



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

2/13/2023 Board Meeting

7-1

Subject

Award a \$407,800.33 procurement contract to Cascade Consultants, LLC for a triple offset ball valve to rehabilitate Service Connection CB-11; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA

Executive Summary

Service connection CB-11 was originally designed solely as a pump well for dewatering a section of the Rialto Pipeline. In 2005, this turnout structure was modified to function as a service connection and consequently could no longer be used effectively for dewatering purposes. Replacing the existing butterfly valve with a triple offset ball valve will enhance CB-11's pump well dewatering functionality while maintaining the required service connection flow capacity. This modification will shorten the amount of time required to dewater this portion of the pipeline. This action awards a procurement contract for a 20-inch diameter triple offset ball valve; the award of this procurement contract at the present time will ensure the timely fabrication and delivery of the valve for a planned 2024/2025 shutdown.

Details

Background

The Rialto Pipeline is approximately 30 miles long and conveys untreated water from California Department of Water Resources' Devil Canyon Powerplant afterbays in San Bernardino to Metropolitan's Live Oak Reservoir in La Verne and Metropolitan's nearby San Dimas Power Plant. The pipeline supplies water to the F. E. Weymouth Water Treatment Plant (Weymouth plant), and serves three member agencies through 11 service connections. The Rialto Pipeline ranges in diameter from 96 inches to 120 inches.

Service connection CB-11's turnout structure, located in the city of Rancho Cucamonga, was originally constructed as a dewatering pump well under the original Rialto Pipeline construction contract. In 2005, the turnout was converted to a 40 cubic feet per second service connection to deliver water to recharge groundwater basins, and a 24-inch diameter butterfly valve was installed. Since that conversion, this turnout can no longer be used as a dewatering location on the pipeline. The existing butterfly valve has a disk in the flow path that obstructs lowering a pump through the valve and into the pipeline for dewatering activities.

The Rialto Pipeline is typically shut down and dewatered every five to seven years for inspections and maintenance. During the 2024/2025 shutdown season, a 35-foot section of steel pipe will be replaced due to significant degradation of the steel cylinder in that section. Staff plans to use this shutdown to also replace the valve at Service Connection CB-11 with a full port triple offset valve that will allow staff to lower a dewatering pump into the pipeline at this location. The use of this location to dewater the pipeline will shorten the overall duration of the upcoming Rialto Pipeline shutdown (and future shutdowns of the pipeline) by approximately 24 hours. In addition to replacing the turnout valve, piping adjacent to the turnout valve has also deteriorated and will be replaced during the same shutdown.

Staff recommends procurement of the new valve and appurtenant piping at this time to meet a planned 2024/2025 shutdown. Staff will seek board authorization to award a construction contract in mid-2023 for the replacement of the Service Connection CB-11 turnout valve and rehabilitation of the structure's piping.

In accordance with the April 2022 action on the biennial budget for fiscal years 2022/23 and 2023/24, the General Manager will authorize staff to proceed with the procurement of the triple offset ball valve to improve water supply reliability of the Rialto Pipeline, pending award of the procurement contract described below. Based on the current Capital Investment Plan (CIP) expenditure forecast, funds for the work to be performed pursuant to the subject contracts during the current biennium are available within the Capital Investment Plan Appropriation for Fiscal Years 2022/23 and 2023/24 (Appropriation No. 15525). This project has been reviewed in accordance with Metropolitan's CIP prioritization criteria and was approved by Metropolitan's CIP evaluation team to be included in the Conveyance and Distribution System Rehabilitation Program.

Service Connection CB-11 Rehabilitation – Procurement of 20-inch Ball Valve

The scope of the procurement contract includes furnishing one 20-inch triple offset ball valve and manual actuator. Metropolitan forces will receive, offload, and place the valve in storage at the Weymouth plant until the valve is needed for the future shutdown work.

A total of \$558,000 is required to perform this work. In addition to the amount of the contract, the allocated funds include \$59,000 for factory fabrication inspection and functional testing; \$5,400 for Metropolitan forces to receive, offload, and store the valve; \$27,000 for submittals review, technical support, and responding to manufacturer requests for information; \$35,000 for contract administration and project management; and \$23,799.67 for remaining budget.

Attachment 1 provides the allocation of required funds. The total estimated cost to complete rehabilitate the Rialto Pipeline distressed pipe segment and replace the valve on Service Connection CB-11, including the amount appropriated to date, funds allocated for the work described in this action, and all future actions, is expected to range between \$3.1 million and \$3.5 million.

Award of Procurement Contract (Cascade Consultants, LLC)

Specifications No. 2046 for furnishing a 20-inch triple offset ball valve to rehabilitate the CB-11 Service Connection was advertised for bids on November 3, 2022. As shown in Attachment 2, one bid was received and opened on December 21, 2022. The bid from Cascade Consultants, LLC in the amount of \$407,800.33, complies with the requirements of the specifications. This amount includes all sales and use taxes imposed by the State of California. The budgetary estimate for this material, based on a survey of vendors, ranged from \$200,000 to \$300,000. Staff attributes the higher-than-expected bid amount to increased costs for materials, labor, and transportation. Staff also investigated why only one bid was received and determined that there are a limited number of valve manufacturers that can supply a full port, triple offset valve of the size required for this project.

