



Midpeninsula Regional  
Open Space District

R-15-119  
August 11, 2015

**AGENDA ITEM 2**

**AGENDA ITEM**

Redwood Cabin Structural Stabilization Analysis

**GENERAL MANAGER'S RECOMMENDATION(S)**

A handwritten signature in dark ink, appearing to be "G.M.", is written over the end of the section header.

The General Manager recommends that the Committee forward the following recommendations for the full Board of Directors' consideration:

1. Amend a contract with Environmental Science Associates to develop cost estimates for stabilization repairs to the Redwood Cabin and to complete a structural evaluation of an access bridge leading to the Redwood Cabin.
2. Register the Redwood Cabin with the San Mateo County Historic Resource Advisory Board in order to qualify the structure for the California Historical Building Code regulations.

**SUMMARY**

The Redwood Cabin is an approximate 1,900 square foot log cabin built in the late 1920s and is located in La Honda Creek Open Space Preserve (OSP). Further structural evaluation of the Redwood Cabin was identified as a high priority in the Board-approved La Honda Creek OSP Master Plan. Based on a preliminary evaluation of the structure, the General Manager recommends consultant assistance to develop a cost estimate of the necessary stabilization repairs (exterior viewing only; no occupancy). The General Manager also recommends a structural evaluation of a vehicular access bridge to the cabin to confirm the vehicle rating for ongoing maintenance, patrol and emergency response. Cost-effective repairs to the Redwood Cabin are possible if the structure is designated as historic, thus triggering alternative and less expensive building code regulations under the California Historical Building Code (CHBC). In order for the structure to qualify for the CHBC regulations, the General Manager recommends registering the Redwood Cabin with the San Mateo County Historic Resource Advisory Board (HRAB).

**MEASURE AA**

The Redwood Cabin stabilization work is an eligible Measure AA Project, as capital improvements to this structure serve to provide a key destination site for visitors to enjoy passive recreational and educational activities. The 5-year Measure AA Project List approved by the Board at the October 29, 2014 meeting includes Portfolio #5 (La Honda Creek: Upper Area Recreation, Habitat Restoration and Conservation Grazing Projects).

## DISCUSSION

The Board of Directors adopted the La Honda Creek OSP Master Plan in August, 2012. District staff is currently working on a number of capital projects prioritized in the Master Plan for implementation: Sears Ranch parking lot and trail connections, Red Barn parking lot and trail connections, the Driscoll Ranch road sediment reduction project, and the demolition of the former Paulin and Houghton properties, and stabilization of the Redwood Cabin (the topic of this Agenda Item) with the goal of opening La Honda Creek OSP to the public.

### Purpose for initiating the Redwood Cabin Evaluation

The cabin is located in a remote and relatively inaccessible portion of the La Honda Creek OSP. The Master Plan calls for improving an existing 10-car permit parking area in the Allen Road area (former Dyer Ranch), and for the construction of a new 2.3 mile 'Redwood Cabin' trail (hiking, equestrians, and dogs permitted) that will extend from the permit parking area and pass directly by the cabin before looping back into the former Dyer Ranch area. Before the improvements to the parking area and construction of this new trail can be added to the District's 3-year capital improvement plan, it is advisable to first address the repairs to the cabin to prepare the site for public use. To this effect, the structural evaluation of the Redwood Cabin was deemed a high priority implementation action in the Master Plan (cultural resources objective 1.3-"Protect historically significant structures").

### Redwood Cabin History and Site Description

The Redwood Cabin was constructed by W. B. Allen in 1927-28 as a family retreat. Allen settled in Palo Alto in 1903 and owned and operated Palo Alto Hardware. By 1918, he had purchased 400 acres. With the assistance of two Norwegian laborers, Allen constructed the lodge on a bedrock foundation using local timber pieced together without nails. In addition to the lodge, Allen imported stones from the coast to construct walls, stairs, and numerous stone-lined hiking trails. In the 1930s, the California Conservation Corps assisted with the improvement of some roads near the property. The Allen family as well as local groups, including the YMCA and the Rotary Club, used the lodge as a summer retreat for decades. The property remained in the Allen/Paulin family until 1988 when the District purchased it. The cabin is unique in the District in that the cabin evokes recreational retreats of the era set in the redwoods and retains strong visual integrity. Many of the potentially historic structures (structures over 50 years old) managed by the District represent past agricultural land uses.

