



**PURCHASING ITEM
FOR
COUNCIL AGENDA
Memo No. CA08-263**

1. Agenda Item Number:
#36

2. Council Meeting Date:
May 22, 2008

TO: MAYOR & COUNCIL

THROUGH: CITY MANAGER

3. Date Prepared: April 30, 2008

4. Requesting Department: Municipal Utilities

5. SUBJECT: Award a project agreement to Carollo Engineers for construction management of the Alamosa Wells 2 & 3 Equipping, Project No. WA0707-451, in an amount not to exceed \$359,796.

6. RECOMMENDATION: Staff recommends that Council award a project agreement to Carollo Engineers for construction management of the Alamosa Wells 2 & 3 Equipping, Project No. WA0707-451, in an amount not to exceed \$359,796.

7. BACKGROUND/DISCUSSION: New wells are needed to meet potable water demands during peak periods and to provide a backup source in times of a surface water shortage. The Alamosa Well No. 2, located one-quarter mile east of Gilbert Road and one-quarter mile south of Chandler Heights Road, was drilled in 2006. Alamosa Well No. 3, located approximately one-third mile west of Lindsay Road and one-half mile north of Chandler Heights Road, was drilled in 2007. This contract will complete the well sites with the installation of the well pumps, chlorination equipment, and discharge piping required to connect the well to the potable water system.

This contract provides for construction management services including project administration, office engineering services, field engineering services, and special services during construction.

8. EVALUATION PROCESS: On September 6, 2007, Council approved an annual contract, EN0406-101, with Carollo Engineers for equipping design and construction management services for potable water wells. Staff has reviewed the scope of work, billing rates, and total fee for this project, compared them to historical costs, and has determined that they are acceptable.

9. FINANCIAL IMPLICATIONS:

Cost: \$359,796
Savings: None
Long Term Costs: None
Fund Source:

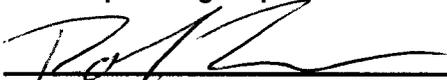
<u>Acct. No.:</u>	<u>Fund Name:</u>	<u>Program Name:</u>	<u>CIP Funded:</u>	<u>Amount:</u>
601.3820.0000.6713.7WA034	Water Bond	Well Construction	FY 06/07	\$359,796

10. PROPOSED MOTION: Move that Council award a project agreement to Carollo Engineers for construction management of the Alamosa Wells 2 & 3 Equipping, Project No. WA0707-451, in an amount not to exceed \$359,796.

