INDEX OF PLANS

SHEET No.	DESCRIPTION
1	TITLE AND LOCATION MAP
2	TYPICAL CROSS SECTIONS
3	LAYOUTS
4	CONSTRUCTION DETAILS
5-6	DRAINAGE PLANS, PROFILES, DETAILS AND QUANTITIES
7	CONSTRUCTION AREA SIGNS
8-10	STAGE CONSTRUCTION PLANS, DETAILS AND QUANTITIES
11	DETOUR PLANS
12	PAVEMENT DELINEATION PLANS, DETAILS AND QUANTITIES
13	SUMMARY OF QUANTITIES
14	EXISTING UTILITIES PLAN
15-17	ELECTRICAL PLANS
18-19	TRAFFIC CONTROL SYSTEM
20-24	REVISED AND NEW STANDARD PLANS
STRUCTURE PLANS	
25-31	COLOMA STREET PEDESTRIAN OC Br No. 25-0050
32-37	SMITH FLAT ROAD UC Br No. 25-0064

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

BH-P050(121)E

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	ED	50	17.8,19.6	1	37

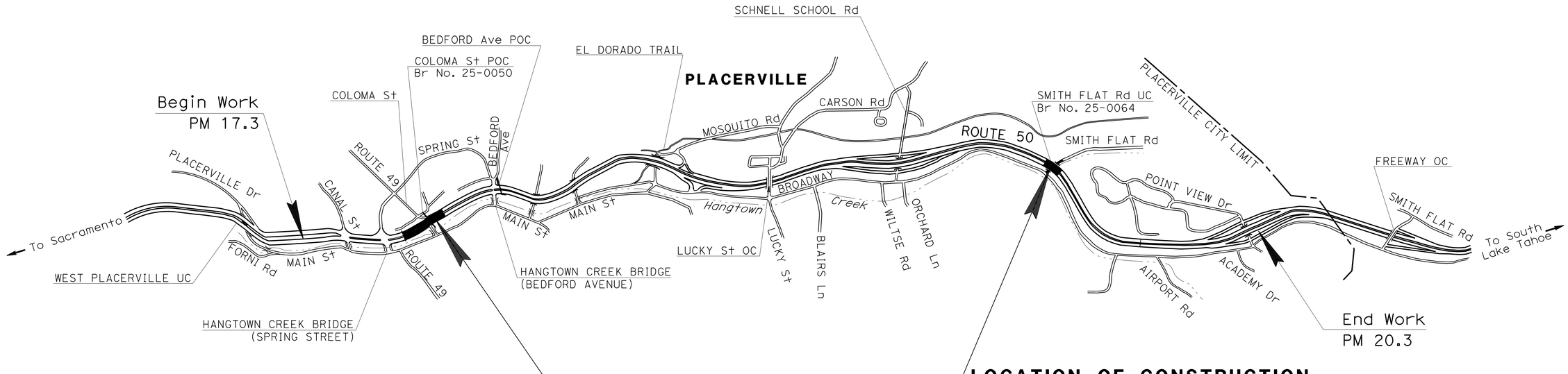
PROJECT PLANS FOR CONSTRUCTION ON

STATE HIGHWAY

IN EL DORADO COUNTY
IN PLACERVILLE

AT COLOMA STREET PEDESTRIAN OVERCROSSING AND AT SMITH FLAT ROAD UNDERCROSSING

TO BE SUPPLEMENTED BY STANDARD PLANS DATED 2010



LOCATION OF CONSTRUCTION
COLOMA STREET POC
Br No. 25-0050 PM 17.8

LOCATION OF CONSTRUCTION
SMITH FLAT ROAD UC
Br No. 25-0064 PM 19.6

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

NO SCALE

12-5-12
PROJECT ENGINEER — DATE
REGISTERED CIVIL ENGINEER

HUAN M. CUNG
No. C74406
Exp. 9-30-13
CIVIL
REGISTERED PROFESSIONAL ENGINEER
STATE OF CALIFORNIA

March 11, 2013
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.	03-0F3004
PROJECT ID	0300000077

PROJECT MANAGER: JOHN HOLDER
DESIGN ENGINEER: NESAR FORMOLI

LAST REVISION 01-04-11
DATE PLOTTED => 08-MAY-2013
TIME PLOTTED => 07:36

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	ED	50	17.8,19.6	2	37

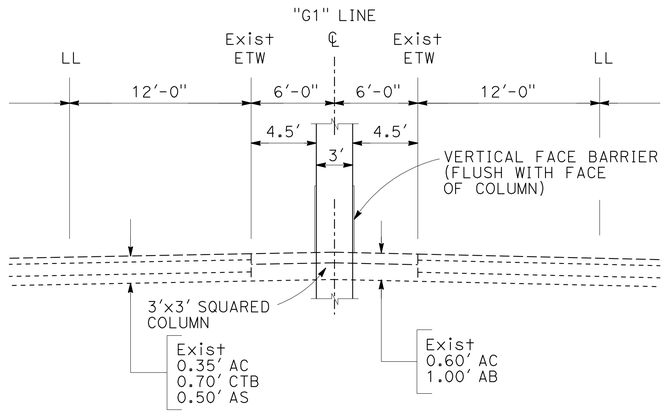
REGISTERED CIVIL ENGINEER — 12-5-12 DATE

HUAN M. CUNG No. C74406 Exp. 9-30-13 CIVIL — REGISTERED PROFESSIONAL ENGINEER — STATE OF CALIFORNIA

3-11-13
PLANS APPROVAL DATE

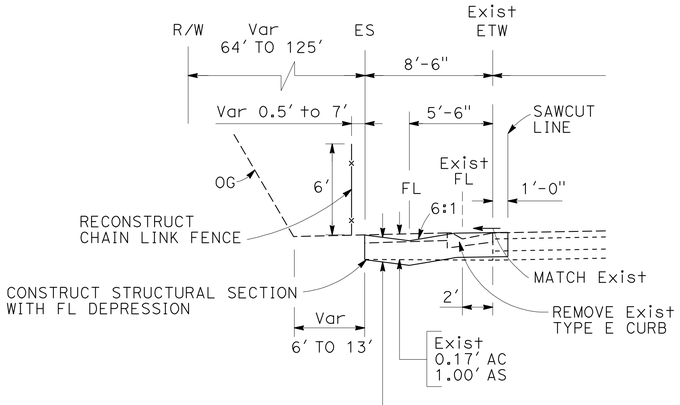
NOTES:

1. DIMENSIONS OF THE PAVEMENT STRUCTURES (STRUCTURAL SECTIONS) ARE SUBJECT TO TOLERANCES SPECIFIED IN THE STANDARD SPECIFICATIONS.
2. SUPERELEVATIONS ARE SHOWN IN THE SUPERELEVATION DIAGRAMS.

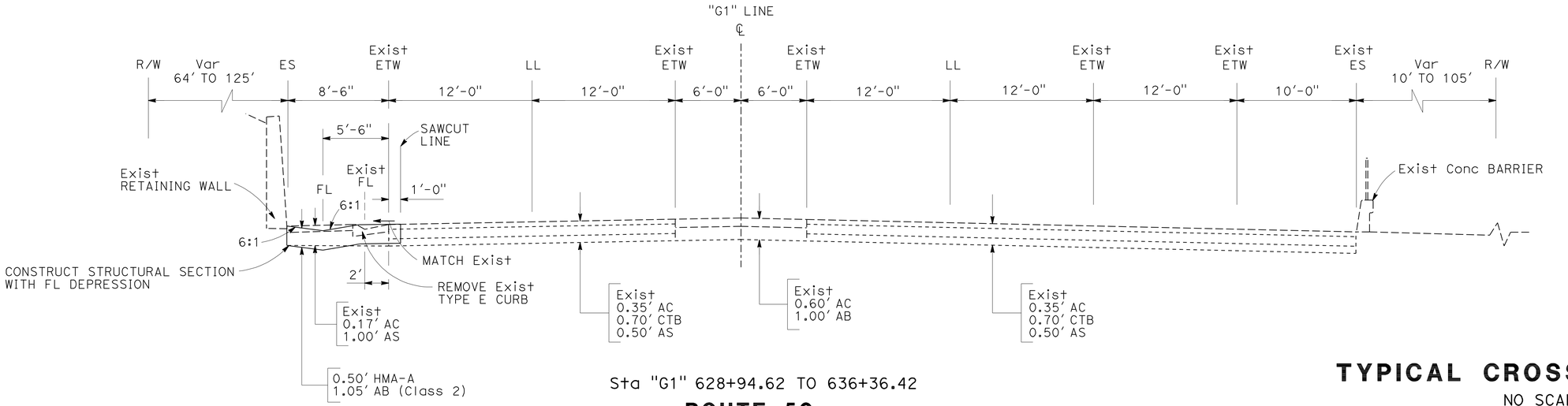


Sta "G1" 635+43.20 TO 635+46.20

ROUTE 50
AT COLOMA STREET POC



Sta "G1" 628+94.62 TO 633+07.45



Sta "G1" 628+94.62 TO 636+36.42

ROUTE 50

TYPICAL CROSS SECTIONS

NO SCALE

X-1

REVISED BY | DATE REVISED
HUAN CUNG | HUAN CUNG
CALCULATED-DESIGNED BY | CHECKED BY
FUNCTIONAL SUPERVISOR: NESAR FORMOLI

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans® DIVISION OF ENGINEERING

LAST REVISION | DATE PLOTTED => 13-MAR-2013
00-00-00 | TIME PLOTTED => 12:55

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	ED	50	17.8,19.6	3	37

REGISTERED CIVIL ENGINEER — 12-5-12 DATE

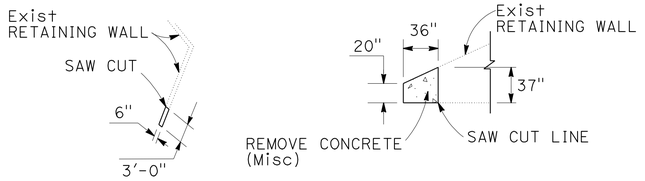
3-11-13
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — HUAN M. CUNG No. C74406 Exp. 9-30-13 CIVIL — STATE OF CALIFORNIA

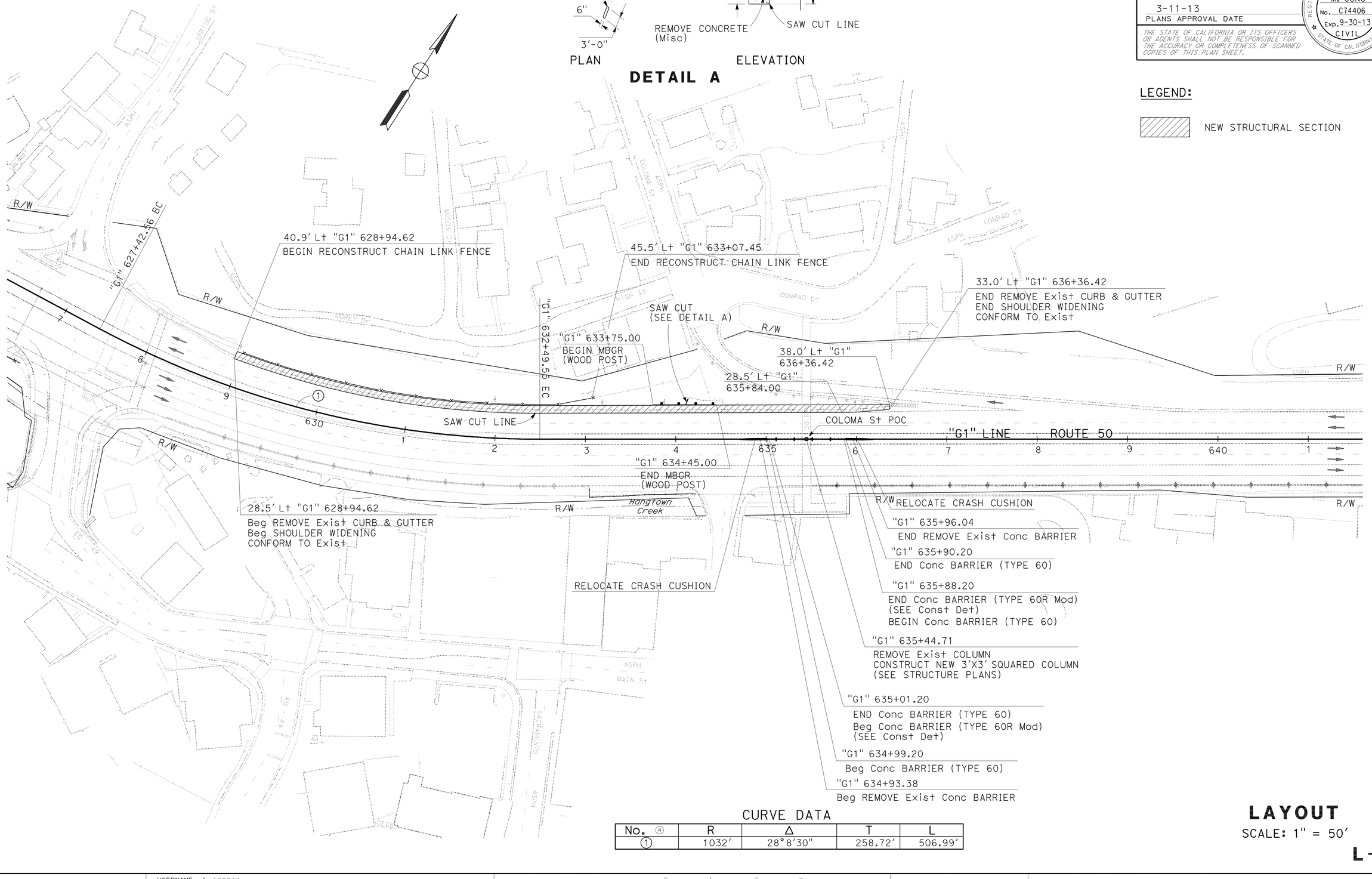
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

NOTE:

FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.



DETAIL A



LEGEND:

NEW STRUCTURAL SECTION

CURVE DATA

No. ⓗ	R	Δ	T	L
①	1032'	28°8'30"	258.72'	506.99'

LAYOUT

SCALE: 1" = 50'

L-1

REVISED BY	DATE REVISED
HUAN CUNG	HUAN CUNG
CALCULATED-DESIGNED BY	CHECKED BY
FUNCTIONAL SUPERVISOR	NESAR FORMOLI

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING

LAST REVISION | DATE PLOTTED => 13-MAR-2013
00-00-00 | TIME PLOTTED => 12:55

BORDER LAST REVISED 7/2/2010 | USERNAME => s128843 | DGN FILE => 0300000077ea001.dgn | RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3 | UNIT 0322 | PROJECT NUMBER & PHASE 0300000077

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	ED	50	17.8,19.6	4	37

REGISTERED CIVIL ENGINEER — 12-5-12 DATE

3-11-13 PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — HUAN M. CUNG No. C74406 Exp. 9-30-13 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.

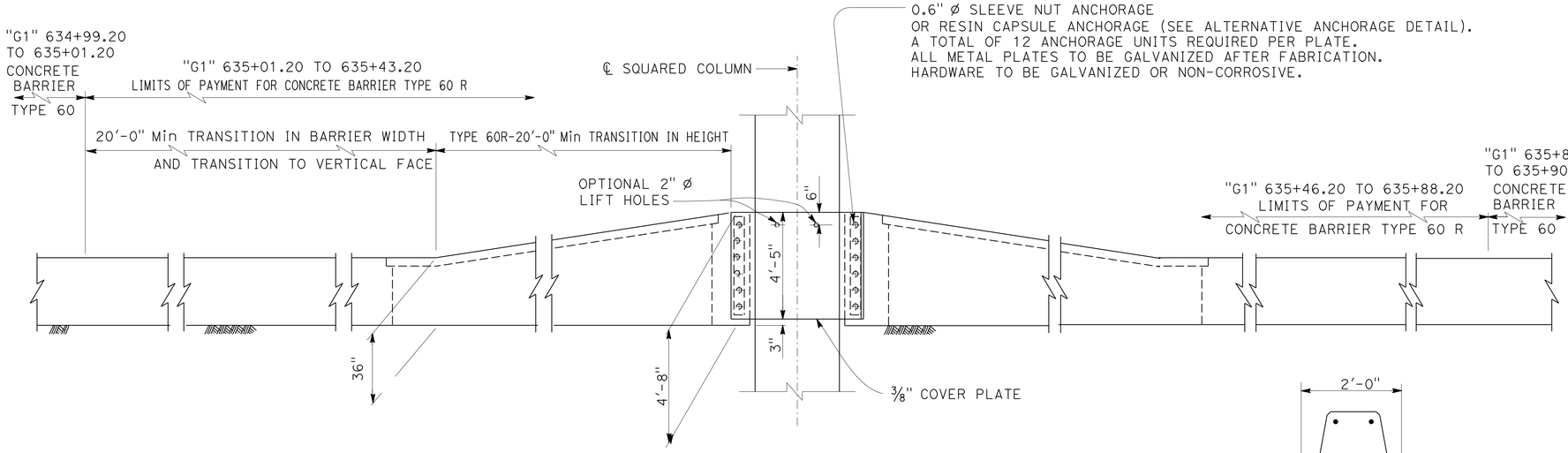
REVISED BY | DATE REVISED

HUAN CUNG | HUAN CUNG

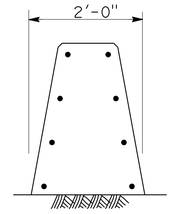
CALCULATED-DESIGNED BY | CHECKED BY

FUNCTIONAL SUPERVISOR: NESAR FORMOLI

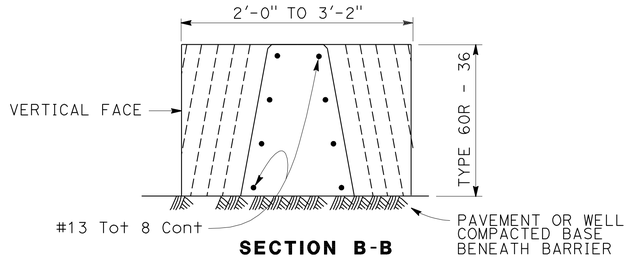
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans® DIVISION OF ENGINEERING



ELEVATION



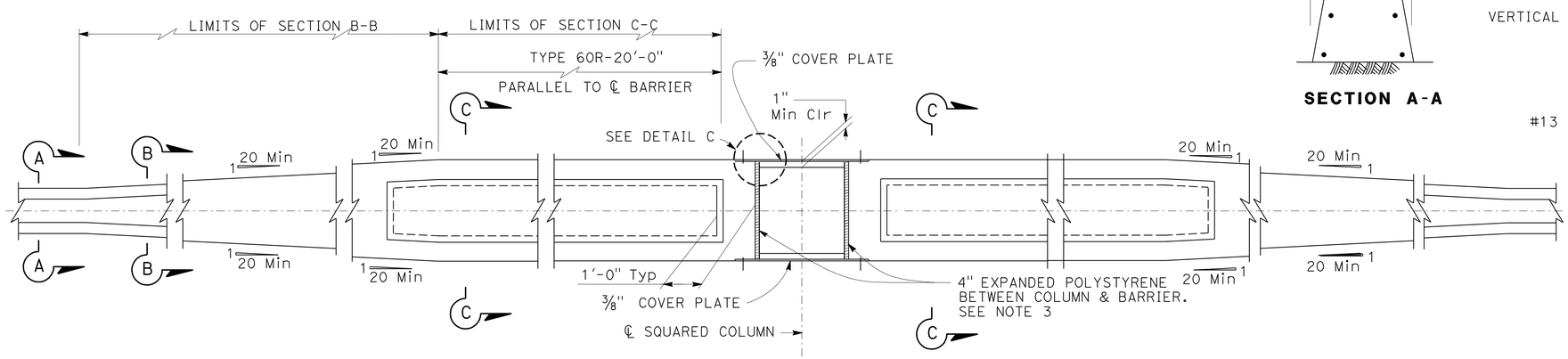
SECTION A-A



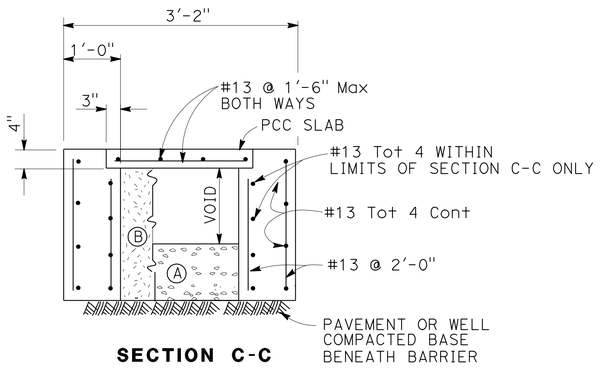
SECTION B-B

NOTES:

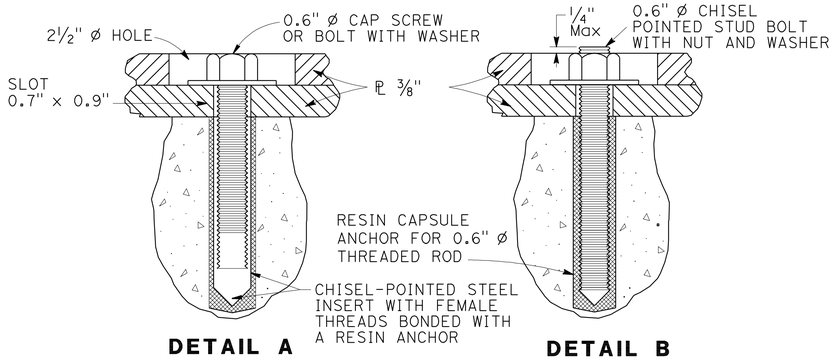
1. CONTRACTOR OPTIONS FOR FILL BETWEEN BARRIER WALLS.
   - (A) PLACE 2'-0" PCC AT BASE BETWEEN BARRIER WALLS.
   - (B) PLACE GRANULAR MATERIAL FROM BASE TO BOTTOM OF 4" CAP.
2. FORMING MATERIAL FOR 4" CAP MAY REMAIN IN PLACE.
3. ENCLOSE COLUMN WITH 4" EXPANDED POLYSTYRENE AT LOCATIONS WHERE CONCRETE OR CEMENT TREATED BASE ENCASES THE COLUMN.
4. ALL CONCRETE BARRIER REINFORCEMENT SHALL BE EPOXY COATED.
5. FOR DETAILS NOT SHOWN, SEE STANDARD PLANS A76A, A76B.



PLAN



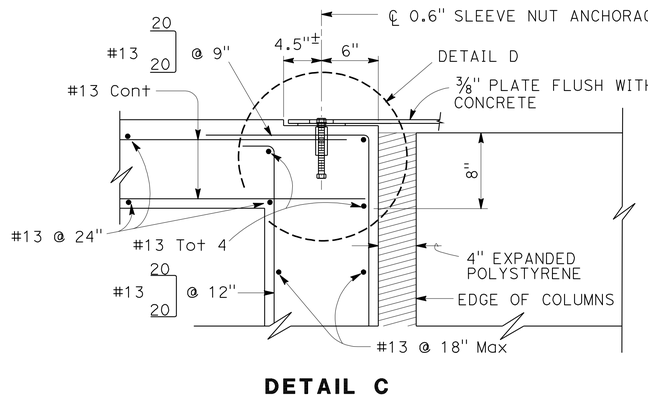
SECTION C-C



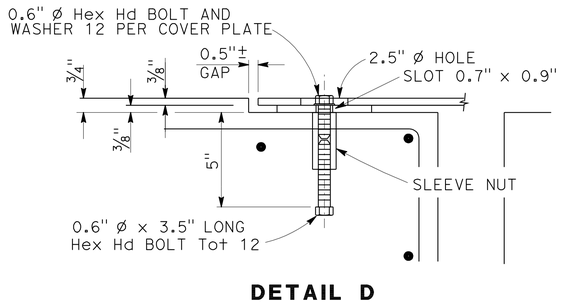
DETAIL A **DETAIL B**

ALTERNATIVE ANCHORAGE

NOTES: 1) RESIN CAPSULE ANCHORAGE IS SUBJECT TO APPROVAL OF THE ENGINEER. INSTALLATION PROCEDURES SHALL COMPLY WITH MANUFACTURER'S INSTRUCTIONS.
2) DETAIL B SIMILAR TO DETAIL A EXCEPT FOR ANCHORAGE DEVICES.



DETAIL C



DETAIL D

CONCRETE BARRIER (TYPE 60R)

CONSTRUCTION DETAILS

NO SCALE

C-1

LAST REVISION | DATE PLOTTED => 13-MAR-2013 | TIME PLOTTED => 12:56
00-00-00

BORDER LAST REVISED 7/2/2010 | USERNAME => s128843 | DGN FILE => 0300000077ga001.dgn | RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3 | UNIT 0322 | PROJECT NUMBER & PHASE 0300000077

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	ED	50	17.8,19.6	5	37

REGISTERED CIVIL ENGINEER — DATE: 12-5-12

HUAN M. CUNG No. C74406 Exp. 9-30-13 CIVIL — REGISTERED PROFESSIONAL ENGINEER — STATE OF CALIFORNIA

PLANS APPROVAL DATE: 3-11-13

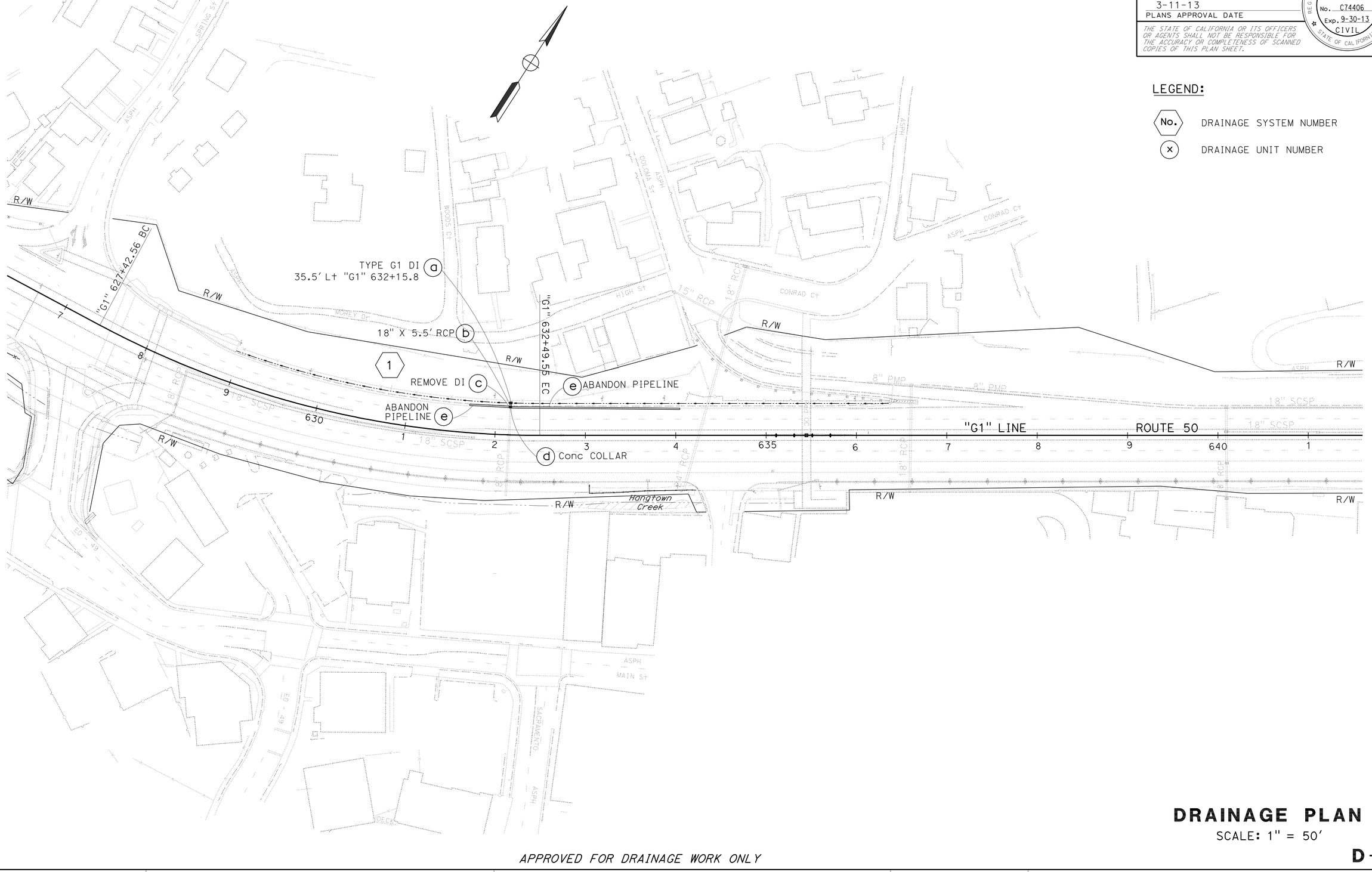
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

NOTE:

FOR ACCURATE RIGHT OF WAY DATA, CONTACT
RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.

LEGEND:

- (No.) DRAINAGE SYSTEM NUMBER
- (X) DRAINAGE UNIT NUMBER



DRAINAGE PLAN

SCALE: 1" = 50'

D-1

APPROVED FOR DRAINAGE WORK ONLY

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING

FUNCTIONAL SUPERVISOR: NESAR FORMOLI

CALCULATED-DESIGNED BY: HUAN CUNG
CHECKED BY:

REVISED BY	DATE REVISED

LAST REVISION | DATE PLOTTED => 13-MAR-2013
00-00-00 | TIME PLOTTED => 12:56

BORDER LAST REVISED 7/2/2010

USERNAME => s128843
DGN FILE => 0300000077id001.dgn

RELATIVE BORDER SCALE IS IN INCHES: 0 1 2 3

UNIT 0322

PROJECT NUMBER & PHASE: 0300000077

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	ED	50	17.8,19.6	6	37

REGISTERED CIVIL ENGINEER — 12-5-12 DATE

3-11-13 PLANS APPROVAL DATE

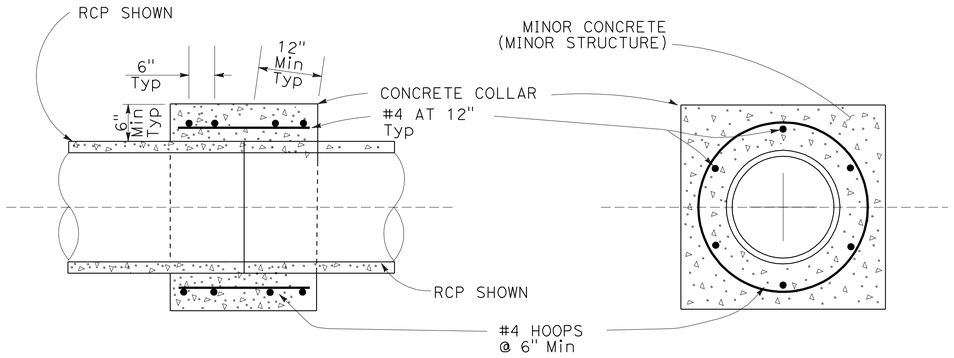
REGISTERED PROFESSIONAL ENGINEER — HUAN M. CUNG No. C74406 Exp. 9-30-13 CIVIL — STATE OF CALIFORNIA

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.

