



Public Works Department

433 N. Virginia Street
Prescott AZ 86301
928-777-1130

**ADDENDUM NUMBER ONE
to the
PROJECT SPECIFICATIONS
and
CONTRACT DOCUMENTS
for
Zone 12 Interconnect Pump Station
(Project # 7007810-8930-15018)**

DATE OF ADDENDUM: November 7, 2014

TO ALL BIDDERS BIDDING ON THE ABOVE PROJECT:

The following addendum shall be made part of the Contract Documents. All other provisions of the Contract Documents remain unchanged.

REVISED BID OPENING DATE: December 4, 2014 @ 2:00P.M.

MANDATORY PRE PROPOSAL MEETING: November 19, 2014 @ 9:00 A.M.

ADD SCOPE OF WORK: 36" & 18" Check Valve Installation Project. See attached scoping report

- END -

City of Prescott, Public Works Department


Henry Hash, Public Works Director

Acknowledgement: (must be signed and turned in with the bid documents)

Company Name

Date

Signature of Company Official

Date

PROJECT SCOPING REPORT November 7, 2014

Project Name: 36" And 18" Check Valve Installation

Project Type: Transmission System-Water Main
Project Account No.(s) 7007810-13103
Funding source water Fund

Project Review Team: **Project Manager – Ben Mokhtari**
Design Consultant - TBD
Program Development Manager – Steve Orosz
Utilities Manager – Joel Berman

Goal Statement

By completing this project, the City will be able to prevent water loss and disruption of service to the city in the event of a failure in a transmission main. A failure in the transmission main could go unnoticed for an extended period of time due to the remote location of the transmission mains. These check valves will prevent water from flowing out of zone 0 water system storage prior to knowledge of the failure and while a repair is being performed.

Project Description

This project will consist of a siting and surge analysis and improvement plans for the installation of check valves and associated vaults on the City's transmission mains (18", 36") between Chino Valley and the City of Prescott.

Project Limits - Existing Conditions:

- Transmission main alignment between Pioneer Parkway located with-in the Deep Well Ranches.

Associated Project Studies:

- 36" Cathodic Protection (available to selected consultant)
- Compaction analysis (available to selected consultant)
- 36" Surge analysis (available to selected consultant)

Related Documents:

- 36" Design Plans and Specifications (available to selected consultant)
- 18" Design Plans and Specifications (available to selected consultant)
- Transmission Main Easements (available to selected consultant)

Adjacent Public CIP Projects:

- Draft Intermediate pump station and storage design plans

Adjacent Private Development Projects:

- .N/A

Public Involvement:

Coordination with James Deep Well Ranches

Primary Technical / Administrative Issues

Existing Utilities:

- High Pressure Water and disruption of water transmission capabilities.

Utility Relocation Issues:

- N/A

Design:

Roadway Design

- N/A

Drainage Design

- N/A

Sewer Design

- N/A

Water Design

- This project will consist of a siting and surge analysis and improvement plans for the installation of check valves and associated vaults on the City's transmission mains (18", 36") between Chino Valley and the City of Prescott.

Selected valves shall be evaluated for head loss and operational abilities (pressure, speed of operation, maintenance, etc).

Geotechnical Design and Recommendations

- Consultant to retain a qualified geotechnical firm to complete a subsurface investigation; and provide recommendations for site work to include foundation, pipeline design.

Private Development Partners:

N/A

Right-of-Way (R.O.W.) and Easements:

- TBD, (no additional easements anticipated)

Environmental Constraints – Required Permits:

100-Year Floodplain –

N/A

Railroad –

N/A

ADOT –

N/A

AZDEQ –

- Consultant will acquire all ADEQ (YCES) permits, including the Approval to Construct, Approval To Operate, and the Engineer's Certificate of Completion.
- The project will need to obtain an AzPDES permit and proper erosion control BMPs will need to be incorporated into the plans and construction methods.
- Dust Control measures will need to be incorporated into the construction methods and a City construction permit will be required.

Yavapai County –

- Not Applicable.

Other Municipalities

- . N/A

Archaeological/Cultural Issues –

- An archaeological pre-determination may be required for this project along with an archaeological survey, if deemed necessary from the pre-determination.

