THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

BOARD ACTION

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

10/11/2022 Board Meeting

7-3

Subject

Authorize an agreement with MWA Architects in an amount not to exceed $990,000 for preliminary design of new warehouse facilities at Metropolitan's La Verne site; the General Manager has determined that the proposed actions are exempt or otherwise not subject to CEQA

Executive Summary

Metropolitan has an ongoing program to evaluate the seismic stability of its facilities to maintain reliable operations and to meet current design practices and building codes. Seismic analyses of the La Verne warehouse buildings have concluded that the existing buildings are vulnerable to significant damage in the event of a major earthquake. Additionally, an assessment of storage facilities at the site has shown that the current configuration of these buildings lack sufficient space for storage of critical materials and equipment. Due to this lack of appropriate storage space, many critical inventory items are stored in portable outdoor containers, and other inventory is stored outside and exposed to the elements. This action authorizes an agreement with MWA Architects to provide preliminary design services to replace two of four existing warehouse buildings at the La Verne site with a single larger building, rehabilitate the remaining two warehouse buildings to ensure seismic integrity, and develop enhanced outdoor storage areas.

Details

Background

Metropolitan's La Verne site is located in the city of La Verne and is approximately 150 acres in size. Facilities located at the site include the F. E. Weymouth Water Treatment Plant (Weymouth plant), the water quality laboratory, Metropolitan's main warehouse, machine shops, and other manufacturing facilities, as well as main offices for Metropolitan's fleet services, construction management, field survey, and other services.

The existing warehouse and storage areas are located near the center of the La Verne site. They are comprised of over 10 acres of indoor and outdoor spaces, including four buildings with a combined interior area of 52,000 square feet (sf). The main warehouse (Buildings 30 and 31) was constructed in the late 1960s and includes shipping and receiving, storage space, and office space. The main warehouse serves as Metropolitan's Central Stores by providing procurement services and inventory for the entire Metropolitan organization. Inventory, including materials ranging from personal protective equipment to flange gaskets, valves, hand tools, meter cabinets, chemical items, and hundreds of other supplies are kept for distribution throughout Metropolitan upon request. Building 30 is the only insulated and temperature-controlled storage area at the site, containing approximately 7,000 sf of storage space.

Two adjacent storage buildings (Buildings 32A and 33), which were constructed in the 1970s with a total area of 26,000 sf, provide storage for survey and mapping equipment, and long-term storage of piping and valves that are needed to maintain Metropolitan's distribution system and cannot be stored outdoors. They also provide storage for Metropolitan's investment recovery asset program, which recycles or auctions assets that have reached the end of their useful life, including office furniture and fleet vehicles. These two buildings are not insulated and are prone to leaks during rain events. Adjacent to these buildings are three uncovered outdoor storage areas that provide storage of durable items, such as structural steel, stainless steel plates for fabrication, large valves, large pipe spools, and filter media.

A seismic study of the La Verne Facility determined that the two existing main warehouse buildings would not be able to withstand a 7.0 magnitude earthquake from the nearby Sierra Madre – Cucamonga Fault. This facility is located approximately 1.5 miles from the fault. These single-story precast concrete tilt-up buildings have several deficiencies under this level of an earthquake, including excessive shear stresses on the roof diaphragm, inadequate anchorage of the precast walls, inadequate column shear capacity, and inadequate connections of the steel girders which support the roof deck.

In addition to the seismic deficiencies, the existing facilities are undersized and do not lend themselves to staff's efficient operations. A space planning and site alternatives study of the warehouse facilities conducted in 2018 determined that replacing the building is more cost-effective than retrofitting the existing facilities. The space planning study recommended replacing the two La Verne Site warehouse buildings (Buildings 30 and 31) with one larger building This insulated and conditioned warehouse space would include new office and restroom facilities. The new building layout would enhance the operational efficiency at the Central Stores by allowing forklifts to easily access all materials from a single floor level when compared to the existing layout that requires navigating forklifts in and out of two buildings with differing pavement levels. The planning study also recommended the rehabilitation of the two existing storage buildings (Buildings 32A and 33), including the replacement of their exterior sheathing, roofing, and insulation. These improvements to the storage buildings will include seismic retrofits for the design earthquake event at the site. The overall storage rehabilitation project would also provide new pavement and canopies for outdoor storage areas.

