



● **Board of Directors**
Engineering and Operations Committee

2/12/2019 Board Meeting

8-1

Subject

Award \$20,975,000 contract to J.F. Shea Construction, Inc., to rehabilitate the Greg Avenue Pump Station; and authorize an agreement with Black & Veatch for a not-to-exceed amount of \$900,000 for engineering services during construction; the General Manager has determined that the proposed actions are exempt or otherwise not subject to CEQA

Executive Summary

This action awards a construction contract to rehabilitate the Greg Avenue Pump Station. The work consists of constructing a new control building, and replacement of pumps, surge tanks, electrical service, and station piping. This project will also reconfigure the intertie for Service Connection B-5. This action also authorizes an agreement for technical support during construction.

Timing and Urgency

The West San Fernando Valley and Ventura County portions of Metropolitan's distribution system depend on water deliveries from the West Branch of the State Water Project (SWP). Backup deliveries of Colorado River supplies to this area are provided by the Greg Avenue Pump Station, which was constructed in the early 1960s. During the critical drought period in 2014 and 2015, the pump station delivered Colorado River water to these portions of Metropolitan's service area. The pump station is also used to deliver these supplies during planned and unplanned shutdowns of the Foothill Feeder and Jensen plant. After more than 50 years of service, significant components of the pump station need to be replaced to ensure reliable water deliveries to this area. Staff recommends moving forward with construction of this project at this time.

This project has been reviewed with Metropolitan's Capital Investment Plan (CIP) prioritization criteria and is included in the System Flexibility/Supply Reliability Program. Funds for this action are available within the appropriation for planned biennial CIP expenditures for fiscal years 2018/19 and 2019/20.

Details

Background

The Greg Avenue Pump Station is located on the East Valley Feeder. It was constructed in the early 1960s to pump treated Colorado River water from the F. E. Weymouth Water Treatment Plant into the San Fernando Valley and Ventura County portions of Metropolitan's service area. Upon completion of the Jensen Treatment Plant in 1972, Metropolitan began delivery of treated water from the SWP into this area via the West Valley Feeder No. 1, and into the Central Pool via the East Valley and Sepulveda Feeders. When the Jensen plant is out of service, and during periods of low SWP allocations, Greg Avenue Pump Station provides backup CRA water supplies to the western portions of Metropolitan's service area. During historical low SWP allocations of 5 percent and 20 percent in 2014 and 2015, respectively, the pump station was operated on a continuous basis to pump Colorado River water to the area.

While regular inspections and maintenance activities are performed by Metropolitan staff, the pumps have deteriorated over time and need to be replaced. Additionally, much of the station's equipment is more than 50 years old and is approaching the end of their operating lives. This project will improve the reliability of the

Greg Avenue Pump Station by replacing the existing pumps, control building, and surge tanks, and upgrading key electrical, mechanical, and control equipment at the facility.

In May 2014, Metropolitan's Board authorized design to replace the two pumps and upgrade the related facilities. The Board authorized procurement of the new pumps in March 2017. Design is complete and fabrication of the pumps is nearly complete. Staff recommends proceeding with the construction of the new facilities and installation of the new pumps at this time.

Greg Avenue Pump Station Rehabilitation – Construction

The scope of the construction contract includes construction of a new control building, paving, perimeter block wall, and access gates; installation of water lines, sewer line, air lines, duct banks, and a new electrical substation; installation of two Metropolitan-furnished pumps, motors, and accessories; installation of five new surge tanks, access ladders, and platform; reconfiguration of the Service Connection B-5; and installation of new plug valves, flow metering controls, and a flow meter. Metropolitan forces will establish access and safety clearances, and recommission the pump station when construction is completed. To facilitate timely completion of the overall project, Metropolitan forces began the construction of an underground electrical duct bank in advance of the main contract work. This advanced work was initiated under the General Manager's authority in October 2018. Upon completion of the duct bank construction, Metropolitan will enter into a contract with the Los Angeles Department of Water and Power (LADWP) to reroute the existing overhead powerlines to the underground duct bank and install a new transformer for the pump station. This work by LADWP will be contracted under the General Manager's authority to enter contracts for utility services.

