



City Clerk Document No. \_\_\_\_\_

City Council Meeting Date: June 24, 2021

**CITY OF CHANDLER SERVICES AGREEMENT  
VIBRATION DIAGNOSTIC SERVICES  
CITY OF CHANDLER AGREEMENT NO. PW1-925-4350**

THIS AGREEMENT (Agreement) is made and entered into by and between the City of Chandler, an Arizona municipal corporation (City), and Mechanical Solutions, Inc., a New Jersey Corporation (Contractor), (City and Contractor may individually be referred to as Party and collectively referred to as Parties) and made \_\_\_\_\_, 20\_\_\_\_(Effective Date).

**RECITALS**

A. City proposes to provide pump and piping vibration diagnostic 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 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.

Following execution of this Agreement by City, the Contractor will immediately commence work and will complete all services described within 120 calendar days from the date the Contractor is notified to proceed.

### **SECTION IV: PAYMENT OF COMPENSATION AND FEES**

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 under this Agreement must not exceed \$120,000. 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. Contractor bears all responsibility and liability for any and all tax obligations that result from Contractor's performance under this Agreement.

### **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 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 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:

| <b>For the City</b>                                              | <b>For the Contractor</b>                                    |
|------------------------------------------------------------------|--------------------------------------------------------------|
| Name: <u>Raquel McMahon</u>                                      | Name: <u>Karen Rizzi</u>                                     |
| Title: <u>Procurement Officer</u>                                | Title: <u>CFO/General Manager</u>                            |
| Address: <u>175 S. Arizona Ave.</u><br><u>Chandler, AZ 85298</u> | Address: <u>11 Apollo Drive</u><br><u>Whippany, NJ 07981</u> |
| Phone: <u>480-782-2407</u>                                       | Phone: <u>973-326-9920</u>                                   |
| Email: <u>raquel.mcmahon@chandleraz.gov</u>                      | Email: <u>Karen.Rizzi@mechsol.com</u>                        |

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.

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.

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 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.

5.23 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 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 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.

5.25 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 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.

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 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.

5.27 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 the Contractor 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 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.

5.34 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.

5.35 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.

5.36 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.

5.37 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.

5.38 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

5.39 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.

5.40 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.

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.

5.41 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.

5.42 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.

5.43 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.

5.44 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.

5.45 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.

5.46 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.

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: Karen Riggi

Its: CFO/General Manager

**APPROVED AS TO FORM:**

By: \_\_\_\_\_

City Attorney

*WMB*

**ATTEST:**

By: \_\_\_\_\_

City Clerk

## **EXHIBIT A TO AGREEMENT SCOPE OF SERVICES**

### **CONTRACTOR'S OBLIGATIONS**

Contractor, Mechanical Solutions., Inc. (MSI), will provide City of Chandler Public Works Department with services to troubleshoot and determine the root cause of the high vibration issues on four permeate pumps and piping at Ocotillo Water Reclamation Facility (OWRF) and seven vertical turbine pumps (VTP) at the Airport Water Reclamation Facility (AWRF) via specialized testing. Contractor will recommend a practical solution based on the proposed field test and in-office analysis results. This step may be augmented with an optional Finite Element Analysis (FEA) if needed. MSI will then support solution implementation.

While MSI was performing post-modification acceptance testing on the raw water VTP's at the Pecos SWTP station in March of 2021, it was requested to perform a preliminary vibration evaluation on four permeate pumps at Ocotillo WRF, which were reported to have high vibration, especially when operating in back pulse mode. The vibration affects the motor, pump, connected piping, and piping support structure, as observed while using MSI's VibVue® motion magnification system (Figure 1). Pump seal 1 has been wearing out more quickly. Also, issues with cracking or breaking small bore piping and piping supports have been reported. The vibration has also resulted in concrete damage, requiring re-grouting around the pump and motor baseplate and piping support connections. The permeate pumps are rotary lobe type pumps with 3 lobes, and are driven by a 50 HP, 1780 rpm motor, through a 3.91:1 speed reducing gear box.

In addition to the Ocotillo permeate pumps, MSI obtained preliminary data on VTP's at AWRF. Seven of the eight VTP's are experiencing high vibration. Plant personnel have determined natural frequencies between 17.25 Hz and 18.25 Hz. The peak operating speed of the pump is approximately 19.75 Hz (1185 rpm), and the pumps are variable speed, controlled by a VFD. MSI's preliminary impact testing revealed natural frequencies from 17 Hz to 19 Hz on Pumps 5 and 7. Vibration measurements also exceeded Hydraulic Institute specification 9.6.4 limits.

