



Santa Clara Valley Water District

File No.: 17-0492

Agenda Date: 8/22/2017

Item No.: 5.2.

BOARD AGENDA MEMORANDUM

SUBJECT:

Amendment No. 2 to Agreement A3678A with HDR Engineering Inc. for Construction Management Services for a Not-to-Exceed Fee of \$24,246,608, Resulting in a Total Not-to-Exceed Fee of \$33,376,676 for the Rinconada Water Treatment Plant Reliability Improvement Project, No. 93294057, Contract No. C0601 (Los Gatos) (District 7).

RECOMMENDATION:

Approve Amendment No. 2 to Agreement No. A3678A with HDR Engineering, Inc. (Consultant) for a not-to-exceed fee of \$24,246,608 for construction management services, resulting in a total not-to-exceed fee of \$33,376,676, and extend the Agreement term.

SUMMARY:

The Consultant agreement for construction management services for the five-year construction of the Rinconada Water Treatment Plant Reliability Improvement Project (Project) was divided into two time periods. Division of the Agreement into two periods allowed for staff evaluation of the Consultant's services during the first time period, prior to approval of additional scope and fees for the second time period of construction. Approval of staff's recommendation will provide for continued construction management services through the remaining phases of Project construction.

Note that a separate agenda item has been prepared for Board consideration to approve an amendment to Agreement No. A3626A with CDM Smith for design and engineering support services during construction; these services are distinct from the construction management services provided by HDR Engineering, Inc.

Project Background

Built in 1968 and located in Los Gatos, the Rinconada Water Treatment Plant (RWTP) is one of three district conventional water treatment plants. The RWTP has the capacity to provide up to 80 million gallons of treated water per day (MGD) to the west side of the district's service area, which includes a population of about one million people. There is no backup facility for this supply. Thus, the plant's operating reliability is critical to meeting the daily water demands of its customers.

The objectives of the RWTP Reliability Improvement Project (Project) include:

1. Improve overall plant reliability by increasing the plant capacity to 100 MGD;
2. Use the latest technology for day-to-day operations; and
3. Implement treatment process improvements that enable the plant to produce water quality that complies with current and anticipated updated state-issued water quality regulations, and is aesthetically pleasing.

Construction Management/Inspection Services

On September 9, 2014, the Board approved Agreement No. A3768A with HDR Engineering, Inc. for the Project's Construction Management (CM) services. The approved NTE fee for this Agreement was \$9,120,067. Staff informed the Board that the scope and fee for this Agreement covered an initial period of 30 months. This would allow staff to evaluate the Consultant's services after two years of construction to determine if the Agreement should be amended to extend through the completion of Project construction. It would also allow staff to more accurately determine the level of effort and cost of construction management services for the remaining years of construction.

The Consultant has completed the predefined scope of service for the first period within the approved NTE fee.

RWTP Reliability Improvement Project Construction Status

In the January 6-12, 2017 CEO Bulletin, staff informed the Board that the District's contractor, Balfour Beatty Infrastructure, Inc., was behind schedule to complete the second of five phases of Project construction. Originally scheduled for completion in December 2016, Phase 2 construction completion is currently expected in January 2018. Nevertheless, significant progress has been achieved on the construction site, can be seen in Attachment 2, and is listed as follows:

- Ninety (90) percent completion of all concrete structures, including the Wash Water Recovery Facility; the Ozone Contactor; the Flocculation and Sedimentation Basins; the Raw Water Metering Facility; and the Electrical Equipment Pad.
- Major electrical and yard piping work is almost complete.

The Project team is developing the Start-Up and Commissioning Plan for Phase 2.

Upon successful completion of Phase 2 construction, the Contractor will start demolition of the four existing clarifiers.

Amendment No. 2 to Consultant Agreement

Approving staff's recommendation to amend the CM services Agreement will allow the Consultant to continue performing construction management services for the remaining portion of Project construction and plant start-up.

In 2014, staff had estimated the total cost of the Project's construction management services to be

\$20 million. The proposed Amendment adds an additional \$24,246,608 to the original Agreement's NTE fee of \$9,120,067, bringing the total NTE fee for CM services to \$33,376,676. The recommended additional amount for construction management in the second time period is significantly larger than the original estimate of approximately \$11 million mainly due to the delays experienced in project construction, as reported above, and the associated additional work required to manage the remaining construction effort as effectively as possible.