A total of \$28.9 million is required for these recommended activities. The following paragraphs and **Attachment 1** provide a breakdown of the planned costs. The total estimated cost of the Greg Avenue Pump Station rehabilitation is approximately \$33.6 million.

Award of Construction Contract (J.F. Shea Construction, Inc.)

Specifications No. 1828 for rehabilitation of the Greg Avenue Pump Station was advertised for bids on August 30, 2018. As shown in **Attachment 2**, two bids were received and opened on December 11, 2018. The low bid from J.F. Shea Construction, Inc. in the amount of \$20,975,000 complies with the requirements of the specifications. The other bid was \$21,934,000, while the engineer's estimate was \$20.099 million. For this contract, Metropolitan established a Small Business Enterprise (SBE) participation level of at least 20 percent of the bid amount. J.F. Shea Construction, Inc. has committed to meet this level of participation. The subcontractors for this contract are listed in **Attachment 3**.

This action awards a \$20.975 million contract to J.F. Shea Construction, Inc. to rehabilitate the Greg Avenue Pump Station. A total of \$28.9 million has been budgeted for this work; besides the amount of the contract other allocated funds include: \$418,000 for the Metropolitan force activities, which include the installation of security equipment and SCADA control system integration by Metropolitan staff; \$804,000 for LADWP powerline relocation and future contract work described above; \$2,841,000 for construction inspection and support; \$650,800 for submittals review and record drawing preparation; \$900,000 for engineering and technical support during construction by Black & Veatch, as discussed below; \$493,000 for contract administration and project management; and \$1,818,200 for remaining budget.

Metropolitan staff will perform construction management and inspection of the construction contract. For this project, the anticipated cost of inspection is approximately 12 percent of the total construction cost. Engineering Services' goal for inspection of projects with construction greater than \$3 million is 9 to 12 percent. The total cost of construction for this project is \$23.65 million, which includes the amount of the contract (\$20,975,000), Metropolitan force activities (\$418,000), LADWP contract electrical upgrades (\$804,000), and Metropolitan furnished pumps (\$1,450,000).

Agreement for Engineering Services (Black & Veatch) – New Agreement

Black & Veatch performed the design of the Greg Avenue Pump Station Rehabilitation. Black & Veatch was prequalified through a competitive process via Request for Qualifications No. 1131. As the engineer of record for the design, staff recommends that Black & Veatch provide technical support during construction. The planned

scope of work includes responding to requests for information from the contractor and reviewing technical submittals related to the facility rehabilitation. The estimated cost for these services is \$900,000.

This action authorizes an agreement with Black & Veatch, for a not to exceed amount of \$900,000, to provide technical support during construction of the Greg Avenue Pump Station Rehabilitation. For this agreement, Metropolitan has established an SBE participation level of 18 percent. The planned subconsultants for this agreement are GeoPentech, Inc., Flow Science, and E2 Consulting Engineers, Inc.

Summary

This action awards a \$20.975 million contract to J.F. Shea Construction, Inc. for rehabilitation of the Greg Avenue Pump Station and authorizes an agreement with Black & Veatch for engineering services. See **Attachment 1** for the Allocation of Budgeted Funds, **Attachment 2** for the Abstract of Bids, **Attachment 3** for the listing of Subcontractors for the Low Bidder, and **Attachment 4** for the Location Map.

A total of \$28.9 million is required for this work. This project has been evaluated and recommended by Metropolitan's CIP Evaluation Team. Funds for this action are available within the appropriation for planned biennial CIP expenditures for fiscal years 2018/19 and 2019/20.

Project Milestone

December 2021 – Completion of construction of the Greg Avenue Pump Station rehabilitation

Policy

Metropolitan Water District Administrative Code Section 8121: General Authority of the General Manager to Enter Contracts

Metropolitan Water District Administrative Code Section 8122: General Manager's Contracting Authority in Specified Circumstances

Metropolitan Water District Administrative Code Section 11104: Delegation of Responsibilities

By Minute Item 51353, dated October 9, 2018, the Board appropriated a total of \$290 million from projects identified in the Capital Investment Plan for Fiscal Years 2018/19 and 2019/20

By Minute Item 50757, dated March 14, 2017, the Board authorized a procurement contract for the pumps at the Greg Avenue Pump Station

