

# Devil's Slide Tunnel Project: Home of the California red-legged frog

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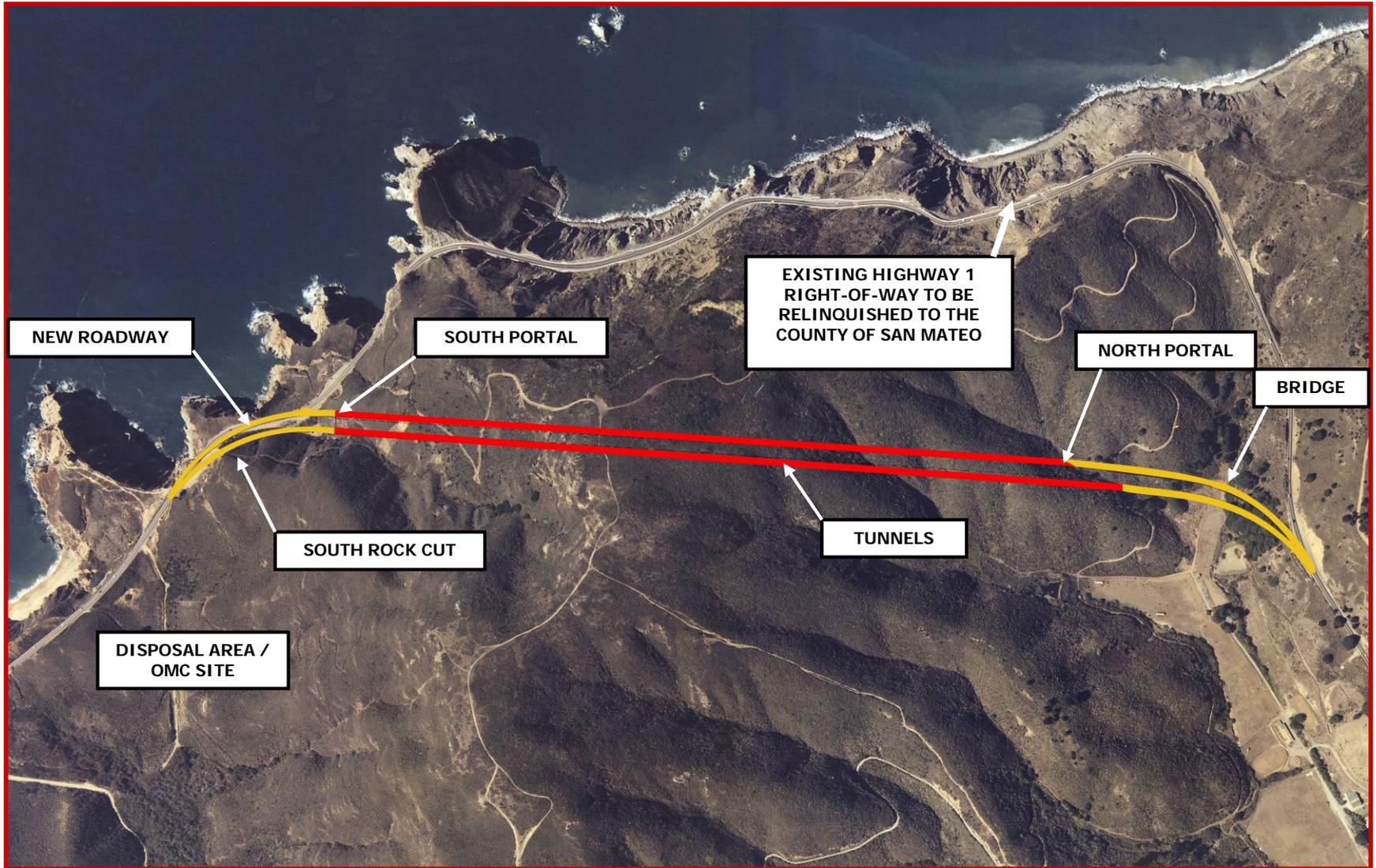
California red-legged frog *Rana draytonii*



# Project Location



# Project Overview



# Project Summary



- Dual Tunnels – 4,200 feet long
- Tandem Bridges – 1,000 feet long
- Disposal Site – 520,000 m<sup>3</sup> capacity
- Operations and Maintenance Center (OMC)
- Wetland Mitigation Site – 5 ½ acres
- Habitat Restoration of Construction Areas and Disposal Site



# Biological Issues

## On-going Biological Tasks:

- Construction monitoring
- Permit compliance
- Attendance at project team meetings
- Biological evaluation and permit amendments for CCO designs
- Long-term mitigation monitoring
- Evaluate public access impacts
- Agency coordination:



Peregrine falcon <sup>3</sup>



Vegetation monitoring



California red-legged frog <sup>1</sup>



San Francisco dusky-footed woodrat house



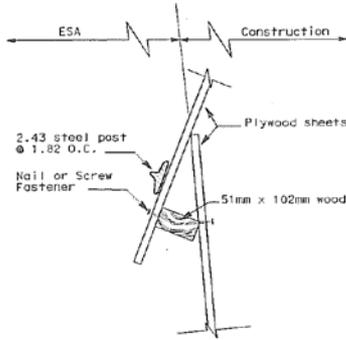
Anna's hummingbird chicks <sup>2</sup>

# Exclusion Fencing

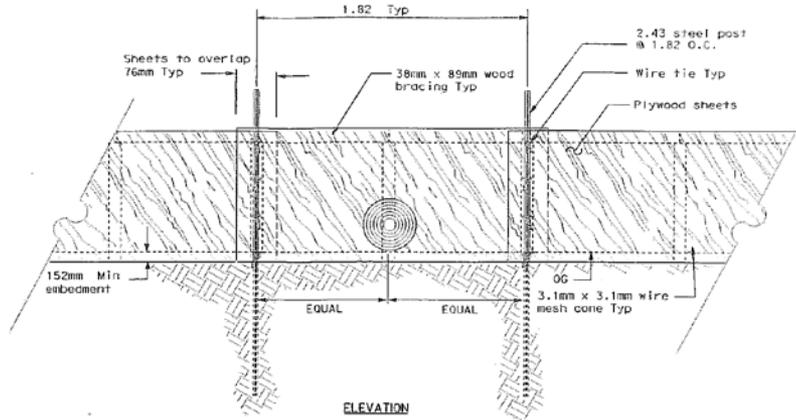
THIS PLAN ACCURATE FOR EROSION CONTROL AND/OR WATER POLLUTION CONTROL ONLY.

**NOTE:**

- 1. Mesh cones will be installed every thirty meters.



PLAN FENCE OVERLAP



ELEVATION



DIST	COUNTY	ROUTE	FILE NUMBER	POST MILES	SHEET NO.	TOTAL SHEETS
04	SM	1	61,2/64.9	48	1086	

PLANS APPROVAL DATE: 3-20-06

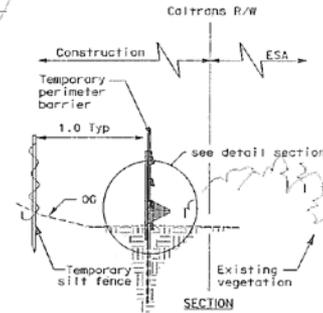
DESIGNED LANDSCAPE ARCHITECT: *[Signature]*

PROFESSIONAL SEAL: *[Seal]*

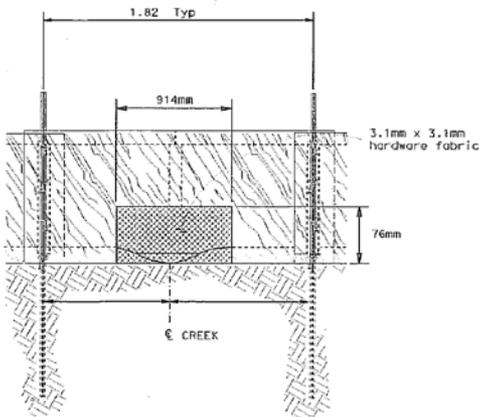
11-30-05

10-14-05

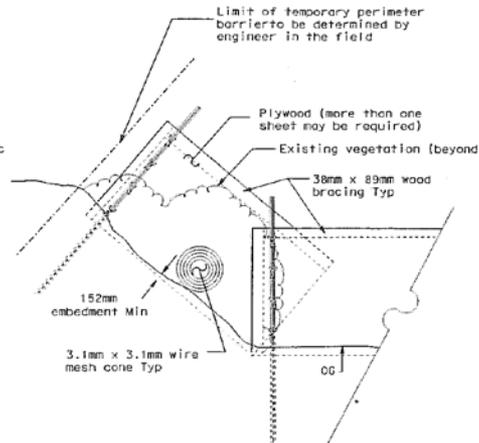
To get to the Caltrans web site, go to <http://www.dot.ca.gov>



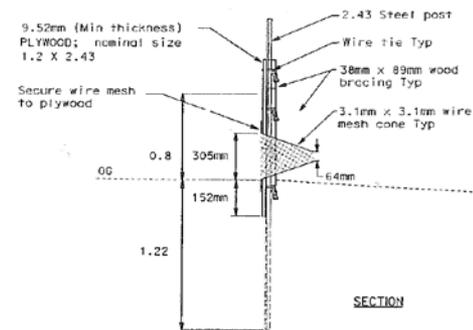
SECTION



ELEVATION AT: CREEK



END DETAIL



TEMPORARY PERIMETER BARRIER (Type Frog)

ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN  
**EROSION CONTROL DETAILS**  
 NO SCALE  
**ECD- 2**

*Bridge: September 2008*



# *Bridge Site Overview*



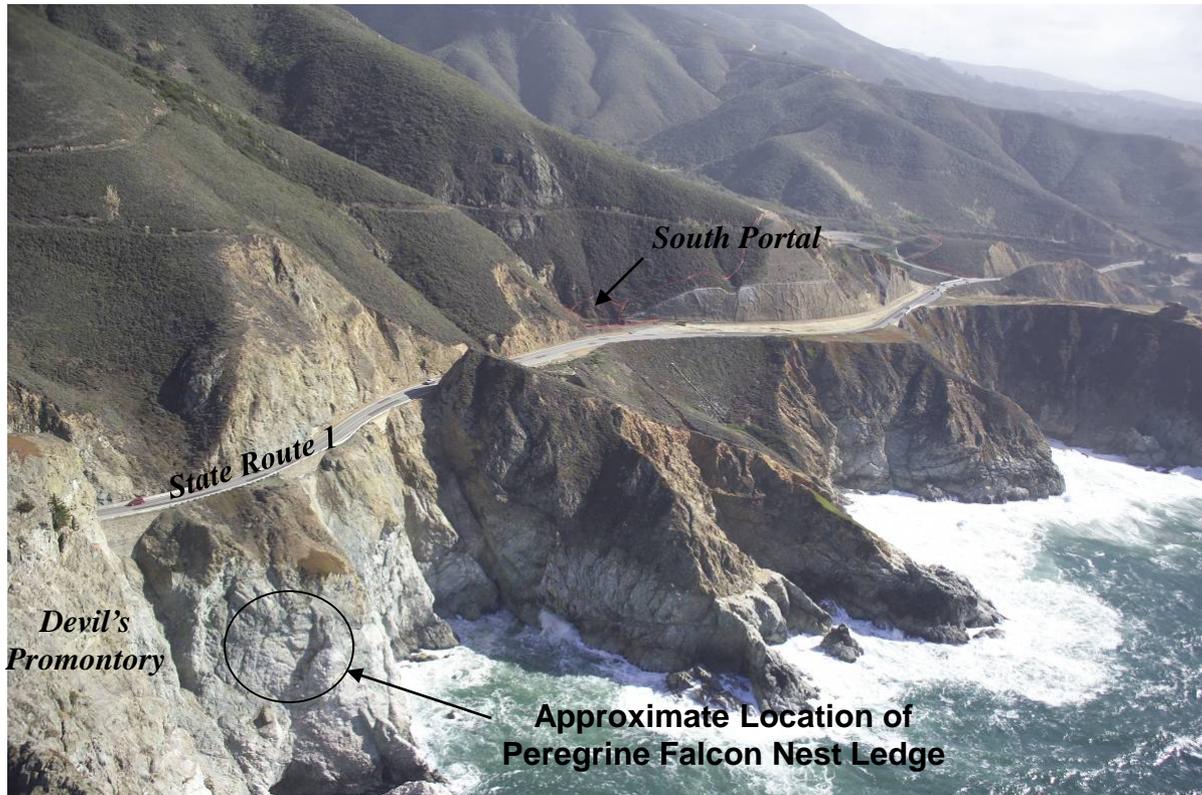
# *Bridge Site Overview*



*South Portal, Disposal Site, OMC*



# *Peregrine Eyrie and South Portal*



# *Disposal Site and OMC Overview*



*Charthouse Mitigation Site:  
September 2008*







**California red-legged frog (*Rana draytonii*)**  
**Status: Federal threatened**

- Existing ponds at Shamrock Ranch were protected.
- New breeding pond created at Shamrock Ranch.
- Frogs excluded from the jobsite to the degree possible with fences and traps.
- Biologists monitor the job site daily to capture any frogs that enter the site.



## Peregrine falcon (*Falco peregrinus*)

**Status: State Endangered**

- Nests on Devil's Promontory near the South Portal.
- Caltrans coordinated with the California Department of Fish and Game.
- Caltrans is monitoring the pair during the breeding season.



Ross Wilming, GANDA

**Anna's hummingbird**



USEWS DLS

**American robin**

## **Nesting birds**

### **Status: Migratory Bird Treaty Act**

- Prior to vegetation clearing, biologists survey the work area for active nests.
- If active nests are found, buffer areas are implemented, and clearing is rescheduled until the young have left the nest.



**San Francisco dusky-footed woodrat (*Neotoma fuscipes annectans*)**  
**Status: California Species of Special Concern**

- California Department of Fish and Game directed Caltrans to dismantle the woodrat houses located within the project site during the non-breeding season.
- Woodrat houses protected within Environmentally Sensitive Areas.