## **MEMORANDUM**

**TAB 105** 

To: CHAIR AND COMMISSIONERS CTC Meeting: March 21-22, 2024 CALIFORNIA TRANSPORTATION COMMISSION

From: STEVEN KECK, Chief Financial Officer

Reference Number: 2.5e.(17), Action Item - YELLOW REPLACEMENT ITEM

Prepared By: Everett Townsend

District 11 – Director (Acting)

Subject: SUPPLEMENTAL FUNDS FOR CONSTRUCTION COMPLETION PHASE

PPNO 1344/EA 43056 - SAN DIEGO COUNTY - STATE ROUTE 67

**RESOLUTION FA-23-97** 

**ACTION UPDATE:** Additional information to summarize the cost increase.

#### **ISSUE:**

Should the California Transportation Commission (Commission) approve the California Department of Transportation's (Department) request for an additional \$1,808,000 in Construction Capital for the State Highway Operation and Protection Program (SHOPP) Roadway Rehabilitation project on State Route (SR) 67, in San Diego County, to complete the construction contract?

#### **RECOMMENDATION:**

The Department recommends that the Commission approve the requested supplemental funds allocation for this SHOPP project.

### PROJECT DESCRIPTION:

This project is located on SR 67 in and near Eucalyptus Hills, the City of Poway, and Ramona, from south of Lakeside Avenue to SR 78, in San Diego County. The project will rehabilitate the pavement, restore drainage systems, upgrade curb ramps and guardrail, and enhance crosswalk visibility.

### **FUNDING AND PROGRAMMING STATUS:**

In December 2018, the project was programmed for \$26,891,000 in Construction Capital and \$5,110,000 in Construction Support in the SHOPP for allocation in Fiscal Year 2020-21. In May 2021, the project was allocated for \$32,000,000 in Construction Capital and \$5,250,000 in Construction Support. In December 2021, the project received a 5-month award time extension

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for the Construction phase. In March 2022, the project received partial G-12 funds for award in the amount of \$3,316,000 and awarded the contract for \$35,316,000 in Construction Capital.

In June 2022, construction began with 350 working days. The remaining Construction Capital funds are currently at \$2,548,000. The project is 90 percent complete with 45 working days remaining. The planned Construction Contract Acceptance is scheduled for June 2024.

#### **REASON FOR COST INCREASE:**

The project realized Construction Capital increases due to several issues encountered during construction. Due to severe storms during construction, unanticipated pavement repairs were required, and differing site conditions were encountered for pavement rehabilitation and guardrail work. The project also required additional placement of high friction surface treatment (HFST), replacement of traffic loops, temporary pavement delineation, culvert abandonment, and time-related overhead. Revisions were made to the project to upgrade the fiber optic cable and modify portions of the permanent pavement delineation work to meet the latest standard. Additional capital funding will be required to complete the above added work.

Construction along the 18-mile segment of SR 67 began in June 2022. During the 2022 Winter season, the San Diego region experienced severe storm events that accelerated the deterioration of various sections of the existing roadway before the scheduled work of this pavement rehabilitation project. The contractor was directed to repair major potholes to allow safe passage of traffic through the project limits and avoid potential damage claims and public safety concerns. A contract change order (CCO) for maintaining traffic in the amount of \$500,000 was utilized to pay for this work.

Prior to the start of the pavement rehabilitation work, a survey of the existing pavement was performed by the contractor and construction staff. It was found that several locations showed structural pavement failure at the top six to eight inches of the structural section which was beyond the current planned rehabilitation strategy. The project's original pavement rehabilitation strategy was to remove and replace the top three inches of the pavement. The contractor was directed to remove and replace the sections of pavement that showed failure beyond the top three inches of the pavement. This work was not anticipated, and two CCOs were executed, for a total amount of \$257,000 to address the structural pavement failure.

As part of the pavement rehabilitation strategy, a stress absorbing membrane was to be placed after the removal of the top three inches of the pavement before the new hot mix asphalt was placed on top. During the paving activities, when the top three inches of pavement was removed, moisture began seeping out of the structural section. The subsurface moisture prevented the proper installation of the membrane which requires the pavement surface to be dry prior to placing the membrane. The contractor tried different strategies to dry the surface, eventually settling on the most efficient process, which consisted of using a pavement heating unit. The contractor submitted a claim and requested additional compensation for the added cost due to the differing site conditions. The approval on the CCO for this work is pending and

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is estimated to cost \$180,000. The supplemental funds from this request will be used to pay for this work.

