

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

March 13, 2007 Board Meeting

8-2

Subject

Authorize change orders for two construction contracts to address urgent shutdown repairs in Metropolitan's distribution system

Description

This action authorizes Metropolitan's General Manager to increase the scope of two construction contracts to address urgent repairs within the distribution system. For the Foothill Feeder Pipeline Replacement contract, all work has been completed. The contractor was directed to perform the additional work during the Foothill Feeder shutdown of January 14-29, 2007, when differing conditions were encountered which required immediate action. As a result, board authorization for a change order for the construction contract is requested to reimburse the contractor's critical work already performed.

The additional work proposed for the Colorado River Aqueduct (CRA) Rehabilitation and Improvements contract was initiated in February 2007, and will continue from March 6-27, 2007 and April 16 - May 7, 2007, during planned shutdown periods of the CRA. The need for urgent repair of the CRA's Lakeview and Freda Siphons was identified in late January 2007. Repairs to the Lakeview Siphon were completed in February. As the Freda Siphon has not yet been inspected internally, the complete extent of repairs will not be confirmed until commencement of the March CRA shutdown.

Background

During the months of October through April, Metropolitan schedules shutdowns of its feeders and treatment plants to perform inspections, execute repairs, and tie-in new facilities. Shutdowns require extensive planning by staff and by the member agencies. They are normally brief and require round-the-clock aggressive efforts to complete the planned work within the scheduled time. During these shutdowns, there are occasions when the inspections identify urgently needed repairs, or that an unanticipated condition is discovered which requires the planned work efforts to be modified.

When work is identified which requires a rapid response, one of the strategies relied upon historically has been to request assistance from construction contractors currently performing work for Metropolitan. This approach has proven extremely successful in the past as the contractors typically have qualified personnel, equipment, and a contracting mechanism in place, and can be deployed rapidly. For these situations which require urgent and immediate response, use of on-board contractors results in timely response at lower cost.

Metropolitan's Administrative Code authorizes the General Manager to execute change orders on construction contracts for an amount not to exceed five percent of the initial amount of the contract or \$250,000, whichever is greater. For change orders that exceed the General Manager's authority, board authorization is required. Metropolitan's construction contracts are typically completed with final change order amounts falling well within the General Manager's authority.

During two recent and ongoing contracts involving distribution system shutdowns, urgent situations arose that required action beyond the capability of Metropolitan's in-house forces. These contracts are the Foothill Feeder Pipeline Replacement and the Colorado River Aqueduct Rehabilitation and Improvements. For both of these contracts, an increase in the General Manager's change order authority is requested for this urgent work. Both projects have sufficient funds within their budget and no additional funds are requested in this action.

Foothill Feeder Pipeline Replacement

The Foothill Feeder is a 201-inch-diameter prestressed concrete cylinder pipeline that was constructed in 1968 and conveys water to the Sepulveda, West Valley and East Valley Feeders serving the Central Pool and western portions of Metropolitan's service area. In September 2006, Metropolitan's Board awarded Contract No. 1638 to Mladen Buntich Construction Co., Inc. in the amount of \$1.841 million, to perform repairs to the Foothill Feeder. Under Metropolitan's Administrative Code, the General Manager's authority to issue change orders on this contract is \$250,000. Principal elements of the repair work were performed during a January 14-29, 2007 shutdown of the feeder. Construction was completed on February 28, 2007.

Differing conditions were encountered during excavation of the pipe. In order to expedite the repairs, the contractor was requested to change the construction plan to accommodate the unforeseen changes. Specifically, a concrete cradle was discovered under the existing pipeline which was not identified on the feeder's as-built drawings. Presence of the cradle required an increase in the size and length of the shoring used to support the sides of the excavation. A crack at the crown of the existing pipe section was also detected after the pipe was uncovered, requiring demolition of the existing pipeline in several pieces to ensure safe handling and disposal of the cracked pipe. Finally, near the end of the shutdown, a leak was discovered in the pipe segment adjacent to the cracked pipe. The shutdown was extended and an internal seal was installed to repair this leak. These changes in the construction plan were required immediately in order to complete the critical repairs to the Foothill Feeder within the time constraints of the operational shutdown. Deferral of this work was not an option.

This action authorizes the General Manager to execute change orders with Mladen Buntich Construction Co., Inc. up to a new aggregate amount not to exceed \$700,000 (38 percent of the original contract). The project will remain within budget, as funds are available within the existing appropriation. No additional appropriation of funds is required.

CRA Rehabilitation and Improvements

The Colorado River Aqueduct (CRA) is a 242-mile-long conveyance system that transports water from Lake Havasu to Lake Mathews. The CRA provides the only means for Metropolitan to convey water from the Colorado River to Southern California. In November 2006, Metropolitan's Board awarded Contract No. 1641 to W. A. Rasic Construction Company, Inc. in the amount of \$10.25 million, to rehabilitate cast iron blow-offs, outlets, and isolation gates. Under Metropolitan's Administrative Code, the General Manager's authority to issue change orders on this contract is \$512,500. Principal elements of this work are planned to be performed during a March 6-27, 2007 shutdown and an April 16 - May 7, 2007 reduced-flow period of the CRA. Rehabilitation work is currently on schedule and is approximately 25 percent complete.