DRAINAGE QUANTITIES

DRAINAGE SHEET No.	DRAINAGE SYSTEM No.	DRAINAGE UNIT	REMOVE DRAINAGE INLET	ABANDON PIPELINE	18" REINFORCED CONCRETE PIPE	Misc IRON AND STEEL	MINOR CONCRETE (MINOR STRUCTURE)	(N) CONCRETE COLLAR	(N) HEIGHT OF INLET	(N) HEIGHT OF COVER	DESCRIPTION	STATION	DRAINAGE SHEET No.	DRAINAGE SYSTEM No.	DRAINAGE UNIT
			EA	EA	LF	LB	CY	EA	LF	LF					
D-1	1	a				239	0.84		2.5		GI DI, GRATE TYPE 24-12X	"G1" 632+15.8	D-1	1	a
		b			5.5					1.0	18" RCP				b
		c	1								REMOVE INLET				c
		d						1			CONCRETE COLLAR				d
		e		1							ABANDON 8" PERFORATED METAL PIPE	"G1" 631+67.40 TO 634+04.50			e
			1	1	5.5	239	0.84				TOTAL				

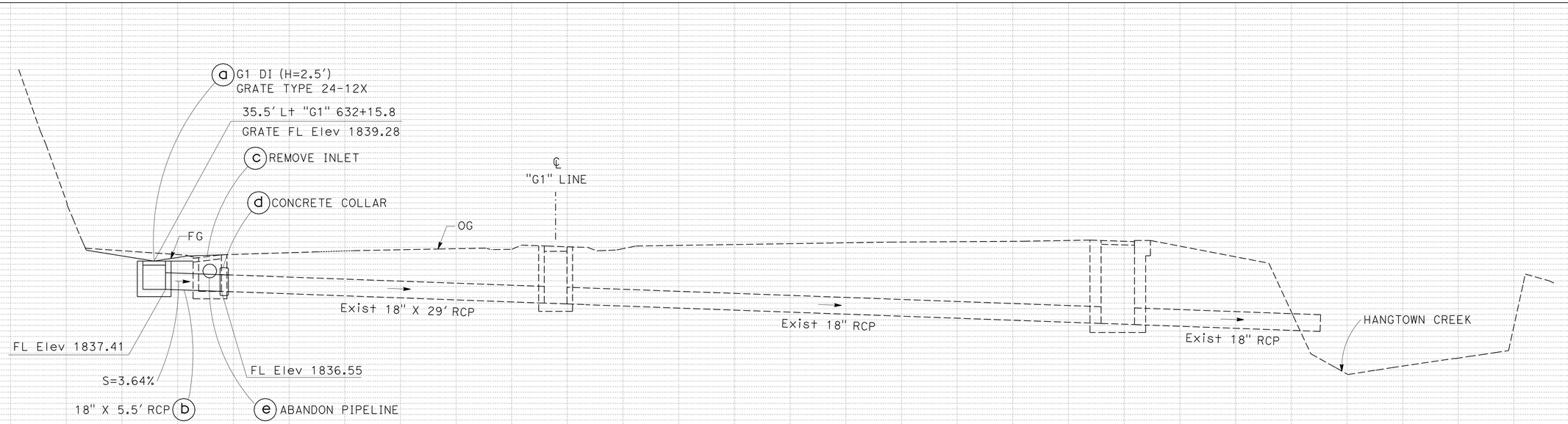
(N) NOT A SEPARATE PAY ITEM, FOR INFORMATION ONLY



NOTES:

1. PIPE EXTENSION SHALL BE POSITIONED TO PROVIDE FOR A SMOOTH TRANSITION AT THE PIPE FLOW LINE.
2. INTERIOR FORM SHALL BE PLACED TO PREVENT CONCRETE INTRUSION INTO PIPE INTERIOR.
3. USE AT ALL LOCATIONS INDICATED ON DRAINAGE PLANS

CONCRETE COLLAR DETAIL



DRAINAGE SYSTEM No. (1)

"G1" 632+15.8

DRAINAGE PROFILES

SCALE: Horiz 1" = 20'
Vert 1" = 20'

DP-1

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING
Caltrans

FUNCTIONAL SUPERVISOR: NESAR FORMOLI
CALCULATED-DESIGNED BY: HUAN CUNG
CHECKED BY:
REVISED BY
DATE REVISED

LAST REVISION 00-00-00
DATE PLOTTED => 13-MAR-2013
TIME PLOTTED => 12:56

BORDER LAST REVISED 7/2/2010
USERNAME => s128843
DGN FILE => 0300000077ib001.dgn
RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3
UNIT 0322
PROJECT NUMBER & PHASE 0300000077

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	ED	50	17.8,19.6	7	37

REGISTERED CIVIL ENGINEER — 12-5-12 DATE

3-11-13
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — HUAN M. CUNG No. C74406 Exp. 9-30-13 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.

STATIONARY MOUNTED CONSTRUCTION AREA SIGNS

SIGN LETTER	SIGN CODE		PANEL SIZE	SIGN MESSAGE	NUMBER OF POST AND SIZE	NUMBER OF SIGNS
	FEDERAL	CALIFORNIA				
(A)	W20-1	C23	48" x 48"	ROAD WORK AHEAD	1 - 6" x 6"	5
(B)	G20-2	C14	36" x 18"	END ROAD WORK	1 - 4" x 4"	3
(C)		C40(Mod)	72" x 42"	TRAFFIC FINES DOUBLED IN WORK ZONES	2 - 4" x 6"	2

SIGN DETAILS

(C) C40(Mod)<CA>

TRAFFIC FINES DOUBLED IN WORK ZONES

6" D SERIES LETTERS

72"x42"

RETROREFLECTIVE WHITE BACKGROUND WITH BLACK LEGEND AND BORDER.

LEGEND:

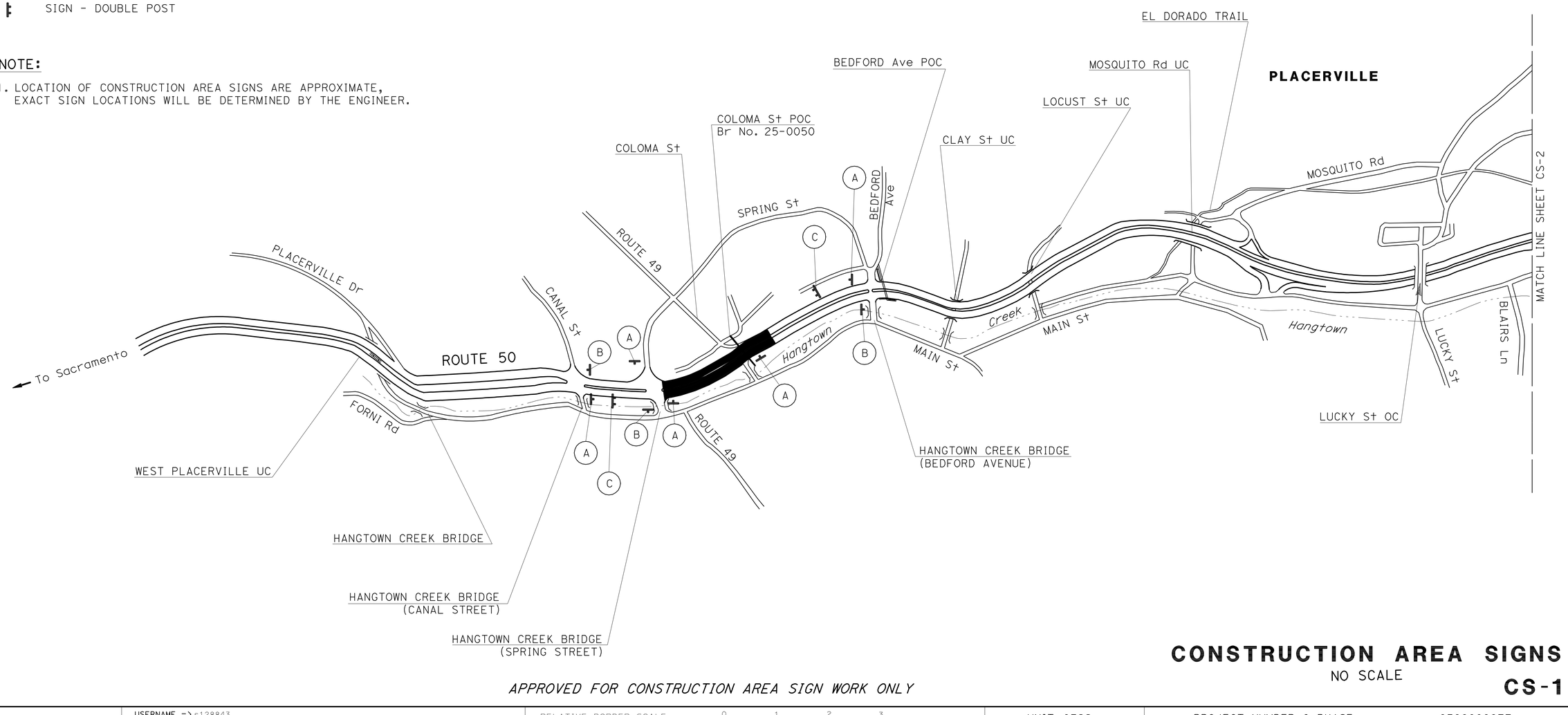
(No.) CONSTRUCTION AREA SIGN LETTER

SIGN - SINGLE POST

SIGN - DOUBLE POST

NOTE:

1. LOCATION OF CONSTRUCTION AREA SIGNS ARE APPROXIMATE, EXACT SIGN LOCATIONS WILL BE DETERMINED BY THE ENGINEER.



APPROVED FOR CONSTRUCTION AREA SIGN WORK ONLY

CONSTRUCTION AREA SIGNS

NO SCALE

CS-1

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans® DIVISION OF ENGINEERING

FUNCTIONAL SUPERVISOR: NESAR FORMOLI

CALCULATED-DESIGNED BY: KEVIN CANFIELD
CHECKED BY: HUAN CUNG

REVISED BY | DATE REVISED

LAST REVISION | DATE PLOTTED => 13-MAR-2013
00-00-00 | TIME PLOTTED => 12:56

BORDER LAST REVISED 7/2/2010

USERNAME => s128843
DGN FILE => 0300000077la001.dgn

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

UNIT 0322

PROJECT NUMBER & PHASE 0300000077

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	ED	50	17.8,19.6	8	37

REGISTERED CIVIL ENGINEER — 12-5-12 DATE

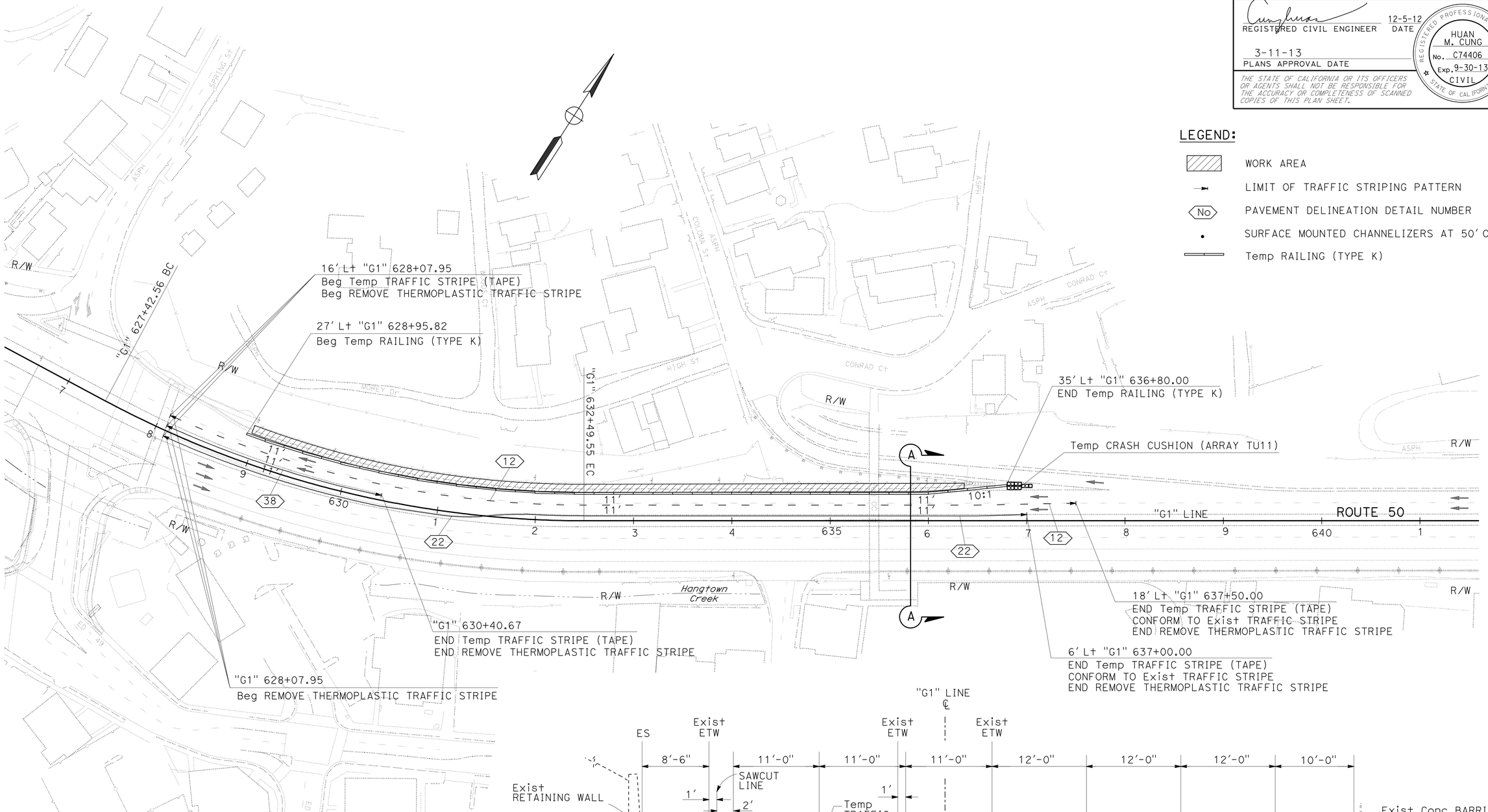
HUAN M. CUNG No. C74406 Exp. 9-30-13 CIVIL — REGISTERED PROFESSIONAL ENGINEER — STATE OF CALIFORNIA

3-11-13
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.

LEGEND:

- WORK AREA
- LIMIT OF TRAFFIC STRIPING PATTERN
- No — PAVEMENT DELINEATION DETAIL NUMBER
- SURFACE MOUNTED CHANNELIZERS AT 50' O.C.
- Temp RAILING (TYPE K)



SECTION A-A
NO SCALE

STAGE CONSTRUCTION AND TRAFFIC HANDLING PLAN
STAGE 1
SCALE: 1" = 50'

SC-1

APPROVED FOR STAGE CONSTRUCTION AND TRAFFIC HANDLING WORK ONLY

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans® DIVISION OF ENGINEERING
FUNCTIONAL SUPERVISOR: NESAR FORMOLI
CALCULATED-DESIGNED BY
CHECKED BY: HUAN CUNG
REVISED BY
DATE REVISED

LAST REVISION: DATE PLOTTED => 13-MAR-2013 00-00-00 TIME PLOTTED => 12:56

BORDER LAST REVISED 7/2/2010 | USERNAME => s128843 DGN FILE => 0300000077ma001.dgn | RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3 | UNIT 0322 | PROJECT NUMBER & PHASE 0300000077

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	ED	50	17.8,19.6	9	37

REGISTERED CIVIL ENGINEER — 12-5-12 DATE

HUAN M. CUNG No. C74406 Exp. 9-30-13 CIVIL — REGISTERED PROFESSIONAL ENGINEER — STATE OF CALIFORNIA

3-11-13
PLANS APPROVAL DATE

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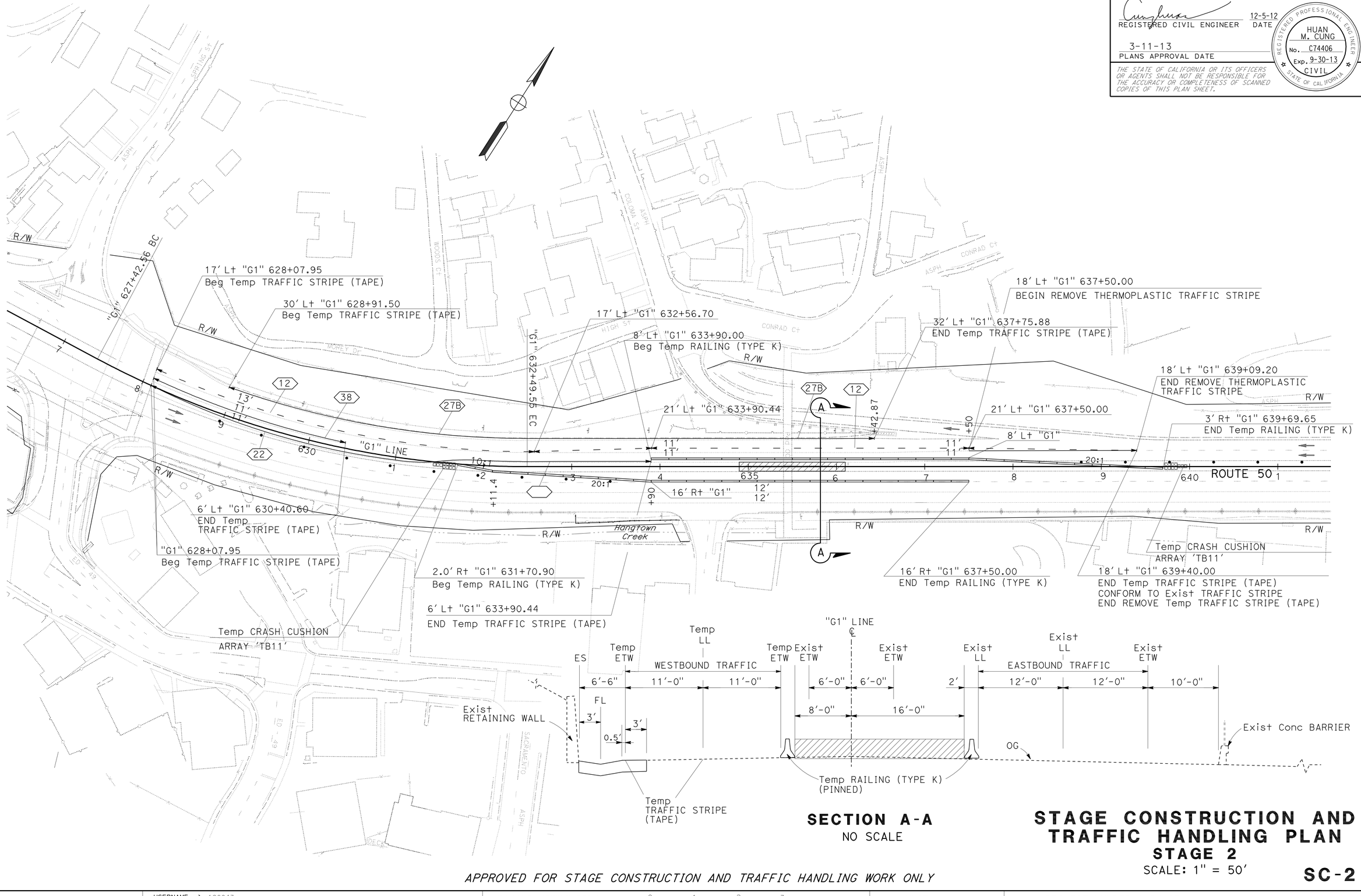


SECTION A-A
NO SCALE

STAGE CONSTRUCTION AND TRAFFIC HANDLING PLAN
STAGE 2
SCALE: 1" = 50'

SC-2

APPROVED FOR STAGE CONSTRUCTION AND TRAFFIC HANDLING WORK ONLY

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING
FUNCTIONAL SUPERVISOR: NESAR FORMOLI
CALCULATED-DESIGNED BY: HUAN CUNG
CHECKED BY:
REVISED BY | DATE REVISED

LAST REVISION 00-00-00 | DATE PLOTTED => 13-MAR-2013 | TIME PLOTTED => 12:56

BORDER LAST REVISED 7/2/2010 | USERNAME => s128843 | DGN FILE => 0300000077ma002.dgn | RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3 | UNIT 0322 | PROJECT NUMBER & PHASE 0300000077

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	ED	50	17.8,19.6	10	37

REGISTERED CIVIL ENGINEER — DATE: 12-5-12

PLANS APPROVAL DATE: 3-11-13

HUAN M. CUNG No. C74406 Exp. 9-30-13 CIVIL — REGISTERED PROFESSIONAL ENGINEER — STATE OF CALIFORNIA

TEMPORARY TRAFFIC STRIPE (TAPE)

LOCATION	TEMPORARY TRAFFIC STRIPE(TAPE)				NOTES
	DETAIL 12	DETAIL 22	DETAIL 27B	DETAIL 38	
	LF	LF	LF	LF	
"G1" 628+07.95 TO 637+50.00	943				STAGE 1 WESTBOUND
"G1" 628+07.95 TO 637+00.00		893			STAGE 1 WESTBOUND
"G1" 628+07.95 TO 630+40.67				233	STAGE 1 WESTBOUND
"G1" 628+91.50 TO 637+75.88			885		STAGE 2 WESTBOUND
"G1" 628+07.95 TO 639+40.00	1,133				STAGE 2 WESTBOUND
"G1" 628+07.95 TO 633+90.44		583			STAGE 2 WESTBOUND
"G1" 628+07.95 TO 630+40.67				233	STAGE 2 WESTBOUND
SUBTOTAL	2,076	1,476	885	466	
TOTAL	4,903				

REMOVE THERMOPLASTIC TRAFFIC STRIPE

LOCATION	REMOVE THERMOPLASTIC TRAFFIC STRIPE				NOTES
	DETAIL 12	DETAIL 22	DETAIL 27B	DETAIL 38	
	LF	LF	LF	LF	
"G1" 628+07.95 TO 637+50.00	943				STAGE 1 WESTBOUND
"G1" 628+07.95 TO 637+00.00		893			STAGE 1 WESTBOUND
"G1" 628+07.95 TO 630+40.67				233	STAGE 1 WESTBOUND
"G1" 628+91.50 TO 637+75.88			885		STAGE 2 WESTBOUND
"G1" 637+50.00 TO 639+40.00	190				STAGE 2 WESTBOUND
SUBTOTAL	1,133	893	885	233	
TOTAL	3,144				

TEMPORARY CRASH CUSHION MODULE

LOCATION	STAGE	ARRAY TYPE	TEMPORARY CRASH CUSHION MODULE	REMARKS
			EA	
"G1" 636+80.00	1	TU11	11	FOR APPROACH END OF TEMPORARY RAILING (TYPE K)
"G1" 631+50.00	2	TB11	11	FOR APPROACH END OF TEMPORARY RAILING (TYPE K)
"G1" 639+90.44	2	TB11	11	FOR APPROACH END OF TEMPORARY RAILING (TYPE K)
TOTAL			33	

TEMPORARY RAILING (TYPE K)

LOCATION	TEMP RAILING (TYPE K)	NOTES
	LF	
"G1" 628+95.82 TO 636+80.00	785	STAGE 1 WESTBOUND
"G1" 631+70.90 TO 637+50.00	580	STAGE 2 EASTBOUND
"G1" 633+90.44 TO 639+69.65	580	STAGE 2 WESTBOUND
TOTAL	1,945	

CHANNELIZER (SURFACE MOUNTED)

LOCATION	CHANNELIZER (SURFACE MOUNTED)	NOTES
	EA	
"G1" 629+00.00 TO 633+50.00	10	STAGE 2 EASTBOUND
"G1" 638+77.85 TO 641+27.85	6	STAGE 2 WESTBOUND
TOTAL	16	

STAGE CONSTRUCTION QUANTITIES

SCQ-1

REVISED BY | DATE REVISED: HUAN CUNG

CALCULATED-DESIGNED BY | CHECKED BY: HUAN CUNG

FUNCTIONAL SUPERVISOR: NESAR FORMOLI

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION — Caltrans® DIVISION OF ENGINEERING

LAST REVISION | DATE PLOTTED => 13-MAR-2013 | TIME PLOTTED => 12:56 | 00-00-00

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	ED	50	17.8,19.6	11	37

REGISTERED CIVIL ENGINEER — 12-5-12 DATE

HUAN M. CUNG No. C74406 Exp. 9-30-13 CIVIL — REGISTERED PROFESSIONAL ENGINEER — STATE OF CALIFORNIA

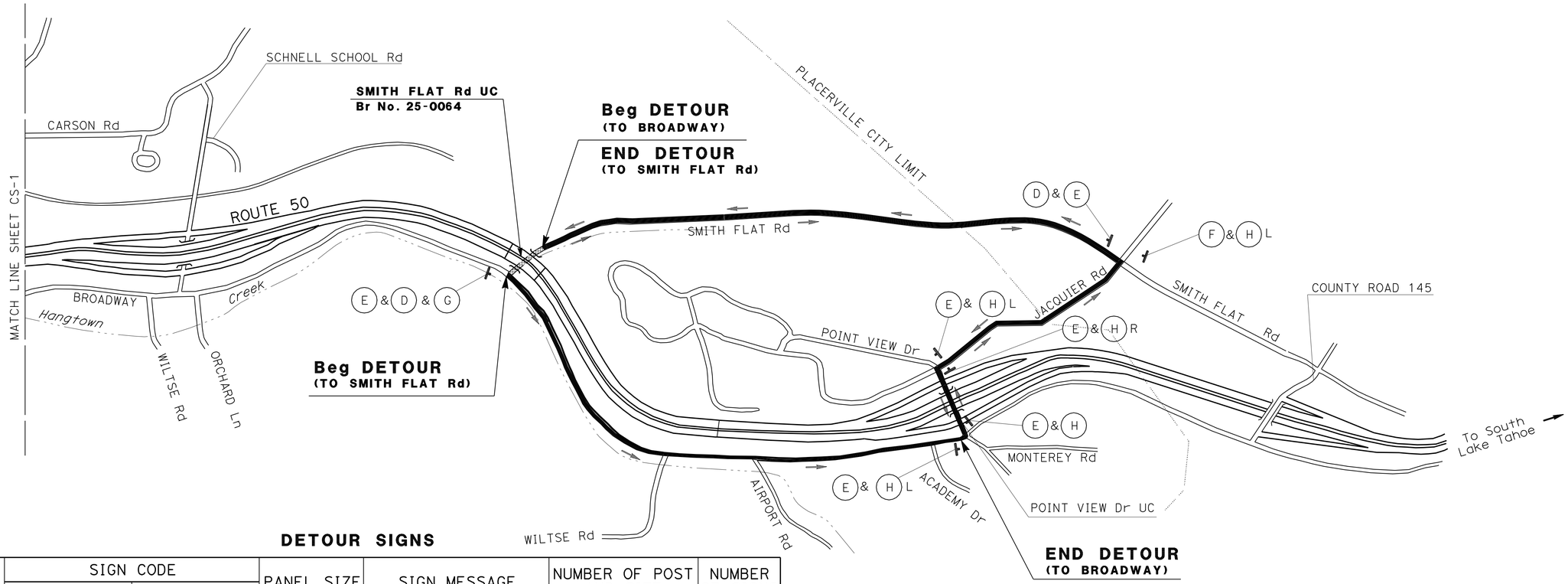
3-11-13
PLANS APPROVAL DATE

LEGEND:

- (No.) DETOUR SIGN LETTER
- SIGN - SINGLE POST
- ROAD CLOSURE
- DETOUR ROUTE
- DIRECTION OF DETOUR TRAVEL

NOTES:

1. LOCATION OF DETOUR SIGNS ARE APPROXIMATE. EXACT SIGN LOCATIONS WILL BE DETERMINED BY THE ENGINEER.
2. ALL SIGNS SHOULD BE COVERED WHEN NOT IN USE.
3. RAMP CLOSURE SHALL CONFORM WITH CALTRANS STANDARD PLAN T14.
4. FOR ADDITIONAL CONSTRUCTION AREA SIGN, SEE SHEET CS-1



DETOUR SIGNS

SIGN LETTER	SIGN CODE		PANEL SIZE	SIGN MESSAGE	NUMBER OF POST AND SIZE	NUMBER OF SIGNS
	FEDERAL	CALIFORNIA				
D	R11-4	C3A	60" x 30"	ROAD CLOSED TO THROUGH TRAFFIC	1 - 4" x 4"	2
E		G7-1	54" x 30"	SMITH FLAT ROAD	1 - 6" x 6"	6
F		G7-1	54" x 30"	BROADWAY	1 - 6" x 6"	1
G		SC3	48" x 18"	DETOUR	1 - 4" x 6"	1
H	M4-10	C5	48" x 18"	DETOUR	1 - 4" x 6"	5

SIGN DETAILS

E — G7-1 <CA>

SMITH FLAT ROAD

54"x30"

6" C SERIES LETTERS

RETROREFLECTIVE ORANGE BACKGROUND WITH BLACK LEGEND AND BORDER.

F — G7-1 <CA>

BROADWAY

54"x30"

6" C SERIES LETTERS

RETROREFLECTIVE ORANGE BACKGROUND WITH BLACK LEGEND AND BORDER.