### Redwood Cabin Structural Evaluation

In the spring of 2015, staff visited the site with an architectural historian and structural engineer to conduct a preliminary assessment of the cabin's condition, focusing on the substructure. The overall structure is currently in fair to good condition. Several major and minor repairs are necessary to ensure the long-term stability of the structure.

The cabin is supported by 12"-16" redwood poles sunk into the ground. The above-grade portions of poles are in good condition, but the below-grade portions are deteriorated. None of the poles has failed to date, but failure of the poles will likely result in stress, distortion, or failure in the flooring, walls, or roof. The perimeter deck is severely rotted and deteriorated beyond repair. Access to the deck has been blocked, and further exclusion and removal of the deck will be required before the public can visit the structure. The roof has a small number of leaks that have caused minimal damage and requires ongoing maintenance and monitoring. The

wood shingles are a potential fire hazard. Replacing the roof will prevent water damage and reduce the maintenance obligation and should be considered if cost-effective.

#### Bridge Evaluation

Driving access to the cabin is off Highway 35 and is limited by a poorly designed and built road that crosses two unrated vehicular bridges. The second access bridge has not been evaluated by a structural engineer, and is likely not rated to carry heavy vehicles. A formal engineering evaluation is needed of the second bridge to rate the bridge for maintenance, patrol, and emergency response.

#### Recommended Level of Repair

The recommended level of repair for the Redwood Cabin would permit 'passive appreciation' of the structure from the outside but not access to the inside of the structure. Retrofitting the structure for the purposes of occupancy would be costly, consume additional project management time, and is not a priority under Measure AA. Therefore, the General Manager is not recommending occupancy or interior use of the structure. The required repairs for this level of use include: addressing the deck; preventing water damage/roof repairs; and stabilizing the substructure. The General Manager recommends amending an existing contract with Environmental Science Associates ("ESA") to (1) prepare a conceptual design and cost estimate for the recommended minimum structural stabilization repairs for the cabin and (2) complete a structural evaluation of the access bridge that leads to the cabin.

If use of the cabin and occupancy by the public and/or staff is desired by the Board, additional site planning will be required to evaluate the need for additional repairs to both the building and the surrounding access roads. Electricity is available at the site. The availability of water and water rights would also require additional evaluation.

#### Recommended Listing as a Historic Structure

Repairs to the cabin will be less costly if the structure is registered as historic with the HRAB, as this designation will allow the District to utilize the CA Historic Building Code, which is less stringent than current building code standards. Note, that if the District desires to demolish the structure at some point in the future and the structure is listed, a formal historic evaluation of the structure, the review of the County HRAB, and potentially an Environmental Impact Report may be required in order for the County to issue a demolition permit. Given that this structure is considered of high cultural value in the Master Plan, the potential for a future demolition is unlikely. Therefore, the General Manager recommends registering the structure as historic to help reduce the potential costs of the stabilization repairs.

### **FISCAL IMPACT**

Registering the structure with the HRAB will have no direct fiscal impact. The extent of repairs to the Redwood Cabin will depend on the desired level of use and will likely cost more than \$35,000. Evaluation of the vehicular access bridge is estimated to cost an additional \$13,000.

### **PUBLIC NOTICE**

Public notice was provided as required by the Brown Act. La Honda Creek OSP Preserve interested parties were notified.

## **CEQA COMPLIANCE**

The La Honda Creek Master Plan and associated Mitigated Negative Declaration were approved by the Board on August 22<sup>nd</sup>, 2012. Further evaluation of the Redwood Cabin is not a project under California Environmental Quality Act. Registering the Redwood Cabin with HRAB would designate the Redwood Cabin an ‘historic resource’ under CEQA.

