

**CITY OF PEORIA, ARIZONA
COUNCIL COMMUNICATIONS**

CC: 10C
Amend No. _____

Date prepared: November 3, 2008

Council Meeting Date: December 2, 2008

TO: Carl Swenson, City Manager

FROM: Stephen L. Bontrager, Utilities Director 

THROUGH: Shawn Kreuzwiesner, Utilities Engineering Manager 

PREPARED BY: Joseph A. Kurrus, Engineering Supervisor 

SUBJECT: Authorize the expenditure of funds utilizing an existing Job Order Contract with Felix Construction Company.

RECOMMENDATION:

Discussion and possible action to approve funds utilizing Job Order Contract P08-0047 with Felix Construction Company for design and construction services to modify and update the Deer Valley Booster Station site located on 83rd Ave. near Williams Road for a Guaranteed Maximum Price (GMP) of \$189,860.64, Capital Improvement Project UT00206, Well and Reservoir Reconditioning Program.

SUMMARY:

The booster station will be upgraded by adding a new pressure reducing valve and water meter to serve Zone 3E from Zone 4E. This will eliminate the need to pump from the Terramar Booster Station which will cause a significant energy savings. The project includes an additional connection to the Deer Valley Estates residential area which will improve reliability. The project is being coordinated with the Engineering Department, Capital Improvement Project; 83rd Avenue Widening: Williams Rd to Calle Lejos.

FISCAL NOTE:

Payment in the amount of \$189,860.64 will be made from Water Utility account 2050-2140-543002-CIPWR-UT00206.

ATTACHMENT(S):

Felix Construction Company Individual Job Order Contract

CITY CLERK USE ONLY:

- Consent Agenda
- Carry Over to Date: _____
- Approved
- Unfinished Business (Date heard previous: _____)
- New Business
- Public Hearing: No Action Taken

ORD. # _____ RES. # _____
LCON# _____ LIC. # _____
Action Date: _____

**SCOPE OF WORK
DEER VALLEY BOOSTER STATION (B202)
CITY OF PEORIA**

Project Improvements

A. INTRODUCTION

Background

The City of Peoria (Peoria) Utilities Department (Utilities) Deer Valley Estates Booster Station (B202) is located at the northeast corner of Williams Road and 83rd Avenue in Peoria, AZ. Utilities wishes to make project improvements that will reduce energy costs and improve water service and reliability in pressure zone 3E. Pressure zone 3E will eventually serve the New River Water Co. customers when that system is taken over by Peoria.

The original design had two pumps dedicated to serving Terramar Development to the north and two pumps serving nearby Deer Valley Estates to the south. The Terramar Development is now served by the Terramar Booster Station/ Reservoir (R202) located at Jomax and 83rd Ave. to the north. As such the B202 dedicated pumps serving Terramar Development are no longer needed for regular service. However Utilities would like to keep these pumps available to move water to the Terramar Reservoir in emergency situations. Such operation would be manual.

The 16" watermain on 83rd Ave. that connects to the Pyramid Peak Water Treatment Plant via Jomax Booster Station will be used to serve Deer Valley Estates. The B202 pumps serving Deer Valley Estates will no longer needed. Deer Valley Estates will be served by the pressure reducing valve located at the Deer Valley Booster site and connections that will be made to zone 3E in the future.

This project will include additions and revisions to the B202 site to complete and implement the above changes. This will improve service and increase the reliability of zone 3E. All design and construction to complete this work is included in this project.

Project Schedule

The project improvements will need to be completed and operational by end of February 2010.

B. SCOPE OF WORK

1. Project Management

- 1.1 Project Schedule. Prepare project schedule and update monthly. The schedule should include major tasks and activities that require coordination with Operations.

- 1.2 Supervision. Supervise, coordinate and provide oversight and direction to staff and sub-consultants.
- 1.3 Meetings with Peoria. Meet with Peoria staff at least once a month and more frequently as needed to facilitate the timely progression of the work.
- 1.4 Invoices/ Progress Reports. Prepare and submit monthly progress reports and invoices throughout the duration of all phases of the project. The progress report will provide the status of the project including brief description of the activity and status of each task, schedule and budget. The report should also address any issues and concerns and potential out of scope work.

