



STAFF REPORT

Meeting Type: Operations Committee/Board of Directors
Title: Staff Update and Award of Professional Services Agreement with Carollo Engineers for Engineering Design Services in support of the Fairfax Manor 1st Pump Station Reconstruction Project
From: Alex Anaya, Director of Engineering
Through: Ben Horenstein, General Manager
Meeting Date: August 16, 2024

TYPE OF ACTION: X Action Information Review and Refer

RECOMMENDATION: Receive a staff update on the Fairfax Manor temporary pump station and authorize the General Manager to execute a professional services agreement with Carollo Engineers in the amount of \$1,225,058, with a staff requested contingency of \$200,000, for a total not exceed amount of \$1,425,058, in support of the Fairfax Manor 1st Pump Station Reconstruction Project

SUMMARY: In May of 2024, the Fairfax Manor 1st Pump Station was destroyed when a retaining wall collapsed under the weight of an asphalt roadway grinder performing work on Tamalpais Road. The pavement grinder rolled off the road onto the pump station. Staff responded to the incident by installing a temporary pumping facility to maintain continuous water service to the area. Staff will update the Board on the status of a temporary pumping facility and next steps.

Staff solicited proposals for engineering design services for the reconstruction of the permanent Fairfax Manor 1st Pump Station. District staff recommends that the Board authorize the General Manager to execute a professional services agreement with Carollo Engineers in the amount of \$1,225,058, with a staff requested contingency of \$200,000, for a total not exceed amount of \$1,425,058, in support of the Fairfax Manor 1st Pump Station Reconstruction Project.

DISCUSSION: The District operates the Fairfax Manor 1st Pump Station located on District property at the intersection of Tamalpais Road and Berry Trail in the Town of Fairfax. This pump station was built in 1929 and was modified in 1972 with the addition of a second pump. The pump station is part of the District's 411 Pressure Zone System and delivers water to three water tanks: the 21,000-gallon Fairfax Manor 1st Lift Tank (elevation 490'), the 108,000-gallon Fairfax Manor Top Tank (elevation 737.6'), and the 120,000-gallon Bay Road Tank (Elevation 496'). The pump station consists of two pumps – a primary 30 hp vertical centrifugal pump rated at 145 gpm, and secondary 15 hp pump rated at 95 gpm, and their associated controls equipment.

In May of 2024, a contractor working for Pacific Gas and Electric (PG&E) was conducting asphalt pavement grinding work on Tamalpais Road, just above the pump station. A retaining wall failure led to a large pavement grinder rolling down the hill from an elevated location, severing electrical service and destroying the District's pump station.

Immediately following the incident, District staff secured a secondary pumping location and installed a new fire hydrant and temporary pump to maintain continuous water service. The temporary pump station has been upgraded with system controls and telemetry equipment and housed in a noise-insulated storage container for maximum sound attenuation. This temporary facility will maintain water service while the new permanent Fairfax Manor 1st Pump Station is being designed and constructed. Staff are actively working with PG&E to assess the feasibility of a temporary electrical power drop, which would eliminate the need for a diesel-driven generator to power the facility. Current conditions do not affect water service to the area and the system's water storage tanks are operating at normal levels.

The Town of Fairfax is currently developing construction plans for the reconstruction of the failed retaining wall and anticipates beginning the construction of a new soldier pile retaining wall September of this year. The District is coordinating with the Town to support the Town's retaining wall reconstruction project as well as the District pump station reconstruction project.

Reconstructing the new permanent pump station will require civil site grading, earth retention, and drainage improvements, as well as structural, mechanical, electrical and wildfire-hardening improvements for the pump station facility itself. Staff is recommending to contract with Carollo Engineers, utilizing a project team that has over 40 years of experience in the design and construction of major water pump stations and distribution systems. The project team has demonstrated their technical abilities and commitment to accelerated project schedules with their work on the Kastania Phase I design project and the Emergency Intertie Project. The scope of work here includes: (1) project management and work plan, (2) Basis of Design Report to review documentation and establish design criteria, (3) topographic and geotechnical survey, (4) stakeholder coordination with the Town of Fairfax and District, (5) design development of construction plans, specifications and engineer's cost estimates, (6) bidding support services, and (7) engineering services during construction.

The proposal submitted by Carollo Engineers provides a comprehensive approach based on its subject matter expertise, attention to detail, and familiarity with the District's system. District staff recommends that the District execute a professional services agreement with Carollo Engineers to proceed with the Fairfax Manor 1st Pump Station Reconstruction Project.

Design Budget:

- Professional Services Agreement: \$1,225,058
- Contingency: \$200,000
- Total Budget: \$1,425,058
- Budget Category: A1A08

The target completion date for the design project is February 2025.

ENVIRONMENTAL REVIEW: Not Applicable, as this work will be preliminary to any project approval and associated environmental review.

FISCAL IMPACT: The Fairfax Manor 1st Pump Station Reconstruction Project design contract will initially be funded by the Capital Reserve as this is an unplanned project performed in response to an accident by a third party. The District will pursue recovery of the cost of this reconstruction project. As shown in the table below, the total cost for the agreement with Carollo Engineers is \$1,225,058 with a staff requested contingency of \$200,000, for a total not to exceed amount of \$1,425,058.

Task Description	Budget
Task 1 – Project Management: This task includes managing the project team, the scope of work, the project schedule and budget, and the coordination of, and documentation of, project meetings. Additionally, the project management task includes Carollo’s quality management program and providing monthly progress reports to the District to accompany the invoices for the services provided by Carollo related to the project.	\$76,288
Task 2 – Basis of Design Report: This task includes collection and review of the District’s hydraulic model, pump station record documents, and other related information. This task also includes a one-day field site visit to the pump station and development of the Basis of Design Report, which will summarize the components and facilities and design criteria of the reconstruction project.	\$107,454
Task 3 – Field Investigations: This task includes topographic survey, right-of-way survey, development of legal descriptions and plats, and temporary construction easement documentation. This task also includes geotechnical field exploration and development of a geotechnical report. Both survey and geotechnical services will inform the design of the new facility and will be performed by subconsultants contracted directly with Carollo Engineers. Other subtasks include utility research, coordination, and development of a utility potholing plan.	\$178,856
Task 4 – Stakeholder Coordination: This task provides for consultant support in coordinating design activities with the Town of Fairfax, obtaining an encroachment permit for work in the Town right-of-way, and public outreach assistance.	\$21,998
Task 5 – Develop Design Documents: This task includes engineering design services for the development of construction plans and specification for civil, mechanical, and electrical improvements. This task consists of 60%, 90%, and 100% design documents.	\$570,900
Task 6 – Bid Phase Services: This task includes attending a pre-bid meeting, preparing bidding documents and contract addenda, answering bidder’s questions, and developing conformed construction documents.	\$37,872
Task 7 – Engineering Services During Construction: This task provides for Carollo to assist during the construction phase of the project, conduct periodic site visits, review and respond to contractor submittals requests for information, assist with facility start-up and testing, and prepare as-built construction documents at the conclusion of the project	\$231,690
Professional Services Agreement Total	\$1,225,058
Contingency	\$200,000
Total Authorized Amount	\$1,425,058

Staff is requesting the Board authorize the General Manager to execute a professional services agreement with Carollo Engineers for \$1,225,058 with a staff requested contingency amount of \$200,000, for a total not to exceed amount of \$1,425,058 for the Fairfax Manor 1st Pump Station Design Project.

ATTACHMENT(S): None.

DEPARTMENT OR DIVISION	DIVISION MANAGER	APPROVED
Engineering	 Alex Anaya Engineering Director	 Ben Horenstein General Manager