MSI is recommending a well-practiced approach focused on yielding a data driven and practical solution. The plan includes the following key features:

- a. The test data analysis will initially reveal if the advanced seal wear and piping failures are due to a forced response issue, a structural resonance issue, an acoustic natural frequency, or a combination of issues.
- b. All MSI test data will be measured and recorded simultaneously and time-stamped. This is particularly important when trying to uncover a failure mode (or combinations) that periodically occurs during transient conditions or is only present during random operating conditions.
- c. A series of specialized on-site tests is used to determine the pump system natural frequencies and associated damping along with system motion, looseness, and deflection including:

- The VibVue® high speed video camera and related software will be used to magnify the motion the pump system to better visualize the actual deflection, vibration, and deformation of select portions of pump systems in slow motion.
- Operating Deflection Shape (ODS), Experimental Modal Analysis (i.e., impact testing) *while the pump is operating*, and proximity probe measurements are proven specialized problem-solving techniques.
- The test measurements will include the accessible areas of the pumps. It is noted that some below ground portions of the VTP's may not be accessible, and that some portions of the piping may not be accessible on the permeate pumps.
- Dynamic pressure testing on the permeate pumps suction and discharge piping to determine if there is excessive pulsation or amplification of the dynamic pressure due to acoustic resonance in the piping.
- Optional Task 8 adds below ground measurements on the VTP's. Please note that a submersible accelerometer with integral 50 foot cable will continue to function for months (maybe years). The pressure transducer can remain installed but will only function for days.

Note: The proposed plan is to perform the detailed testing on one each type of the pumps with comparison data collected on the remaining installed pumps.

- d. Once the problem source is identified, the solution can be formulated. In many cases, MSI in collaboration with the engineering firm, repair facility, and plant personnel are able to recommend and justify a practical solution based on the test and data analysis results.

In other cases, some level of FEA is required to model, evaluate, and "test" solutions before down-selecting to the preferred solution.

MSI is proposing our standard problem-solving approach for high-value pump systems, and MSI is typically involved in more difficult/ challenging problems. MSI believes that the impact on plant reliability and the problem history requires a comprehensive data driven problem-solving approach, not simply more data collection.

### **Phase I: Specialized Field Vibration Testing Ocotillo Permeate Pumps**

1. *History review, preparation, and travel:* MSI has reviewed data and information gathered from its March 2021 initial vibration survey, along with drawings from the permeate pump manufacturer, in order to prepare this proposal. Additional review by MSI, and a teleconference with City of Chandler personnel will take place under this task so that all test plan details are finalized. Water availability for the required testing will be discussed.

MSI will prepare all the hardware needed to perform the planned testing. This includes all temporarily installed triaxial accelerometers, proximity probes, 32-channel MSI Sentry® and/or a 17-channel B&K signal analysis equipment, instrumented impact hammer,

VibVue® motion amplified video hardware/software, and data storage computers (Figure 2).

An MSI Project Engineer and a Senior Technical Specialist or Engineering Associate will travel from MSI offices in Whippany, NJ via Newark Airport (EWR) to the plant via the Phoenix Airport.



**Figure 2.** Typical equipment needed for Operating Deflection Shape (ODS) testing and experimental modal analysis (impact testing) includes: the laptop computer with the data analysis software installed, analyzer with appropriate channel count, associated cables, the required number of above tri-axial accelerometers and uni-axial accelerometers, and an instrumented impact hammer.

2. *On-site test setup:* Onsite test set up will begin on the morning of Day 1. MSI will visually inspect the pump, motor, baseplate, piping, and foundation, and take physical measurements and digital photos. The temporary sensors will be installed by MSI and the equipment can be operational during test set up. MSI will need AC power and support from plant personnel for pump operation while onsite to complete the testing effort.
3. *Structural Assessment via VibVue® Vibration Amplified Video Testing – pump operating:* The VibVue® high speed video camera and related software will be used to magnify the motion of the video allowing engineers (and managers) to better visualize the actual deflection, vibration, and deformation of select portions of the pump system in slow motion. Limited video data has already been taken of the pumps and piping, but more will be taken as necessary. More information about this unique test methodology is available at <https://www.mechsol.com/products/vibvue>. Figure 1 is a still image from VibVue® video of the permeate pump, captured during MSI's initial survey.
4. *Experimental Modal Analysis (EMA) or Impact Testing – pumps on & off):* Perform impact testing on limited and available portions of the pump system while it is *operating* and not operating. MSI's use of its Time Averaged Pulse (TAP™) method makes impact testing on an operating pump system practical, as well as the associated piping.