2. Design Services

- 2.1 Final Design. Provide design of facilities included in this scope of work. Deliverables include drawings and notes. Prepare final level plans that clearly communicate the design of all disciplines. Prepare drawings utilizing AutoCAD software, and Peoria CAD standards. Provide 60% design drawings for review and comment. Provide 100% drawings for construction.
- 2.2 Permits. Obtain MCESD Approval to Construct (ATC). Obtain the Approval of Construction (AOC) from MCESD at the conclusion of the project. Submit documents and coordinate with MCESD as necessary.
- 2.3 Record Documents. Prepare as-built drawings and submit according the Peoria Development Guidelines. Prepare three (3) copies of O&M Manual for all work provided.

3. Construction

- 3.1 Provide construction of items as shown on the attached Exhibit A, Figure 1 and as described below. Construction will include all work necessary to install, test, and startup the completed facility.
 - 1) Pothole two locations to confirm existing water pipe location east of site wall.
 - 2) Install 10" PRV with zone 3E pressure transmitter, gate valves and fittings, to replace the existing 8" PRV.
 - 3) Modify yard piping to allow P3 and P4 to provide water to zone 4E during emergency conditions.
 - 4) Remove pumps P1 and P2.
 - 5) Item Deleted.
 - 6) Install 10" magnetic flow meter with flow transmitter in vault with traffic rated lid.
 - 7) Connect existing 16" DIP to existing 12" DIP at southeast corner of the site wall.
 - 8) Modify controls as needed.
 - 9) Item Deleted.
 - 10) Item deleted.

Scope of Work
Deer Valley Booster Station (B202)
October 30, 2008

- 11) Item Deleted.
- 12) Item Deleted.
- 13) Install 1" service tap into existing 16" watermain north of site and connect to existing water meter. Location to be determined.
- 14) Disconnect, plug and abandon existing 2" and 4" PVC watermain.
- 15) Remove existing 12" check valve on Williams Rd. approx 180' east of 83rd Avenue and replace with 12" DIP spool.

3.2 Coordinate with Utilities Operations to ensure the water system remains in full service with no interruptions.

Felix Construction Company

SOQ # P08-0047

**1455.06 - JOC Cost Summary
Deer Valley Estates PRV Modifications
October 24, 2008**

Amount % of Total G&A O&P

Project Cost Range - \$100,001 to \$250,000

Direct Cost of the Work

| | | | | |
|--------------------|-----------|--------|------|-------|
| Labor | 55,453.00 | 29.21% | 4.7% | 10.0% |
| Company Equipment | 21,716.00 | 11.44% | 4.7% | 7.5% |
| Rental Equipment | 950.00 | 0.50% | 4.7% | 5.0% |
| Materials | 45,925.00 | 24.19% | 4.7% | 5.0% |
| Subcontractors | 4,500.00 | 2.37% | 4.7% | 3.0% |
| Other Direct Costs | 6,565.00 | 3.46% | 4.7% | 5.0% |

Total Direct Cost Of the Work

| | | | | |
|--|------------|--------|--|--|
| | 135,109.00 | 71.16% | | |
|--|------------|--------|--|--|

Indirect Cost of the Work

| | | | | |
|-------------------------------------|-----------|--------|-------|-------|
| Consulting Engineer Services | 21,685.00 | 11.42% | 4.7% | 0.0% |
| General & Administrative Expense | 7,369.32 | 3.88% | | |
| Job Order Contractor's Fee (profit) | 9,981.00 | 5.26% | | |
| Insurance | 397.00 | 0.21% | | |
| Payment and Performance Bonds | 1,919.95 | 1.01% | | |
| Tax: State + County + Peoria | 14,293.36 | 7.53% | Rate: | 8.10% |
| Tax: Exemption Credit | 894.00 | | | |

Total Indirect Cost of the Work

| | | | | |
|--|-----------|--------|--|--|
| | 54,751.64 | 28.84% | | |
|--|-----------|--------|--|--|

