



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

8/15/2017 Board Meeting

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**7-2**

**Subject**

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Adopt CEQA determination and award \$280,238 contract to PK Construction for erosion control improvements at Garvey Reservoir (Appropriation No. 15480)

**Executive Summary**

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This action awards a contract for erosion control improvements at two drainage zones along the perimeter of Metropolitan's property at Garvey Reservoir. These improvements will collect and channelize runoff before it leaves the reservoir site. The drainage systems will then connect to new offsite storm drains that were recently constructed by the city of Monterey Park.

**Timing and Urgency**

During significant storm events, surface runoff from Garvey Reservoir collects and flows downhill through piping systems and natural drainage courses. These flows exit the site at 11 drainage zones, and then traverse residential properties before reaching city streets or storm drains. Many of the drainage systems that collect runoff from the reservoir site have deteriorated over time, resulting in longstanding drainage and erosion issues along the west and south perimeters of the reservoir.

Staff has initiated negotiations with adjacent property owners and the city of Monterey Park to resolve the drainage and erosion issues. For two of the drainage zones, agreements have been reached with the city of Monterey Park and with private residents that allow coordinated improvements, both onsite and offsite, to proceed. The city of Monterey Park has recently completed the offsite improvements, and staff recommends proceeding with similar improvements within the reservoir site that will discharge into the offsite systems. Staff will continue working with the city of Monterey Park and with adjacent property owners to reach agreements and develop site-specific improvement plans for the remaining drainage zones.

This project has been reviewed with Metropolitan's Capital Investment Plan (CIP) prioritization criteria and is included in the Distribution System Reliability Program. No funds are required to be appropriated for this work, as sufficient funds were previously appropriated and are available within Metropolitan's capital expenditure plan for fiscal year 2017/18.

**Details**

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**Background**

Garvey Reservoir was constructed in 1954 as a component of the Middle Feeder system. The reservoir receives treated water from the F. E. Weymouth Water Treatment Plant and has a maximum storage volume of 1,600 acre-feet. Garvey Reservoir provides critical hydraulic flexibility by stabilizing flowrates within the Middle Feeder and maintaining deliveries to member agency service connections when pipelines are shut down for maintenance.

Garvey Reservoir is located on the top of a hill and has earth-filled embankments that reach 150 feet in height along the north side and 130 feet along the south and west sides. When the reservoir was constructed, storm runoff from the site flowed through open lands and eventually into the city of Monterey Park's streets and storm

drain system. After the reservoir was completed, private residences were built below the facility's western and southern boundaries. There are 13 storm drain systems and 11 drainage zones along those perimeters. Storm runoff from the northern and eastern portions of the site flows into natural drainage courses and then into storm drains.

Detailed inspections of the existing storm drain systems extending from the reservoir site through the adjacent residential areas have identified numerous instances of undersized piping, clogged drains, or property modifications that have altered or removed the original drainage systems. In addition, some of the reservoir's perimeter drainage features, such as surface swales and berms, have eroded after 60 years of service.

Prior to and during the 2015/16 storm season, Metropolitan cleaned out drain pipes and constructed temporary erosion control measures onsite at Garvey Reservoir. The city of Monterey Park constructed similar temporary improvements on private and city property during the same period.

In October 2016, Metropolitan's Board authorized initiation of a comprehensive long-term solution to the drainage issues at Garvey Reservoir. This coordinated plan includes the following components:

- **Offsite Improvements** – Monterey Park will construct permanent improvements on property owned by the city and impacted residential properties. Metropolitan will design the offsite improvements to current minimum design standards, at Metropolitan cost. Monterey Park will prepare bid packages, award contracts, and manage construction of all improvements on private property. Construction costs will be split equally between Metropolitan and Monterey Park. An agreement with the city of Monterey Park and affected property owners will be established prior to construction for each zone, in order to resolve issues such as cost sharing, granting of easements, and ownership of residential drainage outlet improvements.
- **Onsite Improvements** – Metropolitan will design and construct permanent facilities on Metropolitan property, and will make connections to offsite improvements.

In October 2016, the Board also delegated authority to the General Manager to execute agreements with the city of Monterey Park and with private property owners for construction of offsite improvements for eight drainage zones, and appropriated funds (\$1.5 million) for construction of onsite drainage improvements for three high-priority zones.

In February 2017, Monterey Park completed construction of permanent improvements to two of the 11 offsite drainage zones. These two zones are now ready for connection to Metropolitan's onsite improvements. Final design of the onsite improvements for the two zones has been completed, and staff recommends moving forward with construction at this time, prior to the upcoming 2017/18 rainy season.

Staff will continue working with the city of Monterey Park and with adjacent property owners to reach agreements and develop site-specific improvement plans for the remaining offsite drainage zones. As Monterey Park moves forward with construction of the offsite improvements, staff will return to the Board for action, as needed (i.e. to award contracts exceeding \$250,000 for adjacent onsite improvements).

### **Erosion Control Improvements at Garvey Reservoir (No Funds Required)**

The scope of the contract includes installation of storm drain piping and concrete channels, stem walls, and erosion control measures at drainage zones 1 and 5. The contract also includes connection to new offsite storm drains that were constructed by the city of Monterey Park.

