

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

July 12, 2005 Board Meeting

7-6

Subject

Appropriate \$1.95 million; and authorize final design for three rehabilitation projects within the Weymouth Water Treatment Plant Improvements Program (Approp. 15369)

Description

The Weymouth Water Treatment Plant Improvements Program was established to address needed rehabilitation work to ensure plant reliability and compliance with drinking water and environmental regulations. Three projects are recommended to commence final design at this time. These three projects have been evaluated and recommended by Metropolitan's Capital Investment Plan Evaluation Team and funds have been included in the fiscal year 2005/06 capital budget.

Weymouth Perimeter Improvements – Preliminary and Final Design (\$554,000)

Based on recent site planning efforts conducted for the Oxidation Retrofit Program (ORP), staff recommends that perimeter improvements be initiated along the northern and western boundaries of the Weymouth plant and that entrance and security improvements proceed at the eastern entrance on Wheeler Avenue. These improvements are consistent with the La Verne Area Master Plan developed during the mid-1990s and with entrance/security improvements underway at Metropolitan's other treatment plants. This work will include perimeter upgrades on the north boundary, along Moreno and Sedalia Avenues, and at the eastern plant entrance along Wheeler Avenue.

Perimeter landscaping will be added along the north boundary to screen the plant from residences. Landscaping, decorative security wall/fencing, and additional employee parking will be completed along Moreno and Sedalia Avenues. Security and entrance improvements along Wheeler Avenue will include a new guard enclosure; improved lighting and communication features for enhanced security; two new gates and two traffic lanes in each direction for improved access control and better management of chemical deliveries; and a new traffic signal and street improvements along Wheeler Avenue. Traffic studies and street improvements will be coordinated with the City of La Verne. Work will be completed by fall 2006.

Future perimeter improvements, beyond those described above, will be phased in order to coordinate with upcoming capital work, primarily the ORP. A plan of the Weymouth site showing planned phases of landscaping work and their completion dates appears in [Attachment 3](#). Under the ORP, landscaping along the southern boundary will be completed in early 2007 so that plantings may provide partial screening during ORP construction. Following completion of railroad track additions along Wheeler Avenue, additional ORP landscaping will be completed in 2009.

This action authorizes final design of landscaping improvements by Tetra Design, Inc., and final design of the Wheeler entrance improvements by Carollo Engineers, both under existing professional services agreements. Tetra Design was selected through a competitive process (Request for Proposals 555). In March 2002, Metropolitan's Board delegated to the Chief Executive Officer the authority to award a competitively selected agreement for architectural services for the Weymouth ORP and other facilities. No amendment to the Tetra Design agreement is required for this work. Carollo Engineers was selected through a competitive process (Request for Qualifications 578) to perform this type of work, and authority to enter into the agreement was approved by Metropolitan's Board in June 2003. No amendment to the Carollo Engineers agreement is required for this work.

Chemical Tank Farm Modifications – Preliminary and Final Design (\$958,000)

The Weymouth plant has recently been treating a higher percentage of State project water (SPW) than previously due to a reduction in Metropolitan's Colorado River allocation. Higher percentages of SPW require the use of higher chemical dosages in the treatment process to comply with water quality regulations. This project will add two coagulant storage tanks and construct a new polymer storage and feed facility. These systems will be complete with storage tanks, secondary containment, roofs, chemical feed pumps and piping, and instrumentation and controls. The polymer storage and feed system will be located just south of its existing location. This action authorizes preliminary and final design of the chemical tank farm modifications by Carollo Engineers under the existing agreement identified above. Final design is scheduled to be completed by April 2006.

Filter Valve Actuator Replacement – Final Design (\$438,000)

The 40-year-old valves and actuators in Filter Building No. 2 are reaching the end of their useful life. Despite routine maintenance, approximately 50 percent of the valves no longer have a tight shut-off, which may affect treatment performance. In September 2004, the Board authorized preliminary design to replace filter valves and actuators at Weymouth. After completing preliminary design, staff recommends replacing all 120 electric valve actuators in Filter Building No. 2. It is also recommended that 20 standby replacement valves be purchased at this time for use when the existing valves must be replaced. There are 10 types of filter valves at the plant, and two of each type are recommended to be purchased. This procurement of standby replacement equipment is recommended as a cost-effective method to change out the valves over time. The on-hand availability of these spares is recommended due to the age of the existing valves, recent failures of the equipment, lack of spare parts, and the long lead time required to order a new valve. Without spares, failure of one of these valves would put a filter out of service for an extended period of time.

