating the violation cited, including, without limitation, those expenses associated with orders issued pursuant to this code, or the procedures set forth in state law or Chapter 26 of the Chandler Code.

~~28-28~~ 28-29. – Provisions deemed continuation of existing ordinances.

The provisions of this code, insofar as they are substantially the same as legislation previously adopted by the City relating to the same subject matter, shall be construed as restatements and continuations thereof and not as new enactments.

2024 Amendments to Chapter 28, Fire Prevention

28-8 Fire re-inspection fees and Council action

- It was not clear that fees would continue after the second re-inspection. Added “and ongoing re-inspections”.

28-17 Emergency Responder Radio Communication (ERRC)

- Name change to Emergency Responder Communication Enhancement Systems (ERCES)

28-21 Construction Requirements for Existing Buildings

- Adding new section to address the importance of interconnected smoke alarms for R-3 group homes. These type of homes have more than the normal occupant load of a single family dwelling and addition of all R-3 group homes to be required to have interconnected smoke alarms will help with early notification to the whole structure to start evacuations. Note: This has already been a requirement in the code for new R-3 (single family) construction since the 80’s. So this will mostly apply to older residential structures converting to group homes and newer construction adding rooms to be able to add more occupants.

28-23 Explosions and Fireworks

- Aligning with State of Arizona SB 1275. This adds in the allowable time frames that you can use fireworks.
- Aligning with State of Arizona HB 2255. This adds Language allowing sale and use of fireworks during Dewali.
- Class I misdemeanor added to this section per City Attorney recommendation.
- Amendment update to strikeout public parking lots, roads, streets, and sidewalks to be consistent with previous conversations regarding this matter.

28-25 Appendices.

- L101.6 Removed. This language is already covered in Appendix L.
- L101.7 Removed. Duplicate language
- L101.8 Removed. Duplicate language
- L101.9 Removed. Duplicate Language
- L101.10 Removed. The language is already covered in Appendix L.
- L101.11 Removed duplicate language that is already in the Appendix L
- L101.13 Removed. Duplicate language already in Appendix L.
- L101.14 Removed. Duplicate Language already in Appendix L.

Mailing Address
Mail Stop 801
PO Box 4008
Chandler, Arizona
85244-4008

Chandler Fire Department
Telephone (480) 782-2120
Fax (480) 782-2125
Web www.chandleraz.gov/fire

Location
151 E. Boston Street
Chandler, Arizona
85225

- L101.15 Removed. This language is not needed in the Amendments.

Mailing Address
Mail Stop 801
PO Box 4008
Chandler, Arizona
85244-4008

Chandler Fire Department
Telephone (480) 782-2120
Fax (480) 782-2125
Web www.chandleraz.gov/fire

Location
151 E. Boston Street
Chandler, Arizona
85225

City Council Memorandum Fire Memo No. N/A

Date: November 04, 2024
To: Mayor and Council
Thru: Joshua H. Wright, City Manager
Tadd Wille, Assistant City Manager
Thomas Dwiggins, Fire Chief
From: Keith Hargis, Assistant Fire Chief
Subject: Agreement No. FD3-200-4486, Amendment No. 2, with 030530 Uniforms, LLC, dba Ace Uniforms of Phoenix, for Fire Uniforms

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Proposed Motion:

Move City Council approve Agreement No. FD3-200-4486, Amendment No. 2, with 030530 Uniforms, LLC, dba Ace Uniforms of Phoenix, for fire uniforms, in an amount not to exceed $125,000, for the period of six months, November 15, 2024, through May 14, 2025.

Background/Discussion:

The Chandler Fire Department (CFD) contracts with a vendor to provide Department-approved uniforms. Staff use an annual uniform allowance to purchase their individual uniforms. As uniforms are purchased throughout the year, amounts are deducted from each employee's account. The account balances are tracked by the vendor and billing invoices are sent to Fire Administration monthly. This practice helps ensure Department staff present the best appearance to the public and are provided with uniform items that meet national standards for safety.

Evaluation:

On October 27, 2022, City Council approved an agreement with 030530 Uniforms, LLC, dba Ace Uniforms of Phoenix, for fire uniforms, for a one-year period, with the option of up to four (4) additional up to one-year extensions. The contractor has agreed to extend for six months at the same terms and conditions. Staff recommends extension of the agreements for the term of November 15, 2024,

through May 14, 2025.

Fiscal Impact

Account No.	Fund Name	Program Name	Dollar Amount	CIP Funded Y/N
101.2210.5313	General fund	N/A	$125,000	N

Attachments

4486 - Amendment 2

Docusign Envelope ID: 4D377035-092A-416E-AD45-B70AD473F098

City Clerk Document No. _____

City Council Meeting Date:_____

AMENDMENT TO CITY OF CHANDLER AGREEMENT
FIRE UNIFORMS
CITY OF CHANDLER AGREEMENT NO. FD3-200-4486

THIS AMENDMENT NO. 2 (Amendment No. 2) is made and entered into by and between the City of Chandler, an Arizona municipal corporation (City), and 030530 Uniforms LLC, dba Ace Uniforms of Phoenix, an Arizona Corporation (Contractor), (City and Contractor may individually be referred to as Party and collectively referred to as Parties) and made _____, 2024 (Effective Date).

RECITALS

WHEREAS, the Parties entered into an agreement for Fire Uniforms (Agreement); and

WHEREAS, the term of the Agreement was November 15, 2022 through November 14, 2023, with the option of up to four (4) one-year extensions; and

WHEREAS, the Parties wish to exercise extension options through this Amendment to extend the Agreement for six (6) - months.

AGREEMENT

NOW THEREFORE, the Parties agree as follows:

1. The recitals are accurate and are incorporated and made a part of the Agreement by this reference.

2. Section III is amended to read as follows: The Agreement is extended for a six-month period November 15, 2024, through May 14, 2025.

3. Section IV is amended to read as follows: The City will pay the Contractor the per unit cost set forth in Exhibit B of the original Agreement, which is incorporated into and made a part of this Amendment No. 2 by this reference. Total payments made to the Contractor during the term of this Amendment No. 2 will not exceed $125,000.

Docusign Envelope ID: 4D377035-092A-416E-AD45-B70AD473F098

4. All other terms and conditions of the Agreement remain unchanged and in full force and effect. If a conflict or ambiguity arises between this Amendment No. 2 and the Agreement, the terms and conditions in this Amendment No. 2 prevail and control.

IN WITNESS WHEREOF, the Parties have entered into this Amendment on the Effective Date.

FOR THE CITY

By: _____

Its: _____

FOR THE CONTRACTOR

By: Garrett Duckworth

Its: Regional Operations Manager

APPROVED AS TO FORM:

By: _____
City Attorney JMB

ATTEST:

By: _____
City Clerk

City Council Memorandum Human Resources Memo No. N/A

Date: November 04, 2024
To: Mayor and Council
Thru: Joshua H. Wright, City Manager
Tadd Wille, Assistant City Manager
Rae Lynn Nielsen, Human Resources Director
From: Fernanda Acurio, Benefits & Compensation Manager
Subject: Agreement No. HR2-948-4453, Amendment No. 1, with Blue Cross Blue Shield of Arizona, for Group Medical and Pharmacy Program Administration

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Proposed Motion:

Move City Council approve Agreement No. HR2-948-4453, Amendment No. 1, with Blue Cross Blue Shield of Arizona, for Group Medical and Pharmacy Program Administration, in an amount not to exceed $2,190,000 per year, for the period of two years, beginning January 1, 2025, through December 31, 2026.

Background/Discussion:

The City's medical benefit is reviewed throughout the year by staff in collaboration with the City-wide Healthcare Task Force, along with assistance from a benefits consulting firm. Since 2015, the City has offered three different plan options for employees to choose from: the Red, White, and Blue plans. The Red and Blue benefit plans include well-established benefit designs of co-insurance, deductibles and out-of-pocket maximums. The White plan is a high-deductible health plan, which currently enrolls over 55% of City employees. No benefit plan design changes will be made to the Red, White, and Blue plans in 2025. All plans will continue to provide preventative services at 100% coverage, such as well woman, well man, and well baby visits. The contracted network and network discounts apply to all plans.

The pharmacy benefit will continue to operate with a co-pay feature immediately in the Red and Blue plans. The same co-pay structure is established in the White Plan, but is not applicable until the employee has reached their deductible based on the legal requirements of a high-deductible health plan.

On August 18, 2024, after review and consideration of the financial attestation provided by the City's healthcare actuary and in accordance with the City of Chandler Health Care Benefits Trust Agreement, the City's Health Benefits Trust Board approved an 8% increase to medical premium rates for all three plans. The contribution strategy will remain at an 80/20 split for the Red and the Blue plans, in which the City pays 80% and the employee 20%, and the White plan will remain at a 5/95 split, in which the City pays 95% and the employee 5%.

Evaluation:

On October 27, 2022, City Council approved an agreement with Blue Cross Blue Shield of Arizona, for group medical and pharmacy program administration, for a two-year period, with the option of up to three two-year extensions. Staff recommends the two-year extension of the agreement.

Fiscal Impact

Account No.	Fund Name	Program Name	Dollar Amount	CIP Funded Y/N
741.1290.5219.0.0.0	Medical Self Insurance	N/A	$2,190,000	N

Attachments

CY 2025 BCBSAZ Amendment

Exhibit 1 CY 2025 ASA

Docusign Envelope ID: 3C1A9EA0-4B44-43D6-8DAB-C33683F9F60F

City Clerk Document No. _____

City Council Meeting Date: November 7, 2024

AMENDMENT TO CITY OF CHANDLER AGREEMENT
GROUP MEDICAL AND PHARMACY PROGRAM ADMINISTRATION
CITY OF CHANDLER AGREEMENT NO. HR2-948-4453

THIS AMENDMENT NO. 1 (Amendment No. 1) is made and entered into by and between the City of Chandler, an Arizona municipal corporation (City), and Blue Cross Blue Shield of Arizona, an Arizona non-profit corporation and an independent licensee of the Blue Cross Blue Shield Association (Contractor), (City and Contractor may individually be referred to as Party and collectively referred to as Parties) and made _____ , 2024 (Effective Date).

RECITALS

WHEREAS, the Parties entered into an agreement for group medical and pharmacy program administration (Agreement); and

WHEREAS, the term of the Agreement was January 1, 2023, through December 31, 2024, with the option of up to three two-year extensions; and

WHEREAS, the Parties wish to exercise the first option through this Amendment to extend the Agreement for two years.

AGREEMENT

NOW THEREFORE, the Parties agree as follows:

1. The recitals are accurate and are incorporated and made a part of the Agreement by this reference.

2. Section III, Period of Service, is amended to extend the term of the Agreement for the two-year period beginning January 1, 2025, through December 31, 2026.

3. Exhibit F of the Agreement is replaced by the Administrative Services Agreement Amendment (ASA Amendment) effective January 1, 2025, through December 31, 2025, and associated documents which are attached as Exhibit 1 and made a part of this Amendment No. 1.

Docusign Envelope ID: 3C1A9EA0-4B44-43D6-8DAB-C33683F9F60F

4. Section IV, Payment of Compensation and Fees, is amended to state: Contractor's compensation and fees as more fully described in Exhibit B of the Agreement and Exhibit 1 of this Amendment 1 for performance of the services approved and accepted by the City under this Agreement must not exceed $2,190,000 per year for the fixed cost of administrative and stop loss fees for the term of this Amendment No. 1.

5. All other terms and conditions of the Agreement remain unchanged and in full force and effect. If a conflict or ambiguity arises between this Amendment No. 1 and the Agreement, the terms and conditions in this Amendment No. 1 prevail and control.

IN WITNESS WHEREOF, the Parties have entered into this Amendment on the Effective Date.

FOR THE CITY

By: _____

Its: Mayor

FOR THE CONTRACTOR

By: Michael Groeger

Its: Vice President, Commercial Sales

APPROVED AS TO FORM:

By: _____

City Attorney REL

ATTEST:

By: _____

City Clerk

EXHIBIT 1

Administrative Service Agreement Amendment (ASA Amendment)

BlueCross BlueShield Arizona
An Independent Licensee of the Blue Cross Blue Shield Association

(If the Employer has purchased BCBSAZ stop loss coverage, this ASA Amendment amends Exhibit C and Exhibit C-1 of the Maximum Aggregate and Specific Liability Agreement. If the Employer has NOT purchased BCBSAZ stop loss coverage, this ASA Amendment amends the ASA.)

Legal Name of Group: CITY OF CHANDLER

Effective Date: 01/01/2025 - 12/31/2025	Group Number(s): 028399	Current Date: 10/15/2024
Strategic Rel. Executive: Christie Thomas	Funding: 12/24 Incurred ASC with Medical and Pharmacy	Days Notice: 210
Underwriter: Brian Cohen	Total Enrollment: 1,872	Specific Stop Loss Limit: $350,000
Broker: SEGAL COMPANY ARIZONA INC: RACHEL MARIE CALISI	Commission (% of Billed Rate): 0.000%	Aggregate Stop Loss Limit: 125%
Commission: 0.000%	Dental Coverage: No	

SOLD BENEFITS	Benefit Descriptions	Grandfathered Status
Red Medical Option	INET: Ded $500/$1,000; 85%; OOP $2,500/$5,000; OV $25/$40; ER $100 Ded+85%; UC $50; Rx $10/$30/$50/$100 2x MOD; ONET: Ded $1,000/$2,000; 60%; OOP $5,000/$10,000	N: Non-Grandfathered
Blue Medical Option	INET: Ded $750/$1,500; 80%; OOP $2,750/$5,500; OV/UC Ded+80%; ER $100 Ded+80%; Rx $10/$30/$50/$100 2x MOD; ONET: Ded $1,750/$3,500; 50%; OOP $6,500/$13,000	N: Non-Grandfathered
White Plan	INET: Ded $1,750/$3,500; 85%; OOP $3,500/$7,000; OV/ER/UC Ded+85%; Rx $10/$30/$50/$100 2x MOD; ONET: Ded $5,000/$10,000; 60%; OOP $10,000/$20,000	N: Non-Grandfathered

Sold Rates Effective 01/01/2025

Red Medical Option	Enrollment	Admin	SSL $350K	ASL 125%	Commission	Other	Fixed Cost	ICAP	Exp Liab	Max Liab
Employee	233	$32.81	$100.72	$2.52	$0.00	$0.00	$136.05	$1,139.39	$1,047.56	$1,275.44
Employee + Spouse	174	$32.81	$100.72	$2.52	$0.00	$0.00	$136.05	$1,964.98	$1,708.03	$2,101.03
Employee + Child(ren)	103	$32.81	$100.72	$2.52	$0.00	$0.00	$136.05	$1,730.87	$1,520.75	$1,866.92
Employee + Family	226	$32.81	$100.72	$2.52	$0.00	$0.00	$136.05	$2,877.58	$2,438.11	$3,013.63
Total Plan 1	**736**	**$24,148**	**$74,130**	**$1,855**	**$0**	**$0**	**$100,133**	**$1,435,997**	**$1,248,929**	**$1,536,130**

Blue Medical Option	Enrollment	Admin	SSL $350K	ASL 125%	Commission	Other	Fixed Cost	ICAP	Exp Liab	Max Liab
Employee	49	$32.81	$100.72	$2.52	$0.00	$0.00	$136.05	$1,115.89	$1,028.76	$1,251.94
Employee + Spouse	12	$32.81	$100.72	$2.52	$0.00	$0.00	$136.05	$1,924.49	$1,675.64	$2,060.54
Employee + Child(ren)	17	$32.81	$100.72	$2.52	$0.00	$0.00	$136.05	$1,695.22	$1,492.23	$1,831.27
Employee + Family	19	$32.81	$100.72	$2.52	$0.00	$0.00	$136.05	$2,818.32	$2,390.71	$2,954.37
Total Plan 2	**97**	**$3,183**	**$9,770**	**$244**	**$0**	**$0**	**$13,197**	**$160,139**	**$141,308**	**$173,336**

White Plan	Enrollment	Admin	SSL $350K	ASL 125%	Commission	Other	Fixed Cost	ICAP	Exp Liab	Max Liab
Employee	383	$32.81	$100.72	$2.52	$0.00	$0.00	$136.05	$879.81	$839.90	$1,015.86
Employee + Spouse	143	$32.81	$100.72	$2.52	$0.00	$0.00	$136.05	$1,517.34	$1,349.92	$1,653.39
Employee + Child(ren)	101	$32.81	$100.72	$2.52	$0.00	$0.00	$136.05	$1,336.55	$1,205.29	$1,472.60
Employee + Family	412	$32.81	$100.72	$2.52	$0.00	$0.00	$136.05	$2,222.03	$1,913.67	$2,358.08
Total Plan 3	**1,039**	**$34,090**	**$104,648**	**$2,618**	**$0**	**$0**	**$141,356**	**$1,604,415**	**$1,424,887**	**$1,745,771**

Sold CDH Account Pricing PEPM (Not Included Above)		PEPM Account Fee
White Plan	Health Savings Account	$2.70

CDH Annual Account Setup Fee (Not Included Above)	# of Accounts	Annual Fee
Annual account setup fee is billed by CDH and is based on the total number of HRA and FSA plans.	0 - 499	$250
	500 - 2,999	$500
	3,000 +	$1,500

Employers selecting Consumer-Directed Healthcare (CDH) Account Administration (including integration), for account types; HSA, HRA, FSA, DCFSA & LPFSA, hereby direct BCBSAZ to collect the administration fees and forward the proportional fees to HealthEquity for services, along with the required personal health information. BCBSAZ collects CDH Account administration fees and is not responsible for any reconciliation, recoupment or adjustments to payments received and forwarded to on behalf of Employer.

Employer agrees to pay for charges for CDH administration services. For HSA and HRAs, these charges apply to all employees enrolled in a health plan the group has paired with a CDH account. For FSAs, those charges apply to any employee for whom an FSA election has been sent to BCBSAZ by the employer.

			Monthly PEPM Fees				One-Time Fee /
Sharecare Account Summary	Effective Date	Non-Enrollees	Employee	EE + Spouse	EE + Child(ren)	EE + Family	Non-Enrollees
Basic	1/1/2025	No	$0.00	$0.00	$0.00	$0.00	$0

Proposed administration assumes BCBSAZ will retain Rx Rebates. In exchange for retaining Rx Rebates, BCBSAZ has adjusted the Admin PEPM by the Rx Rebate Credit. Rx Rebate Credit (PEPM) = $31.00. In addition to the Rx Rebate Credit (PEPM), BCBSAZ is also providing a rebate share agreement based on utilization of brand name drugs eligible for rebates. Please see the assumptions for details.

Premium tax is NOT included in the specific and aggregate charges.

Minimum Monthly Attachment Level: $2,880,496.

Fixed Expenses = Admin Charges + Stop Loss Premium + Commission (if applicable). Exp Liab = Fixed Expenses + ICAP/Aggregate Corridor. Max Liab = Fixed Expenses + ICAP.

$80,000 Misc. Trust & Wellness allowance, $100,000 On Site Wellness Consultant allowance, $25,000 General Fund allowance, and $5,000 Audit Allowance allowance are included. See Assumptions for details.

Administrative rate guarantee is included. Performance Guarantee is included. See Assumptions for details.

Mayo is not included as an in-network provider.

Consumer-Directed Healthcare (CDH) services were purchased and will be billed as an additional charge to the above premium rates. See the CDH rate exhibit for details.

Chiropractic Capitation: $2.93 PMPM. UM Services: excluded. Value Based Services: included.

Out-of-Network Shared Savings: 15% with $10,000 cap per claim.

Sharecare (Basic): included. See Assumptions for details.

Rx coverage through BCBSAZ: Yes. Rx applies to stop loss products: Yes.

Subrogation: Included.

Rx Formulary: Open.

All information from the exhibit Assumptions IASC-2025-028399-4, Administrative Summary, Guarantees and Disclosure of 'Eligible Indirect Compensation' (Exhibit 1) incorporated herein by reference.Employer acknowledges electronic receipt of the Uniform Summaries of Benefits and Coverage (SBCs) for plans selected and the SBCs are incorporated herein by reference. As of the effective date on page 1, this amends and is made part of Employer's Administrative Service Agreement (ASA) with BCBSAZ. All provisions in the ASA not modified by this Amendment remain in full force and effect.

BCBSAZ reserves the right to adjust these premium rates retroactive to the first day of any billing month in which enrollment varies by more than fifteen percent (15%) from that listed above.

The ACA prohibits waiting periods in excess of 90 days. By signing below you represent that you do not impose a waiting period which is longer than 90 days and that you have made all necessary changes to bring all waiting periods for your plan into compliance with the ACA requirements. You agree to promptly advise BCBSAZ of any change which may impact the accuracy of this representation. You agree to provide BCBSAZ with timely and accurate information regarding enrollee effective dates and shall ensure such effective dates comply with applicable laws.

This Rate Acceptance Form must be signed and returned prior to BCBSAZ issuing ID Cards. The Agreement will terminate if this Amendment is not signed and returned prior to the end of your current term. If any information on this Form is inaccurate, please provide the correct information on this Form.

	10/15/2024		Mayor	
BCBSAZ Representative	Date	Group Representative Signature	Group Representative Title	Date

APPROVED AS TO FORM:

By: _____
City Attorney RGL

ATTEST:

By: _____
City Clerk

CITY OF CHANDLER

BlueCross BlueShield Arizona
An Independent Licensee of the Blue Cross Blue Shield Association

Group Number(s): 028399

Renewal Period: 01/01/2025 - 12/31/2025 Assumption: IASC-2025-028399-2

Blue Cross Blue Shield of Arizona (BCBSAZ) Assumptions

GENERAL

* BCBSAZ may adjust rates if the following requirements are not met:

  Where the employer contributes 100% of the employee cost, BCBSAZ requires 100% participation of all eligible employees, excluding those with other qualifying medical coverage.

  Where the employer does not contribute 100%, BCBSAZ requires 70% of all eligible employees to participate.

  BCBSAZ requires a minimum of 50% of all full-time eligible employees in the group to be enrolled in the employer's group plan.

  Employer must contribute a minimum of 50% of the employee's health premium.

  Payroll deduction for employee contribution is required.

* Rates assume BCBSAZ is the sole medical and Rx carrier.

* BCBSAZ reserves the right to re-evaluate the rates if there is a significant change in the rating assumptions (e.g. enrollment).

* BCBSAZ reserves the right to re-evaluate and change the rates if City of Chandler adds or deletes a benefit eligible class that will have BCBSAZ medical coverage.

* We have not included premium tax on this account, based on the assumption that all premiums are paid with the employer's funds, and the employer is a municipality.

* Notwithstanding anything to the contrary in the Agreement, nothing in this Agreement shall restrict Group's ability to access or share the information specified in ERISA Section 724 (commonly referred to as the No Gag Clause provision) for the purposes permitted in ERISA Section 724.

* Beginning in 2015 the Affordable Care Act provides that certain large employers will be subject to a penalty if they fail to offer full-time employees and certain dependents health coverage which satisfies both a 60% minimum value standard and an affordability requirement and a full-time employee obtains a subsidy on the health insurance marketplace. Groups subject to these requirements and seeking to avoid a penalty are responsible for the ultimate determination of whether the minimum value and affordability requirements are satisfied. Using the minimum value calculator made available by HHS and the IRS, BCBSAZ estimates that the minimum value of Red Medical Option, Blue Medical Option, White Plan, plans do meet the minimum value standard. It is important that you independently review and confirm these results as they may be impacted by information not available to us (for example, benefits not provided by BCBSAZ, non-standard benefits not suited for the calculator and certain HSA contributions or HRA funds). BCBSAZ has included its conclusion(s) about minimum value in the plan(s) SBC(s) that BCBSAZ provides to Group. Any changes that Group makes to that conclusion based on Group's independent analysis will also affect the minimum value statement(s) in the SBC.

* To view compensation BCBSAZ may receive if you purchase certain third-party products, visit azblue.com/compensation

PHARMACY

* The Plan Sponsor is responsible for design of the Plan, including any modification or termination of the Plan, and retains sole and complete control to select and change the formularies for its Plan.

  If BCBSAZ receives pharmacy rebates attributable to pharmaceutical products covered under the terms of this Agreement and used by Participants of Employer's Plan, BCBSAZ will pay Employer the following amounts for brand prescriptions filled and for which BCBSAZ received a rebate:

  30 days retail - $50.00 per eligible brand script,

  90 day retail - $203.00 per eligible brand script,

  Mail Order Delivery - $219.00 per eligible brand script,

  Specialty Home Delivery - $881.00 per eligible brand script.

  Employer acknowledges that it accepts these amounts and that it and its group health plan have no right to, or legal interest in, any rebates provided by pharmaceutical manufacturers to BCBSAZ.

CITY OF CHANDLER

Group Number(s): 028399

Renewal Period: 01/01/2025 - 12/31/2025 Assumption: IASC-2025-028399-2

PBM PRICING MODEL: Pharmacy Network discounts are negotiated between BCBSAZ and our pharmacy benefit manager (PBM) over BCBSAZ's entire book of business and not on behalf of any group customer. You have selected the pass through PBM pricing model effective 1/1/2025. The pass through PBM pricing model allows you to pay the same discounted prices for prescription drugs that the PBM actually pays the pharmacies. Prices for the same drug may differ at different pharmacies. The Pass Through PBM pricing model passes on to you 100% of the specific pharmacies' network discount. However, it does not allow the PBM to lower the prices for expensive drugs by applying savings realized elsewhere. Any projected savings discussed with you that may result from this pricing are only estimates. Your actual savings may vary from these estimates.

FUNDING

* Rates assume BCBSAZ is the sole Specific and Aggregate Stop Loss carrier.

* BlueCard fees are included in the Attachment Point rate (if applicable) and are charged on the monthly invoice as a claim expense.

* The Specific Stop Loss level is $350,000 per person per policy year.

* If the Group Participant with the redacted ID number xxxxxx971-01 terminates coverage under Group's plan (including ceasing any elected COBRA coverage), BCBSAZ agrees to re-rate Group's specific stop-loss premium for the remaining months of the 2025 policy period to factor in that change.

* BCBSAZ will continue to process claims incurred during the renewal term of the Agreement (January 1, 2025 - December 31, 2025 for a period of 24 months after the end of the renewal term. Stop loss coverage will apply to claims incurred during the renewal term and paid during the renewal term or within 24 months after the end of the Renewal Term. If the Agreement is terminated before December 31, 2025, the foregoing 24 month periods shall start on the effective date of the termination of the Agreement. BCBSAZ's obligations are contingent upon Employer satisfying its payment obligations.

DISCLOSURE

* Costs for covered services provided by a chiropractor to PPO, EPO, HMO and indemnity members, including an allowance for BCBSAZ to maintain this arrangement, will be paid by the Employer to BCBSAZ on a per member per month (PMPM) basis. The PMPM rate each Employer pays BCBSAZ will differ from the capitated fee BCBSAZ negotiated with the chiropractic administrator. BCBSAZ negotiated the fee that BCBSAZ pays the chiropractic administrator on the basis of BCBSAZ's entire book of business, without regard to any individual Plan. The PMPM rate BCBSAZ charges the employer is subject to change by BCBSAZ upon 60 days prior written notice. The PMPM rate for chiropractic services applicable to this Employer is $2.93 PMPM. Any difference between this amount and the amount paid to the chiropractic administrator will be reflected on the employers Form 5500 Information (if BCBSAZ provides one). The fee BCBSAZ pays may be adjusted at any time as a result of modifications to the contract between BCBSAZ and chiropractic provider. Additionally, the fee may be decreased in a given year if a set claims to capitation ratio is not achieved. Neither of these adjustments to the fee BCBSAZ pays would result in adjustment to the fee applicable to Employer.

* **Third Parties**: BCBSAZ charges a per member per month (PMPM) or other specified amount for certain services provided by third-parties which includes an allowance for BCBSAZ to maintain these arrangements. This PMPM or other amount may be different than the amount BCBSAZ pays the third-party and BCBSAZ will retain any difference as reasonable compensation for services provided. In some cases, the amount retained by BCBSAZ and received by the third-party is a percentage of the savings or recoveries generated by the third-party services. Certain of these third-party contractual arrangements may involve reconciliation processes or other adjustments which may further change the amount paid to the third-party or retained by BCBSAZ. The rate BCBSAZ charges the employer is subject to change by BCBSAZ upon 60 days prior written notice. The fee BCBSAZ pays may be adjusted at any time due to modifications of the contract between BCBSAZ and the third-party. BCBSAZ negotiates the fees it pays these third-parties on the basis of BCBSAZ's entire book of business, without regard to any individual plan.

* **BCBSAZ Value Based Programs**

  Value-Based Program (VBP) is outcome-based payment arrangement and/or a coordinated care model facilitated with one or more local providers that is evaluated against cost and quality metrics/factors and is reflected in provider payment.

  LOCAL - BCBSAZ pays some of its contracted medical providers an amount to manage the medical care of members diagnosed with certain medical conditions if the provider demonstrates to BCBSAZ it has satisfied BCBSAZ's criteria for effectively managing the care ("Value Based Services").

  With respect to BCBSAZ group members residing and receiving Value Based Services in Arizona under a BCBSAZ value based program, BCBSAZ will estimate at the beginning of the contract year the amount BCBSAZ projects it will pay BCBSAZ's contracted providers for members who receive Value Based Services throughout the upcoming year in the form of a PMPM or PEPM charge ("PMPM Charge"). BCBSAZ will charge BCBSAZ's self-insured ("ASC") Groups via the Employer's Claims Invoice this PMPM Charge beginning January 1, 2016.

CITY OF CHANDLER

BlueCross BlueShield Arizona
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On an aggregate basis for the entire Value Based Program, the amounts used to calculate PMPM charge are fixed amounts estimated to be necessary to finance the cost of a particular Value-Based Program. Because amounts are estimates, there may be positive or negative differences based on actual experience, and such differences will be accounted for in a variance account maintained by BCBSAZ until the end of the applicable Value-Based Program payment and/or reconciliation measurement period. The amounts needed to fund a Value-Based Program may be changed before the end of the measurement period if it is determined that amounts being collected are projected to exceed the amount necessary to fund the program or if they are projected to be insufficient to fund the program.

On an aggregate basis for the entire Value Based Program, at the end of the Value-Based Program payment and/or reconciliation measurement period for these arrangements, BCBSAZ will do one of the following:

a. Use any surplus in funds in the variance account to fund Value-Based Program payments or reconciliation amounts in the next measurement period.

b. Address any deficit in funds in the variance account through an adjustment to the PMPM billing amount or the reconciliation billing amount for the next measurement period.

NOTE: If an ASC Group terminates its BCBSAZ contract, that Employer will neither receive a refund nor a charge to reflect any variance between what BCBSAZ charged the Employer in Value Based Charges and what BCBSAZ paid the providers for Value Based Services.

NATIONAL - Value Based Services will also apply to your members who reside in other states/geographical locations served by other Blue Cross Blue Shield Plans. A full description of these arrangements will be described in your contract.

Inter-Plan Arrangements Fees:

BlueCard Program Fees

Access Fees:

- 1.84% in 2025 for 1,000–9,999 Blue PPO, EPO (Self-Funded Group Health Plans Only) or traditional enrolled contracts

Reduced Administrative Expense Allowances (AEAs) – To be considered for reduced fees, the Employer must exceed 1,000 PPO, EPO (Self-Funded Group Health Plans Only) or traditional enrolled Blue contracts:

- Professional - $4.00 per claim
- Institutional - $9.75 per claim
- Non-Participating Provider $3.00 per claim
- Medicare related claims $1.00 per claim
- Non-standard negotiated fees can range from either $5.48 to $15.44 per claim or $8.50 to $21.10 per contract per month depending on the negotiated arrangement and/or the health plan product.

* **Out-of-Network Shared Savings**

  BCBSAZ developed and maintains a proprietary fee schedule and utilizes claim editing software to calculate the Allowed Amount. Costs for calculating the Allowed Amount for Out-of-Network Services will be paid by the Employer to BCBSAZ on a percentage of claims savings basis. The cost for this service is 15% of claims savings with $10,000 cap per claim. This cost will not be applied to Group's ASL and/or SSL. BCBSAZ has hired a third party to attempt negotiation of reimbursement and member protection from balance billing for Out-of-Network Services. When the third party negotiation is successful, BCBSAZ will pay the vendor's fees with no additional charge to the Employer.

* **Sharecare**: For certain Sharecare programs that Employer has specifically elected to purchase, BCBSAZ charges an amount per person which may be based upon employee count, member count or program participation depending on the specific program purchased. These charges will be included in the monthly claims invoice and may be different than the amount BCBSAZ pays Sharecare. BCBSAZ will retain any difference as reasonable compensation for services provided. For the Sharecare Incentive Reward Program, BCBSAZ will charge Employer the amount of the award plus any applicable administrative fees and include this charge in the monthly claims invoice. The rates BCBSAZ charges Employer for the Sharecare programs are subject to change by BCBSAZ upon 60 days' prior written notice. BCBSAZ negotiates fees with Sharecare on the basis of BCBSAZ's entire book of business, without regard to any individual plan. The one-time setup fees are built into the admin rate as a PMPM (per member per month) charge.

ALLOTMENTS

* BCBSAZ's proposal includes a(n) Misc. Trust & Wellness allowance of $80,000 for the 01/01/2025 - 12/31/2025 policy period. Any portion of the misc. trust & wellness not used during the referenced policy period will be retained by BCBSAZ and applied to misc. trust & wellness programs for subsequent policy period(s). Upon termination of the group contract, BCBSAZ will pay any unused portion of the misc. trust & wellness allowance to Group. If group terms its contract prior to 12/31/2025, the group will be required to return a prorated amount of the disbursed funds.

* BCBSAZ's proposal includes a(n) On Site Wellness Consultant allowance of $100,000 for the 01/01/2025 - 12/31/2025 policy period. Any portion of the on site wellness consultant not used during the referenced policy period will be retained by BCBSAZ and applied to on site wellness consultant programs for subsequent policy period(s). Upon termination of the group contract, BCBSAZ will pay any unused portion of the on site wellness consultant allowance to Group. If group terms its contract prior to 12/31/2025, the group will be required to return a prorated amount of the disbursed funds.

CITY OF CHANDLER

BlueCross BlueShield Arizona
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Renewal Period: 01/01/2025 - 12/31/2025 Assumption: IASC-2025-028399-2

* BCBSAZ's proposal includes a(n) General Fund allowance of $25,000 for the 01/01/2025 - 12/31/2025 policy period. Any portion of the general fund not used during the referenced policy period will be retained by BCBSAZ and applied to general fund programs for subsequent policy period(s). Upon termination of the group contract, BCBSAZ will pay any unused portion of the general fund allowance to Group. If group terms its contract prior to 12/31/2025, the group will be required to return a prorated amount of the disbursed funds.

* BCBSAZ's proposal includes a(n) Audit allowance of $5,000 for the 01/01/2025 - 12/31/2025 policy period. Any portion of the audit allowance not used during the referenced policy period will be retained by BCBSAZ and applied to audit allowance programs for subsequent policy period(s). Upon termination of the group contract, BCBSAZ will pay any unused portion of the audit allowance to Group. If group terms its contract prior to 12/31/2025, the group will be required to return a prorated amount of the disbursed funds.

CITY OF CHANDLER

BlueCross BlueShield Arizona
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Renewal Period: 01/01/2025 - 12/31/2025 Assumption: IASC-2025-028399-2

GUARANTEES

* BCBSAZ agrees to an administrative rate guarantee for 1/1/2026 - 12/31/2030.

	PEPM	Increase	Wellness Allowance	On-site Wellness Consultant	General Fund	Audit Allowance
1/1/2026 - 12/31/2026 Net Administration Rate	$33.79	3.0%	$80,000	$100,000	$25,000	$5,000
1/1/2027 - 12/31/2027 Net Administration Rate	$34.80	3.0%	$80,000	$100,000	$25,000	$5,000
1/1/2028 - 12/31/2028 Net Administration Rate	$35.85	3.0%	$80,000	$100,000	$25,000	$5,000
1/1/2029 - 12/31/2029 Net Administration Rate	$36.92	3.0%	$80,000	$100,000	$25,000	$5,000
1/1/2030 - 12/31/2030 Net Administration Rate	$38.03	3.0%	$80,000	$100,000	$25,000	$5,000

This guarantee is contingent upon BCBSAZ being selected as the sole stop loss carrier (Specific and Aggregate) for the entire policy period 1/1/2026 - 12/31/2030 (5 years).The rate guarantee excludes any Allotments, Claim Deposit Credits, which will be subject to pricing information at the time of each renewal. This guarantee assumes BCBSAZ retains all Rx rebates during the time of the guarantee. Guaranteed administration rates assume all quoted benefit plans remain Rx rebate eligible throughout the guarantee period. BCBSAZ reserves the right to change the rate guarantee due to legislative changes.

Total enrollment changes do not exceed +/-15%. Total enrollment as of Apr 2024 is 1,872 subscribers and 4,701 members.

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CITY OF CHANDLER
PERFORMANCE GUARANTEES

Vendor Name	Blue Cross® Blue Shield® of Arizona (BCBSAZ)
Contact Name	Christie Thomas
Contact Title	Strategic Relationship Executive
Contact Number	(602) 864-5234
Authorized Signature	See original for signature.

PERFORMANCE GUARANTEES (ALL PROPOSERS)	**VENDOR RESPONSE**		
For the following categories, provide the performance standard you are willing to offer, the financial penalty (maximum dollar amount or % of administrative fees) you will agree to pay if the standard is not met, and the method of measuring the penalty.	Measurement Frequency	Agree to comply with Performance Guarantee? (Y | N)	Dollars at Risk (% or $)
1. **Vendor attendance at District meetings**	Quarterly		

Attendance by vendor representatives when requested at meetings scheduled by the City of Chandler during the contract period and implementation phase. **BCBSAZ Alternative Recommendation**: BCBSAZ proposes the Account Management Performance Guarantee. **Standard**: Overall score of 3 (satisfied) or better on the BCBSAZ Account Management Score Card (annual Group Benefit Administrator survey) – see attached. **Desired Qualifiers**: Categories include: effective support for open enrollment events, timely client notification of issues impacting members, response to client issues and questions in timely, comprehensive manner, effective coordination to resolve open issues, accessibility, and delivery of agreed-upon reports on time. **Group specific**	**Measured annually**	Yes	2% of annual admin fee
2. **Vendor call (or e-mail) return timeliness**	Quarterly		
City of Chandler or designated consultant's calls (or e-mails) to vendor are returned within 48 business hours. **BCBSAZ Alternative Recommendation**: BCBSAZ proposes combining PGs 1 and 2 under the Account Management guarantee, which guarantees ongoing communication and support activities, including accessibility.	**See #1 above.**	Yes	**See #1 above.**
3. **Processing monthly eligibility updates**	Monthly		
All updates to eligibility or enrollment records will be made within three business days after the information is received by the vendor. **BCBSAZ Alternative Recommendation**: Standard: 99% of valid electronic eligibility files are processed within five business days of receipt of complete and accurate information during initial implementation. **Group Specific**	**Measured quarterly**	Yes	2% of annual admin fee
4. **Telephone call availability & answering speed**	Monthly		

90% of all calls are answered within 30 seconds, and telephone service is available between 8:00 am and 6:00 pm Arizona Time Zone on business days. **BCBSAZ Alternative Response**: Standard: BCBSAZ Customer Service calls answered in an average of 45 seconds or less. **Desired Qualifier**: Average speed of answer begins once the caller exits the IVR.1 **Non-Group specific** Customer Service hours are 6 a.m. to 6 p.m. (Arizona time), Monday through Friday.	**Measured quarterly**	Yes	2% of annual admin fee
5. **Telephone call on-hold (in-queue) time**	Monthly		
An average of less than 2 minute(s) on hold before a **human being** answers. **BCBSAZ Alternative Recommendation**: This guarantee is combined with PG #4 (telephone call availability and answering speed).	**See #4 above.**	Yes	**See #4 above.**
6. **Telephone Abandonment Rate**	Monthly		
An abandonment rate of less than 3% is maintained during standard business hours. **BCBSAZ Alternative Recommendation**: Less than 5% of BCBSAZ Customer Service calls abandoned. **Desired Qualifier**: Call abandonment rate applies to calls abandoned once the caller enters the call queue.[1] **Non-Group specific**	**Measured quarterly**	Yes	2% of annual admin fee
7. **Claims Processing Accuracy**	Quarterly		

99% of claims dollars submitted for payment will be accurately processed and paid. Regardless of whether or not these standards of performance are satisfied, the vendor must reimburse the City of Chandler for all overpayments that are not recovered from the recipient within 60 days after the overpayment is discovered. City of Chandler will assign its right to recover such overpayments to the vendor. **BCBSAZ Alternative Recommendation**: Standard: 98% of audited[1] claims dollars are paid in accordance with benefit plan designs and in-force provider contracts. **Desired Qualifier:** This penalty applies if BCBSAZ fails to perform in accordance with this standard two (2) consecutive reporting periods. A penalty pay out of half of the fees at-risk would occur for results at or below 97.5%.[1] **Non-Group specific**	**Measured quarterly**	Yes	2% of annual admin fee
8. **Turnaround Time on Claims Payments**	Quarterly		

95% of all claims received will be completely processed (paid, denied or pended for additional information) within 14 calendar days after they are received. 100% of claims will be processed within 30 calendar days of receipt. **BCBSAZ Alternative Recommendation**: Standard: 90% of non-investigated clean claims processed (paid or rejected) within 14 calendar days after receipt of clean claim.[1] **Desired Qualifier**: A claim is defined as a request for a payment of a plan benefit by a plan participant or health care provider; a claim is deemed received when it has been time-stamped by BCBSAZ. Claims pended for missing information or benefit eligibility will be included as a documented claim. **Non-Group specific.** **Claims processing penalties are not applicable on claims incurred outside of Arizona.**	**Measured quarterly**	Yes	2% of annual admin fee
9. **Timeliness of Claim Reports**	Annually		
Each report the vendor will supply City of Chandler will be provided within a mutually agreed upon timeframe but no later than the 10th of the month following. **BCBSAZ Alternative Recommendation:** Standard: Monthly standard reports will be delivered on time. **Desired Qualifier**: Delivery of standard reports: whYzen-BlueInsight℠, our self-serve online reporting tool is available online, and updated the 20th of the month. **Group specific**	**Measured annually**	Yes	2% of annual admin fee
10. **Claims Coding**	Annually		

98% of all claims will be coded with no errors. **BCBSAZ Alternative Recommendation**: Standard: 95% of audited claims are processed in accordance with benefit plan designs.[1] **Desired Qualifier**: Percentage of claims processed incorrectly vs. correctly, based on BCBSAZ standard auditing procedures. **Non-Group specific**	**Measured quarterly**	Yes	2% of annual admin fee
11. **Implementation (if appropriate)**	Annually		
Successful implementation as defined by key milestones. Include measurable milestones in your proposal. **BCBSAZ Alternative Recommendation**: Standard: BCBSAZ will complete a successful implementation as defined by key milestones. **Desired Qualifier**: BCBSAZ agrees to meet milestones as outlined on the proposed implementation timeline (See **Section 5**). Note: the current proposed implementation timeline will be agreed upon and finalized during initial implementation meetings. **Group specific**	**Measured 90 days after effective date and paid out 120 days after effective date.**	Yes	2% of annual admin fee
12. **Data Exchange**	Annually		
Receive and transmit data with vendors based on a frequency defined by the business needs of the City of Chandler. **BCBSAZ Alternative Recommendation**: Standard: BCBSAZ will receive and transmit data with vendors based on a frequency defined by the business needs of Client. **Desired Qualifier**: Should BCBSAZ interface with any independent vendors to service client, we agree to establish appropriate mutually agreeable performance standards for data transmission. **TBD**	**TBD**	Yes	2% of annual admin fee

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Comments

Total of all risk measures cannot exceed 20% (based on administrative fee only).

[1] If BCBSAZ fails to perform in accordance with these guarantee(s) for two (2) consecutive reporting periods after the guarantee(s) are effective, BCBSAZ will refund or credit the group up to the amount at risk per measure during the time period which BCBSAZ did not meet the performance guarantee(s).

Additional BCBSAZ Notes:

1. The above stated performance guarantees will be effective for the contract period **1/1/2025 to 12/31/2025**.
2. The performance guarantee payout does not include stop loss premiums, claims reimbursement amounts, vendor interface fees, capitated claim payments, etc.
3. Performance guarantees are reported to the client approximately 90 days after the close of the measurement period or plan year. Payout is made (if applicable) after the reporting of results.
4. BCBSAZ will not be required to pay a penalty for performance guarantees if the group is in default of its contract with BCBSAZ and/or has not paid all claims and premiums by the date due.
5. BCBSAZ will determine the sample size of audited claims.

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BlueCross BlueShield Arizona
An Independent Licensee of the Blue Cross Blue Shield Association

Administrative Summary

Client Information	
Effective Date	**1/1/2025**
Client Name and Group Number AZBlue Group Number(s) Legal Account Name Doing Business As Legal Entity Type Type of Business	 028399 City of Chandler City of Chandler, Arizona Municipality City
Tax ID Numbers	Federal: **86-6000238** State: **07004582**
Headquartered State **Incorporated State**	Headquarters State: **Arizona** Incorporated State: **Arizona**
Client Address	175 S. Arizona Avenue Chandler, AZ 85225
Billing Correspondence Address	☐ Same as the client address ☒ Other: P.O. Box 4008, Mail Stop 703 Chandler, AZ 85244
Group Benefit Administrator (GBA)	**Primary GBA** Fernanda Acurio Benefits and Compensation Manager 480-782-2359 Fernanda.Acurio@chandleraz.gov **Secondary GBA** Rae Lynn Nielsen Director of Human Resources 480-782-2353 Raelynn.Nielsen@chandleraz.gov
Billing Contact	Denise Hooker Benefits Analyst P.O. Box 4008, Mail Stop 703 Chandler, AZ 85244 480-782-2371 Denise.Hooker@chandleraz.gov
Group Executive	Rae Lynn Nielsen Director of Human Resources 480-782-2353 Raelynn.Nielsen@chandleraz.gov
Chief Financial Officer	Dawn Lang Deputy City Manager – Chief Financial Officer 480-782-2255 Dawn.Lang@chandleraz.gov
Chief Executive Officer	Joshua Wright City Manager – CEO 480-782-2211 Joshua.wright@chandleraz.gov
Additional Authorized Group Contact(s)	Rebecca Davis Human Resources Specialist 480-782-2376 Rebecca.davis@chandleraz.gov

BlueCross BlueShield Arizona
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Administrative Summary

Product Information	
Member ID Number Issuance (Generated by AZBlue; includes alternate ID numbers)	**Included**
HealthEquity Integration and Sections	**Integration with HealthEquity** ☒Yes ☐No **Enrollment Section Set up** ☒Yes, set up non-integrated HDHP products ☐No, all HDHP members will be integrated with HealthEquity
Summary of Benefits and Coverage • Draft Summary of Benefits and Coverage • Review initial drafts with the Client and revise as agreed • Member SBCs will be available to members in their MyBlue portal account.	**Included** ☒No printing, AZBlue will provide electronic copies to the Client/Broker and member portal
Benefit Plan Booklets • Prepare draft Benefit Plan Booklet(s) • Review initial draft(s) with Client • Revise the initial draft(s) in response to the Client's comments and obtain the Client's approval of the second draft • Prepare final Benefit Plan Booklet(s). • Benefit Plan Booklet(s) will be in English.	**Included** ☒No printing, AZBlue will provide electronic copies to the Client/Broker and member portal
Assignability of benefits • If a member receives covered services from an out-of-network provider and the member wishes to assign the right to payment to the provider, the member or the provider may submit the documents requesting assignment to AZBlue. • AZBlue, at our sole discretion, will determine whether to honor the assignment and, if approved, remit any payment due directly to the provider.	☒The group has selected this option

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Administrative Summary

Account Management Services	
Implementation Meeting Schedule	**Included**
Ongoing Account Management: • Designated account resources • Ongoing management and review of administration, benefits, and data	**Included**
Open Enrollment Meetings: • At locations that meet AZBlue criteria (available upon request) • AZBlue will attend Open Enrollment meetings as agreed upon	**Included**
Annual Consultation: • Cost impact of benefit design changes • Projection of conventional premium equivalent rates • Year-end accounting reconciliation	**Included**
Annual 1099 filings to the IRS (regarding payments to providers)	**Included**
Standard Accounting Structure: • Individual group numbers for each member of a Pool, if applicable • Suffixes to accommodate separate claims reporting for different benefit plans (i.e., PPO Plan, HSA Plan, Alliance Plan) • Claim accounts to accommodate separate claims data for distinct locations and employee types (i.e., COBRA, Retiree, School)	**Included**
Administrative Fee Statements: • Statements generated monthly **15 business days** before the due date • Due date is the **first of the month.** • The contract has a grace period of thirty-one (31) days for premium payments. If a premium is not paid on or before the date it is due, it may be paid during the grace period. • Billed on a prospective basis • Option for online or hard copy delivery of statements • Ability to view invoices online & and download billing information • Ability to sort and search member information • Ability to remit payment for Charges for Covered Services, Administrative Fees, Other Fees, and any other fees due via ACH, EFT, or check. • Includes a full listing of each enrollee, summary, and total by section • Discrepancies can be addressed with an AZBlue representative	**Included**
Premium Statements Delivery:	**Included** ☐AZBlue will mail hard copies ☒Hard copies will be suppressed, and the group will utilize the Portal to obtain Premium Statements

BlueCross BlueShield Arizona
An Independent Licensee of the Blue Cross Blue Shield Association

Administrative Summary

Group Administration, Eligibility and Open Enrollment Services	
Employee Effective Date	☒First of the month
Employee Termination Date	☒End of the month
Dependent Birthday Termination (Age 26)	☒End of the month
Newborn/Adoptions/ Processing Options	☐ Newborn automatically added; member must request disenrollment. ☒ Newborns are automatically added for the first 31 days after birth; the member positively enrolls the newborn on the plan for coverage after 31 days
Newborn Letters	☐Standard Newborn letter will be sent ☒Custom Newborn letter
Newborn Deductible	☐Newborn deductible applies ☒Newborn deductible waived
Domestic Partnership	☐Same-Sex Only ☐Opposite Sex Only ☐Both ☒Not covered **Domestic Partnership Criteria** ☐AZBlue Standard Criteria Criteria will be published in the Benefit Plan Booklet ☐Client Specific Criteria (or Other) Client specific criteria will not be printed in the benefit booklet; Employees will be referred to the Group Benefit Administrator
Retiree Coverage	☒Yes ☐No If Yes: ☒Under 65 ☒65 and older **Retiree dependents coverage** ☒Yes ☐No As of January 1, 2024, the City mandates Medicare enrollment for retirees and their dependents who become Medicare-eligible in order to remain eligible for continued coverage under the City of Chandler medical plan. Retirees and their dependents who became Medicare-eligible before January 1, 2024, but did not enroll in Medicare are grandfathered and remain eligible for medical plan coverage.
Retroactive Termination	Retroactivity is limited to thirty-one (31) days from the date notice provided to AZBlue for terminations, changes, and reinstatements.
Leave of Absence	☐90 days ☒Other: Please refer to City of Chandler Statement of Eligibility as approved by Resolution No. 4995
Enrollment Eligibility Submission	☒ (834) Electronic file submission via secure file transport ☐ Excel (AZBlue will provide the required format) ☐Portal

BlueCross BlueShield Arizona
An Independent Licensee of the Blue Cross Blue Shield Association

Administrative Summary

Eligibility Vendor details	Vendor: City of Chandler Contact Phone: Primary: Denise Hooker 480-782-2371 Secondary: Rebecca Davis 480-782-2376 Contact email: Denise.hooker@chandleraz.gov Rebecca.davis@chandleraz.gov
Ongoing Eligibility updates/ files- Type	☐AZBlue Employer Portal Submissions ☐Excel (AZBlue will provide the required format) ☐Paper Applications ☒ (834) Electronic file submission via secure file transport
Frequency of files or Portal Updates	☐Portal Updates ☒Full File ☐Change Only file ☐Maintenance File ☐Daily ☒Weekly ☐Bi-Weekly ☐Monthly
Who should receive the Discrepancy reports?	Name: Title Phone: Email: benefits@chandleraz.gov
Open Enrollment Eligibility Transmission	Method: 834 Date: 11/22/2024 ***Enrollment must be received no later than November 26, 2024, to ensure ID cards are delivered by January 1, 2025***
COBRA Vendor Contact	Name of Vendor: Alight Contact Name: Shaun Smith Phone: 410-568-2351 Email: Shaun.smith.3@alight.com
COBRA Processing In the event the Client has future COBRA enrollees, the Client will provide one of the following: 1. A Blanket Guarantee letter that includes a guarantee of payment for the Client's first month's premium for all employees? 2. A Guarantee letter for specific members at the time of COBRA? Will the COBRA submission be a paper application or on the file?	Letter selection: ☐Blanket Guarantee ☐Specific member letter ☑ Not Applicable- members come on 834 file transmission COBRA submission: ☐Cobra Election Form or Paper Application ☒Transmitted via file

Administrative Summary

BlueCross BlueShield Arizona
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Coordination of Benefits (COB)	**Commercial:** The combined payments by the primary payer and AZBlue will not exceed the greater of the primary payer or AZBlue allowed amount. **Medicare:** AZBlue pays up to the Medicare-allowed amount except if the provider does not accept Medicare assignment, in which case AZBlue pays up to the billed charges. When your group health plan is the secondary payer, BCBSAZ utilizes the COB methodology that applies to your group health plan (and not the ACA methodology) to adjudicate claims for emergency services provided by non-contracted providers. As of January 1, 2024, the City mandates Medicare enrollment for retirees and their dependents who become Medicare-eligible in order to remain eligible for continued coverage under the City of Chandler medical plan. Retirees and their dependents who became Medicare-eligible before January 1, 2024, but did not enroll in Medicare are grandfathered and remain eligible for medical plan coverage.
Appeals AZBlue administers Level 1, Level 2, and External Review appeals.	**Included** ☒AZBlue administers Levels 1, 2, and external.
Arizona Senate Bill 1305 ARS 35-196.02	☒The group must comply with SB1305 ARS 35-196.02; prescribed abortion benefits will be administered ☐The group is not subject to SB1305 ARS 35-196.02
Abortion* *Benefits are available for elective and non-elective abortions, if legal where performed*	☒Non-elective abortions covered ☐Elective abortions covered ☐Elective and Non-elective abortions are covered ☐All abortions excluded

Administrative Summary

BlueCross BlueShield Arizona
An Independent Licensee of the Blue Cross Blue Shield Association

Massachusetts Employees Plan Sponsor will timely provide any authorizations required by Massachusetts law or by Massachusetts regulators to enable AZBlue to perform the mailing and/or electronic filing(s). If the Plan Sponsor fails to timely provide such authorization(s), AZBlue will have no duty to make the filing and/or mailing. If in AZBlue's opinion, the Employer's coverage meets the Massachusetts Minimum Creditable Coverage (MMCC) requirements, AZBlue agrees to reflect the coverage as creditable in its electronic filing and 1099-HC mailings. If in AZBlue's opinion, the Employer's coverage does not meet the MMCC requirements, the Employer may choose to either: (a) state the coverage is not creditable in its electronic filing and 1099-HC mailings; or (b) direct AZBlue to not make the electronic filing and provide the uncompleted 1099-HC forms to Employer.	☒AZBlue will **not** issue 1099HC or complete electronic filing with MA ☐AZBlue **will** prepare and distribute annual 1099-HC forms to Participants who are Massachusetts residents and make the electronic filing with Massachusetts regulators.
NYHCRA AZBlue will complete the required filing upon submission of the required forms. Current or prior elector status with the NY Pools may impact which documentation is required to elect and provide AZBlue with consent to perform this action on behalf of an elector.	☒Elect ☐Non-elect

Administrative Summary

BlueCross BlueShield Arizona
An Independent Licensee of the Blue Cross Blue Shield Association

Plan Compliance with Mandates – AZBlue Support Services AZBlue will support the Plan's compliance with the following federal mandates for coverage it administers on behalf of the Plan Sponsor: • Affordable Care Act Transparency in Coverage rule issued in November 2020 ("Transparency Rule") • Certain health plan provisions of the Consolidated Appropriations Act of 2021 ("CAA"). • Additional services will be mutually agreed upon in writing by AZBlue and Plan Sponsor.	
CAA Provider Directory Requirements • Publish a contracted provider directory on AZBlue's website • Update and verify the Provider directory every 90 days • Remove providers whose information cannot be verified • Indicate an "accurate as of" date on printed directories and direct Plan participants to the online directory. • Respond within 1 business day to Participant telephone inquiries regarding provider contractual relationship with AZBlue • Retain responses in the Plan Participant's file for two years. • Apply in-network cost share to covered services provided in reliance on incorrect provider network information (if required by CAA).	**Included**
Transparency Rule Machine Readable Files • Publish legally required machine-readable files that disclose the Plan's: ➢ in-network rates paid to providers ➢ historical out-of-network allowed amounts paid to providers ➢ negotiated rates and historical net prices for covered prescription drugs • Make files accessible to both Plan Participants and Plan Sponsor.	**Included**
Transparency Rule Cost Tool • Make available a cost-sharing liability tool consistent with the Transparency-in-Coverage final rule for the 500 shoppable services identified by the Centers for Medicare and Medicaid Services ("CMS") • Effective 1/1/23 or the end of any deferred enforcement period issued by federal regulators	**Included**
CAA ID Card Requirements • AZBlue will issue physical or electronic insurance ID cards w/ deductibles, out-of-pocket maximums, & telephone number and website address for individuals to seek consumer assistance • Issue to all Plan Participants	**Included**

BlueCross BlueShield Arizona
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Administrative Summary

Billing Model Notice • Inform Plan Participants about the Plan's balance billing protections by providing the Billing Model Notice to the Plan Sponsor and posting it to its public website.	**Included**
Continuity of Care • Apply continuity of care protections when provider contractual relationships are terminated.	**Included**

Prescription Data Reporting
• Submit to CMS specified files for the Prescription Drug Data Collection (RxDC) required by the CAA and implementing regulations
• If AZBlue administers the Plan Sponsor's prescription drug benefit, submit the following files:
  ○ P1 Individual and Student Market Plan List OR P2 Group Health Plan List
  ○ D1 Premium and Life Years
  ○ D2 Spending by Category
  ○ D3 Top 50 Most Frequent Brand Drugs
  ○ D4 Top 50 Most Costly Drugs
  ○ D5 Top 50 Drugs by Spending Increase
  ○ D6 Rx Totals
  ○ D7 Rx Rebates by Therapeutic Class
  ○ D8 Rx Rebates for the Top 25 Drugs
  ○ Narrative Response
• If AZBlue does not administer the Plan Sponsor's prescription drug benefit, submit the following files:
  ○ P1 Individual and Student Market Plan List OR P2 Group Health Plan List
  ○ D1 Premium and Life Years
  ○ D2 Spending by Category
  ○ Narrative Response (if applicable)
	Included
	
	AZBlue's obligations to submit any files for the Plan Sponsor are contingent upon the Plan Sponsor providing AZBlue all information AZBlue requests by the dates and in the formats AZBlue's specifies in its information collection materials. AZBlue will not provide any RxDC information for the Plan for any period of time during the applicable calendar year that the Plan Sponsor was not a Client of AZBlue. AZBlue reserves the right to modify supported reporting upon sixty (60) days' prior written notice to Plan Sponsor.

<u>Other</u> • For coverage it administers for the Plan Sponsor, AZBlue will submit to HHS air ambulance claim data consistent with the CAA and implementing regulations. • For coverage it administers for the Plan Sponsor, AZBlue will submit an annual Gag Clause Prohibition Compliance Attestation consistent with CAA requirements	

BlueCross BlueShield Arizona
An Independent Licensee of the Blue Cross Blue Shield Association

Administrative Summary

IMPORTANT - READ CAREFULLY

As the authorized representative of Plan Sponsor, I certify and agree to the following:

- Information provided in this Administrative Summary and all other applicable documents submitted in connection with this Administrative Summary are complete and accurate.
- If the information contained in the Administrative Summary or other supporting documentation is incomplete, inaccurate, materially misleading, false, or fraudulent, AZBlue has the right to:
  - retroactively adjust the Plan Sponsor's Administrative Fees or Other Fees if such information would have affected the Fee calculation;
  - invalidate, or withdraw any Fee proposal, or terminate coverage to the extent permitted by the Agreement or applicable federal or state law.
- This Administrative Summary is not accepted until approved by AZBlue and AZBlue's acceptance shall be based on information supplied by the Plan Sponsor, the requested benefits, and any other information obtained from outside sources.
- This Administrative Summary shall become binding upon AZBlue and the Plan Sponsor. Upon acceptance, this Administrative Summary shall be attached to and shall become a part of the Agreement.
- By including my e-mail address in the Administrative Summary, I authorize AZBlue to send information to the Plan Sponsor via e-mail. I also understand I may change the e-mail address or rescind this permission at any time by contacting AZBlue through **azblue.com.**

City of Chandler

By: _____

Title: MAYOR

Date: _____

APPROVED AS TO FORM:

By: _____

City Attorney RSL

ATTEST:

By: _____

City Clerk

Accepted and Agreed

BLUE CROSS AND BLUE SHIELD OF ARIZONA, INC.

By: Michael Groeger

Print Name: Michael Groeger

Title: Vice President, Commercial Sales

Date: October 25, 2024

Date Prepared	10/04/2024
Final	

Docusign Envelope ID: 3C1A9EA0-4B44-43D6-8DAB-C33683F9F60F

Re: 2024 Form 5500 Schedule C Service Provider Information

Dear Sir or Madam:

Blue Cross Blue Shield of Arizona (“BCBSAZ”) is providing this information to you to support any Form 5500 reporting obligations your group health plan has to the U.S. Department of Labor.

A. Blue Card Program

Under your contract with BCBSAZ, one of the benefits your employees and their dependents ("Participants") receive is access to healthcare services outside the geographic area BCBSAZ serves under a program known as BlueCard. Typically, in that situation, Participants obtain care from healthcare providers that have a contractual agreement with the local Blue Cross and/or Blue Shield Licensee in that other geographic area (the "Host Blue"). Within that arrangement, BCBSAZ is referred to as the "Home Blue."

Below is a list of indirect compensation that has been and/or is likely to be received in connection with the BlueCard Program. Note that the fees and compensation subject to disclosure under the Department of Labor rules include amounts that are not necessarily passed on to your ERISA Plan or your Participants. The financial terms of the BlueCard Program passed on to your ERISA plan, and additional details about the BlueCard Program, are described in your Administrative Services Agreement with BCBSAZ.

1. **BlueCard Access Fees:** The Access Fee is charged by the Host Blue to us for making its applicable provider network available to your members. The Access Fee will not apply to nonparticipating provider claims. The Access Fee is charged on a per-claim basis and is charged as a percentage of the discount/differential we receive from the applicable Host Blue subject to a maximum of $2,000 per claim. When charged, we pass the Access Fee directly on to you.

2. **Administrative Expense Allowances (AEA):** The AEA is a fixed per-claim dollar amount charged by the Host Blue to us for administrative services the Host Blue provides in processing claims for your members. The dollar amount is normally based on the type of claim (e.g. institutional, professional, international, etc.) and can also be based on the size of your group enrollment. When charged, we pass the AEA fee directly on to you.

   Note: To be considered for reduced BlueCard PPO fees, the claim must be for an account whose total Blue PPO enrollment exceeds 1,000 contracts

3. **Use of Estimated or Average Pricing by Host Blues.** As described in your administrative service agreement, some Host Blues use estimated or average prices to determine the negotiated price that is made available to BCBSAZ when plan participants access the Host Blue's participating provider network. This may result in a difference (positive or negative) between the price you pay on a specific claim and the actual amount paid to the provider by the Host Blue.

   The following describes the formulas used for determining an estimated or average price:

   Estimated: A percentage is used to modify the claim price for covered services. This percentage (either positive or negative) allows Host Blues to incorporate adjustments and actuarial projections prospectively into the final price. The percentage is determined by calculating the aggregate cost to the Host Blue over a look-back period less any initial payments made to providers divided by the total payments initially made to providers. The aggregate cost in the numerator includes all provider retrospective settlements, anti-fraud and abuse recoveries, provider refunds not applied on a claim-specific basis, performance-related bonuses or

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incentives, interest, other non-claim transactions and any positive or negative balance in the variance account. The percentage is then actuarially adjusted for anticipated changes in claims expenses for the prospective period. As of December 31, 2023, the modifying percentage applied to claims from those Host Blues that use estimated pricing ranged from (0.42%) to +9.50% the rate of payment to the provider at the point of the claims. The modifying percentages applied to claims from those Host Blues that will be used for estimated pricing have not been calculated as of the date of this letter.

Average: An average price is determined for a defined category of provider (e.g., institutional, professional, etc.) of a Host Blue in a given geographic area. The average is determined as follows:

Total amount paid to such providers over a look-back period, including initial payments as well as applicable claim and non-claim related transactions, which may include but are not limited to provider retrospective settlements, anti-fraud and abuse recoveries, provider refunds not applied on a claim-specific basis, performance-related bonuses or incentives, interest, etc., and any positive or negative balance in the variance account

divided by

Total amount of such providers' corresponding charges for covered services over the same look-back period (claims for non-covered services are not included in the calculation)

This result is an average price that is applied to each claim for the defined category of provider of the Host Blue in the geographic area and presented as the negotiated price.

The Host Blue determines whether it will use an actual, estimated or average price. The use of estimated or average pricing may result in a difference (positive or negative) between the price you pay on a specific claim and the amount the Host Blue pays to the provider. However, the BlueCard Program requires that the amount paid by the member and you is the final price; no future price adjustment will result in increases or decreases to the pricing of past claims.

Any positive or negative differences in estimated or average pricing are accounted for through variance accounts maintained by the Host Blue and are incorporated into future claim prices. As a result, the amounts charged to you will be adjusted in a following year, as necessary, to account for over- or underestimation of the past years' prices. The Host Blue will not receive compensation from how the estimated price or average price methods, described above, are calculated. Because all amounts paid are final, neither positive variance account amounts (funds available to be paid in the following year), nor negative variance amounts (the funds needed to be received in the following year), are due to or from you. If you terminate, you will not receive a refund or charge from the variance account.

Variance account balances are small amounts relative to the overall paid claims amounts and will be liquidated or drawn down over time. The timeframe for their liquidation depends on variables, including, but not limited to, overall volume/number of claims processed and variance account balance. Variance account balances may earn interest at the federal funds or similar rate. Host Blues may retain interest earned on funds held in variance accounts.

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4. BlueCard Global Core Program. The BlueCard Global Core Program provides members with access to an international network of inpatient, outpatient and professional providers. The Blue Cross and Blue Shield Association (BCBSA) utilizes GeoBlue for Medical Assistance and Claims support Services. The fees paid by the Home Blue are as follows:

Medical Assistance	Fee (in dollars)
General Inbound Calls	$28.45 / Call
Provider Inquiry/Referral (non-medical situation)	$22.35 / Call
Cashless access/Guarantee of Payment (GOP)	$111.76 / GOP
Telephone Translation	$63.50 / Call
Fulfillment	$9.65 / Call
Provider/medical assistance information provided by a nurse	$96.52 / Call
Misrouted Calls	$22.35 / Call
Medical Monitoring	$294.64 / Case

Claims Support Services	Fee (in dollars)
Claim preparation, processing and/or payment (includes translation, coding, currency conversion)	$39.62 / Claim
Misrouted claim (for example, domestic)	$9.65 / Claim
Claim Status inquiry	$22.35 / call/member ID
Medical records translation	At Cost
Currency conversion gains/losses	At Cost
Wire/ACH fees	At Cost

Additional Services	Fee (in dollars)
Medical Evacuation coordination	$1,270.00 / Case
Medical Repatriation coordination	$1,270.00 / Case
Repatriation of Remains coordination	$609.60 / Case
Medical travel coordination	$294.64 / Case
Assistance Partner Engagement (limited to ONLY countries where vendor is restricted from conducting business)	Ranging from $100-500 per Direct Pay Letter (DPL)
Ad hoc UCR claim research, claim line-item audit and case negotiation	As agreed upon by Home Plan and GeoBlue

5. Negotiated Arrangements: With respect to one or more Host Plans, instead of using the BlueCard Program, BCBSAZ may process your Participant claims for Covered Services through Negotiated Arrangements.

   Non-Standard negotiated AEA fees for 2023/2024:

   Non-standard negotiated fees can range from either $5.48 to $17.00 per claim, or $8.50 to $28.33 per contract per month depending on the negotiated arrangement and/or the health plan product

For informational Purposes Only - NO Action Required

Docusign Envelope ID: 3C1A9EA0-4B44-43D6-8DAB-C33683F9F60F

B. Other Services

Under regulations related to the 2009 Form 5500 Schedule C - Service Provider Information, BCBSAZ is required to provide information regarding certain indirect compensation paid by BCBSAZ to other Service Providers during 2023 related to your contract with BCBSAZ.

Company Name: Exela Technologies
Address: 369 Inverness Parkway, Suite 300, Englewood, CO 80112
Service Provided: Claims Edit Resolution
Basis of Compensation: $0.396 per Claim Edit for low complexity, $0.448 for medium complexity, and $0.614 for high complexity.

Company Name: Smart Data Solutions
Address: 960 Blue Gentian Rd., Eagan, MN 55121
Service Provided: Claims Edit Resolution
Basis of Compensation: $0.71 - $1.67 per Claim Edit for low complexity, $0.85 - $2.29 for medium complexity, and $1.00 - $3.20 for high complexity.

Company Name: Cobalt MedPlans
Address: 10740 Nall Ave., Overland Park, KS 66211
Service Provided: Claims Edit Resolution
Basis of Compensation: $1.87 per Claim Edit for low complexity, $2.88 for medium complexity, and $4.13 for high complexity.

Company Name: Sutherland Global Services, Inc.
Address: 2 Brighton Rd., Suite 300 Clifton, NJ 07012
Service Provided: Data entry for provider data, assistance with credentialing
Basis of Compensation: $8.10 per provider recredentialing completed and $27.61 per initial credentialing unit completed

Company Name: Change Healthcare
Address: P.O. Box 572490, Murray Utah 84157-2490
Service Provided: Fee for the Recovery of Overpayments
Basis of Compensation: 16% of the Realized Savings for Diagnostic Related Group (DRG) and Hospital Billing Validation audits and 20.5% of the Realized Savings for Hospital Charge Audits.

Company Name: OptumRx.[1]
Address: 1600 McConnor Parkway, Schaumburg, IL 60173-6801
Service Provided: Pharmacy Claims Processing and select PBM services
Basis of Compensation: for electronic claims only
Pass-Thru Pricing Model = $0.75 per net paid claim
[1] *BCBSAZ paid compensation to OptumRx.only for groups who used BCBSAZ to manage their pharmacy benefits.*

Pharmacy Rebates – BCBSAZ receives rebates from certain Pharmaceutical Manufacturers for certain drugs. Subject to the terms of your BCBSAZ Administrative Services Agreement your Group may be eligible for a Pharmacy Rebate. BCBSAZ may earn interest income on Pharmacy Rebates during the period after the Rebate is paid to BCBSAZ and prior to payment to your Group.

If you have any questions, please contact your BCBSAZ Account Manager.

Sincerely,

Alan Lunde

Alan Lunde
Financial Reporting

For informational Purposes Only - NO Action Required

City Council Memorandum Human Resources Memo No. N/A

Date: November 04, 2024
To: Mayor and Council
Thru: Joshua H. Wright, City Manager
Tadd Wille, Assistant City Manager
Rae Lynn Nielsen, Human Resources Director
From: Fernanda Acurio, Benefits & Compensation Manager
Subject: Agreement No. HR2-948-4496, Amendment No. 1, with ReliaStar Life Insurance Company, for Basic and Voluntary Life and Accidental Death and Dismemberment Insurance

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Proposed Motion:

Move City Council approve Agreement No. HR2-948-4496, Amendment No. 1, with ReliaStar Life Insurance Company, for basic and voluntary life and accidental death and dismemberment insurance, in an amount not to exceed $960,000, for the period of one year, beginning January 1, 2025, through December 31, 2025.

Background/Discussion:

The City provides a life insurance benefit as a piece of the employee benefits package. The basic life and accidental death and dismemberment (AD&D) insurance is funded by the City and all supplemental coverage is funded by the employee based on the benefit selected. City staff reviews the employee benefits package each year with the assistance of an employee benefits consulting firm. This benefit provides basic life and accidental death and dismemberment insurance and supplemental life insurance for spouses and dependent children to benefit-eligible classes. There will be no rate increase for CY2025.

Evaluation:

On November 7, 2022, City Council approved an agreement with ReliaStar Life Insurance Company for basic and voluntary life and accidental death and dismemberment insurance, for a two-year period, with the option of up to three two-year extensions. Staff recommends a one-year extension of the Agreement.

Financial Implications:

Each type of life insurance is funded differently depending on whether it is a City-provided benefit or the supplemental, employee-paid benefit. The City funded Basic and AD&D benefits are paid from all cost centers across all funds where employees work. The Supplemental Voluntary Term and AD&D benefit is paid from the earnings of employees who opt for this coverage. In both cases, the funds are collected in a payroll clearing liability account to pay the total amount due to the insurance company. Retirees may opt for this coverage as well, and this amount is collected in a separate General Fund liability account and paid to the insurance company.

Fiscal Impact

Account No.	Fund Name	Program Name	Dollar Amount	CIP Funded Y/N
XXX.XXXX.5161	Various Funds	N/A	$960,000	N

Attachments

CY 2025 VOYA Amendment

Docusign Envelope ID: 87A2DED5-EC41-4A56-B150-917DFCDCBEB7

City Clerk Document No. _____

City Council Meeting Date: November 7, 2024

AMENDMENT TO CITY OF CHANDLER AGREEMENT
BASIC AND VOLUNTARY LIFE AND ACCIDENTAL DEATH AND DISMEMBERMENT INSURANCE
CITY OF CHANDLER AGREEMENT NO. HR2-948-4496

THIS AMENDMENT NO. 1 (Amendment No. 1) is made and entered into by and between the City of Chandler, an Arizona municipal corporation (City), and ReliaStar Life Insurance Company, a Minnesota corporation (Contractor), (City and Contractor may individually be referred to as Party and collectively referred to as Parties) and made _____ , 2024 (Effective Date).

RECITALS

WHEREAS, the Parties entered into an agreement for basic and voluntary life and accidental death and dismemberment insurance (Agreement); and

WHEREAS, the term of the Agreement was January 1, 2023, through December 31, 2024, with the option of up to three two-year extensions; and

WHEREAS, Contractor guaranteed the rates under the Agreement through January 1, 2026; and

WHEREAS, the Parties wish to exercise the option through this Amendment to extend the Agreement for one year through December 31, 2025.

AGREEMENT

NOW THEREFORE, the Parties agree as follows:

1. The recitals are accurate and are incorporated and made a part of the Agreement by this reference.

2. Section I.D., Term of Agreement, is amended to extend the Agreement for a one-year period beginning January 1, 2025, through December 31, 2025.

3. Section IV, Payment, is amended to state: The City will pay the Contractor the per unit cost set forth in Contract Document 3, City of Chandler Services Agreement No. HR2-948-4465, Exhibit

Docusign Envelope ID: 87A2DED5-EC41-4A56-B150-917DFCDCBEB7

B, Compensation and Fees, which is incorporated into and made a part of this Amendment No. 1 by this reference. Total payments made to the Contractor during the term of this Amendment No. 1 will not exceed $960,000.

4. All other terms and conditions of the Agreement remain unchanged and in full force and effect. If a conflict or ambiguity arises between this Amendment No. 1 and the Agreement, the terms and conditions in this Amendment No. 1 prevail and control.

IN WITNESS WHEREOF, the Parties have entered into this Amendment on the Effective Date.

FOR THE CITY

By: _____

Its: Mayor

FOR THE CONTRACTOR

By: Krista Snow

Its: Vice President

APPROVED AS TO FORM:

By: _____

City Attorney RGA

ATTEST:

By: _____

City Clerk

City Council Memorandum Information Technology Memo No. N/A

Date: November 04, 2024
To: Mayor and Council
Thru: Joshua H. Wright, City Manager
Dawn Lang, Deputy City Manager - CFO
Sandip Dholakia, Chief Information Officer
From: Kerstin Nold, IT Chief Technology Officer
Subject: Agreement No. IT9-208-4034, Amendment No. 5, Fleet Management System

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Proposed Motion:

Move City Council approve Agreement No. IT9-208-4034, Amendment No. 5, with CCG Systems, Inc., dba FASTER Asset Solutions, for the fleet management system, in an amount not to exceed $163,479, for the period of one year, beginning September 30, 2024, through September 29, 2025.

Background/Discussion:

In FY 2019-20, City Council approved an agreement with CCG Systems, Inc., dba FASTER Asset Solutions, for a comprehensive fleet management system. The fleet management system digitally transformed business operations for managing the city's fleet and equipment assets. The FASTER fleet management system meets the Fleet Services Division's needs for management activities including preventative maintenance, operations, fuel, analytics, diagnostics, inventory, and asset management to streamline operational workflows and improve overall efficiency and management of the city-wide fleet, inventory, equipment, and fuel costs. Analytical tools added, such as the 15-point replacement criteria, are helpful when determining assets in need of replacement.

This purchase is for the renewal of the annual maintenance and support of the software, as well as implementation of the new MotorPool module for checking in and checking out general purpose vehicles not assigned to a specific department through rental and reservations, which allows for asset sharing. The new module will replace the current Fleet Commander Motor Pool software and fully integrate

into the existing FASTER fleet management system.

Evaluation:

On September 12, 2019, City Council approved an agreement with CCG Systems, Inc., dba FASTER Asset Solutions, for the fleet management system, for a one-year period, with the option of up to four one-year extensions. The four available extension options have been exercised and the city and Contractor have agreed in principle to a one-year extension option with the same terms and conditions.

Financial Implications:

This item includes annual ongoing maintenance of $96,462, with an additional $6,674.40 added for the MotorPool module support. Also included is a one-time payment of $60,342.40 for the MotorPool implementation which includes setup, training, go-live support and keybox equipment.

Fiscal Impact

Account No.	Fund Name	Program Name	Dollar Amount	CIP Funded Y/N
101.1200.5419.0.0.0	General Fund	N/A	$103,137	N
401.1285.5219.0.6IC102.0	General Government Capital Projects	Fleet Managment System	$ 60,342	Y

Attachments

Amendment

Docusign Envelope ID: 2F21D796-533C-403C-A1E8-9FC01985658A

City Clerk Document No. _____

City Council Meeting Date: November 7, 2024

AMENDMENT TO CITY OF CHANDLER AGREEMENT
FLEET MANAGEMENT SYSTEM
CITY OF CHANDLER AGREEMENT NO. IT9-208-4034

THIS AMENDMENT NO. 5 (Amendment No. 5) is made and entered into by and between the City of Chandler, an Arizona municipal corporation (City), and CCG Systems, Inc. DBA FASTER Asset Solutions (Contractor), (City and Contractor may individually be referred to as Party and collectively referred to as Parties) and made _____ , 2024 (Effective Date).

RECITALS

WHEREAS, the Parties entered into an agreement for the fleet management system (Agreement); and

WHEREAS, the term of the Agreement was September 30, 2019 through September 29, 2020 with the option of up to four one-year extensions; and

WHEREAS, the Parties exercised the four one-year extensions through Amendments to extend the Agreement through extended the Agreement through September 29, 2025; and

WHEREAS, the Parties wish to extend the Agreement for one additional year.

AGREEMENT

NOW THEREFORE, the Parties agree as follows:

1. The recitals are accurate and are incorporated and made a part of the Agreement by this reference.

2. The Parties wish to increase the Scope of Services to include Motorpool + Keybox hardware and software, as more fully described in Attachment A to this Amendment.

3. The City will pay the Contractor the per unit cost set forth in Revised Exhibit B of the original Agreement, which is attached to and incorporated into and made a part of this Amendment No. 5. Total payments made to the Contractor during the term of this Amendment No. 4 will not exceed $163,479.

Docusign Envelope ID: 2F21D796-533C-403C-A1E8-9FC01985658A

4. The Agreement is extended for a one-year period September 30, 2024, through September 29, 2025.

5. All other terms and conditions of the Agreement remain unchanged and in full force and effect. If a conflict or ambiguity arises between this Amendment No. 5 and the Agreement, the terms and conditions in this Amendment No. 5 prevail and control.

IN WITNESS WHEREOF, the Parties have entered into this Amendment on the Effective Date.

FOR THE CITY

By: _____

Its: Mayor

FOR THE CONTRACTOR

By: Mitch Skyer

Its: President

APPROVED AS TO FORM:

By: _____

City Attorney JMB

ATTEST:

By: _____

City Clerk

Docusign Envelope ID: 2F21D796-533C-403C-A1E8-9FC01985658A

ATTACHMENT A
MOTORPOOL + KEYBOX SCOPE OF SERVICES

This Scope of Services describes the minimum requirements for the MotorPool module. The city and the contractor will agree to a final Scope of Services and project start date.

MotorPool Asset Sharing, Rental & Reservations System Set Up
MotorPool Asset Sharing, Rental and Reservation System/Add-on is a comprehensive system for managing motor pools, asset sharing, rental and reservations, which is an add-on to FASTER Web.

With unlimited user access (named accounts), this web-based rental and reservation application is designed for both attended and unattended motor pools. It provides simple and sensible workflow processes that are user friendly for both the customer and end user. Its flexible rate structures, configuration, and consolidated billing provides the ability to seamlessly manage multiple pool locations.

MotorPool is deployed within 10 business days.

Implementation includes two sessions, a system overview meeting for key users and stakeholders and live remote go-live training for users.

MotorPool System Overview & Configuration Sessions
System overview and configuration session activities take place via live remote web-based session to prepare and train customer for set up and software configuration.

MotorPool System Training/Go Live
Remote MotorPool Operations User Training (includes dispatchers, reservationist and admin).

Additional classes may be purchased if needed.

Onsite training is available and can be quoted at customer's request.

KEYBOX Setup

Setup of keybox equipment with FASTER Motorpool Module
This requires the separate purchase of one or more KEYper Systems Inc. key box(es) model: KEYper MXi Lock-in. FASTER has developed with KEYper Systems a special version of the KEYper MXi Lock-in that can integrate with FASTER Web MotorPool. The key box(es) must be procured through FASTER along with the Integration.
(Note: Upgrades and Support for this integration add-on software is separate from the manufacturer's warranty and support information and cost.)

The FASTER Web MotorPool Key Box Integration allows fleet operations to provide attendant-less dispatch and return of MotorPool assets using a KEYper Systems key box. Key fobs associated with an asset in FASTER Web MotorPool are used to track the dispatch and return of asset reservations through

Docusign Envelope ID: 2F21D796-533C-403C-A1E8-9FC01985658A

the key box.

- Enables attendant-less vehicle dispatch and return
- Users will use FASTER Web's MotorPool interface to create and edit asset reservations.
- Drivers will pick up and return keys via the key box.
- Optional upgrade to for driver to input a meter reading at the key box during asset return.
- Sends automated email notifications:
- Multiple cabinet capacity supported (daisy chaining)

KEYper MXi LOCK-IN COMPLETE SYTEM

Complete system includes 1 year of Premier Plus warranty and support plus the following components:

- Locking Cable Seals
- Battery Backup UPC
- Sturdi Fobs
- Biometric Fingerprint Reader
- USB FOB Reader (1)
- Wire Cutter
- Digital Camera
- Network Cable

Docusign Envelope ID: 2F21D796-533C-403C-A1E8-9FC01985658A

REVISED EXHIBIT B
COMPENSATION AND FEES

One-Time Fees

Description	Fee
MotorPool Module including: Set up Training Go-Live Equipment and shipping	**$60,342.40**

Annual Support and Maintenance Fees

Description	Fee
FASTER Web upgrades and support	$31,910.99
Web current customers hosting	$38,345.53
Web current customers SaaS	$26,205.48
MotorPool module support	$6,674.40
Total	**$103,136.40**

City Council Memorandum Management Services Memo No. N/A

Date: November 04, 2024
To: Mayor and Council
Thru: Joshua H. Wright, City Manager
Dawn Lang, Deputy City Manager - CFO
Kristi Smith, Financial Services Director
From: Christina Pryor, Procurement & Supply Senior Manager
Subject: Agreement No. WH4-801-4646, Amendment No. 1, for Traffic Signs and Related Items

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Proposed Motion:

Move City Council approve Agreement No. WH4-801-4646, Amendment No. 1, for traffic signs and related items, with Interwest Safety Supply, LLC, in an amount not to exceed $150,000, for the period of November 1, 2024, through October 31, 2025.

Background/Discussion:

The Traffic Division's preventive maintenance program replaces approximately 1,000 traffic signs and posts annually due to damage, age, and new design requirements. The equipment will be stocked at and distributed from the city's Central Supply Division in addition to purchases made directly by the Public Works and Utilities Department.

This contract is used primarily by the Public Works and Utilities Department. The requested amount of $150,000 reflects the Traffic Division's FY 2024-25 budget for traffic sign replacement which is based on actual spend, with additional provisions for other city department use. Items are purchased throughout the year only as needed and stock levels are maintained at the minimum levels necessary to support city operations.

Evaluation:

On October 19, 2023, City Council approved an agreement with Interwest Safety Supply, LLC, for traffic signs and related items, for a one-year period, with the option of up to four (4) additional one-year extensions. The contractor agreed to extend the agreement for one year under the same terms and conditions and with a price increase on some of the line items, citing higher costs in materials, labor, and shipping. Staff reviewed the requested price increase and found it to be fair and reasonable based on the current market and services provided. Staff recommends extension of the agreement for the term of November 1, 2024, through October 31, 2025. This is the first extension of the original agreement.

Financial Implications:

Funds for the requested supplies will come from the Central Supply Inventory account (101.0000.1516). Individual cost centers will be charged for the supplies as they are issued from Central Supply.

Fiscal Impact

Account No.	Fund Name	Program Name	Dollar Amount	CIP Funded Y/N
101.0000.1516.0.0.0	General	N/A	$150,000	N

Attachments

Amendment 1

Docusign Envelope ID: 933BC41F-C971-4DA4-8476-AF7A94C33F2A

City Clerk Document No._____

City Council Meeting Date: _____

AMENDMENT TO CITY OF CHANDLER AGREEMENT
TRAFFIC SIGNS & RELATED ITEMS
CITY OF CHANDLER AGREEMENT NO. WH4-801-4646

THIS AMENDMENT NO. 1 (Amendment No. 1) is made and entered into by and between the City of Chandler, an Arizona municipal corporation (City), and Interwest Safety Supply, Inc., a Utah Corporation (Contractor), (City and Contractor may individually be referred to as Party and collectively referred to as Parties) and made _____, 2024 (Effective Date).

RECITALS

WHEREAS, the Parties entered into an agreement for Traffic Signs & Related Items (Agreement); and

WHEREAS, the term of the Agreement is November 1, 2023, through October 31, 2024; and

WHEREAS, this is the first renewal option of this Agreement.

AGREEMENT

NOW THEREFORE, the Parties agree as follows:

1. The recitals are accurate and are incorporated and made a part of the Agreement by this reference.

2. Section III: Term is amended to read as follows: The Agreement is extended for a one-year period November 1, 2024, through October 31, 2025.

3. Section IV: Price is amended to read as follows: The City will pay the Contractor an amount not to exceed $150,000, for the one-year term of the contract, as set forth in Revised Exhibit B attached.

4. All other terms and conditions of the Agreement remain unchanged and in full force and effect. If a conflict or ambiguity arises between this Amendment No. 1 and the Agreement, the terms and conditions in this Amendment No. 1 prevail and control.

Docusign Envelope ID: 933BC41F-C971-4DA4-8476-AF7A94C33F2A

IN WITNESS WHEREOF, the Parties have entered into this Amendment on the Effective Date.

FOR THE CITY

By: _____

Its: _____

FOR THE CONTRACTOR

By: Dedunne Morales

Its: Account Manager

APPROVED AS TO FORM:

By: _____

City Attorney

JMB

ATTEST:

By: _____

City Clerk

Docusign Envelope ID: 933BC41F-C971-4DA4-8476-AF7A94C33F2A

REVISED EXHIBIT B TO AGREEMENT
PRICING

Item #	COC Stock #	Description	Unit Price
1	9701.059.0000	SIGN FINISHED, ARROW DOUBLE 24" X 48", HIGH INTENSITY GRADE SHEETING	$65.45
2	9701.408.3000	SIGN, FINISHED, KEEP RIGHT SYMBOL, 18" X 30", # R4-7, HIGH INTENSITY GRADE SHEETING	$23.75
3	9701.408.3400	SIGN, FINISHED, KEEP RIGHT SYMB, 24" X 30", HIGH INTENSITY SHEETING,	$35.52
4	9701.548.3010	SIGN, OBJECT MARKER, 12 X 12, YELLOW HIGH INTENSITY GRADE SHEETING, #OM1-3	$8.22
5	9701.698.3600	SIGN, FINISHED, RIGHT TURN ONLY, SYMBOL 30" X 36", HIGH INTENSITY GRADE SHEETING #R3-5R, B/W	$54.06
6	9701.742.2402	SIGN, SPEED LIMIT 45, COMPLETED, 30" X 36", HIGH ITENSITY GRADE SHEETING	$54.73
7	9701.757.4530	SIGN, STOP, 30 X 30, RI-1-30FIN, HIGH ITENSITY GRADE SHEETING	$44.82
8	9707.080.4101	ARM, EXTRA LONG, 23-1/8" FOR 2-3/8" O.D. CAPS, CANTILEVER ARM BRACKET,	$40.00
9	9701.742.2401	SIGN, SPEED LIMIT 25, COMPLETED, 24" X 30”, HIGH INTENSITY GRADE SHEETING	$36.67
10	9701.757.4705	SIGN, YELLOW, HIGH INTENSITY GRADE REFLECTIVE SHEETING W/BLACK BORDER, 36" X 36"	$68.74
11	9707.058.1500	WHITE BLANK, SQUARE, FLAT, 36 X 36 (HOLES ARE PUNCHED IN CENTER TOP-BOTTOM	$70.32
12	9701.547.2000	SIGN, NO PARKING, SYMBOL, 24 X 24, R8-3, HIGH INTENSITY GRADE SHEETING	$29.58
13	9707.057.7500	WHITE BLANK, RECTANGLE, FLAT, 36W X 30H	$54.24
14	9701.547.1800	SIGN, FINISHED, NO PARKING SYMB, 18 X 18, HIGH INTENSITY GRADE SHEETING	$17.86
15	9707.058.1000	WHITE BLANK, SQUARE, FLAT, 30 X 30	$47.52
16	9707.058.0500	WHITE BLANK, SQUARE, FLAT, 24 X 24	$29.58
17	9706.108.2200	CONE, TRAFFIC, FLOURSCENT ORANGE, 28" HIGH- W/3MREFLECTIVE COLLAR	$21.50
18	9706.108.1800	CONE, TRAFFIC, FLUORESCENT ORANGE, 18", W/REFLECTIVE 3M COLLAR	$12.15
19	9701.542.2003	SIGN, NO U-TURN, COMPLETED, 24" X 24" HIGH INTENSITY GRADE SHEETING	$31.92
20	9701.120.1280	SIGN, DEAD END "OBJECT MARKER" , RED HIGH INTENSITY GRADE SHEETING, #OM4-3-HI-080-18X18	$17.35
21	9701.548.3000	SIGN, OBJECT MARKER, 18 X 18, YELLOW HIGH INTENSITY GRADE SHEETING, #OM1-3,	$16.73

22	9701.723.3610	SIGN, SCHOOL, ADVANCE, 36" X 36", #S1-1, FLUORESCENT YELLOW-GREEN, DIAMOND GRADE REFLECTIVE SHETING, #3M 4083/.080	$79.50
23	9701.059.0003	SIGN FINISHED, ARROW DIAGONAL, PLAQUE, YELLOW GREEN #W16-7PL 30" X 18", DIAMOND GRADE SHEETING	$30.23
24	9707.798.2000	TUBING, POST, SIGN, 2" X 2" SQUARE, 11FT. LONG, 12 GAUGE/.105 INCH GALVANIZED STEEL,	$51.65
25	9707.798.2001	ANCHOR, 2-1/4" X 2-1/4" SQUARE, 2 FT LONG, 12 GAUGE/.105 INCH GALVANIZED STEEL USED WITH 11 FT. LONG SIGNPOST TUBING	$17.51
26	9707.798.2002	SLEEVE, 2-1/2" X 2-1/2" SQUARE, 12" LONG,12 GAUGE GALVANIZED STEEL, USED WITH 11 FT. SIGNPOST TUBING	$10.80
27	9707.798.1000	PERFORATED TUBING, 1 3/4" X 10', 12 GAUGE,	$44.62
28	9707.057.5000	WHITE, RECTANGLE, FLAT, 18W X 24H	$24.10
29	9707.057.4000	WHITE, RECTANGLE, FLAT, 36W X 12H	$24.53
30	9706.048.0500	BARRICADE, TYPE I W/ENGINEER HIGH INTENSITY PRISMATIC (HIP), DOUBLE SIDED, STEEL LEGS, W/O LIGHTS	$57.52
31	9707.057.3500	WHITE, RECTANGLE, FLAT, 18H X 12L, .080 GUAGE ALUMINUM	$11.49
32	9701.057.0338	SIGN, FINISHED, ALL-WAY, 18" X 6", (HIGH INTENSITY GRADE SHEETING	$9.13
33	9707.057.3199	BLANK, COVERED SNS, 1.25 GAUGE, 42" X 8”, WHITE	$28.11
34	9707.057.1990	DEAD END, 1.25 GAUGE, 24" X 8”, YELLOW	$17.86
35	9707.057.2500	BLANK, COVERED SNS, 1.25 GAUGE, 48" X 8", WHITE	$34.05
36	9707.080.4110	CAP, SQAURE POST, 2", # UNIV:120UNF200	$10.91
37	9707.100.4001	CROSS PIECE #120CPF090	$10.91
38	9707.057.2999	BLANK, COVERED SNS, HI-125 GAUGE, 36" X 8", WHITE	$23.75
39	9707.057.6000	BLANK, RECTANGLE, FLAT, 24W X 30H	$16.67
40	9701.725.3603	SIGN, RAILROAD, COMPLETED, W10-1-HI-080 36 X 36" DIAMETER, HIGH INTENSITY GRADE SHEETING	$69.67
41	9707.057.3505	WHITE, RECTANGLE, FLAT, 12W X 24H	$15.39
42	9707.057.2499	BLANK, COVERED SNS, 1.25 GAUGE, 30" X 8", WHITE	$21.91
43	9701.120.1230	SIGN, DEAD END, 30 X 30, W14-1-30" X 30", HIGH INTENSITY GRADE SHEETING	$48.28
44	9701.575.2403	SIGN, SPEED LIMIT 35, COMPLETED, 24" X 30", HIGH INTENSITY GRADE SHEETING	$36.86
45	9701.757.4700	SIGN, YELLOW, HIGH INTENSITY GRADE REFLECTIVE SHEETING W/BLACK BORDER, 30" X 30	$45.00
46	9701.549.2630	SIGN, ONE WAY, RIGHT, 36" X 12" HIGH ITENSITY GRADE SHEETING	$24.20
47	9701.059.0050	SIGN, FINISHED, BIKE LANE, 30" X 24" HIGH ITENSITY GRADE SHEETING	$37.18
48	9707.061.4000	BRACKET, STAINLESS-STEEL, STRAIGHT LEG, BAND-IT, 100/BX	$2.65
49	9701.549.2620	SIGN, ONE WAY, LEFT, 36" X 12", HIGH INTENSITY GRADE SHEETING	$27.14
50	9701.757.4800	SIGN, 20 M.P.H., YELLOW, HIGH INTENSITY SHEETING, W/BLACK BORDER, 18" X 18", #W13-1	$17.86
51	9701.757.4500	SIGN, STOP AHEAD, SYMB, 30 X 30, W3-1A, HIGH INTENSITY GRADE SHEETING	$49.28
52	9707.061.4020	CROSS PIECE, 12" ADJUSTABLE, PART # Z12ADJCPF	$25.75
53	9707.058.1505	HUMPS, SPEED SIGN, 30" X 30", HIGH INTENSITY GRADE SHEETING	$47.87

54	9704.205.2600	SIGN, LANE ENDS MERGE LEFT SYMBOL, 36 X 36	$66.87
55	9704.205.2005	SIGN, LANE ENDS MERGE RIGHT SYMBOL, 36 X 36	$66.87
56	9704.205.1600	SIGN, BEGIN, 6 X 12	$7.31
57	9704.205.1601	SIGN, END, 6 X 12	$7.31
58	9701.757.4525	SIGN, STOP, 36" X 36" R1-1-36, HIGH INTENSITY SHEETING	$64.97
59	9701.059.0006	SIGN, FINISHED, ARROW, SINGLE, 24" X 48", HIGH INTENSITY GRADE SHEETING	$62.62
60	9704.205.2300	SIGN, DO NOT ENTER, 30 X 30, R5-1	$49.28
61	9704.205.1000	SIGN, DO NOT ENTER, 36 X 36	$66.87
62	9701.725.3602	SIGN, NO U-TURN, COMPLETED, 18" X 18", HIGH INTENSITY GRADE SHEETING	$21.39
63	9704.205.3800	SIGN, NO LEFT TURN 24 X 24, R3-2	$30.59
64	9704.205.7510	SIGN, NO RIGHT TURN 24 X 24, R3-1	$30.59
65	9704.733.3330	SHEET, EC FILM, BROWN, 36" X 50 YARDS, 3M #1179C	$576.00
66	9704.505.7000	SIGN, TRANSFER TAPE, CLEAR, 36" X 100YD, 3M # TPM5ECF	$395.12
67	9701.742.2406	SIGN, SPEED LIMIT 30, COMPLETED, 30" X 36", HIGH INTENSITY GRADE SHEETING	$55.89
68	9701.742.2407	SIGN, SPEED LIMIT 40, COMPLETED, 30" X 36", HIGH INTENSITY GRADE SHEETING	$55.89
69	9701.742.2400	SIGN, SPEED LIMIT WITH-OUT NUMBERS R2-1, HIGH INTENSITY GRADE SHEETING	$38.52
70	9704.206.0000	SIGN, THRU TRAFFIC MERGE RIGHT, 36" X 36", HIGH INTENSITY GRADE SHEETING	$66.87
71	9704.206.2000	SIGN, THRU TRAFFIC MERGE LEFT, 36" X 36", HIGH INTENSITY GRADE SHEETING	$66.87
72	9705.480.3350	SIGN, PEDESTRIAN, 30 X 30, W11-2, FLUORESCENT YELLOW GREEN	$59.68
73	9705.480.3360	SIGN, PEDESTRIAN, 36 X 36, W11-2, FLUORESCENT YELLOW GREEN	$81.85

City Council Memorandum Management Services Memo No. 25-042

Date: November 04, 2024
To: Mayor and Council
Thru: Joshua H. Wright, City Manager
Dawn Lang, Deputy City Manager - CFO
Kristi Smith, Financial Services Director
From: Danielle Wells, Revenue and Tax Senior Manager
Subject: License Series 6, Bar Liquor License Application for Juanita Alicia Esparza, Agent, Sneaker Heads Sports Bar, LLC, DBA Snkrheadz Restaurant and Lounge

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Proposed Motion:

Move for recommendation to the State Department of Liquor Licenses and Control for approval of the State Liquor Job No. 308204, a Series 6, Bar Liquor License, for Juanita Alicia Esparza, Agent, Sneaker Heads Sports Bar, LLC, DBA Snkrheadz Restaurant and Lounge, located at 3002 N. Arizona Avenue, Suite 18, and approval of the City of Chandler, Series 6, Bar Liquor License No. 308148.

Discussion:

This application for a liquor license was posted for hearing on November 7, 2024.

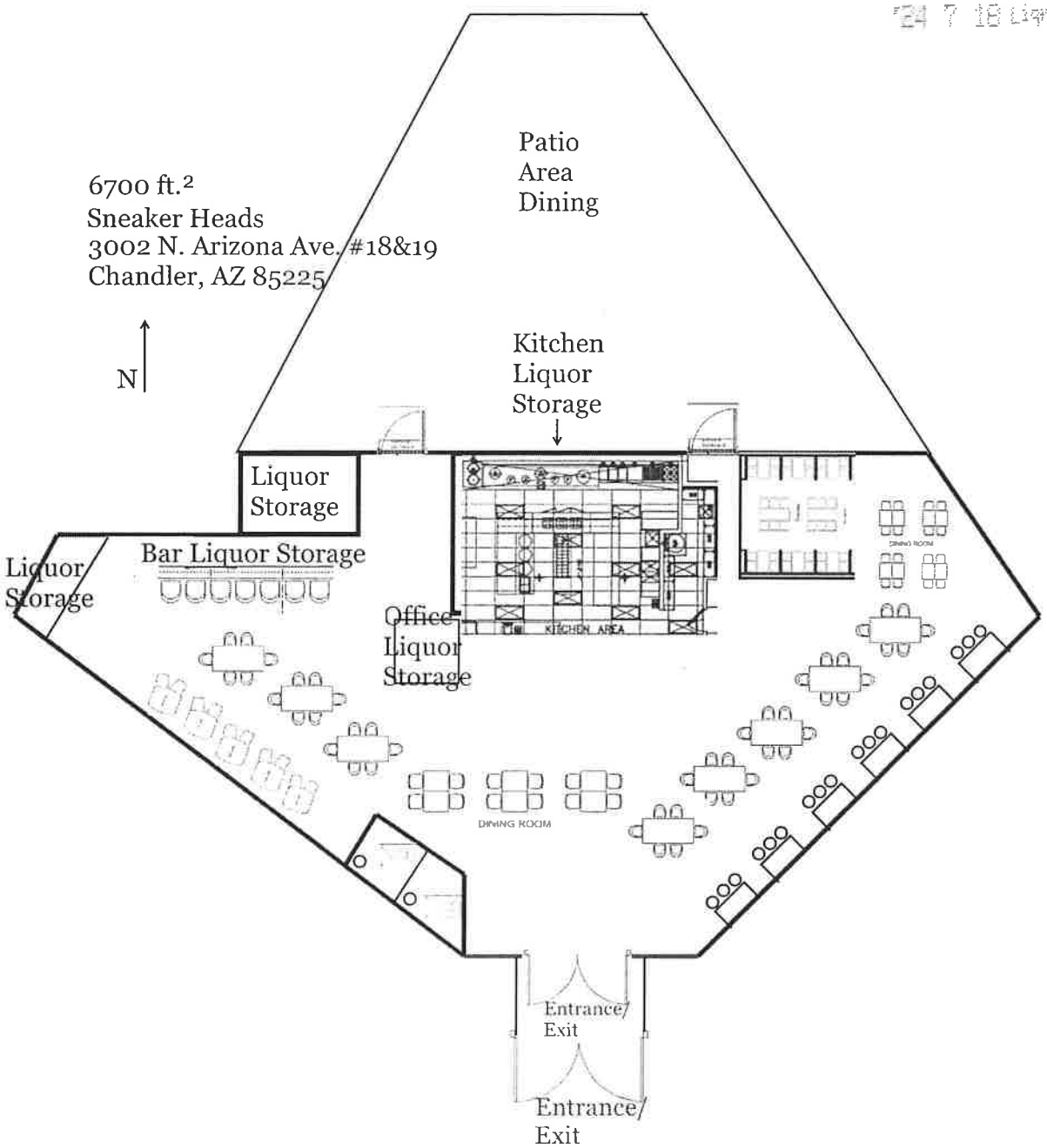
Staff requests a recommendation for this liquor license as the establishment does not have an interim liquor license permit with the Department of Liquor Licenses and Control (DLLC) and desires to begin serving alcohol. The DLLC allows 60 days for the City to provide a recommendation for a liquor license application. This recommendation for approval by the Local Governing Body will be within 60 days allowing the applicant to proceed with their new liquor license application process.

The Police Department reports no objections to the issuance of this license. With a Series 6, Bar Liquor License, the business may sell all alcoholic beverages for on- or off-premise consumption.

Attachments

A-Floor Plan

'24 7 18 Liqr. Dept PM 2:17



City Council Memorandum Management Services Memo No. 25-043

Date: November 04, 2024
To: Mayor and Council
Thru: Joshua H. Wright, City Manager
Dawn Lang, Deputy City Manager - CFO
Kristi Smith, Financial Services Director
From: Danielle Wells, Revenue and Tax Senior Manager
Subject: License Series 12, Restaurant Liquor License Application for Theresa June Morse, Agent, The Original Fish Taco Arizona, LLC, DBA Rubio's Baja Grill #50

Proposed Motion:

Move for recommendation to the State Department of Liquor Licenses and Control for approval of the State Liquor Job No. 308171, a Series 12, Restaurant Liquor License, for Theresa June Morse, Agent, The Original Fish Taco Arizona, LLC, DBA Rubio's Baja Grill #50, located at 5055 W. Ray Road, Suite 3, and approval of the City of Chandler, Series 12, Restaurant Liquor License No. 308206.

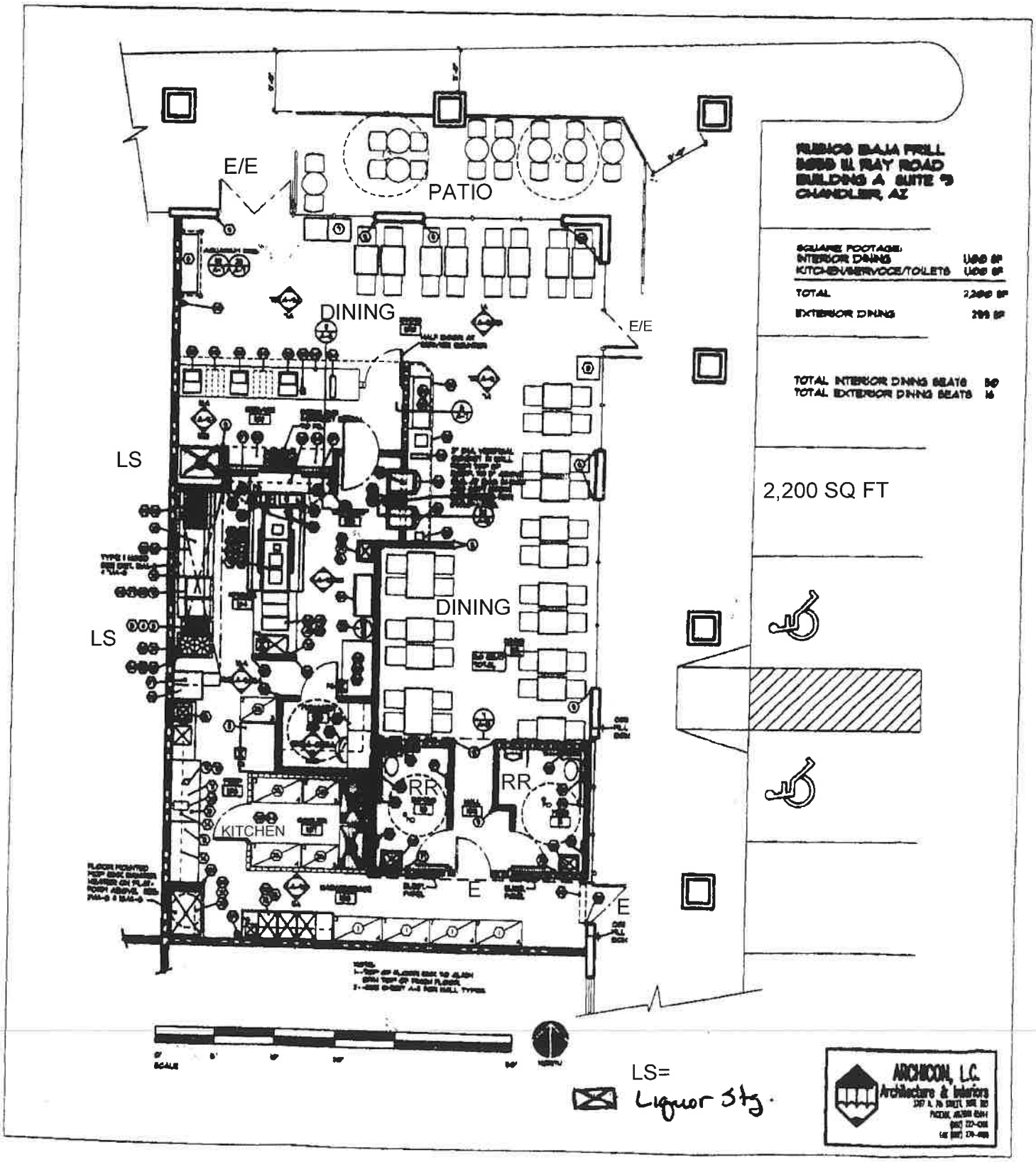
Discussion:

This application for a liquor license was posted for hearing on November 7, 2024.

The Police Department reports no objections to the issuance of this license, and no written protests pursuant to A.R.S. 4-201(B) have been received. With a Series 12, Restaurant Liquor License, the business may sell all liquors for on-premise consumption only, with a minimum of 40% of the gross receipts from the sale of food.

Attachments

A-Floor Plan


E/E
PATIO
DINING
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LS
DINING
KITCHEN
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2,200 SQ FT
LS=
Liquor Stg.
ARCHICON, L.C.
Architecture & Interiors

City Council Memorandum Management Services Memo No. 25-044

Date: November 04, 2024
To: Mayor and Council
Thru: Joshua H. Wright, City Manager
Dawn Lang, Deputy City Manager - CFO
Kristi Smith, Financial Services Director
From: Danielle Wells, Revenue and Tax Senior Manager
Subject: License Series 12, Restaurant Liquor License Application for Theresa June Morse, Agent, The Original Fish Taco Arizona, LLC, DBA Rubio's Fresh Mexican Grill #197

Proposed Motion:

Move for recommendation to the State Department of Liquor Licenses and Control for approval of the State Liquor Job No. 308179, a Series 12, Restaurant Liquor License, for Theresa June Morse, Agent, The Original Fish Taco Arizona, LLC, DBA Rubio's Fresh Mexican Grill #197, located at 2970 E. Germann Road, Suite 6, and approval of the City of Chandler, Series 12, Restaurant Liquor License No. 308258.

Discussion:

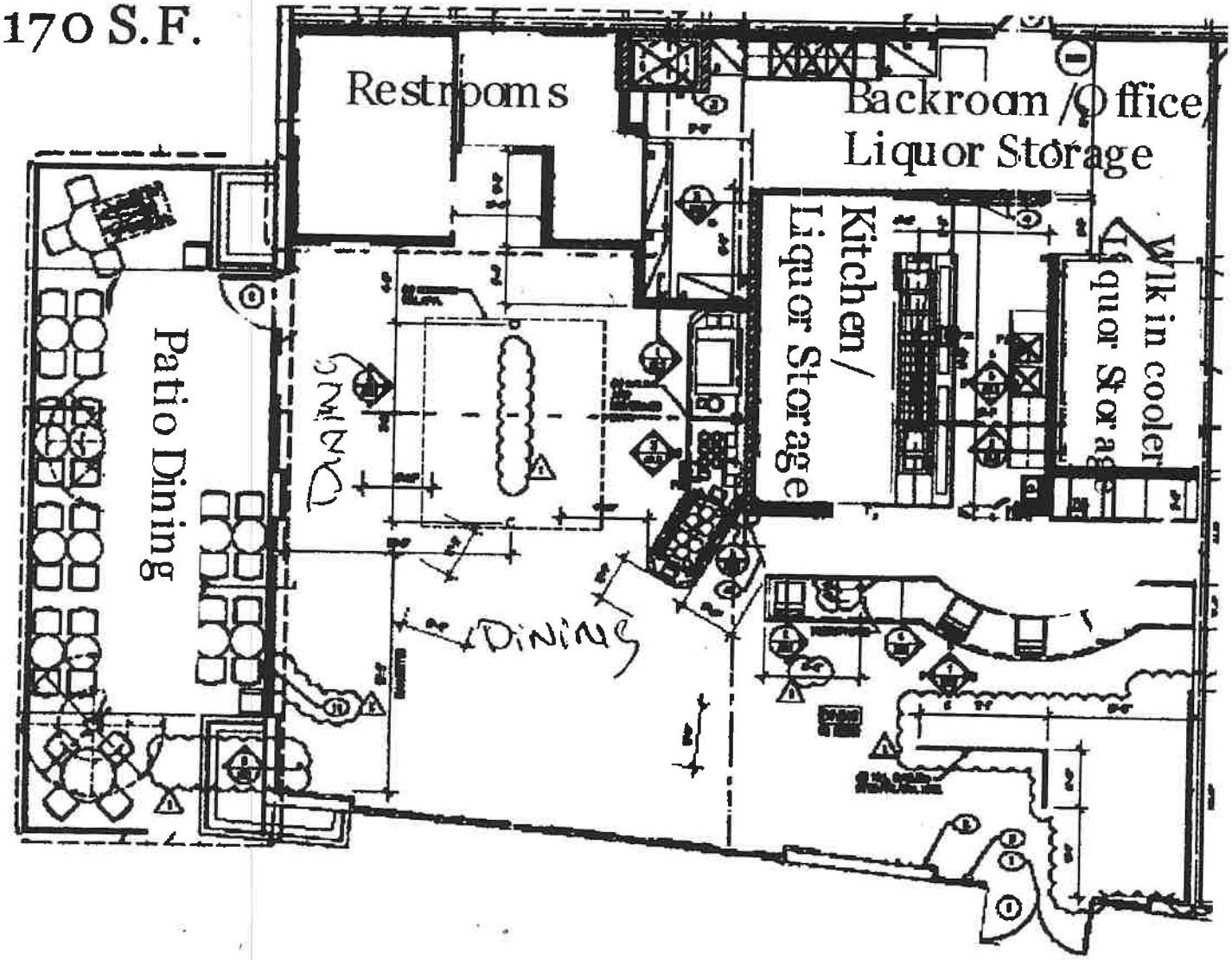
This application for a liquor license was posted for hearing on November 7, 2024.

The Police Department reports no objections to the issuance of this license, and no written protests pursuant to A.R.S. 4-201(B) have been received. With a Series 12, Restaurant Liquor License, the business may sell all liquors for on-premise consumption only, with a minimum of 40% of the gross receipts from the sale of food.

Attachments

A-Floor Plan

2170 S.F.


Restrooms
Backroom /Office
Liquor Storage
Walk in cooler
Liquor Storage
Kitchen /
Liquor Storage
Patio Dining
DINING
DINING
Entrance/Exit

City Council Memorandum Management Services Memo No. 25-045

Date: November 04, 2024
To: Mayor and Council
Thru: Joshua H. Wright, City Manager
Dawn Lang, Deputy City Manager - CFO
Kristi Smith, Financial Services Director
From: Danielle Wells, Revenue and Tax Senior Manager
Subject: License Series 12, Restaurant Liquor License Application for Jay Guohong Deng, Agent, Two Pot Brother, LLC, DBA Top One Hot Pot and Asian Cuisine

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Proposed Motion:

Move for recommendation to the State Department of Liquor Licenses and Control for approval of the State Liquor Job No. 306756, a Series 12, Restaurant Liquor License, for Jay Guohong Deng, Agent, Two Pot Brother, LLC, DBA Top One Hot Pot and Asian Cuisine, located at 4990 S. Gilbert Road, Suite 8, and approval of the City of Chandler, Series 12, Restaurant Liquor License No. 307887.

Discussion:

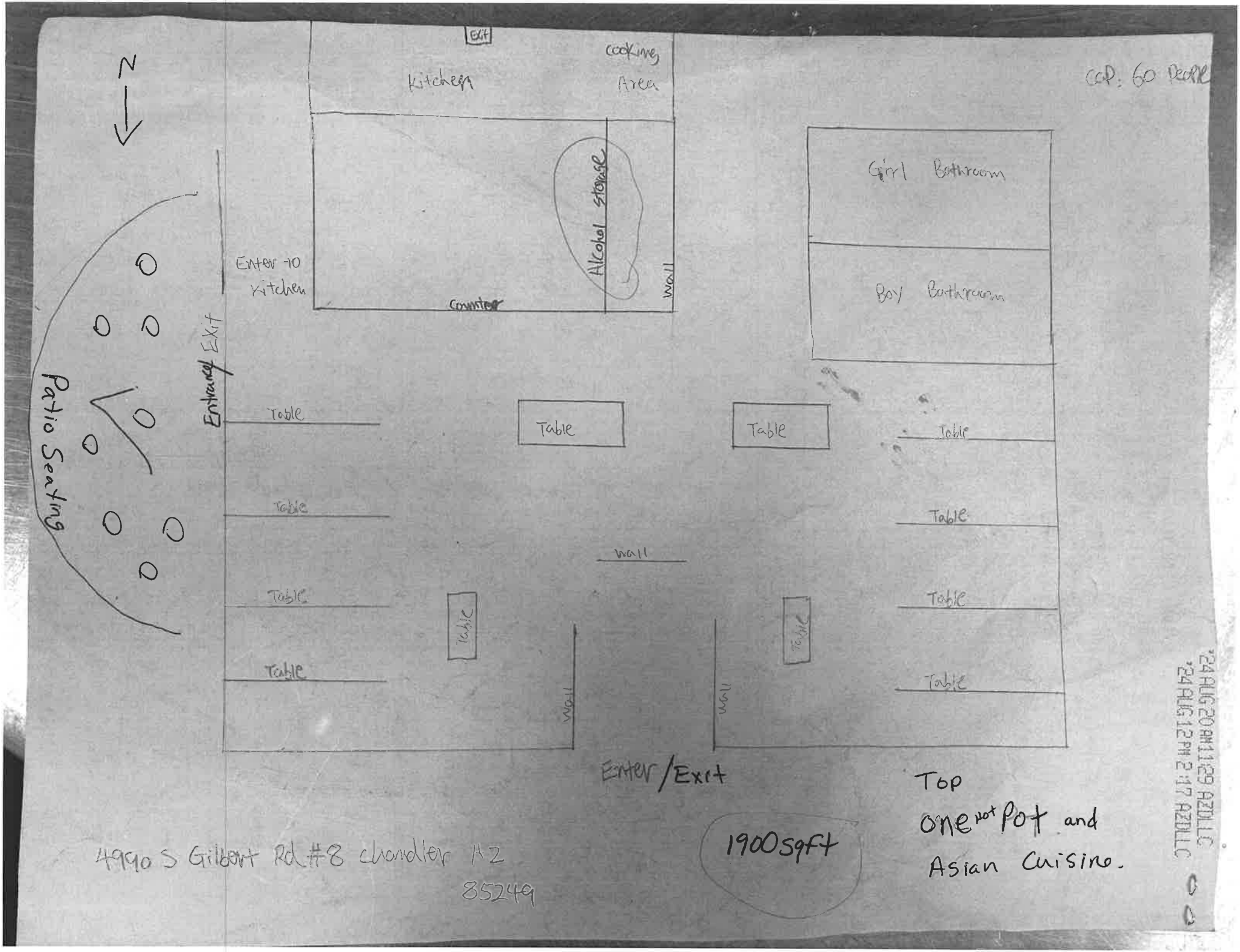
This application for a liquor license was posted for hearing on November 7, 2024.

Staff requests a recommendation for this liquor license as the establishment does not have an interim liquor license permit with the Department of Liquor Licenses and Control (DLLC) and desires to begin serving alcohol. The DLLC allows 60 days for the City to provide a recommendation for a liquor license application. This recommendation for approval by the Local Governing Body will be within 60 days allowing the applicant to proceed with their new liquor license application process.

The Police Department reports no objections to the issuance of this license, and no written protests pursuant to A.R.S. 4-201(B) have been received. With a Series 12, Restaurant Liquor License, the business may sell all liquors for on-premise consumption only, with a minimum of 40% of the gross receipts from the sale of food.

Attachments

A-Floor Plan


N
Exit
Kitchen
cooking Area
CAP: 60 People
Girl Bathroom
Boy Bathroom
Alcohol storage
Enter to Kitchen
counter
wall
Entrance Exit
Patio Seating
Table
Table
Table
Table
Table
Table
Table
Table
Table
Table
Table
Table
wall
wall
wall
Enter/Exit
1900sqft
Top One Hot Pot and Asian Cuisine.
4990 S Gilbert Rd #8 Chandler AZ 85249
'24 AUG 20 AM 11:29 AZDLLC
'24 AUG 12 PM 2:17 AZDLLC

City Council Memorandum Management Services Memo No. 25-046

Date: November 04, 2024
To: Mayor and Council
Thru: Joshua H. Wright, City Manager
Dawn Lang, Deputy City Manager - CFO
Kristi Smith, Financial Services Director
From: Danielle Wells, Revenue and Tax Senior Manager
Subject: License Series 12, Restaurant Liquor License Application for Andrea Dahlman Lewkowitz, Agent, Harkins Chandler Crossroads, LLC, DBA Harkins Theater at Chandler Crossroads

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Proposed Motion:

Move for recommendation to the State Department of Liquor Licenses and Control for approval of the State Liquor Job No. 307410, a Series 12, Restaurant Liquor License, for Andrea Dahlman Lewkowitz, Agent, Harkins Chandler Crossroads, LLC, DBA Harkins Theater at Chandler Crossroads, located at 2980 E. Germann Road, and approval of the City of Chandler, Series 12, Restaurant Liquor License No. 113895.

Discussion:

This application for a liquor license was posted for hearing on November 7, 2024.

Staff requests a recommendation for this liquor license as the establishment does not have an interim liquor license permit with the Department of Liquor Licenses and Control (DLLC) and desires to begin serving alcohol. The DLLC allows 60 days for the City to provide a recommendation for a liquor license application. This recommendation for approval by the Local Governing Body will be within 60 days allowing the applicant to proceed with their new liquor license application process.

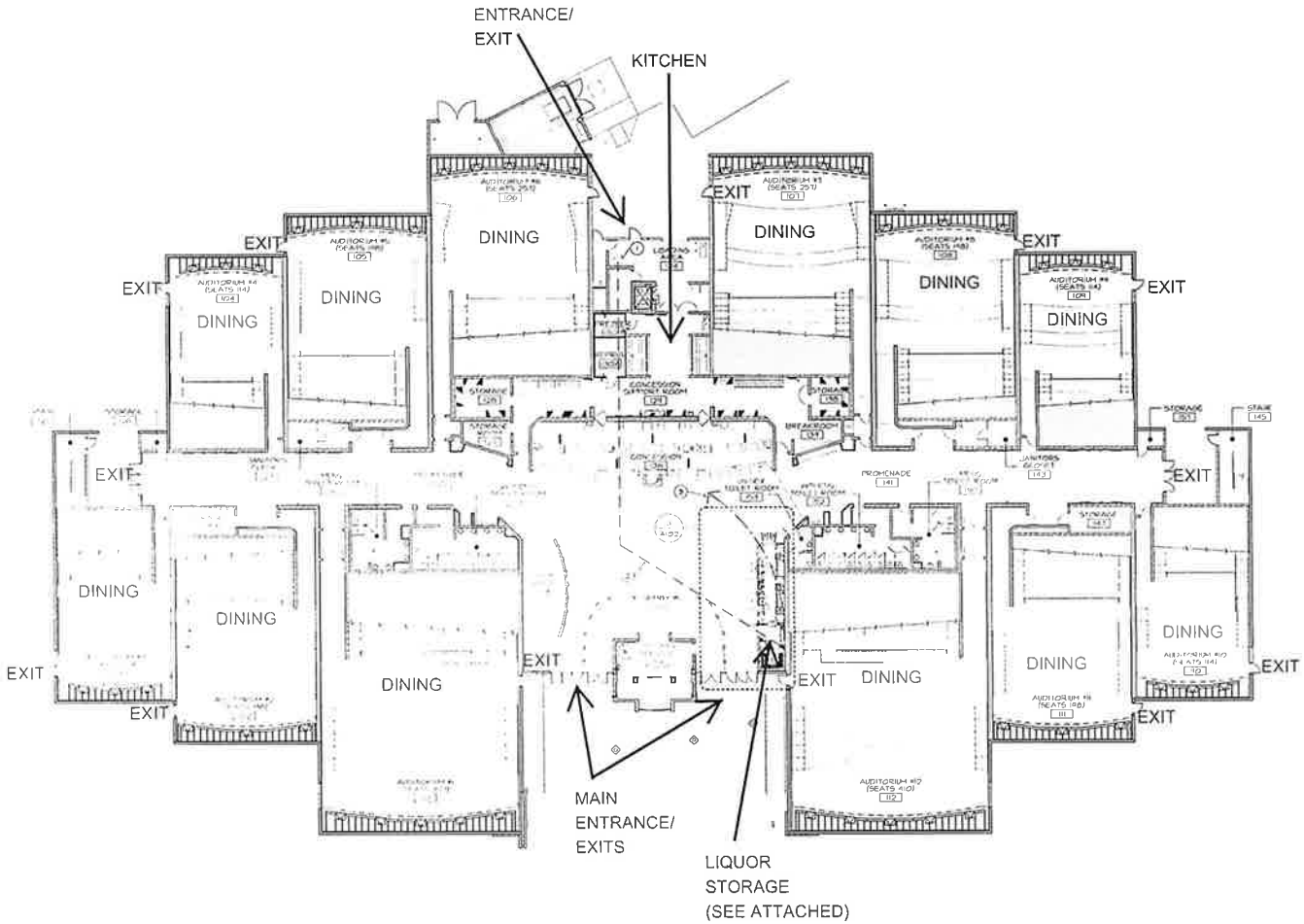
The Police Department reports no objections to the issuance of this license, and no written protests pursuant to A.R.S. 4-201(B) have been received. With a Series 12, Restaurant Liquor License, the business may sell all liquors for on-premise

consumption only, with a minimum of 40% of the gross receipts from the sale of food.

Attachments

A-Floor Plan

'24 9 26 Wed, Sept 4:23



HARKINS THEATER AT CHANDLER CROSSROADS
2980 E GERMANN RD
CHANDLER, AZ 85296
55,402 SF

11 OVERALL FLOOR PLAN
SCALE: 1/8" = 1'-0"

TRUE NORTH CONSTRUCTION NORTH

GENERAL NOTES:

1. VERIFY EXISTING CONDITION AND REPORT ANY DISCREPANCIES TO THE ARCHITECT PRIOR TO COMMENCING CONSTRUCTION.
2. ALL WORK NOT INDICATED ON DRAWINGS BUT REQUIRED FOR A COMPLETE JOB SHOULD BE INCLUDED IN CONTRACTOR'S SCOPE OF WORK.

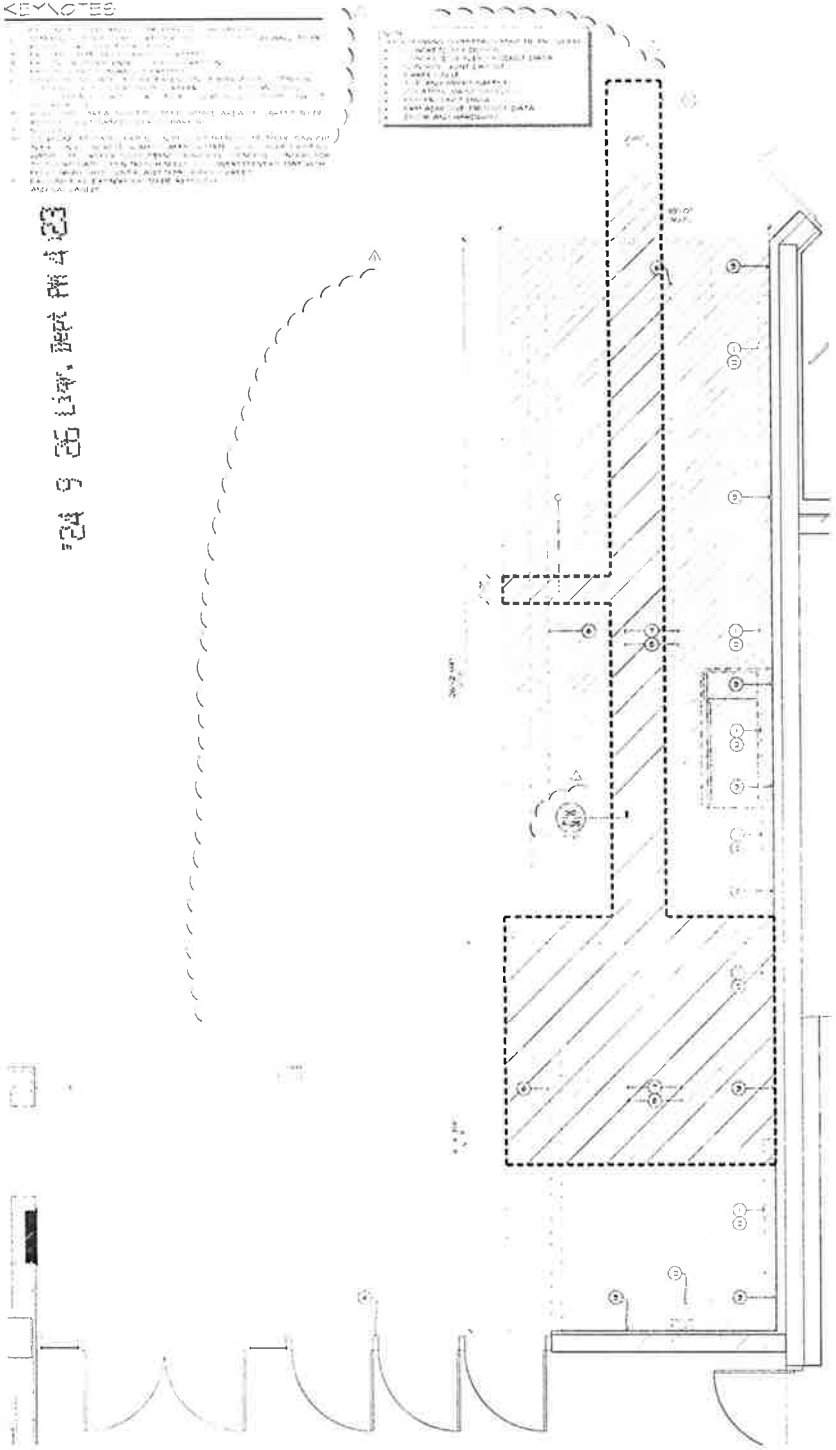
DEMOLITION NOTES:

1. ANY CHANGES SHOULD BE APPROVED BY THE OWNER AND BUILDING INSPECTION.
2. CONSTRUCTION WORK/DEMOLITION SHALL BE CARRIED OUT IN SUCH A MANNER AS TO MINIMIZE INTERFERENCE WITH THE NORMAL OPERATION OF THE THEATRE AND TAKE AS AREA. CONTRACTOR TO SCHEDULE WORK TO REACH THESE MEANS. IN ADDITION CONTRACTOR TO PROVIDE ALL THE NECESSARY PROTECTIVE MEASURES, BARRIERS, AND TEMPORARY ENCLOSURES FOR PROTECTION OF EMPLOYEES, CUSTOMERS, CONSTRUCTION WORKERS AND THE PUBLIC. ANY MECHANICAL, ELECTRICAL, PLUMBING AND FIRE PROTECTION SHUTDOWNS OR WORK REQUIRING EXCESSIVE NOISE TO BE COORDINATED WITH THE THEATRE MANAGER ONE WEEK PRIOR TO PROCEDURE TAKING PLACE.
3. EXISTING THEATRE TO BE PROTECTED TO GREATEST EXTENT POSSIBLE. CONTRACTOR TO REVIEW EXISTING THEATRE WITH OWNER FOR DAMAGES PRIOR TO CONSTRUCTION. ANY ADDITIONAL DAMAGES DUE TO CONSTRUCTION TO BE CONTRACTORS RESPONSIBILITY. CONTRACTOR IS RESPONSIBLE TO MAINTAIN LEGAL EGRESS FOR ALL OCCUPIED SPACES DURING DEMOLITION, AND TO COMPLY WITH ALL LOCAL REQUIREMENTS OF THE FIRE MARSHALL.
4. DISCONNECT ALL ELECTRICAL, PLUMBING, MECHANICAL AND FIRE PROTECTION EQUIPMENT AND FIXTURES PRIOR TO WORKING OR REMOVAL.
5. DEMOLITION TO INCLUDE COMPLETE INTERIOR REMOVAL AND PATCHING OF ALL ITEMS FOR PREPARATION OF NEW CONSTRUCTION. WALLS AND FINISHES TO BE REMOVED IN THEIR ENTIRETY. DOTTED AND HATCHED AREAS SHOWN FOR REMOVAL DO NOT DEPICT ALL REQUIRED DEMOLITION. CONTRACTOR TO REVIEW TOTAL PROJECT PRIOR TO BID AND CONSTRUCTION. DEMOLITION SHOULD BE CONSIDERED IN ALL AREAS WHERE NEW FINISHES ARE TO OCCUR. IT IS THE INTENT THAT ALL EXISTING FINISHES / CONSTRUCTION MATERIALS BE REMOVED AND NOT COVERED. CONTRACTOR TO REVIEW EXISTING CONDITION AND DETERMINE IF REMOVAL OF EXISTING FINISHES FROM WALLS WILL REQUIRE NEW GYPSUM BOARD / SKIM COAT PRIOR INSTALLATION OF FINISHES AND PRICE ACCORDINGLY. PROVIDE BLOCKING, PLYWOOD AND GYPSUM BOARD BACKUP AS REQUIRED FOR INSTALLATION OF NEW FINISHES.
6. EXISTING LOBBY, EXISTING CARPET, WET FRAMING, ETC. TO BE REMOVED IF ANY SAW CUT IN CONCRETE OCCURS. CONCRETE WILL BE PATCHED AS REQUIRED TO INSTALL NEW FINISHES FOR BOX OFFICE, CONCESSION STAND, SCREENS, SPEAKERS, AND ALL ITEMS TO REMAIN TO BE PROTECTED DURING CONSTRUCTION. INSTALL NEW FINISHES AS REQUIRED.
7. REFER TO MECHANICAL, PLUMBING, ELECTRICAL AND STRUCTURAL PLANS FOR ADDITIONAL ITEMS.
8. REFER TO MEP DRAWINGS FOR SALVAGEABLE, REUSABLE AND RELOCATED ITEMS.

KEYNOTES:

1. EXISTING CONCRETE STORAGE TANKS
2. PROVIDE (2) TWO NEW CONC. 3" EMPTY CONDUIT LINES - OVERHEAD LIGHT TO WEST (FIELD OVER TO STORAGE POINT AT DAMP AREA P DOWN [illegible] 3'-0" FURRING WALL AND STUB INTO GROUND A STORAGE ROOM - PAINT PVC LINE EXPOSED IN LOBBY TO MATCH DECK STRUCTURE.
3. ELECTRICAL CONDUITS BACK TO PANELS - [illegible] PANELS. PAINT CONDUIT TO MATCH STRUCTURAL CEILING - REPAIR, PATCH AND PAINT EXISTING FURRING WALL.

KEYNOTES



2 BAR AREA EXISTING / DEMO PLAN
SCALE: 1/2" = 1'-0"

TRUE NORTH CONSTRUCTION NORTH

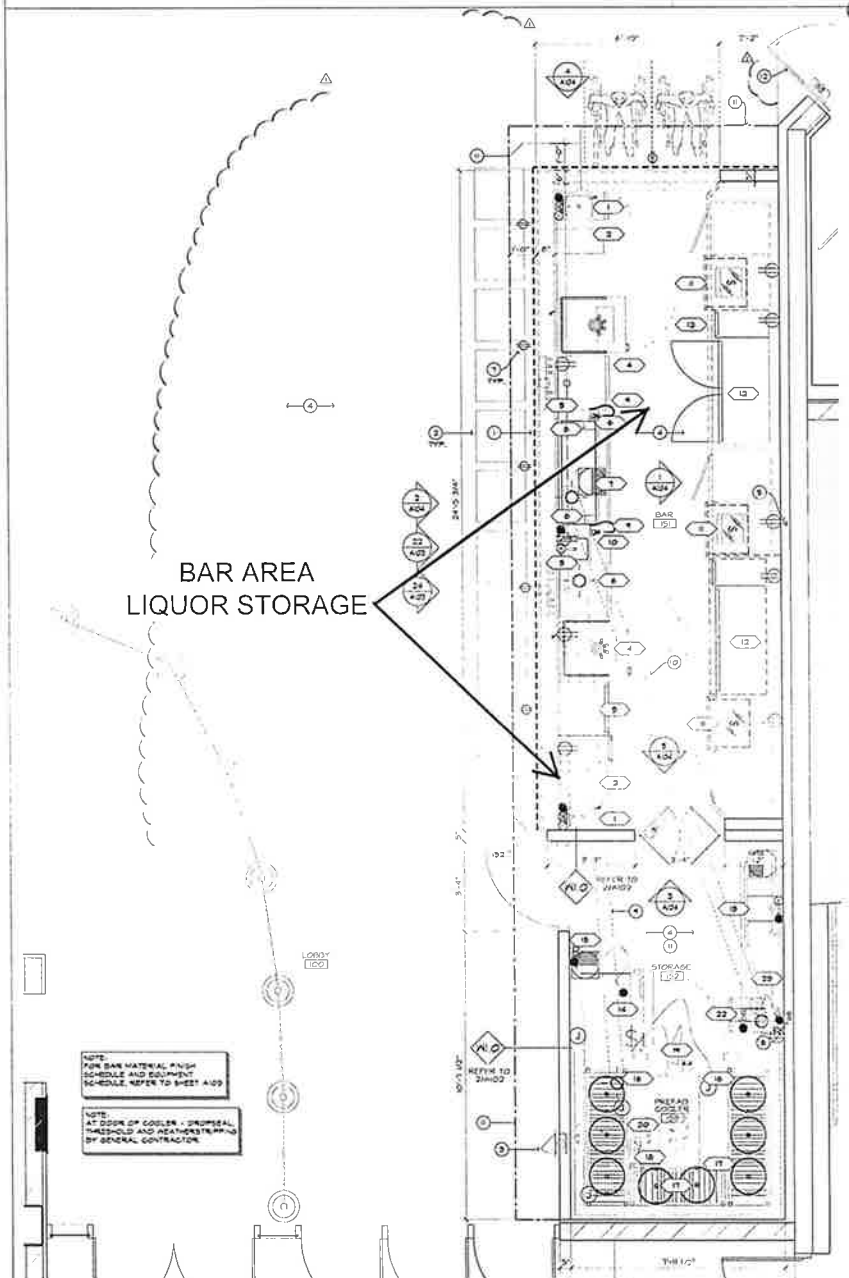
DOOR SCHEDULE

DOOR NO.	DOOR WIDTH	DOOR HEIGHT	DOOR THICKNESS	DOOR MATERIAL	DOOR FINISH	LABEL	FRAME NO.	FRAME MATERIAL	FRAME FINISH	FRAME DETAIL	HARDWARE SET	NOTES	KEYING	HARDWARE GROUP
1ST FLOOR DOORS														
151	1'-0"	7'-0"	1 3/4"	S			---	HM						151
152	3'-0"	7'-0"	1 3/4"	FL	SC	FL	---	HM	PT-1	2HR/60	WD/DS		FL-2	152
153	3'-0"	7'-0"	1 3/4"	FL	SC	FL	---	HM					FL-2	153

NOTES:
1. KLASON DOUBLE ACTING TRAFFIC DOORS (SCP115) WITH 10" ROUND CLEAR WINDOW (TEMPERED) WITH BLACK RUBBER GASKETING
2. FLOOR OR LANDINGS AT ALL DOORS SHALL NOT BE MORE THAN 1/2" LOWER THAN THE THRESHOLD OF THE DOORWAYS.
3. ALL HOLLOW METAL DOOR FRAMES TO HAVE A 4" HEAD.
4. EGRESS DOORS SHALL BE READILY OPERABLE FROM THE EGRESS SIDE WITHOUT USE OF A KEY OR ANY SPECIAL KNOWLEDGE OR EFFORT

HARDWARE:

REFER TO SHEET A103 FOR DOOR HARDWARE



11 BAR AREA FLOOR PLAN
SCALE: 1/2" = 1'-0"

TRUE NORTH CONSTRUCTION NORTH

KEYNOTES:

1. UNDERCOUNTER PARKING STANDARD BLUE LED NOTE LIGHTING
2. BAR SYSTEM SUPPLIED PARKING AND INSTALLED BY G.C.
3. EXISTING FIRE EXTINGUISHER TO BE RELOCATED
4. GLASS TO MEASURE ABOVE
5. 3/4" DIA. SUPPLY FOR DRY THRU WOOD
6. NOT USED
7. PROVIDE PLUMBOLD FOR CELLULAR RECEPTACLES
8. (2) NEW 3" DIA. PVC LINES DOWN BACK OF BAR TO THE FIRST FLOOR WALL. GENERAL CONTRACTOR TO COORDINATE LOCATION. FIX AND REPAIR DAMAGED WALL AFTER INSTALLATION OF LINES TO THE EXISTING CONDITION.
9. 8" DIA. 14 GA GRAVITY - REFER TO PLUMBING DRAWINGS
10. 4" DIA. LIQUID-GAS CHASE - REFER TO PLUMBING DRAWINGS
11. DASHED LINE INDICATES NEW AREA OF UPPER SLAB TO BE POURED ON A 3000 PSI CONCRETE WITH CONCRETE SYSTEM ADMIXTURE TO MITIGATE MOISTURE VAPOR IN CONCRETE SLAB. PROVIDE DRAINS INTO ADJACENT SLAB. CONTROL JOINTS (SAWCUT) TO BE MITIGATED TYP. - REFER TO BAR AREA EXISTING PLAN FOR AREA OF CONC. REMOVED.
12. NEW DOOR TO BE INSTALLED IN OPPOSITE SWING DIRECTION - REFER TO DOOR SCHEDULE FOR MORE INFORMATION.

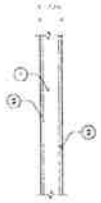
GENERAL NOTES:

1. ALL WOOD BLOCKING, FURRING AND BACKING SHALL BE NON-COMBUSTIBLE FIRE RETARDANT TREATED WOOD OR METAL REQUIRED RATING MATERIALS SHALL BEAR IDENTIFICATION SHOWING PERFORMANCE RATING THEREOF
2. FIELD VERIFY ALL MILLWORK LOCATIONS AND DIMENSIONS PRIOR TO FABRICATION AND INSTALLATION
3. ALL MILLWORK SHALL HAVE CONCEALED HINGES (UNLESS NOTED OTHERWISE).
4. PROVIDE FULL EXTENSION ACCURIDE DRAWER SLIDES FOR ALL MILLWORK DRAWERS.
5. ALL MILLWORK WITH 32MM SYSTEM SPECIFIED SHELVES SHALL BE PROVIDED WITH CONCEALED STEEL SHELF PINS. PLASTIC CLIPS, ETC. ARE NOT ACCEPTABLE.
6. ALL MILLWORK HEIGHTS SHOWN SHALL BE ABOVE FINISHED FLOOR
7. ALL MILLWORK HEIGHTS, WIDTHS, AND DEPTHS SHALL COMPLY WITH ADA REQUIREMENTS
8. SEAMS FOR COUNTERTOPS SHALL BE IN LOCATIONS SHOWN BY INTERIOR DESIGNER. IF LOCATIONS ARE NOT SHOWN, CONTACT INTERIOR DESIGNER BEFORE DETERMINING SEAM LOCATIONS
9. ALL LAMINATE CABINETS SHALL BE AWI CUSTOM GRADE. FLUSH OVERLAY DESIGN CONSTRUCTED FROM MEDIUM DENSITY PARTICLE BOARD WITH THERMO FUSED MELAMINE INTERIORS. MELAMINE COLOR BLACK
10. ALL LAMINATE BASE CABINET COUNTERTOPS TO BE SCRIBED TO WHEREVER BACKSPLASH DOES NOT OCCUR.
11. CONTRACTOR TO COORDINATE SEAMING WITH MANUFACTURER AND SUBMIT SEAMING DIAGRAM FOR DESIGNER APPROVAL PRIOR TO INSTALLATION
12. ALL METAL FINISHES TO CONFORM WITH ASTM STANDARDS
13. PROVIDE METAL STUD CROSS BRACING FOR SUPPORT OF EQUIPMENT, FINISHES, HARDWARE ITEMS AND MISC. WALL SUPPORTED ITEMS
14. ALL OF THE MATERIALS USED IN THIS PROJECT SHALL BE LOW-O VOLATILE ORGANIC COMPOUND (VOC) AND FISH CODE PRODUCT INCLUDING BUT NOT LIMITED TO: FLOORING AND BASE ADHESIVES, CARPET, ADHESIVES, CARPET BACKINGS, LATEX CAULK, STAINS, LATEX AND OIL BASED PAINTS, WALL COVERING ADHESIVES, PARTICLE BOARD, AND CLEANING CHEMICALS

DETAIL NOTES

1. 3 5/8" METAL STUDS
2. SEE ELEVATIONS AND SCHEDULE FOR FINISHES

NOTE
1. 4 5/8" - 16 GAUGE METAL STUDS AT 16" O.C. FROM 0'-0" TO 20'-0" ABOVE 20'-0" TO 22'-0" MAXIMUM SPACE STUDS AT 12" O.C.



2 WALL TYPE A-1.0
SCALE: 1" = 1'-0"

EQUIPMENT SCHEDULE

ITEM #	QTY	DESCRIPTION	MFR.	MODEL	SEE REV
[illegible]	2	HAND SINK	GLASSTENDER	[illegible]	[illegible]
[illegible]	2	DISPENSER GUN	GLASSTENDER	[illegible]	[illegible]
[illegible]	1	BACK BAR COOLER	GLASSTENDER	[illegible]	[illegible]
[illegible]	2	HAT COOLER (SUPERIOR)	MORRISMATIC	[illegible]	[illegible]
[illegible]	2	FRONT DISPENSER (SUPERIOR)	MORRISMATIC	[illegible]	[illegible]
[illegible]	2	GLASS RACK	GLASSTENDER	[illegible]	[illegible]
[illegible]	1	ICE BIN	GLASSTENDER	[illegible]	[illegible]
[illegible]	2	SODA GUN HOLSTER & FOUNTAIN DISPENSER	GLASSTENDER	[illegible]	[illegible]
[illegible]	1	SODA GUN	BY OWNER	[illegible]	[illegible]
[illegible]	1	BLENDER STATION	GLASSTENDER	[illegible]	[illegible]
[illegible]	3	POS STATION	BY OWNER	BY OWNER	[illegible]
[illegible]	2	BACK BAR COOLER	GLASSTENDER	[illegible]	[illegible]
[illegible]	1	UNDERBAR SINK UNITS	GLASSTENDER	[illegible]	[illegible]
[illegible]	1	ICE MAKER	HOSHIZAKI	[illegible]	[illegible]
[illegible]	1	WATER FILTRATION SYSTEM			[illegible]
[illegible]	2	KEG RACK			[illegible]
[illegible]	1	KEG RACK			[illegible]
[illegible]	1	DRAFT BEER SYSTEM POWER PACK			[illegible]
[illegible]	1	MULTI-BEER COOLER	CUSTOM	CUSTOM	[illegible]
[illegible]	1	EVAPORATOR COIL-BEER COOLER	CUSTOM	CUSTOM	[illegible]
[illegible]	1	DUAL IN BOX SYRUP WINE RACK	BY OWNER	WINE RACK	[illegible]
[illegible]	1	WATER FILTRATION SYSTEM			[illegible]

NOTES:
1. REFER TO RESPONSIBILITY MATRIX ON SHEET A103 FOR MORE INFOMATION

City Council Memorandum Management Services Memo No. 25-047

Date: November 04, 2024
To: Mayor and Council
Thru: Joshua H. Wright, City Manager
Dawn Lang, Deputy City Manager - CFO
Kristi Smith, Financial Services Director
From: Danielle Wells, Revenue and Tax Senior Manager
Subject: License Series 12, Restaurant Liquor License Application for Andrea Dahlman Lewkowitz, Agent, Harkins Chandler Fashion Center Cinemas, LLC, DBA Harkins Chandler Fashion Center

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Proposed Motion:

Move for recommendation to the State Department of Liquor Licenses and Control for approval of the State Liquor Job No. 307527, a Series 12, Restaurant Liquor License, for Andrea Dahlman Lewkowitz, Agent, Harkins Chandler Fashion Center Cinemas, LLC, DBA Harkins Chandler Fashion Center, located at 3159 W. Chandler Boulevard, and approval of the City of Chandler, Series 12, Restaurant Liquor License No. 41704.

Discussion:

This application for a liquor license was posted for hearing on November 7, 2024.

Staff requests a recommendation for this liquor license as the establishment does not have an interim liquor license permit with the Department of Liquor Licenses and Control (DLLC) and desires to begin serving alcohol. The DLLC allows 60 days for the City to provide a recommendation for a liquor license application. This recommendation for approval by the Local Governing Body will be within 60 days allowing the applicant to proceed with their new liquor license application process.

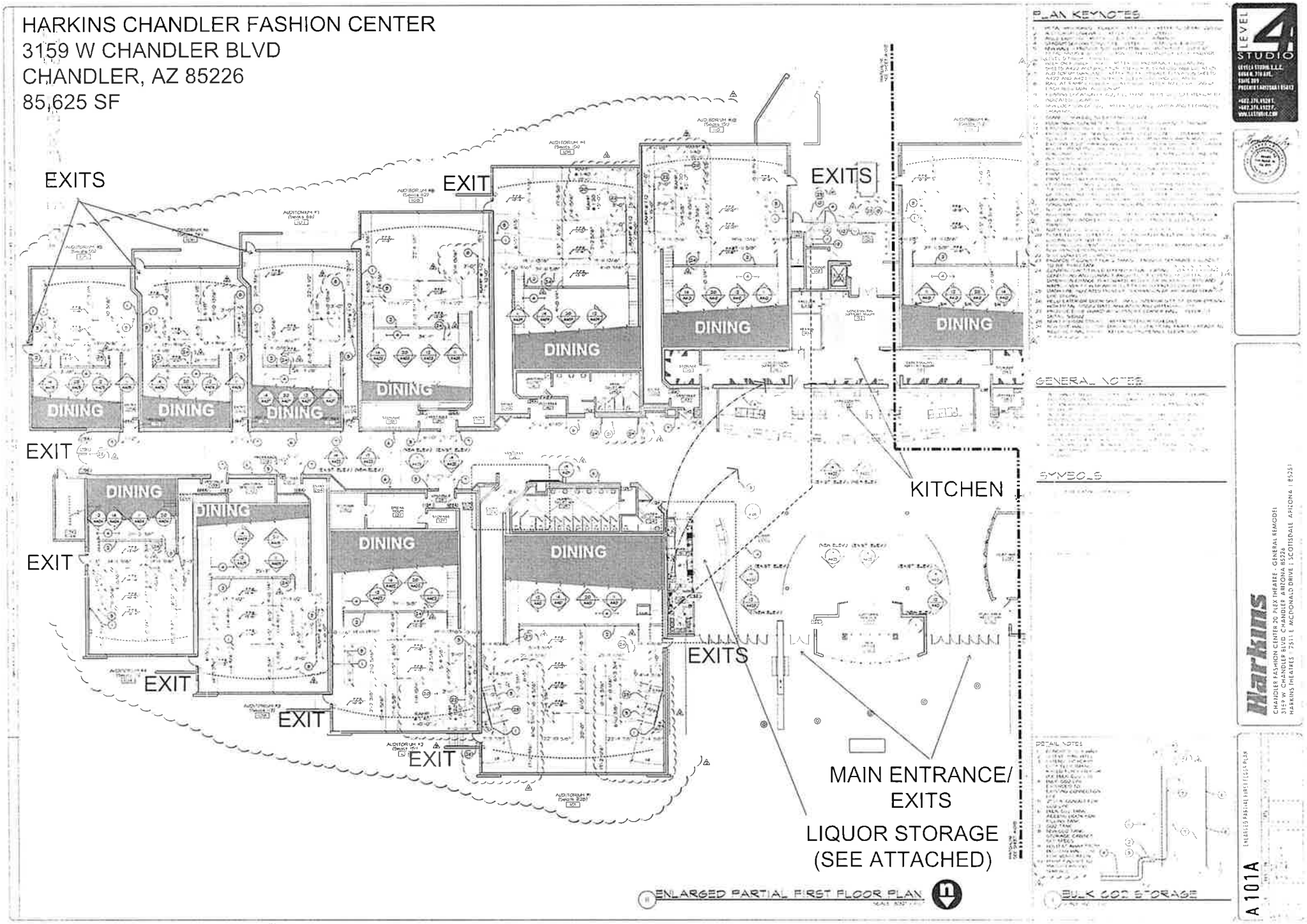
The Police Department reports no objections to the issuance of this license, and no written protests pursuant to A.R.S. 4-201(B) have been received. With a Series 12, Restaurant Liquor License, the business may sell all liquors for on-premise

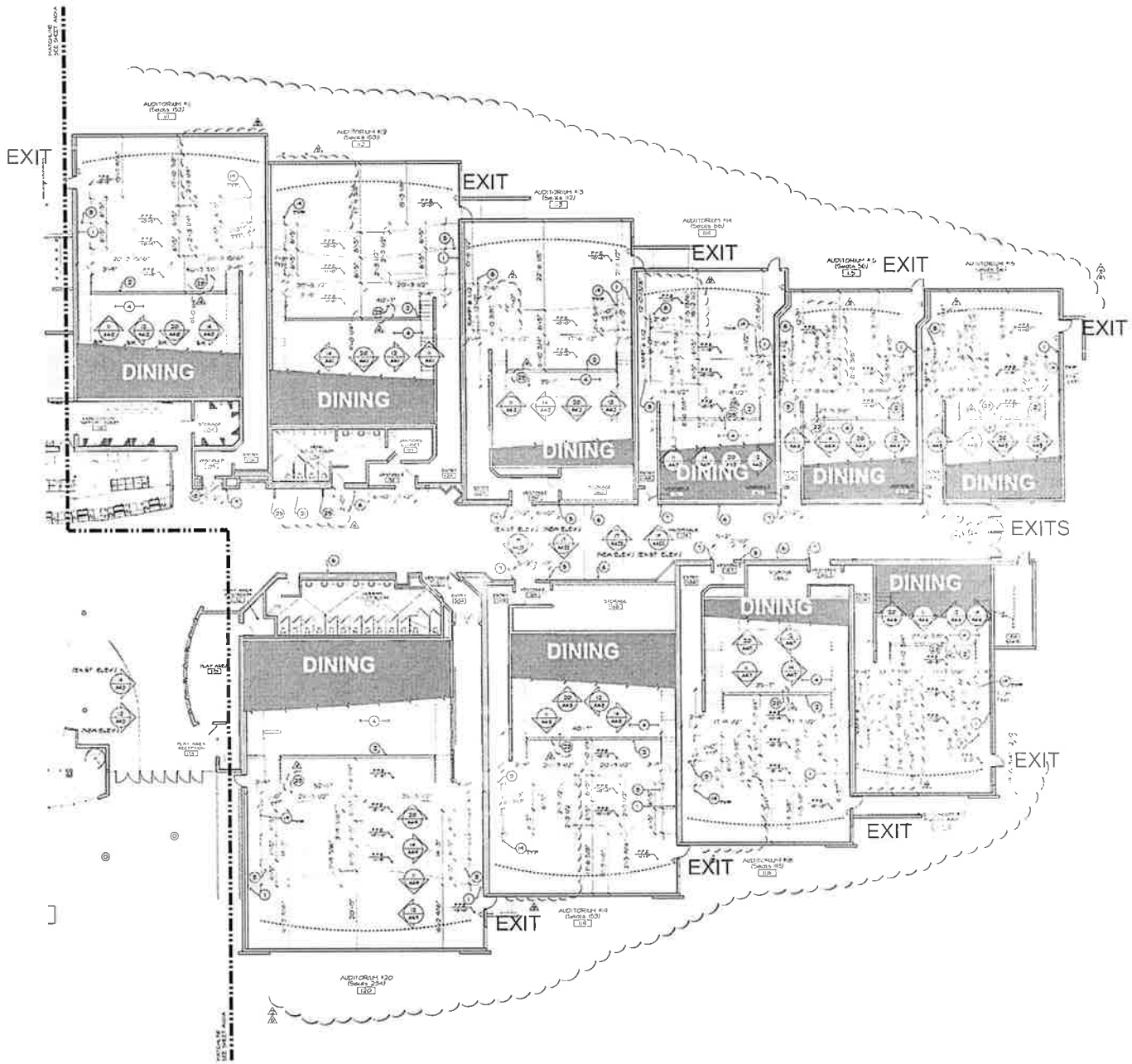
consumption only, with a minimum of 40% of the gross receipts from the sale of food.

Attachments

A-Floor Plan

HARKINS CHANDLER FASHION CENTER
3159 W CHANDLER BLVD
CHANDLER, AZ 85226
85,625 SF





ENLARGED PARTIAL FIRST FLOOR PLAN

PLAN KEYNOTES

GENERAL NOTES

SYMBOLS

DETAIL NOTES

FLOOR PLAN DETAIL

LEVEL 4 STUDIO

Harkins

CHANDLER FASHION CENTER 20 PLEX THEATRE : GENERAL REMODEL
3155 W CHANDLER BLVD, CHANDLER, ARIZONA 85226
HARKINS THEATRES : 7511 E. MCDONALD DRIVE : SCOTTSDALE, ARIZONA 85250

A101B

City Council Memorandum Police Memo No. N/A

Date: November 04, 2024
To: Mayor and Council
Thru: Joshua H. Wright, City Manager
Tadd Wille, Assistant City Manager
Bryan Chapman, Police Chief
From: Travis Feyen, Police Commander
Subject: Agreement No. PD5-968-4833, with ACT Towing, Inc., dba All City Towing, for Police Towing Services

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Proposed Motion:

Move City Council approve Agreement No. PD5-968-4833, with ACT Towing, Inc., dba All City Towing, for police towing services, for a period of two years, January 1, 2025, through December 31, 2026, with the option of up to two additional two-year extensions.

Background/Discussion:

In December 1995, the city began utilizing a single contractor for towing services, which has proven to be a successful alternative to the previous rotation program. Benefits of this contracted service include lower costs to residents, fewer customer complaints, and a streamlined workload for the Police Department.

The Police Department utilizes this contract for the towing, storage, and/or impounding of vehicles in the following circumstances:

- Wrecked
- Abandoned
- Unattended and blocking roadways
- Evidentiary purposes
- Arrested driver

Continuation of this model will allow the Police Department to meet the needs of the community and maintain the level of service it has provided for nearly three decades.

Evaluation:

On August 19, 2024, City staff issued Request for Proposal No. PD5-968-4833 for police towing. Notification was sent to all registered vendors. Seven proposals were received from the following offerors:

Alpha Towing & Recovery dba Alpha Transportation Services
ACT Towing, Inc., dba All City Towing
Apache Sands Service Center, Inc.
Priority Towing
Professional Towing and Recovery, LLC
Quick Pik All Over Towing
Thompson Diversified, LLC, dba Valley Express Towing

The evaluation committee evaluated the proposals and recommends award to ACT Towing, Inc., dba All City Towing, which submitted the most advantageous offer to the City. The term of this Agreement is January 1, 2025, through December 31, 2026, with the option of up to two additional two-year extensions.

Financial Implications:

Vehicle owners are responsible for payment of all fees associated with police-related tows. The City of Chandler will be responsible for payment of all fees associated with towing of city-owned vehicles and vehicles towed for evidence. Historically, the City spends less than $20,000 per year towing city-owned vehicles.

Fiscal Impact

Account No.	Fund Name	Program Name	Dollar Amount	CIP Funded Y/N
101.2030.5219.0.0.0	General Fund	N/A	$20,000.00	N

Attachments

4833 - Agreement

Docusign Envelope ID: 9ED0BAA1-0273-4BE5-B75D-4BE283C0A683

City Clerk Document No. _____

City Council Meeting Date:_____

CITY OF CHANDLER SERVICES AGREEMENT
POLICE TOWING
CITY OF CHANDLER AGREEMENT NO. PD5-968-4833

THIS AGREEMENT (Agreement) is made and entered into by and between the City of Chandler, an Arizona municipal corporation (City), and ACT Towing, INC dba All City Towing, (Contractor), (City and Contractor may individually be referred to as Party and collectively referred to as Parties) and made _____ , 2024 (Effective Date).

RECITALS

A. City proposes to provide towing services as more fully described in Exhibit A, which is attached to and made a part of this Agreement by this reference.

B. Contractor is ready, willing, and able to provide the services described in Exhibit A for the compensation and fees set forth and as described in Exhibit B, which is attached to and made a part of this Agreement by this reference.

C. City desires to contract with the Contractor to provide these services under the terms and conditions set forth in this Agreement.

AGREEMENT

NOW, THEREFORE, in consideration of the premises and the mutual promises contained in this Agreement, City and Contractor agree as follows:

SECTION I: DEFINITIONS

For purposes of this Agreement, the following definitions apply:
Agreement means the legal agreement executed between the City and the Contractor
City means the City of Chandler, Arizona
Contractor means the individual, partnership, or corporation named in the Agreement
Days means calendar days
May, Should means something that is not mandatory but permissible
Shall, Will, Must means a mandatory requirement

SECTION II: CONTRACTOR'S SERVICES

Contractor must perform the services described in Exhibit A to the City's satisfaction within the terms and conditions of this Agreement and within the care and skill that a person who provides

Docusign Envelope ID: 9ED0BAA1-0273-4BE5-B75D-4BE283C0A683

similar services in Chandler, Arizona exercises under similar conditions. All work or services furnished by Contractor under this Agreement must be performed in a skilled and workmanlike manner. Unless authorized by the City in writing, all fixtures, furnishings, and equipment furnished by Contractor as part of the work or services under this Agreement must be new, or the latest model, and of the most suitable grade and quality for the intended purpose of the work or service.

SECTION III: PERIOD OF SERVICE

Contractor must perform the services described in Exhibit A for the term of this Agreement.

The term of the Agreement is two (2) year (s), and begins on January 1, 2025 and ends on December 31, 2026 unless sooner terminated in accordance with the provisions of this Agreement. The City and the Contractor may mutually agree to extend the Agreement for up to 2 additional terms of two (2) year (s) each, or portions thereof. The City reserves the right, at its sole discretion, to extend the Agreement for up to 60 days beyond the expiration of any extension term.

SECTION IV: PAYMENT OF COMPENSATION AND FEES

4.1 Unless amended in writing by the Parties, Contractor's compensation and fees as more fully described in Exhibit B for performance of the services approved and accepted by the City. Contractor must submit requests for payment for services approved and accepted during the previous billing period and must include, as applicable, detailed invoices and receipts, a narrative description of the tasks accomplished during the billing period, a list of any deliverables submitted, and any subcontractor's or supplier's actual requests for payment plus similar narrative and listing of their work. Payment for those services negotiated as a lump sum will be made in accordance with the percentage of the work completed during the preceding billing period. Services negotiated as a not-to-exceed fee will be paid in accordance with the work completed on the service during the preceding month. All requests for payment must be submitted to the City for review and approval. The City will make payment for approved and accepted services within 30 days of the City's receipt of the request for payment.

4.2 Applicable Taxes. The Contractor will pay all applicable taxes. The City is subject to all applicable state and local transaction privilege taxes. To the extent any state and local transaction privilege taxes apply to sales made under the terms of this Agreement, it is the responsibility of the Contractor to collect and remit all applicable taxes to the proper taxing jurisdiction of authority.

4.3 Tax Indemnification. The Contractor and all subcontractors will pay all Federal, state, and local taxes applicable to its operation and any persons employed by the Contractor. The Contractor will and require all subcontractors to hold the City harmless from any responsibility for taxes, damages, and interest, if applicable, contributions required under Federal, state, and local laws and regulations and any other costs including transaction privilege taxes, unemployment compensation insurance, Social Security, and Worker's Compensation.

4.4 All prices offered herein shall be firm against any increase for the initial term of the Agreement. Prior to commencement of subsequent renewal terms, the City may approve a fully documented request for a price adjustment. The City shall determine whether any requested price increases for extension terms is acceptable to the City. If the City approves the price increase, the price shall remain firm for the renewal term for which it was requested. If a price increase is agreed upon by

Docusign Envelope ID: 9ED0BAA1-0273-4BE5-B75D-4BE283C0A683

the Parties a written Agreement Amendment shall be approved and executed by the Parties.

SECTION V: GENERAL CONDITIONS

5.1 Records/Audit. Records of the Contractor's direct personnel payroll, reimbursable expenses pertaining to this Agreement and records of accounts between the City and Contractor must be kept on the basis of generally accepted accounting principles and must be made available to the City and its auditors for up to three years following the City's final acceptance of the services under this Agreement. The City, its authorized representative, or any federal agency, reserves the right to audit Contractor's records to verify the accuracy and appropriateness of all cost and pricing data, including data used to negotiate this Agreement and any amendments. The City reserves the right to decrease the total amount of Agreement price or payments made under this Agreement or request reimbursement from the Contractor following final contract payment on this Agreement if, upon audit of the Contractor's records, the audit discloses the Contractor has provided false, misleading, or inaccurate cost and pricing data. The Contractor will include a similar provision in all of its contracts with subcontractors providing services under the Agreement Documents to ensure that the City, its authorized representative, or the appropriate federal agency, has access to the subcontractors' records to verify the accuracy of all cost and pricing data. The City reserves the right to decrease Contract price or payments made on this Agreement or request reimbursement from the Contractor following final payment on this Agreement if the above provision is not included in subcontractor agreements, and one or more subcontractors refuse to allow the City to audit their records to verify the accuracy and appropriateness of all cost and pricing data. If, following an audit of this Agreement, the audit discloses the Contractor has provided false, misleading, or inaccurate cost and pricing data, and the cost discrepancies exceed 1% of the total Agreement billings, the Contractor will be liable for reimbursement of the reasonable, actual cost of the audit.

5.2 Alteration in Character of Work. Whenever an alteration in the character of work results in a substantial change in this Agreement, thereby materially increasing or decreasing the scope of services, cost of performance, or Project schedule, the work will be performed as directed by the City. However, before any modified work is started, a written amendment must be approved and executed by the City and the Contractor. Such amendment must not be effective until approved by the City. Additions to, modifications, or deletions from this Agreement as provided herein may be made, and the compensation to be paid to the Contractor may accordingly be adjusted by mutual agreement of the Parties. It is distinctly understood and agreed that no claim for extra work done or materials furnished by the Contractor will be allowed by the City except as provided herein, nor must the Contractor do any work or furnish any materials not covered by this Agreement unless such work is first authorized in writing. Any such work or materials furnished by the Contractor without prior written authorization will be at Contractor's own risk, cost, and expense, and Contractor hereby agrees that without written authorization Contractor will make no claim for compensation for such work or materials furnished.

5.3 Termination for Convenience. The City and the Contractor hereby agree to the full performance of the covenants contained herein, except that the City reserves the right, at its discretion and without cause, to terminate or abandon any service provided for in this Agreement, or abandon any portion of the Project for which services have been performed by the Contractor. In the event the City abandons or suspends the services, or any part of the services as provided in this Agreement, the City will notify the Contractor in writing and immediately after receiving such notice, the Contractor must discontinue advancing the work

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specified under this Agreement. Upon such termination, abandonment, or suspension, the Contractor must deliver to the City all drawings, plans, specifications, special provisions, estimates and other work entirely or partially completed, together with all unused materials supplied by the City. The Contractor must appraise the work Contractor has completed and submit Contractor's appraisal to the City for evaluation. The City may inspect the Contractor's work to appraise the work completed. The Contractor will receive compensation in full for services performed to the date of such termination. The fee shall be paid in accordance with Section IV of this Agreement, and as mutually agreed upon by the Contractor and the City. If there is no mutual agreement on payment, the final determination will be made in accordance with the Disputes provision in this Agreement. However, in no event may the payment exceed the payment set forth in this Agreement nor as amended in accordance with Alteration in Character of Work. The City will make the final payment within 60 days after the Contractor has delivered the last of the partially completed items and the Parties agree on the final payment. If the City is found to have improperly terminated the Agreement for cause or default, the termination will be converted to a termination for convenience in accordance with the provisions of this Agreement.

5.4 Termination for Cause. The City may terminate this Agreement for Cause upon the occurrence of any one or more of the following events: in the event that (a) the Contractor fails to perform pursuant to the terms of this Agreement, (b) the Contractor is adjudged a bankrupt or insolvent, (c) the Contractor makes a general assignment for the benefit of creditors, (d) a trustee or receiver is appointed for Contractor or for any of Contractor’s property (e) the Contractor files a petition to take advantage of any debtor's act, or to reorganize under the bankruptcy or similar laws, (f) the Contractor disregards laws, ordinances, rules, regulations or orders of any public body having jurisdiction, or (g) the Contractor fails to cure default within the time requested. Where Agreement has been so terminated by City, the termination will not affect any rights of City against Contractor then existing or which may thereafter accrue.

5.5 Indemnification. The Contractor (Indemnitor) must indemnify, defend, save and hold harmless the City and its officers, officials, agents and employees (Indemnitee) from any and all claims, actions, liabilities, damages, losses or expenses (including court costs, attorneys' fees and costs of claim processing, investigation and litigation) (Claims) caused or alleged to be caused, in whole or in part, by the wrongful, negligent or willful acts, or errors or omissions of the Contractor or any of its owners, officers, directors, agents, employees, or subcontractors in connection with this Agreement. This indemnity includes any claim or amount arising out of or recovered under workers' compensation law or on account of the failure of the Contractor to conform to any federal, state or local law, statute, ordinance, rule, regulation or court decree. The Contractor must indemnify Indemnitee from and against any and all Claims, except those arising solely from Indemnitee's own negligent or willful acts or omissions. The Contractor is responsible for primary loss investigation, defense and judgment costs where this indemnification applies. In consideration of the award of this Agreement, the Contractor agrees to waive all rights of subrogation against Indemnitee for losses arising from or related to this Agreement. The obligations of the Contractor under this provision survive the termination or expiration of this Agreement.

5.6 Insurance Requirements. Contractor must procure insurance under the terms and conditions and for the amounts of coverage set forth in Exhibit C against claims that may arise from or relate to performance of the work under this Agreement by Contractor and its agents, representatives, employees, and subcontractors. Contractor and any subcontractors must

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maintain this insurance until all of their obligations have been discharged, including any warranty periods under this Agreement. These insurance requirements are minimum requirements for this Agreement and in no way limit the indemnity covenants contained in this Agreement. The City in no way warrants that the minimum limits stated in Exhibit C are sufficient to protect the Contractor from liabilities that might arise out of the performance of the work under this Agreement by the Contractor, the Contractor's agents, representatives, employees, or subcontractors. Contractor is free to purchase such additional insurance as may be determined necessary.

5.7 Cooperation and Further Documentation. The Contractor agrees to provide the City such other duly executed documents as may be reasonably requested by the City to implement the intent of this Agreement.

5.8 Notices. Unless otherwise provided, notice under this Agreement must be in writing and will be deemed to have been duly given and received either (a) on the date of service if personally served on the party to whom notice is to be given, or (b) on the date notice is sent if by electronic mail, or (c) on the third day after the date of the postmark of deposit by first class United States mail, registered or certified, postage prepaid and properly addressed as follows:

For the City	**For the Contractor**
Name: Purchasing Division	Name: Jeffrey Dunn
Title: Purchasing Officer	Title: General Manager
Address: 175 S. Arizona Ave	Address: 2031 W. 1st Street
Chandler, AZ 85225	Tempe, Arizona 85281
Phone: 480-782-2400	Phone: 480-833-7287
Email: purchasing@chandleraz.gov	Email: jdunn@allcitytowing.com

5.9 Successors and Assigns. City and Contractor each bind itself, its partners, successors, assigns, and legal representatives to the other party to this Agreement and to the partners, successors, assigns, and legal representatives of such other party in respect to all covenants of this Agreement. Neither the City nor the Contractor may assign, sublet, or transfer its interest in this Agreement without the written consent of the other party. In no event may any contractual relation be created between any third party and the City.

5.10 Disputes. In any dispute arising out of an interpretation of this Agreement or the duties required not disposed of by agreement between the Contractor and the City, the final determination at the administrative level will be made by the City Purchasing and Materials Manager.

5.11 Completeness and Accuracy of Contractor's Work. The Contractor must be responsible for the completeness and accuracy of Contractor's services, data, and other work prepared or compiled under Contractor's obligation under this Agreement and must correct, at Contractor's expense, all willful or negligent errors, omissions, or acts that may be discovered. The fact that the City has accepted or approved the Contractor's work will in no way relieve the Contractor of any of Contractor's responsibilities.

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5.12 Withholding Payment. The City reserves the right to withhold funds from the Contractor's payments up to the amount equal to the claims the City may have against the Contractor until such time that a settlement on those claims has been reached.

5.13 City's Right of Cancellation. The Parties acknowledge that this Agreement is subject to cancellation by the City under the provisions of Section 38-511, Arizona Revised Statutes (A.R.S.).

5.14 Independent Contractor. For this Agreement the Contractor constitutes an independent contractor. Any provisions in this Agreement that may appear to give the City the right to direct the Contractor as to the details of accomplishing the work or to exercise a measure of control over the work means that the Contractor must follow the wishes of the City as to the results of the work only. These results must comply with all applicable laws and ordinances.

5.15 Project Staffing. Prior to the start of any work under this Agreement, the Contractor must assign to the City the key personnel that will be involved in performing services prescribed in the Agreement. The City may acknowledge its acceptance of such personnel to perform services under this Agreement. At any time hereafter that the Contractor desires to change key personnel while performing under the Agreement, the Contractor must submit the qualifications of the new personnel to the City for prior approval. The Contractor will maintain an adequate and competent staff of qualified persons, as may be determined by the City, throughout the performance of this Agreement to ensure acceptable and timely completion of the Scope of Services. If the City objects, with reasonable cause, to any of the Contractor's staff, the Contractor must take prompt corrective action acceptable to the City and, if required, remove such personnel from the Project and replace with new personnel agreed to by the City.

5.16 Subcontractors. Prior to beginning the work, the Contractor must furnish the City for approval the names of subcontractors to be used under this Agreement. Any subsequent changes are subject to the City’s written prior approval.

5.17 Force Majeure. If either party is delayed or prevented from the performance of any act required under this Agreement by reason of acts of God or other cause beyond the control and without fault of the Party (financial inability excepted), performance of that act may be excused, but only for the period of the delay, if the Party provides written notice to the other Party within ten days of such act. The time for performance of the act may be extended for a period equivalent to the period of delay from the date written notice is received by the other Party.

5.18 Compliance with Laws. Contractor understands, acknowledges, and agrees to comply with the Americans with Disabilities Act, the Immigration Reform and Control Act of 1986 and the Drug Free Workplace Act of 1989. All services performed by Contractor must also comply with all applicable City of Chandler codes, ordinances, and requirements. Contractor agrees to permit the City to verify Contractor’s compliance.

5.19 No Israel Boycott. By entering into this Agreement, Contractor certifies that Contractor is not currently engaged in, and agrees for the duration of the Agreement, not to engage in a boycott of Israel as defined by state statute.

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5.20 Legal Worker Requirements. A.R.S. § 41-4401 prohibits the City from awarding a contract to any contractor who fails, or whose subcontractors fail, to comply with A.R.S. § 23-214(A). Therefore, Contractor agrees Contractor and each subcontractor it uses warrants their compliance with all federal immigration laws and regulations that relate to their employees and their compliance with§ 23-214, subsection A. A breach of this warranty will be deemed a material breach of the Agreement and may be subject to penalties up to and including termination of the Agreement. City retains the legal right to inspect the papers of any Contractor's or subcontractor's employee who provides services under this Agreement to ensure that the Contractor and subcontractors comply with the warranty under this provision.

5.21 Lawful Presence Requirement. A.R.S. §§ 1-501 and 1-502 prohibit the City from awarding a contract to any natural person who cannot establish that such person is lawfully present in the United States. To establish lawful presence, a person must produce qualifying identification and sign a City-provided affidavit affirming that the identification provided is genuine. This requirement will be imposed at the time of contract award. This requirement does not apply to business organizations such as corporations, partnerships, or limited liability companies.

5.22 Forced Labor of Ethnic Uyghurs Prohibited. By entering into this Agreement, Contractor certifies and agrees Contractor does not currently use and will not use for the term of this Agreement: (i) the forced labor of ethnic Uyghurs in the People's Republic of China; or (ii) any goods or services produced by the forced labor of ethnic Uyghurs in the People's Republic of China; or (iii) any contractors, subcontractors or suppliers that use the forced labor or any goods or services produced by the forced labor of ethnic Uyghurs in the People's Republic of China.

5.23 Covenant Against Contingent Fees. Contractor warrants that no person has been employed or retained to solicit or secure this Agreement upon an agreement or understanding for a commission, percentage, brokerage, or contingent fee, and that no member of the Chandler City Council, or any City employee has any interest, financially, or otherwise, in Contractor's firm. For breach or violation of this warrant, the City may annul this Agreement without liability or, at its discretion, to deduct from the Agreement price or consideration, the full amount of such commission, percentage, brokerage, or contingent fee.

5.24 Non-Waiver Provision. The failure of either Party to enforce any of the provisions of this Agreement or to require performance of the other Party of any of the provisions hereof must not be construed to be a waiver of such provisions, nor must it affect the validity of this Agreement or any part thereof, or the right of either Party to thereafter enforce each and every provision.

5.25 Disclosure of Information Adverse to the City's Interests. To evaluate and avoid potential conflicts of interest, the Contractor must provide written notice to the City, as set forth in this Section, of any work or services performed by the Contractor for third parties that may involve or be associated with any real property or personal property owned or leased by the City. Such notice must be given seven business days prior to commencement of the services by the Contractor for a third party, or seven business days prior to an adverse action as defined below. Written notice and disclosure must be sent to the City's Purchasing and Materials Manager. An adverse action under this Agreement includes, but is not limited to: (a) using data as defined in the Agreement acquired in connection with this Agreement to assist a third party in pursuing

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administrative or judicial action against the City; or (b) testifying or providing evidence on behalf of any person in connection with an administrative or judicial action against the City; or (c) using data to produce income for the Contractor or its employees independently of performing the services under this Agreement, without the prior written consent of the City. Contractor represents that except for those persons, entities, and projects identified to the City, the services performed by the Contractor under this Agreement are not expected to create an interest with any person, entity, or third party project that is or may be adverse to the City's interests. Contractor's failure to provide a written notice and disclosure of the information as set forth in this Section constitute a material breach of this Agreement.

5.26 Data Confidentiality and Data Security. As used in the Agreement, data means all information, whether written or verbal, including plans, photographs, studies, investigations, audits, analyses, samples, reports, calculations, internal memos, meeting minutes, data field notes, work product, proposals, correspondence and any other similar documents or information prepared by, obtained by, or transmitted to the Contractor or its subcontractors in the performance of this Agreement. The Parties agree that all data, regardless of form, including originals, images, and reproductions, prepared by, obtained by, or transmitted to the Contractor or its subcontractors in connection with the Contractor's or its subcontractor's performance of this Agreement is confidential and proprietary information belonging to the City. Except as specifically provided in this Agreement, Contractor or its subcontractors must not divulge data to any third party without the City's prior written consent. Contractor or its subcontractors must not use the data for any purposes except to perform the services required under this Agreement. These prohibitions do not apply to the following data provided to the Contractor or its subcontractors have first given the required notice to the City: (a) data which was known to the Contractor or its subcontractors prior to its performance under this Agreement unless such data was acquired in connection with work performed for the City; or (b) data which was acquired by the Contractor or its subcontractors in its performance under this Agreement and which was disclosed to the Contractor or its subcontractors by a third party, who to the best of the Contractor's or its subcontractors knowledge and belief, had the legal right to make such disclosure and the Contractor or its subcontractors are not otherwise required to hold such data in confidence; or (c) data which is required to be disclosed by virtue of law, regulation, or court order, to which the Contractor or its subcontractors are subject. In the event the Contractor or its subcontractors are required or requested to disclose data to a third party, or any other information to which the Contractor or its subcontractors became privy as a result of any other contract with the City, the Contractor must first notify the City as set forth in this Section of the request or demand for the data. The Contractor or its subcontractors must give the City sufficient facts so that the City can be given an opportunity to first give its consent or take such action that the City may deem appropriate to protect such data or other information from disclosure. Unless prohibited by law, within ten calendar days after completion or termination of services under this Agreement, the Contractor or its subcontractors must promptly deliver, as set forth in this Section, a copy of all data to the City. All data must continue to be subject to the confidentiality agreements of this Agreement. Contractor or its subcontractors assume all liability to maintain the confidentiality of the data in its possession and agrees to compensate the City if any of the provisions of this Section are violated by the Contractor, its employees, agents or subcontractors. Solely for the purposes of seeking injunctive relief, it is agreed that a breach of this Section must be deemed to cause irreparable harm that justifies injunctive relief in court. Contractor agrees that the requirements of this Section must be incorporated into all subcontracts entered into by Contractor. A violation of this Section may result in immediate termination of this Agreement without notice.

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5.27 Personal Identifying Information-Data Security. Personal identifying information, financial account information, or restricted City information, whether electronic format or hard copy, must be secured and protected at all times by Contractor and any of its subcontractors. At a minimum, Contractor must encrypt or password-protect electronic files. This includes data saved to laptop computers, computerized devices, or removable storage devices. When personal identifying information, financial account information, or restricted City information, regardless of its format, is no longer necessary, the information must be redacted or destroyed through appropriate and secure methods that ensure the information cannot be viewed, accessed, or reconstructed. In the event that data collected or obtained by Contractor or its subcontractors in connection with this Agreement is believed to have been compromised, Contractor or its subcontractors must immediately notify the City contact. Contractor agrees to reimburse the City for any costs incurred by the City to investigate potential breaches of this data and, where applicable, the cost of notifying individuals who may be impacted by the breach. Contractor agrees that the requirements of this Section must be incorporated into all subcontracts entered into by Contractor. It is further agreed that a violation of this Section must be deemed to cause irreparable harm that justifies injunctive relief in court. A violation of this Section may result in immediate termination of this Agreement without notice. The obligations of Contractor or its subcontractors under this Section must survive the termination of this Agreement.

5.28 Jurisdiction and Venue. This Agreement is made under, and must be construed in accordance with and governed by the laws of the State of Arizona without regard to the conflicts or choice of law provisions thereof. Any action to enforce any provision of this Agreement or to obtain any remedy with respect hereto must be brought in the courts located in Maricopa County, Arizona, and for this purpose, each Party hereby expressly and irrevocably consents to the jurisdiction and venue of such court.

5.29 Survival. All warranties, representations, and indemnifications by the Contractor must survive the completion or termination of this Agreement.

5.30 Modification. Except as expressly provided herein to the contrary, no supplement, modification, or amendment of any term of this Agreement will be deemed binding or effective unless in writing and signed by the Parties.

5.31 Severability. If any provision of this Agreement or the application to any person or circumstance may be invalid, illegal or unenforceable to any extent, the remainder of this Agreement and the application will not be affected and will be enforceable to the fullest extent permitted by law.

5.32 Integration. This Agreement contains the full agreement of the Parties. Any prior or contemporaneous written or oral agreement between the Parties regarding the subject matter is merged and superseded.

5.33 Time is of the Essence. Time of each of the terms, covenants, and conditions of this Agreement is hereby expressly made of the essence.

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5.34 Date of Performance. If the date of performance of any obligation or the last day of any time period provided for should fall on a Saturday, Sunday, or holiday for the City, the obligation will be due and owing, and the time period will expire, on the first day after which is not a Saturday, Sunday or legal City holiday. Except as may otherwise be set forth in this Agreement, any performance provided for herein will be timely made if completed no later than 5:00 p.m. (Chandler time) on the day of performance.

5.35 Delivery. All prices are F.O.B. Destination and include all delivery and unloading at the specified destinations. The Contractor will retain title and control of all goods until they are delivered and accepted by the City. All risk of transportation and all related charges will be the responsibility of the Contractor. All claims for visible or concealed damage will be filed by the Contractor. The City will notify the Contractor promptly of any damaged goods and will assist the Contractor in arranging for inspection.

5.36 Third Party Beneficiary. Nothing under this Agreement will be construed to give any rights or benefits in the Agreement to anyone other than the City and the Contractor, and all duties and responsibilities undertaken pursuant to this Agreement will be for the sole and exclusive benefit of City and the Contractor and not for the benefit of any other party.

5.37 Conflict in Language. All work performed must conform to all applicable City of Chandler codes, ordinances, and requirements as outlined in this Agreement. If there is a conflict in interpretation between provisions in this Agreement and those in the Exhibits, the provisions in this Agreement prevail.

5.38 Document/Information Release. Documents and materials released to the Contractor, which are identified by the City as sensitive and confidential, are the City's property. The document/material must be issued by and returned to the City upon completion of the services under this Agreement. Contractor's secondary distribution, disclosure, copying, or duplication in any manner is prohibited without the City's prior written approval. The document/material must be kept secure at all times. This directive applies to all City documents, whether in photographic, printed, or electronic data format.

5.39 Exhibits. The following exhibits are made a part of this Agreement and are incorporated by reference:

Exhibit A - Project Description/Scope of Services
Exhibit B - Compensation and Fees
Exhibit C - Insurance Requirements
Exhibit D - Special Conditions

5.40 Special Conditions. As part of the services Contractor provides under this Agreement, Contractor agrees to comply with and fully perform the special terms and conditions set forth in Exhibit D, which is attached to and made a part of this Agreement.

5.41 Cooperative Use of Agreement. In addition to the City of Chandler and with approval of the Contractor, this Agreement may be extended for use by other municipalities, school districts and government agencies of the State. Any such usage by other entities must be in

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accordance with the ordinance, charter and/or procurement rules and regulations of the respective political entity.

If required to provide services on a school district property at least five times during a month, the Contractor will submit a full set of fingerprints to the school of each person or employee who may provide such service. The District will conduct a fingerprint check in accordance with A.R.S. 41-1750 and Public Law 92-544 of all Contractors, subcontractors or vendors and their employees for which fingerprints are submitted to the District. Additionally, the Contractor will comply with the governing body fingerprinting policies of each individual school district/public entity. The Contractor, sub-contractors, vendors and their employees will not provide services on school district properties until authorized by the District.

Orders placed by other agencies and payment thereof will be the sole responsibility of that agency. The City will not be responsible for any disputes arising out of transactions made by other agencies who utilize this Agreement.

5.42 Non-Discrimination and Anti-Harassment Laws. Contractor must comply with all applicable City, state, and federal non-discrimination and anti-harassment laws, rules, and regulations.

5.43 Licenses and Permits. Beginning with the Effective Date and for the full term of this Agreement, Contractor must maintain all applicable City, state, and federal licenses and permits required to fully perform Contractor's services under this Agreement.

5.44 Warranties. Contractor must furnish a one-year warranty on all work and services performed under this Agreement. Contractor must furnish, or cause to be furnished, a two-year warranty on all fixtures, furnishings, and equipment furnished by Contractor, subcontractors, or suppliers under this Agreement. Any defects in design, workmanship, or materials that do not comply with this Agreement must be corrected by Contractor (including, but not limited to, all parts and labor) at Contractor's sole cost and expense. All written warranties and redlines for as-built conditions must be delivered to the City on or before the City's final acceptance of Contractor's services under this Agreement.

5.45 Emergency Purchases. City reserves the rights to purchase from other sources those items, which are required on an emergency basis and cannot be supplied immediately by the Contractor.

5.46 Non-Exclusive Agreement. This agreement is for the sole convenience of the City of Chandler. The City reserves the right to obtain like goods or services from another source when necessary.

5.47 Budget Approval Into Next Fiscal Year. This Agreement will commence on the Effective Date and continue in full force and effect until it is terminated or expires in accordance with the provisions of this Agreement. The Parties recognize that the continuation of this Agreement after the close of the City's fiscal year, which ends on June 30 of each year, is subject to the City Council's approval of a budget that includes an appropriation for this item as expenditure. The City does not represent that this budget item will be actually adopted. This determination is solely made by the City Council at the time Council adopts the budget.

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This Agreement shall be in full force and effect only when it has been approved and executed by the duly authorized City officials.

FOR THE CITY

By: _____

Its: _____Mayor_____

FOR THE CONTRACTOR

By: Jeffrey D. Dunn

Its: General Manager

APPROVED AS TO FORM:

By: _____

City Attorney JMB

ATTEST:

By: _____

City Clerk

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EXHIBIT A TO AGREEMENT
SCOPE OF WORK

1. SCOPE OF WORK. CONTRACTOR shall provide vehicle towing, storage and impounding services for all vehicles when so requested by the City of Chandler. Many of the vehicles to be towed will have become disabled due to motor vehicle accidents. There will also be a number of service calls relating to stolen vehicle recoveries, the arrest of the vehicle driver, abandoned vehicles, vehicles required for evidentiary purposes and others. The CONTRACTOR shall be available twenty-four (24) hours a day every day of the year to provide service pursuant to this AGREEMENT.

2.1. No guarantee of volume of work. Estimated volume based on historical information ranges from approximately 400 to 500 vehicles per month. This figure is an estimate only. CITY makes no guarantees regarding actual volume to be expected under the Contract.

2.2. Response Time. Except for off road or out of City limits vehicle recoveries CONTRACTOR shall respond, with the proper equipment to the subject location within 30 minutes after receiving CITY'S request for service. The CONTRACTOR must respond to a minimum of 95 percent of the calls referred within the 30-minute period.

2.3. Site Cleanup. The CONTRACTOR shall promptly and thoroughly clean up debris at the scene of accidents, including all vehicle parts and any other matter left in the roadway as a result of the accident. All clean up shall be to the satisfaction of any officer on scene.

2.4. Release of Vehicles. Prior to releasing any vehicle, CONTRACTOR shall require the person or company requesting possession to present a copy of a picture identification verifying ownership of the vehicle as indicated on the police report. An agent of the owner must also present a written statement authorizing the release, with a notarized signature of the vehicle owner and picture ID of the agent. If the owner is incapacitated, the written authorization from the owner's adult next of kin may be substituted for the notarized signature of the vehicle owner. The contractor will accept release documentation by Fax, mail or hand delivery. If requested by CITY, CONTRACTOR shall verify the presence of an ignition interlock or other device. Release of vehicles to insurance companies shall be in accordance with ARS 28-4847 Insurance Companies; release; fees and definition.

2.5. Early Release of Impounded Vehicles. For vehicles ordered impounded by the City Police Officer at the scene, in accordance with ARS 28-3511 et seq, CONTRACTOR shall not release the vehicle prior to the expiration of the 20-day impound period without permission from the Chandler Police Legal Unit. If requested by CITY, CONTRACTOR shall verify the presence of an ignition interlock or other device.

2.6. Release of Personal Property. Upon presentation of a picture identification verifying ownership of the vehicle or written notarized authorization from the owner and picture identification of the agent if the property is being sought by an agent of the owner, CONTRACTOR shall allow vehicle owners or their agents access to the vehicle to recover personal property from the vehicle (allow them to enter the yard, walk to their vehicle and physically remove items themselves) at any time during normal business hours and shall not require payment of any fee or charge prior to or as a condition of such release. If the owner is incapacitated, the written authorization from the owner's adult next of kin may be substituted for the notarized signature of the vehicle owner.

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2.7. Timely Release Of Vehicles. CONTRACTOR shall make vehicle available to owner or owners agent within a reasonable time (not more than 30minutes) from the time the owner or owner's agent arrives at storage facility during the time specified in section 3.3.7 Storage Lot Availability.

2.8. No Other Conditions of Release. Except as listed herein or as required by law, CONTRACTOR shall not require any other documentation as a condition of or prior to release of vehicles or personal property nor impose any other requirements to prevent owners or their agents from obtaining possession of their vehicle or personal property.

2.9. Use of Another Tow Service. CONTRACTOR agrees and understands that requests by motorists for another tow service will be honored if the officer determines that the request is reasonable. The purpose of this contract is to provide towing service for those motorists who do not have a specific request for another tow service, or are incapable of making such a request due to injuries or for other reasons.

2.10. Expansion of Boundaries. City boundaries may expand during the period of the contract due to annexations by the City of Chandler. If annexations occur CONTRACTOR shall provide tow services to the annexed area for the term of the contract under the same terms and conditions as set forth in the Agreement. CITY may occasionally request service outside the City limits for stolen vehicle recoveries or other reasons. When such service is requested, CONTRACTOR is permitted to add the "per mile" rate for the distance from the recovery site and back to the City limits.

2.11. Future Technology: Ability and willingness to work with the City of Chandler on technology improvements, to include, but not limited to direct tow request form a web based platform to improve efficiencies and allow the City to provide a better service to the community.

3. REQUIRED EQUIPMENT, PERSONNEL AND FACILITIES

3.1. Equipment. The tow trucks shall have current inspection and certification by the Arizona Department of Public Safety and shall maintain the certification throughout the term of the Contract. CONTRACTOR must be capable of responding and providing service for any vehicle up to a maximum gross vehicle weight of 25,000 pounds.

3.1.1 Minimum Equipment Requirements. CONTRACTOR will be required to have a minimum of six (6) tow vehicles, one of which must be capable of towing a vehicle up to 25,000 GVW. The tow trucks shall be equipped with the proper complement of dollies, chains, slings, bumpers and other equipment necessary to prevent damage to towed vehicles. Tow trucks shall also be equipped with brooms, shovels, oil absorbent material, and other necessary equipment to clean up the site after removal of the vehicles. CONTRACTOR will be required to add equipment if necessary to meet the terms of the AGREEMENT.

3.1.2 Substitute Equipment Requirements. If any of CONTRACTOR'S equipment is out of service, CONTRACTOR shall be responsible for acquiring substitute equipment sufficient to provide timely service on demand under this Contract. Such substitute equipment shall be considered CONTRACTOR'S equipment for the purposes of this Agreement and be operated by personnel of CONTRACTOR.

3.1.3 Truck Identification. Tow trucks shall have CONTRACTOR's name and telephone number and comply with applicable law regarding truck identification as the law may be amended.

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3.1.4 Communications Equipment Requirements. CONTRACTOR shall have the ability to communicate with drivers via radio, mobile telephone, or other like equipment, so that the City of Chandler Police Department Communications Section will have the ability to pass on information to the driver through CONTRACTOR'S dispatch center as the driver responds to a call. CONTRACTOR must be available by phone to the police department 24 hours a day, 7 days a week. CONTRACTOR shall have a telephone answering machine, or voice mail, to receive customer phone calls when the business office is vacant and for calls received outside of normal business hours.

3.1.5 CONTRACTOR shall be responsible for and is liable for the safekeeping of vehicles towed and/or stored and for items left in stored vehicles.

3.2. Personnel Minimum Requirements. CONTRACTOR shall have available at all times sufficient qualified personnel to operate the number of tow trucks necessary to provide timely service. Such personnel shall be employees of CONTRACTOR. Each driver shall be properly licensed with correct class license as required by the Motor Vehicle Division of the State of Arizona. It shall be CONTRACTOR's responsibility to ensure that all drivers maintain current Arizona licenses during the contract term. Contractor shall hire, train and supervise all drivers in accordance with the laws of the State of Arizona and rules and regulations of the Department of Public safety of the State of Arizona, pursuant to A.R.S. 28-1108.

3.2.1 Driver Conduct. All drivers shall operate the tow trucks in a safe and prudent manner and shall refrain from using profane or vulgar language in a public area while performing work under this agreement. CONTRACTOR will agree to prohibit the use of intoxicating substances by all tow truck drivers and ensure that they do not either use or possess illegal drugs while in the course of performing their duties under this contract. Employees of CONTRACTOR who normally and regularly come into direct contact with the public shall be in a reasonably clean uniform that at a minimum identifies the name of the tow company and the individual. CONTRACTOR shall be fully responsible for drivers' actions.

3.3.Storage Facilities

3.3.1 Lot Location. Storage facility shall be located within a 8.5-mile radius of the intersection of Arizona Ave. and Chandler Blvd. The storage facility must meet all applicable zoning and other requirements of the City, County, State and Federal Government. Vehicles shall be stored in the storage facility offered until released to the owner or other authorized agent.

3.3.2 Location Prohibition. The storage facility shall not be located within a wrecking yard that is in the business of dismantling vehicles.

3.3.3 Fencing. A fence of a minimum of six (6) feet in height is required. The fence may be constructed from chain link, masonry, wood or equivalent as permitted by the appropriate building and zoning regulations. Barbed wire or razor wire may be provided at the top of the fence if permitted by law.

3.3.4 Lighting. The storage area shall be sufficiently lit with overhead lighting that illuminates the entire storage facility.

3.3.5 Security. The fenced storage facility shall be locked when unattended. The CONTRACTOR shall be responsible for the safe keeping of vehicles towed and for items left in stored vehicles. All vehicles shall be kept within the fenced storage area until released to the owner or authorized agent. Access to the

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storage facility shall be limited to the CONTRACTOR'S employees or individuals with a legitimate interest in vehicles being stored. All individuals must be accompanied by an employee of CONTRACTOR. The storage lot shall be dedicated to the storage of vehicles towed and stored by CONTRACTOR.

3.3.6 Size. The minimum storage space required will be 45,000 square feet dedicated to vehicles stored pursuant to this Contract. Vehicles towed under the resultant Contract shall be stored in one location. If additional space is required during the term of the contract, the contractor will be required to provide such additional space.

3.3.7 Storage Lot Availability. CONTRACTOR shall staff its vehicle storage facility between the hours of **8 a.m. and 6 p.m**. Monday through Friday except the following holidays: New Year's Day. Martin Luther King Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and Christmas Day. CONTRACTOR shall have a telephone number and company name prominently posted at the storage location for after-hour release of vehicles.

3.3.8 Zoning. Storage facilities must meet the appropriate zoning/permit requirements of the appropriate government entity where the facility is located.

3.3.9 Overflow Storage Lot. CONTRACTOR may use an overflow storage lot to store vehicles that have been stored in the primary storage facility for over 35 days. CONTRACTOR shall make provision for release of vehicles from overflow storage lot at no additional charge and without any additional delay. Overflow storage lot shall be within a 15 mile radius of Arizona Avenue and Chandler Blvd. The overflow storage lot shall meet requirements set forth in sections 3.3.2, 3.3.3, 3.3.4, 3.3.5, 3.3.7 and 3.3.8.

4. DOCUMENTATION

4.1. Reports to Department of Transportation. CONTRACTOR shall submit all necessary reports to the Arizona Department of Transportation in accordance with A.R.S. Sections 28-1401 through 28-1411 and subsequent amendments thereto, when the statutes are applicable to vehicles towed and stored under this contract.

4.2. Required Records. CONTRACTOR shall maintain adequate records of every vehicle towed at the request of the City of Chandler under the contract showing the following:

a) Location of vehicle pick up.
b) Location where vehicle taken.
c) Date and time of the tow.
d) Make, model and year of the vehicle.
e) License number and state.
f) Vehicle identification number.
g) Name of person or business to whom vehicle released.
h) Itemized tow and storage billing statements.

CONTRACTOR shall maintain a record, either electronically or manually, that is easily separated from all other records CONTRACTOR may keep, of each vehicle towed under this Agreement. The customer record file is to include the master log, signed invoice and service fee listing and must be maintained alphabetically by the last

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name of the customer or the Vehicle Identification Number. The invoice shall be presented to the customer upon the customer's request for the invoice.

4.3. Inspection of Facility and Equipment. CONTRACTOR shall permit and make available for inspection all of its facilities and equipment by CITY upon reasonable notice and during normal business hours.

4.4. Required Reports. On or before the fifteenth of each month, CONTRACTOR shall provide a report for all vehicles towed and released pursuant to the contract. The report shall be in Excel format unlocked, in the form shown in Exhibit A.1, A.2 and A.3. The report shall be provided in electronic and hard copy.

4.5. Confidentiality of Records. CONTRACTOR shall establish and maintain procedures and controls that are acceptable to CITY to assure that no information contained in CONTRACTOR'S records or obtained from CITY or from others in carrying out CONTRACTOR'S functions under this Contract is used by or disclosed by it, its agents, officers, or employees, except as required to efficiently perform duties under the contract. Persons requesting such information shall be referred to CITY. CONTRACTOR also agrees that any such information shall not be divulged other than to employees or officers of CONTRACTOR as needed for the performance of duties under the contract, unless otherwise agreed to in writing by CITY.

5. ALLOWED CHARGES. For all services provided under this Agreement, CONTRACTOR may charge vehicle owners only those fees set forth herein at the rates and in the amounts listed in the Price Sheet attached hereto as Exhibit B and incorporated herein by reference.

5.1. Flat Rate Per Tow Fee. CONTRACTOR shall charge vehicle owners the Flat Rate Per Tow Fee listed in Exhibit B. This fee covers all towing services 24 hours per day including weekdays, weekends and holidays. The flat rate per tow fee includes all costs for hookups, winching, preparation to tow, cleanup of debris, stand by time, use of dollies when necessary, drive line dropping, all labor incurred, mileage, sealing of windows if necessary, and delivery to the public roadway for subsequent tow if necessary. The allowable flat rate per tow fee is listed in Exhibit B and is a flat rate for vehicles up to and including 25,000 lb. GVW.

5.2. Unit Price for Storage. CONTRACTOR may charge the full daily storage charge shown on Exhibit B for any part of a 24-hour period. The Rate set forth in Exhibit B shall apply to all vehicles stored pursuant to this contract excluding those vehicles impounded pursuant to A.R.S. 28-3511 et. seq. The time period for billing for storage shall commence from the time the vehicle arrives at the storage lot. The unit price for storage is for vehicles up to and including 25,000 lb. GVW.

5.3. Extraordinary Recoveries. With prior written approval from the officer on the scene, CONTRACTOR may charge an additional hourly fee for extraordinary recoveries, i.e. lake recoveries, recoveries from canals with water in them, recoveries from swimming pools, etc. This fee will be in addition to the flat rate per tow fee.

5.4. After Hours Opening. CONTRACTOR may charge the fee shown on Exhibit B to open the lot after normal business hours, as defined in Paragraph 3.3.7 Storage Lot Availability. Contractor shall make vehicle available within 60 minutes from the time owner or owner's agent notifies the contractor of request for afterhours opening.

5.5. Mileage. CONTRACTOR shall not charge a "cost per mile" charge when the tow is made to the CONTRACTOR'S storage facility or any location within the City of Chandler. CONTRACTOR may charge the

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Mileage charge shown on Exhibit B only when (1) the owner or agent requests that the vehicle be towed to a location other than CONTRACTOR'S storage facility located outside the City of Chandler and then only for the additional actual mileage beyond the mileage to the nearest City of Chandler border based on the most direct route or (2) when a vehicle is towed from outside the City limits and then only for the actual mileage from the point of pick up to the nearest City or Chandler border based on the most direct route .

5.6. Device Verification. When requested by CITY to verify installation of an interlock or other device, CONTRACTOR shall not charge any fee for such verification.

5.7. Incidental Services. CONTRACTOR shall perform related services such as inflating tires, jump starting, opening of locked vehicles and other incidental services requested by the owner of a towed vehicle without charge from the time the contractor is dispatched to the time vehicle is released.

5.8. Filing Fee. CONTRACTOR may charge a filing fee at the rate set forth by state law for reimbursement of any filing fee paid by CONTRACTOR pursuant to state law.

5.9. Re-tows. CONTRACTOR shall provide vehicle owners or their agents a choice to use CONTRACTOR or another source for re-towing. CONTRACTOR may not charge any re-tow fee nor any other fee to allow the vehicle owner or agent to use another source for re-towing,

5.10. Outside Contracted Services. With approval from the officer on scene, CONTRACTOR may charge actual expenses in cases where it is necessary to hire outside services or lease additional equipment for vehicle recoveries, i.e. hiring divers, crane rental, etc.

5.11. Business Card and Rate Sheet. CONTRACTOR shall provide a business card and Contract Rate Sheet to the owner or agent of each vehicle towed. If unable to do so because the owner or agent has been transported to a hospital or otherwise left the scene, CONTRACTOR will provide the business card and rate sheet to the officer investigating the accident. The Contract Rate Sheet will be provided to CONTRACTOR by CITY. CONTRACTOR shall notify CITY if additional rate sheets are needed.

5.12. Additional Fees. Under no circumstances shall CONTRACTOR charge any fees not authorized herein and listed in the Price Sheet, Exhibit B, for services by reason of this Contract. This Contract covers all services, charges and fees from the time CONTRACTOR receives a request from the City of Chandler to respond until possession of the vehicle is released from CONTRACTOR and passes to the vehicle's owner or owner's agent.

5.13. Compensation, Taxes and Workman's Compensation. CONTRACTOR shall be solely responsible for any and all tax obligations, which may result out of CONTRACTOR'S performance of this Agreement. CITY shall have no obligation to pay any amounts for taxes, of any type, incurred by CONTRACTOR. CONTRACTOR shall have the total responsibility for all salaries, wages, bonuses, retirement, withholdings, Workmen's Compensation and occupational disease compensation insurance, all unemployment compensation, other benefits and all taxes and premiums pertinent thereto concerning any persons(s) supplied by the CONTRACTOR in the performance of this Agreement and CONTRACTOR shall indemnify and hold harmless with respect thereto.

6. RESPONSIBILITY FOR PAYMENT

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6.1. Payment by Vehicle Owners. All payments, except for vehicles towed for evidentiary purposes and City owned vehicles will be the responsibility of the vehicle owner and not CITY. For vehicles owned by the City or vehicles towed or stored for evidentiary purposes, CITY shall pay CONTRACTOR at the rates shown on Exhibit B.

6.2. Method of Payment. CONTRACTOR shall and hereby agrees to accept all reasonable forms of payment from vehicle owners, including but not limited to, cash, credit cards, and debit cards.

7. Solicitation of Business Prohibited. In connection with any vehicle towed pursuant to this agreement, CONTRACTOR may not solicit business for, or contact the vehicle owner or owner's agent on behalf of, any body shop, towing company, wrecking yard, health care provider, lawyer, or other person or business of any description. This prohibition does not prohibit the contractor's employees from answering questions from a vehicle owner or owner's agent. In addition, CONTRACTOR shall not accept any referral fees or commission from any body shop, towing company, wrecking yard, health care provider, lawyer, or other person or business in connection with this contract. In addition, CONTRACTOR is prohibited from receiving a commission, referral fee or other compensation from any body shop, insurance company, legal firm, attorney or others in exchange for referring business from this contract to said parties.

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EXHIBIT B TO AGREEMENT
COMPENSATION AND FEES

Description	*Unit*	*Unit Price*
Flat rate per tow	Each	$ 20.00
Storage (non 28-3511)	Day	$ 32.50
Storage (28-3511)	Day	$ 25.00
Extraordinary Recovery	Hour	$ 50.00
After hours opening	Each	$ 65.00
Mileage	Mile	$ 5.00

Outside Contracted Services at actual cost may also be charged upon written approval from the officer at the scene.

A listing of all towing and service prices as contracted shall be issued to the owner, agent of the owner, or the owner's insurance representative at pick-up and a copy shall be issued when invoiced at the time of vehicle release.

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EXHIBIT C TO AGREEMENT
INSURANCE

INSURANCE

General.

A. At the same time as execution of this Agreement, the Contractor shall furnish the City a certificate of insurance on a standard insurance industry ACORD form. The ACORD form must be issued by an insurance company authorized to transact business in the State of Arizona possessing a current A.M. Best, Inc. rating of A-7, or better and legally authorized to do business in the State of Arizona with policies and forms satisfactory to City. Provided, however, the A.M. Best rating requirement shall not be deemed to apply to required Workers' Compensation coverage.

B. The Contractor and any of its subcontractors shall procure and maintain, until all of their obligations have been discharged, including any warranty periods under this Agreement are satisfied, the insurances set forth below.

C. The insurance requirements set forth below are minimum requirements for this Agreement and in no way limit the indemnity covenants contained in this Agreement.

D. The City in no way warrants that the minimum insurance limits contained in this Agreement are sufficient to protect Contractor from liabilities that might arise out of the performance of the Agreement services under this Agreement by Contractor, its agents, representatives, employees, subcontractors, and the Contractor is free to purchase any additional insurance as may be determined necessary.

E. Failure to demand evidence of full compliance with the insurance requirements in this Agreement or failure to identify any insurance deficiency will not relieve the Contractor from, nor will it be considered a waiver of its obligation to maintain the required insurance at all times during the performance of this Agreement.

F. Use of Subcontractors: If any work is subcontracted in any way, the Contractor shall execute a written contract with Subcontractor containing the same Indemnification Clause and Insurance Requirements as the City requires of the Contractor in this Agreement. The Contractor is responsible for executing the Agreement with the Subcontractor and obtaining Certificates of Insurance and verifying the insurance requirements.

Minimum Scope and Limits of Insurance. The Contractor shall provide coverage with limits of liability not less than those stated below.

A. *Commercial General Liability-Occurrence Form*. Contractor must maintain "occurrence" form Commercial General Liability insurance with a limit of not less than $2,000,000 for each occurrence, $4,000,000 aggregate. Said insurance must also include coverage for products

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and completed operations, independent contractors, personal injury and advertising injury. If any Excess insurance is utilized to fulfill the requirements of this paragraph, the Excess insurance must be "follow form" equal or broader in coverage scope than underlying insurance.

B. *Automobile Liability-Any Auto or Owned, Hired and Non-Owned Vehicles*
Vehicle Liability: Contractor must maintain Business/Automobile Liability insurance with a limit of $1,000,000 each accident on Contractor owned, hired, and non-owned vehicles assigned to or used in the performance of the Contractor's work or services under this Agreement. If any Excess or Umbrella insurance is utilized to fulfill the requirements of this paragraph, the Excess or Umbrella insurance must be "follow form" equal or broader in coverage scope than underlying insurance.

C. *Workers Compensation and Employers Liability Insurance*: Contractor must maintain Workers Compensation insurance to cover obligations imposed by federal and state statutes having jurisdiction of Contractor employees engaged in the performance of work or services under this Agreement and must also maintain Employers' Liability insurance of not less than $1,000,000 for each accident and $1,000,000 disease for each employee.

Additional Policy Provisions Required.

A. *Self-Insured Retentions or Deductibles*. Any self-insured retentions and deductibles must be declared and approved by the City. If not approved, the City may require that the insurer reduce or eliminate any deductible or self-insured retentions with respect to the City, its officers, officials, agents, employees, and volunteers.

1. The Contractor's insurance must contain broad form contractual liability coverage.

2. The Contractor's insurance coverage must be primary insurance with respect to the City, its officers, officials, agents, and employees. Any insurance or self-insurance maintained by the City, its officers, officials, agents, and employees shall be in excess of the coverage provided by the Contractor and must not contribute to it.

3. The Contractor's insurance must apply separately to each insured against whom claim is made or suit is brought, except with respect to the limits of the insurer's liability.

4. Coverage provided by the Contractor must not be limited to the liability assumed under the indemnification provisions of this Agreement.

5. The policies must contain a severability of interest clause and waiver of subrogation against the City, its officers, officials, agents, and employees, for losses arising from Work performed by the Contractor for the City.

6. The Contractor, its successors and or assigns, are required to maintain Commercial General Liability insurance as specified in this Agreement for a minimum period of three

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years following completion and acceptance of the Work. The Contractor must submit a Certificate of Insurance evidencing Commercial General Liability insurance during this three year period containing all the Agreement insurance requirements, including naming the City of Chandler, its agents, representatives, officers, directors, officials and employees as Additional Insured as required.

7. If a Certificate of Insurance is submitted as verification of coverage, the City will reasonably rely upon the Certificate of Insurance as evidence of coverage but this acceptance and reliance will not waive or alter in any way the insurance requirements or obligations of this Agreement.

B. *Insurance Cancellation During Term of Contract/Agreement.*

1. If any of the required policies expire during the life of this Contract/Agreement, the Contractor must forward renewal or replacement Certificates to the City within ten days after the renewal date containing all the required insurance provisions.
2. Each insurance policy required by the insurance provisions of this Contract/Agreement shall provide the required coverage and shall not be suspended, voided or canceled except after 30 days prior written notice has been given to the City, except when cancellation is for non-payment of premium, then ten days prior notice may be given. Such notice shall be sent directly to Chandler Law-Risk Management Department, Post Office Box 4008, Mailstop 628, Chandler, Arizona 85225. If any insurance company refuses to provide the required notice, the Contractor or its insurance broker shall notify the City of any cancellation, suspension, non-renewal of any insurance within seven days of receipt of insurers' notification to that effect.

A. *City as Additional Insured*. The policies are to contain, or be endorsed to contain, the following provisions:

1. The Commercial General Liability and Automobile Liability policies are to contain, or be endorsed to contain, the following provisions: The City, its officers, officials, agents, and employees are additional insureds with respect to liability arising out of activities performed by, or on behalf of, the Contractor including the City's general supervision of the Contractor; Products and Completed operations of the Contractor; and automobiles owned, leased, hired, or borrowed by the Contractor.

2. The City, its officers, officials, agents, and employees must be additional insureds to the full limits of liability purchased by the Contractor even if those limits of liability are in excess of those required by this Agreement.

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EXHIBIT D TO AGREEMENT
SPECIAL CONDITIONS

CITY'S CONTRACTUAL REMEDIES

1. **Right to Assurance.** If the City in good faith has reason to believe that the Contractor does not intend to, or is unable to perform or continue performing under this Agreement, the Agreement Administrator may demand in writing that the Contractor give a written assurance of intent to perform. Failure by the Contractor to provide written assurance within the number of Days specified in the demand may, at the City's option, be the basis for terminating the Agreement in addition to any other rights and remedies provided by law or this Agreement.

2. **Assessment for failure to provide Required Reports**. In addition to other remedies available to CITY for a violation of any term of this contract, CITY may assess, and CONTRACTOR agrees to pay to CITY, fifty dollars ($50) per day that any report is late.

3. **Assessment for Failure to Meet Response Time.** In addition to other remedies available to CITY for a violation of any term of this contract, CITY may assess, and CONTRACTOR agrees to pay to CITY, for violation of the response time requirements herein, one thousand dollars ($1,000) per percentage point below 95 percent that CONTRACTOR fails to respond within the time required during each calendar month.

Compliance Rate	Assessment
94%	$1,000
93%	$2,000
92%	$3,000
91%	$4,000
90%	$5,000
89%	$6,000
88%	$7,000
87%	$8,000
86%	$9,000
85%	$10,000

4. Stop Work Order. The City may, at any time, by written order to the Contractor, require the Contractor to stop all or any part, of the work called for by this Agreement for period(s) of days indicated by the City after the order is delivered to the Contractor. The order shall be specifically identified as a stop work order issued under this clause. Upon receipt of the order, the Contractor shall immediately comply with its terms and take all reasonable steps to minimize the incurrence of costs allocable to the work covered by the order during the period of work stoppage.

If a stop work order issued under this clause is canceled or the period of the order or any extension expires, the Contractor shall resume work. The Agreement Administrator shall make an equitable adjustment in the delivery schedule or Agreement price, or both, and the Agreement shall be amended in writing accordingly.

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5. <u>Non-exclusive Remedies.</u> The rights and the remedies of the City under this Agreement are not exclusive.

6. <u>Nonconforming Tender.</u> Services and materials supplied under this Agreement shall fully comply with Agreement requirements and specifications. Services or materials that do not fully comply constitute a breach of agreement.

7. <u>Right of Offset.</u> The City shall be entitled to offset against any sums due Contractor, any expenses or costs incurred by the City, or damages assessed by the City concerning the Contractor's non-conforming performance or failure to perform the Agreement, including expenses to complete the work and other costs and damages incurred by City.

City Council Memorandum Police Memo No. N/A

Date: November 04, 2024
To: Mayor and Council
Thru: Joshua H. Wright, City Manager
Tadd Wille, Assistant City Manager
Bryan Chapman, Police Chief
From: Michelle Potts, Police Communications Technology Senior Manager
Subject: Purchase of BriefCam Analytics Protect Software and Equipment

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Proposed Motion:

Move City Council approve the purchase of BriefCam Analytics Protect software and equipment, utilizing the Maricopa County Contract No. 210237-C, with Safeware, Inc., in an amount not to exceed $198,465.

Background/Discussion:

In July 2024, the Chandler Police Department launched the Real Time Crime Center (RTCC). The RTCC is a technology hub that centralizes and streamlines technology in order to provide real-time information to first responders and investigators. A key component of the RTCC is the use of cameras and real-time notifications.

BriefCam is an advanced analytics tool that will assist the RTCC and investigators by reducing the time required to review video from hours to minutes by making the video searchable and quantifiable while providing real-time notifications to the RTCC. BriefCam accelerates investigations, increasing situational awareness and delivering critical, time-sensitive intelligence by rapidly pinpointing objects of interest based on an ever-expanding set of search filters. The system integrates seamlessly into a set of Video Management Systems and visualizes object movement, demographic segmentations, behavior trending, hotspots, and object interactions. It offers interactive, intuitive and easy-to-use dashboards for data analysis, as well as tools for auto-generating and prioritizing relevant data points and charts.

By implementing BriefCam into RTCC operations, staff will be able to accelerate investigations, improve situational awareness in critical events, and enhance operational intelligence.

Evaluation:

Maricopa County competitively solicited and awarded a contract for safety equipment and supplies to Safeware, Inc. The City has a current agreement with Maricopa County allowing for the cooperative usage of the Maricopa County contracts. Staff recommend the cooperative use of this contract because it offers significant discounts.

Fiscal Impact

Account No.	Fund Name	Program Name	Dollar Amount	CIP Funded Y/N
101.2061.6314.5RTC.000000	General Fund	N/A	$198,465.00	N

City Council Memorandum **Public Works & Utilities** **Memo No.** RE25-002

Date: November 04, 2024
To: Mayor and Council
Thru: Joshua H. Wright, City Manager
Andy Bass, Deputy City Manager
John Knudson, Public Works and Utilities Director
Daniel Haskins, Capital Projects Division Manager
From: Erich Kuntze, Real Estate Administrator
Subject: Resolution No. 5812 Authorizing the Acquisition of Approximately 0.9197 Acres (40,062 Square Feet) of Vacant Land Located East of the Northeast Corner of Cooper Road and Hunt Highway

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Proposed Motion:

Move City Council pass and adopt Resolution No. 5812 authorizing the acquisition of approximately 0.9197 acres (40,062 square feet) of vacant land located east of the northeast corner of Cooper Road and Hunt Highway at market value, plus closing costs and escrow fees; authorizing the city's real estate administrator to sign, on behalf of the city, the purchase agreement, and any other documents necessary to facilitate these acquisitions; authorizing eminent domain proceedings as needed to acquire said real property and obtain immediate possession thereof; and authorizing relocation assistance as may be required by law.

Background:

The city requires additional well sites to provide adequate water for future growth. Cooper Commons Community Association (the "Association") owns a parcel that is adjacent to the city owned Hunt Highway Water Production Facility (WPF), which includes a water storage tank and booster pump facility. This site is appropriately located for an additional well that will supply the existing facility.

During discussions regarding purchase of the property, the Association's Board of Directors requested the city initiate an eminent domain action to streamline the process. The Association's attorney subsequently provided a letter (attached) to the city indicating the Board has accepted the city's offer and is in support of the

city moving forward with the eminent domain process.

City staff sent letters to adjacent property owners notifying them of the proposed acquisition and of the Board meeting where city staff would make a presentation on the matter. City staff attended the Board meeting virtually on September 25, 2024, made a presentation describing the project, and answered questions from the Board and residents in attendance. The Board provided a positive response to the presentation and sale of its property to the city.

Staff has reviewed the appraisal and offer and supports moving forward with an eminent domain action in order to accomplish the acquisition.

Financial Implications:

The city made an offer to purchase the property in the amount of $352,298, which was accepted by the Association's Board of Directors. The offer was based upon an appraisal obtained from an Arizona independent licensed appraiser.

Funds for the acquisition of the property shall come from the following:

Account No.	Fund Name	Program Name	CIP Funded
603.3820.6713.6WA034	Water Operating	Well Construction/Rehabilitation	Yes

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Attachments

HOA Letter
Resolution No. 5812
Location Map

CHDB Law
Condo | HOA | Defense | Business

PHOENIX AREA
1400 East Southern Avenue, Suite 400
Tempe, Arizona 85282-5691
T 480-427-2800
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Edward D. O'Brien, Esq.
Licensed in Arizona
e-mail: ed.obrien@chdblaw.com
direct: 480-534-4421

August 14, 2024

VIA U.S. MAIL AND EMAIL

City of Chandler Real Estate Administrator
c/o Erich Kuntze
RealManage - Vision Community Management
P.O. Box 4008, MS 407
Chandler, AZ 85244-4008
erich.kuntze@chandleraz.gov

Re: **Cooper Commons Community Association**
City of Chandler Purchase Inquiry

Dear Mr. Kuntze:

This firm represents Cooper Commons Community Association ("**Association**"). The City of Chandler ("**City**") Real Estate Administrator's Office has asked the Association to consider selling, to the City, a parcel of undeveloped Common Area property to the City for use as a new well site.

1. The Parcel

The parcel is Maricopa County Assessor Parcel 303-84-617, which is Tract B of the Association-owned Common Area, which the Association owns pursuant to the June 15, 1999 Deed recorded at Maricopa County Instrument No. 1999-0573026 ("Tract B"). Tract B is a parcel of undeveloped desert between the well site and the Association's park at Hunt Highway and Cooper Road. The Plat Map, at Maricopa County Book of Records 504, Page 43, provides for a 20' Drainage Easement, serving the City's well site. The Association has not developed Tract B because it cannot be used for any purpose other than to serve the well site. The City issued a letter dated July 24, 2023 that provides Tract B will develop and serve the well site, if the City purchases it. In addition to the Plat Map, the Association's governing documents run with the land of Tract B.

2. The CC&Rs

All Association real property, including Tract B, is subject to the terms and requirements of the Declaration of Covenants, Conditions, Restrictions, Assessments, Charges, Servitudes, Liens, Reservations and Easements for Cooper Commons ("**CC&Rs**"). Tract B is also subject to a Tract Declaration, but the Tract Declarations do not appear to provide any obstacle to a sale. The CC&Rs provide that the Association has authority to sell Tract B to the City, but a vote of all Association Members (the 1,630 lot owners) must vote to approve such a sale.

Article III, Section 3.1(c) of the CC&Rs provides the Association with authority to sell Tract B, as a parcel of Common Area, to the City. Section 3.1(c) provides:

> Section 3.1. Easements of Enjoyment. Every Owner and Tenant and other Member of the Association shall have a right and easement of enjoyment in and to the Common Areas which shall be appurtenant to and shall pass with the title to every Lot and Parcel, subject to the following provisions:
>
> . . .
>
> (c) The right of the Association to dedicate or transfer all or any part of the Common Areas to any public agency, authority, or utility company for such purposes and subject to such conditions as may be agreed to by the Association. Unless otherwise required by zoning stipulations or agreements with the City of Chandler effective prior to the date hereof or specified on a Recorded subdivision plat, no such dedication or transfer shall be effective unless approved by the Owners representing at least 75% of the votes entitled to be cast by each class of membership, except that the Board shall have authority to transfer to such public agencies, authorities or utility companies easements and rights-of-way which are intended to benefit Cooper Commons and which do not have any substantial adverse affect on the enjoyment of the Common Areas by the Members.

Article XV, Section 15.13 of the CC&Rs provides:

> Section 15.13. Conveyance or Encumbrances of Association Land. The Association Land shall not be mortgaged, transferred, dedicated or encumbered without the prior written consent or affirmative vote of the Class B Membership and the affirmative vote or written consent of the Owners representing at least two-thirds (2/3) of the votes in Class A Membership.

Both Sections 3.1(c) and 15.13 of the CC&Rs require a member vote, with non-participant votes counting as "no" votes, in order to sell Tract B, although the Sections disagree about the

approval threshold (3/4 and 2/3, respectively). The problem for the Association is that its annual meetings demonstrate the unlikelihood of reaching even 20% participation, and so a member vote to sell Tract B is empirically demonstrated as impossible.

3. Quorum and Member Vote Impossibility

The Association cannot obtain any Membership vote that will achieve 2/3 quorum, which is 1,068 approving Member votes. The Association holds Annual Meetings of the Members to elect its Board of Directors in May of each year, with a 10% quorum requirement that the Members rarely exceed by much. The Association has no record of ever achieving even 20% participation toward quorum since its transition from Developer control approximately 20 years ago. The Association has attempted to increase and encourage the participation in its Annual Meetings each year, most recently by adding electronic voting, but the Association Members' participation does not come close to the quorum necessary to authorize the sale pursuant to the CC&Rs.

Notwithstanding the impossibility of a Member vote to authorize the sale, the Association's Board of Directors has consulted with experts to determine that selling Tract B to the City is in the best interest of the Association. The only reason that the Board cannot move forward with the sale is the impossibility of quorum for the Member vote that the CC&Rs require, or even to amend the CC&Rs at issue. The Association is unwilling to undertake the futile and significant expense of holding a Member vote that the Board knows cannot achieve quorum.

4. Eminent Domain

The Association's Board of Directors is open to a negotiated sale of Tract B if the City has legal authority to acquire it by eminent domain. The Association is open to the City's use of this legal authority. The Association has begun discussing a negotiated sale with the City that would amicably respond and settle such a claim, if the City uses eminent domain to acquire Tract B without an Association Member vote. The Association has reviewed the City's April 18, 2024 letter captioned "OFFER TO PURCHASE," which provided the City's offer to purchase Tract B from the Association for $352,298.00. The Association's Board of Directors accepts this offer. The Association desires to complete the sale through eminent domain because of the impossibility of the Member vote**.** The Association's Board prefers to execute a written agreement for the sale before the City files and serves the eminent domain case.

5. Conclusion

We hope this letter responds to the City's request for the Association's position as to Tract B. This letter follows one year of discussion and negotiations on the sale of Tract B, and the Association's Board of Directors has determined the above-described negotiation is in the best interest of the Association. The Board looks forward to any questions the City has, and to meeting to discuss the continuing negotiations. Please contact this firm on behalf of the Association.

Sincerely,

Edward D. O'Brien, Esq.
for
CHDB LAW, LLP

RESOLUTION NO. 5812

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF CHANDLER, ARIZONA, AUTHORIZING THE ACQUISITION OF APPROXIMATELY 0.9197 ACRES (40,062 SQUARE FEET) OF VACANT LAND LOCATED EAST OF THE NORTHEAST CORNER OF COOPER ROAD AND HUNT HIGHWAY FOR MARKET VALUE PLUS CLOSING COSTS AND ESCROW FEES; AND AUTHORIZING THE CITY'S REAL ESTATE ADMINISTRATOR TO SIGN, ON BEHALF OF THE CITY, THE PURCHASE AGREEMENT, AND ANY OTHER DOCUMENTS NECESSARY TO FACILITATE THESE ACQUISITIONS; AUTHORIZING EMINENT DOMAIN PROCEEDINGS AS NEEDED TO ACQUIRE SAID REAL PROPERTY AND OBTAIN IMMEDIATE POSSESSION THEREOF; AND, RELOCATION ASSISTANCE AS MAY BE REQUIRED BY LAW.

WHEREAS, the City requires additional well sites for future growth; and

WHEREAS, the City has determined that an approximately 0.9197 acre (40,062 square feet) parcel of vacant land owned by the Cooper Commons Community Association that is located east of the northeast corner of Cooper Road and Hunt Highway (the "Property") and that is adjacent to an existing City water production facility meets those needs; and

WHEREAS, the acquisition of this property will provide an additional well site for future City requirements.

NOW, THEREFORE, BE IT RESOLVED that the City Council of the City of Chandler, Arizona, as follows:

Section 1. Determines that the acquisition of the Property as described in Exhibit "A" attached hereto and made a part hereof, will benefit the City of Chandler.

Section 2. Authorizes and directs the City of Chandler to purchase the Property described in Exhibit "A" for an amount equal to the market value, plus closing costs and escrow fees. The written offer must be in a form approved by the Chandler City Attorney prior to being deposited into escrow.

Section 3. Subject to Section 2 above, authorizes the City's Real Estate Administrator, any city real estate officer acting on the Administrator's behalf, or any retained right-of-way consultant acting at the direction of the Real Estate Administrator, to make the written offer for the Property and, when accepted, to execute, deliver and deposit into escrow as required, the approved purchase agreement along with all other documents and instructions necessary to consummate the purchase of the Property.

Section 4. Authorizes and directs the Chandler City Attorney to commence condemnation (eminent domain) proceedings to acquire the Property in the name of the City of Chandler, including any improvements thereon, and to secure immediate possession of the Property, for the public purpose of constructing a potable water well and

associated facilities on the site, and further directs the Chandler City Attorney to do and perform all acts necessary to further the acquisition of title to and immediate possession of the Property.

Section 5. Authorizes the City of Chandler to provide relocation assistance, including benefits, as may be required by law. The City's Real Estate Administrator will make the initial determination of any of any claim received for relocation benefits; any administrative appeal from such decision will be considered and acted upon by and through the Real Estate Administrator or persons acting under the Administrator's direction or on the Administrator's behalf for such purpose, whose decision is final in accordance with applicable law.

PASSED AND ADOPTED by the City Council this _____day of _____, 2024.

ATTEST:

_____ _____
CITY CLERK MAYOR

CERTIFICATION

I HEREBY CERTIFY that the above and foregoing Resolution No. 5812 was duly passed and adopted by the City Council of the City of Chandler, Arizona, at a regular meeting held on the _____ day of _____, 2024, and that a quorum was present thereat.

_____
CITY CLERK

APPROVED AS TO FORM:

Dawn M Grizer for
CITY ATTORNEY

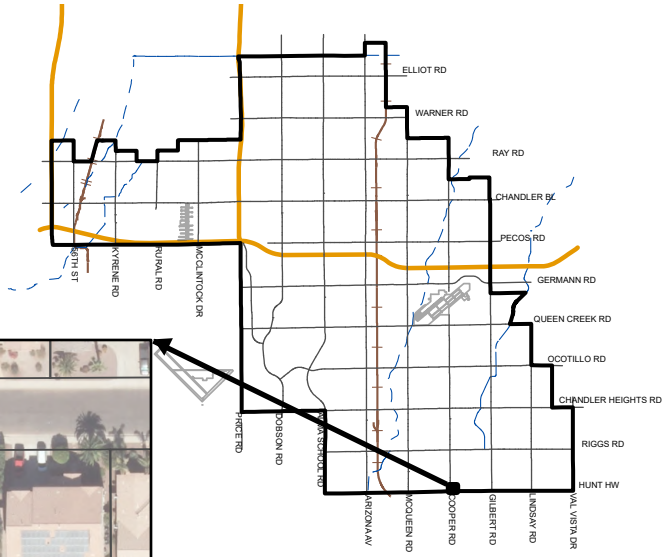
EXHIBIT "A"

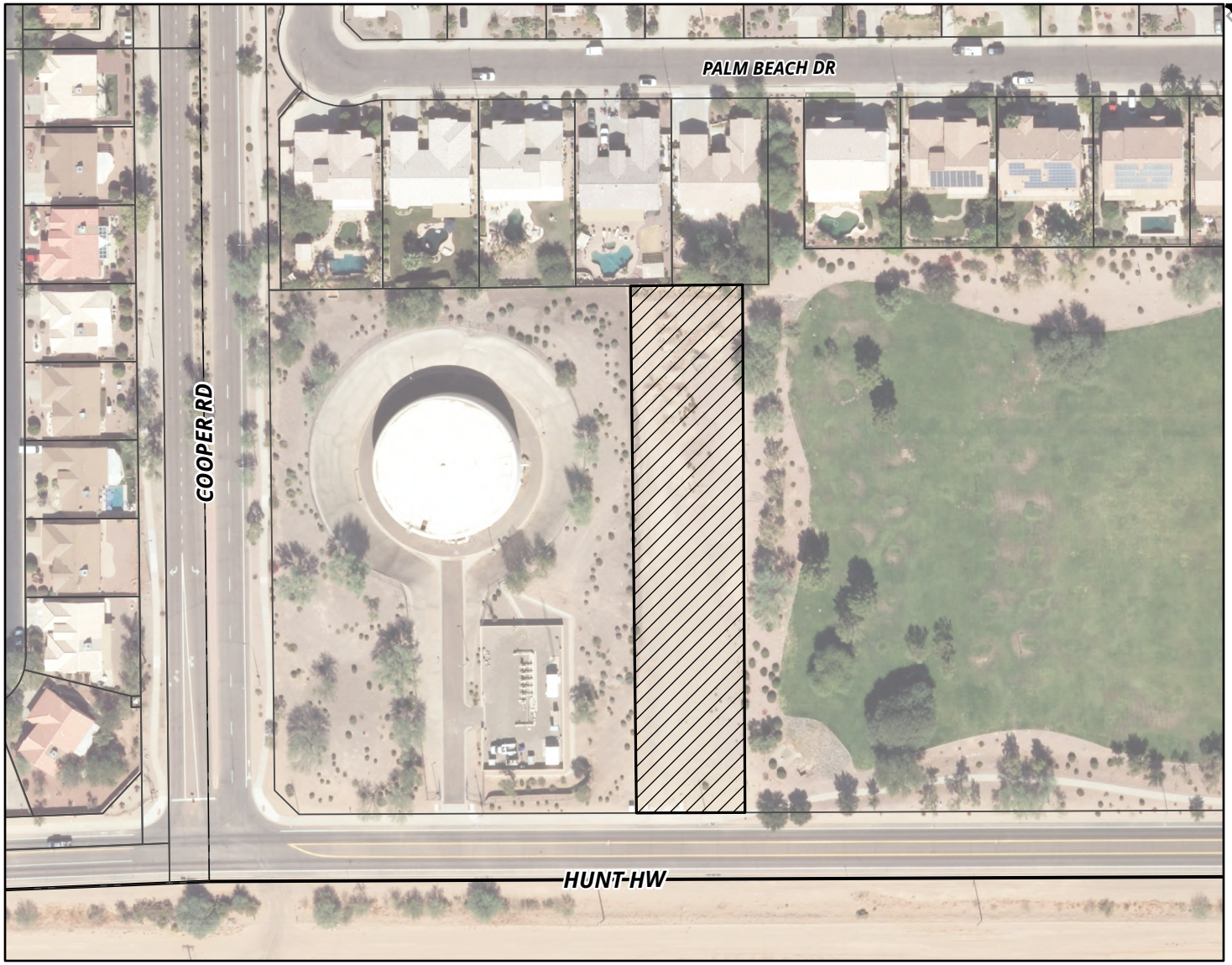
THE LAND REFERRED TO HEREIN BELOW IS SITUATED IN THE COUNTY OF MARICOPA, STATE OF ARIZONA AND IS DESCRIBED AS FOLLOWS:

Tract B of Cooper Commons II Parcel 4, according to Book 504 of Maps, page 43, records of Maricopa County, Arizona.

CHANDLER arizona

THE LAND REFERRED TO HEREIN BELOW IS SITUATED IN THE COUNTY OF MARICOPA, STATE OF ARIZONA AND IS DESCRIBED AS FOLLOWS: TRACT B OF COOPER COMMONS II PARCEL 4, ACCORDING TO BOOK 504 OF MAPS, PAGE 43, RECORDS OF MARICOPA COUNTY, ARIZONA





MEMO NO. RE25-002

RESOLUTION NO. 5812

TRACT B

NTS

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CHANDLER arizona
Community of Innovation

City Council Memorandum Public Works & Utilities Memo No. UA25-030

Date: November 04, 2024
To: Mayor and Council
Thru: Joshua H. Wright, City Manager
Andy Bass, Deputy City Manager
John Knudson, Public Works and Utilities Director
From: Cristabel Dykstra, Utilities Administrative Support Manager
Subject: Agreement No. PW4-920-4773, Utility Services Customer Portal

---

Proposed Motion:

Move City Council approve Agreement No. PW4-920-4773, with i3-Milestone, LLC, a subsidiary of i3 Verticals, LLC, for the utility services customer portal, in an amount not to exceed $640,200.

Background/Discussion:

The city collects approximately 87,000 monthly water meter reads using drive-by technology. The reads are collected to produce and distribute monthly bills to the city's utility customers.

The city will be transitioning to Advanced Metering Infrastructure (AMI). AMI is an integrated system of smart meters, communication network, and data management which provides advanced, daily consumption data. With AMI, customers will be able to view and manage their daily water consumption data, receive leak detection alerts and water system notifications, and pay their bill through an online customer engagement portal, combining utility account bill payment with water conservation efforts into one.

With one robust portal for utility account management, customers will benefit from items such as self-serve capabilities, bill-related interactions, customer communications, customer account action requests, personalized insights about water consumption, leak analytic information, and leak notification settings. The online portal will be accessible to Chandler customers via a laptop, tablet, or smart

phone.

Evaluation:

On July 2, 2024, city staff issued Request for Proposal No. PW4-920-4773, for the utility services customer portal. Notification was sent to all registered vendors. Nine proposals were received from the following offerors:

1. 360S2G
2. Abjayon, Inc.
3. Advanced Utility Systems
4. AquaTrax
5. i3 Verticals, LLC (i3-Milestone, LLC)
6. Mountain States Pipe and Supply Co.
7. Smart Energy Systems, Inc.
8. SpryPoint Services, Inc.
9. Utiliron, Inc.

The Evaluation Committee evaluated the proposals recommends award to i3-Milestone, LLC, a subsidiary of i3 Verticals, LLC, which submitted the most advantageous offer to the city in accordance with the evaluation criteria.

Fiscal Impact

Account No.	Fund Name	Program Name	Dollar Amount	CIP Funded Y/N
217.1280.5219.3AZ004	Grants	Citizen Engagement Mobility Program	$ 500,000	N
417.3820.6419.6WA677	Capital Grants	Advanced Metering Infrastructure	$ 150,000	Y
605.3820.6419.6WA677	Water Operating	Advanced Metering Infrastructure	50,000	Y

Attachments

Agreement

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City Clerk Document No. _____

City Council Meeting Date: November 7, 2024

CITY OF CHANDLER SOFTWARE AS A SERVICE AGREEMENT
UTILITY SERVICES CUSTOMER PORTAL
CITY OF CHANDLER AGREEMENT NO. PW4-920-4773

THIS AGREEMENT (Agreement) is made and entered into by and between the City of Chandler, an Arizona municipal corporation (City), and i3-Milestone, LLC, a subsidiary of i3 Verticals, LLC, a Delaware corporation (Contractor), (City and Contractor may individually be referred to as Party and collectively referred to as Parties) and made _____ , 2024 (Effective Date).

RECITALS

A. City proposes to enter an agreement for the utility services customer portal as more fully described in Exhibit A, which is attached to and made a part of this Agreement by this reference.

B. Contractor is ready, willing, and able to provide the services described in Exhibit A for the compensation and fees set forth therein.

C. City desires to contract with the Contractor to provide these services under the terms and conditions set forth in this Agreement.

AGREEMENT

NOW, THEREFORE, in consideration of the mutual agreements below, and intending to be legally bound, the Parties agree:

1.0 DEFINITIONS.

The following definitions apply to this Agreement.

A.R.S. means Arizona Revised Statutes, as amended.

Access Information means any information relating to City, its Resellers and/or End Users' use of the Services, including without limitation, (a) navigational information, including usage of hyperlinks within or available through the Services; (b) transactional or processing information, including billing information and method of payment; and/or (c) Internet or I/P addresses, demographic information (like age, profession, or gender), domain names, computer type, browser types, and other anonymous statistical data arising from such use of the Services and access to the Facilities.

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Agreement means this legal agreement executed between the City and the Contractor

Affiliate means with respect to any person or entity, any other person or entity that directly or indirectly controls, is controlled by, or is under common control with the specified person or entity, and for the purposes of this definition "control" of an entity means the ownership of 50% of the outstanding shares or other equity interests in such entity, or the right to elect or appoint a majority of the board of directors or governing body of such entity.

Base Programs means each version of a computer program used by Contractor to perform the Services, including the object code and source code, and all Upgrades, Documentation, workarounds, error-corrections, patches, and bug fixes.

City means the City of Chandler, Arizona and its duly authorized agents, employees, officials, and representatives.

City Confidential Information means: (a) all information related to the business of City and any of its City's and other third parties, to which Contractor has access, whether in oral, written, graphic or machine-readable form, in the course of or in connection with this Agreement; (b) all notes, analyses and studies prepared by Contractor or any of its Representatives, during the term of this Agreement or anytime thereafter, incorporating any of the information described in this Section 3; (c) the Access Information; and (d) the City Data.

City Data means all Confidential Information, all personal data and any other information relating to the employees, City or customers of City, or End Users or relating to the businesses of City or its Affiliates, including third party information, operations, facilities, products, services and markets, all as and to the extent provided to or obtained by Contractor or its Representatives from City, Resellers, or End Users, or derived from any of the foregoing. Usage data of End Users who are customers of City shall be considered City Data. City Data includes any such information in any form (tangible or electronic), regardless of the form or method by which such information is created, stored, maintained or communicated, and includes all data maintained by Contractor for City. Unless otherwise indicated, City Data includes all Access Information.

Contractor means the person or business organization named in the Agreement.

Crisis means an extraordinary event affecting Contractor that requires emergency response measures to be taken, including any event that may result in the Services, Software or Facilities becoming unavailable for a significant amount of time.

Confidential Information means City Confidential Information and/or Contractor Confidential Information, as the context may require.

Custom Software means the modifications and enhancements to the Software Programs and new computer programs, including application program interfaces, developed from time to time by Contractor for the exclusive use of City.

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Days means calendar days.

Documentation means the user, operations and training manuals, marketing materials, proposals, and responses to requests for information or proposals pertaining to the Services or the Software Programs, as well as any specifications reviewed by City, concerning the relevant Software licensed hereunder.

End User means any person or entity that receives and uses the Services.

Error means any error in the code of any Software Programs which prevents such Software Programs from operating in accordance with the relevant Documentation.

Exit Plan means the plan set forth in Exhibit F hereto.

Facilities means the hardware, application software, operating system software, firmware, networks, communication devices and lines and all other equipment, software, devices and related materials provided by or used by Contractor to host the Software Programs and provide the Services. Unless otherwise indicated, the Facilities shall be construed to include the Software Programs.

Implementation Date means the implementation date set forth in an applicable Schedule for the respective Services.

Intellectual Property Rights means all: (a) patents, patent applications, patent disclosures and inventions (whether patentable or not), (b) copyrights and copyrightable works (including computer programs) and registrations and applications therefor, (c) semiconductor chip "mask" works, and registrations and applications for registration thereof, (d) trade secrets, know-how and other confidential information, (e) unregistered and registered design rights and any applications for registration thereof, (f) database rights, and (g) all other forms of intellectual property, including waivable or assignable rights of publicity or moral rights, and any right to bring suit or collect damages for the infringement, misappropriation or violation of the foregoing, anywhere in the world. For purposes of the IP License, the Intellectual Property Rights shall be construed to include all Intellectual Property Rights of Contractor and its Affiliates existing on the date of grant of the IP License, plus all Intellectual Property Rights of Contractor and its Affiliates subsequently developed or acquired by Contractor or its Affiliates through the time of the occurrence of an Interruption.

Interruption means any material, or continuing, or repeated suspension or interruption in the supply of the Services by or on behalf of Contractor to City, the Resellers, or End Users, or any other material, or continuing, or repeated failure of Contractor to meet its obligations under this Agreement in regard to the Services, whether resulting from breach, termination, partial or complete cessation of business, disruption of business, bankruptcy or other insolvency proceedings, or otherwise, or termination of this Agreement.

Licensed Materials means all engineering, testing and design documentation, schematics, source code, and other materials necessary for City or its Representatives to exercise the IP License.

May or Should means something that is not mandatory but is permissible.

On Premises Equipment means Facilities provided by Contractor to City, Resellers, or End Users of the Services for receiving, managing, maintaining or using the Services.

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Contractor Confidential Information means Contractor nonpublic financial information.

Reseller(s) means one or more independent sales or support companies engaged to sell, support or implement the Services to End Users.

Representatives means each party's officers, directors, employees, consultants, attorneys, accountants, agents and independent subcontractors (and their employees) and other representatives.

Shall, Will, or Must means a mandatory requirement.

Software Programs means the Base Programs and Custom Programs, including any Upgrades.

Upgrades has the meaning stated in Exhibit A.

2.0 SERVICES

2.1 Services under Schedules. Contractor will perform and deliver Services described in this Agreement and any Schedules hereto, in accordance with the milestones, delivery dates, specifications and requirements as set forth herein.

2.2 Grant of License; Ownership. Contractor hereby grants City a nonexclusive, worldwide license to install (as necessary), access and use the Software Programs in order to receive, manage, maintain and use the Services for and on behalf of End Users (the "IP License"). Contractor has, and shall maintain, full and complete right, title and interest in and to the Software Programs and all Intellectual Property Rights therein, and City's right to use such Software Programs is specifically set forth in this Agreement.

2.3 Reports. On a quarterly basis or more frequently as may be specified in a Schedule, Contractor will provide to City a written report summarizing Contractor's performance of the Services with respect to all metrics and categories of description set forth in an applicable Schedule, and any other information reasonably requested by City.

2.4 Services Audit. City may on 30 days' notice conduct audits and reviews of the Facilities on Contractor's premises with respect to the Services.

2.5 Activation and Installation. Unless otherwise stated in the applicable Schedule, construction, maintenance and operation of the Facilities, and activation and performance of the Services are and shall be the responsibility of Contractor.

2.6 City Data. Notwithstanding any other provision in this Agreement or Schedules, Contractor shall make all City Data (complete and unaltered) available at any time to City, in an industry standard format reasonably requested by City, at no additional charge. As between the parties, City Data shall be and remain the property of City. Contractor shall use the City Data solely to perform Contractor's obligations under this Agreement. Except as expressly permitted in this Agreement, Contractor shall not sell, assign, lease, disseminate, or otherwise dispose of the City Data or any part thereof to any other person, nor shall Contractor commercially exploit any part of the City Data. Contractor shall not possess or assert any

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property interest in or any lien or other right against or to any City Data.

2.7 City Affiliates. City's rights under this Agreement may be exercised by and for the benefit of City and, as applicable, End Users, and their respective Affiliates. For this purpose, "Affiliates" may include any person or organization that is party to any Business Collaboration with City or its other Affiliates. "Business Collaboration" means any strategic alliance, partnership, joint venture, broker-dealer, sales representative, investment advisor, or other marketing or business arrangement between City or its other Affiliates and any such person or organization through which City or such Affiliates derive revenue or profit or conduct business involving financial services.

2.8 Offshore. To address security and identification protection concerns, Contractor shall ensure that City Data under its control remains within the United States; provided, that, Contractor may perform Services (including development work) outside the United States, so long as the City Data remains within the United States. In no event, however, shall Contractor perform customer support from outside the United States.

2.9 Compliance with WCAG Version 2.1 Level AA. Contractor represents and warrants that the software provided hereunder is in compliance with the Web Content Accessibility Guidelines (WCAG) Version 2.1, Level AA.

3. BACKUP IP LICENSE

3.1 Sufficiency of Intellectual Property; Further Assurances. Contractor represents and warrants that the IP License and the Intellectual Property Rights licensed to City thereunder are and will be sufficient for City or its Representatives to manage, maintain, perform and deliver the Services for present and future End Users, to produce, copy, install, operate, manage, maintain, and improve the Services or the Software Programs and Facilities of City's own choosing in order to do so, without infringement of Intellectual Property Rights owned or held by others. Promptly upon the reasonable request by City, Contractor shall, at its expense, sign and deliver such further agreements, certificates and other documents and give City such other assistance as City may reasonably require to evidence more fully and give full and proper effect to the IP License. To the extent that Contractor or its Affiliates' Intellectual Property Rights include any U.S. patents or copyrights that are owned by third-party licensors, Contractor will at City's request, provide City with written confirmation from such third-party owner that such owner will give effect to the terms of Section 3.1 without any further condition, payment or other obligation. The IP License and the terms of Section 3.1 shall not be impaired or diminished by the occurrence or continuance of any breach of this or any other agreement between the Parties, any lack of capacity or authority, any reorganization, liquidation, dissolution, merger, or consolidation of either Party, or any other change of circumstances of either Party.

4. NON-DISCLOSURE

4.1 Restrictions. Each party, as recipient of the other party's Confidential Information, will receive, hold and protect in confidence the Confidential Information of the other party. The receiving party may disclose the Confidential Information of the disclosing party to its Representatives who have a need to know such Confidential Information solely in connection with this Agreement. The receiving party will cause such Representatives to comply with this Agreement and will assume full responsibility for any breach of this Agreement by any such Representatives. The receiving party will not transfer or disclose any Confidential

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Information of the disclosing party to any third party without the disclosing party's prior written permission and without such third party having a contractual obligation (consistent with this Section 4 ("Non-Disclosure") to keep such Confidential Information confidential. The receiving party will not use any Confidential Information of the disclosing party for any purpose other than in connection with this Agreement. Notwithstanding any confidentiality restrictions set forth herein, City may disclose Contractor Confidential Information to third parties in connection with such third party's provision of software or services to City. Such disclosures will be made under an obligation of confidentiality limiting the use of such Confidential Information by such third parties to the provision of services to City.

4.2 Exclusions. Confidential Information will not include information that: (i) is in the public domain at the time of disclosure; (ii) was in the possession of or demonstrably known by the receiving party prior to its receipt from the disclosing party without restriction on its use or disclosure; (iii) is independently developed by the receiving party without use of or reference to or reliance on the disclosing party's Confidential Information; or (iv) becomes known by the receiving party from a source other than the disclosing party without breach of this Agreement and is not subject to an obligation of confidentiality. Notwithstanding anything to the contrary, City may disclose Contractor Confidential Information as required to satisfy any request by any governmental or regulatory body.

4.3 Legal Requirements. If the receiving party is requested or required to disclose any of the disclosing party's Confidential Information under a subpoena, court order, statute, law, rule, regulation or other similar requirement (a "Legal Requirement"), the receiving party will, to the extent not precluded by law, provide prompt notice of such Legal Requirement to the disclosing party so the disclosing party may seek an appropriate protective order or other appropriate remedy or waive compliance with the provisions of this Agreement. If the disclosing party is not successful in obtaining a protective order or other appropriate remedy and the receiving party is, in the reasonable opinion of its counsel, legally compelled to disclose such Confidential Information, or if the disclosing party waives compliance with the provisions of this Agreement in writing, the receiving party may disclose, without liability hereunder, such Confidential Information in accordance with, but solely to the extent necessary, in the reasonable opinion of its counsel, to comply with the Legal Requirement.

4.4 Disposition of Confidential Information on Termination or Expiration. Upon termination or expiration of this Agreement or upon the disclosing party's written request and where practicable, the receiving party will return to the disclosing party all copies of Confidential Information already in the receiving party's possession or within its control. Following its return, and upon notice from the disclosing party, and unless otherwise required by law, the receiving party must destroy such Confidential Information using means to protect against unauthorized access to or use of the information, including, where appropriate, burning, shredding, or pulverizing such information, or by taking such other means as to assure that such information will not be recoverable following its disposal. In such case an officer of the receiving party will certify in writing to the disclosing party that all such Confidential Information has been so destroyed. Notwithstanding the foregoing, the receiving party may retain copies of such Confidential Information as required by applicable law, and, to the extent such copies are electronically stored in accordance with the receiving party's retention or back-up policies or procedures (including, without limitation, those regarding electronic communication), so long as such Confidential Information is kept confidential as required under this Agreement.

4.5 Privacy. For all City Information collected, stored or processed by Contractor, Contractor shall: (a)

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maintain reasonable safeguards against destruction, loss, alteration of or unauthorized access to such City Information; and (b) not, without City's prior approval, modify or discontinue any such safeguards without comparable or better replacement safeguards. Contractor acknowledges the sensitivity and confidentiality of personally identified information which may be contained in the City Information and the applicability of the Gramm-Leach-Bliley Act and/or other applicable privacy laws, regulations and guidelines ("Privacy Laws"). Contractor agrees to comply with all applicable legal and contractual requirements relating to the privacy and confidentiality of personally identified information applicable to Contractor in the performance of its obligations under this Agreement.

5. SECURITY

5.1 Security. Contractor represents and warrants that it shall at all times adhere to and comply with, in all material respects, the minimum security standards to ensure that there is no unauthorized access to or use of City information described in this Section, which security standards may be mutually amended by the parties from time to time (the "Security Standards").

5.2 Security Standards. Contractor will use reasonable efforts to prevent unauthorized access to restricted areas of its servers and any databases or other material generated from or used in conjunction with the Service. Contractor will respond immediately to remedy any known security incidents or breaches.

(a) External Segment Security. Contractor's external connections to the Internet will have appropriate security measures and controls applied to its systems and will include an Intrusion Detection System (IDS) that will monitor all inbound and outbound communications and information. The IDS is intended to detect, record, alert, and terminate unauthorized activity.

(b) Web Site Segment Security. All Internet accessible systems will reside behind Firewalls. The Firewalls will enforce secure access between all Web servers and the Internet. The Firewalls will allow only specific types of data to pass from the Internet to the systems on the Web Segment. An IDS device is used to scan all data that passes within the Web Server segment and will detect, report and terminate any unauthorized activity prior to it reaching the Web Servers.

(c) Internal Network Segment Security. All data entering the Service's internal data network from any external source (Web Segment and Internet) must pass through Firewalls. The Firewalls will enforce secure connections between internal and external systems and will only allow specific types of data to pass through. Access to customer data by Contractor employees will be limited to authorized personnel only. All Contractor employees will follow the security policies regarding access and use of internal systems.

(d) Physical Site Security. All systems containing customer or company related data will be contained in locked data cabinets and will reside in a secure Data Center. Only authorized personnel will have access to the Data Center and/or Operations area via an internal security system. The entire physical facility, internal and external, will be monitored 24/7/365.

(e) General Data Security and Network Monitoring. All printed documents containing customer, confidential, financial, or sensitive information that is no longer needed will be shredded. Any printed material of this nature that is retained will be secured in cabinets. All data backups will be locked and secure both on-site and off-site as documented in the Security Policy Document and the Backup/Disaster Recovery

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Guide. Contractor will actively monitor the IDS systems, Local Area Network/Wide Area Network, (LAN/WAN) equipment and all critical servers. Encryption techniques will be used for data transmissions where applicable.

(f) Assessments. City reserves the right to conduct risk assessments, vulnerability assessments, black box penetration tests or hire a third party to conduct risk assessments, vulnerability assessments, and black-box penetration tests of the Contractor's environment. Contractor will be alerted in advance and arrangements made for an agreeable time. Contractor shall respond to all Critical, High, and Medium severity vulnerabilities discovered by providing an acceptable timeframe to resolve the issue and/or implement compensating control(s).

(g) Audit Logging. Contractor will provide to the City system, audit, and other logs required by the City from the Contractor's environment and service offering upon request.

(h) StateRAMP Authorization. Contractors who will be storing, processing, and/or transmitting City data in external, non-City environments (Cloud), are required to attain verified StateRAMP (www.stateramp.org) Ready status for the cloud products the City will be utilizing in order to be considered for contract award. Contractors will be required to attain verified StateRAMP Authorized or City approved StateRAMP Provisional status, at the security category level required by the City, before receiving production City data. Contractor will be required to maintain StateRAMP authorization at the required category level throughout the contract term and partnership with the City. The City will provide StateRAMP sponsorship to Contractor for the purpose of this contract engagement.

5.3 Updates to Security Standards. If a change or addition to the Security Standards is required by law, rule, regulation, order, judgment or decree, Contractor shall comply with such amended Security Standards as soon as possible but in no event later than the time period for compliance indicated in such law, rule, regulation, order, judgment or decree. If the event Contractor adopts changes to the Security Standards, Contractor will provide the Services in accordance with such new Security Standards; provided that if such new Security Standards are of a level which is less than the level of the Security Standards previously required by this Agreement, and if City does not agree with such new Security Standards, City may terminate and this Agreement upon written notice to Contractor. If City accepts such new security standards, such new security standards shall be deemed to be "Security Standards" for purposes of this Agreement.

5.4 Security and Supervision. Contractor's personnel, when on City's premises or accessing City's networks or providing maintenance services hereunder, will comply with all of City's security, supervision, and other standard procedures applicable to such personnel, including, if applicable, City's Internet and Electronic Communications Usage Policy.

5.5 Audit. City reserves the right to conduct, either itself or through a third-party independent contractor selected by City at City's expense, an on-site audit and review of Contractor's architecture, systems and procedures used in connection with the Services and the Software Programs. Such audit and review shall be conducted upon City's reasonable request. After conducting an audit, City shall be entitled to notify Contractor of the manner in which Contractor does not comply with any of the security, confidentiality or privacy obligations herein, if applicable. Upon such notice, Contractor shall use commercially reasonable efforts to make any necessary changes to ensure compliance with such obligations. If Contractor is unable

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to remedy the defects or deficiencies causing its noncompliance with any obligation in accordance with Section 11.1(a) herein, City may terminate this Agreement upon written notice to Contractor. Any audits described in this Section shall be conducted during reasonable times and upon reasonable advance notice to Contractor and shall be of reasonable duration and shall not unreasonably interfere with Contractor's day-to-day operations. Further, City shall not conduct an audit more than twice per year unless City determines in its reasonable discretion that additional audits are necessary. In the event that City conducts an audit through a third-party independent contractor, such independent contractor shall be required to enter into a non-disclosure agreement containing confidentiality provisions substantially similar to those set forth herein to protect Contractor's proprietary information. In addition to and not in lieu of City's rights to conduct an audit as described in this Section, once per year during the term of this Agreement, Contractor will provide City with a written certification that Contractor has tested its architecture, systems and procedures and that it is in full compliance with the security, confidentiality and privacy obligations herein. Such certification shall be signed by an officer of Contractor.

5.6 Information Security Incident Management. Contractor must adhere to a formally documented incident management process, must cooperate with City personnel in the diagnosis, investigation and response of any security incidents or faults that impact City Data. Contractor must notify the City within 24 hours of suspicion, detection or confirmation of a breach or unauthorized access to City information that is hosted, stored, processed, or transmitted by the Contractor. Notification will be made using City provided email and phone as identified in the Notices section of this contract.

5.7 Business Continuity and Disaster Recovery Management. Contractor must have business continuity and disaster recovery plans and processes in place to ensure the service for the City is adequately maintained in the event of any negative impact on the Contractor´s service. Contractor will regularly backup City data and retain such City backup data copies according to City data retention requirements or otherwise provide backup data to the City. Backups will be maintained offline, encrypted, and regularly tested for availability and integrity for disaster recovery scenarios, including ransomware.

5.8 Applicable Laws and Regulations. Contractor will comply, and assist City to comply with, all applicable State and Federal laws and regulations including, but not limited to:
Federal Information Security Modernization Act of 2014 (FISMA):
https://csrc.nist.gov/topics/laws-and-regulations/laws/fisma

- OMB Circular A-130:
  https://www.federalregister.gov/documents/2016/07/28/2016-17872/revision-of-omb-circular-no-a-130-managing-information-as-a-strategic-resource
- National Cyber Strategy of the United States of America:
  https://www.cisa.gov/executive-order-strengthening-cybersecurity-federal-networks-and-critical-infrastructure
- Application/websites will meet WCAG (Web Content Accessibility Guidelines) Level 2.1 AA requirements for government accessibility.
- Health Insurance Portability and Accountability Act (HIPAA) including Business Associate Agreement/ Health Information Technology for Economic and Clinical Health Act (HITECH):
  https://www.hhs.gov/hipaa/index.html
- Tax Information Security Guidelines For Federal, State and Local Agencies: Safeguards for Protecting Federal Tax Returns and Return Information (IRS Publication 1075):
  https://www.irs.gov/pub/irs-pdf/p1075.pdf

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- Criminal Justice Information Services Security Policy (CJIS) https://www.fbi.gov/services/cjis/cjis-security-policy-resource-center
- Centers for Medicare & Medicaid Services (CMS), Minimum Acceptable Risk Standards for Exchanges (MARS-E) https://www.cms.gov/CCIIO/Resources/Regulations-and-Guidance/Downloads/2-MARS-E-v2-0-Minimum-Acceptable-Risk-Standards-for-Exchanges-11102015.pdf
- A.R.S. 18-551 - Definitions Information Security Including PII: https://www.azleg.gov/ars/18/00551.htm
- A.R.S. 18-552 - Notification of security system breaches; requirements; enforcement; civil penalty; preemption; exceptions: https://www.azleg.gov/ars/18/00552.htm
- State of Arizona statewide policies, standards and procedures: https://aset.az.gov/resources/policies-standards-and-procedures
- SIPC Memorandum of Understanding (MOU): https://www.sipc.org/about-sipc/
- State Environmental policies: https://azdeq.gov/LawsAndRules
- Family Education Rights Privacy Act (FERPA): https://www2.ed.gov/policy/gen/guid/fpco/ferpa/students.html
- Driver's Privacy Protection Act (DPPA): https://azdot.gov/motor-vehicles/driver-services/driver-license-information/motor-vehicle-records
- State of Arizona Library, Archives and Public Records, Records Management Division, General Retention Schedules https://azlibrary.gov/arm/policies
- Payment Card Industry (PCI) Security Standards including but not limited to Supplemental Documents, Information Supplements and Validation Requirements: https://www.pcisecuritystandards.org/

6. FEES AND OTHER PAYMENTS

6.1 Fees. Notwithstanding anything to the contrary in any Schedule, no Fees will be due or owed, with respect to any Services unless and until: (i) the parties agree to a Schedule covering such Services, and (ii) City receives an invoice for the relevant Fees.

6.2 Price Protection. Fees for recurring Services, if any, may be increased only on an annual basis upon at least sixty (60) days written notice before any annual renewal of such Services. The percentage of any such increase will not exceed three percent (3%) per such increase per annum.

6.3 Applicable Taxes. The Contractor will pay all applicable taxes. The City is subject to all applicable state and local transaction privilege taxes. To the extent any state and local transaction privilege taxes apply to sales made under the terms of this Agreement, it is the responsibility of the Contractor to collect and remit all applicable taxes to the proper taxing jurisdiction of authority.

6.4 Tax Indemnification. The Contractor and all subcontractors will pay all Federal, state, and local taxes applicable to its operation and any persons employed by the Contractor. The Contractor will and require all subcontractors to hold the City harmless from any responsibility for taxes, damages, and interest, if applicable, contributions required under Federal, state, and local laws and regulations and any other costs including transaction privilege taxes, unemployment compensation insurance, Social Security, and Worker's Compensation.

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6.4 Invoices. Contractor will provide City with an itemized invoice for all Fees that become due hereunder. Each valid and undisputed invoice will be due and payable within thirty (30) days after City's receipt of such invoice.

6.5 Most Favored Terms. Contractor represents and warrants that the terms and conditions (including the pricing terms) of this Agreement and any Schedule hereunder are and will be comparable to or better than the terms and conditions offered to any other reseller or user of the Services, but only to the extent Contractor provides equivalent Services (in scope, volume, product usage, etc.) to such other reseller or user. Upon request, an officer of Contractor will certify in writing Contractor's compliance with this Section within thirty (30) days.

7. REPRESENTATIONS, WARRANTIES, COVENANTS AND LIMITATION OF LIABILITY

7.1 Compliance with Laws. Contractor shall and shall use its reasonable best efforts to cause its suppliers to, comply with all applicable United States and foreign, federal, state, and local laws, rules, and regulations, with respect to the performance of the Services.

7.2 No Infringement. Contractor represents and warrants that the Services, Facilities and Software to be performed, operated or used under this Agreement do not and will not, infringe any third-party patent, trade secret, copyright, trademark or other intellectual property rights in the United States or any other country or jurisdiction to which Contractor provides the Services for use by City, the Resellers, or End Users.

7.3 Encryption. Contractor will identify in the applicable Schedule any encryption used in the Services and Software and the Commodity Classification, Export License or License Exceptions, and Import License granted with respect thereto. Contractor represents that it has complied with, and will continue to comply with, all applicable laws, rules and regulations of the United States or any foreign country with respect to the export or importation of the Services and Software, any modifications, enhancements or updates thereto, and any technical data derived therefrom.

7.4 Services. Contractor represents, warrants and covenants that: (a) it shall perform the Services in conformance with the levels of service, quality control, and other performance standards described in this Agreement; (b) all Services provided in connection with this Agreement are and will be performed in an effective, timely, professional and workmanlike manner in accordance with the highest applicable industry standards and practices; and (c) Contractor personnel performing any Services hereunder will be appropriately trained and have a level of skill commensurate with the requirements of this Agreement, and Contractor will promptly replace any person who is performing Services under this Agreement upon City's reasonable request.

7.6 Services Not to be Withheld. Contractor represents, warrants, and agrees that during the term of this Agreement it will not withhold Services under this Agreement (including, without limitation, implementation, termination transition assistance services) or access to the Facilities for any reason, including, but not limited to, a dispute between the parties arising under this Agreement, another agreement between the parties, or any unrelated dispute between the parties.

7.7 Viruses. Contractor represents, warrants, and covenants that, to its knowledge, the Software does not

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and will not contain any computer code designed to disrupt, disable, harm, or otherwise impede in any manner, including aesthetic disruptions or distortions, the operation of the Software or any System (referred to as "viruses" or "worms").

7.8 Other Code. Contractor represents, warrants, and covenants that, to its knowledge, the Software Programs does not and will not contain any computer code that: (a) would disable the Software or any System or impair in any way their operation based on the elapsing of a period of time, the exceeding of an authorized number of copies or scope of use, or the advancement to a particular date or other numeral (referred to as "time bombs," "time locks," "license keys," or "drop dead" devices); (b) would permit Contractor or any third party to access the Software or any System (referred to as "traps," "access codes," or "trap door" devices); or (c) would permit Contractor or any third party to track, monitor or otherwise report the operation and use of the Software by City or any of its customers or clients.

7.9 Documentation. Contractor represents, warrants and covenants that the Documentation: (a) does and will accurately and completely describe the relevant Software Programs; (b) is and will be complete, free of errors and sufficiently detailed to allow City's personnel to operate and use such Software Programs; and (c) will be updated as and when any Upgrade is provided for such Software Programs and such updated Documentation will be delivered by Contractor to City promptly upon any such update.

7.10 Disclaimer. EXCEPT AS EXPRESSLY SET FORTH IN THIS AGREEMENT, NEITHER PARTY MAKES ANY OTHER WARRANTY, EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

7.11 Limitation of Liability. NOTWITHSTANDING ANYTHING TO THE CONTRARY IN THIS AGREEMENT OR ANY SCHEDULE, IN NO EVENT WILL CONTRACTOR OR CITY OR ITS RESELLERS BE LIABLE FOR ANY OF THE FOLLOWING: LOST PROFITS, LOST REVENUE, INDIRECT, INCIDENTAL, CONSEQUENTIAL, SPECIAL OR PUNITIVE DAMAGES EVEN IF IT HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. NOTWITHSTANDING THE FOREGOING, NO LIMITATION OR EXCLUSION OF CONTRACTOR'S LIABILITY WILL APPLY WITH RESPECT TO (I) ANY CLAIMS ARISING OUT OF OR RELATING TO A BREACH BY CONTRACTOR OF SECTIONS 3 ("IP LICENSE"), 4 ("NON-DISCLOSURE"), 7.6 ("VIRUSES") OR 7.7 ("OTHER CODE"), (II) AMOUNTS REQUIRED TO BE PAID TO A THIRD PARTY BY CITY AND FOR WHICH CONTRACTOR HAS AN OBLIGATION TO INDEMNIFY CITY UNDER SECTION 8, OR (III) CONTRACTOR'S WILLFUL MISCONDUCT, OR (IV) ANY CLAIMS FOR PERSONAL INJURY, PROPERTY DAMAGE, OR NEGLIGENCE FOR WHICH INSURANCE COVERAGE IS AVAILABLE (INCLUDING WITHOUT LIMITATION ALL COSTS ASSOCIATED WITH THE RECOVERY OR REPLACEMENT OF LOST OR DAMAGED DATA). For the avoidance of doubt, any fines or penalties assessed on a party under applicable law arising out of the other party's breach of this Agreement are direct damages.

8. INTELLECTUAL PROPERTY INDEMNIFICATION

8.1 Indemnification by Contractor. Contractor, at its expense, will indemnify, defend and hold harmless City, the End Users and any of its or their officers, directors, employees, agents, consultants, other representatives, and any third parties permitted to use the Facilities, Software, or Services (collectively, the "Indemnified Parties") from all liabilities, costs, losses, damages and expenses (including reasonable attorneys' and experts' fees and expenses as well as interparty damages caused by Contractor or third parties) that arise from a third party claim against an Indemnified Party relating to any claim that any of

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the Facilities, Software or Services or any portion or use thereof constitutes an infringement, violation, trespass, contravention or breach of any patent, copyright, trademark, license, or other property or proprietary right of any third party, or constitutes the unauthorized use or misappropriation of any trade secret of any third party. City will promptly notify Contractor of any such claim or action and will reasonably cooperate with Contractor in the defense of such claim or action, at Contractor's expense.

8.2 City's Right to Participate. Contractor will have the right to conduct the defense of any such claim or action and all negotiations for its settlement or compromise except that City may in its sole discretion participate in the defense of any such claim or action at City's expense. Without limiting the foregoing, Contractor may not, without City's prior written consent, settle, compromise, or consent to the entry of any judgment in any such commenced or threatened claim or action, unless such settlement, compromise or consent: (i) includes an unconditional release of the relevant Indemnified Parties from all liability arising out of such commenced or threatened claim or action; and (ii) is solely monetary in nature and does not include a statement as to, or an admission of fault, culpability or failure to act by or on behalf of, any Indemnified Party or otherwise adversely affect any Indemnified Party. If Contractor fails to appoint an attorney within twenty (20) calendar days after City has notified Contractor of any such claim or action, or after Contractor becomes aware of such claim or action, whichever is earlier, City will have the right to select and appoint an alternative attorney and the reasonable cost and expense thereof will be paid by Contractor.

8.3 Election of Remedy. If the Facilities, Software or Services or any portion thereof becomes, or in Contractor's or City's reasonable opinion is likely to become, the subject of any such claim or action, then City may terminate the relevant Schedule with respect to the affected Services and cease to receive the benefit, directly or indirectly, of the affected Facilities or Software or require Contractor to either: (i) procure for City the right to continue using the Services and Software, or such portion thereof, as contemplated hereunder; (ii) modify the Services and Software, or such portion thereof, to render same non-infringing (provided such modification does not adversely affect the use of such Services and Software, or such portion thereof, as reasonably determined by City); or (iii) replace same with an equally suitable, functionally equivalent, compatible, non-infringing services and software, as reasonably determined by City. If none of the foregoing is possible and if such Services and Software, is found to infringe by a court, Contractor or City will have the right to terminate the relevant Schedule with respect to such Services and Software and Contractor will refund to City all amounts paid by City for such Services and Software. Any termination of any Schedule(s) by City under this Section will be without prejudice to any other rights and remedies which City may have under this Agreement or at law or in equity.

9. SERVICE LEVELS; SUPPORT SERVICES

9.1 Service Levels. Contractor shall provide the Services in accordance with the Service Levels set forth in Exhibit C hereto.

9.2 Support Services. Contractor shall provide the Support Services set forth in Exhibit D hereto.

10. TERM

10.1 Agreement Term. This Agreement is effective as of the Effective Date. The term of the support and maintenance will begin on the go live date and will continue for a period of two years or until the Agreement

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is terminated as provided for herein. The City and the Contractor may mutually agree to extend the Agreement for up to two additional terms of two years each, or portions thereof.

10.2 Schedule Term. Each Schedule will commence on the date first set forth in such Schedule and will continue until the terms of such Schedule or this Agreement expire or are terminated in accordance with Section 11.

11. TERMINATION

11.1 Termination for Breach.

(a) If Contractor materially breaches this Agreement or any Schedule, and such breach is incapable of cure, or such breach is capable of cure but Contractor does not cure such breach within twenty (20) days after written notice of material breach, City may terminate the relevant Schedule upon written notice to Contractor. To the extent that Contractor commits a material breach of a nature which goes beyond the relevant Schedule and does not cure such breach in accordance with the foregoing, City may terminate: (a) this Agreement (in which event all of the other Schedules will terminate concurrently therewith); or (b) all affected Schedules. Termination of a Schedule or this Agreement will be without prejudice to any other rights and remedies that the non-defaulting party may have under this Agreement or at law or in equity.

(b) Contractor may terminate this Agreement if City materially breaches the payment or license terms of this Agreement and (i) such breach is incapable of cure, or (ii) such breach is capable of cure and City fails to pay undisputed amounts under a particular invoice within three (3) months after such amounts are due, and Contractor has notified City of its intent to terminate this Agreement and City has not cured such breach within thirty (30) days of receipt of such notice.

11.2 Termination for Convenience by Client; No "Abandonment".

(a) City may terminate this Agreement or any Schedule hereunder at any time upon 30 days written notice to Contractor. Notwithstanding anything to the contrary in this Agreement or any Schedule, in the event of any termination under this Agreement, City will only be liable to make any payments which are due hereunder to Contractor for Services provided in accordance with the terms and conditions herein up to the date of such termination.

(b) This Agreement shall automatically expire or terminate upon expiration or termination of this Agreement, unless such termination occurs in conjunction with an Interruption.

(c) Notwithstanding any other provision in this Agreement to the contrary, Contractor agrees that it will not "abandon" its obligations under this Agreement, unless and until this Agreement is terminated and the requirements of Section 3 and 11.3–11.4 hereof have been carried out in full. For purposes hereof, "abandon" means the threatened or actual intentional refusal by Contractor to provide or perform any of the Services required of Contractor under this Agreement, regardless of the reason. If Contractor breaches or threatens to breach this Section, Contractor agrees that City will be irreparably harmed, and, without any additional findings of irreparable injury or harm or other considerations of public policy, City shall be entitled to apply to a court or tribunal of competent jurisdiction for and, provided City follows the appropriate procedural requirements (e.g., notice), Contractor shall not oppose the granting of an injunction compelling specific performance by Contractor of Contractor's obligations under this Agreement

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without the necessity of posting any bond or other security. Contractor further agrees not to oppose any such application for injunctive relief by City except to require that City shall establish that Contractor has committed abandonment.

11.3 Exit Plan. In the event of any expiration or termination of this Agreement, the Parties shall prepare and carry out an Exit Plan on the terms set forth in Exhibit F hereto.

11.4 Services Wind Down Period. Any expiration or termination of this Agreement or any of the Schedules, Client shall be entitled to continued provision of the Services by the Provider and access to the Facilities for a period of time determined by Client, not to exceed ninety (90) days, required for Client to wind down its current use of the Services or to make a transition to alternate services providers or facilities.

12. INSURANCE

(a) Insurance Coverage. Contractor will, during the term of this Agreement, at its sole cost and expense, obtain and maintain in full force and effect, subject to City's reasonable approval, the insurance coverage in the minimum amounts and on the terms set forth in Exhibit G hereto or such other amounts as may be set forth in a Schedule. All insurance required hereunder to be carried by Contractor (as well as any approved subcontractors or agents) will be with sound and reputable insurers and on forms as both are reasonably satisfactory to City.

(b) Insurance Certificates. Contractor will provide City with a copy of all relevant certificates of insurance upon City's request including those evidencing that City has been added as an additional insured. Certificates are to be delivered to City at the address set forth in the applicable Schedule prior to delivery of any Software Program(s) hereunder, and annually thereafter, and at least thirty (30) days prior to any expiration of each insurance policy.

(c) Waiver of Rights of Recovery. Contractor waives all rights of recovery against City and its subcontractors or agents that Contractor may have or acquire because of deductible clauses in or inadequacy of limits of any policies of insurance that are secured and maintained by Contractor. Contractor will require its approved subcontractors and agents to waive the rights of recovery (as the aforesaid waiver by Contractor) against City, Contractor and their other subcontractors or agents and deliver evidence of such waiver to City before such subcontractors or agents perform any Services.

(d) No Limitation. Nothing in this Section will be construed as limiting Contractor's (or any subcontractor's or agent's) liability to City or any third party. The mere purchase and existence of insurance does not reduce or release Contractor from liability incurred or assumed within the scope of this Agreement. Contractor's failure to maintain insurance will not relieve it of liability under this Agreement.

(e) Claims. Contractor will promptly make a full written report to City as to all accidents or claims for damage arising from or in connection with: (i) this Agreement; (ii) the discharge of Contractor's duties under this Agreement or any Schedule; or (iii) the presence of Contractor or Contractor's Representatives on City's premises. Contractor will cooperate fully with City and with any insurance carrier in the investigation and defense of all such accidents and claims, such obligation to survive the termination or expiration of this Agreement.

13. DISASTER RECOVERY

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An outline and executive summary of Contractor's business continuity and disaster recovery plan is attached as Exhibit E hereto (such outline and summary plus all of Contractor's supporting detailed documentation and plans as contemplated by the provisions of this Section, the "Disaster Recovery Plan"). The Disaster Recovery Plan for all Services shall: (a) be designed to continue all Contractor business operations that are critical to the overall operation and functionality of the Services notwithstanding the occurrence of a Crisis; (b) specify procedures and frequency of testing; and (c) shall be, and shall be maintained consistent with, then-current generally accepted industry standards. The Disaster Recovery Plan shall specifically address the ability of Contractor to provide each of the Services in the event of a Crisis. The Disaster Recovery Plan shall provide, among other things, a mechanism for the redundancy or back-up of business operations designed to keep the Services from becoming unavailable as Unscheduled Downtime as defined in the Service Level Agreement due to a Crisis and to permit the related business operations of City to be re-instituted in a time period that permits the ongoing operation and functionality of City's business to which the Services relate. Without limiting the generality of the foregoing, the Disaster Recovery Plan shall address all of the computer software, computer hardware (whether general or special purpose), telecommunications capabilities (including all voice, data and video networks) and other similar or related items of automated, computerized, and/or software system(s) and any other network(s) or system(s) that are used by or relied on by Contractor in the provision of the Services and the manner in which Contractor will re-institute the processing of relevant information in a time period that permits the ongoing operation and functionality of City's business to which the Services relate. Notwithstanding the foregoing, if a Crisis prevents Contractor from providing the Services to City, Contractor shall allocate its efforts and resources to restoring City's Services no less favorably to City than it allocates to any of its other Clients affected by the Crisis.

14. GENERAL

14.1 Force Majeure.

(a) For purposes of this Agreement "*Force Majeure*" means an event that is outside the reasonable control of a Party, or that with the exercise of due diligence or reasonable business practices could not reasonably have been prevented, avoided or removed by that Party, and that prevents that Party from performing its obligations under this Agreement and does not result from such Party's negligence or the negligence of its agents, employees or subcontractors, including unforeseeable events such as acts of God, earthquakes, storms, floods, natural events, wars, court order, rebellions, riots, strikes, civil disturbances, acts of foreign and/or domestic governmental authorities, labor strikes and lockouts, but excluding any failure by a third party to supply any materials or components to Contractor unless such failure is itself the result of Force Majeure affecting such third party.

(b) Upon the occurrence of an event of Force Majeure with respect to a Party, its obligations under this Agreement will, to the extent that they are affected by the event of Force Majeure, be suspended; provided, however, that under no circumstances will a Party's obligations to pay any amounts due under this Agreement be suspended nor Contractor's disaster recovery obligations under sections 5.7 and 13. Any Party affected by an event of Force Majeure will promptly inform the other Party and will use commercially reasonable efforts to fulfill its obligations under this Agreement and to remove or avoid any disability and mitigate any damages caused by such event of Force Majeure at the earliest practicable time and to the greatest extent possible.

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14.2 License of Intellectual Property; 365(n). The Software is "intellectual property" as defined in 11 U.S.C.A. 101(35A) which has been licensed hereunder in a contemporaneous exchange for value and this Agreement will be governed by 11 U.S.C.A. 365(n), as the same may be amended or supplemented from time to time, if Contractor files for bankruptcy.

14.3 UCITA Not Applicable. This Agreement and the transactions contemplated herein are not and will never be subject to the Uniform Computer Information Transactions Act (prepared by the National Conference of Commissioners on Uniform State Laws) as currently enacted by any jurisdiction or as may be codified or amended from time to time by any jurisdiction.

14.4 Contractor Financial Assurances. Upon City's request (to be made not more than once per year) Contractor will provide City with financial information of Contractor which will allow City to adequately assess Contractor's creditworthiness. Contractor will not provide City with any nonpublic financial information unless it is requested by the City Manager or City Manager's designee of City in writing under this Section.

14.5 Assignment. Neither party will assign its rights or obligations under this Agreement without the prior written consent of the other party which shall not be unreasonably delayed or withheld, and any purported assignment without required consent shall be void; provided, that: (a) either Party may collaterally assign this Agreement in connection with any financing or an acquisition of all or substantially all of such Party's assets and business, and (b) City may assign this Agreement to one or more Affiliates or Resellers (but any payment obligations shall remain the primary obligation of the City). Subject to the foregoing limitations, this Agreement will be binding upon the parties and their respective legal successors and permitted assigns.

14.6 Notices. Unless otherwise provided, notice under this Agreement must be in writing and will be deemed to have been duly given and received either (a) on the date of service if personally served on the party to whom notice is to be given, or (b) on the date notice is sent if by electronic mail, or (c) on the third day after the date of the postmark of deposit by first class United States mail, registered or certified, postage prepaid and properly addressed as follows:

For the City	**For the Contractor**
Name: Christina Pryor, CPPO	Name: David Jordan
Title: Procurement and Supply Senior Manager	Title: Senior Account Executive
Address: 175 S. Arizona Ave., 3rd Floor	Address: 40 Burton Hills Blvd., Suite 415
Chandler, AZ 85225	Nashville, TN 37215
Phone: 480-782-2403	Phone: 803-466-8680
Email: christina.pryor@chandleraz.gov	Email: djordan@i3verticals.com

14.7 Remedies. Each party acknowledges that a breach of certain of its obligations under this Agreement each party's confidentiality obligations set forth in this Agreement) other than any payment obligations hereunder, may result in irreparable and continuing damage to the other party for which monetary damages may not be sufficient, and agrees that the other party will be entitled to seek, in addition to its other rights and remedies hereunder or at law, injunctive or all other equitable relief, and such further relief as may be proper from a court of competent jurisdiction.

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14.8 Interpretation. The terms and conditions of this Agreement are the result of negotiations between the parties. The parties intend that this Agreement should not be construed in favor of or against any party by reason of the extent to which any party or its professional advisors participated in the preparation or drafting of the Agreement. Unless the context of this Agreement otherwise indicates when used in a series of items the word "or" will be construed such that the series may include any of the items, all of the items, or any combination of the items.

14.9 Entire Agreement. This Agreement and all exhibits and schedules attached constitute the complete agreement and understanding between the parties with respect to the subject matter hereof and supersede all prior agreements and understandings between the parties.

14.10 Time of the Essence. [Omitted]

14.11 No Waiver by Conduct. No waiver of any of the terms of this Agreement or any Schedule will be valid unless in writing and designated as such. Any forbearance or delay on the part of either party in enforcing any of its rights under this Agreement will not be construed as a waiver of such right to enforce the same for such occurrence or any other occurrence.

14.12 Independent Contractor. Contractor acknowledges that it is acting as an independent contractor, that Contractor is solely responsible for its actions or inactions, and that nothing in this Agreement will be construed to create an agency or employment relationship between City and Contractor or its Representatives. Contractor is not authorized to enter into contracts or agreements on behalf of City or to otherwise create obligations of City to third parties. Neither Contractor nor any of its Representatives are City employees for any purpose, including for: (i) federal, state or local tax, employment, withholding or reporting purposes; or (ii) eligibility or entitlement to any benefit under any of the City's employee benefit plans (including those that are subject to the Employee Retirement Income Security Act of 1974, as amended), incentive, compensation or other employee programs or policies (collectively, "Benefit Plans"). Contractor agrees that all such Representatives will be informed that they are employees solely of Contractor, or its agent or subcontractor if applicable, and not eligible to participate in any Benefit Plan. Contractor agrees that Contractor is solely responsible for payment of all applicable workers' compensation, disability benefits and unemployment insurance, and for withholding and paying such employment taxes and income withholding taxes as required.

14.13 Non-exclusivity. Contractor acknowledges that City may from time to time enter into other transactions with companies that may be competitors, suppliers or customers of Contractor. No such activities will be affected by City's agreement to enter into this Agreement.

14.14 No Publicity. Contractor agrees not to disclose the identity of City or its End Users or any of their directors, officers, managers, employees, consultants or agents as a customer or prospective customer of Contractor or the existence or nature of this Agreement without the City's prior written consent. Without limiting the generality of the foregoing, Contractor will not use, in advertising, publicity or otherwise, the name of City or its End Users or any of their directors, officers, managers, employees, consultants or agents or any trade name, trademark, service mark, logo, or symbol of City or its End Users.

14.15 Severability. If any one or more of the provisions of this Agreement are for any reason held to be

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invalid, illegal or unenforceable by a court of competent jurisdiction, the remaining provisions of this Agreement will be unimpaired and will remain in full force and effect, and the invalid, illegal or unenforceable provision will be replaced by a valid, legal and enforceable provision that comes closest to the intent of the parties underlying the invalid, illegal or unenforceable provision.

14.16 Survival. Any provision of this Agreement which, by its nature, would survive termination or expiration of this Agreement will survive any such termination or expiration of this Agreement, including Sections 2.3 ("Grant of License"), 3 ("IP License"), 4 ("Non-Disclosure"), 7 ("Representations, Warranties, Covenants and Limitation of Liability"), 8 ("Intellectual Property Indemnification"), 11 ("Termination"), 14 ("General") and corresponding Exhibits and Schedules.

14.17 Governing Law. This Agreement will be governed by, and construed in accordance with, the internal laws of the State of Arizona, without regard to its choice of laws principles. Notwithstanding the fact that some of the Products may be manufactured outside the United States, the Parties hereby expressly disclaim the application of the United Nations Convention on the Sale of Goods.

14.18 Counterparts; Method of Amendment. This Agreement, each Schedule and any amendments thereto may be executed in counterparts and will not be effective or enforceable unless and until it is executed with the handwritten signature of an authorized representative of each of the relevant entities. Without limiting the foregoing, none of the following will amend or modify this Agreement or result in the execution of a Schedule: (i) terms and conditions which are displayed or conveyed electronically or are associated with, or are responded to by the operation of a mouse or other pointing device, typing on a keyboard, "virtual" actions, an automated computer program, the removal of shrinkwrap, the opening of a package, the loading or use of software or other goods or services, or any other action other than such a handwritten signature as described in the previous sentence; or (ii) payment by City of any License Fees, Maintenance Fees or other consideration to Contractor or use of or any other action with respect to the Software Programs or Maintenance Services.

14.19 Disputes. In any dispute arising out of an interpretation of this Agreement or the duties required not disposed of by agreement between Contractor and City, the final determination at the administrative level will be made by the City Purchasing and Materials Manager.

14.20 City's Right of Cancellation. The parties acknowledge that this Agreement is subject to cancellation by City under the provisions of A.R.S. § 38-511.

14.21 No Israel Boycott. By entering into this Agreement, Contractor certifies that Contractor is not currently engaged in, and agrees for the duration of this Agreement, not to engage in a boycott of Israel as defined by state statute.

14.22 Legal Worker Requirements. A.R.S. § 41-4401 prohibits the City from awarding a contract to any contractor (as defined under A.R.S.) who fails, or whose subcontractors fail, to comply with A.R.S. § 23-214(A). Therefore, Contractor agrees Contractor and each subcontractor it uses warrants their compliance with all federal immigration laws and regulations that relate to their employees and their compliance with§ 23-214, subsection A. A breach of this warranty will be deemed a material breach of the parties' agreement and may be subject to penalties up to and including termination of the parties' agreement. City retains the legal right to inspect the papers of any Contractor's or

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subcontractor's employee who provides services under this Agreement to ensure that the Contractor and subcontractors comply with the warranty under this provision.

14.23 Lawful Presence Requirement. A.R.S. §§ 1-501 and 1-502 prohibit the City from awarding a contract to any natural person who cannot establish that such person is lawfully present in the United States. To establish lawful presence, a person must produce qualifying identification and sign a City-provided affidavit affirming that the identification provided is genuine. This requirement will be imposed at the time of contract award. This requirement does not apply to business organizations such as corporations, partnerships, or limited liability companies.

14.24 Forced Labor of Ethnic Uyghurs Prohibited. By entering into this Agreement, Contractor certifies and agrees Contractor does not currently use and will not use for the term of this Agreement: (i) the forced labor of ethnic Uyghurs in the People's Republic of China; or (ii) any goods or services produced by the forced labor of ethnic Uyghurs in the People's Republic of China; or (iii) any contractors, subcontractors or suppliers that use the forced labor or any goods or services produced by the forced labor of ethnic Uyghurs in the People's Republic of China.

14.25 Covenant Against Contingent Fees. Contractor warrants that no person has been employed or retained to solicit or secure this Agreement upon an agreement or understanding for a commission, percentage, brokerage, or contingent fee, and that no member of the Chandler City Council, or any City employee has any interest, financially, or otherwise, in Contractor's firm. For breach or violation of this warrant, City may annul this Agreement without liability or, at its discretion, to deduct from the Agreement price or consideration, the full amount of such commission, percentage, brokerage, or contingent fee.

14.26 Non-Waiver Provision. The failure of either party to enforce any of the provisions of this Agreement or to require performance of the other party of any of the provisions hereof must not be construed to be a waiver of such provisions, nor must it affect the validity of this Agreement or any part thereof, or the right of either Party to thereafter enforce each and every provision.

14.27 Disclosure of Information Adverse to the City's Interests. To evaluate and avoid potential conflicts of interest, Contractor must provide written notice to City, as set forth in this Agreement, of any work or services performed by Contractor for third parties that may involve or be associated with any real property or personal property owned or leased by City. Such notice must be given 7 business days prior to commencement of the services by Contractor for a third party, or 7 business days prior to an adverse action as defined below. Written notice and disclosure must be sent to the City's Purchasing and Materials Manager. An adverse action under this Agreement includes, but is not limited to: (a) using data as defined in this Agreement acquired in connection with this Agreement to assist a third party in pursuing administrative or judicial action against City; or (b) testifying or providing evidence on behalf of any person in connection with an administrative or judicial action against the City; or (c) using data to produce income for Contractor or its employees independently of performing the services under this Agreement, without the prior written consent of the City. Contractor represents that except for those persons, entities, and projects identified to the City, the services performed by Contractor under this Agreement are not expected to create an interest with any person, entity, or third-party project that is or may be adverse to the City's interests. Contractor's

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failure to provide a written notice and disclosure of the information as set forth in this Section constitute a material breach of the parties' agreement.

14.28 Jurisdiction and Venue. Any action to enforce any provision of this Agreement or to obtain any remedy with respect hereto must be brought in the courts located in Maricopa County, Arizona, and for this purpose, each party hereby expressly and irrevocably consents to the jurisdiction and venue of such court.

14.29 Budget Approval Into Next Fiscal Year. This Agreement will commence on the Effective Date and continue in full force and effect until it is terminated or expires in accordance with the provisions of this Agreement. The parties recognize that the continuation of this Agreement after the close of the City's fiscal year, which ends on June 30 of each year, is subject to the City Council's approval of a budget that includes an appropriation for this item as an expenditure. The City does not represent that this budget item will be actually adopted. This determination is solely made by the City Council at the time Council adopts the budget.

14.30 Cooperative Use of Agreement. In addition to the City of Chandler and with approval of the Contractor, this Agreement may be extended for use by other municipalities, school districts and government agencies of the State. Any such usage by other entities must be in accordance with the ordinance, charter and/or procurement rules and regulations of the respective political entity.

Orders placed by other agencies and payment thereof will be the sole responsibility of that agency. The City will not be responsible for any disputes arising out of transactions made by other agencies who utilize this Agreement.

14.31 Exhibits, Precedence of Documents. The following exhibits are made a part of this Agreement and are incorporated by reference:

Exhibit A – Scope of Services
Exhibit B – Fee Schedule
Exhibit C – Disaster Recovery Plan
Exhibit D – Exit Plan
Exhibit E – Insurance Requirements

In the event of a conflict in the terms and conditions or a legal ambiguity arises among this Agreement and the attached exhibits, the documents in the following order prevail and control: (1) this Agreement; (2) Exhibit A – Scope of Services; (3) Exhibit B – Fee Schedule; (4) Exhibit C – Disaster Recovery Plan; (5) Exhibit D – Exit Plan; and (6) Exhibit E – Insurance Requirements.

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IN WITNESS WHEREOF, the parties have caused this Agreement to be executed by their duly authorized representatives. This Agreement shall be in full force and effect only when it has been approved and executed by the duly authorized City officials.

FOR THE CITY

By: _____

Its: Mayor

FOR THE CONTRACTOR

By: _____

Its: General Counsel & Secretary

APPROVED AS TO FORM:

By: _____

City Attorney

ATTEST:

By: _____

City Clerk

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EXHIBIT A
SCOPE OF SERVICES

1.1 PROJECT BACKGROUND

The City of Chandler is in the process of transitioning about 86,000 AMR endpoints to AMI using Neptune Technologies AMI solution. With this initiative in progress, the city desires to provide a better customer experience through a robust customer engagement portal which provides self-serve capabilities for each customer's personal online account, bill related interactions, customer communications, customer request transactions including solid waste, and water conservation programs. The city's vision for the customer portal is:

Provide a self-serve customer portal that engages the city's residents and businesses with an outstanding customer experience and provides My Account capabilities such as bill presentment, bill pay, etc., as well as helpful information through personalized insights about water consumption, leak analytics, conservation program opportunities and user-friendly customer transactions.

The replacement and implementation of a modern Customer Experience Portal (CEP) product within the following participating City departments.

Chandler Departments	Primary Services	Accounts
Management Services, Utility Services Division	Water and sewer services for Chandler residents	Approximately 87,000 water metered accounts
Public Works and Utilities, Solid Waste Division	Refuse and recycling collection services for Chandler residents	Approximately 87,000 refuse accounts
Public Works and Utilities, Utilities Administration	Water conservation programs for Chandler residents	N/A
Information Technology	Application support for city departments	N/A

Glossary of acronyms
MDM - Meter Data Management
OMS – Outage Management System
UAT – User Acceptance Testing
QA – Quality Assurance
DEV – Development Environment
PROD – Production Environment
CIS – Customer Information System
BA – Business Analyst
SME - Subject Matter Expert
SOW – Statement of Work

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OCM – Organizational Change Management
MSA – Master Services Agreement
KPI – Key Performance Indicator
VPN – Virtual Private Network
FDD – Functional Design Document

1.2 PROJECT SUMMARY

This Scope of Services, also referred to as the Statement of Work (SOW), delineates the project's objectives, scope, schedule, resources, tasks, and responsibilities, serving as a comprehensive roadmap guiding the project team in executing the work effectively and efficiently.

The ePortal solution by i3 Verticals aims to integrate seamlessly with Advanced Utility Systems CIS Infinity Billing system, facilitating smooth integration with third-party payment processors and other systems. The solution will encompass all the features detailed in Attachment 1 to the Scope of Services, Functional Requirements.

2. PROJECT SCOPE

Except as otherwise specifically provided in this Statement of Work, i3 Verticals will configure, build, and deploy a fully operational, ADA-compliant ePortal solution. This solution aims to replace Infinity Link Customer Experience Portal (CEP) and enhance the functionality of the CEP by introducing various self-service options and expanding customer access to city data and services. This transition signifies a combined business and technological transformation through the implementation of a new hosted CEP solution.

The scope outlined in this statement of work will be delivered over a seven to twelve-month period aligned with the CIS Infinity v5 Cloud based solution and the AMI solution.

The functional requirements that outline the comprehensive scope of i3-Verticals ePortal customer self-service solution is detailed in Attachment 1 to the Scope of Services. These requirements will be delivered as part of this implementation SOW.

This Scope of Services describes the minimum requirements for the customer portal. The city and the contractor will agree to a final Scope of Services, project start date, and project timeline.

2.1 SOLUTION DESCRIPTION

i3-Verticals will provide its eVolve platform, an off the shelf, but configurable, solution meeting key objectives by creating a user-friendly, mobile-first dashboard interface accessible to authenticated users. The solution has the capability to effortlessly connect with multiple third-party systems, including CIS, MDM, payment vendors, bill printing vendors, and OMS. The platform displays detailed customer billing information, including balance details, due dates, payment history, and outstanding balances, ensuring transparency and ease of access. Additionally, it presents energy use information in an intuitive format, enabling users to track usage trends, forecast bills, and understand weather impacts. This functionality is further enhanced through potential API integrations with the client's energy information provider, offering a comprehensive and seamless user experience.

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ePortal is a secure, mobile-first solution that provides customers with consistent customer experiences across all channels. The ePortal solution drives customer behavior, such as conservation, through digital communications, real-time data for requests and reporting to create informed decision making, while also streamlining business processes.

ePortal – ePortal is the customer self-service portal that allows utilities to increase their level of customer service and decrease their cost to serve. City customers can manage their account, view, and pay bills all through a configured payment portal that includes dynamic, real-time alerts based on the city's specific billing and payment business processes. Due to it being tailored for utilities, ePortal can integrate to any customer information system, billing software, or other technology vendor, and the portal's modern look & feel is also fully configurable to reflect City of Chandler, AZ's branding, messaging and campaigns.

eAdmin – eAdmin empowers city business staff with its highly configurable design and adapts in real time. eAdmin provides a comprehensive administrative console designed to manage, report, and analyze all channel content, activity, and settings across all components of the entire platform. eAdmin is user intuitive, providing full control of ePortal, customer notifications, analytics, and full report functionality, all with little training. eAdmin provides access management relating to internal staff roles and responsibilities, ensuring security throughout the entirety of the system, in an easy to navigate, easy to use solution. eAdmin is designed to be configured and maintained by your business users.

eNotify – eNotify engages your customer, where they are, no matter the device. eNotify delivers multi-channel, proactive messaging to all subscribers based on customer preference, business rules, logic, and current third-party delivery providers, with automatic notifications for any update to account information. We understand communication is the basis of business, and with proper notifications, city customers trust and appreciate that their utility cares for each customer.

eNeighbor – eNeighbor is a conservation themed tool for your customers. eNeighbor educates your customers on their energy usage and helps drive specific consumption behaviors. Customers can compare their usage to other community homes, based on specific criteria, allowing valuable feedback and relational energy use data. This powerful tool can also provide homeowners energy disaggregation, demand management for available appliances and more. Customers can assist in reducing costs and potentially improve the capacity planning as customers become more educated.

2.2 MIGRATION SCOPE

Data conversion refers to the process of migrating data from existing systems to the new ePortal application. This will ensure a seamless transition of any profiles and associated data such as account, registration, notification and communication preferences or payment tokens related to wallet as needed. This process outlines the migration of user profiles from the legacy engagement portal to the ePortal and the collaborative efforts between i3-Verticals and Chandler to ensure a smooth transition of data.

Data Conversion (Profile Migration) is detailed as follows: File Format and Data Transfer:

- i3-Verticals will provide Chandler with their preferred file format for receiving user profile data from Chandler's legacy engagement portal.
- Chandler, or a third-party provider instructed by Chandler, will provide the data file containing the

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profiles to be migrated along with the profile-to-account associations.

Data Selection and Cleanup:

- Chandler will define the selection criteria for the data to be migrated from the legacy engagement portal.
- Chandler is responsible for any data cleanup related to the migration data.

Loading Data:

- i3-Verticals will load the provided file into the ePortal registration database.
- Once migrated, users will be required to set a new password on their profile. This process will be facilitated by the ePortal's user login flow, which will guide users through this one- time setup.

Sample File Development:

- i3-Verticals and Chandler will collaborate to receive unlimited sample files to aid in the development of the data load programs.
- Samples will be confirmed before loading the complete set of user profile data.

Documentation:

- Further details regarding how the Profile Migration is performed, including dependencies, will be documented in the Extract and Transform Document.

2.3 INTEGRATION SCOPE

This section outlines the required ePortal integrations to be included in this project as well as the responsible parties for providing and configuring the integration.

i3 Verticals will be responsible for developing the integration APIs in the Customer Information System (CIS) application and performing the required ePortal integrations. Chandler will be responsible for providing CIS Infinity's web services in a consumable form for the ePortal to integrate and present to customers. Chandler will also be responsible for the integration mechanism for the non-CIS applications listed in the table below.

For all integrations, Chandler will be responsible for providing:

- Code and data refreshes
- Environment availability/up time based aligned with project plan
- Connectivity and networking
- Configuration to meet a dependent ePortal requirement
- Provide resources to facilitate integration to production and non-production interfacing applications

The following table lists all the applications that ePortal will be integrated with.

Third Party/Application	Description
CIS Infinity v5	Utilities' CIS
Neptune 360 Meter Data Management	MDM (Meter Data Management)
Invoice Cloud	Third Party Payment Processor
Solid Waste Record Management System	Custom developed RMS
TBD	Third Party Bill Printer The ePortal will securely connect to present bills hosted by the third-party printer selected by the

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	city. All bills required for the ePortal should be accessible based on certain key parameters.

3.0 PROJECT APPROACH

Project Management

i3 Verticals' tailored hybrid/agile methodology approach and project plan exceeds the PMBOK, Sixth Edition in providing and focusing on delivering a project, including all the Methods, Models, and Artifacts, ensuring deliverables and timelines are met, plus setting expectations at the beginning of the project through the use of RACI matrixes throughout all phases.

As part of i3 Verticals' Hybrid Agile/Waterfall Approach, we integrate the Critical Path Method as a key technique in project management. We use this method for scheduling tasks and managing the project timeline. Our project management approach involves collecting all project activities using a work breakdown structure that leads to the final deliverables. We identify task dependencies and assign accountability for each task, including all interaction system owners. Based on this, we identify all the critical paths and track them closely to ensure successful project implementation according to the defined schedule.

A RAID log is a project planning tool for identifying key (**R**)isks, (**A**)ssumptions, (**I**)ssues, and (**D**)ependencies. This allows the project manager to track and rank all project risks, communicate, and close the risk. Our project manager will handle and communicate all issues openly. Each issue will be tracked on the project plan but also on the status report and communicated to everyone.

The project approach and logistics will be detailed in the SOW between City of Chandler, AZ and i3 Verticals. Adherence to the SOW will be reviewed during the executive steering committee meetings. To ensure that the SOW is followed, i3 Verticals will employ the following quality standards as part of the project methodology:

- Specifications will be documented
- Landscape promotion of changes based on testing in each environment (Dev, QA, Prod)
- Any changes to scope will follow the project change control process
- Each Functional and Technical Specification will go through unit testing, integration testing, and UAT
- The project plan will document all deliverables and milestones with:
  - A deliverable owner
  - Effort required
  - Completion Date
- The project plan will be reviewed weekly with the project team
- Risks and Issues will be documented and tracked and reviewed in the weekly status meetings Defects during testing will be documented in the Defect Log and the PMO will be responsible for assignation of the defect for resolution
- Before go-live, all testing results, specifications, defects, risks, and issues must be approved

Detailed documentation of requirements and business processes at the beginning of the project are critical to proper scope management. During the project, reviewing and testing requirements while managing issues, risks, and defects is fundamental to a successful go-live of the solution.

Program Governance

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i3 Verticals believes that a proper governance and meeting/communication cadence is paramount to the success of the project. Whether the project is being delivered virtually or on-site, all delivery team members participate in daily stand-up calls to discuss issues, questions, roadblocks and be able to collaborate. The delivery team escalates up to the PMO any items they need to have resolved to move forward. The PMO meets weekly to discuss all Project control items, including any escalated items. The Executive Steering Committee will convene once a month typically to help resolve an escalation, receive program updates, and help to keep the entire team focused on the objectives at hand and set executive guidance. The i3 Verticals Customer Success Manager will also meet with the delivery team and PMO at least once a month to ensure the project and deliverables align with the direction of the product roadmap.

i3 Verticals will manage and maintain a project plan along with City of Chandler, AZ to ensure proper resource scheduling and identify impacts to the schedule which helps to control project costs. We also incorporate a plan to identify and report risk during project plan creation. During the project status meetings these will be discussed with all participants. A RAID log is incorporated into the status report. A RAID log is a project planning tool for identifying key (**R**)isks, (**A**)ssumptions, (**I**)ssues, and (**D**)ependencies. This allows the project manager to track and rank all project risks, communicate, and close the risk. Our project manager will handle and communicate all issues openly. Each issue will be tracked on the project plan but also on the status report and communicated to everyone. We are ready to identify, focus, and deliver results.

During the project, we must conduct risk assessments continually. It starts with the Project Manager overseeing and scrutinizing every aspect of the project plan. Risks are preemptively identified and/or eventually surface with weekly project meetings or sooner depending on the seriousness of the risk. At times, some risks will require a steering committee meeting and/or a senior staff meeting to arrive at the best decision for the project.

Project milestones play a crucial role in project management, helping break down projects into manageable parts. At i3 Verticals, we believe in collaboration, which is why we work with the city to finalize the itemized project milestones. However, for the current proposed project, we have identified the following high-level milestones along with their associated deliverables and acceptance criteria:

- **Project Kickoff:** Deliverable: Completion of project planning and kickoff activities. Acceptance Criteria: The project team has aligned on project goals, roles, and responsibilities.
- **Requirements Approved:** Deliverable: Requirement Documentation (RTM) delivered. Acceptance Criteria: The city reviews and approves the requirements document.
- **Design Completed:** Deliverable: Technical Architecture Blueprint and Functional Design Document (FDD). Acceptance Criteria: The city approves the design documents, ensuring alignment with project goals.
- **Completion of SIT/QA:** Deliverable: QA testing for all features completed and signed off by city IT and Business. Acceptance Criteria: All features pass quality assurance testing.
- **UAT Signed Off:** Deliverable: User Acceptance Testing (UAT) completed. Acceptance Criteria: City's business users approve all features during UAT.
- **Go Live:** Deliverable: Application with all features implemented in production (PROD). Acceptance Criteria: The application functions as intended in the live environment.
- **Post Go Live Support Completed:** Deliverable: Project Completion Document. Acceptance Criteria: The city approves the project completion documentation.

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These milestones provide clear checkpoints to track progress and ensure successful project delivery.

Define (Project Initiation)
The Project Initiation phase allows for the ramp of the team, resources, expectations, and the schedule to lay the foundation for a successful and well executed project. The i3 Verticals Project Manager will meet with the city Project Manager and the i3 Verticals core team, to review the project schedule and tasks that are required to complete the project and the implementation. The rollout strategy and the roles and responsibilities of the participants for completing the work effort will be defined in the contract. The review meeting will also help to establish the project parameters and enables the parties to address concerns early in the project. The key project individuals will be identified as well as the stakeholders and decision makers. Project resources will be agreed on as well as the project schedule and detailed project plan. The city Project Manager will provide input on the city tasks and deliverables to the i3 Verticals Project Manager so the full project schedule can be developed. i3 Verticals will provide the city with a detailed project plan. A formal project kickoff meeting is scheduled to overview the project with all stakeholders and participants. Meetings that happen throughout the project, can be recorded to keep a record of topics covered and attendees.

Project Schedule
i3-Milestone will produce the project Plan, developed in either excel Gnatt or Microsoft Project Plan (MPP) tool with comprehensive and detailed tasks, steps & required resources to perform these and dependencies to implement the i3-Milestone's "ePortal". The project Plan/Schedule maintained by both i3-Milestone & City's project managers to manage this project. In the Project Plan/Schedule, in collaboration with City, i3-Milestone will identify when each Software component is needed and will be installed. Both parties try hard to ensure that the project plan design will include items that permit us to meet all the business functions of the department. After collaborative discussion both parties agree that this project is scheduled for a duration of 12 months in alignment with the CIS Infinity Cloud migration and the AMI Integration project's timelines. Any deviations from this schedule, not caused solely by the Contractor, will be subject to a change request process unless otherwise agreed upon by both parties at the project's outset.

Define Phase Key Activities
The table below is the RACI matrix for the project. City will use this RACI matrix to clearly indicate project responsibilities through the duration of the project. R = the part Responsible for performing the activity, A = the team Accountable for confirming the activity's completion, C = the team Consulted on how the activity is to be performed, I = the team Informed of the activity's completion, but is otherwise not involved in the activity.

ID	Key Activity	Related Deliverable (D) or Work Product (W)	i3- Milestone	City
1	Create the Project Plan for a comprehensive view and schedule	Project plan (D)	R	A
2	All the project tools agreed and provisioned if needed	List of agreed tools (W)	C, A	R

ID	Key Activity	Related Deliverable (D) or Work Product (W)	i3- Milestone	City
3	Change control process defined	Change control process document (W)	R	R, A
4	RAID log established	RAID Log (W)	R	A
5	Draft an initial Internal and External Communication Plan that documents specific communications (key message, intended audience, delivery medium) needed throughout the project.	Communication Plan (D)	I	R
6	i3-Milestone project team mobilized	N/A	R	I
7	City project team mobilized	N/A	I	R
8	Create an Environment Plan that covers the build and support of City owned environments to which ePortal will be integrated.	Environment Plan (D)	R	C
9	Provide existing ePortal architectural standards which includes the development of Enterprise Solution Architecture and processes that include all work streams including integrations.	ePortal Architecture Blueprint (D)	R	I
10	Coordinate with third parties to confirm the version of products to be used and availability of environments.	3rd. Party Coordination (W)	C	R

Design (Configure)

ePortal is designed with a "mobile-first" approach, built on the Bootstrap framework. It's a highly adaptable portal where the city internal users can utilize eAdmin to configure content, terms and conditions, rules, enable/disable programs, and co-browse user sessions.

Once the project is kicked off and the initial project schedule is created, we are ready to move into the Configure phase of the project. Below are the key activities and deliverables that will occur during this phase. For a cloud deployment, i3 Verticals will take responsibility for environment setup and configuration. i3 Verticals will conduct workshops to review the city business requirements, ePortal, eAdmin, and configuration settings included with the solution. The content management system will be demonstrated, and the city will review the content that has been converted from the existing website. This content includes on-screen messaging, email content, and enrollment policies displayed to the user. This will be where we conduct a detailed gap analysis.

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i3 Verticals will update the outcomes of these workshops into the requirements document, which is based on the requirements and i3 Verticals response to this RFP. i3 Verticals will configure and integrate the systems based on these requirements in the city development instance.

i3 Verticals will document these requirements in a requirements tracibility matrix and provide to the city for traceability. This document will be used to set up the ePortal system for testing as well as the installed application on the City's development environment.

In addition to configuration information, i3 Verticals will capture any requirement or request that is not offered in the base product. A backlog document will be created and maintained throughout the duration of the project and provided to the city along with the initial requirements document. the city may decide to pursue one or more of the requirements listed in the backlog as a modification, however that would fall into the Project Change Request procedure.

After the initial requirements document has been completed, i3 Verticals will begin configuring the base application in the i3 Verticals development instance. This configuration consists of setting system rules, different on-screen messaging, email and SMS content, corporate branding, and enrollment policies.

Additionally, i3 Verticals will develop a functional design for the integrations with 3rd party systems and any City specific features or changes needed to the system based on the requirements. These functional designs will be reviewed and approved with the city and provided to the i3 Verticals technical team to update in the City’s development instance.

ePortal is architected with flexibility and provides straightforward integration with existing SOAP services. The configuration process enables to specify service endpoints, manage WSDL files, and define necessary headers and security protocols. This ensures that the ePortal can seamlessly communicate with SOAP services, handling complex XML data structures and supporting operations such as data retrieval, updates, and transactional processing. ePortal also supports advanced features like WS-Security for secure message exchanges, ensuring compliance with enterprise security standards.

Configuration and Customization

ePortal integration capabilities are highly configurable, allowing users to tailor the setup according to specific business needs. Configuration settings can be managed through user-friendly interfaces or configuration files, providing flexibility for both technical and non-technical users. This includes mapping data fields between systems, defining data transformation rules, and setting up error handling and retry mechanisms. The tool also supports the creation of custom integration workflows, enabling complex business logic to be implemented with minimal coding effort. Data Mapping and payload transformations will be documented and submitted as required.

Based on our Hybrid Agile Implementation methodology, the "Define" and "Design" phases follow a waterfall approach. This means that scope definitions and requirement workshops proceed sequentially. We do not begin builds, including configurations, until we have aligned on the scope and approved requirements.

i3 Verticals is responsible for conducting workshops to review the city's business requirements and demonstrate the features in the i3 Verticals ePortal, the Admin Console, and the configuration settings included with the solution. During these workshops, i3 Verticals will also demonstrate the content

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management system and allow the city to review the content converted from the existing website, including on-screen messaging, email content, and enrollment policies displayed to the user.

i3 Verticals will document all these requirements in a "Requirements Traceability Matrix (RTM)" document. This document helps establish traceability, ensuring that the configuration aligns with the documented requirements. The RTM will be delivered to the City for review and approval, serving as the baseline for developing the Functional Design.

Once the RTM is approved, i3 Verticals will update the outcomes of these workshops into the Functional Design Documents (FDD). These documents are based on the requirements outlined in the Request for Proposal (RFP). The FDD serves as a blueprint for the configuration and integration of the systems based on the City's needs. Once the FDDs are approved, they are used to set up the ePortal system for testing and to install the application on the City's development environment.

The document approval timeline will be discussed and aligned with the City during the Define phase.

Data Conversion

i3 Verticals has extensive experience migrating existing customer registration and profile information from legacy products. Several steps are performed as part of the migration including mapping of all necessary data elements from the existing City platform to the ePortal profile database, scripts to validate exported data against the City's existing customer account information, scripts to populate missing or incorrect data from export, communication, and settings to have customers validate/update information upon first login including password reset if required. Existing enrollment information such as paperless bills, budget bills or auto pay can be migrated and maintained by ePortal, however, we recommend retrieving enrollment information in real-time from CIS when available. If the information is not available in real-time, then ePortal will migrate and maintain enrollment information. i3 Verticals will migrate the customer profile and contact data from the current solution. This includes the profile names and the accounts that are associated with their profile. i3 Verticals will create a conversion design to document the extracted data file layout and the steps that will be performed to convert the data into i3 Verticals' profile database. i3 Verticals will perform small cycle runs as needed for testing and perform a full migration as part of the mock cutover. Data quality will be reviewed based on the extracted data from the current application and a plan will be made to address any known data issues. Exceptions in the migration will be identified and a plan will be created to address these. i3 Verticals utilizes custom scripts and creates conversion staging tables for the conversion process. Conversion activities and initial testing is typically performed in Dev and QA environments. Full / Mock conversions testing will occur in UAT or a separate Conversion environment. This is to ensure the performance and timing being what's expected for Go-Live. i3 Verticals recommends User profile (User ID, Name, Email), Contact information, and Profile to Account type relationship(s). With this approach, customers will be able to use their existing User ID to login, they will be asked to generate a new, secure password and their existing Accounts will be immediately available in ePortal.

As part of each step during user profile conversion, script execution outputs are reviewed, and reports are run to compare records from the source input vs target staging tables. For example, one of the controls is to validate the uniqueness of the User ID. Duplicate User IDs are provided in a report to the legacy CIS system allowing technical staff to perform data correction and/or fix in their export process. Mock Conversions will be performed, which are joint activities performed with i3 Verticals and the City Project Team to monitor the process through each step, review/validate results and address any bugs or issues that arise. i3 Verticals recommends two Mock Conversions with time between them to address any bugs

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and optimize any timing of the steps. i3 Verticals will provide a template Conversion Spec to accelerate the conversion design/process. We will work closely with the City's legacy CIS subject matter experts to map data to be converted, document the conversion process steps, and define additional controls/validations. This joint process will provide i3 Verticals key input about the legacy systems that will be incorporated into the conversion process.

Integration

Mitigating multiple and complex integrations with other third-party solutions requires a strategic approach with proactiveness. i3 Verticals' strategic approach to accomplish this is as follows:

- i3 Verticals has collaborated with critical vendors of most third-party solutions to address all utility functional requirements comprehensively. This collaboration ensures that i3 Verticals has a deep understanding of the capabilities and specifications of these third-party solutions, enabling seamless integration and effective utilization to meet the City's functional needs. By working closely with these vendors, i3 Verticals can leverage their expertise and resources to enhance the functionality and performance of the integrated solutions, ultimately delivering greater value to the city and its stakeholders.
- Pre-built Adapters: i3 Verticals has developed pre-built connectors or adapters for most third-party integrations. This approach significantly reduces integration risks for the city by providing ready-to-use solutions that have been thoroughly tested and optimized.
- API Documentation: i3 Verticals proactively works with third-party vendors to provide updated documentation for their APIs. This ensures that developers have access to accurate and comprehensive information, allowing them to integrate with external systems more efficiently.
- Testing and Validation Tools: i3 Verticals utilizes testing and validation tools to help developers ensure that integrations are functioning correctly. This includes tools for simulating API requests/responses, monitoring integration performance, and identifying potential issues or bottlenecks. By leveraging these tools, i3 Verticals can identify and address integration issues early in the development process, minimizing disruptions and ensuring a smoother implementation.

Enable Design Phase Key Activities

The table below is the RACI matrix for the project. City will use this RACI matrix to clearly indicate project responsibilities through the duration of the project. R = the part Responsible for performing the activity, A = the team Accountable for confirming the activity's completion, C = the team Consulted on how the activity is to be performed, I = the team Informed of the activity's completion, but is otherwise not involved in the activity.

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ID	Key Activity	Related Deliverable (D) or Work Product (W)	i3-Milestone	City
1	Base Product Install	Base Installation (W)	R	A
2	Configuration Documentation	ePortal Configuration Document (D)	R, C	A
3	Configuration and requirements workshops conducted	Configuration & Design Workshops (W)	R	R, A
4	RTM Document	Requirements Traceability Matrix (RTM) Document (D)	R, C	A
5	Corporate web page style guide Provided	N/A	I	R, A
6	ePortal API structures provided	ePortal API Structures Document (D)	A, R	C
7	ePortal Functional Design Document(FDD) - Base	ePortal Base workbook/ Functional Document(D)	R	A
8	ePortal Functional Design Document – Integrations & City Specific(Custom)	Portal Functional Document (D)	R	A
9	ePortal functional designs reviewed and approved	Portal Functional Document Review (W)	A	R
10	Migration Current Portal Accounts	Data Conversion Plan (D)	C	R, A
11	Attain the required approvals to establish connectivity (B2B or VPN) between CIS and the ePortal.	CIS & ePortal connectivity established (W)	C, A	R, A

Build (Development and Test) Interfaces

Once the configuration workshop is complete and all third-party interfaces are identified, i3 Verticals will begin integrating ePortal to all third-party applications ensuring all interfaces are configured properly based on integration design documentation using single sign-on. This will include single sign on interfacing with payment, bill print vendor, and CIS services developed, made available by the city.

Testing

Once the Application Configuration has occurred, i3 Verticals will conduct a basic test ensuring that the application has been configured properly; the appropriate transactions are being created in the CIS. The testing verification will also include migration of existing content from any previous portal to i3 Verticals ePortal where it can be managed within eAdmin. i3 Verticals will make the base test cases available to the city when they are complete, and prior to Configuration Testing, so they can be used in the creation of UAT test cases. The configured software will be installed on the city's Testing or Training environment once it has been successfully verified in Development. This environment will be used for User Acceptance Testing

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and Training. If separate environments are needed, i3 Verticals will provide detailed installation instructions to the city, so that additional instances of the application may be brought online.

ePortal Testing Overview

Comprehensive Testing Process: This process ensures that the application is thoroughly tested and validated at each stage, from unit testing to User Acceptance Testing (UAT). The goal is to meet business requirements and ensure a high level of software quality. There is a strong collaboration between i3 Verticals and the city throughout the testing process, emphasizing the partnership and coordination required to ensure successful testing.

Types of Testing:

The testing process includes different types of testing, with each type having specific responsibilities:

- Unit Testing
- Functional Testing
- Quality Assurance (QA) Testing
- User Acceptance Testing (UAT)

Responsibilities: The city and Contractor will establish responsibilities of the parties for each type of testing, ensuring clarity in roles and activities. This testing process aims to validate the application's functionality, quality, and alignment with business requirements, and it leverages a hybrid approach that combines the best of Agile and Waterfall methodologies.

Unit and Functional Testing:

Application Configuration and Testing:

The i3 Verticals Team will conduct unit and functional testing after the application configuration has taken place. This testing phase ensures that the application has been configured correctly and that the appropriate transactions are generated in the CIS (Customer Information System).

Test Case Sharing:

The i3 Verticals Team will provide the test cases to the city once they are completed. These test cases will be shared before the Functional Testing phase is completed and start of QA testing so that the city can use them in the creation of their QA test cases.

Test Results Sharing:

Test results sharing is a crucial part of ensuring transparency and collaboration between i3 Verticals and the City during the development and testing process. The i3 Verticals Team is responsible for conducting tests on the features identified for development in each sprint.

- Test Results and Test Plan: The i3 Verticals Team provides the city with test results, typically in the form of an updated Test Plan spreadsheet & results in word document. This spreadsheet identifies each test case and specifies whether it has passed or failed.
- Frequency: Test results are shared at the end of each sprint. Sprint boundaries are used to group related development tasks, and the results of testing on the features developed during a specific sprint are shared at the end of that sprint.
- Feature Demos: If needed, the i3 Verticals Team may provide demos of the features to the city's QA testers. These demos help ensure that the city's testing team understands how the features are intended to work and can conduct their testing effectively.

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Testing Environment:
Unit and Functional testing will be performed in the Development (Dev) environment. This testing will take place after the configured software is installed on the city's Dev environment.

Sprint-Based Testing: Unit and Functional testing will be organized into sprints and will follow the prioritization of features that occurred for the Development phase.

This structured approach to unit and functional testing ensures that the application is thoroughly tested and that test cases are shared for further quality assurance efforts. It also considers different factors that influence the prioritization of testing efforts during sprints.

Quality Assurance (QA) Testing:
Responsibility: QA Testing is the responsibility of the city. The city's role is to validate and confirm that the features delivered by the i3 Verticals Team have been correctly configured and tested.

QA Plan and Test Cases: The city is responsible for developing a QA Plan and Test Cases if necessary. These Test Cases can be created using the Functional Test Cases provided by the i3 Verticals Team.

Test Environment: Once the configured software has been successfully verified in the Development environment, it will be installed on the City's Test/QA environment. The Test/QA environment is specifically designated for QA Testing and is separate from the Development environment.

This approach ensures that the city takes ownership of QA Testing, including the development of a QA Plan and Test Cases. It also emphasizes the need to transition the configured software to a dedicated Test/QA environment for thorough quality assurance testing before starting the User Acceptance Testing (UAT) by the City’s business team.

User Acceptance Testing (UAT):
The objective of UAT is to ensure that a specific business function is functioning correctly within the end-to-end process of the changed/Developed application. It verifies that the changes in code and configured components work seamlessly within the business function and meet the requirements of the city’s business community.

The city's Responsibilities: The city is responsible for creating UAT test cases as needed and the execution of all UAT test cases.

i3 Verticals Team Support:
- The i3 Verticals Team will provide functional and technical support for the city's User Acceptance Testing.
- This support includes helping the city in creating a UAT plan if needed.
- The i3 Verticals Team will assist in triaging issues identified by the city's business during UAT.
- They will address these issues through configuration, coding corrections, or potential training solutions based on their priority.
- The i3 Verticals Team will provide the City with Functional Test Cases to be used in creating the city's UAT test cases.

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This approach ensures that the city is actively involved in UAT, from creating test cases to execution, with support from the i3 Verticals Team. It also emphasizes the use of Functional Test Cases to assist in creating the city-specific UAT test cases and effective project management oversight to meet agreed-upon deadlines.

The development (configure and build) process will follow a sprint methodology. Features will be developed in sprints, tested by the i3 team, and demoed to the city's IT and business team. After this, features will be migrated to the Test environment for Quality Assurance (QA) testing.

i3 Verticals will prioritize the features within these sprints based on different dependencies, including essential features with approved requirements that do not rely on other city or third-party systems. Features involving approved requirements for integration with third-party systems and customizations specific to the city will be scheduled for later sprints.

This process ensures that dependencies are identified early, and features are prioritized accordingly, so the delivery of features is not delayed and can be well-planned. The city's team, including business members, is involved in sprint demos and QA, which provides the advantage of gathering feedback from the business and makes them comfortable when they start User Acceptance Testing. Early involvement with the business ensures alignment with the scope and allows for consideration of any business needs that can be prioritized accordingly.

In a product implementation project, addressing testing issues effectively is crucial to ensure a smooth acceptance testing process. As part of our methodology, providing features sprint-wise and involving the business early reduces defect density. However, i3 Verticals will follow the below ticketing process to fix issues and speed up acceptance testing without any impact:

- Ticketing and Issue Tracking: Create tickets or issues for each identified testing issue. Use a dedicated issue tracking system to manage these with relevant details.
- Prioritization: Prioritize testing issues based on business criticality and risk. Consider the impact on functionality, user experience, and project timelines, and allocate resources accordingly.
- Resolution: Break down the testing process into manageable chunks. Divide the issues into smaller tasks that can be addressed incrementally. Regularly monitor progress and adjust priorities as needed.
- Collaborate with city: Our development teams work closely with the city team to resolve issues promptly. Conduct retesting after fixes and demo these resolved issues.

i3 Verticals believes that effective communication among stakeholders is essential to prevent delays during acceptance testing. By following these steps, we streamline the testing process and ensure smoother acceptance and a successful software launch.

Enable: Build and Test Phase Key Activities

The table below is the RACI matrix for the project. City will use this RACI matrix to clearly indicate project responsibilities through the duration of the project. R = the part Responsible for performing the activity, A = the team Accountable for confirming the activity’s completion, C = the team Consulted on how the activity is to be performed, I = the team Informed of the activity’s completion, but is otherwise not involved in the activity.

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ID	Key Activity	Related Deliverable(D) or Work Product(W)	i3- Milestone	City
1	DEV Application Provisioned & Configuration	N/A	R, A	C, I
2	Code Applied to Dev Environment by Sprints	N/A	R, A	C, I
3	Integrated applications such as as CIS, Payment Vendor, Bill images, Address validation and MDM provisioned	N/A	C	R, A
4	Corresponding services developed within interfacing applications such as CIS, Payment Vendor, Bill images, Address validation and MDM	N/A	C	R, A
5	Current Portal Accounts extract file is provided with data based on the format	N/A	C, I	R, A
6	Profile migration (Current Portal Accounts) extract scripts are developed	N/A	R, C, I	R, A
7	Functional Test Plan and Test cases delivered	ePortal Base Test Case Matrix (D)	R, A	C, I
8	Updated Functional Test cases & results delivered (By sprints)	ePortal functional Test results for sprints (W)	R, A	C, I
9	ePortal QA Environments Provisioned	QA Environment (D)	R, A	C, I
10	City's QA Environments Provisioned	QA Environment (D)	C	R, A
11	QA Validation completed	Test Results Matrix (W)	C, I	R, A
12	ePortal UAT Environment Provisioned	UAT Environment (D)	R, A	C, I
13	City's UAT Environments Provisioned	UAT Environment (D)	C	R, A
14	UAT test cases created	Test Case Repository (W)	C, I	R, A
15	UAT Testing Completed	Test Results Matrix (W)	C, I	R, A
16	ePortal Training Material Provided	Training Documentation (D)	R, A	C, I
17	Training needs assessment	Training Needs Assessment Results (W)	C	R, A
18	City specific training material prepared	Training Documentation (D)	C	R, A

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ID	Key Activity	Related Deliverable(D) or Work Product(W)	i3- Milestone	City
19	City Trainers Trained(TtT)	Train the Trainer (W)	R	A
20	Baseline performance metrics provided for existing applications	Performance Metrics (W)	I	R, A
21	Go live transition criteria mutually agreed and approved by steering committee	Go-Live Plan (D)	C	R, A
22	Integrate ePortal to the 3rd. party interfacing applications.	N/A	R, A	C

Deliver (Final Prep)
In the Final Prep phase, we are preparing for all systems to be ready to go online. We are making sure all users are prepared, trained, and doing all final systems checks.

The i3 Verticals Team will update the final configuration settings in the development system. These final changes may include true configuration settings or field changes on the different screens. The i3 Verticals Team does not anticipate reaching this phase of the project and having to configure new modules for the city.

The final configuration settings will be tested in the development instance and then installed on the city's development system. A final verification test will be performed to ensure the final configuration settings are operating correctly in the city's development environment.

Final Prep/Deployment Phase Key Activities
The table below is the RACI matrix for the project. City will use this RACI matrix to clearly indicate project responsibilities through the duration of the project. R = the part Responsible for performing the activity, A = the team Accountable for confirming the activity's completion, C = the team Consulted on how the activity is to be performed, I = the team Informed of the activity's completion, but is otherwise not involved in the activity.

ID	Key Activity	Related Deliverable (D) or Work Product (W)	i3- Milestone	City
1	Performance Testing Completed	Performance Test Execution Plan(D)	R, A	R
2	City End User Training & Knowledge Transfer Completed	Training & Knowledge Transfer (W)	C	R, A
3	ePortal Production Environments Ready	ePortal PROD Environment (D)	R	A
4	City3rd. Party Production Environments Configured/Integrated	3rd. Party PROD Environments Ready (W)	C	R, A

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ID	Key Activity	Related Deliverable (D) or Work Product (W)	i3- Milestone	City
5	Communication Plan Executed	Work Product	C	R, A
6	Go Live Cut Over Plan updated	Go Live Cut Over Plan(W)	R	R, A
7	Approval to go live from Stakeholders	Go/No-Go Decision (W)	R, I	R, A
8	List of non-Sev 1 or Sev 2 defects to be resolved post go- live identified	Remediation Plan (D)	A	R
9	Update Product Backlog	Product Backlog (D)	R	A
10	Establish post go-live support model (ongoing)	Operational Support Guide (W)	R	R, A

Stabilization: Warranty (Go-Live and Post Go-Live Support)

i3 Verticals will provide post-go-live support to the city to assure the Application installation and configuration is operating as expected in Production. These support tasks include triage of issues reported by the city, researching data or software issues, proposing solutions to correct issues in the system, answering questions regarding the functionality of the system. This support period is usually for four weeks post go-live then the city will transition to the proposed i3 Verticals managed services.

The i3 Verticals Project Manager will be responsible for working with the city PM to define the project, the objectives, criteria for success, and assumptions and constraints. The roles and responsibilities should be defined as part of the Statement/Scope of Work (SOW) along with the process for change management, budgeting, document management, communications, and managing risk and issues. i3 Verticals' project management methodology includes 6 key PMO areas that need to be established at the program onset to ensure clear communication, management, and reporting.

At the end of the Go-Live Support Phase, i3 Verticals shall provide the city with a letter documenting the Phase has been completed. The Phase will be determined complete when each deliverable of the Phase, as defined in the section above, has been accepted and approved by the city. The letter will be signed by both parties. In addition, any identified Work Products are established and are being used effectively to manage the project and meet Work Product Standards. The i3 Verticals Project Manager will provide the following documents throughout the project to update stakeholders on the progress of the project.

i3 Verticals provides transition services from implementation to our support model as part of the post go-live support phase of our methodology. Key project resources will provide on-site support for a mutually agreed upon length of time. Additional resources support the effort remotely. Any identified challenges will be triaged and assigned to resources to resolve in a timely manner. Daily defect meetings will be scheduled to discuss open issues and provide delivery schedule for corrections. Prioritization of issues will be discussed during the daily meeting however critical items will be assigned immediately. Typically, full i3 Verticals staff is on-site for approximately 1 week post go-live.

Training, job aids and troubleshooting cheat sheets will be made available to operations staff. In addition, during post go-live stabilization, key i3 Verticals experts will be available to assist, train and provide guidance on troubleshooting techniques.

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To close out this project phase, i3 Verticals will summarize all project information and artifacts, create a checklist utilizing the scope of work, include any additional change requests that were not part of the original scope, and leave with you a complete status on the state of the project in a memo before we depart. We will ensure that all of your documentation is properly inventoried and in a library for future reference by your functional and technical teams. You will have all of your development notes, project artifacts, a complete functional and technical library, all of your design documents inventoried, and include a letter of acceptance. The i3 Verticals Team will leave you with all required forms and documents that will prepare the city for any future project audits.

Go-Live and Support Phase Key Activities

The table below is the RACI matrix for the project. City will use this RACI matrix to clearly indicate project responsibilities through the duration of the project. R = the part Responsible for performing the activity, A = the team Accountable for confirming the activity's completion, C = the team Consulted on how the activity is to be performed, I = the team Informed of the activity's completion, but is otherwise not involved in the activity.

ID	Key Activity	Related Deliverable (D) or Work Product (W)	i3- Milestone	City
1	Determine command center, necessary facilities/equipment, and communication connectivity	Command Center (W)	C	R, A
2	Determine on-call team and schedule.	Staff & Schedule (W)	R	R, A
3	Escalation process	Escalation Process & Contact Method (W)	R	R, A
4	Decommission and update legacy apps and links. Ensure all customer connections and educational support materials are updated.	N/A	I	R, A
5	Transition to post Go-Live support model	Operational Support Guide (W)	A	R, A
6	Determine if product stable and performing per requirements and if all necessary severity 1 and 2 defects and issues have been resolved appropriately	Project Completion Document (D)	R, A	R

Once the City and i3 Verticals have finalized the project, support will transition to maintenance or managed services. i3 Verticals will complete a transition plan where resources are assigned, functionality discussed,

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process for gaining access to the system, etc. are outlined. Managed Services resources typically begin participating in project activity immediately following go live and work with the project team during the post go live stabilization period. The city will be assigned a designated resource as their primary point of contact and provided with instruction regarding reporting issues. Recurring meetings will be set up with the city designated product owner(s) under Managed Services.

i3 Verticals' support team is a remote work force that is available 24x7. i3 Verticals' managed support monitors ePortal and ensures the application is up and available in addition to providing support to the city on a 24x7 basis. Our average team consists of 10 team members including Project QA, Project Manager, Functional Delivery Lead, Functional Consultant, Web Architect, Web Developer, Integration Architect, CIS Integration Developer, Tester, and Training/OCM Consultant.

Support Services

Support services include the services to configure, integrate, manage, and provide access to applications, software, databases, platforms, infrastructure, and other tools included in this proposal.

Training Delivery Methodology

Unless otherwise determined by the Training Needs Assessment, the delivery method will be instructor-led virtual instruction. Instruction will be presented in a repeatable and structured approach. Each session will be led by the i3 Verticals training lead with the support of at least one resource from the city.

Technical resources will be available via telephone for any issues that arise. To maximize individual attention and retention of training content, a maximum of 10 participants will be invited to each training course. The number of classes and class size will also be dependent upon the total number of end-users available and their respective commitment to operational duties.

Scheduling and Invitation Process

The registration process is as follows:

- The city Training Lead requests lists of end-users and their job roles from people managers. They are also expected to provide any participant requests for reasonable accommodation including those of the hearing-impaired population to adjust the Training Schedule accordingly. They will also be asked to confirm employee internet access for remote training.
- The Training Lead will create training session invites following the Training Schedule.
- The People Managers will assign participants from their areas to training that they need to attend as determined by the Training Lead.
- The city Training Lead will enroll participants in their corresponding sessions using mutually agreeable platforms.
- The city Training Lead will notify participants when and where they need to attend training as well as other details of their participation as they coordinate sessions.

i3 Verticals Trainer will receive copies of the training rosters prior to delivering their sessions and will ensure that all participants are documented as attending.

i3 Verticals will provide training to all city project team members to familiarize them with the product terminology, functionality, and navigation/use of the solution to prepare for design workshops and future project activities. The training will cater to both functional and technical audiences and will include

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providing and facilitating hands-on training environments using the city-specific configuration and associated test data. We will also provide workflow and processes, including appropriate desktop procedures/job aids/quick reference user guides, and data.

A detailed training assessment will be conducted based on the SOW and defined functional requirements for the project. Based on the training needs assessment a detailed training plan will then be created. These trainings will be led by the i3 Verticals Training Lead.

While i3 Verticals provides comprehensive training for all essential resources to manage the business, we also offer tailored training and required documentation for the city's non-technical staff to assist in the maintenance or operation of the system. i3 Verticals will provide the ePortal product's runbooks, with materials customized to their functional responsibilities. Below is an outline of i3 Verticals' potential courses, along with the functional responsibilities covered and the expected audience members' roles and positions within the city:

- **Runbooks and Functional Design Documents:** System Overview and Navigations: Introduction to the system's architecture, main features, and basic navigation techniques. Understanding of system components and their interconnections.
- **Configuration Document:** Training on configuring system settings and parameters according to the city's requirements. Understanding of system customization options, including user preferences, workflows, and business rules.
- **Content Management:** Instruction on managing and organizing content within the eAdmin system, including configurable customer messages and online messages.
- **Role Management Document:** Managing user roles, permissions, and access controls within the eAdmin system. Training on role-based security models, user provisioning, and authentication mechanisms.

These courses are designed to equip the city staff with the necessary knowledge and skills to effectively support and utilize the system in their respective roles.

i3 Verticals involves the city's team, including the Train the Trainer and any business users, early in the project as part of Sprint Demos. We will provide training to all city project team members to familiarize them with the product terminology, functionality, and navigation/use of the solution, preparing them for design workshops and future project activities. However, we recommend starting the Train the Trainer program in the later part of UAT, so most of the features are already approved by the business. This timing ensures that the team can also prepare for end-user training, address any further training needs, and be well-prepared for the Go Live.

On-site training is available upon request from the city. The trainings will be conducted at no cost to the city. i3 Verticals may invoice the city for travel costs incurred in accordance with Exhibit B.

4. RESOURCE PLAN

The i3 Verticals resources for the ePortal implementation of the Chandler project are described in the table below. These are projected resources and i3 Verticals will provide what is needed to meet the timeline. i3 Verticals warrants that they will provide experienced and qualified personnel to perform the Services and Deliverables.

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Role and Description	M 1	M 2	M 3	M 4	M 5	M 6	M 7	M 8	M 9	M 10	M 11	M 12
Project Exec	0.1	0.1	0.1	0	0.1	0	0.1	0	0.1	0	0.1	0.1
Project Manager	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25
Functional Lead	0.1	0.25	0.25	0.25	0.25	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Technical Lead	0	0	0.25	0.5	0.5	0.25	0.25	0.25	0.25	0.1	0.1	0.1
Web Developer	0	0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.25	0.25	0.25
CIS Development Lead	0	0	0.25	0.25	0.25	0	0	0	0	0	0	0
CIS Developer	0	0	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25
Functional Consultant – BA and Test Lead	0	0.5	0.5	0.5	0.5	0.25	0.25	0.25	0.25	0.25	0.25	0.25
Functional Consultant - Tester	0	0	0	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25
Training Consultant	0	0	0	0	0	0	0.1	0.1	0.1	0.1	0	0

City Resources: The table below provides city staffing levels by month. It assumes the functional leads are knowledgeable and empowered to make decision and approved designs based on input from SMEs. The Configure, Build, and Final Prep phases of the project will require periodic time commitments from other individuals from the business, not identified as part of the project team. Contractor expects most of these to be half day to one day commitments, although some activities (like data cleansing and user acceptance testing could be substantially more).

Role and Description	M 1	M 2	M 3	M 4	M 5	M 6	M 7	M 8	M 9	M 10	M 11	M 12
Project Manager	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25
Functional/Business Lead	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25
Business Analyst/ OCM/Training	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25
Technical Lead	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25
Integration SME	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25
Infrastructure/Tech Arch	0	0.1	0.1	0.1	0.1	0.1	0	0	0	0	0.1	0.1
Test Lead	0	0	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25
QA Testers	0	0	0	0	0.5	0.5	0.5	0.5	0	0	0	0
Business Users as needed	0	0	0	0	0	X	X	X	X	X		
Trainer	0	0	0	0	0.1	0.1	0.1	0.1	0.1	0.1		
OCM Consultant	0	0	0	0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1

5. SERVICE LEVELS AND SUPPORT

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i3 Verticals will provide all necessary resources to ensure the City has complete System Functionality, technical expertise for troubleshooting and issue resolution, and all applicable updates and upgrades to the System.

i3 Verticals will provide 24 x 7 x 365 telephone and e-mail support for assistance in identifying and resolving Defects and will be available to answer questions related to the operational use of the System. This includes an after-hours contact and access to an online defect tracking system.

Defects will be logged and assigned a severity and a priority base on the definitions below. The severity is a representation of the degree of impact that a defect may have, the priority specifies business importance.

The party that identifies a defect (either the city or i3 Verticals) will allocate the severity and priority using the severity and priority level definitions. The city may then triage unresolved defects to validate and if necessary, update the severity and priority. If i3 Verticals disagrees with a defect classification set by the city, the conflict resolution process will be followed. Our team is available 24/7, ensuring that support is always accessible whenever it is needed.

The ticketing process includes:

- **Issue Reporting:** Users can report issues through various channels, ensuring that problems are quickly identified and logged.
- **Ticket Creation:** Each reported issue is documented in our ticketing system, where it is assigned a unique identifier for easy tracking.
- **Initial Assessment:** Our support team conducts an initial assessment to understand the nature and severity of the issue.
- **Prioritization:** Issues are prioritized based on their impact on the utility's operations, ensuring that critical problems are addressed promptly.
- **Investigation and Diagnosis:** Our team of experts investigates the issue to diagnose the root cause.
- **Resolution:** Depending on the diagnosis, our team works on providing a fix or workaround to resolve the issue.
- **Testing:** Any code changes or fixes undergo rigorous testing to ensure they effectively resolve the issue without introducing new problems.
- **Code Acceptance:** Once the fix is verified, it is accepted and implemented into the production environment.
- **Communication:** Throughout the process, we maintain clear and regular communication with the stakeholders, keeping them informed of the progress and resolution status.
- **Closure:** After the issue is resolved and accepted, the ticket is closed, and a detailed report is provided for future reference.

This mature and systematic approach ensures that all issues are handled efficiently and effectively, minimizing downtime and maintaining the stability and reliability of the utility's operations.

Issue Prioritization and Service Levels

The following tables describe issue prioritization and service levels.

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Severity Level	Description
Level 1 Critical	Definition: The system is unavailable AND there is no work around in place. Operations Down, Core functionality not working, Showstopper. Resolution: These are critical items that must be fixed as soon as possible. The City and i3 Verticals will focus all required and available resources to resolve this issue.
Level 2 High	Definition: A critical business function unavailable OR operating in an unreliable manner. The workaround will adversely impact the customer or require additional resources. Operations were severely degraded, and core functionality not working exactly as designed, degraded. Resolution: The City and i3 Verticals will determine the timing for correction based on plan.
Level 3 Medium	Definition: A business function is not working as designed or operating in an unreliable manner or performance of the application. Non-core functionality affected, minimal or no impact on operations, can be addressed through a work-around. Resolution: Defects need to be fixed or a business-approved work around identified that can remain in place until a permanent solution is implemented.
Level 4 Low	Definition: A defect which may be cosmetic or minor in nature or related to configuration and might decrease system efficiency but would not prevent use of the application. Other effects, non-impacting to overall functionality or operations. Resolution: The City and i3 Verticals will determine the timing for correction based on plan.

Priority Level	Description
Urgent	Defect should be fixed immediately / in the next build.
High	Defect should be fixed in any of the upcoming builds but should be included in the release
Medium	Defect should be fixed after the release / in the next release
Low	Defect may or may not be fixed at all.

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Severity Level	Initial Response provided within	Target Temporary Plan provided within	Frequency of Status Updates	Target for Initial Resolution to be provided within	Target for Final Resolution to be provided within
1	1 hour from receipt. If after business hours, 1 hour from the receipt of the ticket and telephone call	2 hours from Initial Response	Every business* hour after the Resolution Plan provided	8 business hours from receipt of initial notice	10 calendar days
2	2 business hours from receipt. If after business hours, 2 business hours from receipt of ticket and telephone calls	4 business hours from the Initial Response	Every 8 business hours after the Resolution Plan provided	8 business hours from receipt of initial notice	30 calendar days
3	8 business hours from receipt	5 business days from the Initial Response	Weekly after the Resolution Plan provided	8 business hours from receipt of initial notice	90 calendar days
4	16 business hours from receipt of initial notice	5 business days from the Initial Response	Weekly after the Resolution Plan provided	20 business days from receipt of initial notice	120 calendar days

Summary of Support Services

The Contractor will provide the City with the Services in accordance with the Agreement and as outlined in this Exhibit to support the self-service solution. The Scope of Services includes: i) Software Maintenance, ii) Application Managed Services, and iii) Application Hosting Services. These services are defined in the sections below:

Software Maintenance

Contractor will ensure that ePortal will function according to the specifications and documentation, and resolve interruptions or errors associated with the ePortal. Contractor will provide assistance in triaging issues reported by the City and provide corrections to issues that arise from the ePortal, whether or not they are determined to be within specification. Priority & Severity levels will be determined by the city. Source code corrections will be developed and tested in a development environment by the Contractor. The following services are provided as part of Software Maintenance:

a. Timely perform Defect Triage and Corrections related to the ePortal applications.
b. Timely conduct Defect Functional Testing in the Development environment to ensure the system is operating as per Specification or Documentation. This may include integration / interface operation and testing.
c. The city will be responsible for testing, in a timely manner, the solution to the Defect in the upper non-Production environments and approving the code for promotion, provided that any city approval does not reduce or relieve Contractor of its obligations under the Agreement or this SOW.

Scope of Software Maintenance:
Contractor will provide software maintenance services to the City to ensure ePortal is functioning as per the defined documentation and specifications. Contractor will correct errors with the ePortal software according to reports & details provided by the City or internal Contractor sources with approval from the city.

Defect Triage and Corrections
Contractor will provide the following Services to maintain and support the functionality of the ePortal Solution:

- After verifying all ePortal dependent systems are operational and communicating, the Ccty will report a suspected Defect in ePortal to Contractor, Contractor shall attempt, based upon information provided by the city, to recreate the suspected Defect in a non-production instance. If the Defect is confirmed, Contractor shall use commercially reasonable efforts to provide Licensee a Correction
- Contractor will be responsible for correcting Defects in any version of ePortal for which it is continuing to provide support. Contractor guarantees that, as long as city remains current in its support services subscription, Contractor will support prior releases for a the Term of this Agreement and any renewal periods—up to 4 renewal periods, currently not expected to exceed 10 years.
- The city agrees to implement all Corrections provided by Contractor within 60 calendar days.
- If the Contractor determines that the defect is not an issue that can be addressed through the source code, the Contractor will provide a justification to the City on why the issue is out of scope. The city may request Contractor to provide a cost estimate to make the change requested by the city.
- The city is responsible for data changes in ePortal, data analysis, working and identifying issues and confirming ePortal changes before they are moved into the Production environment.
- The city will assist the Contractor with defect resolution when reported errors from production cannot be replicated in test environments.
- The city will assign a priority, using the Defect and Severity Levels defined in the table to tickets associated with such system changes such that the Service Level associated with processing these changes is appropriate for THE CUSTOMER's business.

The city and Contractor will each perform their respective responsibilities as set out in the Responsibility Matrix below (R = Responsible, A = Accountable, C = Consults, I = Informs):

Function	City	i3- Milestone
Log defects in Contractor defect tracking tool and provide steps to recreate & documentation related to the defect report.	R	I
Log defects in Contractor defect tracking tool identified in test environments	I	R
Recreate defects in test environments to facilitate correction	C	R
Triage issue reports and attempt to recreate defect	I	R
Source Code Corrections for defects in the Contractor provided software	I	R
Source Code Corrections for any City owned or 3rd Party software defects	R	C

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Execute Functional Test on any Corrections in the Development Environment.	I	R
Ensure 3rd party applications are available for Functional Testing (if necessary)	R	C
Execute functional testing in QA instance	R	I
Support testing in QA / PreProd Instances	I	R
Source code promotions for City owned or 3rd Party software	R	I
Approve Code Promotions into Production.	R	I

Defects Severity Levels

When city reports an incident in ePortal system to Contractor, Contractor will recreate the incident in a test environment based on the information provided by city and confirm that the incident is a Defect. If the Contractor is not able to recreate the issue in a test environment, the city will assist the Contractor to facilitate an understanding of the issue. In the event the city would like to request a modification to the system, the Contractor will provide a cost estimate and the procedure defined in Modifications and Enhancement section will be followed.

The city will classify the defect in accordance with the following severity incident guidelines. These Incident Severity Levels should always be mutually agreed upon.

Availability and Contacts

Contractor will make technical support available to the city by web user interface or email twenty-four (24) hours per day, seven (7) days per week. Contractor support personnel will provide the city with remote assistance for help in using and operating the System and to accept reports of Defects in the System. Contractor will ensure that each of its personnel performing any Support Services are experienced, knowledgeable, and qualified in the use, maintenance and support of the System.
Contact information for technical support is as follows:

Web Interface:	Contractor defect tracking system
After Hours Telephone	Dedicated phone number will be provided

Contractor may change any of the foregoing contact information from time to time by delivery of not less than thirty (30) days prior written notice to the city, so long as at least one number or address is at all times available for each means of contact.

Application Modifications and Enhancement

Enhancement Requests shall have the business requirements documented by the city. Contractor will review these requests to determine a high-level functional design/financial estimate for review by the city. If approved, Contractor will design the enhancement. The enhancement will be reviewed by the city. If approved, the enhancement will be developed in the city's development environment. The enhancement will be functional tested by the Contractor. Once the functional test has been completed, the enhancement will be promoted to the QA/Test environment for the city to perform QA and UAT testing. Once the enhancement has been accepted by the city, the enhancement will be promoted to production and

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supported as part of the Managed Services agreement.

The city shall submit requests for Enhancements or Modifications as Change Requests pursuant to the Change Management Process in the MSA.

The city and Contractor will each perform their respective responsibilities as set out in the Responsibility Matrix below (R = Responsible, A = Accountable, C = Consults, I = Informs):

Function	City	I3 Verticals
Request Modification/Enhancement	R	I
Provide requirements for Modification/Enhancement (Contractor will assist in reviewing and commenting on such requirements)	R	C
Provide an estimate for the Modification/Enhancement using a Change Request document	I	R
Review estimate and provide written approval for the Change Request document	R	C
Develop and document test procedures	I	R
Perform development activities which may be changing of code or developing new code.	I	R
Perform Administrative Portal configuration change	R	C
Perform configuration change not accessible to city	I	R
Implement system patches	C	R
Perform unit testing of the ePortal component as appropriate	I	R
Perform user acceptance testing of the end-to-end solution	R	I
Provide final functional sign-off	R	C
Validate Changes before they are moved to Production environment	R	C
Validate postproduction implementation	R	C
Deploy any 3rd party related changes to the Production environment	R	C

Managed Services

Contractor will operate the ePortal applications on behalf of the city and provide necessary staff to ensure the application is up and available. Meetings and status reporting will occur between Contractor and the city. The source code will be managed, upgraded (adhering to the Contractor's release schedule) and promoted by the Contractor. The following services will be performed by the Contractor and provided as part of Managed Services:

a. Any and all patches, enhancements, updates, upgrades and new versions of the ePortal that

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Contractor makes generally commercially available as part of the product release schedule. Any such patches, enhancements, updates, upgrades and new versions will be covered by the Managed Services defined.

b. Provide support for operational and troubleshooting issues and the applicable resolutions as needed within the guidelines set forth herein.
c. Monitor ePortal and ensure the application is up and available for the CUSTOMER's employees, contractors, and end-users and provide support to the city on a 24x7 basis.
d. Managing ePortal source code and promotion through the testing and production environments.
e. Updates and management of configuration and content that does not reside within ePortal Admin console with the city.
f. Reporting of issues and resolution progress as set forth herein.

Scope and details of ePortal Managed Services:

Contractor will provide the city with the Managed Services related to ePortal as described in this section. The city may request services by creating a ticket in the Contractor ticketing system or other system as mutually agreed upon. The city will assign a priority using the Incident and Severity Level defined. The Contractor's representative will review the request and work with the city to fully understand the request. The city will be responsible for all approvals to promote any source code, configuration, content or any other system changes through the environment stack, as well as any changes to non-Contractor controlled applications.

Configuration Management

Contractor will provide the following Configuration Management Services to maintain and support the functionality of the ePortal Solutions. Contractor will be responsible for updating Configuration settings in the ePortal Admin Portal and promoting the changes through the lower environments and into Production.

The city and Contractor will each perform their respective responsibilities as set out in the Responsibility Matrix below (R = Responsible, A = Accountable, C = Consults, I = Informs):

Function	City	I3 Verticals
User Creation and Role Assignment	R	C
Add or remove a user update User role assignment	R	I
Request Configuration setting updates in Admin Portal & assign priority.	R	I
Change Configuration settings in Admin Portal	C	R
Promote configuration settings in all portal environments.	C	R
Approve configuration setting promotions.	R	I
Assign Priority to requested changes.	R	C

ePortal Customer Notification Management

Contractor will configure the SMS and email notification engine and ensure that ePortal related City notifications are being sent out and provide a user interface to show notifications sent. The city and Contractor will each perform their respective responsibilities as set out in the Responsibility Matrix below (R = Responsible, A = Accountable, C = Consults, I = Informs):

Function	City	I3 Verticals
Manage email server used for outbound City communication generated by ePortal	I	R
Review and correct failed emails.e	R	C
Run ePortal batch jobs to generate outbound City notifications	I	R
Manage outbound text service used for outbound City communication generated by ePortal	I	R
Assign Priority to requested changes.	R	C
Generate batch files of accounts or profiles for notifications triggered by 3rd party applications.	R	I

ePortal Content Management

Contractor will provide a mechanism that allows a functional user (either city or Contractor) to be able to edit and publish content on ePortal.

City will be responsible for managing the configured Content using the Admin module This includes changes in the lower environments and into production. Contractor will provide the required support.

Contractor will be responsible for managing and changing any content that cannot be managed through the Admin module and promote these changes through the lower environments and into production. The city and Contractor will each perform their respective responsibilities as set out in the Responsibility Matrix below (R = Responsible, A = Accountable, C = Consults, I = Informs):

Function	City	I3 Verticals
Edit content through the Admin portal in lower environments	R	I
Publish content	R	I
Edit content through the Admin portal in production environment	R	I
Approve all non-Admin portal content changes	R	I
Update non-Admin portal content changes	C	R
Promote non-Admin portal content changes	I	R
Assign Priority to requested changes	R	C
Support/provide backup resources to edit and publish Admin content in lower and production environments	A	R

Code Migration / Promotion Management

Contractor will be responsible for managing the source code and promoting ePortal related source code from one environment to another. Contractor will track the code in an online source code repository (GitHub) and will be responsible for checking code out/in. Code promotions will be based upon the

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approval of the city. The city will be responsible for source code managed of city controlled applications (any applications not provided by Contractor). Contractor and the city will collaborate on source code promotions that are dependent on more than one system.

The city and Contractor will each perform their respective responsibilities as set out in the Responsibility Matrix below (R = Responsible, A = Accountable, C = Consults, I = Informs):

Function	City	I3 Verticals
Execute tests on any fixes in Test / Pre-Prod before moving to production.	R	I
Acknowledge acceptance of fixes prior to deployment in production	R	I
Promote ePortal code through lower tier environments	C	R
Approve code promotions through lower tier environments	R	I
Promote ePortal code to Production environments	C	R
Approve code promotions to Production environments	R	I
Promote any non-Contractor provided code fixes & enhancements	R	C
Perform data refreshes of lower environments. Not to exceed 4 refreshes per year.	C	R

Usage Performance Metrics and Improvements

ePortal application will track usage and certain elements of transactions being performed by the city's customers. Contractor will work with the city to define 6 KPI's that can be derived out of the data being captured by ePortal. KPI's will be defined after deployment stabilization prior to turn over to the Managed Services team. The city may request additional reports / KPI's that may be extracted from the data as a change order. The city owns all data that exists within ePortal. Contractor will provide reports on a monthly basis, unless a different frequency is agreed upon.

The city and Contractor will each perform their respective responsibilities as set out in the hosting Responsibility Matrix below (R = Responsible, A = Accountable, C = Consults, I = Informs):

Function	City	I3 Verticals
Define KPI's to be included in monthly reporting.	R	C
Develop reports and deliver them on an agreed upon frequency.	I	R

ePortal Upgrade Services

Contractor will perform two types of changes to ePortal periodically: new features and functions technical currency.

New features and functions: As part of continued improvements, Contractor will perform the upgrades

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to the ePortal with new features and functions. City may activate these non-mandatory new features whenever city is ready to implement them after they have been made generally available by Contractor.

Technical currency: Contractor will apply changes to the platform to maintain the technical currency of the platform, including but not limited to security patches. These generally have minimal impact to city and end user functionalities but are mandatory. City is required to implement them. Urgent updates are packaged as patches and non-urgent updates are packaged with upgrades

Process and communication

a. The Contractor shall provide notice to the city no later than 30 days prior to the release of an Upgrade or Service Pack and no later than 5 days prior to a patch.
b. Inclusive of these notices will be supporting documentation and the availability of staff to discuss relevant details
c. The city will provide notice to the Contractor no later than 30 days prior to deployment of upgrades, Service packs for applications under its control and at the same time that it is notified of Patches to these systems that will be deployed.
d. The city will be responsible for notifying the Contractor of any known integration changes being introduced to non ePortal applications under its control. Contractor will provide a cost estimate to make changes to ePortal to accommodate changes.

The city and Contractor will each perform their respective responsibilities as set out in the Responsibility Matrix below (R = Responsible, A = Accountable, C = Consults, I = Informs):

Function	City	I3 Verticals
Notify city that an Upgrade, Patch, or Service Pack is available	I	R
Develop project schedule for implementation of new feature	R	C
Apply upgraded software to the city 's environment	I	R
Apply all necessary styles according to Style Guide for new pages.	I	R
Perform functional testing on upgraded ePortal application in Dev environment.	I	R
Make adapters to 3rd party or city controlled applications available for new feature operability.	R	C
Provide updated training documentation for Upgraded system	I	R
Provide training to city trainers of new features	C	R
Provide functional test scripts used to test upgraded system	I	R
Correct defects to the upgraded application.	C	R
Promote upgraded system through lower tier	C	R

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environments		
Approve upgraded system for promotion through lower environments and into production	R	I
Notify & train city end users on new features being introduced	R	I

Application Monitoring / 24x7 Support

Contractor will monitor ePortal and ensure the application is up and available for the City 's customers and will provide support to the city on a 24x7 basis. The following lists the method which reported incidents will be resolved.

a. For issues detected by the Contractor, the city will be notified of any application incident that is detected by Contractor. Contractor will log an incident in their online ticketing system and will begin triage on the ticket.
b. For incidents detected by the city, the city will log an incident in the Suppliers online ticketing system with the city severity level and Contractor will begin triage on the ticket. City will provide a reasonable number of support personnel who may access the Supplier's online ticketing system.
c. The city will be responsible for assigning the severity to city generated tickets as defined.
d. The city will be responsible for resolving end user data input errors and addressing any end user errors or training issues.
e. The city will provide the first level of support for the application. This includes triage of functionality issues reported by city s and other city personnel and categorize the issue before turning the issue over to the Supplier (i.e., bug, training issue, 3rd party application issue, etc.) before reporting an incident to the Supplier. (Level 1 support)
f. The responsibility for Application Monitoring tasks is summarized in the Application Incident Management Responsibility Matrix below.

The city and Contractor will each perform their respective responsibilities as set out in the Responsibility Matrix below (R = Responsible, A = Accountable, C = Consults, I = Informs):

Function	City	I3 Verticals
Identify & document application incident (performance, defect, system generated error message) reported by city customers or staff.	R	I
Identify and document application incident as detected by system and application monitoring	I	R
Log Application Incident & provide supporting details	R	I
Assign severity to Application Incident	R	C
Categorize Incident and provide root cause analysis	C	R
Resolve application Defects (code and configuration fixes	C	R
Validate resolution of Defect (code and configuration fixes)	R	C
Resolve technical interface issues	C	R
Resolve system performance issue	I	R
Resolve end user data input errors	R	I

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Address end user errors or training issues	R	I
Generate and log application, transactional exceptions	C	R
Manage and resolve application, transactional exceptions	R	C
Support transaction exception resolution	C	R
Monitor ePortal batch jobs and correct any job failures	I	R

Service Levels and Management

a) Contractor will provide all necessary resources to ensure the city has complete System Functionality, technical expertise for troubleshooting and issue resolution, and all applicable updates and upgrades to the System.
b) Contractor will provide 24 x 7 x 365 telephone support for assistance in identifying and resolving Defects (in accordance with the Severity Levels and Response Times set forth and will be available to answer questions related to the operational use of the System.
c) Contractor will promptly report all System outages, including performance degradation, to the city contact person or email alias identified by the city .
d) Through the duration of all outages, the Contractor will automatically deploy an interstitial or other type of page that will appear when the city or the city 's customers attempt to access the System, or potentially disable login altogether via the Supplier's admin portal. The content and appearance of this page will be reviewed and approved by the city as will be any variable text displayed on the page.
e) Contractor may schedule upgrades and maintenance for the System at a mutually agreeable time frame (the "Maintenance Window").
f) Any non-scheduled or emergency maintenance that impacts the System must be communicated to the city immediately.

Availability and Contacts

Contractor will make technical support available to the city by web user interface or email twenty-four (24) hours per day, seven (7) days per week. Contractor support personnel will provide the city with remote assistance to accept reports of incidents in ePortal. Contractor will ensure that each of its personnel performing any Support Services are experienced, knowledgeable and qualified in the use, maintenance and support of the System.

A Contractor representative will be assigned to the city 60 days prior to the Go Live date. This will be the primary contact person for the city for issue reporting and resolution. Additionally, the city may report Issues through one of the following methods:

Web Interface:	Contractor defect tracking system
After Hours Telephone	To be provided prior to transition to support

Application Hosting Services

Contractor will establish a Cloud environment where the ePortal application will be installed and connected to the city data center for integration with city applications. Contractor will host the production and up to 2 lower tier environments on behalf of the city. The following services are included as part of hosting:

a. Establish a non-production environment appropriately sized for Development and Testing

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b. Establish one pre-production environment sized and tuned similar to production for city User Acceptance/QA testing.
c. Establish one environment sized and tuned for Production
d. Patching and maintenance of ePortal servers, and testing of the lower environments after patching is performed.
e. Define and configure high availability and Disaster Recovery for the production ePortal environment
f. Configure and manage text and email city notification channel

Application Hosting

Contractor will provide software maintenance services to the city to ensure ePortal is functioning as per the defined documentation and specifications. Contractor will correct errors with the ePortal software according to reports & details provided by the city or internal Contractor sources with approval from the City .

Scope of Support- Supplier hosting via Amazon Web Services (AWS)

Environment Set Up

Contractor will set up and configure one production and 3 non-production cloud environments within Amazon Web Services where the ePortal application will be installed. This environment will be connected to the city 's data center via secure connection (VPN or similar agreeable connection tunnel). The city will maintain the secure connection to ensure the application has connectivity to the city's applications. The Contractor will size two environments to be 'production-like'; one to use for pre-production performance, load, and final validation testing; and the other for production. Two additional environments will be configured for Development and Test.

The city and Contractor will each perform their respective responsibilities as set out in the Responsibility Matrix below (R = Responsible, A = Accountable, C = Consults, I = Informs):

Function	City	I3 Verticals
Procure account with Cloud provider (AWS)	I	R
Define Environment size, variables, and other appropriate configuration settings	I	R
Connect the Cloud environment to 3rd party applications via VPN Tunnel	C	R
Maintain secure network connections to non-Contractor applications.	R	I

Environment Hosting and Maintenance – Non- Production

Contractor will provide the city with a stable cloud environment where the ePortal application will be operated for pre-production testing, development, QA testing and training. The Contractor will maintain the environment to ensure proper server patches (non ePortal Software) and maintenance occurs such that the environment will be up and available for use. The city is responsible for maintaining and making available 3rd party systems and city systems that will be integrated to ePortal.

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The city and Contractor will each perform their respective responsibilities as set out in the Responsibility Matrix below (R = Responsible, A = Accountable, C = Consults, I = Informs):

Function	City	I3 Verticals
Maintain ePortal non-production environments	I	R
Ensure server patching is performed	I	R
Maintain and support non-production 3rd Party and city owned applications	R	C

Environment Hosting and Maintenance –Production

Contractor will provide the city with a stable cloud environment where the ePortal application will be operated for production. The Contractor will maintain the environment to ensure proper server patches (non ePortal Software) and maintenance occurs such that the environment will be up and available for use. The city is responsible for maintaining and making available 3rd party systems and city systems that will be integrated to ePortal.

The city and Contractor will each perform their respective responsibilities as set out in the Responsibility Matrix below (R = Responsible, A = Accountable, C = Consults, I = Informs):

Function	City	I3 Verticals
Maintain ePortal production environment	I	R
Ensure server patching is performed	I	R
Maintain and support production 3rd Party and city owned applications	R	C

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Attachment 1 to Scope of Services
Functional Requirements

i3 Verticals will provide its solution meeting the following minimum requirements.

1	General	Capable of meeting utility customer needs as described in these requirements with an option to expand the for other city services as a whole.
2	General	Ability to provide a tailored customer experience for residential, commercial/industrial and multifamily customers.
3	General	Customer portal shall be branded as required per city requirements.
4	General	Customer portal shall provide administrative access to setup, "turn off" capabilities, change, or update customer facing information.
5	Account Registration	Allow existing customer transfer registration from closed account to new account. Do not require closed account be deleted prior to registering new account. Restrict registration into portal for parties that are not served by the City of Chandler or register under the same name of a closed account.
6	Account Registration	Provide simple customer registration process with minimal information. Include registration tutorial and step by step process for customers.
7	Integration	Ability for customer to make account profile changes (email, phone, name, authorized user, etc.) and these changes are updated in hosted utility billing system.
8	Integration	Ability to integrate with CIS Infinity for customer account and meter information, billing, and AMI usage presentment through APIs with no custom development.
9	Integration	Ability to integrate with a third-party payment applications and services such as Invoice Cloud for bill pay, payment history, etc. using APIs with no custom development.
10	Dashboard	Provide a dashboard to provide a customer configurable one page view of everything that is important about their account - Bill pay, bill history, usage, alerts/notifications, account info, important communications, etc.
11	Dashboard	Ability to see graphs and charts, year over year comparisons, month over month comparisons (e.g. usage in Jul 2022 vs Jul 2023). Customer shall also be able to dive into any chart to see more detail (e.g. Dashboard presents monthly consumption. Customer wants to dive into the chart and see the monthly or hourly consumption).

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12	General Account Management	Ability to create or present a click through agreement to customers. Example: Require customer to sign an agreement that they will get delinquent information via this contact information. Also, that their information can be shared for City purposes.
13	General Account Management	Ability to remind customers to update their account information such as contact info (phone, mobile and email). Account information updated or verified every two years.
14	General Account Management	Display on the account of services provided, rates, fee amounts, etc.
15	General Account Management	Primary account owner can add authorized users with multiple levels of access to the account (example: Solid Waste access only, view financials, financially liable, ok to make changes)
16	General Account Management	Customer portal supports set up Parent/Child accounts for Landlord/Tenant/Townhome purposes (Multifamily)
17	General Account Management	Ability to enforce customer entry in City selected mandatory fields. (e.g. enforce customer to answer paperless & autopay - yes/no, contact type: cell, home, or "Don't have cell" for text msg).
18	General Account Management	Ability to migrate existing paperless customers and autopay customers from old portal to the new portal and not require a re-enrollment.
19	General Account Management	Ability to integrate with online payment processor. Provide ability for customer to set up auto pay at any time and provide easy customer access to check autopay status. Provide an easy process to update payment option (e.g. Credit card info, etc.) so no payment is missed. Also have auto pay tutorial (step by step) to help customers with this process.
20	General Account Management	Ability to setup and configure enrollments into any type of customer service program such as paperless billing or autopay.
21	General Account Management	Ability to configure online forms so customers complete mandatory data fields as needed (mailing address, other address & type, phone & type, contact & type, others) and seamlessly integrates with CIS Infinity to update the system of record.
22	General Account Management	Portal shall validate mailing address with the USPS address standards. Describe how the portal validates mailing addresses to avoid returned mail.
23	General Account Management	Portal shall provide account owner the ability to update account information at any time (phone numbers, mailing, authorized user) & allow city to designate what contact details are mandatory.
24	General Account Management	Portal shall validate email address and flag for the customer to double check.

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25	General Account Management	Portal shall provide tools for customer to self-diagnose reason for a high bill.
26	General Account Management	Portal shall have the ability for customer to enroll in bill notifications - bill due reminders, bill threshold alerts, estimated bill at the end of cycle alert.
27	General Account Management	Customer number in the city's CIS can have one or more account numbers. The portal shall support multiple accounts tied to one customer number.
28	General Account Management	Portal shall have the ability to update the utility billing system with any changes to account information made by account holders in the portal. The utility billing system is the system of record for all account information.
29	Solid Waste Account Management	Solid Waste - Display assigned containers, size and serial number, trash & recycle pick up days
30	Solid Waste Account Management	Ability to schedule customer requested items for examples: Ability to schedule bulk pickup on specified days.
31	Solid Waste Account Management	Ability to request and schedule a container repair(s).
32	Solid Waste Account Management	Portal accommodates alley way customer accounts (identified with an alley container)
33	Payments/ Transactions	Ability to pay multiple accounts with one payment (multiple meters)
34	Payments/ Transactions	Ability to pay multiple Chandler fees with one payment (e.g. Airport hanger, utility bill, business registration)
35	Payments/ Transactions	Provide customers the ability to name Co-Customers and ability for either customer to pay
36	Payments/ Transactions	Real time transaction updates from what is entered into CIS (portal and CIS should sync automatically)
37	Payments/ Transactions	View transaction history - fees, payments (regardless where paid such as in person or bank bill pay), adjustments, credits, etc., including all information available from the utility billing system.
38	Payments/ Transactions	Ability to view historical payments and bill history data and is easily accessible to customers, including all information available from the utility billing system.

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39	Payments/ Transactions	Prominently display any credits or balance transfer on account. Describe where this is located.
40	Payments/ Transactions	Ability for the City's admin to control which transaction types to be displayed (reversals, AR reconciliations, etc.)
41	Payments/ Transactions	Ability for customers to request refunds if a credit balance is available and have the ability to inform the customer of the number of processing days for the refund.
42	Payments/ Transactions	Ability to integrate with third party bill print provider. Based on any limitations of the 3rd party bill print provider, ability for customer to print or download current and past bills.
43	Payments/ Transactions	Ability for customer to print or download year to date summary report of charges/charge types (export to Word Excel PDF)
44	Collections	Ability to display collections status if desired (disconnected, cash only, delinquent balance due, etc.)
45	Collections	Ability to auto-generate letter of credit.
46	Collections	Customers in delinquent status shall be prominently seen on the Dashboard and guide the customer to make a payment. Payment confirmation should also display when sent to the account owner.
47	Communications and Education	Ability for customers to set communication preferences - one or more texts, emails, or both.
48	Communications and Education	Ability for customer to select the language of their choice. Mandatory is English and Spanish. Other languages such as Vietnamese, Chinese/ Mandarin, Korean, Persian, French, Arabic are optional.
49	Communications and Education	Ability to draw customers into portal through personalized outbound communications and also personalized insights when logged into the portal.
50	Communications and Education	Ability to send out mass notification (via email and/or text) for Water Main Breaks or unplanned service interruptions (option to dismiss after read). These communications should also be seen prominently on the customers dashboard.
51	Communications and Education	Ability to send account specific notices and alerts display on customer's dashboard and have the option to dismiss after read.
52	Communications and Education	System notifications about the site is down shall redirect to a maintenance page informing customers about the site down issue.
53	Communications and Education	Portal shall provide the customer the ability to export their usage or bill data from the portal.

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54	Communications and Education	Ability to provide a link to the City's "Usage Calculator" which is a tool that can be used by the customer to estimate their bill if they fill their pool.
55	Conservation	Ability to encourage water conservation by presenting customers comparisons of usage behaviors to other customers in the same class. (Single family homes, multi-family homes, commercial, etc.)
56	Conservation	Ability to show customer water consumption forecast or projection for future periods
57	Conservation	Ability to configure campaigns and enrollments for conservation program offerings (e.g. rebate offerings, incentives, water audits, etc.) and provides access to available rebate forms (links).
58	Conservation	Ability for customer to control the view of their water usage graph e.g. Hourly, daily, weekly or monthly from AMI Data. The graphs shall have the ability to toggle on or off the temperature profile over the displayed period. Data shown in any graph shall be exportable or downloadable.
59	Conservation	Ability to provide proactive possible customer leak notifications or abnormal / high usage notifications.
60	Conservation	Ability to enforce an opt out leak notification program instead of an opt in program.
61	Conservation	Ability to market/promote programs, offerings and other educational items to encourage targeted (segmented) customers to participate.
62	Conservation	Ability to push out relevant conservation opportunities based on data about the customer such as seasonal watering tips and general conservation and program messaging (including links to water conservation website)
63	Conservation	Ability for customers to set a conservation goal and see an estimated savings on their bill if they achieve this goal.
64	Conservation	Ability to gamify water conservation programs to encourage neighborhoods, HOA etc. to conserve water.
65	Donations	Ability to integrate with utility billing system and payment processor to take donations to support residents who cannot pay their bills.
66	Donations	Ability to integrate with utility billing system and payment processor to donate to multiple non-profits and multiple types (round up, $1, $2, $5, any amount) (How will this work with Invoice Cloud who offers donations)
67	Donations	Ability for customers to view donation amounts & run their own annual donation report

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68	Service order management	Ability to configure forms to initiate a workflow for customers to initiate move in/move out/transfer or any customer requested actions online.
69	Service order management	At the initiation of a service order, the Portal shall validate location address entry and provide feedback to the customer about an address problem before service order is submitted.
70	Service order management	Create move in for a hydrant meter - Allow invalid addresses to be set up (override hydrant meters)
71	Service order management	Portal shall have move out customers verify the email address, contact number, and new forwarding address to send final bill or any refunds.
72	Service order management	On the dashboard, the portal shall display the service order status based on Infinity Mobile WOMS Statuses (e.g. Service Order 'en-route', 'on site', 'cancelled').
73	Service order management	Text to customer about a service order status - Submitted, Scheduled, Complete, On hold. Describe how this functionality works in the portal and what integrations are required to enable this capability.
74	Service order management	Service order status should sync automatically when updated
75	Support Tools	CSR Impersonator to see what customer is doing on their account while on the phone (similar to screen sharing)
76	Support Tools	Provide a CSR portal/module to support CSRs with responding to Customer questions and inquiries about their account or usage.
77	Support Tools	Ability to provide a chat and call features to support customer with questions
78	Support Tools	Provide an interactive self-help tool for customers navigating the portal

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EXHIBIT B
FEE SCHEDULE

Section 1: Pricing for hosted services and technical support

Item #	Description	Year 1	Annual Escalation (%)	Year annual escalation begins
1	Annual SaaS Fee	$175,000	3.0%	Year 2
2	Tax	$0	N/A	N/A

Section 2: Implementation, Setup and Configuration Services Fees

Item #	Description	Price
1	Implementation ePortal, eAdmin, eNotify and eNeighbor	$465,200.00
2	CEP – Dev/QA/Production Environment	Included
3	Travel Expenses	Reimbursable in accordance with allowable GSA expenses.

Section 3: Hourly Rates for change orders

Item #	Labor/ Role Description	Hourly Rate
1	i3 Verticals hourly rate for change orders	$160

Included within the SaaS fees are the following:

- Solution Hosting
- Maintenance
  - Patches
  - Refreshing environments
  - Updates
  - Bug Fixes
  - Service Packs
  - Integrations configured by i3 Verticals between i3 Vertical's ePortal and defined 3rd party system
  -
- Managed Services

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Implementation Milestone Payment Schedule

The following table describes the payment schedule for the implementation fees.

ID	Payment Milestone Description	Payment Amount	Payment Deliverable
1	Project Kickoff Completed	$26,583	Kickoff completed
2	Requirement Workshops Completed	$26,583	Workshops complete
3	Dev Environment Established	$26,583	ePortal Dev instances is delivered to city
4	ePortal Design Completed	$26,583	FDD Delivered
5	ePortal QA Environment Established	$26,583	ePortal QA instances is delivered to city
6	ePortal Prod Environment Established	$26,583	ePortal Prod instances is delivered to city
7	Go Live	$26,583	Go Live Plan delivered to City
8	**Recurring Monthly Project Delivery:**		
a	Project Delivery Fee Month 1	$23,260	Month 1
b	Project Delivery Fee Month 2	$23,260	Month 2
c	Project Delivery Fee Month 3	$23,260	Month 3
d	Project Delivery Fee Month 4	$23,260	Month 4
e	Project Delivery Fee Month 5	$23,260	Month 5
f	Project Delivery Fee Month 6	$23,260	Month 6
g	Project Delivery Fee Month 7	$23,260	Month 7
h	Project Delivery Fee Month 8	$23,260	Month 8
i	Project Delivery Fee Month 9	$23,260	Month 9
j	Project Delivery Fee Month 10	$23,260	Month 10
k	Project Delivery Fee Month 11	$23,260	Month 11
l	Project Delivery Fee Month 12	$23,260	Month 12
	Total Implementation Fees:	**$465,200**	
	Estimated Travel (up to 13 person trips)	$25,752	As needed on actuals

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EXHIBIT C
DISASTER RECOVERY PLAN

An excerpt of the i3 Verticals Disaster Recovery Plan is included below. The entire Disaster Recovery Plan will be provided to the city following agreement execution.

i3 VERTICALS

Hosted Systems

Disaster Recovery Plan

Version 1

www.i3verticals.com
40 Burton Hills Blvd., Ste. 415, Nashville, TN 37215 • phone: (248) 948-8100 • fax: (248) 948-8146

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Revision History

Version	Date	Description	Author

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1.0 Overview

1.1 Policy

This Disaster Recovery Plan (DRP) delineates our policies and procedures for technology disaster recovery and summarizes our recommended procedures. In the event of an actual emergency, modifications to this document may be made to ensure the physical safety of our people, our systems, and our data.

Our mission is to ensure information system uptime, data integrity and availability, as well as business continuity. To this end, the following policy statement applies:

- The company shall develop a comprehensive IT disaster recovery plan.
- The disaster recovery plan should cover essential and critical infrastructure elements, systems and networks, in accordance with key business activities.
- The disaster recovery plan should be periodically tested in a simulated environment to ensure that it can be implemented in emergency situations and that the management and staff understand how it is to be executed.
- All staff must be made aware of the disaster recovery plan and their own respective roles.
- The disaster recovery plan is to be kept up to date to take into account changing circumstances.

1.2 Objectives

The objectives of the DRP is to resume critical business functions within the Organizations' Recovery Time Objectives.

The specific objectives of this disaster recovery plan are to:

- Immediately mobilize a core group to assess the technical ramifications of a situation.
- Set technical priorities for the recovery team during the recovery period.
- Minimize the impact of the disruption to the impacted features and groups.
- Stage the restoration of operations to full processing capabilities.
- Enable rollback operations once the disruption has been resolved if determined appropriate by the recovery team.

To achieve these objectives, the DRP is structured based on the following principles:

- Formal preparation whenever possible
- Planning for a worst case scenario
- Carefully assessing the potential impact on the organization
- Minimizing the number of people involved in the response
- Allocating decision making to the appropriate levels of authority
- Communicating in an accurate, efficient and secure manner

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- Documenting the response activities properly

1.3 Scope

The Disaster Recovery plan addresses a worst-case scenario involving loss of or loss of access to facilities housing critical information systems managed by i3-ImageSoft, but it is adaptable to a lesser disruption, such as the loss of a single area or piece of equipment. This plan includes the recovery of i3-ImageSoft managed systems supporting the Michigan State Housing Development Authority. Systems/applications that fall within the recovery scope of this policy are documented in Appendices A, C, E and F. Other specific division/system/application recovery plans, including business continuity beyond the applications specified in Appendix A are not inclusive of this plan.

1.4 Assumptions

Because the plan addresses the worst case scenario, the following assumptions are made in developing and maintaining the plan:

- In a disaster situation, protection of people is of the highest priority. No recovery activities should be considered until the safety of everyone present is ensured.
- A complete disruption of facilities has occurred, and there is no access to equipment used to host in scope applications and data. Recovery from anything less than a complete disruption will be achieved by using appropriate portions of this plan.
- Staff members are available to respond to the disaster or alternate staff members with adequate knowledge will be available to implement recovery.
- All vital records, data, and files required to implement resumption of critical functions have been backed up or replicated and stored off-site on a regular basis.
- Some staff members will work from their homes via remote communications.
- Vital records, systems and application may be replicated or restored in one or more other Azure facilities.
- The routine day-to-day operation of the systems at the Disaster Recovery Site will be the responsibility of i3-ImageSoft personnel as it is now under normal conditions.
- Recovery Team personnel will be familiar with their responsibilities and the contents of this plan.
- The command center operations will be set up in at i3-ImageSoft headquarters in Royal Oak, MI.

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2.0 Recovery Strategy

2.1 Overview

A disaster is defined as an event that disrupts the business functions of an organization and inhibits its ability to perform normal operations. For the purposes of this DRP, any disruption with a recovery estimate greater than five contiguous business hours will be considered a disaster and will be subject to the provisions in this document.

2.2 Disaster Recovery Coordinator and Disaster Declaration

The Disaster Recovery Coordinator (DRC) will manage the response to any disaster. After receiving sufficient information – including the anticipated duration of the outage – the DRC will then determine if it is necessary to invoke, or not to invoke, the DRP.

2.3 Recovery Priorities Overview

The following tables represent the recovery priorities and objectives. The Recovery Time Objective (RTO) is defined as the time between the declaration of a disaster and the resumption of processing for the system / application. The Recovery Point Objective (RPO) is defined as the amount of lost data that would be un-recoverable when processing is resumed. RTO and RPO will be assigned to each critical information system supporting Customer. The tiers are:

Tier	RTO	RPO
1	4 hours	1 hour
2	Less than one day	Less than one day
3	Three business days	Two days
4	One week	Two days

Recovery Tiers for each in-scope application are defined in Appendix A.

Note that in the event of a Tier 1 disaster, productivity loss could be measured as high as 5 hours (4 hours of RTO + 1 hour RPO). For example, if a disaster event occurred at noon, applications may not be available until 4pm. The data recovered would be equal to what was available in the system at 11am. Therefore, total productivity loss (measured in hours) would equal the total hours between 11am and 4pm, or 5 hours.

2.4 Organization

The DRP program is based on a team approach. The Emergency Management Team (EMT) is comprised of select group leaders from Customer and i3-ImageSoft. The recovery efforts are directed and coordinated by the Disaster Recovery Coordinator (DRC).

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EXHIBIT D
EXIT PLAN

For purposes of this Exit Plan, the following terms shall bear the meanings set out below:
"**Replacement Services**" means any services which are substantially similar to the Services and which Client or one of its Affiliates procures in substitution for the Services following the termination of this Agreement, whether those services are provided internally and/or by any third party.
"**Replacement Supplier**" means any third party service provider of Replacement Services appointed by Client or one of its Affiliates from time to time.
"**Termination Assistance Fees**" means the charges payable by the Licensee for the Termination Services as shall be set out in the Exit Plan.
"**Termination Period**" means the period of 12 months (which may be reduced at the Licensee's discretion by giving Licensor 60 days' written notice) commencing on the date of service of any notice of termination of this Agreement.
"**Termination Services**" means the termination transition services to be provided under the Exit Plan. In addition, Services under this Agreement shall be provided in accordance with the terms of this Agreement during the Termination Period.

1. Provided that Client and its Affiliates are in compliance in all material respects with their obligations under this Agreement, for the Termination Period, Provider shall provide all reasonable and necessary transition assistance to Client and its Affiliates to allow, as chosen by Client, the orderly transfer and replacement of the Services by Client or a Replacement Supplier, or their respective Representatives. Such transition may entail the substitution of Web sites, communication networks, software, servers, and reports, and/or the termination or modification of the Services in whole or in part. Provider and Client shall cooperate with each other in the production of the Exit Plan in accordance with this Schedule with a view to completing the Exit Plan in a timely manner.
2. As soon as reasonably practicable after any notice of termination is served in accordance with this Agreement, the Parties shall:
   (a) Agree upon a date (which shall be no later than 14 calendar days after the date of such meeting) for the joint production and circulation of a first draft of the Exit Plan; and
   (b) Appoint a senior management individual of each of the Parties, each of whom shall act as a point of contact for the Termination Period and to deal with all matters relating to termination of both the Services and/or any license relating to the Licensed Materials granted under this Agreement.
3. The Exit Plan shall:
   (a) Address the scope of the Termination Services, Termination Assistance Fees and the service levels applying to the Termination Services. Unless otherwise agreed by the parties, each party shall continue to meet its respective obligations under this Agreement during the Termination Period. Provider acknowledges that it is important to Client to effect an orderly transition in-house or to a Replacement Supplier of the Replacement Services and, in this respect, it is also important that there is no degradation in the provision of the Services. All Termination Assistance Fees shall be chargeable as stated in the Exit Plan; and
   (b) Describe more particularly the process by which the parties shall return or cease to use each other's Confidential Information; and
   (c) Address the project management of the Termination Services and identify relevant individuals who shall manage the provision and implementation of the Termination Services.
4. Upon request by Client during the Termination Period, Provider shall provide to Client any reasonable documentation describing, explaining or which would otherwise assist Client in inviting third party service providers to supply the same or similar software and/or services (or any part of the same) and negotiating alternate arrangements with those third parties with regard to the provision of

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Replacement Services. Any such provision shall be made subject to reasonable licensing and/or confidentiality obligations which shall be agreed by the parties.

5. Provider shall provide or make available to Client detailed information, data, and records reasonably necessary for the provision of services similar to the Services and/or any software which may be used by Client or a Replacement Provider in lieu of the Software post termination of this Agreement. Any such availability shall be made subject to reasonable licensing or confidentiality obligations which shall be agreed by the parties.
6. The Parties shall agree any other reasonably necessary provisions to facilitate a smooth and orderly transition from Provider to Client or the Client's nominated Replacement Supplier.

Notes

All schedules referred to in this form must be drafted by the user and are not supplied.

EXHIBIT E
INSURANCE REQUIREMENTS

A. <u>Minimum Scope and Limits of Insurance</u>: Contractor must provide coverage with limits of liability not less than those stated below.

1. <u>Commercial General Liability – Occurrence Form</u>
   Said insurance must also include coverage for products completed operations, independent contractors, personal injury, property damage, and advertising injury.

Products – Completed Operations Aggregate	$4,000,000
Each Occurrence	$2,000,000

   The policy must be endorsed to include the following additional insured language: "The City of Chandler, its agents, representatives, officers, directors, officials, employees, and volunteers shall be named as an additional insured with respect to liability arising out of the activities performed by Contractor." This endorsement may not contain an exclusion or limitation of completed operations coverage as regards the additional insured except with respect to the stated aggregate limits of liability.

   The policy may not exclude the explosion/collapse/underground ("xcu") hazard.

2. <u>Worker's Compensation and Employers' Liability</u>

Workers' Compensation	Statutory
Employers' Liability	
Each Accident	$1,000,000
Disease – Each Employee	$1,000,000
Disease – Policy Limit	$1,000,000

   Policy shall contain a waiver of subrogation against the City of Chandler.

3. <u>Tech E&O and Network Security & Privacy Liability Insurance (Cyber)</u>
   In addition to the insurance requirements set forth in the Agreement, Contractor agrees to provide the following insurance coverage and limits of coverage as part of this Agreement.

Per Loss	$5,000,000
Aggregate	$5,000,000

   The policy shall cover professional misconduct or lack of ordinary skill for those positions defined in the Scope of Services of this Agreement. In the event that the professional liability insurance required by this Agreement is written on a claims-made basis, Contractor warrants that any retroactive date under the policy shall precede the effective date of this Agreement; and that either continuous coverage will be maintained for an extended discovery period will be exercised for a period of two (2) years beginning at the time work under this Agreement is completed. If such insurance is maintained on an occurrence form basis, Contractor shall maintain such insurance for an additional period of one (1) year following termination of Agreement. If such insurance is

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maintained on a claims-made basis, Contractor shall maintain such insurance for an additional period of three (3) years following termination of the Agreement. If Contractor contends that any of the insurance it maintains pursuant to other sections of this clause satisfies this requirement (or otherwise insures the risks described in this section), then Contractor shall provide proof of same. The insurance shall provide coverage for the following risks:

3.1 Liability arising from theft, dissemination and / or use of confidential information (a defined term including but not limited to bank account, credit card account, personal information such as name, address, social security numbers, etc. information) stored or transmitted in electronic form.

3.2 Network Security Liability arising from the unauthorized access to, use of or tampering with computer systems including hacker attacks, inability of an authorized third party, to gain access to your services including denial of service, unless caused by a mechanical or electrical failure.

3.3 Liability arising from the introduction of a computer virus into, or otherwise causing damage to, a customer's or third person's computer, computer system, network or similar computer related property and the data, software, and programs thereon.

3.4 Additional Requirements: The policy shall provide a waiver of subrogation.

B. **Additional Insurance Requirements**: The policies must contain, or be endorsed to contain, the following provisions: Contractor's insurance coverage must be primary insurance and non-contributory with respect to the obligations that Contractor has undertaken under this Agreement. The policies must contain a severability of interest clause and waiver of subrogation against the City, its officers, officials, agents, volunteers, and employees, for losses arising from work performed by the Contractor under this Agreement.

C. **Notice of Cancellation**: Each insurance policy required by the insurance provisions of this Agreement must provide the required coverage and must provider thirty (30) days prior written notice of cancellation to the City except for non-payment of premium for which a ten (10) day notice will be provided. Such notice must be sent directly to the addresses listed below and must be sent by certified mail, return receipt requested:

City of Chandler
Attention: Purchasing Division
P.O. Box 4008, Mail Stop 901
Chandler, Arizona 85244-4008
Phone: (480) 782-2400
Email: purchasing@chandleraz.gov

With a copy to: Office of the City Attorney
Attention: Risk Management
175 South Arizona Avenue
P.O. Box 4008 Mail Stop 602
Chandler, Arizona 85244-4008

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Phone: (480) 782-4640
Fax: (480) 782-4652
Email: legal.notices@chandleraz.gov

D. **Acceptability of Insurers**: Insurance is to be placed with insurers duly licensed or approved unlicensed companies in the State of Arizona and with an "A.M. Best" rating of not less than A- VII. City in no way warrants that the above-required minimum insurer rating is sufficient to protect Contractor from potential insurer insolvency.

E. **Verification of Coverage**: Contractor must furnish City with certificates of insurance (ACORD form or equivalent approved by City) as required by this Agreement. The certificates for each insurance policy are to be signed by a person authorized by that insurer to bind coverage on its behalf. All certificates and endorsements are to be received and approved by City before work commences. Each insurance policy required by this Agreement must be in effect at or prior to commencement of work under this Agreement and remain in effect for the duration of the Agreement. Failure to maintain the insurance policies as required by this Agreement or to reasonably provide evidence of renewal is a material breach of this Agreement. All certificates required by this Agreement must be sent directly to the City of Chandler Information Technology Department with a copy to Risk Management as the addresses listed in Section C. The Agreement number and description are to be noted on the certificate of insurance. At City's request, Contractor must make certified copies of all insurance policies required by this Agreement available for City's review through a representative and at Contractor's most proximate business location.

F. **Approval**: Any modification or variation from the insurance requirements in this Agreement must have prior approval from the Office of the City Attorney, whose decision will be final. Such action will not require a formal contract amendment but may be made by administrative action

City Council Memorandum Public Works & Utilities Memo No. UA25-027

Date: November 04, 2024
To: Mayor and Council
Thru: Joshua H. Wright, City Manager
Andy Bass, Deputy City Manager
John Knudson, Public Works and Utilities Director
From: Jeremy Abbott, Public Works & Utilities Assistant Director
Subject: Agreement No. PW3-925-4631, Amendment No. 4, with Hazen and Sawyer, P.C., for the Water System Upgrades Program Consultant Services

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Proposed Motion:

Move City Council approve Agreement No. PW3-925-4631, Amendment No. 4, with Hazen and Sawyer, P.C., for the Water System Upgrades Program Consultant Services, increasing the agreement amount by $11,598,345.

Background/Discussion:

The Pecos Surface Water Treatment Plant (PSWTP), located at 1475 East Pecos Road, was put into service in 1989. The current capacity of the PSWTP is 60 million gallons per day (MGD). The water distribution system includes over 1,200 miles of water mains, 19 reservoir and booster sites, and 30 active drinking water wells, and also receives water from the Santan Vista Water Treatment Plant in Gilbert (owned jointly by the City of Chandler and the Town of Gilbert).

The Water System Upgrades Program is intended to leverage outside consultants as extensions of staff to expedite the short and long-term planning for improvements at PSWTP. On October 19, 2023, City Council approved Agreement No. PW3-925-4631 with Hazen and Sawyer, P.C., for the Water System Upgrades Program consultant services. Through the work to date, five major process improvements have been identified to enhance the maximum process and hydraulic throughput of the PSWTP. These improvements are structural rehabilitation of filters 9 through 12, post-filter granular activated carbon contactors, chlorine dioxide facility, equalization pump improvements, and a new dewatering building with modernized and energy efficient equipment. Amendment

No. 4 includes program management, preliminary and detailed design, permitting assistance, and construction management services for the structural rehabilitation of filters 9 through 12. An additional 410 calendar days have been added for a revised total of 860 calendar days to final completion, following the Notice to Proceed.

A related Pre-Construction Services Construction Manager at Risk Contract and a Construction Manager at Risk Contract with Archer Western Construction, LLC, for the Water System Upgrades Program, are also scheduled for this City Council meeting.

