

INDEX OF PLANS

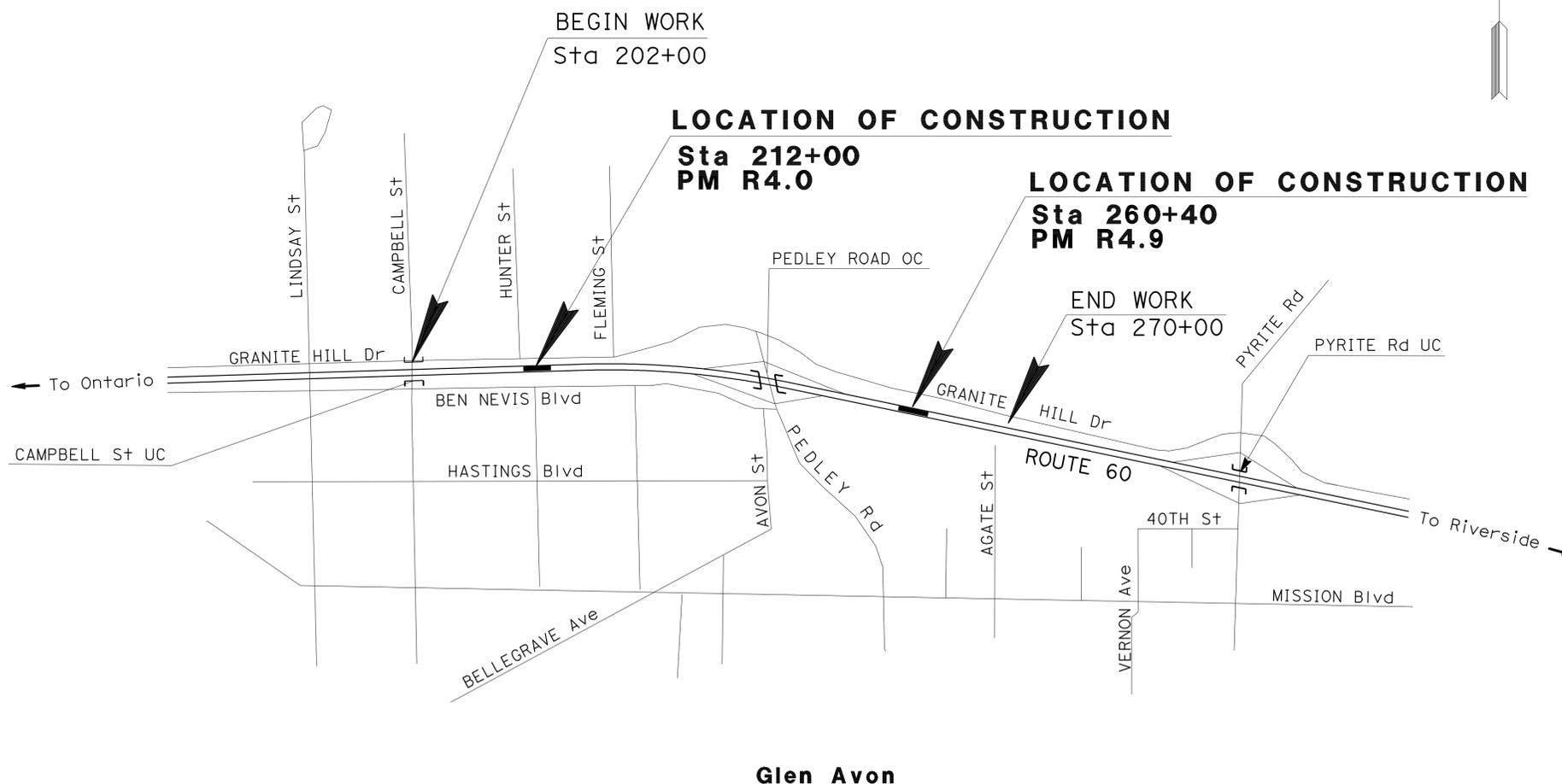
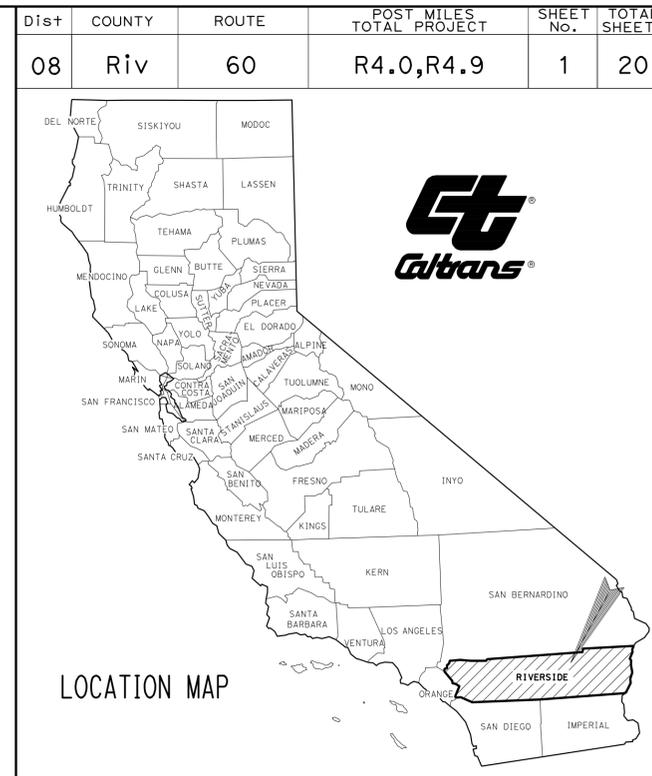
SHEET No.	DESCRIPTION
1	TITLE AND LOCATION MAP
2	LAYOUTS
3	CONSTRUCTION DETAILS
4	CONSTRUCTION AREA SIGNS
5	SUMMARY OF QUANTITIES
6	SIGN PLANS, DETAILS AND QUANTITIES
7-10	ELECTRICAL PLANS
11-20	REVISED AND NEW STANDARD PLANS

THE STANDARD PLANS LIST APPLICABLE TO THIS CONTRACT IS INCLUDED IN THE NOTICE TO BIDDERS AND SPECIAL PROVISIONS BOOK.

STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION

PROJECT PLANS FOR CONSTRUCTION ON  
STATE HIGHWAY  
IN RIVERSIDE COUNTY  
AT GLEN AVON  
AT 0.4 MILE EAST OF PEDLEY ROAD OVERCROSSING  
AND AT 0.4 MILE WEST OF PEDLEY ROAD OVERCROSSING

TO BE SUPPLEMENTED BY STANDARD PLANS DATED MAY 2006



Glen Avon

NO SCALE

PROJECT MANAGER	MUSTAPHA IAALI
DESIGN ENGINEER	W. K. TSAO

THE CONTRACTOR SHALL POSSESS THE CLASS (OR CLASSES) OF LICENSE AS SPECIFIED IN THE "NOTICE TO BIDDERS."

*Savat Khampou* 02-03-10  
PROJECT ENGINEER DATE  
REGISTERED CIVIL ENGINEER

February 16, 2010  
PLANS APPROVAL DATE

THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.



CONTRACT No. **08-0M1404**



**NOTES:**

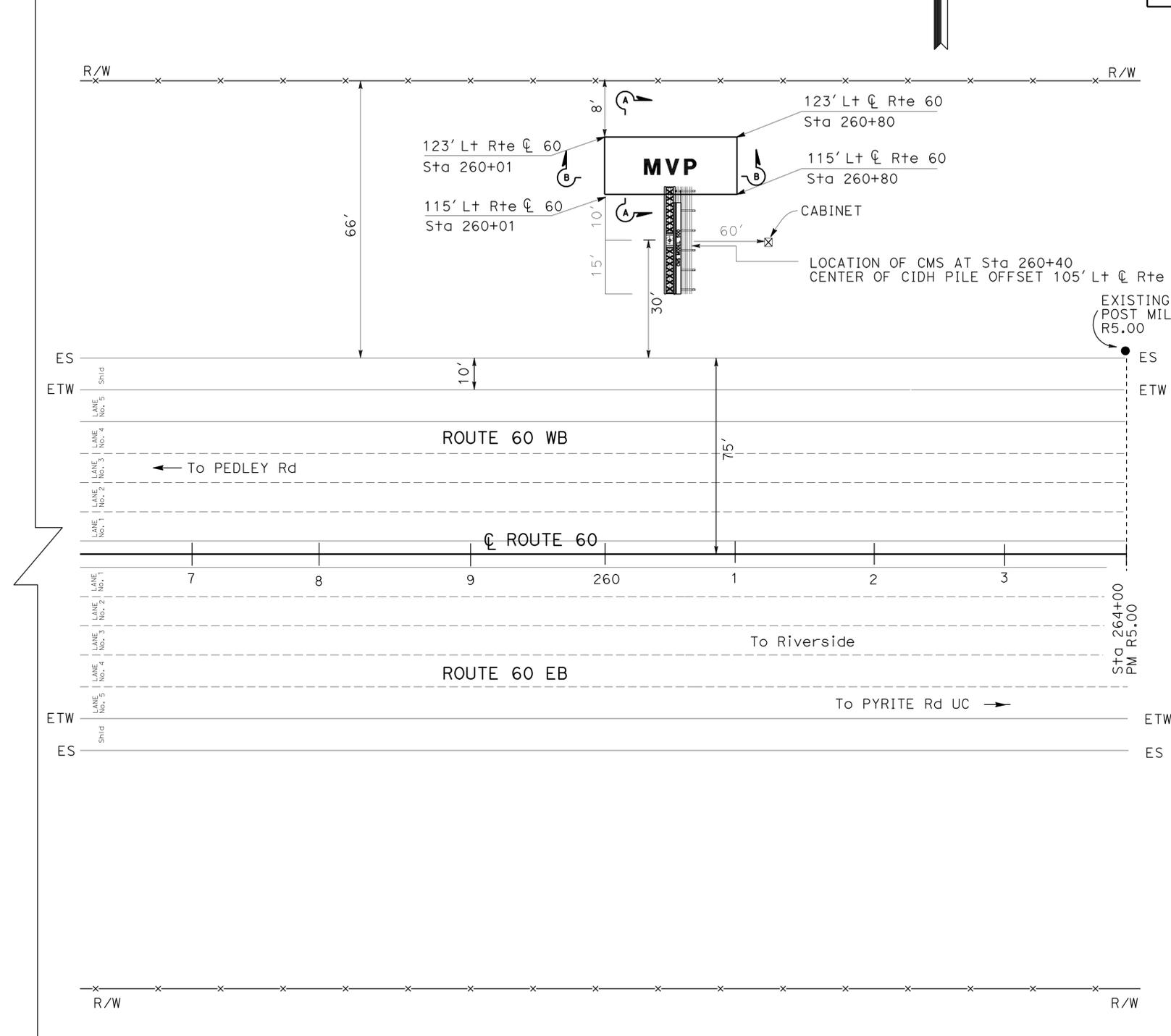
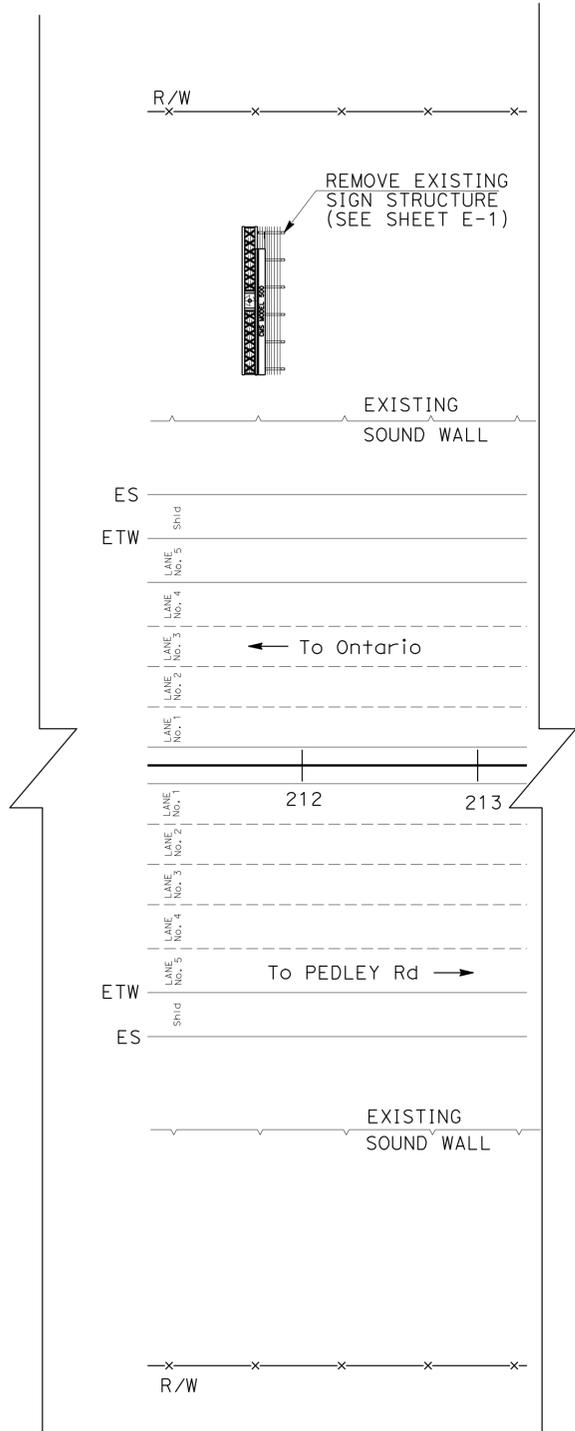
- 1) FOR COMPLETE RIGHT OF WAY AND ACCURATE ACCESS DATA, SEE RIGHT OF WAY MAPS AT DISTRICT OFFICE.
- 2) SEE SHEET C-1 FOR SECTIONS B-B AND C-C.

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	Riv	60	R4.0,R4.9	2	20

12-30-09  
 REGISTERED CIVIL ENGINEER DATE  
 2-16-10  
 PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER  
 SAVAT KHAMPHOU  
 No. 62019  
 Exp. 9/30/11  
 CIVIL  
 STATE OF CALIFORNIA

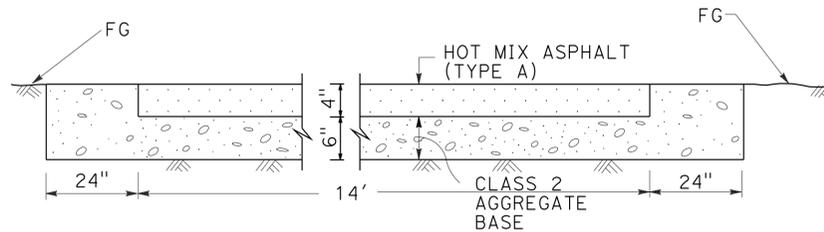
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.



