Cover Memo

File #: CONS 16-186, **Version:** 1

DATE: May 3, 2016

TO: Mayor and City Council

FROM: Director of Utilities & Environmental Services

SUBJECT
Water Main Replacement at Mission Boulevard, Fairway Street to Lexington Avenue: Approval of Plans and Specifications, and Call for Bids

RECOMMENDATION
That Council adopts the attached resolution approving the plans and specifications for the Water Main Replacement at Mission Boulevard, Fairway Street to Lexington Avenue Project and calling for bids to be received on June 7, 2016.

SUMMARY

This project will replace and upgrade approximately 6,300 feet of cast iron (CI) water mains that were installed sixty-two years ago with new ductile iron (DI) water mains in Mission Boulevard from Fairway Street to Lexington Avenue.

BACKGROUND AND DISCUSSION

This project is part of a continuing program to maintain and upgrade the City's water distribution system. The City has approximately 340 miles of water distribution pipeline, of which approximately twenty miles (6%) is CI pipe that was installed between 1926 and 1992. CI pipe has a design life of roughly fifty years, depending upon when it was manufactured and the soil conditions where it is installed. In addition, the joints of old CI pipes can fail due to displacement caused by seismic movement, the forces of water flowing in the pipe, and seasonal changes in the surrounding soil.

Staff has prioritized water mains for replacement throughout the City by rating pipe segments based on age, adequacy of size and flow, the number of leaks or failures that have occurred, and the difficulty to repair the pipe if it failed considering location and traffic conditions. The CI pipes to be replaced as part of this project were also selected for expedited replacement so that the needed water main replacements are completed prior to the construction of the Mission Boulevard Corridor Improvement Project anticipated to start in the spring of 2017.

Water main replacement is done in segments to minimize the impact to customers and traffic. The work generally involves excavating a trench two to three feet in width and four to six feet deep parallel to the water main to be replaced, typically eight feet or more away from the existing water main. After a

segment of new water main has been installed and tested, service connections are expeditiously transferred from the old water main to the new one such that water service is typically restored within two hours. After all services have been transferred to the new water main, the remaining portions of the old water main are abandoned in place.

This project will replace and upgrade water mains with new DI water mains and new service connection pipes in Mission Boulevard from Fairway Street to Lexington Avenue, as shown on Attachment II. The pipeline replacements on this project consist of replacing 6,175 feet of twelve-inch CI pipes with new twelve-inch DI pipes and replacing 125 feet of substandard six-inch CI pipes with new eight-inch DI pipes to improve reliability, fire flow, and minimize future maintenance needs.

ENVIRONMENTAL REVIEW

This pipeline replacement project is categorically exempt from environmental review under the California Environmental Quality Act (CEQA) Section 15301, Existing Facilities, as it consists of the operation, repair, maintenance, permitting, leasing, licensing, or minor alteration of existing public or private structures, facilities, mechanical equipment, or topographical features, involving negligible or no expansion of use beyond that existing at the time of the lead agency's determination.

ECONOMIC AND FISCAL IMPACT

A robust and capable water distribution system can contribute to the vitality of the community and its economic development. Conversely, frequent main breaks and water service disruption can adversely impact economic vitality.

The estimated project costs are as follows:

Design and Construction Administration - City Staff	$ 35,000
Construction Contract	1,920,000
Inspection and Testing	45,000
Total	$2,000,000

The FY 2016 Capital Improvement Program includes $2,000,000 for the "Water Main Replacement at Mission Boulevard between Fairway Street and Lexington Street" project in the Water System Replacement Capital Improvement Fund.

SUSTAINABILITY FEATURES

Water: Efficiency and conservation.
Replacing the old CI pipeline greatly reduces the potential for leaks and breaks which results in water waste minimization.

Solid Waste: Waste reduction and diversion.
The old CI pipe will be abandoned in place. Any exported materials from the site, mainly asphalt and soil, will be recycled.

Purchasing: Consistent with the City's Environmentally Preferred Purchasing Policy.

This project will be done in full compliance with the City's purchasing policies.

PUBLIC CONTACT

Prior to and during construction, notices will be provided to affected residents, property and business owners to inform them of the nature and purpose of the work, potential impacts, work schedule and City contact for additional information. In addition, staff will separately contact any large employers and schools (i.e., Conley-Caraballo High School on Blanch Street) that may be affected by the project and coordinate work in order to minimize impact. Water customers shall be notified of temporary water service interruption both three days and at least one hour prior to shutdown of water service.

NEXT STEPS

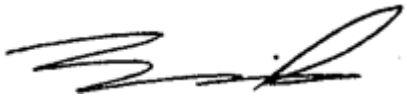
Following Council approval, staff will advertise the project for public bidding. Staff will return to the City Council for award of the construction contract after bids have been received and reviewed. The following schedule has been developed for this project:

Award Construction Contract	June 28, 2016
Notice to Proceed	August 8, 2016
Construction Completion	December 22, 2016

Prepared by: Rod Schurman, Associate Civil Engineer

Recommended by: Alex Ameri, Director of Utilities & Environmental Services

Approved by:



Fran David, City Manager

Attachments:

Attachment I	Resolution
Attachment II	Location Map