



**PURCHASING ITEM  
FOR  
COUNCIL AGENDA  
Memo No. CA08-010**

**1. Agenda Item Number:** 17  
**2. Council Meeting Date:** July 26, 2007

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

**3. Date Prepared:** July 9, 2007  
**4. Requesting Department:** Municipal Utilities

**5. SUBJECT:** Approval of Contract Amendment No. 5 in the amount of \$151,420 to the design services contract with Stantec Consulting, Inc. for the Dobson Road – Warner Road Intersection Improvements, Project No. ST0401-201, for a revised contract total of \$969,893.

**6. RECOMMENDATION:** Staff recommends Council approve Contract Amendment No. 5 in the amount of \$151,420 to the design services contract with Stantec Consulting, Inc. for the Dobson Road – Warner Road Intersection Improvements, Project No. ST0401-201, for a revised contract total of \$969,893.

**7. BACKGROUND/DISCUSSION:** This contract amendment will allow for the supplementary engineering design costs associated with the additional scope of work requested by the Municipal Utilities Department for replacement of Asbestos Cement Pipe that is exceeding its 20 to 30 year life expectancy located within the Dobson Road - Warner Road intersection improvement project limits.

This work will include design services for the replacement of approximately 5,000 linear feet of 12 and 16 inch Asbestos Cement Pipe with Ductile Iron Pipe, preparation of 60%, 90% and 100% Construction Documents, probable cost estimates, roadway plan modifications, permit fees and 40 additional potholes. The project is currently in design and is tentatively scheduled to start construction in Spring 2008 with construction duration of approximately nine months.

**8. EVALUATION:** Stantec Consulting, Inc. was selected in accordance with established City policies and procedures. Council awarded the engineering services contract on August 28, 2003. Council awarded contract Amendment No. 4 on June 28, 2007.

**9. FINANCIAL IMPLICATIONS:**

Total Design Contract:	\$691,500
Contract Amendment No. 1: (3.5%)	\$ 24,700
Contract Amendment No. 2: (10.3%)	\$ 71,157
Contract Amendment No. 3:	Time extension only
Contract Amendment No. 4: (4.5%)	\$ 31,116
Contract Amendment No. 5: (22%)	\$151,420
Revised Contract Amount:	\$969,893
Savings:	N/A
Long Term Costs:	N/A

<u>Acct. No.:</u>	<u>Fund Name:</u>	<u>Program Name:</u>	<u>CIP Funded:</u>	<u>Amount:</u>
601.3820.0000.6718.6WA110	Water Bond	System Upgrade During Street Repairs	FY 05/06	\$151,420

**10. PROPOSED MOTION:** Move that Council approve Contract Amendment No. 5 in the amount of \$151,420 to the design services contract with Stantec Consulting, Inc. for the Dobson Road – Warner Road Intersection Improvements, Project No. ST0401-201, for a revised contract total of \$969,893, and authorize the Mayor to sign the contract documents.

