



Chandler - Arizona  
Where Values Make The Difference

**PURCHASING ITEM  
FOR  
COUNCIL AGENDA  
Memo No. CA07-217**

**1. Agenda Item Number:**  
**31**  
**2. Council Meeting Date:**  
April 26, 2007

**TO: MAYOR & COUNCIL**  
**THROUGH: CITY MANAGER**

**3. Date Prepared:** March 20, 2007  
**4. Requesting Department:** Municipal Utilities

**5. SUBJECT:** Award an engineering services contract to Entellus Construction Services, LLC for construction management services for Germann Sewer and Lift Station, Project WW0506-451, in an amount not to exceed \$216,017.

**6. RECOMMENDATION:** Staff recommends that Council award an engineering services contract to Entellus Construction Services, LLC for construction management services for Germann Sewer and Lift Station, Project WW0506-451, in an amount not to exceed \$216,017.

**7. BACKGROUND/DISCUSSION:** The City's Wastewater Master Plan identifies the need for a lift station and sewer to accommodate projected flows from Tumbleweed Park and the north side of Germann Road to Willis Road, east of Union Pacific Railroad right-of-way and West of McQueen Road. This project completes the sewer in Germann Road, which will flow to the lift station at the intersection with Hamilton Street and constructs the lift station and force main to McQueen Road. The construction is scheduled to be complete by the fourth quarter of 2007 in anticipation of completion of the Tumbleweed Recreation Center.

**8. EVALUATION PROCESS:** On March 22, 2007, Council awarded a construction manager at risk contract to Haydon Building Corp. for construction of the Germann Sewer and Lift Station. This contract is for engineering services for the construction management of this project. Entellus was selected for the design of this project in accordance with established City rules and regulations for the selection of design consultants.

**9. FINANCIAL IMPLICATIONS:**  
Cost: \$216,017  
Savings: N/A  
Long Term Costs: N/A

**Fund Source:**

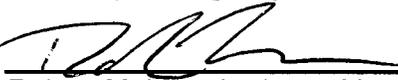
| Account No.               | Fund Name    | Program Name                            | CIP Funded | Amount    |
|---------------------------|--------------|---|------------|-----------|
| 615.3910.0000.6817.7WW189 | WW Operating | Effluent Reuse Storage & Recovery Wells | FY 06/07   | \$216,017 |

**10. PROPOSED MOTION:** Move that Council award an engineering services contract to Entellus Construction Services, LLC for construction management services for Germann Sewer and Lift Station, Project WW0506-451, in an amount not to exceed \$216,017, and authorize the Mayor to sign the contract documents.

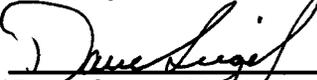
**ATTACHMENTS:** Location Map

**APPROVALS**

**11. Requesting Department**

  
Robert Mulvey, Assistant Municipal Utilities Director

**13. Department Head**

  
Dave Siegel, Municipal Utilities Director

**12. City Engineer**

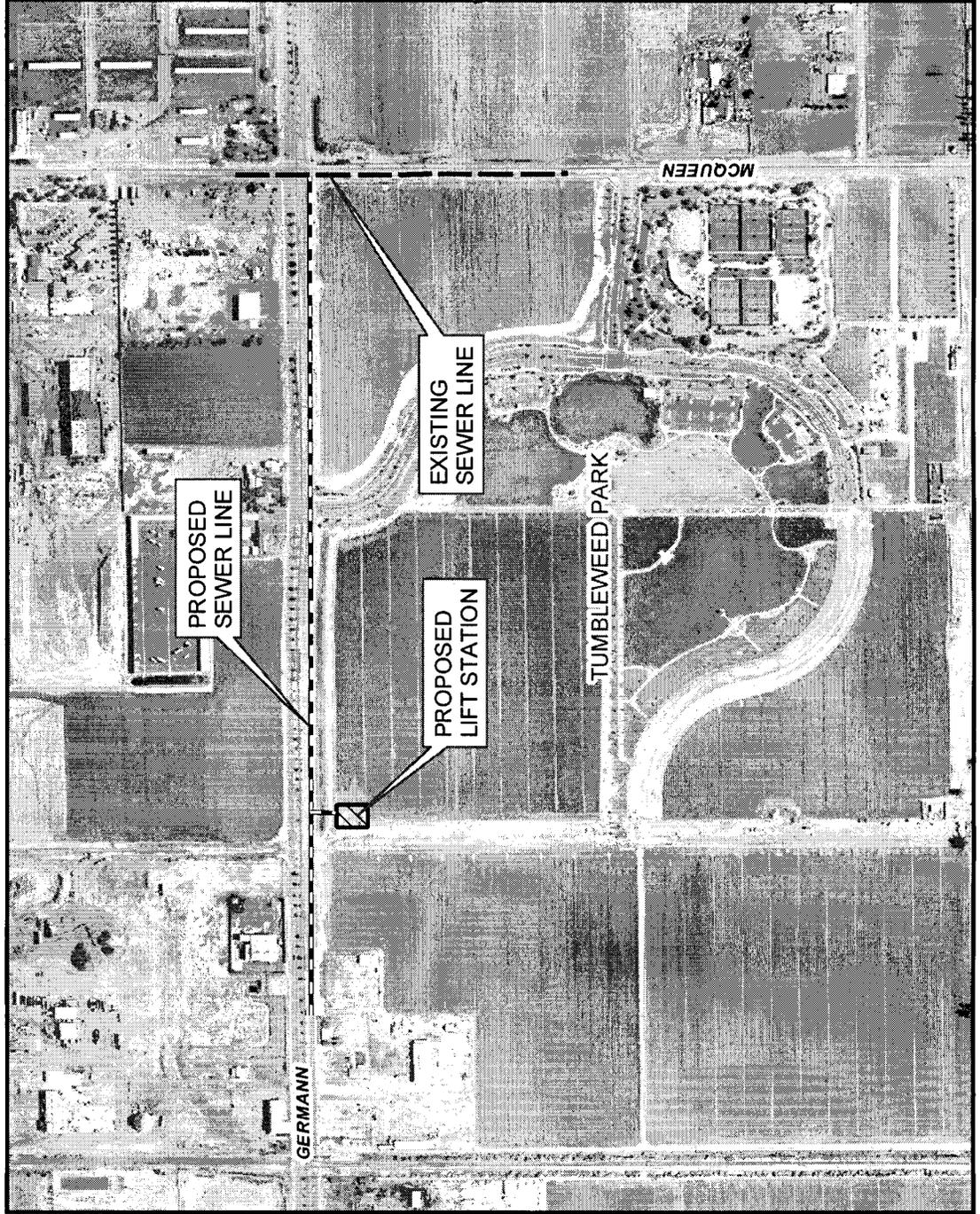
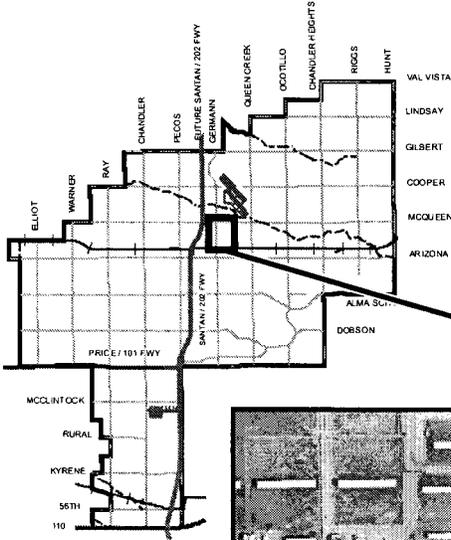
  
