

Board of Directors Engineering and Operations Committee

8/16/2022 Board Meeting

7-2

Subject

Determine that there is a need to continue the emergency action of executing a no-bid contract for the Upper Feeder expansion joint replacement (**Requires four-fifths vote of the Board**); the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA

Executive Summary

This action authorizes the continuation of an emergency contract executed by the General Manager to replace the damaged expansion joint on the Upper Feeder. Staff will provide regular progress updates to the Board on this work and obtain necessary board approvals until the completion of construction.

Details

Background

The Upper Feeder was constructed in 1936 as part of Metropolitan's original water delivery system. The 116-inch-diameter welded-steel pipeline extends approximately 60 miles from Lake Mathews to the Eagle Rock Control Facility in Los Angeles. The feeder conveys up to 750 cubic feet per second (cfs) of untreated water from Lake Mathews to the F. E. Weymouth Water Treatment Plant, and then delivers treated water to the Central Pool portion of the distribution system.

The Upper Feeder crosses the Santa Ana River with a 1,010-foot-long steel truss bridge in the cities of Jurupa Valley and Riverside. The feeder has an existing bellows-type expansion joint at the bridge's mid-span that allows for the pipeline's thermal expansion and contraction. The bellows expansion joint was installed in January 2018.

On April 13, 2022, a leak was discovered at the bellows expansion joint. A steel bracket was installed as a temporary measure to stop the leak, and flow in the pipeline was reduced to approximately 525 cfs to decrease the pipeline's internal pressure. Staff is regularly monitoring the crack length and effectiveness of the short-term repair. After initially observing that the crack length was increasing, the crack length has remained stable. However, both Metropolitan staff and the bellows manufacturer inspected the bellows expansion joint and concluded that the bellows joint should be replaced with a new slip-type joint, which Metropolitan staff are currently fabricating.

Due to the critical nature of the feeder, the location of the expansion joint above environmentally sensitive areas, and the historically low State Water Project (SWP) allocations, in June 2022, the General Manager executed an emergency contract with PCL Construction, Inc. for installation of the new joint consistent with Section 8122(b) of Metropolitan's Administrative Code. This section of the Administrative Code, which mirrors Sections 21567 and 22050 of the California Public Contract Code, allows for the General Manager to waive competitive bidding requirements and execute contracts over the amount of \$250,000 in response to an emergency condition.

An emergency is defined as a sudden, unexpected occurrence that requires immediate action to prevent or mitigate the loss or substantial impairment of life, health, property, or essential public services. Executing an emergency contract was necessary to allow adequate time for the contractor to plan, staff, and mobilize for construction so that the repair can be made as soon as fabrication of the new sleeve joint is complete. Metropolitan is at risk of a prolonged, unplanned outage with the compromised bellows joint if the joint were to

rupture. In addition, the Upper Feeder is currently operating at a reduced flow, and the repair is needed to return the feeder to full flow and support drought actions and operational shifts that could save SWP supply use in 2022.

In July 2022, Metropolitan's board amended the Capital Investment Plan for fiscal years 2022/2023 and 2023/2024 to include replacement of an expansion joint on the Upper Feeder at the Santa Ana River Bridge; and approved the emergency action to execute a no-bid contract for the expansion joint replacement. The Board must determine by a four-fifths vote at subsequent meetings whether there is a need to continue the action or ratify the construction contract.

Upper Feeder Expansion Joint Replacement – Construction

The construction contract includes removal of bridge structural members to access the pipe and joint; removal of the existing bellows expansion joint; installation of the new slip-type expansion joint; removal and reinstallation of the steel cage that provides lateral restraint at the joint; and minor adjustments to the bridge truss isolators. PCL Construction, Inc. was selected to perform the work on a time-and-materials contract to conduct this work. To date, the contractor has prepared contract submittals, developed a work plan, and acquired key equipment. Metropolitan forces have completed grading, clearing, and grubbing adjacent to the bridge to allow access for installation of a crane and other construction activities. Metropolitan forces have also nearly completed the fabrication of the new slip-type expansion joint, which will be furnished to the contractor for installation.

Staff expects that the emergency contracting action will continue until the joint installation is completed in September; a shutdown has been scheduled for September for installation of the new expansion joint. Staff will return to the Board again in September to seek the Board's authorization to continue the emergency action and in October to request ratification of the contract. Each action will require a four-fifths vote of the Board.

Alternatives Considered

Metropolitan's staff could terminate the current contract and prepare a new contracting package for advertisement and board award rather than continue the emergency contracting provisions in the administrative code. However, even with an accelerated advertisement and award approach, construction work would not begin until December 2022. Staff determined that this is not an acceptable schedule considering the current flow restrictions that have been placed on the feeder. Continuation of an emergency contract with PCL Construction, Inc. allows timely completion of rehabilitation of a major pipeline that delivers Colorado River water into the central portion of Metropolitan's distribution system. It is a critical facility helping to reduce the impacts of the extreme drought conditions on the State Water Project. The selected option will reduce the risk of costly emergency repairs and enhance reliable deliveries to Metropolitan's member agencies.

Summary

This action authorizes the continuation of an emergency contract executed by the General Manager to replace the damaged expansion joint. See **Attachment 1** for the Location Map.

Project Milestone

September 2022 – Replacement of compromised expansion joint

Policy

Metropolitan Water District Administrative Code Section 8122: Emergency Contracts

Metropolitan Water District Administrative Code Section 11104: Delegation of Responsibilities

California Environmental Quality Act (CEQA)

CEQA determination for Option #1:

The proposed actions are statutorily exempt under the provisions of CEQA and the State CEQA Guidelines. The proposed actions include the immediate emergency repair of an existing pipeline with the same purpose and capacity to maintain service essential to the public health, safety, or welfare. Alternatively, the proposed actions involve the installation of a new pipeline or maintenance, repair, restoration, removal, or demolition of an existing pipeline that does not exceed one mile in length. Accordingly, the proposed actions are statutorily exempt and

qualifies under an emergency and other exemption for pipeline work less than one mile in length (Section 15269(b) and 15262(k) of the State CEQA Guidelines).

CEQA determination for Option #2:

None required

Board Options

Option #1

Determine that there is a need to continue the emergency action of executing a no-bid contract for construction of pipe joint repairs on the Upper Feeder. (Requires four-fifths vote of the Board.)

Fiscal Impact: Total cost for construction is currently unknown due to the structure of the emergency contract executed by the General Manager. All funds will be incurred in the current biennium and have been previously authorized. It is not anticipated that the addition of the project listed above to the CIP will increase CIP expenditures in the current biennium beyond those which have been previously approved by the Board. **Business Analysis:** This project enhances delivery reliability to member agencies and reduces the risk of unplanned shutdowns of the Upper Feeder.

Option #2

Do not determine that there is a need to continue the emergency action.

Fiscal Impact: Unknown costs for work performed by the contractor to date

Business Analysis: This option would delay the replacement of the expansion joint. The delay would limit flow on the Upper Feeder and expose Metropolitan to a greater risk of pipe rupture, which would severely disrupt water deliveries to member agencies.

Staff Recommendation

Option #1

John V. Bednarski

Manager/Chief Engineer Engineering Services

Adel Hagekhalil General Manager 7/27/2022

7/21/2022

Date

Date

Attachment 1 – Location Map

Ref# es12691220

