

## MEMORANDUM

To: Jose Lopez, Project Manager, SDG&E  
From: Jing Liang  
Date: 2/22/2010  
Re: Scour and Erosion Protection at Creek Crossings

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### **RESPONSE TO MITIGATION MEASURE, H.8a: BURY POWER LINE BELOW 100-YEAR SCOUR DEPTH.**

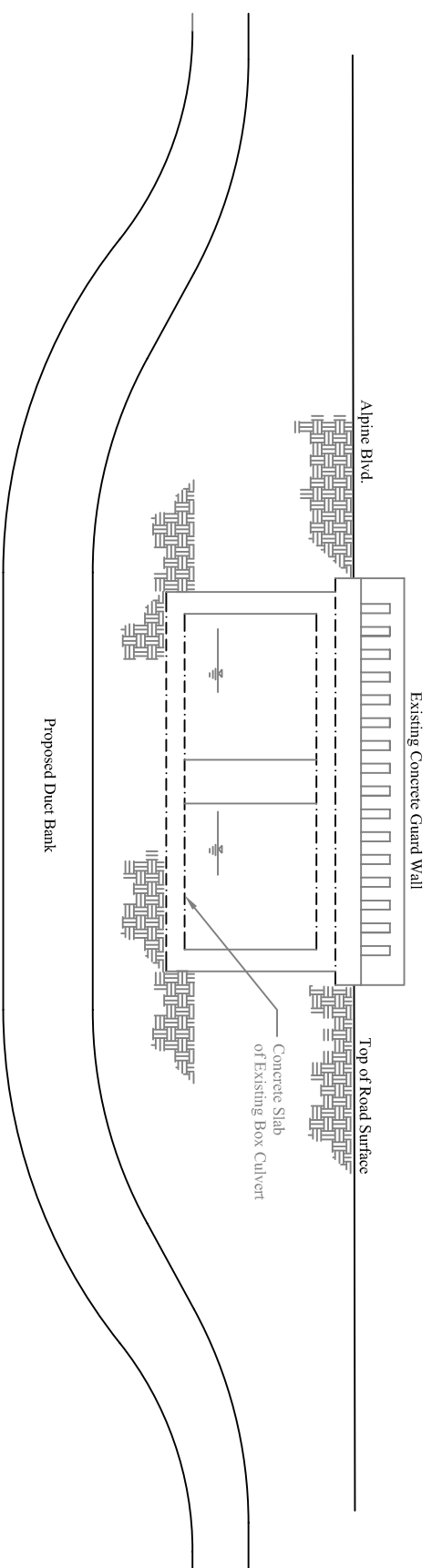
The I-8 Underground Segment of the transmission line crosses two existing creeks on Alpine Blvd. One is located at Sta. 175+75 to 176+75 where the duct bank crosses the creek via Jack & Bore method. Alpine Boulevard was constructed to cross the existing creek via concrete box culverts, with entrance slab and exit slab. The existing entrance and exit concrete slabs outside of the box culvert were constructed to protect erosion and scour from flooding and drainage. Please see attached sketch showing the existing conditions with the proposed duct bank installation. No additional mitigation measure is required for erosion and scour protection at this location.

Another creek crossing is located at Sta. 301+50 to 303+00 on Alpine Blvd. Alpine Boulevard was constructed to cross the existing creek via a concrete bridge. The duct banks for both circuits will cross the existing creek via bridge attachment. Engineering design calls for attaching the proposed duct banks on both sides of the existing bridge under the pedestrian sidewalks. The bottom of the duct bank will match existing deck, and there is not impact to flood control capacity. This design was reviewed and approved by County of San Diego, Department of Public Work. No additional mitigation measure is required for scour and erosion protection at this location.

Attachment --- ALPINE BLVD. CREEK CROSSING

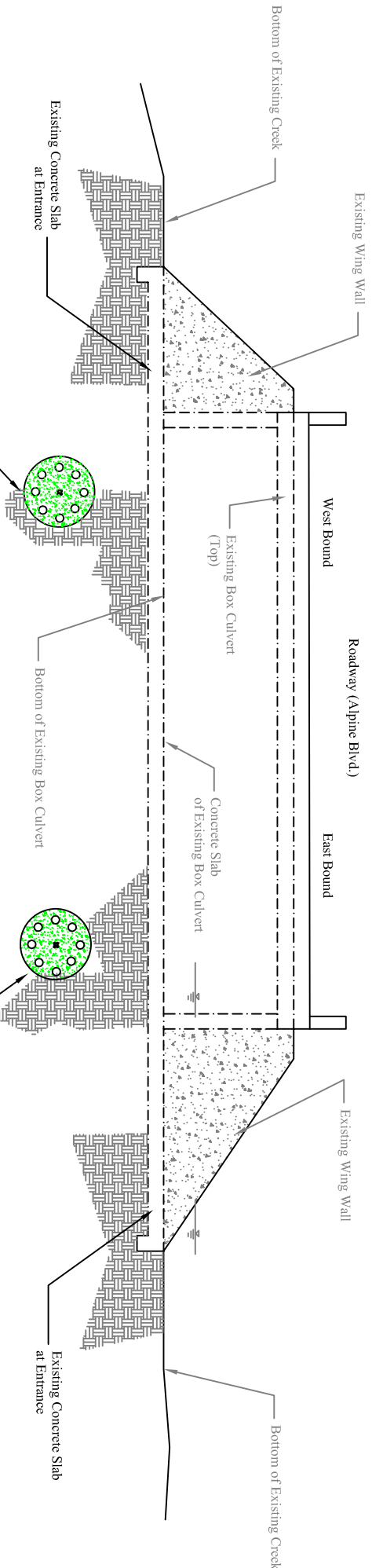
### Alpine Blvd. (Creek Crossing)

Location: Station 175+75 to 176+75 (TL 23055)  
 Station 175+70 to 176+70 (TL 23054)



### LONGITUDINAL VIEW

NOT TO SCALE



### SECTION VIEW

NOT TO SCALE