**ATTACHMENTS:** Location Map, Contract Amendment

**APPROVALS**

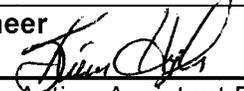
**11. Requesting Department**

  
Robert Mulvey, Assistant Municipal Utilities Director

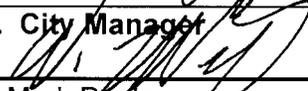
**13. Department Head**

  
Dave Siegel, Municipal Utilities Director

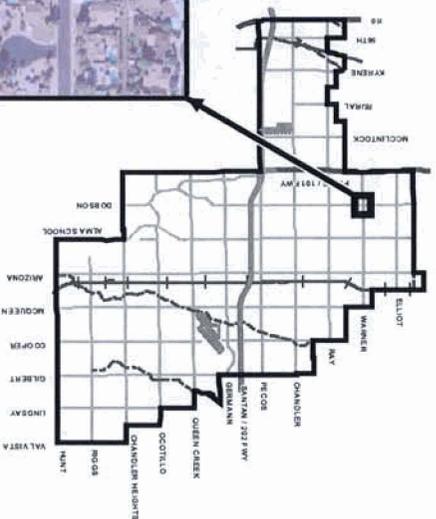
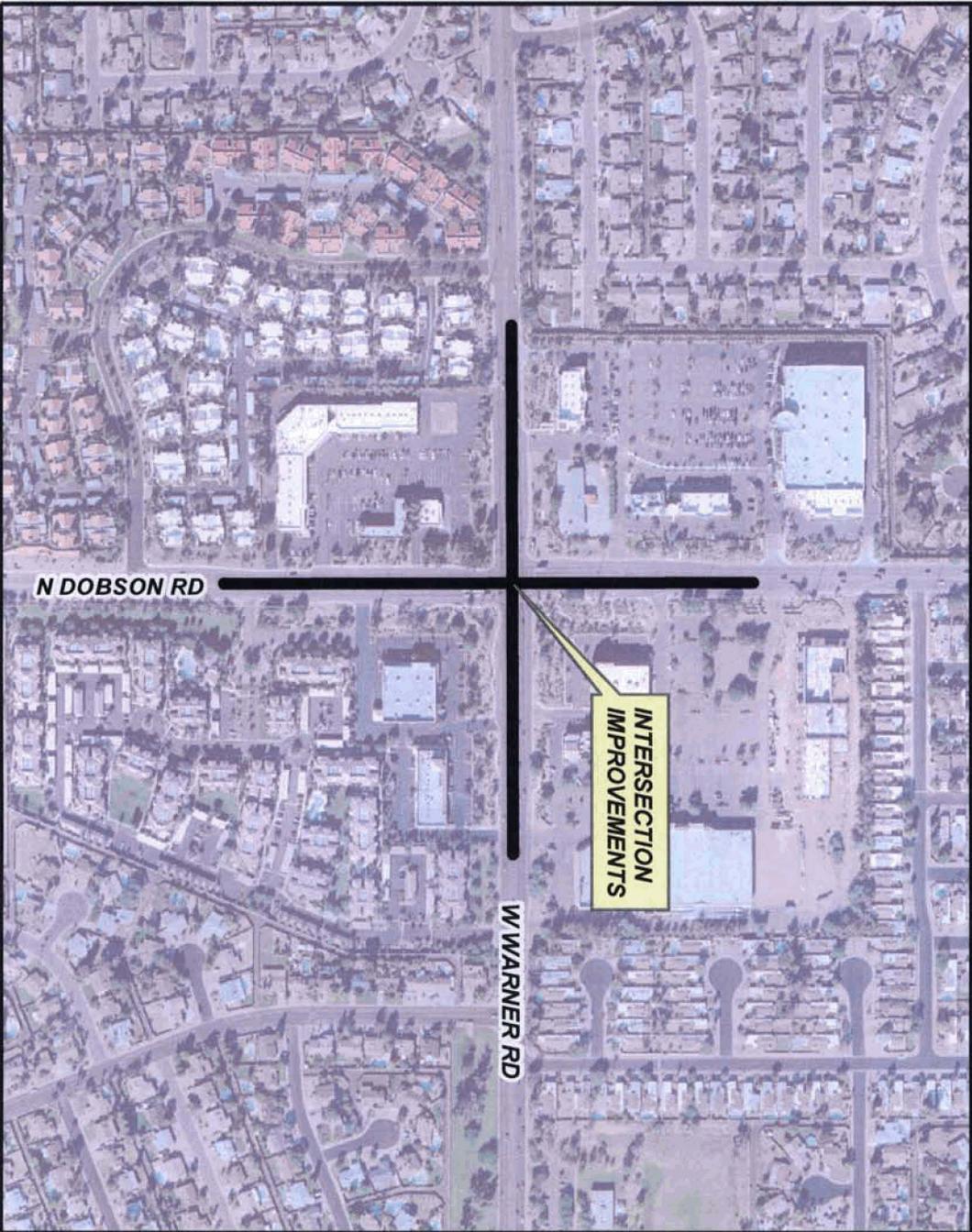
**12. City Engineer**

  
Sheina Hughes, Acting Assistant Public Works Director/City Engineer

**14. City Manager**

  
W. Mark Pertz

# DOBSON RD AND WARNER RD INTERSECTION IMPROVEMENTS PROJECT NO. ST0401-201



**MEMO NO. CA08-010  
CONTRACT  
AMENDMENT NO. 5**

**INTERSECTION  
IMPROVEMENTS**



Chandler Arizona

AMENDMENT NUMBER 5

Project Name: Dobson Road/Warner Road Intersection Improvements
Project No.: ST0401-201

This Amendment No. 5 to that certain Agreement Between the City Of Chandler (CITY) and Stantec Consultants, Inc., an Arizona Corporation, for Dobson Road/Warner Road Intersection Improvements dated 19, September, 2003 is entered into this day of , 2007.