A portion of the testing is performed with the pump *operating* so the water mass effect is taken into account for the casing in the resultant test data. Likewise, any motor and pump/piping structural stiffening/deflection and actual bearing loads are taken into account. MSI performs the impact test in three orthogonal directions (axially and both lateral directions).

The modal test provides the operating natural frequency mode shapes and damping information for the rotating system and the structure. The mode shapes of the relevant excited natural frequencies will be evaluated as Frequency Response Function (FRF) plots by MSI personnel back at MSI's facilities.

5. *Operating Deflection Shape (ODS) testing –pump operating:* The results from Tasks 3 will help focus the ODS testing task. MSI will perform operating forced response testing on the motor, baseplate/ foundation, discharge head (for VTP's), and nearby discharge piping while the pump operates, using tri-axial accelerometers which measure vibration in three orthogonal directions and high frequency single axis accelerometers. Measurements will be taken at representative key locations (*up to 300*) on the system.

MSI will record vibration displacement vs. frequency spectra, and digitally record the same data vs. time for a reasonable time interval (approximately one minute at each location). This natural excitation signature testing (with point-to-point phase information) will be done such that one of the 32-channel FFT analyzer channels is always kept at the same location and direction, for phase reference, such that the data can stored as an operating deflection shape (ODS).

This shape will be plotted, animated, and analyzed later by MSI personnel, back at MSI's facilities under Task 9. Figure 4 is a still frame ODS animation from a past vertical pump problem-solving project involving a discharge head located below the foundation.

Note: Due to the operating conditions, the ODS on the permeate pumps may have to be performed using many accelerometers that simultaneously record the data. This provides similar results as the above method that will be used for the VTP's, but requires many more accelerometers and channels of data.

6. *Dynamic pressure testing (Permeate pump only) – pump operating:* Determine pressure pulsations at the suction and discharge using high frequency piezo dynamic pressure transducers (Figure 5). This testing will help to determine if there is acoustic resonance that is amplifying the dynamic pressure of the pump.

### **Phase II: Specialized Field Vibration Testing AWRFVTP's**

7. *Field vibration testing of the 7 VTP's at the AWRF:* MSI will repeat tasks 1 through 4 on 7 of the VTP's at the AWRF. Additionally, task 5, the operating deflection shape testing, will be performed on at least one of the seven VTP's.
8. *Optional below-ground vibration and pressure data measurements:* MSI will collect vibration data and pressure data from a submersible tri-axial accelerometer (Figure 6) and a pressure transducer mounted on the suction bell, if the instrumentation is mounted by plant personnel prior to MSI's arrival. The data will help diagnose and solve the problem if it is either a) a below-ground resonance problem and/or b) an issue with the flow entering the suction below. The data will be analyzed and used under Task 10.

### **Phase III: Test data preparation, analysis, and reporting with recommendations**

9. *Test data analysis and reporting with specific recommendations:* MSI will use the test results to identify the specific nature of the problems on a best effort basis and recommend how to effectively resolve the problem. MSI will write a clear and concise technical report that will document the testing and analysis which MSI performed.

The report will enable the City of Chandler to follow what was done, what the relevant results were, and recommendations for solving the problem. MSI will prepare both static plots and

animations of the final test results for distribution to City of Chandler with the final report. A report section will provide design information for recommended modification(s) supported by computer generated and dimensionalized sketches, if needed.

