



Legislation Details (With Text)

File #: 2021-1033
Type: Consent Calendar Item **Status:** Passed
File created: 9/20/2021 **In control:** Sonoma County Water Agency
On agenda: 11/2/2021 **Final action:** 11/2/2021
Title: Engineering and Design Services for Ely Booster Station Hazard Mitigation Project
Sponsors: Sonoma County Water Agency
Indexes:
Attachments: 1. Summary

Date	Ver.	Action By	Action	Result
11/2/2021	1	Board of Supervisors	Approved as recommended	Pass

To: Board of Directors, Sonoma County Water Agency
Department or Agency Name(s): Sonoma County Water Agency
Staff Name and Phone Number: Hannah Camp 707-524-6435
Vote Requirement: Majority
Supervisory District(s): Second

Title:
Engineering and Design Services for Ely Booster Station Hazard Mitigation Project

Recommended Action:

Authorize Sonoma County Water Agency's General Manager to execute the First Amended Agreement for Engineering and Design Services for Ely Booster Station Hazard Mitigation Project with LEE + RO, Inc., in a form approved by County Counsel, to provide engineering and design services. The amended agreement increases the amount by \$50,000, expands the scope of work, and extends the agreement term by three years for a new not-to-exceed agreement total of \$387,321 and end date of January 31, 2026. (Second District)

Executive Summary:

Ely Booster Station (Station) sits within a 100-year floodplain in an unincorporated area of Petaluma and houses Sonoma County Water Agency (Sonoma Water) pumps that aid in the transportation of potable water around Sonoma and Marin counties. During the wet season (October-April), the Station operates intermittently but is periodically inundated with floodwaters that enter the electrical facilities and threaten operability, which could compromise delivery of drinking water to 310,000 residents. In addition, the Station is within five miles of the Rodgers Creek Earthquake Fault. Sonoma Water's Local Hazard Mitigation Plan identifies the Station as vulnerable to soil liquefaction and lateral spread. Lateral spread could damage pumps and electrical equipment. Damage to pumps and electrical equipment could render them inoperable for months, leaving the water transmission system unable to keep the system pressurized. If the system cannot maintain pressure, a boil water notice would need to be issued to over 310,000 people served by the Station.

The purpose of the Agreement is to design plans for a retrofit that would effectively provide protection against a 500-year flood event, and a seismic event. This First Amended Agreement expands the scope of work to

include seismic assessment of the generator, removal of a transformer elevation from drawings, and additional project design criteria.

Discussion:

HISTORY OF ITEM/BACKGROUND

Sonoma Water conducted a hazard assessment of its water supply and transmission system that was published in the "Phase II Natural Hazard Reliability Assessment, Water Supply and Transmission System for Sonoma County Water Agency" dated July 18, 2008 (Assessment).

On January 8, 2008, Sonoma Water adopted its first Local Hazard Mitigation Plan (Plan) that was approved by the Federal Emergency Management Agency (FEMA). This Plan has been updated as required by FEMA on a five-year recurring schedule. The most recent 2018 Local Hazard Mitigation Plan Update was adopted by the Board of Directors on October 9, 2018, and approved by FEMA on October 16, 2018.

The Assessment and Plan identify the Ely Booster Station Hazard Mitigation Project (Project) as one of several mitigation projects that could be implemented to reduce the risk of damage to, or failure of, the water supply and transmission system as a result of potential vulnerabilities to a major seismic event or flood.

As part of Sonoma Water's water transmission system, the Station helps supply water to over 310,000 residents in Marin and Sonoma counties by pumping potable water to the City of Petaluma, the North Marin Water District, and the Marin Municipal Water District. The Station is within five miles of the Rodgers Creek Earthquake Fault and sits within the 100-year floodplain in an unincorporated area of east Petaluma on Ely Road North. The extreme elevation of potential floodwaters threatens the operability of the Station itself and raises safety concerns for onsite personnel.

Sonoma Water submitted a grant application for the Project to the U.S. Department of Homeland Security, FEMA Hazard Mitigation Grant Program for design and construction. In July 2019, Sonoma Water was awarded a \$2,306,867 FEMA grant through the California Governor's Office of Emergency Services for hazard mitigation for the Station (award number DR-4344 #PJOSOS).

