



**PURCHASING ITEM
FOR
COUNCIL AGENDA
Memo No. CP15-128**

1. Agenda Item Number:
34

2. Council Meeting Date:
November 20, 2014

TO: MAYOR & COUNCIL

3. Date Prepared: November 3, 2014

THROUGH: CITY MANAGER

4. Requesting Department: Municipal Utilities

5. SUBJECT: Project Agreement with Carollo Engineers, Inc., for design services for the Surface Water Treatment Plant (SWTP) Rehabilitation.

6. RECOMMENDATION: Staff recommends City Council award a Project Agreement to Carollo Engineers, Inc., for design services for the SWTP Rehabilitation, pursuant to On-call Water and Wastewater Services Contract No. EN1518.101, Project No. WA1503.201, in an amount not to exceed \$240,572.

7. BACKGROUND/DISCUSSION: The 2013 Capital improvement Program established an on-going program to rehabilitate aging infrastructure at the SWTP, located on Pecos Road. An assessment of the facility was completed and recommended various improvements.

The project scope of work includes design for a new gravity thickener, sedimentation basin improvements, grading, chemical pipe improvements, replacement of the raw water pump drives, and Administration Building heating system.

8. EVALUATION: This project is being performed under the On-call Water and Wastewater Services Contract No. EN1518.101, to Carollo Engineers, Inc. The costs proposed for this project have been evaluated by Staff and are determined to be reasonable. The contract completion time is 180 calendar days following Notice to Proceed.

9. FINANCIAL IMPLICATIONS:

Cost: \$240,572
Savings: N/A
Long Term Costs: N/A
Fund Source:

<u>Acct. No.:</u>	<u>Fund Name:</u>	<u>Program Name:</u>	<u>CIP Funded:</u>	<u>Amount:</u>
601.3820.6718.6WA210	Water Bonds	Water Treatment Plant Improvements	Yes	\$240,572

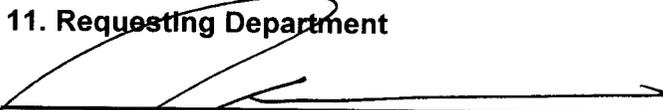
10. PROPOSED MOTION: Move City Council award a Project Agreement to Carollo Engineers, Inc., for design services for the SWTP Rehabilitation, pursuant to On-call Water and Wastewater Services Contract No. EN1518.101, Project No. WA1503.201, in an amount not to exceed \$240,572.