Evaluation:

On October 19, 2023, City Council approved an agreement with Hazen and Sawyer, P.C., for the Water System Upgrades Program consultant services, in an amount not to exceed $695,720. City Council approved Amendment No. 1 on February 22, 2024, adding additional services, extending the term of the agreement, and increasing the amount of the agreement by $149,680. Amendment No. 2 added additional services, extended the term of the agreement, and increased the amount of the agreement by $89,720, and was administratively approved. Amendment No. 3 added additional services, extended the term of the agreement, and increased the amount of the agreement by $98,750, and was administratively approved. Amendment No. 4 includes additional services, extends the term of the agreement, and increases the amount of the agreement by $11,598,345. Staff recommends this amendment to the agreement.

Financial Implications:

This Amendment No. 4 is in the amount of $11,598,345, for a revised total contract amount not to exceed $12,629,215.

Fiscal Impact

Account No.	Fund Name	Program Name	Dollar Amount	CIP Funded Y/N
601.3820.6718.6WA210	Water Bond	Water Treatment Plant Improvements	$11,598.345.00	Y

Attachments

Amendment

Docusign Envelope ID: D4A3F3E4-74AE-41A4-A222-FD75C1902BE0

AMENDMENT NO. 4 TO
CONSULTANT SERVICES AGREEMENT

Water System Upgrades Program
Project No. PW3-925-4631

Council Date: November 7, 2024

THIS AMENDMENT NO. Four ("Amendment No. 4") to the professional services agreement dated October 24, 2023 (the "Agreement") is made by and between the City of Chandler, an Arizona municipal corporation, ("City") and **Hazen and Sawyer, P.C., a New York professional corporation** ("Consultant"), on this _____ day of _____, 2024 ("Effective Date" by Clerk). (City and Consultant may individually be referred to as "Party" and collectively referred to as "Parties").

RECITALS

A. The Parties entered into the Agreement for: **Consultant Services** ("Services") for the **Water System Upgrades Program** project.

B. The Parties have determined that it is necessary and desirable for the Consultant to perform additional services for the City under the terms and conditions set forth in this Amendment No. 4 and the Agreement.

AGREEMENT

NOW, THEREFORE, in consideration of the premises and mutual promises contained in the Agreement and this Amendment No. 4, the Parties agree to amend and modify the Agreement as follows.

SECTION I – CONSULTANT'S SERVICES

The Consultant's Services are modified as described in the Exhibit "A" attached to and made part of this amendment by reference.

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SECTION II – PERIOD OF SERVICE

The Period of Service is increased by 514 calendar days for a revised total of 964 calendar days.

SECTION III – PAYMENT OF COMPENSATION AND FEES

The Fees are increased by $11,598,345 and will be payable in accordance with Exhibit B attached to and made part of this amendment by reference, for a revised total not to exceed $12,629,215.

SECTION IV – CONFLICT AMONG DOCUMENTS

The Agreement, this amendment, and any previous amendments constitute the complete agreement between the Parties concerning the subject matter of the Agreement and replace any prior oral or written communications between the Parties. If a conflict or ambiguity arises between the Agreement and this amendment, the instrument in the following order prevails and controls: (1) this amendment; (2) any previous Amendments from most recent to oldest; and (3) the Agreement.

SIGNATURE PAGE TO FOLLOW

Docusign Envelope ID: D4A3F3E4-74AE-41A4-A222-FD75C1902BE0

IN WITNESS WHEREOF, the Parties hereto have caused this Amendment No. 4 to be duly executed. Each Party warrants and represents that its respective signatories whose signatures appear below have been and are on the date of signature duly authorized to execute this Amendment No. 4.

"CITY" CITY OF CHANDLER

MAYOR

RECOMMENDED BY:

Jeremy Abbott
Public Works and Utilities Assistant Director

APPROVED AS TO FORM:

City Attorney JMB

ATTEST:

City Clerk Seal

"CONSULTANT"
Hazen and Sawyer, P.C.

Curtis Courter October 11, 2024

Signature Date

Curtis Courter

Print Name

Vice President

Title

ccourter@hazenandsawyer.com

Signer Email Address

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These changes result in the following adjustments of Agreement amount and/or time:

Amendment authorized by Owner name: Danny Sargent	**Date:** 10/9/2024	
Consultant email: ccourter@hazenandsawyer.com		
Original Agreement amount:	$695,720	
Previous Amendment(s) total:	$335,150	
Last Agreement amount approved by Council:	$845,400	
This Amendment:	$11,598,345	
This Amendment + previous Amendment(s) not approved by Council total:	$11,783,815	
Revised Agreement total:	$12,629,215	
Council Approval Required (yes indicates approval required)	**Yes**	**No**
Amendment(s) total over $100,000:	☒	☐
Amendment(s) total causes Agreement to exceed $100,000:	☒	☐
Agreement Time		
Agreement time prior to this Amendment (including previous amendments):	450 Calendar Days	
Net change resulting from this Amendment:	514 Calendar Days	
Revised Agreement time (including this Amendment):	964 Calendar Days	
Council Approval (if applicable)		
Council Approval Date: 2/22/2024 Item No. 27		

cc: Project Manager, Consultant, Owner, File

Docusign Envelope ID: D4A3F3E4-74AE-41A4-A222-FD75C1902BE0

EXHIBIT A
SCOPE OF WORK

Project Description

The City of Chandler (City) has hired Hazen and Sawyer (Consultant) to serve as Program Manager for the Water System Upgrades Program. This Program consists of the planning, design, and construction phases.

During the planning phase, several improvement projects for the Pecos Surface Water Treatment Plant (SWTP) were identified and recommended for meeting the program objective to reliably operate the plant at 60MGD capacity while also addressing the water quality challenges with respect to high total organic carbon in the finished water. The project team decided to move forward with the top 5 priority projects, listed below and numbered by Facility as shown in Appendix A and described in the Strategic Execution Plan developed as part of planning phase of the Program.

- **42.1 Filters 9-12 Rehab**: Design for this project is currently underway per Amendment 3. This scope amendment includes Construction Management (CM) services for this project, which is planned for construction from November 2024 – May 2025.
- **43.1 Post Filter GAC Contactors**: This project involves the construction of new concrete GAC contactors with a nominal capacity of 30 mgd, influent pump station, ancillary components, site improvements, yard piping connections, and a new electrical building. Preliminary and detailed design for this system is included in this scope.
- **86.1 Chlorine Dioxide**: A new Chlorine Dioxide facility will include, but not be limited, to chlorine dioxide generator equipment, storage tanks for necessary chemicals, ancillary mechanical equipment, electrical equipment, and a building to house the equipment. Site improvements and yard piping connections will be included. Design and a pilot project to verify efficacy are included in this scope.
- **65.1A EQ Pumps:** This project includes the replacement and improvement of the recycle pumps located within Equalization Basin Nos. 1 and 2 and related piping improvements. Preliminary and detailed design for this project is included in this scope.
- **75.1D Dewatering Building:** This project includes the preliminary and final design of a new dewatering facility, which includes mechanical dewatering equipment housed within a pre-fabricated building, ancillary mechanical equipment (e.g. feed pumps, polymer pumps, dry solids conveyance system), electrical equipment, HVAC, plumbing, and site and yard piping improvements and connections.

This project will utilize the Construction Manager at Risk (CMAR) delivery method. There are 3 Guaranteed Maximum Price (GMP) packages anticipated as shown in list below. The final number of GMPs will be determined in coordination with the CMAR.

- GMP 1: Construction of 42.1 Filters 9-12 Rehab
- GMP 2: Long Lead Package

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- GMP 3: Balance of Construction

This scope covers design services for the entire project and Program Management services, Permitting and Construction Management services through GMP 2.

The Consultant will perform the following tasks as part of this scope:

- Task 1: Program Management (Through GMP 2 – Long Lead Package)
- Task 2: Preliminary Design
- Task 3: Detailed Design
- Task 4: Permitting (Through GMP 2 – Long Lead Package)
- Task 5: CMAR Coordination During Design (Through GMP 2 – Long Lead Package)
- Task 6: GMP 1 (Filters 9-12) CM Services

1. Program Management (Through Completion of GMP2)

As Program Manager, the Consultant will oversee the design and CM services as outlined in this scope and serve as the City Project Manager for the CMAR. These services include but are not limited to contractor/vendor solicitations, selections, negotiation, contract preparation, pre-submittal meetings, overall schedule and budget tracking, coordinating design reviews, permitting, overseeing construction, providing inspections, startup support and commissioning. The current scope for Task 1 defines the details of activities leading up to GMP 2 anticipated in July/August 2025. The City will issue future amendments for the period beyond GMP2.

1.1 Program Management and Coordination Activities

Consultant will perform Program Management and related coordination activities, including monitoring and tracking schedule, budgets for Program tasks. Consultant will provide on-site presence of the Program Manager (PM) and/or Deputy Program Manager (DPM) for the duration of the project for minimum 6 hours a day, 5 days a week, excluding weekends and City holidays.

1.2 Program Execution Plan Update

Consultant will update the Program Execution Plan for the project scope herein and distribute to all project team members. This work plan will include the project purpose and objectives, scope of work, detailed project delivery schedule, deliverables, budget, organizational chart and team contact information, document management system and the communication plan. A CAD/BIM execution plan will also be developed and included as an appendix to the Program Execution Plan. Consultant will update the plan with any major changes as the project progresses.

1.3 Project Kickoff Meeting and Progress Meetings

Consultant will conduct an initial project kick-off meeting/chartering session with the stakeholders at the City's offices and the CMAR to review the project goals, objectives, scope of work, project schedule, and roles and responsibilities. Meeting minutes will be prepared and distributed to document the meeting.

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Consultant will conduct regular progress meetings with stakeholders at the City and CMAR to review the development of the project. Progress meetings will occur biweekly. Meetings may be combined with other design and coordination meetings identified in Tasks 2-5. Key takeaways and action items lists will be prepared and distributed to document the meeting.

Team conference calls and e-mail exchanges will be conducted as needed with the City to support communication throughout the project to facilitate efficient delivery of the task elements. In addition, PM and/or DPM will be in-person at Chandler offices coordinating and conducting meetings with City staff and the Consultant team as necessary.

1.4 Progress Reports

Consultant will prepare and distribute monthly progress reports to the City throughout the course of the project. The progress reports will summarize the work that has been completed during the preceding month and any key action items for the City in the upcoming month. These reports will be delivered as part of the monthly invoice packet.

1.5 Quality Control

Consultant will institute and comply with the Design Quality Control Plan for the project.

Design Quality Control Plan will follow Consultant's standard quality program that is implemented at all stages of project execution. The program is divided into two parts: quality assurance and quality control.

- Quality Assurance (QA) - Actively monitored QA requirements establish project-related policies, procedures, standards, training, guidelines, and systems to ensure high quality deliverables.
- Quality Control (QC) - The QC program includes project-specific requirements and features a review of processes and deliverables by experts outside of the core team.

Consultant's Project Manager and Regional QC Manager will enforce QA/QC requirements and ensure the implementation of the Project QC Program. Quality Control reviews will be performed ahead of each milestone deliverable by subject matter experts in each discipline that are employed by the firm, but that are not part of the core project team. QC comments and design team responses will be documented and made available to the City upon request.

QAQC hours are included in the individual tasks within Tasks 2-7.

Task 1 Assumptions:

- Progress meetings will be 1 hour long and will be held biweekly or combined with project milestone meetings; all meetings will have a virtual option.
- Duration = 9 months from NTP
- City will provide a desk/office for PM and DPM at the City's offices.

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Task 1 Deliverables:

- Meeting agenda and key takeaway notes with action items for each progress meeting
- Project execution plan update including project schedule with major tasks and key milestones
- Monthly progress reports along with invoice

2. Preliminary Design

The preliminary design task includes investigations to define design criteria, Preliminary Design Report development, and 30% schematic (preliminary) design development. Preliminary design tasks listed under Task 2 will be performed for the following projects, as described in the introduction, unless otherwise noted in individual tasks.

- 43.1 Post-Filter GAC Contactors
- 86.1 Chlorine Dioxide
- 65.1A EQ pumps
- 75.1D Dewatering Building

2.1 Data Review and Site Visits

Consultant will review existing documentation relevant to the design, including the following:

- Existing as-builts and reports
- City policies, regulations, standards, design manuals and requirements
- Investigate existing conditions and verify accuracy of drawings or other information furnished by City.

Up to (2) site visits are assumed for investigation of field conditions.

Labor hours for this task are included in design tasks (Task 2.4 and Task 3).

2.2 Geotechnical Investigation

Consultant will perform geotechnical investigation through a sub-consultant, which includes the drilling and sampling of soil and pavement borings to determine subsoil conditions. Consultant will also coordinate with the geotechnical subconsultant to establish geotechnical design data for construction of new facilities identified in this scope. Geotechnical investigation is limited to the areas shown in the drawing index site plan in Exhibit B. A draft Geotechnical Report will be provided to the City and CMAR for review. Any comments received will be addressed and incorporated into the final Geotechnical Report.

Labor hours related to coordination and management of geotechnical subconsultant included in design tasks (Task 2.4 and Task 3).

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2.3 Chlorine Dioxide (ClO2) Pilot

For project 86.1 Chlorine Dioxide, a pilot will be performed to develop a cost/benefit analysis of implementation of chlorine dioxide (ClO2). Bench testing indicated that ClO2 may be an effective preoxidant to reduce TTHM formation in conjunction with the Post-Filter GAC Contactors, and may reduce GAC operation and maintenance costs by reducing media change out frequency. Pilot testing will inform the decision to implement chlorine dioxide at full scale. However, preliminary (30%) design of ClO2 system is included in Task 2.5 and detailed design is included in Task 3.

2.3.1 Pilot Set up and Coordination

ClO2 pilot set up includes a 4-column pilot skid system with feed pumps and with a chlorine dioxide feed. Estimated material cost for the pilot skid is included in the fee. Consultant will procure materials and assemble the skids with assistance from plant operations staff. Consultant will coordinate pilot system set up and develop a pilot plan.

2.3.2 Pilot Monitoring

Consultant will check pilot 5 days a week for the duration of the pilot to monitor operation and collect data in accordance with the pilot plan. Assumes a maximum of 10 hours per week for one person to monitor and check pilot. Pilot is anticipated to operate for one year.

2.3.3 Data Analysis and Reporting

Consultant will analyze up to one year of operational data and present results to the City. This analysis will be used to determine whether to proceed with detailed design and construction of 86.1 Chlorine Dioxide system. Results will be documented in a technical memorandum.

2.4 30% Design

Consultant will prepare design submittal milestones in accordance with the Interim Design Submittals list provided in Appendix B. The Schematic 30% Design will include the items noted for the 30% submittal in Appendix B.

2.4.1 Preliminary Design Report (PDR)

Consultant will prepare a draft and final Preliminary Design Report (PDR) documenting the preliminary design for the projects identified for Task 2. The preliminary design includes development of process and equipment design criteria and sizing and will form the basis of design for preparing the detailed design documents. The PDR will include the following:

- Documentation of design criteria and preliminary schematics for treatment processes and ancillary facilities, including civil, mechanical, architectural, structural, electrical, instrumentation and controls (I&C), HVAC, fire protection, and plumbing preliminary design criteria.

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- Process flow diagrams, preliminary hydraulic profile, and preliminary schematics for the treatment processes.
- Drainage report and preliminary Grading and Drainage plan (report to be included as an addendum to the PDR)
- Permitting matrix with requirements and timelines for Maricopa County Environmental Services Department (MCESD) and City permits.

2.4.2 30% Design Documents

The 30% design documents will establish the design scheme and includes preparation of working drawings. The 30% design documents will include the following:

- Consultant will develop the drawing basefile from a topographic survey to be performed by the CMAR. It is assumed that CMAR will coordinate and perform the survey following Hazen's CAD survey requirements.
- Prepare 30% design drawings in accordance with the Interim Design Submittals list in Appendix B. Cover sheet to be provided by City.
- Submit to City's Project Manager and CMAR for comment electronic drawing set in pdf format with structural calculations if applicable.
- Preliminary drawing list and Technical Specification table of contents.
- List of long lead equipment to be identified by the CMAR contractor.
- Draft technical specifications for select long lead items.

2.4.3 Design Workshop and Comment Review

Consultant will conduct a design workshop and address City and CMAR design review comments as described below:

- Conduct a workshop with City and its representatives (including CMAR contractor). Staff will collaborate with designers to verify plans and mutually finalize design concepts that will be carried forward to the Long Lead Package and 60% design.
- The final schematic design will incorporate City's and CMAR's comments. This will be used as the design basis for Long Lead Package and rest of the design.

Task 2 Assumptions

- Drawings will be developed using Hazen's drafting and CADD standards. Cover page will use the City's standard cover page. Drawings will use the City's standard cover sheet and be in accordance with the City's Engineering Design Standards Manual.
- Technical Specifications will be prepared using the Division 1 through 50 format.
- Level of effort for this design phase has been developed based on the preliminary drawing list shown in Appendix C.
- DOC and TOC samples collected for the ClO2 pilot will be analyzed by the City's lab.
- All deliverables to be submitted electronically in PDF format unless otherwise noted.

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Task 2 Deliverables

- ClO2 Pilot Plan
- ClO2 Pilot Results Technical Memorandum
- Draft and Final Geotechnical Report
- Draft and Final Preliminary Design Report
- 30% Design Drawings in 11 x 17 format
- 30% Technical Specifications

3. Detailed Design

Detailed design tasks listed under this task assume the following projects are included, as described in the introduction, unless otherwise noted in individual tasks.

- 43.1 Post-Filter GAC Contactors
- 86.1 Chlorine Dioxide
- 65.1A EQ pumps
- 75.1D Dewatering Building

Adjustments for any changes in the project list included for detailed design and construction will be addressed in a scope amendment.

3.1 Long Lead Package

Based on the approved 30% Design Documents and any adjustments authorized by City in the program, schedule or construction budget, Consultant will prepare, for approval by City, a long lead design package for the CMAR to prepare GMP 2 for procurement of long lead equipment. Long lead package will include technical specifications and design drawings required for suppliers to provide submittal packages for procurement. Long lead package includes the following:

- Prepare technical specification for long lead items identified by the CMAR contractor and Consultant.
- Prepare technical specifications referencing and in accordance with City General Conditions.
- Perform code reviews and implement requirements into the long lead design documents.
- Submit the design drawings and technical specifications electronically in pdf format to CMAR and City for review. Include original redline drawings and comments received from 30% review along with a review summary indicating action taken for items included in long lead package.
- Conduct workshop with City and CMAR contractor to review and address comments.
- Prepare final, stamped long lead drawings and specification package incorporating any comments from the City and CMAR for long lead equipment procurement.

Task 3.1 Deliverables

- Draft Long lead drawings
- Draft Long lead specifications

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- Long Lead Design Review Meeting & Workshop presentation slides
- Comment resolution log in Bluebeam Studio
- Final long lead drawings
- Final long lead specifications

3.2 60% Design

Based on the approved 30% Design Documents, Consultant will prepare sixty percent (60%) design documents in accordance with the Interim Design Submittals list in Appendix B, with the following elements:

- Prepare plans, elevations, sections, schedules and notes as required to address civil, architectural, structural, mechanical, electrical, instrumentation and controls, HVAC, fire, plumbing and special systems.
- Perform code reviews and implement requirements into the design documents.
- Prepare technical specifications referencing and in accordance with City General Conditions.
- Submit the design drawings and technical specifications electronically in pdf format to City's Project Manager and CMAR for review. Include original redline drawings and comments received from 30% design and Long Lead package along with a review summary indicating action taken.
- Conduct workshop with City and CMAR contractor to review and address comments.

Task 3.2 Deliverables

- 60% design drawings
- 60% technical specifications
- 60% Design Review Meeting & Workshop presentation slides
- Comment resolution log in Bluebeam Studio

3.3 90% Design

Based on the approved 60% Design Documents, Consultant will develop ninety percent (90%) design documents in accordance with the Interim Design Submittals list in Appendix B, with the following elements:

- Prepare drawings and technical specifications as required to be able to construct the project in its entirety.
- Submit the design drawings and technical specifications electronically in pdf format to City and CMAR for review. Include original redline drawings and comments received from previous review along with a review summary indicating action taken.
- Conduct workshop with City and CMAR contractor to review and address comments.
- Update the PDR (described in Task 2.4.1) with any changes from 30% to 90% design for MCESD permitting.
- Prepare stamped drawings, technical specifications, and reports for permitting agencies in accordance with the requirements identified in Task 4.

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Task 3.3 Deliverables

- 90% design drawings
- 90% technical specifications
- 90% Design Review Meeting & Workshop presentation slides
- Comment resolution log in Bluebeam Studio
- Prepare Agency Review design documents

3.4 Final Construction Documents 100% Design

Based on City Development Services and MCESD comments, Consultant will prepare Construction Documents consisting of drawings and technical specifications setting forth in detail the requirements for the construction of the Project.

- Prepare plans, elevations, sections, schedules, notes and technical specifications as required to be able to construct the project in its entirety.
- Provide City of Chandler and CMAR with a copy the CAD drawing files and 3D models.
- Submit the design drawings and technical specifications electronically in pdf format to City and CMAR for review. Include original redline drawings and comments received from previous review along with a review summary indicating action taken.

Task 3.4 Deliverables

- 100% stamped design drawings
- 100% technical specifications
- Comment resolution log in Bluebeam Studio

Task 3 Assumptions

- 65.1A EQ pumps will proceed in detailed design with option A, which assumes no connection installed between EQ basins 1 and 2. If the EQ basin connection is added after the 30% cost model is completed, then additional effort to update the design for different pump sizing will be included in a separate amendment.
- 75.1D Dewatering Building will proceed in detailed design with Option D, which is the option presented at the 8/7/2024 meeting on Liquids Treatment CIPs assuming 3 volute screw presses and a 50' x 100' pre-engineered metal building.
- All deliverables to be submitted electronically in PDF format unless otherwise noted.

4. Permitting (Through Completion of GMP2)

Consultant will coordinate and facilitate initial communication with the regulatory agencies to define and confirm submittal requirements, process, durations, and fees, as described in the tasks below. Permits anticipated include the following:

- MCESD Approval to Construct (ATC)

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- MCESD Approval of Construction (AOC) permits
- City of Chandler Development Services Building Permits
- City of Chandler Development Services Civil Plan Review & Pre-Technical Review

Labor hours for this task are included in design tasks (Task 2.4 and Task 3).

Services related to obtaining the permits are not included in this scope. These services will be included in a later scope amendment.

4.1 MCESD Permit

Consultant will conduct pre application meeting with MCESD to define and confirm submittal requirements, process, durations, and fees for the projects outlined in Task 2. Results of the meeting will be documented in the PDR.

Hazen will pay for the MCEST ATC/AOC fee. An allowance is included for ATC/AOC fees (See Task 8)

4.2 Chandler Development Services

Consultant will coordinate with Development Services to define and confirm submittal requirements, process, durations, and fees for the projects outlined in Task 2. Results of the meeting will be documented in the PDR.

City is responsible for all fees and cost associated with Chandler Development Services permit applications, review, and final permits.

5. CMAR Coordination During Design (Through Completion of GMP2)

CMAR services for the Consultant included in this scope are only through completion of GMP 2 for long lead items anticipated in July/August 2025. Additional CMAR coordination and CM services after GMP 2 will be incorporated as an amendment with the submission of GMP 2.

5.1 Monthly Invoice and Progress Report Review

Acting as the City's project manager, Consultant will review monthly invoices and progress reports from the CMAR and process those invoices for payment using the City's standard processes. Assumes monthly invoices and progress reports through August 2025.

5.2 Cost Model Reviews

Consultant will review and provide comments on CMAR cost models at the milestones noted below. Cost models to include construction cost estimate and schedule.

- 30% / Baseline

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- Long lead
- 60% (not included in this scope; will include in future scope amendment)
- 90% (not included in this scope; will include in future scope amendment)

When the 30% cost model is completed, a project prioritization workshop will be held to confirm which projects will move forward to detailed design. Any changes to this scope of work identified at that time will be incorporated as an amendment with the submission of GMP 2.

5.3 GMP Reviews

Consultant will review two Guaranteed Maximum Price (GMPs) prepared by the CMAR, as listed below.

- GMP 1: Construction of 42.1 Filters 9-12 Rehab
- GMP 2: Long Lead Procurement Package

Consultant will provide comments and attend one comment resolution meeting for each GMP.

5.4 Detailed Project Schedule

Review preliminary construction schedule and phasing plans, long lead recommendations and analysis, and equipment plan and provide comments.

5.5 Design Coordination and Meetings

Collaboration meetings between the Designer and CMAR will be held as needed, and may include:

- Value Engineering review meetings
- Construction document rolling reviews
- GMP review/negotiation meetings
- Utility Coordination Meetings

Design reviews will include input from CMAR on constructability, procurement and schedule impacts of design.

It is assumed that CMAR coordination meetings may be held biweekly through August 2025 (GMP 2) in hybrid or virtual format and will be 1 hour in length. Any changes identified during Designer/CMAR meetings will be brought to the City for review in either a meeting or email format.

5.5.1 Maintenance of Plant Operations (MOPOs) Assistance

The Maintenance of Plant Operations (MOPO) is a plan or series of plans that describe how to maintain operation of existing facilities during construction and start-up of new facilities. Consultant will coordinate with the CMAR to identify a draft MOPO list during preliminary design to be included in the PDR. During development of long lead design, Hazen will identify design elements that may be required from the list of MOPOs identified at 30% design.

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The CMAR will develop specific MOPO activities and identify potential design impacts during detailed design. Consultant will coordinate with CMAR on MOPO development, which includes the following activities:

- Assist CMAR in developing draft MOPOs with input from the City's operation and maintenance staff, including MOPO durations, constraints and shared responsibilities.
- Consider possible impacts to the design from the draft MOPO
- Incorporate MOPO requirements into the drawings and specifications
- Participate in a site walk-through with CMAR and the City's operation and maintenance staff.
- Review MOPOs prepared by the CMAR and incorporate in the specifications.

6. GMP 1 (Filters 9-12) CM Services

Consultant will provide Construction Management Services for GMP 1: 42.1 Filters 9-12 Rehab.

6.1 Pre-Construction Assistance

6.1.1 Pre-construction Assistance

These services are covered under Task 5.

6.2 Construction Management

6.2.1 Weekly Construction Meetings

Consultant must conduct weekly construction meetings. Each meeting includes agenda and minutes; Request for Information (RFI); Shop Drawing; Request for Information (RFI); Field Directive (FD); Material Certification; and Allowance Logs. Consultant assumes 16 weekly meetings will be held.

6.2.2 CPM Schedule

Consultant will review and evaluate Contractor's initial CPM schedule and provide recommendations for acceptance.

Consultant will review Contractor's monthly CPM schedule updates submitted with each payment application, identify CPM tasks that are behind schedule that may affect critical path items, project substantial and final completion dates and initiate correspondence to City regarding those tasks. Consultant assumes one draft and one final review of updated CPM schedule.

6.2.3 Requests for Information (RFI)

Consultant will review, evaluate, and respond to Contractor Requests for Information (RFI's); and prepare and maintain a submittal log of all RFI's. Consultant assumes five RFI responses.

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6.2.4 Shop Drawing Submittals

Consultant will review, evaluate, and respond to Contractor shop drawing submittals; and prepare and maintain a submittal log of all shop drawing submittals. Consultant assumes 8 shop drawing submittals, including re-submittals.

6.2.5 Requests for Proposal (RFP)

Consultant will prepare Requests for Proposal (RFP) documents detailing requested additional work tasks; review and evaluate Contractor RFP responses (cost derivations) with approval recommendations; and prepare and maintain a submittal log list of all RFP's. Consultant assumes two RFPs.

6.2.6 Field Directive (FD)

Consultant will prepare Field Directive (FD) documents detailing requested additional work tasks; review and evaluate Contractor FD responses with approval recommendations; and prepare and maintain a submittal log list of all FD's. Consultant assumes a maximum of two FD's.

6.2.7 Contractor Payment Applications

Consultant will review and evaluate Contractor monthly payment applications and make recommendation for payment; maintain a weekly record of constructed pay quantities and compile monthly totals; and coordinate payment application with the City quantity report and the inspectors' daily logs. Consultant assumes six payment applications, with one draft and one final review for each.

6.3 Construction Inspection

6.3.1 Inspection Services

Consultant will provide weekly construction inspection to verify materials and installations conform to construction documents; prepare inspection reports at each visit documenting Contractor construction activities and progress during field inspection visits; and perform special inspections with reports as required. Consultant assumes 3 visits per week for 4 hours each for up to 5 months.

Consultant will provide a special inspection to identify structural deficiencies requiring repair after filter media is removed and prior to structural rehab activities. Consultant assumes 1 full day site visit.

Consultant will review and verify Contractor's Quality Control material test type and frequencies are consistent with City and MAG; review and evaluate Contractor's QC test schedule and provide recommendations on acceptance; and review and evaluate all Contractor sampling, test, and inspection results for conformance with construction documents.

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6.3.2 Project Closeout

Consultant will secure Approval of Construction (AOC) from MCESD. The Consultant will review all Approval to Construct Permit Stipulations and prepare all required documentation and will submit on behalf of the City to MCESD.

Consultant will compile non-conformance list prior to Substantial Completion; schedule and conduct Substantial Completion inspection; prepare Substantial Completion punch list generated from Substantial Completion inspection; track items on punch list and note completed items; make recommendation to the City for issuance of Contractor Substantial Completion; and complete and distribute Substantial Completion certificates.

Consultant will schedule and conduct Final Completion inspection; make recommendations to the City for issuance of Contractor Final Completion; and complete and distribute Final Completion certificates.

Consultant will provide all documents in an electronic version that matches the City's filing system, so it can be imported into City's files.

Consultant will participate in a meeting with City staff and Designer to review request for information log to discuss lessons learned during the course of construction.

Consultant will coordinate with the Contractor for the submission of required warranties, guarantees, lien releases and other similar documents as required by the contract for construction. Consultant will advise the City as to the acceptability and compliance of these documents with the contract for construction. Consultant will provide to the Owner an organized set of project documents and records.

6.4 Testing And Startup

6.4.1 Equipment Testing and Facility Startup

Startup planning meetings shall be conducted by Consultant in order to facilitate completion and communication of the start-up plan. The Consultant will review Contractor's start up plan which include facility and performance demonstration plan. The Consultant will provide one day for witness field performance tests required to confirm that individual components and systems operate as specified in startup plan. Consultant will provide up to one day of witness polymer system functional testing in the field after equipment installation to verify system performance in accordance with the specifications. The Contractor will perform testing under the witness of the Consultant. A report will be issued for the testing based on data presented by the Contractor.

Consultant will provide up to one day of field witnessed pump testing after pump installation to verify pump performance is in accordance with specifications. Contractor will perform testing under the witness of Consultant. Consultant will provide a report on the testing based on field witness test observations, and data provided by Contractor.

Consultant will prepare a performance testing plan and Approval to Commence Operations (ATCO) application to submit to MCESD for approval to initiate performance testing while sending filtered water

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to distribution. The Consultant will review all Approval to Construct Permit Stipulations and prepare all required documentation and will submit on behalf of the City to MCESD.

Upon completion of start-up, Consultant will review functional and performance test results submitted by Contractor and advise City if the facility is functioning in accordance with contract documents.

As part of the Start Up plan, the Consultant will receive and review disinfection plan and procedures including review and approval of independent testing agency for performing water quality sampling and testing. Consultant will witness disinfection performance. Upon receiving water quality test results from the Contractor, the Consultant will review and advise the City on the acceptance and water quality is met based upon the conformance of bacterial limitations for public drinking water.

6.5 Record Drawings

6.5.1 Record Drawings

Consultant will review and monitor Contractor's weekly updates on red-line drawing set.

Consultant will coordinate the Contractor's submittal of construction red lines of drawings, specifications and other record documents in preparation for finalizing record drawings and will transmit these to the Owner. The Consultant will meet with the Contractor to discuss the preparation and submittal of record drawings. Provide resident engineer stamp/certification on record drawings cover sheet. Ensure all required signatures on the cover sheet.

Provide and deliver record drawings in digital pdf format to the City as required for as-built submittal process to City construction manager for submittal to Development Services.

Electronic files (pdf and AutoCAD format) will be transmitted to the City. Based on experience of similar work and drawing count, up to four hours of CAD technician labor is anticipated for each sheet. An As-Built Certification note will be included on each drawing that contain as-built changes that will state: "I certify that the "as-built" information shown hereon was obtained under my direct supervision and is correct and complete to the best of my knowledge and belief." This note will be sealed by a Registered Professional Engineer in Arizona. The following note will be included in the title block for each drawing: "This drawing was originally sealed on referenced date by referenced PE, a registered Professional Engineer in Arizona."

Consultant will coordinate and provide documents to Development Services for Building Permit if required.

6.5.2 Assumptions, Clarifications, and Exclusions

- Application fees for City reviews and permits will be paid by City.
- The Owner's Allowance will only be utilized with prior written approval from the City representative.
- The Direct Expense Allowance will be used for normal reimbursable expenses on the project. Items must be billed at cost and backup must be provided with pay applications.

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7. Other Direct Costs (ODC)

This task is for expenses related to the project, such as travel and shipping.

8. Allowances

8.1 Owner's Allowance

Owner's allowance for any changes to scope. Consultant will request written authorization from the City to utilize the funds. The associated scope will be included in the authorization request.

8.2 MCESD Permit Fees

Allowance is included for up to (2) ATC/AOC applications. If additional permitting submissions are required, associated fees will be included in a scope amendment.

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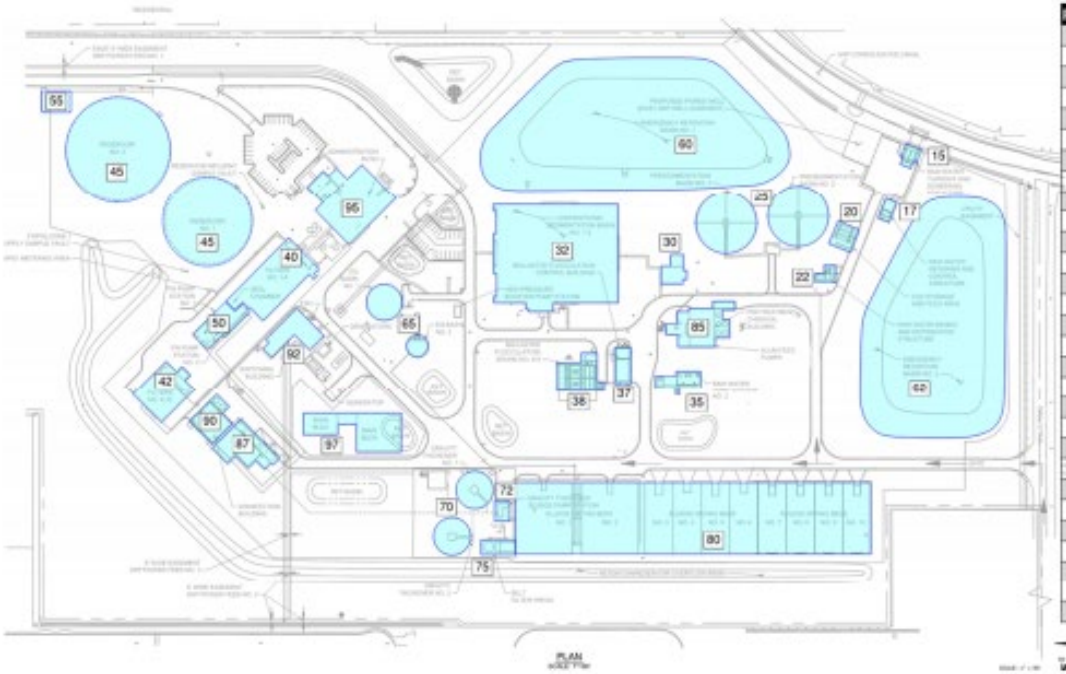
Appendix A
CIP Project Numbering



Facility No.	Facility Name
10	Site
15	Raw Water Turnout and Screening Structure
17	Raw Water Metering and Control Structural
20	Carbon Dioxide Storage and Feed Area
22	Raw Water Mixing and Distribution Structure
25	Presedimentation Basins
30	Raw Water Pump Station No. 1 (RWPS 1)
32	Conventional Sedimentation Basins
35	Raw Water Pump Station No. 2 (RWPS 2)
37	Ballasted Flocculation Control Building
38	Ballasted Flocculation Basins
40	Filters No. 1-8
42	Filters No. 9-12
45	Finished Water Reservoirs
50	Finished Water Pump Station (FWPS)
55	Transfer Station
60	Emergency Retention Basin 1 (ERB 1)
62	Emergency Retention Basin 2 (ERB 2)
65	Equalization Basins
70	Gravity Thickeners
72	Gravity Thickener Sludge Pump Station
75	Belt Filter Press
80	Sludge Dryng Beds
85	Pretreatment Chemical Building
87	Post-treatment Chemical Building
90	Disinfection Building
92	Switchgear Building
95	Control Building
97	Maintenance Building

Facility Numbering

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CIP No.	Project Name	Project Description	Justification/Driver
42.1	Filter 9-12 Rehab	• Structural rehab (crack injection, waterproof coating) • GAC media replacement • Polymer pump & injection	Achieve 50 year useful life of filters; filters 13-16 not needed
43.1	Post Filter GAC Contactors	• Install 10 new concrete GAC contactors • New GAC contactor feed and backwash pumps • New electrical building	Achieve Water Quality goals for TOC & TTHM
86.1	Chlorine Dioxide (Final decision will depend on Pilot results)	• New building with chlorine dioxide feed system • 1 duty + 1 standby generator • 2-10,000 gal sodium chlorite tanks • 1x hydrochloric acid tank • 2 chlorine dioxide storage tanks and feed pumps	Achieve TTHM water quality goals in summer (to be confirmed with testing)
65.1A	EQ Pumps	• Replace EQ basin 1 and 2 pumps with 3 pump configuration • Assumed no connection of EQ basins	Steadier recycle flows to operated 60 mgd + 4 mgd recycle
75.1D	Dewatering Building	• New 50' x 100' metal dewatering building with (3) volute screw press • Includes electrical room, dewatering polymer pumps and thickened solids pumps • Solids conveyor system, roll-off bins, yard piping	Required to operate at maximum 60 mgd flow and anticipated worst case water quality condition

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Appendix B
Interim Design Submittals

Hazen *Guideline for Interim Design Submittals*

Key: X = Initial Preparation
U = Update

GENERAL REQUIREMENTS	30% SUBMITTAL		60% SUBMITTAL		90% SUBMITTAL	
	Reqd	Complete	Reqd	Complete	Reqd	Complete
Specification Requirements						
Table of Contents	X		U		U	
Major Mechanical Equipment Specifications	X		U		U	
Technical Specifications (Div 01)			X		U	
Technical Specifications (Site/Civil)			X		U	
Technical Specifications (Structural)			X		U	
Technical Specifications (Architectural)			X		U	
Technical Specifications (Mechanical)			X		U	
Technical Specifications (Odor Control)			X		U	
Technical Specifications (HVAC/Plumbing)			X		U	
Technical Specifications (Fire Suppression)			X		U	
Technical Specifications (Electrical)			X		U	
Technical Specifications (Instrumentation)			X		U	
Bidding and Contract Requirements					X	
Spec Items Required for Interdiscipline Coordination						
Piping Schedule (with Design Pressures, Heat Tracing Requirements)	X		U		U	
Valve Schedule (with Electrical and I&C Req'ts for motorized valves, gates)			X		U	
Functional Descriptions	X		U		U	
Input/Output Schedules			X		U	
Instrument Schedules			X		U	
Maintenance of Plant Operations (MOPO), construction sequencing	X		U		U	
General Drawing Requirements						
Cover Sheet with Location Maps	X		U		U	
Confirm Official Project Name	X		U		U	
Identify Owner Contract Numbering Requirements	X		U		U	
Scale	X		U		U	
North Arrows	X		U		U	
Plans Oriented to North where possible	X		U		U	
Level of Notation Appropriate to Submittal Milestone	X		U		U	
Level of Dimensioning Appropriate to Submittal Milestone	X		U		U	
Reference Elevation on Each Section	X		U		U	
Standard Details			X		U	

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Hazen *Guideline for Interim Design Submittals*

Key: X = Initial Preparation
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SITE / CIVIL DISCIPLINE REQUIREMENTS	30% SUBMITTAL		60% SUBMITTAL		90% SUBMITTAL	
	Reqd	Complete	Reqd	Complete	Reqd	Complete
Responsibilities						
Identify State Erosion Control and Stormwater Requirements	X					
Identify Local Erosion Control and Stormwater Requirements	X					
Identify Local Planning/Zoning Requirements (setbacks, buffers, etc.)	X					
Identify State DOT Requirements (driveway permits, R-O-W)	X					
Identify all Existing Easements	X					
Identify Wetland/Stream Encroachments	X					
Confirm adequate survey info available	X					
Confirm horizontal and vertical control	X					
Confirm proper survey datum used	X					
Locate 100-yr floodplain / floodway	X					
Interdiscipline Coordination						
Coordinate with Mechanical, Electrical on piping, ductbank, and facilities layouts	X		U		U	
Identify Anticipated Major Erosion and Sediment Control features (Basins, Ponds)			X			
Coordinate Parking Requirements with Architectural, Mechanical (incl ADA)			X		U	
Coordinate Final Grade and Flood Elevations with Structural	X		U		U	
Coordinate Dewatering Requirements with Structural			X		U	
Coordinate Downspout Locations with Architectural, Electrical			X		U	
Coordinate confined space identification with Architectural, Mechanical, Electrical	X		U		U	
Drawing Requirements						
Horizontal and Vertical Control Information	X		U		U	
Right-of-Ways	X		U		U	
Setbacks / Buffers	X		U		U	
100-Yr Floodplain and Floodway	X		U		U	
Existing Easements	X		U		U	
Existing Facilities	X		U		U	
Existing Roads	X		U		U	
Existing Grading	X		U		U	
Existing Stormwater Facilities	X		U		U	
Proposed Stormwater Control Measures (SCM)	X		U		U	
Proposed Facilities	X		U		U	
Proposed Roads	X		U		U	
			X		U	
Proposed Yard Piping	X		U		U	
Proposed Yard Piping Plan and Profile (if required)			X		U	
Storm Drain Plan and Profile			X		U	
Proposed Grading	X		U		U	
Demolition Plans			X		U	
Erosion Control Measures (Major Ponds, etc.)			X		U	
Erosion Control Measures (Remaining Measures)					X	
Staking Data					X	
Landscaping and Irrigation Plans					X	
Contractor Staging Areas					X	
Project Specific Details					X	
Standard Details			X		U	

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Hazen *Guideline for Interim Design Submittals*

Key: X = Initial Preparation
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PROCESS / MECHANICAL DISCIPLINE REQUIREMENTS	30% SUBMITTAL		60% SUBMITTAL		90% SUBMITTAL	
	Reqd	Complete	Reqd	Complete	Reqd	Complete
Responsibilities						
Identify Applicable Process/Treatment Codes and Regulations	X					
Identify Special Requirements of Funding Agencies (Grants/Loans)	X					
Determine if Air Quality Permit is Required	X					
Determine if Odor Control is Required	X					
Identify Utility Requirements (e.g., Natural Gas, PW)	X					
Develop/Document Process Design Criteria	X		U		U	
Finalize Process Modeling Calculations	X					
Hydraulic Profile Calculations	X		U		U	
Identify Piping Systems that Require Analysis for Support and Thrust Restraint			X		U	
Perform Piping System Surge Analyses	X		U			
Establish Process for Developing Pipe and Valve Schedules (e.g., Revit, other)	X		U		U	
Identify Owner Reqts for Equipment/Valve/Instrument Tagging Protocol	X		U		U	
Complete Technical Memoranda	X					
Preliminary Equipment Selection and Sizing Calculations	X					
Identify Owner Preferences/Philosophy for Redundancy and Future Expansion	X		U		U	
Identify Client Philosophy for Equipment Removal (Cranes, etc.)	X					
Identify MOPO Issues	X		U		U	
Finalize Design Calculations for Project Record					X	
Interdiscipline Coordination						
Provide Cutsheets of Major Equipment for Interdiscipline Coordination	X		U		U	
Coordinate Electric Load List with Electrical, HVAC, and Plumbing	X		U		U	
Coordinate Motor Controllers (e.g. VFD) with Electrical	X		U		U	
Coordinate with Civil, Electrical on piping, ductbank, facilities layouts	X		U		U	
Coordinate NFPA Req'ts with Electrical, HVAC, Architectural, Fire	X		U		U	
Coordinate Demolition within Existing Structures with Structural	X		U		U	
Coordinate Pipe Support and Restraint Design with Structural	X		U		U	
Coordinate with Structural on Weights and Loads for Major Equipment	X		U		U	
Coordinate Crane/Equipment Lifting Req'ts with Structural, HVAC, Electrical	X		U		U	
Coordinate Wall/Roof Op'ngs/Penetrations with HVAC, Structural, Architectural			X		U	
Coordinate Heat Tracing Requirements with Electrical			X		U	
Coordinate Parking Req'ts with Civil, Architectural			X		U	
Coordinate Instrumentation Reqts for P&IDs with Instrumentation	X		U		U	
Coordinate Functional Descriptions with Instrumentation	X		U		U	
Coordinate with Instrumentation on Instrument Ranges			X		U	
Coordinate Pile Locations with Piping and Ductbanks Under Structures			X		U	
Coordinate Requirements for Windows in Doors with Architectural, Electrical					X	
Coordinate Equipment/Valve/Instrument Tagging with Instrumentation	X		U		U	
Coordinate Odor Control Req'ts with HVAC	X		U		U	
Coordinate confined space identification with Architectural, Civil, Electrical	X		U		U	
Drawing Requirements						
Liquid Train Process Flow Diagram	X		U		U	
Solids Train Process Flow Diagram	X		U		U	
Chemical Feed System Schematics (if no P&IDs)	X		U		U	
Determine if Isometrics will be developed	X		U		U	
Hydraulic Profile	X		U		U	
Existing Yard Piping	X		U		U	
Proposed Yard Piping (Major Process Piping)	X		U		U	
Proposed Yard Piping (Secondary Piping)			X		U	
Pipe Profiles (if Reqd)					X	
Facility Plans (including tag number+physical location of field instruments, MOVs)	X		U		U	
Facility Sections (Primary)	X		U		U	
Facility Sections (Secondary)			X		U	
Demolition Plans			X		U	
Standard Details			X		U	
Pipe Support Details			X		U	
Project Specific Details					X	

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Hazen *Guideline for Interim Design Submittals*

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STRUCTURAL DISCIPLINE REQUIREMENTS	30% SUBMITTAL		60% SUBMITTAL		90% SUBMITTAL	
	Reqd	Complete	Reqd	Complete	Reqd	Complete
Responsibilities						
Identify Applicable Codes	X					
Coordinate Geotechnical Investigation	X					
Identify Special Dewatering Requirements			X			
Interdiscipline Coordination						
Review Preliminary Layouts for Type and Feasibility of Foundations	X		U		U	
Review Wall Thicknesses in Preliminary Layouts	X		U		U	
Review Column Locations and Sizes in Preliminary Layouts	X		U		U	
Coordinate Demolition within Existing Structures with Mechanical	X		U		U	
Coordinate Final Grade and Flood Elevations with Civil	X		U		U	
Coordinate Equipment Weights/Loads with Mechanical			X		U	
Coordinate Wall/Roof Op'ngs/Penetrations with Mechanical, HVAC, Architectural			X		U	
Coordinate Pipe Support and Restraint Design with Mechanical			X		U	
Coordinate Beam Depths with Interior Piping			X		U	
Coordinate Dewatering Requirements with Civil			X		U	
Coordinate Seismic Requirements with all Disciplines - 01350			X		U	
Coordinate Pile Locations with Piping and Ductbanks Under Structures			X		U	
Coordinate with Electrical Regarding ~~Large~~ Conduits embedded in slabs, walls, etc.			X		U	
Coordinate with Electrical Regarding Penetrations Through Footings			X		U	
Coordinate with Electrical Regarding Ductbank Routing Between Piles			X		U	
Coordinate Crane/Equipment Lifting Req'ts with Mechanical, HVAC, Electrical	X		U		U	
Drawing Requirements						
General Notes			X		U	
Facility Plans			X		U	
Facility Sections (Primary) [No Reinforcing Shown at 60%]			X		U	
Facility Sections (Secondary)					X	
Pile Location Plans					X	
Beam & Column Schedules					X	
Standard Details			X		U	
Project Specific Details					X	
Steel Framing Elevations and Details			X		U	
Demolition Plans			X		U	
Special Inspections Requirements					X	

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Key: X = Initial Preparation
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ARCHITECTURAL DISCIPLINE REQUIREMENTS	30% SUBMITTAL		60% SUBMITTAL		90% SUBMITTAL	
	Reqd	Complete	Reqd	Complete	Reqd	Complete
Responsibilities						
Identify Applicable Building Codes	X					
Identify Local Planning/Building Requirements	X					
Identify Local Noise Ordinances	X					
Identify Owner Architectural Preferences						
Wall Construction	X					
Roofing Systems	X					
Architectural Treatments to Match Existing Facilities	X					
Door Materials of Construction			X			
Interior Finishes and Coatings			X			
Identify Confined Spaces	X		U		U	
Interdiscipline Coordination						
Verify Egress Requirements	X		U			
Coordinate Roof/Wall Op'ngs/Penetrations with Structural, Mechanical, HVAC			X		U	
Coordinate Downspout Locations with ~~Site~~ Civil and Electrical			X		U	
Coordinate Overhead Door Operators with Electrical			X		U	
Coordinate Building Lighting Fixtures with Electrical					X	
Coordinate Requirements for Windows in Doors with Electrical, Mechanical					X	
Coordinate Ceiling Tile Layout with Electrical, HVAC					X	
Coordinate with Electrical for Exterior Lighting and Overflow Scuppers			X		U	
Coordinate Parking Req'ts with Civil, Mechanical			X		U	
Coordinate NFPA 820 Requirements with Mechanical, Electrical, HVAC, Fire	X		U		U	
Coordinate confined space identification with Mechanical, Civil, Electrical	X		U		U	
Drawing Requirements						
Code Summary Sheets			X		U	
Facility Plans			X		U	
Roof Plans			X		U	
Exterior Elevations			X		U	
Interior Elevations (if Req'd)			X		U	
Standard Details			X		U	
Wall Sections and Details					X	
Finish Schedules					X	
Project Specific Details					X	

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ELECTRICAL DISCIPLINE REQUIREMENTS	30% SUBMITTAL		60% SUBMITTAL		90% SUBMITTAL	
	Reqd	Complete	Reqd	Complete	Reqd	Complete
Responsibilities						
Identify Applicable Codes	X					
Coordinate with Electrical Utility	X		U		U	
Confirm basic power distribution plan	X					
Identify Owner Preferences						
Selector Switch / Pushbutton Nomenclature	X					
Telephone System Requirements	X					
Fire Alarm Requirements	X					
Site Lighting Preferences	X					
Building Lighting Preferences	X					
Identify Lightning Protection Requirements			X		U	
Interdiscipline Coordination						
Review Facility Electrical Room Sizes	X		U			
Coordinate Electrical Load List with Mechanical, HVAC, Plumbing	X		U		U	
Provide Cutsheets of Equipment for Interdiscipline Coordination			X		U	
Coordinate NFPA 820 Requirements with Mechanical, HVAC, Arch, Fire	X		U		U	
Coordinate Instrument Wiring and Network Cabling Requirements with I&C			X		U	
Coordinate with Structural Regarding Conduits embedded in slabs, walls, etc.			X		U	
Coordinate with Structural Regarding Penetrations Through Footings			X		U	
Coordinate with Structural Regarding Ductbank Routing Between Piles			X		U	
Coordinate Heat Tracing Requirements with Mechanical			X		U	
Coordinate with Mechanical, Civil on piping, ductbank, and facilities layouts	X		U		U	
Coordinate with Architectural for Exterior Lighting and Overflow Scuppers			X		U	
Coordinate with Instrumentation on Instrument List and I/O Schedule			X		U	
Coordinate with Civil, Mechanical on piping, ductbank, and facilities layouts	X		U		U	
Coordinate Downspout Locations with Civil and Architectural			X		U	
Coordinate Overhead Door Operators with Architectural			X		U	
Coordinate Building Lighting Fixtures with Architectural					X	
Coordinate Requirements for Windows in Doors with Architectural, Mechanical					X	
Coordinate Ceiling Tile Layout with Architectural, HVAC					X	
Coordinate Motor Controllers (e.g. VFD) with Mechanical	X		U		U	
Coordinate Crane/Equipment Lifting Reqts with Structural, HVAC, Mechanical	X		U		U	
Coordinate Pile Locations with Piping and Ductbanks Under Structures			X		U	
Coordinate confined space identification with Architectural, Mechanical, Civil	X		U		U	
Drawing Requirements						
General Notes, Legend, and Symbols	X		X		U	
Overall Plant Electrical Single Line Diagram	X		X		U	
Overall Site Plan	X		X		U	
Site Plans - Existing (including all ductbank)			X		U	
Site Plans - Proposed	X		U		U	
Site Plans - Demolition			X		U	
Ductbank Schedules			X		U	
Facility Single Line Diagrams			X		U	
Facility Lighting Plans			X		U	
Facility Power Plans			X		U	
Facility Demolition Plans			X		U	
Grounding Plans			X		U	
Single Line Diagrams	X		U		U	
Electrical Equipment Elevations - Switchgear, MCCs			X		U	
Panel Schedules			X		U	
Riser Diagrams					X	
Control One Line Diagrams					X	
Elementary Control Schematics					X	
Conduit and Wire Schedules					X	
Project Specific Details					X	
Standard Details			X		U	

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INSTRUMENTATION DISCIPLINE REQUIREMENTS	30% SUBMITTAL		60% SUBMITTAL		90% SUBMITTAL	
	Reqd	Complete	Reqd	Complete	Reqd	Complete
Responsibilities						
Identify Existing Control System Architecture, Redundancy, Cybersecurity Req'ts	X					
Identify Owner Control Philosophy						
Level of Automation	X					
Selector Switch / Pushbutton Nomenclature	X					
Status Indication Light Colors	X					
Establish Equipment, Valve, and Instrument Tagging Protocol	X					
Interdiscipline Coordination						
Coordinate Instrumentation Requirements for P&IDs with Mechanical	X		U		U	
Coordinate Functional Descriptions with Mechanical	X		U		U	
Coordinate Instrument Wiring and Network Cabling Requirements with Electrical			X		U	
Coordinate with Mechanical on Instrument Ranges			X		U	
Coordinate with Electrical on Instrument List and I/O Schedule			X		U	
Coordinate Equipment/Valve/Instrument Tagging with Mechanical	X		U		U	
Drawing Requirements						
Symbols and Legends	X		U		U	
Process and Instrumentation Diagrams (P&IDs)	X		U		U	
Control System Architecture	X		U		U	
Standard Details			X		U	
Project Specific Details					X	

Hazen Guideline for Interim Design Submittals

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HVAC DISCIPLINE REQUIREMENTS	30% SUBMITTAL		60% SUBMITTAL		90% SUBMITTAL	
	Reqd	Complete	Reqd	Complete	Reqd	Complete
Responsibilities						
Identify Applicable Codes	X					
Identify Local Planning/Building Requirements	X					
Identify Requirements for Radon Mitigation	X					
Interdiscipline Coordination						
Review Facility Electrical Room Sizes for HVAC Requirements	X		U		U	
Coordinate NFPA 820 Requirements with Mech, Elec, Arch, Fire	X		U		U	
Coordinate Wall/Roof Op'ngs/Penetrations with Mechanical, Structural, Architectural			X		U	
Provide Cutsheets of Equipment for Interdiscipline Coordination			X		U	
Coordinate Roof/Wall Openings with Structural, Mechanical, Architectural			X		U	
Coordinate Ceiling Tile Layout with Architectural, Electrical					X	
Coordinate Crane/Equipment Lifting Reqts with Structural, Electrical, Mechanical	X		U		U	
Coordinate Electric Load List with Electrical, Mechanical, Plumbing	X		U		U	
Coordinate Odor Control Req'ts with Mechanical	X		U		U	
Drawing Requirements						
General Mechanical Notes	X		U		U	
Facility Plans (General Arrangement for 30% Submittal)	X		U		U	
Facility Sections and Details			X		U	
Schedules	X		U		X	
Standard Details			X		U	
Project Specific Details					X	
Flow Control Diagrams	X		U		U	
Equipment Control Diagrams/Risers			X		U	

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PLUMBING DISCIPLINE REQUIREMENTS	30% SUBMITTAL		60% SUBMITTAL		90% SUBMITTAL	
	Reqd	Complete	Reqd	Complete	Reqd	Complete
Responsibilities						
Identify Applicable Plumbing Codes	X					
Contact Building Inspections Dept for Local requirements	X					
Interdiscipline Coordination						
Coordinate with Architectural on Plumbing Fixture Locations, etc.			X		U	
Coordinate with Yard Piping for PW and Drain Connections			X		U	
Coordinate Water Heaters, Eye Wash, Tepid Water Systems, etc. with Electrical			X		U	
Coordinate with Architectural, Structural, Fire, Electrical if fire pump/tank is req'd	X		U		U	
Coordinate Electric Load List with Electrical, Mechanical, HVAC	X		U		U	
Drawing Requirements						
General Plumbing Notes			X		U	
Facility Plans	X		U		U	
Riser Diagrams and Isometrics			X		U	
Schedules			X		U	
Standard Details			X		U	
Project Specific Details					X	

Hazen *Guideline for Interim Design Submittals*

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FIRE SUPPRESSION DISCIPLINE REQUIREMENTS	30% SUBMITTAL		60% SUBMITTAL		90% SUBMITTAL	
	Reqd	Complete	Reqd	Complete	Reqd	Complete
Responsibilities						
Identify applicable fire suppression codes	X					
Contact Authority Having Jurisdiction (AHJ) for local requirements	X					
Determine type of sprinkler (water or chemical)	X					
Obtain flow/pressure test	X					
Determine if fire pump or fire tank is required; coordinate with Plumbing	X					
Interdiscipline Coordination						
Coordinate with Arch, Stru, Plum, Elec if fire pump/tank is req'd	X		U		U	
Coordinate NFPA 820 Requirements with Mech, Elec, HVAC, Arch	X		U		U	
Drawing Requirements						
General Fire Suppression Notes			X		U	
Facility Plans (Schematic)			X		U	
Riser Diagrams and Isometrics			X		U	
Schedules	X		U		U	
Standard Details			X		U	
Project Specific Details					X	

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Appendix C
Preliminary Drawing List

Sheet No.	Discipline	No.	Dwg. No.	Sheet Name
001	G	001	G-001	Title Sheet
002	G	002	G-002	Vicinity/Location Map
003	G	003	G-003	Index of Drawings 1
004	G	004	G-004	Index of Drawings 2
005	G	005	G-005	General Construction Notes
006	G	006	G-006	Abbreviations and Legend
007	G	007	G-007	Site Area Plan
008	G	008	G-008	Process Flow Diagram - Proposed Advanced Water Treatment
009	G	009	G-009	Process Flow Diagram - Proposed Residuals
010	G	010	G-010	Process Flow Diagram - Proposed Solids
011	G	011	G-011	Hydraulic Profile - Process
012	G	012	G-012	Hydraulic Profile - Residuals
013	G	013	G-013	Sample and Analyzer Diagram Sheet 1
014	G	014	G-014	Design Criteria 1 - Liquids
015	G	015	G-015	Design Criteria 2 - Solids
016	G	016	G-016	Temporary Utilities
017	C	001	C-001	Notes, Abbreviations and Legend
018	C	002	C-002	Site Preparation - Existing Conditions, Clearance and Demolition Plan
019	C	003	C-003	Survey Control and Overall Site Plan
020	C	004	C-004	Site Grading
021	C	005	C-005	Site Grading Area 1
022	C	006	C-006	Site Grading Area 1a

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Sheet No.	Discipline	No.	Dwg. No.	Sheet Name
023	C	007	C-007	Site Grading Area 2
024	C	008	C-008	Site Grading Area 3
025	C	009	C-009	Site Grading Area 4
026	C	010	C-010	Site Grading Area 5
027	C	011	C-011	Site Grading Area 6
028	C	012	C-012	Site Grading Area 7
029	C	013	C-013	Site Erosion Control
030	C	014	C-014	Erosion Control Area 1
031	C	015	C-015	Erosion Control Area 1a
032	C	016	C-016	Erosion Control Area 2
033	C	017	C-017	Erosion Control Area 3
034	C	018	C-018	Erosion Control Area 4
035	C	019	C-019	Erosion Control Area 5
036	C	020	C-020	Erosion Control Area 6
037	C	021	C-021	Erosion Control Area 7
038	C	022	C-022	Site Paving
039	C	023	C-023	Site Paving Area 1
040	C	024	C-024	Site Paving Area 1a
041	C	025	C-025	Site Paving Area 2
042	C	026	C-026	Site Paving Area 3
043	C	027	C-027	Site Paving Area 4
044	C	028	C-028	Site Paving Area 5
045	C	029	C-029	Site Paving Area 6
046	C	030	C-030	Site Paving Area 7
047	C	031	C-031	Yard Piping Plan
048	C	032	C-032	Yard Piping Area 1
049	C	033	C-033	Yard Piping Area 1a
050	C	034	C-034	Yard Piping Area 2
051	C	035	C-035	Yard Piping Area 3
052	C	036	C-036	Yard Piping Area 4
053	C	037	C-037	Yard Piping Area 5
054	C	038	C-038	Yard Piping Area 6
055	C	039	C-039	Yard Piping Area 7
056	C	040	C-040	Yard Piping Profiles 1
057	C	041	C-041	Yard Piping Profiles 2
058	C	042	C-042	Yard Piping Profiles 3
059	C	043	C-043	Yard Piping Profiles 4
060	C	044	C-044	Yard Piping Details 1
061	C	045	C-045	Yard Piping Details 2
062	C	046	C-046	Stormwater Channel Grading
063	C	047	C-047	Stormwater Channel Grading Area 1
064	C	048	C-048	Stormwater Channel Grading Area 2
065	C	049	C-049	Stormwater Channel Grading Area 4
066	C	050	C-050	Stormwater Channel Grading Area 5
067	C	051	C-051	Stormwater Channel Grading Area 6
068	C	052	C-052	Stormwater Channel Area 1
069	C	053	C-053	Stormwater Channel Area 2
070	C	054	C-054	Stormwater Channel Area 4
071	C	055	C-055	Stormwater Channel Area 5
072	C	056	C-056	Stormwater Channel Area 6

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Sheet No.	Discipline	No.	Dwg. No.	Sheet Name
073	C	057	C-057	Stormwater Channel Profiles Area 1
074	C	058	C-058	Stormwater Channel Profiles Area 2
075	C	059	C-059	Stormwater Channel Profiles Area 4
076	C	060	C-060	Stormwater Channel Profiles Area 5
077	C	061	C-061	Stormwater Channel Profiles Area 6
078	C	062	C-062	Stormwater Channel Cross Sections Sheet 1
079	C	063	C-063	Stormwater Channel Cross Sections Sheet 2
080	C	064	C-064	Stormwater Channel Cross Sections Sheet 3
081	C	065	C-065	Stormwater Channel Details Sheet 1
082	C	066	C-066	Stormwater Channel Details Sheet 2
083	C	046	G-046	Civil Details BMPs Required for SWPPP
084	C	001	CD-01	Civil Details 1
085	C	002	CD-02	Civil Details 2
086	C	003	CD-03	Civil Details 3
087	C	004	CD-04	Civil Details 4
088	C	005	CD-05	Civil Details 5
089	C	006	CD-06	Civil Details 6
090	A	001	A-001	Abbreviations, Legends, Symbols, & General Notes
091	A	002	A-002	Building Schedules
092	A	003	A-003	Room Finish Schedule
093	A	004	A-004	Door and Window Schedule
094	A	005	A-005	Wall Panel Schedule
095	A	006	A-006	Door, Window and Louver Details 1
096	A	007	A-007	Door, Window and Louver Details 2
097	A	008	A-008	Door, Window and Louver Details 3
098	A	009	A-009	Partition Types
099	A	010	A-010	Firestopping Details
100	A	100	A43-100	PF GAC Facility Architectural Code Summary
101	A	101	A43-101	PF GAC General Arrangement Sheet
102	A	102	A43-102	PF GAC Facility Bottom Plan Sheet 1
103	A	103	A43-103	PF GAC Facility Bottom Plan Sheet 2
104	A	104	A43-104	PF GAC Facility Intermediate and Stair Plan Sheet 1
105	A	105	A43-105	PF GAC Facility Intermediate and Stair Plan Sheet 2
106	A	106	A43-106	PF GAC Facility Top Plan Sheet 1
107	A	107	A43-107	PF GAC Facility Top Plan Sheet 2
108	A	108	A43-108	PF GAC Facility Roof Plan Sheet 1
109	A	109	A43-109	PF GAC Facility Roof Plan Sheet 2
110	A	110	A43-110	PF GAC Facility Life Safety Plans
111	A	111	A43-111	PF GAC Backwash Pump Room Top Plan Sheet
112	A	112	A43-112	PF GAC Facility Elevations N-S Sheet 1
113	A	113	A43-113	PF GAC Facility Elevations N-S Sheet 2
114	A	114	A43-114	PF GAC Facility Elevations E-W Sheet 1
115	A	115	A43-115	PF GAC Facility Elevations E-W Sheet 2
116	A	116	A43-116	PF GAC Facility Sections Sheet 1
117	A	117	A43-117	PF GAC Facility Sections Sheet 2
118	A	118	A43-118	PF GAC Facility Sections Sheet 3
119	A	119	A43-119	PF GAC Facility Sections Sheet 4
120	A	120	A43-120	PF GAC Facility Sections Sheet 5
121	A	121	A43-121	PF GAC Facility Sections Sheet 6
122	A	122	A43-122	PF GAC Facility Sections Sheet 7

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Sheet No.	Discipline	No.	Dwg. No.	Sheet Name
123	A	123	A43-123	PF GAC Facility Sections Sheet 8
124	A	124	A43-124	Detail Sheet 1
125	A	125	A43-125	Detail Sheet 2
126	A	126	A43-126	Detail Sheet 3
127	A	127	A43-127	Detail Sheet 4
128	A	200	A87-200	Chlorine Dioxide Building Plan
129	A	201	A87-201	Chlorine Dioxide Building Roof Plan
130	A	202	A87-202	Chlorine Dioxide Building Life Safety Plan
131	A	203	A87-203	Chlorine Dioxide Building Details 1
132	A	204	A87-204	Chlorine Dioxide Roof Details 1
133	A	205	A87-205	Chlorine Dioxide Interior Details 1
134	A	206	A87-206	Chlorine Dioxide Interior Details 2
135	A	207	A87-207	Chlorine Dioxide Exterior Details 1
136	A	208	A87-208	Chlorine Dioxide Facility Elevations N-S
137	A	209	A87-209	Chlorine Dioxide Facility Elevations E-W
138	A	210	A87-210	Chlorine Dioxide Stair and Floor Coating Details
139	A	211	A87-211	Chlorine Dioxide Facility Details 1
140	A	212	A87-212	Chlorine Dioxide Facility Details 2
141	A	300	A43-300	Dewatering Building Plan
142	A	301	A43-301	Dewatering Building Roof Plan
143	A	302	A43-302	Dewatering Building Life Safety Plan
144	A	303	A43-303	Dewatering Facility Details 1
145	A	304	A43-304	Dewatering Facility Details 2
146	A	305	A43-305	Dewatering Facility Details 3
147	A	306	A43-306	Dewatering Facility Roof Details 1
148	A	307	A43-307	Dewatering Facility Roof Details 2
149	A	308	A43-308	Dewatering Facility Interior Details 1
150	A	309	A43-309	Dewatering Facility Interior Details 2
151	A	310	A43-310	Dewatering Facility Elevations N-S
152	A	311	A43-311	Dewatering Facility Elevations E-W
153	A	312	A43-312	Dewatering Facility Stair and Floor Coating Details
154	A	313	A43-313	Dewatering Roll Off Bin Area Wall Sections/Elevations N-S
155	A	314	A43-314	Dewatering Roll Off Bin Area Wall Sections/Elevations E-W
156	A	315	A43-315	Dewatering Roll Off Bin Area Wall Details
157	A	001	AD75-001	Standard Details Sheet 1
158	A	002	AD75-002	Standard Details Sheet 2
159	A	003	AD75-003	Standard Details Sheet 3
160	A	004	AD75-004	Standard Details Sheet 4
161	S	001	S-001	Structural Notes Sheet 1
162	S	002	S-002	Structural Notes Sheet 2
163	S	003	S-003	Structural Special Inspections Sheet 1
164	S	004	S-004	Structural Special Inspections Sheet 2
165	S	100	S43-100	PF GAC Facility Wet Well Plan
166	S	101	S43-101	PF GAC Facility Structural Bottom Plan Sheet 1
167	S	102	S43-102	PF GAC Facility Structural Bottom Plan Sheet 2
168	S	103	S43-103	PF GAC Facility Structural Intermediate Plan Sheet 1
169	S	104	S43-104	PF GAC Facility Structural Intermediate Plan Sheet 2
170	S	105	S43-105	PF GAC Facility Structural Top Plan Sheet 1
171	S	106	S43-106	PF GAC Facility Structural Top Plan Sheet 2
172	S	107	S43-107	PF GAC Facility Structural Lower Roof Plan/Details

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Sheet No.	Discipline	No.	Dwg. No.	Sheet Name
173	S	108	S43-108	PF GAC Facility Structural Upper Roof Plan/Details
174	S	109	S43-109	PF GAC Backwash Pump Room Top Plan Sheet
175	S	110	S43-110	PF GAC Facility Section Sheet 1
176	S	111	S43-111	PF GAC Facility Section Sheet 2
177	S	112	S43-112	PF GAC Facility Section Sheet 3
178	S	113	S43-113	PF GAC Facility Section Sheet 4
179	S	114	S43-114	PF GAC Facility Section Sheet 5
180	S	115	S43-115	PF GAC Facility Section Sheet 6
181	S	116	S43-116	PF GAC Facility Section Sheet 7
182	S	117	S43-117	PF GAC Facility Section Sheet 8
183	S	118	S43-118	PF GAC Facility Detail Sheet 1
184	S	119	S43-119	PF GAC Facility Detail Sheet 2
185	S	120	S43-120	PF GAC Foundations and Support Structures Details 1
186	S	121	S43-121	PF GAC Foundations and Support Structures Details 2
187	S	122	S43-122	PF GAC Structural Connections and Anchorage Details
188	S	123	S43-123	PF GAC Facility Beam Schedule, Section and Details
189	S	124	S43-124	PF GAC Facility Stair Plans and Sections
190	S	125	S43-119	PF GAC Facility Stair Sections and Details
191	S	200	S86-200	Chlorine Dioxide Facility Foundation Plan
192	S	201	S86-201	Chlorine Dioxide Facility Structural Plan
193	S	202	S86-202	Chlorine Dioxide Facility Structural Roof Plan/Details
194	S	203	S86-203	Chlorine Dioxide Facility Section Sheet 1 (Chlorine Dioxide Room 1 NW)
195	S	204	S86-204	Chlorine Dioxide Facility Section Sheet 2 (Chlorine Dioxide Room 1 NW)
196	S	205	S86-205	Chlorine Dioxide Facility Section Sheet 3 (Chlorine Dioxide Room 2 NE)
197	S	206	S86-206	Chlorine Dioxide Facility Section Sheet 4 (Chlorine Dioxide Room 2 NE)
198	S	207	S86-207	Chlorine Dioxide Facility Section Sheet 5 (Hydrochloric Acid Room 3 SW)
199	S	208	S86-208	Chlorine Dioxide Facility Section Sheet 6 (Sodium Chlorite Room 4 SE)
200	S	209	S86-209	Chlorine Dioxide Detail Sheet 1
201	S	210	S86-210	Chlorine Dioxide Detail Sheet 2
202	S	211	S86-211	Chlorine Dioxide Detail Sheet 3
203	S	212	S86-212	Chlorine Dioxide Detail Sheet 4
204	S	213	S86-213	Chlorine Dioxide Detail Sheet 5
205	S	214	S86-214	Chlorine Dioxide Facility Beam Schedule, Section and Details
206	S	215	S86-215	Chlorine Dioxide Facility Stair Plans and Sections
207	S	216	S86-216	Chlorine Dioxide Facility Stair Sections and Details
208	S	300	S43-300	Dewatering Facility Foundation Plan
209	S	301	S75-301	Dewatering Facility Structural Plan
210	S	302	S75-302	Dewatering Facility Structural Roof Plan/Details
211	S	303	S75-303	Dewatering Facility Section Sheet 1
212	S	304	S75-304	Dewatering Facility Section Sheet 2
213	S	305	S75-305	Dewatering Facility Section Sheet 3
214	S	306	S75-306	Dewatering Facility Section Sheet 4
215	S	307	S75-307	Detail Sheet 1
216	S	308	S75-308	Detail Sheet 2
217	S	309	S75-309	Dewatering Facility Beam Schedule, Section and Details
218	S	310	S75-310	Dewatering Facility Stair Plans and Sections
219	S	311	S75-311	Dewatering Facility Stair Sections and Details
220	S	312	S75-312	Dewatering Roll Off Bin Area Details 1
221	S	313	S75-313	Dewatering Roll Off Bin Area Details 2
222	S	314	M95-500	Yard Piping Plan View

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Sheet No.	Discipline	No.	Dwg. No.	Sheet Name
223	S	315	M95-501	Yard Piping Sheet 1
224	S	316	M95-502	Yard Piping Detail Sheet 1
225	S	001	SD-01	Structural Details Sheet 1
226	S	002	SD-02	Structural Details Sheet 2
227	S	003	SD-03	Structural Details Sheet 3
228	S	004	SD-04	Structural Details Sheet 4
229	S	005	SD-05	Structural Details Sheet 5
230	S	006	SD-06	Structural Details Sheet 6
231	M	100	M-100	Notes, Abbreviations and Legend
232	M	100	M43-100	PF GAC Perspective View
233	M	101	M43-101	PF GAC Facility Mechanical Bottom Plan Sheet 1
234	M	102	M43-102	PF GAC Facility Mechanical Bottom Plan Sheet 2
235	M	103	M43-103	PF GAC Facility Mechanical Intermediate Plan Sheet 1
236	M	104	M43-104	PF GAC Facility Mechanical Intermediate Plan Sheet 2
237	M	105	M43-105	PF GAC Facility Mechanical Top Plan Sheet 1
238	M	106	M43-106	PF GAC Facility Mechanical Top Plan Sheet 2
239	M	107	M43-107	PF GAC Facility Section Sheet 1
240	M	108	M43-108	PF GAC Facility Section Sheet 2
241	M	109	M43-109	PF GAC Facility Section Sheet 3
242	M	110	M43-110	PF GAC Facility Section Sheet 4
243	M	111	M43-111	PF GAC Facility Section Sheet 5
244	M	112	M43-112	PF GAC Facility Section Sheet 6
245	M	113	M43-113	PF GAC Facility Section Sheet 7
246	M	114	M43-114	PF GAC Facility Section Sheet 8
247	M	115	M43-115	PF GAC Facility Section Sheet 9
248	M	116	M43-116	PF GAC Facility Section Sheet 10
249	M	117	M43-117	PF GAC Facility Detail Sheet 1
250	M	118	M43-118	PF GAC Facility Detail Sheet 2
251	M	119	M43-119	PF GAC Facility Detail Sheet 3
252	M	120	M43-120	PF GAC Facility Detail Sheet 4
253	M	121	M43-121	PF GAC Facility Detail Sheet 5
254	M	122	M43-122	PF GAC Facility Detail Sheet 6
255	M	123	M43-123	PF GAC Facility Detail Sheet 7
256	M	200	M87-200	Chlorine Dioxide Facility Perspective View
257	M	201	M87-201	Chlorine Dioxide Facility Mechanical Plan View
258	M	202	M87-202	Chlorine Dioxide Facility Section Sheet 1 (Chlorine Dioxide Room 1 NW)
259	M	203	M87-203	Chlorine Dioxide Facility Section Sheet 3 (Chlorine Dioxide Room 2 NE)
260	M	204	M87-204	Chlorine Dioxide Facility Section Sheet 5 (Hydrochloric Acid Room 3 SW)
261	M	205	M87-205	Chlorine Dioxide Facility Section Sheet 6 (Sodium Chlorite Room 4 SE)
262	M	206	M87-206	Chlorine Dioxide Facility Fill Station Truck Delivery
263	M	207	M87-207	Chlorine Dioxide Facility Isometrics Sheet 1
264	M	208	M87-208	Chlorine Dioxide Facility Isometrics Sheet 2
265	M	209	M87-209	Chlorine Dioxide Facility Isometrics Sheet 3
266	M	210	M87-210	Chlorine Dioxide Facility Isometrics Sheet 4
267	M	211	M87-211	Chlorine Dioxide Facility Detail Sheet 1
268	M	212	M87-212	Chlorine Dioxide Facility Detail Sheet 2
269	M	213	M87-213	Chlorine Dioxide Facility Detail Sheet 3

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Sheet No.	Discipline	No.	Dwg. No.	Sheet Name
270	M	214	M87-214	Chlorine Dioxide Facility Detail Sheet 4
271	M	300	M87-300	Dewatering Facility Perspective View
272	M	301	M75-301	Dewatering Facility Mechanical Plan View
273	M	302	M75-302	Dewatering Facility Section Sheet 1
274	M	303	M75-303	Dewatering Facility Section Sheet 2
275	M	304	M75-304	Dewatering Facility Section Sheet 3
276	M	305	M75-305	Dewatering Facility Section Sheet 4
277	M	306	M75-306	Dewatering Facility Detail Sheet 1
278	M	307	M75-307	Dewatering Facility Detail Sheet 2
279	M	308	M75-308	Dewatering Facility Detail Sheet 3
280	M	309	M75-309	Dewatering Facility Detail Sheet 4
281	M	310	M75-310	Dewatering Roll Off Bin Area Details 1
282	M	311	M75-311	Dewatering Roll Off Bin Area Details 2
283	M	400	M75-400	EQ Basin Pumps Mechanical Plan View
284	M	401	M75-401	EQ Basin Pumps Section Sheet 1
285	M	402	M75-402	EQ Basin Pumps Section Sheet 2
286	M	403	M75-403	EQ Basin Pumps Detail Sheet 1
287	M	404	M75-404	EQ Basin Pumps Detail Sheet 2
288	M	405	M95-500	Yard Piping Connection Mechanical Plan View
289	M	406	M95-501	Yard Piping Connection Section Sheet 1
290	M	407	M95-502	Yard Piping Connection Detail Sheet 1
291	M	001	MD-01	Process Mechanical Standard Details Sheet 1
292	M	002	MD-02	Process Mechanical Standard Details Sheet 2
293	M	003	MD-03	Process Mechanical Standard Details Sheet 3
294	M	004	MD-04	Process Mechanical Standard Details Sheet 4
295	M	005	MD-05	Process Mechanical Standard Details Sheet 5
296	H	001	H-001	General Notes, Symbols, and Abbreviations
297	H	002	H-002	Schedules, Air Flow, Sequence of Operations
298	H	003	H-003	Schedules, Heaters, Air Handling Units and Fans
299	H	100	H43-100	PF GAC Facility Bottom Plan
300	H	101	H43-101	PF GAC General Arrangement Sheet
301	H	102	H43-102	PF GAC Facility Intermediate Plan
302	H	103	H43-103	PF GAC Facility Top/Roof Plan
303	H	104	H43-104	PF GAC Facility Sections Sheet 1
304	H	105	H43-105	PF GAC Facility Sections Sheet 2
305	H	106	H43-106	Building Air Schematics
306	H	107	H43-107	Building HVAC Controls
307	H	200	H87-200	Chlorine Dioxide Facility Building Plan
308	H	201	H87-201	Chlorine Dioxide Facility Roof Plan
309	H	202	H87-202	Chlorine Dioxide Facility Sections Sheet 1
310	H	203	H87-203	Chlorine Dioxide Facility Sections Sheet 2
311	H	204	H87-204	Chlorine Dioxide Facility Sections Sheet 3
312	H	205	H87-205	Building Air Schematics
313	H	206	H87-206	Building HVAC Controls
314	H	300	H75-300	Dewatering Facility Building Plan
315	H	301	H75-301	Dewatering Facility Roof Plan

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Sheet No.	Discipline	No.	Dwg. No.	Sheet Name
316	H	302	H75-302	Dewatering Facility Sections Sheet 1
317	H	303	H75-303	Dewatering Facility Sections Sheet 2
318	H	304	H75-304	Dewatering Facility Sections Sheet 3
319	H	305	H75-305	Building Air Schematics
320	H	306	H75-306	Building HVAC Controls
321	H	001	HD-01	HVAC Standard Details Sheet 1
322	H	002	HD-02	HVAC Standard Details Sheet 2
323	H	003	HD-03	HVAC Standard Details Sheet 3
324	P	001	P-001	Plumbing Legend, Abbreviations, Notes
325	P	002	P-002	Plumbing Schedule
326	P	100	P43-100	PF GAC General Plumbing Arrangement Sheet
327	P	101	P43-101	PF GAC Facility Riser Diagram - Waste and Vent
328	P	102	P43-102	PF GAC Facility Plan View - Waste and Vent
329	P	103	P43-103	PF GAC Facility Roof Drains
330	P	104	P43-104	PF GAC Facility Sections Sheet 1
331	P	105	P43-105	PF GAC Facility Sections Sheet 2
332	P	200	P87-200	Chlorine Dioxide Facility Riser Diagram - Waste and Vent
333	P	201	P87-201	Chlorine Dioxide Facility Plan View - Waste and Vent
334	P	202	P87-202	Chlorine Dioxide Facility Roof Drains
335	P	203	P87-203	Chlorine Dioxide Facility Sections Sheet 1
336	P	204	P87-204	Chlorine Dioxide Facility Sections Sheet 2
337	P	205	P87-205	Chlorine Dioxide Facility Sections Sheet 3
338	P	300	P75-300	Dewatering Facility Riser Diagram - Waste and Vent
339	P	301	P75-301	Dewatering Facility Plan View - Waste and Vent
340	P	302	P75-302	Dewatering Facility Roof Drains
341	P	303	P75-303	Dewatering Facility Sections Sheet 1
342	P	304	P75-304	Dewatering Facility Sections Sheet 2
343	P	305	P75-305	Dewatering Facility Sections Sheet 3
344	P	306	P95-500	WQ Lab Connection Plan View
345	P	307	P95-501	WQ Lab Connection Sections Sheet 1
346	P	001	PD-01	Plumbing Standard Details Sheet 1
347	P	002	PD-02	Plumbing Standard Details Sheet 2
348	F	200	FD87-200	Chlorine Dioxide Fire Protection Plan
349	F	300	FD75-300	Dewatering Facility Fire Protection Plan
350	F	001	FD-01	Fire Protection Details
351	E	001	E-001	Legend and Symbols
352	E	002	E-002	Notes and Abbreviations
353	E	003	E-003	Electrical Site Plan
354	E	004	E-004	Yard Electrical Area 1
355	E	005	E-005	Yard Electrical Area 2
356	E	006	E-006	Yard Electrical Area 3
357	E	007	E-007	Yard Electrical Area 4
358	E	008	E-004	Yard Electrical Area 5
359	E	009	E-005	Yard Electrical Area 6
360	E	010	E-007	Power Distribution Single Line Diagram
361	E	011	E-008	Electrical Schedules 1
362	E	012	E-009	Electrical Schedules 2
363	E	013	E-010	Electrical Schedules 3
364	E	014	E-011	Electrical Schedules 4
365	E	015	E-012	Electrical Schedules 5

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Sheet No.	Discipline	No.	Dwg. No.	Sheet Name
366	E	100	E43-100	PF GAC Electrical Arrangement Sheet
367	E	101	E43-101	PF GAC Facility Bottom and Grounding Plan Sheet 1
368	E	102	E43-102	PF GAC Facility Bottom and Grounding Plan Sheet 2
369	E	103	E43-103	PF GAC Facility Top Power Plan Sheet 1
370	E	104	E43-104	PF GAC Facility Top Power Plan Sheet 2
371	E	105	E43-105	PF GAC Facility Top Lighting Plan Sheet 1
372	E	106	E43-106	PF GAC Facility Top Lighting Plan Sheet 2
373	E	107	E43-107	PF GAC Facility Enlarged Power and Lighting Plan - Electrical Room
374	E	108	E43-108	PF GAC Facility Enlarged Power and Lighting Plan - Pipe Gallery
375	E	109	E43-109	PF GAC Facility Intermediate Power and Lighting Plan - Pump Room
376	E	110	E43-110	PF GAC Facility Roof Power Plan
377	E	111	E43-111	PF GAC Facility Single Line Diagram
378	E	112	E43-112	PF GAC Facility Panel Schedules and Riser Diagram 1
379	E	113	E43-113	PF GAC Facility Panel Schedules and Riser Diagram 2
380	E	114	E43-114	PF GAC Facility Control One Line Diagram Sheet 1
381	E	115	E43-115	PF GAC Facility Elementary Control Schematics
382	E	116	E43-116	PF GAC Facility Conduit and Wire Schedules Sheet 1
383	E	117	E43-117	PF GAC Facility Conduit and Wire Schedules Sheet 2
384	E	118	E43-118	PF GAC Facility Conduit and Wire Schedules Sheet 3
385	E	200	E87-200	Chlorine Dioxide Facility Electrical Arrangement Sheet
386	E	201	E87-201	Chlorine Dioxide Facility Grounding Plan
387	E	202	E87-202	Chlorine Dioxide Facility Top Power and Lighting Plan
388	E	203	E87-203	Chlorine Dioxide Facility Enlarged Power and Lighting Plan - Electrical Room
389	E	204	E87-204	Chlorine Dioxide Facility Enlarged Power and Lighting Plan - Pipe Gallery
390	E	205	E87-205	Chlorine Dioxide Facility Intermediate Power and Lighting Plan - Pump Room
391	E	206	E87-206	Chlorine Dioxide Facility Roof Power Plan
392	E	207	E87-207	Chlorine Dioxide Facility Single Line Diagram
393	E	208	E87-208	Chlorine Dioxide Facility Panel Schedules and Riser Diagram 1
394	E	209	E87-209	Chlorine Dioxide Facility Panel Schedules and Riser Diagram 2
395	E	210	E87-210	Chlorine Dioxide Facility Control One Line Diagram Sheet 1
396	E	211	E87-211	Chlorine Dioxide Facility Elementary Control Schematics
397	E	212	E87-212	Chlorine Dioxide Facility Conduit and Wire Schedules Sheet 1
398	E	213	E87-213	Chlorine Dioxide Facility Conduit and Wire Schedules Sheet 2
399	E	300	E75-300	Dewatering Facility Electrical Arrangement Sheet
400	E	301	E75-301	Dewatering Facility Grounding Plan
401	E	302	E75-302	Dewatering Facility Top Power and Lighting Plan
402	E	303	E75-303	Dewatering Facility Enlarged Power and Lighting Plan - Electrical Room
403	E	304	E75-304	Dewatering Facility Enlarged Power and Lighting Plan - Pipe Gallery
404	E	305	E75-305	Dewatering Facility Intermediate Power and Lighting Plan - Pump Room
405	E	306	E75-306	Dewatering Facility Roof Power Plan
406	E	307	E75-307	Dewatering Facility Single Line Diagram
407	E	308	E75-308	Dewatering Facility Panel Schedules and Riser Diagram 1
408	E	309	E75-309	Dewatering Facility Panel Schedules and Riser Diagram 2
409	E	310	E75-310	Dewatering Facility Control One Line Diagram Sheet 1
410	E	311	E75-311	Dewatering Facility Elementary Control Schematics
411	E	312	E75-312	Dewatering Facility Conduit and Wire Schedules Sheet 1

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Sheet No.	Discipline	No.	Dwg. No.	Sheet Name
412	E	313	E75-313	Dewatering Facility Conduit and Wire Schedules Sheet 2
413	E	400	E65-400	EQ Basin Pumps Grounding Plan
414	E	401	E65-401	EQ Basin Pumps Top Power Plan
415	E	402	E65-402	EQ Basin Pumps Electrical Service
416	E	403	E65-403	EQ Basin Pumps Single Line Diagram
417	E	404	E65-404	EQ Basin Pumps Control One Line Diagram Sheet 1
418	E	405	E65-405	EQ Basin Pumps Elementary Control Schematics
419	E	406	E65-406	EQ Basin Pumps Conduit and Wire Schedules Sheet 1
420	E	407	E65-500	Sampling Connection Electrical Service
421	E	408	E65-501	Sampling Connection Single Line Diagram
422	E	409	E65-502	Sampling Connection Control One Line Diagram Sheet 1
423	E	410	E65-503	Sampling Connection Elementary Control Schematics
424	E	411	E65-504	Sampling Connection Conduit and Wire Schedules Sheet 1
425	E	001	ED-001	Standard Details 1
426	E	002	ED-002	Standard Details 2
427	E	003	ED-003	Standard Details 3
428	E	004	ED-004	Standard Details 4
429	I	001	I-001	Legend and Symbols Sheet 1
430	I	002	I-002	Legend and Symbols Sheet 2
431	I	003	I-003	SCADA Architecture Overview
432	I	100	I43-100	P&ID PF GAC Facility Control Panel Detail and Layout
433	I	101	I43-101	P&ID PF GAC Facility Influent and Backwash Pump Station
434	I	102	I43-102	P&ID PF GAC Facility Treatment Sheet 1
435	I	103	I43-103	P&ID PF GAC Facility Treatment Sheet 2
436	I	104	I43-104	P&ID PF GAC Facility Treatment Sheet 3
437	I	105	I43-105	P&ID PF GAC Facility Treatment Sheet 4
438	I	106	I43-106	P&ID PF GAC Facility Treatment Sheet 5
439	I	107	I43-103	Individual GAC Contactors 1 and 2
440	I	108	I43-104	Individual GAC Contactors 3 and 4
441	I	109	I43-105	Individual GAC Contactors 5 and 6
442	I	110	I43-106	Individual GAC Contactors 7 and 8
443	I	111	I43-107	Individual GAC Contactors 9 and 10
444	I	200	I86-200	P&ID Chlorine Dioxide Tanks and Scrubber Sheet 1
445	I	201	I86-201	P&ID Chlorine Dioxide Tanks and Scrubber Sheet 2
446	I	202	I86-202	P&ID Chlorine Dioxide Pump Systems
447	I	203	I86-203	P&ID Chlorine Dioxide Fill, Drain, Wash and Control Sheet
448	I	204	I86-204	P&ID Chlorine Dioxide Generation Equipment (redrawn vendor sheet)
449	I	205	I86-205	P&ID Hydrochloric Acid Tank and Scrubber
450	I	206	I86-206	P&ID Hydrochloric Acid System
451	I	207	I86-207	P&ID Sodium Chlorite Tanks
452	I	208	I86-208	P&ID Sodium Chlorite System
453	I	209	I86-209	P&ID Facility MCP / Control Room Details
454	I	210	I75-300	P&ID Dewatering Facility Gravity Thickener Polymer Pump System 1
455	I	211	I75-301	P&ID Dewatering Facility Gravity Thickener Polymer Pump System 2
456	I	212	I75-302	P&ID Dewatering Facility Thickened Solids Pump System 1
457	I	213	I75-303	P&ID Dewatering Facility Thickened Solids Pump System 2
458	I	214	I75-304	P&ID Dewatering Facility Thickened Solids Pump System 3
459	I	215	I75-305	P&ID Dewatering Facility Thickened Solids Pump System 4
460	I	216	I75-306	P&ID Dewatering Facility Polymer Pump System 1

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Sheet No.	Discipline	No.	Dwg. No.	Sheet Name
461	I	217	I75-307	P&ID Dewatering Facility Polymer Pump System 2
462	I	218	I75-308	P&ID Dewatering Facility Polymer Pump System 3
463	I	219	I75-309	P&ID Dewatering Facility Polymer Pump System 4
464	I	220	I75-310	P&ID Dewatering Facility Press Sheet 1
465	I	221	I75-311	P&ID Dewatering Facility Conveyors (Screw, Transfer and Distribution)
466	I	222	I75-312	P&ID Dewatering Facility Press Support Systems
467	I	223	I75-313	P&ID Dewatering Facility MCP / Control Room Details
468	I	224	I65-400	EQ Basin Pumps Sheet 1
469	I	225	I65-401	EQ Basin Pumps Sheet 2
470	I	226	I95-500	Details Sheet 1
471	I	227	I95-501	Details Sheet 2
472	I	226	ID-001	Sample Panel Details
473	I	227	ID-002	Sample Panel Details
474	I	228	ID-003	Example Wiring Diagrams
475	I	229	ID-004	Example Wiring Diagrams
476	I	230	ID-005	Standard Details 1
477	I	231	ID-006	Standard Details 2
478	I	232	ID-007	Standard Details 3
479	I	233	ID-008	Standard Details 4

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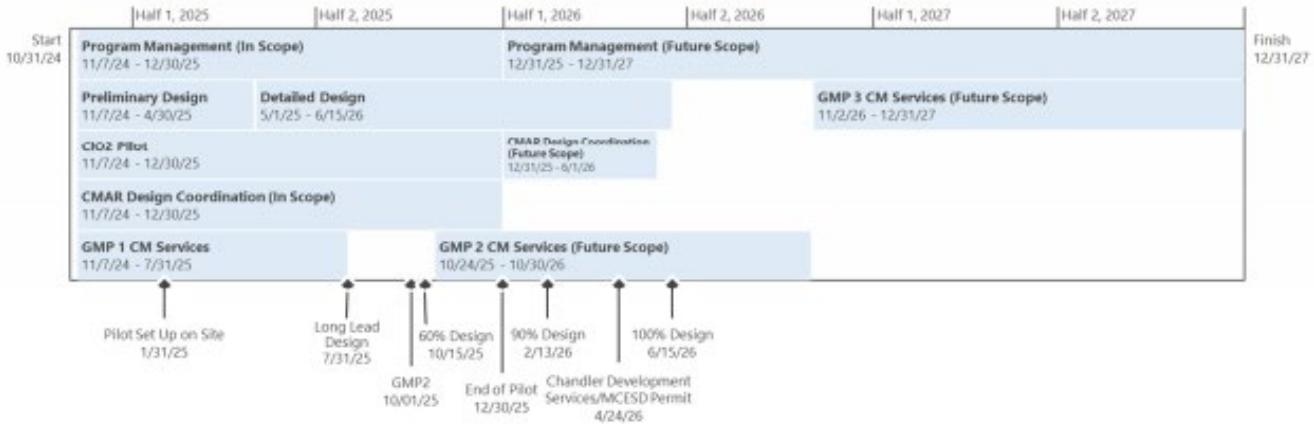
Appendix D: Schedule

Schedule Summary with Key Milestones



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Detailed Schedule

Water System Program - Amendment 1 Schedule - Med Detail

ID	Task Name	Duration	Start	Finish
0	**Chandler Water System Program - Design**	**820 days**	**Thu 10/31/24**	**Fri 12/31/27**
1	NTP	0 days	Thu 11/7/24	Thu 11/7/24
2	**Program Management**	**820 days**	**Thu 10/31/24**	**Fri 12/31/27**
21	**Preliminary Design**	**123 days**	**Thu 11/7/24**	**Wed 4/30/25**
37	**ClO2 Pilot**	**295 days**	**Thu 11/7/24**	**Tue 12/30/25**
43	**Detailed Design**	**291 days**	**Thu 5/1/25**	**Mon 6/15/26**
58	**CMAR Coordination During Design**	**404 days**	**Thu 11/7/24**	**Mon 6/1/26**
61	GMP 1 CM Services	189 days	Thu 11/7/24	Thu 7/31/25
62	GMP 2 CM Services (Future Scope)	264 days	Thu 10/2/25	Thu 10/8/26
63	GMP 3 CM Services (Future Scope)	302 days	Fri 10/9/26	Thu 12/9/27

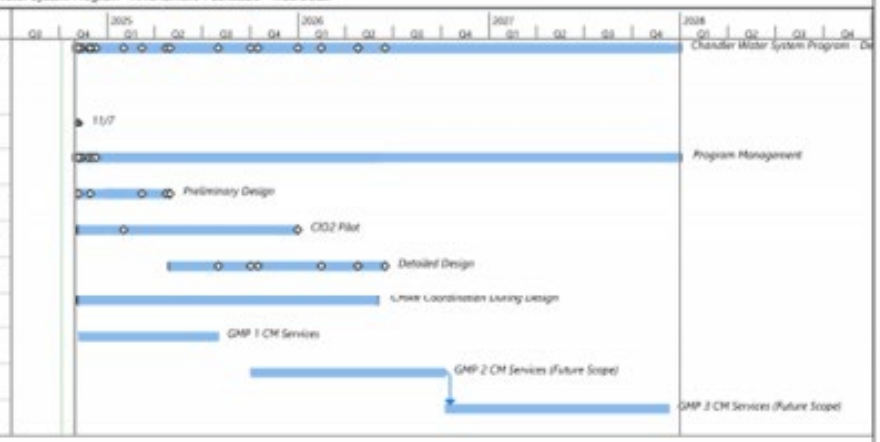

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EXHIBIT B
FEE SCHEDULE

Lump Sum Cost Per Task

	TASK DESCRIPTION		SUBTOTAL
Task 1 Program Management (thru GMP2)			**$ 632,000.00**
	Project Management/Project Execution Plan/Meeting	$ 632,000.00	
Task 2 Preliminary Design			**$ 3,759,550.00**
2.1	Data Review & Site Visits	$ -	
2.2	Geotechnical	$ 20,000.00	
2.3	ClO2 Pilot	$ 275,550.00	
2.4	30% Design	$ 3,464,000.00	
Task 3 Detailed Design			**$ 6,734,615.00**
3.1	Long Lead Package	$ 1,073,585.00	
3.2	60% Design Submittal	$ 2,993,660.00	
3.3	90% Design Submittal	$ 2,276,990.00	
3.4	100% Design Submittal	$ 390,380.00	
Task 4 Permitting (thru GMP2)			**$ -**
4.1	MCESD Permit	$ -	
4.2	Chander Development Services Permit	$ -	
Task 5 CMAR Coordination During Design (thru GMP2)			**$ 235,000.00**
5.1	CMAR Management	$ 25,000.00	
5.2	Cost Model Reviews	$ 50,000.00	
5.3	GMP Reviews	$ 10,000.00	
5.4	Schedule Reviews	$ 25,000.00	
5.5	Coordination Meetings	$ 36,000.00	
5.5.1	Design Reviews/MOPO	$ 89,000.00	
Task 6 GMP 1 CM Services			**$ 176,180.00**
6.1	Preconstruction Assistance	$ -	
6.2	Construction Management	$ 52,280.00	
6.3	Construction Inspection	$ 96,700.00	
6.4	Testing and Start Up	$ 10,080.00	
6.5	Record Drawings	$ 17,120.00	
Task 7 Other Direct Costs (ODC)			**$ 30,000.00**
Task 8 Allowances			**$ 31,000.00**
	TOTAL COST:		**$ 11,598,345.00**

		Name	Curtis Courter	Brindha Dhanasekaran	Daniela Panill	Jason Curl	Matt Ridens	Doran Purseo	Sjoberg/ Perez	Chris Currier	Steve Alvira	Katie Robles	Jacob Millan	Rahul Raina	Varies	Varies	Varies	Varies	Varies	Varies	Varies	Varies		TASK SUBTOTAL	TOTAL FEE
		Classification	Client Manager	Program Manager	Deputy Program Manager	Design Project Manager	Process QAQC	Design Manager	CAD/BIM Lead	Cost Estimating/ Constructability	CM/Inspector	Sr Engineer	Mid Level Engineer	Sr. Engineer	Discipline QAQC	Discipline Lead	Sr. Engineer	Mid Level Engineer	Assistant Engineer	Senior Designer	Designer	Admin or Intern	Expenses		
			VP	SA	SPE	AVP	SA	A	SPD CAD	A	SFC	SPE	AE	A	SA	A	SPE	PE	AE	SPD	CAD	Admin			
		Hourly Rate	$ 275	$ 265	$ 230	$ 270	$ 265	$ 250	$ 185	$ 250	$ 200	$ 230	$ 180	$ 230	$ 270	$ 265	$ 230	$ 180	$ 155	$ 170	$ 150	$ 95	1		
Task	Description																							(HOURS)	
			LEVEL OF EFFORT (HOURS)																						
Task 1	Program Management (thru GMP2)																								$ 632,000
	Project Management/Project Execution Plan/Meetings		80	1000	1500																			2580	$ 632,000
Task 2	Preliminary Design																								$ 3,759,550
2.1	Data Review & Site Visits																							0	$ -
2.2	Geotechnical																						$ 20,000	0	$ 20,000
2.3	CIO2 Pilot					80	40								30				550				$ 150,000	700	$ 275,550
2.4	30% Design					450	250	800	600			600	600	400	700	1700	1800	2200	3400	800	3400	50		17750	$ 3,464,000
Task 3	Detailed Design																								$ 6,734,615
3.1	Long Lead Package																							5098	$ 1,073,585
	43.1 Post-Filter GAC Contactors					200	125	300	80			300	300		250	300	350	350	450	125	350	20		3500	$ 735,825
	86.1 Chlorine Dioxide																							0	$ -
	65.1A EQ Pumps					5	5	5	5				10		10				40		40			120	$ 21,550
	75.1D Dewatering Building					70	50	140	20					240	120	120	150	150	200	60	150	8		1478	$ 316,210
3.2	60% Design Submittal																							14868	$ 2,992,660
	43.1 Post-Filter GAC Contactors				160	240	140	360	280			320	320		280	1100	1100	1100	1300	280	1500	24		8504	$ 1,706,180
	86.1 Chlorine Dioxide				60	80	40	140	100			120	120		100	360	360	360	360	80	400	12		2692	$ 549,240
	65.1A EQ Pumps							10					20						40		40			110	$ 18,300
	75.1D Dewatering Building				60	100	60	160	100					240	120	450	470	500	550	120	620	12		3562	$ 719,940
3.3	90% Design Submittal		30000																					11484	$ 2,276,990
	43.1 Post-Filter GAC Contactors				80	170	80	200	200			180	180		170	880	960	990	1100	220	1210	20		6640	$ 1,315,700
	86.1 Chlorine Dioxide				20	40	20	60	40			60	60		40	260	260	260	300	60	330	8		1818	$ 360,960
	65.1A EQ Pumps												10						24		24			58	$ 9,120
	75.1D Dewatering Building				40	70	40	90	70					140	70	400	440	450	500	100	550	8		2968	$ 591,210
3.4	100% Design Submittal																							1976	$ 390,280
	43.1 Post-Filter GAC Contactors				80	50	80	70	40			80	80		80		80	110	170	20	170	8		1118	$ 226,610
	86.1 Chlorine Dioxide				2	5		10				20	20						100		130	2		289	$ 47,700
	65.1A EQ Pumps				2			2					5						24		24			57	$ 9,180
	75.1D Dewatering Building				40	20	40	30	20					80	40		40	50	70	8	70	4		512	$ 106,890
Task 4	Permitting (thru GMP2)																								$ -
4.1	MCESD Permit																							0	$ -
4.2	Chandler Development Services Permit																							0	$ -
Task 5	CMAR Coordination During Design (thru GMP2)																								$ 235,000
5.1	CMAR Management									100														100	$ 25,000
5.2	Cost Model Reviews									200														200	$ 50,000
5.3	GMP Reviews									40														40	$ 10,000
5.4	Schedule Reviews									100														100	$ 25,000
5.5	Coordination Meetings									80	80													160	$ 36,000
5.5.1	Design Reviews/MOPO					40		40		80		40	40	40			40	40	40					400	$ 89,000
Task 6	GMP 1 CM Services																								$ 176,180
6.1	Preconstruction Assistance																							0	$ -
6.2	Construction Management									80														80	$ 20,000
6.2.1	Meetings					8							12											20	$ 4,320
6.2.2	Const Schedule Review					2																		2	$ 540
6.2.3	RFIs					8							16			8	8			12				52	$ 11,040
6.2.4	Submittals					8							20			12	12							52	$ 11,700
6.2.5	RFP					4							12											16	$ 3,240
6.2.6	Work Change Directive												8											8	$ 1,440
6.2.7	Pay App Review																							0	$ -
6.3	Construction Inspection									100	140													240	$ 53,000
6.3.1	Inspection Services					16							80			60	16							172	$ 38,300
6.3.2	Project Closeout					4							24											28	$ 5,400
6.4	Testing and Start Up					16							32											48	$ 10,080
6.5	Record Drawings					12			12				12			8	6				40			90	$ 17,120
Task 7	Other Direct Costs (ODC)																								$ 30,000
	Expenses (travel, shipping, etc)																						$ 30,000.00		$ 30,000
Task 8	Allowances																								$ 31,000
8.1	Owner's Allowance																						$ 25,000.00		$ 25,000
8.2	MCESD Permit Fee(s)																						$ 6,000.00		$ 6,000
	TOTAL FEE																								$ 11,598,345

City Council Memorandum Public Works & Utilities Memo No. CP25-057

Date: November 04, 2024
To: Mayor and Council
Thru: Joshua H. Wright, City Manager
Andy Bass, Deputy City Manager
John Knudson, Public Works and Utilities Director
Daniel Haskins, Capital Projects Division Manager
From: Gina Ishida-Raybourn, Principal Engineer
Subject: Construction Manager at Risk (CMAR) Pre-Construction Services Agreement No. WA2100.251, with Archer Western Construction, LLC, for the Water System Upgrades Program

---

Proposed Motion:

Move City Council award CMAR Pre-Construction Services Agreement No. WA2100.251, to Archer Western Constuction, LLC, for the Water System Upgrades Program, in an amount not to exceed $913,965.

Background/Discussion:

The Pecos Surface Water Treatment Plant (PSWTP), located at 1475 East Pecos Road, was put into service in 1989. The current treatment capacity of the PSWTP is 60 million gallons per day. In recent years, the source water quality from the Salt River Project canal that feeds the PSWTP has been dramatically changing with respect to certain characteristics such as Total Organic Carbon. Advanced water treatment upgrades are necessary to treat the challenging incoming water quality. In addition, the existing unit processes such as the filters and dewatering are in need of rehabilitation and replacement.

The work under this project will address process improvements to enhance the maximum process and hydraulic throughput of the PSWTP, including the post-filter granular activated carbon contactors, chlorine dioxide facility, equalization pump improvements, and a new dewatering building with modernized and energy efficient equipment.

The project scope of work consists of constructability studies and review, value engineering, project planning and scheduling, design document reviews, cost model development, subcontractor and supplier selection process, and preparation of Guaranteed Maximum Price packages. The agreement completion time is 419 calendar days following Notice to Proceed.

A related Construction Manager at Risk Contract with Archer Western, for the Water System Upgrades Program, is also scheduled for this City Council meeting.

A related Consultant Services Agreement with Hazen and Sawyer, for the Water System Upgrades Program, is also scheduled for this City Council meeting.

Evaluation:

The selection process was followed in accordance with city policy and procedure and state law. Staff recommends agreement award to Archer Western, based on qualifications, relevant firm experience, team experience, project understanding, and project approach.

Fiscal Impact

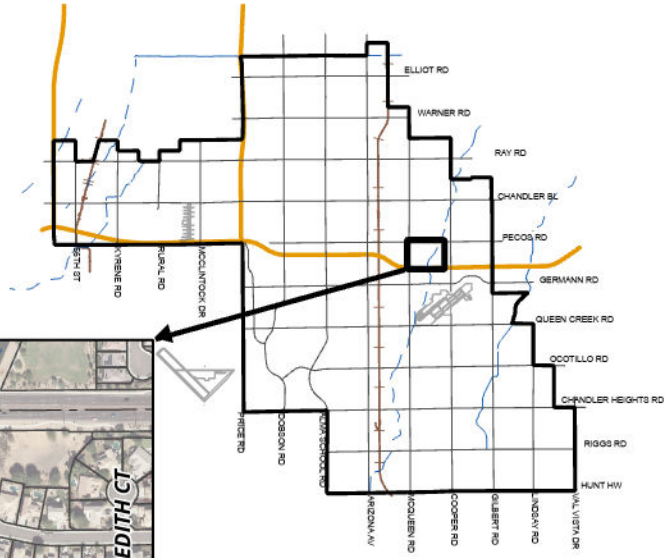
Account No.	Fund Name	Program Name	Dollar Amount	CIP Funded Y/N
601.3820.6718.6WA210	Water Bond	Water Treatment Plant Improvements	$913,965	Y

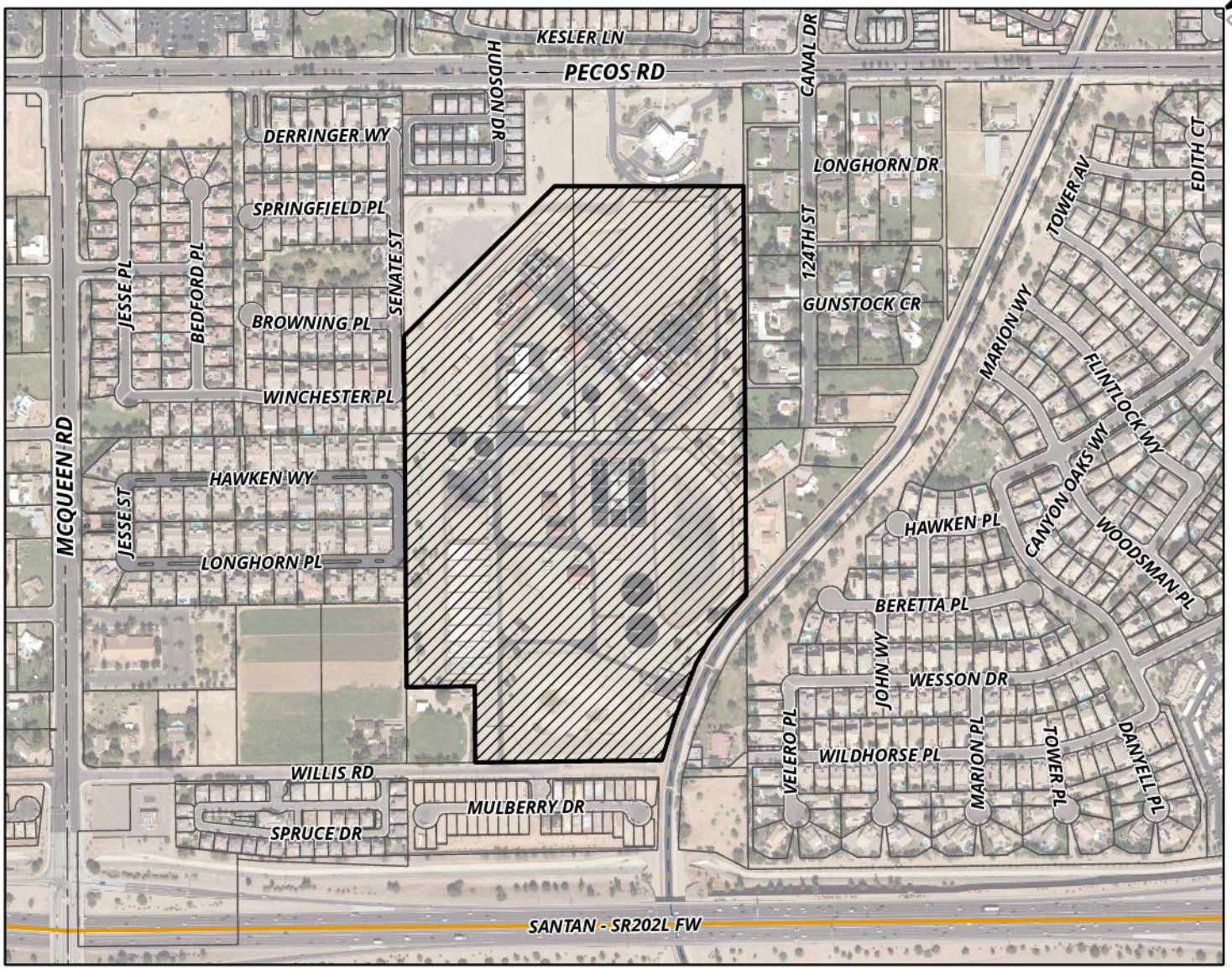
Attachments

Location Map

Agreement - Archer Western

WATER SYSTEM UPGRADE PROGRAM - PRECONSTRUCTION SERVICES PROJECT NO. WA2100.251





MEMO NO. CP25-057

PROJECT SITE

NTS

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CITY OF CHANDLER, ARIZONA

WATER SYSTEM UPGRADES PROGRAM

CITY PROJECT NO. WA2100.251

PRE-CONSTRUCTION SERVICES AGREEMENT

(CONSTRUCTION MANAGER AT RISK)

Daniel Haskins

Daniel Haskins, P.E.
CIP City Engineer

CITY OF CHANDLER, ARIZONA

Water System Upgrades Program
CITY PROJECT NO.: WA2100.251

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CONSTRUCTION MANAGER AT RISK
PRE-CONSTRUCTION SERVICES AGREEMENT
PROJECT NO.: WA2100.251

This Agreement (the "AGREEMENT") is made and entered into on the _____day of _____, 2024, ("Effective Date") by and between City of Chandler, an Arizona municipal corporation, hereinafter called "City" and **Archer Western Construction, LLC** the "Construction Manager at Risk" or "CM@Risk" designated below (City and CM@Risk may individually be referred to as "Party" and collectively referred to as "Parties").

City and CM@Risk agree as follows:

ARTICLE 1 - PARTICIPANTS AND PROJECT

CITY: **CIP City Engineer: Daniel Haskins, P.E.**
Public Works & Utilities Department
P.O. Box 4008, Mail Stop 407 Chandler, AZ 85244-4008
Phone: 480-782-3335 Email: Daniel.Haskins@chandleraz.gov

CITY: **Construction Project Manager: Gina Ishida-Raybourn**
Public Works & Utilities Department
P.O. Box 4008, Mail Stop 409 Chandler, AZ 85244-4008
Phone: 480-782-3584 Email: Gina.Ishida-Raybourn@chandleraz.gov

CM@RISK:

Legal Company Name:	Archer Western Construction, LLC
Mailing Address:	4710 E. Elwood Street, Suite 6, Phoenix, AZ 85040
Physical Address:	SAME
Arizona Roc No.:	275896 & 275897
Federal Tax Id No.:	27-0887868
State Where Organized:	Arizona
Business Organization:	Limited Liability Company
Statutory Agent Name:	Corporation Service Company
Statutory Agent Mailing Address:	8825 North 23rd Avenue, Suite 100, Phoenix, AZ 85021
Statutory Agent Physical Address:	SAME

CM@Risk's Authorized Project Representative:

Name:	Kyle Ledbetter
Title:	Project Executive
Phone:	602-293-7835
Email:	kledbetter@walshgroup.com

PROJECT DESCRIPTION:

Implementation of identified improvement projects for the liquid and solid treatment process at the Pecos Surface Water treatment Plant (PSWTP). Projects may include: GAC media replacement, concrete repair and rehabilitation of existing filters, installation of new post-filter GAC contactors or ozone contactors, new dewatering equipment and associated building, submersible pump replacement and reconfiguration, and miscellaneous yard piping improvements.

PROJECT LOCATION:

Pecos Surface Water Treatment Plant
1475 East Pecos Road
Chandler, AZ 85244

ARTICLE 2 - AGREEMENT DOCUMENTS

2.1 AGREEMENT DOCUMENTS

The Agreement between City and CM@Risk will consist of the following Agreement Documents:

1. This Pre-Construction Services Agreement and all of its Exhibits, incorporated by reference;
2. **Exhibit A** – Pre-Construction Scope of Work and Schedule;
3. **Exhibit B** – Compensation and Fee Schedule;
4. **Exhibit C** – Insurance Requirements;
5. **Exhibit D** – Submittal Requirements for GMP/Price Proposal;
6. **Exhibit E** - General Conditions and General Conditions Appendices.

2.2 DEFINITIONS

The definitions in Sections 2 and 15.1 of the General Conditions apply to all the Agreement Documents, including this Agreement.

ARTICLE 3 - PRE-CONSTRUCTION SERVICES

3.1 SERVICES

CM@Risk must provide all of the services and perform in accordance with Section 17 of the General Conditions. The major components of Pre-Construction Services and the corresponding subsections of Section 17 of the General Conditions are set forth below.

3.2 GENERAL REQUIREMENTS

3.2.1 CM@Risk must perform the services required by, and in accordance with this Agreement and as outlines in the attached **Exhibit A** to the satisfaction of the Project Manager, in full compliance with Section 17.2.1 of the General Conditions.

3.2.2 In performance of the Services under this Agreement, the CM@Risk must fully comply with all applicable Laws, Regulations, or Legal Requirements applicable to City, the Project, and the Agreement.

3.2.3 CM@Risk must perform the Services under this Agreement using only those firms, team members, and individuals designated by CM@Risk consistent with the Statement of Qualifications or as otherwise approved by City in accordance with the General Conditions. No other entities or individuals may be used without the prior written approval of City.

3.2.4 CM@Risk will comply with all terms and conditions of the General Conditions.

3.2.5 In the event of a conflict between this Agreement and the General Conditions or any exhibit hereto or appendix thereto, the terms of this Agreement will control.

3.2.6 **Ownership of Work Product**. Notwithstanding anything to the contrary in this Agreement, all Work Product prepared or otherwise created in connection with the performance of this Agreement, including the Work, are to be and remain the property of City, as set forth in Section 17.2.6 of the General Conditions.

3.3 **DESIGN PROJECT SCHEDULE**

CM@Risk must prepare and present to City a Detailed Project Schedule that is acceptable to the City and in accordance with Section 17.3 of the General Conditions.

3.4 **DESIGN DOCUMENT REVIEW**

CM@Risk must conduct the evaluations, perform the design document reviews, make the recommendations, and provide the other Services referenced in accordance with Section 17.4 of the General Conditions.

3.5 **BASELINE COST MODEL, DETAILED COST ESTIMATES, AND SCHEDULE OF VALUES**

3.5.1 CM@Risk must prepare and submit the Baseline Cost Model, Detailed Cost Estimates, and Schedule of Values in accordance with Section 17.5 of the General Conditions.

3.5.2 The submitted Baseline Cost Model, Detailed Cost Estimates, and Schedule of Values must not exceed the City's Construction Budget, which is **$100,000,000** or a higher amount as revised by the City ("Construction Budget"). If CM@Risk submits a Baseline Cost Model, Detailed Cost Estimates, and Schedule of Values that exceeds the Construction Budget, negotiations could lead to termination or suspension of the Agreement.

3.6 **SUBCONTRACTOR AND MAJOR SUPPLIER SELECTIONS**

CM@Risk must select and obtain approval of Subcontractors and Suppliers in accordance with Section 17.6 of the General Conditions.

3.7 **GUARANTEED MAXIMUM PRICE (GMP) PROPOSAL**

3.7.1 CM@Risk must submit a GMP Proposal for the entire Work, and for each phase (if required) of the Work, at the times set forth in the Pre-Construction Schedule included in attached. The GMP Proposal must be presented in a format acceptable to City based upon the attached **Exhibit D**. City may change the schedule, format, and/or requirements for the GMP Proposal as it deems necessary during Pre-Construction, and may request resubmittal of the GMP Proposal to reflect such changes.

3.7.2 Preparation, submittal, review, and approval (or disapproval, if applicable) of the GMP Proposal will be done in accordance with Section 17.7 of the General Conditions.

3.7.3 For the purposes of the GMP Proposal, the Parties agree that:

a. The CM@Risk Fee will be equal to **8.0%** (percent) of the Cost of Work;
b. General Conditions costs will be a fixed amount or percentage agreed to as part of the Baseline Cost Model.

3.7.4 The GMP Proposal must not exceed the City's Construction Budget.

3.8 **ADDITIONAL PRE-CONSTRUCTION SERVICES**

3.8.1 Additional services which are outside the scope of the services required under the Agreement Documents will not be performed by CM@Risk without prior written authorization from City. Additional services, when authorized by an executed written Change Order under Section 9 of the General Conditions, will be compensated for by a fee mutually agreed upon in such written Change Order between City and CM@Risk.

3.8.2 No claim for additional services, extra work done or materials furnished by CM@Risk will be allowed by City except as provided herein, nor will CM@Risk provide any additional services, do any work, or furnish any materials(s) not covered by this Agreement unless such work or material is first authorized in writing by City. Work or material(s) furnished by CM@Risk without such prior written authorization will be CM@Risk's sole jeopardy, cost, and expense, and CM@Risk hereby agrees that without prior written authorization no claim for compensation for such services, work or materials furnished will be made, and City will not be responsible for such costs.

3.8.3 No Work (as defined by Section 1 of the General Conditions) may be performed under this Pre-Construction Services Agreement, without prior written approval by City. As an example, all procurement of long lead time items that must be procured to support the construction schedule or site investigative Work necessary to complete Pre-Construction Services, if done by the CM@Risk, will be performed only after a GMP Proposal for the Work has been approved and accepted in writing by City and all such Work will be done only under an executed Agreement for Construction Services, or pursuant to a prior written direction from City to engage in such procurement.

ARTICLE 4 - CONSTRUCTION SERVICES

If City accepts CM@Risk's GMP Proposal, CM@Risk and City will enter a Construction Services Agreement for Construction of the Project based upon CM@Risk's Pre-Construction Services performed and GMP Proposal submitted pursuant to this Agreement. The terms of the Construction Services Agreement are being negotiated contemporaneously with this Agreement and CM@Risk agrees to execute the Construction Services Agreement, without further modification, upon acceptance by City of the GMP Proposal. All of CM@Risk's obligations, duties and warranties in relation to Pre-Construction Services and Deliverables (including specifically the GMP

Proposal) survive the completion of this Agreement and will be incorporated into the Construction Services Agreement.

ARTICLE 5 - CITY FURNISHED INFORMATION

5.1 City, at no cost to CM@Risk, will furnish the following to CM@Risk:

5.1.1 One copy of data in City's possession or control which City determines in its discretion to be pertinent to the Work. However, CM@Risk will be responsible for searching the records and requesting information it deems reasonably required for the Project.

5.1.2 Electronic copies of programs, reports, drawings, and specifications reasonably required by CM@Risk, to the extent in possession of City.

ARTICLE 6 - AGREEMENT TIME

Agreement Duration is **419** Calendar Days. The Pre-Construction Services described in this Agreement must be performed by CM@Risk in accordance with the Pre-Construction Schedule set forth in attached **Exhibit A**, as updated and expanded in the most current updated/revised and approved Detailed Project Schedule. Failure on the part of CM@Risk to adhere to the Pre-Construction Schedule requirements for activities for which it is responsible and in control will be deemed a material breach and sufficient ground for termination for cause of this Agreement by City.

ARTICLE 7 - AGREEMENT PRICE

7.1 In exchange for CM@Risk's full, timely, and acceptable performance of the Services under this Agreement, and subject to all of the terms of this Agreement, City will pay CM@Risk a fee of **$913,965** (the "Agreement Price"). The method of payment for this Agreement is Hourly, Not-to-Exceed. The amount paid will not exceed the Agreement Price for actual costs incurred, based on the negotiated hourly rates and reimbursement schedule as defined in **Exhibit B**, Compensation and Fee Schedule.

7.2 The Agreement Price is all-inclusive, and City will not pay any additional amounts, costs or expense, except for only those specifically designated reimbursable costs, without markup, as set forth in **Exhibit B**.

ARTICLE 8 - FORCED LABOR OF ETHNIC UYGHURS PROHIBITED

8.1 By entering into this Agreement, Contractor certifies and agrees Contractor does not currently use and will not use for the term of this Agreement: (i) the forced labor of ethnic Uyghurs in the People's Republic of China; or (ii) any goods or services produced by the forced labor of ethnic Uyghurs in the People's Republic of China; or (iii) any contractors, subcontractors or suppliers that use the forced labor or any goods or services produced by the forced labor of ethnic Uyghurs in the People's Republic of China.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement through their duly authorized representatives and bind their respective entitles as of the Effective Date.

"CITY" CITY OF CHANDLER

MAYOR

RECOMMENDED BY:

Daniel Haskins

Daniel Haskins, P.E.
CIP City Engineer

APPROVED AS TO FORM:

City Attorney

ATTEST:

City Clerk Seal

"CM@Risk"
ARCHER WESTERN CONSTRUCTION, LLC

Signature Date

Daniel P. Walsh
Print Name

President
Title

dpwalsh@walshgroup.com
Signer Email Address

EXHIBIT A

PRE-CONSTRUCTION SERVICES
SCOPE OF WORK AND SCHEDULE

October 7, 2024

Gina Ishida-Raybourn, PE
Utilities Engineering Manager
Public Works & Utilities | Utilities Administration
City of Chandler

Re: CM@Risk Preconstruction Services Proposal Rev 3
Project WA2100.251 Pecos Surface Water Treatment Plant Improvements

Archer Western Construction, LLC (Archer Western) appreciates the opportunity to collaborate with the City of Chandler (City) Public Works & Utilities Department and its selected design team (Hazen) during the design phase of the Pecos Surface Water Treatment Plant (WTP) Improvement project. In this proposal, we have prepared a detailed scope of work (Attachment 1) and schedule of values (Attachment 2) for your final review and approval.

Based on information provided at the September 13 scoping meeting with City and Hazen staff, we have assumed 14-month preconstruction services duration commencing in November 2024. We have used Exhibit A CM@Risk Pre-Construction Services Scope of Work document and Archer Western's past experience to develop the requirements and corresponding schedule of values.

We are assuming the following mark-ups for the construction work activities:
Total Fee (OH&P) = 8% (on direct cost)

During preconstruction, Archer Western will invoice monthly with back-up information provided as described in the scope of work. Allowances will only be used upon written approval from the City.

We are looking forward to providing exceptional preconstruction services to ensure the City and Hazen are provided with the greatest value for the Pecos WTP and ongoing operations.

In your review, please let us know if you have any questions/comments or if you need additional information to complete the review.

Respectfully,

Nathan Antonneau, P.E.
Preconstruction Manager

Kyle Ledbetter
Project Director

Attachment 1: Preconstruction Services Scope of Work
Attachment 2: Preconstruction Services Schedule of Values

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ATTACHMENTS

1. PRECONSTRUCTION SERVICES SCOPE OF WORK

2. SCHEDULE OF VALUES

ATTACHMENT 1

PRECONSTRUCTION SERVICES SCOPE OF WORK

OVERVIEW

The scope of work (SOW) description follows Section 17 of the General Conditions and corresponds with the schedule of values (SOV).

ASSUMPTIONS

Archer Western is assuming the following for the development of the Schedule of Values:

- The initial preconstruction phase is anticipated to be November 2024 through December 2025.
- The SOV includes preconstruction activities that includes GMP1 (filter rehab), GMP2 (long lead procurement), and design through 60% as requested by the City. The remainder of the preconstruction scope will be added as an amendment.
- Pricing has been put together based upon the 2.5.5 CMAR Pre-Const Ex A - Scope of Work - Hazen Markups that was provided on September 17, 2024.
- Ozone will not be part of the project and Chlorine dioxide may be used as a pre-oxidant.
- Autodesk Construction Cloud (ACC) will be used for collaboration with team members. It is assumed that the Hazen Revit files will be made available to the CM@Risk at least on a weekly basis (preferably more frequently).
- Submittals will be electronically transmitted.
- Meeting attendance will have both virtual and in person option.

PROPOSED PRECONSTRUCTION MANAGEMENT TEAM

The following personnel are assigned to the preconstruction services team.

- Project Director: Kyle Ledbetter
- Preconstruction Manager: Nathan Antonneau
- Constructability Manager: Doug Post
- Superintendent: Jimmy Foster
- Felix Electric Preconstruction Manager: Jason Lipsky
- Felix Electric Technical Advisor: Brad Fransen
- Preconstruction Engineer: Heather Beale
- Chief Estimator: Ali Minerva
- AWC Estimators: Tony Jannero, Jonas Vikander, Jacob Roberson, David Songer
- Felix Electric Estimator: Zach Watts
- BIM Modeling: Brent Bieske
- Preconstruction Admin: Kristine Aldrin

PRECONSTRUCTION SERVICES SCOPE OF WORK

17.2 – GENERAL

17.2.3. Meetings & Workshops

17.2.3.A Project Kick-off / Chartering Meeting

Description: Archer Western and Felix Electric staff will attend and participate in Project Kick-off meeting. CM@Risk will provide drawings, schedule diagrams, budget charts, and other materials describing the Project, when their use is required for the meeting.

17.2.3.B Miscellaneous Project Meetings

Description: Archer Western and Felix Electric staff will attend Project/Design meetings for the duration of the preconstruction phase to coordinate design tasks with the City and Hazen. Archer Western and Felix Electric Staff will attend and participate, as may be appropriate, in meetings related to the following:

- Stakeholders and Public Agencies Meetings (1 – two-hour meeting)
- Project Workshops/Design Workshops (2 – four-hour meetings)
  - 30% cost model, 60% cost model
- Construction Document Rolling Reviews (Integrated in Bi-weekly meeting)
- Value Engineering Review Meetings (2 – three-hour meetings)
- Utility Coordination (4 – two-hour meetings)
  - MOPO Planning Meeting
  - Pothole Planning Meeting
  - Pothole Review and Coordination Meeting
  - Electrical Design Coordination Meeting
- Comment Resolution Meetings (2 – four-hour meetings)
  - 30% design, 60% design

Assumptions: Bi-weekly meetings with an expected duration of 1-hour and will be attended virtually via Teams.

17.2.3.C Designer/CM@Risk Coordination Meeting

Description: Archer Wester and Felix Electric staff will attend project meetings with Designer to review design progress, evaluate constructability, discuss schedule updates, and workshop alternate scenarios to achieve the desired project budget and schedule goals.

Assumptions: Bi-weekly meetings with an expected duration of 1-hour and will be attended virtually via teams.

17.2.3.D Owner/CM@Risk Coordination Check-In

Description: Archer Western will attend bi-weekly check-in with Owner and Program Manager/Designer to flush out any outstanding or upcoming financial and non-financial tasks.

Assumptions: Bi-weekly meetings with an expected during of 30 minutes and will be attended virtually via teams.

17.2.3.E GMP Review/Negotiation Meetings

Description: Archer Western and Felix Electric staff will participate in meetings with City and Hazen to review the GMP after submission.

Assumptions: It is assumed there will be two (2) resolution meetings total, one at GMP1 and one at GMP2.

17.3 - DETAILED PROJECT SCHEDULE

17.3.2.A Develop Preliminary Construction Schedule & Phasing Plans

Description: Archer Western and Felix Electric will develop a transition design phase schedule to overall project schedule in association with the baseline cost model and proposed phasing plans for early equipment procurement and construction activities and the remainder of the construction phase.

Assumption: High level schedule will be built based on facility and trade and will include man hours. This schedule will be used to determine the overall project schedule at 30% and 60% design milestones while the design continues to evolve ahead of the baseline schedule.

Deliverable: A pdf copy of the schedule will be provided and will serve as the basis for the cost model.

17.3.2.B Develop Baseline Construction Schedule

Description: Archer Western and Felix Electric will develop a preconstruction deliverable schedule, preliminary construction schedule and phasing plan for the overall project in association with the baseline cost model and proposed construction activities and the remainder of the construction phase.

Assumptions: A P6 schedule will be provided for items included in each GMP. The full baseline construction schedule will be included in the amendment for delivery of the project's baseline schedule at the final GMP.

Deliverable: A pdf copy and .xer file of the schedule will be provided at each GMP. The baseline construction schedule will be finalized after the construction contract award.

17.3.5 Long Lead Analysis and Recommendations

Description: Archer Western and Felix Electric will identify all long lead time materials, fabrications, equipment or other items which may impact the Project Schedule and may require early action on the part of the Project Team including dates required for selecting and procuring such items.

Assumptions: Recommendations will be provided based on the schedule developed at each given milestone and representative market feedback.

Deliverable: At each major design milestone (30%-60%), Archer Western will submit a summary of long lead materials with recommendations for early procurement.

17.3.6 Equipment Plan

Description: Archer Western and Felix Electric staff will prepare and present to City an Equipment Plan that addresses all rental and owned equipment that is necessary to construct the Project as outlined in General Conditions Section 17.3.6. The Equipment Plan will seek to minimize the cost of the equipment to City and maximize the efficient and coordinated use of the equipment for completion of the Project. The Equipment Plan will not only include the costs and allowable lease rates for the equipment, but will also include an equipment schedule that will be incorporated into the Detailed Project Schedule and the Schedule of Values submitted with the GMP Proposal

Deliverable: An equipment plan will be submitted per GC section 17.3.6. at each GMP that has equipment in the scope.

17.4 – DESIGN DOCUMENT REVIEWS

17.4.4 Constructability/Biddability Analysis

Description: In review of the drawings, specifications, and other relevant design information, Archer Western will identify opportunities to improve the constructability of the work elements. Archer Western will also engage subcontractors, suppliers, and process equipment manufacturers to assess the biddability of work packages. Information gathered will be presented in a meeting and/or workshop setting.

Assumptions: Bluebeam Revu and/or ACC will be used for constructability reviews.

Deliverable: In advance of the meetings/workshops, Archer Western will prepare the constructability/biddability agenda information and submit to the City. Any subsequent documentation developed from the meeting/workshop action items will be submitted to Pecos SWTP.

17.4.4.2 Document Complementary Review and Cross Checks

Description: Archer Western will perform reviews and provide written comments regarding the bid-ability of the Project. Archer Western will check cross-references and complementary Drawings and sections within the specifications per GC section 17.4.4.2.

Assumptions: Bluebeam Revu and/or ACC will be used for comments and RFIs

17.4.6 Value Analysis & Alternate Approach Evaluation & Meetings/Workshops

Description: Throughout the course of design, Archer Western will identify opportunities to enhance value to the City through alternate strategies. Alternate strategies may be construction means and methods, alternative materials or equipment that perform the same function, or scope evaluation with respect to project priorities. Archer Western will also consider operating costs and maintainability features of the work elements in the evaluation.

Deliverable: Archer Western will submit a Value Analysis & Alternate Strategies Summary at each major design milestone (30%-60%) and host a meeting/workshop to review submitted information.

17.4.7 Utility/Site Investigations

Description: Archer Western will participate in site investigations and utility potholing as deemed necessary to pothole, identify and record existing utilities to avoid conflicts during design planning. Based on the recommendations developed, Archer Western may perform exploratory activities under the H.2 Site Investigation/Potholing Allowance.

Deliverable: Archer Western will submit a Potholing plan and site investigation documents.

17.4.8 Site Utilization Plan

Description: Archer Western will prepare a site utilization plan that shows the site access, security provisions, construction yard, parking, construction traffic patterns, laydown and staging areas and any other potential conflicts with City operations staff.

Deliverable: Archer Western will submit a site utilization plan with the 60% cost models.

17.4.9 Utility Design Review and Comment

Description: Archer Western and Felix Electric will perform reviews and provide written comments on the utility relocation and design submittals and for coordination with the design development for construction of the Project.

17.4.10 Maintenance of Plant Operations (MOPOs)

Description: Archer Western and Felix Electric will evaluate scope and design for tasks that have the potential to affect plant operations; lead development of planning to minimize or eliminate disruption to Owner's facilities. This may require a plant visit to discuss options with WTP plant staff to understand operational constraints.

Deliverable: Archer Western will submit a preliminary MOPO plan that will be finalized during the construction phase. Critical MOPOs will be added to the schedule as they are finalized. A detailed MOPO plan for PF GAC and dewatering will be submitted at 60%.

17.5 – BASELINE COSTS MODEL, DETAIL COST ESTIMATE, SCHEDULE OF VALUES

17.5.2 Cost Model Reports (Baseline-30-60-90)

17.5.2.A Baseline Cost Model

Description: Archer Western will develop a baseline cost model using the Basis of Design Report for each major design element of the project scope.

Deliverable: Baseline cost model report, both hard copy and electronic copy.

17.5.2.B Cost Model (30% Design)

Description: Upon receipt of acceptable 30% drawings, Archer Western will review all available information regarding design and scope of the Project using the Archer Western's experience in performing similar work, knowledge of similar projects, and current and projected construction costs and, based upon that review, must develop a Baseline Cost Model for review by the Project Team and approval by City.

Deliverable: 30% cost model report, both hard copy and electronic copy.

17.5.2.C Cost Model (60% Design)

Description: Upon receipt of acceptable 60% drawings and specifications, Archer Western will review all available information regarding the design and scope of the Project using Archer Western's experience in performing similar work, knowledge of similar projects and current and projected construction costs and, based upon that review, must update the Cost Model for review by the Project Team and approval by City.

Deliverable: 60% cost model report, both hard copy and electronic copy.

17.5.2.D Cost Model (90% Design)

Description: Upon receipt of acceptable 90% drawings and specifications, Archer Western will review all available information regarding the design and scope of the Project using Archer Western's experience in performing similar work, knowledge of similar projects and current and projected construction costs and, based upon that review, must update the Cost Model for review by the Project Team and approval by City.

Assumption: Deferred to future amendment

Deliverable: Deferred to future amendment

17.5.2.E Continuous Cost Model/Estimate Updates (Design Evolution Log)

Description: Archer Western will track, estimate/price, and address the Project Team's overall project cost issues that arise outside of the Baseline Cost Model and the latest approved Detailed Cost Estimate such as: City generated changes, Project Team proposed changes, alternate system analysis, constructability items and value engineering analysis.

Deliverable: Archer Wester will create and update a design evolution log at 60% cost model comparing to 30% cost model.

17.5.4 Schedule of Values

Description: For each GMP, Archer Western will prepare and submit a Schedule of Values for review by the Project Team and approval by City. The Schedule of Values will be developed and submitted following the approved GMP but prior to the commencement of construction activities.

Assumptions: SOV will be based on AIA Document G703.

Deliverable: Schedule of Values for each GMP proposal.

17.6 – SUBCONTRACTOR AND MAJOR SUPPLIER SELECTIONS

17.6.1. Subcontractors

17.6.1.A Procurement Prequalifications & Subcontractor Prequalifications

Description: Archer Western will evaluate potential suppliers and subcontractors with respect to safety, financial capacity, ability to meet/exceed schedule, and quality to obtain adequate pool of acceptable bidders.

Assumption: Included in early preconstruction scope is prequalification of long lead vendors and manufacturers. Additional time will be needed for the amendment for GMP3 subcontractors, vendors and manufacturer's scopes.

Deliverable: Archer Western will submit a Prequalification List.

17.6.1.B Subcontractor Selection Plan

Description: Develop and submit written subcontractor selection plan per General Conditions Section 17.6 with justification for any qualifications-based selections proposed.

Assumption: Included in early preconstruction scope is sub-selection of long lead vendors and manufacturers. Additional time will be needed for the amendment for GMP3 subcontractors, vendors and manufacturer's scopes.

Deliverable: Archer Western will submit a Subcontractor Selection Plan in compliance with GC section 17.6.1

17.6.2 Subcontractor Bid Evaluation/Reports

Description: Archer Western will prepare and submit a detailed list of recommended subcontractors and summary report of the entire selection process.

Deliverable: Archer Western will submit bid comparison sheets with each GMP.

17.6.7 Pre-bid Conference

Description: Archer Western will plan, communicate, and conduct pre-bid conference with prospective subcontractors and suppliers.

Assumption: Not anticipated for GMP1 and GMP2 scopes.

17.7 – GMP PROPOSAL

17.7.5.A Early Equipment/Early GMP Preparations

Description: Archer Western will identify long-lead equipment that will greatly improve schedule if procured in an early GMP; work with Owner and Project Designer in developing required Agreement Documents to facilitate this procurement. The early procurement proposal will include the direct costs of material and subcontracts as well as Archer Westerns costs for procurement activities to negotiate and write contracts, track submittals, submit pay applications, and coordinate with field staff receiving the procured items

Deliverable: Archer Western will submit an early procurement proposal.

17.7.5.B GMP Preparation and Submission

Description: Archer Western and Felix Electric will prepare and submit the GMP Proposal in accordance with City's request for GMP Proposal requirements based on the most current completed Drawings and Specifications at that time, which unless otherwise directed by City in writing, will be at 100% Construction Drawings.

Deliverable: Archer Western will submit GMP1 and GMP2 which will include the scope of work, cost model, CPM schedule, assumptions / clarifications, risk register, subcontractor / material quotations, and other supporting information.

17.8 – PAYMENT PROCEDURE FOR PRE-CONSTRUCTION SERVICES

17.8.1 Monthly Progress Reports/Request for Payment

Description: Archer Western will prepare and submit a monthly request for payment accompanied by a progress report, detailed invoices and receipts, if applicable.

Deliverable: Archer Western will submit monthly invoices with appropriate back-up information.

ALLOWANCE ITEMS

A.1 Topographic Survey

Description: An allowance to be used to capture and record a current topographic survey and mapping of the site to establish existing elevations for Temporary Easements or other items deemed necessary by City. Archer Western will hire RLS to establish new benchmarks as needed for the project and use benchmark for survey control. Archer Western will use a drone to map the existing conditions. Cost will include planning, data collection, and office activities associated with the submittal.

Deliverable: As necessary, Archer Western will submit a written request to the City with the cost estimate and applicable back-up information for approval. All survey data points and point cloud of the drone mapping will be provided to the City for design evolution.

A.2 Site Utility Investigations (Potholing)

Description: An allowance to supply a potholing subcontractor to continue investigating unknown utilities and locations (if required or not performed by the Project Designer). Cost will include planning, data collection, and office activities associated with the submittal.

Deliverable: As necessary, Archer Western will submit a written request to the City with the cost estimate and applicable back-up information for approval.

A.3 Order Long Lead Items

Description: An allowance to be used to order materials for long lead items, including streetlights, heads, and traffic poles (as directed by City). Archer does not anticipate any long lead procurement outside of GMP long lead items. An allowance is being carried in the event the City wants to purchase an item quickly.

Deliverable: As necessary, Archer Western will submit a written request to the City with the cost estimate and applicable back-up information for approval.

A.4 Owner's Allowance (Contingency)

Description: This allowance is for out-of-scope requests by the City. In the schedule of values, it is an assumed value as 10% of the scope of work value.

Deliverable: As necessary, Archer Western will submit a written request to the City with the cost estimate and applicable back-up information for approval.

A.5 Subcontractor Consulting Allowance

Description: An allowance to be used for consulting subcontractors for design-assist agreements by suppliers and subcontractors.

Deliverable: As necessary, Archer Western will submit a written request to the City with the cost estimate and applicable back-up information for approval.

A.6 Cash Flow Projections

Description: Upon request by the City, Archer Western will prepare a cash flow projection for each GMP milestone to enable Pecos SWTP to accurately predict its cash flow on a month-by-month basis.

Deliverable: Archer Western will prepare and submit cash flow projections in Excel-based format.

EXHIBIT B

COMPENSATION AND FEE SCHEDULE

ATTACHMENT 2

PRECONSTRUCTION SERVICES SCHEDULE OF VALUES

CITY OF CHANDLER
PRECONSTRUCTION SERVICES SCHEDULE OF VALUES
PROJECT WA2204.101 PECOS SWTP FACILITY UPGRADE CMAR SERVICES

DESCRIPTION	LABOR HOURS												Total Hours	Total Cost
	Project Director	Precon Manager	Constructability Manager	Superintendent	Felix Electric Precon Mgr	Felix Technical Advisor	Precon Eng	Chief Estimator	AWC Estimators	Felix Electric Estimator	BIM Modeling	Precon Admin		
RATES	$ 200.00	$ 175.00	$ 175.00	$ 150.00	$ 175.00	$ 175.00	$ 150.00	$ 175.00	$ 150.00	$ 150.00	$ 125.00	$ 100.00		
17.2 General	**76**	**124**	**50**	**28**	**81**	**81**	**111**	**38**	**32**	**43**	**24**	**16**	**704**	**$117,350**
17.2.3 Meetings & Workshops (prep, attendance, minutes)														
17.2.3.A. Project Kick-off / Chartering Meeting	2	2	2	0	2	2	2	2	0	2	0	0	16	$ 2,750
17.2.3.B. Project/Design Meetings (bi-weekly - 1 hr/ea)	25	38	15	8	25	25	38	8	0	25	16	16	239	$ 38,675
17.2.3.B. Miscellaneous Project Meetings	32	32	20	20	32	32	32	16	32	16	0	0	264	$ 44,500
17.2.3.C. Designer /AW Coordination Meetings (bi-weekly - 1 hr/ea)	13	35	13	0	18	18	35	8	0	0	8	0	148	$ 24,950
17.2.3.D. Owner /AW Coordination Meetings (bi-weekly - 30 min/ea)	0	13	0	0	0	0	0	0	0	0	0	0	13	$ 2,275
17.2.3.E. GMP Review/Negotionation Meetings	4	4	0	0	4	4	4	4	0	0	0	0	24	$ 4,200
17.3 Detailed Project Schedule	**92**	**40**	**32**	**24**	**36**	**0**	**0**	**40**	**16**	**4**	**0**	**0**	**284**	**$50,900**
17.3.2.A. Preliminary Construction Schedule and Phasing Plan														
17.3.2.A.30. Schedule Integration (30% Design)	24	8	8	0	8	0	0	8	0	0	0	0	56	$ 10,400
17.3.2.A.60. Schedule Integration (60% Design)	24	8	8	0	8	0	0	8	0	0	0	0	56	$ 10,400
17.3.2.B Baseline Construction Schedule														
17.3.2.B.1. Schedule Integration (GMP1)	16	4	0	0	8	0	0	0	0	0	0	0	28	$ 5,300
17.3.2.B.2. Schedule Integration (GMP2)	8	4	0	0	8	0	0	0	0	0	0	0	20	$ 3,700
17.3.2.B.3. Schedule Integration (GMP3) - To be added with Amendment at GMP2	0	0	0	0	0	0	0	0	0	0	0	0	0	$ -
17.3.5 Long Lead Analysis and Recommendations	4	8	0	0	4	0	0	0	16	4	0	0	36	$ 5,900
17.3.6 Equipment Plan	16	8	16	24	0	0	0	24	0	0	0	0	88	$ 15,200
17.4 Design Document Reviews	**90**	**146**	**144**	**76**	**40**	**44**	**40**	**128**	**304**	**40**	**80**	**0**	**1,132**	**$184,850**
17.4.4 Constructability/Biddability Analysis	24	24	24	40	8	16	8	24	72	24	80	0	344	$ 53,200
17.4.4.2 Document Complementary Review and Cross Checks	24	24	24	0	8	16	8	24	72	16	0	0	216	$ 36,000
17.4.6 Value Analysis & Alternate Approach Evaluation & Meetings/Workshops (Prep)	24	80	80	0	24	12	8	80	160	0	0	0	468	$ 78,300
17.4.7 Utility/Site Investigations	4	8	4	8	0	0	8	0	0	0	0	0	32	$ 5,300
17.4.8 Site Utilization Plan	2	2	0	8	0	0	2	0	0	0	0	0	14	$ 2,250
17.4.9 Utility Design Review and Comment	4	4	4	4	0	0	2	0	0	0	0	0	18	$ 3,100
17.4.10 Maintenance of Plant Operations	8	4	8	16	0	0	4	0	0	0	0	0	40	$ 6,700
17.5 Baseline Cost Model, Detailed Cost Estimates & Schedule of Values	**104**	**136**	**72**	**24**	**72**	**0**	**32**	**312**	**880**	**240**	**0**	**12**	**1,884**	**$302,000**
17.5.2 Cost Model Reports (Baseline-30-60-90)														$ -
17.5.2.A. Cost Model Reports (Baseline)	24	40	24	8	24	0	8	80	240	80	0	4	532	$ 85,000
17.5.2.B. Cost Model Reports (30% Design)	24	40	24	8	24	0	8	100	320	80	0	4	632	$ 100,500
17.5.2.C. Cost Model Reports (60% Design)	24	40	24	8	24	0	8	100	320	80	0	4	632	$ 100,500
17.5.2.D. Cost Model Reports (90% Design) - to be added with Amendment at GMP2	0	0	0	0	0	0	0	0	0	0	0	0	0	$ -
17.5.2.E. Continuous Cost Model/Estimate Updates (Design Evolution Log)	8	16	0	0	0	0	8	32	0	0	0	0	64	$ 11,200
17.5.4 Schedule of Values	24	0	0	0	0	0	0	0	0	0	0	0	24	$ 4,800
17.6 Subcontractor and Major Supplier Selections	**4**	**18**	**0**	**0**	**8**	**8**	**34**	**28**	**56**	**24**	**0**	**12**	**192**	**$29,950**
17.6.1. Subcontractors														
17.6.1.A Procurement Prequalifications and Subcontractor Prequalifications	0	8	0	0	0	0	4	8	24	16	0	4	64	$ 9,800
17.6.1.B Subcontractor Selection Plan	4	10	0	0	0	0	30	4	0	0	0	0	48	$ 7,750
17.6.2 Subcontractor Bid Evaluation/Reports	0	0	0	0	8	8	0	16	32	8	0	8	80	$ 12,400
17.6.7 Pre-bid Conference	0	0	0	0	0	0	0	0	0	0	0	0	0	$ -
17.7 GMP Proposals	**4**	**20**	**0**	**0**	**0**	**0**	**60**	**16**	**0**	**0**	**0**	**0**	**100**	**$16,100**
GMP Proposal 1 - Filter 9-12 Rehab	2	10	0	0	0	0	30	8	0	0	0	0	50	$ 8,050
GMP Proposal 2 - Long Lead Procurement	2	10	0	0	0	0	30	8	0	0	0	0	50	$ 8,050
GMP Proposal 3 - Remaining Construction - to be added with Amendment at GMP2	0	0	0	0	0	0	0	0	0	0	0	0	0	$ -
17.8 Payment Procedure for Pre-Construction Services	**0**	**40**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**40**	**$7,000**
Prepare Application for Payment (10 months)	0	40	0	0	0	0	0	0	0	0	0	0	40	$ 7,000
Total Hours & Costs	**370**	**524**	**298**	**152**	**237**	**133**	**277**	**562**	**1,288**	**351**	**104**	**40**	**4,336**	**708,150**
Allowance Expenses														
A.1 Topographic Survey														$ 20,000
A.2 Site Utility Investigations (Potholing)														$ 80,000
A.3 Order Long Lead Items														$ 10,000
A.4 Owner's Allowance (10% of base cost)														$ 70,815
A.5 Subcontractor Consulting Allowance														$ 25,000
A.6 Cash Flow Projections														$ -
Allowance Expense Totals														**205,815**
PRECONSTRUCTION SERVICES TOTAL														***913,965***

EXHIBIT C

INSURANCE REQUIREMENTS

1. General.

1.1 At the same time as execution of this Agreement, CM@Risk must furnish City a certificate of insurance on a standard insurance industry ACORD form. The ACORD form must be issued by an insurance company authorized to transact business in the State of Arizona possessing a current A.M. Best, Inc. rating of A-7, or better and legally authorized to do business in the State of Arizona with policies and forms satisfactory to City. Provided, however, the A.M. Best rating requirement will not be deemed to apply to required Workers' Compensation coverage.

1.2 CM@Risk and any of its subconsultants must procure and maintain, until all of their obligations have been discharged, including any warranty periods under this Agreement are satisfied, the insurances set forth below.

1.3 The insurance requirements set forth below are minimum requirements for this Agreement and in no way limit the indemnity covenants contained in this Agreement.

1.4 City in no way warrants that the minimum insurance limits contained in this Agreement are sufficient to protect CM@Risk from liabilities that might arise out of the performance of the Agreement services under this Agreement by CM@Risk, its agents, representatives, employees, subconsultants, and CM@Risk is free to purchase any additional insurance as may be determined necessary.

1.5 Failure to demand evidence of full compliance with the insurance requirements in this Agreement or failure to identify any insurance deficiency will not relieve CM@Risk from, nor will it be considered a waiver of its obligation to maintain the required insurance at all times during the performance of this Agreement.

1.6 Use of subconsultants: If any work is subcontracted in any way, CM@Risk must execute a written Agreement with subconsultant containing the same Indemnification Clause and Insurance Requirements as City requires of CM@Risk in this Agreement. CM@Risk is responsible for executing the Agreement with the subconsultant and obtaining Certificates of Insurance and verifying the insurance requirements.

2. Minimum Scope and Limits of Insurance. CM@Risk must provide coverage with limits of liability not less than those stated below.

2.1 *Commercial General Liability-Occurrence Form*. CM@Risk must maintain "occurrence" form Commercial General Liability insurance with a limit of not less than $2,000,000 for each occurrence, $4,000,000 aggregate. Said insurance must also include coverage for products and completed operations, independent contractors, personal

injury and advertising injury. If any Excess insurance is utilized to fulfill the requirements of this paragraph, the Excess insurance must be "follow form" equal or broader in coverage scope than underlying insurance.

2.2 *Automobile Liability-Any Auto or Owned, Hired and Non-Owned Vehicles*
Vehicle Liability: CM@Risk must maintain Business/Automobile Liability insurance with a limit of $1,000,000 each accident on CM@Risk owned, hired, and non-owned vehicles assigned to or used in the performance of CM@Risk's work or services under this Agreement. If any Excess or Umbrella insurance is utilized to fulfill the requirements of this paragraph, the Excess or Umbrella insurance must be "follow form" equal or broader in coverage scope than underlying insurance.

2.3 *Workers Compensation and Employers Liability Insurance*: CM@Risk must maintain Workers Compensation insurance to cover obligations imposed by federal and state statutes having jurisdiction of CM@Risk employees engaged in the performance of work or services under this Agreement and must also maintain Employers' Liability insurance of not less than $1,000,000 for each accident and $1,000,000 disease for each employee.

2.4 *Builders' Risk/Installation Floater Insurance.* The Contractor bears all responsibility for loss to all equipment or Work under construction. Unless waived in writing by the City the Contractor will purchase and maintain in force Builders' Risk/Installation Floater insurance on the entire Work until completed and accepted by the City. This insurance will be Special Causes of Loss policy form, (minimally including perils of fire, flood, lightning, explosion, windstorm and hail, smoke, aircraft and vehicles, riot and civil commotion, theft, vandalism, malicious mischief, and collapse), completed value, replacement cost policy form equal to the Agreement price and all subsequent modifications. The Contractor's Builders' Risk/Installation Floater insurance must be primary and not contributory.

Builders' Risk/Installation Floater insurance must cover the entire Work including reasonable compensation for architects and engineers' services and expenses and other "soft costs" made necessary by an insured loss. Builders' Risk/Installation Floater insurance must provide coverage from the time any covered property comes under the Contractor's control and or responsibility, and continue without interruption during course of construction, renovation and or installation, including any time during which any Project property or equipment is in transit, off Site, or while on Site for future use or installation. Insured property must include, but not be limited to, scaffolding, false work, and temporary buildings at the Site. This insurance must also cover the cost of removing debris, including demolition as may be legally required by operation of any law, ordinance, regulation or code.

The Contractor must also purchase and maintain Boiler and Machinery insurance with the same requirements as Builders' Risk/Installation Floater insurance cited above if the Work to be performed involves any exposures or insurable property normally covered under a Boiler and Machinery insurance policy or made necessary as required by law or testing requirements in the performance of this Agreement. The Contractor

will be responsible for any and all deductibles under these policies and the Contractor waives all rights of recovery and subrogation against the City under the Contractor-Builders' Risk/Installation Floater insurance described herein.

Builders' Risk/Installation Floater Insurance must be maintained until whichever of the following first occurs: (i) final payment has been made; or, (ii) until no person or entity, other than the City, has an insurable interest in the property required to be covered. The Builders' Risk/Installation Floater insurance must be endorsed so that the insurance will not be canceled or lapse because of any partial use or occupancy by the City.

The Builders Risk/Installation Floater insurance must include as named insureds, the City, the Contractor, and all tiers of Subcontractors and others with an insurable interest in the Work who will be named as additional insureds unless they are able to provide the same level of coverage with the City and Contractor named as additional insureds. Certificates must contain a provision that the insurance will not be canceled or materially altered without at least 30 Days advance notice to the City. The City must also be named as a Loss Payee under the Builders' Risk/Installation Floater coverage. The Builders Risk/Installation Floater insurance must be written using the Special Causes of Loss policy form, replacement cost basis.

All rights of subrogation under the Builders Risk/Installation Floater insurance are, by this Agreement, waived against the City, its officers, officials, agents and employees.

The Contractor is responsible for payment of all deductibles under the Builders' Risk/Installation Floater insurance policy.

3. Additional Policy Provisions Required.

3.1 *Self-Insured Retentions or Deductibles.* Any self-insured retentions and deductibles must be declared and approved by City. If not approved, City may require that the insurer reduce or eliminate any deductible or self-insured retentions with respect to City, its officers, officials, agents, employees, and volunteers.

3.1.1. CM@Risk's insurance must contain broad form contractual liability coverage.

3.1.2. CM@Risk's insurance coverage must be primary insurance with respect to City, its officers, officials, agents, and employees. Any insurance or self-insurance maintained by City, its officers, officials, agents, and employees will be in excess of the coverage provided by CM@Risk and must not contribute to it.

3.1.3. CM@Risk's insurance must apply separately to each insured against whom claim is made or suit is brought, except with respect to the limits of the insurer's liability.

3.1.4. Coverage provided by CM@Risk must not be limited to the liability assumed under the indemnification provisions of this Agreement.

3.1.5. The policies must contain a severability of interest clause and waiver of subrogation against City, its officers, officials, agents, and employees, for losses arising from Work performed by CM@Risk for City.

3.1.6. CM@Risk, its successors and or assigns, are required to maintain Commercial General Liability insurance as specified in this Agreement for a minimum period of 3 years following completion and acceptance of the Work. CM@Risk must submit a Certificate of Insurance evidencing Commercial General Liability insurance during this 3 year period containing all the Agreement insurance requirements, including naming City of Chandler, its agents, representatives, officers, directors, officials and employees as Additional Insured as required.

3.1.7. If a Certificate of Insurance is submitted as verification of coverage, City will reasonably rely upon the Certificate of Insurance as evidence of coverage but this acceptance and reliance will not waive or alter in any way the insurance requirements or obligations of this Agreement.

3.2. *Insurance Cancellation During Term of Agreement.*

3.2.1. If any of the required policies expire during the life of this Agreement, CM@Risk must forward renewal or replacement Certificates to City within 10 days after the renewal date containing all the required insurance provisions.

3.2.2. Each insurance policy required by the insurance provisions of this Agreement must provide the required coverage and must not be suspended, voided or canceled except after thirty (30) days prior written notice has been given to City, except when cancellation is for non-payment of premium, then ten (10) days prior notice may be given. Such notice must be sent directly to Chandler Law-Risk Management Department, Post Office Box 4008, Mailstop 628, Chandler, Arizona 85225. If any insurance company refuses to provide the required notice, CM@Risk or its insurance broker must notify City of any cancellation, suspension, non-renewal of any insurance within seven (7) days of receipt of insurers' notification to that effect.

3.3 *City as Additional Insured*. The policies are to contain, or be endorsed to contain, the following provisions:

3.3.1. The Commercial General Liability and Automobile Liability policies are to contain, or be endorsed to contain, the following provisions: City, its officers, officials, agents, and employees are additional insureds with respect to liability arising out of activities performed by, or on behalf of, CM@Risk including City's general supervision of CM@Risk; Products and Completed operations of CM@Risk; and automobiles owned, leased, hired, or borrowed by CM@Risk.

3.3.2. City, its officers, officials, agents, and employees must be additional insureds to the full limits of liability purchased by CM@Risk even if those limits of liability are in excess of those required by this Agreement.

EXHIBIT D

SUBMITTAL REQUIREMENTS FOR GMP/PRICE PROPOSAL
(Page 1 of 2)

1. Unless otherwise instructed, CM@Risk must submit 3 bound copies of any GMP Proposal(s) that includes the following documents, complies with the requirements specified in this Agreement and the following instructions. The GMP Proposal(s) must be organized as follows:

   A. Table of Contents
   B. Project Description
   C. GMP Proposal and the following attachments:
      i. Detailed Cost Estimate upon which the GMP is based and if for phased work, a total project Detailed Cost Estimate as of the time of the phased GMP Proposal.
      ii. List of Subcontractors
      iii. Schedule of Manufacturers and Suppliers
   D. Schedule of Values ("SOV")
   E. Project Schedule and a variance report to the Baseline Project Schedule
   F. Construction phasing/traffic control (if applicable)
   G. List of GMP Plans and Specifications

2. A summary breakdown of the GMP Proposal is shown on page 2 of this Exhibit, along with instructions regarding certain line items. The definitions included in Section 1 of the General Conditions apply to the line items, as appropriate, and set-forth the criteria to be used by CM@Risk in providing the required breakdown.

3. The most current version of CM@Risk's SOV must be submitted with the GMP Proposal. Supporting documents for the SOV, including the request for bids, copies of bids received, and clarification assumptions used for the particular bid item listed must be provided in an organized matter that correlates with the SOV.

4. The final accepted GMP must not include any clarifications/assumptions made by CM@Risk in the preparation of the GMP Proposal, unless any such clarification or assumption is agreed to in writing by City.

5. The most current version of CM@Risk's Detailed Project Schedule must be submitted with the GMP Proposal with a variance report from the project's Baseline Schedule. The Detailed Project Schedule must be prepared as specified in this Agreement.

6. A table listing all drawing sheets included in the GMP Plans and Specifications must be included with the GMP package. The table must include the following information: Sheet Number, Sheet Name, Sheet Version, and Date of Issuance. The GMP Proposal and Specifications, as defined, must be transmitted as specified in this Agreement.

NOTE: The submittal package must be kept as simple as possible all on 8 ½ x 11 sheets. Color or shading must be kept to a minimum. If used, make sure the color or shading will not affect the reproduction of the submittal in black and white.

EXHIBIT D
CM@RISK GMP SUMMARY (PAGE 2 of 2)

Project Name: _____ Date: _____
Project Location: _____
City of Chandler Project No.: _____

	Amount
A. Cost of Work	
A1 Cost of Work (self perform, no mark-up)	$0.00
A2 Cost of Work (subcontractors, suppliers, materialmen)	$0.00
TOTAL COST OF WORK:	**$0.00**
B. General Conditions	**$0.00**
SUBTOTAL 1 (Cost of Work) (A + B):	**$0.00**
C. CM@Risk's Fee	**$0.00**
SUBTOTAL 2 (A + B + C):	**$0.00**
D. Bonds and Insurance (on Subtotal 1)	
D1 Bonds (Payment and Performance)	$0.00
D2 Insurance	$0.00
TOTAL BONDS & INSURANCE:	**$0.00**
SUBTOTAL 3 (SUBTOTAL 2 + BONDS & INS):	**$0.00**
E. Sales Tax	
E1 Sales Tax	$0.00
E2 Tax Credits	$0.00
TOTAL SALES TAX:	**$0.00**
F. Approved Allowances	
F1 Owner's Allowance	$0.00
F2 Owner's Allowance for Water and Wastewater	$0.00
TOTAL ALLOWANCES:	**$0.00**
G. Contingencies	
G1	$0.00
G2	$0.00
TOTAL CONTINGENCIES:	**$0.00**
TOTAL GMP PROPOSAL:	**$0.00**

Establishment of Values:

a. Cost of Work (A) and Allowances (F) to be submitted with GMP Proposal.

b. General Conditions Cost (B) to be established in Baseline Cost Model.

c. CM@Risk Fee as set forth in Section 3.7.3 of this Contract

EXHIBIT E
GENERAL CONDITIONS
AND
GENERAL CONDITIONS APPENDICES

GENERAL CONDITIONS

Approved date: July 20, 2022

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SECTION 1 - SCOPE OF THESE GENERAL CONDITIONS

These General Conditions encompass provisions that apply, and are incorporated into all construction Agreements entered into by the City of Chandler, unless otherwise specifically excluded in the executed Agreement.

SECTION 2 - GENERAL DEFINITIONS

Allowance : A specific amount for a specific item of Work, if any, that City agrees has not been sufficiently designed, detailed, or selected (including design changes from 90% to 100% as authorized by and at the discretion of the City) at the time the Agreement Price is agreed to for Contractor to provide a definitive price.

Alternate Systems Evaluations or Alternative Analysis: Alternatives for design, means and methods or other scope considerations that are evaluated using value analysis principles and have the potential to reduce construction costs while still delivering a quality and functional Project that meets City requirements.

Change Order: A written instrument issued after execution of the Agreement Documents signed by City and Contractor, stating their agreement upon all of the following: the addition, deletion or revision in the scope of services or deliverables; the amount of the adjustment to the Agreement Price, the extent of the adjustment to the Agreement Time, or modifications of other agreement terms. The Agreement Price and the Agreement Time may be changed only by Change Order.

Consultant: Person or firm that provides professional services.

City (Owner or OWNER): City of Chandler, a municipal corporation, with whom Contractor has entered into the Agreement and for whom the Work or Services are to be provided pursuant to the Agreement(s).

Contingent Bid Items: This is a minor bid item which is likely, but not certain, to occur during the course of work. If the Engineer determines that this work is required, the Contractor will accomplish the work and payment will be made based on the contingent unit bid price included in the proposal. Since the quantity listed in the proposal is primarily for bid comparison, the amount of work required by the Engineer may vary materially from this.

Agreement: The written agreement executed between City and Contractor, including all of the Agreement Documents.

Agreement Documents: The documents which together form the Agreement between City and Contractor, as identified in Article 2 of the Agreement, or are otherwise incorporated into the Agreement, including the Agreement, the exhibits thereto, these General Conditions, any Notice to Proceed, and any Job Order (if applicable), the Plans and Specifications, Project Schedule, written and properly executed Change Orders, MAG Specifications and City's amendments thereto, and any other documents so designated in the Agreement.

Agreement Price: The agreed-upon price to be paid to Contractor for full, timely, and acceptable completion of the Work or Services under the terms of the Agreement.

Agreement Time(s): The number of calendar days or the dates related to the applicable phase, Substantial Completion, or Final Acceptance as stated in Agreement Documents. Agreement Time starts

with the Notice to Proceed (NTP) and ends with Final Acceptance. The Agreement Time is set forth in the Agreement and is based upon the Project Schedule agreed to by City in writing.

Contractor: The person or business association with whom City has entered into an agreement for construction related Work or Services in relation to the Project at issue.

Contractor Payment Request: The form that is accepted by City and used by Contractor in requesting progress payments or final payment and which must include such supporting documentation as is required by the Agreement Documents or City.

Construction Budget: The City's budget for construction of the Project.

Construction Documents: The Plans, Specifications, and Drawings prepared and issued by the Design Professional and approved by City for construction, meaning the documents are sealed by the Design Professional (as required), acceptable for permitting and incorporated into the Agreement by this reference. All amendments and modifications to the Construction Documents must be approved in writing by City prior to incorporation into the Agreement.

Cost of the Work: The term Cost of the Work will mean costs necessarily incurred by Contractor in the proper performance of the Work. Such costs will be at rates not higher than the standard paid at the place of the Project except with prior consent of City.

Critical Path Method (CPM): A scheduling technique which identifies the logical sequence of the activities occurring in a Construction Project, the anticipated time required to complete each activity in the Project, and the activities that must be completed on schedule to finish the Project within the anticipated time. Typically, activities are arranged in a network that shows both activities and their dependencies. CPM is also used as a management technique which enables contracting parties to predict when activities may occur so that resources can be effectively used and limitations can be identified.

Critical Path: Critical Path is the sequence of project network activities which add up to the longest overall duration. Once established in the Project Schedule, the Critical Path for the Project must not be changed without prior written approval of City.

Day: Calendar day(s) unless otherwise specifically stated in the Agreement Documents.

Design Professional: The qualified, licensed person, firm or corporation who furnishes design and construction administration services required under the Agreement Documents. These services may include, but are not limited to: development of Construction Drawings and Documents, review of Contractor Submittal(s), review of and response to Requests for Information, approval and certification of progress payment applications, construction administration, and construction agreement close out.

Differing Site Conditions: Concealed or latent physical conditions or subsurface conditions at the Site that, (i) materially differ from the conditions indicated in the Agreement Documents, or (ii) are of an unusual nature, differing materially from the conditions ordinarily encountered and generally recognized as inherent in the Work at the general area of the Site. Caliche, rock, hard-digging or sandy/silty soil encountered on a project is not considered a "Differing Site Condition."

Drawings (Plans): Documents, which visually represent the scope, extent and character of the Work to be furnished and performed by Contractor during the construction phase and which have been prepared

or approved by the Design Professional and City. These documents include Drawings that have reached a sufficient state of completion and released by Design Professional solely for the purposes of review and use in performing constructability or bid-ability reviews by Contractor and in preparing cost estimates (e.g. Master Planning and Programming, Schematic Design, Design Development, and Construction Drawings), but *"not for construction*." Shop Drawings are not Drawings as so defined.

Final Acceptance: The City's acceptance of the facility or project from the Contractor after all Work is completed, tested, and inspected in accordance with the Agreement requirements. Final Acceptance results in a Letter of Acceptance (LOA).

Fixed Price: A fixed price or amount for an Agreement Price, Scope of Work, materials, or other item under an Agreement, Change Order, or other agreement, which City agrees, in writing, to pay instead of the actual cost.

Float: The number of Days by which an activity can be delayed without lengthening the Critical Path and extending the Agreement Time. Unless otherwise expressly agreed in writing, all Float belongs to City.

Laws, Regulations, or Legal Requirements: Any and all applicable laws, rules, regulations, ordinances, codes and orders applicable to the Project of any and all governmental bodies, agencies, authorities and courts having jurisdiction and any applicable provisions of the Development Agreement for the Project (if any), including, without limitation, those provisions relating to the design and construction of the Project.

Line Item: The individual elements of Work identified on a bid or other schedule and associated with a price or a unit price and quantity particular to that individual element of the Work. Also refers to individual items of work within the Schedule of Values.

Liquidated Damages: Designated damages for the City to collect as compensation upon a specific breach (example: late delivery).

Long-Lead Item: Long-lead item refers to the equipment, product, or system that is identified at the earliest stage of a project to have a delivery time long enough to affect directly the Critical Path/the overall lead time of the project.

MAG: The Maricopa Association of Governments.

MAG Specifications: The most current version of the Uniform Standard Specifications for Public Works Construction published by MAG.

MAG Standard Details: The most current version of the Uniform Standard Details as published by MAG.

Minor change: A change in the Work having no impact on cost or time or the City-approved design intent, as determined by City.

Notice to Proceed (NTP): A written notice given by City to Contractor fixing the date on which Contractor will start to perform Contractor's obligations under the Agreement.

Project: The Project specified in the Agreement (including a Job Order).

Project Manager: The Project Manager designated in Article 1 of the Agreement, or any successor thereto

designated by City. The Project Manager has the authority to act on behalf of City, as delineated and limited by the Agreement Documents and applicable law. And City will communicate with Contractor through the Project Manager. However, the Project Manager has no authority to bind City or City Council in contravention of any City code, State or Federal statute or regulation, or these General Conditions.

Project Schedule: The schedule for the completion of the Project agreed to and required by City.

Project Specific Conditions: Additional conditions which apply to the specific Project and Scope of Work which are set forth in Exhibit D of the Agreement.

Project Team: The Project Team consisting of the Design Professional, Contractor, Project Manager, and such others as City may designate.

Punch List: The list initially prepared by Contractor pursuant to the Agreement Documents, reviewed and supplemented by the Project Manager (and at the sole option of the Project Manager, the Design Professional) and approved by City containing items of incomplete work not impacting Substantial Completion, if allowed for under the Agreement, and to be completed or corrected by Contractor after Substantial Completion and before Final Acceptance in accordance with the Agreement Documents.

Quality Assurance (QA) Testing: Testing performed to verify the accuracy and applicability of the QC testing results and to ascertain that the materials installed meet the specified levels of quality in accordance with the Agreement Documents.

Quality Control (QC) Testing: Testing performed to assure that the materials installed comply with the requirements in the Agreement Documents.

Requests for Information (RFIs): Formal written request from Contractor to City or Design Professional for the Project seeking clarification or additional information needed for Contractor to properly complete the Work or Services under the Agreement. City may require RFI's to be submitted on a specific form or in a specified format.

Schedule of Values (SOV): The specified document prepared by Contractor, and approved and accepted by City, which divides the Agreement Price into pay items, such that the sum of all pay items equals the Agreement Price for the construction phase Work, or for any portion of the Work having a separate specified Agreement Price.

Scope of Work: The scope of work agreed to or required by City and incorporated into the Agreement as Exhibit A.

Shop Drawings: All drawings, diagrams, schedules and other data specifically prepared for the Work by Contractor or a Subcontractor, Sub-subcontractor, manufacturer, supplier or distributor to illustrate some portion of the Work.

Site: The land or premises on which the Project is located.

Specifications: The part(s) of the Agreement Documents for the construction phase consisting of written technical descriptions of materials, equipment, construction systems, standards and workmanship as applied to the Work and certain administrative details applicable thereto. Where specified, the Project must be constructed using the current Uniform Standard Specifications and Details for Public Works

Construction as furnished by the Maricopa Association of Governments, as amended by City.

Subconsultant: A person, firm or corporation having an Agreement with Consultant/Contractor to furnish services required as its independent professional associate or consultant with respect to the Project.

Subcontractor: An individual or firm having a direct Agreement with Contractor or any other individual or firm having an Agreement with the aforesaid contractors at any tier, who undertakes to perform a part of pre-construction services or construction phase Work at the Site for which Contractor is responsible. Subcontractors must be selected through the Subcontractor selection process described in the Agreement Documents, if any.

Substantial Completion: The date when the City determines that the Work (or separable units of Phases as provided in the Agreement Documents) is essentially and satisfactorily complete in accordance with the Agreement Documents such that the Project is ready for use by the City for its intended purpose, opening to the general public, full occupancy or use by City (including, without limitation, all separate units, or rooms, facilities, access, income-generating areas, and all areas serving the general public, as applicable, must be ready for full operation without material inconvenience or discomfort), including, to the extent applicable to the Work, the following: all materials, equipment, systems, controls, features, facilities, accessories, and similar elements are installed in the proper manner and in operating condition, inspected, and approved; surfaces have been painted; masonry and concrete cleaned with any sealer or other finish applied; utilities and systems connected and functioning; site work complete; permanent heating, ventilation, air conditioning, vertical transportation, and other systems properly operating with proper controls; lighting and electrical systems installed, operable and controlled; paving completed, signage installed, and other work as applicable, has been performed to a similar state of essential and satisfactory completion.

Supplier: A manufacturer, fabricator, distributor, or vendor having a direct Agreement with Contractor or with any Subcontractor to furnish materials or equipment to be incorporated in the construction phase Work by Contractor or any Subcontractor.

Total Float: Number of Days by which pre-construction services or construction phase Work or any part of the same may be delayed without necessarily extending a pertinent Agreement Time or schedule milestone in the Project Schedule.

Work: The entire completion of construction or the various separately identifiable parts thereof, required to be furnished during the construction phase. Work includes and is the result of performing or furnishing labor and furnishing and incorporating materials, resources and equipment into the construction, and performing or furnishing services and documents as required by the Agreement Documents for the construction phase.

Writing: Typing, printing, photography and other modes of representing or reproducing words in a visible form, including email, and expressions.

SECTION 3 - STANDARD SPECIFICATIONS AND DETAILS

3.1 City operates under the latest revision of the MAG Specifications and MAG Standard Details as amended by City. City's current amendment to the MAG Specifications, part of the City's Unified Development Manual, may be found and downloaded from City's website at http://www.chandleraz.gov.

3.2 Copies of the MAG Specifications and MAG Standard Details are available at the Maricopa Association of Governments office, 302 N. 1st Avenue, Suite 300, Phoenix, Arizona. They may also be downloaded from their website at: http://www.azmag.gov/Newsroom/Publications

3.3 The MAG Specifications and Standard Details and City's amendments thereto are incorporated into the Agreement by this reference.

SECTION 4 - CONTRACTOR'S RESPONSIBILITIES FOR CONSTRUCTION SERVICES

4.1 GENERAL

4.1.1 Contractor must construct the Work in accordance with the Agreement Documents and as outlined in Exhibit A of the Agreement to the satisfaction of City, exercising the degree of professional care, skill, diligence, quality and judgment that a professional construction manager engaged, experienced and specializing in the construction management of construction and facilities of similar scope, function, size, quality, complexity and detail in urban areas throughout the United States comparable to Chandler, Arizona would exercise at such time, under similar conditions. Contractor must, at all times, perform the Work in conformance with sound and generally accepted engineering principles and construction management and construction contracting practices.

4.1.2 If Contractor observes errors, discrepancies or omissions in the Agreement Documents, Contractor must promptly notify the Design Professional and City and request clarification. If Contractor, with the exercise of reasonable care, should have recognized such error, inconsistency, omission, or difference and fails to report it to City, and if Contractor proceeds with the Work affected by such observed errors, discrepancies or omissions, without receiving such clarifications, Contractor does so at its own risk and will be liable to City for damages resulting from proceeding without clarification.

4.1.3 Project Team and agents of each of them, testing agencies and governmental agencies with jurisdictional interests will be provided access to the Work at reasonable times for their observation, inspection, and testing. Contractor must provide proper and safe conditions for such access.

4.1.4 Contractor must comply with, and require all Subcontractors to comply with, the Arizona Contractors' license laws, including all requirements with respect to being duly registered and licensed.

4.1.5 Contractor must ensure that all employees performing any Work for which Contractor is responsible have a legal right to live and work in the United States. In addition, all compensation of any such employee must meet all applicable requirements of the Fair Labor Standards Act (FLSA) and Federal Minimum Wage laws.

4.1.6 Contractor must comply with the Immigration Reform and Control Act of 1986 (IRCA). Contractor understands and acknowledges the applicability of the IRCA activities. Contractor agrees to comply with the IRCA while performing their work and to permit City inspection of Contractor personnel records to verify such compliance.

4.1.7 Pursuant to MAG Specifications §§ 107.4, Contractor must report immediately any discovery of archeological ruins or artifacts. Excavation must stop immediately so that City can decide on the pertinent steps to follow such discovery.

4.1.8 All property owners that may be affected by the proposed construction activities must be notified of the scope, duration of the construction activities and possible interference with their day-to-day activities by Contractor prior to start of construction. In addition, individual residential or commercial interferences, such as driveway restrictions, water outages, and all other Work adjacent to residence/business, require 48-hour notification in advance of specific adjoining Work. Notification may be through door hangers or other procedures approved by the City.

4.1.9 Access must be maintained to adjacent properties at all times during construction. Where property has more than one point of access, no more than one access will be restricted or closed at any one time. Access to adjacent private driveways will be maintained during all non-working hours.

4.1.10 Contractor must furnish and erect construction signs in accordance with Project Specifications. The signs must be professionally prepared and subject to approval by City, must be maintained by Contractor for the duration of the project, and must be removed by Contractor during the final project clean up.

4.1.11 The number of signs required, the size, shape, installation requirements and information to be included for construction signs is established on the detail sheet, provided, however, signs must be a minimum of 4 foot by 8 foot and must be installed so that the bottom of the sign is at least 4 foot above grade. No direct payment will be made for furnishing and erecting construction signs. The cost thereof must be included in other items for which direct payment is made. Sign locations will be determined by City.

4.1.12 All required construction signs must be installed by Contractor within 7 Days of Notice to Proceed.

4.1.13 The Work to be accomplished under these Agreement Documents has been designed for City by a Design Professional retained by City for this purpose. It is understood that normal construction Administration for the purpose of interpretation of the Agreement Documents is provided by City. Should any services of the Design Professional be required to assist in the corrections of errors or omissions by Contractor, or services of the Design Professional be required because of changes in structure or equipment where Contractor has requested approval of substitute methods or material, or any other items detailed herein below, those services will be provided by the Design Professional at the standard hourly rates previously negotiated with City and must be paid for by the Contractor.

4.1.14 Contractor must reimburse City for costs incurred by the Design Professional for additional services to the Project through no fault of City or the Design Professional including, but not limited to, the following conditions:

a. Additional Site visits, investigations, inspections, design work or reports by the Design Professional which are required due to damages to existing facilities or completed Work caused by the Contractor in his performance, Contractor's negligence, or Contractor's Work which is rejected as defective or as failing to conform to the Agreement Documents;

b. Design Professional construction phase services rendered on the project during the time the project remains incomplete after the Agreement date of final completion will be charged to Contractor at a rate previously negotiated City; and

c. All retesting required due to the failure of Contractor's Work to meet the requirements of the Agreement Documents will be at Contractor's expense. All standby and travel time by the City's testing lab, the Design Professional or City due to Contractor's inability to be prepared for testing at the agreed upon time will be at the Contractor's expense.

4.1.15 City may withhold from any payment otherwise due to Contractor any amounts necessary to pay the Design Professional for such additional services as provided herein above.

4.1.16 Contractor will not be required to bear additional costs incurred by City due to errors by the Design Professional.

4.2 **CONTRACTOR'S PRE-AGREEMENT AND PRE-WORK DELIVERABLES**

4.2.1 Prior to award of the Agreement, Contractor must execute Agreement and deliver to City. Failure to do so may delay Agreement award. Contractor must also provide to City its Contractor's License classification and number and its Federal Tax I.D. number.

4.2.2 Before beginning any Work under the Agreement, Agreement must be fully executed by City.

4.2.3 After Agreement award, City will issue to Contractor an award letter. At that time Contractor must deliver to City such bonds and certificates of insurance with endorsements in such amounts (and other evidence of insurance requested by City) required under Section 11 of these General Conditions, and as the Agreement requires.

4.2.4 As evidence of Workmen's Compensation Insurance, Contractor must, upon request, provide a letter of certification from the Industrial Commission of Arizona that Contractor is insured by the State Compensation Fund or is an authorized self-insurer or a certificate of insurance issued by an insurance company authorized by the Insurance Department of Arizona to write Workmen's Compensation and Occupational Disease Insurance in the State of Arizona.

4.2.5 Within 10 Days of the date of the executed Agreement letter issued by City, Contractor must submit to City for review and acceptance the following items:

4.2.5.1 Comprehensive construction Project Schedule including a Critical Path Method (CPM) diagram schedule as described in Section 6.2. Project Schedule must be in Microsoft Project standard file format. Within 10 Days of receipt of City's comments, Contractor must make all required corrections, adjustments, and additions to complete the Project Schedule and resubmit to City for review.

4.2.5.2 Preliminary schedule of submittals and Shop Drawings. Within 10 Days of receipt of City's comments, Contractor must submit the corrected and completed schedule of Shop Drawings submissions for approval. Contractor's schedule of Shop Drawings and sample submittals will be acceptable to City if it provides a workable arrangement for reviewing and processing the required submittals.

4.2.5.3 Schedule of Values in a form specified by City reflecting the subcontracts and other categories that will be used to submit Pay Applications for the Work. The total amount of the Schedule of Values must not be greater than the Agreement Price. The Schedule of Values will be reviewed at the Pre-Construction Conference and revised by Contractor within 10 Days after Pre-Construction Conference in response to comments and questions from

City. Once accepted by City in writing, the Schedule of Values for the Project must not be changed without the prior written approval of City.

4.2.6 Video Recording Requirement. Prior to performing any Work, Contractor must document the existing conditions of the Site, all other areas where Work will occur and all adjacent areas that may be impacted by the Work via digital video format. Contractor must video record and index all areas, features, buildings and other public and private improvements that could potentially be impacted by the Work. Video recording must be coordinated with City. When video recording private property, Contractor must also coordinate the video recording with the private property owner, if possible. Contractor must provide City with a copy of said digital video format prior to performing any Work.

4.2.7 Aerial Drone Construction Photography.

4.2.7.1 If Agreement duration is greater than 90 calendar days, Contractor must engage a professional unmanned aerial vehicle (UAV) aerial pilot to photograph the Site prior to construction mobilization, at three-month intervals during construction, and following final inspection. Drone camera specifications must meet the following minimum requirements:

a. 1-inch CMOS
b. Pixels: 20M
c. FOV 84 8.8 mm/24 mm (35 mm format equivalent) f/2.8-f/11 auto focus at 1 m-
d. For photographing: 16.9 Aspect Ratio: 5472x3078
e. For video shooting: MP4/MOV/H.264
f. FHD: 1920x1080 120p @100Mbps
g. File format: High Definition (HD) JPEG for digital photos and HD MPEG 4 for digital video.
h. All metadata to be recorded including GPS data and preserved with photographs provided.

Interval	**JPEG**
3 month intervals	At an altitude (AGL) between 70-90 ft.
3 month intervals	Images to be taken every 50-100 ft. to be determined based on project scope.

4.2.7.2 Drone photos to be taken in sequential geographical order and then organized and provided in the same manner unless otherwise specified.

4.2.7.3 Photos to be provided digitally via an online file share service and/or by a USB drive to contractor.

4.2.7.4 Drone pilots to obey ALL local (city, county, state) UAV regulations as well as FAA UAV guidelines including, but not limited to, conducting all flights during daylight hours, not exceeding maximum altitude ceilings (depending on area), not flying over people, yielding to other aircraft.

4.2.7.5 Drone pilots must fly drone within visual line of sight (VSOL) and have visual spotter when needed. Drone pilots only to operate in favorable weather conditions when minimum visibility is 3 miles or greater.

4.2.7.6 Drone pilots to conduct a preflight checklist and visually inspect the entire flight path prior to flying to ensure a safe flight.

4.2.7.7 Airspace Authorizations. Operations in Class G airspace are allowed without air traffic control (ATC) permission. Operations in Class B, C, D and E airspace need ATC authorization. Drone pilots to schedule each flight in advance and based on airspace if required will notify nearby airports/control towers, etc.

4.2.8 Government Approvals and Permits.

4.2.8.1 Contractor must obtain all necessary permits for the Work and pay all applicable fees, unless otherwise noted on the Plans and in the Specifications. City permit fees will be paid internally by City. For bidding purposes, an allowance for all permit fees is included in the bid schedule under the item "allowance for permit fees." The Contractor will be paid for the actual cost of the permit fees upon submitting a receipt showing the fee Contractor has paid. Excluded from the above allowance are items such as all costs incurred by the Contractor in securing the permit except for the actual permit fee established by the agency, cost for all shutdowns or outages, cost for pole bracing, cost of permits for construction water, cost of construction water, cost for any additional insurance requirements, cost for any licenses, and other similar type costs. Contractor is specifically notified of the need to obtain the necessary environmental permits or file the necessary environmental and regulatory permit notices.

4.2.8.2 Copies of all permits and the associated notices must be provided to City prior to starting the permitted activity.

4.3 PRE-CONSTRUCTION CONFERENCE

4.3.1 Prior to the commencement of any Work, City will schedule a Pre-Construction Conference.

4.3.2 The purpose of this Conference is to establish a working relationship between Contractor, the utility firms, and various City agencies. The agenda will include critical elements of the Work schedule, submittal schedule, cost breakdown of major lump sum items, Payment Requests and processing, coordination with the involved utility firms, and emergency telephone numbers for all representatives involved in the course of construction.

4.3.3 Minimum attendance by Contractor at any mandatory meeting with City must be (1) Contractor's Representative, who is authorized to execute and sign documents on behalf of the firm, (2) Contractor's on-site Superintendent, and (3) Contractor's Safety Office, or other employee responsible for safety.

4.4 PERFORMANCE OF THE WORK (INCLUDING FIELD MEASUREMENTS, SUBCONTRACTORS, AND SUPPLIERS)

4.4.1 Unless otherwise provided in the Agreement Documents to be the responsibility of City or a separate Contractor, Contractor must provide through itself or Subcontractors the necessary supervision, labor, inspection, testing, start-up, material, equipment, machinery, temporary utilities and other temporary facilities to permit Contractor to complete the Work consistent with the Agreement Documents.

4.4.2 Contractor must perform all construction activities efficiently and with the requisite expertise, skill and competence to satisfy the requirements of the Agreement Documents. Contractor must at all times exercise complete and exclusive control over the means, methods, safety, sequences and techniques of construction.

4.4.3 Contractor's Superintendent must be present at the Site at all times that material Work

under this Agreement is taking place. Contractor's Superintendent or designee must be present at the Site at all times any other Work under this Agreement is taking place. Superintendent must not be replaced without written notice to City. Whenever the Superintendent is not present at a particular part of the Work where the City or Design Professional may desire to inform the Contractor relative to interpretation of the Drawings and Specifications or to disapproval or rejection of materials or Work performed, the City or Design Professional may provide such information in writing to the foreman or other worker in charge of the particular part of the Work in reference to which the information is given. Information so given will be as binding as if given to the Superintendent.

4.4.4 All elements of the Work must be under the direct supervision of a foreman or his designated representative on the Site who must have the authority to take actions required to properly carry out that particular element of the Work.

4.4.5 Working Hours. Except in connection with the safety or protection of persons or the Work or property at the Site or adjacent thereto, and except as otherwise indicated, all Work at the Site must be performed during regular working hours, and Contractor will not permit overtime work or the performance of Work on Saturday, Sunday or any legal holiday without City's written consent given after prior written notice to City. If it will become absolutely necessary to perform Work at night or on Saturdays, Sundays or legal holidays, the City must be informed at least 24 hours in advance of the beginning of performance of such Work. Only such Work will be done at night as can be done satisfactorily as determined by the City. Good lighting and all other necessary facilities for carrying out and inspecting the Work must be provided and maintained at all points where such Work is being done. Further, unless such non-normal work hours are performed at City's request or required by the Agreement Documents, Contractor must pay to City all additional costs incurred by City by reason of such non-normal working hours. Expenses incurred by City for overtime compensation must be reimbursed by Contractor as follows: (i) City staff at the rate set forth in current City Fee Schedule as published on City website, (ii) Design Professional and staff at the standard hourly rates previously negotiated with City, and (iii) all others at actual cost plus ten percent administrative overhead. Such costs may be deducted by City from any payments due to Contractor. Provided, however, if overtime work or work during other than normal hours is at the request of City and not due to Contractor delay, City will pay the cost of City overtime expenses.

4.4.6 Where the Agreement Documents require that a particular product be installed or applied by an applicator approved by the manufacturer, it is Contractor's responsibility to ensure the Subcontractor employed for such work is approved by the manufacturer. All materials and equipment must be stored, applied, installed, connected, erected, used, cleaned and conditioned in accordance with the instructions of the applicable manufacturer, fabricator, supplier or distributor, except as otherwise provided in the Agreement Documents; but no provisions of any such instructions will be effective to impose on City of Design Professional responsibility for the means, methods, techniques, sequences or procedures of construction or for safety precautions incident thereto.

4.4.7 Before starting the Work, Contractor must carefully study and compare the various Plans, Drawings, other Agreement Documents, and Specifications relative to that portion of the Work, as well as the information furnished by City, must take field measurements of any existing conditions related to that portion of the Work and must observe any conditions at the Site affecting it. The exactness of grades, elevations, dimensions, or locations given on any Drawings, or the Work installed by other contractors, is not guaranteed by City.

4.4.8 Before ordering materials or doing Work, Contractor and each Subcontractor must verify measurements at the Site and will be responsible for the correctness of such measurements. No extra charge or compensation will be allowed because of differences between actual dimensions and the dimensions indicated on the Agreement Documents, including the Drawings.

4.4.9 Ground Level Construction Photography.

4.4.9.1 The Contractor must furnish progress photographs of the project. The photographer selected by the Contractor must be approved by the City and must be either a commercial photographer or an individual experienced and equipped for such photography.

4.4.9.2 The Contractor must deliver to City all photographs taken during that period with each application for payment. If the current photographs do not accompany the application, the application will not be reviewed and will be returned to the Contractor as incomplete.

4.4.9.3 Photographs must be identified by use of typewritten labels affixed to the back of the photograph. The label must provide a description of the view, the direction from which the photograph was taken, the name of the project, City's project number, the name of Contractor and the date of the photography. The stationing must also be included for all pipeline installations.

4.4.9.4 Photographs must be taken during the construction period and must be of aesthetic composition and depict the progress of the Work from the beginning of construction through and including the finished product. City may vary the specified frequency so that significant progress or changes can be recorded on the photographs.

4.4.10 Underground Facilities.

4.4.10.1 The existence and number of facilities as shown on the Plans are estimated from information furnished by the particular utility. Contractor is responsible for field verification and location of all utilities prior to the start of construction. No field work will be allowed to start until Contractor has contacted Arizona 811 and all affected utilities have been located. In addition, Contractor must expose and physically locate all potentially conflicting utilities prior to construction. The actual locations of the utilities must be compared to locations shown on the Plans and any required changes in alignment and grade must be made at the time of construction in consultation with Project Manager. It is generally recognized and Contractor should anticipate that information from Arizona 811 or information from utility companies during project design, frequently fails to disclose all underground facilities. The fact that more utility lines or other underground facilities are located in the Project Site than shown on the Project Plans does not constitute an "unforeseen Condition" and such undisclosed underground facilities do not differ materially from the conditions which Contractor should expect. The provisions of Sections 105.4, 105.6, 107.11 and 109.8.1 of the MAG Uniform Standard Specifications for Public Works Construction apply and are incorporated herein by this reference.

4.4.10.2 Contractor is responsible for all coordination with utility companies. The provisions of Sections 105.4, 105.6, 107.11 and 109.8.1 of the MAG Uniform Standard Specifications for Public Works Construction strictly apply and no additional compensation will be paid to Contractor for delays due to utility work on the project.

4.4.11 Relocation of Existing Water Meters. When a service line has been extended and a line

setter installed in a meter box, City forces will re-install meter. No compression fittings will be utilized.

4.4.12 Water Turn-On or Turn-Off.

4.4.12.1 Contractor must coordinate all water line turn-ons and turn-offs through the City. Application must be made to the Municipal Utility Division and Contractor must pay the established charges. The City will close existing valves, but will not guarantee a bone-dry Shutdown.

4.4.12.2 Contractor must notify all customers affected by the turn-off not less than 48 hours in advance. Notification must be in writing, must give the reason for the turn-off and must give the estimated time and duration that water service will be interrupted. Contractor is also notified that water turn-off will not be permitted on the Day before and after Thanksgiving Day and Christmas Day.

4.4.12.3 No direct payment will be made to Contractor for turn-ons or turn-offs. Costs associated therewith will be included in other items for which direct payment is made.

4.4.13 Tests and Inspections.

4.4.13.1 Contractor must give City timely (at a minimum, twenty-four hours) notice of readiness of the Work for all required inspections, tests or approvals. Contractor must give timely notice to City in advance of backfilling or otherwise covering any part of the Work so that city representative may, if desired, observe such part of the Work before it is concealed. Whenever Contractor varies the normal period during which Work or any portion of it is carried on each Day, Contractor must give timely notice to City so that city representative may, if desired, be present to observe the Work in progress. If Contractor fails to give such timely notice, any Work done in the absence of city representative will be subject to rejection. If Contractor gives such notice to City, but then is not ready for such inspections, tests, approvals or observations at the time so noticed, Contractor must reimburse City for all costs incurred by the attendance of city representatives.

4.4.13.2 If any law, ordinance, rule, regulation, code, or orders of any public body having jurisdiction requires any Work (or part thereof) to be inspected, tested or approved, Contractor (unless another party is specified in the Agreement Documents) must assume full responsibility therefor, pay all costs in connection therewith and furnish City the required certificates of inspection, testing, or approval. Contractor must also be responsible for and must pay all costs in connection with any inspection or testing required by the Specifications in connection with City's acceptance of a manufacturer, fabricator, supplier or distributor of materials or equipment proposed to be incorporated in the Work, or of materials or equipment submitted for approval prior to Contractor's purchase thereof for incorporation in the Work. The cost of all other inspections, tests and approvals required by the Agreement Documents will be paid by City (unless otherwise specified).

4.4.13.3 All inspections, tests or approvals other than those required by law, ordinance, rule, regulation, code or order of any public body having jurisdiction must be performed by organizations acceptable to City and by the Design Professional if so specified.

4.4.13.4 Neither observations by City, the Design Professional nor inspections, tests or approvals by others will relieve Contractor from their obligations to perform the Work in accordance with the Agreement Documents.

4.4.14 Uncovering Work. If any Work that is to be observed, inspected, tested or approved is covered without written concurrence of City, it must, if requested by City be uncovered for observation. Unless Contractor has given City timely notice of Contractor's intention to cover such Work and City has not acted with reasonable promptness in response to such notice, Contractor must furnish all necessary labor, material and bear all the expenses of such uncovering, exposure, observation, inspection and testing and of satisfactory reconstruction, including compensation for additional professional services, and an appropriate deductive Change Order will be issued.

4.4.15 In all cases of interconnection of its Work with existing or other Work, Contractor must verify at the Site all dimensions relating to such existing or other Work. Any errors due to Contractor's failure to so verify all such grades, elevations, locations or dimensions must be promptly rectified by Contractor without any increase in the Agreement Price. Any design errors or omissions noted by Contractor during this review must be reported promptly to City.

4.4.16 Contractor must establish and maintain all construction grades, lines, levels, and benchmarks, and will be responsible for accuracy and protection of same. This Work must be performed or supervised by a licensed civil engineer or surveyor in the State of Arizona.

4.4.17 Contractor must photograph all buried piping of greater than four (4) inches in diameter prior to backfill.

4.4.18 Contractor is responsible for the proper performance of the work of Subcontractors and any acts and omissions in connection with such performance. Nothing in the Agreement Documents is intended or deemed to create any legal or contractual relationship between City and any Subcontractor or Sub-Subcontractor, including but not limited to any third-party beneficiary rights.

4.4.19 Contractor must coordinate the activities of all Subcontractors. Contractor must coordinate performance of the Work with City's Public Works & Utilities Department and other departments or agencies within City. The Design Professional and other contractors or parties involved in the Project. If City performs other work on the Project or at the Site with separate contractors under City's control, Contractor agrees to cooperate and coordinate its activities with those of such separate contractors so that the Project can be completed in an orderly and coordinated manner without unreasonable disruption.

4.4.20 Contractor will not substitute or change any Subcontractor or Supplier without the prior written approval of City. Any substitute or replacement Subcontractor or Supplier must be required to meet the same qualifications and selection criteria and process as the original Subcontractor or Supplier. If a Subcontract/Supplier selection plan has been approved by City, Contractor will follow that plan unless otherwise approved by City in writing.

4.4.21 Contractor must not change or replace any members of its Project team, including Contractor's Representative, Project Manager, or Superintendent, without an explanation for the change being given to City, and receiving prior written approval of the change from City, which approval will not be unreasonably withheld.

4.4.22 Subcontractors whose scope of work has a value greater than 15% of the total Agreement Price are required to furnish performance and payment bonds to Contractor, unless

otherwise approved in writing by City.

4.4.23 Contractor must comply with MAG Specification § 108.2 (E) unless otherwise specified in Agreement Documents.

4.5 **CONTROL OF THE PROJECT SITE**

4.5.1 Throughout all phases of construction, including suspension of Work, Contractor must keep the Site reasonably free from debris, trash and construction wastes to permit Contractor to perform its construction services efficiently, safely and without interfering with the use of adjacent land areas. Prior to Final Acceptance of the Work, or a portion of the Work, Contractor must remove all debris, trash, construction wastes, materials, equipment, machinery and tools arising from the Work or applicable portions thereof to permit City to occupy the Project or a portion of the Project for its intended use.

4.5.2 Contractor must take whatever steps, procedures or means necessary to prevent dust nuisance due to construction operations. The dust control measures must be maintained at all times to the satisfaction of City and in accordance with the requirements of the Maricopa County Bureau of Air Pollution Control Rules and Regulations.

4.5.3 Contractor must maintain Americans with Disabilities Act (ADA) and American National Standards Institute (ANSI) accessibility requirements during construction activities, including without limitation compliance with the 2010 regulations governing implementation of the ADA to the extent applicable. ADA and ANSI accessibility requirements must include, but not be limited to, parking, building access, areas of refuge, and emergency exit paths of travel. Contractor is responsible for the coordination of all Work to minimize disruption to residents and the public.

4.5.4 Only materials and equipment used directly in the Work will be brought to and stored on the Site by Contractor. When equipment is no longer required for Work, it must be removed promptly from the Site. Protection of construction materials and equipment stored at the Site from weather, theft, damage and all other adversity is solely the responsibility of the Contractor.

4.5.5 Contractor agrees all persons working on the Site must act at all times in the best interest of the Project and will comply with all applicable rules and regulations reasonably set forth by City related to the Site. Notwithstanding the foregoing or anything in this Agreement to the contrary, City may remove from the Site any individual who City deems in their reasonable discretion to be creating a disturbance or causing any problem on the Site.

4.5.6 Contractor will be responsible to City for the acts and omissions of Contractor's employees, Subcontractors and their agents and employees, and any other person performing any of the Work under an Agreement with Contractor, or claiming by, through or under Contractor, for all damages, losses, costs and expenses resulting from such acts or omissions.

4.5.7 City may conduct criminal, drive history, and all other requested background checks of Contractor and Subcontractor personnel performing Work or who have access to City's information, data, or facilities in accordance with City's current background check policies, or the provisions of the Project Specific Conditions. Any officer, employee or agent that fails to background check must be replaced immediately.

4.5.8 City will have a final authority, based upon security reasons: (i) to determine when

security clearance of Contractor's and Subcontractor's personnel is required; (ii) to determine the nature of the security clearance, up to and including fingerprinting personnel; and (iii) to determine whether or not any individual or entity may provide Services or perform Work under the Agreement.

4.5.9 If City objects to any personnel for any reasonable cause, then Contractor must, upon notice from City, remove such individual from the Project.

4.6 **PROJECT SAFETY**

4.6.1 The Project and all Work performed in relation thereto is governed by applicable provisions of the federal laws, including but not limited to, the latest amendments of the following:

a. Williams-Steiger Occupational Safety & Health Act of 1970, Public Law, 91-596.

b. Part 1910 and Part 1926 – Occupational Safety and Health Standards, Chapter XVII of Title 29, Code of Federal Regulations.

c. Part 1518 – Safety and Health Regulations for Construction, Chapter XIII of Title 29, Code of Federal Regulations.

4.6.2 Contractor is responsible for safety of the job Site for employees of Contractor as well as for members of the general public and others who may drive or walk through or be at the Site.

4.6.3 Contractor recognizes the importance of performing the Work in a safe manner so as to prevent damage, injury or loss to: (i) all individuals at the Site, whether working or visiting; (ii) the Work, including materials and equipment incorporated into the Work and stored On-Site or Off-Site; and (iii) all other property at the Site or adjacent thereto, including trees, shrubs, lawns, walks, pavements, roadways, structures and utilities not designated for removal, relocation or replacement in the course of construction; and (iv) the owners or tenants of adjacent property and their patrons, employees and invitees.

4.6.4 Contractor assumes responsibility for implementing and monitoring all safety precautions and programs related to the performance of the Work.

4.6.5 Contractor must provide a "competent person' as required by O.S.H.A regulations. The "competent person" must be identified at the Pre-Construction Conference with City advised in writing of any changes.

4.6.6 The "competent person" must make routine daily inspections of the Site and must hold weekly safety meetings with Contractor's personnel, Subcontractors and others as applicable.

4.6.7 Contractor and Subcontractors must comply with all legal and regulatory requirements relating to safety, as well as any City specific safety requirements set forth in the Agreement Documents, provided that such City-specific requirements do not violate any applicable legal and regulatory requirements.

4.6.8 Contractor will immediately report in writing any safety-related injury, loss, damage or accident arising from the Work to Project Manager and, to the extent mandated by Legal Requirements, to all government or quasi-government authorities having jurisdiction over safety-related matters involving the Project or the Work.

4.6.9 Contractor's responsibility for safety under this Section is not intended in any way to relieve Subcontractors and Sub-Subcontractors of their own contractual and legal obligations and responsibility for (i) complying with all Legal Requirements, including those related to health and safety matters, and (ii) taking all necessary measures to implement and monitor all safety precautions and programs to guard against injury, losses, damages or accidents resulting from their performance of the Work.

4.6.10 As between City and Contractor, Contractor is responsible to City for any and all the safety issues relating to the Work on the Project. Contractor must administer and manage the safety program. This will include, but not necessarily be limited to review of the safety programs of each Subcontractor. Contractor must monitor the establishment and execution of compliance with all applicable regulatory and advisory agency construction safety standards. Contractor's responsibility for review, monitoring, and coordination of the Subcontractor's safety programs will not extend to direct control over execution of the Subcontractors' safety programs. Notwithstanding Contractor's safety obligations to City, it is agreed and understood that each individual Subcontractor will remain controlling employer responsible for the safety programs and precautions applicable to its own work and the activities of other's work in areas designated to be controlled by such Subcontractor for purposes of workers compensation insurance coverage.

4.6.11 Nothing in this agreement will relieve Contractor of his responsibility to maintain traffic, structures, etc., as noted on the Plans, Specifications, and Project Specific Conditions. Contractor is responsible to provide all necessary shoring, bracing and trench support as is necessary to maintain traffic structures, etc., as stipulated in the Plans, Specifications, and Special Provisions. If the stability of adjoining building, walls, roadways, etc., is endangered by Contractor's excavation, shoring, bracing, or under pinning must be provided as necessary to ensure project safety. Cost for shoring, bracing, underpinnings, and trench support will be included in the appropriate items listed in the Agreement Price, and no additional payment will be made for this work.

4.7 MATERIALS QUALITY, SUBSTITUTIONS, AND SHOP DRAWINGS

4.7.1 Quality Control and Quality Assurance Testing.

4.7.1.1 All construction materials to be used or incorporated in the Project are subject to inspection, Quality Control & Quality Assurance Testing, and approval or rejection by City. Any material rejected by City must be removed immediately and replaced in an acceptable manner to City at no additional cost to City. When QC/QA tests indicate noncompliance with the Agreement Documents, retesting must be performed by the same testing laboratory that performed the tests that indicated noncompliance.

4.7.1.2 The Contractor must establish, provide, and maintain an effective Quality Control Testing Program (QCTP). The Contractor must develop his own program or procure the services of a consultant. In either case, the party performing the tests must be currently certified by the National Bureau of Standards in the National Voluntary Laboratory Accreditation Program (NVLAP) for construction services or the AASHTO Accreditation Plan (AAP) for Soils, Asphalt and Concrete. The Contractor must provide all support necessary to perform QC and QA testing and sampling (i.e. shoring for testing trench backfill, backhoes, motor graders, loaders, etc. to facilitate testing and sampling). The City will perform the QA testing.

4.7.1.3 The Contractor must submit a written QCTP to the City as a required submittal. The Contractor must not begin Work until the Quality Control Program has been reviewed and

accepted by the City. Resumes of all personnel that will be associated directly or indirectly with the QCTP must be included.

4.7.1.4 The QCTP must include, but not be limited to, on-site/field and laboratory testing of all material delivered to the Site and any existing materials or conditions pertinent to the project.

4.7.1.5 All testing must be under the direction of a Professional Engineer registered in the State of Arizona, knowledgeable in Materials Testing. All "Test Report" forms must be stamped by said Engineer.

4.7.1.6 The written QCTP will set forth the responsibilities of the engineer, project manager, supervisory personnel and each technician assigned to this project. Substitutions or replacement of personnel must require prior written approval by the City. All personnel must be proficient within their assigned duties and possess certification(s) commensurate with their position and responsibilities. The minimum certification(s) for each technician must be NICET Level II, Arizona Technical Testing Institute, American Concrete Institute, or other nationally recognized program applicable to the project and approved by the City of Chandler. The written QCTP must include a description of the required field and construction materials laboratory tests, including required frequencies that meet the minimums established herein.

4.7.1.7 The Contractor must establish a system to record and report all material test results. The daily test reports must include, but not be limited to:

a. Test designation;
b. Date of test;
c. Name of tester;
d. Location of test/sample (station and offset);
e. Product suppliers and product codes (as applicable);
f. Depth/elevation of test/sample;
g. Test result;
h. Control requirement(s);
i. Cause of rejection (if applicable);
j. Results of retests (if applicable); and
k. Remedial action (if applicable).

4.7.1.8 The Contractor must submit test results to the designated City representative.

4.7.1.9 The Contractor must also submit a weekly report to the City summarizing the testing and construction activities completed by emailing the report to the email addresses noted above. All weekly reports must be submitted simultaneously to the Contractor and the City of Chandler. The report must include individual summary sheets for each utility line, structure, and portion of the pavement section. Cores must be numbered sequentially throughout the Project. Re-cores must reference the original core by number and must contain the averaged values for thickness and density. Total pavement thickness must be reported. Vertical location of tests for underground utilities must indicate the depth of the

excavation at the location of the test (i.e., cut to flow line [if applicable], depth to bottom or top of pipe, etc.). Density tests must be numbered sequentially. If the minimum number of tests has not been performed per the written QCTP, this must be stated in the weekly summary report with an explanation of the circumstances.

4.7.1.10 The City will maintain a copy of the Project test results and weekly reports in the Project file. In cases where quality control activities do not comply with the Agreement provisions, the City may:

a. Order the Contractor to replace ineffective or unqualified quality control personnel.

b. Order the Contractor to stop operations until appropriate corrective action is taken.

4.7.1.11 Although minimum testing requirements are specified herein, the Contractor bears full responsibility for the quality of the materials and their installation and may elect to perform additional testing beyond the requirements set forth herein to ensure compliance.

4.7.1.12 The Quality Control requirements contained in this Section are in addition to and separate from Quality Assurance Testing, which will be performed by the City of Chandler or its representative. If the Quality Assurance test results are not in agreement with the Quality Control test results, the Contractor will have the option to retain a third party consultant for referee tests. The third party consultant must meet the same requirements as the consultant performing the Quality Control Testing. The results of the third party will be binding. All cost incurred by the referee testing will be the Contractor's expense. If the Contractor elects not to retain a third party for referee testing, the City of Chandler test results will prevail.

4.7.1.13 Except as otherwise noted within this Section, Work or materials required by this Section are non- pay items. Per MAG Section 101, a non-pay item is an item of Work for which no separate payment will be made, the cost of which is to be included as an incidental cost for associated item(s) included on the Bid Schedule or Schedule of Values.

4.7.2 <u>Trade Names and Substitutions</u>.

4.7.2.1 Substitutions prior to bid will only be considered if in compliance with Arizona Revised Statute § 34-104.

4.7.2.2 Contractor, if requested by City, must submit Samples or any additional information that may be necessary to evaluate the acceptability of the substitution.

4.7.2.3 City will make the final decision and will notify Contractor in writing as to whether the substitution has been accepted or rejected.

4.7.2.4 If City does not respond within 15 working days, Contractor must continue to perform the Work in accordance with the Agreement Documents and the substitution will be considered rejected.

4.7.3 <u>Shop Drawings</u>.

4.7.3.1 Contractor must prepare and submit Shop Drawings which show details of all Work to insure proper installation of the Work using those materials and equipment specified under the approved Plans and Specifications.

4.7.3.2 Contractor must submit a schedule of Shop Drawing submissions, which avoids bulk submissions to the extent reasonably possible, with the Project Schedule for City approval. The schedule of Shop Drawing submissions must include all of the items for which Shop Drawings are required by the Agreement Documents, including the Specifications. Unless otherwise noted, Shop Drawings will not be required for items specified or detailed in the Uniform Standard Specifications and Details or the Technical Specifications.

4.7.3.3 Shop Drawings must be numbered consecutively for each Specification section and must accurately and distinctly present the following:

a. All working and erection dimensions.

b. Arrangements and sectional views.

c. Necessary details, including complete information for making connections between work under this Agreement and work under other Agreements.

d. Kinds of materials and finishes.

e. Parts list and description thereof.

4.7.3.4 Each Drawing or page must include:

a. Project Name, City of Chandler Project Number and descriptions.

b. Submittal date and space for revision dates.

c. Identification of equipment, product or material.

d. Name of Contractor and Subcontractor.

e. Name of Supplier and Manufacturer.

f. Relation to adjacent structure of material.

g. Physical dimensions clearly identified.

h. ASTM and Federal Specifications references.

i. Identification of and justification for deviations from the Agreement Documents.

j. Contractor's stamp, initialed or signed, dated and certifying the review of submittal, certification of field measurements and compliance with Agreement.

k. Location at which the equipment or materials are to be installed.

4.7.3.5 Location will mean both physical location and location relative to other connected or attached material. City will return unchecked any submittal, which does not contain complete data on the Work and full information on related matters.

4.7.3.6 Stock or standard drawings will not be accepted for review unless full identification and supplementary information is shown thereon in ink or typewritten form.

4.7.3.7 Contractor must schedule, prepare and submit all Shop Drawings in accordance with a time-table that will allow its suppliers and manufacturers sufficient time to fabricate, manufacture, inspect, test and deliver their respective products to the project Site in a timely manner so as to not delay the complete performance of the Work.

4.7.3.8 If the Shop Drawings show departures from the Agreement requirements, Contractor must make specific mention thereof in the Letter of Transmittal; otherwise review of such submittals by City will not constitute review of the departure. Review of the Drawings will constitute review of the specific subject matter for which the Drawings were submitted and not of any other structure, material, equipment, or apparatus shown on the Drawings.

4.7.3.9 The review of Shop Drawings will be general and will not relieve Contractor of responsibility for the accuracy of such Drawings, nor for the proper fitting and construction of the Work, nor for the furnishing of materials or Work required by the Agreement. No construction called for by Shop Drawings will be initiated until such Drawings have been reviewed and approved by City.

4.7.3.10 The procedure in seeking review of the Shop Drawings will be as follows:

a. Contractor must submit complete sets of Shop Drawings and other descriptive data as specified in this Section.

b. After Contractor's submittal or resubmittal of Shop Drawings, if Contractor has submitted Shop Drawings in accordance with the City-approved submittal schedule, or upon resubmission, City will be provided with three (3) calendar weeks for review. Should City require additional review time above and beyond the three (3) calendar weeks, Contractor may ask for a time extension or monetary compensation, if they can present valid, factual evidence that actual damages were incurred by Contractor. City will determine the amount of the time extension or the monetary compensation to be awarded Contractor, if any, in accordance with City's Policy Statement for Calculating Delays and Damages, Appendix 1.

4.7.3.11 Contractor will be responsible for all extra costs incurred by City caused by Contractor's failure to comply with the procedure outline above.

4.7.4 Long Lead Time Items. Contractor must submit Shop Drawings, as required by the Engineer, on all long lead items to be furnished and installed as part of the project within 10 Days after the date of the executed Agreement letter issued by City. In addition, Contractor must order all long lead items to be furnished and installed as part of this Project within 3 Days after receiving approved Shop Drawings. For all long lead times for which Shop Drawings are not required, Contractor must order said long lead items within 15 Days after the date of the executed Agreement letter issued by City. Within 2 Days after ordering long lead items, Contractor must supply copies of all purchase orders, along with an accurate delivery schedule from the supplier.

4.7.5 Construction Water. If Contractor uses water from City's water system for construction water, Contractor must obtain a fire hydrant meter from City of Chandler Utility Services (480-782-2280) and all construction water must be obtained through the hydrant meter. Contractor must pay all fees related to the hydrant meter and all water bills for construction water. All cost for meters and construction water will be included in the Agreement Price.

4.8 PROJECT RECORD DOCUMENTS

4.8.1 During the construction period, Contractor must maintain at the jobsite a full-size set of prints of the Construction Document Drawings and Shop Drawings for Project Record Document purposes.

4.8.2 Contractor must mark these Drawings to indicate the actual installation where the installation varies from the original Construction Documents. Contractor must give particular attention to information on elements that will be concealed, which would be difficult to identify or measure and record later. Items required to be marked include but are not limited to:

a. Dimensional changes to the Drawings.

b. Revisions to details shown on Drawings.

c. Locations and depths of underground utilities.

d. Revisions to routing of piping and conduits.

e. Actual equipment locations.

f. Changes made by Change Order or Addendum.

g. Details not on original Agreement Drawings.

4.8.3 Contractor must mark completely and accurately Project Record Drawing sets of Construction Documents.

4.8.4 Contractor must mark Project Record Drawings sets with red erasable colored pencil.

4.8.5 Contractor must note Request for Information (RFI) Numbers and Change Order numbers, etc., as required to identify the source of the change to the Construction Documents.

4.8.6 Contractor must submit Project Record Drawing sets and Shop Drawings to City or its representative for review and comment.

4.8.7 Upon receipt of the reviewed Project Record Drawings from City, Contractor must correct any deficiencies and omissions to the Drawings and submit the final original of the Project Record Drawings to City prior to Final Payment.

4.8.8 Project Manager will review the Project Record Drawings monthly prior to the date established for the Payment Request and will be the sole judge of acceptance of these Drawings.

4.9 WARRANTY AND CORRECTION OF DEFECTIVE WORK

4.9.1 Contractor warrants to City that the construction, including all materials and equipment furnished as part of the Work, will be new unless otherwise specified in the Agreement Documents, of good quality, and free of defects in materials and workmanship. Contractor's warranty obligation excludes defects caused by abuse, alterations, or unreasonable failure to maintain the construction by persons other than Contractor, subcontractors, or others under Contractor's control. Nothing in this warranty will limit any manufacturer's warranty which provides City with greater warranty rights than set forth herein or in the Agreement. Contractor will provide City with all manufacturers' warranties and operation and maintenance manuals upon substantial completion of the Work. Contractor's warranty must be for one (1) year, in accordance with MAG Specification § 108.8, and will commence for all portions of the Work upon Final Acceptance of the entire Work as determined by City under the Agreement. All statutory or other warranties, express or implied, related to latent defects will remain in force and are not limited by this provision.

4.9.2 City May Stop the Work. If the Work is defective, or Contractor fails to supply sufficient skilled workmen or suitable materials or equipment, City may order Contractor to stop the

Work without cost to City, or any portion thereof, until the cause for such order has been eliminated; however, this right of City to stop the Work will not give rise to any duty on the part of City to exercise this right for the benefit of Contractor or any other party.

4.9.3 Correction or Removal of Defective Work.

4.9.3.1 If required by City, Contractor must promptly, without cost to City and as specified by City, either correct any defective Work, whether or not fabricated, installed or completed, or, if the Work has been rejected by City, remove it from the Site and replace it with non-defective Work. Contractor must correct any Work which may be displaced in correcting, removing or replacing defective Work. No compensation will be allowed Contractor for such removal, replacement or remedial Work. Contractor must reimburse City for costs incurred by City due to such correction or removal including but not limited to additional expenses for inspection, testing or observation and for repeated reviews by the City or Design Professional.

4.9.3.2 Upon failure on the part of the Contractor to comply within a reasonably prompt time with any written order of City to correct or remove defective Work, City has authority to cause nonconforming materials or rejected Work to be remedied, removed, or replaced at the Contractor's expense and to deduct the costs from any moneys due or to become due the Contractor.

4.9.4 City May Correct Defective Work. If Contractor fails within a reasonable time after written notice of City to proceed to correct defective Work or to remove and replace rejected Work as required by City or if Contractor fails to perform the Work in accordance with the Agreement Documents (including any requirements of the progress schedule), City may, after 7 Days' written notice to Contractor, correct and remedy any such deficiency. To the extent necessary to complete corrective and remedial action, City may exclude Contractor from all or part of the Work, and suspend Contractor's services related thereto, take possession of Contractor's tools, appliances, construction equipment and machinery at the Site and incorporate in the Work all materials and equipment stored at the Site or for which City has paid Contractor, but which are stored elsewhere. Contractor must allow City, city representatives, agents and employees such access to the Site as may be necessary to enable City to exercise City’s rights under this Section. All direct and indirect costs of City in exercising such rights will be charged against Contractor in an amount verified by City representative, and a Change Order will be issued incorporating the necessary revisions in the Agreement Documents and a reduction in the Agreement Price. Such direct and indirect costs will include, in particular but without limitation, compensation for additional professional services required and all costs of repair and replacement of Work or others destroyed or damaged by correction, removal or replacement of Contractor's defective Work. Contractor will not be allowed an extension of the Agreement Time because of any delay in Contractor’s performance of the Work attributable to the exercise by City or City's rights hereunder.

4.9.5 Correction or Removal of Unauthorized Work.

4.9.5.1 Any Work done beyond the lines and grades shown on the Drawings or established by the Design Professional or any changes in, additions to, or deductions from the Work done without written authority will be considered as unauthorized and will not be paid for. Work so done may be ordered remedied, removed, or replaced at the Contractor's expense.

4.9.5.2 Upon failure on the part of the Contractor to comply promptly with any order of the City,

City will have authority to cause unauthorized Work to be remedied, removed, or replaced at the Contractor's expense and to deduct the costs from any moneys due or to become due the Contractor.

4.9.6 Correction Period - One Year Guarantee.

4.9.6.1 If, within one year after the date of Final Acceptance, or such longer period of time as may be prescribed by law or by the terms of any applicable special guarantee required by the Agreement Documents, or by any specific provision of the Agreement Documents, any Work is found to be defective, Contractor must promptly, without cost to City and in accordance with City's written instructions, either correct such defective Work, or, if it has been rejected by City, remove it from the Site and replace it with non-defective Work. If Contractor does not promptly comply with the terms of such instructions, or in an emergency where delay would cause serious risk of loss or damage, City may have the defective Work corrected or the rejected Work removed and replaced, and all direct and indirect costs of such removal and replacement, including compensation for additional professional services, must be paid by Contractor. Such action by the City will not relieve the Contractor of the guarantees required by this Section or elsewhere in the Agreement Documents.

4.9.6.2 If, in the opinion of the City, defective Work creates a dangerous condition or requires immediate correction or attention to prevent further loss to the City or to prevent interruption of operation of the City, the City will attempt to give the notice required by this Section. If the Contractor cannot be contacted or does not comply with the City's request for correction within a reasonable time as determined by the City, the City may, notwithstanding the provisions of this Section, proceed to make such correction or provide such attention; and the costs of such correction or attention will be charged against the Contractor. Such action by the City will not relieve the Contractor of the guarantees required by this Section or elsewhere in the Agreement Documents.

4.9.6.3 This Section does not in any way limit the guarantee on any items for which a longer guarantee is specified or on any items for which a manufacturer or supplier gives a guarantee for a longer period. The Contractor agrees to act as co-guarantor with such manufacturer or supplier and must furnish the City all appropriate guarantee or warranty certificates upon completion of the Project. No guarantee period, whether provided for in this Section or elsewhere, will in any way limit the liability of Contractor or their sureties or insurers under the indemnity or insurance provisions of these General Conditions and the Project Specific Special Conditions.

4.9.7 Acceptance of Defective Work.

4.9.7.1 If, instead of requiring correction or removal and replacement of defective Work, City may accept Work when in the best interest of the City to do so with appropriate monetary credit from Contractor. If any such acceptance occurs prior to final payment, a Change Order will be issued incorporating the necessary revisions in the Agreement Documents, including appropriate reduction in the Agreement Price; or, if the acceptance occurs after final payment, an appropriate amount must be paid by Contractor to City.

4.9.7.2 Alternatively, City may require Contractor to furnish at Contractor's expense, a special performance guarantee or other surety prior to acceptance of defective work.

4.9.8 The Warranty period begins on the Final Acceptance date noted in the Certificate of Completion, irrespective of early completion by some Subcontractors of their work.

4.9.9 Contractor's warranty obligation must be in accordance with MAG Specifications.

4.9.10 Nothing in the warranties contained in the Agreement Documents are intended to limit any manufacturer's warranty which provides City with greater warranty rights than set forth in this Section or the Agreement Documents. Contractor must provide City with all manufacturers' warranties prior to Substantial Completion, if applicable, or Final Acceptance.

4.9.11 Contractor agrees that it will be responsible to manage and administer the correction of any Work that is not in conformance with the Agreement Documents during the warranty periods set forth in this Section, or during any longer periods to the extent required by the Agreement Documents. A progress payment, or partial or entire use or occupancy of the Project by City, will not constitute acceptance of Work not in accordance with the Agreement Documents.

4.9.12 When notified of a warranty issue, Contractor must respond in writing within 48-hours and must perform warranty Work as soon as material for said repairs are available (as judged solely by City), and in any event Contractor must, take immediate steps to commence and complete correction of nonconforming Work no later than the time period set forth in City's written notification in accordance with the Agreement Documents. This includes the correction, removal or replacement of the nonconforming Work and any damage caused to other parts of the Work affected by the nonconforming Work. If defects develop which are determined by City to be an emergency, City will notify Contractor, via the most expeditious means regarding the nature and condition of the defects. In turn, Contractor must immediately dispatch necessary forces to correct the defect or the emergency condition in accordance with Agreement Documents.

4.9.13 The time periods referenced in this Section apply only to Contractor's obligation to correct nonconforming Work and is not intended to constitute a period of limitations for any other rights or remedies that City may have regarding Contractor's other obligations under the Agreement Documents.

4.9.14 Without limiting the foregoing or anything in these General Conditions or the Agreement to the contrary, Contractor must obtain and provide to City all warranties for any portion of the Project offered by the manufacturer, installer or provider thereof. City and the user of the facility will have the right to the full value and benefit of all such warranties. Contractor must ensure all such warranties are fully transferrable to facilitate the full value of this Section.

4.9.15 Contractor's warranty excludes damages or defects caused by abuse, alterations to the Work not executed by or through Contractor, improper or insufficient maintenance, improper operation, or normal wear and tear and normal usage.

4.9.16 In the event of any noncompliance with this entire Section 4, City may require Contractor to stop or suspend the Work in whole or in part.

SECTION 5 - CITY RESPONSIBILITIES

5.1 CITY PROJECT MANAGER AND INSPECTORS

5.1.1 Project Manager is responsible for providing City-supplied information and approvals in a timely manner to assist Contractor to fulfill its obligations under the Agreement Documents.

5.1.2 Project Manager will also provide Contractor with prompt notice when it observes any failure on the part of Contractor to fulfill its contractual obligations, including any default or defect in the Project or non-conformance with the Drawings and Specifications.

5.1.3 City may utilize Field Inspectors to assist Project Manager during construction in observing performance of Contractor. City's use of Inspectors is for the purpose of assisting Project Manager.

5.1.4 The Inspectors are authorized to inspect all Work and materials furnished. Such inspections may extend to all or part of the Work and to preparation, fabrication or manufacture of the materials to be used. The Inspectors have the authority to issue instructions contrary to the Construction Documents if approved and coordinated with the directions of Project Manager.

5.1.5 The Inspectors have the authority to reject work or materials until any questions at issue can be decided by Project Manager.

5.1.6 The use of Inspectors by City will not make City responsible for or give City control over construction means, methods, techniques, sequences or procedures or for safety precautions or programs or responsibility for Contractor's failure to perform the Work in accordance with Agreement Documents. The Inspectors are not authorized to direct any of Contractor's activities, employees or Subcontractors.

5.2 **DESIGN PROFESSIONAL SERVICES**

City may contract separately with one or more Design Professionals to provide construction administration of the Project. The Design Professional's Agreement, as well as other firms hired by City may be furnished to Contractor. Contractor does not have the right to limit or restrict or reject any Agreement modifications that are mutually acceptable to City and Design Professional.

5.3 **CITY'S SEPARATE CONTRACTORS**

City is responsible for all work performed on the Project or at the Site by separate contractors retained by City. City will contractually require its separate contractors to reasonably cooperate with, and reasonably coordinate their activities so as not to interfere with Contractor in order to enable Contractor to timely complete the Work consistent with the Agreement Documents. Contractor must immediately notify the Project manager, and address the matter in the next monthly status report, if any activities of such separate contractors are expected to interfere, or are interfering, with Contractor and such interference will or could result in any delay in Contractor's performance of the Work.

5.4 **PERMIT REVIEW AND INSPECTIONS**

5.4.1 If requested by Contractor, Project Manager will provide assistance and guidance in obtaining necessary reviews, permits and inspections.

5.4.2 The regulating agencies of City, such as Development and Sustainability, Fire and Planning Departments, enforce legal requirements. The enforcement activities of City are independent and separate from this Agreement.

5.5 **PLANS AND SPECIFICATIONS TO THE CONTRACTOR**.

Contractor will be provided up to five copies of the Agreement Documents as are reasonably necessary for the execution of the Work. Additional copies will be furnished,

upon request, at the cost of reproduction.

SECTION 6 - AGREEMENT TIME

6.1 AGREEMENT TIME

6.1.1 The Agreement Time will start with the Notice to Proceed ("NTP") and end with Final Acceptance.

6.1.2 Beginning on the date of the NTP, Contractor must begin to fulfill Contractor's obligations under the Agreement. Contractor's obligations include providing City and other agencies with any submittals required by the Project Specific Special Provisions, including but not limited to, an approved Project Schedule, Traffic Control Plans, and a Stormwater Pollution Prevention Plan. Contractor must submit all such required submittals before any physical construction work commences on the Site. NTP does not authorize construction work until all agreement insurance, bonds, and schedules are submitted to and accepted by the City.

6.1.3 The Agreement Time will be as set forth in the Project Schedule. Contractor agrees that it will commence performance of the Work and complete the Project through both Substantial Completion and Final Acceptance within the Agreement Time.

6.1.4 Time is of the essence of this Agreement, for the Project, for the Work, and for each phase and designated Milestone thereof.

6.1.5 Failure of Contractor to perform any covenant or condition contained in the Agreement Documents within the time periods specified herein, will constitute a material breach of this Agreement entitling City to terminate the Agreement unless Contractor applies for and receives an extension of time, in accordance with the procedures set forth in the Agreement Documents.

6.1.6 Failure of City to insist upon the performance of any covenant or condition within the time periods specified herein, will not constitute a waiver of Contractor's duty to perform every other covenant or condition within the designated periods, unless a specific waiver is granted in writing for each such covenant or condition.

6.1.7 City's agreement to waive a specific time provision or to extend the time for performance will not constitute a waiver of any other time provisions contained in the Agreement Documents. Failure of Contractor to complete performance promptly within the additional time authorized in the waiver or extension of time agreement constitutes a material breach of this Agreement entitling City to all the remedies set forth herein or provided by law.

6.2 PROJECT SCHEDULE

6.2.1 The Project Schedule must be in Microsoft Project standard file format, must be updated and maintained throughout the Agreement Time, and must contain the following:

6.2.1.1 Detailed representation of all activities for the project, both on-site construction and major procurement. All significant activities together with the resource loading requirements for each and all items appearing on the schedule of values or bid schedule for progress payments must be shown on the Project Schedule or in attached transmittal letter as described in Section 6.2.8.

6.2.1.2 Dependencies between activities must be indicated so that it may establish as to the effect the progress of any one activity would have on other activities and on the Schedule.

6.2.1.3 Activities for submission, review, and approval of all required submittals.

6.2.1.4 An amount of time will be established prior to the final completion date for "punch list and cleanup". No other activities will be scheduled during this period. Punch list and cleanup must be shown on the Project Schedule and must be entirely completed prior to the expiration of the Agreement Time.

6.2.2 Within 10 Days of receipt of City's comments, Contractor must make all required corrections, adjustments, and additions to complete the Project Schedule and resubmit to City for review. City's review of and response to the Project Schedule is for the purpose of: (1) City planning and staffing for the Project as may be required from time to time; (2) ensuring Contractor's general conformance with the scheduling requirements of the Agreement Documents and completion of the Project within the Agreement Time; and (3) monitoring and evaluating the construction status for purposes of approving monthly progress payments. Acceptance of a submitted schedule by City should in no way be construed as an affirmation or admission that the schedule is reasonable or workable by Contractor. The responsibility for completing the Work on the Project within the Agreement Time remains the obligation of Contractor. City's review does not relieve Contractor from compliance with the requirements of the Agreement Documents or be construed as relieving Contractor of its complete and exclusive control over the means, methods, sequences and techniques for executing the work.

6.2.3 The Project Schedule must show milestones, including milestones for City-furnished information, and must include activities for City-furnished material and construction by other contractors when those activities are interrelated with Contractor activities.

6.2.4 The Project Schedule must be revised as required by conditions and progress of the Work, but such revisions do not relieve Contractor of its obligations to complete the Work within the Agreement Time, as adjusted in accordance with the Agreement Documents. No modification to the Agreement Documents or the Agreement Time will be effective unless approved in advance by City.

6.2.5 For all items of materials and equipment that are critical or may require long lead times to acquire, the Project Schedule must show dates for submission, review and approval of submittals, ordering, and delivery.

6.2.6 An updated Project Schedule must be submitted monthly to City as part of the Payment Request. The monthly submittal must include one full size plot of the entire schedule and one electronic copy containing the schedule in Microsoft Project standard file format. In addition, Contractor must, upon request by City, provide a copy of all submitted schedule data in electronic format which must be clearly labeled with the Project description, scheduling program name and version number, and schedule print/data date.

6.2.7 Contractor must provide City with a monthly status report with each Project Schedule detailing the progress of the Work, including: (i) if the Work is proceeding according to schedule, (ii) any discrepancies, conflicts, or ambiguities found to exist in the Agreement Documents that require resolution, and (iii) other information detailing items that require resolution so as not to jeopardize the ability to complete the Work in the Agreement Time.

6.2.8 With each Project Schedule submittal, Contractor must include a transmittal letter including the following:

a. Description of problem tasks, referenced to field instructions or requests for information (RFI's), as appropriate.

b. Current and anticipated delays including:

(i) Cause of the delay.

(ii) Corrective action and schedule adjustments to correct the delay.

(iii) Known or potential impacts and their delay on other activities, milestones, and their impact on the Substantial Completion and Final Acceptance dates.

(iv) Changes in construction sequence.

c. Pending items and status thereof including but not limited to:

(i) Time Extension requests;

(ii) Substantial Completion date status;

(iii) Final Acceptance date status.

d. If ahead of schedule, the number of calendar Days ahead.

e. If behind schedule, the number of calendar Days behind.

f. Other Project or scheduling concerns.

6.2.9 Critical Path Method (CPM).

6.2.9.1 Unless otherwise specified in the Agreement, the Project Schedule must include a Critical Path Method (CPM) diagram schedule showing the sequence of activities, the interdependence of each activity and identifies the Critical Path.

6.2.9.2 The CPM diagram schedule must be in calendar Days and indicate duration, earliest and latest start and finish dates for all activities, and total Float Times for all activities except critical activities. The CPM diagram must be presented in a time scaled graphical format for the Project as a whole.

6.2.9.3 The CPM diagram schedule must indicate all relationships between activities.

6.2.9.4 The activities making the Project Schedule must contain sufficient detail to assure that adequate planning has been done for proper execution of the Work and such that it provides an appropriate basis for monitoring and evaluation the progress of the Work. Individual activities must not exceed 30 Days in length, in most cases.

6.2.9.5 The CPM diagram schedule must be based upon activities, which coincide with the Schedule of Values.

6.2.9.6 The CPM diagram schedule must show all submittals associated with each work activity and the review time for each submittal.

6.2.10 Float Time.

6.2.10.1 The total Float Time within the overall schedule is for the exclusive use of City, but City may approve Contractor's use of Float as needed to meet Agreement Milestones and

the Project completion date.

6.2.10.2 Contractor will not be allowed to sequence, hide, or reallocate Float Time through such strategies, as extending activity duration estimates to consume available Float, using preferential logic, or using extensive crew/resource sequencing, tec. No time extensions will be granted nor delay damages paid until a delay occurs which extends the Work beyond the Agreement Time.

6.2.11 City-Caused Delays. City-caused delays on the Project, if any, may be offset by City-caused time savings (i.e., Critical Path submittals returned in less time than allowed by the Agreement, approval of substitution requests and credit changes which result in savings of time to Contractor, etc.) In such an event, Contractor will not be entitled to receive a time extension or delay damages until all City-caused time savings are exceeded and the Agreement Time is also exceeded.

6.2.12 Rain-Related Delays. Contractor is required, in preparing the Project Schedule to take into account all relevant weather conditions, including normal rainfall and distribution. No additional compensation will be given for any rain-related delays or impacts on the Work or the Project Schedule. No time extension will be granted in the Project Schedule unless the rainfall during the construction of Work is unusually severe, was not reasonably anticipated, and the total rainfall was significantly in excess of the normal rainfall for the Project Site location. Normal rainfall for the Project will be determined from the 10-year average rainfall for the Site as measured by the National Oceanic and Atmospheric Administration or comparable source of reliable information for rainfall in Chandler, Arizona. In addition, the excessive rainfall must have actually impacted Work activities on the Critical Path and caused delay beyond any remaining Float at the time of the rain- caused delay. The burden of documenting normal rainfall, the excessive rainfall and the impact on Critical Path activities is on Contractor. All other provisions in the Agreement Documents relating to claims, including without limitation notice requirements, apply to any claim by Contractor for a rain delay.

6.2.13 City's "Policy Statement for Calculating Delays and Damages," Appendix 1 to these General Conditions, will apply to all claims of delay and delay damages.

6.2.14 Force Majeure. If Contractor is delayed or prevented from the performance of any Work required under this Agreement by reason of acts of God or other causes beyond the control and without fault of Contractor (financial inability excepted), performance of that Work will be excused, but only for the period of the delay. The time for performance of the Work will be extended for a period equivalent to the period of delay. In addition, the parties agree if Contractor's delayed or suspended performance directly arises out of or directly results from the COVID-19 pandemic, Contractor's delayed or suspended performance may be excused as set forth in this clause. Provided, however; Contractor must give the City written notice within 30 days of the occurrence of the event giving rise to COVID-19 pandemic related delayed or suspended performance. For COVID-19 pandemic related delay or suspended performance, the parties must agree in writing to the length of the excused delay or suspended performance. Further, Contractor must obtain the City's written approval to use any allowance established as part of the project for delays and costs related to the COVID-19 pandemic.

6.3 SUBSTANTIAL COMPLETION

6.3.1 When Contractor considers that the Work, phase or a portion thereof, which City agrees in

writing to accept separately, is substantially complete, City will prepare and submit to Contractor a comprehensive Punch List of items to be completed or corrected prior to Final Acceptance and Final Payment. Failure to include an item on such Punch List does not alter the responsibility of Contractor to complete all Work in accordance with the Agreement Documents.

6.3.2 Upon receipt of Contractor's Punch List, Project Manager will make an inspection to determine whether the Work or designated portion thereof is substantially complete. Project Manager may, at Project Manager's sole option, be assisted in such inspection by the Design Professional for the Project. If the inspection by the Project Manager discloses any item, whether or not included on Contractor's Punch List, which is not sufficiently completed in accordance with the Agreement Documents so that City can occupy or utilize the Work, phase or designated portion thereof for its intended use, Contractor must, before issuance of the Certificate of Substantial Completion, complete or correct such item upon notification by Project Manager. In such case, Contractor must then submit a request for another inspection by Project Manager to determine Substantial Completion.

6.3.3 Certificate of Substantial Completion.

6.3.3.1 The Project Manager will not issue a Certificate of Substantial Completion unless and until the Work (or separable units or Phases as provided in the Agreement Documents) is essentially and satisfactorily complete in accordance with the Agreement Documents, such that the Project is ready for use by City for its intended purpose, opening to the general public, full occupancy or use by City (including, without limitation, all separate units, or rooms, facilities, access, income-generating areas, and all areas serving the general public, as applicable, must be ready for full-operation without material inconvenience or discomfort), including, to the extent applicable to the Work, the following: all materials, equipment, systems, controls, features, facilities, accessories and similar elements are installed in the proper manner and in operating condition, inspected and approved; surfaces have been painted; masonry and concrete cleaned with any sealer or other finish applied; utilities and systems connected and functioning; site work complete; permanent heating, ventilation, air condition, vertical transportation and other systems properly operating with proper controls; lighting and electrical systems installed, operable and controlled; paving completed, signage installed, and other Work as applicable, has been performed to a similar state of essential and satisfactory completion. A minor amount of Work, as determined by and at the discretion of the Project Manager, such as installation of minor accessories or items, a minor amount of painting, minor replacement of defective work, minor adjustment of controls or sound systems, or completion or correction of minor exterior work that cannot be completed as a result of weather conditions, will not delay determination of Substantial Completion. If prior written approval is obtained from City for purposes of Substantial Completion, specified areas of the entire Work or Project may be individually certified as Substantially Complete. In no event will Substantial Completion be deemed to have occurred unless and until: (i) a temporary certificate of occupancy has been issued by the appropriate Governmental Authorities (as applicable) and (ii) all terms and Work required under this Agreement have been fulfilled by Contractor and same will have also been approved and accepted by City, subject only to the Punch List items.

6.3.3.2 If requested by City, Contractor must complete and turn-over to City the Project on a phased basis. Each phase will have a separate inspection by the Project Manager, a Punch List generated, and then an inspection by City with final approval and acceptance only after the

Project Manager's Punch List.

6.4 **PARTIAL UTILIZATION**

6.4.1 City at City's option may use and occupy any substantially completed parts of the Work which has specifically been identified in the Agreement Documents, or which City, the Design Professional and Contractor agree constitutes a separately functioning and usable part of the Work that can be used by City for its intended purpose, without significant interference with Contractor's performance of the remainder of the Work, provided, however, if the portion of the Work to be used or occupied has not been found to be substantially complete, City must do so in accordance with Section 6.3 prior to such occupancy.

6.4.2 In lieu of the issuance of a Certificate of Substantial Completion as to part of the Work, City may take over operation of a facility constituting part of the Work whether or not it is substantially complete if such facility is functionally and separately usable; provided that prior to any such takeover, City and Contractor agree in writing as to the division of responsibilities between City and Contractor for security, operation, safety, maintenance, correction period, heat, utilities and insurance with respect to such facility.

6.4.3 Substantial Completion of or City's beneficial occupancy of a part of the Project will not alter the fact that the one-year warranty for the whole Project starts at the date of Final Completion of the whole Project.

6.5 **FINAL ACCEPTANCE**

6.5.1 Unless otherwise expressly agreed to in writing by City, Final Acceptance must be obtained by no later than 30 Days (60 Days for federally funded agreements) after the date of Substantial Completion. Failure to timely obtain Final Acceptance will be a material breach of the Agreement.

6.5.2 Upon receipt of written notice that the Work is ready for final inspection and acceptance, City and Contractor will jointly inspect to verify that the remaining items of Work have been completed. There will be no partial acceptance. Final Acceptance will not occur until all items of Work, including Punch List Items, have been completed to City's satisfaction as reflected in the written Final Acceptance.

6.5.3 Final Payment will not be due, owing, or paid by City until Final Acceptance is issued.

6.5.4 Landscape Establishment Period. Unless otherwise expressly agreed to in writing by City, the Landscape Establishment Period will begin on the date of Final Acceptance of the Project and will run 90 Calendar Days thereafter. Landscape Establishment Period requirements are detailed in General Conditions Appendices, attached herein.

6.6 **CONTINUATION OF WORK**

6.6.1 Permitting Contractor to continue and finish the Work or any part of it after the time fixed for its completion (whether milestone, phase, Substantial Completion or Final Acceptance) or after the date to which the time fixed for any completion may have been extended, does not operate as a waiver by City of any rights under the Agreement Documents, law or equity.

6.6.2 Furthermore, the timely completion of the Work being of the utmost importance under this Agreement, notwithstanding the existence of one or more disputes between the parties

concerning the scope of the Work, the Project Schedule, Agreement Time, payments or any other matter, and further notwithstanding a party's invocation of the Dispute Resolution provisions specified in Appendix 6 of these General Conditions, unless City suspends the Agreement or Contractor's performance pursuant to Section 10 of these General Conditions, Contractor will continue to prosecute the Work, including any Change Order work or Extra Work Orders, in a diligent and timely manner and not stop, slow down or impede by action or inaction the progress of the Work, including commencing performance of and thereafter completing any additional work called out in any Change Order or Extra Work Order issued by Project Manager with the approval of City, so long as City makes payment to Contractor in accordance with Section 8 of these General Conditions.

SECTION 7 - AGREEMENT PRICE

7.1 UNIT PRICE AGREEMENTS

7.1.1 The Agreement Price for all Unit Price Agreements will be the amount set forth in the Agreement or Change Order multiplied by the verified quantity provided.

7.1.2 Measurements of quantities to determine the total Agreement Price must be in accordance with MAG Specification §§ 109.1 and 109.2.

7.1.3 The Unit Price may only be changed as set forth in Section 9 below.

7.2 CHANGE ORDERS

7.2.1 Unit Price Change Orders. The Change Order Price for all Unit Price Change Orders will be the amount set forth in the Change Order multiplied by the verified quantity provided.

7.2.2 Measurements of quantities to determine the total Change Order Price must be in accordance with MAG Specifications §§ 109.1 and 109.2.

7.2.3 The Unit Price may only be changed as set forth in Section 9 below.

7.2.4 MAG Specification § 109.4.1 is modified as follows: Before § 109.4.1, the following is added: Any deduction or increase in the Agreement Price must be supported by a signed, written Change Order fully executed by City, and supported by such backup as the Project Manager may require.

7.3 SALES TAX

Contractor is required to pay all applicable sales tax in accordance with the law of the state of Arizona and this cost must be included in all Agreement Prices. When equipment, materials or supplies generally taxable to Contractor are eligible for a tax exemption due to the nature of the Project, Contractor must assist City in applying for and obtaining such tax credits and exemptions which will be paid or credited to City.

SECTION 8 - PAYMENT

8.1 PAYMENT FOR CONSTRUCTION SERVICES

8.1.1 Payment for the Work will be made in accordance with MAG Standard Specification § 109 as amended below.

8.1.2 Contractor must submit to City for review a completed Contractor Payment Request signed

by Contractor, covering the Work completed as of the date of the Request and accompanied by such supporting documentation as is required by the Agreement Documents and also as City may reasonably require. A Contractor Payment Request will not be considered complete unless it is accompanied by an updated Project Schedule and a certification that the on-site, red lined, as built Drawings are up to date. If payment is requested on the basis of materials and equipment not incorporated in the Work but delivered and suitably, securely stored at the Site or at another location (such as a bonded warehouse) agreed to in writing, the Contractor Payment Request must also be accompanied by such data, satisfactory to City, as will establish City's title to the material and equipment and protect City's interest therein, including applicable insurance. Each subsequent Contractor Payment Request must include an affidavit of Contractor stating that all previous progress payments received on account of the Work have been applied to discharge in full all of Contractor's obligations reflected in prior Contractor Payment Requests.

8.1.3 Except for Work performed under a JOC Agreement, the Contracting Agency will retain 10 percent of all estimates as a guarantee for complete performance of the Agreement in accordance with Arizona Revised Statutes Section 34-221 or 34-607. The Contractor may elect to deposit securities in lieu of retention in accordance with Arizona Revised Statutes Section 34-221, Paragraph C.5. or 34-607, Paragraph B.5.

8.1.4 The payment process functions as follows: Prior to the payment cycle date, Contractor must send a draft Contractor Payment Request to Project Manager. The Project Team will review the Request and agree upon any necessary adjustments. Contractor must certify the final Request by signing and returning to Project Manager.

8.1.5 When construction of the Project is fifty percent (50%) completed, Contractor may request payment of one-half of the retention pursuant to A.R.S. § 34-609(B)(3), subject to all of City's rights to withhold or offset payments, and other rights of City, under the Agreement.

8.1.6 City reserves the right under A.R.S. § 34-609(B)(3) to reinstate the ten percent (10%) retention if City determines that satisfactory progress is not being made.

8.1.7 <u>Contractor's Warranty of Title</u>.

8.1.7.1 Contractor warrants and guarantees that title to all Work, materials and equipment covered by any Contractor Payment Request, whether incorporated in the Project or not, will pass to City at the time of payment, free and clear of all liens, claims, security interests, and encumbrances, provided that this will not preclude the Contractor from installing metering devices or other equipment of utility companies or municipalities, the title of which is commonly retained by the utility company or municipality.

8.1.7.2 No materials, supplies, or equipment for the Work under this Agreement will be purchased subject to any chattel mortgage or under a conditional sale contract or other agreement by which an interest therein, or any part thereof, is retained by the seller or supplier.

8.1.7.3 Nothing contained in this Section will defeat or impair the right of such persons furnishing materials or labor under any bond given by the Contractor for their protection, or any right under any law permitting such persons to look to funds due the Contractor in the hands of the City. The provisions of this Section must be inserted in all subcontracts and material agreements, and notices of its provision must be given to all persons furnishing materials for the Work when no formal agreement is entered into for such materials.

8.2 **PAYMENT UPON SUBSTANTIAL COMPLETION**

8.2.1 No payment will be made upon Substantial Completion, except for a regularly-scheduled monthly progress payment, as allowed by Section 8.2.2.

8.2.2 No further payments will be made to Contractor until Final Acceptance.

8.3 **FINAL PAYMENT**

8.3.1 Subject to all of City's rights to withhold or offset payment, and other rights under the Agreement, Final Payment including remaining retainage will be paid only after:

a. Work has been fully completed (including completion of all incorrect or incomplete work items) and the written Final Acceptance has been issued by City;

b. Necessary operating manuals, any excess materials and supplies necessary for matching materials and supplies incorporated into the Work, acceptable sewer video results (if applicable), and complete "as-built" Drawings (including the Building Information Model, if required by the Agreement Documents) have been delivered to City, as specified in this Section 8.3;

c. Full and unconditional lien waivers and releases by Contractor and any person performing labor or supplying material, machinery, fixtures, or tools for the Work have been delivered to Contractor;

d. All conditions and requirements imposed by City or any financing entity for the corresponding disbursement have been met; and

e. Contractor delivers to City a Contractor Payment Request requesting Final Payment.

8.3.2 Contractor must also submit a signed copy of Contractor's Affidavit Regarding Settlement of Claims, Appendix 3 to these General Conditions, and Certificate of Completion, Appendix 7 to these General Conditions, prior to Final Payment.

8.3.3 In addition, if required under the Project Specific Special Provisions, Contractor must compile a complete equipment list and maintenance manual to be submitted to City as a precondition to Final Payment. The list must include the following items for all equipment supplied under the Plumbing, Electrical, Air Conditioning, Elevator, and other Special Equipment Specifications:

a. Name, Model and Manufacturer.

b. Complete parts lists and Drawings.

c. Local source of supply for replacement parts along with suppliers' telephone numbers.

d. Local service organizations serving the equipment and their telephone numbers.

e. All tags, inspection slips, instruction packages, etc., removed from equipment must be properly identified as to pieces of equipment from which they were taken.

8.3.4 Contractor must also deliver to City, prior to Final Payment, one (1) digital (in the format specified by City), and if requested by City, one (1) hard copy, of any applicable Maintenance manuals. Each manual must include all manufacturer's operation and maintenance instructions and "as-built" Drawings with the list herein specified. It must also include all other diagrams and instructions necessary to properly operate and maintain the equipment, the name, address and telephone number of Contractor and all Subcontractors involved.

8.4 **CITY'S RIGHT TO WITHHOLD PAYMENT**

City may withhold payment to such extent as may be necessary in City's opinion to protect City from loss for which Contractor is responsible, including, without limitation, if any of the following conditions exist:

a. Defective Work not remedied;

b. Third party claims filed or reasonable evidence indicating probable filing of such claims unless security acceptable to City is provided by Contractor;

c. Failure of Contractor to make payments properly to Subcontractors or for labor, materials or equipment;

d. Reasonable evidence that the Work cannot be completed for the unpaid balance of the Agreement Price;

e. Damage to City or another Contractor;

f. Reasonable evidence that the Work will not be completed within the Agreement Time, and that the unpaid balance would not be adequate to cover actual or liquidated damages for the anticipated delay;

g. Failure to carry out the Work in accordance with the Agreement Documents; or

h. Contractor is in default of any of its other obligations under the Agreement Documents.

8.5 **JOINT/DIRECT CHECKS**

To promote the timely completion and progress of the Work or when appropriate and necessary, payments to Contractor may be made jointly to Contractor and its employees, agents, Subcontractors and suppliers, or any of them. For federally funded agreements, see federal provisions for additional requirements for the joint check process.

8.6 **PAYMENT NOT A WAIVER**

No payment (nor use or occupancy of the Project by City) will be deemed acceptance or approval of the Work or as a waiver of any claims, rights, or remedies of City.

8.7 **LIENS AND BOND CLAIMS**

Contractor must make all payments, in the time required, of all labor and materials furnished to Contractor in the course of the Work and must promptly furnish evidence of such payments as City may require. Contractor must pay when due all claims arising out of performance of the Work covered by this Agreement for which a lien may be filed either against the real estate or leasehold interest of City, or against payments due from City to Contractor, or for which a claim may be made against any payment or performance bond or both. To the fullest extent permitted by law, Contractor agrees that no liens or other claims in the nature of a lien against the real estate, leasehold, or other interest of City,

against payment due from City to Contractor, or against any payment or performance bond, must be filed or made in connection with the Work by any party who has supplied professional services, labor, materials, machinery, fixtures, tools, or equipment used in or in connection with the performance of this Agreement, and Contractor agrees to remove or to cause to be removed any such liens or claims in the nature of a lien or bond claim within 10 Days upon receiving notice or obtaining actual knowledge of the existence of such liens or claim. In addition, Contractor agrees to defend, indemnify, and hold harmless City from and against any and all such liens and claims. This paragraph does not apply to claims and liens of Contractor due to non-payment for work performed.

8.8 **FINANCIAL RECORDKEEPING AND CITY'S AUDIT RIGHT**

8.8.1 Records for all Agreements between City and Contractor must, upon reasonable notice, be open to inspection and subject to audit, scanning, and reproduction during normal business working hours. Such audits may be performed by any City's representative or any outside representative engaged by City for the purpose of examining such records. City or its designee may conduct such audits or inspections throughout the term of this Agreement and for a period of five years after Final Payment or longer if required by law. City's representatives may (without limitation) conduct verifications such as counting employees at the Site, witnessing the distribution of payroll, verifying information and amounts through interviews and written confirmations with Contractor employees, field and agency labor, Subcontractors, and vendors.

8.8.2 Contractor's "records" must include any and all information, materials and data of every kind and character, including without limitation, records, books, papers, documents, subscriptions, recordings, agreements, purchase orders, leases, contracts, commitments, arrangements, notes daily diaries, superintendent reports, drawings, receipts, vouchers and memoranda, and any and all other agreements, sources of information and matters that may in City's judgment have any bearing on or pertain to any matters, rights, duties or obligations under or covered by any Agreement Document. Such records must include (hard copy, as well as computer readable data if it can be made available), written policies and procedures; time sheets; payroll registers; payroll records; cancelled payroll checks; subcontract files (including proposals of successful and unsuccessful bidders, bid recaps, negotiation notes, etc.); original bid estimates; estimating work sheets; correspondence; Change Order files (including documentation covering negotiated settlements); back-charge logs and supporting documentation; invoices and related payment documentation; general ledger, information detailing cash and trade discounts earned, insurance rebates and dividends; and any other Contractor records which may have a bearing on matters of interest to City or the Project in connection with Contractor's dealings with City or the Project (all foregoing hereinafter referred to as "records") to the extent necessary to adequately permit evaluation and verification of any or all of the following:

a. Compliance with Agreement requirements for deliverables;

b. Compliance with approved Plans and Specifications;

c. Compliance with § 14.9 below;

d. Compliance with Agreement provisions regarding the pricing of Change Orders;

e. Accuracy of Contractor representations regarding the pricing of invoices; or

f. Accuracy of Contractor representations related to claims submitted by

Contractor or any of their employees.

8.8.3 Contractor must require all payees (examples of payees include Subcontractors, Suppliers, Insurance Carriers, etc.) to comply with the provisions of this Section by including the requirements hereof in a written agreement between Contractor and payee. Contractor will ensure that all payees (including those entering into lump sum agreements) have the same right to audit provisions contained in this Agreement included in their agreements with Contractor.

8.8.4 City's authorized representative(s) (including, without limitation, Project Manager) must have reasonable access to Contractor's facilities, must be allowed to interview all current or former employees to discuss matters pertinent to the performance of this Agreement and must be provided adequate and appropriate work space, in order to conduct audits in compliance with this Section.

8.8.5 If an audit inspection or examination in accordance with this Section, discloses overpricing or overcharges to City (of any nature) by Contractor or Contractor's Subcontractors in excess of $100,000 in addition to making adjustments for the overcharges, the reasonable actual cost of City's audit must be reimbursed to City by Contractor. Any adjustments or payments which must be made as a result of any such audit or inspection of Contractor's invoices or records must be made within a reasonable amount of time (not to exceed 90 Days) from presentation of City's findings to Contractor.

8.8.6 In addition to the normal paperwork documentation Contractor typically furnishes to City, Contractor agrees to furnish, upon written request from City, any of the documentation necessary for City to exercise its audit rights under this Section 8.8 in computer readable file formats (Word, Excel, or .pdf), as City may designate.

8.8.7 City, its authorized representative, and the appropriate agency, reserve the right to audit Contractor's records in compliance with local, state or federal policies, statutes or at City's discretion, within three (3) years of Final Acceptance of the Work.

SECTION 9 - CHANGES TO THE AGREEMENT

9.1 **FIELD ORDERS**

City may authorize minor changes in the Work not involving an adjustment in the Agreement Price or the Agreement Times, which are consistent with the overall intent of the Agreement Documents. These may be accomplished by a written Field Order on the standard form approved and executed by City. Such Field Orders must be binding and Contractor must perform the change promptly. If Contractor believes that a Field Order justifies an increase in the Agreement Price or Agreement Time, Contractor may make a claim therefor as provided in Section 7.2.

9.2 **EXTRA WORK/CHANGES IN THE WORK**

9.2.1 City reserves the right to make such changes in the Plans and Specifications for the Work, as it may deem appropriate and any such change as set forth in a written Change Order must be deemed a part of this Agreement as if originally incorporated herein.

9.2.2 In the event City and Contractor cannot agree on the terms of a Change Order, or when circumstances otherwise require, the Project Manager has the authority to direct the Contractor to perform extra work, if the work in question is an item not provided for in the

Agreement as awarded. The Project Manager will have the authority to determine, based upon factual evidence presented by the Contractor, whether the work in question is an item not provided for in the Agreement as awarded. If the Project Manager directs the Contractor to perform extra work, the Project Manager's instructions will include a price that the Contractor cannot exceed in charging the City for the extra work. Upon receipt of the Project Manager's directions to perform extra work, the Contractor must promptly proceed with the extra work and document the actual cost thereof. Contractor's right to payment for extra work will be determined under Subsection 9.2.4 below. The Contractor is responsible to manage the extra work to ensure that the price limits set by the Project Manager are not exceeded. Contractor must perform the extra work and submit documentation for the actual cost of the extra work to the City. A Change Order will be issued to cover this work.

9.2.3 Contractor will not be entitled to payment for extra work unless a written Change Order, in form and content prescribed by City, has been executed by City. On all requests for Change Orders, Contractor must specify the increased or decreased costs and whether it believes any extensions of time will be necessary to complete its Work as modified by the Change Order. If extra work is performed under Subsection 9.2.2 above, a corresponding Change Order will be prepared, approved and processed by City before payment can be made to Contractor.

9.2.4 In general, pricing for Change Orders will include the same mark-up percentages that were in effect when the Agreement was awarded. The cost or credit to the City resulting from a change in the Work is subject to Appendix 1 (Policy Statement for Calculating Delays and Damages) and will be determined, based on the type of pricing for the Agreement involved, as follows:

a. By mutual acceptance of a lump sum properly itemized in a form acceptable to City;

b. By unit prices stated in the Agreement Documents;

c. When the City determines that a Unit Price Book Job Order associated with a Job Order Agreement requires a Change Order, by using the same Total Cost Data and CCI that are in effect when the Change Order is anticipated to be issued; or

d. By actual cost and a percentage fee covering overhead and profit, as follows:

(i) Contractor will perform the extra work and be compensated for actual cost of labor, materials and equipment.

(ii) Contractor will have the right to add the fee percentage applicable to the Work under the Agreement, or if no such fee has been agreed to by the parties, not more than five percent (5%) to the Subcontractor's prices for authorized extra work performed solely by Subcontractors. Such percentage will include all of Contractor's charges for overhead, profit, administration and supervision.

(iii) Contractor or Subcontractor will have the right to add the fee percentage applicable to Work under the Agreement for self-performed extra work, or if no such fee has been agreed to by the parties, Contractor's or Subcontractor's maximum total allowable additions for overhead, profit, administration and supervision will

not exceed ten percent (10%) of actual verifiable labor, materials and equipment for such self- performed extra work.

9.2.5 Any agreement which modifies the terms of the Agreement (including Change Orders) will be approved in writing by the Project Manager. Once properly executed by both parties, these modifications to the Agreement will have the same effect as if they had been included in the original Agreement.

9.3 **ACCURACY OF CHANGE ORDER PRICING INFORMATION**

9.3.1 Subject to Sections 9.3.2 through 9.3.4, signature by the contracting parties constitutes full accord and satisfaction between City and Contractor for all costs, damages, and expenses of whatever kind of nature, including delay, impact or acceleration damages, which may be occasioned by a Change Order of other modification of the Agreement agreed to in writing.

9.3.2 Accurate Change Order Pricing Information: Contractor agrees that it is responsible for submitting accurate cost and pricing data to City to support its Fixed Price, Unit Price, or Cost Plus Change Order Proposals or other Agreement Price adjustments under the Agreement. Contractor further agrees to submit Change Order proposals with cost and pricing data which is accurate, complete, current, and in accordance with the terms of the Agreement with respect to pricing of change orders. Contractor agrees that any "buy-out savings" on Change Orders will accrue 100% to Owner. "Buy-out savings" are defined as any savings negotiated by the Contractor with a Subcontractor or a Material Supplier after receiving approval of a Change Order amount that was designated to be paid to a specific Subcontractor or Supplier for the Approved Change Order work.

9.3.3 Right to Verify Change Order Pricing Information: Contractor agrees that City, through its designated representative, will have the right to examine, copy, and scan the records of the Contractor, Subcontractor or Sub-Subcontractor's records (during the Agreement period and up to three years after final payment is made on the Agreement) to verify the accuracy and appropriateness of the pricing data used to price all Change Order proposals or claims. Contractor agrees that if City determines the cost and pricing data submitted (whether approved or not) was inaccurate, incomplete, not current, or not in compliance with the terms of the Agreement regarding pricing of Change Orders, an appropriate Agreement Price adjustment will be made. Such post-approval Contact Price adjustments will apply to all levels of contractors and Subcontractors and to all types of Change Order proposals, specifically including Fixed Price, Unit Price, and Cost Plus Change Orders.

9.3.4 Requirements for Detailed Change Order Pricing Information: Contractor agrees to provide a detailed breakdown of allowable labor and labor burden cost (i.e., base wage rate of applicable classifications of workers, payroll taxes, and insurance and benefits costs). This information will be used to evaluate the potential cost of labor and labor burden related to Change Order work. It is intended that this information represent an accurate estimate of the Contractor's actual labor and labor burden cost components. Information is not intended to establish fixed billing or Change Order pricing labor rates. However, at the time Change Orders are priced, the submitted cost data for labor rates may be used to price Change Order work. The accuracy of any such agreed upon labor rate cost components used to price Change Orders will be subject to later audit. Approved Change Order amounts may be adjusted later to correct the impact of inaccurate labor cost components if the agreed upon labor cost components are determined to be inaccurate.

9.4 **EMERGENCIES**

In any emergency affecting the safety of persons or property, Contractor will act, at its discretion, to prevent threatened damage, injury or loss. Any change in the Agreement Price or Agreement Time resulting from emergency work will be determined as provided in this Section.

9.5 **DIFFERING SITE CONDITIONS**

9.5.1 If Differing Site Conditions are encountered at the Project Site, then notice by the observing party must be given to the other party promptly before conditions are disturbed (to the extent practicable) and in no event later than 14 Days after first observance of the conditions. City will promptly investigate such conditions and, if City determines that Differing Site Conditions exist and they materially cause an increase in the cost of, or time required for, performance of any part of the Work, Contractor will be entitled to equitable adjustment in the Agreement Price or Construction Schedule (and other time requirements), or both. If it is determined by City that the conditions at the Project Site are not Differing Site Conditions and no change is justified, then City will so notify Contractor in writing, stating the reasons. Claims in opposition to such determination must be made within 14 Days after City has given notice of its decision. If City and Contractor cannot agree on an adjustment in the Agreement Price or Construction Schedule (and other time requirements), the adjustment may be submitted to dispute resolution as provided these General Conditions.

9.6 **CHANGES IN LAWS, REGULATIONS, OR LEGAL REQUIREMENTS OR TAXES**

In the event of a material change in applicable Laws, Regulations, or Legal Requirements, or taxes subsequent to the date of the Agreement by the parties, Contractor may be entitled to a Change Order, in City's discretion, to the extent Contractor can document to the satisfaction of City that such change significantly increases Contractor's actual cost of performance of the Work.

SECTION 10 -SUSPENSION AND TERMINATION

10.1 **SUSPENSION**

City may suspend the Agreement and Contractor's performance in accordance with MAG Specifications § 105.1 and 108.7.

10.2 **TERMINATION BY THE CITY FOR CAUSE**

10.2.1 MAG Specifications § 108.11 applies to the Agreement.

10.2.2 City may also terminate the Agreement if City determines, in its sole discretion that Contractor has:

a. After prior written notice, refused or failed to supply enough properly skilled workers or proper materials;

b. After prior written notice, failed to make payment to Subcontractors for materials or labor in accordance with the respective agreements between Contractor and the Subcontractors;

c. After prior written notice, disregards laws, ordinances, or rules, regulations or orders of a public authority having jurisdiction;

d. After prior written notice, repeatedly failed to comply with written directives from City;

e. Is adjudged as bankrupt or insolvent;

f. Made a general assignment for the benefit of creditors;

g. Appointed a trustee or receiver for itself or any of its property;

h. Filed a petition to take advantage of any debtor's act, or to reorganize under the bankruptcy or similar laws; or

i. Otherwise breached a provision of the Agreement Documents or any other Agreement between City and Contractor.

10.2.3 When any of the above reasons exist, City may terminate the Agreement, without prejudice to any other rights or remedies of City, after giving Contractor and Contractors' surety, if any, 7 Days written notice of City's intent to terminate the Agreement and Contractor's failure to cure any such reasons. Upon such termination, City may: (1) take possession of the Site and of all materials thereon owned by Contractor; or (2) finish the Work by whatever reasonable method City may deem expedient. When City terminates the Agreement for one of the reasons state above, Contractor will not be entitled to receive further payment until the Work is finished. If the unpaid balance of the Agreement Price existing at the time of such termination exceeds the costs and expenses of finishing the Work and any other damages incurred by City, such excess will be paid to Contractor. If such costs, expenses and damages exceed such unpaid balance, Contractor must pay the difference to City. This obligation for payment will survive termination of the Agreement.

10.3 **TERMINATION BY CITY FOR CONVENIENCE**

City may also terminate the Agreement at any time for its convenience upon 7 Days written notice to Contractor specifying the termination date. In the event of termination which is not the fault, in whole or in part, of Contractor, City will pay to Contractor only such compensation, including reimbursable expenses, due for Work properly performed on the Project prior to the termination date. Upon any termination of the Agreement, no further payments will be due from City to Contractor.

10.4 **A.R.S. § 38-511**

The Agreement is subject to, and may be terminated by City in accordance with, the provisions of A.R.S. § 38-511.

SECTION 11 -INSURANCE AND BONDS

11.1 **INSURANCE REQUIREMENTS**

11.1.1 After Agreement award, the Contractor must furnish the City a certificate of insurance on a standard insurance industry ACORD form. The ACORD form must be issued by an insurance company authorized to transact business in the State of Arizona possessing a current A.M. Best, Inc. rating of A-7, or better and legally authorized to do business in the State of Arizona with policies and forms satisfactory to City. Provided, however, the A.M. Best rating requirement may not be deemed to apply to required Worker's Compensation coverage.

11.1.2 The Contractor and any of its Subcontractors must procure and maintain, until all of their obligations have been discharged, including any warranty periods under this Agreement are satisfied, the insurances set forth below.

11.1.3 The insurance requirements set forth below are minimum requirements for this Agreement and in no way limit the indemnity covenants contained in this Agreement.

11.1.4 The City in no way warrants that the minimum insurance limits contained in this Agreement are sufficient to protect Contractor from liabilities that might arise out of the performance of the Agreement services under this Agreement by Contractor**,** its agents, representatives, employees, or Subcontractors and the Contractor is free to purchase any additional insurance as may be determined necessary.

11.1.5 Failure to demand evidence of full compliance with the insurance requirements in this Agreement or failure to identify any insurance deficiency will not relieve the Contractor from, nor will it be considered a waiver of its obligation to maintain the required insurance at all times during the performance of this Agreement.

11.1.6 Use of Subcontractors: If any Work is subcontracted in any way, the Contractor must execute a written agreement with Subcontractor containing the same Indemnification Clause and Insurance Requirements as the City requires of the Contractor in this Agreement. The Contractor is responsible for executing the Agreement with the Subcontractor and obtaining Certificates of Insurance and verifying the insurance requirements.

11.2 **MINIMUM SCOPE AND LIMITS OF INSURANCE**

11.2.1 The Contractor must provide coverage with limits of liability not less than those stated below.

11.2.1.1 Commercial General Liability-Occurrence Form. Contractor must maintain "occurrence" form Commercial General Liability insurance with a limit of not less than $2,000,000 for each occurrence, $4,000,000 aggregate. Said insurance must also include coverage for products and completed operations, independent contractors, personal injury and advertising injury. If any Excess insurance is utilized to fulfill the requirements of this paragraph, the Excess insurance must be "follow form" equal or broader in coverage scope than underlying insurance.

11.2.1.2 Automobile Liability-Any Automobile or Owned, Hired and Non-Owned Vehicles. Contractor must maintain Business/Automobile Liability insurance with a limit of $1,000,000 each accident on Contractor owned, hired, and non-owned vehicles assigned to or used in the performance under this Agreement. If any Excess or Umbrella insurance is utilized to fulfill the requirements of this paragraph, the Excess or Umbrella insurance must be "follow form" equal or broader in coverage scope than underlying insurance.

11.2.1.3 Workers Compensation and Employers Liability Insurance. Contractor must maintain Workers Compensation insurance to cover obligations imposed by federal and state statutes having jurisdiction of Contractor employees engaged in the performance of Work under this Agreement and must also maintain Employers' Liability insurance of not less than $1,000,000 for each accident and $1,000,000 disease for each employee.

11.2.1.4 Builders' Risk/Installation Floater Insurance. The Contractor bears all responsibility for loss to all equipment or Work under construction. Unless waived in writing by the City the Contractor will purchase and maintain in force Builders' Risk/Installation Floater insurance on the entire Work until completed and accepted by the City. This insurance will be Special Causes of Loss policy form, (minimally including perils of fire, flood, lightning, explosion, windstorm and hail, smoke, aircraft and vehicles, riot and civil commotion, theft, vandalism, malicious mischief, and collapse), completed value, replacement cost policy form equal to the Agreement Price and all subsequent modifications. The Contractor's Builders'

Risk/Installation Floater insurance must be primary and not contributory.

a. Builders' Risk/Installation Floater insurance must cover the entire Work including reasonable compensation for architects and engineers' services and expenses and other "soft costs" made necessary by an insured loss. Builders' Risk/Installation Floater insurance must provide coverage from the time any covered property comes under the Contractor's control and or responsibility, and continue without interruption during course of construction, renovation and or installation, including any time during which any Project property or equipment is in transit, off Site, or while on Site for future use or installation. Insured property must include, but not be limited to, scaffolding, false work, and temporary buildings at the Site. This insurance must also cover the cost of removing debris, including demolition as may be legally required by operation of any law, ordinance, regulation or code.

b. The Contractor must also purchase and maintain Boiler and Machinery insurance with the same requirements as Builders' Risk/Installation Floater insurance cited above if the Work to be performed involves any exposures or insurable property normally covered under a Boiler and Machinery insurance policy or made necessary as required by law or testing requirements in the performance of this Agreement. The Contractor will be responsible for any and all deductibles under these policies and the Contractor waives all rights of recovery and subrogation against the City under the Contractor- Builders' Risk/Installation Floater insurance described herein.

c. Builders' Risk/Installation Floater Insurance must be maintained until whichever of the following first occurs: (i) final payment has been made; or, (ii) until no person or entity, other than the City, has an insurable interest in the property required to be covered.

d. The Builders' Risk/Installation Floater insurance must be endorsed so that the insurance will not be canceled or lapse because of any partial use or occupancy by the City.

e. The Builders Risk/Installation Floater insurance must include as named insureds, the City, the Contractor, and all tiers of Subcontractors and others with an insurable interest in the Work who will be named as additional insureds unless they are able to provide the same level of coverage with the City and Contractor named as additional insureds. Certificates must contain a provision that the insurance will not be canceled or materially altered without at least 30 Days advance notice to the City. The City must also be named as a Loss Payee under the Builders' Risk/Installation Floater coverage.

f. The Builders Risk/Installation Floater insurance must be written using the Special Causes of Loss policy form, replacement cost basis.

g. All rights of subrogation under the Builders Risk/Installation Floater insurance are, by this Agreement, waived against the City, its officers, officials, agents and employees.

h. The Contractor is responsible for payment of all deductibles under the Builders' Risk/Installation Floater insurance policy.

11.2.1.5 Pollution Liability Insurance (Including Errors and Omissions). For Job Orders, Pollution Liability Insurance is only required if applicable and determined on a project specific basis. Contractor must maintain Pollution Liability Insurance with a limit of not less than $5,000,000 per loss, $5,000,000 aggregate for losses caused by pollution conditions including coverage for bodily injury, property damage, defense costs, clean-up costs, and completed operations that arise from the operations of Contractor as described in this Agreement.

a. The policy must provide for complete professional service coverage, including coverage for pollution liability that is a result of a breach of professional duties.

b. The policy must provide for protection again claims for third-party bodily injury, property damage, or environmental damage caused for pollution conditions resulting from general contracting activities for which Contractor is legally liable.

c. The policy must provide for cleanup costs when mandated by governmental entities, when required by law, or as a result of third-party claims.

d. Completed Operations Coverage must be kept in place for up to the statute of repose.

e. The policy must be endorsed to include the following additional insured language: "City, its elected officials, trustees, employees, agents, and volunteers must be named as additional insureds with respect to liability arising out of the activities performed by, or on behalf of Contractor".

f. If Work under this Agreement requires the transportation of any hazardous material or regulated substances, Contractor must carry Auto Liability with a CA 9948 endorsement or equivalent.

g. If Work under this Agreement requires the disposal of any hazardous materials from the job site, Contractor must obtain a certificate of insurance for Pollution Legal Liability from the disposal site operator with a limit of not less than $5,000,000 per loss, $5,000,000 aggregate.

11.3 **ADDITIONAL POLICY PROVISIONS REQUIRED**

11.3.1 Self-Insured Retentions or Deductibles. Any self-insured retentions and deductibles must be declared and approved by the City. If not approved, the City may require that the insurer reduce or eliminate any deductible or self-insured retentions with respect to the City, its officers, officials, agents, employees, and volunteers.

11.3.2 The Contractor's insurance must contain broad form contractual liability coverage.

11.3.3 The Contractor's insurance coverage must be primary insurance with respect to the City, its officers, officials, agents, and employees. Any insurance or self-insurance maintained by the City, its officers, officials, agents, and employees will be in excess of the coverage provided by the Contractor and must not contribute to it.

11.3.4 The Contractor's insurance must apply separately to each insured against whom claim is made or suit is brought, except with respect to the limits of the insurer's liability.

11.3.5 Coverage provided by the Contractor must not be limited to the liability assumed under the

indemnification provisions of this Agreement.

11.3.6 The policies must contain a severability of interest clause and waiver of subrogation against the City, its officers, officials, agents, and employees, for losses arising from Work performed by the Contractor for the City.

11.3.7 The Contractor, its successors and or assigns, are required to maintain Commercial General Liability insurance as specified in this Agreement for a minimum period of 3 years following completion and acceptance of the Work. The Contractor must submit a Certificate of Insurance evidencing Commercial General Liability insurance during this 3 year period containing all the Agreement insurance requirements, including naming the required Additional Insureds set forth herein.

11.3.8 If a Certificate of Insurance is submitted as verification of coverage, the City will reasonably rely upon the Certificate of Insurance as evidence of coverage but this acceptance and reliance will not waive or alter in any way the insurance requirements or obligations of this Agreement.

11.3.9 Insurance Cancellation During Agreement Term.

11.3.9.1 If any of the required policies expire during the life of this Agreement, the Contractor must forward renewal or replacement Certificates to the City within 10 Days after the renewal date containing all the required insurance provisions.

11.3.9.2 Each insurance policy required by the insurance provisions of this Agreement must provide the required coverage and must not be suspended, voided or canceled except after 30 Days prior written notice has been given to the City, except when cancellation is for non-payment of premium, then 10 Days prior notice may be given. Such notice must be sent directly to Chandler Law-Risk Management Department, Post Office Box 4008, Mailstop 628, Chandler, Arizona 85225. If any insurance company refuses to provide the require notice, the Contractor or its insurance broker must notify the City of any cancellation, suspension, non-renewal of any insurance within 7 Days of receipt of insurers' notification to that effect.

11.3.10 City as Additional Insured. The above-referenced policies are to contain, or be endorsed to contain, the following provisions:

11.3.10.1 The Commercial General Liability and Automobile Liability policies are to contain, or be endorsed to contain, the following provisions: The City, its officers, officials, agents, and employees are additional insureds with respect to liability arising out of activities performed by, or on behalf of, the Contractor including the City's general supervision of the Contractor; Products and Completed Operations of the Contractor; and automobiles owned, leased, hired, or borrowed by the Contractor.

11.3.10.2 The City, its officers, officials, agents, and employees must be additional insureds to the full limits of liability purchased by the Contractor even if those limits of liability are in excess of those required by this Agreement.

11.4 BONDS AND OTHER PERFORMANCE SECURITY

11.4.1 After Agreement award, Contractor must provide a Performance Bond and a Payment Bond, each in an amount equal to the full amount of the Agreement Price.

11.4.2 Each such bond must be executed by a surety company or companies holding a Certificate

of Authority to transact surety business in the State of Arizona, issued by the Director of the Arizona Department of Insurance and must be named in the current list of "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies" as published in Circular 570 (amended) by the Audit Staff Bureau of Accounts, U.S. Treasury Department. A copy of the Certificate of Authority must accompany the bonds. The Certificate must have been issued or updated within two (2) years prior to the execution of this Agreement. The bonds must be written or countersigned by an authorized representative of the surety who is either a resident of the state of Arizona or whose principal office is maintained in this state, as by law required.

11.4.3 The bonds must be made payable and be acceptable to City. The bond forms for the performance and payment bonds must be in the forms required under A.R.S. § 34-221, *et. Seq.,* as in Appendices 4 and 5 of these General Conditions.

11.4.4 Upon the request of any person or entity appearing to be a potential beneficiary of bonds covering payment of obligations arising under the Agreement Documents, Contractor must promptly furnish a copy of the bonds or must permit a copy to be made.

11.4.5 All bonds submitted for this Project must be provided by a company which has been rated AM Best rating of A- or better for the prior four quarters by the latest edition of the 'Results Best's Key Rating Guide (Property/Casualty)" published by the A.M. Best Company.

11.4.6 Personal or individual bonds are not acceptable.

11.4.7 If the surety on any Bond furnished by Contractor is declared a bankrupt or becomes insolvent, or Contractor's right to do business is terminated in any state where any part of the Project is located, or it ceases to meet the requirements of this Section 11.4, Contractor must within 5 Days thereafter substitute another Bond and surety, both of which must be acceptable to City.

SECTION 12 - INDEMNIFICATION

12.1 To the extent permitted by law, the Contractor and its owners, officers, directors, agents, employees, and subconsultants (collectively "lndemnitor") must indemnify, save, and hold harmless the City and its officers, officials, agents, and employees (collectively "lndemnitee") from any and all claims, actions, liabilities, damages, losses, or expenses (including court costs, attorneys' fees, and costs of claim processing, investigation, and litigation) (collectively "Claims") caused or alleged to be caused, in whole or in part, by the negligent, reckless, wrongful, or willful acts, errors, or omissions of Indemnitor in connection with this Agreement. This indemnity includes any Claim or amount arising out of or recovered under workers' compensation laws or on account of Indemnitor's failure to conform to any federal, state, or local law, statute, ordinance, rule, regulation, or court decree. Indemnitor must indemnify lndemnitee from and against any and all Claims, except those arising solely from lndemnitee's own negligent, reckless, wrongful, or willful acts, errors, or omissions. Indemnitor is responsible for primary loss investigation, defense, and judgment costs where this indemnification applies. In consideration of the award of this Agreement, Indemnitor agrees to waive all rights of subrogation against lndemnitee for losses arising from or related to this Agreement. Indemnitor's obligations under this provision survive the termination or expiration of this Agreement.

SECTION 13 -DISPUTE RESOLUTION

13.1 All disputes arising out of or relating to the Agreement, the Work or the Project, other than termination under Section 10, will be resolved pursuant to the Dispute Resolution process set forth in Appendix 6 of these General Conditions, and not pursuant to MAG Specifications § 110.

13.2 Contractor agrees that during any dispute between the parties, Contractor will continue to perform its obligations under the Agreement until such dispute is resolved.

13.3 Notwithstanding any other provision in this Agreement, City has the right to immediately file in court and pursue an action for a temporary restraining order and injunctive relief against Contractor if City determines that such action is necessary to protect its interests under the Agreement, to obtain specific performance of any provision of the Agreement, to advance the completion of the Project, or to protect health, welfare and safety.

SECTION 14 - MISCELLANEOUS PROVISIONS

14.1 AGREEMENT DOCUMENTS

14.1.1 The Agreement Documents are intended to permit the parties to complete the Work and all obligations required by the Agreement Documents within the Agreement Times for the Agreement Price. The Agreement Documents are intended to be complementary and interpreted in harmony so as to avoid conflict, with words and phrases interpreted in a manner consistent with construction and design industry standards.

14.1.2 It is the intent of the Agreement Documents to describe a functionally complete Project (or part thereof) to be constructed in accordance with the Agreement Documents. Any labor, documentation, services, materials, or equipment that may reasonably be inferred from the Agreement Documents or from prevailing custom or trade usage as being required to produce the intended result must be provided by Contractor whether or not specifically called for at no additional cost to City.

14.1.3 The Agreement Documents establish the rights and obligations of the parties and include the Agreement, Addenda (which pertain to the Agreement Documents), Contractor's Bid or Proposal (including documentation accompanying the Bid and any post-Bid documentation submitted prior to Agreement award) when attached as an exhibit to the Agreement, the accepted Project Schedule, the Notice to Proceed, the Performance Bond, the Payment Bond, Project Design, Engineering and Specifications, these General Conditions, the Project Specific Special Provisions, Technical Specifications, Agreement Drawings, as the same may be more specifically identified in the Agreement, Change Orders, Work Change Directives, Field Orders and the written interpretations and clarifications of the Design Professional or City representative and Modifications issued after execution of the Agreement. Approved Shop Drawings and the reports and drawings of subsurface and physical conditions are not Agreement Documents.

14.1.4 In the event of any inconsistency, conflict, or ambiguity between or among the Agreement Documents, the Agreement Documents will take precedence as follows from highest to lowest: Change Orders, Addenda, Agreement, Project Specific Special Provisions, General Conditions, Technical Specifications, Drawings/Plans, Chandler Amendments to MAG Standard Specifications and Chandler Standard Details, and MAG Uniform Standard Specifications and Details for Public Works Construction. If applicable to this Agreement, Federal Provisions prevail.

14.1.5 On the Drawings, given dimensions will take precedence over scaled measurements and large scale drawings over small-scale drawings.

14.1.6 Clarifications and interpretations of the Agreement Documents will be issued by the Design Professional through the City.

14.1.7 The headings used in this Agreement or any other Agreement Documents, are for ease of reference only and must not in any way be construed to limit or alter the meaning of any provision.

14.1.8 The Agreement Documents form the entire agreement between City and Contractor. No oral representations or other agreements have been made by the parties except as specifically stated in the Agreement Documents.

14.1.9 The Agreement Documents may not be changed, altered, or amended in any way except in writing signed by a duly authorized representative of each party in the form of a Change Order.

14.1.10 Re-Use of Documents. Neither Contractor nor any Subcontractor, manufacturer, fabricator, supplier or distributor will have or acquire any title to or ownership rights in any of the Drawings, Specifications or other documents (or copies of any thereof) prepared by or bearing the seal of the Design Professional; and they must not re-use any of them on extensions of the Project or any other project without written consent of City and the Design Professional and specific written verification or adaptation by the Design Professional.

14.2 REFERENCE STANDARDS

14.2.1 Reference to standards, specifications, manuals, or codes of any technical society, organization, or association, or to Laws or Regulations, whether such reference be specific or by implication, will mean the standard, specification, manual, code, or Laws or Regulations in effect at the time of opening of Bids (or on the Effective Date of the Agreement if there were no Bids), except as may be otherwise specifically stated in the Agreement Documents.

14.2.2 The provisions of any such standard, specification, manual or code, or any instruction of a Supplier will not change the duties or responsibilities of City, Contractor, Design Professional or Project Manager, or any of their Subcontractors, consultants, agents, or employees from those set forth in the Agreement Documents, nor will any such provision or instruction assign to City, Contractor, Design Professional, or any of their agents, or employees any duty or authority to supervise or direct the performance of the Work or any duty or authority to undertake responsibility inconsistent with the provisions of the Agreement Documents.

14.3 COMPLIANCE WITH ARIZONA LAW AND FEDERAL LAW

14.3.1 Compliance with A.R.S. § 41-4401. Pursuant to the provisions of A.R.S. § 41-4401, the Contractor hereby warrants to the City that the Contractor and each of its subcontractors ("Subcontractors") must comply with all Federal Immigration laws and regulations that relate to the immigration status of their employees and the requirement to use E-Verify set forth in A.R.S. §23-214(A).

14.3.2 A breach of the Contractor Immigration Warranty constitutes a material breach of this Agreement and subject to penalties up to and including termination of this Agreement.

14.3.3 The City retains the legal right to inspect the papers of any Contractor or Subcontractor employee who works on this Agreement to ensure that the Contractor or Subcontractor is complying with the Contractor Immigration Warranty. The Contractor agrees to assist the City in the conduct of any such inspections.

14.3.4 The City may, at its sole discretion, conduct random verifications of the employment records of the Contractor and any Subcontractors to ensure compliance with Contractors Immigration Warranty. The Contractor agrees to assist the City in performing any such random verifications.

14.3.5 The provisions of this Article must be included in any agreement the Contractor enters into with any and all of its subcontractors who provide services under this Agreement or any subcontract. "Services" are defined as furnishing labor, time or effort in the State of Arizona by a contractor or subcontractor. Services include construction or maintenance of any structure, building or transportation facility or improvement to real property.

14.4 **HAZARDOUS ENVIRONMENTAL CONDITIONS**

14.4.1 Contractor will not be responsible for any Hazardous Environmental Condition uncovered or revealed at the Site which was not shown or indicated in Drawings or Specifications or identified in the Agreement Document to be within the scope of the Work. Contractor will be responsible for a Hazardous Environmental Condition created with any materials brought to the Site by Contractor, Subcontractors, Suppliers, or anyone else for whom Contractor is responsible.

14.4.2 If Contractor encounters a Hazardous Environmental Condition or if Contractor or anyone for whom Contractor is responsible creates a Hazardous Environmental Condition. Contractor must immediately:

a. Secure or otherwise isolate such condition;

b. Stop all Work in connection with such condition and in any area affected thereby; and

c. Notify City and promptly thereafter confirm such notice in writing.

14.4.3 City will promptly retain a qualified expert to evaluate such condition or take corrective action, if any.

14.4.4 Contractor will be responsible for any and all civil or criminal penalties, fines, damages, or other charges imposed by any regulatory agency or court for sewage discharges that are in violation of applicable statutes and laws and that are a result, direct or indirect, of work performed under this Agreement. Contractor will also be responsible for reimbursement to City for administration, reporting, and tracking expenses required as a result of any spill event. In the event the regulatory agency or court imposes a probationary period, Contractor must post bond for the probationary period to ensure that all such costs are reimbursed to City. This responsibility will apply whether penalties are imposed directly on Contractor or any of its Subcontractors, or the City of Chandler. Contractor must defend and indemnify City against such penalties. Regulatory agencies may include, but are not limited to, the Arizona Department of Environmental Quality (ADEQ) and the United States Environmental Protection Agency (USEPA).

14.5 **COOPERATION AND FURTHER DOCUMENTATION**

Contractor agrees to provide City such other duly executed documents as may be reasonably requested by City to implement the intent of the Agreement Documents.

14.6 **ASSIGNMENT**

Neither Contractor nor City will, without the written consent of the other assign, transfer or sublet any portion of this Agreement or part of the Work or the obligations required by the Agreement Documents, any such assignment will be void, will transfer no rights to the purported assignee, and would be a material breach of the Agreement.

14.7 **SUCCESSORS**

Contractor and City intend that the provisions of the Agreement Documents are binding upon the parties, their employees, agents, heirs, successors and assigns.

14.8 **LAWFUL PRESENCE**

Pursuant to A.R.S. §§ 1-501 and 1-502, City is prohibited from awarding an agreement to any natural person who cannot establish that such person is lawfully present in the United States. To establish lawful presence, a person must produce qualifying identification and sign a City-provided affidavit affirming the identification provided is genuine. This requirement will be imposed at the time of agreement award. This requirement does not apply to business organizations such as corporations, partnerships, or limited liability companies.

14.9 **NO BOYCOTT OF ISRAEL CERTIFICATION**

By Contractor's signature on this Agreement, Contractor certifies under A.R.S. § 35-393.01 that Contractor is not currently engaged in and for the duration of this Agreement will not engage in a boycott of Israel.

14.10 **NO THIRD PARTY BENEFICIARY**

Nothing under the Agreement Documents will be construed to give any rights or benefits in the Agreement Documents to anyone other than City and Contractor, and all duties and responsibilities undertaken pursuant to the Agreement Documents will be for the sole and exclusive benefit of City and Contractor and not for the benefit of any other party, unless otherwise expressly set forth in the Agreement Documents.

14.11 **GOVERNING LAW AND VENUE**

The Agreement and all Agreement Documents will be deemed to be made under, and will be construed in accordance with and governed by the laws of the State of Arizona without regard to the conflicts or choice of law provisions thereof. Any court action to enforce any provision of the Agreement or to obtain any remedy with respect hereto must be brought in the Superior Court, Maricopa County, Arizona, and for this purpose, each party hereby expressly and irrevocably consents to the jurisdiction and venue of such Court.

14.12 **SEVERABILITY**

If any provision of the Agreement Documents or the application thereof to any person or circumstance will be invalid, illegal or unenforceable to any extent, the remainder of the affected provision, the remainder of the Agreement Documents, and the application thereof will not be affected and will be enforceable to the fullest extent permitted by law.

14.13 **LEGAL REQUIREMENTS**

At all times relevant to its entry into this Agreement and performance of the Services and the Work, Contractor must fully comply with all Laws, Regulations, or Legal Requirements applicable to City, the Project, and the Agreement, including, without limitation, those set

forth on Exhibit C of the Agreement.

14.14 **PARTIAL INVALIDITY**

If any provision of the Agreement is held by a court of competent jurisdiction to be invalid, void or unenforceable, the remaining provisions will nevertheless continue in full force without being impaired or invalidated in any way.

14.15 **ATTORNEYS' FEES**

Should either party to the Agreement bring an action to enforce any provision of the Agreement, the prevailing party will be entitled to recover reasonable attorneys' fees and costs in connection therewith.

14.16 **CONFLICT OF INTEREST**

14.16.1 Contractor agrees to disclose any financial or economic interest with the Project property, or any property affected by the Project, existing prior to the execution of the Agreement. Further, Contractor agrees to disclose any financial or economic interest with the Project property, or any property affected by the Project, if Contractor gains such interest during the course of this Agreement. If Contractor gains financial or economic interest in the Project during the course of this Agreement, this may be grounds for terminating this Agreement. Any decision to terminate the Agreement must be at the sole discretion of City.

14.16.2 Contractor will not engage the services on this Agreement of any present City employee who was involved as a decision maker in the selection or approval processes, or who negotiated or approved billings or Agreement Modifications for this Agreement.

14.16.3 Contractor agrees that it will not perform services on this Project for a contractor, subcontractor, or any supplier, not covered under this Agreement.

14.17 **INDEPENDENT CONTRACTOR**

Contractor is and must be an independent contractor. Any provisions in the Agreement Documents that may appear to give City the right to direct Contractor as to the details of accomplishing the Work or to exercise a measure of control over the Work means that Contractor must follow the wishes of City as the results of the Work only. These results must comply with all applicable laws and ordinances.

14.18 **NOTICE OF INJURY**

Should City or Contractor suffer injury or damage to their person or property because of any error, omission or act of the other party or of any of the other party's employees or agents or others for whose acts the other party is legally liable, claim must be made in writing to the other party within 7 Days of the first observance of such injury or damage.

14.19 **CONFIDENTIALITY**

Contractor, for the benefit of City, hereby agrees it will not release or cause or permit to be released to the public any press notices, publicity (oral or written) or advertising promotion relating to, any statement regarding, or any other public announcement or disclosure or cause or permit to be publicly announced or disclosed, in any manner whatsoever, the specific terms and conditions of this Agreement or any comment relating to the Project or the Site. Notwithstanding the foregoing, Contractor will be entitled to disclose the terms of the Agreement to the extent required by law or in the course of enforcing or defending a claim or action hereunder. Contractor must give City reasonably prompt notice of any disclosure or statement made pursuant to this provision.

14.20 DATA CONFIDENTIALITY

14.20.1 As used in the Agreement, "data" means all information, whether written or verbal, including plans, specifications, renderings, photographs, studies, investigations, audits, analyses, samples, reports, calculations, internal memos, meeting minutes, data field notes, work product, proposals, correspondence and any other similar documents or information prepared by, obtained by, or transmitted to the City in the performance of this Agreement.

14.20.2 Contractor agrees that all data, regardless of form, including originals, images, and reproductions, prepared by, obtained by, or transmitted to City in connection with the Contractor's performance of this Agreement is confidential and proprietary information belonging to City.

14.20.3 Except as specifically provided in this Agreement, Contractor or its Subcontractors must not divulge data to any third party without prior written consent of City. Contractor or its Subcontractors must not use data for any purposes except to perform Work required under this Agreement. These prohibitions will not apply to the following data provided Contractor has first given the required notice to City:

a. Data which was known to Contractor or its Subcontractors prior to its performance under this Agreement unless such data was acquired in connection with Work performed for City;

b. Data which was acquired by Contractor or its Subcontractors in its performance under this Agreement and which was disclosed to Contractor or its Subcontractors by a third party, who to the best of Contractor's or its Subcontractor's knowledge and belief, had the legal right to make such disclosure and Contractor or its Subcontractors are not otherwise required to hold such data in confidence; or

c. Data which is required to be disclosed by virtue of law, regulation, or court order, to which the Contractor or its Subcontractors are subject.

14.20.4 In the event the Contractor or its Subcontractors are required or requested to disclose data to a third party, or any other information to which the Contractor or its Subcontractors became privy as a result of any other agreement with City, the Contractor must first notify City as set forth in this Section of the request or demand for the data. The Contractor or its Subcontractors must give City sufficient facts so that City can be given an opportunity to first give its consent or take such action that City may deem appropriate to protect such data or other information from disclosure.

14.20.5 Unless prohibited by law, within 10 Days after completion of services for a third party on real or personal property owned or leased by City, the Contractor must promptly deliver, as set forth in this Section, a copy of all data to City. All data will continue to be subject to the confidentiality agreements of this Agreement.

14.20.6 Contractor or its Subcontractors assume all liability for maintaining the confidentiality of the data in its possession and agree to compensate City if any of the provisions of this Section are violated by Contractor, its employees, agents, or Subcontractors. Solely for the purposes of seeking injunctive relief, it is agreed that a breach of this Section will be deemed to cause irreparable harm that justified injunctive relief in court. Contractor agrees that the requirements of this Section will be incorporated into all subcontracts entered into by Contractor. A violation of this Section may result in immediate termination of this

Agreement without notice.

14.21 **SURVIVAL**

All warranties, representations and indemnifications by Contractor must survive the completion or termination of this Agreement.

14.22 **COVENANTS AGAINST CONTINGENT FEES**

Contractor warrants that no person has been employed or retained to solicit or secure this Agreement upon an agreement or understanding for a commission, percentage, brokerage, or contingent fee, and that no member of City Council, or any employee of City has any interest, financially, or otherwise, in the firm. For breach or violation of this warrant, City will have the right to annul the Agreement without liability or at its discretion to deduct from the Agreement Price or consideration, the full amount of such commission, percentage, brokerage, or contingent fee.

14.23 **NO WAIVER**

The failure of either party to enforce any of the provisions of the Agreement Documents or to require performance of the other party of any of the provisions hereof must not be construed to be a waiver of such provisions, nor will it affect the validity of the Agreement Documents or any part thereof, or the right of either party to thereafter enforce each and every provision.

14.24 **NONEXCLUSIVE REMEDIES**

The remedies set forth in this Agreement are cumulative and not exclusive, and failure to exercise any remedy (including, without limitation, any right to terminate) will not preclude any party from exercising any other right in seeking any other remedy available to it at law or in equity.

14.25 **PROJECT COMMUNICATIONS**

14.25.1 All communications concerning the performance of the Work or the Project will be provided to the designated Project Manager and Contractor's Representative set forth in Article 1 of the Agreement. City may change the designated Project Manager and, subject to Section 4.4.20 of these General Conditions, Contractor may change Contractor Representative, by written notice to the other.

14.25.2 Project communications may be exchanged by e-mail, but email communications cannot change the terms of the Agreement or the Scope of Work, or effectuate any change that requires a written Change Order.

14.25.3 When any provisions of the Agreement Documents requires Contractor or the Design Professional to give written notice to City, it will be deemed to have been validly given if delivered in person or if delivered at or sent by registered or certified mail, postage prepaid, to the Parties indicated in Agreement Article 1, incorporated by reference.

14.25.4 When any provisions of the Agreement Documents requires City, Project Manager, or the Design Professional to give written notice to Contractor, it will be deemed to have been validly given if delivered in person to the person designated in the Agreement Documents as Contractor's Resident Superintendent, or if delivered at or sent by registered or certified mail, postage prepaid, to Contractor at the last address in the Agreement Documents or such substitute address which Contractor designates in writing, or to the business address known to the giver of notice.

14.26 **DRUG FREE WORKPLACE PROGRAM**

14.26.1 City has adopted a policy establishing a drug free workplace for itself and as a requirement for Contractors doing business with City, to ensure the safety and health of employees working on City projects.

14.26.2 Contractor must require a drug free workplace for all employees working under the Agreement. Specifically, all employees of Contractor who are working under an agreement with City must be notified, in writing, by Contractor that they are prohibited from the manufacture, distribution, dispensation, possession or unlawful use of a controlled substance in the workplace.

14.27 Failure to require a drug free workplace in accordance with the City's policy may result in termination of the Agreement and possible debarment form bidding on future City projects.

SECTION 15 - PROVISIONS APPLICABLE SOLELY TO GMP AND COST-BASED AGREEMENTS, CHANGE ORDERS, AND JOB ORDERS

15.1 **ADDITIONAL DEFINITIONS**

The definitions set forth in Section 2 apply to GMP and Cost-Based Agreements, Change Orders, and Job Orders, together with the additional definitions set forth below.

Baseline Cost Model –
A breakdown and estimate of the scope of the Project developed by CM@Risk pursuant to Section 17.5 of these General Conditions.

CM@Risk or Construction Manager at Risk –
The person or firm selected by City to provide pre-construction and/or construction services as detailed in a Construction Manager at Risk Agreement with City. In these General Conditions, the term "Contractor" includes CM@Risk under both Pre-Construction and Construction Services Agreements.

CM@Risk Fee or Contractor's Fee –
An agreed to percentage in an accepted GMP that represents the Contractor's fee for performance of the Work.

Agreement Documents –
Where compensation under the Agreement is based upon a GMP accepted by City, the term "Agreement Documents" also includes the accepted GMP Proposal.

Agreement Price –
Where compensation under the Agreement based upon a GMP accepted by City, the term "Agreement Price" refers to the GMP.

Cost-Based Agreement, Change Order, or Job Order –
A Agreement, Change Order, or Job Order where the Agreement Price is based upon the actual cost of performing the Work, subject to the terms of the Agreement Documents, including this Section 15. These would include those generally referred to as "Cost of the Work plus a Fee with a GMP," "Time and Materials," or "Cost Plus a Fee."

Cost of the Work –
The direct costs necessarily incurred by Contractor in the proper, timely, and complete performance on the Work. The Cost of the Work will include only those costs set forth in Section 15.2 of these

General Conditions.

Deliverables –
The work products prepared by Contractor in performing the scope of work described in the Agreement. Some of the major deliverables to be prepared and provided by Contractor during pre-construction may include but are not limited to: the Baseline Cost Model and Schedule that validate City's plan and budget, Construction Management Plan, Detailed Project Schedule, Schedule of Values, alternative system evaluations, procurement strategies and plans, Detailed Cost Estimates, construction market surveys, cash flow projections, GMP Proposals, Subcontractor procurement plan, Subcontractor agreements, Subcontractor bid packages, Supplier agreements, Constructability Review, Cost Control Log, Traffic control and phasing plans and others as indicated in this Agreement or required by the Project Team.

Pre-Construction Services Agreement –
The Agreement entered into between City and the CM@Risk for Pre-Construction Services to be provided by the CM@Risk, including, without limitation, the generation of a GMP Proposal. If the GMP Proposal is accepted by City and a Construction Agreement is entered into between City and CM@Risk, the duties, obligations and warranties of the CM@Risk under the Pre-Construction Services Agreement survive and are incorporated into the resulting Construction Agreement.

Pre-Construction Services –
The services to be provided under the Pre-Construction Services Agreement, including Section 17 of these General Conditions.

Detailed Project Schedule –
The Detailed Project Schedule developed by the CM@Risk for the review and approval of the Project Manager in accordance with Section 17.3 of these General Conditions, if applicable.

General Conditions Costs –
Those costs set forth in Section 4 of Appendix 9 to these General Conditions.

GMP Plans and Specifications –
The plan and specifications upon which the Guaranteed Maximum price Proposal is based.

GMP Proposal –
The proposal of Contractor submitted pursuant to Section 17.7 of these General Conditions for the entire Work and/or portion (phases) of the Work.

Guaranteed Maximum Price or GMP –
The Guaranteed Maximum Price set forth in the Agreement, Change Order, or Job Order if applicable.

15.2 **AGREEMENT PRICE**

15.2.1 The Agreement Price for all Agreements, Change Orders, and Job Orders based upon payment of the Cost of the Work plus a Fee with a GMP, time and materials, or cost-plus a fee will be the Cost of the Work incurred plus the Fee agreed to in writing by City, limited to the amount of the GMP, if agreed to. Unless otherwise expressly provided in the Agreement, Change Order, or Job Order, all Cost Based pricing will be subject to and limited to GMP.

15.2.2 The Agreement Price may only be changed as set forth in Section 9 above.

15.2.3 Only costs specifically designated as reimbursable costs are eligible for payment by City or may be charged against the Agreement Price. All other costs will not be paid by City and will not be chargeable against the Agreement Price.

15.2.4 Cost-Based Agreements. For Agreements, Change Orders, or Job Orders, reimbursable costs must be determined pursuant to Appendix 9 to these General Conditions, Cost of the Work, and not by MAG Specifications §109.5.

15.3 **ALLOWANCES**

15.3.1 Contractor must include in the Agreement Price all Allowances stated in the Agreement Documents and agreed to in writing by City. Items covered by these Allowances must be supplied for such amounts and by such persons as City may direct, provided Contractor will not be required to employ persons against whom Contractor makes a reasonable objection. Materials, labor, and equipment under an Allowance will be selected by City in accordance with a schedule to be mutually agreed upon by City, Design Professional and Contractor or otherwise in reasonably sufficient time to avoid delay in the Work.

15.3.2 Unless otherwise provided in the Agreement Documents:

15.3.2.1 These Allowances must cover the cost to Contractor, less any applicable trade discount, of the materials, labor, and equipment required by the Allowances, delivered at the Site, and all applicable taxes;

15.3.2.2 Contractor's costs for unloading and handling on the Site, labor, installation costs, overhead, profit and other expenses relating to materials, labor, and equipment required by the Allowance must be included in the Agreement Sum and not in the Allowance; and

15.3.2.3 Whenever the cost is more or less than the Allowance, the Agreement Sum must be adjusted accordingly by Change Order, the amount of which will recognize the difference between actual costs for an Allowance item and the amount of the Allowance item and changes, if any, in handling costs on the Site, labor, installation costs, overhead, profit and other expenses.

15.4 **CONTINGENCY**

An agreed to amount in the GMP that may only be used in accordance with the terms set forth in these General Conditions and with prior written approval by the City.

15.4.1 Construction Contingency. This GMP includes a dollar amount listed as a Construction Contingency which will be readily available for increased costs for subcontractors, material, and equipment subject to prior approval of City, which approval will not be withheld unreasonably. The Construction Contingency may also be used, at the discretion of City, to reimburse CM@Risk for unexpected costs due to (a) scope gaps between trade subcontractors; (b) agreement default by trade subcontractors; (c) unforeseen field conditions, but only as defined in Section 9.5 above; (d) work completed to meet the intent of the design, but which was not indicated on the plans; (e) costs overruns not covered by allowances; (f) costs of corrective work not provided for elsewhere; and (g) implementation of any Recovery Plan. Cost for which CM@Risk desires to be paid from the Construction Contingency must be documented by CM@Risk on a time and materials basis and are subject to verification by City. If agreed to by City, a "Use of Contingency" form will be executed by both parties authorizing the actual cost of the work to be paid and included in the Work Item Direct Costs. The Construction Contingency is not allocated to any particular

item of the Project but may be used for any portion of the work as determined above. Any amount not used in the Construction Contingency will belong to City and will reduce the GMP.

15.4.2 Owner's Contingency. This GMP also includes a dollar amount listed as an Owner's Contingency which may be used only by the City (owner department) for upgrades and changes in scope or other changes not already included within the intent of the Project Program. City will provide CM@Risk with a Work Change Directive authorizing CM@Risk to perform the additional work and to transfer funds from the Owner's Contingency to the Work Item Direct Costs category to be paid with such direct costs. These additional costs will be in an amount mutually agreed upon by CM@Risk and City or will be documented by CM@Risk on a time and materials basis and are subject to verification by City. Any amount not used in the Owner's Contingency will belong to the City and will reduce the GMP.

15.5 **REDUCTION IN RETENTION**

If the Agreement Price is based upon a GMP, in order to receive payment of one-half of the retention as set forth in Section 8.1.5 above, Contractor must also submit to the Project Manager a complete accounting of the Actual Reimbursable Cost of the Work to date, including all such documentation (including, without limitation, invoices, subcontract, subcontractor change orders, purchase orders, records of payment, etc.) as City may require, to establish whether the payments made to Contractor equal, exceed, or are less than the actual reimbursable Cost of the Work to date. Any excess payments by City, as determined by the Project Manager, will be deducted from the one-half retention payment to be made to Contractor, and any additional excess amounts paid to Contractor will be refunded by Contractor to City. The Project Manager's determinations as to Actual Reimbursable Cost of the Work will be the basis of payment until final Project Closeout and Final Payment under the Agreement.

15.6 **FINAL PAYMENT**

If the Agreement Price is based upon a GMP, as a further condition precedent to Final Payment by City, Contractor must submit to the Project Manager a complete final accounting of the Actual Reimbursable Cost of the Work, including all such documentation (including, without limitation, invoices, subcontracts, subcontractor change orders, purchase orders, records of payment, etc.) as City may require, to establish whether the payments made to Contractor equal, exceed, or are less than the Actual Reimbursable Cost of the Work to date. Any excess payments by City, as determined by the Project Manager, will be deducted from the one-half retention payment to be made to Contractor, and any additional excess amounts paid to Contractor will be refunded by Contractor to City. Disputes relating to the Final Cost of the Work will be subject to City's audit rights under Sections 8.8 above and 15.7 below, and the dispute resolution process under Section 13 above.

15.7 **OPEN BOOK**

On any GMP-based or Cost-Based Agreement, Job Order, or Change Order, City may attend any and all meetings or discussions pertaining to the Project, including bid openings, and must have access to all books, invoices, accounts, memoranda, correspondence, and written communications or records of any kind pertaining to the Project, including without limitation, those stored in electronic format.

15.8 **DIFFERING SITE CONDITIONS AND/OR CHANGE IN LAWS**

A Change Order for increased costs under Section 9.5 or 9.6 above will only be considered

or granted by City to the extent such actual, documented costs are justified.

SECTION 16 - PROVISIONS APPLICABLE SOLELY TO JOB ORDER AGREEMENTS (JOC)

16.1 **ADDITIONAL DEFINITIONS**

The definitions set forth in Sections 2 and below will apply to all Job Order Agreements and Job Orders. In addition, the definitions set forth in Section 15.1 above will apply to all Cost-Based Job Orders.

Agreement –
Includes the Job Order Master Agreement and Job Order Project Agreements issued and agreed to by City and JOC Contractor.

JOC Contractor's Coefficient –
A numerical factor that represents JOC Contractor total costs (indirect and direct costs, sales tax, profit, etc.) and other adjustments for market conditions.

Job Order Request for Proposal (RFP) –
The Request for Proposals issued by City for each Job Order Project Agreement relating to a specific Project.

Job Order Cost Proposal –
The Proposal submitted by JOC Contractor in response to a Job Order Request for Proposal (RFP) issued by City to develop a Job Order Project Agreement for a specific Project.

Guaranteed Maximum Price (GMP) Job Order –
Job Order under which JOC Contractor is compensated for actual costs incurred.

Job Order Project Agreement (Job Order) –
The agreement for a specific project, as it may be modified by all Change Orders, executed by the Parties, which incorporates the terms and conditions of the Job Order Master Agreement.

16.2 **ORDERING AND PROCESSING PROCEDURES FOR JOB ORDERS**

16.2.1 The process for developing and issuing a Job Order for a particular Project consists of three (3) procedures: (1) issuance of a RFP by City; (2) JOC Contractor's response to the RFP in the form of JOC Contractor's Job Order Cost Proposal; and (3) Issuance of a Job Order by City, as set for below.

16.2.2 RFP's For Job Orders

16.2.2.1 City will provide to JOC Contractor RFP with a Scope of Work (SOW) describing the Work to be performed, which may include special instructions and conditions, material submittal requirements, and, if applicable, a complete set of sketches, construction drawings and specifications for the Job Order.

16.2.2.2 Some Job Order RFP's will be issued by City without detailed sketches, drawing and specifications and will rely on JOC Contractor to produce them for City review and approval and is considered to be Pre-Construction and incidental design services included in JOC Contractor's overhead for GMP Job Orders. In addition JOC Contractor will not be reimbursed for any Pre-Job Order costs, including proposal preparation, attendance during negotiations, or site visits.

16.2.3 JOC Contractor's Job Order Cost Proposal

16.2.3.1 JOC Contractor must respond within ten (10) calendar days of the RFP date or site visit, whichever is later or as otherwise indicated on a case-by-case basis, by submitting JOC Contractor's Job Order Cost Proposal to the City representative.

16.2.3.2 Unless otherwise required under the terms of the RFP, JOC Contractor's Job Order Cost Proposal must include the following.

a. JOC Contractor's Job Order Cost Proposal in PDF and electronic format;

b. A Project Schedule and schedule of values that reflects the costs of each work element on the schedule. The schedule must show all milestones (e.g., permits, submittals, ordering materials, demolition, work phases, closeout and completion date); and

c. Necessary documentation will be required to indicate that adequate scoping, layout, setup and planning to accomplish the Work has been done. Examples of documentation that might reasonably be expected include sketches, drawings, calculations, catalog cuts and specifications produced to a level of detail and skill that could be expected of experienced, competent Project Managers with five or more periods experience in their respective trade.

16.2.3.3 JOC Contractor must select Subcontractors based on qualifications alone or on a combination of qualifications and price and must not select Subcontractors based on price alone. A qualifications and price selection may be a one-step selection based on a combination of qualifications and price or two-step selection. In a two-step selection, the first step must be based on qualifications alone and the second step may be based or a combination of qualifications and price or on price alone.

16.2.3.4 Upon request, JOC Contractor must provide City with copies of Subcontractor quotes and the basis for selection of each Subcontractor.

16.2.3.5 If City objects to a selected Subcontractor, City will make the objection and the reasons for the objection known to the JOC Contractor. JOC Contractor must then present an acceptable Subcontractor for the applicable discipline. City will not unreasonably object to or withhold approval of a Subcontractor.

16.2.3.6 For self-performed work, the City retains the right to have the JOC Contractor establish JOC Contractor's costs by bidding their costs against at least three (3) other interested trade Contractors. No self- performed work will be allowed to be performed on a lump sum basis.

16.2.4 Issuance of Job Order

16.2.4.1 City Representative will compare the JOC Contractor's Job Order Cost Proposal with the City's estimate, schedules and other requirements, and then, if the City Representative determines it is in the best interest of City, arrange a meeting with JOC Contractor, at which time the JOC Contractor's Job Order Cost Proposal will be discussed and negotiated.

16.2.4.2 If the City Representative determines that it is in the best interest of the City, City will then issue a Job Order to JOC Contractor for execution.

16.2.4.3 Specific Job Orders may vary, but unless agreed to by City in writing otherwise, the content

of Job Orders under the Agreement will generally be as follow, all of which will be signed and/or initialed by JOC Contractor's designated representative:

a. The description of the Scope of the Work and Project Schedule (attached as Exhibit A to the Job Order);

b. The address or location of the Work;

c. The Agreement Price for Work (Construction) included in the Project (attached as Exhibit B to the Job Order);

d. The name of the JOC Contractor representative for the Project;

e. The Drawings and Specifications for the Project;

f. If any shop drawings, project date and/or samples are required for the Job Order, the date for delivery of each required item (included in the Project Schedule, Exhibit A to the Job order); and

g. Project Specific Provisions, if any, in Exhibit A to the Job Order, including, without limitation, whether any of the following are required: Pre-Construction Conference, weekly progress meetings, field office, storage enclosure, materials and equipment handling facility, submittals, shop drawings, product data, equipment list, samples, project manual, schedule of values, Construction progress schedule, narrative reports, progress report, progress charts, progress photographs, materials status report, Construction diagram, Construction status report, operation and maintenance data, operating maintenance instructions and parts list, and as-build drawings.

16.2.5 Job Order Intent. Each Job Order will be interpreted to include all items reasonably necessary to complete the Project under that Job Order as described in the scope of the Work in that Job Order. All Work must be performed in a professional manner and all materials used must be new and of the highest quality and of the type best adapted to their purpose, unless otherwise specified. The Notice to Proceed date, and the award date established therein, will be deemed an integral part of the Job Order the same as if set forth therein.

16.3 **INCIDENTAL DESIGN SERVICES**

16.3.1 This effort includes all "extensions of design" for systems that are typically specified in a performance oriented manner by consultants and designers. Examples include: fire sprinkler systems, fire alarm and sprinkler systems, DDC controls, control systems, prefabricated metal building and similar situations. These designs are normally provided under submittals as a shop drawing with engineering backup and as appropriate, seals of registered engineers specializing in the particular system.

16.3.2 Incidental design includes all documents, sketches, schematic diagrams, floor plan layouts, equipment schedules and other documents produced by the JOC Contractor to define the work required for projects that the City does not develop formal or abbreviated designs requiring a seal by a registered engineer. Incidental design does not include preparation of designs requiring an architect or engineer seal.

16.3.3 JOC Contractor represents, covenants, and agrees, and contractually assumes the obligation to furnish, all of the required Design Services through properly licensed and

experienced Design Professionals in complete accordance with all of the duties imposed on a Design Professional under the Agreement Documents, Laws, Regulations, or Legal Requirements, and the common law.

16.3.4 All Design Documents (and all other Project-related documents, models, computer drawings and other electronic expression, photographs and other expressions CADD, and BIM files and images included) that JOC Contractor and/or JOC Contractor's Design Professional(s) prepare in connection with a Job Order and the copyrights therein (collectively, the "Instruments of Service") will be the property of City. JOC Contractor covenants and agrees to execute any additional document reasonably requested by City to confirm such assignment without any additional compensation.

16.4 **CONSTRUCTION SERVICES**

16.4.1 The following subsections of this Section 16.4 set forth requirements beyond those set forth in Section 4 above which apply to Construction Services performed under a Job Order.

16.4.2 JOC Contractor must perform the Work using only those firms, team members and individuals designated by JOC Contractor consistent with each Job Order or otherwise approved by City pursuant to the General Conditions. No other entities or individuals may be used without the prior written approval of the Project Manager.

16.4.3 Construction Phasing

16.4.3.1 City use of the facilities is anticipated while the Work is being performed. The Work must be planned and accomplished so that there will be a minimum of interference and inconvenience to occupants in the building and agencies in the vicinity and to other craftsmen who may have to do work in the affected facilities. Any blockage of building exits or driveways must be coordinated in advance.

16.4.3.2 If applicable, furniture, portable office equipment and wall appurtenances not rigidly fastened to the walls must be moved by JOC Contractor, protected from damage and replaced to the original position upon completion of the work. If the work required by the Job Order will not allow furniture and portable office equipment to be replaced to its original position, new locations will be designated by City. Incidental costs associated with moving one-piece furnishings up to approximately 150 pounds to perform such tasks as painting, carpet or tile replacement, etc., are considered a general cost of building renovation and must be included in the JOC Contractor's Coefficient. Costs for large scale or wholesale removal and replacement of large quantities of desks or modular workstations, copiers, multiple full file cabinets, etc. to another location or storage outside the work space, or disassembly and reassembly of modular furniture is not considered part of the JOC Contractor's Coefficient and will be priced separately.

16.4.3.3 The work must, so far as practicable, be done in definite sections or divisions and confined to limited areas which must be completed before work in other sections or divisions are begun.

16.4.4 Work Site Conflicts. In the event of a conflict between JOC Contractor and others in an occupied facility or where other Contractors are performing work on the same facility under other Agreements, City will decide to dispute and that decision will be final.

16.4.5 Ownership of Work Product. Work Product prepared or otherwise created in connection

with the performance of this Agreement, including the Work, are to be and remain the property of City. For purposes of this provision, "Work Product" will include all designs, drawings, plans, specifications, ideas, renderings and other information or matter, in whatever form created (e.g., electronic or printed) and in all media now known or hereinafter created. All Work Product will be considered Work Made for Hire as defined in the United States Copyright Act 17 U.S.C. §101 (Copyright Act). If for any reason any such Work is found not to be a work for hire, JOC Contractor hereby transfers and assigns ownership of the copyright in such Work to City. The rights in this Section are exclusive to City in perpetuity.

16.5 **OPTIONAL LIQUIDATED DAMAGES**

16.5.1 Specific Job Orders. City will have the right to assess liquidated damages in relation to any specific JOC Project Agreement as set forth below.

16.5.2 Substantial Completion Liquidated Damages. JOC Contractor acknowledges and agrees that if JOC Contractor fails to obtain Substantial Completion of the Work within the Agreement Time, City will sustain extensive damages and serious loss as a result of such failure. The exact amount of such damages will be extremely difficult to ascertain. Therefore, City and JOC Contractor agree that if JOC Contractor fails to achieve Substantial Completion of the Work within the Agreement Time, City will be entitled to retain or recover from JOC Contractor, as liquidated damages and not as a penalty, the sum per calendar day as indicated in MAG § 108.9.

16.5.3 Final Acceptance Liquidated Damages. For the same reasons set forth in Section 16.5.2 above, City and JOC Contractor further agree that if JOC Contractor fails to achieve Final Acceptance of the Work within the Agreement Time, City will be entitled to retain or recover from JOC Contractor, as liquidated damages and not as a penalty, the sum per calendar day as indicated in MAG § 108.9 commencing from the actual date of Substantial Completion or Final Acceptance as required under any specific JOC Project Agreement.

16.5.4 MAG Liquidated Damages. Liquidated damages provisions in MAG § 108.9 may apply to any specific JOC Project Agreement.

16.5.5 City may deduct liquidated damages assessed pursuant to this Section 16.5 from any unpaid amounts then or thereafter due JOC Contractor under the Agreement or any specific JOC Project Agreement between JOC Contractor and City. Any liquidated damages not so deducted from any unpaid amounts due JOC Contractor must be payable to City at the demand of City, together with interest from the date of the demand at the highest lawful rate of interest payable to JOC Contractor.

16.6 **PERFORMANCE MEASUREMENT**

16.6.1 Performance Assessment. After the Final Acceptance of Work under each Job Order, City will complete a written evaluation of the performance of JOC Contractor on the Job Order.

16.6.2 Consideration in Assignment of Work. JOC Contractor's record of cost, schedule and quality performance and comparative assessments will be significant considerations in City's determination whether to award future Job Orders. JOC Contractor agrees that any determination by City not to not award future Job Orders or Option periods based on performance will be at the sole discretion of City.

SECTION 17 - PROVISIONS APPLICABLE SOLELY TO PRE-CONSTRUCTION SERVICES FOR CONSTRUCTION MANAGER AT RISK

17.1 ADDITIONAL DEFINITIONS

The definitions set forth in Section 2 and 15.1 above will apply to all Pre-Construction Services Agreements.

17.2 GENERAL

17.2.1 CM@Risk must perform the Services required by, and in accordance with the Agreement Documents and as outlined in Exhibit A of the Agreement to the satisfaction of the Project Manager, exercising the degree of care, skill, diligence and judgment a professional construction manager experienced in the performance of such services for construction and/or facilities of similar scope, function, size, quality, complexity and detail to the Project in urban areas throughout the United States, would exercise at such time, under similar conditions. CM@Risk must, at all times, perform the required services consistent with sound and generally accepted engineering principles and construction management and construction contracting practices.

17.2.2 As a participating member of the Project Team, CM@Risk must provide to City and Design Professional a written evaluation of City's Project Program and budget, each in terms of the other, with recommendations as to the appropriateness of each. CM@Risk must prepare a Baseline Cost Model that validates City's budget. The Baseline Cost Model must include all assumptions and basis of estimates in enough detail so that the Project Team can compare future detail estimates to the Baseline Cost model for variances. City and Design Professional will provide all the reasonably required data that is available in order to reach agreement between the team members that the Baseline Cost Model is an accurate projection of the costs of the Project.

17.2.3 CM@Risk must attend Project Team meetings, which may include, but are not limited to, bi- weekly Project management meetings, Project workshops, special Project meetings, construction document rolling reviews, public meetings and partnering sessions. CM@Risk attendance at design or other meetings in which CM@Risk is provided the opportunity but does not actively participate and/or is not properly prepared is not acceptable. Repeated instances of non-participation and/or lack of preparedness will be grounds for termination of CM@Risk Agreement for default.

17.2.4 CM@Risk must provide Pre-Construction Services, described herein, in a timely manner and consistent with the intent of the most current Drawings and Specifications. CM@Risk must promptly notify City in writing whenever CM@Risk determines any Drawings or Specifications are inappropriate for the Project and/or cause changes in the scope of Work that deviates more than the allowed contingencies within the Baseline Cost Model or requires an adjustment in the Baseline Cost Model, Detailed Cost Estimate, Detailed Project Schedule, GMP Proposals and/or in the Agreement Time for the Work, to the extent such as established.

17.2.5 CM@Risk when requested by City, must attend, make presentations and participate as may be appropriate in public agency and or community meetings, relevant to the Project. CM@Risk must provide drawings, schedule diagrams, budget charges and other materials describing the Project when their use is required or appropriate in any such public agency meetings.

17.2.6 Ownership of Work Product. All Work Product prepared or otherwise created in connection with the performance of this Agreement, including the Work, are to be and remain the property of City. For purposes of this provision, "Work Product" will include all designs, drawings, plans, specifications, ideas, renderings and other information or material, in whatever form created (e.g., electronic or printed) and in all media now know or hereinafter created. All Work Product will be considered Work Made for Hire as defined in the United States Copyright Act 17 U.S.C.
§101 (Copyright Act). If for any reason any such Work is found not to be a work for hire, Contractor hereby transfers and assigns ownership of the copyright in such Work to City. The rights in this Section are exclusive to City in perpetuity.

17.2.7 CM@Risk represents to City in completing Pre-Construction Services and providing the reports and analysis required thereunder, that Work can be properly and timely constructed within the GMP Proposal, if accepted. CM@Risk does not assume any design responsibilities unless specifically called for in the scope of work, but CM@Risk will be responsible for their errors, omissions or inconsistencies included in the Work.

17.3 **DETAILED PROJECT SCHEDULE**

17.3.1 The fundamental purpose of the Detailed Project Schedule is to identify, coordinate and record the tasks and activities to be performed by all of the Project Team members and then for the Project Team to utilize that Deliverable as a basis for managing and monitoring all member's compliance with the schedule requirements of the Project. Each Project Team member is responsible for its compliance with the Detailed Project Schedule requirements. CM@Risk must, however, develop and maintain the Detailed Project Schedule on behalf of and to be used by the Project Team based on input from the other Project Team members. The Baseline Project Schedule must be developed as part of the Baseline Cost Model. The Detailed Project Schedule must use the Critical Path method ("CPM") technique, unless required otherwise, in writing by City. CM@Risk must use scheduling software acceptable to City to develop the Detailed Project Schedule. The Detailed Project Schedule must be presented in graphical and tabular reports as agreed upon by the Project Team. If Project phasing as described below is required, the Detailed Project Schedule must indicate milestone dates for the phases once determined. As part of construction phase, City may require CM@Risk to prepare a "resource loaded" schedule for all work, including work performed by Subcontractors, detailing each of the project tasks and the required/anticipated number of personnel per day for each task. CM@Risk must also indicate on the schedule its ability to meet said required/anticipated personnel requirements.

17.3.2 CM@Risk must include and integrate in the Detailed Project Schedule the services and activities required of City, Design Professional and CM@Risk including all construction phase activities based on the input received from City and the Design Professional. The Detailed Project Schedule must define activities as determined by City to the extent required to show: (a) the coordination between preliminary design and various pre-construction documents, (b) any separate long-lead procurements, (c) any permitting issues, (d) any land, right-of-way, or easement acquisition, (e) bid packaging strategy and awards to Subcontractors and Suppliers, (f) major stages of construction, (g) start-up and commissioning, and (h) occupancy of the completed Work by City. The Detailed Project Schedule must include by example and not limitation, proposed activity sequences and durations for design, procurement, construction and testing activities, milestone dates for actions and decisions by the Project Team, preparation and processing of shop drawings

and samples, delivery of materials or equipment requiring long-lead time procurement (if any), milestone dates for various construction phases, Total Float for all activities to the extent authorized by City, relationships between the activities, City's occupancy requirements showing portions of the Project having occupancy priority, and proposed dates for Final Acceptance.

17.3.3 A Baseline Project Schedule must be initiated with the project Baseline Cost Model and agreed to by the project team at the same time. CM@Risk must update and maintain a detailed Project Schedule throughout pre-construction such that it will not require major changes at the start of the construction phase to incorporate CM@Risk's plan for the performance of the construction phase Work. CM@Risk must provide updates and/or revisions to the Detailed Project Schedule for use by the Project Team, whenever required, but no less often than at the Project Team meetings. CM@Risk must include with such submittals a narrative describing its analysis of the progress achieved to-date vs. the Baseline Project Schedule, including any concerns regarding delays or potential delays, and any recommendations regarding mitigating actions.

17.3.4 If phased construction is deemed appropriate at the time of developing the Baseline Cost Model or during the development of the Detailed Project Schedule, and City approves, CM@Risk must review the design and make recommendations regarding the phased issuance of Construction Documents to facilitate phased construction of the Work, with the objective of reducing the Project Schedule and/or Cost of the Work. CM@Risk must take into consideration such factors as natural and practical lines of work severability, sequencing effectiveness, access and availability constraints, total time for completion, construction market conditions, labor and materials availability, and any other factors pertinent to saving time and cost.

17.3.5 Long Lead Time Items. As part of developing the Detailed Project Schedule, CM@Risk must identify all long lead time materials, fabrications, equipment, or other items which may impact the Project Schedule and may require early action on the part of the Project Team. Dates for selecting and ordering long lead time items will be included and highlighted in the Detailed Project Schedule

17.3.6 Equipment Plan. Contractor must develop an Equipment Plan that addresses all rental and owned equipment, regardless of whether such equipment will be provided by CM@Risk or subcontractor(s), that will be necessary to construct the Project and the cost of which will be included as a Cost of the Work in the GMP Proposal. The Equipment Plan will seek to minimize the cost of the equipment to City and maximize the efficient and coordinated use of the equipment for completion of the Project. The Equipment Plan will not only include the costs and allowable lease rates for the equipment, but will also include an equipment schedule that will be incorporated into the Detailed Project Schedule and the Schedule of Values submitted with the GMP Proposal.

17.4 DESIGN DOCUMENT REVIEWS

17.4.1 CM@Risk must evaluate periodically the availability of labor, materials/equipment, cost-sensitive aspects of the design; and other factors that may create an unacceptable variance to the Baseline Cost Model and/or Baseline Project Schedule.

17.4.2 CM@Risk must recommend, in conjunction with the Project Team, those additional surface and subsurface investigations that, in its professional opinion, are required to provide the necessary information for CM@Risk to construct the Project. These additional

investigations, if agreed to be necessary by the Project Manager and the Design Professional, will be acquired by City and copies of the reports will be provided to CM@Risk.

17.4.3 CM@Risk must meet with the Project Team as required to review designs during their development. CM@Risk must familiarize itself with the evolving documents through pre- construction. CM@Risk must proactively advise the Project Team and make recommendations on factors related to construction costs, and concerns pertaining to the feasibility and practicality of any proposed means and methods, selected materials, equipment and building systems, and, labor and material availability. CM@Risk must furthermore advise the Project Team on proposed site improvements, excavation and foundation considerations, as well as, concerns that exist with respect to coordination of the Drawings and Specifications. CM@Risk must use established value analysis principles in recommending cost effective alternatives.

17.4.4 CM@Risk must routinely conduct constructability and bid-ability reviews of the Drawings and Specifications as necessary to satisfy the needs of the Project Team. The reviews must attempt to identify all discrepancies and inconsistencies in the Construction Documents especially those related to clarity, consistency, completeness and coordination of Work of Subcontractors and Suppliers.

17.4.4.1 CM@Risk must evaluate whether: (a) the Drawings and Specifications are configured to enable efficient construction; (b) design elements are standardized; (c) construction efficiency is properly considered in the Drawings and Specifications; (d) module/preassembly design is prepared to facilitate fabrication, transport and installation; (e) sequences of Work required by or inferable from the Drawings and Specifications are practicable; (f) the design has taken into consideration efficiency issues concerning access and entrance to the site, laydown and storage of materials, staging of site facilities, construction parking, and other similar pertinent issues; and (g) the design maintains continued operation of the existing City systems and maintains traffic on adjacent roadways. CM@Risk must also review the Drawings and Specifications to ensure that what is depicted therein can be constructed as designed and must promptly inform the Project Team of any issues.

17.4.4.2 CM@Risk must check cross-reference and complementary Drawings and sections within the Specifications and in general evaluate whether: (a) the Drawings and Specifications are sufficiently clear and detailed to minimize ambiguity and to reduce scope interpretation discrepancies; (b) named materials and equipment are commercially available and are performing well, or otherwise, in similar installations; (c) Specifications include alternatives in the event a requirement cannot be met in the field; and (d) in its professional opinion, the Project is likely to be subject to Differing Site Conditions.

17.4.4.3 The results of the reviews must be provided to Project Team in formal, written reports clearly identifying all reviewed documents and the discovered discrepancies and inconsistencies in the Drawings and Specifications with notations and recommendations made on the Drawings, Specifications and other documents. CM@Risk must meet with Project Team to discuss any findings and review reports.

17.4.4.4 CM@Risk's reviews must be from a Contractor's perspective, and though it will serve to eliminate/reduce the number of RFIs) and changes during the construction phase, responsibility for the Drawings and Specifications will remain with the Design Professional and not CM@Risk.

17.4.5 It is CM@Risk's responsibility to assist the Design Professional in ascertaining that, in CM@Risk's professional opinion, the Construction Documents are in accordance with applicable Laws, Regulations, or Legal Requirements, building codes, sound engineering principle's rules and regulations. If CM@Risk recognizes that portions of the Construction Documents are at variance with applicable laws, statutes, ordinances, building codes, sound engineering principle's rules and regulations, it must promptly notify the Project Team in writing, describing the apparent variance of deficiency. However, the Design Professional is ultimately responsible for the compliance of the Drawings and Specifications with those laws, statutes, ordinances, building codes, rules and regulations.

17.4.6 The Project Team will routinely identify and evaluate using value analysis principles and alternate systems, approaches, design changes that have the potential to reduce Project costs while still delivering a high quality and fully functional Project consistent with the Project Program. If the Project Team agrees, CM@Risk in cooperation with the Design Professional, will perform a cost/benefit analysis of the alternatives and submit such in writing to the Project Team. City, through the Project Manager, will direct which alternatives will be incorporated into the Project. The Design Professional will have full design responsibility for the review and incorporation of CM@Risk suggested alternatives into the Drawings and Specifications. CM@Risk must analyze the costs and schedule impacts of the alternatives against the Baseline Cost Model and Schedule and provide a recommendation for the Project Team's consideration and City's approval prior to the establishment of the GMP.

17.5 **BASELINE COSTS MODEL, DETAILED COST ESTIMATES, AND SCHEDULE OF VALUES**

17.5.1 At the conclusion of the Master Planning and Programming, if required, CM@Risk will review all available information regarding the design and scope of the Project using CM@Risk's experience in performing similar work, knowledge of similar projects and current and projected construction costs and, based upon that review, must develop a Baseline Cost Model for review by the Project Team and approval by City. Once approved by City, the Baseline Cost Model will be continually referenced as detailed estimates are created as the design progresses throughout Pre-Construction until the final GMP for the entire Project is established. A final GMP for the entire Project must be established and approved by City prior to the start of construction. It is the responsibility of CM@Risk to ensure City has sufficient information to evaluate and approve a final GMP prior to the time necessary to start construction so construction can be completed within the Agreement Time. The Project Detailed Cost Estimate will be the best representation from CM@Risk of what the complete functional Project's construction costs will be as indicated by the most current available documents and will be constantly checked against the Baseline Cost Model. CM@Risk must communicate to the Project Team and assumptions made in preparing the Baseline Cost Model. The Baseline Cost Model must support CM@Risk's Detailed Cost Estimates and may be broken down initially as dictated by the available information, as required by City.

17.5.2 After receipt of the Design Professional's most current documents from certain specified pre- construction milestones, CM@Risk must provide a draft Detailed Cost Estimate including a detailed written report detailing any variances to the Baseline Cost Model and Baseline Project Schedule. The Design Professional and CM@Risk will reconcile any disagreements on the estimate to arrive at an agreed upon Detailed Cost Estimate for the construction costs based on the scope of the Project through that specified pre-construction milestone. Pre-Construction milestones applicable to this paragraph are:

Master Planning and Programming, Schematic Design, 50% Design Development, 100% Design Development, and 50% Construction Drawings, If no consensus is reached, City will make the final determination. If the Project Team requires additional updates of the Detailed Cost Estimate beyond that specified in this paragraph, CM@Risk must provide the requested information in a timely manner.

17.5.3 If at any point the Detailed Cost Estimate submitted to City exceeds the previously accepted Baseline Cost Model or previously approved Detailed Cost Estimate agreed to as set forth in Section 17.5.2 above, CM@Risk must make appropriate recommendations to project Team on means/methods, materials, and or other design elements that it believes will reduce the estimated construction costs, such that it is equal to or less than the established Project Team's Baseline Cost Model.

17.5.4 Unless other levels of completion are agreed to in writing in the Construction Documents, at 50% Construction Drawings and included with the associated report, CM@Risk must also submit to the Project Team for review and approval a Schedule of Values that complies with the following requirements. The Schedule of Values must be based on City standard bid schedule and highlight significant variances from any previously submitted Schedule of Values. The Schedule of Values must be directly related to the breakdowns reflected in the Detailed Project Schedule and CM@Risk's Detailed Cost Estimate. In addition, the Schedule of Values must: (a) detail unit prices and quantity take-offs, (b) detail all other contingencies and unit price Work shown and specified in the detailed design documents.

17.5.5 CM@Risk is to track, estimate/price and address the Project Team's overall project cost issues that arise outside of the Baseline Cost Model and the latest approved Detailed Cost Estimate such as: City generated changes, Project Team proposed changes, alternate system analysis, constructability items and value engineering analysis. The system used to implement this process will be referred to as the Design Evolution Log. This is to be addressed between the Baseline Cost Model and the Master Planning and Programming Detailed Cost Estimate, and then (unless other levels of completion are agreed to in writing in the Construction Documents) between the Detailed Cost Estimates for each of the pre-construction milestones thereafter, Schematic Design, 50% Design Development, 100% Design Development, and 50% Construction Documents, and the bid packages for all Phases.

17.5.6 Upon request by City, CM@Risk must submit to City a cash flow projection for the Project based on the current updated/revised Detailed Project Schedule and the anticipated level of payments for CM@Risk during the design and construction phases. In addition, if requested by City and based on information provided by City, CM@Risk must prepare a cash flow projection for the entire Project based on historical records for similar types of projects to assist City in the financing process.

17.5.7 Construction Water. CM@Risk must estimate the quantity of water to be used and include the cost thereof in each Detailed Cost Estimate and GMP Proposal provided by City.

17.6 SUBCONTRACTOR AND MAJOR SUPPLIER SELECTIONS

17.6.1 There are two ways to select Subcontractors and major Suppliers prior to submission of a GMP Proposal: (1) qualifications-based selection; or (2) a combination of qualifications and price. Except as noted below, the selection of Subcontractors/Suppliers is the sole responsibility of CM@Risk. In any case, CM@Risk is solely responsible for the performance of the selected Subcontractors/Suppliers, and for compliance with the requirements of

Title 34 of the Arizona Revised Statutes in the selection of a Subcontractors/Suppliers, to the extent applicable. CM@Risk must comply with its Subcontractor Selection Plan submitted with its Statement of Qualifications.

17.6.2 City may approve the selection of a Subcontractor(s) or Suppliers(s) based only on their qualifications when CM@Risk can demonstrate it is in the best interest of the Project. All Work that is performed, after such a qualifications-based selection, for a price that is negotiated by CM@Risk will be billed in accordance with the GMP for actual costs and may be subject to audit by City.

17.6.2.1 Qualifications based selection of a Subcontractor(s)/Supplier(s) should only occur prior to the submittal of the GMP Proposal.

17.6.2.2 If a Subcontractor/Supplier selection plan was submitted and agreed to by City, CM@Risk must apply the plan in the evaluation of the qualifications of a Subcontractor(s) or Supplier(s) and provide City with its review and recommendations.

17.6.2.3 CM@Risk must receive written City approval for each selected Subcontractor(s) and Supplier(s).

17.6.2.4 CM@Risk must negotiate costs for services/supplies from each Subcontractor/Supplier selected under this method.

17.6.3 All Work must be competitively bid unless a Subcontractor or Supplier was selected pursuant to Section 17.6.2 above.

17.6.3.1 CM@Risk must develop Subcontractor and Supplier interest, submit the names of a minimum of three qualified Subcontractors or Suppliers for each trade in the Project for approval by City and solicit bids for the various Work categories. If there are not three qualified Subcontractors/Suppliers available for a specific trade or there are extenuating circumstances warranting such, CM@Risk may request approval by City to submit less than three names. Without prior written notice to City, no change in the recommended Subcontractors/Supplies will be allowed.

17.6.3.2 If City objects to any nominated Subcontractor/Supplier or to any self-performed Work for good reason, CM@Risk must nominate a substitute Subcontractor/Supplier that is acceptable to City.

17.6.3.3 CM@Risk must distribute Drawings and Specifications, and when appropriate, conduct a Pre- Bid Conference with prospective Subcontractors and Suppliers.

17.6.3.4 If CM@Risk desires to self-perform certain portions of the Work, it must request to be one of the approved Subcontractor bidders for those specific bid packages. CM@Risk's bid will be evaluated in accordance with the process identified below. If events warrant and City concurs that it is necessary in order to ensure compliance with the Project Schedule and/or the most recent Detailed Cost Estimate, CM@Risk may be authorized to self-perform Work without bidding or rebidding the Work. When CM@Risk self-performs work without bidding, only the actual costs associated with performing the Work in accordance with the approved GMP will be billed and may be subject to audit by City.

17.6.3.5 CM@Risk must receive, open, record and evaluate the bids; provided, however, that if CM@Risk or one of its affiliates is bidding to self-perform the Work that is the subject of the bid, then the bids must be received, opened, recorded and evaluated by Project Manager

instead of CM@Risk. Bids for each category of Work must be opened and recorded at a pre-determined time. The apparent low bidders must be interviewed to determine the responsiveness of their proposals. In evaluating the responsiveness of bid proposals CM@Risk, in addition to bid price, may consider the following factors: past performance on similar projects, qualifications and experience of personnel assigned, quality management plan, approach or understanding of the Work to be performed, and performance schedule to complete the Work. The final evaluation of Subcontractor/Supplier bids must be done with Project Manager in attendance to observe and witness the process. CM@Risk must resolve any Subcontractor/Supplier bid withdrawal, protest or disqualification in connection with the award at no increase in the Cost of Work.

17.6.4 CM@Risk will be required to prepare two different reports on the subcontracting process.

17.6.4.1 Within fifteen days after each major Subcontractor/Supplier bid opening process; CM@Risk must prepare a report for City's review and approval identifying the recommended Subcontractors/Supplier for each category of Work. The report must detail: (a) the name of the recommended Subcontractor/Supplier and the amount of the Subcontractor/Supplier bid for each sub-agreement; (b) the sum of all recommended Subcontractor/Supplier bids received; (c) and trade work and its cost that CM@Risk intends to self-perform, if any.

17.6.4.2 Upon completion of the Subcontractor/Supplier bidding process, CM@Risk must submit a summary report to City of the entire Subcontractor/Supplier selection process. The report must indicate, by bid process, all Subcontractors/Suppliers contacted to determine interest, the Subcontractors/Suppliers solicited, the bids received and costs negotiated, and the recommended Subcontractors/Suppliers for each category of Work.

17.6.5 The approved Subcontractors/Suppliers will provide a Schedule of Values with their bid proposals, which will be used to create the overall Project Schedule of Values.

17.6.6 If after receipt of sub-bids or after award to Subcontractors and Suppliers, City objects to any nominated Subcontractor/Supplier or to any self-performed Work without any reasonable basis, CM@Risk must nominate a substitute Subcontractor or Supplier, preferably if such option is still available, from those who submitted Subcontractor bids for the Work affected. Once such substitute Subcontractors and Suppliers are consented to by City, CM@Risk's proposed GMP for the Work or portion thereof must be correspondingly adjusted to reflect any higher or lower costs form any such substitution.

17.7 **GMP PROPOSAL**

17.7.1 When a GMP Proposal is submitted for a phase of the Work, the GMP will have a Detailed Cost Estimate of the Costs of the Work (as set forth in Section 15.2) in each phase of the Work that is being proposed plus the current estimate for all other Work. City will not approve the GMP for the phase of work without a total estimate for the complete Project. City may request a GMP Proposal for all or any portion of the Project and at any time during pre-construction. Any GMP Proposals submitted by CM@Risk must be based on and consistent with Baseline Cost Model and the current update/revised Detailed Cost Estimate at the time of the request and include any clarifications or assumptions upon which the GMP Proposal(s) are based.

17.7.2 A GMP Proposal for the entire Project will be the sum of the Cost of the Work, CM@Risk Fee, and General Conditions Cost. CM@Risk guarantees to complete the Project at or less than

the final GMP Proposal amount plus approved Change Orders. CM@Risk will be responsible for any costs for expenses that would cause the Cost of the Work actually incurred, including the Construction Fee and General Conditions Costs, to exceed the GMP.

17.7.3 CM@Risk must prepare its GMP Proposal in accordance with City's request for GMP Proposal requirements based on the most current completed Drawings and Specifications at that time, which unless otherwise directed by City in writing, will be at 100% Construction Drawings. CM@Risk must mark the face of each document of each set upon which its GMP Proposal is based. These documents must be identified as the GMP Plans and Specifications. CM@Risk must send one set of those documents to the Project Manager, keep one set and return the third set to the Design Professional.

17.7.4 An updated/revised Detailed Project Schedule, Equipment Plan, and Schedule of Values must be included in any GMP Proposal(s), all of which must reflect the GMP Plans and Specifications the Detailed Project Schedule must be shown in relationship to the Project Schedule and identify any variance to the Baseline Project Schedule. Any such Detailed Project Schedule updates/revisions must continue to comply with the requirements of Section 17.3.1 through 17.3.5.

17.7.5 <u>GMP Proposals(s) Review and Approval</u>

17.7.5.1 CM@Risk must meet with the Project Team to review the GMP Proposal(s) and the written statement of its basis. In the event the Project Team discovers inconsistencies or inaccuracies in the information presented, CM@Risk must make adjustments as necessary to the GMP Proposal.

17.7.5.2 If during the review and negotiation of GMP Proposals design changes are required, City may authorize and cause the Design Professional to revise the GMP Plans and Specifications to the extent necessary to reflect the agreed-upon assumptions and clarifications contained in the final approved GMP Proposal. Such revised GMP Plans and Specification will be furnished to CM@Risk. CM@Risk must promptly notify the Project Team in writing if any such revised GMP Plans and Specifications are inconsistent with the agreed upon assumptions and clarifications.

17.7.6 All portions of or items comprising the GMP Proposal are subject to audit by City, as deemed appropriate by City, including, without limitation, any based upon unit prices or Work to be self- performed by CM@Risk, or its affiliates.

17.8 **<u>PAYMENT PROCEDURE FOR PRE-CONSTRUCTION SERVICES</u>**

17.8.1 Requests for monthly payments by CM@Risk for Pre-Construction Services must be submitted monthly and must be accompanied by a progress report, detailed invoices and receipts, if applicable. Any requests for payment must include, as a minimum, a narrative description of the tasks accomplished during the billing period, a listing of any Deliverables submitted, and copies of any Subconsultants' requests for payment, plus similar narrative and listings of Deliverables associated with their Work. Payment for services negotiated as a lump sum will be made in accordance with the percentage of work completed during the preceding month.

17.8.2 In no event will City pay more than seventy-five (75%) of the Agreement Price until acceptance of ALL Pre-Construction Services and award of the final approved Construction Services Agreement for the entire Project by City Council. If CM@Risk does not prepare a

GMP Proposal that is acceptable to City, or the GMP Proposal exceeds the City's Construction Budget, then CM@Risk understands and acknowledges that it will forfeit any right to receive the 25% of the Agreement Price being retained by City.

17.8.3 CM@Risk agrees that no charges or claims for costs or damages of any type will be made by it for any delays or hindrances beyond the reasonable control of City during the progress of any portion of Pre-Construction Services specified in this Agreement. Such delays or hindrances, if any, will be solely compensated for by an extension of time for such reasonable period and may be mutually agreed between the parties. It is understood and agreed, however, that permitting CM@Risk to proceed to complete any such Services, in whole or in part after the date to which the time of completion may have been extended, will in no way act as a waiver on the part of City of any of their respective legal rights herein.

17.8.4 No compensation to CM@Risk will be allowed contrary to Article I, Chapter I, Title 34 of the Arizona Revised Statutes.

17.8.5 If any service(s) executed by CM@Risk is abandoned or suspended in whole or in part, for a period of more than 180 days through no fault of CM@Risk, CM@Risk is to be paid for the services performed prior to the abandonment or suspension.

17.9 **SURVIVAL OF THE DESIGN SERVICES AGREEMENT, DUTIES, OBLIGATIONS AND WARRANTIES**

If the GMP Proposal is accepted by City and a Construction Agreement is entered into between City and CM@Risk, the duties, obligations and warranties of CM@Risk under the Pre- Construction Services Agreement survive and are incorporated into the resulting Construction Agreement.

SECTION 15 – APPENDICES

The following Appendices attached hereto are referenced in the General Conditions and are incorporated herein.

Appendix 1 – Policy Statement for Calculating Delays and Damages
Appendix 2 – Cost Reduction Incentive Proposals for Design Bid Build Agreements
Appendix 3 – Contractor's Affidavit Regarding Settlement of Claims
Appendix 4 – Forms of Performance Bond
Appendix 5 – Forms of Payment Bond
Appendix 6 – Dispute Resolution
Appendix 7 – Certificate of Completion
Appendix 8 – Construction Sign Detail
Appendix 9 – Cost of the Work (Applicable solely to Construction Manager at Risk and Job Order Contracting)
Appendix 10 Landscape Establishment Period

CALCULATING DELAYS AND DAMAGES

The purpose of this policy statement is to establish guidelines and procedures for negotiation between the Contractor and City of Chandler relating to compensation for delays pursuant to Arizona Revised Statutes (A.R.S.) 34-221(F). This policy statement contains notice requirements in addition to those set forth in the Agreement Documents, and will be the Agreement Provision contemplated by that statute.

NOTE: As used herein, the term "Engineer" will refer to the City of Chandler City Engineer or his/her designated representative. Nothing in this Policy Statement will be construed to void any provision in the Agreement which requires timely notice of delays or provides for arbitration or any other procedure for settlement or provides for liquidated damages.

I. TYPES OF DELAYS:

For the purposes of this document, there are essentially four types of delays encountered by City of Chandler Construction Contractors; excusable/compensable, excusable/non-compensable, non- excusable, and concurrent. Only delays that extend Agreement Completion Time set forth in the Agreement Document will be considered for issues relating to Agreement extensions or additional compensation. All other delays are considered to be activity delays and do not entitle the Contractor to either time extensions or additional compensation. Agreement Completion Time will be defined as the date set forth in Maricopa Association of Governments (MAG) Uniform Standard Specification Section 101 and as may be modified by the Agreement Documents.

A. Excusable/Compensable:

These are delays caused solely by the City's actions or inactions, are unreasonable under the circumstances, and which were not within the contemplation of the parties to the Agreement at or prior to the time of execution of the Agreement. Since the Contractor presumably has no control over the events causing the delay, he may be entitled to both Agreement time extensions and additional compensation for delay damages. Further, he/she may be entitled to additional compensation from the impact of that delay on other work. Examples of excusable/compensable (E/C) delays include: failure to properly locate an underground City-owned utility within 2 feet of the actual location; failure to relocate City-owned utilities far enough in advance of construction in an area where the Contractor is scheduled to work that it delays start or completion of the Contractor's regularly scheduled work; failure to provide City-furnished equipment or materials in a timely manner if required by the Agreement; failure to acquire necessary Right-of-Way or Public Utility Easements prior to the Contractor beginning Work in the area; failure to timely return Shop Drawings or other Agreement Submittals in accordance with the Agreement; unreasonable delay by the City in making decisions which affect critical activities; surveying errors when the City is contractually responsible for providing Project Surveying. This list is not meant to be all inclusive, but is intended merely as examples of the type of City action or inaction which can result in a Contractor's claim for additional time and

compensation.

B. Excusable/Non-compensable:

These are delays over which neither the City nor the Contractor had control. Since both parties to the Agreement have been potentially damaged by the delay, but neither have caused it, only Time Extensions are warranted. Examples of excusable, non-compensable (E/N) delays include: unusually severe weather; fire; acts of God; failure of non-City owned utilities (SRP, CenturyLink, Cable TV, Southern Pacific Railroad, and Southwest Gas, etc.) to properly or timely locate accurately; failure of non-City owned utilities to relocate in advance of construction; the voluntary or involuntary filing for Bankruptcy protection by a Supplier or Subcontractor which causes the Supplier/Subcontractor to fail to meet a contractual deadline provided the Contractor can provide documentation that he/she executed the required Purchase Orders/Subcontract Agreements and received delivery schedules which, if met, would have eliminated the delay; delays as a result of an incomplete shutdown of a City or non-City owned utility main (the City does not guarantee a complete shutdown). This list also is not necessarily all inclusive but merely indicative of type and class of E/N delays.

C. Non-excusable/Non-compensable:

These are delays caused by the actions or inactions of Contractor or an officer, employee, agent, Subcontractor, Supplier or any other party for whom the Contractor is responsible. Since the Contractor has assumed responsibility for the risks associated with the events that caused the delay, he/she are not entitled to either time extensions or monetary delay damages. All non-excusable delays are also non-compensable. Examples of non- excusable, non-compensable (N/N) delays include: failure to perform by the Contractor, its Subcontractors and/or Suppliers (except as noted in section I.B above); failure to provide adequate labor, materials, and/or equipment on the Project; failure to perform contractually-required coordination with utilities, agencies and other Contractors; failure to notify the Engineer, in writing, of delay impacts within two working days, as required by MAG 104.2.3, or the next work day, as required by MAG 109.8.2; failure to timely submit Shop Drawings; failure to pothole or otherwise visually locate utilities sufficiently ahead of the Work to allow the Engineer to direct corrective action when necessary; delays due to retesting of previously failed work, re-inspection, and/or restaking resulting from faulty workmanship, poor quality control, or lack of compliance with Agreement Specifications. Again, this list is not necessarily all inclusive.

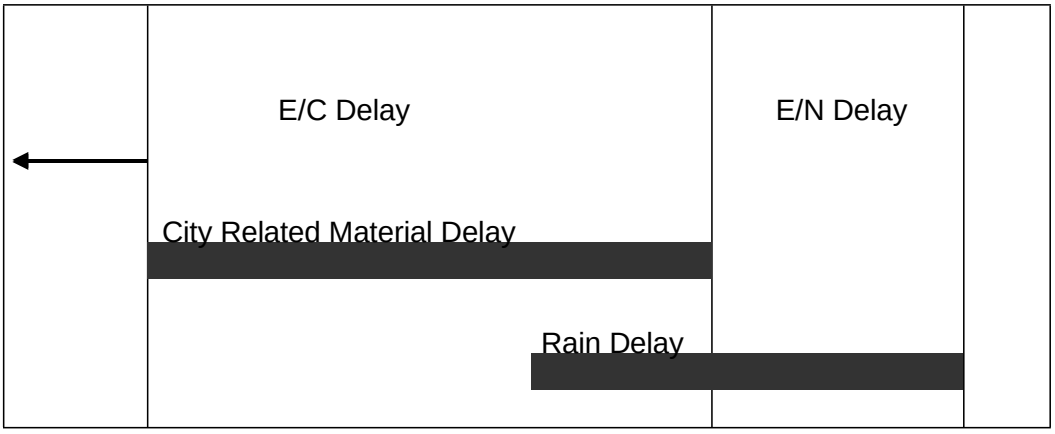
D. Concurrent:

When two or more delays occur simultaneously or overlap, each delay is analyzed separately to determine its impact on the overall project completion date based on when that delay started. Once again, only those delays which actually extend the Agreement completion time are considered as delays. The concurrent delay is considered an additional delay only to the extent it prolongs

the delay to the Agreement Completion Time beyond the date that the one it is concurrent with had already delayed that date. For example, if two delays are concurrent, and one is five days long and the second is seven days long, the second concurrent delay will only extend the Agreement Completion Time by two days. The same method of analysis is used when there are multiple concurrent delays. Only those extending the Project Completion Date are considered to be delays for the purposes of this policy. The portion of each concurrent delay that delays the completion of the work is classified in the same manner as described previously for individual delays and being either E/C, E/N or N/N.

An example of a concurrent delay is where the City delays furnishing material, but the Contractor could not have installed it anyway due to unusually severe weather. The effect of the first delaying activity will extend for the full duration and will be considered controlling on the Contractor's schedule. A subsequent, concurrent delay will thereafter only be considered to effect the project completion (if at all) once the first delaying activity has ceased to impact the project completion. In this case, if the unusually severe weather continued and delayed the work after the material was delivered, the first portion of the delay would be classified E/C (delay for material) and the second as E/N (delay due to unusually severe weather). Using the procedure set forth above, the entire concurrent portion would be considered E/C as shown in the chart which follows.

Example of a Concurrent Delay:



II. ANALYZING THE DELAY:

The Contractor must provide all documents required or requested by the Engineer to analyze the delay(s). It is important to understand that, prior to the delay analysis, delays and their impacts are alleged issues. The information the Contractor provides will be compared with the Inspector's Daily Log, Schedules and other available Project information and together they will support or refute that delays occurred and, if so, how they impact other work and the overall project completion. The Contractor's delay in providing these documents will be considered prima facie evidence that either the delay did not occur or it did not impact the Project Completion Date and any claim for time extension or damages will be denied.

The Engineer will accept delay analyses in CPM format, as these may demonstrate to his/her satisfaction whether or not Project Completion has been impacted by a specific event. If the Contractor chooses not to use CPM scheduling procedures, then the burden will be on the Contractor to prove to the Engineer's satisfaction that the Project Completion has been impacted. The procedures below assume that the Contractor is using CPM scheduling methods. As a minimum the Contractor must provide the following materials to the Engineer:

A. As-Planned Schedule. The initial construction schedule, required by the Agreement Documents, will be considered the baseline schedule. It is to the Contractor's advantage that the As-Planned (baseline) Schedule be as detailed as possible in order for delays, as they occur, to be incorporated into the schedule in representative locations. It is also to the Contractor's advantage to use a computer software program to generate the schedule since updated schedules are required monthly by the Agreement Documents and since updated schedules are required to support delays and requests for additional compensation for delays. The As-Planned (baseline) Schedule must be presented in network format which clearly shows the interrelationships of the activities. The Contractor must also provide a printout of the activities showing early start, early finish, late start, late finish, duration and float. The activity list printout must also indicate predecessor and successor activities.

B. As-Built Schedules. The as planned (baseline) schedule must be updated with complete progress-to-date information (actualized) up to the date of the start of the alleged delay. Each updated schedule will serve as the as-built schedule for analyzing the alleged delay and provide a new baseline as-planned schedule for the next delay. This process must be repeated for each alleged delay as it occurs. In updating the baseline schedule, the alleged delay must be treated as an activity and inserted into the schedule as a predecessor to the impacted activity (ies). When an activity that has already started is impacted, it is preferable to divide this activity into two parts and show the impact affecting the second part. For schedules which incorporate a time line (or data date), the delay activity must be inserted at the time it actually occurred. Some software scheduling programs have a PAUSE-RESUME feature that can be used to facilitate the requirements. The updated schedule must also be accompanied by a listing of activities as with the baseline schedule. This activities list must contain the alleged delay as an activity showing the duration and the activities which are predecessors and successors to it. When computer generated schedules are used, the Contractor must provide, in electronic media format, the complete data files for the updated schedule that included the delay activity, preferably either in Suretrak or in Microsoft Project. Each electronic media must contain a label identifying the Project name, Contractor's name, program name and version number, data date and project finish date.

C. Other Documents: In order to determine the amount of the alleged delay and if it is compensable, the Contractor must provide all backup documentation relevant to the issue and as required by the Engineer. This documentation must include copies of such items as: purchase orders; delivery schedules; correspondence; memoranda of telephone calls; force account daily worksheets (initialed by the Inspector); payroll data; estimating (bid) worksheets; and any other materials which may be

requested by the Engineer.

D. Procedure: Only after receipt of sufficient documentation will the Engineer analyze each alleged delay and determine if it is supported or refuted. If supported, the Engineer will determine if it is excusable or non-excusable, compensable or non-compensable. If the Engineer determines that the delay did not affect the Project Completion, the as-planned schedule, which has been updated to the date of the alleged delay, must be revised to indicate this. If the Engineer determines the delay did occur but was N/N, then no time extension will be granted. It is imperative that an actualized schedule be submitted as soon as the occurrence of the alleged delay is known. In no event will the Contractor submit an actualized updated schedule later than 60 days after the occurrence of the alleged delay becomes known.

If the Engineer determines the delay did occur and was excusable but, due to a reason listed in section I.B. is non-compensable, he/she will determine the length of the E/N delay and prepare a Change Order to add that time to the Agreement. The Engineer's decision will be final.

If the Engineer determines the delay was excusable and compensable, he/she will determine the length of the E/C delay and proceed to review the Contractor's damage calculations in accordance with Section III. The Engineer will check the Contractor's calculations, review the backup documentation provided, and prepare a Change Order to cover both the additional compensation and the time extension. The Engineer's decision on both the time extension and additional compensation for the delay will be final.

If the issue involves a concurrent delay, the Engineer will analyze available data to determine the portions which are E/C, E/N, and/or N/N as described above. The Engineer will proceed to determine the length of E/C delay and verify the Contractor's delay damage calculations, if any are provided. Upon completion of this review, the Engineer will prepare a Change Order for the Contractor's review and signature. The Engineer's decision regarding excusable delay and additional compensation for the delay is final.

The amount of time the Engineer will require to analyze the alleged delay(s) will depend upon the Engineer's workload, the complexity of the delay analysis, availability of supporting data, extent of cooperation by the Contractor, and other factors beyond the Engineer's control. It is entirely possible other delay(s) may occur while the Engineer is analyzing particular claim for delay(s). The Engineer's failure to respond to the Contractor in a set period of time will not be used as the basis for a further delay claim or as justification for extending and existing delay claim. The time required for delay analysis by the Engineer will not be counted against the time allotted for processing Final Payment as required by (MAG Section 109.7(B)) or the release of retention and Final Payment as prescribed by A.R.S. Arizona Revised Statutes §34-221.

III. CALCULATING MONETARY DELAY DAMAGES:

Additional compensation for delay, when authorized by the Engineer, will be calculated in accordance

with MAG Section 109.5 ACTUAL COST WORK with the following exceptions:

A. No additional compensation or other monetary damages will be awarded or paid for any loss of anticipated profits by the Contractor, Subcontractors or Suppliers.

B. No additional compensation or other monetary damages will be awarded for home office overhead or non-project general conditions of the Contractor, Subcontractors or Suppliers.

C. Equipment:

1. Contractor-owned equipment rate calculations must be computed in accordance with Section 109.04(D)(3), Arizona Department of Transportation "Standard Specifications for Road and Bridge Construction," 2008 or latest edition and as modified herein. Year and regional adjustment factors must be based on the most recent publications of the Rental Rate Blue Book for Construction Equipment, published by the Equipment Guide-Book Company, San Jose, CA, same as provided by ADOT and in print as of the date of alleged delay. In no event will the compensation for Contractor-owned equipment exceed the purchase price, including tax, paid by the Contractor for the equipment. Compensation will not be allowed for small tools or equipment that show a daily equipment rental rate of less than $5.00 per day or for unlisted equipment that has a value of less than for hundred dollars ($400.00).
2. For leased and rented equipment or equipment not otherwise listed in the Blue Book, rental contracts, or other supporting data will be used to establish the hourly rate. No hourly operating expense will be allowed for delay on standby equipment. In no case will equipment be considered for rental which exceeds the hourly rate for the first eight hours and the daily rate divided by eight for all additional hours as compared with similar equipment listed in the Blue Book. The hourly standby rate must be computed as the lesser of:

    a. Dividing the monthly invoice or rental value by 176 hours per month when the equipment is utilized by the Contractor for more than three weeks;

    b. Dividing the monthly invoice or rental value by 40 hours per week when the equipment is utilized by the Contractor for more than three days.

    In no event will compensation be paid for delay at more than 8 hours per day or 40 hours per week.

3. Except for vehicles used by supervisory personnel, all equipment will be paid at the "standby" rate during the delay period.

4. Equipment brought solely to mitigate the delay (such as pumps, light plants, etc.) may be paid in accordance with ADOT section 109.04(D) (3).

5. The Blue Book regional adjustment will apply in determining rental rates.

D. Material:

Allowable material charges may include, in addition to material incorporated in the work material used to mitigate the delay such as barricades, plates, shoring, cold mix, etc. Except in emergencies the Contractor will not employ such material without the prior written approval of the Engineer.

E. Labor:

1. Except for Supervisory Personnel (Superintendent, Project Engineer, and Foremen), labor wages will not be paid after the first one-half day of claimed delay or impact. It is expected the Contractor will reassign or layoff unneeded employees.

2. For Foreman wages to be included, that Foreman must have been actively employed on the project prior to the commencement of the delay and be directly responsible for the activity being delayed.

3. Labor burden must be actual amounts incurred but must not exceed the ADOT approved rate.

F. All costs (equipment, material, and labor) must be substantiated by the City of Chandler's Daily Work Reports.

IV. DOCUMENT REQUIRED FOR CLAIM ANALYSIS:

For purposes of reviewing the Contractor's request for additional compensation, it will be required that the Contractor submit the following listed information. Information requested must be prepared on forms which are substantially similar to the City of Chandler's Daily Work Report form, a copy of which is attached as an exhibit.

A. Labor:

For each employee, laborer, and foreman, for which compensation is requested: Name, classification, dates of work performed, daily hours worked, total hours worked, labor rates, labor burden rates, overtime or premium time charges. Further, the Contractor must make available for inspection and copying to the Engineer the following listed documentation.

1. Certified payroll reports for the period of work claimed.
2. Accounting of Fringe Benefits – certified by a CPA.
3. Contractor's and Subcontractor's daily field reports and daily diaries.

B. Materials:

For all materials for which compensation is requested, if any, total quantities of materials, prices, extensions and transportation costs must be provided on a daily

basis. Further, the Contractor must make available for inspection and copying to the Engineer the following listed documentation.

1. Invoices for all materials incorporated.
2. Weigh tickets.
3. Purchase orders.
4. Delivery schedules.
5. Quotes or proposals from manufacturers or supplier.
6. Freight bills, Bills of Lading, or other documentation to show transportation costs.
7. Restocking charges-invoices from vendor.

C. Equipment:

For all equipment, the Contractor must provide the Engineer with the designation, dates and hours of usage, dates and hours of standby, if any, daily hours, total hours, rental rates and extension for each unit of equipment and machinery. Rental rates will be as established in Section III. Further, the Contractor must make available for inspection and copying to the Engineer the following listed documentation.

1. Owned:
   a. Purchase contracts(s).
   b. Depreciation schedule(s).
   c. Invoices for fuel, lube, repairs and other operating costs.

2. Leased:
   a. Lease agreement with hourly rate, overtime rate, double shift rate, etc.
   b. Invoices or other documentation showing hours worked on a daily basis.

D. Subcontractors/Owner-Operators:

In the event the Contractor submits a claim which includes requests for compensation for Subcontractors of Owner-Operators, the same information requested of the Contractor must be provided by the Subcontractor/Owner-Operator. Further, the Contractor must make available for inspection and copying to the Engineer the following listed documentation.

1. Bid/Estimate work sheets and/or spreadsheets.
2. Subcontract Agreements or Agreements with Owner-Operator.
3. All invoices and billing statements received from the Subcontractor/Owner-Operator which relates to the amount requested.

E. Miscellaneous:

Further, the Contractor must make available for inspection and copying to the Engineer the following listed documentation.

1. Evidence of payment for bonds and insurance premiums (MAG 109.5.6).

2. Taxes – unless the Contractor can show otherwise, taxes are reimbursable at 65% of the total cost (less bonds and insurance).

V. TIME LIMIT ON SUBMISSIONS OF CLAIM FOR DELAY OR IMPACT DAMAGES:

No claims for delay or impact damages will be considered or allowed more than 45 days after the event or occurrence which the Contractor claims gives rise to the delay or impact. In no event will a claim for delay or impact damages be considered after submission by the Contractor of the Final Payment Request.

COST REDUCTION INCENTIVE PROPOSALS FOR DESIGN BID BUILD AGREEMENTS

The Contractor may submit to the Engineer proposals for modifying the Plans, Specifications, or other requirements of the Agreement for the sole purpose of reducing the total cost of Project construction. The proposals must not impair in any manner the essential functions or characteristics of the project; including but not limited to service life, economy of operations, ease of maintenance, desired appearance, compatibility with existing or planned equipment, standardization of systems, or design and safety standards.

It must not be inferred from this Policy that the Engineer is required to consider any proposal submitted.

Submissions that propose changes in the basic design of a bridge, propose changes in pipe line size, materials, bedding conditions, pipe specifications; or that propose any change in pavement design will not be considered.

Proposals submitted pursuant to this Policy will be identified as Cost Reduction Incentive Proposals. They must be submitted in writing and, at a minimum, contain the following.

1. Complete the attached or similar cost reduction incentive proposal form.

2. A description of both the existing Agreement Requirements for performing the work and the proposed changes.

3. All Engineering Drawings and computations necessary for the thorough and expeditious evaluation.

4. An itemization of the existing Agreement Requirements that must be changed if the Proposal is adopted and a recommendation as to the manner in which the change should be made.

5. A detailed estimate of the cost of performing the Work under the existing Agreement and under the proposed changes, including the cost of developing and implementing the changes.

6. The Agreement items affected by the proposed changes and any variations in quantities resulting from the changes.

7. An objective estimate of any effects the proposal will have on collateral cost to the City, costs of related items, and cost of maintenance and operation.

8. A statement as to the effect that the Proposal will have on the time for the completion of the Project.

9. A statement as to the time by which a Change Order adopting the Proposal must be executed or when the Engineer must have given verbal approval.

Proposals will be processed expeditiously; however, the City will not be liable for any delay in acting upon any Proposal nor for any failure to accept any Proposal pursuant to this Special Provision.

The Engineer will be the sole judge of the acceptability of a Proposal and of the estimated net savings in construction costs from the adoption of all or any part of the Proposal. The Contractor will be notified in writing by the Engineer as to whether his/her Proposal has been accepted. The decision by the Engineer is final.

When the City deems such action to be appropriate, it reserves the right to require the Contractor to share equally in the cost to the City of investigating, evaluating, and processing the proposal as a condition for the consideration of such Proposal. Such cost must be shared whether the Proposal is accepted or rejected. When such a condition is imposed, the City will estimate these costs and the Contractor must indicate his acceptance thereof in writing. Such acceptance will authorize the City to deduct the Contractor's share of the costs from any monies due or that may become due to the Contractor under the Agreement.

If the Contractor's Proposal is accepted in whole or in part, the necessary Agreement Modifications and Agreement Price Adjustments will be affected by the execution of a Change Order which will specifically state that it is executed pursuant to this Special Provision.

The Contractor must continue to perform the work in accordance with the requirements of the Agreement until a Change Order incorporating the Proposal has been executed or until he/she has been given verbal approval by the Engineer that his/her Proposal has been accepted. If the Change Order has not been executed or he/she has not been given verbal approval on or before the date specified on the attached cost reduction incentive proposal form or on or before such other date as the Contractor may have subsequently specified in writing, the Proposal may be deemed to be rejected.

The executed Change Order will incorporate the changes in the Plans, Specifications, or other requirements of the Agreement which are necessary to permit the Proposal, or such part of it which has been accepted, to be put into effect, and will include any condition – upon which the City's approval thereof is based, if such approval is conditional. The executed Change Order may also extend the time for the completion of the Agreement if such an extension has been deemed to be warranted by the Engineer as a result of his evaluation of the Proposal.

The executed Change Order will also establish the estimated net savings in the cost of performing the Work attributable to the Proposal effectuated by the Change Order. In determining the net savings, the right is reserved to the Engineer to disregard the Agreement bid prices if, in his/her judgment, such prices do not represent a fair measure of the value of the Work to be performed or to be deleted. The net savings will be established by determining the Contractor's cost of performing the Work, taking into account his/her cost of developing the Proposal and implementing the change, and reducing this amount by any ascertainable collateral costs to the City. The executed Change Order may provide that the Contractor be paid 50 percent of the estimated net savings amount.

The executed Change Order may also provide for the adjustment in Agreement prices. Agreement prices may be adjusted by subtracting the City's share of the accrued net savings.

The amount specified to be paid to the Contractor in the executed Change Order which effectuates a Cost Reduction Proposal will constitute full compensation to the Contractor for the Cost Reduction Proposal and the performance of the work thereof pursuant to the said Change Order.

Upon acceptance of a Cost Reduction Incentive Proposal, any restrictions imposed by the Contractor on its use or on disclosure of the information will become void, and the City thereafter will have the right to use all or any part of the Proposal without obligation or compensation of any kind to the Contractor.

COST REDUCTION INCENTIVE PROPOSAL FORM

TO: CIP City Engineer

FROM:

PROJECT NAME: **WATER SYSTEM UPGRADES PROGRAM**

CITY PROJECT NUMBER: **WA2100.251**

DATE:

Summary of Change (Brief description of proposed change including advantages and disadvantages):

ESTIMATED COST SUMMARY (Attached detailed estimate):

A.	Original Cost:	$
B.	Proposed Cost:	$ _____
C.	Construction Savings (A-B):	$ _____
D.	Gross Savings (Included OH %, Bond %)	$ _____
E.	Contractor Implementing	$_____
F.	City Implementing Cost:	$_____
	Reduction in Agreement Price (C+D-E-F) x 50%:	$ _____

Date by which a Change Order must be issued so as to obtain maximum cost reduction:

CITY OF CHANDLER, ARIZONA
PUBLIC WORKS & UTILITIES DEPARTMENT

CONTRACTOR'S AFFIDAVIT REGARDING SETTLEMENT OF CLAIMS

_____, Arizona
Date _____

Project Name: WATER SYSTEM UPGRADES PROGRAM
City Project No.: WA2100.251

To the City of Chandler, Arizona

Gentlemen:

This is to certify that all lawful claims for materials, rental of equipment and labor used in connection with the construction of the above project, whether by subcontractor or claimant in person, have been duly discharged.

The undersigned, for the total compensation of $_____, as set out in the final pay application, as full and complete payment under the terms of the Agreement, hereby waives and relinquishes any and all further claims or right of lien under, in connection with, or as a result of the above described project. The undersigned further agrees to indemnify and save harmless the City of Chandler against any and all liens, claims or liens, suits, actions, damages, charges and expenses whatsoever, which said City may suffer arising out of the failure of the undersigned to pay for all labor performances and materials furnished for the performance of said installation.

Signed and dated at _____, this _____ day of _____ 20_____.

_____
CONTRACTOR

By _____

STATE OF ARIZONA)
) SS
COUNTY OF MARICOPA)

The foregoing instrument was subscribed and sworn to before me this _____ day of _____ 20 _____.

_____
Notary Public

_____
My Commission Expires

PERFORMANCE BOND

ARIZONA STATUTORY PERFORMANCE BOND
PURSUANT TO TITLES 28, 34, AND 41, ARIZONA REVISED STATUTES
(Penalty of this bond must be 100% of the Agreement amount)

KNOW ALL MEN BY THESE PRESENTS THAT:_____

(hereinafter "Principal"), and _____ (hereinafter "Surety"), a corporation organized and existing under the laws of the State of _____ with its principal office in the City of _____, holding a certificate of authority to transact surety business in Arizona issued by the Director of Insurance pursuant to Title 20, Chapter 2, Article 1, as Surety, are held and firmly bound unto _____(hereinafter "Obligee") in the amount of _____ (Dollars) ($_____), for the payment whereof, Principal and Surety bind themselves, and their heirs, administrators, executors, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, the Principal has entered into a certain written Agreement with the Obligee, dated

the _____ day of _____, 20___ for construction of **WATER SYSTEM UPGRADES PROGRAM, WA2100.251** which Agreement is hereby referred to and made a part hereof as fully and to the same extent as if copies at length herein.

NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION IS SUCH, that if the Principal faithfully performs and fulfills all the undertakings, covenants, terms, and conditions of the Agreement during the original term of the Agreement and any extension of the Agreement, with or without notice of the Surety, and during the life of any guaranty required under the Agreement, and also performs and fulfills all the undertakings, covenants, terms, conditions, and agreements of all duly authorized modifications of the Agreement that may hereafter be made, notice of which modifications to the Surety being hereby waived, the above obligation is void. Otherwise it remains in full force and effect.

PROVIDED, HOWEVER that this bond is executed pursuant to the provisions of Title 34, Chapter 2, Article 2, Arizona Revised Statutes, and all liabilities on this bond will be determined in accordance with the provisions of Title 34, Chapter 2, Article 2, Arizona Revised Statutes, to the same extent as if it were copied at length in this Agreement.

The prevailing party in a suit on this bond may recover as part of the judgment reasonable attorney fees that may be fixed by a judge of the court.

Witness our hands this _____ day of _____, 20__.

_____
PRINCIPAL SEAL

_____
AGENT OF RECORD

By _____

_____
SURETY SEAL

_____
AGENT ADDRESS

PAYMENT BOND

ARIZONA STATUTORY PAYMENT BOND
PURSUANT TO TITLES 28, 34, AND 41, OF THE ARIZONA REVISED STATUTES
(Penalty of this Bond must be 100% of the Agreement amount)

KNOW ALL MEN BY THESE PRESENTS THAT:_____

(hereinafter "Principal"), as Principal, and _____(hereinafter "Surety"), a corporation organized and existing under the laws of the State of _____ with its principal office in the City of _____, holding a certificate of authority to transact surety business in Arizona issued by the Director of the Department of Insurance pursuant to Title 20, Chapter 2, Article 1, as Surety, are held and firmly bound unto _____ (hereinafter "Obligee") in the amount of _____ (Dollars) ($_____), for the payment whereof, the Principal and Surety bind themselves, and their heirs, administrators, executors, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, the Principal has entered into a certain written Agreement with the Obligee, dated the _____ day of _____, 20___ for construction of **WATER SYSTEM UPGRADES PROGRAM**, **WA2100.251** which Agreement is hereby referred to and made a part hereof as fully and to the same extent as if copied at length herein.

NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION IS SUCH, that if the Principal promptly pays all moneys due to all persons supplying labor or materials to the Principal or the Principal's subcontractors in the prosecution of the work provided for in said Agreement, this obligation is void. Otherwise it remains in full force and effect.

PROVIDED, HOWEVER that this bond is executed pursuant to the provisions of Title 34, Chapter 2, Article 2 Arizona Revised Statutes, and all liabilities on this bond will be determined in accordance with the provisions, conditions and limitations of Title 34, Chapter 2, Article 2, Arizona Revised Statutes, to the same extent as if it were copied at length in this Agreement.

The prevailing party in a suit on this bond may recover as part of the judgment reasonable attorney fees that may be fixed by a judge of the court.

Witness our hands this _____ day of _____, 20__.

_____
PRINCIPAL SEAL

_____
AGENT OF RECORD

By _____

_____
SURETY SEAL

_____
AGENT ADDRESS

DISPUTE RESOLUTION

A. INFORMAL DISPUTE RESOLUTION

The parties to the Agreement agree that time is of the essence in relation to performance of the Agreement and completion of the Project, therefore any and all disputes in relation to the Agreement will initially be referred to the Project Manager, the Design Professional Representative and/or the Contractor Representative as applicable to the dispute, for immediate resolution. If, after good faith efforts to reach a resolution, none is reached, any party to the dispute may submit the dispute to the Dispute Resolution Representative ("DRR") process set forth below, which is intended to be an expedited process.

B. DISPUTE RESOLUTION REPRESENTATIVE ("DRR") PROCESS

1. The Parties under the Agreement agree that all claims and disputes in relation to the Project which are not resolved in the ordinary course of the Project ("Claim" or "Claims") will, as a prerequisite to any mediation, or litigation of the Claim, first be submitted for resolution between the designated Dispute Resolution Representatives of the Parties as set forth herein (the "DRR Process").

2. The DRR Process will be initiated through service of a DRR Notice as set forth below:

   a. For claims by the Contractor or the Design Professional, the DRR Process will be initiated by the party asserting the claim serving written notice on the City setting forth in detail: (i) the basis for the claim; (ii) the effect of the Claim upon the construction of, and/or Project Schedule for, the Project;
   (iii) the specific relief requested, the amount thereof, and how such was calculated; (iv) the parties involved in the Claim, and how they are involved; (v) the specific Agreement provisions in the Agreement Documents (including, if applicable, drawings and specifications) which apply; and (vi) efforts made to date to resolve the Claim.

   b. For claims by the City, the DRR process will be initiated by the City providing written notice to the other parties of the basis and amount of its claim, the parties involved in the Claim, and how they are involved, the provisions in the Agreement Documents that apply, and the relief requested.

   c. The DRR Notice will be hand-delivered and e-mailed to the other parties' designated Dispute Resolution Representatives.

3. The other parties will respond in writing to the DRR Notice ("DRR Response") within ten (10) calendar days of receipt of the DRR Notice, setting forth those items set forth in the DRR Notice that they agree with, dispute, and/or have questions concerning. The DRR Response will be hand-delivered and e-mailed to the other parties' Dispute Resolution Representatives.

4. The designated Dispute Resolution Representatives for the Parties to the claim will then meet as soon as possible and in any event within twenty (20) calendar days of submission of the DRR Notice (regardless of whether a DRR Response has been submitted by all parties involved in the dispute), at a mutually agreed upon time and place, to attempt to resolve the Claim based upon the DRR Notice and DRR Response.

5. At any time after the first meeting required above, either party may terminate the DRR Process by written notice to the other party.

6. The parties may agree, in writing, to extend or modify the time limits or other provisions of the DRR process in relation to a specific pending Claim.

7. Unless otherwise designated in a written notice to the other parties, the City and the representatives of the Contractor and of the Design Professional will act as the parties' designated Dispute Resolution Representatives.

8. If a resolution of the Claim is reached, that resolution must be set forth in writing and must be signed by the Parties' designated Dispute Resolution Representative. If the resolution involves a change in any Agreement Documents, the Agreement Price, the Project Schedule, or any other change requiring a written Change Order or Amendment, the parties must execute an appropriate written Change Order or Amendment pursuant to the terms of the Agreement Documents.

C. MEDIATION

1. Unless extended by written agreement of the parties involved in the dispute, any Claim not resolved through the DRR process set forth above within five (5) calendar days after the meeting required under B (4) above, or after the DRR is terminated pursuant to B (5) above, whichever is earlier, will be submitted to mediation as a condition precedent to litigation by either party.

2. The mediation will be commenced by written demand upon the other party for mediation. If the parties cannot agree upon a mediator within ten (10) calendar days of the written demand, either party may make a request to the Civil Presiding Judge of the Maricopa County Superior Court to appoint a mediator. The mediation will occur within forth (40) calendar days of the written demand for mediation, unless the parties agree, in writing, to a longer period of time.

3. The qualifications for the mediator will be that he/she be: (a) an experienced mediator, arbitrator or litigator of construction disputes; and (b) having engaged a significant portion of his/her time involving and/or resolving construction disputes for at least the past five (5) years.

4. Each party will provide to the other party and the mediator all of the information and documentation required under B(1) and (2) above, together with any additional information and documentation which the party believes relevant. In addition, the parties will exchange, and provide to the mediator

such additional memoranda, information and/or documentation, as the mediator may request, and in the form and at such times, as the mediator may direct.

5. The parties will share the mediator's fee and any filing fees equally. The mediation will be held in Chandler, Arizona, unless another location is mutually agreed upon. Agreements reached in mediation will be specifically enforceable in any court having jurisdiction thereof.

D. LITIGATION

Any claim arising out of or related to the Agreement, except Claims relating to aesthetic effect and except those claims waived as provided for in the Agreement Documents, must be resolved through litigation in the Maricopa County, Arizona Superior Court.

CITY OF CHANDLER, ARIZONA
PUBLIC WORKS & UTILITIES DEPARTMENT

CERTIFICATE OF COMPLETION

PROJECT NAME:	**WATER SYSTEM UPGRADES PROGRAM**		
CITY PROJECT NO.:	**WA2100.251**		
If Federally Funded:			
FEDERAL NO.:		**ADOT NO:**	

(*This section to be completed by Prime*)
I HEREBY CERTIFY THAT ALL GOODS AND/OR SERVICES REQUIRED BY CITY OF CHANDLER FOR THIS PROJECT HAVE BEEN DELIVERED IN ACCORDANCE WITH THE AGREEMENT DOCUMENTS AND BID SPECIFICATIONS AND ALL ACTIVITIES REQUIRED BY THE AGREEMENTOR UNDER THE AGREEMENT HAVE BEEN COMPLETED AS OF THE COMPLETION DATE LISTED HERE:

FINAL ACCEPTANCE DATE:	

PRIME CONTRACTOR:

FIRM NAME:			
PRINCIPAL:			
TITLE:			
SIGNATURE:		DATE:	

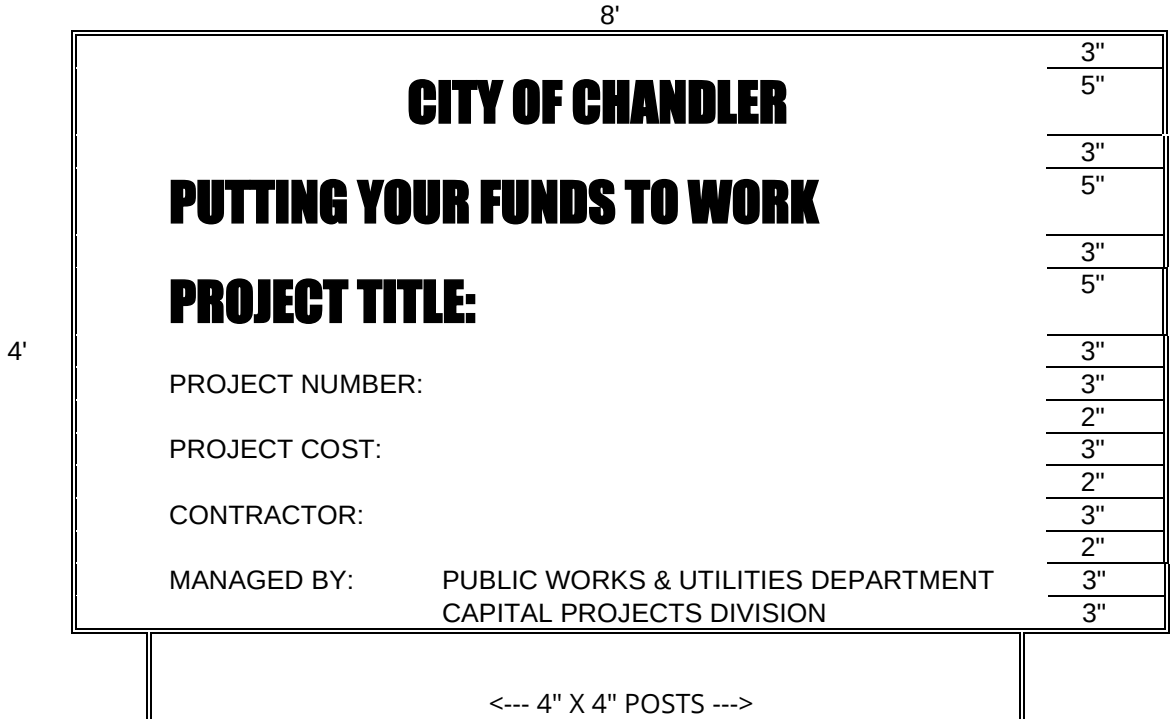
CERTIFIED BY [*INSERT NAME AND TITLE OF PARTY THAT OVERSEES CONSTRUCTION*]:

FIRM NAME:			
SIGNATURE:		DATE:	

PROJECT ACCEPTED BY CITY OF CHANDLER:

NAME:			
SIGNATURE:		DATE:	

CONSTRUCTION SIGN DETAIL



NOTES:

SIGN(S) MUST BE FURNISHED AND ERECTED PRIOR TO COMMENCEMENT OF CONSTRUCTION. POSTS MUST BE ANCHORED A MINIMUM OF TWO FEET INTO THE GROUND. BOTTOM OF SIGN MUST BE A MINIMUM OF FOUR FEET ABOVE THE GROUND.

TYPICAL PROJECT IDENTIFICATION SIGN FOR GENERAL PROJECTS MUST BE NON-REFLECTORIZED GREEN BACKGROUND, AND NON-REFLECTORIZED WHITE LETTERS AND NUMERALS.

ONE SIGN MUST BE ERECTED FOR BUILDINGS AND OTHER LIMITED AREA SINGLE SITES. FOR MULTIPLE SITES, ONE SIGN MUST BE ERECTED AT EACH SITE.

FOR LINEAR PROJECTS ONE HALF MILE OR LONGER, PLACE ONE SIGN AT EACH END OF THE PROJECT.

COST OF THE WORK

(APPLICABLE SOLELY TO CONSTRUCTION MANAGER AT RISK AND JOB ORDER CONTRACTING)

SECTION 1 – COSTS TO BE REIMBURSED

1.1 Cost of the Work

The term Cost of the Work will mean costs necessarily incurred by Contractor in the proper performance of the Work. Such costs must be at rates not higher than the standard paid at the place of the Project except with prior consent of City. The Cost of the Work will include only the items set forth in this Section 1.

1.2 Labor Costs

1.2.1 Wages of construction workers directly employed by the Contractor to perform the construction of the Work at the site or, with City's approval, at off-site workshops. Cost to be reimbursed will be the actual wages paid to the individuals performing the work.

1.2.2 Wages or salaries of the Contractor's supervisory and administrative personnel when stationed at the site with City's approval. No Contractor personnel stationed at the Contractor's home or branch offices will be charged to the Cost of the Work. Non-field office based Contractor management and support personnel are expected to provide service and advice from time to time throughout the job and his/her time devoted to Project matters is considered to be covered by the Contractor's Fee.

1.2.3 Wages and salaries of Contractor's supervisory or administrative personnel who would normally be stationed at the field office in accordance with Section 1.2.2 but who become engaged, at factories, workshops or on the road, in expediting the production or transportation of materials or equipment required for the Work, but only for that portion of his/her time required for the Work. Employee bonuses and/or costs associated with Employee Stock Ownership Plans ("ESOP") will not be considered reimbursable labor or labor burden costs and will be considered non-reimbursable costs considered to be covered by the Contractor's Fee.

1.2.4 Costs paid or incurred by Contractor for taxes, insurance, contributions, assessments and benefits required by law or collective bargaining agreements and, for personnel not covered by such agreements, customary benefits such as sick leave, medical and health benefits, holiday, vacations and pensions, provided such costs are based on wages and salaries included in the Cost of the Work under Subparagraphs 1.2.1 through 1.2.3.

1.2.4.1 Cost of the Work will include the actual net cost to Contractor for worker's compensation insurance attributable to the wages chargeable to the Cost of Work per this Agreement. The actual net cost of worker's compensation must take into consideration all cost adjustments due to experience modifiers, premium discounts, policy dividends, retrospective rating plan premium adjustments, assigned risk pool rebates, any applicable weekly maximums, etc. Contractor may charge an estimated amount for worker's compensation insurance costs, but will make appropriate cost adjustments to actual costs within 45 days of receipt of actual cost adjustments from the insurance carrier.

1.2.4.3 Overtime wages paid to salaried personnel (if approved in advance in writing by City) will be reimbursed at the actual rate of overtime pay paid to the individual. No time charges for overtime hours worked on the Project will be allowed if the individual is not paid for the overtime worked.

1.2.4.4 Any overtime premium or shift differential expense to be incurred by Contractor for hourly workers will require City's advance written approval before the incremental cost of the overtime premium or shift differential will be considered a reimbursable cost. If the Contractor is required to work overtime as a result of an inexcusable delay or other coordination problems caused by the Contractor or anyone he/she is responsible for, the overtime premium and/or shift differential expense portion of the payroll expense and related labor burden costs will be considered as cost not to be reimbursed.

1.2.4.5 Reimbursable labor burden costs will be limited to payroll taxes, worker's compensation insurance, the employer's portion of union benefit costs for union employees working on the Project, and the actual verifiable fringe benefit costs incurred by Contractor for non-union individuals working on the Project subject to the following maximum percentages for the following reimbursable non-union fringe benefit costs. The following maximums (as a percentage of reimbursable actual wages by individual) will apply for each of the following types of fringe benefit costs specifically attributable to each of the non-union personnel working on the Project:

- Medical Insurance, Dental, Life & AD&D Insurance: 12.00%
- Holiday, vacation and other paid time not worked: 10.00%
- Pension Plan Contributions to Vested Employee Account, Simplified Employee Pension Plans, or 401K matching plans (Note: ESOP related costs are covered by the Contractor Fee) 10.00%

For non-union personnel, no other fringe benefit costs (other than the three specific categories listed immediately above, will be considered reimbursable Cost of Work. Any labor burden costs that are in excess of the amounts considered reimbursable or are otherwise not considered reimbursable under the terms of this agreement are intended to be covered by the Contractor Fee.

1.3 Subcontract Costs

1.3.1 Payments made by Contractor to Subcontractors in accordance with the requirements of the subcontracts.

1.3.2 For Scope of Work Bid Packages typically performed by Subcontractors, Contractor may "self- perform" such work on an actual cost basis subject to an agreed upon Guaranteed Maximum Price for the "self-performed work". The Contractor must, unless agreed to by City in writing, bid his/her proposed guaranteed Maximum Price for the work to be "self-performed" against at least three other interested trade Contractors. All savings under any such Subcontract for "self-performed work" must be applied to reduce the Cost of Work under the Agreement and the Guaranteed Maximum Price. For purposes of defining "self-performed work" subject to this provision, any division of Contractor, or any separate Contractor or Subcontractor that is partially owned or wholly owned by the Contractor or any of his/her employees or employee's relatives will be considered a related party entity

and will be subject to this provision regarding "self-performed work". No self-performed work will be allowed to be performed on a Fixed Price basis.

1.3.3 Contractor (with respect to its Suppliers, Subcontractors and all lower tier Subcontractors) must provide City advance written notice and must obtain City's approval for any proposed Subcontract Change Order, Material Purchase Order, or other financial commitment in an amount in excess of $5,000 prior to placing such order or entering into such agreement (regardless of whether or not any such commitment will affect the prime Agreement Guaranteed Maximum Cost). It is agreed that sums applicable to any Subcontract Change Order, Purchase Order or other financial commitment entered into in violation of the above notice and approval requirement will not be included in the amounts owning to Contractor, Subcontractors or Suppliers whether as Costs of the Work or as reasonable termination costs in the event of termination.

1.4 Costs of Material and Equipment Incorporated in the Completed Construction

1.4.1 Costs, including transportation and storage, of materials and equipment incorporated or to be incorporated in the completed construction.