Specifications No. 1894 for erosion control improvements at Garvey Reservoir was advertised for bids on May 16, 2017. As shown in [Attachment 1](#), five bids were received and opened on June 29, 2017. The low bid from PK Construction in the amount of \$280,238 complies with requirements of the specifications. The four higher bids ranged from \$296,500 to \$740,000, while the engineer's estimate was \$350,000. For this contract, Metropolitan established a Small Business Enterprise (SBE) participation level of 25 percent. PK Construction is an SBE firm and thus achieves 100 percent participation. PK Construction does not plan to use subcontractors for this contract.

Metropolitan staff will perform inspection of the construction. For this project, the anticipated cost of inspection is approximately 15 percent of the total construction cost. Engineering Services' goal for inspection of projects with construction less than \$3 million is 9 to 15 percent.

This action awards a \$280,238 contract to PK Construction for initial erosion control improvements at Garvey Reservoir. The total estimated cost to complete the drainage improvements, including the amount appropriated to date and future construction costs, is anticipated to range from \$4 million to \$4.6 million.

This project has been evaluated and recommended by Metropolitan's CIP Evaluation Team, and funds are available within the fiscal year 2017/18 capital expenditure plan. See [Attachment 1](#) for the Abstract of Bids and [Attachment 2](#) for the Location Map.

This work is included within capital Appropriation No. 15480, the Conveyance and Distribution System Rehabilitation Appropriation – FY 2012/13 Through 2017/18, which was initiated in fiscal year 2012/13. No funds are required to be appropriated for this work, as sufficient funds were previously appropriated and are available within Appropriation No. 15480.

### ***Project Milestone***

November 2017 – Completion of erosion control improvements for two drainage zones at Garvey Reservoir

### **Policy**

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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 project was previously determined to be categorically exempt under the provisions of CEQA (Class 1, Section 15301; Class 2, Section 15302; Class 3, Section 15303; Class 4, Section 15304; and Class 11, Section 15311 of the State CEQA Guidelines) on October 11, 2016. A Notice of Exemption (NOE) was filed on the project at that time and the statute of limitations has ended. With the current action, there are no substantial changes proposed to the project since the original NOE was filed. Hence, the previous environmental documentation in conjunction with the project fully complies with CEQA and the State CEQA Guidelines. Accordingly, no further CEQA documentation is necessary for the Board to act with regard to the proposed action.

The CEQA determination is: Determine that the proposed action has been previously addressed in the 2016 NOE (Class 1, Section 15301; Class 2, Section 15302; Class 3, Section 15303; Class 4, Section 15304; and Class 11, Section 15311 of the State CEQA Guidelines), and that no further environmental analysis or documentation is required.

#### **CEQA determination for Option #2:**

None required

### **Board Options**

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#### **Option #1**

Adopt the CEQA determination that the proposed action has been previously addressed in the 2016 Notice of Exemption, and that no further environmental analysis or documentation is required, and

Award \$280,238 contract to PK Construction for erosion control improvements at Garvey Reservoir.

**Fiscal Impact:** None. Funds for this work were previously appropriated.

**Business Analysis:** These improvements will reduce the risk of storm runoff exiting Metropolitan property in an uncontrolled manner.

**Option #2**

Do not proceed with the improvements at this time.

**Fiscal Impact:** None

**Business Analysis:** Under this option, Metropolitan would defer construction of the improvements until additional zones can be addressed at a single time. This option may increase overall costs and would forego an opportunity to reduce the risk of damage and claims at two drainage zones from uncontrolled storm flows exiting Metropolitan property.

**Staff Recommendation**

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Option #1

  
\_\_\_\_\_  
Gordon Johnson  
Manager/Chief Engineer  
Engineering Services  
7/24/2017  
Date

  
\_\_\_\_\_  
Jeffrey Kightlinger  
General Manager  
7/26/2017  
Date

- [Attachment 1 – Abstract of Bids](#)
- [Attachment 2 – Location Map](#)

**The Metropolitan Water District of Southern California**

**Abstract of Bids Received on June 29, 2017 at 2:00 P.M.**

**Specifications No. 1894**

**Garvey Reservoir Drainage and Erosion Improvements – Areas 1 and 5**

The work consists of installation of a permanent drainage system and erosion control features including installation of drainage piping, concrete ditches, stem walls, flow detention and dissipation structures; grading; surface improvements; fence removal and installation; and hydroseeding.

Engineer’s Estimate: \$350,000

<b>Bidder and Location</b>	<b>Total</b>	<b>SBE \$</b>	<b>SBE %</b>	<b>Met SBE<sup>1</sup></b>
<b>PK Construction Altadena, CA</b>	<b>\$280,238</b>	<b>\$280,238</b>	<b>100%</b>	<b>Yes</b>
Access Pacific Pasadena, CA	\$296,500	-	-	-
Environmental Construction, Inc. Woodland Hills, CA	\$298,500	-	-	-
Kaveh Engineering, Inc. Yorba Linda, CA	\$344,670	-	-	-
Bosco Constructors, Inc. Chatsworth, CA	\$740,000	-	-	-

<sup>1</sup> SBE (Small Business Enterprise) participation level was established at 25 percent for this contract.

# Distribution System