DETOUR PLAN

NO SCALE **DE-1**

REVISED BY | DATE REVISED
HUAN CUNG | HUAN CUNG
CALCULATED-DESIGNED BY | CHECKED BY
FUNCTIONAL SUPERVISOR: NESAR FORMOLI

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans® DIVISION OF ENGINEERING

LAST REVISION: DATE PLOTTED => 13-MAR-2013 | 00-00-00 | TIME PLOTTED => 10:45

BORDER LAST REVISED 7/2/2010 | USERNAME => s109858 | DGN FILE => 0300000077mg001.dgn | RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3 | UNIT 0322 | PROJECT NUMBER & PHASE 0300000077

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	ED	50	17.8,19.6	12	37

REGISTERED CIVIL ENGINEER — 12-5-12 DATE

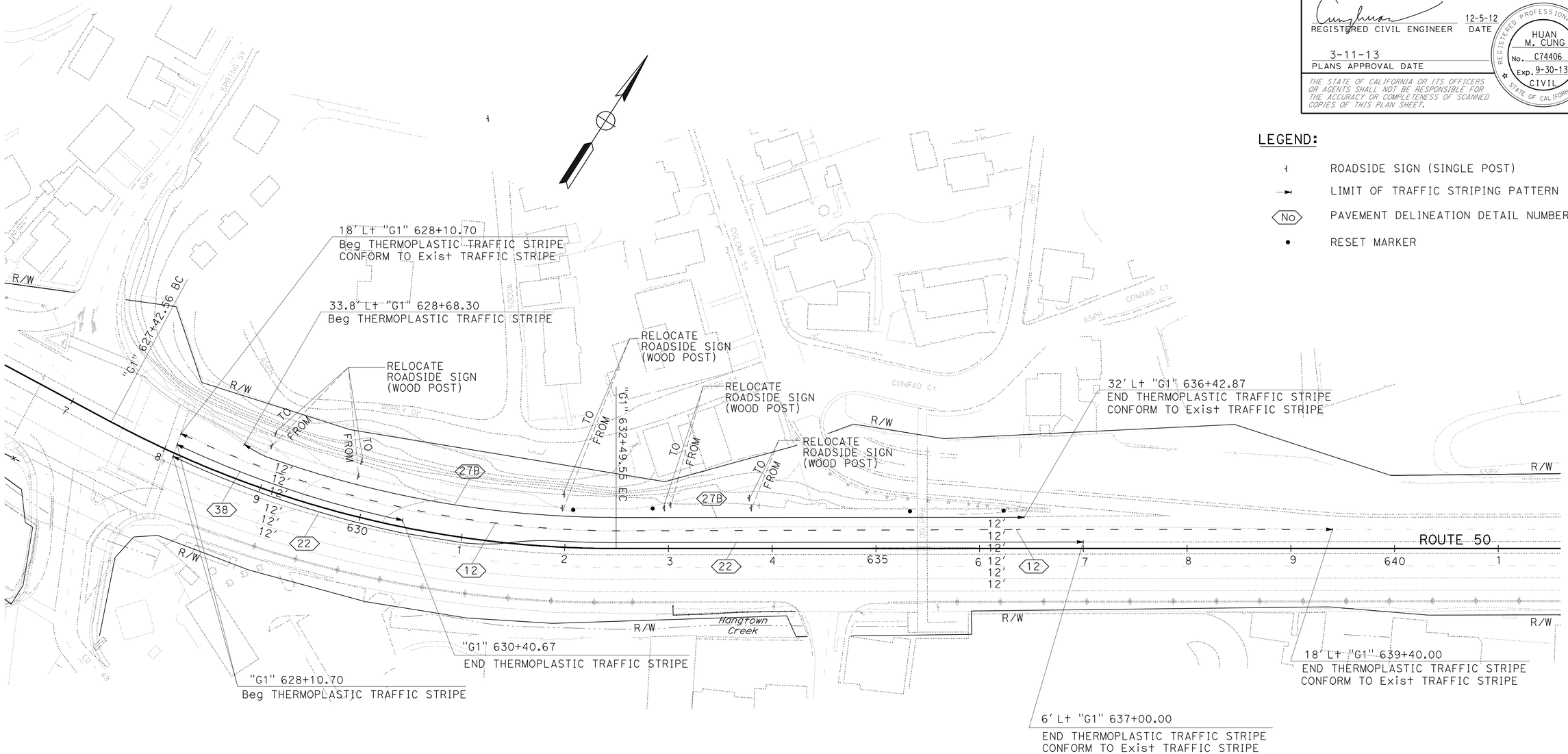
HUAN M. CUNG No. C74406 Exp. 9-30-13 CIVIL — REGISTERED PROFESSIONAL ENGINEER — STATE OF CALIFORNIA

3-11-13
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.

LEGEND:

- ROADSIDE SIGN (SINGLE POST)
- LIMIT OF TRAFFIC STRIPING PATTERN
- No — PAVEMENT DELINEATION DETAIL NUMBER
- RESET MARKER



PAVEMENT DELINEATION QUANTITIES

LOCATION	DESCRIPTION	DETAIL NUMBER	FT	TOTAL
"G1" 628+07.95 TO 637+00.00	4" THERMOPLASTIC TRAFFIC STRIPE	22	893	893
"G1" 628+07.95 TO 639+40.00	4" THERMOPLASTIC TRAFFIC STRIPE (BROKEN 36-12)	12	1,133	1,133
"G1" 628+07.95 TO 630+40.67	8" THERMOPLASTIC TRAFFIC STRIPE	38	233	233
"G1" 628+68.30 TO 636+42.87	THERMOPLASTIC TRAFFIC STRIPE (SPRAYABLE)	27B	775	775

APPROVED FOR PAVEMENT DELINEATION AND SIGN WORK ONLY

PAVEMENT DELINEATION PLAN AND QUANTITIES

SCALE: 1" = 50'

PD-1

REVISED BY | DATE REVISED
HUAN CUNG | HUAN CUNG
CALCULATED-DESIGNED BY | CHECKED BY
FUNCTIONAL SUPERVISOR: NESAR FORMOLI

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING

LAST REVISION 00-00-00 | DATE PLOTTED => 13-MAR-2013 | TIME PLOTTED => 10:46

BORDER LAST REVISED 7/2/2010 | USERNAME => s109858 | DGN FILE => 0300000077na001.dgn | RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3 | UNIT 0322 | PROJECT NUMBER & PHASE 0300000077

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	ED	50	17.8,19.6	13	37

REGISTERED CIVIL ENGINEER — DATE: 12-5-12

HUAN M. CUNG No. C74406 Exp. 9-30-13 CIVIL — REGISTERED PROFESSIONAL ENGINEER — STATE OF CALIFORNIA

3-11-13
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.

CONCRETE BARRIER

STATION LIMITS	REMOVE CONCRETE BARRIER	CONCRETE BARRIER (TYPE 60)	CONCRETE BARRIER (TYPE 60R MOD)	RELOCATE CRASH CUSHION
	LF	LF	LF	EA
"G1" 634+99.20 TO 635+01.20		2		
"G1" 635+01.20 TO 635+88.20			87	
"G1" 635+88.20 TO 635+90.20		2		
"G1" 634+93.38 TO 635+96.04	103			
"G1" 634+99.20				1
"G1" 635+90.20				1
TOTAL	103	4	87	2

ROADWAY AND EARTHWORK SUMMARY

STATION LIMITS	HOT MIX ASPHALT (TYPE A)	CLASS 2 AGGREGATE BASE	ROADWAY EXCAVATION
	TON	CY	CY
"G1" 628+94.62 TO 636+36.40	319.7	274	405
TOTAL	319.7	274	405

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

RECONSTRUCT CHAIN LINK FENCE

LOCATION	QUANTITY
	LF
"G1" 628+94.62 TO 633+07.45	412.8
TOTAL	412.8

REMOVE CONCRETE CURB

LOCATION	QUANTITY
	LF
"G1" 628+94.62 TO 636+36.42	741.8
TOTAL	741.8

REMOVE CONCRETE (Misc)

LOCATION	QUANTITY
	CY
39.00' Lt "G1" 634+11.18	3.6
TOTAL	3.6

RESET MARKER

LOCATION	QUANTITY
	EA
Lt "G1" 632+06.40	1
Lt "G1" 632+82.80	1
Lt "G1" 635+32.80	1
Lt "G1" 636+23.10	1
TOTAL	4

METAL BEAM GUARD RAILING (WOOD POST)

LOCATION	QUANTITY
	LF
"G1" 633+75.00 TO 634+45.00	70
TOTAL	70

RELOCATE ROADSIDE SIGN (WOOD POST)

LOCATION	QUANTITY
	EA
Lt "G1" 629+00.00	1
Lt "G1" 629+85.70	1
Lt "G1" 631+91.75	1
Lt "G1" 632+94.70	1
Lt "G1" 633+79.45	1
TOTAL	5

TEMPORARY WATER POLLUTION CONTROL QUANTITIES

DESCRIPTION	QUANTITY	UNIT
TEMPORARY SILT FENCE	1,100	FT
TEMPORARY DRAINAGE INLET PROTECTION	10	EA

SUMMARY OF QUANTITIES

Q-1

REVISED BY | DATE REVISED
KEVIN CANFIELD | HUAN CUNG
CALCULATED-DESIGNED BY | CHECKED BY
FUNCTIONAL SUPERVISOR: NESAR FORMOLI
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans® DIVISION OF ENGINEERING

LAST REVISION | DATE PLOTTED => 13-MAR-2013
00-00-00 | TIME PLOTTED => 10:46

BORDER LAST REVISED 7/2/2010 | USERNAME => s109858 | DGN FILE => 0300000077pa001.dgn | RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3 | UNIT 0322 | PROJECT NUMBER & PHASE 0300000077

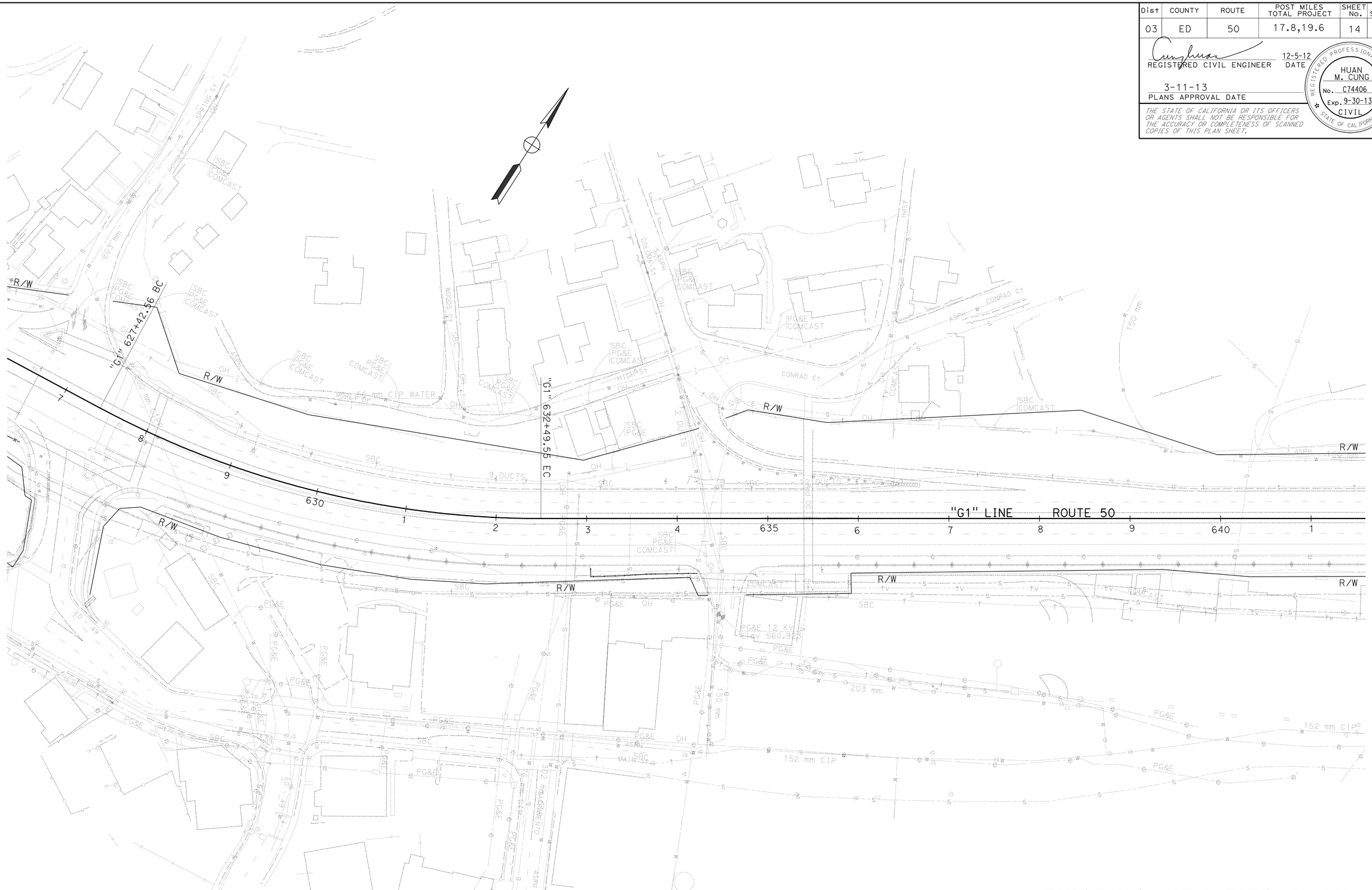
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	ED	50	17.8,19.6	14	37

REGISTERED CIVIL ENGINEER — DATE: 12-5-12

HUAN M. CUNG
No. C74406
Exp. 9-30-13
CIVIL
REGISTERED PROFESSIONAL ENGINEER
STATE OF CALIFORNIA

3-11-13
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.



APPROVED FOR UTILITY INFORMATION ONLY

EXISTING UTILITIES PLAN

SCALE: 1" = 50'

EU-1

REVISED BY | DATE REVISED

CALCULATED-DESIGNED BY: HUAN CUNG
CHECKED BY: HUAN CUNG

FUNCTIONAL SUPERVISOR: NESAR FORMOLI

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING

LAST REVISION | DATE PLOTTED => 13-MAR-2013
00-00-00 | TIME PLOTTED => 10:46

BORDER LAST REVISED 7/2/2010

USERNAME => s109858
DGN FILE => 0300000077tq001.dgn

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

UNIT 0322

PROJECT NUMBER & PHASE 0300000077

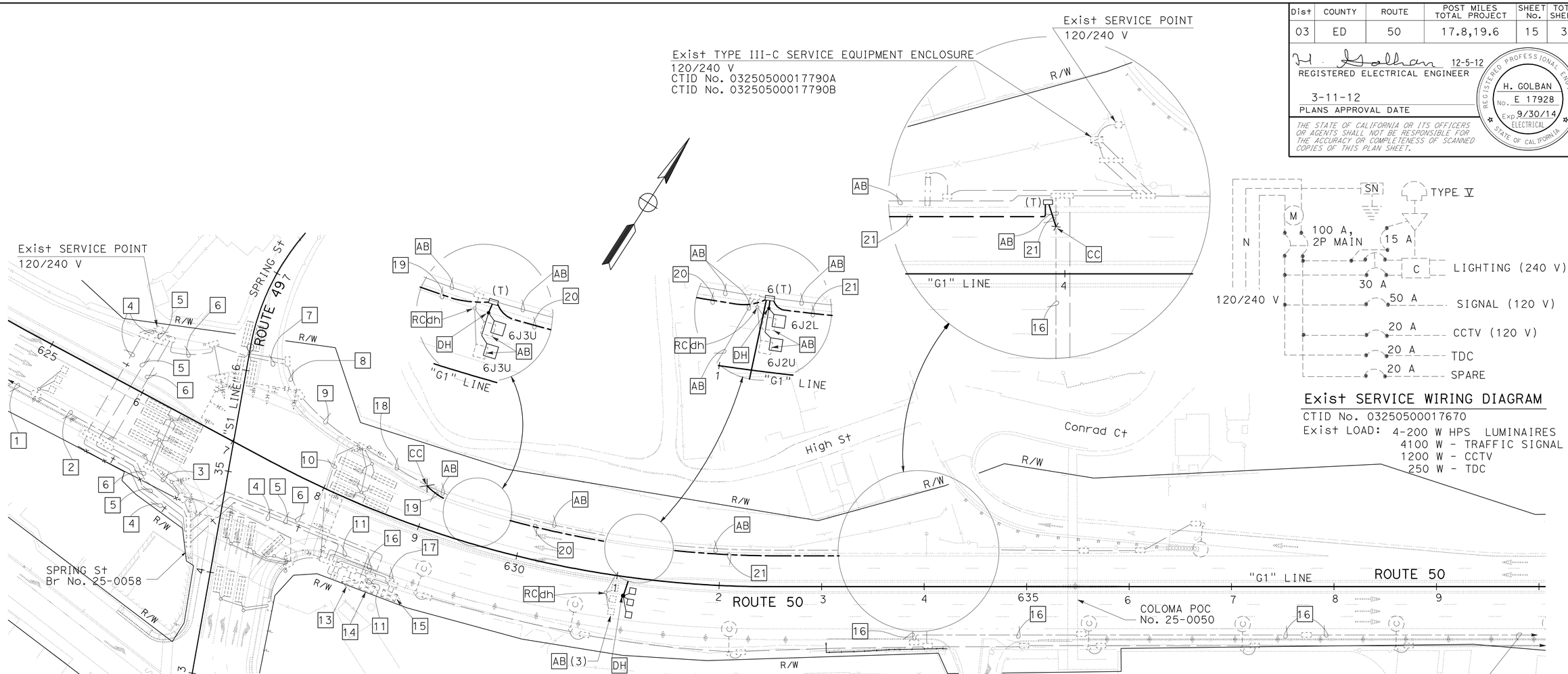
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	ED	50	17.8,19.6	15	37

H. Golban 12-5-12
REGISTERED ELECTRICAL ENGINEER

3-11-12
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — H. GOLBAN — No. E 17928 — Exp. 9/30/14 — ELECTRICAL — 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.



Exist SERVICE WIRING DIAGRAM

CTID No. 03250500017670
Exist LOAD: 4-200 W HPS LUMINAIRES
4100 W - TRAFFIC SIGNAL
1200 W - CCTV
250 W - TDC

LEGEND: (THIS SHEET ONLY)

1 Exist 2"C, 3 dlc, 1 sic.
2 Exist 2"C, 6 dlc, 1 sic.
3 Exist 2"C, 7 dlc, 1 sic.
4 Exist 2"C, 2 TELEPHONE CABLES.
5 Exist 2"C, 3#2.
6 Exist 2"C, 1 sic.
7 Exist 2"C, 1-12CSC, 1-3CSC, 2#10, 2 evc.
8 Exist 3"C, 1-12CSC, 1-3CSC, 2#10, 2 evc, 2 dlc.
9 Exist 3"C, 2-12CSC, 2-3CSC, 2#10, 4 evc, 4 dlc.
10 Exist 3"C, 3-12CSC, 3-3CSC, 2#10, 4 evc, 11 dlc, 1 sic. RC 6 dlc, 1 sic. ADD 6 DLC, 1 SIC.
11 Exist 2-4"C, 7-12CSC, 6-3CSC, 2#10, 8 evc, 22 dlc, 2 sic, 1 TELEPHONE CABLE. RC 6 dlc, 1 sic. ADD 6 DLC, 1 SIC.
12 NOT USED.
13 Exist TYPE III-AF SERVCIE EQUIPMENT ENCLOSURE, 120/240 V, CTID No. 03250500017670.
14 Exist MODEL 332 CABINET FOR TRAFFIC SIGNAL.
15 Exist MODEL 334 CABINET FOR CCTV.
16 Exist 2"C, 1 sic. RC 1 sic. ADD 1 SIC.
17 Exist 2"C, 1 MULTICONDUCTOR CABLE.
18 Exist 2"C, 6 dlc, 1 sic. RC 6 dlc, 1 sic. ADD 6 DLC, 1 SIC.
19 2"C, 6 DLC, 1 SIC.
20 2"C, 5 DLC, 1 SIC.
21 2"C, 1 SIC.
(C) = Exist DECORATIVE CITY LIGHT STANDARD

ABBREVIATION:

CTID CALTRANS IDENTIFICATION

WIRING DIAGRAM LEGEND:

C CONTACTOR
SN SOLID NEUTRAL
AUTO TEST SWITCH
PHOTOELECTRIC UNIT
M METER SOCKET

MODIFY SIGNAL

SCALE: 1" = 50'

E-1

APPROVED FOR ELECTRICAL WORK ONLY

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
ELECTRICAL DESIGN
FUNCTIONAL SUPERVISOR: NELSON LEE
CALCULATED-DESIGNED BY: YOUNG TON
CHECKED BY: HABIB GOLBAN
REVISED BY | DATE REVISED

LAST REVISION | DATE PLOTTED => 13-MAR-2013 | 01-01-13 | TIME PLOTTED => 10:46

BORDER LAST REVISED 7/2/2010
USERNAME => s109858
DGN FILE => 0300000077ua001.dgn
RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3
UNIT 0403
PROJECT NUMBER & PHASE 03000000771

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	ED	50	17.8,19.6	16	37

H. Golban 12-5-12
REGISTERED ELECTRICAL ENGINEER

3-11-13
PLANS APPROVAL DATE

H. GOLBAN No. E 17928 Exp. 9/30/14 ELECTRICAL — REGISTERED PROFESSIONAL ENGINEER — 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.

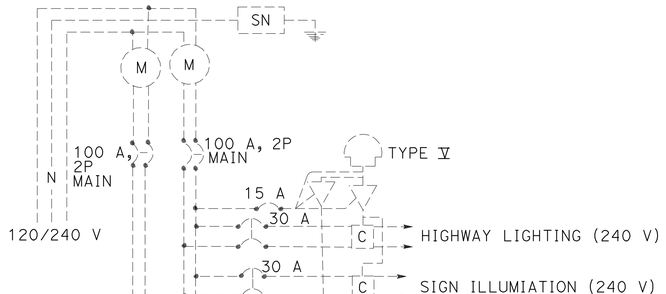
LEGEND: (THIS SHEET ONLY)

1. 2"C, 2#6.
2. Exist 2"C, 2#6. RC 2#6. ADD 2#6.
3. 2"C, 2#8.
4. Exist 2"C, 4#8.
5. Exist 2½"C, 3#3/0.
6. Exist 2"C, 2#6.

Exist DECORATIVE CITY LIGHT STANDARD

WIRING DIAGRAM LEGEND:

- C — CONTACTOR
- SN — SOLID NEUTRAL
- AUTO TEST SWITCH
- PHOTOELECTRIC UNIT
- M — METER SOCKET



Exist SERVICE WIRING DIAGRAM

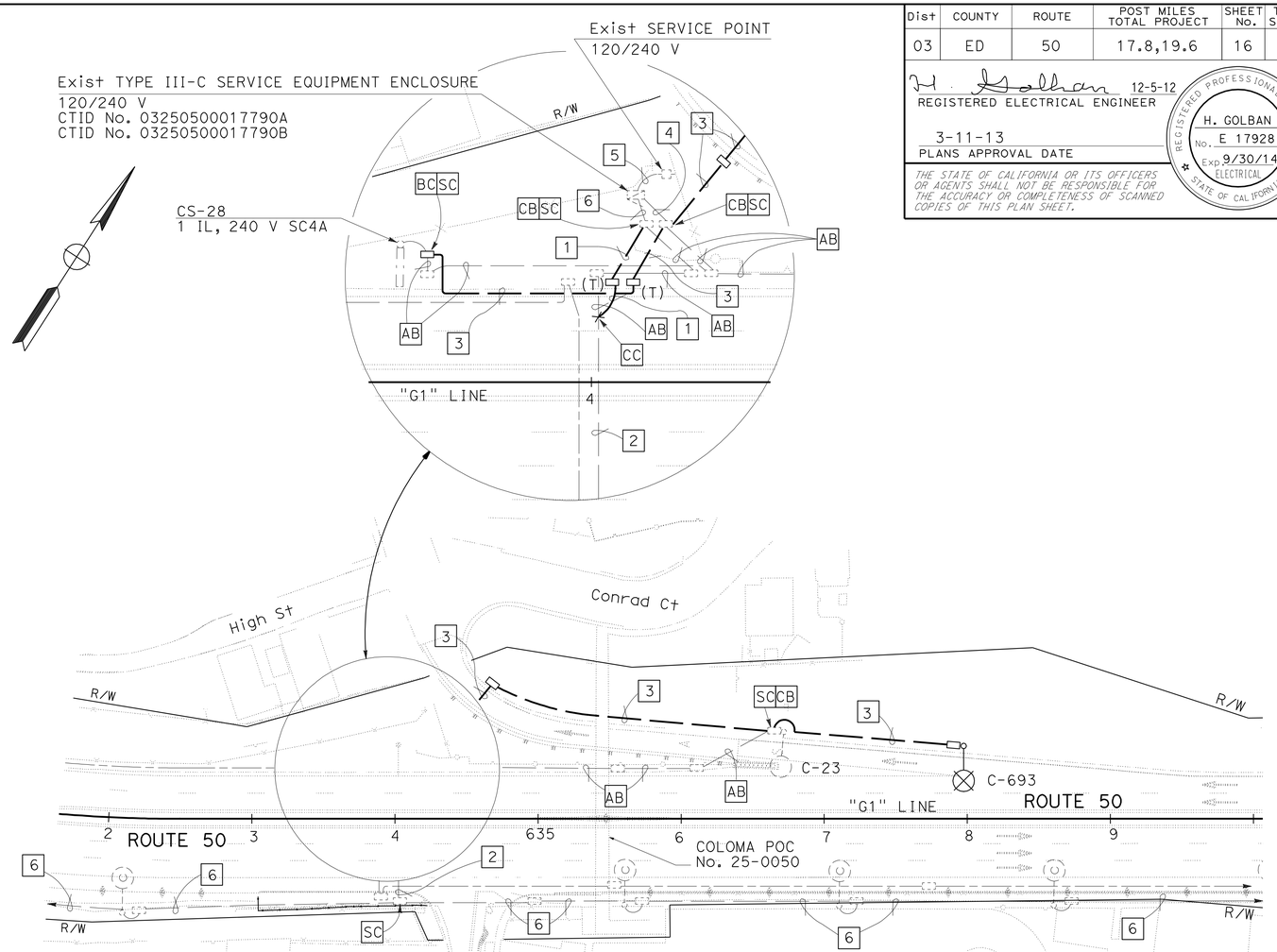
CTID No. 032505000177790A

Exist LOAD:
1-200 W HPS LUMINAIRES
1-85 W ISL SIGN LIGHTING

LOAD AFTER MODIFICATION:
2-200 W HPS LUMINAIRES
1-85 W ISL SIGN LIGHTING

CTID No. 032505000177790B

Exist LOAD:
10-70 W HPS LUMINAIRES



MODIFY LIGHTING AND SIGN ILLUMINATION

SCALE: 1" = 50'

E-2

APPROVED FOR ELECTRICAL WORK ONLY

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
ELECTRICAL DESIGN
FUNCTIONAL SUPERVISOR: NELSON LEE
CALCULATED-DESIGNED BY: HABIB GOLBAN
CHECKED BY: YOUNG TON
REVISED BY | DATE REVISED

LAST REVISION DATE PLOTTED => 13-MAR-2013
01-01-13 TIME PLOTTED => 10:46

BORDER LAST REVISED 7/2/2010 | USERNAME => s109858 | DGN FILE => 0300000077ua002.dgn | RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3 | UNIT 0403 | PROJECT NUMBER & PHASE 03000000771

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	ED	50	17.8,19.6	17	37

H. Golban 12-5-12
REGISTERED ELECTRICAL ENGINEER DATE

3-11-13
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
H. GOLBAN
No. E 17928
Exp. 9/30/14
ELECTRICAL
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.

NOTE:

THE QUANTITIES ON THIS SHEET ARE NOT A SEPARATE PAY ITEM AND ARE FOR INFORMATION ONLY.

MODIFY SIGNAL

SHEET No.	SIC	DLC	No. 5 (T) PULL BOX	No. 6 (T) PULL BOX	T&B IN STREET BY MACHINE 30" DEEP	2"C, TYPE 3	DETECTOR HANDHOLE	REMOVE EXISTING DETECTOR HANDHOLE	TERMINATE 2"C, TYPE 3	CONNECT NEW AND EXISTING CONDUIT	LOOPS (6' x 6')
	LF	LF	EA	EA	LF	LF	EA	EA	EA	EA	EA
E-1	4100	7800	2	1	625	625	3	3	9	2	8

MODIFY LIGHTING AND SIGN ILLUMINATION

SHEET No.	TYPE 30	No. 5 PULL BOX	No. 5 (T) PULL BOX	#6 CONDUCTOR	#8 CONDUCTOR	T&B IN STREET BY MACHINE 30" DEEP	2"C, TYPE 3	INSTALL CONDUIT IN EXISTING PULL BOX	INSTALL PULL BOX IN EXISTING CONDUIT RUN	2" TERMINATE PVC CONDUIT SCH40	CONNECT NEW AND EXISTING CONDUIT	SPLICE NEW TO EXISTING CONDUCTORS
	EA	LF	EA	LF	LF	LF	LF	EA	EA	EA	EA	EA
E-2	1	4	2	400	1400	645	645	5	1	15	1	10

APPROVED FOR ELECTRICAL WORK ONLY

ELECTRICAL QUANTITIES
E-3

REVISED BY | DATE REVISED
YOUNG TON | HABIB GOLBAN
CALCULATED-DESIGNED BY | CHECKED BY
FUNCTIONAL SUPERVISOR | NELSON LEE
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
ELECTRICAL DESIGN

LAST REVISION | DATE PLOTTED => 13-MAR-2013
01-01-13 | TIME PLOTTED => 10:46

BORDER LAST REVISED 7/2/2010
USERNAME => s109858
DGN FILE => 0300000077ua003.dgn
RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3
UNIT 0403
PROJECT NUMBER & PHASE 03000000771

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	ED	50	17.8,19.6	18	37

REGISTERED CIVIL ENGINEER — 12-7-12 DATE

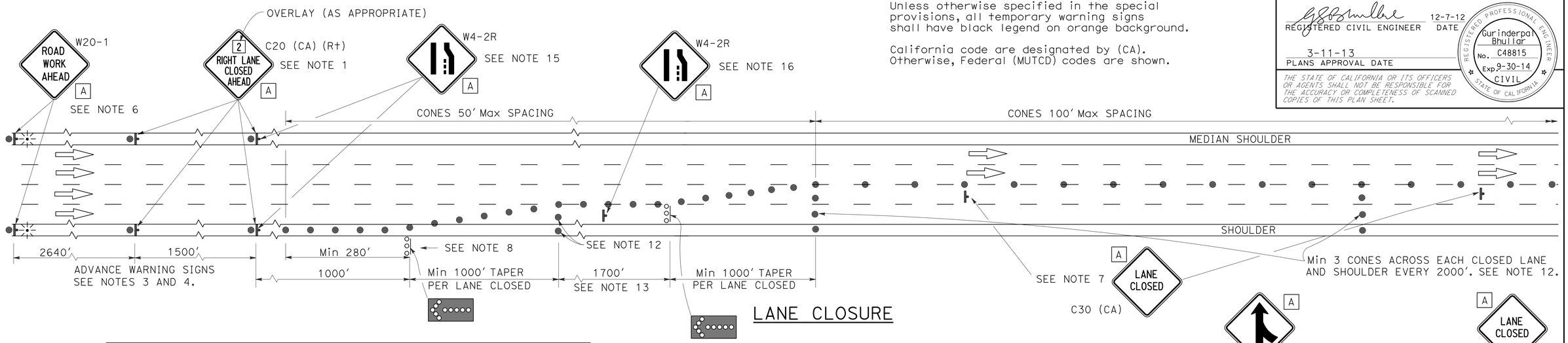
Gurinderpal Bhullar No. C48815 Exp. 9-30-14 CIVIL — REGISTERED PROFESSIONAL ENGINEER — STATE OF CALIFORNIA

3-11-13
PLANS APPROVAL DATE

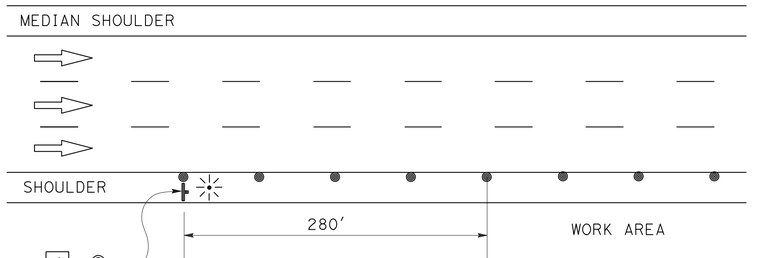
NOTES:

Unless otherwise specified in the special provisions, all temporary warning signs shall have black legend on orange background.

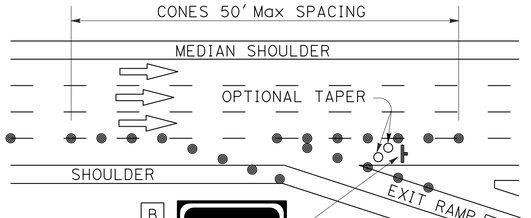
California code are designated by (CA). Otherwise, Federal (MUTCD) codes are shown.