1.4.2 Costs of materials described in the preceding Subparagraph 1.4.1 in excess of those actually installed to allow for reasonable waste and spoilage. Unused excess materials, in any, will become City's property at the completion of the Work or, at City's option, may be sold by the Contractor. Any amounts realized from such sales must be credited to City as a deduction from the Cost of Work.

1.4.3 Proceeds from the sale of recyclable materials, scrap, waste, etc. will be credited to job cost.

1.5 Costs of Other materials and Equipment, Temporary Facilities and Related Items

1.5.1 Costs, including transportation and storage, installation, maintenance, dismantling and removal of materials, supplies, temporary facilities, machinery, equipment and hand tools not customarily owned by construction workers, that are provided by the Contractor at the site and fully consumed in the performance of the Work; and cost (less salvage value) of such items if not fully consumed, whether sold to others or retained by Contractor. Cost for items previously used by Contractor will mean fair market value.

1.5.2 Rental charges for temporary facilities, machinery, equipment, and hand tools not customarily owned by construction workers that are provided by Contractor at the site, whether rented from Contractor or others, and costs of transportation, installation, minor repairs and replacements, dismantling and removal thereof. Rates and quantities of equipment rented will be subject to City's prior written approval.

1.5.2.1 The Projected usage for each piece of equipment to be rented for use on the Project and the estimated total rentals must be considered by Contractor before the piece of equipment is rented so that an appropriate rent versus buy decision can be made. Purchased equipment must be considered "job owned". At the completion of the Project, Contractor must transfer title and possession of all remaining job-owned equipment to City, or Contractor may keep any such equipment for an appropriate fair market value credit to job cost, which will be mutually agreed to by City and Contractor.

1.5.2.2 Each piece of equipment to be rented must have hourly, daily, weekly and monthly rates and the most economical rate available will be reimbursed based on the circumstances of actual need and usage of the piece of equipment while it is stationed at the jobsite. When the piece of equipment is no longer needed for the work, no rental charges will be reimbursed if the piece of equipment remains at the jobsite for the convenience of Contractor.

1.5.2.3 Equipment Rental Rates

1.5.2.3.1 Compensation for equipment used on the Project will be paid in accordance with the Equipment Plan submitted by Contractor in the accepted GMP Proposal and no payments will be made in excess of the rates set forth in the Equipment Plan, or actual documented costs, whichever is less.

1.5.2.3.2 All equipment rental rates and costs are subject to City's right to audit when submitted as part of Equipment Plan and/or at any time during the Project.

1.5.2.4 The aggregate rentals chargeable for each piece of Contractor owned tools or equipment must not exceed 50% of the fair market value of such equipment at the time of its commitment to the Work. The original purchase price and date of purchase of the equipment will be documented with a copy of the purchase invoice for the piece of equipment. Such aggregate limitations will apply and no further rentals will be charged even if a piece of equipment is taken off the job and is later replaced by a similar piece of equipment. For purposes of computing the aggregate rentals applicable to aggregate rental limitations, rental charges for similar pieces of equipment will be combined if the pieces of equipment were not used at the same time.

1.5.2.5 Fair market value for used material and equipment as referred to in the Agreement Documents will mean the estimated price a reasonable purchaser would pay to purchase the used material or equipment at the time it was initially needed for the job. Note: This is usually lower than the price a reasonable purchaser would pay for similar new construction material or construction equipment.

1.5.2.6 All losses resulting from lost, damaged or stolen tools and equipment will be the sole responsibility of Contractor, and not City, and the cost of such losses will not be reimbursable under the Agreement.

1.5.2.7 Contractor will be required to maintain a detailed equipment inventory of all job-owned equipment (either purchased and charged to job cost or job-owned through aggregate rentals) and such inventory must be submitted to City each month. For each piece of equipment, such inventory should contain at a minimum (1) original purchase price or acquisition cost (2) acquisition date (3) approved Fair Market Value at the time the piece of equipment was first used on the job and (4) final disposition.

1.5.2.8 All costs incurred for minor maintenance and repairs will be reimbursed at actual cost. Such costs include routine and preventative maintenance, minor repairs and other incidental costs. Repairs and/or replacement of a capital nature are considered to be covered by the rental rates. Major repairs and overhauls are not considered routine and ordinary; consequently such costs are not reimbursable and are intended to be covered by the rental

rates.

1.5.3 Costs of removal of debris from the Site.

1.5.4 Costs of document reproductions, facsimile transmissions and long-distance telephone calls, postage and parcel delivery charges, telephone service at the site and reasonable petty cash expenses of the site office.

1.5.5 That portion of the reasonable expenses of Contractor's personnel incurred while traveling in discharge of duties connected with the Work.

1.5.5.1 No travel expenses will be reimbursed to Contractor's representatives unless Project related travel required them to travel to a destination more than 100 miles from the Project location. Any travel involving airfare will require advance written approval by an authorized City's representative.

1.5.6 Costs of materials and equipment suitably stored off the site at a mutually acceptable location, if approved in advance by the City.

1.5.7 Reproduction costs will be the actual costs of reproduction subject to a maximum of five cents ($.05) per square foot for prints and a maximum of five cents ($.05) per 8 ½ by 11-inch page for offset print or photo copied agreement documents, specifications, etc. Telephone costs will be the actual costs paid to the third party telephone company for the field office telephone.

1.6 Miscellaneous Costs

1.6.1 That portion of insurance and bond premiums that can be directly attributed to the Agreement. The City will reimburse Contractor for contractually required bond at time of first pay application for GMP and Cost-Based Agreements upon receipt of proof of payment from the Contractor. If the Contractor completes Work for less than the Agreement Price, Contractor must credit the City a pro- rated amount for the unused portion of the bond payment

1.6.1.1 Contractor's actual cost for insurance will be considered to be included within the Maximum limit for General Conditions Costs. All premiums for any insurance and bonds required for the Project must reflect the net actual costs to Contractor after taking into consideration cost adjustments due to experience modifiers, premium discounts, policy dividends, retrospective rating plan premium adjustments, assigned risk pool rebates, refunds, etc.

1.6.1.2 The amount to be reimbursed to Contractor for all contractually required insurance will be actual costs not to exceed a total of 2% of the Agreement Value, unless Contractor establishes to City's satisfaction that the actual cost is higher and City agrees to such actual higher cost in writing. If Contractor's cost of contractually required insurance is greater than the amount agreed to be reimbursed per this Agreement Provision, the difference will be considered to be covered by the Contractor's Fee. The City will reimburse Contractor for contractually required insurance on a monthly basis for GMP and Cost-Based Agreements. If Contractor can demonstrate substantial savings by paying for all insurance in advance, the City may agree to reimburse all insurance costs at time of first pay

application for GMP and Cost-Based Agreements with proof of payment from Contractor.

1.6.2 Sales, use or similar taxes imposed by a governmental authority that are related to the Work.

1.6.3 Fees and assessments for the building permit and for other permits, licenses and inspections for which Contractor is required by the Agreement Documents to pay.

1.6.4 Fees of laboratories for tests required by the Agreement Documents, except those related to defective or nonconforming Work and which do not fall within the scope of ¶ 1.7.3 below.

1.6.5 Royalties and license fees paid for the use of a particular design, process or product required by the Agreement Documents; the cost of defending suites or claims for infringement of patent rights arising from such requirement of the Agreement Documents; and payments made in accordance with legal judgments against Contractor resulting from such suites or claims and payments of settlements made with City's consent. However, such costs of legal defenses, judgments and settlements must not be included in the calculation of the Contractor's Fee or subject to the Guaranteed Maximum Price.

1.6.6 Data processing costs related to the Work. However, any such data processing costs will be limited to the cost of personal computer hardware used at the field office in the normal day to day administration, management and control of the Project. The aggregate charges for any such hardware must not exceed the Fair Market Value of the hardware at the time it was brought to the field office. If the total charges for any particular piece of hardware reach an amount equal to the Fair Market Value, that particular piece of hardware must be turned over to City whenever it is no longer needed for the Project. If Contractor elects to keep the particular piece of hardware, the job costs must be credited with a mutually agreeable amount which will represent the Fair Market Value of the particular piece of hardware at the time it was no longer needed for the job. Software or other costs associated with the use of computer programs will not be considered to be a reimbursable cost and will be considered to be covered by the Contractor's Fee.

1.6.7 Deposits lost for causes other than Contractor's negligence or failure to fulfill a specific responsibility to City as set forth in the Agreement Documents.

1.6.8 Legal, mediation and arbitration costs, including attorneys' fees, other than those arising from disputes between City and Contractor, reasonably incurred by Contractor in the performance of the Work and with City's prior written approval; which approval will not be unreasonably withheld.

1.6.9 Expenses incurred in accordance with Contractor's standard personnel policy for relocation and temporary living allowances of personnel required for the Work, if pre-approved by City in writing. If City authorizes the reimbursement of relocation costs, the reimbursable relocation expenses will be limited to a maximum of $50,000 per person. Any relocation cost incurred by Contractor in excess of the amount reimbursed by City will be considered to be covered by the Contractor's Fee.

1.7 Other Costs and Emergencies

1.7.1 Other costs incurred in the performance of the Work if and to the extent approved in

advance in writing by City.

1.7.2 Costs due to emergencies incurred in taking action to prevent threatened damage, injury or loss in case of an emergency affecting the safety of persons and property.

1.7.3 Costs of repairing or correcting damaged or nonconforming Work executed by Contractor, Subcontractors or Suppliers, provided that such damaged or nonconforming Work was not caused by negligence or failure to fulfill a specific responsibility of Contractor and only to the extent that the cost of repair or correction is not recoverable by Contractor from insurance, sureties, Subcontractors or Suppliers.

1.8 Related Party Transactions

1.8.1 The term "related party" will mean a parent, subsidiary, affiliate or other entity having common ownership or management with Contractor; any entity in which any stockholder in, or management employee of, Contractor owns any interest in excess of ten percent in the aggregate; or any person or entity which has the right to control the business or affairs of Contractor. The term "related party" includes any member of the immediate family of any person identified above.

1.8.2 If any of the costs to be reimbursed arise from a transaction between Contractor and a related party, Contractor must notify City in writing of the specific nature of the contemplated transaction, including the identity of the related party and the anticipated cost to be incurred, before any such transaction is consummated or cost incurred. If City, after such notification, authorizes in writing the proposed transaction, then the cost incurred will be included as a cost to be reimbursed, and Contractor must procure the Work, equipment, goods or service from the related party, as a Subcontractor. If City fails to authorize the transaction, Contractor must procure the Work, equipment, goods or service from some person or entity other than a related party.

SECTION 2 – COSTS NOT TO BE REIMBURSED

2.1 The Cost of Work must not include:

2.1.1 Salaries and other compensation of Contractor's personnel stationed at Contractor's principal office or offices other than the site office, except as specifically provided in Subparagraphs 1.2.2 and 1.2.3.

2.1.2 Expenses of Contractors' principal office and offices other than the site office.

2.1.3 Overhead and general expenses, except as may be expressly included in Section 1.

2.1.3.1 Costs of Contractor's home office computer services or other outside computer processing services will be considered overhead and general expense. Accordingly, Contractor should not plan to perform any such computer related services or alternatives at the field office when such services or functions can be performed at Contractor's home or branch offices, or other outside service locations.

2.1.4 Contractor's capital expenses, including interest on Contractor's capital employed for the Work.

2.1.5 Rental costs of machinery and equipment, except as specifically provided in subparagraph 1.5.2.

2.1.6 Except as provided in Subparagraph 1.7.3 of the Agreement, costs due to the negligence or failure to fulfill a specific responsibility of Contractor, Subcontractors and Suppliers or anyone directly or indirectly employed by any of them or for whose acts of them may be liable.

2.1.7 Any cost not specifically and expressly described in Section 1.

2.1.8 Costs, other than costs included in Change Orders approved by City that would cause the GMP to be exceeded.

SECTION 3 – DISCOUNTS, REBATES, REFUNDS AND SAVINGS

3.1 Cash discounts obtained on payments made by Contractor will accrue to City if (1) before making the payment, Contractor included them in an Application for Payment and received payment therefore from City, or (2) City has deposited funds with Contractor with which to make payments; otherwise, cash discounts will accrue to Contractor. Trade discounts, rebates, refunds and amounts received from sales or surplus materials and equipment will accrue to City, and Contractor must make provisions so that they can be secured.

3.1.1 Cost of the Work will be credited with all insurance policy discounts, performance and payment bond rebates or refunds, refunds or return premiums from any Subcontractor default insurance, refunds or rebates from any Contractor controlled insurance programs applicable to the Project, merchandise rebates of any nature, refunds of any nature, insurance dividends; and a portion of any volume rebates or free material credits earned with purchase of material or other goods and services charged to the job.

3.1.2 "Cash" discounts which may accrue to Contractor will be limited to a maximum of 1.5% of invoice cost. Any portion of "Cash" discounts greater than 1.5% will automatically accrue to City if Contractor is eligible to take advantage of the discounts.

3.2 Amounts that accrue to City in accordance with the provisions of Paragraph 3.1 will be credited to City as a deduction from the Cost of the Work.

3.3 Any and all savings on the GMP, or any separately guaranteed items comprising the GMP, will belong to City, subject to any express right in the Agreement for Contractor to share in savings. Savings are subject to City's right to audit, and may be audited separately.

SECTION 4 – GENERAL CONDITIONS COSTS

4.1 General Conditions Costs may include, but are not limited to, the following types of costs incurred by Contractor during construction of the Work to the extent they are reimbursable Costs of the Work as delineated above: payroll costs for Work conducted at the site, payroll costs for the superintendent and full-time general foremen, payroll costs for management

personnel resident and working on the site workers not included as direct labor costs engaged in support (e.g. loading/unloading, clean-up, etc.), administrative office personnel, costs of offices and temporary facilities including office materials, office supplies, office equipment, minor expenses, utilities, fuel, sanitary facilities and telephone services at the site, costs of liability insurance premiums not included in labor burdens for direct labor costs, costs of bond premiums, costs of consultants not in the direct employ of Contractor or Subcontractors, fees for permits and licenses.

4.2 General Conditions Costs may be paid on a percentage of the Agreement Price or on a lump/stipulate sum basis as set forth in the Agreement. All costs included in the General Conditions Costs will not be separately invoiced to or paid by City.

4.3 The total amount of General Conditions Costs for the Work may be divided by the number of days allowed for performance of the Work, to determine a fixed daily rate for General Conditions Costs that may be used in computing the General Conditions Costs allocated to any period of time, or for any adjustments in the General Conditions Costs agreed to in writing by City.

LANDSCAPE ESTABLISHMENT PERIOD

Section 1 – Description and General

Contractor is in direct control of work performed under the Landscape Establishment Period. If work is subcontracted, a representative of the Contractor will be present at the site of the work for all hours that the subcontractor works. Subcontracting of Landscape Establishment work will be permitted for weed eradication with herbicides, because of special licensing. A licensed temporary service may be used to supply labor to Contractor if Contractor has received approval from City Representatives. Contractor will submit the required subcontract documentation.

Contractor must provide adequate personnel to accomplish the required maintenance of the plant materials at intervals acceptable to City Representatives.

If not healthy at the end of the maintenance period, the maintenance must be continued until the plant material is approved by City.

1.1 Time and Schedule

Unless otherwise expressly agreed to in writing by City, the Landscape Establishment Period will be per General Conditions Section 6.5.4.

1.2 Planted Stock and Seeding Establishment

1.2.1 Tree planting and staking must be per City of Chandler Standard Detail C-801.

1.2.2 All trees will stand erect on their own without stakes when brought to this site. If the tree cannot stand on its own when nursery stakes are removed, the tree will be removed and replaced.

1.3 Pre-Emergent Herbicide and Weed Control

1.3.1 Contractor will provide three applications of an approved pre-emergent herbicide on all unpaved areas of the project, as directed by City Representatives, to control weed growth in all areas of the project. The number of applications may be increased as directed by the City Representative, and at no additional cost to City, if the City Representative deems additional applications are required to control weed growth.

1.3.2 Application sequence will be approved in advance by City. The first application of pre-emergent will be completed prior to the application of Decomposed Granite and will be included with the cost of the Decomposed Granite as specified and part of the Construction Phase portion of work. The second application of pre-emergent will be completed after installation of the Decomposed Granit and no later than half-way through the Landscape Establishment Period. The third and final application of pre-emergent will be applied 15 days prior to completion of the Landscape Establishment portion of the project. The second and third pre-emergent applications will be included with the cost of Landscape Establishment. Watering will be completed in accordance with the manufacturer's recommendations, as included and as related to each application.

1.3.3 The pre-emergent herbicide will be applied in accordance with the Technical Specifications and the recommendations of the pre-emergent herbicide manufacturer, as approved by City Representatives.

1.3.4 The control of weeds will be accomplished by the use of herbicides. Manual removal of weeds will be required, after herbicides have taken affect.

1.3.5 Contractor is responsible for the removal and disposal of all trash and debris that during the Landscape Establishment Period. Contractor will keep the project in a neat and orderly manner during the duration of the Landscape Establishment Period.

1.4 Water

The water used during Landscape Establishment to properly maintain the plant material will be furnished by City, at designated sources from within the project limits, at no charge to Contractor. Contractor will be responsible for all equipment, materials and labor necessary to load, transport and unload water for watering purposes.

1.5 Plant Material Replacements

The plant material replacement will be considered as included in the work for Landscape Establishment, and will be made at no charge to the City.

1.5.1 Shrub and Plant Replacement - During the second half of the Landscaping Establishment period, Contractor will provide, where required, plant replacements as follows:

Original Size	Replacement Size
1 gallon	5 gallon
5 gallon	15 gallon
15 gallon	24-inch box
36-inch box	48-inch box

1.5.2 Tree Replacement – During the second half of the Landscape Establishment Period, Contractor will provide plant material replacements for existing plants that die as follows:

Existing Plant Material Sizes	Replacement Size
Trees:	
2-inch Caliper	24-inch box
4-inch Caliper	36-inch box
6-inch Caliper and greater	54-inch box
Shrubs:	
All Existing Shrubs	15 gallon

1.6 Measurement and Payment

See Technical Specifications for Measurement Payment provisions.

EXHIBIT F

SUBCONTRACTOR DOCUMENTS WITH CM@RISK

Any subcontractor assumptions, clarifications, exclusions, terms & conditions, signature blocks, etc. included are strictly between the CM@RISK and their subcontractors, and do not apply to the Agreement between the CM@RISK and the City.

City Council Memorandum Public Works & Utilities Memo No. CP25-058

Date: November 04, 2024
To: Mayor and Council
Thru: Joshua H. Wright, City Manager
Andy Bass, Deputy City Manager
John Knudson, Public Works and Utilities Director
Daniel Haskins, Capital Projects Division Manager
From: Gina Ishida-Raybourn, Principal Engineer
Subject: Construction Manager at Risk (CMAR) Construction Services Agreement No. WA2100.401, with Archer Western Construction, LLC, for the Water System Upgrades Program

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Proposed Motion:

Move City Council award CMAR Construction Services Agreement No. WA2100.401, to Archer Western Construction, LLC, for the Water System Upgrades Program, in an amount not to exceed $2,094,455.

Background/Discussion:

The Pecos Surface Water Treatment Plant (PSWTP), located at 1475 East Pecos Road, was put into service in 1989. The current treatment capacity of the PSWTP is 60 million gallons per day (MGD). In recent years, the source water quality from the Salt River Project canal that feeds the PSWTP has been increasing in total organic carbon (TOC). TOC is a major contributing factor in the formation of Total Trihalomethanes (TTHM), which are regulated compounds that can occur in the city's water distribution system. The most effective method to mitigate TTHM formation in the water system is to reduce TOC levels in the treated water at the PSWTP. A common method to accomplish TOC reduction utilizes contact with granular activated carbon (GAC) filter media to reduce TOC in the water.

The PSWTP currently has four existing filters with anthracite media installed and eight filters which had GAC media installed in early 2022 and early 2024. This project will replace the remaining four filters with GAC media to directly reduce TOC levels in the treated water. Additionally, minor structural rehabilitation work

will be performed to extend the remaining useful life of the four concrete filter basins.

The project scope of work consists of the replacement of existing anthracite media with GAC and sand media, procurement and installation of polymer pump and associated piping, and minor concrete rehabilitation. The agreement completion time is 235 calendar days following Notice to Proceed.

A related Professional Services Agreement with Hazen and Sawyer, for the Water System Upgrades Program, is also scheduled for this City Council meeting.

A related Pre-Construction Services Construction Manager at Risk Contract with Archer Western Construction, LLC, for the Water System Upgrades Program, is also scheduled for this City Council meeting.

Evaluation:

The selection process was followed in accordance with city policy and procedure and state law. Staff recommends agreement award to Archer Western Construction, LLC, based on qualifications, relevant firm experience, team experience, project understanding, and project approach. Staff reviewed the Guaranteed Maximum Price proposal and determined it to be reasonable.

Fiscal Impact

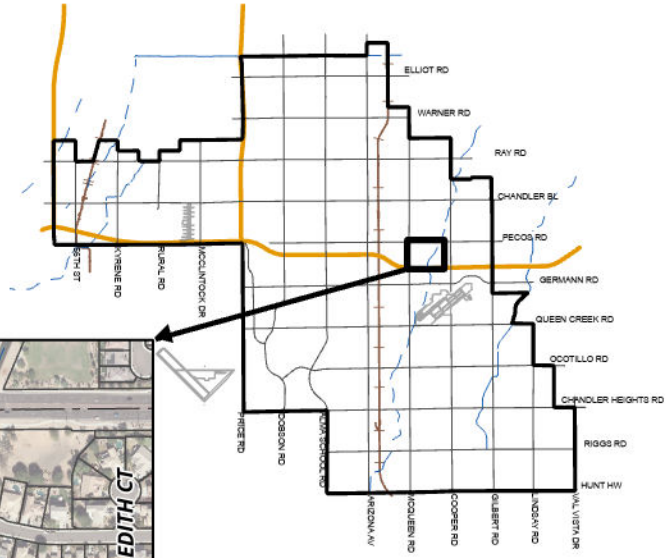
Account No.	Fund Name	Program Name	Dollar Amount	CIP Funded Y/N
601.3820.6718.6WA210	Water Bond	Water Treatment Plant Improvements	$2,094,455	Y

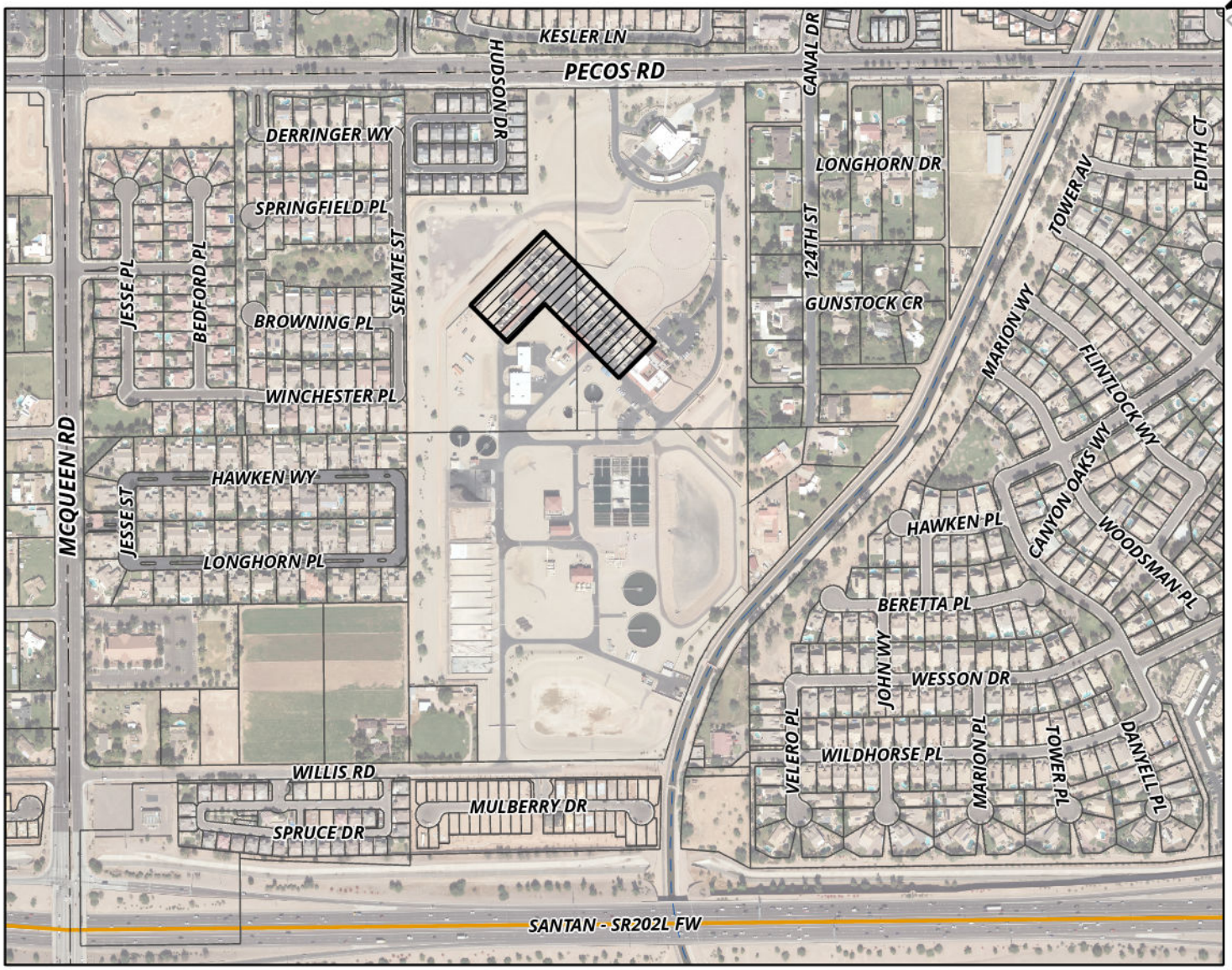
Attachments

Location Map

Agreement - Archer Western

WATER SYSTEM UPGRADE PROGRAM - CONSTRUCTION PROJECT NO. WA2100.401





MEMO NO. CP25-058

PROJECT SITE

NTS

ChanGIS

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CITY OF CHANDLER, ARIZONA

Water System Upgrades Program

CITY PROJECT NO. WA2100.401

CONSTRUCTION SERVICES AGREEMENT

(CONSTRUCTION MANAGER AT RISK)

Daniel Haskins

Daniel Haskins, P.E.
CIP City Engineer

CITY OF CHANDLER, ARIZONA

Water System Upgrades Program
CITY PROJECT NO.: WA2100.401

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CONSTRUCTION MANAGER AT RISK
CONSTRUCTION SERVICES AGREEMENT
PROJECT NO.: WA2100.401

This Agreement (the "AGREEMENT") is made and entered into on the _____day of _____, 2024, ("Effective Date") by and between City of Chandler, an Arizona municipal corporation, hereinafter called "City" and **Archer Western** the "Construction Manager at Risk" or "CM@Risk" designated below (City and CM@Risk may individually be referred to as "Party" and collectively referred to as "Parties").

City and CM@Risk agree as follows:

ARTICLE 1 - PARTICIPANTS AND PROJECT

CITY: **CIP City Engineer: Daniel Haskins, P.E.**
Public Works & Utilities Department
P.O. Box 4008, Mail Stop 407 Chandler, AZ 85244-4008
Phone: 480-782-3335 Email: Daniel.Haskins@chandleraz.gov

CITY: **Construction Project Manager: Gina Ishida-Raybourn**
Public Works & Utilities Department
P.O. Box 4008, Mail Stop 409 Chandler, AZ 85244-4008
Phone: 480-782-3584 Email: Gina.Ishida-Raybourn@chandleraz.gov

CM@RISK:

Legal Company Name:	Archer Western Construction
Mailing Address:	4710 E. Elwood Street, Suite 6, Phoenix, AZ 85040
Physical Address:	SAME
Arizona Roc No.:	275896 & 275897
Federal Tax Id No.:	27-0887868
State Where Organized:	Arizona
Business Organization:	Limited Liability Company
Statutory Agent Name:	Corporation Service Company
Statutory Agent Mailing Address:	8825 North 23rd Avenue, Suite 100, Phoenix, AZ 85021
Statutory Agent Physical Address:	SAME

CM@Risk's Authorized Project Representative:

Name:	Kyle Ledbetter
Title:	Project Executive
Phone:	602-293-7835
Email:	kledbetter@walshgroup.com

PROJECT DESCRIPTION:

Filters 9-12 media replacement with GAC/Sand media and structural rehabilitation. Includes installation of a new polymer pump and polymer piping to the filters.

PROJECT LOCATION:

Pecos Surface Water Treatment Plant
1475 East Pecos Road
Chandler AZ 85244

ARTICLE 2 - AGREEMENT DOCUMENTS

2.1 **AGREEMENT DOCUMENTS**

The Agreement between City and CM@Risk will consist of the following Agreement Documents:

1. This Construction Services Agreement and all of its Exhibits, including Project Plans and Technical Specifications.
2. General Conditions and General Conditions Appendices, incorporated by reference.
3. Project Specific Special Provisions as set forth in **Exhibit A**, incorporated by reference.
4. Accepted GMP/Price Proposal as set forth in **Exhibit D**, incorporated by reference.

2.2 In the event of any inconsistency, conflict, or ambiguity between or among the Agreement Documents, the Agreement Documents will take precedence as described in Section 14.1.4 of the General Conditions.

2.3 **DEFINITIONS**

The definitions in Sections 2 and 15 of the General Conditions apply to all the Agreement Documents, including this Agreement.

ARTICLE 3 - PRE-CONSTRUCTION SERVICES

Although CM@Risk has performed Pre-Construction Services pursuant to a separate Agreement between City and CM@Risk, the completion, quality and accuracy of those services and the deliverables provided by City thereunder directly impact CM@Risk's performance of its obligations under this Agreement. Therefore, all of CM@Risk's obligations, duties, and warranties in relation to Pre-Construction Services and deliverables survive completion of the Pre-Construction Services Agreement and are incorporated herein. Any breach of any of CM@Risk's duties, obligations, or warranties under the Pre-Construction Services Agreement will likewise be considered a breach of this Agreement.

ARTICLE 4 - CONSTRUCTION SERVICES

4.1 **GENERAL**

4.1.1 CM@Risk agrees at its own cost and expense, to do all work necessary and required to fully, timely and properly complete the construction of the Project in strict accordance with the Agreement Documents in a good and workmanlike manner, free and clear of all claims, liens, and charges whatsoever, in the manner and under the conditions specified, and within the schedule, stated in attached **Exhibit A**.

4.1.2 CM@Risk must provide all of the labor and materials, and perform the Work in accordance with Section 4 of the General Conditions. Some, but not all, of the major components of the Construction Services and the corresponding subsections of Section 4 of the General Conditions are set forth below.

4.1.3 This is an Agreement for complete construction services in accordance with the Construction Manager at Risk method of delivery of construction services. CM@RISK has participated in the design process and been an active member of the Project Design Team and is fully aware of any issues and constraints involved in this Construction Project.

4.1.4 CM@RISK is the CITY's fiduciary responsible for undertaking all necessary action contemplated under the Agreement documents to construct the Project and ensure timely and quality completion of the Project at a cost within the Guaranteed Maximum Price (GMP).

4.1.5 At all times relevant to this Agreement and performance of the Work, the CM@Risk must fully comply with all Laws, Regulations, or Legal Requirements applicable to City, the Project and the Agreement, including, without limitation, those set forth on attached **Exhibit A**.

4.1.6 CM@Risk must perform the Work under this Agreement using only those firms, team members and individuals designated by CM@Risk consistent with the Statement of Qualifications, the GMP Proposal, or otherwise approved by City pursuant to the General Conditions. No other entities or individuals may be used without prior approval of the Project Manager

4.1.7 CM@Risk will comply with all terms and conditions of the General Conditions.

4.1.8 In the event of a conflict between this Agreement and the General Conditions or an exhibit hereto or appendix thereto, the terms of this Agreement will control.

4.1.9 Ownership of Work Product. Notwithstanding anything to the contrary in this Agreement, all Work Product prepared or otherwise created in connection with the performance of this Agreement, including the Work, are to be and remain the property of City. For purposes of this provision, "Work Product" will include all designs, drawings, plans, specifications, ideas, renderings and other information or matter, in whatever form created (e.g., electronic or printed) and in all media now known or hereinafter created. All Work Product will be considered Work Made for Hire as defined in the United States Copyright Act 17 U.S.C. § 101 (Copyright Act). If for any reason, any such Work is found not to be a Work Made for Hire, CM@Risk hereby transfers and assigns ownership of the copyright in such Work to City. The rights in this Section are exclusive to City in perpetuity.

4.2 **CM@RISK'S PRE-AGREEMENT AND PRE-WORK DELIVERABLES**

4.2.1 The CM@Risk must provide the Deliverables in accordance with Section 4.2 of the General Conditions.

4.3 **PRE-CONSTRUCTION CONFERENCE**

Refer to Section 4.3 of the General Conditions.

4.4 **PERFORMANCE OF THE WORK (INCLUDING FIELD MEASUREMENTS, SUBCONTRACTORS, AND SUPPLIERS)**

Refer to Section 4.4 of the General Conditions.

4.5 **CONTROL OF THE PROJECT SITE**

Refer to Section 4.5 of the General Conditions.

4.6 **PROJECT SAFETY**

Refer to Section 4.6 of the General Conditions.

4.7 **MATERIALS QUALITY, SUBSTITUTIONS AND SHOP DRAWINGS**

Refer to Section 4.7 of the General Conditions.

4.8 **PROJECT RECORD DOCUMENTS**

Refer to Section 4.8 of the General Conditions.

4.9 **WARRANTY AND CORRECTION OF DEFECTIVE WORK**

Refer to Section 4.9 of the General Conditions.

ARTICLE 5 - CITY RESPONSIBILITIES

5.1 City will have the responsibilities, and provide the information specified in, and subject to the conditions set forth in, Section 5 of the General Conditions.

ARTICLE 6 - AGREEMENT TIME

6.1 **GENERAL**

6.1.1 The Agreement Duration is **235** Calendar Days.

6.1.2 The Agreement Time will start with the Notice to Proceed (NTP) and end with Final Acceptance, as set forth in Article 6.4 below. The Notice to Proceed cannot be issued until approval and acceptance by City of the GMP or Fixed Price.

6.1.3 The Agreement Time will be as set forth in the Project Schedule. CM@Risk agrees that it will commence performance of the Work and complete the Project through Final Acceptance within the Agreement Time.

6.1.4 Time is of the essence of this Agreement for the Project, and for each phase and designated Milestone thereof.

6.2 PROJECT SCHEDULE

6.2.1 The Project Schedule approved as part of the GMP Proposal and incorporated herein as part of the attached **Exhibit D** must be updated and maintained throughout CM@Risk's performance under this Agreement in accordance with Section 6.2 of the General Conditions.

6.2.2 Failure on the part of CM@Risk to adhere to the approved Project Schedule will be deemed a material breach and sufficient grounds for termination of this Agreement by City.

6.3 SUBSTANTIAL COMPLETION

Substantial Completion must be achieved no later than the Substantial Completion Date set forth in the Project Schedule. Substantial Completion will be determined in accordance with Section 6.3 of the General Conditions.

6.4 FINAL ACCEPTANCE

6.4.1 Final Acceptance will be obtained within the time period set forth in the Project Schedule.

6.4.2 Final Acceptance will be issued pursuant to Section 6.5 of the General Conditions.

6.5 LIQUIDATED DAMAGES

6.5.1 Substantial Completion Liquidated Damages. CM@Risk acknowledges and agrees that if CM@Risk fails to obtain Substantial Completion of the Work within the Agreement Time, City will sustain extensive damages and serious loss as a result of such failure. The exact amount of such damages will be extremely difficult to ascertain. Therefore, City and CM@Risk agree that if CM@Risk fails to achieve Substantial Completion of the Work within the Agreement Time, City will be entitled to retain or recover from CM@Risk, as liquidated damages and not as a penalty, the sum per calendar day as indicated in MAG § 108.9.

6.5.2 Final Acceptance Liquidated Damages. For the same reasons set forth in Article 6.5.1 above, City and CM@Risk further agree that if CM@Risk fails to achieve Final Acceptance of the Work within the Agreement Time, City will be entitled to retain or recover from

CM@Risk, as liquidated damages and not as a penalty, the sum per calendar day as indicated in MAG § 108.9 commencing from the actual date of Substantial Completion or Final Acceptance as required under the Agreement.

6.5.3 MAG Liquidated Damages. If no liquidated damages are specified in Articles 6.5.1 or 6.5.2 above, then the liquidated damages provisions in MAG § 108.9 will apply.

6.5.4 City may deduct liquidated damages described in this Article 6.5 from any unpaid amounts then or thereafter due CM@Risk under this Agreement. Any liquidated damages not so deducted from any unpaid amounts due CM@Risk will be payable to City at the demand of City, together with interest from the date of the demand at the highest lawful rate of interest payable by CM@Risk.

6.6 **MUTUAL WAIVER OF CONSEQUENTIAL DAMAGES ONLY**

6.6.1 CM@Risk and City waive claims against each other for consequential damages arising out of or relating to this Agreement. This mutual waiver includes:

6.6.1.1 Damages incurred by City for rental expenses, for losses of use, income, profit, financing, business and reputation, and for loss of management or employee productivity or of the services of such persons; and

6.6.1.2 Damages incurred by CM@Risk for principal office expenses including the compensation of personnel stationed there, for losses of financing, business and reputation, and for loss of profit except anticipated profit arising directly from the Work.

6.6.2 This mutual waiver is applicable, without limitation, to all consequential damages due to either Party's termination of this Agreement. Nothing contained in this Article 6.6 will be deemed to preclude an award of liquidated damages, when applicable, in accordance with Article 6.5 above.

6.6.3 Nothing herein will be deemed to constitute a waiver of any other remedy available to City in the event of CM@Risk's default under this Agreement prior to full performance of the Work including, as applicable, specific performance or completion of the Work on behalf of CM@Risk, the cost and expense of which will be offset against any monies then or thereafter due to CM@Risk (if any) and otherwise immediately reimbursed to City by CM@Risk.

ARTICLE 7 - AGREEMENT PRICE

7.1 **AGREEMENT PRICE**

7.1.1 In exchange for CM@Risk's full, timely, and acceptable performances and construction of the Work under this Agreement, and subject to all of the terms of this Agreement, City will pay CM@Risk the "Agreement Price," which:

The sum of the CM@Risk's Fee and reimbursable Cost of the Work, as defined in Section 15 of the General Conditions, which the CM@Risk guarantees will not exceed the GMP set forth in **Exhibit D** in the amount of **$2,094,455.** Costs which would cause the GMP to be exceeded must be paid by CM@Risk without reimbursement from City.

7.1.2 The Agreement Price is all-inclusive and specifically includes all fees, cost, insurance and bond premiums, allowances, construction contingency, owner's contingency, and taxes of any type necessary to fully, properly and timely perform and construct Work.

7.2 **CHANGES TO AGREEMENT PRICE**
Shall be determined under Section 9 of the General Conditions.

ARTICLE 8 - FORCED LABOR OF ETHNIC UYGHURS PROHIBITED

8.1 **FORCED LABOR OF ETHNIC UYGHURS PROHIBITED.** By entering into this Agreement, Contractor certifies and agrees Contractor does not currently use and will not use for the term of this Agreement: (i) the forced labor of ethnic Uyghurs in the People's Republic of China; or (ii) any goods or services produced by the forced labor of ethnic Uyghurs in the People's Republic of China; or (iii) any contractors, subcontractors or suppliers that use the forced labor or any goods or services produced by the forced labor of ethnic Uyghurs in the People's Republic of China.

SIGNATURE PAGE TO FOLLOW

IN WITNESS WHEREOF, the Parties hereto have executed this Agreement through their duly authorized representatives and bind their respective entitles as of the effective date.

"CITY" CITY OF CHANDLER

MAYOR

RECOMMENDED BY:

Daniel Haskins

Daniel Haskins, P.E.
CIP City Engineer

APPROVED AS TO FORM:

City Attorney

ATTEST:

City Clerk Seal

"CM@Risk"
Archer Western Construction, LLC

Signature Date

Daniel P. Walsh
Print Name

President
Title

dpwalsh@walshgroup.com
Signer Email Address

EXHIBIT A

PROJECT SPECIFIC
SPECIAL PROVISIONS

4.2.7 Aerial Construction Photography

General Conditions Section 4 Subsections 4.2.7.1 & 4.2.7.2 are not applicable to this project.

4.2.8 Government Approvals and Permits

General Conditions Section 4 Subsection 4.2.8.1, City permit fees will be paid internally by the City and all other fees will be the responsibility of the Contractor.

Subletting of Agreement

Contractor must perform, with his own organization, work amounting to not less than 50 percent of the total Agreement cost.

Failure to submit Subcontractor's List Form, demonstrating self-performance not less than 50 percent of the total Agreement cost, will cause the bid to be deemed non-responsive.

Contractors should contact the Arizona Registrar of Contractors for information on license requirements.

EXHIBIT B

GENERAL CONDITIONS

GENERAL CONDITIONS

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SECTION 1 - SCOPE OF THESE GENERAL CONDITIONS

These General Conditions encompass provisions that apply, and are incorporated into all construction Agreements entered into by the City of Chandler, unless otherwise specifically excluded in the executed Agreement.

SECTION 2 - GENERAL DEFINITIONS

Allowance : A specific amount for a specific item of Work, if any, that City agrees has not been sufficiently designed, detailed, or selected (including design changes from 90% to 100% as authorized by and at the discretion of the City) at the time the Agreement Price is agreed to for Contractor to provide a definitive price.

Alternate Systems Evaluations or Alternative Analysis: Alternatives for design, means and methods or other scope considerations that are evaluated using value analysis principles and have the potential to reduce construction costs while still delivering a quality and functional Project that meets City requirements.

Change Order: A written instrument issued after execution of the Agreement Documents signed by City and Contractor, stating their agreement upon all of the following: the addition, deletion or revision in the scope of services or deliverables; the amount of the adjustment to the Agreement Price, the extent of the adjustment to the Agreement Time, or modifications of other agreement terms. The Agreement Price and the Agreement Time may be changed only by Change Order.

Consultant: Person or firm that provides professional services.

City (Owner or OWNER): City of Chandler, a municipal corporation, with whom Contractor has entered into the Agreement and for whom the Work or Services are to be provided pursuant to the Agreement(s).

Contingent Bid Items: This is a minor bid item which is likely, but not certain, to occur during the course of work. If the Engineer determines that this work is required, the Contractor will accomplish the work and payment will be made based on the contingent unit bid price included in the proposal. Since the quantity listed in the proposal is primarily for bid comparison, the amount of work required by the Engineer may vary materially from this.

Agreement: The written agreement executed between City and Contractor, including all of the Agreement Documents.

Agreement Documents: The documents which together form the Agreement between City and Contractor, as identified in Article 2 of the Agreement, or are otherwise incorporated into the Agreement, including the Agreement, the exhibits thereto, these General Conditions, any Notice to Proceed, and any Job Order (if applicable), the Plans and Specifications, Project Schedule, written and properly executed Change Orders, MAG Specifications and City's amendments thereto, and any other documents so designated in the Agreement.

Agreement Price: The agreed-upon price to be paid to Contractor for full, timely, and acceptable completion of the Work or Services under the terms of the Agreement.

Agreement Time(s): The number of calendar days or the dates related to the applicable phase, Substantial Completion, or Final Acceptance as stated in Agreement Documents. Agreement Time starts

with the Notice to Proceed (NTP) and ends with Final Acceptance. The Agreement Time is set forth in the Agreement and is based upon the Project Schedule agreed to by City in writing.

Contractor: The person or business association with whom City has entered into an agreement for construction related Work or Services in relation to the Project at issue.

Contractor Payment Request: The form that is accepted by City and used by Contractor in requesting progress payments or final payment and which must include such supporting documentation as is required by the Agreement Documents or City.

Construction Budget: The City's budget for construction of the Project.

Construction Documents: The Plans, Specifications, and Drawings prepared and issued by the Design Professional and approved by City for construction, meaning the documents are sealed by the Design Professional (as required), acceptable for permitting and incorporated into the Agreement by this reference. All amendments and modifications to the Construction Documents must be approved in writing by City prior to incorporation into the Agreement.

Cost of the Work: The term Cost of the Work will mean costs necessarily incurred by Contractor in the proper performance of the Work. Such costs will be at rates not higher than the standard paid at the place of the Project except with prior consent of City.

Critical Path Method (CPM): A scheduling technique which identifies the logical sequence of the activities occurring in a Construction Project, the anticipated time required to complete each activity in the Project, and the activities that must be completed on schedule to finish the Project within the anticipated time. Typically, activities are arranged in a network that shows both activities and their dependencies. CPM is also used as a management technique which enables contracting parties to predict when activities may occur so that resources can be effectively used and limitations can be identified.

Critical Path: Critical Path is the sequence of project network activities which add up to the longest overall duration. Once established in the Project Schedule, the Critical Path for the Project must not be changed without prior written approval of City.

Day: Calendar day(s) unless otherwise specifically stated in the Agreement Documents.

Design Professional: The qualified, licensed person, firm or corporation who furnishes design and construction administration services required under the Agreement Documents. These services may include, but are not limited to: development of Construction Drawings and Documents, review of Contractor Submittal(s), review of and response to Requests for Information, approval and certification of progress payment applications, construction administration, and construction agreement close out.

Differing Site Conditions: Concealed or latent physical conditions or subsurface conditions at the Site that, (i) materially differ from the conditions indicated in the Agreement Documents, or (ii) are of an unusual nature, differing materially from the conditions ordinarily encountered and generally recognized as inherent in the Work at the general area of the Site. Caliche, rock, hard-digging or sandy/silty soil encountered on a project is not considered a "Differing Site Condition."

Drawings (Plans): Documents, which visually represent the scope, extent and character of the Work to be furnished and performed by Contractor during the construction phase and which have been prepared

or approved by the Design Professional and City. These documents include Drawings that have reached a sufficient state of completion and released by Design Professional solely for the purposes of review and use in performing constructability or bid-ability reviews by Contractor and in preparing cost estimates (e.g. Master Planning and Programming, Schematic Design, Design Development, and Construction Drawings), but *"not for construction*." Shop Drawings are not Drawings as so defined.

Final Acceptance: The City's acceptance of the facility or project from the Contractor after all Work is completed, tested, and inspected in accordance with the Agreement requirements. Final Acceptance results in a Letter of Acceptance (LOA).

Fixed Price: A fixed price or amount for an Agreement Price, Scope of Work, materials, or other item under an Agreement, Change Order, or other agreement, which City agrees, in writing, to pay instead of the actual cost.

Float: The number of Days by which an activity can be delayed without lengthening the Critical Path and extending the Agreement Time. Unless otherwise expressly agreed in writing, all Float belongs to City.

Laws, Regulations, or Legal Requirements: Any and all applicable laws, rules, regulations, ordinances, codes and orders applicable to the Project of any and all governmental bodies, agencies, authorities and courts having jurisdiction and any applicable provisions of the Development Agreement for the Project (if any), including, without limitation, those provisions relating to the design and construction of the Project.

Line Item: The individual elements of Work identified on a bid or other schedule and associated with a price or a unit price and quantity particular to that individual element of the Work. Also refers to individual items of work within the Schedule of Values.

Liquidated Damages: Designated damages for the City to collect as compensation upon a specific breach (example: late delivery).

Long-Lead Item: Long-lead item refers to the equipment, product, or system that is identified at the earliest stage of a project to have a delivery time long enough to affect directly the Critical Path/the overall lead time of the project.

MAG: The Maricopa Association of Governments.

MAG Specifications: The most current version of the Uniform Standard Specifications for Public Works Construction published by MAG.

MAG Standard Details: The most current version of the Uniform Standard Details as published by MAG.

Minor change: A change in the Work having no impact on cost or time or the City-approved design intent, as determined by City.

Notice to Proceed (NTP): A written notice given by City to Contractor fixing the date on which Contractor will start to perform Contractor's obligations under the Agreement.

Project: The Project specified in the Agreement (including a Job Order).

Project Manager: The Project Manager designated in Article 1 of the Agreement, or any successor thereto

designated by City. The Project Manager has the authority to act on behalf of City, as delineated and limited by the Agreement Documents and applicable law. And City will communicate with Contractor through the Project Manager. However, the Project Manager has no authority to bind City or City Council in contravention of any City code, State or Federal statute or regulation, or these General Conditions.

Project Schedule: The schedule for the completion of the Project agreed to and required by City.

Project Specific Conditions: Additional conditions which apply to the specific Project and Scope of Work which are set forth in Exhibit D of the Agreement.

Project Team: The Project Team consisting of the Design Professional, Contractor, Project Manager, and such others as City may designate.

Punch List: The list initially prepared by Contractor pursuant to the Agreement Documents, reviewed and supplemented by the Project Manager (and at the sole option of the Project Manager, the Design Professional) and approved by City containing items of incomplete work not impacting Substantial Completion, if allowed for under the Agreement, and to be completed or corrected by Contractor after Substantial Completion and before Final Acceptance in accordance with the Agreement Documents.

Quality Assurance (QA) Testing: Testing performed to verify the accuracy and applicability of the QC testing results and to ascertain that the materials installed meet the specified levels of quality in accordance with the Agreement Documents.

Quality Control (QC) Testing: Testing performed to assure that the materials installed comply with the requirements in the Agreement Documents.

Requests for Information (RFIs): Formal written request from Contractor to City or Design Professional for the Project seeking clarification or additional information needed for Contractor to properly complete the Work or Services under the Agreement. City may require RFI's to be submitted on a specific form or in a specified format.

Schedule of Values (SOV): The specified document prepared by Contractor, and approved and accepted by City, which divides the Agreement Price into pay items, such that the sum of all pay items equals the Agreement Price for the construction phase Work, or for any portion of the Work having a separate specified Agreement Price.

Scope of Work: The scope of work agreed to or required by City and incorporated into the Agreement as Exhibit A.

Shop Drawings: All drawings, diagrams, schedules and other data specifically prepared for the Work by Contractor or a Subcontractor, Sub-subcontractor, manufacturer, supplier or distributor to illustrate some portion of the Work.

Site: The land or premises on which the Project is located.

Specifications: The part(s) of the Agreement Documents for the construction phase consisting of written technical descriptions of materials, equipment, construction systems, standards and workmanship as applied to the Work and certain administrative details applicable thereto. Where specified, the Project must be constructed using the current Uniform Standard Specifications and Details for Public Works

Construction as furnished by the Maricopa Association of Governments, as amended by City.

Subconsultant: A person, firm or corporation having an Agreement with Consultant/Contractor to furnish services required as its independent professional associate or consultant with respect to the Project.

Subcontractor: An individual or firm having a direct Agreement with Contractor or any other individual or firm having an Agreement with the aforesaid contractors at any tier, who undertakes to perform a part of pre-construction services or construction phase Work at the Site for which Contractor is responsible. Subcontractors must be selected through the Subcontractor selection process described in the Agreement Documents, if any.

Substantial Completion: The date when the City determines that the Work (or separable units of Phases as provided in the Agreement Documents) is essentially and satisfactorily complete in accordance with the Agreement Documents such that the Project is ready for use by the City for its intended purpose, opening to the general public, full occupancy or use by City (including, without limitation, all separate units, or rooms, facilities, access, income-generating areas, and all areas serving the general public, as applicable, must be ready for full operation without material inconvenience or discomfort), including, to the extent applicable to the Work, the following: all materials, equipment, systems, controls, features, facilities, accessories, and similar elements are installed in the proper manner and in operating condition, inspected, and approved; surfaces have been painted; masonry and concrete cleaned with any sealer or other finish applied; utilities and systems connected and functioning; site work complete; permanent heating, ventilation, air conditioning, vertical transportation, and other systems properly operating with proper controls; lighting and electrical systems installed, operable and controlled; paving completed, signage installed, and other work as applicable, has been performed to a similar state of essential and satisfactory completion.

Supplier: A manufacturer, fabricator, distributor, or vendor having a direct Agreement with Contractor or with any Subcontractor to furnish materials or equipment to be incorporated in the construction phase Work by Contractor or any Subcontractor.

Total Float: Number of Days by which pre-construction services or construction phase Work or any part of the same may be delayed without necessarily extending a pertinent Agreement Time or schedule milestone in the Project Schedule.

Work: The entire completion of construction or the various separately identifiable parts thereof, required to be furnished during the construction phase. Work includes and is the result of performing or furnishing labor and furnishing and incorporating materials, resources and equipment into the construction, and performing or furnishing services and documents as required by the Agreement Documents for the construction phase.

Writing: Typing, printing, photography and other modes of representing or reproducing words in a visible form, including email, and expressions.

SECTION 3 - STANDARD SPECIFICATIONS AND DETAILS

3.1 City operates under the latest revision of the MAG Specifications and MAG Standard Details as amended by City. City's current amendment to the MAG Specifications, part of the City's Unified Development Manual, may be found and downloaded from City's website at http://www.chandleraz.gov.

3.2 Copies of the MAG Specifications and MAG Standard Details are available at the Maricopa Association of Governments office, 302 N. 1st Avenue, Suite 300, Phoenix, Arizona. They may also be downloaded from their website at: http://www.azmag.gov/Newsroom/Publications

3.3 The MAG Specifications and Standard Details and City's amendments thereto are incorporated into the Agreement by this reference.

SECTION 4 - CONTRACTOR'S RESPONSIBILITIES FOR CONSTRUCTION SERVICES

4.1 GENERAL

4.1.1 Contractor must construct the Work in accordance with the Agreement Documents and as outlined in Exhibit A of the Agreement to the satisfaction of City, exercising the degree of professional care, skill, diligence, quality and judgment that a professional construction manager engaged, experienced and specializing in the construction management of construction and facilities of similar scope, function, size, quality, complexity and detail in urban areas throughout the United States comparable to Chandler, Arizona would exercise at such time, under similar conditions. Contractor must, at all times, perform the Work in conformance with sound and generally accepted engineering principles and construction management and construction contracting practices.

4.1.2 If Contractor observes errors, discrepancies or omissions in the Agreement Documents, Contractor must promptly notify the Design Professional and City and request clarification. If Contractor, with the exercise of reasonable care, should have recognized such error, inconsistency, omission, or difference and fails to report it to City, and if Contractor proceeds with the Work affected by such observed errors, discrepancies or omissions, without receiving such clarifications, Contractor does so at its own risk and will be liable to City for damages resulting from proceeding without clarification.

4.1.3 Project Team and agents of each of them, testing agencies and governmental agencies with jurisdictional interests will be provided access to the Work at reasonable times for their observation, inspection, and testing. Contractor must provide proper and safe conditions for such access.

4.1.4 Contractor must comply with, and require all Subcontractors to comply with, the Arizona Contractors' license laws, including all requirements with respect to being duly registered and licensed.

4.1.5 Contractor must ensure that all employees performing any Work for which Contractor is responsible have a legal right to live and work in the United States. In addition, all compensation of any such employee must meet all applicable requirements of the Fair Labor Standards Act (FLSA) and Federal Minimum Wage laws.

4.1.6 Contractor must comply with the Immigration Reform and Control Act of 1986 (IRCA). Contractor understands and acknowledges the applicability of the IRCA activities. Contractor agrees to comply with the IRCA while performing their work and to permit City inspection of Contractor personnel records to verify such compliance.

4.1.7 Pursuant to MAG Specifications §§ 107.4, Contractor must report immediately any discovery of archeological ruins or artifacts. Excavation must stop immediately so that City can decide on the pertinent steps to follow such discovery.

4.1.8 All property owners that may be affected by the proposed construction activities must be notified of the scope, duration of the construction activities and possible interference with their day-to-day activities by Contractor prior to start of construction. In addition, individual residential or commercial interferences, such as driveway restrictions, water outages, and all other Work adjacent to residence/business, require 48-hour notification in advance of specific adjoining Work. Notification may be through door hangers or other procedures approved by the City.

4.1.9 Access must be maintained to adjacent properties at all times during construction. Where property has more than one point of access, no more than one access will be restricted or closed at any one time. Access to adjacent private driveways will be maintained during all non-working hours.

4.1.10 Contractor must furnish and erect construction signs in accordance with Project Specifications. The signs must be professionally prepared and subject to approval by City, must be maintained by Contractor for the duration of the project, and must be removed by Contractor during the final project clean up.

4.1.11 The number of signs required, the size, shape, installation requirements and information to be included for construction signs is established on the detail sheet, provided, however, signs must be a minimum of 4 foot by 8 foot and must be installed so that the bottom of the sign is at least 4 foot above grade. No direct payment will be made for furnishing and erecting construction signs. The cost thereof must be included in other items for which direct payment is made. Sign locations will be determined by City.

4.1.12 All required construction signs must be installed by Contractor within 7 Days of Notice to Proceed.

4.1.13 The Work to be accomplished under these Agreement Documents has been designed for City by a Design Professional retained by City for this purpose. It is understood that normal construction Administration for the purpose of interpretation of the Agreement Documents is provided by City. Should any services of the Design Professional be required to assist in the corrections of errors or omissions by Contractor, or services of the Design Professional be required because of changes in structure or equipment where Contractor has requested approval of substitute methods or material, or any other items detailed herein below, those services will be provided by the Design Professional at the standard hourly rates previously negotiated with City and must be paid for by the Contractor.

4.1.14 Contractor must reimburse City for costs incurred by the Design Professional for additional services to the Project through no fault of City or the Design Professional including, but not limited to, the following conditions:

a. Additional Site visits, investigations, inspections, design work or reports by the Design Professional which are required due to damages to existing facilities or completed Work caused by the Contractor in his performance, Contractor's negligence, or Contractor's Work which is rejected as defective or as failing to conform to the Agreement Documents;

b. Design Professional construction phase services rendered on the project during the time the project remains incomplete after the Agreement date of final completion will be charged to Contractor at a rate previously negotiated City; and

c. All retesting required due to the failure of Contractor's Work to meet the requirements of the Agreement Documents will be at Contractor's expense. All standby and travel time by the City's testing lab, the Design Professional or City due to Contractor's inability to be prepared for testing at the agreed upon time will be at the Contractor's expense.

4.1.15 City may withhold from any payment otherwise due to Contractor any amounts necessary to pay the Design Professional for such additional services as provided herein above.

4.1.16 Contractor will not be required to bear additional costs incurred by City due to errors by the Design Professional.

4.2 **CONTRACTOR'S PRE-AGREEMENT AND PRE-WORK DELIVERABLES**

4.2.1 Prior to award of the Agreement, Contractor must execute Agreement and deliver to City. Failure to do so may delay Agreement award. Contractor must also provide to City its Contractor's License classification and number and its Federal Tax I.D. number.

4.2.2 Before beginning any Work under the Agreement, Agreement must be fully executed by City.

4.2.3 After Agreement award, City will issue to Contractor an award letter. At that time Contractor must deliver to City such bonds and certificates of insurance with endorsements in such amounts (and other evidence of insurance requested by City) required under Section 11 of these General Conditions, and as the Agreement requires.

4.2.4 As evidence of Workmen's Compensation Insurance, Contractor must, upon request, provide a letter of certification from the Industrial Commission of Arizona that Contractor is insured by the State Compensation Fund or is an authorized self-insurer or a certificate of insurance issued by an insurance company authorized by the Insurance Department of Arizona to write Workmen's Compensation and Occupational Disease Insurance in the State of Arizona.

4.2.5 Within 10 Days of the date of the executed Agreement letter issued by City, Contractor must submit to City for review and acceptance the following items:

4.2.5.1 Comprehensive construction Project Schedule including a Critical Path Method (CPM) diagram schedule as described in Section 6.2. Project Schedule must be in Microsoft Project standard file format. Within 10 Days of receipt of City's comments, Contractor must make all required corrections, adjustments, and additions to complete the Project Schedule and resubmit to City for review.

4.2.5.2 Preliminary schedule of submittals and Shop Drawings. Within 10 Days of receipt of City's comments, Contractor must submit the corrected and completed schedule of Shop Drawings submissions for approval. Contractor's schedule of Shop Drawings and sample submittals will be acceptable to City if it provides a workable arrangement for reviewing and processing the required submittals.

4.2.5.3 Schedule of Values in a form specified by City reflecting the subcontracts and other categories that will be used to submit Pay Applications for the Work. The total amount of the Schedule of Values must not be greater than the Agreement Price. The Schedule of Values will be reviewed at the Pre-Construction Conference and revised by Contractor within 10 Days after Pre-Construction Conference in response to comments and questions from

City. Once accepted by City in writing, the Schedule of Values for the Project must not be changed without the prior written approval of City.

4.2.6 Video Recording Requirement. Prior to performing any Work, Contractor must document the existing conditions of the Site, all other areas where Work will occur and all adjacent areas that may be impacted by the Work via digital video format. Contractor must video record and index all areas, features, buildings and other public and private improvements that could potentially be impacted by the Work. Video recording must be coordinated with City. When video recording private property, Contractor must also coordinate the video recording with the private property owner, if possible. Contractor must provide City with a copy of said digital video format prior to performing any Work.

4.2.7 Aerial Drone Construction Photography.

4.2.7.1 If Agreement duration is greater than 90 calendar days, Contractor must engage a professional unmanned aerial vehicle (UAV) aerial pilot to photograph the Site prior to construction mobilization, at three-month intervals during construction, and following final inspection. Drone camera specifications must meet the following minimum requirements:

a. 1-inch CMOS
b. Pixels: 20M
c. FOV 84 8.8 mm/24 mm (35 mm format equivalent) f/2.8-f/11 auto focus at 1 m-
d. For photographing: 16.9 Aspect Ratio: 5472x3078
e. For video shooting: MP4/MOV/H.264
f. FHD: 1920x1080 120p @100Mbps
g. File format: High Definition (HD) JPEG for digital photos and HD MPEG 4 for digital video.
h. All metadata to be recorded including GPS data and preserved with photographs provided.

Interval	**JPEG**
3 month intervals	At an altitude (AGL) between 70-90 ft.
3 month intervals	Images to be taken every 50-100 ft. to be determined based on project scope.

4.2.7.2 Drone photos to be taken in sequential geographical order and then organized and provided in the same manner unless otherwise specified.

4.2.7.3 Photos to be provided digitally via an online file share service and/or by a USB drive to contractor.

4.2.7.4 Drone pilots to obey ALL local (city, county, state) UAV regulations as well as FAA UAV guidelines including, but not limited to, conducting all flights during daylight hours, not exceeding maximum altitude ceilings (depending on area), not flying over people, yielding to other aircraft.

4.2.7.5 Drone pilots must fly drone within visual line of sight (VSOL) and have visual spotter when needed. Drone pilots only to operate in favorable weather conditions when minimum visibility is 3 miles or greater.

4.2.7.6 Drone pilots to conduct a preflight checklist and visually inspect the entire flight path prior to flying to ensure a safe flight.

4.2.7.7 Airspace Authorizations. Operations in Class G airspace are allowed without air traffic control (ATC) permission. Operations in Class B, C, D and E airspace need ATC authorization. Drone pilots to schedule each flight in advance and based on airspace if required will notify nearby airports/control towers, etc.

4.2.8 Government Approvals and Permits.

4.2.8.1 Contractor must obtain all necessary permits for the Work and pay all applicable fees, unless otherwise noted on the Plans and in the Specifications. City permit fees will be paid internally by City. For bidding purposes, an allowance for all permit fees is included in the bid schedule under the item "allowance for permit fees." The Contractor will be paid for the actual cost of the permit fees upon submitting a receipt showing the fee Contractor has paid. Excluded from the above allowance are items such as all costs incurred by the Contractor in securing the permit except for the actual permit fee established by the agency, cost for all shutdowns or outages, cost for pole bracing, cost of permits for construction water, cost of construction water, cost for any additional insurance requirements, cost for any licenses, and other similar type costs. Contractor is specifically notified of the need to obtain the necessary environmental permits or file the necessary environmental and regulatory permit notices.

4.2.8.2 Copies of all permits and the associated notices must be provided to City prior to starting the permitted activity.

4.3 PRE-CONSTRUCTION CONFERENCE

4.3.1 Prior to the commencement of any Work, City will schedule a Pre-Construction Conference.

4.3.2 The purpose of this Conference is to establish a working relationship between Contractor, the utility firms, and various City agencies. The agenda will include critical elements of the Work schedule, submittal schedule, cost breakdown of major lump sum items, Payment Requests and processing, coordination with the involved utility firms, and emergency telephone numbers for all representatives involved in the course of construction.

4.3.3 Minimum attendance by Contractor at any mandatory meeting with City must be (1) Contractor's Representative, who is authorized to execute and sign documents on behalf of the firm, (2) Contractor's on-site Superintendent, and (3) Contractor's Safety Office, or other employee responsible for safety.

4.4 PERFORMANCE OF THE WORK (INCLUDING FIELD MEASUREMENTS, SUBCONTRACTORS, AND SUPPLIERS)

4.4.1 Unless otherwise provided in the Agreement Documents to be the responsibility of City or a separate Contractor, Contractor must provide through itself or Subcontractors the necessary supervision, labor, inspection, testing, start-up, material, equipment, machinery, temporary utilities and other temporary facilities to permit Contractor to complete the Work consistent with the Agreement Documents.

4.4.2 Contractor must perform all construction activities efficiently and with the requisite expertise, skill and competence to satisfy the requirements of the Agreement Documents. Contractor must at all times exercise complete and exclusive control over the means, methods, safety, sequences and techniques of construction.

4.4.3 Contractor's Superintendent must be present at the Site at all times that material Work

under this Agreement is taking place. Contractor's Superintendent or designee must be present at the Site at all times any other Work under this Agreement is taking place. Superintendent must not be replaced without written notice to City. Whenever the Superintendent is not present at a particular part of the Work where the City or Design Professional may desire to inform the Contractor relative to interpretation of the Drawings and Specifications or to disapproval or rejection of materials or Work performed, the City or Design Professional may provide such information in writing to the foreman or other worker in charge of the particular part of the Work in reference to which the information is given. Information so given will be as binding as if given to the Superintendent.

4.4.4 All elements of the Work must be under the direct supervision of a foreman or his designated representative on the Site who must have the authority to take actions required to properly carry out that particular element of the Work.

4.4.5 Working Hours. Except in connection with the safety or protection of persons or the Work or property at the Site or adjacent thereto, and except as otherwise indicated, all Work at the Site must be performed during regular working hours, and Contractor will not permit overtime work or the performance of Work on Saturday, Sunday or any legal holiday without City's written consent given after prior written notice to City. If it will become absolutely necessary to perform Work at night or on Saturdays, Sundays or legal holidays, the City must be informed at least 24 hours in advance of the beginning of performance of such Work. Only such Work will be done at night as can be done satisfactorily as determined by the City. Good lighting and all other necessary facilities for carrying out and inspecting the Work must be provided and maintained at all points where such Work is being done. Further, unless such non-normal work hours are performed at City's request or required by the Agreement Documents, Contractor must pay to City all additional costs incurred by City by reason of such non-normal working hours. Expenses incurred by City for overtime compensation must be reimbursed by Contractor as follows: (i) City staff at the rate set forth in current City Fee Schedule as published on City website, (ii) Design Professional and staff at the standard hourly rates previously negotiated with City, and (iii) all others at actual cost plus ten percent administrative overhead. Such costs may be deducted by City from any payments due to Contractor. Provided, however, if overtime work or work during other than normal hours is at the request of City and not due to Contractor delay, City will pay the cost of City overtime expenses.

4.4.6 Where the Agreement Documents require that a particular product be installed or applied by an applicator approved by the manufacturer, it is Contractor's responsibility to ensure the Subcontractor employed for such work is approved by the manufacturer. All materials and equipment must be stored, applied, installed, connected, erected, used, cleaned and conditioned in accordance with the instructions of the applicable manufacturer, fabricator, supplier or distributor, except as otherwise provided in the Agreement Documents; but no provisions of any such instructions will be effective to impose on City of Design Professional responsibility for the means, methods, techniques, sequences or procedures of construction or for safety precautions incident thereto.

4.4.7 Before starting the Work, Contractor must carefully study and compare the various Plans, Drawings, other Agreement Documents, and Specifications relative to that portion of the Work, as well as the information furnished by City, must take field measurements of any existing conditions related to that portion of the Work and must observe any conditions at the Site affecting it. The exactness of grades, elevations, dimensions, or locations given on any Drawings, or the Work installed by other contractors, is not guaranteed by City.

4.4.8 Before ordering materials or doing Work, Contractor and each Subcontractor must verify measurements at the Site and will be responsible for the correctness of such measurements. No extra charge or compensation will be allowed because of differences between actual dimensions and the dimensions indicated on the Agreement Documents, including the Drawings.

4.4.9 Ground Level Construction Photography.

4.4.9.1 The Contractor must furnish progress photographs of the project. The photographer selected by the Contractor must be approved by the City and must be either a commercial photographer or an individual experienced and equipped for such photography.

4.4.9.2 The Contractor must deliver to City all photographs taken during that period with each application for payment. If the current photographs do not accompany the application, the application will not be reviewed and will be returned to the Contractor as incomplete.

4.4.9.3 Photographs must be identified by use of typewritten labels affixed to the back of the photograph. The label must provide a description of the view, the direction from which the photograph was taken, the name of the project, City's project number, the name of Contractor and the date of the photography. The stationing must also be included for all pipeline installations.

4.4.9.4 Photographs must be taken during the construction period and must be of aesthetic composition and depict the progress of the Work from the beginning of construction through and including the finished product. City may vary the specified frequency so that significant progress or changes can be recorded on the photographs.

4.4.10 Underground Facilities.

4.4.10.1 The existence and number of facilities as shown on the Plans are estimated from information furnished by the particular utility. Contractor is responsible for field verification and location of all utilities prior to the start of construction. No field work will be allowed to start until Contractor has contacted Arizona 811 and all affected utilities have been located. In addition, Contractor must expose and physically locate all potentially conflicting utilities prior to construction. The actual locations of the utilities must be compared to locations shown on the Plans and any required changes in alignment and grade must be made at the time of construction in consultation with Project Manager. It is generally recognized and Contractor should anticipate that information from Arizona 811 or information from utility companies during project design, frequently fails to disclose all underground facilities. The fact that more utility lines or other underground facilities are located in the Project Site than shown on the Project Plans does not constitute an "unforeseen Condition" and such undisclosed underground facilities do not differ materially from the conditions which Contractor should expect. The provisions of Sections 105.4, 105.6, 107.11 and 109.8.1 of the MAG Uniform Standard Specifications for Public Works Construction apply and are incorporated herein by this reference.

4.4.10.2 Contractor is responsible for all coordination with utility companies. The provisions of Sections 105.4, 105.6, 107.11 and 109.8.1 of the MAG Uniform Standard Specifications for Public Works Construction strictly apply and no additional compensation will be paid to Contractor for delays due to utility work on the project.

4.4.11 Relocation of Existing Water Meters. When a service line has been extended and a line

setter installed in a meter box, City forces will re-install meter. No compression fittings will be utilized.

4.4.12 Water Turn-On or Turn-Off.

4.4.12.1 Contractor must coordinate all water line turn-ons and turn-offs through the City. Application must be made to the Municipal Utility Division and Contractor must pay the established charges. The City will close existing valves, but will not guarantee a bone-dry Shutdown.

4.4.12.2 Contractor must notify all customers affected by the turn-off not less than 48 hours in advance. Notification must be in writing, must give the reason for the turn-off and must give the estimated time and duration that water service will be interrupted. Contractor is also notified that water turn-off will not be permitted on the Day before and after Thanksgiving Day and Christmas Day.

4.4.12.3 No direct payment will be made to Contractor for turn-ons or turn-offs. Costs associated therewith will be included in other items for which direct payment is made.

4.4.13 Tests and Inspections.

4.4.13.1 Contractor must give City timely (at a minimum, twenty-four hours) notice of readiness of the Work for all required inspections, tests or approvals. Contractor must give timely notice to City in advance of backfilling or otherwise covering any part of the Work so that city representative may, if desired, observe such part of the Work before it is concealed. Whenever Contractor varies the normal period during which Work or any portion of it is carried on each Day, Contractor must give timely notice to City so that city representative may, if desired, be present to observe the Work in progress. If Contractor fails to give such timely notice, any Work done in the absence of city representative will be subject to rejection. If Contractor gives such notice to City, but then is not ready for such inspections, tests, approvals or observations at the time so noticed, Contractor must reimburse City for all costs incurred by the attendance of city representatives.

4.4.13.2 If any law, ordinance, rule, regulation, code, or orders of any public body having jurisdiction requires any Work (or part thereof) to be inspected, tested or approved, Contractor (unless another party is specified in the Agreement Documents) must assume full responsibility therefor, pay all costs in connection therewith and furnish City the required certificates of inspection, testing, or approval. Contractor must also be responsible for and must pay all costs in connection with any inspection or testing required by the Specifications in connection with City's acceptance of a manufacturer, fabricator, supplier or distributor of materials or equipment proposed to be incorporated in the Work, or of materials or equipment submitted for approval prior to Contractor's purchase thereof for incorporation in the Work. The cost of all other inspections, tests and approvals required by the Agreement Documents will be paid by City (unless otherwise specified).

4.4.13.3 All inspections, tests or approvals other than those required by law, ordinance, rule, regulation, code or order of any public body having jurisdiction must be performed by organizations acceptable to City and by the Design Professional if so specified.

4.4.13.4 Neither observations by City, the Design Professional nor inspections, tests or approvals by others will relieve Contractor from their obligations to perform the Work in accordance with the Agreement Documents.

4.4.14 Uncovering Work. If any Work that is to be observed, inspected, tested or approved is covered without written concurrence of City, it must, if requested by City be uncovered for observation. Unless Contractor has given City timely notice of Contractor's intention to cover such Work and City has not acted with reasonable promptness in response to such notice, Contractor must furnish all necessary labor, material and bear all the expenses of such uncovering, exposure, observation, inspection and testing and of satisfactory reconstruction, including compensation for additional professional services, and an appropriate deductive Change Order will be issued.

4.4.15 In all cases of interconnection of its Work with existing or other Work, Contractor must verify at the Site all dimensions relating to such existing or other Work. Any errors due to Contractor's failure to so verify all such grades, elevations, locations or dimensions must be promptly rectified by Contractor without any increase in the Agreement Price. Any design errors or omissions noted by Contractor during this review must be reported promptly to City.

4.4.16 Contractor must establish and maintain all construction grades, lines, levels, and benchmarks, and will be responsible for accuracy and protection of same. This Work must be performed or supervised by a licensed civil engineer or surveyor in the State of Arizona.

4.4.17 Contractor must photograph all buried piping of greater than four (4) inches in diameter prior to backfill.

4.4.18 Contractor is responsible for the proper performance of the work of Subcontractors and any acts and omissions in connection with such performance. Nothing in the Agreement Documents is intended or deemed to create any legal or contractual relationship between City and any Subcontractor or Sub-Subcontractor, including but not limited to any third-party beneficiary rights.

4.4.19 Contractor must coordinate the activities of all Subcontractors. Contractor must coordinate performance of the Work with City's Public Works & Utilities Department and other departments or agencies within City. The Design Professional and other contractors or parties involved in the Project. If City performs other work on the Project or at the Site with separate contractors under City's control, Contractor agrees to cooperate and coordinate its activities with those of such separate contractors so that the Project can be completed in an orderly and coordinated manner without unreasonable disruption.

4.4.20 Contractor will not substitute or change any Subcontractor or Supplier without the prior written approval of City. Any substitute or replacement Subcontractor or Supplier must be required to meet the same qualifications and selection criteria and process as the original Subcontractor or Supplier. If a Subcontract/Supplier selection plan has been approved by City, Contractor will follow that plan unless otherwise approved by City in writing.

4.4.21 Contractor must not change or replace any members of its Project team, including Contractor's Representative, Project Manager, or Superintendent, without an explanation for the change being given to City, and receiving prior written approval of the change from City, which approval will not be unreasonably withheld.

4.4.22 Subcontractors whose scope of work has a value greater than 15% of the total Agreement Price are required to furnish performance and payment bonds to Contractor, unless

otherwise approved in writing by City.

4.4.23 Contractor must comply with MAG Specification § 108.2 (E) unless otherwise specified in Agreement Documents.

4.5 **CONTROL OF THE PROJECT SITE**

4.5.1 Throughout all phases of construction, including suspension of Work, Contractor must keep the Site reasonably free from debris, trash and construction wastes to permit Contractor to perform its construction services efficiently, safely and without interfering with the use of adjacent land areas. Prior to Final Acceptance of the Work, or a portion of the Work, Contractor must remove all debris, trash, construction wastes, materials, equipment, machinery and tools arising from the Work or applicable portions thereof to permit City to occupy the Project or a portion of the Project for its intended use.

4.5.2 Contractor must take whatever steps, procedures or means necessary to prevent dust nuisance due to construction operations. The dust control measures must be maintained at all times to the satisfaction of City and in accordance with the requirements of the Maricopa County Bureau of Air Pollution Control Rules and Regulations.

4.5.3 Contractor must maintain Americans with Disabilities Act (ADA) and American National Standards Institute (ANSI) accessibility requirements during construction activities, including without limitation compliance with the 2010 regulations governing implementation of the ADA to the extent applicable. ADA and ANSI accessibility requirements must include, but not be limited to, parking, building access, areas of refuge, and emergency exit paths of travel. Contractor is responsible for the coordination of all Work to minimize disruption to residents and the public.

4.5.4 Only materials and equipment used directly in the Work will be brought to and stored on the Site by Contractor. When equipment is no longer required for Work, it must be removed promptly from the Site. Protection of construction materials and equipment stored at the Site from weather, theft, damage and all other adversity is solely the responsibility of the Contractor.

4.5.5 Contractor agrees all persons working on the Site must act at all times in the best interest of the Project and will comply with all applicable rules and regulations reasonably set forth by City related to the Site. Notwithstanding the foregoing or anything in this Agreement to the contrary, City may remove from the Site any individual who City deems in their reasonable discretion to be creating a disturbance or causing any problem on the Site.

4.5.6 Contractor will be responsible to City for the acts and omissions of Contractor's employees, Subcontractors and their agents and employees, and any other person performing any of the Work under an Agreement with Contractor, or claiming by, through or under Contractor, for all damages, losses, costs and expenses resulting from such acts or omissions.

4.5.7 City may conduct criminal, drive history, and all other requested background checks of Contractor and Subcontractor personnel performing Work or who have access to City's information, data, or facilities in accordance with City's current background check policies, or the provisions of the Project Specific Conditions. Any officer, employee or agent that fails to background check must be replaced immediately.

4.5.8 City will have a final authority, based upon security reasons: (i) to determine when

security clearance of Contractor's and Subcontractor's personnel is required; (ii) to determine the nature of the security clearance, up to and including fingerprinting personnel; and (iii) to determine whether or not any individual or entity may provide Services or perform Work under the Agreement.

4.5.9 If City objects to any personnel for any reasonable cause, then Contractor must, upon notice from City, remove such individual from the Project.

4.6 **PROJECT SAFETY**

4.6.1 The Project and all Work performed in relation thereto is governed by applicable provisions of the federal laws, including but not limited to, the latest amendments of the following:

a. Williams-Steiger Occupational Safety & Health Act of 1970, Public Law, 91-596.

b. Part 1910 and Part 1926 – Occupational Safety and Health Standards, Chapter XVII of Title 29, Code of Federal Regulations.

c. Part 1518 – Safety and Health Regulations for Construction, Chapter XIII of Title 29, Code of Federal Regulations.

4.6.2 Contractor is responsible for safety of the job Site for employees of Contractor as well as for members of the general public and others who may drive or walk through or be at the Site.

4.6.3 Contractor recognizes the importance of performing the Work in a safe manner so as to prevent damage, injury or loss to: (i) all individuals at the Site, whether working or visiting; (ii) the Work, including materials and equipment incorporated into the Work and stored On-Site or Off-Site; and (iii) all other property at the Site or adjacent thereto, including trees, shrubs, lawns, walks, pavements, roadways, structures and utilities not designated for removal, relocation or replacement in the course of construction; and (iv) the owners or tenants of adjacent property and their patrons, employees and invitees.

4.6.4 Contractor assumes responsibility for implementing and monitoring all safety precautions and programs related to the performance of the Work.

4.6.5 Contractor must provide a "competent person' as required by O.S.H.A regulations. The "competent person" must be identified at the Pre-Construction Conference with City advised in writing of any changes.

4.6.6 The "competent person" must make routine daily inspections of the Site and must hold weekly safety meetings with Contractor's personnel, Subcontractors and others as applicable.

4.6.7 Contractor and Subcontractors must comply with all legal and regulatory requirements relating to safety, as well as any City specific safety requirements set forth in the Agreement Documents, provided that such City-specific requirements do not violate any applicable legal and regulatory requirements.

4.6.8 Contractor will immediately report in writing any safety-related injury, loss, damage or accident arising from the Work to Project Manager and, to the extent mandated by Legal Requirements, to all government or quasi-government authorities having jurisdiction over safety-related matters involving the Project or the Work.

4.6.9 Contractor's responsibility for safety under this Section is not intended in any way to relieve Subcontractors and Sub-Subcontractors of their own contractual and legal obligations and responsibility for (i) complying with all Legal Requirements, including those related to health and safety matters, and (ii) taking all necessary measures to implement and monitor all safety precautions and programs to guard against injury, losses, damages or accidents resulting from their performance of the Work.

4.6.10 As between City and Contractor, Contractor is responsible to City for any and all the safety issues relating to the Work on the Project. Contractor must administer and manage the safety program. This will include, but not necessarily be limited to review of the safety programs of each Subcontractor. Contractor must monitor the establishment and execution of compliance with all applicable regulatory and advisory agency construction safety standards. Contractor's responsibility for review, monitoring, and coordination of the Subcontractor's safety programs will not extend to direct control over execution of the Subcontractors' safety programs. Notwithstanding Contractor's safety obligations to City, it is agreed and understood that each individual Subcontractor will remain controlling employer responsible for the safety programs and precautions applicable to its own work and the activities of other's work in areas designated to be controlled by such Subcontractor for purposes of workers compensation insurance coverage.

4.6.11 Nothing in this agreement will relieve Contractor of his responsibility to maintain traffic, structures, etc., as noted on the Plans, Specifications, and Project Specific Conditions. Contractor is responsible to provide all necessary shoring, bracing and trench support as is necessary to maintain traffic structures, etc., as stipulated in the Plans, Specifications, and Special Provisions. If the stability of adjoining building, walls, roadways, etc., is endangered by Contractor's excavation, shoring, bracing, or under pinning must be provided as necessary to ensure project safety. Cost for shoring, bracing, underpinnings, and trench support will be included in the appropriate items listed in the Agreement Price, and no additional payment will be made for this work.

4.7 MATERIALS QUALITY, SUBSTITUTIONS, AND SHOP DRAWINGS

4.7.1 Quality Control and Quality Assurance Testing.

4.7.1.1 All construction materials to be used or incorporated in the Project are subject to inspection, Quality Control & Quality Assurance Testing, and approval or rejection by City. Any material rejected by City must be removed immediately and replaced in an acceptable manner to City at no additional cost to City. When QC/QA tests indicate noncompliance with the Agreement Documents, retesting must be performed by the same testing laboratory that performed the tests that indicated noncompliance.

4.7.1.2 The Contractor must establish, provide, and maintain an effective Quality Control Testing Program (QCTP). The Contractor must develop his own program or procure the services of a consultant. In either case, the party performing the tests must be currently certified by the National Bureau of Standards in the National Voluntary Laboratory Accreditation Program (NVLAP) for construction services or the AASHTO Accreditation Plan (AAP) for Soils, Asphalt and Concrete. The Contractor must provide all support necessary to perform QC and QA testing and sampling (i.e. shoring for testing trench backfill, backhoes, motor graders, loaders, etc. to facilitate testing and sampling). The City will perform the QA testing.

4.7.1.3 The Contractor must submit a written QCTP to the City as a required submittal. The Contractor must not begin Work until the Quality Control Program has been reviewed and

accepted by the City. Resumes of all personnel that will be associated directly or indirectly with the QCTP must be included.

4.7.1.4 The QCTP must include, but not be limited to, on-site/field and laboratory testing of all material delivered to the Site and any existing materials or conditions pertinent to the project.

4.7.1.5 All testing must be under the direction of a Professional Engineer registered in the State of Arizona, knowledgeable in Materials Testing. All "Test Report" forms must be stamped by said Engineer.

4.7.1.6 The written QCTP will set forth the responsibilities of the engineer, project manager, supervisory personnel and each technician assigned to this project. Substitutions or replacement of personnel must require prior written approval by the City. All personnel must be proficient within their assigned duties and possess certification(s) commensurate with their position and responsibilities. The minimum certification(s) for each technician must be NICET Level II, Arizona Technical Testing Institute, American Concrete Institute, or other nationally recognized program applicable to the project and approved by the City of Chandler. The written QCTP must include a description of the required field and construction materials laboratory tests, including required frequencies that meet the minimums established herein.

4.7.1.7 The Contractor must establish a system to record and report all material test results. The daily test reports must include, but not be limited to:

a. Test designation;
b. Date of test;
c. Name of tester;
d. Location of test/sample (station and offset);
e. Product suppliers and product codes (as applicable);
f. Depth/elevation of test/sample;
g. Test result;
h. Control requirement(s);
i. Cause of rejection (if applicable);
j. Results of retests (if applicable); and
k. Remedial action (if applicable).

4.7.1.8 The Contractor must submit test results to the designated City representative.

4.7.1.9 The Contractor must also submit a weekly report to the City summarizing the testing and construction activities completed by emailing the report to the email addresses noted above. All weekly reports must be submitted simultaneously to the Contractor and the City of Chandler. The report must include individual summary sheets for each utility line, structure, and portion of the pavement section. Cores must be numbered sequentially throughout the Project. Re-cores must reference the original core by number and must contain the averaged values for thickness and density. Total pavement thickness must be reported. Vertical location of tests for underground utilities must indicate the depth of the

excavation at the location of the test (i.e., cut to flow line [if applicable], depth to bottom or top of pipe, etc.). Density tests must be numbered sequentially. If the minimum number of tests has not been performed per the written QCTP, this must be stated in the weekly summary report with an explanation of the circumstances.

4.7.1.10 The City will maintain a copy of the Project test results and weekly reports in the Project file. In cases where quality control activities do not comply with the Agreement provisions, the City may:

a. Order the Contractor to replace ineffective or unqualified quality control personnel.

b. Order the Contractor to stop operations until appropriate corrective action is taken.

4.7.1.11 Although minimum testing requirements are specified herein, the Contractor bears full responsibility for the quality of the materials and their installation and may elect to perform additional testing beyond the requirements set forth herein to ensure compliance.

4.7.1.12 The Quality Control requirements contained in this Section are in addition to and separate from Quality Assurance Testing, which will be performed by the City of Chandler or its representative. If the Quality Assurance test results are not in agreement with the Quality Control test results, the Contractor will have the option to retain a third party consultant for referee tests. The third party consultant must meet the same requirements as the consultant performing the Quality Control Testing. The results of the third party will be binding. All cost incurred by the referee testing will be the Contractor's expense. If the Contractor elects not to retain a third party for referee testing, the City of Chandler test results will prevail.

4.7.1.13 Except as otherwise noted within this Section, Work or materials required by this Section are non- pay items. Per MAG Section 101, a non-pay item is an item of Work for which no separate payment will be made, the cost of which is to be included as an incidental cost for associated item(s) included on the Bid Schedule or Schedule of Values.

4.7.2 <u>Trade Names and Substitutions</u>.

4.7.2.1 Substitutions prior to bid will only be considered if in compliance with Arizona Revised Statute § 34-104.

4.7.2.2 Contractor, if requested by City, must submit Samples or any additional information that may be necessary to evaluate the acceptability of the substitution.

4.7.2.3 City will make the final decision and will notify Contractor in writing as to whether the substitution has been accepted or rejected.

4.7.2.4 If City does not respond within 15 working days, Contractor must continue to perform the Work in accordance with the Agreement Documents and the substitution will be considered rejected.

4.7.3 <u>Shop Drawings</u>.

4.7.3.1 Contractor must prepare and submit Shop Drawings which show details of all Work to insure proper installation of the Work using those materials and equipment specified under the approved Plans and Specifications.

4.7.3.2 Contractor must submit a schedule of Shop Drawing submissions, which avoids bulk submissions to the extent reasonably possible, with the Project Schedule for City approval. The schedule of Shop Drawing submissions must include all of the items for which Shop Drawings are required by the Agreement Documents, including the Specifications. Unless otherwise noted, Shop Drawings will not be required for items specified or detailed in the Uniform Standard Specifications and Details or the Technical Specifications.

4.7.3.3 Shop Drawings must be numbered consecutively for each Specification section and must accurately and distinctly present the following:

a. All working and erection dimensions.

b. Arrangements and sectional views.

c. Necessary details, including complete information for making connections between work under this Agreement and work under other Agreements.

d. Kinds of materials and finishes.

e. Parts list and description thereof.

4.7.3.4 Each Drawing or page must include:

a. Project Name, City of Chandler Project Number and descriptions.

b. Submittal date and space for revision dates.

c. Identification of equipment, product or material.

d. Name of Contractor and Subcontractor.

e. Name of Supplier and Manufacturer.

f. Relation to adjacent structure of material.

g. Physical dimensions clearly identified.

h. ASTM and Federal Specifications references.

i. Identification of and justification for deviations from the Agreement Documents.

j. Contractor's stamp, initialed or signed, dated and certifying the review of submittal, certification of field measurements and compliance with Agreement.

k. Location at which the equipment or materials are to be installed.

4.7.3.5 Location will mean both physical location and location relative to other connected or attached material. City will return unchecked any submittal, which does not contain complete data on the Work and full information on related matters.

4.7.3.6 Stock or standard drawings will not be accepted for review unless full identification and supplementary information is shown thereon in ink or typewritten form.

4.7.3.7 Contractor must schedule, prepare and submit all Shop Drawings in accordance with a time-table that will allow its suppliers and manufacturers sufficient time to fabricate, manufacture, inspect, test and deliver their respective products to the project Site in a timely manner so as to not delay the complete performance of the Work.

4.7.3.8 If the Shop Drawings show departures from the Agreement requirements, Contractor must make specific mention thereof in the Letter of Transmittal; otherwise review of such submittals by City will not constitute review of the departure. Review of the Drawings will constitute review of the specific subject matter for which the Drawings were submitted and not of any other structure, material, equipment, or apparatus shown on the Drawings.

4.7.3.9 The review of Shop Drawings will be general and will not relieve Contractor of responsibility for the accuracy of such Drawings, nor for the proper fitting and construction of the Work, nor for the furnishing of materials or Work required by the Agreement. No construction called for by Shop Drawings will be initiated until such Drawings have been reviewed and approved by City.

4.7.3.10 The procedure in seeking review of the Shop Drawings will be as follows:

a. Contractor must submit complete sets of Shop Drawings and other descriptive data as specified in this Section.

b. After Contractor's submittal or resubmittal of Shop Drawings, if Contractor has submitted Shop Drawings in accordance with the City-approved submittal schedule, or upon resubmission, City will be provided with three (3) calendar weeks for review. Should City require additional review time above and beyond the three (3) calendar weeks, Contractor may ask for a time extension or monetary compensation, if they can present valid, factual evidence that actual damages were incurred by Contractor. City will determine the amount of the time extension or the monetary compensation to be awarded Contractor, if any, in accordance with City's Policy Statement for Calculating Delays and Damages, Appendix 1.

4.7.3.11 Contractor will be responsible for all extra costs incurred by City caused by Contractor's failure to comply with the procedure outline above.

4.7.4 Long Lead Time Items. Contractor must submit Shop Drawings, as required by the Engineer, on all long lead items to be furnished and installed as part of the project within 10 Days after the date of the executed Agreement letter issued by City. In addition, Contractor must order all long lead items to be furnished and installed as part of this Project within 3 Days after receiving approved Shop Drawings. For all long lead times for which Shop Drawings are not required, Contractor must order said long lead items within 15 Days after the date of the executed Agreement letter issued by City. Within 2 Days after ordering long lead items, Contractor must supply copies of all purchase orders, along with an accurate delivery schedule from the supplier.

4.7.5 Construction Water. If Contractor uses water from City's water system for construction water, Contractor must obtain a fire hydrant meter from City of Chandler Utility Services (480-782-2280) and all construction water must be obtained through the hydrant meter. Contractor must pay all fees related to the hydrant meter and all water bills for construction water. All cost for meters and construction water will be included in the Agreement Price.

4.8 PROJECT RECORD DOCUMENTS

4.8.1 During the construction period, Contractor must maintain at the jobsite a full-size set of prints of the Construction Document Drawings and Shop Drawings for Project Record Document purposes.

4.8.2 Contractor must mark these Drawings to indicate the actual installation where the installation varies from the original Construction Documents. Contractor must give particular attention to information on elements that will be concealed, which would be difficult to identify or measure and record later. Items required to be marked include but are not limited to:

a. Dimensional changes to the Drawings.

b. Revisions to details shown on Drawings.

c. Locations and depths of underground utilities.

d. Revisions to routing of piping and conduits.

e. Actual equipment locations.

f. Changes made by Change Order or Addendum.

g. Details not on original Agreement Drawings.

4.8.3 Contractor must mark completely and accurately Project Record Drawing sets of Construction Documents.

4.8.4 Contractor must mark Project Record Drawings sets with red erasable colored pencil.

4.8.5 Contractor must note Request for Information (RFI) Numbers and Change Order numbers, etc., as required to identify the source of the change to the Construction Documents.

4.8.6 Contractor must submit Project Record Drawing sets and Shop Drawings to City or its representative for review and comment.

4.8.7 Upon receipt of the reviewed Project Record Drawings from City, Contractor must correct any deficiencies and omissions to the Drawings and submit the final original of the Project Record Drawings to City prior to Final Payment.

4.8.8 Project Manager will review the Project Record Drawings monthly prior to the date established for the Payment Request and will be the sole judge of acceptance of these Drawings.

4.9 WARRANTY AND CORRECTION OF DEFECTIVE WORK

4.9.1 Contractor warrants to City that the construction, including all materials and equipment furnished as part of the Work, will be new unless otherwise specified in the Agreement Documents, of good quality, and free of defects in materials and workmanship. Contractor's warranty obligation excludes defects caused by abuse, alterations, or unreasonable failure to maintain the construction by persons other than Contractor, subcontractors, or others under Contractor's control. Nothing in this warranty will limit any manufacturer's warranty which provides City with greater warranty rights than set forth herein or in the Agreement. Contractor will provide City with all manufacturers' warranties and operation and maintenance manuals upon substantial completion of the Work. Contractor's warranty must be for one (1) year, in accordance with MAG Specification § 108.8, and will commence for all portions of the Work upon Final Acceptance of the entire Work as determined by City under the Agreement. All statutory or other warranties, express or implied, related to latent defects will remain in force and are not limited by this provision.

4.9.2 City May Stop the Work. If the Work is defective, or Contractor fails to supply sufficient skilled workmen or suitable materials or equipment, City may order Contractor to stop the

Work without cost to City, or any portion thereof, until the cause for such order has been eliminated; however, this right of City to stop the Work will not give rise to any duty on the part of City to exercise this right for the benefit of Contractor or any other party.

4.9.3 Correction or Removal of Defective Work.

4.9.3.1 If required by City, Contractor must promptly, without cost to City and as specified by City, either correct any defective Work, whether or not fabricated, installed or completed, or, if the Work has been rejected by City, remove it from the Site and replace it with non-defective Work. Contractor must correct any Work which may be displaced in correcting, removing or replacing defective Work. No compensation will be allowed Contractor for such removal, replacement or remedial Work. Contractor must reimburse City for costs incurred by City due to such correction or removal including but not limited to additional expenses for inspection, testing or observation and for repeated reviews by the City or Design Professional.

4.9.3.2 Upon failure on the part of the Contractor to comply within a reasonably prompt time with any written order of City to correct or remove defective Work, City has authority to cause nonconforming materials or rejected Work to be remedied, removed, or replaced at the Contractor's expense and to deduct the costs from any moneys due or to become due the Contractor.

4.9.4 City May Correct Defective Work. If Contractor fails within a reasonable time after written notice of City to proceed to correct defective Work or to remove and replace rejected Work as required by City or if Contractor fails to perform the Work in accordance with the Agreement Documents (including any requirements of the progress schedule), City may, after 7 Days' written notice to Contractor, correct and remedy any such deficiency. To the extent necessary to complete corrective and remedial action, City may exclude Contractor from all or part of the Work, and suspend Contractor's services related thereto, take possession of Contractor's tools, appliances, construction equipment and machinery at the Site and incorporate in the Work all materials and equipment stored at the Site or for which City has paid Contractor, but which are stored elsewhere. Contractor must allow City, city representatives, agents and employees such access to the Site as may be necessary to enable City to exercise City’s rights under this Section. All direct and indirect costs of City in exercising such rights will be charged against Contractor in an amount verified by City representative, and a Change Order will be issued incorporating the necessary revisions in the Agreement Documents and a reduction in the Agreement Price. Such direct and indirect costs will include, in particular but without limitation, compensation for additional professional services required and all costs of repair and replacement of Work or others destroyed or damaged by correction, removal or replacement of Contractor's defective Work. Contractor will not be allowed an extension of the Agreement Time because of any delay in Contractor’s performance of the Work attributable to the exercise by City or City's rights hereunder.

4.9.5 Correction or Removal of Unauthorized Work.

4.9.5.1 Any Work done beyond the lines and grades shown on the Drawings or established by the Design Professional or any changes in, additions to, or deductions from the Work done without written authority will be considered as unauthorized and will not be paid for. Work so done may be ordered remedied, removed, or replaced at the Contractor's expense.

4.9.5.2 Upon failure on the part of the Contractor to comply promptly with any order of the City,

City will have authority to cause unauthorized Work to be remedied, removed, or replaced at the Contractor's expense and to deduct the costs from any moneys due or to become due the Contractor.

4.9.6 Correction Period - One Year Guarantee.

4.9.6.1 If, within one year after the date of Final Acceptance, or such longer period of time as may be prescribed by law or by the terms of any applicable special guarantee required by the Agreement Documents, or by any specific provision of the Agreement Documents, any Work is found to be defective, Contractor must promptly, without cost to City and in accordance with City's written instructions, either correct such defective Work, or, if it has been rejected by City, remove it from the Site and replace it with non-defective Work. If Contractor does not promptly comply with the terms of such instructions, or in an emergency where delay would cause serious risk of loss or damage, City may have the defective Work corrected or the rejected Work removed and replaced, and all direct and indirect costs of such removal and replacement, including compensation for additional professional services, must be paid by Contractor. Such action by the City will not relieve the Contractor of the guarantees required by this Section or elsewhere in the Agreement Documents.

4.9.6.2 If, in the opinion of the City, defective Work creates a dangerous condition or requires immediate correction or attention to prevent further loss to the City or to prevent interruption of operation of the City, the City will attempt to give the notice required by this Section. If the Contractor cannot be contacted or does not comply with the City's request for correction within a reasonable time as determined by the City, the City may, notwithstanding the provisions of this Section, proceed to make such correction or provide such attention; and the costs of such correction or attention will be charged against the Contractor. Such action by the City will not relieve the Contractor of the guarantees required by this Section or elsewhere in the Agreement Documents.

4.9.6.3 This Section does not in any way limit the guarantee on any items for which a longer guarantee is specified or on any items for which a manufacturer or supplier gives a guarantee for a longer period. The Contractor agrees to act as co-guarantor with such manufacturer or supplier and must furnish the City all appropriate guarantee or warranty certificates upon completion of the Project. No guarantee period, whether provided for in this Section or elsewhere, will in any way limit the liability of Contractor or their sureties or insurers under the indemnity or insurance provisions of these General Conditions and the Project Specific Special Conditions.

4.9.7 Acceptance of Defective Work.

4.9.7.1 If, instead of requiring correction or removal and replacement of defective Work, City may accept Work when in the best interest of the City to do so with appropriate monetary credit from Contractor. If any such acceptance occurs prior to final payment, a Change Order will be issued incorporating the necessary revisions in the Agreement Documents, including appropriate reduction in the Agreement Price; or, if the acceptance occurs after final payment, an appropriate amount must be paid by Contractor to City.

4.9.7.2 Alternatively, City may require Contractor to furnish at Contractor's expense, a special performance guarantee or other surety prior to acceptance of defective work.

4.9.8 The Warranty period begins on the Final Acceptance date noted in the Certificate of Completion, irrespective of early completion by some Subcontractors of their work.

4.9.9 Contractor's warranty obligation must be in accordance with MAG Specifications.

4.9.10 Nothing in the warranties contained in the Agreement Documents are intended to limit any manufacturer's warranty which provides City with greater warranty rights than set forth in this Section or the Agreement Documents. Contractor must provide City with all manufacturers' warranties prior to Substantial Completion, if applicable, or Final Acceptance.

4.9.11 Contractor agrees that it will be responsible to manage and administer the correction of any Work that is not in conformance with the Agreement Documents during the warranty periods set forth in this Section, or during any longer periods to the extent required by the Agreement Documents. A progress payment, or partial or entire use or occupancy of the Project by City, will not constitute acceptance of Work not in accordance with the Agreement Documents.

4.9.12 When notified of a warranty issue, Contractor must respond in writing within 48-hours and must perform warranty Work as soon as material for said repairs are available (as judged solely by City), and in any event Contractor must, take immediate steps to commence and complete correction of nonconforming Work no later than the time period set forth in City's written notification in accordance with the Agreement Documents. This includes the correction, removal or replacement of the nonconforming Work and any damage caused to other parts of the Work affected by the nonconforming Work. If defects develop which are determined by City to be an emergency, City will notify Contractor, via the most expeditious means regarding the nature and condition of the defects. In turn, Contractor must immediately dispatch necessary forces to correct the defect or the emergency condition in accordance with Agreement Documents.

4.9.13 The time periods referenced in this Section apply only to Contractor's obligation to correct nonconforming Work and is not intended to constitute a period of limitations for any other rights or remedies that City may have regarding Contractor's other obligations under the Agreement Documents.

4.9.14 Without limiting the foregoing or anything in these General Conditions or the Agreement to the contrary, Contractor must obtain and provide to City all warranties for any portion of the Project offered by the manufacturer, installer or provider thereof. City and the user of the facility will have the right to the full value and benefit of all such warranties. Contractor must ensure all such warranties are fully transferrable to facilitate the full value of this Section.

4.9.15 Contractor's warranty excludes damages or defects caused by abuse, alterations to the Work not executed by or through Contractor, improper or insufficient maintenance, improper operation, or normal wear and tear and normal usage.

4.9.16 In the event of any noncompliance with this entire Section 4, City may require Contractor to stop or suspend the Work in whole or in part.

SECTION 5 - CITY RESPONSIBILITIES

5.1 CITY PROJECT MANAGER AND INSPECTORS

5.1.1 Project Manager is responsible for providing City-supplied information and approvals in a timely manner to assist Contractor to fulfill its obligations under the Agreement Documents.

5.1.2 Project Manager will also provide Contractor with prompt notice when it observes any failure on the part of Contractor to fulfill its contractual obligations, including any default or defect in the Project or non-conformance with the Drawings and Specifications.

5.1.3 City may utilize Field Inspectors to assist Project Manager during construction in observing performance of Contractor. City's use of Inspectors is for the purpose of assisting Project Manager.

5.1.4 The Inspectors are authorized to inspect all Work and materials furnished. Such inspections may extend to all or part of the Work and to preparation, fabrication or manufacture of the materials to be used. The Inspectors have the authority to issue instructions contrary to the Construction Documents if approved and coordinated with the directions of Project Manager.

5.1.5 The Inspectors have the authority to reject work or materials until any questions at issue can be decided by Project Manager.

5.1.6 The use of Inspectors by City will not make City responsible for or give City control over construction means, methods, techniques, sequences or procedures or for safety precautions or programs or responsibility for Contractor's failure to perform the Work in accordance with Agreement Documents. The Inspectors are not authorized to direct any of Contractor's activities, employees or Subcontractors.

5.2 **DESIGN PROFESSIONAL SERVICES**

City may contract separately with one or more Design Professionals to provide construction administration of the Project. The Design Professional's Agreement, as well as other firms hired by City may be furnished to Contractor. Contractor does not have the right to limit or restrict or reject any Agreement modifications that are mutually acceptable to City and Design Professional.

5.3 **CITY'S SEPARATE CONTRACTORS**

City is responsible for all work performed on the Project or at the Site by separate contractors retained by City. City will contractually require its separate contractors to reasonably cooperate with, and reasonably coordinate their activities so as not to interfere with Contractor in order to enable Contractor to timely complete the Work consistent with the Agreement Documents. Contractor must immediately notify the Project manager, and address the matter in the next monthly status report, if any activities of such separate contractors are expected to interfere, or are interfering, with Contractor and such interference will or could result in any delay in Contractor's performance of the Work.

5.4 **PERMIT REVIEW AND INSPECTIONS**

5.4.1 If requested by Contractor, Project Manager will provide assistance and guidance in obtaining necessary reviews, permits and inspections.

5.4.2 The regulating agencies of City, such as Development and Sustainability, Fire and Planning Departments, enforce legal requirements. The enforcement activities of City are independent and separate from this Agreement.

5.5 **PLANS AND SPECIFICATIONS TO THE CONTRACTOR**.

Contractor will be provided up to five copies of the Agreement Documents as are reasonably necessary for the execution of the Work. Additional copies will be furnished,

upon request, at the cost of reproduction.

SECTION 6 - AGREEMENT TIME

6.1 AGREEMENT TIME

6.1.1 The Agreement Time will start with the Notice to Proceed ("NTP") and end with Final Acceptance.

6.1.2 Beginning on the date of the NTP, Contractor must begin to fulfill Contractor's obligations under the Agreement. Contractor's obligations include providing City and other agencies with any submittals required by the Project Specific Special Provisions, including but not limited to, an approved Project Schedule, Traffic Control Plans, and a Stormwater Pollution Prevention Plan. Contractor must submit all such required submittals before any physical construction work commences on the Site. NTP does not authorize construction work until all agreement insurance, bonds, and schedules are submitted to and accepted by the City.

6.1.3 The Agreement Time will be as set forth in the Project Schedule. Contractor agrees that it will commence performance of the Work and complete the Project through both Substantial Completion and Final Acceptance within the Agreement Time.

6.1.4 Time is of the essence of this Agreement, for the Project, for the Work, and for each phase and designated Milestone thereof.

6.1.5 Failure of Contractor to perform any covenant or condition contained in the Agreement Documents within the time periods specified herein, will constitute a material breach of this Agreement entitling City to terminate the Agreement unless Contractor applies for and receives an extension of time, in accordance with the procedures set forth in the Agreement Documents.

6.1.6 Failure of City to insist upon the performance of any covenant or condition within the time periods specified herein, will not constitute a waiver of Contractor's duty to perform every other covenant or condition within the designated periods, unless a specific waiver is granted in writing for each such covenant or condition.

6.1.7 City's agreement to waive a specific time provision or to extend the time for performance will not constitute a waiver of any other time provisions contained in the Agreement Documents. Failure of Contractor to complete performance promptly within the additional time authorized in the waiver or extension of time agreement constitutes a material breach of this Agreement entitling City to all the remedies set forth herein or provided by law.

6.2 PROJECT SCHEDULE

6.2.1 The Project Schedule must be in Microsoft Project standard file format, must be updated and maintained throughout the Agreement Time, and must contain the following:

6.2.1.1 Detailed representation of all activities for the project, both on-site construction and major procurement. All significant activities together with the resource loading requirements for each and all items appearing on the schedule of values or bid schedule for progress payments must be shown on the Project Schedule or in attached transmittal letter as described in Section 6.2.8.

6.2.1.2 Dependencies between activities must be indicated so that it may establish as to the effect the progress of any one activity would have on other activities and on the Schedule.

6.2.1.3 Activities for submission, review, and approval of all required submittals.

6.2.1.4 An amount of time will be established prior to the final completion date for "punch list and cleanup". No other activities will be scheduled during this period. Punch list and cleanup must be shown on the Project Schedule and must be entirely completed prior to the expiration of the Agreement Time.

6.2.2 Within 10 Days of receipt of City's comments, Contractor must make all required corrections, adjustments, and additions to complete the Project Schedule and resubmit to City for review. City's review of and response to the Project Schedule is for the purpose of: (1) City planning and staffing for the Project as may be required from time to time; (2) ensuring Contractor's general conformance with the scheduling requirements of the Agreement Documents and completion of the Project within the Agreement Time; and (3) monitoring and evaluating the construction status for purposes of approving monthly progress payments. Acceptance of a submitted schedule by City should in no way be construed as an affirmation or admission that the schedule is reasonable or workable by Contractor. The responsibility for completing the Work on the Project within the Agreement Time remains the obligation of Contractor. City's review does not relieve Contractor from compliance with the requirements of the Agreement Documents or be construed as relieving Contractor of its complete and exclusive control over the means, methods, sequences and techniques for executing the work.

6.2.3 The Project Schedule must show milestones, including milestones for City-furnished information, and must include activities for City-furnished material and construction by other contractors when those activities are interrelated with Contractor activities.

6.2.4 The Project Schedule must be revised as required by conditions and progress of the Work, but such revisions do not relieve Contractor of its obligations to complete the Work within the Agreement Time, as adjusted in accordance with the Agreement Documents. No modification to the Agreement Documents or the Agreement Time will be effective unless approved in advance by City.

6.2.5 For all items of materials and equipment that are critical or may require long lead times to acquire, the Project Schedule must show dates for submission, review and approval of submittals, ordering, and delivery.

6.2.6 An updated Project Schedule must be submitted monthly to City as part of the Payment Request. The monthly submittal must include one full size plot of the entire schedule and one electronic copy containing the schedule in Microsoft Project standard file format. In addition, Contractor must, upon request by City, provide a copy of all submitted schedule data in electronic format which must be clearly labeled with the Project description, scheduling program name and version number, and schedule print/data date.

6.2.7 Contractor must provide City with a monthly status report with each Project Schedule detailing the progress of the Work, including: (i) if the Work is proceeding according to schedule, (ii) any discrepancies, conflicts, or ambiguities found to exist in the Agreement Documents that require resolution, and (iii) other information detailing items that require resolution so as not to jeopardize the ability to complete the Work in the Agreement Time.

6.2.8 With each Project Schedule submittal, Contractor must include a transmittal letter including the following:

a. Description of problem tasks, referenced to field instructions or requests for information (RFI's), as appropriate.

b. Current and anticipated delays including:

(i) Cause of the delay.

(ii) Corrective action and schedule adjustments to correct the delay.

(iii) Known or potential impacts and their delay on other activities, milestones, and their impact on the Substantial Completion and Final Acceptance dates.

(iv) Changes in construction sequence.

c. Pending items and status thereof including but not limited to:

(i) Time Extension requests;

(ii) Substantial Completion date status;

(iii) Final Acceptance date status.

d. If ahead of schedule, the number of calendar Days ahead.

e. If behind schedule, the number of calendar Days behind.

f. Other Project or scheduling concerns.

6.2.9 Critical Path Method (CPM).

6.2.9.1 Unless otherwise specified in the Agreement, the Project Schedule must include a Critical Path Method (CPM) diagram schedule showing the sequence of activities, the interdependence of each activity and identifies the Critical Path.

6.2.9.2 The CPM diagram schedule must be in calendar Days and indicate duration, earliest and latest start and finish dates for all activities, and total Float Times for all activities except critical activities. The CPM diagram must be presented in a time scaled graphical format for the Project as a whole.

6.2.9.3 The CPM diagram schedule must indicate all relationships between activities.

6.2.9.4 The activities making the Project Schedule must contain sufficient detail to assure that adequate planning has been done for proper execution of the Work and such that it provides an appropriate basis for monitoring and evaluation the progress of the Work. Individual activities must not exceed 30 Days in length, in most cases.

6.2.9.5 The CPM diagram schedule must be based upon activities, which coincide with the Schedule of Values.

6.2.9.6 The CPM diagram schedule must show all submittals associated with each work activity and the review time for each submittal.

6.2.10 Float Time.

6.2.10.1 The total Float Time within the overall schedule is for the exclusive use of City, but City may approve Contractor's use of Float as needed to meet Agreement Milestones and

the Project completion date.

6.2.10.2 Contractor will not be allowed to sequence, hide, or reallocate Float Time through such strategies, as extending activity duration estimates to consume available Float, using preferential logic, or using extensive crew/resource sequencing, tec. No time extensions will be granted nor delay damages paid until a delay occurs which extends the Work beyond the Agreement Time.

6.2.11 City-Caused Delays. City-caused delays on the Project, if any, may be offset by City-caused time savings (i.e., Critical Path submittals returned in less time than allowed by the Agreement, approval of substitution requests and credit changes which result in savings of time to Contractor, etc.) In such an event, Contractor will not be entitled to receive a time extension or delay damages until all City-caused time savings are exceeded and the Agreement Time is also exceeded.

6.2.12 Rain-Related Delays. Contractor is required, in preparing the Project Schedule to take into account all relevant weather conditions, including normal rainfall and distribution. No additional compensation will be given for any rain-related delays or impacts on the Work or the Project Schedule. No time extension will be granted in the Project Schedule unless the rainfall during the construction of Work is unusually severe, was not reasonably anticipated, and the total rainfall was significantly in excess of the normal rainfall for the Project Site location. Normal rainfall for the Project will be determined from the 10-year average rainfall for the Site as measured by the National Oceanic and Atmospheric Administration or comparable source of reliable information for rainfall in Chandler, Arizona. In addition, the excessive rainfall must have actually impacted Work activities on the Critical Path and caused delay beyond any remaining Float at the time of the rain- caused delay. The burden of documenting normal rainfall, the excessive rainfall and the impact on Critical Path activities is on Contractor. All other provisions in the Agreement Documents relating to claims, including without limitation notice requirements, apply to any claim by Contractor for a rain delay.

6.2.13 City's "Policy Statement for Calculating Delays and Damages," Appendix 1 to these General Conditions, will apply to all claims of delay and delay damages.

6.2.14 Force Majeure. If Contractor is delayed or prevented from the performance of any Work required under this Agreement by reason of acts of God or other causes beyond the control and without fault of Contractor (financial inability excepted), performance of that Work will be excused, but only for the period of the delay. The time for performance of the Work will be extended for a period equivalent to the period of delay. In addition, the parties agree if Contractor's delayed or suspended performance directly arises out of or directly results from the COVID-19 pandemic, Contractor's delayed or suspended performance may be excused as set forth in this clause. Provided, however; Contractor must give the City written notice within 30 days of the occurrence of the event giving rise to COVID-19 pandemic related delayed or suspended performance. For COVID-19 pandemic related delay or suspended performance, the parties must agree in writing to the length of the excused delay or suspended performance. Further, Contractor must obtain the City's written approval to use any allowance established as part of the project for delays and costs related to the COVID-19 pandemic.

6.3 SUBSTANTIAL COMPLETION

6.3.1 When Contractor considers that the Work, phase or a portion thereof, which City agrees in

writing to accept separately, is substantially complete, City will prepare and submit to Contractor a comprehensive Punch List of items to be completed or corrected prior to Final Acceptance and Final Payment. Failure to include an item on such Punch List does not alter the responsibility of Contractor to complete all Work in accordance with the Agreement Documents.

6.3.2 Upon receipt of Contractor's Punch List, Project Manager will make an inspection to determine whether the Work or designated portion thereof is substantially complete. Project Manager may, at Project Manager's sole option, be assisted in such inspection by the Design Professional for the Project. If the inspection by the Project Manager discloses any item, whether or not included on Contractor's Punch List, which is not sufficiently completed in accordance with the Agreement Documents so that City can occupy or utilize the Work, phase or designated portion thereof for its intended use, Contractor must, before issuance of the Certificate of Substantial Completion, complete or correct such item upon notification by Project Manager. In such case, Contractor must then submit a request for another inspection by Project Manager to determine Substantial Completion.

6.3.3 Certificate of Substantial Completion.

6.3.3.1 The Project Manager will not issue a Certificate of Substantial Completion unless and until the Work (or separable units or Phases as provided in the Agreement Documents) is essentially and satisfactorily complete in accordance with the Agreement Documents, such that the Project is ready for use by City for its intended purpose, opening to the general public, full occupancy or use by City (including, without limitation, all separate units, or rooms, facilities, access, income-generating areas, and all areas serving the general public, as applicable, must be ready for full-operation without material inconvenience or discomfort), including, to the extent applicable to the Work, the following: all materials, equipment, systems, controls, features, facilities, accessories and similar elements are installed in the proper manner and in operating condition, inspected and approved; surfaces have been painted; masonry and concrete cleaned with any sealer or other finish applied; utilities and systems connected and functioning; site work complete; permanent heating, ventilation, air condition, vertical transportation and other systems properly operating with proper controls; lighting and electrical systems installed, operable and controlled; paving completed, signage installed, and other Work as applicable, has been performed to a similar state of essential and satisfactory completion. A minor amount of Work, as determined by and at the discretion of the Project Manager, such as installation of minor accessories or items, a minor amount of painting, minor replacement of defective work, minor adjustment of controls or sound systems, or completion or correction of minor exterior work that cannot be completed as a result of weather conditions, will not delay determination of Substantial Completion. If prior written approval is obtained from City for purposes of Substantial Completion, specified areas of the entire Work or Project may be individually certified as Substantially Complete. In no event will Substantial Completion be deemed to have occurred unless and until: (i) a temporary certificate of occupancy has been issued by the appropriate Governmental Authorities (as applicable) and (ii) all terms and Work required under this Agreement have been fulfilled by Contractor and same will have also been approved and accepted by City, subject only to the Punch List items.

6.3.3.2 If requested by City, Contractor must complete and turn-over to City the Project on a phased basis. Each phase will have a separate inspection by the Project Manager, a Punch List generated, and then an inspection by City with final approval and acceptance only after the

Project Manager's Punch List.

6.4 **PARTIAL UTILIZATION**

6.4.1 City at City's option may use and occupy any substantially completed parts of the Work which has specifically been identified in the Agreement Documents, or which City, the Design Professional and Contractor agree constitutes a separately functioning and usable part of the Work that can be used by City for its intended purpose, without significant interference with Contractor's performance of the remainder of the Work, provided, however, if the portion of the Work to be used or occupied has not been found to be substantially complete, City must do so in accordance with Section 6.3 prior to such occupancy.

6.4.2 In lieu of the issuance of a Certificate of Substantial Completion as to part of the Work, City may take over operation of a facility constituting part of the Work whether or not it is substantially complete if such facility is functionally and separately usable; provided that prior to any such takeover, City and Contractor agree in writing as to the division of responsibilities between City and Contractor for security, operation, safety, maintenance, correction period, heat, utilities and insurance with respect to such facility.

6.4.3 Substantial Completion of or City's beneficial occupancy of a part of the Project will not alter the fact that the one-year warranty for the whole Project starts at the date of Final Completion of the whole Project.

6.5 **FINAL ACCEPTANCE**

6.5.1 Unless otherwise expressly agreed to in writing by City, Final Acceptance must be obtained by no later than 30 Days (60 Days for federally funded agreements) after the date of Substantial Completion. Failure to timely obtain Final Acceptance will be a material breach of the Agreement.

6.5.2 Upon receipt of written notice that the Work is ready for final inspection and acceptance, City and Contractor will jointly inspect to verify that the remaining items of Work have been completed. There will be no partial acceptance. Final Acceptance will not occur until all items of Work, including Punch List Items, have been completed to City's satisfaction as reflected in the written Final Acceptance.

6.5.3 Final Payment will not be due, owing, or paid by City until Final Acceptance is issued.

6.5.4 Landscape Establishment Period. Unless otherwise expressly agreed to in writing by City, the Landscape Establishment Period will begin on the date of Final Acceptance of the Project and will run 90 Calendar Days thereafter. Landscape Establishment Period requirements are detailed in General Conditions Appendices, attached herein.

6.6 **CONTINUATION OF WORK**

6.6.1 Permitting Contractor to continue and finish the Work or any part of it after the time fixed for its completion (whether milestone, phase, Substantial Completion or Final Acceptance) or after the date to which the time fixed for any completion may have been extended, does not operate as a waiver by City of any rights under the Agreement Documents, law or equity.

6.6.2 Furthermore, the timely completion of the Work being of the utmost importance under this Agreement, notwithstanding the existence of one or more disputes between the parties

concerning the scope of the Work, the Project Schedule, Agreement Time, payments or any other matter, and further notwithstanding a party's invocation of the Dispute Resolution provisions specified in Appendix 6 of these General Conditions, unless City suspends the Agreement or Contractor's performance pursuant to Section 10 of these General Conditions, Contractor will continue to prosecute the Work, including any Change Order work or Extra Work Orders, in a diligent and timely manner and not stop, slow down or impede by action or inaction the progress of the Work, including commencing performance of and thereafter completing any additional work called out in any Change Order or Extra Work Order issued by Project Manager with the approval of City, so long as City makes payment to Contractor in accordance with Section 8 of these General Conditions.

SECTION 7 - AGREEMENT PRICE

7.1 UNIT PRICE AGREEMENTS

7.1.1 The Agreement Price for all Unit Price Agreements will be the amount set forth in the Agreement or Change Order multiplied by the verified quantity provided.

7.1.2 Measurements of quantities to determine the total Agreement Price must be in accordance with MAG Specification §§ 109.1 and 109.2.

7.1.3 The Unit Price may only be changed as set forth in Section 9 below.

7.2 CHANGE ORDERS

7.2.1 Unit Price Change Orders. The Change Order Price for all Unit Price Change Orders will be the amount set forth in the Change Order multiplied by the verified quantity provided.

7.2.2 Measurements of quantities to determine the total Change Order Price must be in accordance with MAG Specifications §§ 109.1 and 109.2.

7.2.3 The Unit Price may only be changed as set forth in Section 9 below.

7.2.4 MAG Specification § 109.4.1 is modified as follows: Before § 109.4.1, the following is added: Any deduction or increase in the Agreement Price must be supported by a signed, written Change Order fully executed by City, and supported by such backup as the Project Manager may require.

7.3 SALES TAX

Contractor is required to pay all applicable sales tax in accordance with the law of the state of Arizona and this cost must be included in all Agreement Prices. When equipment, materials or supplies generally taxable to Contractor are eligible for a tax exemption due to the nature of the Project, Contractor must assist City in applying for and obtaining such tax credits and exemptions which will be paid or credited to City.

SECTION 8 - PAYMENT

8.1 PAYMENT FOR CONSTRUCTION SERVICES

8.1.1 Payment for the Work will be made in accordance with MAG Standard Specification § 109 as amended below.

8.1.2 Contractor must submit to City for review a completed Contractor Payment Request signed

by Contractor, covering the Work completed as of the date of the Request and accompanied by such supporting documentation as is required by the Agreement Documents and also as City may reasonably require. A Contractor Payment Request will not be considered complete unless it is accompanied by an updated Project Schedule and a certification that the on-site, red lined, as built Drawings are up to date. If payment is requested on the basis of materials and equipment not incorporated in the Work but delivered and suitably, securely stored at the Site or at another location (such as a bonded warehouse) agreed to in writing, the Contractor Payment Request must also be accompanied by such data, satisfactory to City, as will establish City's title to the material and equipment and protect City's interest therein, including applicable insurance. Each subsequent Contractor Payment Request must include an affidavit of Contractor stating that all previous progress payments received on account of the Work have been applied to discharge in full all of Contractor's obligations reflected in prior Contractor Payment Requests.

8.1.3 Except for Work performed under a JOC Agreement, the Contracting Agency will retain 10 percent of all estimates as a guarantee for complete performance of the Agreement in accordance with Arizona Revised Statutes Section 34-221 or 34-607. The Contractor may elect to deposit securities in lieu of retention in accordance with Arizona Revised Statutes Section 34-221, Paragraph C.5. or 34-607, Paragraph B.5.

8.1.4 The payment process functions as follows: Prior to the payment cycle date, Contractor must send a draft Contractor Payment Request to Project Manager. The Project Team will review the Request and agree upon any necessary adjustments. Contractor must certify the final Request by signing and returning to Project Manager.

8.1.5 When construction of the Project is fifty percent (50%) completed, Contractor may request payment of one-half of the retention pursuant to A.R.S. § 34-609(B)(3), subject to all of City's rights to withhold or offset payments, and other rights of City, under the Agreement.

8.1.6 City reserves the right under A.R.S. § 34-609(B)(3) to reinstate the ten percent (10%) retention if City determines that satisfactory progress is not being made.

8.1.7 <u>Contractor's Warranty of Title</u>.

8.1.7.1 Contractor warrants and guarantees that title to all Work, materials and equipment covered by any Contractor Payment Request, whether incorporated in the Project or not, will pass to City at the time of payment, free and clear of all liens, claims, security interests, and encumbrances, provided that this will not preclude the Contractor from installing metering devices or other equipment of utility companies or municipalities, the title of which is commonly retained by the utility company or municipality.

8.1.7.2 No materials, supplies, or equipment for the Work under this Agreement will be purchased subject to any chattel mortgage or under a conditional sale contract or other agreement by which an interest therein, or any part thereof, is retained by the seller or supplier.

8.1.7.3 Nothing contained in this Section will defeat or impair the right of such persons furnishing materials or labor under any bond given by the Contractor for their protection, or any right under any law permitting such persons to look to funds due the Contractor in the hands of the City. The provisions of this Section must be inserted in all subcontracts and material agreements, and notices of its provision must be given to all persons furnishing materials for the Work when no formal agreement is entered into for such materials.

8.2 **PAYMENT UPON SUBSTANTIAL COMPLETION**

8.2.1 No payment will be made upon Substantial Completion, except for a regularly-scheduled monthly progress payment, as allowed by Section 8.2.2.

8.2.2 No further payments will be made to Contractor until Final Acceptance.

8.3 **FINAL PAYMENT**

8.3.1 Subject to all of City's rights to withhold or offset payment, and other rights under the Agreement, Final Payment including remaining retainage will be paid only after:

a. Work has been fully completed (including completion of all incorrect or incomplete work items) and the written Final Acceptance has been issued by City;

b. Necessary operating manuals, any excess materials and supplies necessary for matching materials and supplies incorporated into the Work, acceptable sewer video results (if applicable), and complete "as-built" Drawings (including the Building Information Model, if required by the Agreement Documents) have been delivered to City, as specified in this Section 8.3;

c. Full and unconditional lien waivers and releases by Contractor and any person performing labor or supplying material, machinery, fixtures, or tools for the Work have been delivered to Contractor;

d. All conditions and requirements imposed by City or any financing entity for the corresponding disbursement have been met; and

e. Contractor delivers to City a Contractor Payment Request requesting Final Payment.

8.3.2 Contractor must also submit a signed copy of Contractor's Affidavit Regarding Settlement of Claims, Appendix 3 to these General Conditions, and Certificate of Completion, Appendix 7 to these General Conditions, prior to Final Payment.

8.3.3 In addition, if required under the Project Specific Special Provisions, Contractor must compile a complete equipment list and maintenance manual to be submitted to City as a precondition to Final Payment. The list must include the following items for all equipment supplied under the Plumbing, Electrical, Air Conditioning, Elevator, and other Special Equipment Specifications:

a. Name, Model and Manufacturer.

b. Complete parts lists and Drawings.

c. Local source of supply for replacement parts along with suppliers' telephone numbers.

d. Local service organizations serving the equipment and their telephone numbers.

e. All tags, inspection slips, instruction packages, etc., removed from equipment must be properly identified as to pieces of equipment from which they were taken.

8.3.4 Contractor must also deliver to City, prior to Final Payment, one (1) digital (in the format specified by City), and if requested by City, one (1) hard copy, of any applicable Maintenance manuals. Each manual must include all manufacturer's operation and maintenance instructions and "as-built" Drawings with the list herein specified. It must also include all other diagrams and instructions necessary to properly operate and maintain the equipment, the name, address and telephone number of Contractor and all Subcontractors involved.

8.4 **CITY'S RIGHT TO WITHHOLD PAYMENT**

City may withhold payment to such extent as may be necessary in City's opinion to protect City from loss for which Contractor is responsible, including, without limitation, if any of the following conditions exist:

a. Defective Work not remedied;

b. Third party claims filed or reasonable evidence indicating probable filing of such claims unless security acceptable to City is provided by Contractor;

c. Failure of Contractor to make payments properly to Subcontractors or for labor, materials or equipment;

d. Reasonable evidence that the Work cannot be completed for the unpaid balance of the Agreement Price;

e. Damage to City or another Contractor;

f. Reasonable evidence that the Work will not be completed within the Agreement Time, and that the unpaid balance would not be adequate to cover actual or liquidated damages for the anticipated delay;

g. Failure to carry out the Work in accordance with the Agreement Documents; or

h. Contractor is in default of any of its other obligations under the Agreement Documents.

8.5 **JOINT/DIRECT CHECKS**

To promote the timely completion and progress of the Work or when appropriate and necessary, payments to Contractor may be made jointly to Contractor and its employees, agents, Subcontractors and suppliers, or any of them. For federally funded agreements, see federal provisions for additional requirements for the joint check process.

8.6 **PAYMENT NOT A WAIVER**

No payment (nor use or occupancy of the Project by City) will be deemed acceptance or approval of the Work or as a waiver of any claims, rights, or remedies of City.

8.7 **LIENS AND BOND CLAIMS**

Contractor must make all payments, in the time required, of all labor and materials furnished to Contractor in the course of the Work and must promptly furnish evidence of such payments as City may require. Contractor must pay when due all claims arising out of performance of the Work covered by this Agreement for which a lien may be filed either against the real estate or leasehold interest of City, or against payments due from City to Contractor, or for which a claim may be made against any payment or performance bond or both. To the fullest extent permitted by law, Contractor agrees that no liens or other claims in the nature of a lien against the real estate, leasehold, or other interest of City,

against payment due from City to Contractor, or against any payment or performance bond, must be filed or made in connection with the Work by any party who has supplied professional services, labor, materials, machinery, fixtures, tools, or equipment used in or in connection with the performance of this Agreement, and Contractor agrees to remove or to cause to be removed any such liens or claims in the nature of a lien or bond claim within 10 Days upon receiving notice or obtaining actual knowledge of the existence of such liens or claim. In addition, Contractor agrees to defend, indemnify, and hold harmless City from and against any and all such liens and claims. This paragraph does not apply to claims and liens of Contractor due to non-payment for work performed.

8.8 **FINANCIAL RECORDKEEPING AND CITY'S AUDIT RIGHT**

8.8.1 Records for all Agreements between City and Contractor must, upon reasonable notice, be open to inspection and subject to audit, scanning, and reproduction during normal business working hours. Such audits may be performed by any City's representative or any outside representative engaged by City for the purpose of examining such records. City or its designee may conduct such audits or inspections throughout the term of this Agreement and for a period of five years after Final Payment or longer if required by law. City's representatives may (without limitation) conduct verifications such as counting employees at the Site, witnessing the distribution of payroll, verifying information and amounts through interviews and written confirmations with Contractor employees, field and agency labor, Subcontractors, and vendors.

8.8.2 Contractor's "records" must include any and all information, materials and data of every kind and character, including without limitation, records, books, papers, documents, subscriptions, recordings, agreements, purchase orders, leases, contracts, commitments, arrangements, notes daily diaries, superintendent reports, drawings, receipts, vouchers and memoranda, and any and all other agreements, sources of information and matters that may in City's judgment have any bearing on or pertain to any matters, rights, duties or obligations under or covered by any Agreement Document. Such records must include (hard copy, as well as computer readable data if it can be made available), written policies and procedures; time sheets; payroll registers; payroll records; cancelled payroll checks; subcontract files (including proposals of successful and unsuccessful bidders, bid recaps, negotiation notes, etc.); original bid estimates; estimating work sheets; correspondence; Change Order files (including documentation covering negotiated settlements); back-charge logs and supporting documentation; invoices and related payment documentation; general ledger, information detailing cash and trade discounts earned, insurance rebates and dividends; and any other Contractor records which may have a bearing on matters of interest to City or the Project in connection with Contractor's dealings with City or the Project (all foregoing hereinafter referred to as "records") to the extent necessary to adequately permit evaluation and verification of any or all of the following:

a. Compliance with Agreement requirements for deliverables;

b. Compliance with approved Plans and Specifications;

c. Compliance with § 14.9 below;

d. Compliance with Agreement provisions regarding the pricing of Change Orders;

e. Accuracy of Contractor representations regarding the pricing of invoices; or

f. Accuracy of Contractor representations related to claims submitted by

Contractor or any of their employees.

8.8.3 Contractor must require all payees (examples of payees include Subcontractors, Suppliers, Insurance Carriers, etc.) to comply with the provisions of this Section by including the requirements hereof in a written agreement between Contractor and payee. Contractor will ensure that all payees (including those entering into lump sum agreements) have the same right to audit provisions contained in this Agreement included in their agreements with Contractor.

8.8.4 City's authorized representative(s) (including, without limitation, Project Manager) must have reasonable access to Contractor's facilities, must be allowed to interview all current or former employees to discuss matters pertinent to the performance of this Agreement and must be provided adequate and appropriate work space, in order to conduct audits in compliance with this Section.

8.8.5 If an audit inspection or examination in accordance with this Section, discloses overpricing or overcharges to City (of any nature) by Contractor or Contractor's Subcontractors in excess of $100,000 in addition to making adjustments for the overcharges, the reasonable actual cost of City's audit must be reimbursed to City by Contractor. Any adjustments or payments which must be made as a result of any such audit or inspection of Contractor's invoices or records must be made within a reasonable amount of time (not to exceed 90 Days) from presentation of City's findings to Contractor.

8.8.6 In addition to the normal paperwork documentation Contractor typically furnishes to City, Contractor agrees to furnish, upon written request from City, any of the documentation necessary for City to exercise its audit rights under this Section 8.8 in computer readable file formats (Word, Excel, or .pdf), as City may designate.

8.8.7 City, its authorized representative, and the appropriate agency, reserve the right to audit Contractor's records in compliance with local, state or federal policies, statutes or at City's discretion, within three (3) years of Final Acceptance of the Work.

SECTION 9 - CHANGES TO THE AGREEMENT

9.1 **FIELD ORDERS**

City may authorize minor changes in the Work not involving an adjustment in the Agreement Price or the Agreement Times, which are consistent with the overall intent of the Agreement Documents. These may be accomplished by a written Field Order on the standard form approved and executed by City. Such Field Orders must be binding and Contractor must perform the change promptly. If Contractor believes that a Field Order justifies an increase in the Agreement Price or Agreement Time, Contractor may make a claim therefor as provided in Section 7.2.

9.2 **EXTRA WORK/CHANGES IN THE WORK**

9.2.1 City reserves the right to make such changes in the Plans and Specifications for the Work, as it may deem appropriate and any such change as set forth in a written Change Order must be deemed a part of this Agreement as if originally incorporated herein.

9.2.2 In the event City and Contractor cannot agree on the terms of a Change Order, or when circumstances otherwise require, the Project Manager has the authority to direct the Contractor to perform extra work, if the work in question is an item not provided for in the

Agreement as awarded. The Project Manager will have the authority to determine, based upon factual evidence presented by the Contractor, whether the work in question is an item not provided for in the Agreement as awarded. If the Project Manager directs the Contractor to perform extra work, the Project Manager's instructions will include a price that the Contractor cannot exceed in charging the City for the extra work. Upon receipt of the Project Manager's directions to perform extra work, the Contractor must promptly proceed with the extra work and document the actual cost thereof. Contractor's right to payment for extra work will be determined under Subsection 9.2.4 below. The Contractor is responsible to manage the extra work to ensure that the price limits set by the Project Manager are not exceeded. Contractor must perform the extra work and submit documentation for the actual cost of the extra work to the City. A Change Order will be issued to cover this work.

9.2.3 Contractor will not be entitled to payment for extra work unless a written Change Order, in form and content prescribed by City, has been executed by City. On all requests for Change Orders, Contractor must specify the increased or decreased costs and whether it believes any extensions of time will be necessary to complete its Work as modified by the Change Order. If extra work is performed under Subsection 9.2.2 above, a corresponding Change Order will be prepared, approved and processed by City before payment can be made to Contractor.

9.2.4 In general, pricing for Change Orders will include the same mark-up percentages that were in effect when the Agreement was awarded. The cost or credit to the City resulting from a change in the Work is subject to Appendix 1 (Policy Statement for Calculating Delays and Damages) and will be determined, based on the type of pricing for the Agreement involved, as follows:

a. By mutual acceptance of a lump sum properly itemized in a form acceptable to City;

b. By unit prices stated in the Agreement Documents;

c. When the City determines that a Unit Price Book Job Order associated with a Job Order Agreement requires a Change Order, by using the same Total Cost Data and CCI that are in effect when the Change Order is anticipated to be issued; or

d. By actual cost and a percentage fee covering overhead and profit, as follows:

(i) Contractor will perform the extra work and be compensated for actual cost of labor, materials and equipment.

(ii) Contractor will have the right to add the fee percentage applicable to the Work under the Agreement, or if no such fee has been agreed to by the parties, not more than five percent (5%) to the Subcontractor's prices for authorized extra work performed solely by Subcontractors. Such percentage will include all of Contractor's charges for overhead, profit, administration and supervision.

(iii) Contractor or Subcontractor will have the right to add the fee percentage applicable to Work under the Agreement for self-performed extra work, or if no such fee has been agreed to by the parties, Contractor's or Subcontractor's maximum total allowable additions for overhead, profit, administration and supervision will

not exceed ten percent (10%) of actual verifiable labor, materials and equipment for such self- performed extra work.

9.2.5 Any agreement which modifies the terms of the Agreement (including Change Orders) will be approved in writing by the Project Manager. Once properly executed by both parties, these modifications to the Agreement will have the same effect as if they had been included in the original Agreement.

9.3 **ACCURACY OF CHANGE ORDER PRICING INFORMATION**

9.3.1 Subject to Sections 9.3.2 through 9.3.4, signature by the contracting parties constitutes full accord and satisfaction between City and Contractor for all costs, damages, and expenses of whatever kind of nature, including delay, impact or acceleration damages, which may be occasioned by a Change Order of other modification of the Agreement agreed to in writing.

9.3.2 Accurate Change Order Pricing Information: Contractor agrees that it is responsible for submitting accurate cost and pricing data to City to support its Fixed Price, Unit Price, or Cost Plus Change Order Proposals or other Agreement Price adjustments under the Agreement. Contractor further agrees to submit Change Order proposals with cost and pricing data which is accurate, complete, current, and in accordance with the terms of the Agreement with respect to pricing of change orders. Contractor agrees that any "buy-out savings" on Change Orders will accrue 100% to Owner. "Buy-out savings" are defined as any savings negotiated by the Contractor with a Subcontractor or a Material Supplier after receiving approval of a Change Order amount that was designated to be paid to a specific Subcontractor or Supplier for the Approved Change Order work.

9.3.3 Right to Verify Change Order Pricing Information: Contractor agrees that City, through its designated representative, will have the right to examine, copy, and scan the records of the Contractor, Subcontractor or Sub-Subcontractor's records (during the Agreement period and up to three years after final payment is made on the Agreement) to verify the accuracy and appropriateness of the pricing data used to price all Change Order proposals or claims. Contractor agrees that if City determines the cost and pricing data submitted (whether approved or not) was inaccurate, incomplete, not current, or not in compliance with the terms of the Agreement regarding pricing of Change Orders, an appropriate Agreement Price adjustment will be made. Such post-approval Contact Price adjustments will apply to all levels of contractors and Subcontractors and to all types of Change Order proposals, specifically including Fixed Price, Unit Price, and Cost Plus Change Orders.

9.3.4 Requirements for Detailed Change Order Pricing Information: Contractor agrees to provide a detailed breakdown of allowable labor and labor burden cost (i.e., base wage rate of applicable classifications of workers, payroll taxes, and insurance and benefits costs). This information will be used to evaluate the potential cost of labor and labor burden related to Change Order work. It is intended that this information represent an accurate estimate of the Contractor's actual labor and labor burden cost components. Information is not intended to establish fixed billing or Change Order pricing labor rates. However, at the time Change Orders are priced, the submitted cost data for labor rates may be used to price Change Order work. The accuracy of any such agreed upon labor rate cost components used to price Change Orders will be subject to later audit. Approved Change Order amounts may be adjusted later to correct the impact of inaccurate labor cost components if the agreed upon labor cost components are determined to be inaccurate.

9.4 **EMERGENCIES**

In any emergency affecting the safety of persons or property, Contractor will act, at its discretion, to prevent threatened damage, injury or loss. Any change in the Agreement Price or Agreement Time resulting from emergency work will be determined as provided in this Section.

9.5 **DIFFERING SITE CONDITIONS**

9.5.1 If Differing Site Conditions are encountered at the Project Site, then notice by the observing party must be given to the other party promptly before conditions are disturbed (to the extent practicable) and in no event later than 14 Days after first observance of the conditions. City will promptly investigate such conditions and, if City determines that Differing Site Conditions exist and they materially cause an increase in the cost of, or time required for, performance of any part of the Work, Contractor will be entitled to equitable adjustment in the Agreement Price or Construction Schedule (and other time requirements), or both. If it is determined by City that the conditions at the Project Site are not Differing Site Conditions and no change is justified, then City will so notify Contractor in writing, stating the reasons. Claims in opposition to such determination must be made within 14 Days after City has given notice of its decision. If City and Contractor cannot agree on an adjustment in the Agreement Price or Construction Schedule (and other time requirements), the adjustment may be submitted to dispute resolution as provided these General Conditions.

9.6 **CHANGES IN LAWS, REGULATIONS, OR LEGAL REQUIREMENTS OR TAXES**

In the event of a material change in applicable Laws, Regulations, or Legal Requirements, or taxes subsequent to the date of the Agreement by the parties, Contractor may be entitled to a Change Order, in City's discretion, to the extent Contractor can document to the satisfaction of City that such change significantly increases Contractor's actual cost of performance of the Work.

SECTION 10 -SUSPENSION AND TERMINATION

10.1 **SUSPENSION**

City may suspend the Agreement and Contractor's performance in accordance with MAG Specifications § 105.1 and 108.7.

10.2 **TERMINATION BY THE CITY FOR CAUSE**

10.2.1 MAG Specifications § 108.11 applies to the Agreement.

10.2.2 City may also terminate the Agreement if City determines, in its sole discretion that Contractor has:

a. After prior written notice, refused or failed to supply enough properly skilled workers or proper materials;

b. After prior written notice, failed to make payment to Subcontractors for materials or labor in accordance with the respective agreements between Contractor and the Subcontractors;

c. After prior written notice, disregards laws, ordinances, or rules, regulations or orders of a public authority having jurisdiction;

d. After prior written notice, repeatedly failed to comply with written directives from City;

e. Is adjudged as bankrupt or insolvent;

f. Made a general assignment for the benefit of creditors;

g. Appointed a trustee or receiver for itself or any of its property;

h. Filed a petition to take advantage of any debtor's act, or to reorganize under the bankruptcy or similar laws; or

i. Otherwise breached a provision of the Agreement Documents or any other Agreement between City and Contractor.

10.2.3 When any of the above reasons exist, City may terminate the Agreement, without prejudice to any other rights or remedies of City, after giving Contractor and Contractors' surety, if any, 7 Days written notice of City's intent to terminate the Agreement and Contractor's failure to cure any such reasons. Upon such termination, City may: (1) take possession of the Site and of all materials thereon owned by Contractor; or (2) finish the Work by whatever reasonable method City may deem expedient. When City terminates the Agreement for one of the reasons state above, Contractor will not be entitled to receive further payment until the Work is finished. If the unpaid balance of the Agreement Price existing at the time of such termination exceeds the costs and expenses of finishing the Work and any other damages incurred by City, such excess will be paid to Contractor. If such costs, expenses and damages exceed such unpaid balance, Contractor must pay the difference to City. This obligation for payment will survive termination of the Agreement.

10.3 **TERMINATION BY CITY FOR CONVENIENCE**

City may also terminate the Agreement at any time for its convenience upon 7 Days written notice to Contractor specifying the termination date. In the event of termination which is not the fault, in whole or in part, of Contractor, City will pay to Contractor only such compensation, including reimbursable expenses, due for Work properly performed on the Project prior to the termination date. Upon any termination of the Agreement, no further payments will be due from City to Contractor.

10.4 **A.R.S. § 38-511**

The Agreement is subject to, and may be terminated by City in accordance with, the provisions of A.R.S. § 38-511.

SECTION 11 -INSURANCE AND BONDS

11.1 **INSURANCE REQUIREMENTS**

11.1.1 After Agreement award, the Contractor must furnish the City a certificate of insurance on a standard insurance industry ACORD form. The ACORD form must be issued by an insurance company authorized to transact business in the State of Arizona possessing a current A.M. Best, Inc. rating of A-7, or better and legally authorized to do business in the State of Arizona with policies and forms satisfactory to City. Provided, however, the A.M. Best rating requirement may not be deemed to apply to required Worker's Compensation coverage.

11.1.2 The Contractor and any of its Subcontractors must procure and maintain, until all of their obligations have been discharged, including any warranty periods under this Agreement are satisfied, the insurances set forth below.

11.1.3 The insurance requirements set forth below are minimum requirements for this Agreement and in no way limit the indemnity covenants contained in this Agreement.

11.1.4 The City in no way warrants that the minimum insurance limits contained in this Agreement are sufficient to protect Contractor from liabilities that might arise out of the performance of the Agreement services under this Agreement by Contractor**,** its agents, representatives, employees, or Subcontractors and the Contractor is free to purchase any additional insurance as may be determined necessary.

11.1.5 Failure to demand evidence of full compliance with the insurance requirements in this Agreement or failure to identify any insurance deficiency will not relieve the Contractor from, nor will it be considered a waiver of its obligation to maintain the required insurance at all times during the performance of this Agreement.

11.1.6 Use of Subcontractors: If any Work is subcontracted in any way, the Contractor must execute a written agreement with Subcontractor containing the same Indemnification Clause and Insurance Requirements as the City requires of the Contractor in this Agreement. The Contractor is responsible for executing the Agreement with the Subcontractor and obtaining Certificates of Insurance and verifying the insurance requirements.

11.2 **MINIMUM SCOPE AND LIMITS OF INSURANCE**

11.2.1 The Contractor must provide coverage with limits of liability not less than those stated below.

11.2.1.1 Commercial General Liability-Occurrence Form. Contractor must maintain "occurrence" form Commercial General Liability insurance with a limit of not less than $2,000,000 for each occurrence, $4,000,000 aggregate. Said insurance must also include coverage for products and completed operations, independent contractors, personal injury and advertising injury. If any Excess insurance is utilized to fulfill the requirements of this paragraph, the Excess insurance must be "follow form" equal or broader in coverage scope than underlying insurance.

11.2.1.2 Automobile Liability-Any Automobile or Owned, Hired and Non-Owned Vehicles. Contractor must maintain Business/Automobile Liability insurance with a limit of $1,000,000 each accident on Contractor owned, hired, and non-owned vehicles assigned to or used in the performance under this Agreement. If any Excess or Umbrella insurance is utilized to fulfill the requirements of this paragraph, the Excess or Umbrella insurance must be "follow form" equal or broader in coverage scope than underlying insurance.

11.2.1.3 Workers Compensation and Employers Liability Insurance. Contractor must maintain Workers Compensation insurance to cover obligations imposed by federal and state statutes having jurisdiction of Contractor employees engaged in the performance of Work under this Agreement and must also maintain Employers' Liability insurance of not less than $1,000,000 for each accident and $1,000,000 disease for each employee.

11.2.1.4 Builders' Risk/Installation Floater Insurance. The Contractor bears all responsibility for loss to all equipment or Work under construction. Unless waived in writing by the City the Contractor will purchase and maintain in force Builders' Risk/Installation Floater insurance on the entire Work until completed and accepted by the City. This insurance will be Special Causes of Loss policy form, (minimally including perils of fire, flood, lightning, explosion, windstorm and hail, smoke, aircraft and vehicles, riot and civil commotion, theft, vandalism, malicious mischief, and collapse), completed value, replacement cost policy form equal to the Agreement Price and all subsequent modifications. The Contractor's Builders'

Risk/Installation Floater insurance must be primary and not contributory.

a. Builders' Risk/Installation Floater insurance must cover the entire Work including reasonable compensation for architects and engineers' services and expenses and other "soft costs" made necessary by an insured loss. Builders' Risk/Installation Floater insurance must provide coverage from the time any covered property comes under the Contractor's control and or responsibility, and continue without interruption during course of construction, renovation and or installation, including any time during which any Project property or equipment is in transit, off Site, or while on Site for future use or installation. Insured property must include, but not be limited to, scaffolding, false work, and temporary buildings at the Site. This insurance must also cover the cost of removing debris, including demolition as may be legally required by operation of any law, ordinance, regulation or code.

b. The Contractor must also purchase and maintain Boiler and Machinery insurance with the same requirements as Builders' Risk/Installation Floater insurance cited above if the Work to be performed involves any exposures or insurable property normally covered under a Boiler and Machinery insurance policy or made necessary as required by law or testing requirements in the performance of this Agreement. The Contractor will be responsible for any and all deductibles under these policies and the Contractor waives all rights of recovery and subrogation against the City under the Contractor- Builders' Risk/Installation Floater insurance described herein.

c. Builders' Risk/Installation Floater Insurance must be maintained until whichever of the following first occurs: (i) final payment has been made; or, (ii) until no person or entity, other than the City, has an insurable interest in the property required to be covered.

d. The Builders' Risk/Installation Floater insurance must be endorsed so that the insurance will not be canceled or lapse because of any partial use or occupancy by the City.

e. The Builders Risk/Installation Floater insurance must include as named insureds, the City, the Contractor, and all tiers of Subcontractors and others with an insurable interest in the Work who will be named as additional insureds unless they are able to provide the same level of coverage with the City and Contractor named as additional insureds. Certificates must contain a provision that the insurance will not be canceled or materially altered without at least 30 Days advance notice to the City. The City must also be named as a Loss Payee under the Builders' Risk/Installation Floater coverage.

f. The Builders Risk/Installation Floater insurance must be written using the Special Causes of Loss policy form, replacement cost basis.

g. All rights of subrogation under the Builders Risk/Installation Floater insurance are, by this Agreement, waived against the City, its officers, officials, agents and employees.

h. The Contractor is responsible for payment of all deductibles under the Builders' Risk/Installation Floater insurance policy.

11.2.1.5 Pollution Liability Insurance (Including Errors and Omissions). For Job Orders, Pollution Liability Insurance is only required if applicable and determined on a project specific basis. Contractor must maintain Pollution Liability Insurance with a limit of not less than $5,000,000 per loss, $5,000,000 aggregate for losses caused by pollution conditions including coverage for bodily injury, property damage, defense costs, clean-up costs, and completed operations that arise from the operations of Contractor as described in this Agreement.

a. The policy must provide for complete professional service coverage, including coverage for pollution liability that is a result of a breach of professional duties.

b. The policy must provide for protection again claims for third-party bodily injury, property damage, or environmental damage caused for pollution conditions resulting from general contracting activities for which Contractor is legally liable.

c. The policy must provide for cleanup costs when mandated by governmental entities, when required by law, or as a result of third-party claims.

d. Completed Operations Coverage must be kept in place for up to the statute of repose.

e. The policy must be endorsed to include the following additional insured language: "City, its elected officials, trustees, employees, agents, and volunteers must be named as additional insureds with respect to liability arising out of the activities performed by, or on behalf of Contractor".

f. If Work under this Agreement requires the transportation of any hazardous material or regulated substances, Contractor must carry Auto Liability with a CA 9948 endorsement or equivalent.

g. If Work under this Agreement requires the disposal of any hazardous materials from the job site, Contractor must obtain a certificate of insurance for Pollution Legal Liability from the disposal site operator with a limit of not less than $5,000,000 per loss, $5,000,000 aggregate.

11.3 **ADDITIONAL POLICY PROVISIONS REQUIRED**

11.3.1 Self-Insured Retentions or Deductibles. Any self-insured retentions and deductibles must be declared and approved by the City. If not approved, the City may require that the insurer reduce or eliminate any deductible or self-insured retentions with respect to the City, its officers, officials, agents, employees, and volunteers.

11.3.2 The Contractor's insurance must contain broad form contractual liability coverage.

11.3.3 The Contractor's insurance coverage must be primary insurance with respect to the City, its officers, officials, agents, and employees. Any insurance or self-insurance maintained by the City, its officers, officials, agents, and employees will be in excess of the coverage provided by the Contractor and must not contribute to it.

11.3.4 The Contractor's insurance must apply separately to each insured against whom claim is made or suit is brought, except with respect to the limits of the insurer's liability.

11.3.5 Coverage provided by the Contractor must not be limited to the liability assumed under the

indemnification provisions of this Agreement.

11.3.6 The policies must contain a severability of interest clause and waiver of subrogation against the City, its officers, officials, agents, and employees, for losses arising from Work performed by the Contractor for the City.

11.3.7 The Contractor, its successors and or assigns, are required to maintain Commercial General Liability insurance as specified in this Agreement for a minimum period of 3 years following completion and acceptance of the Work. The Contractor must submit a Certificate of Insurance evidencing Commercial General Liability insurance during this 3 year period containing all the Agreement insurance requirements, including naming the required Additional Insureds set forth herein.

11.3.8 If a Certificate of Insurance is submitted as verification of coverage, the City will reasonably rely upon the Certificate of Insurance as evidence of coverage but this acceptance and reliance will not waive or alter in any way the insurance requirements or obligations of this Agreement.

11.3.9 Insurance Cancellation During Agreement Term.

11.3.9.1 If any of the required policies expire during the life of this Agreement, the Contractor must forward renewal or replacement Certificates to the City within 10 Days after the renewal date containing all the required insurance provisions.

11.3.9.2 Each insurance policy required by the insurance provisions of this Agreement must provide the required coverage and must not be suspended, voided or canceled except after 30 Days prior written notice has been given to the City, except when cancellation is for non-payment of premium, then 10 Days prior notice may be given. Such notice must be sent directly to Chandler Law-Risk Management Department, Post Office Box 4008, Mailstop 628, Chandler, Arizona 85225. If any insurance company refuses to provide the require notice, the Contractor or its insurance broker must notify the City of any cancellation, suspension, non-renewal of any insurance within 7 Days of receipt of insurers' notification to that effect.

11.3.10 City as Additional Insured. The above-referenced policies are to contain, or be endorsed to contain, the following provisions:

11.3.10.1 The Commercial General Liability and Automobile Liability policies are to contain, or be endorsed to contain, the following provisions: The City, its officers, officials, agents, and employees are additional insureds with respect to liability arising out of activities performed by, or on behalf of, the Contractor including the City's general supervision of the Contractor; Products and Completed Operations of the Contractor; and automobiles owned, leased, hired, or borrowed by the Contractor.

11.3.10.2 The City, its officers, officials, agents, and employees must be additional insureds to the full limits of liability purchased by the Contractor even if those limits of liability are in excess of those required by this Agreement.

11.4 BONDS AND OTHER PERFORMANCE SECURITY

11.4.1 After Agreement award, Contractor must provide a Performance Bond and a Payment Bond, each in an amount equal to the full amount of the Agreement Price.

11.4.2 Each such bond must be executed by a surety company or companies holding a Certificate

of Authority to transact surety business in the State of Arizona, issued by the Director of the Arizona Department of Insurance and must be named in the current list of "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies" as published in Circular 570 (amended) by the Audit Staff Bureau of Accounts, U.S. Treasury Department. A copy of the Certificate of Authority must accompany the bonds. The Certificate must have been issued or updated within two (2) years prior to the execution of this Agreement. The bonds must be written or countersigned by an authorized representative of the surety who is either a resident of the state of Arizona or whose principal office is maintained in this state, as by law required.

11.4.3 The bonds must be made payable and be acceptable to City. The bond forms for the performance and payment bonds must be in the forms required under A.R.S. § 34-221, *et. Seq.,* as in Appendices 4 and 5 of these General Conditions.

11.4.4 Upon the request of any person or entity appearing to be a potential beneficiary of bonds covering payment of obligations arising under the Agreement Documents, Contractor must promptly furnish a copy of the bonds or must permit a copy to be made.

11.4.5 All bonds submitted for this Project must be provided by a company which has been rated AM Best rating of A- or better for the prior four quarters by the latest edition of the 'Results Best's Key Rating Guide (Property/Casualty)" published by the A.M. Best Company.

11.4.6 Personal or individual bonds are not acceptable.

11.4.7 If the surety on any Bond furnished by Contractor is declared a bankrupt or becomes insolvent, or Contractor's right to do business is terminated in any state where any part of the Project is located, or it ceases to meet the requirements of this Section 11.4, Contractor must within 5 Days thereafter substitute another Bond and surety, both of which must be acceptable to City.

SECTION 12 - INDEMNIFICATION

12.1 To the extent permitted by law, the Contractor and its owners, officers, directors, agents, employees, and subconsultants (collectively "Indemnitor") must indemnify, save, and hold harmless the City and its officers, officials, agents, and employees (collectively "Indemnitee") from any and all claims, actions, liabilities, damages, losses, or expenses (including court costs, attorneys' fees, and costs of claim processing, investigation, and litigation) (collectively "Claims") caused or alleged to be caused, in whole or in part, by the negligent, reckless, wrongful, or willful acts, errors, or omissions of Indemnitor in connection with this Agreement. This indemnity includes any Claim or amount arising out of or recovered under workers' compensation laws or on account of Indemnitor's failure to conform to any federal, state, or local law, statute, ordinance, rule, regulation, or court decree. Indemnitor must indemnify Indemnitee from and against any and all Claims, except those arising solely from Indemnitee's own negligent, reckless, wrongful, or willful acts, errors, or omissions. Indemnitor is responsible for primary loss investigation, defense, and judgment costs where this indemnification applies. In consideration of the award of this Agreement, Indemnitor agrees to waive all rights of subrogation against Indemnitee for losses arising from or related to this Agreement. Indemnitor's obligations under this provision survive the termination or expiration of this Agreement.

SECTION 13 -DISPUTE RESOLUTION

13.1 All disputes arising out of or relating to the Agreement, the Work or the Project, other than termination under Section 10, will be resolved pursuant to the Dispute Resolution process set forth in Appendix 6 of these General Conditions, and not pursuant to MAG Specifications § 110.

13.2 Contractor agrees that during any dispute between the parties, Contractor will continue to perform its obligations under the Agreement until such dispute is resolved.

13.3 Notwithstanding any other provision in this Agreement, City has the right to immediately file in court and pursue an action for a temporary restraining order and injunctive relief against Contractor if City determines that such action is necessary to protect its interests under the Agreement, to obtain specific performance of any provision of the Agreement, to advance the completion of the Project, or to protect health, welfare and safety.

SECTION 14 - MISCELLANEOUS PROVISIONS

14.1 AGREEMENT DOCUMENTS

14.1.1 The Agreement Documents are intended to permit the parties to complete the Work and all obligations required by the Agreement Documents within the Agreement Times for the Agreement Price. The Agreement Documents are intended to be complementary and interpreted in harmony so as to avoid conflict, with words and phrases interpreted in a manner consistent with construction and design industry standards.

14.1.2 It is the intent of the Agreement Documents to describe a functionally complete Project (or part thereof) to be constructed in accordance with the Agreement Documents. Any labor, documentation, services, materials, or equipment that may reasonably be inferred from the Agreement Documents or from prevailing custom or trade usage as being required to produce the intended result must be provided by Contractor whether or not specifically called for at no additional cost to City.

14.1.3 The Agreement Documents establish the rights and obligations of the parties and include the Agreement, Addenda (which pertain to the Agreement Documents), Contractor's Bid or Proposal (including documentation accompanying the Bid and any post-Bid documentation submitted prior to Agreement award) when attached as an exhibit to the Agreement, the accepted Project Schedule, the Notice to Proceed, the Performance Bond, the Payment Bond, Project Design, Engineering and Specifications, these General Conditions, the Project Specific Special Provisions, Technical Specifications, Agreement Drawings, as the same may be more specifically identified in the Agreement, Change Orders, Work Change Directives, Field Orders and the written interpretations and clarifications of the Design Professional or City representative and Modifications issued after execution of the Agreement. Approved Shop Drawings and the reports and drawings of subsurface and physical conditions are not Agreement Documents.

14.1.4 In the event of any inconsistency, conflict, or ambiguity between or among the Agreement Documents, the Agreement Documents will take precedence as follows from highest to lowest: Change Orders, Addenda, Agreement, Project Specific Special Provisions, General Conditions, Technical Specifications, Drawings/Plans, Chandler Amendments to MAG Standard Specifications and Chandler Standard Details, and MAG Uniform Standard Specifications and Details for Public Works Construction. If applicable to this Agreement, Federal Provisions prevail.

14.1.5 On the Drawings, given dimensions will take precedence over scaled measurements and large scale drawings over small-scale drawings.

14.1.6 Clarifications and interpretations of the Agreement Documents will be issued by the Design Professional through the City.

14.1.7 The headings used in this Agreement or any other Agreement Documents, are for ease of reference only and must not in any way be construed to limit or alter the meaning of any provision.

14.1.8 The Agreement Documents form the entire agreement between City and Contractor. No oral representations or other agreements have been made by the parties except as specifically stated in the Agreement Documents.

14.1.9 The Agreement Documents may not be changed, altered, or amended in any way except in writing signed by a duly authorized representative of each party in the form of a Change Order.

14.1.10 Re-Use of Documents. Neither Contractor nor any Subcontractor, manufacturer, fabricator, supplier or distributor will have or acquire any title to or ownership rights in any of the Drawings, Specifications or other documents (or copies of any thereof) prepared by or bearing the seal of the Design Professional; and they must not re-use any of them on extensions of the Project or any other project without written consent of City and the Design Professional and specific written verification or adaptation by the Design Professional.

14.2 REFERENCE STANDARDS

14.2.1 Reference to standards, specifications, manuals, or codes of any technical society, organization, or association, or to Laws or Regulations, whether such reference be specific or by implication, will mean the standard, specification, manual, code, or Laws or Regulations in effect at the time of opening of Bids (or on the Effective Date of the Agreement if there were no Bids), except as may be otherwise specifically stated in the Agreement Documents.

14.2.2 The provisions of any such standard, specification, manual or code, or any instruction of a Supplier will not change the duties or responsibilities of City, Contractor, Design Professional or Project Manager, or any of their Subcontractors, consultants, agents, or employees from those set forth in the Agreement Documents, nor will any such provision or instruction assign to City, Contractor, Design Professional, or any of their agents, or employees any duty or authority to supervise or direct the performance of the Work or any duty or authority to undertake responsibility inconsistent with the provisions of the Agreement Documents.

14.3 COMPLIANCE WITH ARIZONA LAW AND FEDERAL LAW

14.3.1 Compliance with A.R.S. § 41-4401. Pursuant to the provisions of A.R.S. § 41-4401, the Contractor hereby warrants to the City that the Contractor and each of its subcontractors ("Subcontractors") must comply with all Federal Immigration laws and regulations that relate to the immigration status of their employees and the requirement to use E-Verify set forth in A.R.S. §23-214(A).

14.3.2 A breach of the Contractor Immigration Warranty constitutes a material breach of this Agreement and subject to penalties up to and including termination of this Agreement.

14.3.3 The City retains the legal right to inspect the papers of any Contractor or Subcontractor employee who works on this Agreement to ensure that the Contractor or Subcontractor is complying with the Contractor Immigration Warranty. The Contractor agrees to assist the City in the conduct of any such inspections.

14.3.4 The City may, at its sole discretion, conduct random verifications of the employment records of the Contractor and any Subcontractors to ensure compliance with Contractors Immigration Warranty. The Contractor agrees to assist the City in performing any such random verifications.

14.3.5 The provisions of this Article must be included in any agreement the Contractor enters into with any and all of its subcontractors who provide services under this Agreement or any subcontract. "Services" are defined as furnishing labor, time or effort in the State of Arizona by a contractor or subcontractor. Services include construction or maintenance of any structure, building or transportation facility or improvement to real property.

14.4 **HAZARDOUS ENVIRONMENTAL CONDITIONS**

14.4.1 Contractor will not be responsible for any Hazardous Environmental Condition uncovered or revealed at the Site which was not shown or indicated in Drawings or Specifications or identified in the Agreement Document to be within the scope of the Work. Contractor will be responsible for a Hazardous Environmental Condition created with any materials brought to the Site by Contractor, Subcontractors, Suppliers, or anyone else for whom Contractor is responsible.

14.4.2 If Contractor encounters a Hazardous Environmental Condition or if Contractor or anyone for whom Contractor is responsible creates a Hazardous Environmental Condition. Contractor must immediately:

a. Secure or otherwise isolate such condition;

b. Stop all Work in connection with such condition and in any area affected thereby; and

c. Notify City and promptly thereafter confirm such notice in writing.

14.4.3 City will promptly retain a qualified expert to evaluate such condition or take corrective action, if any.

14.4.4 Contractor will be responsible for any and all civil or criminal penalties, fines, damages, or other charges imposed by any regulatory agency or court for sewage discharges that are in violation of applicable statutes and laws and that are a result, direct or indirect, of work performed under this Agreement. Contractor will also be responsible for reimbursement to City for administration, reporting, and tracking expenses required as a result of any spill event. In the event the regulatory agency or court imposes a probationary period, Contractor must post bond for the probationary period to ensure that all such costs are reimbursed to City. This responsibility will apply whether penalties are imposed directly on Contractor or any of its Subcontractors, or the City of Chandler. Contractor must defend and indemnify City against such penalties. Regulatory agencies may include, but are not limited to, the Arizona Department of Environmental Quality (ADEQ) and the United States Environmental Protection Agency (USEPA).

14.5 **COOPERATION AND FURTHER DOCUMENTATION**

Contractor agrees to provide City such other duly executed documents as may be reasonably requested by City to implement the intent of the Agreement Documents.

14.6 **ASSIGNMENT**

Neither Contractor nor City will, without the written consent of the other assign, transfer or sublet any portion of this Agreement or part of the Work or the obligations required by the Agreement Documents, any such assignment will be void, will transfer no rights to the purported assignee, and would be a material breach of the Agreement.

14.7 **SUCCESSORS**

Contractor and City intend that the provisions of the Agreement Documents are binding upon the parties, their employees, agents, heirs, successors and assigns.

14.8 **LAWFUL PRESENCE**

Pursuant to A.R.S. §§ 1-501 and 1-502, City is prohibited from awarding an agreement to any natural person who cannot establish that such person is lawfully present in the United States. To establish lawful presence, a person must produce qualifying identification and sign a City-provided affidavit affirming the identification provided is genuine. This requirement will be imposed at the time of agreement award. This requirement does not apply to business organizations such as corporations, partnerships, or limited liability companies.

14.9 **NO BOYCOTT OF ISRAEL CERTIFICATION**

By Contractor's signature on this Agreement, Contractor certifies under A.R.S. § 35-393.01 that Contractor is not currently engaged in and for the duration of this Agreement will not engage in a boycott of Israel.

14.10 **NO THIRD PARTY BENEFICIARY**

Nothing under the Agreement Documents will be construed to give any rights or benefits in the Agreement Documents to anyone other than City and Contractor, and all duties and responsibilities undertaken pursuant to the Agreement Documents will be for the sole and exclusive benefit of City and Contractor and not for the benefit of any other party, unless otherwise expressly set forth in the Agreement Documents.

14.11 **GOVERNING LAW AND VENUE**

The Agreement and all Agreement Documents will be deemed to be made under, and will be construed in accordance with and governed by the laws of the State of Arizona without regard to the conflicts or choice of law provisions thereof. Any court action to enforce any provision of the Agreement or to obtain any remedy with respect hereto must be brought in the Superior Court, Maricopa County, Arizona, and for this purpose, each party hereby expressly and irrevocably consents to the jurisdiction and venue of such Court.

14.12 **SEVERABILITY**

If any provision of the Agreement Documents or the application thereof to any person or circumstance will be invalid, illegal or unenforceable to any extent, the remainder of the affected provision, the remainder of the Agreement Documents, and the application thereof will not be affected and will be enforceable to the fullest extent permitted by law.

14.13 **LEGAL REQUIREMENTS**

At all times relevant to its entry into this Agreement and performance of the Services and the Work, Contractor must fully comply with all Laws, Regulations, or Legal Requirements applicable to City, the Project, and the Agreement, including, without limitation, those set

forth on Exhibit C of the Agreement.

14.14 **PARTIAL INVALIDITY**

If any provision of the Agreement is held by a court of competent jurisdiction to be invalid, void or unenforceable, the remaining provisions will nevertheless continue in full force without being impaired or invalidated in any way.

14.15 **ATTORNEYS' FEES**

Should either party to the Agreement bring an action to enforce any provision of the Agreement, the prevailing party will be entitled to recover reasonable attorneys' fees and costs in connection therewith.

14.16 **CONFLICT OF INTEREST**

14.16.1 Contractor agrees to disclose any financial or economic interest with the Project property, or any property affected by the Project, existing prior to the execution of the Agreement. Further, Contractor agrees to disclose any financial or economic interest with the Project property, or any property affected by the Project, if Contractor gains such interest during the course of this Agreement. If Contractor gains financial or economic interest in the Project during the course of this Agreement, this may be grounds for terminating this Agreement. Any decision to terminate the Agreement must be at the sole discretion of City.

14.16.2 Contractor will not engage the services on this Agreement of any present City employee who was involved as a decision maker in the selection or approval processes, or who negotiated or approved billings or Agreement Modifications for this Agreement.

14.16.3 Contractor agrees that it will not perform services on this Project for a contractor, subcontractor, or any supplier, not covered under this Agreement.

14.17 **INDEPENDENT CONTRACTOR**

Contractor is and must be an independent contractor. Any provisions in the Agreement Documents that may appear to give City the right to direct Contractor as to the details of accomplishing the Work or to exercise a measure of control over the Work means that Contractor must follow the wishes of City as the results of the Work only. These results must comply with all applicable laws and ordinances.

14.18 **NOTICE OF INJURY**

Should City or Contractor suffer injury or damage to their person or property because of any error, omission or act of the other party or of any of the other party's employees or agents or others for whose acts the other party is legally liable, claim must be made in writing to the other party within 7 Days of the first observance of such injury or damage.

14.19 **CONFIDENTIALITY**

Contractor, for the benefit of City, hereby agrees it will not release or cause or permit to be released to the public any press notices, publicity (oral or written) or advertising promotion relating to, any statement regarding, or any other public announcement or disclosure or cause or permit to be publicly announced or disclosed, in any manner whatsoever, the specific terms and conditions of this Agreement or any comment relating to the Project or the Site. Notwithstanding the foregoing, Contractor will be entitled to disclose the terms of the Agreement to the extent required by law or in the course of enforcing or defending a claim or action hereunder. Contractor must give City reasonably prompt notice of any disclosure or statement made pursuant to this provision.

14.20 **DATA CONFIDENTIALITY**

14.20.1 As used in the Agreement, "data" means all information, whether written or verbal, including plans, specifications, renderings, photographs, studies, investigations, audits, analyses, samples, reports, calculations, internal memos, meeting minutes, data field notes, work product, proposals, correspondence and any other similar documents or information prepared by, obtained by, or transmitted to the City in the performance of this Agreement.

14.20.2 Contractor agrees that all data, regardless of form, including originals, images, and reproductions, prepared by, obtained by, or transmitted to City in connection with the Contractor's performance of this Agreement is confidential and proprietary information belonging to City.

14.20.3 Except as specifically provided in this Agreement, Contractor or its Subcontractors must not divulge data to any third party without prior written consent of City. Contractor or its Subcontractors must not use data for any purposes except to perform Work required under this Agreement. These prohibitions will not apply to the following data provided Contractor has first given the required notice to City:

a. Data which was known to Contractor or its Subcontractors prior to its performance under this Agreement unless such data was acquired in connection with Work performed for City;

b. Data which was acquired by Contractor or its Subcontractors in its performance under this Agreement and which was disclosed to Contractor or its Subcontractors by a third party, who to the best of Contractor's or its Subcontractor's knowledge and belief, had the legal right to make such disclosure and Contractor or its Subcontractors are not otherwise required to hold such data in confidence; or

c. Data which is required to be disclosed by virtue of law, regulation, or court order, to which the Contractor or its Subcontractors are subject.

14.20.4 In the event the Contractor or its Subcontractors are required or requested to disclose data to a third party, or any other information to which the Contractor or its Subcontractors became privy as a result of any other agreement with City, the Contractor must first notify City as set forth in this Section of the request or demand for the data. The Contractor or its Subcontractors must give City sufficient facts so that City can be given an opportunity to first give its consent or take such action that City may deem appropriate to protect such data or other information from disclosure.

14.20.5 Unless prohibited by law, within 10 Days after completion of services for a third party on real or personal property owned or leased by City, the Contractor must promptly deliver, as set forth in this Section, a copy of all data to City. All data will continue to be subject to the confidentiality agreements of this Agreement.

14.20.6 Contractor or its Subcontractors assume all liability for maintaining the confidentiality of the data in its possession and agree to compensate City if any of the provisions of this Section are violated by Contractor, its employees, agents, or Subcontractors. Solely for the purposes of seeking injunctive relief, it is agreed that a breach of this Section will be deemed to cause irreparable harm that justified injunctive relief in court. Contractor agrees that the requirements of this Section will be incorporated into all subcontracts entered into by Contractor. A violation of this Section may result in immediate termination of this

Agreement without notice.

14.21 **SURVIVAL**

All warranties, representations and indemnifications by Contractor must survive the completion or termination of this Agreement.

14.22 **COVENANTS AGAINST CONTINGENT FEES**

Contractor warrants that no person has been employed or retained to solicit or secure this Agreement upon an agreement or understanding for a commission, percentage, brokerage, or contingent fee, and that no member of City Council, or any employee of City has any interest, financially, or otherwise, in the firm. For breach or violation of this warrant, City will have the right to annul the Agreement without liability or at its discretion to deduct from the Agreement Price or consideration, the full amount of such commission, percentage, brokerage, or contingent fee.

14.23 **NO WAIVER**

The failure of either party to enforce any of the provisions of the Agreement Documents or to require performance of the other party of any of the provisions hereof must not be construed to be a waiver of such provisions, nor will it affect the validity of the Agreement Documents or any part thereof, or the right of either party to thereafter enforce each and every provision.

14.24 **NONEXCLUSIVE REMEDIES**

The remedies set forth in this Agreement are cumulative and not exclusive, and failure to exercise any remedy (including, without limitation, any right to terminate) will not preclude any party from exercising any other right in seeking any other remedy available to it at law or in equity.

14.25 **PROJECT COMMUNICATIONS**

14.25.1 All communications concerning the performance of the Work or the Project will be provided to the designated Project Manager and Contractor's Representative set forth in Article 1 of the Agreement. City may change the designated Project Manager and, subject to Section 4.4.20 of these General Conditions, Contractor may change Contractor Representative, by written notice to the other.

14.25.2 Project communications may be exchanged by e-mail, but email communications cannot change the terms of the Agreement or the Scope of Work, or effectuate any change that requires a written Change Order.

14.25.3 When any provisions of the Agreement Documents requires Contractor or the Design Professional to give written notice to City, it will be deemed to have been validly given if delivered in person or if delivered at or sent by registered or certified mail, postage prepaid, to the Parties indicated in Agreement Article 1, incorporated by reference.

14.25.4 When any provisions of the Agreement Documents requires City, Project Manager, or the Design Professional to give written notice to Contractor, it will be deemed to have been validly given if delivered in person to the person designated in the Agreement Documents as Contractor's Resident Superintendent, or if delivered at or sent by registered or certified mail, postage prepaid, to Contractor at the last address in the Agreement Documents or such substitute address which Contractor designates in writing, or to the business address known to the giver of notice.

14.26 **DRUG FREE WORKPLACE PROGRAM**

14.26.1 City has adopted a policy establishing a drug free workplace for itself and as a requirement for Contractors doing business with City, to ensure the safety and health of employees working on City projects.

14.26.2 Contractor must require a drug free workplace for all employees working under the Agreement. Specifically, all employees of Contractor who are working under an agreement with City must be notified, in writing, by Contractor that they are prohibited from the manufacture, distribution, dispensation, possession or unlawful use of a controlled substance in the workplace.

14.27 Failure to require a drug free workplace in accordance with the City's policy may result in termination of the Agreement and possible debarment form bidding on future City projects.

SECTION 15 - PROVISIONS APPLICABLE SOLELY TO GMP AND COST-BASED AGREEMENTS, CHANGE ORDERS, AND JOB ORDERS

15.1 **ADDITIONAL DEFINITIONS**

The definitions set forth in Section 2 apply to GMP and Cost-Based Agreements, Change Orders, and Job Orders, together with the additional definitions set forth below.

Baseline Cost Model –
A breakdown and estimate of the scope of the Project developed by CM@Risk pursuant to Section 17.5 of these General Conditions.

CM@Risk or Construction Manager at Risk –
The person or firm selected by City to provide pre-construction and/or construction services as detailed in a Construction Manager at Risk Agreement with City. In these General Conditions, the term "Contractor" includes CM@Risk under both Pre-Construction and Construction Services Agreements.

CM@Risk Fee or Contractor's Fee –
An agreed to percentage in an accepted GMP that represents the Contractor's fee for performance of the Work.

Agreement Documents –
Where compensation under the Agreement is based upon a GMP accepted by City, the term "Agreement Documents" also includes the accepted GMP Proposal.

Agreement Price –
Where compensation under the Agreement based upon a GMP accepted by City, the term "Agreement Price" refers to the GMP.

Cost-Based Agreement, Change Order, or Job Order –
A Agreement, Change Order, or Job Order where the Agreement Price is based upon the actual cost of performing the Work, subject to the terms of the Agreement Documents, including this Section 15. These would include those generally referred to as "Cost of the Work plus a Fee with a GMP," "Time and Materials," or "Cost Plus a Fee."

Cost of the Work –
The direct costs necessarily incurred by Contractor in the proper, timely, and complete performance on the Work. The Cost of the Work will include only those costs set forth in Section 15.2 of these

General Conditions.

Deliverables –
The work products prepared by Contractor in performing the scope of work described in the Agreement. Some of the major deliverables to be prepared and provided by Contractor during pre-construction may include but are not limited to: the Baseline Cost Model and Schedule that validate City's plan and budget, Construction Management Plan, Detailed Project Schedule, Schedule of Values, alternative system evaluations, procurement strategies and plans, Detailed Cost Estimates, construction market surveys, cash flow projections, GMP Proposals, Subcontractor procurement plan, Subcontractor agreements, Subcontractor bid packages, Supplier agreements, Constructability Review, Cost Control Log, Traffic control and phasing plans and others as indicated in this Agreement or required by the Project Team.

Pre-Construction Services Agreement –
The Agreement entered into between City and the CM@Risk for Pre-Construction Services to be provided by the CM@Risk, including, without limitation, the generation of a GMP Proposal. If the GMP Proposal is accepted by City and a Construction Agreement is entered into between City and CM@Risk, the duties, obligations and warranties of the CM@Risk under the Pre-Construction Services Agreement survive and are incorporated into the resulting Construction Agreement.

Pre-Construction Services –
The services to be provided under the Pre-Construction Services Agreement, including Section 17 of these General Conditions.

Detailed Project Schedule –
The Detailed Project Schedule developed by the CM@Risk for the review and approval of the Project Manager in accordance with Section 17.3 of these General Conditions, if applicable.

General Conditions Costs –
Those costs set forth in Section 4 of Appendix 9 to these General Conditions.

GMP Plans and Specifications –
The plan and specifications upon which the Guaranteed Maximum price Proposal is based.

GMP Proposal –
The proposal of Contractor submitted pursuant to Section 17.7 of these General Conditions for the entire Work and/or portion (phases) of the Work.

Guaranteed Maximum Price or GMP –
The Guaranteed Maximum Price set forth in the Agreement, Change Order, or Job Order if applicable.

15.2 **AGREEMENT PRICE**

15.2.1 The Agreement Price for all Agreements, Change Orders, and Job Orders based upon payment of the Cost of the Work plus a Fee with a GMP, time and materials, or cost-plus a fee will be the Cost of the Work incurred plus the Fee agreed to in writing by City, limited to the amount of the GMP, if agreed to. Unless otherwise expressly provided in the Agreement, Change Order, or Job Order, all Cost Based pricing will be subject to and limited to GMP.

15.2.2 The Agreement Price may only be changed as set forth in Section 9 above.

15.2.3 Only costs specifically designated as reimbursable costs are eligible for payment by City or may be charged against the Agreement Price. All other costs will not be paid by City and will not be chargeable against the Agreement Price.

15.2.4 Cost-Based Agreements. For Agreements, Change Orders, or Job Orders, reimbursable costs must be determined pursuant to Appendix 9 to these General Conditions, Cost of the Work, and not by MAG Specifications §109.5.

15.3 **ALLOWANCES**

15.3.1 Contractor must include in the Agreement Price all Allowances stated in the Agreement Documents and agreed to in writing by City. Items covered by these Allowances must be supplied for such amounts and by such persons as City may direct, provided Contractor will not be required to employ persons against whom Contractor makes a reasonable objection. Materials, labor, and equipment under an Allowance will be selected by City in accordance with a schedule to be mutually agreed upon by City, Design Professional and Contractor or otherwise in reasonably sufficient time to avoid delay in the Work.

15.3.2 Unless otherwise provided in the Agreement Documents:

15.3.2.1 These Allowances must cover the cost to Contractor, less any applicable trade discount, of the materials, labor, and equipment required by the Allowances, delivered at the Site, and all applicable taxes;

15.3.2.2 Contractor's costs for unloading and handling on the Site, labor, installation costs, overhead, profit and other expenses relating to materials, labor, and equipment required by the Allowance must be included in the Agreement Sum and not in the Allowance; and

15.3.2.3 Whenever the cost is more or less than the Allowance, the Agreement Sum must be adjusted accordingly by Change Order, the amount of which will recognize the difference between actual costs for an Allowance item and the amount of the Allowance item and changes, if any, in handling costs on the Site, labor, installation costs, overhead, profit and other expenses.

15.4 **CONTINGENCY**

An agreed to amount in the GMP that may only be used in accordance with the terms set forth in these General Conditions and with prior written approval by the City.

15.4.1 Construction Contingency. This GMP includes a dollar amount listed as a Construction Contingency which will be readily available for increased costs for subcontractors, material, and equipment subject to prior approval of City, which approval will not be withheld unreasonably. The Construction Contingency may also be used, at the discretion of City, to reimburse CM@Risk for unexpected costs due to (a) scope gaps between trade subcontractors; (b) agreement default by trade subcontractors; (c) unforeseen field conditions, but only as defined in Section 9.5 above; (d) work completed to meet the intent of the design, but which was not indicated on the plans; (e) costs overruns not covered by allowances; (f) costs of corrective work not provided for elsewhere; and (g) implementation of any Recovery Plan. Cost for which CM@Risk desires to be paid from the Construction Contingency must be documented by CM@Risk on a time and materials basis and are subject to verification by City. If agreed to by City, a "Use of Contingency" form will be executed by both parties authorizing the actual cost of the work to be paid and included in the Work Item Direct Costs. The Construction Contingency is not allocated to any particular

item of the Project but may be used for any portion of the work as determined above. Any amount not used in the Construction Contingency will belong to City and will reduce the GMP.

15.4.2 Owner's Contingency. This GMP also includes a dollar amount listed as an Owner's Contingency which may be used only by the City (owner department) for upgrades and changes in scope or other changes not already included within the intent of the Project Program. City will provide CM@Risk with a Work Change Directive authorizing CM@Risk to perform the additional work and to transfer funds from the Owner's Contingency to the Work Item Direct Costs category to be paid with such direct costs. These additional costs will be in an amount mutually agreed upon by CM@Risk and City or will be documented by CM@Risk on a time and materials basis and are subject to verification by City. Any amount not used in the Owner's Contingency will belong to the City and will reduce the GMP.

15.5 **REDUCTION IN RETENTION**

If the Agreement Price is based upon a GMP, in order to receive payment of one-half of the retention as set forth in Section 8.1.5 above, Contractor must also submit to the Project Manager a complete accounting of the Actual Reimbursable Cost of the Work to date, including all such documentation (including, without limitation, invoices, subcontract, subcontractor change orders, purchase orders, records of payment, etc.) as City may require, to establish whether the payments made to Contractor equal, exceed, or are less than the actual reimbursable Cost of the Work to date. Any excess payments by City, as determined by the Project Manager, will be deducted from the one-half retention payment to be made to Contractor, and any additional excess amounts paid to Contractor will be refunded by Contractor to City. The Project Manager's determinations as to Actual Reimbursable Cost of the Work will be the basis of payment until final Project Closeout and Final Payment under the Agreement.

15.6 **FINAL PAYMENT**

If the Agreement Price is based upon a GMP, as a further condition precedent to Final Payment by City, Contractor must submit to the Project Manager a complete final accounting of the Actual Reimbursable Cost of the Work, including all such documentation (including, without limitation, invoices, subcontracts, subcontractor change orders, purchase orders, records of payment, etc.) as City may require, to establish whether the payments made to Contractor equal, exceed, or are less than the Actual Reimbursable Cost of the Work to date. Any excess payments by City, as determined by the Project Manager, will be deducted from the one-half retention payment to be made to Contractor, and any additional excess amounts paid to Contractor will be refunded by Contractor to City. Disputes relating to the Final Cost of the Work will be subject to City's audit rights under Sections 8.8 above and 15.7 below, and the dispute resolution process under Section 13 above.

15.7 **OPEN BOOK**

On any GMP-based or Cost-Based Agreement, Job Order, or Change Order, City may attend any and all meetings or discussions pertaining to the Project, including bid openings, and must have access to all books, invoices, accounts, memoranda, correspondence, and written communications or records of any kind pertaining to the Project, including without limitation, those stored in electronic format.

15.8 **DIFFERING SITE CONDITIONS AND/OR CHANGE IN LAWS**

A Change Order for increased costs under Section 9.5 or 9.6 above will only be considered

or granted by City to the extent such actual, documented costs are justified.

SECTION 16 - PROVISIONS APPLICABLE SOLELY TO JOB ORDER AGREEMENTS (JOC)

16.1 **ADDITIONAL DEFINITIONS**

The definitions set forth in Sections 2 and below will apply to all Job Order Agreements and Job Orders. In addition, the definitions set forth in Section 15.1 above will apply to all Cost-Based Job Orders.

Agreement –
Includes the Job Order Master Agreement and Job Order Project Agreements issued and agreed to by City and JOC Contractor.

JOC Contractor's Coefficient –
A numerical factor that represents JOC Contractor total costs (indirect and direct costs, sales tax, profit, etc.) and other adjustments for market conditions.

Job Order Request for Proposal (RFP) –
The Request for Proposals issued by City for each Job Order Project Agreement relating to a specific Project.

Job Order Cost Proposal –
The Proposal submitted by JOC Contractor in response to a Job Order Request for Proposal (RFP) issued by City to develop a Job Order Project Agreement for a specific Project.

Guaranteed Maximum Price (GMP) Job Order –
Job Order under which JOC Contractor is compensated for actual costs incurred.

Job Order Project Agreement (Job Order) –
The agreement for a specific project, as it may be modified by all Change Orders, executed by the Parties, which incorporates the terms and conditions of the Job Order Master Agreement.

16.2 **ORDERING AND PROCESSING PROCEDURES FOR JOB ORDERS**

16.2.1 The process for developing and issuing a Job Order for a particular Project consists of three (3) procedures: (1) issuance of a RFP by City; (2) JOC Contractor's response to the RFP in the form of JOC Contractor's Job Order Cost Proposal; and (3) Issuance of a Job Order by City, as set for below.

16.2.2 RFP's For Job Orders

16.2.2.1 City will provide to JOC Contractor RFP with a Scope of Work (SOW) describing the Work to be performed, which may include special instructions and conditions, material submittal requirements, and, if applicable, a complete set of sketches, construction drawings and specifications for the Job Order.

16.2.2.2 Some Job Order RFP's will be issued by City without detailed sketches, drawing and specifications and will rely on JOC Contractor to produce them for City review and approval and is considered to be Pre-Construction and incidental design services included in JOC Contractor's overhead for GMP Job Orders. In addition JOC Contractor will not be reimbursed for any Pre-Job Order costs, including proposal preparation, attendance during negotiations, or site visits.

16.2.3 JOC Contractor's Job Order Cost Proposal

16.2.3.1 JOC Contractor must respond within ten (10) calendar days of the RFP date or site visit, whichever is later or as otherwise indicated on a case-by-case basis, by submitting JOC Contractor's Job Order Cost Proposal to the City representative.

16.2.3.2 Unless otherwise required under the terms of the RFP, JOC Contractor's Job Order Cost Proposal must include the following.

a. JOC Contractor's Job Order Cost Proposal in PDF and electronic format;

b. A Project Schedule and schedule of values that reflects the costs of each work element on the schedule. The schedule must show all milestones (e.g., permits, submittals, ordering materials, demolition, work phases, closeout and completion date); and

c. Necessary documentation will be required to indicate that adequate scoping, layout, setup and planning to accomplish the Work has been done. Examples of documentation that might reasonably be expected include sketches, drawings, calculations, catalog cuts and specifications produced to a level of detail and skill that could be expected of experienced, competent Project Managers with five or more periods experience in their respective trade.

16.2.3.3 JOC Contractor must select Subcontractors based on qualifications alone or on a combination of qualifications and price and must not select Subcontractors based on price alone. A qualifications and price selection may be a one-step selection based on a combination of qualifications and price or two-step selection. In a two-step selection, the first step must be based on qualifications alone and the second step may be based or a combination of qualifications and price or on price alone.

16.2.3.4 Upon request, JOC Contractor must provide City with copies of Subcontractor quotes and the basis for selection of each Subcontractor.

16.2.3.5 If City objects to a selected Subcontractor, City will make the objection and the reasons for the objection known to the JOC Contractor. JOC Contractor must then present an acceptable Subcontractor for the applicable discipline. City will not unreasonably object to or withhold approval of a Subcontractor.

16.2.3.6 For self-performed work, the City retains the right to have the JOC Contractor establish JOC Contractor's costs by bidding their costs against at least three (3) other interested trade Contractors. No self- performed work will be allowed to be performed on a lump sum basis.

16.2.4 Issuance of Job Order

16.2.4.1 City Representative will compare the JOC Contractor's Job Order Cost Proposal with the City's estimate, schedules and other requirements, and then, if the City Representative determines it is in the best interest of City, arrange a meeting with JOC Contractor, at which time the JOC Contractor's Job Order Cost Proposal will be discussed and negotiated.

16.2.4.2 If the City Representative determines that it is in the best interest of the City, City will then issue a Job Order to JOC Contractor for execution.

16.2.4.3 Specific Job Orders may vary, but unless agreed to by City in writing otherwise, the content

of Job Orders under the Agreement will generally be as follow, all of which will be signed and/or initialed by JOC Contractor's designated representative:

a. The description of the Scope of the Work and Project Schedule (attached as Exhibit A to the Job Order);

b. The address or location of the Work;

c. The Agreement Price for Work (Construction) included in the Project (attached as Exhibit B to the Job Order);

d. The name of the JOC Contractor representative for the Project;

e. The Drawings and Specifications for the Project;

f. If any shop drawings, project date and/or samples are required for the Job Order, the date for delivery of each required item (included in the Project Schedule, Exhibit A to the Job order); and

g. Project Specific Provisions, if any, in Exhibit A to the Job Order, including, without limitation, whether any of the following are required: Pre-Construction Conference, weekly progress meetings, field office, storage enclosure, materials and equipment handling facility, submittals, shop drawings, product data, equipment list, samples, project manual, schedule of values, Construction progress schedule, narrative reports, progress report, progress charts, progress photographs, materials status report, Construction diagram, Construction status report, operation and maintenance data, operating maintenance instructions and parts list, and as-build drawings.

16.2.5 Job Order Intent. Each Job Order will be interpreted to include all items reasonably necessary to complete the Project under that Job Order as described in the scope of the Work in that Job Order. All Work must be performed in a professional manner and all materials used must be new and of the highest quality and of the type best adapted to their purpose, unless otherwise specified. The Notice to Proceed date, and the award date established therein, will be deemed an integral part of the Job Order the same as if set forth therein.

16.3 **INCIDENTAL DESIGN SERVICES**

16.3.1 This effort includes all "extensions of design" for systems that are typically specified in a performance oriented manner by consultants and designers. Examples include: fire sprinkler systems, fire alarm and sprinkler systems, DDC controls, control systems, prefabricated metal building and similar situations. These designs are normally provided under submittals as a shop drawing with engineering backup and as appropriate, seals of registered engineers specializing in the particular system.

16.3.2 Incidental design includes all documents, sketches, schematic diagrams, floor plan layouts, equipment schedules and other documents produced by the JOC Contractor to define the work required for projects that the City does not develop formal or abbreviated designs requiring a seal by a registered engineer. Incidental design does not include preparation of designs requiring an architect or engineer seal.

16.3.3 JOC Contractor represents, covenants, and agrees, and contractually assumes the obligation to furnish, all of the required Design Services through properly licensed and

experienced Design Professionals in complete accordance with all of the duties imposed on a Design Professional under the Agreement Documents, Laws, Regulations, or Legal Requirements, and the common law.

16.3.4 All Design Documents (and all other Project-related documents, models, computer drawings and other electronic expression, photographs and other expressions CADD, and BIM files and images included) that JOC Contractor and/or JOC Contractor's Design Professional(s) prepare in connection with a Job Order and the copyrights therein (collectively, the "Instruments of Service") will be the property of City. JOC Contractor covenants and agrees to execute any additional document reasonably requested by City to confirm such assignment without any additional compensation.

16.4 **CONSTRUCTION SERVICES**

16.4.1 The following subsections of this Section 16.4 set forth requirements beyond those set forth in Section 4 above which apply to Construction Services performed under a Job Order.

16.4.2 JOC Contractor must perform the Work using only those firms, team members and individuals designated by JOC Contractor consistent with each Job Order or otherwise approved by City pursuant to the General Conditions. No other entities or individuals may be used without the prior written approval of the Project Manager.

16.4.3 Construction Phasing

16.4.3.1 City use of the facilities is anticipated while the Work is being performed. The Work must be planned and accomplished so that there will be a minimum of interference and inconvenience to occupants in the building and agencies in the vicinity and to other craftsmen who may have to do work in the affected facilities. Any blockage of building exits or driveways must be coordinated in advance.

16.4.3.2 If applicable, furniture, portable office equipment and wall appurtenances not rigidly fastened to the walls must be moved by JOC Contractor, protected from damage and replaced to the original position upon completion of the work. If the work required by the Job Order will not allow furniture and portable office equipment to be replaced to its original position, new locations will be designated by City. Incidental costs associated with moving one-piece furnishings up to approximately 150 pounds to perform such tasks as painting, carpet or tile replacement, etc., are considered a general cost of building renovation and must be included in the JOC Contractor's Coefficient. Costs for large scale or wholesale removal and replacement of large quantities of desks or modular workstations, copiers, multiple full file cabinets, etc. to another location or storage outside the work space, or disassembly and reassembly of modular furniture is not considered part of the JOC Contractor's Coefficient and will be priced separately.

16.4.3.3 The work must, so far as practicable, be done in definite sections or divisions and confined to limited areas which must be completed before work in other sections or divisions are begun.

16.4.4 Work Site Conflicts. In the event of a conflict between JOC Contractor and others in an occupied facility or where other Contractors are performing work on the same facility under other Agreements, City will decide to dispute and that decision will be final.

16.4.5 Ownership of Work Product. Work Product prepared or otherwise created in connection

with the performance of this Agreement, including the Work, are to be and remain the property of City. For purposes of this provision, "Work Product" will include all designs, drawings, plans, specifications, ideas, renderings and other information or matter, in whatever form created (e.g., electronic or printed) and in all media now known or hereinafter created. All Work Product will be considered Work Made for Hire as defined in the United States Copyright Act 17 U.S.C. §101 (Copyright Act). If for any reason any such Work is found not to be a work for hire, JOC Contractor hereby transfers and assigns ownership of the copyright in such Work to City. The rights in this Section are exclusive to City in perpetuity.

16.5 **OPTIONAL LIQUIDATED DAMAGES**

16.5.1 Specific Job Orders. City will have the right to assess liquidated damages in relation to any specific JOC Project Agreement as set forth below.

16.5.2 Substantial Completion Liquidated Damages. JOC Contractor acknowledges and agrees that if JOC Contractor fails to obtain Substantial Completion of the Work within the Agreement Time, City will sustain extensive damages and serious loss as a result of such failure. The exact amount of such damages will be extremely difficult to ascertain. Therefore, City and JOC Contractor agree that if JOC Contractor fails to achieve Substantial Completion of the Work within the Agreement Time, City will be entitled to retain or recover from JOC Contractor, as liquidated damages and not as a penalty, the sum per calendar day as indicated in MAG § 108.9.

16.5.3 Final Acceptance Liquidated Damages. For the same reasons set forth in Section 16.5.2 above, City and JOC Contractor further agree that if JOC Contractor fails to achieve Final Acceptance of the Work within the Agreement Time, City will be entitled to retain or recover from JOC Contractor, as liquidated damages and not as a penalty, the sum per calendar day as indicated in MAG § 108.9 commencing from the actual date of Substantial Completion or Final Acceptance as required under any specific JOC Project Agreement.

16.5.4 MAG Liquidated Damages. Liquidated damages provisions in MAG § 108.9 may apply to any specific JOC Project Agreement.

16.5.5 City may deduct liquidated damages assessed pursuant to this Section 16.5 from any unpaid amounts then or thereafter due JOC Contractor under the Agreement or any specific JOC Project Agreement between JOC Contractor and City. Any liquidated damages not so deducted from any unpaid amounts due JOC Contractor must be payable to City at the demand of City, together with interest from the date of the demand at the highest lawful rate of interest payable to JOC Contractor.

16.6 **PERFORMANCE MEASUREMENT**

16.6.1 Performance Assessment. After the Final Acceptance of Work under each Job Order, City will complete a written evaluation of the performance of JOC Contractor on the Job Order.

16.6.2 Consideration in Assignment of Work. JOC Contractor's record of cost, schedule and quality performance and comparative assessments will be significant considerations in City's determination whether to award future Job Orders. JOC Contractor agrees that any determination by City not to not award future Job Orders or Option periods based on performance will be at the sole discretion of City.

SECTION 17 - PROVISIONS APPLICABLE SOLELY TO PRE-CONSTRUCTION SERVICES FOR CONSTRUCTION MANAGER AT RISK

17.1 ADDITIONAL DEFINITIONS

The definitions set forth in Section 2 and 15.1 above will apply to all Pre-Construction Services Agreements.

17.2 GENERAL

17.2.1 CM@Risk must perform the Services required by, and in accordance with the Agreement Documents and as outlined in Exhibit A of the Agreement to the satisfaction of the Project Manager, exercising the degree of care, skill, diligence and judgment a professional construction manager experienced in the performance of such services for construction and/or facilities of similar scope, function, size, quality, complexity and detail to the Project in urban areas throughout the United States, would exercise at such time, under similar conditions. CM@Risk must, at all times, perform the required services consistent with sound and generally accepted engineering principles and construction management and construction contracting practices.

17.2.2 As a participating member of the Project Team, CM@Risk must provide to City and Design Professional a written evaluation of City's Project Program and budget, each in terms of the other, with recommendations as to the appropriateness of each. CM@Risk must prepare a Baseline Cost Model that validates City's budget. The Baseline Cost Model must include all assumptions and basis of estimates in enough detail so that the Project Team can compare future detail estimates to the Baseline Cost model for variances. City and Design Professional will provide all the reasonably required data that is available in order to reach agreement between the team members that the Baseline Cost Model is an accurate projection of the costs of the Project.

17.2.3 CM@Risk must attend Project Team meetings, which may include, but are not limited to, bi- weekly Project management meetings, Project workshops, special Project meetings, construction document rolling reviews, public meetings and partnering sessions. CM@Risk attendance at design or other meetings in which CM@Risk is provided the opportunity but does not actively participate and/or is not properly prepared is not acceptable. Repeated instances of non-participation and/or lack of preparedness will be grounds for termination of CM@Risk Agreement for default.

17.2.4 CM@Risk must provide Pre-Construction Services, described herein, in a timely manner and consistent with the intent of the most current Drawings and Specifications. CM@Risk must promptly notify City in writing whenever CM@Risk determines any Drawings or Specifications are inappropriate for the Project and/or cause changes in the scope of Work that deviates more than the allowed contingencies within the Baseline Cost Model or requires an adjustment in the Baseline Cost Model, Detailed Cost Estimate, Detailed Project Schedule, GMP Proposals and/or in the Agreement Time for the Work, to the extent such as established.

17.2.5 CM@Risk when requested by City, must attend, make presentations and participate as may be appropriate in public agency and or community meetings, relevant to the Project. CM@Risk must provide drawings, schedule diagrams, budget charges and other materials describing the Project when their use is required or appropriate in any such public agency meetings.

17.2.6 Ownership of Work Product. All Work Product prepared or otherwise created in connection with the performance of this Agreement, including the Work, are to be and remain the property of City. For purposes of this provision, "Work Product" will include all designs, drawings, plans, specifications, ideas, renderings and other information or material, in whatever form created (e.g., electronic or printed) and in all media now know or hereinafter created. All Work Product will be considered Work Made for Hire as defined in the United States Copyright Act 17 U.S.C.
§101 (Copyright Act). If for any reason any such Work is found not to be a work for hire, Contractor hereby transfers and assigns ownership of the copyright in such Work to City. The rights in this Section are exclusive to City in perpetuity.

17.2.7 CM@Risk represents to City in completing Pre-Construction Services and providing the reports and analysis required thereunder, that Work can be properly and timely constructed within the GMP Proposal, if accepted. CM@Risk does not assume any design responsibilities unless specifically called for in the scope of work, but CM@Risk will be responsible for their errors, omissions or inconsistencies included in the Work.

17.3 **DETAILED PROJECT SCHEDULE**

17.3.1 The fundamental purpose of the Detailed Project Schedule is to identify, coordinate and record the tasks and activities to be performed by all of the Project Team members and then for the Project Team to utilize that Deliverable as a basis for managing and monitoring all member's compliance with the schedule requirements of the Project. Each Project Team member is responsible for its compliance with the Detailed Project Schedule requirements. CM@Risk must, however, develop and maintain the Detailed Project Schedule on behalf of and to be used by the Project Team based on input from the other Project Team members. The Baseline Project Schedule must be developed as part of the Baseline Cost Model. The Detailed Project Schedule must use the Critical Path method ("CPM") technique, unless required otherwise, in writing by City. CM@Risk must use scheduling software acceptable to City to develop the Detailed Project Schedule. The Detailed Project Schedule must be presented in graphical and tabular reports as agreed upon by the Project Team. If Project phasing as described below is required, the Detailed Project Schedule must indicate milestone dates for the phases once determined. As part of construction phase, City may require CM@Risk to prepare a "resource loaded" schedule for all work, including work performed by Subcontractors, detailing each of the project tasks and the required/anticipated number of personnel per day for each task. CM@Risk must also indicate on the schedule its ability to meet said required/anticipated personnel requirements.

17.3.2 CM@Risk must include and integrate in the Detailed Project Schedule the services and activities required of City, Design Professional and CM@Risk including all construction phase activities based on the input received from City and the Design Professional. The Detailed Project Schedule must define activities as determined by City to the extent required to show: (a) the coordination between preliminary design and various pre-construction documents, (b) any separate long-lead procurements, (c) any permitting issues, (d) any land, right-of-way, or easement acquisition, (e) bid packaging strategy and awards to Subcontractors and Suppliers, (f) major stages of construction, (g) start-up and commissioning, and (h) occupancy of the completed Work by City. The Detailed Project Schedule must include by example and not limitation, proposed activity sequences and durations for design, procurement, construction and testing activities, milestone dates for actions and decisions by the Project Team, preparation and processing of shop drawings

and samples, delivery of materials or equipment requiring long-lead time procurement (if any), milestone dates for various construction phases, Total Float for all activities to the extent authorized by City, relationships between the activities, City's occupancy requirements showing portions of the Project having occupancy priority, and proposed dates for Final Acceptance.

17.3.3 A Baseline Project Schedule must be initiated with the project Baseline Cost Model and agreed to by the project team at the same time. CM@Risk must update and maintain a detailed Project Schedule throughout pre-construction such that it will not require major changes at the start of the construction phase to incorporate CM@Risk's plan for the performance of the construction phase Work. CM@Risk must provide updates and/or revisions to the Detailed Project Schedule for use by the Project Team, whenever required, but no less often than at the Project Team meetings. CM@Risk must include with such submittals a narrative describing its analysis of the progress achieved to-date vs. the Baseline Project Schedule, including any concerns regarding delays or potential delays, and any recommendations regarding mitigating actions.

17.3.4 If phased construction is deemed appropriate at the time of developing the Baseline Cost Model or during the development of the Detailed Project Schedule, and City approves, CM@Risk must review the design and make recommendations regarding the phased issuance of Construction Documents to facilitate phased construction of the Work, with the objective of reducing the Project Schedule and/or Cost of the Work. CM@Risk must take into consideration such factors as natural and practical lines of work severability, sequencing effectiveness, access and availability constraints, total time for completion, construction market conditions, labor and materials availability, and any other factors pertinent to saving time and cost.

17.3.5 Long Lead Time Items. As part of developing the Detailed Project Schedule, CM@Risk must identify all long lead time materials, fabrications, equipment, or other items which may impact the Project Schedule and may require early action on the part of the Project Team. Dates for selecting and ordering long lead time items will be included and highlighted in the Detailed Project Schedule

17.3.6 Equipment Plan. Contractor must develop an Equipment Plan that addresses all rental and owned equipment, regardless of whether such equipment will be provided by CM@Risk or subcontractor(s), that will be necessary to construct the Project and the cost of which will be included as a Cost of the Work in the GMP Proposal. The Equipment Plan will seek to minimize the cost of the equipment to City and maximize the efficient and coordinated use of the equipment for completion of the Project. The Equipment Plan will not only include the costs and allowable lease rates for the equipment, but will also include an equipment schedule that will be incorporated into the Detailed Project Schedule and the Schedule of Values submitted with the GMP Proposal.

17.4 DESIGN DOCUMENT REVIEWS

17.4.1 CM@Risk must evaluate periodically the availability of labor, materials/equipment, cost-sensitive aspects of the design; and other factors that may create an unacceptable variance to the Baseline Cost Model and/or Baseline Project Schedule.

17.4.2 CM@Risk must recommend, in conjunction with the Project Team, those additional surface and subsurface investigations that, in its professional opinion, are required to provide the necessary information for CM@Risk to construct the Project. These additional

investigations, if agreed to be necessary by the Project Manager and the Design Professional, will be acquired by City and copies of the reports will be provided to CM@Risk.

17.4.3 CM@Risk must meet with the Project Team as required to review designs during their development. CM@Risk must familiarize itself with the evolving documents through pre- construction. CM@Risk must proactively advise the Project Team and make recommendations on factors related to construction costs, and concerns pertaining to the feasibility and practicality of any proposed means and methods, selected materials, equipment and building systems, and, labor and material availability. CM@Risk must furthermore advise the Project Team on proposed site improvements, excavation and foundation considerations, as well as, concerns that exist with respect to coordination of the Drawings and Specifications. CM@Risk must use established value analysis principles in recommending cost effective alternatives.

17.4.4 CM@Risk must routinely conduct constructability and bid-ability reviews of the Drawings and Specifications as necessary to satisfy the needs of the Project Team. The reviews must attempt to identify all discrepancies and inconsistencies in the Construction Documents especially those related to clarity, consistency, completeness and coordination of Work of Subcontractors and Suppliers.

17.4.4.1 CM@Risk must evaluate whether: (a) the Drawings and Specifications are configured to enable efficient construction; (b) design elements are standardized; (c) construction efficiency is properly considered in the Drawings and Specifications; (d) module/preassembly design is prepared to facilitate fabrication, transport and installation; (e) sequences of Work required by or inferable from the Drawings and Specifications are practicable; (f) the design has taken into consideration efficiency issues concerning access and entrance to the site, laydown and storage of materials, staging of site facilities, construction parking, and other similar pertinent issues; and (g) the design maintains continued operation of the existing City systems and maintains traffic on adjacent roadways. CM@Risk must also review the Drawings and Specifications to ensure that what is depicted therein can be constructed as designed and must promptly inform the Project Team of any issues.

17.4.4.2 CM@Risk must check cross-reference and complementary Drawings and sections within the Specifications and in general evaluate whether: (a) the Drawings and Specifications are sufficiently clear and detailed to minimize ambiguity and to reduce scope interpretation discrepancies; (b) named materials and equipment are commercially available and are performing well, or otherwise, in similar installations; (c) Specifications include alternatives in the event a requirement cannot be met in the field; and (d) in its professional opinion, the Project is likely to be subject to Differing Site Conditions.

17.4.4.3 The results of the reviews must be provided to Project Team in formal, written reports clearly identifying all reviewed documents and the discovered discrepancies and inconsistencies in the Drawings and Specifications with notations and recommendations made on the Drawings, Specifications and other documents. CM@Risk must meet with Project Team to discuss any findings and review reports.

17.4.4.4 CM@Risk's reviews must be from a Contractor's perspective, and though it will serve to eliminate/reduce the number of RFIs) and changes during the construction phase, responsibility for the Drawings and Specifications will remain with the Design Professional and not CM@Risk.

17.4.5 It is CM@Risk's responsibility to assist the Design Professional in ascertaining that, in CM@Risk's professional opinion, the Construction Documents are in accordance with applicable Laws, Regulations, or Legal Requirements, building codes, sound engineering principle's rules and regulations. If CM@Risk recognizes that portions of the Construction Documents are at variance with applicable laws, statutes, ordinances, building codes, sound engineering principle's rules and regulations, it must promptly notify the Project Team in writing, describing the apparent variance of deficiency. However, the Design Professional is ultimately responsible for the compliance of the Drawings and Specifications with those laws, statutes, ordinances, building codes, rules and regulations.

17.4.6 The Project Team will routinely identify and evaluate using value analysis principles and alternate systems, approaches, design changes that have the potential to reduce Project costs while still delivering a high quality and fully functional Project consistent with the Project Program. If the Project Team agrees, CM@Risk in cooperation with the Design Professional, will perform a cost/benefit analysis of the alternatives and submit such in writing to the Project Team. City, through the Project Manager, will direct which alternatives will be incorporated into the Project. The Design Professional will have full design responsibility for the review and incorporation of CM@Risk suggested alternatives into the Drawings and Specifications. CM@Risk must analyze the costs and schedule impacts of the alternatives against the Baseline Cost Model and Schedule and provide a recommendation for the Project Team's consideration and City's approval prior to the establishment of the GMP.

17.5 **BASELINE COSTS MODEL, DETAILED COST ESTIMATES, AND SCHEDULE OF VALUES**

17.5.1 At the conclusion of the Master Planning and Programming, if required, CM@Risk will review all available information regarding the design and scope of the Project using CM@Risk's experience in performing similar work, knowledge of similar projects and current and projected construction costs and, based upon that review, must develop a Baseline Cost Model for review by the Project Team and approval by City. Once approved by City, the Baseline Cost Model will be continually referenced as detailed estimates are created as the design progresses throughout Pre-Construction until the final GMP for the entire Project is established. A final GMP for the entire Project must be established and approved by City prior to the start of construction. It is the responsibility of CM@Risk to ensure City has sufficient information to evaluate and approve a final GMP prior to the time necessary to start construction so construction can be completed within the Agreement Time. The Project Detailed Cost Estimate will be the best representation from CM@Risk of what the complete functional Project's construction costs will be as indicated by the most current available documents and will be constantly checked against the Baseline Cost Model. CM@Risk must communicate to the Project Team and assumptions made in preparing the Baseline Cost Model. The Baseline Cost Model must support CM@Risk's Detailed Cost Estimates and may be broken down initially as dictated by the available information, as required by City.

17.5.2 After receipt of the Design Professional's most current documents from certain specified pre- construction milestones, CM@Risk must provide a draft Detailed Cost Estimate including a detailed written report detailing any variances to the Baseline Cost Model and Baseline Project Schedule. The Design Professional and CM@Risk will reconcile any disagreements on the estimate to arrive at an agreed upon Detailed Cost Estimate for the construction costs based on the scope of the Project through that specified pre-construction milestone. Pre-Construction milestones applicable to this paragraph are:

Master Planning and Programming, Schematic Design, 50% Design Development, 100% Design Development, and 50% Construction Drawings, If no consensus is reached, City will make the final determination. If the Project Team requires additional updates of the Detailed Cost Estimate beyond that specified in this paragraph, CM@Risk must provide the requested information in a timely manner.

17.5.3 If at any point the Detailed Cost Estimate submitted to City exceeds the previously accepted Baseline Cost Model or previously approved Detailed Cost Estimate agreed to as set forth in Section 17.5.2 above, CM@Risk must make appropriate recommendations to project Team on means/methods, materials, and or other design elements that it believes will reduce the estimated construction costs, such that it is equal to or less than the established Project Team's Baseline Cost Model.

17.5.4 Unless other levels of completion are agreed to in writing in the Construction Documents, at 50% Construction Drawings and included with the associated report, CM@Risk must also submit to the Project Team for review and approval a Schedule of Values that complies with the following requirements. The Schedule of Values must be based on City standard bid schedule and highlight significant variances from any previously submitted Schedule of Values. The Schedule of Values must be directly related to the breakdowns reflected in the Detailed Project Schedule and CM@Risk's Detailed Cost Estimate. In addition, the Schedule of Values must: (a) detail unit prices and quantity take-offs, (b) detail all other contingencies and unit price Work shown and specified in the detailed design documents.

17.5.5 CM@Risk is to track, estimate/price and address the Project Team's overall project cost issues that arise outside of the Baseline Cost Model and the latest approved Detailed Cost Estimate such as: City generated changes, Project Team proposed changes, alternate system analysis, constructability items and value engineering analysis. The system used to implement this process will be referred to as the Design Evolution Log. This is to be addressed between the Baseline Cost Model and the Master Planning and Programming Detailed Cost Estimate, and then (unless other levels of completion are agreed to in writing in the Construction Documents) between the Detailed Cost Estimates for each of the pre-construction milestones thereafter, Schematic Design, 50% Design Development, 100% Design Development, and 50% Construction Documents, and the bid packages for all Phases.

17.5.6 Upon request by City, CM@Risk must submit to City a cash flow projection for the Project based on the current updated/revised Detailed Project Schedule and the anticipated level of payments for CM@Risk during the design and construction phases. In addition, if requested by City and based on information provided by City, CM@Risk must prepare a cash flow projection for the entire Project based on historical records for similar types of projects to assist City in the financing process.

17.5.7 Construction Water. CM@Risk must estimate the quantity of water to be used and include the cost thereof in each Detailed Cost Estimate and GMP Proposal provided by City.

17.6 SUBCONTRACTOR AND MAJOR SUPPLIER SELECTIONS

17.6.1 There are two ways to select Subcontractors and major Suppliers prior to submission of a GMP Proposal: (1) qualifications-based selection; or (2) a combination of qualifications and price. Except as noted below, the selection of Subcontractors/Suppliers is the sole responsibility of CM@Risk. In any case, CM@Risk is solely responsible for the performance of the selected Subcontractors/Suppliers, and for compliance with the requirements of

Title 34 of the Arizona Revised Statutes in the selection of a Subcontractors/Suppliers, to the extent applicable. CM@Risk must comply with its Subcontractor Selection Plan submitted with its Statement of Qualifications.

17.6.2 City may approve the selection of a Subcontractor(s) or Suppliers(s) based only on their qualifications when CM@Risk can demonstrate it is in the best interest of the Project. All Work that is performed, after such a qualifications-based selection, for a price that is negotiated by CM@Risk will be billed in accordance with the GMP for actual costs and may be subject to audit by City.

17.6.2.1 Qualifications based selection of a Subcontractor(s)/Supplier(s) should only occur prior to the submittal of the GMP Proposal.

17.6.2.2 If a Subcontractor/Supplier selection plan was submitted and agreed to by City, CM@Risk must apply the plan in the evaluation of the qualifications of a Subcontractor(s) or Supplier(s) and provide City with its review and recommendations.

17.6.2.3 CM@Risk must receive written City approval for each selected Subcontractor(s) and Supplier(s).

17.6.2.4 CM@Risk must negotiate costs for services/supplies from each Subcontractor/Supplier selected under this method.

17.6.3 All Work must be competitively bid unless a Subcontractor or Supplier was selected pursuant to Section 17.6.2 above.

17.6.3.1 CM@Risk must develop Subcontractor and Supplier interest, submit the names of a minimum of three qualified Subcontractors or Suppliers for each trade in the Project for approval by City and solicit bids for the various Work categories. If there are not three qualified Subcontractors/Suppliers available for a specific trade or there are extenuating circumstances warranting such, CM@Risk may request approval by City to submit less than three names. Without prior written notice to City, no change in the recommended Subcontractors/Supplies will be allowed.

17.6.3.2 If City objects to any nominated Subcontractor/Supplier or to any self-performed Work for good reason, CM@Risk must nominate a substitute Subcontractor/Supplier that is acceptable to City.

17.6.3.3 CM@Risk must distribute Drawings and Specifications, and when appropriate, conduct a Pre- Bid Conference with prospective Subcontractors and Suppliers.

17.6.3.4 If CM@Risk desires to self-perform certain portions of the Work, it must request to be one of the approved Subcontractor bidders for those specific bid packages. CM@Risk's bid will be evaluated in accordance with the process identified below. If events warrant and City concurs that it is necessary in order to ensure compliance with the Project Schedule and/or the most recent Detailed Cost Estimate, CM@Risk may be authorized to self-perform Work without bidding or rebidding the Work. When CM@Risk self-performs work without bidding, only the actual costs associated with performing the Work in accordance with the approved GMP will be billed and may be subject to audit by City.

17.6.3.5 CM@Risk must receive, open, record and evaluate the bids; provided, however, that if CM@Risk or one of its affiliates is bidding to self-perform the Work that is the subject of the bid, then the bids must be received, opened, recorded and evaluated by Project Manager

instead of CM@Risk. Bids for each category of Work must be opened and recorded at a pre-determined time. The apparent low bidders must be interviewed to determine the responsiveness of their proposals. In evaluating the responsiveness of bid proposals CM@Risk, in addition to bid price, may consider the following factors: past performance on similar projects, qualifications and experience of personnel assigned, quality management plan, approach or understanding of the Work to be performed, and performance schedule to complete the Work. The final evaluation of Subcontractor/Supplier bids must be done with Project Manager in attendance to observe and witness the process. CM@Risk must resolve any Subcontractor/Supplier bid withdrawal, protest or disqualification in connection with the award at no increase in the Cost of Work.

17.6.4 CM@Risk will be required to prepare two different reports on the subcontracting process.

17.6.4.1 Within fifteen days after each major Subcontractor/Supplier bid opening process; CM@Risk must prepare a report for City's review and approval identifying the recommended Subcontractors/Supplier for each category of Work. The report must detail: (a) the name of the recommended Subcontractor/Supplier and the amount of the Subcontractor/Supplier bid for each sub-agreement; (b) the sum of all recommended Subcontractor/Supplier bids received; (c) and trade work and its cost that CM@Risk intends to self-perform, if any.

17.6.4.2 Upon completion of the Subcontractor/Supplier bidding process, CM@Risk must submit a summary report to City of the entire Subcontractor/Supplier selection process. The report must indicate, by bid process, all Subcontractors/Suppliers contacted to determine interest, the Subcontractors/Suppliers solicited, the bids received and costs negotiated, and the recommended Subcontractors/Suppliers for each category of Work.

17.6.5 The approved Subcontractors/Suppliers will provide a Schedule of Values with their bid proposals, which will be used to create the overall Project Schedule of Values.

17.6.6 If after receipt of sub-bids or after award to Subcontractors and Suppliers, City objects to any nominated Subcontractor/Supplier or to any self-performed Work without any reasonable basis, CM@Risk must nominate a substitute Subcontractor or Supplier, preferably if such option is still available, from those who submitted Subcontractor bids for the Work affected. Once such substitute Subcontractors and Suppliers are consented to by City, CM@Risk's proposed GMP for the Work or portion thereof must be correspondingly adjusted to reflect any higher or lower costs form any such substitution.

17.7 **GMP PROPOSAL**

17.7.1 When a GMP Proposal is submitted for a phase of the Work, the GMP will have a Detailed Cost Estimate of the Costs of the Work (as set forth in Section 15.2) in each phase of the Work that is being proposed plus the current estimate for all other Work. City will not approve the GMP for the phase of work without a total estimate for the complete Project. City may request a GMP Proposal for all or any portion of the Project and at any time during pre-construction. Any GMP Proposals submitted by CM@Risk must be based on and consistent with Baseline Cost Model and the current update/revised Detailed Cost Estimate at the time of the request and include any clarifications or assumptions upon which the GMP Proposal(s) are based.

17.7.2 A GMP Proposal for the entire Project will be the sum of the Cost of the Work, CM@Risk Fee, and General Conditions Cost. CM@Risk guarantees to complete the Project at or less than

the final GMP Proposal amount plus approved Change Orders. CM@Risk will be responsible for any costs for expenses that would cause the Cost of the Work actually incurred, including the Construction Fee and General Conditions Costs, to exceed the GMP.

17.7.3 CM@Risk must prepare its GMP Proposal in accordance with City's request for GMP Proposal requirements based on the most current completed Drawings and Specifications at that time, which unless otherwise directed by City in writing, will be at 100% Construction Drawings. CM@Risk must mark the face of each document of each set upon which its GMP Proposal is based. These documents must be identified as the GMP Plans and Specifications. CM@Risk must send one set of those documents to the Project Manager, keep one set and return the third set to the Design Professional.

17.7.4 An updated/revised Detailed Project Schedule, Equipment Plan, and Schedule of Values must be included in any GMP Proposal(s), all of which must reflect the GMP Plans and Specifications the Detailed Project Schedule must be shown in relationship to the Project Schedule and identify any variance to the Baseline Project Schedule. Any such Detailed Project Schedule updates/revisions must continue to comply with the requirements of Section 17.3.1 through 17.3.5.

17.7.5 <u>GMP Proposals(s) Review and Approval</u>

17.7.5.1 CM@Risk must meet with the Project Team to review the GMP Proposal(s) and the written statement of its basis. In the event the Project Team discovers inconsistencies or inaccuracies in the information presented, CM@Risk must make adjustments as necessary to the GMP Proposal.

17.7.5.2 If during the review and negotiation of GMP Proposals design changes are required, City may authorize and cause the Design Professional to revise the GMP Plans and Specifications to the extent necessary to reflect the agreed-upon assumptions and clarifications contained in the final approved GMP Proposal. Such revised GMP Plans and Specification will be furnished to CM@Risk. CM@Risk must promptly notify the Project Team in writing if any such revised GMP Plans and Specifications are inconsistent with the agreed upon assumptions and clarifications.

17.7.6 All portions of or items comprising the GMP Proposal are subject to audit by City, as deemed appropriate by City, including, without limitation, any based upon unit prices or Work to be self- performed by CM@Risk, or its affiliates.

17.8 **<u>PAYMENT PROCEDURE FOR PRE-CONSTRUCTION SERVICES</u>**

17.8.1 Requests for monthly payments by CM@Risk for Pre-Construction Services must be submitted monthly and must be accompanied by a progress report, detailed invoices and receipts, if applicable. Any requests for payment must include, as a minimum, a narrative description of the tasks accomplished during the billing period, a listing of any Deliverables submitted, and copies of any Subconsultants' requests for payment, plus similar narrative and listings of Deliverables associated with their Work. Payment for services negotiated as a lump sum will be made in accordance with the percentage of work completed during the preceding month.

17.8.2 In no event will City pay more than seventy-five (75%) of the Agreement Price until acceptance of ALL Pre-Construction Services and award of the final approved Construction Services Agreement for the entire Project by City Council. If CM@Risk does not prepare a

GMP Proposal that is acceptable to City, or the GMP Proposal exceeds the City's Construction Budget, then CM@Risk understands and acknowledges that it will forfeit any right to receive the 25% of the Agreement Price being retained by City.

17.8.3 CM@Risk agrees that no charges or claims for costs or damages of any type will be made by it for any delays or hindrances beyond the reasonable control of City during the progress of any portion of Pre-Construction Services specified in this Agreement. Such delays or hindrances, if any, will be solely compensated for by an extension of time for such reasonable period and may be mutually agreed between the parties. It is understood and agreed, however, that permitting CM@Risk to proceed to complete any such Services, in whole or in part after the date to which the time of completion may have been extended, will in no way act as a waiver on the part of City of any of their respective legal rights herein.

17.8.4 No compensation to CM@Risk will be allowed contrary to Article I, Chapter I, Title 34 of the Arizona Revised Statutes.

17.8.5 If any service(s) executed by CM@Risk is abandoned or suspended in whole or in part, for a period of more than 180 days through no fault of CM@Risk, CM@Risk is to be paid for the services performed prior to the abandonment or suspension.

17.9 **SURVIVAL OF THE DESIGN SERVICES AGREEMENT, DUTIES, OBLIGATIONS AND WARRANTIES**

If the GMP Proposal is accepted by City and a Construction Agreement is entered into between City and CM@Risk, the duties, obligations and warranties of CM@Risk under the Pre- Construction Services Agreement survive and are incorporated into the resulting Construction Agreement.

SECTION 15 – APPENDICES

The following Appendices attached hereto are referenced in the General Conditions and are incorporated herein.

Appendix 1 – Policy Statement for Calculating Delays and Damages
Appendix 2 – Cost Reduction Incentive Proposals for Design Bid Build Agreements
Appendix 3 – Contractor's Affidavit Regarding Settlement of Claims
Appendix 4 – Forms of Performance Bond
Appendix 5 – Forms of Payment Bond
Appendix 6 – Dispute Resolution
Appendix 7 – Certificate of Completion
Appendix 8 – Construction Sign Detail
Appendix 9 – Cost of the Work (Applicable solely to Construction Manager at Risk and Job Order Contracting)
Appendix 10 Landscape Establishment Period

CALCULATING DELAYS AND DAMAGES

The purpose of this policy statement is to establish guidelines and procedures for negotiation between the Contractor and City of Chandler relating to compensation for delays pursuant to Arizona Revised Statutes (A.R.S.) 34-221(F). This policy statement contains notice requirements in addition to those set forth in the Agreement Documents, and will be the Agreement Provision contemplated by that statute.

NOTE: As used herein, the term "Engineer" will refer to the City of Chandler City Engineer or his/her designated representative. Nothing in this Policy Statement will be construed to void any provision in the Agreement which requires timely notice of delays or provides for arbitration or any other procedure for settlement or provides for liquidated damages.

I. TYPES OF DELAYS:

For the purposes of this document, there are essentially four types of delays encountered by City of Chandler Construction Contractors; excusable/compensable, excusable/non-compensable, non- excusable, and concurrent. Only delays that extend Agreement Completion Time set forth in the Agreement Document will be considered for issues relating to Agreement extensions or additional compensation. All other delays are considered to be activity delays and do not entitle the Contractor to either time extensions or additional compensation. Agreement Completion Time will be defined as the date set forth in Maricopa Association of Governments (MAG) Uniform Standard Specification Section 101 and as may be modified by the Agreement Documents.

A. Excusable/Compensable:

These are delays caused solely by the City's actions or inactions, are unreasonable under the circumstances, and which were not within the contemplation of the parties to the Agreement at or prior to the time of execution of the Agreement. Since the Contractor presumably has no control over the events causing the delay, he may be entitled to both Agreement time extensions and additional compensation for delay damages. Further, he/she may be entitled to additional compensation from the impact of that delay on other work. Examples of excusable/compensable (E/C) delays include: failure to properly locate an underground City-owned utility within 2 feet of the actual location; failure to relocate City-owned utilities far enough in advance of construction in an area where the Contractor is scheduled to work that it delays start or completion of the Contractor's regularly scheduled work; failure to provide City-furnished equipment or materials in a timely manner if required by the Agreement; failure to acquire necessary Right-of-Way or Public Utility Easements prior to the Contractor beginning Work in the area; failure to timely return Shop Drawings or other Agreement Submittals in accordance with the Agreement; unreasonable delay by the City in making decisions which affect critical activities; surveying errors when the City is contractually responsible for providing Project Surveying. This list is not meant to be all inclusive, but is intended merely as examples of the type of City action or inaction which can result in a Contractor's claim for additional time and

compensation.

B. Excusable/Non-compensable:

These are delays over which neither the City nor the Contractor had control. Since both parties to the Agreement have been potentially damaged by the delay, but neither have caused it, only Time Extensions are warranted. Examples of excusable, non-compensable (E/N) delays include: unusually severe weather; fire; acts of God; failure of non-City owned utilities (SRP, CenturyLink, Cable TV, Southern Pacific Railroad, and Southwest Gas, etc.) to properly or timely locate accurately; failure of non-City owned utilities to relocate in advance of construction; the voluntary or involuntary filing for Bankruptcy protection by a Supplier or Subcontractor which causes the Supplier/Subcontractor to fail to meet a contractual deadline provided the Contractor can provide documentation that he/she executed the required Purchase Orders/Subcontract Agreements and received delivery schedules which, if met, would have eliminated the delay; delays as a result of an incomplete shutdown of a City or non-City owned utility main (the City does not guarantee a complete shutdown). This list also is not necessarily all inclusive but merely indicative of type and class of E/N delays.

C. Non-excusable/Non-compensable:

These are delays caused by the actions or inactions of Contractor or an officer, employee, agent, Subcontractor, Supplier or any other party for whom the Contractor is responsible. Since the Contractor has assumed responsibility for the risks associated with the events that caused the delay, he/she are not entitled to either time extensions or monetary delay damages. All non-excusable delays are also non-compensable. Examples of non- excusable, non-compensable (N/N) delays include: failure to perform by the Contractor, its Subcontractors and/or Suppliers (except as noted in section I.B above); failure to provide adequate labor, materials, and/or equipment on the Project; failure to perform contractually-required coordination with utilities, agencies and other Contractors; failure to notify the Engineer, in writing, of delay impacts within two working days, as required by MAG 104.2.3, or the next work day, as required by MAG 109.8.2; failure to timely submit Shop Drawings; failure to pothole or otherwise visually locate utilities sufficiently ahead of the Work to allow the Engineer to direct corrective action when necessary; delays due to retesting of previously failed work, re-inspection, and/or restaking resulting from faulty workmanship, poor quality control, or lack of compliance with Agreement Specifications. Again, this list is not necessarily all inclusive.

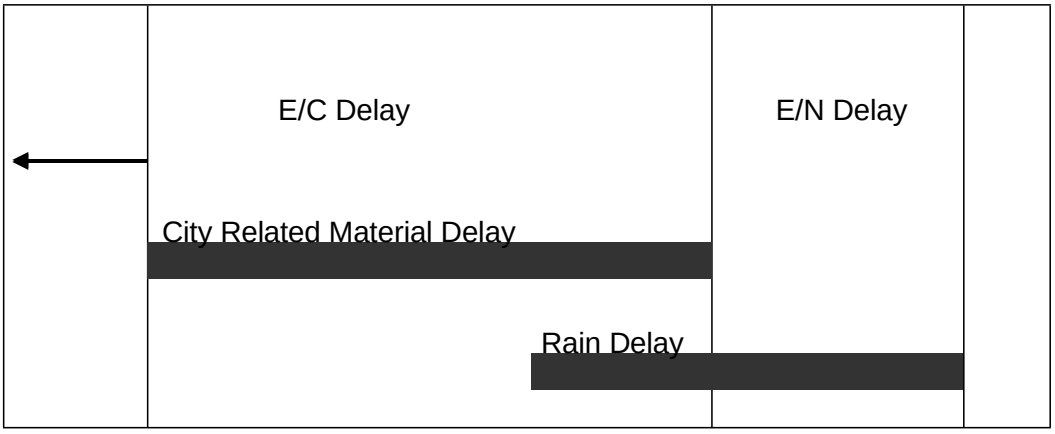
D. Concurrent:

When two or more delays occur simultaneously or overlap, each delay is analyzed separately to determine its impact on the overall project completion date based on when that delay started. Once again, only those delays which actually extend the Agreement completion time are considered as delays. The concurrent delay is considered an additional delay only to the extent it prolongs

the delay to the Agreement Completion Time beyond the date that the one it is concurrent with had already delayed that date. For example, if two delays are concurrent, and one is five days long and the second is seven days long, the second concurrent delay will only extend the Agreement Completion Time by two days. The same method of analysis is used when there are multiple concurrent delays. Only those extending the Project Completion Date are considered to be delays for the purposes of this policy. The portion of each concurrent delay that delays the completion of the work is classified in the same manner as described previously for individual delays and being either E/C, E/N or N/N.

An example of a concurrent delay is where the City delays furnishing material, but the Contractor could not have installed it anyway due to unusually severe weather. The effect of the first delaying activity will extend for the full duration and will be considered controlling on the Contractor's schedule. A subsequent, concurrent delay will thereafter only be considered to effect the project completion (if at all) once the first delaying activity has ceased to impact the project completion. In this case, if the unusually severe weather continued and delayed the work after the material was delivered, the first portion of the delay would be classified E/C (delay for material) and the second as E/N (delay due to unusually severe weather). Using the procedure set forth above, the entire concurrent portion would be considered E/C as shown in the chart which follows.

Example of a Concurrent Delay:



II. ANALYZING THE DELAY:

The Contractor must provide all documents required or requested by the Engineer to analyze the delay(s). It is important to understand that, prior to the delay analysis, delays and their impacts are alleged issues. The information the Contractor provides will be compared with the Inspector's Daily Log, Schedules and other available Project information and together they will support or refute that delays occurred and, if so, how they impact other work and the overall project completion. The Contractor's delay in providing these documents will be considered prima facie evidence that either the delay did not occur or it did not impact the Project Completion Date and any claim for time extension or damages will be denied.

The Engineer will accept delay analyses in CPM format, as these may demonstrate to his/her satisfaction whether or not Project Completion has been impacted by a specific event. If the Contractor chooses not to use CPM scheduling procedures, then the burden will be on the Contractor to prove to the Engineer's satisfaction that the Project Completion has been impacted. The procedures below assume that the Contractor is using CPM scheduling methods. As a minimum the Contractor must provide the following materials to the Engineer:

A. As-Planned Schedule. The initial construction schedule, required by the Agreement Documents, will be considered the baseline schedule. It is to the Contractor's advantage that the As-Planned (baseline) Schedule be as detailed as possible in order for delays, as they occur, to be incorporated into the schedule in representative locations. It is also to the Contractor's advantage to use a computer software program to generate the schedule since updated schedules are required monthly by the Agreement Documents and since updated schedules are required to support delays and requests for additional compensation for delays. The As-Planned (baseline) Schedule must be presented in network format which clearly shows the interrelationships of the activities. The Contractor must also provide a printout of the activities showing early start, early finish, late start, late finish, duration and float. The activity list printout must also indicate predecessor and successor activities.

B. As-Built Schedules. The as planned (baseline) schedule must be updated with complete progress-to-date information (actualized) up to the date of the start of the alleged delay. Each updated schedule will serve as the as-built schedule for analyzing the alleged delay and provide a new baseline as-planned schedule for the next delay. This process must be repeated for each alleged delay as it occurs. In updating the baseline schedule, the alleged delay must be treated as an activity and inserted into the schedule as a predecessor to the impacted activity (ies). When an activity that has already started is impacted, it is preferable to divide this activity into two parts and show the impact affecting the second part. For schedules which incorporate a time line (or data date), the delay activity must be inserted at the time it actually occurred. Some software scheduling programs have a PAUSE-RESUME feature that can be used to facilitate the requirements. The updated schedule must also be accompanied by a listing of activities as with the baseline schedule. This activities list must contain the alleged delay as an activity showing the duration and the activities which are predecessors and successors to it. When computer generated schedules are used, the Contractor must provide, in electronic media format, the complete data files for the updated schedule that included the delay activity, preferably either in Suretrak or in Microsoft Project. Each electronic media must contain a label identifying the Project name, Contractor's name, program name and version number, data date and project finish date.

C. Other Documents: In order to determine the amount of the alleged delay and if it is compensable, the Contractor must provide all backup documentation relevant to the issue and as required by the Engineer. This documentation must include copies of such items as: purchase orders; delivery schedules; correspondence; memoranda of telephone calls; force account daily worksheets (initialed by the Inspector); payroll data; estimating (bid) worksheets; and any other materials which may be

requested by the Engineer.

D. Procedure: Only after receipt of sufficient documentation will the Engineer analyze each alleged delay and determine if it is supported or refuted. If supported, the Engineer will determine if it is excusable or non-excusable, compensable or non-compensable. If the Engineer determines that the delay did not affect the Project Completion, the as-planned schedule, which has been updated to the date of the alleged delay, must be revised to indicate this. If the Engineer determines the delay did occur but was N/N, then no time extension will be granted. It is imperative that an actualized schedule be submitted as soon as the occurrence of the alleged delay is known. In no event will the Contractor submit an actualized updated schedule later than 60 days after the occurrence of the alleged delay becomes known.

If the Engineer determines the delay did occur and was excusable but, due to a reason listed in section I.B. is non-compensable, he/she will determine the length of the E/N delay and prepare a Change Order to add that time to the Agreement. The Engineer's decision will be final.

If the Engineer determines the delay was excusable and compensable, he/she will determine the length of the E/C delay and proceed to review the Contractor's damage calculations in accordance with Section III. The Engineer will check the Contractor's calculations, review the backup documentation provided, and prepare a Change Order to cover both the additional compensation and the time extension. The Engineer's decision on both the time extension and additional compensation for the delay will be final.

If the issue involves a concurrent delay, the Engineer will analyze available data to determine the portions which are E/C, E/N, and/or N/N as described above. The Engineer will proceed to determine the length of E/C delay and verify the Contractor's delay damage calculations, if any are provided. Upon completion of this review, the Engineer will prepare a Change Order for the Contractor's review and signature. The Engineer's decision regarding excusable delay and additional compensation for the delay is final.

The amount of time the Engineer will require to analyze the alleged delay(s) will depend upon the Engineer's workload, the complexity of the delay analysis, availability of supporting data, extent of cooperation by the Contractor, and other factors beyond the Engineer's control. It is entirely possible other delay(s) may occur while the Engineer is analyzing particular claim for delay(s). The Engineer's failure to respond to the Contractor in a set period of time will not be used as the basis for a further delay claim or as justification for extending and existing delay claim. The time required for delay analysis by the Engineer will not be counted against the time allotted for processing Final Payment as required by (MAG Section 109.7(B)) or the release of retention and Final Payment as prescribed by A.R.S. Arizona Revised Statutes §34-221.

III. CALCULATING MONETARY DELAY DAMAGES:

Additional compensation for delay, when authorized by the Engineer, will be calculated in accordance

with MAG Section 109.5 ACTUAL COST WORK with the following exceptions:

A. No additional compensation or other monetary damages will be awarded or paid for any loss of anticipated profits by the Contractor, Subcontractors or Suppliers.

B. No additional compensation or other monetary damages will be awarded for home office overhead or non-project general conditions of the Contractor, Subcontractors or Suppliers.

C. Equipment:

1. Contractor-owned equipment rate calculations must be computed in accordance with Section 109.04(D)(3), Arizona Department of Transportation "Standard Specifications for Road and Bridge Construction," 2008 or latest edition and as modified herein. Year and regional adjustment factors must be based on the most recent publications of the Rental Rate Blue Book for Construction Equipment, published by the Equipment Guide-Book Company, San Jose, CA, same as provided by ADOT and in print as of the date of alleged delay. In no event will the compensation for Contractor-owned equipment exceed the purchase price, including tax, paid by the Contractor for the equipment. Compensation will not be allowed for small tools or equipment that show a daily equipment rental rate of less than $5.00 per day or for unlisted equipment that has a value of less than for hundred dollars ($400.00).
2. For leased and rented equipment or equipment not otherwise listed in the Blue Book, rental contracts, or other supporting data will be used to establish the hourly rate. No hourly operating expense will be allowed for delay on standby equipment. In no case will equipment be considered for rental which exceeds the hourly rate for the first eight hours and the daily rate divided by eight for all additional hours as compared with similar equipment listed in the Blue Book. The hourly standby rate must be computed as the lesser of:

    a. Dividing the monthly invoice or rental value by 176 hours per month when the equipment is utilized by the Contractor for more than three weeks;

    b. Dividing the monthly invoice or rental value by 40 hours per week when the equipment is utilized by the Contractor for more than three days.

    In no event will compensation be paid for delay at more than 8 hours per day or 40 hours per week.

3. Except for vehicles used by supervisory personnel, all equipment will be paid at the "standby" rate during the delay period.

4. Equipment brought solely to mitigate the delay (such as pumps, light plants, etc.) may be paid in accordance with ADOT section 109.04(D) (3).

5. The Blue Book regional adjustment will apply in determining rental rates.

D. Material:

Allowable material charges may include, in addition to material incorporated in the work material used to mitigate the delay such as barricades, plates, shoring, cold mix, etc. Except in emergencies the Contractor will not employ such material without the prior written approval of the Engineer.

E. Labor:

1. Except for Supervisory Personnel (Superintendent, Project Engineer, and Foremen), labor wages will not be paid after the first one-half day of claimed delay or impact. It is expected the Contractor will reassign or layoff unneeded employees.

2. For Foreman wages to be included, that Foreman must have been actively employed on the project prior to the commencement of the delay and be directly responsible for the activity being delayed.

3. Labor burden must be actual amounts incurred but must not exceed the ADOT approved rate.

F. All costs (equipment, material, and labor) must be substantiated by the City of Chandler's Daily Work Reports.

IV. DOCUMENT REQUIRED FOR CLAIM ANALYSIS:

For purposes of reviewing the Contractor's request for additional compensation, it will be required that the Contractor submit the following listed information. Information requested must be prepared on forms which are substantially similar to the City of Chandler's Daily Work Report form, a copy of which is attached as an exhibit.

A. Labor:

For each employee, laborer, and foreman, for which compensation is requested: Name, classification, dates of work performed, daily hours worked, total hours worked, labor rates, labor burden rates, overtime or premium time charges. Further, the Contractor must make available for inspection and copying to the Engineer the following listed documentation.

1. Certified payroll reports for the period of work claimed.
2. Accounting of Fringe Benefits – certified by a CPA.
3. Contractor's and Subcontractor's daily field reports and daily diaries.

B. Materials:

For all materials for which compensation is requested, if any, total quantities of materials, prices, extensions and transportation costs must be provided on a daily

basis. Further, the Contractor must make available for inspection and copying to the Engineer the following listed documentation.

1. Invoices for all materials incorporated.
2. Weigh tickets.
3. Purchase orders.
4. Delivery schedules.
5. Quotes or proposals from manufacturers or supplier.
6. Freight bills, Bills of Lading, or other documentation to show transportation costs.
7. Restocking charges-invoices from vendor.

C. Equipment:

For all equipment, the Contractor must provide the Engineer with the designation, dates and hours of usage, dates and hours of standby, if any, daily hours, total hours, rental rates and extension for each unit of equipment and machinery. Rental rates will be as established in Section III. Further, the Contractor must make available for inspection and copying to the Engineer the following listed documentation.

1. Owned:
   a. Purchase contracts(s).
   b. Depreciation schedule(s).
   c. Invoices for fuel, lube, repairs and other operating costs.

2. Leased:
   a. Lease agreement with hourly rate, overtime rate, double shift rate, etc.
   b. Invoices or other documentation showing hours worked on a daily basis.

D. Subcontractors/Owner-Operators:

In the event the Contractor submits a claim which includes requests for compensation for Subcontractors of Owner-Operators, the same information requested of the Contractor must be provided by the Subcontractor/Owner-Operator. Further, the Contractor must make available for inspection and copying to the Engineer the following listed documentation.

1. Bid/Estimate work sheets and/or spreadsheets.
2. Subcontract Agreements or Agreements with Owner-Operator.
3. All invoices and billing statements received from the Subcontractor/Owner-Operator which relates to the amount requested.

E. Miscellaneous:

Further, the Contractor must make available for inspection and copying to the Engineer the following listed documentation.

1. Evidence of payment for bonds and insurance premiums (MAG 109.5.6).

2. Taxes – unless the Contractor can show otherwise, taxes are reimbursable at 65% of the total cost (less bonds and insurance).

V. TIME LIMIT ON SUBMISSIONS OF CLAIM FOR DELAY OR IMPACT DAMAGES:

No claims for delay or impact damages will be considered or allowed more than 45 days after the event or occurrence which the Contractor claims gives rise to the delay or impact. In no event will a claim for delay or impact damages be considered after submission by the Contractor of the Final Payment Request.

COST REDUCTION INCENTIVE PROPOSALS FOR DESIGN BID BUILD AGREEMENTS

The Contractor may submit to the Engineer proposals for modifying the Plans, Specifications, or other requirements of the Agreement for the sole purpose of reducing the total cost of Project construction. The proposals must not impair in any manner the essential functions or characteristics of the project; including but not limited to service life, economy of operations, ease of maintenance, desired appearance, compatibility with existing or planned equipment, standardization of systems, or design and safety standards.

It must not be inferred from this Policy that the Engineer is required to consider any proposal submitted.

Submissions that propose changes in the basic design of a bridge, propose changes in pipe line size, materials, bedding conditions, pipe specifications; or that propose any change in pavement design will not be considered.

Proposals submitted pursuant to this Policy will be identified as Cost Reduction Incentive Proposals. They must be submitted in writing and, at a minimum, contain the following.

1. Complete the attached or similar cost reduction incentive proposal form.

2. A description of both the existing Agreement Requirements for performing the work and the proposed changes.

3. All Engineering Drawings and computations necessary for the thorough and expeditious evaluation.

4. An itemization of the existing Agreement Requirements that must be changed if the Proposal is adopted and a recommendation as to the manner in which the change should be made.

5. A detailed estimate of the cost of performing the Work under the existing Agreement and under the proposed changes, including the cost of developing and implementing the changes.

6. The Agreement items affected by the proposed changes and any variations in quantities resulting from the changes.

7. An objective estimate of any effects the proposal will have on collateral cost to the City, costs of related items, and cost of maintenance and operation.

8. A statement as to the effect that the Proposal will have on the time for the completion of the Project.

9. A statement as to the time by which a Change Order adopting the Proposal must be executed or when the Engineer must have given verbal approval.

Proposals will be processed expeditiously; however, the City will not be liable for any delay in acting upon any Proposal nor for any failure to accept any Proposal pursuant to this Special Provision.

The Engineer will be the sole judge of the acceptability of a Proposal and of the estimated net savings in construction costs from the adoption of all or any part of the Proposal. The Contractor will be notified in writing by the Engineer as to whether his/her Proposal has been accepted. The decision by the Engineer is final.

When the City deems such action to be appropriate, it reserves the right to require the Contractor to share equally in the cost to the City of investigating, evaluating, and processing the proposal as a condition for the consideration of such Proposal. Such cost must be shared whether the Proposal is accepted or rejected. When such a condition is imposed, the City will estimate these costs and the Contractor must indicate his acceptance thereof in writing. Such acceptance will authorize the City to deduct the Contractor's share of the costs from any monies due or that may become due to the Contractor under the Agreement.

If the Contractor's Proposal is accepted in whole or in part, the necessary Agreement Modifications and Agreement Price Adjustments will be affected by the execution of a Change Order which will specifically state that it is executed pursuant to this Special Provision.

The Contractor must continue to perform the work in accordance with the requirements of the Agreement until a Change Order incorporating the Proposal has been executed or until he/she has been given verbal approval by the Engineer that his/her Proposal has been accepted. If the Change Order has not been executed or he/she has not been given verbal approval on or before the date specified on the attached cost reduction incentive proposal form or on or before such other date as the Contractor may have subsequently specified in writing, the Proposal may be deemed to be rejected.

The executed Change Order will incorporate the changes in the Plans, Specifications, or other requirements of the Agreement which are necessary to permit the Proposal, or such part of it which has been accepted, to be put into effect, and will include any condition – upon which the City's approval thereof is based, if such approval is conditional. The executed Change Order may also extend the time for the completion of the Agreement if such an extension has been deemed to be warranted by the Engineer as a result of his evaluation of the Proposal.

The executed Change Order will also establish the estimated net savings in the cost of performing the Work attributable to the Proposal effectuated by the Change Order. In determining the net savings, the right is reserved to the Engineer to disregard the Agreement bid prices if, in his/her judgment, such prices do not represent a fair measure of the value of the Work to be performed or to be deleted. The net savings will be established by determining the Contractor's cost of performing the Work, taking into account his/her cost of developing the Proposal and implementing the change, and reducing this amount by any ascertainable collateral costs to the City. The executed Change Order may provide that the Contractor be paid 50 percent of the estimated net savings amount.

The executed Change Order may also provide for the adjustment in Agreement prices. Agreement prices may be adjusted by subtracting the City's share of the accrued net savings.

The amount specified to be paid to the Contractor in the executed Change Order which effectuates a Cost Reduction Proposal will constitute full compensation to the Contractor for the Cost Reduction Proposal and the performance of the work thereof pursuant to the said Change Order.

Upon acceptance of a Cost Reduction Incentive Proposal, any restrictions imposed by the Contractor on its use or on disclosure of the information will become void, and the City thereafter will have the right to use all or any part of the Proposal without obligation or compensation of any kind to the Contractor.

COST REDUCTION INCENTIVE PROPOSAL FORM

TO: CIP City Engineer

FROM:

PROJECT NAME: **Water System Upgrades Program**

CITY PROJECT NUMBER: **WA2100.401**

DATE:

Summary of Change (Brief description of proposed change including advantages and disadvantages):

ESTIMATED COST SUMMARY (Attached detailed estimate):

A.	Original Cost:	$
B.	Proposed Cost:	$ _____
C.	Construction Savings (A-B):	$ _____
D.	Gross Savings (Included OH %, Bond %)	$ _____
E.	Contractor Implementing	$_____
F.	City Implementing Cost:	$_____
	Reduction in Agreement Price (C+D-E-F) x 50%:	$ _____

Date by which a Change Order must be issued so as to obtain maximum cost reduction:

CITY OF CHANDLER, ARIZONA
PUBLIC WORKS & UTILITIES DEPARTMENT

CONTRACTOR'S AFFIDAVIT REGARDING SETTLEMENT OF CLAIMS

_____, Arizona
Date _____

Project Name: Water System Upgrades Program
City Project No.: WA2100.401

To the City of Chandler, Arizona

Gentlemen:

This is to certify that all lawful claims for materials, rental of equipment and labor used in connection with the construction of the above project, whether by subcontractor or claimant in person, have been duly discharged.

The undersigned, for the total compensation of $_____, as set out in the final pay application, as full and complete payment under the terms of the Agreement, hereby waives and relinquishes any and all further claims or right of lien under, in connection with, or as a result of the above described project. The undersigned further agrees to indemnify and save harmless the City of Chandler against any and all liens, claims or liens, suits, actions, damages, charges and expenses whatsoever, which said City may suffer arising out of the failure of the undersigned to pay for all labor performances and materials furnished for the performance of said installation.

Signed and dated at _____, this _____ day of _____ 20_____.

_____
CONTRACTOR

By _____

STATE OF ARIZONA)
) SS
COUNTY OF MARICOPA)

The foregoing instrument was subscribed and sworn to before me this _____ day of _____ 20 _____.

_____
Notary Public

_____
My Commission Expires

PERFORMANCE BOND

ARIZONA STATUTORY PERFORMANCE BOND
PURSUANT TO TITLES 28, 34, AND 41, ARIZONA REVISED STATUTES
(Penalty of this bond must be 100% of the Agreement amount)

KNOW ALL MEN BY THESE PRESENTS THAT:_____

(hereinafter "Principal"), and _____ (hereinafter "Surety"), a corporation organized and existing under the laws of the State of _____ with its principal office in the City of _____, holding a certificate of authority to transact surety business in Arizona issued by the Director of Insurance pursuant to Title 20, Chapter 2, Article 1, as Surety, are held and firmly bound unto _____(hereinafter "Obligee") in the amount of _____ (Dollars) ($_____), for the payment whereof, Principal and Surety bind themselves, and their heirs, administrators, executors, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, the Principal has entered into a certain written Agreement with the Obligee, dated

the _____ day of _____, 20___ for construction of **Water System Upgrades Program, WA2100.401** which Agreement is hereby referred to and made a part hereof as fully and to the same extent as if copies at length herein.

NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION IS SUCH, that if the Principal faithfully performs and fulfills all the undertakings, covenants, terms, and conditions of the Agreement during the original term of the Agreement and any extension of the Agreement, with or without notice of the Surety, and during the life of any guaranty required under the Agreement, and also performs and fulfills all the undertakings, covenants, terms, conditions, and agreements of all duly authorized modifications of the Agreement that may hereafter be made, notice of which modifications to the Surety being hereby waived, the above obligation is void. Otherwise it remains in full force and effect.

PROVIDED, HOWEVER that this bond is executed pursuant to the provisions of Title 34, Chapter 2, Article 2, Arizona Revised Statutes, and all liabilities on this bond will be determined in accordance with the provisions of Title 34, Chapter 2, Article 2, Arizona Revised Statutes, to the same extent as if it were copied at length in this Agreement.

The prevailing party in a suit on this bond may recover as part of the judgment reasonable attorney fees that may be fixed by a judge of the court.

Witness our hands this _____ day of _____, 20__.

_____
PRINCIPAL SEAL

_____
AGENT OF RECORD

By _____

_____
SURETY SEAL

_____
AGENT ADDRESS

PAYMENT BOND

ARIZONA STATUTORY PAYMENT BOND
PURSUANT TO TITLES 28, 34, AND 41, OF THE ARIZONA REVISED STATUTES
(Penalty of this Bond must be 100% of the Agreement amount)

KNOW ALL MEN BY THESE PRESENTS THAT:_____

(hereinafter "Principal"), as Principal, and _____(hereinafter "Surety"), a corporation organized and existing under the laws of the State of _____ with its principal office in the City of _____, holding a certificate of authority to transact surety business in Arizona issued by the Director of the Department of Insurance pursuant to Title 20, Chapter 2, Article 1, as Surety, are held and firmly bound unto _____ (hereinafter "Obligee") in the amount of _____ (Dollars) ($_____), for the payment whereof, the Principal and Surety bind themselves, and their heirs, administrators, executors, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, the Principal has entered into a certain written Agreement with the Obligee, dated the _____ day of _____, 20___ for construction of **Water System Upgrades Program**, **WA2100.401** which Agreement is hereby referred to and made a part hereof as fully and to the same extent as if copied at length herein.

NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION IS SUCH, that if the Principal promptly pays all moneys due to all persons supplying labor or materials to the Principal or the Principal's subcontractors in the prosecution of the work provided for in said Agreement, this obligation is void. Otherwise it remains in full force and effect.

PROVIDED, HOWEVER that this bond is executed pursuant to the provisions of Title 34, Chapter 2, Article 2 Arizona Revised Statutes, and all liabilities on this bond will be determined in accordance with the provisions, conditions and limitations of Title 34, Chapter 2, Article 2, Arizona Revised Statutes, to the same extent as if it were copied at length in this Agreement.

The prevailing party in a suit on this bond may recover as part of the judgment reasonable attorney fees that may be fixed by a judge of the court.

Witness our hands this _____ day of _____, 20__.

_____
PRINCIPAL SEAL

_____
AGENT OF RECORD

By _____

_____
SURETY SEAL

_____
AGENT ADDRESS

DISPUTE RESOLUTION

A. INFORMAL DISPUTE RESOLUTION

The parties to the Agreement agree that time is of the essence in relation to performance of the Agreement and completion of the Project, therefore any and all disputes in relation to the Agreement will initially be referred to the Project Manager, the Design Professional Representative and/or the Contractor Representative as applicable to the dispute, for immediate resolution. If, after good faith efforts to reach a resolution, none is reached, any party to the dispute may submit the dispute to the Dispute Resolution Representative ("DRR") process set forth below, which is intended to be an expedited process.

B. DISPUTE RESOLUTION REPRESENTATIVE ("DRR") PROCESS

1. The Parties under the Agreement agree that all claims and disputes in relation to the Project which are not resolved in the ordinary course of the Project ("Claim" or "Claims") will, as a prerequisite to any mediation, or litigation of the Claim, first be submitted for resolution between the designated Dispute Resolution Representatives of the Parties as set forth herein (the "DRR Process").

2. The DRR Process will be initiated through service of a DRR Notice as set forth below:

   a. For claims by the Contractor or the Design Professional, the DRR Process will be initiated by the party asserting the claim serving written notice on the City setting forth in detail: (i) the basis for the claim; (ii) the effect of the Claim upon the construction of, and/or Project Schedule for, the Project;
   (iii) the specific relief requested, the amount thereof, and how such was calculated; (iv) the parties involved in the Claim, and how they are involved; (v) the specific Agreement provisions in the Agreement Documents (including, if applicable, drawings and specifications) which apply; and (vi) efforts made to date to resolve the Claim.

   b. For claims by the City, the DRR process will be initiated by the City providing written notice to the other parties of the basis and amount of its claim, the parties involved in the Claim, and how they are involved, the provisions in the Agreement Documents that apply, and the relief requested.

   c. The DRR Notice will be hand-delivered and e-mailed to the other parties' designated Dispute Resolution Representatives.

3. The other parties will respond in writing to the DRR Notice ("DRR Response") within ten (10) calendar days of receipt of the DRR Notice, setting forth those items set forth in the DRR Notice that they agree with, dispute, and/or have questions concerning. The DRR Response will be hand-delivered and e-mailed to the other parties' Dispute Resolution Representatives.

4. The designated Dispute Resolution Representatives for the Parties to the claim will then meet as soon as possible and in any event within twenty (20) calendar days of submission of the DRR Notice (regardless of whether a DRR Response has been submitted by all parties involved in the dispute), at a mutually agreed upon time and place, to attempt to resolve the Claim based upon the DRR Notice and DRR Response.

5. At any time after the first meeting required above, either party may terminate the DRR Process by written notice to the other party.

6. The parties may agree, in writing, to extend or modify the time limits or other provisions of the DRR process in relation to a specific pending Claim.

7. Unless otherwise designated in a written notice to the other parties, the City and the representatives of the Contractor and of the Design Professional will act as the parties' designated Dispute Resolution Representatives.

8. If a resolution of the Claim is reached, that resolution must be set forth in writing and must be signed by the Parties' designated Dispute Resolution Representative. If the resolution involves a change in any Agreement Documents, the Agreement Price, the Project Schedule, or any other change requiring a written Change Order or Amendment, the parties must execute an appropriate written Change Order or Amendment pursuant to the terms of the Agreement Documents.

C. MEDIATION

1. Unless extended by written agreement of the parties involved in the dispute, any Claim not resolved through the DRR process set forth above within five (5) calendar days after the meeting required under B (4) above, or after the DRR is terminated pursuant to B (5) above, whichever is earlier, will be submitted to mediation as a condition precedent to litigation by either party.

2. The mediation will be commenced by written demand upon the other party for mediation. If the parties cannot agree upon a mediator within ten (10) calendar days of the written demand, either party may make a request to the Civil Presiding Judge of the Maricopa County Superior Court to appoint a mediator. The mediation will occur within forth (40) calendar days of the written demand for mediation, unless the parties agree, in writing, to a longer period of time.

3. The qualifications for the mediator will be that he/she be: (a) an experienced mediator, arbitrator or litigator of construction disputes; and (b) having engaged a significant portion of his/her time involving and/or resolving construction disputes for at least the past five (5) years.

4. Each party will provide to the other party and the mediator all of the information and documentation required under B(1) and (2) above, together with any additional information and documentation which the party believes relevant. In addition, the parties will exchange, and provide to the mediator

such additional memoranda, information and/or documentation, as the mediator may request, and in the form and at such times, as the mediator may direct.

5. The parties will share the mediator's fee and any filing fees equally. The mediation will be held in Chandler, Arizona, unless another location is mutually agreed upon. Agreements reached in mediation will be specifically enforceable in any court having jurisdiction thereof.

D. LITIGATION

Any claim arising out of or related to the Agreement, except Claims relating to aesthetic effect and except those claims waived as provided for in the Agreement Documents, must be resolved through litigation in the Maricopa County, Arizona Superior Court.

CITY OF CHANDLER, ARIZONA
PUBLIC WORKS & UTILITIES DEPARTMENT

CERTIFICATE OF COMPLETION

PROJECT NAME:	**Water System Upgrades Program**		
CITY PROJECT NO.:	**WA2100.401**		
If Federally Funded:			
FEDERAL NO.:		**ADOT NO:**	

(*This section to be completed by Prime*)
I HEREBY CERTIFY THAT ALL GOODS AND/OR SERVICES REQUIRED BY CITY OF CHANDLER FOR THIS PROJECT HAVE BEEN DELIVERED IN ACCORDANCE WITH THE AGREEMENT DOCUMENTS AND BID SPECIFICATIONS AND ALL ACTIVITIES REQUIRED BY THE AGREEMENTOR UNDER THE AGREEMENT HAVE BEEN COMPLETED AS OF THE COMPLETION DATE LISTED HERE:

FINAL ACCEPTANCE DATE:	

PRIME CONTRACTOR:

FIRM NAME:			
PRINCIPAL:			
TITLE:			
SIGNATURE:		DATE:	

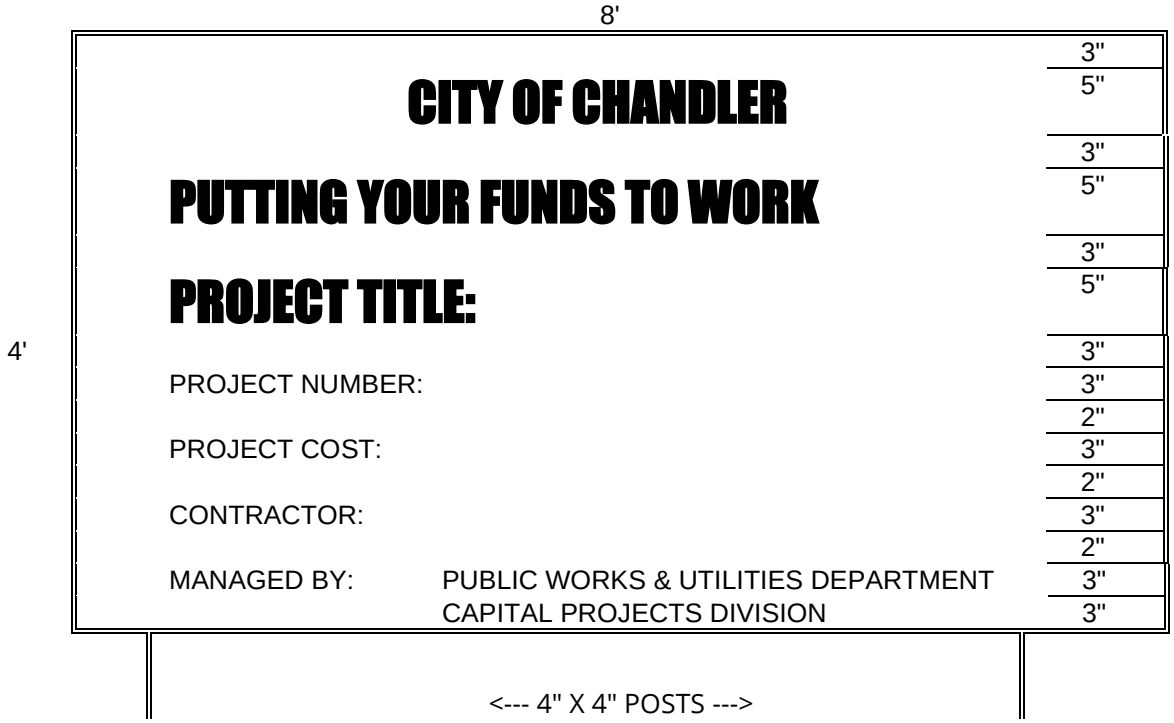
CERTIFIED BY [*INSERT NAME AND TITLE OF PARTY THAT OVERSEES CONSTRUCTION*]:

FIRM NAME:			
SIGNATURE:		DATE:	

PROJECT ACCEPTED BY CITY OF CHANDLER:

NAME:			
SIGNATURE:		DATE:	

CONSTRUCTION SIGN DETAIL



NOTES:

SIGN(S) MUST BE FURNISHED AND ERECTED PRIOR TO COMMENCEMENT OF CONSTRUCTION. POSTS MUST BE ANCHORED A MINIMUM OF TWO FEET INTO THE GROUND. BOTTOM OF SIGN MUST BE A MINIMUM OF FOUR FEET ABOVE THE GROUND.

TYPICAL PROJECT IDENTIFICATION SIGN FOR GENERAL PROJECTS MUST BE NON-REFLECTORIZED GREEN BACKGROUND, AND NON-REFLECTORIZED WHITE LETTERS AND NUMERALS.

ONE SIGN MUST BE ERECTED FOR BUILDINGS AND OTHER LIMITED AREA SINGLE SITES. FOR MULTIPLE SITES, ONE SIGN MUST BE ERECTED AT EACH SITE.

FOR LINEAR PROJECTS ONE HALF MILE OR LONGER, PLACE ONE SIGN AT EACH END OF THE PROJECT.

COST OF THE WORK

(APPLICABLE SOLELY TO CONSTRUCTION MANAGER AT RISK AND JOB ORDER CONTRACTING)

SECTION 1 – COSTS TO BE REIMBURSED

1.1 Cost of the Work

The term Cost of the Work will mean costs necessarily incurred by Contractor in the proper performance of the Work. Such costs must be at rates not higher than the standard paid at the place of the Project except with prior consent of City. The Cost of the Work will include only the items set forth in this Section 1.

1.2 Labor Costs

1.2.1 Wages of construction workers directly employed by the Contractor to perform the construction of the Work at the site or, with City's approval, at off-site workshops. Cost to be reimbursed will be the actual wages paid to the individuals performing the work.

1.2.2 Wages or salaries of the Contractor's supervisory and administrative personnel when stationed at the site with City's approval. No Contractor personnel stationed at the Contractor's home or branch offices will be charged to the Cost of the Work. Non-field office based Contractor management and support personnel are expected to provide service and advice from time to time throughout the job and his/her time devoted to Project matters is considered to be covered by the Contractor's Fee.

1.2.3 Wages and salaries of Contractor's supervisory or administrative personnel who would normally be stationed at the field office in accordance with Section 1.2.2 but who become engaged, at factories, workshops or on the road, in expediting the production or transportation of materials or equipment required for the Work, but only for that portion of his/her time required for the Work. Employee bonuses and/or costs associated with Employee Stock Ownership Plans ("ESOP") will not be considered reimbursable labor or labor burden costs and will be considered non-reimbursable costs considered to be covered by the Contractor's Fee.

1.2.4 Costs paid or incurred by Contractor for taxes, insurance, contributions, assessments and benefits required by law or collective bargaining agreements and, for personnel not covered by such agreements, customary benefits such as sick leave, medical and health benefits, holiday, vacations and pensions, provided such costs are based on wages and salaries included in the Cost of the Work under Subparagraphs 1.2.1 through 1.2.3.

1.2.4.1 Cost of the Work will include the actual net cost to Contractor for worker's compensation insurance attributable to the wages chargeable to the Cost of Work per this Agreement. The actual net cost of worker's compensation must take into consideration all cost adjustments due to experience modifiers, premium discounts, policy dividends, retrospective rating plan premium adjustments, assigned risk pool rebates, any applicable weekly maximums, etc. Contractor may charge an estimated amount for worker's compensation insurance costs, but will make appropriate cost adjustments to actual costs within 45 days of receipt of actual cost adjustments from the insurance carrier.

1.2.4.3 Overtime wages paid to salaried personnel (if approved in advance in writing by City) will be reimbursed at the actual rate of overtime pay paid to the individual. No time charges for overtime hours worked on the Project will be allowed if the individual is not paid for the overtime worked.

1.2.4.4 Any overtime premium or shift differential expense to be incurred by Contractor for hourly workers will require City's advance written approval before the incremental cost of the overtime premium or shift differential will be considered a reimbursable cost. If the Contractor is required to work overtime as a result of an inexcusable delay or other coordination problems caused by the Contractor or anyone he/she is responsible for, the overtime premium and/or shift differential expense portion of the payroll expense and related labor burden costs will be considered as cost not to be reimbursed.

1.2.4.5 Reimbursable labor burden costs will be limited to payroll taxes, worker's compensation insurance, the employer's portion of union benefit costs for union employees working on the Project, and the actual verifiable fringe benefit costs incurred by Contractor for non-union individuals working on the Project subject to the following maximum percentages for the following reimbursable non-union fringe benefit costs. The following maximums (as a percentage of reimbursable actual wages by individual) will apply for each of the following types of fringe benefit costs specifically attributable to each of the non-union personnel working on the Project:

- Medical Insurance, Dental, Life & AD&D Insurance: 12.00%
- Holiday, vacation and other paid time not worked: 10.00%
- Pension Plan Contributions to Vested Employee Account, Simplified Employee Pension Plans, or 401K matching plans (Note: ESOP related costs are covered by the Contractor Fee) 10.00%

For non-union personnel, no other fringe benefit costs (other than the three specific categories listed immediately above, will be considered reimbursable Cost of Work. Any labor burden costs that are in excess of the amounts considered reimbursable or are otherwise not considered reimbursable under the terms of this agreement are intended to be covered by the Contractor Fee.

1.3 Subcontract Costs

1.3.1 Payments made by Contractor to Subcontractors in accordance with the requirements of the subcontracts.

1.3.2 For Scope of Work Bid Packages typically performed by Subcontractors, Contractor may "self- perform" such work on an actual cost basis subject to an agreed upon Guaranteed Maximum Price for the "self-performed work". The Contractor must, unless agreed to by City in writing, bid his/her proposed guaranteed Maximum Price for the work to be "self-performed" against at least three other interested trade Contractors. All savings under any such Subcontract for "self-performed work" must be applied to reduce the Cost of Work under the Agreement and the Guaranteed Maximum Price. For purposes of defining "self-performed work" subject to this provision, any division of Contractor, or any separate Contractor or Subcontractor that is partially owned or wholly owned by the Contractor or any of his/her employees or employee's relatives will be considered a related party entity

and will be subject to this provision regarding "self-performed work". No self-performed work will be allowed to be performed on a Fixed Price basis.

1.3.3 Contractor (with respect to its Suppliers, Subcontractors and all lower tier Subcontractors) must provide City advance written notice and must obtain City's approval for any proposed Subcontract Change Order, Material Purchase Order, or other financial commitment in an amount in excess of $5,000 prior to placing such order or entering into such agreement (regardless of whether or not any such commitment will affect the prime Agreement Guaranteed Maximum Cost). It is agreed that sums applicable to any Subcontract Change Order, Purchase Order or other financial commitment entered into in violation of the above notice and approval requirement will not be included in the amounts owning to Contractor, Subcontractors or Suppliers whether as Costs of the Work or as reasonable termination costs in the event of termination.

1.4 Costs of Material and Equipment Incorporated in the Completed Construction

1.4.1 Costs, including transportation and storage, of materials and equipment incorporated or to be incorporated in the completed construction.

1.4.2 Costs of materials described in the preceding Subparagraph 1.4.1 in excess of those actually installed to allow for reasonable waste and spoilage. Unused excess materials, in any, will become City's property at the completion of the Work or, at City's option, may be sold by the Contractor. Any amounts realized from such sales must be credited to City as a deduction from the Cost of Work.

1.4.3 Proceeds from the sale of recyclable materials, scrap, waste, etc. will be credited to job cost.

1.5 Costs of Other materials and Equipment, Temporary Facilities and Related Items

1.5.1 Costs, including transportation and storage, installation, maintenance, dismantling and removal of materials, supplies, temporary facilities, machinery, equipment and hand tools not customarily owned by construction workers, that are provided by the Contractor at the site and fully consumed in the performance of the Work; and cost (less salvage value) of such items if not fully consumed, whether sold to others or retained by Contractor. Cost for items previously used by Contractor will mean fair market value.

1.5.2 Rental charges for temporary facilities, machinery, equipment, and hand tools not customarily owned by construction workers that are provided by Contractor at the site, whether rented from Contractor or others, and costs of transportation, installation, minor repairs and replacements, dismantling and removal thereof. Rates and quantities of equipment rented will be subject to City's prior written approval.

1.5.2.1 The Projected usage for each piece of equipment to be rented for use on the Project and the estimated total rentals must be considered by Contractor before the piece of equipment is rented so that an appropriate rent versus buy decision can be made. Purchased equipment must be considered "job owned". At the completion of the Project, Contractor must transfer title and possession of all remaining job-owned equipment to City, or Contractor may keep any such equipment for an appropriate fair market value credit to job cost, which will be mutually agreed to by City and Contractor.

1.5.2.2 Each piece of equipment to be rented must have hourly, daily, weekly and monthly rates and the most economical rate available will be reimbursed based on the circumstances of actual need and usage of the piece of equipment while it is stationed at the jobsite. When the piece of equipment is no longer needed for the work, no rental charges will be reimbursed if the piece of equipment remains at the jobsite for the convenience of Contractor.

1.5.2.3 Equipment Rental Rates

1.5.2.3.1 Compensation for equipment used on the Project will be paid in accordance with the Equipment Plan submitted by Contractor in the accepted GMP Proposal and no payments will be made in excess of the rates set forth in the Equipment Plan, or actual documented costs, whichever is less.

1.5.2.3.2 All equipment rental rates and costs are subject to City's right to audit when submitted as part of Equipment Plan and/or at any time during the Project.

1.5.2.4 The aggregate rentals chargeable for each piece of Contractor owned tools or equipment must not exceed 50% of the fair market value of such equipment at the time of its commitment to the Work. The original purchase price and date of purchase of the equipment will be documented with a copy of the purchase invoice for the piece of equipment. Such aggregate limitations will apply and no further rentals will be charged even if a piece of equipment is taken off the job and is later replaced by a similar piece of equipment. For purposes of computing the aggregate rentals applicable to aggregate rental limitations, rental charges for similar pieces of equipment will be combined if the pieces of equipment were not used at the same time.

1.5.2.5 Fair market value for used material and equipment as referred to in the Agreement Documents will mean the estimated price a reasonable purchaser would pay to purchase the used material or equipment at the time it was initially needed for the job. Note: This is usually lower than the price a reasonable purchaser would pay for similar new construction material or construction equipment.

1.5.2.6 All losses resulting from lost, damaged or stolen tools and equipment will be the sole responsibility of Contractor, and not City, and the cost of such losses will not be reimbursable under the Agreement.

1.5.2.7 Contractor will be required to maintain a detailed equipment inventory of all job-owned equipment (either purchased and charged to job cost or job-owned through aggregate rentals) and such inventory must be submitted to City each month. For each piece of equipment, such inventory should contain at a minimum (1) original purchase price or acquisition cost (2) acquisition date (3) approved Fair Market Value at the time the piece of equipment was first used on the job and (4) final disposition.

1.5.2.8 All costs incurred for minor maintenance and repairs will be reimbursed at actual cost. Such costs include routine and preventative maintenance, minor repairs and other incidental costs. Repairs and/or replacement of a capital nature are considered to be covered by the rental rates. Major repairs and overhauls are not considered routine and ordinary; consequently such costs are not reimbursable and are intended to be covered by the rental

rates.

1.5.3 Costs of removal of debris from the Site.

1.5.4 Costs of document reproductions, facsimile transmissions and long-distance telephone calls, postage and parcel delivery charges, telephone service at the site and reasonable petty cash expenses of the site office.

1.5.5 That portion of the reasonable expenses of Contractor's personnel incurred while traveling in discharge of duties connected with the Work.

1.5.5.1 No travel expenses will be reimbursed to Contractor's representatives unless Project related travel required them to travel to a destination more than 100 miles from the Project location. Any travel involving airfare will require advance written approval by an authorized City's representative.

1.5.6 Costs of materials and equipment suitably stored off the site at a mutually acceptable location, if approved in advance by the City.

1.5.7 Reproduction costs will be the actual costs of reproduction subject to a maximum of five cents ($.05) per square foot for prints and a maximum of five cents ($.05) per 8 ½ by 11-inch page for offset print or photo copied agreement documents, specifications, etc. Telephone costs will be the actual costs paid to the third party telephone company for the field office telephone.

1.6 Miscellaneous Costs

1.6.1 That portion of insurance and bond premiums that can be directly attributed to the Agreement. The City will reimburse Contractor for contractually required bond at time of first pay application for GMP and Cost-Based Agreements upon receipt of proof of payment from the Contractor. If the Contractor completes Work for less than the Agreement Price, Contractor must credit the City a pro- rated amount for the unused portion of the bond payment

1.6.1.1 Contractor's actual cost for insurance will be considered to be included within the Maximum limit for General Conditions Costs. All premiums for any insurance and bonds required for the Project must reflect the net actual costs to Contractor after taking into consideration cost adjustments due to experience modifiers, premium discounts, policy dividends, retrospective rating plan premium adjustments, assigned risk pool rebates, refunds, etc.

1.6.1.2 The amount to be reimbursed to Contractor for all contractually required insurance will be actual costs not to exceed a total of 2% of the Agreement Value, unless Contractor establishes to City's satisfaction that the actual cost is higher and City agrees to such actual higher cost in writing. If Contractor's cost of contractually required insurance is greater than the amount agreed to be reimbursed per this Agreement Provision, the difference will be considered to be covered by the Contractor's Fee. The City will reimburse Contractor for contractually required insurance on a monthly basis for GMP and Cost-Based Agreements. If Contractor can demonstrate substantial savings by paying for all insurance in advance, the City may agree to reimburse all insurance costs at time of first pay

application for GMP and Cost-Based Agreements with proof of payment from Contractor.

1.6.2 Sales, use or similar taxes imposed by a governmental authority that are related to the Work.

1.6.3 Fees and assessments for the building permit and for other permits, licenses and inspections for which Contractor is required by the Agreement Documents to pay.

1.6.4 Fees of laboratories for tests required by the Agreement Documents, except those related to defective or nonconforming Work and which do not fall within the scope of ¶ 1.7.3 below.

1.6.5 Royalties and license fees paid for the use of a particular design, process or product required by the Agreement Documents; the cost of defending suites or claims for infringement of patent rights arising from such requirement of the Agreement Documents; and payments made in accordance with legal judgments against Contractor resulting from such suites or claims and payments of settlements made with City's consent. However, such costs of legal defenses, judgments and settlements must not be included in the calculation of the Contractor's Fee or subject to the Guaranteed Maximum Price.

1.6.6 Data processing costs related to the Work. However, any such data processing costs will be limited to the cost of personal computer hardware used at the field office in the normal day to day administration, management and control of the Project. The aggregate charges for any such hardware must not exceed the Fair Market Value of the hardware at the time it was brought to the field office. If the total charges for any particular piece of hardware reach an amount equal to the Fair Market Value, that particular piece of hardware must be turned over to City whenever it is no longer needed for the Project. If Contractor elects to keep the particular piece of hardware, the job costs must be credited with a mutually agreeable amount which will represent the Fair Market Value of the particular piece of hardware at the time it was no longer needed for the job. Software or other costs associated with the use of computer programs will not be considered to be a reimbursable cost and will be considered to be covered by the Contractor's Fee.

1.6.7 Deposits lost for causes other than Contractor's negligence or failure to fulfill a specific responsibility to City as set forth in the Agreement Documents.

1.6.8 Legal, mediation and arbitration costs, including attorneys' fees, other than those arising from disputes between City and Contractor, reasonably incurred by Contractor in the performance of the Work and with City's prior written approval; which approval will not be unreasonably withheld.

1.6.9 Expenses incurred in accordance with Contractor's standard personnel policy for relocation and temporary living allowances of personnel required for the Work, if pre-approved by City in writing. If City authorizes the reimbursement of relocation costs, the reimbursable relocation expenses will be limited to a maximum of $50,000 per person. Any relocation cost incurred by Contractor in excess of the amount reimbursed by City will be considered to be covered by the Contractor's Fee.

1.7 Other Costs and Emergencies

1.7.1 Other costs incurred in the performance of the Work if and to the extent approved in

advance in writing by City.

1.7.2 Costs due to emergencies incurred in taking action to prevent threatened damage, injury or loss in case of an emergency affecting the safety of persons and property.

1.7.3 Costs of repairing or correcting damaged or nonconforming Work executed by Contractor, Subcontractors or Suppliers, provided that such damaged or nonconforming Work was not caused by negligence or failure to fulfill a specific responsibility of Contractor and only to the extent that the cost of repair or correction is not recoverable by Contractor from insurance, sureties, Subcontractors or Suppliers.

1.8 Related Party Transactions

1.8.1 The term "related party" will mean a parent, subsidiary, affiliate or other entity having common ownership or management with Contractor; any entity in which any stockholder in, or management employee of, Contractor owns any interest in excess of ten percent in the aggregate; or any person or entity which has the right to control the business or affairs of Contractor. The term "related party" includes any member of the immediate family of any person identified above.

1.8.2 If any of the costs to be reimbursed arise from a transaction between Contractor and a related party, Contractor must notify City in writing of the specific nature of the contemplated transaction, including the identity of the related party and the anticipated cost to be incurred, before any such transaction is consummated or cost incurred. If City, after such notification, authorizes in writing the proposed transaction, then the cost incurred will be included as a cost to be reimbursed, and Contractor must procure the Work, equipment, goods or service from the related party, as a Subcontractor. If City fails to authorize the transaction, Contractor must procure the Work, equipment, goods or service from some person or entity other than a related party.

SECTION 2 – COSTS NOT TO BE REIMBURSED

2.1 The Cost of Work must not include:

2.1.1 Salaries and other compensation of Contractor's personnel stationed at Contractor's principal office or offices other than the site office, except as specifically provided in Subparagraphs 1.2.2 and 1.2.3.

2.1.2 Expenses of Contractors' principal office and offices other than the site office.

2.1.3 Overhead and general expenses, except as may be expressly included in Section 1.

2.1.3.1 Costs of Contractor's home office computer services or other outside computer processing services will be considered overhead and general expense. Accordingly, Contractor should not plan to perform any such computer related services or alternatives at the field office when such services or functions can be performed at Contractor's home or branch offices, or other outside service locations.

2.1.4 Contractor's capital expenses, including interest on Contractor's capital employed for the Work.

2.1.5 Rental costs of machinery and equipment, except as specifically provided in subparagraph 1.5.2.

2.1.6 Except as provided in Subparagraph 1.7.3 of the Agreement, costs due to the negligence or failure to fulfill a specific responsibility of Contractor, Subcontractors and Suppliers or anyone directly or indirectly employed by any of them or for whose acts of them may be liable.

2.1.7 Any cost not specifically and expressly described in Section 1.

2.1.8 Costs, other than costs included in Change Orders approved by City that would cause the GMP to be exceeded.

SECTION 3 – DISCOUNTS, REBATES, REFUNDS AND SAVINGS

3.1 Cash discounts obtained on payments made by Contractor will accrue to City if (1) before making the payment, Contractor included them in an Application for Payment and received payment therefore from City, or (2) City has deposited funds with Contractor with which to make payments; otherwise, cash discounts will accrue to Contractor. Trade discounts, rebates, refunds and amounts received from sales or surplus materials and equipment will accrue to City, and Contractor must make provisions so that they can be secured.

3.1.1 Cost of the Work will be credited with all insurance policy discounts, performance and payment bond rebates or refunds, refunds or return premiums from any Subcontractor default insurance, refunds or rebates from any Contractor controlled insurance programs applicable to the Project, merchandise rebates of any nature, refunds of any nature, insurance dividends; and a portion of any volume rebates or free material credits earned with purchase of material or other goods and services charged to the job.

3.1.2 "Cash" discounts which may accrue to Contractor will be limited to a maximum of 1.5% of invoice cost. Any portion of "Cash" discounts greater than 1.5% will automatically accrue to City if Contractor is eligible to take advantage of the discounts.

3.2 Amounts that accrue to City in accordance with the provisions of Paragraph 3.1 will be credited to City as a deduction from the Cost of the Work.

3.3 Any and all savings on the GMP, or any separately guaranteed items comprising the GMP, will belong to City, subject to any express right in the Agreement for Contractor to share in savings. Savings are subject to City's right to audit, and may be audited separately.

SECTION 4 – GENERAL CONDITIONS COSTS

4.1 General Conditions Costs may include, but are not limited to, the following types of costs incurred by Contractor during construction of the Work to the extent they are reimbursable Costs of the Work as delineated above: payroll costs for Work conducted at the site, payroll costs for the superintendent and full-time general foremen, payroll costs for management

personnel resident and working on the site workers not included as direct labor costs engaged in support (e.g. loading/unloading, clean-up, etc.), administrative office personnel, costs of offices and temporary facilities including office materials, office supplies, office equipment, minor expenses, utilities, fuel, sanitary facilities and telephone services at the site, costs of liability insurance premiums not included in labor burdens for direct labor costs, costs of bond premiums, costs of consultants not in the direct employ of Contractor or Subcontractors, fees for permits and licenses.

4.2 General Conditions Costs may be paid on a percentage of the Agreement Price or on a lump/stipulate sum basis as set forth in the Agreement. All costs included in the General Conditions Costs will not be separately invoiced to or paid by City.

4.3 The total amount of General Conditions Costs for the Work may be divided by the number of days allowed for performance of the Work, to determine a fixed daily rate for General Conditions Costs that may be used in computing the General Conditions Costs allocated to any period of time, or for any adjustments in the General Conditions Costs agreed to in writing by City.

LANDSCAPE ESTABLISHMENT PERIOD

Section 1 – Description and General

Contractor is in direct control of work performed under the Landscape Establishment Period. If work is subcontracted, a representative of the Contractor will be present at the site of the work for all hours that the subcontractor works. Subcontracting of Landscape Establishment work will be permitted for weed eradication with herbicides, because of special licensing. A licensed temporary service may be used to supply labor to Contractor if Contractor has received approval from City Representatives. Contractor will submit the required subcontract documentation.

Contractor must provide adequate personnel to accomplish the required maintenance of the plant materials at intervals acceptable to City Representatives.

If not healthy at the end of the maintenance period, the maintenance must be continued until the plant material is approved by City.

1.1 Time and Schedule

Unless otherwise expressly agreed to in writing by City, the Landscape Establishment Period will be per General Conditions Section 6.5.4.

1.2 Planted Stock and Seeding Establishment

1.2.1 Tree planting and staking must be per City of Chandler Standard Detail C-801.

1.2.2 All trees will stand erect on their own without stakes when brought to this site. If the tree cannot stand on its own when nursery stakes are removed, the tree will be removed and replaced.

1.3 Pre-Emergent Herbicide and Weed Control

1.3.1 Contractor will provide three applications of an approved pre-emergent herbicide on all unpaved areas of the project, as directed by City Representatives, to control weed growth in all areas of the project. The number of applications may be increased as directed by the City Representative, and at no additional cost to City, if the City Representative deems additional applications are required to control weed growth.

1.3.2 Application sequence will be approved in advance by City. The first application of pre-emergent will be completed prior to the application of Decomposed Granite and will be included with the cost of the Decomposed Granite as specified and part of the Construction Phase portion of work. The second application of pre-emergent will be completed after installation of the Decomposed Granit and no later than half-way through the Landscape Establishment Period. The third and final application of pre-emergent will be applied 15 days prior to completion of the Landscape Establishment portion of the project. The second and third pre-emergent applications will be included with the cost of Landscape Establishment. Watering will be completed in accordance with the manufacturer's recommendations, as included and as related to each application.

1.3.3 The pre-emergent herbicide will be applied in accordance with the Technical Specifications and the recommendations of the pre-emergent herbicide manufacturer, as approved by City Representatives.

1.3.4 The control of weeds will be accomplished by the use of herbicides. Manual removal of weeds will be required, after herbicides have taken affect.

1.3.5 Contractor is responsible for the removal and disposal of all trash and debris that during the Landscape Establishment Period. Contractor will keep the project in a neat and orderly manner during the duration of the Landscape Establishment Period.

1.4 Water

The water used during Landscape Establishment to properly maintain the plant material will be furnished by City, at designated sources from within the project limits, at no charge to Contractor. Contractor will be responsible for all equipment, materials and labor necessary to load, transport and unload water for watering purposes.

1.5 Plant Material Replacements

The plant material replacement will be considered as included in the work for Landscape Establishment, and will be made at no charge to the City.

1.5.1 Shrub and Plant Replacement - During the second half of the Landscaping Establishment period, Contractor will provide, where required, plant replacements as follows:

Original Size	Replacement Size
1 gallon	5 gallon
5 gallon	15 gallon
15 gallon	24-inch box
36-inch box	48-inch box

1.5.2 Tree Replacement – During the second half of the Landscape Establishment Period, Contractor will provide plant material replacements for existing plants that die as follows:

Existing Plant Material Sizes	Replacement Size
Trees:	
2-inch Caliper	24-inch box
4-inch Caliper	36-inch box
6-inch Caliper and greater	54-inch box
Shrubs:	
All Existing Shrubs	15 gallon

1.6 Measurement and Payment

See Technical Specifications for Measurement Payment provisions.

EXHIBIT C

TECHNICAL SPECIFICATIONS

CITY OF CHANDLER

TECHNICAL SPECIFICATIONS

FOR

PW3-925-4631: PECOS SURFACE WATER TREATMENT PLANT FILTER IMPROVEMENTS - PHASE III

AUGUST 2024

90% SUBMITTAL

VOLUME 1 OF 1

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SECTION 01 11 00
SUMMARY OF WORK

PART 1 – GENERAL

1.01 SUMMARY

A. Section Includes:

1. Summary
2. Location and Description of Work
3. Construction Contracts, This Project
4. Construction Contracts, Other Projects
5. Work by Others
6. Work by Owner
7. Owner Furnished Equipment and Materials
8. Owner Assigned Procurement Contracts
9. Owner Pre-selected Equipment and Materials
10. Sequence and Progress of Work
11. Contractor's Use of Site
12. Easements and Rights-of-Way
13. Notices to Owners and Authorities of Properties Adjacent to the Work
14. Salvage of Equipment and Materials
15. Partial Utilization by Owner

1.02 LOCATION AND DESCRIPTION OF WORK

A. The Work is located at the following Site:

1. Pecos Surface Water Treatment Plant
   1475 E. Pecos Road, Chandler, AZ 85286

11-18-20

B. The Work to be performed under this Contract includes, but is not limited to, constructing the Work described below and all appurtenances related to the Work. The Work shall be as follows:

1. The work to be performed under this Contract and in accordance with these specifications consists of the furnishing and installation of equipment, materials, superintendence, labor, skill and all other items necessary for the removal of anthracite media and coordination with the Owner over installation of sand media and GAC filter media in Filters 9, 10, 11 and 12, structural rehabilitation of Filters 9 through 12, and expansion of the filter aid polymer system at the Pecos Surface Water Treatment Plant, located in the City of Chandler, Arizona. The Contractor shall perform all work required for such construction in accordance with the Contract Documents and subject to the terms and conditions of the Contract, complete and ready for use.

2. The principal features of the work to be performed for this Project under this Contract include, but are not limited to, the following:

   a. Remove and dispose of existing anthracite media in Filters 9 through 12 (Owner and GAC Manufacturer with Contractor assistance).

   b. Repair concrete and filter appurtenances in Filters 9 through 12, dependent upon condition observed during inspection that shall be performed after the anthracite filter media has been removed (Contractor).

   c. Coordinate with Owner for the installation of the sand media in Filters 9 through 12 (Contractor).

   d. Coordinate with Owner and GAC Manufacturer for the installation of the GAC filter media in Filters 9 through 12 (Contractor).

   e. Furnish and install a filter polymer metering pump and associated instrumentation in the Disinfection Building (Contractor).

   f. Furnish and install process piping, motorized valves and flow meters at Filters 9 through 12 (Contractor).

   g. Furnish and install electrical power and control signals to the new filter aid polymer system, flow meters and motorized valves (Contractor).

3. Construction includes, but is not limited to, process equipment, process piping, yard piping, site work, plumbing, electrical systems, security features and integrated instrumentation. This is a general description only and shall not be construed as a complete description of the work to be performed.

1.03 CONSTRUCTION CONTRACTS, THIS PROJECT

A. The Contracts under which the Project will be constructed are:

1. Work specified in Divisions 01 through 46 (inclusive) of the Specifications.

2. Work shown on sheets 1 through 26 (inclusive) of the Drawings.

1.04 CONSTRUCTION CONTRACTS, OTHER PROJECTS (NOT USED)

1.05 WORK BY OTHERS

A. All aspects of PLC programming and system integration shall be by Others. Contractor shall coordinate with the Owner for all programming related coordination.

B. Hazen and Sawyer, Inc. shall perform engineering services during construction.

C. GAC Manufacturer shall perform services including removing and disposing of the existing anthracite media in Filters 9 through 12, furnishing and installing the GAC filter media in Filters 9 through 12 per the specifications on the Contract Documents.

1.06 WORK BY OWNER

A. Owner will perform the following in connection with the Work: Operate all existing valves, gates, pumps, equipment, and appurtenances that will affect Owner's operation, unless otherwise specified or indicated.

B. Owner will provide water required for backwashing and flushing filter boxes.

C. Owner will coordinate with the services provided by the GAC Manufacturer in regards to the removal and disposal of the existing anthracite media in Filters 9 through 12 and the installation of the GAC filter media in Filters 9 through 12. Owner will also coordinate with the services provided by the Sand Media Manufacturer and the Contractor for the installation of the Sand Media in Filters 9 through 12.

1.07 OWNER-FURNISHED EQUIPMENT AND MATERIALS

A. The Owner shall furnish sand filter media in Filters 9 through 12 as specified in Section 46 61 17.

B. The Owner shall furnish GAC filter media in Filters 9 through 12 as specified in Section 46 61 16.

1.08 OWNER ASSIGNED PROCUREMENT DOCUMENTS

A. The Owner shall use Section 46 61 17 for the procurement of the sand filter media in Filters 9-12.

B. The Owner shall use Section 46 61 16 for the procurement of the GAC filter media in Filters 9-12.

1.09 OWNER PRE-SELECTED EQUIPMENT AND MATERIALS (NOT USED)

1.10 SEQUENCE AND PROGRESS OF WORK

A. Requirements for sequencing and coordinating with Owner's operations, including maintenance of plant operations during construction, and requirements for tie-ins and shutdowns, are in Section 01 14 00 – Coordination with Owner's Operations.

1.11 CONTRACTOR'S USE OF SITE

A. Contractors' use of the Site shall be confined to the areas shown. Contractors shall share use of the Site with other contractors and others specified in this Section.

B. Contractor shall move stored products that interfere with operations of Owner, other contractors, or others performing work for Owner.

1.12 EASEMENTS AND RIGHTS-OF-WAY

A. Easements and rights-of-way will be provided by Owner in accordance with the General Conditions. Confine construction operations to within Owner's property, public rights-of-way, easements obtained by Owner, and the limits shown. Use care in placing construction tools, equipment, excavated materials, and products to be incorporated into the Work to avoid damaging property and interfering with traffic. Do not enter private property outside the construction limits without permission from the owner of the property.

1.13 SALVAGE OF EQUIPMENT AND MATERIALS

A. Existing equipment and materials removed and not shown or specified to be reused in the Work will be Contractor's property, except as noted on Contract Drawings.

B. Existing equipment and material removed by Contractor shall not be reused in the Work, except where specified or indicated.

C. Carefully remove in manner to prevent damage all equipment and materials specified or indicated to be salvaged and reused or to remain property of Owner. Store and protect salvaged items specified or indicated to be used in the Work. Replace in kind or with new items equipment, materials, and components damaged in removal, storage, or handling through carelessness or improper procedures.

D. Contractor may furnish and install new items, with Engineer's approval, instead of those specified or indicated to be salvaged and reused, in which case such removed items will become Contractor's property.

1.14 PARTIAL UTILIZATION BY OWNER

A. Owner reserves the right to enter and use portions of the Work prior to Certificate of Substantial Completion is issued by Engineer.

B. Owner shall be responsible to prevent premature connections by private and public parties, persons or groups of persons, before Engineer issues Certificate of Substantial Completion for the portion of Work being partially utilized by Owner.

C. Contractor shall cooperate with Owner, Owner's agents, and Engineer to accelerate completion of Work designed for partial utilization by Owner in accordance with Contractor's progress schedule.

PART 2 – PRODUCTS (NOT USED)

PART 3 – EXECUTION (NOT USED)

END OF SECTION

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SECTION 01 11 00
SUMMARY OF WORK

PART 1 – GENERAL

1.01 SUMMARY

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   c. Coordinate with Owner for the installation of the sand media in Filters 9 through 12 (Contractor).

   d. Coordinate with Owner and GAC Manufacturer for the installation of the GAC filter media in Filters 9 through 12 (Contractor).

   e. Furnish and install a filter polymer metering pump and associated instrumentation in the Disinfection Building (Contractor).

   f. Furnish and install process piping, motorized valves and flow meters at Filters 9 through 12 (Contractor).

   g. Furnish and install electrical power and control signals to the new filter aid polymer system, flow meters and motorized valves (Contractor).

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1.05 WORK BY OTHERS

A. All aspects of PLC programming and system integration shall be by Others. Contractor shall coordinate with the Owner for all programming related coordination.

B. Hazen and Sawyer, Inc. shall perform engineering services during construction.

C. GAC Manufacturer shall perform services including removing and disposing of the existing anthracite media in Filters 9 through 12, furnishing and installing the GAC filter media in Filters 9 through 12 per the specifications on the Contract Documents.

1.06 WORK BY OWNER

A. Owner will perform the following in connection with the Work: Operate all existing valves, gates, pumps, equipment, and appurtenances that will affect Owner's operation, unless otherwise specified or indicated.

B. Owner will provide water required for backwashing and flushing filter boxes.

C. Owner will coordinate with the services provided by the GAC Manufacturer in regards to the removal and disposal of the existing anthracite media in Filters 9 through 12 and the installation of the GAC filter media in Filters 9 through 12. Owner will also coordinate with the services provided by the Sand Media Manufacturer and the Contractor for the installation of the Sand Media in Filters 9 through 12.

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1.09 OWNER PRE-SELECTED EQUIPMENT AND MATERIALS (NOT USED)

1.10 SEQUENCE AND PROGRESS OF WORK

A. Requirements for sequencing and coordinating with Owner's operations, including maintenance of plant operations during construction, and requirements for tie-ins and shutdowns, are in Section 01 14 00 – Coordination with Owner's Operations.

1.11 CONTRACTOR'S USE OF SITE

A. Contractors' use of the Site shall be confined to the areas shown. Contractors shall share use of the Site with other contractors and others specified in this Section.

B. Contractor shall move stored products that interfere with operations of Owner, other contractors, or others performing work for Owner.

1.12 EASEMENTS AND RIGHTS-OF-WAY

A. Easements and rights-of-way will be provided by Owner in accordance with the General Conditions. Confine construction operations to within Owner's property, public rights-of-way, easements obtained by Owner, and the limits shown. Use care in placing construction tools, equipment, excavated materials, and products to be incorporated into the Work to avoid damaging property and interfering with traffic. Do not enter private property outside the construction limits without permission from the owner of the property.

1.13 SALVAGE OF EQUIPMENT AND MATERIALS

A. Existing equipment and materials removed and not shown or specified to be reused in the Work will be Contractor's property, except as noted on Contract Drawings.

B. Existing equipment and material removed by Contractor shall not be reused in the Work, except where specified or indicated.

C. Carefully remove in manner to prevent damage all equipment and materials specified or indicated to be salvaged and reused or to remain property of Owner. Store and protect salvaged items specified or indicated to be used in the Work. Replace in kind or with new items equipment, materials, and components damaged in removal, storage, or handling through carelessness or improper procedures.

D. Contractor may furnish and install new items, with Engineer's approval, instead of those specified or indicated to be salvaged and reused, in which case such removed items will become Contractor's property.

1.14 PARTIAL UTILIZATION BY OWNER

A. Owner reserves the right to enter and use portions of the Work prior to Certificate of Substantial Completion is issued by Engineer.

B. Owner shall be responsible to prevent premature connections by private and public parties, persons or groups of persons, before Engineer issues Certificate of Substantial Completion for the portion of Work being partially utilized by Owner.

C. Contractor shall cooperate with Owner, Owner's agents, and Engineer to accelerate completion of Work designed for partial utilization by Owner in accordance with Contractor's progress schedule.

PART 2 – PRODUCTS (NOT USED)

PART 3 – EXECUTION (NOT USED)

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SECTION 01 14 00
COORDINATION WITH OWNER'S OPERATIONS

PART 1 – GENERAL

1.01 SUMMARY

A. Section Includes:

1. Requirements for coordinating with Owner's operations during the Work and included requirements for tie-ins and shutdowns necessary to complete the Work without impact on Owner's operations except as allowed in this Section.

2. Contractor shall provide labor, materials, tools, equipment and incidentals shown, specified and required to coordinate with Owner's operations during the Work.

B. General Requirements:

1. Except for shutdowns specified in this Section, perform the Work such that Owner's facility remains in continuous satisfactory operation during the Project. Schedule and conduct the Work such that the Work does not: impede Owner's production or processes, create potential hazards to operating equipment and personnel, reduce the quality of the facility's products or effluent, or cause odors or other nuisances.

2. Work not specifically covered in this Section or in referenced Sections may, in general, be completed at any time during regular working hours in accordance with the General Conditions and Supplementary Conditions, subject to the requirements in this Section.

3. Contractor has the option of providing additional temporary facilities that can eliminate or mitigate a constraint without additional cost to Owner, provided such additional temporary facilities: do not present hazards to the public, personnel, structures, and equipment; that such additional temporary facilities do not adversely affect Owner's ability to comply with Laws and Regulations, permits, and operating requirements; that such temporary facilities do not generate or foster the generation of odors and other nuisances; and that requirements of the Contract Documents are fulfilled.

4. Coordinate shutdowns with Owner and Engineer. When possible, combine multiple tie-ins into a single shutdown to minimize impacts on Owner's operations and processes.

5. Do not shut off or disconnect existing operating systems, unless accepted by Engineer in writing. Operation of existing equipment will be by Owner unless

otherwise specified or indicated. Where necessary for the Work, Contractor shall seal or bulkhead Owner-operated gates and valves to prevent leakage that may affect the Work, Owner's operations, or both. Provide temporary watertight plugs, bulkheads, and line stops as required. After completing the Work, remove seals, plugs, bulkhead, and line stops to satisfaction of Engineer.

C. Continuous Treatment Provision:

1. Contractor shall provide labor, equipment, materials, and incidentals to provide continuous treatment to the level prior to construction Work.

2. Contractor shall be responsible for providing temporary pumping facilities, systems, piping, valve, appurtenances, equipment, materials, and temporary utilities necessary to complete the Work without treatment bypassing.

D. Related Sections:

1. Section 01 11 00 – Summary of Work

1.02 REFERENCES

A. Definitions: A "shutdown" is when a portion of the normal operation of Owner's facility, whether equipment, systems, piping, or conduit, has to be temporarily suspended or taken out of service to perform the Work.

1.03 ADMINSTRATIVE REQUIREMENTS

A. Coordination:

1. Review installation procedures under other Specification sections and coordinate Work that must be performed with or before the Work specified in this Section.

2. Notify other contractors in advance of Work requiring coordination with Owner's operations, to provide other contractors sufficient time for work included in their contracts that must be installed with or before Work specified in this Section.

3. When possible, combine multiple tie-ins into a single shutdown to minimize impacts on Owner's operations and processes.

B. Pre-Shutdown Meetings: Contractor shall schedule and conduct meeting with Owner and Engineer at least thirty 30 days prior to scheduling shutdown.

C. Sequencing:

1. Perform the Work in the specified sequence. Certain phases or stages of the Work may require working 24-hour days or work during hours outside of regular working hours. Work may be accelerated from a later stage to an earlier stage if Owner's

operations are not adversely affected by proposed sequence change, with Engineer's acceptance. Stages specified in this Section are sequential in performance of the Work.

D. Scheduling:

1. Work that may interrupt normal operations shall be accomplished at times convenient to Owner.

2. Furnish at the Site, in close proximity to the shutdown and tie-in work areas, tools, equipment, spare parts and materials, both temporary and permanent, necessary to successfully complete the shutdown. Complete to the extent possible, prefabrication of piping and other assemblies prior to the associated shutdown Demonstrate to Engineer's satisfaction that Contractor has complied with these requirements before commencing the shutdown.

3. If Contractor's operations cause an unscheduled interruption of Owner's operations, immediately re-establish satisfactory operation for Owner.

4. Unscheduled shutdowns or interruptions of continued safe and satisfactory operation of Owner's facilities that result in fines or penalties by authorities having jurisdiction shall be paid solely by Contractor if, in Engineer's opinion, Contractor did not conform to the requirements of the Contract Documents, or was negligent in the Work, or did not exercise proper precautions in conducting the Work.

5. Work requiring service interruptions for tie-ins shall be performed during scheduled shutdowns.

6. Temporary, short-term shutdowns of smaller piping, conduits, equipment, and systems may be required. Coordinate requirements for such shutdowns with Engineer and Owner.

1.04 SUBMITTALS

A. Action/Informational Submittals:

1. Substitute Sequence Submittal: When deviation from specified sequence is proposed, provide submittal explaining in detail the proposed sequence change and its effects, including evidence that Owner's operations will not be adversely affected by proposed change. List benefits of proposed sequence change, including benefits to Progress Schedule.

2. Shutdown Planning Submittal:

a. For each shutdown, submit an inventory of labor and materials required to perform the shutdown and tie-in tasks, an estimate of time required to accomplish the complete shutdown including time for Owner to take down

and start up existing equipment, systems, or conduits, and written description of steps required to complete the Work associated with the shutdown.

b. Furnish submittal to Engineer at least thirty (30) days prior to proposed shutdown start date. Do not start shutdown until obtaining Engineer's acceptance of shutdown planning submittal.

3. Shutdown Notification: After acceptance of shutdown planning submittal and prior to starting the shutdown, provide written notification to Owner and Engineer of date and time each shutdown is to start. Provide notification at least 72 hours in advance of each shutdown.

1.05 SITE CONDITIONS

A. General Constraints: Specified in the Contract Documents are the sequence and shutdown durations, where applicable, for Owner's equipment, systems, and conduits that are to be taken out of service temporarily for the Work. New equipment, materials, and systems may be used by Owner after the specified field quality controls and testing are successfully completed and the materials or equipment are Substantially Complete.

B. The following constraints apply to coordination with Owner's operations:

1. Operational Access: Owner's personnel shall have access to equipment and areas that remain in operation.

2. Schedule and perform equipment and system start-ups for Monday through Thursday. Equipment and systems shall not be placed into operation on Friday, Saturday, and Sunday without prior approval of Owner.

3. Dead End Valves or Pipe: Provide blind flanges, watertight bulkheads, or valves at temporary and permanent terminuses of pipes and conduits. Blind flanges and bulkheads shall be suitable for the service and braced and blocked, as required, or otherwise restrained as directed by Engineer. Temporary valves shall be suitable for their associated service. Where valve is provided at permanent terminus of pipe or conduit, also provide on downstream side of valve a blind flange with drain/flushing connection.

4. Owner will assist Contractor in dewatering process tanks, basins, conduits, and other work areas to be dewatered for shutdowns. Maintain clean and dry work area by pumping and properly disposing of fluid that accumulates in work areas.

5. Draining and Cleaning of Conduits, Tanks, and Basins: Unless otherwise specified, Owner will dewater process tanks and basins at beginning of each shutdown. Owner will flush and wash down tanks and basins with plant non-

potable water. Draining and cleaning conducted by Contractor shall be as specified below:

a. Contractor shall remove liquids and solids and dispose of them at appropriate location at the Site as directed by Engineer. Contents of pipes, tanks, basins, and conduits undergoing modifications shall be transferred to existing process tanks or conduits at the Site with capacity sufficient to accept such discharges, using hoses, piping, pumps, or other means provided by Contractor. Discharge of fluids across floors is not allowed.

b. If drainage point is not available on the piping or conduit to be drained, provide a wet tap using tapping saddle and valve or other method approved by Engineer. Uncontrolled spillage of pipe's or conduit's contents is not allowed.

c. Spillage shall be brought to Engineer's attention immediately, both verbally and in writing, and reported in accordance with Laws and Regulations. Contractor shall wash down spillage to floor drains or sumps and flush the system to prevent clogging and odors. If spillage is not suitable for discharge to the drainage system, such as chemical spills, as determined by Engineer, Contractor shall remove spillage by other method, such as vactor truck, acceptable to Engineer.

6. Electrical, Control, Communication, and Monitoring Systems:

a. Owner's existing SCADA system and fiber optic network shall remain functional, subject to the constraints herein.

b. Unless Contractor elects to use existing fiber and/or temporary fiber, at his/her discretion, at least one communication path through the new dual redundant fiber optic ring to all communication points shall be in place at all times until substantial completion.

c. Each process area shall be permitted to have a single, non-concurrent, scheduled outage for the purpose of making PLC panel hardware modifications, loading the associated PLC logic, and its field testing/demonstration. Field testing and demonstration shall immediately follow modifications in an effort to keep scheduled shutdowns as short as possible. A 14-day day period of no SCADA outage shall proceed each scheduled shutdown.

1.06 SUGGESTED SEQUENCE OF WORK

A. Perform the Work in the specified sequence or as otherwise approved by Engineer. Certain phases or stages of the Work may require working 24-hour days or work during hours outside of regular working hours. Work may be accelerated from a later stage to

an earlier stage if Owner's operations are not adversely affected by proposed sequence change, and with Engineer's acceptance. Construction may occur on all four filters simultaneously after contractor schedule has been approved.

B. Stages specified in this Section are sequence-dependent.

1. Stage 1: Removal and reinstallation of filter media

- Removal of existing anthracite media
- Filter condition assessment and potential concrete and filter repair.
- Installation of sand media.
    1) Disinfection of filters
- Installation of GAC media
- Installation of polymer metering pump, piping and valves.
- Installation of instrumentation, power, and electrical components
- Electrical and mechanical tie-ins

2. Stage 2: Testing, commissioning, and startup.

1.07 TIE-INS

A. Contractor shall perform tie-ins required to complete the Work and obtain requirements for tie-ins from Engineer.

1.08 SHUTDOWNS

A. General:

1. Work that may interrupt normal operations shall be accomplished at times convenient to Owner.

2. Furnish at the Site, in close proximity to the shutdown and tie-in work areas, tools, equipment, spare parts and materials, both temporary and permanent, necessary to successfully complete the shutdown. Complete to the extent possible, prefabrication of piping and other assemblies prior to the associated shutdown. Demonstrate to Engineer's satisfaction that Contractor has complied with these requirements before commencing the shutdown.

3. If Contractor's operations cause an unscheduled interruption of Owner's operations, immediately re-establish satisfactory operation for Owner.

4. Unscheduled shutdowns or interruptions of continued safe and satisfactory operation of Owner's facilities that result in fines or penalties by authorities having jurisdiction shall be paid solely by Contractor if, in Engineer's opinion, Contractor did not conform to the requirements of the Contract Documents, or was negligent in the Work, or did not exercise proper precautions in conducting the Work.

5. Shutdowns shall be in accordance with this Section. Work requiring service interruptions for tie-ins shall be performed during scheduled shutdowns.

6. Contractor shall coordinate requirements for temporary, short-term shutdowns of smaller piping, conduits, equipment, and systems shutdowns with Engineer and Owner.

B. Treatment Process Shutdown and Site Access Constraints:

1. Owner shall have the following unit processes and equipment operational at all times during the Project, unless specified herein:

a. All conveyance and existing treatment processes at the Pecos Surface Water Treatment Plant.

2. Contractor shall maintain clear access to a minimum 15-foot roadway for Owner access.

C. Shutdowns of Electrical Systems: Comply with Laws and Regulations, including the National Electric Code. Contractor shall lock out and tag circuit breakers and switches operated by Owner and shall verify that affected cables and wires are de-energized to ground potential before shutdown Work is started. Upon completion of shutdown Work, remove the locks and tags and notify Engineer that facilities are available for use.

D. Shutdowns of Communications, SCADA, and Networking:

1. SCADA outages shall be approved by the Engineer and shall be coordinated with and scheduled at times suitable to the Owner.

PART 2 – PRODUCTS (NOT USED)

PART 3 – EXECUTION

3.01 GENERAL

A. In addition to requirements of this Section, conform to requirements of the General Conditions.

3.02 DETAILED SHUTDOWN REQUIREMENTS:

A. Prior to Typical Shutdown:

1. Obtain Engineer's acceptance of proposed shutdown planning submittal and shutdown notification submittal.

2. Submittal and approval of all shop drawings required.

3. Coordinate with plant operations on timing of shutdown and provide required notice to Owner.

4. Bring necessary piping, couplings, valves, equipment, and appurtenances to the work areas.

5. Assist Owner in preparing to take equipment, tanks, basins, and conduits temporarily out of service.

6. Coordinate other tie-ins to be performed simultaneously.

7. Install and ensure functionality of temporary systems as applicable.

B. During Typical Shutdown:

1. Owner will dewater tanks and basins.

2. Remove existing equipment, piping, and accessories as required.

3. Verify operation of new equipment, materials, and systems.

4. Following approval from Engineer, return equipment and system to operation with Owner.

C. Following Typical Shutdown:

1. Verify functionality of equipment and system.

2. Verify operation of new equipment and systems, and verify that joints in piping are watertight or gastight as applicable.

3. Repair joints that are not watertight or gastight as applicable.

4. Remove temporary systems as applicable.

3.03 PROPOSED SHUTDOWN SEQUENCE (NOT USED)

END OF SECTION

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SECTION 01 25 00
SUBSTITUTION PROCEDURES

PART 1 – GENERAL

1.01 SUMMARY

A. Section includes:

1. Procedural requirements for product substitutions.

2. Procedural requirements for substitute construction methods or procedures, when construction methods or procedures are specified.

B. Requests for substitutions of equipment and material shall conform to the requirements of the General Conditions and Supplemental Conditions.

C. Procedure for substitution requests and review including evaluation, reimbursement, acceptance, and determination shall be in accordance with General Conditions and Supplemental Conditions.

1.02 REFERENCES

A. Definitions: The following words or terms are not defined but, when used in this Section, have the following meaning:

1. “Acceptable Manufacturers” considered for substitution include Suppliers of equipment and material of proven reliability, and as manufactured by reputable manufacturers having experience in the production of specified equipment and material. Equipment furnished shall be designed, constructed, and installed in accordance with the industry accepted practices and shall operate satisfactorily when installed in accordance with the Contract Documents.

2. “Products” includes materials, equipment, machinery, components, fixtures, systems, and other goods incorporated in the Work. Products do not include machinery and equipment used for preparing, fabricating, conveying, erecting, or installing the Work. Products include Owner-furnished goods incorporated in the Work where use of such goods is specifically required in the Contract Documents.

1.03 ADMINSTRATIVE REQUIREMENTS

A. Contractor’s Responsibilities: In submitting request for substitution, Contractor represents that:

1. Contractor has investigated proposed substitution and determined that it is equivalent to item, product, method, or procedure specified, as applicable.

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2. Contractor will provide the same or better guarantees or warranties for proposed substitution as for the specified product, manufacturer, method, or procedure, as applicable.

3. Contractor waives all Claims for additional costs or extension of time related to proposed substitution that subsequently may become apparent.

4. Contractor shall submit a minimum of five (5) successful installations of the manufacturer's equipment of the same model, size, and type as specified in the Contract Documents.

5. All costs associated with incorporation of a substitution shall be borne by the Contractor, including but not limited to, the cost of redesign and construction provisions.

B. Engineer's Review: A proposed substitution will not be accepted for review if:

1. Approval would require changes in design concept or a substantial revision of the Contract Documents.

2. Approval would delay completion of the Work or the work of other contractors.

3. Substitution request is indicated or implied on a Shop Drawing or other submittal, or on a request for interpretation or clarification, and is not accompanied by Contractor's formal request for substitution.

4. If the substitution is not clearly substantiated by performance criteria as providing an equivalent or superior performing installation.

5. All costs associated with Engineer's review of a substitution shall be recorded by Engineer, submitted to Owner, and charged to Contractor.

C. If Engineer does not approve the proposed substitute, Contractor shall provide the specified product, manufacturer, method, or procedure, as applicable.

D. Approval of a substitution request will not relieve Contractor from requirement for submitting Shop Drawings as set forth in the Contract Documents.

E. Product Substitutions Procedure:

1. Requests for approval of substitute products or items will be considered for a period of 30 days after the Effective Date of the Agreement. After end of specified period, requests will be considered only in case of unavailability of a specified product or other conditions beyond Contractor's control.

2. Submit copies of request for substitution.

3. Submit separate request for each substitution.

4. In addition to requirements of the General Conditions and information required on substitution request forms, include with request the following:

    a. Product identification, including manufacturer's name and address.

    b. Manufacturer's literature with product description, performance and test data, and reference standards with which product complies.

    c. Samples, if appropriate.

    d. Name and address of similar projects on which product was used, and date of installation.

    e. Certified tests, where applicable, by an independent laboratory attesting the proposed substitution is equal.

    f. Cost information for the proposed substitution and the specified products.

    g. Lead time information for the proposed substitution and specified products.

    h. All other submittal requirements indicated in the individual Specification Sections associated with the specified equipment and material.

F. Construction Methods Substitutions Procedures:

1. Where construction methods or procedures are specified, for a period of 30 days after the Effective Date of the Agreement, Engineer will consider Contractor's written requests for substitute construction methods or procedures specified.

2. Submit copies of request for substitution.

3. Submit separate request for each substitution.

4. In addition to requirements of the General Conditions and information required on substitution request forms, include with request the following:

    a. Detailed description of proposed method or procedure.

    b. Itemized comparison of the proposed substitution with the specified method or procedure.

    c. Drawings illustrating method or procedure.

    d. Other data required by Engineer to establish that proposed substitution is equivalent to specified method or procedure.

PART 2 – PRODUCTS (NOT USED)

PART 3 – EXECUTION (NOT USED)

END OF SECTION

SECTION 01 29 73
SCHEDULE OF VALUES

PART 1 – GENERAL

1.01 SUMMARY

A. Section includes:

1. General requirements for preliminary and final Schedule of Values.

2. Schedule of Values and the Progress Schedule updates shall be basis for preparing each Application for Payment. Schedule of Values may be used as a basis for negotiating price of changes, if any, in the Work.

1.02 ADMINSTRATIVE REQUIREMENTS

A. General Requirements:

1. Schedule of Values shall include breakdown of costs for materials and equipment, installation, and other costs used in preparing the Bid by Contractor and each Subcontractor. List purchase and delivery costs for materials and equipment for which Contractor may apply for payment as stored materials.

2. Include separate amounts for each Specification Section in the Contract Documents by structure, building, and work area.

3. Identify each line item with number corresponding to the associated Specification Section number. List sub-items of major products or systems, as appropriate or when requested by Engineer.

4. Include in Schedule of Values unit price payment items with their associated quantity. Provide in the Schedule of Values detailed breakdown of unit prices when required by Engineer.

5. Include in Schedule of Values itemized list of Work for each major part of the Contract, for each payment item specified in Section 01 20 00 – Measurement and Payment.

6. Sum of individual values shown on the Schedule of Values shall equal the total of associated payment item. Sum of payment item totals in the Schedule of Values shall equal the Contract Price.

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B. Specific Requirements:

1. Include in each line item a directly proportional amount of Contractor's overhead and profit. Do not include overhead and profit as separate item(s).

2. Include separate line item for each allowance, and for each unit price item

3. Include line item for bonds and insurance in amount not exceeding two percent of the Contract Price. This may be applied for in the first Application for Payment.

4. Include items for the General Conditions, permits (when applicable), construction Progress Schedule, and other items required by Engineer. Include such items in Applications for Payment on schedule accepted by Engineer

5. Line items for Site maintenance such as dust control, snow removal, compliance with storm water pollution prevention plans and permits, spill prevention control and countermeasures plans, and for construction photographic documentation; temporary utilities and temporary facilities, field offices, temporary controls, field engineering, and similar Work shall be included in the Schedule of Values and proportioned in Applications for Payment throughout duration of the Work.

6. Include separate line items under each appropriate payment item for mobilization and demobilization. Document for Engineer the activities included in mobilization and demobilization line items.

    a. Mobilization will be limited to two percent of the Contract Price, and will be paid in two payments, each of 50 percent of total amount for mobilization.

    b. Demobilization shall be at least one percent of the Contract Price and shall be included with the Application for Payment following Substantial Completion, or other schedule accepted by Engineer.

7. Costs for submittals, operations and maintenance manuals, field testing, and training of operations and maintenance personnel shall be as follows, unless otherwise accepted by Engineer:

    a. Up to three percent of total cost of each item (including overhead and profit), including materials and equipment, and installation, may be apportioned to testing and included in the Application for Payment following Engineer's acceptance of the associated written Site testing report(s).

C. Preliminary Schedule of Values: Submit preliminary Schedule of Values to Engineer for initial review. Contractor shall incorporate Engineer's comments into the Schedule of Values and resubmit to Engineer. Engineer may require corrections and re-submittals until Schedule of Values is acceptable.

D. Time Frame for Submittals:

1. Submit preliminary Schedule of Values within ten days of date that the Contract Times commence running in accordance with the Notice to Proceed.

2. Submittal of the Schedule of Values shall be in accordance with the General Conditions. Engineer will not accept Applications for Payment without an acceptable Schedule of Values.

3. When required by Engineer, promptly submit updated Schedule of Values to include cost breakdowns for changes in the Contract Price.

1.03 SUBMITTALS

A. Submit the following:

1. Electronic copy of preliminary Schedule of Values.

2. Electronic copy of Schedule of Values.

PART 2 – PRODUCTS (NOT USED)

PART 3 – EXECUTION (NOT USED)

END OF SECTION

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SECTION 01 31 19
PROJECT MEETINGS

PART 1 – GENERAL

1.01 SUMMARY

A. Section Includes:

1. Progress Meetings:

a. Progress meetings will be held throughout the Project. Contractor shall attend each progress meeting prepared to discuss in detail all items on the agenda.

b. Engineer will preside at progress meetings and will prepare and distribute minutes of progress meetings to all meeting participants and others as requested.

c. Date, Time and Location:

1) Regular Meetings: Every month on a day and time agreeable to Owner, Engineer, and Contractor.

2) At the Site or other location mutually agreed upon by Owner, Contractor, and Engineer.

d. Additional meetings may be conducted as progress of Work requires at a mutually agreed date, time and location.

1.02 ADMINSTRATIVE REQUIREMENTS

A. Progress Meetings:

1. Progress meetings frequency shall be conducted as specified in this Section, unless modified and agreed upon by Owner, Contractor, and Engineer. Additional meetings may be conducted as progress of Work requires.

2. Contractor shall provide submittals specified in this Section prior to each progress meeting.

3. Attendance:

a. Contractor, including project manager, site superintendent, safety representative, and representatives of Subcontractors and Suppliers as required.

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b. Engineer, including project manager (or designated representative), Resident Project Representative (if any), others as required by Engineer.

c. Owner, including Owner's Site Representative (if any).

d. Subcontractors, only with Engineer's approval or request, as required in the agenda.

4. Agenda, minimum:

a. Review, comment, and amendment (if required) of minutes of previous progress meeting.

b. Review of progress since the previous progress meeting.

c. Planned progress through next 30 – 60 days.

d. Review of Progress Schedule

1) Contract Times, including Milestones (if any)

2) Critical path.

3) Schedules for fabrication and delivery of materials and equipment.

4) Corrective measures, if required.

e. Submittals:

1) Review of status of critical submittals.

2) Review revisions to schedule of submittals.

f. Contract Modifications:

1) Requests for interpretation

2) Clarification notices

3) Field Orders

4) Proposal requests

5) Change Proposals

6) Work Change Directives.

7) Change Orders.

8) Claims.

g. Applications for progress payments.

h. Problems, conflicts, and observations.

i. Quality standards, testing, and inspections.

j. Coordination between parties.

k. Site management issues, including access, security, maintenance and protection of traffic, maintenance, cleaning, and other Site issues.

l. Safety.

m. Permits.

n. Record documents status.

o. Punch list status, as applicable.

p. Other business.

1.03 SUBMITTALS

A. Progress Meeting Submittals:

1. List of Work accomplished since the previous progress meeting.

2. Up-to-date Progress Schedule.

3. Up-to-date Schedule of Submittals.

4. Detailed “look-ahead” schedule of Work planned through the next progress meeting, with specific starting and ending dates for each activity, including shutdowns, deliveries of important materials and equipment, Milestones (if any), and important activities affecting the Owner, Project, and Site.

5. When applicable, list of upcoming, planned time off (with dates) for personnel with significant roles on the Project, and the designated contact person in their absence.

1.04 EMERGENCY CONTACT INFORMATION

A. Contractor shall provide list of emergency contact information for 24-hour use throughout the Project. Emergency contact information shall be updated and kept current throughout the Project. If personnel or contact information change, provide updated emergency contact information list at the next progress meeting.

B. Contractor’s list of emergency contact information shall include:

1. Contractor's project manager's office, field office, cellular, and home telephone numbers.

2. Contractor's Site superintendent's office, field office, cellular, and home telephone numbers.

3. Contractor's foreman's field office, cellular (if available), and home telephone numbers.

4. Major Subcontractors' and Suppliers' office, cellular, and home telephone numbers of project manager and foreman (when applicable).

C. Additional Emergency Contact Information:

1. Owner's Project Manager: office, cellular, and home telephone numbers.

2. Owner's central 24-hour emergency telephone number.

3. Engineer's project engineer's office, cellular, and home telephone numbers.

4. Resident Project Representative's office, field office, cellular, and home telephone numbers.

5. Emergency telephone numbers, including: "Emergency: Dial 911", and seven-digit telephone numbers for the hospital, ambulance, police, and fire department nearest to the Site. Provide names of each of these institutions.

6. Other involved entities as applicable.

PART 2 – PRODUCTS (NOT USED)

PART 3 – EXECUTION (NOT USED)

END OF SECTION

SECTION 01 33 00
SUBMITTAL PROCEDURES

PART 1 – GENERAL

1.01 SUMMARY

A. Section includes:

1. Contractor shall provide submittals in accordance with the General Conditions as modified by the Supplementary Conditions, and this Section.

2. Contractor is responsible to confirm and correct dimensions at the Site, for information pertaining to the fabrication processes and to techniques of construction, and for coordinating the work of all trades. Contractor's signature of submittal's stamp and letter of transmittal shall be Contractor's representation that Contractor has met his obligations under the Contract Documents relative to that submittal.

B. Related Sections:

1. Section 01 78 23 – Operation and Maintenance Data.

2. Section 01 78 43 – Spare Parts and Extra Material.

3. Section 01 79 00 – Instruction of Owner's Personnel.

1.02 ADMINISTRATIVE REQUIREMENTS

A. Types of Submittals: When type of submittal is not specified and is not specified in this Section, Engineer will determine type of submittal.

1. Action/Informational Submittals:

a. Shop Drawings.

b. Product data.

c. Delegated design submittals in accordance with the General Conditions and as modified by the Supplemental Conditions.

d. Samples.

e. Testing plans, procedures, and testing limitations.

f. Design data not sealed and signed by a design professional retained by Contractor, Subcontractor, or Supplier.

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g. Pre-construction test and evaluation reports, such as reports on pilot testing, subsurface investigations, potential Hazardous Environmental Conditions, and similar reports.

h. Supplier instructions, including installation data, and instructions for handling, starting-up, and troubleshooting.

i. Sustainable design submittals (other than sustainable design closeout documentation).

j. Lesson plans for training and instruction of Owner's personnel.

2. Closeout Submittals:

a. Maintenance contracts.

b. Operations and maintenance data.

c. Bonds, such as maintenance bonds and bonds for a specific product or system.

d. Warranty documentation.

e. Record documentation.

f. Sustainable design closeout documentation.

g. Software.

3. Maintenance Material Submittals:

a. Maintenance materials schedule and checklist.

b. Spare parts.

c. Extra stock materials.

d. Tools.

4. Quality Assurance Submittals:

a. Performance affidavits.

b. Certificates.

c. Source quality control submittals (other than testing plans, procedures, and testing limitations), including results of shop testing.

d. Field or Site quality control submittals (other than testing plans, procedures, and testing limitations), including results of operating and acceptability tests at the Site.

e. Supplier reports.

f. Special procedure submittals, including health and safety plans and other procedural submittals.

g. Qualifications statements.

B. Submittal Requirements:

1. Contractor shall submit electronic copy of submittals for Engineer's review via Procore Document Management, unless otherwise specified in individual Specification Sections. Acceptable electronic formats are Adobe PDF, Microsoft Word, Autodesk DWF and AutoCAD.

2. Submittals shall be furnished in two dimensional PDF.

3. Submittal shall be accompanied by letter of transmittal containing date, project title, Contractor's name, number and title of submittal, list of relevant Specification Sections, notification of deviations from Contract Documents, and other material required for Engineer's review.

C. Scheduling:

1. Provide submittals well in advance of the Work following Engineer's approval or acceptance of the associated submittal. Work covered by a submittal will not be included in progress payments until approval or acceptance of related submittals has been obtained in accordance with the Contract Documents.

2. Submittals shall be provided by Contractor with at least fifteen (15) working days for review and processing.

1.03 SCHEDULE OF SUBMITTALS

A. Schedule of Submittals, as specified in this Section:

1. Timing:

a. Provide submittal within time frames specified in the Contract Documents.

b. Provide updated Schedule of Submittals with each submittal of the updated Progress Schedule.

2. Content: In accordance with the General Conditions as modified by the Supplementary Conditions, and this Section. Requirements for content of

preliminary Schedule of Submittals and subsequent submittals of the Schedule of Submittals are identical.

a. Identify submittals required in the Contract Documents. Updates of Schedule of Submittals shall show scheduled dates and actual dates for completed tasks. Indicate submittals that are on the Project's critical path.

b. Indicate the following for each submittal:

1) Date when submittals are requested and received from Supplier.

2) Date when certification is received from Supplier and when submitted to Engineer.

3) Date when submittals are submitted to Engineer and returned with disposition from Engineer.

4) Date when submittals are revised by Supplier and submitted to Engineer.

5) Date when submittals are returned with "Furnish as Submitted" (FAS) or "Furnish as Corrected" (FAC) disposition from Engineer.

6) Date when approved submittals are returned to Supplier.

7) Date of Supplier scheduled delivery of equipment and material.

8) Date of actual delivery of equipment and material.

9) Whether submittal will be for a substitution or "equal". Procedures for substitutions and "or equals" are specified in the General Conditions.

10) For submittals for materials or equipment, date by which material or equipment must be at the Site to avoid delaying the Work and to avoid delaying the work of other contractors.

3. Prepare Schedule of Submittals using same software, and in same format, specified for Progress Schedules.

4. Coordinate Schedule of Submittals with the Progress Schedule.

5. Schedule of Submittals that is not compatible with the Progress Schedule, or that does not indicate submittals on the Project's critical path, or that places extraordinary demands on Engineer for time and resources, is unacceptable. Do not include submittals not required by the Contract Documents.

6. In preparing Schedule of Submittals:

a. Considering the nature and complexity of each submittal, allow sufficient time for review and revision.

b. Reasonable time shall be allowed for: Engineer's review and processing of submittals, for submittals to be revised and resubmitted, and for returning submittals to Contractor.

c. Identify and accordingly schedule submittals that are expected to have long anticipated review times.

1.04 ACTION/INFORMATIONAL SUBMITTALS

A. Provide the following Submittals in accordance with the individual Specification Sections, including, but not limited to, the following:

1. Product Data:

a. Catalog cut-sheets

b. Descriptive bulletins/brochures/specifications

c. Material of construction data, including details on all components including applicable ASTM designations.

d. Lifting, erection, installation, and adjustment instructions, and recommendations.

e. Finish/treatment data, including interior and exterior shop coating systems.

f. Equipment/material weight/loading data, including total uncrated weight of the equipment plus the approximate weight of shipped materials. Support locations and loads that will be transmitted to bases and foundations following installation. Size, placement, and embedment requirements of anchor bolts.

g. Complete information regarding location, type, size, and length of all field welds in accordance with "Standard Welding Symbols" AWS A2.0 of the American Welding Society. Special conditions shall be fully explained by notes and details.

h. Motor data including horsepower; enclosure type; voltage; insulation class; temperature rise and results of dielectric tests; service-rating; rotative speed; motor speed-torque relationship; efficiency and power factor at ½, ¾, and full load; slip at full load; running, full load, and locked rotor current values; safe running time-current curves; motor protective devices; and interconnection diagrams.

i. Engineering design data, calculations, and system analyses

j. Digital system documentation

k. Operating sequence descriptions

l. Software/programming documentation

m. Manufacturer's instructions

2. Shop Drawings:

a. Equipment and material layout drawings, including panel layout drawings.

b. System schematics and diagrams including, but not limited to, piping systems; HVAC and ventilation systems; process equipment systems; electrical operating systems; wiring diagrams; controls, alarm and communication systems.

c. Layout and installation drawings (interior and exterior) for all pipes, valves, fittings, sewers, drains, heating and ventilation ducts, all electrical, heating, ventilating and other conduits, plumbing lines, electrical cable trays, lighting fixture layouts, and circuiting, instrumentation, interconnection wiring diagrams, communications, power supply, alarm circuits, etc.

d. Layout and installation drawings shall show connections to structures, equipment, sleeves, valves, fittings, etc.

e. Drawings shall show the location and type of all supports, hangers, foundations, etc., and the required clearances to operate valves, equipment, etc.

f. Drawings for pipes, ducts, conduits, etc., shall show all 3 inch and larger electrical conduits and pressure piping, electrical cable trays, heating and ventilation ducts or pipes, structure, manholes or any other feature within four (4) feet (measured as the clear dimension) from the pipe duct, conduit, etc., for which the profile is drawn.

g. Equipment and material schedules.

3. Delegated design submittals, which include documents prepared, sealed, and signed by a design professional retained by Contractor, Subcontractor, or Supplier for materials and equipment to be incorporated into the completed Work. Delegated design submittals do not include submittals related to temporary construction unless specified otherwise in the related Specification Section. Delegated design submittals include: design drawings, design data including calculations, specifications, certifications, and other submittals prepared by such design professional.

B. Samples:

1. General Requirements:

    a. Conform submittal of Samples to the General Conditions as modified by the Supplementary Conditions, this Section, and the Specification Section in which the Sample is specified.

    b. Furnish at the same time Samples and submittals that are related to the same unit of Work or Specification Section. Engineer will not review submittals without associated Samples and will not review Samples without associated submittals.

    c. Samples shall clearly illustrate functional characteristics of product, all related parts and attachments, and full range of color, texture, pattern, and material.

2. Submittal Requirements:

    a. Securely label or tag Samples with submittal identification number. Label or tag shall not cover, conceal, or alter appearance or features of Sample. Label or tag shall not be separated from the Sample.

    b. Submit number of Samples required in Specifications. If number of Samples is not specified in the associated Specification Section, provide at least one identical Samples of each item required for Engineer's approval. If Contractor requires Sample(s) for Contractor's use, notify Engineer in writing and provide additional Sample(s). Contractor is responsible for furnishing, shipping, and transporting additional Samples.

    c. Deliver one Sample to Engineer's field office at the Site. Deliver balance of Samples to location directed by Engineer.

1.05 CLOSEOUT SUBMITTALS

A. Provide the following Closeout Submittals in accordance with the individual Specification Sections, including, but not limited to, the following:

    1. Maintenance contracts

    2. Bonds for specific products or systems

    3. Warranty documentation

    4. Sustainable design closeout documentation.

    5. Software programming and documentation.

B. On documents such as maintenance contracts and bonds, include on each document furnished original signature of entity issuing the document.

C. Operations and Maintenance Data: Submit in accordance with Section 01 78 23 – Operations and Maintenance Data.

D. Record Documentation: Submit in accordance with the General Conditions.

E. Disposition: Dispositions and meanings are the same as specified for Informational Submittals.

1.06 MAINTENANCE MATERIAL SUBMITTALS

A. For spare parts, extra stock materials, and tools, submit quantity of items specified in associated Specification Section. Furnish in accordance with Section 01 78 43 – Spare Parts and Extra Materials.

B. Disposition: Dispositions and meanings are the same as specified for Informational Submittals.

1.07 CONTRACTOR'S RESPONSIBILITIES

A. Contractor shall review, coordinate, and verify submittals with Subcontractors, Manufacturers, and Suppliers, including field measurements at Site, in accordance with the General Conditions and as modified by Supplemental Conditions prior to submitting material for Engineer's review.

B. Contractor shall provide Contractor's stamp of approval certifying submittal material has been reviewed and conform to the Contract Documents prior to submitting material for Engineer's review.

C. Contractor shall provide written notice of deviations or variations that submittal may have with the Contract Documents.

D. Contractor shall provide bound, dated, labeled, tabulated, and consecutively numbered submittals as specified in the individual Specification Section. Label shall contain the following:

1. Specification Section.

2. Referenced Drawing number.

3. Subcontractor or Supplier name.

4. Type of equipment and/or materials.

E. Contractor shall perform the following after receiving Engineer's review disposition:

1. Order, fabricate, or ship equipment and materials included in the submittal (pending Engineer's review of source quality control submittals) with the following disposition:

a. “Furnish as Submitted” (FAS).

b. “Furnish as Corrected” (FAC).

c. “Furnish as Corrected – Confirm” (FACC), only portions of Work that do not require resubmittal for Engineer’s review.

2. Resubmittal requirements:

a. Partial resubmittal of “Furnish as Corrected – Confirm” (FACC) returned dispositions, until Engineer’s disposition is either “Furnish as Submitted” (FAS) or “Furnish as Corrected” (FAC).

b. Full resubmittal of material with Engineer’s disposition of “Revise and Resubmit” (R&R), until Engineer’s disposition is “Furnish as Submitted” (FAS), “Furnish as Corrected” (FAC), or “Furnish as Corrected – Confirm” (FACC) that requires a partial resubmittal.

c. Contractor shall be responsible for Engineer’s charges to Owner if submittals are not approved within the number of specified submittals in accordance with the General Conditions. Engineer’s charges shall include, but not limited to, additional review effort, meetings, and conference calls with Contractor, Subcontractor, or Supplier.

1.08 ENGINEER’S REVIEW

A. Engineer’s review of the Contractor’s submittal shall not relieve Contractor’s responsibility under the Contract Document in accordance with the General Conditions and as modified in the Supplemental Conditions. An acceptance of a submittal shall be intended to mean the Engineer does not have specific objection to the submitted material, subject to conformance with the Contract Drawings and Specifications.

B. Engineer’s review of Contractor’s submittal shall be confined to general arrangement and compliance with the Contract Documents, and shall not be for the purpose of checking dimensions, weights, clearances, fittings, tolerances, interferences, coordination of Subcontractor work, etc.

C. Review Dispositions:

1. “Furnish as Submitted” (FAS) – No exceptions are taken.

2. “Furnish as Corrected” (FAC) – Minor corrections are noted for Contractor’s correction.

3. “Furnish as Corrected – Confirm” (FACC) – Corrections are noted and partial resubmittal shall be made as noted.

4. “Revise and Resubmit” (R&R) – Corrections are noted and complete resubmittal shall be made. Submittal does not conform to applicable requirements of the Contract Documents and is not acceptable. Revise submittal and re-submit to indicate acceptability and conformance with the Contract Documents.

5. “Receipt Acknowledged” (RA) –

    a. Information included in submittal conforms to the applicable requirements of the Contract Documents and is acceptable. No further action by Contractor is required relative to this submittal, and the Work covered by the submittal may proceed, and products with submittals with this disposition may be shipped or operated, as applicable.

    b. Information included in submittal is for Project record purposes and does not require Engineer’s review or approval.

6. “Rejected” (R) – Information included in submittal does not conform to the applicable requirements of the Contract Documents and is unacceptable. Contractor shall submit products and materials as specified in the Contract Documents or provide required information for substitution as specified in the Contract Documents for consideration by Engineer.

D. Electronic Submittal Return to Contractor: Electronic submittals shall be returned electronically with dispositions provided.

PART 2 – PRODUCTS (NOT USED)

PART 3 – EXECUTION (NOT USED)

END OF SECTION

SECTION 01 42 00
REFERENCES

PART 1 – GENERAL

1.01 SUMMARY

A. Definitions and terminology applicable to all the Contract Documents are included in the General Conditions and Supplementary Conditions.

1.02 REFERENCES

A. Abbreviations and Acronyms: Common abbreviations that may be found in the Contract Documents are listed below:

alternating current	a-c
ampere	A
Architectural Barriers Act	ABA
Americans with Disabilities Act	ADA
Americans with Disabilities Act Accessibility Guidelines	ADAAG
ante meridian	a.m.
average	avg
biochemical oxygen demand	BOD
brake horsepower	bhp
British thermal unit	Btu
Centigrade (or Celsius)	C
chlorinated polyvinyl chloride	CPVC
Code of Federal Regulations	CFR
cubic inch	cu in
cubic foot	cu ft
cubic yard	cdu yd, or CY
cubic feet per minute	cfm
cubic feet per second	cfs
degree Centigrade (or Celsius)	degrees C or ºC

degrees Fahrenheit	degrees F or ºF
diameter	dia
direct current	d-c
dollars	$
each	ea
efficiency	eff
Fahrenheit	F
feet	ft
feet per hour	fph
feet per minute	fpm
feet per second	fps
figure	Fig
flange	flg
foot-pound	ft-lb
gallon	gal
gallons per hour	gph
gallons per minute	gpm
gallons per second	gps
gram	g
grams per liter	g/L
Hertz	Hz
horsepower	hp or HP
hour	hr
human-machine interface	HMI
inch	in.
inches water gage	in. w.g.
inch-pound	in.-lb
inside diameter	ID
iron pipe size	IPS

thousand pounds	kips
thousand pounds per square inch	ksi
kilovolt-ampere	kva
kilowatt	kw
linear foot	lin ft or LF
liter	L
maximum	max
mercury	Hg
milligram	mg
milligrams per liter	mg/l or mg/L
milliliter	ml
millimeter	mm
million gallons per day	mgd or MGD
million gallons	MG
minimum	min
national pipe threads	NPT
net positive suction head	NPSH
net positive suction head available	NPSHA
net positive suction head required	NPSHR
nominal pipe size	NPS
number	no.
operator interface terminal	OIT
ounce	oz
ounce-force	ozf
outside diameter	OD
parts per hundred	pph
parts per million	ppm
parts per billion	ppb
polyvinyl chloride	PVC

post meridian	p.m.
pound	lb
pounds per square inch	psi
pounds per square inch absolute	psia
pounds per square inch gauge	psig
pounds per square foot	psf
process control system	PCS
programmable logic controller	PLC
revolutions per minute	rpm
second	sec
specific gravity	sp gr or SG
square	sq
square foot	sq ft or sf
square inch	sq in.
square yard	sq yd or SY
standard	std
standard cubic feet per minute	scfm
total dynamic head	TDH

B. Definitions: Terminology used in the Specifications includes:

1. “Indicated” refers to graphic representations, notes, or schedules on the Drawings, or to other paragraphs or schedules in the Specifications and similar locations in the Contract Documents.

2. “Shown”, “noted”, “scheduled”, and “specified” are used to help the user locate the reference without limitation on the location.

3. “Installer”, “applicator”, or “erector” is Contractor or another entity engaged by Contractor, either as an employee or subcontractor, to perform a particular construction activity, including installation, erection, application or similar Work. Installers shall be experienced in the Work that installer is engaged to perform.

4. “Experienced”, when used with the term “installer” means having successfully completed a minimum of five previous projects similar in size and scope to this Project; being familiar with the special requirements indicated; being familiar with

Laws and Regulations; and having complied with requirements of authorities having jurisdiction, and complying with requirements of the Supplier of the material or equipment being installed.

5. Trades: Use of a term such as “carpentry” does not imply that certain construction activities must be performed by accredited or unionized individuals of a corresponding generic name, such as “carpenter”, unless otherwise indicated in the Contract Documents or required by Laws or Regulations. Such terminology also does not imply that specified requirements apply exclusively to trade personnel of the corresponding generic name.

6. “Assigned specialists” and similar terms: Certain Sections of the Specifications require that specific construction activities be performed by specialists recognized as experts in those operations. Engage said specialists for those activities, and their engagement is a requirement over which Contractor has no option. These requirements do not conflict with enforcement of building codes and other Laws and Regulations. Also, such requirements are not intended to interfere with local trade union jurisdictional settlements and similar conventions. Such assignments shall not relieve Contractor of responsibility for complying with the requirements of the Contract Documents.

C. Reference Standards:

1. Refer to General Conditions, as may be modified by the Supplementary Conditions, relative to reference standards and resolving discrepancies between reference standards and the Contract Documents. Provisions of reference standards are in effect in accordance with the Specifications.

2. Copies of Standards: Each entity engaged in the Work shall be familiar with reference standards applicable to its construction activity. Copies of applicable reference standards are not bound with the Contract Documents. Where reference standards are needed for a construction activity, obtain copies of standards from the publication source.

3. Abbreviations and Names: Where reference standards, specifications, codes, manuals, Laws or Regulations, or other published data of international, national, regional or local organizations are referred to in the Contract Documents, the organization issuing the standard may be referred to by their acronym or abbreviation only.

4. Following acronyms or abbreviations that may appear in the Contract Documents shall have the meanings indicated below. Listing is alphabetical by acronym.

AA	Aluminum Association
AABC	Associated Air Balance Council
AAMA	American Architectural Manufacturers Association

AASHTO	American Association of State Highway and Transportation Officials
ACI	American Concrete Institute
ACIFS	American Cast Iron Flange Standards
ACS	American Chemical Society
ADC	Air Diffusion Council
ADSC	International Association of Foundation Drilling.
AEIC	Association of Edison Illuminating Companies
AF&PA	American Forest and Paper Association
ABMA	American Bearing Manufacturers Association (formerly Anti- Friction Bearing Manufacturers Association (AFBMA))
AGA	American Gas Association
AGMA	American Gear Manufacturers Association
AHDGA	American Hot Dip Galvanizers Association
AI	Asphalt Institute
AIA	American Institute of Architects
AIChE	American Institute of Chemical Engineers
AISC	American Institute of Steel Construction
AISI	American Iron and Steel Institute
AITC	American Institute of Timber Construction
ALSC	American Lumber Standards Committee
AMA	Acoustical Materials Association
AMCA	Air Movement and Control Association
AMP	National Association of Architectural Metal Manufacturers, Architectural Metal Products Division
ANSI	American National Standards Institute
APA	The Engineered Wood Association
API	American Petroleum Institute
APHA	American Public Health Association
AREA	American Railway Engineering Association
ARI	Air Conditioning and Refrigeration Institute
ASA	American Standards Association

ASAE	American Society of Agricultural Engineers
ASCE	American Society of Civil Engineers
ASHRAE	American Society of Heating, Refrigerating and Air Conditioning Engineers
ASME	American Society of Mechanical Engineers
ASNT	American Society for Non-Destructive Testing
ASQ	American Society for Quality
ASSE	American Society of Safety Engineers
ASTM	American Society for Testing and Materials
AWCI	Association of the Wall and Ceiling Industry
AWI	Architectural Woodwork Institute
AWPA	American Wood Protection Association
AWPI	American Wood Preservers Institute
AWS	American Welding Society
AWWA	American Water Works Association
BAAQMD	Bay Area Air Quality Management District
BHMA	Builders Hardware Manufacturers Association
BIA	Brick Industry Association
BOCA	Building Officials and Code Administrators
CBMA	Certified Ballast Manufacturers Association
CDA	Copper Development Association
CEMA	Conveyor Equipment Manufacturers Association
CGA	Compressed Gas Association
CISCA	Ceilings and Interior Systems Construction Association
CISPI	Cast Iron Soil Pipe Institute
CLFMI	Chain Link Fence Manufacturers Institute
COC	City of Chandler
CMAA	Crane Manufacturers Association of America
CPSC	Consumer Product Safety Commission
CRSI	Concrete Reinforcing Steel Institute

CSI	Construction Specifications Institute
DIN	Deutsches Institut fur Normung eV (German Institute for Standardization)
DIPRA	Ductile Iron Pipe Research Association
EJCDC	Engineers Joint Contract Documents Committee
EJMA	Expansion Joint Manufacturers Association, Inc.
ETL	Intertek Testing Services, Inc. (formerly ETL Testing Laboratories, Inc.)
FCC	Federal Communications Commission
FEMA	Federal Emergency Management Agency
FHWA	Federal Highway Administration
FM	Factory Mutual (FM Global)
FRPI	Fiberglass Reinforced Plastics Institute
FS	Federal Specification
GA	Gypsum Association
GANA	Glass Association of North America
HEW	United States Department of Health, Education and Welfare
HI	Hydraulic Institute
HMI	Hoist Manufacturers Institute
HUD	United States Department of Housing and Urban Development
IBC	International Building Code
ICC	International Code Council
ICEA	Insulated Cable Engineers Association
IEEE	Institute of Electrical and Electronics Engineers
IESNA	Illuminating Engineering Society of North America
IFI	Industrial Fasteners Institute
IFCEA	Insulated Power Cable Engineers Association
IRI	Industrial Risk Insurers
ISA	Instrumentation, Systems, and Automation Society (formerly Instrument Society of America)
ISO	Insurance Services Office

IOS	International Organization for Standardization
LPI	Lightning Protection Institute
MAG	Maricopa Association of Governments
MIA	Marble Institute of America
ML/SFA	Metal Lath/Steel Framing Association
MS	Military Specifications
MSS	Manufacturers' Standardization Society
MMA	Monorail Manufacturers Association
NAAMM	National Association of Architectural Metal Manufacturers
NACE	National Association of Corrosion Engineers
NAPF	National Association of Pipe Fabricators, Inc.
NARUC	National Association of Regulatory Utilities Commissioners
NBHA	National Builders Hardware Association
NBS	United States Department of Commerce, National Bureau of Standards
NCMA	National Concrete Masonry Association
NEC	National Electric Code
NELMA	Northeastern Lumber Manufacturers' Association
NEMA	National Electrical Manufacturers Association
NESC	National Electrical Safety Code
NETA	International Electrical Testing Association
NFPA	National Fire Protection Association
NFRC	National Fenestration Rating Council
NGA	National Glass Association
NHLA	National Hardwood Lumber Association
NHPMA	Northern Hardwood and Pine Manufacturers Association
NIST	United States Department of Commerce, National Institute of Standards and Technology
NLGA	National Lumber Grades Authority
NRCA	National Roofing Contractors Association
NRMCA	National Ready Mixed Concrete Association

NSF	National Sanitation Foundation
NSSGA	National Stone, Sand, and Gravel Association
NTMA	National Terrazzo and Mosaic Association
OSHA	Occupational Safety and Health Administration
PCA	Portland Cement Association
PCI	Precast/Prestressed Concrete Institute
PEI	Porcelain Enamel Institute
PFI	Pipe Fabrication Institute
PPI	Plastics Pipe Institute
PGMC	Primary Glass Manufacturers Council
PS	Product Standards Section, United States Department of Commerce
RCSC	Research Council on Structural Connections (part of AISC)
RMA	Rubber Manufacturers Association
SAE	Society of Automotive Engineers
SBCCI	Southern Building Code Congress International, Inc.
SCAQMD	Southern California Air Quality Management District
SCPRF	Structural Clay Products Research Foundation
SCTE	Society of Cable Telecommunications Engineers
SDI	Steel Deck Institute
SDI	Steel Door Institute
SIGMA	Sealed Insulating Glass Manufacturing Association
SJI	Steel Joist Institute
SMACNA	Sheet Metal and Air Conditioning Contractor’s National Association
SPI	Society of the Plastics Industry
SPIB	Southern Pine Inspection Bureau
SSPC	Society for Protective Coatings
SWI	Steel Window Institute
TCNA	Tile Council of North America
TEMA	Tubular Exchanger Manufacturers Association

TIA/EIA	Telecommunications Industry Association/Electronic Industries Alliance
UBC	Uniform Building Code
UL	Underwriters Laboratories, Inc.
USAB	United States Access Board
USDOE	United States Department of Energy
USEPA	United States Environmental Protection Agency
USGBC	United States Green Building Council
USGS	United States Geological Survey
USPHS	United States Public Health Service
WCLIB	West Coast Lumber Inspection Bureau
WCMA	Window Covering Manufacturers Association
WCMA	Wood Component Manufacturers Association
MDMA	Window and Door Manufacturers Association
WWEMA	Water and Wastewater Equipment Manufacturers Association
WWPA	Western Wood Products Association

PART 2 – PRODUCTS (NOT USED)

PART 3 – EXECUTION (NOT USED)

END OF SECTION

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SECTION 01 45 23

TESTING SERVICES FURNISHED BY CONTRACTOR

SECTION TO IDENTIFY TESTING REQUIREMENTS BY THE CONTRACTOR. THIS SECTION REQUIRES COORDINATION WITH OWNER AND CIVIL & STRUCTURAL DESIGN LEADERS TO ESTABLISH TESTING REQUIREMENTS.

TESTING IS REQUIRED FOR MOST PROJECTS. EITHER OWNER OR CONTRACTOR WILL RETAIN TESTING SERVICES.

THIS SECTION DOES NOT APPLY FOR TESTING INDICATED TO BE PROVIDED BY OWNER IN ACCORDANCE WITH OTHER SECTIONS OF SPECIFICATIONS. SPECIAL INSPECTIONS CANNOT BE PROVIDED BY THE CONTRACTOR PER THE GOVERNING BUILDING CODES. SEE SECTION 01 45 33 – SPECIAL INSPECTIONS. OTHER INDIVIDUAL SECTIONS INCLUDE REQUIREMENTS AND REQUIRED TESTS FOR TESTING OF SPECIFIC MATERIALS AND CONDITIONS.

PART 1 – GENERAL

1.01 SUMMARY

A. This specification addresses requirements for testing services specifically required to be provided by the Contractor. This section does not apply to any testing required to be provided by the Owner or Owner's representative.

B. This section does not apply to any Special Inspections as required by Section 01 45 33. Special Inspections cannot be provided by the Contractor in accordance with the Governing Building Code.

C. Contractor shall employ and pay for independent testing entity to perform specified services covered by this specification. Entity selected shall be subject to approval by Engineer.

D. Inspection, sampling, and testing shall be as specified in the individual Specification Sections.

E. Related Sections, but not limited to, the following:

1. Section 01 88 16 – Watertightness Testing of Concrete Structures
2. Section 03 01 30 – Concrete Repairs
3. Section 07 16 16 – Crystalline Waterproofing

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1.02 ADMINISTRATIVE REQUIREMENTS

A. Contractor's Responsibilities:

1. Provide to laboratory representative samples of materials to be tested, in required quantities.

2. Provide labor and facilities:

   a. To provide access to the Work to be tested, and where required, to Suppliers' operations.

   b. To obtain and handle samples at the Site.

   c. To facilitate inspections and tests.

   d. For testing entity's exclusive use for storage and curing of test samples.

   e. Forms for preparing concrete test beams and cylinders.

3. Notify testing entity and Engineer sufficiently in advance of operations to allow for assignment of personnel and scheduling of tests.

4. Arrange with testing entity and pay for additional services, sampling, and testing required for Contractor's convenience.

5. Provide to testing entity the preliminary design mix proposed for concrete, and other material mixes that require testing by the testing laboratory.

B. Testing Entity's Responsibilities:

1. Cooperate with Contractor and Engineer and provide qualified personnel promptly when notified.

2. Perform specified inspections, sampling, and testing of materials and methods of construction; comply with applicable standards; ascertain compliance with requirements of the Contract Documents.

3. Promptly notify Engineer and Contractor of irregularities or deficiencies in the Work observed during performance of services.

4. Submit specified quantity of report copies of inspections and tests to Contractor and Engineer.

5. Perform additional tests and services as required to ensure compliance with the Contract Documents.

C. Report Requirements:

1. Electronic Submittal of testing reports.

2. Include the following information:

   a. Date issued.

   b. Project title, number, and name of the Site.

   c. Testing laboratory name and address.

   d. Name and signature of inspector or person obtaining samples.

   e. Date of inspection or sampling.

   f. Record of temperature and weather.

   g. Date of test.

   h. Identification of material or product tested and associated Specification Section.

   i. Location in the Project.

   j. Type of inspection or test.

   k. Results of tests and observations regarding compliance with the Contract Documents.

1.03 SUBMITTALS

A. Submit copies of material and product test reports where required by the Contract Documents and as requested by Engineer.

B. Quality Assurance Submittals:

   1. Qualifications statement indicating experience and facilities for tests required under the Contract Documents.

   2. Copy of report of inspection of facilities during most recent NIST inspection tour. Include memorandum of remedies of deficiencies reported during inspection.

   3. Copy of certificate of calibration for each instrument or measuring device proposed for use, by accredited calibration agency.

1.04 QUALIFICATIONS

A. Comply with applicable requirements of ASTM E329, Specification for Agencies Engaged in Construction Inspection and/or Testing.

B. Laboratory shall be authorized to operate in the same State or Commonwealth as the Site. Where applicable, laboratory shall be certified by the authority having jurisdiction for the types of testing required.

C. Testing equipment used by laboratory will be calibrated at maximum twelve month intervals by devices of accuracy traceable to either NIST's Standard Reference Materials (SRM), ISO 17025, General Requirements for the Competence of Testing and Calibration Laboratories, or certified by State, Commonwealth, or local bureau of weights and measures, or values of natural physical constants generally accepted in the engineering and scientific community.

PART 2 – PRODUCTS (NOT USED)

PART 3 – EXECUTION (NOT USED)

END OF SECTION

SECTION 01 51 00
TEMPORARY UTILITIES

PART 1 – GENERAL

1.01 SUMMARY

A. Contractor shall provide temporary utilities required for the Project and to complete the Work.

1. Make arrangements with utility service companies for temporary services and obtain required permits and approvals for temporary utilities.

2. Pay utility service costs, including connection fees, required for the Work as needed.

3. Continuously maintain adequate utilities for all purposes during the Project, until removal of temporary utilities and temporary facilities. At minimum, provide and maintain temporary utilities through Substantial Completion and removal of temporary field offices and sheds.

4. Should Owner occupy part of the Project prior to Substantial Completion of the entire Work, cost of utilities consumed via temporary utilities serving the portion occupied by Owner will be shared proportionately between Owner and Contractor as mutually agreed to by the parties.

5. Maintain, including cleaning, temporary utilities and continuously provide consumables as required.

6. Temporary utilities and temporary facilities shall be adequate for personnel using the Site and requirements of Project.

7. Provide temporary utilities and temporary facilities in compliance with Laws and Regulations and, when applicable, requirements of utility owners.

B. Provide the following temporary utilities at minimum:

1. Electricity and lighting.

2. Telephone and communications.

3. Sanitary facilities.

4. Water service.

5. First-aid facilities.

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6. Fire protection.

1.02 ADMINSTRATIVE REQUIREMENTS

A. Use of Owner's System:

1. Existing Utility Systems: Do not use systems in existing buildings or structures for temporary utilities without Owner's written permission and mutually acceptable basis agreed upon by the parties for proportionate sharing of costs between Owner and Contractor.

2. Use of Permanent Utility Systems Provided Under the Project:

a. Permanent lighting, water, heating, ventilating, and fire protection systems and first-aid facilities may be used to provide temporary utilities and temporary facilities if the following are met:

1) Obtain Owner's written permission to use permanent systems.

2) Permanent systems to be used for temporary utilities or temporary facilities shall have achieved Substantial Completion, including complete functionality of all controls.

3) Contractor shall pay all costs while using permanent system, including operation, maintenance, replacement of consumables, and provide replacement parts.

b. Do not use the following permanent facilities:

1) Telephone and communication facilities.

2) Sanitary facilities.

1.03 SYSTEM DESCRIPTION

A. Electricity and lighting:

1. Contractor shall provide electrical and lighting service for construction field offices, sheds, storage containers, etc. and as required for the Work.

B. Telephone and communications: Contractor shall provide temporary telephone and communications required for its operations at the Site and for summoning emergency medical assistance.

C. Heating:

1. Contractor shall provide temporary heating, ventilation coverings and enclosures necessary to protect the Work and materials against wetness and temperature damage, to dry out the Work, and to facilitate the Work in structures.

2. Equipment, fuel, materials, personnel and methods used shall be adequate to maintain critical installation temperatures and ventilation of Work at all times in areas where necessary to perform the Work.

3. Contractor shall provide sufficient heat to maintain a minimum temperature of 65°F before and during application of interior finishing, painting, coating, etc.

4. Contractor shall replace any Work damaged by dampness or insufficient/abnormal heating at no cost to the Owner.

D. Sanitary facilities:

1. Contractor shall provide suitably-enclosed chemical or self-contained toilets for Contractor's employees and visitors to the Site. Location of temporary toilets shall be acceptable to Owner and screened from public observation.

2. Facilities shall be maintained and provided in accordance with State or Commonwealth Labor Regulations and local ordinances. Contents shall be removed and disposed in accordance with local and state or commonwealth regulations as required.

3. Contractor shall be prohibited from committing nuisances within, on, or in the vicinity of the Site.

E. Water service:

1. Contractor shall provide temporary water service for the Work including for construction purposes, sanitary facilities, fire protection, field office, and cleaning purposes.

2. Contractor shall provide potable water for Contractor's personnel either by portable containers or drinking fountains.

3. Contractor shall provide temporary hose bibs, hoses, and watertight barrels for the distribution of water.

4. Contractor shall provide freeze protection for water service.

F. First-aid facilities:

1. Contractor shall provide temporary first-aid stations at or immediately adjacent to the Site's major work areas. Contractor shall provide temporary first-aid stations inside its temporary field office. Locations of first-aid stations shall be determined by Contractor's safety representative.

2. Contractor shall provide list of emergency telephone numbers at each hardwired telephone at the Site. List shall be in accordance with the list of emergency contact information required in Section 01 31 19 – Project Meetings.

G. Fire protection:

1. Contractor shall comply with NFPA 241, Safeguarding Building Construction, Alteration, and Demolition Operations, and requirements of fire marshals and authorities having jurisdiction at the Site.

2. Contractor shall provide temporary fire exits, fire extinguishers, hoses and safety devices as required by authorities having jurisdiction.

3. Contractor shall notify Engineer, Owner, and fire marshals in the event of fire at the Site including, but not limited to, fuel tanks and similar hazardous utilities and devices. Contractor shall cooperate with Owner of fuel tank and utilities to prevent occurrence of fire or explosion.

4. Contractor shall perform safety precautions and comply with fire marshal's instructions in the event of fire.

PART 2 – PRODUCTS

2.01 EQUIPMENT

A. Materials and equipment for temporary systems may be new or used but shall be adequate for purposes intended and shall not create unsafe conditions and shall comply with Laws and Regulations.

B. Provide required materials, equipment, and facilities, including piping, wiring, and controls.

C. Electrical system requirements: System shall consist of wiring, switches, insulated supports, poles, fixtures, sockets, receptacles, lamps, guards, cutouts and fuses as required for completion of the Work.

PART 3 – EXECUTION

3.01 INSTALLATION

A. Install temporary facilities in neat, orderly, manner, and make structurally, mechanically, and electrically sound throughout.

B. Location of Temporary Utilities and Temporary Facilities:

1. Locate temporary systems for proper function and service.

2. Temporary systems shall not interfere with or provide hazards or nuisances to: the Work under this and other contracts, movement of personnel, traffic areas, materials handling, hoisting systems, storage areas, finishes, and work of utility companies.

3. Do not install temporary utilities on the ground, with the exception of temporary extension cords, hoses, and similar systems in place for short durations.

C. Modify and extend temporary systems as required by progress of the Work.

3.02 MAINTENANCE

A. Maintain temporary systems to provide safe, continuous service as required.

B. Properly supervise operation of temporary systems:

1. Enforce compliance with Laws and Regulations.

2. Enforce safe practices.

3. Prevent abuse of services.

4. Prevent nuisances and hazards caused by temporary systems and their use.

5. Prevent damage to finishes.

6. Ensure that temporary systems and equipment do not interrupt continuous progress of construction.

C. At end of each work day, check temporary systems and verify that sufficient consumables are available to maintain operation until work is resumed at the Site. Provide additional consumables if the supply on hand is insufficient.

D. Contractor shall replace broken and burned out lamps, blown fuses, and damaged wiring and appurtenances as required to maintain adequate and safe operating conditions.

E. Contractor shall permit subcontractors and others at a mutually agreed arrangement to use temporary electrical system that meet the following requirements:

1. Equipment are suitable for 120 V, single phase, 60 Hz operation.

2. Operating input does not exceed 1,500 volt-amperes.

3. Single piece of equipment connected to one outlet.

4. Contractor shall restrict use of equipment as required to prevent overloading circuits.

3.03 CLOSEOUT ACTIVITES

A. Completely remove temporary utilities, facilities, equipment, and materials when no longer required. Repair damage caused by temporary systems and their removal and restore the Site to condition required by the Contract Documents; if restoration of damaged areas is not specified, restore to preconstruction condition.

B. Contractor is responsible for and shall return to original condition those portions of permanent electric system used in completing the Work.

C. Where temporary utilities are disconnected from existing utility, provide suitable, watertight or gastight (as applicable) cap or blind flange, as applicable, on service line, in accordance with requirements of utility owner.

D. When permanent utilities and systems that were used for temporary utilities, upon Substantial Completion replace all consumables such as filters and light bulbs and parts used during the Work.

END OF SECTION

SECTION 01 52 00
CONSTRUCTION FACILITIES

PART 1 – GENERAL

1.01 SUMMARY

A. Contractor shall provide construction facilities for performance of the Work, including the following:

1. Contractor's field office, sheds, and storage containers that shall be erected within 30 days of Notice to Proceed on the Project.

2. Project sign and panel that shall be erected prior to commencement of construction.

1.02 FACILITY DESCRIPTION

A. Contractor's Field Office, Sheds, and Storage:

1. Contractor shall provide and maintain a field office at the Site, including temporary utility services specified.

2. Size and Furnishings: As required by Contractor

3. Features: Exterior Contractor identification sign, night lighting for security, and temporary utilities specified in Section 01 51 00 – Temporary Utilities.

4. Location: As shown on the Contract Documents.

5. Contractor shall provide and maintain one set of Contract Documents, latest approved Shop Drawings, Field Orders, request for interpretations, clarification notices, Work Change Directives, proposal requests, Change Proposals, Change Orders, and other pertinent Project related correspondence.

B. Project Identification Sign:

1. Contractor shall provide in accordance to the General Conditions.

2. Contractor shall maintain project identification sign for the duration of the Contract.

3. Contractor shall remove and dispose of project identification sign at the completion of the Project when notified by the Engineer.

4. Contractor shall not receive additional payment for deterioration or replacement of names and other pertinent sign information throughout the duration of the Project.

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1.03 SUBMITTALS

A. Action/Informational Submittals: Project identification sign layout, details, and materials of construction.

PART 2 – PRODUCTS (NOT USED)

PART 3 – EXECUTION (NOT USED)

END OF SECTION

SECTION 01 55 00
CONTRACTOR ACCESS AND PARKING

PART 1 – GENERAL

1.01 SUMMARY

A. Section includes:

1. Contractor shall provide and maintain temporary laydown and employee parking areas and appurtenances required during the Project for use by Contractor, other contractors employed on the Project, Owner's, and emergency vehicles, as shown on the Drawings.

2. Laydown and employee parking areas shall be designed and maintained by Contractor and shall be fully passable to vehicles in all weather conditions.

1.02 ADMINSTRATIVE REQUIREMENTS

A. Access roads:

1. Contractor shall construct and maintain such temporary access roads as required to perform the Work.

2. Contractor shall construct access roads, where possible, in locations over the areas of future road systems.

3. Access roads shall be located within the property lines of the Owner unless the Contractor independently secures easements for use and convenience.

a. Contractor shall submit written documentation to the Engineer for Contractor secured easements across privately held property.

b. Easement agreements shall specify terms and conditions of use and provisions for Site restoration.

c. Written release from property owner certifying that terms of the easement agreement have been complied by the Contractor shall be furnished to the Engineer prior to final payment.

B. Use of existing access roads:

1. Contractor will be allowed to use Owner's existing roads as shown on the Drawings.

2. Prevent interference with traffic on existing roads and parking areas. At all times, keep access roads and entrances serving the Site clear and available to Owner,

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Owner's employees, emergency vehicles, and other contractors. Do not use access roads or Site entrances for parking or storage of materials or equipment.

3. Contractor shall indemnify and hold harmless Owner and Engineer from expenses caused by Contractor's operations over existing roads and parking areas.

4. Schedule deliveries to minimize use of driveways and Site entrances.

5. Contractor shall suitably maintain existing access road at Contractor's expense for the duration of the Contract time.

C. Contractor parking areas:

1. Contractor employee vehicles shall park in area(s) designated by Owner or as shown on the Drawings.

2. Contractor shall construct and maintain parking area at the Site.

D. State/Commonwealth and local regulations:

1. Contractor shall obtain and pay all cost associated with bonds required by authorized entity (i.e. State or Commonwealth Department of Transportation) for the use of State or Commonwealth maintained roads.

2. Contractors shall obey traffic laws and comply with requirements, rules and regulations of the authorized entity (i.e. State or Commonwealth Department of Transportation), including local authorities having jurisdiction, to maintain warning signs, lights, barriers, etc. for the protection of traffic on public roadways.

E. Site security:

1. Contractor shall safely guard all the Work, the Project, products, equipment, and property from loss, theft, damage, and vandalism until Substantial Completion. Contractor's duty includes safely guarding Owner's property in vicinity of the Work and Project, and other private property in the vicinity of the Project from injury and loss in connection with performance of the Project.

2. Employ watchmen as required to provide required security and prevent unauthorized entry.

3. Costs for security required under this Section shall be paid by Contractor.

4. Make no claim against Owner for damage resulting from trespass.

5. Pay full compensation for, or repair or replace, damage to property of Owner and others arising from failure to furnish adequate security.

6. Provide temporary fencing in accordance with the Contract Documents.

7. Security requirements specified in the Section shall begin as soon as the contractor delivers materials to the Site and/or begins work, and shall continue until the date of Final Completion.

8. Procedures:

   a. Contractor shall conform to Owner's security procedures and access restrictions at Site throughout entire Project.

   b. Contractor, including Subcontractors and Suppliers, shall comply with the following:

      1) Personnel Identification: All Contractor personnel shall wear at all times on-Site a badge bearing Contractor's name, employee's name and, as applicable, employee number.

      2) Parking: Do not park outside of designated Contractor parking area, which is shown on the Drawings. Prepare and maintain parking area as required. Personal vehicles are not allowed outside Contractor parking area.

9. Contractor shall provide and maintain temporary security fencing if existing security fencing or barriers are breached or temporarily removed for the Project at no additional cost to the Owner. Temporary security fencing shall be equal to existing, unless otherwise specified, and provided and maintained in a manner satisfactory to Engineer and Owner.

PART 2 – PRODUCTS (NOT USED)

PART 3 – EXECUTION

3.01 INSTALLATION

A. Contractor shall determine if and where temporary fencing is necessary, unless existing security fencing is damaged, which will be determined by Engineer and Owner.

B. Install temporary fencing used for site security in accordance with the Contract Documents and fence manufacturer's instructions. Provide temporary fencing for site security so that integrity of site security is maintained throughout the Project.

C. Maintain temporary fencing. Repair damage to temporary fencing and replace fencing when required to maintain site security.

D. Remove temporary fencing when permanent site security fencing is in place and fully functional, or when otherwise directed by Owner or Engineer.

END OF SECTION

SECTION 01 57 00
TEMPORARY CONTROLS

PART 1 – GENERAL

1.01 SUMMARY

A. Contractor shall provide and maintain methods, equipment, and temporary construction as required to control environmental conditions at the Site and adjacent areas.

B. Maintain controls until no longer required.

C. Temporary controls include, but are not limited to, the following:

1. Dust control.

2. Noise controls.

3. Pest and rodent control.

4. Pollution control.

PART 2 – PRODUCTS (NOT USED)

PART 3 – EXECUTION

3.01 DUST CONTROL

A. Contractor shall take measures to control dust from Contractor's operations and prevent spillage of excavated materials on public roads.

B. Contractor shall remove spillage of excavated materials, debris and dust from public roads by methods approved by Engineer.

C. Contractor shall provide temporary dust-proof partitions where required to protect unaltered portions of existing structures and facilities and as directed by Engineer or Owner. Temporary partitions shall be provided where demolition Work is required, to protect equipment and material, and shall consist of the following:

1. Wood studs with plywood on both sides and extend from floor to ceiling.

2. Closure plate at floor and ceiling.

3. One door (minimum) with hardware.

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D. Contractor shall refer to applicable sections of local and state/commonwealth regulations on dust control for additional guidance.

1. Contractor shall apply water at locations, quantities, and frequencies required by Engineer to control dust for nuisance prevention to Owner, Engineer, and properties in the vicinity of the Site.

2. Dust control and cleaning measures shall be provided at no additional cost to the Owner.

3.02 NOISE CONTROL

A. Contractor's vehicles and equipment shall minimize noise emissions to greatest degree practicable. Provide mufflers, silencers, and sound barriers when necessary.

B. Noise levels shall comply with Laws and Regulations, including OSHA requirements and local ordinances.

C. Noise emissions shall not interfere with the work of Owner or others.

3.03 PEST AND RODENT CONTROL

A. Provide rodent and pest control as required to prevent infestation of the Site and storage areas.

B. Employ methods and use materials that do not adversely affect conditions at the Site or on adjoining properties.

C. In accordance with laws and regulations, promptly and properly dispose of pests and rodents trapped or otherwise controlled.

3.04 POLLUTION CONTROL.

A. General:

1. Provide means, methods, and facilities required to prevent contamination of soil, water, and atmosphere caused by discharge of noxious substances from construction operations.

2. Equipment used during construction shall comply with Laws and Regulations.

B. Spills and Contamination:

1. Provide equipment and personnel to perform emergency measures required to contain spills and to remove contaminated soils and liquids.

2. Excavate contaminated material and properly dispose of off-site, and replace with suitable compacted fill and topsoil.

C. Protection of Surface Waters: Implement special measures to prevent harmful substances from entering surface waters. Prevent disposal of wastes, effluents, chemicals, and other such substances in or adjacent to surface waters and open drainage routes, in sanitary sewers, or in storm sewers.

D. Atmospheric Pollutants:

1. Provide systems for controlling atmospheric pollutants related to the Work.

2. Prevent toxic concentrations of chemicals and vapors.

3. Prevent harmful dispersal of pollutants into atmosphere.

E. Solid Waste:

1. Provide systems for controlling and managing solid waste related to the Work.

2. Prevent solid waste from becoming airborne, and from discharging to surface waters and drainage routes.

3. Properly handle and dispose of solid waste.

END OF SECTION

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SECTION 01 61 00
PRODUCT REQUIREMENTS AND OPTIONS

PART 1 – GENERAL

1.01 SUMMARY

A. Section includes:

1. Common requirements for products.

2. Contractor's options for selecting products.

3. Requirements for consideration of "or equal" products.

4. Warranty requirements of products.

1.02 REFERENCES

A. Definitions:

1. "Products" includes materials, equipment, machinery, components, fixtures, systems, and other goods incorporated in the Work. Products do not include machinery and equipment used for preparing, fabricating, conveying, erecting, or installing the Work. Products include Owner-furnished goods incorporated in the Work where use of such goods is specifically required in the Contract Documents.

2. "Special Warranties" includes additions or modifications to standard warranty requirements specified in the Contract Documents.

3. "Or-Equal" Items: If in Engineer's sole discretion an item of material or equipment proposed by Contractor is functionally equal to that named and sufficiently similar so that no change in related Work will be required, it may be considered by Engineer as an "or-equal" item, in which case review and approval of the proposed item may, in Engineer's sole discretion, be accomplished without compliance with some or all of the requirements for approval of proposed substitute items. For the purposes of this Paragraph, a proposed item of material or equipment will be considered functionally equal to an item so named if:

   a. In the exercise of reasonable judgment Engineer determines that:

      1) it is at least equal in materials of construction, quality, durability, appearance, strength, and design characteristics;

      2) it will reliably perform at least equally well the function and achieve the results imposed by the design concept of the completed Project as a functioning whole; and

3) it has a proven record of performance and availability of responsive service.

b. Contractor certifies that, if approved and incorporated into the Work:

1) there will be no increase in cost to the Owner or increase in Contract Times; and

2) it will conform substantially to the detailed requirements of the item named in the Contract Documents.

1.03 SUBMITTALS

A. Warranty Log Book:

1. Submit warranty log book prepared specifically for this Project. Submittal shall include a summary listing of all equipment and material warranties furnished in the Contract, date received, and start/end date of warranty period. Individual warranty documentation shall be provided in the submittal.

2. Submit prior to submittal of final application for payment.

B. Patent Documentation: Submit licensing arrangement and agreement documentation.

1.04 REQUIREMENT

A. Common Products:

1. Provide products that have not been previously incorporated into another project or facility unless otherwise indicated in the Contract Documents.

2. Provide products of the same generic kind from a single source.

3. Provide products complete with accessories, trim, finish, fasteners, and other items shown, indicated, or required for a complete installation for the indicated use and performance.

4. Standard Products: When available, and unless custom or nonstandard options are specified or indicated, provide standard products of types that have been produced and used successfully in similar situations on other projects.

5. Visual Matching: Where required in the Contract Documents, provide products that match referenced existing construction, approved mock-ups, or approved Sample, as determined by Engineer.

6. Where the Contract Documents include the phrase “as selected” for product color, finish pattern, option, or similar phrase, provide products selected by Engineer as follows:

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a. Standard Range: Where the Contract Documents include the phrase “standard range of colors, patterns, textures” or similar phrase, provide color, pattern, density, or texture selected by Engineer from manufacturer’s product line that does not include premium items.

b. Full Range: Where the Contract Documents include the phrase “full range of colors, patterns, textures” or similar phrase, Engineer will select color, pattern, density, or texture from manufacturer’s entire product line, including standard and premium items.

B. Product Compatibility:

1. Similar products by the same Supplier shall be compatible with each other, unless otherwise indicated in the Contract Documents.

2. Provide products compatible with products previously selected or installed on the Project.

C. Product Options:

1. For products specified only by reference standard or description, without reference to Supplier, provide products meeting that standard, by a Supplier or from a source that complies with the Contract Documents.

2. For products specified by naming one or more products or Suppliers, provide the named products that comply with the Contract Documents, unless an “or equal” or substitute product is approved by Engineer.

3. For products specified by naming one or more products or Suppliers and the term, “or equal”, when Contractor proposes a product or Supplier as an “or equal”, submit to Engineer a request for approval of an “or equal” product or Supplier.

4. For products specified by naming only one product or manufacturer and followed by words indicating that no substitution is allowed, there is no option and no substitution will be allowed.

D. Concerning Patents:

1. Owner shall be provided a guarantee by Contractor and equipment Supplier that equipment and material furnished in accordance with the Contract Documents is not the subject of patent litigation.

2. Patent litigation or controversy shall include, but not limited to, the following:

a. Actual furnished equipment and material the is subject or could be subject to patent litigation or is known to infringe on a patent.

b. Furnished equipment and material that may result in a process that use of equipment and material in a manner that infringes upon or violates a patent.

3. When patent infringement may occur, Contractor and Supplier shall submit license arrangements among parties, including Contractor, Supplier, and patent owner (controller of patent) at a minimum, which shall permit use of equipment and material as specified in the Contract Documents.

4. Supplier shall indemnify and hold harmless Owner and Engineer against all claims, costs, losses, and damages arising out of or relating to any infringement or patent rights or copyrights incident to the use of equipment and material specified in the Contract Documents and as required in General Conditions and as modified in the Supplemental Conditions.

E. “Or Equal” Products:

1. For proposed products not named in the Contract Documents and considered as an “or equal”, Contractor shall request in writing Engineer’s approval of the “or equal”. Request for approval of an “or equal” product shall accompany the Shop Drawing or product data submittal for the proposed product and shall include:

a. Contractor’s request that the proposed product be considered as an “or equal” in accordance with the Contract Documents, accompanied by Contractor’s certifications.

b. Documentation adequate to demonstrate that proposed product does not require revisions to the Contract Documents, that proposed product is consistent with the Contract Documents, and that proposed product will produce results and performance required in the Contract Documents, and that proposed product is compatible with other portions of the Work.

c. Detailed comparison of significant qualities of proposed product with the products and manufacturers named in the Contract Documents. Significant qualities include attributes such as performance, weight, size, durability, visual effect, performance and specific features and requirements shown or indicated.

d. Evidence that proposed product manufacturer will furnish warranty equal to or better than specified, if any.

e. List of similar installations for completed projects with project names and physical addresses of installation along with the names, telephone numbers, email addresses and physical address of design professionals and owners associated with the referenced installation, if requested.

f. Samples, if requested.

g. Other information requested by Engineer.

1.05 WARRANTY

A. Warranties specified for products shall be in addition to, and run concurrent with, Contractor's general warranty and guarantee and requirements for the required correction period. Disclaimers and limitations in specific product warranties do not limit Contractor's general warranty and guarantee.

1. Product manufacturer's warranty is preprinted written warranty published by product manufacturer and specifically endorsed by product manufacturer to Owner.

2. Equipment and material shall be guaranteed to be free from defects in workmanship, design, and/or materials for a period of one (1) year unless otherwise specified in the individual Specification Section for a Special Warranty.

3. Warranty period shall start on the date of the particular equipment and material is substantially complete, which includes requirements specified in Section 01 75 00 – Checkout and Startup Procedures for start-up certification and specified elsewhere in the Contract Documents.

4. Warranty requirements may be added to or modified in the individual Specification Sections. Special warranty is written warranty required by or incorporated into the Contract Documents, either to extend time limit provided by product manufacturer's warranty or to provide increased rights to Owner.

5. Special warranty information, if any, will be located in the Specification Section for that product.

B. Requirements for Special Warranties: Provide written special warranty document that contains appropriate terms and identification, ready for execution by product manufacturer and Owner. Submit draft warranty with submittals required for product.

1. Manufacturer's Standard Form: Modified to include Project-specific information and properly executed by product manufacturer and other parties as appropriate.

2. Specified Form: When specified forms are included in the Contract Documents, prepare written document, properly executed by product manufacturer and Owner, using appropriate form.

3. Refer to Specifications for content and requirements for submitting special warranties.

C. Submit product manufacturer's warranties and special warranties as submittals in accordance with Schedule of Submittals accepted by Engineer.

PART 2 – PRODUCTS (NOT USED)

PART 3 – EXECUTION (NOT USED)

END OF SECTION

SECTION 01 65 00
PRODUCT DELIVERY REQUIREMENTS

PART 1 – GENERAL

1.01 SUMMARY

A. Section includes:

1. General requirements for preparing for shipping, delivering, and handling materials and equipment.

2. Contractor shall make all arrangements for transporting, delivering, and handling of materials and equipment required for prosecution and completion of the Work.

1.02 SUBMITTALS

A. Refer to individual Specification Sections for submittal requirements relative to delivery and handling materials and equipment.

1.03 SHIPMENT REQUIREMENTS

A. When practical, factory-assemble materials and equipment. Match mark or tag separate parts and assemblies to facilitate field assembly. Cover machined and unpainted parts that may be damaged by the elements with strippable, protective coating.

B. Package materials and equipment to facilitate handling, and protect materials and equipment from damage during shipping, handling, and storage. Mark or tag outside of each package or crate to indicate the associated purchase order number, bill of lading number, contents by name, Owner's contract name and number, Contractor name, equipment number, and approximate weight. Include complete packing lists and bills of materials with each shipment.

C. Protect materials and equipment from exposure to the elements and keep thoroughly dry and dust-free at all times. Protect painted surfaces against impact, abrasion, discoloration, and other damage. Lubricate bearings and other items requiring lubrication in accordance with manufacturer's instructions.

D. Advance Notice of Shipments:

1. Keep Engineer informed of delivery of all materials and equipment to be incorporated in the Work.

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E. Do not ship materials and equipment until:

1. Related Shop Drawings, Samples, and other submittals have been approved or accepted (as applicable) by Engineer, including, but not necessarily limited to, Submittals associated with the materials and equipment being delivered.

2. Manufacturer's instructions for handling, storing, and installing the associated materials and equipment have been submitted to and accepted by Engineer in accordance with the Specifications.

3. Results of source quality control testing (factory testing), when required by the Contract Documents for the associated materials or equipment, have been reviewed and accepted by Engineer.

4. Facilities required for handling materials and equipment in accordance with manufacturer's instructions are in place and available.

5. Required storage facilities have been provided.

1.04 DELIVERY REQUIREMENTS

A. Scheduling and Timing of Deliveries:

1. Arrange deliveries of materials and equipment in accordance with the accepted Progress Schedule and in ample time to facilitate inspection prior to installation.

   a. Equipment and material shall not be delivered to the Site prior to 90 days in advance of scheduled installation.

   b. Partial payment requests will not be processed for materials delivered prior to 90 days before installation or for materials that are improperly stored.

2. Schedule deliveries to minimize space required for and duration of storage of materials and equipment at the Site or delivery location, as applicable.

3. Coordinate deliveries to avoid conflicting with the Work and conditions at Site, and to accommodate the following:

   a. Work of other contractors and Owner.

   b. Owner's operations and maintenance.

   c. Storage space limitations.

   d. Availability of equipment and personnel for handling materials and equipment.

   e. Owner's use of premises.

4. Deliver materials and equipment to the Site during regular working hours.

5. Deliver materials and equipment to avoid delaying the Work and the Project, including work of other contractors, as applicable. Deliver anchor system materials, including anchor bolts to be embedded in concrete or masonry, in ample time to avoid delaying the Work.

B. Deliveries:

1. Shipments shall be delivered with Contractor's name, Subcontractor's name (if applicable), Site name, Project name, and contract designation clearly marked.

2. Site may be listed as the "ship to" or "delivery" address; but Owner shall not be listed as recipient of shipment unless otherwise directed in writing by Engineer.

3. Provide Contractor's telephone number to shipper; do not provide Owner's telephone number.

4. Arrange for deliveries while Contractor's personnel are at the Site. Contractor shall receive and coordinate shipments upon delivery. Shipments delivered to the Site when Contractor is not present will be refused by Owner, and Contractor shall be responsible for the associated delays and additional costs, if incurred.

C. Containers and Marking:

1. Have materials and equipment delivered in manufacturer's original, unopened, labeled containers.

2. Clearly mark partial deliveries of component parts of materials and equipment to identify materials and equipment, to allow easy accumulation of parts, and to facilitate assembly.

D. Inspection of Deliveries:

1. Immediately upon delivery, Contractor shall inspect shipment to verify that:

a. Materials and equipment comply with the Contract Documents and approved or accepted (as applicable) submittals.

b. Quantities are correct.

c. Materials and equipment are undamaged.

d. Containers and packages are intact and labels are legible.

e. Materials and equipment are properly protected.

2. Promptly remove damaged materials and equipment from the Site and expedite delivery of new, undamaged materials and equipment, and remedy incomplete or lost materials and equipment to furnish materials and equipment in accordance with the Contract Documents, to avoid delaying progress of the Work.

3. Advise Engineer in writing when damaged, incomplete, or defective materials and equipment are delivered, and advise Engineer of the associated impact on the Progress Schedule.

1.05 HANDLING REQUIREMENTS

A. Provide equipment and personnel necessary to handle materials and equipment, including those furnished by Owner, by methods that prevent soiling or damaging materials and equipment and packaging.

B. Provide additional protection during handling as necessary to prevent scraping, marring, and otherwise damaging materials and equipment and surrounding surfaces.

C. Handle materials and equipment by methods that prevent bending and overstressing.

D. Lift heavy components only at designated lifting points.

E. Handle materials and equipment in safe manner and as recommended by the manufacturer to prevent damage. Do not drop, roll, or skid materials and equipment off delivery vehicles or at other times during handling. Hand-carry or use suitable handling equipment.

PART 2 – PRODUCTS (NOT USED)

PART 3 – EXECUTION (NOT USED)

END OF SECTION

SECTION 01 66 00

PRODUCT STORAGE AND PROTECTION REQUIREMENTS

PART 1 – GENERAL

1.01 SUMMARY

A. General requirements of storing and protecting equipment and materials.

1.02 STORAGE

A. Store and protect materials and equipment in accordance with manufacturer's recommendations and the Contract Documents.

B. Contractor shall make all arrangements and provisions necessary for, and pay all costs for, storing materials and equipment. Construction equipment, and materials and equipment to be incorporated into the Work shall be placed to avoid injuring the Work and existing facilities and property, and so that free access is maintained at all times to all parts of the Work and to public utility installations in vicinity of the Work. Store materials and equipment neatly and compactly in locations that cause minimum inconvenience to Owner, other contractors, public travel, and owners, tenants, and occupants of adjoining property. Arrange storage in manner to allow easy access for inspection.

C. Areas available at the Site for storing materials and equipment are shown or indicated in the Contract Documents, or as approved by Engineer.

D. Store materials and equipment to become Owner's property to facilitate their inspection and ensure preservation of quality and fitness of the Work, including proper protection against damage by freezing, moisture, and high ambient temperatures. Store in indoor, climate-controlled storage areas all materials and equipment subject to damage by moisture, humidity, heat, cold, and other elements, unless otherwise acceptable to Owner.

E. Contractor shall be fully responsible for loss or damage (including theft) to stored materials and equipment.

F. Do not open manufacturer's containers until time of installation, unless recommended by the manufacturer, directed by Engineer or otherwise specified in the Contract Documents.

G. Do not store materials or equipment in structures being constructed unless approved by Engineer in writing.

H. Do not use lawns or other private property for storage without written permission of the owner or other person in possession or control of such premises.

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I. Contractor shall not store unnecessary equipment and materials at the Site.

J. Contractor shall prevent structures from being loaded with a weight that endanger its security and/or safety of persons.

K. Stored equipment and materials shall not be placed within 10 feet of fire hydrants.

L. Gutters, drainage channels and inlets shall be kept unobstructed at all times.

1.03 PROTECTION

A. Contractor shall provide temporary storage containers/facilities, if required, to protect equipment and materials at the Site.

B. Equipment to be incorporated into the Work shall be boxed, crated, or otherwise completely enclosed and protected during shipping, handling, and storage, in accordance with Section 01 65 00 – Product Delivery Requirements.

C. Store all materials and equipment off the ground (or floor) on raised supports such as skids or pallets.

D. Protect painted surfaces against impact, abrasion, discoloration, and other damage. Painted equipment surfaces that are damaged or marred shall be repainted in their entirety in accordance with equipment manufacturer and paint manufacturer requirements, to the satisfaction of Engineer.

1.04 SPECIFIC STORAGE REQUIREMENTS

A. Uncovered:

1. The following types of materials may be stored outdoors without cover on supports so there is no contact with the ground:

    a. Piping, except polyvinyl chloride (PVC) or chlorinated PVC (CPVC) pipe.

B. Covered:

1. The following materials and equipment may be stored outdoors on supports and completely covered with covering impervious to water:

    a. Grout and mortar materials.

    b. Rough lumber.

    c. PVC and CPVC pipe.

2. Tie down covers with rope, and slope covering to prevent accumulation of water.

C. Fully Protected:

1. All materials and equipment not named as uncovered or covered in this Section, shall be stored on supports in buildings or trailers that have concrete or wooden flooring, roof, and fully closed walls on all sides. Covering with plastic sheeting or similar material in space without floor, roof, and walls is not acceptable. Comply with the following:

    a. Provide heated storage for materials and equipment that could be damaged by low temperatures or freezing.

    b. Provide air-conditioned storage for materials and equipment that could be damaged by high temperatures.

    c. Protect mechanical and electrical equipment from being contaminated by dust, dirt, and moisture.

    d. Maintain humidity at levels recommended by manufacturers of electrical and electronic equipment.

    e. Energize space heaters fore electrical equipment and material.

D. Maintenance of Storage: On scheduled basis, periodically inspect stored materials and equipment to ensure that:

1. Condition and status of storage facilities is adequate to provide required storage conditions.

2. Required environmental conditions are maintained on continuing basis.

3. Materials and equipment exposed to elements are not adversely affected.

1.05 RECORDS

A. Keep up-to-date account of materials and equipment in storage to facilitate preparation of Applications for Payment, if the Contract Documents provide for payment for materials and equipment not incorporated in the Work but delivered and suitably stored at the Site or at another location agreed to in writing.

PART 2 – PRODUCTS (NOT USED)

PART 3 – EXECUTION (NOT USED)

END OF SECTION

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SECTION 01 71 33
PROTECTION OF WORK AND PROPERTY

PART 1 – GENERAL

1.01 SUMMARY

A. Section includes:

1. Protection of existing utilities and structures.

2. Protection of installed equipment and materials.

3. Protection during inclement weather.

4. Reporting of accidents.

5. Barricades and warning signals.

B. Contractor shall be responsible for taking all precautions, providing all programs, and taking all actions necessary to protect the Work and all public and private property and facilities from damage, as specified in the General Conditions, Supplementary Conditions, and this Section.

C. To prevent damage, injury, or loss, Contractor's actions shall include the following:

1. Storing apparatus, materials, supplies, and equipment in an orderly, safe manner that does not unduly interfere with progress of the Work or work of other contractors or utility companies.

2. Providing suitable storage facilities for equipment and materials subject to damage or degradation by exposure to weather, theft, breakage, or other cause.

3. Placing upon the Work or any part thereof only loads consistent with the safety and integrity of that portion of the Work and existing construction.

4. Frequently removing and disposing of refuse, rubbish, scrap materials, and debris caused by Contractor's operations so that, at all times, the Site is safe, orderly, and workmanlike in appearance.

