



- Board of Directors
Engineering and Operations Committee

10/14/2014 Board Meeting

8-1

Subject

Appropriate \$3.81 million; and award \$2,565,063 contract to Hobbs-Bannerman, Inc. for improvements to the industrial wastewater handling system at the Henry J. Mills Water Treatment Plant (Approp. 15452)

Executive Summary

This action awards a construction contract for improvements to the industrial wastewater transfer, holding, and discharge system at the Henry J. Mills Water Treatment Plant.

Timing and Urgency

At the Mills plant, industrial wastewater generated from maintenance activities, drains, equipment operation, and plant instrumentation, is held in a temporary storage system until it can be tested and assessed for safe disposal. If the wastewater is measured to be within a specific pH range, it may be discharged into the plant's solids lagoons and recycled. Otherwise, it must be removed by a disposal vendor as hazardous waste. A permanent industrial wastewater system is needed to handle industrial wastewater and chemicals more efficiently and reduce the risk of accidental release of these materials.

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

Details

Background

The Mills plant was placed into service in 1978 with an initial capacity of 75 million gallons per day (mgd). The plant is currently rated to treat 220 mgd. The Mills plant exclusively treats water from the East Branch of the State Water Project and is located within the city of Riverside.

As Metropolitan's smallest water treatment facility, the Mills plant was originally constructed without a centralized wastewater collection system. Industrial wastewater was originally handled separately at each point of origin. Over time, as the number of facilities on-site increased, the need for centralized industrial wastewater handling was identified and an overall plan was developed and incorporated into the CIP. As an interim measure, a temporary system was installed that remains in service today, but which has begun to deteriorate. Staff recommends moving forward with the permanent industrial wastewater handling system at this time.

At the Mills plant, industrial wastewater is generated from a number of sources and operational activities which include cleaning and maintenance, equipment lubrication, drains, and plant-wide water quality instrumentation. This wastewater is currently directed to a temporary storage system where it is held until its level of acidity is verified. The form of disposal is typically dependent on the wastewater's pH. If the pH is within the range of 6.5 to 8.5, the wastewater can be discharged into the plant's lagoons. If the pH is outside of this range, it must be removed by a vendor and transported to a disposal site as hazardous waste.

The current waste handling system requires a number of improvements to provide stable long-term service and minimize the risk of accidental discharge. The temporary storage system consists of two unlined 20,000-gallon steel tanks with temporary spill containment measures. These tanks were not designed for the pH variability of the plant's industrial wastewater, and are corroding. In addition, the tanks are supported by a temporary wooden foundation. During an earthquake, the system may move and the tanks and piping may sustain damage. The secondary containment system consists of heavy plastic sheeting over sand, which makes removal and disposal of any captured leakage difficult. The wooden support beams and the plastic sheeting are subject to weathering and will deteriorate over time.

To provide a permanent disposal option for a majority of the industrial wastewater, staff has obtained a permit from the city of Riverside to discharge wastewater into the sanitary sewer system, provided it does not exceed specific contaminant levels and its pH is between 5 and 11.5. Currently, there is no sewer connection on the north side of the Mills plant where the containment tanks are located.

The planned improvements will permit most of the Mills plant's industrial wastewater to be discharged into the local sanitary sewer system. The upgrades will allow safer and more efficient handling of the wastewater and will reduce the risk of an accidental release. The system will include three new 20,000-gallon epoxy-lined steel storage tanks; a chemical-resistant wastewater collection system; secondary containment; a tank mixing and discharge system; a pH adjustment feed system; emergency eyewash stations; instrumentation; and a connection to the city of Riverside municipal sewer system near the northwest corner of the plant.

In September 2010, Metropolitan's Board authorized final design of the wastewater handling improvements. Final design has been completed, and staff recommends proceeding with construction at this time.