## **NEXT STEPS**

If the Committee confirms the General Manager’s recommendations, staff will bring the amended contract to the Board of Directors for approval. Staff will return to the PNR committee when the evaluation and cost estimate is complete.

### Attachment(s)

1. Redwood Cabin Photo
2. La Honda Creek OSP Trails Planning Exhibit
3. Substructure Plan Sheet

### Responsible Department Head:

Jane Mark, Planning Manager, AICP

### Prepared by:

Aaron Hébert, Project Manager, Planning

### Contact person:

Aaron Hébert, Project Manager, Planning

**Attachment: 1**



## PUBLIC ACCESS TRAILS

listed in order by implementation phase

- |    |                                    |     |
|----|------------------------------------|-----|
| 1  | Driscoll Ranch Main Access Road    | 5.6 |
| 2  | Easy Access Loop Trail             | 0.9 |
| 3  | Vista Point Loop Trail             | 2.8 |
| 4  | Trail Connection to Red Barn Area  | 0.3 |
| 5  | Trail Connection to Driscoll Ranch | 1.5 |
| 6  | La Honda Creek Loop Trail          | 4.8 |
| 7  | Redwood Cabin Loop Trail           | 2.3 |
| 8  | Interior Loop Trail                | 2.4 |
| 9  | Red Barn Loop Trail                | 2.0 |
| 10 | Folger Ranch Loop Trail            | 3.9 |
| 11 | Harrington Creek Trail             | 1.6 |
| 12 | Sears Ranch Loop Trail             | 1.9 |
| 13 | Trail to Ray's Peak                | 0.1 |

## TRAIL USE



All trails open to hiking. Off-trail hiking allowed throughout except in Conservation Management Units.



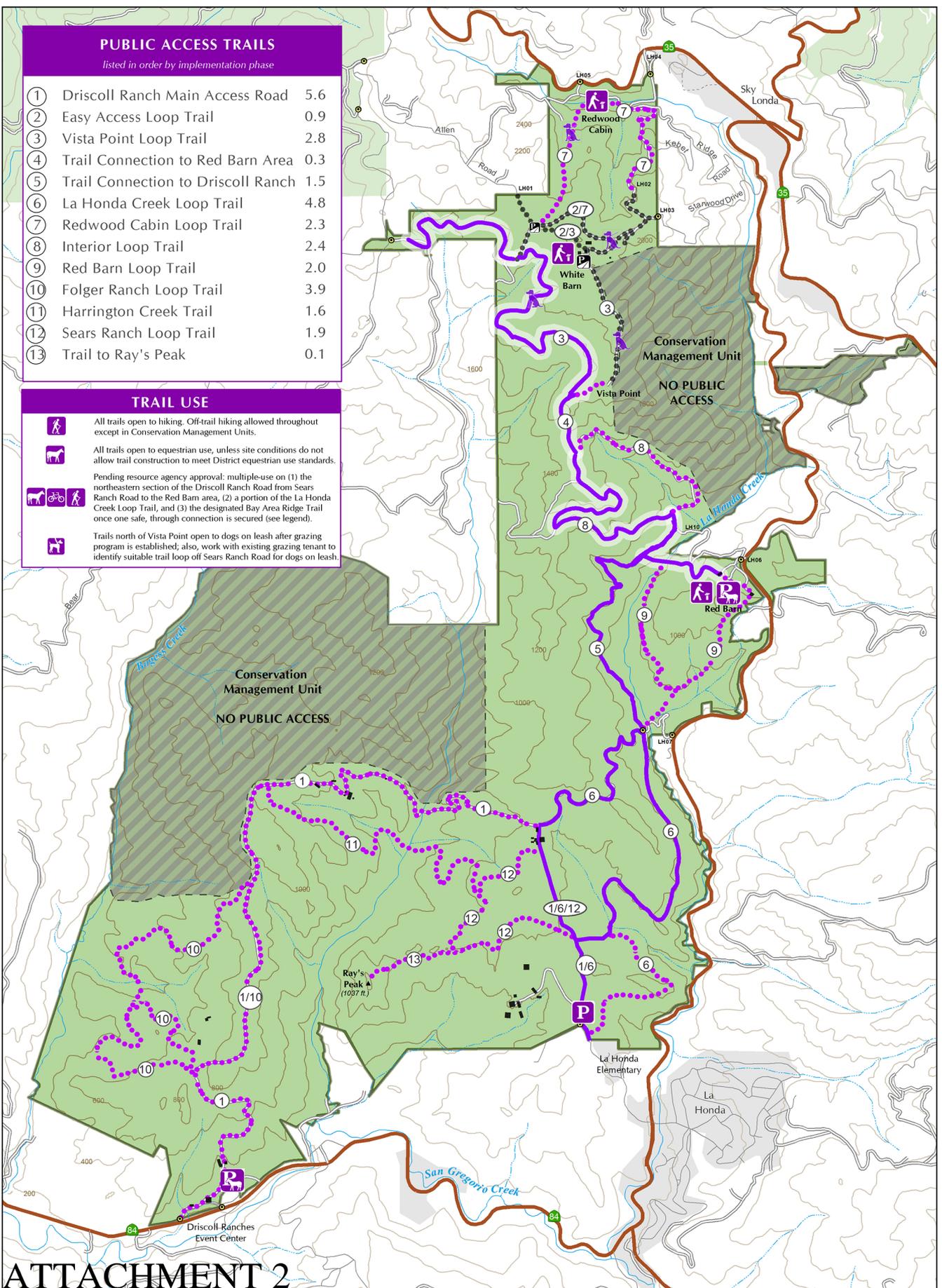
All trails open to equestrian use, unless site conditions do not allow trail construction to meet District equestrian use standards.



