



Board Report

File #: 2022-0640, **File Type:** Informational Report

Agenda Number: 5.

CONSTRUCTION COMMITTEE NOVEMBER 17, 2022

SUBJECT: SOUNDWALL PACKAGE 10 HIGHWAY PROJECT

ACTION: APPROVE RECOMMENDATIONS

RECOMMENDATION

AUTHORIZE the Chief Executive Officer to:

- A. AMEND the Life of Project Budget (LOP) for Soundwall Package 10 Highway Project (Project) by \$21,682,694 from \$50,862,000 to \$72,544,694, using the fund sources from the soundwall program as summarized in Attachment A consistent with the provisions of the Board-adopted Measure R and Measure M Unified Cost Management Policy (Attachment B); and
- B. AUTHORIZE the Chief Executive Officer to negotiate and execute project related agreements, including contract modifications, up to the authorized Life-of-Project budget.

ISSUE

Staff is seeking the Board's approval to Amend the LOP for the Project that was established in 2015 and assumed a construction budget of \$34,165,000 (inclusive of ROW activities); construction costs have escalated since the LOP was established in 2015 and certain project components and scope have been added since then. Additionally, staff seeks the Board's approval to execute project-related agreements, including contract modifications within the Life of Project budget.

BACKGROUND

This project consists of constructing soundwalls along I-210 freeway from west of Marengo Avenue Overcrossing to Wilson Avenue in the City of Pasadena, constructing soundwalls from Baldwin Avenue to Santa Anita Avenue in the City of Arcadia, and constructing soundwalls on SR-134 East of Cahuenga Blvd near Arcola Street.

Caltrans completed the Package 10 PS&E and Right of Way work in 2012 with the standards in effect at that time and delivered the PS&E to Metro. Caltrans had also secured many of the Temporary Construction Easements (TCEs) for the Project. Although the project was anticipated to be advertised

shortly after LOP was established, there were multiple factors which delayed the Project:

Project Delivery Selection

The Project was nominated to be included in the Accelerated Regional Transportation Improvements (ARTI) project. The construction of the Project was on hold while the evaluation process for ARTI was being conducted. After a lengthy process, ARTI was determined to be infeasible as a bundle of projects and Soundwall Package 10 was advanced as a standalone project with changes, including updating the PS&E to 2015 standards and specifications, adding new soundwall segments that were not identified in the original project scope, extending TCEs that expired, and obtaining new TCEs.

Redesign from Lessons Learned on Adjacent Project

Package 4 soundwalls between Santa Anita Ave in Arcadia and California Ave in Monrovia were completed in November 2013. Due to adverse geological conditions at the project site, foundations for the soundwalls needed to be redesigned from piles to spread footing, thereby increasing the cost of the project for additional design, technical support services and time adjustment for construction delays resulting in a 29% increase in construction costs. The location of Package 10 Project is adjacent to the Package 4 project. Due to similarities in terrain conditions between Packages 4 and 10, Caltrans revised the design of the foundations for Package 10 to avoid the delays and change orders in construction. Final design (100% PS&E) was completed by Caltrans in December of 2020 and RTL was achieved in July of 2021 in conjunction with the application for the HIP funds that were submitted to FHWA in partnership with Caltrans.

Source of Federal Funds

In July 2021, Metro pursued federal HIP funds to supplement the construction cost of the Project, the total available HIP funds for the project are \$48,649,000. Eligible costs include construction capital as well as construction engineering. The funds authorization request was approved in September 2021 at which time Metro was able to begin the procurement process for the construction contract

DISCUSSION

The proposed increase in the LOP budget for this project is based on total project costs incurred including Metro labor and non-labor costs for PA&ED, PS&E, Utilities, ROW support, the forecasted construction cost and support, and required contingencies. The current LOP budget was approved by the Board in May 2015, prior to the current Program Management policy of establishing project LOP's upon receipt of construction bids. The current LOP does not accurately reflect the current cost of construction as well as the scope changes that have occurred since the LOP was established.

Right of Way Cost Increase

The original TCEs will be expiring in FY 2023. It is required that TCEs be extended to FY 2026 to accommodate the construction duration and account for any Project deficiencies encountered during construction. The extension of TCEs will increase the original Right of Way cost established in the current LOP budget.

Construction Cost Increase

The Project Invitation for Bid was released on June 6, 2022 and 5 bids were received on August 30, 2022. The bids are currently being evaluated for responsiveness and responsibility.

C.A. Rasmussen	\$48,890,254.70
Powell Constructors	\$49,091,986.85
Ortiz Enterprises	\$56,161,960.20
Security Paving	\$60,596,660.00.
Skanska	\$63,895,900.00
Metro Independent Cost Estimate	\$42,324,121.00

The current LOP assumed a construction budget of \$34,165,000 (inclusive of ROW activities); construction costs have escalated since the LOP was established in 2015 and the redesign of the soundwall footings and additional location of a soundwall on the 134 freeway in Toluca Lake are not accounted for.

