



- Board of Directors  
*Engineering and Operations Committee*

8/19/2014 Board Meeting

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**7-2**

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## **Subject**

Appropriate \$980,000; and authorize: (1) final design of an operations and maintenance service center for the Orange County region; and (2) agreement with La Cañada Design Group for architectural design services (Approp. 15480)

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## **Executive Summary**

This action authorizes final design of a permanent service center to support operations and maintenance (O&M) activities within the Orange County region of Metropolitan's distribution system. The new building will replace an interim service center that was established for temporary use during construction of the Diemer Oxidation Retrofit Program (ORP) facilities.

### **Timing and Urgency**

At present, critical O&M support functions for the 700-square-mile Orange County region of the distribution system are being performed from temporary trailers, shipping containers, and an aging warehouse. A permanent service center will provide local storage of materials and equipment, house staff, and contain shops for minor repairs. A permanent facility will provide a safer and more efficient workplace to support shutdowns, routine maintenance activities, and urgent repairs.

This project has been reviewed with Metropolitan's Capital Investment Plan (CIP) prioritization criteria and is categorized as an Infrastructure Reliability project. Funds for this action are available within Metropolitan's capital expenditure plan for fiscal year 2014/15.

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## **Details**

### **Background**

Metropolitan's conveyance and distribution system contains over 830 miles of pipelines and 5,400 individual structures that require regular maintenance and monitoring. This system traverses a broad service area of 5,200 square miles. To efficiently perform needed O&M work across this system, Metropolitan has established permanent service centers at several locations to support local maintenance activities. Typical activities include refurbishing small to medium-sized valves; welding damaged or corroded piping, vent stacks, and above-grade meter cabinets; and maintaining specialized equipment for dewatering, chlorination, and dechlorination of pipelines. Service centers for the conveyance and distribution system are located at the Colorado River Aqueduct pumping plants, on the grounds of the Joseph Jensen and F. E. Weymouth Water Treatment Plants, and at Diamond Valley Lake. The Orange County region is currently served by a temporary facility located at the Robert B. Diemer Water Treatment Plant.

A permanent service center for the Orange County region had formerly been located at the Diemer plant within the footprint of the ORP facilities. This aging service center was demolished to enable the Diemer plant's south slope stabilization project to proceed. As an interim measure, a temporary service center was established for use during construction of the ozonation facilities. Now that primary construction of the Diemer ORP is complete, this project will provide a permanent service center to address O&M needs within the Orange County region.

The Orange County region contains approximately 143 miles of pipelines, 1,270 appurtenant structures, four pressure control facilities, three power plants, one regulating reservoir, and one pumping plant. The area extends from Corona on the east to Buena Park on the west and from Yorba Linda on the north to Upper Newport Bay on the south.

The temporary service center at the Diemer plant consists of an aging metal warehouse building, two 40-foot-long office trailers, and shipping containers for storage of equipment. This temporary facility is located adjacent to the Upper Feeder along the plant's primary entrance road, at the site of a future pressure control structure. Typical maintenance activities performed at this location include refurbishing, sandblasting, and coating small to medium-sized valves; welding damaged or corroded piping, vent stacks, and above-grade meter cabinets; and maintaining specialized equipment for dewatering, chlorination, and dechlorination of pipelines. The types of repairs that can be performed at this location are limited due to the restricted space and lifting restrictions. Maintenance supplies and dewatering equipment (which includes large pumps, piping, dechlorination trailers, blowers, and portable generators) are stored in shipping containers, which are inefficient for use as a warehouse due to their limited access and inadequate ventilation and lighting. The office space is located in several modular trailers and a converted metal storage container. This space was intended for temporary use only and is unsuitable for long-term occupancy as an office.

As part of a planning effort to determine the most efficient and cost-effective location for a service center to serve the Orange County region, staff surveyed possible sites including the Orange County Reservoir, the former Yorba Linda Test Facility, and other parcels not owned by Metropolitan. The survey concluded that locating a new service center on Metropolitan property at the Diemer plant would be the most economical alternative. As a result, the Diemer plant's site master plan has incorporated a location for the service center on the northwest upper pad, separate from the plant's primary operational areas. Due to the limited space on-site which is not already occupied, this location represents the only viable site for the service center at the Diemer plant. Preliminary design of the new service center at this location was authorized by the Board in September 2012. Preliminary design has been completed, and staff recommends proceeding with final design at this time.

