



A Tradition of Stewardship
A Commitment to Service

Agenda Date: 1/26/2021

Agenda Placement: 7C

NAPA COUNTY BOARD OF SUPERVISORS Board Agenda Letter

TO: Board of Supervisors

FROM: Steven Lederer - Director of Public Works
Public Works

REPORT BY: German Sierra-Frutos, Junior Engineer - 8372

SUBJECT: Budget Adjustment for Scour Repairs at the Silverado Trail Bridge Over Bell Canyon Creek Bridge, RDS 18-43

RECOMMENDATION

Director of Public Works request the following:

1. Creation of a new Capital Improvement Project (CIP) within the Roads Capital Improvement Program budget (Fund 2040, Sub-Division 2040500) for the SB1- Silverado Trail Bridge over Bell Canyon Creek (Program 21031); and
2. Approval of Budget Transfer No. DPW 034 for the following (4/5 vote required):
 - a. Increase appropriations by \$124,000 in the SB-1 Non-Operating Special Revenue Fund (SRF) budget (Fund 2440, Sub-Division 1220052) to transfer to Program 21031 offset by use of its available fund balance; and
 - b. Increase appropriations by \$124,000 in Program 21031 budget offset by an increase in revenue from the transfer from the SB1 SRF budget.

EXECUTIVE SUMMARY

The Silverado Trail Bridge over Bell Canyon Creek (Bridge No. 21C0001) is located just north of the intersection of Silverado Trail and Glass Mountain Road, which is approximately 2.5 miles northwest of the City of Saint Helena. In the latest Bridge Inspection Report, Caltrans has determined that scour has occurred at the bridge foundations; however, Caltrans staff could not determine the level of risk associated with the scour. Caltrans requested that the County complete a Scour Plan of Action (SPOA) which will be implemented to reduce the risk to users from bridge failure during and immediately after a flood event.

A preliminary SPOA was developed by a consultant and sent to the District Local Assistance Engineer for review and approval. The preliminary SPOA proposes that the County place rock protection under the bridge and visually

monitor the bridge during high water flow events. The County needs to notify Caltrans once we install effective and permanent scour countermeasures so Caltrans can remove the bridge structure from the Scour Critical List. The budget transfer will allow the County to proceed with the design of scour countermeasures. Because the work is "in river", environmental studies and permits will likely be required.

FISCAL & STRATEGIC PLAN IMPACT

Is there a Fiscal Impact?	Yes
Is it currently budgeted?	No
What is the revenue source?	Staff is requesting \$124,000 in SB1 funding for the design of the countermeasures proposed in the Scour Plan of Action for the Silverado Trail Bridge over Bell Canyon Creek Project, RDS 20-43 (Fund 2040, Subdivision 2040500 and Program 21031). When staff asks the Board to award a construction contract, staff will also request funding for construction.
Is it Mandatory or Discretionary?	Discretionary
Discretionary Justification:	Approval of the Budget Transfer is necessary to move the project forward toward construction and minimize the risk to travelers on this road.
Is the general fund affected?	No
Future fiscal impact:	Staff will request approximately \$220,000 in additional SB1 funding to implement the countermeasures portion of the Silverado Trail Bridge over Bell Canyon Creek Project, RDS 20-43.
Consequences if not approved:	Construction of the scour countermeasures at the foundation of the bridge will occur in later years, thus putting the safety of travelers on the bridge at risk.
County Strategic Plan pillar addressed:	The Project will improve the existing transportation and roads system to safely accommodate all users.
Additional Information:	

ENVIRONMENTAL IMPACT

ENVIRONMENTAL DETERMINATION: The proposed action is not a project as defined by 14 California Code of Regulations 15378 (State CEQA Guidelines) and therefore CEQA is not applicable.

BACKGROUND AND DISCUSSION

The County owns and maintains 74 bridges in the National Bridge Inventory and Caltrans inspects the bridges in accordance with federal regulations as part of the Highway Bridge Program. Caltrans has been inspecting the Silverado Trail Bridge over Bell Canyon Creek since 1939 and the 2004 Bridge Inspection Report (BIR) stated that Caltrans did not find any scour at the bridge. In 2007, Caltrans noted debris and scour on the upstream side of the bridge. Over 12 years, Caltrans observed up to two feet of footing exposure with no undermining.

On December 31, 2019, Caltrans Division of Maintenance mailed a letter to the County stating that Caltrans had classified the Silverado Trail Bridge over Bell Canyon Creek as "Scour Critical" based on bridge inspections made by Structure Maintenance and Investigations staff. The November 2019 BIR states that Caltrans could not determine the type of bridge foundation nor the scour risk, and asked the County to prepare a Scour Plan of Action (SPOA) to determine the risk of scour per the Federal Highway Administrations Hydraulic Engineering Circular Number 23.

County staff inspected the bridge and did not find any immediate risk of damage or failure. County staff also hired a consultant to evaluate the bridge and prepare a preliminary SPOA and sent it to the District Local Assistance Engineer for review and approval. The SPOA proposes that the County place rock protection under the bridge and County staff visually monitor the bridge during high water flow events. The County needs to notify Caltrans once the County installs effective and permanent scour countermeasures so Caltrans can remove the bridge structure from the Scour Critical List.

Due to the severity of the scour problem at the foundation of the bridge, completing the Project is a high priority to prevent more damage to the bridge foundations. Staff is requesting SB-1 funding to complete the SPOA to evaluate the scour, design any required scour countermeasures and establish an inspection strategy. County expects to construct the Project during the summer of 2021; however, County staff need SB1 funding to proceed with the design phase of the project. Staff recommends the Board approve the action today to allow the design of Silverado Trail Bridge over Bell Canyon Creek Project to proceed.

SUPPORTING DOCUMENTS

A . RDS 20-43 Budget

CEO Recommendation: Approve

Reviewed By: Susan Kuss