ATTACHMENTS: Agreement, Location Map

APPROVALS

11. Requesting Department

13. Department Head


John Knudsen, Utilities Engineering Manager


Dave Siegel, Municipal Utilities Director

12. Transportation & Development

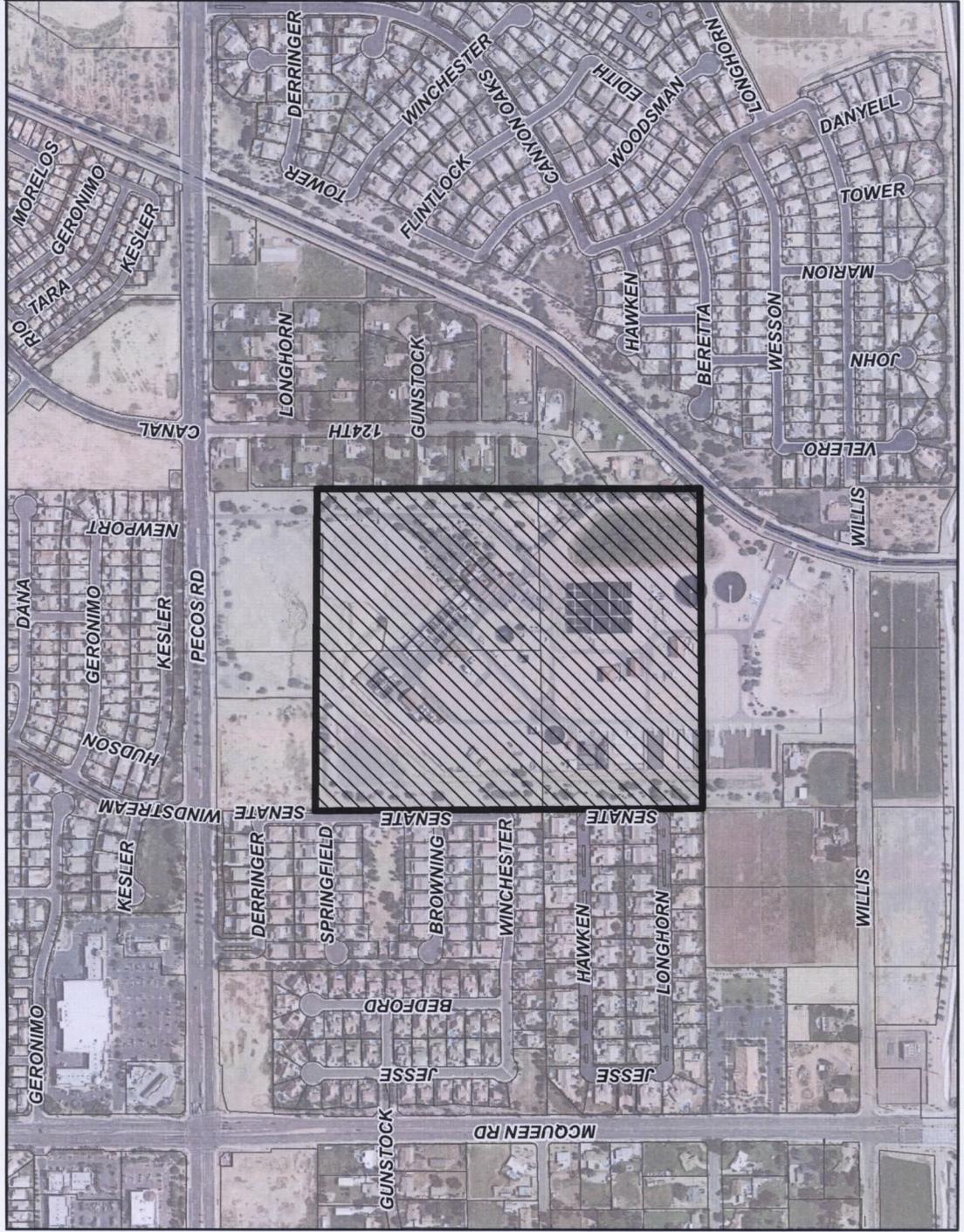
14. City Manager


Bob Fortier, Capital Projects Manager


Rich Dlugas



SURFACE WATER TREATMENT PLANT (SWTP) VALVE REHABILITATION PROJECT NO. WA1503.201



MEMO NO. CP15-128



PROJECT SITE



**PROJECT AGREEMENT
PURSUANT TO ANNUAL CONTRACT NO. EN1518.101**

PROJECT AGREEMENT NO: WA1503.201

This PROJECT AGREEMENT is made this ____ day of _____, 2014, by and between the City of Chandler, a municipal corporation (hereinafter referred to as "CITY") and Carollo Engineers, Inc. a Delaware corporation, licensed to do business in the State of Arizona (hereinafter referred to as "Annual Consultant") and is a project agreement entered into pursuant to Annual Contract No. EN1518.101.

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

ARTICLE 1 - DESCRIPTION OF WORK:

This project is Surface Water Treatment Plant Valve Rehabilitation, Project Number WA1503.201. The scope of work consists of design services for Surface Water Treatment Plant (SWTP) Valve Rehabilitation improvements, 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 Two Hundred Forty Thousand Five Hundred Seventy Two Dollars (\$240,572) determined and payable as set forth in Annual Contract EN1518.101 and Exhibit B attached hereto and made a part hereof by reference.

