

# INFORMATION HANDOUT

For Contract No. 11-260414

At 11-SD-8-R37.8/R39.1

Identified by

Project ID 1100000203

## MATERIALS INFORMATION

### Corrosion Study

- Corrosion Study, dated February 12, 2015

### Water Source Information

- Descanso Community Water District, dated March 23, 2015

### Preliminary Geotechnical Recommendations

- Preliminary Geotechnical Recommendations, dated October 8, 2014

### Work Site Photographs

- Site photographs organized by Drainage System (DS)

# Memorandum

To : Tom Guerrini (MS 343)  
Project Engineer  
Design

Date: February 12, 2015

File: 11-SD-8  
PM R37.8/R39.1  
EA 11-260411  
EFIS 1100000203

From : DEPARTMENT OF TRANSPORTATION - DISTRICT 11  
MATERIALS ENGINEERING BRANCH

Subject: **CORROSION STUDY**

In response to your request we are submitting material recommendations for drainage systems within the above referenced project.

The area soils are considered corrosive to steel.

Design values are as follows:

1. pH = 6.8
2. Minimum Resistivity = 1040 Ohms.cm
3. Sulfates = 2000 mg/kg
4. Chlorides = 2000 mg/kg
5. Non-abrasive flow conditions

## **Recommendations for culverts**

Aluminum or Aluminized pipe is not acceptable

Polymeric Sheet coated (inside and out) pipe 0.52" (18 gage) or thicker may be used.

Plastic Pipes can be used but must incorporate the minimum and maximum fill height requirements. Type-C or S Polyvinyl Chloride pipe and Type-C or S High Density Polyethylene pipe are acceptable. Consideration should be made to end treatments of plastic pipe to avoid UV exposure.

Use of reinforced concrete pipe (RCP) and or reinforced Concrete Box (RCB), must incorporate type IP (MS) modified cement, type II modified cement with mineral admixture or Type V cement with mineral admixture as set forth in subsection 90-1.01 of the Standard Specifications. Concrete pipe shall contain a minimum 5.0 sac (470#) with a minimum 1.0" cover to steel and a maximum water/cement ratio of 0.40.

Hydraulics must be contacted to address minimum/maximum fill and abrasion considerations.

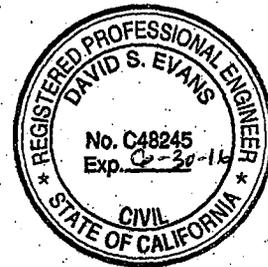
If you have any questions or comments concerning this report, you can contact J. Scandore at 858-467-4069 or David Evans at 858-467-4056.

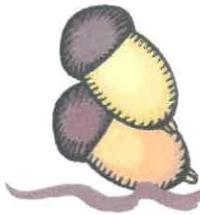
Prepared by:

  
John L. Scandore  
M&R Eng. Assoc.

Reviewed By:

  
David Evans  
Assoc TE (CT/Reg.)





## DESCANSO COMMUNITY WATER DISTRICT

P.O. Box 610 Descanso, California 91916 (619) 409-7750 FAX (619) 575-2070

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March 23, 2015

Department of Transportation  
Tom Guerrini – Project Engineer  
District 11  
4050 Taylor Street - M.S. 340  
San Diego, Ca 92110

RE: Descanso Community Water District

Tom,

This is in response to your request for verification of available water for the storm water erosion repair project in the Descanso area along Route 8 east of Hwy 79.

I would like to be able give you the concurrence you are requesting for the 125 HCF for that one year project starting in early 2016 but the District has one well with a maximum production of 115 gpm. We are currently in violation of the MCLG on Iron and Manganese as well as the MCL on Uranium. Given our current quantity and quality issues, I cannot guarantee you will have the water you need for the project as you have requested.

The District will work with the county at the time of the project to provide the water needed but District supply will be the priority. In essence, I don't think there will be a problem supplying water but I am not willing to give written concurrence or the impression of any guarantee of the availability of water for the project this far in advance.