Endangered Species Act (ESA) –

- A pre-determination for any listed endangered species that may be impacted within the project vicinity, along with an evaluation, if deemed necessary from the pre-determination.

Required Environmental Permits/Approvals -

- AZDOT Permit – N/A
- NPDES Permit – SWPPP and NOI
- FEMA – N/A

Construction Issues:

- Water disruption during construction.
- Timing and sequencing of construction during low demand periods.
- Ranch access and security.

City Liability and Risk Assessment

- A failure in the transmission main could go unnoticed for an extended period of time due to the remote location of the transmission mains.
- Water loss and disruption of service to the city in the event of a failure.

Design Deliverables

1. **Project Kick-Off Meeting.** The Engineer will be required to attend a kick-off meeting with City staff at a time and on a date amenable to both parties. At that meeting, the Engineer will be required to provide a detailed design schedule, a list of the team members who will be involved in the project, along with their phone numbers and e-mail addresses, an org. chart showing the relationship of all of the team members and any submittals required contractually.
2. **Design Schedule.** The Engineer will be required to submit a detailed schedule depicting all major tasks and primary submittal dates for approval by the City. Thereafter, the Engineer shall submit monthly project schedule updates in the same format and shall highlight and provide justification for any changes to the approved schedule. The Engineer shall include 3 weeks for each of the City review periods.
3. **Public Meetings.** N/A

4. **Preliminary Design Report and Preliminary Construction Cost Estimate.** Within 60 days of entering into a contract with the City of Prescott, the Engineer will be required to provide a set of preliminary alignment plans, a preliminary design report with major infrastructure components sized and a preliminary cost estimate. An analysis of alternate design considerations shall be included in this submittal.
5. **Utility Review.** Concurrent with submittal to the City of the 30% design, the Engineer shall submit copies to the private utility companies (electric, cable, telephone, gas) for their comments and/or clearance letters. The Engineer will provide to the City copies of each of the transmittal letters to each of the utilities. If necessary, a meeting will be held between the Engineer and reviewing agencies to discuss the conceptual plan and construction scheduling. Based upon input from the 30% plans, the Engineer shall submit a revised design completion schedule.
6. **Utility Potholing.** Based on the results of utility research, the need for utility potholing to establish existing horizontal and vertical locations of utilities will be established. For the purpose of this scope, the Engineer shall provide up to four(4) utility potholes.
7. **Geotechnical Investigation and Recommendations.** A geotechnical report will be prepared to identify subsurface conditions and need for any special equipment for excavation. Two (2) soil borings up to 12 (12) feet in depth will be performed and a geotechnical report will be prepared. Findings in the geotechnical report will be incorporated into the design and specifications.
8. **Preparation of Preliminary (30%) Design.** The conceptual design shall identify exiting conditions including: right-of-way and easements; topography; benchmarks; adjacent property lines; existing pavement limits; proposed plan and profile pipe alignments; and all utilities (electric, gas, fiber, water, sewer, effluent, and storm drain) located within the project limits. The conceptual design shall further identify any required additional easements/right-of-way; all existing water meters, water valves, sewer manholes and cleanouts and any other utility fixture or potential utility conflict, and any other efforts required to design and construct a quality product. The design submittal shall include a detailed construction cost estimate.

In generating the specifications, the Engineer shall adhere to the City's boilerplate for Technical Specifications unless conditions require Special Provisions. ALL bid items SHALL be addressed in the Technical Specifications or Special Provisions. Items NOT required for the project SHALL be deleted from the text. Any deviation(s) from the boilerplate shall be brought to the City's attention.

