



**AMENDMENT NO. 1 TO
CONSTRUCTION MANAGEMENT SERVICES AGREEMENT**

**Reclaimed Water Conveyance Improvements
Project No. WW2206.451**

Council Date: December 7, 2023 Item No.

THIS AMENDMENT NO. 1 ("Amendment No. 1") to the professional services agreement dated July 10, 2023 (the "Agreement") is made by and between the City of Chandler, an Arizona municipal corporation, ("City") and **Wilson Engineers, LLC**. ("Consultant"), on this ____ day of _____, 2023 ("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: **Construction Management Services** ("Services") for the **Reclaimed Water Conveyance Improvements** 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. 1 and the Agreement.

CHOOSE IF CONTRACT IS EXPIRED. IF NOT EXPIRED, THEN DELETE.

AGREEMENT

NOW, THEREFORE, in consideration of the premises and mutual promises contained in the Agreement and this Amendment No. 1, 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.

SECTION II – PERIOD OF SERVICE

The Period of Service is increased by 201 calendar days for a revised total of 741 calendar days.

SECTION III – PAYMENT OF COMPENSATION AND FEES

The Fees are increased by \$1,316,320 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 \$1,518,770.

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

IN WITNESS WHEREOF, the Parties hereto have caused this Amendment No. 1 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. 1.

"CITY" CITY OF CHANDLER

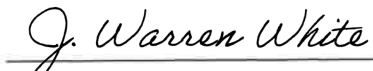
"CONSULTANT"

Wilson Engineers, LLC.

MAYOR

 11/7/23
Signature Date

RECOMMENDED BY:


Warren White, P.E.
Acting CIP City Engineer

Uday Kumar Gandhe
Print Name

Principal
Title

APPROVED AS TO FORM:

Uday.gandhe@Wilson-Engineers.com
Signer Email Address

City Attorney 

ATTEST:

City Clerk

Seal

Amendment No. 1 (cont.)
Project No. WW2206.451

These changes result in the following adjustments of Agreement amount and/or time:

Amendment authorized by Owner name: Josef Kennis		Date: 10/31/2023
Consultant email: uday.gandhe@wilsonengineers.com		
Original Agreement amount:	\$202,450	
Previous Amendment(s) total:	\$0	
Last Agreement amount approved by Council:	\$202,450	
This Amendment:	\$1,316,320	
This Amendment + previous Amendment(s) not approved by Council total:	\$1,316,320	
Revised Agreement total:	\$1,518,770	
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):	<u>540</u> Calendar Days	
Net change resulting from this Amendment:	<u>201</u> Calendar Days	
Revised Agreement time (including this Amendment):	<u>741</u> Calendar Days	
Council Approval (if applicable)		
Council Approval Date: <u>December 7, 2023</u> Item No. _____		

cc: Project Manager, Consultant, Owner, File

EXHIBIT A
SCOPE OF WORK



EXHIBIT "A"

CONSTRUCTION MANAGEMENT SCOPE OF SERVICES RECLAIMED WATER CONVEYANCE IMPROVEMENTS PROJECT

GENERAL DESCRIPTION

The City of Chandler is building the Reclaimed Water Conveyance Improvements (RWCI) to convey the additional flows from the AWRP RWPS to the reclaimed water distribution system and to provide additional flexibility to meet flow demands to the City's industrial customer near OWRF. Two new pumps and a redundant reclaimed water line will be added at the Airport WRF Campus. The early procurement package (GMP 1) is already executed to procure long lead equipment to maintain project schedule. The design of the Phase 2 is essentially complete and submitted to agencies for final reviews. The City is finalizing the construction contract for GMP 2. This Construction Management scope of work will include effort by Wilson Engineers (Consultant) and will involve Project Administration, Engineering and Resident Services during this phase (GMP 2) of the Project.

PROJECT TASKS

1. PRE-CONSTRUCTION ASSISTANCE

A. Task 1.1 Preconstruction Assistance

- i. Not Included

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 56 weekly meetings.