By Minute Item 49767, dated May 13, 2014, the Board authorized the final design to upgrade the Greg Avenue Pump Station

California Environmental Quality Act (CEQA)

CEQA determination for Option #1:

The proposed actions are categorically exempt under the provisions of CEQA and the State CEQA Guidelines. The proposed project involves minor alterations to existing facilities, reconstruction and replacement of existing public facilities and new construction of pertinent structures with no expansion of use, as well as minor alteration of land with no possibility of significantly impacting the physical environment. Accordingly, the proposed action qualifies under Class 1, Class 2, Class 3, and Class 4 Categorical Exemptions (Sections 15301, 15302, 15303, and 15304) of the State CEQA Guidelines.

CEQA determination for Option #2:

None required

Board Options

Option #1

- a. Award \$20,975,000 contract to J.F. Shea Construction Inc., to rehabilitate the Greg Avenue Pump Station; and
- b. Authorize an agreement with Black & Veatch, with a not-to-exceed amount of \$900,000, for technical support during construction.

Fiscal Impact: \$28.9 million in capital funds.

Business Analysis: This option will enhance Metropolitan's ability to reliably serve Colorado River Aqueduct water to portions of the distribution system that are normally dependent on State Water Project supplies.

Option #2

Do not proceed with pump station rehabilitation at this time.

Fiscal Impact: None

Business Analysis: This option would forego an opportunity to increase delivery reliability within Metropolitan's distribution system.

Staff Recommendation

Option #1


 _____ 1/23/2019
 John V. Bednarski Date
 Manager / Chief Engineer
 Engineering Services


 _____ 1/29/2019
 Jeffrey Nightlinger Date
 General Manager

Attachment 1 – Allocation of Budgeted Funds

Attachment 2 – Abstract of Bids

Attachment 3 – Subcontractors for Low Bidder

Attachment 4 – Location Map

Ref# es12661955

Allocation of Budgeted Funds for Greg Avenue Pump Station Upgrades

	Current Board Action (Feb. 2019)
Labor	
Studies & Investigations	\$ -
Final Design	-
Owner Costs (Program mgmt., envir. monitoring)	493,000
Submittals Review & Record	650,800
Construction Inspection & Support	2,841,000
Metropolitan Force Construction	418,000
Materials & Supplies	-
Incidental Expenses	-
Professional/Technical Services	900,000
Equipment Use	-
Contracts	-
J. F. Shea Construction, Inc.	20,975,000
LADWP electrical upgrades	804,000
Remaining Budget	1,818,200
Total	\$ 28,900,000

The total amount expended to date to upgrade the Greg Avenue Pump Station is approximately \$4.7 million. The total estimated cost to complete this project, including the amount appropriated to date and current funds requested with this action is \$33.6 million. No future funding requests are currently anticipated for this project.

The Metropolitan Water District of Southern California
Abstract of Bids Received on November 29, 2018 at 2:00 P.M.
Specifications No. 1828
Greg Avenue Pump Station Upgrades

The work consists of constructing a new control building and electrical service, replacing pumps, surge tanks, and valves for the Greg Avenue Pump Station Upgrades.

Engineer's estimate: \$20,099,000

Bidder and Location	Total	SBE \$	SBE %	Met SBE¹
J.F. Shea Construction, Inc. Walnut, CA	\$20,975,000	\$4,809,568	22.93%	Yes
Kiewit Infrastructure West Co. Santa Fe Springs, CA	\$21,934,000	-	-	-

¹ Small Business Enterprise (SBE) participation level was established at 20% for this contract.

The Metropolitan Water District of Southern California**Subcontractors for Low Bidder****Specifications No. 1828
Greg Avenue Pump Station Upgrades**

Low Bidder: J.F. Shea Construction, Inc.

Subcontractor and Location
Fence Corp, Inc. Riverside, CA
Matrix Environment, Inc. Long Beach, CA
C. L. Coatings, Inc. Stanton, CA
Allied Steel Co., Inc. Riverside, CA
J. A. Lynch Masonry, Inc. Buena Park, CA
Amber Steel Co. Rialto, CA
Condon-Johnson & Assoc., Inc. San Diego, CA
LEED Electric Santa Fe Springs, CA

Distribution System

