

evaluation report. In addition, prior to the delay of construction, Woodard & Curran provided additional engineering services during the Phase I construction submittal review process. Both grant funding assistance and construction submittal design support were not part of the scope of work under Amendment No. 1 of the Agreement. The District approved Amendment No. 2 on March 21, 2023 to cover these additional costs. Amendment No. 3 was executed under the General Managers authority previously authorized by the Board under Amendment No. 1 at the January 4, 2022 Board meeting. Amendment No. 3 utilized the \$54,000 contingency to cover additional engineering services during Phase I construction.

Amendment No. 4 to Professional Services Agreement MA-5963 with Woodard & Curran, will add budget for engineering services during Phase II construction as well as finalize the Phase II plans, specifications and engineering estimate, allowing the District to advertise the project by the end of this year and start Phase II construction on August 1, 2025.

DISCUSSION: The Pine Mountain Tunnel is an 8,700-foot long tunnel built in 1919 to convey and treat water from Alpine Lake to San Rafael and the Ross Valley, now known as the Ross Valley System, which serves 44,000 District customers or roughly 23% of the District's service area. Due to regulatory constraints, the District abandoned the tunnel as a conveyance system in 1971, but retained the tunnel to provide storage (approximately 3 million gallons) and surge protection. The tunnel is severely deteriorated and at end of its useful life. The District provides periodic updates to the State Water Resources Control Board Division of Drinking Water regarding the District's progress for the tunnel's decommissioning and replacement.

In support of the Water System Master Plan, the District and its consultant, Woodard & Curran, conducted a focused evaluation of the storage needed to replace Pine Mountain Tunnel and support the larger Ross Valley system, including a detailed reviewed of the previous studies and assumptions to improve storage capacity and reliability in the Ross Valley system. A sizing study for the Ross Valley system determined the appropriate sizing (estimated at 3 to 4 MG) for the storage needed to replace Pine Mountain Tunnel and established an optimum elevation for the replacement storage. Project siting alternatives were developed, with sites including locations that were previously analyzed in prior efforts as well as new potential storage site locations. The preferred project location for a storage facility to replace Pine Mountain Tunnel was located at Concrete Pipe Road near drainage culvert No. 5. The siting analysis was presented to the Operations Committee on May 21, 2021, and is part of the approved Project.

Following the May 21st Operations Committee meeting, the next step for the Pine Mountain Tunnel Replacement Project were to integrate the engineering studies with the environmental analysis and documentation needed for the project by preparing the preliminary design of the project to the 30% design level. Environmental Science Associates (ESA) conducted and prepared the environmental analysis and documentation for the Pine Mountain Tunnel Replacement Project under their on-call environmental services contract with the District. Preliminary design of the preferred alternative was a necessary component to completing the environmental analysis and documentation. The preliminary design of the Project was completed by Woodard & Curran, and Environmental Science Associates prepared the California Environmental Quality Act documents (Initial Study and Mitigated Negative Declarations (IS/MND)) along with the Mitigation Monitoring Reporting Plan (MMRP) required for the District to proceed with the Project. On December 14, 2021, the Board of Directors adopted the Final IS/MND and MMRP for the Project.

At the January 4, 2022 Board Meeting, the Board approved Amendment No. 1 with Woodard & Curran for final design of the Project along with a \$54,000 staff requested contingency. After award of the Phase I construction contract on May 24, 2022, and prior to the start of Phase I construction, an opportunity was presented to apply for grant funding for the Project. District staff worked with CalOES on a FEMA Hazard Mitigation grant application which required additional effort from Woodard & Curran to generate a seismic evaluation report. In addition, prior to the delay of construction, Woodard & Curran provided additional engineering services during the Phase I construction submittal review process. Both grant funding assistance and construction submittal design support were not part of the scope of work under Amendment No. 1 of the Agreement. The District approved Amendment No. 2 on March 21, 2023 to cover these additional costs. Amendment No. 3 was executed under the General Managers authority previously authorized by the Board under Amendment No. 1 at the January 4, 2022 Board meeting. Amendment No. 3 utilized the \$54,000 contingency to cover additional engineering services during Phase I construction.

District staff recommends the Board approve and authorize the General Manager to execute, Amendment No. 4 to the Professional Services Agreement No. 5963 with Woodard & Curran to augment the contract budget to cover the cost for project management assistance in the amount of \$30,089; ensure staff has engineering support during Phase II construction activities in the amount of \$200,000; and complete Phase II design and provide 100% plans, specifications and an estimate of project costs along with assistance during advertisement of Phase II of construction in the amount of \$219,926.

As shown the below project schedule, Phase II advertisement for construction bids are anticipated in December 2024.

Project Implementation:

Present project to Operations Committee:	June 18, 2021
Board approval of professional services agreement:	July 6, 2021
Complete preliminary design:	November 2021
Adopted Final IS/MND:	December 14, 2021
Award Amendment No.1:	January 4, 2022
Complete Phase I design:	April 2022
Advertised Phase I Project:	April 5, 2022
Award Phase I Contract:	May 24, 2022
Award Amendment No. 2:	March 21, 2023
Award Amendment No. 3:	March 19, 2024
Award Amendment No. 4:	September 17, 2024
Complete Phase II design:	November, 2024
Advertise Phase II Project:	December, 2024
Complete Phase I Construction:	January 31, 2025
Award Phase II Contract:	February, 2025
Start Phase II Construction:	August 1, 2025
Phase II Project Completion	February, 2028

FISCAL IMPACT: The existing Professional Services Agreement with Woodard & Curran for MA-5963 is for a total of \$1,232,913. Amendment No. 4 to MA-5963 will increase the existing amount by \$450,015 to a new contract amount of \$1,682,928. Funding for this amendment is identified in FY 25 adopted budget under the Pine Mountain Tunnel Replacement Project in the Replacement of Storage Tanks fund center.

**Table 1
Pine Mountain Tunnel Replacement Project
Design Scope of Work Summary**

Task Description	Budget
Task 1 – Project Management: This task includes managing the project team, the scope of work, conducting project progress meetings, preparing monthly progress reports and baseline schedule.	\$30,089
Task 7 – Pine Mountain Tanks – ESDC’s: This task includes engineering support during construction, including attending Phase II preconstruction meeting, bi-weekly construction progress meetings, submittal reviews, response to request for information (RFI), contract document changes, construction closeout and as built drawing preparation.	\$200,000
Task 9 – Pine Mountain Tanks – Design Updates: This task includes updating 65% plans based on District comments and holding a Phase II 90% design review meeting with District staff to discuss plans and specifications; update Phase II plans, specifications and estimate to 100% based on design review meeting and provide final PS&E package.	\$219,926
TOTAL AUTHORIZED AMOUNT	\$450,015

ATTACHMENT(S): None.

DEPARTMENT OR DIVISION	DIVISION MANAGER	APPROVED
Engineering	 <hr/> Alex Anaya Engineering Director	 <hr/> Ben Horenstein General Manager