



- Board of Directors
Engineering and Operations Committee

3/12/2013 Board Meeting

7-7

Subject

Appropriate \$270,000; and authorize final design and procurement to rehabilitate Service Connection G-01 on the Santa Monica Feeder (Approp. 15441)

Executive Summary

This action authorizes final design to rehabilitate Service Connection G-01 (Glendale-01) on the Santa Monica Feeder. This project will replace a leaking venturi meter and rehabilitate the meter structure and piping. These improvements will enhance reliability of the service connection.

Timing and Urgency

Rehabilitation of Service Connection G-01 is needed to repair corrosion damage to the piping and equipment items, which have deteriorated gradually after 72 years of operation. Since Metropolitan owns and maintains the service connection, Metropolitan is responsible for the cost of the planned repairs pursuant to Administrative Code Section 4700. Given the importance of Service Connection G-01 in delivering treated water to the city of Glendale, staff recommends moving forward with final design of the rehabilitation work at this time.

This project has been reviewed with Metropolitan's Capital Investment Plan (CIP) prioritization criteria, and is categorized as an Infrastructure Improvement project. Funds for this action are available within Metropolitan's capital expenditure plan for fiscal year 2012/13.

Details

Background

The Santa Monica Feeder was constructed in 1941 as part of Metropolitan's original distribution system. The feeder is approximately 25 miles long, with a diameter ranging from 28 to 120 inches. The feeder has various reaches comprised of cast iron, welded steel, and reinforced concrete pipe. The Santa Monica Feeder delivers treated water from the Eagle Rock Control Facility in the city of Los Angeles to four member agency service connections before reaching its terminus in the city of Santa Monica.

Service Connection G-01 consists of a 30-inch venturi meter located partially within a concrete vault structure. Gradual corrosion over the course of 72 years of operation has led to deterioration of the venturi meter and adjacent piping. In 2003, six small leaks developed on the venturi meter. Since that time, staff has attempted to repair the meter using localized welding and fiberglass wraps with limited success, due to the meter's age and continued deterioration. The leakage has progressively increased. Failure of the service connection could negatively impact deliveries to the city of Glendale and potentially damage surrounding properties.

In February 2012, Metropolitan's Board authorized preliminary design to rehabilitate the facility. Preliminary design is complete and staff recommends proceeding with final design at this time. Planned rehabilitation work includes partial demolition of the existing vault to remove the venturi meter; enlargement of the vault to fit the new meter and associated piping; installation of a new magnetic flow meter; upgrade of the electrical system; and remediation of hazardous materials. Due to the vault's location within a public street, shoring and traffic control must be addressed. Additionally, access to the city of Glendale's maintenance and operation building driveway

must be maintained. Procurement of the magnetic flow meter requires substantial lead time for fabrication and delivery. Proceeding with meter procurement at this time will allow the installation to occur during a scheduled February 2014 shutdown

Service Connection G-01 Rehabilitation – Final Design Phase (\$270,000)

Planned final design activities include procurement of the magnetic flow meter via competitive bidding; preparation of drawings and specifications for the construction contract; receipt of bids; local agency permitting; development of a construction cost estimate; and all other activities in advance of award of the construction contract. All final design and procurement activities will be performed by Metropolitan staff.

This action appropriates \$270,000 and authorizes final design phase activities for rehabilitation of Service Connection G-01. Requested funds include: \$153,000 for final design; \$26,000 for procurement of the magnetic flow meter; \$17,000 for potholing to identify utility interferences; \$48,000 for permitting and project management; and \$26,000 for remaining budget. The magnetic meter procurement contract is planned to be awarded under the General Manager's Administrative Code authority to award contracts of \$250,000 or less. For this project, the final design cost as a percentage of the estimated construction cost is approximately 13.9 percent. Engineering Services' goal for design of projects with construction cost less than \$3 million is 9 to 15 percent. The construction cost for this project is anticipated to range from \$1.1 million to \$1.4 million. Staff will return to the Board at a later date for award of the construction contract.

This project has been evaluated and recommended by Metropolitan's CIP Evaluation Team, and funds have been included in the fiscal year 2012/13 capital budget. This work is included within capital Appropriation No. 15441, the Conveyance and Distribution System Rehabilitation Program - Phase 2, which was initiated in fiscal year 2006/07. Appropriation No. 15441 also includes projects such as PCCP repairs of the Calabasas Feeder, Lake Skinner Outlet Conduit, Rialto Pipeline, San Diego Pipeline No. 5, and Sepulveda Feeder. With the current action, the total funding for Appropriation No. 15441 will increase from \$43,884,000 to \$44,154,000. See [Attachment 1](#) for the Financial Statement and [Attachment 2](#) for the Location Map.