Elizabeth M. Huning, Assistant Public Works Director/City Engineer

**14. City Manager**

  
W. Mark Pentz



# GERMANN SEWER AND LIFT STATION PROJECT NO. WW0506-451



MEMO NO. C A07-217



AGREEMENT FOR  
ENGINEERING SERVICES

PROJECT TITLE: **Germann Road Sewer and Lift Station**  
PROJECT NO: **WW0506-451**

This contract is made and entered into by and between the City of Chandler, Arizona, a municipal Corporation, hereinafter called the CITY, and **Entellus, Inc.**, hereinafter called ENGINEER.

WHEREAS, ENGINEER represents ENGINEER has the expertise and is qualified to perform the services described in this agreement; and

WHEREAS, the Mayor and City Council/City Manager of the City of Chandler are authorized and empowered by the provisions of the City Charter to execute contracts for Professional Services;

NOW THEREFORE, for and in consideration of the mutual covenants and conditions hereinafter contained, it is agreed by and between the CITY and ENGINEER, as follows:

1. DESCRIPTION OF PROJECT

The CITY's Wastewater Master Plan identifies the need for a lift station and sewer that accommodates projected flows from Tumbleweed Park and the north side of Germann Road (between McQueen Rd. and Hamilton St. south of Willis). The infrastructure is necessary to serve the area bounded by the Santan Freeway and Ryan Road on the north and south, and the Southern Pacific Railroad and McQueen Road on the east and west. This lift station will serve developments in the area including Tumbleweed Recreation Center. A CM@Risk construction contract has been awarded for this project to Haydon Building Corporation. The ENGINEER will be responsible for providing construction management services throughout construction.

2. SCOPE OF WORK

ENGINEER shall provide construction management and post design services as described in Exhibit A attached hereto and made a part hereof by reference.

3. PAYMENT SCHEDULE

For services described in paragraph 2 of this Agreement, the CITY shall pay ENGINEER a fee based on the fee schedule attached hereto and made a part hereof by reference Exhibit B not to exceed the sum **Two Hundred Sixteen Thousand Seventeen dollars (\$216,017)**. Payment will be made monthly on the basis of progress reports. An Application and Certification for Payment Sheet must be provided. In addition, the following must also be included: a clear, detailed invoice reflecting items being billed for, a summary sheet showing percentage of work completed to date, amount/percent billed to date and current status of all tasks within a project; any/all backup documentation supporting the above items. Work schedule updates will be included in the monthly progress payment requests.

4. PERIOD OF SERVICE

ENGINEER shall complete all services described in paragraph 2 within **One Hundred Eighty (180)** calendar days after "Notice to Proceed" is issued by the CITY. In the event delays are experienced beyond the control of ENGINEER, the completion date may be extended as mutually agreed upon by CITY and ENGINEER.

5. OPINIONS OF PROBABLE COSTS (ESTIMATES)

Any opinions of probable project cost or probable construction cost provided by ENGINEER are made on the basis of information available to ENGINEER and on the basis of ENGINEER's experience and qualifications, and represents its judgment as an experienced and qualified professional engineer. However, since ENGINEER has no control over the cost of labor, materials, equipment or services furnished by others, or over the contractor(s) methods of determining prices, or over competitive bidding or market conditions, ENGINEER does not guarantee that proposals, bids or actual project or construction cost will not vary from opinions of probable cost ENGINEER prepares.

6. APPROVALS

All work shall be subject to the approval by the City Engineer.

ENGINEER agrees to exercise the skill and care which would be exercised by comparable professional engineers performing similar services at the time and in the locality such services are performed. If the failure to meet these standards results in faulty work, ENGINEER shall undertake at its own expense, the corrective adjustments or modifications.

