



**PURCHASING ITEM
FOR
COUNCIL AGENDA
Memo No. CP16-148**

1. Agenda Item Number:
13
2. Council Meeting Date:
February 11, 2016

TO: MAYOR AND COUNCIL

3. Date Prepared: January 27, 2016

THROUGH: CITY MANAGER

4. Requesting Department: Municipal Utilities

5. SUBJECT: Project Agreement with Wilson Engineering, LLC, for Construction Management Services, for the Riggs Road Well Equipping

6. RECOMMENDATION: Staff recommends City Council award a Project Agreement to Wilson Engineers, LLC, for construction management services, for the Riggs Road Well Equipping, pursuant to Annual Water and Wastewater Services Contract No. EN1517.101, Project No. WA1506.451, in an amount not to exceed \$157,265.

7. BACKGROUND/DISCUSSION: The 2008 Water Master Plan recommends 74.5 million gallon per day build-out capacity for groundwater wells. As the City's groundwater wells age, well production will decrease over time. To maintain the proposed capacity, new replacement wells are needed. The new well, known as the Riggs Road Well, will be located at 5920 S. 142nd Street. Equipping this well will increase water production capacity and help maintain adequate water supply in southeast Chandler. This project includes construction management services for the installation of pumping equipment and site development for the previously drilled well site.

The project scope of work consists of: project administration, engineering services, inspection services, start-up, Supervisory Control and Data Acquisition (SCADA) system programming, and project close-out.

A Construction Contract, Project No. WA1506.401, to Weber Water Resources, LLC, is also scheduled for this City Council meeting.

8. EVALUATION: This project is being performed under the Annual Water and Wastewater Services Contract No. EN1517.101, to Wilson Engineering, LLC. The costs proposed for this project have been evaluated by staff and are determined to be reasonable. The contract completion time is 300 calendar days following Notice to Proceed.

9. FINANCIAL IMPLICATIONS:

Cost: \$157,265
Savings: N/A
Long Term Costs: N/A

Fund Source:

<u>Acct. No.:</u>	<u>Fund Name:</u>	<u>Program Name:</u>	<u>CIP Funded:</u>	<u>Amount:</u>
603.3820.6713.6WA034	Water SDF	Well Construction & Rehab	Yes	\$157,265

10. PROPOSED MOTION: Move City Council award a Project Agreement to Wilson Engineers, LLC, for construction management services, for the Riggs Road Well Equipping, pursuant to Annual Water and Wastewater Services Contract No. EN1517.101, Project No. WA1506.451, in an amount not to exceed \$157,265.