Industrial Wastewater Handling System Improvements – Construction (\$3.81 million)

Specifications No. 1707A for the Mills Industrial Wastewater Handling and Discharge project was advertised for bids on July 31, 2014. As shown in [Attachment 2](#), eight bids were received on September 9, 2014. The low bid from Hobbs-Bannerman, Inc. in the amount of \$2,565,063 complies with the requirements of the specifications. The seven higher bids ranged from approximately \$2.69 million to \$4.38 million, while the engineer's estimate was \$3.23 million. For this contract, Metropolitan established a Small Business Enterprise (SBE) participation level of at least 20 percent of the total bid amount. Hobbs-Bannerman, Inc. has committed to meet this level of participation.

This action appropriates \$3.81 million and awards a \$2,565,063 contract to Hobbs-Bannerman, Inc. to construct improvements to the Mills industrial wastewater handling system. In addition to the amount of the contract, the requested funds include \$150,000 for construction by Metropolitan forces, which includes modification of chemical tank farm sump drains, programming of the plant's Supervisory Control and Data Acquisition (SCADA) system, changeover of industrial wastewater lines, and start-up and testing of the new system. The requested funds also include \$420,000 for construction inspection; \$176,000 for submittals review and record drawing preparation by Metropolitan staff; \$140,000 for permitting, contract administration, and project management; and \$358,937 for remaining budget. Metropolitan staff will perform inspection of the construction.

For this project, the anticipated cost of inspection and support is approximately 15 percent of the total construction cost. Engineering Services' goal for inspection of projects with construction cost less than \$3 million is 9 to 15 percent. For this project, the total cost of construction, which includes the construction contract and Metropolitan force activities, is \$2.72 million.

The total estimated cost to complete the new wastewater handling system, including the amount appropriated to date and current funds requested, is \$5.08 million.

This project 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, [Attachment 2](#) for the Abstract of Bids, and [Attachment 3](#) for the Location Map.

This project is included within capital Appropriation No. 15452, the Mills Improvements Appropriation – FY 2006/07 Through FY 2011/12, which was initiated in year fiscal year 2006/07. With the present action, the total funding for Appropriation No. 15452 will increase from \$10,209,000 to \$14,019,000.

Project Milestone

April 2016 – Completion of construction

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:

The proposed Industrial Wastewater Handling Facilities Improvements and Industrial Wastewater Sewer Discharge System were previously determined by the Board to be categorically exempt under Classes 1, 2, 3, 4, and 6 (Sections 15301, 15302, 15303, 15304, and 15306 of the State CEQA Guidelines) on September 14, 2010. Both projects are now being considered for award of construction as the Industrial Wastewater System Improvements. With the current action, there is no substantial change proposed since the original projects were first approved in 2010. 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 regards to the current proposed action.

The CEQA determination is: Determine that the proposed action has been previously addressed in the 2010 categorical exemptions (Classes 1, 2, 3, 4, and 6; Sections 15301, 15302, 15303, 15304, and 15306 of the State CEQA Guidelines) and that no further environmental analysis or documentation is required.

CEQA determination for Option #2:

None required

Board Options

Option #1

Adopt the CEQA determination that the proposed action has been previously addressed in the 2010 categorical exemptions, and

- a. Appropriate \$3.81 million; and
- b. Award \$2,565,063 contract to Hobbs-Bannerman, Inc. for improvements to the Mills industrial wastewater handling system.

Fiscal Impact: \$3.81 million in capital funds under Approp. 15452

Business Analysis: This option will reduce the risk of unintentional discharge of hazardous wastewater, and will provide a more reliable and flexible wastewater handling and discharge system.

Option #2

Do not proceed with the project at this time.

Fiscal Impact: None

Business Analysis: This option would forgo an opportunity to improve the existing industrial wastewater handling facilities and to reduce the risk of unintentional discharge of industrial wastewater.