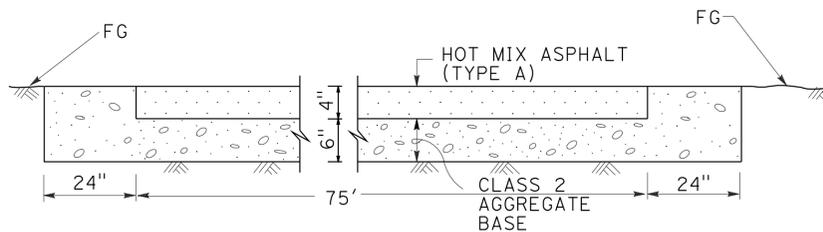
**LAYOUT**  
 NO SCALE **L-1**

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	Riv	60	R4.0,R4.9	3	20
<i>Savat Khamphou</i> REGISTERED CIVIL ENGINEER			12-30-09 DATE	REGISTERED PROFESSIONAL ENGINEER <b>SAVAT KHAMPHOU</b> No. 62019 Exp. 9/30/11 CIVIL STATE OF CALIFORNIA	
2-16-10 PLANS APPROVAL DATE			<small>THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.</small>		

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	DESIGN N
<b>Caltrans</b>	
FUNCTIONAL SUPERVISOR	SAVAT KHAMPHOU
CALCULATED-DESIGNED BY	CHECKED BY
W.K. TSAO	MAINUL KHAN
REVISED BY	DATE REVISED



**A - A**  
**SECTION**



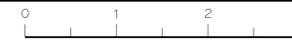
**B - B**  
**SECTION**

**MAINTENANCE VEHICLE PAD**

**CONSTRUCTION DETAILS**

NO SCALE

**C-1**

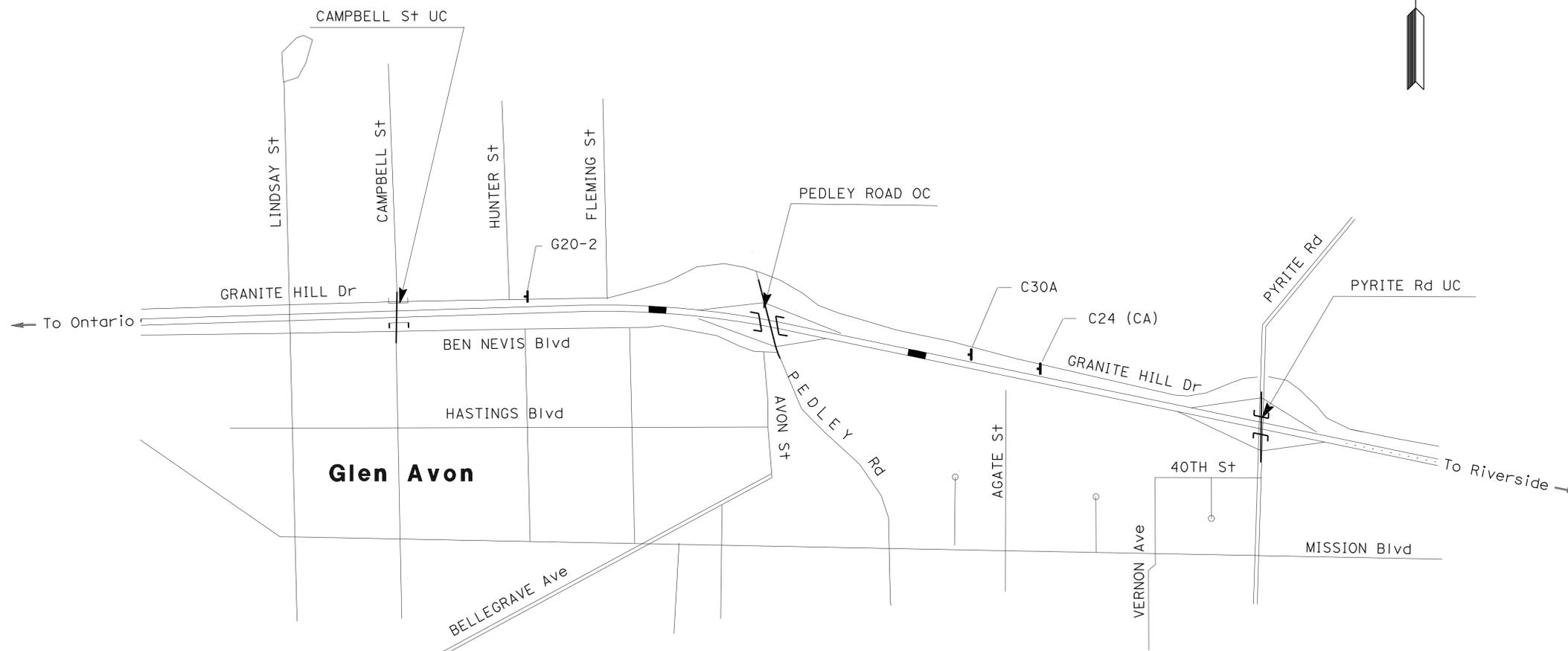


Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	Riv	60	R4.0,R4.9	4	20

12-30-09  
 REGISTERED CIVIL ENGINEER DATE  
 2-16-10  
 PLANS APPROVAL DATE

TRAN HOANG  
 No. C54996  
 Exp. 6/30/10  
 CIVIL

THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.



**STATIONARY MOUNTED CONSTRUCTION AREA SIGNS**

SIGN CODE	PANEL SIZE (INCHES)	SIGN MESSAGE	No. OF POST AND SIZE	No. OF SIGNS (N)
C24 (CA)	48 x 48	SHOULDER WORK AHEAD	1 - 4" x 6"	1
C30A	48 x 60	SHOULDER CLOSED	1 - 6" x 6"	1
G20-2	48 x 24	END ROAD WORK	1 - 4" x 6"	1

(N) NOT A SEPARATE PAY ITEM, FOR INFORMATION ONLY.

**NOTES:**

- CONSTRUCTION AREA SIGN LOCATIONS SHOWN ARE APPROXIMATE. EXACT SIGN LOCATIONS WILL BE DETERMINED BY THE ENGINEER.
- REFER TO STANDARD PLAN T10 PLAN FOR TRAFFIC CONTROL REQUIREMENTS.

**CONSTRUCTION AREA SIGNS**

NO SCALE

**CS-1**

THIS PLAN ACCURATE FOR CONSTRUCTION AREA SIGN WORK ONLY.

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**Caltrans**  
 DESIGN N

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	Riv	60	R4.0,R4.9	5	20

*Savat Khamphou* 12-30-09  
 REGISTERED CIVIL ENGINEER DATE

2-16-10  
 PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER  
 SAVAT KHAMPHOU  
 No. 62019  
 Exp. 9/30/11  
 CIVIL  
 STATE OF CALIFORNIA

THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

### MAINTENANCE VEHICLE PULLOUT QUANTITIES

LOCATION	AB CLASS 2	HMA (TYPE A)	ROADWAY EXCAVATION
	CY	TON	CY
STA 260+40	31	25	45
TOTAL	31	25	45

### TEMPORARY WATER POLLUTION CONTROL QUANTITIES

DESCRIPTION	(FT)	(EA)
GRAVEL BAG BERM	450	
TEMPORARY DRAIN INLET PROTECTION		1
TOTAL	450	1

## SUMMARY OF QUANTITIES

**Q-1**

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**Caltrans** DESIGN N  
 FUNCTIONAL SUPERVISOR SAVAT KHAMPHOU  
 CALCULATED-DESIGNED BY CHECKED BY  
 W.K.TSAO MAINUL KHAN  
 REVISED BY DATE REVISED

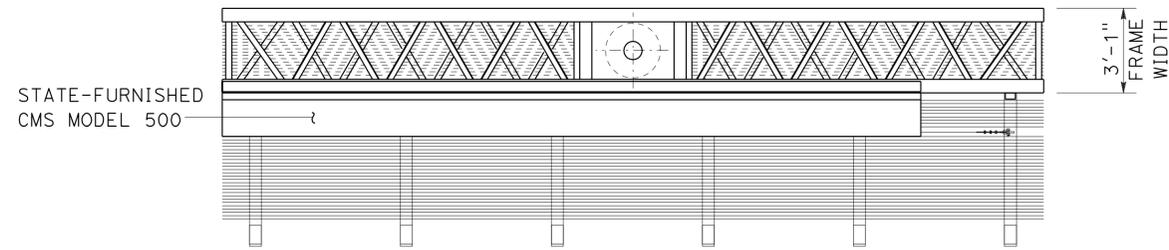


Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	Riv	60	R4.0,R4.9	6	20

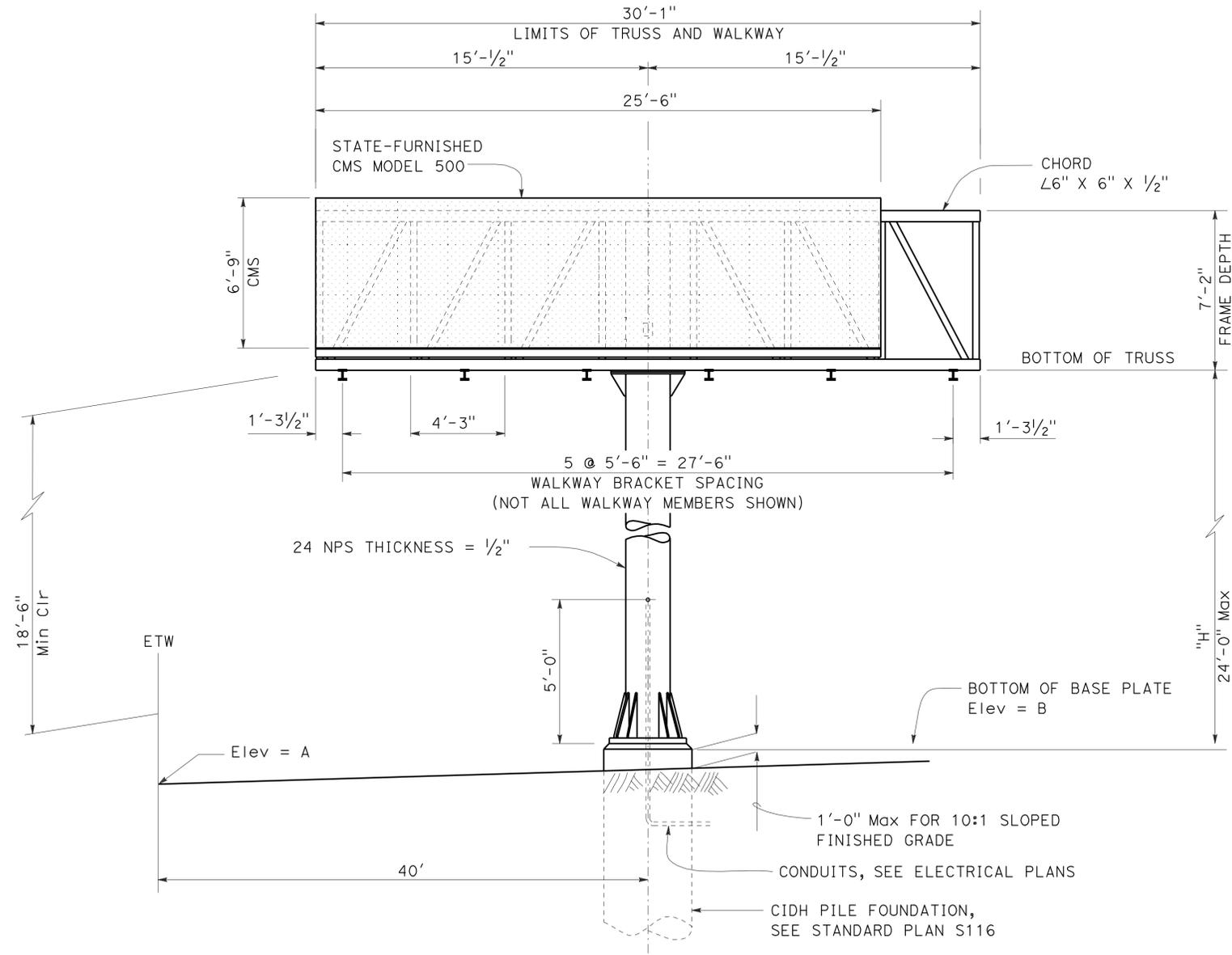
REGISTERED CIVIL ENGINEER DATE 12-30-09  
 2-16-10  
 PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER  
 SAVAT KHAMPHOU  
 No. 62019  
 Exp. 9/30/11  
 CIVIL  
 STATE OF CALIFORNIA

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PLAN



ELEVATION

CMS TYPE	MODEL	LOCATION STATION	STATE ROUTE	CMS ORIENTATION	X (FT)	H (FT)	Assumed	**	SIGN STRUSS (TRUSS)		
							Elev A (FT)	Elev B (FT)	FURNISH (LB)	INSTALL (LB)	CIDH PILE
BALANCED BUTTERFLY	500	260+40	60	FWBT	40	24	100	101.33	15298	15298	5 (FT Dia) 20 (FT DEEP)

**CHANGABLE MESSAGE SIGN TRUSS**  
**(SIGN DETAIL)**  
 NO SCALE **SD-1**



STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**Et Caltrans**  
**DESIGN N**  
 FUNCTIONAL SUPERVISOR SAVAT KHAMPHOU  
 W.K. TSAO MAINUL KHAN  
 REVISIONS: [REVISIONS TABLE]  
 REVISION BY DATE REVISION BY DATE REVISION BY DATE

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	Riv	60	R4.0,R4.9	7	20
			02-03-10		
			REGISTERED CIVIL ENGINEER	DATE	
			2-16-10	PLANS APPROVAL DATE	
<small>THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.</small>					



**PROJECT NOTES (THIS SHEET ONLY):**

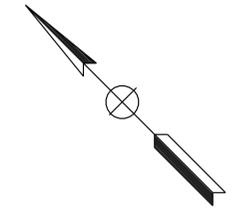
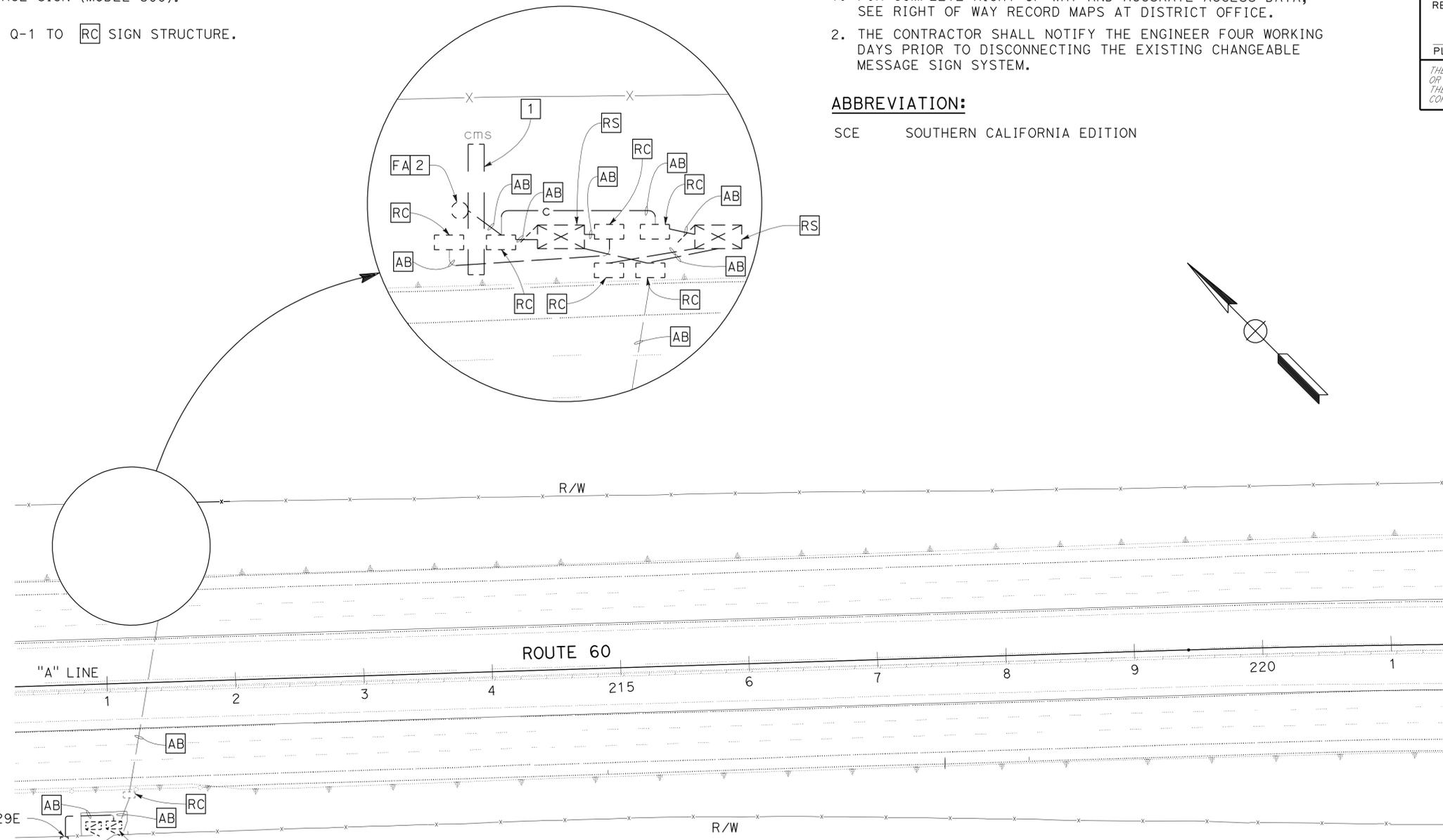
- 1 **RS** CHANGEABLE MESSAGE SIGN (MODEL 500).
- 2 SEE SHEETS L-1 AND Q-1 TO **RC** SIGN STRUCTURE.

**GENERAL NOTES (THIS SHEET ONLY):**

- 1. FOR COMPLETE RIGHT OF WAY AND ACCURATE ACCESS DATA, SEE RIGHT OF WAY RECORD MAPS AT DISTRICT OFFICE.
- 2. THE CONTRACTOR SHALL NOTIFY THE ENGINEER FOUR WORKING DAYS PRIOR TO DISCONNECTING THE EXISTING CHANGEABLE MESSAGE SIGN SYSTEM.