B. Task 2.2 CPM Schedule

- i. Consultant's opinions concerning various scheduling documents produced or used by the Contractor are for information and not controlling on the Contractor. It is Contractor's responsibility to continue to exercise its independent judgement concerning means, methods and sequences of construction it employs. The Contractor remains solely responsible for meeting contract time(s) identified in the construction documents.
- 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 reviews of updated CPM schedule.

C. Task 2.3 Perform Site Visits

- i. The Consultant's design staff will make site visits appropriate for the type of construction at periods appropriate to the various stages of construction to observe, as an experienced qualified professional, the progress and quality of the executed work of a Contractor and to determine in general, if such work is proceeding in accordance with the design intent. The Consultant's site visit or site presence shall support the inspection needs and requirements established by the City.

D. Task 2.4 Requests for Information (RFI's)

- i. Consultant will issue necessary interpretations and clarifications of the construction documents; have authority, as City's representative, to require special inspection or testing of the work; act as initial interpreter of the requirements of the construction documents and judge the acceptability of the work thereunder, and make decisions on all claims of City and Contractor(s) relating to the acceptability of the work or the interpretation of the requirements of the construction documents pertaining to the execution and progress of the work. Consultant will render interpretations or decisions in good faith and in accordance with the requirements of the construction documents.
- ii. Consultant will respond to the City's representative and/or Contractor to clarify and/or interpret technical or design-related questions. Consultant will respond to issues raised during construction regarding interpretation and clarification of the contractual administrative and technical requirements of the construction documents. Consultant will serve as the City's advisor in resolution of these issues.
- iii. Consultant will prepare and maintain a submittal log of all RFI's. Consultant assumes a maximum of 100 RFI responses.

E. Task 2.5 Shop Drawing Submittals

- i. Consultant will receive, review, evaluate, and distribute (or take other appropriate action in respect of) shop drawings, samples, test results, and other data which Contractor is required to submit. Consultant review shall be for conformance with the design concept of the Project and compliance with the information given in the construction documents. Such review or other action shall not extend to means, methods, sequences, techniques, or procedures of construction selected by Contractor(s), or to safety precautions and programs associated thereto. Consultant will receive and review (for general contents as required by the construction documents) maintenance and operating schedules and instructions, operation and maintenance manuals, guarantees, and certificates of inspection, which are to be assembled by Contractor(s) in accordance with the construction documents.
- ii. Consultant will maintain a submittal log showing dates of submittal, transmittal action to other sub-consultants, dates of return, and review action. Copies of the log shall be furnished to the City and the Contractor weekly. Consultant will promptly and in accordance with Project schedule requirements, review and approve, reject or take other appropriate action on the Contractor's request for substitutions. Consultant will not approve any proposed substitution unless such substitution conforms to the Project design concept and the construction documents including the contract price.

- iii. Task effort is based on receiving an estimated 200 shop drawing submittals. Submittal review efforts is based upon a maximum of two (2) reviews per submittal and that no more than fifty percent (50%) of the total number of first submittals will require two (2) reviews.

F. Task 2.6 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 deviations) with approval recommendations; and prepare and maintain a submittal log list of all RFP's. Consultant assumes fifty (30) RFPs.

G. Task 2.7 Field Directives (FD's)

- i. Consultant, without the City's prior approval, may authorize or direct minor changes in the Work which are consistent with the intent of the construction contract documents and which do not involve a change in Project cost, time for construction, Project scope, aesthetics, or approved design elements. Any such minor changes shall be implemented by written field order. Except as provided in this paragraph, Consultant shall not have authority to direct or authorize changes in the Work without the City's prior written approval; however, Consultant shall provide a copy of any written field order to the City.
- ii. Consultant will prepare and submit change order requests explaining the merits for the change and a recommendation for the City's approval and acceptance.
- iii. Consultant will negotiate an agreement with the Contractor as to scope of work and cost, time or both associated with the change in Work. The change order shall include a written justification for the cost of the Work. Consultant will administer and manage minor changes, change order requests, and change orders on behalf of the City. Change orders shall be prepared on a standard form provided by the City. Should a change order request be accepted by the City in the absence of an agreement with the Contractor as to cost, time, or both, Consultant will:
 - A) receive and maintain all documentation pertaining to the change order request required of the Contractor;
 - B) examine such documentation on the City's behalf;
 - C) take such other action as may be reasonably necessary or as the City may request; and
 - D) make a recommendation to the City concerning any appropriate adjustment in the construction cost and/or time, and prepare a change order for Contractor's acceptance and City approval.
- iv. Changes and substitutions shall be limited to the scope of the Project as defined by the construction documents or additional work as may be requested by the City. Consultant will promptly consult with and advise the City concerning, and shall administer and manage, all change order requests and change orders.
- v. Consultant will prepare, when requested by the City, required drawings, specifications and other supporting data regarding minor changes, change order requests, and change orders. 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. Multiple directives may be combined to create a field directive. Consultant assumes twenty five (15) FD's.