Project Milestone

November 2013 – Completion of final design of the Service Connection G-01 Rehabilitation Project

Policy

Metropolitan Water District Administrative Code Section 5108: Appropriations
Metropolitan Water District Administrative Code Section 4700: General Authorization

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 overall activities involve the funding, studying, carrying out final design, and preparing and processing environmental documentation for the proposed action. These activities consist of basic data collection and resource evaluation activities that 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. In addition, the activities may involve a check for performance of an operation, or quality, health, or safety of a project. Accordingly, the proposed action qualifies for both Class 6 and Class 9 Categorical Exemptions (Sections 15306 and 15309 of the State CEQA Guidelines).

The CEQA determination is:

Determine that pursuant to CEQA, the proposed action qualifies under two Categorical Exemptions (Class 6, Section 15306; and Class 9, Section 15309 of the State CEQA Guidelines).

CEQA determination for Option #2:

None required

Board Options

Option #1

Adopt the CEQA determination and

- a. Appropriate \$270,000; and
- b. Authorize final design to rehabilitate Service Connection G-01 on the Santa Monica Feeder.

Fiscal Impact: \$270,000 in capital funds under Approp. 15441

Business Analysis: This project will protect Metropolitan’s assets, enhance service reliability to a member agency, and reduce the risk of costly emergency repairs.

Option #2


Do not authorize final design at this time.

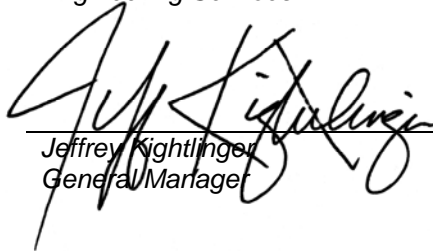
Fiscal Impact: None

Business Analysis: Under this option, staff will continue to monitor the condition of Service Connection G-01. This option would forego an opportunity to enhance reliability and extend the connection’s service life, and could lead to higher repair costs and unplanned shutdowns.

Staff Recommendation

Option #1


 _____ 2/20/2013
 Gordon Johnson Date
 Manager/Chief Engineer,
 Engineering Services


 _____ 2/26/2013
 Jeffrey Nightlinger Date
 General Manager

[Attachment 1 – Financial Statement](#)

[Attachment 2 – Location Map](#)

Financial Statement for Conveyance and Distribution System Rehabilitation Program – FY 2006/07 Through FY 2011/12

A breakdown of Board Action No. 52 for Appropriation No. 15441 for the Service Connection G-01 Rehabilitation project¹ is as follows:

	Previous Total Appropriated Amount (Feb. 2013)	Current Board Action No. 52 (Mar. 2013)	New Total Appropriated Amount
Labor			
Studies & Investigations	\$ 2,716,000	\$ -	\$ 2,716,000
Final Design	3,953,293	153,000	4,106,293
Owner Costs (Program mgmt., bidding, permitting)	5,258,400	48,000	5,306,400
Submittals Review & Record Drwgs	296,670	-	296,670
Construction Inspection & Support	2,012,550	-	2,012,550
Metropolitan Force Construction	8,906,710	17,000	8,923,710
Materials & Supplies (Magnetic meter)	2,299,400	26,000	2,325,400
Incidental Expenses	885,900	-	885,900
Professional/Technical Services	2,551,000	-	2,551,000
Right-of-Way	550,000	-	550,000
Equipment Use	325,200	-	325,200
Contracts	11,981,524	-	11,981,524
Remaining Budget	2,147,353	26,000	2,173,353
Total	\$ 43,884,000	\$ 270,000	\$ 44,154,000

Funding Request

Program Name:	Conveyance and Distribution System Rehabilitation Program – FY 2006/07 Through FY 2011/12		
Source of Funds:	Revenue Bonds, Replacement and Refurbishment or General Funds		
Appropriation No.:	15441	Board Action No.:	52
Requested Amount:	\$ 270,000	Capital Program No.:	15441-I
Total Appropriated Amount:	\$ 44,154,000	Capital Program Page No.:	284
Total Program Estimate:	\$ 114,849,000	Program Goal:	I-Infrastructure Reliability

¹ The total amount expended to date on the Service Connection G-01 Rehabilitation project is approximately \$152,000.

Distribution System