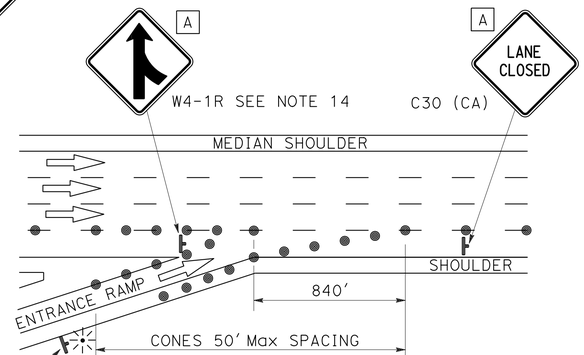
LANE CLOSURE



SHOULDER CLOSURE



LANE CLOSURE AT EXIT RAMP



LANE CLOSURE AT ENTRANCE RAMP

NOTES:

1. Median lane closures shall conform to the details for outside lane closures except that C20 (CA) (Lt) signs shall be used.
2. At least one person shall be assigned to provide full time maintenance of traffic control devices for lane closures.
3. Duplicate sign installations are not required:
   a) On opposite shoulder if at least one-half of the available lanes remain open to traffic.
   b) In the median if the width of the median shoulder is less than 8' and the outside lanes are to be closed.
4. Each advance warning sign on each side of the roadway shall be equipped with at least two flags for daytime closure. Each flag shall be at least 16" x 16" in size and shall be orange or fluorescent red-orange in color. Flashing beacons shall be placed at the locations indicated for lane closure during hours of darkness.
5. A C14 (CA) "END ROAD WORK" sign, as appropriate, shall be placed at the end of the lane closure unless the end of work area is obvious or ends within a larger project's limits.
6. If the W20-1 sign would follow within 2000' of a stationary W20-1 or C11 (CA) "ROAD WORK NEXT _____ MILES", use a C20 (CA) sign for the first advance warning sign.
7. Place a C30 (CA) sign every 2000' throughout length of lane closure.
8. One flashing arrow sign for each lane closed. The first flashing arrow sign shall be Type I. All others may be either Type I or Type II.
9. A minimum 1500' of sight distance shall be provided where possible for vehicles approaching the first flashing arrow sign. Lane closures shall not begin at top of crest vertical curve or on a horizontal curve.
10. All cones used for lane closures during the hours of darkness shall be fitted with retroreflective bands (or sleeves) as specified in the specifications.
11. Portable delineators, placed at one-half the spacing indicated for traffic cones may be used instead of cones for daytime closures only.
12. Unless otherwise specified in the special provisions, a minimum of 3 cones shall be placed transversely across each closed lane and shoulder at each location where a taper across a traffic lane ends and every 2000' as shown on the "Lane Closure" detail. Two Type II barricades may be used instead of the 3 cones. The transverse alignment of the cones or barricades on the closed shoulder may be shifted from the transverse alignment to provide access to the work.
13. Unless otherwise specified in the special provisions, the 1700' tangent shown along lane lines shall be used between the 1000' tapers required for each closed traffic lane.
14. Unless otherwise specified in the special provisions, the G84 (CA) and W4-1 signs shall be used as shown.
15. When specified in the special provisions, a W4-2 "LANE ENDS" symbol sign is to be used in place of the C20 (CA) "RIGHT LANE CLOSED AHEAD" sign.
16. The W4-2 "LANE ENDS" symbol sign shown at this location is to be used where the W4-2 sign is used as advance warning as described in Note 15.

SIGN PANEL SIZE (Min)

A	48" x 48"
B	54" x 48"

LEGEND

- TRAFFIC CONE
- TRAFFIC CONE (OPTIONAL TAPER)
- TEMPORARY SIGN
- FLASHING ARROW SIGN (FAS)
- FAS SUPPORT OR TRAILER
- PORTABLE FLASHING BEACON

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL SYSTEM FOR LANE CLOSURE ON FREEWAYS AND EXPRESSWAYS

NO SCALE

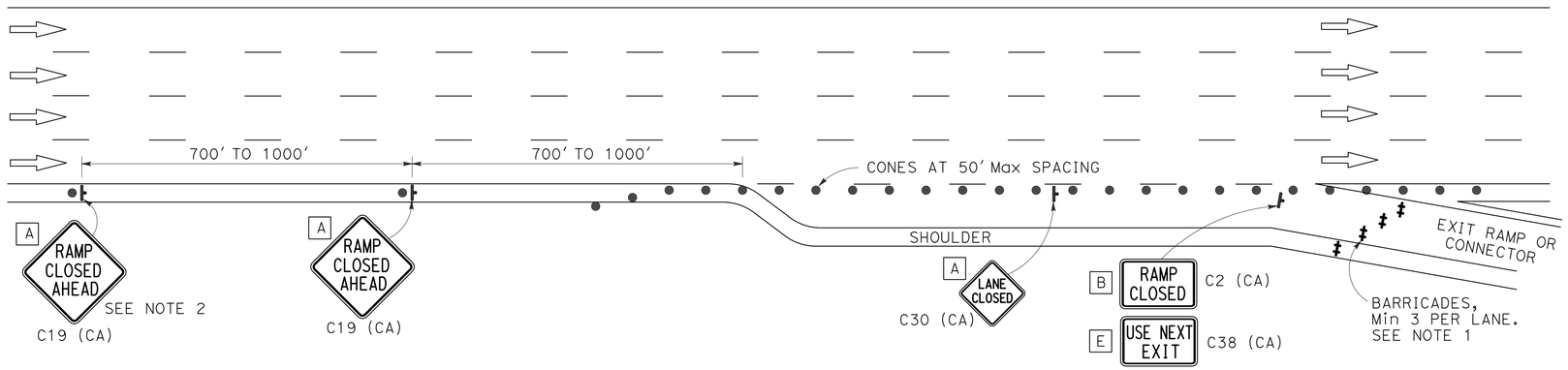
TCS-1

REVISED BY | DATE REVISED
CALCULATED-DESIGNED BY | CHECKED BY
FUNCTIONAL SUPERVISOR
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans

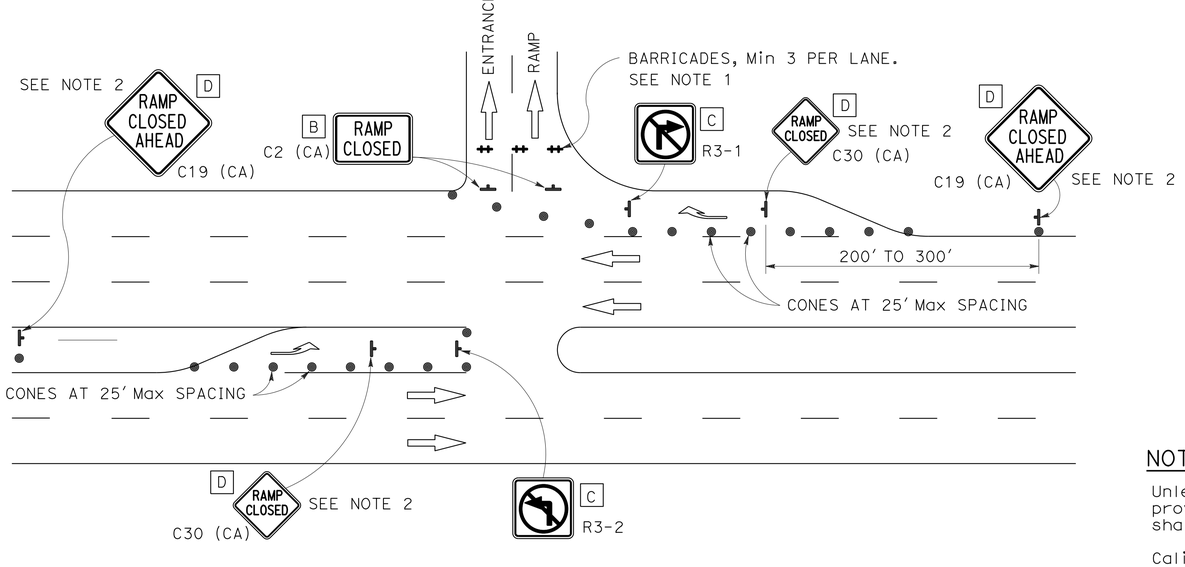
LAST REVISION | DATE PLOTTED => 13-MAR-2013
00-00-00 | TIME PLOTTED => 12:38

TYPICAL RAMP CLOSURES

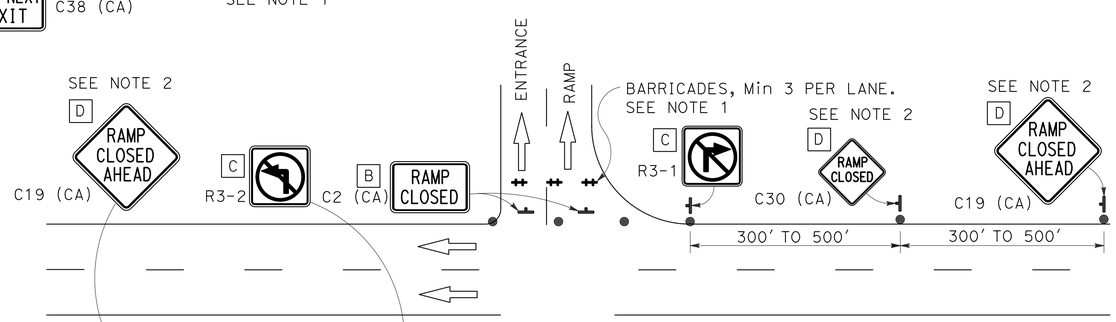
EXIT RAMP OR CONNECTOR



EXIT RAMP OR CONNECTOR WITH ADDITIONAL LANE



ENTRANCE RAMP WITH TURNING POCKETS



ENTRANCE RAMP WITHOUT TURNING POCKETS

SIGN PANEL SIZE (Min)

- A 48" x 48"
- B 48" x 30"
- C 30" x 30"
- D 48" x 48" - SPEED OF 50 mph OR MORE
  36" x 36" - SPEED LESS THAN 50 mph
- E 48" x 36"

LEGEND

- ● TRAFFIC CONE
- ⊢ TEMPORARY SIGN
- ‡ BARRICADES

NOTES:

1. Barricades shall be Type I, II, or III for closures lasting one week or less and Type III for closures lasting longer than one week.
2. In addition to placing the C19 (CA) "RAMP CLOSED AHEAD" and C30 (CA) "RAMP CLOSED" signs, black on orange overlay plates with the word "CLOSED" may be mounted, as directed by the Engineer, on all guide signs that refer to the closed ramp. The letter size on the overlay shall be the same as the guide sign.
3. Each advance C19 (CA) "RAMP CLOSED AHEAD" sign shall be equipped with at least two flags for daytime closure. Each flag shall be at least 16" x 16" in size and shall be orange or fluorescent red-orange in color.
4. All cones used for ramp closures during the hours of darkness shall be fitted with retroreflective bands (or sleeves) as specified in the specifications.
5. Portable delineators, placed at one-half the spacing indicated for traffic cones, may be used instead of cones for daytime ramp closures only.
6. At least one person shall be assigned to provide full time maintenance of traffic control devices, unless otherwise directed by the Engineer.
7. The existing "EXIT" sign in the gore area shall be covered during ramp closures.

NOTES:

Unless otherwise specified in the special provisions, all temporary warning signs shall have black legend on orange background.

California code are designated by (CA). Otherwise, Federal (MUTCD) codes are shown.

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	ED	50	17.8,19.6	19	37

REGISTERED CIVIL ENGINEER — 12-7-12 DATE

Gurinderpal Bhullar No. C48815 Exp. 9-30-14 CIVIL — REGISTERED PROFESSIONAL ENGINEER — STATE OF CALIFORNIA

3-11-13
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.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL SYSTEM FOR RAMP CLOSURE

NO SCALE

TCS-2

REVISED BY | DATE REVISED
CALCULATED-DESIGNED BY | CHECKED BY
FUNCTIONAL SUPERVISOR
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans

LAST REVISION | DATE PLOTTED => 13-MAR-2013
00-00-00 | TIME PLOTTED => 12:38

BORDER LAST REVISED 7/2/2010 | USERNAME => s123631 | DGN FILE => tcs14.dgn | RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3 | UNIT 0337 | PROJECT NUMBER & PHASE 03000000771

TO ACCOMPANY PLANS DATED 3-11-13

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	ED	50	17.8,19.6	20	37

Glenn DeCou
REGISTERED CIVIL ENGINEER

October 19, 2012
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — Glenn DeCou — No. C34547 — Exp. 9-30-13 — CIVIL — STATE OF CALIFORNIA

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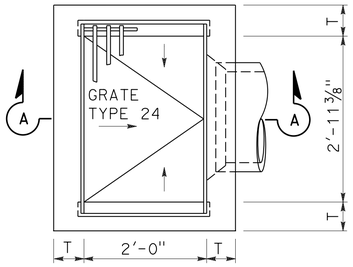
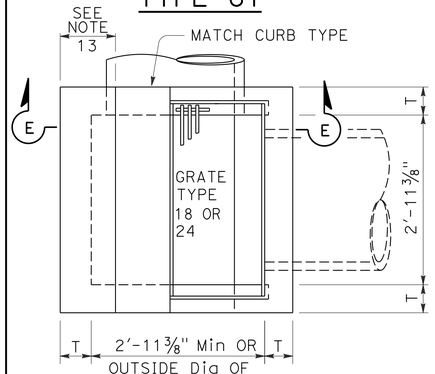
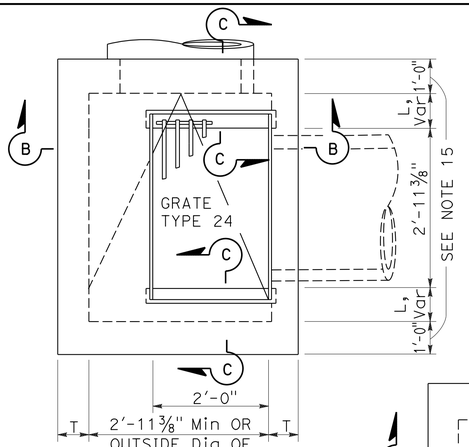


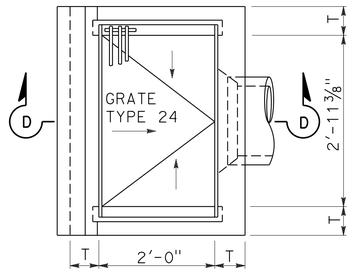
TYPE G1



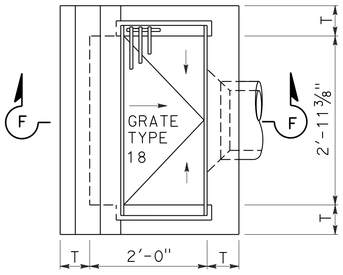
TYPE G4



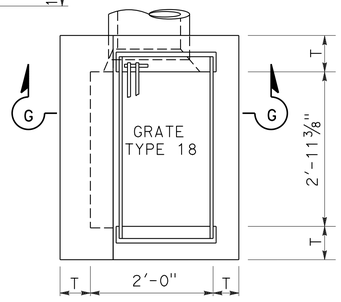
TYPE G2



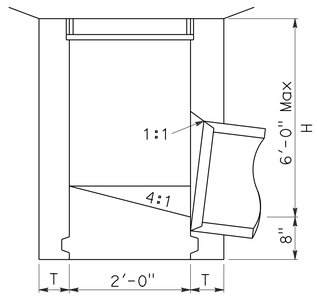
TYPE G3



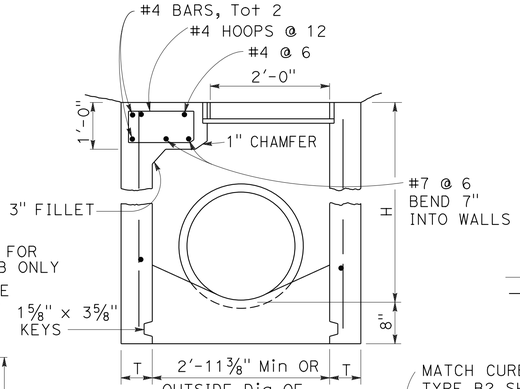
TYPE G5



TYPE G6



SECTION A-A



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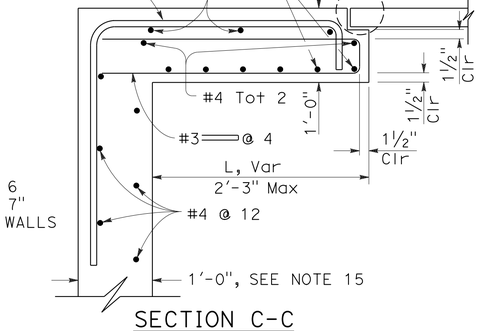
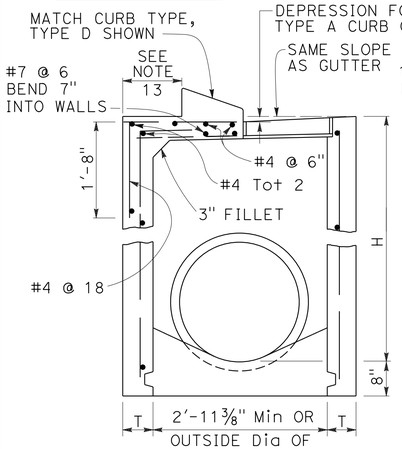
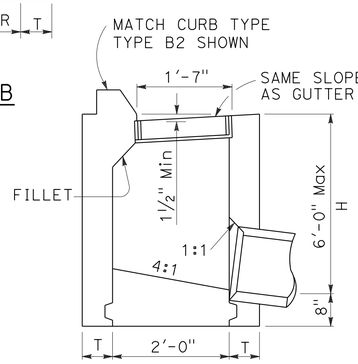


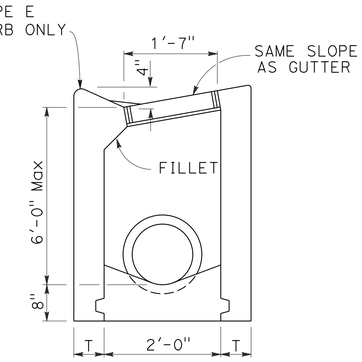
SECTION C-C



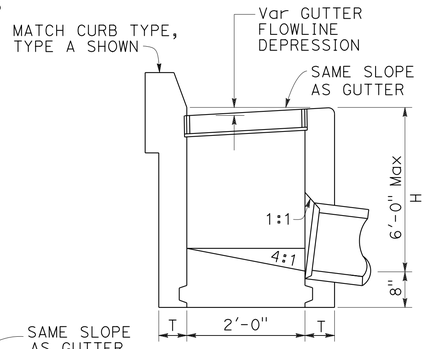
SECTION E-E



SECTION F-F



SECTION G-G



SECTION D-D

NOTES:

1. "H" is the difference in elevation between the outlet pipe flow line and the normal gutter grade line undepressed.
2. For "T" wall thickness, see Table A below.
3. Wall reinforcing not required when "H" is 8'-0" or less and the unsupported width or length is 7'-0" or less. Walls exceeding these limits shall be reinforced with #4 bars @ 1'-6" ± centers placed 1½" clear to inside of box unless otherwise shown.
4. Inlet bottom reinforcing not required. See Standard Plan D74C for alternative reinforced bottom and alternative half round bottom.
5. Steps-None required where "H" is less than 2'-6". Where "H" is 2'-6" or more, install steps with lowest rung 1'-0" above the floor and highest rung not more than 6" below top of inlet. The distance between steps shall not exceed 1'-0" and shall be uniform throughout the length of the wall. Place steps in the wall without an opening. Steps inserts may be substituted for the bar steps. Step inserts shall comply with State Industrial Safety requirements. See Standard Plan D74C for step details.
6. Details shown apply to both metal and concrete pipe.
7. Pipe(s) can be placed in any wall.
8. Curb section shall match adjacent curb.
9. Basin floors shall have wood trowel finish and a minimum slope of 12:3 from all directions toward outlet pipe.
10. Set inlet so that grate bars are parallel to direction of principal surface flow.
11. See Revised Standard Plans D77A and D77B for grate and frame details and weights of miscellaneous iron and steel.
12. See Standard Plan D78A for gutter depression details.
13. This dimenison will vary with different grates, curbs types, box width and wall thickness.
14. Bar may be rotated as necessary to clear opening. Where "L" is 6" or less, bar may be omitted.
15. Where "L" is 6" or less, wall thickness shall be as shown in Table A.
16. Cast-in-place inlets to be formed around all pipes/stubs intersecting the inlet, and concrete poured in one continuous operation. Precast inlets shall have mortared connections conforming to details for Type GCP Inlet shown on Standard Plan D75B. See Standard Specifications for mortar composition.

TABLE A

TYPE	CONCRETE QUANTITIES			
	H=3'-0" TO 8'-0" (T=6")		H=8'-1" TO 20'-0" (T=8")	
	H=3'-0" (CY)	ADDITIONAL PCC PER FOOT (CY)	H=8'-1" (CY)	ADDITIONAL PCC PER FOOT (CY)
G-1	0.95	0.220	See Note A	SEE NOTE A
G-2*	1.31	0.255	3.50	0.357
G-3	1.03	0.220	See Note A	SEE NOTE A
G-4* (TYPE 24)	1.27	0.255	3.48	0.357
G-4* (TYPE 18)	1.30	0.255	3.50	0.357
G-5	1.02	0.220	SEE NOTE A	SEE NOTE A
G-6	1.04	0.220	SEE NOTE A	SEE NOTE A

TABLE BASED ON 8" FLOOR SLAB. NO DEDUCTIONS ARE TO BE MADE TO THESE QUANTITIES BECAUSE OF PIPE OPENINGS, DIFFERENT FLOOR ALTERNATIVES OR DIFFERENT CURB TYPES. * QUANTITIES FOR TYPE G-2 AND G-4 INLETS BASED ON THE MINIMUM INTERIOR DIMENSIONS.

NOTE A:

Maximum allowable height 6'-0".

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DRAINAGE INLETS

NO SCALE

RSP D73 DATED OCTOBER 19, 2012 SUPERSEDES STANDARD PLAN D73 DATED MAY 20, 2011 - PAGE 156 OF THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP D73

2010 REVISED STANDARD PLAN RSP D73

7-19-12

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	ED	50	17.8,19.6	21	37

Raymond Don Tsztoo
REGISTERED CIVIL ENGINEER

July 20, 2012
PLANS APPROVAL DATE

Raymond Don Tsztoo
No. C37332
Exp. 6-30-14
CIVIL
REGISTERED PROFESSIONAL ENGINEER
STATE OF CALIFORNIA

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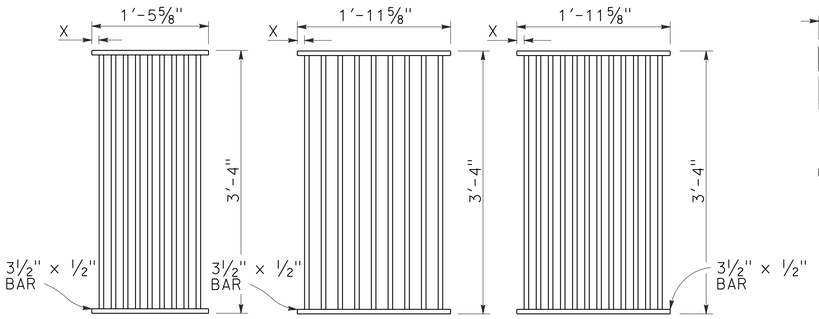
TO ACCOMPANY PLANS DATED 3-11-13



TYPE 18-9

1⅜" Clear spacing. Use within the roadbed on highways where bicycles and pedestrians are excluded.

TYPE 24-9

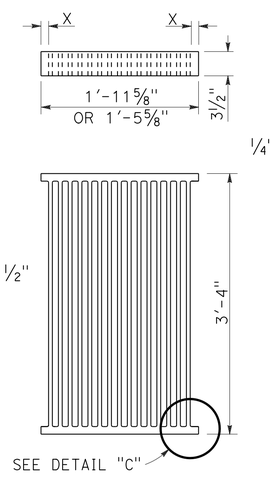
2" Clear spacing. Use in locations off the roadbed on all types of highways.

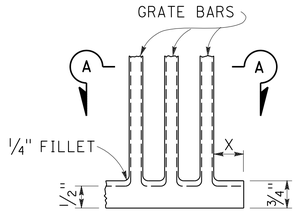
TYPE 24-12

1⅜" Clear spacing. Use within the roadbed on highways where bicycles and pedestrians are excluded.

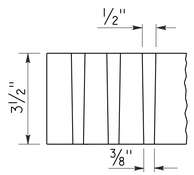
RECTANGULAR GRATE DETAILS

(See table below)

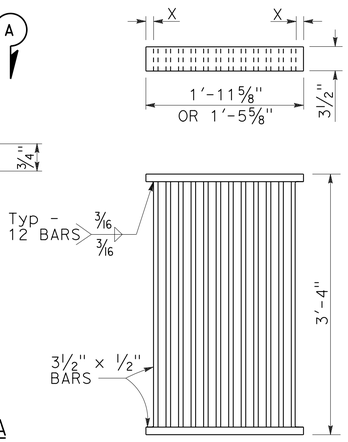




DETAIL "C"

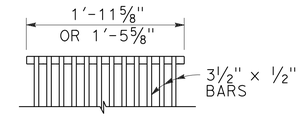


SECTION A-A

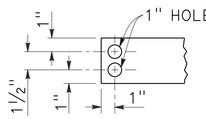


ALTERNATIVE CAST DUCTILE IRON GRATE OR CAST CARBON STEEL GRATE

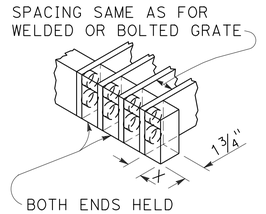
ALTERNATIVE WELDED GRATE



CAST END BLOCK



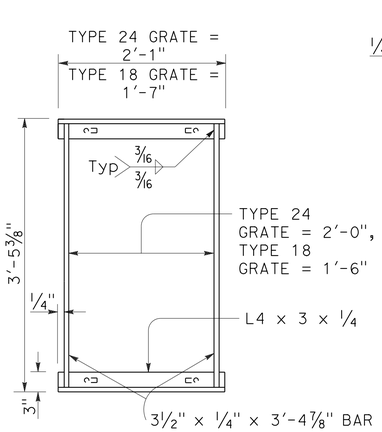
END OF BAR



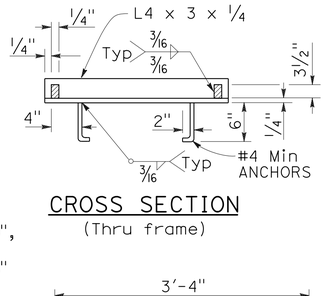
ALTERNATIVE CAST DUCTILE IRON OR CAST CARBON STEEL END BLOCK GRATE

NOTES:

1. Grate type numbers refer to approximate width of grate in inches and number of bars, respectively.
2. Contractor has the option of using cast ductile iron, cast carbon steel, welded, bolted, or cast end block grate.
3. Rounded top of bars optional on all grates.
4. Pipe inlets with a grate shall be placed so that bars parallel direction of principle surface flow.
5. Complete joint penetration butt welds may be substituted for the fillet welds on all anchors.
6. Standard square, hexagon, round or equivalent headed anchors may be substituted for the right angle hooks on the anchors shown on this plan.
7. Grate and frame weights are based on welded grates (weights of face angles, steps, protection bars, etc. are not included).
8. Connect chain to grate and frame only at locations shown on the plans. When chain is required, do not use cast ductile iron grates.

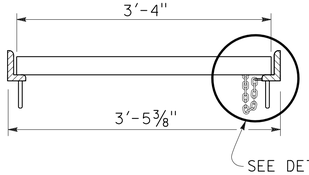


TYPICAL FRAME



CROSS SECTION

(Thru frame)

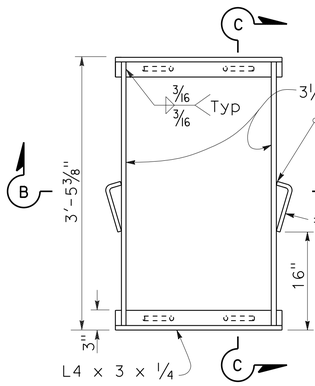


LONGITUDINAL SECTION

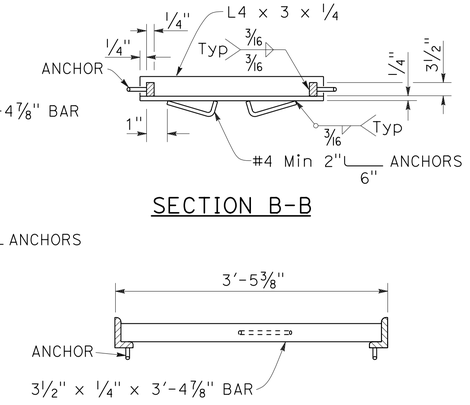
(Thru frame and grate)

RECTANGULAR FRAME DETAILS

(For all rectangular grates)



TYPICAL FRAME

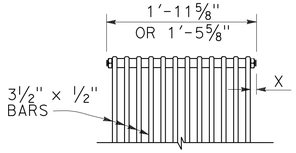


SECTION B-B

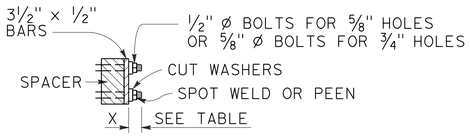
SECTION C-C

ALTERNATIVE ANCHOR FOR RECTANGULAR FRAME

(For details not shown, See Rectangular Frame Details)

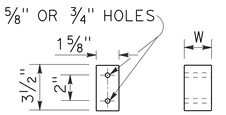


BOLTED END BLOCK

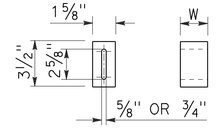


BOLTING DETAIL

ALTERNATIVE BOLTED GRATE

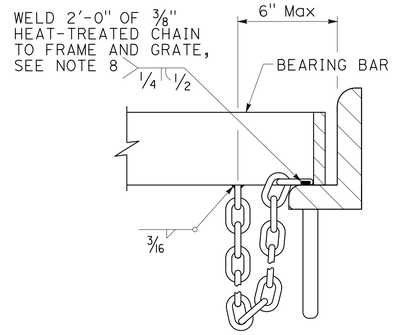


BAR SPACER



ALTERNATIVE SPACER

W = 1⅜" or 2"



DETAIL "D"

(Steel grates only)

GRATE BAR SPACING TABLE

TYPE	No. OF BARS	CLEAR BAR SPACING	X
18-9	9	1⅜"	1 1/16"
24-9	9	2"	1 9/16"
24-12	12	1⅜"	1¼"

INLET TYPE	COVER TYPE	WEIGHT LB
OS	PLATE	174
OL-7	PLATE	170
OL-10	PLATE	170
OL-14	PLATE	170
OL-21	PLATE	170
OCP	PLATE	112
OCPI	PLATE	112
OCPI	REDWOOD	42
OMP	PLATE	177
OMPI	PLATE	177

INLET TYPE	GRATE TYPE	No. OF GRATES	WEIGHT LB
GDO	24-12	2	634
GOL-7	24-12	1	326
GOL-10	24-12	1	326
GO,G1,G2,G3,G4 (TYPE 24)	24-9	1	263
	24-12	1	326
G4 (TYPE 18),G5,G6	18-9	1	249
GT1	18-9	2	498
GT2	18-9	2	498
GT3	24-12	2	652
GT4	24-12	2	652
TRASH RACK			22
GRATE CHAIN			3

BASIS FOR Misc IRON & STEEL FINAL PAY WEIGHTS FOR DRAINAGE INLETS

(See Note 7)

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

GRATE DETAILS

NO SCALE

RSP D77A DATED JULY 20, 2012 SUPERSEDES STANDARD PLAN D77A DATED MAY 20, 2011 - PAGE 164 OF THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP D77A

2010 REVISED STANDARD PLAN RSP D77A

6-13-12

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
03	ED	50	17.8,19.6	22	37

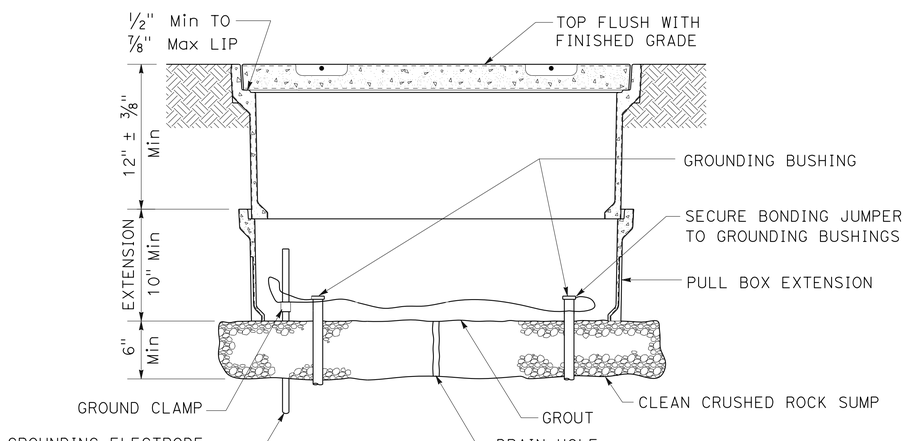
Jeffery G. McRae
REGISTERED ELECTRICAL ENGINEER

January 20, 2012
PLANS APPROVAL DATE

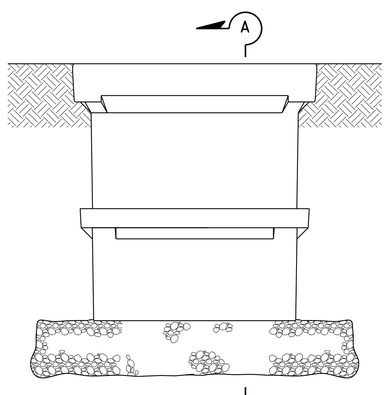
REGISTERED PROFESSIONAL ENGINEER
Jeffery G. McRae
No. E14512
Exp. 6-30-12
ELECTRICAL
STATE OF CALIFORNIA

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.