H. Task 2.8 Contractor Payment Applications

- i. Consultant will review, prepare comments, and reach agreement with the Contractor on the progress represented in the Contractor's schedule of values. The monthly schedule update, schedule of values, in combination with Consultant's

field inspections, and the progress schedule shall be used by Consultant to determine the appropriateness of the Contractor's request for payment.

- ii. Consultant, as an experienced and qualified professional, and on review of applications for payment and the accompanying data and schedules, determine the amounts owed to Contractor and recommend in writing, payments to Contractor in such amounts; such recommendations of payment will constitute a representation to City, based on such inspections and review, that;
 - A) the work has progressed to the point indicated;
 - B) to the best of Consultant's knowledge, information and belief, the quality of such work is in accordance with the construction documents (subject to an evaluation of such work as a functioning Project upon Substantial Completion, to the results of any subsequent tests called for in the construction documents, and to any qualifications stated in the recommendation); and
 - C) payment of the amount recommended is due and owed to the Contractor.
- iii. For unit price work, Consultant's recommendations for payment will be a determination of completed quantities of such work.
- iv. Consultant assumes a maximum of 15 payment applications, with 2 reviews each.

I. Task 2.9 Use of Allowance and Use of Contingency

- i. The Consultant shall assist the City with the Allowances and Contingencies that are identified in the contract. It is anticipated that the City or the Contractor may request the use of the contingency and allowance funds. The Consultant shall maintain all documentation and logs pertaining to the use of any allowances and contingencies. It is anticipated that approximately Twenty (20) Use of Allowances or Contingency requests.

J. Task 2.10 Public Outreach

- i. Not Included

3. CONSTRUCTION INSPECTION

A. Task 3.1 Inspection Services

- i. The Resident Project Representative (RPR) and various Inspectors will be on-site and will act as directed by Consultant, in order to assist Consultant in inspecting performance of the work of the Contractor(s). Consultant will endeavor to provide further protection for City against deficiencies in the work of Contractor(s) through more extensive on-site inspections of the work and field checks of materials and equipment by the RPR and Inspectors,. The furnishing of such RPR representation will not make Consultant responsible for construction means, methods, techniques, sequences or procedures, or for safety precautions or programs, or for Contractor(s) failure to perform their work in accordance with the construction documents. The Resident Project Representative (RPR) will be at the Project site to be knowledgeable about the progress and quality of the work to:
 - A) Conduct on-site inspections of the work in progress to assist Consultant in determining if the work is proceeding in accordance with the construction documents and that completed work conforms to the construction documents.
 - B) Report to Consultant whenever it is believed that any work is unsatisfactory, faulty, or defective, or does not conform to the construction documents, or does not meet the requirements of inspections, tests or approval required to be made, or has been damaged prior to final payment; and advise Consultant when it is believed work should be corrected or rejected or should be uncovered for inspection, or requires special testing, inspection or approval.
 - C) Verify that tests, equipment, and systems start-up and operating and maintenance instructions are conducted as required by the construction documents and in presence of the required personnel, and that Contractor

maintains adequate records thereof; inspect, record and report to Consultant appropriate details relative to the test procedures and start-ups. Accompany visiting inspectors representing public or other agencies having jurisdiction over the Project, record the outcome of these inspections, and report to Consultant.

The RPR, as Consultant's agent, will act as directed by and under the supervision of Consultant. The RPR's dealings in matters pertaining to the on-site work shall in general be only with Consultant and Contractor, and dealings with subcontractors shall only be through or with the full knowledge of Contractor. Written communication with City will be only through or as directed by Consultant, and when appropriate, may be through the RPR.

