

AGENDA REPORT

Resolution: Authorize the Executive Director to Execute a Contract Change Order in an Amount Not-to-Exceed \$425,000 with Valentine Corporation to Replace Three Pumps at Lift Station No. 2 at Oakland International Airport and Approve a Total Project Budget in an Amount Not-to-Exceed \$3,383,000. **(Aviation/Engineering)** Choose an item.

MEETING DATE: 5/13/2021

AMOUNT: \$425,000 Contract Authority, Capital Expenditure
(Total Project Budget of \$3,383,000)

PARTIES INVOLVED: Valentine Corporation, San Rafael, CA
Robert Valentine, President

SUBMITTED BY: Kristi McKenney, Chief Operating Officer
Bryant L. Francis C.M., Director of Aviation

APPROVED BY: Danny Wan, Executive Director

ACTION TYPE: Resolution

EXECUTIVE SUMMARY

The pump system recommend by the design consultant and recently constructed for this project have caused significant operational issues including regular clogging. Port staff has assessed the issues and determined the best course of action is to replace the pump system with more appropriate pumps for this application while we simultaneously explore financial liability for the issue. The pump replacement is proposed to be accomplished through a change order.

BACKGROUND

Lift Station No. 2, located in the Oakland International Airport (OAK) daily parking lot, is a critical sanitary sewer lift station that collects all sewage from Terminal 2. The project location is shown in Figure 1.

On December 12, 2019, the Board, through Resolution 19-126, approved a \$2,038,000 construction budget, for a total project budget of \$2,578,000, for the Lift Station No. 2 improvements project, awarding the construction contract to Valentine Corporation (Valentine) for \$1,263,369, and an additional \$253,631 in contract change order authority. On November 5, 2020, the Board, through Resolution 20-81, approved an additional \$75,000 in contract change authority to Valentine's contract, for a total \$328,631 in contract change authority (this was to construct an emergency by-pass sewer line for an

unrelated collapsed sewer line near serving Terminal1 that was discovered during the Sewer Asset Management Program Assessment phase).

During installation of the three new pumps, the Contractor notified Port staff that the pump system recommended by the design consultant caused significant clogging issues and required that the system's pump mechanical seal be lubricated with pressurized water at all times. This was an unacceptable operating condition for the Port, requiring additional cost for the Contractor and Port staff to immediately resolve.

Addressing these issues demanded significantly more Port staff time than was budgeted. Currently, the lift station continues to operate temporarily with only one pump in operation, as staff pursues the best permanent solution.

Port staff has notified the lift station designer of potential design errors and/or omissions while we investigate design assumptions and evaluate financial responsibility for the pump issues discussed above. Port staff recommends, as described below, moving forward with replacing all three pumps with pumps that do not require an external water lubrication system and can pass the type of material that flows through the airport's sewer lines while we simultaneously explore financial liability for this work.

Figure 1 – Lift Station No. 2 Location Map



ANALYSIS

Port staff has been working with Valentine and one of the on-call water and wastewater engineering services consultants to evaluate options to replace these pumps. Based on the internal discussions; discussions with on-call consultants, pump suppliers, and East Bay Municipal Utility District (EBMUD) wastewater staff; and experience with pumps used at other Port lift stations, Port staff is recommending replacing the current pumps with two Flygt Concertor pumps and one Vaughan chopper pump. The Flygt Concertor pumps have a clog detection system and have been used successfully at Lift Station No. 5 and are used by

EBMUD. The Vaughan chopper pump is explosion proof, has a submersible feature, and does not require any unique type of pump seal lubrication system.

Port staff recommend using Valentine to replace the pumps through a construction change order to their existing contract. Valentine will replace the pumps and associated infrastructure as a design-build project supported by a design subconsultant who also serves as one of the Port's on-call water and wastewater engineering services consultants. Valentine has demonstrated that they can perform the work as specified in the contract documents, have submitted all required documentation, and they have submitted an unconditional offer to provide the work as specified in the contract change order. Port staff recommend issuing Valentine a contract change order in the amount of \$425,000 to replace the pumps with a fully operable and reliable pumps at Lift Station 2. Port staff estimate an additional \$305,000 in Port labor, consultant fees, MAPLA, and OCIP costs to support the pump replacement.

BUDGET & STAFFING

The Lift Station No. 2 Improvements project is part of the Port's five-year Capital Improvement Plan (CIP) with an original \$2,578,000 budget to be funded with Port cash, which will be reimbursed partially through the terminal rental rate over the useful life of the constructed asset.

