PURCHASING ITEM
FOR
COUNCIL AGENDA
Memo No. CA08-247

1. Agenda Item Number: 37

2. Council Meeting Date: May 8, 2008

TO: MAYOR & COUNCIL	**3. Date Prepared:** April 14, 2008
THROUGH: CITY MANAGER	**4. Requesting Department:** Municipal Utilities

5. SUBJECT: Award an engineering services contract to Tri-Core Engineering for Construction Management Services for Water Main Replacements Phase III, Project No. WA0401-453, in an amount not to exceed $119,898.

6. RECOMMENDATION: Staff recommends that Council award an engineering services contract to Tri-Core Engineering for Construction Management Services for Water Main Replacements Phase III, Project No. WA0401-453, in an amount not to exceed $119,898.

7. BACKGROUND/DISCUSSION: Some of the existing water mains in the older sections of the City are undersized and/or deteriorating. The result has been a high number of repairs to broken water mains, interrupted water service, numerous citizen complaints, and property damage. City staff has prioritized the areas for replacement based on the number of repairs made and complaints received.

This project provides for construction management services for the replacement of approximately two and a half miles of existing 6-inch and 8-inch water lines in the area bounded by Arizona Avenue and Jay Street, and by Ivanhoe Street and Harrison Street, and in the area bounded by Nebraska Street and Hartford Street, and by Erie Street and Chandler Boulevard. Construction of this project is scheduled to begin in summer 2008, with a contract time of 270 days. A construction contract will be awarded separately.

8. EVALUATION: Tri-Core Engineering is the designer for the Water Main Replacements Phase III project and was selected in accordance with established City policies and procedures. Council awarded the design contract to Tri-Core on November 6, 2003.

9. FINANCIAL IMPLICATIONS:

Cost:	$119,898
Savings:	N/A
Long Term Costs:	N/A

Fund Source:

Acct. No.:	Fund Name:	Program Name:	CIP Funded:	Amount:
601.3820.0000.6714.8WA023	Water Capital	Main Replacements	FY 07/08	$119,898

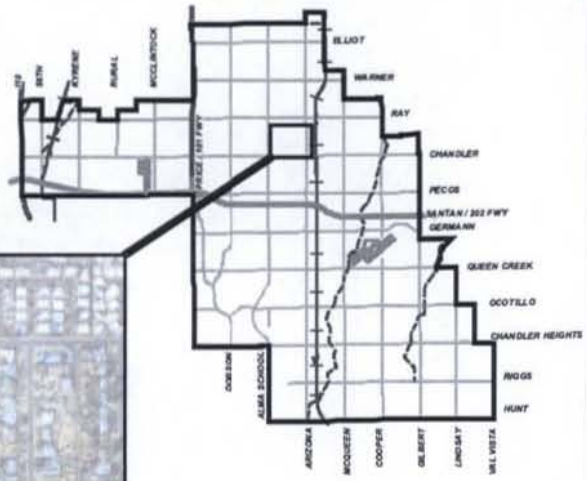
10. PROPOSED MOTION: Move that Council award an engineering services contract to Tri-Core Engineering for Construction Management Services for Water Main Replacements Phase III, Project No. WA0401-453, in an amount not to exceed $119,898, and authorize the Mayor to sign the contract documents.

ATTACHMENTS: Location Map, Contract

APPROVALS

11. Requesting Department	**13. Department Head**
Robert Mulvey, Assistant Municipal Utilities Director	Dave Siegel, Municipal Utilities Director
12. City Engineer	**14. City Manager**
Sheina Hughes, Assistant Public Works Director/City Engineer	W. Mark Pentz

CONSTRUCTION MANAGEMENT SERVICES FOR WATER MAIN REPLACEMENTS PHASE III PROJECT NO. WA0401-453



MEMO NO. CA08-247

WATER MAIN REPLACEMENT

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ENGINEERING SERVICES CONTRACT

PROJECT TITLE: **Construction Management Services for Water Main Replacements Phase III**
PROJECT NO: **WA0401-453**

This contract is made and entered into by and between the City of Chandler, Arizona, a municipal Corporation, hereinafter called the CITY, and **Tri-Core Engineering, an Arizona Corporation**, 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

ENGINEER shall see that the project is constructed in accordance with the current versions of the City of Chandler Standard Specifications and Details, the MAG Standards and Details, and the contract documents prepared for the construction of the project. Basic services for this contract shall include: construction management services and post design services for construction to replace existing 6-inch and 8-inch water mains with new ductile iron pipe, within quarter sections 9-53, 9-54, and 10-54 relative to PHASE III. The work in general includes contract administration, meeting minutes, providing an on-site representative as requested, reviewing shop drawing submittals, change order processing, as-built drawings, and related services.

2. SCOPE OF WORK

ENGINEER shall provide those services 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 **One Hundred Nineteen Thousand Eight Hundred Ninety Eight** dollars (**$119,898**). 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 **Two Hundred Seventy (270)** 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. ENGINEER shall be familiar with CITY's Standard Details and Specifications and other relevant CITY regulations. ENGINEER shall ensure 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.