7. REPORTING

Written monthly reports, along with updated work schedules, will be made by ENGINEER in the format prescribed by the CITY. These reports will be delivered to the CITY per schedule. When requested by the CITY, ENGINEER will attend Council meetings and provide finished documents including correspondence for Council action, supporting charts, graphs, drawings and colored slides of same.

8. STANDARDS OF PERFORMANCE:

A. This contract has been awarded to ENGINEER based on their proposal that those personnel and consultants listed in Exhibit A attached hereto will perform the portions of the work listed on said Exhibit A. ENGINEER shall not deviate nor substitute any of these team members without prior written approval by CITY.

B. ENGINEER shall be familiar with CITY's Standard Details and Specifications and other relevant CITY regulations. ENGINEER shall insure there are no conflicts among the Contract Documents including, but not limited to, the CITY's General and Supplementary Conditions for Construction Contracts, the plans and specifications prepared by ENGINEER, any standard details or specifications incorporated therein by reference, and the Construction Contract.

C. Correction of Mistakes: ENGINEER shall be responsible for the completeness and accuracy of the work prepared or compiled under ENGINEER's obligation for this project and shall correct, at ENGINEER's expense, all errors or omissions therein which may be disclosed. Correction of errors disclosed and determined to exist during any construction of the project on architectural or engineering drawings and specifications shall be accomplished by ENGINEER. The cost of the design necessary to correct those errors attributable to DESIGN

9. INDEMNIFICATION

(a) For Professional Liability:

To the fullest extent permitted by law, ENGINEER shall defend, indemnify and hold harmless the City of Chandler, its agents, representatives, officers, directors, officials and employees, individually and collectively, (hereinafter CoC) from and against all losses, claims, damages, suits, actions, payments, judgments, demands, expenses, and costs, including but not limited to, attorney's fees, defense costs, court costs, and the cost of appellate proceedings, or actions of any kind and nature related to, arising out of, or alleged to have resulted from the errors, mistakes or omissions relating to professional services by ENGINEER, its employees, agents, or any tier of subcontractors in the performance of this Contract or of any other person for whose

errors, mistakes or omissions ENGINEER may be legally liable. This indemnity shall not be construed to include losses, claims, damages, suits, or actions of any kind and nature, to the extent arising from or alleged to have resulted from the errors, mistakes or omissions of CoC (other than ENGINEER, its employees, agents, or any tier of subcontractors). The provisions of this paragraph shall survive termination of this Contract.

(b) For all Other Liabilities, Hazards and Exposures:

To the fullest extent permitted by law, ENGINEER shall defend, indemnify and hold harmless the City of Chandler, its agents, representatives, officers, directors, officials and employees, individually and collectively, (hereinafter CoC) from and against all losses, claims, damages, suits, actions, payments, judgments, demands, expenses, and costs, including but not limited to, attorney's fees, defense costs, court costs, and the cost of appellate proceedings, or actions of any kind and nature, wages or overtime compensation due employees in rendering service under this Contract and whether to any person or property, including natural resources and any claim made under the Fair Labor Standards Act or any other federal or state laws, related to, arising out of, or alleged to have resulted from the actions of ENGINEER and alleged to have been caused in whole or in part by any act or omission of ENGINEER, anyone directly or indirectly employed by them or anyone for whose acts ENGINEER may be legally liable, and from any claims or amounts arising or recovered under Workers' Compensation laws or any other law, bylaw, or ordinance, order or decree or any failure on the part of ENGINEER, its agents, employees or representatives to fulfill ENGINEER's obligations under this Contract. This indemnity shall not be construed to include losses, claims, damages, suits, or actions of any kind and nature, to the extent arising from or alleged to have resulted from the errors, mistakes or omissions of CoC, (other than ENGINEER, its employees, agents, or any tier of subcontractors). The provisions of this paragraph shall survive termination of this Contract.

(c) Consequential Damages:

The parties intend that damages and/or costs and all other terms implying an amount tied to liability shall include consequential damages and loss of productivity limited to the total value of this contract in dollars as payable by the City of Chandler or twice the amount of aggregate insurance required by this Contract, whichever is greater.

(d) Insurance does not limit liability:

The amount and type of insurance coverage requirements set forth herein will in no way be construed as limiting the scope of the indemnity in this paragraph.

**10. INSURANCE REQUIREMENTS:**

- A ENGINEER, at its own expense, shall purchase and maintain insurance of the types and amounts required in this section, with companies possessing a current A.M. Best, Inc. rating of B++6, or better and legally authorized to do business in the State of Arizona with policies and forms satisfactory to CITY.
- B Policies written on a "Claims made" basis are not acceptable without written permission from the City's Risk Manager.
- C All insurance required herein shall be maintained in full force and effect until all work or services required to be performed under the terms of this Agreement is satisfactorily completed and formally accepted. Failure to do so may, at the sole discretion of CITY, constitute a material breach of this Agreement and may result in termination of this contract.
- D If any of the insurance policies are not renewed prior to expiration, payments to the ENGINEER may be withheld until these requirements have been met, or at the option of the City, the City may pay the Renewal Premium and withhold such payments from any monies due the ENGINEER.
- E All insurance policies, except Workers' Compensation and Professional Liability required by this Agreement, and self-insured retention or deductible portions, shall name, to the fullest extent permitted

by law for claims arising out of the performance of this contract, the City of Chandler, its agents, representatives, officers, directors, officials and employees as Additional Insureds.