Sonoma Water and LEE + RO, Inc., (Consultant) entered into an agreement for engineering and design services, dated March 23, 2020, in the amount of \$337,321. The Project has progressed through receipt of the 90% Design Submittal from Consultant, and the 90% Design Review Meeting with Sonoma Water.

SELECTION PROCESS

On August 27, 2019, Sonoma Water issued a Request for Proposals (RFP) to the 29.

The RFP was also posted on Sonoma Water and County of Sonoma Purchasing Department websites, as well as the Small Business Administration and Minority Business Development Agency websites. The three firms listed below submitted Proposals:

1. IEC Corporation - Sacramento, California
2. HydroScience Engineers Inc. - Sacramento, California
3. LEE + RO, Inc. - Walnut Creek, California

The following criteria, listed in order of importance, were used to evaluate each firm:

- 1) Professional qualifications and demonstrated ability to perform the work
- 2) Responsiveness to the work requirements
- 3) Exceptions to standard terms in the sample agreement
- 4) Thoroughness of proposal

Consultant was selected to perform the work because Consultant submitted a well-thought-out and thorough proposal for the work to be done at the Station. Consultant has designed many similar projects that address the need for flood resiliency and seismic stability. In the proposal, Consultant described a number of design strategies that could be used to address issues that Sonoma Water is currently mitigating. The proposal also included code compliance reflecting Consultant's commitment and awareness of requirements that must be met.

SERVICES TO BE PERFORMED

Under the scope of the original agreement, Consultant will complete design improvements to the station including sealing and elevating electrical appurtenances above the 500-year floodplain, replacing the pump motor housing structures and switchgear equipment, and anchoring equipment critical to the operation of the Station which will protect against a 500-year flood event and a seismic event. Consultant will also provide support to Sonoma Water during bidding and construction.

Under the proposed amended agreement, additional tasks and meetings are being added for seismic assessment and verification of emergency back-up power generator being used in the design, removal of transformer elevation from the design, inclusion of additional design criteria related to systems and controls elements, and incorporation of additional Sonoma Water comments on specifications and drawings.

Time is being added to accommodate the additional tasks. In addition, changes to the Project schedule are required due to impacts on Sonoma Water staff workload from the Kincadee fire, and impacts from COVID-19 on Sonoma Water staff, Consultant, and electrical equipment companies' personnel. Also, additional time will be needed during the construction phase because the supply chain for delivery of electrical equipment is experiencing significant delays.

The cost for the additional tasks is \$50,000, for a new not-to-exceed agreement total of \$387,321. The new end date is January 31, 2026.

Prior Board Actions:

03/10/2020: Approved agreement between Sonoma Water and LEE + RO, Inc., for engineering and design services. Cost \$337,321; term end January 31, 2023.

10/09/2018: Resolution 18-0411 Adopting 2018 Sonoma County Water Agency Local Hazard Mitigation Plan.

06/20/2017: Adopted a Resolution designating the Water Agency's General Manager, Assistant General Managers, and Chief Engineer/Director of Groundwater Management to file applications and execute agreements for federal and/or state disaster financial assistance.

FISCAL SUMMARY

Expenditures	FY 21-22 Adopted	FY22-23 Projected	FY 23-24 Projected
Budgeted Expenses	\$50,000		

Additional Appropriation Requested			
Total Expenditures	\$50,000		
Funding Sources			
General Fund/WA GF			
State/Federal	\$37,500		
Fees/Other	\$12,500		
Use of Fund Balance			
Contingencies			
Total Sources	\$50,000		

Narrative Explanation of Fiscal Impacts:

Budgeted amount of \$50,000 is available from FY 2021/2022 appropriations for the Petaluma Aqueduct Capital Fund. No additional appropriation is required.

Offsetting revenue in the amount of \$37,500 (75%) from a FEMA grant through the California Governor's Office of Emergency Service.

Staffing Impacts:			
Position Title (Payroll Classification)	Monthly Salary Range (A-I Step)	Additions (Number)	Deletions (Number)

Narrative Explanation of Staffing Impacts (If Required):

N/A

Attachments:

None

Related Items "On File" with the Clerk of the Board:

None