

INDEX OF PLANS

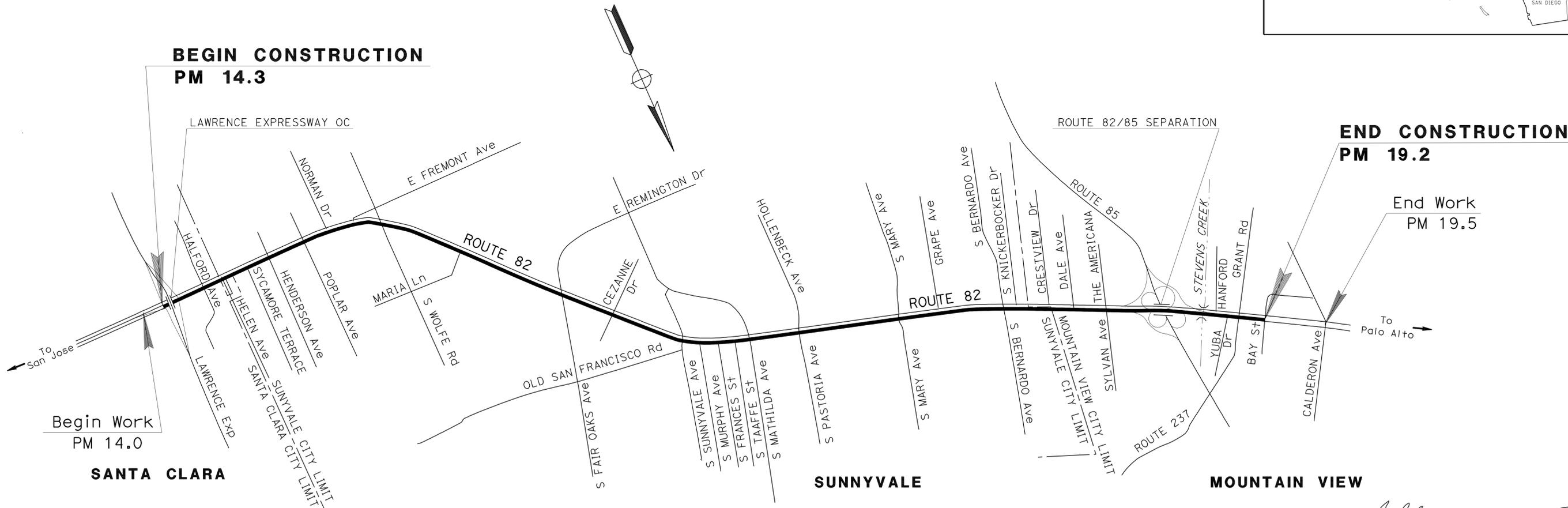
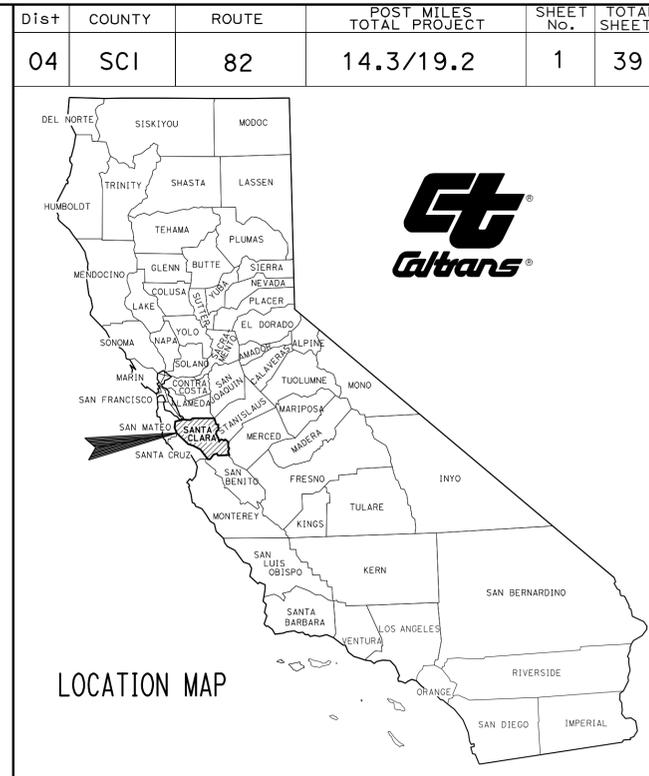
SHEET No.	DESCRIPTION
1	TITLE SHEET AND LOCATION MAP
2	TYPICAL CROSS SECTIONS
3-12	CONSTRUCTION DETAILS
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38-39	REVISED STANDARD PLANS

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

STATE OF CALIFORNIA ACSTP-P082(023)E
DEPARTMENT OF TRANSPORTATION

PROJECT PLANS FOR CONSTRUCTION ON
STATE HIGHWAY
IN SANTA CLARA COUNTY
IN AND NEAR SANTA CLARA, SUNNYVALE AND MOUNTAIN VIEW
FROM LAWRENCE EXPRESSWAY
TO 0.4 MILE WEST OF ROUTE 82/85 SEPARATION

TO BE SUPPLEMENTED BY STANDARD PLANS DATED 2010



PROJECT MANAGER	RAMSES SARGISS
DESIGN MANAGER	VIJITH THILAKARATNE

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

PROJECT ENGINEER: *Binh V. Hong* DATE: 1/16/13
 REGISTERED CIVIL ENGINEER
 No. 63850 Exp. 9-30-14
 February 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.	04-3E2904
PROJECT ID	0412000292

DATE PLOTTED => 27-FEB-2013 TIME PLOTTED => 11:21 02-11-13

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans MAINTENANCE

FUNCTIONAL SUPERVISOR
 VIJITH THILAKARATNE

CALCULATED/DESIGNED BY
 CHECKED BY

CHAO-HUN TANG
 BINH HONG

REVISOR BY
 DATE REVISED

CHT
 1/15/13

NOTES:

1. DIMENSIONS OF THE PAVEMENT STRUCTURES (STRUCTURAL SECTIONS) ARE SUBJECT TO TOLERANCES SPECIFIED IN THE STANDARD SPECIFICATIONS.
2. SUPERELEVATION AS SHOWN OR AS DIRECTED BY THE ENGINEER.
3. THE EXISTING PAVEMENT DELINEATION WILL BE REPLACED AT THE SAME LOCATION IN KIND.
4. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
5. EXISTING UTILITY FACILITIES HAVE NOT BEEN PLOTTED ON THESE PLANS.
6. PROTECT STEVENS CREEK TRAIL TUNNEL GLASS TILE ROOF AT POSTMILE 18.96.

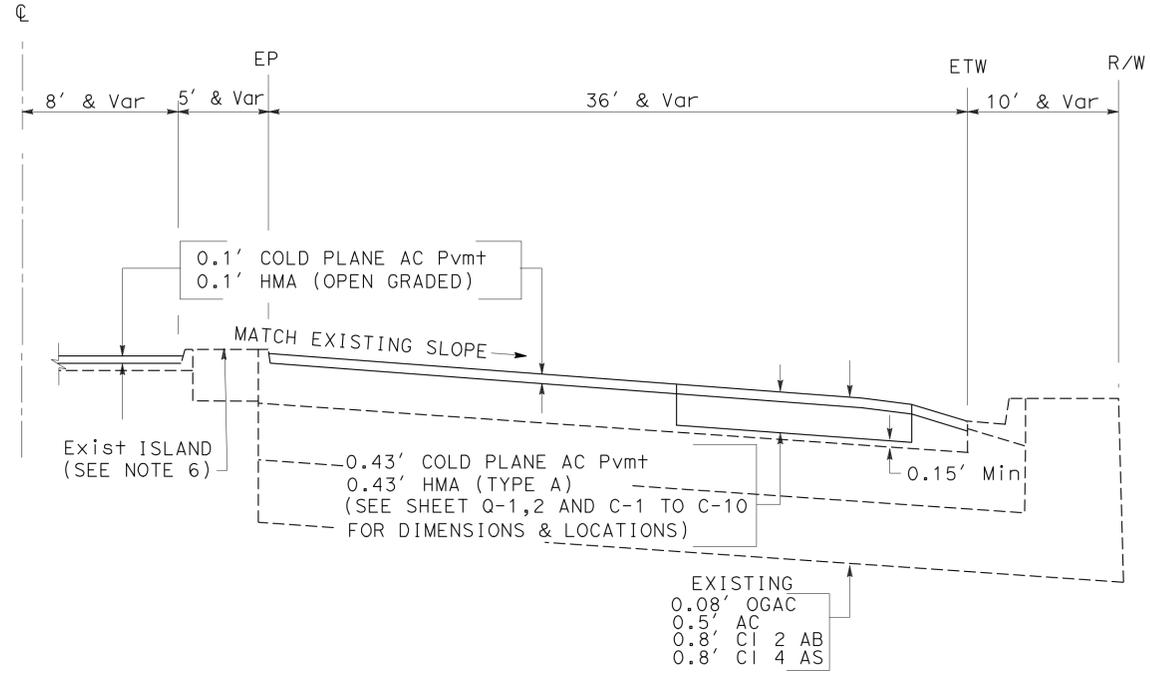
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04	SCI	82	14.3/19.2	2	39

REGISTERED CIVIL ENGINEER DATE 1/16/13

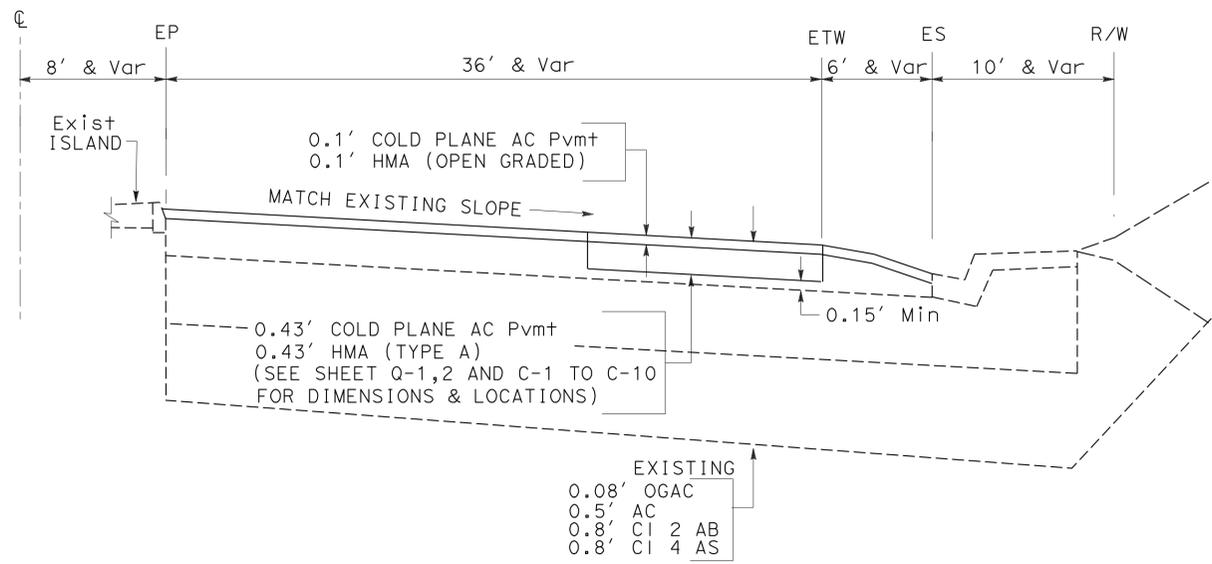
2-11-2013
 PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
 Binh V. Hong
 No. 63850
 Exp. 9-30-14
 CIVIL

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**NORTHBOUND
 ROUTE 82**
 PM 15.49, 15.70, 15.92, 16.38.
 16.59, 16.93, 17.45, 18.29, 19.05



**NORTHBOUND
 ROUTE 82**
 PM 14.3/19.2

TYPICAL CROSS SECTIONS
 NO SCALE

X-1

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans MAINTENANCE

FUNCTIONAL SUPERVISOR
 VIJITH THILAKARATNE

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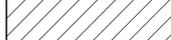
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 DATE REVISED

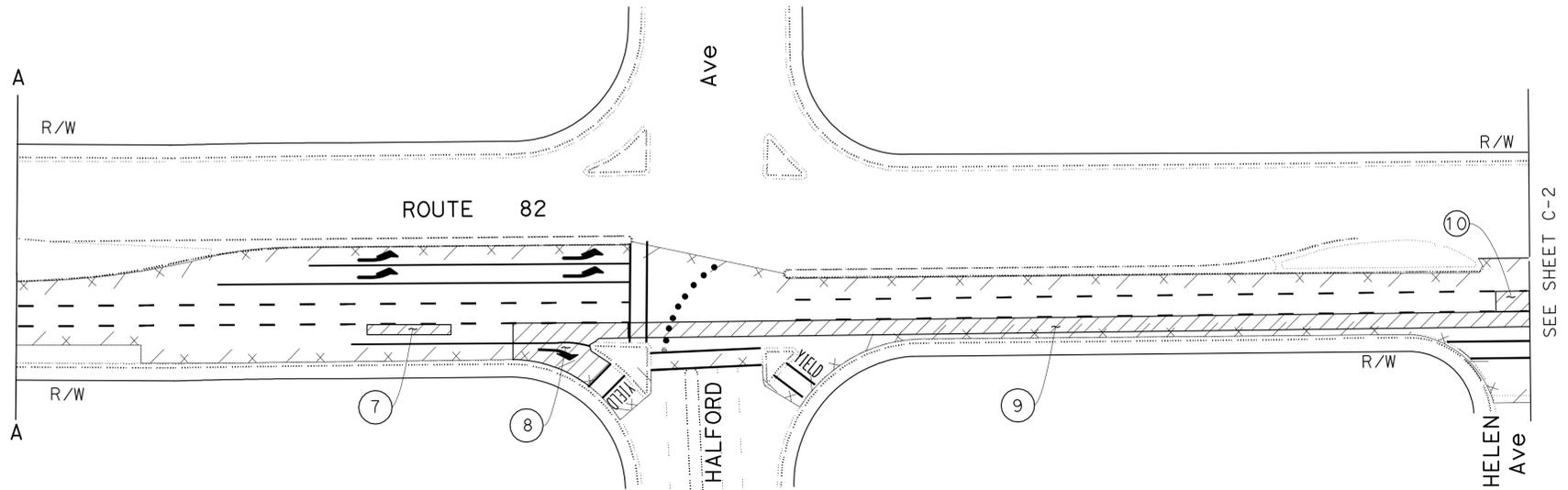
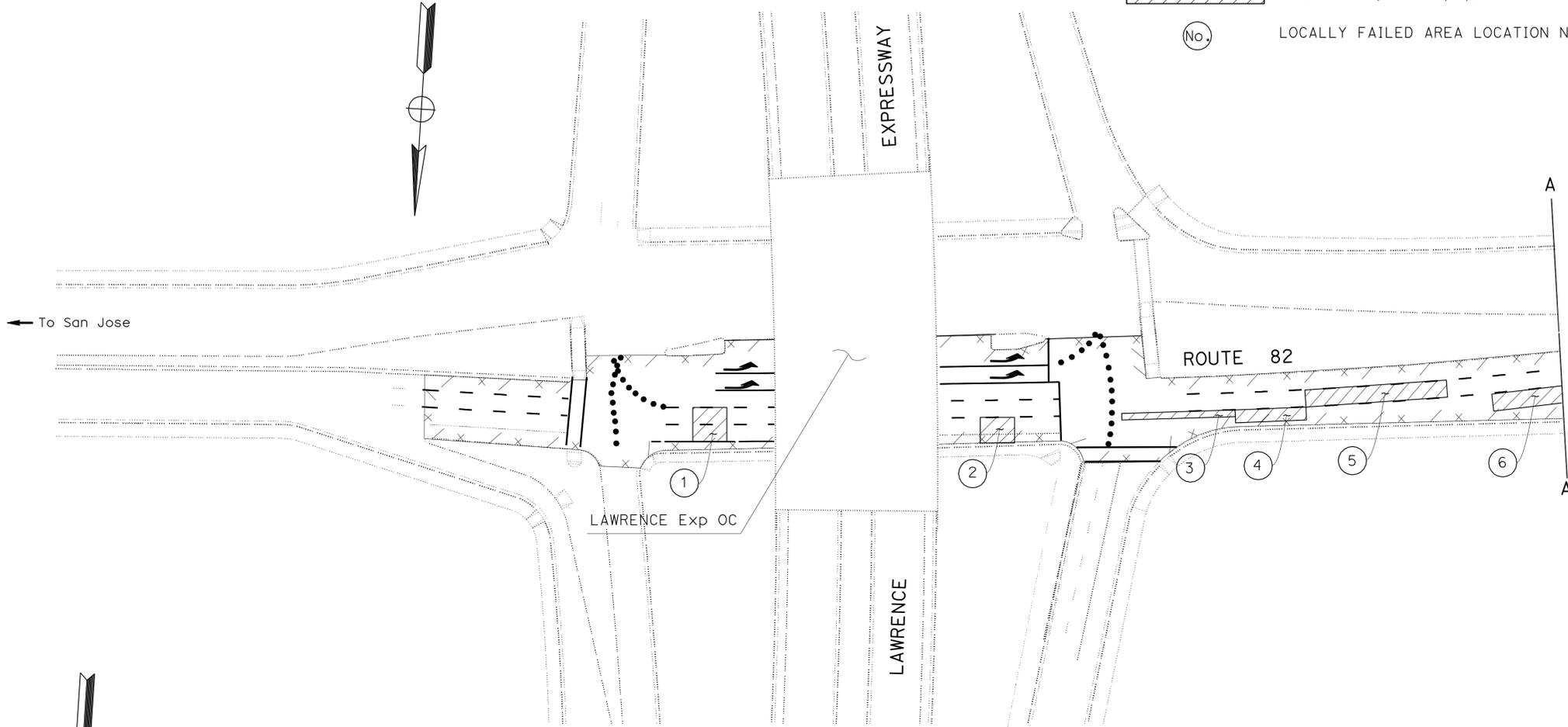
CHT
 1/15/13

NOTES:

- FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
- LIMIT LINE OF HMA (OPEN GRADED) ON CROSS STREETS IS AT OUTER EDGE OF CROSSWALK STRIPE OR AS DIRECTED BY THE ENGINEER.

LEGEND:

-  BUS PAD
-  COLD PLANE AC Pvm+ (0.1') AND 0.1' HMA (OPEN GRADED)
-  COLD PLANE AC Pvm+ (0.43') AND 0.43' HMA (TYPE A) (SEE Q-1 TO Q-2 SHEET)
-  LOCALLY FAILED AREA LOCATION No.