- F ENGINEER's insurance shall be primary insurance over any insurance available to the CITY and as to any claims resulting from this contract, it being the intention of the parties that the insurance policies so effected shall protect both parties and be primary coverage for any and all losses covered by the described insurance.
- G The insurance policies, except Workers' Compensation, shall contain a waiver of transfer rights of recovery (subrogation) against CITY, its agents, representatives, officers, directors, officials and employees for any claims arising out of ENGINEER's acts, errors, mistakes, omissions, work or service.
- H The insurance policies may provide coverage which contain deductibles or self-insured retentions. Such deductible and/or self-insured retentions shall be assumed by and be for the account of, and at the sole risk of ENGINEER. ENGINEER shall be solely responsible for the deductible and/or self-insured retention. The amounts of any self-insured retentions shall be noted on the Certificate of Insurance. CITY, at its option, may require ENGINEER to secure payment of such deductibles or self-insured retentions by a Surety Bond or an irrevocable and unconditional letter of credit. Self-insured retentions (SIR) in excess of \$25,000 will only be accepted with the permission of the Management Services Director/designee.
- I All policies and certificates shall contain an endorsement providing that the coverage afforded under such policies shall not be reduced, canceled or allowed to expire until at least thirty (30) days prior written notice has been given to CITY.
- J Information concerning reduction of coverage on account of revised limits or claims paid under the General Aggregate, or both, shall be furnished by the ENGINEER with reasonable promptness in accordance with the ENGINEER's information and belief.
- K In the event that claims in excess of the insured amounts provided herein, are filed by reason of any operations under this contract, the amount of excess of such claims, or any portion thereof, may be withheld from payment due or to become due the ENGINEER until such time as the ENGINEER shall furnish such additional security covering such claims as may be determined by the CITY.

## **10.2 Proof of Insurance - Certificates of Insurance**

- A Prior to commencing work or services under this Agreement, ENGINEER shall furnish to CITY Certificates of Insurance, issued by ENGINEER's insurer(s), as evidence that policies providing the required coverages, conditions and limits required by this Agreement are in full force and effect and obtain from the City's Risk Management Division approval of such Certificates.
- B If a policy does expire during the life of this Agreement, a renewal certificate must be sent to the City of Chandler five (5) days prior to the expiration date.
- C All Certificates of Insurance shall identify the policies in effect on behalf of ENGINEER, their policy period(s), and limits of liability. Each Certificate shall include the job site and project number and title. Coverage shown on the Certificate of Insurance must coincide with the requirements in the text of the contract documents. Information required to be on the certificate of Insurance may be typed on the reverse of the Certificate and countersigned by an authorized representative of the insurance company.
- D CITY reserves the right to request and to receive, within 10 working days, certified copies of any or all of the herein required insurance policies and/or endorsements. CITY shall not be obligated, however, to review same or to advise ENGINEER of any deficiencies in such policies and endorsements, and such receipt shall not relieve ENGINEER from, or be deemed a waiver of CITY's right to insist on, strict fulfillment of ENGINEER's obligations under this Agreement.

### 10.3 Required Coverage

Such insurance shall protect ENGINEER from claims set forth below which may arise out of or result from the operations of ENGINEER under this Contract and for which ENGINEER may be legally liable, whether such operations be by the ENGINEER or by a Sub-consultant or subcontractor or by anyone directly or indirectly employed by any of them, or by anyone for whose acts any of them may be liable. Coverage under the policy will be at least as broad as Insurance Services Office, Inc., policy form CG00011093 or equivalent thereof, including but not limited to severability of interest and waiver of subrogation clauses.

- A Claims under workers' compensation, disability benefit and other similar employee benefit acts which are applicable to the Work to be performed;
- B Claims for damages because of bodily injury, occupational sickness or disease, or death of the Contractor's employees;
- C Claims for damages because of bodily injury, sickness or disease, or death of any person other than the Contractor's employees;
- D Claims for damages insured by usual personal injury liability coverage;
- E Claims for damages, other than to Work itself, because of injury to or destruction of tangible property, including loss of use resulting therefrom;
- F Claims for damages because of bodily injury, death of a person or property damage arising out of ownership, maintenance or use of a motor vehicle; Coverage will be at least as broad as Insurance Service Office, Inc., coverage Code "I" "any auto" policy form CA00011293 or equivalent thereof.
- G Claims for bodily injury or property damage arising out of completed operations;
- H Claims involving contractual liability insurance applicable to the Contractor's obligations under the Indemnification Agreement;
- I Claims for injury or damages in connection with one's professional services;
- J Claims involving construction projects while they are in progress. Such insurance shall include coverage for loading and off loading hazards. If any hazardous material, as defined by any local, state or federal authorities are to be transported, MCS 90 endorsement shall be included.

#### 10.3.1 Commercial General Liability - Minimum Coverage Limits:

The Commercial General Liability insurance required herein shall be written for not less than \$1,000,000 limits of liability or ten percent (10%) of the Contract Price, whichever coverage is greater. Any combination between general liability and excess general liability alone amounting to a minimum of \$1,000,000 per occurrence (or 10% per occurrence) and an aggregate of \$2,000,000 (or 20% whichever is greater) in coverage will be acceptable. The Commercial General Liability additional insured endorsement shall be as broad as the Insurance Services, Inc's (ISO) Additional Insured, Form B, CG 20101001, and shall include coverage for ENGINEER's operations and products, and completed operations.

#### 10.3.2 General Liability - Minimum Coverage Limits

The General Liability insurance required herein, including, Comprehensive Form, Premises-Operations, Explosion and Collapse, Underground Hazard, Products/Completed Operations, Contractual Insurance, Broad Form Property Damage, Independent Contractors, and Personal Injury shall be written for Bodily

Injury and Property Damage Combined shall be written for not less than \$1,000,000 or 10% of the contract cost and with a \$2,000,000 aggregate.