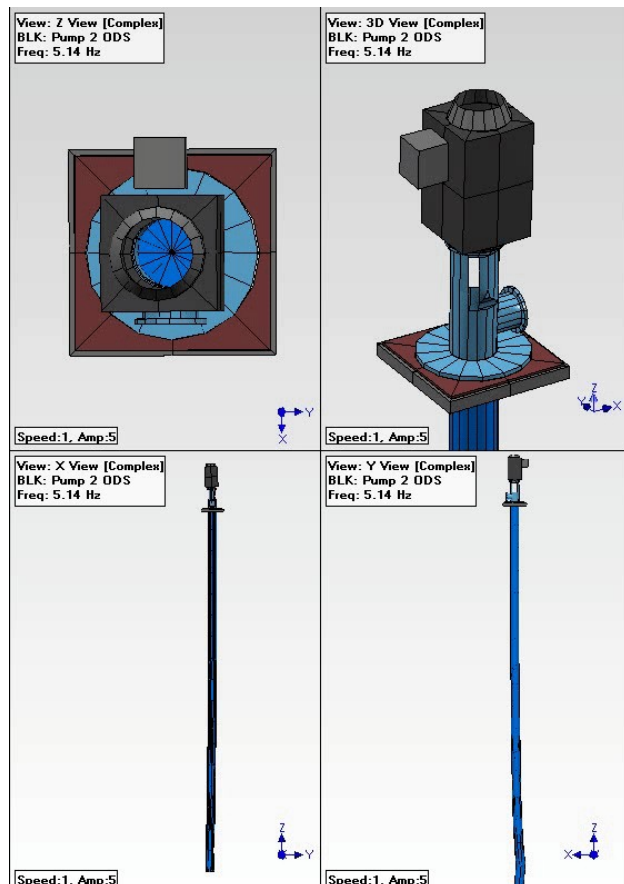
**Phase IV: If needed, Finite Element Analysis (FEA) Option**

10. *Finite Element Analysis (FEA)*: Usually, MSI can provide solutions based on field data and using the ME'Scope software. However, depending on the results of the above ODS and modal analysis it may be preferable for MSI to use Finite Element Analysis (FEA) to design and analyze a recommended solution. This will be discussed with the customer early in Task 9.

FEA can be used to analyze and finalize a structural modification to correct a structural resonance. If needed, this optional task consists of constructing a structural modal analysis model of the pump, nearby foundation, and nearby piping using MSI field measurements and any repair vendor measurements. MSI uses ANSYS or Pro/Mechanical FEA.

Initially, the FEA model will be calibrated with the ODS model (structural) that is based on the field data. Next, potential solutions are analyzed and refined. The FEA work is only far enough to design a solution that will work for all seven pumps.

If this option is needed, the FEA work will include two iterations to the support structure achieve the desired separation margin between running speed and the offending natural frequency. The Task 9 report will be amended with the FEA results and will include the details for the specific modifications needed to solve the problem. The FEA report amendment will reference key plots and tabulated FEA results.





**Figure 4.** Static image of an ODS animation of a vertical pump system. ODS animation overlay test data on an MSI prepared 3D solid model. When animated looseness, deflections, and natural frequencies can be viewed to identify problems with more certain so a fix can be recommended with more confidence.



**Figure 5:** Dynamic pressure testing is performed if pressure pulsations/ acoustic natural frequencies are a possible root cause of, or contributor to, the problem. These will only be used on the permeate pumps.



**Figure 6** – Optionally a submersible triaxial accelerometer with an integral cable mounted at the suction bell helps characterize and resolve below-ground structural resonance issues.

#### **Personnel:**

Maki Onari, Vice President, will be assigned as the overall project manager responsible for successful completion of this project. He will be supported by a several engineers and technicians from among MSI 35-person staff. A Project Engineer III and a Senior Technical Specialist or second Project Engineer will be the performing the on-site testing and test data analysis. Paul Boyadjis, Director of Structural Analysis, will be involved in the optional Task 5 (FEA) effort. Oversight will be provided by William D. Marscher, P.E., Technical Director, who has over 45 years of experience pump experience. A companion document provides background information about the qualifications of the company and its staff.

#### **About the Company:**

MSI is an engineering design, development, and analysis company specializing in rotating machinery and related systems with a particular focus on pumping/piping systems. MSI's activities include specialized vibration analysis and testing, stress analysis & testing, advanced mechanical component development, heat transfer and fluid flow analysis, and fluid dynamic component development. MSI engineers are recognized experts in their various fields. MSI staff have authored or co-authored the vibration chapter of Sank's Pumping Station Design Handbook; "Centrifugal Pump Design & Performance", published by Oxford University Press; and "Centrifugal Pump Mechanical Behavior and Vibration" chapter in the 4<sup>th</sup> edition of the Pump Handbook (McGraw Hill, 2008). MSI is a Standards Partner with the Hydraulic Institute and the Vice-Chair of the Vibration committee.

On a regular basis MSI is contracted by users of high value pumps, engineering firms, manufacturers, and to resolve problems, analyze component or system stress and vibration, analyze flow fields, develop advanced components or complete machines, apply or develop specialty software, and perform machinery testing on test stands and operating in the field.