CONSTRUCTION DETAILS
 NO SCALE

C-1

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SCI	82	14.3/19.2	3	39

 1/16/13
 REGISTERED CIVIL ENGINEER DATE
 2-11-2013
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BINH V. HONG
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 CIVIL

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STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans MAINTENANCE

FUNCTIONAL SUPERVISOR
 VIJITH THILAKARATNE

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 CHECKED BY

CHAO-HUN TANG
 BINH HONG

REVISED BY
 DATE REVISED

CHT
 1/15/13

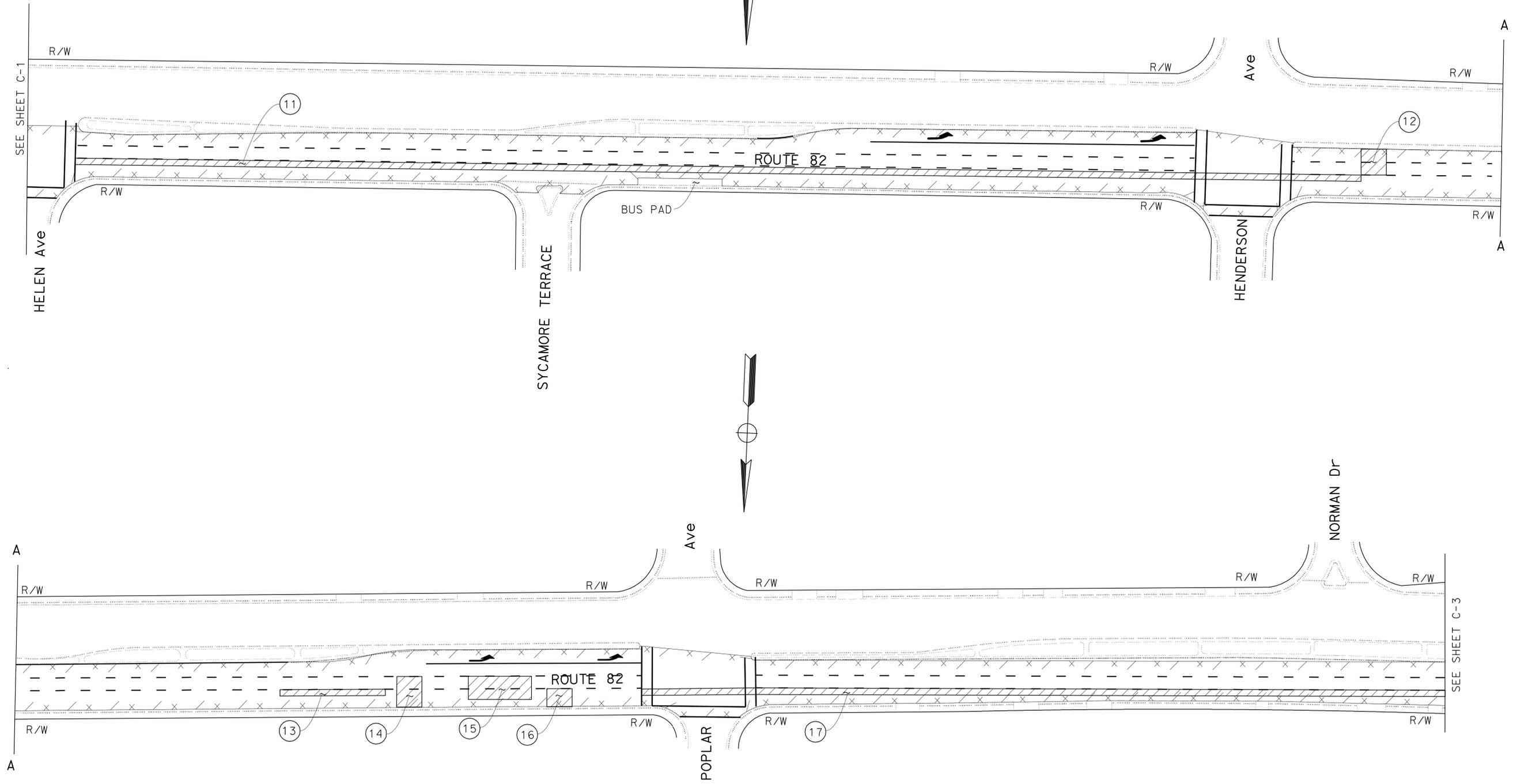
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 FOR ACCURATE RIGHT OF WAY DATA, CONTACT
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Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SCI	82	14.3/19.2	4	39

REGISTERED CIVIL ENGINEER DATE 1/16/13
 BINH V. HONG
 No. 63850
 Exp. 9-30-14
 CIVIL

PLANS APPROVAL DATE 2-11-2013

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FOR NOTES, ABBREVIATIONS
 AND LEGEND, SEE SHEET C-1

CONSTRUCTION DETAILS
 NO SCALE

C-2

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 VIJITH THILAKARATNE

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 CHECKED BY

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 BINH HONG

REVISOR BY
 DATE REVISED

CHT
 1/15/13

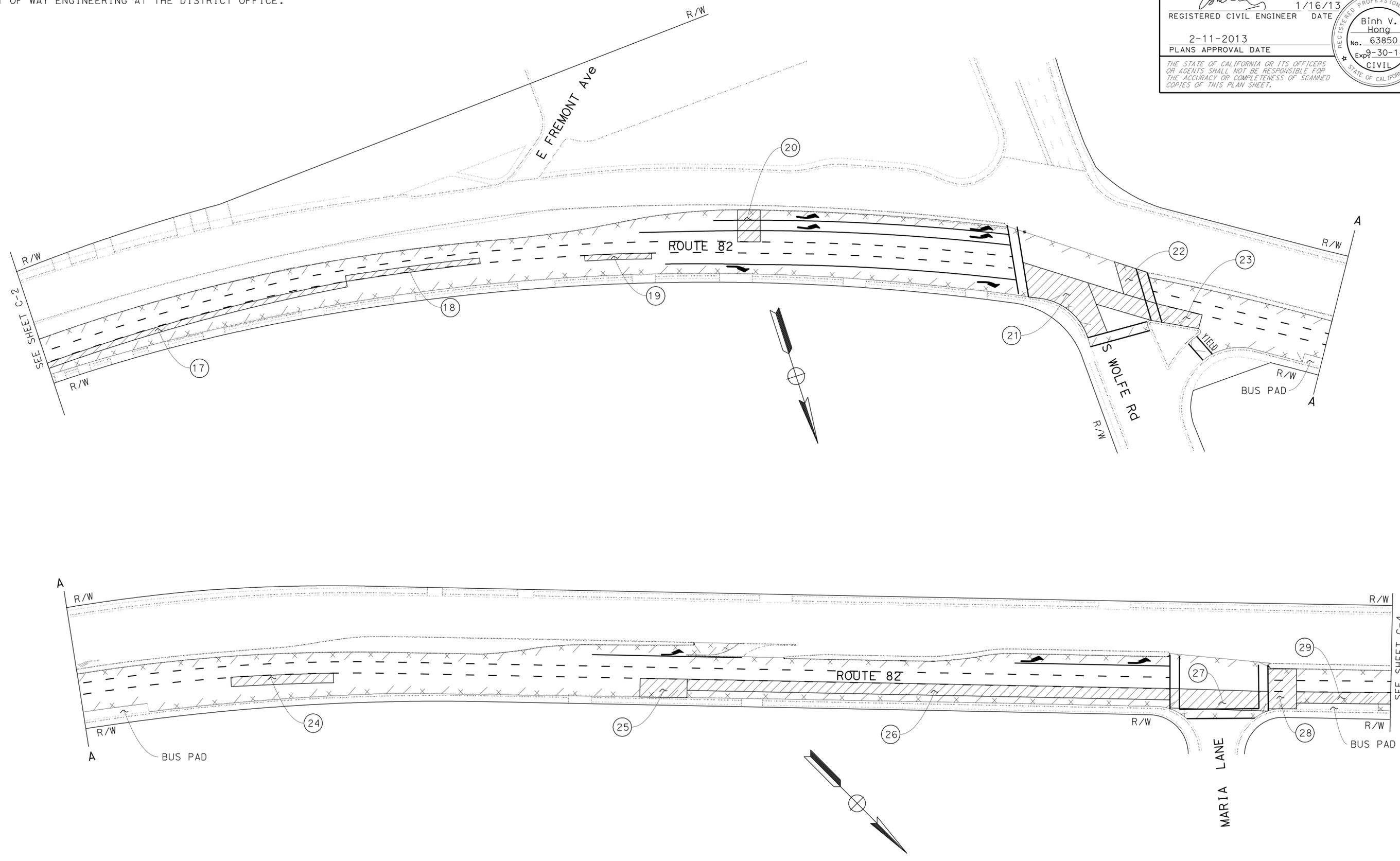
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DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SCI	82	14.3/19.2	5	39

REGISTERED CIVIL ENGINEER DATE 1/16/13
 2-11-2013
 PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
 Binh V. Hong
 No. 63850
 Exp. 9-30-14
 CIVIL
 STATE OF CALIFORNIA

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FOR NOTES, ABBREVIATIONS
 AND LEGEND, SEE SHEET C-1

CONSTRUCTION DETAILS
 NO SCALE

C-3

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
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FUNCTIONAL SUPERVISOR
 VIJITH THILAKARATNE

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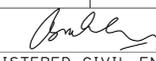
CHAO-HUN TANG
 BINH HONG

REVISED BY
 DATE REVISED

CHT
 1/15/13

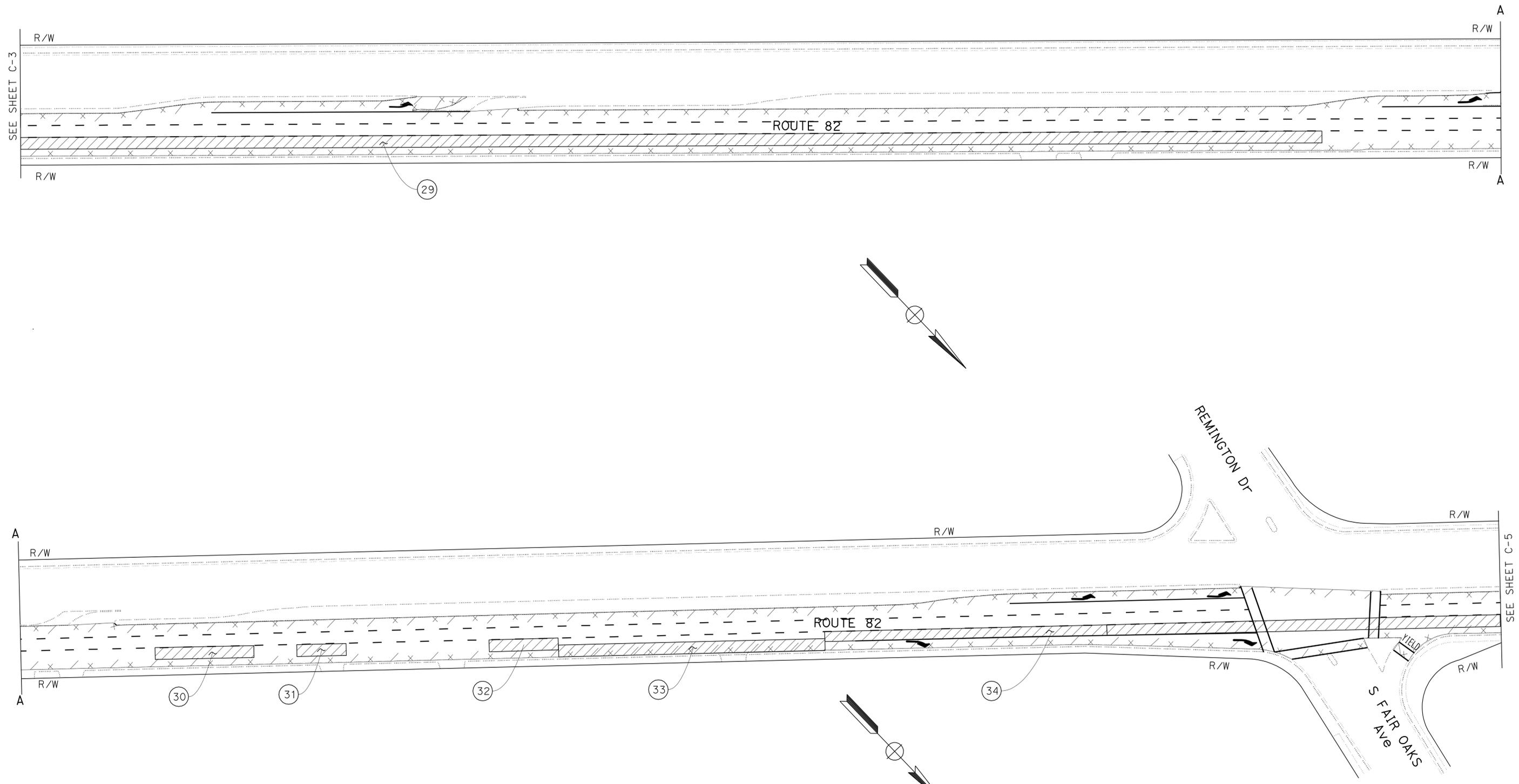
NOTE:
 FOR ACCURATE RIGHT OF WAY DATA, CONTACT
 RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SCI	82	14.3/19.2	6	39

 1/16/13
 REGISTERED CIVIL ENGINEER DATE
 2-11-2013
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REGISTERED PROFESSIONAL ENGINEER
 Binh V. Hong
 No. 63850
 Exp. 9-30-14
 CIVIL
 STATE OF CALIFORNIA

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FOR NOTES, ABBREVIATIONS
 AND LEGEND, SEE SHEET C-1

CONSTRUCTION DETAILS
 NO SCALE

C-4

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
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FUNCTIONAL SUPERVISOR
 VIJITH THILAKARATNE

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CHAO-HUN TANG
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REVISOR BY
 DATE REVISED

CHT
 1/15/13

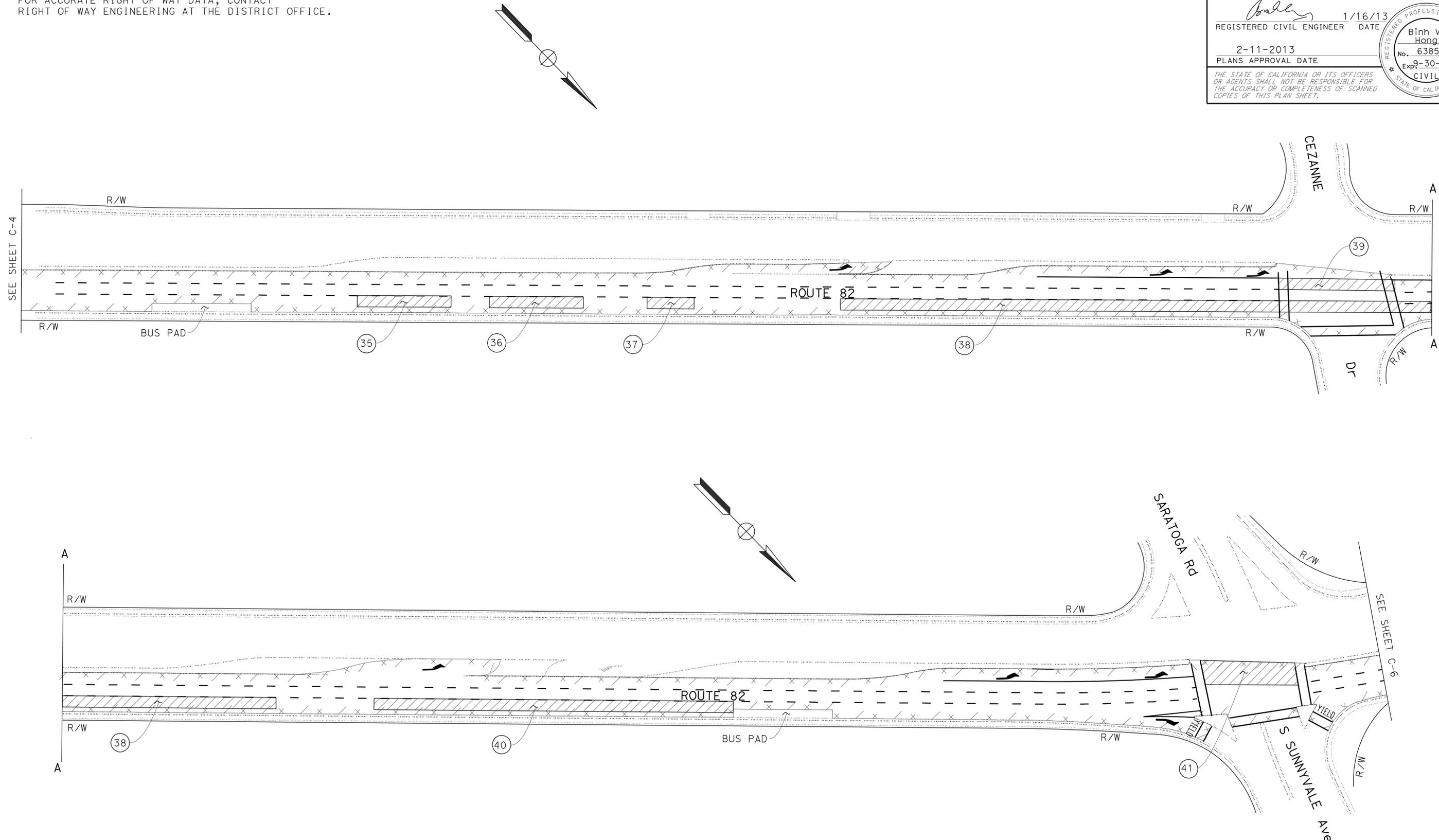
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 FOR ACCURATE RIGHT OF WAY DATA, CONTACT
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Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SCI	82	14.3/19.2	7	39

REGISTERED CIVIL ENGINEER
 DATE 1/16/13
 2-11-2013
 PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
 Binh V. Hong
 No. 63850
 Exp. 9-30-14
 CIVIL
 STATE OF CALIFORNIA

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FOR NOTES, ABBREVIATIONS
 AND LEGEND, SEE SHEET C-1

CONSTRUCTION DETAILS
 NO SCALE

C-5

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans MAINTENANCE

FUNCTIONAL SUPERVISOR VIJITH THILAKARATNE	CALCULATED-DESIGNED BY CHECKED BY	CHAO-HUN TANG BINH HONG	REVISED BY DATE REVISED	CHT 1/15/13
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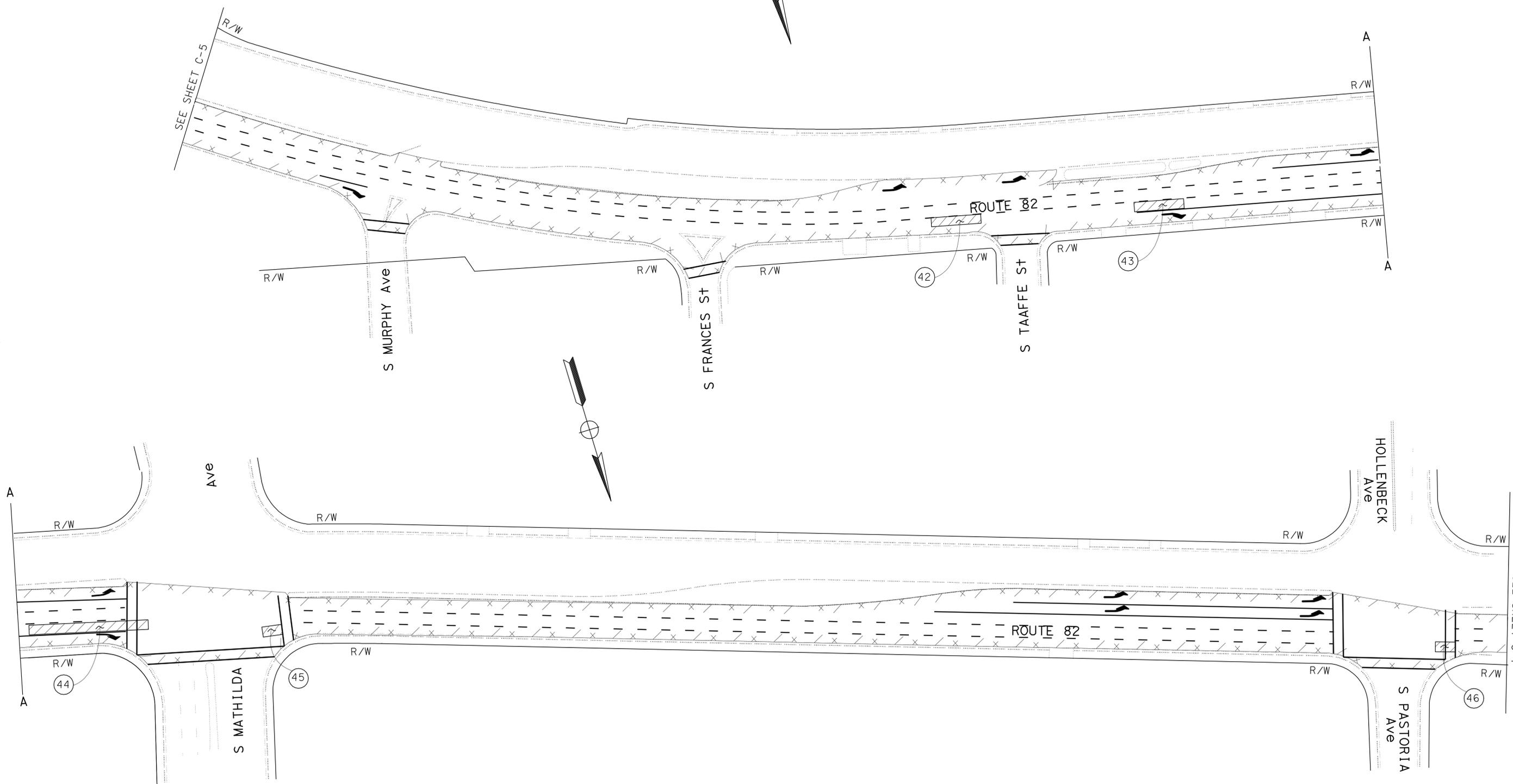
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DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SCI	82	14.3/19.2	8	39

1/16/13
 REGISTERED CIVIL ENGINEER DATE
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BINH V. HONG
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 Exp. 9-30-14
 CIVIL