ATTACHMENTS: Location Map, Agreement

APPROVALS

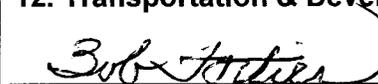
11. Requesting Department


John Knudsen, Utilities Engineering Manager

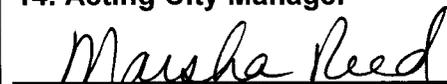
13. Department Head


Gregg Gapps, Acting Municipal Utilities Director

12. Transportation & Development

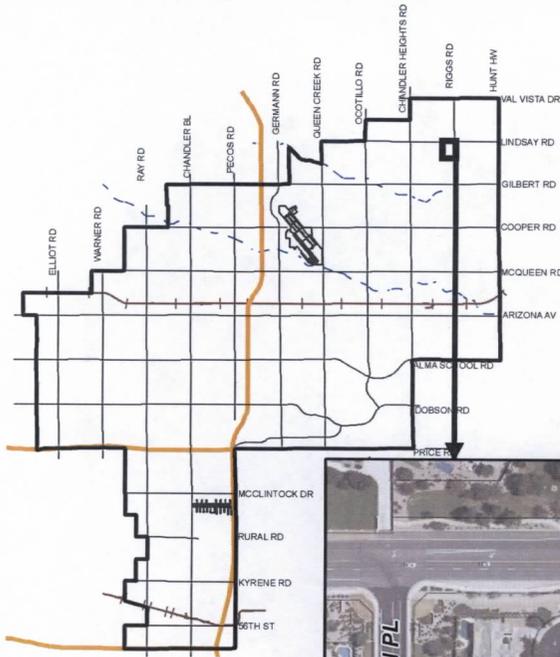

Bob Fortier, Capital Projects Manager

14. Acting City Manager


Marsha Reed

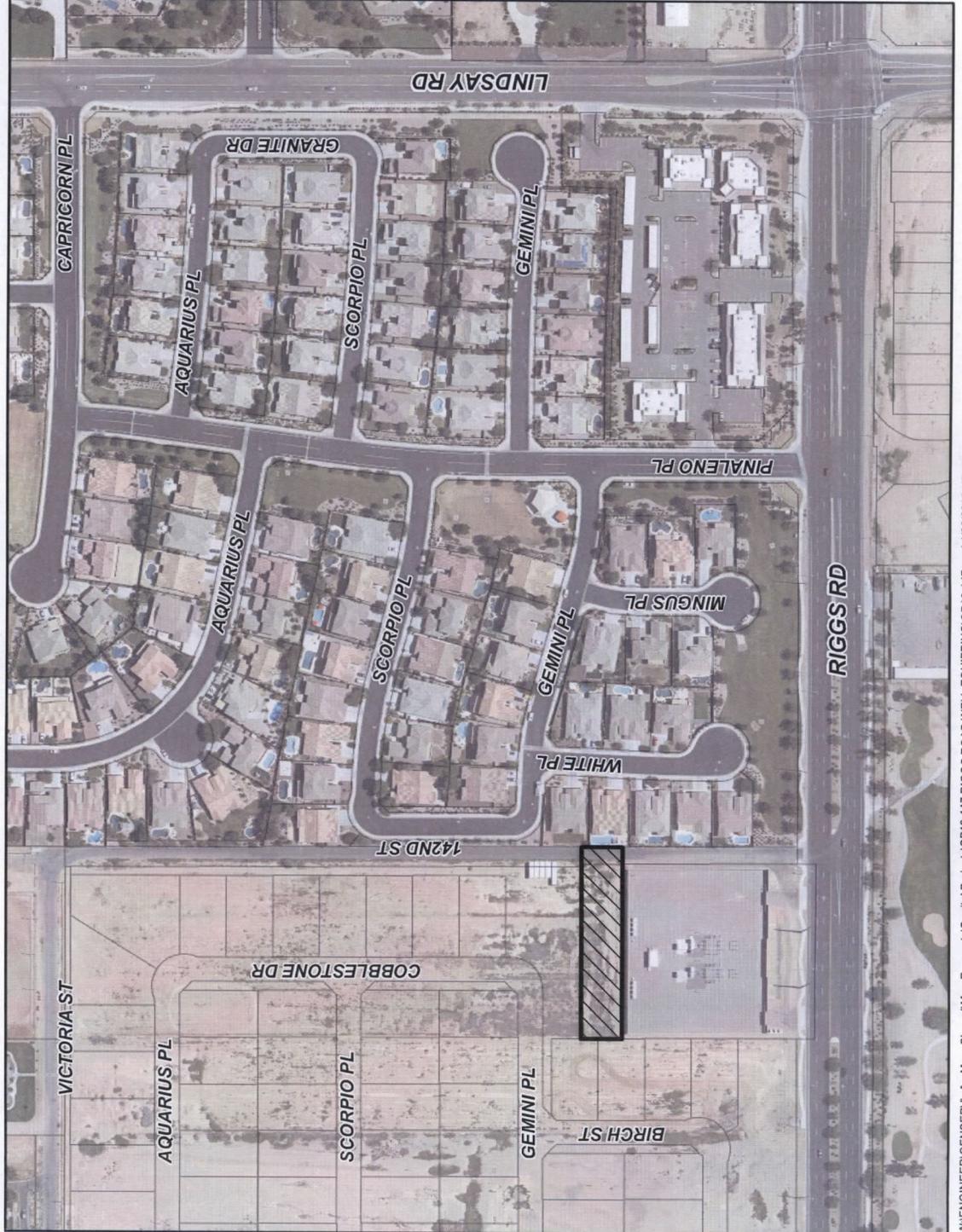


RIGGS ROAD WELL EQUIPPING PROJECT NO. WA1506.451



MEMO NO. CP16-148

PROJECT SITE -
5920 S. 142ND
STREET



**PROJECT AGREEMENT
PURSUANT TO ANNUAL CONTRACT NO. EN1517.101**

PROJECT AGREEMENT NO: WA1506.451

This PROJECT AGREEMENT is made this ____ day of _____, 2016, by and between the City of Chandler, a municipal corporation (hereinafter referred to as "CITY") and Wilson Engineers, LLC, registered in the state of Arizona (hereinafter referred to as "Annual Consultant") and is a project agreement entered into pursuant to Annual Contract No. EN1517.101.

CITY and Wilson Engineers, LLC, in consideration of the mutual covenants herein set forth, agree as follows:

ARTICLE 1 - DESCRIPTION OF WORK:

This project is Riggs Road Well Equipping Construction Management Services, Project Number WA1506.451. The scope of work consists of construction management services for Riggs Road Well Equipping project, all as more particularly set forth in Exhibit A attached hereto and incorporated herein by reference.

The Annual Consultant shall not accept any change of scope, or change in contract provisions, unless issued in writing, as a contract amendment and signed by the Contract Administrator.

ARTICLE 2 - CONTRACT PRICE:

CITY shall pay Annual Consultant for completion of the Work in accordance with the Contract Documents a fee not to exceed One Hundred Fifty Seven Thousand Two Hundred Sixty Five Dollars (\$157,265) determined and payable as set forth in Annual Contract EN1517.101 and Exhibit B attached hereto and made a part hereof by reference.

