# MEMORANDUM

**TAB 85** 

## To: CHAIR AND COMMISSIONERS CALIFORNIA TRANSPORTATION COMMISSION

**CTC Meeting**: June 27-28, 2024

From: STEVEN KECK, Chief Financial Officer

Reference Number: 2.5e.(10), Action Item - YELLOW REPLACEMENT ITEM

Prepared By: Catalino Pining III District 08 – Director

#### Subject: <u>SUPPLEMENTAL FUNDS FOR CONSTRUCTION COMPLETION PHASE</u> <u>PPNO 0050P/EA 1C850 – RIVERSIDE COUNTY – STATE ROUTE 74</u> <u>RESOLUTION FA-23-132</u>

**<u>ACTION UPDATE:</u>** Additional information on the reason for cost increase.

#### ISSUE:

Should the California Transportation Commission (Commission) approve the California Department of Transportation's (Department) request for an additional \$5,700,000 in Construction Capital for the State Highway Operation and Protection Program (SHOPP) Safety Improvements project on State Route (SR) 74, in Riverside 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 74 near the City of Lake Elsinore, from the Orange County Line to Monte Vista Street, in Riverside County. The project will widen the roadway to provide standard lane and shoulder widths and construct ground-in rumble strips.

#### FUNDING AND PROGRAMMING STATUS:

In June 2014, the project was programmed for \$53,600,000 in Construction Capital in the SHOPP for allocation in Fiscal Year 2017-18. In May 2017, the project was amended to move the construction allocation to 2019-20, due to the federal land transfer process. In May 2020, the project was allocated for \$53,996,000 in Construction Capital. In November 2020, the

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project was awarded for \$43,285,000 in Construction Capital. In February 2021, construction began with 500 working days. In August 2021, the project received partial G-12 funding in the amount of \$2,000,000 in Construction Capital. In September 2022, the project received partial G-12 funding in the amount of \$1,600,000 in Construction Capital. In October 2023, the project received supplemental funds in the amount of \$4,250,000 in Construction Capital. The project also received a 27-month project completion time extension for the Construction phase. The remaining funds are currently at \$4,412,000 in Construction Capital. The project is 95 percent complete, with 100 working days remaining. The planned Construction Contract Acceptance is scheduled for February 2026. This project includes 360 working days for plant establishment.

## **REASON FOR COST INCREASE:**

In October 2023, supplemental funds were approved to address additional pavement surface profile and cross slope adjustments than was anticipated, along with related traffic control measures. Adding to the cost was an increase to the number of trees impacted by construction activities and encountering differing site conditions for the concrete barrier footing. The project also encountered severe weather events during the Winter season of 2022-23 requiring unanticipated repair to the temporary erosion control measures. All of these cost increases resulted in additional time-related overhead. In addition, there was a cost increase to the asphalt concrete due to the fluctuation in oil prices.

Additional project costs above the initial supplemental request were realized due to multiple issues with guardrail installation, differing site conditions for storm water treatment systems, and placement of larger than anticipated mulch quantities. In addition, concrete barriers that were not installed at the standard height required replacement. These increases required additional enhanced traffic control and time-related overhead.

The project plans require upgrading guardrail at various locations. Various issues were encountered at a few of the locations. After the paving operation was completed for the project and prior to the installation of guardrail, it was discovered that the pavement width at two guardrail locations on a horizontal curve needed to be extended an additional three feet to allow for the proper installation of the guardrail and to meet sight distance requirements. There was a discrepancy between the plans and survey staking that resulted in extending the pavement. Differing site conditions, which consisted of a hard rock layer and boulders, were encountered at various locations where guardrail posts were to be installed. This operation is still ongoing, requires different installation techniques, and is extremely slow to install. Related to the paving operations, a tapered edge was placed per the project plans. However, at several locations, the guardrail and drainage dikes are required to be installed at a vertical edge of the pavement. As a result, the tapered pavement edge had to be removed. In addition, two guardrail locations were found to be in conflict with the existing drainage system at the end of the concrete barrier. This was not identified in the plans and required mitigation. To address this conflict, the concrete barrier was extended past the drainage system prior to the installation of guardrail. As

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a result of the additional efforts that were needed to address these issues, the cost amounted to an increase of \$1,300,000.

As part of the environmental commitments for treating impervious areas of more than one acre, storm water treatment systems in the form of infiltration trenches were required to be installed at various locations. During the excavation of the treatment systems, differing site conditions were encountered at several locations, which consisted of a hard rock layer and boulders. As a result, the design was adjusted but the work proceeded slower than anticipated, and the additional efforts that were needed to install the treatment systems amounted to an increase of \$500,000.

The project also includes the construction of concrete barriers on top of retaining walls. During the construction of the barrier, it was found that the height of the barrier varied from 36 to 42 inches. The standard height required is 42 inches, however, there was a discrepancy in the plans as to how this was to be calculated. The contractor was directed to remove and replace the barrier that did not meet the standard height. The cost of removing and replacing the non-standard barrier amounts to \$1,500,000.

During the initial supplemental request, additional funds were provided to address the increased quantity of tree removal that was discovered after the final tree survey in May 2023. As part of the erosion control plans, the trees were to be processed into mulch, which was mandated to stay within the project and placed along the project limits per environmental requirements. The additional trees that were processed into mulch resulted in almost four times the original quantity per plan. The project limits have very limited areas where mulch could be placed on the original quantity per plan. The placement of the additional quantity of mulch was extremely challenging to execute and very time consuming as the nature of the project terrain was either a steep cut or embankment slopes where a creek runs at the toe of slopes. Temporary fences were placed at the toe of the slope to prevent the mulch from going into the creek. The effort to finding suitable locations to place the mulch amounted to an increase of \$550,000.

To address all of the items above, additional night closures were needed to perform the work. As a result, this required enhanced traffic control with the use of highway patrol which amounted to an increase of \$650,000. In addition, these activities had time impacts to the project's critical path of work. The contract change orders have resulted in an increase to time-related overhead in the amount of \$1,200,000.

With the additional work that was required to install guardrail and storm water treatment systems, replacement of concrete barrier that was not installed at the standard height, and placement of mulch, the project will need an additional \$5,700,000 in Construction Capital to address the contract change orders and complete the remaining work.

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### **CONSEQUENCES:**

If this request for supplemental funds is not approved, the Department will not be able to complete construction of this project and deliver critical safety improvements along this segment of SR 74. If the construction contract is further delayed or terminated, it will likely result in claims by the contractor. To complete construction 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 \$5,700,000 be allocated from the Budget Act of 2023, Budget Act Items 2660-302-0042 and 2660-302-0890 for Construction Capital, to provide funds to complete the Construction phase for this SHOPP project.

Attachment