Regards,

Dan DeMoss  
DCWD General Manager  
Cell# 916-616-7761  
P: 855-224-6981

## Memorandum

*Flex Your Power!  
Be energy efficient!*

**To:** Ed L. Hajj/  
Project Design Manager

**Date:** October 8, 2014

**File:** 11-SD-8-PM 37.8/39.4

**EA:** 11-26041

**EFIS:** 1100000203

**From:** DEPARTMENT OF TRANSPORTATION  
DIVISION OF ENGINEERING SERVICES  
Geotechnical Services  
Office of Geotechnical Design—South 2, Branch D

**Subject:** Preliminary Geotechnical Recommendations for Construction of Headwalls and Wingwalls at three Culvert Outlets along Westbound Interstate 8 near Pine Valley.

Pursuant to your request of September 30, 2014, the Office of Geotechnical Design South 2 (OGDS2) staff performed a review of the site for three culvert outlets along westbound Interstate 8 (I-8) from Post Mile (PM) 37.8 to 39.4. The proposed project is to construct headwalls and wingwalls at three culvert outlets 9, 19 and 31 near the northerly right of way line. The proposed project sites are presented in the Layout plans L-1, L-3, and L-5.

Based on our site reconnaissance the subsurface materials consist of engineered fill over granitic rock. The fill is comprised of silty sand derived from decomposed granitic rocks. A large riprap rock, approximately 6 feet in maximum dimension, exists at the outlet of the culvert 9 which needs to be removed in order to construct the proposed structures.

Based on the results of our study the following preliminary considerations are presented:

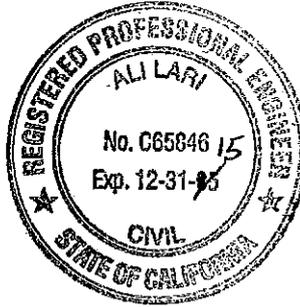
- The in place soil is anticipated to be competent enough to build Caltrans Standard Plan headwall and wingwall.
- Relatively hard digging may be encountered during excavation into the decomposed granitic rock. A mid size or larger excavator may be necessary to perform the excavation.
- The large riprap rock at outlet of the culvert 9 may be broken in pieces by using an excavator equipped with a rock breaker or other rock breaking methods.

In order to prepare a more detailed final report please provide us the project plans including cross sections for the headwalls and wingwalls.

Our Office will be available for further assistance as needed. Should you have any questions, please call Ali Lari at (760) 929-5945.



Ali Lari, P E  
Transportation Engineer (Civil)  
Office of Geotechnical Design-South 2



Attachments  
Layout plans L-1, L-3, L-5.

