State of California
DEPARTMENT OF TRANSPORTATION

California State Transportation Agency

M e m o r a n d u m

To: CHAIR AND COMMISSIONERS
CALIFORNIA TRANSPORTATION COMMISSION

CTC Meeting: December 10, 2014

Reference No.: 2.5d.
Action Item

From: NORMA ORTEGA
Chief Financial Officer

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Transportation Programming

Subject: **ALLOCATION FOR PROJECT THAT EXCEEDS THE PROGRAMMED CONSTRUCTION AMOUNT BY MORE THAN 20 PERCENT**
RESOLUTION FP-14-23

RECOMMENDATION:

The California Department of Transportation (Department) recommends that the California Transportation Commission allocate $6,500,000 for one State Highway Operation and Protection Program (SHOPP) project identified below.

ISSUE:

Funds are needed for one programmed project in order to advertise the construction contract.

RESOLUTION:

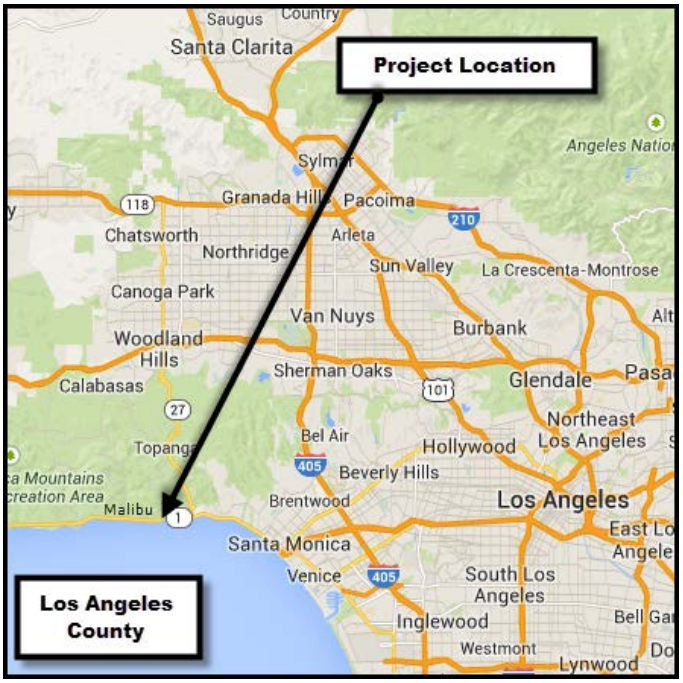
Resolved, that $6,500,000 be allocated from the Budget Act of 2014, Budget Act Item 2660-302-0042 and 2660-302-0890, to provide funds for the project identified below.

Project	Dist-Co-Rte	Original Programmed Amount	Current Programmed Amount	Program Adjustment	Revised Programmed Amount	% Increase Above Current Programmed Amount
1	07-LA-1	$3,500,000	$3,500,000	$3,000,000	$6,500,000	185.7%

Project # Allocation Amount County Dist-Co-Rte Postmile	Location Project Description	PPNO Program/Year Prgm'd Amount Project ID Adv Phase EA	Budget Year Item # Fund Type Program Code	Amount by Fund Type
2.5d.	**Financial Allocation that Exceeds the Programmed Construction Amount by More Than 20 Percent**			**Resolution FP-14-23**
1 $6,500,000 Los Angeles 07-LA-1 41.8/42.1	In Malibu, one mile north of Topanga Canyon Boulevard. Outcomes/Outputs: Reconstruct roadway embankment and shoulder, and repair failed drainage system. (Construction Support: $1,560,000)	07-4446 SHOPP/14-15 $3,500,000 0712000164 3X4504	2013-14 302-0042 SHA 302-0890 FTF 20.20.201.131	$130,000 $6,370,000

RECOMMENDATION:

The Department recommends that this request for $6,500,000 be approved to allow this project to be advertised.