Contingency

Design-bid-build projects typically carry a 10 to 15 percent contingency because the design is carried out to 100%. For this Project, staff has allocated a 15% percent contingency due to the following risk factors that could result in cost increases and schedule delays:

- Project is located in an area with a cobble top layer in the alluvial fan of the San Gabriel Mountains which could result in geotechnical issues not known at the time of design. Spread footings will need to be utilized and there is a high likelihood of latent sub-surface features, including buried human-made objects and differing site conditions.
- Current market conditions following extreme Covid-19 volatility, resulting in supply-chain issues, material shortage and procurement delays of long-lead item.
- Throughout the year there are events organized by local jurisdictions, such as the Rose Bowl parade, that have a high likelihood of impacting traffic, road closures and construction sequencing.
- Construction activities in the City of Pasadena right of way will require City's inspection and concurrence which could cause delays in construction, plant establishment, and Project close-out.

Construction Support

In addition to the increased contingency, staff are recommending additional budget for oversight and support. Given lessons learned on past collaborative highway efforts between Metro and Caltrans, staff have allocated roughly 20% percent construction oversight for the Project. This cost is inclusive of a Caltrans mandated Owner controlled quality oversight program that is not typical of Metro projects. This program is designed to reduce rework, reduce rejected work, minimize schedule delays, and ensure timely and complete Caltrans final acceptance of the Project.

DETERMINATION OF SAFETY IMPACT

The recommended Board action will have no detrimental safety impact.

FINANCIAL IMPACT

Allocation of HIP funds for the project releases approximately \$27.0 million of previously planned Measure R 20% and Prop C 25% funds. These funds will be available for current and future highway projects. These funds are not eligible for bus and rail operation expenses. This is a multiyear project; the Project Manager and the Chief Program Management Officer are responsible for future budgets.

Impact to Budget

The anticipated expenditure of \$6.7 million is included in FY2023 adopted budget for this project hence no additional budget is required.

EQUITY PLATFORM

The project is designed to reduce freeway noise affecting communities that were adversely impacted by the construction of the freeway. The soundwall program is a response to the noise complaints by residents. Soundwall 10 traverses along the 210 Freeway between Pasadena and Arcadia. The westernmost portion of the soundwall project is anticipated to benefit seven Equity Focus Communities (EFC) concentrated in the City of Pasadena.

Metro awarded a Construction Support Services Contract in 2021, for this and other projects. The selected firm was an SBE Firm who committed to achieving a 64.06% SBE goal and a 3.95% DVBE goal. This commitment exceeded the DEOD recommended goal of 27% SBE and 3% DVBE. It is anticipated that Metro will award the construction contract after the bids have been evaluated and the construction contract has a 22% DBE goal. To ensure maximum opportunity for participation on this Project, Metro staff performed extensive outreach to the small business community, including those within the Disadvantaged Veterans Business Enterprise and the Small Business Enterprise programs for each procurement. The solicitations were advertised through periodicals of general circulation, posted on Metro's Vendor Portal, and e-mail notices to small business with applicable NAICS codes.

IMPLEMENTATION OF STRATEGIC PLAN GOALS

The Project supports the following strategic goals:

Goal 1: Providing high-quality mobility options and improve transit efficiency;

Goals 4 and 5: Transforming LA County through regional collaboration with Caltrans and the corridor cities by contributing funds and providing resources to assist Caltrans in completion of these projects

ALTERNATIVES CONSIDERED

The Board may choose not to approve this staff recommendation. This alternative is not recommended as Metro would be unable to provide funding to complete the Project according to the current schedule.

NEXT STEPS

Upon Board approval, the LOP budget will be amended accordingly per the Recommendation.

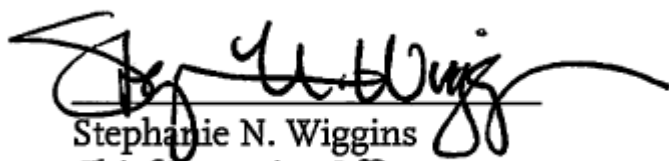
ATTACHMENTS

Attachment A - Funding and Expenditure Plan

Attachment B - Soundwall Package 10 Measure R & Measure M Unified Cost Management Policy

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ATTACHMENT "A"
EXPENDITURE and FUNDING PLAN
SOUNDWALL PACKAGE 10 HIGHWAY PROJECT Cash Flow and Sources of Funds

