



**PURCHASING ITEM  
FOR  
COUNCIL AGENDA  
Memo No. CA08-155**

**1. Agenda Item Number:** 40  
**2. Council Meeting Date:** January 17, 2008

**TO: MAYOR & COUNCIL**

**3. Date Prepared:** December 20, 2007

**THROUGH: CITY MANAGER**

**4. Requesting Department:** Municipal Utilities

**5. SUBJECT:** Approve Contract Amendment No. 4 in an amount not to exceed \$48,861 to the engineering services contract to Tri-Core Engineering for the design of water main replacements, Project No. WA0401-201, for a revised contract total not to exceed \$524,144.

**6. RECOMMENDATION:** Staff recommends that Council approve Contract Amendment No. 4 in an amount not to exceed \$48,861 to the engineering services contract to Tri-Core Engineering for the design of water main replacements, Project No. WA0401-201, for a revised contract total not to exceed \$524,144.

**7. BACKGROUND/DISCUSSION:** Some of the existing water mains in the older sections of the City are undersized and/or deteriorating resulting in a high number of repairs to broken water mains, interrupted water service, numerous citizen complaints, and property damage. In November 2003, Council approved an engineering contract that provided for the design of approximately nine miles of small diameter water main replacements in several residential neighborhoods. During the plan review process, Staff identified a benefit to relocating the new construction into the road right-of-way to eliminate significant reconstruction in residents' front yards. Contract Amendment No. 4 provides for additional design services to relocate the water mains requested by Staff.

**8. EVALUATION PROCESS:** Tri-Core Engineering was selected as the designer for the water main replacement project in accordance with established City policies and procedures. Staff has reviewed the scope of work, billing rates, and fee for this amendment to be consistent with similar projects.

**9. FINANCIAL IMPLICATIONS:**

Cost:

Original Contract Amount: \$400,796

	<u>Amount of Amendment</u>	<u>Percent of Original Contract</u>	
Contract Amendment No. 1:	\$ 36,100	9.0%	(Staff approved)
Contract Amendment No. 2:	\$ 14,805	3.7%	
Contract Amendment No. 3:	\$ 23,582	5.9%	
Contract Amendment No. 4:	\$ 48,861	12%	
New Contract Amount:	\$451,701		

Savings: None

Long Term Costs: None

Fund Source:

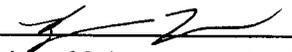
<u>Acct. No.:</u>	<u>Fund Name:</u>	<u>Program Name:</u>	<u>CIP Funded:</u>	<u>Amount:</u>
601.3820.0000.6714.8WA023	Water Bonds	Main Replacements	FY 07/08	\$48,861

**10. PROPOSED MOTION:** Move that Council approve Contract Amendment No. 4 in an amount not to exceed \$48,861 to the engineering services contract to Tri-Core Engineering for the design of water main replacements, Project No. WA0401-201, for a revised contract total not to exceed \$524,144, and authorize the Mayor to sign the contract documents.

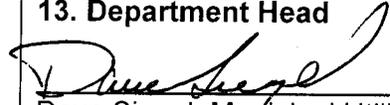
**ATTACHMENTS:** Location Map, Contract

APPROVALS

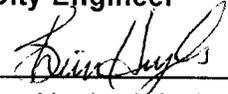
11. Requesting Department

  
\_\_\_\_\_  
Robert Mulvey, Assistant Municipal Utilities Director

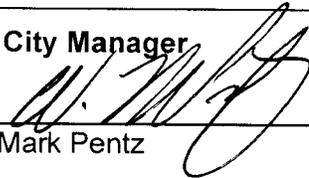
13. Department Head

  
\_\_\_\_\_  
Dave Siegel, Municipal Utilities Director

12. City Engineer

  
\_\_\_\_\_  
Sheina Hughes, Acting Assistant Public Works Director/City Engineer

14. City Manager

  
\_\_\_\_\_  
W. Mark Pentz



Chandler Arizona

AMENDMENT NUMBER 4

Project Name: Water Main Replacements
Project No.: WA0401-201

This Amendment No. 4 to that certain Agreement Between the City Of Chandler (CITY) and Tri-Core Engineering, Inc., an Arizona corporation, for Water Main Replacements dated November 19, 2003 is entered into this day of , 200 .