- ii. **Certificates. Maintenance and Operation Manuals:** During the course of the work, review and determine that certificates, maintenance and operation manuals and other data required to be assembled and furnished by Contractor are applicable to the items actually installed; and deliver this material to Consultant for review and forwarding to City prior to final acceptance of the work.
- iii. **Start-up Assistance:** Start-up services shall be sufficient to transfer finished work from a construction status to operating, functional system(s). Such services may include review of Contractor's start-up plan, prepare and coordinate a start-up plan and procedures for City personnel use, supervise during start-up procedures, and assist City personnel during a period of initial operation.
- iv. **Special Inspection:** During the course of the work, arrange and coordinate Special Inspections for structural, mechanical, and electrical work as required by the Special Inspection Certificates required by the City.

B. Task 3.2 Landscape / Irrigation Inspection Services

- i. Not Included

C. Task 3.3 Project Closeout

- i. Following notice from the Contractor, The Consultant will conduct an inspection to determine if the Project or the work associated with interim milestones is substantially complete in accordance with the construction documents. If the Consultant considers the work substantially complete, the Consultant will deliver to the City and the Contractor the Certificate of Substantial Completion and the punch list, the date for completion of the punch list, and recommend the division of responsibilities between the City and the Contractor. If the work is not substantially complete, the process shall be repeated until the work is substantially complete.
- ii. The Consultant, upon completion of the punch list items as notified by the Contractor, make final inspection. The inspection will be to determine if the finished work is complete to the standard required by the construction documents, and determine whether required inspections and approvals for permit compliance are met. The Consultant will further verify whether the Contractor has fulfilled the contractual obligations so that Consultant may recommend, in writing, final payment to Contractor and may give written notice to City and the Contractor that the work is acceptable, subject to any conditions therein expressed and in consultation with the City, whether the work is finally complete. At or prior to the final inspection, the Consultant will request the Contractor prepare and furnish;
 - 1) Certification that all obligations for payment for labor, materials or equipment related to the work have been paid and satisfied;
 - 2) Certification that all insurance and bonds required of the Contractor beyond final payment is in effect and will not be canceled or allowed to expire without notice to the City;
 - 3) Written consent of surety for final payment;
 - 4) Record document information is complete and submitted;

5) All keys, manuals, required spare parts, guaranties and warranties, and other documents necessary for close-out of the work; and

6) Verification of permit close-out including the Certification of Occupancy.

If the work is not finally complete, the process will be repeated until the work is complete. Promptly after the work is determined to be finally complete and the Consultant determines that the Contractor has properly submitted the items required for final inspection, the Consultant will determine whether the Contractor is entitled to final payment and, if so, will so certify to the City.

iii. The Consultant certification that the Contractor is entitled to final payment constitutes the Consultant representation to the City that;

1) the work complies with (a) the construction contract documents, (b) applicable building codes, rules or regulations of all governmental authorities having jurisdiction over the Project, and (c) applicable installation and workmanship standards;

2) The Contractor has submitted proper Final Completion close-out documents; and

3) The Contractor is entitled to final payment.

The Consultant will provide to the City, at the time it submits a signed final payment request from the Contractor, all Final Completion close-out documents.

Consultant will not be responsible for the acts or omissions of any Contractor, or subcontractor, or any of the Contractor(s)' or subcontractor(s)' agents or employees or any other persons (except Consultant's own employees and agents) at the site(s) or otherwise performing any of the Contractor(s)' work;

4. UTILITY COORDINATION

A. Task 4.1 Utility Coordination

- i. The Consultant will coordinate with the Maricopa County Department of Environmental Services and submit Approval of Construction (AOC) documents for review and approval. The Consultant will also coordinate with the County to approve Temporary AOC's for portions of the work as needed prior to the completion of the entire project. The Consultant will also coordinate County site visits for the temporary and final AOCs.

5. MATERIALS TESTING

A. Task 5.1 Quality Control (QC) Test Program

- i. Consultant shall review and verify Contractor's Quality Control material test type and frequencies are consistent with City, and MAG requirements.
- ii. Consultant shall review Contractor's QC test schedule and provide recommendations on acceptance.
- iii. Consultant shall review all Contractor sampling, test and inspection results for conformance with construction documents.