**ABBREVIATION:**

SCE SOUTHERN CALIFORNIA EDITION



**RS** Exist 120/240 V, TYPE III-CF SERVICE EQUIPMENT ENCLOSURE WITH:

- 100 A, 240 V, 2P, CB MAIN BREAKER (TC-1)
- 30 A, 120 V, 1P, CB (CONTROLLER)
- 15 A, 120 V, 1P, CB (CMS RECEPTACLE 1)
- 15 A, 120 V, 1P, CB (CMS RECEPTACLE 2)
- 30 A, 120 V, 1P, CB (SPARE)
- 80 A, 120 V, 1P, CB (CMS)
- 80 A, 120 V, 1P, CB (CMS)
- 30 A, 120 V, 1P, CB (CMS)

9421 BEN NEVIS Blvd, GLEN AVON  
CALTRANS ID No.: 08-56-060-0-003.880-M

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	FUNCTIONAL SUPERVISOR	DESIGNED BY	REVISOR
<b>Caltrans</b> ELECTRICAL DESIGN A	DAVID A. GONZALEZ	MICHAEL APANTE	HARRY UMEMOTO
	CHECKED BY	DATE	REVISION

**REMOVE EXISTING CHANGEABLE MESSAGE SIGN SYSTEM**

SCALE: 1" = 50' **E-1**

THIS PLAN IS ACCURATE FOR ELECTRICAL WORK ONLY.

LAST REVISION DATE PLOTTED => 17-FEB-2010 02-01-10 TIME PLOTTED => 10:13

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**Caltrans** ELECTRICAL DESIGN A

FUNCTIONAL SUPERVISOR	DAVID A. GONZALEZ
CALCULATED-DESIGNED BY	CHECKED BY
MICHAEL APANTE	HARRY UMEMOTO
REVISOR	DATE
REVISOR	DATE
REVISOR	DATE

**PROJECT NOTES (THIS SHEET ONLY):**

- 1 EXISTING TYPE III-CF 240/480 V SERVICE EQUIPMENT ENCLOSURE
- METER A: 100 A, 480 V, 2P, CB (MAIN) LS-3  
 30 A, 480 V, 2P, CB (LIGHTING)  
 30 A, 240 V, 1P, CB (SIGN)  
 15 A, 240 V, 1P, CB (CONTROL)
- RS 30 A, 480 V, 2P, CB (TMS)
- RS 50 A, 240 V, 1P, CB (SIGNAL)
- RS 30 A, 240 V, 1P, CB (RAMP METER)
- CALTRANS ID No: 08-56-060-0-004.548-L  
 3602 PEDLEY ROAD, GLEN AVON
- METER B: 100 A, 480 V, 2P, CB (MAIN) TC-1  
 ADD 20 A, 480 V, 2P CB (CMS SYSTEM STEP-DOWN XFMR)
- CALTRANS ID No: 08-56-060-0-004.708-M  
 3602B PEDLEY ROAD, GLEN AVON

**GENERAL NOTES (THIS SHEET ONLY):**

- 1. FOR COMPLETE RIGHT OF WAY AND ACCURATE ACCESS DATA, SEE RIGHT OF WAY RECORD MAPS AT DISTRICT OFFICE.
- 2. ALL PULL BOXES SHALL BE RECESSED 6" FROM FINISHED GRADE. THE CONTRACTOR SHALL MARK THE LOCATION OF PULL BOXES WITH GPS COORDINATES IN DEGREES, MINUTES, SECONDS NORTH AND DEGREES, MINUTES, SECONDS WEST.
- 3. THE CONTRACTOR SHALL RS CB LABELS NOT USED AND INSTALL NEW CMS SYSTEM LABEL OF SAME TYPE. ALL BLANKS FROM REMOVING CIRCUIT BREAKER SHALL BE COVERED WITH APPROVED MANUFACTURER'S PLUGS.

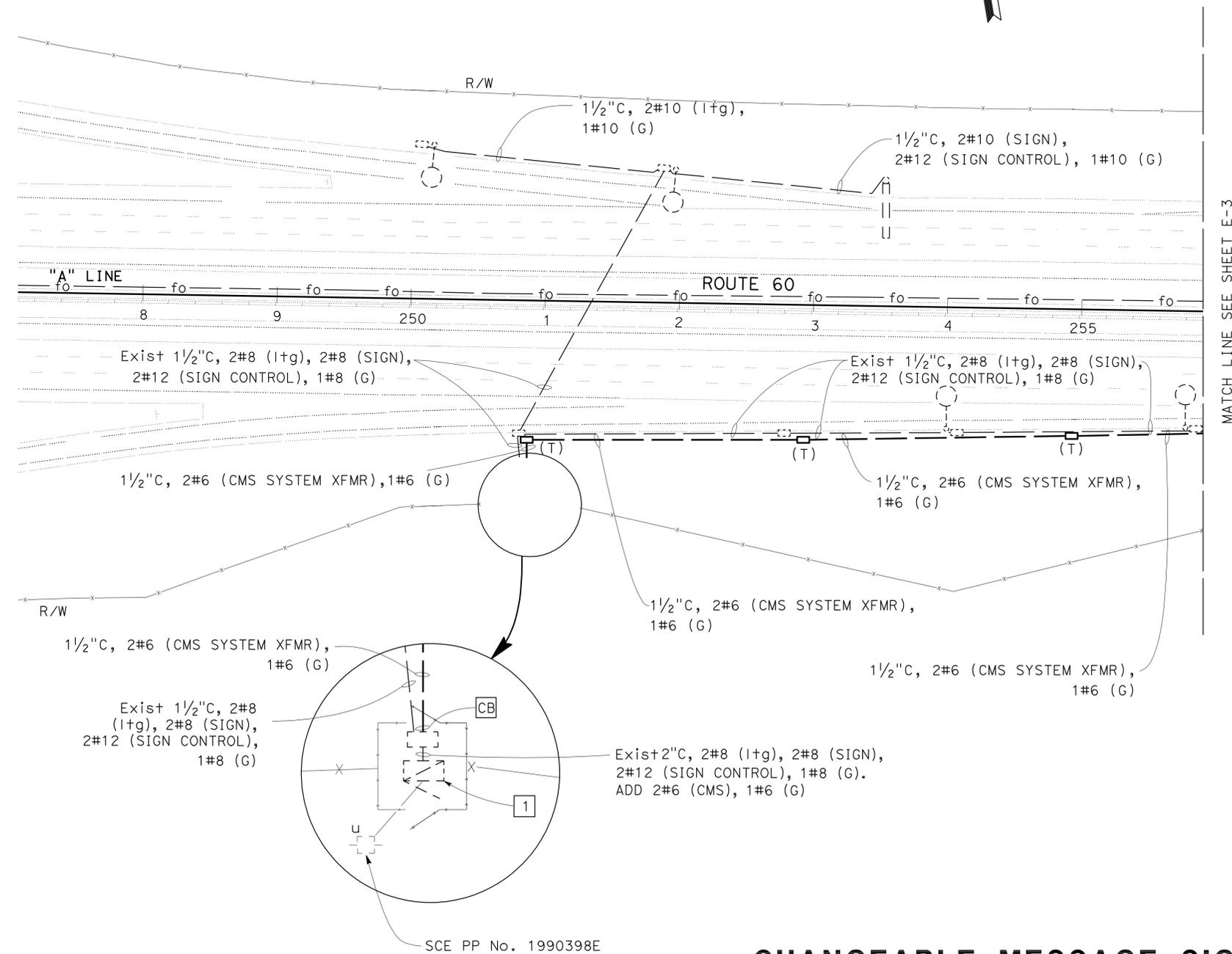
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	Riv	60	R4.0,R4.9	8	20

02-03-10  
 REGISTERED CIVIL ENGINEER DATE

2-16-10  
 PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER  
 MICHAEL APANTE  
 No. E 17164  
 Exp. 9-30-11  
 CIVIL

THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.



MATCH LINE SEE SHEET E-3

**CHANGEABLE MESSAGE SIGN SYSTEM**

SCALE: 1" = 50'

**E-2**

THIS PLAN IS ACCURATE FOR ELECTRICAL WORK ONLY.

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**Caltrans** ELECTRICAL DESIGN A  
 FUNCTIONAL SUPERVISOR: DAVID A. GONZALEZ  
 CALCULATED-DESIGNED BY: MICHAEL APANTE  
 CHECKED BY: HARRY UMEMOTO  
 REVISED BY: DATE REVISION:

**PROJECT NOTES (THIS SHEET ONLY):**

1. INSTALL 10 KVA, 480-120/240 V, Ø1 PAD MOUNTED STEP-DOWN XFMR  
 NEMA 3R PANEL AT XFMR PRIMARY WITH  
 20 A, 480 V, 2P CB (DISCONNECT)  
 NEMA 3R PANEL AT XFMR SECONDARY WITH  
 40 A, 240 V, 2P CB (CMS SIGN)  
 30 A, 120 V, 1P CB (CMS CABINET)  
 INSTALL (SEE SHEET E-4 FOR SYSTEM WIRING DIAGRAM)
2. INSTALL STATE-FURNISHED MODEL 170E CONTROLLER ASSEMBLY AND FOUNDATION.

**LEGEND:**

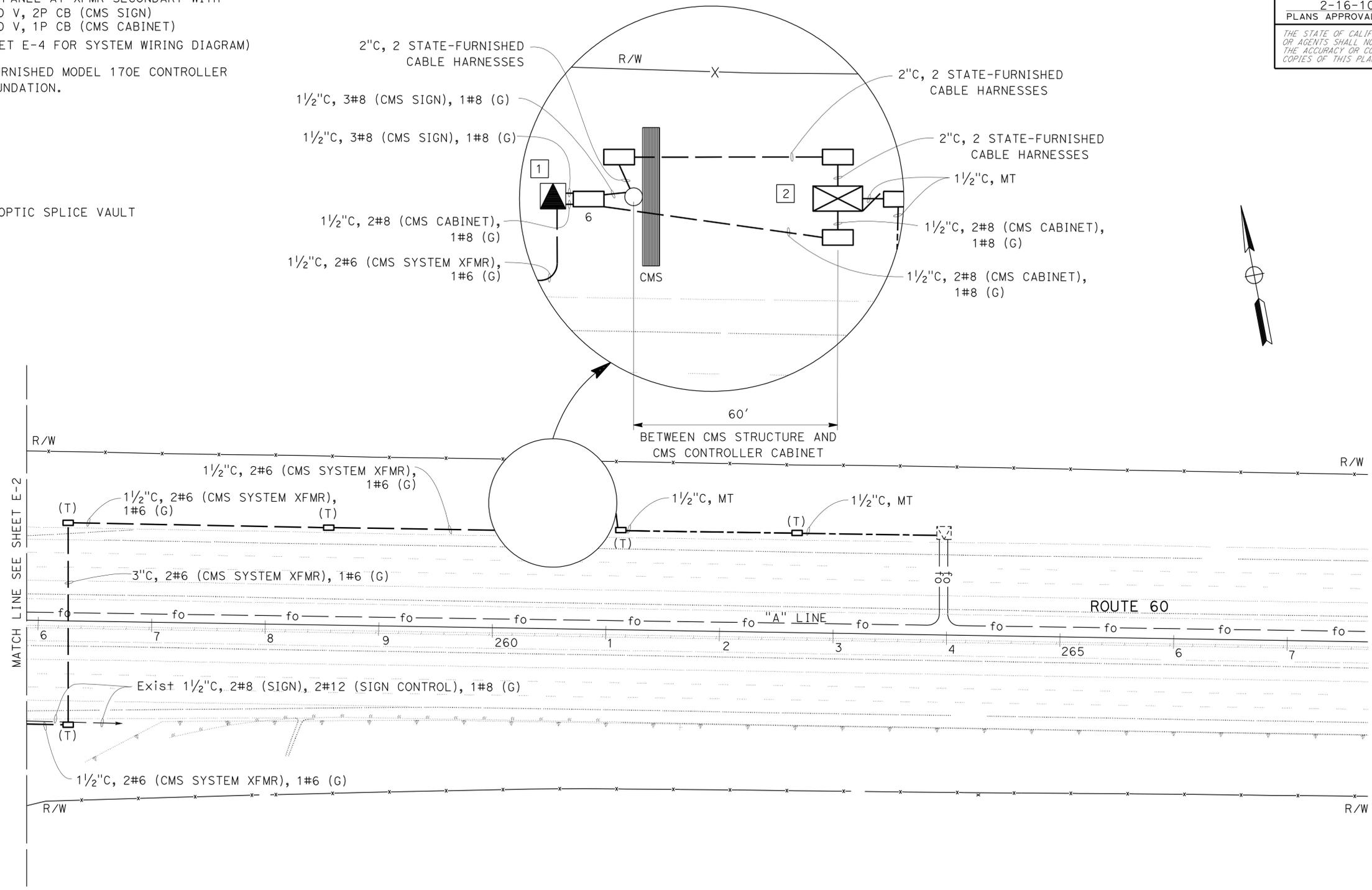
EXISTING FIBER OPTIC SPLICE VAULT

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	Riv	60	R4.0,R4.9	9	20

02-03-10  
 REGISTERED CIVIL ENGINEER DATE  
 2-16-10  
 PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER  
**MICHAEL APANTE**  
 No. E 17164  
 Exp. 9-30-11  
 CIVIL  
 STATE OF CALIFORNIA

THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.



**GENERAL NOTES (THIS SHEET ONLY):**

1. FOR COMPLETE RIGHT OF WAY AND ACCURATE ACCESS DATA, SEE RIGHT OF WAY RECORD MAPS AT DISTRICT OFFICE.
2. ALL PULL BOXES SHALL BE RECESSED 6" FROM FINISHED GRADE. THE CONTRACTOR SHALL MARK THE LOCATION OF THE PULL BOXES WITH GPS COORDINATES IN DEGREES, MINUTES, SECONDS NORTH AND DEGREES, MINUTES, SECONDS WEST.

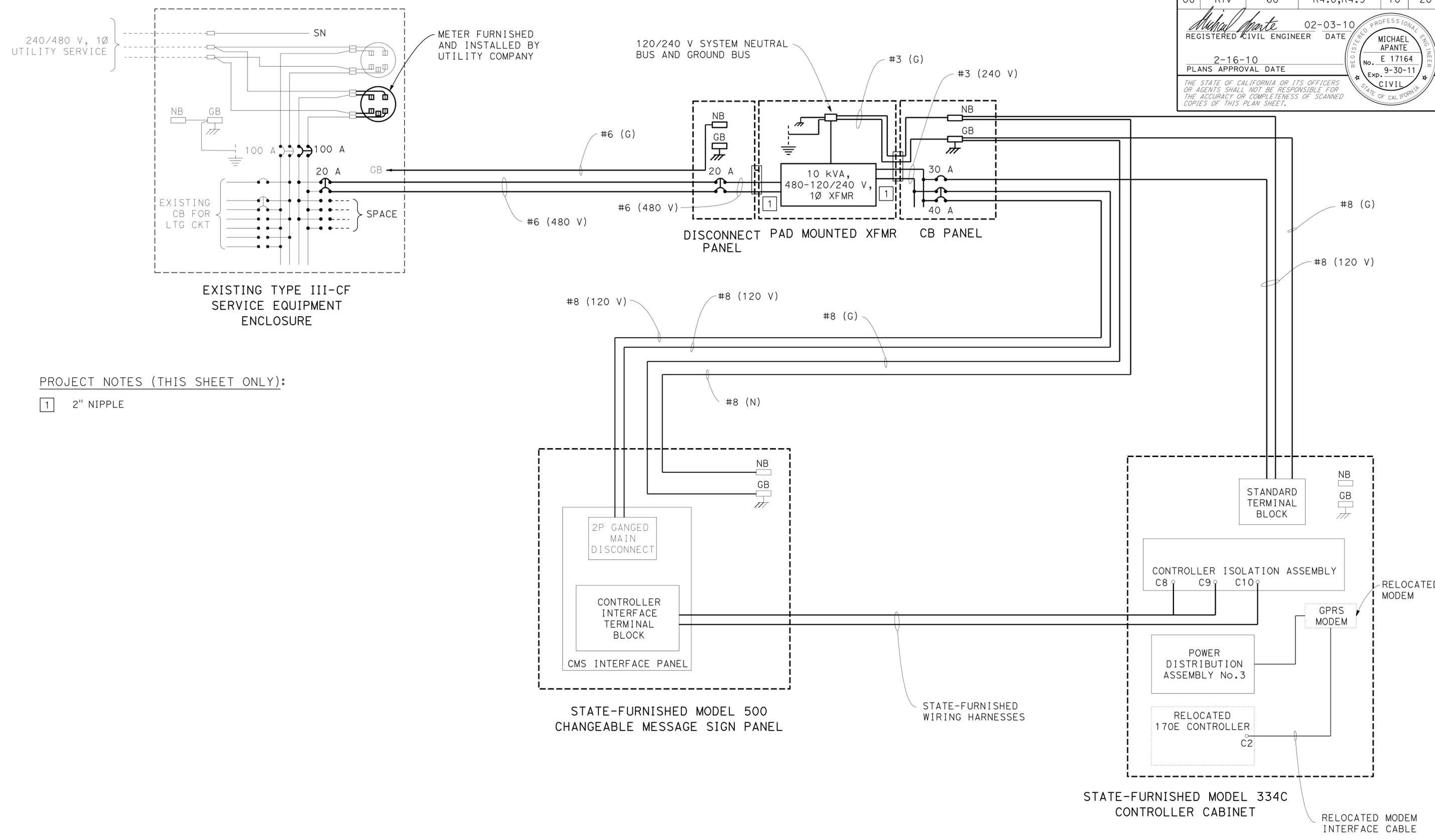
**CHANGEABLE MESSAGE SIGN SYSTEM**

**E-3**

THIS PLAN IS ACCURATE FOR ELECTRICAL WORK ONLY.