WHEREAS the parties have determined that it is necessary and desirable for ENGINEER to perform additional services for CITY;

NOW THEREFORE, the parties agree as follows:

- 1. Section 2, of the above referenced Agreement, is hereby; amended by adding additional scope of work described in more detail in Exhibit A attached hereto and incorporated herein by reference.
2. Section 3, of the above referenced Agreement, is hereby; amended by increasing the total contract price by an amount not to exceed the sum of Forty Eight Thousand Eight Hundred Sixty One dollars, (\$48,861) all payable in accordance with Exhibit B, for a total contract price not to exceed the sum of Five Hundred Twenty Four Thousand One Hundred Forty Four dollars, (\$524,144).
3. All other terms and conditions of the above referenced Agreement shall remain unchanged and in full force and effect.

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

CITY OF CHANDLER:
By:
MAYOR Date

APPROVED AS TO FORM:
City Attorney by:
ATTEST:

City Clerk

ENGINEER:
By:
Title: President

ATTEST: (If corporation)
Secretary

WITNESS: (If Individual or Partnership)

SEAL

Amendment No. 4 cont.

Project No. WA0401-201

**THESE CHANGES RESULT IN THE FOLLOWING ADJUSTMENTS OF CONTRACT PRICE AND TIME**

<b>ORIGINAL CONTRACT AMOUNT</b>		<b>\$ 400,796</b>
<b>CURRENT CONTRACT PRICE PRIOR TO THIS AMENDMENT</b> (Including previous amendments)		<b>\$ 475,283</b>
<b>NET INCREASE / DECREASE</b> (Resulting from this amendment)		<b>\$ 48,861</b>
<b>REVISED CONTRACT PRICE</b> (Including this amendment)		<b>\$ 524,144</b>
<b>AMENDMENT PERCENTAGE</b> (Of original contract price)		<b>12%</b>
<b>CONTRACT TIME PRIOR TO THIS AMENDMENT</b> (Including previous amendments)		<b>8/15/05</b> (Days or Date)
<b>NET INCREASE/DECREASE</b> (Resulting from this amendment)		(Days or Date)
<b>REVISED CONTRACT TIME</b> (Including this amendment)		<b>4/15/08</b> (Days or Date)
THIS AMENDMENT No. _____	Does not Require Council Approval: Less than \$30,000*	_____
	More than \$30,000 but less than 10% of Contract*	_____
THIS AMENDMENT No. <u>4</u>	Requires Council Approval Greater than \$30,000*	_____
	Greater than 10% of Contract *	<b>X</b>
*Including City Manager approved Amendments		
<b>ORIGINAL CONTRACT COUNCIL DATE:</b> 11/6/2003 <b>ITEM NO.:</b> 22, if applicable		
<b>COUNCIL APPROVAL:</b> _____ <b>ITEM NO:</b> _____, if applicable		

CC: City Clerk    User Dept    Project Mgr    Consultant    Project Anaylst    File

## EXHIBIT A

### General

The ENGINEER shall complete the additional work in accordance with the current versions of the City of Chandler Standard Details / Specifications and MAG Standard Details / Specifications.

Services for this Change Order shall include:

### Design and Plan Preparation

#### **PHASE II**

The City has decided to move the waterlines that are currently located behind the sidewalks to the streets at roughly a 3-foot offset from lip of gutter. This is going to be done in the field during construction by the contractor and under the direction of City of Chandler construction management personnel. ENGINEER shall perform the following tasks in support of this move on a fast track schedule:

- Determine the location of all crossings of existing utilities by the new water line alignment located in the street.
- Design the new water line to cross under or over the identified existing utilities based on current MAG and COC clearance and design criteria.
- Prepare construction plans for these crossings.
- Determine the location of all existing waterlines affected by this alignment change that will be abandoned in place.
- Determine the best location on these existing waterlines to be abandoned to cut and plug them or apply a cutout detail.
- Prepare construction plans for these locations.
- Revise quantities for any changes and identify new quantities

#### **PHASE III**

The City has decided to move the waterlines that are currently located behind the sidewalks to the streets at roughly a 3-foot offset from lip of gutter. ENGINEER shall perform the following tasks in support of this move on a fast track schedule:

- Revise the current final construction documents to reflect this alignment change.
- Determine the location of all crossings of existing utilities by the new water line alignment located in the street.
- Design the new water line to cross under or over the identified existing utilities based on current MAG and COC clearance and design criteria.
- Determine the location of all existing waterlines affected by this alignment change that will now be abandoned in place.
- Determine the best location on these existing waterlines to be abandoned to cut and plug them or apply a cutout detail.
- Coordinate Phase II changes and incorporate them into the Phase III design.
- Submit revised construction documents (100%) to the city for review.
- Submit revised construction documents (100%) to the Maricopa County Environmental Services Department for review and approval on the expedited schedule.
- Incorporate all review comments into a final set of construction documents.
- Changes and/or additions to the Technical Specifications are **not** included.