ARTICLE 3 - CONTRACT TIME:

The contract time is Three Hundred calendar days and Annual Consultant agrees to complete all work within Three Hundred (300) calendar days of the date CITY issues a Notice to Proceed.

ARTICLE 4 - GENERAL:

This Project Agreement is entered into pursuant to Annual Contract No. EN1517.101 and the terms and conditions contained therein are incorporated herein by reference as if set forth in full.

IN WITNESS WHEREOF, the parties hereto have executed this Project Agreement on the day and year first written above.

This Project Agreement will be effective on this _____ day of _____, 2016.

CITY OF CHANDLER

FOR THE ANNUAL:

MAYOR DATE:

By: Steve Todd
Title: PRINCIPAL

ADDRESS FOR NOTICE
City of Chandler
P.O. Box 4008, Mail Stop 407
Chandler, AZ 85244-4008
480-782-3307

ADDRESS FOR NOTICE
Mr. Steve Todd
Wilson Engineers, LLC
9633 S. 48th St., Ste. 290
Phoenix, AZ 85044-5658

APPROVED AS TO FORM:

Phone: 480-893-8860

City Attorney By: Cit

ATTEST:

City Clerk

EXHIBIT A SCOPE OF WORK

Project Description

The Project will consist of equipping the Riggs Road Well Site located at 5920 South 142nd Street in Chandler, Arizona. Work under this project includes the installation of a new vertical turbine well pump and foundation; new discharge piping, valves, and appurtenances; new calcium hypochlorite (tablet) based chlorination system and enclosure; new pump-to-waste piping and drywell; connecting the new well into the CITY's water distribution system; adding a new reclaimed water pumps and wet well; new reclaimed water discharge piping, valves, and accessories; connecting the reclaimed water pump station to the CITY's existing reclaimed water distribution system; new 480v/three phase electrical power supply equipment including service entrance, power monitoring, and controls; pad and electrical for a portable generator sized to accommodate the loads from the new well; instrumentation, pump controls, RTU, and antenna tied to the CITY's SCADA system; and PLC programming.