SCALE: 1" = 50'

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
08	Riv	60	R4.0,R4.9	10	20
<i>Michael Apante</i> REGISTERED CIVIL ENGINEER DATE 02-03-10			2-16-10 PLANS APPROVAL DATE		
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.			REGISTERED PROFESSIONAL ENGINEER <b>MICHAEL APANTE</b> No. E 17164 Exp. 9-30-11 CIVIL STATE OF CALIFORNIA		



PROJECT NOTES (THIS SHEET ONLY):

- 1 2" NIPPLE

**CHANGEABLE MESSAGE SIGN SYSTEM**  
**(SYSTEM WIRING DIAGRAM)**  
 NO SCALE **E-4**

THIS PLAN IS ACCURATE FOR ELECTRICAL WORK ONLY.



USERNAME => trlenard  
 DGN FILE => 080m140ua004.dgn

CU 08212

EA 0M1401

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**Caltrans** ELECTRICAL DESIGN A

REVISOR BY DATE

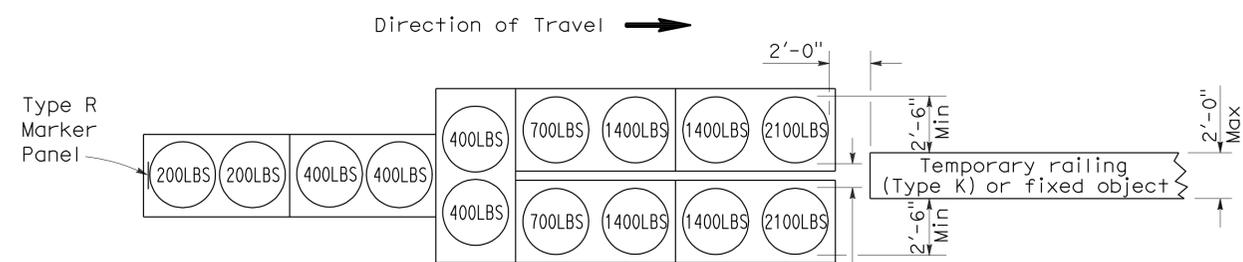
MICHAEL APANTE HARRY UMEMOTO

CALCULATED-DESIGNED BY CHECKED BY

FUNCTIONAL SUPERVISOR DAVID A. GONZALEZ

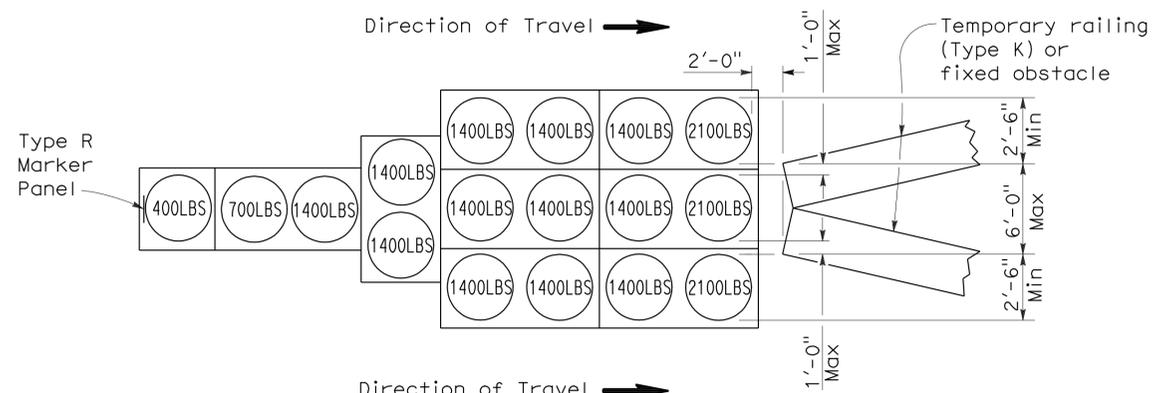
To accompany plans dated 2-16-10

2006 REVISED STANDARD PLAN RSP T1A



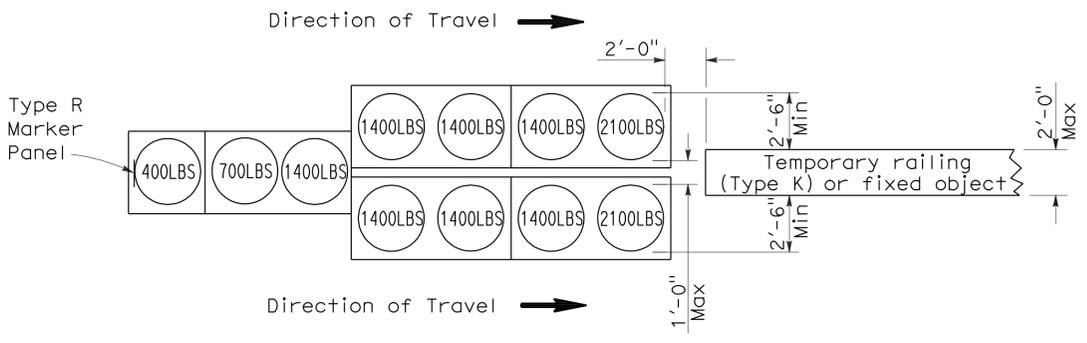
**ARRAY 'TU14'**

Approach speed 45 mph or more



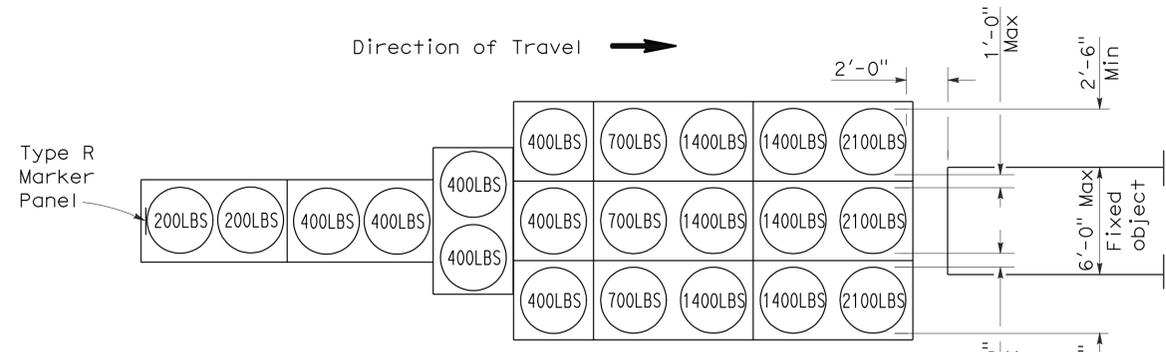
**ARRAY 'TU17'**

Approach speed less than 45 mph



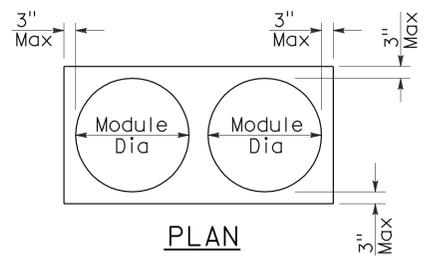
**ARRAY 'TU11'**

Approach speed less than 45 mph

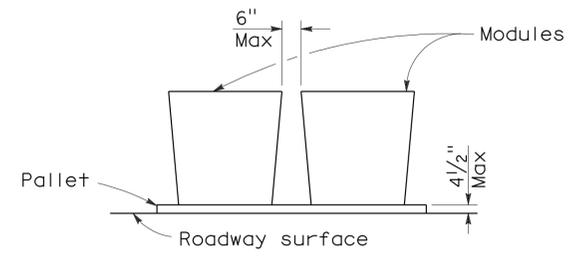


**ARRAY 'TU21'**

Approach speed 45 mph or more



**PLAN**



**ELEVATION**

**CRASH CUSHION PALLET DETAIL**

See Note 7

**NOTES:**

1. (XXX) Indicates sand filled module location and weight of sand in pounds for each module. Module spacing is based on the greater diameter of the module.
2. All sand weights are nominal.
3. Temporary crash cushion arrays shall not encroach on the traveled way.
4. Place the top of Type R marker panel 1" below the module lid.
5. Refer to Standard Plan A73B for marker details.
6. Approach speeds indicated conform to NCHRP 350 Report criteria.
7. Use of pallets is optional.

STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION

**TEMPORARY CRASH CUSHION,  
SAND FILLED  
(UNIDIRECTIONAL)**

NO SCALE

RSP T1A DATED JUNE 6, 2008 SUPERSEDES STANDARD PLAN T1A  
DATED MAY 1, 2006 - PAGE 211 OF THE STANDARD PLANS BOOK DATED MAY 2006.

**REVISED STANDARD PLAN RSP T1A**

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
08	Riv	60	R4.0,R4.9	12	20

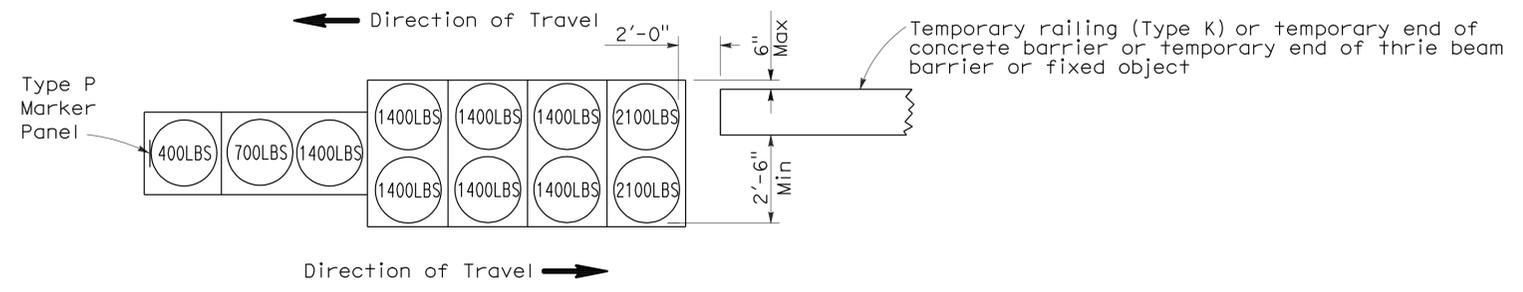
*Randell D. Hiatt*  
REGISTERED CIVIL ENGINEER

June 6, 2008  
PLANS APPROVAL DATE

*Randell D. Hiatt*  
REGISTERED PROFESSIONAL ENGINEER  
No. C50200  
Exp. 6-30-09  
CIVIL  
STATE OF CALIFORNIA

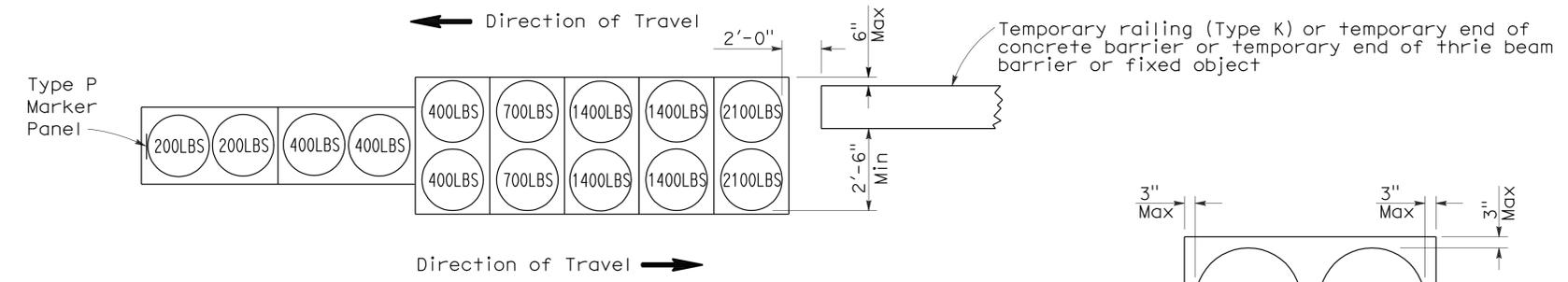
The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

To accompany plans dated 2-16-10



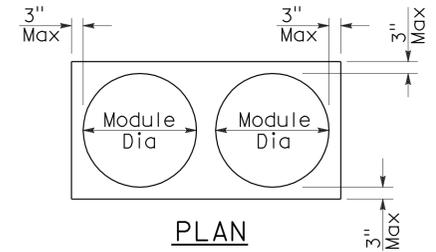
**ARRAY 'TB11'**

Approach speed less than 45 mph

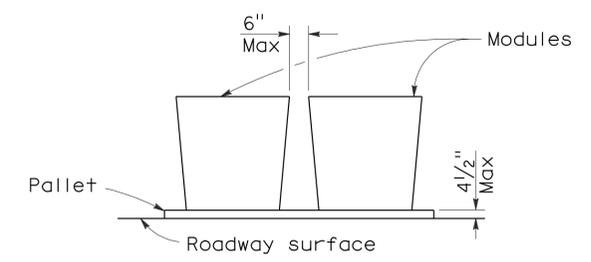


**ARRAY 'TB14'**

Approach speed 45 mph or more



PLAN



ELEVATION

**CRASH CUSHION PALLET DETAIL**

See Note 7

**NOTES:**

1. (XXX) Indicates sand filled module location and weight of sand in pounds for each module. Module spacing is based on the greater diameter of the module.
2. All sand weights are nominal.
3. Temporary crash cushion arrays shall not encroach on the traveled way.
4. Place the Type P marker panel so that the bottom of the panel rests upon the pallet.
5. Refer to Standard Plan A73B for marker details.
6. Approach speeds indicated conform to NCHRP 350 Report criteria.
7. Use of pallets is optional.

STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION

**TEMPORARY CRASH CUSHION,  
SAND FILLED  
(BIDIRECTIONAL)**

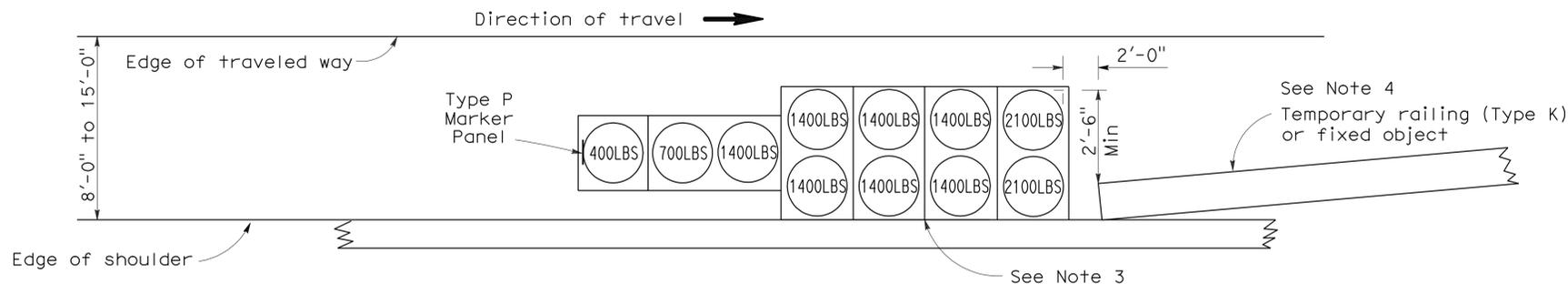
NO SCALE

RSP T1B DATED JUNE 6, 2008 SUPERSEDES STANDARD PLAN T1B  
DATED MAY 1, 2006 - PAGE 212 OF THE STANDARD PLANS BOOK DATED MAY 2006.