D. Contractor has full responsibility for preserving public and private property and facilities on and adjacent to the Site. Direct or indirect damage done by, or on account of, any act, omission, neglect, or misconduct by Contractor in executing the Work, shall be restored by Contractor, at his expense to condition equal to that existing before damage was done.

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E. Contractor shall comply with safety regulations required by Owner or authorities having jurisdiction. Contractor shall comply with and correct unsafe conditions created or caused by Contractor's personnel. In the event Contractor fails to comply, Owner receives the right to take necessary measures to correct conditions or practices for reimbursement by Contractor.

1.02 REFERENCES

A. Definitions:

1. "Existing utilities" shall refer to both publicly-owned and privately-owned utilities such as, but are not limited to, electric power and lighting, telephone, water, gas, storm drains, process lines, sanitary sewers and all appurtenant structures.

2. "Surface structures" are existing buildings, structures, and other facilities at or above ground surface, including their foundations or any extension below ground surface. Surface structures include, but are not limited to, buildings, tanks, walls, channels, open drainage, exposed piping and utilities, poles, exposed wires, posts, signs, markers, curbs, walks, fencing, and other facilities visible at or above ground surface.

1.03 SITE CONDITIONS

A. Location of Existing Utilities and Structures:

1. Contractor shall confirm and verify location of existing utilities and structures at the Site prior to commencing the Work.

2. Contractor shall notify and obtain approval from authority having jurisdiction prior to performing the Work in the vicinity of the existing utilities and structures.

PART 2 – PRODUCTS (NOT USED)

PART 3 – EXECUTION

3.01 PROTECTION OF EXISTING UTILITIES AND STRUCTURES

A. General:

1. Contractor shall satisfy Engineer that methods and procedures for protection have been approved by authorities having jurisdiction prior to proceeding with the Work.

2. Contractor shall provide temporary support and protection, as required, to existing utilities and structures during the Work, including excavation.

a. Temporary support and protection of existing utilities shall be provided in accordance with requirements of the authority having jurisdiction.

b. Temporary support and protection of existing structures shall be provided as directed by the Engineer.

3. Contractor shall be responsible for costs incurred for temporary support or protection provided by a third-party or authority having jurisdiction to insure safety of the existing utility, Owner, and public and private parties.

B. Existing Buried Utilities:

1. Contractor shall perform field investigate to identify conflicts or interferences between existing utilities and utility Work prior to excavation Work.

a. Investigation of conflicts and interferences shall be performed on Site locations, elevations, slopes, etc. of the existing utilities determined during the field investigations.

b. Contractor shall notify Engineer and Owner in writing of identified conflicts or interferences. Contractor shall not proceed with the Work until written authorization is provided by the Engineer.

c. Identified conflicts and interferences shall be handled in accordance with the Contract Documents. If required, potential modification to the Contract Documents shall be performed in accordance with the General Conditions.

2. Contractor shall perform the Work to prevent disruption of existing service and damage to existing utilities.

a. Temporary connections shall be provided, as required, to provide un-interrupted service of existing utilities.

b. Contractor shall repair damage to existing utilities as directed by the Engineer or the authority having jurisdiction at Contractor's own expense.

c. Contractor shall be responsible for damages and repair costs to the authority having jurisdiction if third-party or authority having jurisdiction personnel repair damaged existing utilities.

C. Protection of Existing Structures:

1. Contractor shall sustain existing surface structures in existing place and protect from direct or indirect injury located within or adjacent to the limits of the Work. Such sustaining and supporting shall be done carefully and as required by the party owning or controlling such structure or facility.

2. Contractor shall bear all risks attending the presence or proximity of all surface structures within or adjacent to limits of the Work, in accordance with the Contract Documents.

3. Contractor shall be responsible for damage and expense for direct or indirect injury caused by his Work to structures and facilities.

4. Contractor shall repair immediately damage caused by his Work, to the satisfaction of owner of damaged structure or facility at no cost to the Owner.

5. Contractor shall provide temporary weather protection for existing structures and buildings where exterior walls or roofs are modified or disturbed in the Work. Contractor shall be responsible for damages due to inadequate protection of existing structures and building.

D. Relocation of Surface Structures: Existing surface facilities, including but not limited to guard rails, posts, guard cables, signs, poles, markers, curbs, and fencing, that are temporarily removed to facilitate the Work shall be replaced and restored to their original condition at Contractor's expense.

3.02 PROTECTION OF INSTALLED EQUIPMENT AND MATERIALS

A. Contractor shall protect installed equipment and materials equipment to prevent damage, injury or loss from subsequent operations. Remove protection facilities when no longer needed prior to completion of the Work.

B. Control traffic to prevent damage to equipment, materials, and surfaces.

C. Coverings: Provide coverings to protect materials and equipment from damage.

3.03 PROTECTION DURING INCLEMENT WEATHER

A. Contractor shall not perform Work during inclement or unsuitable weather that will affect the quality of the completed Work.

B. Contractor shall take necessary precautions in the event of impending inclement weather to protect equipment, materials and Work from damage or deterioration due to floods, driving rain, wind, or snow storms.

1. Owner reserves the right to require additional protection measures beyond Contractor's proposed protection measures to protect the Work.

2. Contractor shall not claim additional compensation for additional protection measures required by Owner nor for damages to equipment, material, or Work due to the inclement weather.

C. When directed by Engineer, Contractor shall stop Work and protect new Work by protective covering during rain storms for, but not limited to, the following:

1. Concrete mixing and placement.

2. Paving placement.

3. Masonry installation.

4. Buried piping, valve and appurtenance installation.

5. Additional inclement weather requirements and limitations are specified in individual Specification Sections.

3.04 REPORTING OF ACCIDENTS

A. Contractor shall immediately report, in writing, to Engineer and Owner accidents out of, or in conjunction with, the performance of Work.

1. Accident reporting includes on Site and adjacent to Site, which cause death, personal injury, or property damage.

2. Written report shall provide full details and witness statements.

3. If claim is made against Contractor, Supplier, or Subcontractor due to accident, Contractor shall promptly report facts, in writing, to Engineer and Owner, with full account of the claim.

B. Contractor shall immediately report death, serious injury, or serious damage caused by telephone or messenger to Engineer and Owner.

3.05 BARRICADES AND WARNING SIGNALS

A. General:

1. Where the Work is performed on or adjacent to roadway, access road, right-of-way, or public place:

a. Provide barricades, fences, lights, warning signs, danger signals, watchmen, and take other precautionary measures for protecting persons, property, and the Work.

b. Paint barricades to be visible at night.

c. From sunset to sunrise, furnish and maintain at least one light at each barricade.

d. Erect sufficient barricades to keep vehicles from being driven on or into Work under construction.

e. Furnish watchmen in sufficient numbers to protect the Work.

B. Provide temporary barricades to protect personnel and property for Work not in or adjacent to vehicular travel areas, including indoor work, in accordance with Laws and Regulations.

C. Contractor's responsibility for maintaining temporary barricades, signs, lights, and for providing watchmen shall continue until the Work is accepted in accordance with the Contract Documents.

END OF SECTION

SECTION 01 73 23

ANCHORAGE AND BRACING OF NONSTRUCTURAL COMPONENTS

PART 1 – GENERAL

1.01 THE REQUIREMENT

A. Furnish all equipment, labor, materials, and services required to design and provide anchorage and bracing for all nonstructural components in accordance with the Contract Documents and Building Code requirements, including the seismic design requirements of Chapter 13 in ASCE 7.

B. This Section covers requirements for only the anchorage and bracing of nonstructural components. Design requirements for nonstructural components (other than their anchorage and bracing) are covered in the Section for that component.

1.02 RELATED WORK SPECIFIED ELSEWHERE

A. Section 05 10 00 – Metal Materials

B. Section 05 05 23 – Metal Fastening

C. Section 05 12 00 – Structural Steel

D. Section 05 13 00 – Stainless Steel

E. Further requirements for anchorage and bracing are included in other Sections of the Specifications. See Section for the specific nonstructural component in question.

1.03 DEFINITIONS

A. Nonstructural components: All architectural, mechanical, electrical, or plumbing elements or systems and their supports or attachments provided under this contract which are permanently attached to new or existing structures.

1. Architectural nonstructural components include, but are not limited to, interior nonstructural walls and partitions, exterior wall panels and glazing elements, glass curtain walls, skylights, cabinets, suspended ceilings, fascia, and cladding.

2. Mechanical nonstructural components include, but are not limited to, HVAC units, fans, water and wastewater treatment process equipment, instrumentation cabinets, piping and ductwork.

3. Electrical nonstructural components include, but are not limited to, conduit systems, cable tray systems, boxes, transformers, panelboards, switchboards, switchgear, busway, individual motor controllers, motor control centers, variable frequency drives, automatic transfer switches, and lighting systems.

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4. Plumbing nonstructural components include, but are not limited to, sprinkler systems and associated piping, and sump pumps.

B. Attachment: Elements including anchor bolts, welded connections, and mechanical fasteners which secure nonstructural components or supports to the structure.

C. Essential Components: Nonstructural components considered necessary to public safety for which the component importance factor I_p is required by chapter 13 in ASCE 7 to be taken as 1.5, including:

1. Life safety systems which must function following an earthquake, including but not limited to, sprinklers for fire protection, emergency lighting, egress corridors and stairways, and smoke purge systems.

2. Components which contain, convey or support toxic, highly toxic, or explosive substances where the quantity of the material exceeds a threshold quantity established by the Building Code.

3. Components which are within or attached to an Occupancy or Risk Category IV structure as defined in ASCE 7 Chapter 1 and are needed for continued operation of the facility or failure could impair the continued operation of the facility.

4. Components which contain, convey, or support hazardous substances and are attached to a structure or portion thereof classified by the Building Code as a hazardous occupancy.

D. Nonbuilding Structures: All self-supporting structures which are supported by an independent foundation or by other structures which include, but are not limited to, storage tanks, silos, exhaust stacks, storage racks, and towers.

E. Delegated Design: Design of a structure or structural element(s) which has been deferred by the contract documents to be performed during the project construction stage, by a registered design professional retained by the Contractor and with the design submitted as a shop drawing to the Engineer.

1.04 REQUIREMENTS

A. Anchorage and bracing of nonstructural components shall be designed and installed to resist the controlling load combination of gravity loads, operational forces (including static and dynamic), wind forces, seismic forces and any other applicable forces required in accordance with the governing Building Code.

B. Anchorage and bracing of nonstructural components shall comply with seismic design requirements of ASCE 7 Chapter 13 unless the nonstructural component meets the criteria to be exempt. The following nonstructural components are exempt from requirements specific to seismic anchorage and bracing: (See paragraph 1.07.F.3 herein for Seismic Design Category)

1. Storage cabinets no more than 6 feet tall, furniture, and movable equipment, regardless of Seismic Design Category.

2. All architectural, mechanical, electrical, and plumbing nonstructural components in Seismic Design Category A.

3. All mechanical, electrical, and plumbing nonstructural components in Seismic Design Category B.

4. Architectural nonstructural components in Seismic Design Category B, other than parapets, provided that $I_p = 1.0$.

5. Mechanical, electrical, and plumbing nonstructural components in Seismic Design Category C provided that either:

   a. $I_p = 1.0$, and the component is positively attached to the structure, or

   b. Component weighs 20 lbs. or less, or 5 lb/ft or less for distribution systems.

6. Mechanical, electrical, and plumbing nonstructural components in Seismic Design Category D, E or F that are positively attached to the structure, provided that either:

   a. $I_p = 1.0$, component weighs 400 lbs or less and its center of mass is 4 ft or less above a floor level, and flexible connections are provided between the components and associated ductwork, piping and conduit: or

   b. Component weighs 20 lbs. or less, or 5 lb/ft or less for distribution systems.

7. Other exemptions as allowed by the Specifications, Codes and Standards referenced herein.

1.05 REFERENCE SPECIFICATIONS, CODES AND STANDARDS

A. Without limiting the generality of the Specifications, all work herein shall conform to or exceed the applicable requirements of the following documents. The Building Code shall be the version in effect at the time of Bid within the jurisdiction where the Work is located. All other referenced specifications, codes, and standards refer to the version as referenced by the Building Code. If no version is referenced by the Building Code, then the most current issue available at the time of Bid shall be used.

1. International Building Code

2. ASCE/SEI 7 Minimum Design Loads for Buildings and Other Structures

3. NFPA 13 Standard for Installation of Sprinkler Systems

4. FEMA 412 Installing Seismic Restraints for Mechanical Equipment

5. FEMA 413 Installing Seismic Restraints for Electrical Equipment

6. FEMA 414 Installing Seismic Restraints for Duct and Pipe

7. SMACNA Sheet Metal and Air Conditioning Contractors' National Association, Seismic Restraint Manual: Guidelines for Mechanical Systems

8. ACI 318 Building Code Requirements for Structural Concrete and Commentary

9. ACI 355.2 Qualifications of Post-Installed Mechanical Anchors in Concrete

10. ACI 355.4 Qualifications of Post-Installed Adhesive Anchors in Concrete

1.06 SUBMITTALS

A. Submit the following in accordance with Section 01 33 00 – Submittal Procedures.

1. Anchorage and bracing submittals for all architectural, mechanical, electrical, and plumbing nonstructural components, elements and systems that do not have a design for anchorage and bracing provided within the Contract Documents. Submittals shall include the following:

a. Component manufacturer's cut sheets and fabrication details for equipment bases and foundations, including dimensions, structural member sizes, support point locations and equipment operational loads. Equipment anchorage details shall clearly indicate anchor size, pattern, embedment, and edge distance requirements to satisfy operational, wind, seismic and other forces required by the governing Building Code. Details shall also indicate grout, bearing pads, isolators, etc. required for complete installation.

b. Design calculations, signed and sealed by a Professional Engineer registered in the State of Arizona. Design shall include all loads and load combinations required by the governing Building Code. Separate calculation submittals for vertical and lateral load support systems shall not be allowed.

c. Detailed Shop Drawings, signed and sealed by a Professional Engineer registered in the State of Arizona, showing specific details of the support design including material, installation, attachments, connection hardware, etc., and the layout and location of all hangers and supports (resisting both gravity and lateral loads), including bracing orientation and direction of force(s) to be resisted.

d. Seismic loads and requirements are not required to be included in design for anchorage and bracing of components which are exempt in accordance with Section 1.04B.

e. For components required to be certified as seismically qualified in accordance with paragraph 1.06.A.1.f below, submit installation guidelines

provided by the equipment manufacturer for proper seismic mounting of the equipment.

f. Seismic qualification testing shall be based on ASCE 7 and on a nationally recognized testing standard procedure such as ICC-ES AC 156.

1.07 DESIGN REQUIREMENTS

A. Mechanical fasteners used to secure nonstructural components shall meet the requirements of Section 05 05 23 – Metal Fastening. Post-installed concrete anchors shall be prequalified for use in seismic applications.

B. No reaction loads (either vertical or lateral) from nonstructural component anchorage and bracing shall be allowed on any element where design has been delegated unless the additional loads on the element have been coordinated with the delegated designer and the submittal is accompanied by a sealed letter from the delegated designer indicating the element has been designed to support the reaction loads.

C. Reaction loads from nonstructural component anchorage and bracing shall be transferred directly to the primary structural members (girders, beams, etc.), with no components supported from secondary members (purlins, bracing, etc.) unless otherwise approved.

D. No holes shall be drilled into any structural steel for attachment of component supports without prior approval of the Engineer.

E. Attachments of nonstructural component anchorage and bracing that cause overstressing of any structural element shall not be permitted.

F. Seismic Requirements

1. Seismic anchorage and bracing for nonstructural components shall be subject to the current local Building Code in conjunction with the seismic provisions of the International Building Code (IBC) Section 1613 and referenced ASCE 7 Chapter 13.

2. Where the weight of a nonstructural component is greater than or equal to 25 percent of the effective seismic weight (as defined by ASCE 7) of the structure it is attached to, the component shall be classified as a nonbuilding structure for purposes of seismic design. Seismic design for nonbuilding structures shall comply with Building Code requirements in conjunction with the provisions of ASCE 7 Chapter 15.

3. Nonstructural components shall be assigned to the same Seismic Design Category as the structure they occupy or to which they are attached. Design of seismic support system and anchorage shall incorporate the site-specific seismic criteria given on the Contract Drawings. Criteria shall include site-specific spectral response coefficients, Site Class, Seismic Design Category, and Risk Category.

4. Component Importance Factor Ip shall be 1.5 for all essential nonstructural components noted in item 1.03.E above. All other nonstructural components shall utilize I_p = 1.0 unless noted otherwise.

5. Components shall be anchored and braced for earthquake forces both in the vertical and each orthogonal direction. Seismic anchorage and bracing shall limit deflections of components per ASCE 7, and the displacements shall not impede component functionally and containment.

6. Anchorage design shall account for disparate seismic response behavior of supporting structures. Seismic supports or bracing shall not cross structural expansion joints. Nonstructural components shall not be attached to multiple structural elements which may respond differently during a seismic event without provisions to accommodate independent movement. Flexible expansion loops or offsets, flexible joints, bellows type pipe expansion joints, couplings, etc. shall be provided at structure expansion joints to allow for independent structure movement and thermal movement of piping, ductwork, and conduit. Minimum movement capability in the vertical and each orthogonal direction shall equal the width of the joint.

7. Provide flexible connections, piping, conduit, etc. at foundation levels where below grade utilities enter the structure.

8. Design of support system for components with multiple attachments shall consider the stiffness and ductility of the supporting members. Equipment designed as free-standing shall only be attached at its base. Use of non-free-standing equipment requiring both vertical and lateral attachment is contingent upon loads applied to the structure and requires approval by the Engineer.

9. The seismic anchorage and bracing design shall be based on actual equipment data (dimensions, weight, center of gravity, etc.) obtained from the specifications or the approved equipment manufacturer. The equipment manufacturer shall verify the attachment points on the equipment can safely withstand the combination of seismic, self-weight and other loads imposed.

G. Powder actuated fasteners in steel or concrete shall not be used for sustained tension loads in Seismic Design Categories D, E or F unless approved for seismic loading or specifically exempted by ASCE 7. Powder actuated fasteners in masonry shall not be used unless approved for seismic loading regardless of Seismic Design Category.

H. Friction clips shall not be used in Seismic Design Categories D, E or F for supporting sustained tension loads in combination with resisting seismic forces. C-type and large flange clamps may be used for hanger attachments provided restraining straps meeting NFPA 13 requirements are utilized and loosening of threaded connections is prevented by lock nuts, burred threads, etc.

PART 2 – PRODUCTS

2.01 MATERIALS

A. Anchorage and bracing of nonstructural components shall be constructed of appropriate materials and connecting hardware to provide a continuous load path between the component and supporting structure of sufficient strength and stiffness to resist the calculated design seismic forces and displacements.

B. Component anchorage, bracing and connection materials shall be compatible with and in general match the component and component gravity support materials. Contact between dissimilar metals shall be prevented.

PART 3 – EXECUTION

3.01 INSTALLATION OF ANCHORAGE AND BRACING

A. No anchorage and bracing of nonstructural components shall be installed prior to review and acceptance by the Engineer and permitting agency.

B. Equipment shall be installed per the manufacturer's recommendations. Fasteners shall meet manufacturer's requirements.

C. Following installation, all anchorage and bracing and seismically qualified equipment shall be inspected unless it meets requirements in Section 1.04 above.

END OF SECTION

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SECTION 01 75 00
CHECKOUT AND STARTUP PROCEDURES

PART 1 – GENERAL

1.01 SUMMARY

A. Section Includes:

1. Checkout of products and equipment.

2. Startup procedures of products and equipment

B. Contractor shall initially start up and place equipment installed under the Contract into successful operation, in accordance with the equipment manufacturer's written instructions and as instructed by Supplier at the Site.

C. Provide all material, labor, tools, and equipment required to complete equipment checkout and start-up.

D. Provide chemicals, lubricants, and other required operating fluids.

E. Owner to provide water for flushing chemical lines and chemicals for startup.

F. General activities include:

1. Cleaning, as required under other provisions of the Contract Documents.

2. Removing temporary protective coatings.

3. Checking and correcting (if necessary) leveling plates, grout, bearing plates, anchorage devices, fasteners, and alignment of piping, conduits, and ducts that may place stress on the connected equipment.

4. All adjustments required.

1.02 ADMINISTRATIVE REQUIREMENTS

A. Definitions:

1. Displacement, as used herein, shall mean total peak-to-peak movement of vibrating equipment, in mils; velocity or speed of the vibration cycle, measured in distance per time, velocity and acceleration of the vibration cycle. Displacement, velocity and acceleration shall be measured by instruments/equipment equal to IRD Mechanalysis, Bentley, Nevada.

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B. Coordination:

1. Coordinate checkout and start-up with other contractors performing Work at the Site.

2. Do not start up system or subsystem for continuous operation until all components of that system or subsystem, including instrumentation and controls, have been tested to the extent practicable and proven to be operable as intended by the Contract Documents.

3. Responsibility for proper operation is by Contractor.

4. Supplier shall be present during checkout, start-up, and initial operation, except as otherwise specified.

5. Do not start up system, unit process, or equipment without submitting acceptable preliminary operations and maintenance manuals by Contractor, in accordance with Section 01 78 23 – Operations and Maintenance Data.

C. Contractor's Requirements Prior to Owner's Responsibility:

1. Owner will assume responsibility for the equipment upon Substantial Completion.

2. Prior to turning over to Owner responsibility for operating and maintaining system or equipment shall be in accordance with this Section and the following requirements:

a. Submit acceptable final operations and maintenance manuals in accordance with Section 01 78 23 – Operations and Maintenance Data.

b. Provide training of operations and maintenance personnel in accordance with Section 01 79 00 – Instruction of Owner's Personnel.

c. Complete system field quality control testing in accordance with the Contract Documents including, but not limited to, the following:

1) Start-up certification shall be performed and completed by the equipment Supplier for the equipment and material prior to be placed into intended use by Owner as specified in the Contract Documents.

2) Equipment and material shall be operated for a minimum 30-day operational period to verify performance. In addition to specific requirements specified in the individual specification sections, process data that is recorded in the PLC shall be submitted to the Engineer in tabular format showing hourly process performance data. A log of all alarms shall also be submitted, along with notes describing corrective measures applied in response to alarm condition.

3) If equipment and material does not perform satisfactorily during the 30-day operational period, then the warranty period start shall be delayed until satisfactorily performance is verified.

a) Contractor shall repair or replace equipment and material that does not perform satisfactorily at no cost to Owner.

b) Contractor shall furnish all equipment and material, labor, and incidentals necessary to provide equipment and material to the performance level required by the Contract Documents.

d. Obtain from Engineer final certificate of Substantial Completion for either entire Work or the portion being turned over to Owner.

1.03 SUBMITTALS

A. Startup Schedule: Detailed summary of schedule, duration, manpower requirement, and Contractor's means and methods for startup.

B. Closeout Submittals: Manufacturer's certification of installation in accordance with this Section.

C. Startup testing and operational demonstration performance data.

PART 2 – PRODUCTS (NOT USED)

PART 3 – EXECUTION

3.01 PRELIMINARY REQUIREMENTS

A. Prior to the start-up of the facilities, Contractor shall have prepared and tested all equipment, subsystems and systems in accordance with the requirements of the individual Specification Section to check its ability for sustained operation, including inspections and adjustments by Manufacturer's representative.

B. Contractor shall develop and submit schedule in accordance with this Section.

C. After the facilities are sufficiently complete to permit start-up, Contractor shall furnish competent personnel to start-up the facilities. Contractor will be responsible for startup of all facilities constructed under this Contract. During the initial start-up period the Contractor shall check and provide for mechanical operation in accordance with the Contract Documents.

3.02 FIELD QUALITY CONTROL

A. Manufacturers' Field Services:

1. When specified, furnish services of factory trained representatives of material and equipment manufacturers as specified, including supervising installation, adjusting, checkout, start-up, and testing of materials and equipment.

2. Certification:

   a. When services by manufacturer are required at the Site, within 14 days after first test operation of equipment, submit to Engineer a letter from manufacturer, on manufacturer's letterhead, stating that materials and equipment are installed in accordance with manufacturer's requirements and installation instructions, and in accordance with the Contract Documents.

   b. Include in the final operations and maintenance manual for the associated equipment a copy of the letter or completed form, as applicable.

3. Manufacturer shall bring any discrepancies to the immediate attention of the Contractor for correction. Contractor shall promptly correct any discrepancies noted by the Manufacturer. Manufacturer shall coordinate correction of discrepancies with the Contractor. Discrepancies and their correction shall be noted in inspection records and in all required reports. Any corrections that result in changes to the work as shown on the Contract Documents shall be approved by the Engineer prior to their execution.

3.03 VIBRATION TESTING (NOT USED)

3.04 SYSTEM START-UP

A. Equipment and materials shall be provided in conformance with the manufacturer's installation instructions and in accordance with the Contract Documents.

B. Provide start-up services as specified in the individual Specification Sections.

C. Contractor shall furnish consumables required for startup including, but not limited to, temporary electricity (if required) and lubrication. Contractor shall provide a plan for disposal of water used for testing unless otherwise specified in the Contract Documents.

D. Contractor to start up chemical system using water for a long as practicable prior to introduction of chemical to the system.

E. General system requirements:

1. Start-up of the plant by Contractor shall include all mechanical systems, including but not limited to, pumps, compressors, and like equipment, and the ventilating, air conditioning (or heating), plumbing, and electrical systems. Start-up of either the heating or air conditioning systems is dependent upon the time of year that the plant start up is initiated. Contractor will be required to return at the beginning of the next heating or air conditioning season (whichever is applicable) to start the appropriate system.

2. Cleaning as required under provisions of the Contract Documents.

3. Remove temporary protective coatings.

4. Flushing and replacing greases and lubricants as required by Manufacturer

5. Lubrication.

6. Verify the following:

    a. Shaft and coupling alignments and reset where needed.

    b. Set motor, pump and other equipment rotation, safety interlocks, and belt tensions.

    c. Leveling plates, grout, bearing plates, anchor bolts, fasteners, and alignment of piping, conduits and ducts that may apply stress on equipment.

7. Valves:

    a. Tighten packing glands to ensure no leakage but allow valve stems to operate without galling.

    b. Replace packing in valves to retain maximum adjustment after system is determined to be complete.

    c. Replace packing on valves that continue to leak.

    d. Remove and repair bonnets that leak.

    e. After cleaning, coat packing gland threads and valve stems with surface preparation of “Molycote” or “Fel-Pro”.

8. Verify that control valve seats are free of foreign matter and are properly positioned for intended service.

9. Tighten flanges and other pipe joints after system has been placed in operation.

10. Replace gaskets that show signs of leakage after tightening.

11. Inspect all joints for leakage:

    a. Promptly remake each joint that appears to be faulty; do not wait for rust other corrosion to form.

    b. Clean threads on both parts and apply compound and remake joints.

12. After system has been placed in operation, clean valve seats and headers in fluid system to ensure freedom from foreign matter.

13. Remove rust, scale, and foreign matter from equipment and renew defaced surfaces.

14. Repair damaged insulation.

END OF SECTION

SECTION 01 77 19
CLOSEOUT REQUIREMENTS

PART 1 – GENERAL

1.01 SUMMARY

A. Section includes:

1. Substantial Completion.

2. Final inspection.

3. Request for final payment.

1.02 REFERENCES

A. Definitions:

1. Substantial completion procedures for requesting and documenting are in the General Conditions, as modified by Supplemental Conditions.

2. Final inspection procedures for requesting and documenting are in the General Conditions, as modified by Supplemental Conditions.

1.03 ADMINSTRATIVE REQUIREMENTS

A. Request for Final Payment:

1. Procedure: Submit request for final payment in accordance with the Agreement and General Conditions, as may be modified by the Supplementary Conditions.

B. Request for final payment shall include:

1. Documents required for progress payments in the General Conditions.

2. Documents required in the General Conditions, as may be modified by the Supplementary Conditions.

3. Releases or Waivers of Lien Rights:

a. Provide a final release or waiver by Contractor and each Subcontractor and Supplier that provided Contractor with labor, material, or equipment totaling $10,000 or more.

b. Provide list of Subcontractors and Suppliers for which release or waiver of Lien is required.

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c. Each release or waiver of Lien shall be signed by an authorized representative of the entity submitting release or waiver to Contractor, and shall include Subcontractor's or Supplier's corporate seal, when applicable.

d. Release or waiver of Lien may be conditional upon receipt of final payment.

e. Manufacturer's Affidavit of Release of Liens – furnish a separate, completed form from the manufacturer.

4. Consent of Surety Company to Final Payment.

PART 2 – PRODUCTS (NOT USED)

PART 3 – EXECUTION (NOT USED)

END OF SECTION

SECTION 01 78 23
OPERATION AND MAINTENANCE DATA

PART 1 – GENERAL

1.01 SUMMARY

A. Section Includes: Requirements for operation and maintenance data, manuals, and documentation.

1. Submit operation and maintenance data, in accordance with this Section and in accordance with requirements elsewhere in the Contract Documents, as instructional and reference manuals by operations and maintenance personnel at the Site.

2. Required operation and maintenance data groupings are listed in this Section. At minimum, submit operation and maintenance data for:

a. All equipment and systems

b. Valves, gates, actuators, and related accessories

c. Instrumentation and control devices

d. Electrical gear

3. For each operation and maintenance manual, submit the following:

a. Preliminary Submittal: Electronic copy of entire operation and maintenance manual, except for test data and service reports by Supplier.

b. Final Submittal: Electronic Copy and Printed and bound copy of complete operations and maintenance manual and electronic copy, including test data and service reports by Supplier.

1.02 ADMINISTRATIVE REQUIREMENTS

A. Quantity Required and Timing of Submittals:

1. Preliminary Submittal:

a. Electronic Copies: One copy.

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b. Submit to Engineer, whichever occurs first:

1) 60 days prior to starting training of operations and maintenance personnel.

2) 30 days prior to field quality control testing at the Site.

c. Furnish preliminary operation and maintenance data submittal in acceptable form and content, as determined by Engineer, before associated materials and equipment will be eligible for payment.

2. Preliminary Submittal shall be reviewed by Engineer. One printed or electronic copy shall be returned to Contractor with required revisions noted.

3. Final Submittal: Provide 14 days prior to checkout and startup procedures specified in Section 01 75 00 – Checkout and Startup Procedures, unless Submittal is specified as required prior to an interim Milestone.

a. Printed Copies: One copy.

b. Electronic Copies: One copy.

B. Format of Printed Copies:

1. Binding and Cover:

a. Bind each operation and maintenance manual in durable, permanent, stiff-cover binder(s), comprising one or more volumes per copy as required. Binders shall be minimum one-inch wide and maximum of three-inch wide. Binders for each copy of each volume shall be identical.

b. Provide the following information on cover of each volume:

1) Title: “OPERATING AND MAINTENANCE INSTRUCTIONS”.

2) Name or type of material or equipment covered in the manual.

3) Volume number, if more than one volume is required, listed as “Volume __ of __”, with appropriate volume-designating numbers filled in.

4) Name of Project and, if applicable, Contract name and number.

5) Name of building or structure, as applicable.

c. Provide the following information on spine of each volume:

1) Title: “OPERATING AND MAINTENANCE INSTRUCTIONS”.

2) Name or type of material or equipment covered in the manual.

3) Volume number, if more than one volume is required, listed as “Volume __ of __”, with appropriate volume-designating numbers filled in.

4) Project name and building or structure name.

2. Drawings:

a. Bind into the manual drawings, diagrams, and illustrations up to and including 11 inches by 17 inches in size, with reinforcing.

b. Documents larger than 11 inches by 17 inches shall be folded and inserted into clear plastic pockets bound into the manual. Mark pockets with printed text indicating content and drawing numbers. Include no more than three drawing sheets per pocket.

3. Copy Quality and Document Clarity:

a. Contents shall be original-quality copies. Documents in the manual shall be either original manufacturer-printed documents or first-generation photocopies indistinguishable from originals. If original is in color, copies shall be in color.

b. Clearly mark in ink to indicate all components of materials and equipment on catalog pages for ease of identification. In standard or pre-printed documents, indicate options furnished or cross out inapplicable content.

4. Organization:

a. Provide table of contents in each volume for each chapter or section.

b. Use dividers and indexed tabs between major categories of information, such as operating instructions, preventive maintenance instructions, and other major subdivisions of data in each manual.

C. Format of Electronic Copies:

1. Each electronic copy shall include all information included in the corresponding printed copy.

2. Submit electronic copy via transferable method and format acceptable to Engineer.

3. File Format:

a. Acceptable formats include Adobe PDF, Microsoft Word, Autodesk DWF, and AutoCAD.

b. Files shall be electronically searchable, including text in all drawings and figures.

c. Submit separate file for each separate document in the printed copy.

d. Within each file, provide bookmarks for the following:

1) Each chapter and subsection listed in the corresponding printed copy document's table of contents

2) Each figure

3) Each table

4) Each appendix

4. Submit drawings and figures in one of the following formats: ".bmp", ".tif", ".jpg", ".gif", "dwf", or "dwg".

D. General Content Requirements:

1. Prepare each operations and maintenance manual specifically for the Project. Include in each manual all pertinent instructions, as-built drawings as applicable, bills of materials, technical bulletins, installation and handling requirements, maintenance and repair instructions, and other information required for complete, accurate, and comprehensive data for safe and proper operation, maintenance, and repair of materials and equipment furnished for the Project. Include in manuals specific information required in the Specification Section for the material or equipment, data required by Laws and Regulations, and data required by authorities having jurisdiction.

2. Submit complete, detailed written operating instructions for each material or equipment item including: function; operating characteristics; limiting conditions; operating instructions for start-up, normal and emergency conditions; regulation and control; operational troubleshooting; and shutdown. Also include, as applicable, written descriptions of alarms generated by equipment and proper responses to such alarm conditions.

3. Submit written explanations of all safety considerations relating to operation and maintenance procedures.

4. Submit complete, detailed, written preventive maintenance instructions including all information and instructions to keep materials, equipment, and systems properly lubricated, adjusted, and maintained so that materials, equipment, and systems function economically throughout their expected service life. Instructions shall include:

a. Written explanations with illustrations for each preventive maintenance task such as inspection, adjustment, lubrication, calibration, and cleaning. Include pre-startup checklists for each equipment item and maintenance requirements for long-term shutdowns.

b. Recommended schedule for each preventive maintenance task.

c. Lubrication charts indicating recommended types of lubricants, frequency of application or change, and where each lubricant is to be used or applied.

d. Table of alternative lubricants.

e. Troubleshooting instructions.

f. List of required maintenance tools and equipment.

5. Submit complete bills of material or parts lists for materials and equipment furnished. Lists or bills of material may be furnished on a per-drawing or per-equipment assembly basis. Bills of material shall indicate:

a. Manufacturer's name, address, telephone number, fax number, and Internet website address.

b. Manufacturer's local service representative's or local parts supplier's name, address, telephone number, fax number, Internet website address, and e-mail addresses, when applicable.

c. Manufacturer's shop order and serial number(s) for materials, equipment or assembly furnished.

d. For each part or piece include the following information:

1) Parts cross-reference number. Cross-reference number shall be used to identify the part on assembly drawings, Shop Drawings, or other type of graphic illustration where the part is clearly shown or indicated.

2) Part name or description.

3) Manufacturer's part number.

4) Quantity of each part used in each assembly.

5) Current unit price of the part at the time the operations and maintenance manual is submitted. Price list shall be dated.

6. Submit complete instructions for ordering replaceable parts, including reference numbers (such as shop order number or serial number).

7. Submit manufacturer's recommended inventory levels for spare parts, extra stock materials, and consumable supplies for the initial two years of operation. Consumable supplies are items consumed or worn by operation of materials or equipment, and items used in maintaining the operation of material or equipment, including items such as lubricants, seals, reagents, and testing chemicals used for calibrating or operating the equipment. Include estimated delivery times, shelf life limitations, and special storage requirements.

8. Submit manufacturer's installation and operation bulletins, diagrams, schematics, and equipment cutaways. Where materials pertain to multiple models or types, mark the literature to indicate specific material or equipment supplied. Marking may be in the form of checking, arrows, or underlining to indicate pertinent information, or by crossing out or other means of obliterating information that does not apply to the materials and equipment furnished.

9. Submit original-quality copies of each approved and accepted Shop Drawing, product data, and other submittal, updated to indicate as-installed condition. Reduced drawings are acceptable only if reduction is to not less than one-half original size and all lines, dimensions, lettering, and text are completely legible on the reduction.

10. Submit complete electrical schematics and wiring diagrams, including complete point-to-point wiring and wiring numbers or colors between all terminal points.

11. Submit copy of warranty bond and service contract as applicable.

12. When copyrighted material is used in operations and maintenance manuals, obtain copyright holder's written permission to use such material in the operation and maintenance manual.

1.03 SUBMITTALS

A. Action/Informational Submittals: Submit preliminary schedule (listing) of operations and maintenance data for Engineer's review. Preliminary operations and maintenance data shall be grouped as major equipment and material systems and divided into sub-systems as required for clarity, subject to Engineer's approval.

B. Closeout Submittals:

1. Operation and maintenance data: Submit the operations and maintenance data indicated in the Contract Documents, grouped into submittals as approved by Engineer.

PART 2 – PRODUCTS (NOT USED)

PART 3 – EXECUTION

3.01 SCHEDULE

A. Contractor shall furnish Operation & Maintenance Manuals for the following systems and equipment, at a minimum. Operation & Maintenance Manual Schedule:

Spec. Section	Specification Title
40 05 57	Valve Operators and Electric Valve Actuators
Div 40	Instrumentation
46 33 44	Peristaltic Tube Metering Pumps

END OF SECTION

SECTION 01 78 43
SPARE PARTS AND EXTRA MATERIAL

PART 1 – GENERAL

1.01 SUMMARY

A. Contractor shall furnish spare parts data and extra materials for materials and equipment in accordance with the Contract Documents.

B. Spare Parts and Extra Materials:

1. Provide spare parts, extra stock materials, maintenance supplies, and special tools required for maintenance ("spare parts and extra materials") for one year of operation (unless otherwise specified in the individual Specification Section).

   a. Provide Supplier recommended lubricating oil and grease in accordance with this Section and the Contract Documents.

2. Provide list of Supplier recommended spare parts and extra material.

   a. Include list of four standard lubricants, minimum, that shall be interchangeable for each type of lubricant required in the Contract Documents.

   b. Include unit prices in current United States funds

   c. Source(s) of supply for each.

C. Packaging and Labeling:

1. Furnish spare parts and extra materials in manufacturer's unopened cartons, boxes, crates, or other original, protective covering suitable for preventing corrosion and deterioration for maximum length of storage normally anticipated by manufacturer.

2. Packaging of spare parts and extra materials shall be clearly marked and identified with name of manufacturer, applicable equipment, part number, part description, and part location in the equipment.

3. Protect and package spare parts and extra materials for maximum shelf life normally anticipated by manufacturer.

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D. Finishes: Spare parts and extra material shall have painting, protective coating, and finishes identical to original installed equipment and material. Where painting, protective coating, or finishes are not specified, suitable provisions shall be furnished to protect from corrosion.

E. Special Tools: Contractor shall provide special tools necessary to operate, disassemble, service, repair, and adjust equipment and material in accordance with the manufacturer's operation and maintenance manual. Special tool requirements shall be the same as spare parts and extra material specified in this Section.

F. Storage Prior to Delivery to Owner: Prior to furnishing spare parts and extra materials to Owner, store spare parts and extra materials in accordance with the Contract Documents and manufacturers' recommendations.

G. Delivery Time and Eligibility for Payment:

1. Deliver to Owner spare parts and extra materials prior to date of Substantial Completion for equipment or system associated with the spare parts and extra materials. Do not deliver spare parts and extra materials before commencing start-up for associated equipment or system.

2. Spare parts and extra materials are not eligible for payment until delivered to Owner and Contractor's receipt of Owner's countersignature on letter of transmittal.

H. Procedure for Delivery to Owner:

1. Deliver spare parts and extra materials to Owner's permanent storage rooms at the Site or area(s) at the Site designated by Owner.

2. When spare parts and extra materials are delivered, Engineer and Owner will mutually inventory the spare parts and extra materials delivered to verify compliance with the Contract Documents regarding quantity and part numbers.

3. Additional procedures for delivering spare parts and extra materials to Owner, if required, will be developed by Engineer and complied with by Contractor.

I. Transfer Documentation:

1. Furnish on Contractor letterhead a letter of transmittal for spare parts and extra materials furnished under each Specification Section. Letter of transmittal shall accompany spare parts and extra materials. Do not furnish letter of transmittal separate from associated spare parts and extra materials.

2. Furnish three original, identical, signed letters of transmittal for each Specification Section. Upon delivery of specified quantities and types of spare parts and extra materials to Owner, designated person from Owner will countersign each original letter of transmittal indicating Owner's receipt of spare parts and extra materials.

a. Owner will retain one fully signed original.

b. Contractor shall submit one fully signed original to Engineer.

c. Contractor shall retain one fully signed original for Contractor's file.

3. Letter of transmittal shall include the following:

a. Information required for letters of transmittal in Section 01 33 00 – Submittal Procedures.

b. Transmittal shall list spare parts and extra materials furnished under each Specification Section. List each individual part or product and quantity furnished.

c. Provide space for countersignature by Owner as follows: space for signature, space for printed name, and date.

J. Contractor shall be fully responsible for loss or damage to spare parts and extra materials until spare parts and extra materials are received by Owner.

1.02 SUBMITTALS

A. Action/Informational Submittals: Individual Specification Sections that require spare parts, extra material, or tools, Contractor shall submit inventory checklist for each individual Specification Section that includes the following information:

1. Specification Section number and title.

2. Name of spare parts, extra material, or tools.

3. Manufacturer, part number and description.

4. Quantity specified and furnished.

PART 2 – PRODUCTS (NOT USED)

PART 3 – EXECUTION (NOT USED)

END OF SECTION

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SECTION 01 79 00
INSTRUCTION OF OWNER'S PERSONNEL

PART 1 – GENERAL

1.01 SUMMARY

A. Contractor shall furnish services of operation and maintenance training specialists to instruct Owner's personnel in recommended operation and maintenance procedures for materials and equipment furnished, in accordance with the Contract Documents.

B. Contractor shall provide a combination of classroom and field training at the Site, unless otherwise required elsewhere in the Contract Documents.

C. Owner reserves the right to record training sessions on video for Owner's later use in instructing Owner's personnel.

1.02 ADMINISTRATIVE REQUIREMENTS

A. Definitions:

1. Training – Manufacturer will provide verbal, visual, and written presentation of materials to Owner's staff to ensure that any Owner personnel undergoing training understand the Manufacturer's recommended procedures to properly operate and maintain the equipment and systems for the expected service life.

B. Qualifications:

1. Contractor's instructors shall be factory-trained by manufacturer of material or equipment.

2. Contractor's instructors shall be proficient and experienced in conducting training of type required.

3. Qualifications of instructors are subject to acceptance by Engineer. If Engineer does not accept qualifications of proposed instructor, Contractor shall furnish services of replacement instructor with acceptable qualifications.

C. Scheduling:

1. General:

a. Contractor shall coordinate training services with start-up and initial operation of materials and equipment on days and times, and in manner, acceptable to Owner, in accordance with the Contract Documents.

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b. Training may be required outside of normal business hours to accommodate schedules of operations and maintenance personnel. Furnish training services at the required days and times at no additional cost to Owner.

c. Prerequisites to Training: Training of Owner's personnel shall commence after acceptable preliminary operation and maintenance data has been submitted and work required in Section 01 75 00 – Checkout and Startup Procedures is complete.

2. Training Schedule Submittal:

a. Training Schedule Required: Contractor shall prepare and submit proposed training schedule for review and acceptance by Engineer and Owner. Proposed training schedule shall show all training required in the Contract Documents, and shall demonstrate compliance with specified training requirements relative to number of hours of training, number of training sessions, and scheduling.

b. Timing of Training Schedule Submittal: Submit initial training schedule at least thirty days before scheduled start of first training session. Submit final training schedule, incorporating revisions in accordance with Engineer's comments, no later than seven days prior to starting the first training session.

c. Owner reserved the right to modify personnel availability for training in accordance with process or emergency needs at the Site.

D. Video Recording

1. Contractor shall provide a training specialist for a minimum of three (3) days, for each item of equipment specified, to meet with the Engineer to prepare training scripts and to participate in video recording of training. Video recorded training sessions shall be conducted separately from training sessions held for the Owner's personnel.

2. Manufacturer shall have the ownership rights to one unedited and one edited copy of the video recorded training.

3. As an alternative to video recording training at the Site, the Manufacturer may submit pre-recorded digital media covering the equipment supplied for approval. Submitted pre-recorded digital media shall meet the intent of this Section for approval consideration. If approved, Owner shall have the right to permanent ownership and use of at least one complete copy.

1.03 TRAINING REQUIREMENTS

A. General Lesson Plan Requirements:

1. Contractor's lesson plan shall describe specific instruction topics, system components for which training will be furnished, and training procedures. Handouts, if any, to be used in training shall be included with the lesson plan. Describe in lesson plan "hands-on" demonstrations planned for training sessions.

2. Lesson plan shall be approved a minimum of 30 days prior to starting associated training.

3. Lesson plan shall include estimated duration of each training segment.

B. Specific Lesson Plans Requirements:

1. Equipment overview shall cover the following:

a. Equipment's operating (process) function, performance objectives, and fundamental operating principles.

b. Equipment's mechanical, electrical, and electronic components and features. Group related components into subsystems and describe function of subsystem and subsystem's interaction with other subsystems.

c. Support equipment and appurtenances.

d. Safety and potential hazards.

e. Safety and control interlocks.

2. Operations personnel training shall cover the following:

a. Equipment overview: As described in this Section.

b. Operation:

1) Principles, operating, start-up, and shutdown procedures.

2) Abnormal or emergency start-up, operating, and shutdown procedures.

3) Alarm conditions and responses.

4) Monitoring and recordkeeping.

5) Housekeeping.

c. Troubleshooting: Required corrective maintenance or an operating parameter adjustment.

3. Maintenance personnel training:

a. Equipment overview: As described in this Section.

b. Equipment preventive maintenance:

1) Inspection procedures:

a) Operation.

b) Trouble symptoms and anticipate breakdowns.

c) Predictive maintenance.

2) Preventative maintenance intervals.

3) Lubricant and replacement parts.

4) Cleaning practices and intervals.

5) Special tools required.

6) Removal, installation, and disassembly and assembly procedures.

7) “Hands-on” demonstrations of preventive maintenance procedures.

8) Measuring instruments and procedures

9) Torqueing, mounting, calibrating, and aligning procedures and settings requirements.

10) Check and test equipment following corrective maintenance.

4. Equipment Troubleshooting:

a. Systematic troubleshooting procedures.

b. Checklists.

c. Testing and diagnostic procedures.

d. Corrective maintenance procedures with “hands on” demonstrations.

C. Training Aids:

1. Contractor’s instructor shall incorporate training aids as appropriate to assist in the instruction. Provide handouts of text, tables, graphs, and illustrations as required. Other appropriate training aids include:

a. Audio-visual aids

b. Equipment cutaways and samples

c. Tools, including special tools

2. Podium presentation aids: Presentation shall cover equipment, products and materials provided. Provide electronic version of presentation material to Engineer.

    a. Electronic version of presentation aids shall be Microsoft PowerPoint or equivalent format.

    b. Presentation shall include the following sections:

        1) Complete system overview including, but not limited to, related and associated equipment specific to the system.

        2) Specific equipment requirements and how equipment functions within the overall system.

        3) Site specific system and equipment requirements.

    c. Hardcopy handouts of the electronic presentation aids shall be provided prior to each training section for review during podium presentation.

3. Handouts:

    a. Contractor's instructor shall distribute and use descriptive handouts during training.

    b. Handouts should be coordinated with the instruction

    c. Provide at least ten copies of handouts for each training session

4. Audio-visual Equipment: Training provider shall provide audio-visual equipment required for training sessions.

1.04 SUBMITTALS

A. Action/Informational Submittals:

1. Training Schedule: Detailed schedule of training sessions, demonstrating compliance with number of training sessions, hours required in the Contract Documents, and complying with the Contract Times. Submit training schedule submittals in accordance with timeframes specified in this Section.

2. Lesson Plan: Acceptable lesson plan for training on each material or equipment item, in accordance with the Contract Documents. Lesson plan shall comply with requirements of this Section. Include with lesson plan copy of handouts that will be used during training sessions. Provide lesson plan submittals in accordance with timeframes specified in this Section.

3. Podium presentation material, electronic version.

4. Qualifications: Credentials of Contractor's proposed operations and maintenance instructor(s). Credentials shall demonstrate compliance with requirements of this Section and shall include brief resume and specific details of instructor's operating, maintenance, and training experience relative to the specific material and equipment for which instructor will provide training.

B. Closeout Submittals:

1. Trainee sign-in sheet for each training session. Submit to Owner's training coordinator.

C. Quality Assurance Submittals:

1. Qualifications: Credentials of Contractor's proposed operations and maintenance instructor(s). Credentials shall demonstrate compliance with requirements of this Section and shall include brief resume' and specific details of instructor's operating, maintenance, and training experience relative to the specific material and equipment for which instructor will provide training.

PART 2 – PRODUCTS (NOT USED)

PART 3 – EXECUTION

3.01 "HANDS-ON" DEMONSTRATIONS

A. Contractor's instructor shall provide "hands-on" demonstration of operations and maintenance of equipment and materials for each training session.

B. Contractor shall furnish tools and appurtenances required for demonstrations.

3.02 SCHEDULE

A. Contractor shall furnish the hours of training and number of sessions indicated, at a minimum. Travel time and expenses are the responsibility of the manufacturer and are excluded from required training time indicated in the Contract Documents.

B. Owner's operations at the Site occur 24 hours per day, divided into three shifts. Training shall be scheduled during day shift, normal working hours unless otherwise approved by Engineer.

C. Training shall be provided for a minimum of two identical sessions, unless otherwise specified, with each session scheduled for different weeks.

D. Contractor shall furnish training for the following systems and equipment, at a minimum. Training Schedule:

Spec. Section	Specification Title
40 05 57	Valve Operators and Electric Valve Actuators
Div 40	Instrumentation
46 33 44	Peristaltic Tube Metering Pumps

END OF SECTION

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SECTION 01 88 16

WATERTIGHTNESS TESTING OF CONCRETE STRUCTURES

PART 1 – GENERAL

1.01 THE REQUIREMENT

A. All concrete work and sealing work around built-in items and penetrations shall be performed as required to ensure that groundwater, surface water, and water or liquids in tanks, channels, and containers will not intrude into any equipment rooms, pipe galleries, habitable areas, or other generally dry areas.

B. The required watertightness shall be achieved by quality concrete construction and proper sealing of all joints and penetrations.

C. Each unit shall be tested separately, and the leakage tests shall be made prior to backfilling and before equipment is installed. Testing water shall be from any potable, non-potable, or natural moving source such as a river or stream, but not from any still water source such as a lake or pond, and not from any wastewater source.

D. All water holding structures shall be tested for leakage by the Contractor. The Contractor shall provide at their own expense all labor, material, temporary bulkheads, pumps, water measuring devices, etc., necessary to perform the required tests.

1.02 RELATED WORK SPECIFIED ELSEWHERE

A. Section 01 45 23 – Testing Services Furnished by Contractor

B. Section 03 01 30 – Concrete Repairs

1.03 REFERENCE SPECIFICATIONS, CODES AND STANDARDS

A. ACI 350.1-10 - Specification for Tightness Testing of Environmental Engineering Concrete Structures

1.04 SUBMITTALS

A. Testing procedures shall be submitted for approval prior to the test.

B. Testing Report: Prior to placing the structure in service, submit for review and approval a detailed bound report summarizing the watertightness test data, describing the testing procedure, and showing the calculations confirming the test data.

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PART 2 – PRODUCTS (NOT USED)

PART 3 – EXECUTION

3.01 TEST PREPARATION

A. The design capability of the structure to withstand testing shall be verified for the pressures to be applied. Another type of test shall not be substituted for hydrostatic tightness testing without approval of the Engineer.

B. The structure shall not be tested before all elements of the structure which resist any portion of the retained liquid pressure are in place and the concrete has attained its specified compressive strength.

C. Unless otherwise specified, coatings shall not be applied until after the hydrostatic tightness testing is complete. Liners that are mechanically locked to the surface during the placement of the concrete shall be installed before the hydrostatic tightness testing. Interior liners shall be visually examined for deficiencies (pinholes, tears, and partially fused splices) and must pass integrity testing. Deficiencies shall be repaired.

D. Clean the exposed concrete surfaces of the structure, including the floor, of all foreign material and debris. Prior to testing, standing water in or outside of the structure that would interfere with the inspection of the exposed concrete surfaces of the structure shall be removed.

E. The concrete surfaces and concrete joints shall be thoroughly inspected for potential leakage points. Areas of potential leakage shall be repaired before filling the containment structure with water.

F. All openings, fittings, and pipe penetrations in the structure shall be inspected at both faces of the concrete, if practical. Defective or cracked concrete shall be repaired prior to testing. All structural penetrations and inlet/outlets shall be securely sealed to prevent the loss of water from the structure during the test. All structural penetrations shall be monitored before and during the test to determine the watertightness of these appurtenances. If the structure will be filled using the inlet/outlet pipe, positive means shall be provided to check that water is not entering or leaving through this pipe once the structure is filled to the test level. Leakage at these inlet/outlets shall be repaired prior to testing. No allowance shall be made in test measurements for uncorrected known points of leakage.

G. The flow from any underdrain system, if a system is provided, shall be monitored during this same period, and any increase in flow shall be recorded and considered for information as a part of the hydrostatic tightness testing.

H. The ground water level shall be brought to a level below the top of the base slab and kept at that elevation or at a lower elevation during the test.

I. No backfill shall be placed against the walls or on the wall footings of the structure to be tested unless otherwise specified.

3.02 PROCEDURE

A. The initial filling of a new structure should not exceed a rate of 4 ft/hour. Filling shall be continued until the water surface is at the design maximum liquid level, or either 1 in. below any fixed overflow level in covered containment structures or 4 in. in open structures, whichever is lower.

B. The exterior surfaces of the structure shall be inspected during the period of filling the structure. If any flow of water is observed from the structure exterior surfaces, including joints or cracks, the defect causing the leakage shall be repaired prior to testing.

C. Watertightness Test - Part 1: Qualitative Criteria

1. The water shall be kept at the test level for at least 3 days prior to Part 2 of the testing.

2. The exterior surfaces of the structure shall be observed in both the early mornings and later afternoons during the 3-day period before Part 2 of the test. If any water is observed on the structure exterior surfaces, including joints, repaired honeycombed areas and cracks, where water droplets can be picked up on a dry hand, the containment structure shall be considered to have failed Part 1 of the test.

3. Wet areas on top of wall footing shall not indicate a failure of Part 1 of the test unless the water can be observed to be flowing.

4. Part 2 of the test may begin prior to completion of repairs for Part 1. However, all defects causing the failure of Part 1 shall be repaired before the structure is accepted. The 3-day period of keeping water at the test level shall be observed again after completion of all repairs and prior to acceptance of structure.

D. Watertightness Test - Part 2: Quantitative Criteria

1. The test measurements shall not be scheduled when the weather forecast predicts a difference of more than 35°F between the ambient temperature readings at the times of the initial and final level measurements of the water surface. The test shall also not be scheduled when the weather forecast indicates the water surface could be frozen before the test is completed.

2. The vertical distance to the water surface shall be measured to within 1/16 in. from a fixed point on the structure above the water surface. Measurements shall be recorded at 24-hour intervals. Measurements taken at the same time of day will reduce the probability of temperature difference.

3. Measurements shall be taken at two locations, 180° apart, to minimize the possible effect of differential settlement. Measurements shall be taken at the same locations to reduce the probability of measurement differences.

4. The test period shall be at least the theoretical time required to lower the water surface 3/8 in. assuming a loss of water at 0.050% of the water volume per 24-hour period. The test period shall not be longer than five days.

5. The water temperature shall be recorded at a depth of 18 in. below the water surface at the start and end of the test.

6. A floating, restrained, partially filled, calibrated, open container for evaporation and precipitation measurement should be positioned in open structures and the water level in the container recorded at 24-hour intervals. Determination of evaporation by a shallow pan-type measuring device is not acceptable due to possible heating of the bottom of the shallow pan resulting in accelerated evaporation.

3.03 EVALUATION

A. The containment structure shall continue to be observed in both the early mornings and late afternoons to verify compliance with Part 1 of the test during Part 2.

B. At the end of the test period, the water surface shall be recorded to within 1/16-in at the location of original measurements. The water temperature and the evaporation and precipitation measurements shall be recorded.

C. The allowable loss of water for tightness tests shall not exceed 0.050% of the test water volume in 24 hours.

D. The change in water volume in the structure shall be calculated and corrected, if necessary, for evaporation, precipitation, and temperature based on the change recorded in the water level from the open container. If the loss exceeds the allowable loss, the structure shall be considered to have failed the test.

E. During Part 2 of the test, observed flow or seepage of water from the exterior surface, including that from cracks and joints, should be considered as a failed test. Excessive wetness resulting in water droplets on dry hand after contact will also be considered a failed test. Slight dampness with only slight wetting of dry hand will not necessarily qualify as a failed test, depending on application, location, and visibility. Dampness or wetness on top of a footing shall not be considered as a failed test.

3.04 RETESTING

A. A restart of the test shall be required when test measurements become unreliable due to unusual precipitation or other external factors.

B. The Contractor shall be permitted to immediately retest when no visible leakage is exhibited. If the structure fails the second test or if the Contractor does not exercise the

option of immediately retesting after the first test failure, the interior of the structure shall be inspected by a diver or by other means to determine probable areas of leakage. The structure shall only be retested after the most probable areas of leakage are repaired.

C. If the leakage exceeds the allowable limit, the work shall be corrected by methods approved by the Engineer.

D. Upon completion of the necessary remedial work, the leakage test shall be repeated until it is successfully passed. A minimum of three days shall occur between completion of any repairs with water level remaining at required test level without further issues prior to structure being deemed as satisfying all requirements of testing.

3.05 NOTIFICATION BY ENGINEER

A. If any leaks greater than the specified amount are not remedied by the Contractor within four (4) weeks of notification by the Engineer, regardless of whether the cause of these leaks is or is not determined, the Engineer shall have the authority to have these leaks repaired by others. The cost of repairs, by others, shall be deducted from monies due or to become due to the General Contractor.

END OF SECTION

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SECTION 02 41 00
DEMOLITION

PART 1 – GENERAL

1.01 THE REQUIREMENT

A. The Contractor shall furnish all labor, materials, and equipment in accordance with the requirements of

1. Section 02 41 16 – Removal of Filter Media.

B. In addition, the Contractor shall demolish and remove all concrete and asphalt paving, curbs, sidewalk, and miscellaneous yard piping, utilities, and structures as required and shown on the Contract Drawings during the construction work.

1.02 RELATED WORK SPECIFIED ELSEWHERE

A. Generation Conditions, Section 4.4 – Performance of Work

B. General Conditions, Section 4.7 – Materials Quality, Substitutions, and Shop Drawings

1.03 REFERENCE SPECIFICATIONS, CODES, AND STANDARDS

A. References shall be in accordance with reference standards, codes, and specifications as set forth herein and in MAG Section 201 – Clearing and Grubbing.

1.04 SUBMITTALS

A. In accordance with the procedures and requirements set forth in Section 01 33 00 – Submittal Procedures, the Contractor shall submit the following:

1. Copies of all photographs and other records from the joint existing conditions surveys.

PART 2 – EXECUTION

2.01 DEMOLITION

A. Existing concrete and asphalt paving, curbs, sidewalk and miscellaneous yard piping, utilities, and structures within the areas designated for new construction work shall be completely demolished and all debris removed from the site.

B. Excavation caused by demolition shall be backfilled with fill free from rubbish and debris.

C. Work shall be performed in such manner as not to endanger the safety of the workmen or the public or cause damage to nearby structures.

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D. Provide all barriers and precautionary measures in accordance with Owner's requirements and other authorities having jurisdiction.

E. Where parts of existing pavements or structures are to remain in service, demolish the portions to be removed, repair damage, and leave the pavement or structure in proper condition for the intended use. Remove asphalt or concrete pavement, concrete, and masonry by saw-cutting, drilling, chipping, or other suitable methods. Leave the resulting surfaces reasonably true and even, with sharp straight corners that will result in neat joints with new construction and be satisfactory for the purpose intended. Where existing reinforcing rods are to extend into new construction, remove the concrete so that the reinforcing is clean and undamaged. Cut off other reinforcing 1/2-inch below the surface and fill with epoxy resin binder flush with the surface.

F. Prior to the execution of the work, the Contractor, Owner and Engineer shall jointly survey the condition of the adjoining and/or nearby pavements and structures. Photographs and records shall be made of any prior settlement or cracking of structures, pavements, and the like, that may become the subject of possible damage claims. Contractor shall provide Owner a copy of all records of the joint survey of conditions before demolition activities may begin. Contractor shall provide copies of the existing conditions survey report to the Owner and Engineer before any demolition or construction activities begin.

2.02 DISPOSAL OF MATERIAL

A. All debris resulting from the demolition and removal work shall be disposed of by the Contractor at a properly permitted facility as part of the work of this Contract. Material designated by the Engineer to be salvaged shall be stored on the construction site as directed. All other material shall be disposed of off-site by the Contractor at his expense.

B. Burning of any debris resulting from the demolition will not be permitted at the site.

PART 3 – EXECUTION

3.01 DEMOLITION

A. General:

1. Demolition Work shall comply with the applicable provisions and recommendation of ANSI A10.2, Safety Code for Building Construction, all governing codes, and as specified in this Section.

2. Contractor shall furnish competent and experienced personnel for the various type of demolition and removal Work. Demolition and removal Work shall be performed with regard to the safety of Owner employees, individuals at the Site, and the public.

3. Contractor shall remove temporary work, such as enclosures, signs, guards, etc. when such temporary Work is no longer required or when directed at the completion of the Work.

4. Contractor shall perform patching, restoration and Work in accordance with individual Specification Sections and details shown on Contract drawings.

5. Contractor shall be responsible for damage caused by demolition Work to existing structures, equipment and materials indicated for reuse or to remain at no additional cost to Owner.

6. Contractor shall maintain a clean working environment during the demolition Work.

B. Protection during Demolition:

1. Contractor shall provide, erect, and maintain catch platforms, lights, barriers, weather protection, warning signs and other items as required for proper protection of the public, occupants of the building, personnel engaged in demolition Work, and adjacent construction.

2. Contractor shall provide and maintain weather protection at exterior openings so as to fully protect the interior premises against damage from the elements until such openings are closed by the Work.

3. Contractor shall provide and maintain temporary protection of the existing structure designated to remain where demolition, removal and Work is being done, connections made, materials handled or equipment moved.

4. Contractor shall take necessary precautions to prevent dust from rising by wetting demolished masonry, concrete, plaster and similar debris. Unaltered portions of the existing buildings affected by the operations in the Contract Documents shall be protected by dust proof partitions and other adequate means. Dust control shall be provided.

5. Contractor shall provide adequate fire protection in accordance with authorities having jurisdiction.

6. Contractor shall perform the demolition Work with minimum traffic interference. Contractor shall not close or obstruct walkways, passageways, or stairways. Contractor shall not store or place materials in passageways, stairs or other means of egress.

7. Contractor shall minimize disturbances to exterior walls and roofs to small sections that are readily repaired and patched to maintain watertight conditions in existing structures and buildings.

C. Maintenance during Demolition:

1. Contractor shall maintain the buildings, structures and public properties free from accumulations of waste, debris and rubbish, generated by the demolition Work.

2. Contractor shall provide cleaning and waste management of demolition equipment and materials.

3.02 CUTTING AND CORING

A. General:

1. Contractor shall notify Engineer in writing and receive Engineer's approval prior to cutting load bearing walls (concrete or masonry) and structural concrete floors.

2. Perform cutting and coring to limit extent of patching required.

3. Structural Elements: Do not cut or core structural elements in manner that would change structural element's load-carrying capacity as load deflection ratio.

4. Operating Elements: Do not cut or core operating elements in manner that would reduce capacity to perform as intended. Do not cut or core operating elements or related components in manner that would increase maintenance requirements or decrease operational life or safety.

5. Replace, patch, and repair materials and surfaces cut or damaged during cutting and coring Work, Contractor shall use methods that do not void required or existing warranties.

6. Provide temporary or permanent bypass provisions prior to cutting existing pipe, conduit, ductwork, or other utilities serving facilities scheduled to be removed or relocated in accordance with the Contract Documents.

7. Inspection: Examine and prepare surfaces prior to commencing Work. Contractor shall report unsatisfactory or questionable conditions to Engineer in writing. Contractor shall not proceed with the Work until unsatisfactory conditions are corrected.

8. Preparation:

   a. Provide temporary support required to maintain structural integrity, to protect adjacent Work from damage, and to support the element(s) to be cut or cored.

   b. Protection of Existing Construction During Cutting and Coring:

      1) Protect existing structures, equipment, and materials during cutting and coring to prevent damage.

      2) Provide protection from adverse weather conditions that will be exposed during cutting and coring Work.

3) Avoid interference with use of adjoining areas or interruption of free passage to adjoining areas.

9. Restoration:

a. Clean equipment, materials, piping systems, valves, conduit and appurtenances that were damaged due to the Work prior to applying paint or other finishing materials.

b. Restore damaged pipe coverings, including insulation, to original condition.

Coring:

10. Core-drill holes through concrete and masonry walls, slabs, or arches, in accordance with the Contract Documents, unless written authorization is furnished by Engineer.

11. Protection: Protect existing structures, equipment, materials, utilities, and adjacent areas from water and other damage by core-drilling Work.

12. Coring:

a. Perform coring with non-impact rotary tool using diamond core-drills.

b. Size holes for pipe, conduit, sleeves, equipment or mechanical seals, as required, to be installed through the penetration and in accordance with the Contract Documents.

c. After core-drilling and before installing equipment and material through the penetration, trim back exposed steel then coat exposed concrete and steel with protective coating material specified in this Section. Apply protective coating in accordance with manufacturer's instructions.

13. Cleaning: Vacuum or otherwise remove slurry and tailings from the work area following core-drilling.

3.03 PATCHING

A. General:

1. Construction shall be patched by filling, repairing, refinishing, closing-up, and similar methods at completion of the Work.

2. Provide equipment and materials in accordance with the Contract Documents for patching Work. Comply with manufacturer's installation instructions.

3. Provide airtight connections to pipes, sleeves, ducts, conduit, and other penetrations through surfaces when patching the Work. Provide durable patching seams that minimize visual appearance.

4. Patched areas shall be tested to demonstrate integrity of installation as directed by the Engineer. Contractor shall provide testing equipment, material and services for patch testing.

B. Restoration:

1. Restore exposed finishes of patched areas to minimize evidence of patching and refinishing.

2. Contractor shall extend refinishing and restoration into adjoining areas to blend patched areas with existing adjacent areas.

a. Refinish to nearest intersection for continuous surfaces.

b. Refinish the entire assembly and system for equipment and materials.

c. Repair and rehang existing ceilings to provide an even-plane surface of uniform appearance.

d. Apply plaster and finishes to match adjacent interior walls and partition areas for openings sealed with brick and/or masonry block.

3.04 DISPOSAL OF MATERIAL

A. All debris resulting from the demolition and removal work shall be disposed of by the Contractor as part of the work of this Contract. Material designated by the Engineer to be salvaged shall be stored on the construction site as directed. All other material shall be disposed of off-site by the Contractor at his expense.

B. Burning of any debris resulting from the demolition will not be permitted at the site.

END OF SECTION

SECTION 02 41 16
REMOVAL OF FILTER MEDIA

PART 1 – GENERAL

1.01 THE REQUIREMENT

A. This Section covers the demolition, removal, and disposal of filter media as indicated on the Drawings and as specified hereinafter. The Contractor shall furnish all labor, materials, and equipment to perform this work.

1.02 RELATED WORK SPECIFIED ELSEWHERE

A. Section 01 14 00 - Coordination with Owner's Operations

B. Section 01 42 00 - References

C. Section 02 41 00 - Demolition

PART 2 – PRODUCTS (NOT USED)

PART 3 – EXECUTION

3.01 DEMOLITION AND REMOVALS

A. The removal of the materials shall be done by the Contractor, and shall become the Contractor's property, for disposition in any manner not contrary to the Contract requirements and shall be removed from the site to the Contractor's own place of disposal.

B. The Contractor shall proceed with the removal of the material/media in a sequence designed to maintain the plant in continuous operation as directed by City of Chandler Operations and shall proceed only after approval of the Engineer.

C. Any equipment piping and appurtenances removed without proper authorization, which are necessary for the operation of the existing facilities shall be replaced to the satisfaction of the Engineer at no cost to the Owner.

D. Prior to the execution of the work, the Contractor, Owner and Engineer shall jointly survey the condition of the adjoining and/or nearby structures. Photographs and records shall be made of any cracking of structures, that may become the subject of possible damage claims.

3.02 PROTECTION

A. Demolition and removal work shall be performed by competent experienced workmen for the various type of demolition and removal work and shall be carried out through to completion with due regard to the safety of Owner employees, workmen on-site and the public. The work shall be performed with as little nuisance as possible.

B. The work shall comply with the applicable provisions and recommendation of OSHA all governing codes, and as hereinafter specified.

3.03 EQUIPMENT AND MATERIALS RETAINED BY OWNER

A. All debris resulting from the demolition and removal work shall be disposed of by the Contractor as part of the work of this Contract. Material designated by the Engineer to be salvaged shall be stored on the construction site as directed. All other material shall be disposed of off-site by the Contractor at his expense.

END OF SECTION

SECTION 03 01 30
CONCRETE REPAIRS

PART 1 – GENERAL

1.01 THE REQUIREMENT

A. The Contractor shall furnish all materials, labor, equipment, tools, etc., required for the pH testing, repair, renovation, and replacement of concrete and/or reinforcing steel as indicated on the Drawings, specified herein, and determined by field survey.

B. The Contractor, in conjunction with the Engineer, shall determine the extent of cracked or deteriorated concrete to be rehabilitated and/or resurfaced. A summary of the work to be performed shall be submitted to the Engineer for review, and such summary shall be approved by the Engineer prior to commencement of the Work. The extent of damaged concrete material to be removed prior to installation of repair material shall be determined by parent material soundness as well as surface pH levels. Prepared surfaces to receive repair materials or coatings shall have a minimum surface pH level of 11. Removal of materials shall continue until the exposed surface pH level is 11 or higher.

C. Concrete repairs include the following:

1. Leaking crack repair and leaking base of wall joints at the existing media filter basins.

1.02 RELATED WORK SPECIFIED ELSEWHERE

A. Division 01 – General Requirements

B. Section 01 20 00 – Measurement and Payment

C. Division 03 – Concrete

1.03 REFERENCE SPECIFICATIONS, CODES, AND STANDARDS

A. Shall be as specified in Section 01 42 00 – References.

B. ICRI CSP – International Concrete Repair Institute Concrete Surface Profile.

1.04 SUBCONTRACTOR/APPLICATOR QUALIFICATIONS

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A. The Contractor shall furnish the name of all subcontractors/applicators which they proposes to use for this work, including necessary evidence and/or experience records to ascertain their qualifications in the application of epoxy, urethane, and polymer-modified and silica fume enhanced repair materials.

B. Approved applicator qualifications shall include a minimum of 5 years of experience in applying epoxy, urethane, and polymer-modified and silica fume enhanced cement-based repair materials like those materials specified in this Section.

C. A letter from the manufacturer of the specified materials, on the manufacturer's letterhead, signed by an officer of the company, stating that the subcontractor/applicator has been trained in the proper techniques for applying the product, including surface preparation and mixing, placing, curing, and caring for the manufacturer's products shall be submitted. This letter shall further state that the subcontractor/applicator is on the manufacturer's approved list of contractors.

1.05 SUBMITTALS

A. Material certifications and technical data sheets on all grouts, mortars, epoxy resins, aggregates and repair products specified in this Section.

B. Subcontractor/Applicator qualifications as specified in Section 1.04.

C. Shop Drawings detailing any planned deviation from the proposed construction sequence and/or method of repair.

D. The Contractor, based on their experience in their profession, and/or recommendation from product manufacturers, may submit to the Engineer for approval, alternative materials and/or methods of work to assure the durability and watertight integrity of the repair work performed.

E. Detailed repair procedures for each repair type.

F. Letter from repair material manufacturer(s) certifying that all repair materials to be used to create single repairs are compatible for use together

1.06 ADDITIONAL GUARANTEE

A. The Contractor shall guarantee all repair work performed under this Contract against defects in workmanship resulting in leakage and/or failure of concrete bond for a period of three (3) years from the date of the Certificate of Substantial Completion.

PART 2 – MATERIALS

2.01 GENERAL

A. All concrete repair materials shall conform to NSF Standards for contact with potable water supplies.

B. All concrete repair materials, when used in combination to create a single repair, shall be compatible.

2.02 WATER

A. The water used for mixing concrete repair products shall be clear, potable, and free of deleterious substances.

2.03 AGGREGATE

A. All aggregate shall conform to ASTM C-33. The aggregate supplier shall submit to the Engineer documentation that the proposed aggregates comply with ASTM C-33 and the requirements listed below:

B. Pea Gravel - Pea gravel shall meet the gradation and material requirements of Standard Size 14 as defined by ASTM C-33. Pea gravel shall be clean and free from deleterious matter and shall contain no limestone.

2.04 EPOXY BONDING AGENT

A. Epoxy bonding agent shall conform to ASTM C-881 Type I, II, IV or V; Grade 2 for epoxy resin adhesives, depending on the application. The class of epoxy bonding agent shall be suitable for all ambient and substrate temperatures. The epoxy resin shall be "Sikadur Hi-Mod Series" as manufactured by the Sika Corp, Lyndhurst, NJ, "Duralbond" as manufactured by Euclid Chemical Company, Cleveland, OH, "Euco #452 Series" by the Euclid Chemical Company, or "MasterEmaco ADH series" by Master Builders Solutions.

2.05 ANTI-CORROSION REBAR COATING

A. Anti-corrosive coating shall be a polymer-modified cementitious material such as "Sika Armatec 110 EpoCem " manufactured by Sika Corp., Lyndhurst, NJ, Atlanta, GA, "Duralprep A.C." by the Euclid Chemical Company, or "MasterEmaco P 124" by Master Builders Solutions.

2.06 TYPE I CRACK REPAIR - CEMENTITIOUS SURFACE SEAL

A. Type I Crack Repair - Cementitious Surface Seal shall be a polymer-modified or silica fume enhanced trowel grade cementitious mortar and shall conform to EPA/USPHS standards for surface contact with potable water supplies. Type I Crack Repair material shall be "Sikatop 123 Plus" manufactured by Sika Corp., Lyndhurst, NJ, "Verticoat" or "Verticoat Supreme" by Euclid Chemical Company; or "Emaco S88 CI" or by Master Builders Solutions.

2.07 TYPE II CRACK REPAIR – EPOXY INJECTION CRACK REPAIR

A. Type II Crack Repair – Epoxy Injection Crack Repair shall be a 100% solids, high-modulus, low viscosity, moisture insensitive epoxy adhesive designed for structural repair. The epoxy adhesive shall be "Sikadur 52" manufactured by Sika Corp., Lyndhurst, NJ, "Dural 452 LV" manufactured by Euclid Chemical Company, Cleveland,

OH, “Eucopoxy Injection Resin” by the Euclid Chemical Company, or “MasterInject 1500” by Master Builders Solutions.

2.08 TYPE III CRACK REPAIR - WATERPROOF INJECTION GROUT

A. Type III Crack Repair - Waterproof Injection Grout shall be a one-component, water-activated, extra-low viscosity polyurethane or methacrylic acrylate hydrophobic injection grout capable of 400% expansion. Injection grout shall form a tough rigid foam seal that is impenetrable to water. Hydrophilic injection grout shall be “MasterInject 1210” manufactured by Master Builders Solutions, "Prime Flex 900 XLV" manufactured by Prime Resins, Conyers, GA, "AV-330 Safeguard" manufactured by Avanti International, Webster, TX, or "DeNeef Sealfoam PURe" or “Gelacryl Superflex” manufactured by Grace Construction Products/GCP Applied Technologies or “SikaFix HH Hydrophilic” manufactured by Sika Corp., Lyndhurst, NJ,. Hydrophobic injection grout shall be “MasterInject 1230” manufactured by Master Builders Solutions, "Prime Flex 940" manufactured by Prime Resins, Conyers, GA, "Sikafix HHLV or “Sikafix HH+” manufactured by Sika Corp., Lyndhurst, NJ, "AV-248-LV Flexseal LV" manufactured by Avanti International, Webster, TX, or "DeNeef Flex SLV one or PURe" manufactured by Grace Construction Products.

2.09 SPALL REPAIR PATCHING MATERIAL

A. All spall repairs not requiring formwork shall be repaired using a polymer-modified cementitious mortar and shall have a minimum 28-day compressive strength of 7,000 psi. Spall repair mortar for use in horizontal applications shall be "Sikatop 122 Plus" manufactured by Sika Corp., Lyndhurst, NJ, “Eucocrete Supreme” or “Duraltop Flowable Mortar” by the Euclid Chemical Company, or “MasterEmaco T-302” or “MasterEmaco T310CI” by Master Builders Solutions. Spall repair mortar for use in vertical and overhead applications shall be "Sikatop 123 Plus" manufactured by Sika Corp., Lyndhurst, NJ, “Verticoat or Verticoat Supreme” by the Euclid Chemical Company, or “MasterEmaco N 425” or “MasterEmaco N 400” by Master Builders Solutions.

B. All spall repairs requiring formwork shall be repaired using a polymer-modified cementitious mortar/pea gravel mixture and shall have a minimum 28-day compressive strength of 7,000 psi. Spall repair mortar shall be "SikaTop 111 PLUS" manufactured by Sika Corp., Lyndhurst, NJ, "Eucocrete Supreme” manufactured by Euclid Chemical Company, Cleveland, OH, or “MasterEmaco T 310 CI” by Master Builders Solutions.

C. All spall repair materials shall conform to EPA/USPHS standards for surface contact with potable water supplies.

2.10 WATERSTOP REPAIR SYSTEM

A. Waterstop repair system shall be a flexible rubber sealing strip secured to the concrete substrate with an epoxy adhesive. System shall be provided by a single manufacturer, installed per manufacturer's recommendations and shall be "Sikadur Combiflex" manufactured by Sika Corp., Lyndhurst, NJ or Engineer approved equal. Minimum width

of waterproof membrane patch shall be twelve (12) inches unless shown otherwise on Contract Drawings.

2.11 STORAGE OF MATERIALS

A. The Contractor shall provide an area for repair material storage free from exposure to moisture in any form, before, during, and after delivery to the site. Manufactured materials shall be delivered in unbroken containers labeled with the manufacturer's name and product type. All mortar products shall be stored on raised platforms. Materials susceptible to damage by freezing shall be stored in a dry, heated, insulated area. Any material that has hardened, partially set, become caked and/or has been contaminated or deteriorated shall be rejected. All aggregates shall be stored in clean bins, scows or platforms.

PART 3 – INSTALLATION

3.01 GENERAL REQUIREMENTS

A. No repair work shall be undertaken when ambient temperatures are below manufacturer's safe recommendations. No admixtures, except those required by the manufacturer, shall be used in the repairs specified herein.

B. All products shall be applied in strict accordance with manufacturer's recommendations. The Contractor shall furnish and install safe scaffolding and ladders for the Engineer's prework inspection, the repair work activities, and the Engineer's final inspection.

C. Sandblast or waterblast (3000-5000 psi waterjet) or use low impact hand chipping tools to clean deteriorated areas to remove all loose concrete, existing coatings, unsound material, debris, and laitance. All surfaces shall be clean, free of dirt, grease, loose particles, and deleterious substances and shall be prepared according to manufacturer's requirements.

3.02 EPOXY BONDING AGENT

A. An epoxy bonding agent shall be used when applying fresh concrete to previously placed concrete unless otherwise recommended by the manufacturer.

B. Existing concrete surfaces shall be roughened (1/16” or CSP 5 minimum profile) unless otherwise recommended by the manufacturer prior to application of bonding agent. Concrete surface shall be clean and sound, free of all foreign particles and laitance. Repair material shall be placed while bonding agent is still tacky. If bonding agent cures prior to placement of repair material, bonding agent shall be reapplied.

C. Repairing concrete with epoxy mortars shall conform to all the requirements of ACI 503.4 "Standard Specification for Repairing Concrete with Epoxy Mortars" (latest edition), except as modified herein.

3.03 ANTI-CORROSION REBAR COATING

A. Reinforcing steel cut or exposed during demolition and/or repair operations shall be sandblasted and cleaned prior to coating with an anti-corrosive coating. Anti-corrosive coating shall be applied as soon as the reinforcement is exposed and cleaned. Coating shall thoroughly cover all exposed parts of the steel and shall be applied according to manufacturer's recommendations.

3.04 TYPE I CRACK REPAIR – CEMENTITIOUS SURFACE SEAL

A. Where indicated on the Drawings, or as directed by the Engineer, existing nonstructural cracks 1/16" and wider in vertical and overhead surfaces or existing cracks between 1/16" and 1/4" wide in horizontal surfaces shall be repaired with Type I Crack Repair Material. Rout crack to 3/4" wide by 3/4" deep V-notch to expose sound concrete. Provide a 3/8” high vertical shoulder at the top of notch on each side. Where rebar has deteriorated, or where deteriorated concrete extends below the top of rebar, crack shall be routed to expose 3/4" all around rebar. The resulting void in concrete shall be patched flush with the existing concrete surface using Type I Crack Repair material.

3.05 TYPE II CRACK REPAIR – EPOXY INJECTION

A. Vertical and Overhead Surfaces

1. Where indicated on the Drawings, or as directed by the Engineer, existing structural cracks 1/4" wide or narrower shall be repaired by pressure injecting Type II Crack Repair material into the prepared crack. Seal crack surface using epoxy resin binder and install injection ports per manufacturer's recommendations. Holes drilled for injection ports shall not cut rebar. If rebar is encountered during drilling, the hole shall be abandoned and relocated, and the abandoned hole shall be patched immediately with non-shrink grout flush with the surface of the existing concrete. Once the surface sealing material has fully cured, inject crack with Type II Crack Repair material using standard pressure injection equipment as directed by the manufacturer.

B. Horizontal Surfaces

1. Where indicated on the Drawings, or as directed by the Engineer, existing structural cracks 1/4" wide or narrower shall be repaired using Type II Crack Repair by pressure injecting Type II Crack Repair material into the prepared crack. Seal crack surface using epoxy resin binder and install injection ports per manufacturer's recommendations. Holes drilled for injection ports shall not cut rebar. If rebar is encountered during drilling, the hole shall be abandoned and relocated, and the abandoned hole shall be patched immediately with non-shrink grout flush with the surface of the existing concrete. Once the surface sealing material has fully cured, inject crack with Type II Crack Repair material using standard pressure injection equipment as directed by the manufacturer.

2. Where indicated on the Drawings, or as directed by the Engineer, existing structural cracks wider than 1/4" shall be repaired by gravity feeding Type II Crack Repair material into the prepared crack. First rout the concrete surface to form a 1/4" wide by 1/4" deep v-notch and clean the crack to remove all loose and foreign particles. Fill the crack with clean, dry sand and then pour structural crack repair binder into V-notch, completely filling crack. As binder penetrates crack, additional binder shall be applied to the V-notch.

3.06 TYPE III CRACK REPAIR – WATERPROOF INJECTION GROUT

A. Existing, leaking cracks 1/4" or smaller, identified as nonstructural by the Engineer, shall be repaired by pressure injecting a Type III Crack Repair material into the prepared crack. Seal crack surface with epoxy binder and install injection ports per manufacturer's recommendations. Holes drilled for injection ports shall not cut rebar. If rebar is encountered during drilling, the hole shall be abandoned and relocated, and the abandoned hole shall be patched immediately with non-shrink grout flush with the surface of the existing concrete. Once the surface sealing material has cured, clean, potable water shall be injected into the ports to flush the crack and provide the water necessary for chemical reaction of the grout. Immediately following injection of water, inject the crack with Type III Crack Repair material using standard pressure injection equipment as directed by the manufacturer.

B. All existing, leaking cracks larger than 1/4", not identified as structural by the Engineer, shall be repaired by first soaking oakum rope or open cell backer rod in waterproof injection grout, and then tightly packing the soaked oakum into the crack so as to completely fill the crack.

3.07 SPALL REPAIR PATCHING MATERIAL

A. All voids or spalled areas to be repaired shall be chipped back to sound concrete a minimum 1/8" deep, with a minimum surface profile of CSP-5, cleaned and repaired with spall repair patching material according to manufacturer's recommendations. All patching shall provide a final finished surface which is flat, level and even with the existing concrete surface. Repair mortar shall not be feathered to meet existing concrete surface. Prior to commencing repair surface preparation, saw cut or grind a 1/2" deep groove around the perimeter around the repair area, perpendicular to the finished concrete surface to provide a square shoulder to the repair area. Repair areas shall be formed using clean, straight rectangular edges where possible. Final patching on horizontal surfaces shall receive a broom finish consistent with the finish on the existing structure.

3.08 EXPANSION JOINT REPAIR SYSTEM

A. Thoroughly clean the concrete substrate and apply Expansion Joint Repair System according to the manufacturer's recommendations.

3.09 CURING

A. All repair products shall be cured in strict accordance with manufacturer recommendations. Wet curing is preferred where possible.

3.10 WORK IN CONFINED SPACES

A. The Contractor shall provide and maintain safe working conditions for all employees and subcontractors. Fresh air shall be supplied continuously to confined spaces through the combined use of existing openings, forced-draft fans and temporary ducts to the outside, or by direct air supply to individual workers. Fumes shall be exhausted to the outside from the lowest level of the confined space. Electrical fan motors shall be explosion-proof if in contact with fumes. No smoking or open fires shall be permitted in or near areas where volatile fumes may accumulate.

END OF SECTION

SECTION 03 60 00
GROUT

PART 1 – GENERAL

1.01 THE REQUIREMENT

A. Furnish all materials, labor, and equipment required to provide all grout used in concrete work and as bearing surfaces for base plates, and as grout repair for filter underdrains, in accordance with the Contract Documents.

1.02 RELATED WORK SPECIFIED ELSEWHERE

A. Requirements of related work are included in Division 01 and Division 02 of these Specifications.

1.03 REFERENCE SPECIFICATIONS, CODES AND STANDARDS

A. Without limiting the generality of the other requirements of the specifications, all work herein shall conform to the applicable requirements of the following documents. All referenced specifications, codes, and standards refer to the most current issue available at the time of Bid.

1. CRD-C 621 – Corps of Engineers Specification for Non-shrink Grout

2. ASTM C 33 – Standard Specification for Concrete Aggregates

3. ASTM C 109 – Standard Test Method for Compressive Strength of Hydraulic Cement Mortars (Using 2 inch or 50 mm cube Specimens)

4. ASTM C 531 – Standard Test Method for Linear Shrinkage and Coefficient of Thermal Expansion of Chemical-Resistant Mortars, Grouts and Monolithic surfacing's

5. ASTM C 579 – Test Method for Compressive Strength of Chemical-Resistant Mortars and Monolithic Surfacing's

6. ASTM C 827 – Standard Test Method for Early Volume Change of Cementitious Mixtures

7. ASTM C 1107 – Standard Specification for Packaged Dry, Hydraulic Cement Grout (Nonshrink)

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1.04 SUBMITTALS

A. Submit the following in accordance with Section 01 33 00 – Submittal Procedures.

1. Certified test results verifying the compressive strength and shrinkage and expansion requirements specified herein.

2. Manufacturer's literature containing instructions and recommendations on the mixing, handling, placement, and appropriate uses for each type of grout used in the work.

1.05 QUALITY ASSURANCE

A. Field Tests

1. Compression test specimens will be taken during construction from the first placement of each type of grout and at intervals thereafter as selected by the Engineer to ensure continued compliance with these Specifications. The specimens will be made by the Engineer or its representative.

   a. Compression tests and fabrication of specimens for cement grout and non-shrink grout will be performed as specified in ASTM C 109 at intervals during construction as selected by the Engineer. A set of three specimens will be made for testing at seven days, 28 days, and any additional times as appropriate.

   b. Compression tests and fabrication of specimens for epoxy grout will be performed as specified in ASTM C 579, Method B, at intervals during construction as selected by the Engineer. A set of three specimens will be made for testing at seven days and any other time as appropriate.

2. The cost of all laboratory tests on grout will be borne by the Owner, but the Contractor shall assist the Engineer in obtaining specimens for testing. The Contractor shall be charged for the cost of any additional tests and investigation on work performed which does not meet the specifications. The Contractor shall supply all materials necessary for fabricating the test specimens, at no additional cost to the Owner.

3. All grout, already placed, which fails to meet the requirements of these Specifications, is subject to removal and replacement at no additional cost to the Owner.

PART 2 – PRODUCTS

2.01 MATERIALS

A. Cement Grout

1. Cement grout shall be composed of Portland Cement conforming to ASTM C150, Type II for general use, and sand in the proportion specified in the Contract Documents and the minimum amount of water necessary to obtain the desired

consistency. Cement-sand ratio by weight shall be 1:2, i.e., two portions of sand by weight shall be used for one portion of cement by weight. Cement grout shall conform to NSF 61 requirements.

2. The minimum compressive strength at 28 days shall be 4000 psi.

3. For beds thicker than 1-1/2 inch and/or where free passage of grout will not be obstructed by coarse aggregate, 1-1/2 parts of coarse aggregate having a top size of 3/8 inch should be added. This stipulation does not apply for grout being swept in by a mechanism. These applications shall use a plain cement grout without coarse aggregate regardless of bed thickness.

4. Sand shall be cleaned and washed masonry sand per ASTM C144. When tested in accordance with ASTM C144, 100% of sand particles shall pass No. 4 Sieve (4.75mm) and not more than 4% of sand particles shall pass No. 200 Sieve (0.075mm).

B. Non-Shrink Grout

1. Non-shrink grout shall conform to CRD-C 621 and ASTM C 1107, Grade B or C when tested at a max. fluid consistency of 30 seconds per CDC 611/ASTM C939 at temperature extremes of 45°F and 90°F and an extended working time of 15 minutes. Grout shall have a min. 28-day strength of 7,000 psi. Non-shrink grout shall be, "Euco N-S" by the Euclid Chemical Company, "Sikagrout 212" by Sika Corporation, “Conspec 100 Non-Shrink Non-Metallic Grout” by Conspec, “MasterFlow 928” by Master Builders Solutions.

C. Epoxy Grout

1. Epoxy grout shall be "Sikadur 32 Hi-Mod" by Sika Corporation, "Duralcrete LV" by Tamms Industries, or "Euco #452 Series" by Euclid Chemical, “MasterEmaco ADH 1090 RS” by Master Builders Solutions.

2. Epoxy grout shall be modified as required for each application with aggregate per manufacturer's instructions.

2.02 CURING MATERIALS

A. Curing materials shall be as specified in Section 03 39 00 – Concrete Curing for cement grout and as recommended by the manufacturer for prepackaged grouts.

PART 3 – EXECUTION

3.01 GENERAL

A. The different types of grout shall be used for the applications stated below unless noted otherwise in the Contract Documents. Where grout is called for in the Contract

Documents which does not fall under any of the applications stated below, non-shrink grout shall be used unless another type is specifically referenced.

1. Cement grout shall be used for grout toppings and for patching of fresh concrete.

2. Non-shrink grout shall be used for grouting beneath base plates of structural metal framing.

3. Epoxy grout shall be used for bonding new concrete to hardened concrete.

B. New concrete surfaces to receive cement grout shall be as specified in Section 03 35 00 – Concrete Finishes, and shall be cleaned of all dirt, grease, and oil-like films. Existing concrete surfaces shall likewise be cleaned of all similar contamination and debris, including chipping, or roughening the surface if a laitance or poor concrete is evident. The finish of the grout surface shall match that of the adjacent concrete. Curing and protection of cement grout shall be as specified in Section 03 39 00 – Concrete Curing.

C. All mixing, surface preparation, handling, placing, consolidation, and other means of execution for prepackaged grouts shall be done according to the instructions and recommendations of the manufacturer.

D. The Contractor, through the manufacturer of a non-shrink grout and epoxy grout, shall provide on-site technical assistance upon request, at no additional cost to the Owner.

3.02 CONSISTENCY

A. The consistency of grouts shall be that necessary to completely fill the space to be grouted for the application. Dry pack consistency is such that the grout is plastic and moldable but will not flow.

3.03 MEASUREMENT OF INGREDIENTS

A. Measurements for cement grout shall be made accurately by volume using containers. Shovel measurement shall not be allowed.

B. Prepackaged grouts shall have ingredients measured by means recommended by the manufacturer.

3.04 GROUT INSTALLATION

A. Grout shall be placed quickly and continuously, shall completely fill the space to be grouted and be thoroughly compacted and free of air pockets. The grout may be poured in place, pressure grouted by gravity, or pumped. The use of pneumatic pressure or dry-packed grouting requires approval of the Engineer. For grouting beneath base plates, grout shall be placed from one side only and allowed to flow across to the open side to avoid air-entrapment.

END OF SECTION

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SECTION 05 05 23
METAL FASTENING

PART 1 – GENERAL

1.01 THE REQUIREMENT

A. Furnish all materials, labor, and equipment required to provide all metal welds and fasteners not otherwise specified, in accordance with the Contract Documents.

1.02 RELATED WORK SPECIFIED ELSEWHERE

A. Section 05 10 00 – Metal Materials

B. Section 05 13 00 – Stainless Steel

C. Section 05 12 00 – Structural Steel

1.03 REFERENCE SPECIFICATIONS, CODES, AND STANDARDS

A. Without limiting the generality of the other requirements of the specifications, all work herein shall conform to the applicable requirements of the following documents. All referenced specifications, codes, and standards refer to the most current issue available at the time of Bid.

1. International Building Code

2. AC 193 – Acceptance Criteria for Mechanical Anchors in Concrete Elements

3. AC 308 – Acceptance Criteria for Post-Installed Adhesive Anchors in Concrete Elements

4. ACI 318 – Building Code Requirements for Structural Concrete

5. ACI 355.2 – Qualifications of Post-Installed Mechanical Anchors in Concrete

6. ACI 355.4 – Qualifications of Post-Installed Adhesive Anchors in Concrete

7. AISC – RCSC Specification for Structural Joints Using High Strength Bolts

8. AISC – Code of Standard Practice

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9. AWS D1.1 – Structural Welding Code – Steel

10. AWS D1.2 – Structural Welding Code – Aluminum

11. AWS D1.6 – Structural Welding Code – Stainless Steel

12. Aluminum Association – Specifications for Aluminum Structures

13. ASTM A572/A572M-94C – Standard Specification for High Strength Low-Alloy Columbium-Vanadium Structural Steel Grade 50

14. ASTM A36 – Standard Specification for Carbon Structural Steel

15. ASTM A489 – Standard Specification for Eyebolts

16. ASTM A563 – Standard Specifications for Carbon and Alloy Steel Nuts

17. ASTM D1785 – Standard Specification for Polyvinyl Chloride (PVC) Plastic Pipe

18. ASTM E3121 – Standard Test Methods for Field Testing of Anchors in Concrete or Masonry

19. ASTM F436 – Standard Specification for Hardened Steel Washers

20. ASTM F467 – Standard Specification for Nonferrous Nuts for General Use

21. ASTM F593 – Standard Specification for Stainless Steel Bolts; Hex Cap Screws, and Studs

22. ASTM F594 – Standard Specification for Stainless Steel Nuts

23. ASTM F1554 – Standard Specification for Anchor Bolts, Steel, 36, 55, and 105-ksi Yield Strength

24. ASTM F3125 – Standard Specification for High Strength Structural Bolts, Steel and Alloy Steel, Heat Treated, 120 ksi and 150 ksi Minimum Tensile Strength, Inch and Metric Dimension

1.04 SUBMITTALS

A. Submit the following in accordance with Section 01 33 00 – Submittal Procedures.

1. Shop Drawings providing the fastener's manufacturer and type and certification of the fastener's material and capacity.

2. Anchor design calculations sealed by a Professional Engineer currently registered in the State of Arizona. Only required if design not shown on Contract Drawings.

3. A current Evaluation Report shall be submitted for all anchors that will be considered for use on this project.

4. Manufacturer’s installation instructions.

5. Copy of valid certification for each person who is to perform field welding.

6. Certified weld inspection reports, when required.

7. Welding procedures.

8. Installer qualifications.

9. Certification of Installer Training.

10. Inspection Reports.

11. Results of Anchor Proof Testing.

12. Manufacturer's Literature for Resistance of Adhesive to Appropriate Chemical Exposure, where deemed necessary.

1.05 QUALITY ASSURANCE

A. Fasteners not manufactured in the United States shall be tested and certification provided with respect to specified quality and strength standards. Certifications of origin shall be submitted for all U.S. fasteners supplied on the project.

B. Evaluation Report: A current Evaluation Report from an independent testing and evaluation agency (ITEA) shall be submitted for all anchors that will be used on this project. The ITEA producing the evaluation report shall be accredited in accordance with the requirements for ITEA's in ACI 355.2 (mechanical anchors) or 355.4 (adhesive anchors). Acceptable ITEA's include but are not necessarily limited to the International Code Council Evaluation Service (ICC-ES) and the International Association of Plumbing and Mechanical Officials Uniform Evaluation Service (IAPMO-UES).

C. Installer Qualifications: All concrete anchors shall be installed by an Installer with at least three years of experience performing similar installations. Concrete adhesive anchor installers for anchor installations shall be certified as an Adhesive Anchor Installer in accordance with ACI-CRSI Adhesive Anchor Installation Certification Program.

D. Installer Training: For concrete anchors, conduct a thorough training with the manufacturer or the manufacturer's representative for the Installer on the project. Training shall consist of a review of the complete installation process to include but not be limited to the following:

1. Hole drilling procedure.

2. Hole preparation and cleaning technique.

3. Adhesive injection technique and dispenser training/maintenance.

4. Concrete adhesive anchor preparation and installation.

5. Proof loading/torquing.

6. Provide a list of names of all installers who are trained by the Manufacturer's Field Representative on this jobsite prior to installation of products. Record must include the installer name, date of training, products included in the training and trainer name and contact information.

7. Provide a copy of the current ACI/CRSI "Adhesive Anchor Installer" certification cards for all installers.

E. All steel welding shall be performed by welders certified in accordance with AWS D1.1. All aluminum welding shall be performed by welders certified in accordance with AWS D1.2. All stainless-steel welding shall be performed by welders certified in accordance with AWS D1.6. Certifications of field welders shall be submitted prior to performing any field welds.

F. Welds and high strength bolts used in connections of structural steel will be visually inspected in accordance with Article 3.04.

G. The Owner may engage an independent testing agency to perform testing of welded connections and to prepare test reports in accordance with AWS. Inadequate welds shall be corrected or redone and retested to the satisfaction of the Engineer and/or an acceptable independent testing laboratory, at no additional cost to the Owner.

H. Provide a welding procedure for each type and thickness of weld. For welds that are not prequalified, include a Performance Qualification Report. The welding procedure shall be given to each welder performing the weld. The welding procedure shall follow the format in Annex E of AWS D1.1 with relevant information presented.

I. Special inspections for concrete adhesive anchors shall be conducted in accordance with the requirements of the ESR published by the manufacturer. Downward installations require periodic inspection and horizontal and overhead installations require continuous inspection.

PART 2 – PRODUCTS

2.01 ANCHOR RODS

A. Anchor rods shall conform to ASTM F1554 Grade 55 except where stainless steel or other approved anchor rods are shown on the Drawings or stated herein. Anchor rods shall have hexagonal heads and shall be supplied with hexagonal nuts meeting the requirements of ASTM A563 Grade A. Washers shall meet the requirements of ASTM A436.

B. All anchors into concrete shall be cast-in-place anchors unless specifically referenced otherwise on Drawings.

C. Where anchor rods are used to anchor galvanized steel or are otherwise specified to be galvanized, anchor rods and nuts shall be hot dipped galvanized in accordance with ASTM F1554.

D. Where pipe sleeves around anchor rods are shown on the Drawings, pipe sleeves shall be cut from Schedule 40 PVC plastic piping meeting the requirements of ASTM D1785.

2.02 HIGH STRENGTH BOLTS

A. High strength bolts and associated nuts and washers shall be in accordance with ASTM F3125, Grade A325 Type 1 or Grade F1852 Type 1. Bolts, nuts, and washers shall meet the requirements of RCSC “Specification for Structural Joints Using High Strength Bolts”.

B. Where high strength bolts are used to connect galvanized steel or are otherwise specified to be galvanized, bolts, nuts, and washers shall be hot dipped galvanized in accordance with ASTM A325.

2.03 STAINLESS STEEL BOLTS

A. Stainless steel bolts shall conform to ASTM F-593 for alloy groups 1 and 2, Condition CW1, or ASTM F-3125. All fasteners for aluminum and stainless steel members that are underwater, in confined areas containing fluid, and in corrosive environments shall be Type 316 stainless steel unless noted otherwise. Fasteners for aluminum and stainless-steel members not subject to the above conditions shall be Type 304 stainless steel unless otherwise noted.

B. Stainless steel bolts shall have hexagonal heads with a raised letter or symbol on the bolts indicating the manufacturer and shall be supplied with hexagonal nuts meeting the requirements of ASTM F594. Nuts, washers, and lock washers shall be of the same alloy as the bolts.

2.04 CONCRETE ANCHORS

A. General

1. Where concrete anchors are called for on the Drawings, one of the types listed below shall be used. Where one of the types listed below is specifically called for on the Drawings, only that type shall be used. If no specific type is indicated on the Drawings, the concrete anchor shall be a cast-in-place anchor. The determination of anchors equivalent to those listed below shall be based on test data performed by an approved independent testing laboratory. Two types of anchors shall be used:

a. Mechanical anchors include any of the following anchors:

1) Expansion anchors shall be mechanical anchors of the wedge, sleeve, or drop-in type that are set by expanding against the sides of the drilled hole.

2) Screw anchors are mechanical anchors that derive tensile holding strength by the mechanical interlock provided by threads cutting into the concrete during installation. Screw anchors shall be one-piece, heavy duty screw anchors with a finished head.

b. Adhesive anchors shall consist of threaded rods anchored with an adhesive system into hardened concrete. Adhesive anchors shall be two-part injection type using the manufacturer's static mixing nozzle and shall be supplied as an entire system.

2. Adhesive anchors shall conform to the requirements of ACI 355.4 or alternately to AC 308. Mechanical anchors shall conform to the requirements of ACI 355.2 or alternately to AC 193. Anchors in Seismic Design Categories C through F shall conform to the International Building Code and ACI 318 Chapter 17 requirements as applicable, including seismic test requirements.

3. Engineer's approval is required for use of concrete anchors in locations other than those shown on the Drawings.

B. Wedge Anchors:

a. Do not use when subjected to vibration.

b. Do not use in exterior locations or locations subjected to freezing.

c. Do not use in submerged, intermittently submerged, or buried locations.

d. Suitable for use in overhead applications.

C. Screw Anchors:

a. Do not use when subjected to vibration.

b. Do not use in exterior locations or locations subjected to freezing.

c. Do not use in submerged, intermittently submerged, or buried locations.

d. Suitable for use in overhead applications.

D. Sleeve Anchors:

a. Do not use when subjected to vibration.

b. Do not use in exterior locations or locations subjected to freezing.

c. Do not use in submerged, intermittently submerged, or buried locations.

d. Suitable for use in overhead applications.

E. Undercut Anchors:

a. Suitable for use where subjected to vibration.

b. Do not use in exterior locations or locations subjected to freezing.

c. Do not use in submerged, intermittently submerged, or buried locations.

d. Suitable for use in overhead applications.

F. Adhesive Anchors in Concrete:

a. Suitable for use where subjected to vibration.

b. Suitable for use in exterior locations or locations subjected to freezing.

c. Suitable for use in submerged, intermittently submerged, or buried locations.

d. Do not use in overhead applications, unless otherwise shown or approved by Engineer.

e. Suitable for use in chemical areas provided manufacturer's literature confirms appropriate chemical resistance.

f. Do not use for pipe hangers, unless otherwise shown or approved by Engineer.

G. Concrete Anchor Design:

1. Basis of design shall include the following design parameters:

a. Actual compressive strength of concrete.

b. Cracked concrete conditions.

c. Dry or water saturated installation conditions.

d. Base material temperature between 40- and 104-degrees Fahrenheit.

e. Installation with hammer drill or hollow-drill bit system drilling methods.

f. Installation not prior to 21-day minimum age of concrete.

2. An anchor design consists of specifying anchor size, quantity, spacing, edge distance and embedment to resist all applicable loads. Where an anchor design is indicated on the Drawings, the anchors shall be installed to the prescribed size, spacing, embedment depth, and edge distance. If all parts of an anchor design are provided on the Drawings except embedment depth, the Contractor shall provide the embedment depth as indicated in Paragraph B.3 unless otherwise directed by

the Engineer. Where an anchor design is not indicated on the Drawings, the Contractor shall provide the anchor design per the requirements listed below.

a. The Contractor shall submit design with sealed calculations and drawings performed by an Engineer currently registered in the State of Arizona. Anchors shall be of a type recommended by the anchor manufacturer for use in cracked concrete and shall be designed by the Contractor in accordance with ACI 318 Chapter 17.

b. Embedment Depth

1) Minimum anchor embedment shall be as indicated on the Drawings unless anchor design is stipulated to be by Contractor or equipment provider. The provider of equipment including pumps, blowers, etc. shall provide anchor design including size of anchors, pattern, and embedment depth. If the equipment provider is unable to provide design of embedment depth, the design shall be provided by the contractor using the loads furnished by the equipment provider. Although all manufacturers listed are permitted, the embedment depth indicated on the Drawings is based on ““Pure 110+ by DeWalt” ESR 3298 issued 7/2023. If the contractor submits one of the other concrete adhesive anchors listed, the Engineer shall evaluate the required embedment and the Contractor shall provide the required embedment depth stipulated by the Engineer specific to the approved dowel adhesive.

2) Where the embedment depth is not shown on the Drawings, concrete anchors shall be embedded no less than the manufacturer’s standard embedment (mechanical anchors) or to provide a minimum allowable bond strength equal to the allowable yield capacity of the rod according to the manufacturer (adhesive anchors).

3) The embedment depth shall be determined using the actual concrete compressive strength, a cracked concrete state, maximum long-term temperature of 110 degrees F, and maximum short-term temperature of 140 degrees F. In no case shall the embedment depth be less than the minimum or more than the maximum stated in the manufacturer’s literature.

H. Anchors:

1. Mechanical Anchors:

a. Wedge Anchors: Wedge anchors shall be “Kwik Bolt TZ” by Hilti, Inc., “Strong-Bolt 2” by Simpson Strong-Tie Co. or “Power-Stud+SD1” or “Power-Stud+ SD-2” by DeWalt.

b. Screw Anchors: Screw anchors shall be “KWIK HUS-EZ”, “KWIK HUS-EZ-I”, or “KWIK HUS-EZ CRC” by Hilti, Inc., “Titen HD” or “Stainless Steel Titen HD” by Simpson Strong-Tie Co., or “Screw-Bolt+” by DeWalt.

c. Sleeve Anchors: Sleeve anchors shall be “HSL-3 Heavy Duty Sleeve Anchor” by Hilti, Inc. or “Power-Bolt +” by DeWalt.

d. Shallow Embedment Internally Threaded Insert (3/4” max embedment): “Mini-Undercut +Anchor” by DeWalt, “HDI-P-TZ” by Hilti, Inc. or approved equal.

e. Concrete Undercut Anchors: Concrete undercut anchors shall be “HDA Undercut Anchors” by Hilti, Inc, “DUC Ductile Undercut Anchor”, by USP Structural Connectors, or approved equal.

f. Mechanical anchor systems shall comply with ACI 355.2 or alternatively the latest revision of AC 193 and shall have a valid evaluation report in accordance with the applicable building code.

2. Adhesive Anchors:

a. Adhesive anchors shall be “HIT HY-200 Adhesive Anchoring System” by Hilti, Inc., “SET-3G Epoxy Adhesive Anchors” by Simpson Strong-Tie Co., or “Pure 110+ Epoxy Adhesive Anchor System” by DeWalt.

b. Adhesive anchor systems shall be IBC compliant and capable of resisting short term wind and seismic loads (Seismic Design Categories A through F) as well as long term and short term sustained static loads in both cracked and uncracked concrete in all Seismic Design Categories. Adhesive anchor systems shall comply with ACI 355.4 or alternatively the latest revision of AC308 and shall have a valid evaluation report in accordance with the applicable building code. **No or equal products will be considered unless prequalified and approved by the Engineer and Owner**.

I. Concrete Anchor Materials:

1. Concrete anchors used to anchor structural steel shall be a threaded steel rod per anchor manufacturer’s recommendations but shall not have a yield strength (fy) less than 58 ksi nor an ultimate strength (fu) less than 72.5 ksi, unless noted otherwise. Where steel to be anchored is galvanized, concrete anchors shall also be galvanized unless otherwise indicated on the Drawings.

2. Concrete anchors used to anchor aluminum, FRP, or stainless steel shall be manufactured from stainless steel unless noted otherwise. All underwater fasteners, fasteners in confined areas containing fluid, and fasteners in corrosive environments shall be Type 316 stainless steel unless noted otherwise. Fasteners for aluminum and stainless-steel members not subject to the above conditions shall be Type 304 stainless steel unless otherwise noted.

3. Nuts, washers, lock washers and other hardware shall be of a material to match the anchors.

2.05 WELDS

A. Electrodes for welding structural steel and all ferrous steel shall comply with AWS Code, using E70 series electrodes for shielded metal arc welding (SMAW), or F7 series electrodes for submerged arc welding (SAW).

B. Electrodes for welding aluminum shall comply with the Aluminum Association Specifications and AWS D1.2.

C. Electrodes for welding stainless steel and other metals shall comply with AWS D1.6.

2.06 EYEBOLTS

A. Eyebolts shall conform to ASTM A489 unless noted otherwise.

2.07 ANTISEIZE LUBRICANT

A. Antiseize lubricant shall be C5-A Anti-Seize by Loctite Corporation, Molykote P-37 Anti-Seize Paste by Dow Corning, 3M Anti-Seize by 3M, or equal.

PART 3 – EXECUTION

3.01 MEASUREMENTS

A. The Contractor shall verify all dimensions and review the Drawings and shall report any discrepancies to the Engineer for clarification prior to starting fabrication.

3.02 FASTENER INSTALLATION

A. Anchor Rods, Concrete Anchors, and Masonry Anchors

1. Anchor rods shall be installed in accordance with AISC "Code of Standard Practice" by securing rods where concrete will be placed and positioned by means of a rigidly secured template. Overhead anchors, and base plates or elements being anchored, shall be shored as required and securely held in place during anchor setting to prevent movement during anchor installation. Movement of anchors during curing is prohibited.

2. The Contractor shall verify that all concrete and masonry anchors have been installed in accordance with the manufacturer's recommendations and that the capacity of the installed anchor meets or exceeds the specified safe holding capacity.

3. Post-installed concrete anchors shall not be used in place of cast-in-place anchor rods without Engineer's approval.

4. All stainless-steel threads shall be coated with anti-seize lubricant.

B. High Strength Bolts

1. All bolted connections for structural steel shall use high strength bolts. High strength bolts shall be installed in accordance with RCSC “Specification for Structural Joints Using High Strength Bolts”. All bolted joints shall be Type N, snug-tight, bearing connections in accordance with AISC Specifications unless noted otherwise on the Drawings.

C. Stainless Steel Bolts

1. Where connections indicate the use of stainless-steel bolts, the bolts shall be installed to the snug tight condition. Connections shall include stainless steel washers under both the bolt head and the nut head. Lock washers shall be utilized for all connections and shall be placed under the nut head.

D. Concrete Anchors

1. Concrete at time of anchor installation shall be a minimum age of 21 days, have a minimum compressive strength of 2500 psi, and ambient temperature at time of installation shall be at least 50 degrees F.

2. Concrete Anchor Testing:

a. At all locations, at least 10 percent of all concrete anchors installed shall be proof tested to 80% of the yield strength of the anchor rod, with a minimum of one tested anchor per anchor group.

b. Contractor shall submit a plan and schedule indicating locations of anchors to be proof tested, load test values and proposed anchor testing procedure (including a diagram of the testing equipment proposed for use) to the Engineer for review prior to conducting any testing. Proof testing of anchors shall be in accordance with ASTM E3121 for the static tension test. If additional tests are required, inclusion of these tests shall be as stipulated on Contract Drawings.

c. Where Contract Documents indicate anchor design to be the Contractor’s responsibility, the Contractor shall submit a plan and schedule indicating locations of anchors to be proof tested and load test values, sealed by a Professional Engineer currently registered in the State of Arizona. Documentation shall also be submitted indicating the Contractor’s proof testing procedures have been reviewed and the proposed procedures are acceptable. Proof testing procedures shall be in accordance with ASTM E3121.

d. Concrete Anchors shall have no visible indications of displacement or damage during or after the proof test. Concrete cracking in the vicinity of the anchor after loading shall be considered a failure. Anchors exhibiting damage shall be removed and replaced. If more than 5 percent of tested anchors fail, then 100 percent of anchors shall be proof tested.

e. Proof testing of concrete anchors shall be performed by an independent testing laboratory hired directly by the Contractor and approved by the Engineer. The Contractor shall be responsible for costs of all proof testing, including additional testing required due to previously failed tests.

3. All concrete anchors shall be installed in strict conformance with the manufacturer's printed installation instructions. A representative of the manufacturer shall be on site when required by the Engineer.

4. All holes shall be drilled in accordance with the manufacturer's instructions except that cored holes shall not be allowed unless specifically approved by the Engineer. If cored holes are allowed, cored holes shall be roughened in accordance with manufacturer requirements. If hammer drills are used to drill holes in slabs, the drills shall be equipped with a depth stop device. The depth of hole shall be the minimum depth required for anchor embedment and development of required capacity. Prior to drilling, the contractor shall use GPR or other means to confirm anchor installation will not interfere with reinforcement or embedded items, especially electrical conduit. Thoroughly clean drill holes of all debris, drill dust, and water in accordance with the manufacturer's instructions prior to installation of adhesive and threaded rod unless otherwise recommended by the manufacturer. Degree of hole dampness shall be in strict accordance with manufacturer recommendations. Installation conditions shall be either dry or water saturated. Water filled or submerged holes shall not be permitted unless specifically approved by the Engineer. Injection of adhesive into the hole shall be performed to minimize the formation of air pockets in accordance with the manufacturer's instructions. Wipe rod free from oil that may be present from shipping or handling.

5. All adhesive anchor installations shall be conducted by a certified Adhesive Anchor Installer as certified by ACI/CSRI per ACI 318-19 17.8.2.2. Current AAI Certificate must be submitted to the Engineer of Record prior to commencement of any adhesive anchor installations.

E. Other Bolts

1. All dissimilar metal shall be connected with appropriate fasteners and shall be isolated via an approved dielectric.

2. All stainless-steel bolts shall be coated with anti-seize lubricant.

3.03 WELDING

A. All welding shall comply with AWS Code for procedures, appearance, quality of welds, qualifications of welders and methods used in correcting welded work.

B. Welded stud connectors shall be installed in accordance with AWS D1.1.

C. Welds shown on the Drawings with a field weld symbol shall be field welded. All other welds shall be shop welded unless specifically approved by the Engineer.

3.04 INSPECTION

A. High strength bolting will be visually inspected in accordance with RCSC “Specification for Structural Joints Using High Strength Bolts”. Rejected bolts shall be either replaced or retightened as required.

B. Field welds will be visually inspected in accordance with AWS Codes. Inadequate welds shall be corrected or redone as required in accordance with AWS Codes.

C. Post-installed concrete anchors shall be inspected as required by ACI 318.

3.05 CUTTING OF EMBEDDED REBAR

A. The Contractor shall not cut embedded rebar cast into concrete during installation of post-installed anchors without prior approval of the Engineer.

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SECTION 05 10 00
METAL MATERIALS

PART 1 – GENERAL

1.01 THE REQUIREMENT

A. Metal materials not otherwise specified shall conform to the requirements of this Section.

1.02 RELATED WORK SPECIFIED ELSEWHERE

A. Materials for fasteners are included in Section 05 05 23 – Metal Fastening.

B. Requirements for specific products made from the materials specified herein are included in other sections of the Specifications. See the section for the specific item in question.

1.03 REFERENCE SPECIFICATIONS, CODES AND STANDARDS

A. ASTM A36 – Standard Specification for Structural Steel

B. ASTM A47 – Standard Specification for Malleable Iron Castings

C. ASTM A48 – Standard Specification for Gray Iron Castings

D. ASTM A53 – Standard Specification for Pipe, Steel, Black and Hot-Dipped, Zinc-Coated Welded and Seamless

E. ASTM A167 – Standard Specification for Stainless and Heat-Resisting Chromium-Nickel Steel Plate, Sheet, and Strip

F. ASTM A276 – Standard Specification for Stainless and Heat-Resisting Steel Bars and Shapes

G. ASTM A307 – Standard Specification for Carbon Steel Externally Threaded Standard Fasteners

H. ASTM A446 – Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) by the Hot-Dip Process, Structural (Physical) quality

I. ASTM A500 – Standard Specification for Cold-Formed Welded and Seamless Carbon Steel Structural Tubing in Rounds and Shapes

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J. ASTM A501 – Standard Specification for Hot-Formed Welded and Seamless Carbon Steel Structural Tubing

K. ASTM A529 – Standard Specification for Structural Steel with 42 000 psi (290 Mpa) Minimum Yield Point (1/2 in. (12.7 mm) Maximum Thickness)

L. ASTM A536 – Standard Specification for Ductile Iron Castings

M. ASTM A570 – Standard Specification for Hot-Rolled Carbon Steel Sheet and Strip, Structural Quality

N. ASTM A572 – Standard Specification for High-Strength Low-Alloy Columbium-Vanadium Structural Steel

O. ASTM A992 – Standard Specification for Structural Steel Shapes

P. ASTM A666 – Standard Specification for Austenitic Stainless Steel, Sheet, Strip, Plate, and Flat Bar for Structural Applications

Q. ASTM A1085 – Standard Specification for Cold-Formed Welded Carbon Steel Hollow Structural Sections (HSS)

R. ASTM B26 – Standard Specification for Aluminum-Alloy Sand Castings

S. ASTM B85 – Standard Specification for Aluminum-Alloy Die Castings

T. ASTM B108 – Standard Specification for Aluminum-Alloy Permanent Mold Castings

U. ASTM B138 – Standard Specification for Manganese Bronze Rod, Bar, and Shapes

V. ASTM B209 – Standard Specification for Aluminum-Alloy Sheet and Plate

W. ASTM B221 – Standard Specification for Aluminum-Alloy Extruded Bars, Rods, Wire, Shapes, and Tubes

X. ASTM B308 – Standard Specification for Aluminum-Alloy Standard Structural Shapes, Rolled or Extruded

Y. ASTM B574 – Standard Specification for Nickel-Molybdenum-Chromium Alloy Rod

Z. ASTM F468 - Standard Specification for Nonferrous Bolts, Hex Cap Screws, and Studs for General Use

AA. ASTM F593 – Standard Specification for Stainless Steel Fasteners

1.04 SUBMITTALS

A. Material certifications shall be submitted along with any shop drawings for metal products and fabrications required by other sections of the Specifications.

1.05 QUALITY ASSURANCE

A. Owner may engage the services of a testing agency to test any metal materials for conformance with the material requirements herein. If the material is found to be in conformance with Specifications the cost of testing will be borne by the Owner. If the material does not conform to the Specifications, the cost of testing shall be paid by the Contractor and all materials not in conformance as determined by the Engineer shall be replaced by the Contractor at no additional cost to the Owner. In lieu of replacing materials, the Contractor may request further testing to determine conformance, but any such testing shall be paid for by the Contractor regardless of outcome of such testing.

PART 2 – PRODUCTS

2.01 CARBON AND LOW ALLOY STEEL

A. Material types and ASTM designations shall be as listed below:

Steel W, C, and MC Shapes	A992
Steel HP Shapes	A572 Grade 50
Steel M and S shapes and Angles, Bars, and Plates	A36
Rods	F 1554 Grade 36
Pipe - Structural Use	A53 Grade B
Hollow Structural Sections	A500 Grade C or A1085 Grade A
Cold-Formed Steel Framing	A 653

2.02 STAINLESS STEEL

A. All stainless steel fabrications exposed to underwater service shall be Type 316. All other stainless steel fabrications shall be Type 304, unless noted otherwise.

B. Material types and ASTM designations are listed below:

Plates and Sheets	ASTM A167 or A666 Grade A
Structural Shapes	ASTM A276
Fasteners (Bolts, etc.)	ASTM F593

2.03 ALUMINUM

A. All aluminum shall be alloy 6061-T6, unless otherwise noted or specified herein.

B. Material types and ASTM designations are listed below:

Structural Shapes	ASTM B308
Castings	ASTM B26, B85, or B108
Extruded Bars	ASTM B221 - Alloy 6061
Extruded Rods, Shapes and Tubes	ASTM B221 - Alloy 6063
Plates	ASTM B209 - Alloy 6061
Sheets	ASTM B221 - Alloy 3003

C. All aluminum structural members shall conform to the requirements of Section 05 14 00 – Structural Aluminum.

D. All aluminum shall be provided with mill finish unless otherwise noted.

E. Where bolted connections are indicated, aluminum shall be fastened with stainless steel bolts.

2.04 DISSIMILAR METALS

A. Dielectric isolation shall be installed wherever dissimilar metals are connected according to the following table.

	Zinc	**Galvanized Steel**	**Aluminum**	**Cast Iron**	**Ductile Iron**	**Mild Steel/ Carbon Steel**	**Copper**	**Brass**	**Stainless Steel**
Zinc			●	●	●	●	●	●	●
Galvanized Steel			●	●	●	●	●	●	●
Aluminum	●	●		●	●	●	●	●	●
Cast Iron	●	●	●				●	●	●
Ductile Iron	●	●	●				●	●	●
Mild Steel/ Carbon Steel	●	●	●				●	●	●
Copper	●	●	●	●	●	●			●
Brass	●	●	●	●	●	●			●

	Zinc	Galvanized Steel	Aluminum	Cast Iron	Ductile Iron	Mild Steel/ Carbon Steel	Copper	Brass	Stainless Steel
Stainless Steel	●	●	●	●	●	●	●	●	

1. "●" signifies dielectric isolation is required between the two materials noted.
2. Consult Engineer for items not listed in table.

PART 3 – EXECUTION (NOT USED)

END OF SECTION

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SECTION 05 13 00
STAINLESS STEEL

PART 1 – GENERAL

1.01 SECTION INCLUDES

A. The Contractor shall furnish, install and erect the stainless steel work as shown on the Contract Drawings and specified herein.

B. Stainless steel work shall be furnished complete with all accessories, mountings and appurtenances of the type of stainless steel and finish as specified or required for a satisfactory installation.

1.02 RELATED WORK SPECIFIED ELSEWHERE

A. Section 01 33 00 – Submittal Procedures

B. Section 05 10 00 – Metal Materials

C. Section 05 05 23 – Metal Fastening

D. Section 05 50 00 – Metal Fabrications

1.03 REFERENCES

A. ASTM A193 – Alloy-Steel and Stainless Steel Bolting Materials for High-Temperature Service

B. ASTM A194 – Carbon and Alloy Steel Nuts for Bolts for High-Pressure and High-Temperature Service

C. ASTM A262 – Practice for Detecting Susceptibility to Intergranular Attack in Austenitic Stainless Steel

D. ASTM A276 – Stainless and Heat-Resisting Steel Bars and Shapes

E. ASTM A314 – Stainless and Heat-Resisting Steel Billets and Bars for Forging

F. ASTM A380 – Practice for Cleaning and Descaling Stainless Steel Parts, Equipment and Systems

G. ASTM A473 – Stainless and Heat-Resisting Steel Forgings

H. ASTM A666 – Austenitic Stainless Steel, Sheet, Strip, Plate and Flat Bar

I. ASTM A774 – Stainless Steel Pipe Fittings

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J. ASTM A778 – Stainless Steel Pipe

K. ASTM F593 – Stainless Steel Bolts, Hex Cap Screws and Studs

L. ASTM F594 – Stainless Steel Nuts

M. ANSI/ASME B1.1 – Unified Inch Screw Thread (UN and UNR Thread Form)

1.04 TESTS

A. All stainless steel materials including stainless test welds, shall be checked for compliance with tests for susceptibility to intergranular attack. Such tests shall be Practices A, B and E of ASTM A262. Detailed procedures for the tests shall be submitted to the Engineer for approval prior to start of work. Practice A shall be used only for acceptance of materials but not for rejection of materials, and shall be used for screening material intended for testing in Practice B and Practice E. The maximum acceptable corrosion rate under Practice B shall be 0.004 inch per month, rounded off to the third decimal place. If the certified mill report indicates that such test has been satisfactory performed, the fabricator may not be required to repeat the test. Material passing Practice E shall be acceptable.

B. Sample selection for the susceptibility to intergranular attack tests shall be as follows:

1. One (1) sample per heat treatment lot for plates and forgings;

2. One (1) sample per each Welding Procedure Qualification regardless of the joint design;

3. If tests indicate a reduction in corrosion resistance, welding procedure shall be adjusted or heat treatment determined as needed to restore required corrosion resistance.

4. The samples so chosen shall have received all the post-weld heat treatments identical to the finished part.

1.05 SUBMITTALS

A. The Contractor shall prepare and submit for approval shop drawings for all stainless steel fabrication in accordance with Section 01 33 00 – Submittal Procedures.

B. Submittals shall include, but not be limited to, the following:

1. Certified test reports for susceptibility to intergranular attack.

2. Affidavit of compliance with type of stainless steel shown on the Contract Drawings or specified herein.

3. Certified weld inspection reports.

4. Cleaning and handling of stainless steel in accordance with Paragraph 3.04, Cleaning and Handling.

C. Samples of finish, on each type of stainless steel to be furnished, shall be submitted to the Engineer upon request.

1.06 QUALITY ASSURANCE

A. Shop inspections may be made by the Engineer. The Contractor shall give ample notice to the Engineer prior to the beginning of any stainless steel fabrication work so that inspection may be provided. The Contractor shall furnish all facilities for the inspection of materials and workmanship in the shop, and the inspectors shall be allowed free access to the necessary parts of the works.

B. Inspectors shall have the authority to reject any materials or work which does not meet the requirements of the Contract Drawings or the Specifications.

C. Inspection at the shop is intended as a means of facilitating the work and avoiding errors, but is expressly understood that it will in no way relieve the Contractor from his responsibility for furnishing proper materials or workmanship.

1.07 HANDLING, STORAGE AND DELIVERY

A. Mechanical damage (e.g., scratches and gouges) to the stainless steel material shall not be permitted and is cause for rejection. Care shall be taken in the material handling since such mechanical damage will result in the passive oxide film being "punctured" leading to a possible lower resistance to the initiation of corrosion than the surrounding chemically-passivated surface.

B. Stainless steel plates and sheets shall be stored vertically in racks and not be dragged out of the racks or over one another. Racks shall be protected to prevent iron contamination.

C. Heavy stainless steel plates shall be carefully separated and chocked with wooden blocks so that the forks of a fork-lift could be inserted between plates without mechanically damaging the surface.

D. Stainless steel plates and sheets laid out for use shall be off the floor and be divided by wooden planks to prevent surface damage and to facilitate subsequent handling.

E. Plate clamps, if used, shall be used with care as the serrated faces can dig in, indent and gouge the surface.

F. Stainless steel fabrications shall be loaded in such a manner that they may be transported and unloaded without being overstressed, deformed or otherwise damaged.

G. Stainless steel fabrications and packaged materials shall be protected from corrosion and deterioration and shall be stored in a dry area. Materials stored outdoors shall be

supported above ground surfaces on wood runners and protected with approved effective and durable covers.

H. Stainless steel fabrications shall not be placed in or on a structure in a manner that might cause distortion or damage to the fabrication. The Contractor shall repair or replace damaged stainless steel fabrications or materials as directed by the Engineer.

1.08 FIELD MEASUREMENTS

A. The Contractor shall verify all dimensions and shall make any field measurements necessary and shall be fully responsible for accuracy and layout of the work.

B. The Contractor shall review the Contract Drawings and any discrepancies shall be reported to the Engineer for clarification prior to starting fabrication.

PART 2 – PRODUCTS

2.01 MATERIALS AND FINISHES

A. Stainless steel shall be Type 304 unless it is used for underwater service. Stainless steel for underwater service shall be Type 316. Minimum mechanical finish shall be No. 4 as stated in Table 2 unless otherwise noted on the Contract Drawings.

B. The basic mill forms (sheet, strip, plate and bar) are classified by size as shown on Table 1. Tables 2, 3 and 4 identify finishes and conditions in which sheet, bar and plate are available.

C. Tables 2, 3 and 4 show numbered finishes and conditions for sheet, bar and plate. While there are no specific designations for polished finishes on bar or plate, the sheet finish designations are used to describe the desired effect. This also applies to finishes on ornamental tubing.

D. There are three standard finishes for strip, which are broadly described by the finishing operations employed:

1. No. 1 Strip Finish

    a. No. 1 strip finish is approximately the same as No. 2D Sheet Finish. It varies in appearance from dull gray matte to a fairly reflective surface, depending largely on alloy composition and amount of cold reduction.

2. No. 2 Strip Finish is approximately the same as a No. 2B sheet finish. It is smoother, more reflective than No. 1, and likewise varies with alloy composition.

3. Bright annealed finish is a highly reflective finish that is retained by final annealing in a controlled atmosphere furnace.

Table 1: Classification of Stainless Steel Product Form

Item	Description	Dimensions		
		Thickness	Width	Diameter or Size
Sheet	Coils and cut length:			
	Mill finishes Nos. 1, 2D and 2B	under 3/16"	24" and over all widths	-
	Polished finishes Nos. 3, 4, 6, 7 & 8			
Strip	Cold finished, coils or cut lengths:			
	Polished finishes Nos. 3, 4, 6,7 & 8	under 3/16"	under 24" all widths	-
Plate	Flat rolled or forged	3/16" and over	over 10"	-
Bar	Hot finished rounds, squares, octagons and hexagons	-	-	1/4" and over
	Hot finished flats	1/8" to 8" incl.	1/4" to 10" incl.	-
	Cold finished rounds, squares, octagons and hexagons	-	-	over 1/8"
	Cold finished flats	1/8" to 4-1/2"	3/8" to 4-1/2"	-
Wire	Cold finishes only: (in coil)			
	Round, square, octagon, hexagon and flat wire	under 3/16"	under 3/8"	-
Pipe & Tubing	Several different classifications, with differing specifications, are available.			
Extrusion	Not considered “standard” shapes. Currently limited in size to approximately 6-1/2" diameter or structurals.			

Table 2: Standard Mechanical Sheet Finishes

Unpolished or Rolled Finishes		Polished Finishes	
No. 1	A rough dull surface which results from hot rolling to the specified thickness followed by annealing and descaling.	**No. 3**	An intermediate polish surface obtained by finishing with a 100 grit abrasive. Generally used where a semi-finished polished surface is required. A No. 3 finish usually receives additional polishing during fabrication
No. 2D	A dull finish which results from cold rolling followed by annealing and descaling, and may perhaps get a final light roll pass through unpolished rolls. A 2D finish is used where appearance is of no concern.	**No. 4**	A polished surface obtained by finishing with a 120-150 mesh abrasive, following initial grinding with coarser abrasives. This is a general purpose bright finish with a visible "grain" which prevents mirror reflection.
No. 2B	A bright cold-rolled finish resulting in the same manner as No. 2D finish, except that the annealed and descaled sheet receives a final light roll pass through polished rolls. This is the general purpose cold-rolled finish that can be used as is, or as a preliminary step to polishing.	**No. 6**	A dull satin finish having lower reflectivity than No. 4 finish. It is produced by Tampico brushing the No. 4 finish in a medium of abrasive and oil. It is used for architectural applications and ornamentation where a high luster is undesirable, and to contrast with brighter finishes.
		No. 7	A high reflective finish that is obtained by buffing finely ground surfaces but not to the extent of completely removing the "grit" lines. It is used chiefly for architectural and ornamental purposes.
		No. 8	The most reflective surface, which is obtained by polishing with successively finer abrasives and buffing extensively until all grit lines from preliminary grinding operations are removed. It is used for applications such as mirrors and reflectors.

Table 3: Conditions and Finishes for Bar

Conditions	Surface Finishes[1]
Hot worked only	(a) Scale not removed (excluding spot conditioning) (b) Rough turned[2] (c) Pickled or blast cleaned and pickled.
Annealed or otherwise heat treated	(a) Scale not removed (excluding spot conditioning) (b) Rough turned (c) Pickled or blast cleaned and pickled (d) Cold drawn or cold rolled (e) Centerless ground (f) Polished
Annealed and cold worked to high tensile strength[3]	(a) Cold drawn or cold rolled (b) Centerless ground (c) Polished

Table 4: Conditions and Finishes for Plate

Condition and Finish	Description and Remarks
Hot rolled	Scale not removed. Not heat treated. Plates not recommended for final use in this condition.[4]
Hot rolled, annealed or heat treated	Scale not removed. Use of plates in this condition is generally confined to heat resisting applications. Scale impairs corrosion resistance.[1]
Hot rolled, annealed or heat treated, blast cleaned or pickled	Condition and finish commonly preferred for corrosion resisting and most heat resisting applications.
Hot rolled, annealed, descaled and temper passed	Smoother finish for specialized applications.
Hot rolled, annealed, descaled cold rolled, annealed, descaled, optionally temper passed	Smooth finish with greater freedom from surface imperfection than the above.
Hot rolled, annealed or heat treated, surface cleaned and polished	Polished finishes refer to Table 2.

[1] Surface finishes (b), (e) and (f) are applicable to round bars only.

[2] Bars of the 4xx series stainless steels which are highly hardenable, such as Types 414, 420, 420F, 431, 440A, 440B and 440C, are annealed before rough turning. Other hardenable grades, such as Types 403, 410, 416 and 416Se, may also require annealing depending on their composition and size.

[3] Produced in Types 302, 303Se, 304 and 316.

[4] Surface inspection is not practicable on plates which have not been pickled or otherwise descaled.

PART 3 – EXECUTION

3.01 FABRICATION

A. Holes for bolts and screws shall be drilled. Fastenings shall be concealed where practicable. Joints exposed to the weather shall be formed to exclude water.

B. As far as practicable, all fabricated units shall be fitted and assembled in the shop, with all cuts and bends made to precision measurements in accordance with details shown on approved shop drawings.

C. Work shall be fabricated so that it is installed in a manner that will provide for expansion and contraction, prevent the shearing of bolts, screws and other fastenings, ensure rigidity, and provide close fitting of sections.

D. All finished and/or machined faces shall be true to line and level. Stainless steel sections shall be well formed to shape and size with sharp lines and angles; curved work shall be sprung evenly to curves.

E. All work shall be fitted together at the shop as far as possible, and delivered complete and ready for erection. Proper care shall be exercised in handling all work so as not to injure the finished surfaces.

3.02 WELDING

A. Welding shall be done in a manner that will prevent buckling and in accordance with Section 05 05 23 – Metal Fastening, and as modified hereinafter.

B. All welds exposed in the work shall be ground smooth and finished to match the finish of the adjacent stainless steel surfaces.

C. Select weld rods that provide weld filler metal having corrosion resistant properties as nearly identical or better than the base metal to insure preservation of the corrosion-resistant properties. Provide heat treatment at welds where testing of weld procedure indicates it is required to restore the corrosion resistance.

D. Thermal conductivity of stainless steel is about half that of other steels; and the following methods may be used to accommodate this situation:

   1. Use lower weld current setting.

   2. Use skip-weld techniques to minimize heat concentration.

   3. Use back-up chill bars or other cooling techniques to dissipate heat.

E. Edges of the stainless steel to be welded shall be cleaned of contaminants.

3.03 FASTENERS

A. Stainless steel fasteners shall be used for joining stainless steel work.

B. Stainless steel fasteners shall be made of alloys that are equal to or more corrosion resistant than the materials they join.

3.04 CLEANING AND HANDLING

A. All stainless steel surfaces shall be precleaned, descaled, passivated and inspected before, during and after fabrication in accordance with the applicable sections of ASTM A380 and as detailed in the procedures to be submitted to the Engineer for approval prior to start of work. Degreasing and passivation of stainless steel articles shall be conducted as the last step after fabrication.

B. Measures to protect cleaned surfaces shall be taken as soon as final cleaning is completed and shall be maintained during all subsequent handling, storage and shipping.

   1. The Contractor shall submit for approval specific procedures listing all the steps to be followed in detecting contamination and in descaling, cleaning, passivation and protecting of all stainless steel.

   2. Area showing clear indications of contamination shall be recleaned, repassivated and reinspected.

C. At approved stages in the shop operations, contaminants such as scale, embedded iron, rust, dirts, oil, grease and any other foreign matter shall be removed from the metal, as directed or approved by the Engineer. The adequacy of these operations shall be checked by the Engineer. Operations in the shop shall be conducted so as to avoid contamination of the stainless steel and to keep the metal surfaces free from dirt and foreign matter.

D. In order to prevent incipient corrosion during fabrication, special efforts shall be made at all times to keep all stainless steel surfaces from coming in contact with other metals.

   1. Stainless steel and stainless steel welds shall be cleaned with clean sand free of iron, stainless steel wool, stainless steel brushes, or other approved means and shall be protected at all times from contamination by any materials, including carbon steel, that shall impair its resistance to corrosion.

   2. Approved methods of cutting, grinding and handling shall be used to prevent contamination. If air-arc, or carbon-arc cutting is used, additional metal shall be removed by approved mechanical means so as to provide clean, weldable edges. All grinding of stainless steel shall be performed with aluminum oxide or silicon carbide grinding wheels bonded with resin or rubber. Grinding wheels used on carbon steel shall not be used on stainless steel.

3. Sand, grinding wheels, brushes and other materials used for cleaning stainless steel shall be checked periodically by the Engineer for contaminants. Cleaning aids found to contain contaminants shall not be used on the work.

3.05 INSTALLATION

A. All stainless steel fabrications shall be erected square, plumb and true, accurately fitted, adequately anchored in place, set at proper elevations and positions.

B. All inserts, anchor rods and all other miscellaneous work specified in the Detailed Specifications or shown on the Contract Drawings or required for the proper completion of the work, which are embedded in concrete, shall be properly set and securely held in position in the forms before the concrete is placed.

C. All stainless steel fabrications shall be installed in conformance with details shown on the Contract Drawings or on the approved shop drawings.

END OF SECTION

SECTION 07 16 16
CRYSTALLINE WATERPROOFING

PART 1 – GENERAL

1.01 THE REQUIREMENT

A. Furnishing all labor, materials, services and equipment necessary for the supply and installation of topical cementitious crystalline waterproofing to concrete substrates, above-grade or below-grade, on either dry or wet side of substrates, as indicated on drawings and as specified herein.

B. Principal items of work include:

Filters 9 through 12 located on the interior of the filter cells, center gullet between filter cells, and settled water channels.

1.02 RELATED WORK SPECIFIED ELSEWHERE

A. Section 03 01 30 – Concrete Repairs

1.03 REFERENCE SPECIFICATIONS, CODES, AND STANDARDS

A. Without limiting the generality of these specifications Work shall conform to the applicable requirements of the following documents:

1. American Society for Testing and Materials (ASTM)

2. Army Corps of Engineers (CRD)

3. NSF International (NSF)

1.04 SUBMITTALS

A. In accordance with the procedures and requirements set forth in Section 01 33 00 – Submittal Procedures, submit the following:

1. Submit product data, including manufacturer's specifications, installation instructions, and general recommendations for waterproofing applications. Include manufacturer's certification or other data substantiating that products comply with requirements of the Contract Documents.

2. Submit complete test reports from approved independent testing laboratories certifying that waterproofing system conforms to performance characteristics and testing requirements specified herein.

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3. Provide certificates signed by manufacturer or manufacturer's representative certifying that the materials to be installed comply in all respects with the requirements of this specification, and that the applicator is qualified and approved to install the materials in accordance with manufacturer's product data.

1.05 SYSTEM PERFORMANCE REQUIREMENTS

A. Testing Requirements: Crystalline waterproofing system shall be tested in accordance with the following standards and conditions, and the testing results shall meet or exceed the performance requirements as specified herein.

B. Independent Laboratory: Testing shall be performed by an independent laboratory meeting the requirements of ASTM E 329 and certified by the United States Bureau of Standards. Testing laboratory shall obtain all concrete samples and waterproofing product samples.

C. Crystalline Penetration: Crystallizing capability of waterproofing material shall be evidenced by independent SEM (Scanning Electron Microscope) photographs documenting penetration of crystal-forming waterproofing material to a depth of 2 inches.

D. Permeability: Independent testing shall be performed according to U.S. Army Corps of Engineers CRD C48-73 "Permeability of Concrete".

1. Concrete samples (treated and untreated) to have design strength of 2000 psi and thickness of 2 inches. No admixtures permitted.

2. Coatings to have maximum thickness of 0.05 inches per coat with up to two coats permitted.

3. Samples to be pressure tested to 175 psi (405 feet head of water).

4. Treated samples, after crystalline growth has occurred, shall exhibit no measurable leakage.

E. Chemical Resistance: Independent testing shall be performed according to ASTM C 267 "Chemical Resistance of Mortars" and ASTM C 39 "Compressive Strength of Cylindrical Concrete Specimens".

1. Concrete samples (treated and untreated) to have design strength of 4000 psi. No admixtures permitted.

2. Coatings to have maximum thickness of 0.05 inches per coat with up to two coats permitted.

3. Untreated and treated specimens to be immersed for a minimum of 84 days in following chemical solutions: hydrochloric acid (3.5pH), brake fluid, transformer oil, ethylene glycol, toluene, caustic soda.

4. Treated specimens shall exhibit no detrimental effects after exposure, and shall have a minimum of 14% increase in compressive strength versus untreated control specimens.

F. Potable Water Approval: Independent testing shall be performed according to NSF Standard 61/600 and approval for use of waterproofing material on structures holding potable water shall be evidenced by NSF certification.

1.06 DELIVERY, STORAGE AND HANDLING

A. Deliver materials in manufacturer's unopened containers identified with name, brand, type, grade, class, and all other qualifying information.

B. Store materials in dry location, in such manner as to prevent damage or intrusion of foreign matter. Conspicuously mark "Rejected" on materials which have been damaged and remove from the job site.

PART 2 – PRODUCTS

2.01 SYSTEM DESCRIPTION

A. Cementitious Crystalline Waterproofing: Blend of portland cement, fine treated silica sand and active proprietary chemicals. When mixed with water and applied as a cementitious coating, the active chemicals cause a catalytic reaction which generates a non-soluble crystalline formation of dendritic fibers within the pores and capillary tracts of concrete. This process causes concrete to become permanently sealed against the penetration of liquids from either direction.

2.02 ACCEPTABLE MANUFACTURERS

A. Subject to compliance with the Specifications provide products manufactured by one of the following:

1. Xypex Chemical

2. Tamms (Euclid)

3. Vandex (Euclid)

4. Kryton International

2.03 PRODUCTS

A. Crystalline Waterproofing Materials as follows:

1. Xypex Concentrate

2. Tamms Hey’Di K-11

3. Vandex Super

4. Krystol T1

2.04 SOURCE QUALITY

A. Obtain proprietary crystalline waterproofing products from a single manufacturer.

PART 3 – EXECUTION

3.01 EXAMINATION OF SURFACES

A. Verify that the concrete surfaces are sound and clean, and that form release agents and materials used to cure the concrete are compatible with waterproofing treatment.

B. Examine surfaces to be waterproofed for form tie holes and structural defects such as honeycombing, rock pockets, faulty construction joints and cracks. Such defects to be repaired in accordance with manufacturer's product data and Section 3.02 below.

C. Coordinate all work under this Section with contiguous work of other trades.

3.02 PREPARATION

A. Concrete Finish: Concrete surfaces to receive waterproofing treatment shall have an open capillary system to provide tooth and suction, and shall be free from scale, excess form oil, laitance, curing compounds and foreign matter. Horizontal surfaces shall have a rough wood float or broom finish. Where a smooth trowel finish is required on horizontal surface, crystalline waterproofing material shall be applied by dry shake method at time of concrete finishing in accordance with manufacturer's product data.

B. Surface Preparation: Existing smooth surfaces (e.g. where steel forms are used) or surfaces covered with excess form oil or other contaminants shall be washed, lightly sand-blasted, water-blasted, or acid etched with muriatic acid as necessary. Surfaces to be acid-etched shall be saturated with water prior to application of acid. Procedures for preparing surface profile to receive waterproofing treatment shall be in accordance with the manufacturer's recommendations and instructions.

C. Repair of Defects: Surface defects shall be repaired in accordance with Specification Section 03 01 30 – Concrete Repairs.

D. Wetting Concrete: Prior to application of waterproofing treatment, thoroughly saturate concrete surfaces with clean water as required to ensure migration of crystalline chemicals into voids and capillary tracts of the concrete. Remove free surface water before application.

3.03 APPLICATION

A. Surface Application: After repairs, surface preparation, treatment of construction joints, and sealing strip placement have been completed in accordance with manufacturer's product data and as specified herein, apply crystalline waterproofing treatment uniformly to concrete surfaces with semi-stiff bristle brush or broom, or suitable spray equipment. Application rates and locations shall be in accordance with manufacturer's product data, unless otherwise indicated on the Drawings. When brushing, work slurry well into surface of the concrete, filling surface pores and hairline cracks. When spraying, hold nozzle close enough to ensure that slurry is forced into pores and hairline cracks.

1. First Coat (of one or two coat applications): Apply crystalline waterproofing slurry coat to specified locations and as indicated on the drawings in accordance with manufacturer's product data.

2. Second Coat (of two coat applications): Where indicated on drawings or as required by manufacturer's product data, apply crystalline waterproofing slurry coat while first coat of crystalline waterproofing is still "green" but after it has reached an initial set. Use light pre-watering between coats. Contractor shall ensure that all curing requirements are met prior to application. If curing requirements are not met, contractor shall follow manufacturer recommendations to remediate.

3.04 CURING

A. Begin curing as soon as crystalline waterproofing has hardened sufficiently so as not to be damaged by a fine spray. Cure with a mist fog spray of clean water at a frequency and duration as recommended by the waterproofing manufacturer, or cover treated surfaces with damp burlap for the prescribed period. In warm climates, more than three sprayings per day may be necessary to prevent excessive drying of coating.

B. Do not lay plastic sheeting directly on the waterproofing coating as air contact is required for proper curing. If poor circulation exists in treated areas, it may be necessary to provide fans or blown air to aid in curing of waterproofing treatment.

C. For concrete holding structures such as reservoirs, water treatment tanks and wet wells, cure for three days and allow treatment to set (air cure) for 12 days before filling structure with liquid. For structures holding hot or corrosive liquids, cure waterproofing treatment for three days and allow to set for 18 days before filling.

D. During the curing period, protect treated surfaces from damage by wind,sun, rain and temperatures below 36°F. If plastic sheeting is used for protection, sheets must be elevated above waterproofing coating to allow sufficient air circulation.

3.05 FIELD QUALITY CONTROL

A. Do not conceal installed waterproofing system before installation has been observed by Architect/Engineer and other designated entities.

B. For watertightness testing after concrete repairs and coating are complete, refer to specification 01 88 16 – Watertightness Testing of Concrete Structures.

3.06 CLEANING AND PROTECTION

1. Clean spillage and soiling from adjacent surfaces using appropriate cleaning agents and procedures.

2. Take measures to protect completed coating from damage after application. Do not permit traffic on unprotected coating.

END OF SECTION

SECTION 07 90 00

JOINT FILLERS, SEALANTS AND CAULKING

PART 1 – GENERAL

1.01 THE REQUIREMENT

A. Furnish labor, materials, equipment and appliances required for the complete execution of Work shown on the Drawings and specified herein.

1.02 RELATED WORK SPECIFIED ELSEWHERE

1.03 REFERENCE SPECIFICATIONS, CODES AND STANDARDS

A. Without limiting the generality of the other requirements of the specifications, all work herein shall conform to the applicable requirements of the following documents. All referenced specifications, codes, and standards refer to the most current issue available at the time of Bid.

1. ASTM C-920 – Elastomeric Joint Sealants

2. ASTM D-1056 – Flexible Cellular Materials – Sponge or Expanded Rubber

3. SWRI – Sealant and Caulking Guide Specification

1.04 SUBMITTALS

A. In accordance with the procedures and requirements set forth in Section 01 33 00 – Submittal Procedures, submit the following:

1. Manufacturers literature and installation instructions. Label each product submitted with Type as indicated in paragraph 2.01 A.

2. Color samples of each type of sealant.

1.05 QUALITY ASSURANCE

A. Applicator shall be a company specializing in the installation of sealants with a minimum of five years of experience.

1.06 DELIVERY, STORAGE AND HANDLING

A. Deliver materials in unopened labeled packages.

B. Store materials in location protected from freezing or damages.

C. Reject and remove from the site materials within broken or damaged packaging.

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PART 2 – PRODUCTS

2.01 MATERIALS

A. Sealants

1. Type 1: Multi-component, non-sag, low-modulus polyurethane rubber sealant meeting ASTM C-920, Type M, Grade NS, Class 25, use NT, M, A, and O. Capable of withstanding 50% in extension or compression such as Sikaflex-2C NS/SL, Sika Corporation, or Sonolastic NP-2, Sonneborn, or DynaTrol II by Pecora Corporation.

2. Type 2: Single component polyurethane sealant meeting ASTM C-920, Type S, Grade NS, Class 25, Use NT, M, A, and O. Capable of withstanding 25% in extension or compression such as Sikaflex 1A by Sika Corporation, DynaTrol 1-XL by Pecora Corporation, or Sonolastic NP-1 by Master Builders Solutions.

3. Type 3: Single component, low-modulus moisture curing silicone meeting ASTM C-920, Type S, Grade NS, Class 25, Use NT, M, G, and A. Capable of withstanding 50% extension and compression. Pecora 890 by Pecora Corporation, Sonolastic Omni Seal by Master Builders Solutions.

B. Primer: Non-staining primer recommended by sealant manufacturer for the substrates on this project.

C. Backer Rod: Closed cell foam, nonreactive with caulking materials, non-oily, and approved by the sealant manufacturer. Minimum density shall be 2.00 pounds per cubic foot. Use no asphalt or bitumen-impregnated fiber with sealants.

D. Joint Cleaner: Recommended by sealant or caulking compound manufacturer.

E. Bond breaker: Either polyethylene film or plastic tape as recommended by the sealant manufacturer.

F. Color: Where manufacturer’s standard colors do not closely match materials being sealed, provide a custom color.

PART 3 – EXECUTION

3.01 QUALITY CONTROL

A. Coordinate work with details shown on approved shop drawings prepared by other trades.

B. Verify conditions in the field.

C. Schedule work to follow closely the installation of other trades.

D. Apply sealants and related items in temperatures and dry conditions recommended by the manufacturers.

E. Do not paint sealant, unless recommended by sealant and paint manufacturer.

3.02 PREPARATION

A. Protect finished surfaces adjoining by using masking tape or other suitable materials.

B. Clean and prime joints before starting any caulking or sealing work.

C. Thoroughly clean joints and spaces of mortar and other foreign materials. Cleaning agent shall be Xylol or similar non-contaminating solvent to remove any film from metal surfaces. Masonry or concrete surfaces shall be brushed or air jet cleaned.

D. Joint Requirements

1. All joints and spaces to be sealed in exterior work shall be less than ½-inch deep and not less than 1/4 inch wide. If joints in masonry are less than that specified herein, the mortar shall be cut out to the required width and depth. All joints and spaces to receive sealant shall be completely prepared and thoroughly dry before installation of sealant.

2. Unless otherwise specified, joints and spaces which are open to a depth of 1/2 inch or greater shall be solidly filled with back-up material to within 1/4 inch of the surface. Back-up material shall be packed tightly and made continuous throughout the length of the joints. Bond breaker shall be applied as required. If joints are less than ¼-inch deep, the back-up material may be omitted, a bond breaker substituted and the joint completely filled with sealant. The back-up material shall not project beyond the ¼-inch depth of the open space in any joint. The following width-to-depth ratio table shall be adhered to, unless otherwise recommended by manufacturer.

	Sealant Depth	
Joint Width	**Minimum**	**Maximum**
¼ inch	1/4 inch	1/4 inch
Over 1/4 inch to 1/2 inch	1/4 inch	Equal to width
Over 1/2 inch to 1 inch	1/2 inch	Equal to width
Over 1 inch to 2 inches	1/2 inch	1/2 of width

3.03 APPLICATION

A. Exercise care before, during, and after installation so as not to damage any material by tearing or puncturing. All finished work shall be approved before covering with any other material or construction.

B. Apply sealant by an approved type of gun except where the use of a gun is not practicable, suitable hand tools shall be used. Avoid applying the compound to any surface outside of the joints or spaces to be sealed. Mask areas where required to prevent overlapping of sealant.

C. All joints shall be waterproof and weathertight.

D. Point sealed joints to make a slightly concave joint, the edges of which are flush with the surrounding surfaces. Exposed joints in the interior side of the door and other frames shall be neatly pointed flush or to match adjacent jointing work.

E. Adjacent materials which have been soiled shall be cleaned immediately and the work left in neat and clean condition.

F. Comply with sealant manufacturer's written instructions except where more stringent requirements are shown or specified and except where manufacturer's technical representative directs otherwise.

3.04 ADJUSTMENT AND CLEANING

A. Remove misplaced sealant compounds promptly using methods and materials recommended by the manufacturer, as the work progresses.

B. Allow sealants to cure and remove protective edging, of doors, louvers, saddles windows etc. as directed by the Engineer.

3.05 SCHEDULE

Schedule of Sealants

Application	Sealant	Color
Vertical and horizontal expansion and construction joints in concrete structures unless noted otherwise herein or on Drawings.	Type 1	To closely match adjacent surfaces or mortar and as selected by the Owner.
Vertical and horizontal joints bordered on both sides by masonry, precast concrete, natural stone or other porous building material, unless noted otherwise herein or on Drawings.	Type 2	To closely match adjacent surfaces or mortar and as selected by the Owner.
Vertical and horizontal joints bordered on both sides by painted metals, anodized aluminum, mill finished aluminum, PVC, glass or other non-porous building material.	Type 3	To closely match adjacent surfaces and as selected by the Owner.

Schedule of Sealants

Application	Sealant	Color
Masonry expansion and control joints less than 1¼" wide.	Type 2	To closely match adjacent surfaces and as selected by the Owner.
Masonry expansion and control joints equal or greater than 1¼ inches wide and not to exceed 2”.	Type 1	To closely match adjacent surfaces and as selected by the Owner.
Submerged in liquids.[3,4]	Type 1	Manufacturer's standard
Other joints indicated on the drawings or customarily sealed but not listed.	Type recommended by manufacturer	To closely match adjacent surfaces and as selected by the Owner.

[1] Sealant for Laboratory Countertop shall be as recommended by countertop manufacturer.
[2] Provide UL approved sealants for penetrations thru fire-rated walls and as specified in Section 07 84 00 - Firestopping.
[3] Sealants which will come in contact with potable water shall meet the requirements of NSF 61.
[4] Where sealant will be immersed in liquid chemicals verify compatibility prior to installation of sealant.

END OF SECTION

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SECTION 09 90 00
PAINTING

PART 1 – GENERAL

1.01 THE REQUIREMENT

A. Furnish labor, materials, equipment and appliances required for complete execution of Work shown on Drawings and Specified herein.

B. Section Includes:

1. Paint Materials
2. Shop Painting
3. Field Painting
    a. Surface Preparation
    b. Piping and Equipment Identification
    c. Schedule of Colors
    d. Work in Confined Spaces
    e. OSHA Safety Colors

1.02 RELATED SECTIONS

A. Section 40 05 97 – Piping and Equipment Identification Systems

B. Section 07 90 00 – Joint Fillers, Sealants, and Caulking

1.03 REFERENCE SPECIFICATIONS, CODES AND STANDARDS

A. Without limiting the generality of these specifications, the Work shall conform to the applicable requirements of the following documents:

1. SSPC – The Society for Protective Coatings Standards
    a. SSPC-Vis 1 – Pictorial Surface Preparation Standards for Painting Steel Structures
    b. SSPC-SP2 – Hand Tool Cleaning
    c. SSPC-SP3 – Power Tool Cleaning

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d. SSPC-SP5/NACE 1 – White Metal Blast Cleaning

e. SSPC-SP6/NACE 3 – Commercial Blast Cleaning

f. SSPC-SP7/NACE 4 – Brush-off Blast Cleaning

g. SSPC-SP10/NACE 2 – Near-White Metal Blast

h. SSPC-SP11 – Power Tool Cleaning to Bare Metal

i. SSPC-SP13/NACE6 – Surface Preparation of Concrete

2. ICRI – International Concrete Repair Institute

3. NACE – National Association of Corrosion Engineers

4. NAFP – The National Association of Pipe Fabricators

5. ASTM D1737 – Test Method for Elongation of Attached Organic Coatings with Cylindrical Mandrel Apparatus

6. ASTM B117 – Method of Salt Spray (Fog) Testing

7. ASTM D4060 – Test Method for Abrasion Resistance of Organic Coating by the Taber Abraser

8. ASTM D3359 – Method for Measuring Adhesion by Tape Test

1.04 SUBMITTALS

A. In accordance with the procedures and requirements set forth in Section 01 33 00 – Submittal Procedures, submit the following:

1. Manufacturer's literature and Material Safety Data Sheets for each product.

2. Painting schedule identifying surface preparation and paint systems proposed. Cross reference with Tables 1 and 2. Provide the name of the paint manufacturer, and name, address, and telephone number of manufacturer's representative who will inspect the work. Submit schedule for approval as soon as possible following the Award of Contract, so approved schedule may be used to identify colors and specify shop paint systems for fabricated items. Manufacturer shall substitute paint system with equal performance where required for VOC compliance.

3. Contractor shall submit Q.C. Inspection plan describing all tests and inspections task to be performed. Include copy of daily log showing environmental conditions measurements and frequency. Copy of completed log shall be provided at completion of work.

1.05 SYSTEM DESCRIPTION

A. Work shall include surface preparation, paint application, inspection of painted surfaces and corrective action required, protection of adjacent surfaces, cleanup and appurtenant work required for the proper painting of all surfaces to be painted. Surfaces to be painted are designated within the Painting Schedule and may include new and existing piping, miscellaneous metals, equipment, buildings, exterior fiberglass, exposed electrical conduit and appurtenances.

B. Perform Work in strict accordance with manufacturer's published recommendations and instructions, unless the Engineer stipulates that deviations will be for the benefit of the project.

C. Paint surfaces which are customarily painted, whether indicated to be painted or not, with painting system applied to similar surfaces, areas and environments, and as approved by Engineer.

D. Piping and equipment shall receive color coding and identification. Equipment shall be the same color as the piping system.

1.06 QUALITY ASSURANCE

A. Painting operations shall be accomplished by skilled craftsman and licensed by the state/commonwealth to perform painting work.

B. Provide a letter indicating that the painting applicator has five years of experience, and 5 references which show previously successful application of the specified or comparable painting systems. Include the name, address, and the telephone number for the Owner of each installation for which the painting applicator provided services.

C. Contractor shall coordinate Q.C Inspections.

D. Notify Owner and Engineer at completion of surface preparation, priming application and final cure to allow inspection by Owner and Engineer or their Third-Party Inspector.

1.07 STORAGE AND DELIVERY

A. Bring materials to the job site in the original sealed and labeled containers.

B. Container label to include manufacturer's name, type of paint, brand name, lot number, brand code, coverage, surface preparation, drying time, cleanup requirements, color designation, and instructions for mixing and reducing.

C. Store paint materials at minimum ambient temperature of 45 degrees F (7 degrees C) and a maximum of 90 degrees F (32 degrees C), in ventilated area, and as required by manufacturer's instructions.

PART 2 – MATERIALS

2.01 GENERAL INFORMATION

A. The term "paint" is defined as both paints and coatings including emulsions, enamels, stains, varnishes, sealers, and other coatings whether organic or inorganic and whether used as prime, intermediate, or finish coats.

B. Purchase paint from an approved manufacturer. Manufacturer shall assign a representative to inspect application of their product both in the shop and field. The manufacturer's representative shall submit a report to the Engineer at the completion the Work identifying products used and verifying that surfaces were properly prepared, products were properly applied, and the paint systems were proper for the exposure and service.

C. Provide primers and intermediate coats produced by same manufacturer as finish coat. Use only thinners approved by paint manufacturer, and only within manufacturer's recommended limits.

D. Ensure compatibility of total paint system for each substrate. Test shop primed equipment delivered to the site for compatibility with final paint system. Provide an acceptable barrier coat or totally remove shop applied paint system when incompatible with system specified, and repaint with specified paint system.

E. Use painting materials suitable for the intended use and recommended by paint manufacturer for the intended use.

F. Require that personnel perform work in strict accordance with the latest requirements of OSHA Safety and Health Standards for construction. Meet or exceed requirements of regulatory agencies having jurisdiction and the manufacturer's published instructions and recommendations. Maintain a copy of all Material Safety Data Sheets at the job site of each product being used prior to commencement of work. Provide and require that personnel use protective and safety equipment in or about the project site. Provide respiratory devices, eye and face protection, ventilation, ear protection, illumination and other safety devices required to provide a safe work environment.

2.02 ACCEPTABLE MANUFACTURERS

A. Subject to compliance with the Specifications, provide products from one of the following manufacturers:

1. Tnemec Company Inc.

2. PPG

3. CARBOLINE

4. Sherwin-Williams

5. International Paints (Akzo Nobel)

PART 3 – EXECUTION

3.01 SHOP PAINTING

A. Shop prime fabricated steel and equipment with at least one shop coat of prime paint compatible with finish paint system specified. Prepare surface to be shop painted in strict accordance with paint manufacturer's recommendations and as specified. Finish coats may be shop applied, if approved by the Engineer. Package, store and protect shop painted items until they are incorporated into Work. Repair painted surfaces damaged during handling, transporting, storage, or installation to provide a painting system equal to the original painting received at the shop.

B. Identify surface preparation and shop paints on Shop Drawings. Verify compatibility with field applied paints.

C. Coordinate shop painting and field coating to ensure item is delivered and field coating occurs within recoat window of shop painted system requirements.

3.02 SURFACE PREPARATION

A. General

1. Surfaces to be painted shall be clean and dry, and free of dust, rust, scale, and foreign matter. No solvent cleaning, power or hand tool cleaning shall be permitted unless approved by the Engineer.

2. Protect or remove, during painting operations, hardware, accessories, machined surfaces, nameplates, lighting fixtures, and similar items not intended to be painted prior to cleaning and painting. Reposition items removed upon completion of painting operations.

3. Examine surfaces to be coated to determine that surfaces are suitable for specified surface preparation and painting. Report to Engineer surfaces found to be unsuitable in writing. Do not start surface preparation until unsuitable surfaces have been corrected. Starting surface preparation precludes subsequent claim that such surfaces were unsuitable for the specified surface preparation or painting.

4. Surface preparation shall be in accordance with specifications and manufacturer's recommendations. Provide additional surface preparation, and fill coats where manufacturer recommends additional surface preparation, in addition to requirements of specification.

5. Touch-up shop or field applied coatings damaged by surface preparation or any other activity, with the same shop or field applied coating; even to the extent of applying an entire coat when required to correct damage prior to application of the

next coating. Touchup coats are in addition to the specified applied systems, and not considered a field coat.

6. Protect motors and other equipment during blasting operation to ensure blasting material is not blown into motors or other equipment. Inspect motors and other equipment after blasting operations and certify that no damage occurred, or where damage occurred, the proper remedial action was taken.

7. Field paint shop painted equipment in compliance with Color Coding and as approved by Engineer.

B. Metal Surface Preparation

1. Prepare all welds to a minimum NACE weld preparation level “C” per NACE Standard SP0178. Provide additional weld preparation where required by the coating manufacturer. Contractor shall provide NACE SP0178 weld mold visual aids on site for evaluation of all weld preparation.

2. Conform to current The Society for Protective Coatings Standards (SSPC) Specifications for metal surface preparation. Use SSPC-Vis-1 pictorial standards or NACE visual standards TM-01-70 or TM-01-75 to determine cleanliness of abrasive blast cleaned steel.

3. Perform blast cleaning operations for metal when following conditions exist:

   a. Moisture is not present on the surface.

   b. Relative humidity is below 80%.

   c. Ambient and surface temperatures are 5°F or greater than the dew point temperature.

   d. Painting or drying of paint is not being performed in the area.

   e. Equipment is in good operating condition.

   f. Proper ventilation, illumination, and other safety procedures and equipment are being provided and followed.

4. Abrasive blast ferrous metals to be shop primed, or component mechanical equipment in accordance with SSPC-SP5, White Metal Blast.

5. Abrasive blast field prepared ferrous metals in accordance with SSPC-SP10, Near White Metal Blast, where metal is to be submerged, in a corrosive environment, or in severe service. Provide a 3.0 mil minimum angular anchor profile unless recommended otherwise by the coating manufacturer in writing.

6. Abrasive blast field prepared ferrous metals in accordance with SSPC-SP6 Commercial Blast, where metal is to be used in mild or moderate service, or non-

corrosive environment or weathering exposure. Provide a 1.5 mil minimum angular anchor profile unless recommended otherwise by the coating manufacturer in writing.

7. Clean nonferrous metals, copper, or galvanized metal surfaces in accordance to SSPC-SP1, Solvent Cleaning, or give one coat of metal passivator or metal conditioner compatible with the complete paint system. Galvanized metal shall be prepared in accordance with SSPC SP-16. Abrasive blast clean to increase mechanical adhesion in accordance with ASTM D6386, Standard Practice for Preparation of Zinc (Hot-Dip Galvanized) Coated Iron and Steel Product and Hardware Surfaces for Painting when required by coating manufacturer. Provide a 1.5 mil minimum angular anchor profile unless recommended otherwise by the coating manufacturer in writing.

8. Abrasive blast clean internal and external ductile iron pipe surfaces prior to coating in accordance with NAPF 500-03-04, Surface Preparations Standard for Abrasive Blast Cleaning of Ductile Iron Pipe. Abrasive blast clean internal and external cast ductile iron and cast-iron fitting surfaces in accordance with NAPF-03-05.

9. Prime cleaned metals immediately after cleaning to prevent rusting.

10. Clean rusted metals down to bright metal by abrasive blasting and immediately field primed.

C. Concrete Surface Preparation

1. Cure concrete a minimum of 28 days at 75° F before surface preparation, and painting begins. Allow more time at lower temperatures if specified by paint manufacturer.

2. Test concrete for pH and salts using test methods recommended by the paint manufacturer. A minimum of one test per 1000 square feet of area to be coated shall be performed unless approved otherwise by Engineer. Do not begin surface preparation, or painting until acceptable to manufacturer.

3. Moisture content of concrete and masonry surfaces shall conform to manufacturer's recommended limits, and as listed in SSPC-SP13/NACE 6 Section 6 Acceptance Criteria Table 1. Floor surfaces to be coated shall be tested in accordance with ASTM F1869 – Standard Test Method for Measuring Moisture Vapor Emission Rate of Concrete Subfloor Using Anhydrous Calcium Chloride or as required by the coating manufacturer. Moisture vapor transmission shall not exceed three pounds per 1,000 square feet in a 24-hour period or less if specified by Coating Manufacturer. Vertical and horizontal overhead surfaces shall be tested in accordance with ASTM F2170 – Standard Test Method for Determining Relative Humidity in Concrete using in situ Probes (relative humidity shall not exceed 80% or as required by the coating manufacturer) or with ASTM D4263 – Standard Test Method for Indicating Moisture in Concrete by the Plastic Sheet Test Method (test results shall be no moisture present). Engineer or Coating

Manufacturer Representative shall specify all test locations. A minimum of one test per 1000 square feet of area to be coated shall be performed unless approved otherwise by Engineer.

4. Prepare concrete surfaces to receive coatings in accordance with NACE 6/SSPC-13 – Joint Surface Preparation Standards and ICRI Technical Guidelines. Remove contaminants, open bugholes, surface voids, air pockets, and other subsurface irregularities using abrasive blasting, shot blasting, water jetting or mechanical abrading. Use dry, oil-free air for blasting operations. Surface texture after blasting shall achieve profile as required by manufacturer or where not defined by manufacturer, profile shall be a minimum ICRI-CSP 5 surface profile. Remove residual abrasives, dust, and loose particles by vacuuming or other approved method.

5. Surface defects, such as hollow areas, bugholes, honeycombs, and voids shall be filled with polymeric or waterborne epoxy cementitious filler compatible with painting system. Complete fill coats may be used in addition to specified painting system and as approved by the Engineer. Fins, form marks, and all protrusions or rough edges shall be removed.

6. Repair existing concrete surfaces which are deteriorated to the point that surface preparation exposes aggregate with fill coats or patching mortar as recommended by paint manufacturer and as directed by the Engineer.

7. Clean concrete of all dust, form oils, curing compounds, oil, tar, laitance, efflorescence, loose mortar, and other foreign materials before paints are applied.

8. To ease coating around outside corners, provide ¾-inch chamfered edges on all new concrete outside corners and grind existing concrete outside corners to a minimum radius of ¾-inch.

9. Unless recommended otherwise by the coating manufacturer, provide ¼" deep by ¼" wide tool cut terminations at 1-inch maximum from all coating edges for anchorage. Provide terminations around all equipment, piping, openings, gates, top and bottom of walls, stop locations of each day's work and overlap onto previously completed work. Transition coating 3-inches onto interior lining of piping except where coating compatibility concerns are noted by coating manufacturer.

10. Apply epoxy or polymeric filler compatible with painting system to all inside corners of areas to be coated with a margin trowel to form a continuous 45-degree cant cove across corners with a minimum dimension of 1.5-inch. Roughen or prepare cured filler as recommended by coating manufacturer for proper coating adhesion.

11. All equipment grouting shall be installed and cured prior to starting coating work. Coating shall be applied over grout up to the edges of all equipment, gates and uninterrupted piping unless specifically noted otherwise.

D. Castings

1. Prepare castings for painting by applying a brush or a knife-applied filler. Fillers are not to be used to conceal cracks, gasholes, or excessive porosity.

2. Apply one coat of primer with a minimum thickness of 1.2 mils in addition to coats specified. Allow sufficient drying time before further handling.

E. Masonry

1. Cure for a minimum of 30 days prior to paint application.

2. Clean masonry surfaces free from all dust, dirt, oil, grease, loose mortar, chalky deposits, efflorescence, and other foreign materials.

3. Test masonry for moisture content. Use test method recommended by paint manufacturer. Do not begin painting until moisture content is acceptable to manufacturer.

F. Gypsum Drywall

1. Sand joint compound with sandpaper to provide a smooth flat surface. Avoid sanding of adjacent drywall paper.

2. Remove dust, dirt, and other contaminants.

G. Previously-Painted Surfaces

1. Totally remove existing paint when: surface is to be submerged in a severe environment, paint is less than 75% intact, brittle, eroded or has underfilm rusting.

2. Surfaces which are greater than 75% intact require removal of failed paints and then spot primed. Spot priming is in addition to coats specified.

3. Remove surface contamination such as oil, grease, loose paint, mill scale, dirt, foreign matter, rust, mold, mildew, mortar, efflorescence, and sealers.

4. Clean and dull glossy surfaces prior to painting in accordance with the manufacturer's recommendations.

5. Check existing paints for compatibility with new paint system. If incompatible, totally remove existing paint system or apply a barrier coat recommended by the paint manufacturer. Remove existing paints of undetermined origin. Prepare a test patch of approximately 3 square feet over existing paint. Allow test patch to dry thoroughly and test for adhesion. If proper adhesion is not achieved remove existing paint and repaint.

3.03 APPLICATION OF PAINT

A. Apply paint by experienced painters with brushes or other applicators approved by the Engineer, and paint manufacturer.

B. Apply paint without runs, sags, thin spots, or unacceptable marks.

C. Apply at rate specified by the manufacturer to achieve at least the minimum dry mil thickness specified. Apply additional coats, if necessary, to obtain thickness.

D. Special attention shall be given to nuts, bolts, edges, angles, flanges, welds, etc., where insufficient film thicknesses are likely. Stripe paint outside corners and edges in accordance with SSPC PA Guide 11. Stripe painting shall be in addition to coats specified.

E. Perform thinning in strict accordance with the manufacturer's instructions, and with the full knowledge and approval of the Engineer and paint manufacturer.

F. Allow paint to dry a minimum of twenty-four hours between application of any two coats of paint on a particular surface, unless shorter time periods are a requirement by the manufacturer. Longer drying times may be required for abnormal conditions as defined by the Engineer and paint manufacturer. Do not exceed manufacturer's recommended drying time between coats.

G. Suspend painting when any of the following conditions exist:

1. Rainy or excessively damp weather.

2. Relative humidity exceeds 85%.

3. General air temperature cannot be maintained at 50°F or above through the drying period, except on approval by the Engineer and paint manufacturer.

4. Relative humidity will exceed 85% or air temperature will drop below 40°F within 18 hours after application of paint.

5. Surface temperature of item is within 5 degrees of dewpoint.

6. Dew or moisture condensation are anticipated.

7. Surface temperature exceeds the manufacturer's recommendations.

H. Where application of coating across concrete control joints or expansion joints has the potential to crack, turn coating into joints and caulk joints with a sealant compatible with coating rated for the intended service per Section 07 90 00 – Joint Fillers, Sealants, Caulking.

3.04 INSPECTION

A. Each field coat of paint will be inspected and approved by the Engineer or his authorized representative before succeeding coat is applied. Tint successive coats so that no two coats for a given surface are exactly the same color. Tick-mark surfaces to receive black paint in white between coats.

B. Use magnetic dry film thickness gauges and wet fiber thickness gauges for quality control. Furnish magnetic dry film thickness gauge for use by the Engineer.

C. Coatings shall pass a holiday detector test.

D. Determination of Film Thickness: Randomly selected areas, each of at least 107.5 contiguous square feet, totaling at least 5% of the entire control area shall be tested. Within this area, at least 5 squares, each of 7.75 square inches, shall be randomly selected. Three readings shall be taken in each square, from which the mean film thickness shall be calculated. No more than 20 percent of the mean film thickness measurements shall be below the specified thickness. No single measurement shall be below 80 percent of the specified film thickness. Total dry film thickness greater than twice the specified film thickness shall not be acceptable. Areas where the measured dry film thickness exceeds twice that specified shall be completely redone unless otherwise approved by the Engineer. When measured dry film thickness is less than that specified additional coats shall be applied as required.

E. Holiday Testing: Holiday test painted ferrous metal surfaces which will be submerged in water or other liquids, or surfaces which are enclosed in a vapor space in such structures. Mark areas which contain holidays. Repair or repaint in accordance with paint manufacturer's printed instructions and retest.

   1. Dry Film Thickness Exceeding 20 Mils: For surfaces having a total dry film thickness exceeding 20 mils: Pulse-type holiday detector such as Tinker & Rasor Model AP-W, D.E. Stearns Co. Model 14/20, shall be used. The unit shall be adjusted to operate at the voltage required to cause a spark jump across an air gap equal to twice the specified coating thickness.

   2. Dry Film Thickness of 20 Mils or Less: For surfaces having a total dry film thickness of 20 mils or less: Tinker & Rasor Model M1 non-destructive type holiday detector, K-D Bird Dog, shall be used. The unit shall operate at less than 75-volts. For thicknesses between 10 and 20 mils, a non-sudsing type wetting agent, such as Kodak Photo-Flow, shall be added to the water prior to wetting the detector sponge.

F. Paint manufacturer’s NACE certified representative shall provide their services as required by the Engineer. Services shall include, but not be limited to, inspecting existing paint, determination of best means of surface preparation, inspection of completed work, and final inspection of painted work 11 months after the job is completed.

3.05 PROTECTION OF ADJACENT PAINT AND FINISHED SURFACES

A. Use covers, masking tape, other method when protection is necessary, or requested by Owner or Engineer. Remove unwanted paint carefully without damage to finished paint or surface. If damage does occur, repair the entire surface adjacent to and including the damaged area without visible lapmarks and without additional cost to the Owner.

B. Take all necessary precautions to contain dispersion of abrasive blasting debris and paint to the limits of the work. Take into account the effect of wind and other factors which may cause dispersion of the abrasive blasting debris and paint. Suspend painting operations when abrasive blasting debris or paint cannot be properly confined. Assume all responsibilities and cost associated with damage to adjacent structures, vehicles, or surfaces caused by the surface preparation and painting operations.

3.06 PIPING AND EQUIPMENT IDENTIFICATION

A. Piping and equipment identification shall be in accordance with the Owner’s scheme of identification. Contractor must submit to the Owner proposed colors, labels, and letter sizes for approval prior to execution of Work.

3.07 SCHEDULE OF COLORS

A. Match colors existing colors. Contractor shall submit to the Owner proposed colors. No variation shall be made in colors without the Engineer's approval. Color names and numbers shall be identified according to the appropriate color chart issued by the manufacturer of the particular product in question.

3.08 WORK IN CONFINED SPACES

A. Provide and maintain safe working conditions for all employees. Supply fresh air continuously to confined spaces through the combined use of existing openings, forceddraft fans and temporary ducts to the outside, or direct air supply to individual workers. Exhaust paint fumes to the outside from the lowest level in the contained space. Provide explosionproof electrical fans, if in contact with fumes. No smoking or open fires will be permitted in, or near, confined spaces where painting is being done. Follow OSHA, state/commonwealth, and local regulations at all times.

3.09 OSHA SAFETY COLORS

A. Paint wall around wall-mounted breathing or fire apparatus with the appropriate safety red color; area not to exceed 2 feet wide by 3 feet high, unless apparatus covers the area. Fire apparatus include fire hoses, extinguisher, and hydrants.

B. Paint hazardous areas and objects in accordance with OSHA regulations.

3.10 VOC REGULATIONS

A. Provide paint systems in accordance with local, state, and federal regulations. Where paint systems shown in schedule do not comply substitute equal products with VOC limits which comply with local, state, and federal regulations.

Table 1: Painting Schedule

Surface	Application	Painting System and No. of Coats	Product Reference (Table 2)	Total Min. Dry Film Thickness (Mils)
Concrete and Masonry				
Interior masonry and concrete walls and ceilings		1 coat sealer 2 coats acrylic epoxy	101 116	75-85 sq.ft./gal. 4-6/coat
Interior masonry and concrete walls in chemical rooms		1 coat sealer 2 coats epoxy polyamide	117 102	60-80 sq.ft./gal. 4-6/coat
Metals				
Interior and exterior nonsubmerged (gloss)	All new valves, motors and mechanical equipment, piping, etc.	1 coat epoxy polyamide primer 1 coat epoxy polyamide 1 coat aliphatic polyurethane	104 102 115	4-6 4-6 3-5
Other				
PVC Piping		1 coat epoxy polyamide 1 coat aliphatic polyurethane	102 115	5-8 3-4

1 Painting manufacturer shall verify compatibility of containment liner and chemical to be contained. Where incompatible substitute a compatible coating system.

Ref.	System	Purpose	Product			
			Tnemec Series	PPG/AMERON	CARBOLINE	Sherwin-Williams
101	Acrylic filler	Primer-sealer	130-6601	BLOXFIL 4000	Sanitile 100	Cement-Plex 875
102	Epoxy polyamide	Finish coat semi-gloss or gloss	N69	AMERLOCK 2	Carboguard 890	Macropoxy 646
103	Acrylic latex	Sealer	1028/1029	PITT TECH PLUS	Carbocrylic 3359DTM	DTM Acrylic Primer/Finish
104	Epoxy Polyamide – metal	Primer	66	AMERCOAT 385	Carboguard 893SG	Macropoxy 646
105	Epoxy	Primer/Finish	N140	AMERLOCK 2	Carboguard 61/891VOC	Macropoxy 646 PW
106	Coal tar epoxy	Finish high-coat build	46H-413	AMERCOAT 78HB	Bitumastic 300M	Hi-Mil Sher Tar Epoxy
107	Coal tar	Sealer	46-465	AMERCOAT 78HB	Bitumastic 300M	Hi-Mil Sher Tar Epoxy
108	Alkyd-medium oil	Finish coat	2H	DEVGUARD 4308	Carbocoat 8215	Industrial Enamel
109	Alkyd-long oil	Finish coat	1029	DEVGUARD 4308	Carbocoat 8215	Industrial Enamel
110	Epoxy polyamide	Primer	66-1211	AMERCOAT 385	Carboguard 893SG	Macropoxy 646
112	Epoxy polyamide	Sealer	66-1211	AMERCOAT 385	Carboguard 893SG	Macropoxy 920 Pre-Prime
113	Urethane	Barrier coat	530	AMERLOCK SEALER	Rustbond	-
114	Polyamine Epoxy	Intermediate coat	27	AMERLOCK 385	Carboguard 893SG	-
115	Aliphatic Polyurethane	Finish coat	1074 or 1075	AMERCOAT 450 HS	Carbothane 134HG	Acrolon 218HS
116	Acrylic epoxy	Finish coat	113 or 114	AQUAPON WB	Sanitile 255	Water-Based Catalyzed Epoxy
117	Epoxy block filler	Sealer	1254	AMERLOCK 114	Sanitile 500	Kem Cati-Coat HS Epoxy Filler
118	Catalyzed epoxy	Finish coat	84	AMERLOCK 2/400	Carboguard 890	Macropoxy 646
119	High solids epoxy	Finish coat	104	AMERLOCK 400	Carboguard 890	Dura-Plate 235
120	Epoxy	Top coat	N69	AMERLOCK 2/400	Carboguard 890	-

Table 2: Product Listing

END OF SECTION

SECTION 26 05 00
BASIC ELECTRICAL REQUIREMENTS

PART 1 – GENERAL

1.01 THE REQUIREMENT

A. The Contractor shall furnish all labor, materials, tools, and equipment, and perform all work and services necessary for, or incidental, to the furnishing and installation of all electrical work as shown on the Drawings, and as specified in accordance with the provisions of the Contract Documents and completely coordinate with the work of other trades involved in the general construction. Although such work is not specifically shown or specified, all supplementary or miscellaneous items, appurtenances, and devices incidental to or necessary for a sound, secure, and complete installation shall be furnished and installed as part of this work. The Contractor shall obtain approved Shop Drawings showing wiring diagrams, connection diagrams, roughing-in and hook up details for all equipment and comply therewith. All electrical work shall be complete and left in operating condition in accordance with the intent of the Drawings and the Specifications for the electrical work.

B. Reference Section 40 61 13 – Process Control System General Provisions and General Requirements for scope of work details as they relate to the Division 40 Subcontractor.

C. The electrical scope of work for this project primarily includes, but is not limited to, the following:

1. Furnish and install all aboveground raceway systems including conduit, fittings, boxes, supports, and other pertinent components.

2. Furnish and install all low voltage wire and cable resulting in a complete and operable electrical system.

3. Furnish and install new wiring devices.

4. Other electrical work as specified herein and indicated on the Drawings.

D. All material and equipment must be the product of an established, reputable, and approved manufacturer; must be new and of first class construction; must be designed and guaranteed to perform the service required; and must bear the label of approval of the Underwriters Laboratories, Inc., where such approval is available for the product of the listed manufacturer as approved by the Engineer.

E. When a specified or indicated item has been superseded or is no longer available, the manufacturer's latest equivalent type or model of material or equipment as approved by the Engineer shall be furnished and installed at no additional cost to the Owner.

F. Where the Contractor's selection of equipment of specified manufacturers or additionally approved manufacturers requires changes or additions to the system design, the Contractor shall be responsible in all respects for the modifications to all system designs, subject to approval of the Engineer. The Contractor's bid shall include all costs for all work of the Contract for all trades made necessary by such changes, additions or modifications or resulting from any approved substitution.

G. Furnish and install all stands, racks, brackets, supports, and similar equipment required to properly serve the equipment which is furnished under this Contract, or equipment otherwise specified or indicated on the Drawings.

H. All electrical components and systems, including electrical equipment foundations, shall be designed to resist operational forces as well as lateral sway and axial motion from seismic and thermal forces. Seismic support design shall be in accordance with Section 01 73 23 – Seismic Anchorage and Bracing.

1.02 EQUIPMENT LOCATION

A. The Drawings show the general location of feeders, transformers, outlets, conduits, and circuit arrangements. Because of the small scale of the Drawings, it is not possible to indicate all of the details involved. The Contractor shall carefully investigate the structural and finish conditions affecting the work and shall arrange such work accordingly; furnishing such fittings, junction boxes, and accessories as may be required to meet such conditions. The Contractor shall refer to the entire Drawing set to verify openings, special surfaces, and location of other equipment, or other special equipment prior to roughing-in for panels, switches, and other outlets. The Contractor shall verify all equipment dimensions to ensure that proposed equipment will fit properly in spaces indicated.

B. Where outlets are shown near identified equipment furnished by this or other Contractors, it is the intent of the Specifications and Drawings that the outlet be located at the equipment to be served. The Contractor shall coordinate the location of these outlets to be near the final location of the equipment served whether placed correctly or incorrectly on the Drawings.

1.03 LOCAL CONDITIONS

A. The Contractor shall examine the site and become familiar with conditions affecting the work. The Contractor shall investigate, determine, and verify locations of any overhead or buried utilities on or near the site, and shall determine such locations in conjunction with all public and/or private utility companies and with all authorities having jurisdiction. All costs, both temporary and permanent to connect all utilities, shall be included in the Bid. The Contractor shall be responsible for scheduling and coordinating with the local utility for temporary and permanent services.

B. In addition, the Contractor shall relocate all duct banks, lighting fixtures, receptacles, switches, boxes, and other electrical equipment as necessary to facilitate the Work included in this project. Costs for such work shall be included in the Bid.

1.04 SUBMITTALS

A. In accordance with the procedures and requirements set forth in Section 01 33 00 – Submittal Procedures and the requirements of the individual Specification Sections, the Contractor shall obtain from the equipment manufacturer and submit the following:

1. Shop Drawings
2. Operation and Maintenance Manuals
3. Spare Parts List
4. Proposed Testing Methods and Reports of Certified Shop Tests
5. Reports of Certified Field Tests
6. Manufacturer’s Representative’s Certification

B. Submittals shall be sufficiently complete in detail to enable the Engineer to determine compliance with Contract requirements.

C. Submittals will be approved only to the extent of the information shown. Approval of an item of equipment shall not be construed to mean approval for components of that item for which the Contractor has provided no information.

D. Some individual electrical specification sections may require a Compliance, Deviations, and Exceptions (CD&E) letter to be submitted. If the CD&E letter is required and shop drawings are submitted without the letter, the submittal will be rejected. The letter shall include all comments, deviations and exceptions taken to the Drawings and Specifications by the Contractor AND Equipment Manufacturer/Supplier. This letter shall include a copy of this specification section. In the left margin beside each and every paragraph/item, a letter "C", "D", or "E" shall be typed or written in. The letter "C" shall be for full compliance with the requirement. The letter "D" shall be for a deviation from the requirement. The letter "E" shall be for taking exception to a requirement. Any requirements with the letter "D" or "E" beside them shall be provided with a full typewritten explanation of the deviation/exception. Handwritten explanation of the deviations/exceptions is not acceptable. The CD&E letter shall also address deviations, and exceptions taken to each Drawing related to this Specification Section.

E. Seismic support design for all nonstructural electrical components (conduit, raceways, freestanding equipment, etc.) shall be in accordance with all applicable federal, state/commonwealth and local building code requirements and Section 01 73 23 – Seismic Anchorage and Bracing.

1.05 APPLICABLE CODES AND REQUIREMENTS

A. Conformance

1. Unless otherwise noted, all work, equipment and materials furnished shall conform with the latest available version of the existing rules, requirements and specifications of the following:

   a. Insurance Rating Organization having jurisdiction

   b. The serving electrical utility company

   c. The currently adopted edition of the National Electrical Code (NEC)

   d. The National Electric Manufacturers Association (NEMA)

   e. The Institute of Electrical and Electronic Engineers (IEEE)

   f. The Insulated Cable Engineers Association (ICEA)

   g. The American Society of Testing Materials (ASTM)

   h. The American National Standards Institute (ANSI)

   i. The requirements of the Occupational Safety Hazards Act (OSHA)

   j. The National Electrical Contractors Association (NECA) Standard of Installation

   k. National Fire Protection Association (NFPA)

   l. International Electrical Testing Association (NETA)

   m. All other applicable Federal, State/Commonwealth and local laws and/or ordinances.

2. All material and equipment shall bear the inspection labels of Underwriters Laboratories, Inc., if the material and equipment is of the class inspected by said laboratories.

B. Nonconformance

1. Any paragraph of requirements in these Specifications, or Drawings, deviating from the rules, requirements and Specifications of the above organizations shall be invalid and their (the above organizations) requirements shall hold precedent thereto. The Contractor shall be held responsible for adherence to all rules, requirements and specifications as set forth above. Any additional work or material necessary for adherence will not be allowed as an extra, but shall be included in

the Bid. Ignorance of any rule, requirement, or Specification shall not be allowed as an excuse for nonconformity. Acceptance by the Engineer does not relieve the Contractor from the expense involved for the correction of any errors which may exist in the drawings submitted or in the satisfactory operation of any equipment.

C. Certification

1. Upon completion of the work, the Contractor shall obtain certificate(s) of inspection and approval from the National Board of Fire Underwriters or similar inspection organization having jurisdiction and shall deliver same to the Engineer and the Owner.

1.06 PERMITS AND INSPECTIONS

A. The Contractor shall reference the General Conditions and Section 01 11 00 – Summary of Work.

1.07 TEMPORARY LIGHTING AND POWER

A. The Contractor shall reference the General Conditions and Section 01 51 00 – Temporary Utilities.

1.08 TESTS

A. Upon completion of the installation, the Contractor shall perform tests for operation, load (Phase) balance, overloads, and short circuits. Tests shall be made with and to the satisfaction of the Owner and Engineer.

B. The Contractor shall perform all field tests and shall provide all labor, equipment, and incidentals required for testing and shall pay for electric power required for the tests. All defective material and workmanship disclosed shall be corrected by the Contractor at no cost to the Owner. The Contractor shall show by demonstration in service that all circuits and devices are in good operating condition. Test shall be such that each item of control equipment will function not less than five (5) times.

C. Refer to each individual specification section for detailed test requirements.

D. The Contractor shall complete the installation and field testing of the electrical installation at least two (2) weeks prior to the startup and testing of all other equipment. During the period between the completion of electrical installation and the startup and testing of all other equipment, the Contractor shall make all components of the Work available as it is completed for their use in performing Preliminary and Final Field Tests.

E. Before each test commences, the Contractor shall submit a detailed test procedure, and also provide test engineer resume, personnel and scheduling information for the approval by the Engineer. In addition, the Contractor shall furnish detailed test

procedures for any electrical equipment required as part of the field tests of other systems.

1.09 PROTECTIVE DEVICE SETTING AND TESTING

A. The Contractor shall provide the services of a field services organization to adjust, set, calibrate and test all protective devices in the electrical system. The organization shall be a subsidiary of or have a franchise service agreement with the electrical equipment manufacturer. The qualifications of the organization and resumes of the technicians as well as all data forms to be used for the field testing shall be submitted.

B. All protective devices in the electrical equipment shall be set, adjusted, calibrated and tested in accordance with the manufacturers' recommendations, the coordination study, and best industry practice.

C. Proper operation of all equipment associated with the device under test and its compartment shall be verified, as well as complete resistance, continuity and polarity tests of power, protective and metering circuits. Any minor adjustments, repairs and/or lubrication necessary to achieve proper operation shall be considered part of this Contract.

D. All solid state trip devices shall be checked and tested for setting and operation using manufacturers recommended test devices and procedures.

E. Circuit breakers and/or contactors associated with the above devices shall be tested for trip and close functions with their protective device.

F. When completed, the Contractor shall provide a comprehensive report for all equipment tested indicating condition, readings, faults and/or deficiencies in same. Inoperative or defective equipment shall be brought immediately to the attention of the Engineer.

G. Prior to placing any equipment in service, correct operation of all protective devices associated with this equipment shall be demonstrated by field testing under simulated load conditions.

1.10 POWER SYSTEM STUDIES

A. The Contractor shall provide power systems studies performed by a registered professional engineer in accordance with Section 26 05 73 – Power System Studies.

1.11 SCHEDULES AND FACILITY OPERATIONS

A. Since the equipment testing required herein shall require that certain pieces of equipment be taken out of service, all testing procedures and schedules must be submitted to the Engineer for review and approval one (1) month prior to any work beginning. When testing has been scheduled, the Engineer must be notified 48 hours prior to any work to allow time for load switching and/or alternation of equipment. In

addition, all testing that requires temporary shutdown of facility equipment must be coordinated with the Owner/Engineer so as not to affect proper facility operations.

B. At the end of the workday, all equipment shall be back in place and ready for immediate use should a facility emergency arise. In addition, should an emergency condition occur during testing, at the request of the Owner, the equipment shall be placed back in service immediately and turned over to Owner personnel.

C. In the event of accidental shutdown of Owner equipment, the Contractor shall notify Owner personnel immediately to allow for an orderly restart of affected equipment.

D. Maintaining the operation of these facilities during the duration of the construction period is essential and required. The Contractor shall furnish and install temporary equipment as required to maintain facility operation. Reference Section 01 14 00 – Coordination with Owner's Operations for construction sequencing and specific operational constraint information.

1.12 MATERIALS HANDLING

A. Materials arriving on the job site shall be stored in such a manner as to keep material free of rust and dirt and so as to keep material properly aligned and true to shape. Rusty, dirty, or misaligned material will be rejected. Electrical conduit shall be stored to provide protection from the weather and accidental damage. Rigid non-metallic conduit shall be stored on even supports and in locations not subject to direct sun rays or excessive heat. Cables shall be sealed, stored, and handled carefully to avoid damage to the outer covering or insulation and damage from moisture and weather. Adequate protection shall be required at all times for electrical equipment and accessories until installed and accepted. Materials damaged during shipment, storage, installation, or testing shall be replaced or repaired in a manner meeting with the approval of the Engineer. If space heaters are provided in a piece of electrical equipment, they shall be temporarily connected to a power source during storage. The Contractor shall store equipment and materials in accordance with Section 01 55 00 – Contractor Access and Parking.

1.13 WARRANTIES

A. Unless otherwise specified in an individual specification section, all electrical equipment and electrical construction materials shall be provided with a warranty in accordance with the requirements of Section 46 00 00 – Equipment General Provisions and the General Conditions.

1.14 TRAINING

A. Unless otherwise specified in an individual specification section, all training for electrical equipment shall be provided in accordance with the requirements of Section 46 00 00 – Equipment General Provisions.

PART 2 – PRODUCTS

2.01 PRODUCT REQUIREMENTS

A. Unless otherwise indicated, the materials to be provided under this Specification shall be the products of manufacturers regularly engaged in the production of all such items and shall be the manufacturer's latest design. The products shall conform to the applicable standards of UL and NEMA, unless specified otherwise. International Electrotechnical Commission (IEC) standards are not recognized. Equipment designed, manufactured, and labeled in compliance with IEC standards is not acceptable.

B. All items of the same type or ratings shall be identical. This shall be further understood to include products with the accessories indicated.

C. All equipment and materials shall be new, unless indicated or specified otherwise.

D. The Contractor shall submit proof if requested by the Engineer that the materials, appliances, equipment, or devices that are provided under this Contract meet the requirements of Underwriters Laboratories, Inc., in regard to fire and casualty hazards. The label of or listing by the Underwriters Laboratories, Inc., will be accepted as conforming to this requirement.

2.02 SUBSTITUTIONS

A. Unless specifically noted otherwise, any reference in the Specifications or on the Drawings to any article, service, product, material, fixture, or item of equipment by name, make, or catalog number shall be interpreted as establishing the type, function, and standard of quality and shall not be construed as limiting competition. The Contractor, in such cases may use any article, device, product, material, fixture, or item of equipment which in the judgment of the Engineer, expressed in writing, is equal to that specified.

2.03 CONCRETE

A. The Contractor shall furnish all concrete required for the installation of all electrical work, Concrete shall be Class A unless otherwise specified. Concrete and reinforcing steel shall meet the appropriate requirements of Division 03 of the Specifications.

B. The Contractor shall provide concrete equipment pads for all free-standing electrical apparatus and equipment located on new or existing floors or slabs. The Contractor shall provide all necessary anchor bolts, channel iron sills, and other materials as required. The exact location and dimensions shall be coordinated for each piece of equipment well in advance of the scheduled placing of these pads. Equipment pads shall be 4 inches high unless otherwise indicated on the Drawings and shall conform to standard detail for equipment pads shown on the Contract Drawings. Equipment pads shall not have more than 3” excess concrete beyond the edges of the equipment.

2.04 RUBBER INSULATING MATTING

A. Rubber insulating matting shall be furnished and installed on the floor and in front of each piece of electrical equipment that is located indoors and installed under this Contract. Rubber insulating matting shall not be installed outdoors. The mat shall be long enough to cover the full length of the equipment. The mat shall be ¼-inch thick with beveled edges, canvas back, solid type with corrugations running the entire length of the mat. The matting shall meet OSHA requirements and the requirements of ASTM D-178 for Type 2, Class 2 insulating matting. Matting shall be 36 inches wide, minimum. However, matting width shall be no less than the NEC working clearance for the equipment with which it is associated.

B. Matting shall be provided for the following equipment:

1. Variable Frequency Drives

2. Panelboards

PART 3 – EXECUTION

3.01 CUTTING AND PATCHING

A. Coordination

1. The Work shall be coordinated between all trades to avoid delays and unnecessary cutting, channeling and drilling. Sleeves shall be placed in concrete for passage of conduit wherever possible.

B. Damage

1. The Contractor shall perform all chasing, channeling, drilling and patching necessary to the proper execution of this Contract. Any damage to the building, structure, or any equipment shall be repaired by qualified mechanics of the trades involved at the Contractor's expense. If, in the Engineer's judgment, the repair of damaged equipment would not be satisfactory, then the Contractor shall replace damaged equipment at the Contractor’s expense.

C. Existing Equipment

1. Provide a suitable cover or plug for openings created in existing equipment as the result of work under this Contract. For example, provide round plugs in equipment enclosures where the removal of a conduit creates a hole and the enclosure. Covers and plugs shall maintain the NEMA rating of the equipment enclosure. Covers and plugs shall be watertight when installed in equipment located outdoors.

3.02 EXCAVATION AND BACKFILLING

A. The Contractor shall perform all excavation and backfill required for the installation of all electrical work. All excavation and backfilling shall be in complete accordance with the applicable requirements of Division 31.

3.03 CORROSION PROTECTION

A. Wherever dissimilar metals, except conduit and conduit fittings, come into contact, the Contractor shall isolate these metals as required with neoprene washers, nine (9) mil polyethylene tape, or gaskets.

END OF SECTION

SECTION 26 05 19

LOW VOLTAGE CONDUCTORS AND CABLES

PART 1 – GENERAL

1.01 THE REQUIREMENT

A. The Contractor shall furnish, install, connect, test, and place in satisfactory operating condition, all low voltage wire and cable indicated on the Drawings and as specified herein and/or required for proper operation. The work of connecting cables to equipment and devices shall be considered a part of this Section. All appurtenances required for the installation of wire and cable systems shall be furnished and installed by the Contractor.

B. The scope of this Section does not include internal wiring factory installed by electrical equipment manufacturers.

C. Reference Section 26 05 00 – Basic Electrical Requirements and Section 26 05 33.16 – Boxes for Electrical Systems.

1.02 CODES AND STANDARDS

A. Low voltage wire, cable, and appurtenances shall be designed, manufactured, and/or listed to the following standards as applicable:

1. Underwriters Laboratories (UL)

    a. UL 13 – Standard for Power-Limited Circuit Cables

    b. UL 44 – Thermoset-Insulated Wires and Cables

    c. UL 83 – Thermoplastic-Insulated Wires and Cables

    d. UL 1277 – Standard for Electrical Power and Control Tray Cables with Optional Optical-Fiber Members

    e. UL 1581 – Reference Standard for Electrical Wires, Cables, and Flexible Cords

    f. UL 1685 – Standard for Vertical-Tray Fire-Propagation and Smoke-Release Test for Electrical and Optical-Fiber Cables

    g. UL 2250 – Standard for Instrumentation Tray Cable

    h. UL 2556 – Wire and Cable Test Methods

2. American Society for Testing and Materials (ASTM)

070720

a. ASTM B3 – Standard Specification for Soft or Annealed Copper Wire

b. ASTM B8 – Standard Specification for Concentric-Lay-Stranded Copper Conductors, Hard, Medium-Hard, or Soft

c. ASTM B33 – Standard Specification for Tin-Coated Soft or Annealed Copper Wire for Electrical Purposes

d. ASTM D69 – Standard Test Methods for Friction Tapes

e. ASTM D4388 – Standard Specification for Nonmetallic Semi-Conducting and Electrically Insulating Rubber Tapes

3. Insulated Cable Engineers Association (ICEA)

a. ICEA S-58-679 – Standard for Control, Instrumentation and Thermocouple Extension Conductor Identification

b. ICEA T-29-250 – Conducting Vertical Cable Tray Flame Tests with Theoretical Heat Input Rate of 210,000 B.T.U./Hour

4. Institute of Electrical and Electronics Engineers (IEEE)

a. IEEE 1202 – Standard for Flame Testing of Cables

1.03 SUBMITTALS

A. In accordance with the procedures and requirements set forth in the General Conditions and Section 01 33 00 – Submittal Procedures, the Contractor shall obtain from the wire and cable manufacturer and submit the following:

1. Shop Drawings

2. Reports of Field Tests

B. Each submittal shall be identified by the applicable Specification Section.

1.04 SHOP DRAWINGS

A. Each submittal shall be complete in all respects, incorporating all information and data listed herein and all additional information required for evaluation of the proposed material's compliance with the Contract Documents.

B. Partial, incomplete, or illegible Submittals will be returned to the Contractor without review for resubmittal.

C. Shop drawings shall include but not be limited to:

1. Product data sheets for the following:

    a. Wire and cable

    b. Power and control wire terminations

    c. Instrumentation cable terminations

    d. Pulling lubricant.

2. Cable pulling calculations (if required).

3. Wiring identification methods and materials.

D. The shop drawing information shall be complete and organized in such a way that the Engineer can determine if the requirements of these specifications are being met. Copies of technical bulletins, technical data sheets from "soft-cover" catalogs, and similar information which is "highlighted" or somehow identifies the specific equipment items the Contractor intends to provide are acceptable and shall be submitted.

1.05 CABLE PULLING CALCULATIONS

A. Prior to the installation of the wire and cable specified herein, the Contractor shall submit cable pulling calculations for Engineer review and approval when all of the following are true:

1. The amount of cable to be installed will be greater than 200 linear feet between pull points.

2. The installation will have one or more bends.

3. The wire and cable is size #1/0 AWG and larger.

B. Cable pulling calculations shall be performed by a currently registered Professional Engineer in the State or Commonwealth in which the project is located and shall define pulling tension and sidewall loading (sidewall bearing pressure values).

PART 2 – PRODUCTS

2.01 MANUFACTURERS

A. The wire and cable to be furnished and installed for this project shall be the product of manufacturers who have been in the business of manufacturing wire and cable for a minimum of ten (10) years. Wire and cable shall be designed, constructed, and installed in accordance with the best practices of the trade, and shall operate satisfactorily when installed as specified herein and indicated on the Drawings. Only one (1) manufacturer for each wire and cable type shall be permitted.

2.02 POWER AND CONTROL WIRE AND CABLE

A. Power wire for all other loads and control wire shall consist of insulated copper conductors with a nylon (or equivalent) outer jacket. Conductor insulation shall be rated 90°C for dry locations, 75°C for wet locations, and 600V. Insulated conductors shall be UL 83 Listed as NEC Type THHN/THWN.

B. Unless specified otherwise herein, conductors shall be stranded copper per ASTM B-8 and B-3, with Class B or C stranding contingent upon the size. Power conductors for lighting and receptacle branch circuits shall be solid copper per ASTM B-3.

C. Power conductor size shall be no smaller than No. 12 AWG and Control conductor size shall be no smaller than No. 14 AWG.

D. Multi-conductor cable assemblies shall include a grounding conductor and an overall PVC jacket. The jacket shall be PVC and resistant to abrasion, sunlight, and flame in accordance with UL 1277. Multi-conductor cable assemblies shall be UL 1277 Listed as NEC Type TC (Power and Control Tray Cable).

E. Power wire and cable shall be as manufactured by the Okonite Company, the Southwire Company, General Cable, Encore Wire, or equal.

2.03 INSTRUMENTATION CABLE

A. For single-analog signal applications, instrumentation cable shall consist of a single, twisted pair or triad of individually insulated and jacketed copper conductors with an overall cable shield and jacket. Conductor insulation shall be rated 90°C in both wet and dry locations, and 600V. The jacket shall be PVC and resistant to abrasion, sunlight, and flame in accordance with UL 1277. Cable shall be UL 1277 Listed as NEC Type TC (Power and Control Tray Cable).

B. For multiple-analog signal applications, instrumentation cable shall consist of multiple, twisted pairs or triads (i.e. groups) of individually insulated and jacketed copper conductors with individual pair/triad shields (i.e. group shields) and an overall cable shield and jacket. Conductor insulation shall be rated 90°C in both wet and dry locations, and 600V. The jacket shall be PVC and resistant to abrasion, sunlight, and flame in accordance with UL 1277. Cable shall be UL 1277 Listed as NEC Type TC (Power and Control Tray Cable).

C. Cable and group shields shall consist of overlapped aluminum/polyester tape/foil providing 100% coverage. Instrumentation cables shall include an overall copper shield drain wire. Cables containing multiple twisted pairs or triads shall also include group shield drain wires.

D. Conductors, including drain wires, shall be tin or alloy coated (if available), soft, annealed copper, stranded per ASTM B-8, with Class B stranding unless otherwise specified.

E. Instrumentation signal conductor size shall be no smaller than No. 16 AWG.

F. Instrumentation cable shall be Okoseal-N Type P-OS (for single pair or triad applications) or Okoseal-N Type SP-OS (for multiple pair or triad applications) as manufactured by the Okonite Company, Belden equivalent, Southwire Company equivalent, or equal.

2.04 CONDUCTOR IDENTIFICATION

A. Conductors shall be identified using a color-coding method. Color coding for individual power, control, lighting, and receptacle conductors shall be as follows:

1. 480/277V AC Power

    a. Phase A – BROWN

    b. Phase B – ORANGE

    c. Phase C – YELLOW

    d. Neutral – GREY

2. 120/208V or 120/240V AC Power

    a. Phase A – BLACK

    b. Phase B – RED

    c. Phase C – BLUE

    d. Neutral – WHITE

3. DC Power

    a. Positive Lead – RED

    b. Negative Lead - BLACK

4. DC Control

    a. All wiring – BLUE

5. 120 VAC Control

    a. 120 VAC control wire shall be RED except for a wire entering a motor control center compartment, motor controller, or control panel which is an interlock. This interlock conductor shall be color coded YELLOW. For the purposes of

this Section, an interlock is defined as any wiring that brings voltage into the above-mentioned equipment from a source outside that equipment.

6. 24 VAC Control

    a. All wiring - ORANGE

7. Equipment Grounding Conductor

    a. All wiring - GREEN

B. Individual conductors No. 2 AWG and smaller shall have factory color coded insulation. It is acceptable for individual conductors larger than No.2 AWG to be provided with factory color coded insulation as well, but it is not required. Individual conductors larger than No.2 AWG that are not provided with factory color coded insulation shall be identified by the use of colored tape in accordance with the requirements listed in Part 3 herein. Insulation colors and tape colors shall be in accordance with the color-coding requirements listed above.

C. Conductors that are part of multi-conductor cable assemblies shall have black insulation. The conductor number shall be printed on each conductor's insulation in accordance with ICEA S-58-679, Method 4. Each conductor No.2 AWG and smaller within the cable assembly shall also be identified with a heat shrink tag with color coded background. Each conductor larger than No.2 AWG within the cable assembly shall also be identified by the use of colored tape. Heat shrink tags and colored tape shall be in accordance with the requirements listed in Part 3 herein. Tape color and heat shrink tag background color shall be in accordance with the color-coding requirements listed above.

2.05 CABLE PULLING LUBRICANTS

A. Cable pulling lubricants shall be non-hardening type and approved for use on the type of cable installed. Lubricant shall be Yellow #77 Plus by Ideal, Cable Gel by Greenlee, Poly-Gel by Gardner Bender, or equal.

PART 3 – EXECUTION

3.01 WIRE AND CABLE INSTALLATION

A. General

1. Wire and Cable shall be installed as specified herein and indicated on the Drawings. Unless specifically indicated otherwise on the Drawings, wire and cable shall be installed in separate raceways according to wiring type. For example, power wiring shall not be combined with control wiring, and control wiring shall not be combined with instrumentation wiring.

2. Wire shall be furnished and installed as single conductor cables, with limited exceptions. Multi-conductor cable assemblies shall only be installed where indicated on the Drawings, required by the NEC, or after obtaining written permission from the Engineer.

3. Where instrumentation cables are installed in control panels, motor controllers, and other locations, the Contractor shall arrange wiring to provide maximum clearance between these cables and other conductors. Instrumentation cables shall not be installed in same bundle with conductors of other circuits.

4. Instrumentation cable shielding shall be continuous and shall be grounded at one point only.

B. Splices

1. Splices shall not be allowed in power or control wire and cable unless approved in writing by the Engineer. If unique field conditions exist or pulling calculations indicate that splices may be required, the Contractor shall submit a detailed request indicating why splices are required to the Engineer. The Engineer shall be under no obligation to grant such request.

2. Splicing materials shall be barrel type butt splice connectors and heat shrink tubing as manufactured by 3M, Ideal, or equal. The use of screw-on wire connectors (wire nuts) shall only be permitted for lighting and receptacle circuits.

3. No splicing of instrumentation cable is permitted.

C. Wire and Cable Sizes

1. The sizes of wire and cable shall be as indicated on the Drawings, or if not shown, as approved by the Engineer. If required due to field routing, the size of conductors and respective conduit shall be increased so that the voltage drop measured from source to load does not exceed 2-1/2%.

D. Additional Conductor Identification

1. In addition to the color-coding identification requirements specified in Part 2 herein, individual conductors shall be provided with heat shrinkable identification tags. Identification tags for individual conductors shall have a white background where the conductor insulation is colored. Identification tags for individual conductors shall have a colored background where the conductor insulation is black. Background color shall match that of the taping provided on the individual black conductors.

2. Multi-conductor cables shall be provided with heat shrinkable identification tags in accordance with Part 2 herein.

3. All wiring shall be identified at each point of termination. This includes but is not limited to identification at the source, load, and in any intermediate junction boxes where a termination is made. The Contractor shall meet with the Owner and Engineer to come to an agreement regarding a wire identification system prior to installation of any wiring. Wire numbers shall not be duplicated.

4. Wire identification shall be by means of a heat shrinkable sleeve with appropriately colored background and black text. Wire sizes #14 AWG through #10 AWG shall have a minimum text size of 7 points. Wire sizes #8 AWG and larger shall have a minimum text size of 10 points. Sleeves shall be of appropriate length to fit the required text. The use of handwritten text for wire identification shall not be permitted.

5. Sleeves shall be suitable for the size of wire on which they are installed. Sleeves shall not be heat-shrunk onto control cables. Tags shall remain loose on cable to promote easier identification. For all other applications, sleeves shall be tightly affixed to the wire and shall not move. Sleeves shall be heat shrunk onto wiring with a heat gun approved for the application. Sleeves shall not be heated by any means which employs the use of an open flame. The Contractor shall take special care to ensure that the wiring insulation is not damaged during the heating process.

6. Sleeves shall be installed prior to the completion of the wiring terminations and shall be oriented so that they can be easily read.

7. Sleeves shall be polyolefin as manufactured by Brady, Seton, Panduit, or equal.

8. Wire identification in manholes, handholes, pull boxes, and other accessible components in the raceway system where the wiring is continuous (no terminations are made) shall be accomplished by means of a tag installed around the bundled group of individual conductors or around the outer conductor jacket of a multi-conductor cable. Identification shall utilize a FROM-TO system. Each group of conductors shall consist of all of the individual conductors in a single conduit or duct. The tag shall have text that identifies the bundle in accordance with the ‘FROM’ and ‘TO’ column for that particular conduit number in the conduit and wire schedule. Minimum text size shall be 10 point. The tag shall be affixed to the wire bundle by the use of nylon wire ties and shall be made of polyethylene as manufactured by Brady, Seton, Panduit, or equal.

9. Where colored tape is used to identify cables, it shall be wrapped around the cable with a 25% overlap and shall cover at least 2 inches of the cable.

E. Wiring Supplies

1. Rubber insulating tape shall be in accordance with ASTM D4388. Friction tape shall be in accordance with ASTM D69.

F. Training of Cable in Manholes, Handholes, and Vaults

1. The Contractor shall furnish all labor and material required to train cables around cable vaults, manholes, and handholes. Sufficient length of cable shall be provided in each handhole, manhole, and vault so that the cable can be trained and racked in an approved manner. In training or racking, the radius of bend of any cable shall be not less than the manufacturer's recommendation. The training shall be done in such a manner as to minimize chaffing.

2. Instrumentation cable shall be racked and bundled separate from AC wiring to maintain the required separation as follows:

   a. 18 inches for 480/277 VAC wiring

   b. 12 inches for 208/120 VAC wiring

   c. 6 inches for 24 VAC wiring

G. Conductor Terminations

1. Where wires are terminated at equipment which requires lugs, connections shall be made by solderless mechanical lug, crimp type ferrule, or irreversible compression type lugs. Reference individual equipment Specification Sections as applicable for additional termination requirements.

2. Where enclosure sizes and sizes of terminals at limit switches, solenoid valves, float switches, pressure switches, temperature switches, and other devices make terminations impractical due to the size of the field wiring, the Contractor shall terminate field wiring in an adjacent junction box per the requirements of Section 26 05 33.16 – Boxes for Electrical Systems, complete with terminal strips. Contractor shall install the smaller wiring from the device to the junction box in a conduit, using the terminal strip as the means for joining the two different wire sizes. Splicing of wires in lieu of using terminal strips is not acceptable.

3. The cables shall be terminated in accordance with the cable and/or termination product manufacturer's instructions for the particular type of cable.

4. To minimize oxidation and corrosion, wire and cable shall be terminated using an oxide-inhibiting joint compound recommended for "copper-to-copper" connections. The compound shall be Penetrox E as manufactured by Burndy Electrical, or equal.

5. All spare conductors shall be terminated on terminal blocks mounted within equipment or junction boxes. Unless otherwise noted, coiling up of spare conductors within enclosure is not acceptable.

H. Pulling Temperature

1. Cable shall not be installed when the temperature of the jacket is such that damage will occur due to low temperature embrittlement. When cable will be pulled with an ambient temperature of 40°F or less within a three (3) day period prior to pulling, the cable reels shall be stored three (3) days prior to pulling in a protected storage area with an ambient temperature of 55°F or more. Cable pulling shall be completed during the workday for which the cable is removed from the protected storage. Any cable reels with wire remaining on them shall be returned to storage at the completion of the workday.

3.02 TESTING

A. All testing shall be performed in accordance with the requirements of the General Conditions and Division 01. The following tests are required:

1. Shop Test

   a. Wires and cables shall be tested in accordance with the applicable ICEA Standards. Wire and cable shall be physically and electrically tested in accordance with the manufacturer's standards.

2. Field Tests

   a. After installation, all wires and cables shall be tested for continuity. Testing for continuity shall be "test light" or "buzzer" style.

   b. After installation, wires and cables shall be tested for insulation resistance levels between conductors of the same circuit and between conductor and ground as follows:

      1) For #8 AWG and larger 600V wire and cable, apply 1,000 VDC from a Megohmmeter for one (1) minute. Resistance shall be no less than 100 Megohms.

      2) Instrumentation signal cable shall be tested from conductor to conductor, conductor to shield, and conductor to ground using a Simpson No. 260 volt-ohmmeter or approved equal. The resistance value shall be 200 Megohms or greater.

      3) Insulation resistance testing is not required for power and control cables smaller than #8 AWG.

   c. Wires and cables shall be tested after required terminations are made, but before being connected to any equipment.

   d. If tests reveal defects or deficiencies, the Contractor shall make the necessary repairs or shall replace the cable as directed by the Engineer, without additional cost to the Owner. All conductors of a multi-phase circuit

shall be replaced if one conductor fails the required testing. If part of a multi-set (parallel conductors per phase) circuit fails testing, only the set containing failure shall be replaced.

e. All tests shall be made by and at the expense of the Contractor who shall supply all testing equipment. Test reports shall be submitted to the Engineer.

Exhibit A
Test Data – Megohms
Test No. ____

Date:			Company:				
Time:			Location:				
Circuit:	Circuit Length:	Aerial:	Duct:	Buried:	No. of Conductors	Size:	AWG MCM Shield:
Insulation Material:			Insulation Thickness:		Voltage Rating:		Age:
Type: _____ Pothead _____ Terminal					Location: Indoors _____ Outdoors _____		
Number and Type of Joints:							
Recent Operating History:							
Manufacturer:							
State if Potheads or Terminals were grounded during test:							
List associated equipment included in test:							
Miscellaneous Information:							

Exhibit A
Test Data – Megohms
Test No. ____

Part Tested:	Test Performed: _____ Hours/Days: _____ After Shutdown: _____
Grounding Time:	Dry Bulb Temperature: _____ Wet Bulb Temperature: _____
Test Voltage:	Equipment Temperature: _____ How Obtained: _____ Relative Humidity: _____ Absolute Humidity: _____ Dew Point: _____

Megohmmeter: Serial Number: _____ Range: _____
Voltage: _____ Calibration Date: _____

Test Connections	To Line To Earth To Ground	To Line To Earth To Ground	To Line To Earth To Ground	Test Connections	To Line To Earth To Ground	To Line To Earth To Ground	To Line To Earth To Ground
1/4 Minute				5 Minutes			
1/2 Minute				6 Minutes			
3/4 Minute				7 Minutes			
1 Minute				8 Minutes			
2 Minutes				9 Minutes			
3 Minutes				10 Minutes			
4 Minutes				10/1 Minute Ratio			

Remarks:

END OF SECTION

SECTION 26 05 26

GROUNDING AND BONDING FOR ELECTRICAL SYSTEMS

PART 1 – GENERAL

1.01 THE REQUIREMENT

A. The Contractor shall furnish and install grounding systems complete in accordance with the minimum requirements established by Article 250 of the NEC. Article 250 of the NEC shall be considered a minimum requirement for compliance with this Specification.

B. Grounding of all instrumentation and control systems shall be furnished and installed in accordance with the manufacturer/system requirements and IEEE 1100. Conflicts shall be promptly brought to the attention of the Engineer.

C. In addition to the NEC requirements, building structural steel columns [and metallic chemical storage tanks] shall be permanently and effectively grounded.

D. Reference Section 26 05 00 – Basic Electrical Requirements

1.02 CODES AND STANDARDS

A. Equipment and materials covered under this Section shall be designed, manufactured, and/or listed to the following standards as applicable:

1. UL 467 – Grounding and Bonding Equipment

2. IEEE 81 – Guide for Measuring Earth Resistivity, Ground Impedance, and Earth Surface Potentials of a Ground System.

3. IEEE 1100 – Recommended Practice for Power and Grounding Electronic Equipment

1.03 SUBMITTALS

A. In accordance with the procedures and requirements set forth in the General Conditions and Section 01 33 00 – Submittal Procedures, the Contractor shall obtain from the equipment manufacturer and submit the following:

1. Shop Drawings

2. Reports of certified field tests.

B. Each submittal shall be identified by the applicable Specification Section.

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1.04 SHOP DRAWINGS

A. Each submittal shall be complete in all respects, incorporating all information and data listed herein and all additional information required for evaluation of the proposed equipment's compliance with the Contract Documents.

B. Partial, incomplete, or illegible submittals will be returned to the Contractor without review for resubmittal.

C. Shop drawings shall include but not be limited to:

1. Product data sheets.

2. Drawings and written description of how the Contractor intends to furnish and install the grounding system.

PART 2 – PRODUCTS

2.01 MANUFACTURERS

A. The equipment covered by these specifications shall be standard equipment of proven performance as manufactured by reputable concerns. Equipment shall be designed, constructed, and installed in accordance with the best practices of the trade, and shall operate satisfactorily when installed as shown on the Drawings.

2.02 GROUND RODS AND GRID

A. Ground rods shall be rolled to a commercially round shape from a welded copper-clad steel manufactured by the molten-welding process or by the electro-formed process (molecularly bonded). They shall have an ultimate tensile strength of 75,000 pounds per square inch (psi) and an elastic limit of 49,000 psi. The rods shall be not less than 3/4 inch in diameter by 10 feet in length; and the proportion of copper shall be uniform throughout the length of the rod. The copper shall have a minimum wall thickness of 0.010 inch at any point on the rod. Ground rods shall be UL 467 listed. The ground rods shall be manufactured by Erico Products, Blackburn, or equal.

B. Except where specifically indicated otherwise, all exposed non current-carrying metallic parts of electrical equipment, metallic raceway systems, grounding conductors in nonmetallic raceways and neutral conductors of wiring systems shall be grounded.

C. The ground connection shall be made at the main service equipment and shall be extended to the ground grid surrounding the structure. The ground grid shall also be connected to the point of entrance of the metallic water service. Connection to the water pipe shall be made by a suitable ground clamp or lug connection to a plugged tee. If flanged pipes are encountered, connection shall be made with the lug bolted to the street side of the flanged connection.

D. Where ground fault protection is employed, care shall be taken so that the connection of the ground and neutral does not interfere with the correct operation of the ground fault protection system.

2.03 FITTINGS

A. Grounding connections to equipment shall be bolted. Cable end connections shall be made by hydraulic crimp or exothermically welded. Split bolt type connectors are not acceptable. Fittings shall be UL 467 listed.

2.04 EQUIPMENT GROUNDING CONDUCTORS

A. An insulated equipment grounding conductor, which shall be separate from the electrical system neutral conductor, shall be furnished and installed for all circuits. Insulation shall be of the same type as the ungrounded conductors in the raceway and shall be green in color. Equipment grounding conductors shall be furnished and installed in all conduits. Use of conduits as the NEC required equipment grounding conductor is not acceptable.

2.05 EQUIPMENT GROUNDS

A. Equipment grounds shall be solid and continuous from a connection at earth to all distribution panelboards. Ground connections at panelboards, outlets, equipment, and apparatus shall be made in an approved and permanent manner.

B. For all control panels, disconnect switches, and other electrical enclosures, equipment grounds and bonding jumpers shall be terminated individually on a ground bar or mechanical lugs. No wire nuts will be permitted.

2.06 EXOTHERMIC WELDS

A. All exothermic welding shall be completed per welding kit manufacturer's instructions. Exothermic welds shall be CadWeld by Erico or ThermoWeld.

PART 3 – EXECUTION

3.01 INSTALLATION

A. Metal surfaces where grounding connections are to be made shall be clean and dry. Steel surfaces shall be ground or filed to remove all scale, rust, grease, and dirt. Copper and galvanized steel shall be cleaned with emery cloth to remove oxide before making connections.

B. Ground Grid

1. A main ground grid shall be provided for each structure and interconnecting structure grids consisting of driven ground rods as shown on the Drawings.

Ground rods shall be driven straight down into the earth, or if objects are encountered, at an angle to avoid the obstruction.

2. The ground rods shall be interconnected by the use of copper cable exothermically welded to the rods. The grounding cables shall be installed after the excavations for the building have been completed and prior to the pouring of concrete for the footings, mats, etc. Copper "pigtails" shall be connected to the ground grid and shall enter the buildings and structure from the outside and shall be connected to steel structures, and equipment as described in this Section and as required to provide a complete grounding system. The copper pigtails shall be exothermically welded to the ground grid and connected to building reinforcement steel by hydraulic crimp.

3. Grounding conductors shall be continuous between points of connection; splices shall not be permitted.

4. Where conductors are exposed and subject to damage from personnel, traffic, etc., conductors shall be installed in metal raceway. The raceway shall be bonded to the grounding system.

5. Where subsurface conditions do not permit use of driven ground rods to obtain proper ground resistance, rods shall be installed in a trench or plate electrodes shall be provided, as applicable and necessary to obtain proper values of resistance.

6. Buried exothermic welds and ground ring shall not be backfilled until inspected by Engineer.

C. Raceways

1. Conduit which enters equipment such as switchgear, motor control centers, transformers, panelboards, variable frequency drives, instrument and control panels, and similar equipment shall be bonded to the ground bus or ground lug, where provided, and as otherwise required by the NEC.

3.02 TESTING

A. All tests shall be performed in accordance with the requirements of the General Conditions and Division 01. The following tests are required:

1. Witnessed Shop Tests

a. None required.

2. Field Tests

a. Field testing shall be done in accordance with the requirements specified in the General Conditions, Division 01, and NETA Acceptance Testing Specifications, latest edition.

b. Fall of potential tests shall be performed on the ground grid per IEEE81 recommendations by a third party, independent testing firm. A fall of potential plot shall be submitted at the conclusion of testing for Engineer review. Documentation indicating the location of the rod and grounding system as well as the resistance and soil conditions at the time the measurements were made shall be submitted. Testing shall show that the ground grid has 5 ohms resistance or less. Due to soil conditions and/or unforeseen field conditions, ground resistances greater than 5 ohms may be acceptable if specifically approved in writing by the Engineer. Ground resistance measurements shall be made in normally dry weather not less than 48 hours after rainfall and with the ground grid under test isolated from other grounds.

c. Continuity tests for the grounding electrode conductor shall be performed. Test will be accepted when a resistance of less than 1 ohm is shown for this conductor.

END OF SECTION

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SECTION 26 05 29

HANGERS AND SUPPORTS FOR ELECTRICAL SYSTEMS

PART 1 – GENERAL

1.01 THE REQUIREMENT

A. The Contractor shall furnish and install structural supports for mounting and installing all conduit, electrical equipment, lighting, alarm systems, instrumentation, and communications equipment furnished under this Contract.

B. Equipment shall be installed strictly in accordance with recommendations of the manufacturer and best practices of the trade resulting in a complete, operable, and safe installation. The Contractor shall obtain written installation manuals from the equipment manufacturer prior to installation.

C. Reference Section 26 05 00 – Basic Electrical Requirements.

1.02 CODES AND STANDARDS

A. Equipment and materials covered under this Section shall be designed, manufactured, and/or listed to the following standards as applicable:

1. ASTM A123 – Standard Specification for Zinc (Hot Dip Galvanized) Coatings on Iron and Steel Products.

2. ASTM A153 – Standard Specification for Zinc Coating (Hot Dip) on Iron and Steel Hardware.

3. ASTM A240 – Standard Specification for Chromium and Chromium-Nickel Stainless Steel Plate, Sheet, and Strip for Pressure Vessels and for General Applications.

4. ASTM A276 – Standard Specification for Steel Bars and Shapes

5. ASTM B783 – Standard Specification for Materials for Ferrous Powder Metallurgy Structural Parts

1.03 SUBMITTALS

A. In accordance with the procedures and requirements set forth in the General Conditions and Section 01 33 00 – Submittal Procedures, the Contractor shall obtain from the equipment manufacturer and submit the following:

01-10-20

1. Shop drawings

2. Structural support calculations (if required)

B. Each submittal shall be identified by the applicable Specification Section.

1.04 SHOP DRAWINGS

A. Each submittal shall be complete in all respects, incorporating all information and data listed herein and all additional information required for evaluation of the proposed equipment's compliance with the Contract Documents.

B. Partial, incomplete, or illegible submittals will be returned to the Contractor without review for resubmittal.

C. Shop drawings shall include but not be limited to:

1. Product data sheets.

2. Complete assembly, layout, installation, and foundation drawings with clearly marked dimensions.

PART 2 – PRODUCTS

2.01 MANUFACTURERS

A. The equipment covered by this Specification is intended to be standard equipment of proven performance as manufactured by reputable concerns. Equipment shall be designed, constructed, and installed in accordance with the best practices of the trade, and shall operate satisfactorily when installed as shown on the Drawings.

2.02 MATERIALS

A. Support channel shall be 1-5/8” by 1-5/8” minimum, with 12 gage material thickness.

B. Support channel, support channel fittings, and threaded rod shall be furnished with the following material of construction, dependent upon the designation of the area in which they are to be installed. Area designations are indicated on the Drawings.

Area Designation	Material of Construction
Indoor Dry Non-process Area	Hot Dipped Galvanized Steel
Indoor Type 1 Chemical Storage/Transfer Area	Fiberglass
Indoor Type 2 Chemical Storage/Transfer Area	Type 304 Stainless Steel
All Outdoor Areas	Type 304 Stainless Steel

C. Fastening hardware (bolts, nuts, washers, and screws) shall be furnished with the following material of construction, dependent upon the designation of the area in which they are to be installed. Area designations are indicated on the Drawings.

Area Designation	Material of Construction
Indoor Dry Non-process Area	Type 304 Stainless Steel

Indoor Type 1 Chemical Storage/Transfer Area	Fiberglass
Indoor Type 2 Chemical Storage/Transfer Area	Type 304 Stainless Steel
All Outdoor Areas	Type 304 Stainless Steel

PART 3 – EXECUTION

3.01 INSTALLATION

A. Concrete or Masonry Inserts

1. The Contractor shall be responsible for the furnishing and installation of all anchor bolts, masonry inserts, and similar devices required for installation of equipment furnished under this Contract.

2. If a time delay for the arrival of any special inserts or equipment drawings, etc. occurs, the Contractor may, if permitted by the Engineer, make arrangements for providing approved recesses and openings in the concrete or masonry and, upon subsequent installation, the Contractor shall be responsible for filling in such recesses and openings. Any additional costs that may be incurred by this procedure shall be borne by the Contractor.

3. The Contractor shall furnish leveling channels for all switchgear, switchboards, motor control centers, and similar floor mounted equipment. The leveling channels shall be provided for embedment in the equipment housekeeping pads. Coordination of the installation of these channels with the concrete pad is essential and required. Pad height shall be as required to maintain concrete coverage of the reinforcement bars while not causing associated equipment to exceed the maximum mounting height requirements of the NEC.

B. Support Fastening and Locations

1. All equipment fastenings to columns, steel beams, and trusses shall be by beam clamps or welded. No holes shall be drilled in the steel.

2. Unless otherwise indicated on the Drawings or in the Specifications, guards/handrails shall not be utilized as supports for electrical equipment, devices, or appurtenances. Guards/handrails shall not be cut, drilled, or otherwise modified in order to accommodate electrical supports without written approval from the Engineer.

3. All holes made in reflected ceilings for support rods, conduits, and other equipment shall be made adjacent to ceiling grid bars where possible, to facilitate removal of ceiling panels.

4. Support channel shall be provided wherever required for the support of starters, switches, panels, and miscellaneous equipment.

5. All equipment, devices, and raceways that are installed on the dry side of a water bearing wall shall not be installed directly onto the wall. Support channel shall be used to allow ventilation air to pass behind the equipment, devices, or raceway.

6. All supports shall be rigidly bolted together and braced to make a substantial supporting framework. Where possible, control equipment shall be grouped together and mounted on a single framework.

7. Aluminum support members shall not be installed in direct contact with concrete. Stainless steel or non-metallic "spacers" shall be used to prevent contact of aluminum with concrete.

8. Actual designs for supporting framework should take the nature of a picture frame of support channels and bracket with a plate for mounting the components. The Contractor is responsible for the design of supporting structure; Contractor shall submit design details to the Engineer for acceptance before proceeding with the fabrication.

9. Wherever dissimilar metals come into contact, the Contractor shall isolate these metals as required with neoprene washers, nine (9) mil polyethylene tape, or gaskets.

10. For all installations where fiberglass supporting materials are required, the Contractor shall submit structural calculations and the details of the proposed system of support. Structural calculations shall be signed and sealed by a registered Professional Engineer in the State or Commonwealth in which the project is located.

11. For the following installations where conduits are provided with a support system suspended from the above or attached to a vertical structure, the Contractor shall submit structural calculations and details of the proposed system of support. Structural calculations shall be signed and sealed by a registered Professional Engineer in the State or Commonwealth in which the project is located.

    a. A quantity of twelve (12) or more conduits trade size 1” and smaller are proposed for a conduit support rack.

    b. A quantity of eight (8) or more conduits trade sizes 1 ½” to 2 1/2” are proposed for a conduit support rack.

    c. A quantity of four (4) or more conduits trade sizes 3” and larger are proposed for a conduit support rack.

12. Single conduits installed exposed along walls and ceilings shall be secured to the wall or ceiling with a one-hole conduit clamp and clamp-back. Where multiple conduits are installed exposed together, support channel and conduit clamps shall be used.

C. Equipment, boxes, and enclosures which are factory-constructed with integral mounting provisions (such as brackets., mounting feet, bolt holes, etc.) shall be installed/supported utilizing those mounting provisions. Equipment, boxes and enclosures shall not be field-modified by any means which compromises the UL listing or NEMA rating of the enclosure/assembly.

END OF SECTION

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SECTION 26 05 33.13
CONDUIT FOR ELECTRICAL SYSTEMS

PART 1 – GENERAL

1.01 THE REQUIREMENT

A. The Contractor shall furnish and install conduits and conduit fittings to complete the installation of all electrically operated equipment as specified herein, indicated on the Drawings, and as required.

B. Requirements for conduit clamps, support systems, and anchoring are not included in this Section. Reference Section 26 05 29 – Hangers and Supports for Electrical Systems, for these requirements.

C. Reference Section 26 05 00 – Basic Electrical Requirements.

1.02 CODES AND STANDARDS

A. Conduits and conduit fittings shall be designed, manufactured, and/or listed to the following standards as applicable:

1. American National Standards Institute (ANSI)

    a. ANSI B1.20.1 – Pipe Threads, General Purpose

    b. ANSI C80.1 – Electrical Rigid Steel Conduit

    c. ANSI C80.3 – Steel Electrical Metallic Tubing

    d. ANSI C80.5 – Electrical Rigid Aluminum Conduit

    e. ANSI FB 1 – Fittings, Cast Metal Boxes, and Conduit Bodies for Conduit, Electrical Metallic Tubing, and Cable

2. Underwriters Laboratories (UL)

    a. UL 1 – Standard for Flexible Metal Conduit

    b. UL 6 – Electrical Rigid Metal Conduit-Steel

    c. UL 6A – Electrical Rigid Metal Conduit-Aluminum, Red Brass, and Stainless Steel

    d. UL 360 – Standard for Liquid-tight Flexible Metal Conduit

    e. UL 467 – Grounding and Bonding Equipment

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f. UL 514B – Conduit, Tubing, and Cable Fittings

g. UL 651 – Standard for Schedule 40 and 80 Conduit and Fittings

h. UL 797 – Electrical Metallic Tubing-Steel

i. UL 1203 – Standard for Explosion-proof and Dust-ignition-proof Electrical Equipment for use in Hazardous (Classified) Locations

j. UL 1479 – Standard for Fire Tests of Penetration Fire Stops

k. UL 1660 – Liquid-tight Flexible Nonmetallic Conduit

3. National Electrical Manufacturer's Association (NEMA)

a. NEMA FB 2.40 – Installation Guidelines for Expansion and Expansion/Deflection Fittings

b. NEMA RN 1 – PVC Externally Coated Galvanized Rigid Steel Conduit

c. NEMA RV-3 – Application and Installation Guidelines for Flexible and Liquid-tight Flexible Metal and Nonmetallic Conduits

d. NEMA TC-2 – Electrical PVC Conduit

e. NEMA TC-3 – PVC Fittings for Use with Rigid PVC Conduit and Tubing

4. National Electrical Contractors Association (NECA)

a. NECA 1 – Standard for Good Workmanship in Electrical Construction

5. Others

a. ACI-318 – Building Code Requirements for Structural Concrete

1.03 SUBMITTALS

A. In accordance with the procedures and requirements set forth in the General Conditions and Section 01 33 00 – Submittal Procedures, the Contractor shall obtain from the equipment manufacturer and submit the following:

1. Shop Drawings

B. Each submittal shall be identified by the applicable Specification Section.

1.04 SHOP DRAWINGS

A. Each submittal shall be complete in all respects, incorporating all information and data listed herein and all additional information required for evaluation of the proposed equipment's compliance with the Contract Documents.

B. Partial, incomplete, or illegible submittals will be returned to the Contractor without review for resubmittal.

C. Shop drawings shall include but not be limited to:

1. Product data sheets for conduits and fittings.

2. Conduit identification methods and materials.

3. Evidence of training for all personnel that will install PVC coated rigid metal conduit.

1.05 DEFINITIONS

A. Conduits are categorized by the circuit type of the wiring to be installed inside. Conduits are defined as follows:

1. Power Conduits – Conduits that carry AC or DC power wiring from a source to a load. Conduits that carry lighting and receptacle wiring.

2. Control Conduits – Conduits that carry AC or DC discrete control wiring between devices and/or equipment. Conduits that carry fiber optic cables between devices and/or equipment.

3. Instrumentation Conduits – Conduits that carry AC or DC analog signal wiring between devices and/or equipment. Conduits that carry Category 5e or Category 6 unshielded cables.

B. Conduit categories are indicated on the Drawings by the leading letter of the conduit tag. Conduit tag leading letters are defined as follows:

1. P – Power Conduit

2. C – Control Conduit

3. I – Instrumentation Conduit

PART 2 – PRODUCTS

2.01 GENERAL

A. Conduit and conduit fitting products are specified in the text that follows this article. Reference Part 3 herein for the application, uses and installation requirements of these conduits and conduit fittings.

B. All metallic conduit fittings shall be UL 514B and UL 467 Listed and constructed in accordance with ANSI FB 1. All metallic conduit fittings for use in Class I Division I hazardous areas shall be UL 1203 Listed. All non-metallic fittings shall be UL 651 Listed and constructed in accordance with NEMA TC-3.

C. Where threading is specified herein for conduit fitting connections, the fittings shall be manufactured to accept conduit that is threaded to ANSI B1.20.1 requirements.

D. Conduit expansion fittings for all conduit materials of construction shall be capable of 4 inches of movement along the axis of the conduit for trade sizes 2 inches or less. Expansion fittings shall be capable of 8 inches of movement along the axis of the conduit for trade sizes greater than 2 inches.

E. Conduit deflection fittings for all conduit materials of construction shall be provided with a flexible neoprene outer jacket that permits up to ¾ inch of expansion/contraction along the axis of the conduit as well as up to ¾ inch of parallel misalignment between the conduit axes. Outer jacket shall be secured to the conduit hubs by stainless steel clamps.

F. Conduit seals shall either be Listed and labeled for 40% fill, or conduit reducing fittings and a trade size larger conduit seal shall be provided to achieve 25% or less fill within the seal. Percentage fill calculation shall be based on the conductors to be installed. Conduit seals shall be provided with breathers and/or drains where required by the NEC.

G. Conduit insulating bushings shall be constructed of plastic and shall have internal threading.

H. Additional conduit and conduit fitting requirements are specified in the articles that follow based on the specific conduit material of construction to be used.

2.02 RIGID GALVANIZED STEEL (RGS) CONDUIT AND ASSOCIATED FITTINGS

A. Conduit

1. Conduit shall be hot dip galvanized on the inside and outside and made of heavy wall high strength ductile steel. Conduit shall be manufactured in accordance with ANSI C80.1 and shall be UL 6 Listed.

2. Conduit shall be provided with factory-cut 3/4 inch per foot tapered threads at each end in accordance with ANSI B1.20.1. Threads shall be cut prior to galvanizing to

ensure corrosion protection adequately protects the threads. Conduit shall be provided with a matching coupling on one end and a color-coded thread protector on the other.

B. Conduit Bodies for use with Rigid Galvanized Steel

1. Conduit bodies shall be constructed of an electro-galvanized malleable iron alloy which is coated with an acrylic paint finish. Conduit bodies shall have integral threaded conduit hubs.

2. Conduit bodies for all other areas shall be provided with covers that are affixed in place by stainless steel screws which thread directly into the conduit body. Covers that utilize wedge nuts or any other method of attachment to the conduit body are not acceptable. Covers shall be constructed of an electro-galvanized malleable iron alloy which is coated with an acrylic paint finish. Covers shall be provided with matching gasket.

C. Conduit Couplings, Nipples, and Unions for use with Rigid Galvanized Steel

1. Couplings and nipples shall be threaded and shall be constructed of hot dipped galvanized steel. Split-type couplings that use compression to connect conduits are not acceptable.

2. Unions shall be threaded, rain-tight, and constructed of an electro-galvanized malleable iron alloy which is coated with an acrylic paint finish.

D. Conduit Expansion and Deflection Fittings for use with Rigid Galvanized Steel

1. Conduit expansion fittings and conduit deflection fittings shall be constructed of bronze or an electro-galvanized malleable iron alloy. Expansion and deflection fittings shall have threaded conduit connections.

2. Expansion fittings shall have an integral bonding jumper and deflection fittings shall have an external bonding jumper.

E. Conduit Seals for use with Rigid Galvanized Steel

1. Conduit seals shall be constructed of an electro-galvanized malleable iron alloy which is coated with an acrylic paint finish. Conduit seals shall have threaded conduit connections.

F. Conduit Termination Fittings for use with Rigid Galvanized Steel

1. Conduit hubs shall be constructed of stainless steel and shall have threaded connections to the conduit and enclosure. Hubs shall have a plastic insulated throat and shall be watertight when assembled to an enclosure.

2. Conduit locknuts shall be constructed of zinc plated steel. Locknuts shall have internal threading. Locknuts with integral gasket or seal are not acceptable. Locknuts shall have integral bonding screw where required for proper bonding.

3. Conduit bonding bushings shall be constructed of zinc plated malleable iron. Bonding bushings shall have a threaded conduit connection. Bonding bushing shall be provided with properly sized set screw for connecting bonding conductor and an integral plastic insulator rated for 150 degrees C located in the throat.

2.03 RIGID NONMETALLIC CONDUIT AND ASSOCIATED FITTINGS

A. Conduit

1. Conduit shall be Schedule 40 or 80 (dependent on application) polyvinyl chloride (PVC) construction, manufactured in accordance with NEMA TC-2, UL 651 Listed, and suitable for conductors with 90 degree C insulation.

B. Conduit Bodies for use with Rigid Nonmetallic Conduit

1. Conduit bodies shall be constructed of PVC. Conduit hubs shall be integral to the conduit body and shall be smooth inside to accept a glued conduit connection.

2. Conduit body shall be provided with cover that is affixed in place by stainless steel screws which thread directly into the conduit body. Covers that utilize wedge nuts or any other method of attachment to the conduit body are not acceptable. Covers shall be provided with matching gasket.

C. Conduit Couplings and Unions for use with Rigid Nonmetallic Conduit

1. Conduit couplings and unions shall be constructed of PVC and shall be smooth inside to accept a glued conduit connection.

D. Conduit Expansion and Deflection Fittings for use with Rigid Nonmetallic Conduit

1. Conduit expansion fittings and conduit deflection fittings shall be constructed of PVC and shall be smooth inside to accept a glued conduit connection.

E. Conduit Termination Fittings for use with Rigid Nonmetallic Conduit

1. Conduit hubs shall be constructed of PVC and shall be smooth inside to accept a glued conduit connection. Hubs shall have external threads and an accompanying PVC locknut, and shall be watertight when assembled to an enclosure.

2. Conduit locknuts shall be constructed of zinc plated steel. Locknuts shall have internal threading. Locknuts constructed of PVC and locknuts with integral gasket or seal are not acceptable.

3. Conduit end bells shall be constructed of PVC and shall be smooth inside to accept a glued conduit connection. End bell shall have a smooth inner surface that curves outward towards the edge of the fitting.

2.04 PVC COATED RIGID GALVANIZED STEEL CONDUIT AND ASSOCIATED FITTINGS

A. General

1. Where an external coating of polyvinyl chloride (PVC) is specified for conduit and fittings, the coating shall be 40 mil (minimum) thickness. Where an internal coating of urethane is specified for conduit and fittings, the coating shall be 2 mil (minimum) thickness.

2. All conduit fittings shall have a sealing sleeve constructed of PVC which covers all connections to conduit. Sleeves shall be appropriately sized so that no conduit threads will be exposed after assembly.

B. Conduit

1. Conduit shall be hot dip galvanized on the inside and outside and made of heavy wall high strength ductile steel. Conduit shall be manufactured in accordance with ANSI C80.1 and shall be UL 6 Listed.

2. Conduit shall be provided with factory-cut 3/4 inch per foot tapered threads at each end in accordance with ANSI B1.20.1. Threads shall be cut prior to galvanizing to ensure corrosion protection adequately protects the threads. Conduit shall be provided with a matching coupling on one end and a color-coded thread protector on the other.

3. Conduit shall be coated on the exterior with a PVC jacket and coated on the interior with a layer of urethane. Conduit shall be manufactured in accordance with NEMA RN 1.

C. Conduit Bodies for use with PVC Coated Rigid Galvanized Steel Conduit

1. Conduit bodies shall be constructed of an electro-galvanized malleable iron alloy which is coated on the exterior with a PVC jacket and coated on the interior with a layer of urethane. Conduit bodies shall have integral threaded conduit hubs.

2. Conduit bodies for all other areas shall be constructed of an electro-galvanized malleable iron alloy which is coated on the exterior with a PVC jacket and coated on the interior with a layer of urethane. Covers shall be affixed in place by stainless steel screws which thread directly into the conduit body and have a plastic encapsulated head. Covers that utilize wedge nuts or any other method of attachment to the conduit body are not acceptable. Covers shall be provided with matching gasket.

D. Conduit Couplings, Nipples, and Unions for use with PVC Coated Rigid Galvanized Steel Conduit

1. Couplings and nipples shall be threaded and shall be constructed of hot dipped galvanized steel which is coated on the exterior with a PVC jacket and coated on the interior with a layer of urethane. Split-type couplings that use compression to connect conduits are not acceptable.

2. Unions shall be threaded, rain-tight, and constructed of an electro-galvanized malleable iron alloy which is coated on the exterior with a PVC jacket and coated on the interior with a layer of urethane.

E. Conduit Expansion and Deflection Fittings for use with PVC Coated Rigid Galvanized Steel Conduit

1. Conduit expansion fittings and conduit deflection fittings shall be constructed of bronze or an electro-galvanized malleable iron alloy which is coated on the exterior with a PVC jacket and coated on the interior with a layer of urethane. Expansion and deflection fittings shall have threaded conduit connections.

2. Expansion fittings shall have an integral bonding jumper and deflection fittings shall have an external bonding jumper.

F. Conduit Seals for use with PVC Coated Rigid Galvanized Steel Conduit

1. Conduit seals shall be constructed of an electro-galvanized malleable iron alloy which is coated on the exterior with a PVC jacket and coated on the interior with a layer of urethane. Conduit seals shall have threaded conduit connections.

G. Conduit Termination Fittings for Use with PVC Coated Rigid Galvanized Steel Conduit

1. Conduit hubs shall be constructed of an electro-galvanized malleable iron alloy which is coated on the exterior with a PVC jacket and coated on the interior with a layer of urethane. Hubs shall have threaded connections to the conduit and enclosure. Hubs shall have a plastic insulated throat and shall be watertight when assembled to an enclosure.

2. Conduit bonding bushings shall be constructed of zinc plated malleable iron which is coated on the exterior with a PVC jacket and coated on the interior with a layer of urethane. Bonding bushings shall have a threaded conduit connection. Bonding bushing shall be provided with properly sized set screw for connecting bonding conductor and an integral plastic insulator rated for 150 degrees C located in the throat.

2.05 LIQUID TIGHT FLEXIBLE METAL CONDUIT (LFMC) AND ASSOCIATED FITTINGS

A. Conduit

1. Conduit shall be manufactured using a single strip of hot dip galvanized high strength steel alloy, helically formed into a continuously interlocked flexible metal conduit. Trade size 1-1/4 inch and smaller conduits shall be provided with an integrally woven copper bonding strip.

2. Conduit shall be covered with an outside PVC jacket that is UV resistant, moisture-proof, and oil-proof. Conduit shall be UL 360 Listed. Conduits shall be Listed for and marked with maximum temperature ratings as follows:

   a. 105 degrees C dry, 60 degrees C wet for all conduit installed against or within 2 inches of equipment capable of having a surface temperature of 80 degrees C or greater (e.g. blowers, incinerators, etc)

   b. 80 degrees C dry, 60 degrees C wet for all other locations

B. Conduit Termination Fittings for use with LFMC

1. Conduit termination fittings shall be constructed of either 304 stainless steel or an electro-galvanized malleable iron alloy which is coated on the exterior with a 40 mil (minimum) PVC jacket and coated on the interior with a 2 mil (minimum) layer of urethane. PVC coated fittings shall have a sealing sleeve constructed of PVC which covers the connection to conduit.

2. Termination fittings shall have a threaded end with matching locknut and sealing ring for termination to equipment and shall have an integral external bonding lug where required for proper bonding. Termination fittings shall have a plastic insulated throat and shall be watertight when assembled to the conduit and equipment.

2.06 LIQUID TIGHT FLEXIBLE NONMETALLIC CONDUIT (LFNC) AND ASSOCIATED FITTINGS

A. Conduit

1. Conduit shall be constructed of rigid polyvinyl chloride (PVC), fabricated to provide flexibility. Conduit shall be covered with an outside PVC jacket that is UV resistant, moisture-proof, and oil-proof. Conduit shall be UL 1660 Listed.

B. Conduit Termination Fittings for use with LFNC

1. Conduit termination fittings shall be constructed PVC and shall have a threaded end with matching locknut and sealing ring for termination to equipment. Termination fittings shall be watertight when assembled to the conduit and equipment.

2.07 FLEXIBLE METAL CONDUIT (FMC) AND ASSOCIATED FITTINGS

A. Conduit

1. Conduit shall be manufactured using a single strip of hot dip galvanized high strength steel alloy, helically formed into a continuously interlocked flexible metal conduit. Conduit shall be UL 1 Listed.

B. Conduit Termination Fittings for use with FMC

1. Conduit termination fittings shall be constructed of an electro-galvanized malleable iron alloy. Fittings shall have a threaded end with matching locknut for termination to equipment, and a compression-style connection to the associated conduit.

2.08 ELECTRICAL METALLIC TUBING (EMT) AND ASSOCIATED FITTINGS

A. Conduit

1. Conduit shall be hot dipped galvanized on the inside and outside and made of cold-rolled steel tubing. Conduit shall be manufactured in accordance with C80.3 and shall be UL 797 listed.

B. Conduit Bodies for use with EMT

1. Conduit bodies shall be constructed of an electro-galvanized malleable iron alloy which is coated with an acrylic paint finish. Conduit bodies shall have integral threaded conduit hubs.

2. Conduit bodies shall be provided with galvanized sheet steel covers that are affixed in place by stainless steel screws which thread directly into the conduit body. Covers that utilize wedge nuts or any other method of attachment to the conduit body are not acceptable. Covers shall be provided with matching gasket.

C. Conduit Couplings and Nipples for use with EMT

1. Couplings and nipples shall have threaded compression connectors with associated gland and shall be constructed of electro-galvanized steel. Fittings utilizing a set screw or indenter tool to secure the associated conduit to the fitting are not acceptable. Couplings and nipples shall be rain-tight and have a plastic insulated throat.

D. Conduit Expansion and Deflection Fittings for use with EMT

1. Conduit expansion fittings and conduit deflection fittings shall be constructed of an electro-galvanized malleable iron alloy which is coated with an acrylic paint finish. Expansion and deflection fittings shall have threaded conduit connections.

2. Expansion fittings shall have an integral bonding jumper and deflection fittings shall have an external bonding jumper.

E. Conduit Termination Fittings for use with EMT

1. Conduit termination fittings shall be constructed of electro-galvanized steel and have a plastic insulated throat. Termination fittings shall have a threaded compression connector with associated gland on one end and external threads on the other end. Termination fittings utilizing a set screw or indenter tool to secure the associated conduit to the fitting are not acceptable.

2. Conduit locknuts shall be constructed of zinc plated steel. Locknuts shall have internal threading. Locknuts shall have integral bonding screw where required for proper bonding.

2.09 CONDUIT BENDS

A. Rigid conduit bends, both factory-fabricated and field-fabricated, shall meet the same requirements listed in the articles above for the respective conduit type and material of construction.

B. Conduit bend radii for standard radius bends shall be no less than as follows:

Trade Size (inches)	3/4	1	1-1/4	1-1/2	2	2-1/2	3	3-1/2	4	5	6
Min. Radius (inches)	4-1/2	5-3/4	7-1/4	8-1/4	9-1/2	10-1/2	13	15	16	24	30

C. Conduit bend radii for long radius bends shall be no less than as follows:

Trade Size (inches)	3/4	1	1-1/4	1-1/2	2	2-1/2	3	3-1/2	4	5	6
Min. Radius (inches)	N/A	12	18	24	30	30	36	36	48	48	60

2.10 MISCELLANEOUS

A. Conduit Periphery Sealing

1. The sealing of the exterior surface of conduits to prevent water and/or air from passing around the conduit periphery from one space to another (where required) shall be through the use of one of the following:

   a. A conduit sleeve and pressure bushing sealing system. Acceptable products are FSK by OZ-GEDNEY, Link-Seal by Crouse-Hinds, or Engineer approved equal.

   b. A conduit sleeve that is two trade sizes larger than the conduit being sealed, with 2-hour fire rated UL 1479 Listed caulk filling the entire void between the conduit and sleeve. This method is only suitable for penetrations in non-fire

rated walls and floors between spaces within buildings. This method shall not be used for the sealing of conduits leaving a building and/or structure.

2. Conduit penetrations through fire-rated walls and floors shall be made with an approved UL 1479 Listed product specifically intended for the trade size of the conduit.

B. Primer and Cement

1. Nonmetallic conduit shall be cleaned with primer and connected to fittings with the manufacturer's recommended cement that is labeled Low VOC.

C. Galvanizing Compounds

1. Galvanizing compounds for field application shall be the cold-applied type, containing no less than 93% pure zinc.

D. Conduit Interior Sealing

1. The sealing of the inside of conduits against water ingress shall be achieved through the use of one of the following:

a. Two-part expanding polyurethane foam sealing compound, dispensed from a single tube which mixes the two parts as it is injected into the conduit. Expanding foam shall be compatible with the conduit material of construction as well as the outer jacket of the cables in the conduit. Acceptable products are Q-Pak 2000 by Chemque, FST by American Polywater Corporation, or Hydra-seal S-60 by Duraline.

b. Inflatable bag that provides seal around cables and around inside diameter of conduit. Provide appropriate quantity of additional fittings for applications with three or more cables in the conduit to be sealed. Acceptable products are Rayflate by Raychem, or Engineer approved equal. This sealing method is only applicable to conduits trade size 2 inch and larger.

c. Neoprene sealing ring provided with the required quantity and diameter of holes to accommodate the cables in each conduit. Sealing ring shall be compressed by two stainless steel pressure plates. Acceptable products are type CSB by OZ-GEDNEY, or Engineer approved equal. This sealing method is only applicable to metallic conduits containing 4 or less cables.

2. The use of aerosol-based expanding foam sealants or any other method of sealing against water ingress not listed above is not acceptable.

E. Pull Rope

1. Pull ropes for empty and/or spare conduits shall be woven polyester, ½-inch wide, with a minimum tensile strength of 1250 lbs.

2. Pull ropes for the Contractors use in installing conductors shall be the size and strength required for the pull and shall be made of a non-metallic material.

PART 3 – EXECUTION

3.01 GENERAL

A. All conduit and associated fittings and appurtenances shall be installed in accordance with NECA 1.

B. Minimum trade size for all rigid conduits shall be 3/4 inch in exposed applications and 1 inch in embedded applications. Conduits installed within ductbanks shall be allowed to be increased in size to trade size 2 inch, at the Contractor's option, to accommodate the saddle size of the ductbank spacers. However, no combining of circuits shall be allowed in the larger conduits.

C. Minimum trade size for flexible conduits (where specifically allowed herein) shall be 1/2 inch in all applications.

D. Conduit routing and/or homeruns within structures is not shown on the Drawings. Conduits shall be installed concealed wherever practical and within the limitations specified herein. All other conduits not capable of being installed concealed shall be installed exposed.

E. Empty and/or spare conduits shall be provided with pull ropes which have no less than 12 inches of slack at each end.

F. Nonmetallic conduits for installations requiring less than a factory length of conduit shall be field cut to the required length. The cut shall be made square, cleaned of debris, and primer shall be applied to ready each joint for fusing. Conduits shall then be fused together with the conduit manufacturer's approved cement compound.

G. Metallic conduits for installations requiring less than a factory length of conduit shall be field cut to the required length. The cut shall be made square, be cleaned of all debris and be de-burred, then threaded. Conduit threading performed in the field shall be ¾ inch per foot tapered threads in accordance with ANSI B1.20.1.

H. Conduits shall be protected from moisture, corrosion, and physical damage during construction. Install dust-tight and water-tight conduit fittings on the ends of all conduits immediately after installation and do not remove until conductors are installed.

I. Conduits shall be installed to provide no less than 12 inches clearance from pipes that have the potential to impart heat upon the conduit. Such pipes include, but are not limited to, hot water pipes, steam pipes, exhaust pipes, and blower air pipes. Clearance shall be maintained whether conduit is installed in parallel or in crossing of pipes.

J. Where non-metallic instrumentation conduits are installed exposed, the following clearances to other conduit types shall be maintained:

1. Instrumentation conduits installed parallel to conduits with conductors energized at 480V or above shall be 18 inches.

2. Instrumentation conduits installed parallel to conduits with conductors energized at 240V and below shall be 12 inches.

3. Instrumentation conduits installed at right angles to conductors energized at 480V and below shall be 6 inches.

4. Instrumentation conduits installed at right angles to conductors energized at voltages above 480V shall be 12 inches.

K. Where conduit fittings do not include an integral insulated bushing, an insulated bushing shall be installed at all conduit termination points.

L. Conduits which serve multi-section equipment shall be terminated in the section where wiring terminations will be made.

M. Conduits shall not penetrate the floors or walls inside liquid containment areas without specific written authorization from the Engineer. Liquid containment areas are indicated on the Drawings.

N. Conduits that terminate at roof mounted equipment shall be installed through the roof curb for the associated equipment to avoid additional roof penetrations wherever possible. Conduits that are installed horizontally on roof surfaces shall be supported by roof blocks that do not impact the roof manufacturer's warranty and shall be installed at least 7/8 inch above the roof surface to avoid the need to further de-rate the conductors inside.

O. In no case shall conduit be supported or fastened to another pipe or be installed in a manner that would prevent the removal of other pipes for repairs. Spring steel fasteners may only be used to affix conduits containing lighting branch circuits within EMT conduits to structural steel members.

P. All field fabricated threads for rigid galvanized steel conduit shall be thoroughly coated with two coats of galvanizing compound, allowing at least two minutes to elapse between coats for proper drying.

Q. The appropriate specialized tools shall be used for the installation of PVC coated conduit and conduit fittings. No damage to the PVC coating shall occur during installation. Conduit and conduit fittings with damaged PVC coating shall be replaced at the Contractor's cost. The use of PVC coating touch-up compounds is not permitted.

3.02 CONCEALED AND EMBEDDED CONDUITS

A. Conduits are permitted to be installed concealed and/or embedded with the following requirements:

1. Conduits shall not be installed horizontally when concealed within CMU walls, only vertical installation is acceptable.

2. Where conduit bends emerge from concrete embedment, none of the curved portion of the bend shall be visible. Only the straight portion of the bend shall be visible. The straight portion shall emerge perpendicular to the embedment (i.e. neatly oriented 90-degrees to floor/slab/grade). Conduits that emerge in a non-perpendicular orientation are not acceptable.

3. Where multiple conduits emerge from concrete embedment or from concealment below a concrete floor, ample clear space shall be provided between conduits to allow for the appropriate and required conduit termination fittings to be installed.

4. Conduits installed embedded within concrete encasement of any kind shall be installed such that conduit couplings for parallel conduits are staggered so that they are not side by side.

B. Conduits are NOT permitted to be installed concealed and/or embedded for the following situations:

1. Conduits shall not be installed embedded within any water-bearing floors or walls. Conduits shall not be installed embedded within any liquid containment area floors or walls.

2. Conduits shall not be installed concealed within CMU walls or gypsum walls that are adjacent to indoor Type 1 or Type 2 chemical storage/transfer areas.

3.03 CONDUIT USES AND APPLICATIONS

A. Rigid Conduit

1. Rigid conduit for non-hazardous areas shall be furnished and installed in the materials of construction as follows:

Rigid Conduit for Non-Hazardous Areas

Installation Area Designation / Scenario	Conduit Category by Wiring / Circuit Type	
	Power and Control	**Instrumentation**
Exposed in indoor dry non-process areas	Rigid galvanized steel conduit	Same as Power and Control
Exposed in indoor Type 1 chemical storage/transfer areas	Schedule 80 rigid non-metallic PVC conduit	Same as Power and Control
Exposed in indoor Type 2 chemical storage/transfer areas	PVC coated rigid galvanized steel conduit	Same as Power and Control
Exposed in outdoor areas	PVC coated rigid galvanized steel conduit	Same as Power and Control
Exposed within pre-fabricated electrical equipment center buildings	Electrical Metallic Tubing	Same as Power and Control
Concealed above suspended ceilings	Electrical Metallic Tubing	Same as Power and Control
Concealed within interior walls constructed of metal studs and gypsum wall board	Electrical Metallic Tubing	Same as Power and Control

2. The tables for the materials of construction for rigid conduits are intended to exhaustively cover all possible scenarios and installation areas under this Contract. However, if a scenario or installation area is found that is not explicitly governed by these tables, it shall be assumed for bid purposes that the conduit material of construction is to be rigid galvanized steel. This discrepancy shall be brought to the attention of the Engineer (in writing) immediately for resolution.

B. Conduit Bends

1. All conduit bends shall be the same material of construction as the rigid conduit listed in the tables above, with the following exceptions:

   a. All 90-degree bends or combinations of adjacent bends that form a 90-degree bend where concealed within concrete or below a concrete slab shall be rigid galvanized steel.

2. Field fabricated bends of metallic conduit shall be made with a bending machine and shall have no kinks. Field fabricated standard radius and long radius bends shall have minimum bending radii in accordance with the associated tables in Part 2 herein.

3. Field bending of non-metallic conduits is not acceptable, factory fabricated bends shall be used.

4. Long radius bends shall be furnished and installed for the following specific applications, all other bends shall be standard radius:

   a. All conduits containing medium voltage cable.

   b. All conduits containing fiber optic cable.

   c. All conduits containing shielded VFD cable.

   d. Where specifically indicated on the Drawings.

C. Flexible Conduit

1. Flexible conduit shall only be installed for the limited applications specified herein. Flexible conduit shall not be installed in any other application without written authorization from the Engineer. Acceptable applications are as follows:

   a. Connections to motors and engine-generator sets (and similar vibrating equipment)

   b. Connections to solenoid valves and limit switches

   c. Connections to lighting fixtures installed in suspended ceilings

   d. Connections to lighting transformers and combination power units

   e. Connections to pre-fabricated equipment skids

   f. Connections to HVAC equipment

   g. Connections to instrument transmitters and elements

   h. Where specifically indicated in the Standard Details

2. Flexible conduit length shall be limited to three (3) feet, maximum. Flexible conduit shall not be installed buried or embedded within any material.

3. Unless otherwise specified herein, flexible conduits shall be installed in accordance with the Installation Guidelines published within NEMA RV-3.

4. Flexible conduit for non-hazardous areas shall be furnished and installed in the materials of construction as follows:

Flexible Conduit for Non-Hazardous Areas

Installation Area Designation / Scenario	Conduit Category by Wiring / Circuit Type	
	Power and Control	**Instrumentation**
Exposed in indoor dry non-process areas	Flexible metal conduit	Same as Power and Control
Exposed in indoor Type 1 chemical storage/transfer areas	Liquid-tight flexible non-metallic conduit	Same as Power and Control
Exposed in indoor Type 2 chemical storage/transfer areas	Liquid-tight flexible metal conduit	Same as Power and Control
Exposed in outdoor areas	Liquid-tight flexible metal conduit	Same as Power and Control
Concealed above suspended ceilings (all indoor areas)	Same material as exposed conduit in same area	Same as Power and Control

3.04 CONDUIT FITTING USES AND APPLICATIONS

A. General

1. Conduit fittings shall be furnished and installed in the materials of construction as indicated in Part 2, herein. Conduit fitting materials of construction are dependent on the material of construction used for the associated conduit.

2. Conduit fittings shall be provided in the trade size and configuration required to suit the application.

B. Conduit Bodies

1. Conduit bodies shall be installed where wire pulling points are desired or required, or where changes in conduit direction or breaking around beams is required.

2. Where conduit bodies larger than trade size 2 inches are intended to be used as a pull-through fitting during wire installation, oversized or elongated conduit bodies shall be used. Oversized or elongated conduit bodies shall not be required if the conduit body is intended to be used as a pull-out point during wire installation.

C. Conduit Nipples and Unions

1. Conduits with running threads shall not be used in place of 3-piece couplings (unions) or close nipples. After installation of a conduit fitting of any kind, there shall be no more than ¼ inch of exposed threads visible. Factory fabricated all-

thread nipples may be used between adjacent enclosures, however, the same restriction applies regarding the length of exposed threads that are visible.

D. Conduit Expansion and Deflection Fittings

1. Conduit expansion fittings shall be installed where required by the NEC and where indicated on the Drawings. Expansion fittings shall also be installed for exposed straight metallic conduit runs of more than 75 feet, in both indoor and outdoor locations. Expansion fittings for runs of non-metallic conduit shall be installed in accordance with the NEC.

2. Conduit deflection fittings shall be installed where required by the NEC and where conduits are installed (exposed and concealed) across structural expansion joints.

3. Unless otherwise specified herein, conduit expansion and deflection fittings shall be installed in accordance with the Installation Guidelines published within NEMA FB 2.40.

E. Conduit Seals

1. Conduit seals shall be installed for conduits installed within or associated with hazardous areas and other areas as required by the NEC. In addition, conduit seals shall also be furnished and installed as follows:

a. All conduits entering or leaving enclosed areas which store or distribute chlorine gas.

b. All conduits entering or leaving enclosed areas which store or distribute sulfur dioxide gas.

F. Conduit Termination Fittings

1. Where conduits terminate at enclosures with a NEMA 4, 4X, or 3R rating and the enclosure does not have integral conduit hubs, an appropriately sized watertight conduit hub shall be installed to maintain the integrity of the enclosure. The use of locknuts with integral gasket in lieu of watertight conduit hubs is not acceptable.

2. Where conduits terminate at enclosures that do not require conduit hubs, a two-locknut system shall be used to secure the conduit to the enclosure. One locknut shall be installed on the outside of the enclosure, and the other inside, drawn tight against the enclosure wall. The locknut on the interior of the enclosure shall be the type with integral bonding lug, or a conduit bonding bushing may be used in place of the interior locknut.

3. Conduits shall not be installed such that conduit fittings penetrate the top of any enclosure located outdoors, except in cases where specifically required by the serving electric utility. Conduits which serve outdoor equipment or an enclosure from above shall instead be routed into the side of the enclosure at the bottom.

The conduit termination fitting shall be provided with a conduit drain to divert moisture from the raceway away from the enclosure.

3.05 MISCELLANEOUS

A. Conduit Periphery Sealing

1. All conduit penetrations through exterior walls shall be sealed around the periphery using the appropriate products specified in Part 2 herein to prevent air and/or water entry into the structure.

2. All conduit penetrations through interior walls and floors shall be sealed through the use of with conduit sleeves and caulk as specified in Part 2 herein. Alternatively, mortar may be used to seal around the conduit periphery.

3. Conduit penetrations through fire-rated walls as floors shall be made with the appropriate fire rated penetration product.

B. Conduit Interior Sealing

1. All conduits (including spares) entering a structure below grade shall be sealed on the interior of the conduit against water ingress. Sealing shall be at an accessible location in the conduit system located within the building structure and shall be via one of the methods specified in Part 2 herein. If conduit sealing cannot be achieved at an accessible location within the building structure, sealing shall be placed in the conduits in the nearest manhole or handhole outside the structure.

2. Conduit interior sealing shall not be installed until conductors inside are tested and test results are deemed acceptable by the Engineer. Conduit interior sealing shall be installed prior to energization of the conductors inside.

3.06 CONDUIT IDENTIFICATION

A. The identification system for the conduits furnished and installed under this Contract shall match the existing identification system used at the project location.

3.07 TESTING

A. All tests shall be performed in accordance with the requirements of the General Conditions and Division 01. The following tests are required:

1. All conduit installed below grade or concrete encased shall be tested to ensure continuity and the absence of obstructions by pulling through each conduit a swab followed by a mandrel 85% of the conduit inside diameter. After testing, all conduits shall be capped after installation of a suitable pulling rope.

3.08 TRAINING OF INSTALLATION PERSONNEL

A. All Contractor personnel that install PVC coated RGS conduit shall be trained by the PVC coated RGS conduit manufacturer. Training shall include proper conduit system assembly techniques, use of tools appropriate for coated conduit systems, and field bending/cutting/threading of coated conduit. Training shall have been completed within the past 24 months prior to the Notice to Proceed on this Contract to be considered valid. Contractor personnel not trained within this timeframe shall not be allowed to install coated conduit or shall be trained/re-trained as required prior to commencement of conduit installation.

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SECTION 26 05 33.16
BOXES FOR ELECTRICAL SYSTEMS

PART 1 – GENERAL

1.01 THE REQUIREMENT

A. The scope of work under this Section includes furnishing and installing all pull boxes, junction boxes, and outlet boxes.

B. Requirements for other boxes and enclosures are not included in this Section. Reference each specific equipment Section for requirements related to that equipment's respective enclosure.

C. Reference Section 26 05 00 – Basic Electrical Requirements and Section 26 05 33.13 – Conduit for Electrical Systems.

1.02 CODES AND STANDARDS

A. Boxes shall be designed, manufactured, and/or listed to the following standards as applicable:

1. UL 514A – Metallic Outlet Boxes

2. UL 514C – Standard for Non-metallic Outlet Boxes, Flush Device Boxes, and Covers

3. UL 50 – Enclosures for Electrical Equipment, Non-environmental Considerations

4. UL 50E – Enclosures for Electrical Equipment, Environmental Considerations

5. UL 1203 – Standard for Explosion-proof and Dust-ignition-proof Electrical Equipment for use in Hazardous (Classified) Locations.

6. NEMA 250 – Enclosures for Electrical Equipment

1.03 SUBMITTALS

A. In accordance with the procedures and requirements set forth in the General Conditions and Section 01 33 00 – Submittal Procedures, the Contractor shall obtain from the equipment manufacturer(s) and submit the following:

1. Shop Drawings

B. Each submittal shall be identified by the applicable Specification Section.

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1.04 SHOP DRAWINGS

A. Each submittal shall be complete in all respects, incorporating all information and data listed herein and all additional information required for evaluation of the proposed equipment's compliance with the Contract Documents.

B. Partial, incomplete or illegible Submittals will be returned to the Contractor without review for resubmittal.

C. Shop drawings shall include but not be limited to:

1. Product data sheets for boxes, terminal strips, and all accessories

1.05 OPERATION AND MAINTENANCE MANUALS

A. The Contractor shall submit operation and maintenance manuals in accordance with the procedures and requirements set forth in the General Conditions and Division 01.

B. As-built drawings showing dimensions, internal box layout, terminal strip information, and terminal strip identification information shall be provided for all junction boxes. As-built drawings are not required for pull boxes or outlet boxes.

1.06 IDENTIFICATION

A. Each pull and junction box shall be identified with the box name as indicated on the Contract Drawings (e.g. PPB-XXX, CJB-YYY) or as directed by the Engineer. A nameplate shall be securely affixed in a conspicuous place on each box. Nameplates shall be as specified in Section 26 05 53 – Identification for Electrical Systems.

PART 2 – PRODUCTS

2.01 MANUFACTURERS

A. The equipment covered by this Specification is intended to be standard equipment of proven performance as manufactured by reputable concerns. Equipment shall be designed, constructed, and installed in accordance with the best practices of the trade, and shall operate satisfactorily when installed as shown on the Drawings.

2.02 PULL AND JUNCTION BOXES

A. General

1. All pull and junction boxes shall be UL listed and labeled.

2. Pull and junction boxes shall not be provided with eccentric or concentric knockouts.

3. Pull and junction boxes mounted embedded in concrete shall be UL listed for embedment.

4. Where metallic boxes are used, they shall be of all welded construction. Tack welded boxes are not acceptable.

B. Pull Boxes

1. Metallic pull boxes in non-hazardous locations and in hazardous locations where general-purpose enclosures are permitted (e.g. Class I, Division 2 locations) shall be provided with a matching gasketed cover. For covers with dimensions of less than 12 inches by 12 inches, the cover shall be held in place by stainless steel machine screws. Other screw types are not acceptable. For covers with dimensions 12 inches by 12 inches and larger, the cover shall be hinged and held in place by 1/4-turn style latches. Latch mechanism shall be all stainless steel. Hinge pins shall be removable.

2. Non-metallic pull boxes shall be provided with a matching gasketed cover. The cover shall be hinged and held in place by quick-release (e.g. “flip”) latches. Latch material of construction shall match the box material, and include stainless steel hasps. For covers with dimensions 24 inches by 24 inches and larger, a 3-point latching mechanism with external pad-lockable handle may be substituted. Latch mechanism and handle shall be all stainless steel. Hinge pins shall be removable.

3. Pull boxes shall not have any wire terminations inside, other than those for grounding/bonding. A ground bar shall be provided with the necessary number of screw type terminals. Twenty (20) percent of the total amount of terminals otherwise required for the pull box (minimum of two) shall be provided as spare terminations. Boxes requiring any other wire terminations shall be furnished and installed in accordance with the requirements for junction boxes herein.

4. Pull boxes shall be 6 inches wide by 6 inches tall by 4 inches deep, minimum. For applications requiring larger boxes, the box shall be sized in accordance with the fill requirements and dimensional requirements of the NEC.

5. Barriers shall be provided in pull boxes to isolate conductors of different voltages, types, and functions. Barrier material of construction shall match that of the box. Isolation shall be provided between the following groups:

   a. Power wiring

   b. AC control wiring

   c. DC control wiring

   d. Instrumentation wiring

C. Junction Boxes

1. Metallic junction boxes in non-hazardous locations shall be provided with a matching gasketed cover. For covers with dimensions of less than 12 inches by 12 inches, the cover shall be held in place by stainless steel machine screws. Other screw types are not acceptable. For covers with dimensions 12 inches by 12 inches and larger, the cover shall be hinged and held in place by 1/4-turn style latches. Latch mechanism shall be all stainless steel. Hinge pins shall be removable.

2. Metallic junction boxes in hazardous locations shall be provided with a matching gasketed cover. Cover shall be hinged and held in place by stainless steel bolts. Hinge pins shall be removable. Covers shall be installed and bolts torqued in accordance with manufacturer requirements to maintain the hazardous location rating of the enclosure.

3. Non-metallic junction boxes shall be provided with a matching gasketed cover. The cover shall be hinged and held in place by quick-release (e.g. “flip”) latches. Latch material of construction shall match the box material and include stainless steel hasps. For covers with dimensions 24 inches by 24 inches and larger, a 3-point latching mechanism with external pad-lockable handle may be substituted. Latch mechanism and handle shall be all stainless steel. Hinge pins shall be removable.

4. Barriers shall be provided in junction boxes to isolate conductors and terminal blocks of different voltages, types, and functions. Barrier material of construction shall match that of the box. Isolation shall be provided between the following groups:

   a. Power wiring

   b. AC control wiring

   c. DC control wiring

   d. Instrumentation wiring

5. Junction boxes used for lighting and receptacle circuits only shall be allowed to have screw-on (wire nut) type connectors for wire terminations/junctions.

6. Junction boxes for all uses other than lighting and receptacle circuits shall be provided with terminal strips, consisting the necessary number of screw type terminals. Current carrying parts of the terminal blocks shall be of ample capacity to carry the full load current of the circuits connected, with a 10A minimum capacity. Terminal strips shall be rated for the voltage of the circuits connected. A separate ground bar shall be provided with the necessary number of screw type terminals. Twenty (20) percent of the total amount of terminals otherwise required for the junction box (minimum of two) shall be provided as spare terminations.

When barriers are provided within the box, separate terminal strips shall be provided in each barrier area. Terminals shall be lettered and/or numbered to conform to the wiring labeling scheme in place on the project.

7. Junction boxes shall be 6 inches wide by 6 inches tall by 4 inches deep, minimum. For applications requiring larger boxes, the box shall be sized in accordance with the fill requirements and dimensional requirements of the NEC. Terminal blocks (including spare terminals) shall be considered when sizing the junction box.

D. Enclosure Types and Materials

1. In non-hazardous locations, pull and junction boxes shall be furnished with the following enclosure type and material of construction, dependent upon the designation of the area in which they are to be installed. Area designations are indicated on the Drawings.

Area Designation	**Enclosure Type and Material**
Indoor Dry Non-Process Area	NEMA 1, Painted Steel
Indoor Type 1 Chemical Storage/Transfer Area	NEMA 4X, Fiberglass or PVC
Indoor Type 2 Chemical Storage/Transfer Area	NEMA 4X, Type 304 Stainless Steel
All Outdoor Areas	NEMA 4X, Type 304 Stainless Steel

2. Non-metallic enclosures, NEMA 7 enclosures, and NEMA 9 enclosures shall be provided with threaded integral conduit hubs.

3. Where located outdoors or in indoor wet process areas, NEMA 7 and NEMA 9 enclosures shall also carry a NEMA 4X rating.

2.03 OUTLET BOXES

A. General

1. Outlet boxes shall be provided with a trim appropriate for the wiring device installed inside. Reference Section 26 27 26 – Wiring Devices for outlet box trim requirements. An appropriate outlet box trim is required to achieve the NEMA rating of the outlet boxes as specified herein.

B. Surface Mount Outlet Boxes

1. Outlet boxes shall be the deep type, no less than 2.5 inches deep.

2. Outlet boxes shall be provided in single or multi-gang configuration as required, sized in accordance with the requirements of the NEC.

3. In non-hazardous locations, outlet boxes shall be furnished with the following enclosure type and material of construction, dependent upon the designation of the area in which they are to be installed. Area designations are indicated on the Drawings.

Area Designation	**Enclosure Type and Material**
Indoor Dry Non-process Area	NEMA 1, Cast Aluminum
Indoor Type 1 Chemical Storage/Transfer Area	NEMA 4X, PVC
Indoor Type 2 Chemical Storage/Transfer Area	NEMA 4X, PVC Coated Steel
All Outdoor Areas	NEMA 4X, PVC Coated Steel

4. Outlet boxes shall be provided with integral threaded conduit hubs mounted external to the box. Boxes with threaded conduit hubs mounted internal to the box or as a part of the box wall are not acceptable.

C. Flush Mount Outlet Boxes

1. Outlet boxes shall be no less than 2-1/8 inches deep, and 4-11/16 inches square. Boxes shall be UL listed and labeled. Pre-punched single diameter conduit knockouts are acceptable; however, concentric and eccentric knockouts are not acceptable.

2. Outlet boxes mounted flush in CMU walls shall be made of galvanized, tack welded steel, and suitable for installation in masonry walls. Sectional type boxes are not acceptable for this application.

3. Outlet boxes mounted flush in gypsum walls shall be made of galvanized pressed steel. Tack welded boxes are not acceptable for this application. Sectional type boxes are not acceptable for this application.

4. Outlet boxes mounted cast into concrete shall be concrete tight and made of galvanized steel or PVC.

PART 3 – EXECUTION

3.01 INSTALLATION

A. Pull and Junction Boxes

1. Pull boxes and junction boxes shall be solidly attached to structural members prior to installation of conduit and set true and plumb. Boxes shall not be supported by their associated conduits.

2. Wooden plugs are not permitted for securing boxes to concrete. Appropriately rated anchors specifically suited for use in concrete shall be used.

3. Box penetrations for conduits shall be made with a punch tool, and penetrations shall be of the size required for the conduit entry and/or hub. Oversized penetrations in boxes are not acceptable.

4. Watertight conduit hubs shall be provided for boxes where a NEMA 4X enclosure rating is specified. Reference Section 26 05 33.13 – Conduit for Electrical Systems for conduit hub requirements.

5. Pull and junction boxes may be installed flush mounted in gypsum, concrete or CMU walls where appropriate provided that covers are easily removed or opened.

6. Pull and junction boxes shall be provided in the enclosure type and material of construction required for the area in which it is installed. Reference the requirements in Part 2 herein, and the area designations indicated on the Drawings.

B. Outlet Boxes

1. Outlet boxes shall be solidly attached to structural members prior to installation of conduit and set true and plumb. Boxes shall not be supported by their associated conduits.

2. Wooden plugs are not permitted for securing boxes to concrete. Appropriately rated anchors specifically suited for use in concrete shall be used.

3. Flush mounted outlet boxes shall be arranged and located so that tile and grout lines fit closely around the boxes, and so placed that the cover or device plate shall fit flush to the finished wall surface.

4. Outlet boxes shall be flush mounted in finished areas and other areas where practical. Flush mounted outlet boxes shall not be installed in hazardous areas and type 1 or 2 chemical storage/transfer areas.

5. For the below-named items, mounting heights from finished floor, or finished grade to top is applicable, depending on the type of wiring device to be installed in the outlet box. Mounting heights for outlet boxes shall be as follows, unless otherwise specified herein, indicated on the Drawings, or required by the Americans with Disability Act (ADA):

   a. Light switches and wall mounted occupancy sensors, 48 inches

b. Receptacles in indoor dry process/non-process areas, 16 inches

c. Receptacles in indoor wet process areas and all indoor chemical storage/transfer areas, 48 inches

d. Receptacles in outdoor locations, 24 inches

e. Ceiling mounted occupancy sensors, as indicated on the Drawings

6. Outlet boxes shall be provided in the material of construction required for the area in which it is installed. Reference the requirements in Part 2 herein, and the area designations indicated on the Drawings.

END OF SECTION

SECTION 26 05 53

IDENTIFICATION FOR ELECTRICAL SYSTEMS

PART 1 – GENERAL

1.01 THE REQUIREMENT

A. All electrical equipment shall be properly identified in accordance with these Specifications and the Contract Drawings. All switchgear, switchboards, motor control centers, variable frequency drives, lighting and distribution panelboards, combination starters, control panels, pull and junction boxes, enclosures, disconnect switches, control stations, and similar equipment shall be identified in the manner described, or in an equally approved manner.

B. The types of electrical identification specified in this Section include, but are not limited to, the following:

1. Operational instructions and warnings.

2. Danger signs.

3. Equipment/system identification signs.

4. Nameplates.

1.02 SIGNS

A. "DANGER-HIGH-VOLTAGE" signs shall be securely mounted on the entry doors of all electrical rooms.

1.03 LETTERING AND GRAPHICS

A. The Contractor shall coordinate names, abbreviations, and other designations used in the electrical identification work with the corresponding designations shown, specified or scheduled. Provide numbers, lettering, and wording as indicated or, if not otherwise indicated, as recommended by manufacturers or as required for proper identification and operation/maintenance of the electrical systems and equipment.

1.04 SUBMITTALS

A. In accordance with the procedures and requirements set forth in the General Conditions and Section 01 33 00 – Submittal Procedures, the Contractor shall obtain from the equipment manufacturer and submit shop drawings. Each submittal shall be identified by the applicable Specification Section.

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1.05 SHOP DRAWINGS

A. Each submittal shall be complete in all respects, incorporating all information and data listed herein and all additional information required for evaluation of the proposed equipment's compliance with the Contract Documents.

B. Partial, incomplete, or illegible submittals will be returned to the Contractor without review for resubmittal.

C. Shop drawings shall include but not be limited to:

1. Product data sheets.

PART 2 – PRODUCTS

2.01 MANUFACTURERS

A. The material covered by these Specifications is intended to be standard material of proven performance as manufactured by reputable concerns. Material shall be fabricated, constructed, and installed in accordance with the best practices of the trade, and shall operate satisfactorily when installed as specified herein and shown on the Drawings.

2.02 NAMEPLATES

A. Nameplates shall be engraved, high pressure plastic laminate, white with black lettering.

B. Nameplates shall be attached to NEMA 4X enclosures utilizing UL-recognized mounting kits designed to maintain the overall UL Type rating of the enclosure. Mounting kit fasteners shall be stainless steel Type AHK10324X as manufactured by Hoffman, or equal.

2.03 HIGH VOLTAGE SIGNS

A. Standard "DANGER" signs shall be of baked enamel finish on 20 gage steel; of standard red, black and white graphics; 14 inches by 10 inches size except where 10 inches by 7 inches is the largest size which can be applied where needed, and except where a larger size is needed for adequate identification.

2.04 CONDUIT IDENTIFICATION

A. Conduit identification shall be as specified in Section 26 05 33.13 – Conduit for Electrical Systems.

2.05 WIRE AND CABLE IDENTIFICATION

A. Field installed wire and cable identification shall be as specified in Section 26 05 19 – Low Voltage Conductors and Cable.

B. A plastic laminate nameplate shall be provided at each panelboard, motor control center, switchgear assembly, and switchboard assembly. This nameplate shall be used to clearly convey the conductor identification means used at that piece of equipment (i.e. Phase A=Brown, Phase B=Orange, C = Yellow).

C. Wiring identification for factory installed wiring in equipment enclosures shall be as specified in the respective Section.

2.06 BOX IDENTIFICATION

A. Pull, junction and device box identification shall be as specified in Section 26 05 33.16 – Boxes for Electrical Systems.

PART 3 – EXECUTION

3.01 NAMEPLATES

A. Nameplates shall be attached to the equipment enclosures with (2) two stainless steel sheet metal screws for nameplates up to 2-inches wide. For nameplates over 2-inches wide, four (4) stainless steel sheet metal screws shall be used, one (1) in each corner of the nameplate. The utilization of adhesives is not permitted.

3.02 OPERATIONAL IDENTIFICATION AND WARNINGS

A. Wherever reasonably required to ensure safe and efficient operation and maintenance of the electrical systems and electrically connected mechanical systems and general systems and equipment, including prevention of misuse of electrical facilities by unauthorized personnel, install plastic signs or similar equivalent identification, instruction, or warnings on switches, outlets, and other controls, devices, and covers or electrical enclosures. Where detailed instructions or explanations are needed, provide plasticized tags with clearly written messages adequate for the intended purposes. Signs shall be attached as specified above for nameplates.

3.03 POWER SOURCE IDENTIFICATION

A. After installation of all field equipment (i.e. valves, motors, fans, unit heaters, instruments, etc.) install nameplates at each power termination for the field equipment. Nameplate data shall include equipment designation (tag number), power source (MCC number, panelboard, etc.), circuit number, conduit number from schedule and voltage/phase.

B. Contractor to coordinate with the Engineer and the Owner regarding exact nameplate placement during construction.

C. Nameplates shall be as specified herein.

END OF SECTION

SECTION 26 05 73
POWER SYSTEM STUDIES

PART 1 – GENERAL

1.01 THE REQUIREMENT

A. The Contractor shall provide all power system studies for the project as specified herein. The following shall be performed:

1. Short Circuit Studies

2. Load Flow Analyses

3. Protective Device Coordination Studies

4. Equipment Evaluation

5. Arc Flash Risk Assessment

B. The scope of the work for these studies shall include all existing electrical equipment as well as new electrical equipment furnished under this Contract at the project site.

C. The studies shall include all electric utility protective devices, transformers, generators, cables, switchgear, switchboards, motor control centers, individual motor controllers, variable-frequency drives, panelboards, protection relays, and control panels.

D. Prior to receiving final approval of the distribution equipment shop drawings for the equipment proposed under this Contract and/or prior to release of that equipment for manufacture, the Preliminary Report, as specified herein, shall be submitted and approved. Contractor shall expedite the completion of the Preliminary Report so that final approval of proposed equipment is not delayed.

E. The studies shall be performed with the aid of SKM Systems Analysis Power Tools for Windows (PTW) software, Version 9.0 or newer No other software analysis packages are acceptable.

1.02 CODES AND STANDARDS

A. All work shall be performed in accordance with the following Codes and Standards, as applicable (latest edition, unless otherwise specified):

1. Institute of Electrical and Electronic Engineers (IEEE):

a. Standard 141, Recommended Practice for Electric Power Distribution for Industrial Plants

b. Standard 241, Recommended Practice for Electric Power Systems in Commercial Buildings

c. Standard 242, Recommended Practice for Protection and Coordination of Industrial and Commercial Power Systems

d. Standard 3002.2, IEEE Recommended Practice for Conducting Load Flow Studies and Analysis of Industrial and Commercial Power Systems

e. Standard 3002.3, IEEE Recommended Practice for Conducting Short-Circuit Studies and Analysis of Industrial and Commercial Power Systems

f. Standard 1584-2018, IEEE Guide for Performing Arc-Flash Hazard Calculations

2. American National Standards Institute (ANSI):

a. Standard C37.90, IEEE Standard for Relays and Relay Systems Associated with Electric Power Apparatus

b. Standard C37.91, Guide for Protective Relay Applications to Power Transformers

c. Standard C37.95, Guide for Protective Relaying of Utility-Consumer Interconnections

d. Standard C37.96, Guide for AC Motor Protection

e. Standard C57.12.59, Guide Dry-Type Transformer Through-Fault Current Duration

f. Standard C.57.13, Standard Requirements for Instrumentation Transformers

g. Standard C57.109, Guide for Liquid-Immersed Transformer Through Fault-Current Duration

3. National Fire Protection Agency (NFPA):

a. NFPA 70, National Electrical Code (NEC)

b. NFPA 70E, Standard for Electrical Safety in the Workplace (2021 Edition)

1.03 SUBMITTALS

A. The Contractor shall submit one (1) complete electronic copy of the final power system model and all required database files generated by the software analysis package used. Files shall be placed on portable storage media (USB 3.0 flash storage device) or be

uploaded to a cloud-based file sharing service and be submitted with the Final Report. Furnish any necessary documentation requiring the Owner's signature to allow model to be transferred to the Owner.

1.04 QUALIFICATIONS

A. The studies shall be performed by a professional electrical engineer actively licensed in the state or commonwealth in which the project is located. The licensed professional electrical engineer shall have a minimum of five (5) years of experience in performing power system studies.

B. The resume of the licensed professional electrical engineer shall be submitted for approval prior to the start of work. An experience table shall also be provided detailing the power system studies of similar scope to this Contract that have been performed by the proposed engineer over the last two (2) years. The table shall, at a minimum, list the facility owner's name, facility contact person with phone number and email address, and overall scope of work that was provided.

PART 2 – PRODUCTS (NOT USED)

PART 3 – EXECUTION

3.01 DATA COLLECTION

A. The Contractor shall collect all required utility transformer and service information for use in these studies. The serving electric utility representative contact information can be found in Section 26 05 00, Basic Electrical Requirements.

B. Approved equipment shop drawings and product information for all equipment furnished under this Contract shall be used for these studies. Including data for equipment that is not yet approved is not acceptable.

C. One (1) field visit to the project site to collect pertinent data from existing equipment by the personnel performing the studies is permitted. The visit shall span as many days as required to collect all necessary information. This visit shall occur as soon after the Contract is awarded as possible and shall be coordinated with the Owner. The Contractor and personnel performing these studies are responsible for collecting all required data for these studies. If equipment is to be examined while energized parts are exposed, the examining personnel shall wear appropriate PPE in accordance with the requirements of NFPA 70E.

D. Using data from record drawings, "as-built" drawings, or a previous power system study is not acceptable. All data for existing equipment shall be field verified.

3.02 STUDY PARAMETERS

A. The following parameters shall be used for all studies:

1. Transformers 75kVA (nominal) and larger shall be modeled with actual nameplate data including impedance data. Motors 30hp and larger shall be modeled with actual nameplate power factor and efficiency data.

2. Room heating and cooling loads are mutually exclusive. Only the larger of these two load types shall be modeled as in service.

3. Each set of pumps for a specific application (e.g. Influent Sewage Pumps) has one redundant unit. For the purposes of these studies, that redundant unit shall be modeled as out of service.

4. The sources that shall be used in these studies are the serving electric utility and the standby generator. These sources are incapable of paralleling with each other, so each one shall be considered independent of the other for the purposes of these studies.

B. Other parameters may apply for specific studies if noted in the respective study requirements herein.

3.03 SHORT CIRCUIT STUDIES

A. The short circuit studies shall be performed in accordance with IEEE Standard 3002.3.

B. The study input data shall include the short circuit contribution obtained from each source. Short circuit close and latch duty values and interrupting duty values shall be calculated on the basis of assumed three-phase bolted short circuits at each bus. Single-line diagrams shall show the results of the analysis by using datablocks constructed as shown in Appendix A. Provide the results of this study in a tabular format as well, included as an appendix to the report.

C. The short circuit study report shall include recommendations for equipment selection based on calculated short circuit values and all input and output data from the software model.

3.04 PROTECTIVE DEVICE COORDINATION STUDIES

A. A protective device coordination study shall be performed to provide the necessary calculations and logic decisions required to select or to check the selection of power fuse ratings, protective relay characteristics and settings, ratios and characteristics of associated current transformers, and low voltage circuit breaker trip characteristics and settings.

B. The coordination study shall include all equipment from the serving electric utility company source protective devices down to and including all adjustable circuit protective devices. The phase and ground overcurrent protection shall be included as well as settings of all other adjustable protective devices.

C. The time-current characteristics of the proposed protective devices shall be printed on log-log scale coordination plots as specified below.

1. Each plot shall be accompanied by a representative single-line diagram. The coordination plot and single-line diagram shall each occupy one-half of the same printed sheet for ease of cross reference. Each printed sheet shall have a distinct title that identifies the portion of the electrical system it represents.

2. Each coordination plot shall include the following:

a. Sufficient number of separate curves shall be used to clearly indicate the coordination achieved

b. Identification of each curve with its respective component's name

c. Complete operating bands for fuse and low voltage circuit breaker trip curves

d. Transformer magnetizing inrush and ANSI transformer withstand parameters

e. Cable thermal overcurrent withstand limits

f. Significant symmetrical and asymmetrical fault currents for the portion of the electrical system represented by the plot

3. Each accompanying single-line shall include datablocks as described in Appendix A.

4. All restrictions of the National Electrical Code shall be adhered to, and proper coordination intervals and separation of characteristic curves shall be maintained.

D. The selection and settings of all protective devices shall be provided separately in the report in a tabulated form listing circuit identification, IEEE device number, current transformer ratios and connections, manufacturer and type, range of adjustment and recommended settings.

3.05 LOAD FLOW ANALYSIS

A. The load flow analysis shall be performed in accordance with IEEE Standard 3002.2.

B. A load flow analysis shall be performed to determine the steady-state loading profile of the system(s) being studied. From the results of the load flow analysis, the report shall indicate areas of overloaded conductors, busses, or other equipment in the power

distribution system. The load flow analysis results shall be presented in a tabular format as well as a single-line diagram format. Single-line diagrams shall show the results of the analysis by using datablocks constructed as shown in Appendix A. All assumptions associated with the analysis shall be documented in the report.

3.06 EQUIPMENT EVALUATION

A. An equipment evaluation shall be performed to determine the adequacy of existing circuit breakers, panelboards, motor control centers, automatic transfer switches, busses, etc. located at the facility by tabulating and comparing the short circuit ratings of these devices with the calculated fault currents that result from the short circuit study.

B. Appropriate multiplying factors based on system X/R ratios and protective device rating standards shall be applied. A table shall be provided in the report showing the calculated fault currents and the corresponding short circuit ratings of the existing equipment along with a pass for fail status for each piece of equipment.

3.07 ARC FLASH RISK ASSESSMENT

A. An arc flash risk assessment shall be performed in accordance with IEEE Std. 1584-2018, NFPA 70E, and OSHA 29-CFR, Part 1910 Subpart S. The assessment shall use the incident energy analysis method. The arc flash PPE category method shall not be used.

B. The following parameters shall be used for the arc flash risk assessment:

1. Working distance for <u>all</u> equipment: 18 inches

2. Arcing duration limit: 2 seconds, or higher (based on engineering judgement) for equipment locations where additional time may be required to exit the arc flash boundary.

3. Equipment box dimensions and electrode configuration shall be entered for each piece of equipment (existing and/or new) to be assessed. Using software default dimensions and electrode configuration is not acceptable.

4. For equipment operating at 240VAC or below, report incident energy as “<1.2 cal/cm^2” if the bolted fault current is calculated to be less than 2000A.

5. Any protective device settings changes that were recommended as part of these studies shall be included. For devices where settings changes are recommended, the “as-found” settings shall be documented separately in dedicated tables for record purposes.

6. The following operational scenarios shall be used in the assessment, with the worst-case values from each scenario being shown in the study report and on the arc flash labels:

a. Scenario 1: All tie circuit breakers at distribution equipment are open, all main circuit breakers are closed, and the facility is served by the electric utility source.

b. Scenario 2: All A-side main circuit breakers at distribution equipment are open, all tie circuit breakers are closed, all B-side main circuit breakers are closed, and the facility is served by the electric utility source.

c. Scenario 3: All B-side main circuit breakers at distribution equipment are open, all tie circuit breakers are closed, all A-side main circuit breakers are closed, and the facility is served by the electric utility source.

d. Scenario 4: All tie circuit breakers at distribution equipment are open, all main circuit breakers are closed, and the facility is served by the standby generator source.

e. Scenario 5: All A-side main circuit breakers at distribution equipment are open, all tie circuit breakers are closed, all B-side main circuit breakers are closed, and the facility is served by the standby generator source.

f. Scenario 6: All B-side main circuit breakers at distribution equipment are open, all tie circuit breakers are closed, all A-side main circuit breakers are closed, and the facility is served by the standby generator source.

C. The arc flash risk assessment report shall include but not be limited to the following:

1. A brief overview of what arc flash hazards are and how to avoid them.

2. Definitions of key terms used in the report.

3. Confirmation of all parameters and scenarios used in the report.

4. Documentation of any assumptions made for the report.

5. Serving electric utility information received. Copies of the information received shall be included in an appendix.

6. Any recommendations to reduce the arc flash incident energies via protective device settings changes where incident energies are found to exceed 12 cal/cm^2. Protective device settings change recommendations shall not negatively impact selective coordination.

7. A copy of the PPE information from Table 130.5 G in NFPA 70E.

8. Arc flash labels as specified herein.

9. An NFPA 70E energized electrical work permit for each location where an arc flash label is provided.

10. An arc flash evaluation summary sheet, based on the worst-case scenario, that contains the following minimum information:

    a. Bus name

    b. Protective device name

    c. Bus line-to-line voltage

    d. Bus bolted fault

    e. Protective device bolted fault

    f. Protective device arcing fault

    g. Trip/delay time

    h. Breaker opening time

    i. Equipment type

    j. Gap

    k. Electrode configuration

    l. Box height, width, and depth

    m. Arc flash boundary

    n. Working distance

    o. Incident energy

    p. Notes

D. Arc Flash Labels

1. Arc flash labels shall be provided for each piece of equipment that is likely to require examination, adjustment, servicing, or maintenance while energized. When opening an enclosure exposes energized parts on both the line and load side of a device, provide a label with the worst case (line versus load) incident energy printed. The following equipment, at a minimum, shall be provided with labels in the quantities specified:

a. Switchgear/Switchboards – quantity of 1 label per section on front, 1 label per section on rear if rear is accessible. Provide second label at main circuit breaker sections where it is possible to open covers and separately expose line side and load side energized parts.

b. Motor control centers – quantity of 1 label per section on front, 1 label per section on rear if rear is accessible. Provide second label at main circuit breaker sections where it is possible to open covers and separately expose line side and load side energized parts.

c. Panelboards – quantity of 1

d. Variable frequency drives – quantity of 1 label per section

e. Other stand-alone motor starters/controllers – quantity of 1 label per section

f. Automatic and manual transfer switches – quantity of 1

g. Enclosed circuit breakers – quantity of 1

2. Arc flash labels shall be thermal transfer type that is printed on adhesive backed polyester material. Labels shall be ANSI Z535.4 compliant, 4 inches tall by 6 inches wide, and provided with a 5-year warranty. For incident energy values of less than 40 cal/cm^2, the labels shall have an orange-colored header with the word “WARNING”. For incident energy values equal to and above 40 cal/cm^2, the labels shall have a red-colored header with the word “DANGER”. Each label shall include the following information:

a. Equipment name

b. Date of issue and name of firm performing assessment

c. Incident energy

d. Working distance

e. Arc flash boundary

f. Nominal system voltage

3. A generic arc flash label that has a red-colored header with the word “DANGER” and text in large letters that shows “ENERGIZED WORK NOT PERMITTED” shall be provided for the following equipment:

a. Any equipment that requires an arc flash label (as specified above) that is located within a hazardous area.

b. Any equipment found to be in poor working condition, where in the judgement of the engineer performing the study, energized work should not be performed at all, regardless of the outcome of the incident energy analysis at that equipment.

3.08 STUDY REPORTS

A. The results of the studies shall be documented in a series of reports. A total of three (3) separate reports shall be provided as follows:

1. Preliminary Report – The Preliminary Report shall consist of all power systems studies as specified herein, with the following exceptions:

   a. NFPA 70E energized electrical work permits shall not be included.

   b. One (1) WARNING label and one (1) DANGER label shall be printed on plain paper for format review purposes only. Actual adhesive labels with calculated values shall not be included.

2. Pre-final Report – The Pre-final Report shall incorporate all comments received from the previous report review and shall include specific equipment data from the approved shop drawings of the proposed electrical equipment. The Pre-final Report shall consist of all power systems studies as specified herein, with the following exceptions:

   a. NFPA 70E energized electrical work permits shall not be included.

   b. Sample arc flash hazard warning labels one (1) WARNING label and one (1) DANGER label) shall be printed on the proposed adhesive material for review purposes.

3. Final Report – The Final Report shall consist of all power systems studies as specified herein, including final adhesive arc flash hazard warning labels. Final report shall incorporate all installed electrical equipment, including any field changes made during construction, and all comments received from the previous report review. All ‘as-left’ protective device settings shall be included in the report. The Final Report shall bear the signature and seal of the professional electrical engineer that performed the study.

B. Hard copies of reports shall be furnished in the quantities specified herein, neatly organized into properly identified 3-ring binders. Tabs shall clearly separate each section of the report.

C. Electronic copies of reports shall be provided in PDF file format. Electronic copies shall have searchable text and bookmarks for each section of the report.

D. Each report shall begin with a table of contents followed by an executive summary. The executive summary shall detail the configuration of the electrical system and summarize any concerns or recommendations for the electrical distribution system that resulted from the studies specified herein.

E. Reports shall include simplified single line diagrams with only the device name information displayed for all equipment, as well as single line diagrams with specific data displayed as specified herein for each study.

F. All data used in the reports such as conductor sizes and lengths, motor sizes, utility contribution information, fault analysis input, fault contributions, and the like shall be included in the appendices of the report.

G. All single line diagrams and time current curves shall be provided in the reports on 11x17 paper, properly folded to fit into the report binder. Use of standard 8.5x11 paper for these purposes is not permitted. Single line diagrams shall be appropriately split up between several sheets (if required) to allow the drawing scale to be adjusted in order to make text and symbols legible.

3.09 FIELD ADJUSTMENT

A. The Contractor shall adjust all relay and other protective device settings according to the recommended settings table provided in the approved Pre-Final Report.

B. The Contractor shall make minor modifications to equipment as required to accomplish conformance with short circuit and protective device coordination studies.

3.10 ARC FLASH LABEL PLACEMENT

A. The Contractor shall place approved adhesive arc flash labels on equipment after the Final Report is reviewed and approved.

3.11 TRAINING

A. The Contractor shall train the Owner's qualified electrical personnel of the potential arc flash hazards associated with working on energized equipment. The training shall be provided in two (2) separate sessions of no less than two (2) hours each. The training shall be certified for continuing education units (CEUs) by the International Association for Continuing Education Training (IACET), or equivalent. Training certificates shall be provided for all attendees.

END OF SECTION

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APPENDIX A – SUPPLEMENTARY INFORMATION

REQUIRED DATABLOCK CONTENTS FOR POWER SYSTEM STUDIES

Component Type	Input Data Singe-Line	Short Circuit and TCC Single-Lines	Load Flow Single-Line
Utility	Nominal Voltage	Nominal Voltage	Nominal Voltage LF kW and kVAR
Generator	Nominal Voltage Rating (kW) Power Factor	Nominal Voltage	Nominal Voltage LF kW and kVAR
Bus	Voltage	Voltage Fault Magnitude (3P RMS) Fault Magnitude (SLG RMS)	Voltage Percent Voltage Drop
Cable	Size (AWG or kcmil) Parallel Sets Length Type (Cu/Al/Cu-Al)	Total Ampacity	Total Ampacity Percent Voltage Drop LF kW, kVAR, and Amperes
Transformer	Rating (kVA) Impedance (%Z) X/R Ratio	N/A	Percent Voltage Drop LF kW, kVAR, and Amperes
Motor	Rating (hp) Rated Voltage FLA Power Factor	Rating (hp) FLA	Rating (hp) FLA
Non-Motor Load	Rating (A, kW, kVA) Rated Voltage Power Factor	N/A	N/A
Fuse	Manufacturer Model Rating (A)	Same as Input Data	Same as Input Data
Relay*	Manufacturer Model CT Ratio Curve Elements	Same as Input Data	Same as Input Data

Component Type	Input Data Singe-Line	Short Circuit and TCC Single-Lines	Load Flow Single-Line
Circuit Breaker** (all others)	Manufacturer Model [SCCR (kA)] Frame/Sensor/Plug Ratings Settings** LTPU [LTD Curve Shape] [LTD] [STPU] [STD and I^2T On/Off] INST [GFPU] [GFD and I^2T On/Off] [AF Maint. Setting/Curve]	Same as Input Data	Same as Input Data
Motor Circuit Protector	Manufacturer Model [SCCR (kA)] Frame/Trip Ratings	Same as Input Data	Same as Input Data
Motor Overload Relay	Manufacturer Model [SCCR (kA)] Frame/Trip Ratings Settings	Same as Input Data	Same as Input Data

* Complex and/or non-overcurrent settings for multifunction relays (e.g. bus/winding differential, motor thermal model parameters, under/overvoltage, RTD alarm and trip setpoints, etc.) are excluded from the model.

** Hide setting elements where not applicable for a given circuit breaker. Recommended settings for non-overcurrent settings for electronic trip circuit breakers (e.g. under/overvoltage, zone-selective interlocking, alarm setpoints, etc.) are excluded from the model.

SECTION 26 27 26
WIRING DEVICES

PART 1 – GENERAL

1.01 THE REQUIREMENT

A. The Contractor shall furnish and install all switches, occupancy sensors, and receptacles as shown on the Drawings.

B. All switches and receptacles shall be furnished and installed in outlet boxes. Reference Section 26 05 33.16 – Boxes for Electrical Systems for outlet box requirements.

C. Reference Section 26 05 00 – Basic Electrical Requirements and Section 26 05 19 – Low-Voltage Conductors and Cables.

1.02 CODES AND STANDARDS

A. Wiring devices shall be designed, manufactured, and/or listed to the following standards as applicable:

1. UL 20 – General Use Snap Switches

2. UL 498 – Standard for Attachment Plugs and Receptacles

3. UL 943 – Ground Fault Circuit Interrupters

4. UL 1203 – Standard for Explosion-proof and Dust-ignition-proof Electrical Equipment for use in Hazardous (Classified) Locations.

1.03 SUBMITTALS

A. In accordance with the procedures and requirements set forth in the General Conditions and Section 01 33 00 – Submittal Procedures, the Contractor shall obtain from the equipment manufacturer and submit shop drawings. Each submittal shall be identified by the applicable Specification Section.

1.04 SHOP DRAWINGS

A. Each submittal shall be complete in all respects, incorporating all information and data listed herein and all additional information required for evaluation of the proposed equipment's compliance with the Contract Documents.

B. Partial, incomplete, or illegible submittals will be returned to the Contractor without review for resubmittal.

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C. Shop drawings shall include, but not be limited to:

1. Product data sheets.

1.05 SPARE PARTS

A. The Contractor shall furnish 10% (minimum of 1) spare of each receptacle, switch, and plug furnished and installed for this project.

B. Spare parts lists, included with the shop drawing submittal, shall indicate specific sizes, quantities, and part numbers of the items to be furnished. Terms such as "1 lot of packing material" are not acceptable.

C. Parts shall be completely identified with a numerical system to facilitate parts inventory control and stocking. Each part shall be properly identified by a separate number. Those parts which are identical for more than one size shall have the same parts number.

1.06 IDENTIFICATION

A. Each switch and receptacle shall be identified with the equipment item number, manufacturer's name or trademark, and such other information as the manufacturer may consider necessary, or as specified, for complete identification.

PART 2 – PRODUCTS

2.01 MANUFACTURERS

A. The equipment covered by these Specifications is intended to be standard equipment of proven performance as manufactured by reputable concerns. Equipment shall be designed, constructed and installed in accordance with the best practices of the trade, and shall operate satisfactorily when installed as shown on the Drawings.

B. The Contractor shall use the products of a single manufacturer for each type of wiring device.

C. The Contractor shall use the products of a single manufacturer for all device plates. Plate variations are allowed for the following devices:

1. Where the selected plate manufacturer does not manufacture a suitable finish plate.

2. For heavy-duty receptacles rated at more than 30A.

3. Where non-standard plates are required, specified, or shown.

D. The Contractor shall furnish and install all wiring devices and device plates.

E. In non-hazardous areas, provide specification grade devices manufactured by Appleton, Crouse-Hinds, Leviton, Hubbell, Pass & Seymour, or Engineer approved equal.

F. In hazardous areas, provide devices manufactured by Appleton, Cooper Crouse-Hinds, Hubbell-Killark, or Engineer approved equal.

2.02 WIRING DEVICES

A. Wall switches for non-hazardous areas shall be rated for the current required to suit the application, but not less than 20A. Double pole, three-way, and four-way switches shall be provided where indicated on the Drawings, and as required. Switches shall be rated for 120-277VAC and shall be UL 20 Listed.

B. Convenience receptacles for non-hazardous areas shall be rated for 20A at 125VAC and shall be UL 498 Listed. Receptacles shall be weather resistant where installed in wet or damp locations.

C. Special purpose receptacles (welders, lab equipment, etc.) shall be provided with the proper NEMA configuration and ampacity as indicated on the Drawings. The coordinating plug for each special purpose receptacle shall be provided with the equipment which it is serving.

D. Ground fault circuit interrupter receptacles shall be rated for 20A at 125VAC and shall be UL 943 Listed. Receptacles shall be weather resistant where installed in wet or damp locations.

E. Wall switches for hazardous areas shall be the factory sealed type, UL 1203 Listed for use in the hazardous area. Wall switches shall be rated for 120-277VAC, and shall be rated for the current required to suit the application, but not less than 20A

F. Receptacles for hazardous areas shall be rated 20A at 120-240VAC. Receptacles shall be UL 1203 listed for use in the hazardous area, utilizing delayed-action construction.

G. All wiring devices shall be approved for use with stranded conductors, if stranded conductors are to be used with the device. Reference Section 26 05 19 – Low-Voltage Conductors and Cable for conductor requirements

2.03 DEVICE PLATES

A. Device plates for indoor flushmounted receptacles and switches shall be made of Type 304 stainless steel, not less than 0.032 of an inch thick, with beveled edges and milled on the rear so as to lie flat against the wall. Devices plates shall be provided with a gasket.

B. Device plates for outdoor installations, indoor wet process areas, and chemical storage/transfer areas shall be Appleton Type FSK, Crouse-Hinds #DS185, or equal for wall switches. Device plates for receptacles shall be “in-use” style. “In-use”

weatherproof covers shall be rugged, minimum 3 ¼” depth, die-cast aluminum as manufactured by Thomas & Betts "Red Dot," Intermatic International, Inc., or equal.

C. Device plates for indoor dry process and non-process areas with surface mounted boxes shall be Crouse-Hinds DS32, or equal for switches, and Crouse-Hinds DS23 or equal for receptacles.

2.04 PLUGS

A. The Contractor shall furnish suitable plugs with equipment furnished under the respective Specification Section. Plugs shall be black rubber or plastic. For waterproof receptacles, the plugs shall be similar in construction to the receptacles and shall be encased in corrosion resistant yellow housing provided with clamping nuts and stuffing gland cable outlets.

2.05 PROCESS INSTRUMENTS

A. The Contractor shall furnish and install a local disconnect switch at each process instrument (e.g., level transmitter, flow transmitter, analytical instrument etc.,) to disconnect the 120VAC power supply to the instrument. The device shall be a NSSC series manual motor starting switch without overload protection as manufactured by Crouse-Hinds, Appleton equivalent, or equal. For hazardous locations, the device shall be UL 1203 Listed.

2.06

PART 3 – EXECUTION

3.01 INSTALLATION

A. Where more than one (1) switch occurs at one (1) location, gang plates shall be used.

B. All device plates shall be set true and plumb and shall fit tightly against the finished wall surfaces and outlet boxes.

C. Wiring device box (outlet box) mounting heights shall be as specified in Section 26 05 33.16 – Boxes for Electrical Systems.

D. When indicated height would place any of the equipment at an unsuitable location such as at a molding or break in wall finish, the Contractor shall bring it to the attention of the Engineer for a decision.

E. Receptacles installed in toilet, locker, and bathrooms, and within 6 feet of a sink, shall be of ground fault interrupter type. Ground fault circuit interrupter receptacles shall also be furnished and installed in additional locations where indicated on the Drawings, and as required by the NEC.

F. All receptacles shall have a self-adhesive label installed on the top at the respective device plate that indicates which panel and which circuit number the receptacle is supplied from. Labels shall have a white background and black lettering in 14-point font.

G. The turn-off time delay for each occupancy sensor shall initially be set to 10 minutes. Contractor shall be responsible for the proper commissioning and testing of each occupancy sensor to ensure that it operates to the Owner and Engineer’s satisfaction.

3.02 CIRCUITING

A. Convenience receptacles shall be grouped on circuits separate from the lighting circuits. A maximum of eight (8) convenience receptacles are permitted per 20A, 120V circuit, unless otherwise indicated on the Drawings.

END OF SECTION

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SECTION 40 05 00
BASIC MECHANICAL REQUIREMENTS

PART 1 – GENERAL

1.01 THE REQUIREMENT

A. The Contractor shall furnish and install to the required line and grade, all piping together with all fittings and appurtenances, required for a complete installation. Piping to be backfilled and/or encased in concrete is considered to be buried piping. Piping that is not buried is considered to be exposed.

B. The Contractor shall furnish and install fittings, couplings, connections, sleeves, adapters, harness rods and closure pieces as required to connect pipelines of dissimilar materials and/or sizes herein included under this Section and other concurrent Contracts for a complete installation.

C. The Contractor shall furnish all labor, materials, equipment, tools, and services required for the furnishing, installation and testing of all piping as shown on the Drawings, specified in this Section and required for the Work. Piping shall be furnished and installed of the material, sizes, classes, and at the locations shown on the Drawings and/or designated in this Section. Piping shall include all fittings, adapter pieces, couplings, closure pieces, harnessing rods, hardware, bolts, gaskets, wall sleeves, wall pipes, hangers, supports, and other associated appurtenances for required connections to equipment, valves, or structures for a complete installation.

D. Piping assemblies under 4-inch size shall be generally supported on walls and ceilings, unless otherwise shown on the Drawings or ordered by the Engineer, being kept clear of openings and positioned above "headroom" space. Where practical, such piping shall be run in neat clusters, plumb and level along walls, and parallel to overhead beams.

E. The Contractor shall provide taps on piping where required or shown on the Drawings. Where pipe or fitting wall thicknesses are insufficient to provide the required number of threads, a boss or pipe saddle shall be installed.

F. The work shall include, but not be limited to, the following:

1. Connections to existing pipelines.

2. Test excavations necessary to locate or verify existing pipe and appurtenances.

3. Installation of all new pipe and materials required for a complete installation.

4. Cleaning, testing and disinfecting as required.

03-16-20

1.02 RELATED WORK SPECIFIED ELSEWHERE

A. Division 01 – General Requirements

B. Division 02 – Existing Conditions

C. Division 05 – Metals

D. Division 09 – Finishes

E. Division 26 – Electrical

F. Division 46 – Water and Wastewater Equipment

1.03 MATERIAL CERTIFICATION AND SHOP DRAWINGS

A. The Contractor shall furnish to the Owner (through the Engineer) a Material Certification stating that the pipe materials and specials furnished under this Section conform to all applicable provisions of the corresponding Specifications. Specifically, the Certification shall state compliance with the applicable standards (ASTM, AWWA, etc.) for fabrication and testing.

PART 2 – PRODUCTS

2.01 GENERAL

A. All specials and every length of pipe shall be marked with the manufacturer's name or trademark, size, class, and the date of manufacture. Special care in handling shall be exercised during delivery, distribution, and storage of pipe to avoid damage and unnecessary stresses. Damaged pipe will be rejected and shall be replaced at the Contractor's expense. Pipe and specials stored prior to use shall be stored in such a manner as to keep the interior free from dirt and foreign matter.

B. Testing of pipe before installation shall be as described in the corresponding ASTM or AWWA Specifications and in the applicable standard specifications listed in the following sections. Testing after the pipe is installed shall be as specified in Part 3.

C. Joints in piping shall be of the type as specified in the appropriate Piping System Schedule in Section 40 06 20 – Process Pipe, Valve, and Gate Schedules.

D. The Drawings indicate work affecting existing piping and appurtenances. The Contractor shall excavate test pits as required of all connections and crossings which may affect the Contractor's work prior to ordering pipe and fittings to determine sufficient information for ordering materials. The Contractor shall take whatever measurements that are required to complete the work as shown or specified.

2.02 UNIONS

A. For copper piping, unions shall have ground joints and conform to ANSI B16.18.

B. For PVC and CPVC piping, unions shall be socket weld type with Viton O-ring.

2.03 THERMOPLASTIC TUBING AND FITTINGS

A. Thermoplastic tubing shall be manufactured from polyallomor tubing. Tubing shall be protected from ultraviolet radiation degradation with a black coating or integral color conforming to ASTM D-1248, Type 1, Class C, Category 3. Fittings and connectors used with thermoplastic tubing shall be the flareless tube type constructed of brass conforming to SAE CA377, SAE CA360 or equal. Brass sleeves shall be used.

B. Assembly of the thermoplastic tubing shall consist of pushing the tubing into the fitting and hand tightening the nut with final tightening with a wrench. Care shall be taken not to overtighten the nut. Plastic tube racks and bend holders shall be provided for holding the tubing in position. Needle valves used with thermoplastic tubing shall be the globe type constructed with a brass body, stem and seat and Buna-N "O"-ring seals. Installation shall be in accordance with the manufacturer's recommendations. Thermoplastic tubing, shall be the Impolene (polyallomor) system and needle valves, fittings and connectors shall be the Poly-Flo with 261 UB Universal Nut and Sleeve system as manufactured by Imperial Eastman, or equal.

PART 3 – EXECUTION

3.01 INSTALLATION

A. All piping shall be installed by skilled workmen and in accordance with the best standard practice for piping installation as shown on the Drawings, specified or recommended by the pipe manufacturer. Proper tools and appliances for the safe and convenient handling and installing of the pipe and fittings shall be used. Great care shall be taken to prevent any pipe coating from being damaged on the inside or outside of the pipe and fittings. All pieces shall be carefully examined for defects, and no piece shall be installed which is known to be cracked, damaged, or otherwise defective. If any defective pieces should be discovered after having been installed, it shall be removed and replaced with a sound one in a satisfactory manner by the Contractor and at his own expense. Pipe and fittings shall be thoroughly cleaned before they are installed and shall be kept clean until they are accepted in the complete work. All piping connections to equipment shall be provided with unions or coupling flanges located so that piping may be readily dismantled from the equipment. All piping shall be installed in such a manner that it will be free to expand and contract without injury to itself or to structures and equipment to which it is connected. All piping shall be erected to accurate lines and grades with no abrupt changes in line or grade and shall be supported and braced against movement, temporary, or permanent. All exposed piping shall be installed with vertical and horizontal angles properly related to adjoining surfaces or pipes to give the appearance

of good workmanship. Unless otherwise shown or approved, provided a minimum headroom clearance under all piping of 7 feet 6 inches.

B. Unless otherwise shown or specified, all waste and vent piping shall pitch uniformly at a 1/4-inch per foot grade and accessible cleanouts shall be furnished and installed as shown and as required by local building codes. Installed length of waste and vent piping shall be determined from field measurements in lieu of the Drawings.

C. All excavation shall be made in such a manner and to such widths as will provide ample room for properly installing the pipe and permit thorough compaction of backfill around the pipe. The minimum trench widths shall be in strict accordance with the "Trench Width Excavation Limits" as shown on the Drawings. All excavation and trenching shall be done in strict accordance with these specifications and all applicable parts of the OSHA Regulations, 29CFR 1926, Subpart P.

D. ALL EXCAVATION REQUIRED BY THIS CONTRACT SHALL BE UNCLASSIFIED. NO ADDITIONAL PAYMENT WILL BE MADE FOR ROCK EXCAVATION REQUIRED FOR THE INSTALLATION OF PIPE OR STRUCTURES SHOWN ON THE DRAWINGS.

E. Hand excavation shall be employed wherever, in the opinion of the Engineer, it is necessary for the protection of existing utilities, poles, trees, pavements, or obstructions.

F. JOINT DEFLECTION SHALL NOT EXCEED 75 PERCENT OF THE MANUFACTURER'S RECOMMENDED DEFLECTION. Excavation and backfilling shall conform to the requirements of Maricopa Association of Government (MAG) Specification Section 206 – Structure Excavation and Backfill, MAG Specification Section 301 – Trench Excavation, Backfilling, and Compaction, and as specified herein. Maximum trench widths shall conform to the Trench Width Excavation Limits shown on the Drawings. All exposed, submerged, and buried piping shall be adequately supported and braced by means of hangers, concrete piers, pipe supports, or otherwise as may be required by the location.

G. Following proper preparation of the trench subgrade, materials shall be carefully lowered into the trench so as to prevent dirt and other foreign substances from gaining entrance into the pipe and fittings. Proper facilities shall be provided for lowering sections of pipe into trenches. UNDER NO CIRCUMSTANCES SHALL ANY OF THE MATERIALS BE DROPPED OR DUMPED INTO THE TRENCH.

H. Water shall be kept out of the trench until jointing and backfilling are completed. When work is not in progress, open ends of pipe, fittings, and valves shall be securely closed so that no water, earth, or other substance will enter the pipes, fitting, or valves. Pipe ends left for future connections shall be valved, plugged, or capped, and anchored as required.

I. All piping shall be installed in such a manner that it will be free to expand and/or contract without injury to itself or to structures and equipment to which it is connected. All piping shall be erected to accurate lines and grades with no abrupt changes in line or grade and shall be supported and braced against movement, temporary, or permanent. All

exposed piping shall be installed with vertical and horizontal angles properly related to adjoining surfaces or pipes to give the appearance of good workmanship. Pipes crossing within a vertical distance of less than or equal to one (1) foot shall be encased and supported with concrete at the point of crossing to prevent damage to the adjacent pipes as shown on the Drawings.

J. The full length of each section of pipe shall rest solidly upon the bed of the trench, with recesses excavated to accommodate bells, couplings, joints, and fittings. Before joints are made, each pipe shall be well bedded on a solid foundation; and no pipe shall be brought into position until the preceding length has been thoroughly bedded and secured in place. Pipe that has the grade or joint disturbed after laying shall be taken up and relaid by the Contractor at his own expense. Pipe shall not be laid in water or when trench conditions are unsuitable for work.

K. Proper and suitable tools and appliances for the safe convenient handling and laying of pipe shall be used and shall in general agree with manufacturer's recommendations.

L. AT THE CLOSE OF EACH WORK DAY, THE END OF THE PIPELINE SHALL BE TIGHTLY SEALED WITH A CAP OR PLUG SO THAT NO WATER, DIRT, OR OTHER FOREIGN SUBSTANCE MAY ENTER THE PIPELINE, AND THIS PLUG SHALL BE KEPT IN PLACE UNTIL PIPE LAYING IS RESUMED.

M. Ordinarily only full lengths of pipe (as furnished by the pipe manufacturer) shall be used exceptions: closure pieces at manholes and areas where joint deflection is required.

N. AT THE CLOSE OF WORK EACH DAY, IN PAVED AREAS THE SURFACE SHALL BE RESTORED SO AS TO ALLOW FOR TRAFFIC OVER THE TRENCH DURING NON-WORKING HOURS. TRENCHES IN NON-PAVED AREAS WILL HAVE SUFFICIENT MEASURES TAKEN TO ENSURE SAFETY REQUIREMENTS ARE MET.

3.02 JOINTS IN PIPING

A. Threaded and/or screwed joints shall have long tapered full depth threads to be made with the appropriate paste or jointing compound, depending on the type of fluid to be processed through the pipe. All pipe up to, and including 1-1/2-inches, shall be reamed to remove burr and stood on end and well pounded to remove scale and dirt. Wrenches on valves and fittings shall be applied directly over the joint being tightened. Not more than three pipe threads shall be exposed at each connection. Pipe, in all lines subject to temperature changes shall be cut short and cold sprung into place to compensate for expansion when hot. Joints in all piping used for chlorine gas lines shall be made up with a glycerine and litharge cement. Joints in plastic piping (PVC/CPVC) shall be laid and joints made with compounds recommended by the manufacturer. Installation shall conform to the requirements of ASTM D2774 and ASTM D2855. Unions required adjacent to valves and equipment.

B. Solvent or adhesive welded joints in plastic piping shall be accomplished in strict accordance with the pipe manufacturer's recommendations, including necessary field cuttings, sanding of pipe ends, joint support during setting period, etc. Care shall be

taken that no droppings or deposits of adhesive or material remain inside the assembled piping. Solvent or adhesive material shall be compatible with the pipe itself, being a product approved by the pipe manufacturer. Unions are required adjacent to valves and equipment. Sleeve-type expansion joints shall be supplied in exposed piping to permit 1-inch minimum of expansion per 100 feet of pipe length.

C. Dielectric isolation such as flange isolation kits, dielectric unions, or similar, shall be installed wherever dissimilar metals are connected according to the following table.

	Zinc	**Galvanized Steel**	**Aluminum**	**Cast Iron**	**Ductile Iron**	**Mild Steel/ Carbon Steel**	**Copper**	**Brass**	**Stainless Steel**
Zinc			●	●	●	●	●	●	●
Galvanized Steel			●	●	●	●	●	●	●
Aluminum	●	●		●	●	●	●	●	●
Cast Iron	●	●	●				●	●	●
Ductile Iron	●	●	●				●	●	●
Mild Steel/ Carbon Steel	●	●	●				●	●	●
Copper	●	●	●	●	●	●			●
Brass	●	●	●	●	●	●			●
Stainless Steel	●	●	●	●	●	●	●	●	

Notes:
● signifies dielectric isolation is required between the two materials noted.
Consult Engineer for items not listed in table.
Provide flange isolation kits for all flanged connections of dissimilar metals and hardware including connections to equipment.
Contractor shall include all isolation descriptions with piping submittals.

D. Joints in polypropylene and polyvinylidelene fluoride pipe shall be butt fusion weld. All butt welding shall follow the requirements of ASTM D-2657 and the manufacturer's recommendations.

3.03 FLUSHING AND TESTING

A. All piping shall be properly flushed and tested unless specifically exempted elsewhere in the Specifications or otherwise approved by the Engineer. All liquid conveying pipelines shall be flushed and tested with water. The Contractor shall furnish and install all means and apparatus necessary for getting the water into the pipeline for flushing and testing including pumps, gauges, and meters, any necessary plugs and caps, and any required

blow-off piping and fittings, etc., complete with any necessary reaction blocking to prevent pipe movement during the flushing and testing. All pipelines shall be flushed and tested in such lengths or sections as agreed upon among the Owner, Engineer, and Contractor. Test pressures shall be as specified in Section 40 06 20 – Process Pipe, Valve and Gate Schedules and shall be measured at the lowest point of the pipe segment being tested. The Contractor shall give the Owner and Engineer reasonable notice of the time when he intends to test portions of the pipelines. The Engineer reserves the right, within reason, to request flushing and testing of any section or portion of a pipeline.

B. The Contractor shall provide water for all flushing and testing of liquid conveying pipelines. Only potable water shall be used for flushing and testing the potable water system.

C. At the conclusion of the installation work, the Contractor shall thoroughly clean all new liquid conveying pipe by flushing with water or other means to remove all dirt, stones, pieces of wood, etc., which may have entered the pipe during the construction period. If after this cleaning any obstructions remain, they shall be corrected by the Contractor, at his own expense, to the satisfaction of the Engineer. Liquid conveying pipelines shall be flushed at the rate of at least 2.5 feet per second for a duration suitable to the Engineer or shall be flushed by other methods approved by the Engineer.

D. During testing the piping shall show no leakage. Any leaks or defective piping disclosed by the leakage test shall be repaired or replaced by the Contractor, at his own expense, and the test repeated until all such piping shows tight.

E. After flushing, all liquid conveying pipelines shall be hydrostatically tested at the test pressure specified in the appropriate Piping System Schedule in Section 40 06 20 – Process Pipe, Valve and Gate Schedules. The procedure used for the hydrostatic test shall be in accordance with the requirements of AWWA C600. Each pipeline shall be filled with water for a period of no less than 24 hours and then subjected to the specified test pressure for 2 hours. During this test, exposed piping shall show no leakage. Allowable leakage in buried piping shall be in accordance with AWWA C600.

F. Any leaks or defective pipe disclosed by the hydrostatic test shall be repaired or replaced by the Contractor, at his own expense, and the test repeated until all such piping shows tight.

G. After flushing, all gas piping shall be leak tested in accordance with all local codes and regulations and in conformance with the recommendations or requirements of any National Institute or Association for the specific service application.

3.04 PAINTING AND COLOR-CODING SYSTEM

A. All exposed piping specified shall be color coded in accordance with the Owner's standard color designation system for pipe recognition. Contractor must submit to the Owner proposed colors, labels, and letter sizes for approval prior to execution of Work. Paint shall be in accordance with Section 09 90 00 – Painting.

END OF SECTION

SECTION 40 05 07
PIPE SUPPORTS

PART 1 – GENERAL

1.01 THE REQUIREMENT

A. Furnish all equipment, labor, materials, and design calculations required to provide pipe supports in accordance with the Contract Documents.

1.02 RELATED WORK SPECIFIED ELSEWHERE

A. Section 01 73 23 – Seismic Anchorage and Bracing

B. Division 03 – Concrete

C. Section 05 05 13 – Galvanizing

D. Section 05 05 23 – Metal Fastening

E. Section 05 10 00 – Metal Materials

F. Section 05 13 00 – Stainless Steel

G. Section 40 05 00 – Basic Mechanical Requirements

1.03 SUBMITTALS

A. Applicable and associated cut sheets and drawings for materials and support components shall be submitted with the Shop Drawings in accordance with or in addition to the submittal requirements specified in Section 01 33 00 – Submittal Procedures, Section 40 05 00 – Basic Mechanical Requirements and other referenced Sections above.

1. Catalog cut information on all system components such as pipe supports, hangers, guides, anchors, and channel-type support.

2. Drawings of the piping support systems, locating each support, brace, hanger, guide, component, and anchor. Identify support, hanger, guide and anchor type by catalog number and Shop Drawing detail number.

3. With each piping support system Shop Drawing, the Contractor shall attach calculations prepared and sealed by a Professional Engineer, licensed in the State or Commonwealth in which the project is located, showing that the piping support system complies with the specified requirements, including all building code and seismic code requirements pertaining to support of piping and other non-structural components. See notes specified in the Structural Drawings. 031221

4. Table showing the manufacturer's recommended hanger support spacing for PVC, CPVC and FRP pipe for the services listed in Section 40 06 20 – Process Pipe, Valve and Gate Schedules.

PART 2 – PRODUCTS

2.01 GENERAL

A. The Contractor shall be responsible for the design of all piping support systems unless noted otherwise herein or specifically detailed on the Contract Drawings. The absence of pipe supports and details on the Drawings shall not relieve the Contractor of the responsibility of providing a pipe support design sealed by a Professional Engineer, licensed in the State of Arizona. Standard details for pipe supports have been included on the Drawings to define minimum requirements as to the types of Contractor designed pipe supports that will be acceptable.

B. Where a specific location or type of support is shown on the Drawings, the location and type shall be incorporated in the Contractor's pipe support design.

C. Existing piping support systems to support new piping shall only be used if the Contractor can show and demonstrate by submitting supporting calculations that they are adequate for the additional load imposed by the new piping, or if the supports are strengthened to support the additional load.

D. Contractor's pipe support design should include, but not be limited to, the following criteria and loads imposed on the piping system:

1. Thrust Loads based on the design pressures as specified in Piping Schedules in Section 40 06 20 – Process Pipe, Valve and Gate Schedules. Pipe support design shall not utilize process equipment for thrust restraint or support of piping loads.

2. Dead loads and live loads per the latest version of ASCE/SEI 7 or the local building code if more stringent. Loads shall include, but not be limited to, the following:

   a. Weight of pipe

   b. Weight of pipe contents

   c. Weight of insulation

   d. Ice loads (If applicable by location, ice loads per code shall be applied as indicated in the governing building code)

   e. Seismic loading requirements and conditions as specified in the governing building code and referenced seismic design codes. Refer to Structural Notes in the Drawings and the structural code drawing for project specific

seismic design criteria. Seismic and sway bracing shall be provided at maximum 10-foot centers.

f. Wind loads

3. Loads associated with thermal expansion and contraction of the piping system over the full range of potential temperatures the piping system could experience that should include, but not be limited to, the following:

a. Ambient temperature range per local historical weather data (historic high and low obtained from NOAA)

b. Process operating temperature range

c. Exposure to sunlight where applicable

4. Additional pipe support design considerations shall include the following:

a. A minimum safety factor of 2 or as approved by the Engineer, based upon the yield strength of the support material, shall be used for pipe supports, braces, hangers, and guides as well as for beam and column members used in channel-type support systems.

b. The horizontal pipe hanger and/or floor support spacing shall be as recommended by the pipe and/or hanger manufacturer but shall not exceed 10 feet on center unless indicated otherwise herein or on the Drawings.

c. The design, sizing and spacing of anchors, including concrete anchors, shall be based on withstanding shear and pullout loads imposed by loading at each support. The minimum anchor size shall be ½ inches in diameter. Refer to Section 05 59 00 – Bearing Devices and Anchoring.

2.02 HANGERS AND SUPPORTS

A. All piping shall be adequately supported and braced by means of steel hangers and/or supports, concrete piers, supplemental lateral bracing components, pre-fabricated brackets, or otherwise as may be required by the location and forces applied per governing code, including gravity and lateral forces from seismic and/or wind. Generally, concrete supports shall be used where pipe centerline is less than 3 feet above floor, and hangers above 6 feet unless specified or shown otherwise. Supports shall be not more than 10 feet on center for steel and cast iron, 5 feet on center for plastic unless otherwise shown on the Drawings or required by the specific manufacturer. All necessary inserts or appurtenances shall be furnished and installed in the concrete or structures for adequately securing hangers and supports to the structure. Refer to Standard Detail Drawings.

1. Metal pipe support materials, where stainless steel pipe is supported, shall be Type 304L stainless steel meeting the requirements of Section 05 13 00 – Stainless Steel.

2. Metal pipe supports indicated as standard type pipe hangers are designed and detailed for gravity loading only. Resulting lateral loads from wind, seismic, or other lateral loads per code, or special loading conditions during construction, shall be applied to the pipe in accordance with the governing building code. Supplemental lateral stiffening members (when necessary) shall be provided along pipe or at gravity supports using appropriate supplemental members and connections when required by calculations. The Contractor shall include design calculations and details with all pipe hangar and support submissions for review by the Engineer. The main structure and structural components that will support the pipe hangers and other appurtenant components of the facility have been designed to resist all resulting secondary lateral loading from pipe hangers and other non-structural members for gravity and resulting lateral loads.

B. Hangers and supports shall conform to the following requirements:

1. All fabricated metal hangers and supports shall be capable of adjustment after installation. Different types of hangers and supports along a pipe length, including bends, shall be kept to a minimum.

2. Hanger rods shall be straight and vertical. Chain, wire, strap, or perforated bar hangers shall not be used. Hangers shall not be suspended from other piping.

3. Vertical piping shall be properly supported at each floor and between floors by stays or braces to prevent rattling and vibration.

4. Supports and hangers for plastic and FRP piping shall include wide saddles or bands as recommended by the manufacturer and approved by the Engineer to distribute load and thus avoid localized deformation of the pipe.

5. Hanger and supports shall prevent contact between dissimilar metals by use of copper plated, rubber, vinyl coated or stainless-steel hangers.

6. Ferrous pipes to be painted shall be painted in accordance with Section 09 90 00 – Painting. Ferrous pipes that require painting or galvanizing shall be supported by galvanized hangers and supports. Stainless steel piping shall be supported by stainless steel saddles and straps (if required).

7. Copper piping shall be supported by plastic coated or copper plated steel hangers and supports.

8. Plastic piping shall be supported by plastic coated steel hangers and supports.

9. Hangers and supports shall provide for thermal expansion throughout the full operating temperature range.

10. Expansion and adhesive type anchors used for pipe hangers and supports shall be Type 316 stainless steel.

C. Metallic hangers and supports may be standard make by Anvil International, Inc., "Witch" by Carpenter & Paterson, Ltd., B-Line Systems, Inc., or equal; and data on the types and sizes to be used shall be furnished to the Engineer for approval. Metallic support system brackets, rods, support clips, clevis hangers, hardware, etc. shall be cast iron or welded steel construction. All gravity type hangers and supports shall be restrained laterally to resist seismic loading and other loading as required by the governing code.

D. Non-metallic support system shall be a heavy-duty channel framing system. Channel frames shall be manufactured by the pultrusion process using corrosion grade polyester or vinyl ester resins. All fiberglass construction shall include suitable ultraviolet inhibitors for UV exposure and shall have a flame spread rating of 25 or less per ASTM E84. Piping accessories, pipe clamps, clevis hangers, support posts, support racks, fasteners, etc., shall be constructed of vinyl ester or polyurethane resin. Non-metallic support systems shall be standard make Aickinstrut by Aickinstrut, Inc., Unistrut Fiberglass by Unistrut, Inc., Enduro Fiberglass Systems, or equal. The Contractor shall submit data on the types and sizes of approval. Unless otherwise shown or specified the Contractor shall provide support spacings in the conformance with the pipe and support system manufacturer's requirements.

PART 3 – EXECUTION

3.01 GENERAL INSTALLATION REQUIREMENTS

A. Support piping connections to equipment by pipe support and not by the equipment.

B. Support large or heavy valves, fittings, flow meters and appurtenances independently of the connected piping.

C. Support no pipe from the pipe above it.

D. Support piping at changes in direction or in elevation, adjacent to flexible joints, expansion joints, and couplings, and where shown.

E. The Contractor shall not install piping supports and hangers in equipment access areas or bridge crane runs.

F. Brace hanging pipes against horizontal movement by both longitudinal and lateral sway bracing.

G. Install pipe anchors (fixed supports and/or guides) where shown and/or as may otherwise be required to withstand expansion thrust loads and to direct and control thermal expansion. The Contractor may install additional pipe anchors and flexible

couplings to facilitate piping installation, provided that complete details describing location, pipe supports, and hydraulic thrust protection are submitted.

END OF SECTION

SECTION 40 05 31
PVC/CPVC PIPE

PART 1 – GENERAL

1.01 THE REQUIREMENT

A. Reference Section 40 05 00 – Basic Mechanical Requirements.

PART 2 – PRODUCTS

2.01 POLYVINYL CHLORIDE (PVC) PIPE AND FITTINGS

A. PVC pipe and fittings shall be manufactured in accordance with NSF 60/61 approved ASTM D1785, D1784 and F441, "normal impact" pipe, Schedule 40 or 80 as specified.

B. Fittings used with this pipe shall be socket type or flanged type as specified herein, in Section 40 06 20 – Process Pipe, Valve, and Gate Schedules, or indicated on the Drawings. Plastic piping shall be installed in full accordance with the manufacturer's recommendations for the specific installation. No field bending or distortion of the pipe will be permitted.

C. PVC pipe shall be Type 1 Grade 1 conforming to ASTM D1784 and D1785. Fittings shall conform to the following standard specifications:

1. Socket Type: (Schedule 40); ASTM D2466

2. Socket Type: (Schedule 80); ASTM D2467

D. Provide flanged fittings of the same material as the specified pipe and material conforming to ANSI B16.5 at all valves and equipment except at true (double) union valves. Flange gaskets shall be natural rubber or other material fully compatible with the fluid being conveyed. Where flanged piping is used with chemical systems, the gasket material shall conform to the requirements of the following table. Flange bolts shall be type 316 stainless steel minimum, with higher grade materials used where necessary for fluid (chemical) compatibility.

Chemical	Elastomer Material
Polymers	FKM

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E. Acceptable materials of construction of elastomers for non-chemical service shall be as follows:

Non-Chemical Service	Elastomer Material
Potable Water	EPDM

F. Solvent cement for socket type joints shall conform to ASTM D2564 for PVC pipe and fittings. Solvent cement for chemical service shall be Weld-On 724 as manufactured by IPS Corporation, or equal.

2.02 CHLORINATED POLYVINYL CHLORIDE (CPVC) PIPE AND FITTINGS

A. CPVC shall be manufactured in accordance with NSF 60/61 approved ASTM D1785, D1784 and F441, "normal impact" pipe, Schedule 40 or 80 as specified.

B. Fittings used with this pipe shall be socket type or flanged type as specified herein or indicated on the Drawings. Plastic piping shall be installed in full accordance with the manufacturer's recommendations for the specific installation. No field bending or distortion of the pipe will be permitted.

C. CPVC pipe shall be Type 4, Grade 1, Schedule 80, conforming to ASTM D1784 and ASTM F441. CPVC fittings shall be socket type conforming to ASTM F439.

D. Solvent cement for socket type joints shall conform to ASTM F493 for CPVC pipe and fittings. Solvent cement for chemical service shall be Weld-On 724 as manufactured by IPS Corporation, or equal.

2.03 REINFORCED THERMOPLASTIC HOSE AND FITTINGS

A. Reinforced thermoplastic hose shall be clear type, reinforced with polyester yarn. Hose material shall be PVC, EVA (Ethyl Vinyl Acetate), or Low-Density Polyethylene, depending on the application, as indicated in Section 40 06 20 – Process Pipe, Valve, and Gate Schedules. Hose shall be rated for the following working pressures:

Internal Diameter	Minimum Working Pressure (at 68°F)
½”	200 psi (75 psi at 150°F)
1”	125 psi (50 psi at 150°F)
1-½”	100 psi
2”	75 psi

B. Wetted materials shall be completely resistant to corrosion by the specified chemicals. Hose manufacturer shall guarantee that the hose is suitable for the intended service.

PART 3 – EXECUTION

3.01 INSTALLATION

A. Polyvinyl chloride (PVC), chlorinated polyvinyl chloride (CPVC) and High Density Polyethylene (HDPE) pipe shall be laid and joints assembled according to the respective manufacturer's recommendation. PVC pipe installation shall comply with applicable sections of the Uni-Bell PVC Pipe Association Recommended Standard Specifications.

B. Plastic piping shall not be installed when the temperature is less than 60 degrees F except as otherwise recommended by the manufacturer and approved by the Engineer.

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SECTION 40 05 51
VALVES, GENERAL

PART 1 – GENERAL

1.01 THE REQUIREMENT

A. The Contractor shall furnish and install, complete with all assemblies and accessories, all valves shown on the Drawings and specified herein including all fittings, appurtenances and transition pieces required for a complete and operable installation.

B. All valves shall be constructed of first quality materials which have strength, wearing, and corrosion resistance characteristics entirely suitable for the types of service for which the individual valves are designated. Except where noted otherwise, valves designated for water service shall conform to pertinent sections of the latest revision of AWWA C500 Specifications. Cast iron valve bodies and parts shall meet the requirements of the latest revision of ASTM Designation A-126, "Standard Specifications for Gray Iron Castings for Valves, Flanges, and Pipe Fittings, Class B." All valves shall be in compliance with NSF 60/61.

C. All valve body castings shall be clean, sound, and without defects of any kind. No plugging, welding, or repairing of defects will be allowed.

D. Valves shall have flanged ends for exposed service and mechanical joint ends for buried service, unless otherwise shown on the Drawings or specified herein. Flanged ends shall be flat-faced, 125 lb. American Standard unless otherwise shown or specified in accordance with ANSI B16.1. All bolt heads and nuts shall be hexagonal of American Standard size. The Contractor shall be responsible for coordinating connecting piping. Valves with screwed ends shall be made tight with Teflon tape. Unions are required at all screwed joint valves.

1.02 SUBMITTALS

A. The following items shall be submitted in accordance with, or in addition to the submittal requirements specified in 01 33 00 – Submittal Procedures and Section 46 00 00 – Equipment General Provisions:

1. Performance tests shall be conducted in accordance with the latest revision of AWWA C500.

2. Shop Drawings conforming to the requirements of General Conditions, Section 4.7, are required for all valves, and accessories. Submittals shall include all layout dimensions, size and materials of construction for all components, information on support and anchoring where necessary, pneumatic and hydraulic characteristics and complete descriptive information to demonstrate full compliance with the Documents. Shop Drawings for electrically operated/controlled valves shall include

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all details, notes, and diagrams which clearly identify required coordination with the electrical power supply and remote status and alarm indicating devices. Electrical control schematic diagrams shall be submitted with the Shop Drawings for all electrical controls. Diagrams shall be drawn using a ladder-type format in accordance with JIC standards. Shop Drawings for pneumatically operated/controlled valves shall include all details, notes, and diagrams which clearly identify required coordination with the compressed air (service air) system and electrical controls.

3. Operation and maintenance manuals and installation instructions shall be submitted for all valves and accessories in accordance with the Specifications. The manufacturer(s) shall delete all information which does not apply to the equipment being furnished.

1.03 CONTRACTOR'S RESPONSIBILITIES

A. The Contractor shall provide the services of a qualified representative of the manufacturer(s) of the equipment named below to check out and certify the installation(s), to supervise the initial operation, and to instruct the Owner's operating personnel in proper operation and maintenance procedures in accordance with the following schedule:

Item	Valve/Operator Type	Minimum On-Site Time Requirements
1	Automatic Control Check Valve	One (1) 8-hour day
2	Surge Anticipators	One (1) 8-hour day
3	Motor Operated Modulating Valves	One (1) 8-hour day
4	Motor Operated Open-Close Valves (required only if manufacturer is other than for Item 3 above)	One (1) 8-hour day

B. Any additional time required to achieve successful installation and operation shall be at the expense of the Contractor. The manufacturer's representative shall sign in and out at the office of the Engineer's Resident Project Representative on each day he is at the project.

C. A written report covering the representative's findings and installation approval shall be mailed directly to the Engineer covering all inspection and outlining in detail any deficiencies notes.

D. The times specified are exclusive of travel time to and from the facility and shall not be construed as to relieve the manufacturer of any additional visits to provide sufficient service to place the equipment in satisfactory operation.

PART 2 – PRODUCTS

2.01 FLOW INDICATORS

A. Flow indicators shall be the Akron ball-type as manufactured by Brooks Instrument Co., Fischer and Porter, or equal, and shall have bronze bodies, glass dome, and plastic ball.

2.02 STRAINERS

A. Y-Strainers shall be Y-pattern cast iron body, flanged or screwed ends with stainless steel or Monel, 20 mesh strainers. Strainers shall be 200 psi, cold-water service strainers, as manufactured by WATTS, Crane Co., Zurn, or equal.

B. PVC and CPVC y-strainers shall be provided in PVC and CPVC piping and as shown on the Drawings. Strainer shall be provided with PVC or CPVC body and end cap, EPDM or Viton seal as required for the chemical service, and 20 mesh screen. Temperature rating shall be 30ºF to 140ºF, and pressure rating shall be 150 psi @ 70ºF, non-shock. PVC and CPVC y-Strainers shall be as manufactured by Asahi/America, Hayward, or equal.

C. PVC and CPVC simplex basket strainers shall be provided in PVC and CPVC piping as shown on the Drawings. 1/2”-4” strainers shall be one-piece molded body with (3) ports to facilitate straight-thru flow pattern or u-shape flow pattern as required. Connections shall be true union type to ease installation/future maintenance. The cover, vent plug, and drain plug shall all be hand-removable, requiring no tools. EPDM or Viton seals shall be used as required for chemical service, and internal baskets shall be 1/32” perforation (20-mesh) for 1/2”-1” sizes, and 1/8” perforation for 1-1/2”-8” sizes. 6” and 8” strainers shall be fabricated construction and shall contain flanged connections as standard. The pressure rating for 1/2”-8” sizes shall be 150 psi @ 70ºF, non-shock. Strainers shall be manufactured by Hayward Industrial Products, or equal.

2.03 BACKFLOW PREVENTERS

A. Backflow preventer shall be the size shown on the Drawings and shall be of the double check valve principle. Backflow preventer installation shall include isolation valves and four test cocks, furnished as an assembly. For backflow preventers less than 2-1/2", the installation assembly also shall include a strainer. Isolation valves for backflow preventers shall be ball valves, except for size 2-1/2" and larger which shall be resilient seat gate valves. Test cocks shall be located as recommended by the manufacturer to facilitate functional testing of the assembly. The backflow preventer shall be a WATTS 709, or equal.

PART 3 – EXECUTION

3.01 INSTALLATION

A. Except where noted otherwise herein, all valves shall be installing and tested in accordance with the latest revision of AWWA C500. Before installation, all valves shall

be lubricated, manually opened and closed to check their operation and the interior of the valves shall be thoroughly cleaned. Valves shall be placed in the positions shown on the Drawings. Joints shall be made as directed under the Piping Specifications. The valves shall be so located that they are easily accessible for operating purposes and shall bear no stresses due to loads from the adjacent pipe. The Contractor shall be responsible for coordinating connecting piping.

B. All valves shall be tested at the operating pressures at which the particular line will be used. Any leakage or "sweating" of joints shall be stopped, and all joints shall be tight. All motor operated and cylinder operated valves shall be tested for control operation as directed by the Engineer.

C. Provide valves in quantity, size, and type with all required accessories as shown on the Drawings.

D. Install all valves and appurtenances in accordance with manufacturer's instructions. Install suitable corporation stops at all points shown or required where air binding of pipe lines might occur. Install all valves so that operating handwheels or wrenches may be conveniently turned from operating floor but without interfering with access, and as approved by Engineer. Unless otherwise approved, install all valves plumb and level. Valves shall be installed free from distortion and strain caused by misaligned piping, equipment or other causes.

E. Valve boxes shall be set plumb and centered with the bodies directly over the valves so that traffic loads are not transmitted to the valve. Earth fill shall be carefully tamped around each valve box to a distance of 4 feet on all sides of the box, or to the undisturbed trench face, if less than 4 feet.

3.02 SHOP AND FIELD TESTING

A. Shop and field testing of valves shall be as follows:

1. Certified factory testing shall be provided for all components of the valve and operator system. Valves and operators shall be shop tested in accordance with the requirements in the latest revision of AWWA C500, including performance tests, leakage test, hydrostatic tests, and proof-of-design tests. The manufacturer through the Contractor shall submit certified copies of the reports covering the test for acceptance by the Engineer.

2. Shop testing shall be provided for the operators consisting of a complete functional check of each unit. Any deficiencies found in shop testing shall be corrected prior to shipment. The system supplier through the Contractor shall submit written certification that shop tests for the electrical/pneumatic system and all controls were successfully conducted and that these components provide the functions specified and required for proper operation of the valve operator system.

3. The Contractor shall conduct field tests to check and adjust system components, and to test and adjust operation of the overall system. Preliminary field tests shall

be conducted prior to start-up with final field tests conducted during start-up. The factory service representative shall assist the Contractor during all field testing and prepare a written report describing test methods, and changes made during the testing, and summarizing test results. The service representative shall certify proper operation of the valve operator system upon successful completion of the final acceptance field testing.

4. Preliminary and final field tests shall be conducted at a time approved by the Engineer. The Engineer shall witness all field testing.

5. All costs in connection with field testing of equipment such as energy, light, lubricants, water, instruments, labor, equipment, temporary facilities for test purposes, etc. shall be borne by the Contractor. The Contractor shall be fully responsible for the proper operation of equipment during tests and instruction periods and shall neither have nor make any claim for damage which may occur to equipment prior to the time when the Owner formally takes over the operation thereof.

6. Preliminary field tests shall be conducted prior to start-up and shall include a functional check of the entire valve operator system and all system components. Preliminary field tests shall demonstrate that the valve operator system performs according to specifications and that all equipment, valves, controls, alarms, interlocks, etc., function properly. The preliminary field test report must be approved by the Engineer prior to conducting final field acceptance tests. Based on results of preliminary field tests, the Contractor shall make any adjustments required to settings, etc., to achieve the required valve closing time and operation specified or otherwise directed by the Engineer.

7. Final field acceptance tests shall be conducted simultaneously with the start-up and field testing of the pumps, air compressors, process air blowers, etc. Field tests shall be conducted for the full range of operating modes and conditions specified and as directed by the Engineer. Each of the valves shall be tested at minimum, maximum, and normal head/flow conditions, and under all specified conditions of opening and closing. Performance of pneumatic valves and compressed air system under normal operating conditions and during simulated power failures shall be checked.

8. Field testing shall include optimization of opening and closing times of the valves. The Contractor shall provide the means for accurate measurement of pipeline pressures as directed by the Engineer. Valve opening and closing times shall be adjusted based on process requirements to optimize operation of the valves. Final valve opening and closing times as determined by field tests shall be approved by the Engineer prior to final acceptance of the system.

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SECTION 40 05 57

VALVE OPERATORS AND ELECTRIC VALVE ACTUATORS

PART 1 – GENERAL

1.01 THE REQUIREMENT

A. Equipment shall be provided in accordance with the requirements of Section 46 00 00 – Equipment General Provisions and Section 40 05 00 – Basic Mechanical Requirements.

B. Reference Section 40 06 20 – Process Pipe, Valve, and Gate Schedules for additional information on valves and operators/actuators.

C. The electric valve actuators shall meet the signal requirements described in Section 40 61 23 – Signal Coordination, Section 40 61 93 – Process Control System Input/Output List, and Section 40 61 96 – Process Control Descriptions.

D. Valve operators and electric valve actuators shall be designed to unseat, open or close, and seat the valve under the most adverse operating condition to which the valves will be subjected.

E. Operator mounting arrangements shall be as indicated on the Drawings or as directed by the manufacturer and/or Engineer. There shall be no mounting restrictions on the electric valve actuator.

F. The valve operators and electric actuators shall be the full and undivided responsibility of the valve manufacturer in order to ensure complete coordination of the components and to provide unit responsibility.

1.02 SUBMITTALS

A. The following items shall be submitted in accordance with, or in addition to the submittal requirements specified in Section 01 33 00 – Submittal Procedures and Section 46 00 00 – Equipment General Provisions:

1. Shop Drawings

2. O&M Manuals

3. Certification that the force required to operate all valves is as specified herein.

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PART 2 – PRODUCTS

2.01 GENERAL

A. Electric actuators shall be provided where specified in the Valve Schedule in Section 40 06 20 – Process Pipe, Valve, and Gate Schedules.

B. Manual operators shall be provided on all valves which do not receive electric actuators. Manual operator type shall be as specified herein and as shown on the Drawings.

C. Operators/actuators shall be furnished with conservatively sized extension bonnets, extension stems, or torque tubes, and all required appurtenances required for a complete installation. Operators furnished with extension bonnets shall include stainless steel extension stems, or stainless steel torque tubes.

2.02 MANUAL OPERATORS

A. Unless otherwise specified or shown on the Drawings, manual operator type shall be as follows:

1. Exposed valves up to 6-inch shall be lever operated (except gate valves).

2. Exposed gate valves shall be handwheel operated.

3. Valves with centerline of operator located more than 6-feet above the floor or platform from which it is to be operated shall have a chainwheel operator unless otherwise indicated on the Drawings.

B. Manual operators shall be rigidly attached to the valve body unless otherwise specified or shown on the Drawings.

C. All operators shall turn counter-clockwise to open and shall have the open direction clearly and permanently marked.

D. Valve operators shall be designed so that the force required to operate the handwheel, lever, or chain (including breakaway torque requirements) does not exceed 80 pounds applied at the extremity of handwheel or chainwheel operator. Design pressures for sizing of valve operators shall be the piping test pressure for the piping in which the valve is to be installed as shown in the Piping Schedule in Section 40 06 20 – Process Pipe, Valve, and Gate Schedules.

E. Nut operators shall have standard 2-inch square AWWA operating nuts designed in accordance with AWWA C504-94.

F. Geared manual operators shall be of the worm gear, traveling nut or scotch yolk type except manual operators for butterfly valves 18-inch in diameter or larger which shall be worm gear, unless otherwise indicated in the individual valve specification. Gear operators shall be of the worm gear or bevel gear type. Gear box designs incorporating

end of travel stops in the housing shall be equipped with AWWA input stops. Each gearbox shall require a minimum of 10 turns for 90 degree rotation or full valve stem travel and shall be equipped with a mechanical valve position indicator.

2.03 ELECTRIC VALVE ACTUATORS

A. Electric Actuators shall be open/close service or modulating service as specified in the Valve Schedule in Section 40 06 20 – Process Pipe, Valve, and Gate Schedules.

   1. Modulating valve actuators shall be manufactured by Rotork, AUMA, EIM Controls or approved equal.

B. Performance Requirements

   1. The actuators shall be designed for indoor and outdoor service and shall be capable of mounting in any position.

   2. Torque capacity of the actuators shall be sufficient to operate the valves with the maximum pressure differential, as indicated in the Valve Schedule in Section 40 06 20 – Process Pipe, Valve, and Gate Schedules, with a safety factor of 1.5. Actuators in modulating service will be selected such that the required dynamic valve torque is no more than 60% of the electric actuator's maximum rated breakaway of torque.

   3. Operating time for full limits of travel shall be not more than 2 seconds per inch diameter of the valve, +/- 50 percent through 20 inches; +/- 30 percent for valves 24 inches and larger. Operating time shall not be less than 60 seconds for all modulating valves.

   4. Actuators shall be capable of operating in ambient temperatures ranging from 0 degrees F – 160 degrees F.

   5. For modulating actuators, the gearing, motor and contactor shall be capable of 1200 starts per hour without overheating.

C. The actuators shall include, in one integral housing, individual compartments for the motor, gearing, wiring terminals, and control circuits. The terminal compartment shall be separated from the inner electrical components of the actuator by means of a watertight seal. The inner seal shall protect the motor and all other internal electrical elements of the actuator from entrance of moisture and dust when the terminal cover is removed. Double cartridge shaft seals shall be provided on the hand wheel and output shafts for weatherproof protection. All external fasteners shall be stainless steel. Compartments shall be provided with moisture and dust-proof rigid cast covers meeting NEMA 6, certified to submergence in 6 ft of water for 30 minutes. Actuators located in classified areas shall be suitable for use in Class 1, Division 1, Group D environments.

D. The actuators shall be provided with externally operable and lockable 120VAC circuit breakers integral to the control housing

E. All gearing shall be hardened alloy steel or bronze and shall be rated at twice the output torque of the operator and shall be designed to withstand the stall torque of the motor without failure. Output drive gearing shall consist of a worm shaft and worm gear pinion operating in an oil bath. The worm gear pinion shall be alloy bronze. Worm gear drive shall be self-locking to prevent creeping of the valve disc in an intermediate position. Heavy-duty grease shall protect gearing and sealed ball bearings of the main shaft for five years without changing. Motor reduction gearing shall be spur or planetary gearing and shall allow for field repair and change in gear ratio. For quarter turn applications, overtravel of the operator shall be prevented by internal mechanical stops cast into the actuator.

F. A mechanical dial position indicator shall be furnished to continuously indicate the position of the valve at and between the fully open and fully closed positions. The indicator shall be driven by gearing driven off of the main worm gear pinion and shall operate when the actuator is in either the electrical mode or manual mode.

G. A handwheel shall be permanently attached for manual operation. A gear assembly shall be provided between the handwheel and the worm shaft if required to reduce the force necessary to operate the handwheel to less than 40 pounds. A positive declutch mechanism shall engage the handwheel when required. When the actuator is set in the declutched position for handwheel operation, it shall return automatically to electric operation when actuator motor is energized. The handwheel shall not rotate during electric operation nor shall a fused motor prevent handwheel operation.

1. Modulating actuators shall be furnished with solid state reversing starters utilizing thyristors.

H. Leads from the motor shall be brought to the control circuit (limit switch) compartment without external piping or conduit box. An adequately sized space heater shall be installed in the control circuit compartment to aid in the prevention of damage resulting in from condensation. The following items shall be located in the control circuit compartment.

1. Torque limit switches shall be provided to de-energize the motor control circuit in the event of a stall when attempting to unseat a jammed valve and when torque is exceeded during valve travel. Each actuator shall have an open direction torque switch and a close direction torque switch. The torque switches shall be mechanically operated and able to be set in torque units. Torque switches shall be calibrated prior to the actuator's assembly to the valve.

2. Travel limit switches shall be provided to de-energize the motor control circuit when the actuator reaches the limits of travel in the open and close directions. The limit switch drive shall be of the counter gear type and "in step'" with the actuator output drive at all times in either the electrical or manual mode of operation. A minimum of six (6) contacts, three (3) normally open and three (3) normally closed, shall be supplied at each end of valve travel. Four (4) additional

contacts shall be provided to report end of travel or any desired position between ends of travel.

I. Modulating actuators shall have a position feedback potentiometer mounted directly to the valve actuator gearing inside the gearing compartment. The potentiometer shall provide a 4-20 mA signal corresponding to valve position. Modulating valve actuators shall be designed to respond to either a 4-20mADC analog signal or a digital pulse signal as specified herein or as required to coordinate with the requirements of Division 40.

1. Modulating valve actuators designed to respond to a 4-20mADC signal shall be provided with a valve positioner which shall position the valve proportional to an externally generated 4-20mADC signal. The valve positioning control circuitry shall position the valve by comparing the command signal with the present valve position as indicated by the feedback potentiometer. The positioner shall be field adjustable to fail to the “open,” “closed,” or “last” position on loss of 4-20 mADC command signal.

2. Modulating valve actuators designed to respond to “pulse” open/close signals shall operate the valve during the time the open or close pulse signal is high. Modulating actuators designed to respond to “pulse” open/close signals shall have the latching circuitry described above for open/close actuators disabled.

J. The electrical terminals shall be housed in a double sealed terminal compartment isolated from the rest of the actuator components. The actuators shall be designed to operate from a single 120 VAC, 1-phase source. The actuators shall be furnished with fuses inside of the terminal compartment. A quantity of two – ¾ inch NPT conduit entries shall be furnished.

K. Actuators shall contain wiring and terminals for the following control functions. All dry contacts shall be rated for 5A at 250VAC.

1. Open, Close, and Stop commands from external dry contacts (utilizing internal 24VDC) and/or from an external signal of 12V to 120V. The inputs for the open, close, stop signals shall be field selectable to be respond to either maintained or momentary remote signals. In momentary mode, the actuator shall have internal latching circuitry that causes the operator to drive the valve to its limit of travel upon receipt of the momentary contact signal unless a stop signal is received.

2. Emergency override input from a normally closed or normally open contact. The actuator shall either open or close (field selectable) upon receiving the emergency override input.

3. Remote Local-Off-Remote selector switch, Open/Close pushbuttons, and Open/Closed pilot lights for a remote manual control station (see below). The remote Local-Off-Remote selector switch and Open/Close pushbuttons shall be a dry contact input to the actuator control circuitry. The Open/Closed pilot lights shall be powered from the valve actuator control power.

4. Four (4) unpowered contacts shall be provided which can be selected to indicate valve “Opened” and “Closed” position, “Remote” status of the actuator, and fail status of the actuator. The fail status contacts shall activate upon motor overtemperature and actuator overtorque as a minimum.

5. Terminals for 4-20mADC position command and 4-20mADC position feedback as described above for modulating actuators.

L. Local Controls

1. Actuators shall be furnished with a Local-Off-Remote selector switch; Open, Close, and Stop pushbuttons for local control; a red lamp indicating closed and a green lamp indicating open. L-O-R switch shall be padlockable in any of the three positions.

   a. When the LOR is in the “Local” position, open/close control shall be by the open and close pushbuttons on the actuator. The stop push button shall stop the actuator travel.

   b. When the LOR is in the “Off” position, the actuator shall not operate.

   c. When the LOR is in the “Remote” position, the actuator shall be controlled by remote inputs from the PLC or from the remote manual controls station.

2. The local controls shall be arranged so that the direction of travel can be reversed without the necessity of stopping the actuator.

M. Remote Manual Control Station

1. Where indicated in the Valve Schedule in Section 40 06 20 – Process Pipe, Valve, and Gate Schedules, manual actuator controls shall be furnished in a separate NEMA 4X stainless steel enclosure (NEMA 7 if located in a classified area). Manual control station controls shall include Hand–Off-Auto Selector switch; Open, Stop, and Close pushbuttons; a red lamp indicating closed and a green lamp indicating open.

   a. When the HOA is in the “Hand” position, open/close control shall be by the open and close pushbuttons on the remote manual control station. The stop push button shall stop actuator travel.

   b. When the HOA is in the “Off” position, the actuator shall not operate.

   c. When the HOA is in the “Auto” position, the actuator shall be controlled by remote inputs to the valve actuator from the PL

2.04 ELECTRIC OPERATORS FOR PVC/CPVC VALVES

A. Automatic electric operators shall be provided for PVC/CPVC valves where specified and/or as shown on the Drawings. Operators shall operate on 120 volt AC, single phase, 60 hertz power and be equipped with solid state electronic internal controls. Motors shall be brushless, capacitor-run, reversing type, suitable for high duty cycle applications and shall be specifically designed for open/close service. Motors shall be provided with integral thermal overload protection with auto-reset. Operator gears and shafts shall be constructed of heat treated high-alloy steel. Operator output shaft shall be electro-less nickel plated. Operator gear trains shall be permanently lubricated. The gear train shall withstand operator stall torque. Operator enclosures shall be NEMA 4. Operators shall be provided with internally wired, thermostatically controlled enclosure heaters to maintain an enclosure temperature of at least 40 degrees F. Operators shall be provided with positive visual position indication markings permanently affixed to the operator body and final output shaft. Operator drive output shall be provided with a declutchable manual override. A manual lever shall be provided for manual valve positioning. Operators shall be failsafe, utilizing a mechanical spring with a clutch mechanism to uncouple the motor during spring return operation, allowing the spring to relax and either open or close the valve. Selection of either fail-opened or fail-closed shall be made by selection of field wiring terminals.

B. Independently adjustable cam-operated position limit switches shall be provided with dry contacts for remote fully opened and fully closed valve position indication. Operators shall respond to external dry contact open/close controls. The actuator shall have internal latching circuitry that causes the operator to drive the valve to its limit of travel upon receipt of the momentary contact open or close signal unless a stop signal is received. The all actuator control circuitry, including latching circuitry, shall be internal to the valve actuator. Valve control circuits and components mounted in a separate enclosure external to the valve actuator assembly will not be permitted. Connections for external remote controls shall be powered from an internal 24VDC or 120VAC power supply. Limit switches shall be rated for 15 amps at 120 VAC. Valve remote status shall also be provided as specified in Section 40 61 96 – Process Control Descriptions. The Contractor shall coordinate operator controls with the functional requirements specified in Section 40 61 96 – Process Control Descriptions.

PART 3 – EXECUTION

3.01 MANUFACTURER'S FIELD SERVICES

A. The services of a qualified manufacturer's technical representative shall be provided in accordance with Section 46 00 00 – Equipment General Provisions and shall include the following site visits for electric actuators:

Service	Number of Trips	Number of Days/Trip
Installation and Testing	1	1

Startup and Training	1	1
Services after Startup	1	1

3.02 INSTALLATION

A. All valve actuators shall be installed in accordance with the manufacturer's published recommendations and the applicable Specification Sections for valves and motor controls.

B. Valve actuators shall be factory coated in accordance with the manufacturer’s standard paint system.

3.03 SHOP TESTING

A. Shop testing shall be in accordance with Section 46 00 00 – Equipment General Provisions and with the following additional requirements:

1. Conduct a complete functional check of each unit. Correct any deficiencies found in shop testing prior to shipment.

2. Submit written certification that:

   a. Shop tests for the electrical system and all controls were successfully conducted;

   b. Electrical system and all controls provide the functions specified and required for proper operation of the valve operator system.

3. Each actuator shall be performance tested and individual test certificates shall be supplied free of charge. The test equipment shall simulate each typical valve load and the following parameters should be recorded:

   a. Current at maximum torque setting

   b. Torque at maximum torque setting

   c. Flash Test Voltage

   d. Actuator Output Speed or Operating Time

   e. In addition, the test certificate should record details of specification, such as gear ratios for both manual and automatic drive, closing direction, and wiring diagram code number.

   f. Verification of actuator torque rating with valve.

3.04 FIELD TESTS

A. Field testing shall be in accordance with Section 46 00 00 – Equipment General Provisions and with the following additional requirements:

1. Valve actuators shall be field-tested together with the associated valves.

2. Test all valves at the operating pressures at which the particular line will be used.

3. Test all valves for control operation as directed.

4. Field testing shall include optimization of opening and closing times of the valves. Valve opening and closing times shall be adjusted based on process requirements to optimize operation of the valves. Final valve opening and closing times as determined by field tests shall be approved by the Engineer prior to final acceptance of the system.

B. Preliminary Field Tests

1. General: Preliminary field tests shall be conducted prior to start-up and shall include a functional check of the entire valve operator system and all system components.

2. Scope: Preliminary field tests shall demonstrate that the valve operator system performs according to specifications and that all equipment, valves, controls, alarms, interlocks, etc., function properly.

3. Based on results of preliminary field tests, the Contractor shall make any adjustments required to settings, etc., to achieve the required valve closing time and operation, as specified or otherwise directed.

C. Final Field Tests

1. Final field tests shall be conducted in accordance with the latest revision of AWWA C500.

2. Final field tests shall be conducted simultaneously with the start-up and field testing of the pumps.

3. Final field tests shall be conducted for the full range of operating modes and conditions specified and as directed by the Engineer. Each of the valves shall be tested at minimum, maximum, and normal head/flow conditions, and under all specified conditions of opening and closing.

4. Certification of Equipment Compliance: After the final field tests are completed and passed, submit affidavit according to Section 46 00 00 – Equipment and General Provisions.

END OF SECTION

SECTION 40 05 63
BALL VALVES

PART 1 – GENERAL

1.01 THE REQUIREMENT

A. Reference Section 40 05 00 – Basic Mechanical Requirements.

B. Valves required for chemical service shall be constructed of materials suitable for the intended service.

PART 2 – PRODUCTS

2.01 V-PORT BALL VALVES (TYP BV-4)

A. V-port ball valves shall have ANSI Class 150 bodies and raised face flanges. Valves shall meet ANSI/FCI 70-2 Class IV requirements for unidirectional shutoff. Valve material shall be in compliance with NSF 60/61. Valves shall be suitable for 10 psi CWP.

B. Valve segment shall contain a 90 to 120 degree V-port. Valve and actuator shall be suitable for a throttling differential of 120 psi over the entire range of segment travel.

C. Valve materials shall be as follows:

1. Body: ASTM A 351 gr. CF8M or CG8M
2. Segment: AISI 316, 317 or 329, hard-chrome plated
3. Shaft: AISI 316, 317, or 329
4. Seat: Filled PTFE or spring- loaded metal
5. Packing: PTFE

D. Manufacturers:

1. DeZurik Corporation
2. KTM Products
3. Neles Controls

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PART 3 – EXECUTION

3.01 GENERAL

A. All valves shall be tested for unidirectional or bi-directional shut-off as required by service conditions.

END OF SECTION

SECTION 40 05 68.13
PVC AND CPVC VALVES

PART 1 – GENERAL

1.01 THE REQUIREMENT

A. Reference Section 40 05 00 – Basic Mechanical Requirements.

PART 2 – PRODUCTS

2.01 MATERIALS OF CONSTRUCTION

A. Valves shall be constructed of materials suitable for the intended service. PVC valves shall be provided in PVC piping and CPVC valves shall be provided in CPVC piping.

B. PVC valve bodies shall be constructed of PVC which shall meet or exceed the requirements of cell classification 12454 according to ASTM D1784 and shall be in accordance with NSF 60/61. CVPC valve bodies shall be constructed of CPVC which shall meet or exceed the requirements of cell classification 23447 according to ASTM D1784 and shall be in accordance with NSF 60/61.

C. Materials of construction of other valve components shall be as specified below for the particular type of valve.

D. Acceptable materials of construction of elastomers for chemical service shall be as follows:

Chemical Service	Elastomer Material
Polymers	FKM

E. Acceptable materials of construction of elastomers for non-chemical service shall be as follows:

Non-Chemical Service	Elastomer Material
Potable Water	EPDM

F. All flanged valves shall be flat face flanged end type conforming to ANSI B16.5 bolt pattern for 150 lb. flanges.

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SECTION 40 06 20

PROCESS PIPE, VALVE, AND GATE SCHEDULES

PART 1 - GENERAL

1.01 THE REQUIREMENT

A. Reference Section 40 05 00 - Basic Mechanical Requirements.

1.02 PIPING SCHEDULES

A. Piping requirements for this Section are outlined on the Drawings and in the Piping Schedules. In the absence of a specified test pressure, pipe shall be tested at the greater of: 1) 150 percent of working pressure as determined by the Engineer or 2) 10 psig, unless the Schedule indicates no test is required.

B. If the pipe material is not shown on the Piping Schedule or otherwise specified, the following materials shall be used.

PIPE SIZE	MATERIAL	TYPE OF JOINT	CLASS/DESIGN	TEST PRESSURE
4-IN AND LARGER	DIP	FLANGED (EXPOSED)	CLASS 53	(1)
		RESTRAINED (BURIED)	PRESSURE CLASS 350	
LESS THAN 4-IN	PVC/CPVC (2)	SOCKET	SCH 80	(1)

(1) Test at 150 percent of working pressure or 10 psi, whichever is greater.
(2) For all PVC / CPVC designations, if piping is exposed to direct sunlight or if heat tracing is required, CPVC shall be used. Otherwise, PVC shall be used.

1.03 VALVE SCHEDULES

A. All valves shall be tagged by the manufacturer according to the control valve designations listed in this Section.

B. Valves not listed in this Section shall be manually operated, unless otherwise shown on the Drawings.

02-01-22

1.04 GATE SCHEDULES

A. Gates shall be tagged by the manufacturer according to locations listed in this Section.

CHEMICAL PIPING SCHEDULE

PIPE DESIGNATIONS		MATERIAL	BURIED PIPING		EXPOSED PIPING			DESIGN PRESSURE (PSI)[1]	
			TYPE OF JOINT	CLASS/ DESIGN	TYPE OF JOINT	CLASS/ DESIGN	HEAT TRACE[2]	WORKING	FIELD TEST
FAP	FILTER AID POLYMER	< 4" PVC / CPVC[3]	SOCKET	SCH 80	SOCKET/ FLANGED	SCH 80	NO	200	300

1) Surge pressure is the maximum pressure in the system during a surge event. Restraint pressure shall be used to determine pipe joint design and if required, the size, number, material, and dimensions of tabs and threaded-rods and thrust blocking for thrust restraint of piping and piping system components specified.
2) Provide heat tracing and insulation as specified in Section 40 41 13 on all exposed outdoor piping indicated.
3) For all PVC / CPVC designations, if piping is exposed to direct sunlight or if heat tracing is required, CPVC shall be used. Otherwise, PVC shall be used.
4) Flanges shall be provided as shown on the drawings or as approved by the Engineer.

ELECTRICALLY OPERATED VALVE SCHEDULE

TAG NO.	VALVE TYPE	OPERATOR TYPE	SIZE (in.)	FLOW	MAX DIFFERENTIAL PRESSURE (psi)	CLASS	SERVICE	LOCATION
PWTP-PLY-VLV-3509	V-PORT BALL VALVE	MODULATING	1	0.5 - 10 gph	10	150	FAP	FILTER 9
PWTP-PLY-VLV-3510	V-PORT BALL VALVE	MODULATING[1]	1	0.5 - 10 gph	10	150	FAP	FILTER 10
PWTP-PLY-VLV-3511	V-PORT BALL VALVE	MODULATING[1]	1	0.5 - 10 gph	10	150	FAP	FILTER 11
PWTP-PLY-VLV-3512	V-PORT BALL VALVE	MODULATING[1]	1	0.5 - 10 gph	10	150	FAP	FILTER 12

1) Pulse Control - See Specifications 40 05 57 and 40 61 96
2) Provide remote control station as specified in section 40 05 57

SECTION 40 06 20

PROCESS PIPE, VALVE, AND GATE SCHEDULES

PART 1 - GENERAL

1.01 THE REQUIREMENT

A. Reference Section 40 05 00 - Basic Mechanical Requirements.

1.02 PIPING SCHEDULES

A. Piping requirements for this Section are outlined on the Drawings and in the Piping Schedules. In the absence of a specified test pressure, pipe shall be tested at the greater of: 1) 150 percent of working pressure as determined by the Engineer or 2) 10 psig, unless the Schedule indicates no test is required.

B. If the pipe material is not shown on the Piping Schedule or otherwise specified, the following materials shall be used.

PIPE SIZE	MATERIAL	TYPE OF JOINT	CLASS/DESIGN	TEST PRESSURE
4-IN AND LARGER	DIP	FLANGED (EXPOSED)	CLASS 53	(1)
		RESTRAINED (BURIED)	PRESSURE CLASS 350	
LESS THAN 4-IN	PVC/CPVC (2)	SOCKET	SCH 80	(1)

(1) Test at 150 percent of working pressure or 10 psi, whichever is greater.
(2) For all PVC / CPVC designations, if piping is exposed to direct sunlight or if heat tracing is required, CPVC shall be used. Otherwise, PVC shall be used.

1.03 VALVE SCHEDULES

A. All valves shall be tagged by the manufacturer according to the control valve designations listed in this Section.

B. Valves not listed in this Section shall be manually operated, unless otherwise shown on the Drawings.

02-01-22

1.04 GATE SCHEDULES

A. Gates shall be tagged by the manufacturer according to locations listed in this Section.

CHEMICAL PIPING SCHEDULE

PIPE DESIGNATIONS		MATERIAL	BURIED PIPING		EXPOSED PIPING			DESIGN PRESSURE (PSI)[1]	
			TYPE OF JOINT	CLASS/ DESIGN	TYPE OF JOINT	CLASS/ DESIGN	HEAT TRACE[2]	WORKING	FIELD TEST
FAP	FILTER AID POLYMER	< 4" PVC / CPVC[3]	SOCKET	SCH 80	SOCKET/ FLANGED	SCH 80	NO	200	300

1) Surge pressure is the maximum pressure in the system during a surge event. Restraint pressure shall be used to determine pipe joint design and if required, the size, number, material, and dimensions of tabs and threaded-rods and thrust blocking for thrust restraint of piping and piping system components specified.
2) Provide heat tracing and insulation as specified in Section 40 41 13 on all exposed outdoor piping indicated.
3) For all PVC / CPVC designations, if piping is exposed to direct sunlight or if heat tracing is required, CPVC shall be used. Otherwise, PVC shall be used.
4) Flanges shall be provided as shown on the drawings or as approved by the Engineer.

ELECTRICALLY OPERATED VALVE SCHEDULE

TAG NO.	VALVE TYPE	OPERATOR TYPE	SIZE (in.)	FLOW	MAX DIFFERENTIAL PRESSURE (psi)	CLASS	SERVICE	LOCATION
PWTP-PLY-VLV-3509	V-PORT BALL VALVE	MODULATING	1	0.5 - 10 gph	10	150	FAP	FILTER 9
PWTP-PLY-VLV-3510	V-PORT BALL VALVE	MODULATING[1]	1	0.5 - 10 gph	10	150	FAP	FILTER 10
PWTP-PLY-VLV-3511	V-PORT BALL VALVE	MODULATING[1]	1	0.5 - 10 gph	10	150	FAP	FILTER 11
PWTP-PLY-VLV-3512	V-PORT BALL VALVE	MODULATING[1]	1	0.5 - 10 gph	10	150	FAP	FILTER 12

1) Pulse Control - See Specifications 40 05 57 and 40 61 96
2) Provide remote control station as specified in section 40 05 57

2.02 PVC/CPVC BALL VALVES (BLV-P/BLV-C)

A. Ball valves shall be true union design with flanged, socket, or threaded ends as required and as specified in Section 40 06 20 – Process Pipe, Valve, and Gate Schedules. All valves shall be full-port design and allow for bi-directional flow. Valve stems shall contain double o-ring seals. Valves shall have removable handles and integrally molded mounting features for actuator installation. Ball valves shall be rated for a minimum pressure of 150 psi at 70°F.

B. Valve bodies, stems, balls, and unions shall be constructed of PVC or CPVC as specified in 2.01 B. Ball seats shall be made of PTFE, and o-ring seals shall be as specified in 2.01 D and 2.01 E.

C. Ball valves shall be manufactured by Asahi/America, Nibco/Chemtrol, IPEX, Hayward Flow Control, Plastomatic, or equal.

PART 3 – EXECUTION (NOT USED)

END OF SECTION

SECTION 40 61 13

PROCESS CONTROL SYSTEM GENERAL PROVISIONS

PART 1 – GENERAL

1.01 SCOPE

A. The Contractor shall provide, through the services of an instrumentation and control system subcontractor, components, system installation services, as well as required and specified ancillary services in connection with the Instrumentation, Control and Information System.

B. The System includes materials, labor, tools, fees, charges, and documentation required to furnish, install, test and place in operation a complete and operable instrumentation, control and information system.

C. The system shall include measuring elements, signal converters, transmitters, local control panels, digital hardware and software, operator workstations, remote telemetry units, signal and data transmission systems, interconnecting wiring, and pertinent accessories.

D. The scope of the work to be performed under this Division includes but is not limited to the following:

1. The Contractor shall retain overall responsibility for the instrumentation and control system as specified herein.

2. Furnish and install process instrumentation and associated taps and supports as scheduled or shown on the Drawings, unless otherwise noted or supplied by equipment vendors.

3. Furnish and install local control panels, field panels and associated cabinets and panels as shown on the Drawings and as specified in Sections 40 60 00 through 40 79 99, inclusive and where included.

4. Furnish and install digital control system hardware and software as specified in Sections 40 60 00 through 40 79 99, inclusive and where included.

5. Final termination and testing of instrumentation and control system signal wiring and power supply wiring at equipment furnished under Sections 40 60 00 through 40 79 99, inclusive and where included.

6. Furnish, install and terminate special cables for devices (e.g., instruments, printers, radios). Furnish and terminate control system communication network cables.

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7. Furnish and install surge protection devices for digital equipment, local control panels, remote telemetry units, and instrumentation provided under this Division, including connections to grounding system(s) provided under Division 26.

8. Coordinate grounding requirements with the electrical subcontractor for digital equipment, local control panels, remote telemetry units, and instrumentation provided under this Division. Terminate grounding system cables at equipment provided under this Division.

9. Provide system testing, calibration, training and startup services as specified herein and as required to make systems fully operational.

E. It is the intent of the Contract Documents to construct a complete and working installation. Items of equipment or materials that may reasonably be assumed as necessary to accomplish this end shall be supplied whether or not they are specifically stated herein.

1.02 RELATED ITEMS

A. Field mounted switches, torque switches, limit switches, gauges, valve and gate operator position transmitters, sump pump controls, and other instrumentation and controls furnished with mechanical or electrical equipment not listed in the instrument schedule shall be furnished, installed, tested, and calibrated as specified under other Divisions unless otherwise indicated.

B. Additional and related work performed under Division 26 includes the following:

1. Instrument A.C. power source and disconnect switch for process instrumentation, A.C. grounding systems, and A.C. power supplies for equipment, control panels and accessories furnished under Sections 40 60 00 through 40 79 99, inclusive and where included.

2. Conduit and raceways for instrumentation and control system signal wiring, grounding systems, special cables and communication network cables.

3. Instrumentation and control system signal wiring.

4. Install control system communication network cables.

5. Furnish and install grounding systems for digital equipment, local control panels, remote telemetry units, and instrumentation provided under Sections 40 60 00 through 40 79 99, inclusive and where included. Grounding systems shall be complete to the equipment provided under Sections 40 60 00 through 40 79 99, inclusive, and where included, ready for termination by the instrumentation subcontractor.

6. Termination of instrumentation and control system signal wiring at equipment furnished under other Divisions of the Specifications.

7. Final wiring and termination to A.C. grounding systems and to A.C. power sources (e.g., panelboards, motor control centers, and other sources of electrical power).

1.03 GENERAL INFORMATION AND DESCRIPTION

A. Where manufacturers are named for a particular item of equipment, it is intended as a guide to acceptable quality and performance and does not exempt such equipment from the requirements of these Specifications or Drawings.

B. In order to centralize responsibility, it is required that equipment (including field instrumentation and control system hardware and software) offered under this Division shall be furnished and installed by the instrumentation subcontractor, or under the supervision of the instrumentation subcontractor, who shall assume complete responsibility for proper operation of the instrumentation and control system equipment, including that of coordinating signals, and furnishing appurtenant equipment.

C. The Contractor shall retain total responsibility for the proper detailed design, fabrication, inspection, test, delivery, assembly, installation, activation, checkout, adjustment and operation of the entire instrumentation and control system as well as equipment and controls furnished under other Divisions of the Specifications. The Contractor shall be responsible for the delivery of detailed drawings, manuals and other documentation required for the complete coordination, installation, activation and operation of mechanical equipment, equipment control panels, local control panels, field instrumentation, control systems and related equipment/systems and shall provide for the services of a qualified installation engineer to supervise activities required to place the completed facility in stable operation under full digital control.

D. The instrumentation and control system shall be capable of simultaneously implementing all real time control and information system functions, and servicing all operator service requests as specified, without degrading the data handling and processing capability of other system components.

E. Control system inputs and outputs are listed in Section 40 61 93 – Process Control System Input/Output List. This information, together with the functional control descriptions, process and instrumentation diagrams, and electrical control schematics, describes the real time monitoring and control functions to be performed. In addition, the system shall provide various man/machine interface and data reporting functions as specified in the software sections of this Specification.

F. The mechanical, process, and electrical drawings indicate the approximate locations of field instruments, control panels, systems and equipment as well as field mounted equipment provided by others. The instrumentation subcontractor shall examine the mechanical, process and electrical drawings to determine actual size and locations of process connections and wiring requirements for instrumentation and controls furnished under this Contract. The instrumentation subcontractor shall inspect equipment, panels, instrumentation, controls, and appurtenances, either existing or furnished on the Project to determine requirements for interfacing with the control and information system. The

Contractor shall coordinate the completion of required modifications with the associated supplier of the item furnished.

G. The instrumentation subcontractor shall review and approve the size and routing of instrumentation and control cable and conduit systems furnished by the electrical subcontractor for suitability for use with the associated cable system.

H. The Contractor shall coordinate the efforts of each supplier to aid in interfacing systems. This effort shall include, but shall not be limited to, the distribution of approved shop drawings to the electrical subcontractor and to the instrumentation subcontractor furnishing the equipment under this Division.

I. The Contractor shall be responsible for providing a signal transmission system free from electrical interference that would be detrimental to the proper functioning of the instrumentation and control system equipment.

J. The Owner shall have the right of access to the subcontractor's facility and the facilities of his equipment suppliers to observe materials and parts; witness inspections, tests and work in progress; and examine applicable design documents, records, and certifications during all stages of design, fabrication, and tests. The instrumentation subcontractor and his equipment suppliers shall furnish office space, supplies, and services required for these observation activities.

K. The terms "Instrumentation," "Instrumentation and Control System," and "Instrumentation, Control and Information System" shall hereinafter be defined as equipment, labor, services, and documents necessary to meet the intent of the Specifications.

1.04 INSTRUMENTATION AND CONTROL SYSTEM SUBCONTRACTORS

A. Instrumentation and control system subcontractors shall be regularly engaged in the detailed design, fabrication, installation, and startup of instrumentation and control systems for water and wastewater treatment facilities, remote telemetry systems for water supply/distribution systems, and remote telemetry systems for wastewater collection systems. Instrumentation and control system subcontractors shall have a minimum of five years of such experience and shall have completed a minimum of three projects of similar type and size as that specified herein. Where specific manufacturers/models of major hardware or software products (PLC, HMI software, network, etc.) are specified to be used on this project, the instrumentation and control system subcontractor shall have completed at least one project using that specified hardware or software. As used herein, the term “completed” shall mean that a project has been brought to final completion and final payment has been made.

B. Acceptable instrumentation and control system subcontractors shall be Jacobs Engineering.

1.05 DEFINITIONS

A. Solid State: Wherever the term solid state is used to describe circuitry or components in the Specifications, it is intended that the circuitry or components shall be of the type that convey electrons by means of solid materials such as crystals or that work on magnetic principles such as ferrite cores. Vacuum tubes, gas tubes, slide wires, mechanical relays, stepping motors or other devices will not be considered as satisfying the requirements for solid state components of circuitry.

B. Bit or Data Bit: Whenever the terms bit or data bit are used in the Specification, it is intended that one bit shall be equivalent to one binary digit of information. In specifying data transmission rate, the bit rate or data bit rate shall be the number of binary digits transmitted per second and shall not necessarily be equal to either the maximum pulse rate or average pulse rate.

C. Integrated Circuit: Integrated circuit shall mean the physical realization of a number of circuit elements inseparably associated on or within a continuous body to perform the function of a circuit.

D. Mean Time Between Failures (MTBF): The MTBF shall be calculated by taking the number of system operating hours logged during an arbitrary period of not less than six months and dividing by the number of failures experienced during this period plus one.

E. Mean Time to Repair (MTTR): The MTTR shall be calculated by taking the total system down time for repair over an arbitrary period of not less than six months coinciding with that used for calculation of MTBF and dividing by the number of failures causing down time during the period.

F. Availability: The availability of a non-redundant device or system shall be related to its MTBF and MTTR by the following formula:

$$A = 100 \times (MTBF / (MTBF + MTTR)) \text{ Percent}$$

The availability of a device or system provided with an automatically switched backup device or system shall be determined by the following formula:

$$A = A2 + 1 - ((1 - A1) * (1 - A1))$$

where:

A1 = availability of non-redundant device or system

A2 = availability of device or system provided with an automatically switched backup device or system

G. Abbreviations: Specification abbreviations include the following:

1. A - Availability

2. ADC - Analog to Digital Converter
3. AI - Analog Input
4. AO - Analog Output
5. AVAIL - Available
6. BCD - Binary Coded Decimal
7. CSMA/CD - Carrier Sense Multiple Access/Collision Detect
8. CPU - Central Processing Unit
9. CRC - Cyclic Redundancy Check
10. CS - Control Strategy
11. DAC - Digital to Analog Converter
12. DBMS - Data Base Management System
13. DI - Discrete Input
14. DMA - Direct Memory Access
15. DO - Discrete Output
16. DPDT - Double Pole, Double Throw
17. DVE - Digital to Video Electronics
18. EPROM - Erasable, Programmable Read Only Memory
19. FDM - Frequency Division Multiplexing
20. FSK - Frequency Shift Keyed
21. HMI - Human Machine Interface (Software)
22. I/O - Input/Output
23. LAN - Network and Communication Equipment
24. LCD - Liquid Crystal Display
25. LDFW - Lead Follow
26. MCC - Motor Control Center

27. MTBF - Mean Time Between Failures

28. MTTR - Mean Time to Repair

29. OS - Operating System

30. PAC - Programmable Automation Controller

31. PCB - Printed Circuit Board

32. PID - Proportional Integral and Derivative Control

33. PLC - Programmable Logic Controller or Programmable Controller

34. PROM - Programmable Read Only Memory

35. RAM - Random Access Memory

36. RDY - Ready

37. RMSS - Root Mean Square Summation

38. RNG - Running

39. ROM - Read Only Memory

40. RTU - Remote Telemetry Unit

41. SPDT - Single Pole, Double Throw

42. ST/SP - Start/Stop

43. TDM - Time Division Multiplexing

44. UPS - Uninterruptible Power Supply

45. VFD - Variable Frequency Drive

H. To minimize the number of characters in words used in textual descriptions on displays, printouts and nameplates, abbreviations may be used subject to the Engineer's approval. If a specified abbreviation does not exist for a particular word, an abbreviation may be generated using the principles of masking and or vowel deletion. Masking involves retaining the first and last letters in a word and deleting one or more characters (usually vowels) from the interior of the word.

1.06 ENVIRONMENTAL CONDITIONS

A. Instrumentation equipment and enclosures shall be suitable for ambient conditions specified. All system elements shall operate properly in the presence of telephone lines, power lines, and electrical equipment.

