



Midpeninsula Regional
Open Space District

R-18-19
Meeting 18-10
March 14, 2018

AGENDA ITEM 6

AGENDA ITEM

Alpine Road Trail Repair Project

ACTING GENERAL MANAGER'S RECOMMENDATION

Approve selection of repair Option Three (3) for the Alpine Road Trail Repair Project, as described further in the staff report, to proceed with design plans and environmental review. The Board of Directors will have an opportunity to consider final approval of the design, including consideration of the environmental review findings, at a future public meeting.

SUMMARY

The Alpine Road Trail is an important regional trail connection through Coal Creek Preserve for cyclists and hikers traveling from Portola Valley to upper Page Mill Road near Skyline Boulevard that avoids public roads. Alpine Road Trail is in very poor condition and in need of upgrades. During the 2012 Vision Plan process, the public ranked the repairs to Alpine Road Trail as a Tier 1 Priority Action. Following Board approval, this and other Tier 1 Priority Actions formed the basis for the Measure AA Expenditure Plan. More specifically, this project falls under MAA Portfolio #10.

To date, District staff and community volunteers have completed temporary repairs to reopen trail access. However, trail access is not sustainable without major road and trail improvements. Road maintenance has been the responsibility of San Mateo County (County), who owns a segment of the road in fee and otherwise holds easements through private property. The County closed the road to vehicles in 1979. This road is no longer on the County's list of maintained roads, and is therefore no longer eligible for County maintenance funds. During the last several decades, the road has lacked maintenance except for small access repairs and two projects performed by the District under permits-to-enter with the County. The lack of ongoing maintenance has significantly degraded the roadbed and drainage features. Two large failures during the winter of 2016-17 constrained vehicle access and further threatened ongoing trail access. Repairing these two large failures and improving surface drainage are essential to prevent further road degradation and sediment delivery to the creek. The Acting General Manager recommends moving forward with repair Option 3, which repairs a portion of the alignment to road-width and the remainder to trail-width to retain a drivable section, reduce total cost, and allow for future conversion of the entire alignment to road-width, when and if desired. Sufficient funds remain in budget to begin the design work.

BACKGROUND

Upper Alpine Road Trail is an existing County dirt road that runs approximately 2.3 miles between the end of paved Alpine Road above Portola Valley to the north and Page Mill Road near Skyline Boulevard to the south. It provides a valuable regional trail connection between Portola Valley and Woodside up to the District's South Skyline region preserves and trails. Alpine Road Trail travels through Coal Creek Open Space Preserve (Preserve) (see Attachment 1). The District purchased what is now the Preserve in 1982 and used Alpine Road Trail for patrol, maintenance, and emergency access until the mid-1990s when a large slide closed the road.

In 1894, the County received a 40-foot easement over the road and purchased fee title to a small, wider and irregular shaped segment in 1960. The County owns a Right-of-Way across the entire Alpine Road Trail alignment. The County closed the road to vehicles at the southern end of Portola Valley in 1979 in response to neighbor concerns over illegal uses. The District owns only a portion of Alpine Road Trail, with the remainder located on private lands (See Attachment 1). As a partial landowner of Alpine Road Trail, the District has an easement to travel over the County easement even though the road is closed to public vehicle use.

During the mid-1990s, a large landslide eliminated a section of the road, bisecting the County road and eliminating the District's ability to expedite travel between Portola Valley and Page Mill Road for patrol and maintenance purposes. County maintenance of the road ceased at this time. In 2007, District staff completed drainage improvements to stabilize the northern section of Alpine Road Trail to prevent degradation and erosion along that segment.

During the winter storms of 2013-14, a sinkhole developed at the site of a 220-foot long, 48-inch wide culvert. District staff contacted the County, and the County Public Works department applied for funds from the California Office of Emergency Services (Cal OES) for the culvert repair. They received funding approval and developed plans to slip line the culvert in consultation with District staff. Higher priority County projects delayed implementation of the repair.