PROJECT DESCRIPTION:

This project is located in Los Angeles County on Route 1, in the city of Malibu, at approximately one mile north of Topanga Canyon Boulevard. The project will repair damage caused by heavy storm events that first occurred in December 2010 and January 2011. At this location, Route 1 is a four-lane conventional highway immediately adjacent to the Pacific Ocean. Storm surf waves have washed out and collapsed large sections of the ocean-front embankment support slope, undermining the southbound roadway shoulder as well as drainage systems and buried utilities. Temporary railing has been set up along the roadway shoulder to protect traffic from the drop-off edge of the undermined roadway. However, erosion continues to expand during high surf events.

The project proposes to reconstruct the embankment, shoulder, and damaged drainage system by installing approximately 1,600 feet of bank and shore rock slope protection (RSP). The RSP will be wrapped in fabric material and buried at its toe into underlying soils to safeguard against further surf erosion. The new RSP will expand a shorter section of RSP previously installed in 2006 that used this same technique and is performing well. The very narrow sandy beach area will be restored.

FUNDING STATUS:

The project was amended into the SHOPP in November 2011, and scheduled for construction in June 2013. However, additional site data was required to complete a Wave Uprush Study as a prerequisite in obtaining the California Coastal Commission permit. The Wave Uprush Study is a coastal engineering analysis of the site regarding wave action, water level determination, scour trends, and shoreline geography. The study, which commenced February 2013, required wave data to be collected over a one-year period to gather information from moon-phase tidal action and varying weather conditions over all four seasons. The study was completed July 2014. However, because of recent deterioration in the field conditions caused by an active eastern Pacific hurricane season and high surf conditions, additional damage was incurred during the summer of 2014. Additional collapse of the 20 foot high bluff area supporting the roadway shoulder occurred. As much as 6 feet of additional roadway embankment collapsed down into the surf along a 40 foot length and at other various locations along the project site, necessitating the temporary railing placed on the shoulder to be moved back away from edge. A supplemental Damage Assessment Form, which increased the cost, was approved by the Federal Highway Administration (FHWA) and the California Coastal Commission granted an emergency permit on September 9, 2014. In addition to permitting this permanent repair project, the emergency permit also covers temporary measures now in place to immediately protect and support the utilities. A small stacked concrete sack retaining embankment has been constructed by minor contract at a spot location to protect the critical city water main and threatened high-risk large diameter natural gas line buried under the shoulder. These utilities were exposed and under imminent threat. This interim measure will be permanently protected by the larger project.

The project is currently programmed in Fiscal Year 2014-15 in the 2014 SHOPP for $3,500,000, based on the 2011 Damage Assessment Form estimate. This request for $6,500,000 is an increase of 185.7 percent above the programmed amount.

REASON FOR INCREASE:

Detailed design work has been completed. The original estimate for repairs was determined based on the similar RSP work done in 2006. However, project costs have increased to account for additional embankment failure from high surf after the initial assessment and programming, additional restrictive protections, and providing adequate work-site space between the base of the new embankment and advancing surf waterline. Work will require pushing salvaged rock towards the surf and constructing a sand barrier behind which the new embankment slope can be constructed. The increased protection requirements has resulted in an increase in project item cost for RSP, rebuilding and replenishing beach sand, excavation, salvage and reuse of existing RSP on the site, traffic control and other related project costs. These items add an additional $3,000,000 to the cost of this project.

The current construction work is planned to be completed by Director's Order and informal bid process to complete the work as quickly as possible and to avoid further damage and roadway loss.

FUNDING OPTIONS:

OPTION A: Approve this request, as represented above, for $6,500,000 to allow this project to be advertised.

OPTION B: Deny this request and direct the Department to adjust the project to remain within the programmed amount. The Department has considered this option and determined that reducing the scope of work on this project, and executing another project to complete the deleted work later, would result in greater costs and more disruption to the traveling public.

RECOMMENDED OPTION

The Department recommends that this request for $6,500,000 as presented in Option A above, be approved to allow this project to be advertised.