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 as described in more detail in Exhibit A attached hereto and incorporated herein by reference.
2. Section 3 of the above reference Agreement is hereby amended by increasing the total Contract Price by an amount not to exceed the sum of One Hundred Fifty One Thousand Four Hundred Twenty dollars (\$151,420) all payable in accordance with Exhibit B, for a total Contract Price not to exceed the sum of Nine Hundred Sixty Nine Thousand Eight Hundred Ninety Three dollars (\$969,893).
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

ATTEST: City Clerk

ENGINEER:

By: [Signature]

Title: PRINCIPAL

ATTEST: (If corporation)

Secretary

WITNESS: (If Individual or Partnership)

SEAL

ACKNOWLEDGE BY:

User Department Signature: Date:

Recommended: CITY ENGINEER Date

Title

Recommended: DEPARTMENT DIRECTOR Date:

Amendment No. 5 cont.

Project No. ST0401-201

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

<b>ORIGINAL CONTRACT AMOUNT</b>	<b>\$ 691,500</b>
<b>CURRENT CONTRACT PRICE PRIOR TO THIS AMENDMENT</b> (Including previous amendments)	<b>\$ 818,473</b>
<b>NET INCREASE / DECREASE</b> (Resulting from this amendment)	<b>\$ 151,420</b>
<b>REVISED CONTRACT PRICE</b> (Including this amendment)	<b>\$ 969,893</b>
<b>AMENDMENT PERCENTAGE</b> (Of original contract price)	<b>22%</b>
<b>CONTRACT TIME PRIOR TO THIS AMENDMENT</b> (Including previous amendments)	<b>1,420</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>8/13/07</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>5</u>	Requires Council Approval Greater than \$30,000* <u>X</u>
	Greater than 10% of Contract * <u>X</u>
*Including City Manager approved Amendments	
<b>ORIGINAL CONTRACT COUNCIL DATE: 8/28/03 ITEM NO.: 9, if applicable</b>	
<b>COUNCIL APPROVAL: _____ ITEM NO: _____, if applicable</b>	

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

EXHIBIT A  
SCOPE OF WORK

A. GENERAL

1. The Project is generally described as follows:

Provide professional engineering design services for replacement of approximately 5,000 linear feet of 12- and 16-inch Asbestos Cement Pipe (ACP) with Ductile Iron Pipe (DIP) within the project limits of COC project ST0401-201. The location of the project is generally described as Dobson Road and Warner Road within 1,200 feet of the intersection.

2. Engineer shall be responsible for the professional quality, technical accuracy and the coordination of all reports, design, drawings, specifications and other Services furnished by Engineer under this Agreement. Engineer shall, without additional compensation, correct or revise any errors or omissions in its reports, design, drawings, specifications and other Services.
3. Engineer shall maintain record of all meeting minutes and discussions held in conjunction with the Services, with documentation of major discussion points, observations, decisions, question or comments. These shall be furnished to the City for inclusion in the overall Project documentation.
4. All Services performed under this Agreement shall be performed by or under the direct supervision of persons then licensed in the State of Arizona to perform these Services. The name of each such licensed individual shall be listed on the title sheet of the Plans and Specifications.
5. All designs and specifications prepared by Engineer shall comply with applicable engineering and design standards to include, MAG Standard Details and Specifications (current addition), City of Chandler Standard Details and Specifications (current addition).

B. PRE-DESIGN SERVICES

1. DATA COLLECTION

Perform pre-design investigations to establish appropriate guidelines around which and within which the Project is to be designed. These investigations include, but are not necessarily limited to:

- Identification of design issues relating to system functionality
- Identification of applicable permit and code requirements
- Impacts of the Project on neighboring commercial and residential uses.
- Identification of critical issues affecting project completion.
- Collection and review of "As Built" plans from adjacent and relevant projects
- Review of any special issues or concerns noted by City staff.

C. CONSTRUCTION DOCUMENTS

Upon written authorization from the City to proceed, Stantec will prepare Construction Documents using existing utility and topographic base plans, in compliance with the appropriate applicable building codes, ordinances and other regulatory authorities. Engineer shall prepare Construction Documents consisting of the following:

1. Construction Documents (60%):

(A) Engineering:

1. Prepare draft grade and alignment plans to show location of existing utilities and horizontal and vertical alignment of proposed water line. Grade and alignment plans shall include all topographical elements and existing utilities.

2. Revise paving plans removing all references to relocations and waterline details.
3. Prepare details.
4. Coordination with other disciplines and utilities.
5. Waterline plans will be prepared using 1"=20' horizontal and 1"=4' vertical scale.

