



Board of Directors
Engineering and Operations Committee

2/8/2022 Board Meeting

7-5

Subject

Review and consider Addendum No. 4 to the certified 2017 Programmatic Environmental Impact Report; and award \$4,759,000 contract to Facility Builders & Erectors, Inc. for construction of a valve and equipment storage building at the Lake Mathews Reservoir site to support the Prestressed Concrete Cylinder Pipe Rehabilitation Program

Executive Summary

Due to the long-lead time to receive delivery of specialized pieces of equipment, such as large-diameter valves, staff typically procures the critical items in advance of construction to prevent potential manufacturing or logistical delays from impacting subsequent construction contracts that will install the Metropolitan-furnished equipment. This procurement approach is being utilized for the ongoing prestressed concrete cylinder pipe (PCCP) rehabilitation projects. For the first group of PCCP projects, 13 large valves and associated equipment are currently in production. Three valves have already been delivered to Metropolitan and are in temporary storage locations. Suitable facilities are needed to store and maintain the large equipment as they will be delivered to the region over the next two to three years. This action awards a contract for construction of a valve and equipment storage building at the Lake Mathews site to support the PCCP Rehabilitation Program.

Details

Background

In September 2011, Metropolitan's Board authorized the PCCP Rehabilitation Program in order to develop a comprehensive, long-term plan for replacement or relining of Metropolitan's five at-risk PCCP lines. The strategy for maintaining PCCP reliability consists of four coordinated elements: (1) continued assessment and monitoring of PCCP lines; (2) monitoring of stray currents and installation of cathodic protection; (3) near-term repair of PCCP segments; and (4) long-term rehabilitation.

The Second Lower Feeder is the initial PCCP feeder to be addressed under the program due to that pipeline's condition, its history of repairs, its high internal operating pressure, and the presence of corrosive soils and third-party stray currents. To date, four construction contracts have been completed, and 12 of the original 28 miles of PCCP on the Second Lower Feeder have been relined with steel pipe liner.

For the PCCP Program, staff procures large-diameter isolation valves and other long-lead, critical equipment and material in advance of the start of construction. Advanced procurement helps to prevent potential manufacturing or logistical delays from impacting future construction contracts. These contracts are typically scheduled with pipeline shutdowns that are coordinated with member agencies and local cities years in advance. Procuring valves in advance also ensures that the valves are available in the event of material shortages or to address an unanticipated repair.

In December 2018, the Board authorized a \$23,750,060 procurement contract to furnish three 48-inch and ten 54-inch conical plug isolation valves for the Second Lower Feeder and associated future PCCP projects. Delivery of these valves is scheduled to take place from 2021 to 2025. The valves will be stored and maintained until their installation under future PCCP rehabilitation contracts. As of November 2021, three of the 48-inch conical valves have been delivered and are currently stored in temporary facilities under conditions consistent with the manufacturer's instructions.

With the remaining ten valves scheduled to be delivered sequentially through 2025, there is a need to create a longer-term suitable storage approach for the valves. Staff recommends that a new storage building be constructed at the Lake Mathews site for this purpose. The new building will be suitable for storing the initial complement of 13 valves for the Second Lower Feeder project and will also be available to store valves and equipment required for the remaining PCCP rehabilitation projects that are currently scheduled to extend through 2036. The building will allow Metropolitan to comply with the manufacturer's storage instructions for the conical plug valves and avoid potential warranty disputes with manufacturers. After carefully evaluating available space at Metropolitan's existing facilities, assessing site conditions, and accessibility, staff has determined that the Lake Mathews site is the optimal location for the storage building. Once the building is completed, the valves that are currently being stored in temporary locations will be moved to the new building.

Final design for the PCCP Rehabilitation Valve Storage Building project is now complete, and staff recommends moving forward with construction of the project.