#### 10.3.3 Automobile Liability

ENGINEER shall maintain Commercial/Business Automobile Liability insurance with a combined single limit for bodily injury and property damage of not less than \$1,000,000 each occurrence with respect to any owned, hired, and non-owned vehicles assigned to or used in performance of the ENGINEER's work. Coverage shall be at least as broad as coverage code 1, "any auto", (Insurance Service Office, Inc. Policy Form CA 00011293, or any replacements thereof). Such insurance shall include coverage for loading and off loading hazards if hazardous substances, materials or wastes are to be transported and a MCS 90 endorsement shall be included with coverage limits of \$5,000,000 per accident for bodily injury and property damage.

#### 10.3.4 Worker's Compensation and Employer's Liability

ENGINEER shall maintain Workers' Compensation insurance to cover obligations imposed by federal and state statutes having jurisdiction over ENGINEER's employees engaged in the performance of the work or services; and, Employer's Liability insurance of not less than \$1,000,000 for each accident, \$1,000,000 disease coverage for each employee, and \$1,000,000 disease policy limit.

In case any work is subcontracted, ENGINEER will require the Subcontractor to provide Workers' Compensation and Employer's Liability to at least the same extent as required of ENGINEER.

#### 10.3.5 Professional Liability

ENGINEER shall maintain Professional Liability insurance covering acts, errors, mistakes and omissions arising out of the work or services performed by ENGINEER, or any person employed by ENGINEER, with a claims made policy limit of not less than \$1,000,000.

### 11. AMENDMENTS

Whenever a change in the scope of work contemplated in this Contract is determined to be necessary, the work will be performed in accordance with the Contract provided, however, that BEFORE such work is started, a Contract Amendment shall be executed by the CITY and ENGINEER. Additions to, modifications of, or deletions from the project provided herein may be made and the compensation to be paid to ENGINEER may be adjusted accordingly by mutual agreement of the contracting parties. It is agreed that no claim for extra work by ENGINEER will be allowed by the CITY except as provided herein, nor shall ENGINEER do any work not covered by this Contract unless such work is authorized through an executed amendment.

### 12. TERMINATION WITHOUT CAUSE

CITY may at any time and for any or no reason, at its convenience, terminate this contract or any part of the services to be rendered pursuant thereto by written notice to ENGINEER specifying the termination date. Immediately after receiving such notice, ENGINEER shall discontinue advancing the work under this Contract and shall deliver to the CITY all drawings, notes, calculations, sketches and other materials entirely or partially completed, together with all unused materials supplied by the CITY.

ENGINEER shall receive as compensation in full for services performed to date of such termination, a fee for the percentage of work actually completed. This fee shall be a percentage of ENGINEER(S) fee described in this Contract under paragraph 3 and shall be in the amount to be agreed mutually by ENGINEER and the CITY. The CITY shall make this final payment within sixty (60) days after ENGINEER has delivered the last of the partially completed items.

13. OWNERSHIP OF DOCUMENTS

All documents, including, but not limited to, tracings, drawings, original mylars, estimates, field notes, investigations, design analysis and studies which are prepared in the performance of this Contract are to be, and remain the property of, the CITY. ENGINEER shall furnish the CITY, upon its request, originals or reproducible of technical specifications and copies of all other documents listed above. ENGINEER shall endorse, by his professional seal, all plans and engineering data furnished by him.

14. RE- USE OF DOCUMENTS

The parties agree the documents, drawings, specifications and designs, although the property of CITY, are prepared for this specific project and are not intended nor represented by ENGINEER to be suitable for re-use for any other project. Any reuse without written verification or adaptation by ENGINEER for the specific purpose intended will be at CITY's sole risk and without liability or legal exposure to ENGINEER.

15. NO KICK-BACK CERTIFICATION

ENGINEER warrants that no person has been employed or retained to solicit or secure this Contract upon an agreement or understanding for a commission, percentage, brokerage or contingent fee; and that no member of the City Council or any employee of the CITY has any interest, financially or otherwise, in the ENGINEERING firm.

For breach or violation of this warranty, the CITY shall have the right to annul this Contract without liability, or at its discretion to deduct from the Contract Price or consideration, the full amount of such commission, percentage, brokerage or contingent fee.

16. CONFLICT OF INTEREST

ENGINEER stipulates that its officers and employees do not now have a conflict of interest and it further agrees for itself, its officers and its employees that it will not contract for or accept employment for the performance of any work or services with any individual business, corporation or government unit that would create a conflict of interest in the performance of its obligations pursuant to this Contract.

Pursuant to A.R.S. Section 38-511, the City may cancel this contract within three (3) years after its execution without penalty or further obligation by the City if any person significantly involved in initiating, negotiating, securing, drafting or creating the contract on behalf of the City of Chandler is, at any time while the contract is in effect, an employee of any other party to the contract in any capacity or a consultant to any other party of the contract with respect to the subject matter of the contract.

17. CONTROLLING LAW

The law of the state of Arizona shall govern this Contract.

18. NO ASSIGNMENT

ENGINEER shall not assign, transfer, convey or subcontract this contract or the services to be rendered pursuant thereto without the prior written consent of CITY.

19. NOTICES

Any notice required under this Contract shall be in writing, addressed to the appropriate party at its address on the signature page and given personally or by registered or certified mail postage prepaid, or by a commercial courier service. All notices shall be effective upon the date of receipt.

IN WITNESS WHEREOF, the parties have hereunto subscribed their names to this \_\_\_\_\_ day of \_\_\_\_\_ 2007.