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FOR NOTES, ABBREVIATIONS
 AND LEGEND, SEE SHEET C-1



CONSTRUCTION DETAILS
 NO SCALE

C-6

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans MAINTENANCE

FUNCTIONAL SUPERVISOR
 VIJITH THILAKARATNE

CALCULATED/DESIGNED BY
 CHECKED BY

CHAO-HUN TANG
 BINH HONG

REVISOR BY
 DATE REVISED

CHT
 1/15/13

NOTE:
 FOR ACCURATE RIGHT OF WAY DATA, CONTACT
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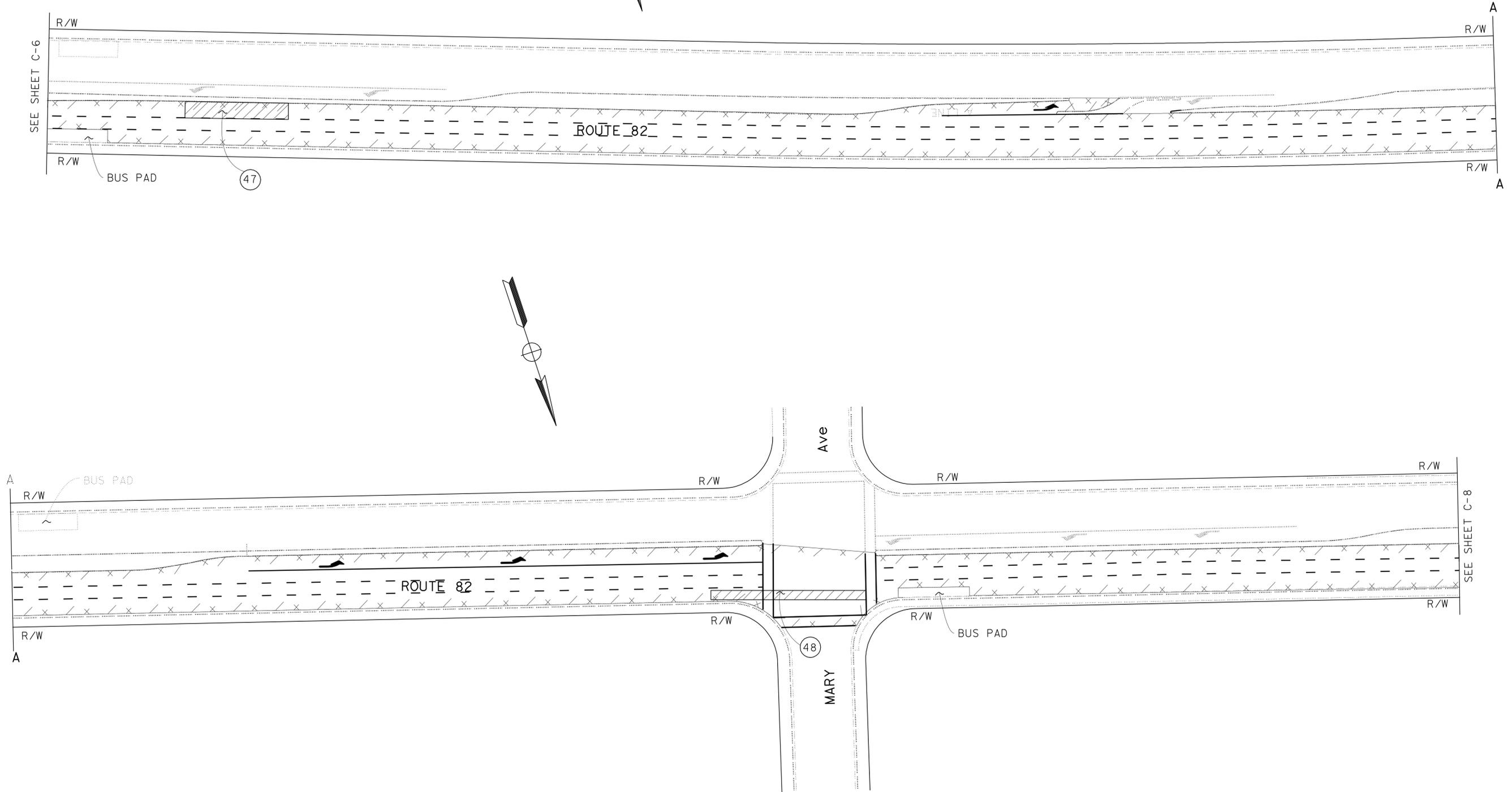
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SCI	82	14.3/19.2	9	39

1/16/13
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2-11-2013
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 No. 63850
 Exp. 9-30-14
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FOR NOTES, ABBREVIATIONS
 AND LEGEND, SEE SHEET C-1

CONSTRUCTION DETAILS
 NO SCALE

C-7

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans MAINTENANCE

FUNCTIONAL SUPERVISOR
 VIJITH THILAKARATNE

CHAO-HUN TANG
 BINH HONG

REVISOR
 CHIT

DATE REVISION
 1/15/13

CALCULATED/DESIGNED BY
 CHECKED BY

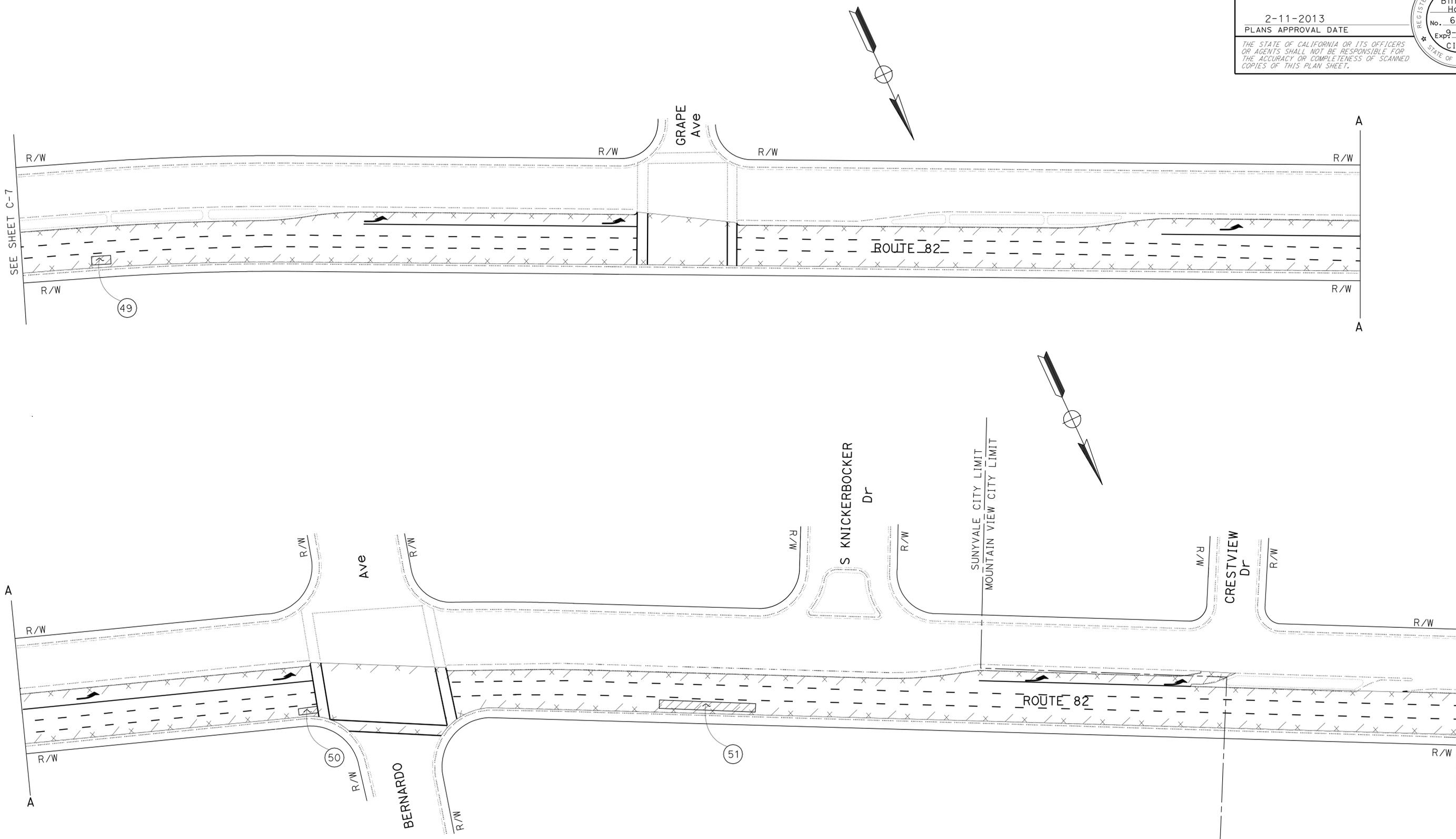
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Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SCI	82	14.3/19.2	10	39

REGISTERED CIVIL ENGINEER DATE 1/16/13
 2-11-2013
 PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
 Binh V. Hong
 No. 63850
 Exp. 9-30-14
 CIVIL
 STATE OF CALIFORNIA

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FOR NOTES, ABBREVIATIONS
 AND LEGEND, SEE SHEET C-1

CONSTRUCTION DETAILS
 NO SCALE

C-8

LAST REVISION DATE PLOTTED => 27-FEB-2013 01-08-13 TIME PLOTTED => 11:22

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FUNCTIONAL SUPERVISOR
 VIJITH THILAKARATNE

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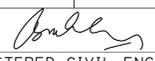
CHAO-HUN TANG
 BINH HONG

REVISED BY
 DATE REVISED

CHT
 1/15/13

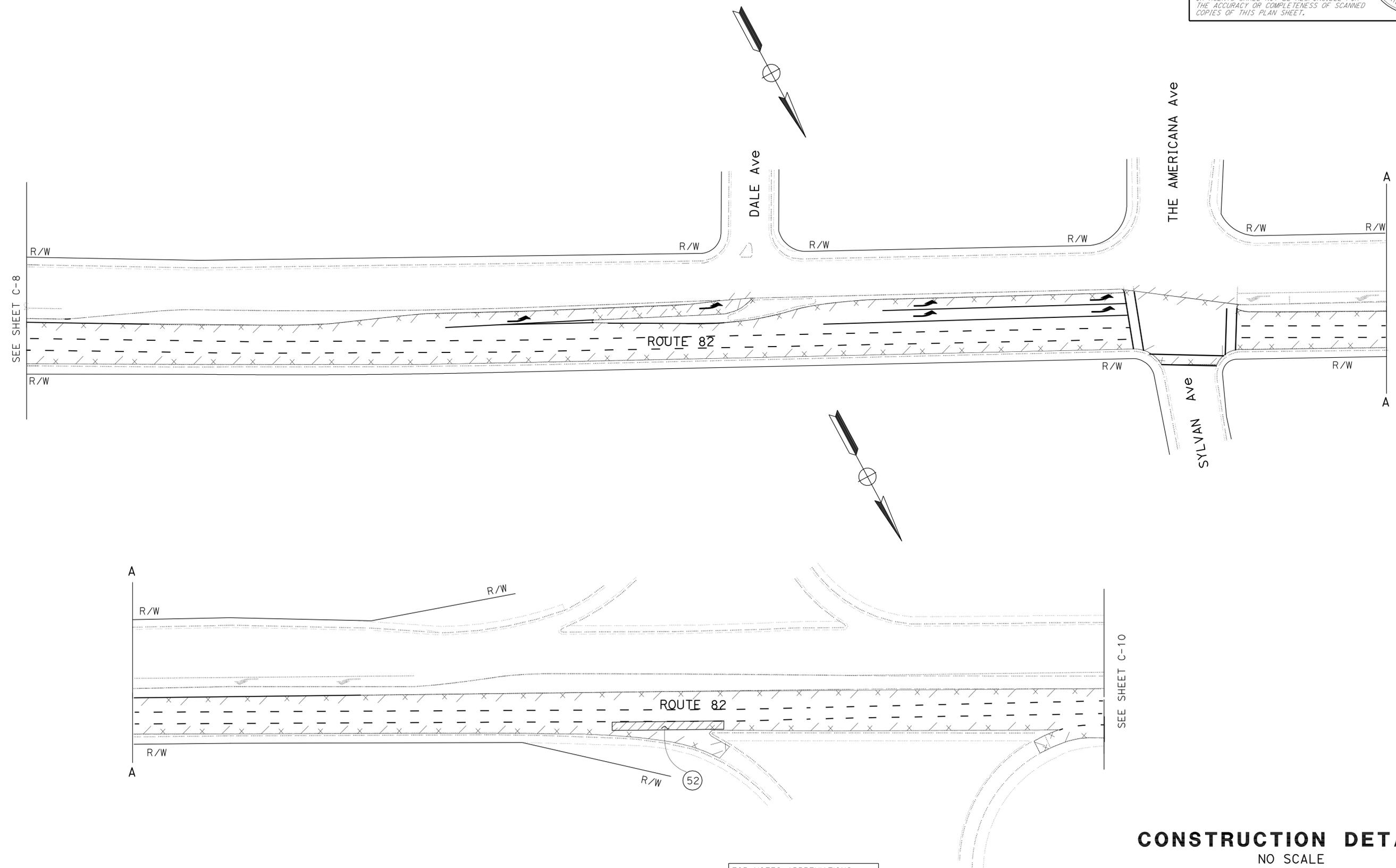
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Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SCI	82	14.3/19.2	11	39

 1/16/13
 REGISTERED CIVIL ENGINEER DATE
 2-11-2013
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REGISTERED PROFESSIONAL ENGINEER
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 No. 63850
 Exp. 9-30-14
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FOR NOTES, ABBREVIATIONS
 AND LEGEND, SEE SHEET C-1

CONSTRUCTION DETAILS
 NO SCALE

C-9

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Caltrans MAINTENANCE

FUNCTIONAL SUPERVISOR
 VIJITH THILAKARATNE

CALCULATED/DESIGNED BY
 CHECKED BY

CHAO-HUN TANG
 BINH HONG

REVISED BY
 DATE REVISED

CHT
 1/15/13

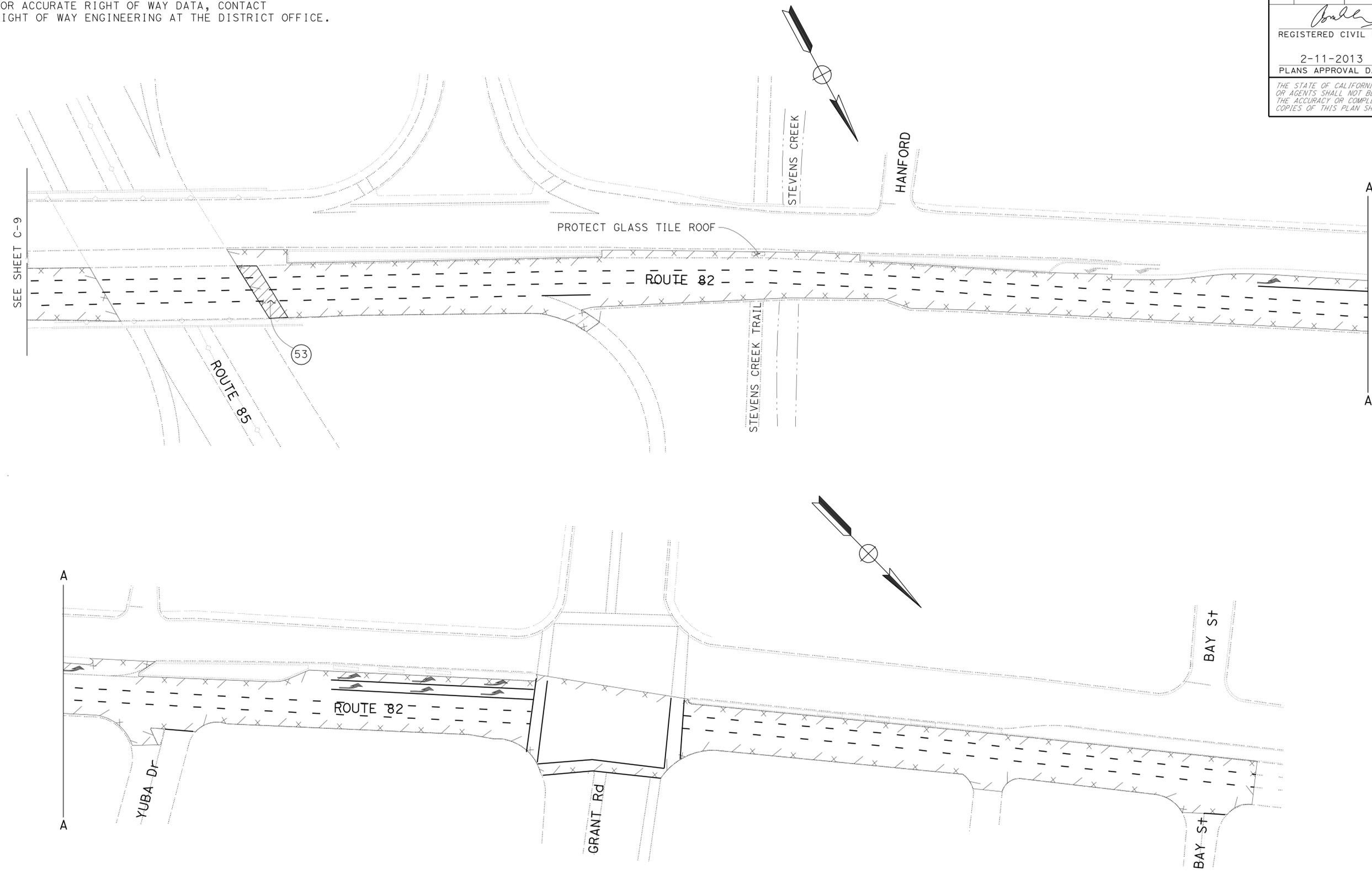
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Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SCI	82	14.3/19.2	12	39

1/16/13
 REGISTERED CIVIL ENGINEER DATE
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Binn V. Hong
 No. 63850
 Exp. 9-30-14
 CIVIL
 STATE OF CALIFORNIA

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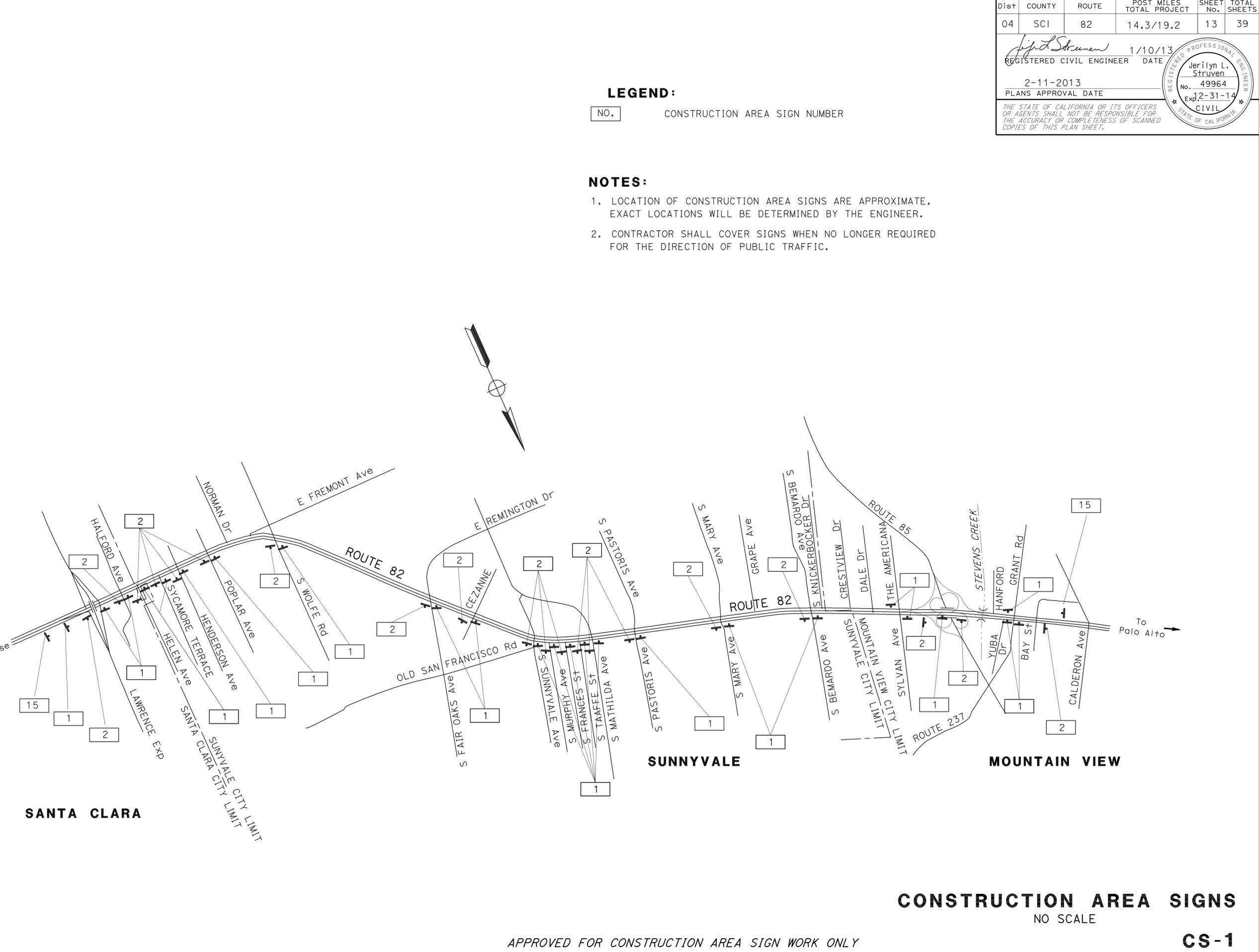
CONSTRUCTION DETAILS
 NO SCALE

C-10

LAST REVISION DATE PLOTTED => 27-FEB-2013
 01-08-13 TIME PLOTTED => 11:22

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
 FUNCTIONAL SUPERVISOR: ROLAND AU-YEUNG
 TRAFFIC

DESIGNED BY	STEVEN LAU	REVISIONS	DATE
CHECKED BY	JERILYN L. STRUVEN	NO.	DATE
DESIGNED BY	STEVEN LAU	REVISIONS	DATE
CHECKED BY	JERILYN L. STRUVEN	NO.	DATE
DESIGNED BY	STEVEN LAU	REVISIONS	DATE
CHECKED BY	JERILYN L. STRUVEN	NO.	DATE
DESIGNED BY	STEVEN LAU	REVISIONS	DATE
CHECKED BY	JERILYN L. STRUVEN	NO.	DATE



Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SCI	82	14.3/19.2	13	39
REGISTERED CIVIL ENGINEER <i>Jerilyn L. Struven</i> No. 49964 Exp. 2-31-14 CIVIL			1/10/13 DATE 2-11-2013 PLANS APPROVAL DATE		
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LEGEND:
 NO. CONSTRUCTION AREA SIGN NUMBER

- NOTES:**
1. LOCATION OF CONSTRUCTION AREA SIGNS ARE APPROXIMATE. EXACT LOCATIONS WILL BE DETERMINED BY THE ENGINEER.
 2. CONTRACTOR SHALL COVER SIGNS WHEN NO LONGER REQUIRED FOR THE DIRECTION OF PUBLIC TRAFFIC.