### **Schedule:**

MSI will work with Carollo Engineers to meet schedule requirements. The following is a tentative schedule for Tasks 2 and 3 (on-site testing):

- Day 1 (Monday) – Travel to a hotel near the job site
- Day 2 (Tuesday) – On-site at Ocotillo for up to 10 hours to complete Task 2 (set up) and start Task 3.
- Day 3 (Wednesday) – On-site at Ocotillo for up to 10 hours to continue with Task 3 through Task 6.
- Day 4 (Thursday) – On-site at Ocotillo for up to 5 hours to complete permeate pump testing. On-site at AWRF for up to 5 hours to start Task 7.
- Day 5 (Friday) – On-site at AWRF for up to 10 hours to complete Task 7.
- Day 6 (Saturday) – Travel home.

The Task 9 (Phase III) effort will take up to 10 to 15 additional working days after the last day on-site. Preliminary conclusions and input will be provided via email shortly after the testing concludes on a provisional basis. If it is needed the optional Task 10 FEA work could add 10 to 15 additional days after receiving all the drawings required to build the computer solids models.

## EXHIBIT B TO AGREEMENT COST SUMMARY

**Table 1.** Level of effort and estimated cost summary by phase with the optional task.

| Phase | Phase name                                                                             | Tasks  | Onsite Time                                                                                                                         | Labor    | Expenses | Total    | NTE      |
|-------|----------------------------------------------------------------------------------------|--------|-------------------------------------------------------------------------------------------------------------------------------------|----------|----------|----------|----------|
| I     | Ocotillo Permeate Pump Testing (review, prep, travel, MMV, EMA, ODS, Dynamic Pressure) | 1 to 6 | 2 people, up to 25 hours over 2.5 days                                                                                              | \$16,510 | \$2,760  | \$19,270 | \$19,800 |
| II    | AWRF vibration testing of 7 VTPs (review, prep, MMV, EMA, ODS)                         | 7      | 2 people, up to 15 hours over 1.5 days                                                                                              | \$6,700  | \$1,300  | \$8,000  | \$8,500  |
| II    | <i>Optional</i> Below Ground Accelerometer Data for 1 VTP                              | 8      |                                                                                                                                     | \$1,500  | \$0      | \$1,500  | \$1,500  |
| III   | Test data analysis and reporting                                                       | 9      |                                                                                                                                     | \$13,500 | \$0      | \$13,500 | \$14,000 |
|       |                                                                                        |        |                                                                                                                                     |          |          |          |          |
| IV    | Finite Element Analysis of AWRF VTP's                                                  | 10     | The need will be known during Task 9. If needed, MSI will quote the work which has a budgeted to cost between \$10,000 to \$13,000. |          |          |          |          |

\* Hourly rates include MSI usage of the specialized test hardware and sensors for the onsite testing, and the analysis software needed.

Work will be billed as follows:

- a) Salaries & Wages: All work under this agreement will be charged at standard hourly rates charged to MSI standard industrial customers. In the event of travel, travel hours are billed at full rate. Standard rates may change without notice, typically as of January 1 of each New Year.
- b) Materials and Services necessary to the project, and purchased outside of MSI.
- c) Travel and other out-of-pocket expenses (air, meals, lodging, rentals, etc.)
- d) A handling charge of 8% on items b and c.

The M&S expenses are for travel and living expenses for the two personnel who will work on-site. The estimate is based on travel and testing for Phase I is based on the travel and on-site testing taking place on four consecutive weekdays.

A daily rate will apply if test personnel encounter on-site non-productive dwell time for factors outside their control. The estimated daily rate including additional living expenses for the two-person team totals \$3,700USD for 8 hour weekdays. The pricing offered is valid for work completed per the schedule indicated.

The MSI Senior Technical Specialist or Engineering Associate is an hourly person any time over 8 hours per weekday or on Saturdays will be charged at time-and-a-half, and any required Sunday work at double-time. Expected weekday overtime is included in the NTE estimate. Work will generally be billed in the month it takes place with net 30 payment terms.

## **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 \$1,000,000 for each occurrence, \$2,000,000 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.

- 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.
- D. *Professional Liability.* If the Agreement is the subject of any professional services or work performed by the Contractor, or if the Contractor engages in any professional services or work adjunct or residual to performing the work under this Agreement, the Contractor must maintain Professional Liability insurance covering errors and omissions arising out of the work or services performed by the Contractor, or anyone employed by the Contractor, or anyone whose acts, mistakes, errors and omissions the Contractor 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 three years past completion and acceptance of the work or services, and the Contractor, 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 three year period.

