DISTRICT 11

MATERIALS INFORMATION BROCHURE

MATERIALS ENGINEERING BRANCH

11-SD-15/56
KP M30.6/M35.4 (15)
KP 14.3/15.0 (56)
11-080901

CT CALIFORNIA DEPARTMENT OF TRANSPORTATION

State of California

Memorandum

Business, Transportation and Housing Agency

To : LEON EDMONDS
Office Engineer
District 11

Date: November 20, 2002

File: 11-SD-15/56
KP M30.6/M35.4 (15)
KP 14.3/15.0 (56)
EA 11-080901

From : **DEPARTMENT OF TRANSPORTATION - DISTRICT 11**
Materials Engineering Branch

Subject: Materials Information Brochure

Attached herewith for your consideration

MATERIALS INFORMATION

FOR PROPOSED PROJECT ON ROUTES 15 & 56

IN SAN DIEGO COUNTY

STATE ROUTES 15 & 56

For Construction of portions of Routes 15 & 56
in San Diego County

Arthur F. Padilla
District Materials Engineer

REGISTERED PROFESSIONAL ENGINEER
ARTHUR F. PADILLA
No. C 49529
Exp. 09-30-04
CIVIL
STATE OF CALIFORNIA

AFP: ra

cc: JHull **(9)**
HOntoy **(35)**
MPeinado **(35)**
LEdmonds **(37)**
JEgan **(63)**
LKemp **(73)**
Construction Admin. Senior **(73)**
Project File (mib 080901.doc)

MATERIALS INFORMATION

11-SD-15/56
KP M30.6/M35.4 (15)
KP 14.3/15.0 (56)
EA 080901

NOTE: Information contained herein has been compiled in accordance with Section 2-1.03 of the Standard Specifications. Additional information is available for review at the District 11, Materials Laboratory, 7177 Opportunity Road, San Diego, California.

TABLE OF CONTENTS

Page

- Project Title Sheet 1
- R-Values 2
- Corrosion Analysis 2
- Recommended Culvert Alternatives 2
- Grading Factors. 2
- Earthwork Quantities 3
- Material Sources. 4

INDEX OF SHEETS

STATE OF CALIFORNIA

DEPARTMENT OF TRANSPORTATION

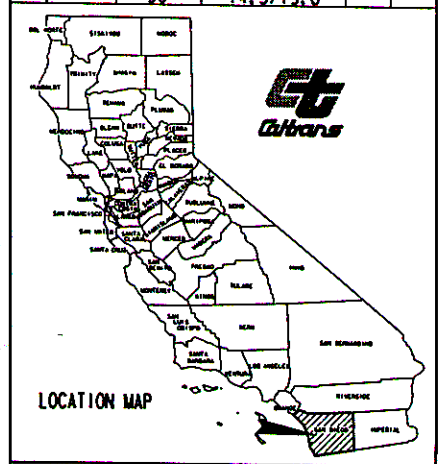
PROJECT PLANS FOR CONSTRUCTION ON

STATE HIGHWAY

IN SAN DIEGO COUNTY IN SAN DIEGO ON ROUTE 15 FROM 0.9 km SOUTH OF ROUTE 56/15 SEPARATION TO 0.1 km NORTH OF CAMINO DEL NORTE UNDERCROSSING AND ON ROUTE 56 FROM 0.5 km WEST TO 0.2 km EAST OF ROUTE 56/15 SEPARATION

To be supplemented by Standard Plans dated July, 1999

DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
11	SD	15 56	M30.6/M35.4 14.3/15.0	1	