The scope to prepare the design and construction required to replace the three pumps is estimated to cost \$730,000. Expenditures in FY 2021 in excess of the original budget, estimated at \$202,000 will be covered by reallocating budget from the Earhart Sewer project. FY 2022 expenditures estimated at \$650,000 have been included in the proposed FY 2022 capital budget. A summary of the cost distribution, including the new total Project Budget of \$3,383,000, is shown in Table 1.

Table 1

Lift Station No. 2 Improvements Project Budget by Category

Description	Design ¹	Construction	Proposed Change	Proposed Total Project Budget
Port Labor	\$210,000	\$300,000	\$270,000	\$780,000
Consultants	\$330,000	\$161,000	\$20,000 ⁴	\$511,000
Original Construction Contract	\$0	\$1,263,369	\$0	\$1,263,369
Construction Change Order Contingency	N/A	\$328,631 ²	\$425,000	\$753,631
Other ³	0	\$60,000	\$15,000	\$75,000
Total Budget	\$540,000	\$2,113,000	\$730,000	\$3,383,000

¹ The Design Budget of \$540,000 was approved by the Board on December 1, 2016 and May 24, 2018.

² Additional contract Change Authority of \$75,000 was approved by the Board on November 5, 2020, for work that will be charged to the unrelated sanitary sewer Pipe 38 repair project.

³ Other includes additional MAPLA and OCIP costs.

⁴ Consultant construction budget request includes construction management support.

There is no anticipated staffing impact.

MARITIME AVIATION PROJECT LABOR AGREEMENT (MAPLA)

The provisions of the Port of Oakland Maritime and Aviation Project Labor Agreement (MAPLA) apply to this work.

STRATEGIC PLAN

The action described herein would help the Port achieve the following goals and objectives in the Port's Strategic Business Plan (2018-2022).

<https://www.portofoakland.com/wp-content/uploads/Port-of-Oakland-Strategic-Plan.pdf>

- Goal: Improve Customer Service
- Goal: Modernize and Maintain Infrastructure
- Goal: Strengthen Safety and Security
- Goal: Care of Our Environment

LIVING WAGE

Living wage requirements, in accordance with the Port's Rules and Regulations for the Implementation and Enforcement of the Port of Oakland Living Wage Requirements (the "Living Wage Regulations"), do not apply because the contract is a construction contract covered by state prevailing wage rules and the prevailing rate of wage is higher than the wage required by the Living Wage Regulations.

SUSTAINABILITY

Port staff completed the Sustainability Opportunities Assessment Form for this project pursuant to the 2000 Sustainability Policy and updated procedures. The Lift Station No. 2 replacement pumps will include with new energy efficient pumps to reduce power usage and eliminate a pressurized water lubrication system to reduce potable water usage.

ENVIRONMENTAL

This action was reviewed in accordance with the requirements of the California Environmental Quality Act (CEQA). The Port has determined that this project is categorically exempt from the California Environmental Quality Act (CEQA) Guidelines pursuant to Section 15302, Replacement or Reconstruction. Section 15302 exempts from CEQA the replacement or reconstruction of existing structures and facilities where the new structure will be located on the same site as the structure replaced and will have

substantially the same purpose and capacity as the structure replaced, including replacement of existing utility facilities involving negligible or no expansion of capacity.

GENERAL PLAN

Pursuant to Section 727 of the City of Oakland Charter, this project has been determined to conform to the policies for the transportation designation of the Oakland General Plan.

OWNER-CONTROLLED INSURANCE PROGRAM (OCIP)

As the construction and design project is a capital improvement project, the applicable Owner Controlled Insurance Program (OCIP) coverages and provisions apply to the construction phase.

OPTIONS

The following options are for the Board's consideration:

1. Approve the actions as outlined in this agenda report. Doing so will enable Port staff to replace the referenced pumps. This is the recommended action.
2. Do not authorize the additional contract change order to replace the Lift Station No. 2 pumps as part of the improvements project. The Port would rely on one pump to process all waste from Terminal 2 and runs the risk of not having a back-up pump and may incur increasing costs to maintain this lift station.

RECOMMENDATION

Staff recommends that the Board authorize the Executive Director to execute a contract change order in an amount not-to-exceed \$425,000 with Valentine Corporation to replace three pumps associated with the Lift Station No. 2 Project at Oakland International Airport and approve a total project budget in an amount not-to-exceed \$3,383,000.