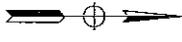
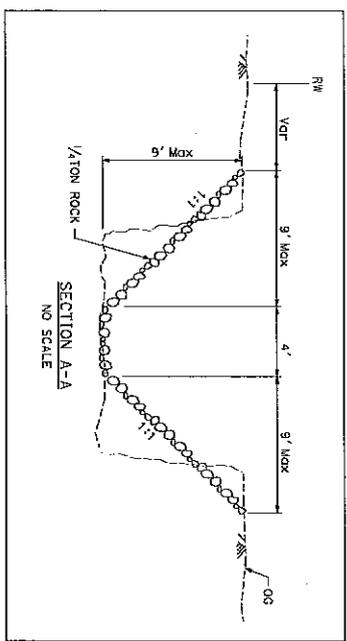
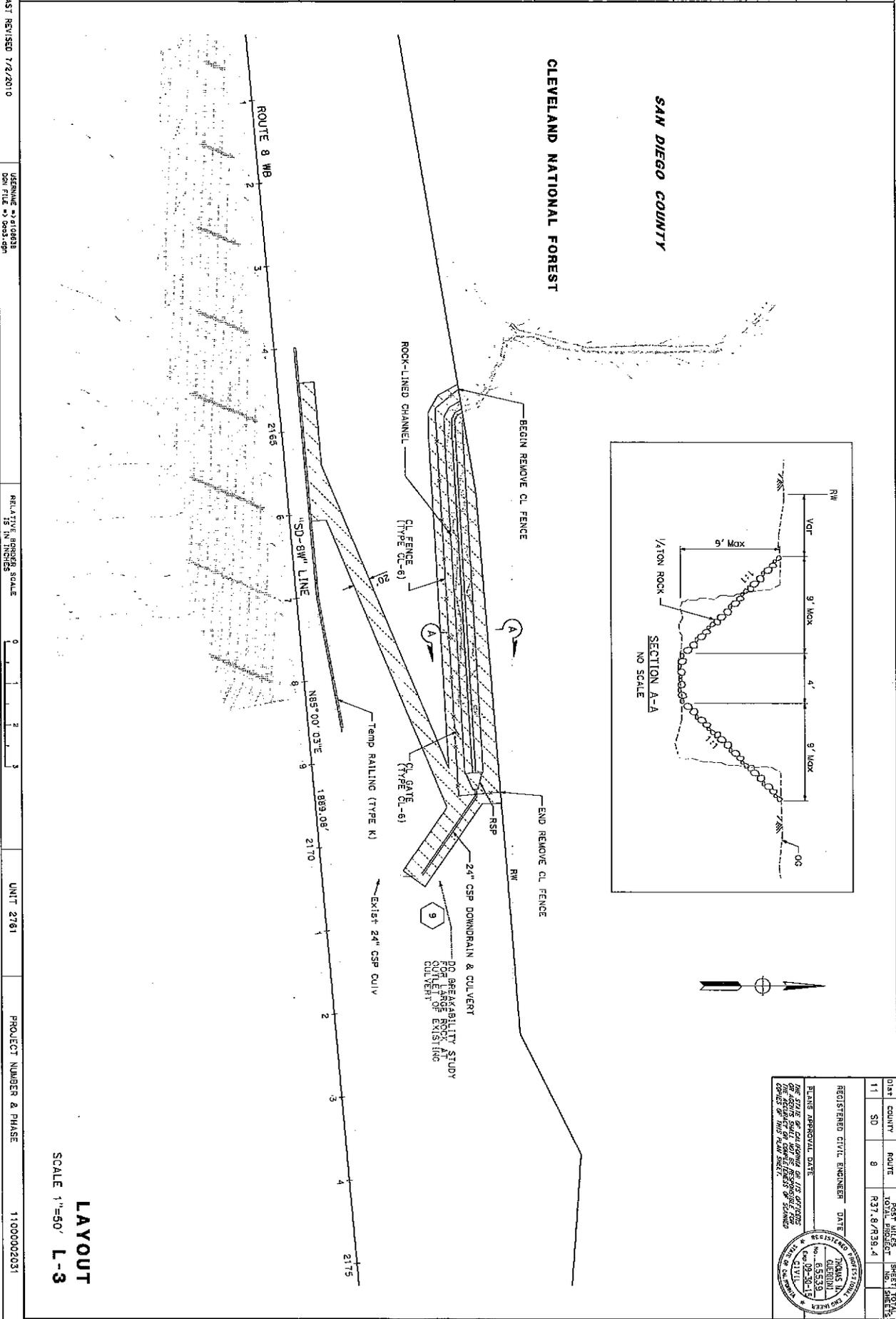
CC:

Art Padilla  
Abbas Abghari  
Shawn Wei *BA for SHAWN*  
Tom Guerrini  
District Construction RE Pending File

District Materials Engineer  
Office Chief, OGDS2  
Branch Chief, Branch D, OGDS2  
Project Design Engineer  
It is the responsibility of the Project Design  
Manager to include this document in the District  
Construction RE Pending File.



STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION <b>Hy-Gilbane</b> DESIGN	FUNCTIONAL SUPERVISOR	CALCULATED-DESIGNED BY	ENGINEER 1	REVISED BY		
	ED HAJJ	CHECKED BY	ENGINEER 2	DATE REVISED		



ROUTE 8 WB  
2165  
2175

SD-8W LINE  
Temp RAILING (TYPE K)  
24" CSP DOWNDRAIN & CULVERT  
DO BREAKABILITY STUDY FOR LARGE ROCK AT CULVERT OF EXISTING

DATE PLOTTED => 02-OCT-2014	PROJECT NUMBER & PHASE	11000002031
THE PLOTTED => 11:05		

Dist	COUNTY	ROUTE	POST MILES	SHEET TOTAL
11	SD	8	R37.8/R39.4	NO. SHEETS
REGISTERED CIVIL ENGINEER				
PLANS APPROVAL DATE		DATE		
THOMAS A. QUERINA		NO. 65539		
No. 09-30-13		No. 09-30-13		
REGISTERED CIVIL ENGINEER				
THOMAS A. QUERINA				
No. 65539				
No. 09-30-13				
No. 09-30-13				