TO ACCOMPANY PLANS DATED 3-11-13



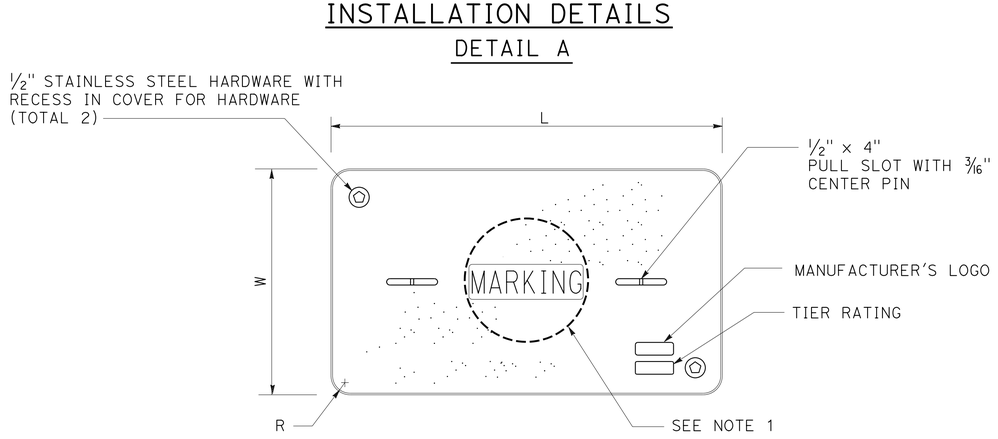
SECTION A-A



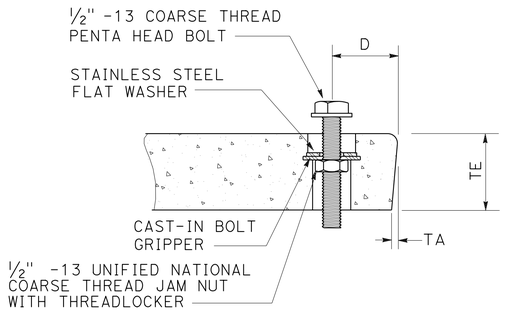
SIDE VIEW

INSTALLATION DETAILS

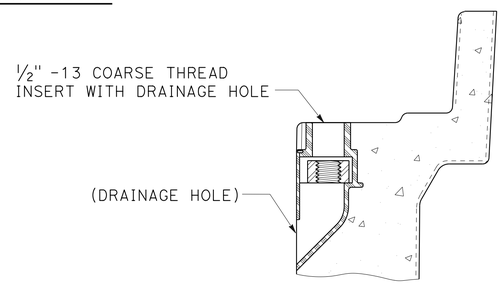
DETAIL A



COVER TOP VIEW



TYPICAL COVER CAPTIVE BOLT
OR SIMILAR



TYPICAL THREADED INSERT
OR SIMILAR

DIMENSION TABLE

PULL BOX	PULL BOX			COVER						
	MINIMUM DEPTH BOX	MINIMUM DEPTH EXTENSION	MAXIMUM WEIGHT	L	W	R	TE	TA	D	MAXIMUM WEIGHT
No. 3½	12"	N/A	40 lb	1' - 3⅜"	10⅛"	1⅜"	2"	⅛"	1¾"	30 lb
No. 5	12"	10"	55 lb	1' - 11¼"	1' - 1¾"	1⅜"	2"	⅛"	1¾"	60 lb
No. 6	12"	10"	70 lb	2' - 6½"	1' - 5½"	1⅜"	2"	⅛"	2"	85 lb

NOTES ON PULL BOXES:

1. Pull box covers must be marked as follows: "SERVICE" Service circuits between service point and service disconnect; "SPRINKLER-CONTROL" sprinkler control circuits, 50 V or less; "CALTRANS" on all pull boxes, except pull boxes marked "SPRINKLER-CONTROL"; and "TELEPHONE" Telephone service;

   A) No. 3½ pull box.
   1) "SIGNAL" - Traffic signal circuits with or without street or sign lighting circuits.
   2) "ST LIGHTING" - Street or sign lighting circuits where voltage is under 600 V.

   B) No. 5, 6, 9 or 9A pull box.
   1) "TRAFFIC SIGNAL" - Traffic signal circuits with or without street or sign lighting circuits.
   2) "STREET LIGHTING" - Street or sign lighting circuits where voltage is under 600 V.
   3) "STREET LIGHTING-HIGH VOLTAGE" - Street or sign lighting circuits where voltage is above 600 V.
   4) "IRRIGATION" - Circuits to irrigation controller 120 V or more.
   5) "RAMP METER" - Ramp meter circuits.
   6) "COUNT STATION" - Count or speed monitor circuits.
   7) "COMMUNICATIONS" - Communication circuits.
   8) "TOS COMMUNICATIONS" - TOS communication line.
   9) "TOS POWER" - TOS power.
   10) "TDC POWER" - Telephone demarcation cabinet power.
   11) "CCTV" - Closed circuit television circuits.
   12) "TMS" - Traffic monitoring station circuits.
   13) "CMS" - Changeable message sign circuits.
   14) "HAR" - Highway advisory radio circuits.

2. The nominal dimensions of the opening in which the cover sets must be the same as the cover dimensions (L and W) plus ⅛" or greater.
3. Covers and boxes must be interchangeable with California Standard. When interchanged with a standard, the top surfaces must be flush within ⅛". Top outside radius of covers and pull boxes must have a ⅛" radius.
4. Pull box extension may be another pull box as long as the bottom edge of the pull box can fit into the cover opening.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

ELECTRICAL SYSTEMS (PULL BOX)

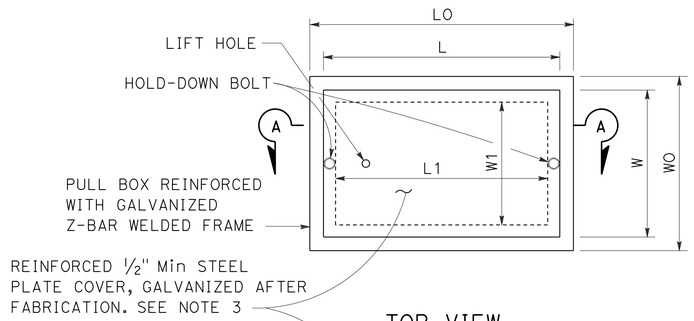
NO SCALE

RSP ES-8A DATED JANUARY 20, 2012 SUPPLEMENTS THE STANDARD PLANS BOOK DATED 2010.

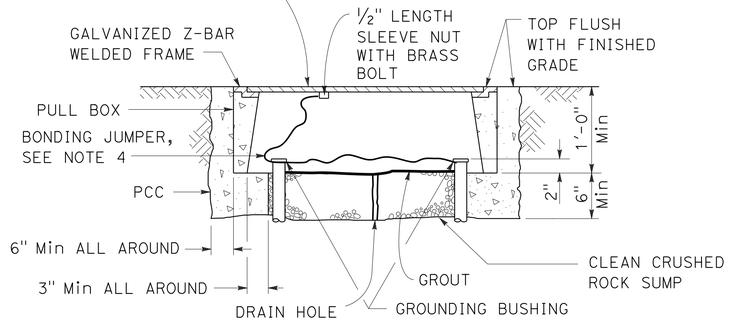
REVISED STANDARD PLAN RSP ES-8A

2010 REVISED STANDARD PLAN RSP ES-8A

01-09-12



TOP VIEW



SECTION A-A

No. 3½(T), No. 5(T) AND No. 6(T) TRAFFIC PULL BOX

DIMENSION TABLE											
PULL BOX	BOX						COVER				
	MINIMUM * THICKNESS	MINIMUM DEPTH BOX AND EXTENSION	WO	LO	L1	W1	L **	W **	R	EDGE THICKNESS	EDGE TAPER
No. 3½(T)	1½"	1'-0"	1'-5"± 1"	1'-8⅞"±	1'-2½"±	10⅝"± 1"	1'-8"±	1'-1¾"±	0"	½"	NONE
No. 5(T)	1¾"	1'-0"	1'-11½"± 1"	2'-5½"±	1'-7"±	1'-1"± 1"	2'-3"±	1'-4"±	0"	½"	NONE
No. 6(T)	2"	1'-0"	2'-6"± 1"	2'-11½"±	1'-11½"±	1'-5"± 1"	2'-9"±	1'-8"±	0"	½"	NONE

* EXCLUDING CONDUIT WEB ** TOP DIMENSION

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
03	ED	50	17.8,19.6	23	37

Jeffery G. McRae
REGISTERED ELECTRICAL ENGINEER

Jeffery G. McRae
No. E14512
Exp. 6-30-12
ELECTRICAL

REGISTERED PROFESSIONAL ENGINEER
STATE OF CALIFORNIA

January 20, 2012
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.

TO ACCOMPANY PLANS DATED 3-11-13

NOTES ON PULL BOXES:

1. Traffic pull box shall be provided with steel cover and special concrete footing. Steel cover shall have embossed non-skid pattern.
2. Steel reinforcing shall be as regularly used in the standard products of the respective manufacturer.
3. Pull box covers must be marked as follows: "SERVICE" Service circuits between service point and service disconnect; "SPRINKLER-CONTROL" Sprinkler control circuits, 50 V or less; "CALTRANS" On all pull boxes, except pull boxes marked "SPRINKLER-CONTROL"; and "TELEPHONE" Telephone service.
   A) No. 3½(T) pull box.
      1) "SIGNAL" - Traffic signal circuits with or without street or sign lighting circuits.
      2) "ST LIGHTING" - Street or sign lighting circuits where voltage is under 600 V.
   B) No. 5(T) or 6(T) pull box.
      1) "TRAFFIC SIGNAL" - Traffic signal circuits with or without street or sign lighting circuits.
      2) "STREET LIGHTING" - Street or sign lighting circuits where voltage is under 600 V.
      3) "STREET LIGHTING-HIGH VOLTAGE" - Street or sign lighting circuits where voltage is above 600 V.
      4) "IRRIGATION" - Circuits to irrigation controller 120 V or more.
      5) "RAMP METER" - Ramp meter circuits.
      6) "COUNT STATION" - Count or speed monitor circuits.
      7) "COMMUNICATION" - Communication circuits.
      8) "TOS COMMUNICATIONS" - TOS communications line.
      9) "TOS POWER" - TOS power.
      10) "TDC POWER" - Telephone demarcation cabinet power.
      11) "CCTV" - Closed circuit television circuits.
      12) "TMS" - Traffic monitoring station circuits.
      13) "CMS" - Changeable message sign circuits.
      14) "HAR" - Highway advisory radio circuits.
4. Bonding jumper for metal covers shall be 3' long, minimum.
5. The nominal dimensions of the opening in which the cover sets must be the same as the cover dimensions except the length and width dimensions shall be ⅛" greater.
6. Covers and boxes must be interchangeable with California standard male and female gages. When interchanged with a standard male or female gage, the top surfaces must be flush within ⅛".

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

ELECTRICAL SYSTEMS (TRAFFIC RATED PULL BOX)

NO SCALE

RSP ES-8B DATED JANUARY 20, 2012 SUPPLEMENTS THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP ES-8B

2010 REVISED STANDARD PLAN RSP ES-8B

01-05-12

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	ED	50	17.8,19.6	24	37

Jeffery G. McRae
REGISTERED ELECTRICAL ENGINEER

July 20, 2012
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
Jeffery G. McRae
No. E14512
Exp. 6-30-14
ELECTRICAL
STATE OF CALIFORNIA

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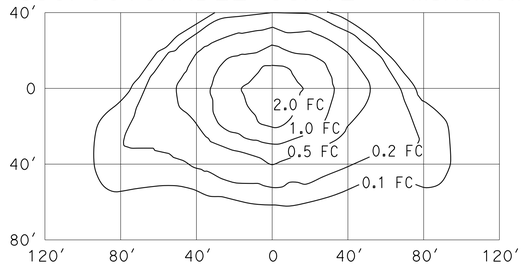
TO ACCOMPANY PLANS DATED 3-11-13

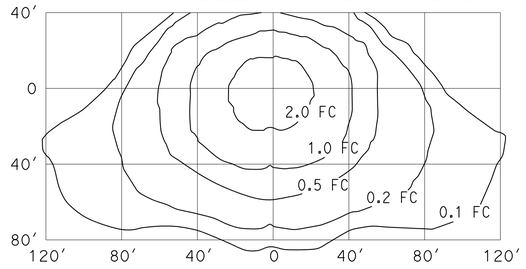
ISOFOOTCANDLE CURVE - MINIMUM



TYPE III MEDIUM CUTOFF

Cutoff Luminaire
34′ Mounting Height
Lamp operated at 22,000 lm
200-W high pressure sodium lamp
ANSI Designation S66

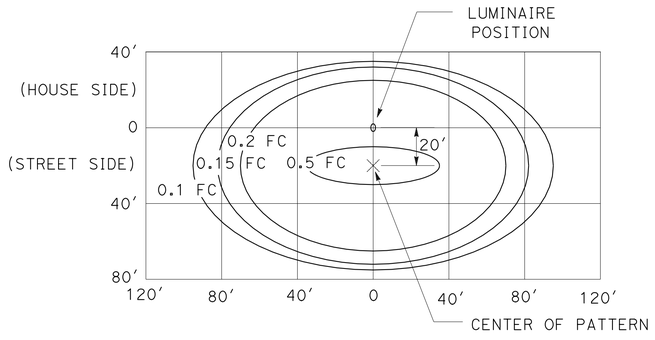
ISOFOOTCANDLE CURVE - MINIMUM



TYPE III MEDIUM CUTOFF

Cutoff Luminaire
40′ Mounting Height
Lamp operated at 37,000 lm
310-W high pressure sodium lamp
ANSI Designation S67

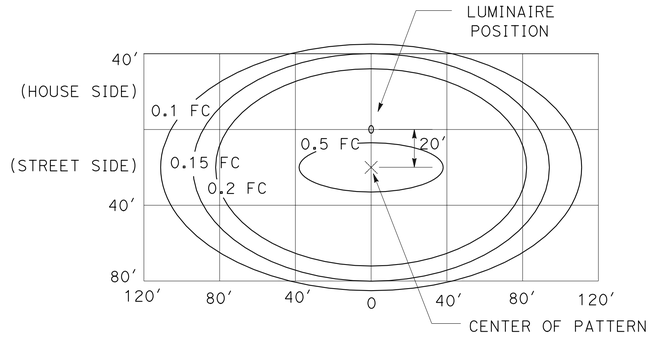
ISOFOOTCANDLE CURVE - MINIMUM



LED LUMINAIRE ROADWAY 1

200-W HPS Equivalent at 34′ Mounting Height

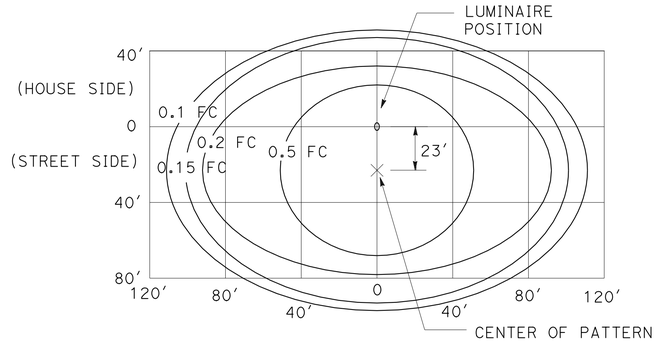
ISOFOOTCANDLE CURVE - MINIMUM



LED LUMINAIRE ROADWAY 2

310-W HPS Equivalent at 40′ Mounting Height

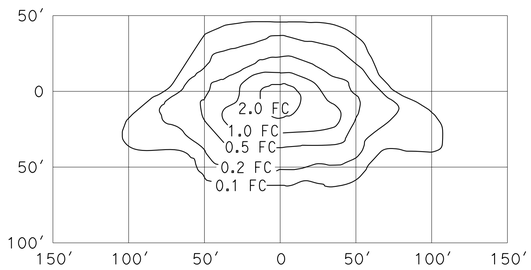
ISOFOOTCANDLE CURVE - MINIMUM



LED LUMINAIRE ROADWAY 4

400-W HPS Equivalent at 40′ Mounting Height

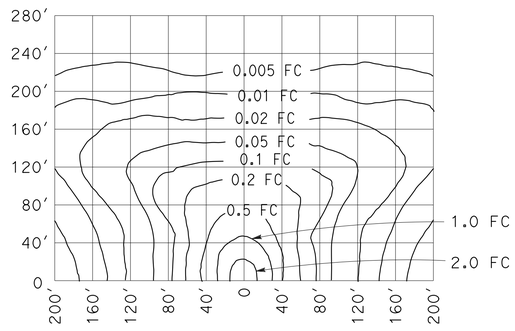
ISOFOOTCANDLE CURVE - MINIMUM



TYPE III MEDIUM CUTOFF

Cutoff Luminaire
30′ Mounting Height
Lamp operated at 16,000 lm
150-W high pressure sodium lamp
ANSI Designation S55

ISOFOOTCANDLE CURVE - MINIMUM



LOW PRESSURE SODIUM LUMINAIRE

40′ Mounting Height
Lamp operated at 33,000 lm
180-W low pressure sodium lamp

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

ELECTRICAL SYSTEMS (ISOFOOTCANDLE DIAGRAMS)

NO SCALE

RSP ES-10A DATED JULY 20, 2012 SUPPLEMENTS THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP ES-10A

2010 REVISED STANDARD PLAN RSP ES-10A

2-16-12

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	ED	50	17.8,19.6	25	37

Robert G Jones 10/24/12
REGISTERED CIVIL ENGINEER DATE

3-11-13
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — Robert G. Jones — No. 65676 — Exp. 9/30/13 — CIVIL — STATE OF CALIFORNIA

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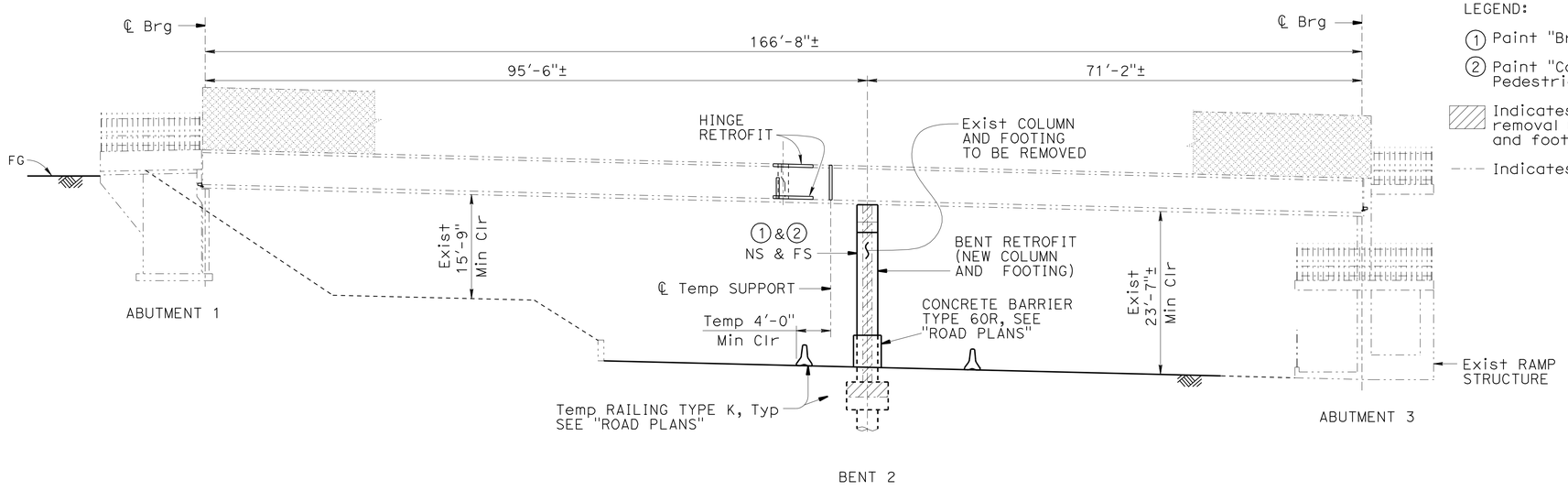


LEGEND:

① Paint "Bridge No. 25-0050"

② Paint "Coloma Street Pedestrian Overcrossing"

Indicates limits of bridge removal (existing column and footing)

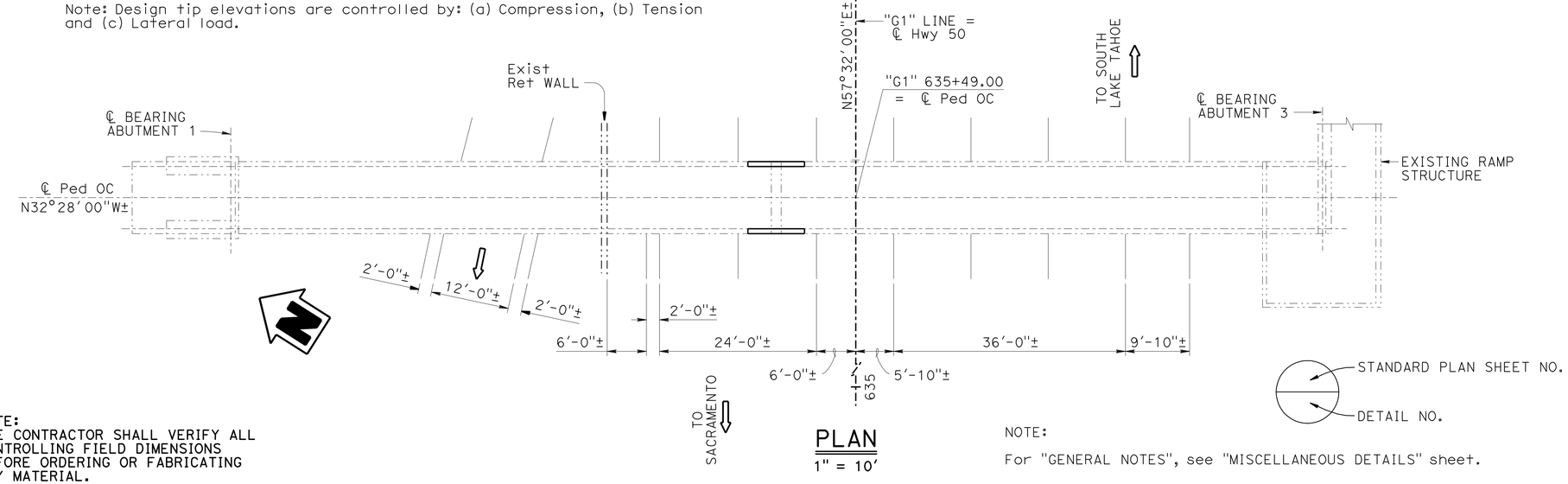
Indicates existing structure

DATUM ELEVATION = 1820.0

ELEVATION
1" = 10'

PILE DATA TABLE						
LOCATION	PILE TYPE	CUT-OFF ELEVATION (ft)	NOMINAL RESISTANCE (KIP)		DESIGN TIP ELEVATION (ft)	SPECIFIED TIP ELEVATION (ft)
			COMPRESSION	TENSION		
Bent 2	36" ø CIDH	1839.5	300	35	1827 (a) 1832 (b) 1830 (c)	1827

Note: Design tip elevations are controlled by: (a) Compression, (b) Tension and (c) Lateral load.



PLAN
1" = 10'

NOTE:
THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

STANDARD PLAN SHEET NO.

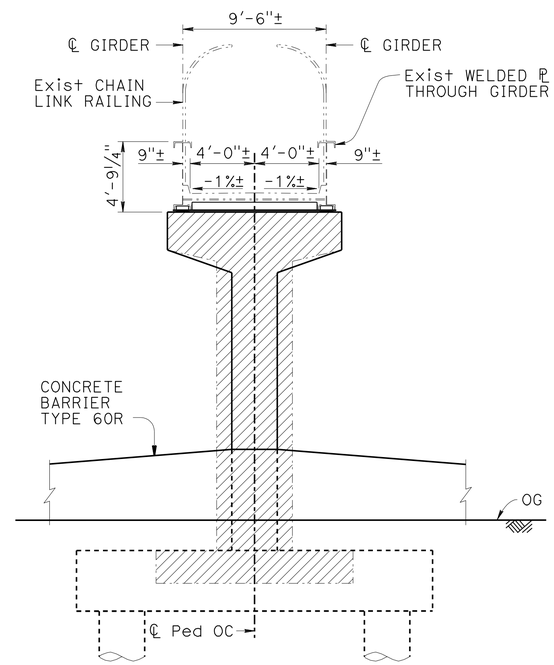
DETAIL NO.

NOTE:

For "GENERAL NOTES", see "MISCELLANEOUS DETAILS" sheet.

QUANTITIES

BRIDGE REMOVAL (PORTION)	LUMP	SUM
STRUCTURE EXCAVATION (BRIDGE)	45	CY
STRUCTURE BACKFILL (BRIDGE)	24	CY
TEMPORARY SUPPORT	LUMP	SUM
36" CAST-IN-DRILLED-HOLE CONCRETE PILING	25	LF
STRUCTURAL CONCRETE, BRIDGE FOOTING	21	CY
STRUCTURAL CONCRETE, BRIDGE	12	CY
ARCHITECTURAL TREATMENT (BRICK TEXTURE)	185	SQFT
BAR REINFORCING STEEL (BRIDGE)	10,130	LB
PREPARE AND STAIN CONCRETE	306	SQFT
MISCELLANEOUS METAL (PIPE KEY)	120	LB
MISCELLANEOUS METAL (BRIDGE)	2,900	LB



TYPICAL SECTION
1" = 5'

INDEX TO PLANS

1. GENERAL PLAN
2. MISCELLANEOUS DETAILS
3. BENT DETAILS
4. GIRDER RETROFIT DETAILS
5. HINGE RETROFIT DETAILS
6. LOG OF TEST BORINGS 1 OF 2
7. LOG OF TEST BORINGS 2 OF 2

STANDARD PLANS DATED 2010

A10A	ABBREVIATIONS (SHEET 1 OF 2)
A10B	ABBREVIATIONS (SHEET 2 OF 2)
A10F	LEGEND - SOIL (SHEET 1 OF 2)
A10G	LEGEND - SOIL (SHEET 2 OF 2)
A10H	LEGEND - ROCK
A62C	LIMITS OF PAYMENT FOR EXCAVATION AND BACKFILL BRIDGE

Jeff Sims
DESIGN ENGINEER

DESIGN	BY Greg Jones	CHECKED Kevin Harper	LOAD & RESISTANCE FACTOR DESIGN	LIVE LOADING: PEDESTRIAN LOAD 90.0 PSF	
DETAILS	BY B.Huddleston / J.Zhou	CHECKED Kevin Harper	LAYOUT	BY Greg Jones	CHECKED Kevin Harper
QUANTITIES	BY Greg Jones	CHECKED Wendy Hou	SPECIFICATIONS	BY Bryan Nagid	PLANS AND SPECS COMPARED Bryan Nagid

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 1

UNIT: 3576
PROJECT NUMBER & PHASE: 03000000771
CONTRACT NO.: 03-0F3004

BRIDGE NO. 25-0050
POST MILE 17.78

EARTHQUAKE RETROFIT PROJECT

COLOMA STREET PEDESTRIAN OVERCROSSING

GENERAL PLAN

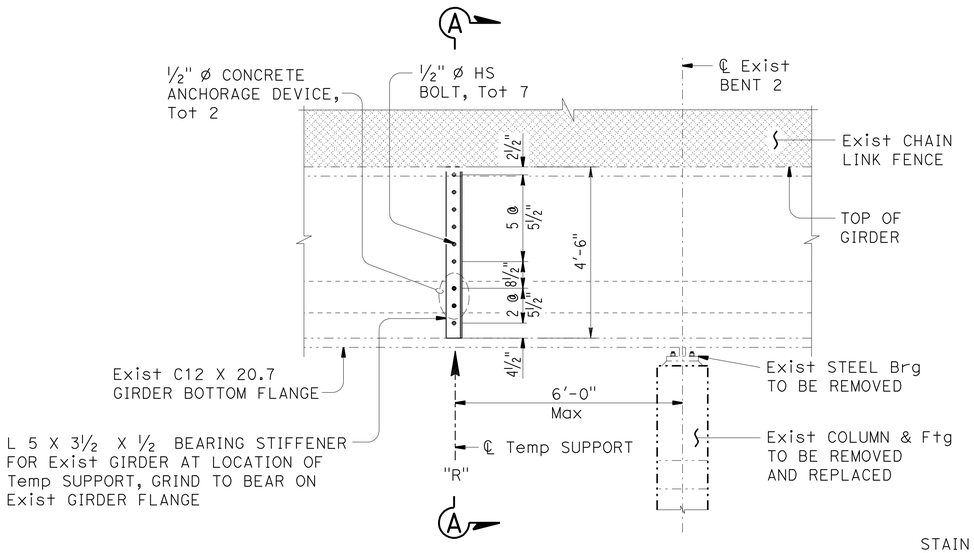
DISREGARD PRINTS BEARING EARLIER REVISION DATES →

REVISION DATES				SHEET	OF
8-24-11		10-05-12	8-15-12	1	7

USERNAME => s113946 DATE PLOTTED => 13-MAR-2013 TIME PLOTTED => 10:58

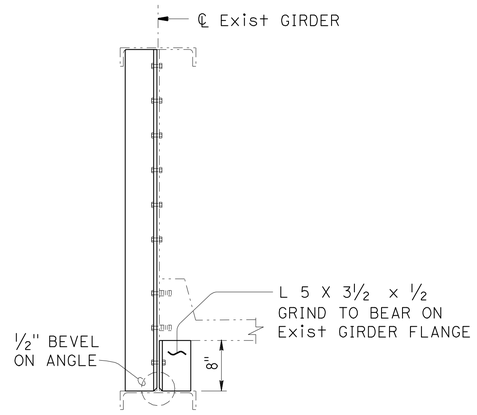
STRUCTURES DESIGN GENERAL PLAN SHEET (ENGLISH) (REV.09-01-10)

FILE => 25-0050-a-gp01.dgn



TEMPORARY SUPPORT

½" = 1'-0"



SECTION A-A

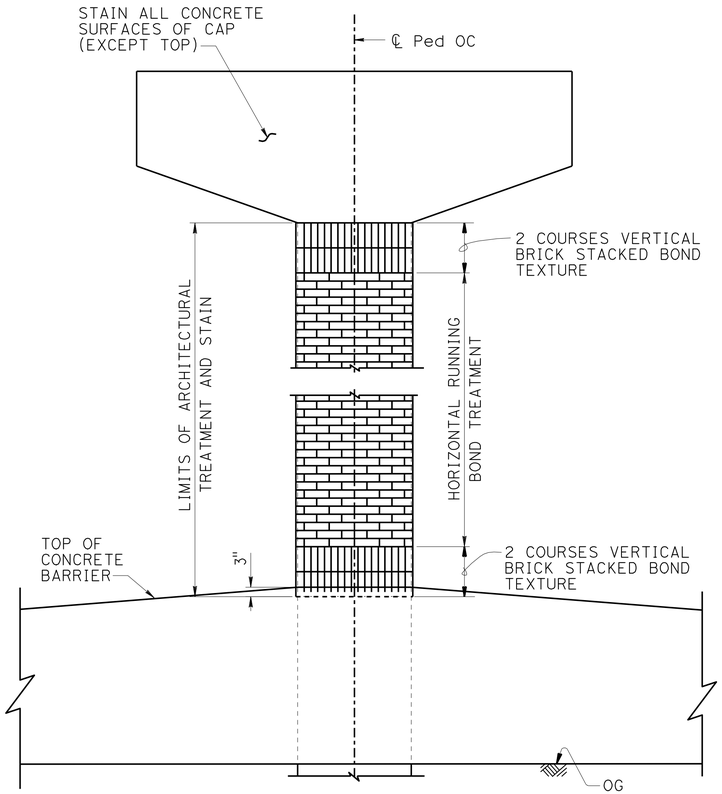
1" = 1'-0"

TEMPORARY SUPPORT DESIGN DATA TABLE

INITIAL JACKING LOADS AND MINIMUM TEMPORARY SUPPORT DESIGN LOADS		MINIMUM LATERAL TEMPORARY SUPPORT DESIGN VALUES	
Initial jacking force (kips)	Minimum temporary support design load "R" (kips)	Transverse force (kips)	Transverse stiffness (kips/ft)
100	200	30	1050

NOTES:

1. Temporary support to be in place prior to the removal of the existing bent.
2. The minimum temporary support design load is equal to 2.0 times permanent loading. Minimum temporary support design load does not include the weight of temporary support.
3. The minimum lateral temporary support design loads are based on distributing the dead load, wind load and thermal forces to the temporary support, but shall not be less than 0.2g. The "g" shall be equal to the dead load on the temporary support without the 2.0 factor.
4. Initial jacking load is the estimated force that should be applied to the structure. Initial jacking load is due to existing structure permanent load.
5. Temporary support members shall evenly distribute jacking forces to existing superstructure girders.