During the winter of 2016-17, the road at the culvert site completely failed. The original solution to slip line the culvert was no longer sufficient to repair the new road failure. With insufficient time to develop new culvert repair plans before the funding deadline, the County stopped work on the project. The road failure at the culvert site along with another 60-foot failure of the road edge have further restricted District vehicle access on Alpine Road Trail, prohibiting access north of the junction with the Meadow Trail. These failures prevent through vehicle access along the upper and mid sections of the road and pose a continuing risk of sediment input into Corte Madera Creek downstream, which is a tributary in the San Francisquito Creek watershed. Several other sites along the road also require repair stemming from a lack of maintenance over the past two decades (See Attachment 2).

The Regional Water Quality Control Board lists the San Francisquito Creek watershed as impaired due to sediment and siltation. The Watershed Analysis and Sediment Reduction plan prepared by the San Francisquito Creek Joint Powers Authority identifies Alpine Road as a chronic contributor of sediment and prioritizes it as a treatment site. Completing the recommended repairs will reduce future sediment delivery to the watershed and help further the goals of improving water quality in the watershed.

DISCUSSION

Repair Approach and Options

To proceed with a long-term repair, the District hired a geotechnical consultant in August 2017 to evaluate the two large-scale failures, and provide preliminary repair designs and cost estimates for various repair options. Additionally, the consultant updated the 2007 Coal Creek Road & Trail Inventory to identify all of the failing drainage features, sediment issues, and road tread deficiencies. The following (3) repair options were evaluated; each option affects the scale and cost of the repair, and future level of access.

Repair Options and Preliminary Cost Estimates

Option	Description	Cost Estimate*
1	Repair full length of Alpine Road Trail to road width (12 feet)	\$ 2,600,000+
2	Repair full length of Alpine Road Trail to trail width (6 feet)	\$ 1,430,000+
3	Repair Alpine Road Trail to Clouds Rest Trail to road width (12 feet) and from Clouds Rest to Portola Valley to trail width (6 feet)	\$ 2,000,000+

*Costs for engineering, construction inspections, permitting, and escalation are assumed to be 30% of the estimated construction cost. Note: these are preliminary, based on concept drawings and not on detailed construction drawings.

Option 1: Restores Alpine Road Trail to road width and includes constructing a new road through the Central Section to replace the “Bypass Trail.” Completion of this project would allow vehicular passage from Portola Valley (Windy Hill Preserve and Hawthorn Property) to Page Mill Road and Skyline Boulevard, a route that improves response times for patrol and emergency access for the District and other emergency services.

Option 2: Repairs the road failures to a six-foot wide trail standard and constructs a new, six-foot wide trail through the Central Section to replace the “Bypass Trail.” This option provides a narrower trail experience and is less costly to maintain. However, emergency vehicle access would be limited or restricted.

Option 3: Repairs the road failures to road width allowing vehicle access to Clouds Rest Trail and constructs a new, six-foot wide trail through the Central Section to replace the “Bypass Trail.” Construction of this option provides a patrol vehicle route through the Preserve and retains the option to reopen the entire length of the Alpine Road Trail for patrol vehicle access at a later date.

All repair options require permits from various regulatory agencies, including California Department of Fish and Wildlife, Regional Water Quality Control Board, US Army Corps of Engineers, and San Mateo County, as well as compliance with the California Environmental Quality Act. Additional permitting requirements related to sensitive resources may surface, which could extend the project schedule.

Option 3 provides the most benefits to the District and leaves the option of reopening the rest of the road for patrol, maintenance, and emergency vehicles. For these reasons, the Acting General Manager recommends proceeding with Option 3. If approved by the Board, the Acting General Manager will direct District staff to apply for a permit-to-enter with the County to prepare design plans and conduct CEQA review. Staff would return to the Board for final approval of the repair along with the environmental review findings prior to commencing the permitting and bidding process.