Proceeding with a contract at this time will enable completion of the rehabilitation of the CB-11 service connection with minimal operational impacts and will enable a future contractor to install the valve during a planned 2024/2025 shutdown of the Rialto Pipeline. As a procurement contract, there are no subcontracting opportunities, and no Small Business Enterprise participation level was established for this contract.

This action awards a \$407,800.33 procurement contract to Cascade Consultants, LLC to furnish a 20-inch triple offset ball valve to rehabilitate the CB-11 Turnout Structure.

Alternatives Considered

During the planning and design of this project, staff considered using different types of valves for this service, including a non-rising stem gate valve. The non-rising stem gate valve provides a full port but does not fit inside the existing structure. The triple offset ball valve provides a full port that allows a large pump to fit through the valve body for dewatering. A 20-inch diameter triple offset ball valve is the largest size valve that can be installed in the existing structure. The selected option will enhance pump well capabilities and maintain the service connection flow requirements. The recommended action allows Metropolitan to procure the valve needed to restore Service Connection CB-11's pump well functionality in a timely and cost-effective manner.

Summary

This action awards a \$407,800.33 procurement contract to Cascade Consultants, LLC to furnish a 20-inch triple offset ball valve to rehabilitate the CB-11 Turnout Structure. See **Attachment 1** for the Allocation of Funds, **Attachment 2** for the Abstract of Bids, and **Attachment 3** for the Location Map.

Project Milestones

March 2024 – Delivery of ball valve to Weymouth plant

February 2025 – Complete installation of ball valve under a separate contract

Policy

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

Metropolitan Water District Administrative Code Section 11104: Delegation of Responsibilities

Metropolitan Water District Administrative Code Section 8140: Competitive Procurement

By Minute Item 52778, dated April 14, 2022, the Board appropriated a total of \$600 million for projects identified in the Capital Investment Plan for Fiscal Years 2022/23 and 2023/24.

California Environmental Quality Act (CEQA)

CEQA determination for Option #1:

The proposed action is categorically exempt under the provisions of CEQA and the State CEQA Guidelines. In particular, the proposed action consists of the operation, repair, maintenance, permitting, leasing, licensing, or minor alteration of existing public or private structures, facilities, mechanical equipment, or topographical features, involving negligible or no expansion of use beyond that existing at the time of the lead agency's determination. In addition, it will not have a significant effect on the environment. Accordingly, this proposed action qualifies as a Class 1 Categorical Exemption (Section 15301 of the State CEQA Guidelines).

CEQA determination for Option #2:

None required

Board Options

Option #1

Award a \$407,800.33 procurement contract to Cascade Consultants, LLC for a triple offset ball valve to rehabilitate Service Connection CB-11.

Fiscal Impact: Expenditure of \$558,000 in capital funds. All costs will be incurred in the current biennium and have been previously authorized.

Business Analysis: This option will improve the operational reliability of the Rialto Pipeline distribution system.

Option #2

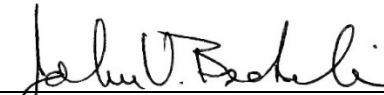

Do not proceed with this project at this time.

Fiscal Impact: None

Business Analysis: This option will forego an opportunity to improve the operational reliability of the Rialto Pipeline, which may lead to costly urgent repairs.

Staff Recommendation

Option #1

 _____ John V. Bednarski Manager/Chief Engineer Engineering Services	1/23/2023 _____ <i>Date</i>
 _____ Adel Hagekhalil General Manager	1/25/2023 _____ <i>Date</i>

Attachment 1 – Allocation of Funds**Attachment 2 – Abstract of Bids****Attachment 3 – Location Map**

Ref# es12693478

Allocation of Funds for Service Connection CB-11 Rehabilitation

	Current Board Action (Feb. 2023)
Labor	
Studies & Investigations	\$ -
Final Design	-
Owner Costs (Program mgmt.)	35,000
Submittals Review & Record Drwgs.	27,000
Construction Inspection & Support	44,000
Metropolitan Force Construction	5,400
Materials & Supplies	-
Incidental Expenses	15,000
Professional/Technical Services	-
Right-of-Way	-
Equipment Use	-
Contracts	-
Cascade Consultants, LLC	407,800.33
Remaining Budget	23,799.67
Total	\$ 558,000

The total amount expended to date for the Service Connection CB-11/ Rialto Pipeline Rehabilitation is \$150,000. The total estimated cost to complete this project, including the amount appropriated to date, funds allocated for the work described in this action, and future construction costs, is anticipated to range from \$3.1 million to \$3.5 million.

The Metropolitan Water District of Southern California

Abstract of Bids Received on December 21, 2022, at 2:00 P.M.

Specifications No. 2046
Furnishing a 20-Inch Triple Offset Ball Valve
for Service Connection CB-11

The work consists of procuring one 20-inch diameter triple offset ball valve to be installed as part of the Rialto Pipeline Rehabilitation project.

Engineer's estimate: \$200,000-\$300,000

Bidder and Location	Base Bid Price Total ^{1,2}
Cascade Consultants, LLC Yorba Linda, CA	\$407,800

¹ As a procurement contract, there are no subcontracting opportunities.

² Includes sales and use taxes of 10.25 percent imposed by the state of California

