



COUNCIL REPORT

DATE: June 27, 2023

CATEGORY: Consent

DEPT.: Public Works

TITLE: **Water and Sanitary Sewer Main Replacement Crossing U.S. 101, Projects 16-61 and 20-41—Various Actions**

RECOMMENDATION

1. Find that in accordance with California Environmental Quality Act requirements, Water and Sanitary Sewer Main Replacement Crossing U.S. 101, Design, Project 16-61, is categorically exempt as Class 2, Replacement or Reconstruction, under the California Environmental Quality Act Guidelines Section 15302 and statutorily exempt under California Public Resources Code Section 21080.21; and the removal of two unused buildings from the VTA North Yard are exempt from the California Environmental Quality Act requirements.
2. Acting in its capacity as Board of Directors of the Shoreline Regional Park Community, appropriate a total of \$2,590,500 from the Shoreline Regional Park Community Fund and transfer \$256,000 to Water and Sanitary Sewer Main Replacement Crossing U.S. 101, Design, Project 16-61, and \$2,334,500 to Water and Sanitary Sewer Main Replacement Crossing U.S. 101, Construction, Project 20-41.
3. Appropriate a total of \$1,690,500 from the Wastewater Fund and transfer \$256,000 to Water and Sanitary Sewer Main Replacement Crossing U.S. 101, Design, Project 16-61, and \$1,434,500 to Water and Sanitary Sewer Main Replacement Crossing U.S. 101, Construction, Project 20-41. (Five votes required)
4. Appropriate and transfer \$500,000 from the Wastewater Capacity Fund to Water and Sanitary Sewer Main Replacement Crossing U.S. 101, Construction, Project 20-41. (Five votes required)
5. Approve plans and specifications for Water and Sanitary Sewer Main Replacement Crossing U.S. 101, Design, Project 16-61, and authorize staff to advertise the project for bids.
6. Authorize the City Manager or designee to award the construction contract to the lowest responsive responsible bidder if the low bid is within the project budget of \$19,456,600.

7. Ratify Amendment No. 3 for the professional services agreement with AECOM Technical Services, Inc., for Water and Sanitary Sewer Main Replacement Crossing U.S. 101, Design, Project 16-61, that extended the term of the Agreement from January 31, 2023 to June 30, 2024.
8. Authorize the City Manager or designee to amend the professional services agreement with AECOM Technical Services, Inc., for Water and Sanitary Sewer Main Replacement Crossing U.S. 101, Design, Project 16-61, to increase compensation by \$410,020 for a total not-to-exceed amount of \$1,221,100 and to extend the term of the Agreement as needed until completion of the project.
9. Authorize the City Manager or designee to execute a professional services agreement with Tanner Pacific, Inc., to provide construction engineering services for Water and Sanitary Sewer Main Replacement Crossing U.S. 101, Construction, Project 20-41, in a not-to-exceed amount of \$629,300.

BACKGROUND

In 2016, an Alignment and Constructability Study was completed for the replacement of the following three critical utility crossings at U.S. 101 and State Route (SR) 85: (1) Shoreline Boulevard at U.S. 101; (2) Rengstorff Avenue at U.S. 101; and (3) SR 85 between Stevens Creek and San Leandro Avenue. The water and sewer mains at these crossings are at the end of their useful life. There is limited maintenance access under the freeways, and the reliability of these mains is low.

As part of the Fiscal Year 2015-16 Capital Improvement Program (CIP), Project 16-61 was approved for the design of the water and sewer main replacements across U.S. 101 at and near Shoreline Boulevard. The right-of-way acquisition and construction costs for the project are funded from Project 20-41, approved as part of the Fiscal Year 2019-20 CIP.

On [March 20, 2018](#), the City Council authorized the City Manager to execute a professional services agreement with AECOM Technical Services, Inc. (AECOM), to perform design work for the Shoreline Boulevard water and sewer main crossings and the new San Rafael Avenue/Macon Avenue water main crossing for a total not-to-exceed amount of \$694,080. Amendment No. 1 to the AECOM agreement was executed on October 18, 2019, to extend the term of the agreement to June 30, 2021.

