



OPERATIONS COMMITTEE

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Agenda Report

File #: 2021-1977

Agenda Date: 12/1/2021

Agenda Item No: 10.

FROM: James D. Herberg, General Manager
Originator: Kathy Millea, Director of Engineering

SUBJECT:

OCEAN OUTFALL CONDITION ASSESSMENT AND SCOPING STUDY, PROJECT NO. PS18-09

GENERAL MANAGER'S RECOMMENDATION

RECOMMENDATION: Recommend to the Board of Directors to:

Approve a contingency increase of \$823,200 (30%) to the Professional Services Agreement with Carollo Engineers, Inc. for Ocean Outfall Condition Assessment and Scoping Study, Project No. PS18-09, for a total contingency of \$1,097,600 (40%).

BACKGROUND

The Ocean Outfall Condition Assessment and Scoping Study is completing a condition assessment of the 120-inch outfall that discharges effluent from the Orange County Sanitation District (OC San) Plant No. 2, approximately five miles off the coast of Huntington Beach. The condition assessment included an internal inspection and external inspection by divers, and development of a 3D model of the outfall using both internal and external mapping. The internal inspection and mapping are complete, and the external inspection and mapping are partially complete with the outstanding work being the removal and replacement of one manhole cover on the outfall to determine the condition of the material, and the 3D mapping.

RELEVANT STANDARDS

- Protect OC San assets
- 24/7/365 treatment plant reliability

PROBLEM

On the morning of October 4, 2021, OC San was scheduled to begin work to determine the condition of the existing manhole covers on the outfall. This work involved sending a specialized dive team to the ocean floor to remove and replace the last manhole cover on the outfall pipe, so the existing manhole cover could be brought to the surface for testing. This work was planned months in advance but had to be called off due to the oil spill. The project incurred mobilization and demobilization costs due to having to cancel the work.

In addition, the condition assessment has revealed that there are several elements of the outfall requiring immediate repair to ensure the outfall continues to function as designed. These repairs include replacing the metal tie-rods connecting joints in the outfall pipe, and cracks in the concrete and metal end gate. If the tie rods are not replaced, a flow surge could cause the joints to separate. If the concrete cracks are left untreated, they could allow the salt water to migrate to the rebar in the pipe leading to corrosion. If the cracked end gate is not repaired, a leak could develop at the end structure.

PROPOSED SOLUTION

Increase the contract contingency to cover:

- 1) Project costs incurred due to mobilizing and canceling the dive team because of the October 4, 2021 oil spill. OC San will work with legal counsel to seek reimbursement for additional costs associated with the oil spill. (\$155,503)
- 2) Urgent outfall repairs to be conducted while the dive team is still under contract, including tie-rod replacement, concrete crack repairs, and metal end gate repairs. (\$671,882)

TIMING CONCERNS

This work needs to be completed as soon as possible. OC San would like to reschedule the manhole cover removal and replacement work for April 2022 after the wet weather season. The crack repair and tie rod replacement can occur during that same mobilization. However, the dive team will need to take detailed measurements of the tie rods before April so the tie rod replacement parts can be manufactured and be available for installation in April.

RAMIFICATIONS OF NOT TAKING ACTION

The outfall joints do not have the extra protection from separating during a flow surge that the tie rods provide until they are replaced. Not repairing the cracks could lead to premature concrete corrosion. Not repairing the cracks on the flap gate can lead to leakage through the gate.

PRIOR COMMITTEE/BOARD ACTIONS

March 2020 - Approved Professional Services Agreement with Carollo Engineers, Inc. to provide engineering services for the Ocean Outfall Condition Assessment and Scoping Study, Project No. PS18-09, for an amount not to exceed \$2,744,000; and approved a contingency of \$274,400 (10%).

ADDITIONAL INFORMATION

N/A

CEQA

The project is exempt from CEQA under the Class 1 categorical exemptions set forth in California Code of Regulations section 15301 and CEQA Guidelines section 15262. A Notice of Exemption has been filed with the OC Clerk-Recorder.

FINANCIAL CONSIDERATIONS

This request complies with authority levels of the OC San Purchasing Ordinance. This item has been budgeted (Budget Update, Fiscal Year 2021-2022, Appendix A, Page 09, M-Studies) and the budget is sufficient for the recommended action.

OC San is working with Legal Counsel to seek reimbursement from the responsible party for costs due to cancelling and rescheduling the manhole removal and replacement due to the oil spill.

ATTACHMENT

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

- Presentation