



DATE: March 16, 2021

TO: Mayor and City Council

FROM: Director of Public Works

SUBJECT Adopt a Resolution Approving Plans and Specifications and Call for Bids for the Sanitary Sewer Main Replacement at Alameda County Transit Maintenance Facility, Project No. 07781

RECOMMENDATION

That Council adopts the attached resolution (Attachment II) approving the plans and specifications for the Sanitary Sewer Main Replacement at the Alameda County Transit (AC Transit) Maintenance Facility, Project 07781, and calling for construction bids to be received by April 13, 2021.

SUMMARY

The Utilities Division of the Department of Public Works & Utilities replaces the City's undersized or structurally damaged sanitary sewer mains through annual capital improvement program (CIP) projects. This project will replace approximately 660 linear feet of 12-inch asbestos cement (AC) sanitary sewer pipe with 12-inch polyvinyl chloride (PVC) pipe by traditional open-cut trenching method along a sewer easement located at the AC Transit Maintenance Facility at 1758 Sabre Street and an adjacent business property at 1842 Sabre Street. The existing sanitary sewer main is severely deteriorated and requires replacement to maintain sanitary sewer service to customers.

This project is statutorily exempt from environmental review under the California Environmental Quality Act (CEQA) Section 15282(k), which allows for the repair and restoration of an existing subsurface pipeline, provided the project does not exceed one mile in length.

BACKGROUND

The City's current CIP includes funding to replace the City's undersized or structurally damaged sanitary sewer mains through annual sewer line replacement projects. The City's sanitary sewer collection system was mostly constructed shortly after World War II.

The Utilities Division staff performs regular sewer main cleaning and has an ongoing program to monitor and inspect the condition of the City's sanitary sewer collection system using closed circuit television (CCTV) technology. The inspection is performed by placing a camera, mounted on tracks, inside a sewer pipe and remotely guiding it through the length of the pipe.

As the camera moves forward, it sends back video to a TV monitor which enables the staff to inspect the pipe in real time. The video recording of the inspection is stored on a computer and can be retrieved and viewed at a later time. These inspections are used to identify structurally damaged sewer mains for repair or replacement.

DISCUSSION

This project consists of replacing approximately 660 linear feet of existing 12-inch asbestos cement (AC) sewer pipe, constructed in 1967, with 12-inch polyvinyl chloride (PVC) pipe along the sanitary sewer line easement at the AC Transit Maintenance Facility at 1758 Sabre Street and at an adjacent business property at 1842 Sabre Street.

This sanitary sewer line segment was originally included in the FY20 Sewer Line Replacement Project, Project No. 07694. The original design specified rehabilitating the sewer main by a trenchless pipe replacement technique known as cured-in-place pipe (CIPP). CIPP involves inserting a resin-impregnated flexible tube into the pipe, inflating, and curing it with hot water or steam forming a structurally sound, watertight new pipe within the existing pipe. The CIPP would have all the structural properties of a stand-alone pipe.

However, the condition of the sanitary sewer pipe severely deteriorated between the initial inspection and start of construction. The City's contractor assessed the condition of the sewer main through CCTV prior to performing CIPP and encountered several holes and heavy grease rails. In order to proceed with the CIPP, the grease rails required removal through hydro jetting to fully insert, inflate, and cure the liner. Due to the poor condition of the sewer main, cleaning the heavy grease rails by hydro jetting further exacerbated the pipe and exposed more holes and structural defects. Emergency spot repairs were performed to keep the sewer main in service. This sewer main has exceeded its service life, and the unforeseen structural defects and grease rails prohibited the use of CIPP. As a result, this sewer main was removed from the FY20 Sewer Line Replacement Project and will be re-advertised as a separate bid package.

The existing sanitary sewer AC pipe will be replaced with PVC pipe by traditional open-cut method. Traditional open-cut sewer repair involves excavating a trench of approximately two to four feet in width and to the depth of the damaged pipe. Once the sewer main is exposed, the damaged section is removed and replaced with new PVC pipe. When the repair is complete, the opened trench is backfilled, compacted, and paved to match the original pavement section.

This project also includes surface restoration to match existing conditions along the easement at AC Transit Maintenance Facility and an adjacent business property. Approximately 11,825 square feet of concrete slab will be replaced as a result of replacing the sewer pipe by open-cut method. Staff estimates approximately 50% of the construction cost is for the concrete restoration work at the AC Transit Maintenance Facility.

ECONOMIC IMPACT

There are no economic impacts to Hayward residents or businesses.

FISCAL IMPACT

The estimated costs for the Sanitary Sewer Main Replacement at the AC Transit Maintenance Facility are as follows:

Construction Contract (Estimated)	\$813,000
Administrative Construction Contingency (Estimated)	\$122,000
Construction Administration – City Staff (Estimated)	\$81,000
Inspection & Testing (Estimated)	<u>\$24,000</u>
Total	\$1,040,000

The Sanitary Sewer Main Replacement at this AC Transit Maintenance Facility was originally part of the FY20 Sewer Line Replacement Project, Project No. 07694. However, staff determined that it would be more appropriate to remove this section of the sewer main from Project 07694 due to the additional repairs and work needed. Staff anticipates an estimated amount of \$800,000 will remain from Project 07694 that could be used for this project. The construction cost is only an estimate, and staff would return to Council to request that additional funds be appropriated to cover the additional cost of the project if needed after the bids are received.

STRATEGIC ROADMAP

This agenda item supports the Strategic Priority of Improve Infrastructure. Specifically, this item relates to the implementation of the following project:

Project 15: Upgrade sewer collection system by replacing an average of 3 miles of sewer lines annually.

SUSTAINABILITY FEATURES

The repair and replacement of deteriorating sewer lines reduces the risk of sewer overflows, which can cause untreated wastewater to flow into public waterways.

PUBLIC CONTACT

Staff will continue to engage with the community and businesses during the preparation of construction design documents via online video meetings and provide notice thru the City's social media resources and project webpage. 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.

NEXT STEPS

If Council approves the project, staff will advertise the construction project for public bidding. Staff will return to Council for the award of the construction contract after construction bids have been received and reviewed.

The following schedule has been developed for this project:

Receive Bids	April 13, 2021
Award Construction Contract	May 4, 2021
Notice to Proceed	June 1, 2021
Construction Completion	December 8, 2021

Prepared by: Mariza Sibal, Assistant Civil Engineer

Reviewed by: Tay Nguyen, Senior Utilities Engineer

Recommended by: Alex Ameri, Director of Public Works

Approved by:



Kelly McAdoo, City Manager