ARTICLE 3 - CONTRACT TIME:

The contract time is One Hundred Fifty calendar days and Annual Consultant agrees to complete all work within One Hundred Eighty (180) calendar days of the date CITY issues a Notice to Proceed.

ARTICLE 4 - GENERAL:

This Project Agreement is entered into pursuant to Annual Contract No. EN1518.101 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 Project Agreement on the day and year first written above.

This Project Agreement will be effective on this _____ day of _____, 2014.

CITY OF CHANDLER

FOR THE ANNUAL:

MAYOR DATE:

By: David Sobeck Robert Mays
Title: SR. VICE PRESIDENT Vice President

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

ADDRESS FOR NOTICE
Mr. David Sobeck
Carollo Engineers, Inc.
4600 E. Washington St., Ste. 500
Phoenix, AZ 85034

APPROVED AS TO FORM:

Phone: 602-263-9500

City Attorney By: CZH

ATTEST:

City Clerk

EXHIBIT A SCOPE OF WORK

ANNUAL CONSULTANT shall provide the following services:

TASK 1 - PROJECT MANAGEMENT AND MEETINGS

ANNUAL CONSULTANT shall perform project management and monitoring activities throughout the Project duration, as delineated in the following tasks.

1.1 Kickoff Meeting and Initial Site Visit

ANNUAL CONSULTANT shall prepare the Agenda for and attend the Kickoff Meeting with City Stakeholders at the Pecos SWTP conference room. At this meeting, the City shall present their objectives of this project, which include:

- a. Design of new gravity thickener
- b. Replacement of existing oil fed boiler with electric heating system
- c. Replacement of consoles in Control Room and other associated improvements
- d. Design of improvements at the sedimentation basins to remove solids in corners
- e. Design of grading improvements on west perimeter wall at irrigation ditch to address issues
- f. Replacement of raw water pump drives with new VFDs to improve operations
- g. Design of chemical utility trench with chlorine and fluoride to finished water pump station

1.2 Project Management

ANNUAL CONSULTANT shall provide project management services to include directing the activities of the project team members, regularly monitoring progress of the work and the budget, preparing progress and activity reports, communicating with the City staff on technical issues and problems encountered, schedule updates, and monitoring and updating the project schedule as appropriate.

TASK 2 – DATA REVIEW AND SITE VISITS

ANNUAL CONSULTANT will review data provided by the City (such as As Builts, property lines and easements, geotechnical reports) and conduct the following site visits:

- Initial visit to ascertain existing site conditions and to interview staff
- Visit to confirm Preliminary Design Report (PDR)

TASK 3 – PRELIMINARY DESIGN REPORT (PDR)

ANNUAL CONSULTANT will prepare both a Draft and Final Preliminary Design Report (PDR) that contains the following elements (as a minimum):

- Listing of individual project elements included in design documents
- Sheet Count and Draft Table of Contents (TOC) for Technical Specifications for Construction Documents
- Engineer's Opinion of Probable Construction Cost
- Opinion of Project Schedule Duration

TASK 4 - 65% DESIGN DOCUMENTS

ANNUAL CONSULTANT will prepare 65% detailed design documents and deliver to the City for review and comment. Design will conform to the City's standards.

Deliverables: Five (5) sets of 1/2 sized drawings, TOC and Engineer's Cost Estimate.

TASK 5 - 95% DESIGN DOCUMENTS

ANNUAL CONSULTANT will prepare 95% detailed design documents and deliver to the City for review and comment. Design will be sent to the City's Development Department for review and comment.

Deliverables: Eight (8) sets of 1/2 sized drawings, technical specifications, and Engineer's Cost Estimate.

TASK 6 - 100% DESIGN DOCUMENTS

ANNUAL CONSULTANT will prepare 100% detailed design documents and deliver to the City for review and comment.

Deliverables: Eight (8) sets of 1/2 sized drawings, technical specifications, and Engineer's Cost Estimate.