On January 21, 2007 multiple leaks were detected in the CRA's Lakeview and Freda Siphons. A shutdown and inspection of the Lakeview Siphon on January 25, 2007 revealed 19 cracks that require the installation of inner seal bands to prevent leakage. Water demands prevented inspection of the Freda Siphon at that time. Based on previous inspection notes and observed wet spots on the ground surface above, it is estimated that approximately 32 bands will be required for the Freda Siphon. The cause of the pipe leakage on both siphons is likely due to the recent unusually cold weather, which caused the concrete pipe to shrink and hairline cracks to develop. In order to expedite repairs, W. A. Rasic Construction Company, Inc. has been requested to perform repairs of the Lakeview Siphon in February and Freda Siphon in March 2007. The Lakeview Siphon work has now been completed, while the Freda Siphon work is scheduled to take place during the planned shutdown.

This action authorizes the General Manager to execute change orders with W. A. Rasic Construction Company, Inc. up to a new aggregate amount not to exceed \$1,212,500 (12 percent of the original contract). The project will remain within budget, as funds are available within the existing appropriation. No additional appropriation of funds is required.

These projects have been evaluated and recommended by Metropolitan's Capital Investment Plan Evaluation Team and funds have been included in the fiscal year 2006/07 capital budget. See [Attachment 1](#) for the Location Maps.

Policy

Metropolitan Water District Administrative Code Section 8115: Negotiated Contracts

California Environmental Quality Act (CEQA)

Foothill Feeder Pipeline Replacement

CEQA determination for Option #1:

The environmental effects from the construction of the proposed project were evaluated in the Foothill Feeder Repair and Future Inspections Project Final Environmental Impact Report (Final EIR), which were certified by the Board on December 13, 2005. The Board also approved the Findings of Fact (findings), the Statement of Overriding Considerations, the Mitigation Monitoring and Reporting Program (MMRP), and the project itself. The current board action authorizes an increase in the General Manager's authority to execute change orders with no substantial modifications to the original approved project. Hence, the previous environmental documentation acted on by the Board in conjunction with the proposed action fully complies with CEQA and the State CEQA Guidelines. Accordingly, no further CEQA documentation is necessary for the Board to act on the proposed action.

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

CRA Rehabilitation and Improvements

CEQA determination for Option #1:

Cast Iron Blow-Off Replacement Phase 4: To comply with CEQA and the State CEQA Guidelines, Metropolitan as Lead Agency prepared in October 2001, a Mitigated Negative Declaration (MND) for the Colorado River Aqueduct Conveyance Reliability Program. The Board later adopted the MND and the Mitigation Monitoring and Reporting Program (MMRP) on January 8, 2002. Subsequent to the adoption of the MND two Addendums were prepared to evaluate minor modification to components of the Colorado River Aqueduct Conveyance Reliability Program. The current board action authorizes an increase in the General Manager's authority to execute change orders with no substantial modifications to the original approved project. Hence, the previous environmental documentation in conjunction with the project 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 actions.

San Jacinto Diversion Structure and Warren Road Gates Rehabilitation, Aqueduct, Reservoir, and Discharge Line Isolation Gates: To comply with CEQA and the State CEQA Guidelines, Metropolitan as the Lead Agency determined that the proposed project was categorically exempt (i.e., Class 1, Section 15301 and Class 2, Section 15302 of the State CEQA Guidelines), and approved the project on February 14, 2006. A Notice of Exemption (NOE) was filed on the projects at that time and the statute of limitations has ended. The current board action authorizes an increase in the General Manager's authority to execute change orders with no substantial modifications to the original approved project. Hence, the previous environmental documentation in conjunction with the project 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 actions.

The CEQA determination is: Determine that the proposed actions have been previously addressed in the 2006 NOE (Classes 1 and 2, Sections 15301 and 15302 of the State CEQA Guidelines) and that no further environmental analysis or documentation is required.

Staff Recommendation

Adopt the CEQA determinations and

- a. Authorize the General Manager to execute change orders on the Foothill Feeder Pipeline Repair contract up to an aggregate amount of \$700,000; and
- b. Authorize the General Manager to execute change orders on the CRA Rehabilitation and Improvements contract up to an aggregate amount of \$1,212,500.

Fiscal Impact: \$1.15 million of previously budgeted and appropriated funds



Roy L. Wolfe
Manager, Corporate Resources

2/27/2007
Date



Jeffrey Kightlinger
General Manager

2/27/2007
Date

Attachment 1 – Location Maps

BLA #5272