On [May 5, 2020](#), Council approved adding \$117,000 to the AECOM agreement as part of Amendment No. 2, for a new total not-to-exceed amount of \$811,080 and extending the term of the contract to January 31, 2023. At the time of this Council action, the COVID pandemic had just begun, and staff added the term to explain the uncertainties for the timing of completing the

design and construction of the project. The design scope was also amended to include sizing the pipelines to handle the development in the North Bayshore Area.

The inclusion of a term date in the Council recommendation is not normal practice as changes of agreement term dates may be executed by the City Manager on agreements approved by City Council; however, since a term date was included in the Council's approval action, extensions to the term require Council approval. On January 17, 2023, staff amended and extended the term from January 31, 2023 to June 30, 2024 for the AECOM agreement as Amendment No. 3 without Council approval. Staff requests that City Council ratify Amendment No. 3 and authorize the City Manager or designee to further extend the term of the agreement as needed until the project is completed.

The San Rafael Avenue to Macon Avenue water main crossing was constructed in 2020 ahead of the Shoreline Boulevard crossings to allow the water main work to be installed prior to completion of Microsoft's new buildings at 1075 La Avenida (location shown in Figure 1). On [January 14, 2020](#), the Council authorized the City Manager to execute an agreement with Tanner Pacific, Inc. (TPI), to provide construction support services for the San Rafael Avenue to Macon Avenue water main crossing. Final cost of their services of \$141,000 is included in the Macon Avenue construction costs from Project 20-41. The contract with TPI for support services for Macon Avenue expired after Council acceptance of the completed work on [December 1, 2020](#).

Water and Sewer Main Crossing—U.S. 101 at Shoreline Boulevard

The alignment for the Shoreline Boulevard water and sewer main crossing under U.S. 101 is from the northern edge of the 1001 North Shoreline Boulevard parcel, across U.S. 101, north through the Valley Transportation Authority (VTA) North Yard, east on La Avenida, north on Inigo Way, and west on Pear Avenue to the Shoreline Boulevard intersection (see Figure 1).



Figure 1: Project Location

The project includes the construction of new water and sewer mains utilizing pilot tube microtunneling (a remote-controlled trenchless tunneling method used when accuracy and settlement requirements are critical) and open trench construction. Within the Caltrans right-of-way (U.S. 101), approximately 610 linear feet of pilot tube microtunneling (for both the water and sewer mains) will be performed from the northern edge of 1001 North Shoreline Boulevard to the southern end of the VTA North Yard. Open trench construction will be used to install approximately 3,100 linear feet of water main and 2,500 linear feet of sewer main within the VTA North Yard, along La Avenida, Inigo Way, and Pear Avenue.

The utility alignment through the VTA North Yard is adjacent to the Northbound (NB) Shoreline/U.S. 101 Off-Ramp Realignment, Project 20-37, which is currently in design. Two abandoned buildings within the VTA Yard are in conflict with the off-ramp project alignment. During the right-of-way negotiations for the utility project, VTA requested the two existing VTA buildings be demolished as part of the utility project in advance of the off-ramp construction (Figure 1). Staff accommodated this request because the buildings are in the vicinity of the proposed utility mains, and the utility construction will benefit from having more access flexibility within the VTA North Yard.

Also shown in Figure 1, the proposed utility mains will connect to new water and sewer mains that are currently being installed by the developer as part of the 1001 North Shoreline Boulevard development under a reimbursement agreement with the City. The utility main construction at 1001 North Shoreline Boulevard is anticipated to be completed by fall 2023. Upon completion of the planned Shoreline Bus Lane and Utility Improvement, Project 18-43, which includes new and upsized water and sewer mains on Shoreline Boulevard from West Middlefield Road to 1001 North Shoreline Boulevard, the existing water and sewer mains crossing under U.S. 101 will be abandoned.

Permanent Utility and Temporary Construction Easement

Two major areas of right-of-way acquisition were needed from south and north of U.S. 101. One was through the 1001 North Shoreline Boulevard development and the other through the VTA North Yard. The new mains under construction traverse 1001 North Shoreline Boulevard through a 24' wide water and sanitary easement dedicated to the City as part of the approval for site development. A temporary construction easement has also been secured to facilitate the construction activities for the utility crossing under U.S. 101. In addition, the City has acquired a 22' wide water and sanitary easement from VTA, through the VTA North Yard.