With the combination of seismic and space deficiencies, staff recommends the following: replacement of Buildings 30 and 31, which have a combined total area of 26,000 sf, with a new warehouse building of 55,000 sf; seismic retrofit and refurbishment of Buildings 32A and 33; and reconfiguration and enhancement of the outdoor storage areas with canopies so that durable items are not directly exposed to the elements. The new and refurbished facilities will have a total indoor area of 81,000 sf and outdoor storage areas of approximately 30,000 sf. Staff recommends proceeding with preliminary design at this time.

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 actions described below, pending board award of the design services agreement described below. Based on the current Capital Investment Plan (CIP) 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 2022/23 and 2023/24. This project has been approved by the CIP evaluation team and included in the System Reliability Program.

New La Verne Warehouse Facilities – Preliminary Design

Planned preliminary design activities include development of design criteria; geotechnical investigations; topographic surveys; preparation of civil, architectural, structural, mechanical, electrical, building sustainability, and security system design drawings; and a value engineering workshop.

A total of $1,800,000 is required for this work. Allocated funds include $990,000 for preliminary design by MWA Architects, as described below. Allocated funds for Metropolitan staff activities include $209,000 for technical oversight and review of consultant's work; $250,000 for environmental support, project management, and project controls; $200,000 for geotechnical investigations and value engineering to be performed under existing on-call agreements; and $151,000 for remaining budget. **Attachment 1** provides the allocation of the required funds.

Preliminary Design Services (MWA Architects) – New Agreement

MWA Architects is recommended to provide architectural design services for preliminary design of the new La Verne warehouse facilities. MWA Architects was prequalified via Request for Qualifications No. 1182 and was selected through a competitive process under Request for Proposals No. 1297. MWA Architects was selected for this project based on their staff qualifications, experience with similar projects, and technical approach and methodology.

The planned activities for MWA Architects include preparation of design criteria and preliminary design drawings, preparation of a three-dimensional building model, participation in value engineering workshops, development of an engineer's estimate, completion of a preliminary code analysis, and development of layout

alternatives, sustainability features, and site planning. MWA Architects will conduct site visits and provide architectural, structural, mechanical, electrical, plumbing, and sustainability design services.

This action authorizes an agreement with MWA Architects for a not-to-exceed amount of $990,000 to provide preliminary design services for La Verne warehouse facilities. For this agreement, Metropolitan has established a Small Business Enterprise participation level of 25 percent. MWA Architects has agreed to meet this level of participation. See **Attachment 2** for a listing of the subconsultants.

Alternatives Considered

Alternatives considered for completing preliminary design activities of seismic upgrades and building improvements included assessing the availability and capability of in-house Metropolitan staff to conduct this work. Metropolitan's staffing strategy for utilizing consultants and in-house Metropolitan staff has been: (1) to assess current work assignments for in-house staff to determine the potential availability of staff to conduct this work; and (2) for long-term rehabilitation projects, when resource needs exceed available in-house staffing or require specialized technical expertise.

This strategy relies on the assumption that in-house engineering staff will handle the baseload of work on capital projects, while professional services agreements are selectively utilized to handle projects above this baseload or where specialized needs are required. This strategy allows Metropolitan's staff to be strategically utilized on projects to best maintain key engineering competencies and to address projects with special needs or issues. After assessing the current workload for in-house staff and the relative priority of this project, staff recommends the use of a professional services agreement for the subject project. This approach will allow for the completion of not only these projects, but also other budgeted capital projects within their current schedules and ensure that the work is conducted in the most efficient manner possible.