TASK 7 – BID PHASE SERVICES

ANNUAL CONSULTANT will assist the City during the advertisement and bidding of this project by providing the 100% Design Documents in the format required for making bid sets available to bidders. The City will provide Bid Documents for potential bidders.

ANNUAL CONSULTANT will also attend the Pre-Bid conference, answer technical questions, and prepare Addenda for issuance to bidders.

PROJECT ASSUMPTIONS

The following assumptions are considered inclusive to the Scope of Work:

1. The CITY will provide access to the Pecos SWTP.
2. **ANNUAL CONSULTANT** will not be required to perform field geotechnical investigations, but will rely on geotechnical work conducted during the last SWTP expansion (2005).
3. **ANNUAL CONSULTANT** will utilize the As-Builts for the design base drawings, except where new design drawings are required, such as with the new gravity thickener.

**EXHIBIT B
FEE SCHEDULE**

TASKS		Project Principal	Senior Professional	Lead Project Professional	Professional	Assistant Professional	Technician	Document Processing/Clerical	Subtotal
Hourly Rates		\$ 245.00	\$ 225.00	\$ 198.00	\$ 170.00	\$ 145.00	\$ 135.00	\$ 85.00	
Task 1	Project Management and Meetings								
1.1	Kickoff and Progress Meetings (assume 4 total)	0	20	16	16	20	0	8	80
1.2	Project Management (5 months)	6	30	0	0	0	0	0	30
Subtotal Task 1		6	60	16	16	20	0	8	116
Task 2	Data Review and Site Visits								
2.1	Data Collection and Review	0	8	8	8	16	0	0	40
2.2	Site Visits (assume 3 during pre-design)	0	8	12	12	12	0	0	42
Subtotal Task 2		0	14	20	20	28	0	0	82
Task 3	Preliminary Design Report (PDR)								
3.1	Setup and run CFD models for Sed basins	1	4	24	0	8	0	2	37
3.2	Prepare Draft PDR	1	12	12	32	48	24	12	140
3.3	Incorporate City's Comments & Prepare Final PDR	0	4	6	12	24	12	8	66
Subtotal Task 3		1	20	42	44	78	36	22	243
Task 4	65% Design Documents								
4.1	Prepare 65% Design Documents	2	18	48	84	96	240	18	506
Subtotal Task 4		2	18	48	84	96	240	18	506
Task 5	95% Design Documents								
5.1	Incorporate City's Review Comments from 65% Documents	0	8	24	24	24	0	0	80
5.2	Prepare 95% Design Documents	0	8	16	30	36	112	24	226
Subtotal Task 5		0	16	40	54	60	112	24	306
Task 6	100% Design Documents								
6.1	Incorporate City's Review Comments from 95% Documents	0	6	12	12	12	0	0	42
6.2	Prepare 100% Design Documents	2	6	4	12	12	50	8	92
Subtotal Task 6		2	12	16	24	24	50	8	136
Task 7	Bid Phase Services								
7.1	Attend Pre-Bid Conference	0	4	0	4	4	0	0	12
7.2	Answer Questions and Prepare Addenda	1	4	12	12	12	18	2	58
Subtotal Task 7		1	8	12	16	16	18	2	71
Total Labor Manhours		12	138	194	258	322	454	82	1,448
Total Not to Exceed (NTE) Labor Cost		\$ 2,940	\$ 31,050	\$ 38,412	\$ 43,860	\$ 46,690	\$ 61,290	\$ 6,970	\$ 228,272
OTHER DIRECT COSTS									
1) Project mileage, mylars and reproduction									\$ 1,300
2) Field survey (1 day - Aztec Eng)									\$ 6,500
3) Potholing services - assume 6 potholes (Aztec Eng - SUE group)									\$ 4,500
NOTES									
1) 180 calendar day project duration.									
2) Use geotech from previous projects - no new geotech field work under this proposal									
Total Other Direct Costs									\$ 12,300
TOTAL PROJECT COST									\$ 240,572