ANALYSIS

Plans and specifications for the Shoreline water and sewer main replacements at U.S. 101 are complete and available for viewing in the Public Works Department. Due to several years of coordinating and negotiating with VTA for the necessary utility easement through its property and the development changes at 1001 North Shoreline Boulevard, design and construction costs have increased significantly.

Design Professional Services Agreement Amendment

Additional funding is needed in Project 16-61 to amend the professional services agreement with AECOM to provide engineering services and support during bidding and construction of the Shoreline Boulevard water and sewer main crossings. The increased design costs are primarily due to the long design duration for the project that has extended well beyond the original scope of work. The requested professional services agreement amendment will add \$410,020, which includes \$341,000 for basic services and \$69,020 for additional services, for a total not-to-exceed contract amount of \$1,221,100.

Construction Management and Inspection Services

The Public Works Department utilizes consultants to supplement staff and provide construction engineering and inspection services as necessary to ensure the timely delivery of the City's

construction projects and for projects requiring specialized construction expertise. Staff has evaluated the anticipated tasks and determined that construction engineering and inspection services are required to support the specialized tunneling construction operation crossing U.S. 101—similar to the San Rafael Avenue/Macon Avenue water main segment of the project.

A new contract with TPI from Project 20-41 is required for the U.S. 101 crossing at Shoreline Boulevard. The TPI scope of services includes construction management, inspection, and project closeout. The recommended total not-to-exceed contract amount of \$629,300 includes \$571,300 for basic services and \$58,000 for additional services. This fee is within the range typically charged for such services, and staff considers the contract costs to be fair and reasonable for the scope of work required. When added to the previous agreement for the Macon Avenue project, the total compensation to TPI from Project 20-41 is \$770,300.

Project Cost Estimates

The estimated project design and construction costs for the Shoreline water and sewer main replacements at U.S. 101 is as follows:

Project Design Cost—Project 16-61

Design Consultant Services	\$ 811,080
Recommended Contract Amendment	410,020
Project Management	125,000
Other Project Costs	<u>16,900</u>
Subtotal	\$1,363,000
City Administration	<u>89,000</u>
Total Design Cost Estimate	<u>\$1,452,000</u>
Current Project Budget	940,000
Budget Shortfall	\$ 512,000

Project 16-61 has a total project budget of \$940,000 and is funded with \$600,000 from Water Capacity Fees, \$200,000 from Wastewater Capacity Fees, and \$140,000 the Wastewater Debt Proceeds. As shown above, an additional \$512,000 is needed to amend the design services contract with AECOM and for other costs through post project construction.

Project Construction Cost—Project 20-41

Construction of Macon Water Main (completed)	\$ 1,700,300
Construction	8,510,000
Construction Contingency	851,000
Project Management	100,000
Construction Management and Inspection	80,000
Construction Consultant Services	629,300
Permitting and Miscellaneous	500,400
Utility Easement (through VTA North Yard)	1,600,000
1001 North Shoreline Reimbursement Agreement	<u>4,600,000</u>
 Subtotal	 \$18,571,000
 City Administration	 <u>1,208,000</u>
 Total Project Construction Estimate	 <u>\$19,779,000</u>
 Current Construction Budget	 15,510,000
 Budget Shortfall	 \$ 4,269,000

Project 20-41 has a total budget of \$15,510,000 and is funded with \$1,579,000 from the Water Fund, \$5,971,000 from the North Bayshore Water Development Impact Fee, \$1,537,000 from Water Capacity Fees, \$741,000 from the Wastewater Fund, \$769,000 from the North Bayshore Sewer Development Impact Fee, and \$4,913,000 from Wastewater Debt Proceeds.

As shown in the table above, Project 20-41 has funded the construction of the Macon Avenue water main crossing, including construction management and inspection services by TPI (\$1,700,300); the right-of-way acquisition for the utility easement through VTA North Yard (\$1,600,000); and the construction of water and sewer main through the 1001 North Shoreline Boulevard development via a reimbursement agreement for the developer (\$4,600,000). An additional \$4,269,000 is needed to fund the construction of the Shoreline water and sewer main crossings under U.S. 101 into the North Bayshore Area. The additional project cost is attributed to continuously rising construction costs, specialized microtunneling pipe installation (for higher accuracy), and land values.