ATTACHMENTS: Location Map

APPROVALS

11. Requesting Department


Robert Mufvey, Assistant Municipal Utilities Director

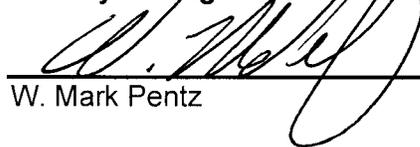
13. Department Head


Dave Siegel, Municipal Utilities Director

12. City Engineer

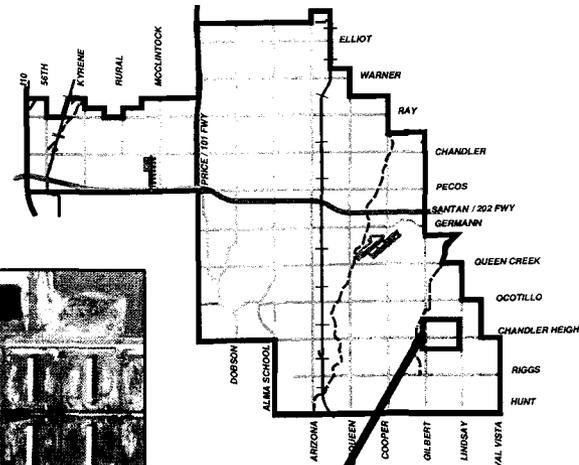
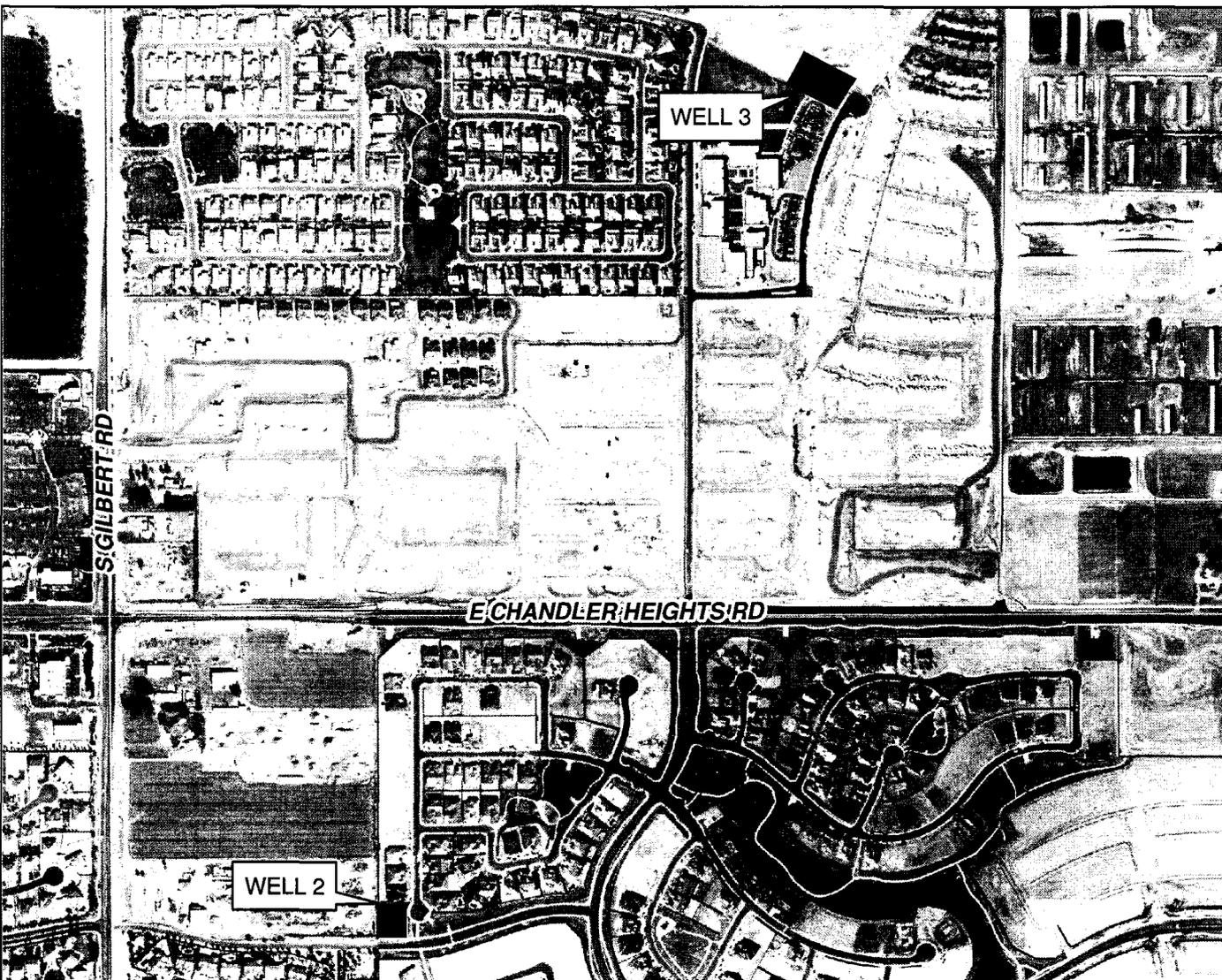

Sheina Hughes, Assistant Public Works Director/
City Engineer

14. City Manager


W. Mark Pentz



ALAMOSA WELLS 2 & 3 PROJECT NO. WA0707-451



MEMO NO. CA08-263

■ WELL SITES



**PROJECT AGREEMENT
PURSUANT TO ANNUAL CONTRACT NO. EN0718-101**

AGREEMENT NO: WA0707-451

This AGREEMENT is made this 12th day of MAY 2008, by and between the City of Chandler, a municipal corporation (hereinafter referred to as "CITY") and **Carollo Engineers, a corporation in the State of Arizona** (hereinafter referred to as "Annual Consultant") and is a project agreement entered into pursuant to Annual Contract No. EN0718-101.

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

ARTICLE 1. DESCRIPTION OF WORK

This project is Alamosa Wells #2 and #3 Construction Management Services, Project Number WA0707-451. The scope of work consists of construction management services for the Alamosa Wells #2 and #3, all as more particularly set forth in Exhibit A attached hereto and incorporated herein by reference.