Pending resource agency approval: multiple-use on (1) the northeastern section of the Driscoll Ranch Road from Sears Ranch Road to the Red Barn area, (2) a portion of the La Honda Creek Loop Trail, and (3) the designated Bay Area Ridge Trail once one safe, through connection is secured (see legend).



Trails north of Vista Point open to dogs on leash after grazing program is established; also, work with existing grazing tenant to identify suitable trail loop off Sears Ranch Road for dogs on leash.

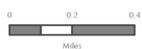


# ATTACHMENT 2

Figure 11: Public Access Trails

## La Honda Creek Open Space Preserve

Map Projection: UTM Zone 10N, NAD 1927  
Data Sources: USGS, CA Dept. of Fish & Game, County of San Mateo, and MROSD.  
Map Printed August, 2012



### Trails

- Existing Public Trails (Hiking, Equestrian)
- New Public Trails (Hiking, Equestrian)
- New Multiple-Use Public Trails (Hiking, Equestrian, Bicycling)
- New Segment of the Bay Area Ridge Trail (Hiking, Equestrian, Bicycling)

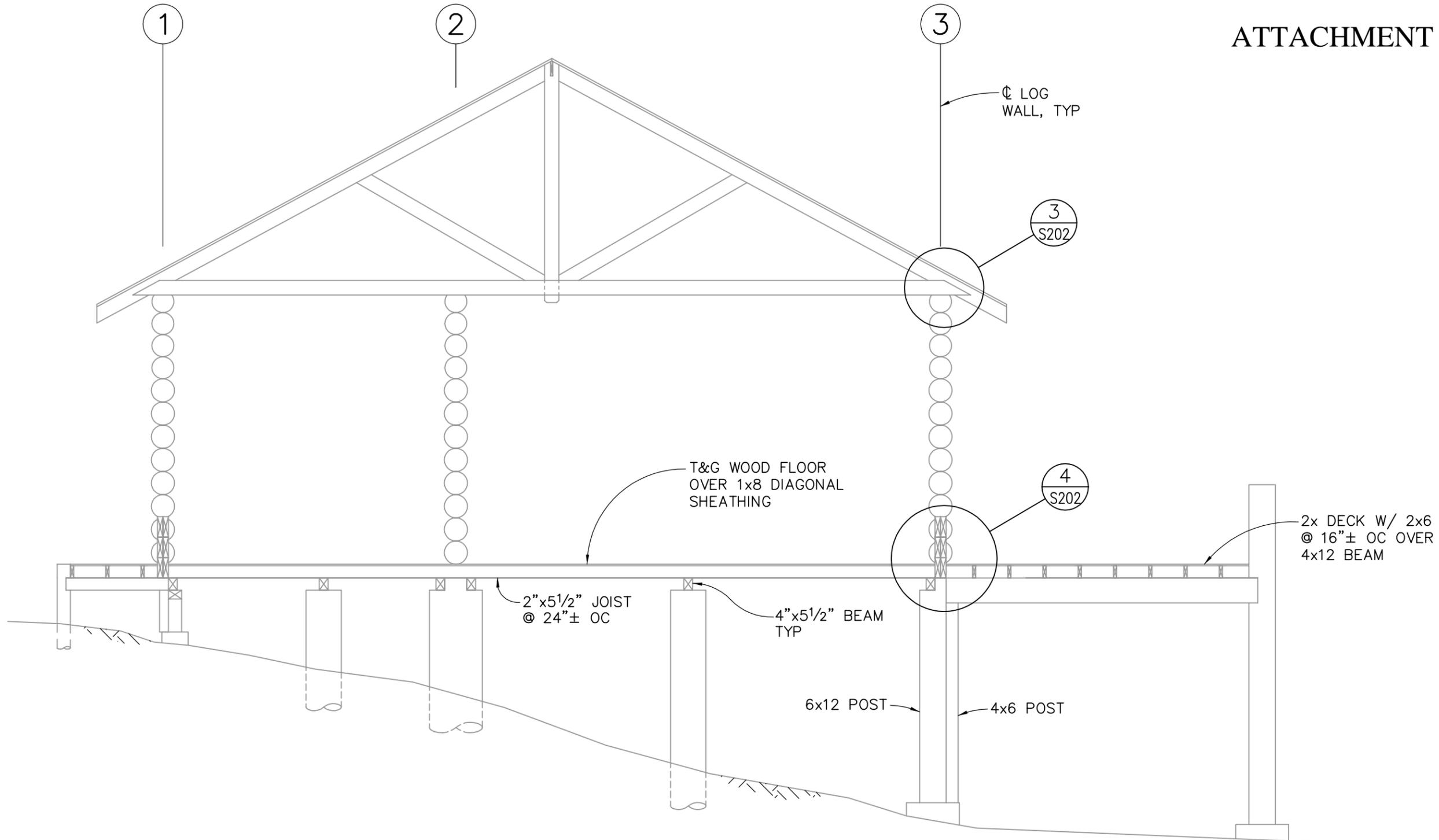
### Facilities

- Existing Parking Area
- New Parking Area
- New Interpretive Site
- New Equestrian Parking Area

### Roads

- Unpaved Ranch / Patrol Road
- Existing Paved Road
- Highway

- Conservation Management Unit (No Public Access)



**TYPICAL SECTION**  
1/4" = 1'-0"

**BIGGS CARDOSA ASSOCIATES INC**  
STRUCTURAL ENGINEERS

865 The Alameda  
San Jose, California 95126  
408-296-5515



TYPICAL SECTION

**Redwood Log Cabin**

La Honda Creek  
Open Space Preserve

DESIGNED BY: AWR	DATE: 5/1/15
DRAWN BY: RLQ	SCALE: AS NOTED
CHECKED BY:	JOB No.: 2015105
SHEET OF	
DRAWING No.	REV. No.
8201	0

PLAN CHECK SET/NOT FOR CONSTRUCTION (5/12/15)