



- Board of Directors
Engineering and Operations Committee

3/12/2013 Board Meeting

7-5

Subject

Award \$246,051 procurement contract to MMC, Inc. for base isolators for the Upper Feeder's Santa Ana River Bridge (Approp. 15441)

Executive Summary

This action awards a procurement contract for new structural base isolators for the Santa Ana River Bridge. This bridge supports an aboveground segment of the Upper Feeder as it crosses the Santa Ana River, upstream of the F. E. Weymouth Water Treatment Plant. In addition, this action adopts environmental documentation for the retrofit work.

Timing and Urgency

The Upper Feeder crossing of the Santa Ana River is unique for Metropolitan in that the pipeline is supported by a 1,010-foot-long steel truss bridge, instead of crossing beneath the streambed via a siphon. The bridge was structurally retrofitted in the 1980s by adding a series of base isolators between the bridge deck and the concrete support piers. The purpose of base isolators is to minimize lateral movement of the bridge superstructure caused by seismic shaking of the piers. A total of 28 base isolators were installed on the 12 concrete piers that support the bridge. Typically, base isolators have a service life of 25-30 years. The existing units at the Santa Ana River Bridge have exceeded the expected service life and begun to deteriorate, and no longer provide the intended level of protection. Further, a recent detailed structural evaluation of the bridge using up-to-date seismic criteria has identified that the existing base isolation system is not capable of accommodating the displacement from a major earthquake. Staff recommends moving forward to award a procurement contract for the new base isolators at this time to allow their installation by fall 2014. Procurement of the base isolators requires substantial lead-time due to the long duration for manufacturing and code-required testing.

This project has been reviewed with Metropolitan's Capital Investment Plan (CIP) prioritization criteria, and is categorized as an Infrastructure Upgrade project. No funds are required for this action, as sufficient funds were previously appropriated.

Details

Background

The Upper Feeder was constructed in 1936 as part of Metropolitan's original water delivery system. The 116-inch-diameter welded-steel pipeline extends approximately 60 miles from Lake Mathews to the Eagle Rock Control Facility in the city of Los Angeles. The feeder conveys untreated water from Lake Mathews to the Weymouth plant, and then delivers treated water to the Central Pool portion of the distribution system.

The Upper Feeder crosses the Santa Ana River with a 1,010-foot-long steel truss bridge. The pipeline is supported within the bridge superstructure, which consists of an 18-foot-wide steel deck with two 22.5-foot-high steel truss sides. The bridge superstructure is supported by 12 concrete piers which vary in height from 20 to 43 feet. The concrete piers sit on top of unreinforced concrete caissons which are embedded into bedrock at depths of 4 to 40 feet. The bridge was structurally retrofitted in the 1980s by adding base isolators between the

bridge deck and the concrete piers. The purpose of base isolators is to minimize lateral movement of the bridge superstructure caused by seismic shaking of the piers. A total of 28 base isolators were installed, including four isolators on the middle two piers and two isolators on each of the remaining ten piers. Typically, base isolators have a service life of 25-30 years. The existing units at the Santa Ana River Bridge have exceeded the expected service life and begun to deteriorate, and no longer provide the intended level of protection.

Several active faults are located within the vicinity of the bridge, including the San Jacinto, Elsinore, Chino-Central and Whittier faults, which are capable of generating earthquakes with a magnitude ranging from 6.7 to 7.5. A recent detailed structural evaluation has identified that the existing base isolation system is not capable of accommodating the displacement resulting from a major earthquake.

In March 2012, Metropolitan's Board authorized final design for seismic retrofit of the Santa Ana River Bridge. Design of the new base isolators has been completed, and staff recommends proceeding with award of a procurement contract at this time due to the long lead time for manufacturing and code-required testing of the units. Fabrication of the isolators will require approximately eight months. Proceeding with their procurement at this time will allow installation to occur in fall 2014. The subject contract will furnish thirty-six base isolators including twenty-eight for replacement, six for prototype testing, and two spare units.

Access onto the river bed is required for the retrofit work to proceed on the bridge deck and piers. Environmental studies were conducted to evaluate potential impacts from the planned work, and a Mitigated Negative Declaration (MND) was prepared. Following board adoption of the MND under this action, staff will obtain regulatory permits from the California Department of Fish and Game, U. S. Fish and Wildlife Service, and U. S. Army Corps of Engineers prior to construction.

Santa Ana River Bridge Base Isolators – Procurement (No Funds Required)

Specifications No. 1732 to furnish 36 base isolators for the Santa Ana River Bridge Retrofit project was advertised for bids on December 19, 2012. As shown in [Attachment 2](#), one bid was received and opened on January 29, 2013. The bid from MMC, Inc., in the amount of \$246,051, complies with the requirements of the specifications.