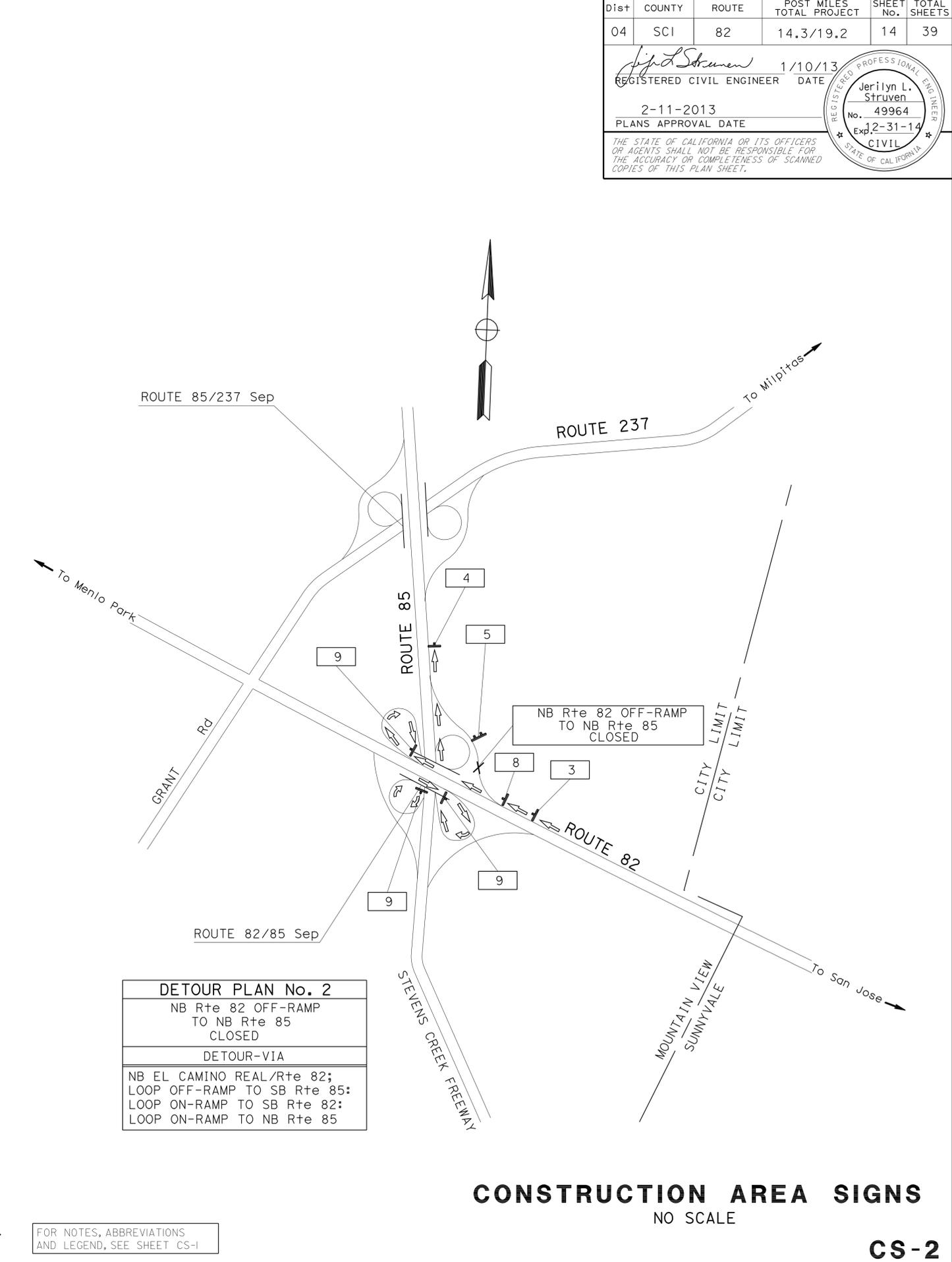
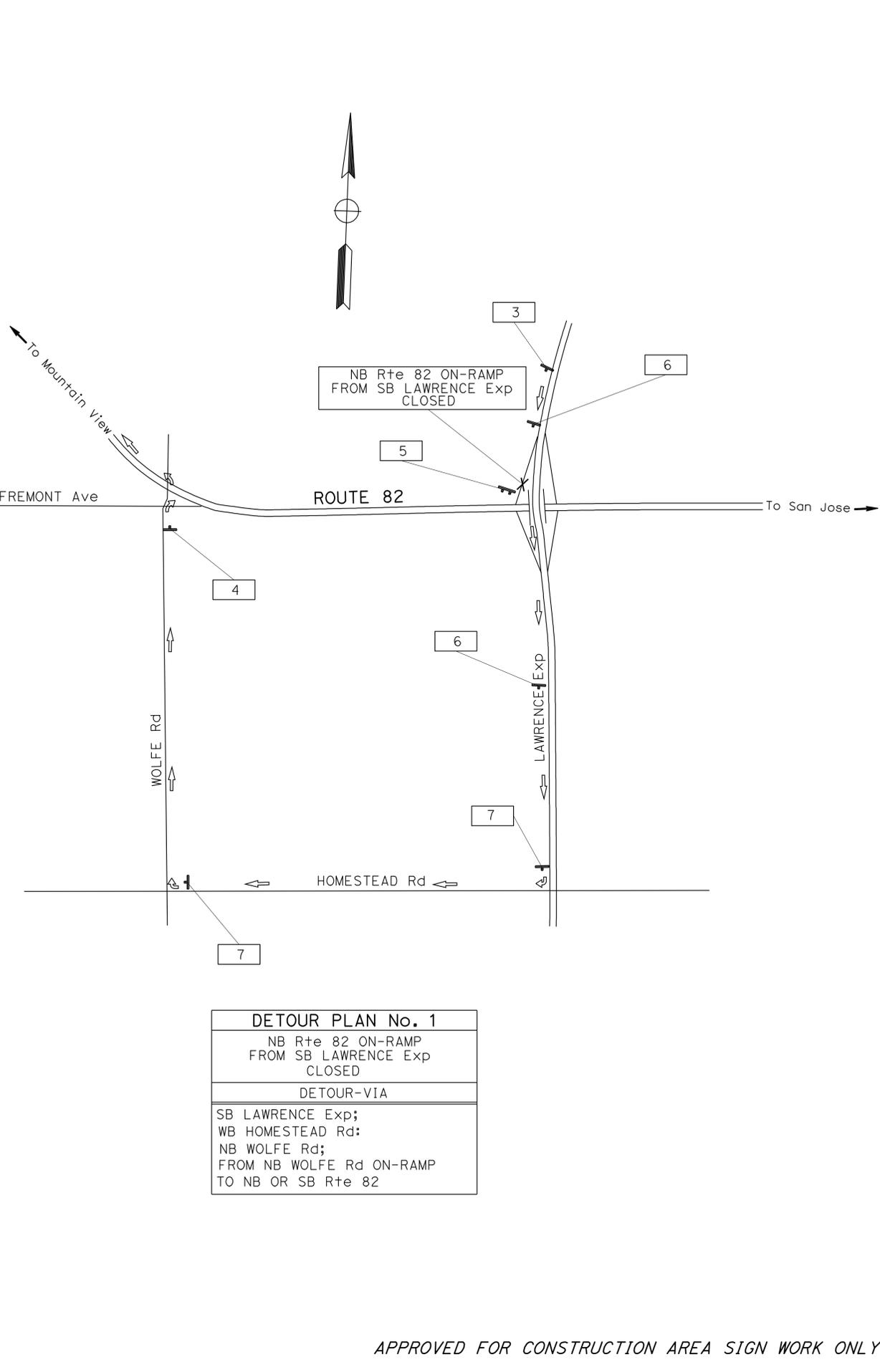
CONSTRUCTION AREA SIGNS
 NO SCALE

CS-1

APPROVED FOR CONSTRUCTION AREA SIGN WORK ONLY

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
 FUNCTIONAL SUPERVISOR: ROLAND AU-YEUNG
 TRAFFIC

DESIGNED BY	STEVEN LAU	REVISOR	CHT
CHECKED BY	JERILYN L. STRUVEN	DATE	1/15/13
DESIGNED BY		REVISOR	
CHECKED BY		DATE	



Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SCI	82	14.3/19.2	14	39

REGISTERED CIVIL ENGINEER
 1/10/13 DATE
 2-11-2013 PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
 Jerilyn L. Struven
 No. 49964
 Exp. 2-31-14
 CIVIL
 STATE OF CALIFORNIA

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APPROVED FOR CONSTRUCTION AREA SIGN WORK ONLY

FOR NOTES, ABBREVIATIONS AND LEGEND, SEE SHEET CS-1

CONSTRUCTION AREA SIGNS
 NO SCALE

CS-2

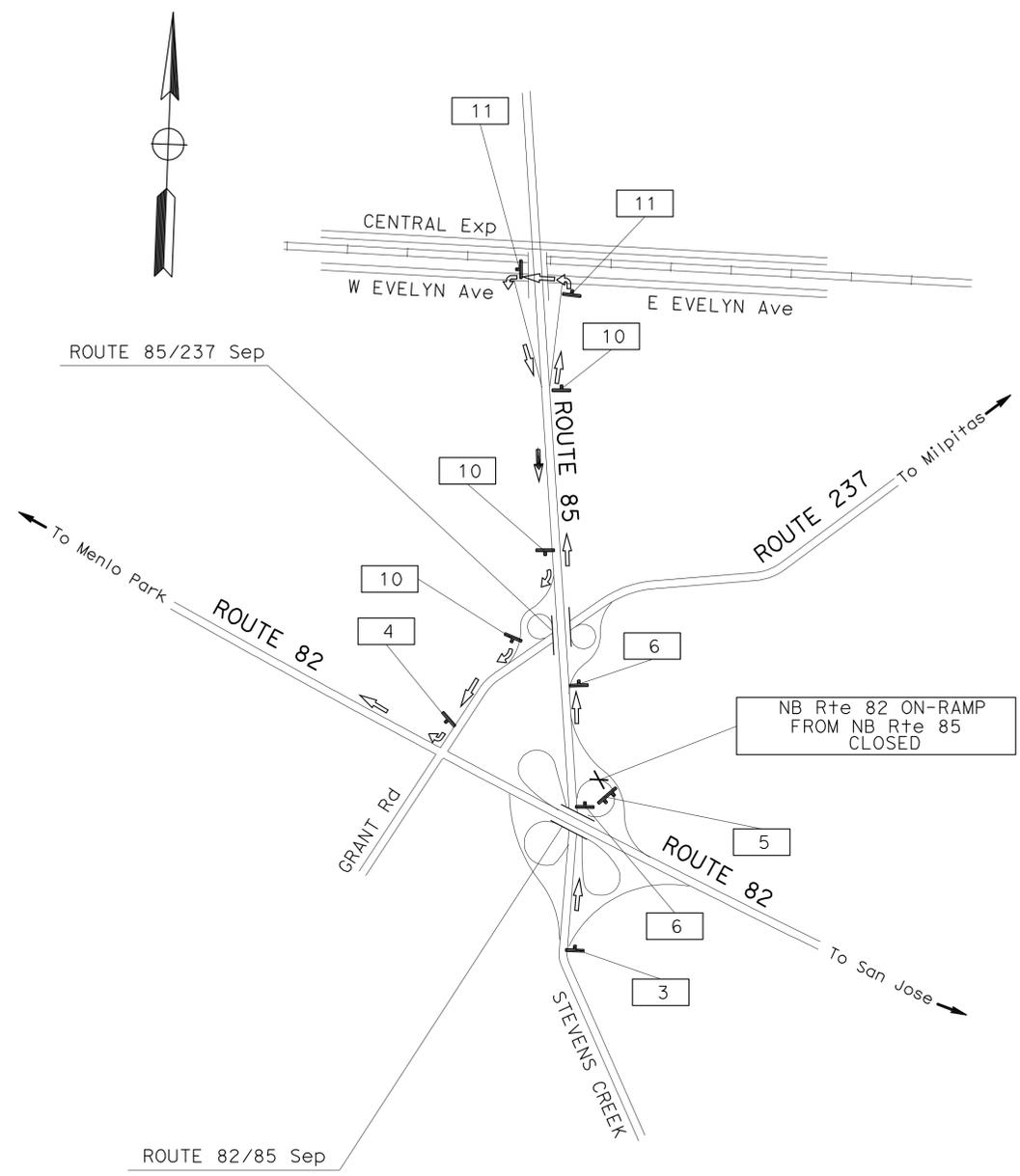
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STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
 FUNCTIONAL SUPERVISOR: ROLAND AU-YEUNG
 TRAFFIC
 CALCULATED/DESIGNED BY: STEVEN LAU
 CHECKED BY: JERILYN L. STRUVEN
 REVISED BY: CHT
 DATE REVISED: 1/15/13

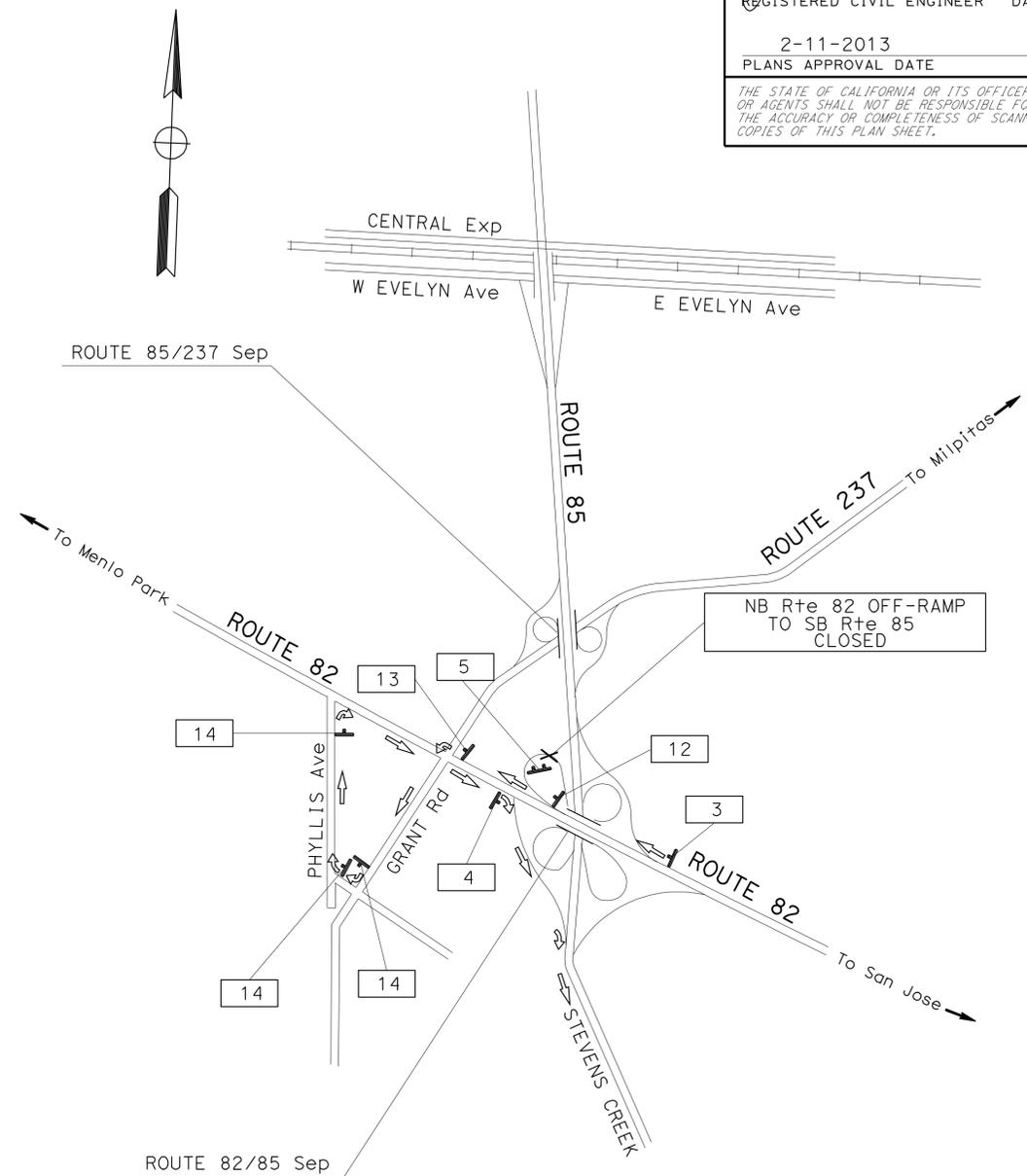
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
04	SCI	82	14.3/19.2	15	39

Jerilyn L. Struven
 REGISTERED CIVIL ENGINEER DATE: 1/10/13
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 No. 49964
 Exp. 2-31-14
 CIVIL
 STATE OF CALIFORNIA

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DETOUR PLAN No. 3
 NB Rte 82 ON-RAMP FROM NB Rte 85 CLOSED
 DETOUR-VIA
 NB Rte 85;
 OFF-RAMP TO WB EVELYN Ave;
 ON-RAMP TO SB Rte 85;
 ON-RAMP TO WB Rte 237;
 FROM WB Rte 237 ON-RAMP TO NB Rte 82



DETOUR PLAN No. 4
 NB Rte 82 OFF-RAMP TO SB Rte 85 CLOSED
 DETOUR-VIA
 NB EL CAMINO REAL/Rte 82;
 WB GRANT Rd;
 NB PHYLLIS Ave;
 SB/EL CAMINO REAL/Rte 82;
 ON-RAMP TO SB Rte 85

CONSTRUCTION AREA SIGNS
 NO SCALE

APPROVED FOR CONSTRUCTION AREA SIGN WORK ONLY
 FOR NOTES, ABBREVIATIONS AND LEGEND, SEE SHEET CS-1

CS-3

LAST REVISION DATE PLOTTED => 27-FEB-2013 08-27-12 TIME PLOTTED => 11:22

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SCI	82	14.3/19.2	16	39

Jerilyn L. Struven 1/10/13
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 2-11-2013
 PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
 No. 49964
 Exp. 2-31-14
 CIVIL
 STATE OF CALIFORNIA

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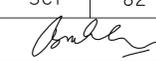
STATIONARY MOUNTED CONSTRUCTION AREA SIGNS

SIGN No.	MUTCD CODE	SIGN	PANEL SIZE	NUMBER OF POST AND SIZE	No. OF SIGNS
1	W20-1	ROAD WORK AHEAD	48" x 48"	(ONE) 4" x 4"	24
2	G20-2	END ROAD WORK	48" x 48"	(ONE) 4" x 4"	20
3	W20-2	DETOUR AHEAD	48" x 48"	(ONE) 4" x 4"	4
4	M4-8A	END DETOUR	30" x 18"	(ONE) 4" x 4"	4
5	SC6-4(CA)	RAMP CLOSED	60" x 48"	(TWO) 4" x 4"	4
6	SC3(↑)	DETOUR (STRAIGHT ARROW)	48" x 18"	(ONE) 4" x 4"	4
	M3-1	NORTH	21" x 9"		
	G28-2(82)	ROUTE SHIELD	28" x 24"		
7	M4-10(R+)	DETOUR (RIGHT)	48" x 18"	(ONE) 4" x 4"	2
	M3-1	NORTH	21" x 9"		
	G28-2(82)	ROUTE SHIELD	28" x 24"		
8	SC3(↑)	DETOUR (STRAIGHT ARROW)	48" x 18"	(ONE) 4" x 4"	1
	M3-1	NORTH	21" x 9"		
	G28-2(85)	ROUTE SHIELD	28" x 24"		
9	M3-8	DETOUR	25" x 24"	(ONE) 4" x 4"	3
	M3-1	NORTH	21" x 9"		
	G28-2(85)	ROUTE SHIELD	28" x 24"		
	M6-2(↗)	DETOUR (DIAGONAL ARROW)	21" x 15"		
10	M3-8	DETOUR	25" x 24"	(ONE) 4" x 4"	3
	M3-1	NORTH	21" x 9"		
	G28-2(82)	ROUTE SHIELD	28" x 24"		
	M6-2(↗)	DETOUR (DIAGONAL ARROW)	21" x 15"		
11	M4-10(L+)	DETOUR (LEFT)	48" x 18"	(ONE) 4" x 4"	2
	M3-1	NORTH	21" x 9"		
	G28-2(82)	ROUTE SHIELD	28" x 24"		
12	SC3(↑)	DETOUR (STRAIGHT ARROW)	48" x 18"	(ONE) 4" x 4"	1
	M3-3	SOUTH	21" x 9"		
	G28-2(85)	ROUTE SHIELD	28" x 24"		
13	M4-10(L+)	DETOUR (LEFT)	48" x 18"	(ONE) 4" x 4"	1
	M3-3	SOUTH	21" x 9"		
	G28-2(85)	ROUTE SHIELD	28" x 24"		
14	M4-10(R+)	DETOUR (RIGHT)	48" x 18"	(ONE) 4" x 4"	3
	M3-3	SOUTH	21" x 9"		
	G28-2(85)	ROUTE SHIELD	28" x 24"		
15	C40(CA)	TRAFFIC FINES DOUBLE	72" x 36"	(TWO) 4" x 6"	2