The project also includes the placement of HFST at specific locations along SR 67. In January 2023, based on traffic investigation reports, the Department's Traffic and Safety Operations (TSO) office requested that HFST be placed at additional locations. In November 2023, the Department's TSO office submitted a second request for additional HFST to be placed at a section that was identified in a traffic investigation report. The supplemental funds from this request will be used to pay for this work. The approval on the CCO for this added work is pending and is estimated to cost \$200,000.

As part of this project, guardrail was to be upgraded at 36 locations. During the contractor's survey of the guardrail work, the contractor discovered discrepancies and omissions in the contract plans and submitted a claim for differing site conditions at 18 of the 36 locations. The claim was reviewed and two CCO's were issued. The first CCO addressed the redesign of the post length and added embankment work to meet minimum hinge standards behind the guardrail, which amounted to \$455,000. The second CCO addressed sections of the guardrail that were changed to concrete barrier at locations where conflicts with underground facilities were encountered, which amounted to \$467,000. As the change order work progressed, it was found the original cost was underestimated for both CCOs and funds were exhausted. An additional \$450,000 is required to complete the work for both CCOs. The work for both CCOs is currently suspended due to lack of funds. The supplemental funds from this request will be used to complete this work.

In September 2023, it was discovered that numerous traffic loops were going to be impacted by the pavement rehabilitation project that had not been accounted for in the original contract plans. It required the replacement of 68 traffic loops within the project limits. The supplemental funds from this request will be used to pay for this work. The approval on the CCO for this added work is pending and is estimated to cost \$150,000.

As pavement rehabilitation work is performed, the contractor is required to place temporary pavement delineation until permanent pavement delineation can be placed after all the work is completed. The contract only included bid items for temporary pavement markings for short-term day/night use. However, temporary pavement markers for long-term day/night use were required. Subsequently, the contractor submitted a claim for additional compensation as they proceeded with the placement of temporary pavement markers for long-term day/night use to allow safe passage of traffic through the project limits. The supplemental funds from this request will be used to pay for this work. The approval on the CCO for additional compensation is pending and is estimated to cost \$450,000.

In January 2023, a CCO was executed to upgrade the Department's fiber optic cable from 144 to 288 count to increase the bandwidth capacity for future operational needs. This CCO was executed for \$346,000.

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After the contract was approved, the Department's TSO office requested changes to the project's permanent pavement delineation at crosswalk markings at various intersections as well as added shared roadway bicycle markings and other miscellaneous pavement markings and striping. The change in delineation is to comply with the latest complete street standards. The supplemental funds from this request will be used to pay for this work. The approval on the CCO for the changes and additional work is pending and is estimated to cost \$30,000.

As part of this project, the drainage system work included the removal/abandonment of two existing culverts. After the contract was awarded, the Department's Design staff identified two additional culverts within the project limits that also needed to be abandoned. The supplemental funds from this request will be used to pay for this work. The approval on the CCO for the added work is pending and is estimated to cost \$20,000.

It is estimated that an additional 25 working days will be required to complete all the added CCO work listed above. In addition to the above CCO costs, the supplemental funds from this request will be used to pay for the contractor's time-related overhead, which amounts to \$74,000.

As work has progressed throughout construction to date, it was found that 19 bid item quantities were underestimated, which resulted in unforeseen expenditures of contingency funds. The current amount of bid item overruns is \$1,251,000.

The remaining contract item work includes pavement delineation, miscellaneous lump sum contract items like traffic control, time-related overhead, and job site management and amounts to \$1,551,000. The total pending CCO need is estimated at \$2,805,000. The total need to complete construction is \$4,356,000. The remaining Construct Capital fund of \$2,548,000 will be used to offset this need. To address the shortfall, the Department will require an additional \$1,808,000 in supplemental funds.

### **CONSEQUENCES:**

If this request for supplemental funds is not approved, the Department will not be able to complete the pavement rehabilitation work and upgrade other assets along the 18-mile segment of SR 67 and improve safety for the traveling public. There may be a risk of delay-claims by the contractor, followed by potential litigation. The cost would shift to Field Maintenance staff to maintain compromised portions of the roadway. To complete this work at a later time, another project will have to be programmed in a future SHOPP cycle at a possible higher project cost.

#### **FINANCIAL RESOLUTION:**

Resolved, that \$1,808,000 be allocated from Non-Budget Act Item 2660-802-3290, for Construction Capital to provide funds to complete the Construction phase for this SHOPP project.

Attachment