



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

5/9/2017 Board Meeting

8-4

Subject

Adopt CEQA determination and appropriate \$10.2 million; and award \$9,134,398 procurement contract to Northwest Pipe Company to provide steel liner pipe for the Second Lower Feeder (Appropriation No. 15497)

Executive Summary

This action awards a procurement contract for approximately 18,000 feet of 75-inch-diameter welded steel liner pipe. This pipe will be installed in an upcoming construction contract to rehabilitate prestressed concrete cylinder pipe (PCCP) within the Second Lower Feeder.

Timing and Urgency

The Second Lower Feeder is the initial pipeline to be addressed under Metropolitan's PCCP Rehabilitation Program. This pipeline has been in continuous service for 50 years, and has required urgent repairs on several occasions. Due to the reduced service life of its PCCP segments, all PCCP within the feeder will be lined with new steel liner pipe. This contract will provide coiled steel pipe that will be furnished to a construction contractor for installation during a shutdown of the Second Lower Feeder scheduled for winter 2017/18.

This project has been reviewed with Metropolitan's Capital Investment Plan (CIP) prioritization criteria and is included in the PCCP Rehabilitation Program. Funds for this action are available within Metropolitan's capital expenditure plan for fiscal year 2016/17.

Details

Background

The Second Lower Feeder delivers treated water from the Robert B. Diemer Water Treatment Plant in the city of Yorba Linda to Palos Verdes Reservoir in the city of Rolling Hills Estates. The feeder was constructed in 1967 and is 39 miles long. The line originally contained approximately 30 miles of PCCP, with diameters ranging from 78 to 84 inches. The remainder of the feeder is constructed of welded steel pipe with a diameter of 84 inches. The Second Lower Feeder operates at pressures up to 340 pounds per square inch and passes through areas with highly corrosive soils. In addition, there are numerous underground utility lines, natural gas lines, and oil lines within the vicinity, which expose the feeder to significant stray current interference. The pipeline traverses a highly urbanized area and crosses several freeways, several flood control channels, and an airport. In addition to supplying water to the Central Pool portion of Metropolitan's distribution system, the Second Lower Feeder has 11 service connections for deliveries to the cities of Long Beach, Los Angeles, and Torrance; Central Basin Municipal Water District; and Municipal Water District of Orange County.

Approximately two miles of PCCP segments within the Second Lower Feeder have been lined to date with a steel liner. Rehabilitation of the remaining 28 miles of PCCP will take place sequentially through a series of construction contracts planned to be issued annually. This approach will provide flexibility to adapt to changing priorities and shutdown opportunities, and will help minimize impacts on water deliveries to member agencies.

The subject procurement contract will provide 18,073 feet of 75-inch-diameter welded steel pipe in 20-foot-long segments that are coiled to 65 inches in diameter for ease of delivery and installation within the existing PCCP

pipe. Once the liner segments have been moved into position, the coiled pipe will be expanded into round and welded together. Due to the lead time required for fabrication of the steel liners, the coiled pipe is being procured in advance of the construction contract. This step is intended to prevent any manufacturing or logistical delays from impacting the shutdown of the Second Lower Feeder, which is planned to commence in October 2017.

In January 2015, Metropolitan's Board authorized final design to rehabilitate PCCP within the Second Lower Feeder. Final design of the initial construction contract, which includes installation of the steel liner pipe, is currently underway and is planned to be completed by June 2017. Award of the construction contract is scheduled for August 2017.