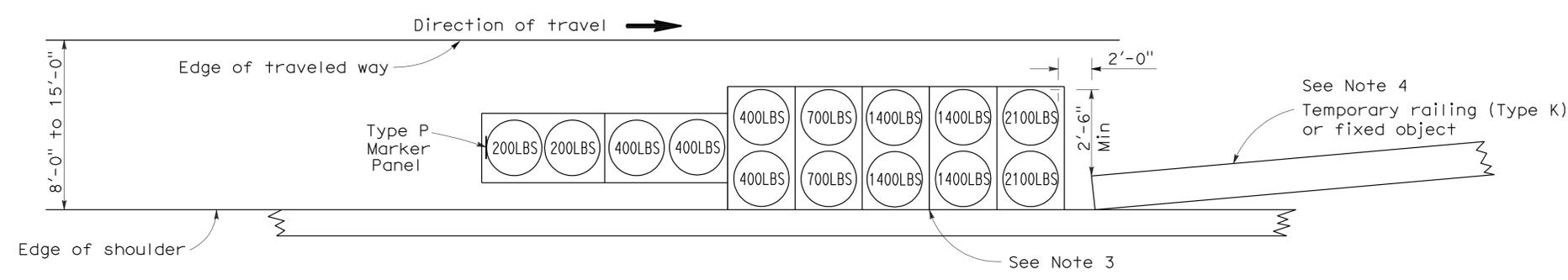
**REVISED STANDARD PLAN RSP T1B**

2006 REVISED STANDARD PLAN RSP T1B

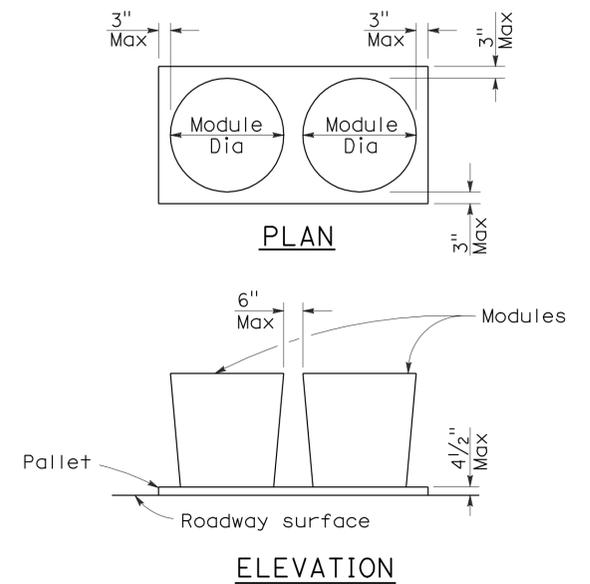
To accompany plans dated 2-16-10



**ARRAY 'TS11'**  
Approach speed less than 45 mph  
See Note 9



**ARRAY 'TS14'**  
Approach speed 45 mph or more  
See Note 9



**CRASH CUSHION PALLET DETAIL**  
See Note 11

**NOTES:**

- (XXX) Indicates sand filled module location and weight of sand in pounds for each module. Module spacing is based on the greater diameter of the module.
- All sand weights are nominal.
- The temporary crash cushion arrays shown on this plan shall be used only in locations where there will be traffic on one side of the temporary crash cushion array.
- If the fixed object or approach end of the temporary railing is less than 15'-0" from the edge of traveled way, a temporary crash cushion is required in a construction or work zone.
- Temporary crash cushion arrays shall not encroach on the traveled way.
- Arrays for median shoulders shall conform to details shown on this plan for outside shoulders.
- Place the Type P marker panel so that the bottom of the panel rests upon the pallet and faces traffic.
- Refer to Standard Plan A73B for marker details.
- For shoulder widths less than 8'-0", appropriate approved crash cushion protection, other than sand filled modules, shall be provided at fixed objects and at approach ends of temporary railing. The specific type of crash cushion shall be as shown on the project plans or as specified in the Special Provisions, or if not shown on the project plans or specified in the Special Provisions, shall be as approved by the Engineer.
- Approach speeds indicated conform to NCHRP 350 Report criteria.
- Use of pallets is optional.

STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION  
**TEMPORARY CRASH CUSHION,  
SAND FILLED  
(SHOULDER INSTALLATIONS)**

NO SCALE  
RSP T2 DATED JUNE 6, 2008 SUPERSEDES STANDARD PLAN T2  
DATED MAY 1, 2006 - PAGE 213 OF THE STANDARD PLANS BOOK DATED MAY 2006.

**REVISED STANDARD PLAN RSP T2**

2006 REVISED STANDARD PLAN RSP T2

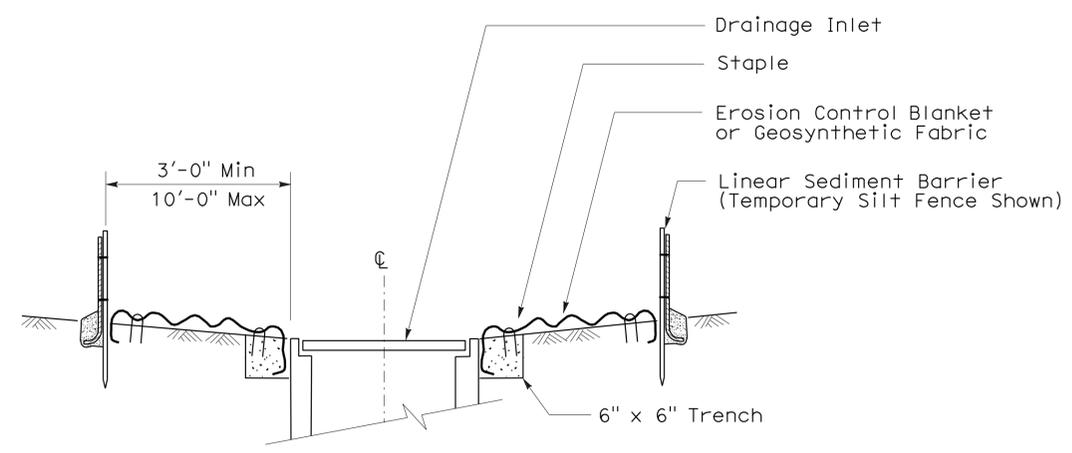
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
08	Riv	60	R4.0,R4.9	14	20

Robert B. Schott  
 LICENSED LANDSCAPE ARCHITECT  
 August 15, 2008  
 PLANS Approval DATE  
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.

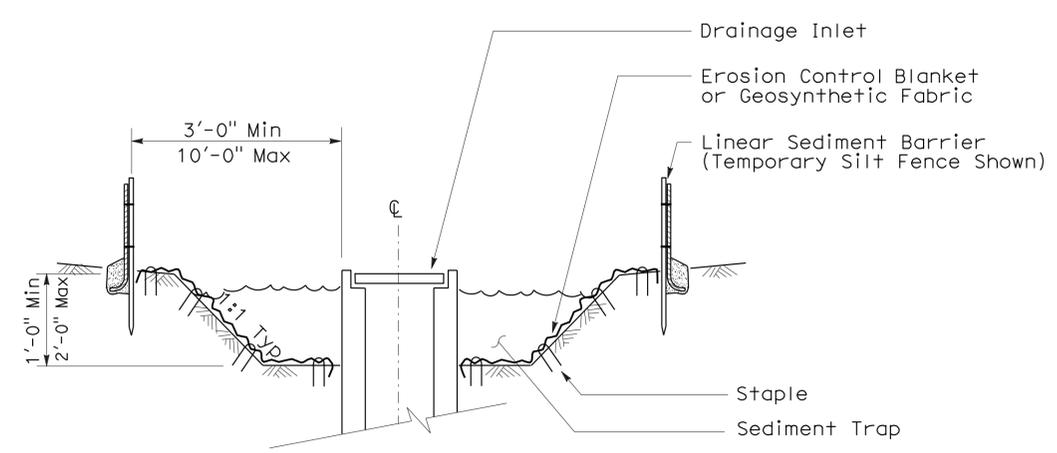


To accompany plans dated 2-16-10

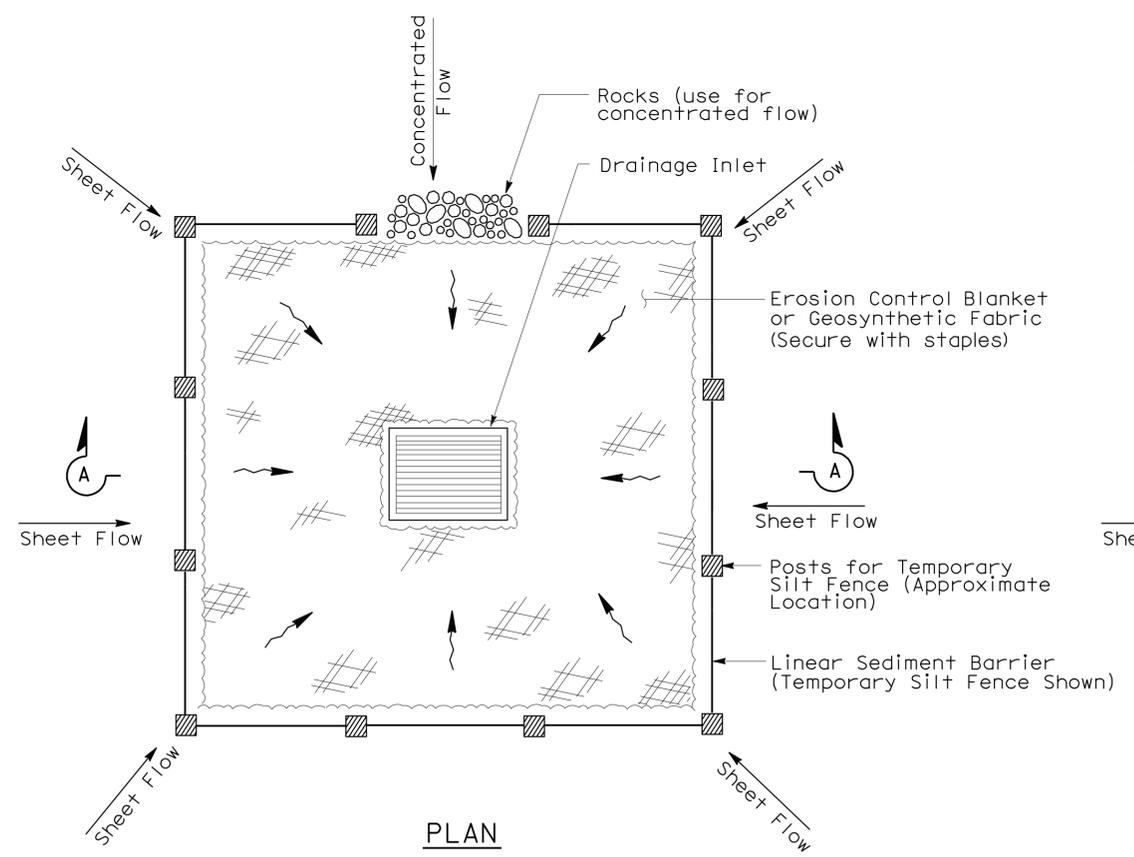
- NOTES:**
- See Standard Plan T51 for Temporary Silt Fence.
  - Dimensions may vary to fit field conditions.



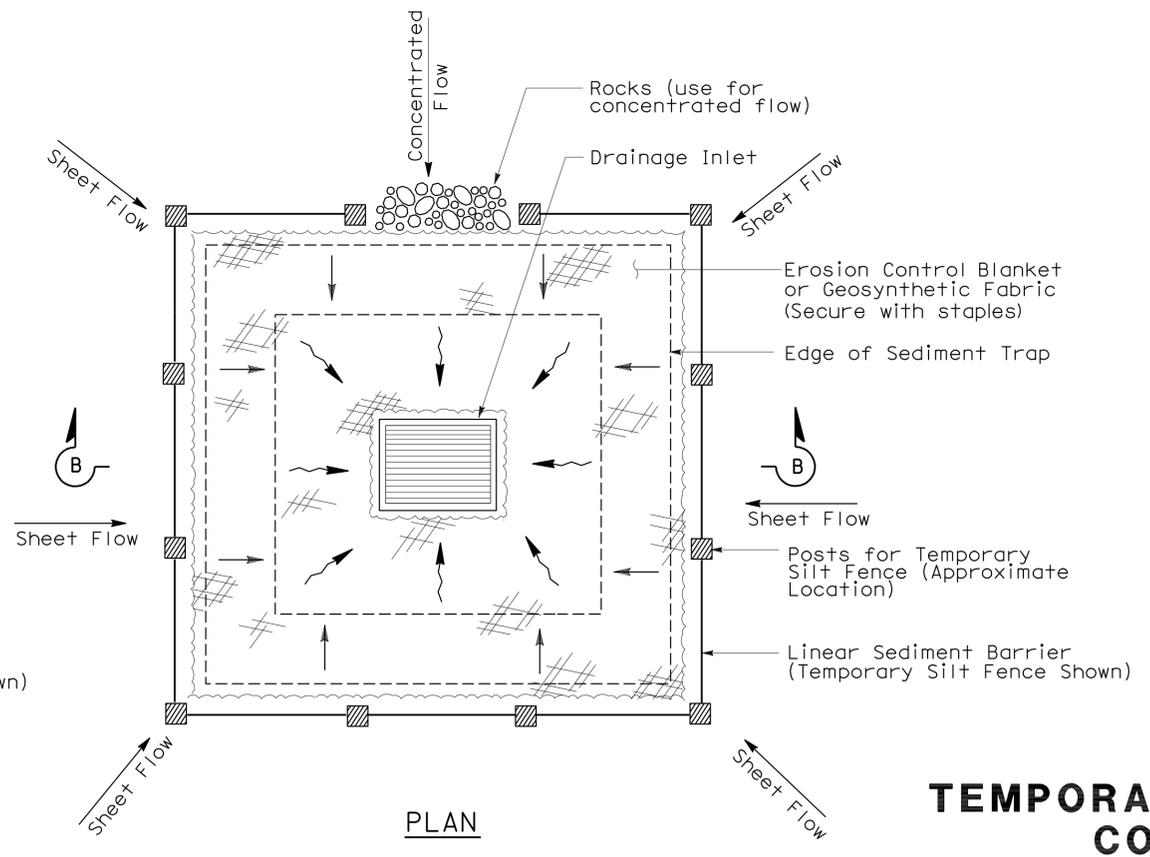
SECTION A-A



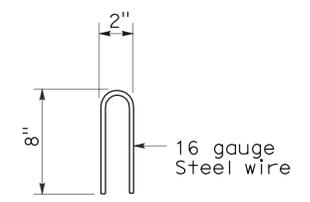
SECTION B-B



TEMPORARY DRAINAGE INLET PROTECTION (TYPE 1)



TEMPORARY DRAINAGE INLET PROTECTION (TYPE 2) (EXCAVATED SEDIMENT TRAP)



STAPLE DETAIL

STATE OF CALIFORNIA  
 DEPARTMENT OF TRANSPORTATION  
**TEMPORARY WATER POLLUTION CONTROL DETAILS**  
**(TEMPORARY DRAINAGE INLET PROTECTION)**  
 NO SCALE

NSP T61 DATED AUGUST 15, 2008 SUPPLEMENTS THE STANDARD PLANS BOOK DATED MAY 2006.

2006 NEW STANDARD PLAN NSP T61

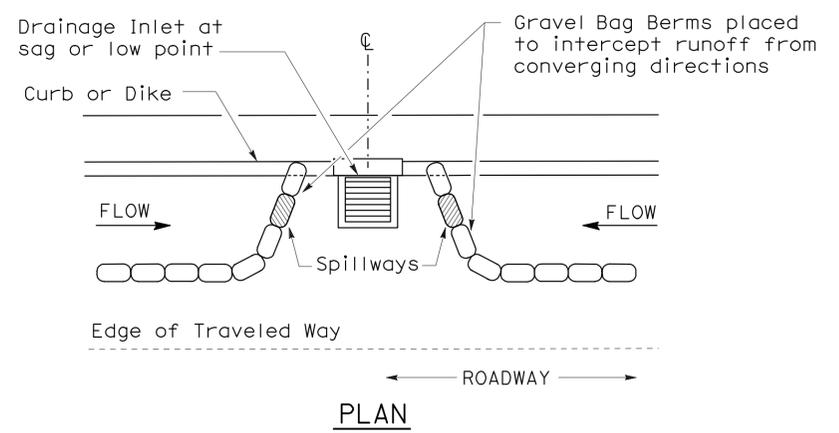


To accompany plans dated 2-16-10

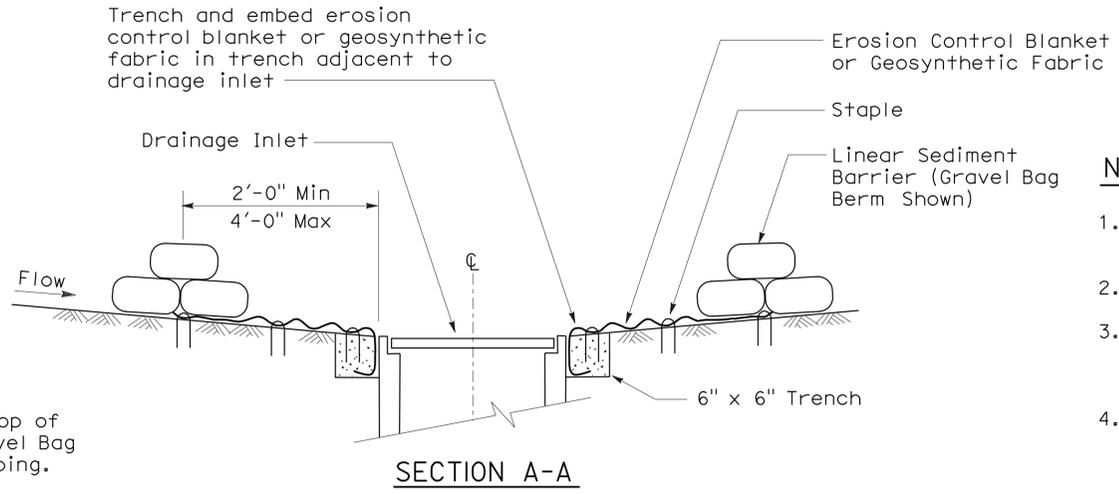
### GRAVEL BAG BERM (TYPE 3A) SPACING TABLE

