DISTRICT 11

MATERIALS INFORMATION BROCHURE

MATERIALS ENGINEERING BRANCH

11-SD-15
KP M35.4/M38.7
11-080911

CT CALIFORNIA DEPARTMENT OF TRANSPORTATION

State of California

Memorandum

Business, Transportation and Housing Agency

To : LEON EDMONDS
Office Engineer
District 11

Date: September 5, 2003

File: 11-SD-15
KP M35.4/M38.7
EA 11-080911

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

Subject: Materials Information Brochure

Attached herewith for your consideration

MATERIALS INFORMATION

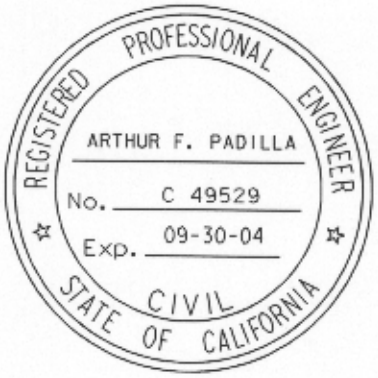
FOR PROPOSED PROJECT ON ROUTE 15

IN SAN DIEGO COUNTY

STATE ROUTE 15

For Construction of a portion of Route 15 in San Diego County

Arthur F. Padilla
District Materials Engineer



AFP: ra

cc: JHaven **(35)**
MPeinado **(35)**
LEdmonds **(37)**
LKemp **(73)**
Project File (mib 080911.doc)

MATERIALS INFORMATION

11-SD-15
KP M35.4/M38.7
EA 080911

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.

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11	SD	15	M35.4/M38.7	1	

STATE OF CALIFORNIA

DEPARTMENT OF TRANSPORTATION

PROJECT PLANS FOR CONSTRUCTION ON

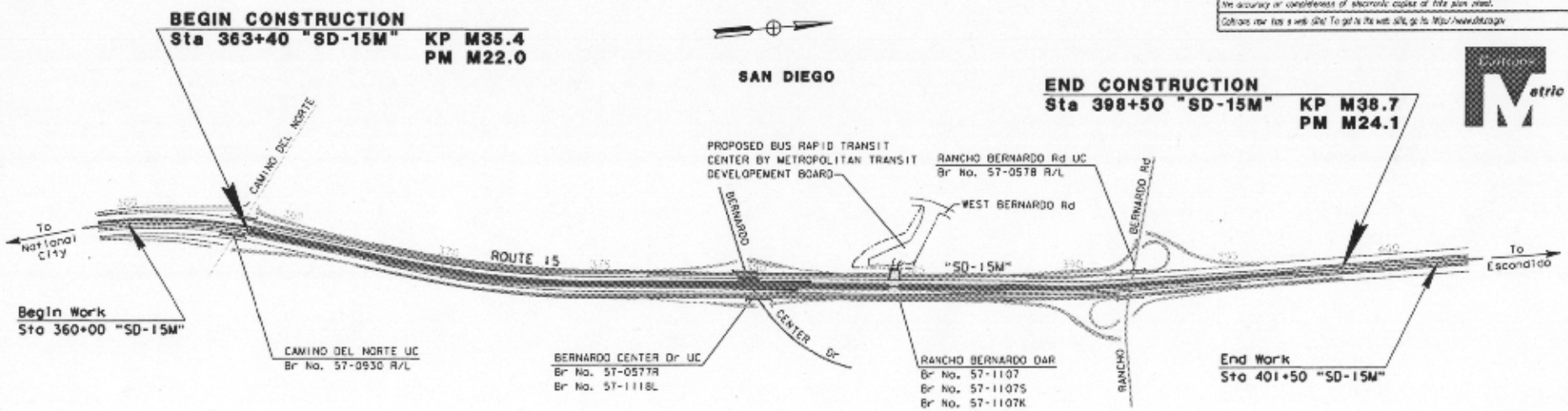
STATE HIGHWAY

IN SAN DIEGO COUNTY
IN SAN DIEGO FROM
CAMINO DEL NORTE UNDERCROSSING TO 0.5 km
NORTH OF RANCHO BERNARDO ROAD UNDERCROSSING

To be supplemented by Standard Plans dated July, 1999

The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

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



Project Engineer Date
Registered Civil Engineer

Plans Approval Date

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

NO SCALE

Contract No. 11-080914

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

USERNAME => AUSER
DGN FILE => WREQUEST

CU 11277

EA 080911

T. N. DOAN | L. R. CARR

04-30-03

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MATERIALS INFORMATION

R-VALUE

The recommended design R-value of 5 is based on a previous Materials Report dated May 30, 1973.

CORROSION ANALYSIS

As reported in the Materials Report, dated May 30, 1973, the project soils tested were corrosive to metal.

RECOMMENDED CULVERT ALTERNATIVES

Recommendations for New Culverts:

1. 2.01 mm (14 gauge) Corrugated Steel Pipe (CSP) or 1.63 mm (16 gauge) bituminous coated 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 30, 1973.

GRADING FACTORS

Kilo Post to Kilo Post	Grading Factor
35.4 +/- to to 37.2 +/-	0.87
37.2 +/- to 38.7 +/-	0.95

These values are based on the Materials Report dated May 24, 1973.

EARTHWORK QUANTITIES

The following earthwork quantities are from the June 6, 2003 Engineer's Estimate.

Roadway Excavation	380,000 m^3
Structural Backfill (Retaining Wall)	8,940 m^3
Structural Backfill (Bridge)	8,215 m^3
Structural Excavation (Retaining Wall)	15,961 m^3
Structural Excavation (Bridge)	5,907 m^3
Structural Excavation (Type D)	3,325 m^3
Class 2 Aggregate Base	47,600 m^3

MATERIALS SOURCES

A current list (dated July 3, 2003) 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