B. 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 ENGINEER and any damage incurred by CITY as a result of additional construction costs caused by such engineering or architectural errors shall be chargeable to ENGINEER and shall not be considered a cost of the Work. The fact that CITY has reviewed or approved ENGINEER's work shall in no way relieve ENGINEER of any of its responsibilities.

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. <u>INSURANCE REQUIREMENTS:</u>

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 With the exception of professional liability policies, 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. TERMINATION WITH CAUSE

This Agreement may be terminated by CITY for cause should the ENGINEER fail to perform any provision of this Agreement, including without limitation, for any of the following reasons:

(a) ENGINEER abandons Work;
(b) ENGINEER assigns or attempts to assign its rights or obligations under this Agreement or any part thereof to any third-party (without the prior written consent of CITY;
(c) ENGINEER is adjudged bankrupt or insolvent, makes a general assignment for the benefit of creditors, has a trustee or receiver appointed for its property, or files a petition to take advantage of any debtor's act;
(d) ENGINEER fails or refuses to perform any obligation under the Agreement, or fails to remedy such nonperformance within seven (7) days after its occurrence;
(e) ENGINEER fails to comply with any applicable Laws and fails to remedy such nonperformance within seven (7) days after its occurrence;
(f) ENGINEER fails to achieve the required dates for performance required pursuant to the Agreement.

The CITY'S right of termination for cause as set forth herein shall be in addition to, and not a limitation of, any and all other remedies available to CITY at law, in equity, or under the terms and provisions of this Agreement.

14. 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.

15. 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.

16. 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.

17. 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.

18. CONTROLLING LAW

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

19. 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.

20. 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 _____ 2008.

CITY OF CHANDLER

_____
MAYOR Date

ADDRESS FOR NOTICE
City of Chandler
P.O. Box 4008, Mail Stop 407
Chandler, AZ 85244-4008
Phone: 480-782-3307
Fax: 480-782-3355

ATTEST:

_____
City Clerk

APPROVED AS TO FORM:

_____
City Attorney by: _____ SEAL

ENGINEER:

By: _____
Title: President

ADDRESS FOR NOTICE
Tri-Core Engineering, Inc.
8840 E. Chaparral Rd., Ste. 150
Scottsdale, AZ 85250
Phone: (480) 346-3200
Fax: (480) 346-3201

ATTEST: If Corporation

_____
Secretary

EXHIBIT A
SCOPE OF WORK

I. GENERAL REQUIREMENTS

A. DESIGN STANDARDS – All work shall conform to:
1. The M.A.G. Standard Specifications and Details
2. The latest City of Chandler Design Standards and Details
3. All applicable uniform and national codes along with the City amendments as adopted by ordinance
4. AWWA, NSF, ACI, ASTM, etc. as applicable
5. The AUCC "Public Improvement Project Guide" (PIPG)

B. QUALITY CONTROL – The City's Representative is responsible for maintaining a Quality Control Program that will provide a quality product. The City's Representative will implement the Quality Control Program to ensure a successful end product throughout the construction process. ENGINEER shall assist in the implementation of this program.

C. PROJECT CONSTRUCTION SCHEDULE – the City's Representative and the ENGINEER shall work together to ensure that the selected contractor meets the required construction timelines as listed in the project specifications. The City's Representative will be responsible for reviewing the contractor's Schedule, Phasing Plan and associated proposed method for keeping the existing water lines and connections in service for compliance with the contract documents and for approval.

II. CONSTRUCTION MANAGEMENT TASKS

A. ON-SITE CONSTRUCTION REPRESENTATIVE
1. Provide an on-site representative as requested by the City for the duration of the construction – anticipated to be approximately 2 days per month.
2. Provide correspondence and communication with the Contractor.
3. Verify and approve the Contractor's monthly pay request.
4. Analyze and make recommendations for any Change Orders necessary.
5. Maintain a daily diary (for days on-site) documenting weather, progress; pay quantities, labor & equipment on-site, new issues arising, and important conversations and happenings of the day.
6. Monitor construction progress relative to the contractor's submitted CPM schedule.

B. MEETINGS
1. Attend and participate in the pre-bid conference.
2. Attend and participate in the pre-construction conference.
3. Attend weekly construction meetings and prepare all meeting minutes.

C. CONSTRUCTION MATERIAL TESTING
1. Assist with coordination as requested by the City to insure timely access by City personnel for the field density testing of bedding, backfill, sub-grade and aggregate base course; Concrete placement inspection, sampling and testing; asphalt placement observation, field density testing and laboratory testing of asphalt properties. Review and reporting for this task will be the responsibility of the City.
2. Assist with the coordination as requested for the City to perform hazardous material/special waste testing, identification and reporting for four (4) samples if required.

D. SHOP DRAWINGS AND SUBMITTALLS

1. Review all shop drawings and submittals for compliance with design drawings and specifications, and provide copies of review to the City. Submittal and review procedures will be according to the project specifications.

E. AS BUILTS

1. Incorporate any revisions to the plans from the contractor's red-marked field set, and prepare and submit 4-mil photo mylar as-built drawings and AutoCAD record disks including any available as-built survey information.

