

- **Board of Directors**  
**Engineering and Capital Programs Committee**

June 10, 2008 Board Meeting

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8-5

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**Subject**

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Appropriate \$2.97 million; award \$1,609,100 contract to Cora Constructors, Inc.; and authorize amendment to existing agreement with Orsa Consulting Engineers, Inc. for the Cross Connection Prevention Program (Approp. 15171)

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**Description**

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This action awards a construction contract to relocate 51 air release and vacuum valves at 31 structures within Metropolitan's treated water distribution system. Relocating these facilities above-ground will bring them into compliance with current State water quality requirements by eliminating the potential for cross connections. This project is categorized as a Water Quality project and is budgeted within Metropolitan's Capital Investment Plan (CIP). Upon completion of the contracts, 139 sites will remain to be relocated.

**Background**

The California Department of Public Health (CDPH) requires that all treated water supply systems be protected from potential contamination through blow-offs, air release and vacuum valves, and other vulnerable piping configurations. Metropolitan has surveyed its distribution system for potential cross connections and has established a priority ranking to address those requiring modification.

In January 2002, Metropolitan's Board authorized field surveys, detailed site investigations, preliminary design, and preparation of environmental documentation for all locations with potential cross connections. A detailed assessment of the 1,270 potential sites was conducted to distinguish those posing a potential hazard versus those that pose little or no risk under normal or special operating conditions. This assessment recommended that relocation proceed for approximately 300 sites. This recommendation was subsequently approved by the CDPH, as the remaining 970 sites present much lower risk and do not need to be modified at this time. The planned relocation of the identified 300 sites will bring Metropolitan into compliance with CDPH requirements.

The Cross Connection Prevention Program has been planned to utilize 12 construction contracts, each with a moderate number of sites (approximately 25 sites per contract), to achieve the goals of: (1) increasing competition by reducing the number of sites per contract to attract more potential bidders, and (2) increasing opportunities for participation by Small Business Enterprise (SBE) firms. The 12 contracts have been staged to minimize operational disruptions to Metropolitan's distribution system, to effectively manage the geographically diverse projects, and to resolve local agency permitting issues on a case-by-case basis. In order to minimize change orders and avoid construction delays, extensive coordination and permitting have been performed with local agencies prior to award of the construction contracts.

The 12 contracts will be constructed over four phases, with approximately 75 sites per phase. The Phase I modifications, which addressed the first 74 sites, were completed in March 2008. Two of the three contracts under Phase II were awarded by Metropolitan's Board in May 2008. The third contract under Phase II is included in this action. With award of this contract, 139 sites will remain to be relocated. All work for Phase II construction is scheduled to be completed by May 2009. See [Attachment 3](#) for the location map.

**Cross Connection Prevention Program Phase II, Construction Package No. 6 - Construction (\$2,970,000)**

Specifications No. 1598 for the Air Release and Vacuum Valve Relocation for Treated Water Pipelines, Construction Package No. 6, was advertised for bids on March 11, 2008. The project consists of relocating 8 air-

release valves and 43 air-vacuum relief valves from underground vaults at 31 sites along five feeders located within six cities. The work includes removal of lead and PCB-containing materials, and asbestos flange gaskets. As shown in [Attachment 2](#), five bids were received and opened on April 15, 2008. The low bid from Cora Constructors, Inc., in the amount of \$1,609,100, complies with the requirements of the specifications. The four higher bids ranged from approximately \$1.9 million to \$2.0 million. The engineer's estimate was \$2.2 million. For this contract, Metropolitan has established an SBE participation level of at least 25 percent of the bid amount. Cora Constructors, Inc. has committed to meet this requirement.

Staff has investigated the difference between Cora's bid, the four other bids, and the engineer's estimate. Staff believes that the difference is primarily due to Cora's extra efforts to obtain competitive supply quotes on steel pipe/fittings and subcontractor bids on the asbestos abatement. In addition, Cora believes that its plan to complete the work in six phases, concentrating efforts on four to six relocations in each phase, is more efficient than working on each site sequentially. Staff has contacted three references for which Cora performed similar work, and these clients indicated satisfaction with Cora's work.

