



Santa Clara Valley Water District

File No.: 16-0699

Agenda Date: 11/22/2016

Item No.: 3.4.

BOARD AGENDA MEMORANDUM

SUBJECT:

Adopt Plans and Specifications and Authorize Advertisement for Bids for Pacheco Conduit Inspection and Rehabilitation Project, Project Nos. 91214001 and 91221006.

RECOMMENDATION:

- A. Adopt the plans and specifications and authorize advertisement for bids for inspection and rehabilitation of the Pacheco Conduit per the Notice to Bidders;
- B. Authorize the Designated Engineer to issue addenda, as necessary, during the bidding process, and;
- C. Find that the Pacheco Conduit Inspection and Rehabilitation Project is substantially complex and, therefore, requires a construction contract retention of 10 percent (10%).

SUMMARY:

The proposed Project involves inspection, maintenance, and rehabilitative work on the Pacheco Conduit and a ½ mile portion of the Santa Clara Conduit, under the Pipeline Maintenance Program (PMP).

The Pacheco Conduit consists of approximately 7.9 miles of 120 inch diameter Prestressed Concrete Cylinder Pipeline (PCCP), constructed in the 1980's. The Pacheco Conduit is an integral part of the U.S. Bureau of Reclamation (Reclamation) Central Valley Project San Felipe Division, which conveys raw water from the San Luis Reservoir to Santa Clara and San Benito counties. The District is responsible for inspecting the Pacheco conduit every five (5) years in accordance with the maintenance and operation agreement with Reclamation. In FY06, staff completed an inspection and rehabilitation project on a portion of the Pacheco Conduit. Approximately 2/3 of the Pacheco Conduit was inspected, with 12 (0.85%) pipe sections found to have wire break damage. Reclamation requested a full re-inspection of the Pacheco Conduit in 2012; however, the threat posed by the presence of zebra mussels in the Hollister conduit delayed this inspection at that time.

The project also includes work on a ½ mile portion of the Santa Clara Conduit and rehabilitation activities at the bifurcation structure. The 96 inch diameter Santa Clara Conduit was constructed by

Reclamation in the 1980's.

The proposed work on the Pacheco Conduit and Santa Clara Conduit involves;

- Pipeline dewatering to facilitate internal inspection and rehabilitation efforts;
- Internal visual, sounding, and electromagnetic inspections of the PCCP for condition assessment;
- Internal maintenance, repair and carbon fiber reinforced polymer (CFRP) structural lining of the PCCP for the remediation of deficiencies identified during inspections;
- Installation of acoustic fiber optic cables for real-time wire break monitoring;
- Sectionalizing valve replacement for improved system isolation and operation capabilities;
- Bypass piping and valve replacement for the remediation of previously identified assembly deficiencies;
- Bypass assembly support installation for the remediation of previously identified structural support deficiencies;
- Pipeline appurtenance assemblies and piping maintenance and rehabilitation for the remediation of previously identified deficiencies and improved operational performance;
- Installation of an additional sectionalizing valve for improved system isolation in an effort to mitigate the intrusion of mussel laden water for the Hollister Conduit during shutdown conditions;
- Installation of additional bypass pumping piping to facilitate future pipeline dewatering; and
- Installation of additional maintenance platforms and ladders to facilitate the safe maintenance and operation the existing facilities.

Completion of the proposed Project will help improve the long term reliable delivery of raw water to Santa Clara and San Benito Counties.

Construction of the proposed Project is scheduled to begin in October 2017 and end in February 2018, with the shutdown of the pipeline limited to the first twelve (12) weeks of the Project schedule, to minimize the impacts to the Santa Clara and San Benito County water supply. Coordination and planning efforts with local, State and Federal water supply and regulatory agencies have been completed. Contingency planning for potential conflicts with concurrent District operations have been evaluated and the ability to move the proposed project construction dates is addressed in the Project specifications.

Staff is also working on an agreement with Reclamation to conduct repairs on the Santa Clara tunnel

during this Project shutdown, which will help reduce the amount of leakage on the tunnel.