FISCAL IMPACT

The Fiscal Year 2017-18 budget includes \$258,800 under MAA10-001 - Alpine Road Regional Trail Improvements project. These funds were originally budgeted to assist the County in its repair of the major culvert failure. Given expiration of the Cal OES grant that resulted in the County no longer taking the lead for the repair, the project scope has changed. The District is now the project lead and will use the available budget to proceed with detailed repair designs and CEQA review to prepare for permit submittals. After a permit-to-enter is secured, expenses and encumbrances to date will be transferred from the General Fund to the Measure AA Fund as shown in the table below. There are sufficient funds in the project budget to cover the recommended action and expenditures.

	FY2017-18
MAA10-001 Budget	\$258,800
Spent-to-Date (as of 2/12/18):	\$0
Encumbrances:	\$0
Transfer Expenses in Support of to MAA:	\$27,120
Transfer Encumbrances in Support of to MAA:	\$4,950
Initiate Design, CEQA (estimate for FY17-18):	\$100,000
Budget Remaining (Proposed):	\$126,730

The following table outlines the Measure AA Portfolio #10 budget, costs-to-date, and the fiscal impact related to the MAA10-001 - Alpine Road Regional Trail Improvements project at this time.

MAA #10 Portfolio Appropriation	\$8,017,000
Life-to-Date Spent (as of 2/12/18):	\$4,286
Encumbrances:	\$0
Transfer Expenses in Support of to MAA:	\$27,120
Transfer Encumbrances in Support of to MAA:	\$4,950
Initiate Design, CEQA (estimate for FY17-18):	\$100,000
Balance Remaining (Proposed):	\$7,880,644

BOARD COMMITTEE REVIEW

No Committee review has occurred for this project. This item is coming to the full Board given Board interest in the project.

PUBLIC NOTICE

Public notice was provided as required by the Brown Act, including interested parties and adjacent landowners.

CEQA COMPLIANCE

Staff will perform appropriate California Environmental Quality Act review of any proposed project before it is implemented.

NEXT STEPS

The Acting General Manager will direct staff to request a permit-to-enter from San Mateo County to develop the design documents and complete CEQA review. The Board will have an opportunity to review the CEQA findings as part of the final design approval at a future date. Concurrently, the Acting General Manager will work with staff to explore cost-sharing opportunities with potential partners. Finally, any proposed changes to the ownership and/or maintenance responsibility of the Alpine Road Trail easement, including any new infrastructure, would come before the full Board at a later date for review and consideration.