The 100% and Final submittals shall adhere to the following:

#### **100% SUBMITTAL**

This submittal shall include:

1. Four copies of the updated Engineer's construction cost estimate
2. Ten (10) full size blue-line copies of the 100% plans for the water lines.

#### FINAL CONSTRUCTION PLANS

ENGINEER shall incorporate all comments from the 100% review into the final documents. The ENGINEER shall deliver a complete set of professionally sealed original documents to the City. ENGINEER shall submit construction drawings on 24"x 36" 4-mil. Mylar sheets. Final mylars shall be the property of the City. ENGINEER shall submit one original of the bid tabulation and cost estimate on 8 1/2" 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 return 100% redlined review plans to the City.

EXHIBIT B  
FEE SCHEDULE

TASK	Senior Project Manager \$156.00	Project Engineer \$105.00	Senior Cadd Tech \$86.00	Word Processor \$49.00	Total Hours	Total Fee
<b>GENERAL PROJECT TASKS</b>						
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Field Visits	4	4			8	\$1,044
Project Management	12			1	13	\$1,921
Utility Coordination	2	2	2	1	7	\$743
Tri-Core Design Team Meetings & Coord.	4	4	4		12	\$1,388
Coordination with City of Chandler Staff	4	2	2	1	9	\$1,055
<b>SECTION TOTAL HRS</b>	<b>26</b>	<b>12</b>	<b>8</b>	<b>3</b>	<b>49</b>	
<b>SECTION TOTAL \$</b>	<b>\$4,056.00</b>	<b>\$1,260.00</b>	<b>\$688.00</b>	<b>\$147.00</b>		<b>\$6,151</b>
<b>ANALYSIS, DESIGN AND CONSTRUCTION DOCUMENTS</b>						
<b>PHASE II SERVICES</b>						
Existing Utility Crossing Design and Plans	4	16	24		44	\$4,368
Abandoned Waterline Cut & Plug Plans	2	8	10		20	\$2,012
Abandoned Waterline Cutout Plans	2	8	10		20	\$2,012
Technical Specification Changes	2	2		1	5	\$571
Quantity Changes	2	4			6	\$732
Cost Estimate Changes	2	4			6	\$732
QA/QC	4	2	2		8	\$1,006
<b>SUBTOTAL</b>	<b>18</b>	<b>44</b>	<b>46</b>	<b>1</b>	<b>109</b>	<b>\$11,433</b>
<b>PHASE III 100% SERVICES</b>						
Revise and Prepare 100% Plans	8	48	80	2	138	\$13,266
Abandoned Waterline Cut & Plug Plans	2	4	9		15	\$1,506

Abandoned Waterline Cutout Plans	2	4	9		15	\$1,506
Quantities	4	12	12		28	\$2,916
Cost Estimate	2	12	4		18	\$1,916
QA/QC	8	4	2		14	\$1,840
Maricopa County Environmental Review Fee						\$600
<b>SUBTOTAL</b>	<b>26</b>	<b>84</b>	<b>116</b>	<b>2</b>	<b>228</b>	<b>\$23,550</b>
<b>PHASE III FINAL SERVICES</b>						
City of Chandler Review Meeting	4	4			8	\$1,044
Final Plans	4	12	16	1	33	\$3,309
Quantities	2	6	4		12	\$1,286
Cost Estimate	1	8	2		11	\$1,168
QA/QC	4	2	1		7	\$920
<b>SUBTOTAL</b>	<b>15</b>	<b>32</b>	<b>23</b>	<b>1</b>	<b>71</b>	<b>\$7,727</b>
<b>SECTION TOTAL HRS</b>	<b>59</b>	<b>160</b>	<b>185</b>	<b>4</b>	<b>408</b>	
<b>SECTION TOTAL \$</b>	<b>\$9,204.00</b>	<b>\$16,800.00</b>	<b>\$15,910.00</b>	<b>\$196.00</b>		<b>\$42,110</b>

<b>PROJECT TOTAL HOURS</b>	<b>85</b>	<b>172</b>	<b>193</b>	<b>7</b>	<b>457</b>	
<b>PROJECT TOTAL COST</b>	<b>\$13,260.00</b>	<b>\$18,060.00</b>	<b>\$16,698.00</b>	<b>\$343.00</b>		<b>\$48,861</b>