Construction Contract Retention:

Public Contract Code (PCC) Section 7201 has been amended to limit retention amounts for public works construction contracts to five percent (5%) of the total contract price. Prior to January 1, 2012, a ten percent (10%) retention was allowed and was typically held by the District for construction projects. The revised PCC section 7201(b)(4) provides that retention proceeds on a project may exceed 5% where the Board makes a finding that the proposed project is “substantially complex” and, therefore, requires a retention amount greater than 5%.

To comply with the PCC in regards to increasing the retention to 10%, staff recommends the Board find that the Pacheco Conduit and Santa Clara Tunnel Rehabilitation Project is substantially complex based on the precision required to perform this critical work and shutdown schedule constraints necessary to minimize unplanned disruption in the delivery of raw water to Santa Clara and San Benito Counties.

Previous Board Actions Related to this Project:

Attachment 2 provides a summary of Board actions related to the Project Delivery Process for the Project.

On March 9, 2010, the Board approved the Resolution to Consider Undertaking a Work of Improvement and set the Public Hearing on the Engineer's Report that covers all the pipeline rehabilitation projects in the PMP. On April 13, 2010, the Board held a Public Hearing and adopted a resolution approving the Engineer's Report.

On September 27, 2016, the Board of Directors adopted the plans and specifications and authorized advertisement for bids for the construction of the Pacheco Conduit and Santa Clara Tunnel Rehabilitation Project, with the intent to start construction in January 2017. Staff later determined that the environmental permits and clearances required for Project construction could not be obtained by the scheduled bid award date.

During the bid process, Staff issued five (5) addenda to respond to contractor inquiries, extend the bidding period, and to cancel the bidding process due to the lack of environmental permits for the project. On December 13, 2016, the Board of Directors ratified addenda nos. 1 through 5 to the contract documents.

Next Steps:

If the Board approves the recommendations, staff will proceed to advertise the project for bids for the construction. Staff would come back to the Board in August 2017 to provide a report on the bids received, and request Board action to award the construction contract.

Staff will also come to the Board to execute an agreement with Reclamation to complete repairs on the Santa Clara tunnel.

FINANCIAL IMPACT:

The total cost of the Project is estimated at \$8.9 million. The funds needed for the planned Project work for this fiscal year are included in the fiscal year 2018 budget.

The estimated cost of the construction contract for the Project is in the range of \$2.5 to \$3.1 million. Additional budgeted funds are for other contracted and non-contracted Project activities, such as confined space support; high-angle rope access support; electromagnetic inspection; acoustic fiber optic monitoring system installation; project planning, design, administration, and construction, biological and regulatory oversight and monitoring; part and material procurement, and facility isolation and restoration.

Costs for additional pipeline work (approximately \$2.5 million dollars which is included in the \$8.9 million estimate) will also be expended during the fiscal year 2018. This includes the costs for leak detection, electromagnetic inspection, and real-time wire break monitoring on the Pacheco Conduit.

CEQA:

As the lead agency under the California Environmental Quality Act (CEQA) the District approved and adopted the PMP Environmental Impact Report (EIR) in November 2007. The PMP provides for the maintenance of the District's 14 raw water pipelines and 9 treated water pipelines. Potential impacts related to all components of the Project have been evaluated and mitigations are specified in the final EIR. The District and the contractor will comply with all BMPs and mitigations developed in the final EIR during Project implementation.

In addition, since the Pacheco Conduit is a federally owned facility, it is also subject to National Environmental Policy Act (NEPA) review. As a result, the District has applied with Reclamation for an Environmental Assessment (EA) for the Project and has applied for a Biological Opinion with the US Fish & Wildlife Service on permitting under the Endangered Species Act-Section 7. This work is also covered under the Valley Habitat Plan, which would help streamline the permitting process.

ATTACHMENTS:

Attachment 1: Notice to Bidders

Attachment 2: Project Delivery Process

Attachment 3: Project Location Map

UNCLASSIFIED MANAGER:

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