B. Task 5.2 Quality Assurance (QA) Test Program

- i. Consultant shall prepare and maintain a materials Quality Assurance plan per City, and MAG requirements.
- ii. Consultant shall coordinate with Contractor's testing representative to obtain required QA tests and sample.
- iii. Consultant shall complete sampling and compaction testing of subgrade aggregate base and asphalt concrete materials in new asphalt concrete pavement areas, concrete structures, and underground utilities.

6. RECORD DRAWINGS

A. Task 6.1 Record Drawings

- i. The Consultant will prepare a set of record drawings showing those changes made during construction. Record drawing information shall be based on marked-up prints, drawings, and other data furnished by Contractor(s) to the Consultant.
- ii. The Consultant will provide stamp/certification on record drawings cover sheet, as well as ensure that all required signatures are present on the cover sheet.
- iii. The Consultant will provide and deliver record drawings in mylar, paper and digital pdf format to the City as required for as-built submittal process to the City Project Manager.

7. ALLOWANCES

A. Task 7.1 Start-up Assistance

- i. The Contractor will be working at an operating wastewater treatment facility. There will be shutdowns associated with the new work that needs to be performed within the vicinity of existing structures, process areas, channels etc. Extensive coordination is required with the Contractor to keep plant shutdowns and disruptions to a minimum.
- ii. The Consultant shall review the Contractor's proposals for any temporary conveyance and/or processing facilities. For work within the areas of process shutdowns, the Consultant shall review list of labor materials, estimation of time, and equipment necessary and written description of the work.
- iii. Some new process areas/equipment may come on line as soon as they are installed and start up services will need to be completed to bring equipment online. The Consultant shall provide start up assistance services. Such services will include review of contractor's start-up checklist, coordinate start-up plan and procedures for City personnel use, supervise during start up procedures, trouble shoot and assist the City staff during the period of initial operation.
- iv. The start-up process will include a planned, systematic approach to verify that facility systems operate as intended and there is an orderly transition from construction phase to routine operation. The start-up program will include four phases with estimated durations as follows:
- v. Start-up Plan: Consultant will review a start-up plan and procedures prepared by the Contractor with the City staff. The start-up plan will include identification of key milestone activities necessary for orderly start-up of the facilities. The milestone activities will include completion of any construction activities required for substantial completion, coordination of required Contractor maintenance activities, etc. The plan shall include the coordination of the activities with the equipment vendors, subcontractors, along with the programming subcontractor and the plant staff and identify the time required and roles and responsibilities during start-up activities. The start-up of activities shall be coordinated with the construction sequencing and MOPO activities.
- vi. The Consultant will assist the Contractor with the start-up and testing of new facilities. Following a sequentially coordinated initial start-up of the facility, the facility would be operated continuously. The Consultant will verify that, all mechanical equipment, associated valves and control devices, and any other components operate properly under actual operating conditions. This includes the verification that all hardwired electrical control interlocks and safeguards are functioning properly. The Consultant will verify that all mechanical equipment, and instrumentation system components are operating properly under actual operating

conditions. This includes the verification that all software based electrical/process control monitoring, interlocks, automatic control logic, alarms, and report generation subroutines.

- vii. The Consultant will maintain documentation of the areas of operational concern encountered during the manual start-up phase with a determination of whether the item of concern is a Contractor warranty issue or requires a design modification. The Consultant will monitor the documented concerns and promptly notify the Contractor of all warranty issues.
- viii. Design modifications that may be necessary, will be promptly evaluated by the Consultant and recommendations will be presented to the City for a determination of the necessity for implementation. The Consultant will complete the necessary check out of the instrumentation system components and initial loading of the control software simultaneously computer operation mode can be verified for each process
- ix. After completion of the start-up of process units, the Consultant shall coordinate with the City and prepare a list of outstanding items that will need to be completed by the Contractor.