9. **Preparation of Preliminary (60%) Design.** Review comments shall be solicited, received and addressed by the Engineer. Utility conflicts that were identified from the Utility Review shall be addressed with a detailed approach for mitigation of these conflicts and coordination with respective utility companies.
10. **Preparation of Pre-Final (90%) Plans, Specifications, and Estimate for Submittal to City and Utility Companies.** Final review comments shall be solicited, received, and addressed by the Engineer.
11. **Regulatory Agency Review.** It shall be the responsibility of the Engineer to prepare the application, plans, specifications, and design report for submittal by the City to ADEQ (YCES) for review, respond to comments and obtain the "Approval to Construct". Any review fees assessed by the regulatory agency will be paid by the City. It will be the responsibility of the Engineer to include estimated time frames for the reviewing agency in the schedule.
12. **Preparation of Easement Legal Descriptions and Map/Drawings.** The Engineer shall prepare all legal descriptions, maps, and obtain all pertinent title reports for the acquisitions of additional easements required, if any, to construct the proposed improvements. In the event additional easements are needed to construct the project, the Engineer shall provide two (2) originals of detailed legal descriptions and maps/drawings, both stamped by a Registered Land Surveyor. The Engineer may be required to accompany the City (or their representative) at meeting(s) held with the respective property owner(s) to explain the need for the taking and its affect on the property. The Engineer will NOT be required to negotiate with the pertinent property owners for the acquisitions of any of the required easements. A final easement map (record of survey) will be required which indicates new permanent easements required. The additional easements shall be staked prior to meetings with property owners.
13. **Pre-Final (90%) Design Meeting.** A meeting will be held between the Engineer and the City to discuss any revisions or additional work required for generation of final (100%) plans and specifications.
14. **Final Concept Stakeholder/Public Meeting.** The final public meeting will be to present the final project plans. Formats for individual meetings will be decided as scheduling of the meetings are determined. The Engineer shall prepare a newsletter publication for each public forum. The City shall be responsible for printing of such newsletters. The Engineer and the City will participate in the public meeting and help the attendees understand the project, its limitations, the options considered, and other project aspects.

15. **Preparation of Final (100%) Plans, Specifications, Design Report, Bid Schedule and Engineers Estimate.** The final plans shall be prepared incorporating any adjustments or corrections made during the review of the pre-final plans. A set of final reproducible plans shall be provided on 3 mil Mylar and on disk (compatible with either MicroStation *.DGN or AUTOCAD *.DXF). A hard copy and disk of specifications, bid schedule, and engineers estimate, shall be submitted (compatible with Microsoft Word). Plans shall not be considered final until ADEQ "Approval to Construct" is acquired. The Engineer will only be responsible for the technical provisions portion of the specifications, bidding schedule, and engineer's estimate. The City will prepare the formal contract documents.

16. **Construction Pre-Bid Meeting.** The Engineer shall attend the construction pre-bid meeting held by the City of Prescott to answer questions from prospective bidders. In the event an addendum is required, the Engineer shall prepare the necessary changes to the plans and specifications.

17. **Pre-Construction Meeting.** The Engineer shall attend the pre-construction meeting held by the City of Prescott to answer questions from the construction contractor. The Engineer shall be prepared to address any design questions presented by the contractor.

18. **Monthly Progress Meetings.** In addition to those meetings indicated above, the Engineer shall meet monthly with the City to discuss the project status and any pertinent issues.

19. **Benchmarks.** The Engineer will be responsible for finding or setting sufficient temporary benchmarks in the field to allow the project to be constructed in accordance with the design. Permanent benchmarks may be included in some projects.

20. **Provision of Post-Design Consultation Services.** The Engineer will be retained to provide consultation assistance during construction, relative to questions pertaining to their design. Construction meeting attendance, technical submittals, RFI's, as-built coordination and preparation, quality assurance/control, project closeout, certification, and other construction phase engineering services shall be anticipated functions of the engineer of record.

21. **Meeting Minutes.** The Engineer shall be responsible for recording and preparing accurate minutes from all meetings involved with the project. A

hard copy and disk of the minutes shall be submitted to the Public Works Department. The disk must be compatible with Microsoft Word.

Miscellaneous Other Deliverables

- Technical Design Reports SWPPP Plan
- Other as may be required
- Siting and surge analysis
- Improvement plans
- Hydraulic Analysis to evaluate head loss and operational abilities (pressure, speed of operation, etc).

Post-Design Construction Services

- Submittal / RFI reviews
- As-Built surveying and final mylar preparation; As-built certification
- Attending construction meetings
- Completion of ECC
- Construction to be managed and inspected by City personnel. Consultant to be retained as Engineer Of Record during construction phase.