Staff Recommendation

Option #1


Gordon Johnson
Manager/Chief Engineer
Engineering Services

9/30/2014
Date


Jeffrey Kightlinger
General Manager

10/1/2014
Date

Attachment 1 – Financial Statement

Attachment 2 – Abstract of Bids

Attachment 3 – Location Map

Ref# es12623323

Financial Statement for Mills Improvements Appropriation – FY 2006/07 Through FY 2011/12

A breakdown of Board Action No. 15 for Appropriation No. 15452 for improvements to the Mills industrial wastewater handling system¹ is as follows:

	Previous Total Appropriated Amount (Apr. 2013)	Current Board Action No. 15 (Oct. 2014)	New Total Appropriated Amount
Labor			
Studies & Investigations	\$ 1,447,600	\$ -	\$ 1,447,600
Final Design	1,572,200	-	1,572,200
Owner Costs (Program mgmt., permitting)	1,498,935	130,100	1,629,035
Submittals Review & Record Drwgs	125,400	174,000	299,400
Construction Inspection & Support	286,000	368,000	654,000
Metropolitan Force Construction	1,255,329	150,000	1,405,329
Materials & Supplies	915,592	-	915,592
Incidental Expenses	128,700	54,000	182,700
Professional/Technical Services	871,500	9,900	881,400
Equipment Use	62,000	-	62,000
Contracts	1,172,758	2,565,063	3,737,821
Remaining Budget	872,986 ²	358,937	1,231,923
Total	\$ 10,209,000	\$ 3,810,000	\$ 14,019,000

Funding Request

Appropriation Name:	Mills Improvements Appropriation – FY 2006/07 Through FY 2011/12		
Source of Funds:	Revenue Bonds, Replacement and Refurbishment or General Funds		
Appropriation No.:	15452	Board Action No.:	15
Requested Amount:	\$ 3,810,000	Budget Page No.:	304
Total Appropriated Amount:	\$ 14,019,000	Total Appropriation Estimate:	\$26,000,000

¹ The total amount expended to date on the Mills Industrial Wastewater Handling Improvements is approximately \$1.27 million. The total estimated cost to complete this project, including the amount expended to date and the current funds requested, is \$5.08 million.

² Includes previous reallocation of \$733,636 to Remaining Budget for work completed below budget from two completed projects; and reallocation from Remaining Budget to the following projects: (1) \$475,000 to Mills Industrial Wastewater Handling System Improvements to obtain industrial wastewater discharge permits and safety compliance with local agencies rules; and for design modifications to accommodate increased ground water elevations, increased local automation of systems, separation of potable industrial waste water lines, and re-advertisement of the project; and (2) \$45,000 to Mills Module Nos. 3 & 4 Inlet Flash Mix Chemical Containment for additional assessments to enhance worker safety at the Modules Nos. 3 and 4 flash mix facilities.

The Metropolitan Water District of Southern California
Abstract of Bids Received on September 9, 2014 at 2:00 P.M.
Specifications No. 1707A
Henry J. Mills Water Treatment Plant
Industrial Wastewater Handling Improvements

The project consists of construction of three 20,000 gallon steel tanks and foundations, spill containment, pH adjustment system, and a force main discharge to the local sanitary sewer.

Engineer's Estimate: \$3,230,000

Bidder and Location	Total	SBE \$	SBE %	Met SBE¹
Hobbs-Bannerman, Inc. Torrance, CA	\$2,565,063	\$763,345	29.76%	Yes
Canyon Springs Enterprises dba RSH Construction Services Hemet, CA	\$2,691,316	-	-	-
Kana Engineering Group, Inc., Rancho Cucamonga, CA	\$3,109,108	-	-	-
Zusser Company, Inc. Los Angeles, CA	\$3,308,562	-	-	-
J.F. Shea Construction, Inc. Walnut, CA	\$3,425,699	-	-	-
C.W. Roen Construction Company Danville, CA	\$3,617,000	-	-	-
Bowe Contractors Inc. Lancaster, CA	\$3,770,000	-	-	-
Minako America Corporation dba Minco Construction Gardena, CA	\$4,377,350	-	-	-

¹ SBE (Small Business Enterprise) participation level set at 20 percent