CONSTRUCTION AREA SIGNS
CS-4



Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SCI	82	14.3/19.2	17	39


 1/16/13
 REGISTERED CIVIL ENGINEER DATE
 2-11-2013
 PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
 Binh V. Hong
 No. 63850
 Exp. 9-30-14
 CIVIL
 STATE OF CALIFORNIA

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TRAFFIC STRIPES, PAVEMENT MARKINGS AND PAVEMENT MARKERS

DESCRIPTION	PM	DETAIL NO. OR PAVEMENT MARKING	NORTHBOUND								
			PAVEMENT MARKER			THERMOPLASTIC PAVEMENT MARKING	THERMOPLASTIC TRAFFIC STRIPE				
			NON-RETRO REFLECTIVE	RETROREFLECTIVE			YELLOW	WHITE			
			TYPE A	TYPE G	TYPE H	WHITE		4 INCH SOLID	4 INCH WHITE (BROKEN 17-7)	8 INCH WHITE (BROKEN 12-3)	8 INCH SOLID
EA			SQFT	LF							
LAWRENCE EXPRESSWAY TO HENDERSON Ave	14.3/14.83	9		236							
		25									
		38			51		2,809		5,618		
		40A		20							1,220
		TYPE III (L) ARROW							420		
		TYPE III (R) ARROW							42		
		12" LIMIT LINE							1,490		
YIELD							48				
HENDERSON Ave TO S WOLFE Rd	14.83/15.32	9		216							
		25									
		38			53		2,577		5,154		
		TYPE III (L) ARROW							252		
		TYPE III (R) ARROW							84		
12" LIMIT LINE							821				
S WOLFE Rd TO MARIA LANE	15.32/15.60	9		126							
		25									
		38			11		1,489		2,978		
		TYPE III (L) ARROW							126		
		12" LIMIT LINE							370		
YIELD							24				
MARIA LANE TO S FAIR OAKS Ave	15.60/16.16	9		246							
		25									
		38			39		2,946		5,892		
		TYPE III (L) ARROW							168		
		TYPE III (R) ARROW							84		
12" LIMIT LINE							470				
S FAIR OAKS Ave TO S SUNNYVALE Ave	16.16/16.76	9		266							
		25									
		38			30		3,179		6,352		
		TYPE III (L) ARROW							252		
		TYPE III (R) ARROW							42		
12" LIMIT LINE							1,030				
YIELD							48				
SUBTOTAL			20	1274	274	5,771	13,000	25,994		4,346	

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

MAINTENANCE

FUNCTIONAL SUPERVISOR

VIJITH THILAKARATNE

CALCULATED/DESIGNED BY

CHECKED BY

CHAO-HUN TANG

BINH HONG

REVISED BY

DATE REVISED

CHT

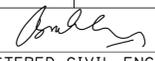
1/15/13

PAVEMENT DELINEATION QUANTITIES

PDQ-1

LAST REVISION DATE PLOTTED => 27-FEB-2013
 03-13-12 TIME PLOTTED => 11:22

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SCI	82	14.3/19.2	18	39

 1/16/13
 REGISTERED CIVIL ENGINEER DATE
 2-11-2013
 PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
 Binh V.
 Hong
 No. 63850
 Exp. 9-30-14
 CIVIL
 STATE OF CALIFORNIA

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TRAFFIC STRIPES, PAVEMENT MARKINGS AND PAVEMENT MARKERS

DESCRIPTION	PM	DETAIL NO. OR PAVEMENT MARKING	NORTHBOUND							
			PAVEMENT MARKER			THERMOPLASTIC PAVEMENT MARKING	THERMOPLASTIC TRAFFIC STRIPE			
			NON-RETRO REFLECTIVE	RETROREFLECTIVE			YELLOW	WHITE		
			TYPE A	TYPE G	TYPE H	WHITE		4 INCH SOLID	4 INCH WHITE (BROKEN 17-7)	8 INCH WHITE (BROKEN 12-3)
EA			SQFT	LF						
S SUNNYVALE Ave TO PASTORIA Ave	16.76/17.26	9		220						
		25								
		38		54						1,280
		TYPE III (L) ARROW			336					
		TYPE III (R) ARROW			126					
12" LIMIT LINE			1,174							
YIELD			24							
PASTORIA Ave TO S MARY Ave	17.26/17.69	9		190				4,540		
		25								
		38		26		2,270				600
		TYPE III (L) ARROW			168					
		12" LIMIT LINE			410					
S MARY Ave TO S BERNARDO Ave	17.69/18.17	9		200				4,774		
		25								
		38		33		2,387				770
		TYPE III (L) ARROW			210					
		12" LIMIT LINE			650					
S BERNARDO Ave TO SYLVAN Ave	18.17/18.58	9		194				4,626		
		25								
		38		44		2,313				1,040
		TYPE III (L) ARROW			336					
		12" LIMIT LINE			380					
SYLVAN Ave TO Rte 82/85 SEPARATION	18.58/18.82	9		106				2,514		
		25								
		38		27		1,257				
		TYPE III (L) ARROW			210					
		12" LIMIT LINE			210					
SUBTOTAL				1,067	231	4,024	10,856	21,712		3,690

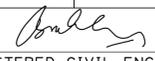
PAVEMENT DELINEATION QUANTITIES

PDQ-2

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
 MAINTENANCE
 CHAO-HUN TANG
 BINH HONG
 CALCULATED/DESIGNED BY
 CHECKED BY
 FUNCTIONAL SUPERVISOR
 VIJITH THILAKARATNE
 CHT
 1/15/13
 REVISED BY
 DATE REVISED



Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SCI	82	14.3/19.2	19	39

 1/16/13
 REGISTERED CIVIL ENGINEER DATE
 2-11-2013
 PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
 Binh V.
 Hong
 No. 63850
 Exp. 9-30-14
 CIVIL
 STATE OF CALIFORNIA

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TRAFFIC STRIPES, PAVEMENT MARKINGS AND PAVEMENT MARKERS

DESCRIPTION	PM	DETAIL NO. OR PAVEMENT MARKING	NORTHBOUND									
			PAVEMENT MARKER			THERMOPLASTIC PAVEMENT MARKING	THERMOPLASTIC TRAFFIC STRIPE					
			NON-RETRO REFLECTIVE	RETROREFLECTIVE			YELLOW	WHITE				
			TYPE A	TYPE G	TYPE H	WHITE		4 INCH SOLID	4 INCH WHITE (BROKEN 17-7)	8 INCH WHITE (BROKEN 12-3)	8 INCH SOLID	
EA			SQFT	LF								
Rte 82/85 SEPARATION TO BAY St	18.82/19.2	9		208					4984			
		25					53					
		38			37						520	
		37B			24							550
		TYPE III (L) ARROW 12" LIMIT LINE					336					
SUBTOTAL(PDQ-3)				269	53	451	2,492	4,984	520	550		
SUBTOTAL(PDQ-1)			20	1274	274	5,771	13,000	25,994		4,346		
SUBTOTAL(PDQ-2)				1,067	231	4,024	10,856	21,712		3,690		
SUBTOTAL			20	2,610	558	10,246	26,348	52,690	520	8,586		
TOTAL			20	3,168		10,246	26,348	52,690	520	8,586		

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans MAINTENANCE

FUNCTIONAL SUPERVISOR
 VIJITH THILAKARATNE

CALCULATED-
DESIGNED BY
 CHECKED BY

CHAO-HUN TANG
 BINH HONG

REVISED BY
 DATE REVISED

CHT
 1/15/13

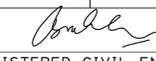
PAVEMENT DELINEATION QUANTITIES

PDQ-3



COLD PLANE AC PAVEMENT (LOCALLY FAILED AREA) AT MAINLINE (NORTHBOUND) *

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SCI	82	14.3/19.2	20	39


 1/16/13
 REGISTERED CIVIL ENGINEER DATE

2-11-2013
 PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
 Binh V. Hong
 No. 63850
 Exp. 9-30-14
 CIVIL
 STATE OF CALIFORNIA

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LOCATION	PM	LOCATION No.	LEFT TURN LANE 1		LEFT TURN LANE 2		LANE 1		LANE 2		LANE 3		COLD PLANE AC PAVEMENT (0.43')		HMA (TYPE A) (0.43')	TACK COAT	
			LENGTH (N)	WIDTH (N)	LENGTH (N)	WIDTH (N)	LENGTH (N)	WIDTH (N)	LENGTH (N)	WIDTH (N)	LENGTH (N)	WIDTH (N)	SQYD	CY(N)	Ton		
			LF														
LAWRENCE EXPRESSWAY TO HENDERSON Ave	14.3/14.83	1							24	12	24	12	64.0	9.2	19	0.03	
		2									24	24	64.0	9.2	19	0.03	
		3									80	6	53.3	7.6	15	0.02	
		4									50	12	66.7	9.6	19	0.03	
		5							100	12			133.3	19.1	39	0.06	
		6									50	12	66.7	9.6	19	0.03	
		7									50	6	33.3	4.8	10	0.01	
		8									80	32	284.4	40.8	83	0.12	
		9										270	12	360.0	51.6	104	0.15
		10								20	12			26.7	3.8	8	0.01
		11										1400	6	933.3	133.8	271	0.39
HENDERSON Ave TO S WOLFE Rd	14.83/15.32	12					24	12	24	12			64.0	9.2	19	0.03	
		13									100	6	66.7	9.6	19	0.03	
		14							24	12	24	24	96.0	13.8	28	0.04	
		15								60	12	60	12	160.0	22.9	46	0.07
		16									24	24	64.0	9.2	19	0.03	
		17									1140	6	760.0	108.9	221	0.32	
		18							150	6			100.0	14.3	29	0.04	
		19									100	6	66.7	9.6	19	0.03	
		20			24	12	24	12	24	12			96.0	13.8	28	0.04	
		21										70	24	186.7	26.8	54	0.08
S WOLFE Rd TO MARIA LANE	15.32/15.60	22					30	12	30	12			80.0	11.5	23	0.03	
		23									120	12	160.0	22.9	46	0.07	
		24									100	12	133.3	19.1	39	0.06	
		25									50	24	133.3	19.1	39	0.06	
		26									600	12	800.0	114.7	232	0.33	
		27									90	24	240.0	34.4	70	0.10	
MARIA LANE TO S FAIR OAKS Ave	15.60/16.16	28					30	12	30	12	30	24	160.0	22.9	46	0.07	
		29									1550	12	2066.7	296.2	600	0.86	
		30									100	12	133.3	19.1	39	0.06	
		31									50	12	66.7	9.6	19	0.03	
		32									70	12	93.3	13.4	27	0.04	
		33									270	12	360.0	51.6	104	0.15	
		34									860	12	1146.7	164.4	333	0.48	
S FAIR OAKS Ave TO S SUNNYVALE Ave	16.16/16.76	35									100	12	133.3	19.1	39	0.06	
		36									100	12	133.3	19.1	39	0.06	
		37									50	12	66.7	9.6	19	0.03	
		38									1120	12	1493.3	214.0	433	0.62	
		39						120	12			160.0	22.9	46	0.07		
		40									400	12	533.3	76.4	155	0.22	
SUBTOTAL													11839.1	1696.9	3436	4.90	

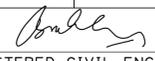
(N) NOT A SEPARATE PAY ITEM, FOR INFORMATION ONLY
 * QUANTITIES ARE INCLUDED IN THE SUMMARY OF QUANTITIES TABLE

SUMMARY OF QUANTITIES

Q - 1



Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SCI	82	14.3/19.2	21	39


 1/16/13
 REGISTERED CIVIL ENGINEER DATE

2-11-2013
 PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
 Binh V. Hong
 No. 63850
 Exp. 9-30-14
 CIVIL
 STATE OF CALIFORNIA

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COLD PLANE AC PAVEMENT (LOCALLY FAILED AREA) AT MAINLINE (NORTHBOUND) *

LOCATION	PM	LOCATION No.	LEFT TURN LANE 1		LEFT TURN LANE 2		LANE 1		LANE 2		LANE 3		COLD PLANE AC PAVEMENT (0.43')		HMA (TYPE A) (0.43')	TACK COAT
			LENGTH (N)	WIDTH (N)	LENGTH (N)	WIDTH (N)	LENGTH (N)	WIDTH (N)	LENGTH (N)	WIDTH (N)	LENGTH (N)	WIDTH (N)	SQYD	CY(N)	Ton	
			LF													
S SUNNYVALE Ave TO PASTORIA Ave	16.76/17.26	41	100	12			100	12					266.7	38.2	77	0.11
		42								50	12	66.7	9.6	19	0.03	
		43								50	12	66.7	9.6	19	0.03	
		44								120	12	160.0	22.9	46	0.07	
		45								20	12	26.7	3.8	8	0.01	
		46								20	12	26.7	3.8	8	0.01	
PASTORIA Ave TO S MARY Ave	17.26/17.69	47					100	12					133.3	19.1	39	0.06
		48								150	12	200.0	28.7	58	0.08	
S MARY Ave TO S BERNARDO Ave	17.69/18.17	49									20	12	26.7	3.8	8	0.01
		50								20	12	26.7	3.8	8	0.01	
S BERNARDO Ave TO SYLVAN Ave	18.17/18.58	51									100	12	133.3	19.1	39	0.06
SYLVAN Ave TO Rte 82/85 SEPARATION	18.58/18.82	52									100	12	133.3	19.1	39	0.06
Rte 82/85 SEPARATION TO BAY St	18.82/19.20	53					20	12	20	12	20	24	106.7	15.3	31	0.04
SUBTOTAL(Q-2)												1373.3	196.8	399	0.6	
SUBTOTAL(Q-1)												11839.1	1696.9	3436	4.9	
TOTAL												13212.4	1893.7	3835	5.5	

(N) NOT A SEPARATE PAY ITEM, FOR INFORMATION ONLY
 * QUANTITIES ARE INCLUDED IN THE SUMMARY OF QUANTITIES TABLE

**SUMMARY OF QUANTITIES
Q-2**

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
 MAINTENANCE
 CHAO-HUN TANG
 BINH HONG
 CALCULATED-DESIGNED BY
 CHECKED BY
 FUNCTIONAL SUPERVISOR
 VIJITH THILAKARATNE

LAST REVISION DATE PLOTTED => 27-FEB-2013 01-08-13 TIME PLOTTED => 11:22

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SCI	82	14.3/19.2	22	39

1/16/13
DATE

REGISTERED CIVIL ENGINEER

Binh V. Hong
No. 63850
Exp. 9-30-14
CIVIL

2-11-2013
PLANS APPROVAL DATE

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ROADWAY QUANTITIES (NORTHBOUND)*

LOCATION	PM	TURNING LEFT LANE 1		TURNING LEFT LANE 2		LANE 1		LANE 2		LANE 3		COLD PLANE AC PAVEMENT 0.1'		HMA (OPEN GRADED) (0.1')	TACK COAT
		LENGTH (N)	WIDTH (N)	LENGTH (N)	WIDTH (N)	LENGTH (N)	WIDTH (N)	LENGTH (N)	WIDTH (N)	LENGTH (N)	WIDTH (N)	SQYD	CY (N)	TON	
		LF													
LAWRENCE EXPRESSWAY TO HENDERSON Ave	14.30/14.83	1150	12	725	12	2809	12	2809	12	2809	24	17481	583	1180	7.28
HENDERSON Ave TO S WOLFE Rd	14.83/15.32	752	12	520	12	2577	12	2577	12	2577	24	15440	515	1042	6.43
S WOLFE Rd TO MARIA LANE	15.32/15.60	460	12	0	12	1489	12	1489	12	1489	24	8555	285	577	3.56
MARIA LANE TO S FAIR OAKS Ave	15.60/16.16	860	12	0	12	2946	12	2946	12	2946	24	16859	562	1138	7.02
S FAIR OAKS Ave TO S SUNNYVALE Ave	16.16/16.76	1110	12	0	12	3179	12	3179	12	3179	24	18435	614	1244	7.68
S SUNNYVALE Ave TO PASTORIA Ave	16.76/17.26	1140	12	475	12	2629	12	2629	12	2629	24	16175	539	1092	6.74
PASTORIA Ave TO S MARY Ave	17.26/17.69	813	12	0	12	2270	12	2270	12	2270	24	13191	440	890	5.50
S MARY Ave TO S BERNARDO Ave	17.69/18.17	1003	12	0	12	2387	12	2387	12	2387	24	14068	469	950	5.86
S BERNARDO Ave TO SYLVAN Ave	18.17/18.58	1035	12	415	12	2313	12	2313	12	2313	24	14269	476	963	5.95
SYLVAN Ave TO Rte 82/85 SEPARATION	18.58/18.82	0	12	0	12	1257	12	1257	12	1257	24	6704	223	453	2.79
Rte 82/85 SEPARATION - BAY STREET	18.82/19.2	560	12	317	12	2492	12	2492	12	2492	24	14460	482	976	6.03
TOTAL												155,636	5,188	10,505	64.8

(N) NOT A SEPARATE PAY ITEM, FOR INFORMATION ONLY
* QUANTITIES ARE INCLUDED IN THE SUMMARY OF QUANTITIES TABLE

SUMMARY OF QUANTITIES (NORTHBOUND)

LOCATION	PM	COLD PLANE AC PAVEMENT (0.43')	COLD PLANE AC PAVEMENT (0.1')	HMA (TYPE A) (0.43')	HMA (OPEN GRADED) (0.1')	TACK COAT
		SQYD		TON		
SUBTOTAL FROM COLD PLANE AC PAVEMENT (LOCAL FAILED AREA) AT MAINLINE (NORTHBOUND)	14.3/19.2	13212.4		3835		5.5
SUBTOTAL FROM HMA (OPEN GRADED) OVERLAY AT MAINLINE (NORTHBOUND)	14.3/19.2		155636.0		10505	64.8
TOTAL		168848.4		3835	10505	70.3

SUMMARY OF QUANTITIES

Q-3



Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SCI	82	14.3/19.2	23	39

<i>Kenneth Y. Xu</i>	1-10-13
REGISTERED ELECTRICAL ENGINEER	DATE
2-11-2013	
PLANS APPROVAL DATE	

REGISTERED PROFESSIONAL ENGINEER
Kenneth Y. Xu
No. 15219
Exp-30-13
ELECTRICAL
STATE OF CALIFORNIA

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NOTE:

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

GENERAL NOTES:

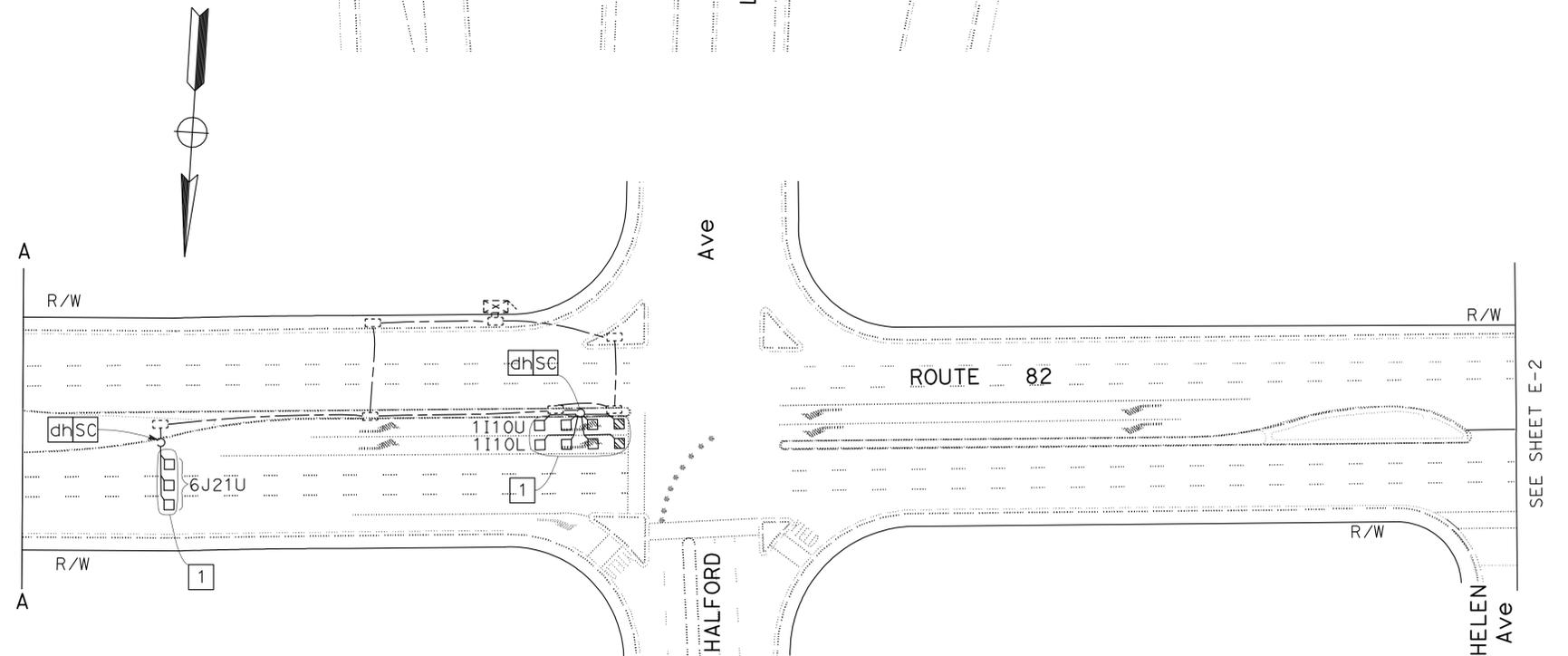
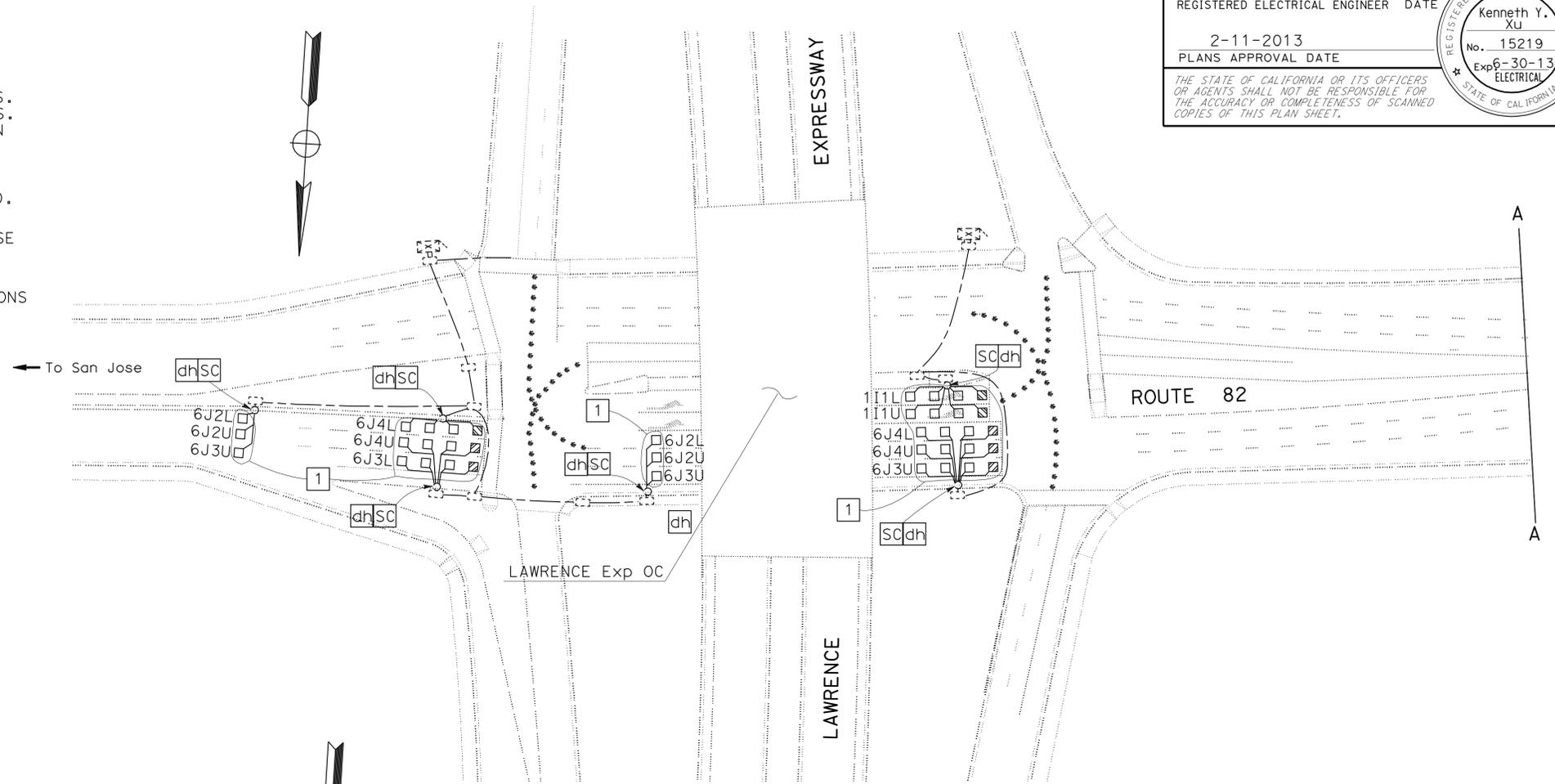
1. ABANDON EXISTING LOOPS IN PLACE WHEN CUTTING NEW REPLACEMENT LOOPS. REPLACED LOOPS SHALL BE AT THE SAME VICINITY OF THE EXISTING LOOPS. SPLICE NEW DETECTOR CONDUCTORS TO CORRESPONDING dlc IN TERMINATION PULL BOX. VERIFY IDENTIFICATION OF EXISTING dlc BEFORE CONNECTING TO THE CORRESPONDING LOOP DETECTORS.
2. INSTALL LOCKING GRADE RING FOR EXISTING DETECTOR HANDHOLE AS NEEDED.
3. EXISTING ELECTRICAL EQUIPMENT SHALL REMAIN IN PLACE EXCEPT OTHERWISE SHOWN ON THE PLAN.
4. PULL BOX AND DETECTOR LOOP LOCATIONS ARE APPROXIMATE, EXACT LOCATIONS ARE TO BE DETERMINED BY THE CONTRACTOR.
5. ALL LOOP DETECTORS AT EACH LOCATION SHALL BE REPLACED AND TESTED WITHIN THE TIME ALLOTTED FOR TRAFFIC SIGNAL SYSTEM SHUTDOWN AT THAT LOCATION.
6. THE CONTRACTOR SHALL PROVIDE TWO REPORTS PER LOCATION ON THE STATUS OF EACH DETECTOR LOOP REPLACEMENT SHOWING CONTINUITY AND INSULATION RESISTANCE READINGS. THE REPORTS SHALL BE SUBMITTED TO THE ENGINEER, ONE BEFORE STARTING WORK AND THE OTHER AFTER WORK HAS BEEN COMPLETED AT EACH LOCATION.
7. WHERE ONE OR MORE TRAFFIC SIGNAL DETECTOR(S) CONSIST OF A SEQUENCE OF 4 LOOPS IN A SINGLE LANE, THE FRONT LOOP CLOSEST TO THE LIMIT LINE OR CROSSWALK SHALL BE LOCATED 1 FOOT FROM THE LINE. THE SET OF 3 LOOPS OR 4 LOOPS ASSIGNED TO THE SAME LOOP DETECTOR LEAD-IN CABLE (DLC) SHALL BE CONNECTED IN SERIES FOR TRAFFIC SIGNAL SYSTEM ONLY AND NOT FOR RAMP METERING SYSTEM.

PROJECT NOTE:

- 1 ABANDON EXISTING LOOP AND INSTALL NEW LOOP.

ELECTRICAL INDEX

- E-1 TO E-10 MODIFY INDUCTIVE LOOP DETECTOR (REPLACE)
- E-11 ELECTRICAL DETAILS



MODIFY INDUCTIVE LOOP DETECTOR (REPLACE)

NO SCALE

E-1

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
 ELECTRICAL
 FUNCTIONAL SUPERVISOR: KENNETH Y. XU
 CALCULATED/DESIGNED BY: KENNETH Y. XU
 CHECKED BY:
 REVISIONS: 1/15/13
 CHT: 1/15/13
 DORIS YANG
 KENNETH Y. XU

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
 ELECTRICAL

FUNCTIONAL SUPERVISOR: KENNETH Y. XU
 CHECKED BY: KENNETH Y. XU
 DESIGNED BY: DORIS YANG
 REVISIONS: 1/15/13
 DATE REVISION: 1/15/13

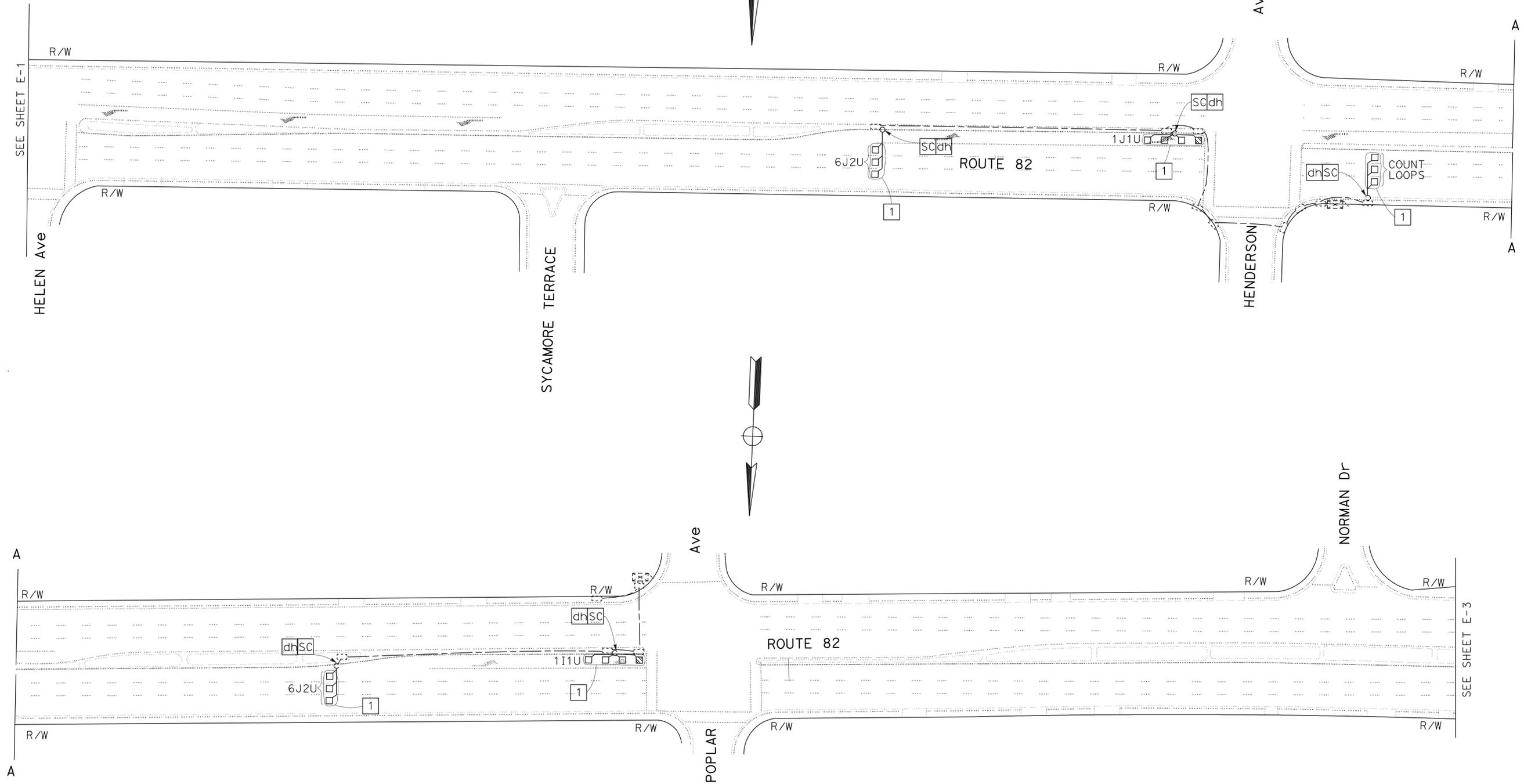
NOTE:
 FOR ACCURATE RIGHT OF WAY DATA, CONTACT
 RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SCI	82	14.3/19.2	24	39

REGISTERED ELECTRICAL ENGINEER: Kenneth Y. Xu
 DATE: 1-10-13
 PLANS APPROVAL DATE: 2-11-2013

REGISTERED PROFESSIONAL ENGINEER: Kenneth Y. Xu
 No. 15219
 Exp. 6-30-13
 ELECTRICAL

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MODIFY INDUCTIVE LOOP DETECTOR (REPLACE)

NO SCALE

E-2

APPROVED FOR ELECTRICAL WORK ONLY

FOR NOTES, ABBREVIATIONS AND LEGEND, SEE SHEET E-1

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans ELECTRICAL

FUNCTIONAL SUPERVISOR: KENNETH Y. XU
 CHECKED BY: KENNETH Y. XU
 DESIGNED BY: DORIS YANG
 REVISIONS: 1/15/13
 DATE: 1/15/13

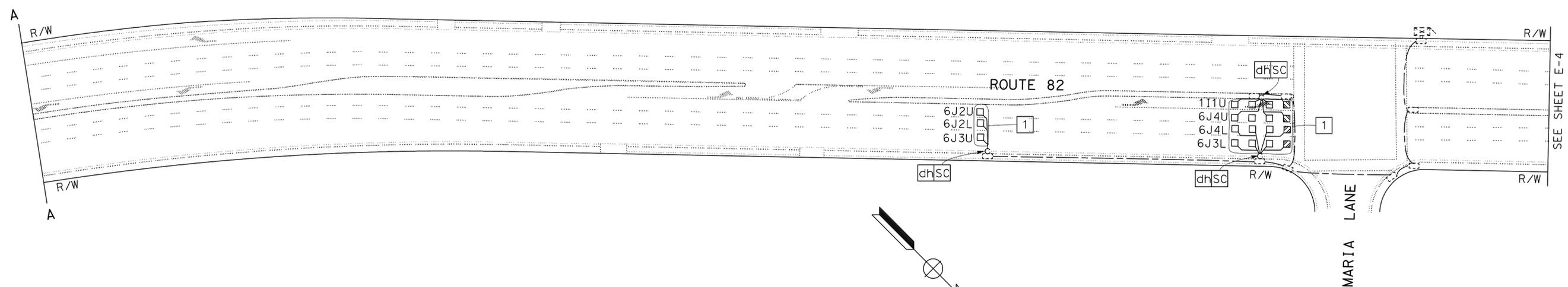
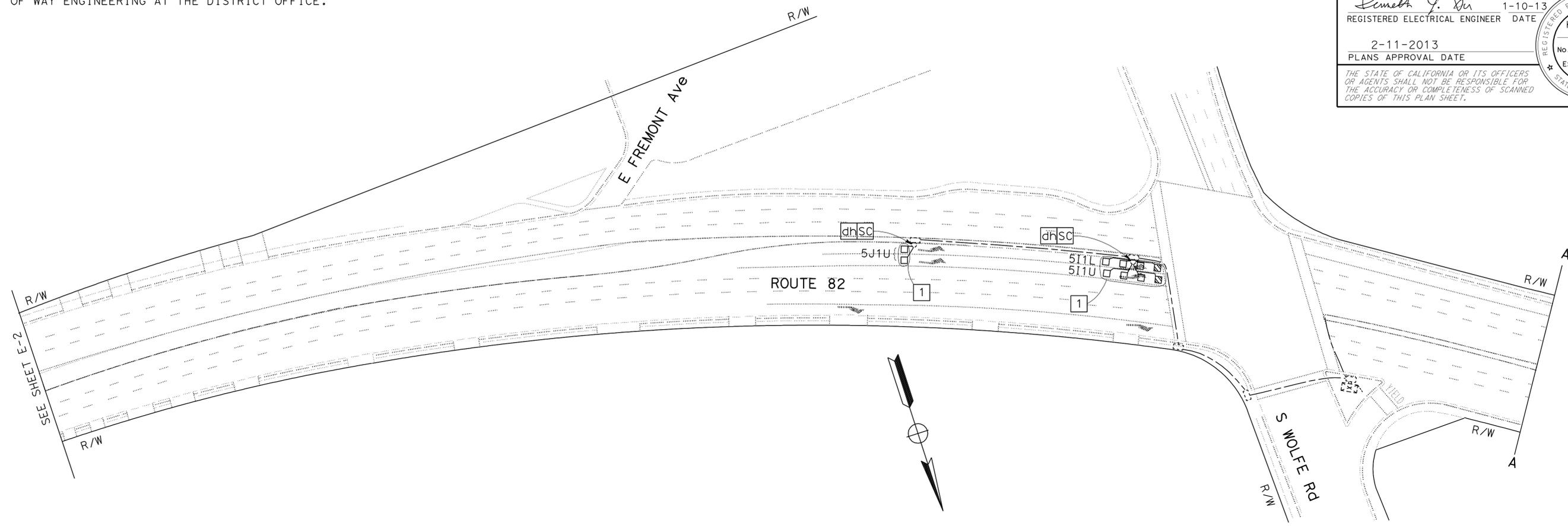
NOTE:
 FOR ACCURATE RIGHT OF WAY DATA, CONTACT
 RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SCI	82	14.3/19.2	25	39

REGISTERED ELECTRICAL ENGINEER: Kenneth Y. Xu
 DATE: 1-10-13
 PLANS APPROVAL DATE: 2-11-2013

PROFESSIONAL ENGINEER: Kenneth Y. Xu
 No. 15219
 Exp. 6-30-13
 ELECTRICAL

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MODIFY INDUCTIVE LOOP DETECTOR (REPLACE)

NO SCALE

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FOR NOTES, ABBREVIATIONS AND LEGEND, SEE SHEET E-1

E-3

LAST REVISION DATE PLOTTED => 27-FEB-2013 03-23-12 TIME PLOTTED => 11:22

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
 ELECTRICAL

FUNCTIONAL SUPERVISOR
KENNETH Y. XU

CALCULATED/DESIGNED BY
CHECKED BY

DORIS YANG
KENNETH Y. XU

REVISOR BY
DATE REVISED

CHT
1/15/13

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

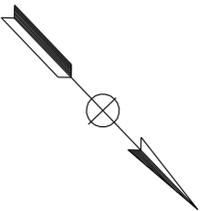
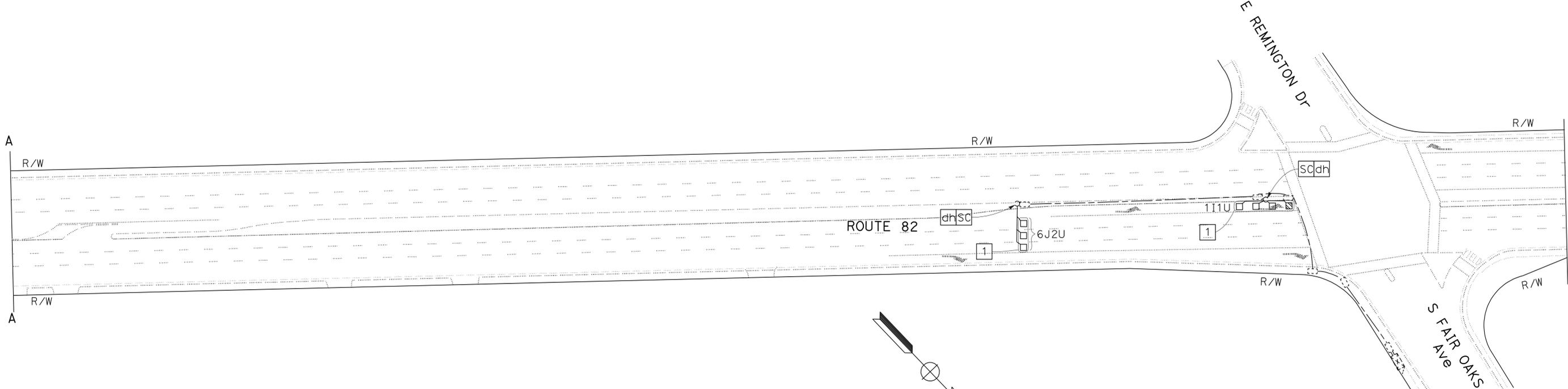
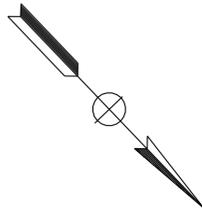
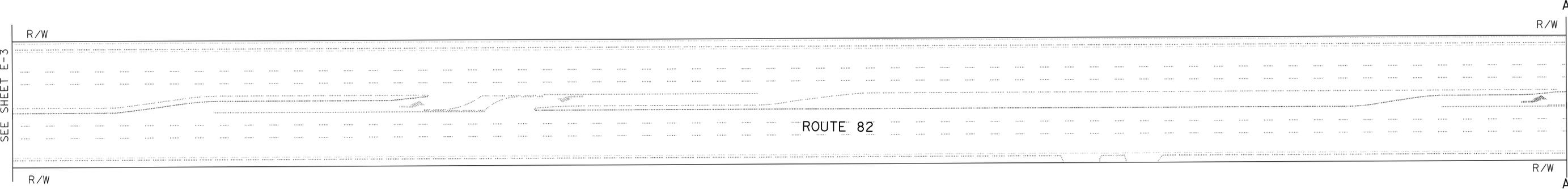
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SCI	82	14.3/19.2	26	39