B. Inside control rooms and climate-controlled electrical rooms, the temperature will normally be 20 to 25 degrees C; relative humidity 40 to 80 percent without condensation and the air will be essentially free of corrosive contaminants and moisture. Appropriate air filtering shall be provided to meet environmental conditions (e.g., dust).

C. Other indoor areas may not be air conditioned/heated; temperatures may range between 0 and 40 degrees C with relative humidity between 40 and 95 percent.

D. Field equipment including instrumentation and panels may be subjected to wind, rain, lightning, and corrosives in the environment, with ambient temperatures from -20 to 40 degrees C and relative humidity from 10 to 100 percent. All supports, brackets, interconnecting hardware, and fasteners shall be aluminum, type 316 stainless steel, or metal alloy as otherwise suitable for chemical resistance within chemical feed/storage areas shown on the installation detail drawings.

PART 2 – PRODUCTS (NOT USED)

PART 3 – EXECUTION

3.01 CLEANING

A. The Contractor shall thoroughly clean soiled surfaces of installed equipment and materials.

B. Upon completion of the instrumentation and control work, the Contractor shall remove surplus materials, rubbish, and debris that has accumulated during the construction work. The entire area shall be left neat, clean, and acceptable to the Owner.

3.02 FINAL ACCEPTANCE

A. Final acceptance of the Instrumentation, Control and Information System will be determined complete by the Engineer, and shall be based upon the following:

1. Receipt of acceptable start up completion and availability reports and other documentation as required by the Contract Documents.

2. Completion of the Availability Demonstration.

3. Completion of control system training requirements.

4. Completion of punch-list items that are significant in the opinion of the Engineer.

B. Final acceptance of the System shall mark the beginning of the warranty period.

END OF SECTION

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SECTION 40 61 15
PROCESS CONTROL SYSTEM SUBMITTALS

PART 1 – GENERAL

1.01 THE REQUIREMENT

A. The Contractor shall submit for review complete Shop Drawings for all equipment in accordance with the General and Supplemental Conditions and Division 01 of the Specifications. All submittal material shall be complete, legible, and reproducible, and shall apply specifically to this project.

B. All submittal materials shall be tailored to this project by highlighting relevant items or crossing out non-applicable items. Generic submittals without identified options will be returned the Contractor without review.

C. Compliance, Deviations, and Exceptions (CD&E) Letter:

1. Where a named manufacturer and product is specified and a substitution or an “or equal” product is submitted, the submittal shall be accompanied by a “Compliance, Deviations, and Exceptions (CD&E) letter.” If the required submittal is submitted without the letter, the submittal will be rejected.

2. The letter shall include all comments, deviations and exceptions taken to the Drawings and Specifications by the Contractor, subcontractor (if applicable), and the equipment Manufacturer/Supplier. This letter shall include a copy of the Specification Section to which the submittal pertains. In the left margin beside each and every paragraph/item, a letter "C", "D", or "E" shall be typed or written in.

   a. The letter "C" shall be for full compliance with the requirement.

   b. The letter "D" shall be for a deviation from the requirement.

   c. The letter "E" shall be for taking exception to a requirement.

3. Any requirements with the letter "D" or "E" beside them shall be provided with a full typewritten explanation of the deviation/exception. Handwritten explanation of the deviations/exceptions shall not be acceptable.

4. The CD&E letter shall also address deviations, and exceptions taken to each Drawing related to this Specification Section.

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1.02 RELATED WORK SPECIFIED ELSEWHERE

A. Section 01 33 00 – Submittal Procedures

B. Section 40 61 13 – Process Control System General Provisions

1.03 DIGITAL HARDWARE SUBMITTALS

A. Submit system block diagram(s) showing:

1. All equipment to be provided.
2. All interconnecting cable.
3. Equipment names, manufacturer, and model numbers.
4. Equipment locations.

B. Submit information for all digital equipment including, but not limited to, the following:

1. Bill of materials with equipment names, manufacturers, complete model numbers and locations.
2. Catalog cuts, including complete part number breakdown information.
3. Complete technical, material and environmental specifications.
4. Assembly drawings.
5. Mounting requirements.
6. Color samples.
7. Nameplates.
8. Environmental requirements during storage and operation.

1.04 INSTRUMENT SUBMITTALS

A. Submit information on all field instruments, including but not limited to the following:

1. Product (item) name and tag number used herein and on the Contract Drawings.
2. Catalog cuts, including complete part number breakdown information.
3. Manufacturer's complete model number.
4. Location of the device.
5. Input output characteristics.
6. Range, size, and graduations.
7. Physical size with dimensions, NEMA enclosure classification, and mounting details.

8. Materials of construction of all enclosures, wetted parts and major components.

9. Instrument or control device sizing calculations where applicable.

10. Certified calibration data on all flow metering devices.

11. Environmental requirements during storage and operation.

12. Associated surge protection devices.

13. Installation drawings/details.

1.05 WIRING AND LOOP DIAGRAMS

A. Submit interconnection wiring and loop diagrams for all panels and signals in the Control and Information System.

B. Electrical interconnection diagrams shall show all terminations of equipment, including terminations to equipment and controls furnished under other Divisions, complete with equipment and cable designations. Where applicable, interconnection wiring diagrams shall be organized by input/output card. Interconnecting diagrams shall be prepared in a neat and legible manner on 11 X 17-inch reproducible prints.

C. Loop drawings shall conform to the latest version of ISA Standards and Recommended Practices for Instrumentation and Control. Loop Drawings shall conform to ISA S5.4, Figures 1-3, Minimum Required Items..

D. Loop drawings shall not be required as a separate document provided that the interconnecting wiring diagrams required in Paragraph B., above, contain all information required by ISA 5.4.

1.06 OPERATION AND MAINTENANCE MANUALS

A. The Contractor shall deliver equipment operation and maintenance manuals in compliance with Section 01 33 00 – Submittal Procedures. Operation and maintenance (O&M) manuals shall consist of two basic parts:

1. Manufacturer standard O&M manuals for all equipment and software furnished under this Division.

2. Custom O&M information describing the specific configuration of equipment and software, and the operation and maintenance requirements for this particular project.

B. The manuals shall contain all illustrations, detailed drawings, wiring diagrams, and instructions necessary for installing, operating, and maintaining the equipment. The illustrated parts shall be numbered for identification. All modifications to manufacturer standard equipment and/or components shall be clearly identified and shown on the drawings and schematics. All information contained therein shall apply specifically to the

equipment furnished and shall only include instructions that are applicable. All such illustrations shall be incorporated within the printing of the page to form a durable and permanent reference book.

C. The manuals shall be prepared specifically for this installation and shall include all required cuts, drawings, equipment lists, descriptions, etc. that are required to instruct operation and maintenance personnel unfamiliar with such equipment. The maintenance instructions shall include troubleshooting data and full preventive maintenance schedules. The instructions shall be bound in locking 3-D-ring binders with bindings no larger than 3.5 inches. The manuals shall include 15% spare space for the addition of future material. The instructions shall include drawings reduced or folded and shall provide the following as a minimum.

1. A comprehensive index.

2. A functional description of the entire system, with references to drawings and instructions.

3. A complete "as built" set of all approved shop drawings, which shall reflect all work required to achieve final system acceptance.

4. A complete list of the equipment supplied, including serial numbers, ranges, and pertinent data.

5. Full specifications on each item.

6. Detailed service, maintenance, and operation instructions for each item supplied.

7. Special maintenance requirements particular to this system shall be clearly defined, along with special calibration and test procedures.

8. Complete parts lists with stock numbers and name, address, and telephone number of the local supplier.

9. References to manufacturers' standard literature where applicable.

10. Warning notes shall be located throughout the manual where such notes are required to prevent accidents or inadvertent misuse of equipment.

D. The operating instructions shall clearly describe the step by step procedures that must be followed to implement all phases of all operating modes. The instructions shall be in terms understandable and usable by operating personnel and maintenance crews and shall be useful in the training of such personnel.

E. The maintenance instructions shall describe the detailed preventive and corrective procedures required, including environmental requirements during equipment storage and system operation, to keep the System in good operating condition. All hardware maintenance documentation shall make reference to appropriate diagnostics, where

applicable, and all necessary wiring diagrams, component drawings and PCB schematic drawings shall be included.

F. The hardware maintenance documentation shall include, as a minimum, the following information:

1. Operation Information: This information shall include a detailed description of how the equipment operates and a block diagram illustrating each major assembly in the equipment.

2. Preventive Maintenance Instructions: These instructions shall include all applicable visual examinations, hardware testing and diagnostic routines, and the adjustments necessary for periodic preventive maintenance of the System.

3. Corrective Maintenance Instructions: These instructions shall include guides for locating malfunctions down to the card replacement level. These guides shall include adequate details for quickly and efficiently locating the cause of an equipment malfunction and shall state the probable source(s) of trouble, the symptoms, probable cause, and instructions for remedying the malfunction.

4. Parts Information: This information shall include the identification of each replaceable or field repairable component. All parts shall be identified on a list in a drawing; the identification shall be of a level of detail sufficient for procuring any repairable or replaceable part. Cross references between equipment numbers and manufacturer's part numbers shall be provided.

5. A program abstract that includes:

   a. Program Name - The symbolic alphanumeric program name.

   b. Program Title - English text identification.

   c. Program Synopsis - A brief text shall be provided that specifies the need for the program, states when it shall be used and functionally describes all inputs, outputs and functions performed. This descriptive text shall be written in a language that is understandable by non-programming-oriented readers.

6. A program description that shall include, but not be limited to, the following:

   a. Applicable Documents - List all documents (standard manufacturer's literature, other program descriptions, etc.) by section, if practical, that apply to the program. One complete copy of all applicable reference material shall be provided.

   b. Input Output - Identify each input and output parameter, variable, and software element used by the program. State the purpose of all inputs, outputs, and variables.

c. Processing - This section shall contain a description of the overall structure and function of the program. Describe the program run stream and present a detailed description of how the program operates. Describe the timing and sequencing of operations of the program relative to other programs. Describe all interactions with other programs. Processing logic that is not readily described without considerable background information shall be handled as a special topic with references to an appendix or to control strategy document that details the necessary information. Reference shall also be made to an appendix or control strategy document for equation and program algorithm derivations.

d. System Configuration - Describe in detail the system configuration or status required for program implementation, if appropriate.

e. Limitations and Constraints - Summarize all known or anticipated limitations of the program, if appropriate.

f. Storage - Define program storage requirements in terms of disk or RAM memory allocation.

g. Verification - Describe, as a minimum, a test that can be used by the operator to assure proper program operation. Define the required system configuration, input requirements and criteria for successful test completion.

h. Diagnostics - Describe all program diagnostics, where applicable. Descriptions shall list each error statement, indicate clearly what it means, and specify what appropriate actions should be taken.

i. Malfunction Procedures - Specify procedures to follow for recovering from a malfunction due to either operator error or other sources.

1.07 FINAL SYSTEM DOCUMENTATION

A. All documentation shall be delivered to the Owner prior to final system acceptance in accordance with the Contract Documents. As a minimum, final documentation shall contain all information originally part of the control system submittals.

B. Provide a complete set of detailed electrical interconnection diagrams required to define the complete instrumentation and control system. All diagrams shall be 11 X 17-inch original reproducible prints. All diagrams shall be corrected to describe final "as built" hardware configurations and to reflect the system configuration and control methodology adopted to achieve final system acceptance.

C. Provide system software documentation for the operation and maintenance of all system software programs provided as a part of the digital system. All system software documentation shall be amended as required to delineate all modifications and to accurately reflect the final as built software configurations.

D. Provide application software documentation that contains program descriptions for the operation, modification, and maintenance of all application programs provided for the digital system.

E. Provide control strategy documentation which shall include control strategy (block oriented or ladder logic) diagrams to describe the control of all processes. Control strategy documentation shall reflect the system configuration and control methodology adopted to achieve final system acceptance. Control strategy documentation shall conform to the submittal requirements listed hereinabove.

F. O&M documentation shall be amended with all final, adjusted values for all setpoints and other operating parameters for Owner reference.

G. The Owner recognizes the fact that not all possible problems related to real time events, software interlocks, and hardware maintenance and utilization can be discovered during the Acceptance Tests. Therefore, the instrumentation subcontractor through the Contractor shall investigate, diagnose, repair, update, and distribute all pertaining documentation of the deficiencies that become evident during the warranty period. All such documentation shall be submitted in writing to the Owner within 30 days of identifying and solving the problem.

1.08 SUBMITTAL/DOCUMENTATION FORMAT

A. All drawing-type submittals and documentation shall be rendered and submitted in the latest version of AutoCAD.

B. All textual-type submittals and documentation shall be rendered and submitted in the latest version of Microsoft Word or in searchable Adobe Portable Document Format (PDF). Raster scans will not be accepted.

1.09 ELECTRONIC O&M MANUALS

A. Subject to acceptance by the Engineer, the O&M information may be submitted in part or in whole in an electronic format on digital media.

B. Electronic O&M manuals shall contain information in standard formats (searchable Adobe PDF, Word, AutoCAD, HTML, etc.) and shall be easily accessible using standard, “off-the-shelf” software such as an Internet browser. Raster scans will not be accepted.

PART 2 – PRODUCTS (NOT USED)

PART 3 – EXECUTION (NOT USED)

END OF SECTION

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SECTION 40 61 21.72
FIELD TESTING

PART 1 – GENERAL

1.01 THE REQUIREMENT

A. The Contractor shall perform field testing on the Control and Information System as specified herein to demonstrate compliance with the Contract Documents.

1.02 RELATED WORK SPECIFIED ELSEWHERE

A. Section 40 61 13 – Process Control System General Provisions

B. Section 40 61 21.73 – Final Acceptance Test

C. Section 40 70 00 – Instrumentation for Process Systems

1.03 GENERAL REQUIREMENTS

A. Control system start-up and testing shall be performed to ensure that all plant processes shall be systematically and safely placed under digital control in the following order:

1. Primary elements such as transmitters and switch devices shall be calibrated and tested as specified in Section 40 70 00 – Instrumentation for Process Systems.

2. Each final control element shall be individually tested as specified hereinafter.

3. Each control loop shall be tested as specified hereinafter.

4. Each control strategy shall be tested under automatic digital control as specified hereinafter.

5. The entire control system shall be tested for overall monitoring, control, communication, and information management functions, and demonstrated for system availability as specified hereinafter.

B. System start-up and test activities shall include the use of water, if necessary, to establish service conditions that simulate, to the greatest extent possible, normal operating conditions in terms of applied process loads, operating ranges and environmental conditions.

C. Each phase of testing shall be fully and successfully completed and all associated documentation submitted and approved prior to the next phase being started. Specific exceptions are allowed if written approval has been obtained in advance from the Engineer.

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1.04 CONTRACTOR'S RESPONSIBILITIES

A. The Contractor shall ensure that all mechanical equipment, equipment control panels, local control panels, field instrumentation, control system equipment and related equipment and/or systems are tested for proper installation, adjusted and calibrated on a loopbyloop basis prior to control system startup to verify that each is ready to function as specified. Each test shall be witnessed, dated and signed off by both the Contractor (or designee) and the Engineer upon satisfactory completion.

B. The Contractor shall be responsible for coordination of meetings with all affected trades. A meeting shall be held each morning to review the day's test schedule with all affected trades. Similarly, a meeting shall be held each evening to review the day's test results and to review or revise the next day's test schedule as appropriate.

C. The Contractor shall ensure that the electrical subcontractor conforms to the startup, test and signoff procedures specified herein to assure proper function and coordination of all motor control center control and interlock circuitry and the transmission of all discrete and/or analog signals between equipment furnished by the electrical subcontractor and the control system specified herein.

D. All aspects of PLC programming and system integration shall be done as part of a separate project by owner. Contractor shall coordinate with owner for all programming related needs.

E.

1.05 FINAL CONTROL ELEMENT TESTING

A. The proper control of all final control elements shall be verified by tests conducted in accordance with the requirements specified herein.

B. All modulating final control elements shall be tested for appropriate speed or position response by applying power and input demand signals, and observing the equipment for proper direction and level of reaction. Each final control element shall be tested at 0, 25, 50, 75, and 100 percent of signal input level and the results checked against specified accuracy tolerances. Final control elements, such as VFDs, that require turndown limits shall be initially set during this test.

C. All non-modulating final control elements shall be tested for appropriate position response by applying and simulating control signals, and observing the equipment for proper reaction.

1.06 LOOP CHECKOUT

A. Prior to control system startup and testing, each monitoring and control loop shall be tested on an individual basis from the primary element to the final element, including the operator workstation or loop controller level, for continuity and for proper operation and calibration.

B. Signals from transducers, sensors, and transmitters shall be utilized to verify control responses. Simulated input data signals may be used subject to prior written approval by the Engineer. All modes of control shall be exercised and checked for proper operation.

C. The accuracy of all DACs shall be verified by manually entering engineering unit data values at the operator workstation and then reading and recording the resulting analog output data.

D. The accuracy of all ADCs shall be verified using field inputs or by manually applying input signals at the final controller, and then reading and recording the resulting analog input data at the operator workstation.

E. Each loop tested shall be witnessed, dated and signed off by both the Contractor (or designee) and the Engineer upon satisfactory completion.

1.07 CONTROL SYSTEM STARTUP AND TESTING

A. Control system startup and testing shall be performed to demonstrate complete compliance with all specified functional and operational requirements. Testing activities shall include the simulation of both normal and abnormal operating conditions.

B. All digital hardware shall be fully inspected and tested for function, operation and continuity of circuits. All diagnostic programs shall be run to verify the proper operation of all digital equipment.

C. Final control elements and ancillary equipment shall be tested under start-up and steady-state operating conditions to verify that proper and stable control is achieved using local area control panels, motor control center circuits, and local field mounted control circuits. All hardwired control circuit interlocks and alarms shall be operational. The control to final control elements and ancillary equipment shall be tested using both manual and automatic (where provided) control circuits.

D. Signals from transducers, sensors, and transmitters shall be utilized to verify control responses for final control elements. Simulated input data signals may be used subject to prior written approval by the Engineer.

E. Each control strategy shall be tested to verify the proper operation of all required functions. The control system start-up and test activities shall include procedures for tuning all control loops incorporating PID control modules, and for adjusting and testing all control loops as required to verify specified performance.

F. The control system start-up and test activities shall include running tests to prove that the Instrumentation, Control and Information System is capable of continuously, safely and reliably regulating processes, as required by the Contract, under service conditions that simulate, to the greatest extent possible, normal plant operating ranges and environmental conditions.

G. A witnessed functional acceptance test shall be performed to demonstrate satisfactory performance of individual monitoring and control loops and control strategies. At least one test shall be performed to verify that the control and instrumentation system is capable of simultaneously implementing all specified operations.

H. Each loop and control strategy test shall be witnessed and signed off by both the Contractor (or designee) and the Engineer upon satisfactory completion.

1.08 FACILITY STARTUP COORDINATION

A. Facility start-up shall comply with requirements specified in the Contract Documents and those requirements specified herein. Facility start-up shall commence after all previously described start-up and test activities have been successfully completed and shall demonstrate that the Instrumentation, Control and Information System can meet all Contract requirements with equipment operating over full operating ranges under actual operating conditions.

B. The control system start-up period shall be coordinated with process startup activities and shall be extended as required until all plant processes are fully operational and to satisfy the Engineer that all control system Contract requirements have been fulfilled in accordance with the Contract Documents.

C. The instrumentation subcontractor's personnel shall be resident at the facility to provide both full time (eight hours/day, five days/week) and 24 hours on call (seven days/week) support of operating and maintenance activities for the duration of the start-up period.

D. At least one qualified control systems technician shall be provided for control system startup and test activities and at least two when loop checkout is being performed.

PART 2 – PRODUCTS (NOT USED)

PART 3 – EXECUTION (NOT USED)

END OF SECTION

SECTION 40 61 21.73
FINAL ACCEPTANCE TEST

PART 1 – GENERAL

1.01 THE REQUIREMENT

A. The Contractor shall perform the Final Acceptance Test on the Instrumentation and Control System as specified herein to demonstrate compliance with the Contract Documents.

1.02 RELATED WORK SPECIFIED ELSEWHERE

A. Section 40 61 13 – Process Control System General Provisions

B. Section 40 61 21.72 – Field Testing

1.03 AVAILABILITY DEMONSTRATION AND FINAL SYSTEM ACCEPTANCE

A. Upon completion of all control system startup activities and prior to final system acceptance, the Contractor shall demonstrate that the availability of the entire control system, including operation under conditions of digital equipment fail-over, initiated either automatically or manually, shall be not less than 99.8 percent during a 30-day availability test period. The Owner shall be given two (2) weeks' notice of the starting date of the 30-day availability test.

B. For purposes of determining availability figures, downtime of each system or portions of each system resulting from the causes specified hereunder will not be considered system failures.

   1. Downtime of any network-connected device that is automatically backed-up upon failure shall not be considered a system failure provided that the downtime of the failed component does not exceed 24 hours.

   2. Downtime of a portion of the system resulting from failure of any field sensor shall not be considered a system failure provided that the system operates as specified under this condition.

C. If the system fails the 30-day availability test, the 30-day test period shall be restarted after the failed component or software is repaired/replaced and full operation is restored. The system shall be demonstrated for the full 30-day period following the restart.

D. The Contractor shall submit an availability demonstration report that shall state that all system availability requirements have been met.

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PART 2 – PRODUCTS (NOT USED)

PART 3 – EXECUTION (NOT USED)

END OF SECTION

SECTION 40 61 22

TOOLS, SUPPLIES, AND SPARE PARTS, GENERAL

PART 1 – GENERAL

1.01 THE REQUIREMENT

A. The Contractor shall provide tools, supplies, and spare parts as specified herein for the operation and maintenance of the Control and Information System.

1.02 RELATED WORK SPECIFIED ELSEWHERE

A. Section 01 33 00 – Submittal Procedures

B. Section 40 61 13 – Process Control System General Provisions

PART 2 – PRODUCTS

2.01 TOOLS

A. Provide special tools, other than those normally found in an electronic technician's tool box, required to test, diagnose, calibrate, install, wire, connect, disconnect, assemble and disassemble any digital equipment, instrument, panel, rack, cabinet or console mounted equipment for service and maintenance. This shall include, but not be limited to, the following: connector pin insertion and removal tools, wire crimping tools, special wrenches, special instrument calibrators, indicator lamp insertion and removal tools, etc.

B. Provide tools and test equipment together with items such as instruction manuals, carrying/storage cases, unit battery charger where applicable, special tools, calibration fixtures, cord extenders, patch cords and test leads, which are not specified but are necessary for checking field operation of equipment supplied under this Division.

2.02 -SUPPLIES

A. The Contractor shall provide supplies as specifically required in other Sections of Division 40.

2.03 SPARE PARTS

A. Provide spare parts for items of control and instrumentation equipment as recommended by the manufacturer and in accordance with the Contract Documents.

B. Furnish all spares in moisture-proof boxes designed to provide ample protection for their contents. Label all boxes to clearly identify contents and purpose.

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C. The Contractor shall replace all spare parts consumed during installation, testing, start-up, the system availability demonstration, and the guarantee period.

D. Refer to individual digital hardware and instrument sections for additional requirements specific to those devices.

PART 3 – EXECUTION (NOT USED)

END OF SECTION

SECTION 40 61 23
SIGNAL COORDINATION REQUIREMENTS

PART 1 – GENERAL

1.01 THE REQUIREMENT

A. The Contractor shall conform to the signal coordination requirements specified herein.

B. The Contractor shall be responsible for coordinating signal types and transmission requirements between the various parties providing equipment under this Contract. This shall include, but not be limited to, distribution of appropriate shop drawings among the equipment suppliers, the electrical subcontractor, the HVAC subcontractor, and the instrumentation subcontractor.

C. Analog signals shall be signals for transmitting process variables, etc. from instruments and to and from panels, equipment PLCs and Control System PLCs.

D. Discrete signals shall consist of contact closures or powered signals for transmitting status/alarm information and control commands between starters, panels, equipment PLCs, the Control System, etc

1.02 ANALOG SIGNAL TRANSMISSION

A. Signal transmission between electric or electronic instruments, controllers, and all equipment and control devices shall be individually isolated, linear 4-20 milliamperes and shall operate at 24 VDC.

B. Signal output from all transmitters and controllers shall be current regulated and shall not be affected by changes in load resistance within the unit's rating.

C. All cable shields shall be grounded at one end only, at the control panel, with terminals bonded to the panel ground bus.

D. Analog signal isolation and/or conversion shall be provided where necessary to interface with instrumentation, equipment controls, panels, and appurtenances.

E. Non-standard transmission systems such as pulse duration, pulse rate, and voltage regulated shall not be permitted except where specifically noted in the Contract Documents. Where transmitters with nonstandard outputs do occur, their outputs hall be converted to an isolated, linear, 4-20 milliampere signal.

F. The Contractor shall provide 24 V power supplies for analog signals and instruments where applicable and as required inside panels, controls, etc.

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G. Where two-wire instruments transmit directly to the Control and Information System, the instrumentation subcontractor shall provide power supplies at the PLC-equipped control panels for those instruments.

H. Where four-wire instruments with on-board loop power supplies transmit directly to the Control and Information System, the instrumentation subcontractor shall provide necessary signal isolators or shall otherwise isolate the input from the Control and Information System loop power supply. Similar provisions shall be made when a third element such as a recorder, indicator, or single loop controller with integral loop power supply is included in the loop.

1.03 DISCRETE INPUTS

A. All discrete inputs to equipment and Control and Information System PLCs, from field devices, starters, panels, etc., shall be unpowered (dry) contacts in the field device or equipment, powered from the PLCs, unless specified otherwise.

B. Sensing power (wetting voltage) supplied by the PLC shall be 24 VDC .

1.04 DISCRETE OUTPUTS

A. All discrete outputs from local control panels and Control and Information System PLCs to field devices, starters, panels, etc., shall be 24 VDC powered (sourced) from PLC's.

B. PLC powered discrete outputs shall energize 24 VDC pilot relay coils in the field devices, starters, panels, etc. which in turn open or close contacts in the associated control circuit. The 24 VDC relay coil, contacts, and associated control circuitry shall be furnished integral with the field device, starter, panel, etc. by the supplier and contractor furnishing the field device, starter, or panel.

C. Where required or specified herein, discrete outputs from equipment and Control and Information System PLC's to field devices, starters, panels, motor operated valves, etc., shall be dry contact or relay outputs.

D. Outputs to solenoid valves shall be 120 VAC, powered from the PLC or control panel unless specified or shown otherwise.

1.05 OTHER DISCRETE SIGNALS

A. Discrete signals between starters, panels, etc. where no 24 VDC power supply is available may be 120 VAC, as long as such contacts are clearly identified in the starter, panel, etc. as being powered from a different power supply than other starter/panel components.

B. Where applicable, warning signs shall be affixed inside the starter, panel, etc. stating that the panel is energized from multiple sources.

C. Output contacts in the starter, panel, etc., that are powered from other locations shall be provided with special tags and/or color-coding. Disconnecting terminal strips shall be provided for such contacts.

D. The above requirements shall apply to all starters and panels, regardless of supplier.

PART 2 – PRODUCTS (NOT USED)

PART 3 – EXECUTION (NOT USED)

END OF SECTION

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SECTION 40 61 91

PROCESS CONTROL SYSTEM INSTRUMENT LIST

PART 1 – GENERAL

1.01 THE REQUIREMENT

A. The Contractor shall furnish, test, install and place in satisfactory operation all instrumentation as herein specified and as shown on the Drawings.

1.02 RELATED WORK SPECIFIED ELSEWHERE

A. Section 40 61 93 – Process Control System Input/Output List

B. Section 40 61 96 – Process Control Descriptions

PART 2 – PRODUCTS

2.01 NAMEPLATES

A. Items of equipment listed in the instrument schedule, control panels, and digital hardware items shall be identified with nameplates. Each nameplate shall be located so that it is readable from the normal observation position and is clearly associated with the device or devices it identifies. Nameplates shall be positioned so that removal of the device for maintenance and repair shall not disturb the nameplate. Nameplates shall include, as necessary, the equipment identification number, description, calibrated range, and set point(s). Abbreviations of the description shall be subject to the Engineer's approval.

B. Nameplates shall be made of 1/16-inch thick machine engraved laminated phenolic plastic having white numbers and letters not less than 3/16-inch high on a black background. Nameplates attached to instruments may be black laser etched 1/8-inch high text on stainless steel with sharp edges made smooth. Stamped text shall not be acceptable.

C. Nameplates shall be attached to metal equipment by NEMA rated stainless steel screws and to other surfaces by an epoxy-based adhesive that is resistant to oil and moisture. In cases where the label cannot be attached by the above methods, it shall be drilled and attached to the associated device by means of a braided stainless steel wire affixed with a permanent crimp.

D. Submit sample nameplate of each type.

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PART 3 – INSTRUMENT SCHEDULE

Inline Magnetic Flow Meters – Section 40 71 13.13

Tag Number	Service Description	State/Span	P&ID	Remarks
PWTP-PLY-FE/FIT-3509	POLYMER TO FILTER 9	0.05 – 15.0 gph	I04	PROVIDE SUN SHIELD; 1-INCH PIPE
PWTP-PLY-FE/FIT-3510	POLYMER TO FILTER 10	0.05 – 15.0 gph	I04	PROVIDE SUN SHIELD; 1-INCH PIPE
PWTP-PLY-FE/FIT-35011	POLYMER TO FILTER 11	0.05 – 15.0 gph	I04	PROVIDE SUN SHIELD; 1-INCH PIPE
PWTP-PLY-FE/FIT-3512	POLYMER TO FILTER 12	0.05 – 15.0 gph	I04	PROVIDE SUN SHIELD; 1-INCH PIPE

Pressure and Differential Pressure Gauges – Section 40 73 13

Tag Number	Service Description	State/Span	P&ID	Remarks
PWTP-PLY-PI-3505	POLYMER PUMP 5 DISCHARGE	0 – 60 psi	I03	

Pressure Switches – Section 40 73 36

PWTP-PLY-PSH-3505	POLYMER PUMP 5 DISCHARGE	30 psi	I03	CONNECT TO DIS AREA PLC

Flow Switches – Section 40 71 79.13

Tag Number	Service Description	State/Span	P&ID	Remarks
PWTP-PLY-FSL-3503	DILUTION WATER TO FILTER 9-12	0.45 gpm	I04	CONNECT TO DIS AREA PLC

END OF SECTION

SECTION 40 61 93

PROCESS CONTROL SYSTEM INPUT / OUTPUT LIST

PART 1 – GENERAL

1.01 THE REQUIREMENT

A. The Contractor shall furnish, test, install and place in satisfactory operation all control system inputs and outputs as herein specified and as shown on the Drawings. Inputs and outputs listed here represent hardwired inputs and outputs and do not include networked I/O from the MBR Master Control Panel, the Chlorine On-Site Generation Control Panel.

1.02 RELATED WORK SPECIFIED ELSEWHERE

A. Section 40 61 90 – Schedules and Control Descriptions, General

B. Section 40 61 91 – Process Control System Instrument List

C. Section 40 61 96 – Process Control Descriptions

PART 2 – CONTROL SYSTEM INPUT / OUTPUT SCHEDULE

Tag Number	Description	Function	I/O Type	PLC	DWG Number
PWTP-PLY-PMP-YAR-3505	POLYMER FEED PUMP 5	RUNNING	DI	DIS AREA PLC	I03
PWTP-PLY-YS-PMP-3505	POLYMER FEED PUMP 5	START/STOP	DO	DIS AREA PLC	I03
PWTP-PLY-PMP-HS-3505	POLYMER FEED PUMP 5	IN REMOTE	DI	DIS AREA PLC	I03
PWTP-PLY-PMP-SI-3505	POLYMER FEED PUMP 5	SPEED	AI	DIS AREA PLC	I03
PWTP-PLY-PMP-SIC-3505	POLYMER FEED PUMP 5	SPEED CONTROL	AO	DIS AREA PLC	I03
PWTP-PLY-PSH-3505	POLYMER FEED PUMP 5 DISCHARGE	HIGH PRESSURE	DI	DIS AREA PLC	I03
PWTP-PLY-FSL-3503	PROCESS WATER TO FILTERS 9-12	LOW FLOW	DI	DIS AREA PLC	I04
PWTP-PLY-VLV-HS-3509	POLYMER TO FILTER 9 VALVE	IN REMOTE	DI	FILTER 9 AREA PLC	I04
PWTP-PLY-VLV-ZT-3509	POLYMER TO FILTER 9 VALVE	POSITION FEEDBACK	AI	FILTER 9 AREA PLC	I04
PWTP-PLY-VLV-ZC-3509	POLYMER TO FILTER 9 VALVE	POSITION CONTROL	AO	FILTER 9 AREA PLC	I04
PWTP-PLY-FIT-3509	POLYMER TO FILTER 9	FLOW	NAI	FILTER 9 AREA PLC	I04
PWTP-PLY-VLV-HS-3510	POLYMER TO FILTER 10 VALVE	IN REMOTE	DI	FILTER 10 AREA PLC	I04
PWTP-PLY-VLV-ZT-3510	POLYMER TO FILTER 10 VALVE	POSITION FEEDBACK	AI	FILTER 10 AREA PLC	I04

Tag Number	Description	Function	I/O Type	PLC	DWG Number
PWTP-PLY-VLV-ZC-3510	POLYMER TO FILTER 10 VALVE	POSITION CONTROL	AO	FILTER 10 AREA PLC	I04
PWTP-PLY-FIT-3510	POLYMER TO FILTER 10	FLOW	NAI	FILTER 10 AREA PLC	I04
PWTP-PLY-VLV-HS-3511	POLYMER TO FILTER 11 VALVE	IN REMOTE	DI	FILTER 11 AREA PLC	I04
PWTP-PLY-VLV-ZT-3511	POLYMER TO FILTER 11 VALVE	POSITION FEEDBACK	AI	FILTER 11 AREA PLC	I04
PWTP-PLY-VLV-ZC-3511	POLYMER TO FILTER 11 VALVE	POSITION CONTROL	AO	FILTER 11 AREA PLC	I04
PWTP-PLY-FIT-3511	POLYMER TO FILTER 11	FLOW	NAI	FILTER 11 AREA PLC	I04
PWTP-PLY-VLV-HS-3512	POLYMER TO FILTER 12 VALVE	IN REMOTE	DI	FILTER 12 AREA PLC	I04
PWTP-PLY-VLV-ZT-3512	POLYMER TO FILTER 12 VALVE	POSITION FEEDBACK	AI	FILTER 12 AREA PLC	I04
PWTP-PLY-VLV-ZC-3512	POLYMER TO FILTER 12 VALVE	POSITION CONTROL	AO	FILTER 12 AREA PLC	I04
PWTP-PLY-FIT-3512	POLYMER TO FILTER 12	FLOW	NAI	FILTER 12 AREA PLC	I04

1. NOTES: Input/Output types are as follows:

    a. DI – Discrete Input

    b. DO – Discrete Output

    c. AI – Analog Input

    d. AO – Analog Output

    e. NAI – Networked Analog Input

PART 3 – EXECUTION (NOT USED)

END OF SECTION

SECTION 40 61 96
PROCESS CONTROL DESCRIPTIONS

PART 1 – GENERAL

1.01 THE REQUIREMENT

A. The Contractor shall furnish, test, install and place in satisfactory operation all equipment as herein specified and as shown on the Drawings. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FURNISHING A COMPLETE FUNCTIONING SYSTEMS AS DESCRIBED HEREIN.

B. Together with the control system input/output schedule, the equipment specifications (including functional descriptions for local equipment control panels), and the Drawings, the functional control descriptions describe the required operation, monitoring, and control of the facilities included in this Contract.

C. THE FUNCTIONAL DESCRIPTIONS CONTAIN REQUIREMENTS FOR FURNISHING AND INSTALLING LABOR AND MATERIALS THAT MAY NOT APPEAR ELSEWHERE IN THE CONTRACT DOCUMENTS.

D. All equipment and services required in equipment local control panels provided to implement the monitoring and control functions described herein or in the process input/output schedules shall be provided by the Contractor through individual equipment suppliers.

E. Unless specifically stated otherwise, all interconnected wiring between all instruments, panels, controls, and other devices listed in the functional descriptions as required to provide all functions specified herein shall be furnished by the electrical subcontractor under Division 26. The electrical subcontractor shall provide all cable and conduit required to carry all signals listed in the process input/output schedules. Special cables that are required for interconnection between sensors or probes and transmitters or signal conditioners shall be furnished with the instrumentation devices by the equipment supplier.

1.02 RELATED WORK SPECIFIED ELSEWHERE

A. Section 01 14 00 – Coordination with Owner’s Operations

B. Section 40 61 90 – Schedules and Control Descriptions, General

C. Section 40 61 91 – Process Control System Instrument List

D. Section 40 61 93 – Process Control System Input/Output List

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PART 2 – FUNCTIONAL CONTROL DESCRIPTIONS, GENERAL

2.01 DEFINITIONS

A. RUNNING status signals shall be from auxiliary contacts provided with the motor control equipment (i.e., starter, VFD, SCR, etc.).

B. AUTO status signals shall be defined as HAND-OFF-AUTO switch in the AUTO position or process control system in AUTO (versus MANUAL).

C. FAIL status signals shall be defined as motor overload and/or any other shut down mode such as overtorque, overtemperature, low oil pressure, high vibration, etc.

D. READY status signal shall be defined as all conditions, including equipment control power, satisfied to permit remote control of the equipment.

2.02 CONVENTIONS

A. Operator workstation graphic display symbols and indicator lights on all MCC's, control panels, starter enclosures, etc. shall conform to the following color convention:

1. Running/On/Open: Green

2. Auto/Ready: White

3. Stopped/Off/Closed: Red

4. Fail/Alarm: Amber

5. Generic Status: Blue or White

2.03 PROCESS CONTROL

A. Where setpoints, operating limits, and other control settings are provided by the functional descriptions, these settings shall be initial settings only and shall be used for assistance in the initial startup of the plant. All such settings shall be fully adjustable and, based on actual operating conditions, the instrumentation subcontractor shall make all necessary adjustments to provide smooth, stable operation at no additional cost to the Owner.

B. Provision shall be made in PLC logic to suppress nuisance alarms and control actions by the following means:

1. For alarms and control actions derived from analog input signals, use adjustable time delays and deadbands.

2. For alarms and control actions derived from discrete input signals, use adjustable time delays.

3. Initial settings for time delays shall be 10 seconds (range 0-120 seconds). Initial settings for deadbands shall be 5% of span (range 0-100%).

4. Equipment that is started or stopped manually by the operator shall start or stop immediately, with no time delay.

C. All setpoint control shall be by PID control algorithms. Where only proportional control is specified, tuning constants shall be used to reduce the Integral and Derivative functions to zero. All setpoints, sequence times, sequence orders, dead bands, PID tuning parameters, PLC delay timers, variable speed operating range limits, and similar control constants shall be accessible and alterable from the operator workstations.

D. Unless otherwise specified, all equipment shall automatically restart after a power failure utilizing adjustable start delay timers in PLC control logic. Unless otherwise specified, all PLC control strategies shall be based upon automatic restart after a power failure and shall return to a normal control mode upon restoration of power.

E. The PLC shall be capable of receiving initial run-time values for existing and proposed equipment. Initial run-time shall not automatically be assumed to be zero.

F. A control discrepancy alarm shall be generated through the PLC for any drive, motor, etc. for which a command has been issued, but for which the PLC is not receiving a confirming status signal (e.g., start command with no run feedback). The failure shall be logged.

G. An instrument failure alarm shall be generated for any instrument which is generating a signal that is less than 4 mA or greater than 20 mA.

H. Unless otherwise specified in an individual control description, an instrument failure or control discrepancy alarm shall cause the control strategy to maintain last values and to generate an alarm. Manual initiation of the automatic control strategy shall be required.

I. A control program that controls multiple pieces of equipment shall not be prevented from running because not all of the equipment is in AUTO. If equipment within an equipment chain is required to be running for program operation and it is running in HAND or MANUAL, then the program shall run and control the other equipment that is in AUTO.

J. All PLC wait states (internal time delays, etc.) after an operator action shall be displayed on the operator workstation.

PART 3 – FUNCTIONAL CONTROL DESCRIPTIONS

3.01 POLYMER FEED TO FILTERS 5, 6, 7, AND 8

A. Process Overview
The polymer feed pump (PWTP-PLY-PMP-3505) shall draw from the polymer

preparation system holding tank and feed polymer to filters 9, 10, 11 and 12. Dilution water will blend with the polymer post feed pump and act as carrier water to the filters. Motor operated valves (PWTP-PLY-VLV-3509, -VLV-3510, -VLV-3511, and -VLV-3512) located at the filters shall modulate to control flow to each of the filters 9, 10, 11, and 12 based on flow meters (PWTP-PLY-FIT-3509, -FIT-3510, -FIT-3511, and -FIT-3512) on each polymer feed line.

B. Equipment

1. The following is controlled and monitored through DIS AREA PLC:

   a. Feed pump (PMP-3505):

      1) PUMP RUNNING

      2) PUMP START/STOP

      3) PUMP IN REMOTE

      4) PUMP SPEED

      5) PUMP SPEED CONTROL

   b. High pressure switch (PSH) on the discharge of the feed pump.

   c. Low flow to filters 9 - 12.

2. The following is controlled and monitored through FILTER 9 AREA PLC

   a. Filter 9 motor operated valve (VLV-3509) and flow transmitter (FIT-3509)

3. The following is controlled and monitored through FILTER 10 AREA PLC

   a. Filter 10 motor operated valve (VLV-3510) and flow transmitter (FIT-3510)

4. The following is controlled and monitored through FILTER 11 AREA PLC

   a. Filter 11 motor operated valve (VLV-3511) and flow transmitter (FIT-3511)

5. The following is controlled and monitored through FILTER 12 AREA PLC

   a. Filter 12 motor operated valve (VLV-3512) and flow transmitter (FIT-3512)

C. Control Operation

   a. Local Feed pump control:

1) The feed pump shall be furnished with integrated controls. The operator shall have the ability to start and stop the pump and set the speed via the LCD Keypad.

2) PLC Based Controls:

   i) When the pump is set to remote status, the pump shall be controlled by the PLC.

   j) In REMOTE-MANUAL mode, the pump speed (RPM) shall be set manually on the PLC OIT or at SCADA. The pump shall START and STOP using the PLC OIT or SCADA Operator Workstation.

   k) In REMOTE-AUTO mode, the PLC shall control the pump based on the logic as described below:

   l) The speed of the polymer feed pump (PMP-3505) shall be flow paced to meet a calculated pump speed using the following equation:

   Polymer Feed Pump Speed (RPM) = [[(F9 x D9)+(F10 x D10)+(F11 x D11)+(F12 x D12)]x 8.34] / (Conc x Density x Capacity x 1440)

Where:

Table 1: Pump Speed Equation Variables

Variable	Units	Description
F9	MGD	Effluent process water flow for Filter No. 9 measured by the sum of flows from existing flow meters FIT-706A and FIT-706B.
F10	MGD	Effluent process water flow for Filter No. 6 measured by the sum of flows from existing flow meters FIT-716A and FIT-716B.
F11	MGD	Effluent process water flow for Filter No. 7 measured by the sum of sum of flows from existing flow meters FIT-726A and FIT-726B.
F12	MGD	Effluent process water flow for Filter No. 8 measured by the sum of flows from existing flow meters FIT-736A and FIT-736B

D9	mg/L	Operator set filter aid polymer dose for Filter No. 9
D10	mg/L	Operator set filter aid polymer dose for Filter No. 10
D11	mg/L	Operator set filter aid polymer dose for Filter No. 11
D12	mg/L	Operator set filter aid polymer dose for Filter No. 12
Capacity	gal/min/rpm	Operator set polymer feed pump capacity 100% speed and stroke
Density	lbs/gal	Operator set polymer bulk density
Conc	%	Operator set polymer concentration

b. Polymer Flow Modulating Control Valves

Polymer flow to each filter is controlled by a modulating motor operated valve on each polymer feed line. The polymer flow will be based on the ratio of pounds per day (ppd) for an individual filter to the combined total ppd of polymer to filters 9, 10, 11, and 12. The system shall modulate VLV-3509, VLV-3510, VLV-3511, VLV-3512 via a PID control function block to control the flow rate as required. The target flow rate (gpm) for the MOVs shall be calculated using the following equation (typical for four filters):

$$\text{Filter 1 Target Flow Rate (gpm)} = \frac{\text{F5} \times \text{D5}}{(\text{F5} \times \text{D5}) + (\text{F6} \times \text{D6}) + (\text{F7} \times \text{D7}) + (\text{F8} \times \text{D8})} \times [\text{PF5} + \text{PF6} + \text{PF7} + \text{PF8}\,]$$

Where:

Table 2: Target Flow Rate Variables

Variable	Units	Description
PF9	gpm	Filter aid polymer flow for Filter No. 9measured by flow meter FIT-3509.
PF10	gpm	Filter aid polymer flow for Filter No. 10 measured by flow meter FIT-35010.
PF11	gpm	Filter aid polymer flow for Filter No. 11 measured by flow meter FIT-3511.

PF12	gpm	Filter aid polymer flow for Filter No. 12 measured by flow meter FIT-3512.

See Table 1 for additional Variables.

D. Interlocks

1. Hardwired

a. Feed pump PMP-3505

1) The feed pumps shall be stopped in a fault condition regardless of local or remote control.

2) Refer to Section 46 77 10 for additional interlock and alarm requirements.

2. Software

a. Feed pump PMP-3505 shall be stopped on low level condition in the 420 gallon holding tank.

b. Feed pump s 1 and 2 shall be stopped on the respective high pressure switch calibrated to 30 psig.

c. Feed pump s 1 and 2 shall be stopped on the respective low flow switch calibrated to 0.45 gpm.

END OF SECTION

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SECTION 40 66 00
PROCESS CONTROL SYSTEM NETWORKS

PART 1 – GENERAL

1.01 THE REQUIREMENT

A. The Contractor shall furnish, test, install and place in satisfactory operation IEEE 802.3 Ethernet local area network(s) for communications among plant devices.

B. Local area network shall be provided with all spare parts, accessories, and appurtenances as herein specified.

1.02 RELATED WORK SPECIFIED ELSEWHERE

A. Section 40 61 13 – Process Control System General Provisions

B. Section 40 63 43 – Programmable Logic Controllers

1.03 TOOLS, SUPPLIES AND SPARE PARTS

A. The following specific spare parts items shall be provided:

1. A termination tool kit shall be provided containing all required tools and consumables for up to 25 connections of each connection type furnished. Termination kit shall be as manufactured by Black Box, Corning Cable Systems, Optical Cable Corporation, or equal.

2. One (1) spare switch of each type furnished under this Contract.

3. Two (2) spare patch cables of each type and of the maximum length used.

4. Two (2) spare GBIC or SFP modules for each type used.

5. One (1) spare media converter for each type used.

1.04 SUBMITTALS

1. Fiber optic testing results, including signal attenuation for each fiber

11-16-21

PART 2 – PRODUCTS

2.01 LOCAL AREA NETWORK (LAN)

A. An IEEE 802.3 Ethernet local area network shall be used for communications between plant devices.

B. Network wiring shall be unshielded, twisted-pair copper cables for connections within buildings. Fiber optic media shall be used for all inter-device communication links extended outside of a building, unless specifically noted. Cables shall be as specified herein.

C. The Contractor may provide a network configuration different from that shown in the Contract Drawings with written approval of the Engineer, but the Contractor shall coordinate with all affected trades and pay for all additional charges incurred.

D. The Contractor shall supply all hardware, cables, connectors, adapters, modules, and software to implement a network as specified herein and shown on Drawings.

2.02 INDUSTRIAL ETHERNET NETWORK SWITCHES

A. Except where specifically allowed on the Control System Architecture Drawing, industrial Ethernet network switches shall be provided for each device connected to the process control system network. The switches shall create switched Ethernet networks that conform to the IEEE 802.3 and 802.3u standards using copper wires or optical fibers in a bus, tree or ring network topology as shown on the Drawings. Ethernet network switches shall be modular, rack mounted, or standard DIN-rail mounted within the PLC cabinet or in an adjacent communication cabinet, as shown on the Drawings.

B. Ethernet network switches shall support ring, bus, tree, or point-to-point network topologies. On-line signal monitoring shall be provided to detect and locate impending faults. Ethernet network switches shall be replaceable on-line without disrupting the network. The Ethernet network switches shall be integrated into the in-plant Ethernet network to form a redundant ring network with self-healing communication recovery. Switches shall support the non-proprietary Media Redundancy Protocol (MRP) and Rapid Spanning Tree Protocol (RSTP) in addition to the switch manufacturer's standard redundant ring network protocol, all of which shall provide self-healing communication recovery.

C. Ethernet network switches shall meet the following minimum performance requirements:

1. Functions: Modular managed switch with store and forward switching mode, 10 Mbps Ethernet, or 100 Mbps Fast-Ethernet, or gigabit Ethernet support, multi-address capability, auto-crossing, auto-negotiation, auto-polarity. Port speed and duplex auto-negotiation shall be configurable. Each network switch shall manage up to eight (8) ports possible via integrated media modules specified below.

2. Management: Simple Network Management Protocol (SNMP) (v1/v2/v3) and Common Industrial Protocol (CIP) support; IGMP filtering and snooping.

3. Power Requirements: Redundant 24 VDC power supply

4. Operating Temperature: 0 to 60 degrees C

5. Relative Humidity: 10 - 95%

6. Network Size: Up to 50 nodes in ring structure

7. Port Type & Quantity (at each PLC location): minimum of four (4) 10/100Base-TX, twisted pair cable, RJ-45 sockets, 0-100 meters LAN segment and two (2) 100/1000Base-FX, multimode fiber optic cables (62.5/125 µm), LC, ST or SC sockets, 0-5000 meters LAN segment

8. Link Budget: 8 dB @ 1300 nm; 10 dB @ 850 nm

9. Wavelength: 850 or 1300 nm

D. Acceptable industrial Ethernet network switches shall be as manufactured by Cisco Systems, Hirschmann, Phoenix Contact, Weidmuller, or equal.

2.03 UNSHIELDED TWISTED PAIR CABLE

A. Unshielded twisted pair cable for drops within buildings shall consist of 4 pair of 24 AWG copper conductors in a flame-retardant jacket. Cable shall be plenum rated (UL 910) and meet EIA/TIA-568 Category 6 specifications. Unshielded twisted pair cable shall be Hyper Grade Extended Distance cable as manufactured by Berk-Tek, Belden equivalent, or equal. Connectors shall be modular RJ-45 plug.

B. Provide copper patch panels where more than one copper communication cable leaves the enclosure.

2.04 MULTIMODE FIBER OPTIC CABLE

A. Fiber optic cable shall conform to the following specifications:

1. Fiber Type: Graded Index (GI) Multimode

2. Fiber/Cladding Diameter: 62.5/125 microns

3. No. Fibers: 12, Color-coded

4. Cable Construction: Loose Tube w/ Ripcords

5. Filling: Water Swellable Dry Block

6. Armored: No

7. Central Member: Dielectric (Kevlar)

8. Rating: Gigabit Ethernet, unless otherwise indicated

9. Modal bandwidth: As required for link speed and distance

10. Maximum Attenuation: 3.5 dB/km at 850 nm; 1.5 dB/km at 1300 nm

11. Application Type: Direct-burial/Conduit/Aerial

12. Sheath: UV Resistant

13. Max. Tensile Load: 600 lb (2700 N) installation; 200 lb (890 N) long term

14. Minimum Bend Radius: 7 in (17.4 cm) under maximum tensile load; 4.6 in (11.6 cm) unloaded (installed)

15. Operating Temperature: -40 to 70 degrees C

16. Operating Relative Humidity: 0 to 100%

B. Fiber optic cable shall utilize mechanically spliced, field installable, SC, LC, or ST compatible connectors. Connections shall have a typical loss of 0.35 dB or better and shall provide stable optical performance after numerous rematings. Connections shall utilize physical contact terminations utilizing UV or heat cured adhesive. Where applicable, field terminations shall use a simple procedure requiring minimal training.

C. Fiber optic cable shall be ALTOS All Dielectric Loose Tube Optical Cable as manufactured by Corning Cable Systems, the Extended Performance Fiber Optic Cable Series as manufactured by Phoenix Digital, Inc., Belden equivalent, equivalent system by Optical Cable Corporation, or equal.

PART 3 – EXECUTION

3.01 GENERAL REQUIREMENTS

A. The destination of all network data cables (both copper and fiber) leaving an enclosure, patch panel, or building shall be labeled at each end using industry-standard wire markers.

B. Refer to Section 40 61 13 – Process Control System General Provisions for additional requirements.

3.02 FIBER OPTIC CABLE

A. Fiber optic cable for installation within buildings shall comply with all applicable fire and building safety codes for such applications.

B. Testing

1. Bulk fiber shall be tested on-site to prior to installation to provide a reference for the installed test data.

2. All individual fibers, including spares, shall be terminated and all connections shall be tested after installation.

3. Complete installed fiber optic cable shall be tested for continuity with a visual fault locator or fiber tracer and the connections verified and documented. Cabling shall also be tested for optical/insertion loss in compliance with Tier 1 testing per TIA-568.

4. Submit all test results.

3.03 FIBER OPTIC PATCH PANELS

A. All patch panels shall be labeled with destination/function of each port. Provide printed directory mounted to or adjacent to patch panel with this information where sufficient space is not available.

END OF SECTION

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SECTION 40 70 00

INSTRUMENTATION FOR PROCESS SYSTEMS

PART 1 – GENERAL

1.01 THE REQUIREMENT

A. The instrumentation subcontractor shall furnish, install, test and place in operation instruments as scheduled together with all signal converters, transmitters, isolators, amplifiers, etc. to interface with the process control system as shown on the Drawings and as specified. The Contractor may elect to install sensors on process lines provided that the instrumentation subcontractor provides full on-site supervision during installation. Mounting of associated indicators, sensors, sampling pumps, power supplies, brackets and appurtenances shall be provided as indicated.

B. It is the intent of the Contract Documents that all process taps, isolation valves, nipples, penetrations, embedded instrumentation supports, conduit, wiring, terminations, and the installation of process instrumentation on process lines shall be provided under this Contract. The Instrumentation Subcontractor shall supervise installation of equipment provided where installation is by other Subcontractors or Contractors.

C. Tapping and connections for primary process sensors shall be sized to suit each individual installation and the requirements of the instrument served. The Contractor shall ensure that the location, supports, orientation and dimensions of the connections and tapping for instruments are such as to provide the proper bracing, the required accuracy of measurement, protection of the sensor from accidental damage and accessibility for maintenance while the plant is in operation. Isolation valves shall be provided at all process taps.

1.02 RELATED WORK SPECIFIED ELSEWHERE

A. Section 40 61 13 – Process Control System General Provisions

B. Section 40 67 00 – Control System Equipment Panels and Racks

C. Section 40 79 00 – Miscellaneous Instruments, Valves, and Fittings

D. Section 40 61 22 – Tools, Supplies, and Spare Parts, General

E. Instruments furnished with mechanical equipment shall be furnished, installed, tested and calibrated as specified elsewhere in the Contract Documents.

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1.03 TOOLS, SUPPLIES AND SPARE PARTS

A. Tools, supplies and spare parts shall be provided as specified in Section 40 61 22 -- Tools, Supplies, and Spare Parts, General.

B. Additional items as recommended by the analytical instrument manufacturers or as described for the specified analytical instrument sections shall be provided.

PART 2 – PRODUCTS

2.01 GENERAL

A. All instrumentation supplied shall be the manufacturer's latest design. Unless otherwise specified, instruments shall be solid state, electronic, using enclosures to suit specified environmental conditions. Microprocessor-based equipment shall be supplied unless otherwise specified. All instruments shall be provided with mounting hardware and floor stands, wall brackets, or instrument racks as shown on the Drawings, or as required.

B. Equipment installed in a hazardous area shall meet or exceed Class, Group, and Division requirements as shown on the Drawings, to comply with the National Electrical Code.

C. All field instrumentation for outdoor service shall be provided with enclosures that are suitable for outdoor service, as follows:

1. Where the manufacturer's enclosures are suitable for outdoor service, they shall be provided with instrument sunshades. Sunshades shall be Style E as manufactured by O'Brien Corporation, or equal. Where possible, these instruments shall be mounted in a north facing direction.

2. Where the manufacturer's standard enclosures are not suitable for outdoor service, instruments shall be mounted in Field Panels in accordance with Section 40 67 00 – Control System Equipment Panels and Racks, or may be furnished with Vipak instrument field enclosures as manufactured by O'Brien Corporation, equivalent by Intertec, or equal. It shall not be necessary to provide the manufacturer's NEMA 4 or 4X enclosures for instruments that will be subsequently mounted in separate field panels.

D. All instruments shall return to accurate measurement without manual resetting upon restoration of power after a power failure.

E. Unless otherwise shown or specified, local indicators shall be provided for all instruments. Where instruments are located in inaccessible locations, local indicators shall be provided and shall be mounted as specified in Paragraph 3.01 B herein. All indicator readouts shall be linear in process units. Readouts of 0 to 100% shall not be acceptable (except for speed and valve position). Isolated outputs shall be provided for all transmitters.

F. Unless otherwise specified, field instrument and power supply enclosures shall be Type 316 stainless steel, fiberglass (or similar, per Engineer’s judgement) or PVC coated copper-free cast aluminum NEMA 4X construction.

G. Where separate elements and transmitters are required, they shall be fully matched, and unless otherwise noted, installed adjacent to the sensor. Special cables or equipment shall be supplied by the associated equipment manufacturer.

H. Electronic equipment shall utilize printed circuitry and shall be coated (tropicalized) to prevent contamination by dust, moisture and fungus. Solid state components shall be conservatively rated for long term performance and dependability over ambient atmosphere fluctuations. Ambient conditions shall be -20 to 50 degrees C and 20 to 100 percent relative humidity, unless otherwise specified. Field mounted equipment and system components shall be designed for installation in dusty, humid, and corrosive service conditions.

I. All devices furnished hereunder shall be heavy duty type, designed for continuous industrial service. The system shall contain products of a single manufacturer, insofar as possible, and shall consist of equipment models that are currently in production. All equipment provided, where applicable, shall be of modular construction and shall be capable of field expansion.

J. All non-loop-powered instruments and equipment shall be designed to operate on a 60 Hz AC power source at a nominal 117 V, plus or minus 10 percent, except where specifically noted. All regulators and power supplies required for compliance with the above shall be provided. Where equipment requires voltage regulation, constant voltage transformers shall be supplied.

K. All analog transmitter and controller outputs shall be isolated, 4 to 20 milliamps into a load of 0 to 750 ohms, unless specifically noted otherwise. All switches shall have double pole, double throw contacts rated at a minimum of 600 VA, unless specified otherwise.

L. Materials and equipment used shall be UL approved wherever such approved equipment and materials are available.

PART 3 – EXECUTION

3.01 INSTALLATION

A. General

1. Equipment shall be located so that it is accessible for operation and maintenance. The instrumentation subcontractor shall examine the Drawings and shop drawings for various items of equipment in order to determine the best arrangement for the work as a whole and shall supervise the installation of process instrumentation supplied under this Division.

2. Work shall be performed in compliance with all applicable local codes and practices. Where the Contract Documents do not delineate precise installation

procedures, the latest version of the American Petroleum Institute (API) Recommended Practice 551 manual (API RP 551) shall be used as a guide to installation procedures.

B. Equipment Mounting and Support

1. Field equipment shall be wall mounted or mounted on two inch diameter pipe stands welded to a 10 inch square by 1/2 inch thick base plate unless shown adjacent to a wall or otherwise noted. Materials of construction shall be aluminum or 316 stainless steel. Instruments attached directly to concrete shall be spaced out from the mounting surface not less than 1/2 inch by use of phenolic spacers. Expansion anchors in walls shall be used for securing equipment or wall supports to concrete surfaces. Unless otherwise noted, field instruments shall be mounted between 48 and 60 inches above the floor or work platform.

2. Embedded pipe supports and sleeves shall be Schedule 40, Type 316 stainless steel pipe, ASA B 36.19, with stainless steel blind flange for equipment mounting, unless otherwise indicated.

3. Materials for miscellaneous mounting brackets and supports shall be Type 316 stainless steel construction.

4. Pipe stands, miscellaneous mounting brackets and supports shall comply with the requirements of Division 05 of the specifications.

5. Transmitters shall be oriented such that output indicators are readily visible.

C. Control and Signal Wiring

1. Electrical, control and signal wiring connections to transmitters and elements mounted on process piping or equipment shall be made through liquid tight flexible conduit. Conduit seals shall be provided where conduits enter all field instrument enclosures and all cabinetry housing electrical or electronic equipment.

3.02 ADJUSTMENT AND CLEANING

A. The instrumentation subcontractor shall comply with the requirements of Division 01 of these Specifications and all instrumentation and control system tests, inspection, and calibration requirements for all instrumentation and controls provided under this Contract and specified herein. The Engineer, or his/her designated representative(s), reserves the right to witness any test, inspection, calibration or start up activity. Acceptance by the Engineer of plans, reports, or documentation relating to testing or commissioning activity shall not relieve the Contractor of his/her responsibility for meeting all specified requirements.

B. The instrumentation subcontractor shall provide the services of factory trained technicians, tools and equipment to field calibrate, test, inspect and adjust each

instrument to its specified performance requirement in accordance with manufacturer's specifications and instructions. Instruments which fails to meet Contract requirements, or published manufacturer performance specification for functional and operational parameters, shall be repaired or replaced, at the discretion of the Engineer, at no cost to the Owner. The Contractor shall bear all costs and provide all personnel, equipment and materials necessary to implement all installation tests and inspection activities for equipment specified herein.

C. At least 60 days before the anticipated initiation of installation testing, the Contractor shall submit to the Engineer a detailed description of the installation test(s) to be conducted to demonstrate the correct operation of the instrumentation supplied hereunder.

D. Field instrument calibration shall conform to the following requirements:

1. The instrumentation subcontractor shall provide the services of factory trained instrumentation technicians, tools and equipment to field calibrate or verify factory calibration of each instrument supplied under this Contract and existing instruments shown to its specified accuracy in accordance with the manufacturer's specification and instructions for calibration. Calibration and verification shall take place under actual process conditions. Forcing outputs shall not be acceptable.

2. Each instrument shall be calibrated/verified at 0, 25, 50, 75 and 100 percent of span using test instruments to simulate inputs and read outputs. Test instruments shall be rated to an accuracy of at least five (5) times greater than the specified accuracy of the instrument being calibrated. Where applicable, such test instruments shall have accuracy’s as set forth by the National Institute for Standards and Technology (NIST).

3. The instrumentation subcontractor shall provide a written calibration/verification sheet to the Engineer for each instrument, certifying that it has been calibrated to its published specified accuracy. The Contractor shall submit proposed calibration sheets for various types of instruments for Engineer approval prior to the start of calibration. This sheet shall include but not be limited to date, instrument tag numbers, brief description of how the calibration process was performed, calibration data for the various procedures described herein, name of person performing the calibration, a listing of the published specified accuracy, permissible tolerance at each point of calibration, calibration reading as finally adjusted within tolerance, defect noted, corrective action required and corrections made. For electronic or powered instruments, the calibration/verification sheet shall also list all configurable parameters that have been modified from their default factory setting.

4. If doubt exists as to the correct method for calibrating or checking the calibration/verification of an instrument, the manufacturer's printed

recommendations shall be used as an acceptable standard, subject to the approval of the Engineer.

5. Upon completion of calibration, devices calibrated hereunder shall not be subjected to adjustments, sudden movements, accelerations, or shocks, and shall be installed in permanent protected positions not subject to moisture, dirt, and excessive temperature variations. Caution shall be exercised to prevent such devices from being subjected to over-voltages, incorrect voltages, overpressure or incorrect air. Damaged equipment shall be replaced and re-calibrated/verified at no cost to the Owner. Equipment that has been adjusted, modified, or moved or there is evidence of such activity shall be re-calibrated/verified at no cost to the Owner.

6. After completion of instrumentation installation, the instrumentation subcontractor shall perform a loop check. The Contractor shall submit final loop test results with all instruments listed in the loop. Loop test results shall be signed by all representatives involved for each loop test.

END OF SECTION

SECTION 40 71 13.13
INLINE MAGNETIC FLOW METERS

PART 1 – GENERAL

1.01 THE REQUIREMENT

A. The Contractor shall furnish, test, install and place in satisfactory operation the magnetic flow meters, with all spare parts, accessories, and appurtenances as herein specified and as shown on the Drawings.

1.02 RELATED WORK SPECIFIED ELSEWHERE

A. Section 40 61 13 – Process Control System General Provisions

B. Section 40 70 00 – Instrumentation for Process Systems

1.03 TOOLS, SUPPLIES AND SPARE PARTS

A. Furnish one spare signal converter.

PART 2 – PRODUCTS

2.01 MAGNETIC FLOW METER SYSTEMS

A. Magnetic flow meter systems shall include a magnetic flow tube and a microprocessor-based "smart" transmitter that is capable of converting and transmitting a signal from the flow tube. Magnetic flow meters shall utilize the characterized field principle of electromagnetic induction and shall produce DC signals directly proportional to the liquid flow rate.

B. Each meter shall be furnished with a 316 stainless steel or carbon steel metering tube and carbon steel flanges with a polyurethane, ceramic, neoprene, hard rubber, or Teflon liner as required by the application and/or as specified herein. Liner shall have a minimum thickness of 0.125 inches. The inside diameter of the liner shall be within 0.125 inches of the inside diameter of the adjoining pipe. Liner protectors shall be provided on all flow tubes. All material shall be in compliance with NSF 60/61.

C. The flow tube shall be provided with flush mounted electrodes.

D. Grounding rings shall be provided for both ends of all meters and shall be constructed of 316 stainless steel.

E. The transmitter shall have Ethernet/IP, as the communication protocol.

F. All materials of construction for metallic wetted parts (electrodes, grounding rings, etc.) shall be minimum 316 stainless steel, but shall be compatible with the process fluid for each meter in accordance with the recommendations of the manufacturer.

G. Flow tube shall be rated for pressures up to 1.1 times the flange rating of adjacent piping. System shall be rated for ambient temperatures of -30 to +65°C. Meter and transmitter housings shall meet NEMA 4X/IP66 requirements as a minimum. When meter and transmitter are located in classified explosion hazard areas, the meter and transmitter housings shall be selected with rating to meet the requirements for use in those areas. Where the flow tube is subject to submergence through installation in a meter vault or similar location, the flow tube assembly shall be rated NEMA 6P/IP68 and electronics shall be factory sealed against moisture intrusion. The use of field kits for modifying NEMA 4/4X/IP66 flow tubes to submergence duty shall not be acceptable. The associated transmitter shall be located in an area not subject to submergence.

H. The transmitter shall provide pulsed DC coil drive current to the flow tube and shall convert the returning signal to a linear, isolated 4-20 mA DC signal. The transmitter shall utilize "smart" electronics and shall contain automatic, continuous zero correction, signal processing routines for noise rejection, and an integral LCD readout capable of displaying flow rate and totalized flow. The transmitter shall continuously run self-diagnostic routines and report errors via English language messages.

I. The transmitter's preamplifier input impedance shall be a minimum of 109-1011 ohms which shall make the system suited for the amplification of low-level input signals and capable of operation with a material build up on the electrodes.

J. The transmitter shall provide an automatic low flow cutoff below a user configurable low flow condition (0-10%). The transmitter's outputs shall also be capable of being forced to zero by an external contact operation.

K. Each flow tube shall be factory calibrated and assigned a calibration constant or factor to be entered into the associated transmitter as part of the meter configuration parameters. Manual calibration of the flow meter shall not be required. Meter configuration parameters shall be stored in non-volatile memory in the transmitter. An output hold feature shall be provided to maintain a constant output during configuration changes.

L. The transmitter shall be capable of communicating digitally with a remote configuration device via a frequency-shift-keyed, high frequency signal superimposed on the 4-20 mA output signal. The remote configuration device shall be capable of being placed anywhere in the 4-20 mA output loop. The remote configuration device shall be as specified under Section 40 70 00 – Instrumentation for Process Systems. A password-based security lockout feature shall be provided to prevent unauthorized modification of configuration parameters.

M. Accuracy shall be 0.30% of rate over the flow velocity range of 1.0 to 10.0 m/s (3.0 to 33 ft/sec) and 0.5% between 0.1 m/s and 1.0 m/s (1-3 ft/s). Repeatability shall be + 0.1%

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of rate; minimum turndown shall be 100:1. Minimum required liquid conductivity shall not be greater than 5 uS/cm. Maximum response time shall be adjustable between 1 and 100 seconds as a minimum. Transmitter ambient temperature operating limits shall be -10 to +60°C. Power supply shall be 115 VAC, 60 Hz.

N. Flow tubes shall be 150-lb flange mounted unless otherwise noted. The cables for interconnecting the meter and transmitter shall be furnished by the manufacturer. Transmitter shall be mounted integrally on flow tube, wall, or 2-inch pipe mounted as shown in the Drawings and/or as specified.

O. Magnetic flow meter systems shall be Model 8750W with optional high accuracy as manufactured by Rosemount, or equivalent by ABB, Endress + Hauser, Foxboro, Krohne, Siemens, Toshiba or equal.

PART 3 – EXECUTION

3.01 REQUIREMENTS

A. Ground magnetic flow meter flow tubes and grounding rings in strict accordance with the manufacturer's recommendations.

B. Flow meter shall be installed according to the minimum straight pipe diameter lengths upstream and downstream as specified by the manufacturer.

C. Refer to Section 40 70 00 – Instrumentation for Process Systems.

END OF SECTION

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SECTION 40 71 79.13
FLOW SWITCHES (VANE)

PART 1 – GENERAL

1.01 THE REQUIREMENT

A. The Contractor shall furnish, test, install and place in satisfactory operation all vane operated flow switches, with all spare parts, accessories, and appurtenances as herein specified and as shown on the Drawings.

1.02 RELATED WORK SPECIFIED ELSEWHERE

A. Section 40 61 13 – Process Control System General Provisions

B. Section 40 70 00 – Instrumentation for Process Systems

PART 2 – PRODUCTS

2.01 VANE OPERATED FLOW SWITCHES

A. Vane operated flow switches shall consist of a paddle or vane, a magnet that moves with the paddle or piston and a reed switch. Motion from the vane shall be passed through a sealed, magnetically coupled mechanism to actuate the switch.

B. Vane operated flow switches shall have the following specifications:

1. Temperature Limit: 275º F
2. Max. Operating Pressure: 1,000 psig
3. Switch Type: SPDT snap action micro switch
4. Switch Rating: 10 A, 125 VAC; 106 cycle contact life
5. Body Type/Material: Single piece milled, bored brass
6. Enclosure Classification: Class I, Groups C, D
7. Enclosure Classification: Class II, Groups E, F, G
8. Vane Type/Material: Layered, 316 stainless steel

C. Manufacturer/Model: Model V4-2-U Flotect by W.E. Anderson, or equal.

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PART 3 – EXECUTION

3.01 REQUIREMENTS

A. Refer to Section 40 70 00 – Instrumentation for Process Systems.

END OF SECTION

SECTION 40 73 13
PRESSURE AND DIFFERENTIAL PRESSURE GAUGES

PART 1 – GENERAL

1.01 THE REQUIREMENT

A. The Contractor shall furnish, test, install and place in satisfactory operation the pressure gauges, with all spare parts, accessories, and appurtenances as herein specified and as shown on the Drawings.

1.02 RELATED WORK SPECIFIED ELSEWHERE

A. Section 40 61 13 – Process Control System General Provisions

B. Section 40 70 00 – Instrumentation for Process Systems

C. Section 40 79 00 – Miscellaneous Instruments, Valves, and Fittings

PART 2 – PRODUCTS

2.01 PRESSURE GAUGES

A. All gauges shall be designed in accordance with the ASME B40.1 entitled, "Gauges, Pressure, Indicating Dial Type - Elastic Element".

B. All gauges shall be direct reading type. Snubbers shall be provided on all gauges. Gauge full-scale pressure range shall be selected such that the maximum operating pressure shall not exceed approximately 75% of the full-scale range.

C. Features

1. Mounting: ½” NPT, lower stem mount type

2. Accuracy: 0.5% full scale

3. Case: Solid front, black phenolic material

4. Dial: White background and black letters

5. Glass: Shatterproof

6. Blow-out protection: Back

7. Pressure element: stainless steel bourdon tube

8. Movement: Stainless steel, Teflon coated pinion gear and segment

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9. Gaskets: Buna-N

D. Liquid-filled or equivalent mechanically-damped gauges shall be used if the gauges are installed with pumps, or where gauges are subjected to vibrations or pulsation. Filling fluid shall be silicone unless oxidizing agents such as sodium hypochlorite are present, where halocarbon shall be used.

E. Gauge size shall be 4-1/2".

F. Diaphragm seals and isolating ring seals shall be furnished in accordance with the requirements specified under Section 40 79 00 – Miscellaneous Instruments, Valves, and Fittings.

G. The complete gauge assembly and appurtenances shall be fully assembled and tested prior to field mounting. A ½" isolation stainless steel ball valve shall be provided for each gauge assembly.

H. Pressure and vacuum gauges shall be Ashcroft Duragauge Model 1279, Ametek-U.S. Gauge Division, H.O. Trerice Co., WIKA Instrument Corporation, or equal.

PART 3 – EXECUTION

3.01 REQUIREMENTS

A. Refer to Section 40 70 00 – Instrumentation for Process Systems.

END OF SECTION

SECTION 40 73 36

PRESSURE AND DIFFERENTIAL PRESSURE SWITCHES

PART 1 – GENERAL

1.01 THE REQUIREMENT

A. The Contractor shall furnish, test, install and place in satisfactory operation the pressure switches, with all spare parts, accessories, and appurtenances as herein specified and as shown on the Drawings.

1.02 RELATED WORK SPECIFIED ELSEWHERE

A. Section 40 61 13 – Process Control System General Provisions

B. Section 40 70 00 – Instrumentation for Process Systems

PART 2 – PRODUCTS

2.01 PRESSURE SWITCHES

A. Pressure, vacuum, and differential pressure switches shall be single or dual action with an adjustable setpoint for the process requirement and/or as specified herein. Switches shall be diaphragm or piston operated and activate S.P.D.T. snap action switches on increasing or decreasing pressure. Minimum differential shall be less than 10 percent of the range. Deadband shall be adjustable. Allowable surge pressure shall be a minimum 1.5 times the range. Each pressure switch shall have visible scale.

B. Pressure switches shall have a contact rating of 10 amperes at 120 volts AC. Pressure switches shall be in NEMA 4X enclosures. Switches shall have a repeatable accuracy of 1 percent of range. Pressure switches shall be isolated from the process fluid by a diaphragm seal or an isolation ring in locations as shown on the Contract Drawings and/or as specified. Wetted parts materials shall be compatible with the process fluid for corrosion resistance. Pressure switches shall be manufactured by ASCO, SOR, Inc., Ashcroft, or equal.

PART 3 – EXECUTION

3.01 REQUIREMENTS

A. Refer to Section 40 70 00 – Instrumentation for Process Systems.

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END OF SECTION

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SECTION 40 78 00
PANEL MOUNTED INSTRUMENTS

PART 1 – GENERAL

1.01 THE REQUIREMENT

A. The Contractor shall furnish, test, install and place in satisfactory operation the panel mounted instruments, with all spare parts, accessories, and appurtenances as specified herein and as shown on the Drawings.

1.02 RELATED WORK SPECIFIED ELSEWHERE

A. Section 40 61 13 – Process Control System General Provisions

B. Section 40 67 00 – Control System Equipment Panels and Racks

1.03 GENERAL INFORMATION AND DESCRIPTION

A. All equipment mounted on the face of a panel shall conform to the same NEMA rating specified for the panel construction.

1.04 TOOLS, SUPPLIES AND SPARE PARTS

A. Tools, supplies and spare parts shall be provided as specified in Section 40 61 22 – Tools, Supplies, and Spare Parts, General. In addition, the following specific spare parts items shall be provided:

1. One of each type of panel mounted equipment (i.e., indicators, signal converters, etc.) provided under this Contract.

2. Five of each type of interposing control relay provided under this Contract.

PART 2 – PRODUCTS

2.01 OPERATORS

A. Control operators shall be 30.5 mm, round, heavy-duty, oil tight NEMA 4X corrosion resistant. For Hazardous areas, control operators shall be rated NEMA 7.

B. Pushbuttons shall be non-illuminated, spring release type. Pushbuttons shall include a full guard. Panic stop/alarm pushbuttons shall be red mushroom type with manual-pull release. Selector switches shall be non-illuminated, maintained contact type, unless otherwise indicated.

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C. Pilot lights shall be of the proper control voltage, push-to-test LED type with lens and LED lamp colors as specified below.

1. Red: stopped, off, or closed

2. Green: running, on, or opened

3. Amber: fault, alarm, or warning

4. White: generic non-alarm status

5. Blue: control power on

D. Control operators shall have legend plates as specified herein, indicated on the Drawings, or otherwise directed by the Engineer. Legend plates shall be plastic, black field (background) with white lettering. Engraved nameplates shall be securely fastened above each control operator. If adequate space is not available, the nameplate shall be mounted below the operator.

E. Control operators for all equipment under this Contract shall be of the same type and manufacturer unless otherwise indicated. Control operators such as pushbuttons (PB), selector switches (SS), and pilot lights (PL) shall be Cutler-Hammer/Westinghouse Type E34, Square D Company Type SK, or equal

2.02 ELECTRONIC INDICATORS

A. Electronic indicators shall be 3.5 or 6 digit, as appropriate, with 0.56" high red LED display. Indicators shall be provided with nameplate and scale calibrated to match the calibration of the primary element. The unit shall be designed primarily for use with 4-20 mA current loop signal circuits. Indicator operating voltage shall be 115 VAC 10%, 60 Hz. Indicator controls shall include three (3) front-panel pushbuttons for modifying alarm values and other indicator setup. Two (2) form-C relays shall be provided for each indicator. Relay contact outputs shall be rated 5A, 120/240 VAC, resistive load. Where required, a regulated and isolated 24 V excitation power supply shall be provided. Indicators shall be suitable for indoor or outdoor service as required and shall have the same NEMA enclosure rating as the associated enclosure.

B. Indicators shall be Red Lion Model IMP or APLCL, Precision Digital, or equal.

2.03 RELAYS

A. Interposing control relays (CR)

1. Where required to interface between motor control centers, equipment controls, and control panels, interposing relays and associated control wiring circuitry shall be furnished and installed to provide the monitoring and/or control functions specified herein.

2. Interposing relays shall be small format type, DPDT, minimum 10 amp, 120 VAC contact rating.

3. Relay coils shall be 120 VAC or 24 VDC as required to interface with equipment.

4. Relays shall have a flag indicator to show relay status, a pushbutton to allow manual operation of the relay, and an internal pilot light to indicate power to the coil.

5. Relays shall be as manufactured by Square D, Potter & Brumfield, Allen-Bradley, or equal.

B. Timing Relays (TR)

1. Timing relays shall be electronic type with 120 VAC coils unless otherwise specified or indicated on the Drawings. Timers shall be provided with a minimum of two SPDT timed output contacts and instantaneous contacts where required. Contact ratings shall be the same as for interposing relays.

2. Timing relays shall be the general purpose plug-in type, Type JCK as manufactured by Square D Company, equivalent by Eaton/Cutler-Hammer, equivalent by Allen-Bradley, or equal.

PART 3 – EXECUTION

3.01 REQUIREMENTS

A. Refer to Section 40 67 00 – Control System Equipment Panels and Racks, for additional requirements.

END OF SECTION

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SECTION 40 79 00

MISCELLANEOUS INSTRUMENTS, VALVES, AND FITTINGS

PART 1 – GENERAL

1.01 THE REQUIREMENT

A. The Contractor shall furnish, test, install and place in satisfactory operation, the instrumentation and control system accessories with all spare parts, and appurtenances as herein specified and as shown on the Drawings.

B. Accessories include various items of equipment that may be required in the system but are not scheduled. Accessories are shown on details, flow sheets or plans. Accessories are also called out in specifications for scheduled instruments and in the installation specifications. It is not intended, however, that each piece of hardware required will be specifically described herein. This Specification shall be used as a guide to qualify requirements for miscellaneous hardware whether the specific item is described or not.

1.02 RELATED WORK SPECIFIED ELSEWHERE

A. Section 40 61 13 – Process Control System General Provisions

B. Section 40 70 00 – Instrumentation for Process Systems

1.03 SUBMITTALS

A. Per Section 40 61 15 – Process Control System Submittals

B. Impulse piping layout and routing drawings

C. Complete instrument assembly drawings showing orientation to installed process piping.

PART 2 – PRODUCTS

2.01 PROCESS TUBING

A. Process, impulse, or capillary tubing shall be 1/2 x 0.065-inch seamless, annealed, ASTM A-269 Type 316L stainless steel with 37 degrees Type 316 stainless steel flared fittings or Swagelock or Parker-CPI flareless fittings.

B. Piping for closely coupling instruments to process seals shall be standard stainless steel NPT threaded piping or NPT tapped mounting blocks. 020119

C. A nickel-based lubricant shall be used on threaded stainless steel piping connections to prevent galling.

2.02 POWER, CONTROL, AND SIGNAL CABLES

A. Power, control and signal wiring shall be provided under Division 26 of the Specifications, unless otherwise indicated.

2.03 CHEMICAL DIAPHRAGM SEALS

A. Diaphragm seals shall be provided for isolation of pressure gauges, switches and transmitters attached to systems containing chemical solutions or corrosive fluids. As a minimum, seals shall be of all 316 stainless steel construction. In general, diaphragms shall be 316L stainless steel for operating pressures at or above 15 psi and elastomers for operating pressures below 15 psi. However, all components shall be non-reactive with the process fluid in all cases. Refer to the Process Control System Instrument Lists for specific materials requirements.

B. Seal shall have fill connection, 1/4-inch NPT valved flush port and capable of disassembly without loss of filler fluid. Where specified, diaphragm seals shall comply with the above requirements and shall be provided with 316 SS factory filled capillaries.

C. Seals shall be Helicoid Type 100 HA, Mansfield & Green, Ashcroft, or equal.

2.04 FILLING MEDIUM:

A. The filling medium between instruments, isolating ring seals and diaphragm seals shall be a liquid suitable for operation in an ambient temperature ranging from -10 degrees F to +150 degrees F.

B. Filling medium shall be silicone unless oxidizing agents, such as sodium hypochlorite, are present, then halocarbon shall be used.

2.05 TAMPER EVIDENT PAINT

A. Piping and screwed/bolted connections of instrumentation containing the filling medium shall be marked with a small continuous tick mark of tamper evident paint over each piping/instrument joint. Tamper evident paint shall be applied prior to instrument assemblies arriving on the job site. Disturbance of the joint shall break the paint.

B. Instrument assemblies with broken paint or missing paint shall not be accepted and shall be repaired or replaced at no additional cost to Owner. Paint shall be Dykem Cross-Check or equal.

2.06 ISOLATION VALVES

A. Isolation valves shall be 1/2 inch diameter ball valves, unless otherwise indicated, with a Type 316 stainless steel body, Type 316 stainless steel ball. Where 316 stainless steel is not compatible with the process fluid, materials of construction shall be suitable for the associated process fluid (e.g., PVC for chemical service).

PART 3 – EXECUTION

3.01 REQUIREMENTS

A. Refer to Section 40 70 00 – Instrumentation for Process Systems.

END OF SECTION

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SECTION 46 00 00
EQUIPMENT GENERAL PROVISIONS

PART 1 – GENERAL

1.01 THE REQUIREMENT

A. The Contractor shall furnish, install, test, and place in acceptable operation all mechanical equipment and all accessories as specified herein, as shown on the Drawings, and as required for a complete and operable system.

B. The mechanical equipment shall be provided complete with all accessories, special tools, spare parts, mountings, shims, sheaves, couplings, and other appurtenances as specified, and as may be required for a complete and operating installation.

C. The Contractor shall provide the Owner complete and operational equipment/systems. To this end, it is the responsibility of the Contractor to coordinate all interfaces with related mechanical, structural, electrical, instrumentation, and control work and to provide necessary ancillary items such as controls, wiring, etc., to make each piece of equipment operational as shown and specified.

D. The complete installation shall be free from excessive vibration, cavitation, noise, and oil or water leaks.

E. The requirements of this section shall apply to equipment furnished under Divisions 40 and 46.

1.02 REFERENCE SPECIFICATIONS, CODES, AND STANDARDS

A. All equipment, materials, and installations shall conform to the requirements of the most recent editions with latest revisions, supplements, and amendments of the specifications, codes, and standards listed in Section 01 42 00 – References.

1.03 ACTION/INFORMATIONAL SUBMITTALS

A. Product Data: Comply with Section 01 33 00 – Submittals Procedures

B. Shop Drawings shall be submitted to the Engineer for all equipment in accordance with Section 01 33 00 – Submittal Procedures and shall include the following additional information:

1. Equipment name, identification number and specification number.

2. Performance characteristics and descriptive data.

3. Detailed equipment dimensional drawings and setting plans.

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4. Drive and motor data as required by Division 26 – Electrical. Where pump and motor speeds are to be regulated by variable speed drives, the CONTRACTOR shall coordinate, furnish and exchange all necessary requirements with the respective equipment manufacturers to ensure compatibility and shall submit pump, motor and variable speed drive shop drawings together as a complete system.

5. Information on bearing types and bearing life.

6. Gear box design and performance criteria and AGMA service factor.

7. Piping schematics.

8. Equipment protective device details and connection diagrams.

9. Panel layout drawings, schematic wiring diagrams, and component product data sheets for control panels.

10. A list of spare parts and special tools to be provided.

11. Any additional information required to demonstrate conformance with the equipment specifications.

12. Warranty documentation including statement of duration of warranty period and contact phone numbers and addresses for warranty issues.

13. Shipment, delivery, handling, and storage instructions.

1.04 CLOSEOUT SUBMITTALS

A. Submit warranty documentation in compliance with:

1. Section 01 33 00 – Submittal Procedures

2. Section 01 61 00 – Product Requirements and Options

B. Operation and Maintenance (O&M) manuals shall be submitted in accordance with Section 01 33 00 – Submittal Procedures and Section 01 78 23 Operation and Maintenance Data.

1.05 MAINTENANCE MATERIALS SUBMITTALS

A. Operation and Maintenance (O&M) manuals shall be submitted in accordance with:

1. Section 01 33 00 – Submittal Procedures

2. Section 01 78 23 – Operation and Maintenance Data

B. Comply with Section 01 78 43 – Spare Parts and Extra Materials:

1. For spare parts, extra stock materials, and tools, submit quantity of items specified in associated Specification Section.

2. Submit complete list of spare parts, extra stock materials, maintenance supplies and special tools required for maintenance for one year with unit prices and source of supply. Indicate number/quantity specified and furnished, manufacturer, part number, description,

C. Comply with Section 01 79 00 – Instructions to Owner's Personnel.

1.06 QUALITY ASSURANCE SUBMITTALS

A. Factory testing plan.

B. Factory Test Results shall be submitted and approved prior to shipment of equipment.

C. Field testing plan.

D. Comply with Section 01 75 00 – Check Out and Start Up Procedures.

E. Preliminary field test data

F. Final field test data

1.07 GENERAL INFORMATION AND DESCRIPTION

A. All parts of the equipment furnished shall, be designed and constructed for the maximum stresses occurring during fabrication, transportation, installation, testing, and all conditions of operation. All materials shall be new and shall conform to all applicable Sections of these Specifications.

B. All parts of duplicate equipment shall be interchangeable without modification. Manufacturer's design shall accommodate all the requirements of these Specifications.

C. Equipment and appurtenances shall be designed in conformity with specifications, codes and reference standards.

D. All bearings and moving parts shall be protected by bushings or other Engineer approved means against wear, and provision shall be made for accessible lubrication by extending lubrication lines and fittings to approximately 30 inches above finished floor elevation.

E. Details shall be designed for appearance as well as utility. Protruding members, joints, corners, gear covers, etc., shall be finished in appearance. All exposed welds on machinery shall be ground smooth and the corners of structural shapes shall be rounded or chamfered.

F. Machinery parts shall conform within allowable tolerances to the dimensions shown on the working drawings.

G. All machinery and equipment shall be safeguarded in accordance with the specifications, codes, and reference standards.

H. All rotating shafts, couplings, or other moving pieces of equipment shall be provided with protective guards of sheet metal or wire mesh, neatly and rigidly supported. Guards shall be removable as required to provide access for repairs.

I. All equipment greater than 100 pounds shall have lifting lugs, eyebolts, etc., for ease of lifting, without damage or undue stress exerted on its components.

J. All manufactured items provided under this Section shall be of current manufacture and shall be the products of manufacturers specializing in the manufacture of such products.

1.08 EQUIPMENT WARRANTIES

A. Warranty requirements shall be as specified in General Conditions, 4. 4 and General Conditions, Section 4.9. Warranty requirements are supplementary to the individual equipment specifications.

PART 2 – PRODUCTS

2.01 ANCHORS AND SUPPORTS

A. The Contractor shall furnish, install, and protect all necessary guides, bearing plates, anchor and attachment bolts, and all other appurtenances required for the installation of the devices included in the equipment specified. Working Drawings for installation shall be furnished by the equipment manufacturer, and suitable templates shall be used by the Contractor when required in the detailed equipment Specifications.

B. Anchor bolts and fasteners shall be furnished in accordance with Section 05 05 23 – Metal Fastening, and with the individual equipment Specifications. All anchor bolts shall be a minimum of 1/2-inch diameter. All anchor bolts, guard bolts, washers, clips, clamps, and fasteners of any type shall be constructed of 316 stainless steel, unless otherwise specified the individual equipment Specifications.

C. The Contractor shall provide all concrete pads or pedestals required for equipment furnished. All concrete equipment pads shall be a minimum of 6” high, unless otherwise shown on the Drawings and shall be doweled.

D. Pipe sleeves or other means of adjusting anchor bolts shall be provided where indicated or required. Equipment shall be leveled by first using sitting nuts on the anchor bolts, and then filling the space between the equipment base and concrete pedestal with non-shrink grout, unless alternate methods are recommended by the manufacturer and are acceptable to the Engineer (such as shim leveling pumps, or chemical grout). Non-shrink grout shall be as specified in Section 03 60 00 – Grout.

2.02 DISSIMILAR METALS

A. All dissimilar metals shall be isolated in accordance with Section 05 10 00 – Metal Materials and to the satisfaction of the Engineer.

2.03 GALVANIZING

A. Where required by the equipment specifications, galvanizing shall be performed in accordance with Section 05 05 13 – Galvanizing.

2.04 STANDARDIZATION OF GREASE FITTINGS

A. The grease fittings on all mechanical equipment shall be such that they can be serviced with a single type of grease gun. Fittings shall be “Zerk” type.

2.05 ELECTRICAL REQUIREMENTS

A. All electrical equipment and appurtenances, including but not limited to motors, panels, conduit, and wiring, etc., specified in the equipment specifications shall comply with the applicable requirements of the Division 26 specifications and the latest National Electric Code. Motor starters and controls shall be furnished and installed under Division 26 and Division 40 unless otherwise specified in the individual pump specifications.

B. In the individual equipment specifications, specified motor horsepower is intended to be the minimum size motor to be provided. If a larger motor is required to meet the specified operating conditions and performance requirements, the Contractor shall furnish the larger sized motor and shall upgrade the electrical service (conduit, wires, starters, etc.) at no additional cost to the Owner.

C. Where variable frequency drives (VFDs) are specified, the Contractor shall be responsible for coordinating between equipment supplier and VFD supplier to ensure a complete and operational system. VFDs shall be furnished under Division 26 unless otherwise specified in the equipment specification.

D. Motor starters and controls shall be furnished and installed under Division 26 and Division 40 unless otherwise specified in the individual equipment specifications.

2.06 ACCESSORIES, SPARE PARTS, AND SPECIAL TOOLS

A. Accessories, spare parts, and special tools shall be provided in accordance with each appropriate Section herein.

2.07 EQUIPMENT IDENTIFICATION

A. All mechanical equipment shall be provided with a substantial stainless-steel nameplate, mechanically fastened with stainless steel hardware in a conspicuous place, and clearly inscribed with the manufacturer's name, year of manufacture, serial number, and principal rating data.

B. Each pump and other piece of mechanical equipment shall also be identified as to name and number by a suitable laminated plastic or stainless-steel nameplate mechanically fastened with stainless steel hardware; for example, "Raw Water Pump #1". Coordinate name and number with same on remotely located controls, control panel, and other related equipment.

C. Nameplates shall not be painted over.

PART 3 – EXECUTION

3.01 SHOP TESTING

A. All equipment shall be tested in the shop of the manufacturer in a manner which shall conclusively prove that its characteristics comply fully with the requirements of the Contract Documents and that it will operate in the manner specified or implied.

B. No equipment shall be shipped to the project until the Engineer has been furnished a certified copy of test results and has notified the Contractor, in writing, that the results of such tests are acceptable.

C. A certified copy of the manufacturer's actual test data and interpreted results thereof shall be forwarded to the Engineer for review.

D. If required by the individual equipment Specifications, arrangements shall be made for the Owner/Engineer to witness performance tests in the manufacturer's shop. The Engineer shall be notified ten working days before shop testing commences. Expenses are to be paid by Owner.

E. Shop testing of electric motors shall conform to:

1. Section 26 05 60 – Low-Voltage Electric Motors

2. Section 26 05 00 – Basic Electrical Requirements.

3.02 SHIPMENT, DELIVERY, HANDLING AND STORAGE

A. Shipment, delivery, and handling of equipment and materials shall be in accordance with General Conditions, Section 4.7.

B. Storage of equipment and materials shall be in accordance with General Conditions, Section 16.2 – Ordering and Processing Procedures for Job Orders and General Conditions, Section 16.4 – Construction Services.

3.03 MANUFACTURER’S FIELD SERVICES

A. Manufacturer’s field services shall be in accordance with General Conditions, Section 4.4

B. The Contractor shall arrange for a qualified factory trained Technical Representative from each manufacturer or supplier of equipment who is regularly involved in the inspection, installation, start-up, troubleshooting, testing, maintenance, and operation of the specified equipment. Qualification of the Technical Representative shall be appropriate to the type of equipment furnished and subject to the approval of the Engineer and the Owner. Where equipment furnished has significant process complexity, furnish the services of engineering personnel knowledgeable in the process involved and the function of the equipment. When necessary, the Contractor shall schedule multiple Technical Representatives to be present at the same time for the purpose of coordinating the operation of multiple pieces of related equipment.

C. Services of the Technical Representative will require a minimum of two (2) site visits, one for installation and testing and one for startup and training, and will be for the minimum number of days recommended by the manufacturer and approved by the Engineer but will not be less than the number of days specified in individual equipment sections. Additional site visits may be required as described below and in the equipment specifications.

D. For each site visit, the Technical Representative shall submit jointly to the Owner, the Engineer, and the Contractor a complete signed report of the results of his inspection, operation, adjustments, and testing. The report shall include detailed descriptions of the points inspected, tests and adjustments made, quantitative results obtained if such are specified.

E. The manufacturer's Technical Representative shall provide the following services.

1. Installation: The Technical Representative shall inspect the installed equipment to verify that installation is in accordance with the manufacturer’s requirements. Where required by individual equipment specifications, the Technical Representative shall also supervise the installation of the equipment.

2. Testing: After installation of the equipment has been completed and the equipment is presumably ready for operation, but before it is operated by others, the Technical Representative shall inspect, operate, test, and adjust the equipment as required to prove that the equipment is in proper condition for satisfactory operation under the conditions specified. Unless otherwise noted in the signed site visit report, the report shall constitute a certification that the equipment conforms to the requirements of the Contract and is ready for startup and that nothing in the installation will render the manufacturer's warranty null and void. The report shall include date of final acceptance field test, as well as a listing of all persons present during tests.

3. Startup: The Technical Representative shall start up the equipment for actual service with the help of the Contractor. If equipment or installation problems are experienced, the Contractor and the representative shall provide the necessary services until the equipment is operating satisfactorily and performing according to the specifications at no additional cost to the Owner. Unless otherwise noted in the

signed site visit report, the report shall constitute a certification that the equipment conforms to the requirements of the Contract and is ready for permanent operation and that nothing in the installation will render the manufacturer's warranty null and void.

4. Training: Training shall be provided in accordance with requirements specified in Section 01 79 00 – Instruction of Owner’s Personnel.

5. Services after Startup: Where required by the individual equipment specifications, the Technical Representative shall return to the project site thirty (30) days after the startup date to review the equipment performance, correct any equipment problems, and conduct operation and maintenance classes as required by the Owner. This follow-up trip is required in addition to the specified services of Technical Representative prior to and during equipment startup. At this time, if there are no equipment problems, each manufacturer shall certify to the Owner in writing that his equipment is fully operational and capable of meeting operating requirements. If the equipment is operating incorrectly, the Technical Representative will make no certification to the Owner until the problems are corrected and the equipment demonstrates a successful thirty (30) days operating period.

F. The Contract amount shall include the cost of furnishing the Technical Representative for the minimum number of days specified, and any additional time required to achieve successful installation and operation. The times specified for services by the Technical Representative in the equipment Specifications are exclusive of travel time to and from the facility and shall not be construed as to relieve the manufacturer of any additional visits to provide sufficient service to place the equipment in satisfactory operation.

G. The Contractor shall notify the Engineer at least 14 days in advance of each equipment test or Owner training session.

H. The Technical Representative shall sign in and out at the office of the Engineer's Resident Project Representative on each day the Technical Representative is at the project.

3.04 INSTALLATION

A. The Contractor shall obtain written installation manuals from the equipment manufacturer prior to installation. Equipment shall be installed strictly in accordance with recommendations of the manufacturer. A copy of all installation instructions shall be furnished the Engineer's field representative one week prior to installation.

B. The Contractor shall have on hand sufficient personnel, proper construction equipment, and machinery of ample capacity to facilitate the work and to handle all emergencies normally encountered in work of this character. To minimize field erection problems, mechanical units shall be factory-assembled insofar as practical.

C. Equipment shall be erected in a neat and workmanlike manner on the foundations at the locations and elevations shown on the Drawings.

D. All equipment sections and loose items shall be match-marked prior to shipping.

E. For equipment that requires field alignment and connections, the Contractor shall provide the services of the manufacturer's qualified mechanic, millwright, or machinist, to align the equipment and motor prior to making piping connections or anchoring the equipment base. Alignment shall be as specified herein.

F. The Contractor shall furnish oil and grease for initial operation and testing. The manufacturer and grades of oil and grease shall be in accordance with the recommendations of the equipment manufacturer.

3.05 ALIGNMENT

A. Set equipment to dimensions shown on drawings. Dimensions shall be accurate to +/- 1/16 inch unless otherwise noted on the drawings. Wedges shall not be used for leveling, aligning, or supporting equipment.

B. General Equipment Leveling: Non-rotating equipment shall be set level to +/- 1/16 inch per 10-foot length (.005 inch per foot) unless otherwise noted on the drawings. Shims shall be used unless equipment is furnished with leveling feet. Set shims flush with equipment baseplate edges. When grouting is required, equipment shall be shimmed to allow a minimum of one-inch grout thickness. Grout shall cover shims at least 3 inches. Final level check shall be held for inspection and approval by Engineer before proceeding.

C. Grouting

1. Fill anchor bolt holes or sleeves with grout, after bolt alignment is proven, and prior to placing grout under equipment bases.

2. Surface Preparation. Roughen surface by chipping, removing laitance, and unsound concrete. Clean area of all foreign material such as oil, grease, and scale. Saturate area with water at least 4 hours prior to grouting, removing excess water ponds.

3. Application. Place grout after the equipment base has been set and its alignment and level have been approved. Form around the base, mix grout, and place in accordance with the grout manufacturers published instructions. Eliminate all air or water pockets beneath the base using a drag chain or rope.

4. Finishing. Point the edges of the grout to form a smooth 45-degree slope.

5. After grout has cured (not before 3 days after placement) paint exposed surfaces of grout with shellac.

6. Level Verification. After grout has cured, and immediately prior to drive alignment, recheck equipment for level and plumb. Re-level and square as necessary. Hold final checks for inspection and approval by Engineer.

D. Inspect for and remove all machining burrs or thread pulls in female holes on mating surfaces of mounting frame and machine feet.

E. Inspect and clean equipment mounting base pads, feet, and frames to remove all grease, rust, paint, and dirt.

F. Assembled equipment shafts shall be set level to .0015 inches per foot of shaft length (+/- .0005 inches) up to a maximum of 0.015 inches for any length shaft unless the manufacturers requirements are more stringent or unless otherwise noted in the equipment specifications. Use the machined surfaces on which the equipment sets for the base/mounting frame leveling plane. Use the machined shaft surface for equipment leveling plane.

G. Sprocket and Sheave Alignment. Check shaft mounted components for face runout and eccentricity (outside diameter) runout by magnetically mounting a dial indicator on a stationary base and indicating over 360 degrees on a continuous machined surface at the outside diameter of the component. Maximum allowable total indicated face runout and eccentricity for sprockets and sheaves will be per ANSI Standard B29.1-1975.

H. Belt tensioning. Set drive belt tension to manufacturer's specification for the belt type. Recheck alignment after drive tensioning.

I. Thermal/Mechanical Growth. Thermal/mechanical growth corrections for driver and driven machines will be used in vertical and horizontal alignment where applicable. The equipment manufacturer will determine thermal/mechanical growth applicability for any machine and provide the correction offsets to be used.

J. Rotating Shaft Alignment

1. Fixtures will be set up on the driver and driven machine, machines shaft surfaces. Machined coupling hubs may be used only if there is no clearance to mount fixtures directly on the shafts.

2. Primary alignment method for direct drive machines is when coupled. Uncoupled alignment will be used only when approved by the Engineer.

3. Account for possible coupling flex by always rotating coupled machines in the same direction during alignment.

4. Uncoupled machines must be connected so that both shafts turn together without relative motion during alignment.

5. Indicator bar sag will be measured and included for each reverse indicator alignment setup.

6. Reverse Dial Indicator. The final maximum allowable misalignment: vertical and horizontal from the desired targets of .000 inches (for a non-thermal growth machine) or from the given target readings (for a thermal growth machine) must meet BOTH of the following conditions simultaneously: 1/2 the final total indicator reading at each indicator will be no more than shown in the table below AND the final remaining correction at each machine foot be no more than .001 inches of required movement.

Machine Speed (RPM)	Total Misalignment* (inches)
Up to 1800	.002
1800 and greater	.001

* 1/2 indicator reading

3.06 FIELD TESTING

A. Field testing shall be in accordance with General Conditions, Section 4.4.

B. All equipment shall be set, aligned, and assembled in conformance with the manufacturer's drawings and instructions. Provide all necessary calibrated instruments to execute performance tests. Submit report certified by the pump manufacturer’s representative.

C. Preliminary Field Tests, Yellow Tag

1. As soon as conditions permit, after the equipment has been secured in its permanent position, the Contractor shall:

   a. Verify that the equipment is free from defects.

   b. Check for alignment as specified herein.

   c. Check for direction of rotation.

   d. Check motor for no load current draw.

2. Contractor shall flush all bearings, gear housings, etc., in accordance with the manufacturer's recommendations, to remove any foreign matter accumulated during shipment, storage or erection. Lubricants shall be added as required by the manufacturer's instructions.

3. When the Contractor has demonstrated to the Engineer that the equipment is ready for operation, a yellow tag will be issued. The tag will be signed by the Engineer, or his assigned representative and attached to the equipment. The tag shall not be removed.

4. Preliminary field tests, yellow tag, must be completed before equipment is subjected to final field tests, blue tag.

D. Final Field Tests, Blue Tag

1. Upon completion of the above, and at a time approved by the Engineer, the equipment will be tested by operating it as a unit with all related piping, ducting, electrical and controls, and other ancillary facilities.

2. The equipment will be placed in continuous operation as prescribed or required and witnessed by the Engineer or his assigned representative and the Owner or his assigned representative.

3. The tests shall prove that the equipment and appurtenances are properly installed, meet their operating cycles and are free from defects such as overheating, overloading, and undue vibration and noise. Operating field tests shall consist of the following:

a. Check equipment for excessive vibration and noise as specified herein.

b. Check motor current draw under load conditions. The rated motor nameplate current shall not be exceeded.

c. Recheck alignment with dial indicators where applicable, after unit has run under load for a minimum of 24 hours.

E. Additional field testing recommended by the manufacturer shall be performed at no cost to Owner.

F. Until final field tests are acceptable to the Engineer, the Contractor shall make all necessary changes, readjustments, and replacements at no additional cost to the Owner.

G. Upon acceptance of the field tests, a blue tag will be issued. The tag will be signed by the Engineer and attached to the unit. The tag shall not be removed, and no further construction work will be performed on the unit, except as required during start-up operations and directed by the Engineer.

H. Defects which cannot be corrected by installation adjustments will be sufficient grounds for rejection of any equipment.

I. All costs in connection with field testing of equipment such as lubricants, temporary instruments, labor, equipment, etc., shall be borne by the Contractor. Power, fuel, chemicals, water, etc. normally consumed by specific equipment shall be supplied by the Owner unless otherwise specified in the individual equipment specifications.

J. The Contractor shall be fully responsible for the proper operation of equipment during tests and instruction periods and shall neither have nor make any claim for damage

which may occur to equipment prior to the time when the Owner formally takes over the operation thereof.

K. Field testing of electric motors shall be in accordance with Section 26 05 60 – Low-Voltage Electric Motorsand Section 26 05 00, Basic Electrical Requirements.

3.07 FAILURE OF EQUIPMENT TO PERFORM

A. Any defects in the equipment, or failure to meet the guarantees or performance requirements of the Specifications shall be promptly corrected by the Contractor by replacements or otherwise.

B. If the Contractor fails to make these corrections, or if the improved equipment shall fail again to meet the guarantees or specified requirements, the Owner, notwithstanding his having made partial payment for work and materials which have entered into the manufacture of said equipment, may reject said equipment and order the Contractor to remove it from the premises at the Contractor's expense.

C. The Contractor shall then obtain specified equipment to meet the contract requirements or upon mutual agreement with the Owner, adjust the contract price to reflect not supplying the specific equipment item.

D. In case the Owner rejects said equipment, then the Contractor hereby agrees to repay to the Owner all sums of money paid to him for said rejected equipment on progress certificates or otherwise on account of the lump sum prices herein specified.

E. Upon receipt of said sums of money, the Owner will execute and deliver to the Contractor a bill of sale of all his rights, title, and interest in and to said rejected equipment; provided, however, that said equipment shall not be removed from the premises until the Owner obtains from other sources other equipment to take the place of that rejected.

F. Said bill of sale shall not abrogate Owner's right to recover damages for delays, losses, or other conditions arising out of the basic contract.

3.08 PAINTING

A. All surface preparation, shop painting, field repairs, finish painting, and other pertinent detailed painting specifications shall conform to applicable paragraphs of Section 09 90 00 – Painting.

B. All shop coatings shall be compatible with proposed field coatings.

C. All inaccessible surfaces of the equipment, which normally require painting, shall be finished painted by the manufacturer. The equipment and motor shall be painted with a high-quality epoxy polyamide semi-gloss coating specifically resistant to chemical, solvent, moisture, and acid environmental conditions, unless otherwise specified.

D. Gears, bearing surfaces, and other unpainted surfaces shall be protected prior to shipment by a heavy covering of rust-preventive compound sprayed or hand applied which shall be maintained until the equipment is placed in operation. This coating shall be easily removable by a solvent.

3.09 WELDING

A. The Equipment Manufacturer's shop welding procedures, welders, and welding operators shall be qualified and certified in accordance with the requirement of AWS D1.1 "Structural Welding Code - Steel" or AWS D1.2 "Structural Welding Code - Aluminum" of the American Welding Society, as applicable.

B. The Contractor's welding procedures, welders, and welding operators shall be qualified and certified in accordance with the requirements of AWS D1.1 "Structural Welding Code - Steel" or AWS D1.2 "Structural Welding Code - Aluminum" of the American Welding Society, as applicable.

C. The Contractor shall perform all field welding in conformance with the information shown on the Equipment Manufacturer's drawings regarding location, type, size, and length of all welds in accordance with "Standard Welding Symbols" AWS A2.0 of the American Welding Society, and special conditions, as shown by notes and details.

END OF SECTION

VASECTION 46 33 44

PERISTALTIC TUBE METERING PUMPS

PART 1 – GENERAL

1.01 THE REQUIREMENT

A. The Contractor shall furnish, install, adjust, and place in satisfactory operation positive displacement peristaltic tube-type pumps for chemical metering as specified herein and as shown on the Drawings. All pumps shall be supplied by the same manufacturer. The manufacturer shall have sole responsibility for the satisfactory manufacture and performance of the system.

B. The complete installation shall be free from excessive vibration, cavitation, noise, and oil or water leaks.

C. Each metering pump shall include pump head, motor, self-contained variable speed drive, flexible tube, and all accessories and appurtenances as specified herein and as indicated on the Drawings.

D. Equipment shall be provided in accordance with the requirements of Section 46 00 00 – Equipment General Provisions.

1.02 OPERATING CONDITIONS AND PERFORMANCE REQUIREMENTS

A. Pumps and pump components shall be suitable for use in the chemical service specified herein. The equipment manufacturer is responsible for the coordination and selection of corrosion resistant materials for the chemical solutions specified herein and shall guarantee the suitability of the materials used in manufacturing the equipment.

B. Chemical Properties

	Liquid Emulsified Polymer
Concentration	0.3%
Specific Gravity	1.1
Viscosity	5.4 cPs
Freezing Point	32 ºF
pH	7 - 9

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C. Pump Performance Requirements

	Liquid Emulsified Polymer
No. of Units	1
Tag Numbers	PWTP-PLY- PMP-3505
Application Point	Filter Influent
Total Pumped Flow Range	0.5 – 41.2 gph
Maximum Pump Speed	125 rpm
Required Discharge Pressure	16.1 psig
Suction and Discharge Connections	½" Threaded
Tubing Material	Norprene
Minimum Acceptable Tube Life	66 days at 40 gph
Motor HP	½ HP
Power	115VAC, 60 Hz, 1 Phase

1.03 SUBMITTALS

A. The following items shall be submitted with the Shop Drawings in accordance with, or in addition to the submittal requirements specified in Section 01 33 00 – Submittal Procedures and Section 46 00 00 – Equipment General Provisions:

1. A pump characteristic performance curve showing flow rate as a function of RPM and pressure

2. Details on materials of construction of all components including applicable ASTM designations

3. Chemical resistance data for all wetted parts of pumps and accessories

4. The total uncrated weight of the equipment plus the approximate weight of shipped materials. Support locations and loads that will be transmitted to bases and foundations. Exact size, placement, and embedment requirements of all anchor bolts.

5. Dimensional drawings

6. Control panel wiring diagrams

7. Motor data sheet indicating motor horsepower; enclosure type; voltage; insulation class; temperature rise and results of dielectric tests; service-rating; rotative speed; motor speed-torque relationship; efficiency and power factor at ½, ¾, and full load; running, full load, and locked rotor current values; and safe running time-current curves

8. Equipment and motor protective device details. Connection diagrams for motor and all protective devices.

9. Complete wiring diagrams

10. Complete control descriptions for pump operation

11. Complete erection, installation, and adjustment instructions and recommendations

12. Warranty documentation including statement of duration of warranty period and contact phone numbers and addresses for warranty issues

13. Complete lubricant schedule, including manufacturers of recommended lubricant and a cross reference table of alternative lubricant manufacturers and brand names for each lubricant recommended. Schedule shall include frequency of lubricant application, type of lubricant, and comments / remarks regarding lubricant application.

14. Tube design information (chemical resistance, life cycle, wall thickness, pressure rating, etc.) and recommended tube replacement schedule

B. Shop drawings shall include all pumps and accessories and shall be submitted as a complete system. Partial submittals will be unacceptable.

1.04 WARRANTY

A. Warranty and Guarantee shall be as specified in Section 46 00 00 – Equipment General Provisions with the exception that the warranty period shall be for two (2) years.

PART 2 – PRODUCTS

2.01 ACCEPTABLE MANUFACTURERS

A. The Manufacturer shall be a company specializing in manufacture, assembly, and field performance of positive displacement peristaltic pumps. Manufacturer of pumps must have at least 20 operating installations in domestic water or wastewater treatment plants located in the United States over a period of at least seven years pumping the same fluid as specified.

B. Tube-type metering pumps shall be ProSeries M, Models M3 or M4, as manufactured by Blue-White Industries.

2.02 GENERAL

A. The pump supplier is responsible for the coordination of corrosion-resistant materials for the chemical solutions specified. The manufacturer shall include all features as necessary

for satisfactory operation of the pumping systems for chemical solutions specified. All pumps shall be capable of handling the designated process fluids in their full commercial strengths. Pumps, motors and accessories shall be non-metallic or shall be coated with a heavy-duty protective epoxy coating resistant to the specified chemical to prevent corrosion.

2.03 PERISTALTIC TUBE-TYPE METERING PUMPS

A. Materials and Equipment

1. The metering pumps shall be motor-operated chemical metering pumps of the positive displacement, peristaltic tube type. Pumps shall be furnished complete with roller assembly, direct coupled motor, DC motor controller, integral tube failure detection system, tube life roller revolution counter with alarm setpoint, and flexible tubing with connection fittings as specified herein. Peristaltic pumping action shall be created by compression of the hose between the pump head rollers and track creating a vacuum that draws fluid in and subsequently displaces the fluid forward. Flow shall be in the direction of the rotor rotation, which can be reversed and shall be proportional to rotor speed. The pumps shall be self-priming to 95% vacuum and shall be capable of indefinite operation without pumped fluid without damage to pump or hose. Metering accuracy shall be ± 1%. Pumps shall be capable of suction lift of 30 feet of water. Drive and pump heads shall be 24-hour continuous duty rated.

B. Pump Head

2. Pump head consisting of an enclosed housing with bolted clear polycarbonate cover and roller compressor mechanism designed for operation with tube shall be provided. Alternately, cartridge-style pump head shall be provided, allowing pump head to be serviceable as a single replaceable component.

3. Pump head and tubing compression surface shall be corrosion-resistant, impact-resistant thermoplastic.

4. Suction and discharge connections shall be 180 degrees apart with bottom suction and top discharge.

5. Rotor shall be glass-filled Nylon.

6. Roller shaft shall be 316 stainless steel.

7. Two polymeric rollers with encapsulated ball bearings shall be provided for compression of the hose against the housing, and two guide rollers shall be provided. One roller shall at all times be fully engaged with hose, providing complete compression to prevent back flow or siphoning. Spring-loaded or hinged rollers shall not be used. Roller diameters and occlusion gap shall be factory set to provide the optimum tubing compression.

8. Rotor and housing shall be bolted directly to the output flange of the gearmotor, which serves to support the rotor and center the rotor assembly within the pump housing. Pump to gearbox connection shall be close coupled and self-aligning requiring no flexible couplings.

9. An integral tube failure detection system shall be provided to shut the pump down immediately upon leak detection.

10. Pump output capacity shall be adjustable over a minimum 1000:1 turndown when using a variable speed motor for pump speed adjustment.

C. Tube and Connections

11. Tube shall be designed specifically for use with peristaltic pumps, with working pressures as specified above. Tube shall be constructed from materials completely compatible with the specified chemicals. Tube life shall be a minimum of 2 months, assuming continuous service at specified feed rate and pressure.

12. Pump tube shall be assembled to polypropylene connection fittings which shall connect to reinforced transparent PVC interface hose. Polypropylene compression by NPT adaptors shall connect interface hose to the process line.

D. Electrical and Control Requirements

13. Motors shall comply with Section 26 05 60, Low Voltage Electric Motors and shall be as specified below.

14. Drive system shall be factory installed and totally enclosed in a NEMA 4X, wash-down enclosure. Drive system shall be capable of operating on any input power from 110 VAC to 240 VAC, 60 Hz, single phase supply.

15. Motor shall be reversible, brushless DC gear motor rated for continuous duty. Motor shall include overload protection. Maximum pump rpm shall be 125.

16. Enclosure shall be NEMA 4X constructed out of corrosion and impact resistant engineered plastic. A wiring compartment shall be provided for connection of input/output signal wires and alarm output loads to un-pluggable type terminal block connectors.

17. Local Control Interface

    a. Display: Backlit graphical TFT Display capable of up to 8 lines of text with up to 26 characters per line to display pump tag number, flow rate, and programming instructions. Display shall also provide visual indication of running status via screen color: Blue = Running, White = Stopped and Red = Warning.

b. Keypad: Keypad for start, stop, speed increment, speed decrement, rapid prime, and programming.

c. Flow units: Programmable in either ml/min or gallons/hour.

d. Security: Programmable keypad lock and PIN security for optional lockout of all keys except emergency start/stop.

e. Auto Restart: Feature to resume pump status in the event of power outage interruption.

f. Fluid level monitor: Programmable flow totalization to advise operator when supply tank is low.

18. Remote Control

a. Running: Digital output

b. Fault: Digital output

c. Start/Stop: Digital input

d. In Remote: Digital output

e. Speed: Analog 4-20mA speed output

f. Speed Control Input: Analog 4-20mA speed input

2.04 PUMP ACCESSORIES

A. The metering pump supplier shall furnish accessory equipment as specified herein and as shown on the Drawings including but not limited to the following:

1. Pressure gauges shall be provided on the discharge of metering pumps in the quantities and locations as shown on the Drawings. Gauges shall be as specified in Section 40 73 13 – Pressure and Differential Pressure Gauges. Each gauge shall have a range of zero to 100 psi. Each gauge shall be provided with a diaphragm seal as specified in Section 40 79 00 – Miscellaneous Instruments, Valves, and Fittings, constructed of materials which are completely resistant to corrosion by the chemicals referred to in this Section. Each pressure gauge shall also be provided with an isolation valve. Isolation valves shall be PVC with seals that are resistant to the chemical applications.

2. Pressure switches shall be supplied by the pump manufacturer in the quantities and locations as shown in the Drawings. Pressure switch shall be as specified in Section 40 73 36 – Pressure and Differential Pressure Switches. The pressure switch shall be calibrated according to Section 40 61 91 – Process Control System Instrument List.

B. Piping on the suction and discharge of each metering pump shall be as specified in the Piping System Schedule in Section 40 06 20 – Process Pipe, Valve, and Gate Schedules. Materials of construction shall be completely compatible with the specified chemical. Contractor shall provide transition fittings for metal pipe connected to PVC accessories or for PVC pipe connected to metal accessories.

2.05 TOOLS, SUPPLIES AND SPARE PARTS

A. The equipment manufacturer shall furnish all special tools necessary to disassemble, service, repair and adjust the equipment.

B. The manufacturer shall furnish the following:

1. Two (2) spare tube assemblies or cartridge assemblies for each pump
2. One (1) spare pump head assembly for each model pump

2.06 EQUIPMENT IDENTIFICATION

A. The equipment shall be provided with a substantial stainless steel nameplate, securely fastened in a conspicuous place, and clearly inscribed with the manufacturer's name, year of manufacture, serial number, and principal rating data.

PART 3 – EXECUTION

3.01 MANUFACTURER'S FIELD SERVICES

The services of a qualified manufacturer's technical representative shall be provided in accordance with Section 46 00 00 – Equipment General Provisions. For each series of pumps, field services shall include the following site visits:

Service	Number of Trips	Number of Days/Trip
Installation and Testing	1	1
Startup and Training	1	1
Services after Startup	1	1

3.02 INSTALLATION

A. The Contractor shall furnish and install the metering pumps and all associated equipment and accessories as required and specified herein in accordance with manufacturer's instructions and in accordance with Section 46 00 00 - Equipment General Provisions. The Contractor shall install the pumps on FRP equipment tables as indicated on the Drawings. FRP equipment tables shall be built to the required elevation, dimensions, level, and finish.

B. All metallic fasteners, brackets, mounting hardware, and accessories located in the storage and feed areas shall be constructed of materials completely resistant to the specified chemicals.

C. Contractor shall supply hose barb-to-process line adapters for connection of pump tubing to process lines. Hose barbs shall be secured to the pump tubing via a hose clamp tightened around the OD of the tubing. Barb material shall be completely resistant to corrosion by the specified chemicals. Contractor shall submit materials of construction of barbs and hose clamps. Contractor shall submit Drawings to Engineers for approval prior to execution.

D. The Contractor shall be fully informed and shall be responsible to ensure that all Contractor's employees, agents, and/or subcontractors are fully informed as to the hazards and proper procedures associated with working with and around the specified chemicals.

3.03 TESTING, CLEANING, AND START-UP

A. Testing shall be in accordance with Section 46 00 00 – Equipment General Provisions.

B. All pumps shall be shop tested for capacity at rated pressure prior to shipment, with documented results provided.

C. After installation of piping and accessories but before connection of piping to the storage tank and pumps, the Contractor shall completely flush the system to clean and remove all foreign matter from the piping system.

D. After chemical storage tanks are hydrostatically tested and the tanks and piping system are cleaned, complete system hydrostatic tests and operational tests shall be completed with potable water. The functioning of all pump accessories, valves, and feed points shall be checked, and all malfunctioning or unsatisfactory components shall be repaired or replaced.

E. After all pumps have been completely installed, conduct in the presence of the Engineer tests to indicate that each item of equipment conforms to this Section. The manufacturer’s representative shall oversee field testing:

1. Functional Test: Check for proper alignment, rotation, excessive or unusual noises, overheating, lubrication, and satisfactory performance, demonstrating the pumps’ ability to deliver the rated capacity and operating pressure. Testing of the pumps will be at 0.5%, 2%, 4%, 50% and 100% of rated speeds. The functioning of all system components including pump accessories shall be checked.

2. Vibration test: Check and verify that each operating pump does not have excessive vibration or movement during operation over the specified speed range.

3. If the performance of any item of equipment does not meet the specified requirements, take corrective measures or remove the unit and replace with one which satisfies the conditions specified.

END OF SECTION

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SECTION 46 61 16
GAC FILTER MEDIA

PART 1 – GENERAL

1.01 WORK INCLUDED

A. This specification covers virgin Granular Activated Carbon (GAC) for use as filter media in a drinking water application. Contractor shall be responsible for coordination of all interfaces with Media supplier to achieve the required operation.

B. Contractor furnish, install, test, and place into satisfactory operation granular activated carbon (GAC) filter media in Filters 9, 10, 11, and 12 at the Pecos Surface Water Treatment Plant, as specified herein.

1.02 RELATED SECTIONS

A. Section 46 61 17 – Filter Media Sand

1.03 REFERENCES

A. American Water Works Association (AWWA)

1. AWWA Standard B100-16 – Granular Filter Material

2. AWWA Standard B604 -18 – Granular Activated Carbon

3. AWWA Standard C653 – Disinfection of Water Treatment Plants

B. National Sanitation Foundation (NSF)

1. NSF 61 – Drinking Water System Components – Health Effects

C. American Society for Testing and Materials (ASTM)

1. ASTM E11 – Specifications For Wire Cloth and Sieves For Testing Purposes

2. ASTM D2862-97 – Standard Test Method for Particle Size Distribution of Granular Activated Carbon

1.04 SYSTEM DESCRIPTION

A. Each of the four filters consists of a bed having two cells and plan dimensions of 14 feet by 27 feet per cell. The filter media shall consist of 72 inches of 8 x 20 mesh GAC filter media installed on top of 12 inches of sand media as specified in 46 61 17 Filter Sand Media.

1.05 DESIGN REQUIREMENTS

A. The design requirements in this specification are to be used as a supplement to the Service Contract for the Supply, Placement, Removal and Thermal Reactivation of Granular Activated Carbon (Service Contract). Requirements of this specification supersedes requirements of Service Contract if there is conflict or duplication between the documents.

B. Filter media shall conform to the design criteria listed in Section 2.03.

The depths shows are after installation, backwashing, and any scraping to remove fines. Excess media shall be installed to allow for scraping and for voidage changes.

1.06 SUBMITTALS

A. The contractor shall obtain from the media manufacturer and submit the following:

1. Working Drawings.

2. Operation and Maintenance Manuals, electronic version.

3. Lists of Spare Parts, Special Tools and Supplies.

4. Reports of Certified Shop Tests.

5. Reports of Field Tests.

6. Reports of Manufacturer's Representative Site Visits.

7. Valid ISO 9001: 2000 certification for the plant of manufacture for the GAC.

8. Samples. Submit to Engineer two 1-pound samples representative of the media to be supplied.

B. Working drawings shall include, but not be limited to, the following:

1. Filter media specifications and data sheets, with identification of all materials used and methods of fabrication. Media sizes will be shown in millimeters.

2. Complete installation drawings with clearly marked dimensions and approaches for staging, storage, etc.

3. Manufacturer's delivery, storage, and handling requirements.

4. Manufacturer's installation instructions and recommendations.

5. Expansion curves for the filter media, showing backwash rate versus percent bed expansion for temperatures between 1ºC and 40ºC in 10ºC increments, minimum.

6. Certification of compatibility of the filter media with the existing filter underdrain system, Leopold Type S with IMS Cap, when operating in either adsorption or biological mode.

7. Certified test reports for acid solubility, friability and sieve analysis and samples of the filter media tested as specified in AWWA B100-16 and AWWA B604-18.

8. Evidence of manufacturer experience and of the successful operation in other facilities of media similar to that proposed for this project, as specified herein.

9. Affidavit of Compliance of GAC filter media as defined AWWA B604-18 and in NSF Standard No. 61.

C. Reports of certified shop tests shall be submitted as specified herein. No filter media shall be shipped from its place of manufacture before the certified shop test reports have been approved by the Engineer. Prior notification of shop tests for media shall be submitted for approval and shall include, but not be limited to, a description of the proposed testing facilities and procedures.

D. Reports of field tests shall be submitted as specified herein.

E. Reports of manufacturer's representative Site visits shall be submitted as specified herein.

F. GAC filter media samples shall be submitted, as specified herein.

G. Other applicable submittals, as required elsewhere in the Contract Documents.

H. Manufacturer's Certificate of Proper Installation.

1.07 QUALITY ASSURANCE AND QUALIFICATIONS

A. Manufacturer/Supplier's Qualifications.

1. Only named manufacturers will be accepted.

2. All filter media provided under this Specification shall be the product of a single manufacturer/supplier.

3. The filter media manufacturer/supplier shall supervise the transportation, handling, on-site storage, and placement of the filter media. The filter media manufacturer/supplier shall also supervise the field preparation of the media for sampling, including backwashing the media prior to sampling.

4. An Affidavit of Compliance shall be furnished certifying that the media is shipped in containers free from harmful contaminants as defined in NSF Standard No. 61.

5. Each package and container shall have legibly marked on it the name of the material, the gradation, filling date, the net weight of the contents, the name of the manufacturer/supplier, the lot number, and the brand name (if any). These markings shall be ineffaceably stenciled on the bag.

6. Bag or semi-bulk truck of media shipment will be accepted. Placement in the filters shall be accomplished using hydraulic slurry transfer only. Dry media placement will not be accepted.

7. The Contractor shall provide the services of an independent testing laboratory to perform the field tests specified herein below. The laboratory shall be experienced in the type of testing to be performed, and the suitability of the laboratory to provide these services shall approved by the Engineer prior to testing.

1.08 SPARE PARTS, SPECIAL TOOLS, AND SUPPLIES

A. The Contractor shall supply, on wrapped pallets, 50 cubic feet of spare GAC filter media. The media shall be supplied in labeled bags on pallets and delivered to the Owner prior to Substantial Completion. The bags shall not exceed 80 lb. in weight and shall be manufactured from a strong, UV-resistant, waterproof and contamination-free woven fabric. Sisal, paper or unreinforced polyethylene bag materials will not be accepted. This spare media shall not to be used for making good any losses of media during the installation, field testing, start up or warranty periods.

B. The Contractor shall provide such special tools and appliances as may be needed to test, place or replace the filter media (such as rakes or screens) furnished under this specification.

1.09 SHOP TESTS

A. Certified shop tests shall be performed by an independent lab for all filter media provided under this specification.

B. Shop tests shall confirm, via samples taken from the point of distribution, that the filter media proposed for supply under this Specification conforms to the design requirements in Article 1.05 herein, and to the product specification requirements in Article 2.03 herein.

1.10 WARRANTY

A. Carbon shall conform to the specifications herein for a period of one year after final completion.

PART 2 – PRODUCTS

2.01 MANUFACTUERS/SUPPLIERS

A. The filter media shall be as purchased by Calgon Carbon Corporation. No other suppliers will be accepted.

2.02 GENERAL

A. All filters shall be provided with GAC filter media as specified. No support gravel shall be provided for the media. The media shall be compatible with Leopold Type S filter underdrain with IMS Cap when operating either in adsorption or biological mode

2.03 GRANULAR ACTIVATED CARBON

A. GAC Product Specifications.

Iodine Number	900 mg/g (min)
Real Density	2.1 g/cc
Typical Apparent Density	0.56 g/cc
Typical Backwashed and Drained	0.46 to 0.65 g/cc
Particle Density, Wetted in Water	1.3 to 1.4 g/cc
Pore Volume	0.75 to 0.85 cc/g
Moisture, wt %	2 % (Max)
Effective Size	1.05 – 1.15 mm
Uniformity Coefficient	<1.5
Abrasion No. (ROTAP	80 (min)
Surface Area	900 sq m/g (min)
Water Soluble Ash Content	0.5% (max)
Total Ash Content	9% (max)
Mesh Size	US Sieve Series 8 x 20
Screen Size (US Sieve), wt%	
On 8 mesh (2.36 mm)	5% (max)

Through 20 mesh (0.85 mm)	4% (max)

B. GAC Product Qualifications

1. The GAC shall be clean, hard, durable particles in conformance with AWWA B604-16.

2. The GAC shall be ANSI/NSF Standard 61 certified virgin quality.

3. The GAC shall be manufactured in the United States of America.

4. GAC shall be a re-agglomerated bituminous coal-based product with petroleum or coal-based pitch binders sized to a granular form prior to baking and activation. Lignite based GAC, peat, wood, coconut, recycled, used GAC media or broken pellets will not be accepted. Direct activated GAC will not be accepted.

5. GAC shall be thermally activated by steam under rigidly controlled conditions.

6. The GAC must possess superior hardness and abrasion characteristics to withstand repeated backwashes, transfers, and handling without significant change in physical size or loss of GAC volume.

7. The GAC shall contain no soluble inorganic or organic substances in quantities capable of producing deleterious or injurious effects upon the health of those consuming the water or that would otherwise render the water treated by the GAC unfit for public use. The GAC shall not impart to the water any contaminant that exceeds the maximum limits as defined by the Safe Drinking Water Act Public Law 93-523 or any of its amendments, or NSF 61 standards.

C. GAC Media Testing

1. Sampling shall be performed by the Media Supplier. Sampling shall be in accordance with the latest revision of AWWA B100 and AWWA B604, and results shall be submitted to the Engineer for approval prior to shipment. Test results shall include a statement certifying that the material for shipment is equal in quality to the sample submitted. Analyses shall be performed to document and confirm gradation, effective size, uniformity coefficient, iodine number, ash content, abrasion number, and apparent density. No plus tolerance shall be allowed on uniformity coefficients. The materials testing cost shall be borne by the Contractor.

2. Samples after arrival to site. Each of the semi-bulk truckloads of media delivered to site shall be sampled. For media in semi-bulk trucks, a composite sample will be obtained by taking a vertical cross section sample at each access hatch to result in at least 10 pound gross sample of each. For media in supersacks, a composite sample will be taken of 16 supersacks by taking a vertical cross section sample in

each of the bags to results in at least 10 pound gross sample of each. The gross sample, weighing at least 10 pounds, shall be mixed thoroughly and divided to provide three 1 pound samples, one sample shall be sent to the lab for initial testing. All samples shall be sealed in airtight, moisture proof glass containers and delivered as described above. Each sample container shall be labeled to identify it, and the label shall be signed by the sampler. Analyses shall be performed to confirm gradation, effective size, uniformity coefficient, iodine number, ash content, abrasion number, and apparent density. The materials testing cost shall be born by the Contractor.

3. If the GAC does not meet the requirements of this specification or of AWWA B100 and AWWA B604, a notice of nonconformance will be provided to the Contractor within five days after receipt of results from the independent lab. The results of the test shall prevail unless the Contractor requests a re-test to the Owner within five (5) working days of the notice. Upon receipt of the request for a retest, the Owner shall forward to the Contractor one of the duplicate sealed samples taken. The Contractor must notify the Owner within 12 days after receipt of the duplicate sealed sample if Contractor retesting reveals that the material complies with specifications. In the event that the retest indicates compliance of the media with the specifications and AWWA B604, then the other sealed sample shall be forwarded, unopened, to a neutral laboratory agreed upon by both parties for analysis. The results of the neutral laboratory analysis shall be accepted as final. The cost of the neutral laboratory analysis shall be paid by the Contractor if the neutral laboratory analysis shows that the material does not meet this standard and by the Owner if it does meet this standard.

D. If the material does not meet the requirements specified in this standard AWWA B100 and AWWA B604, the Contractor shall remove it from the plant site when so ordered by the Owner.

PART 3 – EXECUTION

3.01 COORDINATION WITH PLANT OPERATIONS

A. Contractor shall coordinate all activities with plant operations. Drinking water supply shall not be interrupted. Plant operations and maintenance activities shall not be interrupted. Lockout-tagout procedures must be documented and followed. Work in filters will be near filters that are in the production of drinking water and must be protected from contamination.

B. Construction may occur on all four filters simultaneously after contractor schedule has been approved.

3.02 MEDIA REMOVAL AND DISPOSAL

A. The existing anthracite media removal and disposal shall accord per Section 02 41 00 – Demolition and Section 02 41 16 – Removal of Filter Media.

B. GAC Manufacturer shall remove approximately 84” depth of existing anthracite media. Existing media shall be transferred out of filter cells as water slurry only. Only potable water shall be used for the slurry transfer. Care shall be taken as to prevent damage to Owner’s property and filter boxes, filter troughs, filter underdrains and other appurtenances.

C. GAC Manufacturer shall dispose of spent anthracite at proper solids waste disposal facility (i.e., landfill). Full chain of custody shall be provided to Owner as proof of disposal for record-keeping for the entire quantity of anthracite media removed from the site.

3.03 DELIVERY, STORAGE AND HANDLING

A. Media shall be transported, delivered, and placed in a careful manner to prevent contamination or physical damage to the GAC Media particles and to the existing filter underdrain system.

B. Delivery

1. Media. All shipping and delivery charges shall be included and be paid by the GAC Media supplier. All deliveries shall be accompanied by a legible bill of lading or other evidence suitable to the Contractor, indicating the gross, tare and net weight of shipment, the name of carrier, and other pertinent information. This evidence shall be presented to the Contractor before or at the time of delivery.

2. Bulk Shipment: Shipment shall be delivered to the Pecos Surface Water Treatment Plant.

3. Prior to shipment, Contractor shall inspect and shall coordinate with the Media Supplier the Pecos Surface Water Treatment Plant site and facilities for unloading to make certain that these facilities will accommodate the type of trucks intended to be used.

4. The Contractor shall provide all equipment, connections, hoses, piping and adapters necessary to utilize existing plant potable water supply. The GAC is to be transferred in slurry form to the filters.

5. GAC Media supplier shall furnish equipment and accessories as required to transfer the GAC from the tanker to the filters or shall furnish hopper system to hydraulically educt media from bags or semi-bulk truckloads to the filters.

C. Handling

C. Handling

1. It shall be the Contractor's responsibility to clean up, to the Owner's satisfaction, any GAC spills at the site and to repair any damage resulting from the GAC delivery or unloading operations.

2. Handle the GAC Media at all times in a safe manner and as recommended by the manufacturer and AWWA B100 and AWWA B604 standards. GAC depletes oxygen from air and can be hazardous in a confined situation. Contractor shall be responsible for worker's safety and follow all pertinent GAC media manufacturer, local, state, and federal guidelines.

3. Any media that becomes contaminated or dirty (i.e., contains more than 0.5% of foreign material by weight) either before or after it has been placed in the GAC Contactors shall be removed and replaced with clean media at no cost to the Owner.

3.04 INSTALLATION

A. General: Installation of materials provided under this Specification shall be in accordance with the manufacturer/supplier's recommendations and the approved by the Engineer.

1. Preparation of the filter, after media removal, for GAC media installation shall be in accordance with the AWWA B100-16 and AWWA B604-18 Standards unless specifically noted otherwise herein.

2. The Contractor shall install the GAC media over the sand filter media only after confirmation that the sand filter media material and its installation is accepted by Owner and Engineer.

3. The Contractor shall exercise caution in installing media to avoid damage to the filter underdrain system. Any damage resulting from work by the Contractor shall be repaired at the Contractor's expense. Each layer shall be completed before the layer above is started. Workmen shall not stand or walk directly upon the media, but upon boards or staging so that the weight of the workmen will not displace the media as indicated in ANSI/AWWA B100 and B604.

4. The Contractor shall not support any staging equipment or personnel from the filter wash water troughs at any time.

B. Method of Installation

1. The Contractor shall provide potable water supply connection for GAC transfer and flushing/rinse water. Contractor shall coordinate with Manufacturer to provide all necessary hoses, site glasses, piping, and appurtenances for installing GAC

Media into concrete filter cells. Hoses shall be carefully positioned to reduce headloss and to provide a smooth hydraulic flow path for GAC transport from the truck to the GAC Contactor(s).

2. GAC Media shall be transferred into GAC Contactor(s) as water slurry only, using air pressure via compressed air system or a hydraulic eductor as the motive force. GAC Media supplier shall coordinate for the rental or acquisition of required air compressor for transferring GAC Media.

3. Contractor shall be responsible for cleanup of all GAC Media and slurry spills that may occur during the GAC transfer operation.

4. A continuous chain of custody shall be maintained between the manufacturer and the Owner during GAC production, storage, loading, shipment, and installation of GAC Media into GAC Contactor(s).

C. Placing GAC Filter Media

1. Cleaning and Testing. Keep each filter cell clean throughout installation operations. All equipment used in placing GAC Media shall be cleaned and disinfected in accordance with AWWA C653. All workers shall use boots and gloves which have been disinfected in accordance with AWWA C653.

2. Placement

a. Caution in Installing Material. Carefully place GAC Media to avoid damage to the filter cells, troughs, and underdrain system.

b. The filter cells shall be filled with a minimum of 1.0 feet of water prior to adding GAC Media, as recommended by the GAC Media supplier.

c. Before media is placed, Contractor shall carefully measure and mark top of all layers on side of the filter cell.

d. Level filter media by hand to within plus or minus 6 inches of the appropriate mark prior to backwashing.

e. Place GAC media in 3 lifts. No lift shall be more than 30 inches in depth.

f. Place first lift plus adequate allowance for scrapings of GAC media and finish off smooth to proper elevation.

g. Backwash bed three times as described in 3.03 C. 3. below, and remove a minimum of ½ inch of surface fines by scraping after each washing.

h. Place second lift following procedures outlined in Items f and g above.

i. Place third lift following procedures outlined in Items f and g above.

j. After the final scraping of fines of the third lift, the top 1 inch must meet gradation requirements (effective size and uniformity coefficient).

3. GAC Filter Media Washing.

a. After ensuring the GAC Media is completely wetted as recommended by the Manufacturer and approved by the Contractor, the filter media shall be backwashed at a rate that provides greater than 25% and less than 30% media expansion to remove fines. See Appendix A for backwash rates.

b. Owner shall perform all backwashes. Estimated number of backwashes required per day shall be supplied to Owner 5 working days in advance.

c. The backwash water flow rate may be increased in 5 gpm/sf increments while then holding for approximately 1 minute before increasing another 5 gpm/sf or until the desired bed expansion has been achieved. Backwash for sufficient duration to remove fines.

4. Following backwashing, final total depth of sand media and GAC media after washing and scraping shall be no less than 84 inches.

D. Cleaning and Disposal

1. Water for Testing and Backwashing. The Contractor shall supply all water for testing from potable water onsite to be supplied by Owner.

2. Disposal. The Contractor shall remove from the job site, and if necessary safely dispose of, all excess material and debris as a result of the work completed under this Section, including testing procedures.

3. The filters shall be maintained completely clean and free of any debris or other foreign materials at all times. Filters shall be cleaned to the satisfaction of the Engineer prior to disinfection.

4. Filter cells shall be disinfected prior to GAC media placement as specified in AWWA C653, and as directed and supervised by the Engineer. Disinfected filter cells shall be maintained to preserve disinfection during media placement and scrapings.

5. The Contractor shall remove from the job site and dispose of all excess or rejected filter media and the area around the filters shall be cleaned at the end of each working day.

6. Contractor shall tighten all anchor bolts in filter troughs, check level of filter trough weir plates and reset these to elevations shown in original Contract Drawings.

3.05 FIELD TESTING

A. Samples shall be taken from the materials received at the site. An independent testing laboratory engaged by the Contractor shall prepare the samples in accordance with ASTM D2862-97 and shall then test the samples for compliance with the requirements of this Specification.

B. After the final scraping of fines of the third lift for each filter cell, the top 1 inch must meet gradation requirements (effective size and uniformity coefficient). A composite sample of the top 1 inch of media shall be gathered from a minimum of 5 locations in each cell. This composite shall include each of the four corners at approximately 2' distance from each wall, and one center location.

C. Upon receipt of the samples, the independent testing laboratory shall prepare the samples in accordance with ASTM D2862-97. The tests conducted shall determine the conformance of the media with the acid solubility, gradation, uniformity coefficient and sieve requirements specified herein above and with the other requirements of this Specification.

D. Sieve analysis of samples taken shall include additional sieves such that there are two sieve measurements smaller than the effective size.

3.06 MANUFACTURER/SUPPLIER'S REPRESENTATIVE

A. The Contractor shall provide the services of a qualified manufacturer/supplier's representative to: assist in the installation of the filter media; check the installation before the media is placed into operation and assist in the performance of field tests.

B. The Contractor shall provide the services of the manufacturer/supplier's representative at such times and for such durations of time as are needed to perform the tasks required of the representative. At a minimum, the services of the manufacturer/supplier's representative shall be provided as indicated herein below. The number of visits and person-days per visit indicated below shall be understood as referring to the total required services for the lot of filter media provided under this Specification.

1.	Installation	1	visit of	3	days per visit.
2.	Field testing	1	visit of	2	days per visit.

C. Unless otherwise authorized by the Engineer, the manufacturer/supplier's representative shall be a direct employee of the filter media manufacturer/supplier, with at least three (3) years experience in the installation, testing and start-up of filter media of the type provided under this Specification. The manufacturer/supplier's sales and marketing personnel will not be accepted as manufacturer/supplier's representatives.

D. The manufacturer/supplier's representative shall have full knowledge and experience in the installation of the filter media in filter systems of the type to be provided under this Contract.

E. Reports: The Contractor shall submit a report from the manufacturer/supplier for each visit to the Site of the manufacturer/supplier's representative. The report shall provide complete information regarding the visit, including, but not limited to, dates, times, subject media, tasks performed, persons contacted, problems corrected, test results, training provided, and other pertinent information.

F. In addition to the above, the Contractor shall provide the services of person(s) authorized by the manufacturer/supplier to witness the unloading at the Site of the filter media provided under this Specification, and to ascertain the condition of said media. Manufacturer/supplier's sales and marketing personnel may be accepted as authorized person(s) to perform these specific tasks. The Contractor shall submit to the Engineer a report, completed by the authorized person(s) and certified by the filter media manufacturer, documenting the findings of the authorized person(s).

G. Qualified engineers of the manufacturer/supplier shall inspect the filters before placement of the filter media.

APPENDIX A

FLUDIZATION BACKWASH RATE SCHEDULE

Water Temperature		Backwash Rate (gmp/ft^2)	
(ºC)	(ºF)	(25% Expansion GAC)	(30% Expansion GAC)
1	34	11.7	13.3
5	41	13.0	14.7
10	50	14.7	16.5
15	59	16.1	18.2
20	68	17.8	20.0
25	77	19.8	22.0
30	86	21.3	23.8
35	95	23.2	25.8

END OF SECTION

SECTION 46 61 17

SAND FILTER MEDIA

PART 1 - GENERAL

1.01 WORK INCLUDED

A. The Contractor shall furnish, install, test, and place into satisfactory operation sand filter media in four (4) filters (Filters 9, 10, 11, and 12), as shown on the Contract Drawings and as specified herein.

1.02 RELATED SECTIONS

A. General Conditions

B. Section 01 11 40 – Coordination with Owner's Operations

C. Section 46 00 00 - Equipment General Provisions

D. Section 46 61 16 – GAC Filter Media

1.03 REFERENCES

A. American Water Works Association (AWWA)

B. AWWA Standard B100-16 – Granular Filter Material

C. AWWA Standard C653 – Disinfection of Water Treatment Plants

D. National Sanitation Foundation (NSF)

E. NSF 61 – Drinking Water System Components – Health Effects

F. American Society for Testing and Materials (ASTM)

G. ASTM E11 – Specifications for Wire Cloth and Sieves For Testing Purposes

H. ASTM D4371-84 – Methods for Determining the Washability Characteristics of Anthracite

1.04 SYSTEM DESCRIPTION

A. Each of the four (4) filters consists of two cells, whose bed each has plan dimensions of 14 feet by 27 feet. The filter media shall consist of 12 inches of sand overlaid by 72 inches of GAC, as specified in Section 46 61 16 – GAC Filter Media.

1.05 DESIGN REQUIREMENTS

A. Filter media shall conform to the following:

Layers	Material	Depth after installation (inches)	Average Specific Gravity	Effective Size (mm)	Uniformity Coefficient
One (1)	Sand	12.0	2.60 to 2.70	0.50 to 0.60	1.40 or less

The depths shown are after installation and any scraping to remove fines. Excess media shall be installed to allow for scraping and for voidage changes.

1.06 SUBMITTALS

A. The contractor shall obtain from the media manufacturer and submit the following:

1. Working Drawings.
2. Operation and Maintenance Manuals, including an electronic version.
3. Lists of Spare Parts, Special Tools and Supplies.
4. Reports of Certified Shop Tests.
5. Reports of Field Tests.
6. Reports of Manufacturer's Representative Site Visits.
7. Samples

B. Working drawings shall include, but not be limited to, the following:

1. Filter media specifications and data sheets, with identification of all materials used and methods of fabrication.
2. Complete installation drawings with clearly marked dimensions.
3. Manufacturer's delivery, storage, and handling requirements.
4. Manufacturer's installation instructions and recommendations.
5. Expansion curves for the filter media, showing backwash rate versus percent bed expansion for temperatures between 33ºF and 95ºF. Fluidization velocity versus headloss for sand shall be provided for temperatures between 33ºF and 95ºF.
6. Certification of compatibility of the filter media with the existing filter underdrain systems: Leopold Type S with IMS Media retaining cap.
7. Certified test reports for acid solubility and sieve analysis and samples of the filter media tested as specified in AWWA B100-16.

8. Certification that the sand satisfies the requirements in Articles 1.05 and 2.04 of this specification. Certificates of conformance shall accompany the filter media deliveries to the site.

9. A detailed description of the procedures for filter media placement.

10. Evidence of manufacturer experience and of the successful operation in other facilities of media similar to that proposed for this project, as specified herein and in General Conditions.

11. Affidavit of Compliance as defined in NSF Standard No. 61.

C. Spare parts lists shall indicate sizes, quantities, and part numbers of the items to be furnished. Terms such as “1 lot of packing material” shall not be acceptable.

D. Reports of certified shop tests shall be submitted as specified herein and in General Conditions. No filter media shall be shipped from its place of manufacture before the certified shop test reports have been approved by the Engineer. Prior notification of shop tests shall be submitted for all equipment; shall be as specified in General Conditions; and shall include, but not be limited to, a description of the proposed testing facilities and procedures.

E. Reports of field tests shall be submitted as specified herein and in General Conditions.

F. Reports of manufacturer’s representative Site visits shall be submitted as specified herein and in applicable provisions of Division 1 – General Requirements.

G. Samples shall be submitted, as specified herein and in General Conditions.

H. Other applicable submittals, as required elsewhere in the Contract Documents.

1.07 QUALITY ASSURANCE AND QUALIFICATIONS

A. Manufacturer/Supplier’s Qualifications.

1. The Contractor shall provide evidence to the Engineer that the manufacturer/supplier has a minimum of five (5) years’ experience, within the last seven (7) years in the design, manufacture, and supervision of installation of filter media of the type required under this Specification.

2. The Contractor shall provide evidence to the Engineer that filter media which was designed and manufactured by the manufacturer, and which is similar to the filter media required under this Specification, has been in continuous and successful operation in at least five (5) separate facilities for the past five (5) years.

3. The filter media manufacturer/supplier shall supervise the transportation, handling, on-site storage, and placement of the filter media. The filter media

manufacturer/supplier shall also supervise the field preparation of the media for sampling, including backwashing the media prior to sampling.

4. An Affidavit of Compliance shall be furnished certifying that the media is shipped in containers free from harmful contaminants as defined in NSF Standard No. 61.

5. Each package and container shall have legibly marked on it the name of the material, the gradation, filling date, the net weight of the contents, the name of the manufacturer/supplier, the lot number, and the brand name (if any). These markings shall be ineffaceably stenciled on the bag.

6. Bag or semi-bulk container shipment of media will be accepted. Semi-bulk containers shall not exceed 4,000 lbs in weight. Semi-bulk containers shall include a crane loop and rope locks for lifting by a crane. Bulk media shipment will not be allowed. Placement in the filters shall be accomplished using hydraulic slurry transfer or directly from bags or semi-bulk containers.

7. The Contractor shall provide the services of an independent testing laboratory to perform the field tests specified herein below. The laboratory shall be experienced in the type of testing to be performed, and the suitability of the laboratory to provide these services shall be subject to the approval of the Engineer.

1.08 SPARE PARTS, SPECIAL TOOLS, AND SUPPLIES

A. The Contractor shall supply, on wrapped pallets, 50 cubic feet of spare sand filter media. The media shall be supplied in labeled bags on pallets and delivered to the Owner at the time of the delivery with the bulk of the media. The bags shall not exceed 80 lb. in weight and shall be manufactured from a strong, UV-resistant, waterproof and contamination-free woven fabric. Sisal, paper or unreinforced polyethylene bag materials will not be accepted. This spare media shall not to be used for making good any losses of media during the installation, field testing, start up or warranty periods.

B. The Contractor shall provide such special tools and appliances as may be needed to test, place or replace the filter media (such as rakes or screens) furnished under this Specification, and General Conditions.

1.09 SHOP TESTS

A. Certified shop tests shall be performed by an independent lab for all filter media provided under this Specification and as specified in General Conditions.

B. Shop tests shall confirm, via samples taken from the point of distribution, that the filter media proposed for supply under this Specification conforms to the design requirements in Article 1.05 herein, and to the product specification requirements in Article 2.03 and Article 2.04 herein.

PART 2 - PRODUCTS

2.01 MANUFACTURERS/SUPPLIERS

A. The filter media shall be as purchased by Unifilt Corporation, Red Flint Sand and Gravel; or equal. Only suppliers who regularly furnish sand filtration media for the municipal water treatment industry will be considered for approval.

2.02 GENERAL

A. All filters shall be provided with sand media as specified and as shown on the Drawings. No support gravel shall be provided for the media.

2.03 SAND

A. The filter sand shall be high grade silica sand complying with the Standard Specifications for Granular Filter Material (AWWA B100-16). It shall be well graded. Material showing abnormal grading shall be rejected. The sand shall be washed silica and completely free from mica, dust, dirt, and foreign substances of any kind and shall meet the design criteria listed in Section 1.05. Sand shall have an acid solubility less than 5 percent.

PART 3 – EXECUTION

3.01 MEDIA REMOVAL AND DISPOSAL COORDINATION

A. Contractor shall assist with the media removal and disposal as specified in Section 46 61 16 3.01 and 3.02. Contractor shall coordinate all activities with planter operations.

B. After removal of the existing anthracite is complete, the filter underdrains shall be inspected by a Leopold technician with at least five (5) years' experience. Any defects in the filter underdrain grouting shall be repaired according to Section 03 60 00 – Grout. Any defective caps or blocks shall be replaced as required.

3.02 INSTALLATION

A. Installation of materials provided under this Specification shall be in accordance with the manufacturer/supplier's recommendations and the approved working drawings.

B. Additional instructions for the installation of materials provided under this Specification are as follows:

1. Installation and the preparation of the filter for service shall be in accordance with the AWWA B100-16 unless specifically noted otherwise herein.

2. The Contractor shall take measures to control dust during installation. If the filter media is bagged or in semi-bulk containers, the media shall be wetted to control dust as it is placed. The underdrain in each filter cell shall be inspected by the Contractor for any defects and/or damages, prior to installation of the new filter media.

3. The underdrain in each filter cell shall be inspected and repaired by the Contractor for any defects and/or damages, prior to installation of the new filter media.

4. The filter box shall be thoroughly cleaned by brooming and vacuuming before any media is placed and shall be kept clean throughout the operation.

5. Media shall be placed in the filters hydraulically as a slurry or manually from bags or semi-bulk containers. Media shall not be discharged from the operating level.

6. The Contractor shall exercise caution in installing media to avoid damage to the filter underdrain system. Any damage resulting from work by the Contractor shall be repaired at the Contractor's expense. Each layer shall be completed before the layer above is started. The bottom layer shall be placed carefully by hand to avoid damage to the underdrain system and to ensure a free passage of water from the orifices. Workmen shall not stand or walk directly upon the media, but upon boards or staging so that the weight of the workmen will not displace the media as indicated in ANSI/AWWA B100.

7. The Contractor shall not support any staging equipment or personnel from the filter washwater troughs at any time.

8. Filter sand shall be installed in a uniform thickness with the top surface brought to a true level plane. Bulk media may be placed dry or wet as specified in AWWA B100-16. When shipped in bags, filter media may be placed by scattering material directly from the bags. The elevation of the top surface of each filter media layer shall be checked by filling the filter with water to the level line previously marked on the inside of the filter.

9. After the sand has been placed, the media shall be washed and scraped or skimmed to remove excess fine material. Wash water shall be slowly admitted upward through the underdrain system until the entire bed is flooded. The bed shall be allowed to stand for as long a period as deemed necessary before initial wash. The wash rate shall be increased gradually during the initial wash to remove air from the bed. During each backwash, the water shall be applied at an initial rate of not more than 2 gpm/ft^2 of filter area. The backwash rate shall then be increased gradually over a period of 3 minutes, at the rate as defined in Appendix A – Fluidization Backwash Rate Schedule. The filter bed shall be backwashed for a total period of not less than 30 minutes in order to stratify the bed and to wash out dirt. This process will require several separate backwashes, but not less than 3 backwashes at 10 minutes each at an expansion of not less than 25 percent followed by a slow closing of the wash water valve. Following each backwash, the top layer of media shall be removed such that after the last backwash a total of 2-inch of media shall be removed and discarded, and the final surface leveled. The depth of media, as specified herein, shall be measured in place after backwashing.

10. The field tests specified in Section 3.03 below shall then be conducted.

11. After the sand has been placed, leveled, washed, and scraped, the filters shall be disinfected by chlorination as specified in AWWA C653, and as directed and supervised by the Engineer

12. The filters shall be maintained completely clean and free of any debris or other foreign materials at all times. Filters shall be cleaned to the satisfaction of the Engineer prior to disinfection.

13. After disinfection, the GAC shall be placed, leveled, and scraped as described in Section 41 61 16 – GAC Filter Media.

14. The Contractor shall remove from the job site and dispose of all excess or rejected filter media and the area around the filters shall be cleaned at the end of each working day.

15. All tanks, channels, etc., used in the course of the placement of the media into the filters shall be completely cleaned of media and fines after all media is placed.

3.03 FIELD TESTING

A. Preliminary and final field tests shall be performed for all material provided under this Specification, Section 46 0000 Equipment General Provisions and as specified in the General Conditions.

B. Additional requirements for the field testing of the materials provided under this Specification are as follows:

1. Samples shall be taken from the materials received at the site. An independent testing laboratory engaged by the Contractor shall prepare the samples in accordance with ASTM D4371-84 and shall then test the samples for compliance with the requirements of this Specification.

2. Upon completion of the backwashing procedure specified in Article 3.01 above for sand, a sieve analysis shall be made of composite samples of the sand to determine the gradation. Sufficient material shall be removed from the top of the bed so that the uniformity coefficient shall be less than 1.40 after the sand is scraped. Further backwashing and scraping shall be carried out until the requirements specified in this Article are satisfied. After completion of field testing for sand filter media, placement of anthracite filter media may commence.

3. After filter materials have been placed, soaked and initially backwashed, each filter shall be backwashed three times, for at least ten minutes each time, at a rate as defined in Appendix A. After each backwashing the filter media shall be allowed to compact by slowly reducing the washwater flow.

4. A minimum of four composite samples of the filter media shall be taken for sieve analysis from each filter. Each composite sample shall consist of equal portions from a minimum of five cores. Four cores shall be taken at the corners approximately 2 feet from the walls, and one core shall be taken near the center-line of the filter surface and under a trough. These cores shall be taken using a core sampler of 2-inch empty tubing. The core sampler shall be inserted to the elevation of the underdrain and then removed by excavating around it in order to extract a complete profile of the material found above that elevation.

5. Upon receipt of the samples, the independent testing laboratory shall prepare the samples in accordance with ASTM D4371-84. The tests conducted shall determine the conformance of the media with the acid solubility, gradation, uniformity coefficient and sieve requirements specified herein above and with the other requirements of this Specification.

6. Sieve analysis of samples taken shall include additional sieves such that there are two sieve measurements smaller than the effective size.

3.04 MANUFACTURER/SUPPLIER'S REPRESENTATIVE

A. The Contractor shall provide the services of a qualified manufacturer/supplier's representative to: assist in the installation of the filter media; check the installation before the media is placed into operation and assist in the performance of field tests. The services provided shall be in accordance with the requirements of General Conditions.

B. The Contractor shall provide the services of the manufacturer/supplier's representative at such times and for such durations of time as are needed to perform the tasks required of the representative. At a minimum, the services of the manufacturer/supplier's representative shall be provided as indicated herein below. The number of visits and person-days per visit indicated below shall be understood as referring to the total required services for the lot of filter media provided under this Specification.

1.	Installation	1	visit of 1	day per visit.
2.	Field Testing	1	visit of 1	day per visit.

C. Unless otherwise authorized by the Engineer, the manufacturer/supplier's representative shall be a direct employee of the filter media manufacturer/supplier, with at least three (3) years' experience in the installation, testing and start-up of filter media of the type provided under this Specification. The manufacturer/supplier's sales and marketing personnel will not be accepted as manufacturer/supplier's representatives.

D. The manufacturer/supplier's representative shall have full knowledge and experience in the installation of the filter media in filter systems of the type to be provided under this Contract.

E. Reports: The Contractor shall submit a report from the manufacturer/supplier for each visit to the Site of the manufacturer/supplier's representative. The report shall provide complete information regarding the visit, including, but not limited to, dates, times, subject media, tasks performed, persons contacted, problems corrected, test results, training provided, and other pertinent information.

F. In addition to the above, the Contractor shall provide the services of person(s) authorized by the manufacturer/supplier to witness the unloading at the Site of the filter media provided under this Specification, and to ascertain the condition of said media. Manufacturer/supplier's sales and marketing personnel may be accepted as authorized person(s) to perform these specific tasks. The Contractor shall submit to the Engineer a report, completed by the authorized person(s) and certified by the filter media manufacturer, documenting the findings of the authorized person(s).

G. Qualified engineers of the manufacturer/supplier shall inspect the filters before placement of the filter media.

APPENDIX A

FLUIDIZATION BACKWASH RATE SCHEDULE

Water Temperature		Backwash Rate (gpm/ft^2)	
(°C)	(°F)	(25% Expansion Sand)	(30% Expansion Sand)
1	34	11.8	13.4
5	41	13.0	14.8
10	50	14.5	16.4
15	59	15.9	18.1
20	68	17.8	19.9
25	77	19.4	22.0
30	86	21.0	23.4
35	95	22.8	25.5

END OF SECTION

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EXHIBIT D

ACCEPTED GMP/PRICE PROPOSAL

SUBMITTAL

CITY OF CHANDLER
WATER SYSTEMS UPGRADE PROGRAM
WA2100.251

SUBMITTAL TASK #17.7
GMP-1

SUBMITTED BY: ARCHER WESTERN CONSTRUCTION, LLC
PHOENIX, AZ

DATE SUBMITTED: OCTOBER 10, 2024
REVISION #1

SECTION A

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Bookmark Summary

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SECTION B

PROJECT DESCRIPTION

1. PROJECT DESCRIPTION

The Pecos Surface Water Treatment Plant Improvement project will include preconstruction services and construction services to implement identified improvement projects for the liquid and solid treatment process at the PSWTP, as well as water quality and operational efficiency throughout Chandler's water system. Projects may include GAC media replacement, concrete repair and rehabilitation of existing filters, installation of new post-filter GAC contactors or ozone contactors, new dewatering equipment and associated building, submersible pump replacement and reconfiguration, and miscellaneous yard piping improvements.

Projects Identified to Meet Program Goals:

- 42.1 – Filter 9-12 Rehab
- 43.1 – Post Filter GAC Contactors
- 86.1 – Chlorine Dioxide (Final decision will depend on Pilot Results)
- 65.1A – EQ Pumps
- 75.1D – Dewatering Building

Projects are anticipated to be delivered in multiple separate designs and construction packages over the timeline of Quarter 3 of 2024 through Quarter 4 of 2027. Pre-construction services are tentatively scheduled to begin in Quarter 3 of 2024 and construction tentatively scheduled to begin Quarter 4 of 2024 through Quarter 4 of 2027.

The overall project has been broken into 3 GMPs:

1. Filters 9 to 12 construction
2. Long Lead Procurement
3. Remaining Construction and CIO2 Construction

2. SCOPE OF WORK

This GMP cover the work related to Filters 9 to 12. The work under this project will address new and/or rehabilitated tertiary granular filters, concrete repair and rehabilitation of existing Filters 9-12.

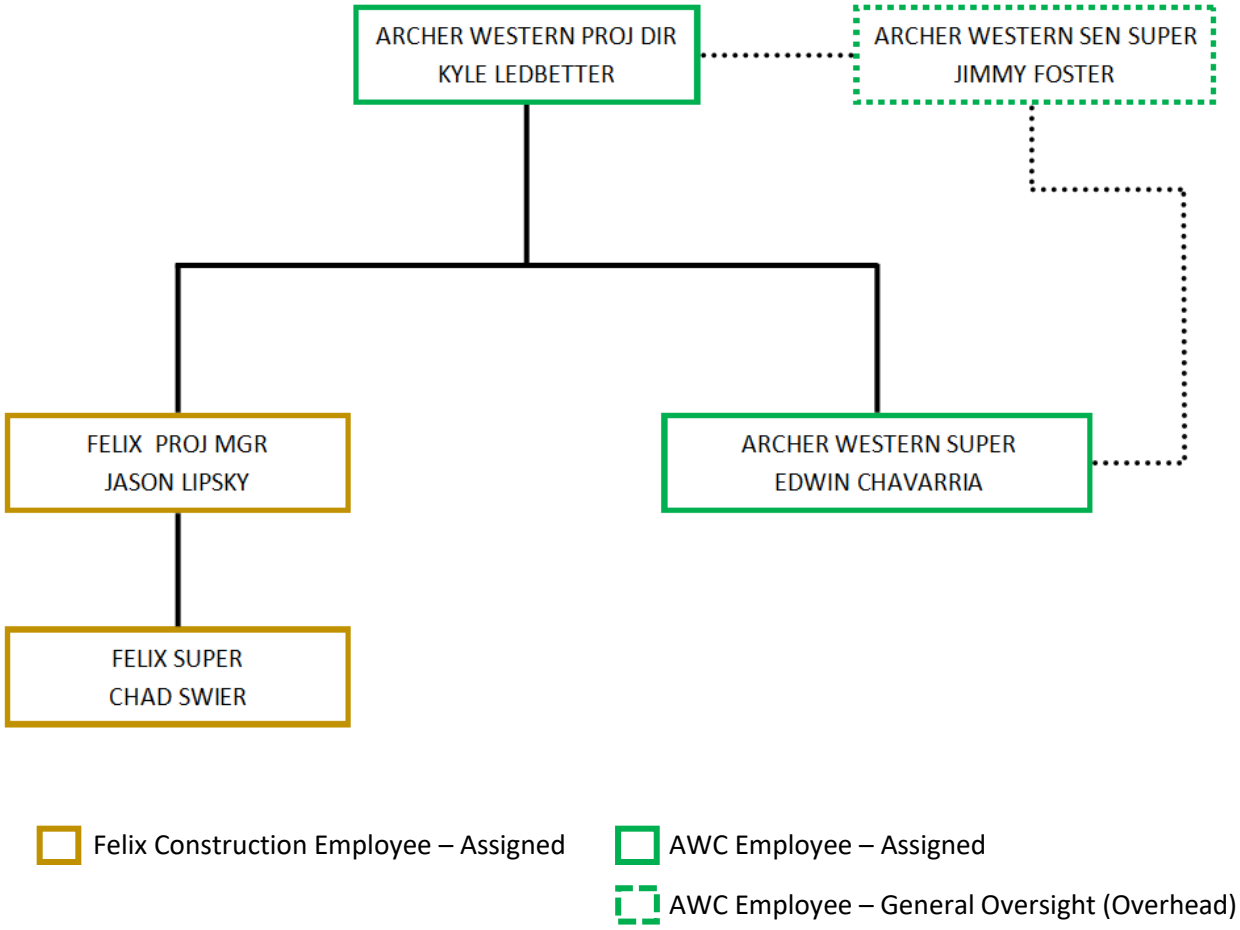
The scope of work includes the following:

- Media Replacement & Underdrain Inspection
    - Remove 84" anthracite media
    - Inspect filter underdrains and filters
    - Install 12 inches of sand media
    - Install 72 inches of GAC media
- Structural Rehabilitation
    - Waterproof Crystalline Coating
    - Hydrophillic Crack injection after coating
- Process Mechanical
    - Extend piping at Filters 9-12 from existing polymer piping from Phase 1, includes flow meters and control valves

- 1 peristaltic metering pump, 1 pressure gauge, and 1 presurre switch in the disinfection building

3. ORGANIZATIONAL CHART

The following individuals and their reporting system will be used during the construction phase of the project:



4. ROLES & RESPONSIBILITIES

Several supervision staff are included in the project. Descriptions of their roles and responsibilities are provided below.

4.1 Project Director

4.1.1 Purpose:

Responsible for the overall direction, completion, financial outcome, technical success and quality of a very large, complex construction project or multiple projects simultaneously. The Project Director also establishes and manages strategic client relationships. Identifies opportunities to expand company relationships and business opportunities.

4.1.2 Major Responsibilities:

- Plans, organizes, coordinates and controls projects in accordance with established policies, procedures, systems and requirements approved by the Company. Creates and manages processes for tracking projects and associated deliverables, collects and analyzes data, and works closely with field personnel, designers, engineers, vendors and subcontractors to manage various programmatic and project processes.
- Leads interdisciplinary teams, such as preconstruction, to deliver projects that reside within a major business group or function. Determines staffing needs, personnel development, performance management and training for the project team. Provides leadership, guidance and direction to the project team members. Ensures projects are completed, tracked and reported on in accordance with all compliance regulations and goals. Completes and/or approves Performance Reviews for subordinates.
- Maintains exceptional relationships with owners, subcontractors, design partners and unions. Responsible for day-to-day contact as well as contact of a multifaceted nature.
- Assists with bid package development, pre-qualification activities and budget preparation. May draft budget/estimate documents and provide oversight for the estimating process.
- Leads efforts to analyze risk and define schedule-related issues, including analysis of long lead materials or equipment which may impact project cost or scheduled delivery.
- Analyzes and presents project delivery approaches, develops alternative approaches and facilitates implementation, ensuring compliance with corporate, federal and state regulations.
- Serves as the primary contact for senior department managers relative to critical business issues. Helps allocate regional assets and resources to projects within business group. Maintains vehicle/equipment database in online management tool in conjunction with EOG/Project Engineer. Assists with obtaining vehicle registrations and vehicle repairs. Tracks and monitors vehicle assignments to ensure vehicle availability and mitigate risk.
- Participates in the design and execution of project safety planning activities to ensure that projects are completed within established safety goals.

4.2 Assistant Project Manager

4.2.1 Purpose:

Responsible for assisting the Project Manager with the overall direction, completion and financial outcome of a construction project.

4.2.2 Major Responsibilities:

- Prepare, review and negotiate project contracts, subcontractor agreements, subcontractor services agreements, purchase orders, quality acceptance agreements, etc.
- Responsible for procurement of materials. From contract execution, through submittal phase, release for fabrication, and tracking of deliveries to ensure schedule of the project is maintained.
- Review owner contracts. Draft and articulate argument/positions on owner contracts. Negotiate owner change orders and claims for extra work. Develop change management and allowance/contingency controls. Review and prepare time and material allowance/contingency usage for execution. Aid in preparation of revenue forecasts.
- Records equipment and material deliveries to ensure accuracy and to ensure that project remains on schedule.
- Coordinate the purchase/renewal of insurance policies on the project. Pursue or aid in pursuing insurance claims on the projects.
- Establish and administer document control procedures.
- Work with Operations team on a daily basis on risk management, and contractual and commercial issues.
- Plans, organizes, coordinates and controls project(s) in accordance with established policies, procedures, systems and requirements approved by the Company.
- Supervises work of project administration, superintendents, and engineers to ensure that work is accomplished in an efficient, effective, profitable and safe manner and meets all quality standards.
- Reviews cost-coding of timesheets and invoices, reviews daily production reports and supervises forecasted final cost/revenue reporting to ensure that profitability goals are met.
- Reviews submittal of change orders and analyzes impact on project schedules. Participates in work planning of self-performed activities.
- Gathers and records subcontractor log and weather conditions and makes recommendations accordingly. May coordinate and schedule subcontractors.
- May coordinate with owners and engineers for project scheduling and issue resolution.
- Assists with the development and review of detailed MOPO plans.
- Manages allowance and contingency tracking and gathering supporting documentation.
- Attend weekly owner progress meetings and support the Project Manager as required.

4.3 Project Superintendent

4.3.1 Purpose:

In conjunction with Project Management, responsible for the direct supervision of field forces, and the efficient scheduling of the physical completion of all project work.

4.3.2 Major Responsibilities:

- The superintendent will be the day-to-day contact on the project for any site activities taking place under the contract.

- Coordinates subcontracts, drawings, and specifications to ensure conformity. Examines drawings and specifications for various work tasks and ensures current information is passed down to front line supervision and trades personnel. Carries out inspections as needed.
- Responsible for daily planning, creation and maintenance of project schedules, including subcontractor specialty schedules and short interval schedules. Involved in creating work plans for each specific work activity.
- Supervises and organizes workers; ensures workers are available and fully qualified to perform assigned duties. Reports on labor and materials. Schedules crews according to available work packages for the project and all required equipment and materials necessary to complete tasks. Monitors timely delivery of necessary materials to assure continued productivity.
- Responsible for controlling costs, adhering to budgets and managing equipment-related expenses. Ensures staff is aware of production rates for assigned items of work.
- Conducts regular safety meetings; maintains a safe work environment with the goal of keeping accidents and injuries to a minimum and complying with company and regulatory safety procedures. Complies with EPA requirements for hazardous materials.
- Coordinates subcontractors through a regular and disciplined series of meetings, questioning and verifying their plans and efforts, changing or augmenting as needed.
- Assists project management team ensuring compliance with the legal and regulatory requirements of the city, state and federal government applicable to the project. Alerts management to any potential concerns.
- Participates in the development and implementation of appropriate portions of the jobsite quality, safety and production plans; ensures maintenance of all records in accordance with project standards.
- Coordinates with internal staff to build professional and productive relationships with owners, architects, engineers and subcontractors.

SECTION C

GMP PROPOSAL

EXHIBIT D

CM@RISK GMP SUMMARY

EXHIBIT D
CMAR GMP SUMMARY

Project Name: Pecos Surface Water Treatment Plant Improvements Date: 10/7/2024
Project Location: 1475 E Pecos Rd
City of Chandler Project No WA2100.251
GMP 1 Rev 1 - 90% Design

A. Cost of Work	
A.1 Cost of Work (self-perform, no mark-ups)	$225,045
A.2. Cost of Work - Subcontracts	$1,060,686
TOTAL COST OF WORK:	**$1,285,731**
B. General Conditions	**$247,442**
SUBTOTAL 1 (Cost of Work) (A+B)	***$1,533,173***
C. CMAR's Fee (8.0%)	**$122,654**
SUBTOTAL 2 (A+B+C):	***$1,655,827***
D. Bonds and Insurance	
D.1. Bonds (Payment and Performance)	$14,305
D.2. Insurance	$28,485
TOTAL BONDS & INSURANCE:	**$42,790**
SUBTOTAL 3 (SUBTOTAL 2 + BONDS & INS):	***$1,698,617***
E. Sales Tax	
E.1. Sales Tax (5.07%)	$92,448
E.2. Tax Credits	
TOTAL SALES TAX:	**$92,448**
TOTAL GMP WITHOUT ALLOWANCES/CONTINGENCIES:	**$1,791,065**
F. Approved Allowances	
F.1. Cofferdam Allowance (Cost + Fee (8.0%))	$24,377
F.2. Concrete Repairs (Cost + Fee (8.0%))	$35,640
F.3. Electrical Allowance (Cost + Fee (8.0%))	$54,000
F.4. Under Drain Repair (Cost + Fee (8.0%))	$10,800
TOTAL ALLOWANCES:	**$124,817**
G. Contingencies	
G. 1. Construction Contingency	$50,000
G. 2. Owner Contingency (10% of total cost of work)	$128,573
TOTAL CONTINGENCIES:	**$178,573**
TOTAL GMP PROPOSAL:	***$2,094,455***

Establishment of Values:
a. Cost of Work (A) and Allowances (F) to be submitted with GMP Proposal.
b. General Conditions Cost (B) to be established in Baseline Cost Model.
c. CMAR Fee as set forth in Section 3.7.3. of this Agreement.

EXHIBIT D: ALLOWANCE DESCRIPTIONS

F.1 Cofferdam Allowance

This allowance is used to pay for installing angle, steel plates, anchors, gaskets, stand by pumps and sandbags as necessary for the cofferdam.

F.2 Concrete Repairs

This allowance is used to pay for structural crack repair. The crack repair will be an epoxy injection crack repair and waterproof injection grout per drawing S02.

F.3 Electrical Allowance

This allowance is used to pay for removing the boxes from the wall and replacing any electrical boxes or conduit as deemed necessary. Instruments and panels are not included in the allowance.

F.4 Filter Underdrain Repair

This allowance is used to pay for replacing any damaged filter underdrain boxes or grout fillets.

EXHIBIT D: CONTINGENCY DESCRIPTIONS

G.1. Construction Contingency

This contingency will be set at $50,000 and will be used as directed by General Conditions 15.4.1.

G.1. Owner Contingency

This contingency will be set at 10% of the total cost of work and will be used as directed by General Conditions 15.4.2.

1. GENERAL NOTE

The GMP Worksheet includes bonds, insurance, and taxes for the full value of the project. Any allowance and contingency usage will only have fee added beyond the cost of work shown.

DETAILED COST ESTIMATE

CITY OF CHANDLER- PECOS SWTP IMPROVEMENTS
PROJECT NO. WA2100.251
GMP 1-90% DESIGN REV 1

AREA	BID ITEM	DESCRIPTION	TAKEOFF QTY		LABOR AMOUNT	MATERIAL AMOUNT	SUB AMOUNT	EQUIPMENT AMOUNT	TOTAL AMOUNT
A. COST OF WORK									**$ 1,285,731**
100		Filter Improvements	1	LS	$ 53,091	$ 7,136	$ 785,094	$ 2,000	$ 847,321
		Site Development	1	LS	$ 8,607	$ 1,168	$ -	$ -	$ 9,775
	02.100.100	Remove GAC Filter Media	18,309	CF	$ 8,607	$ 1,168			$ 9,775
		Painting & Coatings	1	LS	$ 8,681	$ 1,280	$ 686,289	$ -	$ 696,250
	09.100.100	Paint Inspections-Subcontractor	36,287	SF	$ 8,681	$ 1,280	$ 8,400		$ 18,361
	09.100.105	Painting Subcontract	18,144	SF	$ -	$ -	$ 677,889		$ 677,889
		Equipment General	1	LS	$ 7,500	$ 4,688	$ 98,805	$ -	$ 110,993
	46.100.100	Sand Install	3,050	CF	$ 4,564	$ 2,464	$ 700		$ 7,728
	46.100.103	Sand Install Subcontract	3,050	CF	$ -	$ -	$ 93,205		$ 93,205
	46.100.105	GAC Install	18,309	CF	$ 2,936	$ 2,224	$ 1,400		$ 6,560
	46.100.110	Disinfection Subcontract	1	LS			$ 3,500		$ 3,500
		Construction Manager	1	LS	$ 28,303	$ -	$ -	$ 2,000	$ 30,303
	99.995.900	Field Salary Staff	1	LS	$ 28,303			$ 2,000	$ 30,303
110		Polymer Improvements	1	LS	$ 36,741	$ 61,302	$ 1,000	$ 1,000	$ 100,043
		Process Piping	1	LS	$ 24,738	$ 49,640	$ 1,000	$ -	$ 75,378
	40.110.100	Polymer Piping and Valves	400	LF	$ 24,738	$ 8,880	$ 1,000		$ 34,618
	40.110.105	Pipe and MOV Supplier Lump Sum	1	LS		$ 35,391			$ 35,391
	40.110.110	Pipe Support Supplier Lump Sum	1	LS		$ 5,369			$ 5,369
		Equipment General	1	LS	$ 1,793	$ 11,662	$ -	$ -	$ 13,455
	46.110.100	Polymer Metering Pump	1	LS	$ 1,793	$ 712			$ 2,505
	46.110.105	Polymer Metering Pump Supplier Lump Sum	1	LS		$ 10,950			$ 10,950
		Construction Manager	1	LS	$ 10,210	$ -	$ -	$ 1,000	$ 11,210
	99.995.900	Field Salary Staff	1	LS	$ 10,210			$ 1,000	$ 11,210
610		Process Equipment Commissioning	1	LS	$ 13,275	$ 500	$ -	$ 500	$ 14,275
		Process Equipment	1	LS	$ 13,275	$ 500	$ -	$ 500	$ 14,275
	43.610.220	Equipment Commissioning	1	wk	$ 13,275	$ 500		$ 500	$ 14,275
800		Electrical Work	1	LS	$ -	$ -	$ 274,592	$ -	$ 274,592
		Electrical	1	LS	$ -	$ -	$ 274,592	$ -	$ 274,592
	26.800.500	Electrical Work-Full Project	1	LS			$ 274,592		$ 274,592
998		Construction Equipment	1	LS	$ -	$ -	$ -	$ 49,500	$ 49,500
		Construction Manager	1	LS	$ -	$ -	$ -	$ 49,500	$ 49,500
	99.998.900	Construction Equipment-Site Wide (GC)	1	LS				$ 49,500	$ 49,500
B. GENERAL CONDITIONS									**$ 247,442**
997		General Requirements	1	LS	$ 2,046	$ 11,846	$ 4,075	$ -	$ 17,967
		Construction Manager	1	LS	$ 2,046	$ 11,846	$ 4,075	$ -	$ 17,967
	99.997.900	General Requirements-Site Wide (GC)	1	LS	$ 2,046	$ 11,846	$ 4,075		$ 17,967
999		Salaried Staff	1	LS	$ 229,475	$ -	$ -	$ -	$ 229,475
		Construction Manager	1	LS	$ 229,475	$ -	$ -	$ -	$ 229,475
	99.999.900	Salaried Staff-Site Wide (GC)	1	LS	$ 229,475				$ 229,475
SUBTOTAL 1 (COST OF WORK)					***$ 334,628***	***$ 80,784***	***$ 1,064,761***	***$ 53,000***	***$ 1,533,173***

CITY OF CHANDLER- PECOS SWTP IMPROVEMENTS
PROJECT NO. WA2100.251
GMP 1-90% DESIGN REV 1

AREA	BID ITEM	DESCRIPTION	TAKEOFF QTY		LABOR AMOUNT	MATERIAL AMOUNT	SUB AMOUNT	EQUIPMENT AMOUNT	TOTAL AMOUNT
AREA	BID ITEM	DESCRIPTION	TAKEOFF QTY		LABOR AMOUNT	MATERIAL AMOUNT	SUB AMOUNT	EQUIPMENT AMOUNT	TOTAL AMOUNT
F. APPROVED ALLOWANCES (EXLUDING FEE)									$ 115,571
120		Allowances	1	LS	$ 7,747	$ 11,024	$ 96,800	$ -	$ 115,571
		Site Development	1	LS	$ 7,747	$ 11,024	$ 3,800	$ -	$ 22,571
	02.100.105	Coffer Dam - Dewatering	1	LS	$ 7,747	$ 11,024	$ 3,800		$ 22,571
		Concrete Repair	1	LS	$ -	$ -	$ 33,000	$ -	$ 33,000
	03.120.100	Filter Walls Crack Repair	1	LS			$ 23,000		$ 23,000
	03.120.120	Interior Basin Wall Repairs	1	LS			$ 10,000		$ 10,000
		Electrical	1	LS	$ -	$ -	$ 50,000	$ -	$ 50,000
	26.120.100	Electrical Allowance	1	LS			$ 50,000		$ 50,000
		Equipment General	1	LS	$ -	$ -	$ 10,000	$ -	$ 10,000
	46.120.100	Underdrain Repair Allowance	1	LS			$ 10,000		$ 10,000

QUOTE PACKAGE

COATING QUOTES

SECTION 07 16 16
CRYSTALLINE WATERPROOFING

PART 1 – GENERAL

1.01 THE REQUIREMENT

A. Furnishing all labor, materials, services and equipment necessary for the supply and installation of topical cementitious crystalline waterproofing to concrete substrates, above-grade or below-grade, on either dry or wet side of substrates, as indicated on drawings and as specified herein.

B. Principal items of work include:

Filters 9 through 12 located on the interior of the filter cells, center gullet between filter cells, and settled water channels.

1.02 RELATED WORK SPECIFIED ELSEWHERE

A. Section 03 01 30 – Concrete Repairs

1.03 REFERENCE SPECIFICATIONS, CODES, AND STANDARDS

A. Without limiting the generality of these specifications Work shall conform to the applicable requirements of the following documents:

1. American Society for Testing and Materials (ASTM)

2. Army Corps of Engineers (CRD)

3. NSF International (NSF)

1.04 SUBMITTALS

A. In accordance with the procedures and requirements set forth in Section 01 33 00 – Submittal Procedures, submit the following:

1. Submit product data, including manufacturer's specifications, installation instructions, and general recommendations for waterproofing applications. Include manufacturer's certification or other data substantiating that products comply with requirements of the Contract Documents.

2. Submit complete test reports from approved independent testing laboratories certifying that waterproofing system conforms to performance characteristics and testing requirements specified herein.

09-30-20

3. Provide certificates signed by manufacturer or manufacturer's representative certifying that the materials to be installed comply in all respects with the requirements of this specification, and that the applicator is qualified and approved to install the materials in accordance with manufacturer's product data.

1.05 SYSTEM PERFORMANCE REQUIREMENTS

A. Testing Requirements: Crystalline waterproofing system shall be tested in accordance with the following standards and conditions, and the testing results shall meet or exceed the performance requirements as specified herein.

B. Independent Laboratory: Testing shall be performed by an independent laboratory meeting the requirements of ASTM E 329 and certified by the United States Bureau of Standards. Testing laboratory shall obtain all concrete samples and waterproofing product samples.

C. Crystalline Penetration: Crystallizing capability of waterproofing material shall be evidenced by independent SEM (Scanning Electron Microscope) photographs documenting penetration of crystal-forming waterproofing material to a depth of 2 inches.

D. Permeability: Independent testing shall be performed according to U.S. Army Corps of Engineers CRD C48-73 "Permeability of Concrete".

1. Concrete samples (treated and untreated) to have design strength of 2000 psi and thickness of 2 inches. No admixtures permitted.

2. Coatings to have maximum thickness of 0.05 inches per coat with up to two coats permitted.

3. Samples to be pressure tested to 175 psi (405 feet head of water).

4. Treated samples, after crystalline growth has occurred, shall exhibit no measurable leakage.

E. Chemical Resistance: Independent testing shall be performed according to ASTM C 267 "Chemical Resistance of Mortars" and ASTM C 39 "Compressive Strength of Cylindrical Concrete Specimens".

1. Concrete samples (treated and untreated) to have design strength of 4000 psi. No admixtures permitted.

2. Coatings to have maximum thickness of 0.05 inches per coat with up to two coats permitted.

3. Untreated and treated specimens to be immersed for a minimum of 84 days in following chemical solutions: hydrochloric acid (3.5pH), brake fluid, transformer oil, ethylene glycol, toluene, caustic soda.

4. Treated specimens shall exhibit no detrimental effects after exposure, and shall have a minimum of 14% increase in compressive strength versus untreated control specimens.

F. Potable Water Approval: Independent testing shall be performed according to NSF Standard 61/600 and approval for use of waterproofing material on structures holding potable water shall be evidenced by NSF certification.

1.06 DELIVERY, STORAGE AND HANDLING

A. Deliver materials in manufacturer's unopened containers identified with name, brand, type, grade, class, and all other qualifying information.

B. Store materials in dry location, in such manner as to prevent damage or intrusion of foreign matter. Conspicuously mark "Rejected" on materials which have been damaged and remove from the job site.

PART 2 – PRODUCTS

2.01 SYSTEM DESCRIPTION

A. Cementitious Crystalline Waterproofing: Blend of portland cement, fine treated silica sand and active proprietary chemicals. When mixed with water and applied as a cementitious coating, the active chemicals cause a catalytic reaction which generates a non-soluble crystalline formation of dendritic fibers within the pores and capillary tracts of concrete. This process causes concrete to become permanently sealed against the penetration of liquids from either direction.

2.02 ACCEPTABLE MANUFACTURERS

A. Subject to compliance with the Specifications provide products manufactured by one of the following:

1. Xypex Chemical

2. Tamms (Euclid)

3. Vandex (Euclid)

4. Kryton International

2.03 PRODUCTS

A. Crystalline Waterproofing Materials as follows:

1. Xypex Concentrate

2. Tamms Hey’Di K-11

3. Vandex Super

4. Krystol T1

2.04 SOURCE QUALITY

A. Obtain proprietary crystalline waterproofing products from a single manufacturer.

PART 3 – EXECUTION

3.01 EXAMINATION OF SURFACES

A. Verify that the concrete surfaces are sound and clean, and that form release agents and materials used to cure the concrete are compatible with waterproofing treatment.

B. Examine surfaces to be waterproofed for form tie holes and structural defects such as honeycombing, rock pockets, faulty construction joints and cracks. Such defects to be repaired in accordance with manufacturer's product data and Section 3.02 below.

C. Coordinate all work under this Section with contiguous work of other trades.

3.02 PREPARATION Surface prep per manufacturers instructions (ICRI CSP3)

A. Concrete Finish: Concrete surfaces to receive waterproofing treatment shall have an open capillary system to provide tooth and suction, and shall be free from scale, excess form oil, laitance, curing compounds and foreign matter. Horizontal surfaces shall have a rough wood float or broom finish. Where a smooth trowel finish is required on horizontal surface, crystalline waterproofing material shall be applied by dry shake method at time of concrete finishing in accordance with manufacturer's product data.

B. Surface Preparation: Existing smooth surfaces (e.g. where steel forms are used) or surfaces covered with excess form oil or other contaminants shall be washed, lightly sand-blasted, water-blasted, or acid etched with muriatic acid as necessary. Surfaces to be acid-etched shall be saturated with water prior to application of acid. Procedures for preparing surface profile to receive waterproofing treatment shall be in accordance with the manufacturer's recommendations and instructions.

C. Repair of Defects: Surface defects shall be repaired in accordance with Specification Section 03 01 30 – Concrete Repairs.

D. Wetting Concrete: Prior to application of waterproofing treatment, thoroughly saturate concrete surfaces with clean water as required to ensure migration of crystalline chemicals into voids and capillary tracts of the concrete. Remove free surface water before application.

3.03 APPLICATION

Per manufacturers instructions.

A. Surface Application: After repairs, surface preparation, treatment of construction joints, and sealing strip placement have been completed in accordance with manufacturer's product data and as specified herein, apply crystalline waterproofing treatment uniformly to concrete surfaces with semi-stiff bristle brush or broom, or suitable spray equipment. Application rates and locations shall be in accordance with manufacturer's product data, unless otherwise indicated on the Drawings. When brushing, work slurry well into surface of the concrete, filling surface pores and hairline cracks. When spraying, hold nozzle close enough to ensure that slurry is forced into pores and hairline cracks.

1. First Coat (of one or two coat applications): Apply crystalline waterproofing slurry coat to specified locations and as indicated on the drawings in accordance with manufacturer's product data. 1/16" coat

2. Second Coat (of two coat applications): Where indicated on drawings or as required by manufacturer's product data, apply crystalline waterproofing slurry coat while first coat of crystalline waterproofing is still "green" but after it has reached an initial set. Use light pre-watering between coats. Contractor shall ensure that all curing requirements are met prior to application. If curing requirements are not met, contractor shall follow manufacturer recommendations to remediate.

3.04 CURING

A. Begin curing as soon as crystalline waterproofing has hardened sufficiently so as not to be damaged by a fine spray. Cure with a mist fog spray of clean water at a frequency and duration as recommended by the waterproofing manufacturer, or cover treated surfaces with damp burlap for the prescribed period. In warm climates, more than three sprayings per day may be necessary to prevent excessive drying of coating.

B. Do not lay plastic sheeting directly on the waterproofing coating as air contact is required for proper curing. If poor circulation exists in treated areas, it may be necessary to provide fans or blown air to aid in curing of waterproofing treatment.

C. For concrete holding structures such as reservoirs, water treatment tanks and wet wells, cure for three days and allow treatment to set (air cure) for 12 days before filling structure with liquid. For structures holding hot or corrosive liquids, cure waterproofing treatment for three days and allow to set for 18 days before filling.

D. During the curing period, protect treated surfaces from damage by wind,sun, rain and temperatures below 36°F. If plastic sheeting is used for protection, sheets must be elevated above waterproofing coating to allow sufficient air circulation.

3.05 FIELD QUALITY CONTROL

A. Do not conceal installed waterproofing system before installation has been observed by Architect/Engineer and other designated entities.

B. For watertightness testing after concrete repairs and coating are complete, refer to specification 01 88 16 – Watertightness Testing of Concrete Structures.

Existing structure. No hydrostatic test required.

3.06 CLEANING AND PROTECTION

1. Clean spillage and soiling from adjacent surfaces using appropriate cleaning agents and procedures.

2. Take measures to protect completed coating from damage after application. Do not permit traffic on unprotected coating.

END OF SECTION

	Interior Filter Cells
TOW EL (ft)	1241
Max WSEL (ft)	1237.5
+Safety Factor (ft)	1
Wall Height (ft)	16.22
Water Height (ft)	13.72
Cell Width (ft)	14
Cell Length (ft)	27
Cells per Filter	2
# of Filters	4
Surface Area Water (sq. ft)	**9,000**
Wall Surface Area (sq. ft)	**9,560**

	Interior Filter Gullet
TOW EL (ft)	1241
Max WSEL (ft)	1237.5
+Safety Factor (ft)	1
Wall Height (ft)	16.33
Water Height (ft)	13.83
Gullet Width (ft)	5.5
Gullet Length (ft)	27
# of Gullets	4
Surface Area (sq. ft)	**3,596**
Wall Surface Area (sq. ft)	**3,706**

	South Settled Water Channel
TOW EL (ft)	1241
Max WSEL	1237.76
+Safety Factor (ft)	1
Wall Height - 1 (ft)	13
Wall Height - 2 (ft)	31.5
Water Height - 1 (ft)	10.76
Water Height - 2 (ft)	29.26
Width - 1 (ft)	4
Width - 2 (ft)	4.5
Length - 1 (ft)	93
Length - 2 (ft)	7
Surface Area (sq. ft)	**2,908**
Wall Surface Area (sq. ft)	**3,395**

	North Settled Water Channel
TOW EL (ft)	1241
Max WSEL	1237.76
+Safety Factor (ft)	1
Wall Height - 1 (ft)	13
Wall Height - 2 (ft)	23.5
Water Height - 1 (ft)	10.76
Water Height - 2 (ft)	21.26
Width - 1 (ft)	4
Width - 2 (ft)	4
Length - 1 (ft)	93
Length - 2 (ft)	7
Surface Area (sq. ft)	**2,639**
Wall Surface Area (sq. ft)	**3,123**

Parameter	*Work*	***Scenario 1 (Selected)***	*Scenario 2 (Not slected for)*
TOTAL SURFACE AREA (SQ. FT)	**CRYSTALINE COATING**	**18,144**	**19,784**
	SURFACE PREP ON WALLS W/ EXISTING COATING	**9,000**	**9,560**
	SURFACE PREP ON WALLS W/OUT EXISTING COATING	**9,143**	**10,223**
	OTHER COATING	**0**	**0**

Scenario 1 Crystaline coat only what is in contact with water (+1-ft above water surface), assumes surface prep in filter gullet is w/out existing coating
Sceanrio 2 Crystaline coat all wall surfaces to top of wall, assumes surface prep in filter gullet is w/out existing coating

PROJECT NAME	PECOS SURFACE WATER TREATMENT PLANT FILTER IMPROVEMENTS - PHASE III
BID DATE	10/4/2024
OWNER	CITY OF CHANDLER
ENGINEER	HAZEN & SAWYER
SCOPE	COATINGS
ESTIMATOR INITIALS	TJ

CARRIED TO GMP 1

BID QUANTITIES					PPS		AO PAINTING		RILEY INDUSTRIAL		JPCI	
AREA	BID ITEM NO.	ITEM DESCRIPTION	QTY	UNIT	UNIT AMOUNT	BID	UNIT AMOUNT	BID	UNIT AMOUNT	BID	UNIT AMOUNT	BID
100	09.100.105	XYPEX COATING	18144	SF	$ 54.99	$ 997,770.00	$ 35.59	$ 645,777.00	$ 99.40	$ 1,803,515.00	NO BID/TIME	
		ABOVE GRADE PIPE	1	LS	$ 10,965.00	$ 10,965.00	$ 10,965.00	$ 10,965.00	$ 10,965.00	$ 10,965.00		
		SURFACE PREP TO ICRI CSP3	1	LS	INCLUDED		INCLUDED		INCLUDED			
		PROTECTION OF FILTER UNDERDRAIN	1	LS	INCLUDED		INCLUDED		INCLUDED			
		CURING AND PROTECTION REQUIREMENTS (COVERING)	1	LS	INCLUDED		INCLUDED		INCLUDED			
				SUBTOTAL		$ 1,008,735.00		$ 656,742.00		$ 1,814,480.00		$ -
				BOND TOTAL	2.00%	$ 20,174.70	3.00%	$ 19,702.26	1.20%	$ 21,773.76	2.00%	$ -
				TEXTURA TOTAL	0.22%	$ 2,219.22	0.22%	$ 1,444.83	0.22%	$ 3,750.00	0.22%	$ -
				BID AMOUNT TOTAL		$ 1,031,128.92		$ 677,889.09		$ 1,840,003.76		$ -

Professional Piping Systems, LLC
319 E Pioneer Street
Phoenix, AZ 85040
602-497-4997
gilles@ppscoatings.com
www.ppsphx.com
10-04-24

Archer-Western Contractors
4710 East Elwood Street, Suite 6
Phoenix, AZ 85040

Attention: Tony Jennaro, Estimating Department

ATTACHMENT 1
PROPOSED PRICING

Professional Piping Systems, LLC submits its Firm Lump sum pricing below.
Taxes are not Included.
Add 2% For Payment / Performance Bonds

Reference: PPS24-300
Pecos WTP Filter Improvements
Chandler, AZ

The following is PPS Coatings scope of work and pricing per the plans and specifications:

- Xypex Application per Section 07 16 16 Crystalline Waterproofing per quantity provided

- **Surface Preparation to remove existing Coating: 9,560 Sq.F.**
- **Surface Preparation of bare concrete: 10,223 Sq.F.**
- **Application of Xypex 19,784 Sq. F.**

Pricing includes containment as needed, sub-floors protection and water curing of Xypex.

Note:
We are assuming that the existing concrete is in stable and in sound condition in order to achieve the specified CSPI 3 to 5 Profile. Unforseen excessive deterioration of the concrete beyond this understanding will need negotiation for its remedy.

Time for Completion: 2 Months

Please call me if you have any questions regarding this Proposal.

Gilles Bussieres,
Estimator/Project Manager
602-576-2740

Professional Piping Systems, LLC
319 E Pioneer Street
Phoenix, AZ 85040
602-497-4997
gilles@ppscoatings.com
www.ppsphx.com
10-04-24

ATTACHMENT 2
Scope of work

PPS has **INCLUDED** in this proposal the following:

Inclusions					
Bid Item	**Qty.**	**Unit**	**Description**	**Unit Price**	**Total**
		LS	**Xypex Application at Filter Structure**		**$997,770.00**

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gilles@ppscoatings.com
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10-04-24

ATTACHMENT 3

EXCLUSIONS

PPS has specifically **EXCLUDED** from this proposal the following:

- **Third Party Inspection of any kind**
- **Concrete Repairs**
- **Decommissioning of the Filter Structure**
- **Taxes**

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ATTACHMENT 4

Terms & Conditions

The following terms and conditions (these "Terms & Conditions") apply to the sale of goods, materials or products (collectively, "Products") or provision of services (collectively, "Services") by Professional Piping Systems, LLC, an Arizona limited liability company ("PPS"), to the customer identified on the Purchase Order to which these Terms & Conditions are attached (the "Customer") and all purchase orders and the provision of all Products or Services by PPS are subject to the Terms & Conditions.

1. Prices. Except as provided herein, prices offered by PPS for Services or Products in any written quote or estimate ("Quote") will remain in effect for a period of fifteen (15) days after the date of the Quote (the "Quote Date"). After said fifteen (15) day period, prices are subject to change. Prices for Products to be used in any Work (hereafter defined) which are obtained by PPS from a third party, are subject to change at any time to account for any fluctuations in the market price after the Quote Date.

2. Purchase Orders. All Services or Products to be provided by PPS to Customer shall be pursuant to a written purchase order executed by PPS and the Customer (a "Purchase Order"), referencing the scope of work described on the Quote, which will, at a minimum, include a description of the Services or Products to be provided by PPS (collectively, the "Work"), and the compensation to PPS therefor. PPS shall have no obligation to proceed with any Work until such time that it has received a fully executed Purchase Order and any initial deposit required there under.

3. Change Orders. The parties may only modify or add to the Work described in the Purchase Order by executing a written change order describing in reasonable detail the modified or additional Work to be completed and any adjustments to the schedule or the compensation to PPS therefore (a "Change Order"). PPS shall have no obligation whatsoever to commence or complete any additional or modified Work unless and until Customer and PPS have executed a Change Order.

4. Plans and Specifications; Scheduling. PPS shall complete or provide all Work in substantial conformity with written specifications, drawings and descriptions provided by Customer to PPS (collectively, "Customer Specifications"). PPS shall have no liability to Customer for any delays, damages or claims of any kind arising from defects, omissions, errors or deficiencies in the Customer Specifications and Customer shall defend, indemnify and hold PPS harmless for, from and against any and all liability, damages, claims, losses and expenses, including attorneys' fees and costs, arising therefrom or related thereto. PPS will furnish detailed joint design, pipeline layouts and manufacturing drawings for Customers' approval prior to commencing pipe manufacture at no extra cost. Drawings will be provided one (1) week after receipt of the approved layout.

5. Shipping. Shipping rate and delivery date will be arranged by mutual written agreement between PPS and Customer upon receipt of approved drawings. Any revised delivery schedule will be negotiated between PPS and Customer and will take into account PPS' current schedules of work on hand as well as current availability and prices of materials. Any delays on the project resulting in production or delivery delays longer than thirty (30) days may result in an escalation charge in an amount determined by PPS in its sole discretion. Prices are based on delivers in full truckload lots. Deliveries requested for material in quantities less than truckload lots will be billed to Customer at the full truck load rate. Internal bracing,

stulling, and shoring are placed in pipe at the time of manufacture for the purpose of limited pipe deflection during hauling and handling. PPS is not responsible for internal bracing required for the installation or grouting of the pipe. Any special requirements, i.e. vertical elongation etc., will be the sole responsibility of Customer. Shipping Cradles and stull are the property of PPS and are to be grouped and reloaded on trucks, at Customer's expense, for reuse by PPS, if requested. Any bunks or stulls not returned in reusable condition will be billed to the Customer's account at full replacement cost. Risk of loss or damage shall pass to Customer when Products are delivered to Customer or delivered to or picked up by the shipping company.

6. Payment Terms. Payment terms are net thirty (30) days from the date that PPS sends an invoice to Customer for the amounts due. Any amounts not paid within such thirty (30) day period shall accrue interest thereafter until paid in full at a rate which is the lesser of eighteen percent (18%) per annum or the highest rate allowed under applicable laws, computed on a 365/360 day year basis. In addition, in the event that the Customer fails to pay the full amount due within thirty (30) days after PPS has sent Customer an invoice, PPS shall be entitled to exercise any of its available remedies under applicable law, which include suspension of any further work by PPS and retention of any equipment or other personal property owned by the Customer and in PPS' possession, until all past due amounts owing to PPS have been paid in full. PPS will invoice Customer for 100% of raw material (no retention) upon its arrival at PPS' facility. PPS will invoice Customer monthly for progress payments (less retention) per a PPS supplied schedule of values. PPS will invoice for all final amounts including retention amounts, after completion of the Work.

6. Warranty. PPS warrants that Products and Services provided by PPS to Customers are free from defects in material and workmanship. PPS' obligation under this warranty is limited to correction of defects in Products or Services which were provided by PPS. Within ten (10) calendar days after discovery of any defective Services or Products provided by PPS, Customer shall provide PPS written notice of such defect. This warranty does not cover any repairs or replacement required due to a Customer or third parties' accident, abuse, misuse, failure to maintain, disassembly, repair, modification, negligence, fault, or natural or man-made disaster. PPS shall have no liability to Customer for any: (a) consequential, special, indirect, incidental, punitive, or liquidated damages; or, (b) damages to or from products or services not furnished by PPS; or, (c) repair, replacement or other expenses incurred by Customer in correcting defective Products or Services provided by PPS. PPS' warranty will remain in effect for a period of twelve (12) months from the date the Products or Services were provided or completed. Notwithstanding the foregoing, with respect to new equipment, PPS' warranty will remain in effect until the earlier of: (i) twelve (12) months from the time the new equipment is placed into service; or, (ii) eighteen (18) months from the date of delivery to the Customer. PPS' warranty for new equipment shall apply only if Customer properly stores, maintains and operates said equipment in accordance with the original equipment manufacturer's procedures and specifications. EXCEPT FOR PPS' EXPRESS WARRANTY CONTAINED HEREIN, PPS IS NOT MAKING AND HEREBY EXPRESSLY DISCLAIMS ANY OTHER IMPLIED OR EXPRESS WARRANTIES WITH RESPECT TO THE SERVICES AND PRODUCTS. WITHOUT LIMITING THE FOREGOING, PPS EXPRESSLY DISCLAIMS ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

7. Indemnification. PPS will indemnify and hold Customer harmless for, from and against any and all claims, damages, liability, losses, or expenses, including reasonable attorneys' fees and costs pursuant

to Arizona statutes, arising from or relating to PPS' breach of the Purchase Order or the Terms & Conditions. Customer will indemnify and hold PPS harmless for, from, and against any and all claims, damages, liability, losses or expenses, including reasonable attorneys' fees and costs pursuant to Arizona statutes, arising from or relating to Customer's breach of the Purchase Order or the Terms & Conditions. Notwithstanding anything to the contrary, under no circumstances will either party be liable to the other party for consequential, special, indirect, incidental, punitive, or liquidated damages.

8. Shortages, Defects or Errors. Customer shall give prompt written notice to PPS of any shortages, defects or errors in any Products or Services, which notice shall be given to PPS no later than ten (10) business days of Customer's receipt of the Product or the provision of Services.

9. Title. Title to Products provided by PPS shall not pass to Customer until PPS has received full payment of all amounts due for all Services performed and Products provided by PPS.

10. Cancellation. Customer may cancel a Purchase Order by providing written notice to PPS, provided, however, Customer will be obligated for all unpaid Work completed up to and including the date that PPS receives written notice of cancellation, plus PPS' reasonable profit for uncompleted Work under the Purchase Order.

11. Force Majeure. Neither PPS nor the Customer shall be liable for any damages, claims or liability of any kind arising from delay in performance caused by a "Force Majeure Event". As used herein, "Force Majeure Event" shall mean acts of God; acts of terrorism; explosion; fire; extreme weather conditions; flood; drought; epidemic; pandemic; earthquake; riot; insurrection; blockade; war or other hostilities; strike, lockout or other industrial disturbance; act or restraint of governmental authority whether valid or invalid; the refusal or failure of any governmental authority to promptly issue or grant any necessary governmental authorizations, permits, licenses, certificates or approvals or the action or inaction of any governmental authority which causes the lapse or expiration of any of the foregoing; shortages of materials or Products to be incorporated in the Work, and any other cause or event which is reasonably beyond the control of the party and which the party is not able to overcome by the exercise of reasonable diligence, provided, however, that neither party shall be required to settle any strike, work stoppage or other labor dispute on terms which, in its opinion, are unsatisfactory. If any delay in PPS' performance is attributable to a Force Majeure Event, the time for performance shall be extended for a period equal to the time of the delay caused by the Force Majeure Event. Notwithstanding the foregoing, the occurrence of a Force Majeure Event shall not excuse or delay any payment obligation under the Purchase Order or the Terms & Conditions.

12. Access and Cooperation. Customer shall provide PPS access to the Work site at all times during PPS' normal hours of business to enable PPS to complete the Work and shall otherwise cooperate with PPS so that the Work may be completed on a timely and efficient basis. Such cooperation shall include providing information to PPS necessary to obtain permits or other required governmental approvals for the Work and coordination with Customer's other contractors or employees to enable PPS to complete the Work without interference or interruption.

13. Jurisdiction, Venue and Waiver of Jury Trial. These Terms & Conditions and all Purchase Orders between PPS and Customer shall be interpreted and enforced according to Arizona substantive laws, without regard to Arizona's choice of law provisions. Any disputes between the parties arising from these Terms & Conditions or the Purchase Order shall be brought and maintained in a court of competent jurisdiction in Maricopa County, Arizona. PPS and Customer hereby irrevocably waive any and all rights they have to demand that any action, proceeding or counterclaim arising out of or in any way related to these Terms & Conditions or any Purchase Order be tried by jury.

14. Attorney Fees. In the event that either party hereto institutes an action or other proceeding to enforce any rights arising under these Terms & Conditions or any Purchase Order, the party prevailing in

such action or other proceeding shall be paid all reasonable costs and reasonable attorneys' fees by the other party pursuant to Arizona statutes.

15. Entire Agreement. Incorporation and Modification. These Terms & Conditions and the applicable Purchase Order contain the entire agreement between the parties. These Terms & Conditions and the Purchase Order have been negotiated among the parties and, if there is any ambiguity, no presumption construing these Terms & Conditions or the Purchase Order shall be imposed because the same were prepared by such party or its attorney. These Terms & Conditions are hereby incorporated in and as a part of all Purchase Orders. To the extent that there is any conflict in the terms of these Terms & Conditions and the terms of a Purchase Order, these Terms & Conditions shall control, unless the Purchase Order, by its express terms, supersedes these Terms & Conditions by specific reference to the provision of these Terms & Conditions so modified. No modification of these Terms & Conditions or any Purchase Order shall be of any force or effect unless such modification is in writing and executed by both of the parties. These Terms & Conditions shall control over all additional or conflicting terms and conditions that may appear on Customer written documents, including purchase orders, delivery tickets, service order tickets, invoices or any other document and PPS' signature on any Customer written document shall not constitute PPS' consent to any terms and conditions set forth in such document. Notwithstanding the foregoing, the terms of the Purchase Order shall control over any conflicting Customer Specifications.

16. Notices. All notices or other communications required or provided to be given by either party shall be in writing and shall be hand delivered, transmitted by email or by United States first class mail, postage prepaid. Notices shall be deemed given upon hand delivery, or if sent via email, upon transmission provided the same is also sent on the date of transmission by first class mail, postage prepaid, or if mailed, three (3) calendar days after such notice is deposited in the mail, in each case, addressed to the parties to the addresses set forth in the Purchase Order. Any party may change the address to which notice shall be delivered or mailed or emailed by written notice duly given.

17. Severability and Waiver. The invalidity or unenforceability of any provision hereof shall in no way affect the validity or enforceability of any other provision hereof. Any waivers must be in writing and signed by the party sought to be charged. The waiver by any party of a right provided thereunder shall not be deemed to be a continuing waiver of that right or a waiver of any other right.

18. Miscellaneous. In these Term & Conditions: (i) the singular includes the plural and vice versa and reference to any gender includes each other gender; (ii) reference to any person includes such person's successors and assigns but only if such successors and assigns are not prohibited by these Term & Conditions; (iii) "hereunder," "hereof," "hereto," and words of similar import shall be deemed references to these Terms and Conditions as a whole; (iv) reference to any agreement, document or instrument means such agreement, document or instrument as amended or modified and in effect from time to time in accordance with the terms thereof; (v) references to documents, instruments or agreements shall be deemed to refer as well to all addenda, exhibits, schedules, restatement, supplements or amendments thereto; (vi) references to "day" or "days" mean calendar days; (vii) "including" (and with correlative meaning "include") means including without limiting the generality of any description preceding the word "including"; (viii) where specific language is used to clarify by example a general statement contained herein, such specific language shall not be deemed to modify, limit or restrict in any manner; (ix) "or" is used in the inclusive sense of "and/or"; (x) with respect to the determination of any period of time, "from" means "from and including" and "to" means "to but excluding"; (xi) references to amounts of money expressed in Dollars are references to United States Dollars; and (xii) any action required hereunder to be taken within a certain number of days shall, except as may otherwise be expressly provided herein, be taken within that number of days excluding the day on which the counting is initiated and including the final day of the period.

October 4, 2024

Archer Western
Tony Jennaro
4710 East Elwood Street
Suite 6
Phoenix, AZ 85040

RE: City of Chandler- Pecos Surface Water Treatment Plant Filter Improvements

Tony,

Below, please find the updated price to prepare and coat submerged concrete surfaces as outlined in project documents for the above-mentioned project. As discussed during our meeting this week, the coating limits have been better defined. Since coating will terminate approximately One (1) Foot above the water line, a termination line will be cut to allow coating to terminate inside newly cut void. This ensures that there is no leading edge of Xypex Coating Material. As mentioned, AO intends to erect scaffolding to access elevated surfaces safely. This scaffold will protect the under-drain system from spent abrasive and Xypex Material during rehabilitation. AO will contract a scaffold builder to evaluate under-drain conditions and develop a scaffold system that will focus on disbursing the weight of the scaffold as well as protecting under-drain. Also shown is the price to coat new small-diameter piping.

Care will be taken to properly cure Xypex Material, which includes misting the surface a minimum of three (3) times a day for three (3) days following installation. Along with erecting scaffolding, tarps will be used to cover basins to allow for proper curing of Xypex. Depending on environmental conditions, the shade created will help ensure Xypex Cures at the required rate. AO will coordinate with the Xypex Technical Representative before application to ensure that the coating approach is acceptable to the Xypex Representative.

Concrete Waterproofing

- Abrasive Blast Concrete to ICRI CSP 3 Surface Profile
- Two (2) Coats of Xypex Concentrate @ 1/16 inch Per Coat

Project Approach

- Mobilize equipment before shutdown begins
- Coordinate scaffold sub-contractor to develop a preliminary design of proposed scaffold towers and have materials onsite before shut-down to minimize downtime.
- Develop a workflow to ensure work begins immediately on North and South Settled Water Channels since these do not have any under-drains to protect.
- As surface preparation begins, another crew will begin to cover the first portion of the channels ready to receive coating.
- Once the surface has been inspected and approved, termination lines will be cut in preparation for the coating application; this will also include masking surfaces above the termination line to protect from over-spray.
- Multiple crews will be used to complete multiple tasks simultaneously, completing the project within the allowed time.

- Once the Coating is applied, a quality control crew will ensure that the coated surface maintains the correct amount of moisture to cure properly. This includes misting the surfaces three (3) times daily for three (3) days.
- A Quality Control Manager on site will oversee the daily activities and electronically document environmental conditions and progress, including pictures and other important information. These daily logs will be submitted to Archer Western at the end of each shift.
- Special equipment will be used to ensure that work is being completed most efficiently. 12,000 CFM dust collector will minimize the dust created during the abrasive blast process and allow work to continue in neighboring basins. A Hurricane Vac will be used to remove spent abrasive. This will allow for a smaller clean-up crew, thus utilizing other crew members to help with the coating application

Proposed Schedule

November 18-26
- Mobilize equipment and coordinate with the scaffold subcontractor to ensure the majority of scaffold components are on site and ready to start on December 2.

December 2-13
- Scaffold erection to being in North and South Settled Water Channels then continuing to basins and filter gullets

December 5-13
- Surface Preparation and Termination Line in North and South Settled Water Channel

December 16-20
- Coating Application in North Settled Water Channel

December 23-January 3
- Surface Preparation begins in basins

January 6-10
- Surface Preparation begins in filter gullets

January 13-17
- Coating application in South Settled Water Channel

January 20- February 28
- Coating Application in basins and filter gullets

March 3-14
- Scaffold demobilization and clean up

March 17-19
- Final Inspection and clean up

Breakdown

Description	**Price**
Submerged Concrete Surfaces-Xypex	**$645,777.00**
Above Grade Small Diameter Pipe	**$ 10,965.00**
Bond Rate	**3%**

Above Prices Include

- Labor
- Material
- Equipment
- Confine Space Equipment
- Scaffold
- Supervision
- Quality Control Manager
- Disposal

Exclusions

- Existing Mechanical Surfaces
- Architectural Coating
- Caulking
- Sealers
- Taxes and Bonds
- 3rd Party Inspection

If you have any questions, please feel free to contact me.

Best Regards,

Alex "Bruiser" Ortega

Alex "Bruiser" Ortega
Secretary-Treasurer

RILEY INDUSTRIAL SERVICES, INC.

PLANT LOCATION
2615 SAN JUAN BLVD FARMINGTON, NM 87401
PHONE (505) 327-4947

MAILING ADDRESS
P.O. BOX 2014 FARMINGTON, NM 87499
FAX (505) 326-0305

October 4, 2024

Archer Western

Attention: Tony Jennaro

Re: City of Chandler – Pecos WTP – Xypex lining of concrete filter Basins

We hereby submit our proposal for the above referenced project. Our figures include the supervision, labor, equipment, and materials to complete the following scope of work based on 18,144 sf of concrete surface to coated; to include Basin walls up to 1' above water level.

Basic Scope:

- Mobilize men and equipment to the job site.
- Vapor abrasive and water blasting to prepare the concrete surfaces to achieve a surface profile of ICRI CSP3.
- Application of Xypex:
  - Apply the first coat of Concentrate at a rate of 6-7.2 sf per pound as a cementitious slurry coat per manufacturer's data sheet recommendations.
  - Apply a second coat of Modified at a rate of 6-7.2 sf per pound to reinforce the Concentrate per manufacturer's data sheet recommendations.
- Wet curing per manufacturer's data sheet recommendations.
- Rig down and remove equipment from site.

PRICE $1,803,515.00 (see note 3)

Notes:

1. No taxes have been added; if there are applicable taxes, they will be added to the billing invoice.
2. Pricing does not include bonding; our bonding rate is 1.2%.
3. If it is decided to coat all the way to the top (Scenario 2) of the wall, please add $163,116.00 to the above price.
4. Archer Western to provide:
   - Sanitary facilities
   - Clean water source
   - Draining of water and removal of any media.
   - Protecting underdrains using plywood.
5. Exclusions:
   - Tenting or heating
   - Removal of any media
   - Patching of deteriorated concrete to level the surface
   - Epoxy injection of large cracks

6. We anticipate 2-3 weeks' notice for a scheduled start up

Anticipated project duration: *

Task	Number of Days
Mobilize equipment to the site	1
Side #1: Set up scaffolding and equipment	2
Surface prep (abrasive vapor / water blasting)	5-7
Application of Xypex Concentrate slurry coat	8-10
Application of Xypex Modified top coat	8-10
Water curing	3-4
Side #2: Set up scaffolding and equipment	1
Surface prep (abrasive vapor / water blasting)	5-7
Application of Xypex Concentrate slurry coat	8-10
Application of Xypex Modified top coat	8-10
Water curing	3-4
Rig down, load up and demobilize from site	1
Total	53-67

(*) Based on having access to half of the facility at the same time.

Client Acceptance and Award

Authorized Signature _____ Printed Name _____

Title _____ Date _____

Note: By signing, client agrees to pay quoted amount and agrees to the terms explained in the work notes; see also our "Terms and Conditions" and initial the page. Acceptance needs to be returned before scheduling and performance of said work.

If you have any questions, please feel free to E-mail me at ralphd@rileyindustrial.com or call 505-327-4947 for my immediate attention.

Sincerely,

Ralph S. Doolin
Sr. Project Estimator

ELECTRICAL QUOTES

Felix Construction Company
License # L11 - 172036

Project **Chandler Pecos WTP Filter Improvements** **Date** **2024.10.03**

Quoted Scope of Work

Number	Description	By Felix E/I&C	By Others
1	NOTE 1: This bid is based on the Chandler Pecos WTP Filter Improvements - Phase III City Project NO. PW3-925-4631 (Hazen) NOTE 2: Commodities, such as Copper Wire, are quoted based on 2024.10.03 pricing.	**NOTE**	**NOTE**
2	CIVIL (100) - N/A		**All Civil/Site Work By OTHERS**
3	CONDUIT (200) - Felix EI&C to Provide and Install PVC-CTD GRC Conduit in Above Ground Applications, and Anaconda Flex Conduit (UA) for Above Ground Applications. **AG (1"):** PVC-CTD GRC Conduit, PVC-CTD GRC Couplings, PVC-CTD GRC 90-Degree Elbows, PVC-CTD GRC LB Form 8, PVC-CTD GRC Myers Hubs w/ Ground, GRC Conduit, GRC Coupling, GRC 90-Degree Elbows, GRC Myers Hub w/ Ground, Anaconda Flex Conduit (UA), Flex Conduit 45-Degree Connector, Flex Conduit Straight Connector, Sealing Washer & Locknut, and PVC-CTD GRC and/or SS316 Conduit Strut Straps.	**Provided and Installed by Felix E/I&C**	**N/A**
4	CABLE & WIRE (300) - Felix EI&C to Provide and Install XHHW-2 for all Power and Non-Signal Control Wire, Belden TSP and Belden CAT6 for All Signal Wire. **Branch Circuits:** #12 AWG XHHW CU (STR), #14 AWG XHHW CU (STR), Belden 9318 (#18AWG/2 + Shield), and Machine Coded Sleeves for All Cables.	**Provided and Installed by Felix E/I&C**	**N/A**
5	LIGHTING (400) - N/A	**N/A**	**N/A**
6	GEAR (500) - Felix EI&C to Provide and Install Eight (8) 20A, 22kAIC, Bolt-On Branch Circuit Breakers in Panel: PP-FCP and One (1) 20A, 22kAIC, Bolt-On Branch Circuit Breaker in Panel: LP-DIS-1.	**Provided and Installed by Felix E/I&C**	**N/A**
7	GENERATOR (500) - N/A	**N/A**	**N/A**
8	INSTRUMENTATION (600) - Felix EI&C to Provide and ELECTRICALLY Install Four (4) 1" Flow Meters w/ Grounding Rings, One (1) Pressure Gauge w/ Ball Valve, Snubber , One (1) Pressure Switch, and One (1) 316SS Process Tree, One (1) Flow Switch. **Spare Flow Meter** - Felix EI&C to Provide One (1) Spare Flow Meter **Electrical Installation Only:** One (1) Metering Pump, Four (4) MOV's, One (1) Pressure Switch.	**Provided and Electrically Installed by Felix E/I&C**	**Instruments and Field Devices Installed by Others. Valves Procured by Others.**
9	CONTROL AND PUMP PANELS (600) - N/A	**N/A**	**N/A**

Number	Description	By Felix E/I&C	By Others
10	FABRICATION (700) - Felix EI&C to Proved and Install 316 SS Strut and Hardware As-Required to Complete Electrical Installation.	**Provided and Installed by Felix E/I&C**	**N/A**
11	OTHER MISC. (800) - Felix EI&C to Provide Contractor Testing and Owner/Engineer Start-Up, Electronic Submittals for All Felix EI&C Provided Equipment, As-Builts, and Field Reports.	**Provided by Felix E/I&C**	**N/A**
12	**Programming - Not Included in Bid**	**N/A**	√
13	**Spare Parts - Included in bid (Flow Meter Only).**	√	
14	Private Locating and Blue Stake	**N/A**	**N/A**
15	Painting and Coatings	**N/A**	**N/A**
16	Shade Structures SES or other Exterior Locations	**N/A**	**N/A**
17	Coordination / Arc Flash Study	**N/A**	**N/A**
18	As-Built / Red Lines	√	
19	Start-up/Calibrate Felix supplied Controls and Instruments	√	
20	Testing and Commissioning	√	
21	Plant MOPO's	**N/A**	**N/A**
22	Owner Site Training	√	
23	Concrete Pad's, Foundations, Curb's	**N/A**	**N/A**
24	Concrete embed sill's and custom specialty items	**N/A**	**N/A**
25	Concrete Coring, Saw cutting and Surface Restoration	**N/A**	**N/A**
26	Painting and Surface Restorations	**N/A**	**N/A**
27	Accelerated Schedules / Off Shift and Overtime Work	**Excluded**	**Excluded**
28	Trash Receptacles	**N/A**	**N/A**
29	Sanitary Facilities	**N/A**	**N/A**
30	Temporary Power	**N/A**	**N/A**
31	Construction Water	**N/A**	**N/A**
32	Permits / Permit Fees	**N/A**	**N/A**
33	Utility & Utility Fees	**N/A**	**N/A**
34	Taxes	**N/A**	**N/A**
NOTE: This Bid/Scope excludes the Power Study/Test called out on in the notes on SHEET E-08			
NOTE: This Bid/Scope excludes the Fiber Network, Ethernet Network, and PLC Programming on SHEET 1-02			
	Per Bid Scope, Construction Plans & Specifications.	**$ 273,989.78**	
Signature:		**Date:**	
Estimator:	Trent Gillespie 602.618.2620		
	trentg@felixconstruction.com		

Proposal Clarifications

Project: **Chandler Pecos WTP Filter Improvements**
Date: **2024.10.03**
Revision: **Rev 0**

Includes:

1 **AG (1"):** PVC-CTD GRC Conduit, PVC-CTD GRC Couplings, PVC-CTD GRC 90-Degree Elbows, PVC-CTD GRC LB Form 8, PVC-CTD GRC Myers Hubs w/ Ground, GRC Conduit, GRC Coupling, GRC 90-Degree Elbows, GRC Myers Hub w/ Ground, Anaconda Flex Conduit (UA), Flex Conduit 45-Degree Connector, Flex Conduit Straight Connector, Sealing Washer & Locknut, and PVC-CTD GRC and/or SS316 Conduit Strut Straps.

2 **Branch Circuits:** #12 AWG XHHW CU (STR), #14 AWG XHHW CU (STR), Belden 9318 (#18AWG/2 + Shield), and Machine Coded Sleeves for All Cables.

3 Felix EI&C to Provide and Install Eight (8) 20A, 22kAIC, Bolt-On Branch Circuit Breakers in Panel: PP-FCP and One (1) 20A, 22kAIC, Bolt-On Branch Circuit Breaker in Panel: LP-DIS-1.

4 Felix EI&C to Provide and ELECTRICALLY Install Four (4) 1" Flow Meters w/ Grounding Rings, One (1) Pressure Gauge w/ Ball Valve, Snubber , One (1) Pressure Switch, and One (1) 316SS Process Tree, One (1) Flow Switch.
Spare Flow Meter - Felix EI&C to Provide One (1) Spare Flow Meter
Electrical Installation Only: One (1) Metering Pump, Four (4) MOV's, One (1) Pressure Switch.

5 Felix EI&C to Proved and Install 316 SS Strut and Hardware As-Required to Complete Electrical Installation.

6 Felix EI&C to Provide Contractor Testing and Owner/Engineer Start-Up, Electronic Submittals for All Felix EI&C Provided Equipment, As-Builts, and Field Reports.

Excludes:

1 All Civil Requirements - **Provided by OTHERS**
2 Any General Conditions - **Provided by OTHERS**
3 All Mechanical Requirements - **Provided by OTHERS**
4 All Structural Requirements - **Provided by OTHERS**
5 Valves & Motors/Pumps - **Provided by OTHERS**
6 **Power Study/Test called out on in the notes on SHEET E-08**
7 **Fiber Network, Ethernet Network, and PLC Programming on SHEET I-02**
8 Concrete Encased Duct Banks.
10 Pressure Switch or Pressure Transmitter
11 Temporary Power or Controls.
12 Conduit, Conductors, Wiring Devices, Trim Devices - Not Indicated on Construction Plans
13 ALL PLC/OIT/SCADA Software and Licenses
14 ALL Spare Parts - **EXCEPTION for One (1) Flow Meter as called out on in SPEC: 40 71 13.13.1.03.A**
15 Anything Not Listed Includes or Quoted Scope of Work.

Clarifications:

1 Due to current market volatility, material pricing is subject to the terms stated on the included material quotes, some of which may establish that final pricing will be determined at the time of shipment.

2 OTHERS TO INSTALL PROCESS DEVICES SUCH AS FLOW METER(S), PSH, FSL

Price Assumes:

1 Normal Working Hours

Assumes Owner to Provide:

1 Access to Site.

Project Contingency Usage:

1 N/A

Project Allowance Details:

1 N/A

PIPE & PIPE SUPPORT QUOTES

PROJECT NAME	PECOS SURFACE WATER TREATMENT PLANT FILTER IMPROVEMENTS - PHASE III
BID DATE	10/24/2024
OWNER	CITY OF CHANDLER
ENGINEER	HAZEN & SAWYER
SCOPE	PIPE AND PIPE SUPPORTS
ESTIMATOR INITIALS	TJ

BID QUANTITIES					FERGUSON		CAP FLOW (CARRIED TO GMP)		COPPER STATE NUT AND BOLT (CARRIED TO GMP)	
AREA	BID ITEM NO.	ITEM DESCRIPTION	QTY	UNIT	UNIT AMOUNT	BID	UNIT AMOUNT	BID	UNIT AMOUNT	BID
110	40.110.105	1'' FAP CHEMICAL CPVC	420	LF	$ 3.16	$ 1,327.20	$ 2.69	$ 1,128.00		
		1'' FTG 90, FAP CHEMICAL CPVC	50	EA	$ 4.44	$ 222.00	$ 6.00	$ 300.00		
		1'' FTG CAP, FAP CHEMICAL CPVC	10	EA	$ 8.53	$ 85.30	$ 9.00	$ 90.00		
		1'' FTG T, FAP CHEMICAL CPVC	9	EA	$ 6.01	$ 54.09	$ 10.84	$ 97.56		
		1'' FTG UNION, FAP CHEMICAL CPVC	14	EA	$ 12.27	$ 171.78	$ 10.00	$ 140.00		
		1'' BALL V-PORT BALL VALVE, FAP CHEMICAL - MANUAL	2	EA	$ 179.16	$ 358.32	$ 900.00	$ 1,800.00		
		1'' BALL V-PORT BALL VALVE, FAP CHEMICAL - EMO	4	EA	$ 7,993.00	$ 31,972.00	$ 7,086.84	$ 28,347.34		
		1" CPVC VANSTONE FLANGE	16	EA	$ 13.00	$ 208.00	$ 10.00	$ 160.00		
		REMOTE STATION	4	EA	$ 812.50	$ 3,250.00	$ 812.50	$ 3,250.00		
110	40.110.110	1 5/8 X 1 5/8 X 10' 12 GA SINGLE HALF SLOT STRUT 304 S/S 10FT	100	LF	NOT INCLUDED		$ 12.50	~~$ 1,250.00~~	$ 9.59	$ 958.53
		1" RIGID PIPE CUSHION CLAMP 304 S/S	99	EA	NOT INCLUDED		$ 12.00	~~$ 1,188.00~~	$ 11.12	$ 1,100.88
		3 HOLE (1 5/8 DEPTH X 3 1/2 LENGTH) Z FITTING 304 S/S	198	EA	NOT INCLUDED		$ 25.00	~~$ 4,950.00~~	$ 10.92	$ 2,162.48
		1/2" X 4 1/4" WEDGE ANCHOR 316 S/S	198	EA	NOT INCLUDED		$ 10.00	~~$ 1,980.00~~	$ 5.74	$ 1,135.53
				SUBTOTAL		$ 37,648.69		$ 35,312.90		$ 5,357.42
				BOND TOTAL	0.00%	$ -	0.00%	$ -	0.00%	$ -
				TEXTURA TOTAL	0.22%	$ 82.83	0.22%	$ 77.69	0.22%	$ 11.79
				BID AMOUNT TOTAL		$ 37,731.52		$ 35,390.59		$ 5,369.20

Mrs. Jamie Germann
Outside Sales, AZ~NM~El Paso
Strategic Infrastructure Group (Plant Division)

Ferguson Waterworks
1324 S. 3rd Street # 140 Phoenix, AZ 85004
Office (602) 495-8420
Direct Mobile (480) 619-3382
E: jamie.germann@ferguson.com

Pricing valid for 30 days - 9/27/24
Quoting import materials - no specifications provided - pricing subject to change if specs do

Line	Description	QTY	UOM	SELL	EXT	Notes	Lead time
Chemical	1" FAP CHEMICAL	380	LF	$ 3.16	$ 1,201.05	QUOTING 380LF V/ 377LF PER 20' SOLD	
Chemical	1" FTG 90, FAP CHEMICAL	48	EA	$ 4.44	$ 213.12		
Chemical	1" FTG CAP, FAP CHEMICAL	8	EA	$ 8.53	$ 68.27		
Chemical	1" FTG T, FAP CHEMICAL	7	EA	$ 6.01	$ 42.09		
Chemical	1" FTG UNION, FAP CHEMICAL	12	EA	$ 12.27	$ 147.28	QUOTING 1" CPVC S80 SW EPDM UNION	
Chemical	1" BALL V-PORT BALL VALVE, FAP CHEMICAL - MANUAL	2	EA	$ 179.16	$ 358.32	QUOTING CPVC/EPDM SST BALL WITH INDICATOR	APPRX 6-8 WEEKS ARO
Chemical	1" BALL V-PORT BALL VALVE, FAP CHEMICAL - EMO	4	EA	$ 7,993.00	$ 31,972.00	QUOTING CPVC/EPDM SST BALL WITH INDICATOR AND 120VAC EMO	APPRX 14-16 WEEKS ARO
Chemical	1" BALL MAGNETIC FLOW METER, FAP CHEMICAL	4	EA	$ -	$ -	No bid	
Chemical	10' FEET OF 1/2" REINFORCED FLEX TUBE FOR CHEMICAL PUMP + 4 CLAMPS SEE PICTURES	1	EA	$ -	$ -	No bid	
				$ -	$ -		
	Add for waste			$ -	$ -		
				$ -	$ -		
Chemical	1" FAP CHEMICAL	420	LF	$ 3.16	$ 1,327.20		
Chemical	1" FTG 90, FAP CHEMICAL	50	EA	$ 4.44	$ 222.00		
Chemical	1" FTG CAP, FAP CHEMICAL	10	EA	$ 8.53	$ 85.33		
Chemical	1" FTG T, FAP CHEMICAL	9	EA	$ 6.01	$ 54.12		
Chemical	1" FTG UNION, FAP CHEMICAL	14	EA	$ 12.27	$ 171.73	QUOTING 1" CPVC S80 SW EPDM UNION	
					$ 35,862.44		

PHX
3602 N 35th Ave
Phoenix, AZ 85017-4408
USA

Quotation

QT04400509-1

Quotation **QT04400509-1**

 9/25/2024 1:9:32 pm

Ordered by: Javier Acosta
Order Date: 9/25/2024
Expiry Date: 10/2/2024
Mode of delivery:
Delivery notes:
Delivery terms: FOB Origin, PPD & Add
Carrier account number:
Weight (estimated): 0.00
Tax Group: AVATAX
Cash Discount: 0% 0 Days
Payment Days: 0

Customer: ARC02500
Archer Western Contractors, LLC.
4710 E Elwood St
Ste 6
PHOENIX, AZ 85040
USA

Delivery Address: **Archer Western Contractors, LLC.**
3625 S. Winchester Rd
Apache Junction, AZ 85119
USA

Cust P.O.:
Cust Ref:
Contact:
Phone:
Mobile:
Email:

Notes:

# Boxes	# Bundles	# Other	Stage Area

	Item Number/Customer	Config/Source	Description	Quantity	Unit	Availability	Unit Price	Ext. Price	Sales Tax
1	23STA1201H3-10	Bundle .	1 5/8 x 1 5/8 x 10' 12 Ga Single Half Slot Strut 304 S/S	100	Ft	Stock	9.5853	958.53	82.44
2	23PC113-100	. .	1" Rigid Pipe Cushion Clamp 304 S/S	99	Ea	5-7 Days	11.1200	1,100.88	94.68
3	23ZF043	. .	3 Hole (1 5/8 Depth x 3 1/2 Length) Z Fitting 304 S/S	198	Ea	5-7 Days	10.9216	2,162.48	185.98
4	21SW-0500425	. .	1/2" X 4 1/4" Wedge Anchor 316 S/S	198	Ea	Stock	5.7350	1,135.53	97.66

For a complete copy of our Terms & Conditions, please visit our website at www.copperstate.com:
It is the policy of Copper State Bolt & Nut Co. to offer only the highest quality products supplied by established and approved vendors. We assume no liability beyond replacing defective merchandise and refunding the purchase price, providing a claim is processed within a reasonable amount of time. We will not allow claims for consequential damage, transportation charges or for labor or other expenses incurred in removing defective products or installing replacement material. Any product manufactured by Copper State is manufactured per applicable specifications and tested per those specifications in accredited laboratories.

We hereby disclaim all warranties of fitness, fitness for purpose, and/or merchantability, express or implied, other than the limited return and replacement right set forth above and any warranties which the manufacturer may supply.

Sub Total	5,357.42	460.76
Freight:	0.00	
Order Total USD	5,818.18	

Capital Flow Arizona LLC

304 S Price Rd
Tempe, AZ 85281

Estimate

Date	Estimate No.
9/20/2024	1469

Name/Address

ARCHER WESTERN
4710 E ELWOOD ST, STE 6
PHOENIX, AZ 85040
USA

Ship To

WILL CALL

Payment Method	FOB
Net 30	JOBSITE

Project

Qty	U/M	Description	Unit Cost	Total
		****PECOS SWTP FILTER IMPROVEMENTS****		
420	ft	01"x20'-0" SCH80 CPVC PIPE (PE)	2.68571	1,128.00
50	ea	01" SCH80 CPVC 90° BEND - SxS	6.00	300.00
10	ea	01" SCH80 CPVC SLIP CAP	9.00	90.00
9	ea	01"x01" SCH80 CPVC TEE - SxSxS	10.84	97.56
16	ea	01" SCH80 CPVC VANSTONE FLANGE	10.00	160.00
14	ea	01" SCH80 CPVC SxS UNION w/EPDM SEALS	10.00	140.00
4		01" 150lb. FLG'd SS V-PORT BALL VALVE w/ADCWX150UL2Y1Z-UP EMO	7,086.835	28,347.34
4	ea	REMOTE STATION REBUILD	812.50	3,250.00
2	ea	01" 150lb FLG'd SS V-PORT BALL VALVE w/LEVER HANDLE	900.00	1,800.00
1	ea	BLUE WHITE PERISTALTIC PUMP - PWTP-PLY-PMP-3505	9,923.75	9,923.75
100	ft	1-5/8"x1-5/8" 304ss STRUT w/ELONG HOLES	12.50	1,250.00
99	ea	01" 304ss STRUT 'CUSH CLAMP' [1.315od]	12.00	1,188.00
100	ea	1-5/8" 304ss Z-FITTING	25.00	2,500.00
200	ea	1/2"x4-1/4" 316ss WEDGE ANCHOR	10.00	2,000.00

Total	$52,174.65

Phone #	E-mail
4803772838	eric@capfloww.com

PERISTALTIC METERING PUMP QUOTES

PROJECT NAME	PECOS SURFACE WATER TREATMENT PLANT FILTER IMPROVEMENTS - PHASE III
BID DATE	10/4/2024
OWNER	CITY OF CHANDLER
ENGINEER	HAZEN & SAWYER
SCOPE	METERING PUMP
ESTIMATOR INITIALS	TJ

CARRIED TO GMP

BID QUANTITIES					CAP FLOW		PRECISION INSTRUMENTS	
AREA	BID ITEM NO.	ITEM DESCRIPTION	QTY	UNIT	UNIT AMOUNT	BID	UNIT AMOUNT	BID
	46.110.105	BLUE WHITE PERISTALTIC PUMP PWTP-PLY-PMP-3505	1	LS	$ 9,923.75	$ 9,923.75	$ 8,586.03	$ 8,586.03
		NSF 61	1	LS	INCLUDED		INCLUDED	
		5 YEAR WARRANTY	1	LS	INCLUDED		INCLUDED	
		A4 TUBING	2	LS	$ 161.14	$ 322.28	$ 161.14	$ 322.28
		ROLLER ASSEMBLY	1	LS	$ 680.26	$ 680.26	$ 680.26	$ 680.26
		FIELD SERVICES	1	LS	INCLUDED		$ 1,750.00	$ 1,750.00
		SHIPPING	1	LS	INCLUDED		$ 150.00	$ 150.00
				SUBTOTAL		$ 10,926.29		$ 11,488.57
				BOND TOTAL	0.00%	$ -	0.00%	$ -
				TEXTURA TOTAL	0.22%	$ 24.04	0.22%	$ 25.27
				BID AMOUNT TOTAL		$ 10,950.33		$ 11,513.84

Capital Flow Arizona LLC

304 S Price Rd
Tempe, AZ 85281

Estimate

Date	Estimate No.
9/20/2024	1469

Name/Address

ARCHER WESTERN
4710 E ELWOOD ST, STE 6
PHOENIX, AZ 85040
USA

Ship To

WILL CALL

Payment Method	FOB
Net 30	JOBSITE

Project

Qty	U/M	Description	Unit Cost	Total
		****PECOS SWTP FILTER IMPROVEMENTS****		
420	ft	01"x20'-0" SCH80 CPVC PIPE (PE)	2.68571	1,128.00
50	ea	01" SCH80 CPVC 90° BEND - SxS	6.00	300.00
10	ea	01" SCH80 CPVC SLIP CAP	9.00	90.00
9	ea	01"x01" SCH80 CPVC TEE - SxSxS	10.84	97.56
16	ea	01" SCH80 CPVC VANSTONE FLANGE	10.00	160.00
14	ea	01" SCH80 CPVC SxS UNION w/EPDM SEALS	10.00	140.00
4		01" 150lb. FLG'd SS V-PORT BALL VALVE w/ADCWX150UL2Y1Z-UP EMO	7,086.835	28,347.34
4	ea	REMOTE STATION REBUILD	812.50	3,250.00
2	ea	01" 150lb FLG'd SS V-PORT BALL VALVE w/LEVER HANDLE	900.00	1,800.00
1	ea	BLUE WHITE PERISTALTIC PUMP - PWTP-PLY-PMP-3505	9,923.75	9,923.75
100	ft	1-5/8"x1-5/8" 304ss STRUT w/ELONG HOLES	12.50	1,250.00
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100	ea	1-5/8" 304ss Z-FITTING	25.00	2,500.00
200	ea	1/2"x4-1/4" 316ss WEDGE ANCHOR	10.00	2,000.00

Total	$52,174.65

Phone #
4803772838

E-mail
eric@capfloww.com

Precision Integrated Systems
PO Box 147
Wickenburg, AZ 85358
+1 9286845560
robbie@chemfeed.net

Estimate

ADDRESS	SHIP TO
Archer Western Construction, LLC 1830 N. 95th Avenue, Ste 114 Phoenix, AZ 85037 US	Archer Western Construction, LLC 1830 N. 95th Avenue, Ste 114 Phoenix, AZ 85037 US

ESTIMATE #	DATE	
7945	09/23/2024	

ITEM	DESCRIPTION	QTY	RATE	AMOUNT
M4S24-BNL	Blue-White M4S Series Peristaltic Pump- a. Design Capacity: 0.01 – 100 GPH (Flex-A-Prene Tubing) b. Design Pressure: 50 PSIG. c. Power Requirements: 120 Vac, 60 Hz, Single Phase. d. Inlet/Outlet Connections: 1/2" Barb d. Signal Inputs: i. Discrete: Run Command. ii. Analog: 4 – 20 mADC. e. Signal Outputs: i. Discrete: In Remote. ii. Discrete: Fail. iii. Discrete: On Status. iv. Analog: 4 – 20 mADC. b. Warranty: 5-Year c. NSF-61: Yes	1	8,586.03	8,586.03T
A4-BNL-T	A4 Tubing, 1/2" Tubing barb fitting, Flex-A-Prene 0.500 ID	2	161.14	322.28T
A4-MNL-R	Complete roller assembly, A4	1	680.26	680.26T
Service Call	Service Call - (one day onsite)	1 ~~3~~	1,750.00	5,250.00

Lead time: 3-4 weeks ARO

FOB: Origin

Terms: Net 30 on established account. Credit cards accepted with 3.5% transaction fee.

SUBTOTAL	14,838.57
TAX	0.00
SHIPPING	150.00
TOTAL	**$14,988.57**
	-$3,500
	$11,488.57

SAND INSTALLATION QUOTE

Pecos Surface Water Treatment Plant Filter Improvements – Phase III

Calgon Carbon Corporation
3000 GSK Drive,
Moon Township, PA 15108

Date: October 2, 2024
Spec Section: Section 46 61 17

Product	Quantity	Unit Price	Total Price
Sand Installation + Disinfection	3,050 cubic feet	N/A	$93,000
		Total	**$93,000**

Items Included

- Installation and disinfection of sand as per specification 3.02.
- Disinfection shall be followed in accordance with AWWA C653
- All related labor and equipment (trucks, hoppers, hoses, etc), except utilities detailed below.
- Manufacturer installation instructions to be submitted 2 weeks following executed contract, all other submittals documented in 1.06 do not apply to CCC

Items NOT Included

- Owner to provide clean water source for movement of GAC to and from filter via eduction
- Sand to be provided by the owner
- Filter box to be thoroughly cleaned by the contractor (3.02.4)

- Field Testing (3.03) to be completed by the contractor
- Any applicable taxes not included.

Schedule

- Installation: 8-10 weeks after receipt of approved purchase order

8-10 Days for installation per email.

Special Terms & Conditions

1. Unless otherwise noted, or until other Terms and Conditions are provided, this offer is made only under Calgon Carbon Corporation's Terms and Conditions for the Sale of Carbon and Media.
2. Pricing provided is exclusive of any sales tax.
3. Scope of Supply/Pricing does not include any payment or performance bonds. Costs for any such bond (if necessary or requested by the buyer) will be added to the quoted pricing.
4. Upon acknowledgement of any purchase order, the buyer will be requested to complete a Credit Application and provide Tax Exemption Documentation.
5. The quoted price is valid until March 31st, 2024

For more information or to place an order, contact:

James Gray

Calgon Carbon Corporation - A Kuraray Company

Director of Sales - Drinking Water Solutions

james.pgray@kuraray.com

412-956-7885

CalgonCarbon
A Kuraray Company

Terms and Conditions for the Sale of Carbon and Media

1) DEFINITIONS:

(a)	Seller:	Calgon Carbon Corporation or its applicable subsidiary or affiliate
(b)	Buyer:	The buyer named in the Documentation
(c)	Documentation:	The proposal, confirmation, acknowledgement or other contract, as applicable, for the sale of the Products to which these Terms and Conditions are attached
(d)	Goods:	Any carbon cloth, carbon, resin, diatomaceous earth, and/or perlites sold pursuant to the terms of the Documentation
(e)	Products:	The Goods and services, collectively, described in the Documentation
(f)	Agreement:	The Documentation, these Terms and Conditions and any attachments referenced in the Documentation

2) GENERAL: Seller hereby offers for sale to Buyer the Products on the express condition that Buyer agrees to accept and be bound by the terms and conditions set forth herein. To the extent of a conflict between these Terms and Conditions and the express terms set forth in the Documentation, the terms set forth in the Documentation shall control. Any provisions contained in any document issued by Buyer are expressly rejected and if the terms and conditions set forth herein differ from the terms in any document issued by Buyer, this document shall be construed as a counter offer and shall not be effective as an acceptance of Buyer's document. In ordering and delivery of the Products, the parties may employ their standard forms; provided, however, that nothing in those forms shall be construed to modify or amend the terms of this Agreement. In the event of a conflict between this Agreement and either party's standard forms, this Agreement shall govern.

3) PRICE AND PAYMENT: The price shall be as stated in the Documentation. Unless otherwise stated in the Documentation: (a) The price is exclusive of any taxes, tariff, and duties of any kind which either party may be required to pay with respect to the sale of goods described in the Documentation, and Buyer shall be responsible for the payment of all taxes, tariffs and duties related hereto, except for income taxes imposed on Seller; (b) Sales tax will be added to the price based upon the Product destination unless tax exemption or direct pay documentation is provided; (c) Products will be billed for at the time of delivery; and (d) Payment terms shall be net thirty (30) days, or net forty-five (45) days if paid by Electronic Funds Transfer (EFT). A late payment fee of 1.25% per month, or the highest lawful rate, whichever is less, will apply to all amounts past due, and will be prorated per day. Retainage may only be applied on the final invoice. Buyer agrees that Seller, at its discretion, may accelerate and make due and payable all remaining payments if Buyer shall fail to perform any of its obligations hereunder or under the Documentation, including without limitation Buyer's failure to pay any amount when due, subject to any applicable cure periods provided for herein.

4) PRICING CONDITIONS:

(a) Unless otherwise indicated within the Documentation, all pricing quoted in connection with the Documentation is valid for purchase for a sixty (60) day period beginning with the date of the Documentation.

(b) If this Agreement shall continue into the next calendar year, the fees payable pursuant hereto will be adjusted on January 1st of such calendar year as outlined in the Documentation; provided that if the Documentation is silent, the mechanism set forth in Section 4(c) below will apply.

(c) If the Documentation is silent regarding the mechanism for adjustment of fees, the fees will be adjusted on January 1st of such calendar year by the annual percentage change in the combined average of two Producer Price Indices, as published by the United States Department of Labor: (i) Producer Price Index of other Petroleum and Coal Products Manufacturing, and (ii) Producer Price Index of Basic Organic Chemicals. The percent adjustment shall be calculated by taking the percent difference for each index during the twelve month period from January 1st through December 31st of the last completed calendar year as compared to the twelve month period from January 1st through December 31st of the calendar year immediately preceding the last completed calendar year. These two percentages will then be averaged for calculating the final percent increase to which all Goods will be subject. If the calculation would result in a negative adjustment, no changes shall be made for such year.

5) SALE AND DELIVERY: Sale terms and pricing, unless otherwise specified in the Documentation, are F.O.B. Seller's point of shipment (Incoterms® 2020). If freight is to be prepaid by Seller and added to the amount due, Seller shall add up to a thirty-five percent (35%) surcharge to the freight charges. Seller will have the right, at its election, to make partial shipments of the Products and to invoice each shipment separately. Seller reserves the right to stop delivery of any Product in transit and to withhold shipments in whole or in part if Buyer fails to make any payment to Seller when due or otherwise fails to perform its obligations hereunder or under any other outstanding payment obligations of Buyer to Seller, whether related to the Documentation or otherwise.

6) TITLE AND RISK OF LOSS: Notwithstanding the trade terms indicated above and subject to Seller's right to stop delivery of any Goods in transit pursuant to Section 5 above, title to and risk of loss of the Goods will pass to Buyer upon delivery of the Goods by Seller to the carrier at Seller's point of shipment. Notwithstanding the foregoing or the provisions of the Uniform Commercial Code or Incoterms® 2020, if Buyer is located outside of the United States of America, title to the Goods, and all accessions to or products of the Goods, shall remain with Seller until the later of (a) payment in full of the purchase price and of other amounts owing by Buyer and (b) delivery to Buyer.

7) AVAILABILITY: Shipment dates (and delivery and installation dates, if included in the scope of work) are not guaranteed, and Seller will not be liable for any loss or damage resulting from any delay in delivery or failure to deliver which is due to any cause beyond Seller's reasonable control. In the event of a delay due to any cause beyond Seller's reasonable control, Seller reserves the right to reschedule the shipment within a reasonable period of time, and Buyer will not be entitled to refuse delivery or otherwise be relieved of any obligations as the result of such delay. If any delivery is delayed for more than thirty (30) days beyond the originally scheduled delivery date and such delay is caused by Buyer, Buyer will be subject to storage charges from the scheduled shipment date of two percent (2%) of the sale price per month; and such storage charge shall be due monthly on the first day of each month. Storage by Seller shall be at Buyer's risk and expense.

8) SERVICES:

(a) All orders which include services (including installation, supervision, startup, training, testing, etc.) as stated in the Documentation will require the completion of the Pre-Visit Checklist and Service Request Form prior to scheduling the visit. If there are delays, cancellations, or failures by Buyer to meet service personnel at designated times, then fees will be assessed to the customer at Seller's then-applicable per hour rate for each hour of delay for each person. For domestic or international travel, additional fees will apply.

(b) Buyer shall make the premises, where services are to be performed (the "Premises"), available to Seller at all reasonable times as Seller may request, such that Seller shall be able to perform the services in a timely manner. Buyer shall bear all risk and liability associated with its inability to make the Premises available to Seller to perform the services. Prior to the commencement of services, Buyer shall ensure that the Premises are in good repair and in safe condition, and shall notify Seller of any dangerous, unsafe or hazardous conditions associated with the Premises, such that Seller can take the appropriate safeguards. Prior to the commencement of any work, Buyer shall notify Seller of any special workplace requirements, safety standards, operating procedures or other conditions imposed on persons performing work at the Premises.

(c) Any spent activated carbon covered by this Agreement will be subjected to reactivation acceptance testing by Seller as described in Seller's Guidelines for Return for Reactivation of Granular Activated Carbon, which Seller may update from time to time in its sole discretion. Buyer will provide any information required by Seller relative to evaluating carbon acceptance. Seller reserves the right to reject any and all activated carbon if, in its judgment, it is unsuitable for reactivation. Further, Seller will periodically retest the spent activated carbon to assure it remains acceptable for reactivation and that it does not contain constituents that were not in the carbon acceptance sample and/or Adsorbate Profile Document. Seller reserves the right to apply a surcharge for reactivation of spent carbon with quality that creates excessive corrosion, slagging,

exothermic reactions, or other operational problems including lower furnace operating rates. If the spent activated carbon becomes unacceptable for reactivation, disposal of the carbon will be the responsibility of Buyer. Seller reserves the right to reactivate the spent carbon at any of its reactivation facilities where carbon acceptance exists.

9) PERMITS, LICENSES AND FEES: Buyer shall be responsible, at its sole expense, for all environmental permits, applications, regulatory approvals, and other permits or licenses that may be required for installation and/or operation of the Products.

10) TERMINATION: Seller may cancel this Agreement if any of the following occurs: (a) Buyer becomes insolvent; (b) Buyer ceases to conduct its operations in the normal course of business; (c) Buyer is unable to meet its obligations as they mature, or admit in writing such inability or fails to provide adequate assurances of its ability to perform its obligations hereunder; (d) Buyer files a voluntary petition in bankruptcy; (e) Buyer suffers the filing of an involuntary petition in bankruptcy and the same is not dismissed within thirty (30) days after filing; (f) a receiver, custodian or trustee is appointed for Buyer or for a substantial part of its property; (g) Buyer fails to make payment on the terms and within the time specified in this Agreement, or breaches any other obligations under this Agreement; or (h) Buyer executes an assignment for the benefit of its creditors. In the event of such cancellation, Seller shall have all rights and remedies set forth in the Uniform Commercial Code of any applicable jurisdiction and all other remedies available at law or in equity. Sections 2, 10, 11, 12, 14, 15, 16, 18, 19 and 20 shall survive termination or expiration of this Agreement.

11) LIMITED WARRANTIES:
(a) Unless otherwise specifically provided for in the Documentation, Seller warrants that all Products provided under this Agreement shall, at the time of delivery, conform to Seller's then-applicable specifications for such Products. Seller shall correct (by replacement of Goods or reperformance of services) any failure to conform to the foregoing warranty of which it is notified in writing within ninety (90) days from delivery. Any Goods removed in connection with such replacement may be reactivated or disposed of at Seller's sole discretion.

(b) **THE OBLIGATIONS CREATED BY THIS WARRANTY TO REPAIR OR REPLACE DEFECTIVE GOODS OR TO PROVIDE CORRECTIVE SERVICES SHALL BE THE SOLE REMEDY OF BUYER IN THE EVENT OF DEFECTIVE GOODS OR SERVICES. THERE ARE NO WARRANTIES MADE WITH REGARD TO THE PRODUCTS OTHER THAN THOSE CONTAINED IN THIS SECTION. ALL OTHER WARRANTIES, EITHER EXPRESS OR IMPLIED, ARE HEREBY DISCLAIMED, INCLUDING, WITHOUT LIMITATION, THE WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE AND ALL WARRANTIES ARISING FROM COURSE OF DEALING OR USAGE OF TRADE.**

(c) The sale of any Products pursuant to this Agreement does not include any license, express or implied, to practice any intellectual property owned or licensed by any third party. Buyer agrees not to use the Products for any patented use not set forth expressly in this Agreement, absent a separate license from the holder of such patent. Additionally, Buyer agrees not to resell or sublicense the use of Products for any use not expressly granted hereunder. Any warranty obligations do not apply to any specific use of the Products, application of the Products, modification of the Products, or combination of the Products with any product manufactured by any third party. Seller, except as noted herein, does not and will not warrant, indemnify, or in any other way share responsibility for Buyer's use, application, modification, or combination of the Products.

12) LIMITATION OF LIABILITY: Notwithstanding any provision to the contrary herein, except with respect to a breach of the confidentiality obligations set forth in Section 15 hereof, the parties hereto agree that in no event shall either party be liable to the other party for any indirect, special, consequential, incidental or punitive damages, or lost profits, as a result of a breach of any provision of this Agreement or for any other claim of any kind arising out of or relating to this Agreement, whether in contract, in tort or otherwise. Notwithstanding any provision to the contrary herein, for all losses, damages, liabilities or expenses (including attorney's fees and costs), whether for indemnity or negligence, including errors, omissions or other acts, or willful misconduct, or based in contract, warranty (including any costs and fees for repairing, replacing or re-performing services or curing a breach hereof), or for any other cause of action (individually, a "Claim"; collectively, "Claims"), Seller's liability, including the liability of its insurers, employees, agents, directors, and officers and all other persons for whom Seller is legally responsible, shall not, to the maximum extent permitted by law, exceed in the cumulative aggregate with respect to all Claims arising out of or related to this Agreement, the lesser of (a) the total amount of compensation paid to Seller hereunder, and (b) One Million Dollars ($1,000,000). All Claims of whatsoever nature shall be deemed waived unless made in writing within ninety (90) days of the occurrence giving rise to the Claim. Moreover, any failure of Buyer to notify Seller of unsatisfactory operation or any improper or unauthorized installation, maintenance, use, repair, or adjustment shall relieve Seller of any further responsibilities hereunder.

13) FORCE MAJEURE: Notwithstanding any provision to the contrary herein, Seller shall have no liability to Buyer or its affiliates, and shall have the right to suspend performance (including, without limitation, shipments) hereunder, in the event of war, riot, terrorism, accident, explosion, sabotage, flood, acts of God, fire, court order, strike, labor disturbance, work stoppage, national defense requirements, act of governmental authority, pandemic, epidemic, extraordinary failure of equipment or apparatus, inability to obtain electricity or other type of energy, raw material, labor, equipment or transportation, or other causes beyond Seller's reasonable control. It is understood and agreed that settlement of strikes, lockouts and other labor disputes shall be entirely within the discretion of Seller and that nothing in this Agreement shall require the settlement of strikes, lockouts and labor disputes when such course is inadvisable in the sole discretion of Seller.

14) EXPORT CONTROLS: Buyer acknowledges that the Products and related technology are subject to U.S. export control and economic sanctions laws and regulations, which may include the International Traffic in Arms Regulations (ITAR), the Export Administration Regulations (EAR) and regulations promulgated by the U.S. Department of the Treasury Office of Foreign Assets Control (OFAC). Buyer further acknowledges that the re-export of the Products and/or related technology to a third country or retransfer to an unapproved end user may require a license or other authorization from the Government of the United States. Such licenses or other authorizations may impose further restrictions on the re-export or retransfer of the Products and/or related technology. U.S. law also restricts the re-export or retransfer of U.S.-origin goods, technology, or services to countries or persons subject to U.S. sanctions or embargoes. Buyer represents and warrants that it is in compliance with and agrees to comply with all such applicable export control and economic sanctions laws and regulations. It is the sole responsibility of Buyer to apply for and obtain any necessary licenses or other authorizations prior to any re-export or retransfer of the Products and/or related technology. Seller makes no warranty that any such licenses or other authorizations will be granted, and shall have no liability for Buyer's inability to obtain such licenses or other authorization or for any violation by Buyer of any applicable export control and/or economic sanctions laws and regulations. Buyer will indemnify Seller and hold it harmless from any liability resulting from Buyer's violation of this provision or applicable export laws or regulations. Notwithstanding any other provision in this Agreement, Seller shall have the right to terminate this Agreement immediately upon the determination by Seller, in Seller's sole discretion, that Buyer has breached, intends to breach, or insists upon breaching any of the provisions in the above clauses.

15) CONFIDENTIALITY: Other than in the performance of the terms of this Agreement, neither Buyer nor its agents, employees, or subcontractors shall use or disclose to any person or entity any confidential information of Seller (whether written, oral, electronic or other form) that is obtained or otherwise prepared or discovered in connection with this Agreement. Buyer agrees that all pricing, discounts, design drawings and technical information that Seller provides to Buyer are the confidential and proprietary information of Seller, whether or not otherwise identified as such. The obligations under this section continue perpetually and survive the termination or expiration of any underlying agreement between the parties. The provisions of this section relating to use and disclosure shall not apply to any information that: (a) is or becomes generally available to the public other than as a result of a disclosure by Buyer under this Agreement; (b) becomes available to Buyer from a source other than Seller without breach of any obligation of confidentiality; (c) was independently developed by Buyer without violation of Seller's rights and without reference to the confidential information, as evidenced by written records, maintained in the ordinary course of business by Buyer; (d) is used or disclosed with the prior written approval of Seller; (e) is information previously known to Buyer as

evidenced by written records maintained by Buyer in the ordinary course of business, and not otherwise subject to any confidentiality restrictions; or (f) Buyer becomes legally compelled (by oral questions, interrogatories, requests for information or documents, subpoenas, investigative demands or similar process) to disclose. The burden of proof that the information resides within one of the exceptions set forth above shall be on Buyer. If Buyer becomes legally compelled (by oral questions, interrogatories, requests for information or documents, subpoenas, investigative demands or similar process) to disclose any of the confidential information, Buyer shall provide Seller with prompt written notice so that Seller may seek a protective order or other appropriate remedy or waive compliance with the provisions of this Agreement. If such protective order or other remedy is not obtained, or if Seller waives compliance with the provisions of this Agreement, Buyer shall furnish only that portion of the confidential information which Buyer is legally required to disclose and shall exercise its reasonable efforts to obtain reliable assurance that confidential treatment shall be accorded the confidential information. Buyer shall not undertake any qualitative or quantitative analysis, reverse engineering or replication of any of Seller's products, samples or prototypes without Seller's specific written authorization.

16) SECURITY INTEREST: Buyer hereby grants Seller a security interest in the Goods to secure the payment of the purchase price, and shall not sell, lease, transfer or encumber the Goods and will keep the Goods free from any and all liens and security interests until Seller has been paid in full. Buyer shall execute any and all documents reasonably requested by Seller to protect such security interests.

17) MANAGEMENT OF CHANGE: Seller is constantly striving to improve its products and capabilities and to provide the best product to its customers. Seller may from time to time develop product improvements or alterations with respect to the Products hereunder (the "Product Improvements"), and Seller may implement such Product Improvements without notice to Buyer so long as the performance of the Products will not be materially diminished, as determined in Seller's sole discretion, and so long as Seller has not separately agreed in writing to provide such notification to Buyer. In the event that Seller has agreed in writing to provide notice of Product Improvements to Buyer (the "Notice"), then Seller shall provide such Notice in accordance with the terms set forth in the separate writing.

18) APPLICABLE LAW AND JURISDICTION: This Agreement shall be governed by, construed and enforced in accordance with the laws of the Commonwealth of Pennsylvania, without regard to its conflict of law principles. The UN Convention on Contracts for the International Sale of Goods shall not apply to the transaction(s) represented hereby. The parties consent and submit to the exclusive jurisdiction and service of process of any state or federal court located in Allegheny County, Pennsylvania.

19) MISCELLANEOUS:

(a) Neither party may assign this Agreement, including without limitation any of its rights or obligations hereunder, without the express written consent of the other party hereto; provided that Seller may, without Buyer's consent, assign this Agreement, including without limitation any of its rights or obligations hereunder, to any of its parents, subsidiaries or affiliates or to any third party which merges with Seller or acquires all or substantially all of its business and assets or a substantial part of its assets or business relating to the Products. Seller may use subcontractors to fulfill its obligations pursuant to this Agreement.

(b) In the event of any legal proceeding between Seller and Buyer relating to this Agreement, neither party may claim the right to a trial by jury, and both parties waive any right they may have under applicable law or otherwise to a trial by jury.

(c) In the event that any one or more provisions (or portions thereof) contained herein shall be held by a court of competent jurisdiction to be invalid, illegal or unenforceable in any respect, the validity, legality and enforceability of the remaining provisions (or portions thereof) contained herein shall remain in full force and effect, unless the revision materially changes the bargain.

(d) Seller's failure to enforce, or Seller's waiver of a breach of, any provision contained in this Agreement shall not constitute a waiver of any other breach or of such provision.

(e) Seller reserves the right to correct clerical, arithmetical, or stenographic errors or omissions in this Agreement, invoices or other documents.

(f) Any notice or communication required or permitted hereunder shall be in writing and shall be deemed received when personally delivered or three (3) business days after being sent by certified mail, postage prepaid, to a party at the address specified in this Agreement, or at such other address as either party may from time to time designate in writing to the other.

(g) Buyer agrees that it will not use Seller's name(s), logo(s) or mark(s) in any public communication or press release, or for any other marketing or promotional purpose, without Seller's prior written consent.

(h) Terms used in this Agreement which are not defined herein and which are defined by the Uniform Commercial Code of the Commonwealth of Pennsylvania shall have the meanings contained therein.

20) ENTIRE AGREEMENT: With respect to the subject matter hereof, this Agreement constitutes the complete and exclusive statement of the contract between Seller and Buyer. No waiver, consent, modification, amendment or change of the terms contained in this Agreement shall be binding unless made in writing and signed by Seller and Buyer. Seller's failure to object to terms contained in any subsequent communication from Buyer (whether in a purchase order or other communication) will not be a waiver or modification of the terms set forth herein.

YARD SET UP

Chandler Pecos Improvements - Site Access

Chandler Pecos Improvements - Site Access

LIST OF SUBCONTRACTORS

2. LIST OF SUBCONTRACTORS

Archer Western will utilize the following subcontractors:

- Electrical material supply and installation: Felix Construction Company
- Sand Install: Calgon Carbon
- Peristaltic Pump: Capital Flow Arizona
- Pipe: Capital Flow Arizona
- Pipe Supports: Copper State Bolt & Nut Co Inc
- Coatings inside Filters: AO Painting

SECTION D

SCHEDULE OF VALUES

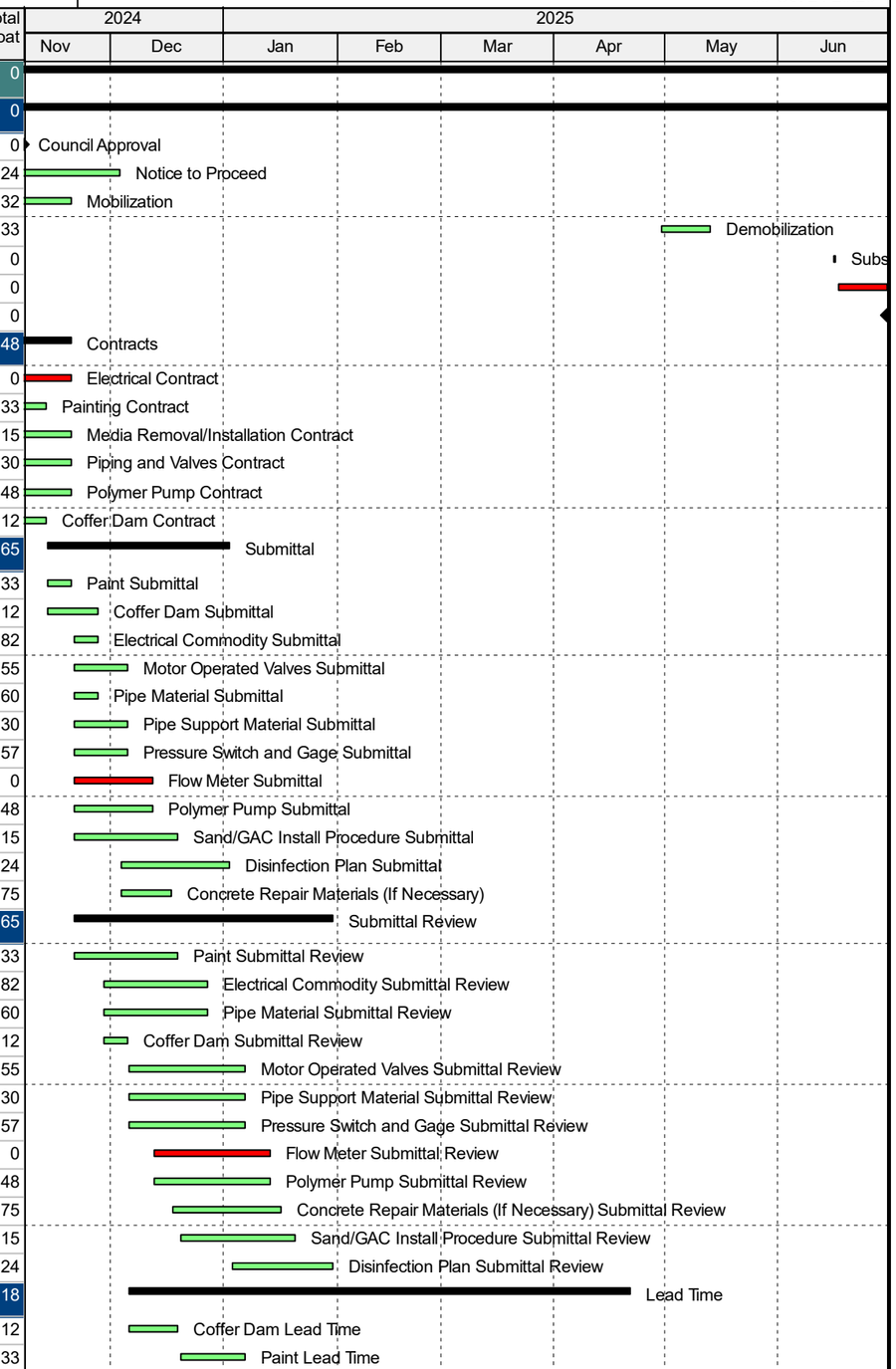
Archer Western Construction
Chandler Pecos Water System Upgrades Program
City Project Number: WA2100.251
Schedule of Values
Pay Application No 1 - Date TBD

Item #	Task No.	Description	Total To Date	Total Previous Qty	GMP Qty	Unit	Total Unit Price	Original Contract Amount	Current Cost	Previous Cost	Total to Date	Notes
1.0		**Cost of Work**										
	1.01	Remove Assistance and Clean of Filter Basins	$ -	0.0	1.0	LS	$ 9,775.00	$ 9,775	$ -	$ -	$ -	
	1.02	Painting Support and Inspections	$ -	0.0	1.0	LS	$ 18,361.00	$ 18,361	$ -	$ -	$ -	
	1.03	Painting Subcontractor - AO Painting	$ -	0.0	1.0	LS	$ 677,889.00	$ 677,889	$ -	$ -	$ -	
	1.04	Sand Install Support	$ -	0.0	1.0	LS	$ 7,728.00	$ 7,728	$ -	$ -	$ -	
	1.05	Sand Install Subcontractor	$ -	0.0	1.0	LS	$ 93,205.00	$ 93,205	$ -	$ -	$ -	
	1.06	GAC Install Support	$ -	0.0	1.0	LS	$ 6,560.00	$ 6,560	$ -	$ -	$ -	
	1.07	Disinfection Subcontractor	$ -	0.0	1.0	LS	$ 3,500.00	$ 3,500	$ -	$ -	$ -	
	1.08	Polymer Piping and Valves	$ -	0.0	400.0	LF	$ 86.55	$ 34,618	$ -	$ -	$ -	
	1.09	Piping and MOV Materials	$ -	0.0	1.0	LS	$ 35,391.00	$ 35,391	$ -	$ -	$ -	
	1.10	Pipe Support Material	$ -	0.0	1.0	LS	$ 5,369.00	$ 5,369	$ -	$ -	$ -	
	1.11	Polymer Metering Pump Install	$ -	0.0	1.0	EA	$ 2,505.00	$ 2,505	$ -	$ -	$ -	
	1.12	Polymer Metering Pump Purchase	$ -	0.0	1.0	EA	$ 10,950.00	$ 10,950	$ -	$ -	$ -	
	1.13	Electrical Subcontract - Felix Electric	$ -	0.0	1.0	LS	$ 274,592.00	$ 274,592	$ -	$ -	$ -	
	1.14	Commissioning	$ -	0.0	1.0	LS	$ 14,275.00	$ 14,275	$ -	$ -	$ -	
	1.15	Supervision	$ -	0.0	1.0	LS	$ 41,513.00	$ 41,513	$ -	$ -	$ -	
	1.16	Construction Equipment	$ -	0.0	1.0	LS	$ 49,500.00	$ 49,500	$ -	$ -	$ -	
2.0		**Indirect Costs**										
	2.01	General Conditions	$ -	0.0	1.0	LS	$ 247,442.00	$ 247,442	$ -	$ -	$ -	
	2.02	CMAR Fee	$ -	0.0	1.0	LS	$ 122,654.00	$ 122,654	$ -	$ -	$ -	
	2.03	Bonds	$ -	0.0	1.0	LS	$ 14,305.00	$ 14,305	$ -	$ -	$ -	
	2.04	Insurance	$ -	0.0	1.0	LS	$ 28,485.00	$ 28,485	$ -	$ -	$ -	
	2.05	Tax	$ -	0.0	1.0	LS	$ 92,448.00	$ 92,448	$ -	$ -	$ -	
3.0		**Allowances**										
	3.01	Coffer Dam and Dewatering Allowance	$ -	0.0	1.0	LS	$ 24,377.00	$ 24,377	$ -	$ -	$ -	
	3.02	Concrete Repairs	$ -	0.0	1.0	LS	$ 35,640.00	$ 35,640	$ -	$ -	$ -	
	3.04	Electrical Allowance	$ -	0.0	1.0	LS	$ 54,000.00	$ 54,000	$ -	$ -	$ -	
	3.05	Underdrain Repairs Allowance	$ -	0.0	1.0	LS	$ 10,800.00	$ 10,800	$ -	$ -	$ -	
4.0		**Contingencies**										
	4.01	Construction Contingency	$ -	0.0	1.0	LS	$ 50,000.00	$ 50,000	$ -	$ -	$ -	
	4.02	Owner Contingency	$ -	0.0	1.0	LS	$ 128,573.00	$ 128,573	$ -	$ -	$ -	
		Chandler Pecos Total	$ -					**$ 2,094,455**	**$ -**	**$ -**	**$ -**	

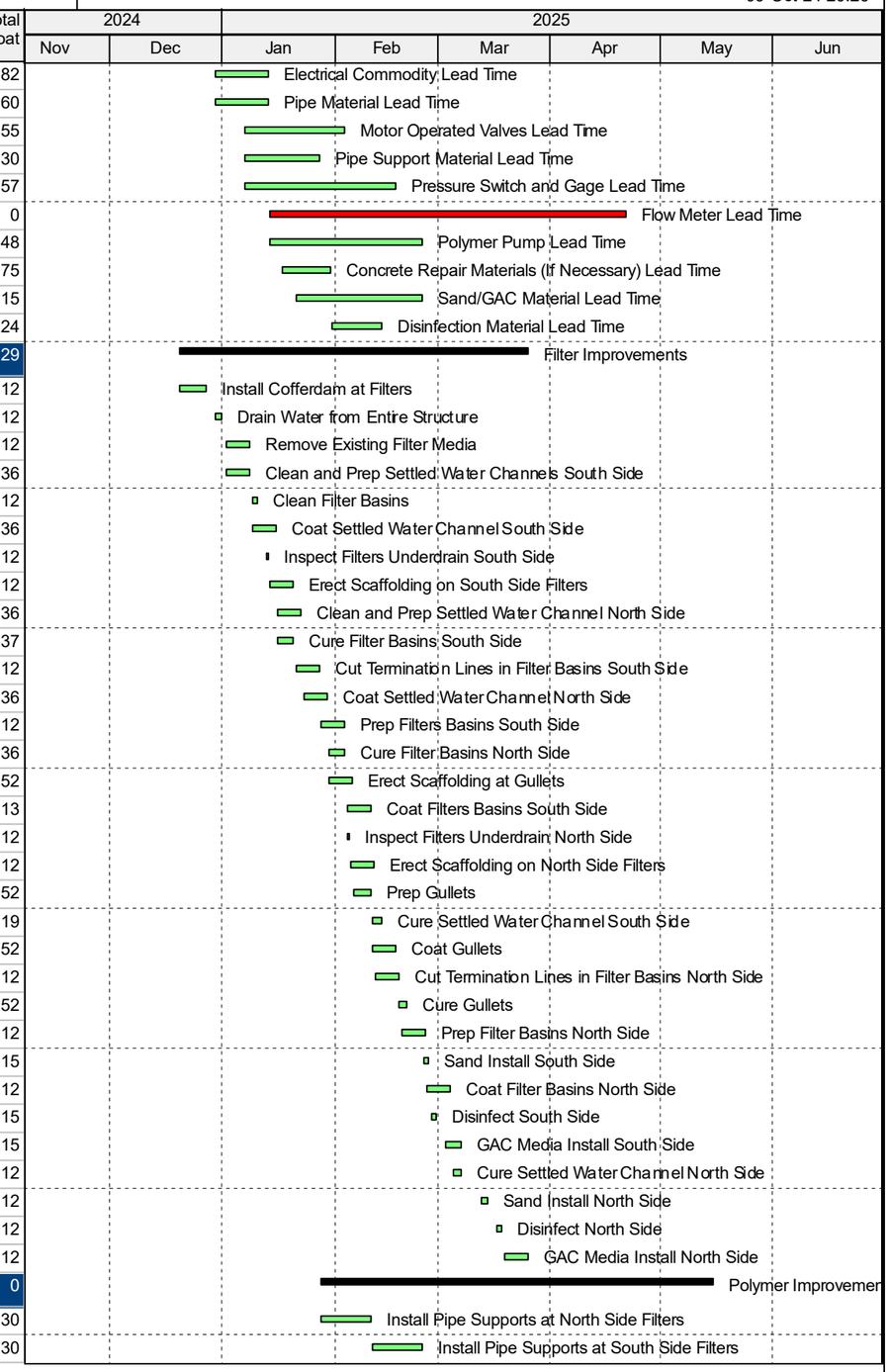
SECTION E

PROJECT SCHEDULE

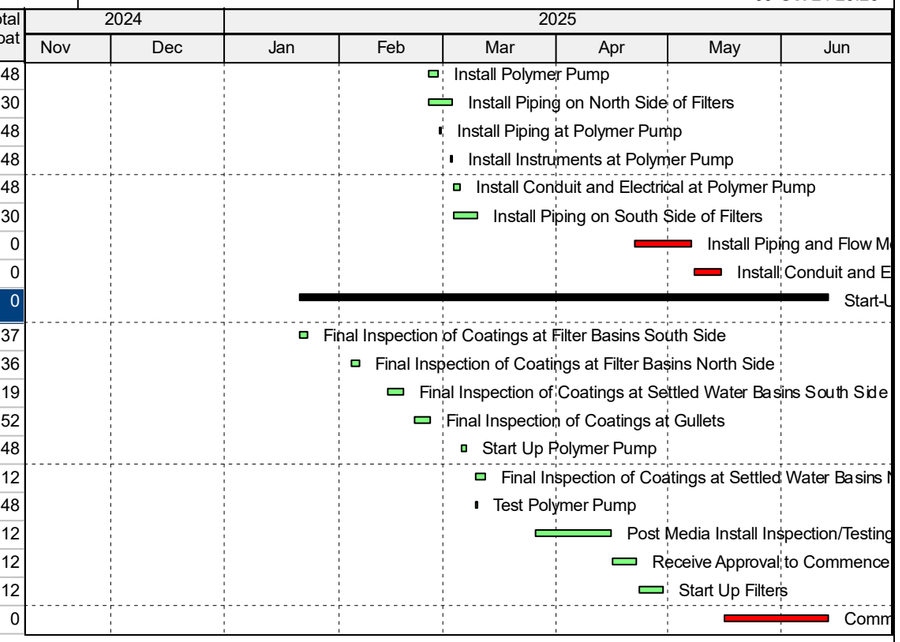
Activity ID	Activity Name	Original Duration	Remaining Duration	Start	Finish	Total Float
Chanderl Pecos Water Plant Improvements - GMP 1		164	164	07-Nov-24	30-Jun-25	0
General		164	164	07-Nov-24	30-Jun-25	0
Gen 1000	Council Approval	0	0	07-Nov-24		0
Gen 1010	Notice to Proceed	18	18	07-Nov-24	03-Dec-24	24
Gen 1020	Mobilization	10	10	07-Nov-24	20-Nov-24	32
Gen 1030	Demobilization	10	10	30-Apr-25	13-May-25	33
Gen 1040	Substantial Completion	1	1	16-Jun-25	16-Jun-25	0
Gen 1050	Punchlist	10	10	17-Jun-25	30-Jun-25	0
Gen 1060	Final Completion	0	0		30-Jun-25	0
Contracts		10	10	07-Nov-24	20-Nov-24	48
Contract 1000	Electrical Contract	10	10	07-Nov-24	20-Nov-24	0
Contract 1010	Painting Contract	5	5	07-Nov-24	13-Nov-24	33
Contract 1020	Media Removal/Installation Contract	10	10	07-Nov-24	20-Nov-24	15
Contract 1030	Piping and Valves Contract	10	10	07-Nov-24	20-Nov-24	30
Contract 1040	Polymer Pump Contract	10	10	07-Nov-24	20-Nov-24	48
Contract 1050	Coffer Dam Contract	5	5	07-Nov-24	13-Nov-24	12
Submittal		33	33	14-Nov-24	02-Jan-25	65
Submittal 1010	Paint Submittal	5	5	14-Nov-24	20-Nov-24	33
Submittal 1080	Coffer Dam Submittal	10	10	14-Nov-24	27-Nov-24	12
Submittal 1000	Electrical Commodity Submittal	5	5	21-Nov-24	27-Nov-24	82
Submittal 1020	Motor Operated Valves Submittal	10	10	21-Nov-24	05-Dec-24	55
Submittal 1030	Pipe Material Submittal	5	5	21-Nov-24	27-Nov-24	60
Submittal 1040	Pipe Support Material Submittal	10	10	21-Nov-24	05-Dec-24	30
Submittal 1050	Pressure Switch and Gage Submittal	10	10	21-Nov-24	05-Dec-24	57
Submittal 1060	Flow Meter Submittal	15	15	21-Nov-24	12-Dec-24	0
Submittal 1070	Polymer Pump Submittal	15	15	21-Nov-24	12-Dec-24	48
Submittal 1090	Sand/GAC Install Procedure Submittal	20	20	21-Nov-24	19-Dec-24	15
Submittal 1100	Disinfection Plan Submittal	20	20	04-Dec-24	02-Jan-25	24
Submittal 1110	Concrete Repair Materials (If Necessary)	10	10	04-Dec-24	17-Dec-24	75
Submittal Review		48	48	21-Nov-24	30-Jan-25	65
Review 1010	Paint Submittal Review	20	20	21-Nov-24	19-Dec-24	33
Review 1000	Electrical Commodity Submittal Review	20	20	29-Nov-24	27-Dec-24	82
Review 1030	Pipe Material Submittal Review	20	20	29-Nov-24	27-Dec-24	60
Review 1080	Coffer Dam Submittal Review	5	5	29-Nov-24	05-Dec-24	12
Review 1020	Motor Operated Valves Submittal Review	20	20	06-Dec-24	06-Jan-25	55
Review 1040	Pipe Support Material Submittal Review	20	20	06-Dec-24	06-Jan-25	30
Review 1050	Pressure Switch and Gage Submittal Review	20	20	06-Dec-24	06-Jan-25	57
Review 1060	Flow Meter Submittal Review	20	20	13-Dec-24	13-Jan-25	0
Review 1070	Polymer Pump Submittal Review	20	20	13-Dec-24	13-Jan-25	48
Review 1110	Concrete Repair Materials (If Necessary) Submittal Review	20	20	18-Dec-24	16-Jan-25	75
Review 1090	Sand/GAC Install Procedure Submittal Review	20	20	20-Dec-24	20-Jan-25	15
Review 1100	Disinfection Plan Submittal Review	20	20	03-Jan-25	30-Jan-25	24
Lead Time		95	95	06-Dec-24	21-Apr-25	18
Lead 1080	Coffer Dam Lead Time	10	10	06-Dec-24	19-Dec-24	12
Lead 1010	Paint Lead Time	10	10	20-Dec-24	06-Jan-25	33



Activity ID	Activity Name	Original Duration	Remaining Duration	Start	Finish	Total Float
Lead 1000	Electrical Commodity Lead Time	10	10	30-Dec-24	13-Jan-25	82
Lead 1030	Pipe Material Lead Time	10	10	30-Dec-24	13-Jan-25	60
Lead 1020	Motor Operated Valves Lead Time	20	20	07-Jan-25	03-Feb-25	55
Lead 1040	Pipe Support Material Lead Time	15	15	07-Jan-25	27-Jan-25	30
Lead 1050	Pressure Switch and Gage Lead Time	30	30	07-Jan-25	17-Feb-25	57
Lead 1060	Flow Meter Lead Time	70	70	14-Jan-25	21-Apr-25	0
Lead 1070	Polymer Pump Lead Time	30	30	14-Jan-25	24-Feb-25	48
Lead 1110	Concrete Repair Materials (If Necessary) Lead Time	10	10	17-Jan-25	30-Jan-25	75
Lead 1090	Sand/GAC Material Lead Time	25	25	21-Jan-25	24-Feb-25	15
Lead 1100	Disinfection Material Lead Time	10	10	31-Jan-25	13-Feb-25	24
Filter Improvements		66	66	20-Dec-24	25-Mar-25	29
Filter 1330	Install Cofferdam at Filters	5	5	20-Dec-24	27-Dec-24	12
Filter 1340	Drain Water from Entire Structure	2	2	30-Dec-24	31-Dec-24	12
Filter 1010	Remove Existing Filter Media	5	5	02-Jan-25	08-Jan-25	12
Filter 1030	Clean and Prep Settled Water Channels South Side	5	5	02-Jan-25	08-Jan-25	36
Filter 1020	Clean Filter Basins	2	2	09-Jan-25	10-Jan-25	12
Filter 1040	Coat Settled Water Channel South Side	5	5	09-Jan-25	15-Jan-25	36
Filter 1260	Inspect Filters Underdrain South Side	1	1	13-Jan-25	13-Jan-25	12
Filter 1170	Erect Scaffolding on South Side Filters	5	5	14-Jan-25	20-Jan-25	12
Filter 1050	Clean and Prep Settled Water Channel North Side	5	5	16-Jan-25	22-Jan-25	36
Filter 1150	Cure Filter Basins South Side	3	3	16-Jan-25	20-Jan-25	37
Filter 1070	Cut Termination Lines in Filter Basins South Side	5	5	21-Jan-25	27-Jan-25	12
Filter 1060	Coat Settled Water Channel North Side	5	5	23-Jan-25	29-Jan-25	36
Filter 1080	Prep Filters Basins South Side	5	5	28-Jan-25	03-Feb-25	12
Filter 1160	Cure Filter Basins North Side	3	3	30-Jan-25	03-Feb-25	36
Filter 1190	Erect Scaffolding at Gullets	5	5	30-Jan-25	05-Feb-25	52
Filter 1090	Coat Filters Basins South Side	5	5	04-Feb-25	10-Feb-25	13
Filter 1290	Inspect Filters Underdrain North Side	1	1	04-Feb-25	04-Feb-25	12
Filter 1180	Erect Scaffolding on North Side Filters	5	5	05-Feb-25	11-Feb-25	12
Filter 1200	Prep Gullets	3	3	06-Feb-25	10-Feb-25	52
Filter 1130	Cure Settled Water Channel South Side	3	3	11-Feb-25	13-Feb-25	19
Filter 1210	Coat Gullets	5	5	11-Feb-25	17-Feb-25	52
Filter 1100	Cut Termination Lines in Filter Basins North Side	5	5	12-Feb-25	18-Feb-25	12
Filter 1220	Cure Gullets	3	3	18-Feb-25	20-Feb-25	52
Filter 1110	Prep Filter Basins North Side	5	5	19-Feb-25	25-Feb-25	12
Filter 1230	Sand Install South Side	2	2	25-Feb-25	26-Feb-25	15
Filter 1120	Coat Filter Basins North Side	5	5	26-Feb-25	04-Mar-25	12
Filter 1240	Disinfect South Side	2	2	27-Feb-25	28-Feb-25	15
Filter 1250	GAC Media Install South Side	5	5	03-Mar-25	07-Mar-25	15
Filter 1140	Cure Settled Water Channel North Side	3	3	05-Mar-25	07-Mar-25	12
Filter 1300	Sand Install North Side	2	2	13-Mar-25	14-Mar-25	12
Filter 1310	Disinfect North Side	2	2	17-Mar-25	18-Mar-25	12
Filter 1320	GAC Media Install North Side	5	5	19-Mar-25	25-Mar-25	12
Polymer Improvements		78	78	28-Jan-25	15-May-25	0
Polymer 1040	Install Pipe Supports at North Side Filters	10	10	28-Jan-25	10-Feb-25	30
Polymer 1050	Install Pipe Supports at South Side Filters	10	10	11-Feb-25	24-Feb-25	30



Activity ID	Activity Name	Original Duration	Remaining Duration	Start	Finish	Total Float
Polymer 1000	Install Polymer Pump	3	3	25-Feb-25	27-Feb-25	48
Polymer 1060	Install Piping on North Side of Filters	5	5	25-Feb-25	03-Mar-25	30
Polymer 1010	Install Piping at Polymer Pump	1	1	28-Feb-25	28-Feb-25	48
Polymer 1020	Install Instruments at Polymer Pump	1	1	03-Mar-25	03-Mar-25	48
Polymer 1030	Install Conduit and Electrical at Polymer Pump	2	2	04-Mar-25	05-Mar-25	48
Polymer 1070	Install Piping on South Side of Filters	5	5	04-Mar-25	10-Mar-25	30
Polymer 1080	Install Piping and Flow Meter above the Deck to Discharge at Filters	12	12	22-Apr-25	07-May-25	0
Polymer 1090	Install Conduit and Electrical at Filters for Polymer Lines	6	6	08-May-25	15-May-25	0
Start-Up and Commissioning		103	103	21-Jan-25	13-Jun-25	0
Filter 1350	Final Inspection of Coatings at Filter Basins South Side	3	3	21-Jan-25	23-Jan-25	37
Filter 1360	Final Inspection of Coatings at Filter Basins North Side	3	3	04-Feb-25	06-Feb-25	36
Filter 1270	Final Inspection of Coatings at Settled Water Basins South Side	3	3	14-Feb-25	18-Feb-25	19
Filter 1370	Final Inspection of Coatings at Gullets	3	3	21-Feb-25	25-Feb-25	52
Polymer 1100	Start Up Polymer Pump	2	2	06-Mar-25	07-Mar-25	48
Filter 1280	Final Inspection of Coatings at Settled Water Basins North Side	3	3	10-Mar-25	12-Mar-25	12
Polymer 1110	Test Polymer Pump	1	1	10-Mar-25	10-Mar-25	48
Commish 1010	Post Media Install Inspection/Testing (Hazen)	15	15	26-Mar-25	15-Apr-25	12
Commish 1020	Receive Approval to Commence Operations (Hazen)	5	5	16-Apr-25	22-Apr-25	12
Filters 1380	Start Up Filters	5	5	23-Apr-25	29-Apr-25	12
Commish 1000	Commission Filters	20	20	16-May-25	13-Jun-25	0



SECTION F

CONSTRUCTION PHASING

1. CONSTRUCTION PHASING

Please see schedule for detailed sequence of work. A high level overview is provided below.

Phase 1: December 2024 – April 2025

- Install angle and temporary plate in the interconnect channel to isolate filters
- Waterproof Crystalline Coating
- Additional crack injections will be performed as time allows
- Media Replacement & Underdrain Inspection
    - Remove 84” anthracite media
    - Inspect filter underdrains and filters
- Reinstall media
    - Install 12 inches of sand media
    - Install 72 inches of GAC media
- Process Mechanical
    - Extend piping at Filters 9-12 from existing polymer piping from Phase 1 including flow meters and control valves
    - 1 peristaltic metering pump, 1 pressure gauge, and 1 pressure switch in the disinfection building

SECTION G

LIST OF GMP PLANS & SPECIFICATIONS

1. LIST OF PLANS AND SPECIFICATIONS

Archer Western utilized the following plans and specifications issued by Hazen to complete this GMP Proposal. All files reside on the ACC site uploaded on September 17, 2024.

- 46 61 17-01.1 – Sand Media Resub
- Chandler Pecos SWTP F820 Submittal
- Pecos SWTP – Filter Improvements Phase III Drawing Set
- Pecos SWTP Filter Improvements Phase III Technical Specs

Additional documents were provided on September 20, 2024, which included previous project submittals, quotes and product sheets. These documents can also be found on the ACC site.

SECTION H

ASSUMPTIONS AND CLARIFICATIONS

1. ASSUMPTIONS AND CLARIFICATIONS

We recognize the desire to receive unclarified proposals for greater cost certainty. As such, Archer Western has attempted to minimize the assumptions and clarifying information in this GMP Proposal. However, at this time we do have the following assumptions and clarifications to qualify our Proposal. The potential cost impact of these items has largely been captured in the recommended allowances and contingencies and will only be applied for unplanned and unmitigated events with cost impacts to the project.

Item	Description
1	Procurement, delivery, unloading and storage of the sand and GAC material is by others.
2	Actuated valves do not include a local control panel.
3	Crack injections are assumed to be performed with a basin full of water so hydrophilic water stop can be used. This is likely due to happen during the second shutdown due to time constraints during the first shutdown/low flow.
4	Plant operators will be required to perform back flushing and draining.
5	Filters 9-12 power and controls will be isolated from the rest of the plant operations by city staff for each operation of work.
6	Disinfection will be completed by Archer Western. BAC-T sampling and testing to be completed by City staff.
7	Water is being carried for install of sand and media. All other water (backwashing, disinfection, and flushing) will be supplied by City.
8	Spec 099000-14 Table 1 calls for two coats of acrylic epoxy. This is not included per discussions with Hazen.
9	City will need to provide non-chlorinated water for start-up and commissioning.
10	Xypex coating will only be applied on inlet channels and interior walls of Filters 9-12 per plans and specifications.
11	Calgon is responsible for hauling spent media from the filters and site and installing GAC media, per Section 46 61 16 and paid for by the City as shown in the 2024.09.13 CMAR Scoping Meeting Presentation.
12	CMAR is excluding any work in Section 46 61 16 GAC Filter Media. The City and Calgon will have a separate contract to perform the work in that Section. CMAR is only quoting the sand installation from Calgon per Section 46 61 17 Sand Filter Media.
13	Leopold inspection is included as an allowance. Major repairs or damage has not been carried.
14	Reference Felix quote from October 3, 2024 for exclusions and additional clarifications.
15	Per AO Painting quote from October 4, 2024, mechanical surfaces (including pipe) are excluded from the scope of work. Reference AO Painting quote for additional clarifications.

Item	Description
16	CMAR is following the redline Specification 07 16 16 Crystalline Waterproofing and takeoff quantities that were provided by Hazen. These documents can be found in the Quote Package
17	CMAR is only responsible for the column presented in the 2024.09.13 CMAR Scoping Meeting Presentation, shown below.

Filters 9-12 Media Removal, Furnishing, & Installation Coordination

Topic	Work	Reference Document	The City (Owner)	Hazen (CM)	CMAR (Contractor)	Calgon Carbon Co.	Red Flint Sand & Gravel, LLC
General	LOTO Procedures	46 61 16 (3.01)	X		X		
Structural	Structural Inspection	-		X			
	Isolation of Filters 9-12 Settled Water Channel (MOPO)	-			X		
Anthracite	Removal and Disposal of Existing Anthracite	46 61 16 (3.02, A) 02 41 00 02 41 16				X	
Underdrain	Underdrain Inspection Coordination	46 61 17 (3.01)			X		
Disinfection	Filter Cell Disinfection	46 61 16 (3.04, D)			X		
	BAC-T Test	-	X				
Sand Media	Manufacture and furnish Sand Media	46 61 17 (1.05 -1.09, 2.03)					X
	Installation of Sand Media (per specified installation and skimming procedures)	46 61 17 (3.02)			X		
	Pre-shipment Sand Media Testing	46 61 17 (1.09)					X
	Post-shipment Sand Media Testing	46 61 17 (3.03)		X			
GAC Media	Pre-shipment GAC Media Testing	46 61 16 (1.09)				X	
	Post-shipment GAC Media Testing	46 61 16 (3.05)		X			
	Delivery of GAC Media	46 61 16 (3.03)				X	
	Installation of GAC Media	46 61 16 (3.04)				X	
	Skimming of GAC Media	46 61 16 (3.04)			X		

Hazen 21

EXHIBIT E

SUBCONTRACTOR DOCUMENTS WITH CM@RISK

Any subcontractor assumptions, clarifications, exclusions, terms & conditions, signature blocks, etc. included are strictly between the CM@RISK and their subcontractors, and do not apply to the Agreement between the CM@RISK and the City.

SUBCONTRACTOR'S LIST FORM

If CM@Risk intends to subcontract any portion of this Agreement, the CM@Risk must submit the name, address, and contractor's license number (if applicable) of each subcontractor, including the work component of such subcontracting. Include the form with the bid submittal documents. CM@Risk may make multiple copies of this form as needed.

Company Name:	
Contact Name:	
Contact Email:	
Contact Phone:	
Work Component:	
Percentage of Total Work Performed:	

Company Name:	
Contact Name:	
Contact Email:	
Contact Phone:	
Work Component:	
Percentage of Total Work Performed:	

Company Name:	
Contact Name:	
Contact Email:	
Contact Phone:	
Work Component:	
Percentage of Total Work Performed:	

Company Name:	
Contact Name:	
Contact Email:	
Contact Phone:	
Work Component:	
Percentage of Total Work Performed:	

Company Name:	
Contact Name:	
Contact Email:	
Contact Phone:	
Work Component:	
Percentage of Total Work Performed:	

Company Name:	
Contact Name:	
Contact Email:	
Contact Phone:	
Work Component:	
Percentage of Total Work Performed:	

EXHIBIT F

GIS / GPS DATA DELIVERY REQUIREMENTS
(IF APPLICABLE)

N/A

EXHIBIT G

SUBCONTRACTOR DOCUMENTS WITH CM@RISK

Any subcontractor assumptions, clarifications, exclusions, terms & conditions, signature blocks, etc. included are strictly between the CM@Risk and their subcontractors, and do not apply to the Agreement between the CM@Risk and the City.

City Council Memorandum Public Works & Utilities Memo No. CP25-061

Date: November 04, 2024
To: Mayor and Council
Thru: Joshua H. Wright, City Manager
Andy Bass, Deputy City Manager
John Knudson, Public Works and Utilities Director
Daniel Haskins, Capital Projects Division Manager
From: Melanie Sikes, Principal Engineer
Subject: Professional Services Agreement No. WW2501.451, with Consultant Engineering, Inc., for the Sewer Rehabilitation for Frye Road Bike Lanes Construction Management Services

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Proposed Motion:

Move City Council award Professional Services Agreement No. WW2501.451, to Consultant Engineering, Inc., for the Sewer Rehabilitation for Frye Road Bike Lanes Construction Management Services, in an amount not to exceed $183,895.

Background/Discussion:

In preparation for the Frye Road Protected Bike Lanes project, the sanitary sewer pipes and manholes were assessed along Frye Road between Fairview Street and the Consolidated Canal. The assessment determined the sewer system within the project area is in need of important maintenance. This project will rehabilitate 40 manholes and one segment of ductile iron pipe with cured-in-place pipe liner.

The contract scope of work consists of pre-construction assistance, meetings, schedule review, requests for information, submittals, field directives, review of payment applications, inspection, project closeout, and record drawings. The agreement completion time is 210 calendar days following the Notice to Proceed, which is anticipated in November 2024.

A related Construction Agreement with Archer Western Construction, LLC, for the Sewer Rehabilitation for Frye Road Bike Lanes, is also scheduled for this City Council meeting.

Evaluation:

The selection process was conducted in accordance with city policy and procedure and state law. Staff recommends approval of this agreement with Consultant Engineering, Inc., based on qualifications, relevant firm experience, team experience, project understanding, and project approach.

Fiscal Impact

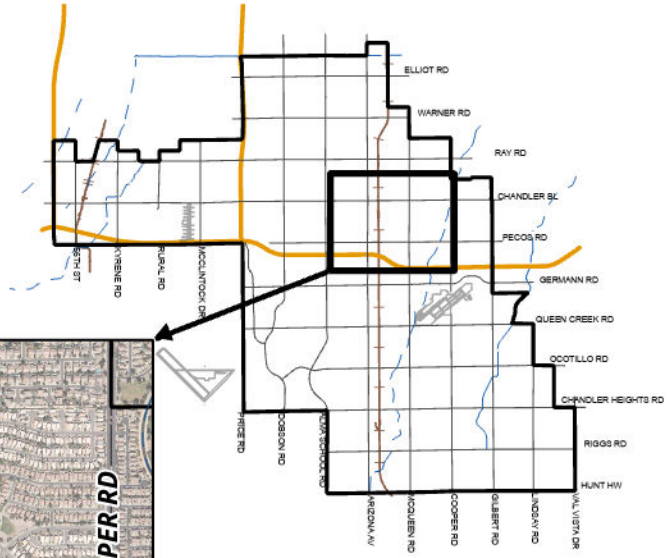
Account No.	Fund Name	Program Name	Dollar Amount	CIP Funded Y/N
615.3910.6812.6WW332	WW Operating	Wastewater System Upgrades with Str	$183,895	Y

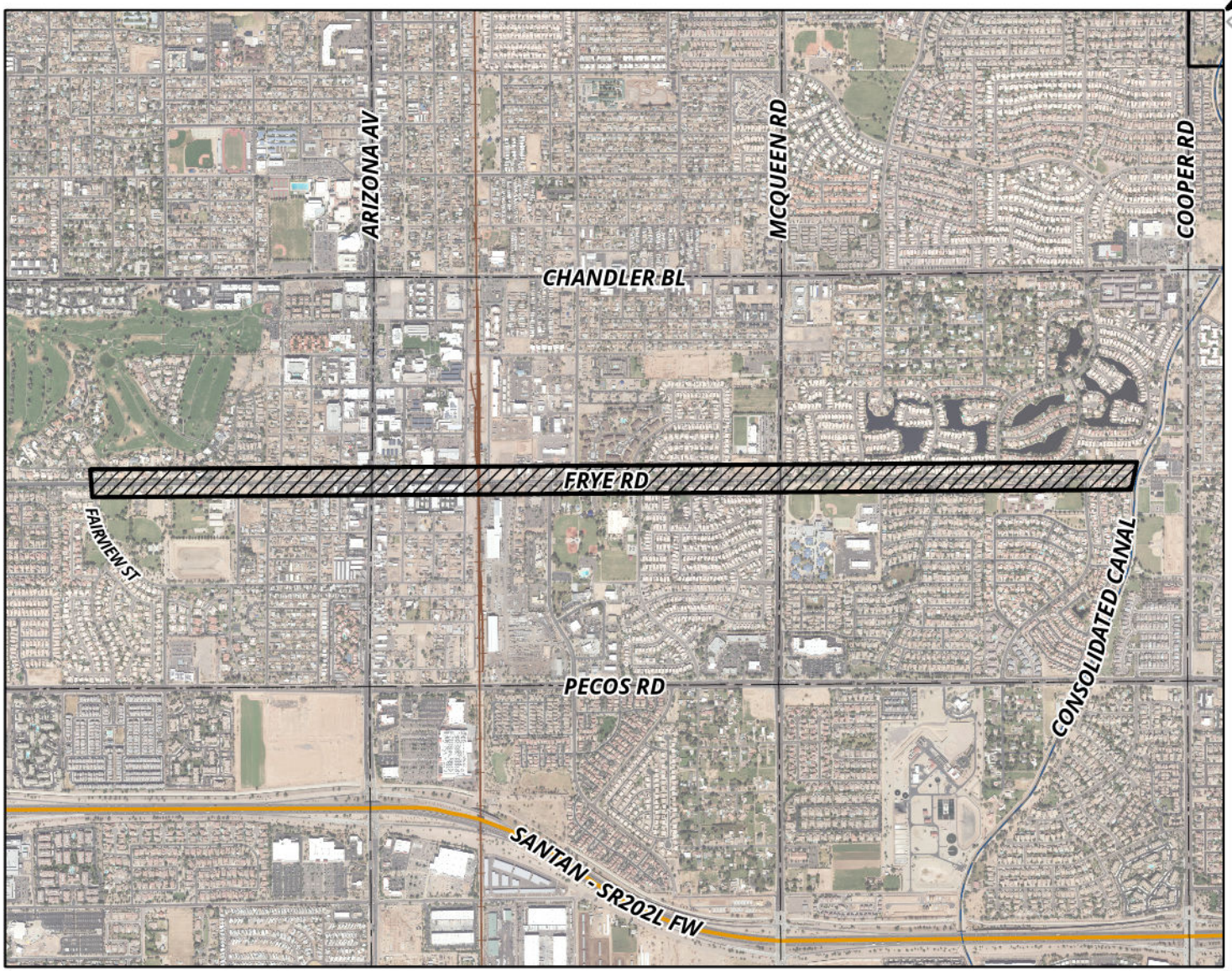
Attachments

Location Map

Agreement - Consultant Engineering

SEWER REHABILITATION FOR FRYE ROAD BIKE LANES PROJECT NO. WW2501.451





MEMO NO. CP25-061

PROJECT AREA

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PROFESSIONAL SERVICES AGREEMENT
Construction Management Services

SEWER REHABILITATION FOR FRYE ROAD BIKE LANES

Project No. WW2501.451

Council Date: November 7, 2024

This Agreement ("Agreement") is made and entered into on the _____ day of_____, 2024 ("Effective Date"), by and between City of Chandler, an Arizona municipal corporation, ("City"), and **Consultant Engineering, Inc,** an Arizona corporation, ("Consultant") (City and Consultant may individually be referred to as "Party" and collectively referred to as "Parties").

RECITALS

A. City proposes to engage Consultant to provide **Construction Management Services** for **Sewer Rehabilitation for Frye Road Bike Lanes** project as more fully described in **Exhibit "A"**, which is attached to and made a part of this Agreement by this reference.

B. Consultant is ready, willing, and able to provide the services described in **Exhibit "A"** for the compensation and fees set forth and as described in **Exhibit "B"**, which is attached to and made a part of this Agreement by this reference.

C. City desires to enter into an Agreement with Consultant to provide these services under the terms and conditions set forth in this Agreement.

AGREEMENT

NOW, THEREFORE, in consideration of the premises and the mutual promises contained in this Agreement, City and Consultant agree as follows:

SECTION I--CONSULTANT'S SERVICES

Consultant must perform the services described in **Exhibit "A"** to City's satisfaction within the terms and conditions of this Agreement and within the care and skill that a person who provides similar services in Chandler, Arizona exercises under similar conditions. All work or services furnished by Consultant under this Agreement must be performed in a skilled and workmanlike manner. All fixtures, furnishings, and equipment furnished by Consultant as part of the work or services under this Agreement must be new, or the latest model, and of the most suitable grade and quality for the intended purpose of the work or service.

SECTION II--PERIOD OF SERVICE

Consultant must perform the services described in **Exhibit "A"** for the term of this Agreement. Unless amended in writing by the Parties, the Agreement term expires **210** calendar days after the Notice to Proceed (NTP) Date.

SECTION III--PAYMENT OF COMPENSATION AND FEES

Unless amended in writing by the Parties, Consultant's compensation and fees as more fully described in **Exhibit "B"** for performance of the services approved and accepted by City under this Agreement must not exceed **$183,895** for the full term of the Agreement. Consultant may not increase any compensation or fees under this Agreement without the City's prior written consent. Consultant must submit monthly requests for payment of services approved and accepted during the previous billing period and must include, as applicable, detailed invoices and receipts, a narrative description of the tasks accomplished during the billing period, a list of any deliverables submitted, and any subconsultant's or supplier's actual requests for payment plus similar narrative and listing of their work. Consultant must submit an Application and Certification for Payment Sheet with the monthly request for payment to: CapitalProjects.Payables@chandleraz.gov. Payment for those services negotiated as a lump sum will be made in accordance with the percentage of the work completed during the preceding billing period. Services negotiated as a not-to-exceed fee will be paid in accordance with the work effort expended on the service during the preceding month. All requests for payment must be submitted to City for review and approval. City will make payment for approved and accepted services within 30 calendar days of City's receipt of the request for payment. Consultant bears all responsibility and liability for any and all tax obligations that result from Consultant's performance under this Agreement.

SECTION IV--CITY'S OBLIGATIONS

As part of Consultant's services under this Agreement, City will provide furnished items, services, or obligations as detailed in **Exhibit "D"**.

SECTION V--GENERAL CONDITIONS

5.1 Notices. Unless otherwise provided herein, demands under this Agreement must be in writing and will be deemed to have been duly given and received either (a) on the date of service if personally served on the party to whom notice is to be given, or (b) on the third day after the date of the postmark of deposit by first class United States mail, registered or certified, postage prepaid and properly addressed as follows:

To City:	City of Chandler - Public Works & Utilities Department Attn: CIP City Engineer: Daniel Haskins, P.E. P.O. Box 4008, Mail Stop 407 Chandler, AZ 85244-4008 Phone: 480-782-3335 Email: Daniel.Haskins@chandleraz.gov	
With a copy to:	City of Chandler - Public Works & Utilities Department Attn: **Raymond Potts,** Project Manager P.O. Box 4008, Mail Stop 407, Chandler, AZ 85244-4008 Phone: 480-782-3326 Email: Raymond.Potts@chandleraz.gov	
To Consultant:	**LEGAL COMPANY NAME:**	Consultant Engineering, Inc.
	Mailing Address:	PO Box 37167, Phoenix, AZ 85069
	Physical Address:	10625 N. 25th Ave, Suite 200, Phoenix, AZ 85029
	Statutory Agent Name:	John Patterson
	Statutory Agent Mailing Address:	PO Box 37167, Phoenix, AZ 85069
	Statutory Agent Physical Address:	10625 N. 25th Ave, Suite 200, Phoenix, AZ 85029
	CONSULTANT'S AUTHORIZED PROJECT REPRESENTATIVE	
	Name:	Brian Lizzet
	Title:	Project Manager/Principal
	Phone:	480.689.6472
	Email:	BLizzet@cei-az.com

5.2 Records/Audit. Records of Consultant's direct personnel payroll, reimbursable expenses pertaining to this Agreement and records of accounts between City and Consultant must be kept on the basis of generally accepted accounting principles and must be made available to City and its auditors for up to three years following City's final acceptance of the services under this Agreement (this requirement is increased to five years if construction of this project is federally funded). City, its authorized representative, or any federal agency, reserves the right to audit Consultant's records to verify the accuracy and appropriateness of all cost and pricing data, including data used to negotiate this Agreement and any amendments. City reserves the right to decrease the total amount of Agreement price or payments made under this Agreement or request reimbursement from Consultant following final Agreement payment on this Agreement if, upon audit of Consultant's records, the audit discloses Consultant has provided false, misleading, or inaccurate cost and pricing data. Consultant will include a similar provision in all of its Agreements with subconsultants who provide services under the Agreement to ensure that City, its authorized representative, or the appropriate federal agency, has access to the subconsultants' records to verify the

accuracy of all cost and pricing data. City reserves the right to decrease Agreement price or payments made on this Agreement or request reimbursement from Consultant following final payment on this Agreement if the above provision is not included in subconsultant agreements, and one or more subconsultants refuse to allow City to audit their records to verify the accuracy and appropriateness of all cost and pricing data. If, following an audit of this Agreement, the audit discloses Consultant has provided false, misleading, or inaccurate cost and pricing data, and the cost discrepancies exceed 1% of the total Agreement billings, Consultant will be liable for reimbursement of the reasonable, actual cost of the audit.

5.3 Alteration in Character of Work. Whenever an alteration in the character of work results in a substantial change in this Agreement, thereby materially increasing or decreasing the scope of services, cost of performance, or Project schedule, the work will be performed as directed by City. However, before any modified work is started, a written amendment must be approved and executed by City and Consultant. Such amendment must not be effective until approved by City. Additions to, modifications, or deletions from this Agreement as provided herein may be made, and the compensation to be paid to Consultant may accordingly be adjusted by mutual agreement of the Parties. It is distinctly understood and agreed that no claim for extra services or materials furnished by Consultant will be allowed by City except as provided herein, nor must Consultant do any work or furnish any materials not covered by this Agreement unless such work is first authorized in writing. Any such work or materials furnished by Consultant without prior written authorization will be at Consultant's own risk, cost, and expense, and Consultant hereby agrees that without written authorization Consultant will make no claim for compensation for such work or materials furnished.

5.4 Termination. City and Consultant hereby agree to the full performance of the covenants contained herein, except that City reserves the right, at its discretion and without cause, to terminate or abandon any service provided for in this Agreement, or abandon any portion of the Project for which services have been performed by Consultant. In the event City abandons or suspends the services, or any part of the services as provided in this Agreement, City will notify Consultant in writing and immediately after receiving such notice, Consultant must discontinue advancing the work specified under this Agreement. Upon such termination, abandonment, or suspension, Consultant must deliver to City all drawings, plans, specifications, special provisions, estimates and other work entirely or partially completed, together with all unused materials supplied by City. Consultant must appraise the work Consultant has completed and submit Consultant's appraisal to City for evaluation. City may inspect Consultant's work to appraise the work completed. Consultant will receive compensation in full for services performed to the date of such termination. The fee will be paid in accordance with Section Ill of this Agreement, and as mutually agreed upon by Consultant and City. If there is no mutual agreement on payment, the final determination will be made in accordance with the "Disputes" provision in this Agreement. However, in no event may the fee exceed the fee set forth in Section Ill of this Agreement nor as amended in accordance with Section "Alteration in Character of Work." City will make the final payment within 60 days after Consultant has delivered the last of the partially completed items and the Parties agree on the final fee. If City is found to have improperly terminated the Agreement for cause or default, the termination will be converted to a termination for convenience in accordance with the provisions of this Agreement.

5.5 Indemnification. To the extent permitted by law, the Consultant ("Indemnitor") must indemnify, save and hold harmless City and its officers, officials, agents and employees ("Indemnitee") from any and all claims, actions, liabilities, damages, losses or expenses (including court costs, attorneys' fees and costs of claim processing, investigation and litigation) ("Claims") caused or alleged to be caused, in whole or in part, by the wrongful, negligent or willful acts, or errors or omissions of Consultant or any of its owners, officers, directors, agents, employees, or subconsultants in connection with this Agreement. This indemnity includes any claim or amount arising out of or recovered under workers' compensation law or on account of the failure of Consultant to conform to any federal, state or local law, statute, ordinance, rule, regulation or court decree. Consultant must indemnify Indemnitee from and against any and all Claims, except those arising solely from Indemnitee's own negligent or willful acts or omissions. Consultant is responsible for primary loss investigation, defense and judgment costs where this indemnification applies. In consideration of the award of this Agreement, Consultant agrees to waive all rights of subrogation against Indemnitee for losses arising from or related to this Agreement. The obligations of Consultant under this provision survive the termination or expiration of this Agreement.

5.6 Insurance Requirements. Consultant must procure insurance under the terms and conditions and for the amounts of coverage set forth in **Exhibit "C"** against claims that may arise from or relate to performance of the work under this Agreement by Consultant and its agents, representatives, employees, and subconsultants. Consultant and any subconsultant must maintain this insurance until all of their obligations have been discharged, including any warranty periods under this Agreement. These insurance requirements are minimum requirements for this Agreement and in no way limit the indemnity covenants contained in this Agreement. City in no way warrants that the minimum limits stated in **Exhibit "C"** are sufficient to protect Consultant from liabilities that might arise out of the performance of the work under this Agreement by Consultant, Consultant's agents, representatives, employees, or subconsultants. Consultant is free to purchase such additional insurance as may be determined necessary.

5.7 Cooperation and Further Documentation. Consultant agrees to provide City such other duly executed documents as may be reasonably requested by City to implement the intent of this Agreement.

5.8 Successors and Assigns. City and Consultant each bind itself, its partners, successors, assigns, and legal representatives to the other party to this Agreement and to the partners, successors, assigns, and legal representatives of such other party in respect to all covenants of this Agreement. Neither City nor Consultant may assign, sublet, or transfer its interest in this Agreement without the written consent of the other party. In no event may any contractual relation be created between any third party and City.

5.9 Disputes. In any dispute arising out of an interpretation of this Agreement or the duties required not disposed of by agreement between Consultant and City, the final determination at the administrative level will be made by City Engineer.

5.10 Completeness and Accuracy of Consultant's Work. Consultant must be responsible for the completeness and accuracy of Consultant's services, data, and other work prepared or

compiled under Consultant's obligation under this Agreement and must correct, at Consultant's expense, all willful or negligent errors, omissions, or acts that may be discovered. Correction of errors disclosed and determined to exist during any construction of the project on architectural or engineering drawings and specifications must be accomplished by Consultant. The cost of the design necessary to correct those errors attributable to Consultant and any damage incurred by City as a result of additional construction costs caused by such engineering or architectural errors will be chargeable to Consultant and will not be considered a cost of the Work. The fact that City has accepted or approved Consultant's work will in no way relieve Consultant of any of Consultant's responsibilities.

5.11 Reporting. Written monthly reports, along with updated work schedules, will be made by Consultant in the format prescribed by City. These reports will be delivered to City per schedule. When requested by City, Consultant will attend Council meetings and provide finished documents including correspondence for Council action, supporting charts, graphs, drawings and colored slides of same.

5.12 Withholding Payment. City reserves the right to withhold funds from Consultant's payments up to the amount equal to the claims City may have against Consultant until such time that a settlement on those claims has been reached.

5.13 City's Right of Cancellation. The Parties acknowledge that this Agreement is subject to cancellation by City under the provisions of Section 38-511, Arizona Revised Statutes (A.R.S.).

5.14 Independent Consultant. For this Agreement Consultant constitutes an independent contractor. Any provisions in this Agreement that may appear to give City the right to direct Consultant as to the details of accomplishing the work or to exercise a measure of control over the work means that Consultant must follow the wishes of City as to the results of the work only. These results must comply with all applicable laws and ordinances.

5.15 Project Staffing. Prior to the start of any work under this Agreement, Consultant must submit to City detailed resumes of key personnel that will be involved in performing services prescribed in the Agreement. City hereby acknowledges its acceptance of such personnel to perform services under this Agreement. At any time hereafter that Consultant desires to change key personnel while performing under the Agreement, Consultant must submit the qualifications of the new personnel to City for prior approval. Key personnel include, but are not limited to, principals-in-charge, project manager, and project Consultant. Consultant will maintain an adequate and competent staff of qualified persons, as may be determined by City, throughout the performance of this Agreement to ensure acceptable and timely completion of the Scope of Services. If City objects, with reasonable cause, to any of Consultant's staff, Consultant must take prompt corrective action acceptable to City and, if required, remove such personnel from the Project and replace with new personnel agreed to by City.

5.16 Consultants or Subconsultants. Prior to beginning the work, Consultant must furnish City for approval the names of consultants or subconsultants to be used under this Agreement. Any subsequent changes are subject to City's written prior approval.

5.17 Force Majeure. If either party is delayed or prevented from the performance of any act required under this Agreement by reason of acts of God or other cause beyond the control and without fault of the Party (financial inability excepted), performance of that act may be excused, but only for the period of the delay, if the Party provides written notice to the other Party within ten days of such act. The time for performance of the act may be extended for a period equivalent to the period of delay from the date written notice is received by the other Party.

5.18 Compliance with Federal Laws. Consultant understands and acknowledges the applicability of the Americans with Disabilities Act, the Immigration Reform and Control Act of 1986 and the Drug Free Workplace Act of 1989 to it. Consultant agrees to comply with these laws in performing this Agreement and to permit City to verify such compliance.

5.19 No Israel Boycott. By entering into this Agreement, Consultant certifies that Consultant is not currently engaged in, and agrees for the duration of the Agreement, not to engage in a boycott of Israel as defined by state statute.

5.20 Legal Worker Requirements. A.R.S. § 41-4401 prohibits City from awarding an Agreement to any consultant who fails, or whose subconsultants fail, to comply with A.R.S. § 23-214(A). Therefore, Consultant agrees Consultant and each subconsultant it uses warrants their compliance with all federal immigration laws and regulations that relate to their employees and their compliance with § 23-214, subsection A. A breach of this warranty will be deemed a material breach of the Agreement and may be subject to penalties up to and including termination of the Agreement. City retains the legal right to inspect the papers of any Consultant's or subconsultant's employee who provides services under this Agreement to ensure that Consultant and subconsultants comply with the warranty under this provision.

5.21 Lawful Presence Requirement. A.R.S. §§ 1-501 and 1-502 prohibit City from awarding an Agreement to any natural person who cannot establish that such person is lawfully present in the United States. To establish lawful presence, a person must produce qualifying identification and sign a City-provided affidavit affirming that the identification provided is genuine. This requirement will be imposed at the time of Agreement award. This requirement does not apply to business organizations such as corporations, partnerships, or limited liability companies.

5.22 Covenant Against Contingent Fees. Consultant warrants that no person has been employed or retained to solicit or secure this Agreement upon an agreement or understanding for a commission, percentage, brokerage, or contingent fee, and that no member of the Chandler City Council, or any City employee has any interest, financially, or otherwise, in Consultant's firm. For breach or violation of this warrant, City may annul this Agreement without liability or, at its discretion, to deduct from the Agreement price or consideration, the full amount of such commission, percentage, brokerage, or contingent fee.

5.23 Non-Waiver Provision. The failure of either Party to enforce any of the provisions of this Agreement or to require performance of the other Party of any of the provisions hereof must not be construed to be a waiver of such provisions, nor must it affect the validity of this Agreement or any part thereof, or the right of either Party to thereafter enforce each and every provision.

5.24 Disclosure of Information Adverse to City's Interests. To evaluate and avoid potential conflicts of interest, Consultant must provide written notice to City, as set forth in this Section, of any work or services performed by Consultant for third parties that may involve or be associated with any real property or personal property owned or leased by City. Such notice must be given 7 business days prior to commencement of the services by Consultant for a third party, or 7 business days prior to an adverse action as defined below. Written notice and disclosure must be sent in accordance with Section 6.7 above. An adverse action under this Agreement includes, but is not limited to: (a) using data as defined in the Agreement acquired in connection with this Agreement to assist a third party in pursuing administrative or judicial action against City; or (b) testifying or providing evidence on behalf of any person in connection with an administrative or judicial action against City; or (c) using data to produce income for Consultant or its employees independently of performing the services under this Agreement, without the prior written consent of City. Consultant represents that except for those persons, entities, and projects identified to City, the services performed by Consultant under this Agreement are not expected to create an interest with any person, entity, or third party project that is or may be adverse to City's interests. Consultant's failure to provide a written notice and disclosure of the information as set forth in this Section constitute a material breach of this Agreement.

5.25 Data Confidentiality and Data Security. As used in the Agreement, "data" means all information, whether written or verbal, including plans, photographs, studies, investigations, audits, analyses, samples, reports, calculations, internal memos, meeting minutes, data field notes, work product, proposals, correspondence and any other similar documents or information prepared by, obtained by, or transmitted to Consultant or its subconsultants in the performance of this Agreement. The Parties agree that all data, regardless of form, including originals, images, and reproductions, prepared by, obtained by, or transmitted to Consultant or its subconsultants in connection with Consultant's or its subconsultant's performance of this Agreement is confidential and proprietary information belonging to City. Except as specifically provided in this Agreement, Consultant or its subconsultants must not divulge data to any third party without City's prior written consent. Consultant or its subconsultants must not use the data for any purposes except to perform the services required under this Agreement. These prohibitions do not apply to the following data provided to Consultant or its subconsultants have first given the required notice to City: (a) data which was known to Consultant or its subconsultants prior to its performance under this Consultant or its subconsultants by a third party, who to the best of Consultant's or its subconsultants' knowledge and belief, had the legal right to make such disclosure and Consultant or its subconsultants are not otherwise required to hold such data in confidence; or (c) data which is required to be disclosed by virtue of law, regulation, or court order, to which Consultant or its subconsultants are subject. In the event Consultant or its subconsultants are required or requested to disclose data to a third party, or any other information to which Consultant or its subconsultants became privy as a result of any other Agreement with City, Consultant must first notify City as set forth in this Section of the request or demand for the data. Consultant or its subconsultants must give City sufficient facts so that City can be given an opportunity to first give its consent or take such action that City may deem appropriate to protect such data or other information from disclosure. All data must continue to be subject to the confidentiality agreements of this Agreement. Consultant or its subconsultants assume all liability to maintain the confidentiality of the data in its possession

and agrees to compensate City if any of the provisions of this Section are violated by Consultant, its employees, agents or subconsultants. Solely for the purposes of seeking injunctive relief, it is agreed that a breach of this Section must be deemed to cause irreparable harm that justifies injunctive relief in court. Consultant agrees that the requirements of this Section must be incorporated into all subagreements entered into by Consultant. A violation of this Section may result in immediate termination of this Agreement without notice.

5.26 Personal Identifying Information-Data Security. Personal identifying information, financial account information, or restricted City information, whether electronic format or hard copy, must be secured and protected at all times by Consultant or its subconsultants. At a minimum, Consultant or its subconsultants must encrypt or password-protect electronic files. This includes data saved to laptop computers, computerized devices, or removable storage devices. When personal identifying information, financial account information, or restricted City information, regardless of its format, is no longer necessary, the information must be redacted or destroyed through appropriate and secure methods that ensure the information cannot be viewed, accessed, or reconstructed. In the event that data collected or obtained by Consultant or its subconsultants in connection with this Agreement is believed to have been compromised, Consultant or its subconsultants must immediately notify City contact. Consultant agrees to reimburse City for any costs incurred by City to investigate potential breaches of this data and, where applicable, the cost of notifying individuals who may be impacted by the breach. Consultant agrees that the requirements of this Section must be incorporated into all subcontracts entered into by Consultant. It is further agreed that a violation of this Section must be deemed to cause irreparable harm that justifies injunctive relief in court. A violation of this Section may result in immediate termination of this Agreement without notice. The obligations of Consultant or its subconsultants under this Section must survive the termination of this Agreement.

5.27 Jurisdiction and Venue. This Agreement is made under and must be construed in accordance with and governed by the laws of the State of Arizona without regard to the conflicts or choice of law provisions thereof. Any action to enforce any provision of this Agreement or to obtain any remedy with respect hereto must be brought in the courts located in Maricopa County, Arizona, and for this purpose, each Party hereby expressly and irrevocably consents to the jurisdiction and venue of such court.

5.28 Survival. All warranties, representations, and indemnifications by Consultant must survive the completion or termination of this Agreement.

5.29 Modification. Except as expressly provided herein to the contrary, no supplement, modification, or amendment of any term of this Agreement will be deemed binding or effective unless in writing and signed by the Parties.

5.30 Severability. If any provision of this Agreement or the application to any person or circumstance may be invalid, illegal or unenforceable to any extent, the remainder of this Agreement and the application will not be affected and will be enforceable to the fullest extent permitted by law.

5.31 Integration. This Agreement contains the full agreement of the Parties. Any prior or contemporaneous written or oral agreement between the Parties regarding the subject

matter is merged and superseded.

5.32 Time is of the Essence. Time of each of the terms, covenants, and conditions of this Agreement is hereby expressly made of the essence.

5.33 Date of Performance. If the date of performance of any obligation or the last day of any time period provided for should fall on a Saturday, Sunday, or holiday for City, the obligation will be due and owing, and the time period will expire, on the first day after which is not a Saturday, Sunday or legal City holiday. Except as may otherwise be set forth in this Agreement, any performance provided for herein will be timely made if completed no later than 5:00 p.m. (Chandler time) on the day of performance.

5.34 Third Party Beneficiary. Nothing under this Agreement will be construed to give any rights or benefits in the Agreement to anyone other than City and Consultant, and all duties and responsibilities undertaken pursuant to this Agreement will be for the sole and exclusive benefit of City and Consultant and not for the benefit of any other party.

5.35 Conflict in Language. All work performed must conform to all applicable City of Chandler codes, ordinances, and requirements as outlined in this Agreement. If there is a conflict in interpretation between provisions in this Agreement and those in **Exhibit "A"**, the provisions in this Agreement prevail.

5.36 Document/Information Release. Documents and materials released to Consultant, which are identified by City as sensitive and confidential, are City's property. The document/material must be issued by and returned to City upon completion of the services under this Agreement. Consultant secondary distribution, disclosure, copying, or duplication in any manner is prohibited without City's prior written approval. The document/material must be kept secure at all times. This directive applies to all City documents, whether in photographic, printed, or electronic data format.

5.37 Exhibits. The following exhibits are made a part of this Agreement and are incorporated by reference:

Exhibit A - Scope of Services / Schedule
Exhibit B - Compensation and Fees
Exhibit C - Insurance Requirements
Exhibit D - Special Conditions
Exhibit E – Subconsultant Documents with Consultant (if applicable)
Exhibit F - Federal Requirements (if applicable)

5.38 Special Conditions. As part of the services Consultant provides under this Agreement, Consultant agrees to comply with and fully perform the special terms and conditions set forth in **Exhibit "D"**, which is attached to and made a part of this Agreement.

5.39 Non-Discrimination and Anti-Harassment Laws. Consultant must comply with all applicable City, state, and federal non-discrimination and anti-harassment laws, rules, and regulations.

5.40 Licenses and Permits. Beginning with the Effective Date and for the full term of this Agreement, Consultant must maintain all applicable City, state, and federal licenses and permits required to fully perform Consultant's services under this Agreement.

5.41 Warranties. Consultant must furnish a one-year warranty on all work and services performed under this Agreement. Consultant must furnish, or cause to be furnished, a two-year warranty on all fixtures, furnishings, and equipment furnished by Consultant, subconsultants or suppliers under this Agreement. Any defects in design, workmanship, or materials that do not comply with this Agreement must be corrected by Consultant (including, but not limited to, all parts and labor) at Consultant's sole cost and expense. All written warranties and redlines for as-built conditions must be delivered to City on or before City's final acceptance of Consultant's services under this Agreement.

5.42 Cooperative Purchasing Agreement (S.A.V.E. – Strategic Alliance for Volume Expenditures). In addition to City of Chandler and with the approval of Consultant, this Agreement may be extended for use by other municipalities, school districts, and government agencies of the State. Any such usage by other entities must be in accordance with the ordinance, charter, or procurement rules and regulations of the respective political entity.

5.43 Budget Approval into Next Fiscal Year. This Agreement will commence on the Effective Date and continue in full force and effect until it is terminated or expires in accordance with the provisions of this Agreement. The Parties recognize that the continuation of this Agreement after the close of the City's fiscal year, which ends on June 30 of each year, is subject to the City Council's approval of a budget that includes an appropriation for this item as an expenditure. The City does not represent that this budget item will be actually adopted. This determination is solely made by the City Council.

5.44 Forced Labor of Ethnic Uyghurs Prohibited. By entering into this Agreement, Contractor certifies and agrees Contractor does not currently use and will not use for the term of this Agreement: (i) the forced labor of ethnic Uyghurs in the People's Republic of China; or (ii) any goods or services produced by the forced labor of ethnic Uyghurs in the People's Republic of China; or (iii) any contractors, subcontractors or suppliers that use the forced labor or any goods or services produced by the forced labor of ethnic Uyghurs in the People's Republic of China.

5.45 License to City for Reasonable Use. With this Agreement, Consultant and its subconsultants hereby grant a license to City, its agents, employees, and representatives for an indefinite period of time to reasonably use, make copies, and distribute as appropriate the Documents, works or deliverables developed or created as a result of the Project and this Agreement. This license also includes the making of derivative works.

This Agreement will be in full force and effect only when it has been approved and executed by the duly authorized City officials.

IN WITNESS WHEREOF, the Parties have executed this Agreement as of the Effective Date.

"CITY" CITY OF CHANDLER

MAYOR

RECOMMENDED BY:

Daniel Haskins

Daniel Haskins, P.E.
CIP City Engineer

APPROVED AS TO FORM:

City Attorney

JWB

ATTEST:

City Clerk Seal

"CONSULTANT"
CONSULTANT ENGINEERING, INC.

Brian C Lizzet 10/14/2024

Signature Date

Brian Lizzet, PE

Print Name

Sr. Vice President

Title

blizzet@cei-az.com

Signer Email Address

EXHIBIT "A"
SCOPE OF SERVICES/SCHEDULE

EXHIBIT "A"

CONSTRUCTION MANAGEMENT
SCOPE OF SERVICES
WW2501.451 – Sewer Rehabilitation for Frye Road Bike Lanes
NOT TO EXCEED

PROJECT TASKS

1. PRE-CONSTRUCTION ASSISTANCE

A. Task 1.1 Preconstruction Assistance

i. Consultant must attend the pre-construction meeting.

2. CONSTRUCTION MANAGEMENT

A. Task 2.1 Weekly Construction Meetings

i. Consultant must conduct weekly construction meetings. Each meeting includes agenda and minutes; Request for Information (RFI); Shop Drawing; Request for Information (RFI); Field Directive (FD); Material Certification; and Allowance Logs. Consultant assumes **10 bi-weekly** meetings will be held.

B. Task 2.2 CPM Schedule

i. Consultant must review and evaluate Contractor's initial CPM schedule and provide recommendations for acceptance.

ii. Consultant must review Contractor's monthly CPM schedule updates submitted with each payment application, identify CPM tasks behind schedule that may affect critical path items, project substantial and final completion dates and initiate correspondence to City regarding those tasks. Consultant assumes **4** reviews of updated CPM schedule.

C. Task 2.3 Requests for Information (RFI's)

i. Consultant must review, evaluate, and respond to Contractor Requests for Information (RFI's); and prepare and maintain a submittal log of all RFI's. Consultant assumes **6** RFI responses.

D. Task 2.4 Shop Drawing Submittals

i. Consultant must review, evaluate, and respond to Contractor shop drawing submittals; and prepare and maintain a submittal log of all shop drawing submittals. Consultant assumes **6** reviews.

E. Task 2.5 Requests for Proposal (RFP)

i. Consultant must prepare Requests for Proposal (RFP) documents detailing requested additional work tasks; review and evaluate Contractor RFP responses (cost derivations) with approval recommendations; and prepare and maintain a submittal log list of all RFPs. Consultant assumes **4** RFPs.

F. Task 2.6 Field Directives (FD's)

i. Consultant must prepare Field Directive (FD) documents detailing requested additional work tasks; review and evaluate Contractor FD responses with approval recommendations; and prepare and maintain a submittal log list of all FDs. Consultant assumes **4** FD's.

G. Task 2.7 Contractor Payment Applications

i. Consultant must review and evaluate Contractor monthly payment applications and make recommendation for payment; maintain a weekly record of constructed pay quantities and compile monthly totals; and coordinate payment application with the city quantity report and the inspectors' daily logs. Consultant assumes **5** payment applications, with **2** reviews each.

H. Task 2.8 Public Outreach (Allowance)

i. Consultant must provide public outreach services, whether by consultant or subconsultant. Tasks will include: create and maintain project website; maintain a 24-hour bilingual project hotline to respond to inquiries, complaints and maintain a call log; public weekly email updates; public interactions with property owners as a liaison between property owners and the City; coordination meetings and project meetings.

3. CONSTRUCTION INSPECTION

A. Task 3.1 Inspection Services

i. Consultant must provide construction inspection to verify materials and installations conform to construction documents; prepare daily inspection reports documenting Contractor construction activities and progress during field inspection visits. Consultant assumes **1** inspector full time **40-hours** per week for the duration of the project. Consultant assumes **10%** total hours for over-time.

B. Task 3.2 Project Closeout

i. Consultant must compile non-conformance list prior to Substantial Completion; schedule and conduct Substantial Completion inspection; prepare Substantial Completion punch list generated from Substantial Completion inspection; track items on punch list and note completed items; and complete and distribute Substantial Completion certificates.

ii. Consultant must schedule and conduct Final Completion inspection; and complete and distribute Final Completion certificates.

iii. Consultant must provide all documents in an electronic version that matches the City's filing system, so it can be imported into City's files

4. MATERIALS TESTING

A. Task 4.1 Quality Control (QC) Test Program

i. Consultant must review and verify Contractor's Quality Control material test type and frequencies are consistent with City and MAG; review and evaluate Contractor's QC test schedule and provide recommendations on acceptance; and review and evaluate all Contractor sampling, test, and inspection results for conformance with construction documents.

5. RECORD DRAWINGS

A. **Task 5.1 Record Drawings**

i. Review and monitor Contractor's updates on post panorama video of sewer manholes after rehabilitation complete.

ii. Prepare Excel file as-built spreadsheet showing manholes rehabilitated, including EID and rehab completed.

ASSUMPTION, CLARIFICATIONS, AND EXCLUSIONS

1. Application fees for City reviews and permits will be paid by CITY.
2. The Owner's Allowance will only be utilized with prior written approval from the city construction manager.

EXHIBIT "B"
COMPENSATION AND FEES

EXHIBIT "B"
CONSTRUCTION MANAGEMENT
SCOPE OF SERVICES
FEE SCHEDULE
WW2501.451 - Sewer Rehabilitation for Frye Road Bike Lanes
NOT TO EXCEED

Task	Description	Cost
1	**PRE-CONSTRUCTION ASSISTANCE**	
1.1	Pre-Construction Assistance	$1,240.00
	SUBTOTAL TASK 1:	**$ 1,240.00**
2	**CONSTRUCTION MANAGEMENT**	
2.1	Weekly Construction Meetings	$10,700.00
2.2	CPM Schedule	$1,880.00
2.3	Requests for Information (RFI)	$5,640.00
2.4	Shop Drawing Submittals	$5,640.00
2.5	Requests for Proposal (RFP)	$1,880.00
2.6	Field Directive (FD)	$1,880.00
2.7	Contractor Payment Applications	$2,350.00
2.8	Public Outreach (Allowance)	$0.00
	SUBTOTAL TASK 2:	**$ 29,970.00**
3	**CONSTRUCTION INSPECTION**	
3.1	Inspection Services	$110,510.00
3.2	Project Closeout	$9,100.00
	SUBTOTAL TASK 3:	**$ 119,610.00**

4	**MATERIALS TESTING**	
4.1	QC Test Program	$2,350.00
	SUBTOTAL TASK 5:	**$ 2,350.00**
5	**RECORD DRAWINGS**	
5.1	Record Drawings	$5,725.00
	SUBTOTAL TASK 6:	**$ 5,725.00**
ALLOWANCES		
Public Outreach - MakPro		$ 5,000.00
Owner's Allowance (approx. 10% rounded)		$ 20,000.00
	SUBTOTAL ALLOWANCES:	**$ 25,000.00**
	PROJECT TOTAL:	**$ 183,895.00**

		Project Manager	Project Supervisor	Senior Inspector	Senior Inspector - OT	Field Office Manager		< PROJECT ROLE
		Brian Lizzet	John Helton	Josh Cantrell	Josh Cantrell	Shanelle Barber		< NAME OF PERSON
		$ 235.00	$ 135.00	$ 135.00	$ 202.50	$ 115.00	$ -	< HOURLY RATES
TASK DESCRIPTION								TOTAL HOURS PER TASK
Task 1 Pre-construction Assistance		**2**	**2**	**2**	**0**	**2**	**0**	**8**
1.1	Pre-construction Assistance	2	2	2		2		*8*
Task 2 Construction Management		**112**	**10**	**0**	**0**	**20**	**0**	**142**
2.1	Weekly Construction Meetings	30	10			20		*60*
2.2	CPM Schedule	8						*8*
2.3	Request for Information's (RFI's)	24						*24*
2.4	Shop Drawing Submittals	24						*24*
2.5	Request for Proposal (RFP)	8						*8*
2.6	Field Directives (FD's)	8						*8*
2.7	Contractor Payment Applications	10						*10*
2.8	Public Outreach (Allowance)	0						*0*
Task 3 Construction Inspection		**10**	**50**	**680**	**64**	**50**	**0**	**854**
3.1	Inspection Services		40	640	64	50		*794*
3.2	Project Closeout	10	10	40				*60*
Task 4 Material Testing		**10**	**0**	**0**	**0**	**0**	**0**	**10**
4.1	Quality Control (QC) Test Program	10						*10*
Task 5 Record Drawings		**10**	**5**	**20**	**0**	**0**	**0**	**35**
5.1	Record Drawings	10	5	20				*35*
	Total Hours:	**144**	**67**	**702**	**64**	**72**	**0**	**1049**

EXHIBIT "C"
INSURANCE REQUIREMENTS

1. General.

1.1 At the same time as execution of this Agreement, Consultant must furnish City a certificate of insurance on a standard insurance industry ACORD form. The ACORD form must be issued by an insurance company authorized to transact business in the State of Arizona possessing a current A.M. Best, Inc. rating of A-7, or better and legally authorized to do business in the State of Arizona with policies and forms satisfactory to City. Provided, however, the A.M. Best rating requirement will not be deemed to apply to required Workers' Compensation coverage.

1.2 Consultant and any of its subconsultants must procure and maintain, until all of their obligations have been discharged, including any warranty periods under this Agreement are satisfied, the insurances set forth below.

1.3 The insurance requirements set forth below are minimum requirements for this Agreement and in no way limit the indemnity covenants contained in this Agreement.

1.4 City in no way warrants that the minimum insurance limits contained in this Agreement are sufficient to protect Consultant from liabilities that might arise out of the performance of the Agreement services under this Agreement by Consultant, its agents, representatives, employees, subconsultants, and Consultant is free to purchase any additional insurance as may be determined necessary.

1.5 Failure to demand evidence of full compliance with the insurance requirements in this Agreement or failure to identify any insurance deficiency will not relieve Consultant from, nor will it be considered a waiver of its obligation to maintain the required insurance at all times during the performance of this Agreement.

1.6 Use of subconsultants: If any work is subcontracted in any way, Consultant must execute a written Agreement with subconsultant containing the same Indemnification Clause and Insurance Requirements as City requires of Consultant in this Agreement. Consultant is responsible for executing the Agreement with the subconsultant and obtaining Certificates of Insurance and verifying the insurance requirements.

2. Minimum Scope and Limits of Insurance. Consultant must provide coverage with limits of liability not less than those stated below.

2.1 *Professional Liability.* If the Agreement is the subject of any professional services or work performed by Consultant, or if Consultant engages in any professional services or work adjunct or residual to performing the work under this Agreement, Consultant must maintain Professional Liability insurance covering errors and omissions arising out of the work or services performed by Consultant, or anyone employed by Consultant, or anyone whose acts, mistakes, errors and omissions Consultant is legally liable, with a liability limit of $1,000,000 each claim and $2,000,000 all claims. In the event the Professional Liability insurance policy is written on a "claims made" basis, coverage must extend for 3 years past

completion and acceptance of the work or services, and Consultant, or its selected Design Professional will submit Certificates of Insurance as evidence the required coverage is in effect. The Design Professional must annually submit Certificates of Insurance citing that the applicable coverage is in force and contains the required provisions for a 3 year period.

2.2 *Commercial General Liability-Occurrence Form.* Consultant must maintain "occurrence" form Commercial General Liability insurance with a limit of not less than $2,000,000 for each occurrence, $4,000,000 aggregate. Said insurance must also include coverage for products and completed operations, independent contractors, personal injury and advertising injury. If any Excess insurance is utilized to fulfill the requirements of this paragraph, the Excess insurance must be "follow form" equal or broader in coverage scope than underlying insurance.

2.3 *Automobile Liability-Any Auto or Owned, Hired and Non-Owned Vehicles*
Vehicle Liability: Consultant must maintain Business/Automobile Liability insurance with a limit of $1,000,000 each accident on Consultant owned, hired, and non-owned vehicles assigned to or used in the performance of Consultant's work or services under this Agreement. If any Excess or Umbrella insurance is utilized to fulfill the requirements of this paragraph, the Excess or Umbrella insurance must be "follow form" equal or broader in coverage scope than underlying insurance.

2.4 *Workers Compensation and Employers Liability Insurance:* Consultant must maintain Workers Compensation insurance to cover obligations imposed by federal and state statutes having jurisdiction of Consultant employees engaged in the performance of work or services under this Agreement and must also maintain Employers' Liability insurance of not less than $1,000,000 for each accident and $1,000,000 disease for each employee.

3. <u>Additional Policy Provisions Required</u>.

3.1 *Self-Insured Retentions or Deductibles*. Any self-insured retentions and deductibles must be declared and approved by City. If not approved, City may require that the insurer reduce or eliminate any deductible or self-insured retentions with respect to City, its officers, officials, agents, employees, and volunteers.

3.1.1. Consultant's insurance must contain broad form contractual liability coverage.

3.1.2. Consultant's insurance coverage must be primary insurance with respect to City, its officers, officials, agents, and employees. Any insurance or self-insurance maintained by City, its officers, officials, agents, and employees will be in excess of the coverage provided by Consultant and must not contribute to it.

3.1.3. Consultant's insurance must apply separately to each insured against whom claim is made or suit is brought, except with respect to the limits of the insurer's liability.

3.1.4. Coverage provided by Consultant must not be limited to the liability assumed under the indemnification provisions of this Agreement.

3.1.5. The policies must contain a severability of interest clause and waiver of subrogation against City, its officers, officials, agents, and employees, for losses arising from Work performed by Consultant for City. (Does not apply to Professional Liability coverage.)

3.1.6. Consultant, its successors and or assigns, are required to maintain Commercial General Liability insurance as specified in this Agreement for a minimum period of 3 years following completion and acceptance of the Work. Consultant must submit a Certificate of Insurance evidencing Commercial General Liability insurance during this 3-year period containing all the Agreement insurance requirements, including naming City of Chandler, its agents, representatives, officers, directors, officials and employees as Additional Insured as required.

3.1.7. If a Certificate of Insurance is submitted as verification of coverage, City will reasonably rely upon the Certificate of Insurance as evidence of coverage, but this acceptance and reliance will not waive or alter in any way the insurance requirements or obligations of this Agreement.

3.2. *Insurance Cancellation During Term of Agreement.*

3.2.1. If any of the required policies expire during the life of this Agreement, Consultant must forward renewal or replacement Certificates to City within 10 days after the renewal date containing all the required insurance provisions.

3.2.2. Each insurance policy required by the insurance provisions of this Agreement must provide the required coverage and must not be suspended, voided or canceled except after thirty (30) days prior written notice has been given to City, except when cancellation is for non-payment of premium, then ten (10) days prior notice may be given. Such notice must be sent directly to Chandler Law-Risk Management Department, Post Office Box 4008, Mailstop 628, Chandler, Arizona 85225. If any insurance company refuses to provide the required notice, Consultant or its insurance broker must notify City of any cancellation, suspension, non-renewal of any insurance within seven (7) days of receipt of insurers' notification to that effect.

3.3 City as Additional Insured. The policies are to contain, or be endorsed to contain, the following provisions:

3.3.1. The Commercial General Liability and Automobile Liability policies are to contain, or be endorsed to contain, the following provisions: City, its officers, officials, agents, and employees are additional insureds with respect to liability arising out of activities performed by, or on behalf of, Consultant; Products and Completed operations of Consultant; and automobiles owned, leased, hired, or borrowed by Consultant.

3.3.2. City, its officers, officials, agents, and employees must be additional insureds to the full limits of liability purchased by Consultant even if those limits of liability are in excess of those required by this Agreement.

EXHIBIT "D"
SPECIAL CONDITIONS

Work within City's Right-of-Way. All work performed within City's Right-of-Way by Consultant and Consultant's subconsultants must comply with City of Chandler requirements.

EXHIBIT "E"
SUBCONSULTANT DOCUMENTS WITH CONSULTANT

Any subconsultant assumptions, clarifications, exclusions, terms & conditions, signature blocks, etc. included are strictly between the Consultant and their subconsultants, and do not apply to the Agreement between the Consultant and the City.

N/A

EXHIBIT "F"
FEDERAL REQUIREMENTS

N/A

City Council Memorandum Public Works & Utilities Memo No. CP25-060

Date: November 04, 2024
To: Mayor and Council
Thru: Joshua H. Wright, City Manager
Andy Bass, Deputy City Manager
John Knudson, Public Works and Utilities Director
Daniel Haskins, Capital Projects Division Manager
From: Melanie Sikes, Principal Engineer
Subject: Job Order Project Agreement No. WW2501.402, with Archer Western Construction, LLC, Pursuant to Job Order Master Agreement No. JOC2415.401, for the Sewer Rehabilitation for Frye Road Bike Lanes

---

Proposed Motion:

Move City Council award Job Order Project Agreement No. WW2501.402, to Archer Western Construction, LLC, Pursuant to Job Order Master Agreement No. JOC2415.401, for the Sewer Rehabilitation for Frye Road Bike Lanes, in an amount not to exceed $1,106,391.09.

Background/Discussion:

In preparation for the Frye Road Protected Bike Lanes project, the sanitary sewer pipes and manholes were assessed between Fairview Street and the Consolidated Canal. During the assessment it was determined that many of the manholes within this area are in need of priority maintenance. This project will rehabilitate approximately 40 manholes and one segment of ductile iron pipe with cured-in-place pipe liner.

The project scope of work consists of manhole rehabilitation, pipe rehabilitation, testing, flow management, and traffic control. The agreement completion time is 150 calendar days following the Notice to Proceed, which is anticipated to occur in November 2024.

A related Professional Services Agreement with Consultant Engineering, Inc., for the Sewer Rehabilitation for Frye Road Bike Lanes Construction Management

Services, is also scheduled for this City Council meeting.

Evaluation:

The selection process was conducted in accordance with city policy and procedure and state law. The costs proposed for this project have been evaluated by staff and determined to be reasonable.

Fiscal Impact

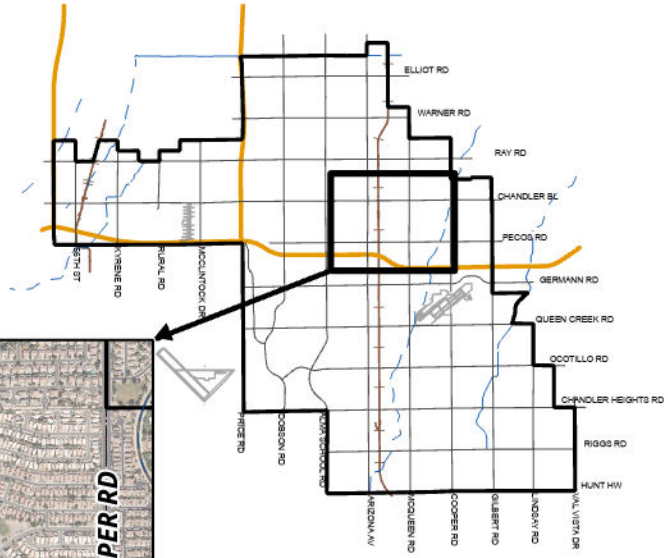
Account No.	Fund Name	Program Name	Dollar Amount	CIP Funded Y/N
615.3910.6812.6WW332	WW Operating	Wastewater System Upgrades with Str	$1,106,391.09	Y

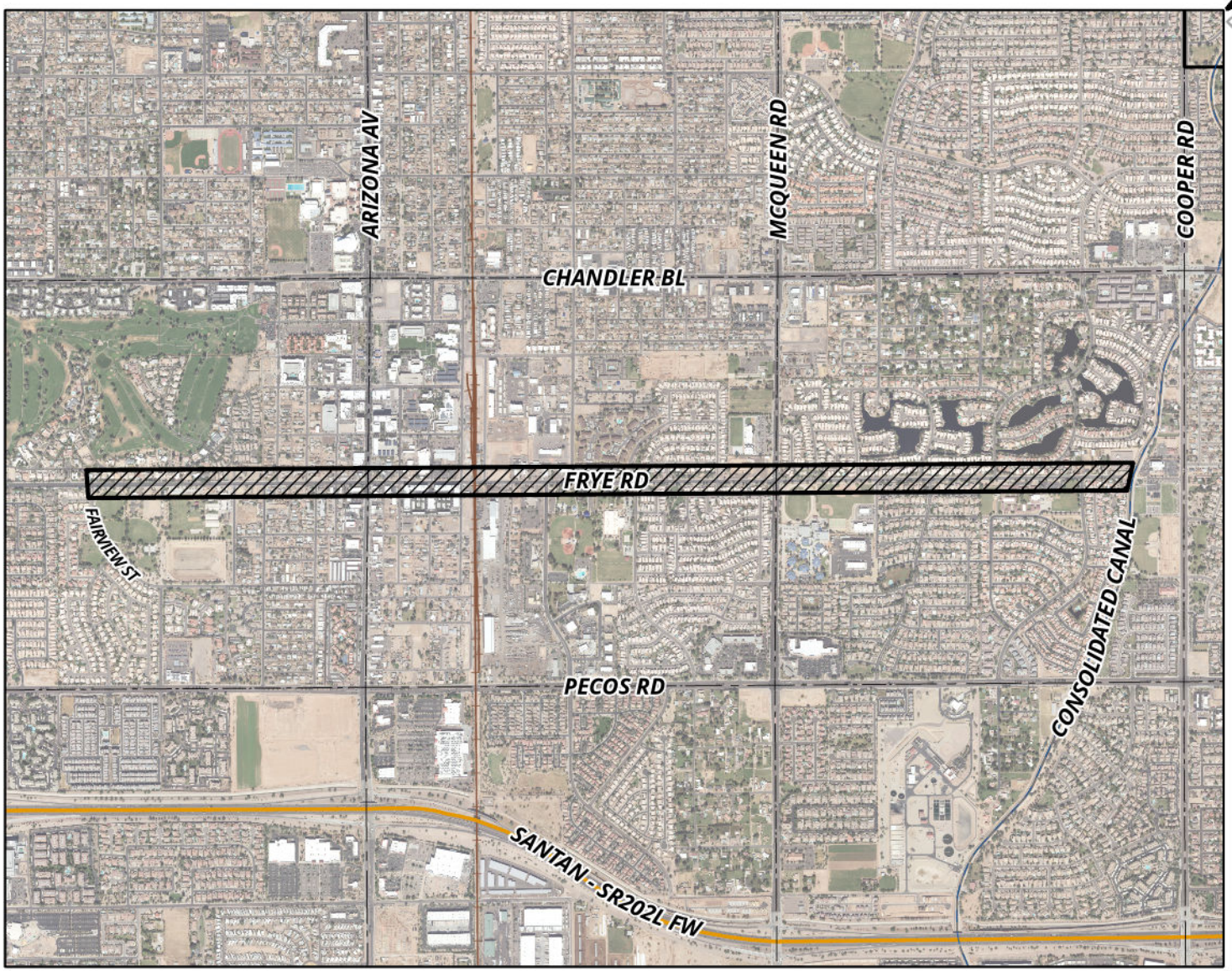
Attachments

Location Map

Agreement - Archer Western

SEWER REHABILITATION FOR FRYE ROAD BIKE LANES PROJECT NO. WW2501.402





MEMO NO. CP25-060

PROJECT AREA

NTS

ChanGIS

\\cc2wf01\dept\PWDATA\ENGINEER\GENSERV_ArcGISPro_Shared\Map Requests\Capital Projects\2025\CP25-060\CP25-060\CP25-060.aprx 10/10/2024 RaistlinS

CITY OF CHANDLER
JOB ORDER PROJECT AGREEMENT

Sewer Rehabilitation for Frye Road Bike Lanes

Project No. WW2501.402
Council Date: November 7, 2024

This JOB ORDER PROJECT AGREEMENT ("Job Order") is made this _____ day of _____ 2024 ("Effective Date"), by and between the City of Chandler, an Arizona municipal corporation, ("City") and **Archer Western Construction, LLC**, an Illinois limited liability company, ("JOC Contractor") and is entered into pursuant to Job Order Master Agreement No. **JOC2415.401** ("JOC Master Agreement"). City and JOC Contractor may be referred to individually as "Party" or collectively as "Parties").

City and JOC Contractor, in consideration of the mutual covenants herein set forth, agree as follows:

RECITALS

A. On or about **March 1, 2024**, the Parties entered into the JOC Master Agreement, which terms and conditions are made a part of and incorporated into this Job Order Project Agreement by this reference.

B. City proposes to engage JOC Contractor for construction services as more fully described in Article 1 and **Exhibit "A"**, which is attached to and made a part of this Job Order by this reference.

C. JOC Contractor is ready, willing, and able to provide the services described in **Exhibit "A"** for the compensation and fees set forth and as described in **Exhibit "B"**, which is attached to and made a part of this Agreement by this reference.

ARTICLE 1. DESCRIPTION OF WORK

The Parties enter into this Job Order Project Agreement for the **Sewer Rehabilitation for Frye Road Bike Lanes**, Project Number **WW2501.402**. The scope of work consists of **rehabilitation of 40 manholes on Frye Road from Fairview Street to the Consolidated Canal and rehabilitation of a sewer pipe segment**, all as more particularly set forth in **Exhibit "A"** attached hereto and incorporated herein by reference.

The JOC Contractor will not accept any change of scope, or change in Agreement provisions, unless issued in writing, as a Agreement amendment or change order and signed by the authorized signatories for each party.

Performance and Payment Bonds, as set forth in **Exhibit "C"** and **Exhibit "D"** respectively attached hereto and incorporated herein by reference, will be due prior to execution of each Job Order Project Agreement in the full amount of each Job Order.

At project completion, JOC Contractor must complete Contractor's Affidavit Regarding Settlement of Claims and Certificate of Completion, as set forth in **Exhibit "E"** and **Exhibit "F"** respectively attached hereto and incorporated herein by reference.

ARTICLE 2. PROJECT PRICE

City will pay JOC Contractor for completion of the Work in accordance with the JOC Master Agreement a fee not to exceed the Guaranteed Maximum Price of **$1,106,391.09** Dollars determined and payable as set forth in JOC Master Agreement and **Exhibit "B"** attached hereto and made a part hereof by reference.

ARTICLE 3. AGREEMENT TIME & SCHEDULE

JOC Contractor agrees to complete all Construction within **150** calendar days from the Notice to Proceed (NTP) Date.

ARTICLE 4. JOB ORDER CONTACTS

The following parties serve in the capacity below for this Job Order Project.

CITY:	Construction Project Manager: Raymond Potts	
	Phone:	480-782-3326
	Email:	Raymond.Potts@chandleraz.gov
JOC CONTRACTOR:	Archer Western Construction, LLC	
	4710 E Elwood St., Suite 6, Phoenix, AZ 85040	
	JOC Contractor Representative: Bradley T. Sanders	
	Phone:	602-246-1485
	Email:	BSanders@walshgroup.com

ARTICLE 5. FORCED LABOR OF ETHNIC UYGHURS PROHIBITED

By entering into this Agreement, Contractor certifies and agrees Contractor does not currently use and will not use for the term of this Agreement: (i) the forced labor of ethnic Uyghurs in the People's Republic of China; or (ii) any goods or services produced by the forced labor of ethnic Uyghurs in the People's Republic of China; or (iii) any contractors, subcontractors or suppliers that use the forced labor or any goods or services produced by the forced labor of ethnic Uyghurs in the People's Republic of China

SIGNATURE PAGE TO FOLLOW

IN WITNESS WHEREOF, the Parties have executed this Job Order as of the Effective Date.

"CITY" CITY OF CHANDLER

MAYOR

RECOMMENDED BY:

Daniel Haskins

Daniel Haskins, P.E.
CIP City Engineer

APPROVED AS TO FORM:

City Attorney

ATTEST:

City Clerk Seal

"JOC CONTRACTOR"
ARCHER WESTERN CONSTRUCTION, LLC

Signature October 15, 2024 Date

Brad Sanders
Print Name

Business Group Leader/Vice President
Title

bsanders@walshgroup.com
Signer Email Address

EXHIBIT A
SCOPE OF WORK

October 11, 2024

Raymond Potts
975 E. Armstrong Way,
Building L,
Chandler, AZ 85286

Re: City of Chandler Job Order Contract Project – JOC2415.401
Reference: WW2501.402 Sewer Rehabilitation for Frye Road Bike Lanes

Dear Mr. Potts,

Archer Western is pleased to submit the attached proposal regarding pricing for the rehabilitation of fort-one manholes along E. Frye Rd. for the City of Chandler, AZ. The total cost for this work is in the amount of $1,106,391.09.

This proposal includes the following:

- 23EA Manholes: Re-build bench, epoxy coat bench and remove stairs
- 14EA Manholes: Rebuild bench, full epoxy coating of shaft and remove stairs
- 2EA Manholes: Abandon manhole, remove cone, backfill with CLSM and restore asphalt.
- 2EA Manholes: Full Polymer insert rehabilitations and bench rebuild. Existing frame and covers will be reused during collar replacements
- 1EA Manhole: MH 756000720 Adjustment and Collar
- Traffic Control
- Dust and SWPP Permitting
- Attendance at Bi-Weekly Owners Meetings
- 25% Adhesion Testing
- 100% Holiday Testing
- Post Pano documentation
- Warranty per MAG Specifications
- Polymer manufacturer warranty
- 5-year warranty certifications for epoxy application
- 475 LF CIPP Lining

These clarifications are intended to address potential variables in the project scope and provide transparency.

- If material can be pulled out of holes left from the removal of ladders in the manholes, holes will be grouted afterwards
- Archer Western Construction has committed to sequencing the work, beginning at the canal on the east end of Frye Road and progressing westward. Additionally, we will prioritize completing as much work as possible near the schools along Frye Road during scheduled school breaks.
- Off-Duty officers will be scheduled through the following platform: https://chandlerazpd.gov/extra-duty/. If a Chandler officer is unavailable, alternative personnel may be used

The following items are assumed to be billed under the allowance:

- 1EA: MH 8866 Re-build Bench and Epoxy Coat Bench if determined necessary by client
- 1EA: Bypass equipment rental in support of CIPP lining
- Potholing

The following items are excluded from this proposal:

- Permitting other than Dust and SWPP permits
- Bypass necessary to complete CIPP lining of sewer line

The anticipated duration of work in the field will be approximately 18 weeks.

Pricing for this proposal is based upon normal labor, material, equipment and markup cost elements.

If you have any questions, or require additional information, please contact me at 602-920-1453.

Sincerely,
ARCHER WESTERN CONSTRUCTION

Sam Elliott
Project Manager
CC: Jason Kelly, Area Manager

4710 E. Elwood St, Ste. 6, Phoenix, AZ 85040
P: 602.246.1485 F: 602.246.1491 www.walshgroup.com
An Equal Opportunity Employer

EXHIBIT B
FEE SCHEDULE

EXHIBIT "B"

JOB ORDER COST PROPOSAL
SUMMARY SHEET
WW2501.402 - Sewer Rehab for Frye Bike Lanes

Negotiated Prices				
Price of Subcontractor(s)			$	528,757.95
Price of Subconsultant(s)			$	-
General Conditions			$	155,863.51
Preconstruction Labor (if applicable)			$	-
Construction Labor (if applicable)			$	164,593.53
		SUBTOTAL (NEGOTIATED PRICES):	**$**	**849,214.99**
Overhead and Profit (Coefficient per Job Order Master Agreement)		**8.00%**	**$**	**67,937.20**
		TOTAL (NEGOTIATED PRICES + OVERHEAD & PROFIT):	**$**	**917,152.18**
Insurance, Bonds, & Taxes				
Sales Tax Percentage (Current Tax Rate)	**ENTER TAX % HERE:**	**5.07%**	$	46,499.62
General Liability Insurance Percentage (Actual Cost per Job Order)		*1.06%*	$	9,721.81
Builder's Risk Insurance Percentage (Actual Cost per Job Order)		*1.50%*	$	13,757.28
Payment Bond (Actual Cost per Job Order)		*1.00%*	$	9,171.52
Performance Bond (Actual Cost per Job Order)		*1.10%*	$	10,088.67
		SUBTOTAL (INSURANCE, BONDS, & TAXES):	**$**	**89,238.91**
		COMBINED TOTAL (TOTAL + INSURANCE, BONDS, & TAXES):	**$**	**1,006,391.09**
City's Allowance			**$**	**100,000.00**
		TOTAL JOB ORDER:	**$**	**1,106,391.09**

Per the Job Order Master Agreement - This Fee Table includes all fees, costs, insurance and bond premiums, allowances, construction contingency, and taxes of any type necessary to fully, propertly and timely perform and construct the Work. Also per the Job Order Master Agreement - For any portion of the Work which, either through this Contract, Change Order or otherwise, is performed and paid for on a cost, or time and materials basis, the costs may be reimbursed to JOC Contractor and chargeable against the Contract Price will be determined as set forth in MAG 109.5.

WW2501.402 Sewer Rehab for Frye Road Bike Lanes

INDEX

CONTRACTOR NAME: **Archer Western Construction**

Contract Type:	JOC	City Project No.:	WW2501.402
Job Order No.:	2415.402	Contractors Job No.:	224148
City Project Mgr.:	Raymond Potts	Prepared By:	Sam Elliott
Fee Type:	**Fixed**	Date:	10/11/2024

City Project Title: **Sewer Rehab for Frye Road Bike Lanes**

Description of Work to be Performed (supporting information attached)**:** General Conditions

GENERAL CONDITIONS OF THE WORK

Item	Unit	Quantity		General Conditions Cost	
				Unit Price	Total
Mobilization / Demobilization	LS	1.00		$ 5,000.00	$ 5,000.00
Supervision	LS	1.00		$ 140,238.51	$ 140,238.51
Permits & Environmental Controls (Dust & SWPP Permit)	LS	1.00		$ 7,500.00	$ 7,500.00
Temporary Facilities & Controls	LS	1.00		$ 1,125.00	$ 1,125.00
Engineering / Testing	LS	1.00		$ 2,000.00	$ 2,000.00
Site Support	LS	-		$ -	$ -
Miscellaneous / Other	LS	-		$ -	$ -
				Subtotal General Conditions (F)	$ 155,863.51

JOC Sewer Main & Manholes: JOC2415.401
Project No: WW2501.401
Project Name: Sewer Rehabiliation for Frye Road Bike Lanes
Client: City of Chandler
General Contractor: Archer Western Construction

	MH NUMBER	COST	DEPTH - BENCH TO RIM	REHABILITATION DESCRIPTION	CONDITION	PRIORITY
1	756012791	$ 18,883.63	14'-3"	Full Epoxy Rehabilitation	POOR	HIGH
2	756003358	$ 9,653.63	14'-6"	Rebuild Bench & Epoxy Coating	GOOD	LOW
3	756003363	$ 9,653.63	14'-7"	Rebuild Bench & Epoxy Coating	FAIR	MEDIUM
4	756006921	$ 9,448.30	14'-9"	Rebuild Bench & Epoxy Coating	FAIR	MEDIUM
5	756003357	$ 9,448.30	14'-4"	Rebuild Bench & Epoxy Coating	FAIR	MEDIUM
6	756014805	$ 9,448.30	12'-10"	Rebuild Bench & Epoxy Coating	FAIR	MEDIUM
7	756010811	$ 13,581.92	10'-4"	Rebuild Bench & Epoxy Coating	GOOD	LOW
8	756014804	$ 19,831.92	9'-8"	Full Epoxy Rehabilitation	POOR	HIGH
9	756006920	$ 26,464.50	15'-6"	Full Epoxy Rehabilitation	POOR	HIGH
10	756006919	$ 26,464.50	14'-4"	Full Epoxy Rehabilitation	POOR	HIGH
11	756006918	$ 13,239.50	12'-10"	Rebuild Bench & Epoxy Coating	FAIR	MEDIUM
12	756003362	$ 20,979.50	12'-3"	Full Epoxy Rehabilitation	POOR	HIGH
13	756010810	$ 15,640.06	9'-5"	Full Epoxy Rehabilitation	FAIR	MEDIUM
14	756003361	$ 21,090.06	9'-5"	Full Epoxy Rehabilitation	POOR	HIGH
15	756003360	$ 27,545.06	8'-8"	Full Epoxy Rehabilitation	GOOD	LOW
16	756011292	$ 88,285.21	15'-0"	Polymer Manhole Inserts	NA	MEDIUM
17	756012768	$ 9,144.40	12'-13'	Full Epoxy Rehabilitation	FAIR	MEDIUM
18	756003270	$ 19,689.92	NA	Abandon Manhole	NA	NA
19	756006891	$ 83,617.40	15'-2"	Polymer Manhole Inserts	POOR	HIGH
20	756014774	$ 7,665.70	14'-6"	Rebuild Bench & Epoxy Coating	FAIR	MEDIUM
21	756014773	$ 10,487.35	14'-0"	Rebuild Bench & Epoxy Coating	GOOD	LOW
22	756010777	$ 10,487.35	15'-4"	Rebuild Bench & Epoxy Coating	GOOD	LOW
23	756012766	$ 10,621.50	15'-8"	Rebuild Bench & Epoxy Coating	GOOD	LOW
24	756012765	$ 9,470.30	12'-2"	Rebuild Bench & Epoxy Coating	GOOD	LOW
25	756020064	$ 9,470.83	13'-7"	Rebuild Bench & Epoxy Coating	GOOD	LOW
26	756014772	$ 9,470.30	14'-10"	Rebuild Bench & Epoxy Coating	FAIR	MEDIUM
27	756003275	$ 10,453.63	13'-1"	Rebuild Bench & Epoxy Coating	GOOD	LOW
28	756003274	$ 10,453.63	13'-7"	Rebuild Bench & Epoxy Coating	FAIR	MEDIUM
29	756003273	$ 9,872.67	14'-0"	Rebuild Bench & Epoxy Coating	GOOD	LOW
30	756014736	$ 47,235.44	NA	Abandon Manhole	NA	NA
31	756014715	$ 12,648.83	13'-5"	Rebuild Bench & Epoxy Coating	POOR	HIGH
32	756003077	$ 9,448.83	13'-8"	Rebuild Bench & Epoxy Coating	GOOD	LOW
33	756003078	$ 9,448.83	14'	Rebuild Bench & Epoxy Coating	FAIR	MEDIUM
34	756012714	$ 22,470.56	14'-1"	Full Epoxy Rehabilitation	POOR	HIGH
35	756003074	$ 22,470.56	13'-8"	Full Epoxy Rehabilitation	POOR	HIGH
36	756003075	$ 22,470.56	13'-9"	Full Epoxy Rehabilitation	POOR	HIGH
37	756006839	$ 22,011.72	12'-3"	Full Epoxy Rehabilitation	POOR	HIGH
38	756003079	$ 14,836.12	11'-8"	Rebuild Bench & Epoxy Coating	FAIR	MEDIUM
39	756003080	$ 9,470.83	11'-6"	Rebuild Bench & Epoxy Coating	GOOD	LOW
40	756006842	$ 17,210.83	11'-8"	Full Epoxy Rehabilitation	POOR	HIGH
41	756008817	$ 8,888.98	12'-3"	Rebuild Bench & Epoxy Coating	GOOD	LOW
50	756000720	$ 2,578.82	NA	Adjust Manhole	NA	NA
51	8866	$ 9,653.63	NA	Allowance - Possible Bench Rebuild	NA	NA
52	CIPP Lining	$ 56,210.70	NA	CIPP Line MH MH7560003357-MH756014805	NA	NA
42	756012769	$ -	13'	No Rehabilitation	GOOD	LOW
43	756012767	$ -	12'-6"	No Rehabilitation	NA	NA
44	756008863	$ -	14'-3"	No Rehabilitation	GOOD	LOW
45	756003272	$ -	14'-0"	No Rehabilitation	GOOD	LOW
46	756000812	$ -	14'-0"	No Rehabilitation	GOOD	LOW
47	756014737	$ -	25'-0"	No Rehabilitation	GOOD	LOW
48	756010724	$ -	12'-7"	No Rehabilitation	GOOD	LOW
49	756019265	$ -	13'-8"	No Rehabilitation	GOOD	LOW

WW2501.402 Sewer Rehab for Frye Road Bike Lanes

INDEX

CONTRACTOR NAME: **Archer Western Construction**

Contract Type:	JOC	City Project No.:	WW2501.402
Job Order No.:	2415.401	Contractors Job No.:	224148
City Project Mgr.:	Raymond Potts	Prepared By:	Sam Elliott
Fee Type:	**Fixed**	Date:	10/11/2024
Location:	MH 756012791 - Frye Rd (San Marcos Elementary) - Group 1	Revision:	2
City Project Title:	**Sewer Rehab for Frye Road Bike Lanes**		

Description of Work to be Performed (supporting information attached)**:** Bench to Rim 14'-3", 4' DIA concrete manhole. Full epoxy rehabilitation.

SECTION A: LABOR (inclusive of burden)

Position	Unit	Quantity		Labor Cost	Total
Project Manager (Includes Truck)	Hours	4.00		$ 141.10	$ 564.40
Superintendent (Includes Truck)	Hours	13.33		$ 131.20	$ 1,748.90
Foreman	Hours	13.33		$ 76.50	$ 1,019.75
**Any emergency or T&M work that requires overtime will be billed at 1.5 times the listed Unit Prices.*					$ 3,333.04

SECTION B: EQUIPMENT (supporting information attached, i.e. EquipmentWatch.com)

Item	Unit	Quantity		Equipment Cost: Unit Price	Total
Truck Crew - (Heavy) F-350	Hours	13.33		$ 32.72	$ 436.16
		-		Subtotal Equipment Cost (B)	$ 436.16

SECTION C: MATERIALS

Item	Unit	Quantity		Material Cost: Unit Price	Total
					$ -
					$ -
					$ -
					$ -
					$ -
					$ -
				Subtotal Material Cost (C)	$ -

SECTION D: SUBS & CONSULTANTS

Company	Description of Work to be Performed (Supporting quote & information attached)	Total Cost
Aguilar Traffic	Traffic Control	$ 2,064.43
AIMS Companies (Southwest Envrionmental)	Full Epoxy Rehabilitation	$ 12,920.00
Pro-Pipe	Panoramic Video Services	$ 130.00
	Subtotal Subcontractors & Consultants (D)	$ 15,114.43

SECTION E: RENTAL EQUIPMENT

Company	Description of Rental Equipment (Supporting quote & information attached)	Total Cost
	Subtotal Rental Equipment (E)	$ -

						Total	**$ 18,883.63**

WW2501.402 Sewer Rehab for Frye Road Bike Lanes

INDEX

CONTRACTOR NAME: **Archer Western Construction**

Contract Type:	JOC	City Project No.:	WW2501.402
Job Order No.:	2415.401	Contractors Job No.:	224148
City Project Mgr.:	Raymond Potts	Prepared By:	Sam Elliott
Fee Type:	**Fixed**	Date:	10/11/2024
Location:	MH 756003358 - Frye Rd. & Fairview St Group 1	Revision:	2
City Project Title:	**Sewer Rehab for Frye Road Bike Lanes**		

Description of Work to be Performed (supporting information attached)**:** Bench to Rim 14'-6", 4' DIA brick manhole. Remove ladders and rehabilitate base only.

SECTION A: LABOR (inclusive of burden)

Position	Unit	Quantity		Labor Cost	Total
Project Manager (Includes Truck)	Hours	4.00		$ 141.10	$ 564.40
Superintendent (Includes Truck)	Hours	13.33		$ 131.20	$ 1,748.90
Foreman	Hours	13.33		$ 76.50	$ 1,019.75
**Any emergency or T&M work that requires overtime will be billed at 1.5 times the listed Unit Prices.*					$ 3,333.04

SECTION B: EQUIPMENT (supporting information attached, i.e. EquipmentWatch.com)

Item	Unit	Quantity		Equipment Cost: Unit Price	Total
Truck Crew - (Heavy) F-350	Hours	13.33		$ 32.72	$ 436.16
		-		Subtotal Equipment Cost (B)	$ 436.16

SECTION C: MATERIALS

Item	Unit	Quantity		Material Cost: Unit Price	Total
					$ -
				Subtotal Material Cost (C)	$ -

SECTION D: SUBS & CONSULTANTS

Company	Description of Work to be Performed (Supporting quote & information attached)	Total Cost
Aguilar Traffic	Traffic Control	$ 2,064.43
Bench Rehabilitation and Epoxy Coating	Remove ladders and rehabilitate base	$ 3,690.00
Pro-Pipe	Panoramic Video Services	$ 130.00
	Subtotal Subcontractors & Consultants (D)	$ 5,884.43

SECTION E: RENTAL EQUIPMENT

Company	Description of Rental Equipment (Supporting quote & information attached)	Total Cost
	Subtotal Rental Equipment (E)	$ -

						Total	**$ 9,653.63**

WW2501.402 Sewer Rehab for Frye Road Bike Lanes

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CONTRACTOR NAME: **Archer Western Construction**

Contract Type:	JOC	City Project No.:	WW2501.402
Job Order No.:	2415.401	Contractors Job No.:	224148
City Project Mgr.:	Raymond Potts	Prepared By:	Sam Elliott
Fee Type:	**Fixed**	Date:	10/11/2024
Location:	Mh 756003363 - Frye Rd. (Chandler Fire Department Station No. 8) - Group 1	Revision:	2
City Project Title:	**Sewer Rehab for Frye Road Bike Lanes**		

Description of Work to be Performed (supporting information attached)**:** Bench to Rim 14'-7", 4' DIA brick manhole. Remove ladders and rehabilitate base only.

SECTION A: LABOR (inclusive of burden)

Position	Unit	Quantity		Labor Cost	Total
Project Manager (Includes Truck)	Hours	4.00		$ 141.10	$ 564.40
Superintendent (Includes Truck)	Hours	13.33		$ 131.20	$ 1,748.90
Foreman	Hours	13.33		$ 76.50	$ 1,019.75
**Any emergency or T&M work that requires overtime will be billed at 1.5 times the listed Unit Prices.*					$ 3,333.04

SECTION B: EQUIPMENT (supporting information attached, i.e. EquipmentWatch.com)

Item	Unit	Quantity		Equipment Cost: Unit Price	Total
Truck Crew - (Heavy) F-350	Hours	13.33		$ 32.72	$ 436.16
		-		Subtotal Equipment Cost (B)	$ 436.16

SECTION C: MATERIALS

Item	Unit	Quantity		Material Cost: Unit Price	Total
					$ -
					$ -
					$ -
					$ -
					$ -
					$ -
				Subtotal Material Cost (C)	$ -

SECTION D: SUBS & CONSULTANTS

Company	Description of Work to be Performed (Supporting quote & information attached)	Total Cost
Aguilar Traffic	Traffic Control	$ 2,064.43
AIMS Companies (Southwest Environmental)	Remove ladders and rehabilitate base	$ 3,690.00
Pro-Pipe	Panoramic Video Services	$ 130.00
	Subtotal Subcontractors & Consultants (D)	$ 5,884.43

SECTION E: RENTAL EQUIPMENT

Company	Description of Rental Equipment (Supporting quote & information attached)	Total Cost
	Subtotal Rental Equipment (E)	$ -

						Total	**$ 9,653.63**

WW2501.402 Sewer Rehab for Frye Road Bike Lanes

INDEX

CONTRACTOR NAME: **Archer Western Construction**

Contract Type:	JOC	City Project No.:	WW2501.402
Job Order No.:	2415.401	Contractors Job No.:	224148
City Project Mgr.:	Raymond Potts	Prepared By:	Sam Elliott
Fee Type:	**Fixed**	Date:	10/11/2024
Location:	MH 756003357 - Frye Rd. & S. Nebraska St. Group 2	Revision:	2
City Project Title:	**Sewer Rehab for Frye Road Bike Lanes**		

Description of Work to be Performed (supporting information attached)**:** Bench to Rim 14'-9", 4' DIA brick manhole. Remove ladders and rehabilitate base only.

SECTION A: LABOR (inclusive of burden)

Position	Unit	Quantity		Labor Cost	
					Total
Project Manager (Includes Truck)	Hours	4.00		$ 141.10	$ 564.40
Superintendent (Includes Truck)	Hours	13.33		$ 131.20	$ 1,748.90
Foreman	Hours	13.33		$ 76.50	$ 1,019.75
		-		$ -	$ -
**Any emergency or T&M work that requires overtime will be billed at 1.5 times the listed Unit Prices.*					$ 3,333.04

SECTION B: EQUIPMENT (supporting information attached, i.e. EquipmentWatch.com)

Item	Unit	Quantity		Equipment Cost	
				Unit Price	Total
Truck Crew - (Heavy) F-350	Hours	13.33		$ 32.72	$ 436.16
		-	Subtotal Equipment Cost (B)		$ 436.16

SECTION C: MATERIALS

Item	Unit	Quantity		Material Cost	
				Unit Price	Total
					$ -
			Subtotal Material Cost (C)		$ -

SECTION D: SUBS & CONSULTANTS

Company	Description of Work to be Performed (Supporting quote & information attached)	Total Cost
Aguilar Traffic	Traffic Control	$ 1,859.10
AIMS Companies (Southwest Environmental)	Remove ladders and rehabilitate base	$ 3,690.00
Pro-Pipe	Panoramic Video Services	$ 130.00
	Subtotal Subcontractors & Consultants (D)	$ 5,679.10

SECTION E: RENTAL EQUIPMENT

Company	Description of Rental Equipment (Supporting quote & information attached)	Total Cost
	Subtotal Rental Equipment (E)	$ -

						Total	**$ 9,448.30**

WW2501.402 Sewer Rehab for Frye Road Bike Lanes

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CONTRACTOR NAME: **Archer Western Construction**

Contract Type:	JOC	City Project No.:	WW2501.402
Job Order No.:	2415.401	Contractors Job No.:	224148
City Project Mgr.:	Raymond Potts	Prepared By:	Sam Elliott
Fee Type:	**Fixed**	Date:	10/11/2024
Location:	MH 756003357 - Frye Rd and Nebraska St. Group 2	Revision:	2
City Project Title:	**Sewer Rehab for Frye Road Bike Lanes**		

Description of Work to be Performed (supporting information attached)**:** Bench to Rim 14'-4", 4' DIA brick manhole. Remove ladders and rehabilitate base only.

SECTION A: LABOR (inclusive of burden)

Position	Unit	Quantity		Labor Cost	Total
Project Manager (Includes Truck)	Hours	4.00		$ 141.10	$ 564.40
Superintendent (Includes Truck)	Hours	13.33		$ 131.20	$ 1,748.90
Foreman	Hours	13.33		$ 76.50	$ 1,019.75
		-		$ -	$ -
**Any emergency or T&M work that requires overtime will be billed at 1.5 times the listed Unit Prices.*					$ 3,333.04

SECTION B: EQUIPMENT (supporting information attached, i.e. EquipmentWatch.com)

Item	Unit	Quantity		Equipment Cost: Unit Price	Total
Truck Crew - (Heavy) F-350	Hours	13.33		$ 32.72	$ 436.16
		-		Subtotal Equipment Cost (B)	$ 436.16

SECTION C: MATERIALS

Item	Unit	Quantity		Material Cost: Unit Price	Total
					$ -
				Subtotal Material Cost (C)	$ -

SECTION D: SUBS & CONSULTANTS

Company	Description of Work to be Performed (Supporting quote & information attached)	Total Cost
Aguilar Traffic	Traffic Control	$ 1,859.10
AIMS Companies (Southwest Environmental)	Remove ladders and rehabilitate base	$ 3,690.00
Pro-Pipe	Panoramic Video Services	$ 130.00
	Subtotal Subcontractors & Consultants (D)	$ 5,679.10

SECTION E: RENTAL EQUIPMENT

Company	Description of Rental Equipment (Supporting quote & information attached)	Total Cost
	Subtotal Rental Equipment (E)	$ -

						Total	**$ 9,448.30**

WW2501.402 Sewer Rehab for Frye Road Bike Lanes

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CONTRACTOR NAME: **Archer Western Construction**

Contract Type:	JOC	City Project No.:	WW2501.402
Job Order No.:	2415.401	Contractors Job No.:	224148
City Project Mgr.:	Raymond Potts	Prepared By:	Sam Elliott
Fee Type:	**Fixed**	Date:	10/11/2024
Location:	MH 756014805 - Frye Rd & S Palm St. Group 2	Revision:	2
City Project Title:	**Sewer Rehab for Frye Road Bike Lanes**		

Description of Work to be Performed (supporting information attached)**:** Bench to Rim 12'-10", 4' DIA brick manhole. Remove ladders and rehabilitate base only.