In accordance with the April 2020 action on the biennial budget for Fiscal Years 2020/21 and 2021/22, the General Manager will authorize staff to proceed with the actions described below, pending board award of the construction contract. Based on the current Capital Investment Plan expenditure forecast, funds for the work to be performed pursuant to this action during the current biennium are available within the Capital Investment Plan Appropriation for Fiscal Years 2020/21 and 2021/22 (Appropriation No. 15497). Funds required for work to be performed pursuant to the subject contract after fiscal year 2021/22 will be budgeted within the Capital Investment Plan Appropriation for Fiscal Years 2022/23 and 2023/24. This project has been reviewed in accordance with Metropolitan's Capital Investment Plan (CIP) prioritization criteria and was approved by Metropolitan's CIP Evaluation Team to be included in the PCCP Reliability Program.

PCCP Rehabilitation Valve and Equipment Storage Building – Construction

The project consists of constructing an approximately 18,200 square-foot pre-engineered metal building with a heavy-duty reinforced concrete slab foundation and motorized roll-up doors; performing site grading and paving; constructing a stormwater retention basin; installing a fire suppression system; modifying an existing power supply; and installing electrical duct banks and wiring. The building's interior concrete foundation and surrounding surface improvements will be designed and constructed in a manner that will accommodate the very heavy loading that will be applied to these surfaces when the valves are moved in and out of the building. Metropolitan forces will perform site clearing in advance of the contract. Metropolitan staff will perform submittal review, including the proposed building specifications.

A total of \$7,100,000 is required for this work. In addition to the amount of the contract described below, other funds to be allocated include \$90,000 for Metropolitan force construction, as described above; \$582,000 for construction management and inspection; \$372,000 for submittal review and preparation of record drawings; \$269,000 for technical support during construction by Lee & Ro, Inc. and \$165,000 for environmental monitoring and reporting by Helix Group Inc., both under existing board authorized agreements; \$534,000 for contract administration, environmental support, and project management; and \$329,000 for remaining budget.

Attachment 1 provides the allocation of the required funds. The total estimated cost to complete the PCCP Rehabilitation Valve and Equipment Storage Building, including the amount allocated to date and funds allocated for the work described in this action, is about \$8 million. Approximately \$850,000 has been expended on this project to date.

Award of Construction Contract (Facility Builders & Erectors, Inc.)

Specification No. 2013 for the construction of the PCCP Rehabilitation Valve and Equipment Storage Building was advertised on November 1, 2021. As shown in **Attachment 2**, seven bids were received and opened on December 14, 2021. The low bid from Facility Builders & Erectors, Inc. in the amount of \$4,759,000 complies with the requirements of the specifications. The other bids ranged from \$4,883,000 to \$5,640,000, while the engineer's estimate for this project was \$7,000,000. Staff investigated the difference between the engineer's estimate and the low bid and attributes the difference to a conservative engineer's estimate that factored inflation for labor and recent supply chain disruption issues for the pre-engineered metal building structure. For this contract, Metropolitan established a Small Business Enterprise participation level of at least 20 percent of the bid

amount. Facility Builders & Erectors, Inc has committed to meet this level of participation. The subcontractors for this contract are listed in **Attachment 3**.

As described above, Metropolitan staff will perform construction management and inspection. Engineering Services' performance metric target range for inspection of projects with construction greater than \$3 million is 9 to 12 percent. For this project, the performance metric goal for inspection is 12 percent of the total construction cost. The total cost of construction for this project is \$4,849,000, which includes the cost of the contract (\$4,759,000) and Metropolitan force construction (\$90,000).

Alternatives Considered

Staff evaluated several alternatives for storage of PCCP rehabilitation equipment. The first alternative considered use of currently available storage spaces within Metropolitan's existing facilities. The Sunset Garage, located adjacent to Metropolitan's former Sunset Headquarters, has space to store one valve. Existing warehouse space at the La Verne site is suitable to store two valves. The remaining Metropolitan facilities that were surveyed do not have available space to store the large valves. This approach, even if feasible, would have distributed valves throughout Metropolitan's service area and would have led to difficulties and inefficiencies in providing regular maintenance to the valves while they were in storage.

Staff also considered renting a warehouse with enough space to store all the valves in a single location. The estimated cost to rent the required storage space for ten years is approximately \$4 million with no guarantee of lease renewal from the property. Moreover, suitable storage space rentals were limited since each valve crate for the larger valves weighs up to 35 tons, which can damage a conventionally designed warehouse foundation. Consequently, staff determined that the available potential inventory of suitable available lease sites would be very limited or nonexistent.