In particular, three key factors have increased the proposed total NTE fee for CM services beyond the approximately \$11 million that was originally estimated for the second period of the Agreement:

- a) Staff anticipates completion of phase two of the Project construction approximately a year later than originally planned. Amendment No. 2 incorporates a one-year extension of construction duration to the CM services scope and fee. The portion of the revised NTE fee associated with the one-year extension is approximately \$6 million.
- b) Based on lessons learned from past District facility start-ups and commissioning, staff believes it is more appropriate and beneficial to the District to assign specific tasks to the Construction Management scope of services. Thus, some Supplemental Service tasks that had originally been designated to CDM Smith to potentially perform as part of engineering support during construction have now been shifted to the Construction Management Supplemental Services in Amendment No. 2. These include:
 - i. Manage and assist development of the new facility's Standard Operating Procedures (SOP)
 - ii. Development of an electronic Operations and Maintenance Manual (eOM)
 - iii. Development of GIS/As-Built Technology Integration

As a result, approximately \$4 million has been added to HDR's revised NTE fee to account for these services.

- c) Based on the Project construction experience to date, staff anticipates requiring an increased level of various Supplemental Services by the Consultant for the next three to four years of construction work, and the Amendment No. 2 fee has been modified to reflect this level of service. Examples of additional Supplemental Services, to be authorized on an as-needed basis, include:
 - 1. Work performed by Field Contract Administrators
 - 2. Partnering, Dispute Resolution Board matters, and related support services;
 - 3. Dispute management to address Contractor claims;
 - 4. Claims negotiation and resolution;
 - 5. Extended public outreach;
 - 6. Additional specialty inspections

The increased level of effort required for the above referenced Supplemental Services, is approximately \$1 million per year, resulting in an increase of approximately \$3 million to the

originally-estimated NTE fee.

Amendment No. 2 will also extend the Agreement term from September 30, 2017 to September 30, 2021. A summary of the tasks and fees for the recommended Amendment No. 2 is presented in Table 1.

Table 1. Summary of HDR Engineering, Inc. CM Services Agreement Tasks and Fees

Task	Description	Not-to-Exceed Fees		
		Original Agreement	Amendment No. 2	Revised Total
1	Project Management and Coordination	\$522,837	\$1,824,441	\$2,347,278
2	Pre-Construction Services	\$223,227	\$0	\$223,227
3	Construction Management	\$2,655,935	\$8,230,584	\$10,886,519
4	Inspections, Special(ty) Inspections	\$3,285,167	\$7,622,723	\$10,907,890
5	Safety Management	\$208,496	\$101,253	\$309,749
6	Training, Testing, Start-Up and Commissioning	\$974,803	\$2,862,423	\$3,837,226
7	Neighborhood Communications	\$113,600	\$606,711	\$720,311
8	Partnering, Claims, and Dispute Management	\$231,231	\$401,806	\$633,037
9	Acceptance and Close-Out	\$75,675	\$236,347	\$312,022
10	Supplemental Services	\$829,097	\$2,360,320	\$3,189,417
TOTAL		\$9,120,068*	\$24,246,608	\$33,376,676

Note: Amendment No. 1 was administrative and did not increase Agreement scope/fees.

*The 9/9/14 Board-approved Agreement NTE was \$9,120,067. Due to rounding, the corrected value of the original approved Agreement is \$9,120,068.

FINANCIAL IMPACT:

The NTE fee for Amendment No. 2 to Agreement 3678A with HDR Engineering, Inc. is \$24,246,608, resulting in a total NTE fee of \$33,376,676 for Project construction management services. There are sufficient funds in the Project's Board-approved Fiscal Year 2017-18 Budget to encumber the planned FY18 expenditures for this Agreement. Planned encumbrances in future fiscal years will be budgeted on an annual basis. This Amendment is included in the total Project cost estimate of \$291 million in the FY18-22 Capital Improvement Program.

CEQA:

An Environmental Impact Report (EIR) for the RWTP Reliability Improvement Project was prepared in accordance with the California Environmental Quality Act (CEQA). On January 27, 2015, the Board

certified the EIR, and adopted the Mitigation Monitoring and Reporting Program, Findings of Fact, and Statement of Overriding Considerations. The Board's approval of the recommended Consultant Agreement Amendment would not result in changes in Project description or associated environmental impacts, and thus no further CEQA analysis would be required.

ATTACHMENTS:

Attachment 1: Amendment No. 2

Attachment 2: PowerPoint

UNCLASSIFIED MANAGER:

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