Attachments

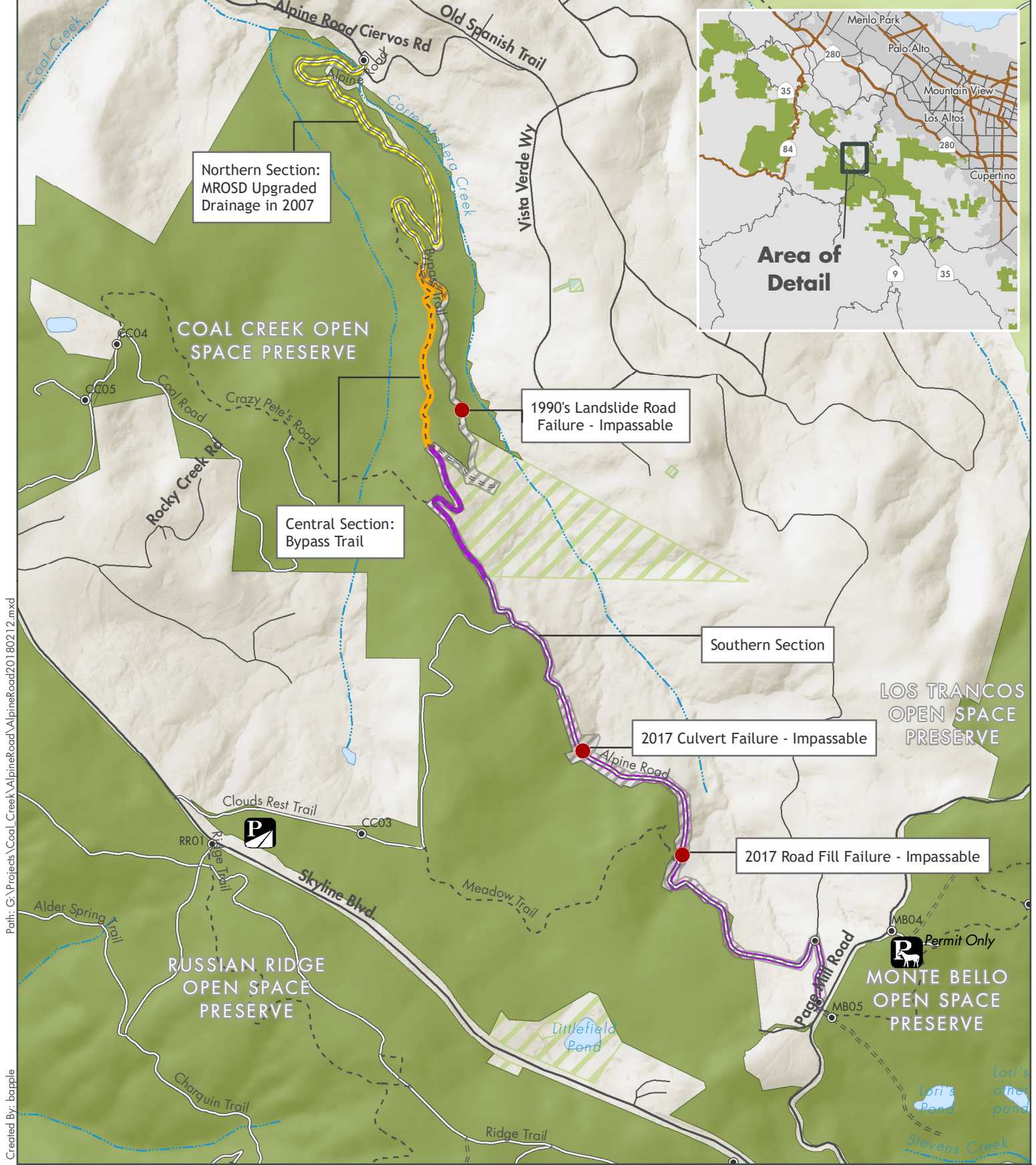
1. Alpine Road Trail Map
2. Sediment Treatment Priority Map

Responsible Department Head:

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Prepared by:

Bryan Apple, Capital Projects Field Manager, Land & Facilities



Path: G:\Projects\Coal_Creek\AlpineRoad\AlpineRoad20180212.mxd
Created By: bappple

Attachment 1: Coal Creek - Alpine Road

- MROSD Preserves
- Private Property
- Non MROSD Conservation Easement
- San Mateo County Right-of-way
- Northern Section
- Central Section
- Southern Section