### **Orange County Region Service Center – Final Design Phase (\$980,000)**

The Service Center project has two primary components: (1) site development; and (2) the service center building. The scope of site development includes construction of the following: roads for building access; vehicle parking; perimeter lighting; storm water system; utility extensions including potable water, sewer, natural gas, and electrical service; and hazardous material storage. The scope of the building construction includes: offices and workspace for approximately 24 staff; a welding/fabrication shop with specialized equipment including a drill press, band saw, grinder, welder, parts cleaner, welding hood, and 3-ton bridge crane; a pipe and conduit-bending area; work bench and parts cleaning areas; and tool crib and storage areas for fabrication, welding, and shutdown supplies. The building is planned to be approximately 11,280 square feet in area, which is comparable in size to other Metropolitan service centers.

The construction cost of the service center building is anticipated to range from \$2.2 million to \$2.4 million. The resulting unit cost for the building is between \$190 and \$210 per square foot, which is consistent with costs for similar buildings within the Orange County area. The construction cost for site development work and specialized equipment is anticipated to range from \$2.8 million to \$3.4 million.

Final design phase activities will include detailed architectural and engineering design, preparation of drawings and specifications, receipt of bids, development of a construction cost estimate, permitting, and all other activities in advance of award of a construction contract. Metropolitan staff will perform the site development design activities, procure specialized equipment, obtain permits, conduct value engineering, and integrate the work with other projects at the Diemer plant. Design of the building is recommended to be performed by La Cañada Design Group, as discussed below. Value engineering will be performed by a specialty consultant selected through a competitive process. This work will be performed via an agreement awarded under the General Manager's Administrative Code authority.

This action appropriates \$980,000 and authorizes final design phase activities for the Orange County Region Service Center. Requested funds include \$597,000 for final design; \$95,000 for permitting and value

engineering; \$185,000 for bidding, project management and design review; and \$103,000 for remaining budget. The cost for final design as a percentage of the estimated construction cost is approximately 12 percent. Engineering Services' goal for design of projects with construction cost greater than \$3 million is 9 to 12 percent. For this project, the total estimated cost of construction is anticipated to range from \$5 million to \$5.8 million.

### **Agreement for Architectural Design Services – La Cañada Design Group**

Staff recommends that La Cañada Design Group perform final design of the Service Center building. La Cañada Design Group was prequalified via Request for Qualifications No. 1040 to provide architectural services, and previously performed space programming and preliminary design of the building. La Cañada Design Group was selected to perform final design based on its expertise in the design of similar industrial maintenance facilities with specialized functions. The planned scope of work includes detailed design, preparation of drawings and specifications, development of a construction cost estimate, and technical assistance during the bid period. The estimated cost for these services is \$347,000.

This action authorizes a professional services agreement with La Cañada Design Group in the amount of \$347,000 to perform final design of the Orange County Region Service Center building. For this agreement, Metropolitan has established a Small Business Enterprise (SBE) participation level of 18 percent. La Cañada Design Group has agreed to meet this level of participation.

### **Summary**

This action appropriates \$980,000, authorizes final design of the Orange County Region Service Center, and authorizes an agreement with La Cañada Design Group for architectural design services. This work has been evaluated and recommended by Metropolitan's CIP Evaluation Team, and funds are available within the fiscal year 2014/15 capital expenditure plan. See [Attachment 1](#) for the Financial Statement and [Attachment 2](#) for the Location Map.

This project is included within capital Appropriation No. 15480, the Conveyance and Distribution System Rehabilitation Appropriation - FY 2012/13 Through FY 2017/18. With the present action, the total funding for Appropriation No. 15480 will increase from \$9.91 million to \$10.89 million. The total estimated cost to complete this project, including the amount expended to date, current funds requested, and future construction cost, is \$7.5 million to \$8.5 million.

Staff will return to the Board at a later date for award of the construction contract.