BENT ARCHITECTURAL TREATMENT

½" =1'-0"

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	ED	50	17.8,19.6	26	37

Robert G Jones 10/24/12
REGISTERED CIVIL ENGINEER DATE

3-11-13
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — Robert G. Jones No. 65676 Exp. 9/30/13 CIVIL — STATE OF CALIFORNIA

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GENERAL NOTES
LOAD AND RESISTANCE FACTOR DESIGN

DESIGN:

AASHTO LRFD Bridge Design Specifications, Fourth Edition with California Amendments

SEISMIC DESIGN:

Caltrans Seismic Design Criteria (SDC), Version 1.6 November 2010

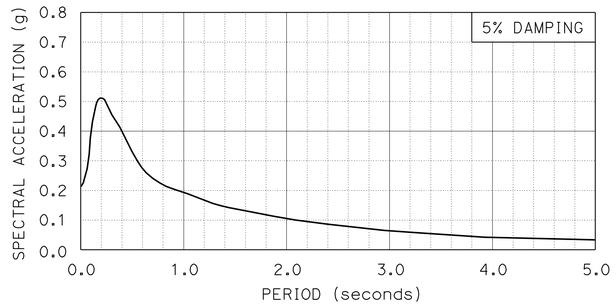
LIVE LOADING:

Pedestrian Load 90 psf

SEISMIC LOADING:

Acceleration Response Curve per Caltrans 2009 Seismic Design Procedure (SDP)

Soil profile: V_{S30} = 1650 ft/sec
Moment magnitude: M_{max} = 6.5
Peak ground acceleration: 0.22 g



CONCRETE:

New	Existing
fy = 60 ksi	fy = 40 ksi
f'c = 3.6 ksi	f'c = 5.0 ksi
n = 8	n = 7

STRUCTURAL STEEL:

New	Existing
fy = 50 ksi	fy = 33 ksi

DESIGN	BY Greg Jones	CHECKED Kevin Harper	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION
DETAILS	BY Bob Huddleston	CHECKED Kevin Harper	
QUANTITIES	BY G. Jones / K. Harper	CHECKED W. Hou / V. Shostak	

DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN
DESIGN BRANCH 1

BRIDGE NO. 25-0050
POST MILE 17.78

EARTHQUAKE RETROFIT PROJECT
COLOMA STREET PEDESTRIAN OVERCROSSING
MISCELLANEOUS DETAILS

STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 09-01-10)

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

UNIT: 3576
PROJECT NUMBER & PHASE: 03000000771
CONTRACT NO.: 03-0F3004

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

REVISION DATES				SHEET	OF
12-08-11		03-01-12	01/07/13	2	7

FILE => 25-0050-h-b01dt02.dgn

USERNAME => s113946 DATE PLOTTED => 13-MAR-2013 TIME PLOTTED => 10:59

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	ED	50	17.8,19.6	27	37

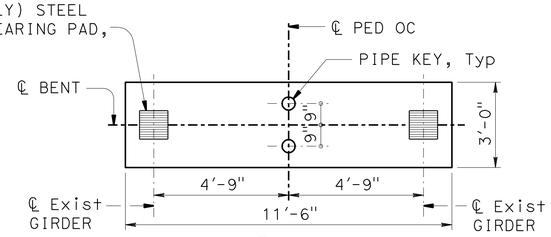
Robert G Jones 10/24/12
REGISTERED CIVIL ENGINEER DATE

3-11-13
PLANS APPROVAL DATE

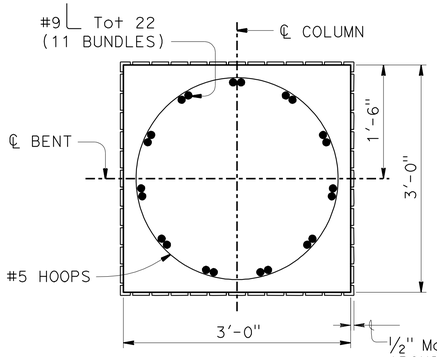
REGISTERED PROFESSIONAL ENGINEER — Robert G. Jones — No. 65676 — Exp. 9/30/13 — CIVIL — STATE OF CALIFORNIA

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.

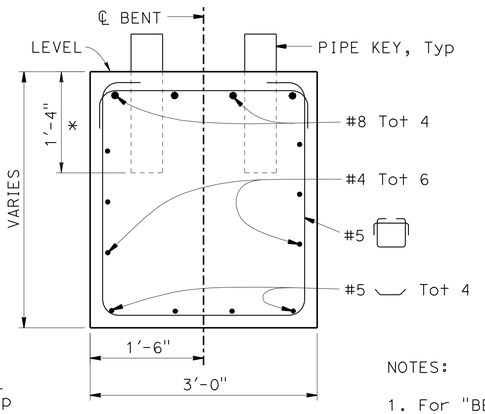
12"x12"x4" PLAIN OR 12"x12"x4" THICK (ELASTOMER ONLY) STEEL Reinf ELASTOMERIC BEARING PAD, Typ



PLAN
3/8" = 1'-0"



SECTION A-A
1" = 1'-0"

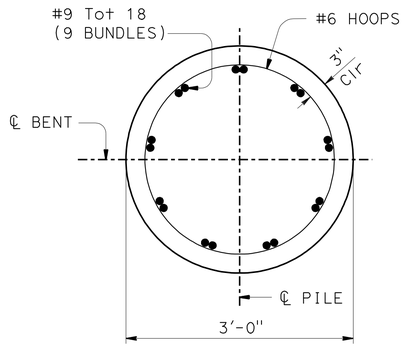


SECTION B-B
1" = 1'-0"

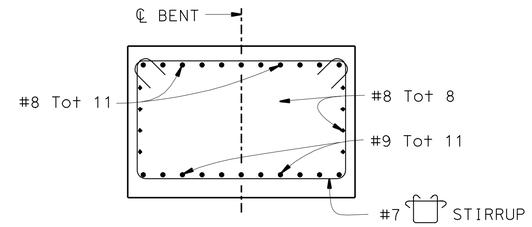
* - MINIMUM EMBEDMENT DEPTH FOR 4XX STRONG PIPE AT ℄ Ped OC

NOTES:

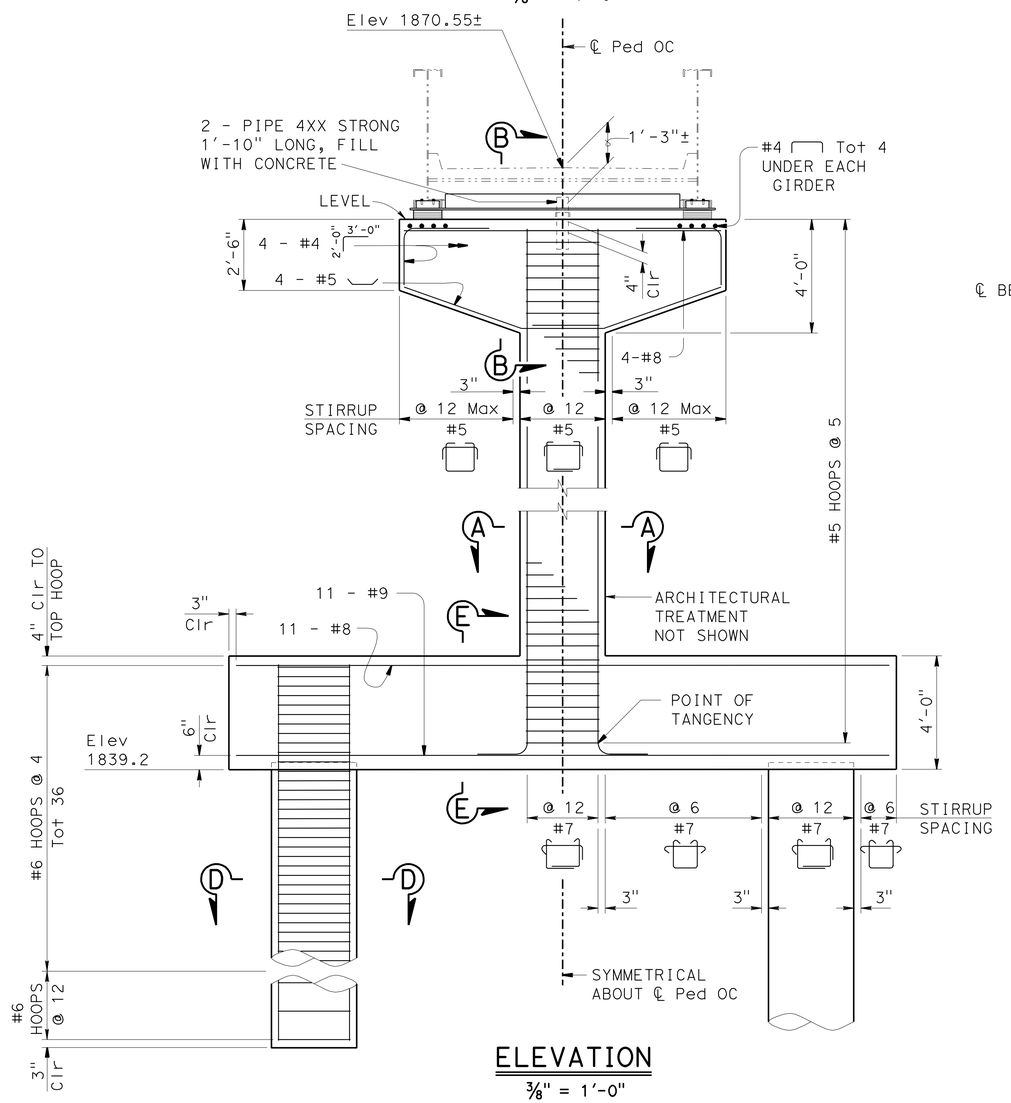
1. For "BENT ARCHITECTURAL TREATMENT" detail, see "MISCELLANEOUS DETAILS" sheet.
2. Only staggered "Ultimate" butt splices are allowed in CIDH pile and column hoops.



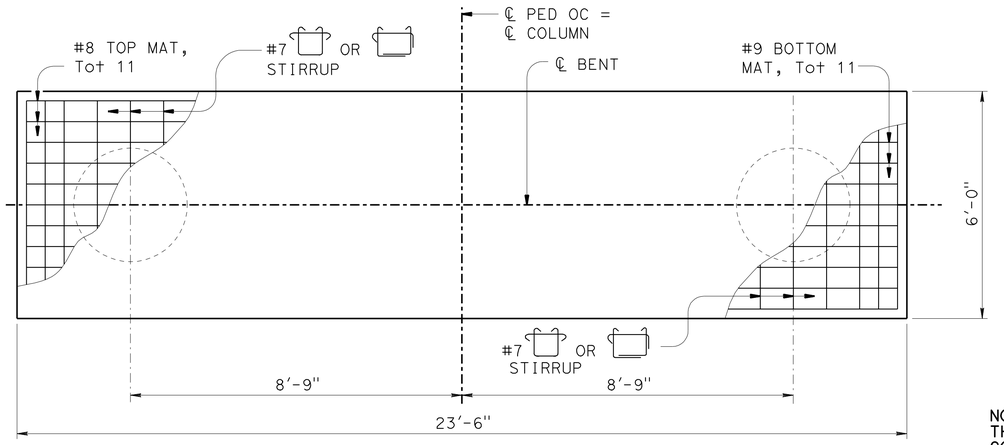
SECTION D-D
1" = 1'-0"



SECTION E-E
1/2" = 1'-0"



ELEVATION
3/8" = 1'-0"



FOOTING PLAN
1/2" = 1'-0"

NOTE:
THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

	BY	CHECKED
DESIGN	Greg Jones	Kevin Harper
DETAILS	Bob Huddleston	Kevin Harper
QUANTITIES	Greg Jones	Wendy Hou

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 1

BRIDGE NO. 25-0050
POST MILE 17.78

EARTHQUAKE RETROFIT PROJECT
COLOMA STREET PEDESTRIAN OVERCROSSING
BENT DETAILS

STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 09-01-10)

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

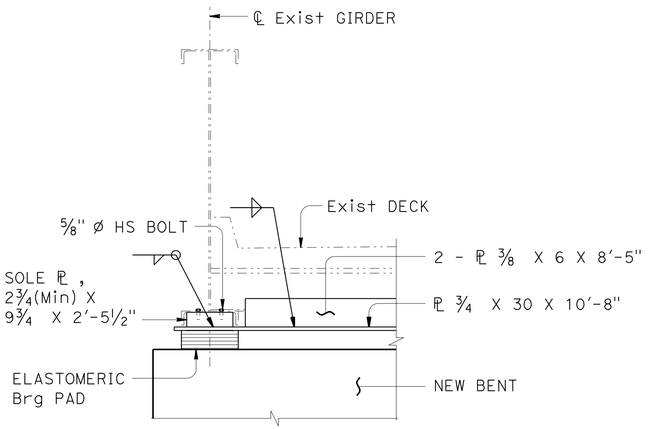
UNIT: 3576
PROJECT NUMBER & PHASE: 03000000771
CONTRACT NO.: 03-0F3004

DISREGARD PRINTS BEARING EARLIER REVISION DATES

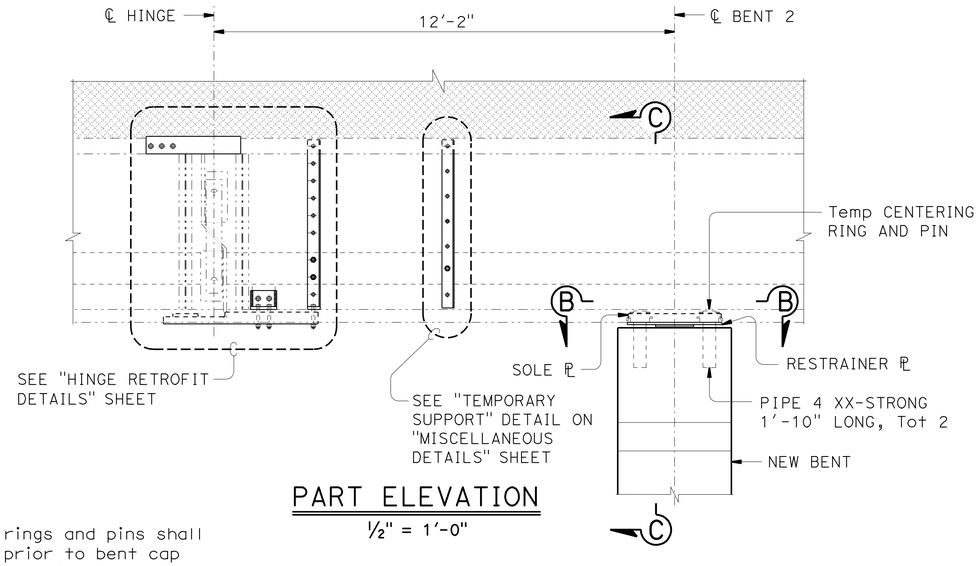
REVISION DATES				SHEET	OF
12-06-11		7-09-12	7-04-12	3	7

FILE => 25-0050-h-b01dt03.dgn

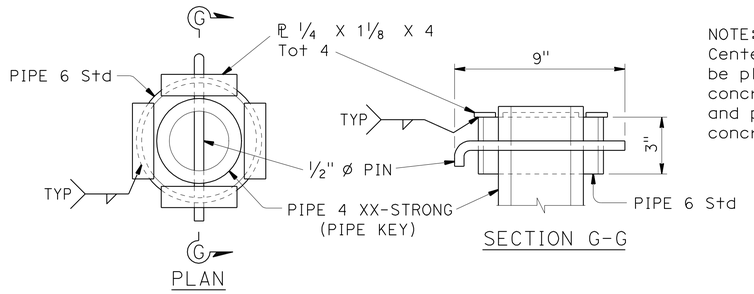
USERNAME => s113946 DATE PLOTTED => 13-MAR-2013 TIME PLOTTED => 10:59



SECTION C-C
¾" = 1'-0"

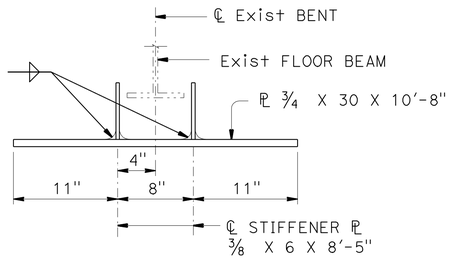


PART ELEVATION
½" = 1'-0"

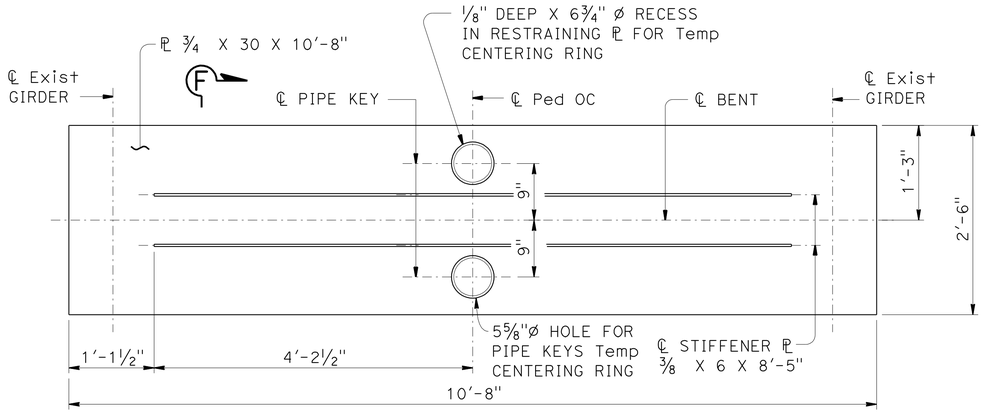


CENTERING RING DETAIL
3" = 1'-0"

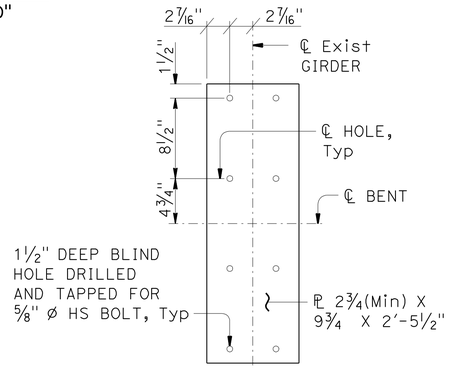
NOTE:
Centering rings and pins shall be placed prior to bent cap concrete pour. Centering rings and pins shall be removed after concrete has set.



SECTION F-F
1½" = 1'-0"

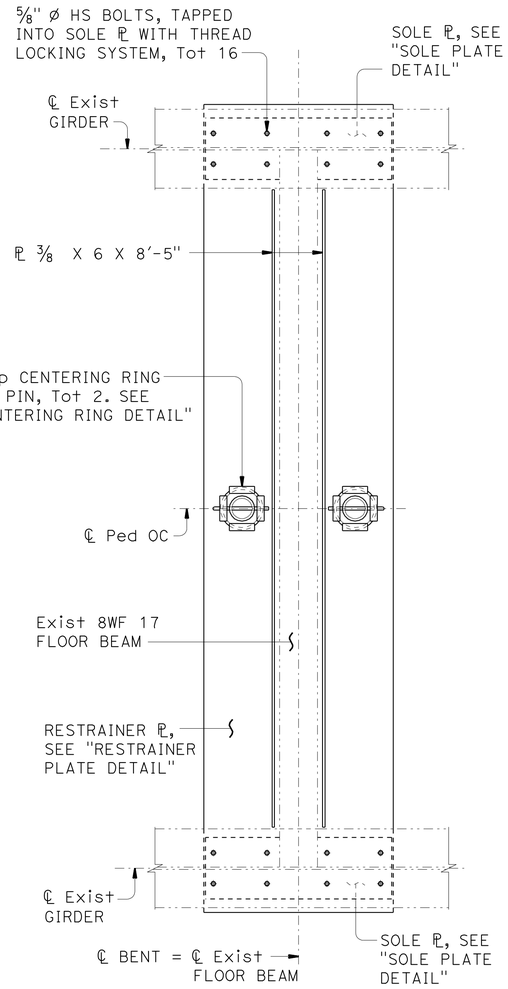


RESTRAINER PLATE DETAIL
1" = 1'-0"



NOTE: Dimensions Sym about ℄ ℙ.

SOLE PLATE DETAIL
1½" = 1'-0"



SECTION B-B
1" = 1'-0"

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	ED	50	17.8,19.6	28	37

Robert G Jones 10/24/12
REGISTERED CIVIL ENGINEER DATE

3-11-13
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — Robert G. Jones — No. 65676 — Exp. 9/30/13 — CIVIL — STATE OF CALIFORNIA

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DESIGN	BY Greg Jones	CHECKED Kevin Harper	
DETAILS	BY Bob Huddleston	CHECKED Kevin Harper	
QUANTITIES	BY Greg Jones	CHECKED Wendy Hou	

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 1

BRIDGE NO. 25-0050
POST MILE 17.78

EARTHQUAKE RETROFIT PROJECT
COLOMA STREET PEDESTRIAN OVERCROSSING
GIRDER RETROFIT DETAILS

STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 09-01-10)

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

UNIT: 3576
PROJECT NUMBER & PHASE: 03000000771
CONTRACT NO.: 03-0F3004

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

REVISION DATES: 02-02-12 | 7-09-12 | 07/11/12

SHEET 4 OF 7

FILE => 25-0050-n-b01dt04.dgn

USERNAME => s113946 DATE PLOTTED => 13-MAR-2013 TIME PLOTTED => 10:59

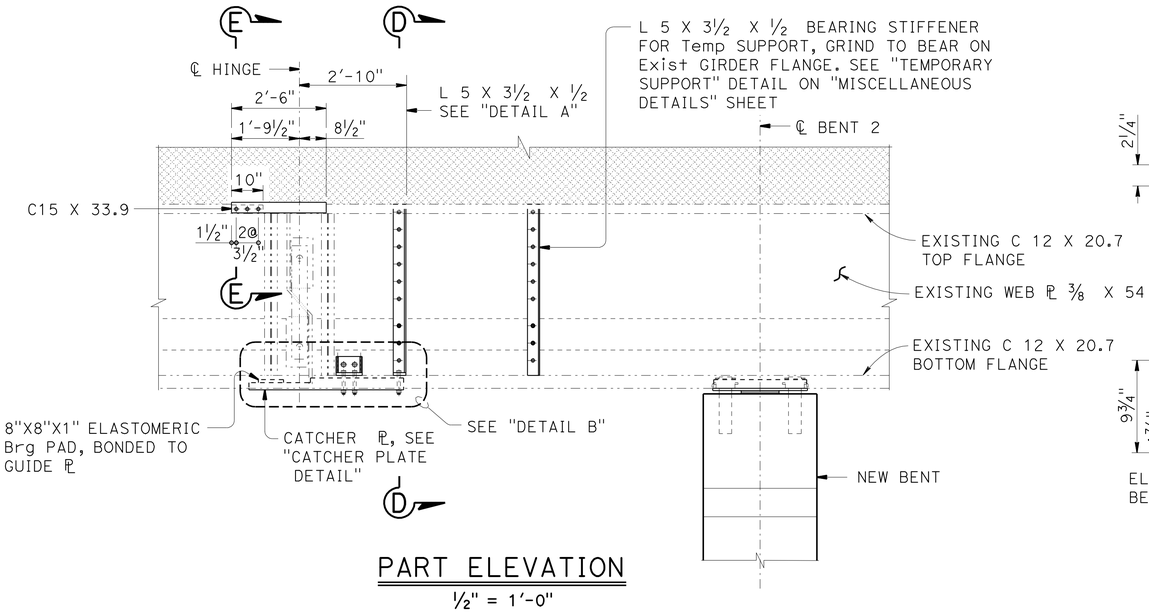
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	ED	50	17.8,19.6	29	37

Robert G Jones 10/24/12
REGISTERED CIVIL ENGINEER DATE

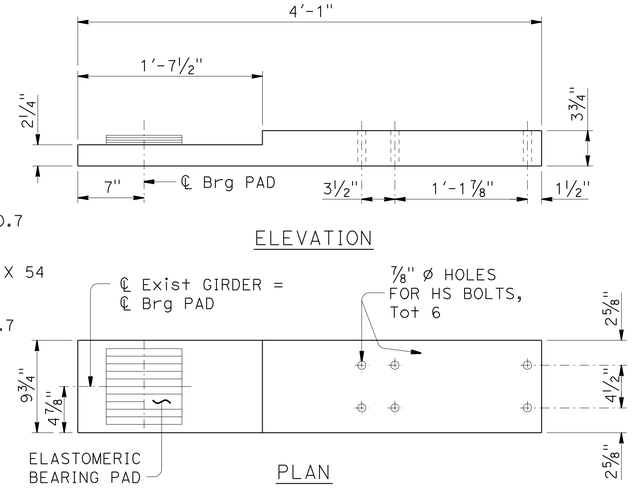
3-11-13
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — Robert G. Jones — No. 65676 — Exp. 9/30/13 — CIVIL — STATE OF CALIFORNIA

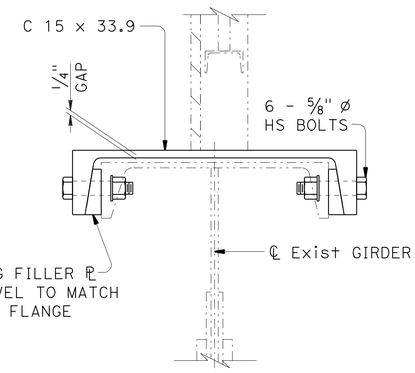
The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.