To fund the professional services agreement amendment with AECOM and additional project construction budget needs, staff recommends transferring and appropriating the following amounts from the respective funds listed below:

	Shoreline Regional Park Community Fund	Wastewater Fund	Wastewater Capacity Fund
Project 16-61 (total transfer \$512,000)			
Water Improvements	\$256,000	—	—
Sewer Improvements	—	\$256,000	—
Subtotal	\$256,000	\$256,000	—
Project 20-41 (total transfer \$4,269,000)			
Water Improvements	\$1,934,500	—	—
Sewer Improvements	—	\$1,434,500	\$500,000
Building Demolition	400,000	—	—
Subtotal	\$2,334,500	\$1,434,500	\$500,000
Total Fund Transfer	\$2,590,500	\$1,690,500	\$500,000

If the recommendations are approved and a responsive bid from a responsible contractor within the project budget is received, construction is anticipated to begin in summer 2023 and be completed by fall 2024. Public noticing will occur prior to and during construction. It is critical for the City to complete the underground utility work in order to coordinate with the private development construction activities at 1001 North Shoreline Boulevard for the City’s project access and prior to construction of the Shoreline Bus Lane and Utility Improvements scheduled for summer 2024.

Environmental Clearance

In accordance with the requirements of the California Environmental Quality Act (CEQA), the project has been determined to be categorically exempt as Class 2, Replacement or Reconstruction, pursuant to Article 19, Section 15302(c), because the project will provide a replacement of existing public facilities involving negligible or no expansion of capacity. In addition, although the water and sewer main to be replaced will be in new locations, the project has been determined to be statutorily exempt pursuant to Section 21080.21 of the California Public Resources Code because the replacement is less than one mile in length, is located within the public right-of-way, and does not have any aboveground facilities. The public right-of-way includes utility easements through 1001 North Shoreline Boulevard and the VTA North Yard property.

The demolition of two unused buildings in support of NB Shoreline Boulevard/101 Off-Ramp Realignment, Construction, Project 20-37, does not involve a change in land use or removal of buildings or structures of historical or architectural consequence as officially designated by Federal, State, or local government action and, therefore, are exempted from the requirements of CEQA.

Staff recommends that Council make a finding that in accordance with the CEQA requirements, the project is categorically exempt as Class 2, Replacement or Reconstruction, under CEQA Guidelines (Title 14, Division 6, Chapter 3 of the California Code of Regulations) Section 15302, and statutorily exempt under Environmental Quality Statute (Division 13, Chapter 2.6 of the California Public Resources Code) Section 21080.21; and the removal of two unused buildings from the VTA North Yard are exempted from CEQA requirements as the work does not involve a change in land use, and the buildings are not designated by Federal, State, and local government as of historical or architectural consequence.

FISCAL IMPACT

To fund the recommended amendment to the professional services agreement with AECOM and other associated design costs, the recommended actions would appropriate \$256,000 from the Shoreline Regional Park Community Fund and \$256,000 from the Wastewater Fund to Project 16-61 for a total project budget of \$1,452,000. There are sufficient balances in these fund sources for the recommended appropriations.

For the construction, right-of-way acquisition, support services, and administration costs, the recommended actions would appropriate \$2,334,500 from the Shoreline Regional Park Community Fund, \$1,434,500 from the Wastewater Fund, and \$500,000 Wastewater Capacity Funds, to Project 20-41 for a total project budget of \$19,799,000. There are sufficient balances in these fund sources for the recommended appropriations.

CONCLUSION

Water and Sanitary Sewer Main Replacement Crossing U.S. 101, Projects 16-61 and 20-41, will replace aging water main and sewer main, increase redundancy of service to the North Bayshore Area, improve maintenance access to City utilities, and provide capacity for North Bayshore Area development. Completion of this project in advance of the planned reversible bus lane and utility improvements project is needed to allow the existing water and sewer main crossing at North Shoreline Boulevard and U.S. 101 to be abandoned.

With Council's approval of staff recommendations, staff will advertise the project for construction bids and proceed to award the construction contract for summer construction if the low bid is within the project budget.

ALTERNATIVES

1. Defer construction.
2. Provide other direction.

PUBLIC NOTICING

Agenda posting and individual letters were sent to property owners and residents within 750' of the project locations.

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