Total Cost of the Work

| | | | | |
|--|------------|---------|--|--|
| | 189,860.64 | 100.00% | | |
|--|------------|---------|--|--|

Contingencies/Allowances

| | | | | |
|------------------------------------|--|-------|--|--|
| Contractor's Contingency/Allowance | | 0.00% | | |
| Owner's Contingency/Allowances | | 0.00% | | |
| | | 0.00% | | |
| | | 0.00% | | |

Total Contingencies/Allowances

| | | | | |
|--|---|-------|--|--|
| | - | 0.00% | | |
|--|---|-------|--|--|

Total Job Order Amount

| | | | | |
|--|------------|---------|--|--|
| | 189,860.64 | 100.00% | | |
|--|------------|---------|--|--|

Felix Construction Company - Cost Model - Comments, Qualifications, Concerns

Deer Valley Estates PRV Station - 30% Cost Model REV - October 24, 2008

Comments, Qualifications, Concerns

| | |
|----|---|
| 1 | We are calling the preliminary info provided the "30% Design". |
| 2 | The 30% Cost Model is based on this pre-design info including the Scope of Work except as noted below. |
| 3 | We include the MCESD permits, but not City of Peoria Building Safety or Off-site permit costs |
| 4 | We do not include City of Peoria Building Safety or Off-site permit costs |
| 5 | We do not include the 1" meter fee or impact fees. |
| 6 | We include the cost of making the wet tap for the 1" service. If we can relocate the tap to the 16" pipe where it is out of the pavement, |
| 7 | Alternate: To relocate 16"x1" tap out of the roadway into the drive area on the west side of the PRV Station - Deduct \$ 7,270. |
| 8 | Per our discussions during the site visit, we do not include modifications to the hydro level system. |
| 9 | We include finish painting of the new work, but not painting of existing facilities. |
| 10 | We do not include replacement of the RTU, PLC, or OIT. |
| 11 | We do not include programming at the RTU or the Master Station (per the understanding from the SCADA meeting) |
| 12 | We do not include relocation of the chain link fence (per our conversations) |
| 13 | We do not include a driveway at the PRV station (per our conversations) |
| 14 | We include Coe & Van Loo's civil engineering including the submittal to MCESD. We do not include the cost for electrical engineering (E/I&C). (per our conversations) |
| | |
| | |
| | |

