State of California
**DEPARTMENT OF TRANSPORTATION**

California State Transportation Agency

**Tab 87**

# M e m o r a n d u m

**To:** CHAIR AND COMMISSIONERS
CALIFORNIA TRANSPORTATION COMMISSION

**CTC Meeting:** August 27, 2015

**Reference No.:** 2.5d.(1)
Action Item

**From:** NORMA ORTEGA
Chief Financial Officer

**Prepared by:** Bruce De Terra, Acting Chief
Division of
Transportation Programming

**Subject:** **ALLOCATION FOR PROJECT WITH COSTS THAT EXCEED THE PROGRAMMED AMOUNT BY MORE THAN 20 PERCENT**
**RESOLUTION FP-15-06**

## RECOMMENDATION:

The California Department of Transportation (Department) recommends the California Transportation Commission (Commission) allocate $1,689,000 for one State Highway Operation and Protection Program (SHOPP) project identified below.

## ISSUE:

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

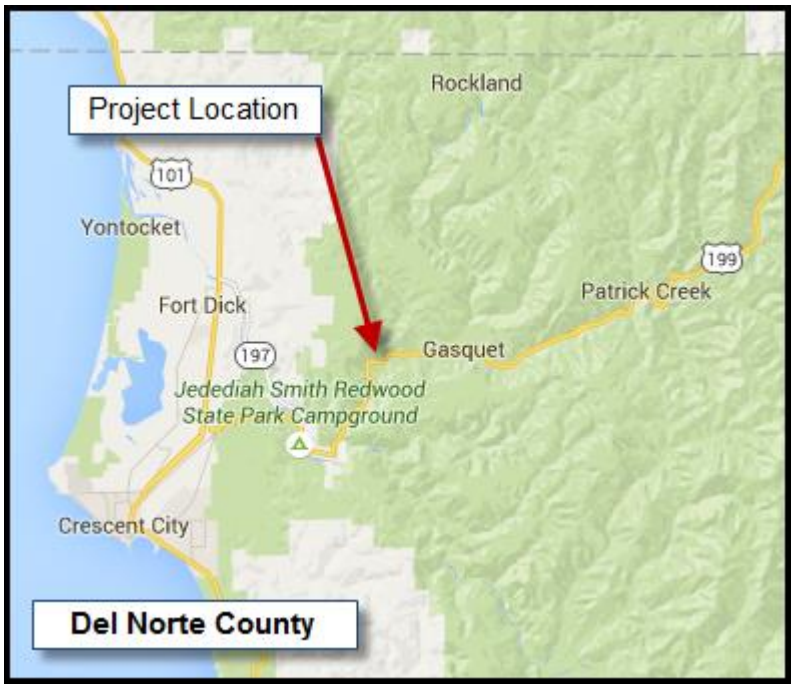
## RESOLUTION:

Resolved, that $1,689,000 be allocated from the Budget Act of 2014, Budget Act Item 2660-302-0042 and 2660-302-0890, to provide funds to advertise the following project.

| Dist-Co-Rte | Programmed Amount | Program Adjustment | Allocation Request | % Increase Above Programmed Amount |
|---|---|---|---|---|
| 01-DN-199 | $1,250,000 | $439,000 | $1,689,000 | 35.1% |

**PROJECT DESCRIPTION:**

This project is located in Del Norte County on Route 199, near Gasquet at 1.5 miles north of Myrtle Creek Bridge. The project repairs two storm damaged locations by constructing a soldier pile wall and a Gabion Earth Retaining Structure (ERS), respectively. The project was initiated by the Department within the project limits to restore the two locations to pre-disaster conditions.




**FUNDING STATUS:**

The project was amended into the SHOPP in September 2011, and is currently programmed in Fiscal Year 2014-15 in the 2014 SHOPP for $1,250,000. This allocation request for $1,689,000 is an increase of 35.1 percent above the programmed amount.

**REASON FOR INCREASE:**

During the heavy spring rains and declared disaster in March 2011, the roadway experienced slip outs at two locations on Route 199. The roadway was stabilized under an emergency contract so that the roadway could be safely utilized by the travelling public. The original strategy for permanent restoration was to reconstruct the roadway using a combination of engineered buttress and gravity wall at Location 1 to address three localized failures and a bio-engineered buttress only at Location 2 to address one small localized failure.

The estimated construction capital cost programmed for the project in the fall of 2011 was for $1,250,000. The main issue that contributed to the higher programmed amount was the timing of the drilling and foundation work. The project included a risk management plan, and one of the components of that plan was the geotechnical investigation work. Due to a large number of ongoing projects statewide, and limited number of geotechnical teams and drilling equipment, there was a possibility that the final foundation report would not be completed in time to start the design phase. Because this was an emergency restoration project, a priority for the Department, a decision was made to develop the plans, specifications, and estimate (PS&E) concurrently with the geotechnical investigation work. The detailed geotechnical investigation was initiated in early 2013, however, the geotechnical report was not finalized until September 2014, the project delivery year. Commission programming guidelines do not allow for cost, scope, and schedule amendment adjustments to programmed projects in the delivery year. The only recourse is to request a cost adjustment at the time of allocation.

The geotechnical investigation did not find competent material to support the gravity wall and bio-engineered buttress at Location 1 until a depth of 15 to 25 feet below the roadway. As such, the original solution proposed at Location 1 would be unstable. In lieu of this solution, it was recommended to construct a soldier pile retaining wall system encompassing all three localized failures at this location. This increased the construction estimate to $1,689,000.

## LESSONS LEARNED:

The Project Delivery Team recognized the geotechnical study as a significant risk factor, with potential impacts to both project cost and delivery schedule. The geotechnical study, which is the foundation for this design of the restoration work, was included by the project team in the projects' risk management plan. Unfortunately the potential impact of this risk to the projects' cost was under-estimated. In the future, greater emphasis on the impact to project cost and schedule will be placed on geotechnical studies.

## DETERMINATION

The Department has determined that reducing the scope of work to the programmed amount and completing the deleted work later, would result in greater costs and more disruption to the traveling public and recommends that this request for $1,689,000 be approved to allow this project to be advertised.

Attachment

## 2.5 Highway Financial Matters

| Project # / Allocation Amount / County / Dist-Co-Rte / Postmile | | PPNO / Program/Year / Prgm'd Amount / Project ID / Adv Phase / EA | Budget Year / Item # / Fund Type / Program Code | Amount by Fund Type |
|---|---|---|---|---|
| **2.5d.(1)** | **Allocations for Projects with Cost Increases Greater than 120 Percent** | | | **Resolution FP-15-06** |
| 1<br>$1,689,000<br><br>Del Norte<br>01-DN-199<br>8.7/21.7 | Near Gasquet, at 1.5 miles north of Myrtle Creek Bridge; also about 8 miles north of Gasquet, at 0.4 mile south of Patrick Creek Bridge. Outcome/Output: Restore storm damage at two locations by constructing a soldier pile wall at Location 1 and Gabion Earth Retaining Structure (ERS) at Location 2.<br><br>Preliminary Engineering / Programmed / Expended<br>PA&ED $200,000 $190,170<br>PS&E $400,000 $466,106<br>R/W Supp $10,000 $3,877<br><br>(Construction Support: $400,000) | 01-1081<br>SHOPP/14-15<br>$1,250,000<br>0112000115<br>4<br>0B310 | 2014-15<br>302-0042<br>SHA<br>302-0890<br>FTF<br>20.20.201.131 | $194,000<br><br>$1,495,000 |