



Santa Clara Valley Water District

File No.: 17-0725

Agenda Date: 11/28/2017

Item No.: 3.2.

BOARD AGENDA MEMORANDUM

SUBJECT:

Amendment No. 2 to Agreement A3778A with URS Corporation for Dam Safety Evaluation Services for a Not-to-Exceed Fee of \$800,000, Resulting in a Total Not-to-Exceed Fee of \$8,600,359 for Dam Safety Evaluation of Coyote, Chesbro, and Uvas Dams Project, Project No. 91084019 (Unincorporated Santa Clara County) (District 1).

RECOMMENDATION:

Approve Amendment No. 2 to Agreement A3778A with URS Corporation for Dam Safety Evaluation Services for a not-to-exceed Fee of \$800,000, resulting in a total not-to-exceed fee of \$8,600,359.

SUMMARY:

The District conducts an ongoing comprehensive dam safety program for the benefit of public safety, and to assure operational availability of the reservoirs. All ten of the District's major dams are operated under the regulatory jurisdiction of the California State Department of Water Resources, Division of Safety of Dams (DSOD).

In February 2017, major incidents at Oroville Dam led to significant damage and erosion of its spillways. As a result, Governor Brown ordered that detailed evaluations of large spillway structures at all high-hazard dams be conducted before the next flood season.

Per the Governor's directive, DSOD completed a reconnaissance-level assessment of spillways at the District's Almaden, Anderson, Calero, Chesbro, Coyote, Guadalupe, Lenihan, Stevens Creek, and Uvas dams. In April 2017, DSOD requested the District perform an additional comprehensive condition assessment at each of these spillways, including foundation materials, concrete lining, and drainage system.

The District submitted detailed work plans to DSOD to perform the required comprehensive spillway assessments for Coyote, Chesbro, and Uvas dams on September 26, 2017, and received DSOD approval on October 9, 2017.

Under Agreement A3778A, URS Corporation (Consultant) is performing dam safety evaluations for Coyote, Chesbro, and Uvas dams to identify potential failure modes, and perform seismic stability evaluations. Staff recommends amending this Agreement to perform the DSOD-required comprehensive spillway assessments in an expedited manner.

Project Background and Previous Board Actions

As part of its seismic re-evaluation program in the early 2000's, DSOD performed independent, preliminary seismic stability evaluations of Almaden, Calero, Guadalupe, Lenihan, Stevens Creek, Chesbro, and Uvas dams. Based on its findings, DSOD notified the District of its concerns regarding seismic stability of these seven dams and directed the District to update the seismic stability analyses for each one. In addition, in 2003, the Federal Energy Regulatory Commission (FERC) reviewed a required safety inspection report for Anderson Dam and concluded that an updated seismic stability evaluation of the dam was required.

The District completed seismic stability evaluations for Anderson Dam in 2011, for Almaden, Calero, and Guadalupe dams in 2012, and for Lenihan and Stevens Creek dams in 2013. Based on the findings of these studies, capital improvement and retrofit projects are currently underway for Almaden, Anderson, Calero, and Guadalupe dams. The Lenihan and Stevens Creek dam studies indicated that those two dams have adequate seismic stability and no remediation of those two dams are required.

As reported in the CEO Bulletin of May 26 to June 1, 2017, the spillway condition assessments for Almaden, Anderson, Calero, and Guadalupe dams will be performed within the existing consultant agreements for the respective seismic retrofit, or dam improvement, capital project for these dams. For Coyote, Chesbro, and Uvas dams, an amendment to the current agreement for consultant services for performance of the comprehensive safety evaluations of these dams, which is the subject of this Board Item, will be necessary. A new capital project will be initiated in 2018 to evaluate the spillway structures at Lenihan and Stevens Creek dams.

On September 9, 2014, the Board approved Agreement A3778A with URS Corporation to perform dam safety evaluation studies for Coyote, Chesbro and Uvas dams. The purpose of this effort is to evaluate the seismic stability of each dam; assess the condition of each dam's outlet works; evaluate and prioritize potential dam failure modes, install instruments for long-term monitoring of the dams, and update probable maximum flood studies for all three dams.

The Dam Seismic Stability Evaluations Project (Project), which includes the work performed under Agreement A3778A with URS Corporation for Dam Safety Evaluation Services, conducts preliminary planning (seismic stability evaluations) for nine dams owned and operated by the District.

Consultant Work Performed to Date

The dam safety evaluation services Agreement with URS Corporation (Consultant) for Coyote, Chesbro and Uvas dams includes the following tasks:

Task 1 - Project management

Task 2 - Data collection and preliminary field investigation

Task 3 - Updated probable maximum flood

Task 4 - Inspections and supporting technical information documents

Task 5 - Seismic stability evaluations

Task 6 - Independent dam safety review and potential failure mode analysis workshop and recommendations

Task 7 - Supplemental evaluations

To date, the Consultant has completed preliminary field investigations (Phase 1 geotechnical and geologic investigations); updated probable maximum flood studies; performed initial inspections and prepared preliminary supporting technical information documents; conducted a preliminary potential failure mode analysis workshop; and is initiating Phase 2 geotechnical investigations seismic stability evaluations.

Staff Management of Consultant Agreement

Staff has been monitoring and managing the Consultant's performance to meet the goals and terms of the Agreement. Bi-monthly progress meetings are held with the Consultant to assess progress of the projects. Consultants are also required to submit detailed monthly progress/status reports with their invoices. These reports are reviewed and analyzed by District staff before approval of any payment to the consultants.

Additionally, another requirement in the District's consultant agreement is the consultant's preparation and implementation of an internal Quality Assurance and Quality Control (QA/QC) Plan for all deliverables transmitted to the District. As part of the deliverable acceptance process, the District also performs QA/QC review of all deliverables received from the Consultant for compliance with project scope, budget, and schedule.

For this agreement, key consultant deliverables are subject to additional technical review by DSOD staff and independent experts.

Amendment No. 2 to Consultant Agreement

The original Agreement with the Consultant was executed on September 9, 2014 for a not-to-exceed fee of \$7,800,359. Amendment No. 1 was executed on October 26, 2016 to modify some elements of the original scope of work in response to findings from initial investigations. There was no change to the not-to-exceed fee or term of the Agreement for Amendment No. 1.

Staff recommends approval of Amendment No. 2, which will modify the scope of services of the current agreement to incorporate the DSOD-mandated comprehensive spillway evaluations required for Coyote, Chesbro, and Uvas Dams, and increase the not-to-exceed fee by \$800,000, resulting in a total not-to-exceed fee of \$8,600,359.

FINANCIAL IMPACT:

Amendment No. 2 to Agreement A3778A with URS Corporation for Dam Safety Evaluation Services

for the Coyote, Chesbro, and Uvas dams will add a not-to-exceed fee of \$800,000, resulting in a total not-to-exceed fee of \$8,600,359. There are adequate funds in the Project's Board-adopted Fiscal Year 2017-2018 budget to encumber this additional fee. This amendment will increase the total Project cost estimate of \$19.6 million in the FY18-22 Capital Improvement Program by \$800,000.

CEQA:

The recommended action does not constitute a project under CEQA because it does not have a potential for resulting in direct or reasonably foreseeable indirect physical change in the environment. Once Project development is complete, a CEQA environmental analysis will be provided for the Board to consider as part of its Project approval process.

ATTACHMENTS:

Attachment 1: Amendment No. 2

UNCLASSIFIED MANAGER:

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