



COUNTY OF SAN MATEO
Inter-Departmental Correspondence
Public Works



Date: October 15, 2014
Board Meeting Date: November 18, 2014
Special Notice / Hearing: None
Vote Required: Majority

To: Honorable Board of Supervisors

From: James C. Porter, Director of Public Works

Subject: Alpine Road Trail Improvements Project
[County Project No. P23P1; Project File No. E4905]

RECOMMENDATION:

Adopt a Resolution authorizing the Department of Public Works to:

- A) Proceed with alternative bank stabilization measures in collaboration with Stanford University for the Alpine Road Trail Improvements Project; and
- B) Revise and recirculate the Initial Study/Mitigated Negative Declaration for the Alpine Road Trail Improvement Project.

BACKGROUND:

The Alpine Road Trail (Trail) is a multi-use trail that extends from approximately Junipero Serra Boulevard, in the City of Menlo Park (City), to Portola Road, in the Town of Portola Valley (Town). Your Board approved funding for the Alpine Road Trail Improvements Project (Project) within the unincorporated County area during the FY 2012-13 Capital Improvement Budget hearing. The Project involves creek bank stabilization work at three locations along Los Trancos Creek (Creek), and rehabilitation of the existing Trail.

At the January 28, 2014 Board of Supervisors' meeting the Department of Public Works (Department) presented proposed creek bank stabilization measures for this Project as represented in the environmental document (Initial Study/Mitigated Negative Declaration). Your Board heard comments regarding the Project from the public and Stanford University (Stanford). The Department was directed by your Board to meet with representatives from Stanford to evaluate alternate biotechnical methods for stabilizing the creek bank along Alpine Road, which could include shifting the Creek away from Alpine Road onto Stanford property, and report back to your Board.

The Department met with Stanford to discuss alternatives and Stanford agreed in principle to allow the County to use their land to access the sites during construction. They did not agree to provide funding for the alternate designs.

The Department reported back to your Board at the March 11, 2014 meeting regarding the discussions with Stanford. At that meeting your Board acted to postpone certifying the Initial Study/ Mitigated Negative Declaration (IS/MND) previously discussed and directed the Department to collaborate with Stanford to explore alternatives for two creek bank stabilization locations (Sites 2 and 3) that would incorporate more environmentally sensitive solutions, and be acceptable to the regulatory agencies and the public.

DISCUSSION:

The proposed Project consists of stabilizing the creek bank at three locations. Bank failures at these locations have narrowed the Trail, threaten to narrow the adjacent roadway, and could impact critical gas, sanitary sewer, and water lines. The Project also involves rehabilitating the County's segment of the 1.84 mile long Trail, from the County/City boundary, near Stowe Lane, at the northern end of the Project, to the County/Town boundary at the southern end of the Project. The Trail rehabilitation in general will involve removing the existing distressed pavement and placing new pavement in its place. Some segments of the Trail are in acceptable condition and will receive a surface type of treatment only.

Since the March 11, 2014 Board meeting, Department staff has worked with consultants to develop hydraulic and feasibility studies (Feasibility Study) and collaborated with Stanford to assess the alternative bank stabilization measures at Sites 2 and 3. Site 1 did not receive specific comments, and will remain a keystone wall as originally proposed.

Alternatives proposed in the Feasibility Study consisted of slightly shifting the Creek and incorporating additional biotechnical features in front of the originally proposed bank stabilization walls. The biotechnical features consist of either incorporating a Live Log Crib Wall (Crib Wall), or a Vegetated Reinforced Soil Slope (VRSS). A Crib Wall acts like a gravity wall and is constructed in a series of interlocking boxes, with live vegetation that are integrated into the face of the wall. Once established the live vegetation acts to further stabilize the bank. The Crib Wall is constructed atop a layer of rocks to prevent scour. A VRSS is composed of soil layers, typically one foot thick, wrapped with two layers of erosion control fabric. Live vegetation is placed between the layers at the face and once established, the vegetation will provide a dense cover. VRSS is also constructed atop a layer of rocks to prevent scour. Both of these alternatives require moving the Creek centerline approximately 15 feet away from the road for the work described at the base of the creek bank.

Another alternative considered only for Site 3, consists of realigning the Creek approximately 75 feet away from the Trail/road. This alternative would include excavating material to create a new Creek alignment and abandoning the existing

Creek alignment through the placement of material. The upstream point of the Creek realignment would be reinforced with rocks to prevent the Creek from occupying its historic alignment. This alternative would require additional permitting, increased environmental mitigation, and may incur delays with the overall project schedule. The extent of the environmental mitigation cannot be determined until the regulatory agencies have been able to evaluate the project impacts.

The Department has been working to schedule meetings with the regulatory agencies to better assess the feasibility of obtaining permits for each of the alternatives presented in the Feasibility Study. It is anticipated that a meeting will help inform the Department regarding feasibility, permit timeline, and mitigation requirements.

The Department has provided Stanford with the Feasibility Study and subsequently discussed the alternatives for both sites. As recommended in the Feasibility Study, the Department, with concurrence from Stanford, is recommending installation of a Crib Wall at Site 2. This alternative also requires the installation of a Soldier Pile wall with concrete lagging for structural integrity.

For Site 3, the Department, with concurrence from Stanford, is recommending that the Creek be realigned approximately 75 feet away from the Trail. However, should the regulatory agencies inform the Department that this alternative is significantly more problematic than a Crib Wall at this location, the Department and Stanford would support a Crib Wall at Site 3. The Crib Wall alternative also requires the installation of a cast-in-place concrete retaining wall for structural integrity.

County Counsel has reviewed and approved the Resolution as to form.

Approval of this action contributes to the Shared Vision 2025 outcome of an Environmentally Conscious Community by maintaining the existing recreational opportunities for the benefit of the public.

FISCAL IMPACT:

There will be additional costs associated with implementing the recommended alternatives. The recommended alternatives will also require revision to and recirculation of the IS/MND along with any additional technical studies required for the environmental process. The recommended alternatives will involve additional costs for the work associated with obtaining regulatory permits, design, and construction.

The Department has provided the estimated costs associated with the original designs presented to your Board in January 2014, as well as, the estimated increase in project costs based on the recommended alternatives. The total cost for the recommended alternatives is the additive of the costs listed below.

Description of Work	Original Design Cost	Recommended Alternatives (additional Cost)
Design	\$250,000	\$150,000
Site 2 Construction	\$200,000	\$500,000
Site 3 Construction	\$200,000	\$125,000
Trail Work	\$480,000	-----
Environmental	\$170,000	\$160,000
Construction Inspection	\$80,000	\$125,000
Alternatives Feasibility Analysis	-----	\$60,000
Total	\$1,380,000	\$1,120,000

The estimated cost for the Project, including the creek bank alternatives for Site 2 and 3 presented in this report, is \$2,500,000. The approved budget for this project was \$1,300,000 leaving an estimated shortfall of \$1,200,000. Additional funding will need to be allocated to this project as part of the upcoming bi-annual budget process if the recommended alternatives are selected by your Board.