Project Tasks

ANNUAL CONSULTANT shall provide construction management services including project administration, engineering services, inspection services, start-up, PLC programming, and project close-out, specifically consisting of the following tasks:

Task 100- PROJECT ADMINISTRATION SERVICES DURING CONSTRUCTION

Task 110 - Representation on Behalf of CITY

The ANNUAL CONSULTANT shall consult with and advise the CITY and act as its representative during construction. On the basis of periodic on-site examination of materials, equipment, and workmanship, ANNUAL CONSULTANT shall keep the CITY informed of the progress of the work, shall endeavor to guard the CITY against defects and deficiencies in such work, and may disapprove or reject work failing to conform to the construction documents.

This task shall include the following items:

1. Conduct Pre-construction Conference: The ANNUAL CONSULTANT shall conduct a pre-construction conference. At the conference, the ANNUAL CONSULTANT shall identify appropriate coordination procedures.
2. Provide construction administration, quality control, and coordination: The ANNUAL CONSULTANT shall provide construction administration and quality control services during the course of the project to ensure the overall technical correctness of the construction phase services, that specified procedures are being followed, and that the Contractor's construction schedule is being met. The ANNUAL CONSULTANT shall provide coordination functions during the construction phase as follows:
 - A. Hold coordination meetings with the CITY and Contractor.
 - B. Coordinate with regulatory and approving agencies and utilities as required.
 - C. Coordinate the work of specialty sub-consultants assigned to the project.
3. Provide project documents: The ANNUAL CONSULTANT shall maintain and provide the following detailed project records and documentation during the construction phase:
 - A. The project records shall include correspondence, schedules, submittals, test data, project data, payments, change orders, meeting minutes, clarifications, mark-ups of drawings and specifications, digital control system documentation, and other such documentation. Project records shall be delivered to the CITY representative upon completion of the construction contract. Records shall be maintained by ANNUAL CONSULTANT and distributed as created.

B. A status report for the construction contract shall be provided under Task 300.

Task 120- Administer the Construction Schedule

1. Review Contractor Schedule: The ANNUAL CONSULTANT shall review and critique the Contractor's schedule in accordance with the construction documents. The ANNUAL CONSULTANT shall examine the work sequence, durations, interim milestones, and other appropriate scheduling features in accordance with the requirements of the construction documents. The ANNUAL CONSULTANT shall prepare a summary of the review comments and shall meet and discuss the schedule comments with the Contractor and the CITY representative.
2. Review Contractor Progress Schedule Updates: The ANNUAL CONSULTANT shall review the Contractor's progress schedule updates to the construction schedule in accordance with the construction documents. The ANNUAL CONSULTANT shall perform a review of the progress accomplished during the period and compare to the planned schedule and discuss significant discrepancies with the Contractor. The ANNUAL CONSULTANT and Contractor shall establish, based on the data, the percent of project completion. The ANNUAL CONSULTANT shall meet with Contractor on a monthly basis to review and update the schedule data. Based upon the schedule update, the ANNUAL CONSULTANT shall recommend processing progress payments.

The ANNUAL CONSULTANT's opinions concerning the various scheduling documents produced or used by the Contractor are for information and are not controlling on the Contractor. It is the Contractor's responsibility to continue to exercise its independent judgment concerning means, methods, and sequences of construction it employs. The Contractor remains solely responsible for meeting contract time(s) given in the construction documents.

Task 130 - Perform Site Visits

The ANNUAL CONSULTANT's design staff shall make site visits appropriate for the type of construction at periods appropriate to the various stages of construction to observe, as an experienced and qualified professional, the progress and quality of the executed work of Contractor and to determine in general, if such work is proceeding in accordance with the design intent. The ANNUAL CONSULTANT's site visits shall support the inspection needs and requirements established by the CITY's Development Services Department.

Task 140 - Review Shop Drawings and Test Results

The ANNUAL CONSULTANT shall receive, review, evaluate, and distribute shop drawings, samples, test results, and other data which Contractor is required to submit. As part of this task, the ANNUAL CONSULTANT shall 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 as part the construction meeting agenda and minutes. The ANNUAL CONSULTANT shall also evaluate the Contractor's request for substitutions in accordance with the CITY's contract requirements. Submittal review efforts are 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 shall require two (2) reviews. The level of effort for this task is based upon receiving 45 shop drawing submittals.