SECTION A: LABOR (inclusive of burden)

Position	Unit	Quantity		Labor Cost	Total
Project Manager (Includes Truck)	Hours	4.00		$ 141.10	$ 564.40
Superintendent (Includes Truck)	Hours	13.33		$ 131.20	$ 1,748.90
Foreman	Hours	13.33		$ 76.50	$ 1,019.75
		-		$ -	$ -
**Any emergency or T&M work that requires overtime will be billed at 1.5 times the listed Unit Prices.*					$ 3,333.04

SECTION B: EQUIPMENT (supporting information attached, i.e. EquipmentWatch.com)

Item	Unit	Quantity		Equipment Cost: Unit Price	Total
Truck Crew - (Heavy) F-350	Hours	13.33		$ 32.72	$ 436.16
		-		Subtotal Equipment Cost (B)	$ 436.16

SECTION C: MATERIALS

Item	Unit	Quantity		Material Cost: Unit Price	Total
					$ -
				Subtotal Material Cost (C)	$ -

SECTION D: SUBS & CONSULTANTS

Company	Description of Work to be Performed (Supporting quote & information attached)	Total Cost
Aguilar Traffic	Traffic Control	$ 1,859.10
AIMS Companies (Southwest Environmental)	Remove ladders and rehabilitate base	$ 3,690.00
Pro-Pipe	Panoramic Video Services	$ 130.00
	Subtotal Subcontractors & Consultants (D)	$ 5,679.10

SECTION E: RENTAL EQUIPMENT

Company	Description of Rental Equipment (Supporting quote & information attached)	Total Cost
	Subtotal Rental Equipment (E)	$ -

						Total	**$ 9,448.30**

WW2501.402 Sewer Rehab for Frye Road Bike Lanes

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CONTRACTOR NAME: **Archer Western Construction**

Contract Type:	JOC	City Project No.:	WW2501.402
Job Order No.:	2415.401	Contractors Job No.:	224148
City Project Mgr.:	Raymond Potts	Prepared By:	Sam Elliott
Fee Type:	**Fixed**	Date:	10/11/2024
Location:	MH 756010811 - Frye Rd. & S. Palm Ln. Group 3	Revision:	2
City Project Title:	**Sewer Rehab for Frye Road Bike Lanes**		

Description of Work to be Performed (supporting information attached)**:** Bench to Rim 10'-4", 4' DIA brick manhole. Remove ladders and rehabilitate base only. (Group of 3 Rehabilitations)

SECTION A: LABOR (inclusive of burden)

Position	Unit	Quantity		Labor Cost	Total
Project Manager (Includes Truck)	Hours	8.00		$ 141.10	$ 1,128.80
Superintendent (Includes Truck)	Hours	26.66		$ 131.20	$ 3,497.79
Foreman	Hours	26.66		$ 76.50	$ 2,039.49
**Any emergency or T&M work that requires overtime will be billed at 1.5 times the listed Unit Prices.*					$ 6,666.08

SECTION B: EQUIPMENT (supporting information attached, i.e. EquipmentWatch.com)

Item	Unit	Quantity		Equipment Cost: Unit Price	Total
Truck Crew - (Heavy) F-350	Hours	26.66		$ 32.72	$ 872.32
		-		Subtotal Equipment Cost (B)	$ 872.32

SECTION C: MATERIALS

Item	Unit	Quantity		Material Cost: Unit Price	Total
					$ -
				Subtotal Material Cost (C)	$ -

SECTION D: SUBS & CONSULTANTS

Company	Description of Work to be Performed (Supporting quote & information attached)	Total Cost
Aguilar Traffic	Traffic Control	$ 2,223.52
AIMS Companies (Southwest Environmental)	Remove ladders and rehabilitate base	$ 3,690.00
Pro-Pipe	Panoramic Video Services	$ 130.00
	Subtotal Subcontractors & Consultants (D)	$ 6,043.52

SECTION E: RENTAL EQUIPMENT

Company	Description of Rental Equipment (Supporting quote & information attached)	Total Cost
	Subtotal Rental Equipment (E)	$ -

						Total	**$ 13,581.92**

WW2501.402 Sewer Rehab for Frye Road Bike Lanes

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CONTRACTOR NAME: **Archer Western Construction**

Contract Type:	JOC	City Project No.:	WW2501.402
Job Order No.:	2415.401	Contractors Job No.:	224148
City Project Mgr.:	Raymond Potts	Prepared By:	Sam Elliott
Fee Type:	**Fixed**	Date:	10/11/2024
Location:	MH 756014804 - Frye Rd. & S. Palm Ln Group 3	Revision:	2
City Project Title:	**Sewer Rehab for Frye Road Bike Lanes**		

Description of Work to be Performed (supporting information attached)**:** Bench to Rim 9'-8", 4' DIA brick manhole. Full epoxy rehabilitation. (Group of 3 Rehabilitations)

SECTION A: LABOR (inclusive of burden)

Position	Unit	Quantity		Labor Cost	Total
Project Manager (Includes Truck)	Hours	8.00		$ 141.10	$ 1,128.80
Superintendent (Includes Truck)	Hours	26.66		$ 131.20	$ 3,497.79
Foreman	Hours	26.66		$ 76.50	$ 2,039.49
**Any emergency or T&M work that requires overtime will be billed at 1.5 times the listed Unit Prices.*					$ 6,666.08

SECTION B: EQUIPMENT (supporting information attached, i.e. EquipmentWatch.com)

Item	Unit	Quantity		Equipment Cost: Unit Price	Total
Truck Crew - (Heavy) F-350	Hours	26.66		$ 32.72	$ 872.32
			Subtotal Equipment Cost (B)		$ 872.32

SECTION C: MATERIALS

Item	Unit	Quantity		Material Cost: Unit Price	Total
					$ -
					$ -
					$ -
					$ -
					$ -
					$ -
			Subtotal Material Cost (C)		$ -

SECTION D: SUBS & CONSULTANTS

Company	Description of Work to be Performed (Supporting quote & information attached)	Total Cost
Aguilar Traffic	Traffic Control	$ 2,223.52
AIMS Companies (Southwest Envrionmental)	Full Epoxy Rehabilitation	$ 9,940.00
Pro-Pipe	Panoramic Video Services	$ 130.00
	Subtotal Subcontractors & Consultants (D)	$ 12,293.52

SECTION E: RENTAL EQUIPMENT

Company	Description of Rental Equipment (Supporting quote & information attached)	Total Cost
	Subtotal Rental Equipment (E)	$ -

						Total	**$ 19,831.92**

WW2501.402 Sewer Rehab for Frye Road Bike Lanes

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CONTRACTOR NAME: **Archer Western Construction**

Contract Type:	JOC	City Project No.:	WW2501.402
Job Order No.:	2415.401	Contractors Job No.:	224148
City Project Mgr.:	Raymond Potts	Prepared By:	Sam Elliott
Fee Type:	**Fixed**	Date:	10/11/2024
Location:	MH 756006920 - Frye Rd & S Essex St. Group 3	Revision:	2
City Project Title:	**Sewer Rehab for Frye Road Bike Lanes**		

Description of Work to be Performed (supporting information attached)**:** Bench to Rim 15'-6", 5' DIA concrete manhole. Full epoxy rehabilitation. (Group of 3 rehabilitations)

SECTION A: LABOR (inclusive of burden)

Position	Unit	Quantity		Labor Cost	Total
Project Manager (Includes Truck)	Hours	8.00		$ 141.10	$ 1,128.80
Superintendent (Includes Truck)	Hours	26.66		$ 131.20	$ 3,497.79
Foreman	Hours	26.66		$ 76.50	$ 2,039.49
		-		$ -	$ -
**Any emergency or T&M work that requires overtime will be billed at 1.5 times the listed Unit Prices.*					$ 6,666.08

SECTION B: EQUIPMENT (supporting information attached, i.e. EquipmentWatch.com)

Item	Unit	Quantity		Equipment Cost: Unit Price	Total
Truck Crew - (Heavy) F-350	Hours	26.66		$ 32.72	$ 872.32
		-	Subtotal Equipment Cost (B)		$ 872.32

SECTION C: MATERIALS

Item	Unit	Quantity		Material Cost: Unit Price	Total
					$ -
					$ -
					$ -
					$ -
					$ -
					$ -
			Subtotal Material Cost (C)		$ -

SECTION D: SUBS & CONSULTANTS

Company	Description of Work to be Performed (Supporting quote & information attached)	Total Cost
Aguilar Traffic	Traffic Contol	$ 2,223.52
AIMS Companies (Southwest Environmental)	Full Epoxy Rehab	$ 17,810.00
Pro-Pipe	Panoramic Video Services	$ 130.00
	Subtotal Subcontractors & Consultants (D)	$ 20,163.52

SECTION E: RENTAL EQUIPMENT

Company	Description of Rental Equipment (Supporting quote & information attached)	Total Cost
	Subtotal Rental Equipment (E)	$ -

						Total	**$ 27,701.92**

WW2501.402 Sewer Rehab for Frye Road Bike Lanes

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CONTRACTOR NAME: **Archer Western Construction**

Contract Type:	JOC	City Project No.:	WW2501.401
Job Order No.:	2415.401	Contractors Job No.:	224148
City Project Mgr.:	Raymond Potts	Prepared By:	Sam Elliott
Fee Type:	**Fixed**	Date:	10/11/2024
Location:	MH 756006919 - Frye Rd and Dakota St. Group 4	Revision:	2
City Project Title:	**Sewer Rehab for Frye Road Bike Lanes**		

Description of Work to be Performed (supporting information attached)**:** Bench to Rim 14'-4", 5' DIA concrete manhole. Full epoxy rehabilitation. (Group of 3 Rehabilitations)

SECTION A: LABOR (inclusive of burden)

Position	Unit	Quantity		Labor Cost	Total
Project Manager (Includes Truck)	Hours	8.00		$ 141.10	$ 1,128.80
Superintendent (Includes Truck)	Hours	26.66		$ 131.20	$ 3,497.79
Foreman	Hours	26.66		$ 76.50	$ 2,039.49
**Any emergency or T&M work that requires overtime will be billed at 1.5 times the listed Unit Prices.*					$ 6,666.08

SECTION B: EQUIPMENT (supporting information attached, i.e. EquipmentWatch.com)

Item	Unit	Quantity		Equipment Cost: Unit Price	Total
Truck Crew - (Heavy) F-350	Hours	26.66		$ 32.72	$ 872.32
		-		Subtotal Equipment Cost (B)	$ 872.32

SECTION C: MATERIALS

Item	Unit	Quantity		Material Cost: Unit Price	Total
					$ -
				Subtotal Material Cost (C)	$ -

SECTION D: SUBS & CONSULTANTS

Company	Description of Work to be Performed (Supporting quote & information attached)	Total Cost
Aguilar Traffic	Traffic Control	$ 1,881.10
AIMS Companies (Southwest Envrionmental)	Full Epoxy Rehabilitation	$ 16,915.00
Pro-Pipe	Panoramic Video Services	$ 130.00
	Subtotal Subcontractors & Consultants (D)	$ 18,926.10

SECTION E: RENTAL EQUIPMENT

Company	Description of Rental Equipment (Supporting quote & information attached)	Total Cost
	Subtotal Rental Equipment (E)	$ -

						Total	**$ 26,464.50**

WW2501.402 Sewer Rehab for Frye Road Bike Lanes

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CONTRACTOR NAME: **Archer Western Construction**

Contract Type:	JOC	City Project No.:	WW2501.402
Job Order No.:	2415.401	Contractors Job No.:	224148
City Project Mgr.:	Raymond Potts	Prepared By:	Sam Elliott
Fee Type:	**Fixed**	Date:	10/11/2024
Location:	MH 756006918 - Frye Rd & S. Dakota St. Group 4	Revision:	2
City Project Title:	**Sewer Rehab for Frye Road Bike Lanes**		

Description of Work to be Performed (supporting information attached)**:** Bench to Rim 12'-10", 4' DIA brick manhole. Remove ladders and rehabilitate base only. (Group of 3 rehabilitations)

SECTION A: LABOR (inclusive of burden)

Position	Unit	Quantity		Labor Cost		Total
Project Manager (Includes Truck)	Hours	8.00		$	141.10	$ 1,128.80
Superintendent (Includes Truck)	Hours	26.66		$	131.20	$ 3,497.79
Foreman	Hours	26.66		$	76.50	$ 2,039.49
**Any emergency or T&M work that requires overtime will be billed at 1.5 times the listed Unit Prices.*						$ 6,666.08

SECTION B: EQUIPMENT (supporting information attached, i.e. EquipmentWatch.com)

Item	Unit	Quantity		Equipment Cost Unit Price	Total
Truck Crew - (Heavy) F-350	Hours	26.66		$ 32.72	$ 872.32
		-	Subtotal Equipment Cost (B)		$ 872.32

SECTION C: MATERIALS

Item	Unit	Quantity		Material Cost Unit Price	Total
					$ -
					$ -
			Subtotal Material Cost (C)		$ -

SECTION D: SUBS & CONSULTANTS

Company	Description of Work to be Performed (Supporting quote & information attached)	Total Cost
Aguilar Traffic	Traffic Control	$ 1,881.10
AIMS Companies (Southwest Environmental)	Remove ladders and rehabilitate base	$ 3,690.00
Pro- Pipe	Panoramic Video Services	$ 130.00
	Subtotal Subcontractors & Consultants (D)	$ 5,701.10

SECTION E: RENTAL EQUIPMENT

Company	Description of Rental Equipment (Supporting quote & information attached)	Total Cost
	Subtotal Rental Equipment (E)	$ -

						Total	**$ 13,239.50**

WW2501.402 Sewer Rehab for Frye Road Bike Lanes

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CONTRACTOR NAME: **Archer Western Construction**

Contract Type:	JOC	City Project No.:	WW2501.402
Job Order No.:	2415.401	Contractors Job No.:	224148
City Project Mgr.:	Raymond Potts	Prepared By:	Sam Elliott
Fee Type:	**Fixed**	Date:	10/11/2024
Location:	MH 756003362 - Frye Rd and Oregon St. Group 4	Revision:	2
City Project Title:	**Sewer Rehab for Frye Road Bike Lanes**		

Description of Work to be Performed (supporting information attached)**:** Bench to Rim 12'-3", 4' DIA brick manhole. Full epoxy rehabilitation. (Group of 3 Rehabilitations)

SECTION A: LABOR (inclusive of burden)

Position	Unit	Quantity		Labor Cost	Total
Project Manager (Includes Truck)	Hours	8.00		$ 141.10	$ 1,128.80
Superintendent (Includes Truck)	Hours	26.66		$ 131.20	$ 3,497.79
Foreman	Hours	26.66		$ 76.50	$ 2,039.49
		-		$ -	$ -
**Any emergency or T&M work that requires overtime will be billed at 1.5 times the listed Unit Prices.*					$ 6,666.08

SECTION B: EQUIPMENT (supporting information attached, i.e. EquipmentWatch.com)

Item	Unit	Quantity		Equipment Cost: Unit Price	Total
Truck Crew - (Heavy) F-350	Hours	26.66		$ 32.72	$ 872.32
		-	Subtotal Equipment Cost (B)		$ 872.32

SECTION C: MATERIALS

Item	Unit	Quantity		Material Cost: Unit Price	Total
					$ -
			Subtotal Material Cost (C)		$ -

SECTION D: SUBS & CONSULTANTS

Company	Description of Work to be Performed (Supporting quote & information attached)	Total Cost
Aguilar Traffic	Traffic Control	$ 1,881.10
AIMS Companies (Southwest Environmental)	Full Epoxy Rehabilitation	$ 11,430.00
Pro-Pipe	Panoramic Video Services	$ 130.00
	Subtotal Subcontractors & Consultants (D)	$ 13,441.10

SECTION E: RENTAL EQUIPMENT

Company	Description of Rental Equipment (Supporting quote & information attached)	Total Cost
	Subtotal Rental Equipment (E)	$ -

						Total	**$ 20,979.50**

WW2501.402 Sewer Rehab for Frye Road Bike Lanes

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CONTRACTOR NAME: **Archer Western Construction**

Contract Type:	JOC	City Project No.:	WW2501.402
Job Order No.:	2415.401	Contractors Job No.:	224148
City Project Mgr.:	Raymond Potts	Prepared By:	Sam Elliott
Fee Type:	**Fixed**	Date:	10/11/2024
Location:	MH 756010810 - Frye Rd & California St. Group 5	Revision:	2
City Project Title:	**Sewer Rehab for Frye Road Bike Lanes**		

Description of Work to be Performed (supporting information attached)**:** Bench to Rim 9'-5", 5' DIA concrete manhole. Remove ladders and rehabilitate base only. (Group of 3 Rehabilitations)

SECTION A: LABOR (inclusive of burden)

Position	Unit	Quantity		Labor Cost	Total
Project Manager (Includes Truck)	Hours	8.00		$ 141.10	$ 1,128.80
Superintendent (Includes Truck)	Hours	26.66		$ 131.20	$ 3,497.79
Foreman	Hours	26.66		$ 76.50	$ 2,039.49
**Any emergency or T&M work that requires overtime will be billed at 1.5 times the listed Unit Prices.*					$ 6,666.08

SECTION B: EQUIPMENT (supporting information attached, i.e. EquipmentWatch.com)

Item	Unit	Quantity		Equipment Cost: Unit Price	Total
Truck Crew - (Heavy) F-350	Hours	26.66		$ 32.72	$ 872.32
		-		Subtotal Equipment Cost (B)	$ 872.32

SECTION C: MATERIALS

Item	Unit	Quantity		Material Cost: Unit Price	Total
					$ -
				Subtotal Material Cost (C)	$ -

SECTION D: SUBS & CONSULTANTS

Company	Description of Work to be Performed (Supporting quote & information attached)	Total Cost
Aguilar Traffic	Traffic Control	$ 3,481.66
AIMS Companies (Southwest Environmental)	Remove ladders and rehabilitate base	$ 4,490.00
Pro-Pipe	Panoramic Video Services	$ 130.00
	Subtotal Subcontractors & Consultants (D)	$ 8,101.66

SECTION E: RENTAL EQUIPMENT

Company	Description of Rental Equipment (Supporting quote & information attached)	Total Cost
	Subtotal Rental Equipment (E)	$ -

						Total	**$ 15,640.06**

WW2501.402 Sewer Rehab for Frye Road Bike Lanes

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CONTRACTOR NAME: **Archer Western Construction**

Contract Type:	JOC	City Project No.:	WW2501.402
Job Order No.:	2415.401	Contractors Job No.:	224148
City Project Mgr.:	Raymond Potts	Prepared By:	Sam Elliott
Fee Type:	**Fixed**	Date:	10/11/2024
Location:	MH 756003361 - Frye Rd & Oregon St. Group 5	Revision:	2
City Project Title:	**Sewer Rehab for Frye Road Bike Lanes**		

Description of Work to be Performed (supporting information attached)**:** Bench to Rim 9'-5", 4' DIA brick manhole. Full epoxy rehabilitation. (Group of 3 Rehabilitations)

SECTION A: LABOR (inclusive of burden)

Position	Unit	Quantity		Labor Cost	Total
Project Manager (Includes Truck)	Hours	8.00		$ 141.10	$ 1,128.80
Superintendent (Includes Truck)	Hours	26.66		$ 131.20	$ 3,497.79
Foreman	Hours	26.66		$ 76.50	$ 2,039.49
**Any emergency or T&M work that requires overtime will be billed at 1.5 times the listed Unit Prices.*					$ 6,666.08

SECTION B: EQUIPMENT (supporting information attached, i.e. EquipmentWatch.com)

Item	Unit	Quantity		Equipment Cost: Unit Price	Total
Truck Crew - (Heavy) F-350	Hours	26.66		$ 32.72	$ 872.32
		-		Subtotal Equipment Cost (B)	$ 872.32

SECTION C: MATERIALS

Item	Unit	Quantity		Material Cost: Unit Price	Total
					$ -
				Subtotal Material Cost (C)	$ -

SECTION D: SUBS & CONSULTANTS

Company	Description of Work to be Performed (Supporting quote & information attached)	Total Cost
Aguilar Traffic	Traffic Control	$ 3,481.66
AIMS Companies (Southwest Environmental)	Full Epoxy Rehabilitation	$ 9,940.00
Pro-Pipe	Panoramic Video Services	$ 130.00
	Subtotal Subcontractors & Consultants (D)	$ 13,551.66

SECTION E: RENTAL EQUIPMENT

Company	Description of Rental Equipment (Supporting quote & information attached)	Total Cost
	Subtotal Rental Equipment (E)	$ -

						Total	**$ 21,090.06**

WW2501.402 Sewer Rehab for Frye Road Bike Lanes

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CONTRACTOR NAME: **Archer Western Construction**

Contract Type:	JOC	City Project No.:	WW2501.402
Job Order No.:	2415.401	Contractors Job No.:	224148
City Project Mgr.:	Raymond Potts	Prepared By:	Sam Elliott
Fee Type:	**Fixed**	Date:	10/11/2024
Location:	MH 756003360 - Frye Rd & S Wall St. Group 5	Revision:	2
City Project Title:	**Sewer Rehab for Frye Road Bike Lanes**		

Description of Work to be Performed (supporting information attached)**:** Bench to Rim 8'-8", 4 DIA concrete manhole with drop. Full epoxy rehabilitation. (Group of 3 Rehabilitations)

SECTION A: LABOR (inclusive of burden)

Position	Unit	Quantity		Labor Cost	
					Total
Project Manager (Includes Truck)	Hours	8.00		$ 141.10	$ 1,128.80
Superintendent (Includes Truck)	Hours	26.66		$ 131.20	$ 3,497.79
Foreman	Hours	26.66		$ 76.50	$ 2,039.49
**Any emergency or T&M work that requires overtime will be billed at 1.5 times the listed Unit Prices.*					$ 6,666.08

SECTION B: EQUIPMENT (supporting information attached, i.e. EquipmentWatch.com)

Item	Unit	Quantity		Equipment Cost	
				Unit Price	Total
Truck Crew - (Heavy) F-350	Hours	26.66		$ 32.72	$ 872.32
		-	Subtotal Equipment Cost (B)		$ 872.32

SECTION C: MATERIALS

Item	Unit	Quantity		Material Cost	
				Unit Price	Total
					$ -
			Subtotal Material Cost (C)		$ -

SECTION D: SUBS & CONSULTANTS

Company	Description of Work to be Performed (Supporting quote & information attached)	Total Cost
Aguilar Traffic	Traffic Control	$ 3,481.66
Bench Rehabilitation and Epoxy Coating	Full Epoxy Rehabilitation	$ 9,195.00
Pro-Pipe	Panoramic Video Services	$ 130.00
Professional Police Services	Off-Duty Officer (Within 300' of signalized intersection)	$ 7,200.00
	Subtotal Subcontractors & Consultants (D)	$ 20,006.66

SECTION E: RENTAL EQUIPMENT

Company	Description of Rental Equipment (Supporting quote & information attached)	Total Cost
	Subtotal Rental Equipment (E)	$ -

						Total	**$ 27,545.06**

WW2501.402 Sewer Rehab for Frye Road Bike Lanes

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CONTRACTOR NAME: **Archer Western Construction**

Contract Type:	JOC	City Project No.:	WW2501.402
Job Order No.:	2415.401	Contractors Job No.:	224148
City Project Mgr.:	Raymond Potts	Prepared By:	Sam Elliott
Fee Type:	**Fixed**	Date:	10/11/2024
Location:	MH 756011292 - Frye Rd & Arizona Ave Group 6	Revision:	2
City Project Title:	**Sewer Rehab for Frye Road Bike Lanes**		

Description of Work to be Performed (supporting information attached)**:** Bench to Rim 20' 0" - 5' DIA concrete manhole. Full rehabilitation with polymer concrete inserts. CLSM backfill and AC replacement. Reuse existing frame and cover during collar replacement.

SECTION A: LABOR (inclusive of burden)

Position	Unit	Quantity	Labor Cost	Total
Project Manager (Includes Truck)	Hours	4.00	$ 141.10	$ 564.40
Superintendent (Includes Truck)	Hours	40.00	$ 131.20	$ 5,248.00
CDL Truck Driver	Hours	40.00	$ 48.70	$ 1,948.00
Foreman	Hours	40.00	$ 76.50	$ 3,060.00
Laborers	Hours	80.00	$ 43.30	$ 3,464.00
Operator	Hours	40.00	$ 54.10	$ 2,164.00
Pipelayer	Hours	40.00	$ 50.05	$ 2,002.00
**Any emergency or T&M work that requires overtime will be billed at 1.5 times the listed Unit Prices.*				$ 18,450.40

SECTION B: EQUIPMENT (supporting information attached, i.e. EquipmentWatch.com)

Item	Unit	Quantity	Equipment Cost: Unit Price	Total
Backhoe - CAT 420F	Hours	40.00	$ 85.09	$ 3,403.60
Dump Truck - (12 CY)	Hours	40.00	$ 117.38	$ 4,695.20
Excavator - CAT 315	Hours	40.00	$ 139.72	$ 5,588.80
Skid Steer - CAT 248B	Hours	40.00	$ 64.11	$ 2,564.40
Transport Trailer	Hours	40.00	$ 5.00	$ 200.00
Truck Crew - (Heavy) F-350	Hours	40.00	$ 32.72	$ 1,308.80
		-	Subtotal Equipment Cost (B)	$ 17,760.80

SECTION C: MATERIALS

Item	Unit	Quantity	Material Cost: Unit Price	Total
Polymer Concrete Inserts	LS	1.0	$ 11,199.60	$ 11,199.60
CLSM Backfill	CY	14.00	$ 144.00	$ 2,016.00
Euclid Grout	EA	16.00	$ 20.00	$ 320.00
Eye Bolts	EA	1.98	$ 20.00	$ 39.60
			Subtotal Material Cost (C)	$ 13,575.20

SECTION D: SUBS & CONSULTANTS

Company	Description of Work to be Performed (Supporting quote & information attached)	Total Cost
Nesbitt Contracting	Asphalt patch, adjust grade rings & pour MH collar	$ 4,500.00
Aguilar Traffic	Traffic Control	$ 19,922.81
AIMS Companies (Southwest Environmental)	Rehabilitate Base	$ 6,500.00
Pro-Pipe	Panoramic Video Services	$ 130.00
A-Core	Asphalt Sawcutting	$ 450.00
Bryco Milling	Asphalt Milling	$ 850.00
Professional Police Services	Off-Duty Officer	$ 5,600.00
	Subtotal Subcontractors & Consultants (D)	$ 37,952.81

SECTION E: RENTAL EQUIPMENT

Company	Description of Rental Equipment (Supporting quote & information attached)	Total Cost
National Trench Safety	Shoring Cylinders	$ 278.00
National Trench Safety	Road Plates	$ 268.00
	Subtotal Rental Equipment (E)	$ 546.00

						Total	**$ 88,285.21**

WW2501.402 Sewer Rehab for Frye Road Bike Lanes

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CONTRACTOR NAME: **Archer Western Construction**

Contract Type:	JOC	City Project No.:	WW2501.402
Job Order No.:	2415.401	Contractors Job No.:	224148
City Project Mgr.:	Raymond Potts	Prepared By:	Sam Elliott
Fee Type:	**Fixed**	Date:	10/11/2024
Location:	MH 756012768 - Frye Rd and Arizona Ave (Black Rock Drive Thru) - Group 6	Revision:	2
City Project Title:	**Sewer Rehab for Frye Road Bike Lanes**		

Description of Work to be Performed (supporting information attached)**:** Bench to Rim 12'-13', 4' DIA brick manhole. Full epoxy rehabilitation. Site supervision and traffic control encompassed with MH 756011292.

SECTION A: LABOR (inclusive of burden)

Position	Unit	Quantity		Labor Cost	Total
Project Manager (Includes Truck)	Hours	4.00		$ 141.10	$ 564.40
		-		$ -	$ -
**Any emergency or T&M work that requires overtime will be billed at 1.5 times the listed Unit Prices.*					$ 564.40

SECTION B: EQUIPMENT (supporting information attached, i.e. EquipmentWatch.com)

Item	Unit	Quantity		Equipment Cost: Unit Price	Total
	Hours				$ -
	Hours				$ -
		-	Subtotal Equipment Cost (B)		$ -

SECTION C: MATERIALS

Item	Unit	Quantity		Material Cost: Unit Price	Total
					$ -
			Subtotal Material Cost (C)		$ -

SECTION D: SUBS & CONSULTANTS

Company	Description of Work to be Performed (Supporting quote & information attached)	Total Cost
Aguilar Traffic	Traffic Control encompassed with MH 756011292	$ -
AIMS Companies (Southwest Environmental)	Full Epoxy Rehab	$ 8,450.00
Pro-Pipe	Panoramic Video Services	$ 130.00
	Subtotal Subcontractors & Consultants (D)	$ 8,580.00

SECTION E: RENTAL EQUIPMENT

Company	Description of Rental Equipment (Supporting quote & information attached)	Total Cost
	Subtotal Rental Equipment (E)	$ -

						Total	**$ 9,144.40**

WW2501.402 Sewer Rehab for Frye Road Bike Lanes

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CONTRACTOR NAME: **Archer Western Construction**

Contract Type:	JOC	City Project No.:	WW2501.402
Job Order No.:	2415.401	Contractors Job No.:	224148
City Project Mgr.:	Raymond Potts	Prepared By:	Sam Elliott
Fee Type:	**Fixed**	Date:	10/11/2024
Location:	MH 756003270 - Frye Rd & Deleware St. Group 7	Revision:	2
City Project Title:	**Sewer Rehab for Frye Road Bike Lanes**		

Description of Work to be Performed (supporting information attached)**:** Remove manhole cone, backfill with CLSM and restore asphalt. Traffic control included with MH 756006891.

SECTION A: LABOR (inclusive of burden)

Position	Unit	Quantity		Labor Cost	Total
Project Manager (Includes Truck)	Hours	4.00		$ 141.10	$ 564.40
Superintendent (Includes Truck)	Hours	16.00		$ 131.20	$ 2,099.20
CDL Truck Driver	Hours	16.00		$ 48.70	$ 779.20
Foreman	Hours	16.00		$ 76.50	$ 1,224.00
Laborers	Hours	32.00		$ 43.30	$ 1,385.60
Operator	Hours	16.00		$ 54.10	$ 865.60
Pipelayer	Hours	16.00		$ 50.05	$ 800.80
Pipefitter	Hours	-		$ 52.75	$ -
		-		$ -	$ -
**Any emergency or T&M work that requires overtime will be billed at 1.5 times the listed Unit Prices.*					$ 7,718.80

SECTION B: EQUIPMENT (supporting information attached, i.e. EquipmentWatch.com)

Item	Unit	Quantity		Equipment Cost: Unit Price	Total
Dump Truck - (12 CY)	Hours	16.00		$ 117.38	$ 1,878.08
Excavator - CAT 315	Hours	16.00		$ 139.72	$ 2,235.52
Transport Trailer	Hours	16.00		$ 5.00	$ 80.00
Truck - Manager (Heavy) F-250	Hours	16.00		$ 12.00	$ 192.00
Truck Crew - (Heavy) F-350	Hours	16.00		$ 32.72	$ 523.52
		-		Subtotal Equipment Cost (B)	$ 4,909.12

SECTION C: MATERIALS

Item	Unit	Quantity		Material Cost: Unit Price	Total
CLSM Backfill	CY	14.00		$ 144.00	$ 2,016.00
					$ -
					$ -
				Subtotal Material Cost (C)	$ 2,016.00

SECTION D: SUBS & CONSULTANTS

Company	Description of Work to be Performed (Supporting quote & information attached)	Total Cost
Aguilar Traffic	Traffic Control included with MH 756006891	$ -
Nesbitt Contracting	Asphalt patch, crack seal and striping	$ 4,500.00
	Subtotal Subcontractors & Consultants (D)	$ 4,500.00

SECTION E: RENTAL EQUIPMENT

Company	Description of Rental Equipment (Supporting quote & information attached)	Total Cost
National Trench Safety	Shoring Cylinders	$ 278.00
National Trench Safety	Road Plates	$ 268.00
	Subtotal Rental Equipment	$ 546.00

						Total	**$ 19,689.92**

WW2501.402 Sewer Rehab for Frye Road Bike Lanes

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CONTRACTOR NAME: **Archer Western Construction**

Contract Type:	JOC	City Project No.:	WW2501.402
Job Order No.:	2415.401	Contractors Job No.:	224148
City Project Mgr.:	Raymond Potts	Prepared By:	Sam Elliott
Fee Type:	**Fixed**	Date:	10/11/2024
Location:	MH 756006891 - Frye Rd & Deleware St. Group 7	Revision:	2
City Project Title:	**Sewer Rehab for Frye Road Bike Lanes**		

Description of Work to be Performed (supporting information attached)**:** Bench to Rim 15'-2", 5' DIA concrete manhole. Full rehabilitation with polymer concrete inserts. CLSM backfill and AC replacement. Reuse existing frame and cover during replacement.

SECTION A: LABOR (inclusive of burden)

Position	Unit	Quantity	Labor Cost	Total
Project Manager (Includes Truck)	Hours	4.00	$ 141.10	$ 564.40
Superintendent (Includes Truck)	Hours	40.00	$ 131.20	$ 5,248.00
CDL Truck Driver	Hours	40.00	$ 48.70	$ 1,948.00
Foreman	Hours	40.00	$ 76.50	$ 3,060.00
Laborers	Hours	80.00	$ 43.30	$ 3,464.00
Operator	Hours	40.00	$ 54.10	$ 2,164.00
Pipelayer	Hours	40.00	$ 50.05	$ 2,002.00
**Any emergency or T&M work that requires overtime will be billed at 1.5 times the listed Unit Prices.*				$ 18,450.40

SECTION B: EQUIPMENT (supporting information attached, i.e. EquipmentWatch.com)

Item	Unit	Quantity	Equipment Cost: Unit Price	Total
Backhoe - CAT 420F	Hours	40.00	$ 85.09	$ 3,403.60
Dump Truck - (12 CY)	Hours	40.00	$ 117.38	$ 4,695.20
Excavator - CAT 315	Hours	40.00	$ 139.72	$ 5,588.80
Skid Steer - CAT 248B	Hours	40.00	$ 64.11	$ 2,564.40
Transport Trailer	Hours	40.00	$ 5.00	$ 200.00
Truck Crew - (Heavy) F-350	Hours	40.00	$ 32.72	$ 1,308.80
		-	Subtotal Equipment Cost (B)	$ 17,760.80

SECTION C: MATERIALS

Item	Unit	Quantity	Material Cost: Unit Price	Total
Polymer Concrete Inserts	LS	1.0	$ 11,199.60	$ 11,199.60
CLSM Backfill	CY	14.00	$ 144.00	$ 2,016.00
Euclid Grout	EA	16.00	$ 20.00	$ 320.00
Eye Bolts	EA	1.98	$ 20.00	$ 39.60
			Subtotal Material Cost (C)	$ 13,575.20

SECTION D: SUBS & CONSULTANTS

Company	Description of Work to be Performed (Supporting quote & information attached)	Total Cost
Nesbitt Contracting	Asphalt patch, adjust grade rings & pour MH collar	$ 4,400.00
Aguilar Traffic	Traffic Control	$ 20,955.00
AIMS Companies (Southwest Environmental)	Rehabilitate Base	$ 6,500.00
Pro-Pipe	Panoramic Video Services	$ 130.00
A-Core	Asphalt Sawcutting	$ 450.00
Bryco Milling	Asphalt Milling	$ 850.00
	Subtotal Subcontractors & Consultants (D)	$ 33,285.00

SECTION E: RENTAL EQUIPMENT

Company	Description of Rental Equipment (Supporting quote & information attached)	Total Cost
National Trench Safety	Shoring Cylinders	$ 278.00
National Trench Safety	Road Plates	$ 268.00
	Subtotal Rental Equipment (E)	$ 546.00

						Total	**$ 83,617.40**

WW2501.402 Sewer Rehab for Frye Road Bike Lanes

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CONTRACTOR NAME: **Archer Western Construction**

Contract Type:	JOC	City Project No.:	WW2501.402
Job Order No.:	2415.401	Contractors Job No.:	224148
City Project Mgr.:	Raymond Potts	Prepared By:	Sam Elliott
Fee Type:	**Fixed**	Date:	10/11/2024
Location:	MH 756014774 - Frye Rd & S Nevada St Group 7	Revision:	2
City Project Title:	**Sewer Rehab for Frye Road Bike Lanes**		

Description of Work to be Performed (supporting information attached)**:** Bench to Rim 14'-6", 4' DIA brick manhole. Remove ladder and rehabilitate bench only. Traffic control included with MH 756006891.

SECTION A: LABOR (inclusive of burden)

Position	Unit	Quantity		Labor Cost	
					Total
Project Manager (Includes Truck)	Hours	4.00		$ 141.10	$ 564.40
Superintendent (Includes Truck)	Hours	13.33		$ 131.20	$ 1,748.90
Foreman	Hours	14.33		$ 76.50	$ 1,096.25
**Any emergency or T&M work that requires overtime will be billed at 1.5 times the listed Unit Prices.*					$ 3,409.54

SECTION B: EQUIPMENT (supporting information attached, i.e. EquipmentWatch.com)

Item	Unit	Quantity		Equipment Cost	
				Unit Price	Total
Truck Crew - (Heavy) F-350	Hours	13.33		$ 32.72	$ 436.16
		-	Subtotal Equipment Cost (B)		$ 436.16

SECTION C: MATERIALS

Item	Unit	Quantity		Material Cost	
				Unit Price	Total
					$ -
					$ -
			Subtotal Material Cost (C)		$ -

SECTION D: SUBS & CONSULTANTS

Company	Description of Work to be Performed (Supporting quote & information attached)	Total Cost
Aguilar Traffic	Traffic Control included with MH 756006891	$ -
AIMS Companies (Southwest Environmental)	Remove ladders and rehabilitate base	$ 3,690.00
Pro-Pipe	Panoramic Video Services	$ 130.00
	Subtotal Subcontractors & Consultants (D)	$ 3,820.00

SECTION E: RENTAL EQUIPMENT

Company	Description of Rental Equipment (Supporting quote & information attached)	Total Cost
	Subtotal Rental Equipment (E)	$ -

						Total	**$ 7,665.70**

WW2501.402 Sewer Rehab for Frye Road Bike Lanes

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CONTRACTOR NAME: **Archer Western Construction**

Contract Type:	JOC	City Project No.:	WW2501.402
Job Order No.:	2415.401	Contractors Job No.:	224148
City Project Mgr.:	Raymond Potts	Prepared By:	Sam Elliott
Fee Type:	**Fixed**	Date:	10/11/2024
Location:	MH 7596014773 - Frye Rd and S Hidalgo St. Group 8	Revision:	2
City Project Title:	**Sewer Rehab for Frye Road Bike Lanes**		

Description of Work to be Performed (supporting information attached)**:** Bench to rim 14'-0", 4' DIA brick manhole. Remove ladder and rehabilitate base only.

SECTION A: LABOR (inclusive of burden)

Position	Unit	Quantity		Labor Cost	Total
Project Manager (Includes Truck)	Hours	4.00		$ 141.10	$ 564.40
Superintendent (Includes Truck)	Hours	13.33		$ 131.20	$ 1,748.90
Foreman	Hours	14.33		$ 76.50	$ 1,096.25
**Any emergency or T&M work that requires overtime will be billed at 1.5 times the listed Unit Prices.*					$ 3,409.54

SECTION B: EQUIPMENT (supporting information attached, i.e. EquipmentWatch.com)

Item	Unit	Quantity		Equipment Cost: Unit Price	Total
Truck Crew - (Heavy) F-350	Hours	13.33		$ 32.72	$ 436.16
		-	Subtotal Equipment Cost (B)		$ 436.16

SECTION C: MATERIALS

Item	Unit	Quantity		Material Cost	Total
					$ -
					$ -
					$ -

SECTION D: SUBS & CONSULTANTS

Company	Description of Work to be Performed (Supporting quote & information attached)	Total Cost
Aguilar Traffic	Traffic Control	$ 2,821.65
AIMS Companies (Southwest Environmental)	Full Epoxy Rehab	$ 3,690.00
Pro-Pipe	Panoramic Video Services	$ 130.00
	Subtotal Subcontractors & Consultants (D)	$ 6,641.65

SECTION E: RENTAL EQUIPMENT

Company	Description of Rental Equipment (Supporting quote & information attached)	Total Cost
	Subtotal Rental Equipment (E)	$ -

						Total	**$ 10,487.35**

WW2501.402 Sewer Rehab for Frye Road Bike Lanes

INDEX

CONTRACTOR NAME: **Archer Western Construction**

Contract Type:	JOC	City Project No.:	WW2501.402
Job Order No.:	2415.401	Contractors Job No.:	224148
City Project Mgr.:	Raymond Potts	Prepared By:	Sam Elliott
Fee Type:	**Fixed**	Date:	10/11/2024
Location:	MH 756010777 - Frye Rd and S Hamilton St. Group 8	Revision:	2
City Project Title:	**Sewer Rehab for Frye Road Bike Lanes**		

Description of Work to be Performed (supporting information attached)**:** Bench to Rim 15'-4", 4' DIA brick manhole. Remove ladders and rehabilitate base only.

SECTION A: LABOR (inclusive of burden)

Position	Unit	Quantity		Labor Cost	Total
Project Manager (Includes Truck)	Hours	4.00		$ 141.10	$ 564.40
Superintendent (Includes Truck)	Hours	13.33		$ 131.20	$ 1,748.90
Foreman	Hours	14.33		$ 76.50	$ 1,096.25
					$ 3,409.54

SECTION B: EQUIPMENT (supporting information attached, i.e. EquipmentWatch.com)

Item	Unit	Quantity		Equipment Cost: Unit Price	Total
Truck Crew - (Heavy) F-350	Hours	13.33		$ 32.72	$ 436.16
		-		Subtotal Equipment Cost (B)	$ 436.16

SECTION C: MATERIALS

Item	Unit	Quantity		Material Cost: Unit Price	Total
					$ -
					$ -
					$ -
					$ -
				Subtotal Material Cost (C)	$ -

SECTION D: SUBS & CONSULTANTS

Company	Description of Work to be Performed (Supporting quote & information attached)	Total Cost
Aguilar Traffic	Traffic Control	$ 2,821.65
AIMS Companies (Southwest Environmental)	Remove ladders and rehabilitate base	$ 3,690.00
Pro- Pipe	Panoramic Video Services	$ 130.00
	Subtotal Subcontractors & Consultants (D)	$ 6,641.65

SECTION E: RENTAL EQUIPMENT

Company	Description of Rental Equipment (Supporting quote & information attached)	Total Cost
	Subtotal Rental Equipment (E)	$ -

						Total	**$ 10,487.35**

WW2501.402 Sewer Rehab for Frye Road Bike Lanes

INDEX

CONTRACTOR NAME: **Archer Western Construction**

Contract Type:	JOC	City Project No.:	WW2501.402
Job Order No.:	2415.401	Contractors Job No.:	224148
City Project Mgr.:	Raymond Potts	Prepared By:	Sam Elliott
Fee Type:	**Fixed**	Date:	10/11/2024
Location:	MH 756012766 - Frye Rd and S Hamilton St (North) - Group 9	Revision:	2
City Project Title:	**Sewer Rehab for Frye Road Bike Lanes**		

Description of Work to be Performed (supporting information attached)**:** Bench to Rim 15'-8", 4' DIA brick manhole. Remove ladders and rehabilitate base only.

SECTION A: LABOR (inclusive of burden)

Position	Unit	Quantity		Labor Cost	
					Total
Project Manager (Includes Truck)	Hours	4.00		$ 141.10	$ 564.40
Superintendent (Includes Truck)	Hours	13.33		$ 131.20	$ 1,748.90
Foreman	Hours	14.33		$ 76.50	$ 1,096.25
**Any emergency or T&M work that requires overtime will be billed at 1.5 times the listed Unit Prices.*					$ 3,409.54

SECTION B: EQUIPMENT (supporting information attached, i.e. EquipmentWatch.com)

Item	Unit	Quantity		Equipment Cost	
				Unit Price	Total
Truck Crew - (Heavy) F-350	Hours	13.33		$ 32.72	$ 436.16
			Subtotal Equipment Cost (B)		$ 436.16

SECTION D: SUBS & CONSULTANTS

Company	Description of Work to be Performed (Supporting quote & information attached)	Total Cost
Aguilar Traffic	Traffic Control	$ 2,955.80
AIMS Companies (Southwest Environmental)	Remove ladders and rehabilitate base	$ 3,690.00
Pro-Pipe	Panoramic Video Services	$ 130.00
	Subtotal Subcontractors & Consultants (D)	$ 6,775.80

SECTION E: RENTAL EQUIPMENT

Company	Description of Rental Equipment (Supporting quote & information attached)	Total Cost
	Subtotal Rental Equipment (E)	$ -

						Total	**$ 10,621.50**

WW2501.402 Sewer Rehab for Frye Road Bike Lanes

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CONTRACTOR NAME: **Archer Western Construction**

Contract Type:	JOC	City Project No.:	WW2501.402
Job Order No.:	2415.401	Contractors Job No.:	224148
City Project Mgr.:	Raymond Potts	Prepared By:	Sam Elliott
Fee Type:	**Fixed**	Date:	10/11/2024
Location:	MH 756012765 - Frye Rd & S Hamilton St (North) - Group 10	Revision:	2
City Project Title:	**Sewer Rehab for Frye Road Bike Lanes**		

Description of Work to be Performed (supporting information attached)**:** Bench to Rim 12'-2", 4' DIA brick manhole. Remove ladders and rehabilitate base only.

SECTION A: LABOR (inclusive of burden)

Position	Unit	Quantity		Labor Cost	Total
Project Manager (Includes Truck)	Hours	4.00		$ 141.10	$ 564.40
Superintendent (Includes Truck)	Hours	13.33		$ 131.20	$ 1,748.90
Foreman	Hours	13.33		$ 76.50	$ 1,019.75
**Any emergency or T&M work that requires overtime will be billed at 1.5 times the listed Unit Prices.*					$ 3,333.04

SECTION B: EQUIPMENT (supporting information attached, i.e. EquipmentWatch.com)

Item	Unit	Quantity		Equipment Cost: Unit Price	Total
Truck Crew - (Heavy) F-350	Hours	13.33		$ 32.72	$ 436.16
		-		Subtotal Equipment Cost (B)	$ 436.16

SECTION D: SUBS & CONSULTANTS

Company	Description of Work to be Performed (Supporting quote & information attached)	Total Cost
Aguilar Traffic	Traffic Control	$ 1,881.10
AIMS Companies (Southwest Environmental)	Remove ladders and rehabilitate base	$ 3,690.00
Pro-Pipe	Panoramic Video Services	$ 130.00
	Subtotal Subcontractors & Consultants (D)	$ 5,701.10

SECTION E: RENTAL EQUIPMENT

Company	Description of Rental Equipment (Supporting quote & information attached)	Total Cost
	Subtotal Rental Equipment (E)	$ -

						Total	**$ 9,470.30**

WW2501.402 Sewer Rehab for Frye Road Bike Lanes

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CONTRACTOR NAME: **Archer Western Construction**

Contract Type:	JOC	City Project No.:	WW2501.402
Job Order No.:	2415.401	Contractors Job No.:	224148
City Project Mgr.:	Raymond Potts	Prepared By:	Sam Elliott
Fee Type:	**Fixed**	Date:	10/11/2024
Location:	MH 756020064 - Frye Rd & S. Hamilton St. (North) - Group 10	Revision:	2
City Project Title:	**Sewer Rehab for Frye Road Bike Lanes**		

Description of Work to be Performed (supporting information attached)**:** Bench to Rim 14'-7", 4' DIA concrete manhole. Remove ladders and rehabilitate base only.

SECTION A: LABOR (inclusive of burden)

Position	Unit	Quantity		Labor Cost	Total
Project Manager (Includes Truck)	Hours	4.00		$ 141.10	$ 564.40
Superintendent (Includes Truck)	Hours	13.33		$ 131.20	$ 1,748.90
Foreman	Hours	13.33		$ 76.50	$ 1,019.75
**Any emergency or T&M work that requires overtime will be billed at 1.5 times the listed Unit Prices.*					$ 3,333.04

SECTION B: EQUIPMENT (supporting information attached, i.e. EquipmentWatch.com)

Item	Unit	Quantity		Equipment Cost: Unit Price	Total
Truck Crew - (Heavy) F-350	Hours	13.33		$ 32.76	$ 436.69
		-		Subtotal Equipment Cost (B)	$ 436.69

SECTION D: SUBS & CONSULTANTS

Company	Description of Work to be Performed (Supporting quote & information attached)	Total Cost
Aguilar Traffic	Traffic Control	$ 1,881.10
AIMS Companies (Southwest Environmental)	Remove ladders and rehabilitate base	$ 3,690.00
Pro-Pipe	Panoramic Video Services	$ 130.00
	Subtotal Subcontractors & Consultants (D)	$ 5,701.10

SECTION E: RENTAL EQUIPMENT

Company	Description of Rental Equipment (Supporting quote & information attached)	Total Cost
	Subtotal Rental Equipment (E)	$ -

						Total	**$ 9,470.83**

WW2501.402 Sewer Rehab for Frye Road Bike Lanes

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CONTRACTOR NAME: **Archer Western Construction**

Contract Type:	JOC	City Project No.:	WW2501.402
Job Order No.:	2415.401	Contractors Job No.:	224148
City Project Mgr.:	Raymond Potts	Prepared By:	Sam Elliott
Fee Type:	**Fixed**	Date:	10/11/2024
Location:	MH 756014772 - Frye Rd & Foley Park Group 10	Revision:	2
City Project Title:	**Sewer Rehab for Frye Road Bike Lanes**		

Description of Work to be Performed (supporting information attached)**:** Bench to Rim 14'-10", 4' DIA concrete manhole. Remove ladders and rehabilitate base only.

SECTION A: LABOR (inclusive of burden)

Position	Unit	Quantity		Labor Cost	Total
Project Manager (Includes Truck)	Hours	4.00		$ 141.10	$ 564.40
Superintendent (Includes Truck)	Hours	13.33		$ 131.20	$ 1,748.90
Foreman	Hours	13.33		$ 76.50	$ 1,019.75
**Any emergency or T&M work that requires overtime will be billed at 1.5 times the listed Unit Prices.*					$ 3,333.04

SECTION B: EQUIPMENT (supporting information attached, i.e. EquipmentWatch.com)

Item	Unit	Quantity		Equipment Cost: Unit Price	Total
Truck Crew - (Heavy) F-350	Hours	13.33		$ 32.72	$ 436.16
		-		Subtotal Equipment Cost (B)	$ 436.16

SECTION C: MATERIALS

Item	Unit	Quantity		Material Cost: Unit Price	Total
					$ -
				Subtotal Material Cost (C)	$ -

SECTION D: SUBS & CONSULTANTS

Company	Description of Work to be Performed (Supporting quote & information attached)	Total Cost
Aguilar Traffic	Traffic Control	$ 1,881.10
AIMS Companies (Southwest Environmental)	Remove ladders and rehabilitate base	$ 3,690.00
Pro-Pipe	Panoramic Video Services	$ 130.00
	Subtotal Subcontractors & Consultants (D)	$ 5,701.10

SECTION E: RENTAL EQUIPMENT

Company	Description of Rental Equipment (Supporting quote & information attached)	Total Cost
	Subtotal Rental Equipment (E)	$ -

						Total	**$ 9,470.30**

WW2501.402 Sewer Rehab for Frye Road Bike Lanes

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CONTRACTOR NAME: **Archer Western Construction**

Contract Type:	JOC	City Project No.:	WW2501.402
Job Order No.:	2415.401	Contractors Job No.:	224148
City Project Mgr.:	Raymond Potts	Prepared By:	Sam Elliott
Fee Type:	**Fixed**	Date:	10/11/2024
Location:	MH 756003275 - Frye Rd & S Elizabeth Way Group 11	Revision:	2
City Project Title:	**Sewer Rehab for Frye Road Bike Lanes**		

Description of Work to be Performed (supporting information attached)**:** Bench to Rim 13'-1", 5' DIA concrete manhole in good condition. Remove ladders and rehabilitate base only.

SECTION A: LABOR (inclusive of burden)

Position	Unit	Quantity		Labor Cost	Total
Project Manager (Includes Truck)	Hours	4.00		$ 141.10	$ 564.40
Superintendent (Includes Truck)	Hours	13.33		$ 131.20	$ 1,748.90
Foreman	Hours	13.33		$ 76.50	$ 1,019.75
**Any emergency or T&M work that requires overtime will be billed at 1.5 times the listed Unit Prices.*					$ 3,333.04

SECTION B: EQUIPMENT (supporting information attached, i.e. EquipmentWatch.com)

Item	Unit	Quantity		Equipment Cost: Unit Price	Total
Truck Crew - (Heavy) F-350	Hours	13.33		$ 32.72	$ 436.16
		-		Subtotal Equipment Cost (B)	$ 436.16

SECTION C: MATERIALS

Item	Unit	Quantity		Material Cost: Unit Price	Total
					$ -
				Subtotal Material Cost (C)	$ -

SECTION D: SUBS & CONSULTANTS

Company	Description of Work to be Performed (Supporting quote & information attached)	Total Cost
Aguilar Traffic	Traffic Control	$ 2,064.43
AIMS Companies (Southwest Environmental)	Remove ladders and rehabilitate	$ 4,490.00
Pro-Pipe	Panoramic Video Services	$ 130.00
	Subtotal Subcontractors & Consultants (D)	$ 6,684.43

SECTION E: RENTAL EQUIPMENT

Company	Description of Rental Equipment (Supporting quote & information attached)	Total Cost
	Subtotal Rental Equipment (E)	$ -

						Total	**$ 10,453.63**

WW2501.402 Sewer Rehab for Frye Road Bike Lanes

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CONTRACTOR NAME: **Archer Western Construction**

Contract Type:	JOC	City Project No.:	WW2501.402
Job Order No.:	2415.401	Contractors Job No.:	224148
City Project Mgr.:	Raymond Potts	Prepared By:	Sam Elliott
Fee Type:	**Fixed**	Date:	10/11/2024
Location:	MH 756003274 - Frye Rd & S Jackson St. Group 11	Revision:	2
City Project Title:	**Sewer Rehab for Frye Road Bike Lanes**		

Description of Work to be Performed (supporting information attached)**:** Bench to Rim 13'-7", 5' DIA concrete manhole. Remove ladders and rehabilitate base only.

SECTION A: LABOR (inclusive of burden)

Position	Unit	Quantity		Labor Cost	Total
Project Manager (Includes Truck)	Hours	4.00		$ 141.10	$ 564.40
Superintendent (Includes Truck)	Hours	13.33		$ 131.20	$ 1,748.90
Foreman	Hours	13.33		$ 76.50	$ 1,019.75
**Any emergency or T&M work that requires overtime will be billed at 1.5 times the listed Unit Prices.*					$ 3,333.04

SECTION B: EQUIPMENT (supporting information attached, i.e. EquipmentWatch.com)

Item	Unit	Quantity		Equipment Cost: Unit Price	Total
Truck Crew - (Heavy) F-350	Hours	13.33		$ 32.72	$ 436.16
		-		Subtotal Equipment Cost (B)	$ 436.16

SECTION C: MATERIALS

Item	Unit	Quantity		Material Cost: Unit Price	Total
					$ -
				Subtotal Material Cost (C)	$ -

SECTION D: SUBS & CONSULTANTS

Company	Description of Work to be Performed (Supporting quote & information attached)	Total Cost
Aguilar Traffic	Traffic Control	$ 2,064.43
AIMS Companies (Southwest Environmental)	Full Epoxy Rehabilitation	$ 4,490.00
Pro-Pipe	Panoramic Video Services	$ 130.00
	Subtotal Subcontractors & Consultants (D)	$ 6,684.43

SECTION E: RENTAL EQUIPMENT

Company	Description of Rental Equipment (Supporting quote & information attached)	Total Cost
	Subtotal Rental Equipment (E)	$ -

						Total	**$ 10,453.63**

WW2501.402 Sewer Rehab for Frye Road Bike Lanes

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CONTRACTOR NAME: **Archer Western Construction**

Contract Type:	JOC	City Project No.:	WW2501.402
Job Order No.:	2415.401	Contractors Job No.:	224148
City Project Mgr.:	Raymond Potts	Prepared By:	Sam Elliott
Fee Type:	**Fixed**	Date:	10/11/2024
Location:	MH 756003273 - Frye Rd & S Kingston St. Group 11	Revision:	2
City Project Title:	**Sewer Rehab for Frye Road Bike Lanes**		

Description of Work to be Performed (supporting information attached)**:** Bench to Rim 14'-0", 4 DIA concrete manhole. Remove ladders and rehabilitate base only.

SECTION A: LABOR (inclusive of burden)

Position	Unit	Quantity		Labor Cost	
					Total
Project Manager (Includes Truck)	Hours	4.00		$ 141.10	$ 564.40
Superintendent (Includes Truck)	Hours	13.33		$ 131.20	$ 1,748.90
Foreman	Hours	13.33		$ 76.50	$ 1,019.75
**Any emergency or T&M work that requires overtime will be billed at 1.5 times the listed Unit Prices.*					$ 3,333.04

SECTION B: EQUIPMENT (supporting information attached, i.e. EquipmentWatch.com)

Item	Unit	Quantity		Equipment Cost	
				Unit Price	Total
Truck Crew - (Heavy) F-350	Hours	20.00		$ 32.76	$ 655.20
		-	Subtotal Equipment Cost (B)		$ 655.20

SECTION C: MATERIALS

Item	Unit	Quantity		Material Cost	
				Unit Price	Total
					$ -
			Subtotal Material Cost (C)		$ -

SECTION D: SUBS & CONSULTANTS

Company	Description of Work to be Performed (Supporting quote & information attached)	Total Cost
Aguilar Traffic	Traffic Control	$ 2,064.43
AIMS Companies (Southwest Environmental)	Remove ladders and rehabilitate base	$ 3,690.00
Pro-Pipe	Panoramic Video Services	$ 130.00
	Subtotal Subcontractors & Consultants (D)	$ 5,884.43

SECTION E: RENTAL EQUIPMENT

Company	Description of Rental Equipment (Supporting quote & information attached)	Total Cost
	Subtotal Rental Equipment (E)	$ -

						Total	**$ 9,872.67**

WW2501.402 Sewer Rehab for Frye Road Bike Lanes

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CONTRACTOR NAME: **Archer Western Construction**

Contract Type:	JOC	City Project No.:	WW2501.402
Job Order No.:	2415.401	Contractors Job No.:	224148
City Project Mgr.:	Raymond Potts	Prepared By:	Sam Elliott
Fee Type:	**Fixed**	Date:	10/11/2024
Location:	MH 756014736 - Frye rd & McQueen Group 12	Revision:	2
City Project Title:	**Sewer Rehab for Frye Road Bike Lanes**		

Description of Work to be Performed (supporting information attached)**:** Remove manhole cone, backfill with CLSM and restore asphalt/striping.

SECTION A: LABOR (inclusive of burden)

Position	Unit	Quantity		Labor Cost	
					Total
Project Manager (Includes Truck)	Hours	4.00		$ 141.10	$ 564.40
Superintendent (Includes Truck)	Hours	24.00		$ 131.20	$ 3,148.80
CDL Truck Driver	Hours	24.00		$ 48.70	$ 1,168.80
Foreman	Hours	24.00		$ 76.50	$ 1,836.00
Laborers	Hours	48.00		$ 43.30	$ 2,078.40
Operator	Hours	24.00		$ 54.10	$ 1,298.40
Pipelayer	Hours	24.00		$ 50.05	$ 1,201.20
**Any emergency or T&M work that requires overtime will be billed at 1.5 times the listed Unit Prices.*					$ 11,296.00

SECTION B: EQUIPMENT (supporting information attached, i.e. EquipmentWatch.com)

Item	Unit	Quantity		Equipment Cost	
				Unit Price	Total
Backhoe - CAT 420F	Hours	24.00		$ 85.09	$ 2,042.16
Dump Truck - (12 CY)	Hours	24.00		$ 117.38	$ 2,817.12
Excavator - CAT 315	Hours	24.00		$ 139.72	$ 3,353.28
Skid Steer - CAT 248B	Hours	24.00		$ 64.11	$ 1,538.64
Transport Trailer	Hours	24.00		$ 5.00	$ 120.00
Truck Crew - (Heavy) F-350	Hours	24.00		$ 32.76	$ 786.24
		-		Subtotal Equipment Cost (B)	$ 10,657.44

SECTION C: MATERIALS

Item	Unit	Quantity		Material Cost	
				Unit Price	Total
CLSM Backfill	CY	14.00		$ 144.00	$ 2,016.00
				Subtotal Material Cost (C)	$ 2,016.00

SECTION D: SUBS & CONSULTANTS

Company	Description of Work to be Performed (Supporting quote & information attached)	Total Cost
Aguilar Traffic	Traffic Control	$ 9,420.00
Nesbitt Contracting	Asphalt replacement and crack sealing	$ 4,500.00
Franklin Striping	Striping & Thermo	$ 3,500.00
A-Core	Asphalt Sawcutting	$ 450.00
Bryco Milling	Asphalt Milling	$ 850.00
Professional Police Services	Off-Duty Officer	$ 4,000.00
	Subtotal Subcontractors & Consultants (D)	$ 22,720.00

SECTION E: RENTAL EQUIPMENT

Company	Description of Rental Equipment (Supporting quote & information attached)	Total Cost
National Trench Safety	Shoring Cylinders	$ 278.00
National Trench Safety	Road Plates	$ 268.00
	Subtotal Rental Equipment (E)	$ 546.00

						Total	**$ 47,235.44**

WW2501.402 Sewer Rehab for Frye Road Bike Lanes

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CONTRACTOR NAME: **Archer Western Construction**

Contract Type:	JOC	City Project No.:	WW2501.402
Job Order No.:	2415.401	Contractors Job No.:	224148
City Project Mgr.:	Raymond Potts	Prepared By:	Sam Elliott
Fee Type:	**Fixed**	Date:	10/11/2024
Location:	MH 756014715 - Frye Rd & McQueen Group 13	Revision:	2
City Project Title:	**Sewer Rehab for Frye Road Bike Lanes**		

Description of Work to be Performed (supporting information attached)**:** Bench to Rim 13'-5", 4' DIA concrete manhole. Remove ladders and rehabilitate base only.

SECTION A: LABOR (inclusive of burden)

Position	Unit	Quantity		Labor Cost	
					Total
Project Manager (Includes Truck)	Hours	4.00		$ 141.10	$ 564.40
Superintendent (Includes Truck)	Hours	13.33		$ 131.20	$ 1,748.90
Foreman	Hours	13.33		$ 76.50	$ 1,019.75
**Any emergency or T&M work that requires overtime will be billed at 1.5 times the listed Unit Prices.*					$ 3,333.04

SECTION B: EQUIPMENT (supporting information attached, i.e. EquipmentWatch.com)

Item	Unit	Quantity		Equipment Cost	
				Unit Price	Total
Truck Crew - (Heavy) F-350	Hours	13.33		$ 32.76	$ 436.69
		-	Subtotal Equipment Cost (B)		$ 436.69

SECTION C: MATERIALS

Item	Unit	Quantity		Material Cost	
				Unit Price	Total
					$ -
			Subtotal Material Cost (C)		$ -

SECTION D: SUBS & CONSULTANTS

Company	Description of Work to be Performed (Supporting quote & information attached)	Total Cost
Aguilar Traffic	Traffic Control	$ 1,859.10
AIMS Companies (Southwest Environmental)	Remove ladders and rehabilitate base	$ 3,690.00
Pro-Pipe	Panoramic Video Services	$ 130.00
Professional Police Services	Off-Duty Officer (Within 300' of signalized intersection)	$ 3,200.00
	Subtotal Subcontractors & Consultants (D)	$ 8,879.10

SECTION E: RENTAL EQUIPMENT

Company	Description of Rental Equipment (Supporting quote & information attached)	Total Cost
	Subtotal Rental Equipment (E)	$ -

						Total	**$ 12,648.83**

WW2501.402 Sewer Rehab for Frye Road Bike Lanes

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CONTRACTOR NAME: **Archer Western Construction**

Contract Type:	JOC	City Project No.:	WW2501.402
Job Order No.:	2415.401	Contractors Job No.:	224148
City Project Mgr.:	Raymond Potts	Prepared By:	Sam Elliott
Fee Type:	**Fixed**	Date:	10/11/2024
Location:	MH 756003077 - Frye Rd between McQueen & S Senate St. - Group 13	Revision:	2
City Project Title:	**Sewer Rehab for Frye Road Bike Lanes**		

Description of Work to be Performed (supporting information attached)**:** Bench to Rim 13'-8", 4' DIA concrete manhole. Remove ladders and rehabilitate base only.

SECTION A: LABOR (inclusive of burden)

Position	Unit	Quantity		Labor Cost	Total
Project Manager (Includes Truck)	Hours	4.00		$ 141.10	$ 564.40
Superintendent (Includes Truck)	Hours	13.33		$ 131.20	$ 1,748.90
Foreman	Hours	13.33		$ 76.50	$ 1,019.75
**Any emergency or T&M work that requires overtime will be billed at 1.5 times the listed Unit Prices.*					$ 3,333.04

SECTION B: EQUIPMENT (supporting information attached, i.e. EquipmentWatch.com)

Item	Unit	Quantity		Equipment Cost: Unit Price	Total
Truck Crew - (Heavy) F-350	Hours	13.33		$ 32.76	$ 436.69
		-	Subtotal Equipment Cost (B)		$ 436.69

SECTION C: MATERIALS

Item	Unit	Quantity		Material Cost: Unit Price	Total
					$ -
			Subtotal Material Cost (C)		$ -

SECTION D: SUBS & CONSULTANTS

Company	Description of Work to be Performed (Supporting quote & information attached)	Total Cost
Aguilar Traffic	Traffic Control	$ 1,859.10
AIMS Companies (Southwest Environmental)	Remove ladders and rehabilitate base	$ 3,690.00
Pro-Pipe	Panoramic Video Services	$ 130.00
	Subtotal Subcontractors & Consultants (D)	$ 5,679.10

SECTION E: RENTAL EQUIPMENT

Company	Description of Rental Equipment (Supporting quote & information attached)	Total Cost
	Subtotal Rental Equipment (E)	$ -

						Total	**$ 9,448.83**

WW2501.402 Sewer Rehab for Frye Road Bike Lanes

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CONTRACTOR NAME: **Archer Western Construction**

Contract Type:	JOC	City Project No.:	WW2501.402
Job Order No.:	2415.401	Contractors Job No.:	224148
City Project Mgr.:	Raymond Potts	Prepared By:	Sam Elliott
Fee Type:	**Fixed**	Date:	10/11/2024
Location:	MH 756003078 - Frye Rd & S Crosscreek Dr. Group 13	Revision:	2
City Project Title:	**Sewer Rehab for Frye Road Bike Lanes**		

Description of Work to be Performed (supporting information attached)**:** Bench to Rim 14'-0", 4' DIA concrete manhole. Remove ladders and rehabilitate base only.

SECTION A: LABOR (inclusive of burden)

Position	Unit	Quantity		Labor Cost	Total
Project Manager (Includes Truck)	Hours	4.00		$ 141.10	$ 564.40
Superintendent (Includes Truck)	Hours	13.33		$ 131.20	$ 1,748.90
Foreman	Hours	13.33		$ 76.50	$ 1,019.75
**Any emergency or T&M work that requires overtime will be billed at 1.5 times the listed Unit Prices.*					$ 3,333.04

SECTION B: EQUIPMENT (supporting information attached, i.e. EquipmentWatch.com)

Item	Unit	Quantity		Equipment Cost: Unit Price	Total
Truck Crew - (Heavy) F-350	Hours	13.33		$ 32.76	$ 436.69
		-		Subtotal Equipment Cost (B)	$ 436.69

SECTION C: MATERIALS

Item	Unit	Quantity		Material Cost: Unit Price	Total
					$ -
				Subtotal Material Cost (C)	$ -

SECTION D: SUBS & CONSULTANTS

Company	Description of Work to be Performed (Supporting quote & information attached)	Total Cost
Aguilar Traffic	Traffic Control	$ 1,859.10
AIMS Companies (Southwest Environmental)	Remove ladders and rehabilitate base	$ 3,690.00
Pro-Pipe	Panoramic Video Services	$ 130.00
	Subtotal Subcontractors & Consultants (D)	$ 5,679.10

SECTION E: RENTAL EQUIPMENT

Company	Description of Rental Equipment (Supporting quote & information attached)	Total Cost
	Subtotal Rental Equipment (E)	$ -

						Total	**$ 9,448.83**

WW2501.402 Sewer Rehab for Frye Road Bike Lanes

INDEX

CONTRACTOR NAME: **Archer Western Construction**

Contract Type:	JOC	City Project No.:	WW2501.402
Job Order No.:	2415.401	Contractors Job No.:	224148
City Project Mgr.:	Raymond Potts	Prepared By:	Sam Elliott
Fee Type:	**Fixed**	Date:	10/11/2024
Location:	MH 756012714 - Frye Rd & S Senate St Group 14	Revision:	2
City Project Title:	**Sewer Rehab for Frye Road Bike Lanes**		

Description of Work to be Performed (supporting information attached)**:** Bench to Rim 14'-1", 4' DIA concrete manhole. Full epoxy rehabilitation. (Group of 3 rehabilitations)

SECTION A: LABOR (inclusive of burden)

Position	Unit	Quantity		Labor Cost	Total
Project Manager (Includes Truck)	Hours	8.00		$ 141.10	$ 1,128.80
Superintendent (Includes Truck)	Hours	26.66		$ 131.20	$ 3,497.79
Foreman	Hours	26.66		$ 76.50	$ 2,039.49
**Any emergency or T&M work that requires overtime will be billed at 1.5 times the listed Unit Prices.*					$ 6,666.08

SECTION B: EQUIPMENT (supporting information attached, i.e. EquipmentWatch.com)

Item	Unit	Quantity		Equipment Cost: Unit Price	Total
Truck Crew - (Heavy) F-350	Hours	26.66		$ 32.76	$ 873.38
			Subtotal Equipment Cost (B)		$ 873.38

SECTION C: MATERIALS

Item	Unit	Quantity		Material Cost: Unit Price	Total
					$ -
			Subtotal Material Cost (C)		$ -

SECTION D: SUBS & CONSULTANTS

Company	Description of Work to be Performed (Supporting quote & information attached)	Total Cost
Aguilar Traffic	Traffic Control	$ 1,881.10
AIMS Companies (Southwest Environmental)	Full epoxy rehabilitation	$ 12,920.00
Pro-Pipe	Panoramic Video Services	$ 130.00
	Subtotal Subcontractors & Consultants (D)	$ 14,931.10

SECTION E: RENTAL EQUIPMENT

Company	Description of Rental Equipment (Supporting quote & information attached)	Total Cost
	Subtotal Rental Equipment (E)	$ -

						Total	**$ 22,470.56**

WW2501.402 Sewer Rehab for Frye Road Bike Lanes

INDEX

CONTRACTOR NAME: **Archer Western Construction**

Contract Type:	JOC	City Project No.:	WW2501.402
Job Order No.:	2415.401	Contractors Job No.:	224148
City Project Mgr.:	Raymond Potts	Prepared By:	Sam Elliott
Fee Type:	**Fixed**	Date:	10/11/2024
Location:	MH 756003074 - Frye Rd between S. Senate St & S Windstream Pl - Group 14	Revision:	2
City Project Title:	**Sewer Rehab for Frye Road Bike Lanes**		

Description of Work to be Performed (supporting information attached)**:** Bench to Rim 13'-8, 4' DIA concrete manhole. Full epoxy rehabilitation. (Group of 3 full rehabilitations)

SECTION A: LABOR (inclusive of burden)

Position	Unit	Quantity		Labor Cost		Total
Project Manager (Includes Truck)	Hours	8.00		$	141.10	$ 1,128.80
Superintendent (Includes Truck)	Hours	26.66		$	131.20	$ 3,497.79
Foreman	Hours	26.66		$	76.50	$ 2,039.49
**Any emergency or T&M work that requires overtime will be billed at 1.5 times the listed Unit Prices.*						$ 6,666.08

SECTION B: EQUIPMENT (supporting information attached, i.e. EquipmentWatch.com)

Item	Unit	Quantity		Equipment Cost Unit Price		Total
Truck Crew - (Heavy) F-350	Hours	26.66		$	32.76	$ 873.38
		-	Subtotal Equipment Cost (B)			$ 873.38

SECTION C: MATERIALS

Item	Unit	Quantity		Material Cost Unit Price	Total
					$ -
			Subtotal Material Cost (C)		$ -

SECTION D: SUBS & CONSULTANTS

Company	Description of Work to be Performed (Supporting quote & information attached)	Total Cost
Aguilar Traffic	Traffic Control	$ 1,881.10
AIMS Companies (Southwest Environmental)	Full epoxy rehabilitation	$ 12,920.00
Pro-Pipe	Panoramic Video Services	$ 130.00
	Subtotal Subcontractors & Consultants (D)	$ 14,931.10

SECTION E: RENTAL EQUIPMENT

Company	Description of Rental Equipment (Supporting quote & information attached)	Total Cost
	Subtotal Rental Equipment (E)	$ -

						Total	**$ 22,470.56**

WW2501.402 Sewer Rehab for Frye Road Bike Lanes

INDEX

CONTRACTOR NAME: **Archer Western Construction**

Contract Type:	JOC	City Project No.:	WW2501.402
Job Order No.:	2415.401	Contractors Job No.:	224148
City Project Mgr.:	Raymond Potts	Prepared By:	Sam Elliott
Fee Type:	**Fixed**	Date:	10/11/2024
Location:	MH 756003075 - Frye Rd & S. Windstream Pl Group 14	Revision:	2
City Project Title:	**Sewer Rehab for Frye Road Bike Lanes**		

Description of Work to be Performed (supporting information attached)**:** Bench to Rim 13'-9", 4' DIA concrete manhole. Full epoxy rehabilitation. (Group of 3 full rehabilitations)

SECTION A: LABOR (inclusive of burden)

Position	Unit	Quantity		Labor Cost	Total
Project Manager (Includes Truck)	Hours	8.00		$ 141.10	$ 1,128.80
Superintendent (Includes Truck)	Hours	26.66		$ 131.20	$ 3,497.79
Foreman	Hours	26.66		$ 76.50	$ 2,039.49
**Any emergency or T&M work that requires overtime will be billed at 1.5 times the listed Unit Prices.*					$ 6,666.08

SECTION B: EQUIPMENT (supporting information attached, i.e. EquipmentWatch.com)

Item	Unit	Quantity		Equipment Cost: Unit Price	Total
Truck Crew - (Heavy) F-350	Hours	26.66		$ 32.76	$ 873.38
		-		Subtotal Equipment Cost (B)	$ 873.38

SECTION C: MATERIALS

Item	Unit	Quantity		Material Cost: Unit Price	Total
					$ -
				Subtotal Material Cost (C)	$ -

SECTION D: SUBS & CONSULTANTS

Company	Description of Work to be Performed (Supporting quote & information attached)	Total Cost
Aguilar Traffic	Traffic Control	$ 1,881.10
AIMS Companies (Southwest Environmental)	Full Epoxy Rehabilitation	$ 12,920.00
Pro-Pipe	Panoramic Video Services	$ 130.00
	Subtotal Subcontractors & Consultants (D)	$ 14,931.10

SECTION E: RENTAL EQUIPMENT

Company	Description of Rental Equipment (Supporting quote & information attached)	Total Cost
	Subtotal Rental Equipment (E)	$ -

						Total	**$ 22,470.56**

WW2501.402 Sewer Rehab for Frye Road Bike Lanes

INDEX

CONTRACTOR NAME: **Archer Western Construction**

Contract Type:	JOC	City Project No.:	WW2501.402
Job Order No.:	2415.401	Contractors Job No.:	224148
City Project Mgr.:	Raymond Potts	Prepared By:	Sam Elliott
Fee Type:	**Fixed**	Date:	10/11/2024
Location:	MH 756006839 - Frye Rd & S Lakeview Blvd Group 15	Revision:	2
City Project Title:	**Sewer Rehab for Frye Road Bike Lanes**		

Description of Work to be Performed (supporting information attached)**:** Bench to Rim 12'-3", 4' DIA concrete manhole. Full epoxy rehabilitation.

SECTION A: LABOR (inclusive of burden)

Position	Unit	Quantity		Labor Cost	Total
Project Manager (Includes Truck)	Hours	4.00		$ 141.10	$ 564.40
Superintendent (Includes Truck)	Hours	20.00		$ 131.20	$ 2,624.00
Foreman	Hours	20.00		$ 76.50	$ 1,530.00
**Any emergency or T&M work that requires overtime will be billed at 1.5 times the listed Unit Prices.*					$ 4,718.40

SECTION B: EQUIPMENT (supporting information attached, i.e. EquipmentWatch.com)

Item	Unit	Quantity		Equipment Cost: Unit Price	Total
Truck Crew - (Heavy) F-350	Hours	20.00		$ 32.76	$ 655.20
		-		Subtotal Equipment Cost (B)	$ 655.20

SECTION C: MATERIALS

Item	Unit	Quantity		Material Cost: Unit Price	Total
					$ -
				Subtotal Material Cost (C)	$ -

SECTION D: SUBS & CONSULTANTS

Company	Description of Work to be Performed (Supporting quote & information attached)	Total Cost
Aguilar Traffic	Traffic Control	$ 5,078.12
AIMS Companies (Southwest Environmental)	Full Epoxy Rehabilitation	$ 11,430.00
Pro-Pipe	Panoramic Video Services	$ 130.00
	Subtotal Subcontractors & Consultants (D)	$ 16,638.12

SECTION E: RENTAL EQUIPMENT

Company	Description of Rental Equipment (Supporting quote & information attached)	Total Cost
	Subtotal Rental Equipment (E)	$ -

						Total	**$ 22,011.72**

WW2501.402 Sewer Rehab for Frye Road Bike Lanes

INDEX

CONTRACTOR NAME: **Archer Western Construction**

Contract Type:	JOC	City Project No.:	WW2501.402
Job Order No.:	2415.401	Contractors Job No.:	224148
City Project Mgr.:	Raymond Potts	Prepared By:	Sam Elliott
Fee Type:	**Fixed**	Date:	10/11/2024
Location:	MH 756003079 - Frye Rd & S Lakeview Blvd Group 15	Revision:	2
City Project Title:	**Sewer Rehab for Frye Road Bike Lanes**		

Description of Work to be Performed (supporting information attached)**:** Bench to Rim 11'-8", 4' DIA concrete manhole. Remove ladders and rehabilitate base only.

SECTION A: LABOR (inclusive of burden)

Position	Unit	Quantity		Labor Cost	Total
Project Manager (Includes Truck)	Hours	8.00		$ 141.10	$ 1,128.80
Superintendent (Includes Truck)	Hours	20.00		$ 131.20	$ 2,624.00
Foreman	Hours	20.00		$ 76.50	$ 1,530.00
**Any emergency or T&M work that requires overtime will be billed at 1.5 times the listed Unit Prices.*					$ 5,282.80

SECTION B: EQUIPMENT (supporting information attached, i.e. EquipmentWatch.com)

Item	Unit	Quantity		Equipment Cost: Unit Price	Total
Truck Crew - (Heavy) F-350	Hours	20.00		$ 32.76	$ 655.20
		-		Subtotal Equipment Cost (B)	$ 655.20

SECTION C: MATERIALS

Item	Unit	Quantity		Material Cost: Unit Price	Total
					$ -
				Subtotal Material Cost (C)	$ -

SECTION D: SUBS & CONSULTANTS

Company	Description of Work to be Performed (Supporting quote & information attached)	Total Cost
Aguilar Traffic	Traffic Control	$ 5,078.12
AIMS Companies (Southwest Environmental)	Full Epoxy Rehabilitation	$ 3,690.00
Pro-Pipe	Panoramic Video Services	$ 130.00
	Subtotal Subcontractors & Consultants (D)	$ 8,898.12

SECTION E: RENTAL EQUIPMENT

Company	Description of Rental Equipment (Supporting quote & information attached)	Total Cost
	Subtotal Rental Equipment (E)	$ -

						Total	**$ 14,836.12**

WW2501.402 Sewer Rehab for Frye Road Bike Lanes

INDEX

CONTRACTOR NAME: **Archer Western Construction**

Contract Type:	JOC	City Project No.:	WW2501.402
Job Order No.:	2415.401	Contractors Job No.:	224148
City Project Mgr.:	Raymond Potts	Prepared By:	Sam Elliott
Fee Type:	**Fixed**	Date:	10/11/2024
Location:	MH 756003080 - Frye Rd and Bologna Elementary - Group 16	Revision:	2
City Project Title:	**Sewer Rehab for Frye Road Bike Lanes**		

Description of Work to be Performed (supporting information attached)**:** Bench to Rim 11'-6", 4' DIA concrete manhole. Remove ladders and rehabilitate base only.

SECTION A: LABOR (inclusive of burden)

Position	Unit	Quantity		Labor Cost	Total
Project Manager (Includes Truck)	Hours	4.00		$ 141.10	$ 564.40
Superintendent (Includes Truck)	Hours	13.33		$ 131.20	$ 1,748.90
Foreman	Hours	13.33		$ 76.50	$ 1,019.75
**Any emergency or T&M work that requires overtime will be billed at 1.5 times the listed Unit Prices.*					$ 3,333.04

SECTION B: EQUIPMENT (supporting information attached, i.e. EquipmentWatch.com)

Item	Unit	Quantity		Equipment Cost: Unit Price	Total
Truck Crew - (Heavy) F-350	Hours	13.33		$ 32.76	$ 436.69
		-		Subtotal Equipment Cost (B)	$ 436.69

SECTION C: MATERIALS

Item	Unit	Quantity		Material Cost: Unit Price	Total
					$ -
				Subtotal Material Cost (C)	$ -

SECTION D: SUBS & CONSULTANTS

Company	Description of Work to be Performed (Supporting quote & information attached)	Total Cost
Aguilar Traffic	Traffic Control	$ 1,881.10
AIMS Companies (Southwest Environmental)	Remove ladders and rehabilitate base	$ 3,690.00
Pro-Pipe	Panoramic Video Services	$ 130.00
	Subtotal Subcontractors & Consultants (D)	$ 5,701.10

SECTION E: RENTAL EQUIPMENT

Company	Description of Rental Equipment (Supporting quote & information attached)	Total Cost
	Subtotal Rental Equipment (E)	$ -

						Total	**$ 9,470.83**

WW2501.402 Sewer Rehab for Frye Road Bike Lanes

INDEX

CONTRACTOR NAME: **Archer Western Construction**

Contract Type:	JOC	City Project No.:	WW2501.402
Job Order No.:	2415.401	Contractors Job No.:	224148
City Project Mgr.:	Raymond Potts	Prepared By:	Sam Elliott
Fee Type:	**Fixed**	Date:	10/11/2024
Location:	MH 756006842 - Frye Rd and Bolgna Elementary School - Group 16	Revision:	2
City Project Title:	**Sewer Rehab for Frye Road Bike Lanes**		

Description of Work to be Performed (supporting information attached)**:** Bench to Rim 11'-8", 4' DIA concrete manhole. Full epoxy rehabilitation.

SECTION A: LABOR (inclusive of burden)

Position	Unit	Quantity		Labor Cost	
					Total
Project Manager (Includes Truck)	Hours	4.00		$ 141.10	$ 564.40
Superintendent (Includes Truck)	Hours	13.33		$ 131.20	$ 1,748.90
Foreman	Hours	13.33		$ 76.50	$ 1,019.75
		-		$ -	$ -
**Any emergency or T&M work that requires overtime will be billed at 1.5 times the listed Unit Prices.*					$ 3,333.04

SECTION B: EQUIPMENT (supporting information attached, i.e. EquipmentWatch.com)

Item	Unit	Quantity		Equipment Cost	
				Unit Price	Total
Truck Crew - (Heavy) F-350	Hours	13.33		$ 32.76	$ 436.69
		-		Subtotal Equipment Cost (B)	$ 436.69

SECTION C: MATERIALS

Item	Unit	Quantity		Material Cost	
				Unit Price	Total
					$ -
				Subtotal Material Cost (C)	$ -

SECTION D: SUBS & CONSULTANTS

Company	Description of Work to be Performed (Supporting quote & information attached)	Total Cost
Aguilar Traffic	Traffic Control	$ 1,881.10
AIMS Companies (Southwest Environmental)	Full Epoxy Rehabilitation	$ 11,430.00
Pro-Pipe	Panoramic Video Services	$ 130.00
	Subtotal Subcontractors & Consultants (D)	$ 13,441.10

SECTION E: RENTAL EQUIPMENT

Company	Description of Rental Equipment (Supporting quote & information attached)	Total Cost
	Subtotal Rental Equipment (E)	$ -

						Total	**$ 17,210.83**

WW2501.402 Sewer Rehab for Frye Road Bike Lanes

INDEX

CONTRACTOR NAME: **Archer Western Construction**

Contract Type:	JOC	City Project No.:	WW2501.402
Job Order No.:	2415.401	Contractors Job No.:	224148
City Project Mgr.:	Raymond Potts	Prepared By:	Sam Elliott
Fee Type:	**Fixed**	Date:	10/11/2024
Location:	MH 756008817 - Frye Rd & S Canal Dr Group 16	Revision:	2
City Project Title:	**Sewer Rehab for Frye Road Bike Lanes**		

Description of Work to be Performed (supporting information attached)**:** Bench to Rim 12'-3", 4' DIA concrete manhole. Remove ladders and rehabilitate base only.

SECTION A: LABOR (inclusive of burden)

Position	Unit	Quantity		Labor Cost	
					Total
Project Manager	Hours	2.00		$ 153.90	$ 307.80
Superintendent	Hours	13.33		$ 122.55	$ 1,633.59
Foreman	Hours	13.33		$ 69.75	$ 929.77
**Any emergency or T&M work that requires overtime will be billed at 1.5 times the listed Unit Prices.*					$ 2,871.16

SECTION B: EQUIPMENT (supporting information attached, i.e. EquipmentWatch.com)

Item	Unit	Quantity		Equipment Cost	
				Unit Price	Total
Truck - Manager (Heavy) F-250	Hours	13.33		$ 23.76	$ 316.72
		-	Subtotal Equipment Cost (B)		$ 316.72

SECTION C: MATERIALS

Item	Unit	Quantity		Material Cost	
				Unit Price	Total
					$ -
			Subtotal Material Cost (C)		$ -

SECTION D: SUBS & CONSULTANTS

Company	Description of Work to be Performed (Supporting quote & information attached)	Total Cost
Aguilar Traffic	Traffic Control	$ 1,881.10
AIMS Companies (Southwest Environmental)	Remove ladders and rehabilitate base	$ 3,690.00
Pro-Pipe	Panoramic Video Services	$ 130.00
	Subtotal Subcontractors & Consultants (D)	$ 5,701.10

SECTION E: RENTAL EQUIPMENT

Company	Description of Rental Equipment (Supporting quote & information attached)	Total Cost
	Subtotal Rental Equipment (E)	$ -

						Total	**$ 8,888.98**

WW2501.402 Sewer Rehab for Frye Road Bike Lanes

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CONTRACTOR NAME: **Archer Western Construction**

Contract Type:	JOC	City Project No.:	WW2501.402
Job Order No.:	2415.401	Contractors Job No.:	224148
City Project Mgr.:	Raymond Potts	Prepared By:	Sam Elliott
Fee Type:	**Fixed**	Date:	10/11/2024
Location:	MH 756008817 - Frye Rd & S Canal Dr Group 16	Revision:	2
City Project Title:	**Sewer Rehab for Frye Road Bike Lanes**		

Description of Work to be Performed (supporting information attached)**:** Adjust manhole - Paved over on previous project.

SECTION A: LABOR (inclusive of burden)

Position	Unit	Quantity		Labor Cost	Total
Project Manager	Hours	-		$ 153.90	$ -
Superintendent	Hours	2.00		$ 122.55	$ 245.10
Foreman	Hours	2.00		$ 69.75	$ 139.50
**Any emergency or T&M work that requires overtime will be billed at 1.5 times the listed Unit Prices.*					$ 384.60

SECTION B: EQUIPMENT (supporting information attached, i.e. EquipmentWatch.com)

Item	Unit	Quantity		Equipment Cost Unit Price	Total
Truck - Manager (Heavy) F-250	Hours	2.00		$ 23.76	$ 47.52
		-		Subtotal Equipment Cost (B)	$ 47.52

SECTION C: MATERIALS

Item	Unit	Quantity		Material Cost Unit Price	Total
					$ -
				Subtotal Material Cost (C)	$ -

SECTION D: SUBS & CONSULTANTS

Company	Description of Work to be Performed (Supporting quote & information attached)	Total Cost
Nesbitt	Adjust Manhole	$ 1,161.47
Aguilar	Traffic Control	$ 985.23
	Subtotal Subcontractors & Consultants (D)	$ 2,146.70

SECTION E: RENTAL EQUIPMENT

Company	Description of Rental Equipment (Supporting quote & information attached)	Total Cost
	Subtotal Rental Equipment (E)	$ -

						Total	**$ 2,578.82**

WW2501.402 Sewer Rehab for Frye Road Bike Lanes

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CONTRACTOR NAME: **Archer Western Construction**

Contract Type:	JOC	City Project No.:	WW2501.402
Job Order No.:	2415.401	Contractors Job No.:	224148
City Project Mgr.:	Raymond Potts	Prepared By:	Sam Elliott
Fee Type:	**Fixed**	Date:	10/11/2024
Location:		Revision:	2
City Project Title:	**Sewer Rehab for Frye Road Bike Lanes**		

Description of Work to be Performed (supporting information attached)**:** Possible bench rebuild - Need to investigate further and confirm condition of manhole during course of project.

SECTION A: LABOR (inclusive of burden)

Position	Unit	Quantity		Labor Cost	Total
Project Manager (Includes Truck)	Hours	4.00		$ 141.10	$ 564.40
Superintendent (Includes Truck)	Hours	13.33		$ 131.20	$ 1,748.90
Foreman	Hours	13.33		$ 76.50	$ 1,019.75
**Any emergency or T&M work that requires overtime will be billed at 1.5 times the listed Unit Prices.*					$ 3,333.04

SECTION B: EQUIPMENT (supporting information attached, i.e. EquipmentWatch.com)

Item	Unit	Quantity		Equipment Cost: Unit Price	Total
Truck Crew - (Heavy) F-350	Hours	13.33		$ 32.72	$ 436.16
		-		Subtotal Equipment Cost (B)	$ 436.16

SECTION C: MATERIALS

Item	Unit	Quantity		Material Cost: Unit Price	Total
					$ -
					$ -
					$ -
					$ -
					$ -
					$ -
				Subtotal Material Cost (C)	$ -

SECTION D: SUBS & CONSULTANTS

Company	Description of Work to be Performed (Supporting quote & information attached)	Total Cost
Aguilar Traffic	Traffic Control	$ 2,064.43
AIMS Companies (Southwest Environmental)	Remove ladders and rehabilitate base	$ 3,690.00
Pro-Pipe	Panoramic Video Services	$ 130.00
	Subtotal Subcontractors & Consultants (D)	$ 5,884.43

SECTION E: RENTAL EQUIPMENT

Company	Description of Rental Equipment (Supporting quote & information attached)	Total Cost
	Subtotal Rental Equipment (E)	$ -

						Total	**$ 9,653.63**

WW2501.402 Sewer Rehab for Frye Road Bike Lanes

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CONTRACTOR NAME: **Archer Western Construction**

Contract Type:	JOC	City Project No.:	WW2501.402
Job Order No.:	2415.401	Contractors Job No.:	224148
City Project Mgr.:	Raymond Potts	Prepared By:	Sam Elliott
Fee Type:	**Fixed**	Date:	10/11/2024
Location:	MH756014805 - MH756003357	Revision:	2
City Project Title:	**Sewer Rehab for Frye Road Bike Lanes**		

Description of Work to be Performed (supporting information attached)**:** CIPP line 475LF 12" VCP/Ductile Sewer from MH756014805 - MH756003357

SECTION A: LABOR (inclusive of burden)

Position	Unit	Quantity		Labor Cost	Total
Project Manager	Hours	8.00		$ 153.90	$ 1,231.20
Superintendent	Hours	40.00		$ 122.55	$ 4,902.00
Foreman	Hours	40.00		$ 69.75	$ 2,790.00
**Any emergency or T&M work that requires overtime will be billed at 1.5 times the listed Unit Prices.*					$ 8,923.20

SECTION B: EQUIPMENT (supporting information attached, i.e. EquipmentWatch.com)

Item	Unit	Quantity		Equipment Cost: Unit Price	Total
Truck - Manager (Heavy) F-250	Hours	40.00		$ 23.76	$ 950.40
		-		Subtotal Equipment Cost (B)	$ 950.40

SECTION C: MATERIALS

Item	Unit	Quantity		Material Cost: Unit Price	Total
					$ -
				Subtotal Material Cost (C)	$ -

SECTION D: SUBS & CONSULTANTS

Company	Description of Work to be Performed (Supporting quote & information attached)	Total Cost
Aguilar Traffic	Traffic Control	$ 3,837.10
Insituform	CIPP Lining, Pre/Post Camera	$ 40,000.00
Pro-Pipe	Heavy Cleaning and Camera	$ 2,500.00
	Subtotal Subcontractors & Consultants (D)	$ 46,337.10

SECTION E: RENTAL EQUIPMENT

Company	Description of Rental Equipment (Supporting quote & information attached)	Total Cost
	Subtotal Rental Equipment (E)	$ -

						Total	**$ 56,210.70**

WW2501.401 Sewer Rehab for Frye Road Bike Lanes

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CONTRACTOR NAME: **Archer Western Construction**

Contract Type:	JOC	City Project No.:	WW2501.401
Job Order No.:	2415.401	Contractors Job No.:	224148
City Project Mgr.:	Raymond Potts	Prepared By:	Sam Elliott
Fee Type:	**Fixed**	Date:	10/11/2024
Location:	MH 756012769 - Frye Rd & Arizona Ave.	Revision:	2
City Project Title:	**Sewer Rehab for Frye Road Bike Lanes**		

Description of Work to be Performed (supporting information attached)**:** Bench to Rim 13', 4' DIA brick manhole. No rehabilitation.

SECTION C: MATERIALS

Item	Unit	Quantity		Material Cost: Unit Price	Material Cost: Total
					$ -
			Subtotal Material Cost (C)		$ -

SECTION D: SUBS & CONSULTANTS

Company	Description of Work to be Performed (Supporting quote & information attached)	Total Cost
	Subtotal Subcontractors & Consultants (D)	$ -

SECTION E: RENTAL EQUIPMENT

Company	Description of Rental Equipment (Supporting quote & information attached)	Total Cost
	Subtotal Rental Equipment (E)	$ -

						Total	**$ -**

WW2501.401 Sewer Rehab for Frye Road Bike Lanes

INDEX

CONTRACTOR NAME: **Archer Western Construction**

Contract Type:	JOC	City Project No.:	WW2501.401
Job Order No.:	2415.401	Contractors Job No.:	224148
City Project Mgr.:	Raymond Potts	Prepared By:	Sam Elliott
Fee Type:	**Fixed**	Date:	10/11/2024
Location:	MH 756012767 - Frye Rd. & S. Washington St.	Revision:	2
City Project Title:	**Sewer Rehab for Frye Road Bike Lanes**		

Description of Work to be Performed (supporting information attached)**:** Bench to Rim 12'-6", 4' DIA brick manhole, abandoned. No rehabilitation.

SECTION C: MATERIALS

Item	Unit	Quantity		Material Cost: Unit Price	Material Cost: Total
					$ -
				Subtotal Material Cost (C)	$ -

SECTION D: SUBS & CONSULTANTS

Company	Description of Work to be Performed (Supporting quote & information attached)	Total Cost
		$ -
	Subtotal Subcontractors & Consultants (D)	$ -

SECTION E: RENTAL EQUIPMENT

Company	Description of Rental Equipment (Supporting quote & information attached)	Total Cost
	Subtotal Rental Equipment (E)	$ -

						Total	**$ -**

WW2501.401 Sewer Rehab for Frye Road Bike Lanes

INDEX

CONTRACTOR NAME: **Archer Western Construction**

Contract Type:	JOC	City Project No.:	WW2501.401
Job Order No.:	2415.401	Contractors Job No.:	224148
City Project Mgr.:	Raymond Potts	Prepared By:	Sam Elliott
Fee Type:	**Fixed**	Date:	10/11/2024
Location:	MH 756008863 - Frye Rd. & S. Ithica St.	Revision:	2
City Project Title:	**Sewer Rehab for Frye Road Bike Lanes**		

Description of Work to be Performed (supporting information attached)**:** Bench to Rim 14'-3", 4' DIA concrete manhole. No rehabilitation.

SECTION C: MATERIALS

Item	Unit	Quantity		Material Cost: Unit Price	Material Cost: Total
					$ -
				Subtotal Material Cost (C)	$ -

SECTION D: SUBS & CONSULTANTS

Company	Description of Work to be Performed (Supporting quote & information attached)	Total Cost
		$ -
	Subtotal Subcontractors & Consultants (D)	$ -

SECTION E: RENTAL EQUIPMENT

Company	Description of Rental Equipment (Supporting quote & information attached)	Total Cost
	Subtotal Rental Equipment (E)	$ -

						Total	**$ -**

WW2501.401 Sewer Rehab for Frye Road Bike Lanes

INDEX

CONTRACTOR NAME: **Archer Western Construction**

Contract Type:	JOC	City Project No.:	WW2501.401
Job Order No.:	2415.401	Contractors Job No.:	224148
City Project Mgr.:	Raymond Potts	Prepared By:	Sam Elliott
Fee Type:	**Fixed**	Date:	10/11/2024
Location:	MH 756003272 - Frye Rd. & S. Kingston St.	Revision:	2
City Project Title:	**Sewer Rehab for Frye Road Bike Lanes**		

Description of Work to be Performed (supporting information attached)**:** Bench to Rim 14'-0", 4 DIA concrete manhole. No rehabilitation.

SECTION C: MATERIALS

Item	Unit	Quantity		Material Cost: Unit Price	Material Cost: Total
					$ -
			Subtotal Material Cost (C)		$ -

SECTION D: SUBS & CONSULTANTS

Company	Description of Work to be Performed (Supporting quote & information attached)	Total Cost
		$ -
	Subtotal Subcontractors & Consultants (D)	$ -

SECTION E: RENTAL EQUIPMENT

Company	Description of Rental Equipment (Supporting quote & information attached)	Total Cost
	Subtotal Rental Equipment (E)	$ -

						Total	**$ -**

WW2501.401 Sewer Rehab for Frye Road Bike Lanes

INDEX

CONTRACTOR NAME: **Archer Western Construction**

Contract Type:	JOC	City Project No.:	WW2501.401
Job Order No.:	2415.401	Contractors Job No.:	224148
City Project Mgr.:	Raymond Potts	Prepared By:	Sam Elliott
Fee Type:	**Fixed**	Date:	10/11/2024
Location:	MH 756000812 - Frye Rd. & McQueen Rd.	Revision:	2
City Project Title:	**Sewer Rehab for Frye Road Bike Lanes**		

Description of Work to be Performed (supporting information attached)**:** 14'-0" Base to Rim, 4' DIA. Manhole. No rehabilitation.

SECTION C: MATERIALS

Item	Unit	Quantity		Material Cost: Unit Price	Material Cost: Total
				$ -	$ -
			Subtotal Material Cost (C)		$ -

SECTION D: SUBS & CONSULTANTS

Company	Description of Work to be Performed (Supporting quote & information attached)	Total Cost
	Subtotal Subcontractors & Consultants (D)	$ -

SECTION E: RENTAL EQUIPMENT

Company	Description of Rental Equipment (Supporting quote & information attached)	Total Cost
	Subtotal Rental Equipment (E)	$ -

						Total	**$ -**

WW2501.401 Sewer Rehab for Frye Road Bike Lanes

INDEX

CONTRACTOR NAME: **Archer Western Construction**

Contract Type:	JOC	City Project No.:	WW2501.401
Job Order No.:	2415.401	Contractors Job No.:	224148
City Project Mgr.:	Raymond Potts	Prepared By:	Sam Elliott
Fee Type:	**Fixed**	Date:	10/11/2024
Location:	MH 756014737 - Frye Rd. & McQueen Rd.	Revision:	2
City Project Title:	**Sewer Rehab for Frye Road Bike Lanes**		

Description of Work to be Performed (supporting information attached)**:** Bench to Rim 25'-0", manhole appears to have been rehabilitated with Polymer inserts. No Rehabilitation.

SECTION C: MATERIALS

Item	Unit	Quantity		Material Cost: Unit Price	Material Cost: Total
					$ -
			Subtotal Material Cost (C)		$ -

SECTION D: SUBS & CONSULTANTS

Company	Description of Work to be Performed (Supporting quote & information attached)	Total Cost
	Subtotal Subcontractors & Consultants (D)	$ -

SECTION E: RENTAL EQUIPMENT

Company	Description of Rental Equipment (Supporting quote & information attached)	Total Cost
	Subtotal Rental Equipment (E)	$ -

						Total	**$ -**

WW2501.401 Sewer Rehab for Frye Road Bike Lanes

INDEX

CONTRACTOR NAME: **Archer Western Construction**

Contract Type:	JOC	City Project No.:	WW2501.401
Job Order No.:	2415.401	Contractors Job No.:	224148
City Project Mgr.:	Raymond Potts	Prepared By:	Sam Elliott
Fee Type:	**Fixed**	Date:	10/11/2024
Location:	MH 756010724 - Frye Rd & S Lakeview Blvd.	Revision:	2
City Project Title:	**Sewer Rehab for Frye Road Bike Lanes**		

Description of Work to be Performed (supporting information attached)**:** Bench to Rim 12'-7", 4' DIA concrete manhole. No rehabilitation.

SECTION C: MATERIALS

Item	Unit	Quantity		Material Cost: Unit Price	Material Cost: Total
					$ -
			Subtotal Material Cost (C)		$ -

SECTION D: SUBS & CONSULTANTS

Company	Description of Work to be Performed (Supporting quote & information attached)	Total Cost
		$ -
	Subtotal Subcontractors & Consultants (D)	$ -

SECTION E: RENTAL EQUIPMENT

Company	Description of Rental Equipment (Supporting quote & information attached)	Total Cost
	Subtotal Rental Equipment (E)	$ -

						Total	**$ -**

WW2501.401 Sewer Rehab for Frye Road Bike Lanes

INDEX

CONTRACTOR NAME: **Archer Western Construction**

Contract Type:	JOC	City Project No.:	WW2501.401
Job Order No.:	2415.401	Contractors Job No.:	224148
City Project Mgr.:	Raymond Potts	Prepared By:	Sam Elliott
Fee Type:	**Fixed**	Date:	10/11/2024
Location:	MH 756019265 - Frye Rd. & Canal	Revision:	2
City Project Title:	**Sewer Rehab for Frye Road Bike Lanes**		

Description of Work to be Performed (supporting information attached)**:** Appears to have been recently rehabiliated, 5' DIA concrete manhole with 3' of grade rings. No Rehabilitation.

SECTION C: MATERIALS

Item	Unit	Quantity		Material Cost: Unit Price	Material Cost: Total
					$ -
			Subtotal Material Cost (C)		$ -

SECTION D: SUBS & CONSULTANTS

Company	Description of Work to be Performed (Supporting quote & information attached)	Total Cost
	Subtotal Subcontractors & Consultants (D)	$ -

SECTION E: RENTAL EQUIPMENT

Company	Description of Rental Equipment (Supporting quote & information attached)	Total Cost
	Subtotal Rental Equipment (E)	$ -

						Total	**$ -**

EXHIBIT C

PERFORMANCE BOND

ARIZONA STATUTORY PERFORMANCE BOND
PURSUANT TO TITLES 28, 34, AND 41, ARIZONA REVISED STATUTES
(Penalty of this bond must be 100% of the Agreement amount)

KNOW ALL MEN BY THESE PRESENTS THAT:_____

(hereinafter "Principal"), and _____ (hereinafter "Surety"), a corporation organized and existing under the laws of the State of _____ with its principal office in the City of _____, holding a certificate of authority to transact surety business in Arizona issued by the Director of Insurance pursuant to Title 20, Chapter 2, Article 1, as Surety, are held and firmly bound unto _____(hereinafter "Obligee") in the amount of _____ (Dollars) ($_____), for the payment whereof, Principal and Surety bind themselves, and their heirs, administrators, executors, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, the Principal has entered into a certain written Agreement with the Obligee, dated

the _____ day of _____, 20___ for construction of **Sewer Rehabilitation for Frye Road Bike Lanes**, **WW2501.402** which Agreement is hereby referred to and made a part hereof as fully and to the same extent as if copies at length herein.

NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION IS SUCH, that if the Principal faithfully performs and fulfills all the undertakings, covenants, terms, conditions and agreements of the Agreement during the original term of the Agreement and any extension of the Agreement, with or without notice of the Surety, and during the life of any guaranty required under the Agreement, and also performs and fulfills all the undertakings, covenants, terms, conditions, and agreements of all duly authorized modifications of the Agreement that may hereafter be made, notice of which modifications to the Surety being hereby waived, the above obligation is void. Otherwise it remains in full force and effect.

PROVIDED, HOWEVER that this bond is executed pursuant to the provisions of Title 34, Chapter 2, Article 2, Arizona Revised Statutes, and all liabilities on this bond will be determined in accordance with the provisions of Title 34, Chapter 2, Article 2, Arizona Revised Statutes, to the same extent as if it were copied at length in this Agreement.

The prevailing party in a suit on this bond may recover as part of the judgment reasonable attorney fees that may be fixed by a judge of the court.

Witness our hands this _____ day of _____, 20__.

_____
PRINCIPAL SEAL

_____
AGENT OF RECORD

By _____

_____
SURETY SEAL

EXHIBIT D

PAYMENT BOND

ARIZONA STATUTORY PAYMENT BOND
PURSUANT TO TITLES 28, 34, AND 41, OF THE ARIZONA REVISED STATUTES
(Penalty of this Bond must be 100% of the Agreement amount)

KNOW ALL MEN BY THESE PRESENTS THAT:_____

(hereinafter "Principal"), as Principal, and _____(hereinafter "Surety"), a corporation organized and existing under the laws of the State of _____ with its principal office in the City of _____, holding a certificate of authority to transact surety business in Arizona issued by the Director of the Department of Insurance pursuant to Title 20, Chapter 2, Article 1, as Surety, are held and firmly bound unto _____ (hereinafter "Obligee") in the amount of _____ (Dollars) ($_____), for the payment whereof, the Principal and Surety bind themselves, and their heirs, administrators, executors, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, the Principal has entered into a certain written Agreement with the Obligee, dated the _____ day of _____, 20___ for construction of **Sewer Rehabilitation for Frye Road Bike Lanes**, **WW2501.402** which Amendment is hereby referred to and made a part hereof as fully and to the same extent as if copied at length herein.

NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION IS SUCH, that if the Principal promptly pays all moneys due to all persons supplying labor or materials to the Principal or the Principal's subcontractors in the prosecution of the work provided for in said Agreement, this obligation is void. Otherwise it remains in full force and effect.

PROVIDED, HOWEVER that this bond is executed pursuant to the provisions of Title 34, Chapter 2, Article 2 Arizona Revised Statutes, and all liabilities on this bond will be determined in accordance with the provisions, conditions and limitations of Title 34, Chapter 2, Article 2, Arizona Revised Statutes, to the same extent as if it were copied at length in this Agreement.

The prevailing party in a suit on this bond may recover as part of the judgment reasonable attorney fees that may be fixed by a judge of the court.

Witness our hands this _____ day of _____, 20__.

_____
PRINCIPAL SEAL

_____
AGENT OF RECORD

By _____

_____
SURETY SEAL

_____
AGENT ADDRESS

EXHIBIT E

CONTRACTOR'S AFFIDAVIT REGARDING SETTLEMENT OF CLAIMS

_____, Arizona

Date _____

Project Name: **Sewer Rehabilitation for Frye Road Bike Lanes**
Project No.: **WW2501.402**

To the City of Chandler, Arizona

Gentlemen:

This is to certify that all lawful claims for materials, rental of equipment and labor used in connection with the construction of the above project, whether by subcontractor or claimant in person, have been duly discharged.

The undersigned, for the consideration of $_____, as set out in the final pay estimate, as full and complete payment under the terms of the Agreement, hereby waives and relinquishes any and all further claims or right of lien under, in connection with, or as a result of the above described project. The undersigned further agrees to indemnify and save harmless the City of Chandler against any and all liens, claims or liens, suits, actions, damages, charges and expenses whatsoever, which said City may suffer arising out of the failure of the undersigned to pay for all labor performances and materials furnished for the performance of said installation.

Signed and dated at _____, this _____ day of _____ 20_____.

_____
CONTRACTOR

By _____

STATE OF ARIZONA)
) SS
COUNTY OF MARICOPA)

The foregoing instrument was subscribed and sworn to before me this _____ day of _____ 20 _____.

_____
Notary Public

_____
My Commission Expires

EXHIBIT F

CERTIFICATE OF COMPLETION

Project: **Sewer Rehabilitation for Frye Road Bike Lanes**
Project No.: **WW2501.402**

(TO BE COMPLETED BY CONTRACTOR)

I HEREBY CERTIFY THAT ALL GOODS AND/OR SERVICES REQUIRED BY CITY OF CHANDLER PROJECT NO. **WW2501.402** HAVE BEEN DELIVERED IN ACCORDANCE WITH THE AGREEMENT DOCUMENTS AND BID SPECIFICATIONS AND ALL ACTIVITIES REQUIRED BY THE CONTRACTOR UNDER THE AGREEMENT HAVE BEEN COMPLETED AS OF _____.
(Date)

FIRM NAME: _____

PRINCIPAL: _____
(Name)

_____
(Signature)

_____ DATE: _____
(Title)

CERTIFIED BY ENGINEER/CONSULTANT (*IF APPLICABLE*):

_____ DATE: _____
(Signature)

_____
(Firm Name)

PROJECT ACCEPTED BY USER DEPARTMENT

_____ DATE: _____
(Signature)

_____
(Dept. /Div.)

_____ Date of Final Walk-Through

_____ Date As-Built Received

_____ City As-Built Number

EXHIBIT G

SUBCONTRACTOR DOCUMENTS WITH JOC CONTRACTOR

Any subcontractor assumptions, clarifications, exclusions, terms & conditions, signature blocks, etc. included are strictly between the JOC Contractor and their subcontractors, and do not apply to the Agreement between the JOC Contractor and the City.

Elliott, Sam

From: Don McDowell <dmcdowell@aimscompanies.com>
Sent: Tuesday, October 1, 2024 3:11 PM
To: Cook, Shane; Elkins, Mike
Subject: [EXTERNAL] RE: Chandler Manhole JOC

CAUTION: This email originated from outside the organization. Do not click links or open attachments unless you are expecting them and know the content is safe.

Shane and Mike, Daniel just forwarded this to me – sorry for the delay. Per your request for preliminary VF pricing see below – let me know if you require additional information.

Unlined* brick or precast walls, cone, and chimney 250mils DFT.
4' dia. = $745.00 - add Bench and flow management = $2490.00
5' dia. = $895.00 - add Bench and flow management = $3490.00
*If lined with existing epoxy add $150.00 per VF., $1000.00 4' bench and $1500.00 5' bench.

Manhole Bench Re-build and Epoxy pricing.

Best.

Don R. McDowell, AMPP
Vice President – Construction

SWE & TGRAY are divisions of the AIMS Companies
Office: (602) 331-0888
Cell: (602) 403-1423

From: Daniel Rivas <drivas@aimscompanies.com>
Sent: Tuesday, October 1, 2024 2:42 PM
To: Don McDowell <dmcdowell@aimscompanies.com>
Subject: Fwd: Chandler Manhole JOC

Begin forwarded message:

From: "Cook, Shane" <skcook@walshgroup.com>
Subject: Chandler Manhole JOC
Date: September 30, 2024 at 8:15:01 AM MST
To: Daniel Rivas <drivas708@gmail.com>
Cc: "Elkins, Mike" <melkins@walshgroup.com>

Good morning, Daniel

Proposal

Aguilar Traffic LLC.

Job Name:	Group 15	**Date:**	10/5/2024
Job Location:	S.Lakeview Blvd. & W.Frye Rd	**Phone:**	
Customer:	Archer Western	**Fax:**	
Contact:	Shane Cook	**Mobile:**	602-501-4113

Estimator:	Purchase Order #	FOB	Ship Via	Terms	Proposed Start Date
Ramon Lopez				Net 30	

Quantity	Description	Labor Price	Unit Price	Total
5 days	**Equipment for a Shift & Road Closure**		$ 134.00	$ 670.00
1	Delivery 2 Men 2 Trucks		$ 540.00	$ 540.00
1	Pick Up 2 Men 2 Trucks		$ 540.00	$ 540.00
2	TCP (ONE TIME CHARGE)		$ 65.00	$ 130.00
1	**Submitsl Fee**		$ 35.00	$ 35.00
1	Bags and Flags (ONE TIME CHARGE)		$ 1.20	$ 220.00
4	RESET & TAKE DOWN 2 MEN 2 TRUCKS		$ 735.00	$ 2,940.00
1	Delivery of Static Signs		$ 236.25	$ 236.25
1	2 Static Signs		$ 250.00	$ 500.00
			2 weeks -	$ 10,156.25
			Subtotal	$ 5,811.25
			9.2 TAX	$ 534.63
			Total	$ 6,345.88

Quotation is valid for 60 days.

Quotation Prepared By: Ramon Lopez

Scope of Work:Group 15 Shift on Frey Rd and Road Closed of Lake View Blvd .

3423 N 28th Ave ,Phoenix
Phone: 602.334.1490
Fax: 602.595.0335

Excluded (Price per day): Sales Tax, Permits, Bonds, & Engineering Fees.

If you have any other questions or comments please feel free to contact us. Thank you for the opportunity to serve all your traffic control needs.

To accept this proposal, please sign and fax back to 602.595.0335

Sign: _____ Date: _____

---Temporary Traffic Control---Traffic Control Plans---Road Plates---Asphalt/Concrete Cutting---
---Asphalt Milling---Asphalt Restoration---Concrete Restoration---

Proposal

Aguilar Traffic LLC.

Job Name:	Group 1	**Date:**	10/5/2024
Job Location:	W.Fairmont St. & W.Frye Rd	**Phone:**	
Customer:	Archer Western	**Fax:**	
Contact:	Shane Cook	**Mobile:**	602-501-4113

Estimator:	Purchase Order #	FOB	Ship Via	Terms	Proposed Start Date
Ramon Lopez				Net 30	

Quantity	Description	Labor Price	Unit Price	Total
5 days	**Equipment for a Football**		$ 120.00	$ 600.00
1	Delivery 1 Man 1 Truck		$ 270.00	$ 270.00
1	Pick Up 1 Man 1 Truck		$ 270.00	$ 270.00
1	TCP (ONE TIME CHARGE)		$ 65.00	$ 65.00
1	**Submitsl Fee**		$ 35.00	$ 35.00
1	Bags and Flags (ONE TIME CHARGE)		$ 1.20	$ 100.80
4	RESET & TAKE DOWN 1 MAN 1 TRUCK		$ 472.50	$ 1,890.00
			2 weeks -	$ 6,193.30
			Subtotal	$ 3,230.80
			9.2 TAX	$ 301.83
			Total	$ 3,532.63

Quotation is valid for 60 days.
Quotation Prepared By: Ramon Lopez

Scope of Work:Group 1 Football ,with EB LLC .

3423 N 28th Ave ,Phoenix
Phone: 602.334.1490
Fax: 602.595.0335

Excluded (Price per day): Sales Tax, Permits, Bonds, & Engineering Fees.

If you have any other questions or comments please feel free to contact us. Thank you for the opportunity to serve all your traffic control needs.

To accept this proposal, please sign and fax back to 602.595.0335

Sign: _____ Date: _____

---Temporary Traffic Control---Traffic Control Plans---Road Plates---Asphalt/Concrete Cutting---
---Asphalt Milling---Asphalt Restoration---Concrete Restoration---

Proposal

Aguilar Traffic LLC.

Job Name:	Group 2	**Date:**	10/5/2024
Job Location:	S. Nebraska St. & W.Frye Rd	**Phone:**	
Customer:	Archer Western	**Fax:**	
Contact:	Shane Cook	**Mobile:**	602-501-4113

Estimator:	Purchase Order #	FOB	Ship Via	Terms	Proposed Start Date
Ramon Lopez				Net 30	

Quantity	Description	Labor Price	Unit Price	Total
5 days	**Equipment for a Football**		$ 58.40	$ 292.00
1	Delivery 1 Man 1 Truck		$ 270.00	$ 270.00
1	Pick Up 1 Man 1 Truck		$ 270.00	$ 270.00
1	TCP (ONE TIME CHARGE)		$ 65.00	$ 65.00
1	**Submitsl Fee**		$ 35.00	$ 35.00
1	Bags and Flags (ONE TIME CHARGE)		$ 1.20	$ 100.80
4	RESET & TAKE DOWN 1 MAN 1 TRUCK		$ 472.50	$ 1,890.00
			2 weeks -	$ 5,577.30
			Subtotal	$ 2,922.80
			9.2 TAX	$ 268.89
			Total	$ 3,191.69

Quotation is valid for 60 days.
Quotation Prepared By: Ramon Lopez

Scope of Work:Group 1 Football ,with W14L traffic into the bike lanes.

3423 N 28th Ave ,Phoenix
Phone: 602.334.1490
Fax: 602.595.0335

Excluded (Price per day): Sales Tax, Permits, Bonds, & Engineering Fees.

If you have any other questions or comments please feel free to contact us. Thank you for the opportunity to serve all your traffic control needs.

To accept this proposal, please sign and fax back to 602.595.0335

Sign: _____ Date: _____

---Temporary Traffic Control---Traffic Control Plans---Road Plates---Asphalt/Concrete Cutting---
---Asphalt Milling---Asphalt Restoration---Concrete Restoration---

Proposal

Aguilar Traffic LLC.

Job Name:	Group 3	**Date:**	10/5/2024
Job Location:	S. Palm Ln & W.Frye Rd	**Phone:**	
Customer:	Archer Western	**Fax:**	
Contact:	Shane Cook	**Mobile:**	602-501-4113

Estimator:	Purchase Order #	FOB	Ship Via	Terms	Proposed Start Date
Ramon Lopez				Net 30	

Quantity	Description	Labor Price	Unit Price	Total
5 days	**Equipment for a Shift and Road Closed /Side walk**		$ 94.10	$ 470.05
1	Delivery 1 Man 1 Truck		$ 270.00	$ 270.00
1	Pick Up 1 Man 1 Truck		$ 270.00	$ 270.00
1	TCP (ONE TIME CHARGE)		$ 65.00	$ 65.00
1	**Submitsl Fee**		$ 35.00	$ 35.00
1	Bags and Flags (ONE TIME CHARGE)		$ 1.20	$ 100.80
4	RESET & TAKE DOWN 1 MAN 1 TRUCK		$ 472.50	$ 1,890.00
1	2 Static Signs		$ 250.00	$ 500.00
1	Delivery of Static Signs		$ 236.25	$ 236.25
			2 weeks -	$ 6,670.55
			Subtotal	$ 3,837.10
			9.2 TAX	$ 353.01
			Total	$ 4,190.11

Quotation is valid for 60 days.
Quotation Prepared By: Ramon Lopez

Scope of Work:Group Shift with W14L with Road Closure and side walk closure .

3423 N 28th Ave ,Phoenix
Phone: 602.334.1490
Fax: 602.595.0335

Excluded (Price per day): Sales Tax, Permits, Bonds, & Engineering Fees.

If you have any other questions or comments please feel free to contact us. Thank you for the opportunity to serve all your traffic control needs.

To accept this proposal, please sign and fax back to 602.595.0335

Sign: _____ Date: _____

---Temporary Traffic Control---Traffic Control Plans---Road Plates---Asphalt/Concrete Cutting---
---Asphalt Milling---Asphalt Restoration---Concrete Restoration---

Proposal

Aguilar Traffic LLC.

Job Name:	Group 4	**Date:**	10/5/2024
Job Location:	Dakota St. & W.Frye Rd	**Phone:**	
Customer:	Archer Western	**Fax:**	
Contact:	Shane Cook	**Mobile:**	602-501-4113

Estimator:	Purchase Order #	FOB	Ship Via	Terms	Proposed Start Date
Ramon Lopez				Net 30	

Quantity	Description	Labor Price	Unit Price	Total
5 days	**Equipment for a Football W14 traffic into bike lanes**		$ 65.00	$ 325.00
1	Delivery 1 Man 1 Truck		$ 270.00	$ 270.00
1	Pick Up 1 Man 1 Truck		$ 270.00	$ 270.00
1	TCP (ONE TIME CHARGE)		$ 65.00	$ 65.00
1	**Submitsl Fee**		$ 35.00	$ 35.00
1	Bags and Flags (ONE TIME CHARGE)		$ 1.20	$ 100.80
4	RESET & TAKE DOWN 1 MAN 1 TRUCK		$ 472.50	$ 1,890.00
			2 weeks -	$ 5,643.30
			Subtotal	$ 2,955.80
			9.2 TAX	$ 268.89
			Total	$ 3,224.69

Quotation is valid for 60 days.
Quotation Prepared By: Ramon Lopez

Scope of Work:Group 1 Football ,with W14L traffic into the bike lanes.

3423 N 28th Ave ,Phoenix
Phone: 602.334.1490
Fax: 602.595.0335

Excluded (Price per day): Sales Tax, Permits, Bonds, & Engineering Fees.

If you have any other questions or comments please feel free to contact us. Thank you for the opportunity to serve all your traffic control needs.

To accept this proposal, please sign and fax back to 602.595.0335

Sign: _____ Date: _____

---Temporary Traffic Control---Traffic Control Plans---Road Plates---Asphalt/Concrete Cutting---
---Asphalt Milling---Asphalt Restoration---Concrete Restoration---

Proposal

Aguilar Traffic LLC.

Job Name:	Group 5	**Date:**	10/5/2024
Job Location:	S.Oregan St. & W.Frye Rd	**Phone:**	
Customer:	Archer Western	**Fax:**	
Contact:	Shane Cook	**Mobile:**	602-501-4113

Estimator:	Purchase Order #	FOB	Ship Via	Terms	Proposed Start Date
Ramon Lopez				Net 30	

Quantity	Description	Labor Price	Unit Price	Total
5 days	**Equipment for a Shift and Road Closed**		$ 120.00	$ 600.00
1	Delivery 1 Man 1 Truck		$ 540.00	$ 540.00
1	Pick Up 1 Man 1 Truck		$ 540.00	$ 540.00
1	TCP (ONE TIME CHARGE)		$ 65.00	$ 65.00
1	**Submitsl Fee**		$ 35.00	$ 35.00
1	Bags and Flags (ONE TIME CHARGE)		$ 1.20	$ 180.00
4	RESET & TAKE DOWN 1 MAN 1 TRUCK		$ 735.00	$ 2,940.00
1	4 Static Signs (ONE TIME CHARGE)		$ 250.00	$ 1,000.00
1	Delivery of Statick Signs		$ 270.00	$ 270.00
			2 weeks -	$ 10,445
			Subtotal	$ 6,170.00
			9.2 TAX	$ 567.64
			Total	$ 6,737.64

Quotation is valid for 60 days.
Quotation Prepared By: Ramon Lopez

Scope of Work:Group Shift with W14L with 2 Road Closure.

3423 N 28th Ave ,Phoenix
Phone: 602.334.1490
Fax: 602.595.0335

Excluded (Price per day): Sales Tax, Permits, Bonds, & Engineering Fees.

If you have any other questions or comments please feel free to contact us. Thank you for the opportunity to serve all your traffic control needs.

To accept this proposal, please sign and fax back to 602.595.0335

Sign: _____ Date: _____

---Temporary Traffic Control---Traffic Control Plans---Road Plates---Asphalt/Concrete Cutting---
---Asphalt Milling---Asphalt Restoration---Concrete Restoration---

Proposal

Aguilar Traffic LLC.

Job Name:	Group 6	**Date:**	10/5/2024
Job Location:	S. Arizona Ave & W.Frye Rd	**Phone:**	
Customer:	Archer Western	**Fax:**	
Contact:	Shane Cook	**Mobile:**	602-501-4113

Estimator:	Purchase Order #	FOB	Ship Via	Terms	Proposed Start Date
Ramon Lopez				Net 30	

Quantity	Description	Labor Price	Unit Price	Total
5 days	**Equipment for a Shift o AZ ave and Road Closed**		$ 182.80	$ 914.00
1	Delivery 3 Men 3 Trucks		$ 810.00	$ 810.00
1	Pick Up 3 Men 3 Trucks		$ 810.00	$ 810.00
4	TCP (ONE TIME CHARGE)		$ 65.00	$ 260.00
1	**Submitsl Fee**		$ 35.00	$ 35.00
1	Bags and Flags (ONE TIME CHARGE)		$ 1.20	$ 220.00
4	RESET & TAKE DOWN 2 MEN 2 TRUCKS		$ 1,080.00	$ 4,320.00
10 DAYS	4 VMB 10 DAYS		$ 340.00	$ 3,400.00
1	Delivery and Pick up of VMB		$ 1,080.00	$ 2,160.00
1	2 Static Signs		$ 250.00	$ 500.00
			2 weeks -	$ 21,260.20
			Subtotal	$ 13,429.00
			9.2 TAX	$ 1,235.46
			Total	$ 14,664.46

Quotation is valid for 60 days.
Quotation Prepared By: Ramon Lopez

Scope of Work:Group Shift with W14L with 2 Road Closures.

3423 N 28th Ave ,Phoenix
Phone: 602.334.1490
Fax: 602.595.0335

Excluded (Price per day): Sales Tax, Permits, Bonds, & Engineering Fees.

If you have any other questions or comments please feel free to contact us. Thank you for the opportunity to serve all your traffic control needs.

To accept this proposal, please sign and fax back to 602.595.0335

Sign: _____ Date: _____

---Temporary Traffic Control---Traffic Control Plans---Road Plates---Asphalt/Concrete Cutting---
---Asphalt Milling---Asphalt Restoration---Concrete Restoration---

Proposal

Aguilar Traffic LLC.

Job Name:	Group 7	**Date:**	10/5/2024
Job Location:	S. Delaware St & W.Frye Rd	**Phone:**	
Customer:	Archer Western	**Fax:**	
Contact:	Shane Cook	**Mobile:**	602-501-4113

Estimator:	Purchase Order #	FOB	Ship Via	Terms	Proposed Start Date
Ramon Lopez				Net 30	

Quantity	Description	Labor Price	Unit Price	Total
5 days	**Equipment for a road closure Of Frye Rd**		$ 134.00	$ 670.00
1	Delivery 3 Men 3 Trucks		$ 810.00	$ 810.00
1	Pick Up 3 Men 3 Trucks		$ 810.00	$ 810.00
4	TCP (ONE TIME CHARGE)		$ 65.00	$ 260.00
1	**Submitsl Fee**		$ 35.00	$ 35.00
1	Bags and Flags (ONE TIME CHARGE)		$ 1.20	$ 220.00
4	RESET & TAKE DOWN 2 MEN 2 TRUCKS		$ 1,080.00	$ 4,320.00
10 DAYS	4 VMB 10 DAYS		$ 340.00	$ 3,400.00
1	Delivery and Pick up of VMB		$ 1,080.00	$ 2,160.00
1	2 Static Signs		$ 250.00	$ 500.00
			2 weeks -	$ 20,955.00
			Subtotal	$ 13,185.00
			9.2 TAX	$ 1,213.02
			Total	$ 14,398.02

Quotation is valid for 60 days.
Quotation Prepared By: Ramon Lopez

Scope of Work:Group 7 Frye Rd Road ClosuresDelaware to Nevada

3423 N 28th Ave ,Phoenix
Phone: 602.334.1490
Fax: 602.595.0335

Excluded (Price per day): Sales Tax, Permits, Bonds, & Engineering Fees.

If you have any other questions or comments please feel free to contact us. Thank you for the opportunity to serve all your traffic control needs.

To accept this proposal, please sign and fax back to 602.595.0335

Sign: _____ Date: _____

---Temporary Traffic Control---Traffic Control Plans---Road Plates---Asphalt/Concrete Cutting---
---Asphalt Milling---Asphalt Restoration---Concrete Restoration---

Proposal

Aguilar Traffic LLC.

Job Name:	Group 8	**Date:**	10/5/2024
Job Location:	S. Hidalgo Rd & W.Frye Rd	**Phone:**	
Customer:	Archer Western	**Fax:**	
Contact:	Shane Cook	**Mobile:**	602-501-4113

Estimator:	Purchase Order #	FOB	Ship Via	Terms	Proposed Start Date
Ramon Lopez				Net 30	

Quantity	Description	Labor Price	Unit Price	Total
5 days	**Equipment for a Football W14 traffic into bike lanes**		$ 65.00	$ 325.00
1	Delivery 1 Man 1 Truck		$ 270.00	$ 270.00
1	Pick Up 1 Man 1 Truck		$ 270.00	$ 270.00
1	TCP (ONE TIME CHARGE)		$ 65.00	$ 65.00
1	**Submitsl Fee**		$ 35.00	$ 35.00
1	Bags and Flags (ONE TIME CHARGE)		$ 1.20	$ 100.80
4	RESET & TAKE DOWN 1 MAN 1 TRUCK		$ 472.50	$ 1,890.00
			2 weeks -	$ 5,643.30
			Subtotal	$ 2,955.80
			9.2 TAX	$ 268.89
			Total	$ 3,224.69

Quotation is valid for 60 days.
Quotation Prepared By: Ramon Lopez

Scope of Work:Group 8 Football ,with W14L traffic into the bike lanes.

3423 N 28th Ave ,Phoenix
Phone: 602.334.1490
Fax: 602.595.0335

Excluded (Price per day): Sales Tax, Permits, Bonds, & Engineering Fees.

If you have any other questions or comments please feel free to contact us. Thank you for the opportunity to serve all your traffic control needs.

To accept this proposal, please sign and fax back to 602.595.0335

Sign: _____ Date: _____

---Temporary Traffic Control---Traffic Control Plans---Road Plates---Asphalt/Concrete Cutting---
---Asphalt Milling---Asphalt Restoration---Concrete Restoration---

Proposal

Aguilar Traffic LLC.

Job Name:	Group 9	**Date:**	10/5/2024
Job Location:	S. Hidalgo Rd & W.Frye Rd	**Phone:**	
Customer:	Archer Western	**Fax:**	
Contact:	Shane Cook	**Mobile:**	602-501-4113

Estimator:	Purchase Order #	FOB	Ship Via	Terms	Proposed Start Date
Ramon Lopez				Net 30	

Quantity	Description	Labor Price	Unit Price	Total
5 days	**Equipment for a Shift W14 South / RTO on Hamilton St**		$ 65.00	$ 325.00
1	Delivery 1 Man 1 Truck		$ 270.00	$ 270.00
1	Pick Up 1 Man 1 Truck		$ 270.00	$ 270.00
1	TCP (ONE TIME CHARGE)		$ 65.00	$ 65.00
1	**Submitsl Fee**		$ 35.00	$ 35.00
1	Bags and Flags (ONE TIME CHARGE)		$ 1.20	$ 100.80
4	RESET & TAKE DOWN 1 MAN 1 TRUCK		$ 472.50	$ 1,890.00
			Subtotal	$ 2,955.80
			9.2 TAX	$ 271.93
			Total	$ 3,227.73

Quotation is valid for 60 days.
Quotation Prepared By: Ramon Lopez

Scope of Work:Group 9 W14L traffic into the bike lanes.

3423 N 28th Ave ,Phoenix
Phone: 602.334.1490
Fax: 602.595.0335

Excluded (Price per day): Sales Tax, Permits, Bonds, & Engineering Fees.

If you have any other questions or comments please feel free to contact us. Thank you for the opportunity to serve all your traffic control needs.

To accept this proposal, please sign and fax back to 602.595.0335

Sign: _____ Date: _____

---Temporary Traffic Control---Traffic Control Plans---Road Plates---Asphalt/Concrete Cutting---
---Asphalt Milling---Asphalt Restoration---Concrete Restoration---

Proposal

Aguilar Traffic LLC.

Job Name:	Group 10	**Date:**	10/5/2024
Job Location:	Hamilton St. & W.Frye Rd	**Phone:**	
Customer:	Archer Western	**Fax:**	
Contact:	Shane Cook	**Mobile:**	602-501-4113

Estimator:	Purchase Order #	FOB	Ship Via	Terms	Proposed Start Date
Ramon Lopez				Net 30	

Quantity	Description	Labor Price	Unit Price	Total
5 days	**Equipment for a Football W14 traffic into bike lanes**		$ 65.00	$ 325.00
1	Delivery 1 Man 1 Truck		$ 270.00	$ 270.00
1	Pick Up 1 Man 1 Truck		$ 270.00	$ 270.00
1	TCP (ONE TIME CHARGE)		$ 65.00	$ 65.00
1	**Submitsl Fee**		$ 35.00	$ 35.00
1	Bags and Flags (ONE TIME CHARGE)		$ 1.20	$ 100.80
4	RESET & TAKE DOWN 1 MAN 1 TRUCK		$ 472.50	$ 1,890.00
			2 weeks -	$ 5,643.30
			Subtotal	$ 2,955.80
			9.2 TAX	$ 268.89
			Total	$ 3,224.69

Quotation is valid for 60 days.
Quotation Prepared By: Ramon Lopez

Scope of Work:Group 10 Football ,with W14L traffic into the bike lanes.

3423 N 28th Ave ,Phoenix
Phone: 602.334.1490
Fax: 602.595.0335

Excluded (Price per day): Sales Tax, Permits, Bonds, & Engineering Fees.

If you have any other questions or comments please feel free to contact us. Thank you for the opportunity to serve all your traffic control needs.

To accept this proposal, please sign and fax back to 602.595.0335

Sign: _____ Date: _____

---Temporary Traffic Control---Traffic Control Plans---Road Plates---Asphalt/Concrete Cutting---
---Asphalt Milling---Asphalt Restoration---Concrete Restoration---

Proposal

Aguilar Traffic LLC.

Job Name:	Group 11	**Date:**	10/5/2024
Job Location:	S.Jackson St. & W.Frye Rd	**Phone:**	
Customer:	Archer Western	**Fax:**	
Contact:	Shane Cook	**Mobile:**	602-501-4113

Estimator:	Purchase Order #	FOB	Ship Via	Terms	Proposed Start Date
Ramon Lopez				Net 30	

Quantity	Description	Labor Price	Unit Price	Total
5 days	**Equipment for a Football W14 traffic into bike lanes**		$ 120.00 ~~58.40~~	$ 292.00
1	Delivery 1 Man 1 Truck		$ 270.00	$ 270.00
1	Pick Up 1 Man 1 Truck		$ 270.00	$ 270.00
1	TCP (ONE TIME CHARGE)		$ 65.00	$ 65.00
1	**Submitsl Fee**		$ 35.00	$ 35.00
1	Bags and Flags (ONE TIME CHARGE)		$ 1.20	$ 100.80
4	RESET & TAKE DOWN 1 MAN 1 TRUCK		$ 472.50	$ 1,890.00
	Same equipment as			
	Group 1 to include		2 weeks -	$ 6,193.30
	MH 756003275 per			
	Shane Cook			
			Subtotal	$ 2,922.80
			9.2 TAX	$ 268.89
			Total	$ 3,191.69

Quotation is valid for 60 days.
Quotation Prepared By: Ramon Lopez

Scope of Work:Group 11 Football ,with W14L traffic into the bike lanes.

3423 N 28th Ave ,Phoenix
Phone: 602.334.1490
Fax: 602.595.0335

Excluded (Price per day): Sales Tax, Permits, Bonds, & Engineering Fees.

If you have any other questions or comments please feel free to contact us. Thank you for the opportunity to serve all your traffic control needs.

To accept this proposal, please sign and fax back to 602.595.0335

Sign: _____ Date: _____

---Temporary Traffic Control---Traffic Control Plans---Road Plates---Asphalt/Concrete Cutting---
---Asphalt Milling---Asphalt Restoration---Concrete Restoration---

Proposal

Aguilar Traffic LLC.

Job Name:	Group 12	**Date:**	10/5/2024
Job Location:	S. McQueen Rd & W.Frye Rd	**Phone:**	
Customer:	Archer Western	**Fax:**	
Contact:	Shane Cook	**Mobile:**	602-501-4113

Estimator:	Purchase Order #	FOB	Ship Via	Terms	Proposed Start Date
Ramon Lopez				Net 30	

Quantity	Description	Labor Price	Unit Price	Total
5 days	**Equipment for a Shift on Mc Queen**		$ 145.00	$ 725.00
1	Delivery 2 Men 2 Trucks		$ 540.00	$ 540.00
1	Pick Up 2 Men 2 Trucks		$ 540.00	$ 540.00
4	TCP (ONE TIME CHARGE)		$ 65.00	$ 260.00
1	**Submitsl Fee**		$ 35.00	$ 35.00
1	Bags and Flags (ONE TIME CHARGE)		$ 1.20	$ 220.00
4	RESET & TAKE DOWN 2 MEN 2 TRUCKS		$ 810.00	$ 4,320.00
10 DAYS	2 VMB 10 DAYS		$ 170.00	$ 1,700.00
2	Delivery and Pick up of VMB		$ 540.00	$ 1,080.00
			Subtotal	$ 9,420.00
			9.2 TAX	$ 866.64
			Total	$ 10,286.64

Quotation is valid for 60 days.
Quotation Prepared By: Ramon Lopez

Scope of Work:Group 12 Shift on MC Queen Rd and Crosswalk Closed.

3423 N 28th Ave ,Phoenix
Phone: 602.334.1490
Fax: 602.595.0335

Excluded (Price per day): Sales Tax, Permits, Bonds, & Engineering Fees.

If you have any other questions or comments please feel free to contact us. Thank you for the opportunity to serve all your traffic control needs.

To accept this proposal, please sign and fax back to 602.595.0335

Sign: _____ Date: _____

---Temporary Traffic Control---Traffic Control Plans---Road Plates---Asphalt/Concrete Cutting---
---Asphalt Milling---Asphalt Restoration---Concrete Restoration---

Proposal

Aguilar Traffic LLC.

Job Name:	Group 13	**Date:**	10/5/2024
Job Location:	S.McQueen Rd & W.Frye Rd	**Phone:**	
Customer:	Archer Western	**Fax:**	
Contact:	Shane Cook	**Mobile:**	602-501-4113

Estimator:	Purchase Order #	FOB	Ship Via	Terms	Proposed Start Date
Ramon Lopez				Net 30	

Quantity	Description	Labor Price	Unit Price	Total
5 days	**Equipment for a Football W14 traffic into bike lanes**		$ 58.40	$ 292.00
1	Delivery 1 Man 1 Truck		$ 270.00	$ 270.00
1	Pick Up 1 Man 1 Truck		$ 270.00	$ 270.00
1	TCP (ONE TIME CHARGE)		$ 65.00	$ 65.00
1	**Submitsl Fee**		$ 35.00	$ 35.00
1	Bags and Flags (ONE TIME CHARGE)		$ 1.20	$ 100.80
4	RESET & TAKE DOWN 1 MAN 1 TRUCK		$ 472.50	$ 1,890.00
			2 weeks -	$ 5,577.30
			Subtotal	$ 2,922.80
			9.2 TAX	$ 268.89
			Total	$ 3,191.69

Quotation is valid for 60 days.
Quotation Prepared By: Ramon Lopez

Scope of Work:Group 13 Football ,with W14L traffic into the bike lanes.

3423 N 28th Ave ,Phoenix
Phone: 602.334.1490
Fax: 602.595.0335

Excluded (Price per day): Sales Tax, Permits, Bonds, & Engineering Fees.

If you have any other questions or comments please feel free to contact us. Thank you for the opportunity to serve all your traffic control needs.

To accept this proposal, please sign and fax back to 602.595.0335

Sign: _____ Date: _____

---Temporary Traffic Control---Traffic Control Plans---Road Plates---Asphalt/Concrete Cutting---
---Asphalt Milling---Asphalt Restoration---Concrete Restoration---

Proposal

Aguilar Traffic LLC.

Job Name:	Group 14	**Date:**	10/5/2024
Job Location:	Senate St. & W.Frye Rd	**Phone:**	
Customer:	Archer Western	**Fax:**	
Contact:	Shane Cook	**Mobile:**	602-501-4113

Estimator:	Purchase Order #	FOB	Ship Via	Terms	Proposed Start Date
Ramon Lopez				Net 30	

Quantity	Description	Labor Price	Unit Price	Total
5 days	**Equipment for a Football W14 traffic into bike lanes**		$ 65.00	$ 325.00
1	Delivery 1 Man 1 Truck		$ 270.00	$ 270.00
1	Pick Up 1 Man 1 Truck		$ 270.00	$ 270.00
1	TCP (ONE TIME CHARGE)		$ 65.00	$ 65.00
1	**Submitsl Fee**		$ 35.00	$ 35.00
1	Bags and Flags (ONE TIME CHARGE)		$ 1.20	$ 100.80
4	RESET & TAKE DOWN 1 MAN 1 TRUCK		$ 472.50	$ 1,890.00
			2 weeks -	$ 5,643.3
			Subtotal	$ 2,955.80
			9.2 TAX	$ 268.89
			Total	$ 3,224.69

Quotation is valid for 60 days.
Quotation Prepared By: Ramon Lopez

Scope of Work:Group 14 Football ,with W14L traffic into the bike lanes.

3423 N 28th Ave ,Phoenix
Phone: 602.334.1490
Fax: 602.595.0335

Excluded (Price per day): Sales Tax, Permits, Bonds, & Engineering Fees.

If you have any other questions or comments please feel free to contact us. Thank you for the opportunity to serve all your traffic control needs.

To accept this proposal, please sign and fax back to 602.595.0335

Sign: _____ Date: _____

---Temporary Traffic Control---Traffic Control Plans---Road Plates---Asphalt/Concrete Cutting---
---Asphalt Milling---Asphalt Restoration---Concrete Restoration---

Proposal

Aguilar Traffic LLC.

Job Name:	Group 16	**Date:**	10/5/2024
Job Location:	S. Canal Dr. & W.Frye Rd	**Phone:**	
Customer:	Archer Western	**Fax:**	
Contact:	Shane Cook	**Mobile:**	602-501-4113

Estimator:	Purchase Order #	FOB	Ship Via	Terms	Proposed Start Date
Ramon Lopez				Net 30	

Quantity	Description	Labor Price	Unit Price	Total
5 days	**Equipment for a Football W14 traffic into bike lanes**		$ 65.00	$ 325.00
1	Delivery 1 Man 1 Truck		$ 270.00	$ 270.00
1	Pick Up 1 Man 1 Truck		$ 270.00	$ 270.00
1	TCP (ONE TIME CHARGE)		$ 65.00	$ 65.00
1	**Submitsl Fee**		$ 35.00	$ 35.00
1	Bags and Flags (ONE TIME CHARGE)		$ 1.20	$ 100.80
4	RESET & TAKE DOWN 1 MAN 1 TRUCK		$ 472.50	$ 1,890.00
			Subtotal	$ 2,955.80
			9.2 TAX	$ 268.89
			Total	$ 3,224.69

Quotation is valid for 60 days.
Quotation Prepared By: Ramon Lopez

Scope of Work:Group 16 W14Shift to the South

3423 N 28th Ave ,Phoenix
Phone: 602.334.1490
Fax: 602.595.0335

Excluded (Price per day): Sales Tax, Permits, Bonds, & Engineering Fees.

If you have any other questions or comments please feel free to contact us. Thank you for the opportunity to serve all your traffic control needs.

To accept this proposal, please sign and fax back to 602.595.0335

Sign: _____ Date: _____

---Temporary Traffic Control---Traffic Control Plans---Road Plates---Asphalt/Concrete Cutting---
---Asphalt Milling---Asphalt Restoration---Concrete Restoration---

PROJECT QUOTE

Quote Nbr.	**PQ002545**
Order Date	**10/3/2024**
Valid Until	
Contact Name	**Ryan Robinson**
Contact Email	**Ryan.Robinson@pro-pipe.com**
Contact Phone	**+1 (602) 872-6708 Ext:**
Customer ID	**Archer Western**
Currency	**USD**
Customer Ref	
Payment Terms	**Net 30 Days**

ISSUED TO

Archer Western
Shane Cook
United States of America

Project **Chandler Sewer JOC -001**

NO.	ITEM	QTY.	UOM	PRICE	AMOUNT
1	MHL2: Pano Manhole Level 2 Inspection (MACP)	37.00	EA	130.00	4,810.00

NOTES: Manhole Coding done by Pro-Pipe

EXCLUSIONS (Any qualifications to exclusions are in parenthesis)

1. Flow diversion, Bypass Pumping and Operating Pump Stations
2. Excavation of any kind
3. Permits, Licenses and Performance Bonds
4. Access (Owner shall provide adequate access)
5. Major Traffic Control
6. disposal (Owner shall provide local disposal site and cover associated fees)
7. Water (Owner shall provide mobile means of providing water, such as mobile meter or fire hydrant hookup)
8. Pipeline Cleaning
9. Pro-Pipe is not responsible for any Liquidated/Consequential Damages

Customer Signature:

Quote Total (USD)	4,810.00
Tax Total (USD)	0.00
Total (USD)	4,810.00

All material is guaranteed to be as specified. All work to be completed in a workmanlike manner according to standard practices. Any alteration or deviation from above specifications involving extra costs will be executed only upon written orders, and will become an extra charge over and above the estimate. All agreements are contingent upon strikes, accidents, or delays beyond our control. Maximum allowable interest charge on overdue invoices. Professional Pipe Services will provide certificate

Authorized Signature:

This proposal may be withdrawn by us if not accepted within 30 days.

Quote: 25209

Date: 11 Oct 2024
Expires: 10 Nov 2024
Quoted By: Jeff Frehner
(480) -
jeff.frehner@a-core.com

A-Core Concrete Cutting, Inc. | 605 Drew St Mesa AZ 85210
Phone# (480) 964-8662 | Fax # | License# 196637 CR-5

Customer	Contact	Job Information
ARCHER WESTERN CONTRACTORS	Shane Cook	JOC
4710 E. Elwood St.	(602) 501-4113	
PHOENIX, AZ 85040	skcook@walshgroup.com	Chandler, AZ
(602) 246-1485		

Qty	Description			Price	Adj	Total
4	Flat Saw	Linear Feet: Depth: Material:	12' x 12' street openings 4"-6" Asphalt	450.00	Each	1,800.00
	Street openings cut around manholes for manhole rehab Price includes mobilization to site					

Total 1,800.00

General Terms & Conditions

This document is to be accepted before the expiration date listed above; otherwise, price is subject to change.

- Protection of existing conditions by others
- If we hit extra heavy amounts of rebar/steel or anything else unforeseen buried in the concrete that would cause excessive wear or damage to our diamond bits, blades or equipment, we will charge you accordingly for this.
- A-Core Inc. will not be responsible for repairs from cutting buried utilities or structures.
- Contractor is responsible for all layout of cut lines & holes.
- A-Core Payments terms are Net 30 with 0% retention, for current account holders.
- Price subject to change if conditions and scope on job vary from this quotation.
- If a bond is required there will be a 3% charge of the bond amount.
- A-Core reserves the right to have an escalation clause as part of this estimate.
- THIS SUBCONTRACT IS CONTINGENT ON A LACK OF IMPACT BY THE CORONAVIRUS NATIONAL EMERGENCY. Given the existence of the coronavirus pandemic, A-Core will use its best efforts to staff and supply this project to meet the scheduled completion date. However, A-Core reserves its right to seek an excusable extension of time if A-Core or its subcontractors and suppliers are unable to maintain planned crew sizes due to the illness, supply shortages or governmental restraints on business, travel and/or assembly. To the extent that the project is suspended pursuant to the terms of the purchase order/subcontract, A-Core intends to seek additional costs associated with the suspension.

Job Exclusions

- All layout to be completed by contractor
- All shoring to be installed and provided by contractor (when applicable)
- X-Raying or scanning by contractor or can be provided by A-Core at an additional charge
- All traffic control, barricades, message boards etc. is to be provided by Contractor
- Contractor to provide all Blue staking & add A-Core Inc. as a duplicate permit holder/rental agreement
- Contractor to provide all access via scaffold,lifts, hoists, etc. to work areas when applicable

Special Instructions

Clarifications:

Minimum trip to project for one truck is $250.00 plus mobilization or lineal ft/mob charge, whichever is more
Stand-by for layout, traffic control, etc. billed at $175.00 per hour

Excludes:
- Layout with string line by others prior to our arrival
- Additional depth at additional cost
- Water Control
- Traffic Control
- Load/unload saw for multiple locations at additional cost

Exclusions
-All Layout is to be completed by Contractor
-All access to work areas via. ladders, lifts, cranes, shoring etc.to be provided by Contractor when applicable
-All shoring to be provided by and installed by Contractor (when applicable)
-All Traffic control, barricades, flaggers, message boards, Highway Patrol etc. is to be provided by Contractor
-Any Slurry / water control is to be provided by and disposed of by Contractor
-Double time will apply for work on Sundays and holidays
-A-Core can provide slurry / water control at an additional charge
-Contractor to provide Eco-Pans and dispose of the slurry / water
-Any X-Raying / GPR / Scanning to be provided by Contractor or A-Core can provide for an additional charge
-Any standby time waiting for access, layout, traffic control, engineer's decision, public,
-Transportation operations etc. will be charged the same hourly / unit rate of that task
-Contractor to provide all Blue Staking & add A-Core Inc. as a duplicate permit holder & on a rental agreement that covers it.
-Price is subject to change due to inclement weather.

Accepted By: _____

Bryco Asphalt Milling, Inc

1959 S. Power Rd.
Suite 103-375
Mesa, AZ 85206

Invoice

Date	Invoice #
10/6/2024	16413

Bill To
Archer Western 1830 N. 95th Ave Suite 114 Phoenix, AZ 85037

P.O. No.	Terms	Project

Quantity	Description	Rate	Amount
	Milling service	850.00	850.00

Total $850.00

Phone #	Fax #	E-mail
480-987-9133	480-223-6411	Info@brycomilling.com

Professional Police Services, Inc.

10/11/2024

Attention:	Shane Cook – Archer Western RE: City of Chandler Bid Item: Off-Duty Law Enforcement Officers

From:	Ryan Leyba Professional Police Services, Inc.
Phone:	602/692-9015
Fax:	602/926-0325

Professional Police Services would like to be considered for the scheduling of off-duty officers on the above project if needed.

Item No: Off-Duty Law Enforcement Officers

Chandler Police Department (Marked Vehicle)
Hourly Cost: $112/hour
*Cancellations less than25-hours in advance will be charged a 4-hour minimum
*Supervisors are needed if 4+ Officers are required for work. (Supervisors are $138/hour)

Individual POST Certified Police Officers [Unmarked Personal Vehicle – Red/Blue Lights}
Hourly Cost: $90/hour
*Price increases to $100/hour if requested less than 48 hours in advance or if manual traffic control in an intersection is required of the officer(s) / Cancellations less than 24-hours in advance will be charged a 4-hour minimum

**All rates above are subject to change based on individual law enforcement departments' reviews of pricing.

- ✓ We cover workers comp & liability insurance for armed officers and their patrol cars
- ✓ You receive one simplified billing – we pay the officers directly. Most law enforcement agencies require individual checks to their officers within 2 weeks of working.

Thank you for your consideration! **All addenda reviewed

ryan@professionalpoliceservices.com / WWW.PROFESSIONALPOLICERSERVICES.COM

1009 E. Carlise Road, Phoenix, AZ 85086 ***** EIN 26-060-3357

☐ Urgent ☒ For Review ☐ Please Comment ☐ Please Reply ☐ Please Recycle

ARMOROCK™

1575 W Horizon Ridge Parkway
#530427
Henderson, NV 89012

207 Heritage Court
Sulphur Springs, TX 75482

1708 Turkey Creek Road
Plant City, FL 33566

702-824-9702
www.armorock.com

For:

Ref:

Quote Date:

Structure		Description			Height	Weight	Price
PP06		**60" Polymer Rehab**			**22.60'**	**7,828**	**$15,821**
1		A-1700 30"GILBERT FRAME AND COVER	1	PR30X1FL	30 IN X 1 IN FLAT PRO-RING		
1	PR30X4FL	30 IN X 4 IN FLAT PRO-RING	1	RMHC6036	60 IN X 3 FT ECC POLYMER CONE W/ 36" ACCESS REHAB		
1	SPECIAL	53"X2"W X 3 FT POLYMER MH SECTION	1	SPECIAL	53"X2"W X 4 FT POLYMER MH SECTION		
1	SPECIAL	53"X2"W X 4 FT POLYMER MH SECTION	1	SPECIAL	53"X2"W X 4 FT POLYMER MH SECTION		
6	MASJ	14' X 1 1/8" JOINT MASTIC	1	PEPOXY	EPOXY KIT FOR CIP BASE		
PP07		**60" Polymer Rehab**			**16.72'**	**5,117**	**$12,541**
1		A-1700 30"GILBERT FRAME AND COVER	1	PR30X1FL	30 IN X 1 IN FLAT PRO-RING		
2	PR30X6FL	30 IN X 6 IN FLAT PRO-RING	1	50536-RC	53 IN X 3 FT ECC POLYMER CONE 36 IN		
1	SPECIAL	53"X2"W X 1 FT POLYMER MH SECTION	1	SPECIAL	53"X2"W X 4 FT POLYMER MH SECTION		
1	SPECIAL	53"X2"W X 4 FT POLYMER MH SECTION	6	MASJ	14' X 1 1/8" JOINT MASTIC		
1	PEPOXY	EPOXY KIT FOR CIP BASE					
PP08		**60" Polymer Rehab**			**16.90'**	**5,117**	**$12,541**
1		A-1700 30"GILBERT FRAME AND COVER	1	PR30X1FL	30 IN X 1 IN FLAT PRO-RING		
2	PR30X6FL	30 IN X 6 IN FLAT PRO-RING	1	50536-RC	53 IN X 3 FT ECC POLYMER CONE 36 IN		
1	SPECIAL	53"X2"W X 1 FT POLYMER MH SECTION	1	SPECIAL	53"X2"W X 4 FT POLYMER MH SECTION		
1	SPECIAL	53"X2"W X 4 FT POLYMER MH SECTION	6	MASJ	14' X 1 1/8" JOINT MASTIC		
1	PEPOXY	EPOXY KIT FOR CIP BASE					
PP09		**60" Polymer Rehab**			**15.86'**	**4,781**	**$11,243**
1		A-1700 30"GILBERT FRAME AND COVER	1	PR30X1FL	30 IN X 1 IN FLAT PRO-RING		
2	PR30X6FL	30 IN X 6 IN FLAT PRO-RING	1	50536-RC	53 IN X 3 FT ECC POLYMER CONE 36 IN		
1	SPECIAL	53"X2"W X 4 FT POLYMER MH SECTION	1	SPECIAL	53"X2"W X 4 FT POLYMER MH SECTION		
4	MASJ	14' X 1 1/8" JOINT MASTIC	1	PEPOXY	EPOXY KIT FOR CIP BASE		
PP10		**60" Polymer Rehab**			**18.50'**	**5,602**	**$13,299**
1		A-1700 30"GILBERT FRAME AND COVER	1	PR30X1FL	30 IN X 1 IN FLAT PRO-RING		
1	PR30X2FL	30 IN X 2 IN FLAT PRO-RING	1	PR30X6FL	30 IN X 6 IN FLAT PRO-RING		
1	50536-RC	53 IN X 3 FT ECC POLYMER CONE 36 IN	1	SPECIAL	53"X2"W X 3 FT POLYMER MH SECTION		
1	SPECIAL	53"X2"W X 4 FT POLYMER MH SECTION	1	SPECIAL	53"X2"W X 4 FT POLYMER MH SECTION		
6	MASJ	14' X 1 1/8" JOINT MASTIC	1	PEPOXY	EPOXY KIT FOR CIP BASE		
PP11		**60" Polymer Rehab**			**19.40'**	**5,891**	**$13,768**
1		A-1700 30"GILBERT FRAME AND COVER	1	PR30X2FL	30 IN X 2 IN FLAT PRO-RING		
1	PR30X6FL	30 IN X 6 IN FLAT PRO-RING	1	50536-RC	53 IN X 3 FT ECC POLYMER CONE 36 IN		
1	SPECIAL	53"X2"W X 4 FT POLYMER MH SECTION	1	SPECIAL	53"X2"W X 4 FT POLYMER MH SECTION		
1	SPECIAL	53"X2"W X 4 FT POLYMER MH SECTION	6	MASJ	14' X 1 1/8" JOINT MASTIC		
1	PEPOXY	EPOXY KIT FOR CIP BASE					
PP12		**60" Polymer Rehab**			**19.33'**	**5,844**	**$13,708**
1		A-1700 30"GILBERT FRAME AND COVER	1	PR30X1FL	30 IN X 1 IN FLAT PRO-RING		
1	PR30X6FL	30 IN X 6 IN FLAT PRO-RING	1	50536-RC	53 IN X 3 FT ECC POLYMER CONE 36 IN		
1	SPECIAL	53"X2"W X 4 FT POLYMER MH SECTION	1	SPECIAL	53"X2"W X 4 FT POLYMER MH SECTION		
1	SPECIAL	53"X2"W X 4 FT POLYMER MH SECTION	6	MASJ	14' X 1 1/8" JOINT MASTIC		
1	PEPOXY	EPOXY KIT FOR CIP BASE					
PP14		**60" Polymer Rehab**			**17.90'**	**5,272**	**$12,840**
1		A-1700 30"GILBERT FRAME AND COVER	1	PR30X2FL	30 IN X 2 IN FLAT PRO-RING		
1	50536-RC	53 IN X 3 FT ECC POLYMER CONE 36 IN	1	SPECIAL	53"X2"W X 3 FT POLYMER MH SECTION		
1	SPECIAL	53"X2"W X 4 FT POLYMER MH SECTION	1	SPECIAL	53"X2"W X 4 FT POLYMER MH SECTION		
6	MASJ	14' X 1 1/8" JOINT MASTIC	1	PEPOXY	EPOXY KIT FOR CIP BASE		

1575 W Horizon Ridge Parkway
#530427
Henderson, NV 89012

207 Heritage Court
Sulphur Springs, TX 75482

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Quote Date:

Structure		Description				Height	Weight	Price
PP15		**60" Polymer Rehab**				**19.20'**	**5,750**	**$13,630**
1		A-1700 30"GILBERT FRAME AND COVER	1	PR30X1FL	30 IN X 1 IN FLAT PRO-RING			
1	PR30X4FL	30 IN X 4 IN FLAT PRO-RING	1	50536-RC	53 IN X 3 FT ECC POLYMER CONE 36 IN			
1	SPECIAL	53"X2"W X 4 FT POLYMER MH SECTION	1	SPECIAL	53"X2"W X 4 FT POLYMER MH SECTION			
1	SPECIAL	53"X2"W X 4 FT POLYMER MH SECTION	6	MASJ	14' X 1 1/8" JOINT MASTIC			
1	PEPOXY	EPOXY KIT FOR CIP BASE						
PP16		**60" Polymer Rehab**				**19.72'**	**5,891**	**$13,768**
1		A-1700 30"GILBERT FRAME AND COVER	1	PR30X2FL	30 IN X 2 IN FLAT PRO-RING			
1	PR30X6FL	30 IN X 6 IN FLAT PRO-RING	1	50536-RC	53 IN X 3 FT ECC POLYMER CONE 36 IN			
1	SPECIAL	53"X2"W X 4 FT POLYMER MH SECTION	1	SPECIAL	53"X2"W X 4 FT POLYMER MH SECTION			
1	SPECIAL	53"X2"W X 4 FT POLYMER MH SECTION	6	MASJ	14' X 1 1/8" JOINT MASTIC			
1	PEPOXY	EPOXY KIT FOR CIP BASE						
PP17		**60" Polymer Rehab**				**19.62'**	**5,985**	**$13,871**
1		A-1700 30"GILBERT FRAME AND COVER	1	PR30X4FL	30 IN X 4 IN FLAT PRO-RING			
1	PR30X6FL	30 IN X 6 IN FLAT PRO-RING	1	50536-RC	53 IN X 3 FT ECC POLYMER CONE 36 IN			
1	SPECIAL	53"X2"W X 4 FT POLYMER MH SECTION	1	SPECIAL	53"X2"W X 4 FT POLYMER MH SECTION			
1	SPECIAL	53"X2"W X 4 FT POLYMER MH SECTION	6	MASJ	14' X 1 1/8" JOINT MASTIC			
1	PEPOXY	EPOXY KIT FOR CIP BASE						
PP18		**60" Polymer Rehab**				**19.59'**	**5,985**	**$13,871**
1		A-1700 30"GILBERT FRAME AND COVER	1	PR30X4FL	30 IN X 4 IN FLAT PRO-RING			
1	PR30X6FL	30 IN X 6 IN FLAT PRO-RING	1	50536-RC	53 IN X 3 FT ECC POLYMER CONE 36 IN			
1	SPECIAL	53"X2"W X 4 FT POLYMER MH SECTION	1	SPECIAL	53"X2"W X 4 FT POLYMER MH SECTION			
1	SPECIAL	53"X2"W X 4 FT POLYMER MH SECTION	6	MASJ	14' X 1 1/8" JOINT MASTIC			
1	PEPOXY	EPOXY KIT FOR CIP BASE						
PP19		**60" Polymer Rehab**				**19.87'**	**6,127**	**$14,058**
1		A-1700 30"GILBERT FRAME AND COVER	1	PR30X1FL	30 IN X 1 IN FLAT PRO-RING			
2	PR30X6FL	30 IN X 6 IN FLAT PRO-RING	1	50536-RC	53 IN X 3 FT ECC POLYMER CONE 36 IN			
1	SPECIAL	53"X2"W X 4 FT POLYMER MH SECTION	1	SPECIAL	53"X2"W X 4 FT POLYMER MH SECTION			
1	SPECIAL	53"X2"W X 4 FT POLYMER MH SECTION	6	MASJ	14' X 1 1/8" JOINT MASTIC			
1	PEPOXY	EPOXY KIT FOR CIP BASE						
PP20		**60" Polymer Rehab**				**20.86'**	**6,463**	**$15,356**
1		A-1700 30"GILBERT FRAME AND COVER	1	PR30X1FL	30 IN X 1 IN FLAT PRO-RING			
2	PR30X6FL	30 IN X 6 IN FLAT PRO-RING	1	50536-RC	53 IN X 3 FT ECC POLYMER CONE 36 IN			
1	SPECIAL	53"X2"W X 1 FT POLYMER MH SECTION	1	SPECIAL	53"X2"W X 4 FT POLYMER MH SECTION			
1	SPECIAL	53"X2"W X 4 FT POLYMER MH SECTION	1	SPECIAL	53"X2"W X 4 FT POLYMER MH SECTION			
8	MASJ	14' X 1 1/8" JOINT MASTIC	1	PEPOXY	EPOXY KIT FOR CIP BASE			
PP21		**60" Polymer Rehab**				**24.15'**	**7,385**	**$17,634**
1		A-1700 30"GILBERT FRAME AND COVER	1	PR30X4FL	30 IN X 4 IN FLAT PRO-RING			
1	50536-RC	53 IN X 3 FT ECC POLYMER CONE 36 IN	1	SPECIAL	53"X2"W X 1 FT POLYMER MH SECTION			
1	SPECIAL	53"X2"W X 4 FT POLYMER MH SECTION	1	SPECIAL	53"X2"W X 4 FT POLYMER MH SECTION			
1	SPECIAL	53"X2"W X 4 FT POLYMER MH SECTION	1	SPECIAL	53"X2"W X 4 FT POLYMER MH SECTION			
10	MASJ	14' X 1 1/8" JOINT MASTIC	1	PEPOXY	EPOXY KIT FOR CIP BASE			
PP21 Sta. 86.82.78		**60" Polymer Rehab**				**21.35'**	**8,531**	**$17,188**
1		A-1700 30" GILBERT FRAME AND COVER	1	PR30X1FL	30 IN X 1 IN FLAT PRO-RING			
1	PR30X2FL	30 IN X 2 IN FLAT PRO-RING	1	RMHC6036	60 IN X 3 FT ECC POLYMER CONE W/ 36" ACCESS REHAB			
1	RMHS6012NB	60 IN X 1 FT POLYMER MH SECTION NO BELL REHAB	4	RMHS6048NB	60 IN X 4 FT POLYMER MH SECTION NO BELL REHAB			
10	MASJ	14' X 1 1/8" JOINT MASTIC	1	PEPOXY	EPOXY KIT FOR CIP BASE			

ARMOROCK™

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For:

Ref:

Quote Date:

Structure		Description			Height	Weight	Price
PP23		**60" Polymer Rehab**			**20.37'**	**6,564**	**$15,383**
1		A-1700 30"GILBERT FRAME AND COVER	1	PR30X2FL	30 IN X 2 IN FLAT PRO-RING		
1	PR30X6FL	30 IN X 6 IN FLAT PRO-RING	1	50536-RC	53 IN X 3 FT ECC POLYMER CONE 36 IN		
1	SPECIAL	53"X2"W X 2 FT POLYMER MH SECTION	1	SPECIAL	53"X2"W X 4 FT POLYMER MH SECTION		
1	SPECIAL	53"X2"W X 4 FT POLYMER MH SECTION	1	SPECIAL	53"X2"W X 4 FT POLYMER MH SECTION		
8	MASJ	14' X 1 1/8" JOINT MASTIC	1	PEPOXY	EPOXY KIT FOR CIP BASE		
PP24		**60" Polymer Rehab**			**19.82'**	**6,463**	**$15,356**
1		A-1700 30"GILBERT FRAME AND COVER	1	PR30X1FL	30 IN X 1 IN FLAT PRO-RING		
2	PR30X6FL	30 IN X 6 IN FLAT PRO-RING	1	50536-RC	53 IN X 3 FT ECC POLYMER CONE 36 IN		
1	SPECIAL	53"X2"W X 1 FT POLYMER MH SECTION	1	SPECIAL	53"X2"W X 4 FT POLYMER MH SECTION		
1	SPECIAL	53"X2"W X 4 FT POLYMER MH SECTION	1	SPECIAL	53"X2"W X 4 FT POLYMER MH SECTION		
8	MASJ	14' X 1 1/8" JOINT MASTIC	1	PEPOXY	EPOXY KIT FOR CIP BASE		
PP25		**60" Polymer Rehab**			**19.18'**	**6,086**	**$14,928**
1		A-1700 30"GILBERT FRAME AND COVER	1	PR30X1FL	30 IN X 1 IN FLAT PRO-RING		
1	PR30X4FL	30 IN X 4 IN FLAT PRO-RING	1	50536-RC	53 IN X 3 FT ECC POLYMER CONE 36 IN		
1	SPECIAL	53"X2"W X 1 FT POLYMER MH SECTION	1	SPECIAL	53"X2"W X 4 FT POLYMER MH SECTION		
1	SPECIAL	53"X2"W X 4 FT POLYMER MH SECTION	1	SPECIAL	53"X2"W X 4 FT POLYMER MH SECTION		
8	MASJ	14' X 1 1/8" JOINT MASTIC	1	PEPOXY	EPOXY KIT FOR CIP BASE		
PP26		**60" Polymer Rehab**			**18.98'**	**5,992**	**$14,825**
1		A-1700 30"GILBERT FRAME AND COVER	1	PR30X1FL	30 IN X 1 IN FLAT PRO-RING		
1	PR30X2FL	30 IN X 2 IN FLAT PRO-RING	1	50536-RC	53 IN X 3 FT ECC POLYMER CONE 36 IN		
1	SPECIAL	53"X2"W X 1 FT POLYMER MH SECTION	1	SPECIAL	53"X2"W X 4 FT POLYMER MH SECTION		
1	SPECIAL	53"X2"W X 4 FT POLYMER MH SECTION	1	SPECIAL	53"X2"W X 4 FT POLYMER MH SECTION		
8	MASJ	14' X 1 1/8" JOINT MASTIC	1	PEPOXY	EPOXY KIT FOR CIP BASE		
PP27		**60" Polymer Rehab**			**17.49'**	**5,602**	**$13,345**
1		A-1700 30"GILBERT FRAME AND COVER	1	PR30X1FL	30 IN X 1 IN FLAT PRO-RING		
1	PR30X2FL	30 IN X 2 IN FLAT PRO-RING	1	PR30X6FL	30 IN X 6 IN FLAT PRO-RING		
1	50536-RC	53 IN X 3 FT ECC POLYMER CONE 36 IN	1	SPECIAL	53"X2"W X 3 FT POLYMER MH SECTION		
1	SPECIAL	53"X2"W X 4 FT POLYMER MH SECTION	1	SPECIAL	53"X2"W X 4 FT POLYMER MH SECTION		
8	MASJ	14' X 1 1/8" JOINT MASTIC	1	PEPOXY	EPOXY KIT FOR CIP BASE		
PP28		**60" Polymer Rehab**			**16.93'**	**5,501**	**$12,918**
1		A-1700 30"GILBERT FRAME AND COVER	1	PR30X2FL	30 IN X 2 IN FLAT PRO-RING		
2	PR30X6FL	30 IN X 6 IN FLAT PRO-RING	1	50536-RC	53 IN X 3 FT ECC POLYMER CONE 36 IN		
1	SPECIAL	53"X2"W X 2 FT POLYMER MH SECTION	1	SPECIAL	53"X2"W X 4 FT POLYMER MH SECTION		
1	SPECIAL	53"X2"W X 4 FT POLYMER MH SECTION	6	MASJ	14' X 1 1/8" JOINT MASTIC		
1	PEPOXY	EPOXY KIT FOR CIP BASE					
Spreader Bar					**0.00'**	**0**	**$1,802**
1		60" REHAB SPREADER BAR					

Sub-Total	**$313,694**
Freight/Delivery	**$12,800**
Total Price for TOG Western Canal	**$326,494**

10/11/2024

Project Proposal

Re: Chandler JOC – Frye Rd. 12-inch CIPP Lining
Tucson, AZ

Attn: Shane Cook
Archer Western

INSITUFORM TECHNOLOGIES, LLC herein proposes to furnish a Proposal for the labor, materials, equipment, and services set forth below to reconstruct the referenced project. The following prices should be considered confidential.

PROPOSAL PRICING

Bid Item	Description	Quantity	Unit	Unit Cost	Amount
1	475 LF of 12" CIPP	1	LS	$ 40,000.00	$ 40,000.00
	TOTAL				**$ 40,000.00**
	Lining only (See full list of Inclusions & Exclusions below)				

ASSUMPTIONS AND QUALIFICATIONS

Insituform Technologies, LLC (Insituform) have based this proposal on a nominal wall thickness for the Insitutube as shown in the specifications or derived from general, industry accepted specifications and design criteria. This is based on the best available information at the time of this proposal. Existing pipe deterioration in excess of the conditions assumed, ground water loads in excess of those assumed, or other loads or conditions may increase the recommended thickness for all or portions of the work. Final recommendations may be submitted to you following the completion of the preliminary TV phase of the project. Stated prices are subject to adjustment if design changes are agreed upon.

Insituform is a NON-union shop, is considered a specialty contractor, and shall not be subject to any union requirements or project labor agreements.

Water shall be provided at no cost to Insituform for all construction phases of this project. Insituform will follow all required deposit, backflow prevention, and metering procedures.

Access requirements for existing pipeline to be rehabilitated shall be provided by Owner and/or Prime Contractor – includes entry and exit access approved from Insituform Project Manager and/or Field Engineer.

Specific service connections, if encountered, will not be reconnected only when written directions are received from the Owner. The Owner will indemnify and hold Insituform harmless from all claims arising from backups and other effects of such actions or inactions from services not opened at the Owner's request. In the event that Insituform is unable to locate or reconnect a service lateral internally, the Prime Contractor will externally reconnect the service and repair any damages to the CIPP at no cost to Insituform.

PROPOSAL INCLUSIONS

Insituform proposal pricing includes only the items listed below; other items, scope of work, and/or project requirements are not part of the Insituform proposal pricing:

1. One mobilization and demobilization. - based **on a mutually agreeable schedule between Insituform and the Owner and/or Prime Contractor.** The Owner and/or Prime Contractor needs to give Insituform at least one-week advance notice of any changes to the mutually agreed upon schedule. If through no fault of Insituform the mutually agreed upon schedule changes with less than one-week notice, then Insituform may charge the Owner and/or Prime Contractor an additional mobilization charge and any potential lost materials including but not limited to tube already "wetout".
2. Installation of Cured-In-Place Pipe (CIPP) lining per ASTM F1216 Cured-In-Place Pipe Lining including inversion, curing, and finishing. Insituform will utilize a polyester resin system.
3. Internal lateral reinstatement.
4. Confined space safe entry practices.
5. As specified standard construction warranty.
6. Certificate of insurance with a standard coverage.

PROPOSAL EXCLUSIONS

Insituform proposal pricing excludes all items and scope of work listed below. These items, if needed or found to be applicable, would be provided by Insituform at your additional cost; or would be furnished by others, at your direction, at no cost to Insituform:

1. Cleaning and CCTV
2. Bypass Pumping
3. Traffic Control
4. Heavy cleaning, mechanical cleaning
5. Lateral Sealing – Top Hats by others
6. Manhole installation, rehabilitation, and/or replacement
7. Point repairs, if required, prior to lining
8. Excavation of any kind
9. Water for curing of CIPP installation
10. Trenchless point repairs or sectional liners
11. Removal of manhole cones for access to sewer pipe – none are expected
12. Surface Restoration
13. Archaeological Monitoring
14. Owner or General Contractor to provide access to water from fire hydrants within a convenient distance from each cleaning and inversion site location
15. *If any hazardous or toxic materials are encountered during the project, the Owner will be responsible for the removal and disposal of the materials.*
16. Any special permits or licenses
17. State and local sales and/or use taxes are excluded, including gross receipts. If the project is exempt, please submit the appropriate documentation.
18. Additional premiums for special insurance coverage(s) required by you or other parties particular to this project.
19. Performance and payment bond not included and is available upon request. If required, please add 2.5% to the total project cost.
20. Stamped Designs.

PROPOSAL TERMS AND CONDITIONS

a) When CIPP is required to negotiate bends or defects in the host pipe, there is a tendency to experience wrinkling in the installed CIPP around the inside radius of the bend or in the area where the host pipe defect is located. This is normal and should be expected. It will not affect the structural integrity of the finished product. Insituform Technologies, LLC will not be liable for repairs or penalties due to wrinkles in the CIPP at the locations of bends or defects in the host pipe.

b) Limits of Liability. In consideration of **INSITUFORM TECHNOLOGIES, LLC** agreement to maintain no less than $5,000,000 of comprehensive general liability insurance in the form required by the Contract, **INSITUFORM TECHNOLOGIES, LLC** liability to the Owner for any matter covered by such insurance will be limited to the extent

of such insurance and the Owner will indemnify and hold **INSITUFORM TECHNOLOGIES, LLC** harmless from any third party claims covered by such insurance to the extent such claims exceed the limits of such insurance. Neither party shall be liable to the other for consequential damages relating to the contract. In case of conflict between this provision and any other provision in the Contract as ultimately executed, this provision shall govern and prevail.

c) LIMITED WARRANTY. IN LIEU OF ALL OTHER EXPRESSED, IMPLIED AND/OR STATUTORY. WARRANTIES, INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, INSITUFORM AGREES TO CORRECT ANY DEFECTS IN THE MATERIALS OR SERVICES PROVIDED BY INSITUFORM WHICH ARE BROUGHT TO THE ATTENTION OF INSITUFORM WITHIN ONE YEAR FOLLOWING COMPLETION OF INSITUFORM'S WORK, PROVIDED OWNER AFFORDS INSITUFORM SUITABLE ACCESS AND WORKING CONDITIONS TO ACCOMPLISH SUCH CORRECTION.

d) MUTUAL RELEASE OF CONSEQUENTIAL DAMAGES. Neither party shall be liable to the other for consequential damages relating to or arising out of the Contract.

e) PROPOSAL SUBJECT TO NEGOTIATION OF OTHER STANDARD TERMS OF AGREEMENT. This proposal is subject to agreement of the parties on other terms and conditions as are customary in contracts of this nature.

f) If actual quantities differ significantly from those stated in the proposal, then work will be renegotiated.

g) Payments are due at net within thirty days of invoice. Final payment is due within thirty days of completion of project.

h) Monthly progress partial payments may be requested for the value of work in progress or completed, including materials secured and on site.

i) Prices stated are in effect for thirty days from the date of this proposal. The acceptance period may be extended at the sole option of **INSITUFORM TECHNOLOGIES, LLC.**

j) Conflicts. In case of conflict between the provision of the aforesaid paragraphs and any other provision in the Contract as ultimately executed the provisions as set forth above shall govern and prevail.

OFFERED BY:

INSITUFORM TECHNOLOGIES, LLC

BRAD CONDER, PE
COMMERCIAL MANAGER
(801) 472-8472
bconder@azuria.com

ARIZONA OFFICE:

645 SOUTH 24TH STREET
TEMPE, AZ 85282
(480) 446-0620

ACCEPTED BY:

CONTRACTOR NAME OR ORGANIZATION

SIGNATURE

AUTHORIZED REPRESENTATIVE

TITLE

DATE

WW2501.402 Frye Rd. Sewer Rehabiliation

475 CIPP Lining MH7560003357-MH756014805

Printed from WAM

10/1/2024, 3:25:37 PM

1:274

0 0 0 0.01 mi

0 0 0.01 0.01 km

County Island
Street Centerline
Freeway
Street
Alley
Chandler Jurisdiction Boundary
Parcel
Mobile Home Pad
Building
Street ROW
Condo

This map is a user generated from the City of Chandler Web Application for
The City of Chandler IT Division makes no warranties, written or implied, regarding the information on this map. Data layers that appear on this map may not be accurate, current, or otherwise reliable.

EXHIBIT H

BUILDERS RISK INSURANCE

City Council Memorandum Public Works & Utilities Memo No. CP25-045

Date: November 04, 2024
To: Mayor and Council
Thru: Joshua H. Wright, City Manager
Andy Bass, Deputy City Manager
John Knudson, Public Works and Utilities Director
Daniel Haskins, Capital Projects Division Manager
From: Hafiz Noor, Construction/Design Project Manager
Subject: Professional Services Agreement No. SW2102.451, with Sunrise Engineering, LLC, for the Solid Waste Complex Recycle Collection Area Relocation Construction Management Services

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Proposed Motion:

Move City Council award Professional Services Agreement No.SW2102.451, to Sunrise Engineering, LLC, for the Solid Waste Complex Recycle Collection Area Relocation Construction Management Services, in an amount not to exceed $123,640.

Background/Discussion:

The Recycling-Solid Waste Collection Center, located at 955 E. Queen Creek Road, is a residential drop-off center for both trash and recyclables. This project relocates the recycling drop-off area from the south end to the north side of the exit scale. This change will enhance customer convenience by eliminating the current requirement for residents to re-enter the drop-off line and check in twice when they have a mixed load (both trash and recyclables). Currently, residents need to drop off recyclables first, so the weight of the recyclables is excluded from any potential fee. The new location will allow for recyclables to be dropped off before trash, avoiding the need to check in twice.

The project scope of work consists of pre-construction assistance, construction management services, inspections, utility coordination, materials testing and record drawings. The agreement completion time is 180 calendar days following Notice to Proceed.

A related Construction Agreement with SDB, Inc., for the Solid Waste Complex Recycle Collection Area Relocation, is also scheduled for this City Council meeting.

Evaluation:

The selection process was conducted in accordance with city policy and procedure and state law. This project is being performed using the Direct Select Procurement Method from a previous On-Call Consultant Pre-Qualified List for Civil Engineering Services. Staff recommends approval of this agreement with Sunrise Engineering, LLC, based on qualifications, relevant firm experience, team experience, project understanding, and project approach.

Fiscal Impact

Account No.	Fund Name	Program Name	Dollar Amount	CIP Funded Y/N
625.3710.6210.0000.6SW100	Solid Waste Operating	Solid Waste Facility Improvements	$123,640	Y

Attachments

Location Map

Agreement - Sunrise Engineering

SOLID WASTE COMPLEX RECYCLE COLLECTION AREA RELOCATION CONSTRUCTIN MANAGEMENT SERVICES SW2102.451

MEMO NO. CP25-0045

PROJECT SITE

NTS

ChanGIS

F:\ENGINEER\GENSERV_ArcGISPro_Shared\Map Requests\Capital Projects\2025\CP25-043\CP25-043\CP25-043.aprx 9/10/2024 JulietteC

PROFESSIONAL SERVICES AGREEMENT
Construction Management Services

SOLID WASTE COMPLEX RECYCLE COLLECTION AREA RELOCATION

Project No. SW2102.451

Council Date: 11/7/2024

This Agreement ("Agreement") is made and entered into on the _____ day of_____, 2024 ("Effective Date"), by and between City of Chandler, an Arizona municipal corporation, ("City"), and **SUNRISE ENGINEERING, LLC,** a UTAH LIMITED LIABILITY COMPANY, ("Consultant") (City and Consultant may individually be referred to as "Party" and collectively referred to as "Parties").

RECITALS

A. City proposes to engage Consultant to provide **Construction Management Services** for **SOLID WASTE COMPLEX RECYCLE COLLECTION AREA RELOCATION** project as more fully described in **Exhibit "A"**, which is attached to and made a part of this Agreement by this reference.

B. Consultant is ready, willing, and able to provide the services described in **Exhibit "A"** for the compensation and fees set forth and as described in **Exhibit "B"**, which is attached to and made a part of this Agreement by this reference.

C. City desires to enter into an Agreement with Consultant to provide these services under the terms and conditions set forth in this Agreement.

AGREEMENT

NOW, THEREFORE, in consideration of the premises and the mutual promises contained in this Agreement, City and Consultant agree as follows:

SECTION I--CONSULTANT'S SERVICES

Consultant must perform the services described in **Exhibit "A"** to City's satisfaction within the terms and conditions of this Agreement and within the care and skill that a person who provides similar services in Chandler, Arizona exercises under similar conditions. All work or services furnished by Consultant under this Agreement must be performed in a skilled and workmanlike manner. All fixtures, furnishings, and equipment furnished by Consultant as part of the work or services under this Agreement must be new, or the latest model, and of

the most suitable grade and quality for the intended purpose of the work or service.

SECTION II--PERIOD OF SERVICE

Consultant must perform the services described in **Exhibit "A"** for the term of this Agreement. Unless amended in writing by the Parties, the Agreement term expires **180** calendar days after the Notice to Proceed (NTP) Date.

SECTION III--PAYMENT OF COMPENSATION AND FEES

Unless amended in writing by the Parties, Consultant's compensation and fees as more fully described in **Exhibit "B"** for performance of the services approved and accepted by City under this Agreement must not exceed **$123,640** for the full term of the Agreement. Consultant may not increase any compensation or fees under this Agreement without the City's prior written consent. Consultant must submit monthly requests for payment of services approved and accepted during the previous billing period and must include, as applicable, detailed invoices and receipts, a narrative description of the tasks accomplished during the billing period, a list of any deliverables submitted, and any subconsultant's or supplier's actual requests for payment plus similar narrative and listing of their work. Consultant must submit an Application and Certification for Payment Sheet with the monthly request for payment to: CapitalProjects.Payables@chandleraz.gov. Payment for those services negotiated as a lump sum will be made in accordance with the percentage of the work completed during the preceding billing period. Services negotiated as a not-to-exceed fee will be paid in accordance with the work effort expended on the service during the preceding month. All requests for payment must be submitted to City for review and approval. City will make payment for approved and accepted services within 30 calendar days of City's receipt of the request for payment. Consultant bears all responsibility and liability for any and all tax obligations that result from Consultant's performance under this Agreement.

SECTION IV--CITY'S OBLIGATIONS

As part of Consultant's services under this Agreement, City will provide furnished items, services, or obligations as detailed in **Exhibit "D"**.

SECTION V--GENERAL CONDITIONS

5.1 Notices. Unless otherwise provided herein, demands under this Agreement must be in writing and will be deemed to have been duly given and received either (a) on the date of service if personally served on the party to whom notice is to be given, or (b) on the third day after the date of the postmark of deposit by first class United States mail, registered or certified, postage prepaid and properly addressed as follows:

To City:	City of Chandler - Public Works & Utilities Department Attn: CIP City Engineer: Daniel Haskins, P.E. P.O. Box 4008, Mail Stop 407 Chandler, AZ 85244-4008 Phone: 480-782-3335 Email: Daniel.Haskins@chandleraz.gov	
With a copy to:	City of Chandler - Public Works & Utilities Department Attn: **Adam Kleiser,** Project Manager P.O. Box 4008, Mail Stop 407, Chandler, AZ 85244-4008 Phone: 480-782-3325 Email: Adam.Kleiser@chandleraz.gov	
To Consultant:	**LEGAL COMPANY NAME:**	Sunrise Engineering, LLC
	Mailing Address:	2045 S. Vineyard Suite 101, Mesa, AZ 85210
	Physical Address:	SAME
	Statutory Agent Name:	Gregory D. Potter P.E.
	Statutory Agent Mailing Address:	25 East 500 North Fillmore, UT 84631
	Statutory Agent Physical Address:	SAME
	CONSULTANT'S AUTHORIZED PROJECT REPRESENTATIVE	
	Name:	Geoffrey S. Child, P.E.
	Title:	Vice President
	Phone:	480.768.8600
	Email:	gchild@sunrise-eng.com

5.2 Records/Audit. Records of Consultant's direct personnel payroll, reimbursable expenses pertaining to this Agreement and records of accounts between City and Consultant must be kept on the basis of generally accepted accounting principles and must be made available to City and its auditors for up to three years following City's final acceptance of the services under this Agreement (this requirement is increased to five years if construction of this project is federally funded). City, its authorized representative, or any federal agency, reserves the right to audit Consultant's records to verify the accuracy and appropriateness of all cost and pricing data, including data used to negotiate this Agreement and any amendments. City reserves the right to decrease the total amount of Agreement price or payments made under this Agreement or request reimbursement from Consultant following final Agreement payment on this Agreement if, upon audit of Consultant's records, the audit discloses Consultant has provided false, misleading, or inaccurate cost and pricing data. Consultant will include a similar provision in all of its Agreements with subconsultants who provide services under the Agreement to ensure that City, its authorized representative, or the appropriate federal agency, has access to the subconsultants' records to verify the

accuracy of all cost and pricing data. City reserves the right to decrease Agreement price or payments made on this Agreement or request reimbursement from Consultant following final payment on this Agreement if the above provision is not included in subconsultant agreements, and one or more subconsultants refuse to allow City to audit their records to verify the accuracy and appropriateness of all cost and pricing data. If, following an audit of this Agreement, the audit discloses Consultant has provided false, misleading, or inaccurate cost and pricing data, and the cost discrepancies exceed 1% of the total Agreement billings, Consultant will be liable for reimbursement of the reasonable, actual cost of the audit.

5.3 Alteration in Character of Work. Whenever an alteration in the character of work results in a substantial change in this Agreement, thereby materially increasing or decreasing the scope of services, cost of performance, or Project schedule, the work will be performed as directed by City. However, before any modified work is started, a written amendment must be approved and executed by City and Consultant. Such amendment must not be effective until approved by City. Additions to, modifications, or deletions from this Agreement as provided herein may be made, and the compensation to be paid to Consultant may accordingly be adjusted by mutual agreement of the Parties. It is distinctly understood and agreed that no claim for extra services or materials furnished by Consultant will be allowed by City except as provided herein, nor must Consultant do any work or furnish any materials not covered by this Agreement unless such work is first authorized in writing. Any such work or materials furnished by Consultant without prior written authorization will be at Consultant's own risk, cost, and expense, and Consultant hereby agrees that without written authorization Consultant will make no claim for compensation for such work or materials furnished.

5.4 Termination. City and Consultant hereby agree to the full performance of the covenants contained herein, except that City reserves the right, at its discretion and without cause, to terminate or abandon any service provided for in this Agreement, or abandon any portion of the Project for which services have been performed by Consultant. In the event City abandons or suspends the services, or any part of the services as provided in this Agreement, City will notify Consultant in writing and immediately after receiving such notice, Consultant must discontinue advancing the work specified under this Agreement. Upon such termination, abandonment, or suspension, Consultant must deliver to City all drawings, plans, specifications, special provisions, estimates and other work entirely or partially completed, together with all unused materials supplied by City. Consultant must appraise the work Consultant has completed and submit Consultant's appraisal to City for evaluation. City may inspect Consultant's work to appraise the work completed. Consultant will receive compensation in full for services performed to the date of such termination. The fee will be paid in accordance with Section Ill of this Agreement, and as mutually agreed upon by Consultant and City. If there is no mutual agreement on payment, the final determination will be made in accordance with the "Disputes" provision in this Agreement. However, in no event may the fee exceed the fee set forth in Section Ill of this Agreement nor as amended in accordance with Section "Alteration in Character of Work." City will make the final payment within 60 days after Consultant has delivered the last of the partially completed items and the Parties agree on the final fee. If City is found to have improperly terminated the Agreement for cause or default, the termination will be converted to a termination for convenience in accordance with the provisions of this Agreement.

5.5 Indemnification. To the extent permitted by law, the Consultant ("Indemnitor") must indemnify, save and hold harmless City and its officers, officials, agents and employees ("Indemnitee") from any and all claims, actions, liabilities, damages, losses or expenses (including court costs, attorneys' fees and costs of claim processing, investigation and litigation) ("Claims") caused or alleged to be caused, in whole or in part, by the wrongful, negligent or willful acts, or errors or omissions of Consultant or any of its owners, officers, directors, agents, employees, or subconsultants in connection with this Agreement. This indemnity includes any claim or amount arising out of or recovered under workers' compensation law or on account of the failure of Consultant to conform to any federal, state or local law, statute, ordinance, rule, regulation or court decree. Consultant must indemnify Indemnitee from and against any and all Claims, except those arising solely from Indemnitee's own negligent or willful acts or omissions. Consultant is responsible for primary loss investigation, defense and judgment costs where this indemnification applies. In consideration of the award of this Agreement, Consultant agrees to waive all rights of subrogation against Indemnitee for losses arising from or related to this Agreement. The obligations of Consultant under this provision survive the termination or expiration of this Agreement.

5.6 Insurance Requirements. Consultant must procure insurance under the terms and conditions and for the amounts of coverage set forth in **Exhibit "C"** against claims that may arise from or relate to performance of the work under this Agreement by Consultant and its agents, representatives, employees, and subconsultants. Consultant and any subconsultant must maintain this insurance until all of their obligations have been discharged, including any warranty periods under this Agreement. These insurance requirements are minimum requirements for this Agreement and in no way limit the indemnity covenants contained in this Agreement. City in no way warrants that the minimum limits stated in **Exhibit "C"** are sufficient to protect Consultant from liabilities that might arise out of the performance of the work under this Agreement by Consultant, Consultant's agents, representatives, employees, or subconsultants. Consultant is free to purchase such additional insurance as may be determined necessary.

5.7 Cooperation and Further Documentation. Consultant agrees to provide City such other duly executed documents as may be reasonably requested by City to implement the intent of this Agreement.

5.8 Successors and Assigns. City and Consultant each bind itself, its partners, successors, assigns, and legal representatives to the other party to this Agreement and to the partners, successors, assigns, and legal representatives of such other party in respect to all covenants of this Agreement. Neither City nor Consultant may assign, sublet, or transfer its interest in this Agreement without the written consent of the other party. In no event may any contractual relation be created between any third party and City.

5.9 Disputes. In any dispute arising out of an interpretation of this Agreement or the duties required not disposed of by agreement between Consultant and City, the final determination at the administrative level will be made by City Engineer.

5.10 Completeness and Accuracy of Consultant's Work. Consultant must be responsible for the completeness and accuracy of Consultant's services, data, and other work prepared or

compiled under Consultant's obligation under this Agreement and must correct, at Consultant's expense, all willful or negligent errors, omissions, or acts that may be discovered. Correction of errors disclosed and determined to exist during any construction of the project on architectural or engineering drawings and specifications must be accomplished by Consultant. The cost of the design necessary to correct those errors attributable to Consultant and any damage incurred by City as a result of additional construction costs caused by such engineering or architectural errors will be chargeable to Consultant and will not be considered a cost of the Work. The fact that City has accepted or approved Consultant's work will in no way relieve Consultant of any of Consultant's responsibilities.

5.11 Reporting. Written monthly reports, along with updated work schedules, will be made by Consultant in the format prescribed by City. These reports will be delivered to City per schedule. When requested by City, Consultant will attend Council meetings and provide finished documents including correspondence for Council action, supporting charts, graphs, drawings and colored slides of same.

5.12 Withholding Payment. City reserves the right to withhold funds from Consultant's payments up to the amount equal to the claims City may have against Consultant until such time that a settlement on those claims has been reached.

5.13 City's Right of Cancellation. The Parties acknowledge that this Agreement is subject to cancellation by City under the provisions of Section 38-511, Arizona Revised Statutes (A.R.S.).

5.14 Independent Consultant. For this Agreement Consultant constitutes an independent contractor. Any provisions in this Agreement that may appear to give City the right to direct Consultant as to the details of accomplishing the work or to exercise a measure of control over the work means that Consultant must follow the wishes of City as to the results of the work only. These results must comply with all applicable laws and ordinances.

5.15 Project Staffing. Prior to the start of any work under this Agreement, Consultant must submit to City detailed resumes of key personnel that will be involved in performing services prescribed in the Agreement. City hereby acknowledges its acceptance of such personnel to perform services under this Agreement. At any time hereafter that Consultant desires to change key personnel while performing under the Agreement, Consultant must submit the qualifications of the new personnel to City for prior approval. Key personnel include, but are not limited to, principals-in-charge, project manager, and project Consultant. Consultant will maintain an adequate and competent staff of qualified persons, as may be determined by City, throughout the performance of this Agreement to ensure acceptable and timely completion of the Scope of Services. If City objects, with reasonable cause, to any of Consultant's staff, Consultant must take prompt corrective action acceptable to City and, if required, remove such personnel from the Project and replace with new personnel agreed to by City.

5.16 Consultants or Subconsultants. Prior to beginning the work, Consultant must furnish City for approval the names of consultants or subconsultants to be used under this Agreement. Any subsequent changes are subject to City's written prior approval.

5.17 Force Majeure. If either party is delayed or prevented from the performance of any act required under this Agreement by reason of acts of God or other cause beyond the control and without fault of the Party (financial inability excepted), performance of that act may be excused, but only for the period of the delay, if the Party provides written notice to the other Party within ten days of such act. The time for performance of the act may be extended for a period equivalent to the period of delay from the date written notice is received by the other Party.

5.18 Compliance with Federal Laws. Consultant understands and acknowledges the applicability of the Americans with Disabilities Act, the Immigration Reform and Control Act of 1986 and the Drug Free Workplace Act of 1989 to it. Consultant agrees to comply with these laws in performing this Agreement and to permit City to verify such compliance.

5.19 No Israel Boycott. By entering into this Agreement, Consultant certifies that Consultant is not currently engaged in, and agrees for the duration of the Agreement, not to engage in a boycott of Israel as defined by state statute.

5.20 Legal Worker Requirements. A.R.S. § 41-4401 prohibits City from awarding an Agreement to any consultant who fails, or whose subconsultants fail, to comply with A.R.S. § 23-214(A). Therefore, Consultant agrees Consultant and each subconsultant it uses warrants their compliance with all federal immigration laws and regulations that relate to their employees and their compliance with § 23-214, subsection A. A breach of this warranty will be deemed a material breach of the Agreement and may be subject to penalties up to and including termination of the Agreement. City retains the legal right to inspect the papers of any Consultant's or subconsultant's employee who provides services under this Agreement to ensure that Consultant and subconsultants comply with the warranty under this provision.

5.21 Lawful Presence Requirement. A.R.S. §§ 1-501 and 1-502 prohibit City from awarding an Agreement to any natural person who cannot establish that such person is lawfully present in the United States. To establish lawful presence, a person must produce qualifying identification and sign a City-provided affidavit affirming that the identification provided is genuine. This requirement will be imposed at the time of Agreement award. This requirement does not apply to business organizations such as corporations, partnerships, or limited liability companies.

5.22 Covenant Against Contingent Fees. Consultant warrants that no person has been employed or retained to solicit or secure this Agreement upon an agreement or understanding for a commission, percentage, brokerage, or contingent fee, and that no member of the Chandler City Council, or any City employee has any interest, financially, or otherwise, in Consultant's firm. For breach or violation of this warrant, City may annul this Agreement without liability or, at its discretion, to deduct from the Agreement price or consideration, the full amount of such commission, percentage, brokerage, or contingent fee.

5.23 Non-Waiver Provision. The failure of either Party to enforce any of the provisions of this Agreement or to require performance of the other Party of any of the provisions hereof must not be construed to be a waiver of such provisions, nor must it affect the validity of this Agreement or any part thereof, or the right of either Party to thereafter enforce each and every provision.

5.24 Disclosure of Information Adverse to City's Interests. To evaluate and avoid potential conflicts of interest, Consultant must provide written notice to City, as set forth in this Section, of any work or services performed by Consultant for third parties that may involve or be associated with any real property or personal property owned or leased by City. Such notice must be given 7 business days prior to commencement of the services by Consultant for a third party, or 7 business days prior to an adverse action as defined below. Written notice and disclosure must be sent in accordance with Section 6.7 above. An adverse action under this Agreement includes, but is not limited to: (a) using data as defined in the Agreement acquired in connection with this Agreement to assist a third party in pursuing administrative or judicial action against City; or (b) testifying or providing evidence on behalf of any person in connection with an administrative or judicial action against City; or (c) using data to produce income for Consultant or its employees independently of performing the services under this Agreement, without the prior written consent of City. Consultant represents that except for those persons, entities, and projects identified to City, the services performed by Consultant under this Agreement are not expected to create an interest with any person, entity, or third party project that is or may be adverse to City's interests. Consultant's failure to provide a written notice and disclosure of the information as set forth in this Section constitute a material breach of this Agreement.

5.25 Data Confidentiality and Data Security. As used in the Agreement, "data" means all information, whether written or verbal, including plans, photographs, studies, investigations, audits, analyses, samples, reports, calculations, internal memos, meeting minutes, data field notes, work product, proposals, correspondence and any other similar documents or information prepared by, obtained by, or transmitted to Consultant or its subconsultants in the performance of this Agreement. The Parties agree that all data, regardless of form, including originals, images, and reproductions, prepared by, obtained by, or transmitted to Consultant or its subconsultants in connection with Consultant's or its subconsultant's performance of this Agreement is confidential and proprietary information belonging to City. Except as specifically provided in this Agreement, Consultant or its subconsultants must not divulge data to any third party without City's prior written consent. Consultant or its subconsultants must not use the data for any purposes except to perform the services required under this Agreement. These prohibitions do not apply to the following data provided to Consultant or its subconsultants have first given the required notice to City: (a) data which was known to Consultant or its subconsultants prior to its performance under this Consultant or its subconsultants by a third party, who to the best of Consultant's or its subconsultants' knowledge and belief, had the legal right to make such disclosure and Consultant or its subconsultants are not otherwise required to hold such data in confidence; or (c) data which is required to be disclosed by virtue of law, regulation, or court order, to which Consultant or its subconsultants are subject. In the event Consultant or its subconsultants are required or requested to disclose data to a third party, or any other information to which Consultant or its subconsultants became privy as a result of any other Agreement with City, Consultant must first notify City as set forth in this Section of the request or demand for the data. Consultant or its subconsultants must give City sufficient facts so that City can be given an opportunity to first give its consent or take such action that City may deem appropriate to protect such data or other information from disclosure. All data must continue to be subject to the confidentiality agreements of this Agreement. Consultant or its subconsultants assume all liability to maintain the confidentiality of the data in its possession

and agrees to compensate City if any of the provisions of this Section are violated by Consultant, its employees, agents or subconsultants. Solely for the purposes of seeking injunctive relief, it is agreed that a breach of this Section must be deemed to cause irreparable harm that justifies injunctive relief in court. Consultant agrees that the requirements of this Section must be incorporated into all subagreements entered into by Consultant. A violation of this Section may result in immediate termination of this Agreement without notice.

5.26 Personal Identifying Information-Data Security. Personal identifying information, financial account information, or restricted City information, whether electronic format or hard copy, must be secured and protected at all times by Consultant or its subconsultants. At a minimum, Consultant or its subconsultants must encrypt or password-protect electronic files. This includes data saved to laptop computers, computerized devices, or removable storage devices. When personal identifying information, financial account information, or restricted City information, regardless of its format, is no longer necessary, the information must be redacted or destroyed through appropriate and secure methods that ensure the information cannot be viewed, accessed, or reconstructed. In the event that data collected or obtained by Consultant or its subconsultants in connection with this Agreement is believed to have been compromised, Consultant or its subconsultants must immediately notify City contact. Consultant agrees to reimburse City for any costs incurred by City to investigate potential breaches of this data and, where applicable, the cost of notifying individuals who may be impacted by the breach. Consultant agrees that the requirements of this Section must be incorporated into all subcontracts entered into by Consultant. It is further agreed that a violation of this Section must be deemed to cause irreparable harm that justifies injunctive relief in court. A violation of this Section may result in immediate termination of this Agreement without notice. The obligations of Consultant or its subconsultants under this Section must survive the termination of this Agreement.

5.27 Jurisdiction and Venue. This Agreement is made under and must be construed in accordance with and governed by the laws of the State of Arizona without regard to the conflicts or choice of law provisions thereof. Any action to enforce any provision of this Agreement or to obtain any remedy with respect hereto must be brought in the courts located in Maricopa County, Arizona, and for this purpose, each Party hereby expressly and irrevocably consents to the jurisdiction and venue of such court.

5.28 Survival. All warranties, representations, and indemnifications by Consultant must survive the completion or termination of this Agreement.

5.29 Modification. Except as expressly provided herein to the contrary, no supplement, modification, or amendment of any term of this Agreement will be deemed binding or effective unless in writing and signed by the Parties.

5.30 Severability. If any provision of this Agreement or the application to any person or circumstance may be invalid, illegal or unenforceable to any extent, the remainder of this Agreement and the application will not be affected and will be enforceable to the fullest extent permitted by law.

5.31 Integration. This Agreement contains the full agreement of the Parties. Any prior or contemporaneous written or oral agreement between the Parties regarding the subject

matter is merged and superseded.

5.32 Time is of the Essence. Time of each of the terms, covenants, and conditions of this Agreement is hereby expressly made of the essence.

5.33 Date of Performance. If the date of performance of any obligation or the last day of any time period provided for should fall on a Saturday, Sunday, or holiday for City, the obligation will be due and owing, and the time period will expire, on the first day after which is not a Saturday, Sunday or legal City holiday. Except as may otherwise be set forth in this Agreement, any performance provided for herein will be timely made if completed no later than 5:00 p.m. (Chandler time) on the day of performance.

5.34 Third Party Beneficiary. Nothing under this Agreement will be construed to give any rights or benefits in the Agreement to anyone other than City and Consultant, and all duties and responsibilities undertaken pursuant to this Agreement will be for the sole and exclusive benefit of City and Consultant and not for the benefit of any other party.

5.35 Conflict in Language. All work performed must conform to all applicable City of Chandler codes, ordinances, and requirements as outlined in this Agreement. If there is a conflict in interpretation between provisions in this Agreement and those in **Exhibit "A"**, the provisions in this Agreement prevail.

5.36 Document/Information Release. Documents and materials released to Consultant, which are identified by City as sensitive and confidential, are City's property. The document/material must be issued by and returned to City upon completion of the services under this Agreement. Consultant secondary distribution, disclosure, copying, or duplication in any manner is prohibited without City's prior written approval. The document/material must be kept secure at all times. This directive applies to all City documents, whether in photographic, printed, or electronic data format.

5.37 Exhibits. The following exhibits are made a part of this Agreement and are incorporated by reference:

Exhibit A - Scope of Services / Schedule
Exhibit B - Compensation and Fees
Exhibit C - Insurance Requirements
Exhibit D - Special Conditions
Exhibit E – Subconsultant Documents with Consultant (if applicable)
Exhibit F - Federal Requirements (if applicable)

5.38 Special Conditions. As part of the services Consultant provides under this Agreement, Consultant agrees to comply with and fully perform the special terms and conditions set forth in **Exhibit "D"**, which is attached to and made a part of this Agreement.

5.39 Non-Discrimination and Anti-Harassment Laws. Consultant must comply with all applicable City, state, and federal non-discrimination and anti-harassment laws, rules, and regulations.

5.40 Licenses and Permits. Beginning with the Effective Date and for the full term of this Agreement, Consultant must maintain all applicable City, state, and federal licenses and permits required to fully perform Consultant's services under this Agreement.

5.41 Warranties. Consultant must furnish a one-year warranty on all work and services performed under this Agreement. Consultant must furnish, or cause to be furnished, a two-year warranty on all fixtures, furnishings, and equipment furnished by Consultant, subconsultants or suppliers under this Agreement. Any defects in design, workmanship, or materials that do not comply with this Agreement must be corrected by Consultant (including, but not limited to, all parts and labor) at Consultant's sole cost and expense. All written warranties and redlines for as-built conditions must be delivered to City on or before City's final acceptance of Consultant's services under this Agreement.

5.42 Cooperative Purchasing Agreement (S.A.V.E. – Strategic Alliance for Volume Expenditures). In addition to City of Chandler and with the approval of Consultant, this Agreement may be extended for use by other municipalities, school districts, and government agencies of the State. Any such usage by other entities must be in accordance with the ordinance, charter, or procurement rules and regulations of the respective political entity.

5.43 Budget Approval into Next Fiscal Year. This Agreement will commence on the Effective Date and continue in full force and effect until it is terminated or expires in accordance with the provisions of this Agreement. The Parties recognize that the continuation of this Agreement after the close of the City's fiscal year, which ends on June 30 of each year, is subject to the City Council's approval of a budget that includes an appropriation for this item as an expenditure. The City does not represent that this budget item will be actually adopted. This determination is solely made by the City Council.

5.44 Forced Labor of Ethnic Uyghurs Prohibited. By entering into this Agreement, Contractor certifies and agrees Contractor does not currently use and will not use for the term of this Agreement: (i) the forced labor of ethnic Uyghurs in the People's Republic of China; or (ii) any goods or services produced by the forced labor of ethnic Uyghurs in the People's Republic of China; or (iii) any contractors, subcontractors or suppliers that use the forced labor or any goods or services produced by the forced labor of ethnic Uyghurs in the People's Republic of China.

5.45 License to City for Reasonable Use. With this Agreement, Consultant and its subconsultants hereby grant a license to City, its agents, employees, and representatives for an indefinite period of time to reasonably use, make copies, and distribute as appropriate the Documents, works or deliverables developed or created as a result of the Project and this Agreement. This license also includes the making of derivative works.

This Agreement will be in full force and effect only when it has been approved and executed by the duly authorized City officials.

IN WITNESS WHEREOF, the Parties have executed this Agreement as of the Effective Date.

"CITY" CITY OF CHANDLER

MAYOR

RECOMMENDED BY:

Daniel Haskins, P.E.
CIP City Engineer

APPROVED AS TO FORM:

City Attorney

ATTEST:

City Clerk Seal

"CONSULTANT"
SUNRISE ENGINEERING, LLC

Signature Date 09/23/2024

Geoffrey S. Child, P.E.
Print Name

Vice President
Title

gchild@sunrise-eng.com
Signer Email Address

EXHIBIT "A"
SCOPE OF SERVICES/SCHEDULE

SUNRISE ENGINEERING
Phoenix Metro Office
2045 S. Vineyard, Suite 101, Mesa, Arizona 85210 | 480.768.8600

Date: September 9, 2024

To: Russ Slotnick
Construction Project Manager
City of Chandler | Public Works & Utilities
Mail Stop 407
PO Box 4008
Chandler, AZ 85244-4008

480-782-3411 Office
480-215-9261 Cell
Russ.Slotnick@chandleraz.gov

Subject: **CM Services for Solid Waste Recycle Relocation**
COC Project No. SW2102.451

Dear Mr. Slotnick,

Sunrise Engineering, LLC (SE) is pleased to submit the following proposal to the City of Chandler (COC), to provide Construction Management (CM) Services for the Solid Waste Recycle Relocation Project (SW2102.451). SE agrees, upon receipt of your acceptance, to perform the following identified services in accordance with the scope contained herein (attached Exhibit A and fees as shown in Exhibits B).

If you have any questions regarding this proposal, please contact me at 480.768.8600 or email at gchild@sunrise-eng.com. We look forward to working with you.

Sincerely,
SUNRISE ENGINEERING, LLC

Geoffrey S. Child, P.E.
Vice President

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EXHIBIT A

CONSTRUCTION MANAGEMENT
SCOPE OF HOURLY NOT TO EXCEED SERVICES
SW2102.451 – SOLID WASTE RECYCLE RELOCATION

PROJECT TASKS

1. PRE-CONSTRUCTION ASSISTANCE

A. Task 1.1 Preconstruction Assistance

i. CM CONSULTANT must attend the pre-construction meeting.

2. CONSTRUCTION MANAGEMENT

A. Task 2.1 Weekly Construction Meetings

i. CM CONSULTANT must conduct bi-weekly construction meetings. Each meeting includes agenda and minutes; Request for Information (RFI); Shop Drawing; Field Directive (FD); Material Certification; and Allowance Logs. Consultant assumes 10 bi-weekly meetings will be held. It is assumed that the overall schedule for the Contractor will be three (3) months plus 30 days for closeout for a total of four (4) months.

B. Task 2.2 CPM Schedule

i. CM CONSULTANT must review and evaluate Contractor's initial CPM schedule and provide recommendations for acceptance.

ii. CM CONSULTANT must review Contractor's monthly CPM schedule updates submitted with each payment application, identify CPM tasks behind schedule that may affect critical path items, project substantial and final completion dates, and initiate correspondence to City regarding those tasks. Consultant assumes four (4) reviews of updated CPM schedule.

C. Task 2.3 Requests for Information (RFIs)

i. CM CONSULTANT will review, evaluate, and respond to Contractor Requests for Information (RFIs); and prepare and maintain a submittal log of all RFIs. Consultant assumes a maximum of 10 RFI responses.

D. Task 2.4 Shop Drawing Submittals

i. CM CONSULTANT will review, evaluate, and respond to Contractor shop drawing submittals; and prepare and maintain a submittal log of all shop drawing submittals. Consultant assumes a maximum of ten (10) reviews.

E. Task 2.5 Field Directives (FDs)

i. CM CONSULTANT must prepare Field Directive (FD) documents detailing requested additional work tasks; review and evaluate Contractor FD responses with approval recommendations; and prepare and maintain a submittal log list of all FDs. Consultant assumes three (3) FDs.

F. Task 2.6 Contractor Payment Applications

i. CM CONSULTANT must review and evaluate Contractor monthly payment applications and make recommendation for payment; maintain a weekly record of constructed pay quantities and compile monthly totals; and coordinate payment application with the City quantity report and the inspectors' daily logs. Consultant assumes a maximum of four (4) payment applications, with two (2) reviews each.

EXHIBIT A

3. CONSTRUCTION INSPECTION

A. Task 3.1 Inspection Services

i. CM CONSULTANT must provide daily construction inspection to verify materials and installations conform to construction documents; prepare daily inspection reports documenting Contractor construction activities and progress during field inspection visits; and perform intermittent erosion control inspections. Consultant assumes one (1) Inspector part-time for 20 hours per week and one Construction Manager II for four (4) hours per week, for three (3) months.

B. Task 3.2 Project Closeout

i. CM CONSULTANT must compile non-conformance list prior to Substantial Completion; schedule and conduct Substantial Completion inspection; prepare Substantial Completion punch list generated from Substantial Completion inspection; track items on punch list and note completed items; and complete and distribute Substantial Completion certificates.

ii. CM CONSULTANT must schedule and conduct Final Completion inspection; and complete and distribute Final Completion certificates.

iii. CM CONSULTANT must provide all documents in an electronic version that matches the City's filing system, so it can be imported into City's files.

4. MATERIALS TESTING

A. Task 4.1 Quality Control (QC) Test Program

i. CM CONSULTANT must review and verify Contractor's Quality Control material test type and frequencies are consistent with City and MAG; review and evaluate Contractor's QC test schedule and provide recommendations on acceptance; and review and evaluate all Contractor sampling, test, and inspection results for conformance with construction documents.

B. Task 4.2 Quality Assurance (QA) Test Program

i. CM CONSULTANT must prepare and maintain a materials Quality Assurance plan per City and MAG.

ii. CM CONSULTANT must coordinate with Contractor's testing representative to obtain required QA tests and sample. Tests/samples may include: complete sampling and compaction testing of subgrade (including lime-stabilized subgrade base), aggregate base and asphalt concrete materials in new asphalt concrete pavement areas; complete sampling and compaction testing of subgrade, aggregate base (where required) and concrete for new curbs, gutters, sidewalks and concrete pavement and structures; and complete sampling and compaction testing of backfill for new irrigation, sewer, water, storm drain pipe, and dry utilities. These tests/samples described above will be provided by the Contractor's testing representative/subconsultant. Should the City choose to have additional QA testing in these areas, CM Consultant may subcontract this work out and charge it to the Allowance described in Task 7.3.

5. RECORD DRAWINGS

A. Task 5.1 Record Drawings

i. CM Consultant will review and monitor Contractor's monthly updates on redline drawing set; review Contractor's submitted as-built Record Drawings; and will receive the final submitted as-built drawings and provide final as-builts to the City.

EXHIBIT A

6. PROJECT MANAGEMENT

A. Task 6.1 Project Management, Coordination and Monitoring

i. This task will be for project management, coordination, and monitoring of the project by the CM CONSULTANT. CM Consultant must submit monthly invoices. Invoices will be broken down to the same level of detail as the attached fee schedule.

7. ALLOWANCES

A. Task 7.1 Owner's Allowance

i. Due to the nature of this project additional services may be required during the course of the project due to unforeseen circumstances. This allowance is intended for additional services (detailed description to be defined later) that will be provided upon written authorization from the City.

B. Task 7.2 Reimbursable Expenses

i. This will be an allowance used for reimbursable expenses which may include, but are not limited to, reprographics (documents, plans, reports, maps, mileage, etc.) related to the scope of work outlined in this contract.

C. Task 7.3 Materials Testing

i. This will be an allowance used for materials testing by a subconsultant. Tasks may include providing field and lab QA tests as described in Task 4.2 above.

ASSUMPTION, CLARIFICATIONS, AND EXCLUSIONS

1. Application fees for City reviews and permits will be paid by CITY.
2. The Owner's Allowance will only be utilized with prior written approval from the City representative.
3. The Direct Expense Allowance will be used for normal reimbursable expenses on the project. Items must be billed at cost and backup must be provided with pay applications.

EXHIBIT "B"
COMPENSATION AND FEES

EXHIBIT B
Cost Summary – Man-hour Estimate - Hourly Rates

CONSTRUCTION MANAGEMENT
SCOPE OF SERVICES
HOURLY NOT TO EXCEED BUDGET SUMMARY
SW2102.451 Solid Waste Recycle Relocation

Task	Description	Cost
1	**PRE-CONSTRUCTION ASSISTANCE**	
1.1	Pre-construction Assistance (1 pre-con meeting, 1 public meeting)	$2,380
	SUBTOTAL TASK 1:	**$ 2,380.00**
2	**CONSTRUCTION MANAGEMENT**	
2.1	Weekly Construction Meetings (10 meetings)	$9,260
2.2	CPM Schedule (4 reviews/updates)	$1,852
2.3	Requests for Information (RFIs) (max of 10 RFI responses)	$4,460
2.4	Shop Drawing Submittals (max of 10 reviews)	$2,676
2.5	Field Directives (FDs) (max of 3)	$2,458
2.6	Contractor Payment Applications (4 applications)	$3,288
	SUBTOTAL TASK 2:	**$ 23,994.00**
3	**CONSTRUCTION INSPECTION**	
3.1	Inspection Services (20 hours/week for 3 months)	$38,880
3.2	Project Closeout	$3,298
	SUBTOTAL TASK 3:	**$ 42,178.00**
4	**MATERIALS TESTING**	
4.1	Quality Control (QC) Test Program	$2,996
4.2	Quality Assurance (QA) Test Program	$3,568
	SUBTOTAL TASK 4:	**$ 6,564.00**
5	**RECORD DRAWINGS**	
5.1	Record Drawings	$3,500
	SUBTOTAL TASK 5:	**$ 3,500.00**
6	**PROJECT MANAGEMENT**	
6.1	Project Management, Coordination and Monitoring	$9,674
	SUBTOTAL TASK 6:	**$ 9,674.00**
SUBCONSULTANTS		
Subconsultant Name		N/A
	SUBTOTAL SUBCONSULTANTS:	**N/A**
7. ALLOWANCES		
Owner's Allowance		$10,000
Reimbursable Expenses		$5,350
Materials Testing		$20,000
	SUBTOTAL ALLOWANCES:	**$35,350**
	PROJECT TOTAL:	**$ 123,640.00**

EXHIBIT B
Cost Summary – Man-hour Estimate - Hourly Rates

Proposed Staff for this Project (see resumes):

Dave Dirren, CET – Construction Manager II
Daniel Didesch – Construction Inspector III
Isaac Saad, EIT – Engineer (EIT) III
Karla Grimm – Administration III

			Isaac Saad	Karla Grimm	Dave Dirren	Daniel Didesch				
Phase	**Task**	**Work Task Description**	**Engineer (E.I.T.) III**	**Admin III**	**Construction Manager II**	**Construction Inspector III**	**Direct Costs**	**Mileage**	**(hours)**	**($)**
0001		**PRE-CONSTRUCTION ASSISTANCE**								
	001	Pre-construction Assistance (1 pre-con meeting, 1 public meeting)			10	6			16	$2,380
									Subtotal	**$2,380**
0002		**CONSTRUCTION MANAGEMENT**								
	001	Weekly Construction Meetings (10 meetings)	20		40				60	$9,260
	002	CPM Schedule (4 reviews/updates)	4		8				12	$1,852
	003	Requests for Information (RFIs) (max of 10 RFI responses)	20		10				30	$4,460
	004	Shop Drawing Submittals (max of 10 reviews)	12		6				18	$2,676
	005	Field Directives (FDs) (max of 3)	6		10				16	$2,458
	006	Contractor Payment Applications (4 applications)	4	4	12	4			24	$3,288
									Subtotal	**$23,994**
0003		**CONSTRUCTION INSPECTION**								
	001	Inspection Services (20 hours/week for 3 months)			48	240			288	$38,880
	002	Project Closeout	6		12	4			22	$3,298
									Subtotal	**$42,178**
0004		**MATERIALS TESTING**								
	001	Quality Control (QC) Test Program	12		8				20	$2,996
	002	Quality Assurance (QA) Test Program	16		8				24	$3,568
									Subtotal	**$6,564**
0005		**RECORD DRAWINGS**								
	001	Record Drawings	20		4				24	$3,500
									Subtotal	**$3,500**
0006		**PROJECT MANAGEMENT**								
	001	Project Management, Coordination and Monitoring	20	6	40				66	$9,674
									Subtotal	**$9,674**
0007		**ALLOWANCES**								
	001	Owner's Allowance					$10,000			$10,000
	002	Reimbursable Expenses					$2,000	5000		$5,350
	003	Materials Testing					$20,000			$20,000
									Subtotal	**$35,350**
Sub-total Hours/Miles/Days			140	10	216	254		5000	150	$123,640
Hourly Billing Rate			$143.00	$69.00	$160.00	$130.00		$0.670		
Total Dollars			$20,020	$690	$34,560	$33,020	$32,000	$3,350	**SUBTOTAL**	**$123,640**
									CONTRACT TOTAL	**$123,640**

EXHIBIT B
Cost Summary – Man-hour Estimate - Hourly Rates

SUNRISE ENGINEERING

Arizona Offices

2024- 1.1a Fee Schedule

CODE	CLASSIFICATION	RATE		CODE	CLASSIFICATION	RATE	
101	Engineer (E.I.T.) I	$123	*per h our*	051	Administrative I	$49	*per hour*
102	Engineer (E.I.T.) II	$133		052	Administrative II	$59	
103	Engineer (E.I.T.) III	$143		053	Administrative III	$69	
104	Engineer III	$173					
105	Engineer IV	$193		921	Survey Tech I	$89	
106	Engineer V	$213		922	Survey Tech II	$99	
110	Principal Engineer	$233		930	Survey CAD Tech	$139	
711	Project Manager I	$168		935	Survey Crew Chief	$165	
712	Project Manager II	$188		940	Survey Manager	$175	
301	Engineering Tech I	$99		945	Registered Surveyor	$189	
302	Engineering Tech II	$119		950	Principal Surveyor	$209	
303	Engineering Tech III	$132		351	Construction Inspector I	$95	
304	Engineering Tech IV	$142		352	Construction Inspector II	$115	
401	CAD Technician I	$94		353	Construction Inspector III	$130	
402	CAD Technician II	$104		354	Construction Inspector IV	$145	
403	CAD Technician III	$114		357	Construction Manager I	$135	
404	CAD Technician IV	$124		358	Construction Manager II	$160	
510	Civil Plan Reviewer	$155		MILE	Mileage	$0.670	*per mile*

EXHIBIT "C"
INSURANCE REQUIREMENTS

1. General.

1.1 At the same time as execution of this Agreement, Consultant must furnish City a certificate of insurance on a standard insurance industry ACORD form. The ACORD form must be issued by an insurance company authorized to transact business in the State of Arizona possessing a current A.M. Best, Inc. rating of A-7, or better and legally authorized to do business in the State of Arizona with policies and forms satisfactory to City. Provided, however, the A.M. Best rating requirement will not be deemed to apply to required Workers' Compensation coverage.

1.2 Consultant and any of its subconsultants must procure and maintain, until all of their obligations have been discharged, including any warranty periods under this Agreement are satisfied, the insurances set forth below.

1.3 The insurance requirements set forth below are minimum requirements for this Agreement and in no way limit the indemnity covenants contained in this Agreement.

1.4 City in no way warrants that the minimum insurance limits contained in this Agreement are sufficient to protect Consultant from liabilities that might arise out of the performance of the Agreement services under this Agreement by Consultant, its agents, representatives, employees, subconsultants, and Consultant is free to purchase any additional insurance as may be determined necessary.

1.5 Failure to demand evidence of full compliance with the insurance requirements in this Agreement or failure to identify any insurance deficiency will not relieve Consultant from, nor will it be considered a waiver of its obligation to maintain the required insurance at all times during the performance of this Agreement.

1.6 Use of subconsultants: If any work is subcontracted in any way, Consultant must execute a written Agreement with subconsultant containing the same Indemnification Clause and Insurance Requirements as City requires of Consultant in this Agreement. Consultant is responsible for executing the Agreement with the subconsultant and obtaining Certificates of Insurance and verifying the insurance requirements.

2. Minimum Scope and Limits of Insurance. Consultant must provide coverage with limits of liability not less than those stated below.

2.1 *Professional Liability.* If the Agreement is the subject of any professional services or work performed by Consultant, or if Consultant engages in any professional services or work adjunct or residual to performing the work under this Agreement, Consultant must maintain Professional Liability insurance covering errors and omissions arising out of the work or services performed by Consultant, or anyone employed by Consultant, or anyone whose acts, mistakes, errors and omissions Consultant is legally liable, with a liability limit of $1,000,000 each claim and $2,000,000 all claims. In the event the Professional Liability insurance policy is written on a "claims made" basis, coverage must extend for 3 years past

completion and acceptance of the work or services, and Consultant, or its selected Design Professional will submit Certificates of Insurance as evidence the required coverage is in effect. The Design Professional must annually submit Certificates of Insurance citing that the applicable coverage is in force and contains the required provisions for a 3 year period.

2.2 *Commercial General Liability-Occurrence Form.* Consultant must maintain "occurrence" form Commercial General Liability insurance with a limit of not less than $2,000,000 for each occurrence, $4,000,000 aggregate. Said insurance must also include coverage for products and completed operations, independent contractors, personal injury and advertising injury. If any Excess insurance is utilized to fulfill the requirements of this paragraph, the Excess insurance must be "follow form" equal or broader in coverage scope than underlying insurance.

2.3 *Automobile Liability-Any Auto or Owned, Hired and Non-Owned Vehicles*
Vehicle Liability: Consultant must maintain Business/Automobile Liability insurance with a limit of $1,000,000 each accident on Consultant owned, hired, and non-owned vehicles assigned to or used in the performance of Consultant's work or services under this Agreement. If any Excess or Umbrella insurance is utilized to fulfill the requirements of this paragraph, the Excess or Umbrella insurance must be "follow form" equal or broader in coverage scope than underlying insurance.

2.4 *Workers Compensation and Employers Liability Insurance:* Consultant must maintain Workers Compensation insurance to cover obligations imposed by federal and state statutes having jurisdiction of Consultant employees engaged in the performance of work or services under this Agreement and must also maintain Employers' Liability insurance of not less than $1,000,000 for each accident and $1,000,000 disease for each employee.

3. <u>Additional Policy Provisions Required</u>.

3.1 *Self-Insured Retentions or Deductibles*. Any self-insured retentions and deductibles must be declared and approved by City. If not approved, City may require that the insurer reduce or eliminate any deductible or self-insured retentions with respect to City, its officers, officials, agents, employees, and volunteers.

3.1.1. Consultant's insurance must contain broad form contractual liability coverage.

3.1.2. Consultant's insurance coverage must be primary insurance with respect to City, its officers, officials, agents, and employees. Any insurance or self-insurance maintained by City, its officers, officials, agents, and employees will be in excess of the coverage provided by Consultant and must not contribute to it.

3.1.3. Consultant's insurance must apply separately to each insured against whom claim is made or suit is brought, except with respect to the limits of the insurer's liability.

3.1.4. Coverage provided by Consultant must not be limited to the liability assumed under the indemnification provisions of this Agreement.

3.1.5. The policies must contain a severability of interest clause and waiver of subrogation against City, its officers, officials, agents, and employees, for losses arising from Work performed by Consultant for City. (Does not apply to Professional Liability coverage.)

3.1.6. Consultant, its successors and or assigns, are required to maintain Commercial General Liability insurance as specified in this Agreement for a minimum period of 3 years following completion and acceptance of the Work. Consultant must submit a Certificate of Insurance evidencing Commercial General Liability insurance during this 3-year period containing all the Agreement insurance requirements, including naming City of Chandler, its agents, representatives, officers, directors, officials and employees as Additional Insured as required.

3.1.7. If a Certificate of Insurance is submitted as verification of coverage, City will reasonably rely upon the Certificate of Insurance as evidence of coverage, but this acceptance and reliance will not waive or alter in any way the insurance requirements or obligations of this Agreement.

3.2. *Insurance Cancellation During Term of Agreement.*

3.2.1. If any of the required policies expire during the life of this Agreement, Consultant must forward renewal or replacement Certificates to City within 10 days after the renewal date containing all the required insurance provisions.

3.2.2. Each insurance policy required by the insurance provisions of this Agreement must provide the required coverage and must not be suspended, voided or canceled except after thirty (30) days prior written notice has been given to City, except when cancellation is for non-payment of premium, then ten (10) days prior notice may be given. Such notice must be sent directly to Chandler Law-Risk Management Department, Post Office Box 4008, Mailstop 628, Chandler, Arizona 85225. If any insurance company refuses to provide the required notice, Consultant or its insurance broker must notify City of any cancellation, suspension, non-renewal of any insurance within seven (7) days of receipt of insurers' notification to that effect.

3.3 City as Additional Insured. The policies are to contain, or be endorsed to contain, the following provisions:

3.3.1. The Commercial General Liability and Automobile Liability policies are to contain, or be endorsed to contain, the following provisions: City, its officers, officials, agents, and employees are additional insureds with respect to liability arising out of activities performed by, or on behalf of, Consultant; Products and Completed operations of Consultant; and automobiles owned, leased, hired, or borrowed by Consultant.

3.3.2. City, its officers, officials, agents, and employees must be additional insureds to the full limits of liability purchased by Consultant even if those limits of liability are in excess of those required by this Agreement.

EXHIBIT "D"
SPECIAL CONDITIONS

Standard Details and Specifications. Consultant must be familiar with City's latest revision of the MAG Specifications and MAG Standard Details as amended by City. City's current amendment to the MAG Specifications, part of City's Unified Development Manual, may be found and downloaded from City's website at http://www.chandleraz.gov/udm.

City Ownership of Project Documents. All work products (electronically or manually generated) including, but not limited to: plans, specifications, cost estimates, field notes, tracings, studies, investigations, design analyses, original drawings, original mylars, Computer Aided Drafting and Design (CADD) file diskettes which reflect all final drawings, and other related documents which are prepared in the performance of this Agreement (collectively referred to as "Documents") are to be and remain the property of City and are to be delivered to the Project Manager before the final payment is made to Consultant. In the event these Documents are altered, modified or adapted without the written consent of Consultant, which consent Consultant must not unreasonably withhold, City agrees to hold Consultant harmless to the extent permitted by law from the legal liability arising out of City's alteration, modification or adaptation of the Documents.

Re-use of Documents. The parties agree the documents, drawings, specifications and designs, although the property of City, are prepared for this specific project and are not intended nor represented by Consultant to be suitable for re-use for any other project. Any re-use without written verification or adaptation by Consultant for the specific purpose intended will be at City's sole risk and without liability or legal exposure to Consultant.

Documents to Bear Seal. Consultant and its subconsultants must endorse by professional seal all plans, works, and deliverables prepared by each for this Agreement as required by state law.

EXHIBIT "E"
SUBCONSULTANT DOCUMENTS WITH CONSULTANT

Any subconsultant assumptions, clarifications, exclusions, terms & conditions, signature blocks, etc. included are strictly between the Consultant and their subconsultants, and do not apply to the Agreement between the Consultant and the City.

N/A

EXHIBIT "F"
FEDERAL REQUIREMENTS

N/A

City Council Memorandum Public Works & Utilities Memo No. CP25-043

Date: November 04, 2024
To: Mayor and Council
Thru: Joshua H. Wright, City Manager
Andy Bass, Deputy City Manager
John Knudson, Public Works and Utilities Director
Daniel Haskins, Capital Projects Division Manager
From: Hafiz Noor, Construction/Design Project Manager
Subject: Job Order Project Agreement No. SW2102.401, with SDB, Inc., Pursuant to Job Order Master Agreement No. JOC2402.401, for the Solid Waste Complex Recycle Collection Area Relocation

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Proposed Motion:

Move City Council award Job Order Project Agreement No. SW2102.401, to SDB, Inc., Pursuant to Job Order Master Agreement No. JOC2402.401, for the Solid Waste Complex Recycle Collection Area Relocation, in an amount not to exceed $1,928,681.32.

Background/Discussion:

The Recycling-Solid Waste Collection Center, located at 955 E. Queen Creek Road, is a residential drop-off center for both trash and recyclables. This project relocates the recycling drop-off area from the south end to the north side of the exit scale. This change will enhance customer convenience by eliminating the current requirement for residents to re-enter the drop-off line and check in twice when they have a mixed load (both trash and recyclables). Currently, residents need to drop off recyclables first, so the weight of the recyclables is excluded from any potential fee. The new location will allow for recyclables to be dropped off before trash, avoiding the need to check in twice.

The project scope of work consists of the construction of new concrete pavement, asphalt pavement, curbs, drywell installations, drainage and retention improvements, block retaining wall, water and power connections, and underground utility improvements. The agreement completion time is 180 calendar

days following the Notice to Proceed.

A related Professional Services Agreement with Sunrise Engineering Inc., for the Solid Waste Complex Recycle Collection Area Relocation, is also scheduled for this City Council meeting.

Evaluation:

The selection process was conducted in accordance with city policy and procedure and state law. The costs proposed for this project have been evaluated by staff and determined to be reasonable.

Fiscal Impact

Account No.	Fund Name	Program Name	Dollar Amount	CIP Funded Y/N
625.3710.6210.0000.6SW100	Solid Waste Operating	Solid Waste Facility Improvements	$1,928,681.32	Y

Attachments

Location Map

Agreement - SDB, Inc.

CHANDLER arizona

SOLID WASTE COMPLEX RECYCLE COLLECTION AREA RELOCATION SW2102.401

MEMO NO. CP25-0043

PROJECT SITE

NTS

ChanGIS

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CHANDLER arizona
Community of Innovation

CITY OF CHANDLER
JOB ORDER PROJECT AGREEMENT

Solid Waste Complex Recycle Collection Area Relocation

Project No. SW2102.401
Council Date: November 7, 2024

This JOB ORDER PROJECT AGREEMENT ("Job Order") is made this _____ day of _____ 202____ ("Effective Date"), by and between the City of Chandler, an Arizona municipal corporation, ("City") and **SDB, INC**, an Arizona corporation, ("JOC Contractor") and is entered into pursuant to Job Order Master Agreement No. **JOC2402.401** ("JOC Master Agreement"). City and JOC Contractor may be referred to individually as "Party" or collectively as "Parties").

City and JOC Contractor, in consideration of the mutual covenants herein set forth, agree as follows:

RECITALS

A. On or about **February 5, 2024**, the Parties entered into the JOC Master Agreement, which terms and conditions are made a part of and incorporated into this Job Order Project Agreement by this reference.

B. City proposes to engage JOC Contractor for construction services as more fully described in Article 1 and **Exhibit "A"**, which is attached to and made a part of this Job Order by this reference.

C. JOC Contractor is ready, willing, and able to provide the services described in **Exhibit "A"** for the compensation and fees set forth and as described in **Exhibit "B"**, which is attached to and made a part of this Agreement by this reference.

ARTICLE 1. DESCRIPTION OF WORK

The Parties enter into this Job Order Project Agreement for the **Solid Waste Complex Recycle Collection Area Relocation**, Project Number **SW2102.401**. The scope of work consists **of construction of new concrete pavement, asphalt pavement, curbs, drainage and retention improvements, drywells installation, block retaining wall, water and power connections, and underground utilities improvements**, all as more particularly set forth in **Exhibit "A"** attached hereto and incorporated herein by reference.

The JOC Contractor will not accept any change of scope, or change in Agreement provisions, unless issued in writing, as a Agreement amendment or change order and signed by the authorized signatories for each party.

Performance and Payment Bonds, as set forth in **Exhibit "C"** and **Exhibit "D"** respectively attached hereto and incorporated herein by reference, will be due prior to execution of each Job Order Project Agreement in the full amount of each Job Order.

At project completion, JOC Contractor must complete Contractor's Affidavit Regarding Settlement of Claims and Certificate of Completion, as set forth in **Exhibit "E"** and **Exhibit "F"** respectively attached hereto and incorporated herein by reference.

ARTICLE 2. PROJECT PRICE

City will pay JOC Contractor for completion of the Work in accordance with the JOC Master Agreement a fee not to exceed the Guaranteed Maximum Price of **$1,928,681.32** Dollars determined and payable as set forth in JOC Master Agreement and **Exhibit "B"** attached hereto and made a part hereof by reference.

ARTICLE 3. AGREEMENT TIME & SCHEDULE

JOC Contractor agrees to complete all Construction within **180** calendar days from the Notice to Proceed (NTP) Date.

ARTICLE 4. JOB ORDER CONTACTS

The following parties serve in the capacity below for this Job Order Project.

CITY:	Construction Project Manager: Adam Kleiser	
	Phone:	480-782-3325
	Email:	Adam.Kleiser@chandleraz.gov
JOC CONTRACTOR:	SDB, INC.	
	1001 S Edward Drive, Tempe, AZ 85281	
	JOC Contractor Representative: Salvador Encinas	
	Phone:	480-967-5810
	Email:	Sal.encinas@sdb.com

ARTICLE 5. FORCED LABOR OF ETHNIC UYGHURS PROHIBITED

By entering into this Agreement, Contractor certifies and agrees Contractor does not currently use and will not use for the term of this Agreement: (i) the forced labor of ethnic Uyghurs in the People's Republic of China; or (ii) any goods or services produced by the forced labor of ethnic Uyghurs in the People's Republic of China; or (iii) any contractors, subcontractors or suppliers that use the forced labor or any goods or services produced by the forced labor of ethnic Uyghurs in the People's Republic of China

SIGNATURE PAGE TO FOLLOW

IN WITNESS WHEREOF, the Parties have executed this Job Order as of the Effective Date.

"CITY" CITY OF CHANDLER

MAYOR

RECOMMENDED BY:

Daniel Haskins

Daniel Haskins, P.E.
CIP City Engineer

APPROVED AS TO FORM:

City Attorney

ATTEST:

City Clerk Seal

"JOC CONTRACTOR"
SDB, INC

Signature 10/15/24 Date

SALVADOR ENCINAS
Print Name

SR. JOC PM.
Title

SAL.ENCINAS@SDB.COM
Signer Email Address

EXHIBIT A
SCOPE OF WORK

SDB | CONTRACTING SERVICES

October 9, 2024

Adam Kleiser
Construction Project Manager
City of Chandler | Public Works & Utilities Department

EXHIBIT A - SW2201.401 RECYCLE COLLECTION AREA RELOCATION

Dear Mr. Kleiser and Members of the City Council,

I am writing to provide an overview of the key elements and scope of work for the Solid Waste Complex Recycle Collection Area Relocation.

Project Overview
The scope of the project involves the relocation of the recycle collection area within the Solid Waste Complex. This relocation is critical to enhance operational efficiency and accommodate future growth. The work includes a combination of site preparation, grading, utility adjustments, paving, and installation of necessary infrastructure.

Key Elements of the Scope of Work

1. **Site Preparation and Grading**
   - Grading work is required to ensure proper drainage within the retention basins, which are sized for 100-year, 2-hour storm events. These basins are strategically located to the north and southeast of the project site.
   - Drywells and erosion control measures such as riprap will be installed to maintain site integrity and manage stormwater runoff.
2. **Utility Adjustments**
   - Existing utility lines, including water, sanitary sewer, and storm drains, will be uncovered and inspected. Any necessary repairs or modifications will be made to ensure the systems function as designed.
   - New underground utilities, including water service, electrical conduit, and fiber optic conduit, will be installed per city standards.
3. **Paving and Infrastructure**
   - The project includes the installation of asphalt concrete and Portland cement concrete pavement, along with curb and gutter structures.
   - Vertical and roll curbs, ribbon curbs, and drainage systems such as spillways will be constructed to manage site flow and maintain accessibility.
4. **Fencing and Site Improvements**
   - Chain-link fencing will be installed as per ADOT standards. Landscaping restoration will include granite covering, installation of irrigation systems, and replanting trees where applicable.
   - Compliance with pre-emergent herbicide treatments and post-construction landscape maintenance is required for a period of 90 days following conditional acceptance.
5. **Compliance and Inspection**
   - The contractor must adhere to all City of Chandler and Maricopa Association of Governments (MAG) specifications. Inspections will be performed by the city at critical stages, including utility tie-ins and grading completion.
   - Final acceptance will be granted upon submission of certified "As-Built" plans, photo documentation, and after all site improvements and inspections are successfully completed.
   - The agreement completion time is 180 calendar days following Notice to Proceed.

Conclusion
The Solid Waste Complex Recycle Collection Area Relocation project aims to modernize the facility's infrastructure while ensuring full compliance with environmental and city standards. Upon completion, the project will support the growing waste management needs of Chandler and contribute to the city's sustainability goals.

We are committed to delivering quality results and are excited to begin this collaboration. Please review at your earliest convenience. I would be happy to discuss any questions or modifications you might have.

Sincerely,

Eric Hoffmann
Director of Preconstruction
(480) 299-7714 | eric.hoffmann@sdb.com

EXHIBIT B
FEE SCHEDULE

EXHIBIT "B"

JOB ORDER COST PROPOSAL
SUMMARY SHEET
SW2202.401 - COC Recycle Collection Area Relocation

Negotiated Prices			
Price of Subcontractor(s)		$	1,393,173.39
Price of Subconsultant(s)		$	-
General Conditions		$	141,953.75
Preconstruction Labor (if applicable)		$	-
Construction Labor (if applicable)		$	-
SUBTOTAL (NEGOTIATED PRICES):		**$**	**1,535,127.14**
Overhead and Profit (Coefficient per Job Order Master Agreement)	**6.00%**	**$**	**92,107.63**
TOTAL (NEGOTIATED PRICES + OVERHEAD & PROFIT):		**$**	**1,627,234.77**
Insurance, Bonds, & Taxes			
Sales Tax Percentage (Current Tax Rate) **ENTER TAX % HERE:**	**5.07%**	$	93,059.95
General Liability Insurance Percentage (Actual Cost per Job Order)	*1.50%*	$	28,500.49
Builder's Risk Insurance Percentage (Actual Cost per Job Order)	*0.75%*	$	14,356.40
Payment Bond (Actual Cost per Job Order)	*1%*	$	12,017.00
Performance Bond (Actual Cost per Job Order)	*Included Above*	$	-
SUBTOTAL (INSURANCE, BONDS, & TAXES):		**$**	**147,933.84**
COMBINED TOTAL (TOTAL + INSURANCE, BONDS, & TAXES):		**$**	**1,775,168.60**
City's Allowance (Typically 10%)		**$**	**153,512.71**
TOTAL JOB ORDER:		**$**	**1,928,681.32**

Per the Job Order Master Agreement - This Fee Table includes all fees, costs, insurance and bond premiums, allowances, construction contingency, and taxes of any type necessary to fully, propertly and timely perform and construct the Work. Also per the Job Order Master Agreement - For any portion of the Work which, either through this Contract, Change Order or otherwise, is performed and paid for on a cost, or time and materials basis, the costs may be reimbursed to JOC Contractor and chargeable against the Contract Price will be determined as set forth in MAG 109.5.

SDB, Inc
1001 S. Edward Dr
Tempe, AZ 85281
480-967-5810

PROPOSAL

CUSTOMER:	City of Chandler	BID DATE:	9/18/2024
ADDRESS:	955 E Queen Creek Rd	PROPOSAL NO.:	24-14-0005
CITY, STATE & ZIP	Chandler, AZ, 85225	PROPOSAL TYPE.:	Lump Sum
JOB DESC.:	COC Recycle Collection Area Relocation REV 2	ARCHITECT/ ENGINEER:	Ritoch-Powell & Associates
CONTACT:	Hafiz Noor	PLANS DATED:	9/8/2022

We are pleased to offer the following Proposal for proposed construction of **COC Recycle Collection Area Relocation REV 2**
Based off the Contract Documents and Drawings by **Ritoch-Powell & Associates**

DIV 1 -GENERAL REQUIREMENTS & ALLOWANCES			
General Conditions		$	88,692.80
General Requirements		$	53,260.95
Subcontractor Bond - For M&J and Torrent Resources		$	19,104.49
Storm Water Pollution Prevention Plan - Desert Services		$	16,371.00
Dust Control - Desert Services		$	21,335.00
Quality Control & Testing - Western Technologies		$	12,200.00
Survey & Staking - S3 Arizona		$	15,500.00
DIV 3 -CONCRETE			
Site Concrete - M&J Construction		$	723,504.89
DIV 20 - 23 MECHANICAL			
Plumbing - SDB Civil Plug		$	34,133.01
DIV 26 - 28 ELECTRICAL & SPECIAL SYSTEMS			
Electrical - M7 Contracting		$	49,820.00
DIV 31 - EARTHWORK			
Clear & Grub / Site Demolition & Removals - M&J Construction		$	14,800.00
Grading - M&J Construction		$	124,500.00
DIV 32 - EXTERIOR IMPROVEMENTS			
Asphalt Paving & Base - M&J Construction & Falcon Contracting		$	243,680.00
Landscape & Irrigation Allowance		$	19,375.00
Fence - Western Fence		$	13,050.00
Drywells - Torrent Resources		$	85,800.00
	SUB TOTAL	$	**1,535,127.14**
Overhead & Profit	*6.00%*	$	92,107.63
TAX	*5.07%*	$	93,059.95
General Liability Insurance Percentage	*1.50%*	$	28,500.49
Builder's Risk Insurance Percentage	*0.75%*	$	14,356.40
Payment Bond	*1.00%*	$	12,017.00
Performance Bond	*Included Above*	$	-
OWNER CONTINGENCY	*10.00%*	$	153,512.71
	TOTAL	$	**1,928,681.32**

ASSUMPTIONS & CLARIFICATIONS

- The intent of this breakout is strictly for accounting purposes and not intended to be stand-alone scopes.
- This proposal is based of doing work during normal working hours.
- Each drywell chamber is estimated to require 8 hours of drilling time. Should the soil prove to be particularly hard or unstable and exceeds the estimated 8 hours, additional costs will be incurred.
- ***This price shall remain valid for 30 days from bid date above.***

EXCLUSIONS

- Site security or watchman, by Owner.
- Overtime or after-hours work is only included for MEP tie-ins and shutdowns.
- Premium time unless otherwise noted.
- Off-Site construction is not required for this job.
- Exclude any and all work not described.
- Onsite soils are considered suitable for reuse onsite.
- Multiple Mobilations.
- Excavation / Drilling through unexpected rock-like soil conditions or correction for unstable soils will incur additional costs.
- Excluding concrete collars for drywell chambers.
- Any and all unforeseen conditions.

AGREEMENT TERMS AND CONDITIONS:

Acceptance of this Proposal \ Work Agreement authorizes SDB, Inc to furnish labor, material, equipment and other resources required to complete the work described herein and as required by the Owner for which the Owner agrees to pay the amount shown above. All pricing is priced at day of estimate any increase in material, equipment, and labor above 5% will be added to the contract at time of purchase via additive change order.

Thank you,

SDB, Inc

Jared Foerster & Jared McCostlin
Prepared by

Eric Hoffmann
Reviewed by

Accepted by:

City of Chandler

COC Recycle Collection Area Relocation REV 2

CC	DESCRIPTION	Each	Mths	Wks	Hours	Labor Rate	Labor $	Rate	Material $	Sub $	Equip $	Total
	CONSTRUCTION PROJECT MANGEMENT											
01-3105	Project Manager	0.3	3.0	13	156	$119.24	$ 18,601					$18,601.44
01-3120	Superintendent	1	3.0	13	520	$104.10	$ 54,132	$ -	$ -			$54,132.00
01-3125	Project Engineering	0.2	3.0	13	104	$78.00	$ 8,112					$8,112.00
01-3125	Project Administration	0.2	3.0	13	104	$75.46	$ 7,847					$7,847.36
	CONSTRUCTION PROJECT MANAGEMENT SUBTOTAL				884		$ 88,693		$ -			$88,692.80
	BONDS, INSURANCE & PERMITS											
	Grading / Excavation Permit	1						$500.00	$ 500			$500.00
	Dust Control Permit	In tab 1-2	Acres					$2.00				
	NPDS Stormwater Discharge Permit	In tab 1-2	3.0					$250.00	SWPPP			SWPPP
	NPDS Groundwater Discharge Permit	In tab 1-2	3.0					$250.00	SWPPP			SWPPP
	Block Wall Permit	1										$1,200.00
	Construction Water Permit	1						$750.00	$ 750			$750.00
01-0200	SITE FACILITIES											
01-0200	Job Photos	1	3.0					$200.00	$ 600			$600.00
01-0200	Plan Reproduction	1	3.0					$150.00	$ 450			$450.00
01-0200	Sanitary - Monthly Bill	1	3.0					$400.00			$ 1,200	$1,200.00
01-0200	Janitorial - Portable toilets & Cleaning Fees	1	3.0					$100.00		$ 300		$300.00
01-0200	Project Signage	2			8	$68.97	$ 552	$400.00	$ 800			$1,351.76
01-0200	Site Fencing	600	LF					$5.00		$ 3,000		$3,000.00
01-0200	Con-Ex's	2	3.0					$400.00			$ 2,400	$2,400.00
01-0200	Dumpsters	2.5	3.0					$475.00			$ 3,563	$3,562.50
01-0200	Project Housekeeping - Daily Jobsite Cleanup	1	3.0		96	$68.97	$ 6,603					$6,602.98
01-0200	Construction Water	2.5	3.0		15	$68.97	$ 2,579		$ 2,244			$4,823.12
01-0200	Maintain Access & Roads	2	3.0	13	77	$68.97	$ 7,985			$ -	$ 10,999	$18,984.76
01-0200	SITE FACILITIES SUBTOTAL						$ 17,720		$ 4,094	$ 3,300	$ 18,162	$43,275.12
01-0600	SAFETY											
01-0600	Radar (locator Service)	10						$300.00		$ 3,000		$3,000.00
01-0600	SAFETY SUBTOTAL						$ -		$ -	$ 3,000	$ -	$3,000.00
01-0625	SMALL TOOLS & CONSUMABLES											
01-0625	Small Tools	1103.883815						$ 1.50	$ 1,655.83			$1,655.83
01-0625	SMALL TOOLS SUBTOTAL						$ -		$ 1,656	$ -	$ -	$1,655.83
01-1500	START-UP, TEST, FINAL											
01-1500	Final Clean-Up STREET SWEEPER DESERT SERVICES	59000	SF		24	$120.00				$ 2,880		$2,880.00
		0			0							$0.00
	START-UP, TEST, FINAL SUBTOTAL						$ -		$ -	$ 2,880	$ -	$2,880.00
	TOTALS				220		$ 17,720		$ 7,000	$ 9,180	$ 18,162	$141,953.75
											CHECK	$141,953.75

City Council Memorandum Public Works & Utilities Memo No. CP25-052

Date: November 04, 2024
To: Mayor and Council
Thru: Joshua H. Wright, City Manager
Andy Bass, Deputy City Manager
John Knudson, Public Works and Utilities Director
Daniel Haskins, Capital Projects Division Manager
From: Sandra Story, Engineering Project Manager
Subject: Professional Services Agreement No. WW2206.453, with Wilson Engineers, LLC, for the Hamilton Street Reclaimed Water Transmission Main (Queen Creek Road to Ryan Road) Construction Management Services

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Proposed Motion:

Move City Council award Professional Services Agreement No. WW2206.453, to Wilson Engineers, LLC, for the Hamilton Street Reclaimed Water Transmission Main (Queen Creek Road to Ryan Road) Construction Management Services, in an amount not to exceed $910,840.

Background/Discussion:

In October 2021, the city executed a reclaimed water agreement with Intel Corporation for the city to provide additional reclaimed water supply to Intel. In order to meet the agreement, the city is constructing improvements at the Airport Water Reclamation Facility (AWRF), located at 905 S. Queen Creek Road. The additional reclaimed water will be pumped from AWRF for recharge to the Tumbleweed Aquifer Storage and Recovery (ASR) wells. This enhancement requires the installation of a 24-inch reclaimed water transmission main from AWRF, north along Hamilton Street to Ryan Road and then east on Ryan Road to the newly drilled Tumbleweed Aquifer Storage Recovery (ASR) wells 11 and 12.

The project scope of work consists of project administration, engineering, and resident services. The agreement completion time is 300 calendar days following the Notice to Proceed.

A related Construction Agreement with Revolution Industrial, LLC, for the Hamilton Street Reclaimed Water Transmission Main (Queen Creek Road to Ryan Road), is also scheduled for this City Council meeting.

Evaluation:

Staff recommends approval of this agreement with Wilson Engineers, LLC, based on qualifications, relevant firm experience, team experience, project understanding, and project approach.

Financial Implications:

The cost of this project will be reimbursed by Intel Corporation (20%) using funding provided for in its development agreement with the city. The remaining 80% of the project cost will utilize State of Arizona Title 42 funding for public infrastructure, per the city's October 2021 Reclaimed Water Agreement with Intel Corporation.

Fiscal Impact

Account No.	Fund Name	Program Name	Dollar Amount	CIP Funded Y/N
615.3910.6814.6WW690	Wastewater Operating	Reclaimed Water Conveyance Phase II	$910,840	Y

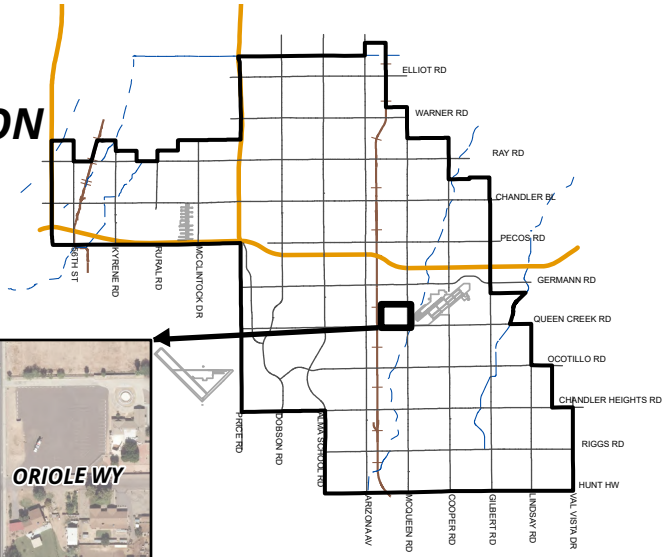
Attachments

Location Map

Agreement - Wilson Engineers, LLC

CHANDLER arizona

HAMILTON STREET RECLAIMED WATER TRANSMISSION MAIN: QUEEN CREEK ROAD TO RYAN ROAD CONSTRUCTION MANAGEMENT SERVICES PROJECT NO. WW2206.453



MEMO NO. CP25-052

PROJECT SITE

NTS

ChanGIS

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PROFESSIONAL SERVICES AGREEMENT
Construction Management Services

HAMILTON STREET RECLAIMED WATER TRANSMISSION MAIN: QUEEN CREEK ROAD TO RYAN ROAD

Project No. WW2206.453

Council Date: November 7, 2024

This Agreement ("Agreement") is made and entered into on the _____ day of_____, 2024 ("Effective Date"), by and between City of Chandler, an Arizona municipal corporation, ("City"), and **WILSON ENGINEERS, LLC,** an **Arizona Limited Liability Corporation**, ("Consultant") (City and Consultant may individually be referred to as "Party" and collectively referred to as "Parties").

RECITALS

A. City proposes to engage Consultant to provide **Construction Management Services** for **HAMILTON STREET RECLAIMED WATER TRANSMISSION MAIN: QUEEN CREEK ROAD TO RYAN ROAD** project as more fully described in **Exhibit "A"**, which is attached to and made a part of this Agreement by this reference.

B. Consultant is ready, willing, and able to provide the services described in **Exhibit "A"** for the compensation and fees set forth and as described in **Exhibit "B"**, which is attached to and made a part of this Agreement by this reference.

C. City desires to enter into an Agreement with Consultant to provide these services under the terms and conditions set forth in this Agreement.

AGREEMENT

NOW, THEREFORE, in consideration of the premises and the mutual promises contained in this Agreement, City and Consultant agree as follows:

SECTION I--CONSULTANT'S SERVICES

Consultant must perform the services described in **Exhibit "A"** to City's satisfaction within the terms and conditions of this Agreement and within the care and skill that a person who provides similar services in Chandler, Arizona exercises under similar conditions. All work or services furnished by Consultant under this Agreement must be performed in a skilled and

workmanlike manner. All fixtures, furnishings, and equipment furnished by Consultant as part of the work or services under this Agreement must be new, or the latest model, and of the most suitable grade and quality for the intended purpose of the work or service.

SECTION II--PERIOD OF SERVICE

Consultant must perform the services described in **Exhibit "A"** for the term of this Agreement. Unless amended in writing by the Parties, the Agreement term expires **300** calendar days after the Notice to Proceed (NTP) Date.

SECTION III--PAYMENT OF COMPENSATION AND FEES

Unless amended in writing by the Parties, Consultant's compensation and fees as more fully described in **Exhibit "B"** for performance of the services approved and accepted by City under this Agreement must not exceed **$910,840** for the full term of the Agreement. Consultant may not increase any compensation or fees under this Agreement without the City's prior written consent. Consultant must submit monthly requests for payment of services approved and accepted during the previous billing period and must include, as applicable, detailed invoices and receipts, a narrative description of the tasks accomplished during the billing period, a list of any deliverables submitted, and any subconsultant's or supplier's actual requests for payment plus similar narrative and listing of their work. Consultant must submit an Application and Certification for Payment Sheet with the monthly request for payment to: CapitalProjects.Payables@chandleraz.gov. Payment for those services negotiated as a lump sum will be made in accordance with the percentage of the work completed during the preceding billing period. Services negotiated as a not-to-exceed fee will be paid in accordance with the work effort expended on the service during the preceding month. All requests for payment must be submitted to City for review and approval. City will make payment for approved and accepted services within 30 calendar days of City's receipt of the request for payment. Consultant bears all responsibility and liability for any and all tax obligations that result from Consultant's performance under this Agreement.

SECTION IV--CITY'S OBLIGATIONS

As part of Consultant's services under this Agreement, City will provide furnished items, services, or obligations as detailed in **Exhibit "D"**.

SECTION V--GENERAL CONDITIONS

5.1 Notices. Unless otherwise provided herein, demands under this Agreement must be in writing and will be deemed to have been duly given and received either (a) on the date of service if personally served on the party to whom notice is to be given, or (b) on the third day after the date of the postmark of deposit by first class United States mail, registered or certified, postage prepaid and properly addressed as follows:

To City:	City of Chandler - Public Works & Utilities Department Attn: CIP City Engineer: Daniel Haskins, P.E. P.O. Box 4008, Mail Stop 407, Chandler, AZ 85244-4008 Phone: 480-782-3335 Email: Daniel.Haskins@chandleraz.gov	
With a copy to:	City of Chandler - Public Works & Utilities Department Attn: **Russ Slotnick,** Project Manager P.O. Box 4008, Mail Stop 407, Chandler, AZ 85244-4008 Phone: 480-782-3411 Email: Russ.Slotnick@chandleraz.gov	
To Consultant:	**LEGAL COMPANY NAME:**	Wilson Engineers
	Mailing Address:	1620 W Fountainhead Parkway, Suite 501 Tempe AZ 85282
	Physical Address:	Same as above
	Statutory Agent Name:	Corporation Service Company
	Statutory Agent Mailing Address:	8825 N 23rd Avenue, Suite 100 Tempe, AZ 85282
	Statutory Agent Physical Address:	Same as above
	CONSULTANT'S AUTHORIZED PROJECT REPRESENTATIVE	
	Name:	Sreeram Rengaraj, P.E.
	Title:	Principal Associate
	Phone:	480-893-8860
	Email:	srengaraj@wilson-engineers.com

5.2 Records/Audit. Records of Consultant's direct personnel payroll, reimbursable expenses pertaining to this Agreement and records of accounts between City and Consultant must be kept on the basis of generally accepted accounting principles and must be made available to City and its auditors for up to three years following City's final acceptance of the services under this Agreement (this requirement is increased to five years if construction of this project is federally funded). City, its authorized representative, or any federal agency, reserves the right to audit Consultant's records to verify the accuracy and appropriateness of all cost and pricing data, including data used to negotiate this Agreement and any amendments. City reserves the right to decrease the total amount of Agreement price or payments made under this Agreement or request reimbursement from Consultant following final Agreement payment on this Agreement if, upon audit of Consultant's records, the audit discloses Consultant has provided false, misleading, or inaccurate cost and pricing data. Consultant will include a similar provision in all of its Agreements with subconsultants who provide services under the Agreement to ensure that City, its authorized representative, or the appropriate federal agency, has access to the subconsultants' records to verify the

accuracy of all cost and pricing data. City reserves the right to decrease Agreement price or payments made on this Agreement or request reimbursement from Consultant following final payment on this Agreement if the above provision is not included in subconsultant agreements, and one or more subconsultants refuse to allow City to audit their records to verify the accuracy and appropriateness of all cost and pricing data. If, following an audit of this Agreement, the audit discloses Consultant has provided false, misleading, or inaccurate cost and pricing data, and the cost discrepancies exceed 1% of the total Agreement billings, Consultant will be liable for reimbursement of the reasonable, actual cost of the audit.

5.3 Alteration in Character of Work. Whenever an alteration in the character of work results in a substantial change in this Agreement, thereby materially increasing or decreasing the scope of services, cost of performance, or Project schedule, the work will be performed as directed by City. However, before any modified work is started, a written amendment must be approved and executed by City and Consultant. Such amendment must not be effective until approved by City. Additions to, modifications, or deletions from this Agreement as provided herein may be made, and the compensation to be paid to Consultant may accordingly be adjusted by mutual agreement of the Parties. It is distinctly understood and agreed that no claim for extra services or materials furnished by Consultant will be allowed by City except as provided herein, nor must Consultant do any work or furnish any materials not covered by this Agreement unless such work is first authorized in writing. Any such work or materials furnished by Consultant without prior written authorization will be at Consultant's own risk, cost, and expense, and Consultant hereby agrees that without written authorization Consultant will make no claim for compensation for such work or materials furnished.

5.4 Termination. City and Consultant hereby agree to the full performance of the covenants contained herein, except that City reserves the right, at its discretion and without cause, to terminate or abandon any service provided for in this Agreement, or abandon any portion of the Project for which services have been performed by Consultant. In the event City abandons or suspends the services, or any part of the services as provided in this Agreement, City will notify Consultant in writing and immediately after receiving such notice, Consultant must discontinue advancing the work specified under this Agreement. Upon such termination, abandonment, or suspension, Consultant must deliver to City all drawings, plans, specifications, special provisions, estimates and other work entirely or partially completed, together with all unused materials supplied by City. Consultant must appraise the work Consultant has completed and submit Consultant's appraisal to City for evaluation. City may inspect Consultant's work to appraise the work completed. Consultant will receive compensation in full for services performed to the date of such termination. The fee will be paid in accordance with Section Ill of this Agreement, and as mutually agreed upon by Consultant and City. If there is no mutual agreement on payment, the final determination will be made in accordance with the "Disputes" provision in this Agreement. However, in no event may the fee exceed the fee set forth in Section Ill of this Agreement nor as amended in accordance with Section "Alteration in Character of Work." City will make the final payment within 60 days after Consultant has delivered the last of the partially completed items and the Parties agree on the final fee. If City is found to have improperly terminated the Agreement for cause or default, the termination will be converted to a termination for convenience in accordance with the provisions of this Agreement.

5.5 Indemnification. To the extent permitted by law, the Consultant ("Indemnitor") must indemnify, save and hold harmless City and its officers, officials, agents and employees ("Indemnitee") from any and all claims, actions, liabilities, damages, losses or expenses (including court costs, attorneys' fees and costs of claim processing, investigation and litigation) ("Claims") caused or alleged to be caused, in whole or in part, by the wrongful, negligent or willful acts, or errors or omissions of Consultant or any of its owners, officers, directors, agents, employees, or subconsultants in connection with this Agreement. This indemnity includes any claim or amount arising out of or recovered under workers' compensation law or on account of the failure of Consultant to conform to any federal, state or local law, statute, ordinance, rule, regulation or court decree. Consultant must indemnify Indemnitee from and against any and all Claims, except those arising solely from Indemnitee's own negligent or willful acts or omissions. Consultant is responsible for primary loss investigation, defense and judgment costs where this indemnification applies. In consideration of the award of this Agreement, Consultant agrees to waive all rights of subrogation against Indemnitee for losses arising from or related to this Agreement. The obligations of Consultant under this provision survive the termination or expiration of this Agreement.

5.6 Insurance Requirements. Consultant must procure insurance under the terms and conditions and for the amounts of coverage set forth in **Exhibit "C"** against claims that may arise from or relate to performance of the work under this Agreement by Consultant and its agents, representatives, employees, and subconsultants. Consultant and any subconsultant must maintain this insurance until all of their obligations have been discharged, including any warranty periods under this Agreement. These insurance requirements are minimum requirements for this Agreement and in no way limit the indemnity covenants contained in this Agreement. City in no way warrants that the minimum limits stated in **Exhibit "C"** are sufficient to protect Consultant from liabilities that might arise out of the performance of the work under this Agreement by Consultant, Consultant's agents, representatives, employees, or subconsultants. Consultant is free to purchase such additional insurance as may be determined necessary.

5.7 Cooperation and Further Documentation. Consultant agrees to provide City such other duly executed documents as may be reasonably requested by City to implement the intent of this Agreement.

5.8 Successors and Assigns. City and Consultant each bind itself, its partners, successors, assigns, and legal representatives to the other party to this Agreement and to the partners, successors, assigns, and legal representatives of such other party in respect to all covenants of this Agreement. Neither City nor Consultant may assign, sublet, or transfer its interest in this Agreement without the written consent of the other party. In no event may any contractual relation be created between any third party and City.

5.9 Disputes. In any dispute arising out of an interpretation of this Agreement or the duties required not disposed of by agreement between Consultant and City, the final determination at the administrative level will be made by City Engineer.

5.10 Completeness and Accuracy of Consultant's Work. Consultant must be responsible for the completeness and accuracy of Consultant's services, data, and other work prepared or

compiled under Consultant's obligation under this Agreement and must correct, at Consultant's expense, all willful or negligent errors, omissions, or acts that may be discovered. Correction of errors disclosed and determined to exist during any construction of the project on architectural or engineering drawings and specifications must be accomplished by Consultant. The cost of the design necessary to correct those errors attributable to Consultant and any damage incurred by City as a result of additional construction costs caused by such engineering or architectural errors will be chargeable to Consultant and will not be considered a cost of the Work. The fact that City has accepted or approved Consultant's work will in no way relieve Consultant of any of Consultant's responsibilities.

5.11 Reporting. Written monthly reports, along with updated work schedules, will be made by Consultant in the format prescribed by City. These reports will be delivered to City per schedule. When requested by City, Consultant will attend Council meetings and provide finished documents including correspondence for Council action, supporting charts, graphs, drawings and colored slides of same.

5.12 Withholding Payment. City reserves the right to withhold funds from Consultant's payments up to the amount equal to the claims City may have against Consultant until such time that a settlement on those claims has been reached.

5.13 City's Right of Cancellation. The Parties acknowledge that this Agreement is subject to cancellation by City under the provisions of Section 38-511, Arizona Revised Statutes (A.R.S.).

5.14 Independent Consultant. For this Agreement Consultant constitutes an independent contractor. Any provisions in this Agreement that may appear to give City the right to direct Consultant as to the details of accomplishing the work or to exercise a measure of control over the work means that Consultant must follow the wishes of City as to the results of the work only. These results must comply with all applicable laws and ordinances.

5.15 Project Staffing. Prior to the start of any work under this Agreement, Consultant must submit to City detailed resumes of key personnel that will be involved in performing services prescribed in the Agreement. City hereby acknowledges its acceptance of such personnel to perform services under this Agreement. At any time hereafter that Consultant desires to change key personnel while performing under the Agreement, Consultant must submit the qualifications of the new personnel to City for prior approval. Key personnel include, but are not limited to, principals-in-charge, project manager, and project Consultant. Consultant will maintain an adequate and competent staff of qualified persons, as may be determined by City, throughout the performance of this Agreement to ensure acceptable and timely completion of the Scope of Services. If City objects, with reasonable cause, to any of Consultant's staff, Consultant must take prompt corrective action acceptable to City and, if required, remove such personnel from the Project and replace with new personnel agreed to by City.

5.16 Consultants or Subconsultants. Prior to beginning the work, Consultant must furnish City for approval the names of consultants or subconsultants to be used under this Agreement. Any subsequent changes are subject to City's written prior approval.

5.17 Force Majeure. If either party is delayed or prevented from the performance of any act required under this Agreement by reason of acts of God or other cause beyond the control and without fault of the Party (financial inability excepted), performance of that act may be excused, but only for the period of the delay, if the Party provides written notice to the other Party within ten days of such act. The time for performance of the act may be extended for a period equivalent to the period of delay from the date written notice is received by the other Party.

5.18 Compliance with Federal Laws. Consultant understands and acknowledges the applicability of the Americans with Disabilities Act, the Immigration Reform and Control Act of 1986 and the Drug Free Workplace Act of 1989 to it. Consultant agrees to comply with these laws in performing this Agreement and to permit City to verify such compliance.

5.19 No Israel Boycott. By entering into this Agreement, Consultant certifies that Consultant is not currently engaged in, and agrees for the duration of the Agreement, not to engage in a boycott of Israel as defined by state statute.

5.20 Legal Worker Requirements. A.R.S. § 41-4401 prohibits City from awarding an Agreement to any consultant who fails, or whose subconsultants fail, to comply with A.R.S. § 23-214(A). Therefore, Consultant agrees Consultant and each subconsultant it uses warrants their compliance with all federal immigration laws and regulations that relate to their employees and their compliance with § 23-214, subsection A. A breach of this warranty will be deemed a material breach of the Agreement and may be subject to penalties up to and including termination of the Agreement. City retains the legal right to inspect the papers of any Consultant's or subconsultant's employee who provides services under this Agreement to ensure that Consultant and subconsultants comply with the warranty under this provision.

5.21 Lawful Presence Requirement. A.R.S. §§ 1-501 and 1-502 prohibit City from awarding an Agreement to any natural person who cannot establish that such person is lawfully present in the United States. To establish lawful presence, a person must produce qualifying identification and sign a City-provided affidavit affirming that the identification provided is genuine. This requirement will be imposed at the time of Agreement award. This requirement does not apply to business organizations such as corporations, partnerships, or limited liability companies.

5.22 Covenant Against Contingent Fees. Consultant warrants that no person has been employed or retained to solicit or secure this Agreement upon an agreement or understanding for a commission, percentage, brokerage, or contingent fee, and that no member of the Chandler City Council, or any City employee has any interest, financially, or otherwise, in Consultant's firm. For breach or violation of this warrant, City may annul this Agreement without liability or, at its discretion, to deduct from the Agreement price or consideration, the full amount of such commission, percentage, brokerage, or contingent fee.

5.23 Non-Waiver Provision. The failure of either Party to enforce any of the provisions of this Agreement or to require performance of the other Party of any of the provisions hereof must not be construed to be a waiver of such provisions, nor must it affect the validity of this Agreement or any part thereof, or the right of either Party to thereafter enforce each and every provision.

5.24 Disclosure of Information Adverse to City's Interests. To evaluate and avoid potential conflicts of interest, Consultant must provide written notice to City, as set forth in this Section, of any work or services performed by Consultant for third parties that may involve or be associated with any real property or personal property owned or leased by City. Such notice must be given 7 business days prior to commencement of the services by Consultant for a third party, or 7 business days prior to an adverse action as defined below. Written notice and disclosure must be sent in accordance with Section 6.7 above. An adverse action under this Agreement includes, but is not limited to: (a) using data as defined in the Agreement acquired in connection with this Agreement to assist a third party in pursuing administrative or judicial action against City; or (b) testifying or providing evidence on behalf of any person in connection with an administrative or judicial action against City; or (c) using data to produce income for Consultant or its employees independently of performing the services under this Agreement, without the prior written consent of City. Consultant represents that except for those persons, entities, and projects identified to City, the services performed by Consultant under this Agreement are not expected to create an interest with any person, entity, or third party project that is or may be adverse to City's interests. Consultant's failure to provide a written notice and disclosure of the information as set forth in this Section constitute a material breach of this Agreement.

5.25 Data Confidentiality and Data Security. As used in the Agreement, "data" means all information, whether written or verbal, including plans, photographs, studies, investigations, audits, analyses, samples, reports, calculations, internal memos, meeting minutes, data field notes, work product, proposals, correspondence and any other similar documents or information prepared by, obtained by, or transmitted to Consultant or its subconsultants in the performance of this Agreement. The Parties agree that all data, regardless of form, including originals, images, and reproductions, prepared by, obtained by, or transmitted to Consultant or its subconsultants in connection with Consultant's or its subconsultant's performance of this Agreement is confidential and proprietary information belonging to City. Except as specifically provided in this Agreement, Consultant or its subconsultants must not divulge data to any third party without City's prior written consent. Consultant or its subconsultants must not use the data for any purposes except to perform the services required under this Agreement. These prohibitions do not apply to the following data provided to Consultant or its subconsultants have first given the required notice to City: (a) data which was known to Consultant or its subconsultants prior to its performance under this Consultant or its subconsultants by a third party, who to the best of Consultant's or its subconsultants' knowledge and belief, had the legal right to make such disclosure and Consultant or its subconsultants are not otherwise required to hold such data in confidence; or (c) data which is required to be disclosed by virtue of law, regulation, or court order, to which Consultant or its subconsultants are subject. In the event Consultant or its subconsultants are required or requested to disclose data to a third party, or any other information to which Consultant or its subconsultants became privy as a result of any other Agreement with City, Consultant must first notify City as set forth in this Section of the request or demand for the data. Consultant or its subconsultants must give City sufficient facts so that City can be given an opportunity to first give its consent or take such action that City may deem appropriate to protect such data or other information from disclosure. All data must continue to be subject to the confidentiality agreements of this Agreement. Consultant or its subconsultants assume all liability to maintain the confidentiality of the data in its possession

and agrees to compensate City if any of the provisions of this Section are violated by Consultant, its employees, agents or subconsultants. Solely for the purposes of seeking injunctive relief, it is agreed that a breach of this Section must be deemed to cause irreparable harm that justifies injunctive relief in court. Consultant agrees that the requirements of this Section must be incorporated into all subagreements entered into by Consultant. A violation of this Section may result in immediate termination of this Agreement without notice.

5.26 Personal Identifying Information-Data Security. Personal identifying information, financial account information, or restricted City information, whether electronic format or hard copy, must be secured and protected at all times by Consultant or its subconsultants. At a minimum, Consultant or its subconsultants must encrypt or password-protect electronic files. This includes data saved to laptop computers, computerized devices, or removable storage devices. When personal identifying information, financial account information, or restricted City information, regardless of its format, is no longer necessary, the information must be redacted or destroyed through appropriate and secure methods that ensure the information cannot be viewed, accessed, or reconstructed. In the event that data collected or obtained by Consultant or its subconsultants in connection with this Agreement is believed to have been compromised, Consultant or its subconsultants must immediately notify City contact. Consultant agrees to reimburse City for any costs incurred by City to investigate potential breaches of this data and, where applicable, the cost of notifying individuals who may be impacted by the breach. Consultant agrees that the requirements of this Section must be incorporated into all subcontracts entered into by Consultant. It is further agreed that a violation of this Section must be deemed to cause irreparable harm that justifies injunctive relief in court. A violation of this Section may result in immediate termination of this Agreement without notice. The obligations of Consultant or its subconsultants under this Section must survive the termination of this Agreement.

5.27 Jurisdiction and Venue. This Agreement is made under and must be construed in accordance with and governed by the laws of the State of Arizona without regard to the conflicts or choice of law provisions thereof. Any action to enforce any provision of this Agreement or to obtain any remedy with respect hereto must be brought in the courts located in Maricopa County, Arizona, and for this purpose, each Party hereby expressly and irrevocably consents to the jurisdiction and venue of such court.

5.28 Survival. All warranties, representations, and indemnifications by Consultant must survive the completion or termination of this Agreement.

5.29 Modification. Except as expressly provided herein to the contrary, no supplement, modification, or amendment of any term of this Agreement will be deemed binding or effective unless in writing and signed by the Parties.

5.30 Severability. If any provision of this Agreement or the application to any person or circumstance may be invalid, illegal or unenforceable to any extent, the remainder of this Agreement and the application will not be affected and will be enforceable to the fullest extent permitted by law.

5.31 Integration. This Agreement contains the full agreement of the Parties. Any prior or contemporaneous written or oral agreement between the Parties regarding the subject matter is merged and superseded.

5.32 Time is of the Essence. Time of each of the terms, covenants, and conditions of this Agreement is hereby expressly made of the essence.

5.33 Date of Performance. If the date of performance of any obligation or the last day of any time period provided for should fall on a Saturday, Sunday, or holiday for City, the obligation will be due and owing, and the time period will expire, on the first day after which is not a Saturday, Sunday or legal City holiday. Except as may otherwise be set forth in this Agreement, any performance provided for herein will be timely made if completed no later than 5:00 p.m. (Chandler time) on the day of performance.

5.34 Third Party Beneficiary. Nothing under this Agreement will be construed to give any rights or benefits in the Agreement to anyone other than City and Consultant, and all duties and responsibilities undertaken pursuant to this Agreement will be for the sole and exclusive benefit of City and Consultant and not for the benefit of any other party.

5.35 Conflict in Language. All work performed must conform to all applicable City of Chandler codes, ordinances, and requirements as outlined in this Agreement. If there is a conflict in interpretation between provisions in this Agreement and those in **Exhibit "A"**, the provisions in this Agreement prevail.

5.36 Document/Information Release. Documents and materials released to Consultant, which are identified by City as sensitive and confidential, are City's property. The document/material must be issued by and returned to City upon completion of the services under this Agreement. Consultant secondary distribution, disclosure, copying, or duplication in any manner is prohibited without City's prior written approval. The document/material must be kept secure at all times. This directive applies to all City documents, whether in photographic, printed, or electronic data format.

5.37 Exhibits. The following exhibits are made a part of this Agreement and are incorporated by reference:

Exhibit A - Scope of Services / Schedule
Exhibit B - Compensation and Fees
Exhibit C - Insurance Requirements
Exhibit D - Special Conditions
Exhibit E – Subconsultant Documents with Consultant (if applicable)
Exhibit F - Federal Requirements (if applicable)

5.38 Special Conditions. As part of the services Consultant provides under this Agreement, Consultant agrees to comply with and fully perform the special terms and conditions set forth in **Exhibit "D"**, which is attached to and made a part of this Agreement.

5.39 Non-Discrimination and Anti-Harassment Laws. Consultant must comply with all applicable City, state, and federal non-discrimination and anti-harassment laws, rules, and regulations.

5.40 Licenses and Permits. Beginning with the Effective Date and for the full term of this Agreement, Consultant must maintain all applicable City, state, and federal licenses and permits required to fully perform Consultant's services under this Agreement.

5.41 Warranties. Consultant must furnish a one-year warranty on all work and services performed under this Agreement. Consultant must furnish, or cause to be furnished, a two-year warranty on all fixtures, furnishings, and equipment furnished by Consultant, subconsultants or suppliers under this Agreement. Any defects in design, workmanship, or materials that do not comply with this Agreement must be corrected by Consultant (including, but not limited to, all parts and labor) at Consultant's sole cost and expense. All written warranties and redlines for as-built conditions must be delivered to City on or before City's final acceptance of Consultant's services under this Agreement.

5.42 Cooperative Purchasing Agreement (S.A.V.E. – Strategic Alliance for Volume Expenditures). In addition to City of Chandler and with the approval of Consultant, this Agreement may be extended for use by other municipalities, school districts, and government agencies of the State. Any such usage by other entities must be in accordance with the ordinance, charter, or procurement rules and regulations of the respective political entity.

5.43 Budget Approval into Next Fiscal Year. This Agreement will commence on the Effective Date and continue in full force and effect until it is terminated or expires in accordance with the provisions of this Agreement. The Parties recognize that the continuation of this Agreement after the close of the City's fiscal year, which ends on June 30 of each year, is subject to the City Council's approval of a budget that includes an appropriation for this item as an expenditure. The City does not represent that this budget item will be actually adopted. This determination is solely made by the City Council.

5.44 Forced Labor of Ethnic Uyghurs Prohibited. By entering into this Agreement, Contractor certifies and agrees Contractor does not currently use and will not use for the term of this Agreement: (i) the forced labor of ethnic Uyghurs in the People's Republic of China; or (ii) any goods or services produced by the forced labor of ethnic Uyghurs in the People's Republic of China; or (iii) any contractors, subcontractors or suppliers that use the forced labor or any goods or services produced by the forced labor of ethnic Uyghurs in the People's Republic of China.

5.45 License to City for Reasonable Use. With this Agreement, Consultant and its subconsultants hereby grant a license to City, its agents, employees, and representatives for an indefinite period of time to reasonably use, make copies, and distribute as appropriate the Documents, works or deliverables developed or created as a result of the Project and this Agreement. This license also includes the making of derivative works.

This Agreement will be in full force and effect only when it has been approved and executed by the duly authorized City officials.

IN WITNESS WHEREOF, the Parties have executed this Agreement as of the Effective Date.

"CITY" CITY OF CHANDLER

MAYOR

RECOMMENDED BY:

Daniel Haskins, P.E.
CIP City Engineer

APPROVED AS TO FORM:

City Attorney

ATTEST:

City Clerk Seal

"CONSULTANT"
WILSON ENGINEERS, LLC

Signature Date 10/10/2024

Stephen Todd
Print Name

Principal
Title

steve.todd@wilson-engineers.com
Signer Email Address

EXHIBIT "A"
SCOPE OF SERVICES/SCHEDULE

EXHIBIT "A"

CONSTRUCTION MANAGEMENT
SCOPE OF SERVICES
Hamilton Street Reclaimed Water Transmission Main: Queen Creek Road to Ryan Road

PROJECT TASKS

1. PRE-CONSTRUCTION ASSISTANCE

A. Task 1.1 Preconstruction Assistance

i. Consultant must attend the pre-construction meeting.

2. CONSTRUCTION MANAGEMENT

A. Task 2.1 Weekly Construction Meetings

i. Consultant must conduct weekly construction meetings. Each meeting includes agenda and minutes; Request for Information (RFI); Shop Drawing; Request for Information (RFI); Field Directive (FD); Material Certification; and Allowance Logs. Consultant assumes forty three (43) weekly meetings will be held.

B. Task 2.2 CPM Schedule

i. Consultant must review and evaluate Contractor's initial CPM schedule and provide recommendations for acceptance.

ii. Review Progress Schedule: Consultant will review and critique the Contractor's progress schedule in accordance with the construction documents, Consultant will examine work sequence, durations, interim milestones, and other appropriate scheduling features in accordance with the requirements of the construction documents. Consultant will prepare a summary of the baseline schedule review comments and will meet and discuss the schedule comments with the Contractor and the City. Consultant will provide recommendations for acceptance.

iii. Review Progress schedule updates: Consultant will review the Contractor's progress schedule updates to the construction schedule in accordance with the construction documents. Consultant will perform a review of progress accomplished during the period and compare to planned schedule and discuss significant discrepancies with the Contractor. Consultant and Contractor will establish, based on the data, the percent of Project completion. Consultant will meet with Contractor on monthly basis to review and update the schedule data. Based upon the schedule update, Consultant will recommend processing progress payments. Consultant will identify CPM tasks behind schedule that may affect critical path items, project substantial and final completion dates and initiate correspondence to City regarding those tasks. Consultant assumes fifteen (15) reviews of updated CPM schedule.

C. Task 2.3 Requests for Information (RFI's)

i. Consultant must review, evaluate, and respond to Contractor Requests for Information (RFI's); and prepare and maintain a submittal log of all RFI's. Consultant assumes a maximum of sixty (60) RFI responses.

D. Task 2.4 Shop Drawing Submittals

i. Consultant must review, evaluate, and respond to Contractor shop drawing submittals; and prepare and maintain a submittal log of all shop drawing submittals. Consultant assumes a maximum of forty (40) reviews.

E. Task 2.5 Requests for Proposal (RFP)

i. Consultant must prepare Requests for Proposal (RFP) documents detailing requested additional work tasks; review and evaluate Contractor RFP responses (cost derivatons) with approval recommendations; and prepare and maintain a submittal log list of all RFP's. Consultant assumes fifteen (15) RFPs.

F. Task 2.6 Field Directives (FD's)

i. Consultant must prepare Field Directive (FD) documents detailing requested additional work tasks; review and evaluate Contractor FD responses with approval recommendations; and prepare and maintain a submittal log list of all FD's. Consultant assumes fifteen (15) FD's.

G. Task 2.7 Contractor Payment Applications

i. Consultant must review and evaluate Contractor monthly payment applications and make recommendation for payment; maintain a weekly record of constructed pay quantities and compile monthly totals; and coordinate payment application with the City quantity report and the inspectors' daily logs. Consultant assumes a maximum of ten (10) payment applications, with two (2) reviews each.

H. Task 2.8 Public Outreach

i. Not included.

3. CONSTRUCTION INSPECTION

A. Task 3.1 Inspection Services

i. Consultant must provide weekly construction inspection to verify materials and installations conform to construction documents; prepare daily inspection reports documenting Contractor construction activities and progress during field inspection visits; and perform intermittent erosion control inspections. Consultant assumes one (1) inspector full time forty (40) hours per week for nine (9) months.

B. Task 3.2 Landscape / Irrigation Inspection Services

i. Consultant must provide Irrigation system layout and installation observations; attend and observe irrigation system pressure tests; and attend a nursery visit to tag and inspect plant material. Consultant assumes 20 hours of inspection each for two weeks.

C. Task 3.3 Project Closeout

i. Consultant must compile non-conformance list prior to Substantial Completion; schedule and conduct Substantial Completion inspection; prepare Substantial Completion punch list generated from Substantial Completion inspection; track items on punch list and note completed items; and complete and distribute Substantial Completion certificates.

ii. Consultant must schedule and conduct Final Completion inspection; and complete and distribute Final Completion certificates.

iii. Consultant must provide all documents in an electronic version that matches the City's filing system, so it can be imported into City's files.

4. UTILITY COORDINATION

A. Task 4.1 Utility Coordination

i. Consultant must complete Acceptance of Construction (AOC) applications and submit to MCESD for reclaimed water transmission main and appurtenances.

5. MATERIALS TESTING

A. Task 5.1 Quality Control (QC) Test Program

i. Consultant must review and verify Contractor's Quality Control material test type and frequencies are consistent with City and MAG; review and evaluate Contractor's QC test schedule and provide recommendations on acceptance; and review and evaluate all Contractor sampling, test, and inspection results for conformance with construction documents.

B. Task 5.2 Quality Assurance (QA) Test Program

i. Consultant must prepare and maintain a materials Quality Assurance plan per City and MAG.

ii. Consultant must coordinate with Contractor's testing representative to obtain required QA tests and sample; complete sampling and compaction testing of subgrade (including lime-stabilized subgrade base), aggregate base and asphalt concrete materials in new asphalt concrete pavement areas; complete sampling and compaction testing of subgrade, aggregate base (where required) and concrete for new curbs, gutters, sidewalks and concrete pavement and structures; and complete sampling and compaction testing of backfill for new irrigation, sewer, water, storm drain pipe, and dry utilities.

6. RECORD DRAWINGS

A. Task 6.1 Record Drawings

i. Review and monitor Contractor's weekly updates on red-line drawing set.

ii. Transfer red-line comments to City's construction plans to create record drawings.

iii. Provide resident engineer stamp/certification on record drawings cover sheet. Ensure all required signatures on the cover sheet.

iv. Provide and deliver record drawings on mylar, paper and digital pdf format to the City as required for as-built submittal process at City permit counter.

7. ALLOWANCES

A. Task 7.1 MOPO Coordination

i. Consultant shall assist the Contractor the MOPOs and MOPO coordination.

ii. Consultant shall attend weekly or periodic MOPO meetings during the construction phase of the project.

iii. Consultant shall assist the Contractor with Mock Shutdown(s) as necessary if needed to verify current conditions.

iv. Conduct pre-MOPO walkthrough with the Contractor and all relevant parties (City, subcontractors etc) prior to every MOPO to verify all equipment and back up contingencies are in place.

v. Communicate and monitor throughout each MOPO duration and conduct any special inspections necessary during each MOPO. The Consultant shall verify workmanship of MOPOs and troubleshoot any issues that come up.

ASSUMPTION, CLARIFICATIONS, AND EXCLUSIONS

1. Application fees for City reviews and permits will be paid by CITY.

2. The Owner's Allowance will only be utilized with prior written approval from the City representative.

3. The Direct Expense Allowance will be used for normal reimbursable expenses on the project. Items must be billed at cost and backup must be provided with pay applications.

EXHIBIT "B"
COMPENSATION AND FEES

EXHIBIT "B"
CONSTRUCTION MANAGEMENT
SCOPE OF SERVICES
FEE SCHEDULE

Task	Description	Cost
1	**PRE-CONSTRUCTION ASSISTANCE**	
1.1	Pre-Construction Assistance	$ 1,410.00
	SUBTOTAL TASK 1:	**$ 1,410.00**
2	**CONSTRUCTION MANAGEMENT**	
2.1	Weekly Construction Meetings	$ 100,660.00
2.2	CPM Schedule	$ 28,680.00
2.3	Perform Site Visits	$ 17,560.00
2.4	Requests for Information (RFI)	$ 35,060.00
2.5	Shop Drawing Submittals	$ 87,260.00
2.6	Requests for Proposal (RFP)	$ 18,040.00
2.7	Field Directive (FD)	$ 26,020.00
2.8	Contractor Payment Applications	$ 16,040.00
2.9	Public Outreach	$ -
	SUBTOTAL TASK 2:	**$ 329,320.00**
3	**CONSTRUCTION INSPECTION**	
3.1	Inspection Services	$ 333,700.00
3.2	Landscape/Irrigation Inspection Services (IF APPLICABLE)	$ 5,800.00
3.3	Project Closeout	$ 36,540.00
	SUBTOTAL TASK 3:	**$ 376,040.00**
4	**UTILITY COORDINATION**	
4.1	Utility Coordination	$ 14,390.00
	SUBTOTAL TASK 4:	**$ 14,390.00**
5	**MATERIALS TESTING**	
5.1	QC Test Program	$ 9,120.00
5.2	QA Test Program	$ 9,120.00
	SUBTOTAL TASK 5:	**$ 18,240.00**
6	**RECORD DRAWINGS**	
6.1	Record Drawings	$ 23,280.00
	SUBTOTAL TASK 6:	**$ 23,280.00**
ALLOWANCES		
7.1	MOPO Coordination	$ 41,160.00
	SUBTOTAL ALLOWANCES:	**$ 41,160.00**
SUBCONSULTANTS		
RAMM (Quality Assurance Testing)		$ 25,000.00
	SUBTOTAL SUBCONSULTANTS:	**$ 25,000.00**
OWNER'S ALLOWANCE		
Direct Expense Allowance		$ 2,000.00
Owner's Allowance		$ 80,000.00
	OWNER'S ALLOWANCE	**$ 82,000.00**
	PROJECT TOTAL:	**$ 910,840.00**

WILSON ENGINEERS

EXHIBIT "B-2"
Hours and Rates

	Principal	Sr. PM	Sr. PM (E/I&C, Str., Process)	Const. PM	Sr. Engr./RPR	Project Engineer / Prof	Lead Const. Inspector	Senior CADD Tech	Senior Admin	< PROJECT ROLE	
	Uday Gandhe	*Sreeram Rengaraj, Craig Ramsey*	*Damien Tonnelle Scott Lorentzen*	*Dave Corrie*	*Katie Gaul, Kileigh Phillips, Vineet Awasthi, Sydney Adamonis, Daniel Hickey*	*Muthu Kathiresan, Sai Namasivayam, Yago Freire, Channing Allen*	*Kristen Reidhead, Martin Villanueva, Paul Cooper*	*Kam Casey, Amber Andrade*	*Brandy Nixon*	*< NAME OF PERSON*	
	$ 265.00	$ 245.00	$ 225.00	$ 225.00	$ 190.00	$ 145.00	$ 145.00	$ 125.00	$ 105.00	< HOURLY RATES	
TASK DESCRIPTION										**TOTAL HOURS PER TASK**	
1. Preconstruction Assistance	**0**	**0**	**0**	**2**	**2**	**2**	**2**	**0**	**0**		**8**
Preconstruction Assistance	0	0	0	2	2	2	2	0	0	*8*	
2.0 CONSTRUCTION MANAGEMENT	**20**	**72**	**132**	**320**	**380**	**644**	**228**	**8**	**48**		**1852**
Weekly Construction Meetings	4	24	32	160	100	140	60	0	24	*544*	
CPM Schedule	4	8	8	60	24	0	40	0	0	*144*	
Perform Site Visits	0	4	8	0	32	60	0	0	0	*104*	
Requests for Information	4	8	24	12	40	80	20	8	8	*204*	
Shop Drawing Submittals	4	12	36	0	160	300	0	0	12	*524*	
Request for Proposals	4	8	12	40	0	0	20	0	4	*88*	
Field Directives	0	4	8	16	24	56	48	0	0	*156*	
Contractor Payment Applications	0	4	4	32	0	8	40	0	0	*88*	
Public Outreach	0	0	0	0	0	0	0	0	0	*0*	
3. Construction Inspection	**0**	**36**	**56**	**432**	**104**	**380**	**1240**	**12**	**12**		**2272**
Inspection Services	0	20	40	400	80	320	1160	0	0	*2020*	
Landscaping and Inspection Services	0	0	0	0	0	0	40	0	0	*40*	
Project Closeout	0	16	16	32	24	60	40	12	12	*212*	
4. Utility Coordination	**0**	**2**	**8**	**0**	**24**	**52**	**0**	**0**	**0**		**86**
Utility Coordination	0	2	8	0	24	52	0	0	0	*86*	
5. Materials Testing	**0**	**4**	**4**	**16**	**0**	**24**	**64**	**0**	**0**		**112**
QC Test Program	0	2	2	8	0	12	32	0	0	*56*	
QA Test Program	0	2	2	8	0	12	32	0	0	*56*	
6. Record Drawings	**0**	**4**	**8**	**4**	**24**	**40**	**12**	**60**	**0**		**152**
Record Drawings	0	4	8	4	24	40	12	60	0	*152*	
ALLOWANCES	**0**	**8**	**10**	**18**	**48**	**108**	**56**	**0**	**0**		**248**
MOPO Coordination	0	8	10	18	48	108	56	0	0	*248*	
TOTAL HOURS:	20	126	218	792	582	1250	1602	80	60		**4730**

EXHIBIT "C"
INSURANCE REQUIREMENTS

1. General.

1.1 At the same time as execution of this Agreement, Consultant must furnish City a certificate of insurance on a standard insurance industry ACORD form. The ACORD form must be issued by an insurance company authorized to transact business in the State of Arizona possessing a current A.M. Best, Inc. rating of A-7, or better and legally authorized to do business in the State of Arizona with policies and forms satisfactory to City. Provided, however, the A.M. Best rating requirement will not be deemed to apply to required Workers' Compensation coverage.

1.2 Consultant and any of its subconsultants must procure and maintain, until all of their obligations have been discharged, including any warranty periods under this Agreement are satisfied, the insurances set forth below.

1.3 The insurance requirements set forth below are minimum requirements for this Agreement and in no way limit the indemnity covenants contained in this Agreement.

1.4 City in no way warrants that the minimum insurance limits contained in this Agreement are sufficient to protect Consultant from liabilities that might arise out of the performance of the Agreement services under this Agreement by Consultant, its agents, representatives, employees, subconsultants, and Consultant is free to purchase any additional insurance as may be determined necessary.

1.5 Failure to demand evidence of full compliance with the insurance requirements in this Agreement or failure to identify any insurance deficiency will not relieve Consultant from, nor will it be considered a waiver of its obligation to maintain the required insurance at all times during the performance of this Agreement.

1.6 Use of subconsultants: If any work is subcontracted in any way, Consultant must execute a written Agreement with subconsultant containing the same Indemnification Clause and Insurance Requirements as City requires of Consultant in this Agreement. Consultant is responsible for executing the Agreement with the subconsultant and obtaining Certificates of Insurance and verifying the insurance requirements.

2. Minimum Scope and Limits of Insurance. Consultant must provide coverage with limits of liability not less than those stated below.

2.1 *Professional Liability.* If the Agreement is the subject of any professional services or work performed by Consultant, or if Consultant engages in any professional services or work adjunct or residual to performing the work under this Agreement, Consultant must maintain Professional Liability insurance covering errors and omissions arising out of the work or services performed by Consultant, or anyone employed by Consultant, or anyone whose acts, mistakes, errors and omissions Consultant is legally liable, with a liability limit of $1,000,000 each claim and $2,000,000 all claims. In the event the Professional Liability insurance policy is written on a "claims made" basis, coverage must extend for 3 years past

completion and acceptance of the work or services, and Consultant, or its selected Design Professional will submit Certificates of Insurance as evidence the required coverage is in effect. The Design Professional must annually submit Certificates of Insurance citing that the applicable coverage is in force and contains the required provisions for a 3 year period.

2.2 *Commercial General Liability-Occurrence Form.* Consultant must maintain "occurrence" form Commercial General Liability insurance with a limit of not less than $2,000,000 for each occurrence, $4,000,000 aggregate. Said insurance must also include coverage for products and completed operations, independent contractors, personal injury and advertising injury. If any Excess insurance is utilized to fulfill the requirements of this paragraph, the Excess insurance must be "follow form" equal or broader in coverage scope than underlying insurance.

2.3 *Automobile Liability-Any Auto or Owned, Hired and Non-Owned Vehicles*
Vehicle Liability: Consultant must maintain Business/Automobile Liability insurance with a limit of $1,000,000 each accident on Consultant owned, hired, and non-owned vehicles assigned to or used in the performance of Consultant's work or services under this Agreement. If any Excess or Umbrella insurance is utilized to fulfill the requirements of this paragraph, the Excess or Umbrella insurance must be "follow form" equal or broader in coverage scope than underlying insurance.

2.4 *Workers Compensation and Employers Liability Insurance:* Consultant must maintain Workers Compensation insurance to cover obligations imposed by federal and state statutes having jurisdiction of Consultant employees engaged in the performance of work or services under this Agreement and must also maintain Employers' Liability insurance of not less than $1,000,000 for each accident and $1,000,000 disease for each employee.

3. <u>Additional Policy Provisions Required</u>.

3.1 *Self-Insured Retentions or Deductibles*. Any self-insured retentions and deductibles must be declared and approved by City. If not approved, City may require that the insurer reduce or eliminate any deductible or self-insured retentions with respect to City, its officers, officials, agents, employees, and volunteers.

3.1.1. Consultant's insurance must contain broad form contractual liability coverage.

3.1.2. Consultant's insurance coverage must be primary insurance with respect to City, its officers, officials, agents, and employees. Any insurance or self-insurance maintained by City, its officers, officials, agents, and employees will be in excess of the coverage provided by Consultant and must not contribute to it.

3.1.3. Consultant's insurance must apply separately to each insured against whom claim is made or suit is brought, except with respect to the limits of the insurer's liability.

3.1.4. Coverage provided by Consultant must not be limited to the liability assumed under the indemnification provisions of this Agreement.

3.1.5. The policies must contain a severability of interest clause and waiver of subrogation against City, its officers, officials, agents, and employees, for losses arising from Work performed by Consultant for City. (Does not apply to Professional Liability coverage.)

3.1.6. Consultant, its successors and or assigns, are required to maintain Commercial General Liability insurance as specified in this Agreement for a minimum period of 3 years following completion and acceptance of the Work. Consultant must submit a Certificate of Insurance evidencing Commercial General Liability insurance during this 3-year period containing all the Agreement insurance requirements, including naming City of Chandler, its agents, representatives, officers, directors, officials and employees as Additional Insured as required.

3.1.7. If a Certificate of Insurance is submitted as verification of coverage, City will reasonably rely upon the Certificate of Insurance as evidence of coverage, but this acceptance and reliance will not waive or alter in any way the insurance requirements or obligations of this Agreement.

3.2. *Insurance Cancellation During Term of Agreement.*

3.2.1. If any of the required policies expire during the life of this Agreement, Consultant must forward renewal or replacement Certificates to City within 10 days after the renewal date containing all the required insurance provisions.

3.2.2. Each insurance policy required by the insurance provisions of this Agreement must provide the required coverage and must not be suspended, voided or canceled except after thirty (30) days prior written notice has been given to City, except when cancellation is for non-payment of premium, then ten (10) days prior notice may be given. Such notice must be sent directly to Chandler Law-Risk Management Department, Post Office Box 4008, Mailstop 628, Chandler, Arizona 85225. If any insurance company refuses to provide the required notice, Consultant or its insurance broker must notify City of any cancellation, suspension, non-renewal of any insurance within seven (7) days of receipt of insurers' notification to that effect.

3.3 City as Additional Insured. The policies are to contain, or be endorsed to contain, the following provisions:

3.3.1. The Commercial General Liability and Automobile Liability policies are to contain, or be endorsed to contain, the following provisions: City, its officers, officials, agents, and employees are additional insureds with respect to liability arising out of activities performed by, or on behalf of, Consultant; Products and Completed operations of Consultant; and automobiles owned, leased, hired, or borrowed by Consultant.

3.3.2. City, its officers, officials, agents, and employees must be additional insureds to the full limits of liability purchased by Consultant even if those limits of liability are in excess of those required by this Agreement.

EXHIBIT "D"
SPECIAL CONDITIONS

Work within City's Right-of-Way. All work performed within City's Right-of-Way by Consultant and Consultant's subconsultants must comply with City of Chandler requirements.

EXHIBIT "E"
SUBCONSULTANT DOCUMENTS WITH CONSULTANT

Any subconsultant assumptions, clarifications, exclusions, terms & conditions, signature blocks, etc. included are strictly between the Consultant and their subconsultants, and do not apply to the Agreement between the Consultant and the City.

N/A

EXHIBIT "F"
FEDERAL REQUIREMENTS

N/A

CHANDLER arizona
Community of Innovation

City Council Memorandum Public Works & Utilities Memo No. CP25-051

Date: November 04, 2024
To: Mayor and Council
Thru: Joshua H. Wright, City Manager
Andy Bass, Deputy City Manager
John Knudson, Public Works and Utilities Director
Daniel Haskins, Capital Projects Division Manager
From: Sandra Story, Engineering Project Manager
Subject: Construction Agreement No. WW2206.403, with Revolution Industrial, LLC, for the Hamilton Street Reclaimed Water Transmission Main (Queen Creek Road to Ryan Road)

Proposed Motion:

Move City Council award Construction Agreement No. WW2206.403, to Revolution Industrial, LLC, for the Hamilton Street Reclaimed Water Transmission Main (Queen Creek Road to Ryan Road), in an amount not to exceed $5,900,084.73.

Background/Discussion:

In October 2021, the city executed a reclaimed water agreement with Intel Corporation for the city to provide additional reclaimed water supply to Intel. In order to meet the agreement, the city is constructing improvements at the Airport Water Reclamation Facility (AWRF), located at 905 E. Queen Creek Road. The additional reclaimed water will be pumped from AWRF for recharge to the Tumbleweed Aquifer Storage and Recovery (ASR) wells. This enhancement requires the installation of additional reclaimed water transmission main from AWRF north along Hamilton Street to Ryan Road, and then east on Ryan Road to the newly drilled Tumbleweed Aquifer Storage Recovery wells 11 and 12.

The project scope of work consists of installation of a 24-inch reclaimed water line along Hamilton Street and a 16-inch reclaimed waterline along Ryan Road. The agreement completion time is 270 calendar days following Notice to Proceed.

A related Professional Services Agreement with Wilson Engineers, LLC, for the Hamilton Street Reclaimed Water Transmission Main (Queen Creek Road to Ryan Road), is also scheduled for this City Council meeting.

Evaluation:

Fourteen (14) bids were opened on October 10, 2024. The bid results were as follows:

Contractor	Bid Total
Revolution Industrial, LLC	$5,900,084.73
Blucor Contracting, Inc.	$6,156,950.00
Redpoint Contracting	$6,584,249.00
Arrowmark, LLC	$6,688,850.00
Sellers & Sons	$6,705,900.50
Kirkland Civil Construction	$7,077,388.00
Hunter Contracting	$7,419,715.00
Granite Construction	$7,767,843.00
DCS Contracting	$7,768,300.00
FPS Civil, LLC	$7,787,533.35
B&F	$7,810,730.00
Archer Western Construction	$7,899,000.00
Elite Construction	$8,729,625.00
TF Contracting Services	Nonresponsive

Financial Implications:

The cost of this project will be reimbursed by Intel Corporation (20%) using funding provided for in its development agreement with the city. The remaining 80% of the project cost will utilize State of Arizona Title 42 funding for public infrastructure, per the city's October 2021 Reclaimed Water Agreement with Intel Corporation.

Fiscal Impact

Account No.	Fund Name	Program Name	Dollar Amount	CIP Funded Y/N

615.3910.6814.6WW690	Wastewater Operating	Reclaimed Water Conveyance Phase II	$5,900,084.73	Y

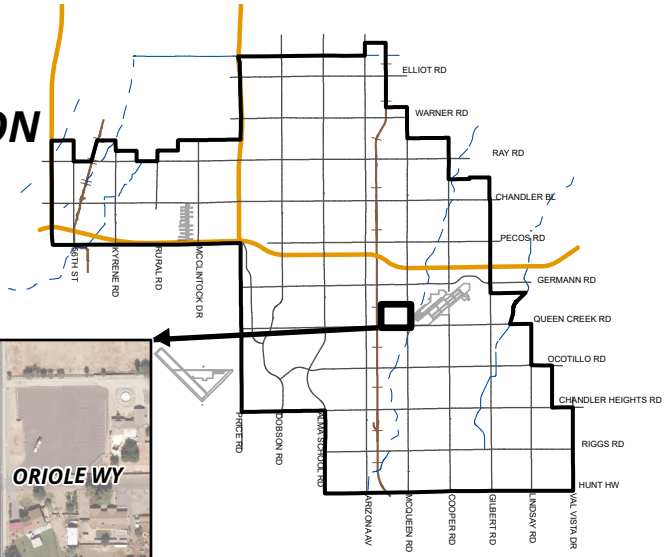
Attachments

Location Map

Agreement - Revolution Industrial

CHANDLER arizona

HAMILTON STREET RECLAIMED WATER TRANSMISSION MAIN: QUEEN CREEK ROAD TO RYAN ROAD CONSTRUCTION PROJECT NO. WW2206.403



MEMO NO. CP25-051

PROJECT SITE

NTS

ChanGIS

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CITY OF CHANDLER, ARIZONA
PUBLIC WORKS & UTILITIES DEPARTMENT
CAPITAL PROJECTS DIVISION

CONSTRUCTION AGREEMENT

Hamilton Street Reclaimed Water Transmission Main: Queen Creek Road to Ryan Road

CITY PROJECT NO.: WW2206.403

MAYOR
Kevin Hartke

VICE MAYOR
OD Harris

COUNCIL
Matt Orlando Christine Ellis
Mark Stewart Angel Encinas Jane Poston

Daniel Haskins

Daniel Haskins, P.E.
CIP City Engineer

CITY OF CHANDLER, ARIZONA

Hamilton Street Reclaimed Water Transmission Main:
Queen Creek Road to Ryan Road

CITY PROJECT NO.: WW2206.403

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CONSTRUCTION SERVICES AGREEMENT
PROJECT NO.: WW2206.403

This Agreement ("Agreement") is made and entered into on the _____ day of _____, 2024, by and between City of Chandler, an Arizona municipal corporation, hereinafter called "City" and **Revolution Industrial** the "Contractor" designated below (City and Contractor may individually be referred to as "Party" and collectively referred to as "Parties").

City and Contractor agree as follows:

ARTICLE 1 - PARTICIPANTS AND PROJECT

CITY: **CIP City Engineer: Daniel Haskins, P.E.**
Public Works & Utilities Department
P.O. Box 4008, Mail Stop 407 Chandler, AZ 85244-4008
Phone: 480-782-3335 Email: Daniel.haskins@chandleraz.gov

CITY: **Construction Project Manager: Russ Slotnick**
Public Works & Utilities Department
P.O. Box 4008, Mail Stop 407 Chandler, AZ 85244-4008
Phone: 480-782-3411 Email: Russ.Slotnick@chandleraz.gov

Contractor:

Legal Company Name:	**Revolution Industrial, LLC**
Mailing Address:	**3115 S Price Road #130 Chandler, AZ 85248**
Physical Address:	**5858 W Riggs Road Chandler, AZ 85226**
Arizona Roc No.:	**272318**
Federal Tax Id No.:	**27-5034679**
State Where Organized:	**Arizona**
Business Organization:	**Partnership**
Statutory Agent Name:	**Christopher Nay**
Statutory Agent Mailing Address:	**8850 S Poplar Street Tempe, AZ 85284**
Statutory Agent Physical Address:	**Same as Mailing**

Contractor's Authorized Project Representative:

Name:	**Chris Nay**
Title:	**Member Manager - President**
Phone:	**602-329-1374**
Email:	**chris@revolutionindustrial.com**

PROJECT DESCRIPTION:

Installation of approximately 4,700 linear feet of 24-inch reclaimed waterline connecting to the existing reclaimed waterlines on Queen Creek Road and Ryan Road on Hamilton Street, and approximately 2,600 linear feet of 16-inch reclaimed waterline connecting ASR Wells 11 and 12 with the Tumbleweed ASR Well Sand Separator System on Ryan Road and Hamilton Street.

PROJECT LOCATION:

Hamilton Street between Queen Creek Road and Ryan Road

ARTICLE 2 - AGREEMENT DOCUMENTS

2.1 **AGREEMENT DOCUMENTS**

The Agreement between City and Contractor will consist of the following Agreement Documents:

1. This Construction Services Agreement and all of its Exhibits, including Project Plans and Technical Specifications.
2. General Conditions and General Conditions Appendices, incorporated by reference.
3. Project Specific Special Provisions as set forth in Exhibit A, incorporated by reference.
4. Project Bid Proposal.

2.2 In the event of any inconsistency, conflict, or ambiguity between or among the Agreement Documents, the Agreement Documents will take precedence as described in Section 14.1.4 of the General Conditions.

2.3 **DEFINITIONS**

The definitions in Section 2 of the General Conditions apply to all the Agreement Documents, including this Agreement.

ARTICLE 3 - CONSTRUCTION SERVICES

3.1 **GENERAL**

3.1.1 Scope of Work. All terms and conditions are set forth in the Agreement. Any terms and conditions and exceptions noted in the Contractor's proposal or other documents do not apply unless agreed to in this Agreement or an approved addendum.

3.1.2 Contractor agrees this is a Unit Price Agreement. Contractor agrees at its own cost and expense, to do all Work necessary required to fully, timely and properly complete the construction of the Project in strict accordance with the Agreement Documents in a good and workmanlike manner, free and clear of all claims, liens, and charges whatsoever, in the manner and under the conditions specified, within the Agreement time.

3.1.3 Contractor must provide all of the labor and materials, and perform the Work in accordance with Section 4 of the General Conditions. Some, but not all, of the major components of the Construction Services and the corresponding subsections of Section 4 of the General Conditions are set forth below.

3.1.4 At all times relevant to this Agreement and performance of the Work, the Contactor must fully comply with all Laws, Regulations, or Legal Requirements applicable to City, the Project and the Agreement, including, without limitation, those set forth on attached Exhibit A.

3.1.5 Contractor must perform the Work under this Agreement using only those firms, team members and individuals designated by Contractor consistent with Contractor's accepted Bid, or otherwise, approved by City pursuant to the General Conditions. No other entities or individuals may be used without the prior written approval of the Project Manager.

3.1.6 Contractor must comply with all terms and conditions of the General Conditions.

3.1.7 In the event of a conflict between this Agreement and the General Conditions or an exhibit hereto or appendix thereto, the terms of this Agreement will control.

3.1.8 Ownership of Work Product. Notwithstanding anything to the contrary in this Agreement, all Work Product prepared or otherwise created in connection with the performance of this Agreement, including the Work, are to be and remain the property of City. For purposes of this provision, "Work Product" will include all designs, drawings, plans, specifications, ideas, renderings and other information or matter, in whatever form created (e.g., electronic or printed) and in all media now known or hereinafter created. All Work Product will be considered Work Made for Hire as defined in the United States Copyright Act 17 U.S.C. § 101 (Copyright Act). If for any reason, any such Work is found not to be a Work Made for Hire, Contractor hereby transfers and assigns ownership of the copyright in such Work to City. The rights in this Section are exclusive to City in perpetuity.

3.2 CONTRACTOR'S PRE-AGREEMENT AND PRE-WORK DELIVERABLES

3.2.1 The Contractor must provide the Deliverables in accordance with Section 4.2 of the General Conditions.

3.3 PRE-CONSTRUCTION CONFERENCE

Contractor must attend the Pre-Construction Conference in accordance with Section 4.3 of the General Conditions.

3.4 PERFORMANCE OF THE WORK (INCLUDING FIELD MEASUREMENTS, SUBCONTRACTORS, AND SUPPLIERS)

Contractor must perform the Work in accordance with Section 4.4 of the General Conditions.

3.5 **CONTROL OF THE PROJECT SITE**

Contractor must control and maintain the Project Site in accordance with Section 4.5 of the General Conditions.

3.6 **PROJECT SAFETY**

Contractor must implement and enforce Project safety in accordance with Section 4.6 of the General Conditions.

3.7 **MATERIALS QUALITY, SUBSTITUTIONS AND SHOP DRAWINGS**

Contractor must provide materials testing and submit substitute materials and Shop Drawings in accordance with Section 4.7 of the General Conditions.

3.8 **PROJECT RECORD DOCUMENTS**

Contractor must maintain and make available the Project Record Documents in accordance with Section 4.8 of the General Conditions.

3.9 **WARRANTY AND CORRECTION OF DEFECTIVE WORK**

Contractor must provide warranties and correct defective Work in accordance with Section 4.9 of the General Conditions.

ARTICLE 4 - CITY RESPONSIBILITIES

4.1 City will have the responsibilities, and provide the information specified in, and subject to the conditions set forth in, Section 5 of the General Conditions.

ARTICLE 5 - AGREEMENT TIME

5.1 **GENERAL**

5.1.1 The total Agreement Duration is **270** Calendar Days (including Substantial Completion by **240** Calendars Days and Final Acceptance by **270** Calendar Days).

5.1.2 The Agreement Time will start with the Notice to Proceed (NTP) and end with Final Acceptance, as set forth in Article 5.4 below.

5.1.3 The Agreement Time will be as set forth in the Project Schedule. Contractor agrees that it will commence performance of the Work and complete the Project through Final Acceptance within the Agreement Time.

5.1.4 Time is of the essence of this Agreement for the Project, and for each phase and designated Milestone thereof.

5.1.5 Failure on the part of Contractor to adhere to the approved Project Schedule will be deemed a material breach and sufficient grounds for termination of this Agreement by City.

5.2 PROJECT SCHEDULE

5.2.1 The Project Schedule will be updated and maintained throughout Contractor's performance under this Agreement in accordance with Section 6.2 of the General Conditions.

5.2.2 Work must be completed to meet the following milestones after the Notice to Proceed:

	Milestone		Time	Liquidated damages for delay
1.	Hamilton Street – Queen Creek Road to Canary Road	within	90days	Refer to MAG Specification Section 108.9 Table 108-1.

5.3 SUBSTANTIAL COMPLETION

Substantial Completion must be achieved no later than the Substantial Completion Date set forth in the Project Schedule. Substantial Completion will be determined in accordance with Section 6.3 of the General Conditions.

5.4 FINAL ACCEPTANCE

5.4.1 Final Acceptance will be obtained within the time period set forth in the Project Schedule.

5.4.2 Final Acceptance will be issued pursuant to Section 6.5 of the General Conditions.

5.5 LIQUIDATED DAMAGES

5.5.1 Substantial Completion Liquidated Damages. Contractor acknowledges and agrees that if Contractor fails to obtain Substantial Completion of the Work within the Agreement Time, City will sustain extensive damages and serious loss as a result of such failure. The exact amount of such damages will be extremely difficult to ascertain. Therefore, City and Contractor agree that if Contractor fails to achieve Substantial Completion of the Work within the Agreement Time, City will be entitled to retain or recover from Contractor, as liquidated damages and not as a penalty, the sum per calendar day as indicated in MAG § 108.9.

5.5.2 Final Acceptance Liquidated Damages. For the same reasons set forth in Article 5.5.1 above, City and Contractor further agree that if Contractor fails to achieve Final Acceptance of the Work within the Agreement Time, City will be entitled to retain or recover from Contractor, as liquidated damages and not as a penalty, the sum per calendar day as indicated in MAG § 108.9 commencing from the actual date of Substantial Completion or Final Acceptance as required under the Agreement.

5.5.3 MAG Liquidated Damages. Liquidated damages provisions in MAG § 108.9 will apply.

5.5.4 City may deduct liquidated damages described in this Article 5.5 from any unpaid amounts then or thereafter due Contractor under this Agreement. Any liquidated damages not so deducted from any unpaid amounts due Contractor will be payable to City at the demand of City, together with interest from the date of the demand at the highest lawful rate of interest payable by Contractor.

5.6 MUTUAL WAIVER OF CONSEQUENTIAL DAMAGES ONLY

5.6.1 Contractor and City waive claims against each other for consequential damages arising out of or relating to this Agreement. This mutual waiver includes.

1. Damages incurred by City for rental expenses, for losses of use, income, profit, financing, business and reputation, and for loss of management or employee productivity or of the services of such persons; and

2. Damages incurred by Contractor for principal office expenses including the compensation of personnel stationed there, for losses of financing, business and reputation, and for loss of profit except anticipated profit arising directly from the Work.

5.6.2 This mutual waiver is applicable, without limitation, to all consequential damages due to either party's termination of this Agreement. Nothing contained in this Article 5.6 will be deemed to preclude an award of liquidated damages, when applicable, in accordance with Article 5.5 above.

5.6.3 Nothing herein will be deemed to constitute a waiver of any other remedy available to City in the event of Contractor's default under this Agreement prior to full performance of the Work including, as applicable, specific performance or completion of the Work on behalf of Contractor, the cost and expense of which will be offset against any monies then or thereafter due to Contractor (if any) and otherwise immediately reimbursed to City by Contractor.

ARTICLE 6 - AGREEMENT PRICE

6.1 AGREEMENT PRICE

6.1.1 In exchange for Contractor's full, timely, and acceptable performances and construction of the Work under this Agreement, and subject to all of the terms of this Agreement, City will pay Contractor the "Agreement Price," which is **$5,900,084.73**.

6.1.2 The Agreement Price is all-inclusive and specifically includes all fees, cost, insurance and bond premiums, and taxes of any type necessary to fully, properly and timely perform and construct Work.

6.2 CHANGES TO AGREEMENT PRICE

Shall be determined under Section 9 of the General Conditions.

ARTICLE 7 - PAYMENT

Payments will be made to Contractor in accordance with Section 8 of the General Conditions.

ARTICLE 8 - CHANGES TO THE AGREEMENT

Changes to the Agreement may be made in strict accordance with Section 9 of the General Conditions.

ARTICLE 9 - SUSPENSION AND TERMINATION

This Agreement may be suspended or terminated in accordance with Section 10 of the General Conditions.

ARTICLE 10 - INSURANCE AND BONDS

10.1 Contractor must provide insurance in accordance with Sections 11.1 through 11.3 of the General Conditions. Contractor must provide proof of such insurance and all required endorsements in forms acceptable to City prior to commencing any Work under this Agreement.

10.2 Contractor must provide performance and payment bonds to City in Accordance with Section 11.4 of the General Conditions and A.R.S. § 34-222.

10.3 Failure to provide proof of insurance and the required endorsements, or the required bonds, in forms acceptable to City, will be a material breach and grounds for termination for cause of this Agreement.

ARTICLE 11 - INDEMNIFICATION

Contractor must have and assume the indemnity obligations set forth in Section 12 of the General Conditions.

ARTICLE 12 - DISPUTE RESOLUTION

Any claims or disputes relating to this Agreement will be resolved according to the dispute resolution process set forth in Section 13 of, and Appendix 6 to, the General Conditions.

ARTICLE 13 - FORCED LABOR OF ETHNIC UYGHURS PROHIBITED By entering into this Agreement, Contractor certifies and agrees Contractor does not currently use and will not use for the term of this Agreement: (i) the forced labor of ethnic Uyghurs in the People's Republic of China; or (ii) any goods or services produced by the forced labor of ethnic Uyghurs in the People's Republic of China; or (iii) any contractors, subcontractors or suppliers that use the forced labor or any goods or services produced by the forced labor of ethnic Uyghurs in the People's Republic of China.

IN WITNESS WHEREOF, the Parties hereto have executed this Agreement through their duly authorized representatives and bind their respective entitles as of the effective date.

"CITY" CITY OF CHANDLER

MAYOR

RECOMMENDED BY:

Daniel Haskins

Daniel Haskins, P.E.
CIP City Engineer

APPROVED AS TO FORM:

City Attorney

ATTEST:

City Clerk Seal

"CONTRACTOR"
REVOLUTION INDUSTRIAL

10/15/2024

Signature Date

Chris Nay

Print Name

President

Title

chris@revolutionindustrial.com

Signer Email Address

EXHIBIT A

PROJECT SPECIFIC SPECIAL PROVISIONS

4.2.7 Aerial Construction Photography

General Conditions Section 4 Subsections 4.2.7.1 & 4.2.7.2 are not applicable to this project.

4.2.8 Government Approvals and Permits

General Conditions Section 4 Subsection 4.2.8.1, City permit fees will be paid internally by the City and all other fees will be the responsibility of the Contractor.

Subletting of Agreement

Contractor must perform, with his own organization, work amounting to not less than 50 percent of the total Agreement cost.

Failure to submit Subcontractor's List Form, demonstrating self-performance not less than 50 percent of the total Agreement cost, will cause the bid to be deemed non-responsive.

Bidders should contact the Arizona Registrar of Contractors for information on license requirements.

EXHIBIT B

GENERAL CONDITIONS

City Council Memorandum Public Works & Utilities Memo No. CP25-059

Date: November 04, 2024
To: Mayor and Council
Thru: Joshua H. Wright, City Manager
Andy Bass, Deputy City Manager
John Knudson, Public Works and Utilities Director
Daniel Haskins, Capital Projects Division Manager
From: Melanie Sikes, Principal Engineer
Subject: Construction Manager at Risk (CMAR) Pre-Construction Services Agreement No. WW2402.251, with B&F Contracting, Inc., for the Loop 101/202 Redundant 66-inch Sewer Line

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Proposed Motion:

Move City Council award CMAR Pre-Construction Services Agreement No. WW2402.251, to B&F Contracting, Inc., for the Loop 101/202 Redundant 66-inch Sewer Line, in an amount not to exceed $504,949.47.

Background/Discussion:

In February 2018, Chandler's potable water distribution system experienced a large water main break northeast of Price Road and the Loop 101/202 Santan Freeway interchange. This water line was accessed, repaired, and recently put back into service. Findings from a subsequent water line assessment raised concerns about a large 66-inch sewer line that also exists adjacent to these water lines crossing under the freeway. This sewer line conveys wastewater flows from north Chandler south to the Ocotillo Water Reclamation Facility for treatment. This large sewer line was installed at the same time as the water main crossing during the construction of the freeway interchange. The city's 2018 Water, Wastewater, and Reclaimed Water Master Plan also analyzed this 66-inch sanitary sewer freeway crossing and system redundancy. The evaluation noted the lack of redundancy for the sanitary sewer system crossing the freeway from north to south and the need in the near future to rehabilitate the existing freeway sewer crossing.

The project includes the 66-inch diameter gravity sewer line segment (approximately 800 linear feet) and steel casing for protection under the Loop 202 Santan Freeway. In addition, this project includes rerouting of several 48-inch diameter gravity lines that are approximately 2,000 linear feet in length and four junction structures for connecting the existing gravity lines to the proposed redundant 66-inch gravity line. Further, the project services will include cured-in-place pipe (CIPP) lining of existing 66-inch diameter sewer, 48-inch diameter sewer, and 30-inch diameter sewer.

The project scope of work consists of meetings and workshops, reviews, schedule development, utility and site investigations, cost models, Guaranteed Maximum Price preparation, public outreach, geotechnical analysis, and coordination with the Arizona Department of Transportation. The agreement completion time is 365 calendar days following Notice to Proceed.

Evaluation:

The selection process was followed in accordance with city policy and procedure and state law. Staff recommends agreement award to B&F Contracting, Inc., based on qualifications, relevant firm experience, team experience, project understanding, and project approach.

Fiscal Impact

Account No.	Fund Name	Program Name	Dollar Amount	CIP Funded Y/N
615.3910.6210.6WW694	Wastewater Operating	Santan Freeway Redundant 66-inch Se	$504,949.47	Y

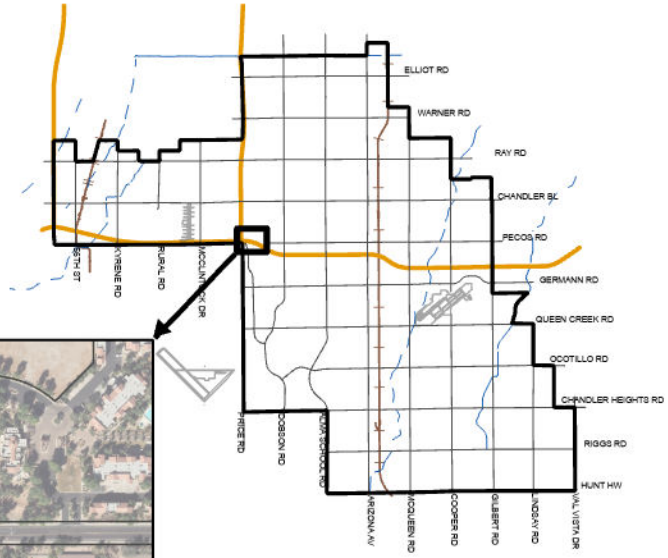
Attachments

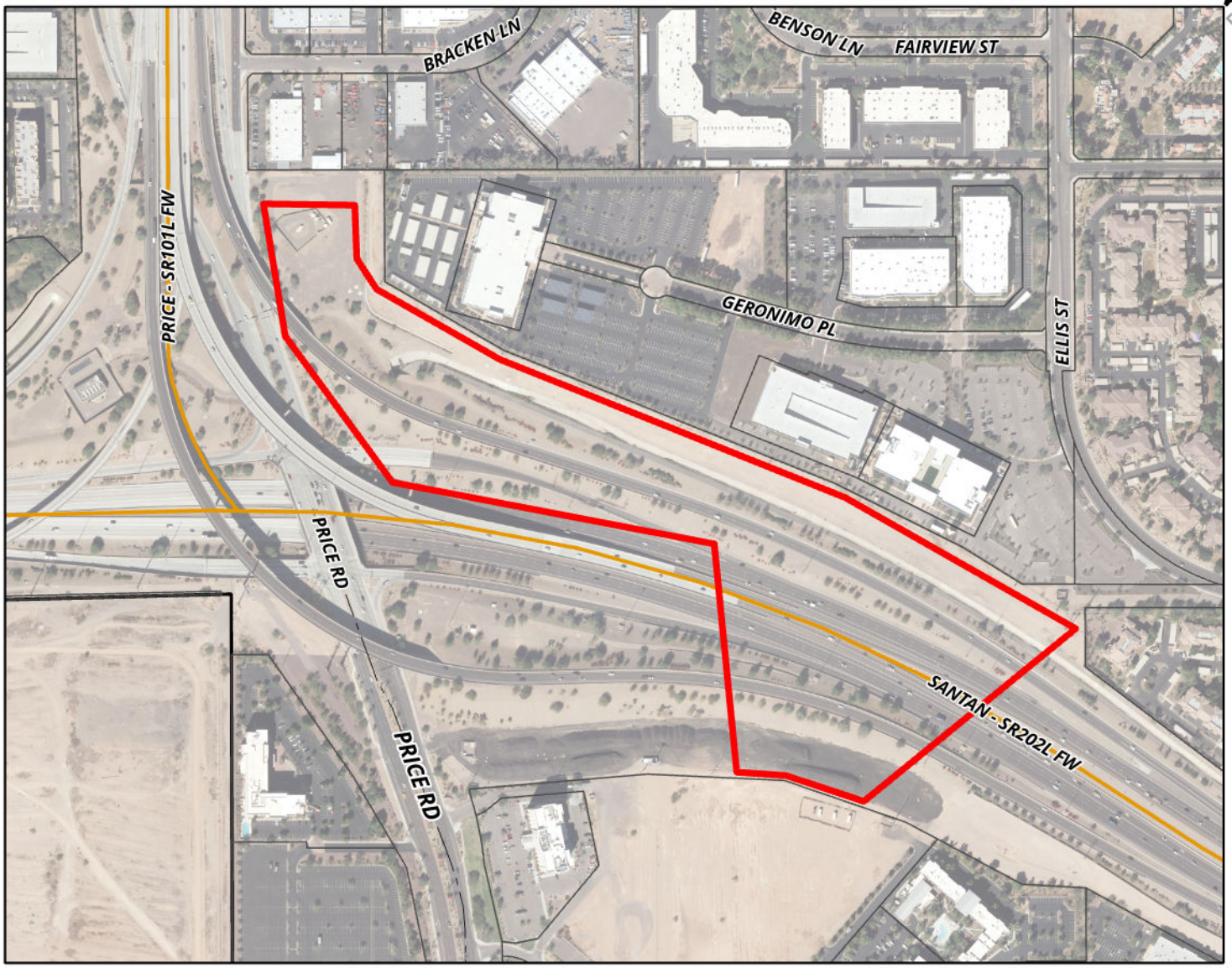
Location Map

Agreement - B&F Contracting

CHANDLER arizona

101/202 REDUNDANT 66-INCH SEWER LINE PROJECT NO. WW2402.251





MEMO NO. CP25-059

PROJECT LOCATION

NTS

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CITY OF CHANDLER, ARIZONA

101/202 REDUNDANT 66-INCH SEWER LINE

CITY PROJECT NO. WW2402.251

PRE-CONSTRUCTION SERVICES AGREEMENT

(CONSTRUCTION MANAGER AT RISK)

Daniel Haskins

Daniel Haskins, P.E.
CIP City Engineer

CITY OF CHANDLER, ARIZONA

101/202 Redundant 66-inch Sewer Line
CITY PROJECT NO.: WW2402.251

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CONSTRUCTION MANAGER AT RISK
PRE-CONSTRUCTION SERVICES AGREEMENT
PROJECT NO.: WW2402.251

This Agreement (the "AGREEMENT") is made and entered into on the _____day of _____, 2024, ("Effective Date") by and between City of Chandler, an Arizona municipal corporation, hereinafter called "City" and **B&F Contracting, Inc.** the "Construction Manager at Risk" or "CM@Risk" designated below (City and CM@Risk may individually be referred to as "Party" and collectively referred to as "Parties").

City and CM@Risk agree as follows:

ARTICLE 1 - PARTICIPANTS AND PROJECT

CITY: **Acting CIP City Engineer: Daniel Haskins, P.E.**
Public Works & Utilities Department
P.O. Box 4008, Mail Stop 407 Chandler, AZ 85244-4008
Phone: 480-782-3335 Email: Daniel.haskins@chandleraz.gov

CITY: **Construction Project Manager: Raymond Potts**
Public Works & Utilities Department
P.O. Box 4008, Mail Stop 407 Chandler, AZ 85244-4008
Phone: 480-782-3326 Email: Raymond.Potts@chandleraz.gov

CM@RISK:

Legal Company Name: B&F Contracting, Inc.

Mailing Address: 11011 N. 23rd Avenue, Phoenix, AZ 85029

Physical Address: SAME

Arizona Roc No.: 089744 A

Federal Tax Id No.: 86-0677300

State Where Organized: Arizona

Business Organization: Corporation

Statutory Agent Name: Bruce W. Balls

Statutory Agent Mailing Address: 1717 W. Mandalay Lane, Phoenix, AZ 85023

Statutory Agent Physical Address: SAME

CM@Risk's Authorized Project Representative:

Name: Josh Onstott

Title: Executive Director

Phone: 623-238-3792

Email: jonstott@bfcontracting.com

PROJECT DESCRIPTION:

This project includes a redundant 66-inch diameter gravity sewer line that crosses the Loop 202 Santan Freeway, rerouting of several 48-inch diameter sewers, new junction structures for connecting the existing and proposed sewer and cured-in-place pipe (CIPP) lining of existing sewers.

PROJECT LOCATION:

Loop 101/202 Santan Freeway interchange

ARTICLE 2 - AGREEMENT DOCUMENTS

2.1 **AGREEMENT DOCUMENTS**

The Agreement between City and CM@Risk will consist of the following Agreement Documents:

1. This Pre-Construction Services Agreement and all of its Exhibits, incorporated by reference;
2. **Exhibit A** – Pre-Construction Scope of Work and Schedule;
3. **Exhibit B** – Compensation and Fee Schedule;
4. **Exhibit C** – Insurance Requirements;
5. **Exhibit D** – Submittal Requirements for GMP/Price Proposal;
6. **Exhibit E** - General Conditions and General Conditions Appendices.

2.2 **DEFINITIONS**

The definitions in Sections 2 and 15.1 of the General Conditions apply to all the Agreement Documents, including this Agreement.

ARTICLE 3 - PRE-CONSTRUCTION SERVICES

3.1 **SERVICES**

CM@Risk must provide all of the services and perform in accordance with Section 17 of the General Conditions. The major components of Pre-Construction Services and the corresponding subsections of Section 17 of the General Conditions are set forth below.

3.2 **GENERAL REQUIREMENTS**

3.2.1 CM@Risk must perform the services required by, and in accordance with this Agreement and as outlines in the attached **Exhibit A** to the satisfaction of the Project Manager, in full compliance with Section 17.2.1 of the General Conditions.

3.2.2 In performance of the Services under this Agreement, the CM@Risk must fully comply with all applicable Laws, Regulations, or Legal Requirements applicable to City, the Project, and the Agreement.

3.2.3 CM@Risk must perform the Services under this Agreement using only those firms, team members, and individuals designated by CM@Risk consistent with the Statement of Qualifications or as otherwise approved by City in accordance with the General Conditions. No other entities or individuals may be used without the prior written approval of City.

3.2.4 CM@Risk will comply with all terms and conditions of the General Conditions.

3.2.5 In the event of a conflict between this Agreement and the General Conditions or any exhibit hereto or appendix thereto, the terms of this Agreement will control.

3.2.6 **<u>Ownership of Work Product</u>**. Notwithstanding anything to the contrary in this Agreement, all Work Product prepared or otherwise created in connection with the performance of this Agreement, including the Work, are to be and remain the property of City, as set forth in Section 17.2.6 of the General Conditions.

3.3 **DESIGN PROJECT SCHEDULE**

CM@Risk must prepare and present to City a Detailed Project Schedule that is acceptable to the City and in accordance with Section 17.3 of the General Conditions.

3.4 **DESIGN DOCUMENT REVIEW**

CM@Risk must conduct the evaluations, perform the design document reviews, make the recommendations, and provide the other Services referenced in accordance with Section 17.4 of the General Conditions.

3.5 **BASELINE COST MODEL, DETAILED COST ESTIMATES, AND SCHEDULE OF VALUES**

3.5.1 CM@Risk must prepare and submit the Baseline Cost Model, Detailed Cost Estimates, and Schedule of Values in accordance with Section 17.5 of the General Conditions.

3.5.2 The submitted Baseline Cost Model, Detailed Cost Estimates, and Schedule of Values must not exceed the City's Construction Budget, which is **$<u>25,000,000 to $35,000,000</u>** or a higher amount as revised by the City ("Construction Budget"). If CM@Risk submits a Baseline Cost Model, Detailed Cost Estimates, and Schedule of Values that exceeds the Construction Budget, negotiations could lead to termination or suspension of the Agreement.

3.6 **SUBCONTRACTOR AND MAJOR SUPPLIER SELECTIONS**

CM@Risk must select and obtain approval of Subcontractors and Suppliers in accordance with Section 17.6 of the General Conditions.

3.7 **GUARANTEED MAXIMUM PRICE (GMP) PROPOSAL**

3.7.1 CM@Risk must submit a GMP Proposal for the entire Work, and for each phase (if required) of the Work, at the times set forth in the Pre-Construction Schedule included in attached. The GMP Proposal must be presented in a format acceptable to City based upon the attached **Exhibit D**. City may change the schedule, format, and/or requirements for the GMP Proposal as it deems necessary during Pre-Construction, and may request resubmittal of the GMP Proposal to reflect such changes.

3.7.2 Preparation, submittal, review, and approval (or disapproval, if applicable) of the GMP Proposal will be done in accordance with Section 17.7 of the General Conditions.

3.7.3 For the purposes of the GMP Proposal, the Parties agree that:

a. The CM@Risk Fee will be equal to **8.5%** (percent) of the Cost of Work;

b. General Conditions costs will be a fixed amount or percentage agreed to as part of the Baseline Cost Model.

3.7.4 The GMP Proposal must not exceed the City's Construction Budget.

3.8 **ADDITIONAL PRE-CONSTRUCTION SERVICES**

3.8.1 Additional services which are outside the scope of the services required under the Agreement Documents will not be performed by CM@Risk without prior written authorization from City. Additional services, when authorized by an executed written Change Order under Section 9 of the General Conditions, will be compensated for by a fee mutually agreed upon in such written Change Order between City and CM@Risk.

3.8.2 No claim for additional services, extra work done or materials furnished by CM@Risk will be allowed by City except as provided herein, nor will CM@Risk provide any additional services, do any work, or furnish any materials(s) not covered by this Agreement unless such work or material is first authorized in writing by City. Work or material(s) furnished by CM@Risk without such prior written authorization will be CM@Risk's sole jeopardy, cost, and expense, and CM@Risk hereby agrees that without prior written authorization no claim for compensation for such services, work or materials furnished will be made, and City will not be responsible for such costs.

3.8.3 No Work (as defined by Section 1 of the General Conditions) may be performed under this Pre-Construction Services Agreement, without prior written approval by City. As an example, all procurement of long lead time items that must be procured to support the construction schedule or site investigative Work necessary to complete Pre-Construction Services, if done by the CM@Risk, will be performed only after a GMP Proposal for the Work has been approved and accepted in writing by City and all such Work will be done only under an executed Agreement for Construction Services, or pursuant to a prior written direction from City to engage in such procurement.

ARTICLE 4 - CONSTRUCTION SERVICES

If City accepts CM@Risk's GMP Proposal, CM@Risk and City will enter a Construction Services Agreement for Construction of the Project based upon CM@Risk's Pre-Construction Services performed and GMP Proposal submitted pursuant to this Agreement. The terms of the Construction Services Agreement are being negotiated contemporaneously with this Agreement and CM@Risk agrees to execute the Construction Services Agreement, without further modification, upon acceptance by City of the GMP Proposal. All of CM@Risk's obligations, duties and warranties in relation to Pre-Construction Services and Deliverables (including specifically the GMP Proposal) survive the completion of this Agreement and will be incorporated into the

Construction Services Agreement.

ARTICLE 5 - CITY FURNISHED INFORMATION

5.1 City, at no cost to CM@Risk, will furnish the following to CM@Risk:

5.1.1 One copy of data in City's possession or control which City determines in its discretion to be pertinent to the Work. However, CM@Risk will be responsible for searching the records and requesting information it deems reasonably required for the Project.

5.1.2 Electronic copies of programs, reports, drawings, and specifications reasonably required by CM@Risk, to the extent in possession of City.

ARTICLE 6 - AGREEMENT TIME

Agreement Duration is **365** Calendar Days. The Pre-Construction Services described in this Agreement must be performed by CM@Risk in accordance with the Pre-Construction Schedule set forth in attached **Exhibit A**, as updated and expanded in the most current updated/revised and approved Detailed Project Schedule. Failure on the part of CM@Risk to adhere to the Pre-Construction Schedule requirements for activities for which it is responsible and in control will be deemed a material breach and sufficient ground for termination for cause of this Agreement by City.

ARTICLE 7 - AGREEMENT PRICE

7.1 In exchange for CM@Risk's full, timely, and acceptable performance of the Services under this Agreement, and subject to all of the terms of this Agreement, City will pay CM@Risk a fee of **$504,949.47** (the "Agreement Price"). The method of payment for this Agreement is Hourly, Not-to-Exceed. The amount paid will not exceed the Agreement Price for actual costs incurred, based on the negotiated hourly rates and reimbursement schedule as defined in **Exhibit B**, Compensation and Fee Schedule.

7.2 The Agreement Price is all-inclusive, and City will not pay any additional amounts, costs or expense, except for only those specifically designated reimbursable costs, without markup, as set forth in **Exhibit B**.

ARTICLE 8 - FORCED LABOR OF ETHNIC UYGHURS PROHIBITED

8.1 By entering into this Agreement, Contractor certifies and agrees Contractor does not currently use and will not use for the term of this Agreement: (i) the forced labor of ethnic Uyghurs in the People's Republic of China; or (ii) any goods or services produced by the forced labor of ethnic Uyghurs in the People's Republic of China; or (iii) any contractors, subcontractors or suppliers that use the forced labor or any goods or services produced by the forced labor of ethnic Uyghurs in the People's Republic of China.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement through their duly authorized representatives and bind their respective entitles as of the Effective Date.

"CITY" CITY OF CHANDLER

MAYOR

RECOMMENDED BY:

Daniel Haskins

Daniel Haskins, P.E.
CIP City Engineer

APPROVED AS TO FORM:

City Attorney

ATTEST:

City Clerk Seal

"CM@Risk"
B&F Contracting, Inc.

10/08/24

Signature Date

Joshua Onstott

Print Name

Executive Director

Title

Jonstott@bfcontracting.com

Signer Email Address

EXHIBIT A

PRE-CONSTRUCTION SERVICES
SCOPE OF WORK AND SCHEDULE

Exhibit A
CM@RISK PRE-CONSTRUCTION SERVICES
SCOPE OF WORK
101/202 REDUNDANT 66-INCH SEWER LINE
WW2402.251

Note: The sections below are numbered to correspond with General Conditions, Section 17 – Provisions Applicable Solely to Pre-Construction Services for Construction Manager at Risk.

17.2 – GENERAL

Project Kick-off Meeting

Attend and participate in Project Kick-off meeting. CM@Risk will provide drawings, schedule diagrams, budget charts, and other materials describing the Project, when their use is required for the meeting.

Stakeholders and Public Agencies Meetings

Attend and participate, as may be appropriate, in meetings related to the Project with Stakeholders and Public Agencies.

Project Workshops/Design Workshops

Participate in Project Workshops and Design Workshops and/or other miscellaneous meetings and partnering sessions as required by City. CM@Risk will provide input consistent with sound and generally accepted construction management and contracting practices related to the procurement, cost impact, schedule, quality, and operations/maintenance.

Construction Document Rolling Reviews

Participate in Construction Document Rolling Review meetings. Review of documents as received from Project Designer; feedback consistent with sound and generally accepted construction management and contracting practices related to procurement, cost impact, schedule, quality, and operation/maintenance.

Value Engineering Review Meetings

Participate in Value Engineering Review meetings or Value Engineering workshops. Project Team will routinely assist to identify and evaluate, using engineering principles, any alternate systems, approaches, and design changes that have the potential to reduce Project costs while still delivering a quality and functional product that meets the design intent.

Utility Coordination Meetings

Participate in Utility Coordination meetings. CM@Risk will attend, make presentations, and participate as may be appropriate, in Utility Coordination meetings related to the Project. CM@Risk will provide drawings, schedule diagrams, budget charts, and other materials describing the Project, when their use is required for the meeting.

Comment Resolution Meetings

Participate in meetings with the Consultants and City to review constructability/bid-ability comments after design submission for both 60% and 90% design.

GMP Review/Negotiation Meetings

Participate in meetings with City to review the GMP after submission.

17.3 – DETAILED PROJECT SCHEDULE

Develop Design Phase Schedule

Prepare and present to City a detailed design phase project schedule with input from City and Project Designer which utilizes the Critical Path method (CPM) technique

Develop Preliminary Construction Schedule & Phasing Plans

Transition design phase schedule to overall project schedule in association with the baseline cost model and proposed phasing plans for early equipment procurement and/or construction activities and the remainder of the construction phase.

Long Lead Analysis and Recommendations

Identify all long lead time materials, fabrications, equipment or other items which may impact the Project Schedule and may require early action on the part of the Project Team including dates required for selecting and procuring such items.

17.4 – DESIGN DOCUMENT REVIEWS

Value Analysis/Efficiency Analysis

Evaluate periodically the availability of labor, materials/equipment, cost-sensitive aspects of the design; and other factors that may create an unacceptable variance to the Baseline Cost Model and/or Baseline Project Schedule; use established value analysis principles in recommending cost effective alternatives

Utility Design Review and Comment

Perform reviews and provide written comments on the utility relocation and design submittals and for coordination with the design development for construction of the Project.

Constructability and Bid-ability Reviews

Perform reviews and provide written comments on the project design submittals and for construction drawings, construction documents, various analyses, and studies and investigations conducted for the design of the Project. Includes, but is not limited to, review and evaluate Design Development documents for clarity, consistency, completeness, and ease of construction in order to achieve the overall objective of the Project. Review prior project as-built plans. Evaluate construction safety issues and proposals of construction safety improvements, as may be applicable. CM@Risk will evaluate whether: (a) the Drawings and Specifications are configured to enable efficient construction; (b) design elements are standardized; (c) construction efficiency is properly considered in the Drawings and Specifications; (d) the design promotes accessibility of personnel, material and equipment, and facilitates construction under adverse weather conditions; (e) sequences of Work required by or inferable from the Drawings and Specifications are practicable; and (f) the design has taken into consideration, efficiency issues concerning access and entrance to the

site, lay down and storage of materials, staging of site facilities, construction parking, and other similar pertinent issues. Review comments will be compiled at each of the following design phase milestones: 60% and 90%.

Document Complementary Review and Cross Checks

Perform reviews and provide written comments regarding the bid-ability of the Project. CM@Risk will check cross-references and complementary Drawings and sections within the Specifications, and in general evaluate whether (a) the Drawings and Specifications are sufficiently clear and detailed to minimize ambiguity and to reduce scope interpretation discrepancies; (b) named materials and equipment are commercially available and are performing well or otherwise in similar installations; (c) Specifications include alternatives in the event a requirement cannot be met in the field; and (d) in its professional opinion, the Project is likely to be subject to differing site conditions. Review comments will be complied at each of the following design phase milestones: 60% and 90%.

Maintenance of Plant Operations (MOPOs)

Evaluate scope and design for tasks that have the potential to effect plant operations; lead development of planning to minimize or eliminate disruption to Owner's facilities.

Utility/Site Investigations

Participate in site investigation and utility potholing as deemed necessary to pothole, identify, and record existing utilities to avoid conflicts during design planning.

17.5 – BASELINE COSTS MODEL, DETAIL COST ESTIMATE, SCHEDULE OF VALUES

60% Cost Model (Baseline Cost Model)

Upon receipt of acceptable 60% drawings and specifications, CM@Risk will review all available information regarding the design and scope of the Project using CM@Risk's experience in performing similar work, knowledge of similar projects and current and projected construction costs and, based upon that review, must update the Cost Model for review by the Project Team and approval by City.

90% Cost Model Development (Design Evolution Log)

Prepare and submit the 90% cost model in accordance with City's request for cost model requirements based on the most current completed Drawings and Specifications at that time, which unless otherwise directed by City in writing, will be at 90% Construction Drawings.

Schedule of Values

Prepare and submit Schedule of Values for review by the Project Team and approval by City.

Cash Flow Projections

Prepare and submit cash flow projections..

17.6 – SUBCONTRACTOR AND MAJOR SUPPLIER SELECTIONS

Procurement Prequalification's & Subcontractor Prequalification

Evaluate potential suppliers and subcontractors with respect to safety, financial capacity, ability to meet/exceed schedule, and quality in order to obtain adequate pool of acceptable bidders.

Subcontractor Selection Plan

Develop and submit written subcontractor selection plan per General Conditions Section 17.6 with justification for any qualifications-based selections proposed.

Subcontractor Bid Evaluation/Reports

Prepare and submit detailed list of recommended subcontractors and summary report of the entire selection process.

Pre-bid Conference

Plan, communicate, and conduct pre-bid conference with prospective subcontractors and suppliers.

17.7 – GMP PROPOSAL

Early Equipment/Early GMP Preparation

Identify long-lead equipment that will greatly improve schedule if procured in an early GMP; work with Owner and Project Designer in developing required Agreement Documents to facilitate this procurement.

GMP Preparation and Submission

Prepare and submit the GMP Proposal in accordance with City's request for GMP Proposal requirements based on the most current completed Drawings and Specifications at that time, which unless otherwise directed by City in writing, will be at 100% Construction Drawings. Preparation and submission of phased GMP Proposals submitted for the Project (such as a separate GMP for long lead equipment or phased construction) are also included in this item.

17.8 – PAYMENT PROCEDURE FOR PRE-CONSTRUCTION SERVICES

Monthly Progress Reports/Request for Payment

Prepare and submit monthly request for payment accompanied by a progress report, detailed invoices and receipts, if applicable.

ALLOWANCE ITEMS

Traffic Control – Allowance

Traffic Control to perform preconstruction investigations and assessment work.

Site Utility Investigations (Potholing) – Allowance

An allowance to supply a potholing subcontractor to continue investigating unknown utilities and locations.

Utility Investigation – Allowance

Allowance to perform manhole assessment, 360 scans, GPR utility mapping, or 3rd

party utility locating during preconstruction for planning and risk mitigation during construction.

Geotechnical Analysis – Allowance

Allowance to take 3rd party soil samples and complete a geotechnical analysis prior to construction to develop and reduce overall project risk.

Owner's Allowance

The Owner's Allowance will only be utilized with prior written approval from the city representative.

Flow Monitoring – Allowance

Install flow monitors, as needed, to establish bypass flows during preconstruction for estimating purposes.

Public Outreach – Allowance – Bring in Teresa to discuss

Allowance to hire MakPro services to complete preconstruction outreach to businesses and residents during preconstruction.

ADOT & SRP Coordination – Allowance

Allowance to complete ADOT, ADOT contractor, and SRP coordination for access and right of way agreements during the preconstruction phase.

Man-Entry Services – Allowance

Subcontractor Consulting – Allowance

Coordinate with specialized subcontractors to conduct heat monitoring, mapping, traffic control plans, and surveying during preconstruction.

Jobsite Trailer Procurement - Allowance

EXHIBIT B

COMPENSATION AND FEE SCHEDULE

EXHIBIT B
CM@RISK PRE-CONSTRUCTION SERVICES
FEE PROPOSAL
101-202 REDUNDANT 66-INCH SEWER LINE
WW2402.251

	Hours	Cost
17.2 - GENERAL	**347**	**$44,165.11**
Project Kick-off Meeting	9.00	$1,085.51
Stakeholders and Public Agencies Meetings	12.00	$1,558.68
Project Workshops/Design Workshops	88.00	$11,378.72
Construction Document Rolling Reviews	53.00	$6,734.72
Value Engineering Review Meetings	70.00	$9,164.72
Utility Coordination Meetings	39.00	$4,794.03
Site Coordination Walks (3ea)	42.00	$5,076.03
Comment Resolution Meetings	22.00	$2,786.02
GMP Review/Negotiation Meetings	12.00	$1,586.68
17.3 - DETAILED PROJECT SCHEDULE	**76**	**$10,418.74**
Develop Design Phase Schedule	24.00	$3,601.36
Develop Preliminary Construction Schedule & Phasing Plans	46.00	$6,050.04
Long Lead Analysis and Recommendations	6.00	$767.34
17.4 - DESIGN DOCUMENT REVIEWS	**428**	**$55,585.52**
Value Analysis/Efficiency Analysis	42.00	$5,807.36
Utility Design Review and Comment	38.00	$5,128.68
Constructability and Bid-ability Reviews	96.00	$12,858.72
Document Complementary Review and Cross Checks	120.00	$15,626.72
Maintenance of Plant Operations (MOPOs)	40.00	$4,998.68
Utility/Site Investigations	92.00	$11,165.36
17.5 - BASELINE COSTS MODEL, DETAIL COST EST, SCHEDULE OF VALUES	**255**	**$32,573.94**
60% Cost Model	92.00	$11,560.08
90% Cost Model	121.00	$15,499.80
Schedule of Values	32.00	$4,242.72
Cash Flow Projections	10.00	$1,271.34
17.6 - SUBCONTRACTOR AND MAJOR SUPPLIER SELECTIONS	**160**	**$20,274.04**
Procurement Prequalifications & Subcontractor Prequalification	62.00	$7,728.68
Subcontractor Selection Plan	54.00	$6,978.68
Subcontractor Bid Evaluation/Reports	28.00	$3,489.34
Pre-bid Conference	16.00	$2,077.34
17.7 - GMP PROPOSALS	**208**	**$25,921.44**
Early Equipment/Early GMP Preparation	112.00	$13,958.72
GMP Preparation and Submission	96.00	$11,962.72
17.8 - PAYMENT PROCEDURE FOR PRE-CONSTRUCTION SERVICES	**20**	**$2,310.68**
Monthly Progress Reports/Request for Payment	20.00	$2,310.68
SUBTOTAL:		**$191,249.47**

	Quanity	Cost
REIMBURSABLES & ALLOWANCES		**$313,700.00**
Traffic Control Allowance	1	$25,000.00
Site Utility Investigation (Potholing)	10	$10,200.00
Owners Allowance	1	$50,000.00
Subcontractor Consulting Allowance (Survey)	1	$10,000.00
Flow Monitoring	2	$13,000.00
Utility Assessment (Man Entry Inspection, 360 Camera)	1	$15,000.00
Public Outreach	1	$12,500.00
ADOT & SRP Coordinaton	1	$8,000.00
Geo Technical	1	$15,000.00
Trailer Procurement	1	$155,000.00
TOTAL:		**$504,949.47**

ITEM DESCRIPTION	SPM	APM	DM	PCM	GS	Sr. Est.	CON	SRPE	TOTAL HOURS	TOTAL COST
	Josh Onstott	Jose Murphy, PE	Kelly Haberly	Travis Monk	Ivan Fimbres	Tommy Hartford	Dennis Onstott	John Walstrom Jr.		
	$ 143.67	$ 123.00	$ 130.00	$ 123.00	$ 117.00	$ 123.00	$ 185.00	$ 94.00		
17.2 - GENERAL										
Project Kick-off Meeting	1.50	1.50	0.00	1.50	1.50	1.50	0.00	1.50	9.00	$ 1,085.51
Stakeholders and Public Agencies Meetings	4.00	4.00	0.00	4.00	0.00	0.00	0.00	0.00	12.00	$ 1,558.68
Project Workshops / Design Workshops (30% Roll Plot, 30% workshop 2 ea, 60% Workshop 2 ea, 90% Workshop)	16.00	8.00	8.00	16.00	16.00	8.00	8.00	8.00	88.00	$ 11,378.72
Construction Document Rolling Reviews	16.00	8.00	4.00	12.00	4.50	4.50	0.00	4.00	53.00	$ 6,734.72
Value Engineering Review Meetings	16.00	8.00	8.00	3.00	16.00	3.00	8.00	8.00	70.00	$ 9,164.72
Utility Coordination Meetings (3ea)	9.00	9.00	3.00	3.00	6.00	3.00	0.00	6.00	39.00	$ 4,794.03
Site Coordination Walks (3ea)	9.00	9.00	3.00	6.00	6.00	0.00	0.00	9.00	42.00	$ 5,076.03
Comment Resolution Meetings	6.00	2.00	2.00	8.00	0.00	2.00	0.00	2.00	22.00	$ 2,786.02
GMP Review / Negotiation Meetings	4.00	0.00	4.00	4.00	0.00	0.00	0.00	0.00	12.00	$ 1,586.68
17.3 - Detailed Project Schedule										
Develop Design Phase Schedule	8.00	4.00	0.00	2.00	2.00	0.00	8.00	0.00	24.00	$ 3,601.36
Develop Preliminary Construction Schedule & Phasing Plans	12.00	8.00	4.00	2.00	4.00	2.00	6.00	8.00	46.00	$ 6,050.04
Long Lead Analysis and Recommendations	2.00	0.00	0.00	2.00	2.00	0.00	0.00	0.00	6.00	$ 767.34
17.4 Design Document Reviews										
Value Analysis/Efficiency Analysis	8.00	4.00	4.00	8.00	8.00	2.00	8.00	0.00	42.00	$ 5,807.36
Utility Design Review and Comment	4.00	6.00	4.00	6.00	6.00	0.00	8.00	4.00	38.00	$ 5,128.68
Constructability and Bid-ability Reviews	16.00	8.00	8.00	16.00	16.00	8.00	16.00	8.00	96.00	$ 12,858.72
Document Complementary Review and Cross Checks	16.00	16.00	8.00	16.00	8.00	24.00	16.00	16.00	120.00	$ 15,626.72
Maintenance of Plant Operations (MOPOs)/Bypass Plans - Prepare	4.00	8.00	4.00	0.00	8.00	4.00	4.00	8.00	40.00	$ 4,998.68
Utility/Site Investigations	8.00	8.00	4.00	8.00	24.00	8.00	8.00	24.00	92.00	$ 11,165.36
17.5 Baseline Cost Model, Detail Cost Estimate, Schedule of Values										
60% Cost Model	24.00	8.00	4.00	32.00	8.00	8.00	0.00	8.00	92.00	$ 11,560.08
90% Cost Model	40.00	8.00	4.00	40.00	1.00	20.00	0.00	8.00	121.00	$ 15,499.80
Schedule of Values	16.00	4.00	0.00	8.00	4.00	0.00	0.00	0.00	32.00	$ 4,242.72
Cash Flow Projections	2.00	6.00	0.00	2.00	0.00	0.00	0.00	0.00	10.00	$ 1,271.34
17.6 - Subcontractor and Major Supplier Selections										
Procurement Prequalification & Subcontractor Prequalification	4.00	8.00	0.00	16.00	2.00	8.00	8.00	16.00	62.00	$ 7,728.68
Subcontractor Selection Plan	4.00	6.00	2.00	16.00	4.00	6.00	8.00	8.00	54.00	$ 6,978.68
Subcontractor Bid Evaluation/Reports	2.00	4.00	0.00	4.00	2.00	4.00	4.00	8.00	28.00	$ 3,489.34
Pre-bid Conference	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	16.00	$ 2,077.34
17.7 - GMP Proposal										
Early Equipment/Early GMP Preparation	16.00	12.00	12.00	32.00	0.00	32.00	0.00	8.00	112.00	$ 13,958.72
GMP Preparation and Submission	16.00	16.00	8.00	24.00	0.00	24.00	0.00	8.00	96.00	$ 11,962.72
17.8 - Payment Procedure and Pre-Construction Services										
Monthly Progress Reports/Request for Payment	4.00	0.00	0.00	8.00	0.00	0.00	0.00	8.00	20.00	$ 2,310.68
SUBTOTAL TEAM MEMBER - HOURS	**289.50**	**185.50**	**100.00**	**301.50**	**151.00**	**174.00**	**112.00**	**180.50**	**TOTAL HOURS**	**1494.00**
SUBTOTAL - PRE-CONSTRUCTION SERVICES COST	$ 41,592.47	$ 22,816.50	$ 13,000.00	$ 37,084.50	$ 17,667.00	$ 21,402.00	$ 20,720.00	$ 16,967.00	**TOTAL COST**	$ 191,249.47
ALLOWANCES ITEMS	**QTY**	**RATE**		**TOTAL**						
Traffic Control Allowance	1	$ 25,000.00		ALLOWANCE						$ 25,000.00
Site Utility Investigation (Potholing)	10	$ 1,020.00		ALLOWANCE						$ 10,200.00
Owners Allowance	1	$ 50,000.00		ALLOWANCE						$ 50,000.00
Subcontractor Consulting Allowance (Survey)	1	$ 10,000.00		ALLOWANCE						$ 10,000.00
Flow Monitoring	2	$ 6,500.00		ALLOWANCE						$ 13,000.00
Utility Assessment (Man Entry Inspection, 360 Camera)	1	$ 15,000.00		ALLOWANCE						$ 15,000.00
Public Outreach	1	$ 12,500.00		ALLOWANCE						$ 12,500.00
ADOT & SRP Coordinaton	1	$ 8,000.00		ALLOWANCE						$ 8,000.00
Geo Technical	1	$ 15,000.00		ALLOWANCE						$ 15,000.00
Trailer Procurement	1	$ 155,000.00		ALLOWANCE						$ 155,000.00
Allowance Subtotal										**$ 313,700.00**
									PRE-CONSTRUCTION SERVICES SUBTOTAL	$ 504,949.47
2500-										$ 504,949.47

EXHIBIT C

INSURANCE REQUIREMENTS

1. General.

1.1 At the same time as execution of this Agreement, CM@Risk must furnish City a certificate of insurance on a standard insurance industry ACORD form. The ACORD form must be issued by an insurance company authorized to transact business in the State of Arizona possessing a current A.M. Best, Inc. rating of A-7, or better and legally authorized to do business in the State of Arizona with policies and forms satisfactory to City. Provided, however, the A.M. Best rating requirement will not be deemed to apply to required Workers' Compensation coverage.

1.2 CM@Risk and any of its subconsultants must procure and maintain, until all of their obligations have been discharged, including any warranty periods under this Agreement are satisfied, the insurances set forth below.

1.3 The insurance requirements set forth below are minimum requirements for this Agreement and in no way limit the indemnity covenants contained in this Agreement.

1.4 City in no way warrants that the minimum insurance limits contained in this Agreement are sufficient to protect CM@Risk from liabilities that might arise out of the performance of the Agreement services under this Agreement by CM@Risk, its agents, representatives, employees, subconsultants, and CM@Risk is free to purchase any additional insurance as may be determined necessary.

1.5 Failure to demand evidence of full compliance with the insurance requirements in this Agreement or failure to identify any insurance deficiency will not relieve CM@Risk from, nor will it be considered a waiver of its obligation to maintain the required insurance at all times during the performance of this Agreement.

1.6 Use of subconsultants: If any work is subcontracted in any way, CM@Risk must execute a written Agreement with subconsultant containing the same Indemnification Clause and Insurance Requirements as City requires of CM@Risk in this Agreement. CM@Risk is responsible for executing the Agreement with the subconsultant and obtaining Certificates of Insurance and verifying the insurance requirements.

2. Minimum Scope and Limits of Insurance. CM@Risk must provide coverage with limits of liability not less than those stated below.

2.1 *Commercial General Liability-Occurrence Form*. CM@Risk must maintain "occurrence" form Commercial General Liability insurance with a limit of not less than $2,000,000 for each occurrence, $4,000,000 aggregate. Said insurance must also include coverage for products and completed operations, independent contractors, personal injury and advertising injury. If any Excess insurance is utilized to fulfill the requirements of this paragraph, the

Excess insurance must be "follow form" equal or broader in coverage scope than underlying insurance.

2.2 *Automobile Liability-Any Auto or Owned, Hired and Non-Owned Vehicles*
Vehicle Liability: CM@Risk must maintain Business/Automobile Liability insurance with a limit of $1,000,000 each accident on CM@Risk owned, hired, and non-owned vehicles assigned to or used in the performance of CM@Risk's work or services under this Agreement. If any Excess or Umbrella insurance is utilized to fulfill the requirements of this paragraph, the Excess or Umbrella insurance must be "follow form" equal or broader in coverage scope than underlying insurance.

2.3 *Workers Compensation and Employers Liability Insurance*: CM@Risk must maintain Workers Compensation insurance to cover obligations imposed by federal and state statutes having jurisdiction of CM@Risk employees engaged in the performance of work or services under this Agreement and must also maintain Employers' Liability insurance of not less than $1,000,000 for each accident and $1,000,000 disease for each employee.

2.4 *Builders' Risk/Installation Floater Insurance.* The Contractor bears all responsibility for loss to all equipment or Work under construction. Unless waived in writing by the City the Contractor will purchase and maintain in force Builders' Risk/Installation Floater insurance on the entire Work until completed and accepted by the City. This insurance will be Special Causes of Loss policy form, (minimally including perils of fire, flood, lightning, explosion, windstorm and hail, smoke, aircraft and vehicles, riot and civil commotion, theft, vandalism, malicious mischief, and collapse), completed value, replacement cost policy form equal to the Agreement price and all subsequent modifications. The Contractor's Builders' Risk/Installation Floater insurance must be primary and not contributory.

Builders' Risk/Installation Floater insurance must cover the entire Work including reasonable compensation for architects and engineers' services and expenses and other "soft costs" made necessary by an insured loss. Builders' Risk/Installation Floater insurance must provide coverage from the time any covered property comes under the Contractor's control and or responsibility, and continue without interruption during course of construction, renovation and or installation, including any time during which any Project property or equipment is in transit, off Site, or while on Site for future use or installation. Insured property must include, but not be limited to, scaffolding, false work, and temporary buildings at the Site. This insurance must also cover the cost of removing debris, including demolition as may be legally required by operation of any law, ordinance, regulation or code.

The Contractor must also purchase and maintain Boiler and Machinery insurance with the same requirements as Builders' Risk/Installation Floater insurance cited above if the Work to be performed involves any exposures or insurable property normally covered under a Boiler and Machinery insurance policy or made necessary as required by law or testing requirements in the performance of this Agreement. The Contractor will be responsible for any and all deductibles under these policies and the Contractor waives all rights of recovery and subrogation against the City under the Contractor- Builders' Risk/Installation Floater insurance described herein.

Builders' Risk/Installation Floater Insurance must be maintained until whichever of the following first occurs: (i) final payment has been made; or, (ii) until no person or entity, other than the City, has an insurable interest in the property required to be covered.
The Builders' Risk/Installation Floater insurance must be endorsed so that the insurance will not be canceled or lapse because of any partial use or occupancy by the City.

The Builders Risk/Installation Floater insurance must include as named insureds, the City, the Contractor, and all tiers of Subcontractors and others with an insurable interest in the Work who will be named as additional insureds unless they are able to provide the same level of coverage with the City and Contractor named as additional insureds. Certificates must contain a provision that the insurance will not be canceled or materially altered without at least 30 Days advance notice to the City. The City must also be named as a Loss Payee under the Builders' Risk/Installation Floater coverage.
The Builders Risk/Installation Floater insurance must be written using the Special Causes of Loss policy form, replacement cost basis.

All rights of subrogation under the Builders Risk/Installation Floater insurance are, by this Agreement, waived against the City, its officers, officials, agents and employees.

The Contractor is responsible for payment of all deductibles under the Builders' Risk/Installation Floater insurance policy.

3. Additional Policy Provisions Required.

3.1 *Self-Insured Retentions or Deductibles.* Any self-insured retentions and deductibles must be declared and approved by City. If not approved, City may require that the insurer reduce or eliminate any deductible or self-insured retentions with respect to City, its officers, officials, agents, employees, and volunteers.

3.1.1. CM@Risk's insurance must contain broad form contractual liability coverage.

3.1.2. CM@Risk's insurance coverage must be primary insurance with respect to City, its officers, officials, agents, and employees. Any insurance or self-insurance maintained by City, its officers, officials, agents, and employees will be in excess of the coverage provided by CM@Risk and must not contribute to it.

3.1.3. CM@Risk's insurance must apply separately to each insured against whom claim is made or suit is brought, except with respect to the limits of the insurer's liability.

3.1.4. Coverage provided by CM@Risk must not be limited to the liability assumed under the indemnification provisions of this Agreement.

3.1.5. The policies must contain a severability of interest clause and waiver of subrogation against City, its officers, officials, agents, and employees, for losses arising from Work performed by CM@Risk for City.

3.1.6. CM@Risk, its successors and or assigns, are required to maintain Commercial General Liability insurance as specified in this Agreement for a minimum period of 3 years following

completion and acceptance of the Work. CM@Risk must submit a Certificate of Insurance evidencing Commercial General Liability insurance during this 3 year period containing all the Agreement insurance requirements, including naming City of Chandler, its agents, representatives, officers, directors, officials and employees as Additional Insured as required.

3.1.7. If a Certificate of Insurance is submitted as verification of coverage, City will reasonably rely upon the Certificate of Insurance as evidence of coverage but this acceptance and reliance will not waive or alter in any way the insurance requirements or obligations of this Agreement.

3.2. *Insurance Cancellation During Term of Agreement.*

3.2.1. If any of the required policies expire during the life of this Agreement, CM@Risk must forward renewal or replacement Certificates to City within 10 days after the renewal date containing all the required insurance provisions.

3.2.2. Each insurance policy required by the insurance provisions of this Agreement must provide the required coverage and must not be suspended, voided or canceled except after thirty (30) days prior written notice has been given to City, except when cancellation is for non-payment of premium, then ten (10) days prior notice may be given. Such notice must be sent directly to Chandler Law-Risk Management Department, Post Office Box 4008, Mailstop 628, Chandler, Arizona 85225. If any insurance company refuses to provide the required notice, CM@Risk or its insurance broker must notify City of any cancellation, suspension, non-renewal of any insurance within seven (7) days of receipt of insurers' notification to that effect.

3.3 *City as Additional Insured*. The policies are to contain, or be endorsed to contain, the following provisions:

3.3.1. The Commercial General Liability and Automobile Liability policies are to contain, or be endorsed to contain, the following provisions: City, its officers, officials, agents, and employees are additional insureds with respect to liability arising out of activities performed by, or on behalf of, CM@Risk including City's general supervision of CM@Risk; Products and Completed operations of CM@Risk; and automobiles owned, leased, hired, or borrowed by CM@Risk.

3.3.2. City, its officers, officials, agents, and employees must be additional insureds to the full limits of liability purchased by CM@Risk even if those limits of liability are in excess of those required by this Agreement.

EXHIBIT D

SUBMITTAL REQUIREMENTS FOR GMP/PRICE PROPOSAL
(Page 1 of 2)

1. Unless otherwise instructed, CM@Risk must submit 3 bound copies of any GMP Proposal(s) that includes the following documents, complies with the requirements specified in this Agreement and the following instructions. The GMP Proposal(s) must be organized as follows:

   A. Table of Contents
   B. Project Description
   C. GMP Proposal and the following attachments:
      i. Detailed Cost Estimate upon which the GMP is based and if for phased work, a total project Detailed Cost Estimate as of the time of the phased GMP Proposal.
      ii. List of Subcontractors
      iii. Schedule of Manufacturers and Suppliers
   D. Schedule of Values ("SOV")
   E. Project Schedule and a variance report to the Baseline Project Schedule
   F. Construction phasing/traffic control (if applicable)
   G. List of GMP Plans and Specifications

2. A summary breakdown of the GMP Proposal is shown on page 2 of this Exhibit, along with instructions regarding certain line items. The definitions included in Section 1 of the General Conditions apply to the line items, as appropriate, and set-forth the criteria to be used by CM@Risk in providing the required breakdown.

3. The most current version of CM@Risk's SOV must be submitted with the GMP Proposal. Supporting documents for the SOV, including the request for bids, copies of bids received, and clarification assumptions used for the particular bid item listed must be provided in an organized matter that correlates with the SOV.

4. The final accepted GMP must not include any clarifications/assumptions made by CM@Risk in the preparation of the GMP Proposal, unless any such clarification or assumption is agreed to in writing by City.

5. The most current version of CM@Risk's Detailed Project Schedule must be submitted with the GMP Proposal with a variance report from the project's Baseline Schedule. The Detailed Project Schedule must be prepared as specified in this Agreement.

6. A table listing all drawing sheets included in the GMP Plans and Specifications must be included with the GMP package. The table must include the following information: Sheet Number, Sheet Name, Sheet Version, and Date of Issuance. The GMP Proposal and Specifications, as defined, must be transmitted as specified in this Agreement.

NOTE: The submittal package must be kept as simple as possible all on 8 ½ x 11 sheets. Color or shading must be kept to a minimum. If used, make sure the color or shading will not affect the reproduction of the submittal in black and white.

EXHIBIT D

CM@RISK GMP SUMMARY (PAGE 2 of 2)

Project Name: _____ Date: _____

Project Location: _____

City of Chandler Project No.: _____

	Amount
A. Cost of Work	
A1 Cost of Work (self perform, no mark-up)	$0.00
A2 Cost of Work (subcontractors, suppliers, materialmen)	$0.00
TOTAL COST OF WORK:	**$0.00**
B. General Conditions	**$0.00**
SUBTOTAL 1 (Cost of Work) (A + B):	**$0.00**
C. CM@Risk's Fee	**$0.00**
SUBTOTAL 2 (A + B + C):	**$0.00**
D. Bonds and Insurance (on Subtotal 1)	
D1 Bonds (Payment and Performance)	$0.00
D2 Insurance	$0.00
TOTAL BONDS & INSURANCE:	**$0.00**
SUBTOTAL 3 (SUBTOTAL 2 + BONDS & INS):	**$0.00**
E. Sales Tax	
E1 Sales Tax	$0.00
E2 Tax Credits	$0.00
TOTAL SALES TAX:	**$0.00**
F. Approved Allowances	
F1 Owner's Allowance	$0.00
F2 Owner's Allowance for Water and Wastewater	$0.00
TOTAL ALLOWANCES:	**$0.00**
G. Contingencies	
G1	$0.00
G2	$0.00
TOTAL CONTINGENCIES:	**$0.00**
TOTAL GMP PROPOSAL:	**$0.00**

Establishment of Values:

a. Cost of Work (A) and Allowances (F) to be submitted with GMP Proposal.

b. General Conditions Cost (B) to be established in Baseline Cost Model.

c. CM@Risk Fee as set forth in Section 3.7.3 of this Contract

EXHIBIT E
GENERAL CONDITIONS
AND
GENERAL CONDITIONS APPENDICES

GENERAL CONDITIONS

Approved date: July 20, 2022

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SECTION 1 - SCOPE OF THESE GENERAL CONDITIONS

These General Conditions encompass provisions that apply, and are incorporated into all construction Agreements entered into by the City of Chandler, unless otherwise specifically excluded in the executed Agreement.

SECTION 2 - GENERAL DEFINITIONS

Allowance : A specific amount for a specific item of Work, if any, that City agrees has not been sufficiently designed, detailed, or selected (including design changes from 90% to 100% as authorized by and at the discretion of the City) at the time the Agreement Price is agreed to for Contractor to provide a definitive price.

Alternate Systems Evaluations or Alternative Analysis: Alternatives for design, means and methods or other scope considerations that are evaluated using value analysis principles and have the potential to reduce construction costs while still delivering a quality and functional Project that meets City requirements.

Change Order: A written instrument issued after execution of the Agreement Documents signed by City and Contractor, stating their agreement upon all of the following: the addition, deletion or revision in the scope of services or deliverables; the amount of the adjustment to the Agreement Price, the extent of the adjustment to the Agreement Time, or modifications of other agreement terms. The Agreement Price and the Agreement Time may be changed only by Change Order.

Consultant: Person or firm that provides professional services.

City (Owner or OWNER): City of Chandler, a municipal corporation, with whom Contractor has entered into the Agreement and for whom the Work or Services are to be provided pursuant to the Agreement(s).

Contingent Bid Items: This is a minor bid item which is likely, but not certain, to occur during the course of work. If the Engineer determines that this work is required, the Contractor will accomplish the work and payment will be made based on the contingent unit bid price included in the proposal. Since the quantity listed in the proposal is primarily for bid comparison, the amount of work required by the Engineer may vary materially from this.

Agreement: The written agreement executed between City and Contractor, including all of the Agreement Documents.

Agreement Documents: The documents which together form the Agreement between City and Contractor, as identified in Article 2 of the Agreement, or are otherwise incorporated into the Agreement, including the Agreement, the exhibits thereto, these General Conditions, any Notice to Proceed, and any Job Order (if applicable), the Plans and Specifications, Project Schedule, written and properly executed Change Orders, MAG Specifications and City's amendments thereto, and any other documents so designated in the Agreement.

Agreement Price: The agreed-upon price to be paid to Contractor for full, timely, and acceptable completion of the Work or Services under the terms of the Agreement.

Agreement Time(s): The number of calendar days or the dates related to the applicable phase, Substantial Completion, or Final Acceptance as stated in Agreement Documents. Agreement Time starts

with the Notice to Proceed (NTP) and ends with Final Acceptance. The Agreement Time is set forth in the Agreement and is based upon the Project Schedule agreed to by City in writing.

Contractor: The person or business association with whom City has entered into an agreement for construction related Work or Services in relation to the Project at issue.

Contractor Payment Request: The form that is accepted by City and used by Contractor in requesting progress payments or final payment and which must include such supporting documentation as is required by the Agreement Documents or City.

Construction Budget: The City's budget for construction of the Project.

Construction Documents: The Plans, Specifications, and Drawings prepared and issued by the Design Professional and approved by City for construction, meaning the documents are sealed by the Design Professional (as required), acceptable for permitting and incorporated into the Agreement by this reference. All amendments and modifications to the Construction Documents must be approved in writing by City prior to incorporation into the Agreement.

Cost of the Work: The term Cost of the Work will mean costs necessarily incurred by Contractor in the proper performance of the Work. Such costs will be at rates not higher than the standard paid at the place of the Project except with prior consent of City.

Critical Path Method (CPM): A scheduling technique which identifies the logical sequence of the activities occurring in a Construction Project, the anticipated time required to complete each activity in the Project, and the activities that must be completed on schedule to finish the Project within the anticipated time. Typically, activities are arranged in a network that shows both activities and their dependencies. CPM is also used as a management technique which enables contracting parties to predict when activities may occur so that resources can be effectively used and limitations can be identified.

Critical Path: Critical Path is the sequence of project network activities which add up to the longest overall duration. Once established in the Project Schedule, the Critical Path for the Project must not be changed without prior written approval of City.

Day: Calendar day(s) unless otherwise specifically stated in the Agreement Documents.

Design Professional: The qualified, licensed person, firm or corporation who furnishes design and construction administration services required under the Agreement Documents. These services may include, but are not limited to: development of Construction Drawings and Documents, review of Contractor Submittal(s), review of and response to Requests for Information, approval and certification of progress payment applications, construction administration, and construction agreement close out.

Differing Site Conditions: Concealed or latent physical conditions or subsurface conditions at the Site that, (i) materially differ from the conditions indicated in the Agreement Documents, or (ii) are of an unusual nature, differing materially from the conditions ordinarily encountered and generally recognized as inherent in the Work at the general area of the Site. Caliche, rock, hard-digging or sandy/silty soil encountered on a project is not considered a "Differing Site Condition."

Drawings (Plans): Documents, which visually represent the scope, extent and character of the Work to be furnished and performed by Contractor during the construction phase and which have been prepared

or approved by the Design Professional and City. These documents include Drawings that have reached a sufficient state of completion and released by Design Professional solely for the purposes of review and use in performing constructability or bid-ability reviews by Contractor and in preparing cost estimates (e.g. Master Planning and Programming, Schematic Design, Design Development, and Construction Drawings), but *"not for construction*." Shop Drawings are not Drawings as so defined.

Final Acceptance: The City's acceptance of the facility or project from the Contractor after all Work is completed, tested, and inspected in accordance with the Agreement requirements. Final Acceptance results in a Letter of Acceptance (LOA).

Fixed Price: A fixed price or amount for an Agreement Price, Scope of Work, materials, or other item under an Agreement, Change Order, or other agreement, which City agrees, in writing, to pay instead of the actual cost.

Float: The number of Days by which an activity can be delayed without lengthening the Critical Path and extending the Agreement Time. Unless otherwise expressly agreed in writing, all Float belongs to City.

Laws, Regulations, or Legal Requirements: Any and all applicable laws, rules, regulations, ordinances, codes and orders applicable to the Project of any and all governmental bodies, agencies, authorities and courts having jurisdiction and any applicable provisions of the Development Agreement for the Project (if any), including, without limitation, those provisions relating to the design and construction of the Project.

Line Item: The individual elements of Work identified on a bid or other schedule and associated with a price or a unit price and quantity particular to that individual element of the Work. Also refers to individual items of work within the Schedule of Values.

Liquidated Damages: Designated damages for the City to collect as compensation upon a specific breach (example: late delivery).

Long-Lead Item: Long-lead item refers to the equipment, product, or system that is identified at the earliest stage of a project to have a delivery time long enough to affect directly the Critical Path/the overall lead time of the project.

MAG: The Maricopa Association of Governments.

MAG Specifications: The most current version of the Uniform Standard Specifications for Public Works Construction published by MAG.

MAG Standard Details: The most current version of the Uniform Standard Details as published by MAG.

Minor change: A change in the Work having no impact on cost or time or the City-approved design intent, as determined by City.

Notice to Proceed (NTP): A written notice given by City to Contractor fixing the date on which Contractor will start to perform Contractor's obligations under the Agreement.

Project: The Project specified in the Agreement (including a Job Order).

Project Manager: The Project Manager designated in Article 1 of the Agreement, or any successor thereto

designated by City. The Project Manager has the authority to act on behalf of City, as delineated and limited by the Agreement Documents and applicable law. And City will communicate with Contractor through the Project Manager. However, the Project Manager has no authority to bind City or City Council in contravention of any City code, State or Federal statute or regulation, or these General Conditions.

Project Schedule: The schedule for the completion of the Project agreed to and required by City.

Project Specific Conditions: Additional conditions which apply to the specific Project and Scope of Work which are set forth in Exhibit D of the Agreement.

Project Team: The Project Team consisting of the Design Professional, Contractor, Project Manager, and such others as City may designate.

Punch List: The list initially prepared by Contractor pursuant to the Agreement Documents, reviewed and supplemented by the Project Manager (and at the sole option of the Project Manager, the Design Professional) and approved by City containing items of incomplete work not impacting Substantial Completion, if allowed for under the Agreement, and to be completed or corrected by Contractor after Substantial Completion and before Final Acceptance in accordance with the Agreement Documents.

Quality Assurance (QA) Testing: Testing performed to verify the accuracy and applicability of the QC testing results and to ascertain that the materials installed meet the specified levels of quality in accordance with the Agreement Documents.

Quality Control (QC) Testing: Testing performed to assure that the materials installed comply with the requirements in the Agreement Documents.

Requests for Information (RFIs): Formal written request from Contractor to City or Design Professional for the Project seeking clarification or additional information needed for Contractor to properly complete the Work or Services under the Agreement. City may require RFI's to be submitted on a specific form or in a specified format.

Schedule of Values (SOV): The specified document prepared by Contractor, and approved and accepted by City, which divides the Agreement Price into pay items, such that the sum of all pay items equals the Agreement Price for the construction phase Work, or for any portion of the Work having a separate specified Agreement Price.

Scope of Work: The scope of work agreed to or required by City and incorporated into the Agreement as Exhibit A.

Shop Drawings: All drawings, diagrams, schedules and other data specifically prepared for the Work by Contractor or a Subcontractor, Sub-subcontractor, manufacturer, supplier or distributor to illustrate some portion of the Work.

Site: The land or premises on which the Project is located.

Specifications: The part(s) of the Agreement Documents for the construction phase consisting of written technical descriptions of materials, equipment, construction systems, standards and workmanship as applied to the Work and certain administrative details applicable thereto. Where specified, the Project must be constructed using the current Uniform Standard Specifications and Details for Public Works

Construction as furnished by the Maricopa Association of Governments, as amended by City.

Subconsultant: A person, firm or corporation having an Agreement with Consultant/Contractor to furnish services required as its independent professional associate or consultant with respect to the Project.

Subcontractor: An individual or firm having a direct Agreement with Contractor or any other individual or firm having an Agreement with the aforesaid contractors at any tier, who undertakes to perform a part of pre-construction services or construction phase Work at the Site for which Contractor is responsible. Subcontractors must be selected through the Subcontractor selection process described in the Agreement Documents, if any.

Substantial Completion: The date when the City determines that the Work (or separable units of Phases as provided in the Agreement Documents) is essentially and satisfactorily complete in accordance with the Agreement Documents such that the Project is ready for use by the City for its intended purpose, opening to the general public, full occupancy or use by City (including, without limitation, all separate units, or rooms, facilities, access, income-generating areas, and all areas serving the general public, as applicable, must be ready for full operation without material inconvenience or discomfort), including, to the extent applicable to the Work, the following: all materials, equipment, systems, controls, features, facilities, accessories, and similar elements are installed in the proper manner and in operating condition, inspected, and approved; surfaces have been painted; masonry and concrete cleaned with any sealer or other finish applied; utilities and systems connected and functioning; site work complete; permanent heating, ventilation, air conditioning, vertical transportation, and other systems properly operating with proper controls; lighting and electrical systems installed, operable and controlled; paving completed, signage installed, and other work as applicable, has been performed to a similar state of essential and satisfactory completion.

Supplier: A manufacturer, fabricator, distributor, or vendor having a direct Agreement with Contractor or with any Subcontractor to furnish materials or equipment to be incorporated in the construction phase Work by Contractor or any Subcontractor.

Total Float: Number of Days by which pre-construction services or construction phase Work or any part of the same may be delayed without necessarily extending a pertinent Agreement Time or schedule milestone in the Project Schedule.

Work: The entire completion of construction or the various separately identifiable parts thereof, required to be furnished during the construction phase. Work includes and is the result of performing or furnishing labor and furnishing and incorporating materials, resources and equipment into the construction, and performing or furnishing services and documents as required by the Agreement Documents for the construction phase.

Writing: Typing, printing, photography and other modes of representing or reproducing words in a visible form, including email, and expressions.

SECTION 3 - STANDARD SPECIFICATIONS AND DETAILS

3.1 City operates under the latest revision of the MAG Specifications and MAG Standard Details as amended by City. City's current amendment to the MAG Specifications, part of the City's Unified Development Manual, may be found and downloaded from City's website at http://www.chandleraz.gov.

3.2 Copies of the MAG Specifications and MAG Standard Details are available at the Maricopa Association of Governments office, 302 N. 1st Avenue, Suite 300, Phoenix, Arizona. They may also be downloaded from their website at: http://www.azmag.gov/Newsroom/Publications

3.3 The MAG Specifications and Standard Details and City's amendments thereto are incorporated into the Agreement by this reference.

SECTION 4 - CONTRACTOR'S RESPONSIBILITIES FOR CONSTRUCTION SERVICES

4.1 GENERAL

4.1.1 Contractor must construct the Work in accordance with the Agreement Documents and as outlined in Exhibit A of the Agreement to the satisfaction of City, exercising the degree of professional care, skill, diligence, quality and judgment that a professional construction manager engaged, experienced and specializing in the construction management of construction and facilities of similar scope, function, size, quality, complexity and detail in urban areas throughout the United States comparable to Chandler, Arizona would exercise at such time, under similar conditions. Contractor must, at all times, perform the Work in conformance with sound and generally accepted engineering principles and construction management and construction contracting practices.

4.1.2 If Contractor observes errors, discrepancies or omissions in the Agreement Documents, Contractor must promptly notify the Design Professional and City and request clarification. If Contractor, with the exercise of reasonable care, should have recognized such error, inconsistency, omission, or difference and fails to report it to City, and if Contractor proceeds with the Work affected by such observed errors, discrepancies or omissions, without receiving such clarifications, Contractor does so at its own risk and will be liable to City for damages resulting from proceeding without clarification.

4.1.3 Project Team and agents of each of them, testing agencies and governmental agencies with jurisdictional interests will be provided access to the Work at reasonable times for their observation, inspection, and testing. Contractor must provide proper and safe conditions for such access.

4.1.4 Contractor must comply with, and require all Subcontractors to comply with, the Arizona Contractors' license laws, including all requirements with respect to being duly registered and licensed.

4.1.5 Contractor must ensure that all employees performing any Work for which Contractor is responsible have a legal right to live and work in the United States. In addition, all compensation of any such employee must meet all applicable requirements of the Fair Labor Standards Act (FLSA) and Federal Minimum Wage laws.

4.1.6 Contractor must comply with the Immigration Reform and Control Act of 1986 (IRCA). Contractor understands and acknowledges the applicability of the IRCA activities. Contractor agrees to comply with the IRCA while performing their work and to permit City inspection of Contractor personnel records to verify such compliance.

4.1.7 Pursuant to MAG Specifications §§ 107.4, Contractor must report immediately any discovery of archeological ruins or artifacts. Excavation must stop immediately so that City can decide on the pertinent steps to follow such discovery.

4.1.8 All property owners that may be affected by the proposed construction activities must be notified of the scope, duration of the construction activities and possible interference with their day-to-day activities by Contractor prior to start of construction. In addition, individual residential or commercial interferences, such as driveway restrictions, water outages, and all other Work adjacent to residence/business, require 48-hour notification in advance of specific adjoining Work. Notification may be through door hangers or other procedures approved by the City.

4.1.9 Access must be maintained to adjacent properties at all times during construction. Where property has more than one point of access, no more than one access will be restricted or closed at any one time. Access to adjacent private driveways will be maintained during all non-working hours.

4.1.10 Contractor must furnish and erect construction signs in accordance with Project Specifications. The signs must be professionally prepared and subject to approval by City, must be maintained by Contractor for the duration of the project, and must be removed by Contractor during the final project clean up.

4.1.11 The number of signs required, the size, shape, installation requirements and information to be included for construction signs is established on the detail sheet, provided, however, signs must be a minimum of 4 foot by 8 foot and must be installed so that the bottom of the sign is at least 4 foot above grade. No direct payment will be made for furnishing and erecting construction signs. The cost thereof must be included in other items for which direct payment is made. Sign locations will be determined by City.

4.1.12 All required construction signs must be installed by Contractor within 7 Days of Notice to Proceed.

4.1.13 The Work to be accomplished under these Agreement Documents has been designed for City by a Design Professional retained by City for this purpose. It is understood that normal construction Administration for the purpose of interpretation of the Agreement Documents is provided by City. Should any services of the Design Professional be required to assist in the corrections of errors or omissions by Contractor, or services of the Design Professional be required because of changes in structure or equipment where Contractor has requested approval of substitute methods or material, or any other items detailed herein below, those services will be provided by the Design Professional at the standard hourly rates previously negotiated with City and must be paid for by the Contractor.

4.1.14 Contractor must reimburse City for costs incurred by the Design Professional for additional services to the Project through no fault of City or the Design Professional including, but not limited to, the following conditions:

a. Additional Site visits, investigations, inspections, design work or reports by the Design Professional which are required due to damages to existing facilities or completed Work caused by the Contractor in his performance, Contractor's negligence, or Contractor's Work which is rejected as defective or as failing to conform to the Agreement Documents;

b. Design Professional construction phase services rendered on the project during the time the project remains incomplete after the Agreement date of final completion will be charged to Contractor at a rate previously negotiated City; and

c. All retesting required due to the failure of Contractor's Work to meet the requirements of the Agreement Documents will be at Contractor's expense. All standby and travel time by the City's testing lab, the Design Professional or City due to Contractor's inability to be prepared for testing at the agreed upon time will be at the Contractor's expense.

4.1.15 City may withhold from any payment otherwise due to Contractor any amounts necessary to pay the Design Professional for such additional services as provided herein above.

4.1.16 Contractor will not be required to bear additional costs incurred by City due to errors by the Design Professional.

4.2 **CONTRACTOR'S PRE-AGREEMENT AND PRE-WORK DELIVERABLES**

4.2.1 Prior to award of the Agreement, Contractor must execute Agreement and deliver to City. Failure to do so may delay Agreement award. Contractor must also provide to City its Contractor's License classification and number and its Federal Tax I.D. number.

4.2.2 Before beginning any Work under the Agreement, Agreement must be fully executed by City.

4.2.3 After Agreement award, City will issue to Contractor an award letter. At that time Contractor must deliver to City such bonds and certificates of insurance with endorsements in such amounts (and other evidence of insurance requested by City) required under Section 11 of these General Conditions, and as the Agreement requires.

4.2.4 As evidence of Workmen's Compensation Insurance, Contractor must, upon request, provide a letter of certification from the Industrial Commission of Arizona that Contractor is insured by the State Compensation Fund or is an authorized self-insurer or a certificate of insurance issued by an insurance company authorized by the Insurance Department of Arizona to write Workmen's Compensation and Occupational Disease Insurance in the State of Arizona.

4.2.5 Within 10 Days of the date of the executed Agreement letter issued by City, Contractor must submit to City for review and acceptance the following items:

4.2.5.1 Comprehensive construction Project Schedule including a Critical Path Method (CPM) diagram schedule as described in Section 6.2. Project Schedule must be in Microsoft Project standard file format. Within 10 Days of receipt of City's comments, Contractor must make all required corrections, adjustments, and additions to complete the Project Schedule and resubmit to City for review.

4.2.5.2 Preliminary schedule of submittals and Shop Drawings. Within 10 Days of receipt of City's comments, Contractor must submit the corrected and completed schedule of Shop Drawings submissions for approval. Contractor's schedule of Shop Drawings and sample submittals will be acceptable to City if it provides a workable arrangement for reviewing and processing the required submittals.

4.2.5.3 Schedule of Values in a form specified by City reflecting the subcontracts and other categories that will be used to submit Pay Applications for the Work. The total amount of the Schedule of Values must not be greater than the Agreement Price. The Schedule of Values will be reviewed at the Pre-Construction Conference and revised by Contractor within 10 Days after Pre-Construction Conference in response to comments and questions from

City. Once accepted by City in writing, the Schedule of Values for the Project must not be changed without the prior written approval of City.

4.2.6 Video Recording Requirement. Prior to performing any Work, Contractor must document the existing conditions of the Site, all other areas where Work will occur and all adjacent areas that may be impacted by the Work via digital video format. Contractor must video record and index all areas, features, buildings and other public and private improvements that could potentially be impacted by the Work. Video recording must be coordinated with City. When video recording private property, Contractor must also coordinate the video recording with the private property owner, if possible. Contractor must provide City with a copy of said digital video format prior to performing any Work.

4.2.7 Aerial Drone Construction Photography.

4.2.7.1 If Agreement duration is greater than 90 calendar days, Contractor must engage a professional unmanned aerial vehicle (UAV) aerial pilot to photograph the Site prior to construction mobilization, at three-month intervals during construction, and following final inspection. Drone camera specifications must meet the following minimum requirements:

a. 1-inch CMOS
b. Pixels: 20M
c. FOV 84 8.8 mm/24 mm (35 mm format equivalent) f/2.8-f/11 auto focus at 1 m-
d. For photographing: 16.9 Aspect Ratio: 5472x3078
e. For video shooting: MP4/MOV/H.264
f. FHD: 1920x1080 120p @100Mbps
g. File format: High Definition (HD) JPEG for digital photos and HD MPEG 4 for digital video.
h. All metadata to be recorded including GPS data and preserved with photographs provided.

Interval	**JPEG**
3 month intervals	At an altitude (AGL) between 70-90 ft.
3 month intervals	Images to be taken every 50-100 ft. to be determined based on project scope.

4.2.7.2 Drone photos to be taken in sequential geographical order and then organized and provided in the same manner unless otherwise specified.

4.2.7.3 Photos to be provided digitally via an online file share service and/or by a USB drive to contractor.

4.2.7.4 Drone pilots to obey ALL local (city, county, state) UAV regulations as well as FAA UAV guidelines including, but not limited to, conducting all flights during daylight hours, not exceeding maximum altitude ceilings (depending on area), not flying over people, yielding to other aircraft.

4.2.7.5 Drone pilots must fly drone within visual line of sight (VSOL) and have visual spotter when needed. Drone pilots only to operate in favorable weather conditions when minimum visibility is 3 miles or greater.

4.2.7.6 Drone pilots to conduct a preflight checklist and visually inspect the entire flight path prior to flying to ensure a safe flight.

4.2.7.7 Airspace Authorizations. Operations in Class G airspace are allowed without air traffic control (ATC) permission. Operations in Class B, C, D and E airspace need ATC authorization. Drone pilots to schedule each flight in advance and based on airspace if required will notify nearby airports/control towers, etc.

4.2.8 Government Approvals and Permits.

4.2.8.1 Contractor must obtain all necessary permits for the Work and pay all applicable fees, unless otherwise noted on the Plans and in the Specifications. City permit fees will be paid internally by City. For bidding purposes, an allowance for all permit fees is included in the bid schedule under the item "allowance for permit fees." The Contractor will be paid for the actual cost of the permit fees upon submitting a receipt showing the fee Contractor has paid. Excluded from the above allowance are items such as all costs incurred by the Contractor in securing the permit except for the actual permit fee established by the agency, cost for all shutdowns or outages, cost for pole bracing, cost of permits for construction water, cost of construction water, cost for any additional insurance requirements, cost for any licenses, and other similar type costs. Contractor is specifically notified of the need to obtain the necessary environmental permits or file the necessary environmental and regulatory permit notices.

4.2.8.2 Copies of all permits and the associated notices must be provided to City prior to starting the permitted activity.

4.3 PRE-CONSTRUCTION CONFERENCE

4.3.1 Prior to the commencement of any Work, City will schedule a Pre-Construction Conference.

4.3.2 The purpose of this Conference is to establish a working relationship between Contractor, the utility firms, and various City agencies. The agenda will include critical elements of the Work schedule, submittal schedule, cost breakdown of major lump sum items, Payment Requests and processing, coordination with the involved utility firms, and emergency telephone numbers for all representatives involved in the course of construction.

4.3.3 Minimum attendance by Contractor at any mandatory meeting with City must be (1) Contractor's Representative, who is authorized to execute and sign documents on behalf of the firm, (2) Contractor's on-site Superintendent, and (3) Contractor's Safety Office, or other employee responsible for safety.

4.4 PERFORMANCE OF THE WORK (INCLUDING FIELD MEASUREMENTS, SUBCONTRACTORS, AND SUPPLIERS)

4.4.1 Unless otherwise provided in the Agreement Documents to be the responsibility of City or a separate Contractor, Contractor must provide through itself or Subcontractors the necessary supervision, labor, inspection, testing, start-up, material, equipment, machinery, temporary utilities and other temporary facilities to permit Contractor to complete the Work consistent with the Agreement Documents.

4.4.2 Contractor must perform all construction activities efficiently and with the requisite expertise, skill and competence to satisfy the requirements of the Agreement Documents. Contractor must at all times exercise complete and exclusive control over the means, methods, safety, sequences and techniques of construction.

4.4.3 Contractor's Superintendent must be present at the Site at all times that material Work

under this Agreement is taking place. Contractor's Superintendent or designee must be present at the Site at all times any other Work under this Agreement is taking place. Superintendent must not be replaced without written notice to City. Whenever the Superintendent is not present at a particular part of the Work where the City or Design Professional may desire to inform the Contractor relative to interpretation of the Drawings and Specifications or to disapproval or rejection of materials or Work performed, the City or Design Professional may provide such information in writing to the foreman or other worker in charge of the particular part of the Work in reference to which the information is given. Information so given will be as binding as if given to the Superintendent.

4.4.4 All elements of the Work must be under the direct supervision of a foreman or his designated representative on the Site who must have the authority to take actions required to properly carry out that particular element of the Work.

4.4.5 Working Hours. Except in connection with the safety or protection of persons or the Work or property at the Site or adjacent thereto, and except as otherwise indicated, all Work at the Site must be performed during regular working hours, and Contractor will not permit overtime work or the performance of Work on Saturday, Sunday or any legal holiday without City's written consent given after prior written notice to City. If it will become absolutely necessary to perform Work at night or on Saturdays, Sundays or legal holidays, the City must be informed at least 24 hours in advance of the beginning of performance of such Work. Only such Work will be done at night as can be done satisfactorily as determined by the City. Good lighting and all other necessary facilities for carrying out and inspecting the Work must be provided and maintained at all points where such Work is being done. Further, unless such non-normal work hours are performed at City's request or required by the Agreement Documents, Contractor must pay to City all additional costs incurred by City by reason of such non-normal working hours. Expenses incurred by City for overtime compensation must be reimbursed by Contractor as follows: (i) City staff at the rate set forth in current City Fee Schedule as published on City website, (ii) Design Professional and staff at the standard hourly rates previously negotiated with City, and (iii) all others at actual cost plus ten percent administrative overhead. Such costs may be deducted by City from any payments due to Contractor. Provided, however, if overtime work or work during other than normal hours is at the request of City and not due to Contractor delay, City will pay the cost of City overtime expenses.

4.4.6 Where the Agreement Documents require that a particular product be installed or applied by an applicator approved by the manufacturer, it is Contractor's responsibility to ensure the Subcontractor employed for such work is approved by the manufacturer. All materials and equipment must be stored, applied, installed, connected, erected, used, cleaned and conditioned in accordance with the instructions of the applicable manufacturer, fabricator, supplier or distributor, except as otherwise provided in the Agreement Documents; but no provisions of any such instructions will be effective to impose on City of Design Professional responsibility for the means, methods, techniques, sequences or procedures of construction or for safety precautions incident thereto.

4.4.7 Before starting the Work, Contractor must carefully study and compare the various Plans, Drawings, other Agreement Documents, and Specifications relative to that portion of the Work, as well as the information furnished by City, must take field measurements of any existing conditions related to that portion of the Work and must observe any conditions at the Site affecting it. The exactness of grades, elevations, dimensions, or locations given on any Drawings, or the Work installed by other contractors, is not guaranteed by City.

4.4.8 Before ordering materials or doing Work, Contractor and each Subcontractor must verify measurements at the Site and will be responsible for the correctness of such measurements. No extra charge or compensation will be allowed because of differences between actual dimensions and the dimensions indicated on the Agreement Documents, including the Drawings.

4.4.9 Ground Level Construction Photography.

4.4.9.1 The Contractor must furnish progress photographs of the project. The photographer selected by the Contractor must be approved by the City and must be either a commercial photographer or an individual experienced and equipped for such photography.

4.4.9.2 The Contractor must deliver to City all photographs taken during that period with each application for payment. If the current photographs do not accompany the application, the application will not be reviewed and will be returned to the Contractor as incomplete.

4.4.9.3 Photographs must be identified by use of typewritten labels affixed to the back of the photograph. The label must provide a description of the view, the direction from which the photograph was taken, the name of the project, City's project number, the name of Contractor and the date of the photography. The stationing must also be included for all pipeline installations.

4.4.9.4 Photographs must be taken during the construction period and must be of aesthetic composition and depict the progress of the Work from the beginning of construction through and including the finished product. City may vary the specified frequency so that significant progress or changes can be recorded on the photographs.

4.4.10 Underground Facilities.

4.4.10.1 The existence and number of facilities as shown on the Plans are estimated from information furnished by the particular utility. Contractor is responsible for field verification and location of all utilities prior to the start of construction. No field work will be allowed to start until Contractor has contacted Arizona 811 and all affected utilities have been located. In addition, Contractor must expose and physically locate all potentially conflicting utilities prior to construction. The actual locations of the utilities must be compared to locations shown on the Plans and any required changes in alignment and grade must be made at the time of construction in consultation with Project Manager. It is generally recognized and Contractor should anticipate that information from Arizona 811 or information from utility companies during project design, frequently fails to disclose all underground facilities. The fact that more utility lines or other underground facilities are located in the Project Site than shown on the Project Plans does not constitute an "unforeseen Condition" and such undisclosed underground facilities do not differ materially from the conditions which Contractor should expect. The provisions of Sections 105.4, 105.6, 107.11 and 109.8.1 of the MAG Uniform Standard Specifications for Public Works Construction apply and are incorporated herein by this reference.

4.4.10.2 Contractor is responsible for all coordination with utility companies. The provisions of Sections 105.4, 105.6, 107.11 and 109.8.1 of the MAG Uniform Standard Specifications for Public Works Construction strictly apply and no additional compensation will be paid to Contractor for delays due to utility work on the project.

4.4.11 Relocation of Existing Water Meters. When a service line has been extended and a line

setter installed in a meter box, City forces will re-install meter. No compression fittings will be utilized.

4.4.12 Water Turn-On or Turn-Off.

4.4.12.1 Contractor must coordinate all water line turn-ons and turn-offs through the City. Application must be made to the Municipal Utility Division and Contractor must pay the established charges. The City will close existing valves, but will not guarantee a bone-dry Shutdown.

4.4.12.2 Contractor must notify all customers affected by the turn-off not less than 48 hours in advance. Notification must be in writing, must give the reason for the turn-off and must give the estimated time and duration that water service will be interrupted. Contractor is also notified that water turn-off will not be permitted on the Day before and after Thanksgiving Day and Christmas Day.

4.4.12.3 No direct payment will be made to Contractor for turn-ons or turn-offs. Costs associated therewith will be included in other items for which direct payment is made.

4.4.13 Tests and Inspections.

4.4.13.1 Contractor must give City timely (at a minimum, twenty-four hours) notice of readiness of the Work for all required inspections, tests or approvals. Contractor must give timely notice to City in advance of backfilling or otherwise covering any part of the Work so that city representative may, if desired, observe such part of the Work before it is concealed. Whenever Contractor varies the normal period during which Work or any portion of it is carried on each Day, Contractor must give timely notice to City so that city representative may, if desired, be present to observe the Work in progress. If Contractor fails to give such timely notice, any Work done in the absence of city representative will be subject to rejection. If Contractor gives such notice to City, but then is not ready for such inspections, tests, approvals or observations at the time so noticed, Contractor must reimburse City for all costs incurred by the attendance of city representatives.

4.4.13.2 If any law, ordinance, rule, regulation, code, or orders of any public body having jurisdiction requires any Work (or part thereof) to be inspected, tested or approved, Contractor (unless another party is specified in the Agreement Documents) must assume full responsibility therefor, pay all costs in connection therewith and furnish City the required certificates of inspection, testing, or approval. Contractor must also be responsible for and must pay all costs in connection with any inspection or testing required by the Specifications in connection with City's acceptance of a manufacturer, fabricator, supplier or distributor of materials or equipment proposed to be incorporated in the Work, or of materials or equipment submitted for approval prior to Contractor's purchase thereof for incorporation in the Work. The cost of all other inspections, tests and approvals required by the Agreement Documents will be paid by City (unless otherwise specified).

4.4.13.3 All inspections, tests or approvals other than those required by law, ordinance, rule, regulation, code or order of any public body having jurisdiction must be performed by organizations acceptable to City and by the Design Professional if so specified.

