



# STAFF REPORT

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**Meeting Type:** Operations Committee/Board of Directors  
**Title:** Engineering Design Service Contracts  
**From:** Alex Anaya, Acting Engineering Director  
**Through:** Ben Horenstein, General Manager  
**Meeting Date:** October 20, 2023

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**TYPE OF ACTION:**                      Action              X              Information                      Review and Refer

**RECOMMENDATION:** Receive staff update on the engineering design service contracts for upcoming capital projects

**SUMMARY:** Staff has been working on various capital projects in support of the District’s adopted two-year capital budget, including pump station design, pipeline design and structural and architectural design of certain projects. Staff issued Request for Proposals for engineering design services for these projects and will provide an update on the projects underway.

**DISCUSSION:** After the adoption of the Fiscal 2024 and 2025 budget by the Board, staff began work on projects identified in the two-year adopted budget. These projects include the Tocaloma Pumps Station Upgrades, Phoenix Lake – Bon Tempe Connection, San Geronimo Treatment Plant Roof Replacement and the Soulajule Pipeline Project in support of the Soulajule Electrification Project.

- The Tocaloma Pump Station Upgrades Project will replace the obsolete electrical components of this pump station that was constructed in the 1960’s. This booster pump station is a critical pumping facility that consists of six raw water pumps that pump water from Nicasio Reservoir to the San Geronimo Water Treatment Plant. This project will replace all the pump station electrical equipment and add variable frequency drives, conduct a condition assessment of all six pumps and motors as well a fire hardening the pump building structure.
- The Phoenix Lake to Bon Tempe Lake connection will require the design and construction of a new pump station that will allow Phoenix Lake water to be pumped into Bon Tempe Lake. This will require the design of a pump station capable of pumping up to 3 MGD of Phoenix Water into Bon Tempe Lake. This project has been identified as one of the Districts “No Regrets” Projects in the recently approved Water Supply Roadmap. The new pump station will have all new modern electrical components that will be housed in a fire hardened structure on District watershed lands.

- The San Geronimo Treatment Plant Roof Replacement Project will involve replacing the old thermoplastic polyolefin (TPO) roof membrane located over the treatment plant control center and walkway with a new fire hardened steel roof. This will require structural modifications to the roof support structure to accommodate the new roof. Having a fire hardened roof will increase the treatment plant's resiliency against wildfires.
- The Soulajule Pipeline Project is a project that has been identified in support of the Soulajule Electrification project. Currently, the Soulajule Pump station conveys water from Soulajule Reservoir through a pipe that daylights approximately two miles away from Nicasio Reservoir. The pumped water then flows via a tributary that feeds Nicasio Reservoir overland. Some of the pumped water is absorbed by the soil and evaporates over that two mile aboveground trek. The new pipe line will connect from the current discharge point and extend the pipeline directly into the main body of Nicasio Reservoir, ensuring that the pumped water all goes into the reservoir.

These four projects require the District to obtain the assistance of professional engineering firms to assist with the design and complexities of the respective projects. The Tocaloma Pump Station and Phoenix –Bon Tempe pump station require design by licensed civil, electrical and mechanical engineers that have prior experience designing pump stations. The San Geronimo Treatment Plant Roof project will require the assistance of a licensed structural engineer and an architect to evaluate and redesign the roof to assure the structure can accept the new steel roof and will have the proper slopes for drainage. The Soulajule Pipeline Project has the complexity of environmental permitting, land surveying and right-of-way easement acquisition to accommodate the new pipeline alignment. In addition, the size and length of this pipeline project would require a significant time commitment by District staff if done in house and that would detract from continuing the workflow on other important District capital and fire flow pipeline projects within the District's design group.

Request for Proposals were sent out to various consultant firms on October 12, 2023 and the District expects to receive proposals for the above mentioned projects by November 17, 2023. District staff will evaluate the proposals and return to the Board at a future date for award of contracts.

**ENVIRONMENTAL REVIEW:** Not applicable.

**FISCAL IMPACT:** None.

**ATTACHMENT(S):** None.