B. Task 7.2 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.

C. Task 7.3 Contractor and Equipment Manufacturer Training Coordination

- i. The Consultant will review and coordinate Contractor's training plan and instruction materials for compliance with Construction Documents. Contractor or Manufacturer training presentations shall be scheduled and coordinated with City and facility operation.
- ii. Consultant will coordinate and monitor the Contractor's and manufacturer's training of City personnel.
- iii. Discuss the preliminary course and lesson plan development with the Contractor and the manufacturer/supplier. Meet with City's operational staff and the Contractor for these discussions.
- iv. Review and approve lesson plans and course materials, act as a liaison between the City and the Contractor, Monitor training sessions, monitor attendance, evaluate course, and assist in class room discussions. After completion of the training sessions, follow up with the City to coordinate and discuss with the City if additional sessions are necessary to complete the project scope.

D. Task 7.4 Systems Training

- i. Consultant will provide instruction to City personnel on the Project objectives, design intent, and system operational procedures. Consultant will provide training on the design and operation of the major process systems that are part of this project to the City prior to substantial completion.
- ii. Specific training services shall consist of the following:
- iii. Prepare training outline, schedule and lesson plan format for review and approval by City.
- iv. Review training plans and presentation materials including training guides for the major process systems and submit to City for review before finalizing by the contractor. The lesson plans shall include the following subjects;
 1. purpose and design intent of system;
 2. process operations and principles;
 3. system controls and control strategies
 4. specific safety procedures and hazards;
 5. specific sampling, monitoring, and process calculations; and
 6. system orientation and hands-on demonstration.
- v. Conduct training on the major process systems. Training may consist of classroom training for each system, followed by field orientation or hands-on instruction.

E. Task 7.5 Prepare Operations Manual and electronic Operations Manual

- i. The Consultant will prepare an Operations Manual for the new facility.
- ii. The content development process for the manual is designed to meet City goals and objectives for content that meets user needs and is presented in an understandable, easy-to-read style. The content level of detail, format, and organization will comply with format and layout to meet the City's standard.
- iii. Each chapter for the major systems will consist of the following sections: Background, Theory, Operating Strategies, Equipment & Control Description, Procedures, Design Criteria, Troubleshooting, Safety, Alarms, Drawings, figures and Photographs. These procedures will be field verified by the Consultant with assistance from the plant staff.
- iv. Workshop(s) will be held with the City prior to content development activities to provide an overview of the content to be developed, to identify key City staff to review draft chapters, and to establish a review schedule. The City will be provided with interim deliverables of completed sections as the construction of major areas of the facility are completed. As each chapter is completed, the Consultant will submit draft chapters to the City for their review and comment. The Consultant to incorporate comments into the final documents.
- v. Prior to submitting the final version of the manual and transferring to the City, the Consultant will conduct a detailed final validation and field verification process. Through this important quality control activity, the Consultant will verify that:
 - 1) Content has been field-verified and checked at the installation.
 - 2) Photographs are current and are reflective of well-maintained and clean conditions.
 - 3) Relevant documentation, such as scanned documents, figures and drawings are appropriately categorized for insertion into the database.

- 4) Standard Operating Procedures are accurate and reflect actual "as-operated" conditions
- vi. The facility Operations Manual will cover new, or any modified and upgraded auxiliary systems included in the Project. New areas of the facility will be created as new sections of the Manual and will be completed in conjunction with the specific completion milestones of construction.

F. Task 7.6 Programming Assistance and Coordination

- i. The Consultant will assist the Contractor during the system configuration phase of the project. As part of this task the Consultant will assist the contractor in implementation of functional requirements outlined as part of the project documents. The Consultant shall conduct weekly meetings with the Contractor and the City to clarify and review Contractor's progress of the work regarding I&C and programming work.
- ii. The Consultant will provide assist the Contractor with the PLC Programming and Startup Services for the Facility. The scope of services will include attending witness at Factory Acceptance Testing (FAT), witness SCADA interface testing, participate in I/O field point-to-point testing, configuration and set-up of any Radio communication to the City SCADA system as necessary, and witness calibration checks and sign calibration reports.
- iii. The Consultant will participate in loop checks of all communication

ASSUMPTIONS, CLARIFICATIONS, AND EXCLUSIONS

The extent and limitations of the duties, responsibilities, and authority of Consultant as assigned herein shall not be modified, except as Consultant may otherwise agree in writing. City's instructions to Contractor(s) shall be issued through Consultant, who shall have authority to act on behalf of the City to the extent provided in this Scope of Services, except as otherwise provided in writing.