4.4.13.4 Neither observations by City, the Design Professional nor inspections, tests or approvals by others will relieve Contractor from their obligations to perform the Work in accordance with the Agreement Documents.

4.4.14 Uncovering Work. If any Work that is to be observed, inspected, tested or approved is covered without written concurrence of City, it must, if requested by City be uncovered for observation. Unless Contractor has given City timely notice of Contractor's intention to cover such Work and City has not acted with reasonable promptness in response to such notice, Contractor must furnish all necessary labor, material and bear all the expenses of such uncovering, exposure, observation, inspection and testing and of satisfactory reconstruction, including compensation for additional professional services, and an appropriate deductive Change Order will be issued.

4.4.15 In all cases of interconnection of its Work with existing or other Work, Contractor must verify at the Site all dimensions relating to such existing or other Work. Any errors due to Contractor's failure to so verify all such grades, elevations, locations or dimensions must be promptly rectified by Contractor without any increase in the Agreement Price. Any design errors or omissions noted by Contractor during this review must be reported promptly to City.

4.4.16 Contractor must establish and maintain all construction grades, lines, levels, and benchmarks, and will be responsible for accuracy and protection of same. This Work must be performed or supervised by a licensed civil engineer or surveyor in the State of Arizona.

4.4.17 Contractor must photograph all buried piping of greater than four (4) inches in diameter prior to backfill.

4.4.18 Contractor is responsible for the proper performance of the work of Subcontractors and any acts and omissions in connection with such performance. Nothing in the Agreement Documents is intended or deemed to create any legal or contractual relationship between City and any Subcontractor or Sub-Subcontractor, including but not limited to any third-party beneficiary rights.

4.4.19 Contractor must coordinate the activities of all Subcontractors. Contractor must coordinate performance of the Work with City's Public Works & Utilities Department and other departments or agencies within City. The Design Professional and other contractors or parties involved in the Project. If City performs other work on the Project or at the Site with separate contractors under City's control, Contractor agrees to cooperate and coordinate its activities with those of such separate contractors so that the Project can be completed in an orderly and coordinated manner without unreasonable disruption.

4.4.20 Contractor will not substitute or change any Subcontractor or Supplier without the prior written approval of City. Any substitute or replacement Subcontractor or Supplier must be required to meet the same qualifications and selection criteria and process as the original Subcontractor or Supplier. If a Subcontract/Supplier selection plan has been approved by City, Contractor will follow that plan unless otherwise approved by City in writing.

4.4.21 Contractor must not change or replace any members of its Project team, including Contractor's Representative, Project Manager, or Superintendent, without an explanation for the change being given to City, and receiving prior written approval of the change from City, which approval will not be unreasonably withheld.

4.4.22 Subcontractors whose scope of work has a value greater than 15% of the total Agreement Price are required to furnish performance and payment bonds to Contractor, unless

otherwise approved in writing by City.

4.4.23 Contractor must comply with MAG Specification § 108.2 (E) unless otherwise specified in Agreement Documents.

4.5 **CONTROL OF THE PROJECT SITE**

4.5.1 Throughout all phases of construction, including suspension of Work, Contractor must keep the Site reasonably free from debris, trash and construction wastes to permit Contractor to perform its construction services efficiently, safely and without interfering with the use of adjacent land areas. Prior to Final Acceptance of the Work, or a portion of the Work, Contractor must remove all debris, trash, construction wastes, materials, equipment, machinery and tools arising from the Work or applicable portions thereof to permit City to occupy the Project or a portion of the Project for its intended use.

4.5.2 Contractor must take whatever steps, procedures or means necessary to prevent dust nuisance due to construction operations. The dust control measures must be maintained at all times to the satisfaction of City and in accordance with the requirements of the Maricopa County Bureau of Air Pollution Control Rules and Regulations.

4.5.3 Contractor must maintain Americans with Disabilities Act (ADA) and American National Standards Institute (ANSI) accessibility requirements during construction activities, including without limitation compliance with the 2010 regulations governing implementation of the ADA to the extent applicable. ADA and ANSI accessibility requirements must include, but not be limited to, parking, building access, areas of refuge, and emergency exit paths of travel. Contractor is responsible for the coordination of all Work to minimize disruption to residents and the public.

4.5.4 Only materials and equipment used directly in the Work will be brought to and stored on the Site by Contractor. When equipment is no longer required for Work, it must be removed promptly from the Site. Protection of construction materials and equipment stored at the Site from weather, theft, damage and all other adversity is solely the responsibility of the Contractor.

4.5.5 Contractor agrees all persons working on the Site must act at all times in the best interest of the Project and will comply with all applicable rules and regulations reasonably set forth by City related to the Site. Notwithstanding the foregoing or anything in this Agreement to the contrary, City may remove from the Site any individual who City deems in their reasonable discretion to be creating a disturbance or causing any problem on the Site.

4.5.6 Contractor will be responsible to City for the acts and omissions of Contractor's employees, Subcontractors and their agents and employees, and any other person performing any of the Work under an Agreement with Contractor, or claiming by, through or under Contractor, for all damages, losses, costs and expenses resulting from such acts or omissions.

4.5.7 City may conduct criminal, drive history, and all other requested background checks of Contractor and Subcontractor personnel performing Work or who have access to City's information, data, or facilities in accordance with City's current background check policies, or the provisions of the Project Specific Conditions. Any officer, employee or agent that fails to background check must be replaced immediately.

4.5.8 City will have a final authority, based upon security reasons: (i) to determine when

security clearance of Contractor's and Subcontractor's personnel is required; (ii) to determine the nature of the security clearance, up to and including fingerprinting personnel; and (iii) to determine whether or not any individual or entity may provide Services or perform Work under the Agreement.

4.5.9 If City objects to any personnel for any reasonable cause, then Contractor must, upon notice from City, remove such individual from the Project.

4.6 **PROJECT SAFETY**

4.6.1 The Project and all Work performed in relation thereto is governed by applicable provisions of the federal laws, including but not limited to, the latest amendments of the following:

a. Williams-Steiger Occupational Safety & Health Act of 1970, Public Law, 91-596.

b. Part 1910 and Part 1926 – Occupational Safety and Health Standards, Chapter XVII of Title 29, Code of Federal Regulations.

c. Part 1518 – Safety and Health Regulations for Construction, Chapter XIII of Title 29, Code of Federal Regulations.

4.6.2 Contractor is responsible for safety of the job Site for employees of Contractor as well as for members of the general public and others who may drive or walk through or be at the Site.

4.6.3 Contractor recognizes the importance of performing the Work in a safe manner so as to prevent damage, injury or loss to: (i) all individuals at the Site, whether working or visiting; (ii) the Work, including materials and equipment incorporated into the Work and stored On-Site or Off-Site; and (iii) all other property at the Site or adjacent thereto, including trees, shrubs, lawns, walks, pavements, roadways, structures and utilities not designated for removal, relocation or replacement in the course of construction; and (iv) the owners or tenants of adjacent property and their patrons, employees and invitees.

4.6.4 Contractor assumes responsibility for implementing and monitoring all safety precautions and programs related to the performance of the Work.

4.6.5 Contractor must provide a "competent person' as required by O.S.H.A regulations. The "competent person" must be identified at the Pre-Construction Conference with City advised in writing of any changes.

4.6.6 The "competent person" must make routine daily inspections of the Site and must hold weekly safety meetings with Contractor's personnel, Subcontractors and others as applicable.

4.6.7 Contractor and Subcontractors must comply with all legal and regulatory requirements relating to safety, as well as any City specific safety requirements set forth in the Agreement Documents, provided that such City-specific requirements do not violate any applicable legal and regulatory requirements.

4.6.8 Contractor will immediately report in writing any safety-related injury, loss, damage or accident arising from the Work to Project Manager and, to the extent mandated by Legal Requirements, to all government or quasi-government authorities having jurisdiction over safety-related matters involving the Project or the Work.

4.6.9 Contractor's responsibility for safety under this Section is not intended in any way to relieve Subcontractors and Sub-Subcontractors of their own contractual and legal obligations and responsibility for (i) complying with all Legal Requirements, including those related to health and safety matters, and (ii) taking all necessary measures to implement and monitor all safety precautions and programs to guard against injury, losses, damages or accidents resulting from their performance of the Work.

4.6.10 As between City and Contractor, Contractor is responsible to City for any and all the safety issues relating to the Work on the Project. Contractor must administer and manage the safety program. This will include, but not necessarily be limited to review of the safety programs of each Subcontractor. Contractor must monitor the establishment and execution of compliance with all applicable regulatory and advisory agency construction safety standards. Contractor's responsibility for review, monitoring, and coordination of the Subcontractor's safety programs will not extend to direct control over execution of the Subcontractors' safety programs. Notwithstanding Contractor's safety obligations to City, it is agreed and understood that each individual Subcontractor will remain controlling employer responsible for the safety programs and precautions applicable to its own work and the activities of other's work in areas designated to be controlled by such Subcontractor for purposes of workers compensation insurance coverage.

4.6.11 Nothing in this agreement will relieve Contractor of his responsibility to maintain traffic, structures, etc., as noted on the Plans, Specifications, and Project Specific Conditions. Contractor is responsible to provide all necessary shoring, bracing and trench support as is necessary to maintain traffic structures, etc., as stipulated in the Plans, Specifications, and Special Provisions. If the stability of adjoining building, walls, roadways, etc., is endangered by Contractor's excavation, shoring, bracing, or under pinning must be provided as necessary to ensure project safety. Cost for shoring, bracing, underpinnings, and trench support will be included in the appropriate items listed in the Agreement Price, and no additional payment will be made for this work.

4.7 MATERIALS QUALITY, SUBSTITUTIONS, AND SHOP DRAWINGS

4.7.1 Quality Control and Quality Assurance Testing.

4.7.1.1 All construction materials to be used or incorporated in the Project are subject to inspection, Quality Control & Quality Assurance Testing, and approval or rejection by City. Any material rejected by City must be removed immediately and replaced in an acceptable manner to City at no additional cost to City. When QC/QA tests indicate noncompliance with the Agreement Documents, retesting must be performed by the same testing laboratory that performed the tests that indicated noncompliance.

4.7.1.2 The Contractor must establish, provide, and maintain an effective Quality Control Testing Program (QCTP). The Contractor must develop his own program or procure the services of a consultant. In either case, the party performing the tests must be currently certified by the National Bureau of Standards in the National Voluntary Laboratory Accreditation Program (NVLAP) for construction services or the AASHTO Accreditation Plan (AAP) for Soils, Asphalt and Concrete. The Contractor must provide all support necessary to perform QC and QA testing and sampling (i.e. shoring for testing trench backfill, backhoes, motor graders, loaders, etc. to facilitate testing and sampling). The City will perform the QA testing.

4.7.1.3 The Contractor must submit a written QCTP to the City as a required submittal. The Contractor must not begin Work until the Quality Control Program has been reviewed and

accepted by the City. Resumes of all personnel that will be associated directly or indirectly with the QCTP must be included.

4.7.1.4 The QCTP must include, but not be limited to, on-site/field and laboratory testing of all material delivered to the Site and any existing materials or conditions pertinent to the project.

4.7.1.5 All testing must be under the direction of a Professional Engineer registered in the State of Arizona, knowledgeable in Materials Testing. All "Test Report" forms must be stamped by said Engineer.

4.7.1.6 The written QCTP will set forth the responsibilities of the engineer, project manager, supervisory personnel and each technician assigned to this project. Substitutions or replacement of personnel must require prior written approval by the City. All personnel must be proficient within their assigned duties and possess certification(s) commensurate with their position and responsibilities. The minimum certification(s) for each technician must be NICET Level II, Arizona Technical Testing Institute, American Concrete Institute, or other nationally recognized program applicable to the project and approved by the City of Chandler. The written QCTP must include a description of the required field and construction materials laboratory tests, including required frequencies that meet the minimums established herein.

4.7.1.7 The Contractor must establish a system to record and report all material test results. The daily test reports must include, but not be limited to:

a. Test designation;
b. Date of test;
c. Name of tester;
d. Location of test/sample (station and offset);
e. Product suppliers and product codes (as applicable);
f. Depth/elevation of test/sample;
g. Test result;
h. Control requirement(s);
i. Cause of rejection (if applicable);
j. Results of retests (if applicable); and
k. Remedial action (if applicable).

4.7.1.8 The Contractor must submit test results to the designated City representative.

4.7.1.9 The Contractor must also submit a weekly report to the City summarizing the testing and construction activities completed by emailing the report to the email addresses noted above. All weekly reports must be submitted simultaneously to the Contractor and the City of Chandler. The report must include individual summary sheets for each utility line, structure, and portion of the pavement section. Cores must be numbered sequentially throughout the Project. Re-cores must reference the original core by number and must contain the averaged values for thickness and density. Total pavement thickness must be reported. Vertical location of tests for underground utilities must indicate the depth of the

excavation at the location of the test (i.e., cut to flow line [if applicable], depth to bottom or top of pipe, etc.). Density tests must be numbered sequentially. If the minimum number of tests has not been performed per the written QCTP, this must be stated in the weekly summary report with an explanation of the circumstances.

4.7.1.10 The City will maintain a copy of the Project test results and weekly reports in the Project file. In cases where quality control activities do not comply with the Agreement provisions, the City may:

a. Order the Contractor to replace ineffective or unqualified quality control personnel.

b. Order the Contractor to stop operations until appropriate corrective action is taken.

4.7.1.11 Although minimum testing requirements are specified herein, the Contractor bears full responsibility for the quality of the materials and their installation and may elect to perform additional testing beyond the requirements set forth herein to ensure compliance.

4.7.1.12 The Quality Control requirements contained in this Section are in addition to and separate from Quality Assurance Testing, which will be performed by the City of Chandler or its representative. If the Quality Assurance test results are not in agreement with the Quality Control test results, the Contractor will have the option to retain a third party consultant for referee tests. The third party consultant must meet the same requirements as the consultant performing the Quality Control Testing. The results of the third party will be binding. All cost incurred by the referee testing will be the Contractor's expense. If the Contractor elects not to retain a third party for referee testing, the City of Chandler test results will prevail.

4.7.1.13 Except as otherwise noted within this Section, Work or materials required by this Section are non- pay items. Per MAG Section 101, a non-pay item is an item of Work for which no separate payment will be made, the cost of which is to be included as an incidental cost for associated item(s) included on the Bid Schedule or Schedule of Values.

4.7.2 <u>Trade Names and Substitutions</u>.

4.7.2.1 Substitutions prior to bid will only be considered if in compliance with Arizona Revised Statute § 34-104.

4.7.2.2 Contractor, if requested by City, must submit Samples or any additional information that may be necessary to evaluate the acceptability of the substitution.

4.7.2.3 City will make the final decision and will notify Contractor in writing as to whether the substitution has been accepted or rejected.

4.7.2.4 If City does not respond within 15 working days, Contractor must continue to perform the Work in accordance with the Agreement Documents and the substitution will be considered rejected.

4.7.3 <u>Shop Drawings</u>.

4.7.3.1 Contractor must prepare and submit Shop Drawings which show details of all Work to insure proper installation of the Work using those materials and equipment specified under the approved Plans and Specifications.

4.7.3.2 Contractor must submit a schedule of Shop Drawing submissions, which avoids bulk submissions to the extent reasonably possible, with the Project Schedule for City approval. The schedule of Shop Drawing submissions must include all of the items for which Shop Drawings are required by the Agreement Documents, including the Specifications. Unless otherwise noted, Shop Drawings will not be required for items specified or detailed in the Uniform Standard Specifications and Details or the Technical Specifications.

4.7.3.3 Shop Drawings must be numbered consecutively for each Specification section and must accurately and distinctly present the following:

a. All working and erection dimensions.

b. Arrangements and sectional views.

c. Necessary details, including complete information for making connections between work under this Agreement and work under other Agreements.

d. Kinds of materials and finishes.

e. Parts list and description thereof.

4.7.3.4 Each Drawing or page must include:

a. Project Name, City of Chandler Project Number and descriptions.

b. Submittal date and space for revision dates.

c. Identification of equipment, product or material.

d. Name of Contractor and Subcontractor.

e. Name of Supplier and Manufacturer.

f. Relation to adjacent structure of material.

g. Physical dimensions clearly identified.

h. ASTM and Federal Specifications references.

i. Identification of and justification for deviations from the Agreement Documents.

j. Contractor's stamp, initialed or signed, dated and certifying the review of submittal, certification of field measurements and compliance with Agreement.

k. Location at which the equipment or materials are to be installed.

4.7.3.5 Location will mean both physical location and location relative to other connected or attached material. City will return unchecked any submittal, which does not contain complete data on the Work and full information on related matters.

4.7.3.6 Stock or standard drawings will not be accepted for review unless full identification and supplementary information is shown thereon in ink or typewritten form.

4.7.3.7 Contractor must schedule, prepare and submit all Shop Drawings in accordance with a time-table that will allow its suppliers and manufacturers sufficient time to fabricate, manufacture, inspect, test and deliver their respective products to the project Site in a timely manner so as to not delay the complete performance of the Work.

4.7.3.8 If the Shop Drawings show departures from the Agreement requirements, Contractor must make specific mention thereof in the Letter of Transmittal; otherwise review of such submittals by City will not constitute review of the departure. Review of the Drawings will constitute review of the specific subject matter for which the Drawings were submitted and not of any other structure, material, equipment, or apparatus shown on the Drawings.

4.7.3.9 The review of Shop Drawings will be general and will not relieve Contractor of responsibility for the accuracy of such Drawings, nor for the proper fitting and construction of the Work, nor for the furnishing of materials or Work required by the Agreement. No construction called for by Shop Drawings will be initiated until such Drawings have been reviewed and approved by City.

4.7.3.10 The procedure in seeking review of the Shop Drawings will be as follows:

a. Contractor must submit complete sets of Shop Drawings and other descriptive data as specified in this Section.

b. After Contractor's submittal or resubmittal of Shop Drawings, if Contractor has submitted Shop Drawings in accordance with the City-approved submittal schedule, or upon resubmission, City will be provided with three (3) calendar weeks for review. Should City require additional review time above and beyond the three (3) calendar weeks, Contractor may ask for a time extension or monetary compensation, if they can present valid, factual evidence that actual damages were incurred by Contractor. City will determine the amount of the time extension or the monetary compensation to be awarded Contractor, if any, in accordance with City's Policy Statement for Calculating Delays and Damages, Appendix 1.

4.7.3.11 Contractor will be responsible for all extra costs incurred by City caused by Contractor's failure to comply with the procedure outline above.

4.7.4 Long Lead Time Items. Contractor must submit Shop Drawings, as required by the Engineer, on all long lead items to be furnished and installed as part of the project within 10 Days after the date of the executed Agreement letter issued by City. In addition, Contractor must order all long lead items to be furnished and installed as part of this Project within 3 Days after receiving approved Shop Drawings. For all long lead times for which Shop Drawings are not required, Contractor must order said long lead items within 15 Days after the date of the executed Agreement letter issued by City. Within 2 Days after ordering long lead items, Contractor must supply copies of all purchase orders, along with an accurate delivery schedule from the supplier.

4.7.5 Construction Water. If Contractor uses water from City's water system for construction water, Contractor must obtain a fire hydrant meter from City of Chandler Utility Services (480-782-2280) and all construction water must be obtained through the hydrant meter. Contractor must pay all fees related to the hydrant meter and all water bills for construction water. All cost for meters and construction water will be included in the Agreement Price.

4.8 PROJECT RECORD DOCUMENTS

4.8.1 During the construction period, Contractor must maintain at the jobsite a full-size set of prints of the Construction Document Drawings and Shop Drawings for Project Record Document purposes.

4.8.2 Contractor must mark these Drawings to indicate the actual installation where the installation varies from the original Construction Documents. Contractor must give particular attention to information on elements that will be concealed, which would be difficult to identify or measure and record later. Items required to be marked include but are not limited to:

a. Dimensional changes to the Drawings.

b. Revisions to details shown on Drawings.

c. Locations and depths of underground utilities.

d. Revisions to routing of piping and conduits.

e. Actual equipment locations.

f. Changes made by Change Order or Addendum.

g. Details not on original Agreement Drawings.

4.8.3 Contractor must mark completely and accurately Project Record Drawing sets of Construction Documents.

4.8.4 Contractor must mark Project Record Drawings sets with red erasable colored pencil.

4.8.5 Contractor must note Request for Information (RFI) Numbers and Change Order numbers, etc., as required to identify the source of the change to the Construction Documents.

4.8.6 Contractor must submit Project Record Drawing sets and Shop Drawings to City or its representative for review and comment.

4.8.7 Upon receipt of the reviewed Project Record Drawings from City, Contractor must correct any deficiencies and omissions to the Drawings and submit the final original of the Project Record Drawings to City prior to Final Payment.

4.8.8 Project Manager will review the Project Record Drawings monthly prior to the date established for the Payment Request and will be the sole judge of acceptance of these Drawings.

4.9 WARRANTY AND CORRECTION OF DEFECTIVE WORK

4.9.1 Contractor warrants to City that the construction, including all materials and equipment furnished as part of the Work, will be new unless otherwise specified in the Agreement Documents, of good quality, and free of defects in materials and workmanship. Contractor's warranty obligation excludes defects caused by abuse, alterations, or unreasonable failure to maintain the construction by persons other than Contractor, subcontractors, or others under Contractor's control. Nothing in this warranty will limit any manufacturer's warranty which provides City with greater warranty rights than set forth herein or in the Agreement. Contractor will provide City with all manufacturers' warranties and operation and maintenance manuals upon substantial completion of the Work. Contractor's warranty must be for one (1) year, in accordance with MAG Specification § 108.8, and will commence for all portions of the Work upon Final Acceptance of the entire Work as determined by City under the Agreement. All statutory or other warranties, express or implied, related to latent defects will remain in force and are not limited by this provision.

4.9.2 City May Stop the Work. If the Work is defective, or Contractor fails to supply sufficient skilled workmen or suitable materials or equipment, City may order Contractor to stop the

Work without cost to City, or any portion thereof, until the cause for such order has been eliminated; however, this right of City to stop the Work will not give rise to any duty on the part of City to exercise this right for the benefit of Contractor or any other party.

4.9.3 Correction or Removal of Defective Work.

4.9.3.1 If required by City, Contractor must promptly, without cost to City and as specified by City, either correct any defective Work, whether or not fabricated, installed or completed, or, if the Work has been rejected by City, remove it from the Site and replace it with non-defective Work. Contractor must correct any Work which may be displaced in correcting, removing or replacing defective Work. No compensation will be allowed Contractor for such removal, replacement or remedial Work. Contractor must reimburse City for costs incurred by City due to such correction or removal including but not limited to additional expenses for inspection, testing or observation and for repeated reviews by the City or Design Professional.

4.9.3.2 Upon failure on the part of the Contractor to comply within a reasonably prompt time with any written order of City to correct or remove defective Work, City has authority to cause nonconforming materials or rejected Work to be remedied, removed, or replaced at the Contractor's expense and to deduct the costs from any moneys due or to become due the Contractor.

4.9.4 City May Correct Defective Work. If Contractor fails within a reasonable time after written notice of City to proceed to correct defective Work or to remove and replace rejected Work as required by City or if Contractor fails to perform the Work in accordance with the Agreement Documents (including any requirements of the progress schedule), City may, after 7 Days' written notice to Contractor, correct and remedy any such deficiency. To the extent necessary to complete corrective and remedial action, City may exclude Contractor from all or part of the Work, and suspend Contractor's services related thereto, take possession of Contractor's tools, appliances, construction equipment and machinery at the Site and incorporate in the Work all materials and equipment stored at the Site or for which City has paid Contractor, but which are stored elsewhere. Contractor must allow City, city representatives, agents and employees such access to the Site as may be necessary to enable City to exercise City’s rights under this Section. All direct and indirect costs of City in exercising such rights will be charged against Contractor in an amount verified by City representative, and a Change Order will be issued incorporating the necessary revisions in the Agreement Documents and a reduction in the Agreement Price. Such direct and indirect costs will include, in particular but without limitation, compensation for additional professional services required and all costs of repair and replacement of Work or others destroyed or damaged by correction, removal or replacement of Contractor's defective Work. Contractor will not be allowed an extension of the Agreement Time because of any delay in Contractor’s performance of the Work attributable to the exercise by City or City's rights hereunder.

4.9.5 Correction or Removal of Unauthorized Work.

4.9.5.1 Any Work done beyond the lines and grades shown on the Drawings or established by the Design Professional or any changes in, additions to, or deductions from the Work done without written authority will be considered as unauthorized and will not be paid for. Work so done may be ordered remedied, removed, or replaced at the Contractor's expense.

4.9.5.2 Upon failure on the part of the Contractor to comply promptly with any order of the City,

City will have authority to cause unauthorized Work to be remedied, removed, or replaced at the Contractor's expense and to deduct the costs from any moneys due or to become due the Contractor.

4.9.6 Correction Period - One Year Guarantee.

4.9.6.1 If, within one year after the date of Final Acceptance, or such longer period of time as may be prescribed by law or by the terms of any applicable special guarantee required by the Agreement Documents, or by any specific provision of the Agreement Documents, any Work is found to be defective, Contractor must promptly, without cost to City and in accordance with City's written instructions, either correct such defective Work, or, if it has been rejected by City, remove it from the Site and replace it with non-defective Work. If Contractor does not promptly comply with the terms of such instructions, or in an emergency where delay would cause serious risk of loss or damage, City may have the defective Work corrected or the rejected Work removed and replaced, and all direct and indirect costs of such removal and replacement, including compensation for additional professional services, must be paid by Contractor. Such action by the City will not relieve the Contractor of the guarantees required by this Section or elsewhere in the Agreement Documents.

4.9.6.2 If, in the opinion of the City, defective Work creates a dangerous condition or requires immediate correction or attention to prevent further loss to the City or to prevent interruption of operation of the City, the City will attempt to give the notice required by this Section. If the Contractor cannot be contacted or does not comply with the City's request for correction within a reasonable time as determined by the City, the City may, notwithstanding the provisions of this Section, proceed to make such correction or provide such attention; and the costs of such correction or attention will be charged against the Contractor. Such action by the City will not relieve the Contractor of the guarantees required by this Section or elsewhere in the Agreement Documents.

4.9.6.3 This Section does not in any way limit the guarantee on any items for which a longer guarantee is specified or on any items for which a manufacturer or supplier gives a guarantee for a longer period. The Contractor agrees to act as co-guarantor with such manufacturer or supplier and must furnish the City all appropriate guarantee or warranty certificates upon completion of the Project. No guarantee period, whether provided for in this Section or elsewhere, will in any way limit the liability of Contractor or their sureties or insurers under the indemnity or insurance provisions of these General Conditions and the Project Specific Special Conditions.

4.9.7 Acceptance of Defective Work.

4.9.7.1 If, instead of requiring correction or removal and replacement of defective Work, City may accept Work when in the best interest of the City to do so with appropriate monetary credit from Contractor. If any such acceptance occurs prior to final payment, a Change Order will be issued incorporating the necessary revisions in the Agreement Documents, including appropriate reduction in the Agreement Price; or, if the acceptance occurs after final payment, an appropriate amount must be paid by Contractor to City.

4.9.7.2 Alternatively, City may require Contractor to furnish at Contractor's expense, a special performance guarantee or other surety prior to acceptance of defective work.

4.9.8 The Warranty period begins on the Final Acceptance date noted in the Certificate of Completion, irrespective of early completion by some Subcontractors of their work.

4.9.9 Contractor's warranty obligation must be in accordance with MAG Specifications.

4.9.10 Nothing in the warranties contained in the Agreement Documents are intended to limit any manufacturer's warranty which provides City with greater warranty rights than set forth in this Section or the Agreement Documents. Contractor must provide City with all manufacturers' warranties prior to Substantial Completion, if applicable, or Final Acceptance.

4.9.11 Contractor agrees that it will be responsible to manage and administer the correction of any Work that is not in conformance with the Agreement Documents during the warranty periods set forth in this Section, or during any longer periods to the extent required by the Agreement Documents. A progress payment, or partial or entire use or occupancy of the Project by City, will not constitute acceptance of Work not in accordance with the Agreement Documents.

4.9.12 When notified of a warranty issue, Contractor must respond in writing within 48-hours and must perform warranty Work as soon as material for said repairs are available (as judged solely by City), and in any event Contractor must, take immediate steps to commence and complete correction of nonconforming Work no later than the time period set forth in City's written notification in accordance with the Agreement Documents. This includes the correction, removal or replacement of the nonconforming Work and any damage caused to other parts of the Work affected by the nonconforming Work. If defects develop which are determined by City to be an emergency, City will notify Contractor, via the most expeditious means regarding the nature and condition of the defects. In turn, Contractor must immediately dispatch necessary forces to correct the defect or the emergency condition in accordance with Agreement Documents.

4.9.13 The time periods referenced in this Section apply only to Contractor's obligation to correct nonconforming Work and is not intended to constitute a period of limitations for any other rights or remedies that City may have regarding Contractor's other obligations under the Agreement Documents.

4.9.14 Without limiting the foregoing or anything in these General Conditions or the Agreement to the contrary, Contractor must obtain and provide to City all warranties for any portion of the Project offered by the manufacturer, installer or provider thereof. City and the user of the facility will have the right to the full value and benefit of all such warranties. Contractor must ensure all such warranties are fully transferrable to facilitate the full value of this Section.

4.9.15 Contractor's warranty excludes damages or defects caused by abuse, alterations to the Work not executed by or through Contractor, improper or insufficient maintenance, improper operation, or normal wear and tear and normal usage.

4.9.16 In the event of any noncompliance with this entire Section 4, City may require Contractor to stop or suspend the Work in whole or in part.

SECTION 5 - CITY RESPONSIBILITIES

5.1 CITY PROJECT MANAGER AND INSPECTORS

5.1.1 Project Manager is responsible for providing City-supplied information and approvals in a timely manner to assist Contractor to fulfill its obligations under the Agreement Documents.

5.1.2 Project Manager will also provide Contractor with prompt notice when it observes any failure on the part of Contractor to fulfill its contractual obligations, including any default or defect in the Project or non-conformance with the Drawings and Specifications.

5.1.3 City may utilize Field Inspectors to assist Project Manager during construction in observing performance of Contractor. City's use of Inspectors is for the purpose of assisting Project Manager.

5.1.4 The Inspectors are authorized to inspect all Work and materials furnished. Such inspections may extend to all or part of the Work and to preparation, fabrication or manufacture of the materials to be used. The Inspectors have the authority to issue instructions contrary to the Construction Documents if approved and coordinated with the directions of Project Manager.

5.1.5 The Inspectors have the authority to reject work or materials until any questions at issue can be decided by Project Manager.

5.1.6 The use of Inspectors by City will not make City responsible for or give City control over construction means, methods, techniques, sequences or procedures or for safety precautions or programs or responsibility for Contractor's failure to perform the Work in accordance with Agreement Documents. The Inspectors are not authorized to direct any of Contractor's activities, employees or Subcontractors.

5.2 **DESIGN PROFESSIONAL SERVICES**

City may contract separately with one or more Design Professionals to provide construction administration of the Project. The Design Professional's Agreement, as well as other firms hired by City may be furnished to Contractor. Contractor does not have the right to limit or restrict or reject any Agreement modifications that are mutually acceptable to City and Design Professional.

5.3 **CITY'S SEPARATE CONTRACTORS**

City is responsible for all work performed on the Project or at the Site by separate contractors retained by City. City will contractually require its separate contractors to reasonably cooperate with, and reasonably coordinate their activities so as not to interfere with Contractor in order to enable Contractor to timely complete the Work consistent with the Agreement Documents. Contractor must immediately notify the Project manager, and address the matter in the next monthly status report, if any activities of such separate contractors are expected to interfere, or are interfering, with Contractor and such interference will or could result in any delay in Contractor's performance of the Work.

5.4 **PERMIT REVIEW AND INSPECTIONS**

5.4.1 If requested by Contractor, Project Manager will provide assistance and guidance in obtaining necessary reviews, permits and inspections.

5.4.2 The regulating agencies of City, such as Development and Sustainability, Fire and Planning Departments, enforce legal requirements. The enforcement activities of City are independent and separate from this Agreement.

5.5 **PLANS AND SPECIFICATIONS TO THE CONTRACTOR**.

Contractor will be provided up to five copies of the Agreement Documents as are reasonably necessary for the execution of the Work. Additional copies will be furnished,

upon request, at the cost of reproduction.

SECTION 6 - AGREEMENT TIME

6.1 AGREEMENT TIME

6.1.1 The Agreement Time will start with the Notice to Proceed ("NTP") and end with Final Acceptance.

6.1.2 Beginning on the date of the NTP, Contractor must begin to fulfill Contractor's obligations under the Agreement. Contractor's obligations include providing City and other agencies with any submittals required by the Project Specific Special Provisions, including but not limited to, an approved Project Schedule, Traffic Control Plans, and a Stormwater Pollution Prevention Plan. Contractor must submit all such required submittals before any physical construction work commences on the Site. NTP does not authorize construction work until all agreement insurance, bonds, and schedules are submitted to and accepted by the City.

6.1.3 The Agreement Time will be as set forth in the Project Schedule. Contractor agrees that it will commence performance of the Work and complete the Project through both Substantial Completion and Final Acceptance within the Agreement Time.

6.1.4 Time is of the essence of this Agreement, for the Project, for the Work, and for each phase and designated Milestone thereof.

6.1.5 Failure of Contractor to perform any covenant or condition contained in the Agreement Documents within the time periods specified herein, will constitute a material breach of this Agreement entitling City to terminate the Agreement unless Contractor applies for and receives an extension of time, in accordance with the procedures set forth in the Agreement Documents.

6.1.6 Failure of City to insist upon the performance of any covenant or condition within the time periods specified herein, will not constitute a waiver of Contractor's duty to perform every other covenant or condition within the designated periods, unless a specific waiver is granted in writing for each such covenant or condition.

6.1.7 City's agreement to waive a specific time provision or to extend the time for performance will not constitute a waiver of any other time provisions contained in the Agreement Documents. Failure of Contractor to complete performance promptly within the additional time authorized in the waiver or extension of time agreement constitutes a material breach of this Agreement entitling City to all the remedies set forth herein or provided by law.

6.2 PROJECT SCHEDULE

6.2.1 The Project Schedule must be in Microsoft Project standard file format, must be updated and maintained throughout the Agreement Time, and must contain the following:

6.2.1.1 Detailed representation of all activities for the project, both on-site construction and major procurement. All significant activities together with the resource loading requirements for each and all items appearing on the schedule of values or bid schedule for progress payments must be shown on the Project Schedule or in attached transmittal letter as described in Section 6.2.8.

6.2.1.2 Dependencies between activities must be indicated so that it may establish as to the effect the progress of any one activity would have on other activities and on the Schedule.

6.2.1.3 Activities for submission, review, and approval of all required submittals.

6.2.1.4 An amount of time will be established prior to the final completion date for "punch list and cleanup". No other activities will be scheduled during this period. Punch list and cleanup must be shown on the Project Schedule and must be entirely completed prior to the expiration of the Agreement Time.

6.2.2 Within 10 Days of receipt of City's comments, Contractor must make all required corrections, adjustments, and additions to complete the Project Schedule and resubmit to City for review. City's review of and response to the Project Schedule is for the purpose of: (1) City planning and staffing for the Project as may be required from time to time; (2) ensuring Contractor's general conformance with the scheduling requirements of the Agreement Documents and completion of the Project within the Agreement Time; and (3) monitoring and evaluating the construction status for purposes of approving monthly progress payments. Acceptance of a submitted schedule by City should in no way be construed as an affirmation or admission that the schedule is reasonable or workable by Contractor. The responsibility for completing the Work on the Project within the Agreement Time remains the obligation of Contractor. City's review does not relieve Contractor from compliance with the requirements of the Agreement Documents or be construed as relieving Contractor of its complete and exclusive control over the means, methods, sequences and techniques for executing the work.

6.2.3 The Project Schedule must show milestones, including milestones for City-furnished information, and must include activities for City-furnished material and construction by other contractors when those activities are interrelated with Contractor activities.

6.2.4 The Project Schedule must be revised as required by conditions and progress of the Work, but such revisions do not relieve Contractor of its obligations to complete the Work within the Agreement Time, as adjusted in accordance with the Agreement Documents. No modification to the Agreement Documents or the Agreement Time will be effective unless approved in advance by City.

6.2.5 For all items of materials and equipment that are critical or may require long lead times to acquire, the Project Schedule must show dates for submission, review and approval of submittals, ordering, and delivery.

6.2.6 An updated Project Schedule must be submitted monthly to City as part of the Payment Request. The monthly submittal must include one full size plot of the entire schedule and one electronic copy containing the schedule in Microsoft Project standard file format. In addition, Contractor must, upon request by City, provide a copy of all submitted schedule data in electronic format which must be clearly labeled with the Project description, scheduling program name and version number, and schedule print/data date.

6.2.7 Contractor must provide City with a monthly status report with each Project Schedule detailing the progress of the Work, including: (i) if the Work is proceeding according to schedule, (ii) any discrepancies, conflicts, or ambiguities found to exist in the Agreement Documents that require resolution, and (iii) other information detailing items that require resolution so as not to jeopardize the ability to complete the Work in the Agreement Time.

6.2.8 With each Project Schedule submittal, Contractor must include a transmittal letter including the following:

a. Description of problem tasks, referenced to field instructions or requests for information (RFI's), as appropriate.

b. Current and anticipated delays including:

(i) Cause of the delay.

(ii) Corrective action and schedule adjustments to correct the delay.

(iii) Known or potential impacts and their delay on other activities, milestones, and their impact on the Substantial Completion and Final Acceptance dates.

(iv) Changes in construction sequence.

c. Pending items and status thereof including but not limited to:

(i) Time Extension requests;

(ii) Substantial Completion date status;

(iii) Final Acceptance date status.

d. If ahead of schedule, the number of calendar Days ahead.

e. If behind schedule, the number of calendar Days behind.

f. Other Project or scheduling concerns.

6.2.9 Critical Path Method (CPM).

6.2.9.1 Unless otherwise specified in the Agreement, the Project Schedule must include a Critical Path Method (CPM) diagram schedule showing the sequence of activities, the interdependence of each activity and identifies the Critical Path.

6.2.9.2 The CPM diagram schedule must be in calendar Days and indicate duration, earliest and latest start and finish dates for all activities, and total Float Times for all activities except critical activities. The CPM diagram must be presented in a time scaled graphical format for the Project as a whole.

6.2.9.3 The CPM diagram schedule must indicate all relationships between activities.

6.2.9.4 The activities making the Project Schedule must contain sufficient detail to assure that adequate planning has been done for proper execution of the Work and such that it provides an appropriate basis for monitoring and evaluation the progress of the Work. Individual activities must not exceed 30 Days in length, in most cases.

6.2.9.5 The CPM diagram schedule must be based upon activities, which coincide with the Schedule of Values.

6.2.9.6 The CPM diagram schedule must show all submittals associated with each work activity and the review time for each submittal.

6.2.10 Float Time.

6.2.10.1 The total Float Time within the overall schedule is for the exclusive use of City, but City may approve Contractor's use of Float as needed to meet Agreement Milestones and

the Project completion date.

6.2.10.2 Contractor will not be allowed to sequence, hide, or reallocate Float Time through such strategies, as extending activity duration estimates to consume available Float, using preferential logic, or using extensive crew/resource sequencing, tec. No time extensions will be granted nor delay damages paid until a delay occurs which extends the Work beyond the Agreement Time.

6.2.11 City-Caused Delays. City-caused delays on the Project, if any, may be offset by City-caused time savings (i.e., Critical Path submittals returned in less time than allowed by the Agreement, approval of substitution requests and credit changes which result in savings of time to Contractor, etc.) In such an event, Contractor will not be entitled to receive a time extension or delay damages until all City-caused time savings are exceeded and the Agreement Time is also exceeded.

6.2.12 Rain-Related Delays. Contractor is required, in preparing the Project Schedule to take into account all relevant weather conditions, including normal rainfall and distribution. No additional compensation will be given for any rain-related delays or impacts on the Work or the Project Schedule. No time extension will be granted in the Project Schedule unless the rainfall during the construction of Work is unusually severe, was not reasonably anticipated, and the total rainfall was significantly in excess of the normal rainfall for the Project Site location. Normal rainfall for the Project will be determined from the 10-year average rainfall for the Site as measured by the National Oceanic and Atmospheric Administration or comparable source of reliable information for rainfall in Chandler, Arizona. In addition, the excessive rainfall must have actually impacted Work activities on the Critical Path and caused delay beyond any remaining Float at the time of the rain- caused delay. The burden of documenting normal rainfall, the excessive rainfall and the impact on Critical Path activities is on Contractor. All other provisions in the Agreement Documents relating to claims, including without limitation notice requirements, apply to any claim by Contractor for a rain delay.

6.2.13 City's "Policy Statement for Calculating Delays and Damages," Appendix 1 to these General Conditions, will apply to all claims of delay and delay damages.

6.2.14 Force Majeure. If Contractor is delayed or prevented from the performance of any Work required under this Agreement by reason of acts of God or other causes beyond the control and without fault of Contractor (financial inability excepted), performance of that Work will be excused, but only for the period of the delay. The time for performance of the Work will be extended for a period equivalent to the period of delay. In addition, the parties agree if Contractor's delayed or suspended performance directly arises out of or directly results from the COVID-19 pandemic, Contractor's delayed or suspended performance may be excused as set forth in this clause. Provided, however; Contractor must give the City written notice within 30 days of the occurrence of the event giving rise to COVID-19 pandemic related delayed or suspended performance. For COVID-19 pandemic related delay or suspended performance, the parties must agree in writing to the length of the excused delay or suspended performance. Further, Contractor must obtain the City's written approval to use any allowance established as part of the project for delays and costs related to the COVID-19 pandemic.

6.3 SUBSTANTIAL COMPLETION

6.3.1 When Contractor considers that the Work, phase or a portion thereof, which City agrees in

writing to accept separately, is substantially complete, City will prepare and submit to Contractor a comprehensive Punch List of items to be completed or corrected prior to Final Acceptance and Final Payment. Failure to include an item on such Punch List does not alter the responsibility of Contractor to complete all Work in accordance with the Agreement Documents.

6.3.2 Upon receipt of Contractor's Punch List, Project Manager will make an inspection to determine whether the Work or designated portion thereof is substantially complete. Project Manager may, at Project Manager's sole option, be assisted in such inspection by the Design Professional for the Project. If the inspection by the Project Manager discloses any item, whether or not included on Contractor's Punch List, which is not sufficiently completed in accordance with the Agreement Documents so that City can occupy or utilize the Work, phase or designated portion thereof for its intended use, Contractor must, before issuance of the Certificate of Substantial Completion, complete or correct such item upon notification by Project Manager. In such case, Contractor must then submit a request for another inspection by Project Manager to determine Substantial Completion.

6.3.3 Certificate of Substantial Completion.

6.3.3.1 The Project Manager will not issue a Certificate of Substantial Completion unless and until the Work (or separable units or Phases as provided in the Agreement Documents) is essentially and satisfactorily complete in accordance with the Agreement Documents, such that the Project is ready for use by City for its intended purpose, opening to the general public, full occupancy or use by City (including, without limitation, all separate units, or rooms, facilities, access, income-generating areas, and all areas serving the general public, as applicable, must be ready for full-operation without material inconvenience or discomfort), including, to the extent applicable to the Work, the following: all materials, equipment, systems, controls, features, facilities, accessories and similar elements are installed in the proper manner and in operating condition, inspected and approved; surfaces have been painted; masonry and concrete cleaned with any sealer or other finish applied; utilities and systems connected and functioning; site work complete; permanent heating, ventilation, air condition, vertical transportation and other systems properly operating with proper controls; lighting and electrical systems installed, operable and controlled; paving completed, signage installed, and other Work as applicable, has been performed to a similar state of essential and satisfactory completion. A minor amount of Work, as determined by and at the discretion of the Project Manager, such as installation of minor accessories or items, a minor amount of painting, minor replacement of defective work, minor adjustment of controls or sound systems, or completion or correction of minor exterior work that cannot be completed as a result of weather conditions, will not delay determination of Substantial Completion. If prior written approval is obtained from City for purposes of Substantial Completion, specified areas of the entire Work or Project may be individually certified as Substantially Complete. In no event will Substantial Completion be deemed to have occurred unless and until: (i) a temporary certificate of occupancy has been issued by the appropriate Governmental Authorities (as applicable) and (ii) all terms and Work required under this Agreement have been fulfilled by Contractor and same will have also been approved and accepted by City, subject only to the Punch List items.

6.3.3.2 If requested by City, Contractor must complete and turn-over to City the Project on a phased basis. Each phase will have a separate inspection by the Project Manager, a Punch List generated, and then an inspection by City with final approval and acceptance only after the

Project Manager's Punch List.

6.4 **PARTIAL UTILIZATION**

6.4.1 City at City's option may use and occupy any substantially completed parts of the Work which has specifically been identified in the Agreement Documents, or which City, the Design Professional and Contractor agree constitutes a separately functioning and usable part of the Work that can be used by City for its intended purpose, without significant interference with Contractor's performance of the remainder of the Work, provided, however, if the portion of the Work to be used or occupied has not been found to be substantially complete, City must do so in accordance with Section 6.3 prior to such occupancy.

6.4.2 In lieu of the issuance of a Certificate of Substantial Completion as to part of the Work, City may take over operation of a facility constituting part of the Work whether or not it is substantially complete if such facility is functionally and separately usable; provided that prior to any such takeover, City and Contractor agree in writing as to the division of responsibilities between City and Contractor for security, operation, safety, maintenance, correction period, heat, utilities and insurance with respect to such facility.

6.4.3 Substantial Completion of or City's beneficial occupancy of a part of the Project will not alter the fact that the one-year warranty for the whole Project starts at the date of Final Completion of the whole Project.

6.5 **FINAL ACCEPTANCE**

6.5.1 Unless otherwise expressly agreed to in writing by City, Final Acceptance must be obtained by no later than 30 Days (60 Days for federally funded agreements) after the date of Substantial Completion. Failure to timely obtain Final Acceptance will be a material breach of the Agreement.

6.5.2 Upon receipt of written notice that the Work is ready for final inspection and acceptance, City and Contractor will jointly inspect to verify that the remaining items of Work have been completed. There will be no partial acceptance. Final Acceptance will not occur until all items of Work, including Punch List Items, have been completed to City's satisfaction as reflected in the written Final Acceptance.

6.5.3 Final Payment will not be due, owing, or paid by City until Final Acceptance is issued.

6.5.4 Landscape Establishment Period. Unless otherwise expressly agreed to in writing by City, the Landscape Establishment Period will begin on the date of Final Acceptance of the Project and will run 90 Calendar Days thereafter. Landscape Establishment Period requirements are detailed in General Conditions Appendices, attached herein.

6.6 **CONTINUATION OF WORK**

6.6.1 Permitting Contractor to continue and finish the Work or any part of it after the time fixed for its completion (whether milestone, phase, Substantial Completion or Final Acceptance) or after the date to which the time fixed for any completion may have been extended, does not operate as a waiver by City of any rights under the Agreement Documents, law or equity.

6.6.2 Furthermore, the timely completion of the Work being of the utmost importance under this Agreement, notwithstanding the existence of one or more disputes between the parties

concerning the scope of the Work, the Project Schedule, Agreement Time, payments or any other matter, and further notwithstanding a party's invocation of the Dispute Resolution provisions specified in Appendix 6 of these General Conditions, unless City suspends the Agreement or Contractor's performance pursuant to Section 10 of these General Conditions, Contractor will continue to prosecute the Work, including any Change Order work or Extra Work Orders, in a diligent and timely manner and not stop, slow down or impede by action or inaction the progress of the Work, including commencing performance of and thereafter completing any additional work called out in any Change Order or Extra Work Order issued by Project Manager with the approval of City, so long as City makes payment to Contractor in accordance with Section 8 of these General Conditions.

SECTION 7 - AGREEMENT PRICE

7.1 UNIT PRICE AGREEMENTS

7.1.1 The Agreement Price for all Unit Price Agreements will be the amount set forth in the Agreement or Change Order multiplied by the verified quantity provided.

7.1.2 Measurements of quantities to determine the total Agreement Price must be in accordance with MAG Specification §§ 109.1 and 109.2.

7.1.3 The Unit Price may only be changed as set forth in Section 9 below.

7.2 CHANGE ORDERS

7.2.1 Unit Price Change Orders. The Change Order Price for all Unit Price Change Orders will be the amount set forth in the Change Order multiplied by the verified quantity provided.

7.2.2 Measurements of quantities to determine the total Change Order Price must be in accordance with MAG Specifications §§ 109.1 and 109.2.

7.2.3 The Unit Price may only be changed as set forth in Section 9 below.

7.2.4 MAG Specification § 109.4.1 is modified as follows: Before § 109.4.1, the following is added: Any deduction or increase in the Agreement Price must be supported by a signed, written Change Order fully executed by City, and supported by such backup as the Project Manager may require.

7.3 SALES TAX

Contractor is required to pay all applicable sales tax in accordance with the law of the state of Arizona and this cost must be included in all Agreement Prices. When equipment, materials or supplies generally taxable to Contractor are eligible for a tax exemption due to the nature of the Project, Contractor must assist City in applying for and obtaining such tax credits and exemptions which will be paid or credited to City.

SECTION 8 - PAYMENT

8.1 PAYMENT FOR CONSTRUCTION SERVICES

8.1.1 Payment for the Work will be made in accordance with MAG Standard Specification § 109 as amended below.

8.1.2 Contractor must submit to City for review a completed Contractor Payment Request signed

by Contractor, covering the Work completed as of the date of the Request and accompanied by such supporting documentation as is required by the Agreement Documents and also as City may reasonably require. A Contractor Payment Request will not be considered complete unless it is accompanied by an updated Project Schedule and a certification that the on-site, red lined, as built Drawings are up to date. If payment is requested on the basis of materials and equipment not incorporated in the Work but delivered and suitably, securely stored at the Site or at another location (such as a bonded warehouse) agreed to in writing, the Contractor Payment Request must also be accompanied by such data, satisfactory to City, as will establish City's title to the material and equipment and protect City's interest therein, including applicable insurance. Each subsequent Contractor Payment Request must include an affidavit of Contractor stating that all previous progress payments received on account of the Work have been applied to discharge in full all of Contractor's obligations reflected in prior Contractor Payment Requests.

8.1.3 Except for Work performed under a JOC Agreement, the Contracting Agency will retain 10 percent of all estimates as a guarantee for complete performance of the Agreement in accordance with Arizona Revised Statutes Section 34-221 or 34-607. The Contractor may elect to deposit securities in lieu of retention in accordance with Arizona Revised Statutes Section 34-221, Paragraph C.5. or 34-607, Paragraph B.5.

8.1.4 The payment process functions as follows: Prior to the payment cycle date, Contractor must send a draft Contractor Payment Request to Project Manager. The Project Team will review the Request and agree upon any necessary adjustments. Contractor must certify the final Request by signing and returning to Project Manager.

8.1.5 When construction of the Project is fifty percent (50%) completed, Contractor may request payment of one-half of the retention pursuant to A.R.S. § 34-609(B)(3), subject to all of City's rights to withhold or offset payments, and other rights of City, under the Agreement.

8.1.6 City reserves the right under A.R.S. § 34-609(B)(3) to reinstate the ten percent (10%) retention if City determines that satisfactory progress is not being made.

8.1.7 <u>Contractor's Warranty of Title</u>.

8.1.7.1 Contractor warrants and guarantees that title to all Work, materials and equipment covered by any Contractor Payment Request, whether incorporated in the Project or not, will pass to City at the time of payment, free and clear of all liens, claims, security interests, and encumbrances, provided that this will not preclude the Contractor from installing metering devices or other equipment of utility companies or municipalities, the title of which is commonly retained by the utility company or municipality.

8.1.7.2 No materials, supplies, or equipment for the Work under this Agreement will be purchased subject to any chattel mortgage or under a conditional sale contract or other agreement by which an interest therein, or any part thereof, is retained by the seller or supplier.

8.1.7.3 Nothing contained in this Section will defeat or impair the right of such persons furnishing materials or labor under any bond given by the Contractor for their protection, or any right under any law permitting such persons to look to funds due the Contractor in the hands of the City. The provisions of this Section must be inserted in all subcontracts and material agreements, and notices of its provision must be given to all persons furnishing materials for the Work when no formal agreement is entered into for such materials.

8.2 **PAYMENT UPON SUBSTANTIAL COMPLETION**

8.2.1 No payment will be made upon Substantial Completion, except for a regularly-scheduled monthly progress payment, as allowed by Section 8.2.2.

8.2.2 No further payments will be made to Contractor until Final Acceptance.

8.3 **FINAL PAYMENT**

8.3.1 Subject to all of City's rights to withhold or offset payment, and other rights under the Agreement, Final Payment including remaining retainage will be paid only after:

a. Work has been fully completed (including completion of all incorrect or incomplete work items) and the written Final Acceptance has been issued by City;

b. Necessary operating manuals, any excess materials and supplies necessary for matching materials and supplies incorporated into the Work, acceptable sewer video results (if applicable), and complete "as-built" Drawings (including the Building Information Model, if required by the Agreement Documents) have been delivered to City, as specified in this Section 8.3;

c. Full and unconditional lien waivers and releases by Contractor and any person performing labor or supplying material, machinery, fixtures, or tools for the Work have been delivered to Contractor;

d. All conditions and requirements imposed by City or any financing entity for the corresponding disbursement have been met; and

e. Contractor delivers to City a Contractor Payment Request requesting Final Payment.

8.3.2 Contractor must also submit a signed copy of Contractor's Affidavit Regarding Settlement of Claims, Appendix 3 to these General Conditions, and Certificate of Completion, Appendix 7 to these General Conditions, prior to Final Payment.

8.3.3 In addition, if required under the Project Specific Special Provisions, Contractor must compile a complete equipment list and maintenance manual to be submitted to City as a precondition to Final Payment. The list must include the following items for all equipment supplied under the Plumbing, Electrical, Air Conditioning, Elevator, and other Special Equipment Specifications:

a. Name, Model and Manufacturer.

b. Complete parts lists and Drawings.

c. Local source of supply for replacement parts along with suppliers' telephone numbers.

d. Local service organizations serving the equipment and their telephone numbers.

e. All tags, inspection slips, instruction packages, etc., removed from equipment must be properly identified as to pieces of equipment from which they were taken.

8.3.4 Contractor must also deliver to City, prior to Final Payment, one (1) digital (in the format specified by City), and if requested by City, one (1) hard copy, of any applicable Maintenance manuals. Each manual must include all manufacturer's operation and maintenance instructions and "as-built" Drawings with the list herein specified. It must also include all other diagrams and instructions necessary to properly operate and maintain the equipment, the name, address and telephone number of Contractor and all Subcontractors involved.

8.4 **CITY'S RIGHT TO WITHHOLD PAYMENT**

City may withhold payment to such extent as may be necessary in City's opinion to protect City from loss for which Contractor is responsible, including, without limitation, if any of the following conditions exist:

a. Defective Work not remedied;

b. Third party claims filed or reasonable evidence indicating probable filing of such claims unless security acceptable to City is provided by Contractor;

c. Failure of Contractor to make payments properly to Subcontractors or for labor, materials or equipment;

d. Reasonable evidence that the Work cannot be completed for the unpaid balance of the Agreement Price;

e. Damage to City or another Contractor;

f. Reasonable evidence that the Work will not be completed within the Agreement Time, and that the unpaid balance would not be adequate to cover actual or liquidated damages for the anticipated delay;

g. Failure to carry out the Work in accordance with the Agreement Documents; or

h. Contractor is in default of any of its other obligations under the Agreement Documents.

8.5 **JOINT/DIRECT CHECKS**

To promote the timely completion and progress of the Work or when appropriate and necessary, payments to Contractor may be made jointly to Contractor and its employees, agents, Subcontractors and suppliers, or any of them. For federally funded agreements, see federal provisions for additional requirements for the joint check process.

8.6 **PAYMENT NOT A WAIVER**

No payment (nor use or occupancy of the Project by City) will be deemed acceptance or approval of the Work or as a waiver of any claims, rights, or remedies of City.

8.7 **LIENS AND BOND CLAIMS**

Contractor must make all payments, in the time required, of all labor and materials furnished to Contractor in the course of the Work and must promptly furnish evidence of such payments as City may require. Contractor must pay when due all claims arising out of performance of the Work covered by this Agreement for which a lien may be filed either against the real estate or leasehold interest of City, or against payments due from City to Contractor, or for which a claim may be made against any payment or performance bond or both. To the fullest extent permitted by law, Contractor agrees that no liens or other claims in the nature of a lien against the real estate, leasehold, or other interest of City,

against payment due from City to Contractor, or against any payment or performance bond, must be filed or made in connection with the Work by any party who has supplied professional services, labor, materials, machinery, fixtures, tools, or equipment used in or in connection with the performance of this Agreement, and Contractor agrees to remove or to cause to be removed any such liens or claims in the nature of a lien or bond claim within 10 Days upon receiving notice or obtaining actual knowledge of the existence of such liens or claim. In addition, Contractor agrees to defend, indemnify, and hold harmless City from and against any and all such liens and claims. This paragraph does not apply to claims and liens of Contractor due to non-payment for work performed.

8.8 **FINANCIAL RECORDKEEPING AND CITY'S AUDIT RIGHT**

8.8.1 Records for all Agreements between City and Contractor must, upon reasonable notice, be open to inspection and subject to audit, scanning, and reproduction during normal business working hours. Such audits may be performed by any City's representative or any outside representative engaged by City for the purpose of examining such records. City or its designee may conduct such audits or inspections throughout the term of this Agreement and for a period of five years after Final Payment or longer if required by law. City's representatives may (without limitation) conduct verifications such as counting employees at the Site, witnessing the distribution of payroll, verifying information and amounts through interviews and written confirmations with Contractor employees, field and agency labor, Subcontractors, and vendors.

8.8.2 Contractor's "records" must include any and all information, materials and data of every kind and character, including without limitation, records, books, papers, documents, subscriptions, recordings, agreements, purchase orders, leases, contracts, commitments, arrangements, notes daily diaries, superintendent reports, drawings, receipts, vouchers and memoranda, and any and all other agreements, sources of information and matters that may in City's judgment have any bearing on or pertain to any matters, rights, duties or obligations under or covered by any Agreement Document. Such records must include (hard copy, as well as computer readable data if it can be made available), written policies and procedures; time sheets; payroll registers; payroll records; cancelled payroll checks; subcontract files (including proposals of successful and unsuccessful bidders, bid recaps, negotiation notes, etc.); original bid estimates; estimating work sheets; correspondence; Change Order files (including documentation covering negotiated settlements); back-charge logs and supporting documentation; invoices and related payment documentation; general ledger, information detailing cash and trade discounts earned, insurance rebates and dividends; and any other Contractor records which may have a bearing on matters of interest to City or the Project in connection with Contractor's dealings with City or the Project (all foregoing hereinafter referred to as "records") to the extent necessary to adequately permit evaluation and verification of any or all of the following:

a. Compliance with Agreement requirements for deliverables;

b. Compliance with approved Plans and Specifications;

c. Compliance with § 14.9 below;

d. Compliance with Agreement provisions regarding the pricing of Change Orders;

e. Accuracy of Contractor representations regarding the pricing of invoices; or

f. Accuracy of Contractor representations related to claims submitted by

Contractor or any of their employees.

8.8.3 Contractor must require all payees (examples of payees include Subcontractors, Suppliers, Insurance Carriers, etc.) to comply with the provisions of this Section by including the requirements hereof in a written agreement between Contractor and payee. Contractor will ensure that all payees (including those entering into lump sum agreements) have the same right to audit provisions contained in this Agreement included in their agreements with Contractor.

8.8.4 City's authorized representative(s) (including, without limitation, Project Manager) must have reasonable access to Contractor's facilities, must be allowed to interview all current or former employees to discuss matters pertinent to the performance of this Agreement and must be provided adequate and appropriate work space, in order to conduct audits in compliance with this Section.

8.8.5 If an audit inspection or examination in accordance with this Section, discloses overpricing or overcharges to City (of any nature) by Contractor or Contractor's Subcontractors in excess of $100,000 in addition to making adjustments for the overcharges, the reasonable actual cost of City's audit must be reimbursed to City by Contractor. Any adjustments or payments which must be made as a result of any such audit or inspection of Contractor's invoices or records must be made within a reasonable amount of time (not to exceed 90 Days) from presentation of City's findings to Contractor.

8.8.6 In addition to the normal paperwork documentation Contractor typically furnishes to City, Contractor agrees to furnish, upon written request from City, any of the documentation necessary for City to exercise its audit rights under this Section 8.8 in computer readable file formats (Word, Excel, or .pdf), as City may designate.

8.8.7 City, its authorized representative, and the appropriate agency, reserve the right to audit Contractor's records in compliance with local, state or federal policies, statutes or at City's discretion, within three (3) years of Final Acceptance of the Work.

SECTION 9 - CHANGES TO THE AGREEMENT

9.1 **FIELD ORDERS**

City may authorize minor changes in the Work not involving an adjustment in the Agreement Price or the Agreement Times, which are consistent with the overall intent of the Agreement Documents. These may be accomplished by a written Field Order on the standard form approved and executed by City. Such Field Orders must be binding and Contractor must perform the change promptly. If Contractor believes that a Field Order justifies an increase in the Agreement Price or Agreement Time, Contractor may make a claim therefor as provided in Section 7.2.

9.2 **EXTRA WORK/CHANGES IN THE WORK**

9.2.1 City reserves the right to make such changes in the Plans and Specifications for the Work, as it may deem appropriate and any such change as set forth in a written Change Order must be deemed a part of this Agreement as if originally incorporated herein.

9.2.2 In the event City and Contractor cannot agree on the terms of a Change Order, or when circumstances otherwise require, the Project Manager has the authority to direct the Contractor to perform extra work, if the work in question is an item not provided for in the

Agreement as awarded. The Project Manager will have the authority to determine, based upon factual evidence presented by the Contractor, whether the work in question is an item not provided for in the Agreement as awarded. If the Project Manager directs the Contractor to perform extra work, the Project Manager's instructions will include a price that the Contractor cannot exceed in charging the City for the extra work. Upon receipt of the Project Manager's directions to perform extra work, the Contractor must promptly proceed with the extra work and document the actual cost thereof. Contractor's right to payment for extra work will be determined under Subsection 9.2.4 below. The Contractor is responsible to manage the extra work to ensure that the price limits set by the Project Manager are not exceeded. Contractor must perform the extra work and submit documentation for the actual cost of the extra work to the City. A Change Order will be issued to cover this work.

9.2.3 Contractor will not be entitled to payment for extra work unless a written Change Order, in form and content prescribed by City, has been executed by City. On all requests for Change Orders, Contractor must specify the increased or decreased costs and whether it believes any extensions of time will be necessary to complete its Work as modified by the Change Order. If extra work is performed under Subsection 9.2.2 above, a corresponding Change Order will be prepared, approved and processed by City before payment can be made to Contractor.

9.2.4 In general, pricing for Change Orders will include the same mark-up percentages that were in effect when the Agreement was awarded. The cost or credit to the City resulting from a change in the Work is subject to Appendix 1 (Policy Statement for Calculating Delays and Damages) and will be determined, based on the type of pricing for the Agreement involved, as follows:

a. By mutual acceptance of a lump sum properly itemized in a form acceptable to City;

b. By unit prices stated in the Agreement Documents;

c. When the City determines that a Unit Price Book Job Order associated with a Job Order Agreement requires a Change Order, by using the same Total Cost Data and CCI that are in effect when the Change Order is anticipated to be issued; or

d. By actual cost and a percentage fee covering overhead and profit, as follows:

(i) Contractor will perform the extra work and be compensated for actual cost of labor, materials and equipment.

(ii) Contractor will have the right to add the fee percentage applicable to the Work under the Agreement, or if no such fee has been agreed to by the parties, not more than five percent (5%) to the Subcontractor's prices for authorized extra work performed solely by Subcontractors. Such percentage will include all of Contractor's charges for overhead, profit, administration and supervision.

(iii) Contractor or Subcontractor will have the right to add the fee percentage applicable to Work under the Agreement for self-performed extra work, or if no such fee has been agreed to by the parties, Contractor's or Subcontractor's maximum total allowable additions for overhead, profit, administration and supervision will

not exceed ten percent (10%) of actual verifiable labor, materials and equipment for such self- performed extra work.

9.2.5 Any agreement which modifies the terms of the Agreement (including Change Orders) will be approved in writing by the Project Manager. Once properly executed by both parties, these modifications to the Agreement will have the same effect as if they had been included in the original Agreement.

9.3 **ACCURACY OF CHANGE ORDER PRICING INFORMATION**

9.3.1 Subject to Sections 9.3.2 through 9.3.4, signature by the contracting parties constitutes full accord and satisfaction between City and Contractor for all costs, damages, and expenses of whatever kind of nature, including delay, impact or acceleration damages, which may be occasioned by a Change Order of other modification of the Agreement agreed to in writing.

9.3.2 Accurate Change Order Pricing Information: Contractor agrees that it is responsible for submitting accurate cost and pricing data to City to support its Fixed Price, Unit Price, or Cost Plus Change Order Proposals or other Agreement Price adjustments under the Agreement. Contractor further agrees to submit Change Order proposals with cost and pricing data which is accurate, complete, current, and in accordance with the terms of the Agreement with respect to pricing of change orders. Contractor agrees that any "buy-out savings" on Change Orders will accrue 100% to Owner. "Buy-out savings" are defined as any savings negotiated by the Contractor with a Subcontractor or a Material Supplier after receiving approval of a Change Order amount that was designated to be paid to a specific Subcontractor or Supplier for the Approved Change Order work.

9.3.3 Right to Verify Change Order Pricing Information: Contractor agrees that City, through its designated representative, will have the right to examine, copy, and scan the records of the Contractor, Subcontractor or Sub-Subcontractor's records (during the Agreement period and up to three years after final payment is made on the Agreement) to verify the accuracy and appropriateness of the pricing data used to price all Change Order proposals or claims. Contractor agrees that if City determines the cost and pricing data submitted (whether approved or not) was inaccurate, incomplete, not current, or not in compliance with the terms of the Agreement regarding pricing of Change Orders, an appropriate Agreement Price adjustment will be made. Such post-approval Contact Price adjustments will apply to all levels of contractors and Subcontractors and to all types of Change Order proposals, specifically including Fixed Price, Unit Price, and Cost Plus Change Orders.

9.3.4 Requirements for Detailed Change Order Pricing Information: Contractor agrees to provide a detailed breakdown of allowable labor and labor burden cost (i.e., base wage rate of applicable classifications of workers, payroll taxes, and insurance and benefits costs). This information will be used to evaluate the potential cost of labor and labor burden related to Change Order work. It is intended that this information represent an accurate estimate of the Contractor's actual labor and labor burden cost components. Information is not intended to establish fixed billing or Change Order pricing labor rates. However, at the time Change Orders are priced, the submitted cost data for labor rates may be used to price Change Order work. The accuracy of any such agreed upon labor rate cost components used to price Change Orders will be subject to later audit. Approved Change Order amounts may be adjusted later to correct the impact of inaccurate labor cost components if the agreed upon labor cost components are determined to be inaccurate.

9.4 **EMERGENCIES**

In any emergency affecting the safety of persons or property, Contractor will act, at its discretion, to prevent threatened damage, injury or loss. Any change in the Agreement Price or Agreement Time resulting from emergency work will be determined as provided in this Section.

9.5 **DIFFERING SITE CONDITIONS**

9.5.1 If Differing Site Conditions are encountered at the Project Site, then notice by the observing party must be given to the other party promptly before conditions are disturbed (to the extent practicable) and in no event later than 14 Days after first observance of the conditions. City will promptly investigate such conditions and, if City determines that Differing Site Conditions exist and they materially cause an increase in the cost of, or time required for, performance of any part of the Work, Contractor will be entitled to equitable adjustment in the Agreement Price or Construction Schedule (and other time requirements), or both. If it is determined by City that the conditions at the Project Site are not Differing Site Conditions and no change is justified, then City will so notify Contractor in writing, stating the reasons. Claims in opposition to such determination must be made within 14 Days after City has given notice of its decision. If City and Contractor cannot agree on an adjustment in the Agreement Price or Construction Schedule (and other time requirements), the adjustment may be submitted to dispute resolution as provided these General Conditions.

9.6 **CHANGES IN LAWS, REGULATIONS, OR LEGAL REQUIREMENTS OR TAXES**

In the event of a material change in applicable Laws, Regulations, or Legal Requirements, or taxes subsequent to the date of the Agreement by the parties, Contractor may be entitled to a Change Order, in City's discretion, to the extent Contractor can document to the satisfaction of City that such change significantly increases Contractor's actual cost of performance of the Work.

SECTION 10 -SUSPENSION AND TERMINATION

10.1 **SUSPENSION**

City may suspend the Agreement and Contractor's performance in accordance with MAG Specifications § 105.1 and 108.7.

10.2 **TERMINATION BY THE CITY FOR CAUSE**

10.2.1 MAG Specifications § 108.11 applies to the Agreement.

10.2.2 City may also terminate the Agreement if City determines, in its sole discretion that Contractor has:

a. After prior written notice, refused or failed to supply enough properly skilled workers or proper materials;

b. After prior written notice, failed to make payment to Subcontractors for materials or labor in accordance with the respective agreements between Contractor and the Subcontractors;

c. After prior written notice, disregards laws, ordinances, or rules, regulations or orders of a public authority having jurisdiction;

d. After prior written notice, repeatedly failed to comply with written directives from City;

e. Is adjudged as bankrupt or insolvent;

f. Made a general assignment for the benefit of creditors;

g. Appointed a trustee or receiver for itself or any of its property;

h. Filed a petition to take advantage of any debtor's act, or to reorganize under the bankruptcy or similar laws; or

i. Otherwise breached a provision of the Agreement Documents or any other Agreement between City and Contractor.

10.2.3 When any of the above reasons exist, City may terminate the Agreement, without prejudice to any other rights or remedies of City, after giving Contractor and Contractors' surety, if any, 7 Days written notice of City's intent to terminate the Agreement and Contractor's failure to cure any such reasons. Upon such termination, City may: (1) take possession of the Site and of all materials thereon owned by Contractor; or (2) finish the Work by whatever reasonable method City may deem expedient. When City terminates the Agreement for one of the reasons state above, Contractor will not be entitled to receive further payment until the Work is finished. If the unpaid balance of the Agreement Price existing at the time of such termination exceeds the costs and expenses of finishing the Work and any other damages incurred by City, such excess will be paid to Contractor. If such costs, expenses and damages exceed such unpaid balance, Contractor must pay the difference to City. This obligation for payment will survive termination of the Agreement.

10.3 **TERMINATION BY CITY FOR CONVENIENCE**

City may also terminate the Agreement at any time for its convenience upon 7 Days written notice to Contractor specifying the termination date. In the event of termination which is not the fault, in whole or in part, of Contractor, City will pay to Contractor only such compensation, including reimbursable expenses, due for Work properly performed on the Project prior to the termination date. Upon any termination of the Agreement, no further payments will be due from City to Contractor.

10.4 **A.R.S. § 38-511**

The Agreement is subject to, and may be terminated by City in accordance with, the provisions of A.R.S. § 38-511.

SECTION 11 -INSURANCE AND BONDS

11.1 **INSURANCE REQUIREMENTS**

11.1.1 After Agreement award, the Contractor must furnish the City a certificate of insurance on a standard insurance industry ACORD form. The ACORD form must be issued by an insurance company authorized to transact business in the State of Arizona possessing a current A.M. Best, Inc. rating of A-7, or better and legally authorized to do business in the State of Arizona with policies and forms satisfactory to City. Provided, however, the A.M. Best rating requirement may not be deemed to apply to required Worker's Compensation coverage.

11.1.2 The Contractor and any of its Subcontractors must procure and maintain, until all of their obligations have been discharged, including any warranty periods under this Agreement are satisfied, the insurances set forth below.

11.1.3 The insurance requirements set forth below are minimum requirements for this Agreement and in no way limit the indemnity covenants contained in this Agreement.

11.1.4 The City in no way warrants that the minimum insurance limits contained in this Agreement are sufficient to protect Contractor from liabilities that might arise out of the performance of the Agreement services under this Agreement by Contractor**,** its agents, representatives, employees, or Subcontractors and the Contractor is free to purchase any additional insurance as may be determined necessary.

11.1.5 Failure to demand evidence of full compliance with the insurance requirements in this Agreement or failure to identify any insurance deficiency will not relieve the Contractor from, nor will it be considered a waiver of its obligation to maintain the required insurance at all times during the performance of this Agreement.

11.1.6 Use of Subcontractors: If any Work is subcontracted in any way, the Contractor must execute a written agreement with Subcontractor containing the same Indemnification Clause and Insurance Requirements as the City requires of the Contractor in this Agreement. The Contractor is responsible for executing the Agreement with the Subcontractor and obtaining Certificates of Insurance and verifying the insurance requirements.

11.2 **MINIMUM SCOPE AND LIMITS OF INSURANCE**

11.2.1 The Contractor must provide coverage with limits of liability not less than those stated below.

11.2.1.1 Commercial General Liability-Occurrence Form. Contractor must maintain "occurrence" form Commercial General Liability insurance with a limit of not less than $2,000,000 for each occurrence, $4,000,000 aggregate. Said insurance must also include coverage for products and completed operations, independent contractors, personal injury and advertising injury. If any Excess insurance is utilized to fulfill the requirements of this paragraph, the Excess insurance must be "follow form" equal or broader in coverage scope than underlying insurance.

11.2.1.2 Automobile Liability-Any Automobile or Owned, Hired and Non-Owned Vehicles. Contractor must maintain Business/Automobile Liability insurance with a limit of $1,000,000 each accident on Contractor owned, hired, and non-owned vehicles assigned to or used in the performance under this Agreement. If any Excess or Umbrella insurance is utilized to fulfill the requirements of this paragraph, the Excess or Umbrella insurance must be "follow form" equal or broader in coverage scope than underlying insurance.

11.2.1.3 Workers Compensation and Employers Liability Insurance. Contractor must maintain Workers Compensation insurance to cover obligations imposed by federal and state statutes having jurisdiction of Contractor employees engaged in the performance of Work under this Agreement and must also maintain Employers' Liability insurance of not less than $1,000,000 for each accident and $1,000,000 disease for each employee.

11.2.1.4 Builders' Risk/Installation Floater Insurance. The Contractor bears all responsibility for loss to all equipment or Work under construction. Unless waived in writing by the City the Contractor will purchase and maintain in force Builders' Risk/Installation Floater insurance on the entire Work until completed and accepted by the City. This insurance will be Special Causes of Loss policy form, (minimally including perils of fire, flood, lightning, explosion, windstorm and hail, smoke, aircraft and vehicles, riot and civil commotion, theft, vandalism, malicious mischief, and collapse), completed value, replacement cost policy form equal to the Agreement Price and all subsequent modifications. The Contractor's Builders'

Risk/Installation Floater insurance must be primary and not contributory.

a. Builders' Risk/Installation Floater insurance must cover the entire Work including reasonable compensation for architects and engineers' services and expenses and other "soft costs" made necessary by an insured loss. Builders' Risk/Installation Floater insurance must provide coverage from the time any covered property comes under the Contractor's control and or responsibility, and continue without interruption during course of construction, renovation and or installation, including any time during which any Project property or equipment is in transit, off Site, or while on Site for future use or installation. Insured property must include, but not be limited to, scaffolding, false work, and temporary buildings at the Site. This insurance must also cover the cost of removing debris, including demolition as may be legally required by operation of any law, ordinance, regulation or code.

b. The Contractor must also purchase and maintain Boiler and Machinery insurance with the same requirements as Builders' Risk/Installation Floater insurance cited above if the Work to be performed involves any exposures or insurable property normally covered under a Boiler and Machinery insurance policy or made necessary as required by law or testing requirements in the performance of this Agreement. The Contractor will be responsible for any and all deductibles under these policies and the Contractor waives all rights of recovery and subrogation against the City under the Contractor- Builders' Risk/Installation Floater insurance described herein.

c. Builders' Risk/Installation Floater Insurance must be maintained until whichever of the following first occurs: (i) final payment has been made; or, (ii) until no person or entity, other than the City, has an insurable interest in the property required to be covered.

d. The Builders' Risk/Installation Floater insurance must be endorsed so that the insurance will not be canceled or lapse because of any partial use or occupancy by the City.

e. The Builders Risk/Installation Floater insurance must include as named insureds, the City, the Contractor, and all tiers of Subcontractors and others with an insurable interest in the Work who will be named as additional insureds unless they are able to provide the same level of coverage with the City and Contractor named as additional insureds. Certificates must contain a provision that the insurance will not be canceled or materially altered without at least 30 Days advance notice to the City. The City must also be named as a Loss Payee under the Builders' Risk/Installation Floater coverage.

f. The Builders Risk/Installation Floater insurance must be written using the Special Causes of Loss policy form, replacement cost basis.

g. All rights of subrogation under the Builders Risk/Installation Floater insurance are, by this Agreement, waived against the City, its officers, officials, agents and employees.

h. The Contractor is responsible for payment of all deductibles under the Builders' Risk/Installation Floater insurance policy.

11.2.1.5 Pollution Liability Insurance (Including Errors and Omissions). For Job Orders, Pollution Liability Insurance is only required if applicable and determined on a project specific basis. Contractor must maintain Pollution Liability Insurance with a limit of not less than $5,000,000 per loss, $5,000,000 aggregate for losses caused by pollution conditions including coverage for bodily injury, property damage, defense costs, clean-up costs, and completed operations that arise from the operations of Contractor as described in this Agreement.

a. The policy must provide for complete professional service coverage, including coverage for pollution liability that is a result of a breach of professional duties.

b. The policy must provide for protection again claims for third-party bodily injury, property damage, or environmental damage caused for pollution conditions resulting from general contracting activities for which Contractor is legally liable.

c. The policy must provide for cleanup costs when mandated by governmental entities, when required by law, or as a result of third-party claims.

d. Completed Operations Coverage must be kept in place for up to the statute of repose.

e. The policy must be endorsed to include the following additional insured language: "City, its elected officials, trustees, employees, agents, and volunteers must be named as additional insureds with respect to liability arising out of the activities performed by, or on behalf of Contractor".

f. If Work under this Agreement requires the transportation of any hazardous material or regulated substances, Contractor must carry Auto Liability with a CA 9948 endorsement or equivalent.

g. If Work under this Agreement requires the disposal of any hazardous materials from the job site, Contractor must obtain a certificate of insurance for Pollution Legal Liability from the disposal site operator with a limit of not less than $5,000,000 per loss, $5,000,000 aggregate.

11.3 **ADDITIONAL POLICY PROVISIONS REQUIRED**

11.3.1 Self-Insured Retentions or Deductibles. Any self-insured retentions and deductibles must be declared and approved by the City. If not approved, the City may require that the insurer reduce or eliminate any deductible or self-insured retentions with respect to the City, its officers, officials, agents, employees, and volunteers.

11.3.2 The Contractor's insurance must contain broad form contractual liability coverage.

11.3.3 The Contractor's insurance coverage must be primary insurance with respect to the City, its officers, officials, agents, and employees. Any insurance or self-insurance maintained by the City, its officers, officials, agents, and employees will be in excess of the coverage provided by the Contractor and must not contribute to it.

11.3.4 The Contractor's insurance must apply separately to each insured against whom claim is made or suit is brought, except with respect to the limits of the insurer's liability.

11.3.5 Coverage provided by the Contractor must not be limited to the liability assumed under the

indemnification provisions of this Agreement.

11.3.6 The policies must contain a severability of interest clause and waiver of subrogation against the City, its officers, officials, agents, and employees, for losses arising from Work performed by the Contractor for the City.

11.3.7 The Contractor, its successors and or assigns, are required to maintain Commercial General Liability insurance as specified in this Agreement for a minimum period of 3 years following completion and acceptance of the Work. The Contractor must submit a Certificate of Insurance evidencing Commercial General Liability insurance during this 3 year period containing all the Agreement insurance requirements, including naming the required Additional Insureds set forth herein.

11.3.8 If a Certificate of Insurance is submitted as verification of coverage, the City will reasonably rely upon the Certificate of Insurance as evidence of coverage but this acceptance and reliance will not waive or alter in any way the insurance requirements or obligations of this Agreement.

11.3.9 Insurance Cancellation During Agreement Term.

11.3.9.1 If any of the required policies expire during the life of this Agreement, the Contractor must forward renewal or replacement Certificates to the City within 10 Days after the renewal date containing all the required insurance provisions.

11.3.9.2 Each insurance policy required by the insurance provisions of this Agreement must provide the required coverage and must not be suspended, voided or canceled except after 30 Days prior written notice has been given to the City, except when cancellation is for non-payment of premium, then 10 Days prior notice may be given. Such notice must be sent directly to Chandler Law-Risk Management Department, Post Office Box 4008, Mailstop 628, Chandler, Arizona 85225. If any insurance company refuses to provide the require notice, the Contractor or its insurance broker must notify the City of any cancellation, suspension, non-renewal of any insurance within 7 Days of receipt of insurers' notification to that effect.

11.3.10 City as Additional Insured. The above-referenced policies are to contain, or be endorsed to contain, the following provisions:

11.3.10.1 The Commercial General Liability and Automobile Liability policies are to contain, or be endorsed to contain, the following provisions: The City, its officers, officials, agents, and employees are additional insureds with respect to liability arising out of activities performed by, or on behalf of, the Contractor including the City's general supervision of the Contractor; Products and Completed Operations of the Contractor; and automobiles owned, leased, hired, or borrowed by the Contractor.

11.3.10.2 The City, its officers, officials, agents, and employees must be additional insureds to the full limits of liability purchased by the Contractor even if those limits of liability are in excess of those required by this Agreement.

11.4 BONDS AND OTHER PERFORMANCE SECURITY

11.4.1 After Agreement award, Contractor must provide a Performance Bond and a Payment Bond, each in an amount equal to the full amount of the Agreement Price.

11.4.2 Each such bond must be executed by a surety company or companies holding a Certificate

of Authority to transact surety business in the State of Arizona, issued by the Director of the Arizona Department of Insurance and must be named in the current list of "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies" as published in Circular 570 (amended) by the Audit Staff Bureau of Accounts, U.S. Treasury Department. A copy of the Certificate of Authority must accompany the bonds. The Certificate must have been issued or updated within two (2) years prior to the execution of this Agreement. The bonds must be written or countersigned by an authorized representative of the surety who is either a resident of the state of Arizona or whose principal office is maintained in this state, as by law required.

11.4.3 The bonds must be made payable and be acceptable to City. The bond forms for the performance and payment bonds must be in the forms required under A.R.S. § 34-221, *et. Seq.,* as in Appendices 4 and 5 of these General Conditions.

11.4.4 Upon the request of any person or entity appearing to be a potential beneficiary of bonds covering payment of obligations arising under the Agreement Documents, Contractor must promptly furnish a copy of the bonds or must permit a copy to be made.

11.4.5 All bonds submitted for this Project must be provided by a company which has been rated AM Best rating of A- or better for the prior four quarters by the latest edition of the 'Results Best's Key Rating Guide (Property/Casualty)" published by the A.M. Best Company.

11.4.6 Personal or individual bonds are not acceptable.

11.4.7 If the surety on any Bond furnished by Contractor is declared a bankrupt or becomes insolvent, or Contractor's right to do business is terminated in any state where any part of the Project is located, or it ceases to meet the requirements of this Section 11.4, Contractor must within 5 Days thereafter substitute another Bond and surety, both of which must be acceptable to City.

SECTION 12 - INDEMNIFICATION

12.1 To the extent permitted by law, the Contractor and its owners, officers, directors, agents, employees, and subconsultants (collectively "lndemnitor") must indemnify, save, and hold harmless the City and its officers, officials, agents, and employees (collectively "lndemnitee") from any and all claims, actions, liabilities, damages, losses, or expenses (including court costs, attorneys' fees, and costs of claim processing, investigation, and litigation) (collectively "Claims") caused or alleged to be caused, in whole or in part, by the negligent, reckless, wrongful, or willful acts, errors, or omissions of Indemnitor in connection with this Agreement. This indemnity includes any Claim or amount arising out of or recovered under workers' compensation laws or on account of Indemnitor's failure to conform to any federal, state, or local law, statute, ordinance, rule, regulation, or court decree. Indemnitor must indemnify lndemnitee from and against any and all Claims, except those arising solely from lndemnitee's own negligent, reckless, wrongful, or willful acts, errors, or omissions. Indemnitor is responsible for primary loss investigation, defense, and judgment costs where this indemnification applies. In consideration of the award of this Agreement, Indemnitor agrees to waive all rights of subrogation against lndemnitee for losses arising from or related to this Agreement. Indemnitor's obligations under this provision survive the termination or expiration of this Agreement.

SECTION 13 -DISPUTE RESOLUTION

13.1 All disputes arising out of or relating to the Agreement, the Work or the Project, other than termination under Section 10, will be resolved pursuant to the Dispute Resolution process set forth in Appendix 6 of these General Conditions, and not pursuant to MAG Specifications § 110.

13.2 Contractor agrees that during any dispute between the parties, Contractor will continue to perform its obligations under the Agreement until such dispute is resolved.

13.3 Notwithstanding any other provision in this Agreement, City has the right to immediately file in court and pursue an action for a temporary restraining order and injunctive relief against Contractor if City determines that such action is necessary to protect its interests under the Agreement, to obtain specific performance of any provision of the Agreement, to advance the completion of the Project, or to protect health, welfare and safety.

SECTION 14 - MISCELLANEOUS PROVISIONS

14.1 AGREEMENT DOCUMENTS

14.1.1 The Agreement Documents are intended to permit the parties to complete the Work and all obligations required by the Agreement Documents within the Agreement Times for the Agreement Price. The Agreement Documents are intended to be complementary and interpreted in harmony so as to avoid conflict, with words and phrases interpreted in a manner consistent with construction and design industry standards.

14.1.2 It is the intent of the Agreement Documents to describe a functionally complete Project (or part thereof) to be constructed in accordance with the Agreement Documents. Any labor, documentation, services, materials, or equipment that may reasonably be inferred from the Agreement Documents or from prevailing custom or trade usage as being required to produce the intended result must be provided by Contractor whether or not specifically called for at no additional cost to City.

14.1.3 The Agreement Documents establish the rights and obligations of the parties and include the Agreement, Addenda (which pertain to the Agreement Documents), Contractor's Bid or Proposal (including documentation accompanying the Bid and any post-Bid documentation submitted prior to Agreement award) when attached as an exhibit to the Agreement, the accepted Project Schedule, the Notice to Proceed, the Performance Bond, the Payment Bond, Project Design, Engineering and Specifications, these General Conditions, the Project Specific Special Provisions, Technical Specifications, Agreement Drawings, as the same may be more specifically identified in the Agreement, Change Orders, Work Change Directives, Field Orders and the written interpretations and clarifications of the Design Professional or City representative and Modifications issued after execution of the Agreement. Approved Shop Drawings and the reports and drawings of subsurface and physical conditions are not Agreement Documents.

14.1.4 In the event of any inconsistency, conflict, or ambiguity between or among the Agreement Documents, the Agreement Documents will take precedence as follows from highest to lowest: Change Orders, Addenda, Agreement, Project Specific Special Provisions, General Conditions, Technical Specifications, Drawings/Plans, Chandler Amendments to MAG Standard Specifications and Chandler Standard Details, and MAG Uniform Standard Specifications and Details for Public Works Construction. If applicable to this Agreement, Federal Provisions prevail.

14.1.5 On the Drawings, given dimensions will take precedence over scaled measurements and large scale drawings over small-scale drawings.

14.1.6 Clarifications and interpretations of the Agreement Documents will be issued by the Design Professional through the City.

14.1.7 The headings used in this Agreement or any other Agreement Documents, are for ease of reference only and must not in any way be construed to limit or alter the meaning of any provision.

14.1.8 The Agreement Documents form the entire agreement between City and Contractor. No oral representations or other agreements have been made by the parties except as specifically stated in the Agreement Documents.

14.1.9 The Agreement Documents may not be changed, altered, or amended in any way except in writing signed by a duly authorized representative of each party in the form of a Change Order.

14.1.10 Re-Use of Documents. Neither Contractor nor any Subcontractor, manufacturer, fabricator, supplier or distributor will have or acquire any title to or ownership rights in any of the Drawings, Specifications or other documents (or copies of any thereof) prepared by or bearing the seal of the Design Professional; and they must not re-use any of them on extensions of the Project or any other project without written consent of City and the Design Professional and specific written verification or adaptation by the Design Professional.

14.2 REFERENCE STANDARDS

14.2.1 Reference to standards, specifications, manuals, or codes of any technical society, organization, or association, or to Laws or Regulations, whether such reference be specific or by implication, will mean the standard, specification, manual, code, or Laws or Regulations in effect at the time of opening of Bids (or on the Effective Date of the Agreement if there were no Bids), except as may be otherwise specifically stated in the Agreement Documents.

14.2.2 The provisions of any such standard, specification, manual or code, or any instruction of a Supplier will not change the duties or responsibilities of City, Contractor, Design Professional or Project Manager, or any of their Subcontractors, consultants, agents, or employees from those set forth in the Agreement Documents, nor will any such provision or instruction assign to City, Contractor, Design Professional, or any of their agents, or employees any duty or authority to supervise or direct the performance of the Work or any duty or authority to undertake responsibility inconsistent with the provisions of the Agreement Documents.

14.3 COMPLIANCE WITH ARIZONA LAW AND FEDERAL LAW

14.3.1 Compliance with A.R.S. § 41-4401. Pursuant to the provisions of A.R.S. § 41-4401, the Contractor hereby warrants to the City that the Contractor and each of its subcontractors ("Subcontractors") must comply with all Federal Immigration laws and regulations that relate to the immigration status of their employees and the requirement to use E-Verify set forth in A.R.S. §23-214(A).

14.3.2 A breach of the Contractor Immigration Warranty constitutes a material breach of this Agreement and subject to penalties up to and including termination of this Agreement.

14.3.3 The City retains the legal right to inspect the papers of any Contractor or Subcontractor employee who works on this Agreement to ensure that the Contractor or Subcontractor is complying with the Contractor Immigration Warranty. The Contractor agrees to assist the City in the conduct of any such inspections.

14.3.4 The City may, at its sole discretion, conduct random verifications of the employment records of the Contractor and any Subcontractors to ensure compliance with Contractors Immigration Warranty. The Contractor agrees to assist the City in performing any such random verifications.

14.3.5 The provisions of this Article must be included in any agreement the Contractor enters into with any and all of its subcontractors who provide services under this Agreement or any subcontract. "Services" are defined as furnishing labor, time or effort in the State of Arizona by a contractor or subcontractor. Services include construction or maintenance of any structure, building or transportation facility or improvement to real property.

14.4 **HAZARDOUS ENVIRONMENTAL CONDITIONS**

14.4.1 Contractor will not be responsible for any Hazardous Environmental Condition uncovered or revealed at the Site which was not shown or indicated in Drawings or Specifications or identified in the Agreement Document to be within the scope of the Work. Contractor will be responsible for a Hazardous Environmental Condition created with any materials brought to the Site by Contractor, Subcontractors, Suppliers, or anyone else for whom Contractor is responsible.

14.4.2 If Contractor encounters a Hazardous Environmental Condition or if Contractor or anyone for whom Contractor is responsible creates a Hazardous Environmental Condition. Contractor must immediately:

a. Secure or otherwise isolate such condition;

b. Stop all Work in connection with such condition and in any area affected thereby; and

c. Notify City and promptly thereafter confirm such notice in writing.

14.4.3 City will promptly retain a qualified expert to evaluate such condition or take corrective action, if any.

14.4.4 Contractor will be responsible for any and all civil or criminal penalties, fines, damages, or other charges imposed by any regulatory agency or court for sewage discharges that are in violation of applicable statutes and laws and that are a result, direct or indirect, of work performed under this Agreement. Contractor will also be responsible for reimbursement to City for administration, reporting, and tracking expenses required as a result of any spill event. In the event the regulatory agency or court imposes a probationary period, Contractor must post bond for the probationary period to ensure that all such costs are reimbursed to City. This responsibility will apply whether penalties are imposed directly on Contractor or any of its Subcontractors, or the City of Chandler. Contractor must defend and indemnify City against such penalties. Regulatory agencies may include, but are not limited to, the Arizona Department of Environmental Quality (ADEQ) and the United States Environmental Protection Agency (USEPA).

14.5 **COOPERATION AND FURTHER DOCUMENTATION**

Contractor agrees to provide City such other duly executed documents as may be reasonably requested by City to implement the intent of the Agreement Documents.

14.6 **ASSIGNMENT**

Neither Contractor nor City will, without the written consent of the other assign, transfer or sublet any portion of this Agreement or part of the Work or the obligations required by the Agreement Documents, any such assignment will be void, will transfer no rights to the purported assignee, and would be a material breach of the Agreement.

14.7 **SUCCESSORS**

Contractor and City intend that the provisions of the Agreement Documents are binding upon the parties, their employees, agents, heirs, successors and assigns.

14.8 **LAWFUL PRESENCE**

Pursuant to A.R.S. §§ 1-501 and 1-502, City is prohibited from awarding an agreement to any natural person who cannot establish that such person is lawfully present in the United States. To establish lawful presence, a person must produce qualifying identification and sign a City-provided affidavit affirming the identification provided is genuine. This requirement will be imposed at the time of agreement award. This requirement does not apply to business organizations such as corporations, partnerships, or limited liability companies.

14.9 **NO BOYCOTT OF ISRAEL CERTIFICATION**

By Contractor's signature on this Agreement, Contractor certifies under A.R.S. § 35-393.01 that Contractor is not currently engaged in and for the duration of this Agreement will not engage in a boycott of Israel.

14.10 **NO THIRD PARTY BENEFICIARY**

Nothing under the Agreement Documents will be construed to give any rights or benefits in the Agreement Documents to anyone other than City and Contractor, and all duties and responsibilities undertaken pursuant to the Agreement Documents will be for the sole and exclusive benefit of City and Contractor and not for the benefit of any other party, unless otherwise expressly set forth in the Agreement Documents.

14.11 **GOVERNING LAW AND VENUE**

The Agreement and all Agreement Documents will be deemed to be made under, and will be construed in accordance with and governed by the laws of the State of Arizona without regard to the conflicts or choice of law provisions thereof. Any court action to enforce any provision of the Agreement or to obtain any remedy with respect hereto must be brought in the Superior Court, Maricopa County, Arizona, and for this purpose, each party hereby expressly and irrevocably consents to the jurisdiction and venue of such Court.

14.12 **SEVERABILITY**

If any provision of the Agreement Documents or the application thereof to any person or circumstance will be invalid, illegal or unenforceable to any extent, the remainder of the affected provision, the remainder of the Agreement Documents, and the application thereof will not be affected and will be enforceable to the fullest extent permitted by law.

14.13 **LEGAL REQUIREMENTS**

At all times relevant to its entry into this Agreement and performance of the Services and the Work, Contractor must fully comply with all Laws, Regulations, or Legal Requirements applicable to City, the Project, and the Agreement, including, without limitation, those set

forth on Exhibit C of the Agreement.

14.14 **PARTIAL INVALIDITY**

If any provision of the Agreement is held by a court of competent jurisdiction to be invalid, void or unenforceable, the remaining provisions will nevertheless continue in full force without being impaired or invalidated in any way.

14.15 **ATTORNEYS' FEES**

Should either party to the Agreement bring an action to enforce any provision of the Agreement, the prevailing party will be entitled to recover reasonable attorneys' fees and costs in connection therewith.

14.16 **CONFLICT OF INTEREST**

14.16.1 Contractor agrees to disclose any financial or economic interest with the Project property, or any property affected by the Project, existing prior to the execution of the Agreement. Further, Contractor agrees to disclose any financial or economic interest with the Project property, or any property affected by the Project, if Contractor gains such interest during the course of this Agreement. If Contractor gains financial or economic interest in the Project during the course of this Agreement, this may be grounds for terminating this Agreement. Any decision to terminate the Agreement must be at the sole discretion of City.

14.16.2 Contractor will not engage the services on this Agreement of any present City employee who was involved as a decision maker in the selection or approval processes, or who negotiated or approved billings or Agreement Modifications for this Agreement.

14.16.3 Contractor agrees that it will not perform services on this Project for a contractor, subcontractor, or any supplier, not covered under this Agreement.

14.17 **INDEPENDENT CONTRACTOR**

Contractor is and must be an independent contractor. Any provisions in the Agreement Documents that may appear to give City the right to direct Contractor as to the details of accomplishing the Work or to exercise a measure of control over the Work means that Contractor must follow the wishes of City as the results of the Work only. These results must comply with all applicable laws and ordinances.

14.18 **NOTICE OF INJURY**

Should City or Contractor suffer injury or damage to their person or property because of any error, omission or act of the other party or of any of the other party's employees or agents or others for whose acts the other party is legally liable, claim must be made in writing to the other party within 7 Days of the first observance of such injury or damage.

14.19 **CONFIDENTIALITY**

Contractor, for the benefit of City, hereby agrees it will not release or cause or permit to be released to the public any press notices, publicity (oral or written) or advertising promotion relating to, any statement regarding, or any other public announcement or disclosure or cause or permit to be publicly announced or disclosed, in any manner whatsoever, the specific terms and conditions of this Agreement or any comment relating to the Project or the Site. Notwithstanding the foregoing, Contractor will be entitled to disclose the terms of the Agreement to the extent required by law or in the course of enforcing or defending a claim or action hereunder. Contractor must give City reasonably prompt notice of any disclosure or statement made pursuant to this provision.

14.20 DATA CONFIDENTIALITY

14.20.1 As used in the Agreement, "data" means all information, whether written or verbal, including plans, specifications, renderings, photographs, studies, investigations, audits, analyses, samples, reports, calculations, internal memos, meeting minutes, data field notes, work product, proposals, correspondence and any other similar documents or information prepared by, obtained by, or transmitted to the City in the performance of this Agreement.

14.20.2 Contractor agrees that all data, regardless of form, including originals, images, and reproductions, prepared by, obtained by, or transmitted to City in connection with the Contractor's performance of this Agreement is confidential and proprietary information belonging to City.

14.20.3 Except as specifically provided in this Agreement, Contractor or its Subcontractors must not divulge data to any third party without prior written consent of City. Contractor or its Subcontractors must not use data for any purposes except to perform Work required under this Agreement. These prohibitions will not apply to the following data provided Contractor has first given the required notice to City:

a. Data which was known to Contractor or its Subcontractors prior to its performance under this Agreement unless such data was acquired in connection with Work performed for City;

b. Data which was acquired by Contractor or its Subcontractors in its performance under this Agreement and which was disclosed to Contractor or its Subcontractors by a third party, who to the best of Contractor's or its Subcontractor's knowledge and belief, had the legal right to make such disclosure and Contractor or its Subcontractors are not otherwise required to hold such data in confidence; or

c. Data which is required to be disclosed by virtue of law, regulation, or court order, to which the Contractor or its Subcontractors are subject.

14.20.4 In the event the Contractor or its Subcontractors are required or requested to disclose data to a third party, or any other information to which the Contractor or its Subcontractors became privy as a result of any other agreement with City, the Contractor must first notify City as set forth in this Section of the request or demand for the data. The Contractor or its Subcontractors must give City sufficient facts so that City can be given an opportunity to first give its consent or take such action that City may deem appropriate to protect such data or other information from disclosure.

14.20.5 Unless prohibited by law, within 10 Days after completion of services for a third party on real or personal property owned or leased by City, the Contractor must promptly deliver, as set forth in this Section, a copy of all data to City. All data will continue to be subject to the confidentiality agreements of this Agreement.

14.20.6 Contractor or its Subcontractors assume all liability for maintaining the confidentiality of the data in its possession and agree to compensate City if any of the provisions of this Section are violated by Contractor, its employees, agents, or Subcontractors. Solely for the purposes of seeking injunctive relief, it is agreed that a breach of this Section will be deemed to cause irreparable harm that justified injunctive relief in court. Contractor agrees that the requirements of this Section will be incorporated into all subcontracts entered into by Contractor. A violation of this Section may result in immediate termination of this

Agreement without notice.

14.21 **SURVIVAL**

All warranties, representations and indemnifications by Contractor must survive the completion or termination of this Agreement.

14.22 **COVENANTS AGAINST CONTINGENT FEES**

Contractor warrants that no person has been employed or retained to solicit or secure this Agreement upon an agreement or understanding for a commission, percentage, brokerage, or contingent fee, and that no member of City Council, or any employee of City has any interest, financially, or otherwise, in the firm. For breach or violation of this warrant, City will have the right to annul the Agreement without liability or at its discretion to deduct from the Agreement Price or consideration, the full amount of such commission, percentage, brokerage, or contingent fee.

14.23 **NO WAIVER**

The failure of either party to enforce any of the provisions of the Agreement Documents or to require performance of the other party of any of the provisions hereof must not be construed to be a waiver of such provisions, nor will it affect the validity of the Agreement Documents or any part thereof, or the right of either party to thereafter enforce each and every provision.

14.24 **NONEXCLUSIVE REMEDIES**

The remedies set forth in this Agreement are cumulative and not exclusive, and failure to exercise any remedy (including, without limitation, any right to terminate) will not preclude any party from exercising any other right in seeking any other remedy available to it at law or in equity.

14.25 **PROJECT COMMUNICATIONS**

14.25.1 All communications concerning the performance of the Work or the Project will be provided to the designated Project Manager and Contractor's Representative set forth in Article 1 of the Agreement. City may change the designated Project Manager and, subject to Section 4.4.20 of these General Conditions, Contractor may change Contractor Representative, by written notice to the other.

14.25.2 Project communications may be exchanged by e-mail, but email communications cannot change the terms of the Agreement or the Scope of Work, or effectuate any change that requires a written Change Order.

14.25.3 When any provisions of the Agreement Documents requires Contractor or the Design Professional to give written notice to City, it will be deemed to have been validly given if delivered in person or if delivered at or sent by registered or certified mail, postage prepaid, to the Parties indicated in Agreement Article 1, incorporated by reference.

14.25.4 When any provisions of the Agreement Documents requires City, Project Manager, or the Design Professional to give written notice to Contractor, it will be deemed to have been validly given if delivered in person to the person designated in the Agreement Documents as Contractor's Resident Superintendent, or if delivered at or sent by registered or certified mail, postage prepaid, to Contractor at the last address in the Agreement Documents or such substitute address which Contractor designates in writing, or to the business address known to the giver of notice.

14.26 **DRUG FREE WORKPLACE PROGRAM**

14.26.1 City has adopted a policy establishing a drug free workplace for itself and as a requirement for Contractors doing business with City, to ensure the safety and health of employees working on City projects.

14.26.2 Contractor must require a drug free workplace for all employees working under the Agreement. Specifically, all employees of Contractor who are working under an agreement with City must be notified, in writing, by Contractor that they are prohibited from the manufacture, distribution, dispensation, possession or unlawful use of a controlled substance in the workplace.

14.27 Failure to require a drug free workplace in accordance with the City's policy may result in termination of the Agreement and possible debarment form bidding on future City projects.

SECTION 15 - PROVISIONS APPLICABLE SOLELY TO GMP AND COST-BASED AGREEMENTS, CHANGE ORDERS, AND JOB ORDERS

15.1 **ADDITIONAL DEFINITIONS**

The definitions set forth in Section 2 apply to GMP and Cost-Based Agreements, Change Orders, and Job Orders, together with the additional definitions set forth below.

Baseline Cost Model –
A breakdown and estimate of the scope of the Project developed by CM@Risk pursuant to Section 17.5 of these General Conditions.

CM@Risk or Construction Manager at Risk –
The person or firm selected by City to provide pre-construction and/or construction services as detailed in a Construction Manager at Risk Agreement with City. In these General Conditions, the term "Contractor" includes CM@Risk under both Pre-Construction and Construction Services Agreements.

CM@Risk Fee or Contractor's Fee –
An agreed to percentage in an accepted GMP that represents the Contractor's fee for performance of the Work.

Agreement Documents –
Where compensation under the Agreement is based upon a GMP accepted by City, the term "Agreement Documents" also includes the accepted GMP Proposal.

Agreement Price –
Where compensation under the Agreement based upon a GMP accepted by City, the term "Agreement Price" refers to the GMP.

Cost-Based Agreement, Change Order, or Job Order –
A Agreement, Change Order, or Job Order where the Agreement Price is based upon the actual cost of performing the Work, subject to the terms of the Agreement Documents, including this Section 15. These would include those generally referred to as "Cost of the Work plus a Fee with a GMP," "Time and Materials," or "Cost Plus a Fee."

Cost of the Work –
The direct costs necessarily incurred by Contractor in the proper, timely, and complete performance on the Work. The Cost of the Work will include only those costs set forth in Section 15.2 of these

General Conditions.

Deliverables –
The work products prepared by Contractor in performing the scope of work described in the Agreement. Some of the major deliverables to be prepared and provided by Contractor during pre-construction may include but are not limited to: the Baseline Cost Model and Schedule that validate City's plan and budget, Construction Management Plan, Detailed Project Schedule, Schedule of Values, alternative system evaluations, procurement strategies and plans, Detailed Cost Estimates, construction market surveys, cash flow projections, GMP Proposals, Subcontractor procurement plan, Subcontractor agreements, Subcontractor bid packages, Supplier agreements, Constructability Review, Cost Control Log, Traffic control and phasing plans and others as indicated in this Agreement or required by the Project Team.

Pre-Construction Services Agreement –
The Agreement entered into between City and the CM@Risk for Pre-Construction Services to be provided by the CM@Risk, including, without limitation, the generation of a GMP Proposal. If the GMP Proposal is accepted by City and a Construction Agreement is entered into between City and CM@Risk, the duties, obligations and warranties of the CM@Risk under the Pre-Construction Services Agreement survive and are incorporated into the resulting Construction Agreement.

Pre-Construction Services –
The services to be provided under the Pre-Construction Services Agreement, including Section 17 of these General Conditions.

Detailed Project Schedule –
The Detailed Project Schedule developed by the CM@Risk for the review and approval of the Project Manager in accordance with Section 17.3 of these General Conditions, if applicable.

General Conditions Costs –
Those costs set forth in Section 4 of Appendix 9 to these General Conditions.

GMP Plans and Specifications –
The plan and specifications upon which the Guaranteed Maximum price Proposal is based.

GMP Proposal –
The proposal of Contractor submitted pursuant to Section 17.7 of these General Conditions for the entire Work and/or portion (phases) of the Work.

Guaranteed Maximum Price or GMP –
The Guaranteed Maximum Price set forth in the Agreement, Change Order, or Job Order if applicable.

15.2 **AGREEMENT PRICE**

15.2.1 The Agreement Price for all Agreements, Change Orders, and Job Orders based upon payment of the Cost of the Work plus a Fee with a GMP, time and materials, or cost-plus a fee will be the Cost of the Work incurred plus the Fee agreed to in writing by City, limited to the amount of the GMP, if agreed to. Unless otherwise expressly provided in the Agreement, Change Order, or Job Order, all Cost Based pricing will be subject to and limited to GMP.

15.2.2 The Agreement Price may only be changed as set forth in Section 9 above.

15.2.3 Only costs specifically designated as reimbursable costs are eligible for payment by City or may be charged against the Agreement Price. All other costs will not be paid by City and will not be chargeable against the Agreement Price.

15.2.4 Cost-Based Agreements. For Agreements, Change Orders, or Job Orders, reimbursable costs must be determined pursuant to Appendix 9 to these General Conditions, Cost of the Work, and not by MAG Specifications §109.5.

15.3 **ALLOWANCES**

15.3.1 Contractor must include in the Agreement Price all Allowances stated in the Agreement Documents and agreed to in writing by City. Items covered by these Allowances must be supplied for such amounts and by such persons as City may direct, provided Contractor will not be required to employ persons against whom Contractor makes a reasonable objection. Materials, labor, and equipment under an Allowance will be selected by City in accordance with a schedule to be mutually agreed upon by City, Design Professional and Contractor or otherwise in reasonably sufficient time to avoid delay in the Work.

15.3.2 Unless otherwise provided in the Agreement Documents:

15.3.2.1 These Allowances must cover the cost to Contractor, less any applicable trade discount, of the materials, labor, and equipment required by the Allowances, delivered at the Site, and all applicable taxes;

15.3.2.2 Contractor's costs for unloading and handling on the Site, labor, installation costs, overhead, profit and other expenses relating to materials, labor, and equipment required by the Allowance must be included in the Agreement Sum and not in the Allowance; and

15.3.2.3 Whenever the cost is more or less than the Allowance, the Agreement Sum must be adjusted accordingly by Change Order, the amount of which will recognize the difference between actual costs for an Allowance item and the amount of the Allowance item and changes, if any, in handling costs on the Site, labor, installation costs, overhead, profit and other expenses.

15.4 **CONTINGENCY**

An agreed to amount in the GMP that may only be used in accordance with the terms set forth in these General Conditions and with prior written approval by the City.

15.4.1 Construction Contingency. This GMP includes a dollar amount listed as a Construction Contingency which will be readily available for increased costs for subcontractors, material, and equipment subject to prior approval of City, which approval will not be withheld unreasonably. The Construction Contingency may also be used, at the discretion of City, to reimburse CM@Risk for unexpected costs due to (a) scope gaps between trade subcontractors; (b) agreement default by trade subcontractors; (c) unforeseen field conditions, but only as defined in Section 9.5 above; (d) work completed to meet the intent of the design, but which was not indicated on the plans; (e) costs overruns not covered by allowances; (f) costs of corrective work not provided for elsewhere; and (g) implementation of any Recovery Plan. Cost for which CM@Risk desires to be paid from the Construction Contingency must be documented by CM@Risk on a time and materials basis and are subject to verification by City. If agreed to by City, a "Use of Contingency" form will be executed by both parties authorizing the actual cost of the work to be paid and included in the Work Item Direct Costs. The Construction Contingency is not allocated to any particular

item of the Project but may be used for any portion of the work as determined above. Any amount not used in the Construction Contingency will belong to City and will reduce the GMP.

15.4.2 Owner's Contingency. This GMP also includes a dollar amount listed as an Owner's Contingency which may be used only by the City (owner department) for upgrades and changes in scope or other changes not already included within the intent of the Project Program. City will provide CM@Risk with a Work Change Directive authorizing CM@Risk to perform the additional work and to transfer funds from the Owner's Contingency to the Work Item Direct Costs category to be paid with such direct costs. These additional costs will be in an amount mutually agreed upon by CM@Risk and City or will be documented by CM@Risk on a time and materials basis and are subject to verification by City. Any amount not used in the Owner's Contingency will belong to the City and will reduce the GMP.

15.5 **REDUCTION IN RETENTION**

If the Agreement Price is based upon a GMP, in order to receive payment of one-half of the retention as set forth in Section 8.1.5 above, Contractor must also submit to the Project Manager a complete accounting of the Actual Reimbursable Cost of the Work to date, including all such documentation (including, without limitation, invoices, subcontract, subcontractor change orders, purchase orders, records of payment, etc.) as City may require, to establish whether the payments made to Contractor equal, exceed, or are less than the actual reimbursable Cost of the Work to date. Any excess payments by City, as determined by the Project Manager, will be deducted from the one-half retention payment to be made to Contractor, and any additional excess amounts paid to Contractor will be refunded by Contractor to City. The Project Manager's determinations as to Actual Reimbursable Cost of the Work will be the basis of payment until final Project Closeout and Final Payment under the Agreement.

15.6 **FINAL PAYMENT**

If the Agreement Price is based upon a GMP, as a further condition precedent to Final Payment by City, Contractor must submit to the Project Manager a complete final accounting of the Actual Reimbursable Cost of the Work, including all such documentation (including, without limitation, invoices, subcontracts, subcontractor change orders, purchase orders, records of payment, etc.) as City may require, to establish whether the payments made to Contractor equal, exceed, or are less than the Actual Reimbursable Cost of the Work to date. Any excess payments by City, as determined by the Project Manager, will be deducted from the one-half retention payment to be made to Contractor, and any additional excess amounts paid to Contractor will be refunded by Contractor to City. Disputes relating to the Final Cost of the Work will be subject to City's audit rights under Sections 8.8 above and 15.7 below, and the dispute resolution process under Section 13 above.

15.7 **OPEN BOOK**

On any GMP-based or Cost-Based Agreement, Job Order, or Change Order, City may attend any and all meetings or discussions pertaining to the Project, including bid openings, and must have access to all books, invoices, accounts, memoranda, correspondence, and written communications or records of any kind pertaining to the Project, including without limitation, those stored in electronic format.

15.8 **DIFFERING SITE CONDITIONS AND/OR CHANGE IN LAWS**

A Change Order for increased costs under Section 9.5 or 9.6 above will only be considered

or granted by City to the extent such actual, documented costs are justified.

SECTION 16 - PROVISIONS APPLICABLE SOLELY TO JOB ORDER AGREEMENTS (JOC)

16.1 **ADDITIONAL DEFINITIONS**

The definitions set forth in Sections 2 and below will apply to all Job Order Agreements and Job Orders. In addition, the definitions set forth in Section 15.1 above will apply to all Cost-Based Job Orders.

Agreement –
Includes the Job Order Master Agreement and Job Order Project Agreements issued and agreed to by City and JOC Contractor.

JOC Contractor's Coefficient –
A numerical factor that represents JOC Contractor total costs (indirect and direct costs, sales tax, profit, etc.) and other adjustments for market conditions.

Job Order Request for Proposal (RFP) –
The Request for Proposals issued by City for each Job Order Project Agreement relating to a specific Project.

Job Order Cost Proposal –
The Proposal submitted by JOC Contractor in response to a Job Order Request for Proposal (RFP) issued by City to develop a Job Order Project Agreement for a specific Project.

Guaranteed Maximum Price (GMP) Job Order –
Job Order under which JOC Contractor is compensated for actual costs incurred.

Job Order Project Agreement (Job Order) –
The agreement for a specific project, as it may be modified by all Change Orders, executed by the Parties, which incorporates the terms and conditions of the Job Order Master Agreement.

16.2 **ORDERING AND PROCESSING PROCEDURES FOR JOB ORDERS**

16.2.1 The process for developing and issuing a Job Order for a particular Project consists of three (3) procedures: (1) issuance of a RFP by City; (2) JOC Contractor's response to the RFP in the form of JOC Contractor's Job Order Cost Proposal; and (3) Issuance of a Job Order by City, as set for below.

16.2.2 RFP's For Job Orders

16.2.2.1 City will provide to JOC Contractor RFP with a Scope of Work (SOW) describing the Work to be performed, which may include special instructions and conditions, material submittal requirements, and, if applicable, a complete set of sketches, construction drawings and specifications for the Job Order.

16.2.2.2 Some Job Order RFP's will be issued by City without detailed sketches, drawing and specifications and will rely on JOC Contractor to produce them for City review and approval and is considered to be Pre-Construction and incidental design services included in JOC Contractor's overhead for GMP Job Orders. In addition JOC Contractor will not be reimbursed for any Pre-Job Order costs, including proposal preparation, attendance during negotiations, or site visits.

16.2.3 JOC Contractor's Job Order Cost Proposal

16.2.3.1 JOC Contractor must respond within ten (10) calendar days of the RFP date or site visit, whichever is later or as otherwise indicated on a case-by-case basis, by submitting JOC Contractor's Job Order Cost Proposal to the City representative.

16.2.3.2 Unless otherwise required under the terms of the RFP, JOC Contractor's Job Order Cost Proposal must include the following.

a. JOC Contractor's Job Order Cost Proposal in PDF and electronic format;

b. A Project Schedule and schedule of values that reflects the costs of each work element on the schedule. The schedule must show all milestones (e.g., permits, submittals, ordering materials, demolition, work phases, closeout and completion date); and

c. Necessary documentation will be required to indicate that adequate scoping, layout, setup and planning to accomplish the Work has been done. Examples of documentation that might reasonably be expected include sketches, drawings, calculations, catalog cuts and specifications produced to a level of detail and skill that could be expected of experienced, competent Project Managers with five or more periods experience in their respective trade.

16.2.3.3 JOC Contractor must select Subcontractors based on qualifications alone or on a combination of qualifications and price and must not select Subcontractors based on price alone. A qualifications and price selection may be a one-step selection based on a combination of qualifications and price or two-step selection. In a two-step selection, the first step must be based on qualifications alone and the second step may be based or a combination of qualifications and price or on price alone.

16.2.3.4 Upon request, JOC Contractor must provide City with copies of Subcontractor quotes and the basis for selection of each Subcontractor.

16.2.3.5 If City objects to a selected Subcontractor, City will make the objection and the reasons for the objection known to the JOC Contractor. JOC Contractor must then present an acceptable Subcontractor for the applicable discipline. City will not unreasonably object to or withhold approval of a Subcontractor.

16.2.3.6 For self-performed work, the City retains the right to have the JOC Contractor establish JOC Contractor's costs by bidding their costs against at least three (3) other interested trade Contractors. No self- performed work will be allowed to be performed on a lump sum basis.

16.2.4 Issuance of Job Order

16.2.4.1 City Representative will compare the JOC Contractor's Job Order Cost Proposal with the City's estimate, schedules and other requirements, and then, if the City Representative determines it is in the best interest of City, arrange a meeting with JOC Contractor, at which time the JOC Contractor's Job Order Cost Proposal will be discussed and negotiated.

16.2.4.2 If the City Representative determines that it is in the best interest of the City, City will then issue a Job Order to JOC Contractor for execution.

16.2.4.3 Specific Job Orders may vary, but unless agreed to by City in writing otherwise, the content

of Job Orders under the Agreement will generally be as follow, all of which will be signed and/or initialed by JOC Contractor's designated representative:

a. The description of the Scope of the Work and Project Schedule (attached as Exhibit A to the Job Order);

b. The address or location of the Work;

c. The Agreement Price for Work (Construction) included in the Project (attached as Exhibit B to the Job Order);

d. The name of the JOC Contractor representative for the Project;

e. The Drawings and Specifications for the Project;

f. If any shop drawings, project date and/or samples are required for the Job Order, the date for delivery of each required item (included in the Project Schedule, Exhibit A to the Job order); and

g. Project Specific Provisions, if any, in Exhibit A to the Job Order, including, without limitation, whether any of the following are required: Pre-Construction Conference, weekly progress meetings, field office, storage enclosure, materials and equipment handling facility, submittals, shop drawings, product data, equipment list, samples, project manual, schedule of values, Construction progress schedule, narrative reports, progress report, progress charts, progress photographs, materials status report, Construction diagram, Construction status report, operation and maintenance data, operating maintenance instructions and parts list, and as-build drawings.

16.2.5 Job Order Intent. Each Job Order will be interpreted to include all items reasonably necessary to complete the Project under that Job Order as described in the scope of the Work in that Job Order. All Work must be performed in a professional manner and all materials used must be new and of the highest quality and of the type best adapted to their purpose, unless otherwise specified. The Notice to Proceed date, and the award date established therein, will be deemed an integral part of the Job Order the same as if set forth therein.

16.3 **INCIDENTAL DESIGN SERVICES**

16.3.1 This effort includes all "extensions of design" for systems that are typically specified in a performance oriented manner by consultants and designers. Examples include: fire sprinkler systems, fire alarm and sprinkler systems, DDC controls, control systems, prefabricated metal building and similar situations. These designs are normally provided under submittals as a shop drawing with engineering backup and as appropriate, seals of registered engineers specializing in the particular system.

16.3.2 Incidental design includes all documents, sketches, schematic diagrams, floor plan layouts, equipment schedules and other documents produced by the JOC Contractor to define the work required for projects that the City does not develop formal or abbreviated designs requiring a seal by a registered engineer. Incidental design does not include preparation of designs requiring an architect or engineer seal.

16.3.3 JOC Contractor represents, covenants, and agrees, and contractually assumes the obligation to furnish, all of the required Design Services through properly licensed and

experienced Design Professionals in complete accordance with all of the duties imposed on a Design Professional under the Agreement Documents, Laws, Regulations, or Legal Requirements, and the common law.

16.3.4 All Design Documents (and all other Project-related documents, models, computer drawings and other electronic expression, photographs and other expressions CADD, and BIM files and images included) that JOC Contractor and/or JOC Contractor's Design Professional(s) prepare in connection with a Job Order and the copyrights therein (collectively, the "Instruments of Service") will be the property of City. JOC Contractor covenants and agrees to execute any additional document reasonably requested by City to confirm such assignment without any additional compensation.

16.4 **CONSTRUCTION SERVICES**

16.4.1 The following subsections of this Section 16.4 set forth requirements beyond those set forth in Section 4 above which apply to Construction Services performed under a Job Order.

16.4.2 JOC Contractor must perform the Work using only those firms, team members and individuals designated by JOC Contractor consistent with each Job Order or otherwise approved by City pursuant to the General Conditions. No other entities or individuals may be used without the prior written approval of the Project Manager.

16.4.3 Construction Phasing

16.4.3.1 City use of the facilities is anticipated while the Work is being performed. The Work must be planned and accomplished so that there will be a minimum of interference and inconvenience to occupants in the building and agencies in the vicinity and to other craftsmen who may have to do work in the affected facilities. Any blockage of building exits or driveways must be coordinated in advance.

16.4.3.2 If applicable, furniture, portable office equipment and wall appurtenances not rigidly fastened to the walls must be moved by JOC Contractor, protected from damage and replaced to the original position upon completion of the work. If the work required by the Job Order will not allow furniture and portable office equipment to be replaced to its original position, new locations will be designated by City. Incidental costs associated with moving one-piece furnishings up to approximately 150 pounds to perform such tasks as painting, carpet or tile replacement, etc., are considered a general cost of building renovation and must be included in the JOC Contractor's Coefficient. Costs for large scale or wholesale removal and replacement of large quantities of desks or modular workstations, copiers, multiple full file cabinets, etc. to another location or storage outside the work space, or disassembly and reassembly of modular furniture is not considered part of the JOC Contractor's Coefficient and will be priced separately.

16.4.3.3 The work must, so far as practicable, be done in definite sections or divisions and confined to limited areas which must be completed before work in other sections or divisions are begun.

16.4.4 Work Site Conflicts. In the event of a conflict between JOC Contractor and others in an occupied facility or where other Contractors are performing work on the same facility under other Agreements, City will decide to dispute and that decision will be final.

16.4.5 Ownership of Work Product. Work Product prepared or otherwise created in connection

with the performance of this Agreement, including the Work, are to be and remain the property of City. For purposes of this provision, "Work Product" will include all designs, drawings, plans, specifications, ideas, renderings and other information or matter, in whatever form created (e.g., electronic or printed) and in all media now known or hereinafter created. All Work Product will be considered Work Made for Hire as defined in the United States Copyright Act 17 U.S.C. §101 (Copyright Act). If for any reason any such Work is found not to be a work for hire, JOC Contractor hereby transfers and assigns ownership of the copyright in such Work to City. The rights in this Section are exclusive to City in perpetuity.

16.5 **OPTIONAL LIQUIDATED DAMAGES**

16.5.1 Specific Job Orders. City will have the right to assess liquidated damages in relation to any specific JOC Project Agreement as set forth below.

16.5.2 Substantial Completion Liquidated Damages. JOC Contractor acknowledges and agrees that if JOC Contractor fails to obtain Substantial Completion of the Work within the Agreement Time, City will sustain extensive damages and serious loss as a result of such failure. The exact amount of such damages will be extremely difficult to ascertain. Therefore, City and JOC Contractor agree that if JOC Contractor fails to achieve Substantial Completion of the Work within the Agreement Time, City will be entitled to retain or recover from JOC Contractor, as liquidated damages and not as a penalty, the sum per calendar day as indicated in MAG § 108.9.

16.5.3 Final Acceptance Liquidated Damages. For the same reasons set forth in Section 16.5.2 above, City and JOC Contractor further agree that if JOC Contractor fails to achieve Final Acceptance of the Work within the Agreement Time, City will be entitled to retain or recover from JOC Contractor, as liquidated damages and not as a penalty, the sum per calendar day as indicated in MAG § 108.9 commencing from the actual date of Substantial Completion or Final Acceptance as required under any specific JOC Project Agreement.

16.5.4 MAG Liquidated Damages. Liquidated damages provisions in MAG § 108.9 may apply to any specific JOC Project Agreement.

16.5.5 City may deduct liquidated damages assessed pursuant to this Section 16.5 from any unpaid amounts then or thereafter due JOC Contractor under the Agreement or any specific JOC Project Agreement between JOC Contractor and City. Any liquidated damages not so deducted from any unpaid amounts due JOC Contractor must be payable to City at the demand of City, together with interest from the date of the demand at the highest lawful rate of interest payable to JOC Contractor.

16.6 **PERFORMANCE MEASUREMENT**

16.6.1 Performance Assessment. After the Final Acceptance of Work under each Job Order, City will complete a written evaluation of the performance of JOC Contractor on the Job Order.

16.6.2 Consideration in Assignment of Work. JOC Contractor's record of cost, schedule and quality performance and comparative assessments will be significant considerations in City's determination whether to award future Job Orders. JOC Contractor agrees that any determination by City not to not award future Job Orders or Option periods based on performance will be at the sole discretion of City.

SECTION 17 - PROVISIONS APPLICABLE SOLELY TO PRE-CONSTRUCTION SERVICES FOR CONSTRUCTION MANAGER AT RISK

17.1 ADDITIONAL DEFINITIONS

The definitions set forth in Section 2 and 15.1 above will apply to all Pre-Construction Services Agreements.

17.2 GENERAL

17.2.1 CM@Risk must perform the Services required by, and in accordance with the Agreement Documents and as outlined in Exhibit A of the Agreement to the satisfaction of the Project Manager, exercising the degree of care, skill, diligence and judgment a professional construction manager experienced in the performance of such services for construction and/or facilities of similar scope, function, size, quality, complexity and detail to the Project in urban areas throughout the United States, would exercise at such time, under similar conditions. CM@Risk must, at all times, perform the required services consistent with sound and generally accepted engineering principles and construction management and construction contracting practices.

17.2.2 As a participating member of the Project Team, CM@Risk must provide to City and Design Professional a written evaluation of City's Project Program and budget, each in terms of the other, with recommendations as to the appropriateness of each. CM@Risk must prepare a Baseline Cost Model that validates City's budget. The Baseline Cost Model must include all assumptions and basis of estimates in enough detail so that the Project Team can compare future detail estimates to the Baseline Cost model for variances. City and Design Professional will provide all the reasonably required data that is available in order to reach agreement between the team members that the Baseline Cost Model is an accurate projection of the costs of the Project.

17.2.3 CM@Risk must attend Project Team meetings, which may include, but are not limited to, bi- weekly Project management meetings, Project workshops, special Project meetings, construction document rolling reviews, public meetings and partnering sessions. CM@Risk attendance at design or other meetings in which CM@Risk is provided the opportunity but does not actively participate and/or is not properly prepared is not acceptable. Repeated instances of non-participation and/or lack of preparedness will be grounds for termination of CM@Risk Agreement for default.

17.2.4 CM@Risk must provide Pre-Construction Services, described herein, in a timely manner and consistent with the intent of the most current Drawings and Specifications. CM@Risk must promptly notify City in writing whenever CM@Risk determines any Drawings or Specifications are inappropriate for the Project and/or cause changes in the scope of Work that deviates more than the allowed contingencies within the Baseline Cost Model or requires an adjustment in the Baseline Cost Model, Detailed Cost Estimate, Detailed Project Schedule, GMP Proposals and/or in the Agreement Time for the Work, to the extent such as established.

17.2.5 CM@Risk when requested by City, must attend, make presentations and participate as may be appropriate in public agency and or community meetings, relevant to the Project. CM@Risk must provide drawings, schedule diagrams, budget charges and other materials describing the Project when their use is required or appropriate in any such public agency meetings.

17.2.6 Ownership of Work Product. All Work Product prepared or otherwise created in connection with the performance of this Agreement, including the Work, are to be and remain the property of City. For purposes of this provision, "Work Product" will include all designs, drawings, plans, specifications, ideas, renderings and other information or material, in whatever form created (e.g., electronic or printed) and in all media now know or hereinafter created. All Work Product will be considered Work Made for Hire as defined in the United States Copyright Act 17 U.S.C.
§101 (Copyright Act). If for any reason any such Work is found not to be a work for hire, Contractor hereby transfers and assigns ownership of the copyright in such Work to City. The rights in this Section are exclusive to City in perpetuity.

17.2.7 CM@Risk represents to City in completing Pre-Construction Services and providing the reports and analysis required thereunder, that Work can be properly and timely constructed within the GMP Proposal, if accepted. CM@Risk does not assume any design responsibilities unless specifically called for in the scope of work, but CM@Risk will be responsible for their errors, omissions or inconsistencies included in the Work.

17.3 **DETAILED PROJECT SCHEDULE**

17.3.1 The fundamental purpose of the Detailed Project Schedule is to identify, coordinate and record the tasks and activities to be performed by all of the Project Team members and then for the Project Team to utilize that Deliverable as a basis for managing and monitoring all member's compliance with the schedule requirements of the Project. Each Project Team member is responsible for its compliance with the Detailed Project Schedule requirements. CM@Risk must, however, develop and maintain the Detailed Project Schedule on behalf of and to be used by the Project Team based on input from the other Project Team members. The Baseline Project Schedule must be developed as part of the Baseline Cost Model. The Detailed Project Schedule must use the Critical Path method ("CPM") technique, unless required otherwise, in writing by City. CM@Risk must use scheduling software acceptable to City to develop the Detailed Project Schedule. The Detailed Project Schedule must be presented in graphical and tabular reports as agreed upon by the Project Team. If Project phasing as described below is required, the Detailed Project Schedule must indicate milestone dates for the phases once determined. As part of construction phase, City may require CM@Risk to prepare a "resource loaded" schedule for all work, including work performed by Subcontractors, detailing each of the project tasks and the required/anticipated number of personnel per day for each task. CM@Risk must also indicate on the schedule its ability to meet said required/anticipated personnel requirements.

17.3.2 CM@Risk must include and integrate in the Detailed Project Schedule the services and activities required of City, Design Professional and CM@Risk including all construction phase activities based on the input received from City and the Design Professional. The Detailed Project Schedule must define activities as determined by City to the extent required to show: (a) the coordination between preliminary design and various pre-construction documents, (b) any separate long-lead procurements, (c) any permitting issues, (d) any land, right-of-way, or easement acquisition, (e) bid packaging strategy and awards to Subcontractors and Suppliers, (f) major stages of construction, (g) start-up and commissioning, and (h) occupancy of the completed Work by City. The Detailed Project Schedule must include by example and not limitation, proposed activity sequences and durations for design, procurement, construction and testing activities, milestone dates for actions and decisions by the Project Team, preparation and processing of shop drawings

and samples, delivery of materials or equipment requiring long-lead time procurement (if any), milestone dates for various construction phases, Total Float for all activities to the extent authorized by City, relationships between the activities, City's occupancy requirements showing portions of the Project having occupancy priority, and proposed dates for Final Acceptance.

17.3.3 A Baseline Project Schedule must be initiated with the project Baseline Cost Model and agreed to by the project team at the same time. CM@Risk must update and maintain a detailed Project Schedule throughout pre-construction such that it will not require major changes at the start of the construction phase to incorporate CM@Risk's plan for the performance of the construction phase Work. CM@Risk must provide updates and/or revisions to the Detailed Project Schedule for use by the Project Team, whenever required, but no less often than at the Project Team meetings. CM@Risk must include with such submittals a narrative describing its analysis of the progress achieved to-date vs. the Baseline Project Schedule, including any concerns regarding delays or potential delays, and any recommendations regarding mitigating actions.

17.3.4 If phased construction is deemed appropriate at the time of developing the Baseline Cost Model or during the development of the Detailed Project Schedule, and City approves, CM@Risk must review the design and make recommendations regarding the phased issuance of Construction Documents to facilitate phased construction of the Work, with the objective of reducing the Project Schedule and/or Cost of the Work. CM@Risk must take into consideration such factors as natural and practical lines of work severability, sequencing effectiveness, access and availability constraints, total time for completion, construction market conditions, labor and materials availability, and any other factors pertinent to saving time and cost.

17.3.5 Long Lead Time Items. As part of developing the Detailed Project Schedule, CM@Risk must identify all long lead time materials, fabrications, equipment, or other items which may impact the Project Schedule and may require early action on the part of the Project Team. Dates for selecting and ordering long lead time items will be included and highlighted in the Detailed Project Schedule

17.3.6 Equipment Plan. Contractor must develop an Equipment Plan that addresses all rental and owned equipment, regardless of whether such equipment will be provided by CM@Risk or subcontractor(s), that will be necessary to construct the Project and the cost of which will be included as a Cost of the Work in the GMP Proposal. The Equipment Plan will seek to minimize the cost of the equipment to City and maximize the efficient and coordinated use of the equipment for completion of the Project. The Equipment Plan will not only include the costs and allowable lease rates for the equipment, but will also include an equipment schedule that will be incorporated into the Detailed Project Schedule and the Schedule of Values submitted with the GMP Proposal.

17.4 DESIGN DOCUMENT REVIEWS

17.4.1 CM@Risk must evaluate periodically the availability of labor, materials/equipment, cost-sensitive aspects of the design; and other factors that may create an unacceptable variance to the Baseline Cost Model and/or Baseline Project Schedule.

17.4.2 CM@Risk must recommend, in conjunction with the Project Team, those additional surface and subsurface investigations that, in its professional opinion, are required to provide the necessary information for CM@Risk to construct the Project. These additional

investigations, if agreed to be necessary by the Project Manager and the Design Professional, will be acquired by City and copies of the reports will be provided to CM@Risk.

17.4.3 CM@Risk must meet with the Project Team as required to review designs during their development. CM@Risk must familiarize itself with the evolving documents through pre- construction. CM@Risk must proactively advise the Project Team and make recommendations on factors related to construction costs, and concerns pertaining to the feasibility and practicality of any proposed means and methods, selected materials, equipment and building systems, and, labor and material availability. CM@Risk must furthermore advise the Project Team on proposed site improvements, excavation and foundation considerations, as well as, concerns that exist with respect to coordination of the Drawings and Specifications. CM@Risk must use established value analysis principles in recommending cost effective alternatives.

17.4.4 CM@Risk must routinely conduct constructability and bid-ability reviews of the Drawings and Specifications as necessary to satisfy the needs of the Project Team. The reviews must attempt to identify all discrepancies and inconsistencies in the Construction Documents especially those related to clarity, consistency, completeness and coordination of Work of Subcontractors and Suppliers.

17.4.4.1 CM@Risk must evaluate whether: (a) the Drawings and Specifications are configured to enable efficient construction; (b) design elements are standardized; (c) construction efficiency is properly considered in the Drawings and Specifications; (d) module/preassembly design is prepared to facilitate fabrication, transport and installation; (e) sequences of Work required by or inferable from the Drawings and Specifications are practicable; (f) the design has taken into consideration efficiency issues concerning access and entrance to the site, laydown and storage of materials, staging of site facilities, construction parking, and other similar pertinent issues; and (g) the design maintains continued operation of the existing City systems and maintains traffic on adjacent roadways. CM@Risk must also review the Drawings and Specifications to ensure that what is depicted therein can be constructed as designed and must promptly inform the Project Team of any issues.

17.4.4.2 CM@Risk must check cross-reference and complementary Drawings and sections within the Specifications and in general evaluate whether: (a) the Drawings and Specifications are sufficiently clear and detailed to minimize ambiguity and to reduce scope interpretation discrepancies; (b) named materials and equipment are commercially available and are performing well, or otherwise, in similar installations; (c) Specifications include alternatives in the event a requirement cannot be met in the field; and (d) in its professional opinion, the Project is likely to be subject to Differing Site Conditions.

17.4.4.3 The results of the reviews must be provided to Project Team in formal, written reports clearly identifying all reviewed documents and the discovered discrepancies and inconsistencies in the Drawings and Specifications with notations and recommendations made on the Drawings, Specifications and other documents. CM@Risk must meet with Project Team to discuss any findings and review reports.

17.4.4.4 CM@Risk's reviews must be from a Contractor's perspective, and though it will serve to eliminate/reduce the number of RFIs) and changes during the construction phase, responsibility for the Drawings and Specifications will remain with the Design Professional and not CM@Risk.

17.4.5 It is CM@Risk's responsibility to assist the Design Professional in ascertaining that, in CM@Risk's professional opinion, the Construction Documents are in accordance with applicable Laws, Regulations, or Legal Requirements, building codes, sound engineering principle's rules and regulations. If CM@Risk recognizes that portions of the Construction Documents are at variance with applicable laws, statutes, ordinances, building codes, sound engineering principle's rules and regulations, it must promptly notify the Project Team in writing, describing the apparent variance of deficiency. However, the Design Professional is ultimately responsible for the compliance of the Drawings and Specifications with those laws, statutes, ordinances, building codes, rules and regulations.

17.4.6 The Project Team will routinely identify and evaluate using value analysis principles and alternate systems, approaches, design changes that have the potential to reduce Project costs while still delivering a high quality and fully functional Project consistent with the Project Program. If the Project Team agrees, CM@Risk in cooperation with the Design Professional, will perform a cost/benefit analysis of the alternatives and submit such in writing to the Project Team. City, through the Project Manager, will direct which alternatives will be incorporated into the Project. The Design Professional will have full design responsibility for the review and incorporation of CM@Risk suggested alternatives into the Drawings and Specifications. CM@Risk must analyze the costs and schedule impacts of the alternatives against the Baseline Cost Model and Schedule and provide a recommendation for the Project Team's consideration and City's approval prior to the establishment of the GMP.

17.5 **BASELINE COSTS MODEL, DETAILED COST ESTIMATES, AND SCHEDULE OF VALUES**

17.5.1 At the conclusion of the Master Planning and Programming, if required, CM@Risk will review all available information regarding the design and scope of the Project using CM@Risk's experience in performing similar work, knowledge of similar projects and current and projected construction costs and, based upon that review, must develop a Baseline Cost Model for review by the Project Team and approval by City. Once approved by City, the Baseline Cost Model will be continually referenced as detailed estimates are created as the design progresses throughout Pre-Construction until the final GMP for the entire Project is established. A final GMP for the entire Project must be established and approved by City prior to the start of construction. It is the responsibility of CM@Risk to ensure City has sufficient information to evaluate and approve a final GMP prior to the time necessary to start construction so construction can be completed within the Agreement Time. The Project Detailed Cost Estimate will be the best representation from CM@Risk of what the complete functional Project's construction costs will be as indicated by the most current available documents and will be constantly checked against the Baseline Cost Model. CM@Risk must communicate to the Project Team and assumptions made in preparing the Baseline Cost Model. The Baseline Cost Model must support CM@Risk's Detailed Cost Estimates and may be broken down initially as dictated by the available information, as required by City.

17.5.2 After receipt of the Design Professional's most current documents from certain specified pre- construction milestones, CM@Risk must provide a draft Detailed Cost Estimate including a detailed written report detailing any variances to the Baseline Cost Model and Baseline Project Schedule. The Design Professional and CM@Risk will reconcile any disagreements on the estimate to arrive at an agreed upon Detailed Cost Estimate for the construction costs based on the scope of the Project through that specified pre-construction milestone. Pre-Construction milestones applicable to this paragraph are:

Master Planning and Programming, Schematic Design, 50% Design Development, 100% Design Development, and 50% Construction Drawings, If no consensus is reached, City will make the final determination. If the Project Team requires additional updates of the Detailed Cost Estimate beyond that specified in this paragraph, CM@Risk must provide the requested information in a timely manner.

17.5.3 If at any point the Detailed Cost Estimate submitted to City exceeds the previously accepted Baseline Cost Model or previously approved Detailed Cost Estimate agreed to as set forth in Section 17.5.2 above, CM@Risk must make appropriate recommendations to project Team on means/methods, materials, and or other design elements that it believes will reduce the estimated construction costs, such that it is equal to or less than the established Project Team's Baseline Cost Model.

17.5.4 Unless other levels of completion are agreed to in writing in the Construction Documents, at 50% Construction Drawings and included with the associated report, CM@Risk must also submit to the Project Team for review and approval a Schedule of Values that complies with the following requirements. The Schedule of Values must be based on City standard bid schedule and highlight significant variances from any previously submitted Schedule of Values. The Schedule of Values must be directly related to the breakdowns reflected in the Detailed Project Schedule and CM@Risk's Detailed Cost Estimate. In addition, the Schedule of Values must: (a) detail unit prices and quantity take-offs, (b) detail all other contingencies and unit price Work shown and specified in the detailed design documents.

17.5.5 CM@Risk is to track, estimate/price and address the Project Team's overall project cost issues that arise outside of the Baseline Cost Model and the latest approved Detailed Cost Estimate such as: City generated changes, Project Team proposed changes, alternate system analysis, constructability items and value engineering analysis. The system used to implement this process will be referred to as the Design Evolution Log. This is to be addressed between the Baseline Cost Model and the Master Planning and Programming Detailed Cost Estimate, and then (unless other levels of completion are agreed to in writing in the Construction Documents) between the Detailed Cost Estimates for each of the pre-construction milestones thereafter, Schematic Design, 50% Design Development, 100% Design Development, and 50% Construction Documents, and the bid packages for all Phases.

17.5.6 Upon request by City, CM@Risk must submit to City a cash flow projection for the Project based on the current updated/revised Detailed Project Schedule and the anticipated level of payments for CM@Risk during the design and construction phases. In addition, if requested by City and based on information provided by City, CM@Risk must prepare a cash flow projection for the entire Project based on historical records for similar types of projects to assist City in the financing process.

17.5.7 Construction Water. CM@Risk must estimate the quantity of water to be used and include the cost thereof in each Detailed Cost Estimate and GMP Proposal provided by City.

17.6 SUBCONTRACTOR AND MAJOR SUPPLIER SELECTIONS

17.6.1 There are two ways to select Subcontractors and major Suppliers prior to submission of a GMP Proposal: (1) qualifications-based selection; or (2) a combination of qualifications and price. Except as noted below, the selection of Subcontractors/Suppliers is the sole responsibility of CM@Risk. In any case, CM@Risk is solely responsible for the performance of the selected Subcontractors/Suppliers, and for compliance with the requirements of

Title 34 of the Arizona Revised Statutes in the selection of a Subcontractors/Suppliers, to the extent applicable. CM@Risk must comply with its Subcontractor Selection Plan submitted with its Statement of Qualifications.

17.6.2 City may approve the selection of a Subcontractor(s) or Suppliers(s) based only on their qualifications when CM@Risk can demonstrate it is in the best interest of the Project. All Work that is performed, after such a qualifications-based selection, for a price that is negotiated by CM@Risk will be billed in accordance with the GMP for actual costs and may be subject to audit by City.

17.6.2.1 Qualifications based selection of a Subcontractor(s)/Supplier(s) should only occur prior to the submittal of the GMP Proposal.

17.6.2.2 If a Subcontractor/Supplier selection plan was submitted and agreed to by City, CM@Risk must apply the plan in the evaluation of the qualifications of a Subcontractor(s) or Supplier(s) and provide City with its review and recommendations.

17.6.2.3 CM@Risk must receive written City approval for each selected Subcontractor(s) and Supplier(s).

17.6.2.4 CM@Risk must negotiate costs for services/supplies from each Subcontractor/Supplier selected under this method.

17.6.3 All Work must be competitively bid unless a Subcontractor or Supplier was selected pursuant to Section 17.6.2 above.

17.6.3.1 CM@Risk must develop Subcontractor and Supplier interest, submit the names of a minimum of three qualified Subcontractors or Suppliers for each trade in the Project for approval by City and solicit bids for the various Work categories. If there are not three qualified Subcontractors/Suppliers available for a specific trade or there are extenuating circumstances warranting such, CM@Risk may request approval by City to submit less than three names. Without prior written notice to City, no change in the recommended Subcontractors/Supplies will be allowed.

17.6.3.2 If City objects to any nominated Subcontractor/Supplier or to any self-performed Work for good reason, CM@Risk must nominate a substitute Subcontractor/Supplier that is acceptable to City.

17.6.3.3 CM@Risk must distribute Drawings and Specifications, and when appropriate, conduct a Pre- Bid Conference with prospective Subcontractors and Suppliers.

17.6.3.4 If CM@Risk desires to self-perform certain portions of the Work, it must request to be one of the approved Subcontractor bidders for those specific bid packages. CM@Risk's bid will be evaluated in accordance with the process identified below. If events warrant and City concurs that it is necessary in order to ensure compliance with the Project Schedule and/or the most recent Detailed Cost Estimate, CM@Risk may be authorized to self-perform Work without bidding or rebidding the Work. When CM@Risk self-performs work without bidding, only the actual costs associated with performing the Work in accordance with the approved GMP will be billed and may be subject to audit by City.

17.6.3.5 CM@Risk must receive, open, record and evaluate the bids; provided, however, that if CM@Risk or one of its affiliates is bidding to self-perform the Work that is the subject of the bid, then the bids must be received, opened, recorded and evaluated by Project Manager

instead of CM@Risk. Bids for each category of Work must be opened and recorded at a pre-determined time. The apparent low bidders must be interviewed to determine the responsiveness of their proposals. In evaluating the responsiveness of bid proposals CM@Risk, in addition to bid price, may consider the following factors: past performance on similar projects, qualifications and experience of personnel assigned, quality management plan, approach or understanding of the Work to be performed, and performance schedule to complete the Work. The final evaluation of Subcontractor/Supplier bids must be done with Project Manager in attendance to observe and witness the process. CM@Risk must resolve any Subcontractor/Supplier bid withdrawal, protest or disqualification in connection with the award at no increase in the Cost of Work.

17.6.4 CM@Risk will be required to prepare two different reports on the subcontracting process.

17.6.4.1 Within fifteen days after each major Subcontractor/Supplier bid opening process; CM@Risk must prepare a report for City's review and approval identifying the recommended Subcontractors/Supplier for each category of Work. The report must detail: (a) the name of the recommended Subcontractor/Supplier and the amount of the Subcontractor/Supplier bid for each sub-agreement; (b) the sum of all recommended Subcontractor/Supplier bids received; (c) and trade work and its cost that CM@Risk intends to self-perform, if any.

17.6.4.2 Upon completion of the Subcontractor/Supplier bidding process, CM@Risk must submit a summary report to City of the entire Subcontractor/Supplier selection process. The report must indicate, by bid process, all Subcontractors/Suppliers contacted to determine interest, the Subcontractors/Suppliers solicited, the bids received and costs negotiated, and the recommended Subcontractors/Suppliers for each category of Work.

17.6.5 The approved Subcontractors/Suppliers will provide a Schedule of Values with their bid proposals, which will be used to create the overall Project Schedule of Values.

17.6.6 If after receipt of sub-bids or after award to Subcontractors and Suppliers, City objects to any nominated Subcontractor/Supplier or to any self-performed Work without any reasonable basis, CM@Risk must nominate a substitute Subcontractor or Supplier, preferably if such option is still available, from those who submitted Subcontractor bids for the Work affected. Once such substitute Subcontractors and Suppliers are consented to by City, CM@Risk's proposed GMP for the Work or portion thereof must be correspondingly adjusted to reflect any higher or lower costs form any such substitution.

17.7 **GMP PROPOSAL**

17.7.1 When a GMP Proposal is submitted for a phase of the Work, the GMP will have a Detailed Cost Estimate of the Costs of the Work (as set forth in Section 15.2) in each phase of the Work that is being proposed plus the current estimate for all other Work. City will not approve the GMP for the phase of work without a total estimate for the complete Project. City may request a GMP Proposal for all or any portion of the Project and at any time during pre-construction. Any GMP Proposals submitted by CM@Risk must be based on and consistent with Baseline Cost Model and the current update/revised Detailed Cost Estimate at the time of the request and include any clarifications or assumptions upon which the GMP Proposal(s) are based.

17.7.2 A GMP Proposal for the entire Project will be the sum of the Cost of the Work, CM@Risk Fee, and General Conditions Cost. CM@Risk guarantees to complete the Project at or less than

the final GMP Proposal amount plus approved Change Orders. CM@Risk will be responsible for any costs for expenses that would cause the Cost of the Work actually incurred, including the Construction Fee and General Conditions Costs, to exceed the GMP.

17.7.3 CM@Risk must prepare its GMP Proposal in accordance with City's request for GMP Proposal requirements based on the most current completed Drawings and Specifications at that time, which unless otherwise directed by City in writing, will be at 100% Construction Drawings. CM@Risk must mark the face of each document of each set upon which its GMP Proposal is based. These documents must be identified as the GMP Plans and Specifications. CM@Risk must send one set of those documents to the Project Manager, keep one set and return the third set to the Design Professional.

17.7.4 An updated/revised Detailed Project Schedule, Equipment Plan, and Schedule of Values must be included in any GMP Proposal(s), all of which must reflect the GMP Plans and Specifications the Detailed Project Schedule must be shown in relationship to the Project Schedule and identify any variance to the Baseline Project Schedule. Any such Detailed Project Schedule updates/revisions must continue to comply with the requirements of Section 17.3.1 through 17.3.5.

17.7.5 <u>GMP Proposals(s) Review and Approval</u>

17.7.5.1 CM@Risk must meet with the Project Team to review the GMP Proposal(s) and the written statement of its basis. In the event the Project Team discovers inconsistencies or inaccuracies in the information presented, CM@Risk must make adjustments as necessary to the GMP Proposal.

17.7.5.2 If during the review and negotiation of GMP Proposals design changes are required, City may authorize and cause the Design Professional to revise the GMP Plans and Specifications to the extent necessary to reflect the agreed-upon assumptions and clarifications contained in the final approved GMP Proposal. Such revised GMP Plans and Specification will be furnished to CM@Risk. CM@Risk must promptly notify the Project Team in writing if any such revised GMP Plans and Specifications are inconsistent with the agreed upon assumptions and clarifications.

17.7.6 All portions of or items comprising the GMP Proposal are subject to audit by City, as deemed appropriate by City, including, without limitation, any based upon unit prices or Work to be self- performed by CM@Risk, or its affiliates.

17.8 **<u>PAYMENT PROCEDURE FOR PRE-CONSTRUCTION SERVICES</u>**

17.8.1 Requests for monthly payments by CM@Risk for Pre-Construction Services must be submitted monthly and must be accompanied by a progress report, detailed invoices and receipts, if applicable. Any requests for payment must include, as a minimum, a narrative description of the tasks accomplished during the billing period, a listing of any Deliverables submitted, and copies of any Subconsultants' requests for payment, plus similar narrative and listings of Deliverables associated with their Work. Payment for services negotiated as a lump sum will be made in accordance with the percentage of work completed during the preceding month.

17.8.2 In no event will City pay more than seventy-five (75%) of the Agreement Price until acceptance of ALL Pre-Construction Services and award of the final approved Construction Services Agreement for the entire Project by City Council. If CM@Risk does not prepare a

GMP Proposal that is acceptable to City, or the GMP Proposal exceeds the City's Construction Budget, then CM@Risk understands and acknowledges that it will forfeit any right to receive the 25% of the Agreement Price being retained by City.

17.8.3 CM@Risk agrees that no charges or claims for costs or damages of any type will be made by it for any delays or hindrances beyond the reasonable control of City during the progress of any portion of Pre-Construction Services specified in this Agreement. Such delays or hindrances, if any, will be solely compensated for by an extension of time for such reasonable period and may be mutually agreed between the parties. It is understood and agreed, however, that permitting CM@Risk to proceed to complete any such Services, in whole or in part after the date to which the time of completion may have been extended, will in no way act as a waiver on the part of City of any of their respective legal rights herein.

17.8.4 No compensation to CM@Risk will be allowed contrary to Article I, Chapter I, Title 34 of the Arizona Revised Statutes.

17.8.5 If any service(s) executed by CM@Risk is abandoned or suspended in whole or in part, for a period of more than 180 days through no fault of CM@Risk, CM@Risk is to be paid for the services performed prior to the abandonment or suspension.

17.9 **SURVIVAL OF THE DESIGN SERVICES AGREEMENT, DUTIES, OBLIGATIONS AND WARRANTIES**

If the GMP Proposal is accepted by City and a Construction Agreement is entered into between City and CM@Risk, the duties, obligations and warranties of CM@Risk under the Pre- Construction Services Agreement survive and are incorporated into the resulting Construction Agreement.

SECTION 15 – APPENDICES

The following Appendices attached hereto are referenced in the General Conditions and are incorporated herein.

Appendix 1 – Policy Statement for Calculating Delays and Damages
Appendix 2 – Cost Reduction Incentive Proposals for Design Bid Build Agreements
Appendix 3 – Contractor's Affidavit Regarding Settlement of Claims
Appendix 4 – Forms of Performance Bond
Appendix 5 – Forms of Payment Bond
Appendix 6 – Dispute Resolution
Appendix 7 – Certificate of Completion
Appendix 8 – Construction Sign Detail
Appendix 9 – Cost of the Work (Applicable solely to Construction Manager at Risk and Job Order Contracting)
Appendix 10 Landscape Establishment Period

CALCULATING DELAYS AND DAMAGES

The purpose of this policy statement is to establish guidelines and procedures for negotiation between the Contractor and City of Chandler relating to compensation for delays pursuant to Arizona Revised Statutes (A.R.S.) 34-221(F). This policy statement contains notice requirements in addition to those set forth in the Agreement Documents, and will be the Agreement Provision contemplated by that statute.

NOTE: As used herein, the term "Engineer" will refer to the City of Chandler City Engineer or his/her designated representative. Nothing in this Policy Statement will be construed to void any provision in the Agreement which requires timely notice of delays or provides for arbitration or any other procedure for settlement or provides for liquidated damages.

I. TYPES OF DELAYS:

For the purposes of this document, there are essentially four types of delays encountered by City of Chandler Construction Contractors; excusable/compensable, excusable/non-compensable, non- excusable, and concurrent. Only delays that extend Agreement Completion Time set forth in the Agreement Document will be considered for issues relating to Agreement extensions or additional compensation. All other delays are considered to be activity delays and do not entitle the Contractor to either time extensions or additional compensation. Agreement Completion Time will be defined as the date set forth in Maricopa Association of Governments (MAG) Uniform Standard Specification Section 101 and as may be modified by the Agreement Documents.

A. Excusable/Compensable:

These are delays caused solely by the City's actions or inactions, are unreasonable under the circumstances, and which were not within the contemplation of the parties to the Agreement at or prior to the time of execution of the Agreement. Since the Contractor presumably has no control over the events causing the delay, he may be entitled to both Agreement time extensions and additional compensation for delay damages. Further, he/she may be entitled to additional compensation from the impact of that delay on other work. Examples of excusable/compensable (E/C) delays include: failure to properly locate an underground City-owned utility within 2 feet of the actual location; failure to relocate City-owned utilities far enough in advance of construction in an area where the Contractor is scheduled to work that it delays start or completion of the Contractor's regularly scheduled work; failure to provide City-furnished equipment or materials in a timely manner if required by the Agreement; failure to acquire necessary Right-of-Way or Public Utility Easements prior to the Contractor beginning Work in the area; failure to timely return Shop Drawings or other Agreement Submittals in accordance with the Agreement; unreasonable delay by the City in making decisions which affect critical activities; surveying errors when the City is contractually responsible for providing Project Surveying. This list is not meant to be all inclusive, but is intended merely as examples of the type of City action or inaction which can result in a Contractor's claim for additional time and

compensation.

B. Excusable/Non-compensable:

These are delays over which neither the City nor the Contractor had control. Since both parties to the Agreement have been potentially damaged by the delay, but neither have caused it, only Time Extensions are warranted. Examples of excusable, non-compensable (E/N) delays include: unusually severe weather; fire; acts of God; failure of non-City owned utilities (SRP, CenturyLink, Cable TV, Southern Pacific Railroad, and Southwest Gas, etc.) to properly or timely locate accurately; failure of non-City owned utilities to relocate in advance of construction; the voluntary or involuntary filing for Bankruptcy protection by a Supplier or Subcontractor which causes the Supplier/Subcontractor to fail to meet a contractual deadline provided the Contractor can provide documentation that he/she executed the required Purchase Orders/Subcontract Agreements and received delivery schedules which, if met, would have eliminated the delay; delays as a result of an incomplete shutdown of a City or non-City owned utility main (the City does not guarantee a complete shutdown). This list also is not necessarily all inclusive but merely indicative of type and class of E/N delays.

C. Non-excusable/Non-compensable:

These are delays caused by the actions or inactions of Contractor or an officer, employee, agent, Subcontractor, Supplier or any other party for whom the Contractor is responsible. Since the Contractor has assumed responsibility for the risks associated with the events that caused the delay, he/she are not entitled to either time extensions or monetary delay damages. All non-excusable delays are also non-compensable. Examples of non- excusable, non-compensable (N/N) delays include: failure to perform by the Contractor, its Subcontractors and/or Suppliers (except as noted in section I.B above); failure to provide adequate labor, materials, and/or equipment on the Project; failure to perform contractually-required coordination with utilities, agencies and other Contractors; failure to notify the Engineer, in writing, of delay impacts within two working days, as required by MAG 104.2.3, or the next work day, as required by MAG 109.8.2; failure to timely submit Shop Drawings; failure to pothole or otherwise visually locate utilities sufficiently ahead of the Work to allow the Engineer to direct corrective action when necessary; delays due to retesting of previously failed work, re-inspection, and/or restaking resulting from faulty workmanship, poor quality control, or lack of compliance with Agreement Specifications. Again, this list is not necessarily all inclusive.

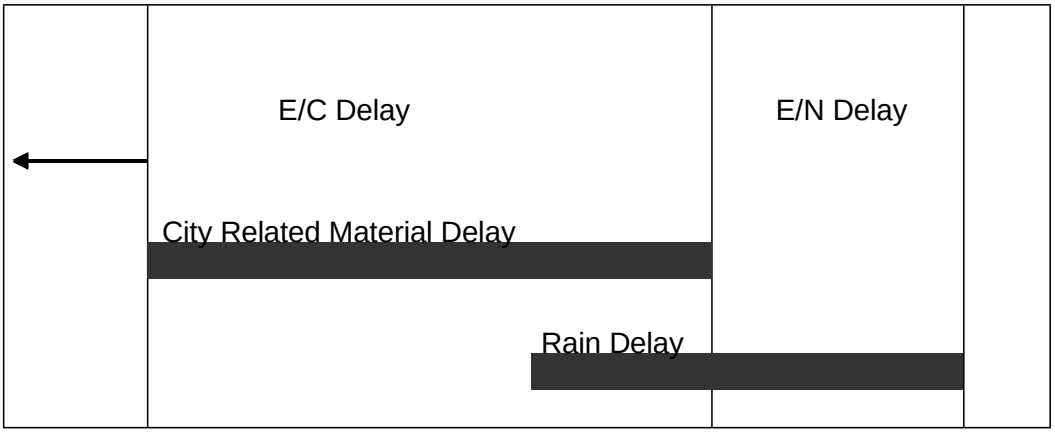
D. Concurrent:

When two or more delays occur simultaneously or overlap, each delay is analyzed separately to determine its impact on the overall project completion date based on when that delay started. Once again, only those delays which actually extend the Agreement completion time are considered as delays. The concurrent delay is considered an additional delay only to the extent it prolongs

the delay to the Agreement Completion Time beyond the date that the one it is concurrent with had already delayed that date. For example, if two delays are concurrent, and one is five days long and the second is seven days long, the second concurrent delay will only extend the Agreement Completion Time by two days. The same method of analysis is used when there are multiple concurrent delays. Only those extending the Project Completion Date are considered to be delays for the purposes of this policy. The portion of each concurrent delay that delays the completion of the work is classified in the same manner as described previously for individual delays and being either E/C, E/N or N/N.

An example of a concurrent delay is where the City delays furnishing material, but the Contractor could not have installed it anyway due to unusually severe weather. The effect of the first delaying activity will extend for the full duration and will be considered controlling on the Contractor's schedule. A subsequent, concurrent delay will thereafter only be considered to effect the project completion (if at all) once the first delaying activity has ceased to impact the project completion. In this case, if the unusually severe weather continued and delayed the work after the material was delivered, the first portion of the delay would be classified E/C (delay for material) and the second as E/N (delay due to unusually severe weather). Using the procedure set forth above, the entire concurrent portion would be considered E/C as shown in the chart which follows.

Example of a Concurrent Delay:



II. ANALYZING THE DELAY:

The Contractor must provide all documents required or requested by the Engineer to analyze the delay(s). It is important to understand that, prior to the delay analysis, delays and their impacts are alleged issues. The information the Contractor provides will be compared with the Inspector's Daily Log, Schedules and other available Project information and together they will support or refute that delays occurred and, if so, how they impact other work and the overall project completion. The Contractor's delay in providing these documents will be considered prima facie evidence that either the delay did not occur or it did not impact the Project Completion Date and any claim for time extension or damages will be denied.

The Engineer will accept delay analyses in CPM format, as these may demonstrate to his/her satisfaction whether or not Project Completion has been impacted by a specific event. If the Contractor chooses not to use CPM scheduling procedures, then the burden will be on the Contractor to prove to the Engineer's satisfaction that the Project Completion has been impacted. The procedures below assume that the Contractor is using CPM scheduling methods. As a minimum the Contractor must provide the following materials to the Engineer:

A. As-Planned Schedule. The initial construction schedule, required by the Agreement Documents, will be considered the baseline schedule. It is to the Contractor's advantage that the As-Planned (baseline) Schedule be as detailed as possible in order for delays, as they occur, to be incorporated into the schedule in representative locations. It is also to the Contractor's advantage to use a computer software program to generate the schedule since updated schedules are required monthly by the Agreement Documents and since updated schedules are required to support delays and requests for additional compensation for delays. The As-Planned (baseline) Schedule must be presented in network format which clearly shows the interrelationships of the activities. The Contractor must also provide a printout of the activities showing early start, early finish, late start, late finish, duration and float. The activity list printout must also indicate predecessor and successor activities.

B. As-Built Schedules. The as planned (baseline) schedule must be updated with complete progress-to-date information (actualized) up to the date of the start of the alleged delay. Each updated schedule will serve as the as-built schedule for analyzing the alleged delay and provide a new baseline as-planned schedule for the next delay. This process must be repeated for each alleged delay as it occurs. In updating the baseline schedule, the alleged delay must be treated as an activity and inserted into the schedule as a predecessor to the impacted activity (ies). When an activity that has already started is impacted, it is preferable to divide this activity into two parts and show the impact affecting the second part. For schedules which incorporate a time line (or data date), the delay activity must be inserted at the time it actually occurred. Some software scheduling programs have a PAUSE-RESUME feature that can be used to facilitate the requirements. The updated schedule must also be accompanied by a listing of activities as with the baseline schedule. This activities list must contain the alleged delay as an activity showing the duration and the activities which are predecessors and successors to it. When computer generated schedules are used, the Contractor must provide, in electronic media format, the complete data files for the updated schedule that included the delay activity, preferably either in Suretrak or in Microsoft Project. Each electronic media must contain a label identifying the Project name, Contractor's name, program name and version number, data date and project finish date.

C. Other Documents: In order to determine the amount of the alleged delay and if it is compensable, the Contractor must provide all backup documentation relevant to the issue and as required by the Engineer. This documentation must include copies of such items as: purchase orders; delivery schedules; correspondence; memoranda of telephone calls; force account daily worksheets (initialed by the Inspector); payroll data; estimating (bid) worksheets; and any other materials which may be

requested by the Engineer.

D. Procedure: Only after receipt of sufficient documentation will the Engineer analyze each alleged delay and determine if it is supported or refuted. If supported, the Engineer will determine if it is excusable or non-excusable, compensable or non-compensable. If the Engineer determines that the delay did not affect the Project Completion, the as-planned schedule, which has been updated to the date of the alleged delay, must be revised to indicate this. If the Engineer determines the delay did occur but was N/N, then no time extension will be granted. It is imperative that an actualized schedule be submitted as soon as the occurrence of the alleged delay is known. In no event will the Contractor submit an actualized updated schedule later than 60 days after the occurrence of the alleged delay becomes known.

If the Engineer determines the delay did occur and was excusable but, due to a reason listed in section I.B. is non-compensable, he/she will determine the length of the E/N delay and prepare a Change Order to add that time to the Agreement. The Engineer's decision will be final.

If the Engineer determines the delay was excusable and compensable, he/she will determine the length of the E/C delay and proceed to review the Contractor's damage calculations in accordance with Section III. The Engineer will check the Contractor's calculations, review the backup documentation provided, and prepare a Change Order to cover both the additional compensation and the time extension. The Engineer's decision on both the time extension and additional compensation for the delay will be final.

If the issue involves a concurrent delay, the Engineer will analyze available data to determine the portions which are E/C, E/N, and/or N/N as described above. The Engineer will proceed to determine the length of E/C delay and verify the Contractor's delay damage calculations, if any are provided. Upon completion of this review, the Engineer will prepare a Change Order for the Contractor's review and signature. The Engineer's decision regarding excusable delay and additional compensation for the delay is final.

The amount of time the Engineer will require to analyze the alleged delay(s) will depend upon the Engineer's workload, the complexity of the delay analysis, availability of supporting data, extent of cooperation by the Contractor, and other factors beyond the Engineer's control. It is entirely possible other delay(s) may occur while the Engineer is analyzing particular claim for delay(s). The Engineer's failure to respond to the Contractor in a set period of time will not be used as the basis for a further delay claim or as justification for extending and existing delay claim. The time required for delay analysis by the Engineer will not be counted against the time allotted for processing Final Payment as required by (MAG Section 109.7(B)) or the release of retention and Final Payment as prescribed by A.R.S. Arizona Revised Statutes §34-221.

III. CALCULATING MONETARY DELAY DAMAGES:

Additional compensation for delay, when authorized by the Engineer, will be calculated in accordance

with MAG Section 109.5 ACTUAL COST WORK with the following exceptions:

A. No additional compensation or other monetary damages will be awarded or paid for any loss of anticipated profits by the Contractor, Subcontractors or Suppliers.

B. No additional compensation or other monetary damages will be awarded for home office overhead or non-project general conditions of the Contractor, Subcontractors or Suppliers.

C. Equipment:

1. Contractor-owned equipment rate calculations must be computed in accordance with Section 109.04(D)(3), Arizona Department of Transportation "Standard Specifications for Road and Bridge Construction," 2008 or latest edition and as modified herein. Year and regional adjustment factors must be based on the most recent publications of the Rental Rate Blue Book for Construction Equipment, published by the Equipment Guide-Book Company, San Jose, CA, same as provided by ADOT and in print as of the date of alleged delay. In no event will the compensation for Contractor-owned equipment exceed the purchase price, including tax, paid by the Contractor for the equipment. Compensation will not be allowed for small tools or equipment that show a daily equipment rental rate of less than $5.00 per day or for unlisted equipment that has a value of less than for hundred dollars ($400.00).
2. For leased and rented equipment or equipment not otherwise listed in the Blue Book, rental contracts, or other supporting data will be used to establish the hourly rate. No hourly operating expense will be allowed for delay on standby equipment. In no case will equipment be considered for rental which exceeds the hourly rate for the first eight hours and the daily rate divided by eight for all additional hours as compared with similar equipment listed in the Blue Book. The hourly standby rate must be computed as the lesser of:

    a. Dividing the monthly invoice or rental value by 176 hours per month when the equipment is utilized by the Contractor for more than three weeks;

    b. Dividing the monthly invoice or rental value by 40 hours per week when the equipment is utilized by the Contractor for more than three days.

    In no event will compensation be paid for delay at more than 8 hours per day or 40 hours per week.

3. Except for vehicles used by supervisory personnel, all equipment will be paid at the "standby" rate during the delay period.

4. Equipment brought solely to mitigate the delay (such as pumps, light plants, etc.) may be paid in accordance with ADOT section 109.04(D) (3).

5. The Blue Book regional adjustment will apply in determining rental rates.

D. Material:

Allowable material charges may include, in addition to material incorporated in the work material used to mitigate the delay such as barricades, plates, shoring, cold mix, etc. Except in emergencies the Contractor will not employ such material without the prior written approval of the Engineer.

E. Labor:

1. Except for Supervisory Personnel (Superintendent, Project Engineer, and Foremen), labor wages will not be paid after the first one-half day of claimed delay or impact. It is expected the Contractor will reassign or layoff unneeded employees.

2. For Foreman wages to be included, that Foreman must have been actively employed on the project prior to the commencement of the delay and be directly responsible for the activity being delayed.

3. Labor burden must be actual amounts incurred but must not exceed the ADOT approved rate.

F. All costs (equipment, material, and labor) must be substantiated by the City of Chandler's Daily Work Reports.

IV. DOCUMENT REQUIRED FOR CLAIM ANALYSIS:

For purposes of reviewing the Contractor's request for additional compensation, it will be required that the Contractor submit the following listed information. Information requested must be prepared on forms which are substantially similar to the City of Chandler's Daily Work Report form, a copy of which is attached as an exhibit.

A. Labor:

For each employee, laborer, and foreman, for which compensation is requested: Name, classification, dates of work performed, daily hours worked, total hours worked, labor rates, labor burden rates, overtime or premium time charges. Further, the Contractor must make available for inspection and copying to the Engineer the following listed documentation.

1. Certified payroll reports for the period of work claimed.
2. Accounting of Fringe Benefits – certified by a CPA.
3. Contractor's and Subcontractor's daily field reports and daily diaries.

B. Materials:

For all materials for which compensation is requested, if any, total quantities of materials, prices, extensions and transportation costs must be provided on a daily

basis. Further, the Contractor must make available for inspection and copying to the Engineer the following listed documentation.

1. Invoices for all materials incorporated.
2. Weigh tickets.
3. Purchase orders.
4. Delivery schedules.
5. Quotes or proposals from manufacturers or supplier.
6. Freight bills, Bills of Lading, or other documentation to show transportation costs.
7. Restocking charges-invoices from vendor.

C. Equipment:

For all equipment, the Contractor must provide the Engineer with the designation, dates and hours of usage, dates and hours of standby, if any, daily hours, total hours, rental rates and extension for each unit of equipment and machinery. Rental rates will be as established in Section III. Further, the Contractor must make available for inspection and copying to the Engineer the following listed documentation.

1. Owned:
   a. Purchase contracts(s).
   b. Depreciation schedule(s).
   c. Invoices for fuel, lube, repairs and other operating costs.

2. Leased:
   a. Lease agreement with hourly rate, overtime rate, double shift rate, etc.
   b. Invoices or other documentation showing hours worked on a daily basis.

D. Subcontractors/Owner-Operators:

In the event the Contractor submits a claim which includes requests for compensation for Subcontractors of Owner-Operators, the same information requested of the Contractor must be provided by the Subcontractor/Owner-Operator. Further, the Contractor must make available for inspection and copying to the Engineer the following listed documentation.

1. Bid/Estimate work sheets and/or spreadsheets.
2. Subcontract Agreements or Agreements with Owner-Operator.
3. All invoices and billing statements received from the Subcontractor/Owner-Operator which relates to the amount requested.

E. Miscellaneous:

Further, the Contractor must make available for inspection and copying to the Engineer the following listed documentation.

1. Evidence of payment for bonds and insurance premiums (MAG 109.5.6).

2. Taxes – unless the Contractor can show otherwise, taxes are reimbursable at 65% of the total cost (less bonds and insurance).

V. TIME LIMIT ON SUBMISSIONS OF CLAIM FOR DELAY OR IMPACT DAMAGES:

No claims for delay or impact damages will be considered or allowed more than 45 days after the event or occurrence which the Contractor claims gives rise to the delay or impact. In no event will a claim for delay or impact damages be considered after submission by the Contractor of the Final Payment Request.

COST REDUCTION INCENTIVE PROPOSALS FOR DESIGN BID BUILD AGREEMENTS

The Contractor may submit to the Engineer proposals for modifying the Plans, Specifications, or other requirements of the Agreement for the sole purpose of reducing the total cost of Project construction. The proposals must not impair in any manner the essential functions or characteristics of the project; including but not limited to service life, economy of operations, ease of maintenance, desired appearance, compatibility with existing or planned equipment, standardization of systems, or design and safety standards.

It must not be inferred from this Policy that the Engineer is required to consider any proposal submitted.

Submissions that propose changes in the basic design of a bridge, propose changes in pipe line size, materials, bedding conditions, pipe specifications; or that propose any change in pavement design will not be considered.

Proposals submitted pursuant to this Policy will be identified as Cost Reduction Incentive Proposals. They must be submitted in writing and, at a minimum, contain the following.

1. Complete the attached or similar cost reduction incentive proposal form.

2. A description of both the existing Agreement Requirements for performing the work and the proposed changes.

3. All Engineering Drawings and computations necessary for the thorough and expeditious evaluation.

4. An itemization of the existing Agreement Requirements that must be changed if the Proposal is adopted and a recommendation as to the manner in which the change should be made.

5. A detailed estimate of the cost of performing the Work under the existing Agreement and under the proposed changes, including the cost of developing and implementing the changes.

6. The Agreement items affected by the proposed changes and any variations in quantities resulting from the changes.

7. An objective estimate of any effects the proposal will have on collateral cost to the City, costs of related items, and cost of maintenance and operation.

8. A statement as to the effect that the Proposal will have on the time for the completion of the Project.

9. A statement as to the time by which a Change Order adopting the Proposal must be executed or when the Engineer must have given verbal approval.

Proposals will be processed expeditiously; however, the City will not be liable for any delay in acting upon any Proposal nor for any failure to accept any Proposal pursuant to this Special Provision.

The Engineer will be the sole judge of the acceptability of a Proposal and of the estimated net savings in construction costs from the adoption of all or any part of the Proposal. The Contractor will be notified in writing by the Engineer as to whether his/her Proposal has been accepted. The decision by the Engineer is final.

When the City deems such action to be appropriate, it reserves the right to require the Contractor to share equally in the cost to the City of investigating, evaluating, and processing the proposal as a condition for the consideration of such Proposal. Such cost must be shared whether the Proposal is accepted or rejected. When such a condition is imposed, the City will estimate these costs and the Contractor must indicate his acceptance thereof in writing. Such acceptance will authorize the City to deduct the Contractor's share of the costs from any monies due or that may become due to the Contractor under the Agreement.

If the Contractor's Proposal is accepted in whole or in part, the necessary Agreement Modifications and Agreement Price Adjustments will be affected by the execution of a Change Order which will specifically state that it is executed pursuant to this Special Provision.

The Contractor must continue to perform the work in accordance with the requirements of the Agreement until a Change Order incorporating the Proposal has been executed or until he/she has been given verbal approval by the Engineer that his/her Proposal has been accepted. If the Change Order has not been executed or he/she has not been given verbal approval on or before the date specified on the attached cost reduction incentive proposal form or on or before such other date as the Contractor may have subsequently specified in writing, the Proposal may be deemed to be rejected.

The executed Change Order will incorporate the changes in the Plans, Specifications, or other requirements of the Agreement which are necessary to permit the Proposal, or such part of it which has been accepted, to be put into effect, and will include any condition – upon which the City's approval thereof is based, if such approval is conditional. The executed Change Order may also extend the time for the completion of the Agreement if such an extension has been deemed to be warranted by the Engineer as a result of his evaluation of the Proposal.

The executed Change Order will also establish the estimated net savings in the cost of performing the Work attributable to the Proposal effectuated by the Change Order. In determining the net savings, the right is reserved to the Engineer to disregard the Agreement bid prices if, in his/her judgment, such prices do not represent a fair measure of the value of the Work to be performed or to be deleted. The net savings will be established by determining the Contractor's cost of performing the Work, taking into account his/her cost of developing the Proposal and implementing the change, and reducing this amount by any ascertainable collateral costs to the City. The executed Change Order may provide that the Contractor be paid 50 percent of the estimated net savings amount.

The executed Change Order may also provide for the adjustment in Agreement prices. Agreement prices may be adjusted by subtracting the City's share of the accrued net savings.

The amount specified to be paid to the Contractor in the executed Change Order which effectuates a Cost Reduction Proposal will constitute full compensation to the Contractor for the Cost Reduction Proposal and the performance of the work thereof pursuant to the said Change Order.

Upon acceptance of a Cost Reduction Incentive Proposal, any restrictions imposed by the Contractor on its use or on disclosure of the information will become void, and the City thereafter will have the right to use all or any part of the Proposal without obligation or compensation of any kind to the Contractor.

COST REDUCTION INCENTIVE PROPOSAL FORM

TO: CIP City Engineer

FROM:

PROJECT NAME: **101/202 REDUNDANT 66-INCH SEWER LINE**

CITY PROJECT NUMBER: **WW2402.251**

DATE:

Summary of Change (Brief description of proposed change including advantages and disadvantages):

ESTIMATED COST SUMMARY (Attached detailed estimate):

A.	Original Cost:	$ _____
B.	Proposed Cost:	$ _____
C.	Construction Savings (A-B):	$ _____
D.	Gross Savings (Included OH %, Bond %)	$ _____
E.	Contractor Implementing	$_____
F.	City Implementing Cost:	$_____
	Reduction in Agreement Price (C+D-E-F) x 50%:	$ _____

Date by which a Change Order must be issued so as to obtain maximum cost reduction:

CITY OF CHANDLER, ARIZONA
PUBLIC WORKS & UTILITIES DEPARTMENT

CONTRACTOR'S AFFIDAVIT REGARDING SETTLEMENT OF CLAIMS

_____, Arizona
Date _____

Project Name: 101/202 REDUNDANT 66-INCH SEWER LINE
City Project No.: WW2402.251

To the City of Chandler, Arizona

Gentlemen:

This is to certify that all lawful claims for materials, rental of equipment and labor used in connection with the construction of the above project, whether by subcontractor or claimant in person, have been duly discharged.

The undersigned, for the total compensation of $_____, as set out in the final pay application, as full and complete payment under the terms of the Agreement, hereby waives and relinquishes any and all further claims or right of lien under, in connection with, or as a result of the above described project. The undersigned further agrees to indemnify and save harmless the City of Chandler against any and all liens, claims or liens, suits, actions, damages, charges and expenses whatsoever, which said City may suffer arising out of the failure of the undersigned to pay for all labor performances and materials furnished for the performance of said installation.

Signed and dated at _____, this _____ day of _____ 20_____.

_____
CONTRACTOR

By _____

STATE OF ARIZONA)
) SS
COUNTY OF MARICOPA)

The foregoing instrument was subscribed and sworn to before me this _____ day of _____ 20 _____.

_____
Notary Public

_____
My Commission Expires

PERFORMANCE BOND

ARIZONA STATUTORY PERFORMANCE BOND
PURSUANT TO TITLES 28, 34, AND 41, ARIZONA REVISED STATUTES
(Penalty of this bond must be 100% of the Agreement amount)

KNOW ALL MEN BY THESE PRESENTS THAT:_____

(hereinafter "Principal"), and _____ (hereinafter "Surety"), a corporation organized and existing under the laws of the State of _____ with its principal office in the City of _____, holding a certificate of authority to transact surety business in Arizona issued by the Director of Insurance pursuant to Title 20, Chapter 2, Article 1, as Surety, are held and firmly bound unto _____(hereinafter "Obligee") in the amount of _____ (Dollars) ($_____), for the payment whereof, Principal and Surety bind themselves, and their heirs, administrators, executors, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, the Principal has entered into a certain written Agreement with the Obligee, dated

the _____ day of _____, 20___ for construction of **101/202 REDUNDANT 66-INCH SEWER LINE, WW2402.251** which Agreement is hereby referred to and made a part hereof as fully and to the same extent as if copies at length herein.

NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION IS SUCH, that if the Principal faithfully performs and fulfills all the undertakings, covenants, terms, and conditions of the Agreement during the original term of the Agreement and any extension of the Agreement, with or without notice of the Surety, and during the life of any guaranty required under the Agreement, and also performs and fulfills all the undertakings, covenants, terms, conditions, and agreements of all duly authorized modifications of the Agreement that may hereafter be made, notice of which modifications to the Surety being hereby waived, the above obligation is void. Otherwise it remains in full force and effect.

PROVIDED, HOWEVER that this bond is executed pursuant to the provisions of Title 34, Chapter 2, Article 2, Arizona Revised Statutes, and all liabilities on this bond will be determined in accordance with the provisions of Title 34, Chapter 2, Article 2, Arizona Revised Statutes, to the same extent as if it were copied at length in this Agreement.

The prevailing party in a suit on this bond may recover as part of the judgment reasonable attorney fees that may be fixed by a judge of the court.

Witness our hands this _____ day of _____, 20__.

_____
PRINCIPAL SEAL

_____
AGENT OF RECORD

By _____

_____
SURETY SEAL

_____
AGENT ADDRESS

PAYMENT BOND

ARIZONA STATUTORY PAYMENT BOND
PURSUANT TO TITLES 28, 34, AND 41, OF THE ARIZONA REVISED STATUTES
(Penalty of this Bond must be 100% of the Agreement amount)

KNOW ALL MEN BY THESE PRESENTS THAT:_____

(hereinafter "Principal"), as Principal, and _____(hereinafter "Surety"), a corporation organized and existing under the laws of the State of _____ with its principal office in the City of _____, holding a certificate of authority to transact surety business in Arizona issued by the Director of the Department of Insurance pursuant to Title 20, Chapter 2, Article 1, as Surety, are held and firmly bound unto _____ (hereinafter "Obligee") in the amount of _____ (Dollars) ($_____), for the payment whereof, the Principal and Surety bind themselves, and their heirs, administrators, executors, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, the Principal has entered into a certain written Agreement with the Obligee, dated the _____ day of _____, 20___ for construction of **101/202 REDUNDANT 66-INCH SEWER LINE**, **WW2402.251** which Agreement is hereby referred to and made a part hereof as fully and to the same extent as if copied at length herein.

NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION IS SUCH, that if the Principal promptly pays all moneys due to all persons supplying labor or materials to the Principal or the Principal's subcontractors in the prosecution of the work provided for in said Agreement, this obligation is void. Otherwise it remains in full force and effect.

PROVIDED, HOWEVER that this bond is executed pursuant to the provisions of Title 34, Chapter 2, Article 2 Arizona Revised Statutes, and all liabilities on this bond will be determined in accordance with the provisions, conditions and limitations of Title 34, Chapter 2, Article 2, Arizona Revised Statutes, to the same extent as if it were copied at length in this Agreement.

The prevailing party in a suit on this bond may recover as part of the judgment reasonable attorney fees that may be fixed by a judge of the court.

Witness our hands this _____ day of _____, 20__.

_____
PRINCIPAL SEAL

_____
AGENT OF RECORD

By _____

_____
SURETY SEAL

_____
AGENT ADDRESS

DISPUTE RESOLUTION

A. INFORMAL DISPUTE RESOLUTION

The parties to the Agreement agree that time is of the essence in relation to performance of the Agreement and completion of the Project, therefore any and all disputes in relation to the Agreement will initially be referred to the Project Manager, the Design Professional Representative and/or the Contractor Representative as applicable to the dispute, for immediate resolution. If, after good faith efforts to reach a resolution, none is reached, any party to the dispute may submit the dispute to the Dispute Resolution Representative ("DRR") process set forth below, which is intended to be an expedited process.

B. DISPUTE RESOLUTION REPRESENTATIVE ("DRR") PROCESS

1. The Parties under the Agreement agree that all claims and disputes in relation to the Project which are not resolved in the ordinary course of the Project ("Claim" or "Claims") will, as a prerequisite to any mediation, or litigation of the Claim, first be submitted for resolution between the designated Dispute Resolution Representatives of the Parties as set forth herein (the "DRR Process").

2. The DRR Process will be initiated through service of a DRR Notice as set forth below:

   a. For claims by the Contractor or the Design Professional, the DRR Process will be initiated by the party asserting the claim serving written notice on the City setting forth in detail: (i) the basis for the claim; (ii) the effect of the Claim upon the construction of, and/or Project Schedule for, the Project;
   (iii) the specific relief requested, the amount thereof, and how such was calculated; (iv) the parties involved in the Claim, and how they are involved; (v) the specific Agreement provisions in the Agreement Documents (including, if applicable, drawings and specifications) which apply; and (vi) efforts made to date to resolve the Claim.

   b. For claims by the City, the DRR process will be initiated by the City providing written notice to the other parties of the basis and amount of its claim, the parties involved in the Claim, and how they are involved, the provisions in the Agreement Documents that apply, and the relief requested.

   c. The DRR Notice will be hand-delivered and e-mailed to the other parties' designated Dispute Resolution Representatives.

3. The other parties will respond in writing to the DRR Notice ("DRR Response") within ten (10) calendar days of receipt of the DRR Notice, setting forth those items set forth in the DRR Notice that they agree with, dispute, and/or have questions concerning. The DRR Response will be hand-delivered and e-mailed to the other parties' Dispute Resolution Representatives.

4. The designated Dispute Resolution Representatives for the Parties to the claim will then meet as soon as possible and in any event within twenty (20) calendar days of submission of the DRR Notice (regardless of whether a DRR Response has been submitted by all parties involved in the dispute), at a mutually agreed upon time and place, to attempt to resolve the Claim based upon the DRR Notice and DRR Response.

5. At any time after the first meeting required above, either party may terminate the DRR Process by written notice to the other party.

6. The parties may agree, in writing, to extend or modify the time limits or other provisions of the DRR process in relation to a specific pending Claim.

7. Unless otherwise designated in a written notice to the other parties, the City and the representatives of the Contractor and of the Design Professional will act as the parties' designated Dispute Resolution Representatives.

8. If a resolution of the Claim is reached, that resolution must be set forth in writing and must be signed by the Parties' designated Dispute Resolution Representative. If the resolution involves a change in any Agreement Documents, the Agreement Price, the Project Schedule, or any other change requiring a written Change Order or Amendment, the parties must execute an appropriate written Change Order or Amendment pursuant to the terms of the Agreement Documents.

C. MEDIATION

1. Unless extended by written agreement of the parties involved in the dispute, any Claim not resolved through the DRR process set forth above within five (5) calendar days after the meeting required under B (4) above, or after the DRR is terminated pursuant to B (5) above, whichever is earlier, will be submitted to mediation as a condition precedent to litigation by either party.

2. The mediation will be commenced by written demand upon the other party for mediation. If the parties cannot agree upon a mediator within ten (10) calendar days of the written demand, either party may make a request to the Civil Presiding Judge of the Maricopa County Superior Court to appoint a mediator. The mediation will occur within forth (40) calendar days of the written demand for mediation, unless the parties agree, in writing, to a longer period of time.

3. The qualifications for the mediator will be that he/she be: (a) an experienced mediator, arbitrator or litigator of construction disputes; and (b) having engaged a significant portion of his/her time involving and/or resolving construction disputes for at least the past five (5) years.

4. Each party will provide to the other party and the mediator all of the information and documentation required under B(1) and (2) above, together with any additional information and documentation which the party believes relevant. In addition, the parties will exchange, and provide to the mediator

such additional memoranda, information and/or documentation, as the mediator may request, and in the form and at such times, as the mediator may direct.

5. The parties will share the mediator's fee and any filing fees equally. The mediation will be held in Chandler, Arizona, unless another location is mutually agreed upon. Agreements reached in mediation will be specifically enforceable in any court having jurisdiction thereof.

D. LITIGATION

Any claim arising out of or related to the Agreement, except Claims relating to aesthetic effect and except those claims waived as provided for in the Agreement Documents, must be resolved through litigation in the Maricopa County, Arizona Superior Court.

CITY OF CHANDLER, ARIZONA
PUBLIC WORKS & UTILITIES DEPARTMENT

CERTIFICATE OF COMPLETION

PROJECT NAME:	**101/202 REDUNDANT 66-INCH SEWER LINE**		
CITY PROJECT NO.:	**WW2402.251**		
If Federally Funded:	N/A		
FEDERAL NO.:	N/A	**ADOT NO:**	N/A

(*This section to be completed by Prime*)
I HEREBY CERTIFY THAT ALL GOODS AND/OR SERVICES REQUIRED BY CITY OF CHANDLER FOR THIS PROJECT HAVE BEEN DELIVERED IN ACCORDANCE WITH THE AGREEMENT DOCUMENTS AND BID SPECIFICATIONS AND ALL ACTIVITIES REQUIRED BY THE AGREEMENTOR UNDER THE AGREEMENT HAVE BEEN COMPLETED AS OF THE COMPLETION DATE LISTED HERE:

FINAL ACCEPTANCE DATE:	

PRIME CONTRACTOR:

FIRM NAME:			
PRINCIPAL:			
TITLE:			
SIGNATURE:		DATE:	

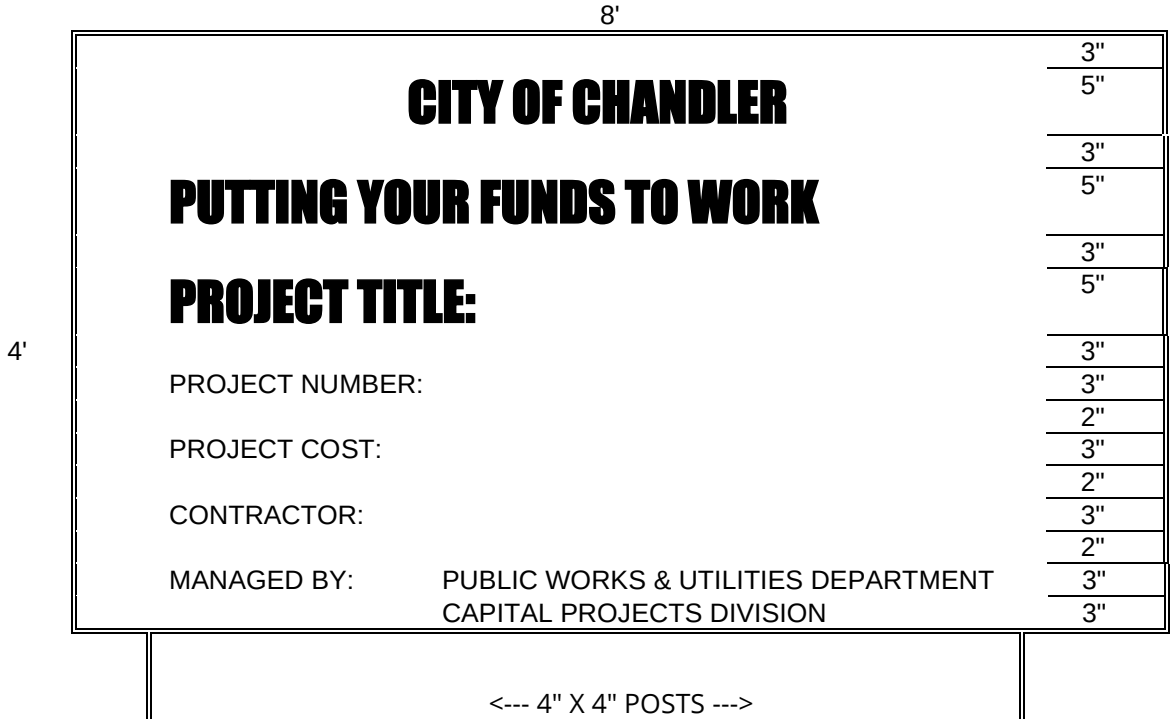
CERTIFIED BY [*INSERT NAME AND TITLE OF PARTY THAT OVERSEES CONSTRUCTION*]:

FIRM NAME:			
SIGNATURE:		DATE:	

PROJECT ACCEPTED BY CITY OF CHANDLER:

NAME:			
SIGNATURE:		DATE:	

CONSTRUCTION SIGN DETAIL



NOTES:

SIGN(S) MUST BE FURNISHED AND ERECTED PRIOR TO COMMENCEMENT OF CONSTRUCTION. POSTS MUST BE ANCHORED A MINIMUM OF TWO FEET INTO THE GROUND. BOTTOM OF SIGN MUST BE A MINIMUM OF FOUR FEET ABOVE THE GROUND.

TYPICAL PROJECT IDENTIFICATION SIGN FOR GENERAL PROJECTS MUST BE NON-REFLECTORIZED GREEN BACKGROUND, AND NON-REFLECTORIZED WHITE LETTERS AND NUMERALS.

ONE SIGN MUST BE ERECTED FOR BUILDINGS AND OTHER LIMITED AREA SINGLE SITES. FOR MULTIPLE SITES, ONE SIGN MUST BE ERECTED AT EACH SITE.

FOR LINEAR PROJECTS ONE HALF MILE OR LONGER, PLACE ONE SIGN AT EACH END OF THE PROJECT.

COST OF THE WORK

(APPLICABLE SOLELY TO CONSTRUCTION MANAGER AT RISK AND JOB ORDER CONTRACTING)

SECTION 1 – COSTS TO BE REIMBURSED

1.1 Cost of the Work

The term Cost of the Work will mean costs necessarily incurred by Contractor in the proper performance of the Work. Such costs must be at rates not higher than the standard paid at the place of the Project except with prior consent of City. The Cost of the Work will include only the items set forth in this Section 1.

1.2 Labor Costs

1.2.1 Wages of construction workers directly employed by the Contractor to perform the construction of the Work at the site or, with City's approval, at off-site workshops. Cost to be reimbursed will be the actual wages paid to the individuals performing the work.

1.2.2 Wages or salaries of the Contractor's supervisory and administrative personnel when stationed at the site with City's approval. No Contractor personnel stationed at the Contractor's home or branch offices will be charged to the Cost of the Work. Non-field office based Contractor management and support personnel are expected to provide service and advice from time to time throughout the job and his/her time devoted to Project matters is considered to be covered by the Contractor's Fee.

1.2.3 Wages and salaries of Contractor's supervisory or administrative personnel who would normally be stationed at the field office in accordance with Section 1.2.2 but who become engaged, at factories, workshops or on the road, in expediting the production or transportation of materials or equipment required for the Work, but only for that portion of his/her time required for the Work. Employee bonuses and/or costs associated with Employee Stock Ownership Plans ("ESOP") will not be considered reimbursable labor or labor burden costs and will be considered non-reimbursable costs considered to be covered by the Contractor's Fee.

1.2.4 Costs paid or incurred by Contractor for taxes, insurance, contributions, assessments and benefits required by law or collective bargaining agreements and, for personnel not covered by such agreements, customary benefits such as sick leave, medical and health benefits, holiday, vacations and pensions, provided such costs are based on wages and salaries included in the Cost of the Work under Subparagraphs 1.2.1 through 1.2.3.

1.2.4.1 Cost of the Work will include the actual net cost to Contractor for worker's compensation insurance attributable to the wages chargeable to the Cost of Work per this Agreement. The actual net cost of worker's compensation must take into consideration all cost adjustments due to experience modifiers, premium discounts, policy dividends, retrospective rating plan premium adjustments, assigned risk pool rebates, any applicable weekly maximums, etc. Contractor may charge an estimated amount for worker's compensation insurance costs, but will make appropriate cost adjustments to actual costs within 45 days of receipt of actual cost adjustments from the insurance carrier.

1.2.4.3 Overtime wages paid to salaried personnel (if approved in advance in writing by City) will be reimbursed at the actual rate of overtime pay paid to the individual. No time charges for overtime hours worked on the Project will be allowed if the individual is not paid for the overtime worked.

1.2.4.4 Any overtime premium or shift differential expense to be incurred by Contractor for hourly workers will require City's advance written approval before the incremental cost of the overtime premium or shift differential will be considered a reimbursable cost. If the Contractor is required to work overtime as a result of an inexcusable delay or other coordination problems caused by the Contractor or anyone he/she is responsible for, the overtime premium and/or shift differential expense portion of the payroll expense and related labor burden costs will be considered as cost not to be reimbursed.

1.2.4.5 Reimbursable labor burden costs will be limited to payroll taxes, worker's compensation insurance, the employer's portion of union benefit costs for union employees working on the Project, and the actual verifiable fringe benefit costs incurred by Contractor for non-union individuals working on the Project subject to the following maximum percentages for the following reimbursable non-union fringe benefit costs. The following maximums (as a percentage of reimbursable actual wages by individual) will apply for each of the following types of fringe benefit costs specifically attributable to each of the non-union personnel working on the Project:

- Medical Insurance, Dental, Life & AD&D Insurance: 12.00%
- Holiday, vacation and other paid time not worked: 10.00%
- Pension Plan Contributions to Vested Employee Account, Simplified Employee Pension Plans, or 401K matching plans (Note: ESOP related costs are covered by the Contractor Fee) 10.00%

For non-union personnel, no other fringe benefit costs (other than the three specific categories listed immediately above, will be considered reimbursable Cost of Work. Any labor burden costs that are in excess of the amounts considered reimbursable or are otherwise not considered reimbursable under the terms of this agreement are intended to be covered by the Contractor Fee.

1.3 Subcontract Costs

1.3.1 Payments made by Contractor to Subcontractors in accordance with the requirements of the subcontracts.

1.3.2 For Scope of Work Bid Packages typically performed by Subcontractors, Contractor may "self- perform" such work on an actual cost basis subject to an agreed upon Guaranteed Maximum Price for the "self-performed work". The Contractor must, unless agreed to by City in writing, bid his/her proposed guaranteed Maximum Price for the work to be "self-performed" against at least three other interested trade Contractors. All savings under any such Subcontract for "self-performed work" must be applied to reduce the Cost of Work under the Agreement and the Guaranteed Maximum Price. For purposes of defining "self-performed work" subject to this provision, any division of Contractor, or any separate Contractor or Subcontractor that is partially owned or wholly owned by the Contractor or any of his/her employees or employee's relatives will be considered a related party entity

and will be subject to this provision regarding "self-performed work". No self-performed work will be allowed to be performed on a Fixed Price basis.

1.3.3 Contractor (with respect to its Suppliers, Subcontractors and all lower tier Subcontractors) must provide City advance written notice and must obtain City's approval for any proposed Subcontract Change Order, Material Purchase Order, or other financial commitment in an amount in excess of $5,000 prior to placing such order or entering into such agreement (regardless of whether or not any such commitment will affect the prime Agreement Guaranteed Maximum Cost). It is agreed that sums applicable to any Subcontract Change Order, Purchase Order or other financial commitment entered into in violation of the above notice and approval requirement will not be included in the amounts owning to Contractor, Subcontractors or Suppliers whether as Costs of the Work or as reasonable termination costs in the event of termination.

1.4 Costs of Material and Equipment Incorporated in the Completed Construction

1.4.1 Costs, including transportation and storage, of materials and equipment incorporated or to be incorporated in the completed construction.

1.4.2 Costs of materials described in the preceding Subparagraph 1.4.1 in excess of those actually installed to allow for reasonable waste and spoilage. Unused excess materials, in any, will become City's property at the completion of the Work or, at City's option, may be sold by the Contractor. Any amounts realized from such sales must be credited to City as a deduction from the Cost of Work.

1.4.3 Proceeds from the sale of recyclable materials, scrap, waste, etc. will be credited to job cost.

1.5 Costs of Other materials and Equipment, Temporary Facilities and Related Items

1.5.1 Costs, including transportation and storage, installation, maintenance, dismantling and removal of materials, supplies, temporary facilities, machinery, equipment and hand tools not customarily owned by construction workers, that are provided by the Contractor at the site and fully consumed in the performance of the Work; and cost (less salvage value) of such items if not fully consumed, whether sold to others or retained by Contractor. Cost for items previously used by Contractor will mean fair market value.

1.5.2 Rental charges for temporary facilities, machinery, equipment, and hand tools not customarily owned by construction workers that are provided by Contractor at the site, whether rented from Contractor or others, and costs of transportation, installation, minor repairs and replacements, dismantling and removal thereof. Rates and quantities of equipment rented will be subject to City's prior written approval.

1.5.2.1 The Projected usage for each piece of equipment to be rented for use on the Project and the estimated total rentals must be considered by Contractor before the piece of equipment is rented so that an appropriate rent versus buy decision can be made. Purchased equipment must be considered "job owned". At the completion of the Project, Contractor must transfer title and possession of all remaining job-owned equipment to City, or Contractor may keep any such equipment for an appropriate fair market value credit to job cost, which will be mutually agreed to by City and Contractor.

1.5.2.2 Each piece of equipment to be rented must have hourly, daily, weekly and monthly rates and the most economical rate available will be reimbursed based on the circumstances of actual need and usage of the piece of equipment while it is stationed at the jobsite. When the piece of equipment is no longer needed for the work, no rental charges will be reimbursed if the piece of equipment remains at the jobsite for the convenience of Contractor.

1.5.2.3 Equipment Rental Rates

1.5.2.3.1 Compensation for equipment used on the Project will be paid in accordance with the Equipment Plan submitted by Contractor in the accepted GMP Proposal and no payments will be made in excess of the rates set forth in the Equipment Plan, or actual documented costs, whichever is less.

1.5.2.3.2 All equipment rental rates and costs are subject to City's right to audit when submitted as part of Equipment Plan and/or at any time during the Project.

1.5.2.4 The aggregate rentals chargeable for each piece of Contractor owned tools or equipment must not exceed 50% of the fair market value of such equipment at the time of its commitment to the Work. The original purchase price and date of purchase of the equipment will be documented with a copy of the purchase invoice for the piece of equipment. Such aggregate limitations will apply and no further rentals will be charged even if a piece of equipment is taken off the job and is later replaced by a similar piece of equipment. For purposes of computing the aggregate rentals applicable to aggregate rental limitations, rental charges for similar pieces of equipment will be combined if the pieces of equipment were not used at the same time.

1.5.2.5 Fair market value for used material and equipment as referred to in the Agreement Documents will mean the estimated price a reasonable purchaser would pay to purchase the used material or equipment at the time it was initially needed for the job. Note: This is usually lower than the price a reasonable purchaser would pay for similar new construction material or construction equipment.

1.5.2.6 All losses resulting from lost, damaged or stolen tools and equipment will be the sole responsibility of Contractor, and not City, and the cost of such losses will not be reimbursable under the Agreement.

1.5.2.7 Contractor will be required to maintain a detailed equipment inventory of all job-owned equipment (either purchased and charged to job cost or job-owned through aggregate rentals) and such inventory must be submitted to City each month. For each piece of equipment, such inventory should contain at a minimum (1) original purchase price or acquisition cost (2) acquisition date (3) approved Fair Market Value at the time the piece of equipment was first used on the job and (4) final disposition.

1.5.2.8 All costs incurred for minor maintenance and repairs will be reimbursed at actual cost. Such costs include routine and preventative maintenance, minor repairs and other incidental costs. Repairs and/or replacement of a capital nature are considered to be covered by the rental rates. Major repairs and overhauls are not considered routine and ordinary; consequently such costs are not reimbursable and are intended to be covered by the rental

rates.

1.5.3 Costs of removal of debris from the Site.

1.5.4 Costs of document reproductions, facsimile transmissions and long-distance telephone calls, postage and parcel delivery charges, telephone service at the site and reasonable petty cash expenses of the site office.

1.5.5 That portion of the reasonable expenses of Contractor's personnel incurred while traveling in discharge of duties connected with the Work.

1.5.5.1 No travel expenses will be reimbursed to Contractor's representatives unless Project related travel required them to travel to a destination more than 100 miles from the Project location. Any travel involving airfare will require advance written approval by an authorized City's representative.

1.5.6 Costs of materials and equipment suitably stored off the site at a mutually acceptable location, if approved in advance by the City.

1.5.7 Reproduction costs will be the actual costs of reproduction subject to a maximum of five cents ($.05) per square foot for prints and a maximum of five cents ($.05) per 8 ½ by 11-inch page for offset print or photo copied agreement documents, specifications, etc. Telephone costs will be the actual costs paid to the third party telephone company for the field office telephone.

1.6 Miscellaneous Costs

1.6.1 That portion of insurance and bond premiums that can be directly attributed to the Agreement. The City will reimburse Contractor for contractually required bond at time of first pay application for GMP and Cost-Based Agreements upon receipt of proof of payment from the Contractor. If the Contractor completes Work for less than the Agreement Price, Contractor must credit the City a pro- rated amount for the unused portion of the bond payment

1.6.1.1 Contractor's actual cost for insurance will be considered to be included within the Maximum limit for General Conditions Costs. All premiums for any insurance and bonds required for the Project must reflect the net actual costs to Contractor after taking into consideration cost adjustments due to experience modifiers, premium discounts, policy dividends, retrospective rating plan premium adjustments, assigned risk pool rebates, refunds, etc.

1.6.1.2 The amount to be reimbursed to Contractor for all contractually required insurance will be actual costs not to exceed a total of 2% of the Agreement Value, unless Contractor establishes to City's satisfaction that the actual cost is higher and City agrees to such actual higher cost in writing. If Contractor's cost of contractually required insurance is greater than the amount agreed to be reimbursed per this Agreement Provision, the difference will be considered to be covered by the Contractor's Fee. The City will reimburse Contractor for contractually required insurance on a monthly basis for GMP and Cost-Based Agreements. If Contractor can demonstrate substantial savings by paying for all insurance in advance, the City may agree to reimburse all insurance costs at time of first pay

application for GMP and Cost-Based Agreements with proof of payment from Contractor.

1.6.2 Sales, use or similar taxes imposed by a governmental authority that are related to the Work.

1.6.3 Fees and assessments for the building permit and for other permits, licenses and inspections for which Contractor is required by the Agreement Documents to pay.

1.6.4 Fees of laboratories for tests required by the Agreement Documents, except those related to defective or nonconforming Work and which do not fall within the scope of ¶ 1.7.3 below.

1.6.5 Royalties and license fees paid for the use of a particular design, process or product required by the Agreement Documents; the cost of defending suites or claims for infringement of patent rights arising from such requirement of the Agreement Documents; and payments made in accordance with legal judgments against Contractor resulting from such suites or claims and payments of settlements made with City's consent. However, such costs of legal defenses, judgments and settlements must not be included in the calculation of the Contractor's Fee or subject to the Guaranteed Maximum Price.

1.6.6 Data processing costs related to the Work. However, any such data processing costs will be limited to the cost of personal computer hardware used at the field office in the normal day to day administration, management and control of the Project. The aggregate charges for any such hardware must not exceed the Fair Market Value of the hardware at the time it was brought to the field office. If the total charges for any particular piece of hardware reach an amount equal to the Fair Market Value, that particular piece of hardware must be turned over to City whenever it is no longer needed for the Project. If Contractor elects to keep the particular piece of hardware, the job costs must be credited with a mutually agreeable amount which will represent the Fair Market Value of the particular piece of hardware at the time it was no longer needed for the job. Software or other costs associated with the use of computer programs will not be considered to be a reimbursable cost and will be considered to be covered by the Contractor's Fee.

1.6.7 Deposits lost for causes other than Contractor's negligence or failure to fulfill a specific responsibility to City as set forth in the Agreement Documents.

1.6.8 Legal, mediation and arbitration costs, including attorneys' fees, other than those arising from disputes between City and Contractor, reasonably incurred by Contractor in the performance of the Work and with City's prior written approval; which approval will not be unreasonably withheld.

1.6.9 Expenses incurred in accordance with Contractor's standard personnel policy for relocation and temporary living allowances of personnel required for the Work, if pre-approved by City in writing. If City authorizes the reimbursement of relocation costs, the reimbursable relocation expenses will be limited to a maximum of $50,000 per person. Any relocation cost incurred by Contractor in excess of the amount reimbursed by City will be considered to be covered by the Contractor's Fee.

1.7 Other Costs and Emergencies

1.7.1 Other costs incurred in the performance of the Work if and to the extent approved in

advance in writing by City.

1.7.2 Costs due to emergencies incurred in taking action to prevent threatened damage, injury or loss in case of an emergency affecting the safety of persons and property.

1.7.3 Costs of repairing or correcting damaged or nonconforming Work executed by Contractor, Subcontractors or Suppliers, provided that such damaged or nonconforming Work was not caused by negligence or failure to fulfill a specific responsibility of Contractor and only to the extent that the cost of repair or correction is not recoverable by Contractor from insurance, sureties, Subcontractors or Suppliers.

1.8 Related Party Transactions

1.8.1 The term "related party" will mean a parent, subsidiary, affiliate or other entity having common ownership or management with Contractor; any entity in which any stockholder in, or management employee of, Contractor owns any interest in excess of ten percent in the aggregate; or any person or entity which has the right to control the business or affairs of Contractor. The term "related party" includes any member of the immediate family of any person identified above.

1.8.2 If any of the costs to be reimbursed arise from a transaction between Contractor and a related party, Contractor must notify City in writing of the specific nature of the contemplated transaction, including the identity of the related party and the anticipated cost to be incurred, before any such transaction is consummated or cost incurred. If City, after such notification, authorizes in writing the proposed transaction, then the cost incurred will be included as a cost to be reimbursed, and Contractor must procure the Work, equipment, goods or service from the related party, as a Subcontractor. If City fails to authorize the transaction, Contractor must procure the Work, equipment, goods or service from some person or entity other than a related party.

SECTION 2 – COSTS NOT TO BE REIMBURSED

2.1 The Cost of Work must not include:

2.1.1 Salaries and other compensation of Contractor's personnel stationed at Contractor's principal office or offices other than the site office, except as specifically provided in Subparagraphs 1.2.2 and 1.2.3.

2.1.2 Expenses of Contractors' principal office and offices other than the site office.

2.1.3 Overhead and general expenses, except as may be expressly included in Section 1.

2.1.3.1 Costs of Contractor's home office computer services or other outside computer processing services will be considered overhead and general expense. Accordingly, Contractor should not plan to perform any such computer related services or alternatives at the field office when such services or functions can be performed at Contractor's home or branch offices, or other outside service locations.

2.1.4 Contractor's capital expenses, including interest on Contractor's capital employed for the Work.

2.1.5 Rental costs of machinery and equipment, except as specifically provided in subparagraph 1.5.2.

2.1.6 Except as provided in Subparagraph 1.7.3 of the Agreement, costs due to the negligence or failure to fulfill a specific responsibility of Contractor, Subcontractors and Suppliers or anyone directly or indirectly employed by any of them or for whose acts of them may be liable.

2.1.7 Any cost not specifically and expressly described in Section 1.

2.1.8 Costs, other than costs included in Change Orders approved by City that would cause the GMP to be exceeded.

SECTION 3 – DISCOUNTS, REBATES, REFUNDS AND SAVINGS

3.1 Cash discounts obtained on payments made by Contractor will accrue to City if (1) before making the payment, Contractor included them in an Application for Payment and received payment therefore from City, or (2) City has deposited funds with Contractor with which to make payments; otherwise, cash discounts will accrue to Contractor. Trade discounts, rebates, refunds and amounts received from sales or surplus materials and equipment will accrue to City, and Contractor must make provisions so that they can be secured.

3.1.1 Cost of the Work will be credited with all insurance policy discounts, performance and payment bond rebates or refunds, refunds or return premiums from any Subcontractor default insurance, refunds or rebates from any Contractor controlled insurance programs applicable to the Project, merchandise rebates of any nature, refunds of any nature, insurance dividends; and a portion of any volume rebates or free material credits earned with purchase of material or other goods and services charged to the job.

3.1.2 "Cash" discounts which may accrue to Contractor will be limited to a maximum of 1.5% of invoice cost. Any portion of "Cash" discounts greater than 1.5% will automatically accrue to City if Contractor is eligible to take advantage of the discounts.

3.2 Amounts that accrue to City in accordance with the provisions of Paragraph 3.1 will be credited to City as a deduction from the Cost of the Work.

3.3 Any and all savings on the GMP, or any separately guaranteed items comprising the GMP, will belong to City, subject to any express right in the Agreement for Contractor to share in savings. Savings are subject to City's right to audit, and may be audited separately.

SECTION 4 – GENERAL CONDITIONS COSTS

4.1 General Conditions Costs may include, but are not limited to, the following types of costs incurred by Contractor during construction of the Work to the extent they are reimbursable Costs of the Work as delineated above: payroll costs for Work conducted at the site, payroll costs for the superintendent and full-time general foremen, payroll costs for management

personnel resident and working on the site workers not included as direct labor costs engaged in support (e.g. loading/unloading, clean-up, etc.), administrative office personnel, costs of offices and temporary facilities including office materials, office supplies, office equipment, minor expenses, utilities, fuel, sanitary facilities and telephone services at the site, costs of liability insurance premiums not included in labor burdens for direct labor costs, costs of bond premiums, costs of consultants not in the direct employ of Contractor or Subcontractors, fees for permits and licenses.

4.2 General Conditions Costs may be paid on a percentage of the Agreement Price or on a lump/stipulate sum basis as set forth in the Agreement. All costs included in the General Conditions Costs will not be separately invoiced to or paid by City.

4.3 The total amount of General Conditions Costs for the Work may be divided by the number of days allowed for performance of the Work, to determine a fixed daily rate for General Conditions Costs that may be used in computing the General Conditions Costs allocated to any period of time, or for any adjustments in the General Conditions Costs agreed to in writing by City.

LANDSCAPE ESTABLISHMENT PERIOD

Section 1 – Description and General

Contractor is in direct control of work performed under the Landscape Establishment Period. If work is subcontracted, a representative of the Contractor will be present at the site of the work for all hours that the subcontractor works. Subcontracting of Landscape Establishment work will be permitted for weed eradication with herbicides, because of special licensing. A licensed temporary service may be used to supply labor to Contractor if Contractor has received approval from City Representatives. Contractor will submit the required subcontract documentation.

Contractor must provide adequate personnel to accomplish the required maintenance of the plant materials at intervals acceptable to City Representatives.

If not healthy at the end of the maintenance period, the maintenance must be continued until the plant material is approved by City.

1.1 Time and Schedule

Unless otherwise expressly agreed to in writing by City, the Landscape Establishment Period will be per General Conditions Section 6.5.4.

1.2 Planted Stock and Seeding Establishment

1.2.1 Tree planting and staking must be per City of Chandler Standard Detail C-801.

1.2.2 All trees will stand erect on their own without stakes when brought to this site. If the tree cannot stand on its own when nursery stakes are removed, the tree will be removed and replaced.

1.3 Pre-Emergent Herbicide and Weed Control

1.3.1 Contractor will provide three applications of an approved pre-emergent herbicide on all unpaved areas of the project, as directed by City Representatives, to control weed growth in all areas of the project. The number of applications may be increased as directed by the City Representative, and at no additional cost to City, if the City Representative deems additional applications are required to control weed growth.

1.3.2 Application sequence will be approved in advance by City. The first application of pre-emergent will be completed prior to the application of Decomposed Granite and will be included with the cost of the Decomposed Granite as specified and part of the Construction Phase portion of work. The second application of pre-emergent will be completed after installation of the Decomposed Granit and no later than half-way through the Landscape Establishment Period. The third and final application of pre-emergent will be applied 15 days prior to completion of the Landscape Establishment portion of the project. The second and third pre-emergent applications will be included with the cost of Landscape Establishment. Watering will be completed in accordance with the manufacturer's recommendations, as included and as related to each application.

1.3.3 The pre-emergent herbicide will be applied in accordance with the Technical Specifications and the recommendations of the pre-emergent herbicide manufacturer, as approved by City Representatives.

1.3.4 The control of weeds will be accomplished by the use of herbicides. Manual removal of weeds will be required, after herbicides have taken affect.

1.3.5 Contractor is responsible for the removal and disposal of all trash and debris that during the Landscape Establishment Period. Contractor will keep the project in a neat and orderly manner during the duration of the Landscape Establishment Period.

1.4 Water

The water used during Landscape Establishment to properly maintain the plant material will be furnished by City, at designated sources from within the project limits, at no charge to Contractor. Contractor will be responsible for all equipment, materials and labor necessary to load, transport and unload water for watering purposes.

1.5 Plant Material Replacements

The plant material replacement will be considered as included in the work for Landscape Establishment, and will be made at no charge to the City.

1.5.1 Shrub and Plant Replacement - During the second half of the Landscaping Establishment period, Contractor will provide, where required, plant replacements as follows:

Original Size	Replacement Size
1 gallon	5 gallon
5 gallon	15 gallon
15 gallon	24-inch box
36-inch box	48-inch box

1.5.2 Tree Replacement – During the second half of the Landscape Establishment Period, Contractor will provide plant material replacements for existing plants that die as follows:

Existing Plant Material Sizes	Replacement Size
Trees:	
2-inch Caliper	24-inch box
4-inch Caliper	36-inch box
6-inch Caliper and greater	54-inch box
Shrubs:	
All Existing Shrubs	15 gallon

1.6 Measurement and Payment

See Technical Specifications for Measurement Payment provisions.

City Council Memorandum **Management Services** **Memo No.** 25-049

Date: November 04, 2024
To: Mayor and Council
Thru: Joshua H. Wright, City Manager
Dawn Lang, Deputy City Manager - CFO
From: Matthew Dunbar, Budget and Policy Director
Subject: Resolution No. 5846 Amending the Citywide Fee Schedule relating to the Community Services, Cultural Development, Development Services, Fire, and Public Works & Utilities Departments

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Proposed Motion:

Move City Council pass and adopt Resolution No. 5846 amending the Citywide Fee Schedule relating to the Community Services, Cultural Development, Development Services, Fire, and Public Works & Utilities Departments, with fee changes effective January 1, 2025.

Background:

Each year, departments review their fees to determine if any updates are necessary that require modifying, eliminating, or adding a new fee. Updates may be necessary to reflect an increased cost of a service or reimbursable product provided, or a need to establish fees for new or enhanced services or facilities. All fees charged to residents or businesses (except those exempted by City Code section 2-17) are reflected in the Citywide Fee Schedule and follow the requirements detailed in the City Code to establish or modify fees.

Fee changes are consolidated and submitted to Council together as one Resolution No. 5846 (Attachment 1) to amend the Citywide Fee Schedule, with Exhibit A being the updated Citywide Fee Schedule (Attachment 2) shown in blackline form with changes struck through and updates in all caps. A clean version of the Citywide Fee Schedule is also included to see final form (Attachment 5).

Based on the requirements of Chandler City Code 2-17, all recommended new or

modified fees have been summarized in The Summary of Proposed New or Modified Fees (Attachment 3). This notice was posted on the City's website on September 06, 2024, for 60 days. Additionally, a Notice of Intention to Amend the Citywide Fee Schedule (Attachment 4) was published in the Arizona Republic on October 16, 2024, as well as through social media on the same day, to inform the public of the proposed fee changes to be discussed at the November 7, 2024, City Council meeting as an action item, to allow for public comment.

Discussion:

Over the past year, City Council has discussed the proposed fee updates on multiple occasions.

The proposed Community Services Department fees were discussed on April 10, 2023, at the Quality of Life Council Subcommittee, April 19, 2023, at the Park and Recreation Board, and October 16, 2023, at a Council Work Session. City Council direction was to move forward on those fees related to exclusive use of city facilities that take city assets out of use by the public, as well as fee changes requested by users to enhance the customer experience.

The proposed Fire Department fees were discussed on March 22, 2024, at the Community Safety Council Subcommittee, with direction by the Subcommittee to advance these fees for recommendation to the full City Council.

Finally, the proposed Development Services Department Transportation Engineering fees were discussed on May 23, 2024, at a Council Work Session, with Council's direction to staff to move forward in preparing these fees for adoption to help address traffic congestion and barricade issues throughout the city.

The following proposed new and modified fees were brought forward by various departments and reflect the fees related to their respective operations and the desire to regulate business activity:

- Community Services - Aquatics: Represents fees requested by users to enhance customer service.
    - Removes the Red Cross Learn to Swim Fee and Red Cross Certification guard fees.
    - Adds a Swim Team Guard fee of $5.00 per lane.
    - Adds discounted Pool Pass applicable to Senior rate for residents (15 and 30 punch fee).
    - Pool Pass Adult (30 punch fee) assigns the discounted rate to residents only.

    - Pool Pass Youth (30 punch fee) assigns the discounted rate to residents only.
    - Pool Pass Adult (15 punch fee) assigns the discounted rate to residents only.
    - Pool Pass Youth (15 punch fee) assigns the discounted rate to residents only.
- Community Services – Parks: Represents fee updates for exclusive use of city facilities that remove use from the public.
    - Pavilion Rental corporate size: changes from $56/hr. to $70/hr. for residents, from $76 to $90/hr. for non-residents, and adds a new $105/hr. for commercial use
    - Pavilion Rental large size: changes from $23/hr. to $29/hr. for residents, $32 to $40/hr. for non-residents, and adds a new $44/hr. for commercial use
    - Pavilion Rental medium size: changes from $16/hr. to $20/hr. for residents, $22 to $27/hr. for non-residents, and adds a new $30/hr. for commercial use
    - Removes the Pavilion Rental medium size entire complex changes
    - Pavilion Rental small size: changes from $8/hr. to $10/hr. for residents, $11 to $14/hr. for non-residents, and adds a new $15/hr. for commercial use
    - Ball field reservation (No Lights) fees are changing from $11/hr. for residents to $14/hr., from $15/hr. for non-residents to $19/hr., and adding a commercial fee of $21/hr.
    - Ball field reservation (Tournaments/Leagues) fees are changing from $11/hr. for residents to $14/hr., from $15/hr. for non-residents to $19/hr., and adding a commercial fee of $21/hr.
    - ½ Multi-Use Field (No Lights) fees are changing from $5.50/hr. for residents to $7/hr., from $8/hr. for non-residents to $10/hr., and adding a commercial fee of $11/hr.
    - Field preparation fees are changing from $25/prep for residents to $40/prep, from $34/prep for non-residents to $54/prep, and for commercial from $38/prep to $60/prep.
    - Field preparation after-hours fees are changing from $35/prep for residents to $60/prep, from $48/prep for non-residents to $81/prep, and for commercial from $53/prep to $90/prep.
    - Site Supervisor fee changes from $15/hr. for residents to $25/hr., from $21/hr. for non-residents to $34/hr., and for commercial from $23/hr. to $38/hr.
    - Park Maintenance Staff (after-hours) fee changes from $35/hr. for residents to $60/hr., from $48/hr. for non-residents to $81/hr., and for commercial from $53/hr. to $90/hr.

- Community Services – Recreation Facilities: Represents fee updates for exclusive use of city facilities that remove use from the public.
    - Multipurpose room – Small: changes from $56/hr. to $65/hr. for residents (50% rate for non-profits), from $76 to $88/hr. for non-residents, and commercial use from $84/hr. to $98/hr.
    - Multipurpose room – Medium: changes from $85/hr. to $91/hr. for residents (50% rate for non-profits), from $115 to $123/hr. for non-residents, and commercial use from $128/hr. to $137/hr.
    - Multipurpose room – Large: changes from $125/hr. to $144/hr. for residents (50% rate for non-profits), from $169 to $195/hr. for non-residents, and commercial use from $188/hr. to $216/hr.
    - Set-up Fee for Room Reservations fee change from $25/hr. to $50/hr. for residents, $34/hr. to $68/hr. for non-residents, and $38/hr. to $75/hr. commercial.
- Community Services – Recreation Fitness Passes: New program to benefit users and does not change fees.
    - Fitness Pass User Teen 6-month: new option for $113 for residents and $152 for non-residents.
    - Fitness Pass User Adult 6-month: new option for $150 for residents and $203 for non-residents.
    - Fitness Pass User Active Adult (55+) 6-month: new option for $113 for residents and $152 for non-residents.
    - Fitness Pass User Youth 6-month: new option for $100 for residents and $135 for non-residents.
    - Fitness Pass Two Users 6-month: new option for $250 for residents and $337.50 for non-residents.
    - Fitness Pass Family Users (2 Adults 4 Dependents) 6-month: new option for $300 for residents and $405 for non-residents.
    - Fitness Pass Additional Family Dependent User 6-month: new option for $25 for residents and $34 for non-residents.
- Community Services – Tennis Center: Represents fee updates for exclusive use of city facilities that remove use from the public.
    - Tennis Court A.M. 1.5 hours: changes from $2.50/person to $3.00/person for residents and $4.00/person to $4.50/person for non-residents.
    - Tennis Court P.M. with Lights 1.5 hours: changes from $3.50/person to $4.00/person for residents and $5.00/person to $5.50/person for non-residents.
- Cultural Development – Special Events
    - Trash can rental: changes from $17.00 to $20.00 for residents and $23.00 to $27.00 for non-residents (pass-through cost from outside vendor).

- Development Services – Transportation Engineering
  - Deposit Fee for Authorized Temporary Traffic Control Permits: New refundable deposit (if time commitment in permit met) of 1% for projects $0 to $100,000 (min. of $1000), 2% for projects $100,001 to $300,000, 3% of projects $300,001 to $500,000, 4% of projects $500,001 to $750,000, 5% of projects $750,001 to $1,000,000 and 6% for projects over $1,000,000 not to exceed $100,000.
  - Traffic Control & Lane Restriction Permit Fee (Non-refundable): New fee of $315.00.
- Fire– Fire Re-inspection Fees
  - Business Fire Re-inspection Fee: changes from $40 per non-compliant visit to no cost for initial inspection, $100 for second inspection if business remains non-compliant, $150 for third inspection if business remains non-compliant, and $200 for fourth and any additional inspections if business remains non-compliant.
- Public Works & Utilities – Water Distribution
  - Refundable Hydrant Meter Deposit: changes from $1,450 to $3,100 per device (pass-through cost from outside vendor).

Financial Implications:

The amendments to the Citywide Fee Schedule are estimated to generate approximately $870,300 for the General Fund.

Attachments

Attachment 1- Resolution 5846

Attachment 2-Exhibit A, Citywide Fee Schedule Blackline

Attachment 3- Summary of New and Modified Fees

Attachment 4- Notice of Intention

Attachment 5- Citywide Fee Schedule Clean version

RESOLUTION NO. 5846

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF CHANDLER, ARIZONA AMENDING THE CITYWIDE FEE SCHEDULE, SECTIONS 3, 4, 6, and 7, RELATING TO THE COMMUNITY SERVICES, CULTURAL DEVELOPMENT, DEVELOPMENT SERVICES, FIRE, AND PUBLIC WORKS & UTILITIES DEPARTMENTS.

WHEREAS, the Citywide Fee Schedule was originally adopted by Resolution No. 3175 on December 16, 1999, pursuant to the requirements of the City Code; and

WHEREAS, the Citywide Fee Schedule has been amended on occasion to update fees that no longer accurately reflect the cost to provide the services listed, or to establish fees for new or enhanced services or facilities; and

WHEREAS, the new fees identified in Exhibit A shall become effective January 1, 2025;

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Chandler, Arizona, that the Citywide Fee Schedule, Sections 3, 4, 6, and 7, and each of the fees listed therein is hereby approved and amended as set forth in Exhibit A of this Resolution attached hereto and incorporated herein.

PASSED AND ADOPTED by the Mayor and City Council of the City of Chandler, Arizona, this 7th day of November, 2024.

ATTEST:

_____ CITY CLERK

_____ MAYOR

CERTIFICATION

I HEREBY CERTIFY that the above and foregoing Resolution No. 5846 was duly passed and adopted by the City Council of the City of Chandler, Arizona, at a regular meeting held on the 7th day of November, 2024, and that a quorum was present thereat.

_____ CITY CLERK

APPROVED AS TO FORM:

_____ CITY ATTORNEY

JWB

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Sec. 1 **Administration and Management Services**

Administration

1.1 Administrative Fee (Res.4703)

(a) Standard Fees (unless otherwise listed)

i.	Appeal fee [§1-7.1] (Res. 3175)	$200.00
ii.	CD / Audio	$10.00
iii.	Copy – per page	$0.15
iv.	DVD / Video	$15.00
v.	Microfilm Copy – per page	$2.00
vi.	Dishonored or Non-Sufficient Fund (NSF) Check fee	$25.00

(b) Fire Department

i.	Digital Photos of event – each print	$1.00
ii.	Digital Photos of event – CD	$5.00
iii.	Audio or DVD of event – each	$10.00
iv.	Fire, EMS & Incident and Occupancy Inspection Report copy – each	$5.00
v.	Environmental Report Review – written	$25.00
vi.	Permit – duplicate	$5.00

(c) Police Department

i.	Audio Recording Copies – per report	$10.00
ii.	Digital Photographs – per report	$5.00
iii.	Photo Red Light Copies – 4 sheets	$10.00
iv.	Report Copies – first 35 pages (each additional page City standard rate applies)	$5.00
v.	Video Recording Copies – per report	$25.00
vi.	Block Watch Signs – per sign	$25.00

(d) Reports, Plans, Manuals, Guides, etc.

i.	Airpark Area Plan	$4.00
ii.	Airpark Map	$1.00
iii.	Airport Master Plan Update	$45.00
iv.	Airport Master Plan Update Executive Summary	$2.00
v.	Airport Master Plan – color	$75.00
vi.	Airport F.A.R. Noise Study with Maps	$68.00
vii.	Crime Free Multi-Housing Program	$6.00
viii.	Code Enforcement Report Copies – first 50 pages (each additional page City standard rate applies)	$5.00
ix.	Drainage Policies & Standards, #3 Technical Design Manual	$2.00
x.	General Plan	$5.00
xi.	Industrial Pretreatment – Annual Report	$25.00
xii.	Landscape & Irrigation Guidelines, #8 Technical Design Manual	$2.00
xiii.	Park and Recreation Master Plan	$6.00
xiv.	Redevelopment Element	$7.00
xv.	Residential Development Standards	$8.00
xvi.	Southeast Chandler Area Plan and Appendices	$10.00
xvii.	Southeast Chandler Area Plan Appendices	$7.00
xviii.	Street Design & Access Control, #4 Technical Design Manual	$2.00
xix.	Streetlight Standards, #7 Technical Design Manual	$2.00
xx.	Subdivision Code	$2.00
xxi.	Traffic Barricade, #7 Technical Design Manual	$2.00
xxii.	Traffic Signal Design, #5 Technical Design Manual	$2.00
xxiii.	Water & Wastewater System, #1 & 2 Technical Design Manual	$2.0

Management Services – Tax and License

1.2 Off-Track Wagering [§58-2.2] (Res. 4703)

(a) Application fee (nonrefundable) [§58-2.2.A] $200.00
(b) Annual License fee
  i. Up to four pari-mutuel betting windows or tote machine [§58-2.2.B.1] $1,200.00
  ii. For each pari-mutuel betting windows or tote machine in excess of four [§58-2.2.B.2] $400.00
(c) Renewal Application Late Filing fee [§58-2.5.A] $100.00

1.3 Auctioneers, Pawnbrokers, and Other Secondhand Permits [Ch. 15] (Res. 3175)

(a) Application fee (nonrefundable) [§15-12] $50.00
(b) Auctioneer, Auction House, annual permit fee [§15-12] $100.00
(c) Pawnbroker, annual permit fee [§15-12] $300.00
(d) Secondhand/Antique, annual permit fee [§15-12] $100.00
(e) Junk Dealer, annual permit fee [§15-12] $200.00
(f) Automatic Electronic Device Kiosks, annual permit fee [§15-12] $500.00
(g) Change of Location fee [§15-12.E] (Res. 4703) $50.00
(h) Fingerprinting fee [§15-12.E] (Res. 3482) ..... Amount Charged by DPS
(i) Late Renewal fee [§15-12.E] ..... 10% of Annual Permit Fee

1.4 Bingo [Arizona Department of Revenue] (Res. 4703)

(a) Class A - Licensing, one-time fee $5.00
(b) Class B and C - Licensing, one-time fee $25.00

1.5 Escort and/or Introductory Service Permit [Ch. 19] (Res. 3175, Res. 4035)

(a) Application fee (nonrefundable) [§19-3.4] $100.00
(b) Annual Permit fee [§19-3.4] $500.00
(c) Renewal Application fee [§19-3.4] (Res. 3482) $50.00
(d) Change of Location fee [§19-4.1] $50.00
(e) Fingerprinting fee [§19-3.4.O] (Res. 4703) ..... Amount Charged by DPS

1.6 Extension of Premises [Ch. 60.6] (Res. 4703)

(a) Permanent Extension of Premises
  i. Application fee (nonrefundable) $100.00
(b) Temporary Extension of Premises
  i. Application fee (nonrefundable), per day $25.00
  ii. Additional application fee, if submitted less than 21 days prior to city council meeting $25.00

1.7 Lien Fee [Ch. 62-590] (Res. 4703) $50.00

1.8 Liquor License (Application fee / Issuance fee / Annual fee) [Ch. 60.4] (Res. 4703)

(a) Series 1, In-State Producer ..... $200.00 / $200.00 / $1,000.00
(b) Series 2, Out-of-State Producer ..... $200.00 / $0.00 / $0.00
(c) Series 3, Microbrewery ..... $200.00 / $200.00 / $1,000.00
(d) Series 4, Wholesale ..... $200.00 / $0.00 / $0.00
(e) Series 5, Government ..... $200.00 / $0.00 / $0.00
(f) Series 6, Bar (all spirituous liquor) ..... $200.00 / $200.00 / $1,000.00
(g) Series 7, Beer and Wine Bar ..... $200.00 / $200.00 / $550.00

(h) Series 8, Conveyance..... $200.00 / $200.00 / $400.00
(i) Series 9, Liquor Store (all spirituous liquor)..... $200.00 / $200.00 / $500.00
(j) Series 10, Beer and Wine Store..... $200.00 / $200.00 / $350.00
(k) Series 11, Hotel-Motel (with restaurant) ..... $200.00 / $200.00 / $1,000.00
(l) Series 12, Restaurant ..... $200.00 / $200.00 / $1,000.00
(m) Series 13, Domestic Farm Winery..... $200.00 / $200.00 / $1,000.00
(n) Series 14, Club (private) ..... $200.00 / $200.00 / $300.00
(o) Series 18D, Liquor Distilleries ..... $200.00 / $200.00 / $1,000.00
(p) Series 19D, Liquor Tasting Rooms (Spirits) ..... $200.00 / $200.00 / $300.00
(q) Series 19W, Liquor Tasting Rooms (Wine)..... $200.00 / $200.00/ $300.00
(r) Series 20, Farm Winery Producer ..... $200.00 / $200.00 / $300.00
(s) Series 21, Wine Producer Custom Crush..... $200.00 / $200.00 / $300.00

1.9 **Liquor License, duplicate of City license (Res. 4703)** $10.00

1.10 **Massage Establishments [Ch. 17] (Res. 4035)**
(a) Permit Application fee (nonrefundable) [§17-3.2]..... $50.00
(b) Annual Permit fee [§17-3.2] $100.00
(c) Change of Location fee [§17-9.A] (Res. 4703) $50.00
(d) Fingerprinting fee [§17-3.3] (Res. 4703)..... Amount Charged by DPS
(e) Late fee [§17-10.C]..... 10% of Annual Permit Fee

1.11 **Peddlers, Canvassers, Transient Merchants and Solicitors [Ch. 20]**
(a) Permit Application Investigation fee (nonrefundable) [§20-5] $50.00
(b) Individual or Employee, annual permit fee [§20-10]..... $50.00
(c) Business (Corporation or Firm), annual permit fee [§20-10.2].....$100.00
(d) Surety Bond or Cash Deposit [§20-14] (Res. 4703) $1,000.00
(e) Fingerprinting fee [§20-5] (Res. 4703)..... $10.00
(f) Late fee [§20-10.3]..... 10% of Annual Permit Fee
(g) Non-Profit Solicitor [§20-8] (Res. 4703)..... $0.00

1.12 **Sexually Oriented Business [Ch.18] (Res. 4035)**
(a) Permit Application fee (nonrefundable) [§18-5.1].....$100.00
(b) Establishment, annual permit fee [§18-5.1 & §18-6.1] $500.00
(c) Business Manager, annual permit fee [§18-5.1 & §18-7.2] $100.00
(d) Adult Service Provider, annual permit fee [§18-5.1 & §18-8.2].....$100.00
(e) Duplicate Permit Copy fee [§18-20] $10.00
(f) Fingerprinting fee [§18-4.1A] ..... Amount Charged by DPS
(g) Late Fee [§18-19.1]..... 10% of Annual Permit Fee

1.13 **Special Event Liquor and Wine Festivals (Series 15, TSPE, Series 16D or Series 16W) [Ch. 60.5] (Res. 4703)**
(a) License fee, per day $25.00
(b) Additional application fee, if submitted less than 21 days prior to city council meeting $25.00

1.14 **Transaction Privilege Tax License [Ch. 62] (Res. 5098)**
(a) Annual License fee [§62-320]..... $2.00
(b) Residential Rental (per unit/max = $50.00) [§62-320]..... $2.00
(c) Late fee [§62-320]..... 50% of Annual License Fee

1.15 Short Term Rental [Ch. 22] (Res. 4703)

(a) License Fee $250.00
(b) License Fee Renewal $250.00

1.16 Transaction Privilege Tax (City Tax Rates) [Ch. 62] (Res. 4703)

(a) Advertising [§62-405] 1.50%
(b) Amusements, Exhibitions, and Similar Activities [§62-410] 1.50%
(c) Construction Contracting: Prime Contractors [§62-415] 1.50%
(d) Construction Contracting: Speculative Builders [§62-416] 1.50%
(e) Construction Contracting: Owner-Builders [§62-417] 1.50%
(f) Hotels (>29 days) [§62-444] 1.50%
(g) Jet Fuel Sales / Jet Fuel Use: Per Gallon [§62-422] $0.023
(h) Job Printing [§62-425] 1.50%
(i) Manufactured Buildings [§62-427] 1.50%
(j) Mining [§62-432] 0.10%
(k) Publishing and Periodicals Distribution [§62-435] 1.50%
(l) Real Property Rental (Residential) [§62-445] 1.50%
(m) Real Property Rental (Commercial) [§62-445] 1.50%
(n) Restaurants & Bars [§62-455] 1.80%
(o) Retail Sales [§62-460] 1.50%
(p) Retail Sales: Food for Home Consumption [§62-462] 1.50%
(q) Tangible Property Rental [§62-450] 1.50%
(r) Telecommunication Services [§62-470] 2.75%
(s) Timbering and other Extraction [§62-430] 1.50%
(t) Transient Lodging (<30 days) [§62-447] 4.40%
(u) Transporting for Hire [§62-475] 1.50%
(v) Use Tax [§62-610] 1.50%
(w) Utility Services [§62-480] 2.75%
(x) Wastewater Removal Services [§62-485] 0.00%

1.17 Business Registration (Res. 5098)

(a) Annual Registration Fee [§61-6.A] $45.00
(b) Non-Profit, Annual Registration Fee [§61-6.B] $0.00
(c) Specialty License Holder, Annual Registration Fee [§61-6.D] $0.00
(d) Late Penalty [§61-5.A] ..... 50% of Annual License Fee
(e) Change of Location Fee, (if not completed online) [§61-7.C] $15.00

1.18 Shared Mobility (Pilot Program (Res. 5337)

(a) License Application One-time Fee (non-refundable) $3,000
(b) Monthly Use Fee (paid monthly) ..... $0.10 per ride
(c) Late Monthly Use Fee $50.00
(d) Violation Fee
  i. 1st violation $50.00
  ii. 2nd violation $250.00
  iii. 3rd and subsequent violations $500.00

Sec. 2 **Chandler Municipal Airport**

(Chapter 8): (Amd entirety by Res. 4505)

2.1 Ground Leases:

(a) Aviation Use, (Non-prime) ..... Negotiable
(Negotiable based on minimum $0.25/Sq Ft/Yr, plus consideration of appraisal and comps)

(b) Aviation Use, (Prime) ..... Negotiable
(Negotiable based on minimum $0.30/Sq Ft/Yr, plus consideration of appraisal and comps)

(c) Non-Aviation Use, all areas (Res. 4703) ..... One and one-half times the aviation use rate

2.2 Hangars:

(a) T-Hangar Units (Res. 4703)
- i. Small unit, monthly fee $244.00
- ii. Small unit with storage, monthly fee $288.00
- iii. Large unit, monthly fee $430.00
- iv. Large unit with storage, monthly fee $551.00

(b) Storage Units (Res. 4703)
- i. Small unit, monthly fee $44.00
- ii. Large unit, monthly fee $121.00

(c) Other Hangars
- i. Daily fee ..... $0.10/Sq. Ft
- ii. Monthly fee ..... $0.33/Sq. Ft
- iii. Annual fee ..... $4/Sq. Ft

(d) Cleaning fee
- i. Retention of deposit $150.00
- ii. Staff Charges ..... as assessed in Sec. 2.10

2.3 T-Shades, all units (qty 12), monthly fee $130.00

2.4 Tie Down Spaces (Res. 4703)

(a) Single Engine Piston Aircraft & Helicopter, less than 2,500 lbs MTOW, monthly fee $50.00

(b) Multi-Engine Piston Aircraft & Helicopter, 2,500 to 5,000 lbs MTOW, monthly fee $68.00

(c) Turbine Engine over 5,000 lbs. MTOW & Helicopter, over 2,500 lbs MTOW, monthly fee $138.00

2.5 Transient or Overnight Parking Fee

(a) Single Engine & Helicopter, less than 2,500 lbs $10.00

(b) Multi-Engine & Helicopter, 2,500 to 5,000 lbs MTOW $12.00

(c) Turbine Engine & Helicopter, over 5,000 lbs MTOW (Res. 4703) $26.00

2.6 Aeronautical Business Permit Fee [Ch.8-6.1]

All commercial operators on the Chandler Municipal Airport (CHD) shall pay one of the following fees according to their primary business activity in relation to the fee categories described below and/or as defined in the Chandler Municipal Airport Rules and Regulations.

(a) FBO Operator (Assessed to a ground lessee)
Annual fee per on-airport business entity $1,500.00

(b) SASO Operator (Assessed to a ground lessee)
Annual fee per on-airport business entity $860.00

(c) Hangar/Shade/Tie Down Leasing of units of size less than or equal to 2,100 SF each.
(Assessed to any entity leasing or subleasing aircraft storage units regardless of aircraft hangar ownership)
Annual fee per unit leased* $50.00

(d) Hangar/Shade/Tie Down Leasing of units of size in excess of 2,100 SF each.
(Assessed to any entity leasing or subleasing aircraft storage units regardless of aircraft hangar ownership)
Annual fee per unit leased* $125.00

(e) Aircraft Charter and Air Taxi *(Assessed to companies that have aircraft based at and operating from Chandler Municipal Airport. All pertinent SASO requirements will apply except on-airport facility requirements)*
Annual fee per business entity operating on the airport $450.00

(f) Mobile aircraft maintenance and repair *(Assessed to aircraft maintenance and repair operations that do not meet the applicable SASO conditions for on-airport facilities or are not conducting said operations as a bona-fide employee – not a temporary contractor - on the aircraft owned by a ground lessee or sublessee. All pertinent SASO requirements will apply except the on- airport facility requirements)*
Annual fee per business entity operating on the airport $1,000.00

(g) Temporary Aeronautical Business Permit – 7-day permit *(Assessed to commercial activity on the airport that is not a ground lessee or sublessee on the airport. All pertinent SASO requirements will apply except on-airport facility requirements)*
Charged per 7-day (7 continuous days) permit $80.00

(h) Temporary Aeronautical Business Permit – 1 day permit *(Assessed to commercial activity on the airport that is not a Ground Lessee or sublessee on the airport. All pertinent SASO requirements will apply except on-airport facility requirements)*
Charged per 1-day permit $25.00

(i) Commercial Sub-lease Tenant *(Includes sublessees that are SASOs and other commercial activities – does not apply to hangar sub-leasing. All pertinent SASO requirements will apply)**
Annual fee per sublessee business entity operating on the airport $450.00

(j) Commercial Users Permit* *(Assessed to commercial activity on the airport that is not a ground lessee or sublessee on the airport. All pertinent SASO requirements will apply except on-airport facility requirements)*
Annual fee per business entity operating on the airport $350.00

(k) Banner Tow Operations *(Applies to commercial Banner Tow Operators. Requires additional appropriate permit [i.e. Temporary Business Permit, SASO Operator or Commercial Users Permit])* Charged per each time a banner is picked up on the airport $20.00

* - Non aviation uses in these categories shall pay three times the aviation use rate.

2.7 <u>Aeronautical Business Permit monthly fee [Ch.8-6.5]</u>

(a) For fuel supply businesses:
Fuel flowage fee, per gallon:
i. All gallons per month $0.10

(b) For self-fueling operations
Fuel flowage fee, per gallon:
i. All gallons per month $0.15

(c) For other businesses ..... Not Applicable

2.8 <u>Through-the-Fence Access Fees</u>

(a) Annual Access Privilege/Operations & Maintenance Fee (Amd by Res. 4505)
Payments for this charge are made on a quarterly basis and are due by the tenth of January, April, July, and October of each calendar year. Payments, administration and contact with Airport Management on Through-the-Fence issues shall be as follows:

- If the through-the-fence area is a property with a single through-the-fence user, a single point-of-contact for that single property owner is responsible for payment, administration and contact with Airport Management.
- If the through-the-fence area is a property with multiple through-the-fence users on that site, then an association formed by those owners is the responsible party for payment and contact with Airport Management.

If payments are more than 30 days past due, all gate access for that property will be denied until payment is received by the City of Chandler.

i. Owner-Occupied Hangar ..... $0.630/SF of Hangar

a. This component is based on the operations and maintenance costs of airport common use area for based aircraft.

b. The actual annual charge will be based upon the actual square footage of any hangars in the through-the-fence area with taxilane access and which are designed for, or capable of aircraft storage. "Actual hangar area" is established by the plans approved by the City. It is the hangar owner's responsibility to provide Airport Management with a copy of the approved plans or plan sheet showing the approved square footage of the hangar.

c. An owner-occupied hangar is one that is owned or controlled by the property owner. Conditions for meeting this criteria include:

(i) The hangar is owned by and its use is controlled exclusively by the applicant. This ownership can be through either:

- Fee simple ownership; or
- A long-term lease for the hangar property with a lease term of 10+ years. In this arrangement, the actual annual charge will be equal to the Owner occupied hangar fee described in paragraph 2.8(a).i.a. and b. of this section. However, the annual charge will change to the Non-owner occupied hangar fee described in paragraphs 2.8(a).ii.a. and b. of this section, if any one of the following conditions occur: (a) the long-term hangar lease is terminated prior to the expiration of a 24-month period; or (b) if a new lease entity assumes the long-term lease and the new entity can't provide a viable connection to the prior long-term lessee (i.e., business acquisition, merger, etc.). The Non-owner-occupied fee will be in effect for that hangar for any further leasing activity while the then current property owner retains ownership of the hangar. If the long-term hangar lease is terminated before 24 months and the hangar owner provides evidence that only their owned and controlled aircraft will be stored in the hangar, the rate will remain at the Owner occupied hangar fee described in paragraphs 2.8(a).i.a. and b. of this section and will remain at this rate until another change in occupancy status occurs.

(ii) The aircraft is owned or otherwise controlled by the property owner for which evidence can be provided including:

- Evidence of clear ownership of the aircraft showing the property owner as aircraft owner. This can be through FAA aircraft registration or other official documentation regarding the ownership or registration of an aircraft.
- Proof of at least 25% ownership and equal control of the aircraft which shall be affirmed through signature of all owners on the required aircraft control entity form, which shall be provided by

Airport Management. In the event of arrangements for an aircraft in which there are multiple owners or partners, a copy of the agreement must be presented to Airport Management. These arrangements for aircraft management, aircraft leasing, interchange agreements, joint ownership agreements or time-sharing agreements must substantially reflect the general guidelines and tenets for the appropriate arrangement as detailed in the National Business Aircraft Association's (NBAA) document titled 2001 NBAA Aircraft Operating & Leasing Package. The agreements, regardless of aircraft size, must also include the general verbiage requirements detailed in Section (a)(1) and (a)(2) of the Federal Aviation Regulations (FAR) Part 91.23 – Truth in Leasing.

d. Property owners shall notify Airport Management in writing prior to a hangar being used to store an aircraft. The "Annual Access Privilege/Operations & Maintenance Fee - Owner Occupied Hangar" fee will be applied for the period beginning with the first day of the month following receipt of the written notice. This fee shall apply for any part of a month in which an aircraft is stored in the hangar and shall continue until the property owner provides evidence that the aircraft or hangar is no longer owned by the property owner.

ii. Non-Owner Occupied Hangar ..... $0.950/SF of Hangar

a. This component is for any off airport hangar property that is occupied by an aircraft not owned or controlled by the property owner. This condition applies to any situation where an aircraft is in a hangar through a lease or other type of agreement. It also applies to situations in which an aircraft is stored in the hangar that is owned by the property owner AND an aircraft is stored the hangar that is not owned by the property owner. The annual charge is based upon the Owner Occupied Hangar rate described in paragraphs 2.8(a).i.a. and b. plus 50% of that rate.

b. The actual annual charge will be based upon the actual square footage of any hangars in the through-the-fence area with taxilane access and which are designed for, or capable of aircraft storage. "Actual hangar area" is established by the plans approved by the City. It is the hangar owner's responsibility to provide Airport Management with a copy of the approved plans or plan sheet showing the approved square footage of the hangar.

c. Upon written notification by property owner and aircraft owner to Airport Management, advising a hangar will be occupied by an aircraft controlled by any entity other than the property owner, the "Annual Access Privilege/Operations & Maintenance Fee - Non-owner Occupied" annual charge will become effective in the following manner:

(i) If the hangar was previously registered as being occupied with an aircraft controlled by the property owner, the Non-owner rate and registration begins with the first day of the following calendar month; or

(ii) If the hangar was previously registered as having no aircraft being stored (reference paragraph 2.8(a).i.c.), the non-owner rate and registration begins with the first day of the following calendar month; or

(iii) If the hangar was previously registered as having a non-owner aircraft, the Non-owner rate will remain in effect and uninterrupted.

The non-owner rate applicable to any of these conditions will continue for 6-months and will expire on the last day of the 6th month of that term regardless of any changes in the aircraft owner status during that 6-month period. The hangar status shall be automatically registered for another 6-month period as a "Non-owner occupied" hangar –unless- the

property owner provides written evidence changing the status of the hangar at least 14 calendar days prior to the current expiration date. Notice changing the status of the hangar is the full responsibility of the property owner.

(b) Annual User Fee

i. Turbine Engine Aircraft & Helicopters having a gross take-off weight greater than 7,000 pounds - per aircraft based in Airpark..... $800.00

ii. Multi-Engine Aircraft & Helicopters having a gross take-off weight greater than 2,500 pounds but less or equal to 7,000 pounds – per aircraft based in Airpark..... $390.00

iii. Single-Engine Aircraft & Helicopters having a gross take-off weight that is less or equal to 2,500 pounds - per aircraft based in Airpark..... $290.00

(c) Annual Taxiway User Fee - per square foot fee for the total area reserved for Airport access use by licensee's members $0.245

(d) Fuel Flowage Fee - All Aircraft (total gallons fee based on gallons/month)
All gallons per month..... $0.15 Per Gallon

(e) Fees Adjustments
The Annual Access Privilege/Operations & Maintenance Fee shall be adjusted annually, without further City Council action, on January 1st of each year subsequent to adoption of this Resolution No. 4505 by an amount equal to the percentage increase, if any, in the Consumer Price Index (CPI-U, Western Region - All items) over the previous 12-month period ending the calendar month prior to the adjustment date; except that, at the fourth adjustment date, and every fourth adjustment date thereafter, the rate shall only be adjusted (increased or decreased) upon action of City Council taken upon completion of a review of the appropriateness of the rate structure. In no event shall the rate be increased more than ten (10%) per cent over any twelve (12) month period between anniversary dates, unless otherwise approved by City Council. Should the annual change in the CPI-U indicate a decline, the fee shall not diminish.

2.9 <u>City Owned, Aviation Fuel Service, Retail Prices</u>

The retail price of aviation fuel shall be per methodology contained below:

(a) The retail price of aviation fuel shall be determined by a "cost-plus" formula based upon the wholesale price of the fuel inventory plus an amount not less than eighty ($0.80) cents per gallon, inclusive of applicable federal, state, and local fees and taxes.

2.10 <u>Airport Hourly Fee</u>

For exclusive use of staff time on activity not associated with normal airport operations and maintenance of the facility.

(a) Regular Staff Charges during posted business hours
Actual time rounded up to nearest .25 hour $45.00/hr

(b) Overtime/Call Out Staff Charges outside of posted business hours (2-hour minimum charge)
Actual time rounded up to nearest .25 hour $68.00/hr

2.11 <u>Security Fee</u>

Payments of these fees will be on an individual basis and as conditions warrant.

(a) Security Card and System Fee – for each lessee/sublessee transfer..... $100.00

(b) Hangar Key/Access Card/Device Replacement Fee (per each replacement or actual cost of replacement, whichever is higher) $35.00

(c) Access System Violation (Pertains to misuse of access cards/devices and access of gates in violation of access agreement(s) and airport policies during a contiguous 24-month period. Upon notice of any violation, should no previous violations have occurred for the individual card

holder of record within the previous rolling 24-month period, the violation is considered a 1st violation)

1st Violation	$0.00 Written warning to be issued
2nd Violation	$100.00 Written notification to be issued
3rd Violation	$200.00 90-day loss of access privileges (Res. 4703)
4th Violation	$200.00 12-month loss of access privileges

2.12 Terminal Administration Conference Room (Assessed to non-aviation related uses) (Res. 4703)

(a) Resident Hourly Use Fee $25.00
(b) Non-Resident Hourly Use Fee $34.00

2.13 Office Leases (one-year term)

(a) Aviation Use (Non-prime) Negotiable (Negotiable base of $9.50/Sq. Ft/Yr. minimum, plus consideration of appraisal and comps)
(b) Aviation Use (Prime) Negotiable (Negotiable base of $22/Sq. Ft/Yr. minimum, plus consideration of appraisal and comps

Sec. 3 Community Services

Parks, Recreation, and Museum
(Res. 4703)

3.1 Recreation Program and Service Fees: [Ch.§31-21.A]

The following includes all fees charged for the use of department facilities or the issuance of permits or licenses. In conjunction with the fees set forth, any applicable rental or retail sales tax will also be assessed as appropriate for items such as, pool rentals, room rentals, ball fields, pavilions, merchandise, lifeguard rentals, permits, etc.

3.1.1 Aquatics

Pool Admission Fees	Resident	Per	Non-Resident	Per
(a) Pool Admission Fee - Youth	$1.00	pp	$1.00	pp
(b) Pool Admission Fee - Adult	$2.25	pp	$2.25	pp
(c) Pool Admission Fee – Senior (55+)	$1.25	pp	$1.25	pp
(d) Lap Swim - Year-Round	$2.00	pp	$2.00	pp
(e) Pool Pass - Youth (15 punches)	25% discount off current admission rounded to nearest ¼ dollar- FOR RESIDENTS ONLY			
(f) Pool Pass – Adult (15 punches)	25% discount off current admission rounded to nearest ¼ dollar- FOR RESIDENTS ONLY			
(G) POOL PASS – SENIOR (15 PUNCHES)	25% DISCOUNT OFF CURRENT ADMISSION ROUNDED TO NEAREST ¼ DOLLAR- FOR RESIDENTS ONLY			
~~(g)~~ (H) Pool Pass - Youth (30 punches)	50% discount off current admission rounded to nearest ¼ dollar- FOR RESIDENTS ONLY			
~~(h)~~ (I) Pool Pass – Adult (30 punches)	50% discount off current admission rounded to nearest ¼ dollar- FOR RESIDENTS ONLY			
(J) POOL PASS – SENIOR (30 PUNCHES)	50% DISCOUNT OFF CURRENT ADMISSION ROUNDED TO NEAREST ¼ DOLLAR- FOR RESIDENTS ONLY			
~~(i)~~ (K)Annual Pool Pass - Family of 4	$112.00	ea	N/A	N/A
~~(j)~~ (L)Annual Pool Pass - Additional Family Member	$15.00	pp	N/A	N/A
~~(k)~~ (M) Annual Lap Swim - Adult Pass	$200.00	ea	N/A	N/A
~~(l)~~ (N) Family Swim	$1.00	family	$1.00	family

Pool Rentals	Resident	Per	Non-Resident	Per
~~(m)~~ (O) Private Pool Rental (plus Guard fee)	$45.00	hr	$61.00	hr
~~(n)~~ (P) Swim Team Use ~~(per guard)~~	$5.00 ~~$15.00~~	LANE ~~hr~~	N/A	N/A
~~(o)~~ (Q) Lifeguard (ALL PROGRAMS)	$20.00	hr	$20.00	hr

Miscellaneous Fees	Resident	Per	Non-Resident	Per
~~(p) Red Cross Learn to Swim~~	~~$0.55~~	~~pp~~	~~$0.55~~	~~pp~~
~~(q) Red Cross Certification (per Guard), minimum # of guard requirements varies~~	~~$16.00 to $36.00~~	~~hr~~	~~$16.00 to $36.00~~	~~hr~~
(r) Special Events (Dive-In Movie, etc.)	$0.25 to $2.75	event	$0.25 to $2.75	event

3.1.2 Parks

Pavilion Rental* ~~Corporate Size~~	Resident	Per	Non-Resident	Per	COMMERCIAL	PER
(a) CORPORATE ~~One~~ Pavilion - 4 hour minimum ~~(McDowell Mountain)~~	$70.00 ~~$56.00~~	hr	$90.00 ~~$76.00~~	hr	$105.00	HR
(B) LARGE PAVILION	$29.00	HR	$40.00	HR	$44.00	HR
(C) MEDIUM PAVILION	$20.00	HR	$27.00	HR	$30.00	HR
(D) SMALL PAVILION	$10.00	HR	$14.00	HR	$15.00	HR
*50% RATE FOR NON-PROFIT GROUPS						

~~Pavilion Rental Large Size~~	~~Resident~~	~~Per~~	~~Non-Resident~~	~~Per~~		
~~(b) One Pavilion - (Arrowhead Park Lion's and Folley Park Memorial)~~	~~$23.00~~	~~hr~~	~~$32.00~~	~~hr~~		

~~Pavilion Rental Medium Size~~	~~Resident~~	~~Per~~	~~Non-Resident~~	~~Per~~		
~~(c) One Pavilion – (Desert Breeze's Acacia, Mesquite, and Palo Verde, and Tumbleweed's San Tan and South Mountain)~~	~~$16.00~~	~~hr~~	~~$22.00~~	~~hr~~		
~~(d) Entire Cluster Complex (Desert Breeze – 3 pavilions)~~	~~$48.00~~	~~hr~~	~~$65.00~~	~~hr~~		

~~Pavilion Rental Small Size~~	~~Resident~~	~~Per~~	~~Non-Resident~~	~~Per~~		
~~(e) One Pavilion~~	~~$8.00~~	~~hr~~	~~$11.00~~	~~hr~~		

Other Rentals	Resident	Per	Non-Resident	Per	Commercial	Per
~~(f)~~ (E) Open Grass Space Rental – Community and Regional Parks	N/A	N/A	N/A	N/A	$30.00	hr
~~(g)~~ (F) Amphitheater – Community and Regional *	$180.00	hr	$243.00	hr	$270.00	hr
* Chandler Non-Profit Groups	Rate - 50%	hr	N/A	N/A	N/A	N/A

Sport Facility Fees	Resident	Per	Non-Resident	Per	Commercial	Per
~~(h)~~ (G) Ball Field Reservation - No Lights	$14.00 ~~$11.00~~	hr	$19.00 ~~$15.00~~	hr	$21.00 ~~N/A~~	N/A
~~(i)~~ (H) Ball Field Reservation - Tournaments/Leagues	$14.00 ~~$11.00~~	hr	$19.00 ~~$15.00~~	hr	$21.00 ~~$17.00~~	hr
~~(j)~~ (I) Ball Field Lights	$15.00	hr	$21.00	hr	$23.00	hr
~~(k)~~ (J)½ Multi Use Field Reservation – No Lights	$7.00 ~~$5.50~~	hr	$10.00 ~~$8.00~~	hr	$11.00 ~~N/A~~	hr ~~N/A~~
~~(l)~~ (K) ½ Ball Field Lights	$7.50	hr	$11.00	hr	N/A	N/A
~~(m)~~ (L) Field Preparation	$40.00 ~~$25.00~~	prep	$54.00 ~~$34.00~~	prep	$60.00 ~~$38.00~~	prep
~~(n)~~ (M) Mini Field Preparations	$21.00	prep	$29.00	prep	$32.00	prep
~~(o)~~ (N) Field Preparation After-Hour	$60.00 ~~$35.00~~	prep	$81.00 ~~$48.00~~	prep	$90.00 ~~$53.00~~	prep
~~(p)~~ (O)-Site Supervisor	$25.00 ~~$15.00~~	hr	$34.00 ~~$21.00~~	hr	$38.00 ~~$23.00~~	hr
~~(q)~~ (P) Basketball Court	$7.00	hr	$10.00	hr	$11.00	hr
~~(r)~~ (Q) Volleyball Court	$7.00	hr	$10.00	hr	$11.00	Hr
~~(S)~~ (R) ATHLETIC FIELD RESERVATION DOWN PAYMENT	$150.00	EVENT	$150.00	EVENT	$150.00	EVENT
~~(T)~~ (S) GATE FEE - 8 TEAMS OR LESS	$100.00	EVENT	$100.00	EVENT	$100.00	EVENT
~~(U)~~ (T) GATE FEE - 9 TO 16 TEAMS	$150.00	EVENT	$150.00	EVENT	$150.00	EVENT
~~(V)~~ (U) GATE FEE - 17 TEAMS OR MORE	$200.00	EVENT	$200.00	EVENT	$200.00	EVENT
~~(W)~~ (V) CONCESSION - 8 TEAMS OR LESS	$100.00	EVENT	$100.00	EVENT	$100.00	EVENT
~~(X)~~ (W) CONCESSION - 9 TO 16 TEAMS	$150.00	EVENT	$150.00	EVENT	$150.00	EVENT
~~(Y)~~ (X) CONCESSION - 17 TEAMS OR MORE	$200.00	EVENT	$200.00	EVENT	$200.00	EVENT
~~(Z)~~ (Y) PARK MAINTENANCE STAFF (AFTER HOURS FEE)	$60.00 ~~$35.00~~	HR	$81.00 ~~$48.00~~	HR	$90.00 ~~$53.00~~	HR

~~(s) Athletic Field Reservation Down Payment~~	~~$150.00~~	~~event~~	~~$150.00~~	~~event~~	~~$150.00~~	~~event~~
~~Sport Facility Fees~~	~~Resident~~	~~Per~~	~~Non-Resident~~	~~Per~~	~~Commercial~~	~~Per~~
~~(t) Gate Fee - 8 teams or less~~	~~$100.00~~	~~event~~	~~$100.00~~	~~event~~	~~$100.00~~	~~event~~
~~(u) Gate Fee - 9 to 16 teams~~	~~$150.00~~	~~event~~	~~$150.00~~	~~event~~	~~$150.00~~	~~event~~
~~(v) Gate Fee - 17 teams or more~~	~~$200.00~~	~~event~~	~~$200.00~~	~~event~~	~~$200.00~~	~~event~~
~~(w) Concession - 8 teams or less~~	~~$100.00~~	~~event~~	~~$100.00~~	~~event~~	~~$100.00~~	~~event~~
~~(x) Concession - 9 to 16 teams~~	~~$150.00~~	~~event~~	~~$150.00~~	~~event~~	~~$150.00~~	~~event~~
~~(y) Concession - 17 teams or more~~	~~$200.00~~	~~event~~	~~$200.00~~	~~event~~	~~$200.00~~	~~event~~
~~(z) Park Maintenance Staff (After Hours Fee)~~	~~$35.00~~	~~hr~~	~~$48.00~~	~~hr~~	~~$53.00~~	~~hr~~

Park Vendor License	Resident	Per	Non-Resident	Per
(aa) Application Fee	$25.00	ea	$34.00	ea
(bb) Up to 3 days per week (9-mo. Term)	$250.00	ea	$338.00	ea
(cc) Up to 5 days per week (12-mo. Term)	$500.00	ea	$675.00	ea

Park Use Permits	Resident	Per	Non-Resident	Per
(dd) Malt Beverage Permit	$14.00	ea	$19.00	ea
(ee) Boating Permit	$6.00	yr	$9.00	yr

3.1.3 Recreation Facilities

Rentals	Resident	Per	Non-Resident	Per	Commercial	Per
(a) Multipurpose Room - Small*	$65.00 ~~$56.00~~	hr	$88.00 ~~$76.00~~	hr	$98.00 ~~$84.00~~	hr
(b) Multipurpose Room - Medium*	$91.00 ~~$85.00~~	hr	$123.00 ~~$115.00~~	hr	$137.00 ~~$128.00~~	hr
(c) Multipurpose Room - Large*	$144.00 ~~$125.00~~	hr	$195.00 ~~$169.00~~	hr	$216.00 ~~$188.00~~	hr
(d) Kitchen*	$25.00	hr	$34.00	hr	$38.00	hr
(e) Courtyard - Medium*	$40.00	hr	$54.00	hr	$60.00	hr
(f) Courtyard - Large*	$125.00	hr	$169.00	hr	$188.00	hr
(g) Classroom/Meeting Room - Small*	$25.00	hr	$34.00	hr	$38.00	hr
(h) Classroom/Meeting Room - Medium*	$40.00	hr	$54.00	hr	$60.00	hr
(i) Classroom/Meeting Room - Large*	$60.00	hr	$81.00	hr	$90.00	hr
(J) CLASSROOM/MEETING ROOM - X-LARGE*	$70.00	HR	$95.00	HR	$105.00	HR
(K) GYM (AFTER HOURS)*	$200.00	HR	$270.00	HR	$300.00	HR
(L) GYM – HALF (AFTER HOURS)*	$100.00	HR	$135.00	HR	$150.00	HR
(M) FULL FACILITY AFTER HOURS	$500.00	HR	$675.00	HR	$750.00	HR
(N) EDUCATION EXPLORATION – CLASS SIZE 1-30 STUDENTS	$65.00	HR	$88.00	HR	N/A	N/A
*50% RATE FOR NON-PROFIT GROUPS						

~~Rentals~~	~~Resident~~	~~Per~~	~~Non-Resident~~	~~Per~~	~~Commercial~~	~~Per~~
~~(j) Classroom/Meeting Room - X-Large*~~	~~$70.00~~	~~hr~~	~~$95.00~~	~~hr~~	~~$105.00~~	~~hr~~
~~(k) Gym (After Hours)*~~	~~$200.00~~	~~hr~~	~~$270.00~~	~~hr~~	~~$300.00~~	~~hr~~
~~(l) Gym – Half (After Hours)*~~	~~$100.00~~	~~hr~~	~~$135.00~~	~~hr~~	~~$150.00~~	~~hr~~
~~(m) Full Facility After Hours~~	~~$500.00~~	~~hr~~	~~$675.00~~	~~hr~~	~~$750.00~~	~~hr~~

Rentals	Resident	Per	Non-Resident	Per	Commercial	Per
(o) Education Exploration – Class Size 31-60 Students	$169.00	1.5 hr	$229.00	1.5 hr	N/A	N/A
(p) Education Exploration – Class Size 61-90 Students	$283.00	1.5 hr	$383.00	1.5 hr	N/A	N/A
(q) Set-up Fee for room reservations	$50.00 ~~$25.00~~	hr	$68.00 ~~$34.00~~	hr	$75.00 ~~$38.00~~	hr
* Chandler Non-Profit Groups	Rate - 50%	hr	N/A	N/A	N/A	N/A

Miscellaneous Fees	Resident	Per	Non-Resident	Per
(r) Alcohol Permit	$14.00	ea	$19.00	ea
(s) Balloon Removal Fee	$50.00	event	$50.00	event
(t) Basic Birthday Party Packages (1 to 10 children)	$80.00	event	$108.00	event
(u) Birthday Party Packages, Nature Options (1 to 10 children)	$100.00	event	$130.00	event
(v) Birthday Party Packages, Sportacular Fun Options (1 to 10 children)	$130.00	event	$176.00	event
(w) Birthday Party Packages, Creative Delight, Outdoor Bounce, Main Event & Theme Options (1 to 10 children)	$155.00	event	$210.00	event
(x) Additional Child	$10.00	ea	$14.00	ea
(y) Birthday Party Add-ons (i.e., cake, pizza, drinks, etc.)	Cost of Goods + 50% markup = Retail Price			
(z) Merchandise	Cost of Goods + 50% markup = Retail Price			
(aa) Cake Decoration Kit	$6.00	ea	$6.00	ea
(bb) Body Composition Analyzer – 1X Assessment	$15.00	ea	$21.00	ea
(cc) Body Composition Analyzer – 4X Assessment	$45.00	ea	$61.00	ea

3.1.4 Recreation Fitness Passes

Daily Admission	Resident	Per	Non-Resident	Per
(a) Teen & Active Adult	$3.00	pp	$5.00	pp
(b) Adult	$4.00	pp	$6.00	pp
(c) Youth	$2.00	pp	$3.00	pp

Monthly Admission	Resident	Per	Non-Resident	Per
(d) Teen, Adult & Active Adult	$30.00	pp	$41.00	pp
(e) Youth	$25.00	pp	$34.00	pp
(f) 2 person	$45.00	ea	$61.00	ea
(g) Family (2 Adults & 4 Dependents)	$60.00	ea	$81.00	ea
(h) Additional Family Dependent	$5.00	pp	$7.00	pp
(I) 6 MONTH ADMISSION- TEEN	$113.00	PP	$152.00	PP
(J) 6 MONTH ADMISSION- ADULT	$150.00	PP	$203.00	PP
(K) 6 MONTH ADMISSION- ACTIVE ADULT	$113.00	PP	$152.00	PP
(L) 6 MONTH ADMISSION- YOUTH	$100.00	PP	$135.00	PP
(M) 6 MONTH ADMISSION- 2 PERSON	$250.00	PP	$337.50	PP
(N) 6 MONTH ADMISSION- FAMILY (2 ADULTS & 4 DEPENDENTS)	$300.00	PP	$405.00	PP
(O) 6 MONTH ADMISSION- ADDITIONAL FAMILY DEPENDENT	$25.00	PP	$34.00	PP

Annual Passes	Resident	Per	Non-Resident	Per
~~(i)~~ (P) Teen & Active Adult	$225.00	pp	$304.00	pp
~~(j)~~ (Q) Adult	$300.00	pp	$405.00	pp
~~(k)~~ (R) Youth	$200.00	pp	$270.00	pp
~~(l)~~ (S)2 person	$500.00	ea	$675.00	ea
~~(m)~~ (T) Family (2 Adults & 4 Dependents)	$600.00	ea	$810.00	ea
~~(n)~~ (U) Additional Family Dependent	$50.00	pp	$68.00	pp

Punch Passes (10 visits)	Resident	Per	Non-Resident	Per
~~(o)~~ (V) Teen & Active Adult	$27.00	ea	$37.00	ea
~~(p)~~ (W) Adult	$36.00	ea	$49.00	ea
~~(q)~~ (X) Youth	$18.00	ea	$25.00	ea

Childwatch	Resident	Per	Non-Resident	Per
~~(r)~~ (Y) Daily	$2.50	ea	$4.00	ea
~~(s)~~ (Z) Month	$20.00	ea	$27.00	ea
~~(t)~~ (AA) Additional Child - Monthly	$10.00	ea	$14.00	ea
~~(u)~~ (BB) Punch Pass - 20 visits	$40.00	ea	$54.00	ea

Corporate Rates	Resident	Per	Non-Resident	Per
~~(v)~~ (CC)Membership Fee, per person	$225.00	ea	$304.00	ea
~~(w)~~ (DD) Corporate Sponsorship	$750.00	yr	$1,013.00	yr

3.1.5 Special Events

Special Event Fees	Resident	Per	Non-Resident	Per	Commercial	Per
(a) Special Recreation Sites (i.e., Dr. AJ Chandler Park/East & West) [1,2]	$180.00	hr	$243.00	hr	$270.00	hr
(b) Downtown East Event Area (i.e., A.J. Chandler Park – Stage Commonwealth Ave, Arizona Place, and Dr. AJ Chandler Park East)[1,3]	$460.00	hr	$621.00	hr	$690.00	hr
(c) Dr. A.J. Chandler Park – Stage Plaza[1,2]	$280.00	hr	$378.00	hr	$420.00	hr
(d) Main Park Rental*	$1,500.00	day	$2,025.00	day	$2,250.00	day
(e) Festival Area*	$700.00	day	$945.00	day	$1,050.00	day
(f) Red Shed Theater*	$300.00	day	$405.00	day	$450.00	day
(g) Road Closure*	$500.00	day	$675.00	day	$750.00	day
(h) Tumbleweed Park Parking Field A, B or C* (see map)	$2,500.00	ea	$3,375.00	ea	$3,750.00	ea
(i) Paseo Vista Dog Park Rental	$20.00	hr	$27.00	hr	$30.00	hr
(j) Trash Can Rental	$20.00 ~~$17.00~~	ea	$27.00 ~~$23.00~~	ea	N/A	N/A
Special Event Fees	**Resident**	**Per**	**Non-Resident**	**Per**	**Commercial**	**Per**
(k) Restroom Staff	$27.00	hr	$37.00	hr	$41.00	hr
(l) Restroom Supply Reimbursement	$50.00	ea	$68.00	ea	N/A	N/A
(m) Special Event Permit Application Fee – 60 or more days in advance	$50.00	ea	$68.00	ea	N/A	N/A
(n) Special Event Permit Application Fee – less than 60 days in advance	$100.00	ea	$135.00	ea	N/A	N/A
(o) Showmobile/Portable Stage Fee	$325.00	event day	$439.00	event day	$488.00	event day
(p) Portable Bleachers*	$500.00	event day	$675.00	event day	N/A	N/A
(q) Loss of Public Use – Parking Spaces	$1.00	space	$2.00	space	$3.00	space
(r) Bike and Skate Park (Exclusive Use Rental)*	$70.00	hr	$95.00	hr	$105.00	hr
(s) Downtown Events Electrician Fee – Pre-Schedule Event Day - Onsite	$51.00	hr	$69.00	hr	$77.00	hr
(t) Facilities Maintenance Fee – On-call Standby	$45.00	hr	$61.00	hr	$68.00	hr

Special Event Fees	Resident	Per	Non-Resident	Per	Commercial	Per
(u) Run/Walk (i.e. 5K/10K) Park Race Route Fee	$100.00	route	$100.00	route	$150.00	route
(v) Parade of Lights Entry Fee	$25.00	entry	$25.00	entry	$25.00	entry
*Chandler Non-Profit Groups	Rate - 50%	hr/event day	N/A	N/A	N/A	N/A
[1] 20% off Event Hour's Rate for Business in Good Standing and Pay into the EMSD						
[2] Set Up/Tear Down Hours	$30.00	hr	$41.00	hr	$45.00	hr
[3] Set Up/Tear Down Hours	$50.00	hr	$68.00	hr	$75.00	hr

Event Vendor Booth Fees (Per Event)	Information	Retail Sales	Food & Beverage	Additional Space	Power
	$50.00	$75.00	$150.00	$50.00/100 sq ft	$30.00

Special Event Deposits	Resident	Per	Non-Resident	Per	Commercial	Per
(w) Cleaning Deposit: 500 participants or less	$250.00	ea	$338.00	ea	$375.00	ea
(x) Cleaning Deposit: 501 participants or more	$500.00	ea	$675.00	ea	$750.00	ea
(y) Showmobile/Portable Stage Deposit	$150.00	ea	$203.00	ea	$225.00	ea
(z) Canopy/Tent Deposit	$250.00	ea	$338.00	ea	$375.00	ea

3.1.6 Tennis Center

Court Rentals	Resident	Per	Non-Resident	Per
(a) Tennis Court – A.M., 1.5 hours	$3.00 ~~$2.50~~	pp	$4.50 ~~$4.00~~	pp
(b) Tennis Court – P.M., 1.5 hours (includes lights)	$4.00 ~~$3.50~~	pp	$5.50 ~~$5.00~~	pp
(c) Tennis Court - General Use A.M., 1.5 hours – Chandler Non-Profit/Schools	$4.50	court	$7.00	court
(d) Tennis Court - General Use P.M., 1.5 hours – Chandler Non-Profit/Schools (includes lights)	$7.50	court	$11.00	court
(e) Tennis Court - General Use A.M., 1.5 hours – Private/Commercial	$6.00	court	$9.00	court
(f) Tennis Court - General Use P.M., 1.5 hours – Private/Commercial (includes lights)	$9.00	court	$13.00	court
(g) Tennis Court - Tournaments A.M. Chandler Non-Profit/Schools	$4.50	match	$7.00	match
(h) Tennis Court - Tournaments P.M. Chandler Non-Profit/Schools (includes lights)	$7.50	match	$11.00	match
Court Rentals	Resident	Per	Non-Resident	Per
(i) Tennis Court - Tournaments A.M. Private/Commercial	$6.00	match	$9.00	match
(j) Tennis Court-Tournaments P.M. Private/Commercial (includes lights)	$9.00	match	$13.00	match
(k) Doubles - Prepay A.M. - 2 hrs	$13.50	court	$19.00	court
(l) Doubles - Prepay P.M. - 2 hrs (includes light fee)	$16.50	court	$23.00	court
(m) Singles - Prepay A.M. - 2 hrs	$6.50	court	$9.00	court
(n) Singles - Prepay P.M. - 2 hrs (includes light fee)	$9.00	court	$13.00	court

Other Rentals	Resident	Per	Non-Resident	Per
(o) Tennis Ball Machine – A.M., 30 minutes (includes court)	$6.50	ea	$9.00	ea
(p) Ball Cart Rental	$5.00	ea	$7.00	ea
(q) Tennis Ball Machine – P.M., 30 minutes (includes court and lights)	$9.00	ea	$12.00	ea
(r) After Hour Staff Fee	$25.00	hr	$34.00	hr
(s) Extended League Play Fee, 30 minutes	$2.00	ea	$3.00	ea
(t) Pro Ball Cart Rental	$2.00	ea	N/A	N/A
(u) Pro Court Rental – P.M., 30 minutes (includes lights)	$6.00	ea	N/A	N/A
(v) Pro Court Rental – P.M., 60 minutes (includes lights)	$10.00	ea	N/A	N/A
(w) Pro Court Rental – A.M., 60 minutes	$7.00	ea	N/A	N/A
(x) Pro Court Rental – A.M., 30 minutes	$4.00	ea	N/A	N/A

3.2 Recreation Division Registration Based Class, Program and Activity Fees: [Ch.§31-21.B]
The formulas presented below may include a factor rate, program supplies and costs, or staff costs. The factor rate is a multiplier that allows the standardization of the program fee over different instructors paid at different rates so that the program as a whole over the entire system meets its cost recovery target. The program supplies and costs include all elements of the program including such things as materials, field trips and transportation, food, contractual scorekeepers/officials. The staff costs include any part-time/temporary staff hired to coordinate, oversee, or maintain any element of the program.

3.2.1 Community Recreation Program (CRP) Classes: Devau – The formula for establishing the fee to participants for special interest classes, such as, arts/crafts, pom and cheer, dance, Spanish, photography, martial arts, ceramics, musical instrument skills, etc., is:

(Class Length + Prep Time) x # of days x 2.75 Factor Rate (includes wages) + $3 Admin = participant cost

3.2.2 CRP Classes: Contractual – The formula for establishing the fee to participants for special interest classes, such as, financial planning, computer skills, women's self-defense, public speaking, advanced robotics, etc., is:

Instructor Fee + 28% of Instructor Fee = participant cost

3.2.3 Specialized Fitness Classes – The formula for establishing the fee to participants for classes, such as, zumba, racketball, yoga, spin, pilates, tai chi, etc., is:

(Class Length + Prep Time) x # of days x 4.5 Factor Rate (includes wages) + $3 Admin = participant cost

3.2.4 Fitness Training – The formula for establishing the fee to participants for individual training is:

Instructor Fee = participant cost (City receives 50% of fee from instructor)

3.2.5 Personal Training – Individual
Participant Cost = 1.75 factor rate x instructor fee
(Individual Personal Training Session Fee)

Personal Training – Group (maximum of 2)
Participant Cost = 2.5 factor rate x instructor fee divided by 2
(Group Training Session paid per person)

Personal Training – 10 Session Package
Participant Cost = Individual Personal Training Session Fee x 9 sessions
(Pay for 9 and receive 1 session free)

3.2.6 Camp Challenge and Therapeutic Recreation Social Events (participants with disabilities) – The formula for establishing the fee is:

$$\frac{\text{Program Supplies and Costs + Staff Costs}}{\text{Minimum \# of Participants}} \times 15\% \text{ cost recovery} = \text{participant cost}$$

3.2.7 Camps, Clinics, Adult Sports, and Aquatics – The formula for establishing the fee to participants for classes, such as, building blocks, field trips, excursions, intersession and summer camps, sport clinics, adult leagues (i.e., softball, volleyball, etc.), aqua fit, aquatics certification classes plus appropriate Red Cross fee (if applicable), recreation swim teams, semi-private swim lessons, etc., is:

$$\frac{\text{Program Supplies and Costs + Staff Costs + Appropriate Red Cross Fee (if applicable)}}{\text{Minimum \# of Participants}} = \text{participant cost}$$

3.2.8 Programs and services that address specific user interest offered at fair market value. The formula for establishing the fee to participants for lessons, leagues, and tournaments such as cardio tennis, mixed doubles league, singles, and doubles tournaments, etc. is:

Fair Market Value = participant cost

3.2.9 Group Swim Lessons – The formula for establishing the fee is:

$$\frac{\text{Program Supplies and Costs + Staff Costs + Red Cross Learn to Swim fee}}{\text{Minimum \# of Participants}} \times 85\% \text{ cost recovery} = \text{participant cost}$$

3.2.10 Chandler Youth Sports Association (CYSA) – The formula for establishing the fee for the CYSA affiliates ball field light use is:

$$\text{Total Cost of Hours of Athletic Light usage during Primary Season} \times 50\% \text{ cost recovery} = \text{reimbursement to the City}$$

3.3 <u>Museum</u>

(a) Banner Museum Exhibit Rental .....$25.00 per rental
(b) Museum School Trunk Education Resource Rental.....$25.00 per rental

Sec. 4 Development Services

(Amd. in entirety Res. 4505)

4.1 Land Use and Zoning:

4.1.1 Administrative Design Review: [§35-1700]

(a) New construction and building additions that are greater than 10% of the existing building area $275.00
(b) Minor changes such as exterior modifications to existing buildings, façade renovations, new canopies, fixtures, color and/or material changes, new outdoor patios, and building additions that that are less than 10% increase in building area $115.00

4.1.2 General Plan Amendments: [§35-2504]

(a) Text amendment (regular) $785.00
(b) Map amendment (special) $785.00

4.1.3 Rezonings: [§35-2504]

(a) Zoning District Changes and Zoning Extensions $785.00
(b) Plus, per acre $40.00
(c) Historic Preservation Neighborhood Application $100.00
(d) Resident/Home addition of Historic Preservation Overlay Application $50.00

4.1.4 Preliminary Development Plans: [§35-2504] $315.00

4.1.5 Area Plans [§35-2504] $785.00

4.1.6 Use Permits: [§35-2504]

(a) Single-family $315.00
(b) All others as detailed in Chandler City Code Chapter 35-2100 ..... $475.00
(c) Use permit extension ..... Same as Original

4.1.7 Variances: [§35-2504]

(a) Single-family $165.00
(b) All others $315.00

4.1.8 Continuances: [§35-2504]

(a) Applicant's request $165.00

4.1.9 Subdivision Planning Fees: [§48-7.1]

(a) Preliminary plat $785.00
(b) Plus, per lot $7.85
(c) Final plat $785.00
(d) Plus, per lot $7.85

4.1.10 Minor Land Divisions application fee [§48-13.6] $315.00

4.1.11 Miscellaneous Planning-Related Fees [§35-2504]:

(a) Administrative use permits [§35-305] $120.00
(b) Zoning verification letters $275.00

4.2 <u>Sign Permit Application [§39-7.4]</u>

Two and five tenths percent (2.5%) of the value of the sign plus twenty-five cents ($0.25) per square foot. If work is started before a permit has been issued, the fees specified above shall be doubled.

4.3 Banner Application Fee [§32-6] (Res. 3482).....$100.00

4.4 Site Development Fees

4.4.1 Site Development Review Fee

(a) Major (new development/redevelopment) $2,395.00
(b) Plus, per acre $105.00
(c) Minor (modification to existing development) $385.00

4.4.2 Tenant Improvement Plan Review $50.00/hr

4.4.3 Zoning Clearance.....$120.00

4.5 <u>Civil Plan Review Fees [§47-6 & 7]:</u>

Civil Plan review fees are based upon the number of sheets submitted for review and approval. Each type of improvement plan (i.e., grading and drainage, water, sewer, right-of-way improvements) may be submitted separately or in combination.

Improvement Plans (including Grading and Drainage)..... $440.00 per sheet
Fourth and subsequent Review Fees..... $150.00 per sheet

4.5.1 Fees for review of the plan revisions which are initiated by the developer or required due to an error or oversight of the developer after plans have been approved by the City Engineer, shall be charged at the flat rate of $110.00 for each revision or set of revisions reviewed.

4.5.2 <u>Civil Engineering Subdivision Review Fees [§48-7]</u>

(a) Preliminary Plat $785.00
(b) Plus, per lot $7.85
(c) Final Plat $850.00
(d) Plus, per lot $8.50
(e) Minor land division.....$340.00
(f) Plat recording.....Pursuant to Maricopa County Recorder Fee Schedule
(g) CC&R recording .....Pursuant to Maricopa County Recorder Fee Schedule

4.6 <u>Building Safety [§29-1] (Res. 4703)</u>

Building permit fees for new construction are based upon the most current building valuation data published by the International Code Council accessible at:
http://www.iccsafe.org/codes-tech-support/codes/code-development-process/building-valuation-data/

Construction valuations for alterations shall be based on all construction costs involved and shall be approved by the Building Official.

4.6.1 Building Permit Fees

Total Valuation	Fee
$1.00 to $500	$50.00
$501 to $2,000	$50.00 for the first $500 plus $1.20 for each additional $100 or fraction thereof, to and including $2,000
$2,001 to $25,000	$68.00 for the first $2,000 plus $12.50 for each additional $1,000 or fraction thereof, to and including $25,000
$25,001 to $50,000	$355.50 for the first $25,000 plus $9.00 for each additional $1,000 or fraction thereof, to and including $50,000
$50,001 to $100,000	$580.50 for the first $50,000 plus $6.25 for each additional $1,000 or fraction thereof, to and including $100,000
$100,001 to $500,000	$893.00 for the first $100,000 plus $5.00 for each additional $1,000 or fraction thereof, to and including $500,000
$500,001 to $1,000,000	$2,893.00 for the first $500,000 plus $4.25 for each additional $1,000 or fraction thereof, to and including $1,000,000
$1,000,001 and up	$5,018.00 for the first $1,000,000 plus $2.75 for each additional $1,000 or fraction thereof

4.6.2 Building Plan Review Fees

(a) Building plan review fee ..... 65% of building permit fee
(b) Additional revisions to approved plans .....$60.00/hour, 1 hour minimum
(c) Expedited
(at Building Official's discretion) (Res. 4703) .....Twice the normal plan review fee
(d) Deferred submittal items ..... $60.00/hour, 1 hour minimum
(e) Renew action on expired application.....New building plan review fee
(f) Sign permit building plan review..... $60.00/hour, 1 hour minimum
(g) Plan review services without a specific fee .....$60.00/hour, 1 hour minimum

4.6.3 Inspection Fees

(a) Inspection outside normal business hours.....$75.00/hour, 2 hour minimum
(b) Re-inspection fee..... $60.00/hour, 1 hour minimum
(c) Inspections without a specific fee ..... $60.00/hour, 1 hour minimum
(d) Sign permit inspection..... $60.00/hour, 1 hour minimum

4.6.4 Miscellaneous Fees:

(a) Demolition permit, commercial/residential $100.00
(b) Electrical service 400 amps or less.....$100.00
(c) Archival fee.....$1.00 per page
(d) Residential pool permit fee.....$110.00
(e) Residential spa permit fee..... $55.00
(f) Annual Facility Permit (trust account required).....
..... $1,000.00 registration plus $60.00 per hour on-site review/inspection
(g) Certificate of Occupancy not associated with a Building Permit.....$100.00
(h) Foundation Only Permit .....25% of calculated building permit fee
(i) Permit Reinstatement (within one-year of expiration) .....50% of current permit fee

(j) Administration Buy-in (per agreement).....$100.00
(k) Residential solar photovoltaic system permit fee (Res. 4703).....$150.00
(l) Residential solar water heating system permit fee (Res. 4703).....$150.00
(m) Residential ramada/accessory storage building permit fee.....$150.00
(n) Administrative fee for permits from approved standard plans $75.00
(o) Temporary Certificate of Occupancy ..... $100.00 for first 30 days,
..... $500.00 for each 30 day renewal for a maximum of 180 days
(p) Appeal to the Building Official $180.00
(q) Miscellaneous minor residential work.....
(1-6 gas outlets, 1-2 branch electrical circuits 1-6 plbg. openings, etc.) $100.00
(r) Permit issuance when no other fees apply.....$60.00

4.7 TRANSPORTATION ENGINEERING FEES

4.7.1 TRAFFIC CONTROL & LANE RESTRICTION PERMIT FEE (NON-REFUNDABLE)

.....$315.00

A TEMPORARY TRAFFIC CONTROL PERMIT AND ASSOCIATED PERMIT ADMINISTRATION FEE IS REQUIRED FOR PRIVATE DEVELOPMENT INITIATED TEMPORARY TRAFFIC CONTROL PROJECTS. A TEMPORARY TRAFFIC CONTROL PERMIT SHALL BE ISSUED FOR CITY OF CHANDLER CAPITAL PROJECTS, BUT A PERMIT ADMINISTRATION FEE SHALL NOT BE REQUIRED. THE PERMIT FEE IS COMPRISED OF AN HOURLY RATE OF $45.00 PER HOUR AND IS INTENDED TO COVER A MAXIMUM OF TWO (2) HOURS FOR PLAN REVIEW AND A MAXIMUM OF FIVE (5) HOURS FOR IN-FIELD INSPECTIONS.

4.7.2 DEPOSIT FEE FOR AUTHORIZED TEMPORARY TRAFFIC CONTROL PERMITS

DEPOSIT AMOUNT IS FULLY REFUNDABLE IF ALL PERMITTED WORK IS COMPLETED PER THE SPECIFICATIONS AND TIMEFRAME AUTHORIZED BY THE ISSUED TEMPORARY TRAFFIC CONTROL PERMIT. FOR EVERY CALENDAR DAY PAST THE TEMPORARY TRAFFIC CONTROL PERMIT EXPIRATION DATE, NOT TO EXCEED TWENTY (20) CALENDAR DAYS, DURING WHICH TEMPORARY BARRICADES AND OTHER EQUIPMENT AUTHORIZED BY THE PERMIT REMAIN IN THE PUBLIC RIGHT-OF-WAY, THE TOTAL REFUNDABLE DEPOSIT AMOUNT SHALL BE REDUCED BY FIVE (5) PERCENT PER DAY OF THE SUBMITTED DEPOSIT AMOUNT. THE REFUNDABLE DEPOSIT AMOUNT SHALL BE ZERO ($0.00) DOLLARS AFTER THE 20TH CALENDAR DAY.

DEPOSIT AMOUNT	PROJECT VALUATION
$0 TO $100,000	1% OF PROJECT VALUATION WITH A MINIMUM DEPOSIT OF $1,000
$100,000 TO $300,000	2% OF PROJECT VALUATION
$300,000 TO $500,000	3% OF PROJECT VALUATION
$500,000 TO $750,000	4% OF PROJECT VALUATION
$750,000 TO $1,000,000	5% OF PROJECT VALUATION
$1,000,000 AND GREATER	6% OF PROJECT VALUATION NOT TO EXCEED $100,000

Sec. 5 Neighborhood Resources

5.1 <u>Neighborhood Resources Non-Compliance/Re-inspection fee [Ch. §30-6.8]</u>

(a) Abatement Administrative Fee [Ch §26.10] (Res. 4703)..... 25% of contractor cost

(b) Demolition Abatement Administrative Fee..... 25% of demolition contractor cost

Sec. 6 Public Safety

Public Safety- Fire

6.1 Fire Department, (Chapters 27 & 28): Adopts International Fire Code

6.1.1 Hazardous Materials Permit Fee [§28-6] (Res. 3312)
(a) More than 550 pounds of materials on site, annual fee $300.00
(b) HAZMAT materials management plan required; annual fee $500.00

6.1.2 Assembly Permit (100 or more occupants) [§28-6] ..... No Charge

6.1.3 Cutting & Welding Permit [§28-6]..... No Charge

6.1.4 High-Piled Combustible Storage Permit [§28-6]
(a) Buildings 5,000 or Less Sq. Ft..... No Charge
(b) Buildings 5,001 or More Sq. Ft..... No Charge

6.1.5 Firework Display Permit (per event) [§28-6] $250.00

6.1.6 Carnival & Fair Permit
(Amusement Events, Trade Shows, Vehicle Displays) [§28-6]..... $125.00

6.1.7 Motor Vehicle Fuel-Dispensing Stations Permit [§28-6] (one-time) $105.00

6.1.8 Temporary Membrane Structures, Tents [§28-6]
(a) Tent or Canopy 801 or More Sq. Ft. (Res. 4703) $170.00
(b) Each Additional Tent or Canopy 801 or More Sq. Ft. (Res. 4703) $40.00
(c) Tent or canopy less than 801 Sq. Ft. (Res. 4703) ..... No Charge

6.1.9 Open Burn Permit [§28-6 & 7] (Res. 4703)
(a) Open flame, or grease laden vapor cooking in accordance with 28-6 ..... $85.00
(b) Open Flame cooking devices more than 600 sq. in. cooking surface
or more than 5 gal. LP gas (20lbs) (No charge if less than that amount) $85.00

6.1.10 Fire Protection Equipment Contractor's License [§28-6]..... $85.00

6.1.11 All Other Permits Not Listed, but Included in the Fire Code [§28-6]..... $40.00

6.1.12 Fire User Fee [Ch.27-4] [§27-3 & 4] (Res. 3482, Res. 4119, Res. 4703)
Charges for Fire response where tactical actions are initiated or Emergency Medical Response where medical evaluation is initiated:
(a) 4-person apparatus response: ..... $1,400 per response apparatus plus the administrative and hourly personnel charges set forth below;
(b) 2-person apparatus response: ..... $700 per response apparatus plus the administrative and hourly personnel charges set forth below;
(c) 1-person apparatus response: ..... $350 per response apparatus plus the administrative and hourly personnel charges set forth below;
(d) Additional hourly* personnel charge:
i. No charge for first hour of response;
ii. $31 per firefighter for hours 2 through 24
iii. $45 per hour per firefighter for hours 25 and beyond

*The additional hourly personnel charges will be billed in 15 minutes increments and measured from the time that fire apparatus/personnel leaves the fire station for a response to the time that fire apparatus/personnel arrive back at the fire station after the response.

(e) Emergency Medical Stand-by:
  i. Per Firefighter (per hour) $46.00
  ii. Equipment Charge (per event) $175.00
(f) Fire Prevention Stand-by per person (per hour) $52.00
(g) Administrative charge ..... 10% of the charges assessed as outlined in (a) – (f)

6.1.13 <u>Arson Restitution & Investigation Fees (Pursuant to A.R.S. § 13-1709) (Res. 4703)</u>

(a) Emergency response: The emergency response cost to the City in responding to a fire determined to be caused by arson is the same as the charges set forth in Section 6.1.15.
(b) Investigation: The cost to the City for investigating a fire caused by arson is:
  i. $42.00 per fire investigative hour (non-overtime)
  ii. $67.00 per fire investigative hour (overtime)
  iii. Actual cost of materials and supplies utilized during the investigation

6.1.14 <u>Training Center Room Fees [Ch.§27-8]</u>

(a) Classroom
  i. Small Room (under 60 seats)
    Business Hours Rate ..... $40/hr (2-hr minimum)
    Evening/Weekend Rate ..... $70/hr (2-hr minimum)
  ii. Large Room (over 60 seats)
    Business Hours Rate ..... $65/hr (2-hr minimum)
    Evening/Weekend Rate ..... $115/hr (2-hr minimum)
(b) Auditorium (250 seats)
    Business Hours Rate ..... $130/hr (2-hr minimum)
    Evening/Weekend Rate ..... $220/hr (2-hr minimum)

6.1.15 <u>Other Training Center Fees [Ch.§27-8]</u>

(a) Chandler Safety Officer $75/hr
(b) Public Safety Training Center Liaison $75/hr
(c) Chandler Facility Prop Technician $50/hr
(d) Fire Instructor ..... $75/hr (4-hr minimum)
(e) Skills Training Area ..... $50/hr (2-hr minimum)
(f) Fees for Material/Equipment/Props Used for Training:
  i. Liquid Smoke ..... Actual Costs
  ii. Propane ..... Actual Costs
  iii. Sheeting ..... Actual Costs
  iv. Class A Burn Building[1] ..... $100/hr (4-hr minimum)
  v. Burn Tower (propane)[1] ..... $75/hr (4-hr minimum)
  vi. Confined Space Prop/TRT ..... $35/hr (4-hr minimum)
  vii. Outside Burn Prop (propane)[1] ..... $35/hr (4-hr minimum)
  viii. Flashover Chamber (must provide own instructors)[1] ..... $50/hr (4-hr minimum)
  ix. Forcible Entry Prop (plus cost of replacement lock) ..... $35/hr (4-hr minimum)
  x. Vertical Ventilation Prop ..... $50/hr (4-hr minimum)
    [(1)] Compliance with NFPA 1403 required. Chandler Safety Officer may be required
(g) Hydrant Connection Fee ..... $100 minimum
(h) Janitorial Charge $100.00
(i) Fire Recruit Academy ..... $4,500 per recruit

(j) Paramedic Program Student Registration.....$6,000 per student
(k) Disposal Fee $50.00

6.1.16 Re-inspection after initial post-notice inspection for same violation [§28-4]~~..... $40.00~~

INSPECTION	FEE
INITIAL INSPECTION	$0.00
REINSPECTION #1	$100.00 OR $0.00 IF VIOLATIONS CORRECTED
REINSPECTION #2	$150.00 OR $0.00 IF VIOLATIONS CORRECTED
REINSPECTION #3 – AND EACH ADDITIONAL REINSPECTION THEREAFTER	$200.00 OR $0.00 IF VIOLATIONS CORRECTED

6.2 Police Department, (Chapters 24 & 30): (Res. 4035, Res. 4535, Res. 4703)

6.2.1 Second or subsequent response to disturbances [§30-7.3] (Res. 3482) ..... Actual Cost

6.2.2 Alarm User's Permit [§24-4.2]
(a) Application Fee $10.00
(b) Annual Renewal Fee..... $10.00
(c) Administrative Penalty for connecting without a permit [§24-8.2] (Res. 3482) $10.00

6.2.3 Alarm Late Filing Fee [§24-9] $25.00

6.2.4 Alarm Permit Reinstatement Fee [§24-5.7] $25.00

6.2.5 Duplicate Permit Copy Fee [§24-9.3] (Res. 3482) $10.00

6.2.6 Fingerprinting..... $10.00

6.2.7 <u>Extra Duty Fee (Res. 4535, Res. 4703)</u>
(a) Rate per hour per officer/sergeant in non-supervisory capacity
(topped out officer rate at time and a half; vendor pays directly to officer/sergeant)
(b) Rate per hour per sergeant in supervisory capacity
(topped out sergeant rate at time and a half; vendor pays directly to sergeant)
(c) Rate per hour for Workers Compensation coverage (vendor pays directly to City)
(effective October 1, 2014) $2.50
(d) Rate per hour for Vehicle usage (vendor pays directly to City) $6.00

6.2.8 <u>Vehicle Impound Fee</u>
(Pursuant to A.R.S §28-3513 and Police Administrative Policy).....$150.00

6.2.9 Pawnbroker Report Fee [§15-2]..... $3.00/per report

Sec. 7 Public Works & Utilities

7.1 Public Works Encroachment and Inspection, (Chapter 46):

7.1.1 Encroachment Permit

(a) Class 1 encroachment permit application base fee [§46-3]..... $97.00
(b) Class 2 encroachment permit application base fee [§46-4]..... $97.00
(c) Class 3 encroachment permit application base fee [§46-5] (Res. 3336)..... $97.00
(d) Class 4 encroachment permit application base fee [§46-6] (Res. 3336)..... $97.00
(e) Class 5 encroachment permit application base fee [§46-7] (Res. 3336)..... $97.00
(f) Class 6 encroachment permit application base fee [§46-8] (Res. 3336)..... $97.00
(g) Class 7 encroachment permit application fee [§46-9] (Res. 3336)..... $97.00
(h) Class 8 encroachment permit application fee [§46-10] (Res. 3336)..... $97.00
(i) Class 9 encroachment permit application fee [§46-11] (Res. 4504)..... $97.00
(j) Encroachment Permit ROW use fee (Res. 4430, Res. 4703)..... $2.27 per linear foot (for calendar year 2019)*

* Pursuant to the approved agreements, the linear foot fee shall be adjusted annually, without further City Council action, on January 1st of each year by an amount equal to the percentage increase, if any, in the Consumer Price Index (CPI-U, Western Region - All items) over the previous 12-month calendar period. In no event shall the rate be increased more than three and eight-tenths (3.8%) per cent over any twelve (12) month period between anniversary dates, unless otherwise approved by City Council. Should the annual change in the CPI-U indicate a decline, the fee shall not diminish.

7.1.2 Cable Television License application base fee [§46-8.8E].....$10,000.00

7.1.3 License applications base fee for all Chapter 46 licenses except cable (Res. 3336)....$3,000.00

7.1.4 Penalty Assessment for failure to obtain encroachment or street cut permit $1,000.00

7.1.5 Pavement Damage Restoration Fee (Res. 3692)

(a) Within one year of construction of new streets, renovation, or reconstruction of a street (as defined by City Code):
  i. For Each Cut:
    a. For 5 sq. yds. or less.....$330.00 per sq. yd. of cut
    b. For larger than 5, to 100 sq. yds. ..... $1,650.00 plus $18.00 per sq. yd. of cut over 5 sq. yds.
    c. For larger than 100 sq. yds. .....$3,360.00 plus $14.00 per sq. yd. of cut over 100 sq. yds.
  ii. For cuts within the first year, the fee is in addition to the requirement for mill and overlay/inlay in accordance with City Code §46-2.7.
  iii. Or for cuts within the first year, the applicant may choose to reconstruct the street in accordance with City Code §46-2.7 in lieu of paying the above fee.

(b) From one to two years after construction of new streets, renovation, or reconstruction of a street (as defined in the City Code):
  i. For Each Cut:
    a. For 5 sq. yds. or less.....$330.00 per sq. yd. of cut
    b. For larger than 5, to 100 sq. yds. ..... $1,650.00 plus $18.00 per sq. yd. of cut over 5 sq. yds.
    c. For larger than 100 sq. yds. .....$3,360.00 plus $14.00 per sq. yd. of cut over 100 sq. yds.

  ii. For cuts from one to two years after construction of new streets, renovation or

reconstruction of a street, the applicant may choose to perform a mill and overlay/inlay, in accordance with City Code §46-2.7 in lieu of paying the above fee.

(c) From two to four years after construction of new streets or renovation or reconstruction of a street (as defined by City Code):
   i. For Each Cut:
      a. For 5 sq. yds. or less.....$230.00 per sq. yd. of cut
      b. For larger than 5, to 100 sq. yd. ..... $1,150.00 plus $13.00 per sq. yd. of cut over 5 sq. yds.
      c. For larger than 100 sq. yds. .....$2,385.00 plus $10.00 per sq. yd. of cut over 100 sq. yds.

(d) From four to six years after construction of new streets or renovation or reconstruction of a street (as defined by City Code):
   i. For Each Cut:
      a. For 5 sq. yds. or less.....$130.00 per sq. yd. of cut
      b. For Larger than 5, to 100 sq. yds. ..... $650.00 plus $8.00 per sq. yd. of cut over 5 sq. yds.
      c. For larger than 100 sq. yds. .....$1,410.00 plus $5.00 per sq. yd. of cut over 100 sq. yds.

(e) Within one year prior to a City street reconstruction project approved in the capital program of the City's Annual Budget ..... No Charge

(f) For cuts from two to six years after construction of new streets, renovation, or reconstruction
of a street, the applicant may choose to perform a mill and overlay/inlay, in accordance with City Code §46-2.7 in lieu of paying the above fee.

(g) The minimum fee shall be based on one square yard. If a pavement cut is so extensive, or the cuts in one area are so numerous that the permittee prefers to perform a renovation (major rehabilitation) of the street in accordance with the City Engineer's requirements, for the full width of any impacted lane and the full length of any cuts plus fifty feet in both directions from the area of the cut on arterial streets and twenty-five in both directions from the area of the cut on collector streets, the permittee may choose to do such renovation in lieu of the Pavement Restoration Fee and such reconstruction shall satisfy the fee requirement. Provided, however, this does not apply to pavement cuts in streets within two years of construction, renovation, or reconstruction. During the first two years, those who desire to perform reconstruction in lieu of paying the pavement restoration fee will be required to reconstruct the street to the satisfaction of the City Engineer. Those companies exempt from the Pavement Restoration Fee shall perform the required repairs and restoration in accordance with City Code §46-2.7 and their contracts with the City unless their written application to pay the established fee in lieu of such restoration is granted by the City Engineer.

(h) For pavement cuts or potholes less than two square feet, no fee will be charged, or for companies with license and franchise agreements that require street reconstruction no reconstruction will be required, provided the pavement cut or pothole meets the spacing requirements shown on Standard Detail No. C-111.

(i) If a pothole cut is done in advance of construction that will remove that portion of the pavement within a reasonable time as specified by the City Engineer, no fee will be charged.

(j) The definitions set forth in Section 46-2.7 are applicable to the provisions herein.

(k) This Pavement Restoration Fee shall not be charged to nor paid by the City Street Division or the City Traffic Engineering Division.

7.1.6 <u>Small Wireless Facility §46-10.3 (Pursuant to A.R.S. §9-592(L), §9-592(D)(4), §9-595(C) and §9-595(D))</u>

(a) Application Fee
- i. New/Replacement Pole $750.00
- ii. Pole exceeding 50ft in height $1,000.00
- iii. Consolidated Application Fee, Existing Pole, Sites 1-5 ..... $100.00
- iv. Consolidated Application Fee, Existing Pole, Sites 6-25 ..... $50.00

(b) Annual Right-of-Way Use Fee $50.00
(for each facility in the City's right-of-way or utility easements)

(c) Annual Right-of-Way Use Fee, Pole exceeding 50ft in height $450.00

(d) Annual City Pole Use Fee $50.00
(for each facility installed on a City-owned pole or on a City owned wireless support structure in the City's right-of-way or utility easements)

7.1.7 <u>Application for disposition of roadway or easement [§47-16.2]</u>

(a) ROW appraisal fee (deposit of $200.00 required) ..... Actual Cost
(b) ROW Vacation Application Fee $1,000.00
(c) Extinguishment of easements appraisal fee (deposit of $200.00 required) ..... Actual Cost
(d) Extinguishment of Easements Application Fee $500.00

7.1.8 Fire Hydrant Meter Deposit [§52-5] (Res. 4703) ..... ~~($1,450)~~ $3,100.00

7.1.9 Reimbursement Agreement Transaction fee [Ch. 51] $100.00

7.1.10 Median & Street Light Construction Buy-In Assessment [§47-12 & 47-15] (Res. 3482)

½ Front Foot	Per foot
(a) Median construction	$11.00 LF
(b) Streetlighting in median	$11.00 LF
(c) Landscaping in median	$1.80 SF
(d) Streetlighting behind curb	$9.00 LF

7.1.11 Water Service Buy-In Assessment [§52-26] (Res. 3482)

	6"	8"	10"	12"	16"
(a) Full front foot	24.00	33.00	38.00	43.00	66.00
(b) ½ front foot	12.00	16.50	19.00	21.50	33.00

7.1.12 Reclaimed Water Buy-In Assessment [§53-12] (Res. 3482)

	12"
Full front foot	37.00
½ front foot	18.50

7.1.13 Sewer Service Buy-In Assessment [§51-20] (Res. 3482)

Full Front Foot	8"	10"	12"	15"
(a) 0 – 10' depth	25.00	31.00	35.00	43.00
(b) 10 – 18' depth	43.00	48.00	52.00	61.00
(c) *Over 18'	49.00	53.00	54.00	63.00

1/2 Front Foot	8"	10"	12"	15"
(d) 0 – 10' depth	12.50	15.50	17.50	21.50
(e) 10 – 18'	21.50	24.00	26.00	30.50
(f) *Over 18'	24.50	26.50	27.00	31.50

*(add $2.50 per full front foot for each additional foot in depth)

7.1.14 Inspection and Testing Fees [§47-7.2] (Res. 3336, Res. 3482, Res. 4505)

Pavement	Unit	Fee/unit without testing
(a) Paving Public Right of Way/Private Streets & Drives	SY	0.36
(b) Parking Areas	SY	0.10
(c) Overlay (all)	SY	0.12
(d) Alley Surface	SY	0.36
(e) Street Sign Bases [Ch. 48-12.7]	EA	10.00
(f) Street Sign (City)	EA	80.00
(g) Mill & Overlay	SY	0.25

Concrete	Unit	Fee/unit without testing
(h) Driveway or alley entrance	EA	41.17
(i) Valley Gutter	LF	0.36
(j) Apron	EA	10.98
(k) Curb & gutter	LF	0.19
(l) Sidewalk	SF	0.07
(m) Catch Basin/Scupper	EA	41.17
(n) Sidewalk Ramp	EA	82.34

Water	Unit	Fee/unit without testing
(o) Water Pipe (4" or larger)	LF	0.82
(p) Water Services	LF	0.55
(q) Pavement Cut	SY	23.87
(r) Tapping Sleeve & Valve (non-fire or fire line)	EA	82.34
(s) Landscape Irrigation System with Backflow Prevention Devices	EA	82.34
(t) Fire Line with and without backflow prevention devices	LF	0.82

Reclaimed Water	Unit	Fee/unit without testing
(u) Reclaimed Water (4" or larger)	LF	0.82
(v) Reclaimed Water Service	LF	0.48
(w) Pavement Cut	SY	23.87
(x) Tapping Sleeve and Valve	EA	82.34

Sewer	Unit	Fee/unit without testing
(y) Sewer pipe (8" or larger)	LF	1.10
(z) Sewer service	LF	0.82
(aa) Manhole	EA	82.34
(bb) Pavement cut	SY	23.87
(cc) Clean out/drop connection	EA	42.54

Drainage	Unit	Fee/unit without testing
(dd) Retention Basin (Grading)	Acre	68.62
(ee) Irrigation Pipe (SRP, RWCD, Private)	LF	1.07
(ff) Stormwater Pipe (including Box Culverts)	LF	1.16
(gg) Headwalls	EA	42.54
(hh) Pavement Cut	SY	23.87
(ii) Drywells	EA	76.85
(jj) Stormwater Retention Pipe	LF	1.16

Utilities [Ch §47-7.2]	Unit	Fee/unit without testing
(kk) Utility trenching in ROW/Easement	LF	0.22
(ll) Street Light Pole (public)	EA	41.17
(mm) Repealed by Ord. 4104 adopted 10/30/08		
(nn) Repealed by Ord. 4104 adopted 10/30/08		
(oo) Borings on a local street	LF	0.14
(pp) Borings on an Arterial or collector street	LF	0.21
(qq) Pavement cut	SY	23.87
(rr) Service Drops	EA	20.59
(ss) Offsite After-hours inspection fee	HR	97.00

Permits [Ch §47-7.2]	Unit	Fee/unit without testing
(tt) Permit application fee	EA	97.00
(uu) As Built Approval fee	SHEET	13.72
(vv) Blanket Permits	EA	450.00
(ww) New Construction Pavement Preservative Seal Coat Permit	YD	0.90

7.2 Solid Waste Services, (Chapter 44):

7.2.1 Monthly Solid Waste Disposal Fee $19.86

(a) A monthly disposal fee applies to all covered residences receiving basic solid waste services as set forth in Chapter 44 of the City Code. The City will bill the monthly disposal fee on the water account serving each covered residence. When the owner or occupant of a covered residence does not have an active water account to bill, a utility billing account will be established. A security deposit, as specified in section 50-3 of the City Code, shall be required from owners or occupants of covered residences without an active water account.

(b) Additional monthly disposal fee applies to Alley solid waste customers..... $1.61

7.2.2 Cost of Solid Waste Containers $148.00

The initial cost of providing refuse containers and recycling containers, including the cost of assembling such containers, for newly constructed covered residences, and shall be paid by the person applying for the initial building permit for each new covered residence at the same time that the fees for the residential building permit are paid. When property with a covered residence located thereon is annexed into the City, the owner of such property shall pay the initial cost to the City of providing such property with a refuse and a recycling container.

7.2.3 Additional and Replacement Container Cost

(a) Additional curbside refuse container (Res. 4703 & 5751)..... $75.00

(b) Replacement of a damaged curbside refuse container or recycling container, where the damage was caused by the resident (Res. 4703 & 5751)..... $75.00

(c) Non-damaged container replacement with refurbished container..... $30.00

(d) Rescheduling container repair/replacement when container is not set out (Res. 4703)..... $26.00

(e) Additional recycling container (Res. 5751) $75.00

(f) Additional alley refuse container (Res. 5751)..... $430.00

(g) Replacement of a damaged alley refuse container where the damage was caused by the resident (Res. 5751)..... $430.00

7.2.4 Additional Monthly Refuse Container Collection Fees

(a) Curbside Refuse Container (Res. 4703) $10.00
This monthly collection fee is in addition to the fee for basic solid waste services set forth in Section 50-15, Code of the City of Chandler, and shall apply to each additional refuse container provided pursuant to subsection 7.2.2 (a).

(b) Alley Refuse Container..... $15.00
This monthly collection fee is in addition to the fee for basic solid waste services set forth in Section 50-15, Code of the City of Chandler, and shall apply to each additional refuse container provided pursuant to subsection 7.2.2 (d).

7.2.5 Special Collection Fees

(a) Fee for one-time special curbside refuse container collection requested by an owner or occupant of a covered residence..... $18.50

(b) Fee for one-time special alley refuse container collection requested by an owner or occupant of a covered residence..... $35.00

7.2.6 Bulk Material Collection Fees

(a) Bulk materials collected for disposal (Up to 4 per calendar year in combination with no charge visits to the RSWCC) ..... No Charge

(b) Bulk materials collected for recycling ..... No Charge

(c) Additional bulk materials collected per collection event $35.00

(d) Freon recovery (Res. 4703) $15.00

7.2.7 Commercial Refuse Hauler Permit

(a) Annual application fee (per applicant) $300.00

(b) Per vehicle annual fee $1,000.00

7.2.8 Recycling Solid Waste Collection Center Fees [§44-7.2A] (Res. 4703 & 5751)

(a) Per visit fee - first 400 lbs. of materials (Up to 4 per calendar year in combination with no charge Bulk Collections)... ..... No Charge
(Excluding no charge RSWCC accepted recyclables)

(b) Per visit fee - first 400 lbs. of materials (after free visits identified above) $10.00
(Excluding no charge RSWCC accepted recyclables)

(c) Per ton fee for weight above the first 400 lbs. covered above (prorated in 20lbs. increments):

i. All debris excluding RSWCC recyclables $50.00

(d) Freon recovery $15.00

7.2.9 Multi-family (non-residential) disposal fee (per load) [§44-7.2B] (Res. 4703) $20.00

7.2.10 City Services (per ton) $50.00

Resolutions

Resolution No. 3175 – 12/16/99 RE-ADOPTING THE FEE SCHEDULE IN CONJUNCTION WITH THE REVISIONS TO THE CITY CODE

Resolution No. 3204 – 03/23/00 AMENDING THE CITY FEE SCHEDULE REGARDING AIRPORT FEES

Resolution No. 3312 – 08/10/00 AMENDING THE CHANDLER CITY FEE SCHEDULE REGARDING HAZARDOUS MATERIAL PERMIT FEES

Resolution No. 3336 – 11/16/00 AMENDING THE FEE SCHEDULE REGARDING CERTAIN PUBLIC WORKS PENALTIES, PERMIT, INSPECTION AND PROCESSING FEES

Resolution No. 3239 – 5/10/01 AMENDING THE CITY FEE SCHEDULE REGARDING AIRPORT FEES TO ESTABLISH FEES AND FEE ADJUSTMENT CRITERIA FOR THROUGH THE FENCE ACCESS

Resolution No. 3401 – 6/14/01 AMENDING THE CITY FEE SCHEDULE REGARDING AIRPORT GROUND LEASE RATES

Resolution No. 3372 – 12/13/01 AMENDING THE CITY FEE SCHEDULE REGARDING PAVEMENT RESTORATION FEES

Resolution No. 3482 – 3/14/02 AMENDING THE CITY FEE SCHEDULE REVISING CERTAIN MANAGEMENT SERVICES, FIRE, AIRPORT, PARKS/RECREATION, PLANNING/DEVELOPMENT, POLICE AND PUBLIC WORKS FEES

Resolution No. 3630 – 5/08/03 AMENDING THE CITY FEE SCHEDULE REVISING CERTAIN MANAGEMENT SERVICES, AIRPORT, REFUSE, PLANNING/DEVELOPMENT, POLICE AND PUBLIC WORKS FEES

Resolution No. 3692 – 11/06/03 AMENDING THE CITY FEE SCHEDULE REVISING PAVEMENT RESTORATION FEES

Resolution No. 3793 – 10/28/04 AMENDING CITY FEE SCHEDULE REVISING AIRPORT FEES

Ordinance No. 3689 – 6/23/05 AMENDING CITY FEE SCHEDULE DELETING REFUSE AND RECYCLING FEES, SECTION 4, AND INCORPORATING THEM INTO CITY CODE CHAPTER 44

Resolution No. 3913 – 11/17/05 AMENDING CITY FEE SCHEDULE REVISING AIRPORT FEES AND ADDING SECTION 2.10 (effective 1/1/2006)

Resolution No. 4035 – 1/11/2007 AMENDING CITY FEE SCHEDULE REVISING MANAGEMENT SERVICES, AIRPORT, PLANNING AND DEVELOPMENT AND POLICE FEES

Resolution No. 4059 – 04/26/2007 AMENDING CITY FEE SCHEDULE ADDING SECTION 4 MUNICIPAL UTILITIES

Resolution No. 4119 – 09/20/2007 AMENDING CITY FEE SCHEDULE SECTION 3
Resolution No. 4145 – 01/17/2008 REPEALED SECTION 5 PARKS AND RECREATION

Resolution No. 4178 – 4/24/2008 AMENDING SECTION 4 MUNICIPAL UTILITIES

Ordinance No. 4104 – 10/30/08 AMENDING SECTION 8, PUBLIC WORKS, REPEALING SEC 8.7 AND SEC 8.15, UTILITIES, MM AND NN EFFECTIVE 11/29/08

Resolution No. 4299 – 5/28/2009 AMENDING THE CITYWIDE FEE SCHEDULE RELATING TO FIRE DEPARTMENT, MUNICIPAL UTILITIES, PLANNING AND DEVELOPMENT, POLICE DEPARTMENT AND PUBLIC WORKS FEES

Resolution No. 4311 – 5/13/2009 AMENDING THE CITYWIDE FEE SCHEDULE AIRPORT RATES AND FEES

Resolution No. 4318 – 07/30/2009 AMENDING THE CITYWIDE FEE SCHEDULE RELATING TO FIRE DEPARTMENT, NEIGHBORHOOD RESOURCES, PLANNING AND DEVELOPMENT, POLICE DEPARTMENT AND PUBLIC WORKS FEES

Resolution No. 4430 – 06/24/2010 AMENDING SECTION 6, PLANNING AND DEVELOPMENT AND SECTION 8 PUBLIC WORKS.

Resolution No. 4483 – 12/09/2010 AMENDING SECTION 7, POLICE DEPARTMENT

Resolution No. 4504 – 04/28/2011 AMENDING SECTION 8, PUBLIC WORKS

Resolution No.4505 – 05/26/2011 AMENDING THE CITYWIDE FEE SCHEDULE RELATING TO TRANSPORTATION & DEVELOPMENT – DEVELOPMENT SERVICES AND TRANSPORTATION & DEVELOPMENT – TRANSPORTATION OPERATIONS.

Resolution No. 4535 – 10/27/2011 AMENDING SECTION 7, POLICE DEPARTMENT

Resolution No. 4615 – 07/26/2012 AMENDING SECTION 6.3.3 DELETING SITE DEVELOPMENT - HOME OCCUPATION FEE

Resolution No. 4703 – 08/12/13 AMENDING THE CITYWIDE FEE SCHEDULE RELATING TO ADMINISTRATION, MANAGEMENT SERVICES - TAX AND LICENSE, CHANDLER MUNICIPAL AIRPORT, FIRE DEPARTMENT, MUNICIPAL UTILITIES, PARKS AND RECREATION, TRANSPORTATION AND DEVELOPMENT - DEVELOPMENT SERVICES AND OPERATIONS, POLICE DEPARTMENT, AND NEIGHBORHOOD RESOURCES

Resolution No. 4773 – 6/12/14 AMENDING THE CITYWIDE FEE SCHEDULE RELATING TO FIRE DEPARTMENT, PARKS AND RECREATION, AND POLICE DEPARTMENT

Resolution No. 4839 – 03/26/2015 MANAGEMENT SERVICES DEPARTMENT, AIRPORT, TRANSPORTATION AND DEVELOPMENT, SOLID WASTE, POLICE, PARKS AND RECREATION, AND CULTURAL AFFAIRS

Resolution No. 4899 – 11/19/2015 AMENDING THE CITYWIDE FEE SCHEDULE RELATING TO MOBILE FOOD

Resolution No. 4941 – 5/12/2016 AMENDING SECTION 2: MUNICIPAL AIRPORT, SECTION 5: PARKS AND RECREATION, SECTION 6: TRANSPORTATION AND DEVELOPMENT, DEVELOPMENT SERVICES

Resolution No. 5034 – 4/13/2017 AMENDING THE CITYWIDE FEE SCHEDULE RELATING TO FIRE DEPARTMENT, MANAGEMENT SERVICES, PARKS AND RECREATION, AND TRANSPORTATION AND DEVELOPMENT DEPARTMENTS

Resolution No. 5098 – 12/7/17 AMENDING THE CITYWIDE FEE SCHEDULE RELATING TO ADMINISTRATION AND MANAGEMENT SERVICES DEPARTMENT

Resolution No. 5104 – 1/11/18 AMENDING THE CITYWIDE FEE SCHEDULE RELATING TO PUBLIC WORKS & UTILITIES DEPARTMENT AND INCORPORATING TECHNICAL CORRECTIONS TO RECOGNIZE REORGANIZATION AND REORDERING SECTIONS.

Resolution No. 5117 – 4/26/2018 AMENDING THE CITYWIDE FEE SCHEDULE RELATING TO COMMUNITY SERVICES, PUBLIC SAFETY - FIRE AND POLICE, AND PUBLIC WORKS & UTILITIES DEPARTMENTS.

Resolution No. 5215 – 12/13/2018 AMENDING THE CITYWIDE FEE SCHEDULE RELATING TO THE MANAGEMENT SERVICES AND DEVELOPMENT SERVICES DEPARTMENTS.

Resolution No. 5243 – 05/09/2019 AMENDING THE CITYWIDE FEE SCHEDULE RELATING TO THE COMMUNITY SERVICES, DEVELOPMENT SERVICES, AND PUBLIC WORKS & UTILITIES DEPARTMENTS.

Resolution No. 5300 – 12/12/2019 AMENDING THE CITYWIDE FEE SCHEDULE RELATING TO ADMINISTRATION AND MANAGEMENT SERVICES AND PUBLIC WORKS & UTILITIES DEPARTMENTS.

Resolution No. 5431 – 2/22/2021 AMENDING THE CITYWIDE FEE SCHEDULE RELATING TO THE AIRPORT, COMMUNITY SERVICES, DEVELOPMENT SERVICES, CULTURAL DEVELOPMENT, FIRE AND NEIGHBORHOOD RESOURCES DEPARTMENTS OR DIVISIONS.

Resolution No. 5558 – 5/12/2022 AMENDING THE CITYWIDE FEE SCHEDULE RELATING TO THE PUBLIC WORKS AND UTILITIES DEPARTMENT, SOLID WASTE DIVISION

Resolution No. 5696 – 7/20/2023 AMENDING THE CITYWIDE FEE SCHEDULE RELATING TO THE MANAGEMENT SERVICES AND PUBLIC WORKS AND UTILITIES DEPARTMENT

Resolution No. 5751 – 1/1/2024 AMENDING THE CITYWIDE FEE SCHEDULE RELATING TO THE PUBLIC WORKS AND UTILITIES DEPARTMENT, SOLID WASTE DIVISION

RESOLUTION NO. 5846 – 1/1/2025 AMENDING THE CITYWIDE FEE SCHEDULE RELATING TO THE COMMUNITY SERVICES DEPARTMENT, CULTURAL DEVELOPMENT DEPARTMENT, DEVELOPMENT SERVICES DEPARTMENT, FIRE DEPARTMENT, AND PUBLIC WORKS & UTILITIES DEPARTMENT

City of Chandler
Summary of Proposed New or Modified Fees
General Fund

City Code	Fee Schedule Reference	Current Fee Description	New or Deleted Fee Description	Customer Impacted	Existing Fee	Proposed Fee	Justification/Cost Basis	Comparisons
Community Services								
Recreation Program and Service Fees - Aquatics								**Other City Fee Ranges:**
31-21.A	3.1.1 (e)	Pool Pass - Youth (15 Punches)	No change	Customers 2-17 years old wishing to buy bulk swim passes	25% discount on the regular entry fee rounded to nearest 1/4 dollar	Resident: $11.25 Non-Residents: $15.00	25% discount on the regular entry fee. With proposed entry fee would equate to $11.25 for residents & no discount for non-residents. Completed on-line, so can validate residency.	**Gilbert:** 30 punches **/** $25.00 for **Mesa:** 10 punches / $15.00 - 30 punches / $45.00
31-21.A	3.1.1 (f)	Pool Pass - Adult (15 Punches)	No change	Customers 18-55 years old wishing to buy bulk swim passes	25% discount on the regular entry fee rounded to nearest 1/4 dollar	Resident: $25.25 Non-Residents: $33.75	25% discount of the normal entry fee. With proposed entry fee would equate to $25.25 & no discount for non-residents. Completed on-line, so can validate residency.	**Gilbert:** 10 punches / $25.00 **Mesa:** 5 punches / $15.00 **Scottsdale:** 10 punches / $30.00 **Tempe:** 10 punches / $35.00
31-21.A	3.1.1 (g)	Pool Pass - Youth (30 Punches)	No change	Customers 2-17 years old wishing to buy bulk swim passes	25% discount on the regular entry fee rounded to nearest 1/4 dollar	Resident: $15.00 Non-Resident: $30.00	50% discount of the normal entry fee. With proposed entry fee would equate to $15 & no discount for non-residents. Completed on-line, so can validate residency.	**Gilbert:** 30 punches / $25.00 **Mesa:** 30 punches / $45.00 **Scottsdale:** 30 punches / $72.00
31-21.A	3.1.1 (h)	Pool Pass - Adult (30 Punches)	No change	Customers 18-55 years old wishing to buy bulk swim passes	50% discount on the regular entry fee rounded to nearest 1/4 dollar	Resident: $33.75 Non-Resident: $67.50	50% discount of the normal entry fee. With proposed entry fee would equate to $33.75 & no discount for non-residents. Completed on-line, so can validate residency.	**Gilbert:** 10 punches / $25.00 **Mesa:** 15 punches / $45.00 **Tempe:** 10 punches / $35.00
31-21.A	3.1.1 (h)	New Fee	Pool Pass - Senior (15 Punches)	Customers 55+ years old wishing to buy bulk swim passes	N/A	Resident: $14.00 Non-Residents: $18.75	25% discount on the regular entry fee. With proposed entry fee would equate to $14 for resident seniors & no discount for non-residents. Completed on-line, so can validate residency.	**Gilbert:** N/A **Mesa:** N/A **Tempe**: 10 punches / $35.00
31-21.A	3.1.1 (h)	New Fee	Pool Pass - Senior (30 Punches)	Customers 55+ years old wishing to buy bulk swim passes	N/A	Resident: $18.75 Non-Resident: $37.50	50% discount of the normal entry fee. With proposed entry fee would equate to $18.75 for resident seniors & no discount for non-residents. Completed on-line, so can validate residency.	**Gilbert:** N/A **Mesa:** N/A **Tempe**: 10 punches / $35.00
31-21.A	3.1.1 (n)	Swim Team Use (per Guard)	Swim Team Use	USA Swim clubs renting lanes for practice time	Resident: $15.00 per hour Non-resident: N/A	$5 per lane	Increase to cover the cost of staffing lifeguards for all swim team rentals. This is a high-risk activity, and we are asking coaches to lifeguard the pool while providing coaching/teaching, which is an intrusion into the primary duties of proper lifeguard surveillance and not supported by our lifeguard certifying agency.	**Gilbert:** $6.12 per lane **Mesa:** $5.00 per lane **Scottsdale:** $5.00 per lane **Peoria:** $6.25 per lane **Chandler Unified School District:** $7.50 per lane
31-21.A	3.1.1 (p)	Red Cross Learn to Swim	Delete Fee	Residents	Resident: $0.55 per person Non-resident: $0.55 per person	Delete Fee	N/A	N/A
31-21.A	3.1.1 (q)	Red Cross Certification (per Guard), minimum # of guard requirements varies	Delete Fee	Residents	Resident: $16-$36 per hour Non-resident: $16-$36 per hour	Delete Fee	N/A	N/A
Recreation Program and Service Fees - Parks								**Other City Fee Ranges:**
31-21.A	3.1.2 (a)	Pavilion Rental Corporate Size (a) One Pavilion - 4 hour minimum (McDowell Mountain)	Corporate Pavilion - 4 hour minimum	Pavilion users	Resident: $56/hr Non-resident: $76/hr	Resident: $70/hr Non-resident: $90/hr Commercial: $105/hr	Staff recommends a 25% increase for rising staff and maintenance costs. Valley average is $200.	**Gilbert:** $100.00 **Tempe:** $300.00
31-21.A	3.1.2 (b)	Pavilion Rental Large Size (b) One Pavilion - (Arrowhead Park Lion's and Folley Park Memorial)	Large Pavilion	Pavilion users	Resident: $23/hr Non-resident: $32/hr	Resident: $29/hr Non-resident: $40/hr Commercial: $44/hr	Staff recommends a 25% increase for rising staff and maintenance costs. Valley average is $72.	**Gilbert:** $25.00 **Glendale:** $25.00 **Mesa:** $33.00 **Scottsdale:** $150.00 **Peoria:** $30.00 **Phoenix:** $60.00 **Queen Creek:** $50.00

City of Chandler
Summary of Proposed New or Modified Fees
General Fund

City Code	Fee Schedule Reference	Current Fee Description	New or Deleted Fee Description	Customer Impacted	Existing Fee	Proposed Fee	Justification/Cost Basis	Comparisons
Community Services								
Recreation Program and Service Fees - Parks								**Other City Fee Ranges:**
31-22.A	3.1.2 (c)	Pavilion Rental Medium Size (c) One Pavilion - Desert Breeze's Acacia, Mesquite, and Palo Verde, and Tumbleweed's San Tan and South Mountain	Medium Pavilion	Pavilion renters	Resident: $16/hr Non-resident: $22/hr	Resident: $20/hr Non-resident: $27/hr Commercial: $30/hr	Staff recommends a 25% increase for rising staff and maintenance costs. Valley average is $26.	**Apache Junction:** $15.00 **Gilbert:** $25.00 **Glendale:** $15.00 **Mesa:** $20.00 **Tempe:** $50.00 **Peoria:** $30.00 **Phoenix:** $30.00
31-21.A	3.1.2 (d)	Pavilion Rental Medium Size (d) Entire Cluster Complex (Desert Breeze - 3 pavilions)	Delete Fee	Pavilion renters	Resident: $48/hr Non-resident: $65/hr	Delete Fee	N/A	**Apache Junction:** $15.00 **Gilbert:** $25.00 **Glendale:** $15.00 **Mesa:** $20.00 **Tempe:** $50.00 **Peoria:** $30.00 **Phoenix:** $30.00
31-22.A	3.1.2 (e)	Pavilion Rental Small Size (e) One Pavilion	Small Pavilion	Pavilion renters	Resident: $8/hr Non-resident: $11/hr	Resident: $10/hr Non-resident: $14/hr Commercial: $15/hr	Staff recommends a 25% increase for rising staff and maintenance costs. Valley average is $16.	**Apache Junction:** $10.00 **Gilbert:** $15.00 **Glendale:** $10.00 **Mesa:** $13.00 **Tempe:** $25.00 **Peoria:** $20.00 **Phoenix:** $24.00
31-21.A	3.1.2 (h)	Ball Field Reservation - No Lights	No change	Renters	Resident: $11/hr Non-resident: $15/hr Commercial: N/A	Resident: $14/hr Non-resident: $19/hr Commercial: $21/hr	Recommend 25% increase for staff and maintenance costs rising. Valley average $14/hr.	**Gilbert:** $10.50 **Glendale:** $17.00 **Mesa:** $18.00 **Scottsdale:** $10.00 **Tempe:** $20.00 **Queen Creek:** $20.00
31-21.A	3.1.2 (i)	Ball Field Reservation - Tournaments/Leagues	No change	Renters	Resident: $11/hr Non-resident: $15/hr Commercial: $17/hr	Resident: $14/hr Non-resident: $19/hr Commercial: $21/hr	Recommend a 25% fee increase for staff and maintenance costs rising. Valley average $27/hr.	**Gilbert:** $45.00 **Mesa:** $32.00 **Scottsdale:** $30.00 **Tempe:** $20.00
31-21.A	3.1.2 (k)	1/2 Multi Use Field Reservation No Lights	No change	Renters	Resident: $5.50/hr Non-resident: $8/hr Commercial: N/A	Resident: $7/hr Non-resident: $10/hr Commercial: $11/hr	This fee would be half of the proposed Ball Field Reservation - No Lights Fee. Below are the full field comparisons. Full Field Valley average: $27 (Apache Junction: $15, Avondale: $350/day, Gilbert: $45, Glendale: $28, Goodyear: $25, Mesa: $32, Queen Creek: $20, Scottsdale: $30, Tempe: $20) Recommend a 25% increase for staff and maintenance costs rising.	There are no half field fee comparisons in the valley.
31-21.A	3.1.2 (m)	Field Preparation	No change	Renters	Resident: $25/prep Non-resident: $34/prep Commercial: $38/prep	Resident: $40/prep Non-resident: $54/prep Commercial: $60/prep	Recommend 29% increase for staff and maintenance cost rising. Valley average $53.	**Apache Junction:** $80.00 **Gilbert:** $40.00 **Goodyear:** $40.00 **Mesa:** $60.00 **Scottsdale:** $66.00
31-21.A	3.1.2 (o)	Field Preparation After-Hour	No change	Renters	Resident: $35/prep Non-resident: $48/prep Commercial: $53/prep	Resident: $60/prep Non-resident: $81/prep Commercial: $90/prep	Recommend 22% increase for staff and maintenance costs rising. Valley average $53.	**Apache Junction:** $80.00 **Gilbert:** $40.00 **Mesa:** $60.00 **Scottsdale:** $66.00 **Tempe:** $30.00
31-21.A	3.1.2 (p)	Site Supervisor	No change	Renters	Resident: $15/hr Non-resident: $21/hr Commercial: $23/hr	Resident: $25/hr Non-resident: $34/hr Commercial: $38/hr	Recommend 25% increase to cover staffing costs.	**Mesa:** $18.00

City of Chandler
Summary of Proposed New or Modified Fees
General Fund

City Code	Fee Schedule Reference	Current Fee Description	New or Deleted Fee Description	Customer Impacted	Existing Fee	Proposed Fee	Justification/Cost Basis	Comparisons
Community Services								
Recreation Program and Service Fees - Parks								**Other City Fee Ranges:**
31-21.A	3.1.2 (z)	Park Maintenance Staff (After Hours Fee)	No change	Renters	Resident: $35/hr Non-resident: $48/hr Commercial: $53/hr	Resident: $60/hr Non-resident: $81/hr Commercial: $90/hr	Recommend 22% increase for staff and maintenance costs rising. Valley average $53/hr.	**Apache Junction:** $80.00 **Gilbert:** $40.00 **Goodyear:** $40.00 **Mesa:** $60.00 **Scottsdale:** $66.00
Recreation Program and Service Fees - Recreation Facilities								**Other City Fee Ranges:**
31-21.A	3.1.3 (a)	Multipurpose Room - Small	No change	Renters	Resident: $56/hr (50% rate for non-profit groups) Non-resident: $76/hr Commercial: $84/hr	Resident: $65/hr (50% rate for non-profit groups) Non-resident: $88/hr Commercial: $98/hr	Valley average is $58/hr. Recommend 15% increase for staff and maintenance costs rising.	**Gilbert:** $45.00 **Mesa:** $66.00 **Queen Creek:** $70.00
31-21.A	3.1.3 (b)	Multipurpose Room - Medium	No change	Renters	Resident: $85/hr (50% rate for non-profit groups) Non-resident: $115/hr Commercial: $128/hr	Resident: $91/hr (50% rate for non-profit groups) Non-resident: $123/hr Commercial: $137/hr	Valley average $96/hr. Recommend a 15% increase for staff and maintenance costs rising.	**Glendale:** $72.00 **Mesa:** $95.00 **Peoria:** $100.00 **Queen Creek:** $81.00
31-21.A	3.1.3 (c)	Multipurpose Room - Large	No change	Renters	Resident: $125/hr (50% rate for non-profit groups) Non-resident: $169/hr Commercial: $188/hr	Resident: $144/hr (50% rate for non-profit groups) Non-resident: $195/hr Commercial: $216/hr	Valley average is $162, recommend 15% increase for staff and maintenance costs rising.	**Glendale:** $142.00 **Mesa:** $145.00 **Peoria:** $200.00
31-21.A	3.1.3 (q)	Set-up Fee for Room Reservations	No change	Renters	Resident: $25/hr Non-resident: $34/hr Commercial: $38/hr	Resident: $50/hr Non-resident: $68/hr Commercial: $75/hr	Increase 38% to cover the cost of two Recreation Leader II's.	**Apache Junction:** Same rate as room rental. **Gilbert:** $60.00 **Mesa:** Same rate as room rental. **Scottsdale:** Same rate as room rental.
Recreation Program and Service Fees - Recreation Fitness Passes								**Other City Fee Ranges:**
31-21.A	New to be inserted under 3.1.4 (h)	New Fee	6 Month Admission - Teen	Fitness pass users	None	Resident: $113 pp Non-resident: $152 pp	The proposed fees are half of the annual pass rate for each category. Currently customers are required to pay for an annual pass all at once. Staff recommends adding this pass option to encourage customers to joining the TRC for a year, by providing a more affordable six-month payment option. Valley Average: $92	**Apache Junction:** $82.00 **Gilbert:** $80.00 **Peoria:** $113.00
31-21.A	New to be inserted	New Fee	6 Month Admission - Adult	Fitness pass users	None	Resident: $150 pp Non-resident: $203 pp	The proposed fees are half of the annual pass rate for each category. Currently customers are required to pay for an annual pass all at once. Staff recommends adding this pass option to encourage customers to joining the TRC for a year, by providing a more affordable six-month payment option. Valley Average: $135	**Apache Junction:** $132.00 **Gilbert:** $130.00 **Peoria:** $142.00
31-21.A	New to be inserted	New fee	6 Month Admission - Active Adult	Fitness pass users	None	Resident: $113 pp Non-resident: $152 pp	The proposed fees are half of the annual pass rate for each category. Currently customers are required to pay for an annual pass all at once. Staff recommends adding this pass option to encourage customers to joining the TRC for a year, by providing a more affordable six-month payment option. In addition, with the increase of winter visitors using the TRC, staff believes this option will appeal to the Active Adult customers. Valley Average: $109	**Gilbert:** $110.00 **Peoria:** $108.00
31-21.A	New to be inserted	New Fee	6 Month Admission - Youth	Fitness pass users	None	Resident: $100 pp Non-resident: $135	The proposed fees are half of the annual pass rate for each category. Currently customers are required to pay for an annual pass all at once. Staff recommends adding this pass option to encourage customers to joining the TRC for a year, by providing a more affordable six-month payment option. Valley Average: $84	**Apache Junction:** $82.00 **Gilbert:** $82.00 **Peoria:** $85.00

City of Chandler
Summary of Proposed New or Modified Fees
General Fund

City Code	Fee Schedule Reference	Current Fee Description	New or Deleted Fee Description	Customer Impacted	Existing Fee	Proposed Fee	Justification/Cost Basis	Comparisons
Community Services								
Recreation Program and Service Fees - Recreation Fitness Passes								**Other City Fee Ranges:**
31-21.A	New to be inserted	New Fee	6 Month Admission - 2 person	Fitness pass users	None	Resident: $250 pp Non-resident: $337.50 pp	The proposed fees are half of the annual pass rate for each category. Currently customers are required to pay for an annual pass all at once. Staff recommends adding this pass option to encourage customers to joining the TRC for a year, by providing a more affordable six-month payment option. Valley Average: $227	**Peoria:** $227.00
31-21.A	New to be inserted	New Fee	6 Month Admission - Family (2 Adults & 4 Dependents)	Fitness pass users	None	Resident: $300 pp Non-resident: $405 pp	The proposed fees are half of the annual pass rate for each category. Currently customers are required to pay for an annual pass all at once. Staff recommends adding this pass option to encourage customers to joining the TRC for a year, by providing a more affordable six-month payment option. Valley Average: $306	**Apache Junction:** $297.00 **Gilbert:** $355.00 **Peoria:** $284.00
31-21.A	New to be inserted	New Fee	6 Month Admission - Additional Family Dependent	Fitness pass users	None	Resident: $25 pp Non-resident: $34 pp	Supports the family pass users.	No other city offers additional family dependent add on.
Recreation Program and Service Fees - Tennis Center								**Other City Fee Ranges:**
31-21.A	3.1.6 (a)	Tennis Court - A.M., 1.5 hours	No change	Tennis players	Resident $2.50 pp Non-resident: $4.00 pp	Resident $3.00 pp Non-resident: $4.50 pp	Valley average is $4.15 pp.	**Glendale:** $5.00 **Mesa:** $9.00 **Scottsdale:** $3.00 **Tempe:** $2.75 **Phoenix:** $3.00 **Surprise:** $2.00
31-21.A	3.1.6 (b)	Tennis Court - P.M., 1.5 hours (includes lights)	No change	Tennis players	Resident: $3.50 pp Non-resident: $5.00 pp	Resident: $4.00 pp Non-resident: $5.50 pp	Valley average is $6	**Glendale:** $5.00 **Mesa:** $12.00 **Scottsdale:** $5.00 **Tempe:** $3.50 **Phoenix:** $8.00 **Surprise:** $3.00
Cultural Development								
Special Events								**Other City Fee Ranges:**
32	3.1.5 (j)	Trash Can Rental	Trash Can Rental	Increase of $3 to residents	$ 17.00	$ 20.00	Increase in service cost with 100% revenue off-set	There are no other city comparisons as this is a direct cost for services from our Solid Waste vendor.
32	3.1.5 (j)	Trash Can Rental	Trash Can Rental	Increase of $4 to non-residents	$ 23.00	$ 27.00	Increase in service cost with 100% revenue off-set	There are no other city comparisons as this is a direct cost for services from our Solid Waste vendor.

City of Chandler
Summary of Proposed New or Modified Fees
General Fund

City Code	Fee Schedule Reference	Current Fee Description	New or Deleted Fee Description	Customer Impacted	Existing Fee	Proposed Fee	Justification/Cost Basis	Comparisons
Development Services								
Transportation Engineering								**Other City Fee Ranges:**
47	**New to be inserted**	New fee	Traffic Control & Lane Restriction Permit Fee (Non-Refundable)	Developers	None	$ 315.00	A temporary traffic control permit and associated permit administration fee is required for private development initiated temporary traffic control projects. A temporary traffic control permit shall be issued for City of Chandler capital projects, but a permit administration fee shall not be required. The permit fee is comprised of an hourly rate of $45.00 per hour and is intended to cover a maximum of two (2) hours for plan review and a maximum of five (5) hours for in-field inspections.	
47	**New to be inserted**	New fee	Deposit Fee for Authorized Temporary Traffic Control Permits	Developers	None	Deposit Amount/Project Valuation: $0 to $100,000/ 1% of project valuation with a minimum deposit of $1,000 $1,00,001 to $300,000/ 2% of project valuation $300,001 to $500,000/ 3% of project valuation $500,001 to $750,000/ 4% of project valuation $750,001 to $1,000,000/ 5% of project valuation $1,000,001 and greater/ 6% of project valuation not to exceed $100,000	Deposit amount is fully refundable if all permitted work is completed per the specifications and timeframe authorized by the issued temporary traffic control permit. For every calendar day past the temporary traffic control permit expiration date, not to exceed twenty (20) calendar days, during which temporary barricades and other equipment authorized by the permit remain in the public right-of-way, the total refundable deposit amount shall be reduced by five (5) percent per day of the submitted deposit amount. The refundable deposit amount shall be zero ($0.00) dollars after the 20th calendar day. A deposit fee shall not be required for City of Chandler capital projects.	
Fire								
Fire Re-inspection Fees								**Other City Fee Ranges:**
28	6.1.16	Re-inspection after initial post-notice inspection for same violation	No change	Businesses who fail to comply with required fire safety improvements	After multiple non-compliance visits $40	Initial Inspection: $0 Reinspection #1: $100 or $0 if violations corrected Resinspection #2: $150 or $0 if violations corrected Reinspection #3 and beyond: $200 or $0 if violations corrected	The Fire Prevention division of the City of Chandler is responsible for enforcing adopted codes and ordinances within the city and performing inspections to assist business owners in mitigating hazards and maintaining safe spaces. The city has modified the existing fee structure for fire re-inspections to ensure code compliance amongst businesses in the community. The modification to these fees aids in achieving timely compliance and promoting safer outcomes within the community.	Mesa: $153-$1,274 Glendale: $55-$330 Peoria: $50-$1,950 Gilbert: $15-$50 Scottsdale: $0-$200

City of Chandler
Summary of Proposed New or Modified Fees
Non-General Fund

City Code	Fee Schedule Reference	Current Fee Description	New or Deleted Fee Description	Customer Impacted	Existing Fee	Proposed Fee	Justification/Cost Basis	Comparisons
Public Works & Utilities								
Water Distribution								**Other City Fee Ranges:**
50-19.1	7.1.8	Fire Hydrant Meter Deposit	No Change	Construction water customers	$ 1,450.00	$ 3,100.00	The City of Chandler has been charging construction water customers a deposit fee of $1,450 since 2013. Prices for hydrant meters, fittings, and required backflow devices have increased in price. Due to price increases, the deposit fee for such parts, also needs to be increased to recover cost. Proposed fee more closely recflects current cost of meter and is fully refunded after returned, less charges for any repair, replacement, labor or balance due. It also includes updated pricing of hydrant meter, fittings and required backflow device.	**Mesa:** $1,295 **Scottsdale**: $2,000 **Phoenix**: $650 **Queen Creek**: $1,500 - $1,775 **Tempe**: $850, however, if lost, damaged, or stolen, full replacement cost applies

City of Chandler
Summary of Proposed New or Modified Fees
Technical Correction - No Impact to Fees

City Code	Fee Schedule Reference	Current Fee Description	New or Deleted Fee Description	Customer Impacted	Existing Fee	Proposed Fee	Justification/Cost Basis	Comparisons
Community Services								
Recreation Program and Service Fees - Aquatics								**Other City Fee Ranges:**
31-21.A	3.1.1 (o)	Lifeguard	Lifeguard (all programs)	Club teams and facility rentals paying for lifeguards needed for emergency action plan	Resident: $20.00 per hour Non-resident: $20.00 per hour	Resident: $20.00 per hour Non-resident: $20.00 per hour	N/A	N/A

CITY OF CHANDLER
NOTICE OF INTENTION TO AMEND THE
CITYWIDE FEE SCHEDULE

NOTICE IS HEREBY GIVEN THAT at a Regular Meeting of the Chandler City Council to be held in the Council Chambers, 88 E. Chicago St., on Thursday, Nov. 7, 2024, at 6 p.m., it is the City Council's intention to amend the Citywide Fee Schedule for the Community Services Department, Cultural Development Department, Development Services Department, Fire Department, and Public Works & Utilities Department fees which will be effective Jan. 1, 2025. This Council agenda item will appear as an action item to allow an opportunity for public comment.

A copy of the document supporting the proposed new and modified fees is also available in the office of the City Clerk and on the City's website.

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Sec. 1 Administration and Management Services

Administration

i. Appeal fee [§1-7.1] (Res. 3175).....$200.00
ii. CD / Audio..... $10.00
iii. Copy – per page..... $0.15
iv. DVD / Video.....$15.00
v. Microfilm Copy – per page.....$2.00
vi. Dishonored or Non-Sufficient Fund (NSF) Check fee.....$25.00

(b) Fire Department
i. Digital Photos of event – each print.....$1.00
ii. Digital Photos of event – CD.....$5.00
iii. Audio or DVD of event – each..... $10.00
iv. Fire, EMS & Incident and Occupancy Inspection Report copy – each..... $5.00
v. Environmental Report Review – written.....$25.00
vi. Permit – duplicate..... $5.00

(c) Police Department
i. Audio Recording Copies – per report..... $10.00
ii. Digital Photographs – per report.....$5.00
iii. Photo Red Light Copies – 4 sheets..... $10.00
iv. Report Copies – first 35 pages..... $5.00
(each additional page City standard rate applies)
v. Video Recording Copies – per report..... $25.00
vi. Block Watch Signs – per sign.....$25.00

(d) Reports, Plans, Manuals, Guides, etc.
i. Airpark Area Plan.....$4.00
ii. Airpark Map..... $1.00
iii. Airport Master Plan Update..... $45.00
iv. Airport Master Plan Update Executive Summary..... $2.00
v. Airport Master Plan – color..... $75.00
vi. Airport F.A.R. Noise Study with Maps..... $68.00
vii. Crime Free Multi-Housing Program.....$6.00
viii. Code Enforcement Report Copies – first 50 pages..... $5.00
(each additional page City standard rate applies)
ix. Drainage Policies & Standards, #3 Technical Design Manual.....$2.00
x. General Plan.....$5.00
xi. Industrial Pretreatment – Annual Report..... $25.00
xii. Landscape & Irrigation Guidelines, #8 Technical Design Manual..... $2.00
xiii. Park and Recreation Master Plan.....$6.00
xiv. Redevelopment Element.....$7.00
xv. Residential Development Standards..... $8.00
xvi. Southeast Chandler Area Plan and Appendices..... $10.00
xvii. Southeast Chandler Area Plan Appendices..... $7.00
xviii. Street Design & Access Control, #4 Technical Design Manual.....$2.00
xix. Streetlight Standards, #7 Technical Design Manual.....$2.00
xx. Subdivision Code.....$2.00
xxi. Traffic Barricade, #7 Technical Design Manual.....$2.00
xxii. Traffic Signal Design, #5 Technical Design Manual..... $2.00
xxiii. Water & Wastewater System, #1 & 2 Technical Design Manual.....$2.0

Management Services – Tax and License

(b) Annual License fee
  i. Up to four pari-mutuel betting windows or tote machine [§58-2.2.B.1]..... $1,200.00
  ii. For each pari-mutuel betting windows or tote machine in excess of four [§58-2.2.B.2]..... $400.00
(c) Renewal Application Late Filing fee [§58-2.5.A]..... $100.00

1.3 Auctioneers, Pawnbrokers, and Other Secondhand Permits [Ch. 15] (Res. 3175)

(a) Application fee (nonrefundable) [§15-12]..... $50.00
(b) Auctioneer, Auction House, annual permit fee [§15-12]..... $100.00
(c) Pawnbroker, annual permit fee [§15-12]..... $300.00
(d) Secondhand/Antique, annual permit fee [§15-12]..... $100.00
(e) Junk Dealer, annual permit fee [§15-12]..... $200.00
(f) Automatic Electronic Device Kiosks, annual permit fee [§15-12]..... $500.00
(g) Change of Location fee [§15-12.E] (Res. 4703)..... $50.00
(h) Fingerprinting fee [§15-12.E] (Res. 3482)..... Amount Charged by DPS
(i) Late Renewal fee [§15-12.E]..... 10% of Annual Permit Fee

1.4 Bingo [Arizona Department of Revenue] (Res. 4703)

(a) Class A - Licensing, one-time fee..... $5.00
(b) Class B and C - Licensing, one-time fee..... $25.00

1.5 Escort and/or Introductory Service Permit [Ch. 19] (Res. 3175, Res. 4035)

(a) Application fee (nonrefundable) [§19-3.4]..... $100.00
(b) Annual Permit fee [§19-3.4]..... $500.00
(c) Renewal Application fee [§19-3.4] (Res. 3482)..... $50.00
(d) Change of Location fee [§19-4.1]..... $50.00
(e) Fingerprinting fee [§19-3.4.O] (Res. 4703)..... Amount Charged by DPS

1.6 Extension of Premises [Ch. 60.6] (Res. 4703)

(a) Permanent Extension of Premises
  i. Application fee (nonrefundable)..... $100.00
(b) Temporary Extension of Premises
  i. Application fee (nonrefundable), per day..... $25.00
  ii. Additional application fee, if submitted less than 21 days prior to city council meeting..... $25.00

1.7 Lien Fee [Ch. 62-590] (Res. 4703)..... $50.00

1.8 Liquor License (Application fee / Issuance fee / Annual fee) [Ch. 60.4] (Res. 4703)

(a) Series 1, In-State Producer ..... $200.00 / $200.00 / $1,000.00
(b) Series 2, Out-of-State Producer ..... $200.00 / $0.00 / $0.00
(c) Series 3, Microbrewery ..... $200.00 / $200.00 / $1,000.00
(d) Series 4, Wholesale..... $200.00 / $0.00 / $0.00
(e) Series 5, Government..... $200.00 / $0.00 / $0.00
(f) Series 6, Bar (all spirituous liquor) ..... $200.00 / $200.00 / $1,000.00
(g) Series 7, Beer and Wine Bar ..... $200.00 / $200.00 / $550.00
(h) Series 8, Conveyance..... $200.00 / $200.00 / $400.00
(i) Series 9, Liquor Store (all spirituous liquor)..... $200.00 / $200.00 / $500.00
(j) Series 10, Beer and Wine Store..... $200.00 / $200.00 / $350.00
(k) Series 11, Hotel-Motel (with restaurant) ..... $200.00 / $200.00 / $1,000.00

(l) Series 12, Restaurant ..... $200.00 / $200.00 / $1,000.00
(m) Series 13, Domestic Farm Winery..... $200.00 / $200.00 / $1,000.00
(n) Series 14, Club (private) ..... $200.00 / $200.00 / $300.00
(o) Series 18D, Liquor Distilleries ..... $200.00 / $200.00 / $1,000.00
(p) Series 19D, Liquor Tasting Rooms (Spirits) ..... $200.00 / $200.00 / $300.00
(q) Series 19W, Liquor Tasting Rooms (Wine)..... $200.00 / $200.00/ $300.00
(r) Series 20, Farm Winery Producer ..... $200.00 / $200.00 / $300.00
(s) Series 21, Wine Producer Custom Crush..... $200.00 / $200.00 / $300.00

1.9 Liquor License, duplicate of City license (Res. 4703)..... $10.00

1.10 Massage Establishments [Ch. 17] (Res. 4035)

(a) Permit Application fee (nonrefundable) [§17-3.2]..... $50.00
(b) Annual Permit fee [§17-3.2]..... $100.00
(c) Change of Location fee [§17-9.A] (Res. 4703)..... $50.00
(d) Fingerprinting fee [§17-3.3] (Res. 4703)..... Amount Charged by DPS
(e) Late fee [§17-10.C]..... 10% of Annual Permit Fee

1.11 Peddlers, Canvassers, Transient Merchants and Solicitors [Ch. 20]

(a) Permit Application Investigation fee (nonrefundable) [§20-5]..... $50.00
(b) Individual or Employee, annual permit fee [§20-10]..... $50.00
(c) Business (Corporation or Firm), annual permit fee [§20-10.2]..... $100.00
(d) Surety Bond or Cash Deposit [§20-14] (Res. 4703)..... $1,000.00
(e) Fingerprinting fee [§20-5] (Res. 4703)..... $10.00
(f) Late fee [§20-10.3]..... 10% of Annual Permit Fee
(g) Non-Profit Solicitor [§20-8] (Res. 4703)..... $0.00

1.12 Sexually Oriented Business [Ch.18] (Res. 4035)

(a) Permit Application fee (nonrefundable) [§18-5.1]..... $100.00
(b) Establishment, annual permit fee [§18-5.1 & §18-6.1]..... $500.00
(c) Business Manager, annual permit fee [§18-5.1 & §18-7.2]..... $100.00
(d) Adult Service Provider, annual permit fee [§18-5.1 & §18-8.2]..... $100.00
(e) Duplicate Permit Copy fee [§18-20]..... $10.00
(f) Fingerprinting fee [§18-4.1A]..... Amount Charged by DPS
(g) Late Fee [§18-19.1]..... 10% of Annual Permit Fee

1.13 Special Event Liquor and Wine Festivals (Series 15, TSPE, Series 16D or Series 16W) [Ch. 60.5] (Res. 4703)

(a) License fee, per day..... $25.00
(b) Additional application fee, if submitted less than 21 days prior to city council meeting..... $25.00

1.14 Transaction Privilege Tax License [Ch. 62] (Res. 5098)

(a) Annual License fee [§62-320]..... $2.00
(b) Residential Rental (per unit/max = $50.00) [§62-320]..... $2.00
(c) Late fee [§62-320]..... 50% of Annual License Fee

1.15 Short Term Rental [Ch. 22] (Res. 4703)

(a) License Fee $250.00
(b) License Fee Renewal $250.00

1.16 Transaction Privilege Tax (City Tax Rates) [Ch. 62] (Res. 4703)

(a) Advertising [§62-405] 1.50%
(b) Amusements, Exhibitions, and Similar Activities [§62-410] 1.50%
(c) Construction Contracting: Prime Contractors [§62-415] 1.50%
(d) Construction Contracting: Speculative Builders [§62-416] 1.50%
(e) Construction Contracting: Owner-Builders [§62-417] 1.50%
(f) Hotels (>29 days) [§62-444] 1.50%
(g) Jet Fuel Sales / Jet Fuel Use: Per Gallon [§62-422] $0.023
(h) Job Printing [§62-425] 1.50%
(i) Manufactured Buildings [§62-427] 1.50%
(j) Mining [§62-432] 0.10%
(k) Publishing and Periodicals Distribution [§62-435] 1.50%
(l) Real Property Rental (Residential) [§62-445] 1.50%
(m) Real Property Rental (Commercial) [§62-445] 1.50%
(n) Restaurants & Bars [§62-455] 1.80%
(o) Retail Sales [§62-460] 1.50%
(p) Retail Sales: Food for Home Consumption [§62-462] 1.50%
(q) Tangible Property Rental [§62-450] 1.50%
(r) Telecommunication Services [§62-470] 2.75%
(s) Timbering and other Extraction [§62-430] 1.50%
(t) Transient Lodging (<30 days) [§62-447] 4.40%
(u) Transporting for Hire [§62-475] 1.50%
(v) Use Tax [§62-610] 1.50%
(w) Utility Services [§62-480] 2.75%
(x) Wastewater Removal Services [§62-485] 0.00%

1.17 Business Registration (Res. 5098)

(a) Annual Registration Fee [§61-6.A] $45.00
(b) Non-Profit, Annual Registration Fee [§61-6.B] $0.00
(c) Specialty License Holder, Annual Registration Fee [§61-6.D] $0.00
(d) Late Penalty [§61-5.A] ..... 50% of Annual License Fee
(e) Change of Location Fee, (if not completed online) [§61-7.C] $15.00

1.18 Shared Mobility (Pilot Program (Res. 5337)

(a) License Application One-time Fee (non-refundable) $3,000
(b) Monthly Use Fee (paid monthly) ..... $0.10 per ride
(c) Late Monthly Use Fee $50.00
(d) Violation Fee
  i. 1st violation $50.00
  ii. 2nd violation $250.00
  iii. 3rd and subsequent violations $500.00

Sec. 2 Chandler Municipal Airport

(Chapter 8): (Amd entirety by Res. 4505)

2.1 Ground Leases:

(a) Aviation Use, (Non-prime).....Negotiable
(Negotiable based on minimum $0.25/Sq Ft/Yr, plus consideration of appraisal and comps)

(b) Aviation Use, (Prime).....Negotiable
(Negotiable based on minimum $0.30/Sq Ft/Yr, plus consideration of appraisal and comps)

(c) Non-Aviation Use, all areas (Res. 4703)..... One and one-half times the aviation use rate

2.2 Hangars:

(a) T-Hangar Units (Res. 4703)
- i. Small unit, monthly fee..... $244.00
- ii. Small unit with storage, monthly fee.....$288.00
- iii. Large unit, monthly fee..... $430.00
- iv. Large unit with storage, monthly fee.....$551.00

(b) Storage Units (Res. 4703)
- i. Small unit, monthly fee..... $44.00
- ii. Large unit, monthly fee..... $121.00

(c) Other Hangars
- i. Daily fee..... $0.10/Sq. Ft
- ii. Monthly fee.....$0.33/Sq. Ft
- iii. Annual fee..... $4/Sq. Ft

(d) Cleaning fee
- i. Retention of deposit.....$150.00
- ii. Staff Charges ..... as assessed in Sec. 2.10

2.3 T-Shades, all units (qty 12), monthly fee..... $130.00

2.4 Tie Down Spaces (Res. 4703)

(a) Single Engine Piston Aircraft & Helicopter, less than 2,500 lbs MTOW, monthly fee.....$50.00

(b) Multi-Engine Piston Aircraft & Helicopter, 2,500 to 5,000 lbs MTOW, monthly fee.....$68.00

(c) Turbine Engine over 5,000 lbs. MTOW & Helicopter, over 2,500 lbs MTOW, monthly fee..... $138.00

2.5 Transient or Overnight Parking Fee

(a) Single Engine & Helicopter, less than 2,500 lbs..... $10.00

(b) Multi-Engine & Helicopter, 2,500 to 5,000 lbs MTOW..... $12.00

(c) Turbine Engine & Helicopter, over 5,000 lbs MTOW (Res. 4703)..... $26.00

2.6 Aeronautical Business Permit Fee [Ch.8-6.1]

All commercial operators on the Chandler Municipal Airport (CHD) shall pay one of the following fees according to their primary business activity in relation to the fee categories described below and/or as defined in the Chandler Municipal Airport Rules and Regulations.

(a) FBO Operator (Assessed to a ground lessee)
Annual fee per on-airport business entity.....$1,500.00

(b) SASO Operator (Assessed to a ground lessee)
Annual fee per on-airport business entity.....$860.00

(c) Hangar/Shade/Tie Down Leasing of units of size less than or equal to 2,100 SF each.
(Assessed to any entity leasing or subleasing aircraft storage units regardless of aircraft hangar ownership)
Annual fee per unit leased*..... $50.00

(d) Hangar/Shade/Tie Down Leasing of units of size in excess of 2,100 SF each.
(Assessed to any entity leasing or subleasing aircraft storage units regardless of aircraft hangar ownership)
Annual fee per unit leased*..... $125.00

(e) Aircraft Charter and Air Taxi *(Assessed to companies that have aircraft based at and operating from Chandler Municipal Airport. All pertinent SASO requirements will apply except on-airport facility requirements)*
Annual fee per business entity operating on the airport..... $450.00

(f) Mobile aircraft maintenance and repair *(Assessed to aircraft maintenance and repair operations that do not meet the applicable SASO conditions for on-airport facilities or are not conducting said operations as a bona-fide employee – not a temporary contractor - on the aircraft owned by a ground lessee or sublessee. All pertinent SASO requirements will apply except the on- airport facility requirements)*
Annual fee per business entity operating on the airport..... $1,000.00

(g) Temporary Aeronautical Business Permit – 7-day permit *(Assessed to commercial activity on the airport that is not a ground lessee or sublessee on the airport. All pertinent SASO requirements will apply except on-airport facility requirements)*
Charged per 7-day (7 continuous days) permit..... $80.00

(h) Temporary Aeronautical Business Permit – 1 day permit *(Assessed to commercial activity on the airport that is not a Ground Lessee or sublessee on the airport. All pertinent SASO requirements will apply except on-airport facility requirements)*
Charged per 1-day permit..... $25.00

(i) Commercial Sub-lease Tenant *(Includes sublessees that are SASOs and other commercial activities – does not apply to hangar sub-leasing. All pertinent SASO requirements will apply)**
Annual fee per sublessee business entity operating on the airport.....$450.00

(j) Commercial Users Permit* *(Assessed to commercial activity on the airport that is not a ground lessee or sublessee on the airport. All pertinent SASO requirements will apply except on-airport facility requirements)*
Annual fee per business entity operating on the airport..... $350.00

(k) Banner Tow Operations *(Applies to commercial Banner Tow Operators. Requires additional appropriate permit [i.e. Temporary Business Permit, SASO Operator or Commercial Users Permit])* Charged per each time a banner is picked up on the airport..... $20.00

* - Non aviation uses in these categories shall pay three times the aviation use rate.

2.7 Aeronautical Business Permit monthly fee [Ch.8-6.5]

(a) For fuel supply businesses:
Fuel flowage fee, per gallon:
i. All gallons per month..... $0.10

(b) For self-fueling operations
Fuel flowage fee, per gallon:
i. All gallons per month..... $0.15

(c) For other businesses.....Not Applicable

2.8 Through-the-Fence Access Fees

(a) Annual Access Privilege/Operations & Maintenance Fee (Amd by Res. 4505)
Payments for this charge are made on a quarterly basis and are due by the tenth of January, April, July, and October of each calendar year. Payments, administration and contact with Airport Management on Through-the-Fence issues shall be as follows:

- If the through-the-fence area is a property with a single through-the-fence user, a single point-of-contact for that single property owner is responsible for payment, administration and contact with Airport Management.
- If the through-the-fence area is a property with multiple through-the-fence users on that site, then an association formed by those owners is the responsible party for payment and contact with Airport Management.

If payments are more than 30 days past due, all gate access for that property will be denied until payment is received by the City of Chandler.

i. Owner-Occupied Hangar..... $0.630/SF of Hangar
   a. This component is based on the operations and maintenance costs of airport common use area for based aircraft.
   b. The actual annual charge will be based upon the actual square footage of any hangars in the through-the-fence area with taxilane access and which are designed for, or capable of aircraft storage. “Actual hangar area” is established by the plans approved by the City. It is the hangar owner’s responsibility to provide Airport Management with a copy of the approved plans or plan sheet showing the approved square footage of the hangar.
   c. An owner-occupied hangar is one that is owned or controlled by the property owner. Conditions for meeting this criteria include:
      (i) The hangar is owned by and its use is controlled exclusively by the applicant. This ownership can be through either:
         - Fee simple ownership; or
         - A long-term lease for the hangar property with a lease term of 10+ years. In this arrangement, the actual annual charge will be equal to the Owner occupied hangar fee described in paragraph 2.8(a).i.a. and b. of this section. However, the annual charge will change to the Non-owner occupied hangar fee described in paragraphs 2.8(a).ii.a. and b. of this section, if any one of the following conditions occur: (a) the long-term hangar lease is terminated prior to the expiration of a 24-month period; or (b) if a new lease entity assumes the long-term lease and the new entity can’t provide a viable connection to the prior long-term lessee (i.e., business acquisition, merger, etc.). The Non-owner-occupied fee will be in effect for that hangar for any further leasing activity while the then current property owner retains ownership of the hangar. If the long-term hangar lease is terminated before 24 months and the hangar owner provides evidence that only their owned and controlled aircraft will be stored in the hangar, the rate will remain at the Owner occupied hangar fee described in paragraphs 2.8(a).i.a. and b. of this section and will remain at this rate until another change in occupancy status occurs.
      (ii) The aircraft is owned or otherwise controlled by the property owner for which evidence can be provided including:
         - Evidence of clear ownership of the aircraft showing the property owner as aircraft owner. This can be through FAA aircraft registration or other official documentation regarding the ownership or registration of an aircraft.
         - Proof of at least 25% ownership and equal control of the aircraft which shall be affirmed through signature of all owners on the required aircraft control entity form, which shall be provided by

Airport Management. In the event of arrangements for an aircraft in which there are multiple owners or partners, a copy of the agreement must be presented to Airport Management. These arrangements for aircraft management, aircraft leasing, interchange agreements, joint ownership agreements or time-sharing agreements must substantially reflect the general guidelines and tenets for the appropriate arrangement as detailed in the National Business Aircraft Association's (NBAA) document titled 2001 NBAA Aircraft Operating & Leasing Package. The agreements, regardless of aircraft size, must also include the general verbiage requirements detailed in Section (a)(1) and (a)(2) of the Federal Aviation Regulations (FAR) Part 91.23 – Truth in Leasing.

d. Property owners shall notify Airport Management in writing prior to a hangar being used to store an aircraft. The "Annual Access Privilege/Operations & Maintenance Fee - Owner Occupied Hangar" fee will be applied for the period beginning with the first day of the month following receipt of the written notice. This fee shall apply for any part of a month in which an aircraft is stored in the hangar and shall continue until the property owner provides evidence that the aircraft or hangar is no longer owned by the property owner.

ii. Non-Owner Occupied Hangar.....$0.950/SF of Hangar

a. This component is for any off airport hangar property that is occupied by an aircraft not owned or controlled by the property owner. This condition applies to any situation where an aircraft is in a hangar through a lease or other type of agreement. It also applies to situations in which an aircraft is stored in the hangar that is owned by the property owner AND an aircraft is stored the hangar that is not owned by the property owner. The annual charge is based upon the Owner Occupied Hangar rate described in paragraphs 2.8(a).i.a. and b. plus 50% of that rate.

b. The actual annual charge will be based upon the actual square footage of any hangars in the through-the-fence area with taxilane access and which are designed for, or capable of aircraft storage. "Actual hangar area" is established by the plans approved by the City. It is the hangar owner's responsibility to provide Airport Management with a copy of the approved plans or plan sheet showing the approved square footage of the hangar.

c. Upon written notification by property owner and aircraft owner to Airport Management, advising a hangar will be occupied by an aircraft controlled by any entity other than the property owner, the "Annual Access Privilege/Operations & Maintenance Fee - Non-owner Occupied" annual charge will become effective in the following manner:

(i) If the hangar was previously registered as being occupied with an aircraft controlled by the property owner, the Non-owner rate and registration begins with the first day of the following calendar month; or

(ii) If the hangar was previously registered as having no aircraft being stored (reference paragraph 2.8(a).i.c.), the non-owner rate and registration begins with the first day of the following calendar month; or

(iii) If the hangar was previously registered as having a non-owner aircraft, the Non-owner rate will remain in effect and uninterrupted.

The non-owner rate applicable to any of these conditions will continue for 6-months and will expire on the last day of the 6th month of that term regardless of any changes in the aircraft owner status during that 6-month period. The hangar status shall be automatically registered for another 6-month period as a "Non-owner occupied" hangar –unless- the

property owner provides written evidence changing the status of the hangar at least 14 calendar days prior to the current expiration date. Notice changing the status of the hangar is the full responsibility of the property owner.

(b) Annual User Fee

i. Turbine Engine Aircraft & Helicopters having a gross take-off weight greater than 7,000 pounds - per aircraft based in Airpark..... $800.00

ii. Multi-Engine Aircraft & Helicopters having a gross take-off weight greater than 2,500 pounds but less or equal to 7,000 pounds – per aircraft based in Airpark.....$390.00

iii. Single-Engine Aircraft & Helicopters having a gross take-off weight that is less or equal to 2,500 pounds - per aircraft based in Airpark..... $290.00

(c) Annual Taxiway User Fee - per square foot fee for the total area reserved for Airport access use by licensee's members..... $0.245

(d) Fuel Flowage Fee - All Aircraft (total gallons fee based on gallons/month)
All gallons per month.....$0.15 Per Gallon

(e) Fees Adjustments
The Annual Access Privilege/Operations & Maintenance Fee shall be adjusted annually, without further City Council action, on January 1st of each year subsequent to adoption of this Resolution No. 4505 by an amount equal to the percentage increase, if any, in the Consumer Price Index (CPI-U, Western Region - All items) over the previous 12-month period ending the calendar month prior to the adjustment date; except that, at the fourth adjustment date, and every fourth adjustment date thereafter, the rate shall only be adjusted (increased or decreased) upon action of City Council taken upon completion of a review of the appropriateness of the rate structure. In no event shall the rate be increased more than ten (10%) per cent over any twelve
(12) month period between anniversary dates, unless otherwise approved by City Council. Should the annual change in the CPI-U indicate a decline, the fee shall not diminish.

2.9 City Owned, Aviation Fuel Service, Retail Prices

The retail price of aviation fuel shall be per methodology contained below:

(a) The retail price of aviation fuel shall be determined by a "cost-plus" formula based upon the wholesale price of the fuel inventory plus an amount not less than eighty ($0.80) cents per gallon, inclusive of applicable federal, state, and local fees and taxes.

2.10 Airport Hourly Fee

For exclusive use of staff time on activity not associated with normal airport operations and maintenance of the facility.

(a) Regular Staff Charges during posted business hours
Actual time rounded up to nearest .25 hour..... $45.00/hr

(b) Overtime/Call Out Staff Charges outside of posted business hours (2-hour minimum charge) Actual time rounded up to nearest .25 hour..... $68.00/hr

2.11 Security Fee

Payments of these fees will be on an individual basis and as conditions warrant.

(a) Security Card and System Fee – for each lessee/sublessee transfer.....$100.00

(b) Hangar Key/Access Card/Device Replacement Fee (per each replacement or actual cost of replacement, whichever is higher)..... $35.00

(c) Access System Violation (Pertains to misuse of access cards/devices and access of gates in violation of access agreement(s) and airport policies during a contiguous 24-month period. Upon notice of any violation, should no previous violations have occurred for the individual card

holder of record within the previous rolling 24-month period, the violation is considered a 1st violation)

1st Violation	$0.00 Written warning to be issued
2nd Violation	$100.00 Written notification to be issued
3rd Violation	$200.00 90-day loss of access privileges (Res. 4703)
4th Violation	$200.00 12-month loss of access privileges

2.12 Terminal Administration Conference Room (Assessed to non-aviation related uses) (Res. 4703)

(a) Resident Hourly Use Fee.....$25.00
(b) Non-Resident Hourly Use Fee.....$34.00

2.13 Office Leases (one-year term)

(a) Aviation Use (Non-prime) Negotiable (Negotiable base of $9.50/Sq. Ft/Yr. minimum, plus consideration of appraisal and comps)
(b) Aviation Use (Prime) Negotiable (Negotiable base of $22/Sq. Ft/Yr. minimum, plus consideration of appraisal and comps

Sec. 3 Community Services

Parks, Recreation, and Museum
(Res. 4703)

3.1 Recreation Program and Service Fees: [Ch.§31-21.A]

The following includes all fees charged for the use of department facilities or the issuance of permits or licenses. In conjunction with the fees set forth, any applicable rental or retail sales tax will also be assessed as appropriate for items such as, pool rentals, room rentals, ball fields, pavilions, merchandise, lifeguard rentals, permits, etc.

3.1.1 Aquatics

Pool Admission Fees	Resident	Per	Non-Resident	Per
(a) Pool Admission Fee - Youth	$1.00	pp	$1.00	pp
(b) Pool Admission Fee - Adult	$2.25	pp	$2.25	pp
(c) Pool Admission Fee – Senior (55+)	$1.25	pp	$1.25	pp
(d) Lap Swim - Year-Round	$2.00	pp	$2.00	pp
(e) Pool Pass - Youth (15 punches)	25% discount off current admission rounded to nearest ¼ dollar- for residents only			
(f) Pool Pass – Adult (15 punches)	25% discount off current admission rounded to nearest ¼ dollar- for residents only			
(g) Pool Pass – Senior (15 punches)	25% discount off current admission rounded to nearest ¼ dollar- for residents only			
(h) Pool Pass - Youth (30 punches)	50% discount off current admission rounded to nearest ¼ dollar- for residents only			
(i) Pool Pass – Adult (30 punches)	50% discount off current admission rounded to nearest ¼ dollar- for residents only			
(j) Pool Pass – Senior (30 punches)	50% discount off current admission rounded to nearest ¼ dollar- for residents only			
(k) Annual Pool Pass - Family of 4	$112.00	ea	N/A	N/A
(l) Annual Pool Pass - Additional Family Member	$15.00	pp	N/A	N/A
(m) Annual Lap Swim - Adult Pass	$200.00	ea	N/A	N/A
(n) Family Swim	$1.00	family	$1.00	family

Pool Rentals	Resident	Per	Non-Resident	Per
(o) Private Pool Rental (plus Guard fee)	$45.00	hr	$61.00	hr
(p) Swim Team Use	$5.00	lane	N/A	N/A
(q) Lifeguard (all programs)	$20.00	hr	$20.00	hr

Miscellaneous Fees	Resident	Per	Non-Resident	Per
(r) Special Events (Dive-In Movie, etc.)	$0.25 to $2.75	event	$0.25 to $2.75	event

3.1.2 Parks

Pavilion Rental Corporate Size	Resident	Per	Non-Resident	Per	Commercial	Per
(a) Corporate Pavilion – 4 hour minimum	$70.00	hr	$90.00	hr	$105.00	hr
(b) Large Pavilion	$29.00	hr	$40.00	hr	$44.00	hr
(c) Medium Pavilion	$20.00	hr	$27.00	hr	$30.00	hr
(d) Small Pavilion	$10.00	hr	$14.00	hr	$15.00	hr

Other Rentals	Resident	Per	Non-Resident	Per	Commercial	Per
(f) Open Grass Space Rental – Community and Regional Parks	N/A	N/A	N/A	N/A	$30.00	hr
(g) Amphitheater – Community and Regional *	$180.00	hr	$243.00	hr	$270.00	hr
* Chandler Non-Profit Groups	Rate - 50%	hr	N/A	N/A	N/A	N/A

Sport Facility Fees	Resident	Per	Non-Resident	Per	Commercial	Per
(h) Ball Field Reservation - No Lights	$14.00	hr	$19.00	hr	$21.00	N/A
(i) Ball Field Reservation - Tournaments/Leagues	$14.00	hr	$19.00	hr	$21.00	hr
(j) Ball Field Lights	$15.00	hr	$21.00	hr	$23.00	hr
(k) ½ Multi Use Field Reservation – No Lights	$7.00	hr	$10.00	hr	$11.00	hr
(l) ½ Ball Field Lights	$7.50	hr	$11.00	hr	N/A	N/A
(m) Field Preparation	$40.00	prep	$54.00	prep	$60.00	prep
(n) Mini Field Preparations	$21.00	prep	$29.00	prep	$32.00	prep
(o) Field Preparation After-Hour	$60.00	prep	$81.00	prep	$90.00	prep
(p) Site Supervisor	$25.00	hr	$34.00	hr	$38.00	hr
(q) Basketball Court	$7.00	hr	$10.00	hr	$11.00	hr
(r) Volleyball Court	$7.00	hr	$10.00	hr	$11.00	hr
(s) Athletic Field Reservation Down Payment	$150.00	event	$150.00	event	$150.00	event
(t) Gate Fee - 8 teams or less	$100.00	event	$100.00	event	$100.00	event
(u) Gate Fee - 9 to 16 teams	$150.00	event	$150.00	event	$150.00	event
(v) Gate Fee - 17 teams or more	$200.00	event	$200.00	event	$200.00	event
(w) Concession - 8 teams or less	$100.00	event	$100.00	event	$100.00	event
(x) Concession - 9 to 16 teams	$150.00	event	$150.00	event	$150.00	event
(y) Concession - 17 teams or more	$200.00	event	$200.00	event	$200.00	event
(z) Park Maintenance Staff (After Hours Fee)	$60.00	hr	$81.00	hr	$90.00	hr

Park Vendor License	Resident	Per	Non-Resident	Per
(aa) Application Fee	$25.00	ea	$34.00	ea
(bb) Up to 3 days per week (9-mo. Term)	$250.00	ea	$338.00	ea
(cc) Up to 5 days per week (12-mo. Term)	$500.00	ea	$675.00	ea

Park Use Permits	Resident	Per	Non-Resident	Per
(dd) Malt Beverage Permit	$14.00	ea	$19.00	ea
(ee) Boating Permit	$6.00	yr	$9.00	yr

3.1.3 Recreation Facilities

Rentals	Resident	Per	Non-Resident	Per	Commercial	Per
(a) Multipurpose Room - Small*	$65.00	hr	$88.00	hr	$98.00	hr
(b) Multipurpose Room - Medium*	$91.00	hr	$123.00	hr	$137.00	hr
(c) Multipurpose Room - Large*	$144.00	hr	$195.00	hr	$216.00	hr
(d) Kitchen*	$25.00	hr	$34.00	hr	$38.00	hr
(e) Courtyard - Medium*	$40.00	hr	$54.00	hr	$60.00	hr
(f) Courtyard - Large*	$125.00	hr	$169.00	hr	$188.00	hr
(g) Classroom/Meeting Room - Small*	$25.00	hr	$34.00	hr	$38.00	hr
(h) Classroom/Meeting Room - Medium*	$40.00	hr	$54.00	hr	$60.00	hr
(i) Classroom/Meeting Room - Large*	$60.00	hr	$81.00	hr	$90.00	hr
(j) Classroom/Meeting Room - X-Large*	$70.00	hr	$95.00	hr	$105.00	hr
(k) Gym (After Hours)*	$200.00	hr	$270.00	hr	$300.00	hr
(l) Gym – Half (After Hours)*	$100.00	hr	$135.00	hr	$150.00	hr
(m) Full Facility After Hours	$500.00	hr	$675.00	hr	$750.00	hr
(n) Education Exploration – Class Size 1-30 Students	$65.00	hr	$88.00	hr	N/A	N/A

Rentals	Resident	Per	Non-Resident	Per	Commercial	Per
(o) Education Exploration – Class Size 31-60 Students	$169.00	1.5 hr	$229.00	1.5 hr	N/A	N/A
(p) Education Exploration – Class Size 61-90 Students	$283.00	1.5 hr	$383.00	1.5 hr	N/A	N/A
(q) Set-up Fee for room reservations	$50.00	hr	$68.00	hr	$75.00	hr
* Chandler Non-Profit Groups	Rate - 50%	hr	N/A	N/A	N/A	N/A

Miscellaneous Fees	Resident	Per	Non-Resident	Per
(r) Alcohol Permit	$14.00	ea	$19.00	ea
(s) Balloon Removal Fee	$50.00	event	$50.00	event
(t) Basic Birthday Party Packages (1 to 10 children)	$80.00	event	$108.00	event
(u) Birthday Party Packages, Nature Options (1 to 10 children)	$100.00	event	$130.00	event
(v) Birthday Party Packages, Sportacular Fun Options (1 to 10 children)	$130.00	event	$176.00	event
(w) Birthday Party Packages, Creative Delight, Outdoor Bounce, Main Event & Theme Options (1 to 10 children)	$155.00	event	$210.00	event
(x) Additional Child	$10.00	ea	$14.00	ea
(y) Birthday Party Add-ons (i.e., cake, pizza, drinks, etc.)	Cost of Goods + 50% markup = Retail Price			
(z) Merchandise	Cost of Goods + 50% markup = Retail Price			
(aa) Cake Decoration Kit	$6.00	ea	$6.00	ea
(bb) Body Composition Analyzer – 1X Assessment	$15.00	ea	$21.00	ea
(cc) Body Composition Analyzer – 4X Assessment	$45.00	ea	$61.00	ea

3.1.4 Recreation Fitness Passes

Daily Admission	Resident	Per	Non-Resident	Per
(a) Teen & Active Adult	$3.00	pp	$5.00	pp
(b) Adult	$4.00	pp	$6.00	pp
(c) Youth	$2.00	pp	$3.00	pp

Monthly Admission	Resident	Per	Non-Resident	Per
(d) Teen, Adult & Active Adult	$30.00	pp	$41.00	pp
(e) Youth	$25.00	pp	$34.00	pp
(f) 2 person	$45.00	ea	$61.00	ea
(g) Family (2 Adults & 4 Dependents)	$60.00	ea	$81.00	ea
(h) Additional Family Dependent	$5.00	pp	$7.00	pp
(i) 6 Month Admission- Teen	$113.00	pp	$152.00	pp
(j) 6 Month Admission- Adult	$150.00	pp	$203.00	pp
(k) 6 Month Admission- Active Adult	$113.00	pp	$152.00	pp
(l) 6 Month Admission- Youth	$100.00	pp	$135.00	pp
(m) 6 Month Admission- 2 Person	$250.00	pp	$337.50	pp
(n) 6 Month Admission- Family (2 Adults & 4 Dependents)	$300.00	pp	$405.00	pp
(o) 6 Month Admission- Additional Family Dependent	$25.00	pp	$34.00	pp

Annual Passes	Resident	Per	Non-Resident	Per

(p) Teen & Active Adult	$225.00	pp	$304.00	pp
(q) Adult	$300.00	pp	$405.00	pp
(r) Youth	$200.00	pp	$270.00	pp
(s) 2 person	$500.00	ea	$675.00	ea
(t) Family (2 Adults & 4 Dependents)	$600.00	ea	$810.00	ea
(u) Additional Family Dependent	$50.00	pp	$68.00	pp

Punch Passes (10 visits)	Resident	Per	Non-Resident	Per
(v) Teen & Active Adult	$27.00	ea	$37.00	ea
(w) Adult	$36.00	ea	$49.00	ea
(x) Youth	$18.00	ea	$25.00	ea

Childwatch	Resident	Per	Non-Resident	Per
(y) Daily	$2.50	ea	$4.00	ea
(z) Month	$20.00	ea	$27.00	ea
(aa) Additional Child - Monthly	$10.00	ea	$14.00	ea
(bb) Punch Pass - 20 visits	$40.00	ea	$54.00	ea

Corporate Rates	Resident	Per	Non-Resident	Per
(cc) Membership Fee, per person	$225.00	ea	$304.00	ea
(dd) Corporate Sponsorship	$750.00	yr	$1,013.00	yr

3.1.5 Special Events

Special Event Fees	Resident	Per	Non-Resident	Per	Commercial	Per
(a) Special Recreation Sites (i.e., Dr. AJ Chandler Park/East & West) 1,2	$180.00	hr	$243.00	hr	$270.00	hr
(b) Downtown East Event Area (i.e., A.J. Chandler Park – Stage Commonwealth Ave, Arizona Place, and Dr. AJ Chandler Park East)1,3	$460.00	hr	$621.00	hr	$690.00	hr
(c) Dr. A.J. Chandler Park – Stage Plaza1,2	$280.00	hr	$378.00	hr	$420.00	hr
(d) Main Park Rental*	$1,500.00	day	$2,025.00	day	$2,250.00	day
(e) Festival Area*	$700.00	day	$945.00	day	$1,050.00	day
(f) Red Shed Theater*	$300.00	day	$405.00	day	$450.00	day
(g) Road Closure*	$500.00	day	$675.00	day	$750.00	day
(h) Tumbleweed Park Parking Field A, B or C* (see map)	$2,500.00	ea	$3,375.00	ea	$3,750.00	ea
(i) Paseo Vista Dog Park Rental	$20.00	hr	$27.00	hr	$30.00	hr
(j) Trash Can Rental	$20.00	ea	$27.00	ea	N/A	N/A
Special Event Fees	**Resident**	**Per**	**Non-Resident**	**Per**	**Commercial**	**Per**

(k) Restroom Staff	$27.00	hr	$37.00	hr	$41.00	hr
(l) Restroom Supply Reimbursement	$50.00	ea	$68.00	ea	N/A	N/A
(m) Special Event Permit Application Fee – 60 or more days in advance	$50.00	ea	$68.00	ea	N/A	N/A
(n) Special Event Permit Application Fee – less than 60 days in advance	$100.00	ea	$135.00	ea	N/A	N/A
(o) Showmobile/Portable Stage Fee	$325.00	event day	$439.00	event day	$488.00	event day
(p) Portable Bleachers*	$500.00	event day	$675.00	event day	N/A	N/A
(q) Loss of Public Use – Parking Spaces	$1.00	space	$2.00	space	$3.00	space
(r) Bike and Skate Park (Exclusive Use Rental)*	$70.00	hr	$95.00	hr	$105.00	hr
(s) Downtown Events Electrician Fee – Pre-Schedule Event Day - Onsite	$51.00	hr	69.00	hr	$77.00	hr
(t) Facilities Maintenance Fee – On-call Standby	$45.00	hr	$61.00	hr	$68.00	hr

Special Event Fees	Resident	Per	Non-Resident	Per	Commercial	Per
(u) Run/Walk (i.e. 5K/10K) Park Race Route Fee	$100.00	route	$100.00	route	$150.00	route
(v) Parade of Lights Entry Fee	$25.00	entry	$25.00	entry	$25.00	entry
*Chandler Non-Profit Groups	Rate - 50%	hr/event day	N/A	N/A	N/A	N/A
[1] 20% off Event Hour's Rate for Business in Good Standing and Pay into the EMSD						
[2] Set Up/Tear Down Hours	$30.00	hr	$41.00	hr	$45.00	hr
[3] Set Up/Tear Down Hours	$50.00	hr	$68.00	hr	$75.00	hr

Event Vendor Booth Fees (Per Event)	Information	Retail Sales	Food & Beverage	Additional Space	Power
	$50.00	$75.00	$150.00	$50.00/100 sq ft	$30.00

Special Event Deposits	Resident	Per	Non-Resident	Per	Commercial	Per
(w) Cleaning Deposit: 500 participants or less	$250.00	ea	$338.00	ea	$375.00	ea
(x) Cleaning Deposit: 501 participants or more	$500.00	ea	$675.00	ea	$750.00	ea
(y) Showmobile/Portable Stage Deposit	$150.00	ea	$203.00	ea	$225.00	ea
(z) Canopy/Tent Deposit	$250.00	ea	$338.00	ea	$375.00	ea

3.1.6 Tennis Center

Court Rentals	Resident	Per	Non-Resident	Per
(a) Tennis Court – A.M., 1.5 hours	$3.00	pp	$4.50	pp
(b) Tennis Court – P.M., 1.5 hours (includes lights)	$4.00	pp	$5.50	pp
(c) Tennis Court - General Use A.M., 1.5 hours – Chandler Non-Profit/Schools	$4.50	court	$7.00	court
(d) Tennis Court - General Use P.M., 1.5 hours – Chandler Non-Profit/Schools (includes lights)	$7.50	court	$11.00	court
(e) Tennis Court - General Use A.M., 1.5 hours – Private/Commercial	$6.00	court	$9.00	court
(f) Tennis Court - General Use P.M., 1.5 hours – Private/Commercial (includes lights)	$9.00	court	$13.00	court
(g) Tennis Court - Tournaments A.M. Chandler Non-Profit/Schools	$4.50	match	$7.00	match
(h) Tennis Court - Tournaments P.M. Chandler Non-Profit/Schools (includes lights)	$7.50	match	$11.00	match
Court Rentals	Resident	Per	Non-Resident	Per
(i) Tennis Court - Tournaments A.M. Private/Commercial	$6.00	match	$9.00	match
(j) Tennis Court-Tournaments P.M. Private/Commercial (includes lights)	$9.00	match	$13.00	match
(k) Doubles - Prepay A.M. - 2 hrs	$13.50	court	$19.00	court
(l) Doubles - Prepay P.M. - 2 hrs (includes light fee)	$16.50	court	$23.00	court
(m) Singles - Prepay A.M. - 2 hrs	$6.50	court	$9.00	court
(n) Singles - Prepay P.M. - 2 hrs (includes light fee)	$9.00	court	$13.00	court

Other Rentals	Resident	Per	Non-Resident	Per
(o) Tennis Ball Machine – A.M., 30 minutes (includes court)	$6.50	ea	$9.00	ea
(p) Ball Cart Rental	$5.00	ea	$7.00	ea
(q) Tennis Ball Machine – P.M., 30 minutes (includes court and lights)	$9.00	ea	$12.00	ea

(r)	After Hour Staff Fee	$25.00	hr	$34.00	hr
(s)	Extended League Play Fee, 30 minutes	$2.00	ea	$3.00	ea
(t)	Pro Ball Cart Rental	$2.00	ea	N/A	N/A
(u)	Pro Court Rental – P.M., 30 minutes (includes lights)	$6.00	ea	N/A	N/A
(v)	Pro Court Rental – P.M., 60 minutes (includes lights)	$10.00	ea	N/A	N/A
(w)	Pro Court Rental – A.M., 60 minutes	$7.00	ea	N/A	N/A
(x)	Pro Court Rental – A.M., 30 minutes	$4.00	ea	N/A	N/A

3.2 Recreation Division Registration Based Class, Program and Activity Fees: [Ch.§31-21.B]
The formulas presented below may include a factor rate, program supplies and costs, or staff costs. The factor rate is a multiplier that allows the standardization of the program fee over different instructors paid at different rates so that the program as a whole over the entire system meets its cost recovery target. The program supplies and costs include all elements of the program including such things as materials, field trips and transportation, food, contractual scorekeepers/officials. The staff costs include any part-time/temporary staff hired to coordinate, oversee, or maintain any element of the program.