FELIX CONSTRUCTION COMPANY

Deer Valley Estates PRV Modifications
Cost Model Development

| # | Description | % Plans 30% Plan Date | | | | NA | | | | % Plans 30% Plan Date | | | | Change from Prior | Comments |
|----|--|-----------------------|------|------------|-------------|-------|-------|------------|-------------|-----------------------|------|------------|-------------|-------------------|----------|
| | | Quant | Unit | Unit Price | Total price | Quant | Unit | Unit Price | Total price | Quant | Unit | Unit Price | Total price | | |
| 1 | DIVISION 2 - SITEWORK | | | | | | | | | | | | | | |
| 2 | Relocate CLF & Gate | 250 | LF | 18.00 | 4,500 | | | Deleted | | | | | (4,500) | | |
| 3 | AC Paving - Drive, 1" tap, check valve | 1 | LS | 9,100 | 9,100 | 1 | Drive | 2,500 | 2,500 | | | | (6,600) | | |
| 4 | | | | | | | | | | | | | | | |
| 5 | Traffic control | 1 | LS | 2,500 | 2,500 | 1 | LS | 1,800 | 1,800 | | | | (700) | | |
| 6 | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | |
| 10 | DIVISION 3 - CONCRETE | | | | | | | | | | | | | | |
| 11 | Precast vault of FM w/acc. bkfill, install | 1 | LS | 6,800 | 6,800 | 1 | LS | 6,800 | 6,800 | | | | (6,800) | | |
| 12 | | | | | | | | | | | | | | | |
| 13 | | | | | | | | | | | | | | | |
| 14 | | | | | | | | | | | | | | | |
| 15 | | | | | | | | | | | | | | | |
| 16 | DIVISION 4 - MASONRY | | | | | | | | | | | | | | |
| 17 | | | | | | | | | | | | | | | |
| 18 | | | | | | | | | | | | | | | |
| 19 | DIVISION 5 - METALS | | | | | | | | | | | | | | |
| 20 | | | | | | | | | | | | | | | |
| 21 | | | | | | | | | | | | | | | |
| 22 | | | | | | | | | | | | | | | |
| 23 | DIVISION 6 - CARPENTRY | | | | | | | | | | | | | | |
| 24 | | | | | | | | | | | | | | | |
| 25 | | | | | | | | | | | | | | | |
| 26 | DIVISION 9 - FINISHES | | | | | | | | | | | | | | |
| 27 | Paint new piping, valves, fittings | 1 | LS | 3,000 | 3,000 | 1 | LS | 3,000 | 3,000 | | | | (3,000) | | |
| 28 | | | | | | | | | | | | | | | |
| 29 | | | | | | | | | | | | | | | |
| 30 | DIVISION 10 - SPECIALTIES | | | | | | | | | | | | | | |
| 31 | | | | | | | | | | | | | | | |
| 32 | | | | | | | | | | | | | | | |
| 33 | DIVISION 11 - EQUIPMENT | | | | | | | | | | | | | | |
| 34 | | | | | | | | | | | | | | | |
| 35 | | | | | | | | | | | | | | | |
| 36 | | | | | | | | | | | | | | | |
| 37 | | | | | | | | | | | | | | | |
| 38 | DIVISION 12 - FURNISHINGS | | | | | | | | | | | | | | |
| 39 | | | | | | | | | | | | | | | |
| 40 | DIVISION 13 - SPECIAL CONSTRUCTION | | | | | | | | | | | | | | |
| 41 | | | | | | | | | | | | | | | |
| 42 | DIVISION 14 - CONVEYING SYSTEMS | | | | | | | | | | | | | | |
| 43 | | | | | | | | | | | | | | | |
| 44 | DIVISION 15 - MECHANICAL | | | | | | | | | | | | | | |
| 45 | Crew - all work inside site walls | 1 | LS | 19,600 | 19,600 | 1 | LS | 19,600 | 19,600 | | | | (19,600) | | |
| 46 | Crew - FM, 18x12 flo-in, check valve | 1 | LS | 16,700 | 16,700 | 1 | LS | 24,337 | 24,337 | 6,637 | | | (24,337) | | |
| 47 | including slurry backfill, wet tap | | | | | | | | | | | | | | |
| 48 | disconnect 2" & 4" piping | | | | | | | | | | | | | | |
| 49 | | | | | | | | | | | | | | | |
| 50 | Bury piping materials incl PRV | 1 | LS | 24,200 | 24,200 | 1 | LS | 24,200 | 24,200 | | | | (24,200) | | |
| 51 | | | | | | | | | | | | | | | |
| 52 | Pot-holing | 1 | LS | 1,040 | 1,040 | 1 | LS | 1,040 | 1,040 | | | | (1,040) | | |
| 53 | | | | | | | | | | | | | | | |
| 54 | | | | | | | | | | | | | | | |