(B) Specifications:

1. Draft technical specifications describing materials, systems and equipment, workmanship, quality and performance criteria required for the construction of the Project.
2. Where articles, materials and equipment are identified by brand names, at least two names shall be used, and such names shall be followed by the words "or approved equal". Specification shall not contain restrictions that will limit competitive bids other than those required for maintenance convenience by the City.
3. Technical specifications for waterline and appurtenances shall provided in ADOT C&S Special Provisions format.

(C) Engineers Opinion of Probable Construction Cost:

1. All costs are to be based on current bid prices.
2. Contingencies for design, bidding or construction, if included in the opinion of probable construction cost, are to be shown as individual line items, with the percentage and base of calculation clearly identified.
3. Engineer shall provide opinion of probable cost in previously approved format.

2. Construction Documents (90%):

(A) Engineering:

1. Complete plan, profile, and details of proposed water line and associated appurtenances. Drawings shall include existing utilities.
2. Prepare Basis of Design brief.
3. Submit sealed plans for permit and Basis of Design brief to MCESD with application for Approval to Construct.

(B) Specifications:

- a. Complete technical specifications describing materials, systems and equipment, workmanship, quality and performance criteria required for the construction of the Project.
- b. Where articles, materials and equipment are identified by brand names, they shall be followed by the words "or approved equal".
- c. Specifications shall not contain restrictions that will limit competitive bids other than those necessary for City maintenance requirements.

(C) Engineers Opinion of Probable Construction Cost:

- a. Update and refine the 60% Construction Document Engineers Opinion of Probable Construction Cost.

3. Construction Documents (Final):

The construction document final stage shall be for the purpose of the Engineer incorporating all Regulatory Agencies' comments into the drawings, specifications, and opinion of probable construction cost.

Make corrections as required, to reflect engineer's final back-check comments into the drawings, specifications and opinion of probable construction cost.

The final contract documents delivered to the City upon completion of the Engineer's work shall consist of the following:

- a. Drawings: Original mylars of all drawings with each Engineer/Sub-consultant's State license stamp.
- b. Specifications: Original word processed technical specifications on sealed reproducible masters in ADOT C&S format.

Upon written approval by the City that the documents are complete, Engineer shall provide to the City completed original mylars and a complete set of word processed specifications on reproducible masters. The City will provide reproduction of the final contract documents for distribution to bidders.

#### 4. Deliverables:

##### Copies:

Sixty percent (60%) submittal – six (6) reproducible half size plan sets and six (6) sets of ADOT CNS Special Provisions for waterline and appurtenances. One copy of Engineer's Opinion of Probable Construction Cost.

Ninety Five percent (90%) submittal – six (6) reproducible half size plan sets and six (6) sets of ADOT C&S Special Provisions for waterline and appurtenances. One copy of Engineer's Opinion of Probable Construction Cost.

Final Submittal – one (1) completed original plan set (mylar) and a complete set of word processed specifications and Engineer's final Opinion of Probable Construction Cost on reproducible masters. Provide two (2) full size sets and four (4) half-size sets of the completed original drawings to City.

A record at each stage of CD review indicating any authorized changes made to the project from the last submittal.

#### E. ASSUMPTIONS AND EXCLUSIONS

Pressure and capacity provided by existing distribution system is sufficient to service the area and replacing existing waterlines with like diameters of DIP waterline will not impact level of service.

Modeling of existing or replaced distribution lines is not included in this scope of work.

Plans shall be prepared using AutoCAD 2005 in accordance with CAD standards previously established for the project.

CADD base plan from topographic and utility survey. CADD base plan shall include record drawing information obtained from utility mapping

Expenses for additional potholing services are included in the fee proposal and shall be paid by the Engineer and reimbursed by the City.

Payment of permit fees is included in the fee proposal and shall be paid by the Engineer and reimbursed by the City.

Preparation of traffic control plans is not included in this scope of work.