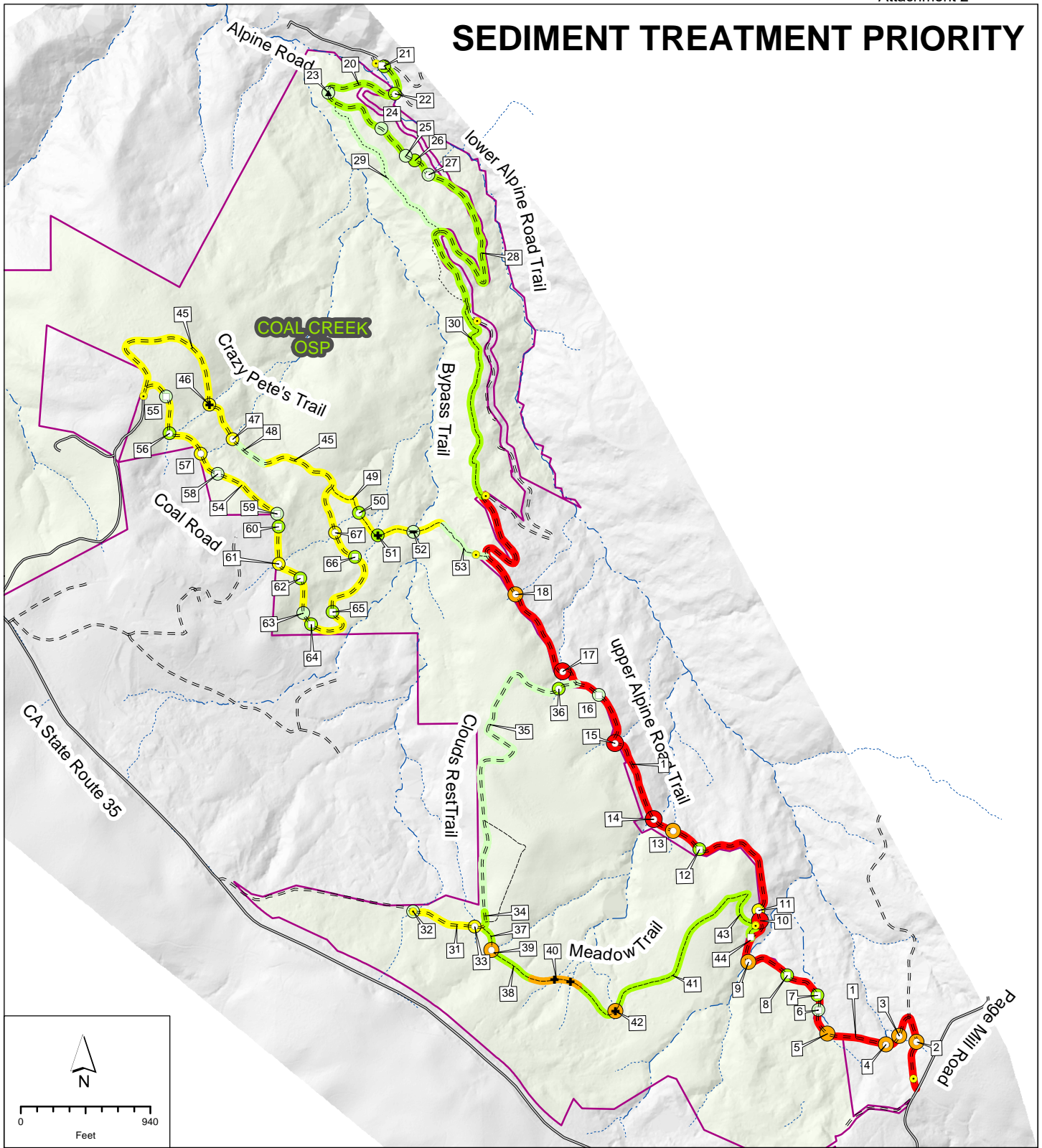
- Road Failure - Impassable
- Minor Unpaved Road
- Unmaintained Road Width
- Trail

Midpeninsula Regional Open Space District (MROSD)
March 2018



While the District strives to use the best available digital data, these data do not represent a legal survey and are merely a graphic illustration of geographic features.

SEDIMENT TREATMENT PRIORITY



Roads and Trails

- Paved Road
- - - Unpaved Road
- Trail
- Undesignated Trail

Features

- Culvert
- Ditch relief culvert
- ✕ Bridge
- ✕ Puncheon
- ✕ Ford
- ▲ Fill Failure
- Gate

Watercourses

- Perennial
- - - Intermittent
- Ephemeral

Sediment Priority: Sites

- High
- Moderate to High
- Moderate
- Low to Moderate
- Low

Sediment Priority: Reaches

- High
- Moderate to High
- Moderate
- Low to Moderate
- Low



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SEDIMENT TREATMENT PRIORITY MAP
 2017 Coal Creek Road and Trail Reassessment
 Midpeninsula Regional Open Space District

FIGURE 4

Job: MPEN-2017-COALCREEK-RTI-779
 Date: 11/30/2017