CITY OF CHANDLER

ENGINEER:

\_\_\_\_\_  
MAYOR Date

By: *Michael J. P.*  
Title: PRESIDENT

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

ADDRESS FOR NOTICE  
Entellus, Inc.  
2255 N. 44<sup>th</sup> Street, Ste. 125  
Phoenix, AZ 85008  
Phone: 602.244.2566

ATTEST:  
\_\_\_\_\_  
City Clerk

ATTEST: If Corporation  
*Patrice M. Miller*  
Secretary

APPROVED AS TO FORM:  
\_\_\_\_\_  
City Attorney by: *dm*

SEAL

**EXHIBIT A  
SCOPE OF WORK**

**SECTION 100 - PROJECT ADMINISTRATION SERVICES PRIOR TO MOBILIZATION**

**Task 110 Pre-Construction Meetings**

The ENGINEER shall conduct and document one (1) pre-construction meeting.

**Task 120 Review Preliminary Schedules**

The ENGINEER shall review and comment on the CONTRACTOR'S preliminary progress schedule, with input from CITY. The ENGINEER shall examine the construction sequence, activity durations, interim milestones, and other pertinent scheduling components in accordance with the contract documents. The ENGINEER shall prepare a letter summarizing the review comments and shall meet with and discuss the schedule comments with the CONTRACTOR and CITY.

**SECTION 200 - PROJECT ADMINISTRATION SERVICES DURING CONSTRUCTION**

**Task 210 Representation on Behalf of City**

The ENGINEER shall consult with and advise CITY and act as its representative during construction. The extent and limitations of the duties, responsibilities and authority of ENGINEER as assigned herein shall not be modified, except as ENGINEER may otherwise agree in writing. All CITY instructions to Contractor(s) shall be issued through ENGINEER who shall have authority to act on behalf of CITY to the extent provided in this scope of services except as otherwise provided in writing.

The ENGINEER shall provide staff to observe the work of the CONTRACTOR.

The ENGINEER shall provide the CITY daily construction progress reports at weekly or bi-weekly construction progress meetings.

**Task 220 Site Visits by Engineer**

The ENGINEER shall make site visits at intervals appropriate to the various stages of construction as the ENGINEER deems necessary in order to observe as an experienced and qualified design professional the progress that has been made and the quality of the various aspects of the CONTRACTOR'S executed work. Based on information obtained during such site visits and observations, the ENGINEER shall evaluate as a representative for the CITY if the work is proceeding in accordance with the Contract Documents. ENGINEER'S efforts shall be directed toward providing a greater degree of confidence for CITY that the completed work of CONTRACTOR shall conform generally to the Contract Documents, but the ENGINEER shall not be responsible for the failure of CONTRACTOR to perform or furnish the work in accordance with the Contract Documents. On the basis of on-site examination of materials, equipment, and workmanship on CITY projects, the ENGINEER shall keep CITY informed of the progress of the work, shall endeavor to guard CITY against defects and deficiencies in such work and may disapprove or reject work failing to conform to Contract Documents.

**Task 250 Certify Progress Payments**

The ENGINEER shall verify the CONTRACTOR'S monthly pay application quantities and recommend payment to the governing agency. In addition, the ENGINEER shall provide

independent change order evaluations, separate and unique from the CONTRACTOR's submitted change orders.

**Task 260 Substantial and Final Completion Inspection**

The ENGINEER shall conduct an inspection to determine if the PROJECT, or work associated with interim milestones is substantially complete in accordance with the contract documents. Any component of work, repair, testing, that prohibits the issuance of substantial completion shall be recorded on a punch list, which shall be distributed to both the CITY AND CONTRACTOR. Upon successful completion of the punch list items the ENGINEER shall issue a Certificate of Substantial Completion.

Upon final completion of all contracted work items the ENGINEER shall perform a final inspection to determine if the finished work has been completed to the standard required by the Contract Documents, and that the CONTRACTOR has fulfilled all obligations thereunder so that the ENGINEER 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).

**SECTION 300 - ENGINEERING SERVICES DURING CONSTRUCTION**

**Task 310 Control Staking and Survey Reference Points**

The ENGINEER shall provide:

1. Survey control points and or benchmarks to enable CONTRACTOR to utilize their own construction staking.

**Task 320 Changes**

Value Engineering as directed by the Owner and in collaboration with the Contractor.

**Task 330 Material Testing**

The ENGINEER shall coordinate required field materials testing with the CITY's designated materials testing agency to provide quality assurance to the CITY. ENGINEER shall evaluate field material testing results for conformance with the contract documents. ENGINEER shall notify CITY of any failing and/or problematic material testing results.

**Task 350 Operation and Maintenance Manual**

During the course of the work, the ENGINEER 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.

The ENGINEER shall assist CONTRACTOR in assembling an operating and maintenance manual in accordance with the intent of design and the manufacturer's requirements. The final manual shall be submitted within 60 days following substantial completion.

**SECTION 400 - RESIDENT SERVICES DURING CONSTRUCTION**

**Task 401 Schedules**

The ENGINEER shall review and comment on the CONTRACTOR'S preliminary progress schedule emphasizing on the work sequence, durations, interim milestones, and other appropriate scheduling features in accordance with the requirements of the Contract Documents. The ENGINEER shall prepare a report summarizing the review comments and shall meet and discuss the schedule comments with the CONTRACTOR and the CITY'S representative.

The ENGINEER shall review (monthly basis) the construction progress accomplished and compare the progress to the planned schedule. Significant discrepancies shall be discussed at the construction progress meetings.

The ENGINEER shall review the CONTRACTOR'S schedule of submittals and schedule of values. The status of each shall be discussed at the construction progress meetings.