Task 150 - Issue Interpretations and Clarifications

The ANNUAL CONSULTANT shall issue the CITY's instructions to Contractor; issue necessary interpretations and clarifications of the construction documents; have authority, as CITY representative, to require special inspection or testing of the work; act as initial interpreter of the requirements of the construction documents and judge of the acceptability of the work thereunder;

and make decisions on claims of the CITY and the Contractor 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. The ANNUAL CONSULTANT shall render interpretations or decisions in good faith and in accordance with the requirements of the construction documents.

The ANNUAL CONSULTANT shall respond to the CITY representative and/or Contractor to clarify and/or interpret technical, design related questions. Routine technical interpretations shall be responded to under Task 200. The ANNUAL CONSULTANT shall assist the CITY, as required, in resolution of these issues. The ANNUAL CONSULTANT shall respond to issues raised during construction regarding interpretation and clarification of the contractual administrative and technical requirements of the construction documents. This level of effort is based upon receiving 30 RFIs.

Task 160- Certify Progress Payments

The ANNUAL CONSULTANT shall review the Contractor's proposed schedule of values (established by the Contractor's bid proposal on the project), and approve after any necessary adjustments are made by the Contractor. The approved schedule of values, construction schedule, and Contractor's monthly progress schedule updates, shall be used in combination with the ANNUAL CONSULTANT field observations to determine the appropriateness of the Contractor's request for payment.

Based on the ANNUAL CONSULTANT on-site observations, as an experienced and qualified professional, and on review of applications for payment and the accompanying data and schedules, the

ANNUAL CONSULTANT shall determine the amounts owing to Contractor and recommend in writing payments to Contractor in such amounts; such recommendations of payment shall constitute a representation to CITY, based on such observations and review, that the work has progressed to the point indicated, that, to the best of ANNUAL CONSULTANT 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 subsequent tests called for in the construction documents, and to qualifications stated in the recommendation), and that payment of the amount recommended is due Contractor.

Task 170 - Substantial Completion and Final Acceptance Inspection

Following notice from the Contractor, the ANNUAL CONSULTANT shall 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 ANNUAL CONSULTANT considers the work substantially complete, the ANNUAL CONSULTANT shall deliver to the CITY and the Contractor a Certificate recommending Substantial Completion including: the punch list, the date for completion of the punch list, and suggesting the division of responsibilities between the CITY and the Contractor.

Upon recommendation of Substantial Completion, the ANNUAL CONSULTANT shall complete the Approval of Construction Application and Engineer's Certificate of Completion and submit to the Maricopa County Department of Environmental Services (MCDES). The Engineer shall also conduct a site visit with a representative of MCDES. The intent of this site visit will be to allow MCDES to review the facility prior to issuing the Approval of Construction Certificate.

The ANNUAL CONSULTANT shall, upon completion of the punch list items, make final inspection to determine if the finished work has been completed to the standard required by the construction documents and that Contractor has fulfilled the obligations thereunder so that ANNUAL 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 conditions therein expressed.

SECTION 200 – ENGINEERING SERVICES DURING CONSTRUCTION

Task 210 - Changes

The ANNUAL CONSULTANT shall perform services in connection with change orders to reflect changes requested by CITY or Contractor, for evaluating substitutions proposed by Contractor, and in making revisions to drawings and specifications occasioned thereby, and resulting from significant delays, changes, or price increases occurring as a direct or indirect result of material or equipment shortages. 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.

Task 220 - Material Testing Review

The ANNUAL CONSULTANT shall coordinate the materials testing requirements with the Contractor. In addition, the ANNUAL CONSULTANT shall review the testing results and inform the Contractor as to its compliance with the contract documents. The ANNUAL CONSULTANT shall provide, through a qualified sub-consultant, materials testing services as indicated in Task 440.