Construction management of the contract will be performed by Metropolitan staff. The anticipated cost of inspection as a percentage of the total construction cost is approximately 17 percent. Engineering Services' goal for inspection of contracts with construction cost less than \$3 million is 9 to 15 percent. The inspection budget is higher than the goal due to the multiple construction sites located over a wide area, the large number of agencies with whom coordination is required, and the additional effort necessary to ensure that local neighbor concerns are addressed.

This action appropriates \$2.97 million in budgeted funds and awards a \$1,609,100 construction contract to Cora Constructors, Inc. In addition to the amount of the contract, the appropriated funds include \$350,000 for field support by Metropolitan forces; \$337,000 for construction inspection; \$298,000 for all other staff and consultant support; and \$375,900 for remaining budget. The Metropolitan field support includes \$75,000 for water quality sampling and laboratory testing; and \$275,000 to provide contractor access to Metropolitan structures and to isolate individual construction sites from active Metropolitan feeders. For this contract, the complex interconnections of multiple valves at nine of the sites will require Metropolitan field staff to frequently operate the valves, so that the sites remain operational as the contractor works on adjacent valves. The other support activities include \$81,000 for permitting with six cities and other local agencies, and for external relations with adjacent businesses and property owners; \$34,000 for environmental monitoring; \$40,000 for project management; \$48,000 for review of submittals; \$65,000 for technical support by the design consultant, Orsa Consulting Engineers, Inc., as discussed below; and \$30,000 for preparation of as-built drawings.

#### **Technical Support during Construction - Amendment to Existing Agreement**

Orsa Consulting Engineers, Inc. performed design of Construction Package No. 6. As the engineer of record, Orsa is recommended to provide technical support during construction of the contract. The consultant will review submittals received from the contractors, respond to requests for information, and advise inspectors on technical issues as they may arise. Orsa was selected through a competitive process (Request for Qualifications No. 654), and the design work was performed under a board-authorized agreement. Amendment of the existing Orsa agreement is consistent with the agreement's scope of work and with the planned approach for project implementation. For this agreement, Metropolitan has established an SBE participation level of 25 percent.

This action authorizes an increase of \$65,000 to the existing agreement with Orsa, for a new not-to-exceed total of \$1,435,000, to provide technical support during construction of Construction Package No. 6.

This project is consistent with Metropolitan's goals for sustainability by protecting distribution system water quality, in order to maintain safe water deliveries in the future. This project has been evaluated and recommended by Metropolitan's CIP Evaluation Team and funds have been included within the fiscal year 2008/09 capital budget. See [Attachment 1](#) for the Financial Statement.

*Project Milestones*

May 2009 – Complete Phase II Construction

April 2009 - Begin Phase III Construction

Dec. 2010 - Complete Phase III Construction

Jan 2011 - Begin Phase IV Construction

April 2012 - Complete Phase IV Construction

**Policy**

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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)**

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CEQA determination for Option #1:

To comply with CEQA and the State CEQA Guidelines, Metropolitan as the Lead Agency prepared a Mitigated Negative Declaration (MND) for the Cross-Connection Prevention Program. The MND was distributed for a 30-day public review period that began on November 3, 2003. The Board later adopted the MND and the Mitigation Monitoring and Reporting Program (MMRP) on September 14, 2004. The present board action is solely based on authorizing construction and not on any changes to the approved project itself. Hence, the previously adopted environmental documentation in conjunction with the current action fully complies with CEQA and the State CEQA Guidelines. Accordingly, no further environmental documentation is necessary for the Board to act on with respect to the proposed action.

The CEQA determination is: Determine that the proposed action has been previously addressed in the adopted 2004 MND and the MMRP 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 and

- a. Appropriate \$2.97 million in budgeted funds;
- b. Award a \$1,609,100 contract to Cora Constructors, Inc. for the Cross Connection Prevention Program; and
- c. Authorize increase of \$65,000 to the existing agreement with Orsa Consulting Engineers, Inc. for an amount not to exceed a total of \$1,435,000.