BORDER LAST REVISED 7/2/2010

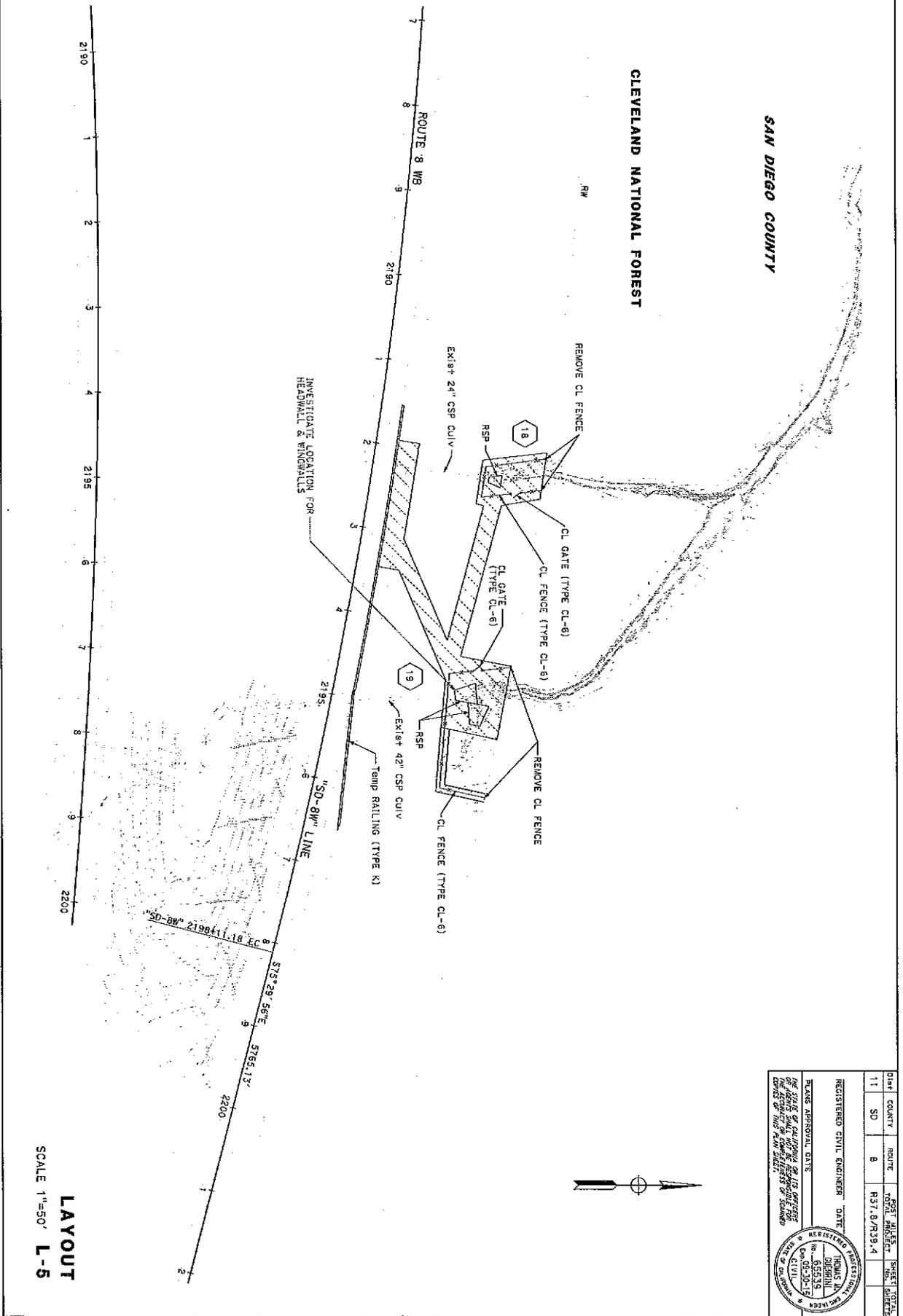
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RELATIVE BORDER SCALE  
 IS IN INCHES

UNIT 2161

PROJECT NUMBER & PHASE

11000002031



LAYOUT  
 SCALE 1"=50'  
 L-5

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET TOTAL
11	SD	8	R37.8/39.4	NO. SHEETS

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

THE STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION  
 REGISTERED CIVIL ENGINEER  
 No. 65539  
 Exp. 09-30-15  
 CIVIL

**DS 30**











**DS 1**





















**DS 9**





























**DS 13**









**DS 18**



























**DS 19**





































