Second Lower Feeder PCCP Rehabilitation – Pipe Procurement (\$10,200,000)

Specifications No. 1861 for furnishing 18,073 feet of 75-inch-diameter coiled steel liner pipe for the Second Lower Feeder was advertised for bids on March 22, 2017. As shown in [Attachment 2](#), two bids were received and opened on April 11, 2017. The low bid from Northwest Pipe Company in the amount of \$9,134,398 complies with the requirements of the specifications. This amount includes all sales and use taxes imposed by the state of California. The budgetary estimate for this material, based on a survey of vendors, ranged from \$10.8 million to \$13.2 million. Staff investigated the difference between the budgetary estimate and the low bid, and attributes the difference to the highly competitive bidding environment and lower-than-expected storage and delivery costs for the pipe. For bid evaluation purposes, bidders who qualified as a Small Business Enterprise (SBE) or Disabled Veteran Business Enterprise (DVBE) received a five percent bid-price reduction credit. In addition, bidders who qualified as a Regional Business Enterprise (RBE) received a five percent bid-price reduction credit. A maximum of \$25,000 or 10 percent in bid-price reduction credit was available for a business that meets SBE or DVBE criteria and the RBE criteria. An additional bid-price adjustment was included based on the location of manufacture to reflect inspection travel costs. As a procurement contract, there are no subcontracting opportunities.

This action appropriates \$10.2 million and awards a \$9,134,398 contract to Northwest Pipe Company to furnish steel liner pipe for the Second Lower Feeder. In addition to the amount of the contract, the requested funds include \$150,000 for fabrication inspection; \$50,000 for review of submittals and responding to requests for information; \$100,000 for contract administration and project management; and \$765,602 for remaining budget. All activities will be performed by Metropolitan staff.

This project is included within capital Appropriation No. 15497, the Second Lower Feeder PCCP Rehabilitation Appropriation. With the present action, the total funding for this appropriation will increase from \$54,686,650 to \$64,886,650. The total estimated cost to complete the rehabilitation of the Second Lower Feeder, including the amount appropriated to date, current funds requested, and future construction costs, is anticipated to range from \$575 million to \$625 million.

This project has been evaluated and recommended by Metropolitan's CIP Evaluation Team, and funds are available within the fiscal year 2016/17 capital expenditure plan. See [Attachment 1](#) for the Financial Statement, [Attachment 2](#) for the Abstract of Bids, and [Attachment 3](#) for the Location Map.

Project Milestone

October 2017 – Delivery of the steel liner pipe

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 environmental effects from the design, construction and operation of the proposed project were evaluated in the Prestressed Concrete Cylinder Pipe Rehabilitation Program Final Programmatic Environmental Impact Report (Final PEIR), which was certified by the Board on January 10, 2017. The Board also approved the Findings of Fact (Findings), the Statement of Overriding Considerations (SOC), the Mitigation Monitoring and Reporting Program (MMRP), and the project itself. The current action is solely based on procurement of steel liner pipe for the Second Lower Feeder and not on any changes to the approved project itself. 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 2017 Final PEIR, Findings, SOC, and MMRP and that no further environmental analysis or documentation is required.

CEQA determination for Option #2:

None required

Board Options

Option #1

Adopt CEQA determination that the proposed action has been previously addressed in the certified 2017 Final PEIR, Findings, SOC, and MMRP, and that no further environmental analysis or documentation is required, and

- a. Appropriate \$10.2 million; and
- b. Award \$9,134,398 contract to Northwest Pipe Company to provide steel liner pipe for the Second Lower Feeder.

Fiscal Impact: \$10.2 million of capital funds under Appropriation No. 15497

Business Analysis: This option will enable the rehabilitation of PCCP portions of the Second Lower Feeder to move forward as planned, and will enhance long-term reliability of the feeder.

Option #2

Do not award the procurement contract and include fabrication of the liner pipe within the future construction contract.

Fiscal Impact: None

Business Analysis: Under this option, the rehabilitation work within the initial contract would not be completed during the winter 2017/18 shutdown season. A second shutdown in 2018/19 would be required, which would increase project costs.

