

OPERATIONS COMMITTEE

Agenda Report

Administration Building 10844 Ellis Avenue Fountain Valley, CA 92708 (714) 593-7433

FROM: James D. Herberg, General Manager

Originator: Kathy Millea, Director of Engineering

SUBJECT:

VFD REPLACEMENTS AT SEAL BEACH PUMP STATION, PROJECT NO. FE19-13

GENERAL MANAGER'S RECOMMENDATION

RECOMMENDATION:

- A. Receive and file Bid Tabulation and Recommendation for VFD Replacements at Seal Beach Pump Station, Project No. FE19-13;
- B. Award a Construction Contract to Energy Management Corporation for VFD Replacements at Seal Beach Pump Station, Project No. FE19-13, for an amount not to exceed \$138,650; and
- C. Approve a contingency of \$27,730 (20%).

BACKGROUND

The Orange County Sanitation District (OC San) owns and operates the Seal Beach Pump Station which was built in 1972 and is near the end of its useful life. The pump station replacement is currently in design with completion scheduled for 2026.

The pump station consists of eight 100- to 200-horsepower pumps. The output of the four 200-horsepower pumps can be varied using variable frequency drives (VFDs).

RELEVANT STANDARDS

- Achieve less than 2.1 sewer spills per 100 miles
- Comply with California Public Contract Code Section 20103.8, award construction contract to lowest responsive, responsible bidder

PROBLEM

Two of the existing 200-horsepower pumps have VFDs that were installed in 1991 are at the end of their useful service life. Replacement parts and manufacturer support services are no longer available. These VFDs are critical for the operational capacity of the pump station and their replacement cannot wait for completion of Seal Beach Pump Station Replacement, Project No. 3-67.

File #: 2021-1787 Agenda Date: 2/2/2022 Agenda Item No: 3.

PROPOSED SOLUTION

Award the construction contract for VFD Replacements at Seal Beach Pump Station, Project No. FE19-13, to replace two existing 200-horsepower VFDs to maintain operation and reliability until completion of the new pump station.

A higher-than-usual contingency is requested because if unforeseen problems arise during replacement of the VFDs and feeder cables, the cost could exceed the typical 10% contingency. In that case, contract completion could be significantly delayed exposing OC San to extended overhead costs by the contract.

TIMING CONCERNS

Replacement of aged equipment will be delayed and risk for a potential sewage spill will remain if the pumps fail or are out of service for an extended period of time.

RAMIFICATIONS OF NOT TAKING ACTION

Increased risk of equipment failure, reducing available pumping capacity that could lead to a spill and increase risk for the need to install an emergency bypass for several months using portable pumps and temporary piping, until VFDs are replaced.

PRIOR COMMITTEE/BOARD ACTIONS

N/A

ADDITIONAL INFORMATION

OC San advertised for bids on August 25, 2021, and nine sealed bids were received on October 7, 2021. A summary of the bid opening follows:

Engineer's Estimate \$ 268,000

Amount of Bid
\$ 138,650
\$ 182,225
\$ 182,986
\$ 213,691
\$ 249,623
\$ 327,500
\$ 340,825
\$ 353,333
\$ 385,000

The bids were evaluated in accordance with OC San's policies and procedures. A notice was sent to all bidders on December 28, 2021 informing them of the intent of OC San to recommend award of the Construction Contract to Energy Management Corporation.

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Staff recommends awarding a Construction Contract to the lowest responsive and responsible bidder, Energy Management Corporation, for a total amount not to exceed \$138,650.

CEQA

The project is exempt from CEQA under the Class 1 categorical exemptions set forth in California Code of Regulations Section 15301. A Notice of Exemption will be filed with the OC Clerk-Recorder after OC San Board of Directors approval of the construction contract.

FINANCIAL CONSIDERATIONS

This request complies with the authority levels of OC San's Purchasing Ordinance. This item has been budgeted (Budget Update, Fiscal Year 2021-2022, Appendix A, Page A-8, Support Facilities - Small Construction Projects Program) and the budget is sufficient for the recommended action.

ATTACHMENT

The following attachment(s) may be viewed on-line at the OC San website (www.ocsan.gov) with the complete agenda package:

Construction Contract

TW:dm