#### **Task 405 Conferences and Meetings**

The ENGINEER shall conduct a preconstruction conference and all the construction progress meetings for the duration of the project, 180 calendar days. The ENGINEER shall prepare and distribute minutes of such meetings. The ENGINEER shall address all field inspections to be covered and shall outline for the benefit of the CONTRACTOR the inspection and coordination procedures for the project.

#### **Task 410 Liaison**

The ENGINEER shall serve as liaison with the CONTRACTOR, working principally with the CONTRACTOR'S superintendent to assist in the understanding of the intent of the Contract Documents. ENGINEER shall also serve as the CITY'S liaison with the CONTRACTOR, when the CONTRACTOR'S operations affect the CITY'S on-site operations.

#### **Task 415 Shop Drawings and Samples**

The ENGINEER shall receive and date samples and shop drawings furnished at the site by the CONTRACTOR.

The ENGINEER shall advise CONTRACTOR prior to commencement of work any activity that requires a shop drawing or activity whose shop drawing has not yet been approved by the ENGINEER.

#### **Task 420 Review of Work, Rejection of Defective Work, Inspections and Tests**

ENGINEER shall conduct on-site observations of the work in progress to determine if the work is proceeding in accordance with the Contract Documents and that completed work shall conform to the Contract Documents.

The ENGINEER shall document and advise CITY whenever it is believed that any work is unsatisfactory, faulty or defective or does not conform to the Contract Documents, or does not meet the requirements of any inspections, tests or approval required to be made, or has been damaged prior to final payment; and advise CITY when the ENGINEER believes that work should be corrected or rejected or should be uncovered for observation, or requires special testing, inspection or approval.

The ENGINEER shall verify that tests, equipment and systems start-up, and operating and maintenance instructions are conducted as required by the Contract Documents and in presence of the required personnel, and that CONTRACTOR maintains adequate records thereof; observe, record and report appropriate details relative to the test procedures and start-ups.

The ENGINEER shall accompany visiting inspectors representing public or other agencies having jurisdiction over the Project, The ENGINEER shall record and report the outcome of these inspections.

#### **Task 425 Interpretation of Contract Documents**

The ENGINEER shall report when clarifications and interpretations of the Contract Documents are needed. The ENGINEER shall communicate and transmit the clarifications and interpretations of the Contract Documents.

#### **Task 435 Records**

ENGINEER shall maintain at the job site orderly files for correspondence, schedules, test data, progress payments, change orders, meeting minutes, reports of job conferences, Shop Drawings and samples submissions, reproductions of original Contract Documents including all addenda, change orders, field orders, additional Drawings issued subsequent to the execution of the Contract, ENGINEER's clarifications and interpretations of the Contract Documents, progress reports, project photos and logs of photos, and other Project related documents.

ENGINEER shall prepare daily reports recording Contractor's hours on the job 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, observations in general and specific observations in more detail as in the case of observing test procedures.

ENGINEER shall record names, addresses and telephone numbers of all Contractors, subcontractors and major suppliers of materials and equipment.

ENGINEER shall maintain notes to be capable of verifying record drawing information for accuracy and completeness.

#### **Task 440 Reports**

ENGINEER shall furnish CITY periodic reports as required of progress of the work and Contractor's compliance with the approved progress schedule and schedule of Shop Drawing submissions.

ENGINEER shall consult with CITY in advance of scheduled major tests, inspections or start of important phases of the work.

ENGINEER report immediately to CITY upon the occurrence of any accident.

#### **Task 445 Payment Application**

ENGINEER shall determine the amounts owing to Contractor(s) and recommend in writing payments to Contractor(s) 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, and materials or equipment stored are accurately represented to the best of ENGINEER's knowledge, information and belief, the quality of such work is in accordance with the Contract 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 Contract Documents, and to any qualifications stated in his recommendation), and that payment of the amount recommended is due Contractor(s).

#### **Task 450 Certificates, Operation and Maintenance Manuals**

ENGINEER shall verify or provide assistance to 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 and in accordance with Contract Documents; and have this material delivered to CITY prior to final acceptance of the work.

#### **Task 455 Substantial Completion**

ENGINEER shall submit to CONTRACTOR a list of observed items requiring completion or correction.

ENGINEER shall conduct final inspection in the company of CITY and CONTRACTOR and prepare a final list of items to be completed or corrected.

ENGINEER shall observe that all items on final list have been completed or corrected and make recommendation to CITY concerning acceptance.

## **SECTION 500 - SPECIAL SERVICES**

### **Task 520 Start-Up Assistance**

ENGINEER shall review 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.

### **Task 540 Travel**

ENGINEER shall submit reimbursable expenses related to mileage logged and ownership and maintenance costs incurred for the vehicles directly assigned to the project.

## **POST DESIGN SERVICES**

### **Task I Review Shop Drawings and Test Results**

The ENGINEER shall:

1. Receive, review and approve (or take other appropriate action in respect of) shop drawings, samples, test results, and other data which CONTRACTOR is required to submit, but only for conformance with the design concept of the Project and compliance with the information given in the Contract Documents. Such review and approval 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 incident thereto.
2. Examine the list of submittals to be submitted by the CONTRACTOR and check for completeness. ENGINEER shall review no more than fifteen (15) CONTRACTOR submittals.
3. Log and track each submittal, and cross-reference submittals to RFIs, change requests, and related correspondence. Submittal log with submittal dates, transmittal action, return dates, and review action shall be copied to the CITY and CONTRACTOR on a monthly basis.
4. Receive and review (for general contents as required by the Specifications) maintenance and operating schedules and instructions, guarantees, bonds and certificates of inspection which are to be assembled by Contractor(s) in accordance with the Contract Documents.

### **Task II Issue Interpretations and Clarifications**

The ENGINEER shall be responsible for monitoring and processing requests for information submitted by the CONTRACTOR up to a total of twenty (20) requests.