**Fiscal Impact:** \$2.97 million of budgeted funds under Approp. 15171

**Business Analysis:** This option will continue Metropolitan's progress to achieve compliance with CDPH requirements for cross connection prevention.

**Option #2**

Do not award the contract and re-advertise in an attempt to receive more favorable bids.

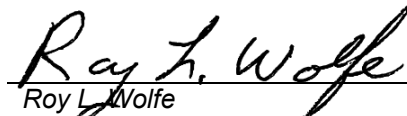
**Fiscal Impact:** None

**Business Analysis:** This option would then delay completion of the Phase II construction and may or may not result in more favorable bids.


**Staff Recommendation**

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Option #1

  
Roy L. Wolfe  
Manager, Corporate Resources

5/17/2008  
Date

  
Debra C. Man  
for Jeffrey Kightlinger  
General Manager

5/22/2008  
Date

**Attachment 1 – Financial Statement**

**Attachment 2 – Abstract of Bids**

**Attachment 3 – Location Map**

BLA #6125

### Financial Statement for Cross Connection Prevention Program

A breakdown of Board Action No. 7 for Appropriation No. 15171 is as follows:

	<b>Previous Total Appropriated Amount (May 2008)</b>	<b>Current Board Action No. 7 (June 2008)</b>	<b>New Total Appropriated Amount</b>
Labor			
Studies and Investigations	\$ 1,981,300	\$ -	\$ 1,981,300
Owner Costs (Program mgmt, local agency coordination, env. monitoring)	4,313,845	233,000	4,546,845
Construction Inspection and Support	746,000	337,000	1,083,000
Metropolitan Force Construction	1,616,750	335,000	1,951,750
Materials and Supplies	758,250	5,000	763,250
Incidental Expenses	155,000	4,000	159,000
Professional/Technical Services	9,187,800	-	9,187,800
Orsa Cons. Engrs., Inc.	-	65,000	65,000
Right of Way	301,000	-	301,000
Equipment Use	320,300	6,000	326,300
Contracts	9,109,755	1,609,100	10,718,855
Remaining Budget	602,000	375,900	977,900
<b>Total</b>	<b>\$ 29,092,000</b>	<b>\$ 2,970,000</b>	<b>\$ 32,062,000</b>

### Funding Request

<b>Program Name:</b>	Cross Connection Prevention Program		
<b>Source of Funds:</b>	Revenue Bonds, Replacement and Refurbishment or General Funds		
<b>Appropriation No.:</b>	15171	<b>Board Action No.:</b>	7
<b>Requested Amount:</b>	\$ 2,970,000	<b>Capital Program No.:</b>	15171-W
<b>Total Appropriated Amount:</b>	\$ 32,062,000	<b>Capital Program Page No.:</b>	E-32
<b>Total Program Estimate:</b>	\$ 53,400,000	<b>Program Goal:</b>	Regulatory – Water Quality