3.2.1 Community Recreation Program (CRP) Classes: Devau – The formula for establishing the fee to participants for special interest classes, such as, arts/crafts, pom and cheer, dance, Spanish, photography, martial arts, ceramics, musical instrument skills, etc., is:

(Class Length + Prep Time) x # of days x 2.75 Factor Rate (includes wages) + $3 Admin = participant cost

3.2.2 CRP Classes: Contractual – The formula for establishing the fee to participants for special interest classes, such as, financial planning, computer skills, women's self-defense, public speaking, advanced robotics, etc., is:

Instructor Fee + 28% of Instructor Fee = participant cost

3.2.3 Specialized Fitness Classes – The formula for establishing the fee to participants for classes, such as, zumba, racketball, yoga, spin, pilates, tai chi, etc., is:

(Class Length + Prep Time) x # of days x 4.5 Factor Rate (includes wages) + $3 Admin = participant cost

3.2.4 Fitness Training – The formula for establishing the fee to participants for individual training is:

Instructor Fee = participant cost (City receives 50% of fee from instructor)

3.2.5 Personal Training – Individual
Participant Cost = 1.75 factor rate x instructor fee
(Individual Personal Training Session Fee)

Personal Training – Group (maximum of 2)
Participant Cost = 2.5 factor rate x instructor fee divided by 2 (Group Training Session paid per person)

Personal Training – 10 Session Package
Participant Cost = Individual Personal Training Session Fee x 9 sessions (Pay for 9 and receive 1 session free)

3.2.6 Camp Challenge and Therapeutic Recreation Social Events (participants with disabilities) – The formula for establishing the fee is:

$$\frac{\text{Program Supplies and Costs + Staff Costs}}{\text{Minimum \# of Participants}} \times 15\% \text{ cost recovery} = \text{participant cost}$$

3.2.7 Camps, Clinics, Adult Sports, and Aquatics – The formula for establishing the fee to participants for classes, such as, building blocks, field trips, excursions, intersession and summer camps, sport clinics, adult leagues (i.e., softball, volleyball, etc.), aqua fit, aquatics certification classes plus appropriate Red Cross fee (if applicable), recreation swim teams, semi-private swim lessons, etc., is:

$$\frac{\text{Program Supplies and Costs + Staff Costs + Appropriate Red Cross Fee (if applicable)}}{\text{Minimum \# of Participants}} = \text{participant cost}$$

3.2.8 Programs and services that address specific user interest offered at fair market value. The formula for establishing the fee to participants for lessons, leagues, and tournaments such as cardio tennis, mixed doubles league, singles, and doubles tournaments, etc. is:

Fair Market Value = participant cost

3.2.9 Group Swim Lessons – The formula for establishing the fee is:

$$\frac{\text{Program Supplies and Costs + Staff Costs + Red Cross Learn to Swim fee}}{\text{Minimum \# of Participants}} \times 85\% \text{ cost recovery} = \text{participant cost}$$

3.2.10 Chandler Youth Sports Association (CYSA) – The formula for establishing the fee for the CYSA affiliates ball field light use is:

$$\text{Total Cost of Hours of Athletic Light usage during Primary Season} \times 50\% \text{ cost recovery} = \text{reimbursement to the City}$$

3.3 Museum

(a) Banner Museum Exhibit Rental.....$25.00 per rental
(b) Museum School Trunk Education Resource Rental.....$25.00 per rental

Sec. 4 Development Services

(Amd. in entirety Res. 4505)

4.1 Land Use and Zoning:

4.1.1 Administrative Design Review: [§35-1700]

(a) New construction and building additions that are greater than 10% of the existing building area..... $275.00

(b) Minor changes such as exterior modifications to existing buildings, façade renovations, new canopies, fixtures, color and/or material changes, new outdoor patios, and building additions that that are less than 10% increase in building area..... $115.00

4.1.2 General Plan Amendments: [§35-2504]

(a) Text amendment (regular)..... $785.00

(b) Map amendment (special)..... $785.00

4.1.3 Rezonings: [§35-2504]

(a) Zoning District Changes and Zoning Extensions..... $785.00

(b) Plus, per acre..... $40.00

(c) Historic Preservation Neighborhood Application..... $100.00

(d) Resident/Home addition of Historic Preservation Overlay Application..... $50.00

4.1.4 Preliminary Development Plans: [§35-2504]..... $315.00

4.1.5 Area Plans [§35-2504]..... $785.00

4.1.6 Use Permits: [§35-2504]

(a) Single-family..... $315.00

(b) All others as detailed in Chandler City Code Chapter 35-2100..... $475.00

(c) Use permit extension..... Same as Original

4.1.7 Variances: [§35-2504]

(a) Single-family..... $165.00

(b) All others..... $315.00

4.1.8 Continuances: [§35-2504]

(a) Applicant's request..... $165.00

4.1.9 Subdivision Planning Fees: [§48-7.1]

(a) Preliminary plat..... $785.00

(b) Plus, per lot..... $7.85

(c) Final plat..... $785.00

(d) Plus, per lot..... $7.85

4.1.10 Minor Land Divisions application fee [§48-13.6]..... $315.00

4.1.11 Miscellaneous Planning-Related Fees [§35-2504]:

(a) Administrative use permits [§35-305]..... $120.00

(b) Zoning verification letters..... $275.00

4.2 Sign Permit Application [§39-7.4]

Two and five tenths percent (2.5%) of the value of the sign plus twenty-five cents ($0.25) per square foot. If work is started before a permit has been issued, the fees specified above shall be doubled.

4.3 Banner Application Fee [§32-6] (Res. 3482)..... $100.00

4.4 Site Development Fees

4.4.1 Site Development Review Fee

(a) Major (new development/redevelopment)..... $2,395.00
(b) Plus, per acre.....$105.00
(c) Minor (modification to existing development).....$385.00

4.4.2 Tenant Improvement Plan Review..... $50.00/hr

4.4.3 Zoning Clearance..... $120.00

4.5 Civil Plan Review Fees [§47-6 & 7]:

Civil Plan review fees are based upon the number of sheets submitted for review and approval. Each type of improvement plan (i.e., grading and drainage, water, sewer, right-of-way improvements) may be submitted separately or in combination.

Improvement Plans (including Grading and Drainage)..... $440.00 per sheet
Fourth and subsequent Review Fees..... $150.00 per sheet

4.5.1 Fees for review of the plan revisions which are initiated by the developer or required due to an error or oversight of the developer after plans have been approved by the City Engineer, shall be charged at the flat rate of $110.00 for each revision or set of revisions reviewed.

4.5.2 Civil Engineering Subdivision Review Fees [§48-7]

(a) Preliminary Plat.....$785.00
(b) Plus, per lot.....$7.85
(c) Final Plat.....$850.00
(d) Plus, per lot.....$8.50
(e) Minor land division..... $340.00
(f) Plat recording.....Pursuant to Maricopa County Recorder Fee Schedule
(g) CC&R recording.....Pursuant to Maricopa County Recorder Fee Schedule

4.6 Building Safety [§29-1] (Res. 4703)

Building permit fees for new construction are based upon the most current building valuation data published by the International Code Council accessible at:
http://www.iccsafe.org/codes-tech-support/codes/code-development-process/building-valuation- data/

Construction valuations for alterations shall be based on all construction costs involved and shall be approved by the Building Official.

4.6.1 Building Permit Fees

Total Valuation	Fee
$1.00 to $500	$50.00
$501 to $2,000	$50.00 for the first $500 plus $1.20 for each additional $100 or fraction thereof, to and including $2,000
$2,001 to $25,000	$68.00 for the first $2,000 plus $12.50 for each additional $1,000 or fraction thereof, to and including $25,000
$25,001 to $50,000	$355.50 for the first $25,000 plus $9.00 for each additional $1,000 or fraction thereof, to and including $50,000
$50,001 to $100,000	$580.50 for the first $50,000 plus $6.25 for each additional $1,000 or fraction thereof, to and including $100,000
$100,001 to $500,000	$893.00 for the first $100,000 plus $5.00 for each additional $1,000 or fraction thereof, to and including $500,000
$500,001 to $1,000,000	$2,893.00 for the first $500,000 plus $4.25 for each additional $1,000 or fraction thereof, to and including $1,000,000
$1,000,001 and up	$5,018.00 for the first $1,000,000 plus $2.75 for each additional $1,000 or fraction thereof

4.6.2 Building Plan Review Fees

(a) Building plan review fee..... 65% of building permit fee
(b) Additional revisions to approved plans..... $60.00/hour, 1 hour minimum
(c) Expedited
(at Building Official's discretion) (Res. 4703)..... Twice the normal plan review fee
(d) Deferred submittal items.....$60.00/hour, 1 hour minimum
(e) Renew action on expired application..... New building plan review fee
(f) Sign permit building plan review.....$60.00/hour, 1 hour minimum
(g) Plan review services without a specific fee..... $60.00/hour, 1 hour minimum

4.6.3 Inspection Fees

(a) Inspection outside normal business hours..... $75.00/hour, 2 hour minimum
(b) Re-inspection fee.....$60.00/hour, 1 hour minimum
(c) Inspections without a specific fee.....$60.00/hour, 1 hour minimum
(d) Sign permit inspection..... $60.00/hour, 1 hour minimum

4.6.4 Miscellaneous Fees:

(a) Demolition permit, commercial/residential.....$100.00
(b) Electrical service 400 amps or less.....$100.00
(c) Archival fee..... $1.00 per page
(d) Residential pool permit fee..... $110.00
(e) Residential spa permit fee..... $55.00
(f) Annual Facility Permit (trust account required).....
.....$1,000.00 registration plus $60.00 per hour on-site review/inspection
(g) Certificate of Occupancy not associated with a Building Permit.....$100.00
(h) Foundation Only Permit..... 25% of calculated building permit fee
(i) Permit Reinstatement (within one-year of expiration)..... 50% of current permit fee

(j) Administration Buy-in (per agreement)..... $100.00
(k) Residential solar photovoltaic system permit fee (Res. 4703).....$150.00
(l) Residential solar water heating system permit fee (Res. 4703)..... $150.00
(m) Residential ramada/accessory storage building permit fee..... $150.00
(n) Administrative fee for permits from approved standard plans.....$75.00
(o) Temporary Certificate of Occupancy..... $100.00 for first 30 days,
.....$500.00 for each 30 day renewal for a maximum of 180 days
(p) Appeal to the Building Official.....$180.00
(q) Miscellaneous minor residential work .....
(1-6 gas outlets, 1-2 branch electrical circuits 1-6 plbg. openings, etc.).....$100.00
(r) Permit issuance when no other fees apply..... $60.00

4.7 Transportation Engineering Fees

4.7.1 Traffic Control & Lane Restriction Permit Fee (Non-Refundable) ……..……$315.00

A temporary traffic control permit and associated permit administration fee is required for private development initiated temporary traffic control projects. A temporary traffic control permit shall be issued for City of Chandler capital projects, but a permit administration fee shall not be required. The permit fee is comprised of an hourly rate of $45.00 per hour and is intended to cover a maximum of two (2) hours for plan review and a maximum of five (5) hours for in-field inspections.

4.7.2 Deposit Fee for Authorized Temporary Traffic Control Permits

Deposit amount is fully refundable if all permitted work is completed per the specifications and timeframe authorized by the issued temporary traffic control permit. For every calendar day past the temporary traffic control permit expiration date, not to exceed twenty (20) calendar days, during which temporary barricades and other equipment authorized by the permit remain in the public right-of-way, the total refundable deposit amount shall be reduced by five (5) percent per day of the submitted deposit amount. The refundable deposit amount shall be zero ($0.00) dollars after the 20th calendar day.

Deposit Amount	Project Valuation
$0 to $100,000	1% of project valuation with a minimum deposit of $1,000
$100,000 to $300,000	2% of project valuation
$300,000 to $500,000	3% of project valuation
$500,000 to $750,000	4% of project valuation
$750,000 to $1,000,000	5% of project valuation
$1,000,000 and greater	6% of project valuation not to exceed $100,000

Sec. 5 Neighborhood Resources

5.1 Neighborhood Resources Non-Compliance/Re-inspection fee [Ch. §30-6.8]

(a) Abatement Administrative Fee [Ch §26.10] (Res. 4703)..... 25% of contractor cost

(b) Demolition Abatement Administrative Fee..... 25% of demolition contractor cost

Sec. 6 Public Safety

Public Safety- Fire

Hazardous Materials Permit Fee [§28-6] (Res. 3312)

(a) More than 550 pounds of materials on site, annual fee.....$300.00
(b) HAZMAT materials management plan required; annual fee.....$500.00

6.1.2 Assembly Permit (100 or more occupants) [§28-6]..... No Charge

6.1.3 Cutting & Welding Permit [§28-6].....No Charge

6.1.4 High-Piled Combustible Storage Permit [§28-6]

(a) Buildings 5,000 or Less Sq. Ft..... No Charge
(b) Buildings 5,001 or More Sq. Ft.....No Charge

6.1.5 Firework Display Permit (per event) [§28-6]..... $250.00

6.1.6 Carnival & Fair Permit
(Amusement Events, Trade Shows, Vehicle Displays) [§28-6].....$125.00

6.1.7 Motor Vehicle Fuel-Dispensing Stations Permit [§28-6] (one-time)..... $105.00

6.1.8 Temporary Membrane Structures, Tents [§28-6]

(a) Tent or Canopy 801 or More Sq. Ft. (Res. 4703)..... $170.00
(b) Each Additional Tent or Canopy 801 or More Sq. Ft. (Res. 4703)..... $40.00
(c) Tent or canopy less than 801 Sq. Ft. (Res. 4703).....No Charge

6.1.9 Open Burn Permit [§28-6 & 7] (Res. 4703)

(a) Open flame, or grease laden vapor cooking in accordance with 28-6.....$85.00
(b) Open Flame cooking devices more than 600 sq. in. cooking surface
or more than 5 gal. LP gas (20lbs) (No charge if less than that amount)..... $85.00

6.1.10 Fire Protection Equipment Contractor's License [§28-6].....$85.00

6.1.11 All Other Permits Not Listed, but Included in the Fire Code [§28-6]..... $40.00

6.1.12 Fire User Fee [Ch.27-4] [§27-3 & 4] (Res. 3482, Res. 4119, Res. 4703)
Charges for Fire response where tactical actions are initiated or Emergency Medical Response where medical evaluation is initiated:

(a) 4-person apparatus response:.....$1,400 per response apparatus plus the administrative and hourly personnel charges set forth below;
(b) 2-person apparatus response:.....$700 per response apparatus plus the administrative and hourly personnel charges set forth below;
(c) 1-person apparatus response:.....$350 per response apparatus plus the administrative and hourly personnel charges set forth below;
(d) Additional hourly* personnel charge:
  i. No charge for first hour of response;
  ii. $31 per firefighter for hours 2 through 24
  iii. $45 per hour per firefighter for hours 25 and beyond

*The additional hourly personnel charges will be billed in 15 minutes increments and measured from the time that fire apparatus/personnel leaves the fire station for a response to the time that fire apparatus/personnel arrive back at the fire station after the response.

(e) Emergency Medical Stand-by:
  i. Per Firefighter (per hour).....$46.00
  ii. Equipment Charge (per event).....$175.00
(f) Fire Prevention Stand-by per person (per hour)..... $52.00
(g) Administrative charge..... 10% of the charges assessed as outlined in (a) – (f)

6.1.13 Arson Restitution & Investigation Fees (Pursuant to A.R.S. § 13-1709) (Res. 4703)

(a) Emergency response: The emergency response cost to the City in responding to a fire determined to be caused by arson is the same as the charges set forth in Section 6.1.15.
(b) Investigation: The cost to the City for investigating a fire caused by arson is:
  i. $42.00 per fire investigative hour (non-overtime)
  ii. $67.00 per fire investigative hour (overtime)
  iii. Actual cost of materials and supplies utilized during the investigation

6.1.14 Training Center Room Fees [Ch.§27-8]

(a) Classroom
  i. Small Room (under 60 seats)
    Business Hours Rate..... $40/hr (2-hr minimum)
    Evening/Weekend Rate..... $70/hr (2-hr minimum)
  ii. Large Room (over 60 seats)
    Business Hours Rate..... $65/hr (2-hr minimum)
    Evening/Weekend Rate..... $115/hr (2-hr minimum)
(b) Auditorium (250 seats)
    Business Hours Rate..... $130/hr (2-hr minimum)
    Evening/Weekend Rate..... $220/hr (2-hr minimum)

6.1.15 Other Training Center Fees [Ch.§27-8]

(a) Chandler Safety Officer.....$75/hr
(b) Public Safety Training Center Liaison.....$75/hr
(c) Chandler Facility Prop Technician..... $50/hr
(d) Fire Instructor.....$75/hr (4-hr minimum)
(e) Skills Training Area.....$50/hr (2-hr minimum)
(f) Fees for Material/Equipment/Props Used for Training:
  i. Liquid Smoke..... Actual Costs
  ii. Propane..... Actual Costs
  iii. Sheeting.....Actual Costs
  iv. Class A Burn Building[1].....$100/hr (4-hr minimum)
  v. Burn Tower (propane)[1].....$75/hr (4-hr minimum)
  vi. Confined Space Prop/TRT.....$35/hr (4-hr minimum)
  vii. Outside Burn Prop (propane)[1].....$35/hr (4-hr minimum)
  viii. Flashover Chamber (must provide own instructors)[1].....$50/hr (4-hr minimum)
  ix. Forcible Entry Prop (plus cost of replacement lock)..... $35/hr (4-hr minimum)
  x. Vertical Ventilation Prop.....$50/hr (4-hr minimum)
    (1) Compliance with NFPA 1403 required. Chandler Safety Officer may be required
(g) Hydrant Connection Fee.....$100 minimum
(h) Janitorial Charge.....$100.00
(i) Fire Recruit Academy.....$4,500 per recruit

(j) Paramedic Program Student Registration..... $6,000 per student
(k) Disposal Fee..... $50.00

6.1.16 Re-inspection after initial post-notice inspection for same violation [§28-4]

Inspection	Fee
Initial Inspection	$0.00
Reinspection #1	$100.00 or $0.00 if violations corrected
Reinspection #2	$150.00 or $0.00 if violations corrected
Reinspection #3 – and each additional reinspection thereafter	$200.00 or $0.00 if violations corrected

6.2 Police Department, (Chapters 24 & 30): (Res. 4035, Res. 4535, Res. 4703)

6.2.1 Second or subsequent response to disturbances [§30-7.3] (Res. 3482)..... Actual Cost

6.2.2 Alarm User's Permit [§24-4.2]
(a) Application Fee..... $10.00
(b) Annual Renewal Fee.....$10.00
(c) Administrative Penalty for connecting without a permit [§24-8.2] (Res. 3482)..... $10.00

6.2.3 Alarm Late Filing Fee [§24-9]..... $25.00

6.2.4 Alarm Permit Reinstatement Fee [§24-5.7].....$25.00

6.2.5 Duplicate Permit Copy Fee [§24-9.3] (Res. 3482)..... $10.00

6.2.6 Fingerprinting..... $10.00

6.2.7 Extra Duty Fee (Res. 4535, Res. 4703)
(a) Rate per hour per officer/sergeant in non-supervisory capacity
(topped out officer rate at time and a half; vendor pays directly to officer/sergeant)
(b) Rate per hour per sergeant in supervisory capacity
(topped out sergeant rate at time and a half; vendor pays directly to sergeant)
(c) Rate per hour for Workers Compensation coverage (vendor pays directly to City)
(effective October 1, 2014).....$2.50
(d) Rate per hour for Vehicle usage (vendor pays directly to City).....$6.00

6.2.8 Vehicle Impound Fee
(Pursuant to A.R.S §28-3513 and Police Administrative Policy).....$150.00

6.2.9 Pawnbroker Report Fee [§15-2].....$3.00/per report

Sec. 7 Public Works & Utilities

7.1 Public Works Encroachment and Inspection, (Chapter 46):

7.1.1 Encroachment Permit

(a) Class 1 encroachment permit application base fee [§46-3].....$97.00
(b) Class 2 encroachment permit application base fee [§46-4].....$97.00
(c) Class 3 encroachment permit application base fee [§46-5] (Res. 3336).....$97.00
(d) Class 4 encroachment permit application base fee [§46-6] (Res. 3336).....$97.00
(e) Class 5 encroachment permit application base fee [§46-7] (Res. 3336).....$97.00
(f) Class 6 encroachment permit application base fee [§46-8] (Res. 3336).....$97.00
(g) Class 7 encroachment permit application fee [§46-9] (Res. 3336).....$97.00
(h) Class 8 encroachment permit application fee [§46-10] (Res. 3336).....$97.00
(i) Class 9 encroachment permit application fee [§46-11] (Res. 4504).....$97.00
(j) Encroachment Permit ROW use fee (Res. 4430, Res. 4703).....$2.27 per linear foot (for calendar year 2019)*

* Pursuant to the approved agreements, the linear foot fee shall be adjusted annually, without further City Council action, on January 1st of each year by an amount equal to the percentage increase, if any, in the Consumer Price Index (CPI-U, Western Region - All items) over the previous 12-month calendar period. In no event shall the rate be increased more than three and eight-tenths (3.8%) per cent over any twelve (12) month period between anniversary dates, unless otherwise approved by City Council. Should the annual change in the CPI-U indicate a decline, the fee shall not diminish.

7.1.2 Cable Television License application base fee [§46-8.8E]..... $10,000.00

7.1.3 License applications base fee for all Chapter 46 licenses except cable (Res. 3336)..... $3,000.00

7.1.4 Penalty Assessment for failure to obtain encroachment or street cut permit..... $1,000.00

7.1.5 Pavement Damage Restoration Fee (Res. 3692)

(a) Within one year of construction of new streets, renovation, or reconstruction of a street (as defined by City Code):
  i. For Each Cut:
    a. For 5 sq. yds. or less.....$330.00 per sq. yd. of cut
    b. For larger than 5, to 100 sq. yds. .....$1,650.00 plus $18.00 per sq. yd. of cut over 5 sq. yds.
    c. For larger than 100 sq. yds. .....$3,360.00 plus $14.00 per sq. yd. of cut over 100 sq. yds.
  ii. For cuts within the first year, the fee is in addition to the requirement for mill and overlay/inlay in accordance with City Code §46-2.7.
  iii. Or for cuts within the first year, the applicant may choose to reconstruct the street in accordance with City Code §46-2.7 in lieu of paying the above fee.

(b) From one to two years after construction of new streets, renovation, or reconstruction of a street (as defined in the City Code):
  i. For Each Cut:
    a. For 5 sq. yds. or less.....$330.00 per sq. yd. of cut
    b. For larger than 5, to 100 sq. yds. .....$1,650.00 plus $18.00 per sq. yd. of cut over 5 sq. yds.
    c. For larger than 100 sq. yds. .....$3,360.00 plus $14.00 per sq. yd. of cut over 100 sq. yds.

  ii. For cuts from one to two years after construction of new streets, renovation or

reconstruction of a street, the applicant may choose to perform a mill and overlay/inlay, in accordance with City Code §46-2.7 in lieu of paying the above fee.

(c) From two to four years after construction of new streets or renovation or reconstruction of a street (as defined by City Code):
   i. For Each Cut:
      a. For 5 sq. yds. or less.....$230.00 per sq. yd. of cut
      b. For larger than 5, to 100 sq. yd.
         .....$1,150.00 plus $13.00 per sq. yd. of cut over 5 sq. yds.
      c. For larger than 100 sq. yds.
         .....$2,385.00 plus $10.00 per sq. yd. of cut over 100 sq. yds.

(d) From four to six years after construction of new streets or renovation or reconstruction of a street (as defined by City Code):
   i. For Each Cut:
      a. For 5 sq. yds. or less.....$130.00 per sq. yd. of cut
      b. For Larger than 5, to 100 sq. yds.
         .....$650.00 plus $8.00 per sq. yd. of cut over 5 sq. yds.
      c. For larger than 100 sq. yds.
         .....$1,410.00 plus $5.00 per sq. yd. of cut over 100 sq. yds.

(e) Within one year prior to a City street reconstruction project approved in the capital program of the City's Annual Budget..... No Charge

(f) For cuts from two to six years after construction of new streets, renovation, or reconstruction
of a street, the applicant may choose to perform a mill and overlay/inlay, in accordance with City Code §46-2.7 in lieu of paying the above fee.

(g) The minimum fee shall be based on one square yard. If a pavement cut is so extensive, or the cuts in one area are so numerous that the permittee prefers to perform a renovation (major rehabilitation) of the street in accordance with the City Engineer's requirements, for the full width of any impacted lane and the full length of any cuts plus fifty feet in both directions from the area of the cut on arterial streets and twenty-five in both directions from the area of the cut on collector streets, the permittee may choose to do such renovation in lieu of the Pavement Restoration Fee and such reconstruction shall satisfy the fee requirement. Provided, however, this does not apply to pavement cuts in streets within two years of construction, renovation, or reconstruction. During the first two years, those who desire to perform reconstruction in lieu of paying the pavement restoration fee will be required to reconstruct the street to the satisfaction of the City Engineer. Those companies exempt from the Pavement Restoration Fee shall perform the required repairs and restoration in accordance with City Code §46-2.7 and their contracts with the City unless their written application to pay the established fee in lieu of such restoration is granted by the City Engineer.

(h) For pavement cuts or potholes less than two square feet, no fee will be charged, or for companies with license and franchise agreements that require street reconstruction no reconstruction will be required, provided the pavement cut or pothole meets the spacing requirements shown on Standard Detail No. C-111.

(i) If a pothole cut is done in advance of construction that will remove that portion of the pavement within a reasonable time as specified by the City Engineer, no fee will be charged.

(j) The definitions set forth in Section 46-2.7 are applicable to the provisions herein.

(k) This Pavement Restoration Fee shall not be charged to nor paid by the City Street Division or the City Traffic Engineering Division.

7.1.6 Small Wireless Facility §46-10.3 (Pursuant to A.R.S. §9-592(L), §9-592(D)(4), §9-595(C) and §9-595(D))

(a) Application Fee
- i. New/Replacement Pole..... $750.00
- ii. Pole exceeding 50ft in height..... $1,000.00
- iii. Consolidated Application Fee, Existing Pole, Sites 1-5..... $100.00
- iv. Consolidated Application Fee, Existing Pole, Sites 6-25..... $50.00

(b) Annual Right-of-Way Use Fee..... $50.00
(for each facility in the City's right-of-way or utility easements)

(c) Annual Right-of-Way Use Fee, Pole exceeding 50ft in height..... $450.00

(d) Annual City Pole Use Fee..... $50.00
(for each facility installed on a City-owned pole or on a City owned wireless support structure in the City's right-of-way or utility easements)

7.1.7 Application for disposition of roadway or easement [§47-16.2]

(a) ROW appraisal fee (deposit of $200.00 required)..... Actual Cost
(b) ROW Vacation Application Fee..... $1,000.00
(c) Extinguishment of easements appraisal fee (deposit of $200.00 required)..... Actual Cost
(d) Extinguishment of Easements Application Fee..... $500.00

7.1.8 Fire Hydrant Meter Deposit [§52-5] (Res. 4703)..... $3,100.00

7.1.9 Reimbursement Agreement Transaction fee [Ch. 51]..... $100.00

7.1.10 Median & Street Light Construction Buy-In Assessment [§47-12 & 47-15] (Res. 3482)

½ Front Foot	Per foot
(a) Median construction	$11.00 LF
(b) Streetlighting in median	$11.00 LF
(c) Landscaping in median	$1.80 SF
(d) Streetlighting behind curb	$9.00 LF

7.1.11 Water Service Buy-In Assessment [§52-26] (Res. 3482)

	6"	8"	10"	12"	16"
(a) Full front foot	24.00	33.00	38.00	43.00	66.00
(b) ½ front foot	12.00	16.50	19.00	21.50	33.00

7.1.12 Reclaimed Water Buy-In Assessment [§53-12] (Res. 3482)

	12"
Full front foot	37.00
½ front foot	18.50

7.1.13 Sewer Service Buy-In Assessment [§51-20] (Res. 3482)

Full Front Foot	8”	10”	12”	15”
(a) 0 – 10’ depth	25.00	31.00	35.00	43.00
(b) 10 – 18’ depth	43.00	48.00	52.00	61.00
(c) *Over 18’	49.00	53.00	54.00	63.00

1/2 Front Foot	8”	10”	12”	15”
(d) 0 – 10’ depth	12.50	15.50	17.50	21.50
(e) 10 – 18’	21.50	24.00	26.00	30.50
(f) *Over 18’	24.50	26.50	27.00	31.50

*(add $2.50 per full front foot for each additional foot in depth)

7.1.14 Inspection and Testing Fees [§47-7.2] (Res. 3336, Res. 3482, Res. 4505)

Pavement	Unit	Fee/unit without testing
(a) Paving Public Right of Way/Private Streets & Drives	SY	0.36
(b) Parking Areas	SY	0.10
(c) Overlay (all)	SY	0.12
(d) Alley Surface	SY	0.36
(e) Street Sign Bases [Ch. 48-12.7]	EA	10.00
(f) Street Sign (City)	EA	80.00
(g) Mill & Overlay	SY	0.25

Concrete	Unit	Fee/unit without testing
(h) Driveway or alley entrance	EA	41.17
(i) Valley Gutter	LF	0.36
(j) Apron	EA	10.98
(k) Curb & gutter	LF	0.19
(l) Sidewalk	SF	0.07
(m) Catch Basin/Scupper	EA	41.17
(n) Sidewalk Ramp	EA	82.34

Water	Unit	Fee/unit without testing
(o) Water Pipe (4” or larger)	LF	0.82
(p) Water Services	LF	0.55
(q) Pavement Cut	SY	23.87
(r) Tapping Sleeve & Valve (non-fire or fire line)	EA	82.34
(s) Landscape Irrigation System with Backflow Prevention Devices	EA	82.34
(t) Fire Line with and without backflow prevention devices	LF	0.82

Reclaimed Water	Unit	Fee/unit without testing
(u) Reclaimed Water (4” or larger)	LF	0.82
(v) Reclaimed Water Service	LF	0.48
(w) Pavement Cut	SY	23.87
(x) Tapping Sleeve and Valve	EA	82.34

Sewer	Unit	Fee/unit without testing
(y) Sewer pipe (8” or larger)	LF	1.10
(z) Sewer service	LF	0.82
(aa) Manhole	EA	82.34
(bb) Pavement cut	SY	23.87
(cc) Clean out/drop connection	EA	42.54

Drainage	Unit	Fee/unit without testing
(dd) Retention Basin (Grading)	Acre	68.62
(ee) Irrigation Pipe (SRP, RWCD, Private)	LF	1.07
(ff) Stormwater Pipe (including Box Culverts)	LF	1.16
(gg) Headwalls	EA	42.54
(hh) Pavement Cut	SY	23.87
(ii) Drywells	EA	76.85
(jj) Stormwater Retention Pipe	LF	1.16

Utilities [Ch §47-7.2]	Unit	Fee/unit without testing
(kk) Utility trenching in ROW/Easement	LF	0.22
(ll) Street Light Pole (public)	EA	41.17
(mm) Repealed by Ord. 4104 adopted 10/30/08		
(nn) Repealed by Ord. 4104 adopted 10/30/08		
(oo) Borings on a local street	LF	0.14
(pp) Borings on an Arterial or collector street	LF	0.21
(qq) Pavement cut	SY	23.87
(rr) Service Drops	EA	20.59
(ss) Offsite After-hours inspection fee	HR	97.00

Permits [Ch §47-7.2]	Unit	Fee/unit without testing
(tt) Permit application fee	EA	97.00
(uu) As Built Approval fee	SHEET	13.72
(vv) Blanket Permits	EA	450.00
(ww) New Construction Pavement Preservative Seal Coat Permit	YD	0.90

7.2 Solid Waste Services, (Chapter 44):

7.2.1 Monthly Solid Waste Disposal Fee.....$19.86

(a) A monthly disposal fee applies to all covered residences receiving basic solid waste services as set forth in Chapter 44 of the City Code. The City will bill the monthly disposal fee on the water account serving each covered residence. When the owner or occupant of a covered residence does not have an active water account to bill, a utility billing account will be established. A security deposit, as specified in section 50-3 of the City Code, shall be required from owners or occupants of covered residences without an active water account.

(b) Additional monthly disposal fee applies to Alley solid waste customers…..... $1.61

7.2.2 Cost of Solid Waste Containers.....$148.00

The initial cost of providing refuse containers and recycling containers, including the cost of assembling such containers, for newly constructed covered residences, and shall be paid by the person applying for the initial building permit for each new covered residence at the same time that the fees for the residential building permit are paid. When property with a covered residence located thereon is annexed into the City, the owner of such property shall pay the initial cost to the City of providing such property with a refuse and a recycling container.

7.2.3 Additional and Replacement Container Cost

(a) Additional curbside refuse container (Res. 4703 & 5751).....$75.00

(b) Replacement of a damaged curbside refuse container or recycling container, where the damage was caused by the resident (Res. 4703 & 5751)..... $75.00

(c) Non-damaged container replacement with refurbished container..... $30.00

(d) Rescheduling container repair/replacement when container is not set out (Res. 4703)..... $26.00

(e) Additional recycling container (Res. 5751)..... .....$75.00

(f) Additional alley refuse container (Res. 5751).....$430.00

(g) Replacement of a damaged alley refuse container where the damage was caused by the resident (Res. 5751).....$430.00

7.2.4 Additional Monthly Refuse Container Collection Fees

(a) Curbside Refuse Container (Res. 4703).....$10.00
This monthly collection fee is in addition to the fee for basic solid waste services set forth in Section 50-15, Code of the City of Chandler, and shall apply to each additional refuse container provided pursuant to subsection 7.2.2 (a).

(b) Alley Refuse Container..... $15.00
This monthly collection fee is in addition to the fee for basic solid waste services set forth in Section 50-15, Code of the City of Chandler, and shall apply to each additional refuse container provided pursuant to subsection 7.2.2 (d).

7.2.5 Special Collection Fees

(a) Fee for one-time special curbside refuse container collection requested by an owner or occupant of a covered residence..... $18.50

(b) Fee for one-time special alley refuse container collection requested by an owner or occupant of a covered residence..... $35.00

7.2.6 Bulk Material Collection Fees

(a) Bulk materials collected for disposal (Up to 4 per calendar year in combination with no charge visits to the RSWCC).....No Charge

(b) Bulk materials collected for recycling..... No Charge

(c) Additional bulk materials collected per collection event.....$35.00

(d) Freon recovery (Res. 4703)..... $15.00

7.2.7 Commercial Refuse Hauler Permit

(a) Annual application fee (per applicant).....$300.00
(b) Per vehicle annual fee..... $1,000.00

7.2.8 Recycling Solid Waste Collection Center Fees [§44-7.2A] (Res. 4703 & 5751)

(a) Per visit fee - first 400 lbs. of materials (Up to 4 per calendar year in combination with no charge Bulk Collections)….....No Charge
(Excluding no charge RSWCC accepted recyclables)
(b) Per visit fee - first 400 lbs. of materials (after free visits identified above)..... $10.00
(Excluding no charge RSWCC accepted recyclables)
(c) Per ton fee for weight above the first 400 lbs. covered above (prorated in 20lbs. increments):
i. All debris excluding RSWCC recyclables.....$50.00
(d) Freon recovery.....$15.00

7.2.9 Multi-family (non-residential) disposal fee (per load) [§44-7.2B] (Res. 4703).....$20.00

7.2.10 City Services (per ton)..... $50.00

Resolutions

Resolution No. 3175 – 12/16/99 RE-ADOPTING THE FEE SCHEDULE IN CONJUNCTION WITH THE REVISIONS TO THE CITY CODE

Resolution No. 3204 – 03/23/00 AMENDING THE CITY FEE SCHEDULE REGARDING AIRPORT FEES

Resolution No. 3312 – 08/10/00 AMENDING THE CHANDLER CITY FEE SCHEDULE REGARDING HAZARDOUS MATERIAL PERMIT FEES

Resolution No. 3336 – 11/16/00 AMENDING THE FEE SCHEDULE REGARDING CERTAIN PUBLIC WORKS PENALTIES, PERMIT, INSPECTION AND PROCESSING FEES

Resolution No. 3239 – 5/10/01 AMENDING THE CITY FEE SCHEDULE REGARDING AIRPORT FEES TO ESTABLISH FEES AND FEE ADJUSTMENT CRITERIA FOR THROUGH THE FENCE ACCESS

Resolution No. 3401 – 6/14/01 AMENDING THE CITY FEE SCHEDULE REGARDING AIRPORT GROUND LEASE RATES

Resolution No. 3372 – 12/13/01 AMENDING THE CITY FEE SCHEDULE REGARDING PAVEMENT RESTORATION FEES

Resolution No. 3482 – 3/14/02 AMENDING THE CITY FEE SCHEDULE REVISING CERTAIN MANAGEMENT SERVICES, FIRE, AIRPORT, PARKS/RECREATION, PLANNING/DEVELOPMENT, POLICE AND PUBLIC WORKS FEES

Resolution No. 3630 – 5/08/03 AMENDING THE CITY FEE SCHEDULE REVISING CERTAIN MANAGEMENT SERVICES, AIRPORT, REFUSE, PLANNING/DEVELOPMENT, POLICE AND PUBLIC WORKS FEES

Resolution No. 3692 – 11/06/03 AMENDING THE CITY FEE SCHEDULE REVISING PAVEMENT RESTORATION FEES

Resolution No. 3793 – 10/28/04 AMENDING CITY FEE SCHEDULE REVISING AIRPORT FEES

Ordinance No. 3689 – 6/23/05 AMENDING CITY FEE SCHEDULE DELETING REFUSE AND RECYCLING FEES, SECTION 4, AND INCORPORATING THEM INTO CITY CODE CHAPTER 44

Resolution No. 3913 – 11/17/05 AMENDING CITY FEE SCHEDULE REVISING AIRPORT FEES AND ADDING SECTION 2.10 (effective 1/1/2006)

Resolution No. 4035 – 1/11/2007 AMENDING CITY FEE SCHEDULE REVISING MANAGEMENT SERVICES, AIRPORT, PLANNING AND DEVELOPMENT AND POLICE FEES

Resolution No. 4059 – 04/26/2007 AMENDING CITY FEE SCHEDULE ADDING SECTION 4 MUNICIPAL UTILITIES

Resolution No. 4119 – 09/20/2007 AMENDING CITY FEE SCHEDULE SECTION 3
Resolution No. 4145 – 01/17/2008 REPEALED SECTION 5 PARKS AND RECREATION

Resolution No. 4178 – 4/24/2008 AMENDING SECTION 4 MUNICIPAL UTILITIES

Ordinance No. 4104 – 10/30/08 AMENDING SECTION 8, PUBLIC WORKS, REPEALING SEC 8.7 AND SEC 8.15, UTILITIES, MM AND NN EFFECTIVE 11/29/08

Resolution No. 4299 – 5/28/2009 AMENDING THE CITYWIDE FEE SCHEDULE RELATING TO FIRE DEPARTMENT, MUNICIPAL UTILITIES, PLANNING AND DEVELOPMENT, POLICE DEPARTMENT AND PUBLIC WORKS FEES

Resolution No. 4311 – 5/13/2009 AMENDING THE CITYWIDE FEE SCHEDULE AIRPORT RATES AND FEES

Resolution No. 4318 – 07/30/2009 AMENDING THE CITYWIDE FEE SCHEDULE RELATING TO FIRE DEPARTMENT, NEIGHBORHOOD RESOURCES, PLANNING AND DEVELOPMENT, POLICE DEPARTMENT AND PUBLIC WORKS FEES

Resolution No. 4430 – 06/24/2010 AMENDING SECTION 6, PLANNING AND DEVELOPMENT AND SECTION 8 PUBLIC WORKS.

Resolution No. 4483 – 12/09/2010 AMENDING SECTION 7, POLICE DEPARTMENT

Resolution No. 4504 – 04/28/2011 AMENDING SECTION 8, PUBLIC WORKS

Resolution No.4505 – 05/26/2011 AMENDING THE CITYWIDE FEE SCHEDULE RELATING TO TRANSPORTATION & DEVELOPMENT – DEVELOPMENT SERVICES AND TRANSPORTATION & DEVELOPMENT – TRANSPORTATION OPERATIONS.

Resolution No. 4535 – 10/27/2011 AMENDING SECTION 7, POLICE DEPARTMENT

Resolution No. 4615 – 07/26/2012 AMENDING SECTION 6.3.3 DELETING SITE DEVELOPMENT - HOME OCCUPATION FEE

Resolution No. 4703 – 08/12/13 AMENDING THE CITYWIDE FEE SCHEDULE RELATING TO ADMINISTRATION, MANAGEMENT SERVICES - TAX AND LICENSE, CHANDLER MUNICIPAL AIRPORT, FIRE DEPARTMENT, MUNICIPAL UTILITIES, PARKS AND RECREATION, TRANSPORTATION AND DEVELOPMENT - DEVELOPMENT SERVICES AND OPERATIONS, POLICE DEPARTMENT, AND NEIGHBORHOOD RESOURCES

Resolution No. 4773 – 6/12/14 AMENDING THE CITYWIDE FEE SCHEDULE RELATING TO FIRE DEPARTMENT, PARKS AND RECREATION, AND POLICE DEPARTMENT

Resolution No. 4839 – 03/26/2015 MANAGEMENT SERVICES DEPARTMENT, AIRPORT, TRANSPORTATION AND DEVELOPMENT, SOLID WASTE, POLICE, PARKS AND RECREATION, AND CULTURAL AFFAIRS

Resolution No. 4899 – 11/19/2015 AMENDING THE CITYWIDE FEE SCHEDULE RELATING TO MOBILE FOOD

Resolution No. 4941 – 5/12/2016 AMENDING SECTION 2: MUNICIPAL AIRPORT, SECTION 5: PARKS AND RECREATION, SECTION 6: TRANSPORTATION AND DEVELOPMENT, DEVELOPMENT SERVICES

Resolution No. 5034 – 4/13/2017 AMENDING THE CITYWIDE FEE SCHEDULE RELATING TO FIRE DEPARTMENT, MANAGEMENT SERVICES, PARKS AND RECREATION, AND TRANSPORTATION AND DEVELOPMENT DEPARTMENTS

Resolution No. 5098 – 12/7/17 AMENDING THE CITYWIDE FEE SCHEDULE RELATING TO ADMINISTRATION AND MANAGEMENT SERVICES DEPARTMENT

Resolution No. 5104 – 1/11/18 AMENDING THE CITYWIDE FEE SCHEDULE RELATING TO PUBLIC WORKS & UTILITIES DEPARTMENT AND INCORPORATING TECHNICAL CORRECTIONS TO RECOGNIZE REORGANIZATION AND REORDERING SECTIONS.

Resolution No. 5117 – 4/26/2018 AMENDING THE CITYWIDE FEE SCHEDULE RELATING TO COMMUNITY SERVICES, PUBLIC SAFETY - FIRE AND POLICE, AND PUBLIC WORKS & UTILITIES DEPARTMENTS.

Resolution No. 5215 – 12/13/2018 AMENDING THE CITYWIDE FEE SCHEDULE RELATING TO THE MANAGEMENT SERVICES AND DEVELOPMENT SERVICES DEPARTMENTS.

Resolution No. 5243 – 05/09/2019 AMENDING THE CITYWIDE FEE SCHEDULE RELATING TO THE COMMUNITY SERVICES, DEVELOPMENT SERVICES, AND PUBLIC WORKS & UTILITIES DEPARTMENTS.

Resolution No. 5300 – 12/12/2019 AMENDING THE CITYWIDE FEE SCHEDULE RELATING TO ADMINISTRATION AND MANAGEMENT SERVICES AND PUBLIC WORKS & UTILITIES DEPARTMENTS.

Resolution No. 5431 – 2/22/2021 AMENDING THE CITYWIDE FEE SCHEDULE RELATING TO THE AIRPORT, COMMUNITY SERVICES, DEVELOPMENT SERVICES, CULTURAL DEVELOPMENT, FIRE AND NEIGHBORHOOD RESOURCES DEPARTMENTS OR DIVISIONS.

Resolution No. 5558 – 5/12/2022 AMENDING THE CITYWIDE FEE SCHEDULE RELATING TO THE PUBLIC WORKS AND UTILITIES DEPARTMENT, SOLID WASTE DIVISION

Resolution No. 5696 – 7/20/2023 AMENDING THE CITYWIDE FEE SCHEDULE RELATING TO THE MANAGEMENT SERVICES AND PUBLIC WORKS AND UTILITIES DEPARTMENT

Resolution No. 5751 – 1/1/2024 AMENDING THE CITYWIDE FEE SCHEDULE RELATING TO THE PUBLIC WORKS AND UTILITIES DEPARTMENT, SOLID WASTE DIVISION

Resolution No. 5846 – 1/1/2025 AMENDING THE CITYWIDE FEE SCHEDULE RELATING TO THE COMMUNITY SERVICES DEPARTMENT, CULTURAL DEVELOPMENT DEPARTMENT, DEVELOPMENT SERVICES DEPARTMENT, FIRE DEPARTMENT, AND PUBLIC WORKS & UTILITIES DEPARTMENT

ITEM 41

City Council Memorandum Management Services Memo No. N/A

Date:	November 04, 2024
To:	Mayor and Council
Thru:	Joshua H. Wright, City Manager Dawn Lang, Deputy City Manager - CFO Kristi Smith, Financial Services Director Julie Goucher, Accounting Senior Manager
From:	Karla Lange, Management Assistant
Subject:	Claims Report for the Quarter Ended September 30, 2024

Background/Discussion

The claims report for the Accounts Payable payments for the quarter ending September 30, 2024, is attached. If viewing the agenda online per Section 3-6 of the City Code: "The City Manager/designee shall advise the City Council of all claims and demands paid, together with the name of the vendors or payees, dates paid and amounts."

Attachments

Claims Report - Jul 1 - Sep 30, 2024

AP Claims Report

Report Parameters:

Check Date - 07/01/2024,09/30/2024

Payment Number	Payment Date	Vendor Name	Amount
1085855	01-Jul-2024	1112 NORTH CALIFORNIA STREET PROPERTY LLC	1,300.00
1086273	31-Jul-2024	1112 NORTH CALIFORNIA STREET PROPERTY LLC	1,300.00
1085942	01-Jul-2024	1125 CALIFORNIA LLC	1,830.00
1086042	11-Jul-2024	1125 CALIFORNIA LLC	1,050.00
1086250	31-Jul-2024	1125 CALIFORNIA LLC	3,430.00
730832	31-Jul-2024	1591 E CARLA VISTA DR LLC (R)	125.00
730013	01-Jul-2024	2013-1 IH BORROWER LP	532.00
731019	31-Jul-2024	2013-1 IH BORROWER LP	578.00
730014	01-Jul-2024	2017-1 IH BORROWER LP	6,445.00
731020	31-Jul-2024	2017-1 IH BORROWER LP	6,445.00
730015	01-Jul-2024	2017-2 IH BORROWER LP	3,556.00
731021	31-Jul-2024	2017-2 IH BORROWER LP	1,416.00
730016	01-Jul-2024	2018-1 IH BORROWER LP	1,700.00
731022	31-Jul-2024	2018-1 IH BORROWER LP	1,700.00
730017	01-Jul-2024	2018-2 IH BORROWER LP	1,860.00
731023	31-Jul-2024	2018-2 IH BORROWER LP	1,860.00
730018	01-Jul-2024	2018-4 IH BORROWER LP	2,241.00
731024	31-Jul-2024	2018-4 IH BORROWER LP	2,241.00
730112	03-Jul-2024	2060 DIGITAL LLC, PHOENIX	350.00
730266	10-Jul-2024	2060 DIGITAL LLC, PHOENIX	70,299.75
730506	17-Jul-2024	2060 DIGITAL LLC, PHOENIX	35,175.00
1085941	01-Jul-2024	330 N COMANCHE LLC	7,403.00
1086249	31-Jul-2024	330 N COMANCHE LLC	7,565.00
1085796	01-Jul-2024	372 CHIPPEWA LLC	4,618.00
1086220	31-Jul-2024	372 CHIPPEWA LLC	4,596.00
730113	03-Jul-2024	4IMPRINT, INC	1,460.52
730507	17-Jul-2024	5 WORDS MEDIA	8,235.90
1085932	01-Jul-2024	847 RAY LLC	12,877.00
1086240	31-Jul-2024	847 RAY LLC	12,877.00
730019	01-Jul-2024	99 N COOPER 133 LLC	1,315.00
731025	31-Jul-2024	99 N COOPER 133 LLC	1,315.00
730267	10-Jul-2024	A MIND FOR DETAIL INC	6,410.00
730833	31-Jul-2024	A&M NUT AND BOLT INC	104.30
730508	17-Jul-2024	AAA LANDSCAPE	23,080.11
730834	31-Jul-2024	AAA LANDSCAPE	121,170.59
1085915	01-Jul-2024	ABDELKARIM, RABAH	2,084.00
1086333	31-Jul-2024	ABDELKARIM, RABAH	2,084.00
730652	24-Jul-2024	ABLE CARD LLC	4,759.74
1085801	01-Jul-2024	ABUNDANT BLESSING LLC	4,021.00
1086174	29-Jul-2024	ABUNDANT BLESSING LLC	3,329.00
1086225	31-Jul-2024	ABUNDANT BLESSING LLC	9,407.00
730835	31-Jul-2024	ACCEL (R)	50.63
1086034	11-Jul-2024	ACCELA INC	100,000.00
730836	31-Jul-2024	ACE PARKING MANAGEMENT, INC	3,335.00
730115	03-Jul-2024	ACE UNIFORMS OF PHOENIX	4,793.89
730509	17-Jul-2024	ACE UNIFORMS OF PHOENIX	3,345.71
730653	24-Jul-2024	ACE UNIFORMS OF PHOENIX	594.97

Payment Number	Payment Date	Vendor Name	Amount
1086035	11-Jul-2024	ACHEN GARDNER CONSTRUCTION LLC	1,663,267.44
730760	24-Jul-2024	ACP 6839 LLC (R)	350.74
730654	24-Jul-2024	ACTIVE HEALTH LLC	100.00
731026	31-Jul-2024	ADAMCZYK, ELAINE	100.00
730598	17-Jul-2024	ADAMS, LEE ANN (R)	9.00
730396	10-Jul-2024	ADESZKO, CHRISTOPHER (R)	55.41
730510	17-Jul-2024	ADP INTERPRETING LLC	245.00
730655	24-Jul-2024	ADP INTERPRETING LLC	840.00
730837	31-Jul-2024	ADP INTERPRETING LLC	420.00
730268	10-Jul-2024	ADVANCE AUTO PARTS	320.53
730511	17-Jul-2024	AFFORDABLE FIRE AND SAFETY	27,553.04
730512	17-Jul-2024	AFLAC	324.19
1085827	01-Jul-2024	AGARWAL, ABHISHEK	1,859.00
1086199	31-Jul-2024	AGARWAL, ABHISHEK	1,859.00
1085833	01-Jul-2024	AGARWAL, GOVIND KUMAR	3,182.00
1086204	31-Jul-2024	AGARWAL, GOVIND KUMAR	3,182.00
1085803	01-Jul-2024	AH PROPERTIES	2,353.00
1086227	31-Jul-2024	AH PROPERTIES	2,353.00
730599	17-Jul-2024	AHMETI-THOMAS, ARIJETA (R)	36.00
730020	01-Jul-2024	AHMETOVIC, AMILA	2,100.00
731027	31-Jul-2024	AHMETOVIC, AMILA	2,100.00
1085969	01-Jul-2024	AILEEN CHU HOLDINGS LLC	3,984.00
1086345	31-Jul-2024	AILEEN CHU HOLDINGS LLC	3,984.00
730490	17-Jul-2024	AIR PRODUCTS & CHEMICAL (R)	1,143,135.78
730116	03-Jul-2024	AIRPARK SIGNS & GRAPHICS	1,295.25
730600	17-Jul-2024	ALAITHAN, HANA (R)	53.10
730269	10-Jul-2024	ALIGHT SOLUTIONS LLC	5,352.00
730513	17-Jul-2024	ALIGHT SOLUTIONS LLC	28,147.40
1086139	25-Jul-2024	ALL ANIMALS RESCUE & TRANSPORTATION, LLC	1,344.20
1086128	25-Jul-2024	ALL CITY TOWING	168.00
1086031	11-Jul-2024	ALL THE KING'S FLAGS	268.29
1086083	18-Jul-2024	ALL THE KING'S FLAGS	821.83
1086127	25-Jul-2024	ALL THE KING'S FLAGS	376.11
730118	03-Jul-2024	ALLARD COLLISION LLC	16,416.97
730656	24-Jul-2024	ALLARD COLLISION LLC	580.00
730119	03-Jul-2024	ALLIED UNIVERSAL JANITORIAL SERVICES	3,629.88
730270	10-Jul-2024	ALLIED UNIVERSAL JANITORIAL SERVICES	607.13
730514	17-Jul-2024	ALLIED UNIVERSAL JANITORIAL SERVICES	38,705.72
730838	31-Jul-2024	ALLIED UNIVERSAL JANITORIAL SERVICES	641.58
730120	03-Jul-2024	ALLIED UNIVERSAL SECURITY SERVICES	1,188.00
730271	10-Jul-2024	ALLIED UNIVERSAL SECURITY SERVICES	1,188.00
730657	24-Jul-2024	ALLIED UNIVERSAL SECURITY SERVICES	2,138.40
730839	31-Jul-2024	ALLIED UNIVERSAL SECURITY SERVICES	1,188.00
730117	03-Jul-2024	ALL-KOTE LINING, INCORPORATED	26,880.00
1085840	01-Jul-2024	ALSAMKARI I, LLC	2,566.00
1086211	31-Jul-2024	ALSAMKARI I, LLC	2,566.00
730985	31-Jul-2024	ALVAREZ, NATALIA (R)	89.81
1085826	01-Jul-2024	AM PRESTIGE REAL ESTATE, LLC	2,116.00
1086198	31-Jul-2024	AM PRESTIGE REAL ESTATE, LLC	2,116.00
730515	17-Jul-2024	AM SIGNAL, LLC	4,312.00
730658	24-Jul-2024	AM SIGNAL, LLC	3,463.94
730840	31-Jul-2024	AM SIGNAL, LLC	1,868.71
730121	03-Jul-2024	AMADEUS (R)	33.75

Payment Number	Payment Date	Vendor Name	Amount
730516	17-Jul-2024	AMERICAN HIGHWAY SOLUTIONS	2,237.89
730122	03-Jul-2024	AMERICAN REFRIGERATION SUPPLIES INC	51.22
730517	17-Jul-2024	AMERICAN REFRIGERATION SUPPLIES INC	3,716.57
730021	01-Jul-2024	AMH 2014-1 BORROWER, LLC	2,513.00
731028	31-Jul-2024	AMH 2014-1 BORROWER, LLC	2,513.00
730659	24-Jul-2024	AMS PLANNING & RESEARCH CORP	16,046.61
730397	10-Jul-2024	ANANB, ALOK (R)	193.33
1085838	01-Jul-2024	ANBARI, MOH BASSAM	2,195.00
1086209	31-Jul-2024	ANBARI, MOH BASSAM	2,195.00
730272	10-Jul-2024	ANCON	3,468.08
730518	17-Jul-2024	ANCON	16,737.33
730841	31-Jul-2024	ANCON	2,504.90
1085830	01-Jul-2024	ANDRAWES, ANTHONY M.	1,507.00
1086202	31-Jul-2024	ANDRAWES, ANTHONY M.	961.00
1085976	03-Jul-2024	ANDREW'S REFRIGERATIONS INC	3,059.00
1086037	11-Jul-2024	ANDREW'S REFRIGERATIONS INC	660.00
1086087	18-Jul-2024	ANDREW'S REFRIGERATIONS INC	330.00
730123	03-Jul-2024	ANIMAL DEFENSE LEAGUE OF ARIZONA	760.00
730519	17-Jul-2024	ANIMAL DEFENSE LEAGUE OF ARIZONA	155.00
730124	03-Jul-2024	ANIXTER INC	7,152.88
730022	01-Jul-2024	ANN L. CHANG, TRUSTEE OF THE ANN L. CHANG LIVING TRUST	2,479.00
731029	31-Jul-2024	ANN L. CHANG, TRUSTEE OF THE ANN L. CHANG LIVING TRUST	2,479.00
1086092	18-Jul-2024	ANTHEM LIFE INSURANCE COMPANY	15,153.12
730023	01-Jul-2024	APC 2020 INVESTMENT, LLC	15,609.00
730261	09-Jul-2024	APC 2020 INVESTMENT, LLC	2,260.00
731030	31-Jul-2024	APC 2020 INVESTMENT, LLC	17,869.00
730125	03-Jul-2024	APL ACCESS & SECURITY	207.43
730520	17-Jul-2024	APL ACCESS & SECURITY	70.00
730660	24-Jul-2024	APL ACCESS & SECURITY	4,845.61
730842	31-Jul-2024	APL ACCESS & SECURITY	6,766.75
730661	24-Jul-2024	APPLIED ART PRODUCTIONS, LLC	10,000.00
730126	03-Jul-2024	AQUATIC CONSULTING & TESTING INC	9,630.00
730843	31-Jul-2024	AQUATIC ENVIRONMENTAL SYSTEMS INC	34,677.50
730662	24-Jul-2024	ARBORPRO INC	9,500.00
730127	03-Jul-2024	ARCADIS US INC	39,726.70
730273	10-Jul-2024	ARCADIS US INC	964.50
730844	31-Jul-2024	ARCADIS US INC	12,979.60
730024	01-Jul-2024	ARDA, JAMET E	1,792.00
731031	31-Jul-2024	ARDA, JAMET E	1,792.00
1085981	03-Jul-2024	ARDURRA GROUP, INC	31,305.00
730521	17-Jul-2024	ARGUS INTERNATIONAL INC	8,186.76
730274	10-Jul-2024	ARIZONA CART SERVICES, INC	252.00
730663	24-Jul-2024	ARIZONA DEPT OF ECONOMIC SECURITY	4,961.96
730522	17-Jul-2024	ARIZONA ELECTRIC SUPPLY-MESA	2,463.83
730128	03-Jul-2024	ARIZONA ELEVATOR SOLUTIONS, INC	4,219.85
730523	17-Jul-2024	ARIZONA ELEVATOR SOLUTIONS, INC	5,692.86
1085966	01-Jul-2024	ARIZONA ELITE PROPERTIES	2,436.00
1086342	31-Jul-2024	ARIZONA ELITE PROPERTIES	2,436.00
730664	24-Jul-2024	ARIZONA FREELANCE INTERPRETING SERVICES	517.50
730275	10-Jul-2024	ARIZONA INFORMANT PUBLISHING CO	2,900.00
730524	17-Jul-2024	ARIZONA OFFICE TECHNOLOGIES	132.19
1086025	11-Jul-2024	ARIZONA PEST PREVENTION	95.00
1086080	18-Jul-2024	ARIZONA PEST PREVENTION	45.00

Payment Number	Payment Date	Vendor Name	Amount
1086124	25-Jul-2024	ARIZONA PEST PREVENTION	155.00
730525	17-Jul-2024	ARIZONA POWER AUTHORITY	3,465.16
730129	03-Jul-2024	ARIZONA PUBLIC SERVICE COMPANY	17,591.22
730455	11-Jul-2024	ARIZONA PUBLIC SERVICE COMPANY	1,984.59
730480	12-Jul-2024	ARIZONA PUBLIC SERVICE COMPANY	5,868.00
730665	24-Jul-2024	ARIZONA PUBLIC SERVICE COMPANY	1,529.85
730526	17-Jul-2024	ARIZONA RECREATION DESIGN, INC.	11,545.88
730527	17-Jul-2024	ARIZONA REGISTRAR OF CONTRACTORS	4.76
730666	24-Jul-2024	ARIZONA RUBBER COMPANY, INC	62.92
730276	10-Jul-2024	ARIZONA STATE TREASURER	218,867.79
1085978	03-Jul-2024	ARIZONA'S BEST, INC	14.00
1086040	11-Jul-2024	ARIZONA'S BEST, INC	89.00
1086089	18-Jul-2024	ARIZONA'S BEST, INC	339.00
1086138	25-Jul-2024	ARIZONA'S BEST, INC	2,271.00
730398	10-Jul-2024	ARMAS-XOCHITIOTZI, STEVE (R)	20.01
730277	10-Jul-2024	ARRINGTON WATKINS ARCHITECTS, LLC	38,713.50
730845	31-Jul-2024	ARRINGTON WATKINS ARCHITECTS, LLC	13,120.00
1086133	25-Jul-2024	ARTHUR J GALLAGHER RISK MANAGEMENT SERVICES INC	1,853,820.24
730130	03-Jul-2024	ARTISTIC LAND MANAGEMENT INC	7,037.01
1085971	03-Jul-2024	ARTISTIC LAND MANAGEMENT INC	47,623.54
730278	10-Jul-2024	ARTISTIC LAND MANAGEMENT INC	3,340.15
1086024	11-Jul-2024	ARTISTIC LAND MANAGEMENT INC	952.89
1086123	25-Jul-2024	ARTISTIC LAND MANAGEMENT INC	56,506.55
730230	03-Jul-2024	ASHNER, ROBERT (R)	5.91
730399	10-Jul-2024	ASLANYAN, MARINA (R)	73.83
730846	31-Jul-2024	ASR CONSTRUCTION GROUP LLC	27,057.03
730667	24-Jul-2024	ASU FOUNDATION	33,000.00
730279	10-Jul-2024	ASU OFFICE FOR RESEARCH & SPONSORED PROJECT	22,916.67
730314	10-Jul-2024	AT&T MOBILITY	25,101.21
730400	10-Jul-2024	ATRIAN, ROSSANA (R)	22.17
1085972	03-Jul-2024	ATTORNEY OF LAW	4,583.34
730131	03-Jul-2024	AVFUEL CORP	33,977.46
730668	24-Jul-2024	AVFUEL CORP	34,314.09
1085944	01-Jul-2024	AZ HOME FOR US	1,792.00
1086252	31-Jul-2024	AZ HOME FOR US	1,792.00
730025	01-Jul-2024	AZ REAL HOLDINGS LLC	2,452.00
731032	31-Jul-2024	AZ REAL HOLDINGS LLC	2,452.00
1085872	01-Jul-2024	AZ REALTY PROPERTY HOLDINGS, LLC	10,167.00
1086022	09-Jul-2024	AZ REALTY PROPERTY HOLDINGS, LLC	1,550.00
1086269	31-Jul-2024	AZ REALTY PROPERTY HOLDINGS, LLC	11,702.00
1085814	01-Jul-2024	AZLTRE LLC	1,482.00
1086186	31-Jul-2024	AZLTRE LLC	1,482.00
730280	10-Jul-2024	AZTEC ENGINEERING GROUP, INC	8,501.36
730986	31-Jul-2024	B&F CONTRACTING (R)	2,786.85
730132	03-Jul-2024	B&F CONTRACTING INC	1,812,708.39
730281	10-Jul-2024	B&F CONTRACTING INC	937,939.25
730987	31-Jul-2024	BAE JAE, HYEON (R)	135.40
730401	10-Jul-2024	BAIG, MIRZA-ZUBIR (R)	69.79
730402	10-Jul-2024	BAINS, SIERRA (R)	10.96
730026	01-Jul-2024	BAKASH LLC	2,326.00
1086228	31-Jul-2024	BAKASH LLC	2,326.00
730133	03-Jul-2024	BAKER & TAYLOR, LLC	3,458.23
730282	10-Jul-2024	BAKER & TAYLOR, LLC	510.15

Payment Number	Payment Date	Vendor Name	Amount
730528	17-Jul-2024	BAKER & TAYLOR, LLC	1,273.00
730669	24-Jul-2024	BAKER & TAYLOR, LLC	1,900.29
730847	31-Jul-2024	BAKER & TAYLOR, LLC	2,655.71
730647	18-Jul-2024	BALCH, RIANN	296.00
730491	17-Jul-2024	BALLARD, JOHN (R)	56.80
730254	03-Jul-2024	BALLET FOLKLORICO QUETZALLI-AZ, INC	150.00
1086019	08-Jul-2024	BANK OF AMERICA	1,298,357.19
730403	10-Jul-2024	BANKS, JAMEELA (R)	32.70
730670	24-Jul-2024	BANNER HEALTH (R)	15.00
730671	24-Jul-2024	BANNER OCCUPATIONAL HEALTH CLINICS	5,721.00
1085891	01-Jul-2024	BARKDOLL PROPERTIES LLC	8,735.00
1086309	31-Jul-2024	BARKDOLL PROPERTIES LLC	8,739.00
730283	10-Jul-2024	BARKER RINKER SEACAT ARCHITECTURE	72,465.01
730601	17-Jul-2024	BARRON, OLIVIA (R)	3.55
730672	24-Jul-2024	BARROS PIZZA (R)	25.00
730231	03-Jul-2024	BARTEK, MARISA (R)	30.45
1085793	01-Jul-2024	BASA, VIJAYA KUMAR	2,700.00
1086217	31-Jul-2024	BASA, VIJAYA KUMAR	2,700.00
730404	10-Jul-2024	BASURTO FLORES, MARIA (R)	29.92
730027	01-Jul-2024	BCORE MF ARCHES LLC	51,785.00
730262	09-Jul-2024	BCORE MF ARCHES LLC	1,608.00
731033	31-Jul-2024	BCORE MF ARCHES LLC	53,374.00
1085839	01-Jul-2024	BEAUX, CANDACE	1,227.00
1086210	31-Jul-2024	BEAUX, CANDACE	1,227.00
1085870	01-Jul-2024	BECKMAN, KRISTI M	2,230.00
1086267	31-Jul-2024	BECKMAN, KRISTI M	2,230.00
1086041	11-Jul-2024	BELLAMY, BARBARA	5,415.00
1086090	18-Jul-2024	BELLAMY, BARBARA	13,062.50
730405	10-Jul-2024	BERSON, JEFFREY (R)	106.45
1085804	01-Jul-2024	BEST NEIGHBORS, LLC	1,424.00
1086176	31-Jul-2024	BEST NEIGHBORS, LLC	2,205.00
730284	10-Jul-2024	BEST TECHNOLOGY SYSTEMS, INC	18,730.00
730285	10-Jul-2024	BEYOND GRAPHIX INC	2,425.50
1085816	01-Jul-2024	BHATT, AMAR BHARAT	2,330.00
1086188	31-Jul-2024	BHATT, AMAR BHARAT	2,330.00
1086134	25-Jul-2024	BIBLIOTHECA LLC	22,814.46
730648	18-Jul-2024	BIDDINGER, KEITH P	625.80
1085849	01-Jul-2024	BIG STAR PROPERTIES, LLC	10,571.00
1086021	09-Jul-2024	BIG STAR PROPERTIES, LLC	68.00
1086076	12-Jul-2024	BIG STAR PROPERTIES, LLC	1,422.00
1086260	31-Jul-2024	BIG STAR PROPERTIES, LLC	12,952.00
730456	11-Jul-2024	BIGGERSTAFF, SARAH K	138.87
730673	24-Jul-2024	BINGHAM EQUIPMENT COMPANY	1,129.40
730848	31-Jul-2024	BINGHAM EQUIPMENT COMPANY	577.37
730940	31-Jul-2024	BLAKEMAN RANCH OWNERS ASSOCIATION	4,300.00
730286	10-Jul-2024	BLOOD ALCOHOL TESTING & CONSULTING, LLC	150.00
730674	24-Jul-2024	BLOOD ALCOHOL TESTING & CONSULTING, LLC	150.00
730849	31-Jul-2024	BLOOMS ENTERPRISES LLC (R)	22.50
1085868	01-Jul-2024	BMF IV AZ LAGUNA VILLAGE LLC	20,587.00
1086265	31-Jul-2024	BMF IV AZ LAGUNA VILLAGE LLC	16,887.00
730823	25-Jul-2024	BODELL, IAN J	100.00
730492	17-Jul-2024	BOND, REBECCA (R)	71.58
730134	03-Jul-2024	BOOT BARN INC	140.00

Payment Number	Payment Date	Vendor Name	Amount
730675	24-Jul-2024	BORDER STATES ELECTRIC SUPPLY	139.98
1085930	01-Jul-2024	BOSCHEE, CHARLES L	1,077.00
1086238	31-Jul-2024	BOSCHEE, CHARLES L	1,077.00
1085815	01-Jul-2024	BOTROS, ASAMA	1,705.00
1086187	31-Jul-2024	BOTROS, ASAMA	1,705.00
730232	03-Jul-2024	BOULEY, ANDREW (R)	54.12
730135	03-Jul-2024	BOUND TREE MEDICAL LLC	2,331.33
730529	17-Jul-2024	BOUND TREE MEDICAL LLC	2,205.98
730676	24-Jul-2024	BOUND TREE MEDICAL LLC	1,527.85
730136	03-Jul-2024	BPG TECHNOLOGIES, LLC	40,712.69
730406	10-Jul-2024	BRADSHER, ALEX (R)	48.46
1085935	01-Jul-2024	BRAVO, DEBORAH LYNN	1,161.00
1086243	31-Jul-2024	BRAVO, DEBORAH LYNN	1,161.00
730028	01-Jul-2024	BREIT MF LUMIERE CHANDLER LLC	1,317.00
731034	31-Jul-2024	BREIT MF LUMIERE CHANDLER LLC	1,317.00
730602	17-Jul-2024	BRENNAN, JAMES (R)	168.00
1085974	03-Jul-2024	BRENNTAG PACIFIC INC	18,833.77
1086033	11-Jul-2024	BRENNTAG PACIFIC INC	9,675.75
1086084	18-Jul-2024	BRENNTAG PACIFIC INC	1,579.77
1086130	25-Jul-2024	BRENNTAG PACIFIC INC	45,371.33
730530	17-Jul-2024	BREYER LAW OFFICES	5.00
730677	24-Jul-2024	BRICKS 4 KIDZ	13,068.00
1085977	03-Jul-2024	BRIGHTVIEW LANDSCAPE SERVICES, INC	219,172.06
1086039	11-Jul-2024	BRIGHTVIEW LANDSCAPE SERVICES, INC	17,639.25
1086088	18-Jul-2024	BRIGHTVIEW LANDSCAPE SERVICES, INC	209,433.56
1086137	25-Jul-2024	BRIGHTVIEW LANDSCAPE SERVICES, INC	256,396.73
730988	31-Jul-2024	BRINKERHOFF, BRADEN (R)	168.00
730287	10-Jul-2024	BRINK'S, INCORPORATED	4,602.00
1085850	01-Jul-2024	BROADWAY ROAD PROPERTY LLC	1,178.00
1086261	31-Jul-2024	BROADWAY ROAD PROPERTY LLC	1,209.00
730407	10-Jul-2024	BROOKS, DANIEL (R)	211.00
730678	24-Jul-2024	BROOKSIES PROPANE	77.62
1085806	01-Jul-2024	BROTHERS TAEKWON DO INC	1,323.00
1086178	31-Jul-2024	BROTHERS TAEKWON DO INC	1,323.00
1086023	11-Jul-2024	BROWN AND CALDWELL	94,057.14
730288	10-Jul-2024	BROWN WHOLESALE ELECTRIC	14,244.00
730761	24-Jul-2024	BRUBAKER, ALANA (R)	44.72
730408	10-Jul-2024	BRUCKNER, TATE (R)	65.60
730850	31-Jul-2024	BRUNER, SAMUEL (R)	25.00
730878	31-Jul-2024	BRUZUAL, LEONARDO LUIS GARCIA (R)	150.00
1086085	18-Jul-2024	BSN SPORTS INC	207.81
1086131	25-Jul-2024	BSN SPORTS INC	207.81
1086018	03-Jul-2024	BUELT, JULIE K	311.00
730679	24-Jul-2024	BUESING CORPORATION	50.00
730851	31-Jul-2024	BUESING CORPORATION	100.00
730029	01-Jul-2024	BULLSEYE PROPERTY MANAGEMENT, LLC	1,510.00
731035	31-Jul-2024	BULLSEYE PROPERTY MANAGEMENT, LLC	1,510.00
1085882	01-Jul-2024	BURCH, CHRISTOPHER	1,433.00
1086301	31-Jul-2024	BURCH, CHRISTOPHER	1,433.00
1085916	01-Jul-2024	BURNHAM, TIMOTHY	1,190.00
1086334	31-Jul-2024	BURNHAM, TIMOTHY	1,190.00
730762	24-Jul-2024	BURTON, CAGEN (R)	7,869.53
730763	24-Jul-2024	BUTLER, RACHEL (R)	14.18

Payment Number	Payment Date	Vendor Name	Amount
730680	24-Jul-2024	BUWALDA PSYCHOLOGICAL SERVICES	400.00
730137	03-Jul-2024	C & I SHOW HARDWARE & SECURITY SYSTEMS INC	1,322.07
730852	31-Jul-2024	C & I SHOW HARDWARE & SECURITY SYSTEMS INC	12,890.50
730030	01-Jul-2024	CALDWELL PROPERTY SOLUTIONS	3,003.00
731036	31-Jul-2024	CALDWELL PROPERTY SOLUTIONS	1,338.00
1086036	11-Jul-2024	CALIENTE CONSTRUCTION INC	929,436.24
730409	10-Jul-2024	CAMMACK, DENNIS (R)	11.98
730138	03-Jul-2024	CARAHSOFT TECHNOLOGY CORPORATION	16,302.91
730139	03-Jul-2024	CARBON ACTIVATED CORPORATION	51,419.40
730531	17-Jul-2024	CARBON ACTIVATED CORPORATION	161,287.20
730681	24-Jul-2024	CARBON ACTIVATED CORPORATION	55,724.40
730140	03-Jul-2024	CAREERS IN GOVERNMENT, INC	2,625.00
730603	17-Jul-2024	CARMAN, DESIREE (R)	39.10
730410	10-Jul-2024	CARNES, VICTORIA (R)	56.20
1086026	11-Jul-2024	CAROLLO ENGINEERS	11,704.18
1086125	25-Jul-2024	CAROLLO ENGINEERS	7,000.34
730764	24-Jul-2024	CARPENTER, JESSICA (R)	300.00
730532	17-Jul-2024	CARPIO, STEPHANIE (R)	5.00
730233	03-Jul-2024	CARROLL, CLINTON (R)	61.89
730853	31-Jul-2024	CASA GRANDE POLICE DEPARTMENT	200.00
730682	24-Jul-2024	CDW GOVERNMENT, LLC	2,925.15
1086038	11-Jul-2024	CE WILSON CONSULTING, LLC	27,922.50
1086136	25-Jul-2024	CE WILSON CONSULTING, LLC	29,877.50
730941	31-Jul-2024	CEIGLER, ELAINE	2,000.00
1086027	11-Jul-2024	CEM-TEC CORPORATION	8,131.97
730411	10-Jul-2024	CENTRAL PLAZA LAUNDRYMAT-AZ AVE (R)	55.16
730854	31-Jul-2024	CENTURY GRAPHICS INC	16,924.10
1086043	11-Jul-2024	CENTURYLINK	1,769.80
730412	10-Jul-2024	CERVANTES, ALISSA (R)	57.88
730234	03-Jul-2024	CHACARRIA, PAUL (R)	74.46
730533	17-Jul-2024	CHANDLER CULTURAL FOUNDATION (R)	24.00
1086093	18-Jul-2024	CHANDLER FIREFIGHTER CHARITIES	7,682.00
1085847	01-Jul-2024	CHANDLER GARDENS	22,282.00
1086258	31-Jul-2024	CHANDLER GARDENS	21,397.00
730413	10-Jul-2024	CHANDLER MEDICAL PLAZA LLC (R)	376.81
1085951	01-Jul-2024	CHANDLER PROPERTY DEVELOPMENT ASSOCIATES LTD PTR (231-1)	17,471.00
1086348	31-Jul-2024	CHANDLER PROPERTY DEVELOPMENT ASSOCIATES LTD PTR (231-1)	18,774.00
730289	10-Jul-2024	CHANDLER SISTER CITIES	12,000.00
730855	31-Jul-2024	CHANDLER YOUTH THEATRE (R)	33.75
730765	24-Jul-2024	CHANG, SHUAI (R)	79.46
1086032	11-Jul-2024	CHASSE BUILDING TEAM INC	720,739.32
730534	17-Jul-2024	CHC: CREATING HEALTHIER COMMUNITIES	630.00
730604	17-Jul-2024	CHEN, GUOHUI (R)	148.45
730290	10-Jul-2024	CHILLER CITY CORPORATION	1,815.00
730605	17-Jul-2024	CHURAN, ANNA (R)	83.00
730141	03-Jul-2024	CINTAS CORPORATION	537.37
730535	17-Jul-2024	CINTAS CORPORATION	3,142.39
730683	24-Jul-2024	CINTAS CORPORATION	1,238.78
730856	31-Jul-2024	CINTAS CORPORATION	1,460.23
730291	10-Jul-2024	CIOX HEALTH	33.88
730142	03-Jul-2024	CITY OF MESA	6,000.00
730292	10-Jul-2024	CITY OF MESA	0.92
730857	31-Jul-2024	CITY OF MESA	10,000.00

Payment Number	Payment Date	Vendor Name	Amount
730481	12-Jul-2024	CITY OF ORLANDO HOUSING AUTHORITY	2,826.16
730293	10-Jul-2024	CITY OF PHOENIX	102.00
730294	10-Jul-2024	CITY OF PHOENIX	45,234.00
730536	17-Jul-2024	CITY OF PHOENIX	358,622.93
730858	31-Jul-2024	CITY OF PHOENIX	421,104.86
730859	31-Jul-2024	CITY OF PHOENIX	11.98
730295	10-Jul-2024	CITY OF SCOTTSDALE	18.36
1086028	11-Jul-2024	CITY WIDE PEST CONTROL INC	1,457.00
730537	17-Jul-2024	CLARK HILL PLC	75.00
730684	24-Jul-2024	CLARK HILL PLC	18,515.85
730860	31-Jul-2024	CLARK TRANSPORTATION SOLUTIONS	9,191.90
730143	03-Jul-2024	CLA-VAL	2,173.45
730144	03-Jul-2024	CLEARTACTICS LLC	425.00
730861	31-Jul-2024	CLERK OF THE CIRCUIT COURT OF THE COOK COUNTY	6.00
730031	01-Jul-2024	CLUB CANCUN APARTMENTS	835.00
731037	31-Jul-2024	CLUB CANCUN APARTMENTS	835.00
730862	31-Jul-2024	COLAB STUDIO, LLC	80,000.00
730145	03-Jul-2024	COMMERCIAL POOL REPAIR	13,545.15
730296	10-Jul-2024	COMMERCIAL POOL REPAIR	15,594.40
730538	17-Jul-2024	COMMERCIAL POOL REPAIR	18,899.50
730685	24-Jul-2024	COMMERCIAL POOL REPAIR	6,993.86
730863	31-Jul-2024	COMMERCIAL POOL REPAIR	32,513.03
730686	24-Jul-2024	COMPUTER AID, INC	78,309.00
730864	31-Jul-2024	CONNEY SAFETY PRODUCTS LLC	171.04
1086030	11-Jul-2024	CONSULTANT ENGINEERING INC	65,837.25
1085975	03-Jul-2024	CONTINENTAL FLOORING CO	1,704.80
730146	03-Jul-2024	CONTRACTOR FIRE PROTECTION	1,524.20
730297	10-Jul-2024	CONTRACTOR FIRE PROTECTION	7,158.70
730539	17-Jul-2024	CONTRACTOR FIRE PROTECTION	480.00
730687	24-Jul-2024	CONTRACTOR FIRE PROTECTION	3,155.00
730866	31-Jul-2024	CONTRACTOR FIRE PROTECTION	249,058.00
730867	31-Jul-2024	CONTRACTOR FIRE PROTECTION	900.00
730147	03-Jul-2024	CORE & MAIN LP	1,276.55
730540	17-Jul-2024	CORE & MAIN LP	3,562.26
730688	24-Jul-2024	CORE & MAIN LP	20,614.47
730868	31-Jul-2024	CORE & MAIN LP	137,203.45
730689	24-Jul-2024	CORONA SOLUTIONS	13,800.00
730690	24-Jul-2024	CORPORATE ACCOUNTING (R)	65.00
730541	17-Jul-2024	CORPORATE INTERIOR SYSTEMS (CIS)	2,065.96
730493	17-Jul-2024	CORREA, STEFANO (R)	25.33
730235	03-Jul-2024	CORRELL, BARBARA (R)	35.85
730494	17-Jul-2024	CORTES ONTIVEROS, ANTONIO (R)	39.13
730542	17-Jul-2024	CORVEL ENTERPRISE COMP INC	19,746.00
1085959	01-Jul-2024	COSTALES, ABEL	696.00
1086288	31-Jul-2024	COSTALES, ABEL	696.00
1086081	18-Jul-2024	COURTESY CHEVROLET	57,363.95
1086126	25-Jul-2024	COURTESY CHEVROLET	57,363.95
730543	17-Jul-2024	COX BUSINESS	1,605.00
730544	17-Jul-2024	CPAAC	37.50
1086135	25-Jul-2024	CPM PIPELINES	119.95
730236	03-Jul-2024	CRANE, DAN (R)	179.55
730298	10-Jul-2024	CRAWFORD MECHANICAL SERVICES, LLC	19,046.77
730545	17-Jul-2024	CRAWFORD MECHANICAL SERVICES, LLC	157.50

Payment Number	Payment Date	Vendor Name	Amount
730691	24-Jul-2024	CRAWFORD MECHANICAL SERVICES, LLC	1,906.00
730869	31-Jul-2024	CRAWFORD MECHANICAL SERVICES, LLC	8,107.46
730870	31-Jul-2024	CREEKWOOD RANCH HOA	2,825.33
730414	10-Jul-2024	CRP III CHANDLER AIRPORT LLC (R)	2,900.00
1085980	03-Jul-2024	CS CONSTRUCTION INC	108,835.75
730148	03-Jul-2024	CU LOOK'N INK LLC (R)	33.75
1086141	25-Jul-2024	CURTIS BLUE LINE	9,191.67
730299	10-Jul-2024	CUTTERS DOCUMENT DESTRUCTION, LLC	159.95
730692	24-Jul-2024	CUTTERS DOCUMENT DESTRUCTION, LLC	149.95
730300	10-Jul-2024	CYRACOM INTERNATIONAL, INC	594.09
730149	03-Jul-2024	D L SALES CORP	11,012.68
730301	10-Jul-2024	D L SALES CORP	1,811.92
730302	10-Jul-2024	D.P. ELECTRIC, INC	4,283.00
1085857	01-Jul-2024	DAVID INVESTMENT LLC	2,046.00
1086275	31-Jul-2024	DAVID INVESTMENT LLC	1,023.00
730766	24-Jul-2024	DAWSON, JASON (R)	92.05
730303	10-Jul-2024	DAY AUTO SUPPLY, INC	58.08
730546	17-Jul-2024	DAY AUTO SUPPLY, INC	1,444.48
730695	24-Jul-2024	DAY AUTO SUPPLY, INC	6,031.79
730871	31-Jul-2024	DAY AUTO SUPPLY, INC	1,411.81
730547	17-Jul-2024	DBA CONSTRUCTION, INC	372,713.52
730696	24-Jul-2024	DBA CONSTRUCTION, INC	146,303.26
730872	31-Jul-2024	DEAN, GRAYCE (R)	20.00
730150	03-Jul-2024	DECA SOUTHWEST	2,695.82
730548	17-Jul-2024	DECA SOUTHWEST	4,595.20
730697	24-Jul-2024	DECA SOUTHWEST	678.40
730415	10-Jul-2024	DEL RIO REAL ESTATE LLC (R)	62.00
730304	10-Jul-2024	DELTA DENTAL OF ARIZONA	11,095.41
730549	17-Jul-2024	DELTA DENTAL OF ARIZONA	187,726.48
1085973	03-Jul-2024	DENNIS L LOPEZ & ASSOCIATES LLC	2,850.00
1086129	25-Jul-2024	DENNIS L LOPEZ & ASSOCIATES LLC	2,100.00
730237	03-Jul-2024	DESERT FIXED INVESTMENTS LLC (R)	27.69
730550	17-Jul-2024	DESERT TOX, LLC	1,155.30
730151	03-Jul-2024	DIBBLE & ASSOCIATES CONSULTING ENGINEERS, INC	12,780.95
730305	10-Jul-2024	DIBBLE & ASSOCIATES CONSULTING ENGINEERS, INC	48,828.34
730306	10-Jul-2024	DIBBLE CM, LLC	98,810.00
730873	31-Jul-2024	DIBBLE CM, LLC	18,550.00
730874	31-Jul-2024	DICK & FRITSCHE DESIGN GROUP, INC	5,025.00
730989	31-Jul-2024	DIEP, TRANG (R)	53.69
730551	17-Jul-2024	DIG STUDIO INC	30,796.00
730990	31-Jul-2024	DIRT WORX CONTRACTING LLC (R)	1,331.63
730152	03-Jul-2024	DISCOUNTCELL INC	4,817.09
730032	01-Jul-2024	DO, HUNG VAN	628.00
730416	10-Jul-2024	DOMINGUEZ, EDUARDO (R)	41.19
730552	17-Jul-2024	DOOLEY ENTERPRISES, INC	50,729.47
730553	17-Jul-2024	DOUGLAS, AMY (R)	10.00
730033	01-Jul-2024	DOUGLAS, SHAWN K	2,908.00
731038	31-Jul-2024	DOUGLAS, SHAWN K	2,908.00
1086029	11-Jul-2024	DOWNTOWN CHANDLER COMMUNITY PARTNERSHIP	65,490.50
1086082	18-Jul-2024	DOWNTOWN CHANDLER COMMUNITY PARTNERSHIP	33,135.09
730991	31-Jul-2024	DRIVER, ERNEST (R)	74.54
730034	01-Jul-2024	DUCKS & ASSOC REALTY INC	1,912.00
731039	31-Jul-2024	DUCKS & ASSOC REALTY INC	1,912.00

Payment Number	Payment Date	Vendor Name	Amount
730255	03-Jul-2024	DUNBAR, MATTHEW R	1,562.23
1086074	12-Jul-2024	DUPAGE HOUSING AUTHORITY	3,132.16
1086086	18-Jul-2024	DYE CARBONIC	1,026.28
1086132	25-Jul-2024	DYE CARBONIC	1,956.25
1086144	25-Jul-2024	DYE CARBONIC	880.44
1085979	03-Jul-2024	DYNAMIC OFFICIALS AND SPORTS	1,248.00
730554	17-Jul-2024	EAR PROFESSIONAL AUDIO VIDEO	342.50
730705	24-Jul-2024	EAR PROFESSIONAL AUDIO VIDEO	375.00
730707	24-Jul-2024	EARNHARDT	9,959.62
730708	24-Jul-2024	EARNHARDT	4,201.04
730879	31-Jul-2024	EARNHARDT	6,783.10
730880	31-Jul-2024	EARNHARDT	653.96
730709	24-Jul-2024	EARNHARDT CHEVROLET	8,299.39
730881	31-Jul-2024	EARNHARDT CHEVROLET	17,950.11
730698	24-Jul-2024	EAST MESA JUSTICE COURT	250.00
1085970	01-Jul-2024	EDB ENTERPRISE LLC	2,260.00
1086346	31-Jul-2024	EDB ENTERPRISE LLC	2,260.00
730992	31-Jul-2024	EDWARDS, ANTHONY (R)	18.90
1085906	01-Jul-2024	EKSS LLC	2,057.00
1086324	31-Jul-2024	EKSS LLC	2,057.00
730238	03-Jul-2024	ELENES, LISA (R)	200.00
730239	03-Jul-2024	ELLIS, JUSTIN (R)	23.86
730315	10-Jul-2024	ELONTEC, LLC	66,994.64
730156	03-Jul-2024	EMCOR SERVICES ARIZONA	8,900.00
730710	24-Jul-2024	EMCOR SERVICES ARIZONA	25,436.00
730711	24-Jul-2024	EMERSON LLLP	2,670.74
730882	31-Jul-2024	EMPIRE SOUTHWEST	1,369.96
730307	10-Jul-2024	ENCANTO JUSTICE COURT	500.00
730417	10-Jul-2024	ENERGY QUEST TECHNOLOGIES INC (R)	326.37
730418	10-Jul-2024	ENG, DIANA (R)	25.21
730316	10-Jul-2024	ENG, LEUNG	320.00
730157	03-Jul-2024	ENTELLUS INC	86,015.53
730317	10-Jul-2024	ENTELLUS INC	104,770.67
730555	17-Jul-2024	ENVIRONMENTAL DRAIN & ODOR CONTROL SERVICES LLC	3,480.00
730883	31-Jul-2024	ENVIRONMENTAL DRAIN & ODOR CONTROL SERVICES LLC	2,905.00
1085902	01-Jul-2024	EPICENTER HOLDINGS LLC	1,657.00
1086044	11-Jul-2024	EPICENTER HOLDINGS LLC	1,900.00
1086320	31-Jul-2024	EPICENTER HOLDINGS LLC	2,337.00
730158	03-Jul-2024	EPS GROUP INC	4,727.50
730712	24-Jul-2024	EPS GROUP INC	11,632.50
730556	17-Jul-2024	EQUIFAX WORKFORCE SOLUTIONS LLC	4,858.19
730035	01-Jul-2024	ESHAQ, MUNAIM GEORGE ABU	612.00
731040	31-Jul-2024	ESHAQ, MUNAIM GEORGE ABU	612.00
1085982	03-Jul-2024	ESRI INC	807.00
1085990	03-Jul-2024	EWING IRRIGATION PRODUCTS INC	9,094.84
1086048	11-Jul-2024	EWING IRRIGATION PRODUCTS INC	16,306.07
1086100	18-Jul-2024	EWING IRRIGATION PRODUCTS INC	4,238.13
1086154	25-Jul-2024	EWING IRRIGATION PRODUCTS INC	1,551.93
730557	17-Jul-2024	EXERPLAY INC	303.36
730884	31-Jul-2024	EZ-LINER INDUSTRIES	333.47
730159	03-Jul-2024	F.D. THOMAS INC (R)	33.75
730885	31-Jul-2024	FACILITEQ AZ LLC	4,385.64
730713	24-Jul-2024	FACTORY MOTOR PARTS COMPANY	5,531.63

Payment Number	Payment Date	Vendor Name	Amount
730889	31-Jul-2024	FACTORY MOTOR PARTS COMPANY	12,103.95
730036	01-Jul-2024	FARNSWORTH REALTY & MANAGEMENT	911.00
731041	31-Jul-2024	FARNSWORTH REALTY & MANAGEMENT	911.00
730037	01-Jul-2024	FASHION CENTER ACQUISTION LLC	1,393.00
731042	31-Jul-2024	FASHION CENTER ACQUISTION LLC	1,807.00
730890	31-Jul-2024	FENNEMORE CRAIG, P.C.	1,709.00
730160	03-Jul-2024	FERGUSON ENTERPRISES, LLC	2,417.91
730318	10-Jul-2024	FERGUSON ENTERPRISES, LLC	15.01
730558	17-Jul-2024	FERGUSON ENTERPRISES, LLC	2,770.54
730714	24-Jul-2024	FERGUSON ENTERPRISES, LLC	3,701.30
730891	31-Jul-2024	FERGUSON ENTERPRISES, LLC	188.23
730161	03-Jul-2024	FIDELITY NATIONAL TITLE AGENCY INC	2,091.00
730319	10-Jul-2024	FIDELITY NATIONAL TITLE AGENCY INC	248,902.00
730320	10-Jul-2024	FIDELITY NATIONAL TITLE AGENCY INC	3,125.00
730321	10-Jul-2024	FIDELITY NATIONAL TITLE AGENCY INC	20,369.00
730559	17-Jul-2024	FIDELITY NATIONAL TITLE AGENCY INC	585.00
730419	10-Jul-2024	FIDUCCIA, JENNIFER (R)	50.71
730560	17-Jul-2024	FIELDPRINT, INC	173.25
1085811	01-Jul-2024	FINNEY, JESSE	1,746.00
1086183	31-Jul-2024	FINNEY, JESSE	1,661.00
730322	10-Jul-2024	FIREWORKS PRODUCTIONS OF ARIZONA	5,175.00
730482	12-Jul-2024	FLAGSTAFF HOUSING AUTHORITY	2,480.16
1086140	25-Jul-2024	FLEXIBLE BENEFIT ADMINISTRATORS INC	877.50
1085794	01-Jul-2024	FLINT HOUSE, LLC	1,339.00
1086218	31-Jul-2024	FLINT HOUSE, LLC	1,339.00
730767	24-Jul-2024	FLINT, TALYIA (R)	61.19
730323	10-Jul-2024	FLOCK SAFETY	72,275.00
730561	17-Jul-2024	FLOCK SAFETY	862.40
730993	31-Jul-2024	FLORES, JOSE (R)	17.67
730562	17-Jul-2024	FLUKE ELECTRONICS CORP	4,512.00
730563	17-Jul-2024	FLYERS ENERGY, LLC	69,020.70
730715	24-Jul-2024	FLYERS ENERGY, LLC	25,685.52
730892	31-Jul-2024	FLYERS ENERGY, LLC	25,455.77
1085795	01-Jul-2024	FNU NOVITA	2,171.00
1086219	31-Jul-2024	FNU NOVITA	2,171.00
1085919	01-Jul-2024	FOCUS LLC	3,226.00
1086337	31-Jul-2024	FOCUS LLC	3,226.00
730606	17-Jul-2024	FOOSHEE, THOMAS FELIX	200.00
730038	01-Jul-2024	FOOTHILLS REALTY & MANAGEMENT	2,233.00
731043	31-Jul-2024	FOOTHILLS REALTY & MANAGEMENT	2,233.00
730240	03-Jul-2024	FOOTPRINT LLC (R)	43.82
730564	17-Jul-2024	FOR OUR CITY-CHANDLER	216.00
730420	10-Jul-2024	FORBES, CAMERON (R)	38.89
1085983	03-Jul-2024	FOSTER ELECTRIC MOTOR SERVICE, INC	13,392.36
1086055	11-Jul-2024	FOSTER ELECTRIC MOTOR SERVICE, INC	18,611.10
1086142	25-Jul-2024	FOSTER ELECTRIC MOTOR SERVICE, INC	4,477.00
730162	03-Jul-2024	FPS CIVIL LLC	150,612.04
731044	31-Jul-2024	FRANK VITIRITTI TRUSTEE	904.00
730716	24-Jul-2024	FREIGHTLINER OF ARIZONA LLC	89.30
730893	31-Jul-2024	FREIGHTLINER OF ARIZONA LLC	1,308.27
1085879	01-Jul-2024	FRESNO INVESTMENTS	1,473.00
1086298	31-Jul-2024	FRESNO INVESTMENTS	1,473.00
730565	17-Jul-2024	FRIENDS OF THE CHANDLER LIBRARY	24.00

Payment Number	Payment Date	Vendor Name	Amount
730894	31-Jul-2024	FRIGHT BITES LLC (R)	11.25
730421	10-Jul-2024	FROETSCHNER, ELISAH (R)	14.94
730324	10-Jul-2024	FRUTH GROUP INC	1,300.73
730325	10-Jul-2024	FX TACTICAL LLC	39,597.58
730566	17-Jul-2024	GAJANAN LLC	48,000.00
730039	01-Jul-2024	GANAPATHY, RAMSUNDAR	1,995.00
731045	31-Jul-2024	GANAPATHY, RAMSUNDAR	1,995.00
730040	01-Jul-2024	GANI, OSAMA S	1,670.00
731046	31-Jul-2024	GANI, OSAMA S	1,670.00
730768	24-Jul-2024	GARDUNO, FELICIA (R)	79.33
730163	03-Jul-2024	GARNEY CONSTRUCTION, INC	181,588.79
730717	24-Jul-2024	GARNEY CONSTRUCTION, INC	32,375.89
730895	31-Jul-2024	GAULKAR, RIJUTA (R)	22.50
730326	10-Jul-2024	GAVAN & BARKER INC	7,259.50
730896	31-Jul-2024	GEOTECHNICAL TESTING & INSPECTIONS	3,000.00
1085828	01-Jul-2024	GHAFOOR, BAN ABDUL	1,648.00
1086200	31-Jul-2024	GHAFOOR, BAN ABDUL	1,817.00
1085823	01-Jul-2024	GHAMRAOUI, SABAH K	1,827.00
1086195	31-Jul-2024	GHAMRAOUI, SABAH K	1,827.00
1086047	11-Jul-2024	GHASTER PAINTING & COATINGS INC	4,125.00
1086099	18-Jul-2024	GHASTER PAINTING & COATINGS INC	7,264.00
730897	31-Jul-2024	GHD INC	16,615.00
730041	01-Jul-2024	GHOMRAWI, ABDALLAH	663.00
731047	31-Jul-2024	GHOMRAWI, ABDALLAH	690.00
730164	03-Jul-2024	GILA RIVER INDIAN COMMUNITY	9.90
730898	31-Jul-2024	GILA RIVER INDIAN COMMUNITY	4,739.74
730165	03-Jul-2024	GILA RIVER INDIAN COMMUNITY UTILITY AUTHORITY	27,007.95
730899	31-Jul-2024	GILA RIVER INDIAN COMMUNITY UTILITY AUTHORITY	24,622.95
1085888	01-Jul-2024	GILBERT, JUSTIN	974.00
1086306	31-Jul-2024	GILBERT, JUSTIN	974.00
1085884	01-Jul-2024	GILBERT, THURMAN	2,947.00
1086302	31-Jul-2024	GILBERT, THURMAN	2,947.00
1085858	01-Jul-2024	GIRGIS, JAKLINE	2,086.00
1086276	31-Jul-2024	GIRGIS, JAKLINE	2,086.00
1085921	01-Jul-2024	GJONZENELI, MURAT	5,442.00
1086020	09-Jul-2024	GJONZENELI, MURAT	71.00
1086229	31-Jul-2024	GJONZENELI, MURAT	5,216.00
730567	17-Jul-2024	GO AZ MOTORCYCLES SCOTTSDALE	166,706.80
1085873	01-Jul-2024	GO GET IT INVESTMENTS LLC	903.00
1086270	31-Jul-2024	GO GET IT INVESTMENTS LLC	903.00
1085995	03-Jul-2024	GOERING, ROBERT, RUBIN, BROGNA, ENOS & TREADWELL-RUBIN, P.C.	105.00
1086146	25-Jul-2024	GOERING, ROBERT, RUBIN, BROGNA, ENOS & TREADWELL-RUBIN, P.C.	717.50
730568	17-Jul-2024	GOGOVAPPS	26,060.00
730900	31-Jul-2024	GOING ON FAITH	200.00
730994	31-Jul-2024	GOLBA GROUP (R)	13.85
1085939	01-Jul-2024	GOLD COAST REALTY	1,938.00
1086247	31-Jul-2024	GOLD COAST REALTY	1,938.00
1085810	01-Jul-2024	GOLD STONE INVESTMENT LLC	2,021.00
1086182	31-Jul-2024	GOLD STONE INVESTMENT LLC	2,021.00
730042	01-Jul-2024	GOLD TRUST REALTY	8,385.00
730569	17-Jul-2024	GOLD TRUST REALTY	1,550.00
730718	24-Jul-2024	GOLD TRUST REALTY	1,050.00
730828	29-Jul-2024	GOLD TRUST REALTY	600.00

Payment Number	Payment Date	Vendor Name	Amount
731048	31-Jul-2024	GOLD TRUST REALTY	9,809.00
730166	03-Jul-2024	GONZALEZ & SMITH, P. C.	4,583.34
1085993	03-Jul-2024	GOODMANS INTERIOR STRUCTURES	47,757.57
1086049	11-Jul-2024	GOODMANS INTERIOR STRUCTURES	2,005.65
1086156	25-Jul-2024	GOODMANS INTERIOR STRUCTURES	12,013.40
730570	17-Jul-2024	GORDWIN LAW, PLLC	4,583.34
1085956	01-Jul-2024	GORE, VIPUL	1,297.00
1086285	31-Jul-2024	GORE, VIPUL	1,297.00
731049	31-Jul-2024	GOVERNMENT FINANCE OFFICERS	150.00
730719	24-Jul-2024	GOVERNOR'S OFFICE OF HIGHWAY SAFETY	945.00
730901	31-Jul-2024	GOVERNOR'S OFFICE OF HIGHWAY SAFETY	150.00
1085877	01-Jul-2024	GOVINDARAJAN, OMKAR	2,478.00
1086296	31-Jul-2024	GOVINDARAJAN, OMKAR	2,478.00
730167	03-Jul-2024	GRAINGER	1,210.73
730168	03-Jul-2024	GRAINGER	673.38
730327	10-Jul-2024	GRAINGER	1,228.98
730571	17-Jul-2024	GRAINGER	7,596.74
730720	24-Jul-2024	GRAINGER	2,725.94
730721	24-Jul-2024	GRAINGER	613.56
730902	31-Jul-2024	GRAINGER	1,663.32
730903	31-Jul-2024	GRAINGER	2,413.58
730169	03-Jul-2024	GRANITE CONSTRUCTION COMPANY	250,950.67
730170	03-Jul-2024	GRAY QUARTER, INC	185.00
730328	10-Jul-2024	GROUNDS CONTROL LLC	121,161.02
730722	24-Jul-2024	GROUNDS CONTROL LLC	59,670.43
730043	01-Jul-2024	GRS INVESTMENT COMPANY, LLC	5,130.00
730643	17-Jul-2024	GRS INVESTMENT COMPANY, LLC	756.00
731050	31-Jul-2024	GRS INVESTMENT COMPANY, LLC	5,911.00
730875	31-Jul-2024	GUBA, DANIEL	1,000.00
730422	10-Jul-2024	GUERRERO, EVA (R)	17.03
1085913	01-Jul-2024	GUERRERO, LAURIE	2,175.00
1086331	31-Jul-2024	GUERRERO, LAURIE	2,175.00
1085910	01-Jul-2024	GUERRERO, ROSE	1,600.00
1086328	31-Jul-2024	GUERRERO, ROSE	1,600.00
730423	10-Jul-2024	GUO, BING (R)	41.67
730171	03-Jul-2024	GYM TECH LLC	2,747.37
730329	10-Jul-2024	HACH COMPANY	2,763.13
1085897	01-Jul-2024	HADAWAY, MICHELLE VIVIANNE	1,502.00
1086315	31-Jul-2024	HADAWAY, MICHELLE VIVIANNE	1,502.00
1085885	01-Jul-2024	HADEED, JAMES	1,714.00
1086303	31-Jul-2024	HADEED, JAMES	1,798.00
1085960	01-Jul-2024	HALL, ERIC	1,182.00
1086289	31-Jul-2024	HALL, ERIC	1,182.00
1085860	01-Jul-2024	HAMMEL INVESTMENTS, LLC	836.00
1086172	29-Jul-2024	HAMMEL INVESTMENTS, LLC	990.00
1086278	31-Jul-2024	HAMMEL INVESTMENTS, LLC	1,826.00
1085923	01-Jul-2024	HANDZEL, SHARON C	1,306.00
1086231	31-Jul-2024	HANDZEL, SHARON C	1,306.00
1085829	01-Jul-2024	HARINAV LLC	3,115.00
1086201	31-Jul-2024	HARINAV LLC	3,115.00
730572	17-Jul-2024	HARMON, SCOTT (R)	5.00
1085869	01-Jul-2024	HARTFORD APARTMENTS	3,140.00
1086266	31-Jul-2024	HARTFORD APARTMENTS	3,538.00

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730457	11-Jul-2024	HARTKE, KEVIN	1,281.10
730607	17-Jul-2024	HASSAN, FURQAN MAQBOOL (R)	39.35
730608	17-Jul-2024	HAVEMAN, ELIZABETH JEAN (R)	58.65
1085865	01-Jul-2024	HAZELTINE RENTALS LLC	2,000.00
1086283	31-Jul-2024	HAZELTINE RENTALS LLC	2,000.00
730172	03-Jul-2024	HAZEN AND SAWYER	98,903.40
730330	10-Jul-2024	HAZEN AND SAWYER	51,072.65
730573	17-Jul-2024	HAZEN AND SAWYER	13,792.30
730904	31-Jul-2024	HAZEN AND SAWYER	128,000.75
730824	25-Jul-2024	HAZER, DUSTIN A	246.00
730044	01-Jul-2024	HCL LLC	1,121.00
731051	31-Jul-2024	HCL LLC	1,121.00
730723	24-Jul-2024	HENDERSON BELTWAY, LLC	6,538.88
730905	31-Jul-2024	HENDERSON BELTWAY, LLC	6,538.88
1085854	01-Jul-2024	HENES, HAIDY	1,190.00
1086272	31-Jul-2024	HENES, HAIDY	1,190.00
730458	11-Jul-2024	HERNACKI, DANIEL J	316.34
730876	31-Jul-2024	HERNANDEZ COMPANIES	8,755.00
1085948	01-Jul-2024	HERNANDEZ, ERIBERTO	1,442.00
1086256	31-Jul-2024	HERNANDEZ, ERIBERTO	1,442.00
730459	11-Jul-2024	HERNANDEZ, MARICELA	44.20
730331	10-Jul-2024	HIGHLANDS PROPERTIES LLC (R)	16.88
1086145	25-Jul-2024	HILL BROTHERS CHEMICAL CO	638.07
1085958	01-Jul-2024	HOANG, BUUCHAU QUOC	2,946.00
1086287	31-Jul-2024	HOANG, BUUCHAU QUOC	2,946.00
1086054	11-Jul-2024	HORIZON DISTRIBUTORS INC	1,906.71
730699	24-Jul-2024	HOSEPOWERUSA AND/OR COMPLETE SAFETY	261.78
730483	12-Jul-2024	HOUSING AUTHORITY OF JOLIET	2,219.16
730995	31-Jul-2024	HU, CHUN-ZHOU (R)	89.37
730574	17-Jul-2024	HUDDLESTON, JAMES E	400.00
730045	01-Jul-2024	HUERTA, JUANITA	160.00
731052	31-Jul-2024	HUERTA, JUANITA	160.00
730906	31-Jul-2024	HUGHES, JANIS (R)	22.50
730332	10-Jul-2024	HUITT-ZOLLARS, INC	11,470.58
730575	17-Jul-2024	HUMBURD, XAVIER (R)	2,800.40
1086053	11-Jul-2024	HUNTER CONTRACTING CO	1,525,939.51
730907	31-Jul-2024	IDEMIA IDENTITY & SECURITY USA LLC	46,187.00
730046	01-Jul-2024	IH2 PROPERTY BORROWER LP	1,438.00
731053	31-Jul-2024	IH2 PROPERTY BORROWER LP	1,438.00
730047	01-Jul-2024	IH5 PROPERTY BORROWER LP	2,375.00
731054	31-Jul-2024	IH5 PROPERTY BORROWER LP	2,375.00
730048	01-Jul-2024	IH6 PROPERTY BORROWER LP	4,616.00
731055	31-Jul-2024	IH6 PROPERTY BORROWER LP	4,616.00
1085809	01-Jul-2024	IMT CAPITAL VI CHANDLER LLC	18,731.00
1086181	31-Jul-2024	IMT CAPITAL VI CHANDLER LLC	18,733.00
730576	17-Jul-2024	INDUSTRIAL COMMISSION OF AZ	705,658.66
730173	03-Jul-2024	INGRAM LIBRARY SERVICES	16,713.19
730333	10-Jul-2024	INGRAM LIBRARY SERVICES	6,364.39
730724	24-Jul-2024	INGRAM LIBRARY SERVICES	4,277.54
730908	31-Jul-2024	INGRAM LIBRARY SERVICES	9,513.18
1085998	03-Jul-2024	IN-PIPE TECHNOLOGY	11,000.00
730725	24-Jul-2024	INSTRUMENTATION AND CONTROLS LLC	4,401.81
730909	31-Jul-2024	INSTRUMENTATION AND CONTROLS LLC	444.44

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730334	10-Jul-2024	INTELLIGENT VIDEO SOLUTIONS, LLC	4,117.96
730700	24-Jul-2024	INTERNAL REVENUE SERVICE	11,086.46
730910	31-Jul-2024	INTERSTATE BATTERY SYSTEM OF SCOTTSDALE	603.63
730174	03-Jul-2024	INTERWEST SAFETY SUPPLY LLC	1,403.52
730577	17-Jul-2024	INTERWEST SAFETY SUPPLY LLC	1,501.96
1085938	01-Jul-2024	INVESTAR REAL ESTATE SPECIALISTS LLC	399.00
1086246	31-Jul-2024	INVESTAR REAL ESTATE SPECIALISTS LLC	399.00
730911	31-Jul-2024	IXP CORPORATION	121,700.00
730049	01-Jul-2024	J & B INVESTMENT	1,271.00
731056	31-Jul-2024	J & B INVESTMENT	1,271.00
1085984	03-Jul-2024	J2 ENGINEERING & ENVIRONMENTAL DESIGN, LLC	44,301.23
1086056	11-Jul-2024	J2 ENGINEERING & ENVIRONMENTAL DESIGN, LLC	12,142.72
730578	17-Jul-2024	JACK, KEIAH (R)	5.00
730241	03-Jul-2024	JACKOSKI, CLAIRE (R)	204.21
730942	31-Jul-2024	JACKSON, MICHAEL R	3,000.00
1086102	18-Jul-2024	JACOBO LAW FIRM, PLLC	4,583.34
1085986	03-Jul-2024	JACOBS ENGINEERING GROUP INC	643.67
1086058	11-Jul-2024	JACOBS ENGINEERING GROUP INC	508,318.23
730912	31-Jul-2024	JACOR CONSTRUCTION INC (R)	22.50
1085943	01-Jul-2024	JAIN, VIKAS	1,522.00
1086251	31-Jul-2024	JAIN, VIKAS	1,522.00
730913	31-Jul-2024	JAMES, KOHEN (R)	5.00
1086017	03-Jul-2024	JANES, KIMBERLY A	203.38
730769	24-Jul-2024	JANSSEN, SCOTT (R)	13.27
730460	11-Jul-2024	JAQUES, GUY Q	375.57
1085893	01-Jul-2024	JDC INVESTMENTS LLC	1,494.00
1086311	31-Jul-2024	JDC INVESTMENTS LLC	1,494.00
1085988	03-Jul-2024	JEFF MARTIN CONSULTING LLC	2,316.00
1086152	25-Jul-2024	JEFF MARTIN CONSULTING LLC	1,066.00
730424	10-Jul-2024	JEFFREY, JEAN (R)	73.19
1085949	01-Jul-2024	JJBMC PROPERTIES LLC	4,353.00
1086339	31-Jul-2024	JJBMC PROPERTIES LLC	3,775.00
730425	10-Jul-2024	JOHNSTON, GEORGE (R)	56.07
730996	31-Jul-2024	JONES, ANDREW (R)	87.07
730770	24-Jul-2024	JONES, KYLIE (R)	114.89
1085898	01-Jul-2024	JONES, PATRICIA A.	1,550.00
1086078	17-Jul-2024	JONES, PATRICIA A.	1,692.00
1086316	31-Jul-2024	JONES, PATRICIA A.	2,396.00
1085822	01-Jul-2024	JOSHI, PRANAV	2,123.00
1086194	31-Jul-2024	JOSHI, PRANAV	2,123.00
730050	01-Jul-2024	JOU, SEN T	3,182.00
730484	12-Jul-2024	JOU, SEN T	2,789.00
731057	31-Jul-2024	JOU, SEN T	5,971.00
730051	01-Jul-2024	JRS GUERRERO LIMITED PARTNERSHIP	2,958.00
731058	31-Jul-2024	JRS GUERRERO LIMITED PARTNERSHIP	2,958.00
730175	03-Jul-2024	JR'S SHOES AND BOOTS, LLC	162.83
730242	03-Jul-2024	JUANG, MENQ TSONG (R)	321.16
730176	03-Jul-2024	JUMPBUNCH	6,625.60
730726	24-Jul-2024	JUNGLE JILL'S ANIMAL ENCOUNTERS, LLC	350.00
1086097	18-Jul-2024	JUST PLANT DESIGNERS INC	165.00
1086098	18-Jul-2024	JUSTIFACTS CREDENTIAL VERIFICATION	73.50
730177	03-Jul-2024	K2 ELECTRIC, LLC	28,485.00
730052	01-Jul-2024	KACHINA APARTMENTS	5,645.00

Payment Number	Payment Date	Vendor Name	Amount
730829	29-Jul-2024	KACHINA APARTMENTS	545.00
731059	31-Jul-2024	KACHINA APARTMENTS	6,190.00
1085996	03-Jul-2024	KALYAN RAMAN KUV CONSULTANTS LLC	15,250.00
730335	10-Jul-2024	KANOPY LLC	2,522.00
730943	31-Jul-2024	KANUHO, REBECCA	1,600.00
1085820	01-Jul-2024	KARAMIZAKHERADI, NAVID	2,150.00
1086192	31-Jul-2024	KARAMIZAKHERADI, NAVID	2,150.00
730727	24-Jul-2024	KARL BALTUTAT VALUATION SERVICES, LLC	9,425.00
730178	03-Jul-2024	KARY ENVIRONMENTAL SERVICES INC	659.10
730336	10-Jul-2024	KARY ENVIRONMENTAL SERVICES INC	2,992.36
730771	24-Jul-2024	KASHIAPPA, ADITYA (R)	87.90
730053	01-Jul-2024	KASIM, WISAM	4,512.00
731060	31-Jul-2024	KASIM, WISAM	4,512.00
1085926	01-Jul-2024	KATZ, JENNIFER ANN	1,176.00
1086234	31-Jul-2024	KATZ, JENNIFER ANN	1,176.00
1086073	11-Jul-2024	KAUP, RYAN J	13.40
730054	01-Jul-2024	KELLER WILLIAMS REALTY PHOENIX	1,207.00
731061	31-Jul-2024	KELLER WILLIAMS REALTY PHOENIX	1,207.00
730256	03-Jul-2024	KENNAUGH, TOBY S	175.00
730426	10-Jul-2024	KERBER, AARON (R)	53.04
730772	24-Jul-2024	KESGOMOL, THANEE (R)	41.09
1085955	01-Jul-2024	KHATRI, SHAH	7,341.00
1086352	31-Jul-2024	KHATRI, SHAH	7,341.00
730997	31-Jul-2024	KHONER PROPERTIES LLC (R)	34.79
1085953	01-Jul-2024	KIANPOUR, FARAMARZ	2,449.00
1086350	31-Jul-2024	KIANPOUR, FARAMARZ	2,449.00
1085985	03-Jul-2024	KIMLEY-HORN AND ASSOCIATES, INC	20,291.08
1086057	11-Jul-2024	KIMLEY-HORN AND ASSOCIATES, INC	39,348.13
1086095	18-Jul-2024	KIMLEY-HORN AND ASSOCIATES, INC	1,327.50
1086143	25-Jul-2024	KIMLEY-HORN AND ASSOCIATES, INC	35,487.15
730179	03-Jul-2024	KING CONCRETE, INC	543.90
730337	10-Jul-2024	KING CONCRETE, INC	1,222.25
730728	24-Jul-2024	KING CONCRETE, INC	2,651.80
730914	31-Jul-2024	KING CONCRETE, INC	2,501.40
730485	12-Jul-2024	KING COUNTY HOUSING AUTHORITY	7,092.64
730427	10-Jul-2024	KIRPATRICK, MARIA (R)	23.38
730338	10-Jul-2024	KITCHELL/CEM INC	44,776.00
730915	31-Jul-2024	KLINEFELTER, KRIS (R)	150.00
730998	31-Jul-2024	KNOCHEL BROS INC (R)	1,412.30
730428	10-Jul-2024	KNOLL, KEVIN (R)	52.71
730461	11-Jul-2024	KNUDSON, JOHN F	55.65
730773	24-Jul-2024	KO, YUSING (R)	73.83
730999	31-Jul-2024	KOO, MYNG SUN (R)	35.85
1085817	01-Jul-2024	KRAMER, NEAL	1,901.00
1086189	31-Jul-2024	KRAMER, NEAL	1,901.00
730774	24-Jul-2024	KROSCHEL, JOANNA (R)	44.60
730579	17-Jul-2024	KRUE INDUSTRIAL, LLC	1,655.69
730729	24-Jul-2024	KRUE INDUSTRIAL, LLC	3,485.16
1085968	01-Jul-2024	KRUY IN, BUN	1,400.00
1086344	31-Jul-2024	KRUY IN, BUN	1,400.00
1085799	01-Jul-2024	K-SERVICES	1,771.00
1086077	12-Jul-2024	K-SERVICES	981.00
1086223	31-Jul-2024	K-SERVICES	2,752.00

Payment Number	Payment Date	Vendor Name	Amount
730775	24-Jul-2024	KUMAR, VIKAS (R)	65.17
730730	24-Jul-2024	KW ENGINEERING	1,000.00
730308	10-Jul-2024	KYRENE JUSTICE COURT	50.00
730580	17-Jul-2024	L P RENT A FENCE	6,417.87
730649	18-Jul-2024	LACKIE, SARAH J	65.91
730429	10-Jul-2024	LAMB, JEFF (R)	35.25
730495	17-Jul-2024	LAMBERT, PETER (R)	92.71
731000	31-Jul-2024	LANE, CLAIRE (R)	106.13
1086072	11-Jul-2024	LANG, DAWN L	1,590.93
730180	03-Jul-2024	LANGUAGE CONNECTION	252.00
730581	17-Jul-2024	LANGUAGE CONNECTION	380.00
730916	31-Jul-2024	LANGUAGE CONNECTION	190.00
730582	17-Jul-2024	LANGUAGE TESTING INTERNATIONAL INC	1,309.00
730731	24-Jul-2024	LANGUAGE TESTING INTERNATIONAL INC	748.00
730430	10-Jul-2024	LARKIN, MICHAEL (R)	13.53
1085947	01-Jul-2024	LAROUSSI, REDOUANE	1,587.00
1086255	31-Jul-2024	LAROUSSI, REDOUANE	1,587.00
730917	31-Jul-2024	LARRY MILLER TOYOTA	188,243.72
1085918	01-Jul-2024	LARSEN DEVELOPMENT LLC	1,140.00
1086336	31-Jul-2024	LARSEN DEVELOPMENT LLC	1,140.00
730583	17-Jul-2024	LAW OFFICES OF STEPHANIE LEE EHBRIGHT, ESQ	4,583.34
731001	31-Jul-2024	LAWIN, AMANDA (R)	67.70
1086157	25-Jul-2024	LAYNE CHRISTENSEN COMPANY	175,812.00
1085957	01-Jul-2024	LE, KIEU	1,605.00
1086286	31-Jul-2024	LE, KIEU	369.00
1085895	01-Jul-2024	LE, THUC	1,607.00
1086313	31-Jul-2024	LE, THUC	1,607.00
730918	31-Jul-2024	LEADSONLINE LLC	23,044.00
730919	31-Jul-2024	LEAGUE OF ARIZONA CITIES & TOWNS	106,300.00
730431	10-Jul-2024	LEBEAU, MAURA (R)	39.07
1085945	01-Jul-2024	LEE, KEVIN	2,560.00
1086253	31-Jul-2024	LEE, KEVIN	2,560.00
1085907	01-Jul-2024	LEE, LARRY	1,798.00
1086325	31-Jul-2024	LEE, LARRY	1,798.00
730257	03-Jul-2024	LERMA, MATTHEW S	418.00
1085886	01-Jul-2024	LETS REED LLC	516.00
1086304	31-Jul-2024	LETS REED LLC	516.00
730339	10-Jul-2024	LEVEL 3 COMMUNICATIONS LLC	1,796.35
730340	10-Jul-2024	LEVEL 3 COMMUNICATIONS LLC	1,769.80
730732	24-Jul-2024	LEVEL 3 COMMUNICATIONS LLC	2,649.20
730733	24-Jul-2024	LEXIPOL, LLC	10,763.50
730055	01-Jul-2024	LIAO, FENGLING	1,985.00
731062	31-Jul-2024	LIAO, FENGLING	1,985.00
730258	03-Jul-2024	LIBURD, MIKAYELA S	222.00
730056	01-Jul-2024	LIFEWELL BEHAVIORAL WELLNESS	1,441.00
731063	31-Jul-2024	LIFEWELL BEHAVIORAL WELLNESS	1,441.00
730341	10-Jul-2024	LIGHTING UNLIMITED INC	742.70
730734	24-Jul-2024	LIGHTING UNLIMITED INC	909.32
730920	31-Jul-2024	LIGHTING UNLIMITED INC	19,833.24
730057	01-Jul-2024	LIN, HEFEN	1,497.00
731064	31-Jul-2024	LIN, HEFEN	1,497.00
1085881	01-Jul-2024	LIN, RONG CHUN	3,062.00
1086300	31-Jul-2024	LIN, RONG CHUN	3,062.00

Payment Number	Payment Date	Vendor Name	Amount
1085831	01-Jul-2024	LINCOLN, EARLE	1,409.00
1086203	31-Jul-2024	LINCOLN, EARLE	1,409.00
730921	31-Jul-2024	LINDSEY GREGOR INDEPENDENT SCENTSY CONSULTANT (R)	33.75
730181	03-Jul-2024	LITHO TECH, INC.	7,833.32
1085812	01-Jul-2024	LIU, QIAN	95.00
1086173	29-Jul-2024	LIU, QIAN	652.00
1086184	31-Jul-2024	LIU, QIAN	747.00
730058	01-Jul-2024	LIU, SUSAN	1,423.00
731065	31-Jul-2024	LIU, SUSAN	1,279.00
731002	31-Jul-2024	LIVE LOVE (R)	1,302.16
730496	17-Jul-2024	LLC J GLOW BEAUTY STUDIO (R)	2,046.92
730243	03-Jul-2024	LOCHTEFELD, KATE (R)	42.39
730182	03-Jul-2024	LOGAN SIMPSON	3,961.06
730342	10-Jul-2024	LOGAN SIMPSON	2,253.19
730735	24-Jul-2024	LOGAN SIMPSON	11,253.09
730343	10-Jul-2024	LOKAHI LLC	5,202.33
1085808	01-Jul-2024	LOTUS REAL ESTATE LLC	1,416.00
1086180	31-Jul-2024	LOTUS REAL ESTATE LLC	1,416.00
731003	31-Jul-2024	LOVE, LISA (R)	33.92
730059	01-Jul-2024	LPB HOLDING, LLC	889.00
730584	17-Jul-2024	LPB HOLDING, LLC	2,550.00
730736	24-Jul-2024	LPB HOLDING, LLC	1,700.00
731066	31-Jul-2024	LPB HOLDING, LLC	2,721.00
730462	11-Jul-2024	LUE SANG, MICHELLE C	677.93
1085900	01-Jul-2024	LUNDIN, ANDREY	1,477.00
1086318	31-Jul-2024	LUNDIN, ANDREY	1,477.00
730432	10-Jul-2024	LUONG, HONG (R)	20.61
730922	31-Jul-2024	LYFT INC	3,728.34
730060	01-Jul-2024	LYNN, DANNY	132.00
731067	31-Jul-2024	LYNN, DANNY	132.00
730183	03-Jul-2024	M. R. TANNER CONSTRUCTION	29,327.30
730737	24-Jul-2024	M. R. TANNER CONSTRUCTION	2,755,609.12
1085863	01-Jul-2024	MACLAY REAL ESTATE, LLC	2,498.00
1086281	31-Jul-2024	MACLAY REAL ESTATE, LLC	2,498.00
730776	24-Jul-2024	MADANKUNI, ASHOKKUMAR (R)	675.86
730433	10-Jul-2024	MAF CHANDLER LLC (R)	355.48
730061	01-Jul-2024	MAIN STREET RENEWAL LLC	6,294.00
731068	31-Jul-2024	MAIN STREET RENEWAL LLC	6,294.00
1085821	01-Jul-2024	MAI'S RENTAL LLC	1,848.00
1086193	31-Jul-2024	MAI'S RENTAL LLC	1,848.00
1085876	01-Jul-2024	MAKEY, JAMES	1,476.00
1086295	31-Jul-2024	MAKEY, JAMES	1,476.00
1085991	03-Jul-2024	MAKPRO SERVICES LLC	5,450.61
731004	31-Jul-2024	MALCOM, WILLIAM (R)	11.18
730309	10-Jul-2024	MANISTEE JUSTICE COURT	500.00
730738	24-Jul-2024	MANLEY BROTHERS OF INDIANA INC	9,978.68
730184	03-Jul-2024	MARATHON STAFFING RESOURCES INC	3,016.40
730344	10-Jul-2024	MARATHON STAFFING RESOURCES INC	28,872.86
730739	24-Jul-2024	MARATHON STAFFING RESOURCES INC	14,714.07
730923	31-Jul-2024	MARATHON STAFFING RESOURCES INC	10,164.12
730345	10-Jul-2024	MARC TAYLOR INC	323,878.00
730777	24-Jul-2024	MARCHWICK, CHRISTOPHER (R)	69.63
730585	17-Jul-2024	MARICOPA ASSOCIATION OF GOVERNMENTS	62,291.00

Payment Number	Payment Date	Vendor Name	Amount
730346	10-Jul-2024	MARICOPA COUNTY	121.00
730586	17-Jul-2024	MARICOPA COUNTY	83,386.14
730740	24-Jul-2024	MARICOPA COUNTY	260.00
730185	03-Jul-2024	MARICOPA COUNTY DEPT OF	79,478.13
730347	10-Jul-2024	MARICOPA COUNTY TREASURER	18,025.67
730778	24-Jul-2024	MARK BROWER PROPERTIES (R)	224.58
1085797	01-Jul-2024	MARKET EDGE REALTY LLC	2,021.00
1086221	31-Jul-2024	MARKET EDGE REALTY LLC	2,021.00
730244	03-Jul-2024	MARSHALL, JAY (R)	50.65
730741	24-Jul-2024	MARTH, STEVEN (R)	230.37
730434	10-Jul-2024	MARTINEZ, DEBORAH GILREATH (R)	44.73
730924	31-Jul-2024	MARTINEZ, RANDOLPH (R)	5.00
730925	31-Jul-2024	MATHESON TRI-GAS INC	325.67
730348	10-Jul-2024	MATRIX NEW WORLD ENGINEERING	20,460.00
730245	03-Jul-2024	MATTERN, SARA (R)	9.18
730062	01-Jul-2024	MAXFIELD, JONATHAN	543.00
731069	31-Jul-2024	MAXFIELD, JONATHAN	543.00
730246	03-Jul-2024	MAYA, ROBERT (R)	34.92
731005	31-Jul-2024	MAYER, JORDAN (R)	14.10
730779	24-Jul-2024	MAYNARD, LOIS (R)	13.56
731006	31-Jul-2024	MAZER, MASHA (R)	46.40
730349	10-Jul-2024	MBA DESIGN & DISPLAY PRODUCTS CORP	19,418.00
1085994	03-Jul-2024	MCCARTHY BUILDING COMPANIES, INC	1,267,814.39
1086050	11-Jul-2024	MCCARTHY BUILDING COMPANIES, INC	317,556.26
730186	03-Jul-2024	MCCOOK INDUSTRIES LLC	2,493.45
730742	24-Jul-2024	MCCORMICK VENDING	350.00
730435	10-Jul-2024	MCDOWELL, SIOBHAN (R)	69.19
730436	10-Jul-2024	MCGINN, THOMAS (R)	65.44
1085899	01-Jul-2024	MCKINDLES, JOHN	3,364.00
1086317	31-Jul-2024	MCKINDLES, JOHN	3,364.00
1085967	01-Jul-2024	MCKINLEY, ROSS HARRISON	1,053.00
1086343	31-Jul-2024	MCKINLEY, ROSS HARRISON	1,053.00
730497	17-Jul-2024	MCKINLEY, SHARON (R)	15.77
731007	31-Jul-2024	MCNEIL BROTHERS INC (R)	2,667.79
1085887	01-Jul-2024	MCNELLIS, JOHN	1,572.00
1086305	31-Jul-2024	MCNELLIS, JOHN	1,572.00
730063	01-Jul-2024	MCP CROSSWINDS LLC	19,969.00
731070	31-Jul-2024	MCP CROSSWINDS LLC	20,706.00
730926	31-Jul-2024	MECHANICAL PRODUCTS SOUTHWEST, INC	19,930.27
730743	24-Jul-2024	MEDTOX LABORATORIES INC.	20.00
730187	03-Jul-2024	MERCER LLC	168,503.31
730927	31-Jul-2024	METERING SERVICES INC	26,041.00
730587	17-Jul-2024	METRO CHANDLER APARTMENTS	85,366.00
730744	24-Jul-2024	METROHM USA, INC.	6,038.41
730188	03-Jul-2024	MGC CONTRACTORS, INC	316,661.00
730745	24-Jul-2024	MGC CONTRACTORS, INC	327,342.18
730189	03-Jul-2024	MGX EQUIPMENT SERVICES LLC	16,081.60
730746	24-Jul-2024	MGX EQUIPMENT SERVICES LLC	2,063.40
730928	31-Jul-2024	MGX EQUIPMENT SERVICES LLC	983.92
1085843	01-Jul-2024	MHK INVESTMENT GROUP, LLC	2,094.00
1086214	31-Jul-2024	MHK INVESTMENT GROUP, LLC	2,094.00
1086149	25-Jul-2024	MIDEO SYSTEMS INC	16,526.03
730190	03-Jul-2024	MIDWEST TAPE	896.25

Payment Number	Payment Date	Vendor Name	Amount
730588	17-Jul-2024	MIDWEST TAPE	750.50
730747	24-Jul-2024	MIDWEST TAPE	115.26
730929	31-Jul-2024	MIDWEST TAPE	367.68
730191	03-Jul-2024	MILLER MENDEL, INC	676.54
1085914	01-Jul-2024	MILLER, JEFFERY ROBERT	2,335.00
1086332	31-Jul-2024	MILLER, JEFFERY ROBERT	2,335.00
730930	31-Jul-2024	MINER, LTD	1,477.41
730064	01-Jul-2024	MIRA SANTI	6,829.00
731071	31-Jul-2024	MIRA SANTI	7,498.00
730350	10-Jul-2024	MIRACLE RECREATION EQUIPMENT COMPANY, INC	4,099.81
730065	01-Jul-2024	MOGHARRABI, SOHRAB	1,170.00
731072	31-Jul-2024	MOGHARRABI, SOHRAB	1,170.00
730463	11-Jul-2024	MORRISON SKUPIN, ALICIA M	380.34
1085852	01-Jul-2024	MORTENSEN, GLORIA J	1,861.00
1086263	31-Jul-2024	MORTENSEN, GLORIA J	1,861.00
730351	10-Jul-2024	MOSAIC PUBLIC PARNTERS LLC	7,500.00
730247	03-Jul-2024	MOSLEY, SAUNDRA (R)	54.08
730352	10-Jul-2024	MOTOROLA	138,551.28
1086122	18-Jul-2024	MOYERS, KIMBERLY K	60.71
731008	31-Jul-2024	MR TANNER CONSTRUCTION (R)	1,405.65
1085892	01-Jul-2024	MRGUDICH, JON A	1,079.00
1086310	31-Jul-2024	MRGUDICH, JON A	1,079.00
1085834	01-Jul-2024	MSRAT, LLC	2,192.00
1086205	31-Jul-2024	MSRAT, LLC	2,192.00
730353	10-Jul-2024	MUNICIPAL EMERGENCY SERVICES INC	7,409.61
1086045	11-Jul-2024	MYTHICS LLC	1,327.15
1086151	25-Jul-2024	N HARRIS COMPUTER CORPORATION	138,717.01
1085940	01-Jul-2024	N/A TOWN SQUARE-65 LP	1,217.00
1086248	31-Jul-2024	N/A TOWN SQUARE-65 LP	1,217.00
730825	25-Jul-2024	NALL, CARYN L	499.42
730944	31-Jul-2024	NANDAN, RAGHU HADADI	2,180.00
730931	31-Jul-2024	NATIONAL CARWASH SOLUTIONS INC	872.58
730354	10-Jul-2024	NATIONAL TESTING NETWORK INC	3,755.00
730932	31-Jul-2024	NATIONAL WATERPROOFING & ROOFING LLC	3,529.00
730589	17-Jul-2024	NCDMV, DRIVER LICENSE RECORDS (R)	15.00
730780	24-Jul-2024	NECTAR GILA 2023 LLC (R)	499.66
1086094	18-Jul-2024	NEENAH FOUNDRY COMPANY	20,332.09
730933	31-Jul-2024	NESCON, LLC	151.62
730437	10-Jul-2024	NEWLAND, TIMOTHY (R)	59.13
730192	03-Jul-2024	NFRA INC	2,257.49
1085894	01-Jul-2024	NGUY CONCEPT LLC	2,000.00
1086312	31-Jul-2024	NGUY CONCEPT LLC	2,000.00
1085928	01-Jul-2024	NGUY HUANG LLC	2,200.00
1086236	31-Jul-2024	NGUY HUANG LLC	2,200.00
730438	10-Jul-2024	NGUYEN, BELLA (R)	21.79
1085845	01-Jul-2024	NGUYEN, HIEN	2,325.00
1086216	31-Jul-2024	NGUYEN, HIEN	2,325.00
1085952	01-Jul-2024	NGUYEN, HUNG Q.	4,406.00
1086349	31-Jul-2024	NGUYEN, HUNG Q.	2,119.00
1085963	01-Jul-2024	NGUYEN, NGOC	2,878.00
1086292	31-Jul-2024	NGUYEN, NGOC	2,878.00
1085864	01-Jul-2024	NGUYEN, SAMANTHA BAO ANH	2,901.00
1086282	31-Jul-2024	NGUYEN, SAMANTHA BAO ANH	2,901.00

Payment Number	Payment Date	Vendor Name	Amount
1085866	01-Jul-2024	NICHOLAS JOSEPH AGENCY LLC	1,696.00
1086284	31-Jul-2024	NICHOLAS JOSEPH AGENCY LLC	1,696.00
730748	24-Jul-2024	NINA CONSTRUCTION SUPPLY	302.89
1085842	01-Jul-2024	NINE PACK LLC	2,598.00
1086213	31-Jul-2024	NINE PACK LLC	2,598.00
1085853	01-Jul-2024	NINEVEH PROPERTIES LLC	1,549.00
1086271	31-Jul-2024	NINEVEH PROPERTIES LLC	1,549.00
730498	17-Jul-2024	NJOGU, HENRY (R)	44.72
1085889	01-Jul-2024	NJOROGE, ELIZABETH	793.00
1086307	31-Jul-2024	NJOROGE, ELIZABETH	793.00
730464	11-Jul-2024	NOLLE, ALEXA A	316.34
730193	03-Jul-2024	NORRIS DESIGN AZ LLC	2,047.15
730781	24-Jul-2024	NSAH, MICHAEL (R)	9.57
1086148	25-Jul-2024	NST TECHNOLOGIES INC	50,085.00
730590	17-Jul-2024	OCLC, INC	38,434.13
730749	24-Jul-2024	OCLC, INC	4,000.00
730439	10-Jul-2024	O'CONNELL, JOHN (R)	10.21
730066	01-Jul-2024	OCOTILLO BAY APARTMENTS	28,491.00
730263	09-Jul-2024	OCOTILLO BAY APARTMENTS	2,440.00
730486	12-Jul-2024	OCOTILLO BAY APARTMENTS	476.00
731073	31-Jul-2024	OCOTILLO BAY APARTMENTS	27,031.00
730826	25-Jul-2024	ODOM, ZACHARY J	136.00
1085903	01-Jul-2024	OKATI LLC	1,999.00
1086321	31-Jul-2024	OKATI LLC	1,999.00
730644	17-Jul-2024	OKLAHOMA HOUSING FIN AGY (231-5)	1,059.19
730194	03-Jul-2024	OLSSON, INC	41,938.15
730355	10-Jul-2024	OLSSON, INC	5,179.12
730067	01-Jul-2024	ON Q PROPERTY MANAGEMENT	4,117.00
730487	12-Jul-2024	ON Q PROPERTY MANAGEMENT	169.00
731074	31-Jul-2024	ON Q PROPERTY MANAGEMENT	4,286.00
730440	10-Jul-2024	O'NEILL, DANIELLE (R)	59.91
730310	10-Jul-2024	OPTUM	3,928.96
1086075	12-Jul-2024	ORANGE COUNTY HOUSING AUTHORITY	7,698.48
730750	24-Jul-2024	ORIGAMI RISK, LLC	29,712.42
730356	10-Jul-2024	ORIGINAL WATERMEN, INC	210.34
730751	24-Jul-2024	ORIGINAL WATERMEN, INC	134.23
730068	01-Jul-2024	OROS, ARSENIO	66.00
731075	31-Jul-2024	OROS, ARSENIO	68.00
730069	01-Jul-2024	ORTH, AMY	1,704.00
731076	31-Jul-2024	ORTH, AMY	1,704.00
730499	17-Jul-2024	ORTIZ-SOTO, MANUEL (R)	52.80
730195	03-Jul-2024	OTTO TRUCKING, INC	10,692.02
730357	10-Jul-2024	OTTO TRUCKING, INC	34,377.11
730753	24-Jul-2024	OTTO TRUCKING, INC	35,296.05
730934	31-Jul-2024	OTTO TRUCKING, INC	20,669.70
731077	31-Jul-2024	PACIFIC SOUTHWEST REGIONAL COUNCIL NAHRO	197.28
730441	10-Jul-2024	PAGAYA SMARTRESI F1 FUND PROPERTY (R)	42.35
730196	03-Jul-2024	PAINT THE PARTY LLC	125.00
1086150	25-Jul-2024	PARAMOUNT STREETLIGHT	2,265.00
730070	01-Jul-2024	PARKER, DIXIE L.	658.00
730645	17-Jul-2024	PARKER, DIXIE L.	658.00
731078	31-Jul-2024	PARKER, DIXIE L.	658.00
1086104	18-Jul-2024	PARSUS SOLUTIONS, LLC	26,446.68

Payment Number	Payment Date	Vendor Name	Amount
1085924	01-Jul-2024	PASHAPOUR NIKU, MAZIAR	2,538.00
1086232	31-Jul-2024	PASHAPOUR NIKU, MAZIAR	2,538.00
1085883	01-Jul-2024	PASQUALINA VITIRITTI TRUSTEE	904.00
730754	24-Jul-2024	PATRIOT BOILER	16,147.17
730945	31-Jul-2024	PAULSON, BONNIE ANN	3,000.00
730782	24-Jul-2024	PAVLAKES, KATHERINE (R)	112.03
1085989	03-Jul-2024	PCL CONSTRUCTION INC	217,193.17
1086046	11-Jul-2024	PCL CONSTRUCTION INC	44,285.95
1086153	25-Jul-2024	PCL CONSTRUCTION INC	209,918.82
730200	03-Jul-2024	PEDDICORD, MICHAEL	1,100.00
730946	31-Jul-2024	PELA, ROBRT	400.00
730264	09-Jul-2024	PETERSEN REALTY	2,246.00
731079	31-Jul-2024	PETERSEN REALTY	2,246.00
730071	01-Jul-2024	PHAN, THAO	1,221.00
731080	31-Jul-2024	PHAN, THAO	1,221.00
730877	31-Jul-2024	PHILLIP D LETT, PH.D.	1,650.00
730197	03-Jul-2024	PHOENIX PROCESS EQUIPMENT CO	74,950.00
730358	10-Jul-2024	PHOENIX PROCESS EQUIPMENT CO	31,850.00
730755	24-Jul-2024	PHOENIX PROCESS EQUIPMENT CO	14,950.00
1085992	03-Jul-2024	PHOENIX PUMPS INC	375.00
1086101	18-Jul-2024	PHOENIX PUMPS INC	10,321.34
1086155	25-Jul-2024	PHOENIX PUMPS INC	269.49
730591	17-Jul-2024	PHX EAST VALLEY PARTNERSHIP	10,000.00
730359	10-Jul-2024	PIERCE COLEMAN PLLC	5,389.00
730259	03-Jul-2024	PIERCE, KRISTEN N	217.00
1085819	01-Jul-2024	PINDER PROPERTIES, LLC	966.00
1086191	31-Jul-2024	PINDER PROPERTIES, LLC	966.00
730311	10-Jul-2024	PIONEER JUSTICE	500.00
730592	17-Jul-2024	PLACER LABS INC	5,250.00
730072	01-Jul-2024	PLC SOLEIL APARTMENTS, LLC	2,678.00
730488	12-Jul-2024	PLC SOLEIL APARTMENTS, LLC	325.00
731081	31-Jul-2024	PLC SOLEIL APARTMENTS, LLC	3,182.00
1085807	01-Jul-2024	PLEASANT DESERT PROPERTIES LLC	2,030.00
1086179	31-Jul-2024	PLEASANT DESERT PROPERTIES LLC	2,030.00
1085997	03-Jul-2024	PM PLUMBING & MECHANICAL, INC	1,070.00
1086051	11-Jul-2024	PM PLUMBING & MECHANICAL, INC	407.50
1086103	18-Jul-2024	PM PLUMBING & MECHANICAL, INC	3,403.43
1086147	25-Jul-2024	PM PLUMBING & MECHANICAL, INC	3,660.32
730756	24-Jul-2024	POLICY AZ, LLC	6,500.00
1085987	03-Jul-2024	POLYDYNE, INC.	7,084.00
1086096	18-Jul-2024	POLYDYNE, INC.	17,010.00
730935	31-Jul-2024	PORTER KYLE BUILDERS (R)	293,519.65
730947	31-Jul-2024	PORTNOY, RANDI (R)	250.00
730198	03-Jul-2024	POSTAL STRATEGIES CORPORATION	1,102.74
1085950	01-Jul-2024	POUCHKAREV, ANDREI	2,295.00
1086347	31-Jul-2024	POUCHKAREV, ANDREI	2,295.00
731009	31-Jul-2024	PRANGER, CHAD (R)	856.91
730783	24-Jul-2024	PRATER, DEAN (R)	1,886.52
731010	31-Jul-2024	PRATIK INVESTMENTS LLC (R)	357.65
730593	17-Jul-2024	PRECISION INTEGRATED SYSTEMS, LLC	5,724.36
730757	24-Jul-2024	PREMIER EMBLEM & INSIGNIA INC	5,881.44
730936	31-Jul-2024	PREMIER EMBLEM & INSIGNIA INC	6,595.19
730594	17-Jul-2024	PREMISE ONE LLC	1,106.70

Payment Number	Payment Date	Vendor Name	Amount
730937	31-Jul-2024	PRIDE OUTFITTING, LLC	18,704.73
1085841	01-Jul-2024	PROEX REALTY MANAGEMENT	5,189.00
1086052	11-Jul-2024	PROEX REALTY MANAGEMENT	3,557.00
1086212	31-Jul-2024	PROEX REALTY MANAGEMENT	5,189.00
730073	01-Jul-2024	PRS PROPERTY MANAGEMENT	2,050.00
731082	31-Jul-2024	PRS PROPERTY MANAGEMENT	2,410.00
730595	17-Jul-2024	PUMPMAN WATERWORKS CONTRACTORS PM LLC	8,650.00
730938	31-Jul-2024	PUMPMAN WATERWORKS CONTRACTORS PM LLC	25,230.00
1085813	01-Jul-2024	PUNG, SOKENG	5,139.00
1086185	31-Jul-2024	PUNG, SOKENG	5,347.00
730784	24-Jul-2024	PUTHALATH, SAJITHA (R)	11.45
730153	03-Jul-2024	PVS DX INC	7,640.78
730199	03-Jul-2024	PVS DX INC	32,485.90
730360	10-Jul-2024	PVS DX INC	9,849.92
730596	17-Jul-2024	PVS DX INC	8,711.25
730758	24-Jul-2024	PVS DX INC	52,500.11
730939	31-Jul-2024	PVS DX INC	35,569.36
730074	01-Jul-2024	QUACH, TAM	2,470.00
731083	31-Jul-2024	QUACH, TAM	2,470.00
730609	17-Jul-2024	QUADIENT, INC	16,824.44
1086008	03-Jul-2024	QUANTUM INTEGRATED SOLUTIONS INC	327,145.65
1086069	11-Jul-2024	QUANTUM INTEGRATED SOLUTIONS INC	110,881.23
730500	17-Jul-2024	QUINONEZ, JOEL (R)	48.70
730610	17-Jul-2024	RACHEL FRAZIER JOHNSON LAW (R)	25.00
730362	10-Jul-2024	RAILROAD MANAGEMENT COMPANY LLC	2,548.47
730948	31-Jul-2024	RAILROAD MANAGEMENT COMPANY LLC	666.80
730361	10-Jul-2024	RAMOS, JAMES JAMAAL	250.00
730501	17-Jul-2024	RANEY, PHILLIP (R)	92.88
1085851	01-Jul-2024	RAY ROAD PROPERTY LLC	966.00
1086079	17-Jul-2024	RAY ROAD PROPERTY LLC	3,015.00
1086262	31-Jul-2024	RAY ROAD PROPERTY LLC	2,300.00
730949	31-Jul-2024	RDO EQUIPMENT CO	78.00
730950	31-Jul-2024	READING TRUCK EQUIPMENT, LLC	40.86
730789	24-Jul-2024	READY REFRESH	2,627.87
730951	31-Jul-2024	READY REFRESH	672.59
730075	01-Jul-2024	REALTY EXECUTIVES, AN ARIZONA CORP	4,334.00
730363	10-Jul-2024	REALTY EXECUTIVES, AN ARIZONA CORP	1,500.00
731084	31-Jul-2024	REALTY EXECUTIVES, AN ARIZONA CORP	4,334.00
730790	24-Jul-2024	RECOVERY CAFE ARIZONA	25,000.00
1086110	18-Jul-2024	RECREATION AND ATHLETICS FOR INDIVIDUALS WITH DISABILITIES	246.00
730611	17-Jul-2024	REDWOOD OUTDOORS	9,104.79
730201	03-Jul-2024	REFRIGERATION SUPPLIES DISTRIBUTOR	153.79
730612	17-Jul-2024	REFRIGERATION SUPPLIES DISTRIBUTOR	159.05
730952	31-Jul-2024	REFRIGERATION SUPPLIES DISTRIBUTOR	1,549.01
730364	10-Jul-2024	REGAL FENCE LLC	2,107.00
730953	31-Jul-2024	REGAL FENCE LLC	40,852.54
730365	10-Jul-2024	RELIABLE MAINTENANCE AND CUSTODIAL SERVICES	3,200.00
730954	31-Jul-2024	RELIABLE MAINTENANCE AND CUSTODIAL SERVICES	3,200.00
730366	10-Jul-2024	RELIANT GASES, LTD.	4,047.00
730613	17-Jul-2024	RELIANT GASES, LTD.	14,697.00
730791	24-Jul-2024	RELIANT GASES, LTD.	7,192.30
730955	31-Jul-2024	RELIANT GASES, LTD.	6,816.00
730367	10-Jul-2024	REPUBLIC SERVICES INC	974.45

Payment Number	Payment Date	Vendor Name	Amount
730614	17-Jul-2024	REPUBLIC SERVICES INC	26,945.89
730792	24-Jul-2024	REPUBLIC SERVICES INC	1,211.46
730793	24-Jul-2024	REPUBLIC SERVICES INC	6,640.51
730076	01-Jul-2024	RESICAP ARIZONA OWNER III LLC	3,045.00
731085	31-Jul-2024	RESICAP ARIZONA OWNER III LLC	3,045.00
730202	03-Jul-2024	RICOH USA INC	448.17
730368	10-Jul-2024	RICOH USA INC	2,372.07
730615	17-Jul-2024	RICOH USA INC	1,249.13
730794	24-Jul-2024	RICOH USA INC	2,241.54
730956	31-Jul-2024	RICOH USA INC	9,201.08
1086002	03-Jul-2024	RITOCH-POWELL & ASSOCIATES CONSULTING ENGINEERS INC	88,898.64
730203	03-Jul-2024	RITZ SAFETY LLC	214.30
730616	17-Jul-2024	RITZ SAFETY LLC	488.88
730795	24-Jul-2024	RITZ SAFETY LLC	32.94
730957	31-Jul-2024	RITZ SAFETY LLC	131.76
730442	10-Jul-2024	RIVERA, NICHOLAS (R)	19.65
730077	01-Jul-2024	RIVIERA PARK INVESTORS LLC	3,854.00
731086	31-Jul-2024	RIVIERA PARK INVESTORS LLC	3,838.00
1085871	01-Jul-2024	RJ TORRANCE LLC	454.00
1086268	31-Jul-2024	RJ TORRANCE LLC	454.00
730078	01-Jul-2024	ROBERTS, CAROL YVONNE	742.00
730204	03-Jul-2024	ROCHA, LLC	480.00
731011	31-Jul-2024	RODNEY G SIMON REVOCABLE TRUST (R)	65.60
730248	03-Jul-2024	RODNEY, ALICE (R)	54.91
1085954	01-Jul-2024	RODRIGUEZ-MESA, IVAN	1,311.00
1086351	31-Jul-2024	RODRIGUEZ-MESA, IVAN	1,311.00
730796	24-Jul-2024	ROGERS CORPORATION (R)	15.00
730958	31-Jul-2024	ROLLED OUT BAKERY LLC (R)	125.00
730079	01-Jul-2024	RPC CHANDLER APARTMENTS LLC	3,758.00
731087	31-Jul-2024	RPC CHANDLER APARTMENTS LLC	3,758.00
1085901	01-Jul-2024	RRC INVESTMENTS LLC	1,032.00
1086319	31-Jul-2024	RRC INVESTMENTS LLC	657.00
730205	03-Jul-2024	RUGGIERO'S ACE HARDWARE	2,537.48
730617	17-Jul-2024	RUGGIERO'S ACE HARDWARE	608.19
730959	31-Jul-2024	RUGGIERO'S ACE HARDWARE	1,510.29
730443	10-Jul-2024	RUIZ, JORGE (R)	50.28
1085856	01-Jul-2024	RUVOLO, CHARLES C AND LAURIE L	720.00
1086274	31-Jul-2024	RUVOLO, CHARLES C AND LAURIE L	720.00
1085896	01-Jul-2024	S J FOWLER REAL ESTATE INC	5,160.00
1086314	31-Jul-2024	S J FOWLER REAL ESTATE INC	5,160.00
731012	31-Jul-2024	SADOSKI, KAREN (R)	39.01
730444	10-Jul-2024	SAEED, MOHSAN (R)	19.70
1085800	01-Jul-2024	SAISSAN, JOHN	2,483.00
1086224	31-Jul-2024	SAISSAN, JOHN	2,483.00
1085964	01-Jul-2024	SALEH, ZIAD	1,051.00
1086340	31-Jul-2024	SALEH, ZIAD	1,051.00
730154	03-Jul-2024	SALT RIVER PROJECT	199.83
730369	10-Jul-2024	SALT RIVER PROJECT	12,835.96
730370	10-Jul-2024	SALT RIVER PROJECT	58,567.18
730465	11-Jul-2024	SALT RIVER PROJECT	2,057.96
730489	12-Jul-2024	SALT RIVER PROJECT	8,069.00
730701	24-Jul-2024	SALT RIVER PROJECT	157.82
730830	29-Jul-2024	SALT RIVER PROJECT	20.00

Payment Number	Payment Date	Vendor Name	Amount
730960	31-Jul-2024	SALT RIVER PROJECT	14,983.00
1085917	01-Jul-2024	SALZMAN, BART	1,406.00
1086335	31-Jul-2024	SALZMAN, BART	1,406.00
730080	01-Jul-2024	SAN CERVANTES APARTMENTS	1,306.00
731088	31-Jul-2024	SAN CERVANTES APARTMENTS	1,306.00
730081	01-Jul-2024	SAN HACIENDA APARTMENTS	4,964.00
731089	31-Jul-2024	SAN HACIENDA APARTMENTS	2,900.00
730082	01-Jul-2024	SAN PALMAS MF REALTY COMPANY LLC	1,545.00
731090	31-Jul-2024	SAN PALMAS MF REALTY COMPANY LLC	1,545.00
730618	17-Jul-2024	SAN TAN FORD	85,546.06
730797	24-Jul-2024	SAN TAN FORD	243,888.69
730961	31-Jul-2024	SAN TAN FORD	143,431.48
730083	01-Jul-2024	SAN VALENCIA APARTMENTS LLC	3,854.00
730646	17-Jul-2024	SAN VALENCIA APARTMENTS LLC	2,126.00
731091	31-Jul-2024	SAN VALENCIA APARTMENTS LLC	6,389.00
730785	24-Jul-2024	SANCHEZ, VALERIE (R)	16.60
730084	01-Jul-2024	SANTANA RIDGE	1,841.00
731092	31-Jul-2024	SANTANA RIDGE	1,841.00
1085927	01-Jul-2024	SANTOS, AGNES	2,100.00
1086235	31-Jul-2024	SANTOS, AGNES	2,100.00
730962	31-Jul-2024	SAPSIS RIGGING, INC	4,935.00
730619	17-Jul-2024	SAR SYSTEMS LLC	126,175.00
730620	17-Jul-2024	SARAH'S MUSE	100.00
730963	31-Jul-2024	SARKAR, RAJIB S	2,600.00
730085	01-Jul-2024	SAVAGE, ERIC	1,777.00
731093	31-Jul-2024	SAVAGE, ERIC	1,777.00
730249	03-Jul-2024	SCHENK, JASON (R)	73.27
730964	31-Jul-2024	SCHNEIDER ELECTRIC SYSTEMS USA INC	17,005.97
1085920	01-Jul-2024	SCHOENFELD, RANDY	4,544.00
1086338	31-Jul-2024	SCHOENFELD, RANDY	4,544.00
1085835	01-Jul-2024	SCOTT, DAMONE	3,506.00
1086206	31-Jul-2024	SCOTT, DAMONE	3,506.00
730798	24-Jul-2024	SECRETARY OF STATE	43.00
730965	31-Jul-2024	SECRETARY OF STATE	68.00
730086	01-Jul-2024	SECURED EQUITIES	906.00
731094	31-Jul-2024	SECURED EQUITIES	906.00
730206	03-Jul-2024	SECURITY TITLE AGENCY, INC	750.00
730799	24-Jul-2024	SECURITY TITLE AGENCY, INC	60.00
1086059	11-Jul-2024	SEGAL COMPANY, THE	733.50
1086113	18-Jul-2024	SELECTRON TECHNOLOGIES, INC	34,000.00
730621	17-Jul-2024	SENERGY PETROLEUM, LLC	30,861.72
730800	24-Jul-2024	SENERGY PETROLEUM, LLC	21,579.13
730966	31-Jul-2024	SENERGY PETROLEUM, LLC	3,786.91
730371	10-Jul-2024	SENTINEL TECHNOLOGIES, INC	281,814.52
730622	17-Jul-2024	SENTINEL TECHNOLOGIES, INC	2,340.00
1085832	01-Jul-2024	SERRANO, DINA DALILA	1,236.00
730087	01-Jul-2024	SETO, MINDY LIU	2,438.00
731095	31-Jul-2024	SETO, MINDY LIU	808.00
730088	01-Jul-2024	SEVEN STRONG ENTERPRISES, LLC	984.00
731096	31-Jul-2024	SEVEN STRONG ENTERPRISES, LLC	984.00
1085933	01-Jul-2024	SFR 2012-1 US WEST LLC	1,252.00
1086241	31-Jul-2024	SFR 2012-1 US WEST LLC	1,252.00
730089	01-Jul-2024	SFR JAVELIN BORROWER LP	2,028.00

Payment Number	Payment Date	Vendor Name	Amount
731097	31-Jul-2024	SFR JAVELIN BORROWER LP	2,756.00
1085836	01-Jul-2024	SHAFIQUE, ASHFAQUE B	2,009.00
1086207	31-Jul-2024	SHAFIQUE, ASHFAQUE B	2,009.00
1085937	01-Jul-2024	SHAHIN, GABRIEL	1,900.00
1086245	31-Jul-2024	SHAHIN, GABRIEL	1,900.00
1085837	01-Jul-2024	SHAMS, SHAIKH	2,650.00
1086208	31-Jul-2024	SHAMS, SHAIKH	2,650.00
1085929	01-Jul-2024	SHAO, LAN	4,368.00
1086237	31-Jul-2024	SHAO, LAN	4,368.00
730801	24-Jul-2024	SHASTA INDUSTRIES	43,400.00
730372	10-Jul-2024	SHERRIE BUZBY PHOTOGRAPHY LLC	950.26
730802	24-Jul-2024	SHERRIE BUZBY PHOTOGRAPHY LLC	572.86
730967	31-Jul-2024	SHERRIE BUZBY PHOTOGRAPHY LLC	497.38
1086010	03-Jul-2024	SHI INTERNATIONAL CORP	73,728.38
1086066	11-Jul-2024	SHI INTERNATIONAL CORP	126,009.07
1086118	18-Jul-2024	SHI INTERNATIONAL CORP	8,931.34
1086159	25-Jul-2024	SHI INTERNATIONAL CORP	3,044.79
730207	03-Jul-2024	SIERRA CONTAINER GROUP, LLC	86,842.46
730466	11-Jul-2024	SILVA, SCOTT C	316.34
730208	03-Jul-2024	SIMONCRE CSH, LLC	5,000.00
1086105	18-Jul-2024	SIMPSON NORTON CORPORATION	9,459.44
730623	17-Jul-2024	SINGH, NEHA (R)	21.55
1085961	01-Jul-2024	SINGH, REENA	1,800.00
1086290	31-Jul-2024	SINGH, REENA	1,800.00
1085922	01-Jul-2024	SJ PROPERTIES LLC	1,115.00
1086230	31-Jul-2024	SJ PROPERTIES LLC	1,115.00
1085965	01-Jul-2024	SKOGLUND, NANCY B	1,500.00
1086341	31-Jul-2024	SKOGLUND, NANCY B	1,950.00
730209	03-Jul-2024	SKYLINE WINDOW CLEANING	98.00
730624	17-Jul-2024	SKYLINE WINDOW CLEANING	115.00
730803	24-Jul-2024	SKYLINE WINDOW CLEANING	4,860.00
730968	31-Jul-2024	SKYLINE WINDOW CLEANING	185.00
1086006	03-Jul-2024	SKYNAV, LLC	7,500.00
730969	31-Jul-2024	SMALL MARKET MEETINGS	300.00
1085844	01-Jul-2024	SMITH, ANA	1,606.00
1086215	31-Jul-2024	SMITH, ANA	1,606.00
730445	10-Jul-2024	SMITH, GINA (R)	52.14
730250	03-Jul-2024	SMITH, KATHLEEN (R)	82.78
730210	03-Jul-2024	SMITH, RICK C.	2,177.50
730211	03-Jul-2024	SNIDER SPORTS & APPAREL	297.69
730373	10-Jul-2024	SNIDER SPORTS & APPAREL	2,437.62
730212	03-Jul-2024	SOLARI, INC	6,250.00
730502	17-Jul-2024	SONG, RUNJIAN (R)	60.67
730446	10-Jul-2024	SORANI, OLIVIA (R)	26.29
730213	03-Jul-2024	SOUTH MOUNTAIN DIVE CLUB	2,400.00
730804	24-Jul-2024	SOUTH MOUNTAIN DIVE CLUB	1,500.00
730805	24-Jul-2024	SOUTHERN TIRE MART, LLC	7,159.19
730970	31-Jul-2024	SOUTHERN TIRE MART, LLC	13,026.88
730971	31-Jul-2024	SOUTHLAND ENVELOPE LLC	3,760.06
730625	17-Jul-2024	SOUTHWEST BARRICADES, LLC	1,954.80
730155	03-Jul-2024	SOUTHWEST GAS CORP	3,307.92
730467	11-Jul-2024	SOUTHWEST GAS CORP	13.77
730702	24-Jul-2024	SOUTHWEST GAS CORP	2,015.13

Payment Number	Payment Date	Vendor Name	Amount
1085862	01-Jul-2024	SOUZANDEH, HAMID	1,807.00
1086280	31-Jul-2024	SOUZANDEH, HAMID	1,807.00
730806	24-Jul-2024	SPARKS KARATE	700.00
730807	24-Jul-2024	SPEEDIE & ASSOCIATES, INC	13,583.00
730759	24-Jul-2024	SPENGLER, JAMES W	1,600.00
1086004	03-Jul-2024	SPIKER SPORTS	4,795.00
731013	31-Jul-2024	SPIRIT OF JOY LUTHERAN CHURCH (R)	108.49
730214	03-Jul-2024	SPOK, INC	103.96
730808	24-Jul-2024	SPOK, INC	68.22
730215	03-Jul-2024	SPORTS BLING & THINGS	799.94
730626	17-Jul-2024	SPORTS BLING & THINGS	624.13
730090	01-Jul-2024	SPRINGS REALTY INC	814.00
731098	31-Jul-2024	SPRINGS REALTY INC	814.00
1085999	03-Jul-2024	SPRINKLER WORLD OF AZ INC	2,620.18
1086062	11-Jul-2024	SPRINKLER WORLD OF AZ INC	2,837.39
1086108	18-Jul-2024	SPRINKLER WORLD OF AZ INC	6,355.75
1086166	25-Jul-2024	SPRINKLER WORLD OF AZ INC	2,474.63
730503	17-Jul-2024	SQUIBB, SHELLY (R)	73.83
730265	09-Jul-2024	SRGMF III PECOS CHANDLER, LLC	1,855.00
731099	31-Jul-2024	SRGMF III PECOS CHANDLER, LLC	1,917.00
730627	17-Jul-2024	STABILIZER SOLUTIONS	1,127.40
731014	31-Jul-2024	STAGGER, JENNIFER (R)	7.81
730374	10-Jul-2024	STANLEY CONSULTANTS INC	3,648.07
1086013	03-Jul-2024	STANTEC CONSULTING SERVICES INC	149,889.00
1086067	11-Jul-2024	STANTEC CONSULTING SERVICES INC	1,626.50
1086120	18-Jul-2024	STANTEC CONSULTING SERVICES INC	4,200.00
730216	03-Jul-2024	STATE ELECTRICAL CONTRACTORS INC (R)	33.75
1086011	03-Jul-2024	STAYCLASSYTV, LLC	632.00
730251	03-Jul-2024	STOLIKER, KURT (R)	13.24
1085798	01-Jul-2024	STONE OAKS APARTMENTS	1,786.00
1086222	31-Jul-2024	STONE OAKS APARTMENTS	1,786.00
730091	01-Jul-2024	STONE VIEW PHX LLC	4,941.00
731100	31-Jul-2024	STONE VIEW PHX LLC	4,941.00
730628	17-Jul-2024	STORM	5,000.00
1086109	18-Jul-2024	STOTZ EQUIPMENT	626.34
1086070	11-Jul-2024	STRAND ASSOCIATES, INC.	23,671.35
1085846	01-Jul-2024	STRATEGIC CAPITAL ALLIANCE LTD PARTNERSHIP	14,849.00
1086257	31-Jul-2024	STRATEGIC CAPITAL ALLIANCE LTD PARTNERSHIP	16,504.00
730809	24-Jul-2024	SUBBARAYAN, MANO PRABHA (R)	35.10
730447	10-Jul-2024	SUDER, AUSTIN (R)	73.83
1085802	01-Jul-2024	SUGGS, TERRELL	1,450.00
1086175	29-Jul-2024	SUGGS, TERRELL	15,198.00
1086226	31-Jul-2024	SUGGS, TERRELL	1,450.00
730810	24-Jul-2024	SUN COUNTRY TRUCK EQUIPMENT INC	3,705.46
730092	01-Jul-2024	SUN, HONGXLA	2,650.00
731101	31-Jul-2024	SUN, HONGXLA	2,650.00
730217	03-Jul-2024	SUNBELT RENTALS, INC	64,882.66
730093	01-Jul-2024	SUNDIAL REAL ESTATE LC	968.00
730094	01-Jul-2024	SUNDIAL REAL ESTATE LC	1,100.00
730095	01-Jul-2024	SUNDIAL REAL ESTATE LC	752.00
731102	31-Jul-2024	SUNDIAL REAL ESTATE LC	2,820.00
1086063	11-Jul-2024	SUNLAND ASPHALT	354,534.77
730811	24-Jul-2024	SUNROAD LAZO APARTMENTS, LLC	967.52

Payment Number	Payment Date	Vendor Name	Amount
730812	24-Jul-2024	SUNSHINE MOVING COMPANY, LLC	1,346.50
1085962	01-Jul-2024	SUNSHINE REALTY LLC	1,217.00
1086291	31-Jul-2024	SUNSHINE REALTY LLC	1,217.00
730813	24-Jul-2024	SUPERIOR COURT OF ARIZONA	290.00
1086000	03-Jul-2024	SUPREME OIL CO	8,643.63
1086168	25-Jul-2024	SUPREME OIL CO	10,193.91
1085905	01-Jul-2024	SURCHIK, EDWARD	1,128.00
1086323	31-Jul-2024	SURCHIK, EDWARD	1,128.00
730375	10-Jul-2024	SURVEILLANCE SECURITY INC	424.00
730096	01-Jul-2024	SWAY 2014-1 BORROWER LLC	2,085.00
731103	31-Jul-2024	SWAY 2014-1 BORROWER LLC	2,085.00
730376	10-Jul-2024	SWCA ENVIRONMENTAL CONSULTANTS	2,227.25
1085925	01-Jul-2024	SWH 2017-1 BORROWER, LP	6,064.00
1086233	31-Jul-2024	SWH 2017-1 BORROWER, LP	6,064.00
1086015	03-Jul-2024	T Y LIN INTERNATIONAL	15,336.74
1085904	01-Jul-2024	TALAI, FRANCESCO	527.00
1086322	31-Jul-2024	TALAI, FRANCESCO	527.00
1085912	01-Jul-2024	TAM, VIVIAN	707.00
1086330	31-Jul-2024	TAM, VIVIAN	707.00
730097	01-Jul-2024	TANG, JEANNIE	971.00
731104	31-Jul-2024	TANG, JEANNIE	971.00
730219	03-Jul-2024	TDINDUSTRIES INC	2,716.59
730973	31-Jul-2024	TDINDUSTRIES INC	175,314.10
1086007	03-Jul-2024	TECHNOLOGY CONSTRUCTION, INC	83,419.76
730220	03-Jul-2024	TECHNOLOGY INTEGRATORS LLC	253.42
730629	17-Jul-2024	TECHNOLOGY PROVIDERS INC	7,500.00
730814	24-Jul-2024	TEL TECH NETWORKS, INC.	252,139.66
730448	10-Jul-2024	TEO, CHARLOTTE (R)	112.36
730377	10-Jul-2024	TETRA TECH BAS, INC	9,636.00
730974	31-Jul-2024	TEXTME, INCORPORATED	75.00
730630	17-Jul-2024	THARP, JAMES H	100.00
730221	03-Jul-2024	THATCHER COMPANY OF ARIZONA, INC	58,591.21
730378	10-Jul-2024	THATCHER COMPANY OF ARIZONA, INC	13,128.19
730631	17-Jul-2024	THATCHER COMPANY OF ARIZONA, INC	68,870.88
730975	31-Jul-2024	THATCHER COMPANY OF ARIZONA, INC	112,661.10
730312	10-Jul-2024	THE CLOUDBURST GROUP	77.50
730976	31-Jul-2024	THE END GOAL LLC (R)	33.75
730098	01-Jul-2024	THE HOUSING PROFESSIONALS LLC	4,977.00
731105	31-Jul-2024	THE HOUSING PROFESSIONALS LLC	5,104.00
730597	17-Jul-2024	THE LAMAR COMPANIES	6,045.00
1086071	11-Jul-2024	THE LAW OFFICE OF JARED ALLEN, PLLC	4,583.34
1085825	01-Jul-2024	THE LINQ	11,477.00
1086197	31-Jul-2024	THE LINQ	10,309.00
730222	03-Jul-2024	THE MOBILE FOOD ENTERPRISE (R)	33.75
730977	31-Jul-2024	THE RV GUYS	9,236.78
730827	29-Jul-2024	THE UNIVERSITY OF ARIZONA	200,000.00
730978	31-Jul-2024	THERMAIR SYSTEMS, LLC	3,714.06
1085936	01-Jul-2024	THOMASIAN, BIKI	1,323.00
1086244	31-Jul-2024	THOMASIAN, BIKI	1,323.00
1085818	01-Jul-2024	THOMASIAN, SAAD	1,950.00
1086190	31-Jul-2024	THOMASIAN, SAAD	1,950.00
730252	03-Jul-2024	THOMPSON, KIMBERLY (R)	92.22
730632	17-Jul-2024	THORN RUN PARTNERS, LLC	7,500.00

Payment Number	Payment Date	Vendor Name	Amount
730099	01-Jul-2024	THR PHOENIX LP	4,224.00
731106	31-Jul-2024	THR PHOENIX LP	4,224.00
730100	01-Jul-2024	THR PROPERTY BORROWER LP	2,842.00
731107	31-Jul-2024	THR PROPERTY BORROWER LP	2,842.00
1085867	01-Jul-2024	THY LLC	388.00
1086264	31-Jul-2024	THY LLC	937.00
730633	17-Jul-2024	TIDEMORE LAW - SAMANTHA HERRERA (R)	5.00
730101	01-Jul-2024	TIDES AT CHANDLER	1,540.00
731108	31-Jul-2024	TIDES AT CHANDLER	1,540.00
730786	24-Jul-2024	TINTI, STEWART (R)	57.31
730102	01-Jul-2024	TJAHJA, CRYSTAL	1,326.00
731109	31-Jul-2024	TJAHJA, CRYSTAL	1,326.00
730103	01-Jul-2024	TJAHJA, YULIANI	2,126.00
731110	31-Jul-2024	TJAHJA, YULIANI	2,126.00
730218	03-Jul-2024	T-MOBILE USA, INC	59.50
730972	31-Jul-2024	T-MOBILE USA, INC	445.00
730379	10-Jul-2024	TOPETE/STONEFIELD INC	3,586.69
730703	24-Jul-2024	TORRENT RESOURCES INC	2,852.33
730787	24-Jul-2024	TOURE, MARIAM (R)	21.22
730223	03-Jul-2024	TOWN CHANDLER OWNER LLC (R)	45.00
1086064	11-Jul-2024	TOWN OF GILBERT	194,430.98
1086167	25-Jul-2024	TOWN OF GILBERT	34,659.77
730104	01-Jul-2024	TRADELANDS LLC	2,060.00
731111	31-Jul-2024	TRADELANDS LLC	2,060.00
730224	03-Jul-2024	TRAFFICADE SERVICE INC	674.80
730831	29-Jul-2024	TRAN, TOM B	786.00
731112	31-Jul-2024	TRAN, TOM B	393.00
730449	10-Jul-2024	TRAN, VICTORIA (R)	72.31
730225	03-Jul-2024	TRANE U.S. INC	1,582.12
730380	10-Jul-2024	TRANE U.S. INC	5,207.66
730979	31-Jul-2024	TRANE U.S. INC	137.19
730381	10-Jul-2024	TREELAND NURSERIES, INC	1,062.97
730634	17-Jul-2024	TREELAND NURSERIES, INC	35.74
1086121	18-Jul-2024	TRISTAR ICS	6,396.92
1086003	03-Jul-2024	TSSMC	550.00
1086112	18-Jul-2024	TSSMC	792.00
730226	03-Jul-2024	TURNAGE, JANICE LT (R)	135.00
730650	18-Jul-2024	TURNER, STEVEN A	378.08
730980	31-Jul-2024	TW RUB AND BRINE LLC (R)	50.63
730382	10-Jul-2024	UBM ENTERPRISE, INC	13,592.11
730815	24-Jul-2024	UBM ENTERPRISE, INC	281.68
731015	31-Jul-2024	UME, PEKELO (R)	16.76
1086106	18-Jul-2024	UNIFIRST CORPORATION	59.83
1086164	25-Jul-2024	UNIFIRST CORPORATION	105.63
730227	03-Jul-2024	UNITED ROTARY BRUSH CORPORATION	9,656.71
730383	10-Jul-2024	UNITED SITE SERVICES OF ARIZONA, INC.	208.61
730635	17-Jul-2024	UNITED SITE SERVICES OF ARIZONA, INC.	170.60
730816	24-Jul-2024	UNITED STATES CONFERENCE OF MAYORS	13,466.00
1086161	25-Jul-2024	UNITED STATES POSTAL SERVICES	100,000.00
1086005	03-Jul-2024	UNIVAR USA INC	68,723.62
1086065	11-Jul-2024	UNIVAR USA INC	13,267.55
1086114	18-Jul-2024	UNIVAR USA INC	19,822.55
1086170	25-Jul-2024	UNIVAR USA INC	85,811.32

Payment Number	Payment Date	Vendor Name	Amount
730817	24-Jul-2024	USP TECHNOLOGIES	9,857.12
730504	17-Jul-2024	VALDEZ, GLORIA (R)	20.10
1086091	18-Jul-2024	VALLEY OF THE SUN UNITED WAY	1,937.12
1086009	03-Jul-2024	VALLEYWIDE GENERATOR SERVICE LLC	1,120.00
1086117	18-Jul-2024	VALLEYWIDE GENERATOR SERVICE LLC	6,330.39
730253	03-Jul-2024	VEATCH, RACHEL (R)	14.36
730105	01-Jul-2024	VENTURA ACQUISITION LLC	3,408.00
731113	31-Jul-2024	VENTURA ACQUISITION LLC	3,408.00
1086001	03-Jul-2024	VERIZON WIRELESS SERVICES LLC	7,434.40
730384	10-Jul-2024	VERIZON WIRELESS SERVICES LLC	75.00
1086111	18-Jul-2024	VERIZON WIRELESS SERVICES LLC	18,372.16
1086169	25-Jul-2024	VERIZON WIRELESS SERVICES LLC	15,466.69
730636	17-Jul-2024	VILLAS AT OCOTILLO CONDOMINIUM ASSOCIATION (R)	653.00
730228	03-Jul-2024	VINCERE PHYSICIANS GROUP PLLC	2,500.00
730637	17-Jul-2024	VINCON ENGINEERING CONSTRUCTION LLC	504,928.70
730818	24-Jul-2024	VINCON ENGINEERING CONSTRUCTION LLC	695,345.48
730981	31-Jul-2024	VINCON ENGINEERING CONSTRUCTION LLC	6,935.28
1086162	25-Jul-2024	VIP BUILDING SERVICES LLC	3,860.00
730505	17-Jul-2024	VISHT, KAJASH (R)	78.31
1086107	18-Jul-2024	VISION SERVICE PLAN OF ARIZONA	66,065.67
730819	24-Jul-2024	VISIONARY PROPERTIES	1,845.00
1085859	01-Jul-2024	VISTA ASSET COMPANY LLC	2,254.00
1086277	31-Jul-2024	VISTA ASSET COMPANY LLC	2,254.00
1085861	01-Jul-2024	VISTA STAR COMPANY, LLC	9,409.00
1086279	31-Jul-2024	VISTA STAR COMPANY, LLC	9,405.00
730385	10-Jul-2024	VOCATIONAL DIAGNOSTICS INC	4,929.00
1086115	18-Jul-2024	VOYA FINANCIAL	85,947.22
1086061	11-Jul-2024	VULCAN MATERIALS CO	1,456.15
1086165	25-Jul-2024	VULCAN MATERIALS CO	1,569.39
730229	03-Jul-2024	W W WILLIAMS	2,195.53
730386	10-Jul-2024	W W WILLIAMS	3,899.48
730820	24-Jul-2024	W W WILLIAMS	3,069.62
730982	31-Jul-2024	W W WILLIAMS	221.81
730638	17-Jul-2024	W/C 2701 RYAN HOLDINGS VIII, LLC (R)	35,152.12
730450	10-Jul-2024	WALDNER, RACHEL (R)	97.00
730639	17-Jul-2024	WALKME, INC	161,700.00
731016	31-Jul-2024	WARD, MERILEE (R)	35.92
731017	31-Jul-2024	WARNER PLAZA (R)	309.28
1086016	03-Jul-2024	WASTE MANAGEMENT OF ARIZONA, INC	31,943.78
1086060	11-Jul-2024	WASTE MANAGEMENT OF ARIZONA, INC	965,954.38
1086163	25-Jul-2024	WASTE MANAGEMENT OF ARIZONA, INC	51,523.20
730983	31-Jul-2024	WATER & ENERGY SYSTEMS TECHNOLOGY INC	2,306.75
730387	10-Jul-2024	WATER WORKS ENGINEERS, LLC	343.75
730640	17-Jul-2024	WATER WORKS ENGINEERS, LLC	6,355.00
730106	01-Jul-2024	WATER'S EDGE AT OCOTILLO	1,571.00
731114	31-Jul-2024	WATER'S EDGE AT OCOTILLO	1,569.00
1085878	01-Jul-2024	WATTS, ELSKA M.	146.00
1086297	31-Jul-2024	WATTS, ELSKA M.	146.00
1086012	03-Jul-2024	WAXIE SANITARY SUPPLY	43,930.54
1086119	18-Jul-2024	WAXIE SANITARY SUPPLY	7,339.11
1086160	25-Jul-2024	WAXIE SANITARY SUPPLY	8,097.63
730107	01-Jul-2024	WEALTH BUILDER REAL ESTATE	758.00
731115	31-Jul-2024	WEALTH BUILDER REAL ESTATE	758.00

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730388	10-Jul-2024	WELCH, NATALIE (R)	1,681.04
731018	31-Jul-2024	WELSH, ROBERT (R)	8.12
730389	10-Jul-2024	WEST COAST ARBORISTS, INC	7,395.00
730313	10-Jul-2024	WEST MESA JUSTICE COURT	150.00
730108	01-Jul-2024	WEST USA REALTY, INC.	2,502.00
731116	31-Jul-2024	WEST USA REALTY, INC.	2,502.00
730390	10-Jul-2024	WESTERN STATES FIRE PROTECTION CO	150.00
730260	03-Jul-2024	WHITE, JASON T	20.25
730109	01-Jul-2024	WHITMAN, STEVEN	2,789.00
731117	31-Jul-2024	WHITMAN, STEVEN	2,789.00
730391	10-Jul-2024	WHITTENTON LAW GROUP LLC	4,583.34
730451	10-Jul-2024	WILCH, CYNTHIA (R)	38.35
730468	11-Jul-2024	WILLE, TADD G	1,074.79
730452	10-Jul-2024	WILLIAMS, MAGDELANE (R)	53.16
730392	10-Jul-2024	WILSON ENGINEERS	674,729.00
730641	17-Jul-2024	WILSON ENGINEERS, LLC	95,957.50
1085824	01-Jul-2024	WIND RIVER 88 LLC	1,598.00
1086196	31-Jul-2024	WIND RIVER 88 LLC	1,598.00
730984	31-Jul-2024	WING, AMY	380.00
1086116	18-Jul-2024	WIST BUSINESS SUPPLIES & EQUIPMENT	1,183.05
1086171	25-Jul-2024	WIST BUSINESS SUPPLIES & EQUIPMENT	54,748.83
1085934	01-Jul-2024	WL INVESTMENT LLC	1,802.00
1086242	31-Jul-2024	WL INVESTMENT LLC	1,802.00
1085880	01-Jul-2024	WONG, CHRISTOPHER DINH	1,046.00
1086299	31-Jul-2024	WONG, CHRISTOPHER DINH	1,046.00
730821	24-Jul-2024	WORKSBUREAU, INC	7,804.45
730453	10-Jul-2024	WORSHAM, JONI (R)	90.94
1086014	03-Jul-2024	WSP USA ENVIRONMENT & INFRASTRUCTURE INC	49,128.00
1086068	11-Jul-2024	WSP USA ENVIRONMENT & INFRASTRUCTURE INC	2,617.75
1085890	01-Jul-2024	WU, SUYUAN LIN	5,014.00
1086308	31-Jul-2024	WU, SUYUAN LIN	4,095.00
730454	10-Jul-2024	WULLEN, BIANCA (R)	26.00
1085848	01-Jul-2024	WUZ 66 RENTAL LLC	2,625.00
1086259	31-Jul-2024	WUZ 66 RENTAL LLC	2,580.00
1085874	01-Jul-2024	XIA, JINGNA	1,257.00
1086293	31-Jul-2024	XIA, JINGNA	1,257.00
1085908	01-Jul-2024	XIAO, HONG MEI	2,150.00
1086326	31-Jul-2024	XIAO, HONG MEI	2,150.00
1085875	01-Jul-2024	XIE, YUN	2,996.00
1086294	31-Jul-2024	XIE, YUN	2,996.00
730393	10-Jul-2024	Y2K ENGINEERING, LLC	7,710.00
730110	01-Jul-2024	YAMASA CO. LTD	1,827.00
731118	31-Jul-2024	YAMASA CO. LTD	1,827.00
730394	10-Jul-2024	YANG, HAO AND XIAO LUO (R)	95.00
1085946	01-Jul-2024	YASSIR, YOUSEF	2,700.00
1086254	31-Jul-2024	YASSIR, YOUSEF	2,700.00
730788	24-Jul-2024	YATKO, GREGORY (R)	62.85
1085931	01-Jul-2024	YIN, WENBI	793.00
1086239	31-Jul-2024	YIN, WENBI	793.00
730469	11-Jul-2024	YNCLAN, BRANDON R	246.00
1085805	01-Jul-2024	YO, TIMOTHY	1,664.00
1086177	31-Jul-2024	YO, TIMOTHY	1,664.00
730704	24-Jul-2024	YOUNG REMBRANDTS OF SOUTHEAST PHOENIX	7,620.00

Payment Number	Payment Date	Vendor Name	Amount
730651	18-Jul-2024	ZAMORA, ADRIAN B	238.00
1085911	01-Jul-2024	ZHANG, JUNLI	1,193.00
1086329	31-Jul-2024	ZHANG, JUNLI	1,193.00
1085909	01-Jul-2024	ZHANG, QISHENG	2,112.00
1086327	31-Jul-2024	ZHANG, QISHENG	2,112.00
730111	01-Jul-2024	ZHENG, SHAO MEI	2,200.00
731119	31-Jul-2024	ZHENG, SHAO MEI	2,200.00
730395	10-Jul-2024	ZIKA RECOVERY LLC (R)	33.75
1086158	25-Jul-2024	ZIONS BANCORPORATION, NATIONAL ASSOCIATION	350.00
730642	17-Jul-2024	ZOLL MEDICAL CORPORATION	39,133.21
730822	24-Jul-2024	ZOOBEAN, INC	5,248.95
1086612	20-Aug-2024	1112 NORTH CALIFORNIA STREET PROPERTY LLC	1,300.00
1086589	20-Aug-2024	1125 CALIFORNIA LLC	3,430.00
731508	20-Aug-2024	2013-1 IH BORROWER LP	578.00
731509	20-Aug-2024	2017-1 IH BORROWER LP	7,218.00
731510	20-Aug-2024	2017-2 IH BORROWER LP	1,416.00
731511	20-Aug-2024	2018-1 IH BORROWER LP	1,747.00
731512	20-Aug-2024	2018-2 IH BORROWER LP	1,860.00
731513	20-Aug-2024	2018-4 IH BORROWER LP	2,313.00
731126	07-Aug-2024	2060 DIGITAL LLC, PHOENIX	12,060.00
731795	28-Aug-2024	2060 DIGITAL LLC, PHOENIX	5,025.00
1086461	15-Aug-2024	330 N COMANCHE LLC	1,000.00
1086588	20-Aug-2024	330 N COMANCHE LLC	7,565.00
1086559	20-Aug-2024	372 CHIPPEWA LLC	4,596.00
1086675	20-Aug-2024	847 RAY LLC	12,877.00
731514	20-Aug-2024	99 N COOPER 133 LLC	1,315.00
731610	21-Aug-2024	A MIND FOR DETAIL INC	7,122.50
731611	21-Aug-2024	A&M NUT AND BOLT INC	272.28
1086658	20-Aug-2024	ABDELKARIM, RABAH	2,084.00
1086564	20-Aug-2024	ABUNDANT BLESSING LLC	9,407.00
731127	07-Aug-2024	ACCURATE METAL FABRICATING	39,539.35
731324	14-Aug-2024	ACE UNIFORMS OF PHOENIX	1,975.97
731612	21-Aug-2024	ACE UNIFORMS OF PHOENIX	296.03
731796	28-Aug-2024	ACE UNIFORMS OF PHOENIX	703.56
731128	07-Aug-2024	ADP INTERPRETING LLC	350.00
731325	14-Aug-2024	ADP INTERPRETING LLC	140.00
731258	07-Aug-2024	AENEAS VENTURES PARTNERS 1 (R)	751.58
731326	14-Aug-2024	AFLAC	324.19
1086539	20-Aug-2024	AGARWAL, ABHISHEK	1,859.00
1086565	20-Aug-2024	AH PROPERTIES	2,353.00
731515	20-Aug-2024	AHMETOVIC, AMILA	2,100.00
1086435	14-Aug-2024	AILEEN CHU HOLDINGS LLC	2,736.00
1086507	20-Aug-2024	AILEEN CHU HOLDINGS LLC	8,735.00
731843	28-Aug-2024	AISPURO, TAYLOR R	176.07
731327	14-Aug-2024	AJ LAW GROUP, PLC	5,000.00
731259	07-Aug-2024	AKINA MISCAVAGE PLLC (R)	90.94
731328	14-Aug-2024	ALIGHT SOLUTIONS LLC	36,678.99
731797	28-Aug-2024	ALIGHT SOLUTIONS LLC	970.89
1086717	29-Aug-2024	ALL ANIMALS RESCUE & TRANSPORTATION, LLC	1,728.12
1086447	15-Aug-2024	ALL CITY TOWING	839.22
1086681	22-Aug-2024	ALL CITY TOWING	24.00
1086725	29-Aug-2024	ALL CITY TOWING	12.00
1086423	08-Aug-2024	ALL THE KING'S FLAGS	617.48

Payment Number	Payment Date	Vendor Name	Amount
1086680	22-Aug-2024	ALL THE KING'S FLAGS	1,038.56
731329	14-Aug-2024	ALLARD COLLISION LLC	899.70
731613	21-Aug-2024	ALLARD COLLISION LLC	19,533.03
731129	07-Aug-2024	ALLIED UNIVERSAL JANITORIAL SERVICES	2,896.78
731330	14-Aug-2024	ALLIED UNIVERSAL JANITORIAL SERVICES	1,070.67
731130	07-Aug-2024	ALLIED UNIVERSAL SECURITY SERVICES	1,188.00
731331	14-Aug-2024	ALLIED UNIVERSAL SECURITY SERVICES	2,376.00
731798	28-Aug-2024	ALLIED UNIVERSAL SECURITY SERVICES	1,188.00
1086550	20-Aug-2024	ALSAMKARI I, LLC	2,566.00
731332	14-Aug-2024	ALTEC INDUSTRIES INC	184.13
731614	21-Aug-2024	ALTEC INDUSTRIES INC	420.71
1086538	20-Aug-2024	AM PRESTIGE REAL ESTATE, LLC	2,116.00
731799	28-Aug-2024	AM SIGNAL, LLC	244,810.38
731482	14-Aug-2024	AMARNATH, PAVAN KUMAR	2,167.00
731516	20-Aug-2024	AMARNATH, PAVAN KUMAR	2,488.00
731517	20-Aug-2024	AMH 2014-1 BORROWER, LLC	2,513.00
1086548	20-Aug-2024	ANBARI, MOH BASSAM	2,195.00
731131	07-Aug-2024	ANCON	17,341.94
731800	28-Aug-2024	ANCON	16,116.28
1086542	20-Aug-2024	ANDRAWES, ANTHONY M.	961.00
1086429	08-Aug-2024	ANDREW'S REFRIGERATIONS INC	703.80
1086456	15-Aug-2024	ANDREW'S REFRIGERATIONS INC	815.75
1086728	29-Aug-2024	ANDREW'S REFRIGERATIONS INC	15,285.01
731518	20-Aug-2024	ANN L. CHANG, TRUSTEE OF THE ANN L. CHANG LIVING TRUST	2,479.00
1086449	15-Aug-2024	ANTHEM LIFE INSURANCE COMPANY	15,205.03
731519	20-Aug-2024	APC 2020 INVESTMENT, LLC	17,869.00
731132	07-Aug-2024	APL ACCESS & SECURITY	385.00
731333	14-Aug-2024	APL ACCESS & SECURITY	1,890.00
731133	07-Aug-2024	AQUA METROLOGY SYSTEMS LIMITED	12,950.00
731307	08-Aug-2024	ARANDA, RUBEN J	102.00
731801	28-Aug-2024	ARCADIS US INC	12,004.00
731456	14-Aug-2024	ARCONTI, ELIZABETH (R)	47.67
731520	20-Aug-2024	ARDA, JAMET E	1,792.00
731134	07-Aug-2024	ARDEO LAW GROUP	4,583.34
1086460	15-Aug-2024	ARDURRA GROUP, INC	69,305.00
1086689	22-Aug-2024	ARDURRA GROUP, INC	4,627.50
1086356	01-Aug-2024	ARIZONA 811	1,701.09
731615	21-Aug-2024	ARIZONA CART SERVICES, INC	348.00
731616	21-Aug-2024	ARIZONA ELECTRIC SUPPLY-MESA	3,018.48
731334	14-Aug-2024	ARIZONA ELEVATOR SOLUTIONS, INC	5,692.86
731617	21-Aug-2024	ARIZONA ELEVATOR SOLUTIONS, INC	157.84
1086505	20-Aug-2024	ARIZONA ELITE PROPERTIES	2,436.00
1086357	01-Aug-2024	ARIZONA EMERGENCY PRODUCTS	27,926.34
1086448	15-Aug-2024	ARIZONA EMERGENCY PRODUCTS	64,215.76
731618	21-Aug-2024	ARIZONA FREELANCE INTERPRETING SERVICES	417.50
731761	21-Aug-2024	ARIZONA LIVING PROP MGT (R)	86.27
731802	28-Aug-2024	ARIZONA NEUROPSYCHOLOGY, P.C.	3,500.00
731619	21-Aug-2024	ARIZONA OFFICE TECHNOLOGIES	132.19
1086422	08-Aug-2024	ARIZONA PEST PREVENTION	235.00
1086445	15-Aug-2024	ARIZONA PEST PREVENTION	180.00
1086722	29-Aug-2024	ARIZONA PEST PREVENTION	200.00
731135	07-Aug-2024	ARIZONA POWER AUTHORITY	3,094.73
731260	07-Aug-2024	ARIZONA PROPERTY BROKER (R)	75.93

Payment Number	Payment Date	Vendor Name	Amount
731136	07-Aug-2024	ARIZONA PUBLIC SERVICE COMPANY	22,712.06
731483	14-Aug-2024	ARIZONA PUBLIC SERVICE COMPANY	5,548.00
731505	15-Aug-2024	ARIZONA PUBLIC SERVICE COMPANY	7,319.62
731803	28-Aug-2024	ARIZONA PUBLIC SERVICE COMPANY	19,012.83
731335	14-Aug-2024	ARIZONA STATE TREASURER	254,791.62
731804	28-Aug-2024	ARIZONA STATE TREASURER	61,156.00
731805	28-Aug-2024	ARIZONA STATE TREASURER	78,776.00
731806	28-Aug-2024	ARIZONA STATE TREASURER	169,794.00
731807	28-Aug-2024	ARIZONA STATE TREASURER	63,270.00
731808	28-Aug-2024	ARIZONA STATE TREASURER	69,986.00
1086353	01-Aug-2024	ARIZONA WATER WORKS SUPPLY INC	143.21
1086362	01-Aug-2024	ARIZONA'S BEST, INC	211.00
1086431	08-Aug-2024	ARIZONA'S BEST, INC	50.00
1086459	15-Aug-2024	ARIZONA'S BEST, INC	211.00
1086688	22-Aug-2024	ARIZONA'S BEST, INC	486.00
1086730	29-Aug-2024	ARIZONA'S BEST, INC	159.00
731501	15-Aug-2024	ARMSTRONG, CLARENCE JR	815.75
1086360	01-Aug-2024	ARTHUR J GALLAGHER RISK MANAGEMENT SERVICES INC	1,998,493.40
1086421	08-Aug-2024	ARTISTIC LAND MANAGEMENT INC	26,820.24
1086444	15-Aug-2024	ARTISTIC LAND MANAGEMENT INC	90,068.78
1086678	22-Aug-2024	ARTISTIC LAND MANAGEMENT INC	7,090.15
1086721	29-Aug-2024	ARTISTIC LAND MANAGEMENT INC	27,493.00
731484	14-Aug-2024	ASADI, JASIM AL (R)	22,236.65
731620	21-Aug-2024	ASSISTANCE LEAGUE OF EAST VALLEY, ARIZONA	3,250.00
731621	21-Aug-2024	AT&T MOBILITY	854.40
731137	07-Aug-2024	ATLASSIAN PTY LTD	8,663.45
1086424	08-Aug-2024	ATTORNEY OF LAW	5,000.00
731622	21-Aug-2024	AVFUEL CORP	34,040.22
731623	21-Aug-2024	AWP SAFETY	2,558.76
731809	28-Aug-2024	AWP SAFETY	620.11
1086591	20-Aug-2024	AZ HOME FOR US	1,792.00
731521	20-Aug-2024	AZ REAL HOLDINGS LLC	2,452.00
1086608	20-Aug-2024	AZ REALTY PROPERTY HOLDINGS, LLC	8,606.00
1086526	20-Aug-2024	AZLTRE LLC	1,482.00
731138	07-Aug-2024	AZTEC ENGINEERING GROUP, INC	32,806.00
731336	14-Aug-2024	B&E APPRAISAL SERVICE LLC	348.00
731139	07-Aug-2024	B&F CONTRACTING INC	518,726.09
731624	21-Aug-2024	B&F CONTRACTING INC	1,487,095.43
731810	28-Aug-2024	B&F CONTRACTING INC	996,227.22
731720	21-Aug-2024	BACHMANN, STEPHEN ROBERT	3,501.00
731782	22-Aug-2024	BACHMANN, STEPHEN ROBERT	1,331.00
1086566	20-Aug-2024	BAKASH LLC	2,326.00
731337	14-Aug-2024	BAKER & TAYLOR, LLC	2,617.12
731625	21-Aug-2024	BAKER & TAYLOR, LLC	2,356.04
1086719	29-Aug-2024	BAKER COMMODITIES INC	150.00
1086385	05-Aug-2024	BANK OF AMERICA	988,983.75
731811	28-Aug-2024	BANNER IMAGING SERVICES LLC	25.00
731338	14-Aug-2024	BANNER OCCUPATIONAL HEALTH CLINICS	1,819.00
731812	28-Aug-2024	BANNER OCCUPATIONAL HEALTH CLINICS	1,090.00
1086633	20-Aug-2024	BARKDOLL PROPERTIES LLC	8,739.00
731502	15-Aug-2024	BARKER, JAMES R	448.00
731844	28-Aug-2024	BARNES II, STEPHEN A	248.00
1086556	20-Aug-2024	BASA, VIJAYA KUMAR	2,700.00

Payment Number	Payment Date	Vendor Name	Amount
731140	07-Aug-2024	BASELINE, INC	3,392.44
731976	29-Aug-2024	BASILIO, GILBERTO (R)	16.47
1086720	29-Aug-2024	BAVCO	9,549.46
731522	20-Aug-2024	BCORE MF ARCHES LLC	50,027.00
1086549	20-Aug-2024	BEAUX, CANDACE	1,227.00
1086606	20-Aug-2024	BECKMAN, KRISTI M	2,230.00
1086731	29-Aug-2024	BELLAMY, BARBARA	3,705.00
1086582	20-Aug-2024	BEST NEIGHBORS, LLC	2,205.00
731626	21-Aug-2024	BEST PLUMBING SPECIALTIES INC	63.99
731813	28-Aug-2024	BEST PLUMBING SPECIALTIES INC	578.55
731457	14-Aug-2024	BEST, BRANDEN (R)	13.09
1086528	20-Aug-2024	BHATT, AMAR BHARAT	2,170.00
731261	07-Aug-2024	BHN2189, LLC (R)	91.43
1086454	15-Aug-2024	BIG STAR PROPERTIES, LLC	1,700.00
1086462	15-Aug-2024	BIG STAR PROPERTIES, LLC	2,550.00
1086599	20-Aug-2024	BIG STAR PROPERTIES, LLC	12,952.00
731141	07-Aug-2024	BINGHAM EQUIPMENT COMPANY	30,130.22
731814	28-Aug-2024	BINGHAM EQUIPMENT COMPANY	377.54
1086440	14-Aug-2024	BMF IV AZ LAGUNA VILLAGE LLC	244.00
1086604	20-Aug-2024	BMF IV AZ LAGUNA VILLAGE LLC	19,163.00
731142	07-Aug-2024	BOOT BARN INC	303.76
731815	28-Aug-2024	BORDER STATES ELECTRIC SUPPLY	7,188.01
1086673	20-Aug-2024	BOSCHEE, CHARLES L	1,077.00
1086690	22-Aug-2024	BOSCHEE, CHARLES L	1,900.00
1086527	20-Aug-2024	BOTROS, ASAMA	1,705.00
731627	21-Aug-2024	BOUND TREE MEDICAL LLC	4,259.81
731816	28-Aug-2024	BOUND TREE MEDICAL LLC	16,440.07
731664	21-Aug-2024	BOUTET, MIRANDY (R)	67.20
731762	21-Aug-2024	BOYD, HUNTER (R)	239.54
1086455	15-Aug-2024	BOYS & GIRLS CLUBS OF THE VALLEY, INC	10,826.27
1086718	29-Aug-2024	BOYS & GIRLS CLUBS OF THE VALLEY, INC	21,189.80
731665	21-Aug-2024	BRADLEY, MEMORY	1,500.00
1086568	20-Aug-2024	BRAVO, DEBORAH LYNN	1,161.00
731523	20-Aug-2024	BREIT MF LUMIERE CHANDLER LLC	1,317.00
1086358	01-Aug-2024	BRENNTAG PACIFIC INC	9,288.85
1086426	08-Aug-2024	BRENNTAG PACIFIC INC	19,841.36
1086450	15-Aug-2024	BRENNTAG PACIFIC INC	9,363.19
1086682	22-Aug-2024	BRENNTAG PACIFIC INC	19,242.55
1086726	29-Aug-2024	BRENNTAG PACIFIC INC	28,320.27
731339	14-Aug-2024	BREYER LAW OFFICES	35.00
731628	21-Aug-2024	BREYER LAW OFFICES	10.00
731143	07-Aug-2024	BRICKS 4 KIDZ	11,172.00
1086361	01-Aug-2024	BRIGHTVIEW LANDSCAPE SERVICES, INC	4,979.98
1086430	08-Aug-2024	BRIGHTVIEW LANDSCAPE SERVICES, INC	18,172.75
1086458	15-Aug-2024	BRIGHTVIEW LANDSCAPE SERVICES, INC	26,155.64
1086687	22-Aug-2024	BRIGHTVIEW LANDSCAPE SERVICES, INC	36,640.00
1086729	29-Aug-2024	BRIGHTVIEW LANDSCAPE SERVICES, INC	4,979.98
731340	14-Aug-2024	BRINK'S, INCORPORATED	4,664.50
731629	21-Aug-2024	BROAD, MICHAEL (R)	35.00
1086600	20-Aug-2024	BROADWAY ROAD PROPERTY LLC	1,209.00
731144	07-Aug-2024	BROOKSIES PROPANE	66.16
731341	14-Aug-2024	BROOKSIES PROPANE	77.20
1086584	20-Aug-2024	BROTHERS TAEKWON DO INC	1,323.00

Payment Number	Payment Date	Vendor Name	Amount
731342	14-Aug-2024	BROWN WHOLESALE ELECTRIC	3,785.23
731817	28-Aug-2024	BROWN WHOLESALE ELECTRIC	505.76
731763	21-Aug-2024	BROWN, LYNN (R)	39.05
1086691	22-Aug-2024	BUELT, JULIE K	212.20
731343	14-Aug-2024	BUESING CORPORATION	530.00
731524	20-Aug-2024	BULLSEYE PROPERTY MANAGEMENT, LLC	1,510.00
1086625	20-Aug-2024	BURCH, CHRISTOPHER	1,433.00
1086659	20-Aug-2024	BURNHAM, TIMOTHY	1,190.00
731145	07-Aug-2024	BUWALDA PSYCHOLOGICAL SERVICES	250.00
731146	07-Aug-2024	C & I SHOW HARDWARE & SECURITY SYSTEMS INC	9,199.96
731630	21-Aug-2024	C & I SHOW HARDWARE & SECURITY SYSTEMS INC	56,720.15
731631	21-Aug-2024	CACTUS ASPHALT	354,015.08
731147	07-Aug-2024	CACTUS KELLY	200.00
1086428	08-Aug-2024	CALIENTE CONSTRUCTION INC	26,283.52
1086685	22-Aug-2024	CALIENTE CONSTRUCTION INC	764,390.96
731148	07-Aug-2024	CALLYO 2009 CORP	4,191.27
731262	07-Aug-2024	CANTERE, MARY (R)	22.73
731632	21-Aug-2024	CARAHSOFT TECHNOLOGY CORPORATION	11,942.08
731149	07-Aug-2024	CARBON ACTIVATED CORPORATION	54,289.20
731633	21-Aug-2024	CARBON ACTIVATED CORPORATION	54,372.00
731818	28-Aug-2024	CARBON ACTIVATED CORPORATION	55,338.00
731458	14-Aug-2024	CARMAN, NICKLOUS (R)	47.36
1086723	29-Aug-2024	CAROLLO ENGINEERS	3,034.00
731150	07-Aug-2024	CDW GOVERNMENT, LLC	6,149.23
731819	28-Aug-2024	CDW GOVERNMENT, LLC	31,635.49
731820	28-Aug-2024	CELLEBRITE INC	14,876.40
1086446	15-Aug-2024	CEM-TEC CORPORATION	151,953.12
1086354	01-Aug-2024	CENTRAL ARIZONA PROJECT	897,522.50
1086724	29-Aug-2024	CENTRAL ARIZONA PROJECT	446,710.25
731344	14-Aug-2024	CENTURYLINK	11,578.37
1086478	15-Aug-2024	CENTURYLINK	1,769.80
731764	21-Aug-2024	CHAN, JOHNNY (R)	57.31
731634	21-Aug-2024	CHANDLER CARE CENTER CHILDREN'S MEDICAL AND DENTAL CLINIC, INC	43,669.13
731635	21-Aug-2024	CHANDLER COMMUNITY OF CHRIST (R)	143.37
1086597	20-Aug-2024	CHANDLER GARDENS	22,717.00
731821	28-Aug-2024	CHANDLER INTERNATIONAL FILM FESTIVAL, INC	10,000.00
1086510	20-Aug-2024	CHANDLER PROPERTY DEVELOPMENT ASSOCIATES LTD PTR (231-1)	18,675.00
731151	07-Aug-2024	CHANDLER STORAGE PARTNERS, LLC (R)	20,677.37
731822	28-Aug-2024	CHANDLER UNIFIED SCHOOL DISTRICT #80	590.00
731308	08-Aug-2024	CHAPMAN, BRYAN D	136.00
731345	14-Aug-2024	CHEN, MAGGIE	62.00
731636	21-Aug-2024	CHEN, MAGGIE	62.00
731637	21-Aug-2024	CHEN, MAGGIE	62.00
731823	28-Aug-2024	CHEN, MAGGIE	62.00
731638	21-Aug-2024	CIGNA MEDICAL GROUP (R)	340.00
731152	07-Aug-2024	CINTAS CORPORATION	2,425.43
731346	14-Aug-2024	CINTAS CORPORATION	1,921.28
731639	21-Aug-2024	CINTAS CORPORATION	1,214.97
731824	28-Aug-2024	CINTAS CORPORATION	571.85
731347	14-Aug-2024	CITY ELECTRIC SUPPLY	6,946.40
731640	21-Aug-2024	CITY ELECTRIC SUPPLY	545.74
731825	28-Aug-2024	CITY ELECTRIC SUPPLY	945.89
731826	28-Aug-2024	CITY OF CHANDLER	7,900.00

Payment Number	Payment Date	Vendor Name	Amount
731641	21-Aug-2024	CITY OF MESA	600.00
731485	14-Aug-2024	CITY OF ORLANDO HOUSING AUTHORITY	1,226.16
731348	14-Aug-2024	CITY OF PHOENIX	24,412.00
731642	21-Aug-2024	CITY OF PHOENIX	52,594.63
731349	14-Aug-2024	CITY OF TEMPE	52,438.75
1086355	01-Aug-2024	CITY WIDE PEST CONTROL INC	931.00
731643	21-Aug-2024	CLARK HILL PLC	26,710.62
731120	01-Aug-2024	CLARK, JAY J	136.00
1086420	08-Aug-2024	CLEANVIEW SEWER INSPECTIONS LLC	1,292.33
1086677	22-Aug-2024	CLEANVIEW SEWER INSPECTIONS LLC	1,541.03
731525	20-Aug-2024	CLUB CANCUN APARTMENTS	835.00
731263	07-Aug-2024	COLLINS, SAMANTHA (R)	84.16
731153	07-Aug-2024	COMMERCIAL POOL REPAIR	31,886.52
731350	14-Aug-2024	COMMERCIAL POOL REPAIR	18,336.69
731154	07-Aug-2024	COMPUTER AID, INC	232,804.22
731351	14-Aug-2024	COMPUTER AID, INC	20,000.00
731644	21-Aug-2024	COMPUTER AID, INC	57,330.00
731827	28-Aug-2024	COMPUTER AID, INC	34,800.00
731264	07-Aug-2024	CONKLIN, SHARON (R)	203.56
1086679	22-Aug-2024	CONSULTANT ENGINEERING INC	78,739.76
1086359	01-Aug-2024	CONTINENTAL FLOORING CO	1,414.10
1086684	22-Aug-2024	CONTINENTAL FLOORING CO	12,411.03
731155	07-Aug-2024	CONTRACTOR FIRE PROTECTION	300.00
731156	07-Aug-2024	CONTRACTOR FIRE PROTECTION	1,870.00
731352	14-Aug-2024	CONTRACTOR FIRE PROTECTION	3,095.90
731353	14-Aug-2024	CONTRACTOR FIRE PROTECTION	300.00
731645	21-Aug-2024	CONTRACTOR FIRE PROTECTION	4,705.15
731828	28-Aug-2024	CONTRACTOR FIRE PROTECTION	300.00
731121	01-Aug-2024	COOPER, TIMOTHY K	512.00
731157	07-Aug-2024	CORE & MAIN LP	43.01
731646	21-Aug-2024	CORE & MAIN LP	11,582.83
731829	28-Aug-2024	CORE & MAIN LP	7,806.77
731158	07-Aug-2024	CORPORATE INTERIOR SYSTEMS (CIS)	209,116.88
731647	21-Aug-2024	CORPORATE INTERIOR SYSTEMS (CIS)	17,280.07
1086518	20-Aug-2024	COSTALES, ABEL	696.00
731648	21-Aug-2024	COUNTRYSIDE ESTATES COMMUNITY ASSOCIATION	13,241.00
731122	01-Aug-2024	COWDEN, SCOTT W	23.22
731783	22-Aug-2024	COWDEN, SCOTT W	37.42
731649	21-Aug-2024	COX BUSINESS	1,605.00
731765	21-Aug-2024	COY, ANDERSON (R)	25.70
731159	07-Aug-2024	CRAWFORD MECHANICAL SERVICES, LLC	1,321.00
731830	28-Aug-2024	CRAWFORD MECHANICAL SERVICES, LLC	210.00
731766	21-Aug-2024	CREDIO, CHERYL (R)	13.29
731354	14-Aug-2024	CROWDRIFF INC	11,680.00
731958	28-Aug-2024	CURRAN, PATRICIA (R)	78.33
1086473	15-Aug-2024	CURTIS BLUE LINE	511.67
1086733	29-Aug-2024	CURTIS BLUE LINE	10,246.06
731355	14-Aug-2024	CUTTERS DOCUMENT DESTRUCTION, LLC	149.95
731831	28-Aug-2024	CUTTERS DOCUMENT DESTRUCTION, LLC	159.95
731356	14-Aug-2024	CVENT INC	45,925.71
731832	28-Aug-2024	CYRACOM INTERNATIONAL, INC	1,515.10
731650	21-Aug-2024	D L SALES CORP	14,019.65
1086457	15-Aug-2024	D.H. PACE COMPANY, INC	2,419.46

Payment Number	Payment Date	Vendor Name	Amount
1086686	22-Aug-2024	D.H. PACE COMPANY, INC	312.50
731357	14-Aug-2024	D.P. ELECTRIC, INC	23,931.00
731265	07-Aug-2024	DANG, TOAN (R)	35.50
1086614	20-Aug-2024	DAVID INVESTMENT LLC	1,023.00
731833	28-Aug-2024	DAVIDSON & BELLUSO, INC	31,250.00
731784	22-Aug-2024	DAVISSON, HUNTER N	290.00
731358	14-Aug-2024	DAY AUTO SUPPLY, INC	1,904.94
731651	21-Aug-2024	DAY AUTO SUPPLY, INC	1,628.13
731834	28-Aug-2024	DAY AUTO SUPPLY, INC	796.76
731652	21-Aug-2024	DBA CONSTRUCTION, INC	532,432.09
1086432	08-Aug-2024	DEANDA, MELISSA K	136.00
731160	07-Aug-2024	DECA SOUTHWEST	5,703.73
731359	14-Aug-2024	DECA SOUTHWEST	1,692.15
731835	28-Aug-2024	DECA SOUTHWEST	14,607.88
731360	14-Aug-2024	DEEP ROOTS TREE CARE LLC	8,375.00
731959	28-Aug-2024	DELIGOZ, CONSTANCE (R)	2,382.06
731161	07-Aug-2024	DELTA DENTAL OF ARIZONA	186,108.00
731162	07-Aug-2024	DELTA DENTAL OF ARIZONA	11,134.53
1086425	08-Aug-2024	DENNIS L LOPEZ & ASSOCIATES LLC	5,000.00
731836	28-Aug-2024	DESERT PLUNGE LLC	5,281.22
731163	07-Aug-2024	DESERT TOX, LLC	77.20
731266	07-Aug-2024	DESHAZER, BRANDON (R)	21.62
731361	14-Aug-2024	DIBBLE & ASSOCIATES CONSULTING ENGINEERS, INC	39,592.53
731653	21-Aug-2024	DIBBLE & ASSOCIATES CONSULTING ENGINEERS, INC	26,792.98
731164	07-Aug-2024	DIBBLE CM, LLC	93,735.00
731654	21-Aug-2024	DICK & FRITSCHE DESIGN GROUP, INC	55,076.00
731267	07-Aug-2024	DICKY, MADISON (R)	10.79
731362	14-Aug-2024	DIG STUDIO INC	6,701.75
731837	28-Aug-2024	DIGIQUATICS	5,413.50
731363	14-Aug-2024	DJ FLOW ENTERTAINMENT	325.00
731366	14-Aug-2024	DJRON	300.00
731165	07-Aug-2024	DLT SOLUTIONS LLC	4,574.56
731459	14-Aug-2024	DMR HOLDINGS LLC (R)	83.31
1086453	15-Aug-2024	DNG CONSTRUCTION	64,953.00
731960	28-Aug-2024	DONG, ZHAOYANG (R)	325.11
731526	20-Aug-2024	DOUGLAS, SHAWN K	2,908.00
731655	21-Aug-2024	DRAKE, DAKOTA PAIGE	1,500.00
731527	20-Aug-2024	DUCKS & ASSOC REALTY INC	1,912.00
731166	07-Aug-2024	DUGGAN, SEAN	4,948.99
731656	21-Aug-2024	DUGGAN, SEAN	341.31
731310	08-Aug-2024	DUNN, WENDY M	130.91
1086437	14-Aug-2024	DUPAGE HOUSING AUTHORITY	3,132.16
1086390	08-Aug-2024	DYE CARBONIC	456.14
1086427	08-Aug-2024	DYE CARBONIC	3,858.44
1086451	15-Aug-2024	DYE CARBONIC	1,113.82
1086683	22-Aug-2024	DYE CARBONIC	884.71
1086727	29-Aug-2024	DYE CARBONIC	177.34
731977	29-Aug-2024	DYKSTRA, MILAGRO CRISTABEL	168.90
731368	14-Aug-2024	EARNHARDT	79.27
731666	21-Aug-2024	EARNHARDT	3,096.17
731864	28-Aug-2024	EARNHARDT	1,345.75
731369	14-Aug-2024	EARNHARDT CHEVROLET	4,233.69
731667	21-Aug-2024	EARNHARDT CHEVROLET	3,328.58

Payment Number	Payment Date	Vendor Name	Amount
731865	28-Aug-2024	EARNHARDT CHEVROLET	517.71
731866	28-Aug-2024	EAST VALLEY DREAM CENTER	2,500.00
731171	07-Aug-2024	EBSCO INFORMATION SERVICES, LLC	7,000.00
731268	07-Aug-2024	ECKLES, MARY KATE (R)	39.12
731309	08-Aug-2024	ECKWOOD, CORNATHAN	115.35
1086508	20-Aug-2024	EDB ENTERPRISE LLC	2,260.00
731172	07-Aug-2024	EDEN, GERALD BUCHANAN JR	100.00
731269	07-Aug-2024	EDJOURIAN, NEVART (R)	23.59
1086649	20-Aug-2024	EKSS LLC	2,057.00
731173	07-Aug-2024	EMCOR SERVICES ARIZONA	171,402.00
731668	21-Aug-2024	EMCOR SERVICES ARIZONA	10,637.50
731370	14-Aug-2024	EMPIRE SOUTHWEST	47.76
731785	22-Aug-2024	ENCINAS, ANGELA (R)	195.02
731867	28-Aug-2024	ENTELLUS INC	49,429.68
1086477	15-Aug-2024	ENTERPRISE NETWORKS SOLUTIONS INC	184,422.44
731868	28-Aug-2024	ENVIRONMENTAL DRAIN & ODOR CONTROL SERVICES LLC	685.00
1086644	20-Aug-2024	EPICENTER HOLDINGS LLC	2,337.00
731367	14-Aug-2024	E-PLANSOFT	72,213.75
731669	21-Aug-2024	EPS GROUP INC	1,865.00
731869	28-Aug-2024	EPS GROUP INC	7,070.00
731845	28-Aug-2024	ESCALANTE, CHANDLER G	79.98
731528	20-Aug-2024	ESHAQ, MUNAIM GEORGE ABU	612.00
731174	07-Aug-2024	EUROFINS ENVIRONMENT TESTING SOUTHWEST LLC	214.00
731311	08-Aug-2024	EVANS, KELLIE M	102.00
731371	14-Aug-2024	EVENT APPROVALS, INC	65,000.00
731175	07-Aug-2024	EVERGREEN VILLA HOA (R)	3,750.00
1086368	01-Aug-2024	EWING IRRIGATION PRODUCTS INC	458.07
1086398	08-Aug-2024	EWING IRRIGATION PRODUCTS INC	13,217.70
1086468	15-Aug-2024	EWING IRRIGATION PRODUCTS INC	7,289.37
1086696	22-Aug-2024	EWING IRRIGATION PRODUCTS INC	20,831.01
1086742	29-Aug-2024	EWING IRRIGATION PRODUCTS INC	1,136.64
731176	07-Aug-2024	EXERPLAY INC	3,058.33
731670	21-Aug-2024	EXERPLAY INC	115,616.93
731870	28-Aug-2024	EXERPLAY INC	4,235.83
731961	28-Aug-2024	FABILA GARCIA, DAVID ARTURO (R)	125.07
731871	28-Aug-2024	FACILITEQ AZ LLC	1,415.79
731372	14-Aug-2024	FACTORY MOTOR PARTS COMPANY	4,528.68
731671	21-Aug-2024	FACTORY MOTOR PARTS COMPANY	644.58
731872	28-Aug-2024	FACTORY MOTOR PARTS COMPANY	831.64
731486	14-Aug-2024	FARNSWORTH REALTY & MANAGEMENT	1,031.00
731529	20-Aug-2024	FARNSWORTH REALTY & MANAGEMENT	911.00
731873	28-Aug-2024	FARONICS TECHNOLOGIES USA INC	4,990.65
731530	20-Aug-2024	FASHION CENTER ACQUISTION LLC	1,798.00
731962	28-Aug-2024	FENDON, MATTHEW (R)	104.51
731874	28-Aug-2024	FENNEMORE CRAIG, P.C.	1,974.00
731177	07-Aug-2024	FERGUSON ENTERPRISES, LLC	5,660.54
731373	14-Aug-2024	FERGUSON ENTERPRISES, LLC	61.85
731672	21-Aug-2024	FERGUSON ENTERPRISES, LLC	17,158.45
731875	28-Aug-2024	FERGUSON ENTERPRISES, LLC	5,723.54
731673	21-Aug-2024	FIBERQUANT, INC	607.75
731374	14-Aug-2024	FIELDPRINT, INC	101.00
1086523	20-Aug-2024	FINNEY, JESSE	1,661.00
731487	14-Aug-2024	FLAGSTAFF HOUSING AUTHORITY	2,480.16

Payment Number	Payment Date	Vendor Name	Amount
731925	28-Aug-2024	FLAHERTY, DANIEL GILBERT	1,340.00
731846	28-Aug-2024	FLEMINGS, ANTHONY L	529.00
1086746	29-Aug-2024	FLEXIBLE BENEFIT ADMINISTRATORS INC	880.00
1086557	20-Aug-2024	FLINT HOUSE, LLC	2,703.00
731270	07-Aug-2024	FLOCAS, ALEXANDER (R)	76.29
731178	07-Aug-2024	FLYERS ENERGY, LLC	24,380.26
731375	14-Aug-2024	FLYERS ENERGY, LLC	25,525.85
731674	21-Aug-2024	FLYERS ENERGY, LLC	27,415.80
1086558	20-Aug-2024	FNU NOVITA	2,171.00
1086662	20-Aug-2024	FOCUS LLC	3,226.00
731531	20-Aug-2024	FOOTHILLS REALTY & MANAGEMENT	2,233.00
731376	14-Aug-2024	FOR OUR CITY-CHANDLER	10,000.00
731377	14-Aug-2024	FORENSIC SCIENCE CONSULTANTS	1,690.00
1086388	08-Aug-2024	FOSTER ELECTRIC MOTOR SERVICE, INC	20,402.28
1086474	15-Aug-2024	FOSTER ELECTRIC MOTOR SERVICE, INC	5,130.38
1086698	22-Aug-2024	FOSTER ELECTRIC MOTOR SERVICE, INC	230.00
1086734	29-Aug-2024	FOSTER ELECTRIC MOTOR SERVICE, INC	13,934.47
731532	20-Aug-2024	FRANK VITIRITTI TRUSTEE	904.00
731271	07-Aug-2024	FRANZEN, BRENT (R)	56.07
731378	14-Aug-2024	FREIGHTLINER OF ARIZONA LLC	1,277.03
1086436	14-Aug-2024	FRESNO INVESTMENTS	243.00
1086622	20-Aug-2024	FRESNO INVESTMENTS	1,716.00
731379	14-Aug-2024	FRUTH GROUP INC	1,187.14
731179	07-Aug-2024	FSL HOME IMPROVEMENTS	32,504.69
1086389	08-Aug-2024	FULL SPECTRUM GROUP, LLC	9,141.00
731767	21-Aug-2024	FULLER, LACHLYN (R)	48.77
731272	07-Aug-2024	FURET, ALBERTO (R)	90.68
731312	08-Aug-2024	GAJANAN LLC	48,000.00
731533	20-Aug-2024	GANAPATHY, RAMSUNDAR	1,995.00
731534	20-Aug-2024	GANI, OSAMA S	1,670.00
731876	28-Aug-2024	GANNETT ARIZONA LOCALIQ	2,048.20
731488	14-Aug-2024	GARCIA, GLORIA (R)	54.00
731877	28-Aug-2024	GARCIA, ISABEL (R)	3,496.35
731489	14-Aug-2024	GARCIA, YVETTE (R)	2,500.00
731675	21-Aug-2024	GAVAN & BARKER INC	12,480.26
731460	14-Aug-2024	GEANS, KEN (R)	78.62
1086540	20-Aug-2024	GHAFOOR, BAN ABDUL	1,817.00
1086535	20-Aug-2024	GHAMRAOUI, SABAH K	1,827.00
1086367	01-Aug-2024	GHASTER PAINTING & COATINGS INC	28,825.07
1086397	08-Aug-2024	GHASTER PAINTING & COATINGS INC	7,745.00
1086467	15-Aug-2024	GHASTER PAINTING & COATINGS INC	3,950.00
1086695	22-Aug-2024	GHASTER PAINTING & COATINGS INC	1,924.25
1086741	29-Aug-2024	GHASTER PAINTING & COATINGS INC	1,295.00
731380	14-Aug-2024	GHD INC	17,835.50
731535	20-Aug-2024	GHOMRAWI, ABDALLAH	690.00
731847	28-Aug-2024	GHOUGASSIAN, VIKEN	510.99
731381	14-Aug-2024	GILA RIVER INDIAN COMMUNITY	4,739.74
731180	07-Aug-2024	GILA RIVER TELECOMMUNICATION	223.15
1086630	20-Aug-2024	GILBERT, JUSTIN	974.00
1086626	20-Aug-2024	GILBERT, THURMAN	2,947.00
1086615	20-Aug-2024	GIRGIS, JAKLINE	2,086.00
731273	07-Aug-2024	GIUNTA, MICHAEL (R)	72.31
1086664	20-Aug-2024	GJONZENELI, MURAT	5,216.00

Payment Number	Payment Date	Vendor Name	Amount
731382	14-Aug-2024	GO AZ MOTORCYCLES SCOTTSDALE	1,339.25
1086609	20-Aug-2024	GO GET IT INVESTMENTS LLC	903.00
731181	07-Aug-2024	GOBLE SAMPSON ASSOCIATES INC	3,178.54
1086745	29-Aug-2024	GOERING, ROBERT, RUBIN, BROGNA, ENOS & TREADWELL-RUBIN, P.C.	560.00
1086572	20-Aug-2024	GOLD COAST REALTY	1,938.00
1086522	20-Aug-2024	GOLD STONE INVESTMENT LLC	2,021.00
731536	20-Aug-2024	GOLD TRUST REALTY	9,809.00
731878	28-Aug-2024	GOLD TRUST REALTY	1,200.00
731313	08-Aug-2024	GONZALES, RICARDO M	290.00
731383	14-Aug-2024	GONZALEZ & SMITH, P. C.	5,000.00
1086369	01-Aug-2024	GOODMANS INTERIOR STRUCTURES	29,178.60
731182	07-Aug-2024	GORDWIN LAW, PLLC	5,000.00
1086515	20-Aug-2024	GORE, VIPUL	1,297.00
1086620	20-Aug-2024	GOVINDARAJAN, OMKAR	2,478.00
731183	07-Aug-2024	GRAINGER	688.81
731184	07-Aug-2024	GRAINGER	1,356.27
731384	14-Aug-2024	GRAINGER	426.74
731385	14-Aug-2024	GRAINGER	896.07
731676	21-Aug-2024	GRAINGER	1,067.95
731677	21-Aug-2024	GRAINGER	4,015.27
731678	21-Aug-2024	GRAINGER	65,087.48
731879	28-Aug-2024	GRAINGER	1,570.75
731679	21-Aug-2024	GRANITE CONSTRUCTION COMPANY	1,273,528.79
731386	14-Aug-2024	GRAY QUARTER, INC	12,957.50
731680	21-Aug-2024	GRAYBAR ELECTRIC COMPANY INC	3,769.51
1086738	29-Aug-2024	GREATER PHOENIX ECONOMIC COUNCIL	2,000.00
1086366	01-Aug-2024	GREEN & BAKER LTD	526.50
731461	14-Aug-2024	GREEN, KYLE (R)	71.73
731185	07-Aug-2024	GROUNDS CONTROL LLC	88,808.09
731387	14-Aug-2024	GROUNDS CONTROL LLC	10,836.93
731681	21-Aug-2024	GROUNDS CONTROL LLC	12,164.00
731880	28-Aug-2024	GROUNDS CONTROL LLC	52,655.06
731537	20-Aug-2024	GRS INVESTMENT COMPANY, LLC	5,911.00
1086392	08-Aug-2024	GRUBER POWER SERVICES	1,492.92
731682	21-Aug-2024	GSI INTERNATIONAL (R)	170.00
1086656	20-Aug-2024	GUERRERO, LAURIE	2,175.00
1086653	20-Aug-2024	GUERRERO, ROSE	1,600.00
1086365	01-Aug-2024	H&E EQUIPMENT SERVICES INC	4,941.30
731881	28-Aug-2024	HACH COMPANY	1,813.96
1086639	20-Aug-2024	HADAWAY, MICHELLE VIVIANNE	1,502.00
1086627	20-Aug-2024	HADEED, JAMES	1,798.00
1086519	20-Aug-2024	HALL, ERIC	1,182.00
1086575	20-Aug-2024	HAMMEL INVESTMENTS, LLC	1,348.00
731388	14-Aug-2024	HANDTEVY	10,489.50
1086666	20-Aug-2024	HANDZEL, SHARON C	1,306.00
731657	21-Aug-2024	HANSEN, CHRISTIE (R)	34.00
731768	21-Aug-2024	HANSON INDUSTRIES LLC (R)	22.17
1086541	20-Aug-2024	HARINAV LLC	3,115.00
1086441	14-Aug-2024	HARTFORD APARTMENTS	91.00
1086605	20-Aug-2024	HARTFORD APARTMENTS	3,629.00
731314	08-Aug-2024	HARTKE, KEVIN	1,810.50
731848	28-Aug-2024	HARTKE, KEVIN	1,077.50
731683	21-Aug-2024	HASSANI, HALIM A	3,353.00

Payment Number	Payment Date	Vendor Name	Amount
731684	21-Aug-2024	HASSANI, SABOOR KHAN	3,353.00
731882	28-Aug-2024	HAWKEYE ELECTRIC INC	31,695.00
1086580	20-Aug-2024	HAZELTINE RENTALS LLC	2,000.00
731186	07-Aug-2024	HAZEN AND SAWYER	11,879.50
731389	14-Aug-2024	HAZEN AND SAWYER	78,040.00
731538	20-Aug-2024	HCL LLC	1,121.00
731769	21-Aug-2024	HEATH, CODY (R)	6.21
731123	01-Aug-2024	HEATHERBROOK SQUARE ASSOCIATION	35,022.90
1086747	29-Aug-2024	HEINFELD, MEECH & CO PC	9,000.00
731883	28-Aug-2024	HENDERSON BELTWAY, LLC	6,538.88
1086611	20-Aug-2024	HENES, HAIDY	1,190.00
731187	07-Aug-2024	HENNESY MECHANICAL SALES	27,075.00
731884	28-Aug-2024	HENNESY MECHANICAL SALES	12,950.00
1086595	20-Aug-2024	HERNANDEZ, ERIBERTO	1,442.00
1086370	01-Aug-2024	HILL BROTHERS CHEMICAL CO	10,162.49
1086469	15-Aug-2024	HILL BROTHERS CHEMICAL CO	9,583.84
1086743	29-Aug-2024	HILL BROTHERS CHEMICAL CO	19,135.84
731963	28-Aug-2024	HILLES, SAMANTHA (R)	13.25
731462	14-Aug-2024	HO, CASSANDRA (R)	92.71
1086517	20-Aug-2024	HOANG, BUUCHAU QUOC	2,946.00
731786	22-Aug-2024	HOLT, VINCENT J	266.00
731188	07-Aug-2024	HOMESTEAD STEAKS LLC (R)	45.00
731685	21-Aug-2024	HONORHEALTH	3,300.00
1086732	29-Aug-2024	HORIZON DISTRIBUTORS INC	904.09
731364	14-Aug-2024	HOSEPOWERUSA AND/OR COMPLETE SAFETY	108.43
731658	21-Aug-2024	HOSEPOWERUSA AND/OR COMPLETE SAFETY	77.68
731838	28-Aug-2024	HOSEPOWERUSA AND/OR COMPLETE SAFETY	96.17
731490	14-Aug-2024	HOUSING AUTHORITY OF JOLIET	2,219.16
731686	21-Aug-2024	HOYLE LEGAL (R)	70.00
731539	20-Aug-2024	HUERTA, JUANITA	160.00
731687	21-Aug-2024	HUITT-ZOLLARS, INC	2,147.49
731770	21-Aug-2024	HUNT, MARK (R)	100.73
1086363	01-Aug-2024	HUNTER CONTRACTING CO	1,434,168.06
1086386	08-Aug-2024	HUNTER CONTRACTING CO	2,156,641.17
731787	22-Aug-2024	HYE TECH NETWORK & SECURITY SOLUTIONS LLC	658,530.92
731540	20-Aug-2024	IH2 PROPERTY BORROWER LP	1,438.00
731541	20-Aug-2024	IH5 PROPERTY BORROWER LP	2,375.00
731542	20-Aug-2024	IH6 PROPERTY BORROWER LP	4,616.00
731885	28-Aug-2024	IMAGE TREND, INC.	585.98
1086442	14-Aug-2024	IMT CAPITAL VI CHANDLER LLC	1,638.00
1086587	20-Aug-2024	IMT CAPITAL VI CHANDLER LLC	21,249.00
731390	14-Aug-2024	INGRAM LIBRARY SERVICES	1,093.63
731688	21-Aug-2024	INGRAM LIBRARY SERVICES	9,085.90
731964	28-Aug-2024	INSIGNIA LLC (R)	30.87
1086471	15-Aug-2024	INTERFACE TECHNICAL TRAINING	8,000.00
731886	28-Aug-2024	INTERNATIONAL ECONOMIC DEVELOPMENT COUNCIL	1,100.00
731689	21-Aug-2024	INTERWEST SAFETY SUPPLY LLC	2,574.80
1086438	14-Aug-2024	INVESTAR REAL ESTATE SPECIALISTS LLC	1,050.00
1086571	20-Aug-2024	INVESTAR REAL ESTATE SPECIALISTS LLC	1,449.00
731543	20-Aug-2024	J & B INVESTMENT	1,271.00
1086735	29-Aug-2024	J2 ENGINEERING & ENVIRONMENTAL DESIGN, LLC	22,972.23
1086470	15-Aug-2024	JACOBO LAW FIRM, PLLC	5,000.00
1086736	29-Aug-2024	JACOBS ENGINEERING GROUP INC	385,727.38

Payment Number	Payment Date	Vendor Name	Amount
1086590	20-Aug-2024	JAIN, VIKAS	1,522.00
1086394	08-Aug-2024	JAMES COOKE & HOBSON	8,463.69
1086693	22-Aug-2024	JAMES COOKE & HOBSON	57,456.49
731463	14-Aug-2024	JANOSIK, CHASE (R)	34.75
731274	07-Aug-2024	JCAB INVESTMENT LLC (R)	46.52
731391	14-Aug-2024	JCG TECHNOLOGIES, INC	6,350.00
1086635	20-Aug-2024	JDC INVESTMENTS LLC	1,494.00
1086395	08-Aug-2024	JEFF MARTIN CONSULTING LLC	1,275.00
1086465	15-Aug-2024	JEFF MARTIN CONSULTING LLC	1,733.00
1086739	29-Aug-2024	JEFF MARTIN CONSULTING LLC	2,017.35
731189	07-Aug-2024	JENI MCCUTCHEON, PSY.D., PLLC	2,000.00
731690	21-Aug-2024	JGZ PROPERTIES (R)	40.00
1086502	20-Aug-2024	JJBMC PROPERTIES LLC	3,775.00
731464	14-Aug-2024	JOAN SLACK FAMILY REVOCABLE TRUST (R)	82.78
731275	07-Aug-2024	JOHNJOHN, IAN (R)	91.06
731788	22-Aug-2024	JOHNSON, LEANN P	62.92
731849	28-Aug-2024	JONAS, LUCAS A	290.00
731887	28-Aug-2024	JONES, JIM (R)	5.25
1086640	20-Aug-2024	JONES, PATRICIA A.	2,396.00
731850	28-Aug-2024	JORDAN, NICHOLAS A	345.00
731276	07-Aug-2024	JORDAN, SUSIE (R)	41.47
731190	07-Aug-2024	JOSEPH PAINTING COMPANY	117,058.00
1086534	20-Aug-2024	JOSHI, PRANAV	2,123.00
731191	07-Aug-2024	JOTFORM INC	9,972.00
731544	20-Aug-2024	JOU, SEN T	5,971.00
731545	20-Aug-2024	JRS GUERRERO LIMITED PARTNERSHIP	2,801.00
731192	07-Aug-2024	JUMPBUNCH	5,348.00
1086393	08-Aug-2024	JUST PLANT DESIGNERS INC	165.00
1086396	08-Aug-2024	JUSTIFACTS CREDENTIAL VERIFICATION	24.50
731691	21-Aug-2024	K2 ELECTRIC, LLC	76,767.00
731888	28-Aug-2024	K2 ELECTRIC, LLC	1,056.81
1086384	01-Aug-2024	K9 GROUP HOLLAND BV	15,000.00
731546	20-Aug-2024	KACHINA APARTMENTS	4,491.00
731193	07-Aug-2024	KANOPY LLC	2,506.00
1086532	20-Aug-2024	KARAMIZAKHERADI, NAVID	2,150.00
731889	28-Aug-2024	KARL BALTUTAT VALUATION SERVICES, LLC	5,750.00
731547	20-Aug-2024	KASIM, WISAM	4,737.00
731851	28-Aug-2024	KASPOR, JOSEPH E	465.87
1086669	20-Aug-2024	KATZ, JENNIFER ANN	1,176.00
731548	20-Aug-2024	KELLER WILLIAMS REALTY PHOENIX	1,207.00
731771	21-Aug-2024	KELLY, SHERMAINE (R)	74.22
731277	07-Aug-2024	KEPES, ZACHARY (R)	65.48
731465	14-Aug-2024	KESSARY, ALLYSON (R)	65.03
1086514	20-Aug-2024	KHATRI, SHAH	7,509.00
731466	14-Aug-2024	KHIJI, QASIN (R)	56.68
1086512	20-Aug-2024	KIANPOUR, FARAMARZ	2,449.00
1086475	15-Aug-2024	KIMLEY-HORN AND ASSOCIATES, INC	14,847.30
1086699	22-Aug-2024	KIMLEY-HORN AND ASSOCIATES, INC	50,311.62
731194	07-Aug-2024	KING CONCRETE, INC	543.90
731392	14-Aug-2024	KING CONCRETE, INC	1,247.26
731692	21-Aug-2024	KING CONCRETE, INC	678.35
731890	28-Aug-2024	KING CONCRETE, INC	1,516.15
731491	14-Aug-2024	KING COUNTY HOUSING AUTHORITY	6,620.64

Payment Number	Payment Date	Vendor Name	Amount
731693	21-Aug-2024	KITCHELL/CEM INC	1,280.00
731891	28-Aug-2024	KITCHELL/CEM INC	41,272.75
731852	28-Aug-2024	KOLL, LAUREN M	250.00
731467	14-Aug-2024	KP OCOTILLO LLC (R)	128.67
1086529	20-Aug-2024	KRAMER, NEAL	1,901.00
731195	07-Aug-2024	KRUE INDUSTRIAL, LLC	3,938.94
731694	21-Aug-2024	KRUE INDUSTRIAL, LLC	5,079.69
1086562	20-Aug-2024	K-SERVICES	2,752.00
731278	07-Aug-2024	KUDER, JOSEPH (R)	63.10
731279	07-Aug-2024	KUKUSA, JACLYN (R)	42.78
731978	29-Aug-2024	KULTALA, DAVID P	345.00
731892	28-Aug-2024	KW ENGINEERING	800.00
731853	28-Aug-2024	LACKIE, SARAH J	41.75
731468	14-Aug-2024	LALUMENERE, MICHAEL (R)	60.38
731196	07-Aug-2024	LANGUAGE CONNECTION	380.00
731695	21-Aug-2024	LANGUAGE CONNECTION	190.00
731393	14-Aug-2024	LANGUAGE TESTING INTERNATIONAL INC	374.00
731893	28-Aug-2024	LANGUAGE TESTING INTERNATIONAL INC	498.00
731394	14-Aug-2024	LANTEGO	37,500.00
731316	08-Aug-2024	LAPP, LISA M	2,839.27
731504	15-Aug-2024	LAPP, LISA M	337.00
731789	22-Aug-2024	LAPP, LISA M	81.17
1086594	20-Aug-2024	LAROUSSI, REDOUANE	1,587.00
1086661	20-Aug-2024	LARSEN DEVELOPMENT LLC	1,140.00
731197	07-Aug-2024	LATTER, JAMES LEROY	100.00
731894	28-Aug-2024	LAW OFFICE OF CHRISTOPHER J. PALMISANO PLC	2,666.66
1086516	20-Aug-2024	LE, KIEU	369.00
731469	14-Aug-2024	LE, MINH (R)	80.88
1086637	20-Aug-2024	LE, THUC	1,607.00
731224	07-Aug-2024	LE, THUHA (R)	28.00
731198	07-Aug-2024	LED ROADWAY LIGHTING LTD	8,024.60
1086592	20-Aug-2024	LEE, KEVIN	2,560.00
1086650	20-Aug-2024	LEE, LARRY	1,798.00
731772	21-Aug-2024	LENNAR ARIZONA CONSTRUCTION INC (R)	104.91
731696	21-Aug-2024	LERNER AND ROWE (R)	5.00
1086628	20-Aug-2024	LETS REED LLC	516.00
731395	14-Aug-2024	LEVEL 3 COMMUNICATIONS LLC	1,769.80
731396	14-Aug-2024	LEVEL 3 COMMUNICATIONS LLC	991.84
731895	28-Aug-2024	LEVEL 3 COMMUNICATIONS LLC	3,025.18
731470	14-Aug-2024	LEVERETTE, LAUREN (R)	100.93
731697	21-Aug-2024	LEXIS NEXIS (R)	5.00
731549	20-Aug-2024	LIAO, FENGLING	1,985.00
731471	14-Aug-2024	LIBERTY, GABRIELLE (R)	21.81
1086401	08-Aug-2024	LIFELONG FITNESS BY KATHI	5,445.00
731550	20-Aug-2024	LIFEWELL BEHAVIORAL WELLNESS	1,441.00
731199	07-Aug-2024	LIGHTING UNLIMITED INC	1,757.57
731397	14-Aug-2024	LIGHTING UNLIMITED INC	94.13
731698	21-Aug-2024	LIGHTING UNLIMITED INC	2,938.58
731896	28-Aug-2024	LIGHTING UNLIMITED INC	2,156.32
731200	07-Aug-2024	LIM FAMILY MARTIAL ARTS	2,750.00
731551	20-Aug-2024	LIN, HEFEN	1,497.00
1086624	20-Aug-2024	LIN, RONG CHUN	3,062.00
1086543	20-Aug-2024	LINCOLN, EARLE	1,250.00

Payment Number	Payment Date	Vendor Name	Amount
731201	07-Aug-2024	LINDSAY ENGINEERING, INC	3,116.00
731398	14-Aug-2024	LINDSAY ENGINEERING, INC	96.00
731897	28-Aug-2024	LINDSAY ENGINEERING, INC	336.00
731773	21-Aug-2024	LINDSAY, JENNIFER (R)	38.62
731280	07-Aug-2024	LIPT WEST CHANDLER BOULEVARD, LLC (R)	691.67
731399	14-Aug-2024	LITHO TECH, INC.	7,833.32
731898	28-Aug-2024	LITHO TECH, INC.	4,813.16
731854	28-Aug-2024	LITTLE, AARON M	295.00
731774	21-Aug-2024	LITTLE, JULIE (R)	100.73
1086524	20-Aug-2024	LIU, QIAN	747.00
731552	20-Aug-2024	LIU, SUSAN	1,279.00
731202	07-Aug-2024	LOGOCOMOTION	91.63
731899	28-Aug-2024	LOGOCOMOTION	223.39
731775	21-Aug-2024	LOHIYA, PARAG (R)	1,587.91
731400	14-Aug-2024	LOKAHI LLC	8,071.65
1086586	20-Aug-2024	LOTUS REAL ESTATE LLC	1,416.00
731401	14-Aug-2024	LPB HOLDING, LLC	400.00
731553	20-Aug-2024	LPB HOLDING, LLC	4,474.00
1086642	20-Aug-2024	LUNDIN, ANDREY	1,477.00
731402	14-Aug-2024	LYFT INC	3,969.95
731554	20-Aug-2024	LYNN, DANNY	204.00
731900	28-Aug-2024	M. R. TANNER CONSTRUCTION	1,293,421.41
1086578	20-Aug-2024	MACLAY REAL ESTATE, LLC	2,498.00
731901	28-Aug-2024	MAGNET FORENSICS, LLC	58,632.42
731555	20-Aug-2024	MAIN STREET RENEWAL LLC	6,294.00
1086533	20-Aug-2024	MAI'S RENTAL LLC	1,848.00
1086619	20-Aug-2024	MAKEY, JAMES	1,476.00
731855	28-Aug-2024	MANN, AMAR V	329.54
731203	07-Aug-2024	MARATHON STAFFING RESOURCES INC	31,715.40
731403	14-Aug-2024	MARATHON STAFFING RESOURCES INC	2,968.95
731699	21-Aug-2024	MARATHON STAFFING RESOURCES INC	34,814.79
731700	21-Aug-2024	MARIACHI NUEVA FUSION	600.00
731902	28-Aug-2024	MARICOPA CO DEPT OF ANIMAL CARE & CONTROL	43,679.00
731167	07-Aug-2024	MARICOPA CO SUPERIOR COURT	250.00
731168	07-Aug-2024	MARICOPA CO SUPERIOR COURT	250.00
731204	07-Aug-2024	MARICOPA COUNTY	78,322.50
731903	28-Aug-2024	MARICOPA COUNTY ATTORNEY'S OFFICE	14,426.98
731904	28-Aug-2024	MARICOPA COUNTY DEPT OF	107,739.75
731205	07-Aug-2024	MARICOPA COUNTY LIBRARY COUNCIL	300.00
731404	14-Aug-2024	MARICOPA COUNTY TREASURER	22,113.69
1086560	20-Aug-2024	MARKET EDGE REALTY LLC	2,021.00
731856	28-Aug-2024	MARKHAM, AARON I	377.72
731317	08-Aug-2024	MARRIDI, AMJAD N	102.80
731965	28-Aug-2024	MARTINEZ, DIEGO (R)	30.20
731905	28-Aug-2024	MATHESON TRI-GAS INC	943.16
731281	07-Aug-2024	MATTINGLY, CHASE (R)	46.86
731556	20-Aug-2024	MAXFIELD, JONATHAN	543.00
731282	07-Aug-2024	MAYNARD, MASON (R)	12.25
1086744	29-Aug-2024	MCCARTHY BUILDING COMPANIES, INC	1,697,291.08
1086641	20-Aug-2024	MCKINDLES, JOHN	3,364.00
1086506	20-Aug-2024	MCKINLEY, ROSS HARRISON	1,053.00
731857	28-Aug-2024	MCMILLAN, JOHN G	276.00
1086629	20-Aug-2024	MCNELLIS, JOHN	1,572.00

Payment Number	Payment Date	Vendor Name	Amount
731557	20-Aug-2024	MCP CROSSWINDS LLC	20,706.00
731721	21-Aug-2024	MCPHILIMY, KEITH	3,000.00
731790	22-Aug-2024	MEDIC A&P, INC	6,000.00
731701	21-Aug-2024	MEDTOX LABORATORIES INC.	44.30
731283	07-Aug-2024	MENASCI, ARLENE (R)	332.54
731906	28-Aug-2024	METRO CHANDLER APARTMENTS	42,583.00
731206	07-Aug-2024	METROHM USA, INC.	382.58
731907	28-Aug-2024	MGC CONTRACTORS, INC	1,076,639.83
731405	14-Aug-2024	MGX EQUIPMENT SERVICES LLC	866.79
731702	21-Aug-2024	MGX EQUIPMENT SERVICES LLC	3,498.01
1086553	20-Aug-2024	MHK INVESTMENT GROUP, LLC	2,094.00
731908	28-Aug-2024	MICHELLE LANGAN MEDIATION LAW FIRM LLC	2,025.00
731207	07-Aug-2024	MIDCO SALES LLC	32,757.91
731208	07-Aug-2024	MIDWEST FOOD BANK, NFP	16,700.00
731209	07-Aug-2024	MIDWEST TAPE	291.06
731406	14-Aug-2024	MIDWEST TAPE	71.40
731703	21-Aug-2024	MIDWEST TAPE	1,071.54
731909	28-Aug-2024	MIDWEST TAPE	727.32
731858	28-Aug-2024	MIELKE, MITCHELL P	290.00
731704	21-Aug-2024	MILES, MURRAY W. AND EVA MARIE MILES (R)	4,712.57
731472	14-Aug-2024	MILLER, ADAM (R)	89.24
1086657	20-Aug-2024	MILLER, JEFFERY ROBERT	2,335.00
731210	07-Aug-2024	MINER, LTD	1,061.72
731407	14-Aug-2024	MINER, LTD	454.59
731910	28-Aug-2024	MINER, LTD	681.34
731558	20-Aug-2024	MIRA SANTI	7,498.00
731705	21-Aug-2024	MIRACLE RECREATION EQUIPMENT COMPANY, INC	65,332.59
731559	20-Aug-2024	MOGHARRABI, SOHRAB	1,170.00
731859	28-Aug-2024	MONTETON, KARY L	290.00
731473	14-Aug-2024	MORA, MAYRA (R)	441.78
731284	07-Aug-2024	MORENO, MARIA (R)	31.14
1086602	20-Aug-2024	MORTENSEN, GLORIA J	1,863.00
731285	07-Aug-2024	MOSS, JOHN L (R)	80.00
731211	07-Aug-2024	MOTOROLA	34,901.00
1086500	15-Aug-2024	MOYERS, KIMBERLY K	336.95
1086634	20-Aug-2024	MRGUDICH, JON A	1,079.00
731212	07-Aug-2024	MRO	133.60
731911	28-Aug-2024	MRO	259.28
1086544	20-Aug-2024	MSRAT, LLC	2,192.00
731474	14-Aug-2024	MULLENS, TIMOTHY (R)	808.48
731213	07-Aug-2024	MUNRO, REGINA	6,000.00
731659	21-Aug-2024	MURPHY, BRIAN T	1,892.00
1086466	15-Aug-2024	MYTHICS LLC	49,501.22
1086694	22-Aug-2024	MYTHICS LLC	3,654.66
1086573	20-Aug-2024	N/A TOWN SQUARE-65 LP	1,217.00
731706	21-Aug-2024	NATIONAL CONSTRUCTION RENTALS	2,242.59
731214	07-Aug-2024	NATIONAL TESTING NETWORK INC	5,790.00
731912	28-Aug-2024	NATIONAL TESTING NETWORK INC	4,000.00
731913	28-Aug-2024	NAVIGATE360, LLC	2,401.67
731408	14-Aug-2024	NEOGOV	11,566.39
731409	14-Aug-2024	NESCON, LLC	2,899.29
731410	14-Aug-2024	NEW PIG CORPORATION	8,058.99
731707	21-Aug-2024	NFRA INC	3,450.00

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1086636	20-Aug-2024	NGUY CONCEPT LLC	2,000.00
1086671	20-Aug-2024	NGUY HUANG LLC	2,200.00
731475	14-Aug-2024	NGUYEN, DEREK (R)	64.07
1086555	20-Aug-2024	NGUYEN, HIEN	2,325.00
1086511	20-Aug-2024	NGUYEN, HUNG Q.	2,119.00
1086616	20-Aug-2024	NGUYEN, NGOC	2,878.00
1086579	20-Aug-2024	NGUYEN, SAMANTHA BAO ANH	2,901.00
1086581	20-Aug-2024	NICHOLAS JOSEPH AGENCY LLC	1,696.00
731708	21-Aug-2024	NICHOLS, JOANNE (R)	61.74
731914	28-Aug-2024	NIGHTHAWK.CLOUD, INC	75,002.93
1086552	20-Aug-2024	NINE PACK LLC	2,598.00
1086610	20-Aug-2024	NINEVEH PROPERTIES LLC	1,549.00
731979	29-Aug-2024	NIXON, JAMES K	345.00
1086631	20-Aug-2024	NJOROGE, ELIZABETH	793.00
731915	28-Aug-2024	NORRIS DESIGN AZ LLC	5,907.20
731560	20-Aug-2024	NUNEZ, FLAVIA (R)	11,457.63
1086387	08-Aug-2024	NUTRIEN AG SOLUTIONS, INC	34,226.50
1086472	15-Aug-2024	NUTRIEN AG SOLUTIONS, INC	1,243.59
731916	28-Aug-2024	OCLC, INC	38,753.41
731411	14-Aug-2024	OCOTILLO AT PRICE LLC	378.00
731492	14-Aug-2024	OCOTILLO BAY APARTMENTS	3,144.00
731561	20-Aug-2024	OCOTILLO BAY APARTMENTS	31,875.00
731791	22-Aug-2024	OCOTILLO GOLF CLUB	75.00
1086645	20-Aug-2024	OKATI LLC	1,999.00
731493	14-Aug-2024	OLIVAS, EDGARDO (R)	476.40
731412	14-Aug-2024	OLSSON, INC	6,554.34
731562	20-Aug-2024	ON Q PROPERTY MANAGEMENT	4,286.00
731413	14-Aug-2024	OPTUM	3,926.72
1086439	14-Aug-2024	ORANGE COUNTY HOUSING AUTHORITY	2,188.16
731563	20-Aug-2024	OROS, ARSENIO	76.00
731124	01-Aug-2024	OROZCO, MARTIN A	136.00
731564	20-Aug-2024	ORTH, AMY	1,704.00
731216	07-Aug-2024	OTTO TRUCKING, INC	37,074.09
731414	14-Aug-2024	OTTO TRUCKING, INC	23,073.73
731709	21-Aug-2024	OTTO TRUCKING, INC	9,134.13
731917	28-Aug-2024	OTTO TRUCKING, INC	3,176.78
731217	07-Aug-2024	PACIFIC WEST ENVIRONMENTAL AND INFRASTRUCTURE	3,712.50
731710	21-Aug-2024	PACIFIC WEST ENVIRONMENTAL AND INFRASTRUCTURE	6,379.75
731980	29-Aug-2024	PANTANA, TYLER (R)	62.08
1086697	22-Aug-2024	PARAMOUNT STREETLIGHT	29,965.00
731565	20-Aug-2024	PARKER, DIXIE L.	658.00
731503	15-Aug-2024	PARKS, DAVID W	448.00
731966	28-Aug-2024	PARRY, BRETT (R)	82.09
1086464	15-Aug-2024	PARSUS SOLUTIONS, LLC	28,959.84
731218	07-Aug-2024	PASEO VISTA ARCHERY CLUB INC	5,600.00
1086667	20-Aug-2024	PASHAPOUR NIKU, MAZIAR	2,538.00
731711	21-Aug-2024	PATRIOT BOILER	2,809.04
731476	14-Aug-2024	PATRIOT PROPERTY MANAGEMENT (R)	94.50
731415	14-Aug-2024	PB&J CREATVE LLC	5,580.00
1086740	29-Aug-2024	PCL CONSTRUCTION INC	554,962.38
731286	07-Aug-2024	PEELER, NICOLAS (R)	14.37
731722	21-Aug-2024	PELA, ROBRT	800.00
731926	28-Aug-2024	PELA, ROBRT	400.00

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731318	08-Aug-2024	PEREZ, CHRISTOPHER D	359.98
1086501	15-Aug-2024	PETERS, RYAN P	242.54
731566	20-Aug-2024	PETERSEN REALTY	2,246.00
731567	20-Aug-2024	PHAN, THAO	1,221.00
731918	28-Aug-2024	PHILLIP D LETT, PH.D.	2,250.00
731416	14-Aug-2024	PHOENIX NATIONAL LABORATORIES, INC	11,865.60
731219	07-Aug-2024	PHOENIX PROCESS EQUIPMENT CO	14,950.00
731417	14-Aug-2024	PHOENIX PROCESS EQUIPMENT CO	9,434.00
1086399	08-Aug-2024	PHOENIX PUMPS INC	36,684.68
731712	21-Aug-2024	PIERCE COLEMAN PLLC	29.50
731919	28-Aug-2024	PIERCE COLEMAN PLLC	10,329.00
1086531	20-Aug-2024	PINDER PROPERTIES, LLC	966.00
731920	28-Aug-2024	PINE TOWERS HOUSING CORPORATION	333.00
731921	28-Aug-2024	PIONEER LANDSCAPE CENTERS INC	4,670.93
731287	07-Aug-2024	PIRWITZ, GARRETT (R)	39.00
731220	07-Aug-2024	PLAY IT SAFE PLAYGROUNDS & PARK EQUIPMENT INC	2,686.33
731418	14-Aug-2024	PLAY IT SAFE PLAYGROUNDS & PARK EQUIPMENT INC	4,412.72
731419	14-Aug-2024	PLC SOLEIL APARTMENTS, LLC	800.00
731494	14-Aug-2024	PLC SOLEIL APARTMENTS, LLC	1,757.00
731568	20-Aug-2024	PLC SOLEIL APARTMENTS, LLC	4,998.00
1086585	20-Aug-2024	PLEASANT DESERT PROPERTIES LLC	2,030.00
731967	28-Aug-2024	PLUMMER-BEAGEL, ANDREA (R)	16.88
1086371	01-Aug-2024	PM PLUMBING & MECHANICAL, INC	37,406.05
1086400	08-Aug-2024	PM PLUMBING & MECHANICAL, INC	2,937.50
1086463	15-Aug-2024	PM PLUMBING & MECHANICAL, INC	17,970.11
731922	28-Aug-2024	POLICY AZ, LLC	6,500.00
1086391	08-Aug-2024	POLYDYNE, INC.	43,996.00
1086737	29-Aug-2024	POLYDYNE, INC.	10,626.00
731420	14-Aug-2024	POSTAL STRATEGIES CORPORATION	576.57
1086509	20-Aug-2024	POUCHKAREV, ANDREI	2,295.00
731221	07-Aug-2024	PRECISION SWEEPING SERVICES, LLC	175.00
731421	14-Aug-2024	PRECISION SWEEPING SERVICES, LLC	2,645.45
731713	21-Aug-2024	PRECISION SWEEPING SERVICES, LLC	1,880.39
731792	22-Aug-2024	PRESTWOOD, LILLIAN J	462.92
731477	14-Aug-2024	PREVITALI, LARRY (R)	55.48
731714	21-Aug-2024	PRIDE OUTFITTING, LLC	1,288.12
1086551	20-Aug-2024	PROEX REALTY MANAGEMENT	5,189.00
1086364	01-Aug-2024	PROFORCE LAW ENFORCEMENT	12,297.73
1086476	15-Aug-2024	PROFORCE LAW ENFORCEMENT	6,426.28
1086692	22-Aug-2024	PROFORCE LAW ENFORCEMENT	3,954.68
731423	14-Aug-2024	PROJECT HOSTS INC	3,501.90
731715	21-Aug-2024	PROJECT HOSTS INC	3,501.90
731222	07-Aug-2024	PRO-LINE INDUSTRIAL PRODUCTS INC	9,220.18
731422	14-Aug-2024	PRO-PIPE, INC	1,252.00
731569	20-Aug-2024	PRS PROPERTY MANAGEMENT	2,410.00
1086525	20-Aug-2024	PUNG, SOKENG	5,308.00
731424	14-Aug-2024	PURDY, BILLIE	274.33
731968	28-Aug-2024	PURE GRIPS (R)	360.78
731223	07-Aug-2024	PVS DX INC	53,503.92
731425	14-Aug-2024	PVS DX INC	35,387.12
731716	21-Aug-2024	PVS DX INC	32,870.86
731923	28-Aug-2024	PVS DX INC	17,978.54
731225	07-Aug-2024	Q-MATION, INC	56,400.00

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731570	20-Aug-2024	QUACH, TAM	2,470.00
1086498	15-Aug-2024	QUANTUM INTEGRATED SOLUTIONS INC	12,837.36
731723	21-Aug-2024	QUICK COURIER	115.00
731776	21-Aug-2024	QUINTERO, PEDRO (R)	77.06
1086433	08-Aug-2024	RAMER, WALTER DAVID	136.00
731478	14-Aug-2024	RAMIREZ, MARGARITO (R)	51.92
731288	07-Aug-2024	RAMIREZ, OLIVIA (R)	32.01
1086601	20-Aug-2024	RAY ROAD PROPERTY LLC	2,444.00
731428	14-Aug-2024	RDO EQUIPMENT CO	197.68
731724	21-Aug-2024	RDO EQUIPMENT CO	232.57
731927	28-Aug-2024	READY REFRESH	3,230.36
731571	20-Aug-2024	REALTY EXECUTIVES, AN ARIZONA CORP	4,334.00
731226	07-Aug-2024	RED DEVELOPMENT OF OCOTILLO, LLC FOUR	108,647.28
1086452	15-Aug-2024	REDPOINT CONTRACTING	30,957.30
731227	07-Aug-2024	REDWOOD OUTDOORS	9,104.79
731777	21-Aug-2024	REEVES, ELENA (R)	120.00
731228	07-Aug-2024	REFRIGERATION SUPPLIES DISTRIBUTOR	773.25
731725	21-Aug-2024	REFRIGERATION SUPPLIES DISTRIBUTOR	193.03
731726	21-Aug-2024	REGAL FENCE LLC	1,294.00
731229	07-Aug-2024	RELIANT GASES, LTD.	7,437.25
731727	21-Aug-2024	REPUBLIC SERVICES OF PHOENIX	31,576.39
731728	21-Aug-2024	REPUBLIC SERVICES OF PHOENIX	6,640.51
731928	28-Aug-2024	REPUBLIC SERVICES OF PHOENIX	5,002.71
1086702	22-Aug-2024	RESURRECTION STREET MINISTRY, INCORPORATED	10,000.00
731230	07-Aug-2024	RICOH USA INC	39.78
731429	14-Aug-2024	RICOH USA INC	11,665.58
731729	21-Aug-2024	RICOH USA INC	133.92
731929	28-Aug-2024	RICOH USA INC	49.03
1086489	15-Aug-2024	RITOCH-POWELL & ASSOCIATES CONSULTING ENGINEERS INC	147,213.09
731231	07-Aug-2024	RITZ SAFETY LLC	150.23
731730	21-Aug-2024	RITZ SAFETY LLC	431.87
731930	28-Aug-2024	RITZ SAFETY LLC	156.30
731430	14-Aug-2024	RIVER NORTH TRANSIT, LLC	87,550.06
731289	07-Aug-2024	RIVERS, STEVE (R)	75.93
731572	20-Aug-2024	RIVIERA PARK INVESTORS LLC	2,250.00
731931	28-Aug-2024	RIVIERA PARK INVESTORS LLC	1,731.65
1086607	20-Aug-2024	RJ TORRANCE LLC	454.00
731731	21-Aug-2024	ROBAINA, AIZHAN (R)	28.00
731290	07-Aug-2024	ROBERTS, MILES (R)	70.93
1086513	20-Aug-2024	RODRIGUEZ-MESA, IVAN	1,311.00
731319	08-Aug-2024	ROHRS, CLAUDIA M	102.00
731320	08-Aug-2024	ROSALES, ROSEMARY H	102.00
731291	07-Aug-2024	ROSWICK, CALIN (R)	149.85
731292	07-Aug-2024	ROYCE, MATTHEW (R)	61.23
731573	20-Aug-2024	RPC CHANDLER APARTMENTS LLC	3,758.00
1086643	20-Aug-2024	RRC INVESTMENTS LLC	657.00
731232	07-Aug-2024	RUGGIERO'S ACE HARDWARE	2,545.60
731732	21-Aug-2024	RUGGIERO'S ACE HARDWARE	749.04
731932	28-Aug-2024	RUGGIERO'S ACE HARDWARE	342.09
731293	07-Aug-2024	RUIZ, STEPHANIE (R)	60.30
1086613	20-Aug-2024	RUVOLO, CHARLES C AND LAURIE L	720.00
731431	14-Aug-2024	RYAN HERCO FLOW SOLUTIONS	7,020.96
1086638	20-Aug-2024	S J FOWLER REAL ESTATE INC	5,160.00

Payment Number	Payment Date	Vendor Name	Amount
731933	28-Aug-2024	SABA SOFTWARE INC	150,865.05
731793	22-Aug-2024	SACCO, STACY A	191.00
731432	14-Aug-2024	SAFECO INSURANCE AS SUBROGEE FOR TIELA FRASER (R)	4,061.11
731433	14-Aug-2024	SAFEWARE, INC	200,859.46
1086563	20-Aug-2024	SAISSAN, JOHN	2,483.00
1086503	20-Aug-2024	SALEH, ZIAD	808.00
731169	07-Aug-2024	SALT RIVER PROJECT	240.18
731495	14-Aug-2024	SALT RIVER PROJECT	8,618.00
731506	15-Aug-2024	SALT RIVER PROJECT	4,665.16
731733	21-Aug-2024	SALT RIVER PROJECT	1,973.46
731839	28-Aug-2024	SALT RIVER PROJECT	244.00
1086381	01-Aug-2024	SALT WORKS	3,819.58
1086413	08-Aug-2024	SALT WORKS	7,640.68
1086495	15-Aug-2024	SALT WORKS	7,642.21
731233	07-Aug-2024	SALVATION ARMY	42,785.67
731934	28-Aug-2024	SALVATION ARMY	12,500.00
1086660	20-Aug-2024	SALZMAN, BART	1,406.00
731574	20-Aug-2024	SAN CERVANTES APARTMENTS	1,306.00
731575	20-Aug-2024	SAN HACIENDA APARTMENTS	2,900.00
731840	28-Aug-2024	SAN MARCOS JUSTICE COURT	250.00
731576	20-Aug-2024	SAN PALMAS MF REALTY COMPANY LLC	1,545.00
731434	14-Aug-2024	SAN TAN FORD	481,002.66
731734	21-Aug-2024	SAN TAN FORD	111,077.57
731935	28-Aug-2024	SAN TAN FORD	55,281.95
731577	20-Aug-2024	SAN VALENCIA APARTMENTS LLC	6,389.00
1086703	22-Aug-2024	SANDS MOTOR COMPANY, INC	50,000.00
731234	07-Aug-2024	SANDY'S BALLROOM	360.00
731735	21-Aug-2024	SANDY'S BALLROOM	792.00
731578	20-Aug-2024	SANTANA RIDGE	1,841.00
1086670	20-Aug-2024	SANTOS, AGNES	2,100.00
731736	21-Aug-2024	SARAH'S MUSE	100.00
731579	20-Aug-2024	SAVAGE, ERIC	1,777.00
731294	07-Aug-2024	SAYERS, NATACIA (R)	46.65
731860	28-Aug-2024	SCHARNITZKE, NICHOLAS P	345.00
731479	14-Aug-2024	SCHEFFEL, ALLISON (R)	74.11
731435	14-Aug-2024	SCHNEIDER ELECTRIC SYSTEMS USA INC	22,750.00
1086663	20-Aug-2024	SCHOENFELD, RANDY	4,544.00
731794	22-Aug-2024	SCHUHRKE, THOMAS R	311.00
731480	14-Aug-2024	SCHWARTZ, TYLER (R)	49.77
1086545	20-Aug-2024	SCOTT, DAMONE	3,001.00
731580	20-Aug-2024	SECURED EQUITIES	1,171.00
731436	14-Aug-2024	SECURITY TITLE AGENCY, INC	620.00
731936	28-Aug-2024	SECURITY TITLE AGENCY, INC	498,060.11
731981	30-Aug-2024	SECURITY TITLE AGENCY, INC	502,174.18
1086419	08-Aug-2024	SEGAL COMPANY, THE	34,993.75
731235	07-Aug-2024	SENERGY PETROLEUM, LLC	22,017.61
731437	14-Aug-2024	SENERGY PETROLEUM, LLC	10,623.81
731737	21-Aug-2024	SENERGY PETROLEUM, LLC	21,916.51
731236	07-Aug-2024	SENTINEL TECHNOLOGIES, INC	319,924.37
731438	14-Aug-2024	SENTINEL TECHNOLOGIES, INC	206,529.06
731738	21-Aug-2024	SENTINEL TECHNOLOGIES, INC	72,685.90
731937	28-Aug-2024	SENTINEL TECHNOLOGIES, INC	17,290.00
731581	20-Aug-2024	SETO, MINDY LIU	808.00

Payment Number	Payment Date	Vendor Name	Amount
731582	20-Aug-2024	SEVEN STRONG ENTERPRISES, LLC	984.00
731778	21-Aug-2024	SF JV-2 NTL BORROWER LLC (R)	42.35
1086676	20-Aug-2024	SFR 2012-1 US WEST LLC	1,252.00
731583	20-Aug-2024	SFR JAVELIN BORROWER LP	2,756.00
1086546	20-Aug-2024	SHAFIQUE, ASHFAQUE B	2,009.00
1086570	20-Aug-2024	SHAHIN, GABRIEL	1,975.00
1086547	20-Aug-2024	SHAMS, SHAIKH	2,312.00
1086672	20-Aug-2024	SHAO, LAN	4,368.00
731660	21-Aug-2024	SHAPIRO, DAVID	5,731.00
731661	21-Aug-2024	SHAPIRO, DAVID	2,410.00
731295	07-Aug-2024	SHARMA, BABITA (R)	29.06
731717	21-Aug-2024	SHEARER, GERALDINE (R)	80.00
1086711	22-Aug-2024	SHI INTERNATIONAL CORP	40,738.92
1086754	29-Aug-2024	SHI INTERNATIONAL CORP	98,782.19
731315	08-Aug-2024	SIECZKOWSKI, JASON M	136.00
731861	28-Aug-2024	SIGNORETTA, ADAM M	348.00
731969	28-Aug-2024	SILVA, JOAO (R)	45.17
731439	14-Aug-2024	SIMPLEVIEW INC	48,497.89
1086520	20-Aug-2024	SINGH, REENA	1,800.00
1086665	20-Aug-2024	SJ PROPERTIES LLC	1,115.00
1086504	20-Aug-2024	SKOGLUND, NANCY B	1,950.00
731440	14-Aug-2024	SKYLINE WINDOW CLEANING	1,390.00
731323	08-Aug-2024	SLABAUGH, INGRID	1,956.00
1086499	15-Aug-2024	SLABAUGH, INGRID	2,850.00
1086647	20-Aug-2024	SLABAUGH, INGRID	1,956.00
731441	14-Aug-2024	SMALL MARKET MEETINGS	300.00
1086554	20-Aug-2024	SMITH, ANA	1,606.00
731662	21-Aug-2024	SMITH, BARRY (R)	65.38
731739	21-Aug-2024	SMITH, RALPH (R)	15.00
731938	28-Aug-2024	SMITH, RICK C.	4,122.50
731237	07-Aug-2024	SNEDIGAR MARTIAL ARTS	2,950.00
731238	07-Aug-2024	SOFT HANDS PRESSURE WASHING	3,285.00
731239	07-Aug-2024	SOL SOURCE PROPERTY SERVICES	450.00
731740	21-Aug-2024	SOL SOURCE PROPERTY SERVICES	600.00
731939	28-Aug-2024	SOLAR TRAFFIC CONTROLS LLC	1,015.42
731940	28-Aug-2024	SOLARI, INC	6,250.00
731481	14-Aug-2024	SOLDEVERE, TAMI (R)	168.50
731240	07-Aug-2024	SORENSON LAW (R)	5.00
731426	14-Aug-2024	SOSA, HECTOR M	62.00
731718	21-Aug-2024	SOSA, HECTOR M	124.00
731924	28-Aug-2024	SOSA, HECTOR M	62.00
731321	08-Aug-2024	SOTO, SARA S	102.00
731741	21-Aug-2024	SOUTH MOUNTAIN DIVE CLUB	1,380.00
731442	14-Aug-2024	SOUTHERN TIRE MART, LLC	8,000.59
731742	21-Aug-2024	SOUTHERN TIRE MART, LLC	2,332.72
731941	28-Aug-2024	SOUTHERN TIRE MART, LLC	1,439.24
731365	14-Aug-2024	SOUTHWEST GAS CORP	1.58
731507	15-Aug-2024	SOUTHWEST GAS CORP	1,740.60
731663	21-Aug-2024	SOUTHWEST GAS CORP	19.59
731841	28-Aug-2024	SOUTHWEST GAS CORP	185.81
1086577	20-Aug-2024	SOUZANDEH, HAMID	1,807.00
731241	07-Aug-2024	SPARKS KARATE	770.00
731242	07-Aug-2024	SPOK, INC	103.96

Payment Number	Payment Date	Vendor Name	Amount
731743	21-Aug-2024	SPORTS BLING & THINGS	2,930.41
731584	20-Aug-2024	SPRINGS REALTY INC	814.00
1086404	08-Aug-2024	SPRINKLER WORLD OF AZ INC	2,305.58
1086485	15-Aug-2024	SPRINKLER WORLD OF AZ INC	2,009.30
1086705	22-Aug-2024	SPRINKLER WORLD OF AZ INC	776.38
1086749	29-Aug-2024	SPRINKLER WORLD OF AZ INC	173.91
731585	20-Aug-2024	SRGMF III PECOS CHANDLER, LLC	1,917.00
731719	21-Aug-2024	STALLINGS, JAMES (R)	35.00
731443	14-Aug-2024	STANLEY CONSULTANTS INC	21,835.17
731942	28-Aug-2024	STARFISH AQUATICS INSTITUTE, LLC	14,800.00
731243	07-Aug-2024	STARGUARD ELITE, LLC	20,500.00
731842	28-Aug-2024	STATE OF ARIZONA	19,354.00
1086561	20-Aug-2024	STONE OAKS APARTMENTS	1,786.00
731586	20-Aug-2024	STONE VIEW PHX LLC	4,941.00
731125	01-Aug-2024	STONE, CHERIE R	529.42
1086376	01-Aug-2024	STOTZ EQUIPMENT	161.27
1086405	08-Aug-2024	STOTZ EQUIPMENT	193.39
1086487	15-Aug-2024	STOTZ EQUIPMENT	68.92
1086706	22-Aug-2024	STOTZ EQUIPMENT	13,882.44
1086596	20-Aug-2024	STRATEGIC CAPITAL ALLIANCE LTD PARTNERSHIP	17,160.00
731587	20-Aug-2024	SUGGS, TERRELL	1,450.00
731744	21-Aug-2024	SUN COUNTRY TRUCK EQUIPMENT INC	3,396.07
731745	21-Aug-2024	SUN MECHANICAL CONTRACTING INC.	76,984.00
731588	20-Aug-2024	SUN, HONGXLA	2,650.00
731244	07-Aug-2024	SUNBELT RENTALS, INC	953.56
731444	14-Aug-2024	SUNBELT RENTALS, INC	18,708.51
731496	14-Aug-2024	SUNDIAL REAL ESTATE LC	968.00
731497	14-Aug-2024	SUNDIAL REAL ESTATE LC	1,100.00
731498	14-Aug-2024	SUNDIAL REAL ESTATE LC	752.00
731589	20-Aug-2024	SUNDIAL REAL ESTATE LC	752.00
731590	20-Aug-2024	SUNDIAL REAL ESTATE LC	968.00
731591	20-Aug-2024	SUNDIAL REAL ESTATE LC	1,100.00
731296	07-Aug-2024	SUNRISE IN CHANDLER OWNER LLC (R)	567.00
731943	28-Aug-2024	SUNSHINE MOVING COMPANY, LLC	900.00
1086521	20-Aug-2024	SUNSHINE REALTY LLC	1,521.00
731746	21-Aug-2024	SUPERIOR COURT OF ARIZONA	290.00
1086377	01-Aug-2024	SUPREME OIL CO	12,844.97
1086406	08-Aug-2024	SUPREME OIL CO	3,012.48
1086488	15-Aug-2024	SUPREME OIL CO	9,770.45
1086648	20-Aug-2024	SURCHIK, EDWARD	1,128.00
731944	28-Aug-2024	SURVEILLANCE SECURITY INC	2,086.25
731245	07-Aug-2024	SUTTON BAY PROPERTIES LLC (R)	46,701.15
731592	20-Aug-2024	SWAY 2014-1 BORROWER LLC	2,085.00
731445	14-Aug-2024	SWFC STORES, LLC	342.50
1086668	20-Aug-2024	SWH 2017-1 BORROWER, LP	6,064.00
1086409	08-Aug-2024	SYSTEMS ELECTRONICS GROUP	1,816.88
1086479	15-Aug-2024	T Y LIN INTERNATIONAL	5,347.24
731747	21-Aug-2024	TAF LIFT TRUCK SERVICE	478.73
1086646	20-Aug-2024	TALAI, FRANCESCO	527.00
1086655	20-Aug-2024	TAM, VIVIAN	707.00
731297	07-Aug-2024	TAN, ROUYU (R)	100.63
731593	20-Aug-2024	TANG, JEANNIE	971.00
731862	28-Aug-2024	TAYLOR, JASON L	525.99

Payment Number	Payment Date	Vendor Name	Amount
731447	14-Aug-2024	TDINDUSTRIES INC	66,332.34
731748	21-Aug-2024	TDINDUSTRIES INC	2,716.59
1086416	08-Aug-2024	TELEVEDA SYSTEMS LLC	4,125.00
1086716	22-Aug-2024	TELEVEDA SYSTEMS LLC	8,250.00
731248	07-Aug-2024	THATCHER COMPANY OF ARIZONA, INC	44,076.75
731448	14-Aug-2024	THATCHER COMPANY OF ARIZONA, INC	79,937.10
731749	21-Aug-2024	THATCHER COMPANY OF ARIZONA, INC	19,294.62
731946	28-Aug-2024	THATCHER COMPANY OF ARIZONA, INC	54,932.54
731970	28-Aug-2024	THE ARGUS REAL ESTATE COMPANY (R)	22.05
731750	21-Aug-2024	THE HOME OUTLET (R)	520.00
731594	20-Aug-2024	THE HOUSING PROFESSIONALS LLC	5,104.00
731971	28-Aug-2024	THE HOUSING PROFESSIONALS LLC (R)	23.15
1086418	08-Aug-2024	THE LAW OFFICE OF JARED ALLEN, PLLC	5,000.00
731298	07-Aug-2024	THE LENNY J GULERMOVICH LIVING TRUST (R)	69.79
1086434	08-Aug-2024	THE LINQ	1,665.00
1086443	14-Aug-2024	THE LINQ	751.00
1086537	20-Aug-2024	THE LINQ	11,997.00
731972	28-Aug-2024	THE REALTY ASSOCIATES FUND XII PORTFOLIO LP (R)	164.80
731299	07-Aug-2024	THOMAS, AMANDA (R)	62.62
731322	08-Aug-2024	THOMAS, ZACHARY G	136.00
1086569	20-Aug-2024	THOMASIAN, BIKI	1,323.00
1086530	20-Aug-2024	THOMASIAN, SAAD	1,950.00
731947	28-Aug-2024	THORN RUN PARTNERS, LLC	7,500.00
731595	20-Aug-2024	THR PHOENIX LP	4,413.00
731596	20-Aug-2024	THR PROPERTY BORROWER LP	2,842.00
731300	07-Aug-2024	THUKU, BENSON (R)	93.36
731170	07-Aug-2024	THUNDERFIRE PRODUCTIONS LLC	2,000.00
1086603	20-Aug-2024	THY LLC	937.00
731597	20-Aug-2024	TIDES AT CHANDLER	1,540.00
731973	28-Aug-2024	TIDWELL, JEFFREY (R)	30.08
731598	20-Aug-2024	TJAHJA, CRYSTAL	1,828.00
731599	20-Aug-2024	TJAHJA, YULIANI	2,126.00
731246	07-Aug-2024	T-MOBILE USA, INC	94.08
731247	07-Aug-2024	T-MOBILE USA, INC	181.48
731446	14-Aug-2024	T-MOBILE USA, INC	59.50
731945	28-Aug-2024	T-MOBILE USA, INC	990.00
731449	14-Aug-2024	TOPETE/STONEFIELD INC	924.00
1086375	01-Aug-2024	TOWN OF GILBERT	167,430.00
1086486	15-Aug-2024	TOWN OF GILBERT	10,031.36
731600	20-Aug-2024	TRADELANDS LLC	2,060.00
731499	14-Aug-2024	TRAN, TOM B	693.00
731601	20-Aug-2024	TRAN, TOM B	624.00
731249	07-Aug-2024	TRANE U.S. INC	3,568.13
731450	14-Aug-2024	TRANE U.S. INC	1,165.56
731751	21-Aug-2024	TRANE U.S. INC	2,748.62
731451	14-Aug-2024	TREELAND NURSERIES, INC	341.69
731752	21-Aug-2024	TREELAND NURSERIES, INC	259.92
731301	07-Aug-2024	TREKK REALTY (R)	16.08
731779	21-Aug-2024	TRINITY HOME INVESTMENTS LLC (R)	25.33
731452	14-Aug-2024	TRISTAR ENGINEERING AND MANAGEMENT INC	13,799.08
1086715	22-Aug-2024	TRISTAR ICS	6,378.87
731302	07-Aug-2024	TRUE TRUDAMAI LLC (R)	33.26
1086490	15-Aug-2024	TSSMC	3,626.00

Payment Number	Payment Date	Vendor Name	Amount
731250	07-Aug-2024	TURF AND SPORT LLC	582.12
731251	07-Aug-2024	UBM ENTERPRISE, INC	392.76
731453	14-Aug-2024	UBM ENTERPRISE, INC	13,592.11
731427	14-Aug-2024	UNGERBOECK SYSTEMS INTERNATIONAL, LLC	26,680.50
1086373	01-Aug-2024	UNIFIRST CORPORATION	315.62
1086402	08-Aug-2024	UNIFIRST CORPORATION	114.78
1086482	15-Aug-2024	UNIFIRST CORPORATION	64.05
1086704	22-Aug-2024	UNIFIRST CORPORATION	216.15
1086748	29-Aug-2024	UNIFIRST CORPORATION	56.19
731753	21-Aug-2024	UNITED ROTARY BRUSH CORPORATION	4,206.73
731252	07-Aug-2024	UNITED SITE SERVICES OF ARIZONA, INC.	379.21
1086379	01-Aug-2024	UNIVAR USA INC	96,100.25
1086410	08-Aug-2024	UNIVAR USA INC	24,277.74
1086491	15-Aug-2024	UNIVAR USA INC	24,489.68
1086708	22-Aug-2024	UNIVAR USA INC	60,969.14
1086751	29-Aug-2024	UNIVAR USA INC	43,137.79
1086710	22-Aug-2024	US BANK	2,725.00
731253	07-Aug-2024	USP TECHNOLOGIES	9,846.72
1086415	08-Aug-2024	VALLEY METRO RPTA	120.00
1086497	15-Aug-2024	VALLEY METRO RPTA	126,587.16
1086757	29-Aug-2024	VALLEY METRO RPTA	118.00
731754	21-Aug-2024	VALLEY OF THE SUN YMCA	10,000.00
1086411	08-Aug-2024	VALLEYWIDE GENERATOR SERVICE LLC	7,145.00
1086493	15-Aug-2024	VALLEYWIDE GENERATOR SERVICE LLC	2,364.90
1086753	29-Aug-2024	VALLEYWIDE GENERATOR SERVICE LLC	280.00
731500	14-Aug-2024	VEGA AND ASSOCIATES REAL ESTATE	331.00
731602	20-Aug-2024	VEGA AND ASSOCIATES REAL ESTATE	331.00
731303	07-Aug-2024	VELORIA, GIANNE (R)	72.47
731603	20-Aug-2024	VENTURA ACQUISITION LLC	3,408.00
1086383	01-Aug-2024	VEOLIA WTS ANALYTICAL INSTRUMENTS, INC	11,587.00
731454	14-Aug-2024	VEOLIA WTS USA, INC	5,728.80
1086378	01-Aug-2024	VERIZON WIRELESS SERVICES LLC	2,225.08
1086407	08-Aug-2024	VERIZON WIRELESS SERVICES LLC	890.75
1086707	22-Aug-2024	VERIZON WIRELESS SERVICES LLC	2,325.53
1086750	29-Aug-2024	VERIZON WIRELESS SERVICES LLC	87.45
731948	28-Aug-2024	VERMEER MOUNTAIN WEST, INC	704.88
1086412	08-Aug-2024	VERRA MOBILITY	44,948.92
1086494	15-Aug-2024	VERRA MOBILITY	3,640.62
1086712	22-Aug-2024	VERRA MOBILITY	55,942.00
1086408	08-Aug-2024	VERRA MOBILITY SYSTEMS	30.97
731780	21-Aug-2024	VESTAR LTV LLC (R)	168.23
731949	28-Aug-2024	VINCON ENGINEERING CONSTRUCTION LLC	122,978.40
731950	28-Aug-2024	VIRTOWER LLC	6,000.00
1086484	15-Aug-2024	VISION SERVICE PLAN OF ARIZONA	32,943.45
1086574	20-Aug-2024	VISTA ASSET COMPANY LLC	2,254.00
1086576	20-Aug-2024	VISTA STAR COMPANY, LLC	9,312.00
731254	07-Aug-2024	VOCATIONAL DIAGNOSTICS INC	1,809.00
731951	28-Aug-2024	VOCATIONAL DIAGNOSTICS INC	837.00
1086480	15-Aug-2024	VOSS LIGHTING	59.61
1086492	15-Aug-2024	VOYA FINANCIAL	87,260.12
1086374	01-Aug-2024	VULCAN MATERIALS CO	647.36
1086403	08-Aug-2024	VULCAN MATERIALS CO	416.16
1086483	15-Aug-2024	VULCAN MATERIALS CO	2,018.75

Payment Number	Payment Date	Vendor Name	Amount
731755	21-Aug-2024	W W WILLIAMS	3,614.77
731952	28-Aug-2024	W W WILLIAMS	158.00
731756	21-Aug-2024	WANG, KE (R)	180.00
731304	07-Aug-2024	WANG, TING (R)	76.29
731455	14-Aug-2024	WARD, SARA ANNE	278.00
1086372	01-Aug-2024	WASTE MANAGEMENT OF ARIZONA, INC	428.50
1086481	15-Aug-2024	WASTE MANAGEMENT OF ARIZONA, INC	71,160.75
1086701	22-Aug-2024	WASTE MANAGEMENT OF ARIZONA, INC	1,134,361.37
731757	21-Aug-2024	WATER & ENERGY SYSTEMS TECHNOLOGY INC	2,306.75
731953	28-Aug-2024	WATER WORKS ENGINEERS, LLC	7,128.75
731604	20-Aug-2024	WATER'S EDGE AT OCOTILLO	1,569.00
1086621	20-Aug-2024	WATTS, ELSKA M.	146.00
1086382	01-Aug-2024	WAXIE SANITARY SUPPLY	5,116.70
1086414	08-Aug-2024	WAXIE SANITARY SUPPLY	6,452.48
1086496	15-Aug-2024	WAXIE SANITARY SUPPLY	124.93
1086713	22-Aug-2024	WAXIE SANITARY SUPPLY	3,887.29
1086755	29-Aug-2024	WAXIE SANITARY SUPPLY	170.09
731605	20-Aug-2024	WEALTH BUILDER REAL ESTATE	758.00
731305	07-Aug-2024	WEAVER, DOMINIC (R)	87.43
731306	07-Aug-2024	WEILAND, CHEYANNE (R)	32.98
731974	28-Aug-2024	WEISS, WILLIAM (R)	38.64
731255	07-Aug-2024	WEST COAST ARBORISTS, INC	8,835.00
731606	20-Aug-2024	WEST USA REALTY, INC.	2,502.00
731975	28-Aug-2024	WESTERMAN, MINA (R)	23.94
1086700	22-Aug-2024	WESTERN ENVIRONMENTAL EQUIPMENT COMPANY	19,735.27
731758	21-Aug-2024	WESTERN TECHNOLOGIES INC	1,670.00
731781	21-Aug-2024	WHIP AZ II LLC (R)	245.22
731954	28-Aug-2024	WHITE & ASSOCIATES	1,074.70
731607	20-Aug-2024	WHITMAN, STEVEN	2,789.00
731256	07-Aug-2024	WIENEKE LAW GROUP PLC	26,382.60
731955	28-Aug-2024	WIENEKE LAW GROUP PLC	9,356.60
731956	28-Aug-2024	WILSON ENGINEERS, LLC	15,088.75
731257	07-Aug-2024	WILSON, PEARL (R)	19.55
1086536	20-Aug-2024	WIND RIVER 88 LLC	1,598.00
1086380	01-Aug-2024	WIST BUSINESS SUPPLIES & EQUIPMENT	396.94
1086709	22-Aug-2024	WIST BUSINESS SUPPLIES & EQUIPMENT	330.78
1086752	29-Aug-2024	WIST BUSINESS SUPPLIES & EQUIPMENT	330.79
1086417	08-Aug-2024	WITTE LIGHTING SERVICES & REPAIR, LLC	119.54
1086567	20-Aug-2024	WL INVESTMENT LLC	1,802.00
1086623	20-Aug-2024	WONG, CHRISTOPHER DINH	1,046.00
731759	21-Aug-2024	WORKSBUREAU, INC	2,315.60
731760	21-Aug-2024	WRIGHT, WANDA	500.00
1086714	22-Aug-2024	WSP USA ENVIRONMENT & INFRASTRUCTURE INC	620,020.48
1086756	29-Aug-2024	WSP USA ENVIRONMENT & INFRASTRUCTURE INC	869.16
1086632	20-Aug-2024	WU, SUYUAN LIN	4,410.00
1086598	20-Aug-2024	WUZ 66 RENTAL LLC	2,580.00
1086617	20-Aug-2024	XIA, JINGNA	1,257.00
1086651	20-Aug-2024	XIAO, HONG MEI	2,150.00
1086618	20-Aug-2024	XIE, YUN	2,996.00
731957	28-Aug-2024	XU, WANPENG	1,520.00
731608	20-Aug-2024	YAMASA CO. LTD	1,827.00
1086593	20-Aug-2024	YASSIR, YOUSEF	2,700.00
1086674	20-Aug-2024	YIN, WENBI	793.00

Payment Number	Payment Date	Vendor Name	Amount
1086583	20-Aug-2024	YO, TIMOTHY	1,664.00
731863	28-Aug-2024	YOUNG, ANTHONY D	276.00
1086654	20-Aug-2024	ZHANG, JUNLI	1,193.00
1086652	20-Aug-2024	ZHANG, QISHENG	2,112.00
731609	20-Aug-2024	ZHENG, SHAO MEI	2,200.00
1086999	27-Sep-2024	1112 NORTH CALIFORNIA STREET PROPERTY LLC	1,300.00
1087075	27-Sep-2024	1125 CALIFORNIA LLC	3,430.00
732741	27-Sep-2024	2013-1 IH BORROWER LP	578.00
732742	27-Sep-2024	2017-1 IH BORROWER LP	5,281.00
732743	27-Sep-2024	2017-2 IH BORROWER LP	1,525.00
732744	27-Sep-2024	2018-1 IH BORROWER LP	1,747.00
732745	27-Sep-2024	2018-2 IH BORROWER LP	1,916.00
732746	27-Sep-2024	2018-4 IH BORROWER LP	2,277.00
731982	04-Sep-2024	2060 DIGITAL LLC, PHOENIX	10,050.00
1087074	27-Sep-2024	330 N COMANCHE LLC	7,565.00
1086991	27-Sep-2024	372 CHIPPEWA LLC	4,596.00
1086854	11-Sep-2024	847 RAY LLC	290.00
1087065	27-Sep-2024	847 RAY LLC	13,167.00
732747	27-Sep-2024	99 N COOPER 133 LLC	1,315.00
731983	04-Sep-2024	A MIND FOR DETAIL INC	650.00
732378	18-Sep-2024	A MIND FOR DETAIL INC	6,916.25
732551	25-Sep-2024	A MIND FOR DETAIL INC	650.00
1087098	27-Sep-2024	ABDELKARIM, RABAH	2,084.00
1086812	11-Sep-2024	ABOUT CARE INC	12,500.00
732303	11-Sep-2024	ABRAMSON, BRETT (R)	14.28
1086996	27-Sep-2024	ABUNDANT BLESSING LLC	9,631.00
1086870	19-Sep-2024	ACCELA INC	327,452.80
732379	18-Sep-2024	ACE UNIFORMS OF PHOENIX	1,908.56
732552	25-Sep-2024	ACE UNIFORMS OF PHOENIX	1,038.95
1086801	11-Sep-2024	ACHEN GARDNER CONSTRUCTION LLC	131,541.87
1086872	19-Sep-2024	ACHEN GARDNER CONSTRUCTION LLC	213,750.00
1086925	26-Sep-2024	ACHEN GARDNER CONSTRUCTION LLC	390,619.18
732380	18-Sep-2024	ADP INTERPRETING LLC	1,470.00
732553	25-Sep-2024	ADP INTERPRETING LLC	1,470.00
732554	25-Sep-2024	ADVANCE AUTO PARTS	244.26
731984	04-Sep-2024	ADVANCED EXERCISE EQUIPMENT, INC	3,226.74
732381	18-Sep-2024	AFLAC	324.19
1087033	27-Sep-2024	AGARWAL, ABHISHEK	1,859.00
1086859	11-Sep-2024	AGARWAL, GOVIND KUMAR	3,182.00
1087038	27-Sep-2024	AGARWAL, GOVIND KUMAR	3,182.00
1086998	27-Sep-2024	AH PROPERTIES	2,353.00
732748	27-Sep-2024	AHMETOVIC, AMILA	2,100.00
1087046	27-Sep-2024	AILEEN CHU HOLDINGS LLC	7,135.00
731985	04-Sep-2024	AIRPARK SIGNS & GRAPHICS	3,128.48
732118	11-Sep-2024	AIRPARK SIGNS & GRAPHICS	1,925.37
732119	11-Sep-2024	AJ LAW GROUP, PLC	5,000.00
732304	11-Sep-2024	ALAITHAN, HANA (R)	86.41
732382	18-Sep-2024	ALDECOA, RAMON T	6,897.00
732120	11-Sep-2024	ALIGHT SOLUTIONS LLC	20,965.60
732383	18-Sep-2024	ALIGHT SOLUTIONS LLC	6,954.41
1086763	05-Sep-2024	ALL CITY TOWING	60.00
1086807	11-Sep-2024	ALL CITY TOWING	48.00
1086868	19-Sep-2024	ALL CITY TOWING	168.00

Payment Number	Payment Date	Vendor Name	Amount
1086921	26-Sep-2024	ALL CITY TOWING	48.00
1086762	05-Sep-2024	ALL THE KING'S FLAGS	201.15
1086798	11-Sep-2024	ALL THE KING'S FLAGS	541.44
732305	11-Sep-2024	ALLEN, JESSICA (R)	191.46
732089	04-Sep-2024	ALLIANCE EQUITY, LLC (R)	89.01
732384	18-Sep-2024	ALLIED UNIVERSAL JANITORIAL SERVICES	5,873.61
732555	25-Sep-2024	ALLIED UNIVERSAL JANITORIAL SERVICES	83,311.71
731986	04-Sep-2024	ALLIED UNIVERSAL SECURITY SERVICES	1,188.00
732121	11-Sep-2024	ALLIED UNIVERSAL SECURITY SERVICES	1,188.00
732385	18-Sep-2024	ALLIED UNIVERSAL SECURITY SERVICES	950.40
732556	25-Sep-2024	ALLIED UNIVERSAL SECURITY SERVICES	1,188.00
1086978	27-Sep-2024	ALSAMKARI I, LLC	2,566.00
731987	04-Sep-2024	ALTEC INDUSTRIES INC	332.69
1087032	27-Sep-2024	AM PRESTIGE REAL ESTATE, LLC	2,116.00
731988	04-Sep-2024	AM SIGNAL, LLC	43,093.50
732386	18-Sep-2024	AM SIGNAL, LLC	27,827.92
732557	25-Sep-2024	AM SIGNAL, LLC	21,204.71
732749	27-Sep-2024	AMARNATH, PAVAN KUMAR	2,488.00
732536	19-Sep-2024	AMAYA, DANIELLE R	178.57
732306	11-Sep-2024	AMBARI, ARVIND (R)	65.76
732122	11-Sep-2024	AMERICAN CANCER SOCIETY #8WHCTQ (R)	1,809.00
732123	11-Sep-2024	AMERICAN REFRIGERATION SUPPLIES INC	163.72
732558	25-Sep-2024	AMERICAN REFRIGERATION SUPPLIES INC	3,977.80
732559	25-Sep-2024	AMERICAN WATER COLLEGE, LLC	10,950.00
732750	27-Sep-2024	AMH 2014-1 BORROWER, LLC	2,513.00
731989	04-Sep-2024	AMS PLANNING & RESEARCH CORP	12,200.00
732560	25-Sep-2024	AMS PLANNING & RESEARCH CORP	11,420.78
1086976	27-Sep-2024	ANBARI, MOH BASSAM	2,195.00
732124	11-Sep-2024	ANCON	23,478.84
732387	18-Sep-2024	ANCON	6,595.02
1086858	11-Sep-2024	ANDRAWES, ANTHONY M.	239.00
1087036	27-Sep-2024	ANDRAWES, ANTHONY M.	1,200.00
1086767	05-Sep-2024	ANDREW'S REFRIGERATIONS INC	13,369.71
1086804	11-Sep-2024	ANDREW'S REFRIGERATIONS INC	9,211.51
732751	27-Sep-2024	ANN L. CHANG, TRUSTEE OF THE ANN L. CHANG LIVING TRUST	2,479.00
1086878	19-Sep-2024	ANTHEM LIFE INSURANCE COMPANY	15,456.76
732752	27-Sep-2024	APC 2020 INVESTMENT, LLC	17,860.00
731990	04-Sep-2024	APL ACCESS & SECURITY	280.00
732561	25-Sep-2024	APL ACCESS & SECURITY	1,313.43
732562	25-Sep-2024	AQUAFIT CHLORINATION SYSTEMS, LLC	26,250.25
731991	04-Sep-2024	ARCADIS US INC	19,042.70
732563	25-Sep-2024	ARCADIS US INC	2,825.25
732125	11-Sep-2024	ARCAN, UGUR (R)	15.00
732126	11-Sep-2024	ARCHITECTURAL BUILDING SYSTEMS, LLC	5,022.35
732753	27-Sep-2024	ARDA, JAMET E	1,792.00
1086877	19-Sep-2024	ARDURRA GROUP, INC	39,051.25
732711	25-Sep-2024	ARGALL, JUSTIN (R)	46.53
1086799	11-Sep-2024	ARIZONA 811	1,701.09
732388	18-Sep-2024	ARIZONA CART SERVICES, INC	192.00
731992	04-Sep-2024	ARIZONA ELECTRIC SUPPLY-MESA	2,463.83
732127	11-Sep-2024	ARIZONA ELECTRIC SUPPLY-MESA	2,053.37
732564	25-Sep-2024	ARIZONA ELECTRIC SUPPLY-MESA	1,133.03
732389	18-Sep-2024	ARIZONA ELEVATOR SOLUTIONS, INC	5,692.86

Payment Number	Payment Date	Vendor Name	Amount
1087044	27-Sep-2024	ARIZONA ELITE PROPERTIES	2,436.00
1086764	05-Sep-2024	ARIZONA EMERGENCY PRODUCTS	23,986.22
1086808	11-Sep-2024	ARIZONA EMERGENCY PRODUCTS	22,851.90
1086922	26-Sep-2024	ARIZONA EMERGENCY PRODUCTS	588.39
732565	25-Sep-2024	ARIZONA MUNICIPAL WATER USERS ASSOC	124,114.00
732390	18-Sep-2024	ARIZONA OFFICE TECHNOLOGIES	132.19
1086760	05-Sep-2024	ARIZONA PEST PREVENTION	90.00
1086797	11-Sep-2024	ARIZONA PEST PREVENTION	95.00
1086865	19-Sep-2024	ARIZONA PEST PREVENTION	40.00
1086916	26-Sep-2024	ARIZONA PEST PREVENTION	215.00
732128	11-Sep-2024	ARIZONA POWER AUTHORITY	2,688.36
732512	18-Sep-2024	ARIZONA PROPERTY BROKER (R)	147.01
731993	04-Sep-2024	ARIZONA PUBLIC SERVICE COMPANY	56.94
732102	05-Sep-2024	ARIZONA PUBLIC SERVICE COMPANY	1,600.61
732129	11-Sep-2024	ARIZONA PUBLIC SERVICE COMPANY	1,745.01
732391	18-Sep-2024	ARIZONA PUBLIC SERVICE COMPANY	319.06
732528	18-Sep-2024	ARIZONA PUBLIC SERVICE COMPANY	5,830.00
732130	11-Sep-2024	ARIZONA RUBBER COMPANY, INC	439.94
732566	25-Sep-2024	ARIZONA RUBBER COMPANY, INC	207.72
731994	04-Sep-2024	ARIZONA STATE TREASURER	89,424.00
732131	11-Sep-2024	ARIZONA STATE TREASURER	267,525.71
1086769	05-Sep-2024	ARIZONA'S BEST, INC	169.00
1086794	11-Sep-2024	ARIZONA'S BEST, INC	4,222.00
1086875	19-Sep-2024	ARIZONA'S BEST, INC	4,220.00
1086928	26-Sep-2024	ARIZONA'S BEST, INC	497.00
731995	04-Sep-2024	ARNOLD, ALISA (R)	10.00
731996	04-Sep-2024	ART OF KEYMINTT LLC	1,500.00
1086766	05-Sep-2024	ARTHUR J GALLAGHER RISK MANAGEMENT SERVICES INC	27,000.00
1086759	05-Sep-2024	ARTISTIC LAND MANAGEMENT INC	7,600.01
1086796	11-Sep-2024	ARTISTIC LAND MANAGEMENT INC	33,993.89
1086864	19-Sep-2024	ARTISTIC LAND MANAGEMENT INC	93,074.20
1086915	26-Sep-2024	ARTISTIC LAND MANAGEMENT INC	15,805.52
731997	04-Sep-2024	AT&T MOBILITY	851.77
732017	04-Sep-2024	AT&T MOBILITY	52,031.94
732567	25-Sep-2024	AT&T MOBILITY	930.20
732593	25-Sep-2024	AT&T MOBILITY	26,964.44
1086810	11-Sep-2024	ATTORNEY OF LAW	5,000.00
732392	18-Sep-2024	AXON ENTERPRISE, INC.	39,214.48
1087077	27-Sep-2024	AZ HOME FOR US	1,792.00
732754	27-Sep-2024	AZ REAL HOLDINGS LLC	2,452.00
1086970	27-Sep-2024	AZ REALTY PROPERTY HOLDINGS, LLC	7,258.00
1086926	26-Sep-2024	AZCEND	73,750.00
1087020	27-Sep-2024	AZLTRE LLC	1,473.00
732393	18-Sep-2024	AZTEC ENGINEERING GROUP, INC	76,252.10
732568	25-Sep-2024	B&E APPRAISAL SERVICE LLC	224.50
732394	18-Sep-2024	B&F CONTRACTING INC	1,892,089.16
732569	25-Sep-2024	B&F CONTRACTING INC	1,577,101.06
732132	11-Sep-2024	B&H FOTO & ELECTRONICS CORP	59,465.70
732018	04-Sep-2024	BAEZ, NOE A. JR	1,500.00
1086981	27-Sep-2024	BAKASH LLC	2,326.00
1086863	19-Sep-2024	BALAR EQUIPMENT	265,441.81
732546	19-Sep-2024	BALLET ARIZONA	15,000.00
1086758	03-Sep-2024	BANK OF AMERICA	1,129,106.70

Payment Number	Payment Date	Vendor Name	Amount
732395	18-Sep-2024	BANNER HEALTH (R)	10.00
732396	18-Sep-2024	BANNER OCCUPATIONAL HEALTH CLINICS	50.00
1087134	27-Sep-2024	BARKDOLL PROPERTIES LLC	8,746.00
731998	04-Sep-2024	BARKER RINKER SEACAT ARCHITECTURE	40,638.79
732570	25-Sep-2024	BARKER RINKER SEACAT ARCHITECTURE	18,653.40
732513	18-Sep-2024	BARR, BARRY (R)	37.63
732103	05-Sep-2024	BARTOSIK, HALEY E	148.00
1086988	27-Sep-2024	BASA, VIJAYA KUMAR	2,700.00
732307	11-Sep-2024	BASS, JOSEPH (R)	109.57
1086795	11-Sep-2024	BAVCO	3,208.13
732529	18-Sep-2024	BCORE MF ARCHES LLC	985.00
732755	27-Sep-2024	BCORE MF ARCHES LLC	52,249.00
1086977	27-Sep-2024	BEAUX, CANDACE	1,227.00
1086968	27-Sep-2024	BECKMAN, KRISTI M	2,230.00
732308	11-Sep-2024	BEHNKE, GARY (R)	219.84
1086929	26-Sep-2024	BELLAMY, BARBARA	1,852.50
732133	11-Sep-2024	BENNETTE DAWSON ED. D. PSYCHOLOGIST	175.00
732309	11-Sep-2024	BERHANE, YONAS (R)	44.66
732104	05-Sep-2024	BERNER, ERIC M	96.00
732537	19-Sep-2024	BERRY, ERIKA M	266.34
1087010	27-Sep-2024	BEST NEIGHBORS, LLC	2,217.00
1087022	27-Sep-2024	BHATT, AMAR BHARAT	1,887.00
732571	25-Sep-2024	BIDDLE & BROWN FENCE CO LLC	2,629.78
732397	18-Sep-2024	BIEL'S INFORMATION TECHNOLOGY SYSTEMS	84,050.54
1086856	11-Sep-2024	BIG STAR PROPERTIES, LLC	2,633.00
1087085	27-Sep-2024	BIG STAR PROPERTIES, LLC	10,718.00
731999	04-Sep-2024	BINGHAM EQUIPMENT COMPANY	952.36
732134	11-Sep-2024	BINGHAM EQUIPMENT COMPANY	134.16
732398	18-Sep-2024	BINGHAM EQUIPMENT COMPANY	122.28
732572	25-Sep-2024	BINGHAM EQUIPMENT COMPANY	99.92
732431	18-Sep-2024	BINGHAM, KEVIN (R)	72.00
732310	11-Sep-2024	BINNS, MERCEDES (R)	41.38
732665	25-Sep-2024	BLEVINS, COLLEEN (R)	336.00
732135	11-Sep-2024	BLOOD ALCOHOL TESTING & CONSULTING, LLC	150.00
1087090	27-Sep-2024	BMF IV AZ LAGUNA VILLAGE LLC	19,155.00
732237	11-Sep-2024	BOGART, ANNTOINETTE G	42.60
732000	04-Sep-2024	BORDER STATES ELECTRIC SUPPLY	595.26
1087063	27-Sep-2024	BOSCHEE, CHARLES L	1,696.00
1087021	27-Sep-2024	BOTROS, ASAMA	2,300.00
732001	04-Sep-2024	BOUND TREE MEDICAL LLC	3,335.53
732399	18-Sep-2024	BOUND TREE MEDICAL LLC	9,138.49
732573	25-Sep-2024	BOUND TREE MEDICAL LLC	1,318.34
1087068	27-Sep-2024	BRAVO, DEBORAH LYNN	1,161.00
732311	11-Sep-2024	BREA, EMILI (R)	12.49
732756	27-Sep-2024	BREIT MF LUMIERE CHANDLER LLC	1,317.00
1086811	11-Sep-2024	BRENNTAG PACIFIC INC	27,548.52
1086869	19-Sep-2024	BRENNTAG PACIFIC, INC	1,896.42
1086923	26-Sep-2024	BRENNTAG PACIFIC, INC	19,701.83
1086876	19-Sep-2024	BRIGHT BROTHERS LLC	55,000.00
1086768	05-Sep-2024	BRIGHTVIEW LANDSCAPE SERVICES, INC	22,619.23
1086806	11-Sep-2024	BRIGHTVIEW LANDSCAPE SERVICES, INC	533.50
1086874	19-Sep-2024	BRIGHTVIEW LANDSCAPE SERVICES, INC	422,210.12
1086927	26-Sep-2024	BRIGHTVIEW LANDSCAPE SERVICES, INC	16,583.33

Payment Number	Payment Date	Vendor Name	Amount
732400	18-Sep-2024	BRINK'S, INCORPORATED	4,594.50
1087086	27-Sep-2024	BROADWAY ROAD PROPERTY LLC	1,209.00
732002	04-Sep-2024	BROOKSIES PROPANE	68.71
1087012	27-Sep-2024	BROTHERS TAEKWON DO INC	1,323.00
1086914	26-Sep-2024	BROWN AND CALDWELL	12,762.96
732723	26-Sep-2024	BROWN, TAYLOR P	319.00
1086813	11-Sep-2024	BSN SPORTS INC	1,952.96
732724	26-Sep-2024	BUCKLEY, TYLER J	247.34
732003	04-Sep-2024	BUESING CORPORATION	150.00
732136	11-Sep-2024	BUESING CORPORATION	40.00
732574	25-Sep-2024	BUESING CORPORATION	150.00
732757	27-Sep-2024	BULLSEYE PROPERTY MANAGEMENT, LLC	1,510.00
1087127	27-Sep-2024	BURCH, CHRISTOPHER	1,433.00
1087099	27-Sep-2024	BURNHAM, TIMOTHY	1,190.00
732004	04-Sep-2024	C&S ENGINEERS, INC	53,224.75
732137	11-Sep-2024	C&S ENGINEERS, INC	63,986.25
732401	18-Sep-2024	CACTUS ASPHALT	1,193,857.87
732758	27-Sep-2024	CALDWELL PROPERTY SOLUTIONS	1,011.00
1086803	11-Sep-2024	CALIENTE CONSTRUCTION INC	36,871.37
732725	26-Sep-2024	CALLIS, HEATHER L	217.39
732051	04-Sep-2024	CAMACHO, DANIELLE J (R)	19.00
732312	11-Sep-2024	CANCHOLA, STEFAN (R)	62.08
732138	11-Sep-2024	CARBON ACTIVATED CORPORATION	55,006.80
732402	18-Sep-2024	CARBON ACTIVATED CORPORATION	52,550.40
732313	11-Sep-2024	CAVA, FRANK (R)	67.70
732139	11-Sep-2024	CDW GOVERNMENT, LLC	4,773.80
1086918	26-Sep-2024	CENTRAL ARIZONA PROJECT	446,710.25
1086873	19-Sep-2024	CENTURYLINK	0.07
732238	11-Sep-2024	CHAMBERLAIN, JESSICA L	104.00
732594	25-Sep-2024	CHAMBERS, PEPPUR	500.00
732403	18-Sep-2024	CHANDLER COMMUNITY OF CHRIST (R)	125.35
1087083	27-Sep-2024	CHANDLER GARDENS	20,533.00
732005	04-Sep-2024	CHANDLER MUNICIPAL COURT	27.00
1086848	11-Sep-2024	CHANDLER PROPERTY DEVELOPMENT ASSOCIATES LTD PTR (231-1)	12.00
1087106	27-Sep-2024	CHANDLER PROPERTY DEVELOPMENT ASSOCIATES LTD PTR (231-1)	18,687.00
732140	11-Sep-2024	CHANDLER SCHOOL BOOSTERS, INC.	1,000.00
732141	11-Sep-2024	CHANDLER UNIFIED SCHOOL DISTRICT #80	200.00
732142	11-Sep-2024	CHANDLER UNIFIED SCHOOL DISTRICT #80	10,000.00
732143	11-Sep-2024	CHANDLER UNIFIED SCHOOL DISTRICT #80	200.00
732144	11-Sep-2024	CHANDLER UNIFIED SCHOOL DISTRICT #80	200.00
732145	11-Sep-2024	CHANDLER UNIFIED SCHOOL DISTRICT #80	200.00
732314	11-Sep-2024	CHANDLER VILLAGE CENTER LLC (R)	4,385.43
732105	05-Sep-2024	CHAPMAN, SCOTT R	148.00
732146	11-Sep-2024	CHARGEPOINT INC	6,167.16
732575	25-Sep-2024	CHARGEPOINT INC	2,040.00
1086809	11-Sep-2024	CHASSE BUILDING TEAM INC	1,925,681.10
732315	11-Sep-2024	CHAVEZ, MATTHEW (R)	10.46
732147	11-Sep-2024	CHEN, MAGGIE	62.00
732404	18-Sep-2024	CHEN, MAGGIE	62.00
732576	25-Sep-2024	CHEN, MAGGIE	62.00
732239	11-Sep-2024	CHILAKAMARRI, ANANTHA L	150.00
732148	11-Sep-2024	CHILD CRISIS ARIZONA	8,750.00
732006	04-Sep-2024	CHILLER CITY CORPORATION	4,848.00

Payment Number	Payment Date	Vendor Name	Amount
732052	04-Sep-2024	CHU, R (R)	171.00
732007	04-Sep-2024	CINTAS CORPORATION	3,276.61
732149	11-Sep-2024	CINTAS CORPORATION	2,297.05
732405	18-Sep-2024	CINTAS CORPORATION	173.59
732577	25-Sep-2024	CINTAS CORPORATION	2,199.90
732008	04-Sep-2024	CITY ELECTRIC SUPPLY	76.90
732578	25-Sep-2024	CITY ELECTRIC SUPPLY	23.61
732579	25-Sep-2024	CITY OF MESA	600.00
732362	11-Sep-2024	CITY OF ORLANDO HOUSING AUTHORITY	1,226.16
732406	18-Sep-2024	CITY OF PHOENIX	375.60
732407	18-Sep-2024	CITY OF PHOENIX	20,822.00
732580	25-Sep-2024	CITY OF PHOENIX	204,426.24
732150	11-Sep-2024	CITY OF TEMPE	10,692.40
1086919	26-Sep-2024	CITY WIDE PEST CONTROL INC	2,062.00
732408	18-Sep-2024	CLARK HILL PLC	21,079.65
732240	11-Sep-2024	CLARK, KRISTINE F	261.00
1086913	26-Sep-2024	CLEANVIEW SEWER INSPECTIONS LLC	1,748.81
1086935	26-Sep-2024	CLOTHES CABIN	12,500.00
732759	27-Sep-2024	CLUB CANCUN APARTMENTS	2,004.00
732151	11-Sep-2024	COLAB STUDIO, LLC	40,000.00
732316	11-Sep-2024	COLLINS, JENNALEE (R)	16.06
732009	04-Sep-2024	COMMERCIAL POOL REPAIR	29,051.84
732152	11-Sep-2024	COMMERCIAL POOL REPAIR	842.40
732409	18-Sep-2024	COMMERCIAL POOL REPAIR	5,843.02
732581	25-Sep-2024	COMMERCIAL POOL REPAIR	13,428.10
732010	04-Sep-2024	COMPUTER AID, INC	194,750.69
732410	18-Sep-2024	COMPUTER AID, INC	119,429.00
732582	25-Sep-2024	COMPUTER AID, INC	21,937.50
732153	11-Sep-2024	CONFERENCEDIRECT	30,500.00
732154	11-Sep-2024	CONFIENCE	14,831.00
1086867	19-Sep-2024	CONSULTANT ENGINEERING INC	47,309.75
1086920	26-Sep-2024	CONSULTANT ENGINEERING INC	23,993.00
732583	25-Sep-2024	CONTRACTOR FIRE PROTECTION	777.36
732712	25-Sep-2024	CONWAY, CHAD O (R)	76.40
732411	18-Sep-2024	CORDES, DONALD (R)	10.00
732011	04-Sep-2024	CORE & MAIN LP	13,444.31
732155	11-Sep-2024	CORE & MAIN LP	7,614.04
732412	18-Sep-2024	CORE & MAIN LP	97,271.45
732584	25-Sep-2024	CORE & MAIN LP	12,139.60
732413	18-Sep-2024	CORE CONSTRUCTION INC	544,182.48
732117	06-Sep-2024	CORPORATE INTERIOR SYSTEMS (CIS)	32,794.61
732156	11-Sep-2024	CORPORATE INTERIOR SYSTEMS (CIS)	3,664.51
732585	25-Sep-2024	CORPORATE INTERIOR SYSTEMS (CIS)	308,519.41
1087114	27-Sep-2024	COSTALES, ABEL	696.00
732550	20-Sep-2024	COSTAR REALTY INFORMATION, INC	9,080.35
732414	18-Sep-2024	COX BUSINESS	1,605.00
732012	04-Sep-2024	CRAWFORD MECHANICAL SERVICES, LLC	1,801.00
732157	11-Sep-2024	CRAWFORD MECHANICAL SERVICES, LLC	29,743.54
732415	18-Sep-2024	CRAWFORD MECHANICAL SERVICES, LLC	16,782.49
732586	25-Sep-2024	CRAWFORD MECHANICAL SERVICES, LLC	1,948.01
732538	19-Sep-2024	CRAWFORD, STEWART F	100.00
732158	11-Sep-2024	CRISIS PREPARATION & RECOVERY	300.00
732317	11-Sep-2024	CRUZ, GENEVIEVE (R)	21.22

Payment Number	Payment Date	Vendor Name	Amount
732713	25-Sep-2024	CUEVAS, EDGAR (R)	322.46
1086761	05-Sep-2024	CURTIS BLUE LINE	2,765.34
1086816	11-Sep-2024	CURTIS BLUE LINE	14,957.25
1086866	19-Sep-2024	CURTIS BLUE LINE	25,986.11
1086917	26-Sep-2024	CURTIS BLUE LINE	882.06
1086944	26-Sep-2024	CURTIS BLUE LINE	45,435.81
732107	05-Sep-2024	CUTHBERTSON, EDDIE M	316.00
732416	18-Sep-2024	CUTTERS DOCUMENT DESTRUCTION, LLC	159.95
732318	11-Sep-2024	CUTTING, DANE (R)	72.41
732159	11-Sep-2024	CYRACOM INTERNATIONAL, INC	1,212.02
732090	04-Sep-2024	CYWINSKI, ANTHONY (R)	302.29
732160	11-Sep-2024	D L SALES CORP	5,321.67
732417	18-Sep-2024	D&H WATER SYSTEMS INC	58,189.70
732587	25-Sep-2024	D&H WATER SYSTEMS INC	10,358.81
1086805	11-Sep-2024	D.H. PACE COMPANY, INC	38,249.55
1087001	27-Sep-2024	DAVID INVESTMENT LLC	1,023.00
732013	04-Sep-2024	DAY AUTO SUPPLY, INC	1,827.36
732161	11-Sep-2024	DAY AUTO SUPPLY, INC	2,182.13
732418	18-Sep-2024	DAY AUTO SUPPLY, INC	890.93
732588	25-Sep-2024	DAY AUTO SUPPLY, INC	1,126.11
732589	25-Sep-2024	DBA CONSTRUCTION, INC	490,628.20
732319	11-Sep-2024	DCRE HOLDINGS LLC (R)	46.40
732014	04-Sep-2024	DECA SOUTHWEST	1,191.30
732162	11-Sep-2024	DECA SOUTHWEST	5,779.35
732419	18-Sep-2024	DECA SOUTHWEST	70.00
732590	25-Sep-2024	DECA SOUTHWEST	4,553.97
732420	18-Sep-2024	DELTA DENTAL OF ARIZONA	195,456.86
732421	18-Sep-2024	DELTA DENTAL OF ARIZONA	11,163.87
732163	11-Sep-2024	DESERT TOX, LLC	973.20
732514	18-Sep-2024	DIAZ, JOEL (R)	35.96
732164	11-Sep-2024	DIBBLE & ASSOCIATES CONSULTING ENGINEERS, INC	87,374.23
732422	18-Sep-2024	DIBBLE & ASSOCIATES CONSULTING ENGINEERS, INC	4,729.00
732165	11-Sep-2024	DIBBLE CM, LLC	89,380.00
732015	04-Sep-2024	DICK & FRITSCHE DESIGN GROUP, INC	11,534.15
732166	11-Sep-2024	DIG STUDIO INC	17,821.00
1086802	11-Sep-2024	DNG CONSTRUCTION	109,229.40
732595	25-Sep-2024	DOBBS, KATE (R)	19.99
732591	25-Sep-2024	DOBSON FARMS V, LLC	12,911.40
732167	11-Sep-2024	DOMINY, MATTHEW	1,329.00
732168	11-Sep-2024	DOOLEY ENTERPRISES, INC	20,937.96
732320	11-Sep-2024	DORANTES, MARTIN (R)	25.10
732760	27-Sep-2024	DOUGLAS, SHAWN K	2,903.00
732109	05-Sep-2024	DRYER, MEGAN C	507.00
732321	11-Sep-2024	DU, REI (R)	55.00
732761	27-Sep-2024	DUCKS & ASSOC REALTY INC	1,912.00
732423	18-Sep-2024	DULBERG, ADAM	250.00
1086853	11-Sep-2024	DUPAGE HOUSING AUTHORITY	3,132.16
1086765	05-Sep-2024	DYE CARBONIC	3,226.73
1086800	11-Sep-2024	DYE CARBONIC	820.33
1086871	19-Sep-2024	DYE CARBONIC	1,026.30
1086924	26-Sep-2024	DYE CARBONIC	1,598.59
1086930	26-Sep-2024	DYNAMIC OFFICIALS AND SPORTS	2,730.00
732019	04-Sep-2024	EARNHARDT	4,724.13

Payment Number	Payment Date	Vendor Name	Amount
732020	04-Sep-2024	EARNHARDT	238.24
732176	11-Sep-2024	EARNHARDT	126.45
732177	11-Sep-2024	EARNHARDT	1,464.36
732432	18-Sep-2024	EARNHARDT	410.77
732433	18-Sep-2024	EARNHARDT	4,757.82
732596	25-Sep-2024	EARNHARDT	1,785.15
732597	25-Sep-2024	EARNHARDT	502.07
732021	04-Sep-2024	EARNHARDT CHEVROLET	10,510.63
732178	11-Sep-2024	EARNHARDT CHEVROLET	11,676.47
732434	18-Sep-2024	EARNHARDT CHEVROLET	20.74
732598	25-Sep-2024	EARNHARDT CHEVROLET	78.10
732106	05-Sep-2024	ECKWOOD, CORNATHAN	362.00
1087047	27-Sep-2024	EDB ENTERPRISE LLC	2,260.00
732091	04-Sep-2024	EDJOURIAN, NEVART (R)	19.70
1087053	27-Sep-2024	EKSS LLC	2,057.00
732322	11-Sep-2024	ELICERIO, RAFAEL (R)	11.15
732599	25-Sep-2024	ELONTEC, LLC	6,477.40
732600	25-Sep-2024	EMCOR SERVICES ARIZONA	224,969.00
732022	04-Sep-2024	EMERSON LLLP	5,985.07
732023	04-Sep-2024	EMPIRE SOUTHWEST	1,601.19
732179	11-Sep-2024	EMPIRE SOUTHWEST	100.94
732180	11-Sep-2024	ENG, LEUNG	160.00
732181	11-Sep-2024	ENTELLUS INC	69,344.31
732435	18-Sep-2024	ENTELLUS INC	33,107.02
732601	25-Sep-2024	ENTELLUS INC	17,114.52
732024	04-Sep-2024	ENVIRONMENTAL DRAIN & ODOR CONTROL SERVICES LLC	2,075.00
732182	11-Sep-2024	ENVISIONWARE, INC	5,350.03
1087048	27-Sep-2024	EPICENTER HOLDINGS LLC	921.00
732602	25-Sep-2024	EQUIFAX WORKFORCE SOLUTIONS LLC	13,210.48
732323	11-Sep-2024	ERICKSON, JOURDAN (R)	62.27
732530	18-Sep-2024	ERRAIS, FATIMA (R)	337.00
732603	25-Sep-2024	ESENCIA (R)	275.00
732762	27-Sep-2024	ESHAQ, MUNAIM GEORGE ABU	612.00
732253	11-Sep-2024	ESPINOSA, TERESA (R)	300.05
732241	11-Sep-2024	ETHERIDGE, KEVIN M II	96.00
1086818	11-Sep-2024	EUREKA PRODUCTIONS, INC	8,025.50
732436	18-Sep-2024	EUROFINS ENVIRONMENT TESTING SOUTHWEST LLC	2,336.00
732604	25-Sep-2024	EVERGREEN TURF INC	3,757.35
1086775	05-Sep-2024	EWING IRRIGATION PRODUCTS INC	1,400.72
1086827	11-Sep-2024	EWING IRRIGATION PRODUCTS INC	29,746.65
1086884	19-Sep-2024	EWING IRRIGATION PRODUCTS INC	842.84
1086938	26-Sep-2024	EWING IRRIGATION PRODUCTS INC	7,133.28
732183	11-Sep-2024	EXCHANGE ON THE 8	2,464.10
732025	04-Sep-2024	FACTORY MOTOR PARTS COMPANY	3,581.76
732184	11-Sep-2024	FACTORY MOTOR PARTS COMPANY	4,287.66
732437	18-Sep-2024	FACTORY MOTOR PARTS COMPANY	3,026.31
732605	25-Sep-2024	FACTORY MOTOR PARTS COMPANY	3,178.62
732763	27-Sep-2024	FARNSWORTH REALTY & MANAGEMENT	911.00
732515	18-Sep-2024	FARR, AMMON (R)	74.29
732764	27-Sep-2024	FASHION CENTER ACQUISTION LLC	1,798.00
732606	25-Sep-2024	FENNEMORE CRAIG, P.C.	21,774.00
732026	04-Sep-2024	FERGUSON ENTERPRISES, LLC	3,864.29
732185	11-Sep-2024	FERGUSON ENTERPRISES, LLC	1,660.12

Payment Number	Payment Date	Vendor Name	Amount
732438	18-Sep-2024	FERGUSON ENTERPRISES, LLC	194,785.17
732607	25-Sep-2024	FERGUSON ENTERPRISES, LLC	3,505.29
732186	11-Sep-2024	FIBERQUANT, INC	186.00
732187	11-Sep-2024	FIDELITY NATIONAL TITLE AGENCY INC	1,170.00
732608	25-Sep-2024	FIELDPRINT, INC	288.75
1087017	27-Sep-2024	FINNEY, JESSE	1,661.00
732363	11-Sep-2024	FLAGSTAFF HOUSING AUTHORITY	2,480.16
732324	11-Sep-2024	FLAKE, JUDD (R)	106.22
732325	11-Sep-2024	FLICKINGER, BARRY (R)	200.00
1086989	27-Sep-2024	FLINT HOUSE, LLC	2,021.00
732439	18-Sep-2024	FLOOR COVERINGS INTERNATIONAL OF CHANDLER-GILBERT	5,587.35
732531	18-Sep-2024	FLORES-JIMENEZ, TIFFANY (R)	698.25
732440	18-Sep-2024	FLYERS ENERGY LLC	23,343.50
732609	25-Sep-2024	FLYERS ENERGY LLC	25,367.73
732188	11-Sep-2024	FLYERS ENERGY, LLC	50,609.42
1086990	27-Sep-2024	FNU NOVITA	2,171.00
1087102	27-Sep-2024	FOCUS LLC	3,226.00
732765	27-Sep-2024	FOOTHILLS REALTY & MANAGEMENT	2,233.00
732092	04-Sep-2024	FORD, HUNTER (R)	21.22
1086772	05-Sep-2024	FOSTER ELECTRIC MOTOR SERVICE, INC	345.00
1086817	11-Sep-2024	FOSTER ELECTRIC MOTOR SERVICE, INC	6,833.31
1086879	19-Sep-2024	FOSTER ELECTRIC MOTOR SERVICE, INC	1,790,624.00
1086945	26-Sep-2024	FOSTER ELECTRIC MOTOR SERVICE, INC	5,905.41
732539	19-Sep-2024	FRANCIS, ARIANE M	252.34
732766	27-Sep-2024	FRANK VITIRITTI TRUSTEE	904.00
732189	11-Sep-2024	FREIGHTLINER OF ARIZONA LLC	1,888.39
732441	18-Sep-2024	FREIGHTLINER OF ARIZONA LLC	10,463.92
732442	18-Sep-2024	FREIGHTLINER OF ARIZONA LLC	778.38
732610	25-Sep-2024	FREIGHTLINER OF ARIZONA LLC	1,299.45
1087124	27-Sep-2024	FRESNO INVESTMENTS	1,716.00
732190	11-Sep-2024	FRUTH GROUP INC	1,603.81
732027	04-Sep-2024	FSL HOME IMPROVEMENTS	3,868.45
732611	25-Sep-2024	FSL HOME IMPROVEMENTS	3,155.56
732516	18-Sep-2024	FULLMER, KATELYNN (R)	40.88
732326	11-Sep-2024	FULTON, NICHOLAS (R)	11.41
732443	18-Sep-2024	GAJANAN LLC	48,000.00
732327	11-Sep-2024	GALBREATH, PAUL (R)	46.65
732053	04-Sep-2024	GALVAN, DIANE (R)	85.00
732364	11-Sep-2024	GANAPATHY, RAMSUNDAR	794.00
732767	27-Sep-2024	GANAPATHY, RAMSUNDAR	2,789.00
732768	27-Sep-2024	GANI, OSAMA S	1,670.00
732093	04-Sep-2024	GARCIA, CAMERON (R)	162.00
732726	26-Sep-2024	GERSON, DEREK A	182.00
1087034	27-Sep-2024	GHAFOOR, BAN ABDUL	1,817.00
1087029	27-Sep-2024	GHAMRAOUI, SABAH K	1,827.00
1086826	11-Sep-2024	GHASTER PAINTING & COATINGS INC	121,776.00
1086883	19-Sep-2024	GHASTER PAINTING & COATINGS INC	39,130.00
1086937	26-Sep-2024	GHASTER PAINTING & COATINGS INC	11,975.00
732191	11-Sep-2024	GHD INC	8,747.50
732769	27-Sep-2024	GHOMRAWI, ABDALLAH	690.00
732028	04-Sep-2024	GILA RIVER INDIAN COMMUNITY UTILITY AUTHORITY	21,518.74
732612	25-Sep-2024	GILA RIVER INDIAN COMMUNITY UTILITY AUTHORITY	21,046.41
732192	11-Sep-2024	GILA RIVER TELECOMMUNICATION	223.15

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732169	11-Sep-2024	GILBERT MUNICIPAL COURT	40.00
1086851	11-Sep-2024	GILBERT, JUSTIN	546.00
1087132	27-Sep-2024	GILBERT, JUSTIN	1,247.00
1086850	11-Sep-2024	GILBERT, THURMAN	776.00
1087128	27-Sep-2024	GILBERT, THURMAN	3,723.00
1087002	27-Sep-2024	GIRGIS, JAKLINE	2,086.00
1087104	27-Sep-2024	GJONZENELI, MURAT	5,331.00
732193	11-Sep-2024	GO AZ MOTORCYCLES SCOTTSDALE	107.36
732444	18-Sep-2024	GO AZ MOTORCYCLES SCOTTSDALE	3,174.70
1086971	27-Sep-2024	GO GET IT INVESTMENTS LLC	903.00
732029	04-Sep-2024	GOBLE SAMPSON ASSOCIATES INC	31,834.00
1086831	11-Sep-2024	GOERING, ROBERT, RUBIN, BROGNA, ENOS & TREADWELL-RUBIN, P.C.	87.50
732194	11-Sep-2024	GOING ON FAITH	1,800.00
1087072	27-Sep-2024	GOLD COAST REALTY	1,938.00
1087016	27-Sep-2024	GOLD STONE INVESTMENT LLC	2,021.00
732770	27-Sep-2024	GOLD TRUST REALTY	11,591.00
732517	18-Sep-2024	GOMEZ, BRIANNA (R)	26.28
732195	11-Sep-2024	GONZALEZ & SMITH, P. C.	5,000.00
732727	26-Sep-2024	GONZALEZ & SMITH, P. C.	5,000.00
1086829	11-Sep-2024	GOODMANS INTERIOR STRUCTURES	1,945.92
1086939	26-Sep-2024	GOODMANS INTERIOR STRUCTURES	10,547.32
732196	11-Sep-2024	GORDWIN LAW, PLLC	5,000.00
1087111	27-Sep-2024	GORE, VIPUL	1,297.00
1087122	27-Sep-2024	GOVINDARAJAN, OMKAR	2,478.00
732030	04-Sep-2024	GRAINGER	2,330.38
732031	04-Sep-2024	GRAINGER	2,275.32
732197	11-Sep-2024	GRAINGER	194.26
732198	11-Sep-2024	GRAINGER	2,193.66
732445	18-Sep-2024	GRAINGER	10,047.82
732446	18-Sep-2024	GRAINGER	1,442.35
732613	25-Sep-2024	GRAINGER	118.34
732614	25-Sep-2024	GRAINGER	3,634.29
732447	18-Sep-2024	GRAY QUARTER, INC	601.25
732615	25-Sep-2024	GRAYBAR ELECTRIC COMPANY INC	7,617.73
732032	04-Sep-2024	GREAT TRAINING LLC	2,300.00
1086822	11-Sep-2024	GREATER PHOENIX ECONOMIC COUNCIL	34,919.50
1086881	19-Sep-2024	GREEN & BAKER LTD	2,398.50
732616	25-Sep-2024	GRESCO SUPPLY, INC	28,852.86
732242	11-Sep-2024	GRESSLY, DANIELLE F	33.69
732033	04-Sep-2024	GROUNDS CONTROL LLC	5,144.00
732199	11-Sep-2024	GROUNDS CONTROL LLC	92,385.02
732448	18-Sep-2024	GROUNDS CONTROL LLC	53,616.21
732617	25-Sep-2024	GROUNDS CONTROL LLC	17,793.00
732771	27-Sep-2024	GRS INVESTMENT COMPANY, LLC	5,811.00
1087096	27-Sep-2024	GUERRERO, LAURIE	1,455.00
1087093	27-Sep-2024	GUERRERO, ROSE	1,600.00
732714	25-Sep-2024	GUILLORY, AMANDA (R)	96.23
732449	18-Sep-2024	GUMENIK, NORM AND TONIA GUMENIK (R)	4,709.69
732034	04-Sep-2024	GYM TECH LLC	162.54
732200	11-Sep-2024	HACH COMPANY	5,258.55
732450	18-Sep-2024	HACH COMPANY	32,772.00
732618	25-Sep-2024	HACH COMPANY	3,000.00
1087140	27-Sep-2024	HADAWAY, MICHELLE VIVIANNE	1,502.00

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1087129	27-Sep-2024	HADEED, JAMES	1,798.00
1087115	27-Sep-2024	HALL, ERIC	1,182.00
1087004	27-Sep-2024	HAMMEL INVESTMENTS, LLC	1,348.00
1086779	05-Sep-2024	HANDLING SYSTEMS, INC	96.00
1087056	27-Sep-2024	HANDZEL, SHARON C	1,306.00
1086793	05-Sep-2024	HARGIS, KEITH A	148.00
1087035	27-Sep-2024	HARINAV LLC	3,115.00
732619	25-Sep-2024	HARRIS ARIZONA, LLC	461.15
732328	11-Sep-2024	HARRIS, KYLE (R)	43.12
732329	11-Sep-2024	HARRISON, EVAN (R)	4,000.00
1086967	27-Sep-2024	HARTFORD APARTMENTS	3,485.00
732424	18-Sep-2024	HASSAYAMPA JUSTICE COURT	45.00
732201	11-Sep-2024	HAWKEYE ELECTRIC INC	59,100.00
732772	27-Sep-2024	HAZELTINE RENTALS LLC	2,000.00
732202	11-Sep-2024	HAZEN AND SAWYER	19,011.03
732773	27-Sep-2024	HCL LLC	1,121.00
732203	11-Sep-2024	HEATHERBROOK ASSOCIATION	1,000.00
1086778	05-Sep-2024	HEINFELD, MEECH & CO PC	43,100.00
732204	11-Sep-2024	HELMSBRISCOE PERFORMANCE GROUP, INC.	21,000.00
732620	25-Sep-2024	HENDERSON BELTWAY, LLC	6,538.88
1086973	27-Sep-2024	HENES, HAIDY	1,190.00
732621	25-Sep-2024	HENNESY EQUIPMENT SALES CO	42,307.94
732451	18-Sep-2024	HENNESY MECHANICAL SALES	19,499.00
732518	18-Sep-2024	HERNANDEZ, ASHLEY (R)	6.66
732728	26-Sep-2024	HERNANDEZ, CADIA L	216.00
1087081	27-Sep-2024	HERNANDEZ, ERIBERTO	1,442.00
732254	11-Sep-2024	HERNANDEZ, MELANIE A	1,660.00
732452	18-Sep-2024	HERNANDEZ-TRINIDAD, JORGE	900.00
732094	04-Sep-2024	HERRERA, ALICIA (R)	45.01
1086888	19-Sep-2024	HILL BROTHERS CHEMICAL CO	38,506.50
1087113	27-Sep-2024	HOANG, BUUCHAU QUOC	3,100.00
732715	25-Sep-2024	HOOPER, JUSTIN (R)	28.22
1086770	05-Sep-2024	HORIZON DISTRIBUTORS INC	956.49
1086814	11-Sep-2024	HORIZON DISTRIBUTORS INC	2,677.68
1086942	26-Sep-2024	HORIZON DISTRIBUTORS INC	129.46
732016	04-Sep-2024	HOSEPOWERUSA AND/OR COMPLETE SAFETY	23.40
732170	11-Sep-2024	HOSEPOWERUSA AND/OR COMPLETE SAFETY	790.40
732425	18-Sep-2024	HOSEPOWERUSA AND/OR COMPLETE SAFETY	4.14
732519	18-Sep-2024	HOSKISSON, MATTHEW (R)	43.06
732453	18-Sep-2024	HOT SHOT DELIVERY, INC	75.00
732365	11-Sep-2024	HOUSING AUTHORITY OF JOLIET	2,219.16
732454	18-Sep-2024	HUDDLESTON, JAMES E	150.00
732774	27-Sep-2024	HUERTA, JUANITA	160.00
732035	04-Sep-2024	HUITT-ZOLLARS, INC	5,668.35
732622	25-Sep-2024	HUITT-ZOLLARS, INC	2,670.00
732205	11-Sep-2024	ICAN	25,000.00
732366	11-Sep-2024	IH2 PROPERTY BORROWER LP	12.00
732775	27-Sep-2024	IH2 PROPERTY BORROWER LP	1,450.00
732776	27-Sep-2024	IH5 PROPERTY BORROWER LP	2,375.00
732777	27-Sep-2024	IH6 PROPERTY BORROWER LP	4,616.00
1086861	18-Sep-2024	IMT CAPITAL VI CHANDLER LLC	4,314.00
1087015	27-Sep-2024	IMT CAPITAL VI CHANDLER LLC	23,406.00
732206	11-Sep-2024	INDUSTRIAL COMMISSION OF AZ	12,406.52

Payment Number	Payment Date	Vendor Name	Amount
732455	18-Sep-2024	INGRAM LIBRARY SERVICES	26,686.29
732207	11-Sep-2024	INNOVATIVE INTERFACES INC	7,348.19
732036	04-Sep-2024	INSTRUMENTATION AND CONTROLS LLC	2,000.00
732456	18-Sep-2024	INSTRUMENTATION AND CONTROLS LLC	32,004.58
1086832	11-Sep-2024	INTEGRATED MEDIA SOLUTIONS	11,502.01
1086777	05-Sep-2024	INTERFACE TECHNICAL TRAINING	2,995.00
1086940	26-Sep-2024	INTERFACE TECHNICAL TRAINING	2,995.00
732623	25-Sep-2024	INTERSTATE BATTERY SYSTEM OF SCOTTSDALE	9,190.53
732457	18-Sep-2024	INTERWEST SAFETY SUPPLY LLC	772.92
732624	25-Sep-2024	INTERWEST SAFETY SUPPLY LLC	14,693.44
1087071	27-Sep-2024	INVESTAR REAL ESTATE SPECIALISTS LLC	1,449.00
732458	18-Sep-2024	INVESTIGATIVE RESEARCH INC	342.45
732625	25-Sep-2024	INVESTIGATIVE RESEARCH INC	437.15
732778	27-Sep-2024	J & B INVESTMENT	1,271.00
732459	18-Sep-2024	J SCOTT HALVERSON LAW OFFICES (R)	5.00
732626	25-Sep-2024	J.S. HELD LLC	1,009.50
732330	11-Sep-2024	JACKSON, MADDISON (R)	18.67
1086830	11-Sep-2024	JACOBO LAW FIRM, PLLC	5,000.00
1086820	11-Sep-2024	JACOBS ENGINEERING GROUP INC	295,457.89
1087076	27-Sep-2024	JAIN, VIKAS	1,522.00
1087136	27-Sep-2024	JDC INVESTMENTS LLC	1,656.00
1086823	11-Sep-2024	JEFF MARTIN CONSULTING LLC	1,421.00
1086936	26-Sep-2024	JEFF MARTIN CONSULTING LLC	2,141.00
732208	11-Sep-2024	JENI MCCUTCHEON, PSY.D., PLLC	1,200.00
732054	04-Sep-2024	JENIK, SPENCER L	1,462.50
1087041	27-Sep-2024	JJBMC PROPERTIES LLC	3,775.00
732426	18-Sep-2024	JOHNSON, CARL (R)	10.00
732331	11-Sep-2024	JONES, DANIELLE (R)	1,473.46
732332	11-Sep-2024	JONES, HAILEY (R)	31.68
1086852	11-Sep-2024	JONES, PATRICIA A.	182.00
1087141	27-Sep-2024	JONES, PATRICIA A.	2,487.00
1087028	27-Sep-2024	JOSHI, PRANAV	2,123.00
732779	27-Sep-2024	JOU, SEN T	5,971.00
732780	27-Sep-2024	JRS GUERRERO LIMITED PARTNERSHIP	2,801.00
732209	11-Sep-2024	JUMPBUNCH	3,914.00
732716	25-Sep-2024	JUNG, JUNGYONG (R)	29.92
732520	18-Sep-2024	JURADO, JASMIN (R)	53.41
1086774	05-Sep-2024	JUST PLANT DESIGNERS INC	165.00
1086825	11-Sep-2024	JUSTIFACTS CREDENTIAL VERIFICATION	121.50
732781	27-Sep-2024	KACHINA APARTMENTS	2,759.00
732666	25-Sep-2024	KALAGARLA, ANANTH (R)	222.36
732729	26-Sep-2024	KANIUT, RAYMOND W	136.68
732210	11-Sep-2024	KANOPY LLC	2,213.00
1087026	27-Sep-2024	KARAMIZAKHERADI, NAVID	2,150.00
732627	25-Sep-2024	KARY ENVIRONMENTAL SERVICES INC	2,371.78
732782	27-Sep-2024	KASIM, WISAM	4,870.00
1087059	27-Sep-2024	KATZ, JENNIFER ANN	1,176.00
1086847	11-Sep-2024	KAUP, RYAN J	144.05
1086912	19-Sep-2024	KAUP, RYAN J	186.00
732730	26-Sep-2024	KEE, PAUL D	319.00
732783	27-Sep-2024	KELLER WILLIAMS REALTY PHOENIX	1,207.00
732628	25-Sep-2024	KFH DOBSON LLC (R)	24,885.22
1087110	27-Sep-2024	KHATRI, SHAH	7,509.00

Payment Number	Payment Date	Vendor Name	Amount
1087108	27-Sep-2024	KIANPOUR, FARAMARZ	2,449.00
1086773	05-Sep-2024	KIMLEY-HORN AND ASSOCIATES, INC	5,823.00
1086819	11-Sep-2024	KIMLEY-HORN AND ASSOCIATES, INC	77,463.35
1086880	19-Sep-2024	KIMLEY-HORN AND ASSOCIATES, INC	14,153.34
1086933	26-Sep-2024	KIMLEY-HORN AND ASSOCIATES, INC	113,294.51
732037	04-Sep-2024	KING CONCRETE, INC	1,870.89
732211	11-Sep-2024	KING CONCRETE, INC	1,674.23
732460	18-Sep-2024	KING CONCRETE, INC	1,845.88
732629	25-Sep-2024	KING CONCRETE, INC	1,301.98
732367	11-Sep-2024	KING COUNTY HOUSING AUTHORITY	11,032.80
732630	25-Sep-2024	KITCHELL/CEM INC	36,900.00
732212	11-Sep-2024	KM FACILITY SERVICES LLC	7,350.00
732731	26-Sep-2024	KOLL, LAUREN M	21.59
1087023	27-Sep-2024	KRAMER, NEAL	1,901.00
732213	11-Sep-2024	KRUE INDUSTRIAL, LLC	1,324.70
732631	25-Sep-2024	KRUE INDUSTRIAL, LLC	1,709.50
1086994	27-Sep-2024	K-SERVICES	2,752.00
732540	19-Sep-2024	KUIPER, REBECCA L	287.34
732038	04-Sep-2024	KUPFERER, KEVIN R	1,789.00
732632	25-Sep-2024	KUTAK ROCK, LLP	49,999.00
732633	25-Sep-2024	KW ENGINEERING	800.00
732427	18-Sep-2024	KYRENE JUSTICE COURT	250.00
732333	11-Sep-2024	LA, TAM (R)	87.07
732634	25-Sep-2024	LADY BLOW MUSIC LLC	5,000.00
1086911	19-Sep-2024	LANG, DAWN L	64.67
732214	11-Sep-2024	LANGUAGE CONNECTION	855.00
732635	25-Sep-2024	LANGUAGE CONNECTION	190.00
732461	18-Sep-2024	LANGUAGE TESTING INTERNATIONAL INC	811.00
1087080	27-Sep-2024	LAROUSSI, REDOUANE	1,587.00
1087101	27-Sep-2024	LARSEN DEVELOPMENT LLC	1,140.00
732334	11-Sep-2024	LAUDERBACK, SARAH (R)	40.71
732636	25-Sep-2024	LAW OFFICE OF CHRISTOPHER J. PALMISANO PLC	2,666.66
1086887	19-Sep-2024	LAYNE CHRISTENSEN COMPANY	83,732.00
732335	11-Sep-2024	LE FEVER, ANDREW (R)	13.75
1087112	27-Sep-2024	LE, KIEU	369.00
1087138	27-Sep-2024	LE, THUC	1,607.00
1087078	27-Sep-2024	LEE, KEVIN	2,560.00
1087054	27-Sep-2024	LEE, LARRY	1,798.00
1087130	27-Sep-2024	LETS REED LLC	516.00
732215	11-Sep-2024	LEVEL 3 COMMUNICATIONS LLC	5,934.64
732637	25-Sep-2024	LEVEL 3 COMMUNICATIONS LLC	2,700.08
732336	11-Sep-2024	LGE DESIGN BUILD (R)	522.77
1086983	27-Sep-2024	LIAO, FENGLING	1,985.00
1086781	05-Sep-2024	LIFELONG FITNESS BY KATHI	5,040.00
732784	27-Sep-2024	LIFEWELL BEHAVIORAL WELLNESS	1,441.00
732638	25-Sep-2024	LIGHTING UNLIMITED INC	192.62
732039	04-Sep-2024	LIM FAMILY MARTIAL ARTS	3,350.00
732785	27-Sep-2024	LIN, HEFEN	1,497.00
1086849	11-Sep-2024	LIN, RONG CHUN	537.00
1087126	27-Sep-2024	LIN, RONG CHUN	3,592.00
1087037	27-Sep-2024	LINCOLN, EARLE	1,250.00
732639	25-Sep-2024	LINDSAY ENGINEERING, INC	144.00
732243	11-Sep-2024	LINDSEY, JATENA M	319.00

Payment Number	Payment Date	Vendor Name	Amount
732040	04-Sep-2024	LITHO TECH, INC.	6,350.92
1087018	27-Sep-2024	LIU, QIAN	747.00
1086982	27-Sep-2024	LIU, SUSAN	1,279.00
732216	11-Sep-2024	LIVE LOVE	10,000.00
732640	25-Sep-2024	LOGOCOMOTION	354.88
732217	11-Sep-2024	LOKAHI LLC	4,980.00
732171	11-Sep-2024	LOS WAUKIS ANDINOS	300.00
1087014	27-Sep-2024	LOTUS REAL ESTATE LLC	1,416.00
732337	11-Sep-2024	LOTUS REAL ESTATE LLC (R)	92.71
732786	27-Sep-2024	LPB HOLDING, LLC	2,274.00
732338	11-Sep-2024	LUCERO, ERNESTO (R)	56.90
1087143	27-Sep-2024	LUNDIN, ANDREY	1,458.00
732641	25-Sep-2024	LYFT INC	5,059.52
732787	27-Sep-2024	LYNN, DANNY	265.00
732462	18-Sep-2024	M&J ENTERPRISES CONSTRUCTION INC (R)	10.00
732041	04-Sep-2024	M&M CONTRACTORS, LLC	5,735.00
1087007	27-Sep-2024	MACLAY REAL ESTATE, LLC	2,498.00
732095	04-Sep-2024	MADANKUNI, ASHOKKUMAR (R)	675.86
732339	11-Sep-2024	MAGLIONE, NICHOLAS (R)	31.25
732788	27-Sep-2024	MAIN STREET RENEWAL LLC	6,294.00
1087027	27-Sep-2024	MAI'S RENTAL LLC	1,848.00
1086776	05-Sep-2024	MAK EQUIPMENT	13,100.00
1087121	27-Sep-2024	MAKEY, JAMES	1,476.00
1086828	11-Sep-2024	MAKPRO SERVICES LLC	1,710.00
1086885	19-Sep-2024	MAKPRO SERVICES LLC	3,460.00
732110	05-Sep-2024	MALLOY, BRIAN P	1,464.00
732732	26-Sep-2024	MANN, ANDREW L	136.00
732042	04-Sep-2024	MARATHON STAFFING RESOURCES INC	25,411.62
732218	11-Sep-2024	MARATHON STAFFING RESOURCES INC	5,485.93
732463	18-Sep-2024	MARATHON STAFFING RESOURCES INC	4,600.63
732642	25-Sep-2024	MARATHON STAFFING RESOURCES INC	22,000.27
732219	11-Sep-2024	MARIACHI NUEVA FUSION	600.00
732464	18-Sep-2024	MARICOPA COUNTY	175.00
732643	25-Sep-2024	MARICOPA COUNTY	126,671.08
732220	11-Sep-2024	MARICOPA COUNTY DEPT OF	102,676.04
732221	11-Sep-2024	MARICOPA COUNTY TREASURER	22,830.95
1086992	27-Sep-2024	MARKET EDGE REALTY LLC	2,021.00
732644	25-Sep-2024	MARRIOTT PHOENIX CHANDLER	1,058.00
732172	11-Sep-2024	MARTINEZ, JEANNETTE	500.00
732465	18-Sep-2024	MASIZO DEVELOPMENT LLC	2,195.00
732645	25-Sep-2024	MATRIX NEW WORLD ENGINEERING	6,707.50
732111	05-Sep-2024	MATSON, TIMBERLY J	293.66
1086932	26-Sep-2024	MATTHEW'S CROSSING	10,000.00
732789	27-Sep-2024	MAXFIELD, JONATHAN	543.00
732340	11-Sep-2024	MAYFIELD, ROBERT (R)	88.80
732244	11-Sep-2024	MCAULIFFE, RILEY H	237.60
732733	26-Sep-2024	MCCALL, EDYIE A	95.14
1087142	27-Sep-2024	MCKINDLES, JOHN	3,364.00
732717	25-Sep-2024	MCKINLEY GEMSTONE LLC (R)	47.04
1087045	27-Sep-2024	MCKINLEY, ROSS HARRISON	944.00
732521	18-Sep-2024	MCMILLIAN, ALEXANDER (R)	22.29
1087131	27-Sep-2024	MCNELLIS, JOHN	1,572.00
732532	18-Sep-2024	MCP CROSSWINDS LLC	222.00

Payment Number	Payment Date	Vendor Name	Amount
732790	27-Sep-2024	MCP CROSSWINDS LLC	18,457.00
732245	11-Sep-2024	MENDEZ, JOSHUA P	319.00
732246	11-Sep-2024	MERRILL, PAUL A	359.00
732646	25-Sep-2024	METROHM USA, INC.	2,502.62
732043	04-Sep-2024	MGC CONTRACTORS, INC	1,024,658.25
732222	11-Sep-2024	MGX EQUIPMENT SERVICES LLC	2,739.98
732466	18-Sep-2024	MGX EQUIPMENT SERVICES LLC	815.59
1086985	27-Sep-2024	MHK INVESTMENT GROUP, LLC	2,094.00
732467	18-Sep-2024	MIDWEST TAPE	885.80
732647	25-Sep-2024	MIDWEST TAPE	321.81
1087097	27-Sep-2024	MILLER, JEFFERY ROBERT	2,335.00
732044	04-Sep-2024	MINER, LTD	1,136.20
732223	11-Sep-2024	MINER, LTD	8,928.34
732648	25-Sep-2024	MINER, LTD	794.89
732368	11-Sep-2024	MIRA SANTI	3,712.00
732791	27-Sep-2024	MIRA SANTI	9,629.00
732247	11-Sep-2024	MIRANDA, MICAH R	161.00
732734	26-Sep-2024	MIRANDA, MICAH R	914.26
732718	25-Sep-2024	MITCHELL, JACQUELINE (R)	147.17
732792	27-Sep-2024	MOGHARRABI, SOHRAB	1,158.00
732096	04-Sep-2024	MONDAL, SASWATA (R)	75.55
732341	11-Sep-2024	MORALES-ZUNEGA, NADIA (R)	72.31
732097	04-Sep-2024	MORRIS, DOUG (R)	93.00
1087088	27-Sep-2024	MORTENSEN, GLORIA J	1,863.00
732468	18-Sep-2024	MOTOROLA	2,094.12
732649	25-Sep-2024	MOTOROLA	167,036.80
732342	11-Sep-2024	MOU, JENNY (R)	40.95
732343	11-Sep-2024	MOWRY, ALYSSA (R)	25.93
1086931	26-Sep-2024	MOYERS, KIMBERLY K	280.00
1087135	27-Sep-2024	MRGUDICH, JON A	1,079.00
1087039	27-Sep-2024	MSRAT, LLC	2,192.00
1086882	19-Sep-2024	MYTHICS LLC	99,335.09
1087073	27-Sep-2024	N/A TOWN SQUARE-65 LP	1,217.00
732248	11-Sep-2024	NAKORNTHAP, JILLIAN	147.00
732045	04-Sep-2024	NATIONAL CARWASH SOLUTIONS INC	898.96
732650	25-Sep-2024	NATIONAL TESTING NETWORK INC	3,105.00
732224	11-Sep-2024	NATIONAL WATERPROOFING & ROOFING LLC	161,978.50
732651	25-Sep-2024	NAVJOY CONSULTING SERVICES, INC.	25,000.00
732652	25-Sep-2024	NELROD COMPANY, THE	5,863.00
732046	04-Sep-2024	NESCON, LLC	7,204.33
732225	11-Sep-2024	NESCON, LLC	846.20
732469	18-Sep-2024	NESCON, LLC	840.04
1087137	27-Sep-2024	NGUY CONCEPT LLC	1,895.00
1087061	27-Sep-2024	NGUY HUANG LLC	2,200.00
1086987	27-Sep-2024	NGUYEN, HIEN	2,325.00
1087107	27-Sep-2024	NGUYEN, HUNG Q.	2,119.00
1087118	27-Sep-2024	NGUYEN, NGOC	2,878.00
1087008	27-Sep-2024	NGUYEN, SAMANTHA BAO ANH	2,901.00
1087009	27-Sep-2024	NICHOLAS JOSEPH AGENCY LLC	1,696.00
1086980	27-Sep-2024	NINE PACK LLC	2,598.00
1086972	27-Sep-2024	NINEVEH PROPERTIES LLC	1,549.00
732226	11-Sep-2024	NORTHSTAR TRAVEL MEDIA, LLC	5,500.00
1086890	19-Sep-2024	NST TECHNOLOGIES INC	49,342.50

Payment Number	Payment Date	Vendor Name	Amount
1086771	05-Sep-2024	NUTRIEN AG SOLUTIONS, INC	25,333.00
1086815	11-Sep-2024	NUTRIEN AG SOLUTIONS, INC	23,543.52
1086943	26-Sep-2024	NUTRIEN AG SOLUTIONS, INC	2,048.20
732369	11-Sep-2024	OCOTILLO BAY APARTMENTS	3,584.00
732533	18-Sep-2024	OCOTILLO BAY APARTMENTS	1,084.00
732793	27-Sep-2024	OCOTILLO BAY APARTMENTS	35,424.00
1087049	27-Sep-2024	OKATI LLC	1,999.00
732249	11-Sep-2024	OLSON, ELIZABETH A	176.00
732719	25-Sep-2024	OLSON, NADIA (R)	24.55
732047	04-Sep-2024	OLSSON, INC	125.30
732227	11-Sep-2024	OLSSON, INC	47,965.04
732470	18-Sep-2024	OLSSON, INC	7,094.15
732794	27-Sep-2024	ON Q PROPERTY MANAGEMENT	4,286.00
732173	11-Sep-2024	ONTELLUS / CHARTSWAP, LLC	37.00
732653	25-Sep-2024	OPENROAD ALLARD COLLISION-HIGHLAND	11,420.94
732471	18-Sep-2024	OPTUM	4,102.56
1086855	11-Sep-2024	ORANGE COUNTY HOUSING AUTHORITY	2,188.16
732472	18-Sep-2024	ORIGAMI RISK, LLC	19,808.28
732795	27-Sep-2024	OROS, ARSENIO	56.00
732796	27-Sep-2024	ORTH, AMY	1,704.00
732048	04-Sep-2024	OTTO TRUCKING, INC	12,481.13
732229	11-Sep-2024	OTTO TRUCKING, INC	26,134.20
732473	18-Sep-2024	OTTO TRUCKING, INC	5,981.13
732654	25-Sep-2024	OTTO TRUCKING, INC	29,332.99
732655	25-Sep-2024	PACIFIC WEST ENVIRONMENTAL AND INFRASTRUCTURE	31,029.82
1086780	05-Sep-2024	PARAMOUNT STREETLIGHT	18,870.00
1086891	19-Sep-2024	PARAMOUNT STREETLIGHT	2,220.00
732797	27-Sep-2024	PARKER, DIXIE L.	658.00
732108	05-Sep-2024	PARKS, DAVID W	90.70
1087057	27-Sep-2024	PASHAPOUR NIKU, MAZIAR	2,538.00
732250	11-Sep-2024	PASTORE, GEORGE A	359.00
732482	18-Sep-2024	PATEL, REENA	150.00
1086824	11-Sep-2024	PCL CONSTRUCTION INC	1,412,476.99
732344	11-Sep-2024	PEI, HAOJUN (R)	82.50
732483	18-Sep-2024	PELA, ROBRT	400.00
732255	11-Sep-2024	PENG, YONGZHAO (R)	178.00
732230	11-Sep-2024	PEORIA PEST CONTROL INC	11,564.60
732474	18-Sep-2024	PEORIA PEST CONTROL INC	3,996.20
732798	27-Sep-2024	PETERSEN REALTY	2,246.00
732251	11-Sep-2024	PETTERSON, ALISA ANN	41.07
732799	27-Sep-2024	PHAN, THAO	1,221.00
732656	25-Sep-2024	PHOENIX PROCESS EQUIPMENT CO	14,950.00
1086886	19-Sep-2024	PHOENIX PUMPS INC	12,222.75
732475	18-Sep-2024	PIERCE COLEMAN PLLC	590.00
732657	25-Sep-2024	PIERCE COLEMAN PLLC	1,217.50
1087025	27-Sep-2024	PINDER PROPERTIES, LLC	964.00
732256	11-Sep-2024	PINELAKE COMMUNITY ASSOCIATION	1,127.28
732428	18-Sep-2024	PIONEER JUSTICE	256.00
732049	04-Sep-2024	PIONEER LANDSCAPE CENTERS INC	12,756.64
732658	25-Sep-2024	PIPELINE SERVICES, INC	18,174.21
732098	04-Sep-2024	PIPER, ANITA (R)	660.00
732659	25-Sep-2024	PLAY IT SAFE PLAYGROUNDS & PARK EQUIPMENT INC	3,166.59
732800	27-Sep-2024	PLC SOLEIL APARTMENTS, LLC	4,998.00

Payment Number	Payment Date	Vendor Name	Amount
1087013	27-Sep-2024	PLEASANT DESERT PROPERTIES LLC	2,030.00
1086889	19-Sep-2024	PM PLUMBING & MECHANICAL, INC	2,549.75
1086941	26-Sep-2024	PM PLUMBING & MECHANICAL, INC	10,780.06
1086934	26-Sep-2024	POLYDYNE, INC.	42,691.94
732231	11-Sep-2024	POSTAL STRATEGIES CORPORATION	585.96
1087105	27-Sep-2024	POUCHKAREV, ANDREI	2,295.00
732476	18-Sep-2024	POWERDMS, INC	8,146.42
732257	11-Sep-2024	POWERS, BRANDI	1,160.00
732232	11-Sep-2024	PRECISION SWEEPING SERVICES, LLC	315.65
732477	18-Sep-2024	PRECISION SWEEPING SERVICES, LLC	2,234.00
732522	18-Sep-2024	PREUSS, CHANTEL (R)	52.57
732112	05-Sep-2024	PRICE, CHASE E	119.00
732233	11-Sep-2024	PRIDE GUIDE	5,825.82
732234	11-Sep-2024	PRIDE OUTFITTING, LLC	1,732.43
732478	18-Sep-2024	PRIDE OUTFITTING, LLC	2,052.40
732660	25-Sep-2024	PRIDE OUTFITTING, LLC	9,971.88
1086979	27-Sep-2024	PROEX REALTY MANAGEMENT	5,189.00
1086821	11-Sep-2024	PROFORCE LAW ENFORCEMENT	2,561.32
732479	18-Sep-2024	PROGRESS SOFTWARE CORPORATION	371.91
732541	19-Sep-2024	PRO-LINE INDUSTRIAL PRODUCTS INC	9,220.18
732661	25-Sep-2024	PRO-PIPE, INC	17,018.02
732801	27-Sep-2024	PRS PROPERTY MANAGEMENT	2,410.00
732662	25-Sep-2024	PUMPMAN WATERWORKS CONTRACTORS PM LLC	64,219.69
1087019	27-Sep-2024	PUNG, SOKENG	5,308.00
732050	04-Sep-2024	PVS DX INC	57,429.31
732235	11-Sep-2024	PVS DX INC	23,655.64
732480	18-Sep-2024	PVS DX INC	19,375.39
732663	25-Sep-2024	PVS DX INC	67,679.52
732802	27-Sep-2024	QUACH, TAM	2,470.00
732667	25-Sep-2024	QUADIENT, INC	6,652.92
1086948	26-Sep-2024	QUALITY EMULSIONS LLC	182.46
1086910	19-Sep-2024	QUANTUM INTEGRATED SOLUTIONS INC	76,402.85
732258	11-Sep-2024	R.L.H. INDUSTRIES, LLC	1,139.00
732523	18-Sep-2024	RAMANATHAN, LAKSHMI (R)	75.85
1087087	27-Sep-2024	RAY ROAD PROPERTY LLC	2,444.00
732055	04-Sep-2024	RDO EQUIPMENT CO	486.87
732259	11-Sep-2024	RDO EQUIPMENT CO	355.39
732056	04-Sep-2024	READING TRUCK EQUIPMENT, LLC	621.22
732668	25-Sep-2024	READY REFRESH	2,757.18
732803	27-Sep-2024	REALTY EXECUTIVES, AN ARIZONA CORP	4,334.00
732057	04-Sep-2024	RED ROSE PROPERTIES, LLC	1,450.00
732345	11-Sep-2024	REDDY PARTNERS LLC (R)	97.47
732346	11-Sep-2024	REEVES, NICHOLAS (R)	50.61
732260	11-Sep-2024	REFRIGERATION SUPPLIES DISTRIBUTOR	489.88
732058	04-Sep-2024	RELIABLE MAINTENANCE AND CUSTODIAL SERVICES	3,200.00
732059	04-Sep-2024	REPUBLIC SERVICES OF PHOENIX	962.44
732261	11-Sep-2024	REPUBLIC SERVICES OF PHOENIX	1,965.02
732484	18-Sep-2024	REPUBLIC SERVICES OF PHOENIX	33,678.15
732669	25-Sep-2024	REPUBLIC SERVICES OF PHOENIX	922.78
732060	04-Sep-2024	RESA SERVICE, LLC	7,242.70
732262	11-Sep-2024	RESA SERVICE, LLC	12,030.44
732670	25-Sep-2024	RESA SERVICE, LLC	43,650.00
732804	27-Sep-2024	RESICAP ARIZONA OWNER III LLC	477.00

Payment Number	Payment Date	Vendor Name	Amount
732061	04-Sep-2024	RICOH USA INC	70.45
732263	11-Sep-2024	RICOH USA INC	30,192.82
732485	18-Sep-2024	RICOH USA INC	2,929.79
732671	25-Sep-2024	RICOH USA INC	238.14
732735	26-Sep-2024	RIETZ, MICHAEL L	793.66
732174	11-Sep-2024	RILEY, JULIE K AND JOSHUA J RILEY (R)	1,000.00
1086840	11-Sep-2024	RITOCH-POWELL & ASSOCIATES CONSULTING ENGINEERS INC	95,667.69
732062	04-Sep-2024	RITZ SAFETY LLC	124.02
732264	11-Sep-2024	RITZ SAFETY LLC	144.99
732486	18-Sep-2024	RITZ SAFETY LLC	248.80
732672	25-Sep-2024	RITZ SAFETY LLC	722.32
732673	25-Sep-2024	RIVER NORTH TRANSIT, LLC	116,572.48
732805	27-Sep-2024	RIVIERA PARK INVESTORS LLC	2,250.00
1086857	11-Sep-2024	RJ TORRANCE LLC	1,471.00
1086969	27-Sep-2024	RJ TORRANCE LLC	1,925.00
732487	18-Sep-2024	ROCHA, LLC	630.00
1087109	27-Sep-2024	RODRIGUEZ-MESA, IVAN	1,311.00
732736	26-Sep-2024	ROJAS, LACEY M	319.00
732063	04-Sep-2024	ROSSITTO, SCOTT (R)	10.00
732370	11-Sep-2024	RPC CHANDLER APARTMENTS LLC	906.00
732806	27-Sep-2024	RPC CHANDLER APARTMENTS LLC	4,695.00
1087144	27-Sep-2024	RRC INVESTMENTS LLC	657.00
732064	04-Sep-2024	RUGGIERO'S ACE HARDWARE	108.47
732265	11-Sep-2024	RUGGIERO'S ACE HARDWARE	1,827.57
732488	18-Sep-2024	RUGGIERO'S ACE HARDWARE	1,079.08
732674	25-Sep-2024	RUGGIERO'S ACE HARDWARE	1,431.02
732347	11-Sep-2024	RUIZ, MARISSA (R)	86.86
732720	25-Sep-2024	RUSSELL, NOAH (R)	9.66
1087000	27-Sep-2024	RUVOLO, CHARLES C AND LAURIE L	720.00
1087139	27-Sep-2024	S J FOWLER REAL ESTATE INC	5,160.00
732348	11-Sep-2024	SAEED, MOHSAN (R)	43.45
1086995	27-Sep-2024	SAISSAN, JOHN	2,483.00
1087042	27-Sep-2024	SALEH, ZIAD	808.00
732721	25-Sep-2024	SALINAS, JONATHAN (R)	10.44
732349	11-Sep-2024	SALLIS, LAWANDA (R)	85.19
732065	04-Sep-2024	SALT RIVER PROJECT	3,818.95
732066	04-Sep-2024	SALT RIVER PROJECT	400,534.92
732113	05-Sep-2024	SALT RIVER PROJECT	5,115.06
732175	11-Sep-2024	SALT RIVER PROJECT	104.17
732266	11-Sep-2024	SALT RIVER PROJECT	39,600.00
732489	18-Sep-2024	SALT RIVER PROJECT	2,650.00
732490	18-Sep-2024	SALT RIVER PROJECT	10,600.00
732534	18-Sep-2024	SALT RIVER PROJECT	9,301.00
732675	25-Sep-2024	SALT RIVER PROJECT	5,079.32
1086792	05-Sep-2024	SALT WORKS	3,824.16
1086952	26-Sep-2024	SALT WORKS	4,126.59
1087100	27-Sep-2024	SALZMAN, BART	1,406.00
732807	27-Sep-2024	SAN CERVANTES APARTMENTS	1,306.00
732371	11-Sep-2024	SAN HACIENDA APARTMENTS	3,342.00
732808	27-Sep-2024	SAN HACIENDA APARTMENTS	8,486.00
732809	27-Sep-2024	SAN PALMAS MF REALTY COMPANY LLC	1,545.00
732067	04-Sep-2024	SAN TAN FORD	539.63
732491	18-Sep-2024	SAN TAN FORD	526.65

Payment Number	Payment Date	Vendor Name	Amount
732676	25-Sep-2024	SAN TAN FORD	293,006.47
732810	27-Sep-2024	SAN VALENCIA APARTMENTS LLC	6,389.00
732372	11-Sep-2024	SANTANA RIDGE	1,555.00
732811	27-Sep-2024	SANTANA RIDGE	4,174.00
732350	11-Sep-2024	SANTISEBAN, JORGE (R)	100.48
1087060	27-Sep-2024	SANTOS, AGNES	2,100.00
732677	25-Sep-2024	SAR SYSTEMS LLC	84,350.00
732812	27-Sep-2024	SAVAGE, ERIC	1,777.00
732492	18-Sep-2024	SAYER, DANIEL TODD	1,592.00
732524	18-Sep-2024	SCEBELO, KRISTINE (R)	46.52
1087103	27-Sep-2024	SCHOENFELD, RANDY	4,544.00
732535	18-Sep-2024	SCIMECA, ANTHONY	1,546.00
732813	27-Sep-2024	SCIMECA, ANTHONY	2,577.00
1087040	27-Sep-2024	SCOTT, DAMONE	3,001.00
1086841	11-Sep-2024	SDB, INC	151,493.95
732267	11-Sep-2024	SECRETARY OF STATE	43.00
732268	11-Sep-2024	SECRETARY OF STATE	43.00
732814	27-Sep-2024	SECURED EQUITIES	1,171.00
732737	26-Sep-2024	SEFTON, JOHN R JR	252.34
1086833	11-Sep-2024	SEGAL COMPANY, THE	7,312.50
1086959	26-Sep-2024	SEGAL COMPANY, THE	1,625.00
732068	04-Sep-2024	SENERGY PETROLEUM, LLC	21,649.92
732269	11-Sep-2024	SENERGY PETROLEUM, LLC	14,037.72
732493	18-Sep-2024	SENERGY PETROLEUM, LLC	10,367.51
732678	25-Sep-2024	SENERGY PETROLEUM, LLC	21,800.97
732069	04-Sep-2024	SENTINEL TECHNOLOGIES, INC	9,420.00
732270	11-Sep-2024	SENTINEL TECHNOLOGIES, INC	525,331.94
732679	25-Sep-2024	SENTINEL TECHNOLOGIES, INC	40,075.56
732114	05-Sep-2024	SERVICE, TYLER C	362.00
732815	27-Sep-2024	SETO, MINDY LIU	808.00
732816	27-Sep-2024	SEVEN STRONG ENTERPRISES, LLC	984.00
1087066	27-Sep-2024	SFR 2012-1 US WEST LLC	1,449.00
732817	27-Sep-2024	SFR JAVELIN BORROWER LP	2,756.00
1086974	27-Sep-2024	SHAFIQUE, ASHFAQUE B	2,009.00
1087070	27-Sep-2024	SHAHIN, GABRIEL	1,975.00
1086975	27-Sep-2024	SHAMS, SHAIKH	2,312.00
1087062	27-Sep-2024	SHAO, LAN	4,368.00
732547	20-Sep-2024	SHELLUM, DANIEL W	290.00
732099	04-Sep-2024	SHI, BIN (R)	30.04
732070	04-Sep-2024	SIERRA CONTAINER GROUP, LLC	43,535.24
732351	11-Sep-2024	SIKSNUS, ALLISON (R)	46.81
732271	11-Sep-2024	SIMPLEVIEW INC	17,045.32
1086894	19-Sep-2024	SIMPSON NORTON CORPORATION	61.47
1086960	26-Sep-2024	SIMPSON NORTON CORPORATION	50.72
732100	04-Sep-2024	SINGH, JOGINDER (R)	73.67
1087116	27-Sep-2024	SINGH, REENA	1,800.00
732494	18-Sep-2024	SJ ANDERSON CO, THE	508,236.64
1087055	27-Sep-2024	SJ PROPERTIES LLC	1,115.00
1087043	27-Sep-2024	SKOGLUND, NANCY B	1,950.00
732071	04-Sep-2024	SKYLINE WINDOW CLEANING	70.00
732495	18-Sep-2024	SKYLINE WINDOW CLEANING	3,393.00
732680	25-Sep-2024	SKYLINE WINDOW CLEANING	1,724.00
1087051	27-Sep-2024	SLABAUGH, INGRID	1,956.00

Payment Number	Payment Date	Vendor Name	Amount
732272	11-Sep-2024	SMALL MARKET MEETINGS	2,300.00
732273	11-Sep-2024	SMARTWRAP LLC	8,794.18
1086986	27-Sep-2024	SMITH, ANA	1,573.00
732681	25-Sep-2024	SMITH, RICK C.	3,612.50
732072	04-Sep-2024	SNEDIGAR MARTIAL ARTS	1,550.00
732496	18-Sep-2024	SNIDER SPORTS & APPAREL	174.61
732274	11-Sep-2024	SOFT HANDS PRESSURE WASHING	1,095.00
732682	25-Sep-2024	SOL SOURCE PROPERTY SERVICES	225.00
732683	25-Sep-2024	SOLAR TRAFFIC CONTROLS LLC	3,252.52
732275	11-Sep-2024	SOLARI, INC	6,250.00
732684	25-Sep-2024	SOLUTIONZ, INC	8,103.00
732236	11-Sep-2024	SOSA, HECTOR M	62.00
732481	18-Sep-2024	SOSA, HECTOR M	62.00
732664	25-Sep-2024	SOSA, HECTOR M	62.00
732276	11-Sep-2024	SOUTH MOUNTAIN DIVE CLUB	1,320.00
732073	04-Sep-2024	SOUTHERN TIRE MART, LLC	2,405.87
732277	11-Sep-2024	SOUTHERN TIRE MART, LLC	2,066.12
732497	18-Sep-2024	SOUTHERN TIRE MART, LLC	10,607.69
732685	25-Sep-2024	SOUTHERN TIRE MART, LLC	4,455.95
732278	11-Sep-2024	SOUTHLAND ENVELOPE LLC	4,760.45
732279	11-Sep-2024	SOUTHWEST BARRICADES, LLC	977.40
732429	18-Sep-2024	SOUTHWEST GAS CORP	1,458.51
732542	19-Sep-2024	SOUTHWEST GAS CORP	593.81
732074	04-Sep-2024	SOUTHWEST SOD	9,920.00
1087006	27-Sep-2024	SOUZANDEH, HAMID	1,807.00
732075	04-Sep-2024	SPARKS KARATE	875.00
732686	25-Sep-2024	SPARKS KARATE	875.00
732280	11-Sep-2024	SPEEDIE & ASSOCIATES, INC	480.50
732687	25-Sep-2024	SPEEDIE & ASSOCIATES, INC	2,205.00
1086947	26-Sep-2024	SPIKER SPORTS	4,165.00
732076	04-Sep-2024	SPOK, INC	177.23
732281	11-Sep-2024	SPOK, INC	68.22
732282	11-Sep-2024	SPORTS BLING & THINGS	1,387.60
732688	25-Sep-2024	SPORTS BLING & THINGS	1,315.65
1086984	27-Sep-2024	SPRINGS REALTY INC	814.00
1086837	11-Sep-2024	SPRINKLER WORLD OF AZ INC	1,266.54
1086899	19-Sep-2024	SPRINKLER WORLD OF AZ INC	343.38
1086963	26-Sep-2024	SPRINKLER WORLD OF AZ INC	1,782.28
732818	27-Sep-2024	SRGMF III PECOS CHANDLER, LLC	1,917.00
732689	25-Sep-2024	ST JOSEPH THE WORKER	5,000.00
732498	18-Sep-2024	STANLEY CONSULTANTS INC	16,909.79
732283	11-Sep-2024	STELLARRAD SYSTEMS, LLC	26,245.00
1086860	11-Sep-2024	STONE OAKS APARTMENTS	2,943.00
1086993	27-Sep-2024	STONE OAKS APARTMENTS	3,769.00
732819	27-Sep-2024	STONE VIEW PHX LLC	4,941.00
732077	04-Sep-2024	STOOKS, WALLACE BRYANT	103.13
732690	25-Sep-2024	STORMWATER PROS LLC	2,940.00
1086838	11-Sep-2024	STOTZ EQUIPMENT	10,917.71
1086965	26-Sep-2024	STOTZ EQUIPMENT	760.49
1086785	05-Sep-2024	STRAND ASSOCIATES, INC.	35,161.90
1087082	27-Sep-2024	STRATEGIC CAPITAL ALLIANCE LTD PARTNERSHIP	16,663.00
732352	11-Sep-2024	STUTTGEN, GLENN (R)	60.62
1086997	27-Sep-2024	SUGGS, TERRELL	1,450.00

Payment Number	Payment Date	Vendor Name	Amount
1086900	19-Sep-2024	SUMMIT ELECTRIC SUPPLY	552.34
732691	25-Sep-2024	SUN MECHANICAL CONTRACTING INC.	25,508.65
732820	27-Sep-2024	SUN, HONGXLA	2,650.00
732078	04-Sep-2024	SUNBELT RENTALS, INC	749.79
732821	27-Sep-2024	SUNDIAL REAL ESTATE LC	1,100.00
732822	27-Sep-2024	SUNDIAL REAL ESTATE LC	752.00
732823	27-Sep-2024	SUNDIAL REAL ESTATE LC	968.00
1086964	26-Sep-2024	SUNLAND ASPHALT	1,057,577.73
732353	11-Sep-2024	SUNRISE IN CHANDLER OWNER LLC (R)	707.44
732079	04-Sep-2024	SUNRISE MEADOWS ESTATES COMMUNITY ASSOCIATION	4,587.00
1087117	27-Sep-2024	SUNSHINE REALTY LLC	1,521.00
732499	18-Sep-2024	SUPERIOR COURT OF ARIZONA	224.01
732692	25-Sep-2024	SUPERIOR COURT OF ARIZONA	1,588.52
1086788	05-Sep-2024	SUPREME OIL CO	12,694.22
1087052	27-Sep-2024	SURCHIK, EDWARD	1,128.00
732080	04-Sep-2024	SURVEILLANCE SECURITY INC	212.00
732500	18-Sep-2024	SURVEILLANCE SECURITY INC	440.00
732824	27-Sep-2024	SWAY 2014-1 BORROWER LLC	2,085.00
732693	25-Sep-2024	SWCA ENVIRONMENTAL CONSULTANTS	7,845.00
1087058	27-Sep-2024	SWH 2017-1 BORROWER, LP	6,064.00
1086902	19-Sep-2024	SYSTEMS ELECTRONICS GROUP	2,775.00
1086892	19-Sep-2024	T Y LIN INTERNATIONAL	18,166.62
732354	11-Sep-2024	TABILIN, SHEILA (R)	64.46
1087050	27-Sep-2024	TALAI, FRANCESCO	527.00
732699	25-Sep-2024	TALIS CONSTRUCTION CORP	16,362.11
1087095	27-Sep-2024	TAM, VIVIAN	707.00
732825	27-Sep-2024	TANG, JEANNIE	971.00
732355	11-Sep-2024	TARAZON, ZAYDI (R)	54.25
732700	25-Sep-2024	TDINDUSTRIES INC	2,716.59
732081	04-Sep-2024	TECHNOLOGY INTEGRATORS LLC	2,710.33
732501	18-Sep-2024	TECHNOLOGY INTEGRATORS LLC	68,774.53
1086845	11-Sep-2024	TELEVEDA SYSTEMS LLC	4,125.00
1086957	26-Sep-2024	TELEVEDA SYSTEMS LLC	4,125.00
732284	11-Sep-2024	TENNIS EQUIPMENT SALES & SERVICES, LLC	18,238.47
732738	26-Sep-2024	TERRILL, KENNEDY R	117.00
732285	11-Sep-2024	THARP, JAMES H	100.00
732082	04-Sep-2024	THATCHER COMPANY OF ARIZONA, INC	24,970.11
732286	11-Sep-2024	THATCHER COMPANY OF ARIZONA, INC	37,887.99
732502	18-Sep-2024	THATCHER COMPANY OF ARIZONA, INC	104,819.01
732701	25-Sep-2024	THATCHER COMPANY OF ARIZONA, INC	132,511.07
732373	11-Sep-2024	THE HOUSING PROFESSIONALS LLC	3,786.00
732826	27-Sep-2024	THE HOUSING PROFESSIONALS LLC	8,364.00
1086846	11-Sep-2024	THE LAW OFFICE OF JARED ALLEN, PLLC	5,000.00
1086862	18-Sep-2024	THE LINQ	270.00
1087031	27-Sep-2024	THE LINQ	9,808.00
732702	25-Sep-2024	THE REGENTS OF THE UNIVERSITY OF COLORADO	61,960.00
732543	19-Sep-2024	THOMAS, GRAINNE C	82.00
1087069	27-Sep-2024	THOMASIAN, BIKI	1,323.00
1087024	27-Sep-2024	THOMASIAN, SAAD	1,950.00
732827	27-Sep-2024	THR PHOENIX LP	4,413.00
732828	27-Sep-2024	THR PROPERTY BORROWER LP	2,842.00
1087089	27-Sep-2024	THY LLC	937.00
732829	27-Sep-2024	TIDES AT CHANDLER	1,540.00

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732830	27-Sep-2024	TJAHJA, CRYSTAL	1,828.00
732831	27-Sep-2024	TJAHJA, YULIANI	2,126.00
732548	20-Sep-2024	T-MOBILE USA, INC	125.00
732549	20-Sep-2024	T-MOBILE USA, INC	125.00
732694	25-Sep-2024	T-MOBILE USA, INC	282.84
732695	25-Sep-2024	T-MOBILE USA, INC	330.85
732696	25-Sep-2024	T-MOBILE USA, INC	330.20
732697	25-Sep-2024	T-MOBILE USA, INC	330.20
732698	25-Sep-2024	T-MOBILE USA, INC	282.72
732287	11-Sep-2024	TOPETE/STONEFIELD INC	1,731.95
732832	27-Sep-2024	TRADELANDS LLC	2,060.00
732833	27-Sep-2024	TRAN, TOM B	25.00
732083	04-Sep-2024	TRANE U.S. INC	1,699.45
732288	11-Sep-2024	TRANE U.S. INC	1,621.84
732703	25-Sep-2024	TRANE U.S. INC	10,220.00
732356	11-Sep-2024	TRASK, RONNESHA (R)	17.81
732289	11-Sep-2024	TREELAND NURSERIES, INC	103.43
732503	18-Sep-2024	TRISTAR ENGINEERING AND MANAGEMENT INC	68,343.42
1086955	26-Sep-2024	TRISTAR ICS	6,418.58
732290	11-Sep-2024	TSO, CARMELITA (R)	11.23
1086901	19-Sep-2024	TSSMC	1,312.00
1086946	26-Sep-2024	TSSMC	6,406.00
732357	11-Sep-2024	TURNER, TIANNA (R)	61.23
732291	11-Sep-2024	UBM ENTERPRISE, INC	281.68
732504	18-Sep-2024	UBM ENTERPRISE, INC	13,592.11
732084	04-Sep-2024	UNICOA	966.56
1086787	05-Sep-2024	UNIFIRST CORPORATION	94.08
1086835	11-Sep-2024	UNIFIRST CORPORATION	57.16
1086896	19-Sep-2024	UNIFIRST CORPORATION	125.77
1086961	26-Sep-2024	UNIFIRST CORPORATION	49.95
732085	04-Sep-2024	UNION PACIFIC RAILROAD COMPANY	2,721.83
732292	11-Sep-2024	UNITED ROTARY BRUSH CORPORATION	7,037.28
732505	18-Sep-2024	UNITED ROTARY BRUSH CORPORATION	2,619.43
732293	11-Sep-2024	UNITED SITE SERVICES OF NEVADA, INC	170.60
732506	18-Sep-2024	UNITED SITE SERVICES OF NEVADA, INC	208.61
732704	25-Sep-2024	UNITED SITE SERVICES OF NEVADA, INC	170.60
1086842	11-Sep-2024	UNIVAR USA INC	75,629.92
1086903	19-Sep-2024	UNIVAR USA INC	36,396.38
1086949	26-Sep-2024	UNIVAR USA INC	18,739.46
732592	25-Sep-2024	UNIVERSITY LAKES JUSTICE COURT	100.00
732252	11-Sep-2024	URIDGE, DAVID B	319.00
732294	11-Sep-2024	US AIR CONDITIONING DISTRIBUTORS LLC	17,723.52
732705	25-Sep-2024	USAA (R)	9,390.35
732706	25-Sep-2024	USP TECHNOLOGIES	30,742.19
732544	19-Sep-2024	VALENZUELA, JENSEN	252.34
1086783	05-Sep-2024	VALLEY METRO RPTA	63,293.58
1086956	26-Sep-2024	VALLEY METRO RPTA	130.00
1086791	05-Sep-2024	VALLEYWIDE GENERATOR SERVICE LLC	1,085.00
1086906	19-Sep-2024	VALLEYWIDE GENERATOR SERVICE LLC	2,767.29
732374	11-Sep-2024	VEGA AND ASSOCIATES REAL ESTATE	1,643.00
732834	27-Sep-2024	VEGA AND ASSOCIATES REAL ESTATE	1,974.00
732835	27-Sep-2024	VENTURA ACQUISITION LLC	2,015.00
732086	04-Sep-2024	VEOLIA ES NORTH AMERICA, INC	2,122.79

Payment Number	Payment Date	Vendor Name	Amount
1086789	05-Sep-2024	VERIZON WIRELESS SERVICES LLC	5,307.61
1086839	11-Sep-2024	VERIZON WIRELESS SERVICES LLC	10,489.00
1086966	26-Sep-2024	VERIZON WIRELESS SERVICES LLC	35,261.93
1086843	11-Sep-2024	VERRA MOBILITY	3,960.04
1086907	19-Sep-2024	VERRA MOBILITY	44,073.00
732087	04-Sep-2024	VINCON ENGINEERING CONSTRUCTION LLC	8,082.78
732295	11-Sep-2024	VINCON ENGINEERING CONSTRUCTION LLC	856,572.95
732375	11-Sep-2024	VIRDEE, ARVINDER S	1,482.00
732836	27-Sep-2024	VIRDEE, ARVINDER S	1,482.00
1086898	19-Sep-2024	VISION SERVICE PLAN OF ARIZONA	33,231.28
1087003	27-Sep-2024	VISTA ASSET COMPANY LLC	2,254.00
1087005	27-Sep-2024	VISTA STAR COMPANY, LLC	9,300.00
732507	18-Sep-2024	VOCATIONAL DIAGNOSTICS INC	2,038.00
732525	18-Sep-2024	VOCB, LLC (R)	384.38
1086904	19-Sep-2024	VOYA FINANCIAL	87,585.59
732526	18-Sep-2024	VOYLES, JON (R)	9.95
1086836	11-Sep-2024	VULCAN MATERIALS CO	2,374.37
1086897	19-Sep-2024	VULCAN MATERIALS CO	326.46
732508	18-Sep-2024	W W WILLIAMS	380.00
732707	25-Sep-2024	W W WILLIAMS	3,831.93
732722	25-Sep-2024	WALSH, KELLY (R)	456.45
732739	26-Sep-2024	WALTERS, ROBERT S	319.00
732296	11-Sep-2024	WARNOCK MACKINLAY LAW PLLC (R)	10.00
1086786	05-Sep-2024	WASTE MANAGEMENT OF ARIZONA, INC	6,983.02
1086834	11-Sep-2024	WASTE MANAGEMENT OF ARIZONA, INC	35,421.67
1086895	19-Sep-2024	WASTE MANAGEMENT OF ARIZONA, INC	1,129,442.48
732509	18-Sep-2024	WATER & ENERGY SYSTEMS TECHNOLOGY INC	2,306.75
732297	11-Sep-2024	WATER WORKS ENGINEERS, LLC	23,535.00
732837	27-Sep-2024	WATER'S EDGE AT OCOTILLO	1,569.00
1087123	27-Sep-2024	WATTS, ELSKA M.	146.00
732298	11-Sep-2024	WAV ELECTRIC LLC	776.74
1086782	05-Sep-2024	WAXIE SANITARY SUPPLY	18,053.12
1086908	19-Sep-2024	WAXIE SANITARY SUPPLY	4,851.84
1086953	26-Sep-2024	WAXIE SANITARY SUPPLY	5,245.02
732838	27-Sep-2024	WEALTH BUILDER REAL ESTATE	758.00
1086962	26-Sep-2024	WEBER WATER RESOURCES LLC	57,813.00
732101	04-Sep-2024	WEI, XIAOHUI (R)	99.29
732376	11-Sep-2024	WEN YIN	4,312.00
732839	27-Sep-2024	WEN YIN	2,345.00
732299	11-Sep-2024	WEST COAST ARBORISTS, INC	55,851.00
732430	18-Sep-2024	WEST MESA JUSTICE COURT	300.00
732377	11-Sep-2024	WEST USA REALTY, INC.	3,461.00
732840	27-Sep-2024	WEST USA REALTY, INC.	4,352.00
1086893	19-Sep-2024	WESTERN ENVIRONMENTAL EQUIPMENT COMPANY	19,180.70
1086958	26-Sep-2024	WESTERN ENVIRONMENTAL EQUIPMENT COMPANY	57,935.56
732510	18-Sep-2024	WHITE & ASSOCIATES	4,325.00
732115	05-Sep-2024	WHITE, JAMES WARREN	267.67
732841	27-Sep-2024	WHITMAN, STEVEN	2,789.00
732300	11-Sep-2024	WHOLE PHONICS, INC	1,340.00
732708	25-Sep-2024	WIENEKE LAW GROUP PLC	2,147.40
732358	11-Sep-2024	WILLIAMSON, RACHELLE (R)	11.82
732088	04-Sep-2024	WILSON ENGINEERS, LLC	432,730.89
732709	25-Sep-2024	WILSON ENGINEERS, LLC	284,784.75

Payment Number	Payment Date	Vendor Name	Amount
1087030	27-Sep-2024	WIND RIVER 88 LLC	1,598.00
1086790	05-Sep-2024	WIST BUSINESS SUPPLIES & EQUIPMENT	66.16
1086905	19-Sep-2024	WIST BUSINESS SUPPLIES & EQUIPMENT	274.74
1086950	26-Sep-2024	WIST BUSINESS SUPPLIES & EQUIPMENT	14,856.05
1086784	05-Sep-2024	WITTE LIGHTING SERVICES & REPAIR, LLC	434.39
1087067	27-Sep-2024	WL INVESTMENT LLC	1,802.00
1087125	27-Sep-2024	WONG, CHRISTOPHER DINH	1,046.00
732710	25-Sep-2024	WORKSBUREAU, INC	21,759.10
1086844	11-Sep-2024	WSP USA ENVIRONMENT & INFRASTRUCTURE INC	13,725.00
1086909	19-Sep-2024	WSP USA ENVIRONMENT & INFRASTRUCTURE INC	2,465.60
1086954	26-Sep-2024	WSP USA ENVIRONMENT & INFRASTRUCTURE INC	381,334.67
1087133	27-Sep-2024	WU, SUYUAN LIN	3,963.00
1087084	27-Sep-2024	WUZ 66 RENTAL LLC	2,580.00
1087119	27-Sep-2024	XIA, JINGNA	1,257.00
1087091	27-Sep-2024	XIAO, HONG MEI	2,150.00
1087120	27-Sep-2024	XIE, YUN	3,008.00
732359	11-Sep-2024	YADAV, CHANDRA (R)	2,374.83
732842	27-Sep-2024	YAMASA CO. LTD	1,794.00
732527	18-Sep-2024	YARBROUGH, SAMUEL (R)	154.03
1087079	27-Sep-2024	YASSIR, YOUSEF	2,700.00
732360	11-Sep-2024	YAZZIE, AUDRIANNA (R)	152.59
732301	11-Sep-2024	YELLOWMAN, SHEENA (R)	5.00
732511	18-Sep-2024	YESCO LLC	950.87
1087064	27-Sep-2024	YIN, WENBI	673.00
1087011	27-Sep-2024	YO, TIMOTHY	1,664.00
732361	11-Sep-2024	ZANDER, CARLY (R)	15.63
732740	26-Sep-2024	ZERMENO, EVA M	383.99
1087094	27-Sep-2024	ZHANG, JUNLI	1,193.00
1087092	27-Sep-2024	ZHANG, QISHENG	2,112.00
732843	27-Sep-2024	ZHENG, SHAO MEI	2,200.00
732116	05-Sep-2024	ZIMMERMAN, J ALLAN	800.29
1086951	26-Sep-2024	ZIONS BANCORPORATION, NATIONAL ASSOCIATION	2,000.00
732302	11-Sep-2024	ZOOMGRANTS	8,500.00
732545	19-Sep-2024	ZUNIGA ARREOLA, MELINA	460.00

City Council Memorandum Management Services Memo No. MS 25-051

Date: November 04, 2024
To: Mayor and Council
Joshua H. Wright, City Manager
Thru: Dawn Lang, Deputy City Manager - CFO
Kristi Smith, Financial Services Director
From: Christina Pryor, Procurement & Supply Senior Manager
Subject: Contracts and Agreements Administratively Approved, Month of October 2024

Background/Discussion

On November 7, 2022, City Council adopted Ordinance No. 5030 amending the Code of the City of Chandler, Chapter 3, raising the threshold for Council approval of contracts and agreements for materials, services, equipment, and construction from $50,000 to $100,000. The threshold for Council approval of contracts and agreements for professional services was raised from $30,000 to $100,000. The changes allow contracts and agreements valued less than $100,000 to be administratively approved. As part of the changes, Council requested a monthly summary of contracts and agreements approved under the newly adopted thresholds that would have required Council approval under the previous thresholds. The attached report summarizes the administratively approved contracts and agreements for materials, services, equipment, and construction valued between $50,000 and $99,999, and professional services valued between $30,000 and $99,999.

Attachments

Contracts and Agreements Administratively Approved

Informational Procurement Council Item – October 2024 Administrative Approvals

Administrative Approval of Contracts and Agreements for Materials, Services, Equipment and Construction Valued Between $50,000 and $99,999 and Professional Services Valued Between $30,000 and $99,999

Agreement No.: 4819
Subject: Water Efficiency Audits for Commercial Properties
Contractor: Water Resources Consulting, Gary C. Woodard
Value: $65,000.00
Notes: Provides for on-site assessments of water efficiency at commercial properties.

Agreement No.: ST2409.101
Subject: Downtown Paver Study
Contractor: Adurra Group, Inc.
Value: $96,845.00
Notes: Project management, GIS database/field collection database, field walk and documentation of existing conditions, draft assessment report, final assessment report.

Agreement No.: WA2203.451
Subject: Water Main Replacement 2022
Contractor: Dibble CM, LLC
Value: $76,375.00
Notes: Preconstruction assistance, preconstruction management

Agreement No.: PR2107.271
Subject: Gazelle Meadows Park Renovations
Contractor: Dig Studio, Inc.
Value: $69,030.00
Notes: Post design services including preconstruction assistance and landscape architectural and engineering design services during construction to address issues and/or specialized technical products regarding the designer of record, and preparation of as-built record drawings.

Agreement No.: BF2501.101
Subject: Centralized Fleet and Fire Support Services Study
Contractor: Arrington Watkins Architects, LLC
Value: $76,760.00
Notes: Design services for the Fire Support Services feasibility study including programming and concept, estimate, report and presentation.

Contracts or Agreements with Significant (+50%) Price Changes Valued Between $50,000 and $99,999

Agreement No.:
Subject:

Contractor:
Value:
Notes:

ITEM 43

City Council Memorandum Management Services Memo No. 25-048

Date: November 04, 2024
To: Mayor and Council
Joshua H. Wright, City Manager
Thru: Dawn Lang, Deputy City Manager - CFO
Kristi Smith, Financial Services Director
From: Danielle Wells, Revenue and Tax Senior Manager
Subject: Special Event Liquor Licenses and Temporary and Permanent Extensions of Liquor License Premises Administratively Approved

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Attachments

Special Event Liquor Licenses and Temporary and Permanent Extensions of Liquor License Premises Administratively Approved

November 7, 2024

Special Event Liquor and Extensions of Liquor Premises Approvals

Special Event Liquor Licenses

Organization Name: Ahwatukee Children's Theater Inc., DBA Ahwatukee Children's Theater
Applicant: Michael W. McDaniel
Event Details: AZACT Wine & Whiskey Event, Saturday, November 9, 2024, from 6:00 p.m. until 11:00 p.m.
Location: Fusion Power, 6150 W. Chandler Boulevard Suite 17

Organization Name: Sunbird Golf Resort Homeowners Association Inc., DBA Sunbird Golf Resort
Applicant: Layne Steven Varney
Event Details: Sunbird's Fall Fiesta Saturday, November 23, 2024, from 4:00 p.m. until 9:00 p.m.
Location: Sunbird Golf Course, 6250 S. Sunbird Boulevard

Organization Name: Heartstrings Foundation
Applicant: Rown Pickering
Event Details: Live Life Songwriters Music Festival, Saturday, November 2, 2024, from Noon until 11:00 p.m.
Location: Downtown Ocotillo, 2577 W. Queen Creek Road

Organization Name: Azcend
Applicant: Trinity Donovan
Event Details: Big League Wiffle Ball, Saturday, November 23, 2024, from 9:00 a.m. until 5:00 p.m.
Location: Dr. A.J. Park, 3 S. Arizona Avenue

Organization Name: Ahwatukee Foothills Chamber of Community Foundation
Applicant: Andrew Hayes
Event Details: Ahwatukee Chamber Foundation Gala, Thursday, November 7, 2024, from 5:00 p.m. until 10:00 p.m.
Location: Bella Rose Estate, 1380 S. Price Road

Organization Name: Chandler Chamber of Commerce
Applicant: Theresa Crandall Kimble
Event Details: Chandler 100, The State of the Business Community, Thursday, November 21, 2024, from 4:00 p.m. until 9:00 p.m.
Location: Quantum Helicopters, 2401 S. Heliport Way

Temporary Extensions of Liquor License Premises
N/A

Permanent Extensions of Liquor License Premises
N/A