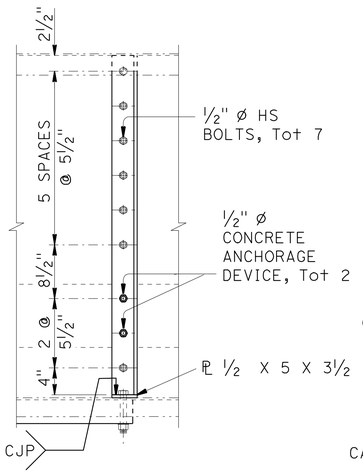
PART ELEVATION
½" = 1'-0"



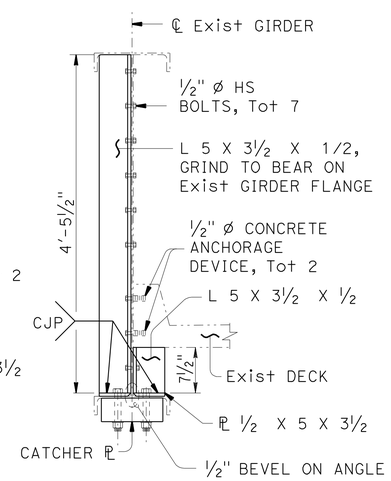
CATCHER PLATE DETAIL
1½" = 1'-0"



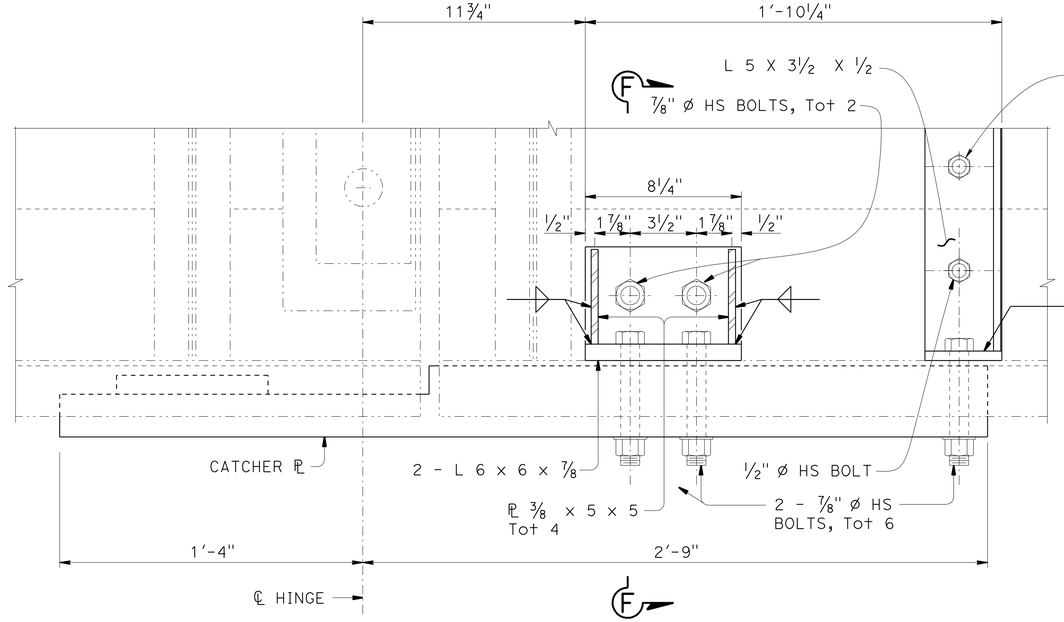
SECTION E-E
3" = 1'-0"



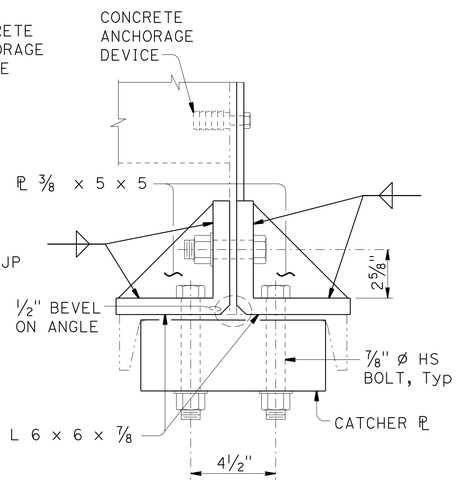
DETAIL A
1" = 1'-0"



SECTION D-D
1" = 1'-0"



DETAIL B
3" = 1'-0"



SECTION F-F
3" = 1'-0"

NOTE:
THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

	BY	CHECKED
DESIGN	Greg Jones	Kevin Harper
DETAILS	Bob Huddleston	Kevin Harper
QUANTITIES	Greg Jones	Wendy Hou

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 1

BRIDGE NO. 25-0050
POST MILE 17.78

EARTHQUAKE RETROFIT PROJECT
COLOMA STREET PEDESTRIAN OVERCROSSING
HINGE RETROFIT DETAILS

STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 09-01-10)

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

UNIT: 3576
PROJECT NUMBER & PHASE: 03000000771
CONTRACT NO.: 03-0F3004

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

REVISION DATES				SHEET	OF
6-28-12	6-29-12	7-11-12		5	7

FILE => 25-0050-n-hingedt.dgn

DATE PLOTTED => 13-MAR-2013 TIME PLOTTED => 10:59
USERNAME => s113946

BENCH MARK

The OG elevation located at the Intersection of the ℄ of the existing POC and US 50 (Sta 635+49 ℄ US 50). Elev = 1845.14′.

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	ED	50	17.8,19.6	30	37

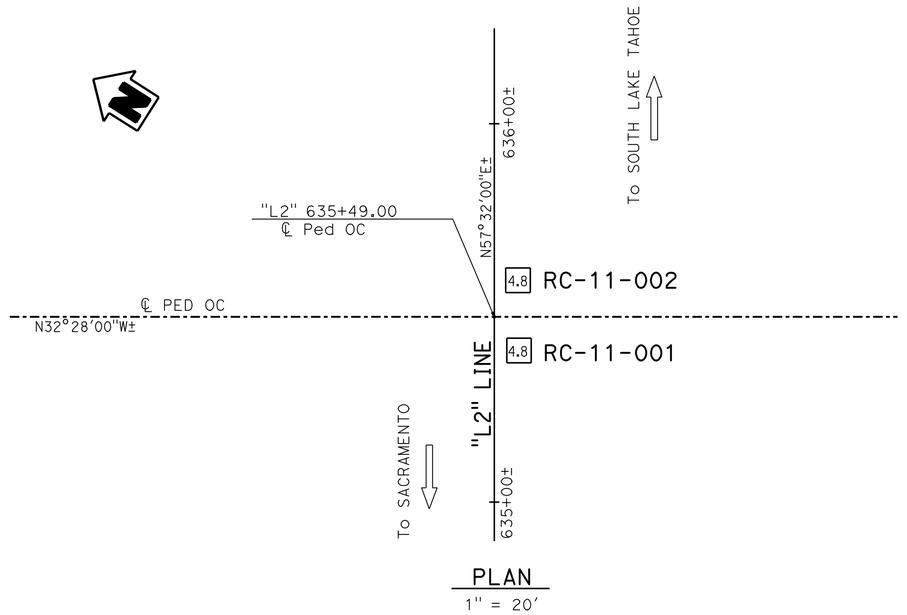
Zheng, Xing — 5-30-12
CERTIFIED ENGINEERING GEOLOGIST — DATE

3-11-13
PLANS APPROVAL DATE

Xing Zheng
No. 2130
Exp. 3-31-13
CERTIFIED ENGINEERING GEOLOGIST
PROFESSIONAL GEOLOGIST — STATE OF CALIFORNIA

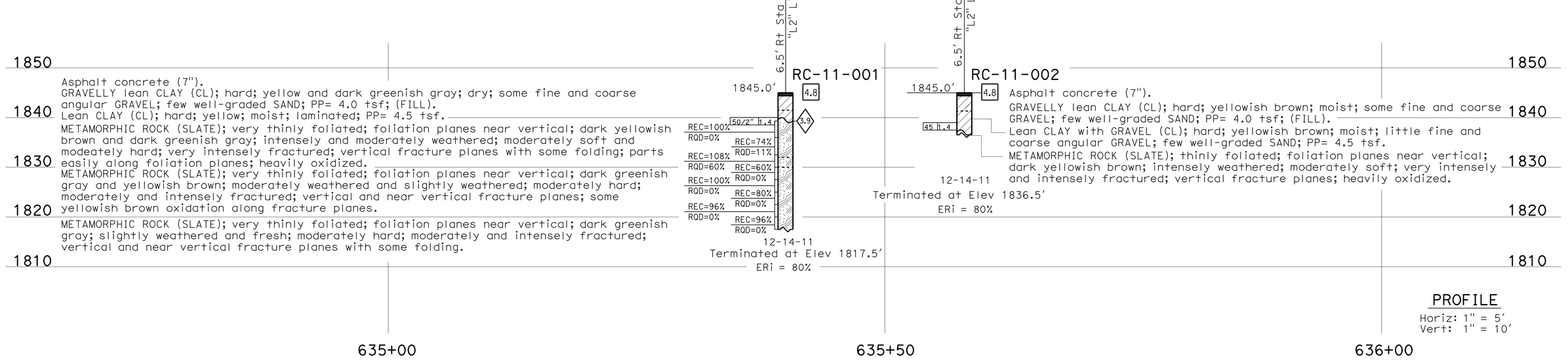
The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

This LOTB sheet was prepared in accordance with the Caltrans Soil & Rock Logging, Classification, & Presentation Manual (2010 Edition).
See 2010 Standard Plans A10F and A10G for Soil Legend, and A10H for Rock Legend.



PLAN
1" = 20′

Note: No ground water encountered during field investigation.



PROFILE
Horiz: 1" = 5′
Vert: 1" = 10′

ENGINEERING SERVICES	MATERIALS AND GEOTECHNICAL SERVICES	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 1	BRIDGE NO. 25-0050	EARTHQUAKE RETROFIT PROJECT
FUNCTIONAL SUPERVISOR NAME: R. Buell	DRAWN BY: F. Nguyen CHECKED BY: A. Barrie	FIELD INVESTIGATION BY: J. Thorne		POST MILE 17.78	COLOMA STREET PEDESTRIAN OVERCROSSING LOG OF TEST BORINGS 1 OF 2

OGS CIVIL LOG OF TEST BORINGS SHEET — ORIGINAL SCALE IN INCHES FOR REDUCED plans 0 1 2 3

UNIT: 3643
PROJECT NUMBER & PHASE: 03000000771 CONTRACT NO.: 03-0F3004

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

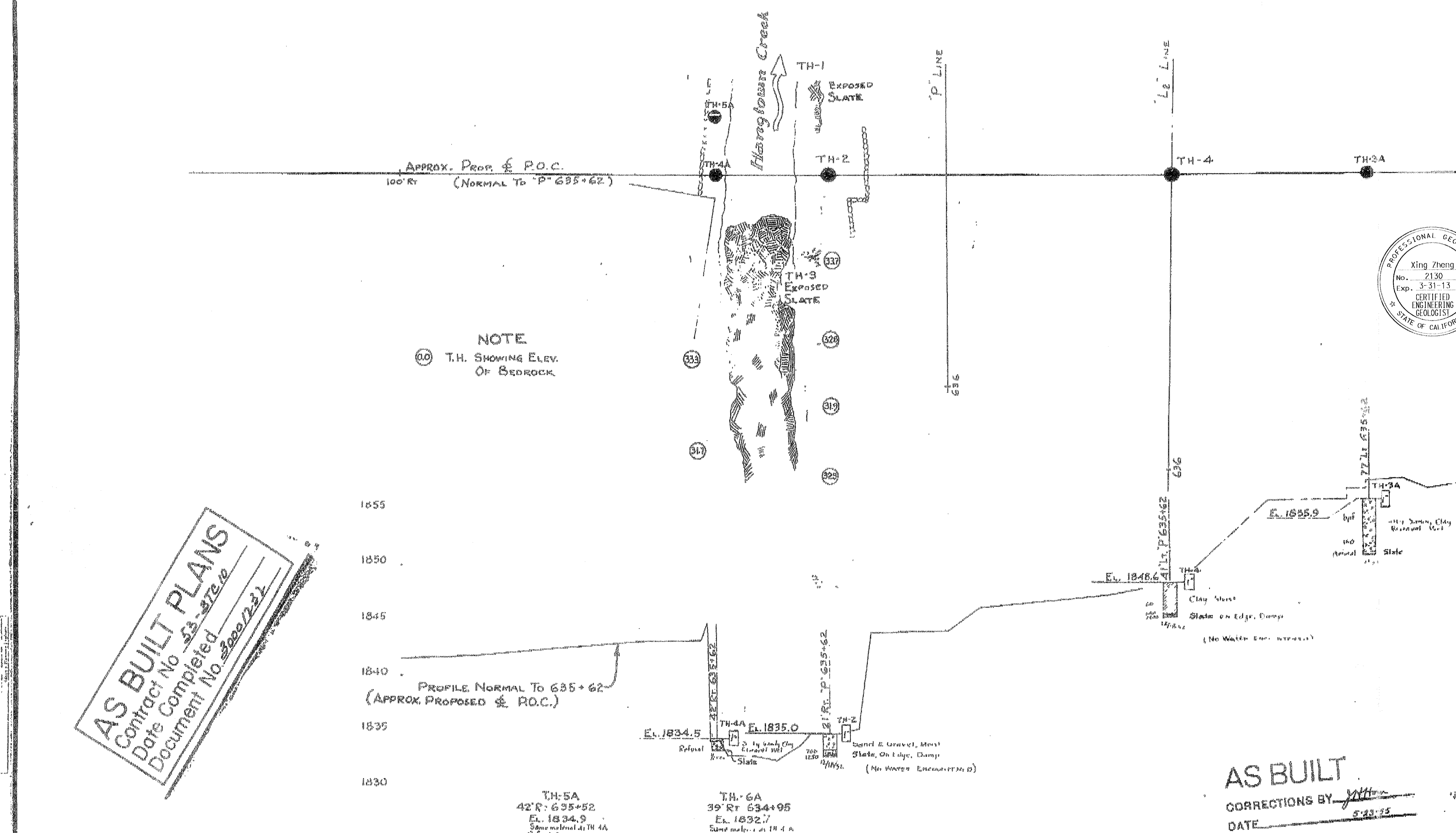
REVISION DATES			SHEET	OF
04-13-12		05-29-12 05-30-12	6	7

FILE => 25-0050-z-1tb01.dgn

USERNAME => s114926 DATE PLOTTED => 13-MAR-2013 TIME PLOTTED => 10:59

Dist.	County	Route	Section	Sheet No.	Total Sheets
III	E.D.	50	P.CR		

Approved October 19, 1953



AS BUILT PLANS
Contract No. 53-3TC10
Date Completed
Document No. 3000/231

AS BUILT
CORRECTIONS BY
DATE 5-23-55

MICROFILMED

BRIDGE DEPARTMENT

DIVISION OF ENGINEERING SERVICES - MATERIALS AND GEOTECHNICAL SERVICES					
As-Built Log of Test Borings sheet is considered an informational document only. As such, the State of California registration seal with signature, license number and registration certificate expiration date confirm that this is a true and accurate copy of the original document. It does not attest to the accuracy or validity of the information contained in the original document. This drawing is available and presented only for the convenience of any bidder, contractor or other interested party.					
DIST.	COUNTY	ROUTE	POST MILE-TOTAL PROJECT	Sheet No.	Total Sheets
03	ED	50	17.8,19.6	31	37

Professional Geologist — Xing Zheng, No. 2130, Exp. 3-31-13, Certified Engineering Geologist, State of California

CERTIFIED ENGINEERING GEOLOGIST — DATE 5/30/11

COLOMA STREET POC (SEISMIC RETROFIT)

LOG OF TEST BORINGS 2 OF 2

UNIT: 3643 / PROJ. No. & PHASE: 03000000771	CONTRACT No. 03-0F3001	BRIDGE No. 25-0050
VERT DATUM: NGVD 29 CONVERSION: N/A	Sheet 7	of 7

NOTE: A COPY OF THIS LOG OF TEST BORINGS IS AVAILABLE AT OFFICE OF STRUCTURE MAINTENANCE AND INVESTIGATIONS, SACRAMENTO, CALIFORNIA

TO ACCOMPANY PLANS DATED 3-11-13

Classification of Material Based on Standard Grade Size Limits

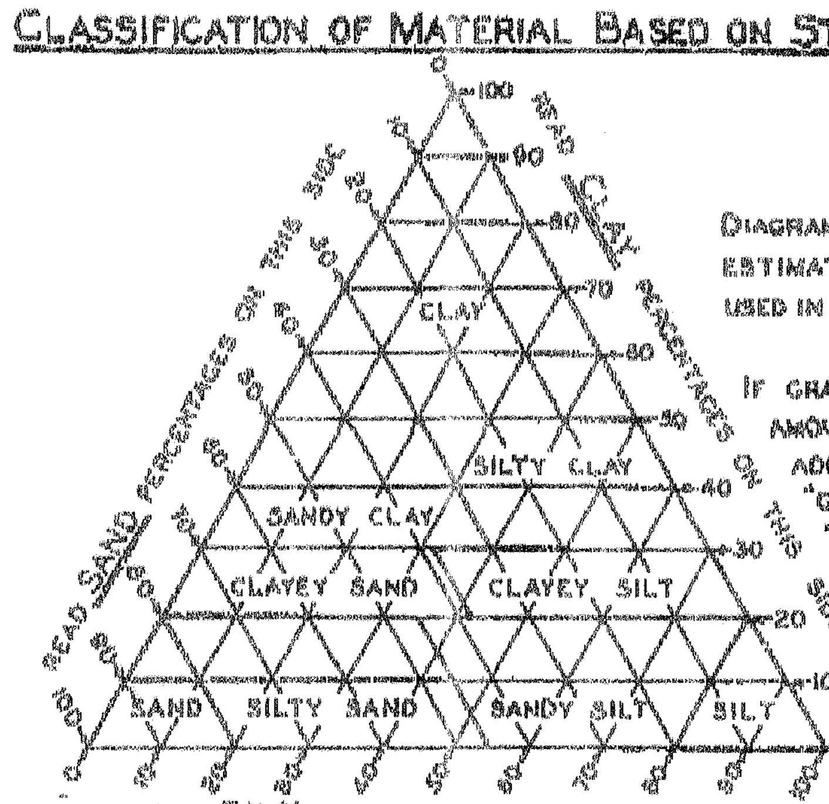


Diagram showing the basis for estimates of grade size distribution used in determination of class names

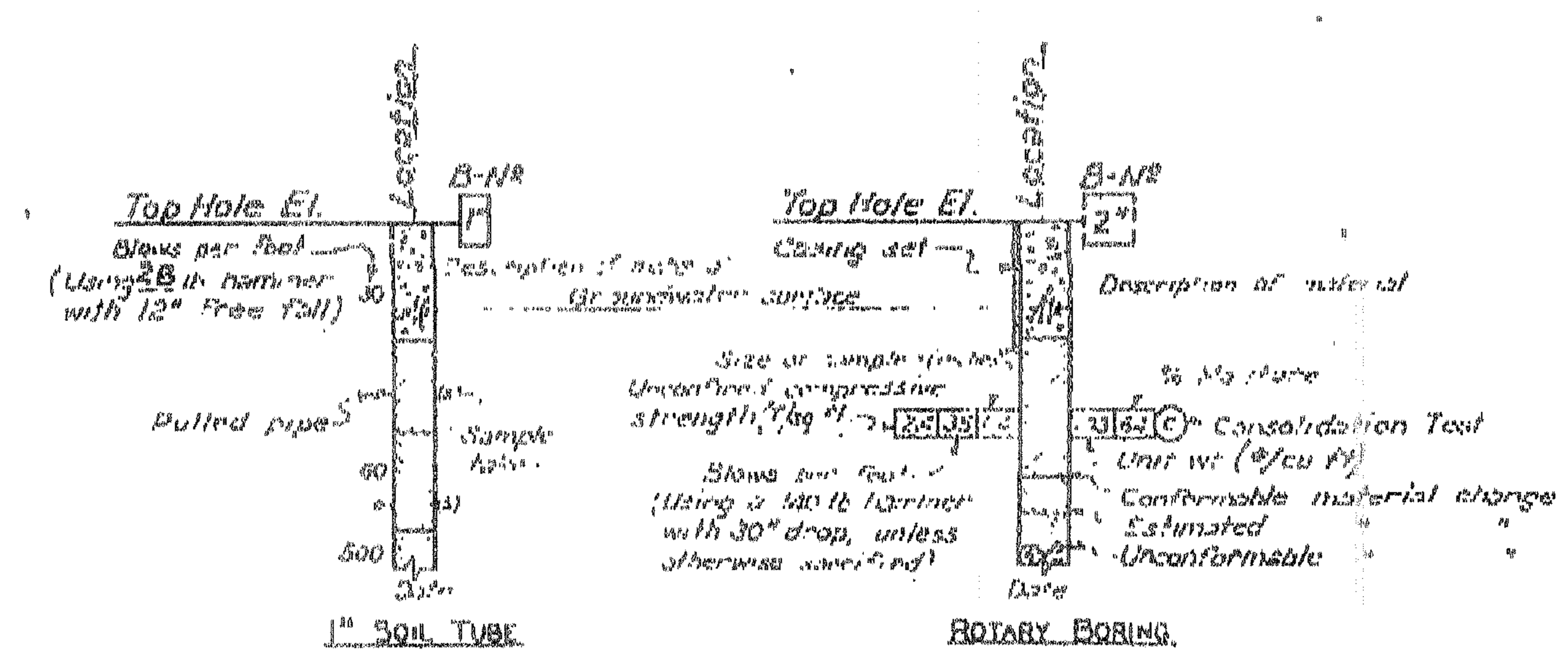
If gravel is present in appreciable amounts the term "gravelly" may be added to the class name, viz. "gravelly sand". The terms "coarse", "medium" and "fine" when used to describe gravel, sand and silt refer to standard grade size limits.

Legend of Earth Materials

- Gravel
- Sand
- Silt
- Clay
- Sandy Clay or Clayey Sand
- Sandy Silt or Silty Sand
- Silty Clay or Clayey Silt
- Peat and/or Organic Clay
- Filled Material
- Igneous Rock
- Sedimentary Rock
- Metamorphic Rock

Legend of Boring Operations

- Plan of any boring
- Penetrometer
- 2½" Cone penetrometer
- Sampler boring (dry)
- Rotary boring (wet)
- Auger boring (dry)
- Jet boring
- Core boring
- Test pit



Notes

The contractor's attention is directed to section 2, article (c) of the standard specifications and to the special provisions accompanying this set of plans.

Classification of earth material as shown on this sheet is based upon field inspection and is not to be construed to imply mechanical analysis.

Penetrometer borings having a rate of penetration measured in seconds per foot are driven with a No 2 McKiernan-Terry air hammer at 115 PSI.

State of California
Department of Public Works
Division of Highways

Coloma Street Pedestrian Overcrossing

LOG OF TEST BORINGS

Scale	Bridge	File	Drawing
Horiz 1" = 10', Vert 1" = 5'	25-50	E-25	G-3154-14

FILENAME => 25-0050-z-I+b02.tif

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	ED	50	17.8,19.6	32	37

Robert G. Jones 10/24/12
REGISTERED CIVIL ENGINEER DATE

3-11-13
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — Robert G. Jones — No. 65676 — Exp. 9/30/13 — CIVIL — STATE OF CALIFORNIA

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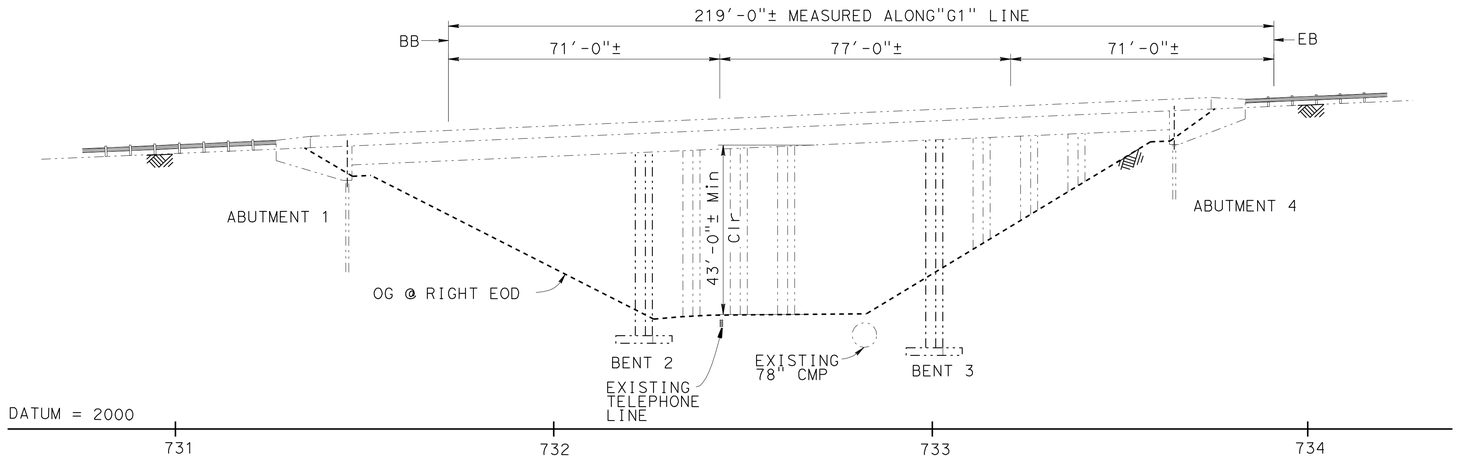
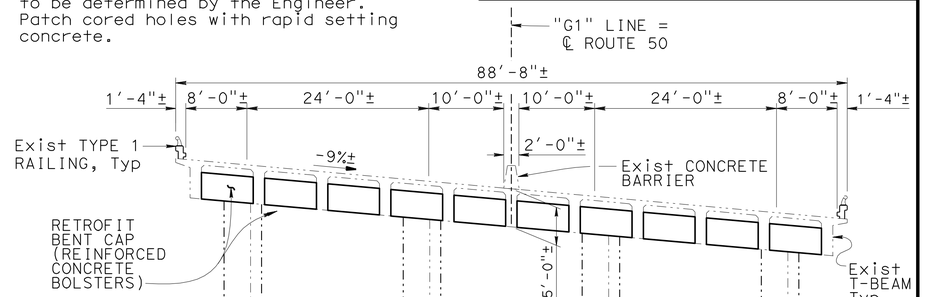
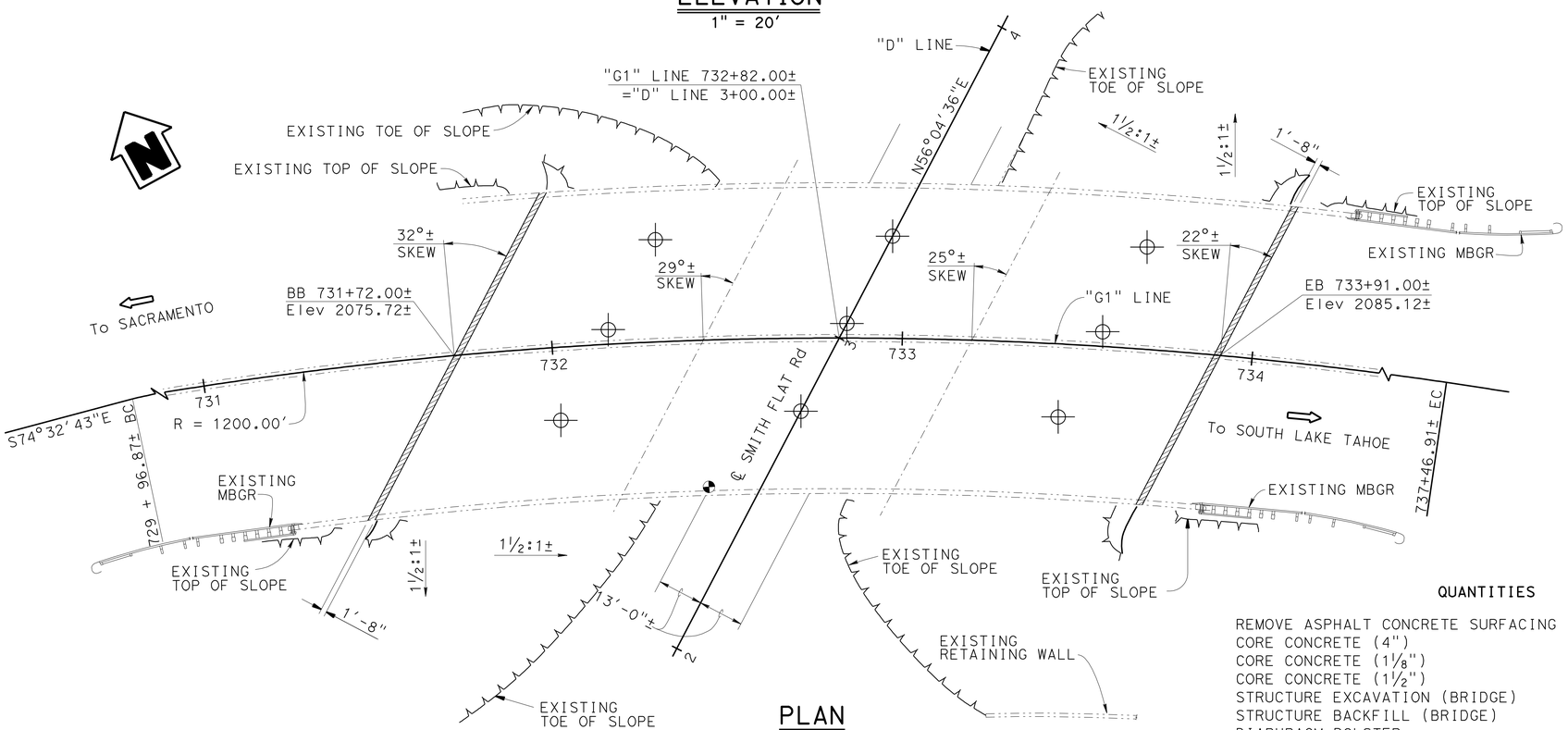


LEGEND:

- Indicates Approx Point of Min Vert Clr
- Indicates limits of remove existing AC overlay (thickness = 2"±), and replace with asphaltic plug
- Indicates existing structure
- Indicates approximate location of 4" Ø deck cores. Exact location to be determined by the Engineer. Patch cored holes with rapid setting concrete.

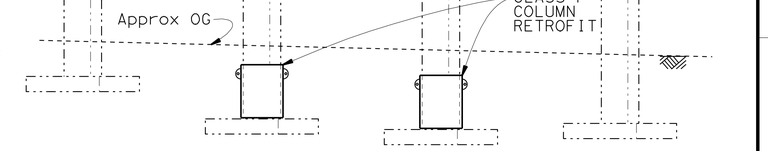


ELEVATION
1" = 20'



PLAN
1" = 20'

TYPICAL SECTION
1" = 10'



INDEX TO PLANS

SHEET No.	TITLE
1.	GENERAL PLAN
2.	BENT RETROFIT DETAILS No. 1
3.	BENT RETROFIT DETAILS No. 2
4.	BENT RETROFIT DETAILS No. 3
5.	BENT RETROFIT DETAILS No. 4
6.	ASPHALTIC PLUG JOINT SEAL DETAILS

QUANTITIES

REMOVE ASPHALT CONCRETE SURFACING	316	SQFT
CORE CONCRETE (4")	5	LF
CORE CONCRETE (1⅛")	480	LF
CORE CONCRETE (1½")	160	LF
STRUCTURE EXCAVATION (BRIDGE)	85	CY
STRUCTURE BACKFILL (BRIDGE)	68	CY
DIAPHRAGM BOLSTER	40	EA
JOINT SEAL (ASPHALTIC PLUG)	190	LF
COLUMN CASING	5,865	LB

STANDARD PLANS 2010

A10A	ABBREVIATIONS (SHEET 1 OF 2)
A10B	ABBREVIATIONS (SHEET 2 OF 2)

STANDARD PLAN SHEET No.
DETAIL No.

NOTE:
THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

For "GENERAL NOTES", see "ASPHALTIC PLUG JOINT SEAL DETAILS" sheet.