Consultant shall not be responsible for the means, methods, techniques, sequences, or procedures of construction selected by Contractor, unless otherwise specified in the construction documents or the safety precautions and programs incident to the work of Contractor. Consultant efforts shall be directed toward providing a greater degree of confidence for the City that the completed work of Contractor shall conform to the Contract Documents, but Consultant shall not be responsible for the failure of Contractor to perform the work in accordance with the construction documents.

The Consultant review shall only be for conformance with the design concept of the Project and compliance with the information given in the construction documents. Such review or other action shall not extend to means, methods, sequences, techniques, or procedures of construction selected by Contractor or to safety precautions and programs incident thereto. The Consultant shall receive and review (for general contents as required by the construction documents) maintenance and operating schedules and instructions, operation and maintenance manuals, guarantees, bonds, and certificates of inspection which are to be assembled by Contractor in accordance with the construction documents.

Consultant shall not be responsible for the acts or omissions of the Contractor, or subcontractor, or any of the Contractor's or subcontractor's agents or employees, or any other persons (except Consultant own employees and agents) at the site or otherwise performing any of the Contractor's work;

Limitations of Authority: Except upon written instructions, the Consultant:

- 1. will not authorize any deviation from the Contract Documents or approve any substitute materials or equipment;
- 2. will not undertake any of the responsibilities of Contractor, subcontractors or Contractor's superintendent, or expedite the work;

3. will not advise on or issue directions relative to any aspect of the means, methods, techniques, sequences or procedures of construction unless such is specifically called for in the Construction Documents;
4. will not advise on or issue directions as to safety precautions and programs in connection with the work; and
5. will not authorize City to occupy the Project in whole or in part.

Reimbursable costs allowance shall be utilized to reimburse for items such as reproduction, delivery, and mileage.

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.

End of Scope of Work

EXHIBIT B
FEE SCHEDULE

EXHIBIT "B"
CONSTRUCTION MANAGEMENT
SCOPE OF SERVICES
FEE SCHEDULE

Task	Description	Cost
1	PRE-CONSTRUCTION ASSISTANCE	
1.1	Pre-Construction Assistance	\$ 6,590.00
	SUBTOTAL TASK 1:	\$ 6,590.00
2	CONSTRUCTION MANAGEMENT	
2.1	Weekly Construction Meetings	\$ 80,060.00
2.2	CPM Schedule	\$ 29,620.00
2.3	Perform Site Visits	\$ 52,280.00
2.4	Requests for Information (RFI)	\$ 162,060.00
2.5	Shop Drawing Submittals	\$ 97,880.00
2.6	Requests for Proposal (RFP)	\$ 18,020.00
2.7	Field Directive (FD)	\$ 52,880.00
2.8	Contractor Payment Applications	\$ 14,320.00
2.9	Public Outreach	\$ -
	SUBTOTAL TASK 2:	\$ 507,120.00
3	CONSTRUCTION INSPECTION	
3.1	Inspection Services	\$ 556,100.00
3.2	Landscape/Irrigation Inspection Services (IF APPLICABLE)	\$ -
3.3	Project Closeout	\$ 34,320.00
	SUBTOTAL TASK 3:	\$ 590,420.00
4	UTILITY COORDINATION	
4.1	Utility Coordination	\$ 15,640.00
	SUBTOTAL TASK 4:	\$ 15,640.00
5	MATERIALS TESTING	
5.1	QC Test Program	\$ 6,240.00
5.2	QA Test Program	\$ 22,260.00
	SUBTOTAL TASK 5:	\$ 28,500.00
6	RECORD DRAWINGS	
6.1	Record Drawings	\$ 23,020.00
	SUBTOTAL TASK 6:	\$ 23,020.00
ALLOWANCES		
7.1	Startup Assistance	\$ 29,260.00
7.2	MOPO Coordination	\$ 46,460.00
7.3	Contractor and Eqpt Manufacturer Coordination	\$ 9,700.00
7.4	Systems Training	\$ 5,190.00
7.5	Prepare Operations Manual	\$ 17,210.00
7.6	Programming Assistance and Coordination	\$ 17,210.00
	SUBTOTAL ALLOWANCES:	\$ 125,030.00
SUBCONSULTANTS		
	Gannett Fleming (Structural Services)	\$ 20,000.00
	RAMM (Quality Assurance Testing)	\$ 20,000.00
	SUBTOTAL SUBCONSULTANTS:	\$ 20,000.00
PROJECT TOTAL:		\$ 1,316,320.00



