
File #: 2025-4153

Agenda Date: 4/2/2025

Agenda Item No: 4.

FROM: Robert Thompson, General Manager
Originator: Mike Dorman, Director of Engineering

SUBJECT:

HEADWORKS REHABILITATION AT PLANT NO. 1, PROJECT NO. P1-105

GENERAL MANAGER'S RECOMMENDATION

RECOMMENDATION: Recommend to the Board of Directors to:

Approve a contingency increase of \$8,893,200 (4%) to the existing Construction Contract with Kiewit Infrastructure West Co. for Headworks Rehabilitation at Plant No. 1, Project No. P1-105, for a new total contingency of \$17,786,400 (8%).

BACKGROUND

The headworks process is where all incoming sewers enter the plant and preliminary treatment is performed. The existing headworks at the Orange County Sanitation District (OC San) have been in service for more than 30 years without a major rehabilitation effort.

OC San is executing the Headworks Rehabilitation Project to rehabilitate the existing systems, including the metering and diversion structure, bar screen building, bin loading building, influent pump station, grit basins, primary influent channels, and electrical power distribution and control systems. This project is also constructing new facilities that include a grit pump station, grit handling building, headworks odor control and chemical facility, a drainage lift station, electrical buildings, and other support systems.

Construction started in May 2021 and is expected to be completed by late 2028. The construction is approximately 65% complete.

When the construction contract was awarded in March 2021, staff proposed a lower than usual contingency for a rehabilitation project and planned to present a mid-construction review to the Board of Directors, highlighting the progress and risks encountered to date.

RELEVANT STANDARDS

- Ensure the public's money is wisely spent
- 24/7/365 treatment plant reliability

PROBLEM

The cost of change orders to the construction contract is nearing the Board-approved contingency amount. The changes to date have largely been related to unanticipated rehabilitation efforts, unknown conditions, utility conflicts, bypass systems that were not anticipated, and electrical design changes. Examples of these large changes that were not anticipated include: (1) Rehabilitation of the five main sewage pumps 54-inch discharge pipes due to unanticipated corrosion; (2) Electrical design changes and functionality modifications to Power Building No. 3 electrical equipment; (3) Additional temporary bypass systems required during dry weather season to address flow isolation constraints and ensure compliance with OC San's operational requirements; (4) Additional polyvinyl chloride (PVC) liner repairs at existing concrete structures; and (5) Unanticipated below grade utilities and additional demolition.

The current authorized contingency is insufficient to cover future changes for the remaining work. The remaining work includes rehabilitation of the influent sewage pump station, grit basins, metering and diversion structure, one primary influent channel, and major construction and commissioning of Power Building No. 3, Headworks Electrical Room, Headworks Standby Power building, Headworks odor control and chemical facilities, grit pump station, and Grit Handling building.

For the construction changes to date, the large majority have been either negotiated or the magnitude of the costs are reasonably well-known and factored into the remaining contingency. There are, however, several unresolved disputed items with the Contractor that have a value of approximately \$10.3 million. While OC San has disputed the merit of these items, the full problem-solving process offered to the Contractor by the Public Contract Code have not concluded. Final determination of merit and extent of potential added costs for these items remain a potential risk.

PROPOSED SOLUTION

Approve a contingency increase to cover future changes required to complete the remaining construction work.

TIMING CONCERNS

Additional contingency funds are required to approve any future construction changes without causing project delays. If problems arise, the construction work might have to be stopped until additional contract funds are authorized to resolve the issue. These delays could result in potential extended overhead claims from the Contractor.

RAMIFICATIONS OF NOT TAKING ACTION

Not increasing the construction contingency will prevent OC San from authorizing Kiewit Infrastructure West Co. to execute additional unanticipated work.

PRIOR COMMITTEE/BOARD ACTIONS

March 2021 - Received and filed Bid Tabulation and Recommendation for Headworks Rehabilitation at Plant No. 1, Project No. P1-105; Awarded a Construction Contract to Kiewit Infrastructure West

Co. for Headworks Rehabilitation at Plant No. 1 for a total amount not to exceed \$222,330,000; and approved a contingency of \$8,893,200 (4%).

ADDITIONAL INFORMATION

N/A

CEQA

The project is included in the “Headworks Rehabilitation at Plant No. 1 (Project No. P1-105)” Mitigated Negative Declaration (MND), State Clearinghouse Number 2019049152.

FINANCIAL CONSIDERATIONS

This request complies with authority levels of OC San’s Purchasing Ordinance. This item has been budgeted (Budget FY 2024-2025 and 2025-26, Section 8, Page 54, Headworks Rehabilitation at Plant No. 1, Project No. P1-105) 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:

- Presentation

RC:lb