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

ARTICLE 2. CONTRACT PRICE

CITY shall pay Annual Consultant for completion of the Work in accordance with the Contract Documents a fee not to exceed Three Hundred Fifty Nine Thousand Seven Hundred Ninety Six Dollars (\$359,796) determined and payable as set forth in Annual Contract EN0718-101 and Exhibit B attached hereto and made a part hereof by reference.

ARTICLE 3. CONTRACT TIME

The contract time is two hundred days and Annual Consultant agrees to complete all work within two hundred (200) days of the date CITY issues a Notice to Proceed.

ARTICLE 4. GENERAL

This Project Agreement is entered into pursuant to Annual Contract No. EN0718-101 and the terms and conditions contained therein are incorporated herein by reference as if set forth in full.

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

This Agreement will be effective on this 12th day of MAY, 2008.

CITY OF CHANDLER

FOR THE ANNUAL:

MAYOR DATE:

By: [Signature]
Title: PARTNER 5-12-08

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

ADDRESS FOR NOTICE
Mr. Rob Buss
Carollo Engineers
3033 N. 44th St., Ste. 101
Phoenix, AZ 85018

APPROVED AS TO FORM:

Phone: 602-263-9500
Fax: 602-265-1422

ATTEST: City Attorney By: [Signature]

BY: [Signature]
TITLE: PARTNER

City Clerk

EXHIBIT A SCOPE OF WORK

The engineering services to be provided under this scope shall include services related to the construction, start-up, and post-construction warranty phases of the Alamosa Well No. 2 and Well No. 3 Equipping Project (Project). The work to be performed for the Project consists of the following four types of services:

- Project Administration Services during Construction
- Office Engineering Services during Construction
- Field Engineering Services during Construction
- Special Services

PROJECT ASSUMPTIONS

The following assumptions are considered inclusive to this scope of services:

1. The City will provide the design files in AutoCAD format for use during construction and for preparation of Record Drawings.
2. No permit costs, if any are required, are included in this Proposal.
3. The City will acquire New Water Source Approvals from Arizona Department of Water Resources (ADWR).
4. The anticipated number of shop drawings for this Project is assumed to be 50.
5. The anticipated number of requests for information (RFIs) is assumed to be 25.
6. Programming of programming logic controls (PLCs) will be completed by a subconsultant to Consultant (Jen Jensen).

TASK 1. PROJECT ADMINISTRATION SERVICES DURING CONSTRUCTION

1.1 Representation on Behalf of the City

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

On the basis of periodic on-site examination of materials, equipment, and workmanship, Consultant 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 the construction documents. This task shall include the following items:

- Conduct Pre-construction Conference: Consultant shall conduct a pre-construction conference. At the conference, Consultant shall identify field services to be provided by the Consultant and discuss appropriate coordination procedures. Consultant shall prepare an agenda for the meeting and shall prepare and distribute the meeting minutes.

1.2 Perform Site Visits

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

1.3 Review Shop Drawings and Test Results

Consultant shall receive, review, evaluate, and distribute shop drawings, samples, test results, and other data that Contractor is required to submit. Consultant's review shall only be for conformance with the design concept of the Project and compliance with the information given in the construction documents. Consultant shall receive and review (for general contents as required by the construction documents) maintenance and operating schedules and instructions, operation and maintenance manuals, guarantees, bonds and certificates of inspection which are to be assembled by Contractor in accordance with the construction documents.

As part of this task, Consultant shall maintain a submittal log showing dates of submittal, transmittal action to other sub consultants, dates of return and review action. Copies of the log shall be furnished to the City and the Contractor monthly. Consultant shall also evaluate the Contractor's request for substitutions. The level of effort for this task is based upon receiving 50 shop-drawing submittals.

1.4 Issue Interpretations and Clarifications

Consultant shall issue the City's instructions to Contractor; issue necessary interpretations and clarifications of the construction 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 construction documents and judge of the acceptability of the work there under, and make decisions on claims of the City and the Contractor relating to the acceptability of the work or the interpretation of the requirements of the construction documents pertaining to the execution and progress of the work. Consultant shall render interpretations or decisions in good faith and in accordance with the requirements of the construction documents.

Consultant shall respond to the City's representative and/or Contractor to clarify and/or interpret technical, design related questions. Consultant shall respond to issues raised during construction regarding interpretation and clarification of the contractual administrative and technical requirements of the construction documents. This level of effort is based upon receiving 25 RFIs.