### ***Project Milestone***

April 2016 – Completion of final design of the Orange County Region Service Center

### **Policy**

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Metropolitan Water District Administrative Code Section 5108: Appropriations

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

### **California Environmental Quality Act (CEQA)**

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CEQA determination for Option #1:

The proposed action to authorize a new agreement with La Cañada Design Group is not subject to CEQA because it involves other government fiscal activities which do not involve any commitment to any specific project which may result in a potentially significant physical impact on the environment (Section 15378(b)(4) of the State CEQA Guidelines). In addition, the proposed action to authorize final design consists of basic data collection and resource evaluation activities which do not result in a serious or major disturbance to an environmental resource. This 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 for a Class 6 Categorical Exemption (Section 15306 of the State CEQA Guidelines).

The CEQA determination is: Determine that the proposed action is not subject to CEQA and is categorically exempt from CEQA pursuant to Sections 15306 and 15378(b)(4) of the State CEQA Guidelines.

CEQA determination for Option #2:

None required

## Board Options

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### Option #1

Adopt the CEQA determination that the proposed action is not subject to CEQA and is categorically exempt, and

- a. Appropriate \$980,000;
- b. Authorize final design of an operations and maintenance service center for the Orange County region; and
- c. Authorize an agreement with La Cañada Design Group in an amount not to exceed \$347,000 for architectural design services.

**Fiscal Impact:** \$980,000 in capital funds under Approp. 15480

**Business Analysis:** This option will enhance reliability and efficiency of O&M activities within the Orange County region.

### Option #2

Do not proceed with the service center at this time.

**Fiscal Impact:** None

**Business Analysis:** This option would forgo an opportunity to provide an efficient and safer facility to support O&M and rehabilitation projects in the Orange County region. Staff would return to the Board with an alternate option for permanent warehouse space, offices, and shop facilities.

## Staff Recommendation

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Option #1

  
 \_\_\_\_\_ 7/25/2014  
 Gordon Johnson Date  
 Manager/Chief Engineer  
 Engineering Services

  
 \_\_\_\_\_ 8/5/2014  
 Jeffrey Kightlinger Date  
 General Manager

**Attachment 1 – Financial Statement**

**Attachment 2 – Location Map**

**Financial Statement for Conveyance and Distribution System Rehabilitation Appropriation – FY 2012/13 Through FY 2017/18**

A breakdown of Board Action No. 6 for Appropriation No. 15480 for the Orange County Region Service Center<sup>1</sup> is as follows:

	<b>Previous Total Appropriated Amount (June 2014)</b>	<b>Current Board Action No. 6 (Aug. 2014)</b>	<b>New Total Appropriated Amount</b>
Labor			
Studies & Investigations	\$ 687,000	\$ -	\$ 687,000
Final Design	616,000	250,000	866,000
Owner Costs (Program mgmt., permitting, bidding, envir. documents)	524,779 <sup>2</sup>	240,000	764,779
Submittals Review & Record Drawings	130,000	-	130,000
Construction Inspection & Support	137,000	-	137,000
Metropolitan Force Construction	-	-	-
Materials & Supplies	-	-	-
Incidental Expenses	23,000	-	23,000
Professional/Technical Services	862,000	-	862,000
La Cañada Design Group	-	347,000	347,000
Value engineering firm	-	40,000	40,000
Right of Way	11,000	-	11,000
Equipment Use	-	-	-
Contracts	6,000,000	-	6,000,000
Remaining Budget	919,221 <sup>2</sup>	103,000	1,022,221
<b>Total</b>	<b>\$ 9,910,000</b>	<b>\$ 980,000</b>	<b>\$ 10,890,000</b>

**Funding Request**

<b>Appropriation Name:</b>	Conveyance and Distribution System Rehabilitation Appropriation - FY 2012/13 Through FY 2017/18		
<b>Source of Funds:</b>	Revenue Bonds, Replacement and Refurbishment or General Funds		
<b>Appropriation No.:</b>	15480	<b>Board Action No.:</b>	6
<b>Requested Amount:</b>	\$ 980,000	<b>Budget Page No.:</b>	286
<b>Total Appropriated Amount:</b>	\$ 10,890,000	<b>Total Appropriation Estimate:</b>	\$17,210,700

<sup>1</sup> The total amount expended to date on the Orange County Region Service Center is approximately \$467,617. The total estimated cost to complete this project, including the amount authorized to date, the current funds requested, and future construction cost, is estimated to range from \$7.5 million to \$8.5 million.

<sup>2</sup> Includes reallocation of \$43,779 from Remaining Budget for the Orange County Region Service Center project for building optimization to incorporate value engineering recommendations.

# Distribution System