REGISTERED ELECTRICAL ENGINEER
 Kenneth Y. Xu
 No. 15219
 Exp. 3-30-13
 ELECTRICAL

1-10-13
 DATE

2-11-2013
 PLANS APPROVAL DATE

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**MODIFY INDUCTIVE LOOP DETECTOR
 (REPLACE)**

NO SCALE

APPROVED FOR ELECTRICAL WORK ONLY

FOR NOTES, ABBREVIATIONS
 AND LEGEND, SEE SHEET E-1

E - 4

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
 ELECTRICAL

FUNCTIONAL SUPERVISOR
 KENNETH Y. XU

CALCULATED/DESIGNED BY
 CHECKED BY

DORIS YANG
 KENNETH Y. XU

REVISOR BY
 DATE REVISED

CHT
 1/15/13

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

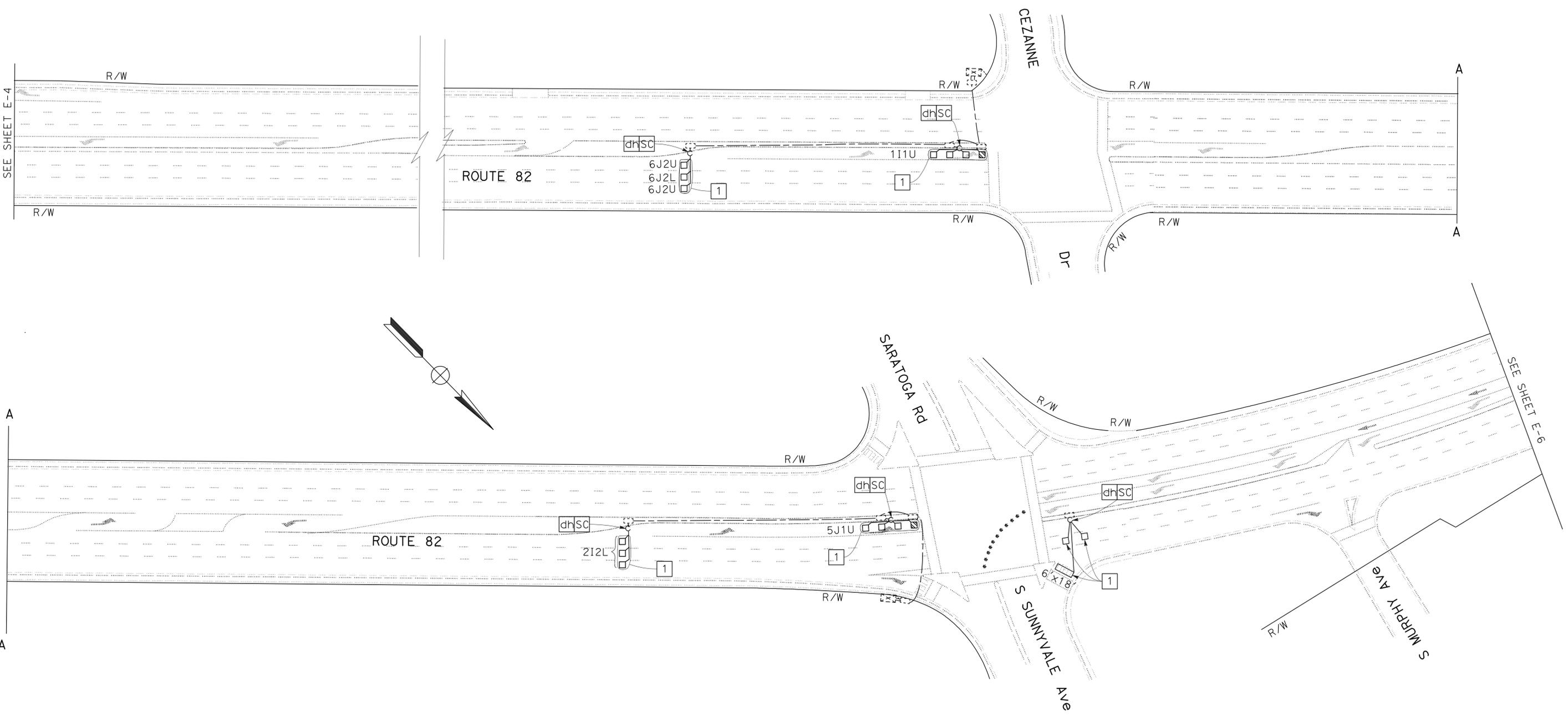
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SCI	82	14.3/19.2	27	39

REGISTERED ELECTRICAL ENGINEER
 Kenneth Y. Xu
 No. 15219
 Exp. 6-30-13
 ELECTRICAL

1-10-13
 DATE

2-11-2013
 PLANS APPROVAL DATE

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**MODIFY INDUCTIVE LOOP DETECTOR
 (REPLACE)**

NO SCALE

E-5

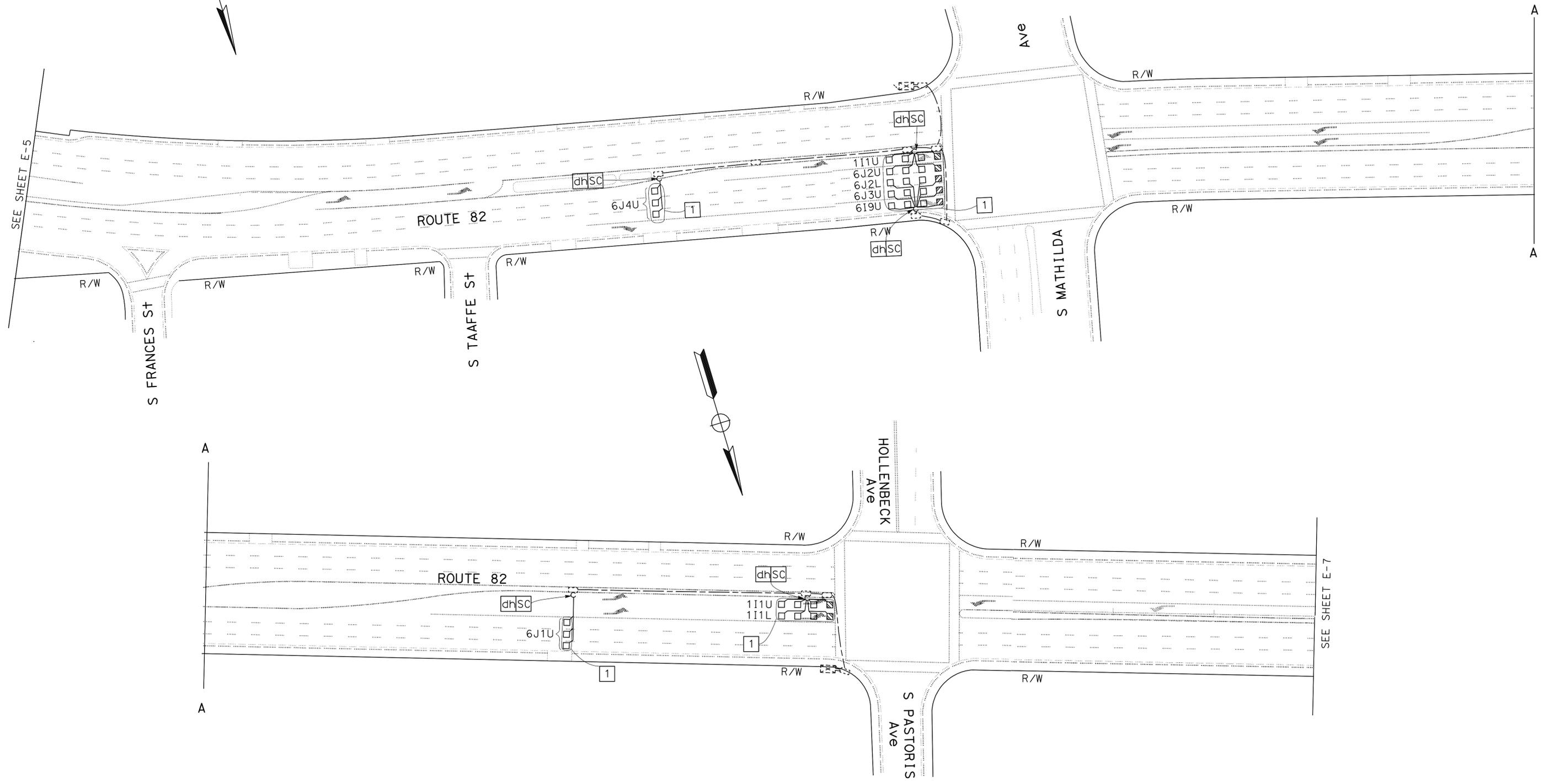
APPROVED FOR ELECTRICAL WORK ONLY

FOR NOTES, ABBREVIATIONS
 AND LEGEND, SEE SHEET E-1

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
 ELECTRICAL

FUNCTIONAL SUPERVISOR: KENNETH Y. XU
 CALCULATED/DESIGNED BY: KENNETH Y. XU
 CHECKED BY: DORIS YANG
 REVISED BY: KENNETH Y. XU
 DATE REVISED: 1/15/13
 CHT: 1/15/13

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



Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SCI	82	14.3/19.2	28	39

Kenneth Y. Xu 1-10-13
 REGISTERED ELECTRICAL ENGINEER DATE
 2-11-2013
 PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
 Kenneth Y. Xu
 No. 15219
 Exp. 3-30-13
 ELECTRICAL
 STATE OF CALIFORNIA

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**MODIFY INDUCTIVE LOOP DETECTOR
 (REPLACE)**

NO SCALE

E - 6

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FOR NOTES, ABBREVIATIONS
 AND LEGEND, SEE SHEET E-1

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans ELECTRICAL

FUNCTIONAL SUPERVISOR KENNETH Y. XU	CALCULATED/DESIGNED BY CHECKED BY	DORIS YANG KENNETH Y. XU	REVISED BY DATE REVISED	CHT 1/15/13
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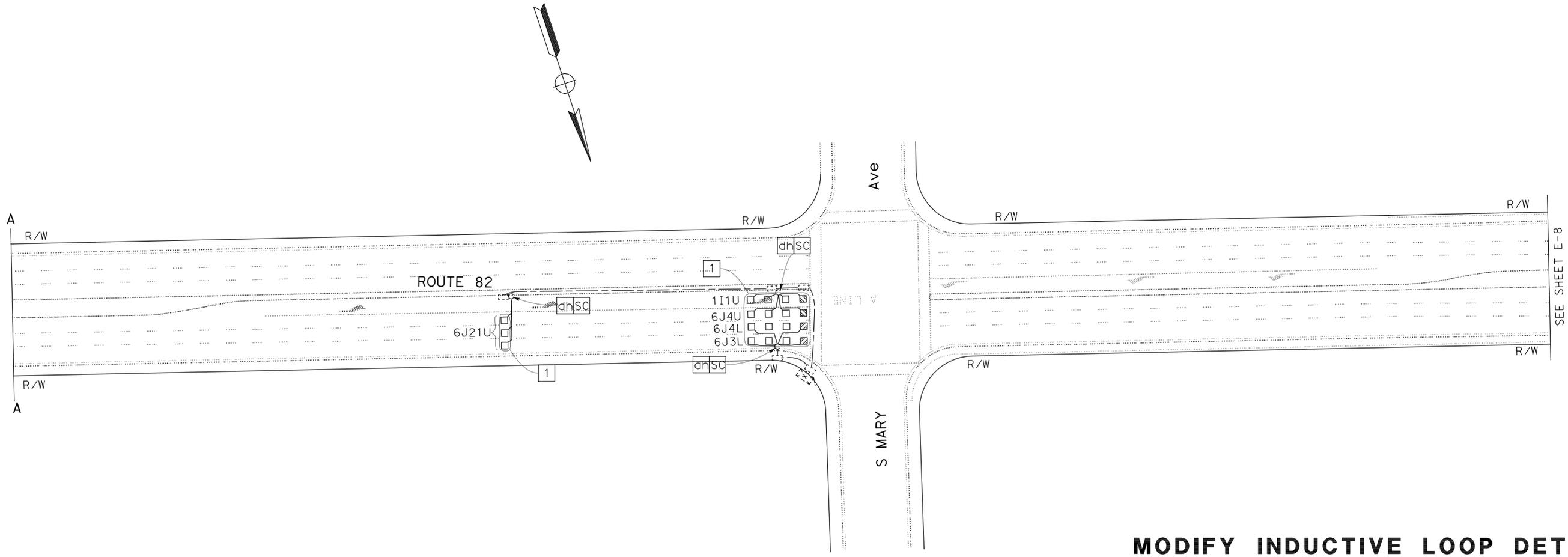
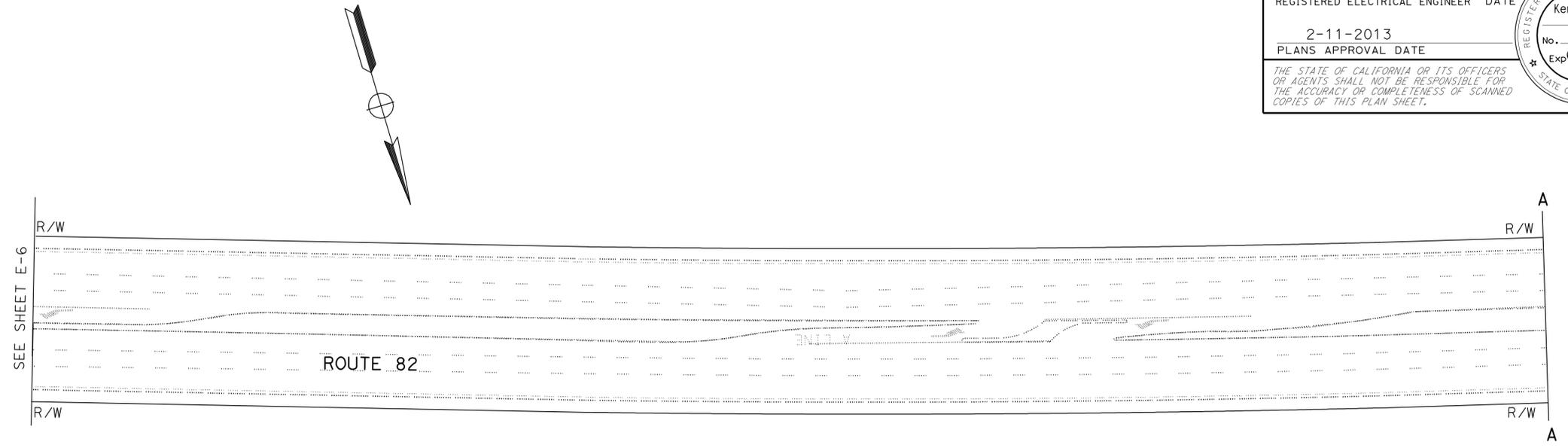
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DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SCI	82	14.3/19.2	29	39

Kenneth Y. Xu 1-10-13
 REGISTERED ELECTRICAL ENGINEER DATE
 2-11-2013
 PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
 Kenneth Y. Xu
 No. 15219
 Exp. 3-30-13
 ELECTRICAL
 STATE OF CALIFORNIA

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**MODIFY INDUCTIVE LOOP DETECTOR
 (REPLACE)**

NO SCALE

APPROVED FOR ELECTRICAL WORK ONLY

FOR NOTES, ABBREVIATIONS
 AND LEGEND, SEE SHEET E-1

E - 7

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans ELECTRICAL
 FUNCTIONAL SUPERVISOR: KENNETH Y. XU
 CHECKED BY: KENNETH Y. XU
 DESIGNED BY: DORIS YANG
 DATE REVISION: 1/15/13
 CHT

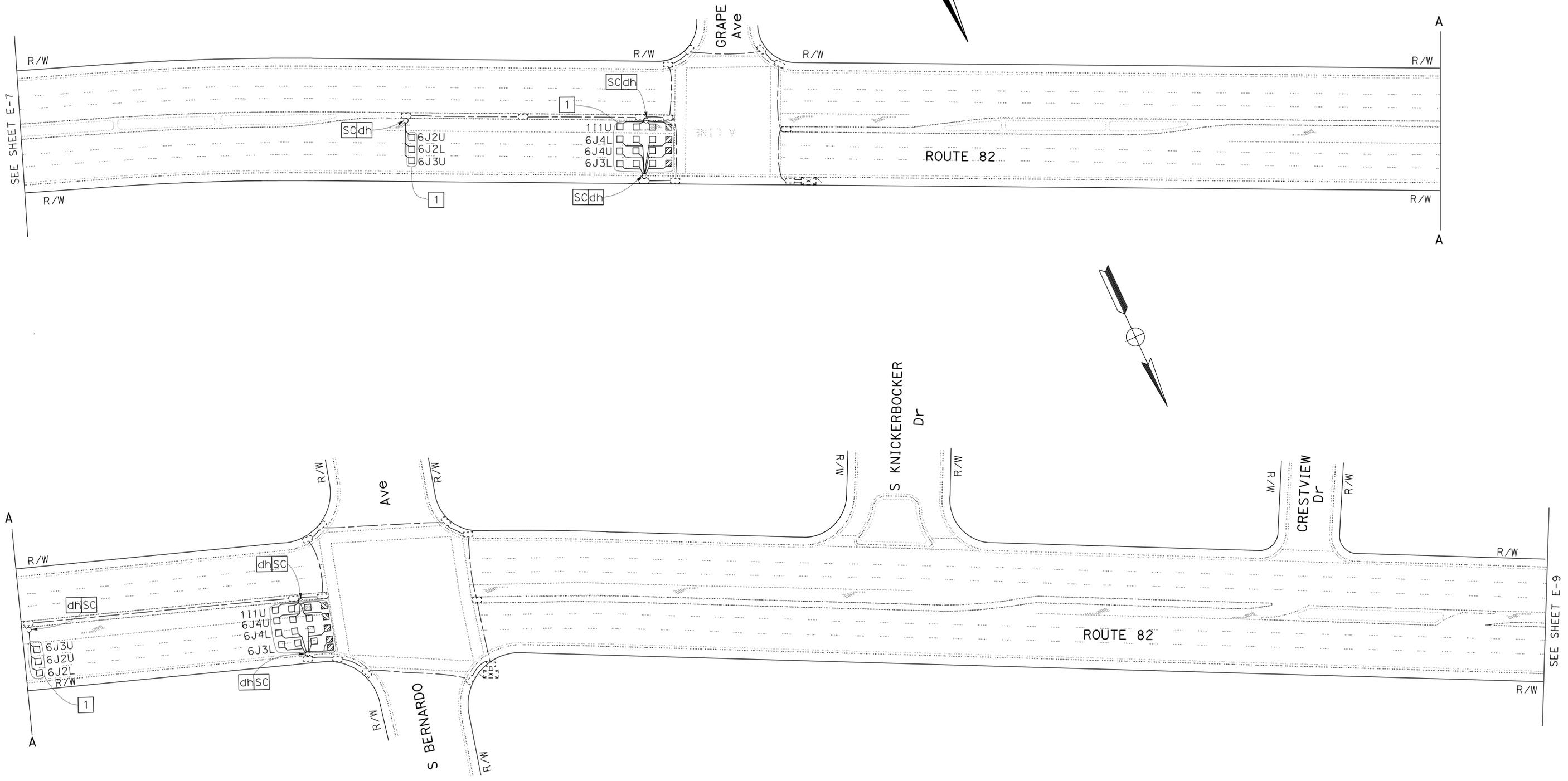
NOTE:
 FOR ACCURATE RIGHT OF WAY DATA, CONTACT
 RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SCI	82	14.3/19.2	30	39

Kenneth Y. Xu 1-10-13
 REGISTERED ELECTRICAL ENGINEER DATE
 2-11-2013
 PLANS APPROVAL DATE

Kenneth Y. Xu
 No. 15219
 Exp. 3-30-13
 ELECTRICAL
 STATE OF CALIFORNIA

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**MODIFY INDUCTIVE LOOP DETECTOR
 (REPLACE)**

NO SCALE

E - 8

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FOR NOTES, ABBREVIATIONS
 AND LEGEND, SEE SHEET E-1

LAST REVISION:
 DATE PLOTTED => 27-FEB-2013
 03-23-12
 TIME PLOTTED => 11:22

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans ELECTRICAL

FUNCTIONAL SUPERVISOR: KENNETH Y. XU
 CALCULATED/DESIGNED BY: KENNETH Y. XU
 CHECKED BY: DORIS YANG
 REVISED BY: KENNETH Y. XU
 DATE REVISED: 1/15/13
 CHT: 1/15/13