Summary

This action authorizes an agreement with MWA Architects in an amount not to exceed $990,000 to provide engineering services for preliminary design of La Verne warehouse facilities. See **Attachment 1** for the Allocation of Funds, **Attachment 2** for the List of Subconsultants, and **Attachment 3** for the Location Map.

Project Milestone

March 2024 – Complete preliminary design for new La Verne warehouse facilities

Policy

Metropolitan Water District Administrative Code Section 5108: Appropriations

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

By Minute Item 52790, dated April 12, 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. The proposed action consists of basic data collection, research, and resource evaluation activities, which do not result in a serious or major disturbance to an environmental resource. These may be strictly for information gathering purposes, or as part of a study leading to an action which a public agency has not yet approved, adopted, or funded. Accordingly, the proposed action qualifies as a Class 6 Categorical Exemption (Section 15306 of the State CEQA Guidelines).

CEQA determination for Option #2:

None required

Board Options

Option #1

Authorize an agreement with MWA Architects, in an amount not to exceed $990,000, for preliminary design of La Verne warehouse facilities.

Fiscal Impact: $1.8 million in capital funds. All funds will be incurred in the current biennium and have been previously authorized.

Business Analysis: This option will enhance worker safety in the event of a major earthquake, and will improve Metropolitan's storage needs for operations and other business requirements.

Option #2

Do not authorize an agreement with MWA Architects.

Fiscal Impact: None

Business Analysis: This option would forego an opportunity to reduce the risk of damage to the La Verne warehouse facilities in the event of a major earthquake. Staff would continue to assess potential initiatives to minimize the risk of disruption to Metropolitan warehouse storage and would continue to store critical materials outdoors.

Staff Recommendation

Option #1

9/21/2022

John V. Bednarski *Date*
Chief Engineer/Manager
Engineering Services

9/27/2022

Adel Hagekhalil *Date*
General Manager

Attachment 1 – Allocation of Funds

Attachment 2 – Listing of Subconsultants

Attachment 3 – Location Map

Ref# es12686925

Allocation of Funds for La Verne Warehouse Facilities

	Current Board Action (Oct. 2022)
Labor	
Studies & Investigations	$ 209,000
Final Design	-
Owner Costs (Program mgmt.,	250,000
envir. monitoring)	-
Submittals Review & Record Drwgs.	-
Construction Inspection & Support	-
Metropolitan Force Construction	-
Materials & Supplies	-
Incidental Expenses	-
Professional/Technical Services	
MWA Architects	990,000
Value engineering consultant	60,000
Geotechnical engineering consultant	140,000
Right-of-Way	-
Equipment Use	-
Contracts	-
Remaining Budget	151,000
Total	**$ 1,800,000**

The total amount expended for La Verne Warehouse facilities is approximately $93,000. 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 $28 million to $31 million.

The Metropolitan Water District of Southern California

Subconsultants for Agreement with MWA Architects
La Verne Warehouse Facilities

Subconsultant
Black & Veatch Los Angeles, California
IDS Group Irvine, California
Leland Saylor Associates Los Angeles, California


Distribution System
N
CASTAIC LAKE
Foothill Feeder
VENTURA COUNTY
LOS ANGELES COUNTY
LOS ANGELES COUNTY
SAN BERNARDINO COUNTY
SILVERWOOD LAKE
La Verne Facilities
LIVE OAK RESERVOIR
Upper Feeder
GARVEY RESERVOIR
Middle Feeder
Upper Feeder
SAN BERNARDINO COUNTY
RIVERSIDE COUNTY
Lower Feeder
Colorado River Aqueduct
LAKE PERRIS
LAKE MATHEWS
PALOS VERDES RESERVOIR
PACIFIC OCEAN
DIAMOND VALLEY LAKE
ORANGE COUNTY
RIVERSIDE COUNTY
LAKE SKINNER
RIVERSIDE COUNTY
SAN DIEGO COUNTY