Task 230 - Record Drawings

ANNUAL CONSULTANT shall prepare a set of reproducible record drawings showing those changes made during the construction process, based on the marked-up prints, drawings, and other data furnished by Contractor(s) to ANNUAL CONSULTANT and which ANNUAL CONSULTANT has sufficiently reviewed for accuracy and completeness. One (1) set of reproducible record drawings shall be provided to the CITY. Record drawing information may be reproduced by computer aided methods (CAD). The record drawings shall be provided on 4-mil Mylar as required by the CITY.

Task 240 - Operation and Maintenance Manual

During the course of the work, ANNUAL CONSULTANT shall verify that certificates, maintenance and operation manuals, and other data required to be assembled and furnished by Contractor are applicable to the items actually installed. As part of this task, the ANNUAL CONSULTANT will also coordinate the compilation of an overall operating and maintenance manual with the Contractor in accordance with the intent of design and the manufacturer's requirements. The manual will be a compilation of the manufacturers operating and maintenance instructions as submitted by the Contractor. For purposes of this task, the ANNUAL CONSULTANT will review the manufacturer O&M Manuals for conformity with the contract documents. Submittal review efforts are based upon a maximum of two (2) reviews per submittal and that no more than twenty five percent (25%) of the total number of first O&M submittals will require two (2) reviews. The level of effort estimated for O&M manual submittal is based upon receiving 20 O&M submittals. A draft manual shall be compiled and submitted to the CITY at about 80 percent construction completion; and a final manual shall be submitted (as part of the project closeout) within 30 days following substantial completion.

SECTION 300- FIELD INSPECTION SERVICES DURING CONSTRUCTION

The ANNUAL CONSULTANT shall provide a Field Inspector to observe the performance of the work of the Contractor. Through increased on-site observations of the work in progress and field checks of materials and equipment by the Field Inspector, ANNUAL CONSULTANT shall endeavor to provide further protection for CITY against defects and deficiencies in the work of Contractor; but the furnishing of such Field Inspector shall not make ANNUAL CONSULTANT responsible for construction means, methods, techniques, sequences, or procedures, or for safety precautions or programs, or for Contractor failure to perform their work in accordance with the construction documents.

Task 310 - Field Administration

Schedules: ANNUAL CONSULTANT shall review the progress schedule, schedule of Shop Drawing submissions, and the schedule of values prepared by Contractor, and notify the CITY concerning their acceptability.

Meetings: ANNUAL CONSULTANT shall conduct periodic construction progress meetings (not more than bi-weekly). ANNUAL CONSULTANT shall prepare and distribute minutes of such meetings.

Liaison: ANNUAL CONSULTANT's Field Inspector shall serve as liaison with Contractor, working principally through Contractor's superintendent and assist the superintendent in understanding the meaning of the Construction Documents. ANNUAL CONSULTANT shall also notify Contractor when Contractor's operations affect CITY operations. As directed by ANNUAL CONSULTANT, assist in obtaining from CITY additional details or information, when required at the job site for proper execution of the work.

ANNUAL CONSULTANT's Field Inspector shall prepare daily reports (when at the site) recording Contractor's work performed on the job site, major construction equipment on-site, weather conditions, data relative to questions of extras or deductions, list of visiting officials and representatives of manufacturers, fabricators, suppliers and distributors, daily activities, decisions, on-site equipment, subcontractors on-site, inspections in general and specific inspections in detail as to inspecting test procedures.

ANNUAL CONSULTANT's shall maintain a digital photographic file of the progress of the construction activities throughout the duration of the Project. This photo file will consist of color photographs taken to document specific construction activities where the information may be of future value.

Contractor Pay Applications: ANNUAL CONSULTANT's Field Inspector shall review applications for payment as described in Task 160 with Contractor(s) for compliance with the established procedure for their submission and forward those with recommendations to ANNUAL CONSULTANT, noting particularly their relation to the schedule of values, work completed, and materials and equipment delivered at the site but not incorporated in the work.