SLOPE OF ROADWAY (PERCENT)	1 to 3.9	4 to 5.9	6 to 7.9	8 to 10	10+
INTERVAL BETWEEN BERM	100'	75'	50'	25'	12'

For slope of less than 1%, install barriers only if erosion/sediment is prevalent



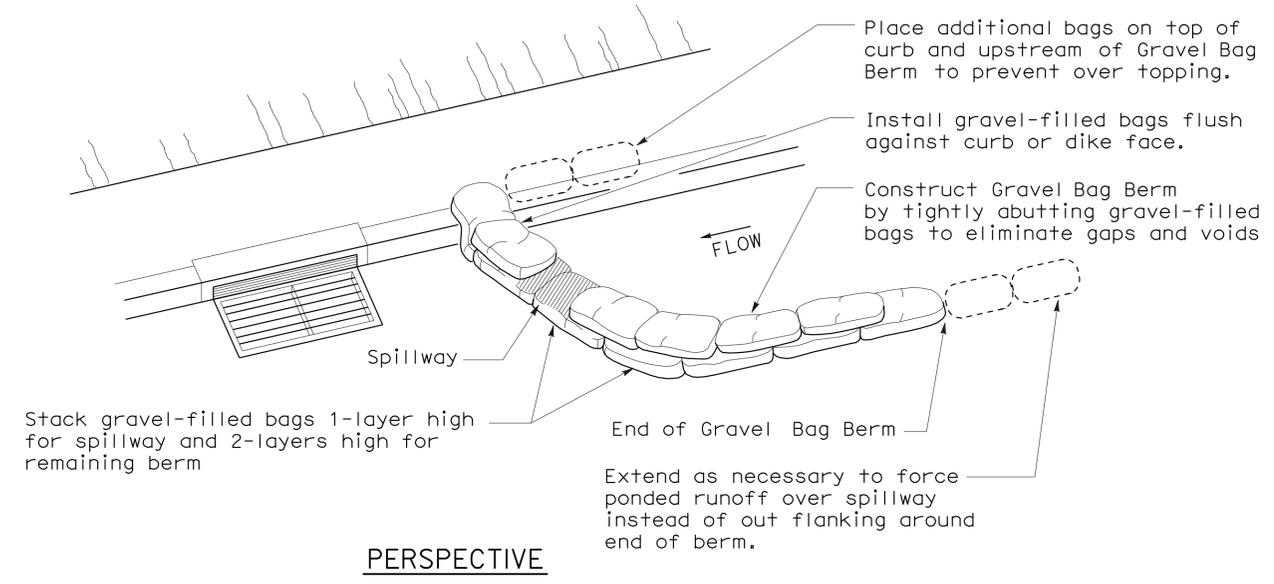
**PLAN**  
**CONFIGURATION FOR SAG POINT INLET (GRAVEL BAG BERM)**



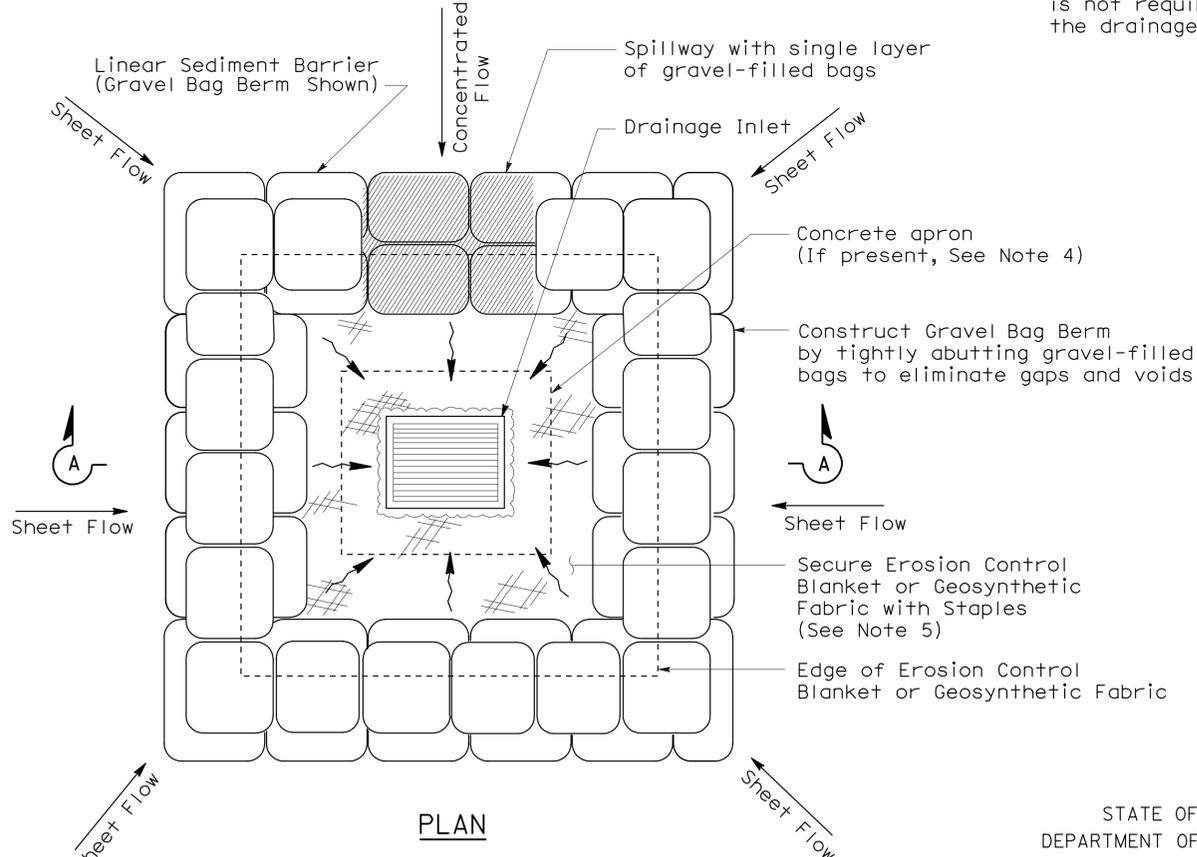
**SECTION A-A**

**NOTES:**

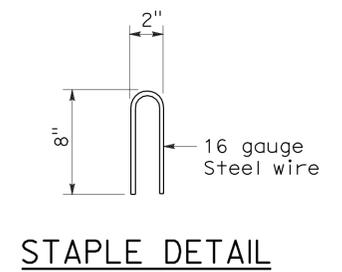
1. Place safety cones adjacent to drainage inlet protection.
2. Dimensions may vary to fit field conditions.
3. Install a minimum of 3 gravel bag berms upstream of each drainage inlet to be protected.
4. Position erosion control blanket or geosynthetic fabric at edge of concrete apron and secure in trench.
5. Erosion control blanket or geosynthetic fabric is not required if the area adjacent to the drainage inlet is vegetated or paved.



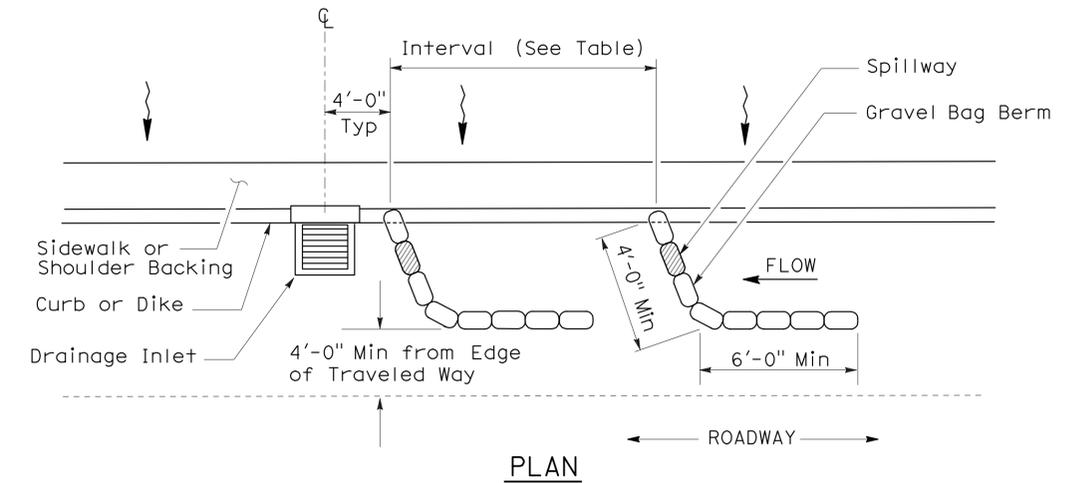
**PERSPECTIVE**



**PLAN**  
**TEMPORARY DRAINAGE INLET PROTECTION (TYPE 3B)**



**STAPLE DETAIL**



**PLAN**  
**TEMPORARY DRAINAGE INLET PROTECTION (TYPE 3A) (GRAVEL BAG BERM)**

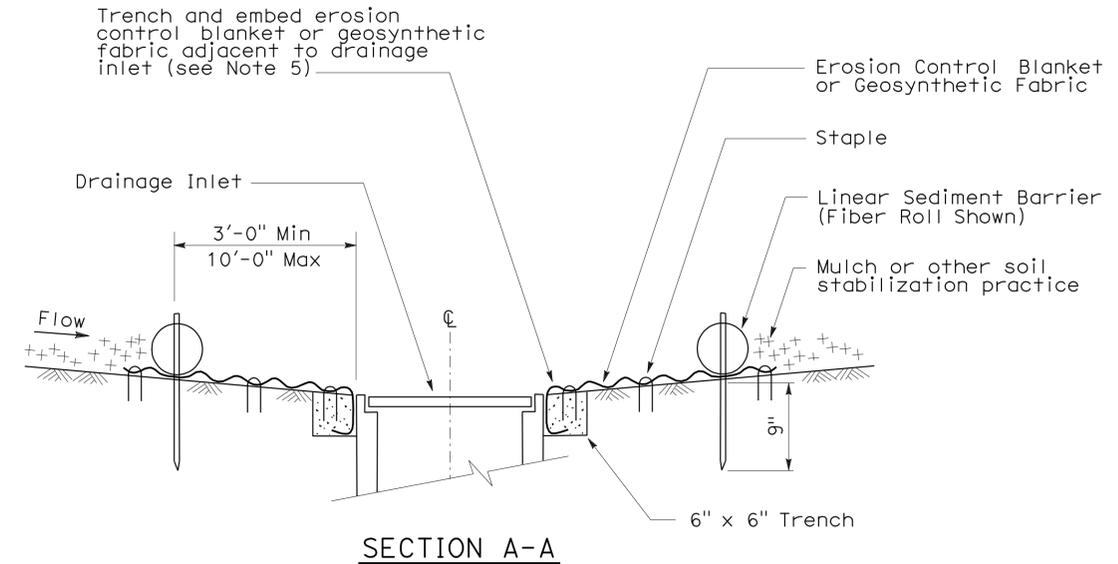
STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION  
**TEMPORARY WATER POLLUTION CONTROL DETAILS (TEMPORARY DRAINAGE INLET PROTECTION)**

NO SCALE  
NSP T62 DATED AUGUST 15, 2008 SUPPLEMENTS THE STANDARD PLANS BOOK DATED MAY 2006.

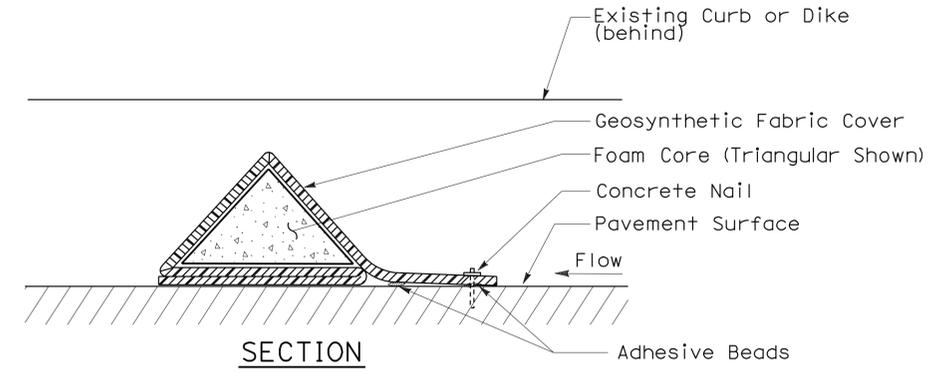
2006 NEW STANDARD PLAN NSP T62

**FLEXIBLE SEDIMENT BARRIER SPACING TABLE**

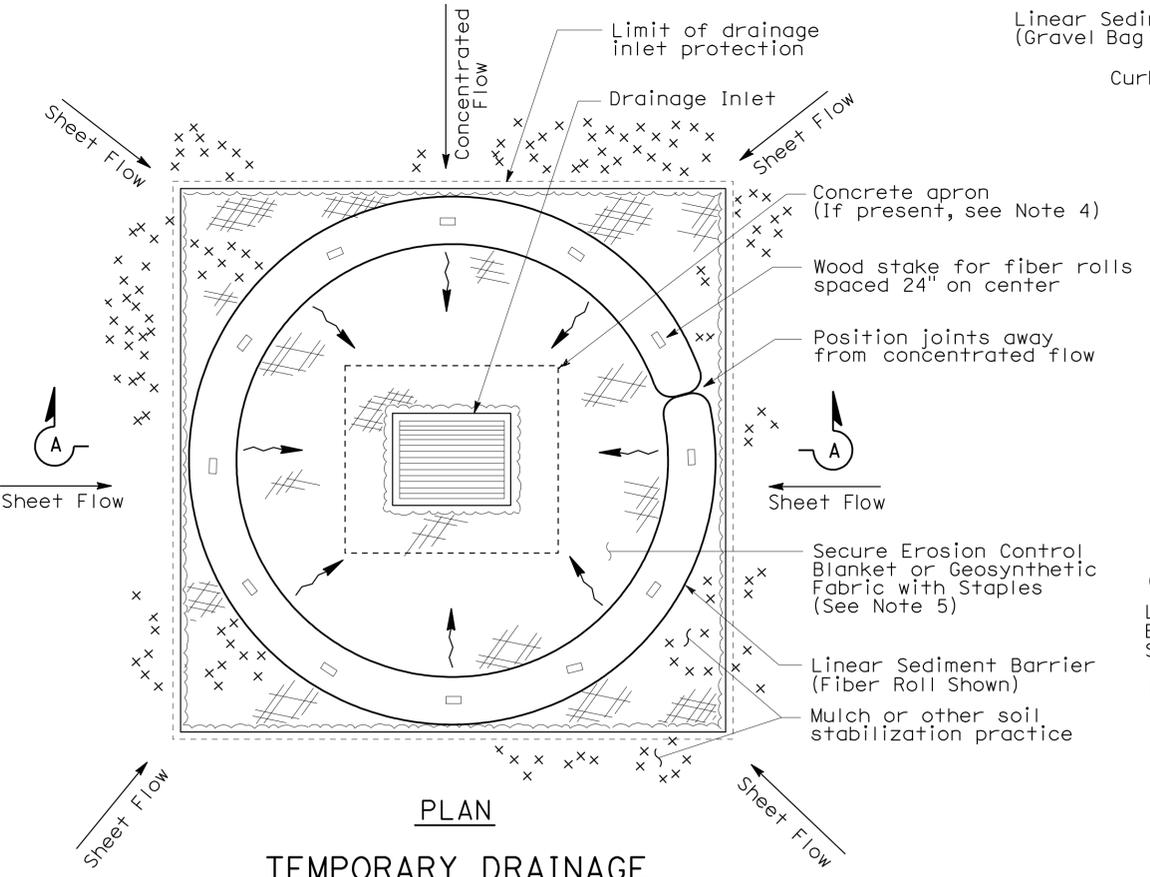
SLOPE OF ROADWAY (PERCENT)	0 to 0.9	1 to 1.9	2 to 2.9	3 to 4	5+
INTERVAL BETWEEN BARRIERS	50'	35'	30'	25'	20'
ANGLE FROM FACE OF CURB	70°	70°	70°	45°	45°
SUGGESTED BARRIER LENGTH	6'	6'	6'	6'	6'



