Midpeninsula Regional Open Space District

Memorandum

DATE: February 26th, 2014

MEMO TO: MROSD Board of Directors

THROUGH: Stephen Abbors, General Manager

FROM: Aaron Hébert, Contingent Project Manager

SUBJECT: Harkins Bridge Project Update

Summary

Staff is proposing, as part of the FY 2014-15 Action Plan, to design, engineer and permit for the replacement of the Harkins Bridge in Purisima Creek Open Space Preserve. Demolition of the old rail car bridge and construction of the new bridge is proposed for FY 15-16. After a review of District vehicle bridges by staff and an engineer, the Harkins Bridge was identified as the highest priority bridge for replacement. The bridge provides an essential connection between the western access to the preserve and Skyline Boulevard.

Background

In August 2013, the Board authorized staff to enter into contract with Questa Engineering for an amount not-to-exceed $200,000 (R-13-78) to implement District priority projects, such as the replacement and repair of vehicle bridges at Purisima Creek Redwoods Preserve, demolition of structures throughout the District, and environmental review of Real Property projects.

In December, the District contracted with Questa for $27,150 to complete assessments of several bridges and make recommendations for use, maintenance, or replacement.

Current Project Scope

The goal under this contract, in the current fiscal year, is to determine what bridges can be repaired or used in their current condition and to consider replacement alternatives if nesseccary. Staff and Questa identified the Harkins Bridge, near the lower parking lot of Purisima Creek Redwoods Preserve, as in need of replacement.

The Harkins Bridge was recommended for replacement due to rust that has corroded important structural members. It also lacks engineered footings and the current estimated maximum weigh load does not accommodate most District vehicles. Repair is not an effective option because all three main components of the bridge: the abutments, girders (structural beams), and superstructure (decking, crossbeams, and railing) are deteriorated. Repairing one component will not provide a long term safe and stable bridge.

Replacing bridges requires significant engineering, regulatory and permit review, construction costs, as well as staff time to manage the project. District staff are working with Questa to explore different design alternatives to keep costs down while providing for safety and supporting the required weight for emergency response vehicles.

Next steps

This project is in the proposed FY 2014-15 Action Plan and Budget. If approved as part of Action Plan and Budget, Operations and Planning staff will review design alternatives with Questa, select a bridge and seek to complete drawings and apply for permits in the next fiscal year with the goal of construction in the fall of 2015.

The cost for potential bridge design alternatives is estimated to be $378,000 to $421,000. Approximately 20% of the cost will be design/engineering, 10% permitting, and 70% construction and related costs.

$110,000 is in the proposed FY14-15 Budget to begin the engineering and permitting process with Questa.