Staff also considered enlarging the planned La Verne Warehouse Storage Replacement project to include sufficient space for storage of PCCP equipment. The La Verne Warehouse acts as Metropolitan's central equipment storage for capital and O&M project equipment and general facility supplies. The current La Verne Warehouse is planned to be replaced due to seismic deficiencies, but this project is not scheduled to be completed until 2027 or 2028. This alternative does not meet the equipment delivery dates for the PCCP equipment, and other temporary storage would need to be identified.

Staff recommends the construction of a new equipment storage building at the Lake Mathews site. This alternative is a cost-effective approach and will minimize risks associated with temporary storage space and potential contractual issues with the rental options. This alternative is consistent with the objectives of Metropolitan's PCCP Rehabilitation Program, long-term cost saving, and will provide maximum flexibility for all future storage needs for PCCP and relevant projects.

Summary

This action awards a \$4,759,000 construction contract to Facility Builders & Erectors, Inc. to furnish and construct the PCCP Rehabilitation Valve and Equipment Storage Building.

This project has been evaluated and recommended by Metropolitan's CIP Evaluation Team, and funds are available within the fiscal year 2020/21 capital expenditure plan. See **Attachment 1** for the Allocation of Funds, **Attachment 2** for the Abstract of Bids, **Attachment 3** for the listing of Subcontractors for Low Bidder, and **Attachment 4** for the Location Map.

Project Milestone

September 2023– Completion of construction of the PCCP Rehabilitation Equipment and Valve Storage Building

Policy

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

By Minute Item 50699, dated January 10, 2017, the Board certified the Final PEIR for the PCCP Rehabilitation Program, and approved the program for the Second Lower Feeder, Sepulveda Feeder, Calabasas Feeder, Rialto Pipeline, and AMP for the purposes of CEQA

By Minute Item 51421, dated December 11, 2018 Board awarding a \$23,750,060 procurement contract to Ebara Corporation to furnish conical plug isolation valves for the Second Lower Feeder.

By Minute Item 51963, dated April 13, 2020, the Board appropriated a total of \$500 million for projects identified in the Capital Investment Plan for Fiscal Years 2020/21 and 2021/22.

California Environmental Quality Act (CEQA)

CEQA determination for Option #1:

Metropolitan's Board certified the PCCP Rehabilitation Program's Final PEIR on January 10, 2017. At that time, the Board also adopted the Findings, the SOC, the MMRP, and the program itself. On April 3, 2019, Addendum No. 4 to the Final PEIR was prepared to document the proposed minor modifications to the approved project as described in this letter. CEQA and the State CEQA Guidelines require the preparation of an addendum to a previously certified PEIR if changes or additions are necessary, but none of the conditions calling for the preparation of a subsequent EIR have occurred (Section 15164 of the State CEQA Guidelines).

CEQA determination for Option #2:

None required

Board Options

Option #1

Review and consider Addendum No. 4 to the 2017 Programmatic Environmental Impact Report; and Award \$4,759,000 contract to Facility Builders & Erectors, Inc. for construction of the PCCP Rehabilitation Valve and Equipment Storage Building.

Fiscal Impact: Expenditure of \$7,100,000 in capital funds. Approximately \$2,100,000 will be incurred in the current biennium and has been previously authorized. The remaining capital expenditures will be funded from future CIP budgets following Board approval of those budgets

Business Analysis: This option will protect Metropolitan's assets; enhance operational flexibility; and reduce risk of project delays for the PCCP Program.

Option #2

Do not proceed with the project at this time.

Fiscal Impact: None

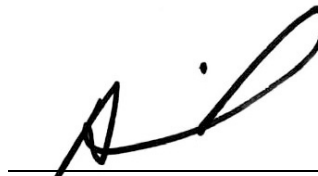
Business Analysis: This option will require that staff pursue another, less cost-effective option for storage of the large-diameter valves for PCCP rehabilitation.