Staff had anticipated that two bids would be received for this procurement as there are two domestic manufacturers of these seismic isolation devices. Staff investigated the reason why the second manufacturer did not submit a bid, and found that the second firm made a business decision to focus on base isolation of the more typical types of installations involving office building retrofits. Due to the relatively small and specialized nature of this project, it is unlikely that another bid could be obtained from a qualified nondomestic manufacturer. As a result, staff recommends moving forward with award of the contract to MMC, Inc. Due to the limited number of potential bidders, no Small Business Enterprise incentive credit was identified for this procurement contract.

This action awards a \$246,051 procurement contract to MMC, Inc. to furnish base isolators for the Santa Ana River Bridge. The contract amount includes all sales and use taxes imposed by the state of California. No funds are requested in this action, as sufficient funds were previously appropriated under the Conveyance and Distribution System Rehabilitation Program – FY 2006/07 through FY 2011/12 (Approp. 15441).

Staff will return to the Board for award of a construction contract for structural retrofit of the bridge, including installation of the base isolators. This project has been evaluated and recommended by Metropolitan's CIP Evaluation Team, and funds are available within the fiscal year 2012/13 capital expenditure plan. See [Attachment 1](#) for the Abstract of Bids, [Attachment 2](#) for the Location Map, [Attachment 3](#) for the Mitigated Negative Declaration, [Attachment 4](#) for the Comments from Public Review, and [Attachment 5](#) for the Mitigation Monitoring and Reporting Program. (Attachments 3, 4, and 5 are available for review in the Board Executive Secretary's Office.)

Project Milestones

January 2014 – Delivery of the base isolators

December 2014 – Completion of the seismic retrofit

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

California Environmental Quality Act (CEQA)

CEQA determination for Option #1:

To comply with CEQA and the State CEQA Guidelines, Metropolitan as the Lead Agency prepared a MND on the proposed project. The MND was distributed for a 30-day public review period beginning on September 21, 2012 and ending on October 22, 2012. The MND includes the Initial Study and Environmental Checklist form (see **Attachment 3**). **Attachment 4** contains comment letters received during the public review period along with responses to those comments. As stated in the State CEQA Guidelines (Section 15074), the Board is required to review and consider the MND, the Initial Study, and comments received during the public review period prior to the adoption of the MND. Adoption of the MND is dependent on the finding by the Board that, based on the whole record before it, there is no substantial evidence that, with the mitigation measures required by the MND, the proposed project will have a significant impact on the environment, and that the MND reflects the Lead Agency's independent judgment and analysis. The Mitigation Monitoring and Reporting Program (MMRP) in **Attachment 5** is required under CEQA (Section 21081.6 of the California Public Resources Code) and must also be adopted by the Board prior to project approval. All of the above documentation, including other materials that constitute the record of proceedings upon which the Lead Agency decision is based, has been and will be on file in the Board Executive Secretary's Office at Metropolitan's headquarters located at 700 North Alameda Street, Los Angeles, CA 90012.

The CEQA determination is: Review and consider the information in the MND, Initial Study, and comments received during the public review period; find that based on the whole record before the Board that there is no substantial evidence that the proposed project will have a significant impact on the environment, and that the MND reflects the Lead Agency's independent judgment and analysis; adopt the MND for the proposed project; and adopt the MMRP.

CEQA determination for Option #2:

None required

Board Options

Option #1

Adopt the CEQA determination and award \$246,051 contract to MMC, Inc. to furnish base isolators for the Santa Ana River Bridge.

Fiscal Impact: \$246,051 of previously appropriated capital funds under Approp. 15441

Business Analysis: This project will enhance delivery reliability to member agencies, and reduce the risk of costly emergency repairs.

Option #2


Do not award the contract and readvertise in an attempt to receive more favorable bids.

Fiscal Impact: None

Business Analysis: This option may or may not result in more favorable bids, and would delay the retrofit work for at least one year until completion of the next bird nesting season.

Staff Recommendation

Option #1



Gordon Johnson
Manager/Chief Engineer,
Engineering Services

2/20/2013

Date



Jeffrey Kightlinger
General Manager

2/28/2013

Date

Attachment 1 – Abstract of Bids

Attachment 2 – Location Map

Attachment 3 – Mitigated Negative Declaration

Attachment 4 – Comments from Public Review

Attachment 5 – Mitigation Monitoring and Reporting Program

Ref# es12622486

The Metropolitan Water District of Southern California
Abstract of Bids Received on January 29, 2013 at 2:00 P.M.
Specifications No. 1732
Furnishing Base Isolators for the Upper Feeder Santa Ana River Crossing

The work consists of designing, fabricating, testing, and furnishing 36 seismic isolation bearings for the Upper Feeder Santa Ana River Crossing.

Engineer's estimate: \$215,000

Bidder and Location	Total¹
MMC, Inc., La Palma, CA	\$ 246,051

¹ Due to the limited number of potential bidders, no Small Business Enterprise incentive credit was identified for this procurement contract.

Distribution System