Staff Recommendation

Option #1



Gordon Johnson
Manager/Chief Engineer,
Engineering Services

4/26/2017
Date



Jeffrey Kightlinger
General Manager

4/27/2017
Date

Attachment 1 – Financial Statement

Attachment 2 – Abstract of Bids

Attachment 3 – Location Map

Ref# es12658640

Financial Statement for Second Lower Feeder PCCP Rehabilitation

A breakdown of Board Action No. 2 for Appropriation No. 15497 to rehabilitate PCCP portions of the Second Lower Feeder¹ is as follows:

	Previous Total Appropriated Amount (Apr. 2016)	Current Board Action No. 2 (May 2017)	New Total Appropriated Amount
Labor			
Studies and Investigations	\$ 1,103,000	\$ -	\$ 1,103,000
Final Design	4,584,000	-	4,584,000
Owner Costs (Contract admin. & program mgmt)	4,394,900	100,000	4,494,900
Submittals Review & Record Drwgs.	514,000	50,000	564,000
Construction Inspection & Support	1,179,000	150,000	1,329,000
Metropolitan Force Construction	2,591,901	-	2,591,901
Materials & Supplies	608,004	-	608,004
Incidental Expenses	220,644	-	220,644
Right-of-Way	3,131,000	-	3,131,000
Equipment Use	10,000	-	10,000
Professional/Technical Services	20,133,304	-	20,133,304
Contracts	9,689,216	-	9,689,216
Northwest Pipe Company	-	9,134,398	9,134,398
Remaining Budget	6,527,681	765,602	7,293,283
Total	\$ 54,686,650 ²	\$ 10,200,000	\$ 64,886,650

Funding Request

Appropriation Name:	Second Lower Feeder PCCP Rehabilitation		
Source of Funds:	Revenue Bonds, Replacement and Refurbishment or General Funds		
Appropriation No.:	15497	Board Action No.:	2
Requested Amount:	\$10,200,000	Budget Page No.:	262
Total Appropriated Amount:	\$64,886,650	Total Appropriation Estimate	\$ 606,400,000

¹ The total amount expended to date to rehabilitate PCCP on the Second Lower Feeder is approximately \$23.26 million. The total estimated cost to complete the rehabilitation of this pipeline, including the amount appropriated to date, current funds requested, and future construction costs, is anticipated to range from \$575 million to \$625 million.

² The amount appropriated to date was originally included in Appropriation No. 15471. With this action, all appropriated funds and expenditures to date for the Second Lower Feeder PCCP Rehabilitation will be transferred to Appropriation No. 15497.

The Metropolitan Water District of Southern California

Abstract of Bids Received on April 11, 2017 at 2:00 P.M.

**Specifications No. 1861
Furnishing Collapsible Steel Pipe for Second Lower Feeder PCCP Rehabilitation**

The contract furnishes 18,073 feet of 75-inch-diameter coiled steel liners to rehabilitate prestressed concrete cylinder pipe on a portion of the Second Lower Feeder.

Estimated Range of Cost: \$10,800,000 to \$13,200,000

Bidder and Location	Base Bid Price Total¹	Small Business or Disabled Veteran Business (Y/N)	Regional Business (Y/N)	Bid Price Reduction for SBE/DVBE or RBE	Bid Price Increase for Inspection	Total Evaluated Bid Price
Northwest Pipe Company, Adelanto, CA	\$ 9,134,398	N	Y	(\$25,000)	0	\$ 9,109,398
Ameron, Rancho Cucamonga, CA	\$ 10,807,808	N	Y	(\$25,000)	\$ 17,920	\$ 10,800,728

¹ Includes sales and use taxes of 10.25 percent imposed by the state of California. The sales tax reflects an adjustment from the previous rate of 9.75 percent, which will take effect on July 1, 2017.

² For bid evaluation purposes, bidders who qualified as a Small Business Enterprise (SBE) or Disabled Veteran Business Enterprise (DVBE) received a five percent bid-price reduction credit. In addition, bidders who qualified as a Regional Business Enterprise (RBE) received a five percent bid-price reduction credit. A maximum of \$25,000 or 10 percent in bid-price reduction credit was available for a business that meets SBE or DVBE criteria and the RBE criteria. An additional bid-price adjustment was included based on the location of manufacture.

Distribution System