Major Milestones

<u>Milestone</u>	<u>Tentative Date</u>
Advertise RFP/RSOQ	**
Award Design Contract	**
Survey complete	**
Preliminary Design Report Complete	**
30% Design Complete	**
60% Design Complete	**
90% Design Complete	**
R/W Easements Complete	**
100% Plans And Specs complete	**
ASLD Permit Complete	**
Bid Award	**
Begin Construction	**
Construction Complete	**
Project Close-out Complete	**

Miscellaneous Products

N/A

Approvals

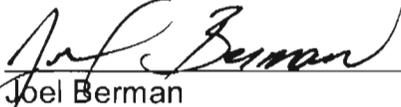
Program Development Manager



Date 11/7/14

Steve Orosz

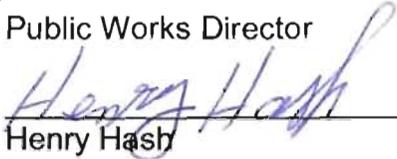
Utility Operations Manager



Date 11/7/14

Joel Berman

Public Works Director



Date 11/7/14

Henry Hash

City of Prescott
CIP Design Submittal Requirements

In order to maintain a consistent and effective review of the plans, it is important for the necessary information to be provided as follows:

30% Submittal

1. Preliminary water design report
2. Preliminary drainage design report
3. Preliminary geotechnical report
4. Preliminary pavement recommendations
5. Aerial photograph with catch points & preliminary right-of-way superimposed (1:50) scale
6. Preliminary plan & profile for all required facilities – road, water, storm sewer
7. Preliminary catch points
8. Alternative drainage analysis, conceptual drainage layout
9. Conceptual wall locations
10. Conceptual storm water control facility location
11. Preliminary land acquisition estimate
12. Preliminary utility conflicts and relocations (dry & wet utilities)
13. Preliminary typical sections
14. Preliminary erosion control sheets
15. Total Estimated Quantities and Engineer's Estimate
16. Value Engineering Study (projects > 1 million or State or Federal funding)

60% Submittal

1. Draft final water design report
2. Draft final drainage design report
3. Draft final geotechnical report
4. Preliminary structural design report
5. Final pavement recommendations
6. Preliminary pavement mix design
7. Final plan & profile for all required facilities – road, water, storm sewer
8. Final Intersection horizontal layout (including curb return and curb ramp info.)
9. Draft final wall locations – Plan & Profile
10. Catch points
11. Draft final drainage layout including pipe profiles
12. Updated utility locations/relocations
13. R/W purchase plans, contact summary – including property owners for water, sanitary,
14. Roadway typical sections
15. Preliminary detail sheets
16. Draft construction notes
17. Erosion control plan sheets
18. Cross Section sheets
19. Draft Specifications, Special Provisions, including landscape requirements and slope stabilization
20. Total Estimated Quantities and Engineer's Estimate
21. Variance modification requests (as required)

90% Submittal

1. Final water design report
2. Final drainage design report
3. Final geotechnical report
4. Final structural design report
5. Final pavement recommendations
6. Final pavement mix design
7. Final plan & profile for all required facilities – road, water, storm sewer
8. Final Intersection horizontal layout (including curb return and curb ramp info.)
9. Final wall locations – Plan & Profile
10. Catch points
11. Final drainage layout including pipe profiles
12. Final utility locations/relocations
13. Roadway typical sections
14. Final detail sheets
15. Final construction notes
16. Final Erosion control plan sheets
17. Final Cross Section sheets
18. Final Specifications and Special Provisions
19. Total Estimated Quantities and Engineer's Estimate
20. Submit plans to all agencies required for permitting

Final P.S. & E

1. Final Civil plans (Mylar & Digital)
2. Submittal of all final Technical reports
3. Final Technical Specifications and Special Provisions
4. Final Total Estimates Quantities and Engineer's Estimate
5. Approved permits (DEQ, COE, etc.)

Definitions

Conceptual: General design idea or plan based upon experience and judgment from other comparable work. cursory plan view illustrations; calculations not required.

Preliminary: Introductory, but reasonably accurate, design element or feature. General consistency with design standards. Plan view illustration. Rough calculations and notes. First run models.

Final: Complete and ultimate design element or feature. Full consistency with design standards (or road modifications). Complete plan, profile and section views, as applicable. Thorough and complete engineering calculations and notes. Finished run models.

Alternative analysis: Study of all (at least two) viable options which satisfies a given transportation plan or design need. Analysis to include, but not limited to, comparisons of: safety, scope, cost, functionality, efficiency, compliance to standards and environmental effects.