Task 320 - Inspection of Work, Rejection of Defective Work, and Review of Tests

ANNUAL CONSULTANT shall:

1. Conduct on-site observations of the work in progress to determine if the work is proceeding in accordance with the construction documents and that completed work conforms to the Construction Documents.
2. Notify the Contractor whenever it is believed that 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 Contractor when it is believed work should be corrected, uncovered for observation, or requires special testing, inspection or approval.
3. 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 required records thereof; observe, record and report appropriate details relative to the test procedures and start-ups.
4. Accompany visiting inspectors representing public or other agencies having jurisdiction over the project; record the outcome of these inspections and report to the CITY.

Task 330 - Completion

1. Before ANNUAL CONSULTANT recommends issuance of a Certificate of Substantial Completion, ANNUAL CONSULTANT's Field Inspector shall submit to Contractor a list of inspected items requiring completion or correction in accordance with the requirements of the construction documents.
2. After the Contractor has completed the work of the list of Subtask 330.1 and upon request of the Contractor, ANNUAL CONSULTANT will conduct final inspection with the CITY and Contractor. If necessary, ANNUAL CONSULTANT's Field Inspector shall prepare a final punch list of items to be completed or corrected in accordance with the requirements of the construction documents.
3. After the Contractor has completed the work of the final punch list of Subtask 330.2 and upon written notice from the Contractor, ANNUAL CONSULTANT shall review and determine that items on the final list have been completed or corrected and make recommendations to CITY concerning final acceptance.

SECTION 400 - SPECIAL SERVICES

Task 410- Warranty Inspection

The ANNUAL CONSULTANT shall provide services after completion of the construction phase, such as inspections during the 12-month guarantee/warranty period, reporting observed discrepancies under guarantees called for in the construction documents, and provide assistance for resolution of defects to be corrected under warranty.

Task 420 -Training

The ANNUAL CONSULTANT shall review the Contractor's training plan and instruction materials for compliance with construction documents. Contractor or Manufacturer training presentations shall be scheduled and coordinated with the CITY's personnel and facility operation. ANNUAL CONSULTANT shall provide instruction to CITY personnel on the project objectives, design intent, and system operational procedures.

Task 430 – I&C and Programming Services Allowance

Sub-consultant, Jensen Systems, Inc. shall provide instrumentation and control (I&C) systems professional services including the following as it applies to I&C systems: site inspections, control points for point testing verification, calibration verification, install and test software, facilitate testing SCADA software (provided by the CITY), and operator training (for the control panels, exclusively that required by the equipment vendors). If Jensen Systems, Inc. is unable to perform for any reason the ANNUAL CONSULTANT is responsible for completion of the work described in this paragraph at no extra cost to the CITY.

Task 440 – Material Testing Allowance

Sub-consultant, RAMM shall provide material testing (concrete and compaction testing) support and assistance to the ANNUAL CONSULTANT to conform to the construction contract documents. If RAMM is unable to perform for any reason the ANNUAL CONSULTANT is responsible for completion of the work described in this paragraph at no extra cost to the CITY.

Task 450 – Structural Engineering Allowance

Sub-consultant, Heerup Engineering shall provide structural engineering and special structural inspection services to ANNUAL CONSULTANT to conform to the construction contract documents.

Special structural inspection services shall be provided for those items required by the special inspection certificate issued by the CITY. If Heerup Engineering is unable to perform for any reason the ANNUAL CONSULTANT is responsible for completion of the work described in this paragraph at no extra cost to the CITY.

Task 460 – Landscape Architecture Allowance

Sub-consultant, Vollmer & Associates shall provide landscape architecture services to ANNUAL CONSULTANT to conform to the construction contract documents. If Vollmer & Associates is unable to perform for any reason the ANNUAL CONSULTANT is responsible for completion of the work described in this paragraph at no extra cost to the CITY.

Task 470 Owners Allowance

Owner's Allowance shall only be utilized with prior written approval from CITY for use for additional Construction Management services.

ASSUMPTIONS, CLARIFICATIONS, AND EXCLUSIONS

The extent and limitations of the duties, responsibilities, and authority of ANNUAL CONSULTANT as assigned herein shall not be modified, except as ANNUAL CONSULTANT may otherwise agree in writing. CITY instructions to Contractor(s) shall be issued through ANNUAL 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.

