



STAFF REPORT

Meeting Type: Board of Directors
Title: Amendment No. 1 to MA-6102 with Miller Pacific Engineering Group in support of the construction of the Pine Mountain Tanks Phase I Project
From: Alex Anaya, Acting Director of Engineering
Through: Ben Horenstein, General Manager
Meeting Date: December 19, 2023

TYPE OF ACTION: X Action Information Review and Refer

RECOMMENDATION: Authorize the General Manger to execute Amendment No. 1 to Professional Services Agreement No. MA-6102 with Miller Pacific Engineering Group for continued geotechnical engineering and special inspection services in support of the construction of the Pine Mountain Tanks Phase I Project (D21043) in the amount of \$305,000, for a revised total contract not-to-exceed amount of \$385,000

SUMMARY: On May 24, 2022, the District entered into Professional Services Agreement MA-6102 with Miller Pacific Engineering Group for the geotechnical engineering consultation, observation, and testing during construction of the Pine Mountain Tanks Phase I Project (D21043).

The initial scope of services for this agreement included part-time general observation of soil and bedrock materials exposed during excavation, drilling and grouting of soil nails, placement of reinforcing steel and shotcrete, and soil nail load verification testing. Additionally, the agreement included material sampling and laboratory testing to ensure construction contract compliance with specifications.

The original scope and budget anticipated part-time limited observation and materials testing services to verify construction contract conformance per the construction project bidding documents. Upon award of the construction contract, the project contractor was required to hire their own design engineer to complete the design of the soil nail retaining wall that they would construct. The completion of the final design plans for the wall identified a need for the District to utilize a third party to provide more frequent and detailed geotechnical and special inspection services throughout the entirety of the construction phase, which is estimated to be complete January 31, 2025.

Amendment No. 1 will include a similar scope of work as the original agreement but increases the frequency and duration of field observations and material testing to address the needs established

during the contractor-furnished design plans of the soil nail retaining wall. Additionally, Amendment No. 1 will extend the contract completion date from January 31, 2024 to December 31, 2025 in order to include the second season of the construction project and to provide adequate time for the completion of consultation, reporting, and invoicing.

DISCUSSION: The proposed Amendment No. 1 to Professional Services Agreement MA-6102 with Miller Pacific Engineering Group includes geotechnical construction observation and material testing services for the District's Pine Mountain Tanks Phase I Project.

The project consists of installing two new 2-million-gallon water storage tanks within an undeveloped area between Sky Oaks Road and Concrete Pipe Road. The first phase of the project includes site grading with excavation cuts of up to approximately 75 feet high to create a level pad for the tanks and building a new soil nail and shotcrete retaining wall system to support the excavation. The contractor began the retaining wall construction in August 2023 and should complete the project by January 31, 2025.

The original Professional Services Agreement dated May 24, 2022 included a not-to-exceed construction services budget estimate of \$80,000. The original scope and budget anticipated part-time as-needed observation and limited materials testing services to verify construction contract conformance per the construction project bidding documents. At the time of the original proposal, Miller Pacific Engineering Group anticipated that the Contractor would hire their own special inspector to perform construction inspections and testing in accordance with their design and applicable codes. However, the project team identified that ideal quality assurance for this important project would require that the District employ one or more approved agencies to provide special inspections and testing at a near full-time level during the entirety of construction project.

Miller Pacific Engineering Group has been on site nearly full-time with the District inspection team since construction has commenced, observing the contractor's work during site excavation, soil nail installation and testing, drainage panel and reinforcing steel placement, shotcrete placement and other work items.

District staff recommend that Miller Pacific Engineering Group continue to provide full-time or near full-time geotechnical observation and testing services, and work closely with the District inspector to document construction and perform the necessary quality control and special inspections and continue their role as the project geotechnical engineer of record.

The proposed scope of services associated with Amendment No. 1 includes the following:

1. Consultation with the project team to attend weekly project meetings, review submittals and work items of non-compliance and other issues.
2. Observing the soil and bedrock materials exposed during excavation.
3. Observing drilling, installation, and grouting of soil nails.
4. Collecting samples and performing laboratory testing to evaluate the compressive strength of the grout used for the soil nails.
5. Observing placement of the drainage panels and other components of the retaining wall drainage system.
6. Observing placement of the reinforcing steel for the shotcrete facing.

7. Collecting samples and performing laboratory testing to evaluate compressive strength of the shotcrete used for the wall facing.
8. Observing load testing of soil nails.
9. Geotechnical laboratory testing to determine the compaction characteristics of fill, subgrade, and aggregate base materials.
10. Field density testing of fill, aggregate base materials and storm drain trench backfill.
11. General project management and administration, including coordinating and scheduling site visits, preparation of reports summarizing the results of field observation and testing, and other items as required.

Staff recommend that the Board authorize the General Manager to execute Amendment No. 1 to the Professional Services Agreement No. 6102 with Miller Pacific Engineering Group for continued geotechnical engineering and special inspection services in support of the construction of the Pine Mountain Tanks Phase I Project (D21043) in the amount of \$305,000, for a revised total contract not-to-exceed amount of \$385,000.

ENVIRONMENTAL REVIEW: A Mitigated Negative Declaration was prepared for this Project and a Notice of Determination was filed with the Office of Planning and Research and the Marin County Clerk.

FISCAL IMPACT: The existing Professional Services Agreement MA-6102 with Miller Pacific Engineering Group has a current total not-to-exceed fee of \$80,000. Amendment No. 1 to MA-6102 will increase the existing amount by \$305,000 to a new total contract amount of \$385,000. Services will be provided on a time-and-expense basis in accordance with the original contract provisions. Budget for this amendment has been identified in the FY24 capital project budget, and from the FY 25 Pine Mountain Tanks Project budget.

ATTACHMENT(S): None.

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