**EXHIBIT B  
FEE SCHEDULE**

TASKS	Personnel and Rate											TOTAL COST			
	Project Principal	Project Manager	Senior Engineer	Project Engineer	Design Engineer	Design Technician	CAD Technician	Clerical	Survey Manager	2-person Survey Crew	Sub-Total Hours per Task		Sub-Total Hours per Task	Expenses	Sub-Consultant
<b>1 Construction Documents (60%)</b>															
a) Field investigations				8	8						16	\$1,696			\$1,696
b) Prepare plan & profiles	16		8	16	40	64	80				224	\$20,696			\$20,696
c) Prepare plan & profile for hydrant leads	4			4	8	16	32				64	\$5,620			\$5,620
d) Prepare project detail sheets	4			4	8	12	24				52	\$4,660			\$4,660
e) Prepare draft specifications in ADOT CNS format	4		4	8	16			24			56	\$4,832			\$4,832
f) Opinion of probable construction cost	2		4	8							14	\$1,750			\$1,750
g) Revised project quantities	2		2	4		8					16	\$1,716			\$1,716
h) Utility coordination	16			16		8					40	\$4,752			\$4,752
i) QC and plan review	4		8	4							16	\$2,108			\$2,108
<b>Subtotal</b>	<b>0</b>	<b>52</b>	<b>26</b>	<b>72</b>	<b>80</b>	<b>108</b>	<b>136</b>	<b>24</b>	<b>0</b>	<b>0</b>	<b>498</b>	<b>\$47,830</b>			<b>\$47,830</b>
<b>2 Construction Documents (90%)</b>															
a) Plan & profile changes/revisions	8		4	8	24	32	40				116	\$10,732			\$10,732
b) Hydrant lead plan & profile revisions	2			4	8	12	16				42	\$3,778			\$3,778
c) Project detail sheets revisions	2			2	4	8	16				32	\$2,810			\$2,810
d) Final specifications in ADOT CNS format	4		2	4	8			8			26	\$2,478			\$2,478
e) Basis of Design brief for MCESD permitting	2			8				4			14	\$1,414			\$1,414
f) Permit submittals and coordination	2			4				4			10	\$870			\$870
g) Updated opinion of probable construction cost	2		2	4							8	\$1,012			\$1,012
h) Revised project quantities	2		2	4		8					16	\$1,716			\$1,716
i) QC and plan review	4		8	4							16	\$2,108			\$2,108
<b>Subtotal</b>	<b>0</b>	<b>28</b>	<b>18</b>	<b>38</b>	<b>48</b>	<b>60</b>	<b>72</b>	<b>16</b>	<b>0</b>	<b>0</b>	<b>280</b>	<b>\$26,918</b>			<b>\$26,918</b>
<b>3 Construction Documents (100%)</b>															
a) Plan & profile changes/revisions	4			8	8	16	24				60	\$5,476			\$5,476
b) Hydrant lead plan & profile revisions	2			2	2	4	8				18	\$1,658			\$1,658
c) Project detail sheets revisions	2			2	2	4	8				18	\$1,658			\$1,658
d) Updated opinion of probable construction cost	2		2	2							4	\$506			\$506
e) Revised project quantities	2		2	2							4	\$506			\$506
f) Construction document coordination	4			4				16			24	\$1,860			\$1,860
g) QC and plan review	2		4	2							8	\$1,054			\$1,054

	0	18	4	22	12	24	40	16	0	0	136	\$12,718	\$12,718
<b>4 Roadway Plan Modifications</b>													
a) Delete water improvement notes and revise paving plans		4		32	40	48	56				180	\$16,580	\$16,580
b) Utility coordination		16		16	8						40	\$4,752	\$4,752
<b>Subtotal</b>	<b>0</b>	<b>20</b>	<b>0</b>	<b>48</b>	<b>40</b>	<b>56</b>	<b>56</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>220</b>	<b>\$21,332</b>	<b>\$21,332</b>
<b>5 Project Management</b>													
a) Progress and design review meetings		8		8				8			24	\$2,448	\$2,448
b) Schedule/Coordination/Control/Staffing/Documentation		16	24								40	\$5,624	\$5,624
<b>Subtotal</b>	<b>16</b>	<b>32</b>	<b>0</b>	<b>8</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>8</b>	<b>0</b>	<b>0</b>	<b>64</b>	<b>\$8,072</b>	<b>\$8,072</b>
<b>6 Expenses</b>													
a) Other Direct Costs												\$9,350	\$9,350
<b>Subtotal</b>												\$9,350	\$9,350
<b>7 Allowances</b>													
a) Permits Fees												\$1,200	\$1,200
b) Potholes (40 Holes @ \$600 each)												\$24,000	\$24,000
<b>Subtotal</b>												\$1,200	\$25,200
<b>TOTAL HOURS</b>	<b>16</b>	<b>150</b>	<b>48</b>	<b>188</b>	<b>180</b>	<b>248</b>	<b>304</b>	<b>64</b>	<b>0</b>	<b>0</b>	<b>1198</b>		
<b>TOTAL LABOR AND FEE</b>	<b>\$2,336</b>	<b>\$20,550</b>	<b>\$6,576</b>	<b>\$21,808</b>	<b>\$17,280</b>	<b>\$21,824</b>	<b>\$23,104</b>	<b>\$3,392</b>			<b>\$116,870</b>		<b>\$151,420</b>