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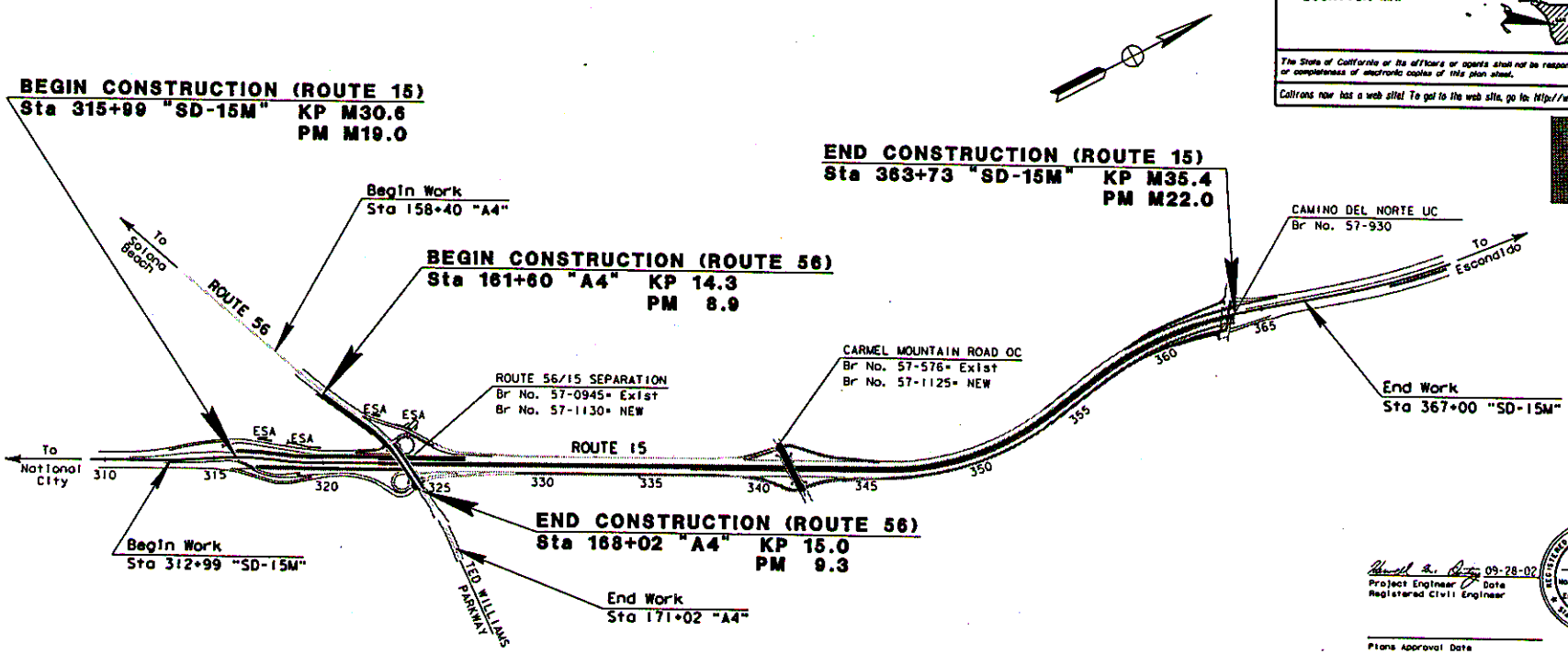
Caltrans now has a web site! To get to the web site, go to: http://www.dot.ca.gov



Metric

The Contractor shall possess the Class (or Classes) of license as specified in the "Notice to Contractors".

NO SCALE

09-28-02
Project Engineer Date
Registered Civil Engineer

Plans Approval Date

REGISTERED PROFESSIONAL ENGINEER H. M. ONTOY No. 55969 Exp. 12-31-04 CIVIL STATE OF CALIFORNIA

PROJECT ENGINEER	DATE	PROJECT MANAGER	DATE
H M ONTOY		L. R. CARR	

LAST REVISION 09-31-02 DATE PLOTTED => SCALE TIME PLOTTED => STYLE

FOR REDUCED PLANS ORIGINAL SCALE IS IN MILLIMETERS 0 20 40 60 80

USERNAME => MUSER DGN FILE => aREQUEST

Contract No. 11-080904

CU 11277

EA 080901

a:\b08090a001.dgn Oct. 31, 2002 13:28:51

MATERIALS INFORMATION

R-VALUES

The recommended design R-value of 15 is based on the Materials Report for 11-SD-15, PM M18.5 to M21.8, dated May 24, 1973.

CORROSION ANALYSIS

As reported in the Materials Report, dated May 24, 1973, the project soils tested were corrosive to metal and non-corrosive to concrete.

RECOMMENDED CULVERT ALTERNATIVES

Recommendations for New Culverts:

1. 4.27mm (8 gauge) Corrugated Steel Pipe (CSP) or 2.77 mm (12 gauge) bituminous coated, paved invert CSP.

2. Reinforced Concrete Pipe (RCP) using the standard design.

3. Plastic Pipe Culverts meeting the minimum and maximum fill height requirements. Either Corrugated Polyethylene (Type S), Ribbed Profile Wall Polyethylene, or Ribbed Profile Wall Polyvinyl Chloride pipe.

The first two recommendations are based on the Materials Report dated May 24, 1973.

GRADING FACTORS

Station to Station ("SD-15M")	Grading Factor
315+99 to 346+00 +/-	0.97
346+00 +/- to 352+00 +/-	1.18
352+00 +/- to 363+73	1.00

These values are recommended for cuts within the station limits indicated and are based on the Materials Report dated May 24, 1973.

EARTHWORK QUANTITIES

The following earthwork quantities are from the October 4, 2002 Engineer's Estimate.