ANNUAL 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. ANNUAL 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 ANNUAL CONSULTANT shall not be responsible for the failure of Contractor to perform the work in accordance with the construction documents.

The ANNUAL 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. ANNUAL 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 ANNUAL CONSULTANT own employees and agents) at the site or otherwise performing any of the Contractor's work.

**EXHIBIT B
FEE SCHEDULE**

TASK No.	TASK DESCRIPTION	Staff Hours						TOTAL HOURS	LABOR COST	Other (Sub)	TOTAL COST
		Principal \$205	Project Mgr \$165	Project Eng \$140	Sr Const Obsvr \$125	CADD Tech III \$85	Admin Assist III \$75				
SECTION 100 - PROJECT ADMINISTRATION SERVICES DURING CONSTRUCTION											
110	Representation on Behalf of CITY	2	24	8	40			74	\$ 10,490	\$ -	\$ 10,490
120	Administer the Construction Schedule		8	4	16			28	\$ 3,880	\$ -	\$ 3,880
130	Perform Site Visits		8	24				32	\$ 4,680	\$ -	\$ 4,680
140	Review Shop Drawings & Test Results		16	80			40	136	\$ 18,840	\$ -	\$ 18,840
150	Issue Interpretations & Clarifications		4	40		8	8	60	\$ 7,540	\$ -	\$ 7,540
160	Certify Progress Payments		8		20			28	\$ 3,820	\$ -	\$ 3,820
170	Substantial Completion & Final Acceptance Inspection				16			16	\$ 2,240	\$ -	\$ 2,240
SUBTOTAL - PROJECT ADMINISTRATION		2	68	172	76	8	48	374	\$ 49,490	\$ -	\$ 49,490
SECTION 200 - ENGINEERING SERVICES DURING CONSTRUCTION											
210	Changes	2	4	24	8	8	4	50	\$ 6,410	\$ -	\$ 6,410
220	Material Testing				4			4	\$ 500	\$ -	\$ 500
230	Record Drawings			4	20	24	16	64	\$ 6,300	\$ -	\$ 6,300
240	O&M Manuals		4	20			16	40	\$ 4,660	\$ -	\$ 4,660
SUBTOTAL - PROJECT ADMINISTRATION		2	8	48	32	32	36	158	\$ 17,870	\$ -	\$ 17,870
SECTION 300 - FIELD INSPECTION SERVICES DURING CONSTRUCTION											
310	Field Administration		16	16	32		8	72	\$ 9,480	\$ -	\$ 9,480
320	Inspection of Work, Rejection of Work, and Review of Tests		32		298		16	344	\$ 43,480	\$ -	\$ 43,480
330	Completion		8		24			32	\$ 4,320	\$ -	\$ 4,320
SUB TOTAL - RESIDENT ENGINEERING		0	56	16	352	0	24	448	\$ 57,280	\$ -	\$ 57,280
SECTION 400 - SPECIAL SERVICES											
410	Warranty Inspection		2	4	4			10	\$ 1,390	\$ -	\$ 1,390
420	Training			4	4		4	12	\$ 1,360	\$ -	\$ 1,360
430	PLC Programming Services Allowance (Jensen Systems)									\$ 7,800	\$ 7,800
440	Material Testing Allowance (RAMM)									\$ 5,000	\$ 5,000
450	Structural Engineering Allowance (Hearup Engineering)									\$ 6,225	\$ 6,225
460	Landscape Architecture Allowance (Vollmer & Assoc.)									\$ 850	\$ 850
470	Owner's Allowance									\$ 7,500	\$ 7,500
	Reimbursable Costs								\$ 2,500	\$ -	\$ 2,500
SUBTOTAL - SPECIAL SERVICES		0	2	8	8	0	4	22	\$ 5,250	\$ 27,375	\$ 32,625
TOTAL - LABOR SUMMARY		4	134	244	468	40	112	1002	\$129,890	\$27,375	\$157,265

Direct Expense allowance shall be utilized at cost to reimburse for items such as reproductions, delivery, MCESD permit fees, and mileage.