Staff Recommendation

Option #1



John V. Bednarski
Manager/Chief Engineer
Engineering Services
1/24/2022
Date



Adel Hagekhalil
General Manager
1/26/2022
Date

Attachment 1 – Allocation of Funds

Attachment 2 – Abstract of Bids

Attachment 3 – Listing of Subcontractors

Attachment 4 – Location Map

Attachment 5 – Addendum No. 4 to Final PEIR

Attachment 6 – Final PEIR

Attachment 7 – Findings, MMRP and SOC

Ref# ES12685344

Allocation of Funds for PCCP Rehabilitation Valve and Equipment Storage Building

	Current Board Action (Feb. 2022)
Labor	\
Studies & Investigations	\$ -
Final Design	-
Owner Costs (Program mgmt., envir. monitoring)	534,000
Submittals Review & Record Drwgs.	372,000
Construction Inspection & Support	582,000
Metropolitan Force Construction	90,000
Materials & Supplies	-
Incidental Expenses	
Professional/Technical Services	
Helix Inc. (Environmental Consultant)	165,000
Lee & Ro, Inc.	269,000
Right-of-Way	-
Equipment Use	-
Contracts	
Facility Builders & Erectors, Inc.	4,759,000
Remaining Budget	329,000
Total	\$ 7,100,000

The total amount expended to date for the PCCP Rehabilitation Valve and Equipment Storage Building is approximately \$850,000. The total estimated cost to complete the facility, including the amount appropriated to date and funds allocated for the work described in this action, is about \$8 million.

The Metropolitan Water District of Southern California

Abstract of Bids Received on December 14, 2021, at 2:00 P.M.

Specifications No. 2013

Lake Mathews Reservoir

PCCP Rehabilitation Valve and Equipment Storage Building

The work includes furnishing and erecting an approximately 18,200 sq. ft. pre-engineered metal building with a reinforced concrete slab foundation and motorized roll-up doors; site grading, installation of a stormwater basin, asphalt paving, a fire protection system; modification of existing power supply; and installation of electrical duct banks and wiring.

Engineer's estimate: \$7,000,000

Bidder and Location	Total	SBE \$	SBE %	Met SBE¹
Facility Builders & Erectors, Inc. Anaheim, CA	\$4,759,000	\$2,207,000	46%	Yes
Woodcliff Corporation Los Angeles, CA	\$4,883,000	-	-	-
ACT I Construction, Inc. Norco, CA	\$5,183,586	-	-	-
PCN3, Inc. Los Alamitos, CA	\$5,288,000	-	-	-
Trinity Construction Blue Jay, CA	\$5,307,040	-	-	-
R.J. Daum Construction CO. Garden Grove, CA	\$5,537,751	-	-	-
Insight Pacific Brea, CA	\$5,640,000	-	-	-

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

The Metropolitan Water District of Southern California
Subcontractors for Low Bidder
Specifications No. 2013
PCCP Rehabilitation Valve and Equipment Storage Building

Low bidder: Facility Builders & Erectors, Inc.

Subcontractor and Location
Haitbrink Asphalt Paving, Inc. Corona, CA
Purnico, Inc. Yorba Linda, CA
Total Quality Construction Corp. Beaumont, CA
Earth Tek Engineering Chino Hills, CA
GMAT Inc., DBA Overhead Door Company of Inland Empire Colton, CA
Harris & Ruth Painting Contracting West Covina, CA
Millennium Fire Protection Corporation Oceanside, CA
Cicle City Electric Riverside, CA





*THE METROPOLITAN WATER DISTRICT
OF SOUTHERN CALIFORNIA*
700 N. Alameda Street, Los Angeles, California 90012

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[Attachment 5 – Addendum No. 4 to Final PEIR](#)

The CEQA documentation attachments are not included.



*THE METROPOLITAN WATER DISTRICT
OF SOUTHERN CALIFORNIA*
700 N. Alameda Street, Los Angeles, California 90012

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[Attachment 6— Final PEIR](#)

The CEQA documentation attachments are not included.



*THE METROPOLITAN WATER DISTRICT
OF SOUTHERN CALIFORNIA*

700 N. Alameda Street, Los Angeles, California 90012

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[Attachment 7– Final PEIR Findings, MMRP and SOC](#)

The CEQA documentation attachments are not included.