Roadway Excavation	255,000 m^3
Structural Backfill (Retaining Wall)	3,100 m^3
Structural Backfill (Bridge)	15,250 m^3
Structural Excavation (Retaining Wall)	28,700 m^3
Structural Excavation (Bridge)	18,415 m^3
Class 2 Aggregate Base	45,200 m^3

MATERIALS SOURCES

A current list (dated October 4, 2002) of mining operations eligible to sell materials such as aggregates to the State of California in San Diego County follows:

Calif. Mine ID	Mine Name	Operated By
91-37-0002	NORTH TWIN OAKS VALLEY QUARRY	HANSON AGGREGATE CO.
91-37-0004	MISSION VALLEY ROCK PLANT	H.G. FENTON CO.
91-37-0005	PALA ROCK PLANT (SAND)	HANSON AGGREGATE CO.
91-37-0007	CARROLL CANYON PLANT	HANSON AGGREGATE CO.
91-37-0009	WYROC SYCAMORE QUARRY	WYROC, INC.
91-37-0010	LAKESIDE SAND PIT	C.W. MCGRATH, INC.
91-37-0011	HILLSDALE PIT	C.W. MCGRATH, INC.
91-37-0012	EL CORZAN	CITY OF OCEANSIDE
91-37-0013	SIM J. HARRIS COMPANY	HANSON AGGREGATE CO.
91-37-0015	UCLH SAN MARCOS	HANSON AGGREGATE CO.
91-37-0016	OCEANSIDE/CARLSBAD	HANSON AGGREGATE CO.
91-37-0019	TTT QUARRY	SUPERIOR READY MIX CONCRETE
91-37-0020	HESTER'S GRANITE	HANSON AGG
91-37-0021	SLAUGHTER HOUSE CANYON	PIONEER CONCRETE OF CA., INC.
91-37-0022	MCGRATH BORROW PIT	C.W. MCGRATH, INC.
91-37-0024	MISSION GORGE PIT	SUPERIOR READY MIX CONCRETE, L
91-37-0025	RCP PITS 1,2,3, & 5 INCLUSIVE	RCP BLOCK & BRICK, INC.
91-37-0026	MISSION VALLEY	CALMAT CO
91-37-0027	SLOAN CANYON	SLOAN CANYON SAND COMPNAY
91-37-0028	MISSION VALLEY-EX FENTON	CALMAT CO
91-37-0029	CARROLL CANYON	CALMAT CO
91-37-0030	VULCAN - POWAY	VULCAN MATERIALS
91-37-0033	LAKESIDE	VULCAN MATERIALS
91-37-0034	EL MONTE PIT	HANSON AGGREGATE CO.
91-37-0035	OTAY RANCH PIT	HANSON AGGREGATE CO.
91-37-0036	NELSON & SLOAN PIT 12	HANSON AGGREGATE CO.
91-37-0037	BORDER HIGHLANDS PIT	JIM & LOIS NELSON LP
91-37-0042	MONTE VISTA BORROW PIT	SAN DIEGO COUNTY PUBLIC WORKS
91-37-0043	ALLEN BORROW PIT	SAN DIEGO COUNTY PUBLIC WORKS
91-37-0044	BUCKMAN SPRINGS BORROW PIT	SAN DIEGO COUNTY PUBLIC WORKS
91-37-0045	OLIVE STREET BORROW PIT	SAN DIEGO COUNTY PUBLIC WORKS
91-37-0046	MCCAIN BORROW PIT	SAN DIEGO COUNTY PUBLIC WORKS
91-37-0047	BURNAND BORROW PIT	SAN DIEGO COUNTY PUBLIC WORKS
91-37-0048	WARNER BORROW PIT	SAN DIEGO COUNTY PUBLIC WORKS
91-37-0050	MORETTI-MESA GRANDE B.P.	SAN DIEGO COUNTY PUBLIC WORKS
91-37-0052	NATIONAL QUARRIES	NATIONAL QUARRIES
91-37-0053	JAMUL QUARRY	CALMAT CO.
91-37-0054	INLAND VALLEY MATERIALS	INLAND VALLEY MATERIALS
91-37-0056	PALO VERDE LAKE DESILTATION &	PALO VERDE RANCH HOA
91-37-0057	THE PAUMA VALLEY COUNTRY CLUB	THE PAUMA VALLEY COUNTRY CLUB
91-37-0060	RANCHO SAN DIEGO GOLF COURSE	J. CLOUD INC.
91-37-0063	WOODWARD SAND	LAKESIDE LAND COMPANY, INC.
91-37-0064	BAXTER QUARRY	M.J. BAXTER DRILLING COMPANY