**The Metropolitan Water District of Southern California**

**Abstract of Bids Received on April 15, 2008 at 2:00 P.M.**

**Specifications No. 1598**

**Air Release and Vacuum Valve Relocation for Treated  
Water Pipelines, Construction Package No. 6**

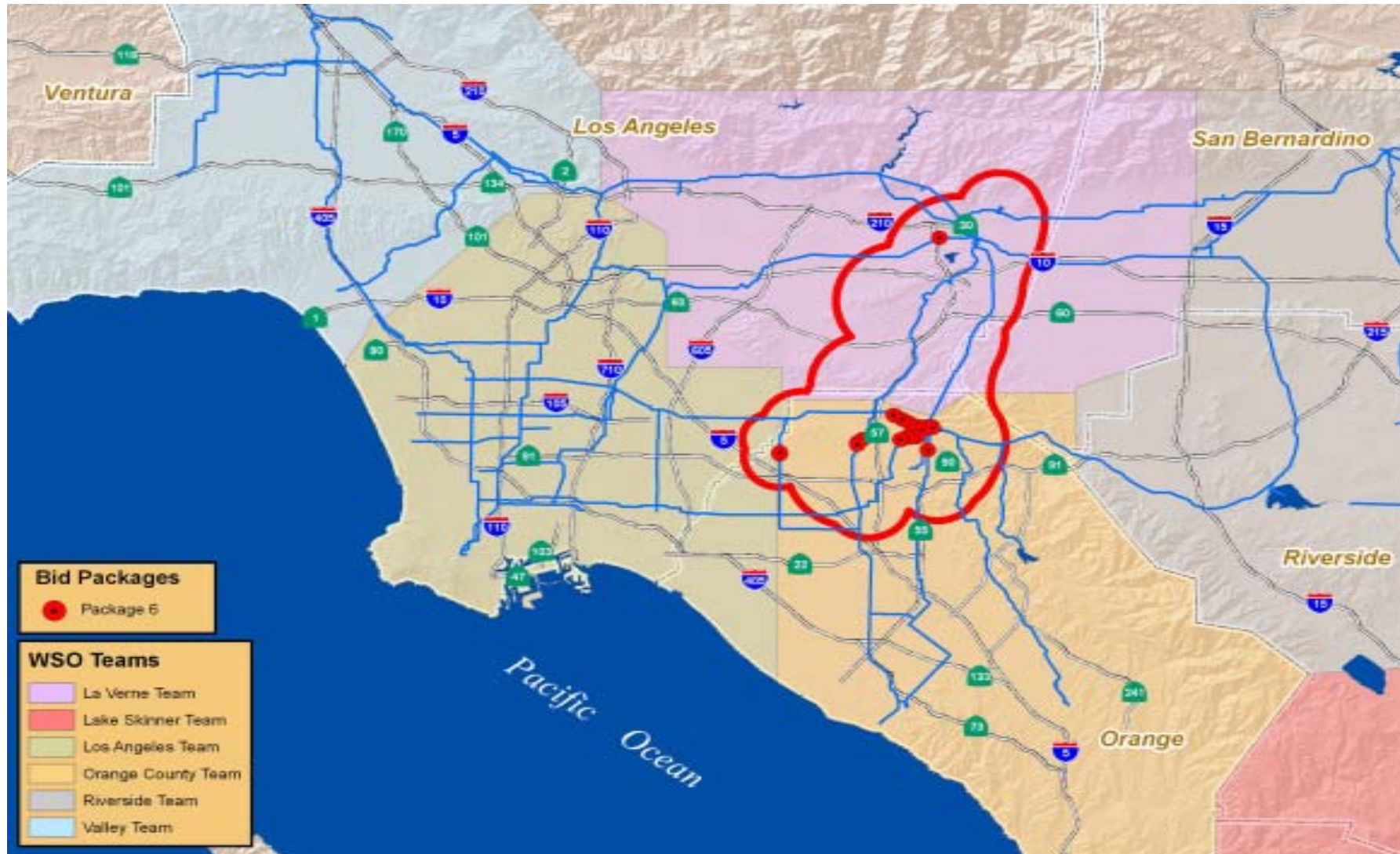
This package consists of construction to relocate existing air release and vacuum valves from subsurface vaults on the treated water distribution system to above-ground locations to prevent potential cross connections at 30 sites.

**Engineer's Estimate: \$2,254,500**

<b>Bidder and Location</b>	<b>Total Bid</b>	<b>SBE \$</b>	<b>SBE %</b>	<b>Met SBE*</b>
Cora Constructors, Inc., Palm Desert, CA	\$ 1,609,100	\$1,609,100	100	yes
Steve P. Rados, Inc. Santa Ana, CA	\$ 1,872,500	-	-	-
Cedro Construction, Inc., Santa Paula, CA	\$ 1,937,237	-	-	-
PPC Construction, Inc., Los Angeles, CA	\$ 1,975,000	-	-	-
Abhe & Svoboda, Inc., Alpine, CA	\$ 1,977,100	-	-	-

\* SBE (Small Business Enterprise) participation set at 25 percent

## **Cross Connection Prevention Program Construction Contract No.6**



**Location Map**