The ENGINEER shall issue all instructions of CITY to CONTRACTOR; issue necessary interpretations and clarifications of the Contract 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 Contract Documents and judge the acceptability of the work there under, and make decisions on all claims of CITY and CONTRACTOR relating to the acceptability of the work or the interpretation of the requirements of the Contract Documents pertaining to the execution and progress of the work. The ENGINEER shall render all interpretations or decisions in good faith and in accordance with the requirements of the Contract Documents.

### **Task III Changes**

The ENGINEER shall provide services in connection with change orders to reflect changes requested by CITY or CONTRACTOR, provide services after the award of contract in evaluating substitutions proposed by CONTRACTOR, and in making revisions to Drawings and Specifications occasioned thereby. ENGINEER shall provide services for a total of five (5) changes. Engineering Services required

due to significant delays, and changes or price increases occurring as a direct or indirect result of material or equipment shortages shall be considered a change in the scope of the ENGINEER'S work.

The ENGINEER shall:

1. Notify the CITY of changes or alterations believed to be in the CITY'S best interest.
2. Provide the CITY with supporting details of proposed changes.
3. Prepare drawings, details, and specifications needed to adequately convey the desired change.
4. Provide analysis and recommendations to the CITY regarding a CONTRACTOR claim.
5. Prepare an estimate of the cost and time impact of the change.
6. Conduct negotiations with the CONTRACTOR and CITY.
7. Track all changes using a change order log. Provide cross-referencing to related information requests, submittals, or correspondence.
8. Assist the CITY in preparing and processing change order documentation.

#### **Task IV      Record Drawings**

The ENGINEER 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 to ENGINEER and which the ENGINEER has sufficiently reviewed for accuracy and completeness.

**EXHIBIT B  
FEE SCHEDULE**

| Task #      | CONSTRUCTION PHASE  | PRIN  | PM    | RPR   | CADD  | SURV CREW | INSPECTOR | CLER  | ENTELLUS  | SUB      | DESCRIPTION       | REIMB   | Subtotal               |
|-------------|---|-------|-------|-------|-------|-----------|-----------|-------|-----------|----------|-------------------|---------|------------------------|
| 110,120,401 | Preconstruction Conference / Master Schedule Eval.        | \$165 | \$126 | \$115 | \$69  | \$140     | \$85      | \$42  | LABOR     | \$520    | DARCOR-electrical |         | \$189,183              |
| 310         | Control Survey  |       | 2     |       |       |           | 2         |       | \$736     |          |                   | \$200   | Mileage                |
| 405         | Conferences and Meetings (Avg. 1 per week)                |       | 4     |       |       | 10        |           |       | \$1,904   |          | DARCOR-electrical |         |                        |
| 220,420,440 | Review Work and Inspections                               |       | 12    | 26    |       |           | 26        | 8     | \$7,048   | \$3,120  | DARCOR-electrical |         |                        |
| 320         | Changes - Value Engineering                               | 6     | 56    | 48    | 120   |           | 1400      |       | \$119,000 | \$3,815  | DARCOR-electrical | \$3,115 | Mileage                |
| 330         | Materials Testing - concrete, asphalt, backfill           |       |       | 12    |       |           | 24        |       | \$25,902  | \$4,200  | DARCOR-electrical | \$374   | Mileage                |
| 250,445     | Review Pay Applications/Evaluate contractor change orders |       |       | 24    |       |           | 12        |       | \$2,400   | \$3,815  | DARCOR-electrical |         |                        |
| 260,455     | Develop Punchlist   |       | 4     |       |       |           | 24        |       | \$4,800   |          |                   |         |                        |
| 350,450,520 | O&M Manuals - Start-up Assistance                         |       | 4     | 4     |       |           | 16        |       | \$1,820   | \$1,140  | DARCOR-electrical |         |                        |
|             | TOTALS  | 6     | 78    | 120   | 120   | 10        | 1,512     | 58    | \$165,254 | \$20,240 |                   | \$3,689 |                        |
|             | % of Total  | 0.32% | 4.10% | 6.30% | 6.30% | 0.53%     | 79.41%    | 3.05% |           |          |                   |         | <b>TOTAL \$189,183</b> |

| Task #  | CONSTRUCTION PHASE                                      | PRIN  | PM     | RPR    | CADD   | SURV CREW | INSPECTOR | CLER  | ENTELLUS | SUB     | DESCRIPTION       | REIMB | Subtotal                                   |
|---------|---|-------|--------|--------|--------|-----------|-----------|-------|----------|---------|-------------------|-------|--|
| I       | Shop Drawing Review (Assume max of 40)                  | \$165 | \$126  | \$115  | \$69   | \$140     | \$85      | \$42  | LABOR    | \$3,970 | DARCOR-electrical |       | \$26,834                                   |
| II, III | Interpret Docs/Issue Corrections (RFI max 20, change 5) |       | 20     | 60     |        |           | 20        |       | \$11,120 | \$1,760 | DARCOR-electrical |       |  |
| IV      | Process As-Builts                                       |       | 2      | 4      | 24     |           | 10        |       | \$5,261  | \$1,335 | DARCOR-electrical |       |  |
|         | TOTALS  | 0     | 32     | 89     | 28     | 0         | 42        | 0     | \$19,769 | \$7,065 |                   | \$0   |  |
|         | % of Total  | 0.00% | 16.75% | 46.60% | 14.66% | 0.00%     | 21.99%    | 0.00% |          |         |                   |       | <b>TOTAL POST DESIGN SERVICES \$26,834</b> |

**TOTAL OF SERVICES \$216,017.00**