Jeff Sims
DESIGN ENGINEER

DESIGN	BY Greg Jones	CHECKED Kevin Harper	LOAD & RESISTANCE FACTOR DESIGN			
DETAILS	BY Bob Huddleston	CHECKED Kevin Harper	LAYOUT	BY Greg Jones	CHECKED Kevin Harper	
QUANTITIES	BY Eric Watson	CHECKED Greg Thornton	SPECIFICATIONS	BY Bryan Nagid	PLANS AND SPECS COMPARED Bryan Nagid	

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 1

BRIDGE NO. 25-0064
POST MILE 19.61

EARTHQUAKE RETROFIT PROJECT
SMITH FLAT ROAD UNDERCROSSING
GENERAL PLAN

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

UNIT: 3576
PROJECT NUMBER & PHASE: 03000000771
CONTRACT NO.: 03-0F3004

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

REVISION DATES				SHEET	OF
08-16-11		10-09-12	10-05-12	1	6

STRUCTURES DESIGN GENERAL PLAN SHEET (ENGLISH) (REV.09-01-10)

FILE => 25-0064-a-gp.dgn

USERNAME => s119926 DATE PLOTTED => 13-MAR-2013 TIME PLOTTED => 10:59

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	ED	50	17.8,19.6	33	37

Robert G Jones 10/24/12
REGISTERED CIVIL ENGINEER DATE

3-11-13
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — Robert G. Jones — No. 65676 — Exp. 9/30/13 — CIVIL — STATE OF CALIFORNIA

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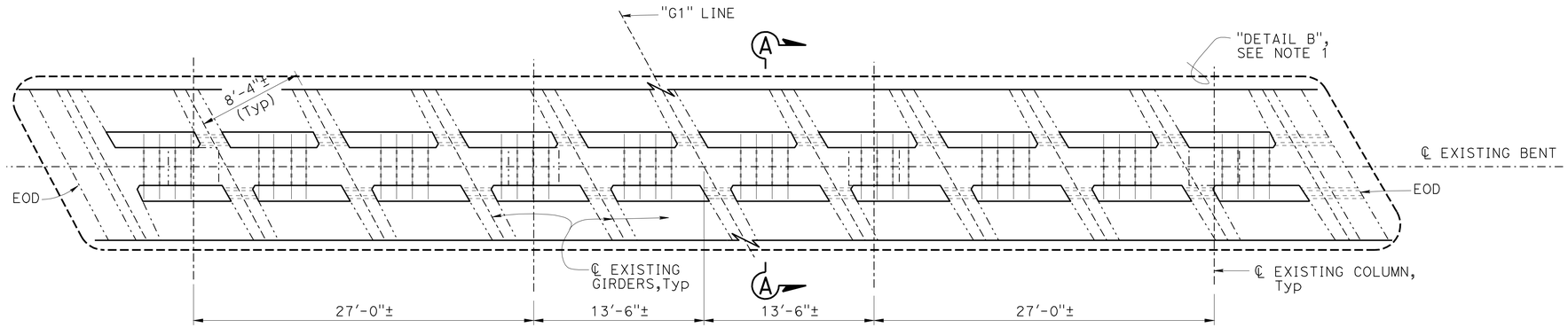
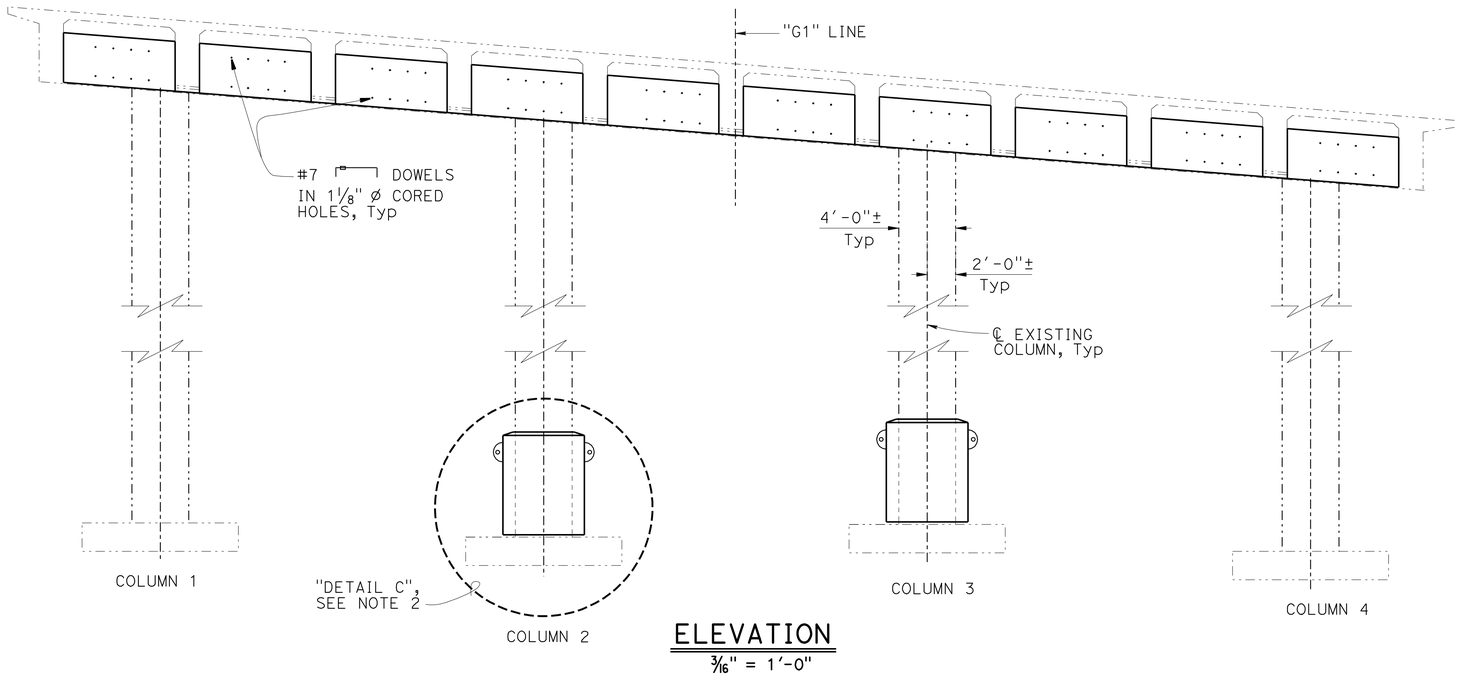
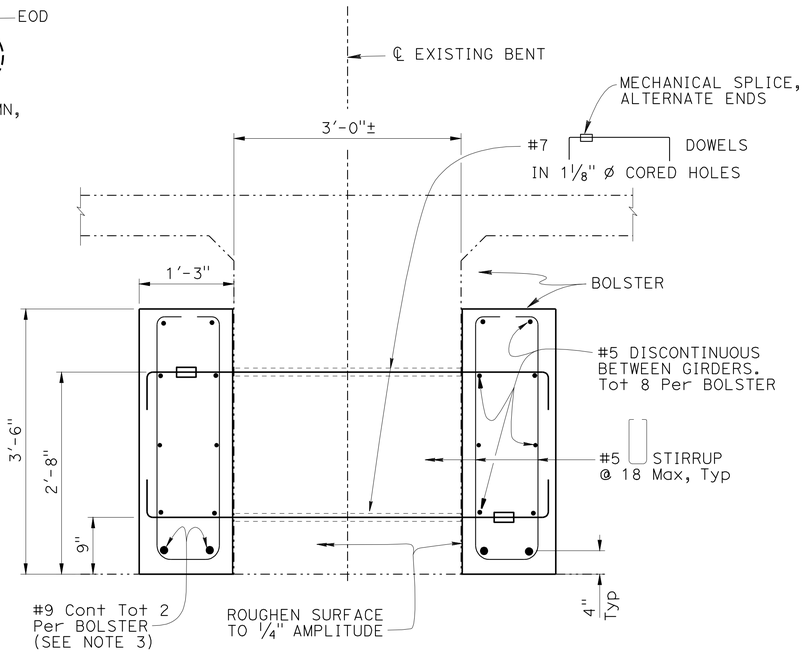


PLAN
3/16" = 1'-0"



ELEVATION
3/16" = 1'-0"



SECTION A-A
1" = 1'-0"

NOTES:

1. For "DETAIL B", see "BENT RETROFIT DETAILS No. 2" sheet for Bent 2 and "BENT RETROFIT DETAILS No. 3" sheet for Bent 3.
2. For "DETAIL C", see "BENT RETROFIT DETAILS No. 4" sheet.
3. No lap splices permitted.

-·-·-·- Indicates existing structure.

NOTE:
THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

	BY	CHECKED
DESIGN	Greg Jones	Kevin Harper
DETAILS	G. M. Souza / J. Zhou	Kevin Harper
QUANTITIES	Eric Watson	Greg Thornton

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 1

BRIDGE NO. 25-0064
POST MILE 19.61

EARTHQUAKE RETROFIT PROJECT
SMITH FLAT ROAD UNDERCROSSING
BENT RETROFIT DETAILS NO. 1

STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 09-01-10)

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

UNIT: 3576
PROJECT NUMBER & PHASE: 03000000771 CONTRACT NO.: 03-0F3004

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

REVISION DATES				SHEET	OF
02-09-12		10-05-12	8-14-12	2	6

FILE => 25-0064-I-bent-cap-rf-dt01-dt.dgn

USERNAME => s119926 DATE PLOTTED => 13-MAR-2013 TIME PLOTTED => 10:59

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Riv	50	17.8,19.6	34	37

Robert G Jones 10/24/12
REGISTERED CIVIL ENGINEER DATE

3-11-13
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
Robert G. Jones
No. 65676
Exp. 9/30/13
CIVIL
STATE OF CALIFORNIA

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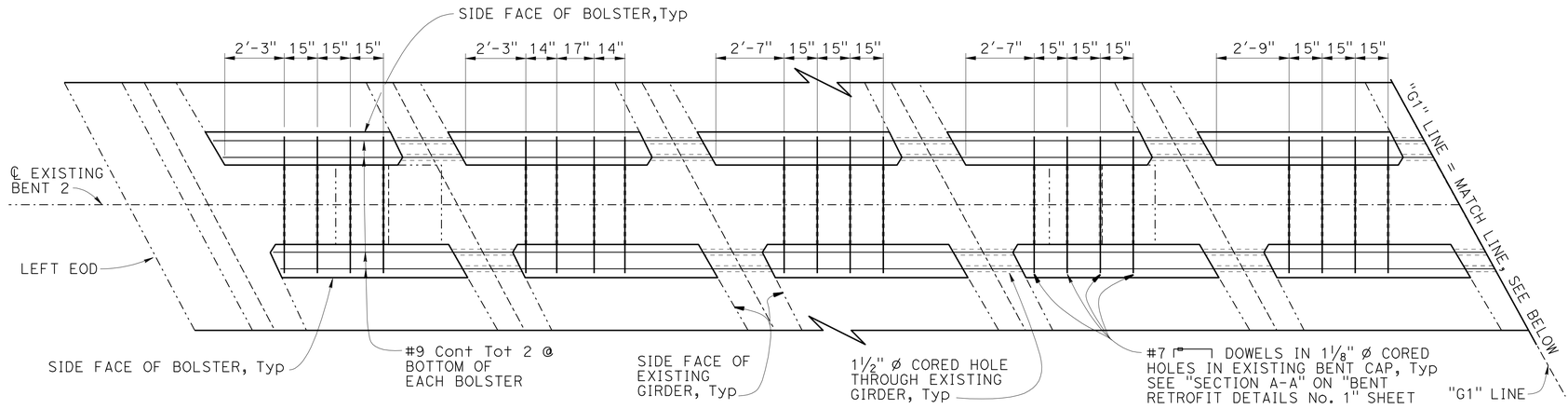
NOTES:

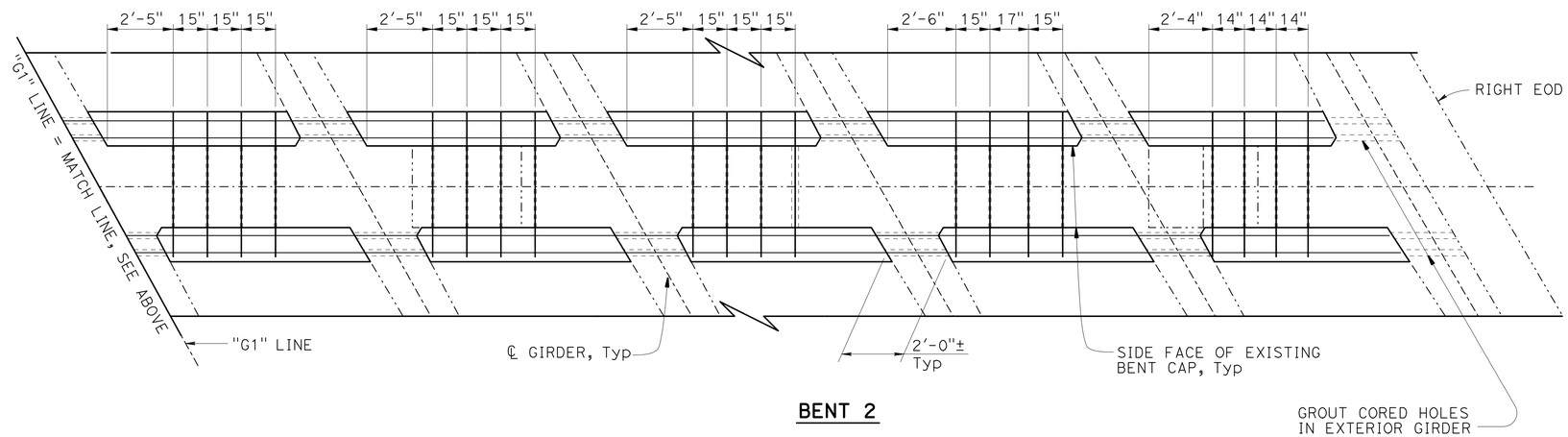
1. Location of cored holes for dowels shown in Bent Cap are approximate. Prior to coring holes in concrete, the Contractor shall locate all reinforcing steel and adjust locations of the holes to clear all reinforcing bars. Final hole locations are subject to approval by the Engineer.

2. Roughen concrete surface of existing cap to ¼" minimum amplitude.

LEGEND:

–··–··– Indicates existing structure.





BENT 2

DETAIL B

⅜" = 1'-0"

NOTE:
THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

DESIGN	BY Greg Jones	CHECKED Kevin Harper	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION
DETAILS	BY G. M. Souza / J. Zhou	CHECKED Kevin Harper	
QUANTITIES	BY Eric Watson	CHECKED Greg Thornton	

DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN
DESIGN BRANCH 1

BRIDGE NO. 25-0064
POST MILE 19.61

EARTHQUAKE RETROFIT PROJECT
SMITH FLAT ROAD UNDERCROSSING
BENT RETROFIT DETAILS No. 2

STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 09-01-10)

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

UNIT: 3576
PROJECT NUMBER & PHASE: 03000000771 CONTRACT NO.: 03-0F3004

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

REVISION DATES			SHEET	OF
02-29-12		06-28-12 10-05-12	3	6

FILE => 25-0064-1-bent-cap-rf-dt02-dt.dgn

USERNAME => s124496 DATE PLOTTED => 13-MAR-2013 TIME PLOTTED => 13:19

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	ED	50	17.8,19.6	35	37

Robert G Jones 10/24/12
REGISTERED CIVIL ENGINEER DATE

3-11-13
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
Robert G. Jones
No. 65676
Exp. 9/30/13
CIVIL
STATE OF CALIFORNIA

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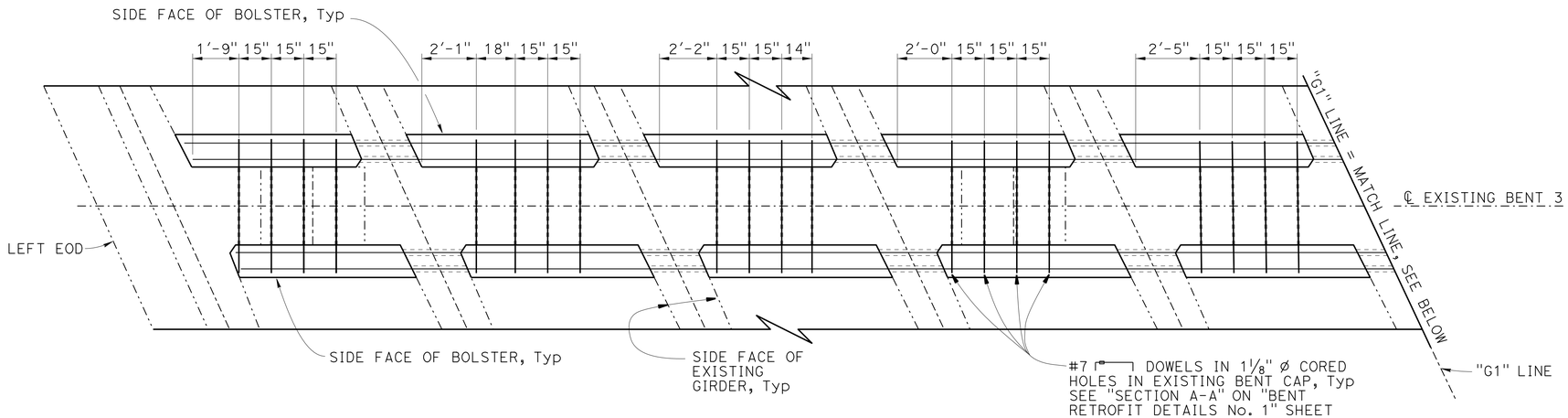

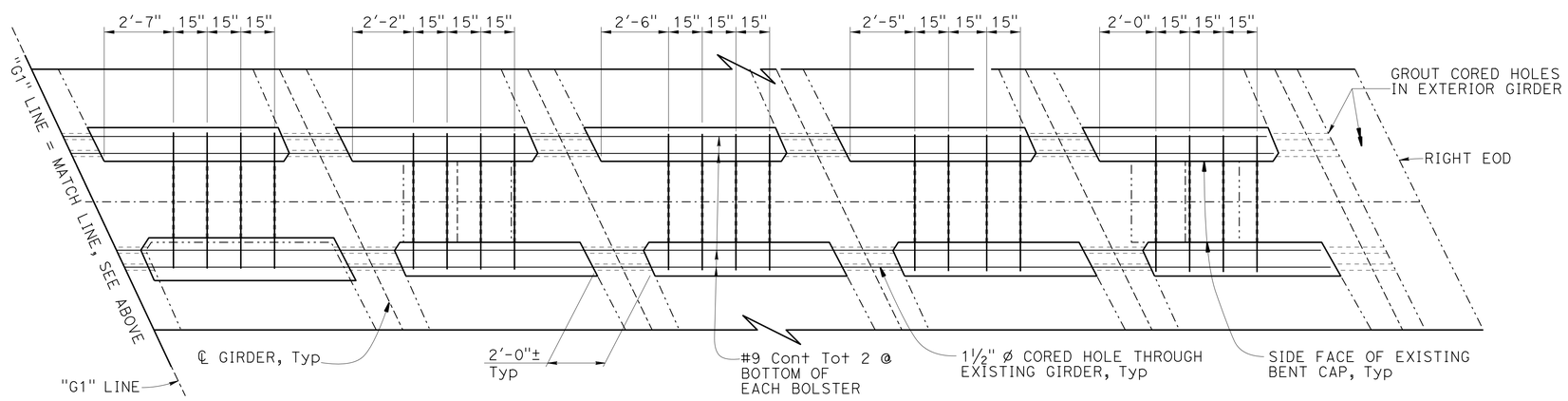

BENT 3

DETAIL B

⅜" = 1'-0"

NOTE:
THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIAL.

NOTE: See "NOTES" on "BENT RETROFIT DETAILS No. 2" sheet.

DESIGN	BY Greg Jones	CHECKED Kevin Harper	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION
DETAILS	BY G. M. Souza / J. Zhou	CHECKED Kevin Harper	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 1
QUANTITIES	BY Eric Watson	CHECKED Greg Thornton	BRIDGE NO. 25-0064 POST MILE 19.61

EARTHQUAKE RETROFIT PROJECT
SMITH FLAT ROAD UNDERCROSSING
BENT RETROFIT DETAILS No. 3

STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 09-01-10)

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

UNIT: 3576
PROJECT NUMBER & PHASE: 03000000771 CONTRACT NO.: 03-0F3004

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

REVISION DATES				SHEET	OF
02-10-12	03-02-12	06/26/12		4	6

FILE => 25-0064-1-bent-cap-rf-dt03-dt.dgn

USERNAME => s114937 DATE PLOTTED => 13-MAR-2013 TIME PLOTTED => 10:59

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	ED	50	17.8,19.6	36	37

Robert G Jones 10/24/12
REGISTERED CIVIL ENGINEER DATE

3-11-13
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — Robert G. Jones — No. 65676 — Exp. 9/30/13 — CIVIL — STATE OF CALIFORNIA

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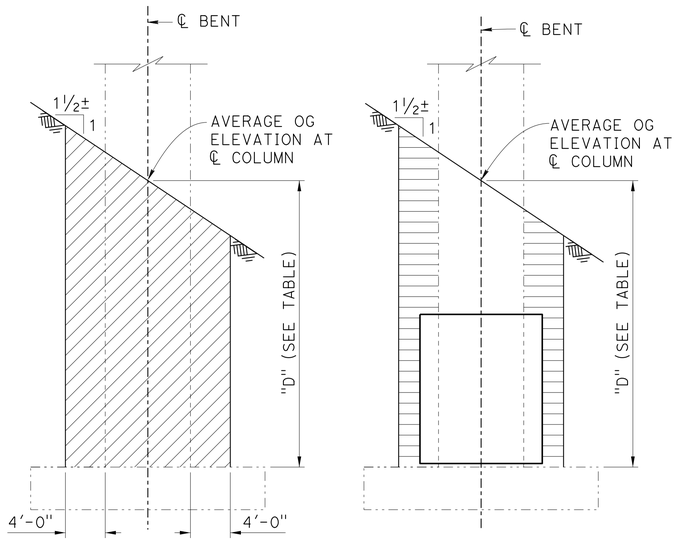
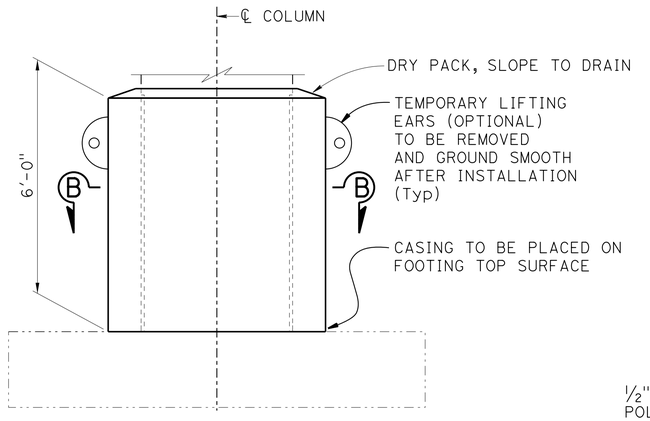


STRUCTURE EXCAVATION
NO SCALE

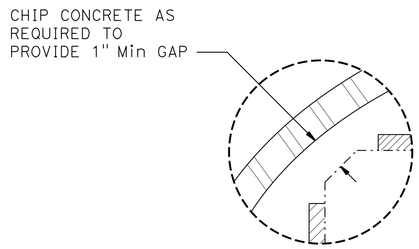
STRUCTURE BACKFILL
NO SCALE

OG ELEVATION TABLE	
LOCATION	DISTANCE "D"
BENT 2, COLUMN 2	9'-0"±
BENT 3, COLUMN 2	12'-0"±
BENT 3, COLUMN 3	15'-0"±
BENT 3, COLUMN 3	16'-0"±

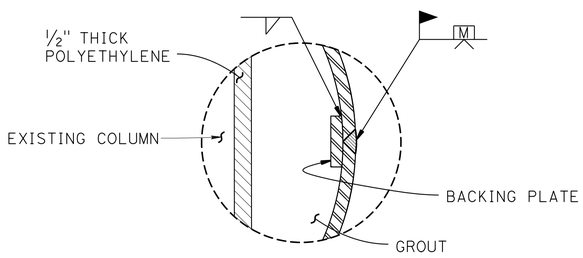
LIMITS OF PAYMENT FOR EXCAVATION AND BACKFILL
NO SCALE



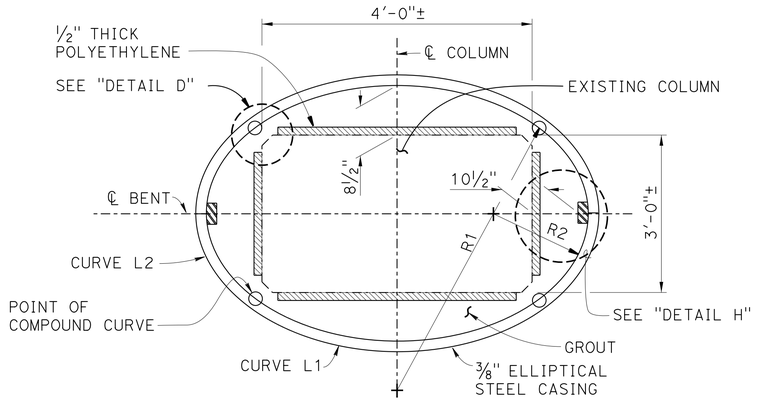
DETAIL C
½" = 1'-0"



DETAIL D



DETAIL H



NOTE:
Radius R1, R2 to be determined by the Contractor and subject to approval of the Engineer.

SECTION B-B
NO SCALE

NOTES:

1. Appropriate injection nozzles to be provided on casing, but removed and ground flush following completion of grouting operation
2. All voids between steel casing and polyethylene to be filled with grout.
3. Location and number of vertical welds to be determined by the Contractor and subject to the approval of the Engineer. The location of casing welds are for illustration. No skip welds allowed
4. Steel casing to be ⅜" thick minimum. Backing plates to be ⅜" thick.
5. Waterproofing shall extend full height of steel casing.

–·–·–·– Indicates existing structure.

DESIGN	BY Greg Jones	CHECKED Kevin Harper	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 1	BRIDGE NO. 25-0064
DETAILS	BY G. M. Souza / J. Zhou	CHECKED Kevin Harper			POST MILE 19.61
QUANTITIES	BY	CHECKED			

EARTHQUAKE RETROFIT PROJECT

SMITH FLAT ROAD UNDERCROSSING

BENT RETROFIT DETAILS No. 4

STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 09-01-10)

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

UNIT: 3576
PROJECT NUMBER & PHASE: 03000000771 CONTRACT NO.: 03-0F3004

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

REVISION DATES				SHEET	OF
02-10-12	03-02-12	06/26/12		5	6

FILE => 25-0064-I-bent-cap-rf-dt04-dt.dgn

DATE PLOTTED => 13-MAR-2013 TIME PLOTTED => 10:59
USERNAME => s114937

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	ED	50	17.8,19.6	37	37

Robert G Jones 10/24/12
REGISTERED CIVIL ENGINEER DATE

3-11-13
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
Robert G. Jones
No. 65676
Exp. 9/30/13
CIVIL
STATE OF CALIFORNIA

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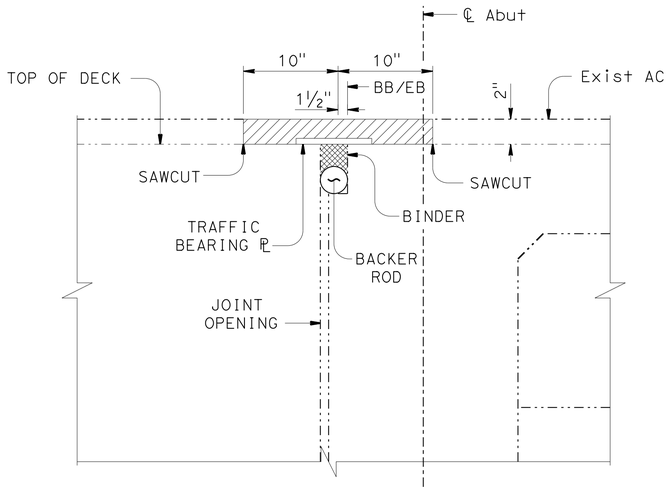


ASPHALTIC PLUG JOINT SEAL DETAIL

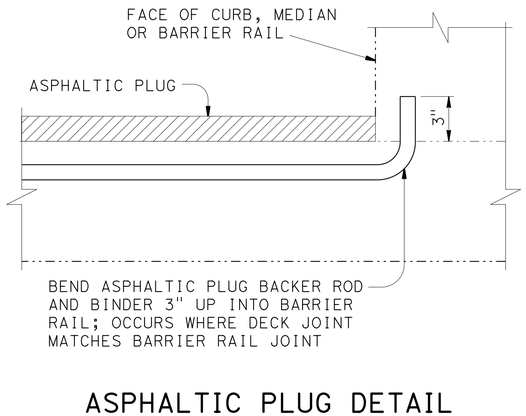
NO SCALE

LEGEND:

Sawcut and remove existing AC within limits shown.
Abrasive blast clean exposed concrete deck / abutment.
Place new asphaltic plug, minimum 2" thickness.

Indicates existing structure

LOCATION	MINIMUM "MR" (in)	Approx LENGTH (ft)	EXISTING WATERSTOP	Approx DEPTH OF CLEANING Exp Jt (ft)
Abutment 1	1	99.1	NO	1.0
Abutment 4	1	90.6	NO	1.0



ASPHALTIC PLUG DETAIL - BARRIER RAIL

NO SCALE

GENERAL NOTES

LOAD AND RESISTANCE FACTOR DESIGN

DESIGN:
AASHTO LRFD Bridge Design Specifications, Fourth Edition with California Amendments

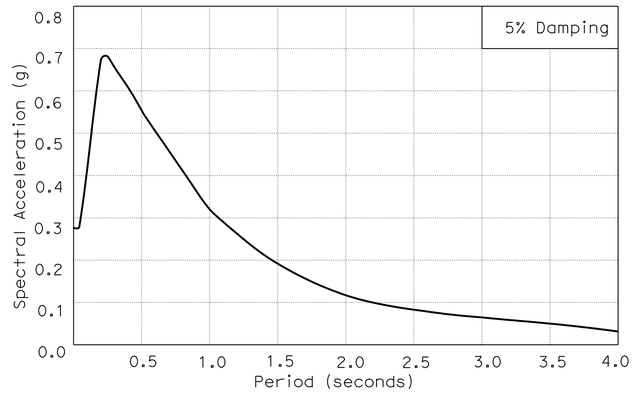
SEISMIC DESIGN:
Caltrans Seismic Design Criteria (SDC), Version 1.6, November 2010

SEISMIC LOADING:
Acceleration Response Curve Per Caltrans 2009 Seismic Design Procedure (SDP)

SOIL PROFILE:
Vs_{30} = 1650 ft/sec

Moment Magnitude: M_{max} = 6.5

Peak Ground Acceleration: 0.22g



REINFORCED CONCRETE:

NEW	EXISTING
f'c = 3.6 ksi	f'c = 5.0 ksi
fy = 60 ksi	fy = 40 ksi

DESIGN	BY Daniel Sessions	CHECKED Vadim Shostak	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION
DETAILS	BY Bob Huddleston	CHECKED Vadim Shostak	
QUANTITIES	BY Eric Watson	CHECKED Greg Thornton	

DIVISION OF ENGINEERING SERVICES
STRUCTURE DESIGN
DESIGN BRANCH 1

BRIDGE NO. 25-0064
POST MILE 19.61

EARTHQUAKE RETROFIT PROJECT
SMITH FLAT ROAD UNDERCROSSING
ASPHALTIC PLUG JOINT SEAL DETAILS

STRUCTURES DESIGN DETAIL SHEET (ENGLISH) (REV. 09-01-10)

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3

UNIT: 3576
PROJECT NUMBER & PHASE: 03000000771
CONTRACT NO.: 03-0F3004

DISREGARD PRINTS BEARING EARLIER REVISION DATES →

REVISION DATES				SHEET	OF
10-08-12	10-10-12			6	6

FILE => 25-0064-u-miscdt01.dgn

USERNAME => s114937 DATE PLOTTED => 13-MAR-2013 TIME PLOTTED => 10:59