EXHIBIT "B-2"
Hours and Rates

	Principal	Sr. PM	Sr. PM (E/I&C)	Const. PM	Sr. Engr./RPR	Project Engineer / Prof	Lead Const. Inspector	Sr Elec. Inspector / Designer	Senior CADD Tech	Senior Admin	< PROJECT ROLE
	Uday Gandhe	Sreeram R., Craig R.,	Mike C.	Dave C	Sean Z., Dan H., Luis C., Katie G.	Muthu K., Sydney A.	Kristen R., Martin V.	Jason Gilley, Elvin R.	Kam C. Chace M-D	Brandy Nixon	< NAME OF PERSON
	\$ 265.00	\$ 240.00	\$ 225.00	\$ 225.00	\$ 170.00	\$ 145.00	\$ 145.00	\$ 160.00	\$ 115.00	\$ 95.00	< HOURLY RATES
TASK DESCRIPTION											TOTAL HOURS PER TASK
1. Preconstruction Assistance	2	4	0	8	16	4	0	0	0	0	34
Preconstruction Assistance	2	4	0	8	16	4	0	0	0	0	34
2. Preliminary Design Report	32	244	60	276	716	1180	212	172	24	112	3028
Weekly Construction Meetings	0	60	12	100	60	80	60	48	0	24	444
CPM Schedule	12	24	0	48	24	0	40	0	0	0	148
Perform Site Visits	0	12	0	0	120	200	0	0	0	0	332
Requests for Information	8	60	24	40	240	480	20	80	24	24	1000
Shop Drawing Submittals	8	24	16	0	200	300	0	20	0	60	628
Request for Proposals	4	12	8	40	0	0	20	0	0	4	88
Field Directives	0	40	0	24	72	120	48	8	0	0	312
Contractor Payment Applications	0	12	0	24	0	0	24	16	0	0	76
Public Outreach	0	0	0	0	0	0	0	0	0	0	0
3. Construction Inspection	0	92	48	424	212	580	1640	520	100	100	3716
Inspection Services	0	80	40	400	200	540	1600	480	80	80	3500
Landscaping and Inspection Services (N/A)	0	0	0	0	0	0	0	0	0	0	0
Project Closeout	0	12	8	24	12	40	40	40	20	20	216
4. Utility Coordination	0	8	0	0	24	40	0	24	0	0	96
Utility Coordination	0	8	0	0	24	40	0	24	0	0	96
5. Materials Testing	0	8	0	20	0	0	64	80	0	0	172
QC Test Program	0	4	0	8	0	0	24	0	0	0	36
QA Test Program	0	4	0	12	0	0	40	80	0	0	136
6. Record Drawings	0	4	0	8	24	40	24	0	60	0	160
Record Drawings	0	4	0	8	24	40	24	0	60	0	160
Subconsultants	0	0	0	0	0	0	0	0	0	0	0
NSB Group of Gannett Fleming (Structural)											
ALLOWANCES	0	22	8	30	128	280	72	240	0	0	780
Start up Assistance	0	8	4	12	20	40	12	80	0	0	176
MOPO Coordination	0	4	0	12	40	100	60	80	0	0	296
Contractor and Eqpt Manufacturer Coordination	0	4	0	4	12	40	0	0	0	0	60
Systems Training	0	2	0	2	8	20	0	0	0	0	32
Prepare Operations Manual	0	2	2	0	24	40	0	40	0	0	108
Programming Assistance and Coordination	0	2	2	0	24	40	0	40	0	0	108
											0
TOTAL HOURS:	34	382	116	766	1120	2124	2012	1036	184	212	7986