USES OF FUNDS

	Thru FY23	FY24	FY25	FY26	FY27	Total
PA&ED	\$ 680,241					\$ 680,241
PS&E	\$ 1,965,453					\$ 1,965,453
Construction Support	\$ 1,700,000	\$ 2,000,000	\$ 2,000,000	\$ 2,000,000	\$ 2,000,000	\$ 9,700,000
Right of Way	\$ 2,347,000	\$ 147,000	\$ 375,000	\$ 375,000	\$ 375,000	\$ 3,619,000
Construction Capital	\$ 3,000,000	\$ 15,000,000	\$ 18,000,000	\$ 8,004,000	\$ 5,196,000	\$ 49,200,000
Unallocated Contingency	\$ 450,000	\$ 2,250,000	\$ 2,700,000	\$ 1,200,600	\$ 779,400	\$ 7,380,000
Total Project Estimate	\$ 10,142,694	\$ 19,397,000	\$ 23,075,000	\$ 11,579,600	\$ 8,350,400	\$ 72,544,694

SOURCES OF FUNDS

Federal Revenue

HIP	\$ 3,000,000	\$ 15,000,000	\$ 18,000,000	\$ 8,004,000	\$ 4,645,000	\$ 48,649,000
Federal Revenue Subtotal	\$ 3,000,000	\$ 15,000,000	\$ 18,000,000	\$ 8,004,000	\$ 4,645,000	\$ 48,649,000

Local Revenue

Measure R 20% / Prop C 25%	\$ 7,142,694	\$ 4,397,000	\$ 5,075,000	\$ 3,575,600	\$ 3,705,400	\$ 23,895,694
Local Revenue Subtotal	\$ 7,142,694	\$ 4,397,000	\$ 5,075,000	\$ 3,575,600	\$ 3,705,400	\$ 23,895,694

TOTAL SOURCES	\$ 10,142,694	\$ 19,397,000	\$ 23,075,000	\$ 11,579,600	\$ 8,350,400	\$ 72,544,694
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ATTACHMENT B

SOUNDWALL PACKAGE 10 HIGHWAY PROJECT

Measure R and Measure M Unified Cost Management Policy Analysis

Introduction

The Measure R and Measure M Unified Cost Management Policy (the Policy) was adopted by the Metro Board of Directors in June 2018. The precursor Measure R cost management policy was adopted in March 2011. The intent of the Policy is to inform the Metro Board of Directors regarding cost increases to Measure R and Measure M funded projects and the strategies available to close a funding gap. The Soundwall Package 10 Highway Project (Project) is subject to this policy analysis.

The life of project (LOP) budget for the Project as approved by the Board is \$50,862,000. The Project is subject to the Policy analysis now due to a proposed \$21,682,694 increase to the LOP budget. Funding for the cost increase is needed through FY 2027. This analysis recommends trade-offs required by the Policy to identify cost reductions or the funds necessary to meet the cost increase.

Measure R and Measure M Unified Cost Management Policy Summary

The adopted Policy stipulates the following: If a project cost increase occurs, the Metro Board of Directors must approve a plan of action to address the issue prior to taking any action necessary to permit the project to move to the next milestone. Increases will be measured against subsequent actions on cost estimates taken by the Metro Board of Directors, including the determination of the budget. Shortfalls will first be addressed at the project level prior to evaluation for any additional resources using these methods in this order as appropriate:

- 1) Scope reductions;
- 2) New local agency funding resources;
- 3) Value engineering;
- 4) Other cost reductions within the same transit or highway corridor;
- 5) Other cost reductions within the same subregion; and finally,
- 6) Countywide transit or highway cost reductions or other funds will be sought using pre-established priorities.

1) Scope Reductions

The Project received Ready to List (RTL) from Caltrans in July 2021 and was allocation \$48.6M in Highway Infrastructure Program (HIP) Funding with the current scope. Any scope reductions could jeopardize the Funds allocated and could delay the schedule. Because of this, we recommend moving to the next step.

2) New Local Agency Funding Resources

Local funding resources (i.e., specific to the affected corridor or subregion) are considered in the next step as opposed to countywide or regional sources so as not to impact the funding of other Metro Board-approved projects and programs or subregions in the County.

3) Value Engineering

The Project received bids on August 30th 2022 and are anticipated to award a Design/Bid/Build contract with a FY 2026 estimated completion for the construction contract, with plant establishment and project closeout completing in FY 2027. Any value engineering would require negotiation and agreement with the contractor that could delay the schedule. Because of this, we recommend moving to the next step.

4) Other Cost Reductions within the Same Transit or Highway Corridor, or within the Same Sub-region; 5) Countywide Cost Reductions and/or Other Funds

The Project received \$48,649,000 of HIP grant funding in September 2021 that is sufficient to pay for the increase to the LOP budget. Other cost reductions or other funds are not needed to address the Project cost increase.

Recommendation

The LOP, if approved, would increase by \$21,682,694. However, Metro received federal funding through the HIP of \$48,649,000 that is sufficient to pay for the LOP increase without offsetting cost reductions or other funding. No additional action is recommended to address the cost increase.