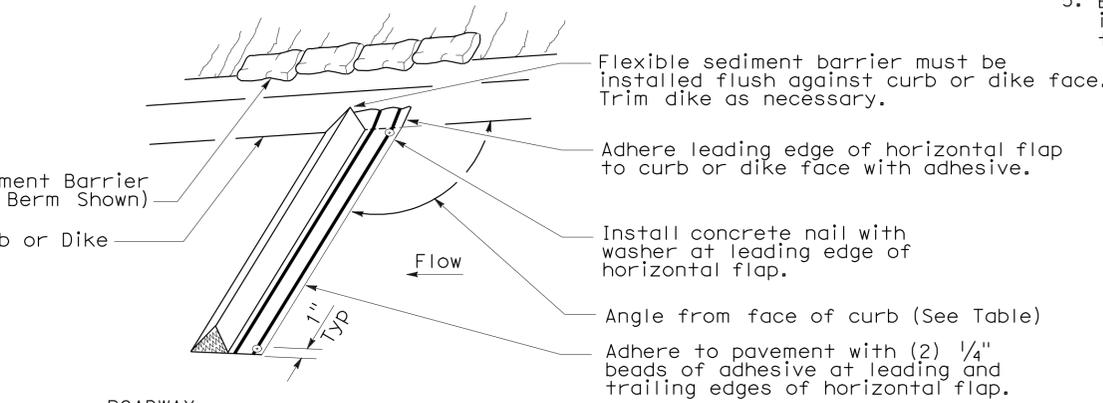
**SECTION A-A**



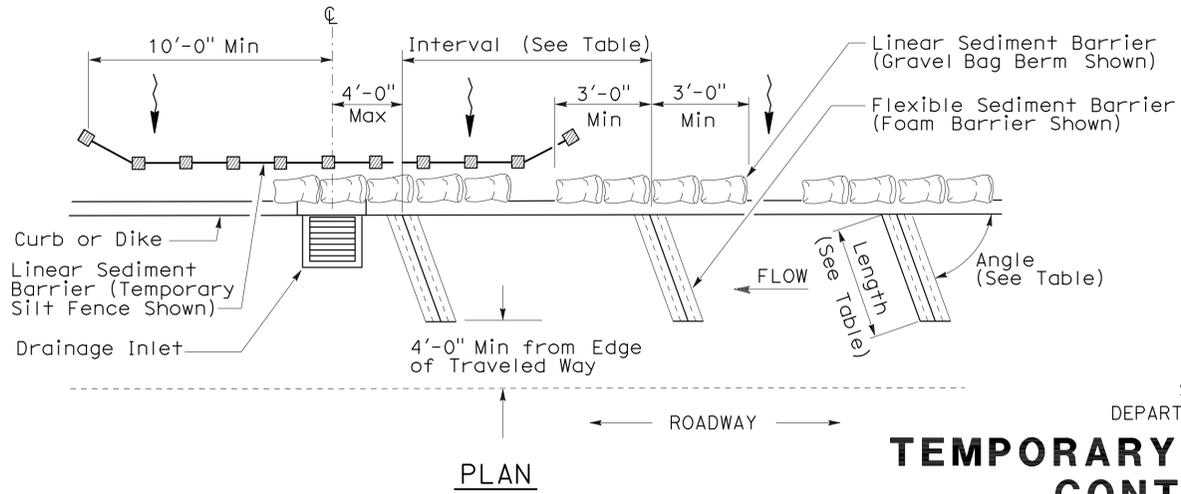
**FLEXIBLE SEDIMENT BARRIER DETAIL (FOAM BARRIER SHOWN)**



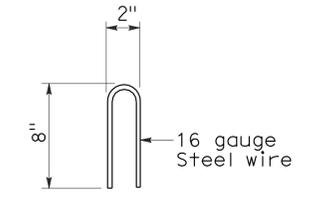
**TEMPORARY DRAINAGE INLET PROTECTION (TYPE 4A)**



**PERSPECTIVE**



**TEMPORARY DRAINAGE INLET PROTECTION (TYPE 4B) FLEXIBLE SEDIMENT BARRIER**



**STAPLE DETAIL**

STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION

**TEMPORARY WATER POLLUTION CONTROL DETAILS (TEMPORARY DRAINAGE INLET PROTECTION)**

NO SCALE  
NSP T63 DATED AUGUST 15, 2008 SUPPLEMENTS THE STANDARD PLANS BOOK DATED MAY 2006.

2006 NEW STANDARD PLAN NSP T63

To accompany plans dated 2-16-10

**NOTES:**

1. See Standard Plan T51 for Temporary Silt Fence.
2. Dimensions may vary to fit field conditions.
3. Install a minimum of 3 flexible sediment barriers upstream of each drainage inlet to be protected.
4. Position erosion control blanket or geosynthetic fabric at edge of concrete apron and secure in trench.
5. Erosion control blanket or geosynthetic fabric is not required if the area adjacent to the drainage inlet is vegetated.

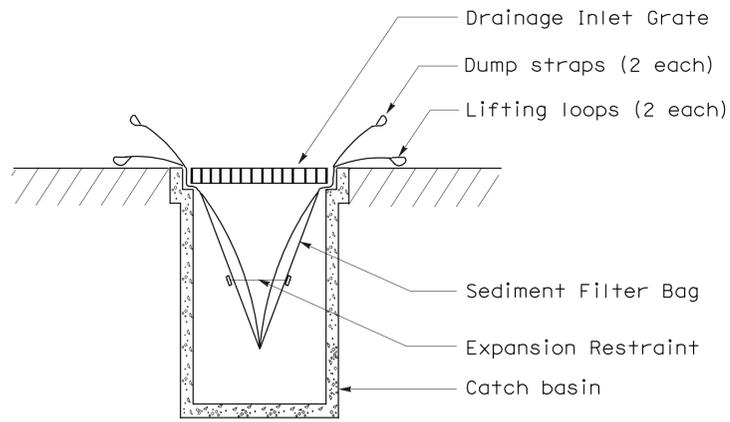
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
08	Riv	60	R4.0,R4.9	17	20

*Robert B. Schott*  
 LICENSED LANDSCAPE ARCHITECT

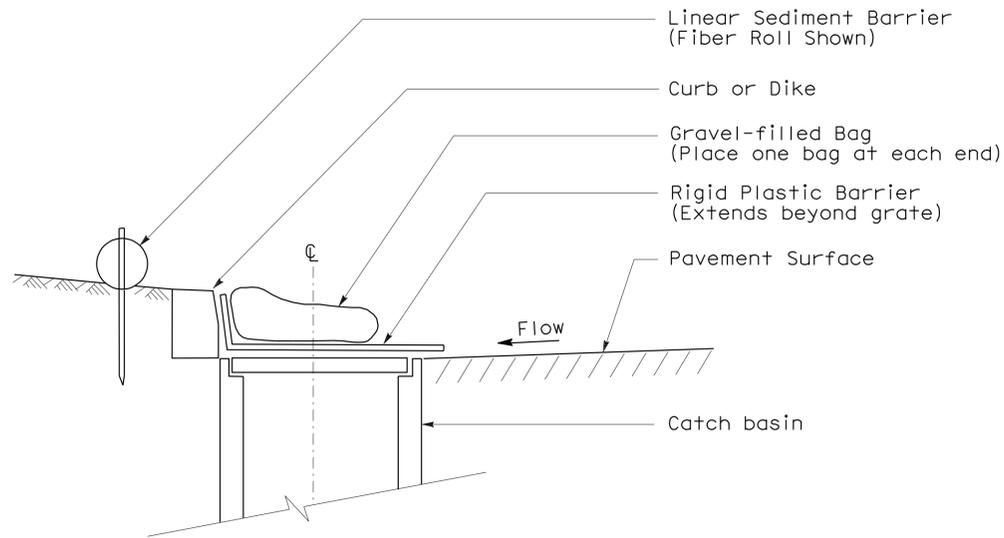
August 15, 2008  
 PLANS APPROVAL DATE

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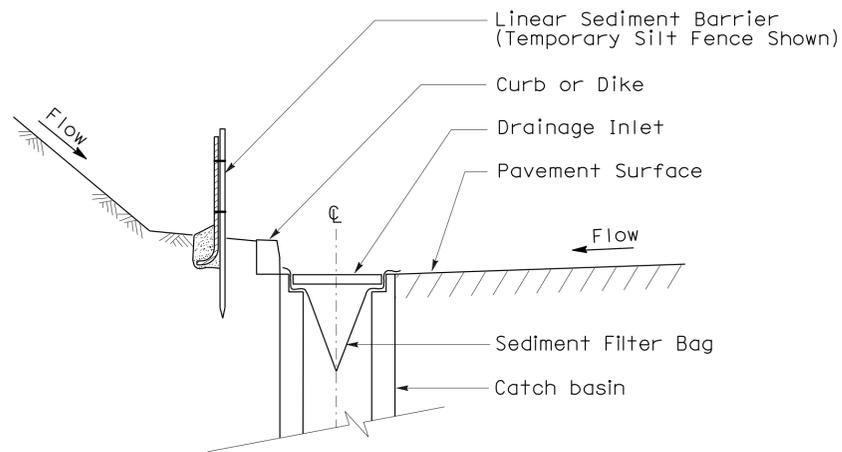
To accompany plans dated 2-16-10



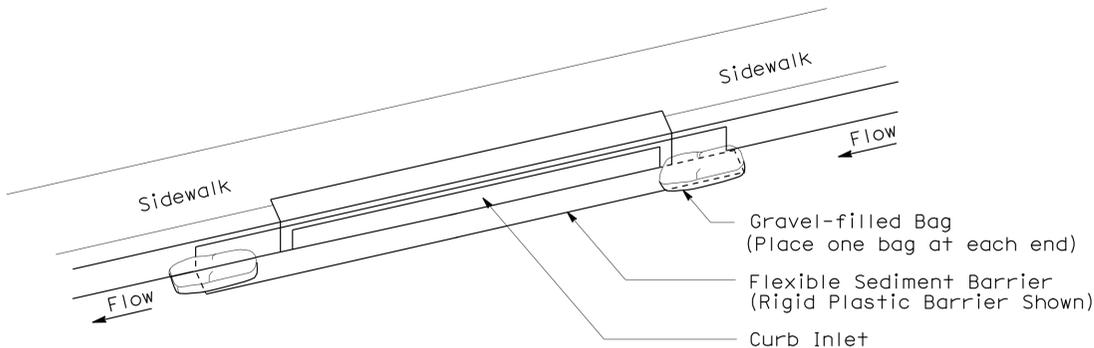
SECTION B-B  
SEDIMENT FILTER BAG DETAIL



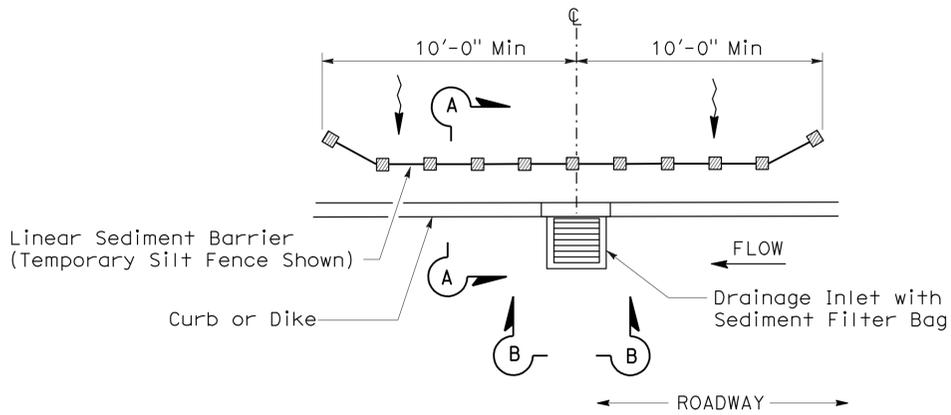
SECTION  
TEMPORARY DRAINAGE  
INLET PROTECTION (TYPE 6A)  
(CATCH BASIN WITH GRATE)



SECTION A-A



PERSPECTIVE



PLAN  
TEMPORARY DRAINAGE  
INLET PROTECTION (TYPE 5)  
(SEDIMENT FILTER BAG)

TEMPORARY DRAINAGE  
INLET PROTECTION (TYPE 6B)  
(CURB INLET WITHOUT GRATE)

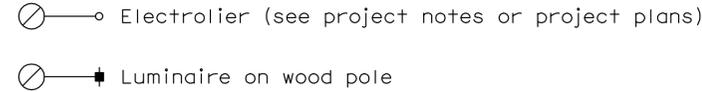
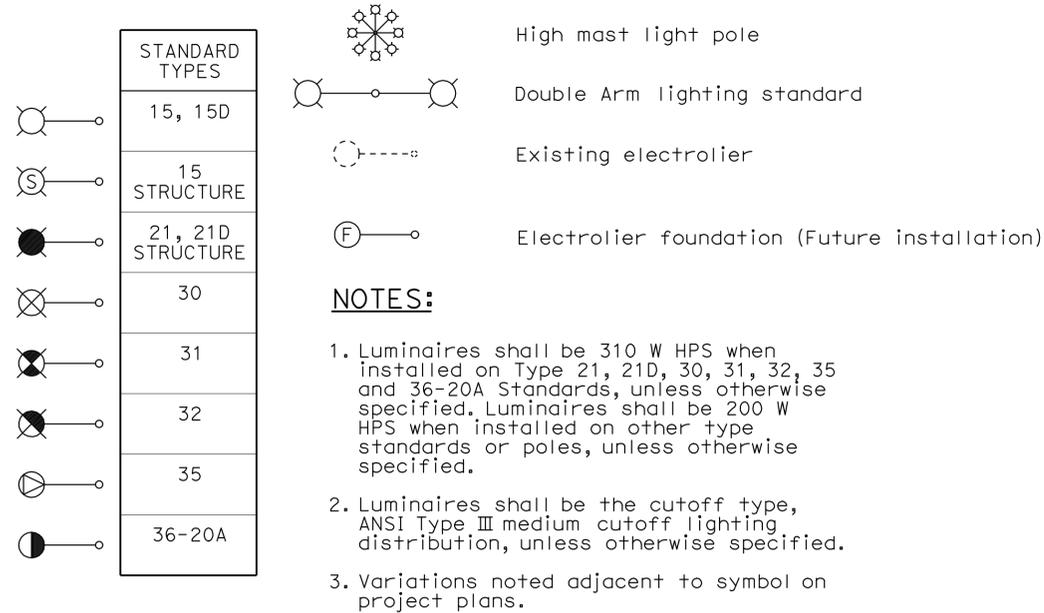
**NOTES:**

1. See Standard Plan T51 for Temporary Silt Fence.
2. Dimensions may vary to fit field conditions.

STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION  
**TEMPORARY WATER POLLUTION  
CONTROL DETAILS  
(TEMPORARY DRAINAGE  
INLET PROTECTION)**

NO SCALE  
NSP T64 DATED AUGUST 15, 2008 SUPPLEMENTS  
THE STANDARD PLANS BOOK DATED MAY 2006.

# ELECTROLIERS



## STANDARD NOTES:

- AB** Abandon. If applied to conduit, remove conductors.
- BC** Install pull box in existing conduit run.
- BP** Pedestrian barricade, type as indicated on plan.
- CB** Install conduit into existing pull box.
- CC** Connect new and existing conduit. Remove existing conductors and install conductors as indicated.
- CF** Conduit to remain for future use. Remove conductors. Install pull wire or rope.
- DH** Detector handhole.
- FA** Foundation to be abandoned.
- IS** Install sign on signal mast arm.
- NS** No slip base on standard.
- PEC** Photoelectric control.
- PEU** Photoelectric unit.
- RC** Equipment or material to be removed and become the property of the Contractor.
- RE** Remove electrolier, fuses and ballast. Tape ends of conductors.
- RL** Relocate equipment.
- RR** Remove and reuse equipment.
- RS** Remove and salvage equipment.
- SC** Splice new to existing conductors.
- SD** Service disconnect.
- SF** Standard to remain for future use. Remove luminaire, pole conductors, fuses and ballast.
- TSP** Telephone service point.