This action authorizes final design to replace 120 actuators and procure 20 replacement valves. Final design is scheduled to be completed by March 2006. Staff will return to the Board at a later date to award procurement contracts for the valves and actuators. Final design will be performed by Carollo Engineers under the existing agreement identified above.

The final design cost as a percentage of the estimated total construction cost for these projects is approximately 12 percent. The Engineering Services goal for design of projects with construction costs less than \$3 million is 9 to 15 percent. See [Attachment 1](#) for the Financial Statement, [Attachment 2](#) for the Location Map, and [Attachment 3](#) for the Weymouth Plant Landscaping Plan.

Policy

Metropolitan Water District Administrative Code Section 5108: Capital Project Appropriation
Metropolitan Water District Administrative Code Section 8117: Professional and Technical Consultants

California Environmental Quality Act (CEQA)

CEQA determination for Option #1:

Weymouth Water Treatment Plant – Improvements Program

The environmental effects from the funding, designing, constructing, and operating of the proposed projects, including studies, preliminary design and construction, were originally evaluated in the Final Environmental Impact Report (Final EIR) for the F. E. Weymouth Filtration Plant Ozonation Facilities and Site Improvements Program. The Final EIR was certified by the Board on April 12, 2005. The Board also approved the Findings of Fact (findings), the Statement of Overriding Considerations (SOC), and the Mitigation Monitoring and Reporting Program (MMRP). The current board actions are solely based on final design for some of the Improvements Program and not on any changes to the approved projects themselves. Hence, the previous environmental documentation acted on by the Board in conjunction with the proposed actions fully comply with CEQA and the State CEQA Guidelines. Accordingly, no further CEQA documentation is necessary for the Board to act on the proposed actions.

The CEQA determination is: Determine that the proposed actions have been previously addressed in the certified 2005 Final EIR, findings, SOC, and MMRP and that no further environmental analysis or documentation is required.

CEQA determination for Option #2:

None required

Board Options/Fiscal Impacts

Option #1

Adopt the CEQA determination and

- a. Appropriate \$1.95 million in budgeted funds; and
- b. Authorize final design of three Weymouth plant rehabilitation projects.

Fiscal Impact: \$1.95 million of budgeted funds under Appropriation 15369

Option #2

Do not authorize the three rehabilitation projects.

Fiscal Impact: None

Staff Recommendation

Option #1

	6/20/2005
_____ Roy L. Wolfe Manager, Corporate Resources	Date

	6/21/2005
_____ Dennis B. Underwood CEO/General Manager	Date

Attachment 1 – Financial Statement

Attachment 2 – Location Map

Attachment 3 – Weymouth Landscape Plan

BLA #3741

Financial Statement for Weymouth Water Treatment Plant Improvements Program

A breakdown of Board Action No. 14 for Appropriation No. 15369 for the Weymouth Water Treatment Plant Improvements Program is as follows:

	Previous Total Appropriated Amount (Jun 2005)	Current Board Action No. 14 (Jul 2005)	New Total Appropriated Amount
Labor			
Studies & Investigations	\$ 1,291,260	\$ 0	\$ 1,291,260
Final Design	518,000	13,000	531,000
Owner Costs (Project management, environmental documentation, bidding process)	1,657,000	266,000	1,923,000
Construction Inspection & Support	2,351,000	0	2,351,000
Metropolitan Force Construction	1,148,000	0	1,148,000
Materials and Supplies	826,000	0	826,000
Incidental Expenses	66,000	8,000	74,000
Professional/Technical Services	3,552,000	1,422,000	4,974,000
Contracts	24,446,735	0	24,446,735
Remaining Budget	5,230,005	241,000	5,471,005
Total	\$ 41,086,000	\$ 1,950,000	\$ 43,036,000

Funding Request

Program Name:	Weymouth Water Treatment Plant Improvements Program		
Source of Funds:	Revenue Bonds, Replacement and Refurbishment or General Funds		
Appropriation No.:	15369	Board Action No.:	14
Requested Amount:	\$ 1,950,000	Capital Program No.:	15369-I
Total Appropriated Amount:	\$ 43,036,000	Capital Program Page No.:	E-64
Total Program Estimate:	\$ 153,300,000	Program Goal:	I-Infrastructure Reliability

Weymouth Plant Landscaping