1.5 Certify Progress Payments

Based on Consultant's on-site observations, as an experienced and qualified professional, and on review of applications for payment and the accompanying data and schedules, Consultant shall determine the amounts owing to Contractor and recommend in writing payments to Contractor in such amounts; such recommendations of payment will constitute a representation to City, based on such observations and review, that the work has progressed to the point indicated, that, to the best of Consultant's knowledge, information and belief, the quality of such work is in accordance with the construction documents and that payment of the amount recommended is due Contractor.

TASK 2 - ENGINEERING SERVICES DURING CONSTRUCTION

2.1 Review Brown and Caldwell Documents

The Alamosa Well No. 2 and Well No. 3 Equipping Project construction drawings and technical specifications were prepared by the engineering consulting firm Brown and Caldwell. Since Consultant was not the design firm, this task provides effort to review the documents as the third party construction manager. The results of this task will prepare the construction management team for carrying out the remaining work assignments outlined in this contract.

In addition, the City will provide Consultant with a current version of the Alamosa Well No. 2 and Well No. 3 AutoCAD files for use in preparation of field changes and of the Record Drawings.

2.2 Changes

Consultant shall perform services in connection with change orders to reflect changes requested by City or Contractor, for evaluating substitutions proposed by Contractor, and in making revisions to drawings and specifications occasioned thereby, and resulting from significant delays, changes or price increases occurring as a direct or indirect result of material or equipment shortages. Changes and substitutions shall be limited to the scope of the project as defined by the construction documents or additional work as may be requested by the City.

2.3 Record Drawings

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

2.4 Operation and Maintenance Manual

Consultant shall, during the course of the work, 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.

Consultant shall prepare an operating and maintenance manual that is a compilation of the manufacturers' operating and maintenance instructions as submitted by the Contractor. The manual prepared under these services will be in Report format and comb bound to enable City operations staff to maintain these two well sites.

2.5 Programming of PLCs

Under this task, a subconsultant to Consultant (Jen Jensen) will program the PLCs associated with each well site. This firm performs most of the programming related to the water production wells for the City, and is assumed to be familiar with the programming software and protocols. Consultant will not directly provide programming for these two well site.

TASK 3 - FIELD INSPECTION SERVICES DURING CONSTRUCTION

The Field Inspector will be furnished and will act as directed by Consultant, in order to assist Consultant in observing performance of the work of the Contractor.

The Field Inspector, as the Consultant's agent, will act as directed by and under the supervision of Consultant, and will confer with Consultant. Field Inspector's dealings in matters pertaining to the on-site work shall in general be only with Consultant and Contractor, and dealings with subcontractors shall only be through or with the full knowledge of Contractor. Written communication with City will be only through or as directed by Consultant, and may be through the Field Inspector.

3.1 Conferences

Consultant shall attend pre-construction conference and construction progress meetings, and prepare and distribute minutes of such meetings. Construction conferences will be held no more than twice per month during the course of construction.

3.2 Inspection of Work, Rejection of Defective Work, and Review of Tests.

3.2.1 Field Inspector shall conduct on-site observations of the work in progress to assist Consultant in determining if the work is proceeding in accordance with the construction documents and that completed work conforms to the Construction Documents.

3.2.2 Field Inspector shall report to Consultant whenever it is believed that work is unsatisfactory, faulty, or defective; does not conform to the construction documents; does not meet the requirements of inspections, tests, or approval required to be made; or has been damaged prior to final payment. Field Inspector shall advise Consultant when it is believed work should be corrected, rejected, uncovered for observation, or requires special testing, inspection, or approval.

3.2.3 Field Inspector shall verify that tests, equipment, and systems start-up and operating and maintenance instructions are conducted as required by the Construction Documents and in presence of the required personnel, and that Contractor maintains required records thereof; observe, record and report to Consultant appropriate details relative to the test procedures and start-ups.

3.3 Records

3.3.1 Consultant shall maintain orderly files for correspondence, reports of job conferences, shop drawings and samples submissions, reproductions of original construction documents including all addenda, change orders, field orders, additional drawings issued subsequent to the execution of the Contract, clarifications and interpretations of the construction documents, progress reports, and other Project related documents.

3.3.2 Field Inspector shall prepare reports recording the Contractor's work performed on the job site, major construction equipment on-site, weather conditions, data relative to questions of extras or deductions, list of visiting officials and representatives of manufacturers, fabricators, suppliers and distributors, daily activities, decisions, on-site equipment, subcontractors on-site, observations in general and specific observations in detail as in the case of observing test procedures. Send copies to Consultant.