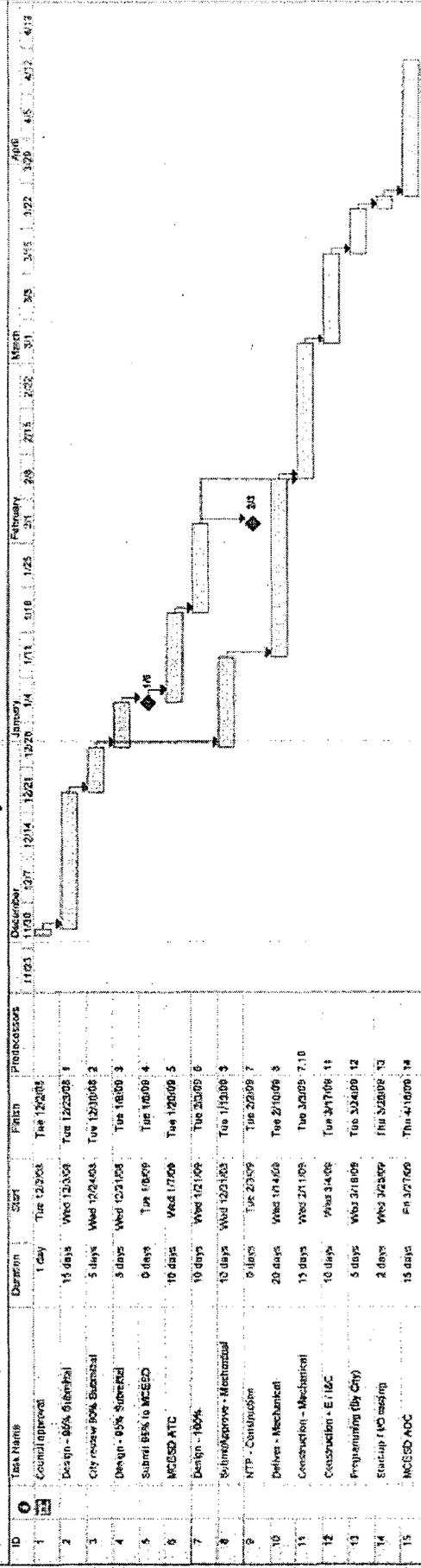
FELIX CONSTRUCTION COMPANY

Deer Valley Estates PRV Modifications
 Cost Model Development

| # | Description | % Plans 30% Plan Date | | | | after SCADA meeting | | | | % Plans | | | | Change from Prior | Comments |
|-----|---|-----------------------|------|------------|----------------|---------------------|------|------------|----------------|---------|------|------------|-------------|-------------------|----------|
| | | Quant | Unit | Unit Price | Total price | Quant | Unit | Unit Price | Total price | Quant | Unit | Unit Price | Total price | | |
| 55 | | | | | | | | | | | | | | | |
| 56 | | | | | | | | | | | | | | | |
| 57 | DIVISION 16 - ELECTRICAL | | | | | | | | | | | | | | |
| 58 | Electric conduil, wiring, fittings | 1 | LS | 8,500 | 8,500 | 1 | LS | 8,500 | 8,500 | | | | | (8,500) | |
| 59 | Electric / Instrument sub O&P | 1 | LS | 6,000 | 6,000 | 1 | LS | 6,000 | 6,000 | | | | | (6,000) | |
| 60 | | | | | | | | | | | | | | | |
| 61 | | | | | | | | | | | | | | | |
| 62 | | | | | | | | | | | | | | | |
| 63 | | | | | | | | | | | | | | | |
| 64 | | | | | | | | | | | | | | | |
| 65 | DIVISION 17 - INSTRUMENTATION | | | | | | | | | | | | | | |
| 66 | Flowmeter | 1 | LS | 7,300 | 7,300 | 1 | LS | 7,300 | 7,300 | | | | | (7,300) | |
| 67 | Pressure transmitter | 1 | LS | 1,600 | 1,600 | 1 | LS | 1,600 | 1,600 | | | | | (1,600) | |
| 68 | Gauge w / instrument tree | 1 | LS | 325 | 325 | 1 | LS | 325 | 325 | | | | | (325) | |
| 69 | | | | | | | | | | | | | | | |
| 70 | Programming at RTU | 1 | LS | 7,500 | 7,500 | | | | | | | | | (7,500) | |
| 71 | Programming at Host | 1 | LS | 6,000 | 6,000 | | | | | | | | | (6,000) | |
| 72 | Programming software | 1 | LS | 6,000 | 6,000 | | | | | | | | | (6,000) | |
| 73 | Control modifications | 1 | LS | 7,500 | 7,500 | 1 | LS | 6,000 | 6,000 | | | | | (1,500) | |
| 74 | | | | | | | | | | | | | | | |
| 75 | DIVISION 1 - GENERAL REQUIREMENTS | | | | | | | | | | | | | | |
| 76 | | | | | | | | | | | | | | | |
| 77 | PM | 100 | HR | 74.00 | 7,400 | 100 | HR | 74 | 7,400 | | | | | (7,400) | |
| 78 | Supv w/ Pickup | 120 | HR | 62.00 | 9,840 | 120 | HR | 62 | 9,840 | | | | | (9,840) | |
| 79 | | | | | | | | | | | | | | | |
| 80 | Metalization, storage trailer, JON, water | 1 | LS | 3,350 | 3,350 | 1 | LS | 3,350 | 3,350 | | | | | (3,350) | |
| 81 | O&M's | 1 | LS | 1,800 | 1,800 | 1 | LS | 1,800 | 1,800 | | | | | (1,800) | |
| 82 | | | | | | | | | | | | | | | |
| 83 | | | | | | | | | | | | | | | |
| 84 | Felix const - design phase | 1 | LS | 4,000 | 4,000 | 1 | LS | 4,000 | 4,000 | | | | | (4,000) | |