# ABBREVIATIONS AND EQUIPMENT DESIGNATIONS

## PROPOSED EXISTING

BBS	bbs	Battery backup system
BC	bc	Bolt circle
C	C	Conduit
CCTV	cctv	Closed circuit television
CKT	ckt	Circuit
CMS	cms	Changeable message sign
DLC	dlc	Loop detector lead-in cable
EMS	ems	Extinguishable message sign
EVC	evc	Emergency vehicle cable
EVD	evd	Emergency vehicle detector
FB	fb	Flashing beacon
FBCA	fbca	Flashing beacon control assembly
FBS	fbs	Flashing beacon with slip base
FO	fo	Fiber optic
G	G	Ground (Equipment Grounding Conductor)
GFCI	GFCI	Ground fault circuit interrupt
HAR	har	Highway advisory radio
HEX	hex	Hexagonal
HPS	hps	High pressure sodium
IISNS	iisns	Internally illuminated street name sign
ISL	isl	Induction sign lighting
LED	led	Light emitting diode
LMA	lma	Luminaire mast arm
LPS	lps	Low pressure sodium
LTG	ltg	Lighting
LUM	lum	Luminaire
MAT	mat	Mast arm mounting vehicle signal faces, top attachment
MAS	mas	Mast arm mounting vehicle signal faces, side attachment
MAS-4A	mas-4A	Mast arm mounting vehicle signal faces, side attachment - 4 signal section
MAS-4B	mas-4B	
MAS-4C	mas-4C	
MAS-5A	mas-5A	Mast arm mounting vehicle signal faces, side attachment - 5 signal section
MAS-5B	mas-5B	
MC	mc	Mercury contactor
M/M	m/m	Multiple to multiple transformer
MT	mt	Conduit with pull wire or rope only
MTG	mtg	Mounting
	mv	Mercury vapor lighting fixture
N	N	Neutral (Grounded Conductor)
NC	NC	Normally closed
NO	NO	Normally open
PB	pb	Pull box
PEC	pec	Photoelectric control (Type I, II, III, IV or V as shown)
PED	ped	Pedestrian
PEU	peu	Photoelectric unit
PPB	ppb	Pedestrian push button
RL		Relocated equipment
RM	rm	Ramp metering
SB	sb	Slip base
SIC	sic	Signal interconnect cable
SIG	sig	Signal
SMA	sma	Signal mast arm
SNS	sns	Street name sign
SP	sp	Service point
TDC	tdc	Telephone demarcation cabinet
TMS	tms	Traffic monitoring station
TOS	tos	Traffic Operations System
VEH	veh	Vehicle
XFMR	xfmr	Transformer
COMM	comm	Communication
RWIS	rwis	Roadway weather information system

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
08	Riv	60	R4.0,R4.9	18	20

*Jeffery G. McRae*  
REGISTERED ELECTRICAL ENGINEER

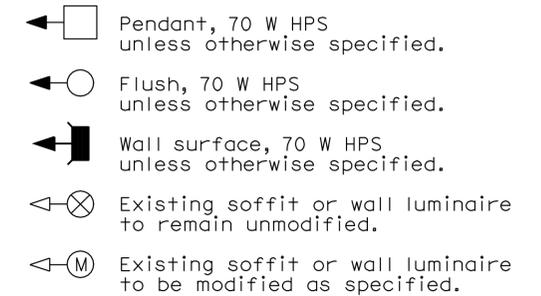
October 5, 2007  
PLANS APPROVAL DATE

Jeffery G. McRae  
No. E14512  
Exp. 6-30-08  
ELECTRICAL  
STATE OF CALIFORNIA

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To accompany plans dated 2-16-10

## SOFFIT AND WALL MOUNTED LUMINAIRES



### NOTE:

Arrow indicates "street side" of luminaire.

STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION

## ELECTRICAL SYSTEMS (SYMBOLS AND ABBREVIATIONS)

NO SCALE

RSP ES-1A DATED OCTOBER 5, 2007 SUPERSEDES STANDARD PLAN ES-1A DATED MAY 1, 2006 - PAGE 400 OF THE STANDARD PLANS BOOK DATED MAY 2006.

**REVISED STANDARD PLAN RSP ES-1A**

2006 REVISED STANDARD PLAN RSP ES-1A

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
08	Riv	60	R4.0,R4.9	19	20

*Jeffery G. McRae*  
 REGISTERED ELECTRICAL ENGINEER  
 No. E14512  
 Exp. 6-30-08  
 ELECTRICAL  
 STATE OF CALIFORNIA

October 5, 2007  
 PLANS APPROVAL DATE

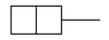
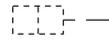
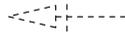
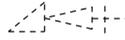
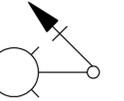
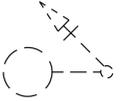
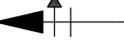
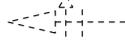
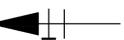
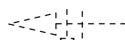
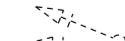
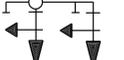
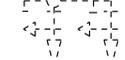
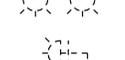
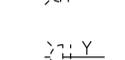
*The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.*

To accompany plans dated 2-16-10

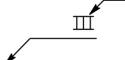
### CONDUIT

PROPOSED	EXISTING	
---	---	Lighting Conduit, unless otherwise indicated or noted
---	---	Traffic signal conduit
-C-	-c-	Communication conduit
-T-	-t-	Telephone conduit
-F-	-f-	Fire alarm conduit
-FO-	-fo-	Fiber optic conduit
---	---	Conduit termination 
		Conduit riser in/on structure or service pole

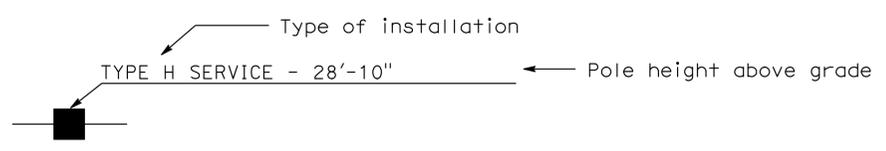
### SIGNAL EQUIPMENT

PROPOSED	EXISTING	
		Pedestrian signal face
		Pedestrian push button post
		Pedestrian barricade
		Vehicle signal face (with backplate, 3-Section: red, yellow and green)
		Vehicle signal face with angle visors
		Modifications of basic symbols: "L" indicates all non-arrow sections louvered "LG" indicates louvered green section only "PV" indicates 12" programmed visibility sections "8" indicates all 8" sections (only when specified)
		Type 15TS and Vehicle signal face
		Vehicle signal face with red, yellow and green left arrow sections
		Vehicle signal face with red and yellow sections and up green arrow
		Vehicle signal face (5 Section) with red, yellow and green sections and yellow and green right arrows
		Type 1 Standard and attached vehicle signal faces
		Standard with signal mast arm only and attached vehicle signal faces and internally illuminated street name sign
		Type 33 Standard, Left-turn vehicle signal face and sign
		Standard with luminaire and signal mast arms and attached vehicle signal faces
		Cantilever flashing beacon Type 9 Frame, with a sign unless otherwise specified or indicated
		Type 15-FBS Standard with two vehicle signal face sections with lens, backplate and visor with a sign
		Flashing beacon. One vehicle signal face section with lens, backplate and visor. "R" indicates red indication, "Y" indicates yellow indication
		Controller assembly. Door indicates front of cabinet

### SERVICE EQUIPMENT

PROPOSED	EXISTING	
---OH	---oh	Overhead lines
		Wood pole "U" indicates utility owned
		Pole guy with anchor
		Utility transformer - ground mounted
		Service equipment enclosure type
		Service equipment enclosure door indicates front of enclosure
		Telephone demarcation cabinet

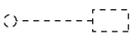
### POLE-MOUNTED SERVICE DESIGNATION



### ILLUMINATED OVERHEAD SIGN

PROPOSED	EXISTING	
		Overhead sign - Single post
		Overhead sign - Two post
		Overhead sign - Mounted on structure
		Overhead sign with electrolier

### SIGNAL EQUIPMENT Cont

PROPOSED	EXISTING	
		Guard post
		Type 1 Standard with "Meter On" sign
		Emergency Vehicle detector

### NOTES:

- All signal sections shall be 12" unless shown otherwise.
- Signal heads shall be provided with backplates unless shown otherwise.
- Signal indication shall be LED.

STATE OF CALIFORNIA  
 DEPARTMENT OF TRANSPORTATION  
**ELECTRICAL SYSTEMS  
 (SYMBOLS AND ABBREVIATIONS)**  
 NO SCALE

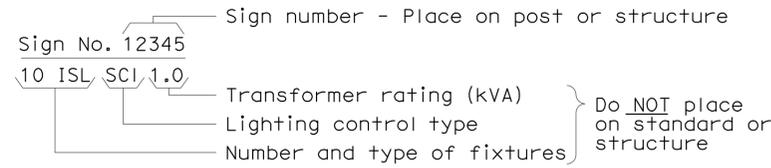
RSP ES-1B DATED OCTOBER 5, 2007 SUPERCEDES STANDARD PLAN ES-1B  
 DATED MAY 1, 2006 - PAGE 401 OF THE STANDARD PLANS BOOK DATED MAY 2006.

**REVISED STANDARD PLAN RSP ES-1B**

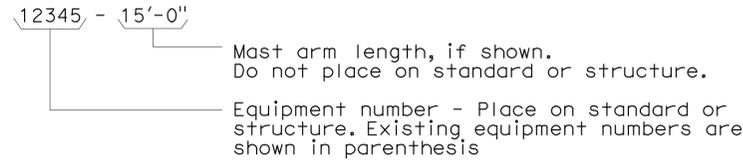
2006 REVISED STANDARD PLAN RSP ES-1B

### EQUIPMENT IDENTIFICATION

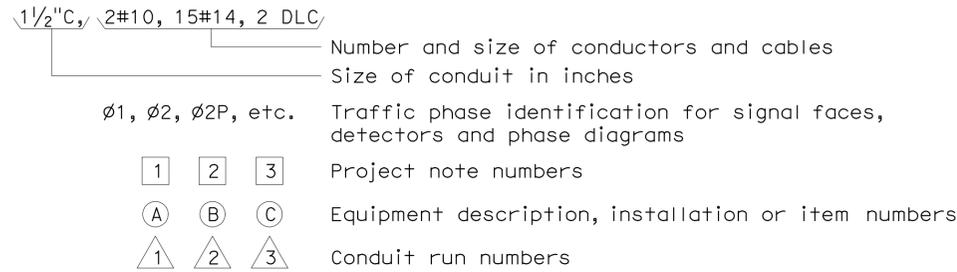
#### ILLUMINATED SIGN IDENTIFICATION NUMBER:



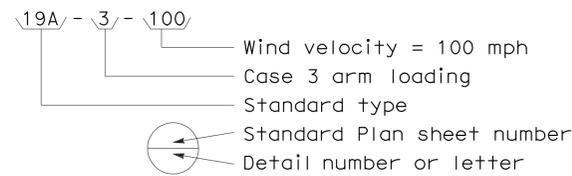
#### ELECTROLIER OR EQUIPMENT IDENTIFICATION NUMBER:



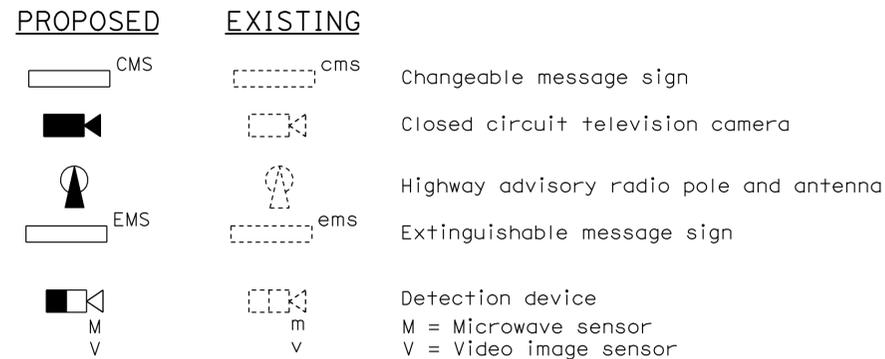
#### CONDUIT AND CONDUCTOR IDENTIFICATION:



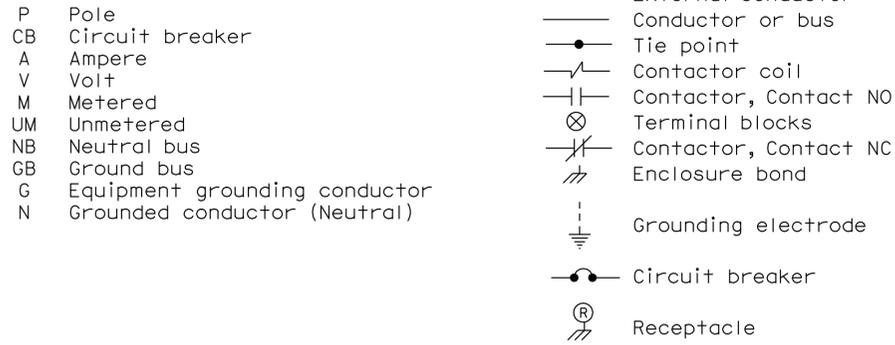
#### SIGNAL AND LIGHTING STANDARD (TYPICAL DESIGNATION):



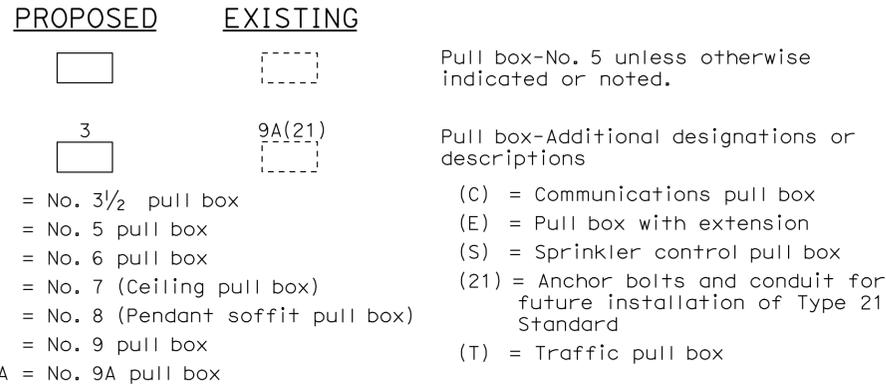
### MISCELLANEOUS EQUIPMENT



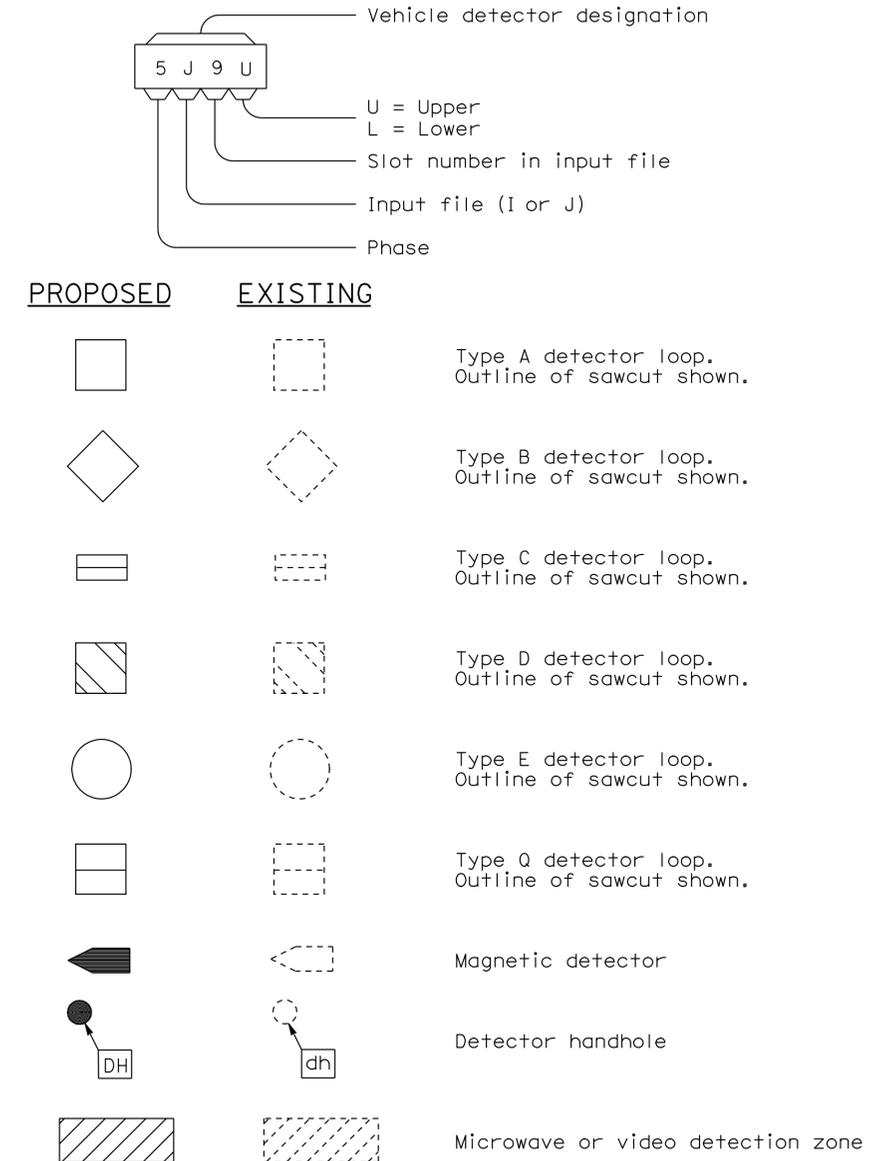
### WIRING DIAGRAM LEGEND



### PULL BOXES



### VEHICLE DETECTORS



STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION

## ELECTRICAL SYSTEMS (SYMBOLS AND ABBREVIATIONS)

NO SCALE

RSP ES-1C DATED OCTOBER 5, 2007 SUPERCEDES STANDARD PLAN ES-1C  
DATED MAY 1, 2006 - PAGE 402 OF THE STANDARD PLANS BOOK DATED MAY 2006.

**REVISED STANDARD PLAN RSP ES-1C**

2006 REVISED STANDARD PLAN RSP ES-1C