III. ADDITIONAL DESIGN TASKS

A. SURVEY AND BASE MAPS

1. Perform survey and prepare topographic and utility base maps for the following areas:
   - Along Hartford Street from Chandler Boulevard to Galveston Street.
   - Along Chandler Boulevard, 100 feet east and west of Hartford Street.
   - Along Galveston Street, 100 feet east and west of Hartford Street.

B. DESIGN AND PLAN PREPARATION

1. Perform waterline design and prepare construction plans for the following items on **Hartford Street**:
   - Design a new 8" water line along Hartford Street from Chandler Boulevard to Galveston Street.
   - Abandon the existing 8" water main that is in Hartford Street from Chandler Boulevard to Galveston Street.
   - Determine the best location on the existing 8" water main to be abandoned to cut and plug.
   - Determine the location of any service lines and provide for connection to the new 8" water main.
   - Revise the current Phase III plans for connection to the new 8" water main instead of the existing 8" water main as currently shown on sheets W08, W10, & W11.
   - Provide connections to the already installed Phase I water mains at the alleys north of Oakland Street and Tulsa Street, and also in Galveston Street.
   - Submit these new plans (100%) to the City for review with the revised Phase III construction documents.
   - Revise the Special Provisions as required.
   - Incorporate all review comments into the final plans.

2. *As an addendum to be added to the contractors work on the phase III contract*, prepare sketches, CADD conversions, and service line layout for the following items associated with the new 4" water main in **Toledo Street**:

   - Accompany City staff to the 12 residences that will require new service lines running from the new 4" water main in the street to their back yards. Prepare hand sketches on site to show all above ground features on the property. Convert these sketches to CADD drawings. Layout the most feasible service line route and show it conceptually on the drawings (rough dimensions).
   - Submit this to the City to be added via addendum to the Phase III contractors work

The 100% and Final submittals for these plans, which will be a part of Phase III, shall adhere to the following:

100% SUBMITTAL

This submittal shall include:

1. Four copies of the updated Engineer's construction cost estimate
2. Five (5) full size black-line copies of the 100% plans.

FINAL CONSTRUCTION PLANS

All comments from the 100% review shall be incorporated into the final documents. The Engineer shall deliver a complete set of professionally sealed original documents to the City. Construction drawings shall be submitted on 24"x 36" 4-mil. Mylar sheets. Final Mylars shall be the property of the City. One original of the bid tabulation and cost estimate shall all be submitted on 8 ½" x 11" sheets.

In addition to the original contract documents, the ENGINEER shall provide to the City all drawings, cost estimates, and bid schedules stored on optical disks (AutoCAD 2000® for drawings and MS Word™ for written materials; or as approved by the City's Project Manager). ENGINEER shall also return 100% redlined review plans to the City

EXHIBIT B
FEE SCHEDULE

TASK (Hourly Billing Rate)	Senior Project Manager $162.00	Project Engineer $109.00	Senior Cadd Tech $89.00	Word Processor $49.00	Total Hours	Total Fee
CONSTRUCTION MANAGEMENT, SHOP DRAWING REVIEW AND AS-BUILTS						
GENERAL PROJECT TASKS						
Project Management	88	72		4	164	$ 22,300
Shop Drawing Review	16	42	6	2	66	$ 7,802
Construction Management	80	72	40	12	204	$ 24,956
As-Built Mylars	12	24	42	2	80	$ 8,396
Construction Material Review and Consultation	2	12	16	4	34	$ 3,252
Environmental Asbestos Storage Area Testing Review	8	8	4	2	22	$ 2,622
SECTION TOTAL HRS	206	230	108	26	570	
SECTION TOTAL $	$ 33,372	$ 25,070	$ 9,612	$ 1,274		$ 69,328
ADDITIONAL DESIGN						
Survey by Manhard Consulting (Sub Consultant)						$ 4,400
New Water Main in Hartford from Chandler Boulevard to Galveston Street	24	52	88	4	168	$ 17,584
Private Residence Site Visits, Sketches, CADD Conversions, and Service Line Layouts	12	32	56	2	102	$ 10,514

Revise Sheets W08, W10, & W11 for the Connection to the New 8" Water Main in Hartford Street	4	10	16		30	$	3,162
Prepare 100% Plans	4	16	40	2	62	$	6,050
Abandoned Waterline Cut & Plug Plans	1	2	12		15	$	1,448
Special Provisions	12	4		2	18	$	2,478
Quantities	2	4	8		14	$	1,472
Cost Estimate	2	8	4		14	$	1,552
QA/QC	8	4	2		14	$	1,910
SECTION TOTAL HRS	**69**	**132**	**226**	**10**	**437**		
SECTION TOTAL $	**$ 11,178**	**$ 14,388**	**$ 20,114**	**$ 490**		**$**	**50,570**

PROJECT TOTAL HOURS	**275**	**362**	**334**	**36**	**1007**		
PROJECT TOTAL $	**$ 44,550**	**$ 39,458**	**$ 29,726**	**$ 1,764**		**$**	**119,898**