3.4 Substantial Completion / Final Acceptance

3.4.1 Field Inspector shall assist Consultant in the completion of the Substantial Completion and Final Acceptance.

3.4.2 Before Consultant issues a Certificate of Substantial Completion, the Consultant shall submit to Contractor a list of observed items requiring completion or correction in accordance with the requirements of the construction documents.

3.4.3 After the Contractor has completed the work of the list of Subtask 3.4.2 and upon request of the Contractor, Field Inspector shall conduct final inspection in the company of Consultant, City, and Contractor. Field Inspector shall prepare a final list of items to be completed or corrected in accordance with the requirements of the construction documents.

TASK 4 – SPECIAL SERVICES

4.1 Warranty

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

STANDARD OF CARE

Consultant shall be responsible to the level of competency and standard of care presently maintained by other practicing Professional Engineers performing the same or similar type of work at the time notice to proceed is issued. Consultant and the City mutually agree that standard of care, as applied to design professionals, shall be defined as the ordinary and reasonable care required and established by expert testimony of what a reasonable and prudent professional would have done under the same or similar circumstances.

Consultant shall not be responsible for the means, methods, techniques, sequences, or procedures of construction selected by contractors or the safety precautions and programs incidental to the work of contractors and will not be responsible for Contractor's failure to carry out work in accordance with the Contract Documents.

Consultant has no control over the cost of labor, materials, equipment, or services furnished by others, or over Contractor's methods of determining prices, or other competitive bidding or market conditions, practices, or bidding strategies. Cost estimates are based on the Consultant's opinion based on experience and judgment. Consultant cannot and does not guarantee that proposals, bids, or actual project construction costs will not vary from cost estimates prepared by the Consultant.

**EXHIBIT B
FEE SCHEDULE**

CONSTRUCTION PHASE TASKS	Categories						Subtotals
	Senior Professional	Project Professional	Assistant Professional	Senior Technician	Field Inspector	Clerical	
<i>Hourly Rates</i>	\$ 208.00	\$ 175.00	\$ 138.00	\$ 101.00	\$ 101.00	\$ 70.00	
Task 1 Project Administration Services							
1.1 Representation on Behalf of Owner	3	56	24	0	0	0	83
1.2 Perform Site Visits	2	24	196	0	0	0	222
1.3 Review Shop Drawings and Test Results	0	32	88	0	0	86	206
1.4 Issue Interpretations and Clarifications	2	12	36	0	0	24	74
1.5 Certify Progress Payments	0	4	24	0	36	0	64
Subtotal Task 1	7	128	368	0	36	110	649
Task 2 Office Engineering Services							
2.1 Review of Brown & Caldwell Documents	2	18	18	0	0	0	38
2.2 Changes	0	12	24	6	8	8	58
2.3 Record Drawings	2	8	20	104	36	0	170
2.4 Operation and Maintenance Manual	2	8	48	16	0	24	98
2.5 Programming of PLCs	0	6	16	0	32	0	54
Subtotal Task 2	6	52	126	126	76	32	418
Task 3 Field Inspection Services							
3.1 Conferences	2	48	104	0	52	8	214
3.2 Inspection of Work, Rejection of Defective Work	0	24	96	0	900	0	1,020
3.3 Records	0	4	56	0	40	36	136
3.4 Substantial Completion / Final Acceptance	2	8	16	0	32	0	58
Subtotal Task 3	4	84	272	0	1,024	44	1,428
Task 4 Special Services							
4.1 Warranty	1	10	24	0	0	0	35
Subtotal Task 4	1	10	24	0	0	0	35
Total - Construction Phase - Manhours	18	274	790	126	1,136	186	2,530
Total - Labor Cost - Not To Exceed (NTE)	\$ 3,744	\$ 47,950	\$ 109,020	\$ 12,726	\$ 114,736	\$ 13,020	\$ 301,196
DIRECT COST ALLOWANCES							
1) Misc. Expenses - Mylars, reproduction							\$ 5,600
2) Project Mileage - from Phoenix office to Project sites							\$ 14,000
3) Surveying - Allowance							\$ 5,000
4) Material Testing - Allowance							\$ 10,000
5) Programming for PLCs - Jen Jensen estimate							\$ 24,000
NOTES							Total Direct Cost Allowances \$ 58,600
1) Assumes a 12-month construction period.							TOTAL CM PHASE PROJECT COSTS \$ 359,796