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 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.

## **EXHIBIT D TO AGREEMENT SPECIAL CONDITIONS**

### **INTELLECTUAL PROPERTY**

City Ownership of Project Documents. All work products (electronically or manually generated) including, but not limited to: plans, specifications, cost estimates, tracings, studies, design analyses, original drawings, 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 the City and are to be delivered to the City Representative before the final payment is made to the Contractor. In the event these Documents are altered, modified or adapted without the written consent of the Contractor, which consent the Contractor shall not unreasonably withhold, the City agrees to hold the Contractor harmless to the extent permitted by law from the legal liability arising out of the City's alteration, modification or adaptation of the Documents.

Contractor to Retain Copyrights. The copyrights, patents, trade secrets or other intellectual property rights associated with the ideas, concepts, techniques, inventions, processes or works of authorship developed or created by the Contractor, its subcontractors or personnel, during the course of performing this Agreement or arising out of the Project shall belong to the Contractor.

License to City for Reasonable Use. With this Agreement, the Contractor and its subcontractors hereby grant a license to the 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. In the event that the derivative works require the City to alter or modify the Documents, then the provisions of this section apply.

Documents to Bear Seal. The Contractor and its subcontractors shall endorse by professional seal all plans, works, and deliverables prepared by each for this Agreement as required by state law

### **ACCESS TO SECURED FACILITIES**

Contract Worker Access Controls, Badge and Key Access Requirements. A Contract Worker shall not be allowed to begin work in any City facility without: (A) The prior completion and the City's acceptance of the required background screening; and (B) when required, the Contract Worker's receipt of a City issued badge. A badge will be issued to a Contract Worker solely for access to the City facility(s) to which the Contract Worker is assigned. Each Contract Worker who enters a City facility must use the badge issued to the Contract Worker. Any and all fees associated with security badging will be assessed in compliance with Chandler City Code §4-22.

Key Access Procedures. If the Contract Worker's services require keyed access to enter a City facility(s), a separate key issue/return form must be completed and submitted by Contractor for each key issued.

Stolen or Lost Badges or Keys. Contractor shall report lost or stolen badges or keys to the City immediately. A new badge application or key issue form shall be completed and submitted along with payment of the applicable fees prior to issuance of a new badge or key.



Return of Badges or Keys. All badges and keys are the property of the City and must be returned to the City within one business day of when the Contract Worker's access to a City facility is no longer required to furnish the services under this Agreement. Contractor shall collect a Contract Worker's badge and key(s) upon the termination of the Contract Worker's employment; when the Contract Worker's services are no longer required at the particular City facility(s); or upon termination, cancellation or expiration of this Agreement.

Contractor's default under this Section shall include, but is not limited to the following: (1) Contract Worker gains access to a City facility(s) without the proper badge or key; (2) Contract Worker uses a badge or key of another to gain access to a City facility; (3) Contract Worker commences services under this Agreement without the proper badge, key or Background Screening; (4) Contract Worker or Contractor submits false information or negligently submits wrong information to the City to obtain a badge, key or applicable Background Screening; or (5) Contractor fails to collect and timely return Contract Worker's badge or key upon termination of Contract Worker's employment, reassignment of Contract Worker to another City facility or upon the expiration, cancellation or termination of this Agreement. Contractor acknowledges and agrees that the access control, badge and key requirements in this Section are necessary to preserve and protect public health, safety and welfare. Accordingly, Contractor agrees to properly cure any default under this Section within three business days from the date notice of default is sent by the City. The parties agree that Contractor's failure to properly cure any default under this Section shall constitute a breach of this Section. In addition to any other remedy available to the City at law or in equity, Contractor shall be liable for and shall pay to the City the sum of \$1,000.00 for each breach by Contractor of this Section. The parties further agree that the sum fixed above is reasonable and approximates the actual or anticipated loss to the City at the time and making of this Agreement in the event that Contractor breaches this Section. Further, the parties expressly acknowledge and agree to the fixed sum set forth above because of the difficulty of proving the City's actual damages in the event that Contractor breaches this Section. The parties further agree that three breaches by Contractor of this Section arising out of any default within a consecutive period of three months or three breaches by Contractor of this Section arising out of the same default within a period of 12 consecutive months shall constitute a material breach of this Agreement by Contractor and the City expressly reserves all of its rights, remedies and interests under this Agreement, at law and in equity including, but not limited to, termination of this Agreement.