| 85 | | | | | | | | | | | | | | | |
| 86 | Design Consultant - design phase | 1 | LS | 22,000 | 22,000 | 1 | LS | 18,000 | 18,000 | | | | | (4,000) | |
| 87 | Design Consultant - construction phase | 1 | LS | 11,000 | 11,000 | 1 | LS | 3,685 | 3,685 | | | | | (7,315) | |
| 88 | | | | | | | | | | | | | | | |
| 89 | MCESD Permit | 1 | LS | 1,500 | 1,500 | 1 | LS | 1,500 | 1,500 | | | | | (1,500) | |
| 90 | | | | | | | | | | | | | | | |
| 91 | | | | | | | | | | | | | | | |
| 92 | | | | | | | | | | | | | | | |
| 93 | | | | | | | | | | | | | | | |
| 94 | | | | | | | | | | | | | | | |
| 95 | | | | | | | | | | | | | | | |
| 96 | | | | | | | | | | | | | | | |
| 97 | DEER VALLEY ESTATES 30% DESIGN REV | | | | | | | | | | | | | | |
| 98 | | | | | | | | | | | | | | | |
| 99 | | | | | | | | | | | | | | | |
| 100 | | | | | | | | | | | | | | | |
| 101 | | | | | | | | | | | | | | | |
| 102 | Subtotal 1 | | | | 201,255 | | | | 162,777 | | | | | (38,478) | |
| 103 | Contingency - Owner's | | LS | | | | LS | | | | | | | | |
| 104 | Contingency - Contractor's | | LS | | | 1 | LS | | | | 1 | LS | | | |
| 105 | Construction Manager fee | 8 | % | | 18,779 | 8.00 | % | | 15,183 | | | | | (3,596) | |
| 106 | Tax | 8.10 | % | 0.65 | 12,359 | 8.10 | % | 0.65 | 9,980 | | | | | (2,379) | |
| 107 | Bond | 1.00 | % | | 2,347 | 1.00 | % | | 1,899 | | | | | (449) | |
| 108 | Subtotal 2 | | | | 33,486 | | | | 27,084 | | | | | (6,402) | |
| 109 | TOTAL | | | | 234,741 | | | | 189,861 | | | | | (44,880) | |

Schedule - Deer Valley Estates PRV Modifications

Felix Construction Company





NOTICE TO PROCEED

**Materials Management
Procurement**

Solicitation Number: P08-0047B-P1

8314 West Cinnabar Ave
Peoria, Arizona 85345-8560
Phone: (623) 773-7115
Fax: (623) 773-7118

To: Felix Construction Company
309 E. 10th Drive
Mesa, AZ 85210

Date: December 3, 2008

Project Description: Deer Valley Estates Booster Station

You are hereby notified to commence work in accordance with the Agreement dated April 11, 2008, on or before December 3, 2008, and you are to complete the work within 134 consecutive calendar days thereafter. The date of completion of all work is therefore April 16, 2009.

You are required to return an acknowledge copy of this Notice to Proceed to the OWNER.

City of Peoria
OWNER

By: Materials Management
Name: Peggy Ferrin
Title: Contract Officer

Contact: Joseph A. Kurrus, P.E.
Title: Engineering Supervisor
Phone: 623.773-7753
Fax: 623.773.7291

ACCEPTANCE OF NOTICE

Receipt of the above Notice to Proceed is hereby acknowledged.

By: _____
CONTRACTOR

this, the _____ day of _____, _____.

Signature

Printed Name