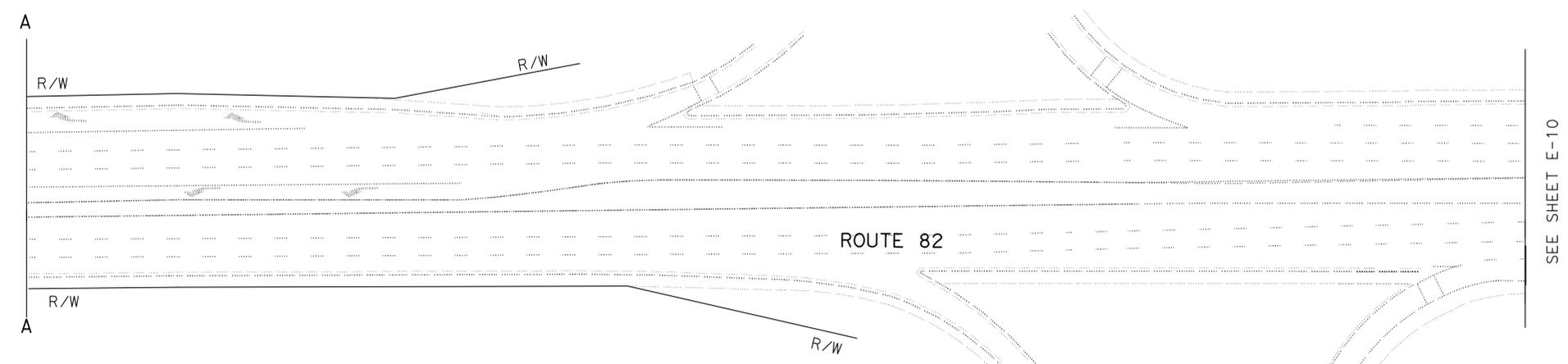
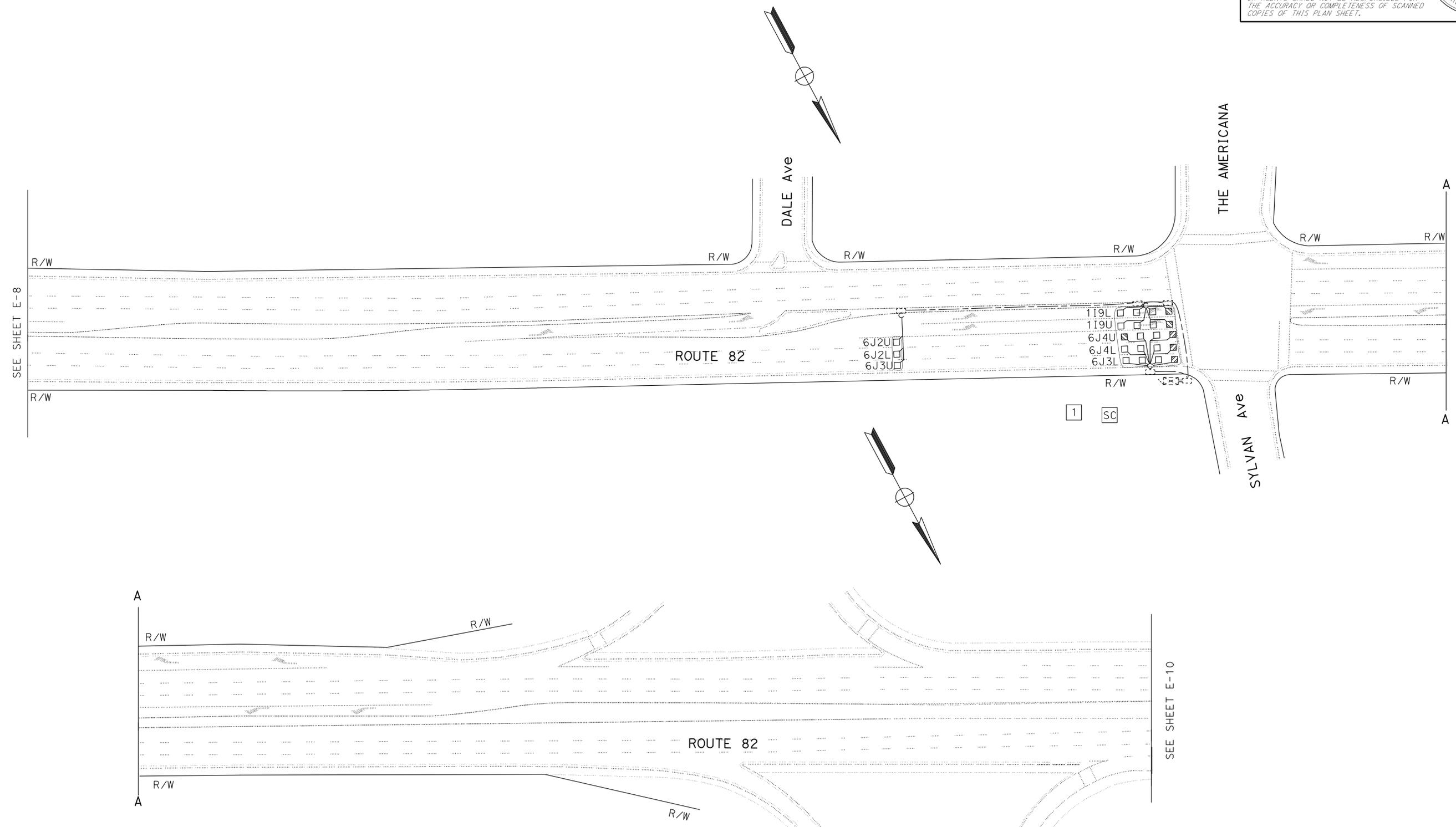
NOTE:
 FOR ACCURATE RIGHT OF WAY DATA, CONTACT
 RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SCI	82	14.3/19.2	31	39

Kenneth Y. Xu 1-10-13
 REGISTERED ELECTRICAL ENGINEER DATE
 2-11-2013
 PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
 Kenneth Y. Xu
 No. 15219
 Exp. 3-30-13
 ELECTRICAL
 STATE OF CALIFORNIA

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MODIFY INDUCTIVE LOOP DETECTOR (REPLACE)
 NO SCALE

APPROVED FOR ELECTRICAL WORK ONLY

FOR NOTES, ABBREVIATIONS AND LEGEND, SEE SHEET E-1

E - 9

LAST REVISION DATE PLOTTED => 27-FEB-2013 03-23-12 TIME PLOTTED => 11:22

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
 ELECTRICAL

FUNCTIONAL SUPERVISOR: KENNETH Y. XU
 CALCULATED/DESIGNED BY: KENNETH Y. XU
 CHECKED BY: DORIS YANG
 REVISED BY: KENNETH Y. XU
 DATE REVISED: 1/15/13
 CHT: 1/15/13

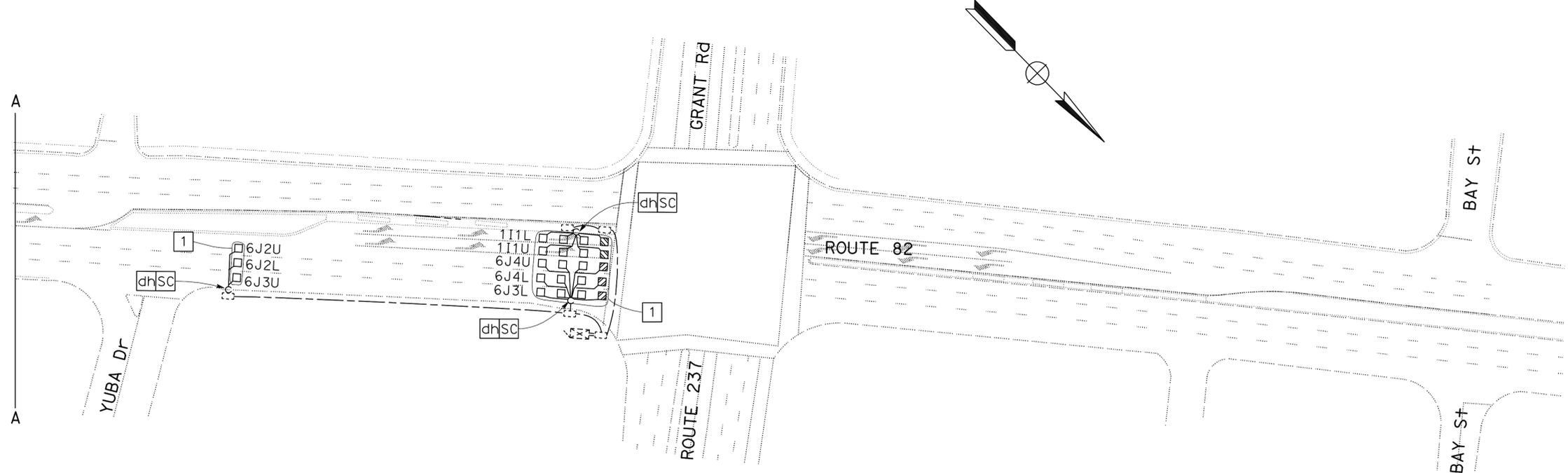
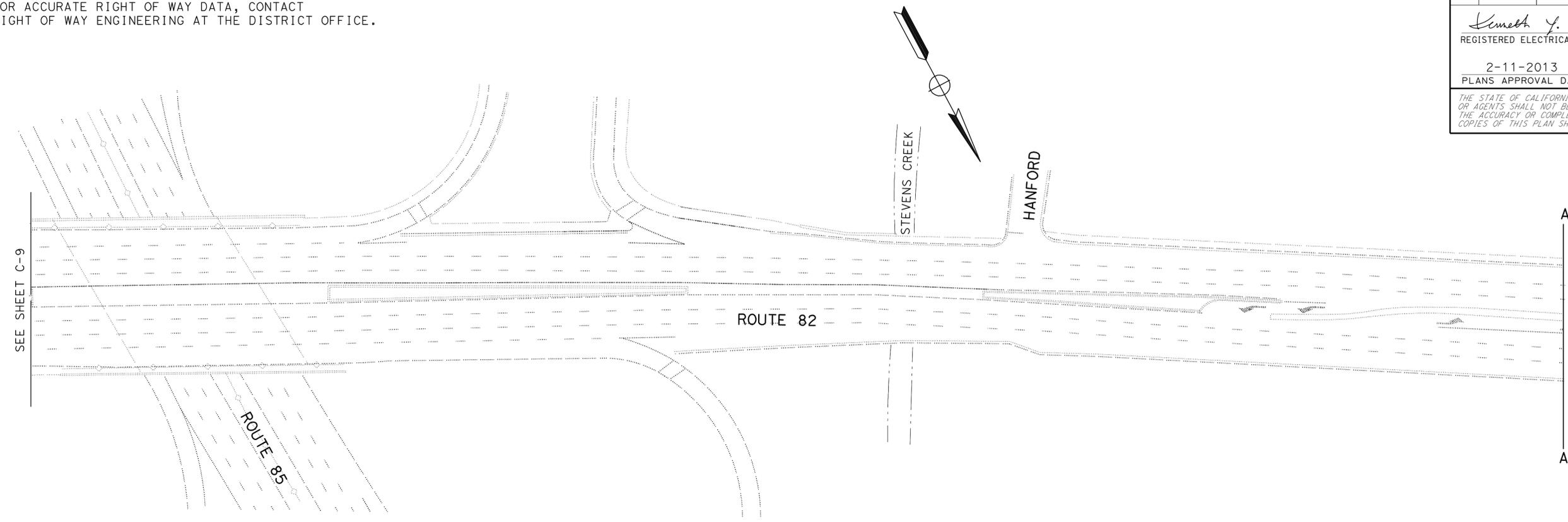
NOTE:
 FOR ACCURATE RIGHT OF WAY DATA, CONTACT
 RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SCI	82	14.3/19.2	32	39

Kenneth Y. Xu 1-10-13
 REGISTERED ELECTRICAL ENGINEER DATE
 2-11-2013
 PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
 Kenneth Y. Xu
 No. 15219
 Exp. 3-30-13
 ELECTRICAL
 STATE OF CALIFORNIA

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ELECTRICAL QUANTITIES

SHEET No.	(N) TYPE A LOOP DETECTOR EA	(N) TYPE D LOOP DETECTOR EA	(N) SPLICE CONDUCTOR EA
E-1	31	10	59
E-2	15	2	19
E-3	6	1	39
E-4	6	1	8
E-5	15	2	25
E-6	27	7	51
E-7	15	4	23
E-8	40	8	50
E-9	18	5	55
E-10	18	5	55
TOTAL	191	45	244

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

**MODIFY INDUCTIVE LOOP DETECTOR
 (REPLACE)**

NO SCALE

E-10

APPROVED FOR ELECTRICAL WORK ONLY

FOR NOTES, ABBREVIATIONS
 AND LEGEND, SEE SHEET E-1

TYPICAL RAMP CLOSURES

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"

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SCI	82	14.3/19.2	35	39

REGISTERED CIVIL ENGINEER
 12-7-12 DATE
 2-11-2013 PLANS APPROVAL DATE
 Gurinderpal Bhullar
 No. C48815
 Exp. 9-30-14
 CIVIL
 STATE OF CALIFORNIA

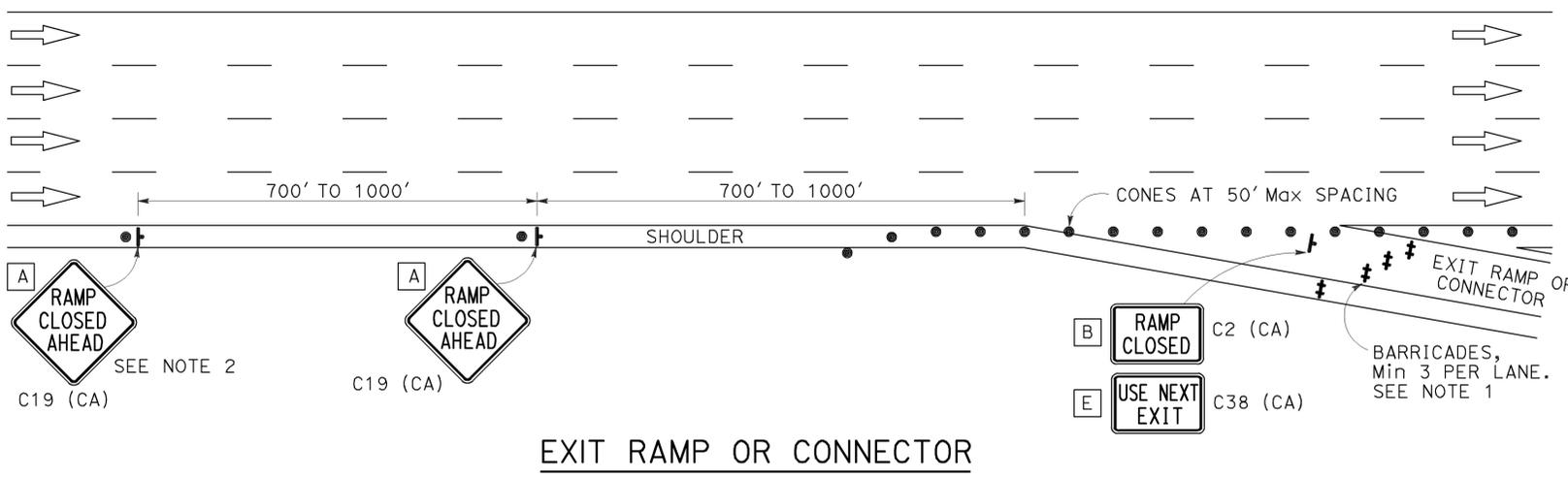
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

LEGEND

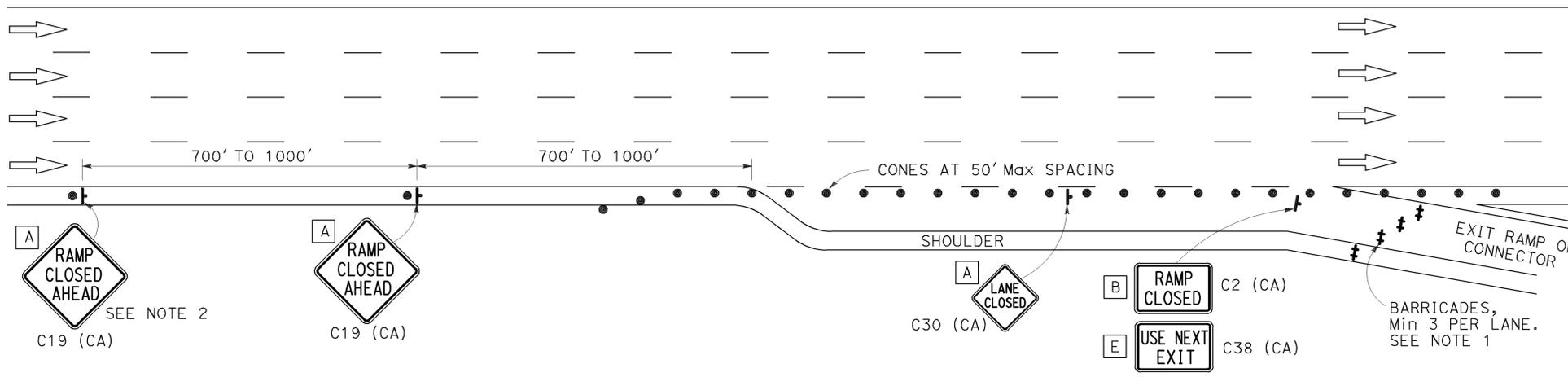
- TRAFFIC CONE
- † TEMPORARY SIGN
- ‡ BARRICADES

NOTES:

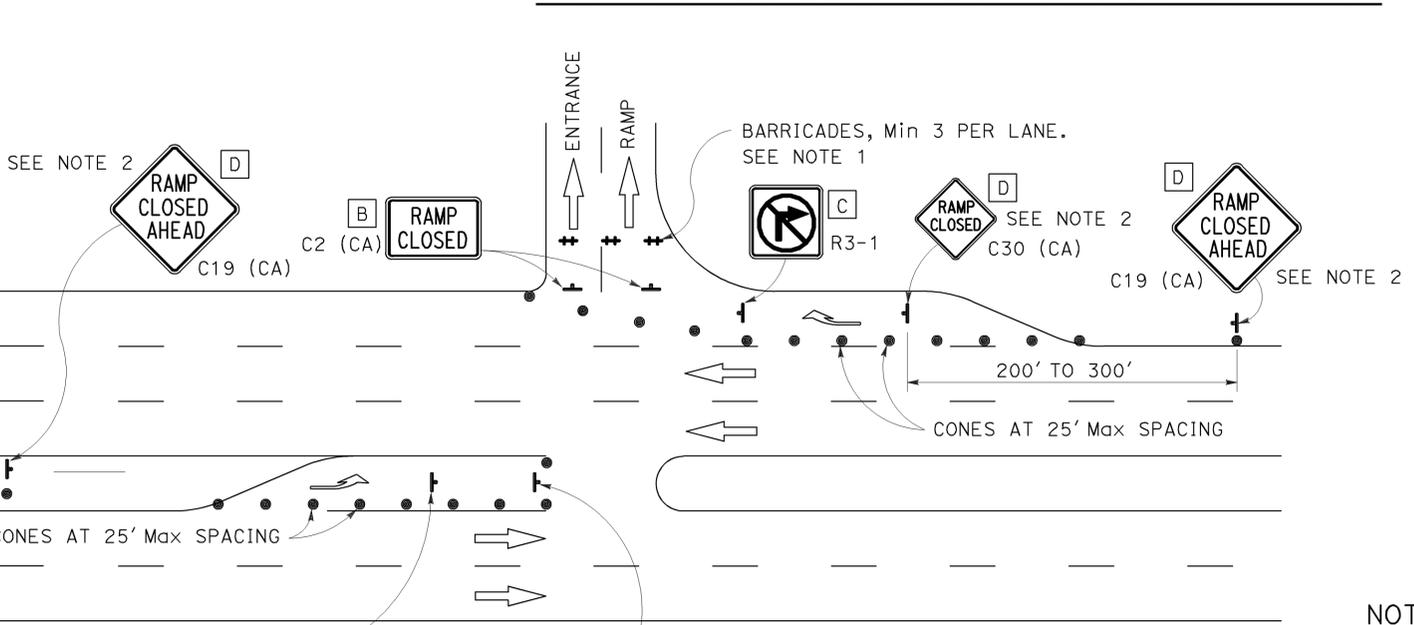
- Barricades shall be Type I, II, or III for closures lasting one week or less and Type III for closures lasting longer than one week.
- In addition to placing the C19 (CA) "RAMP CLOSED AHEAD" and C30 (CA) "RAMP CLOSED" signs, black on orange overlay plates with the word "CLOSED" may be mounted, as directed 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.
- 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.
- All cones used for ramp closures during the hours of darkness shall be fitted with retroreflective bands (or sleeves) as specified in the specifications.
- Portable delineators, placed at one-half the spacing indicated for traffic cones, may be used instead of cones for daytime ramp closures only.
- At least one person shall be assigned to provide full time maintenance of traffic control devices, unless otherwise directed by the Engineer.
- The existing "EXIT" sign in the gore area shall be covered during ramp closures.



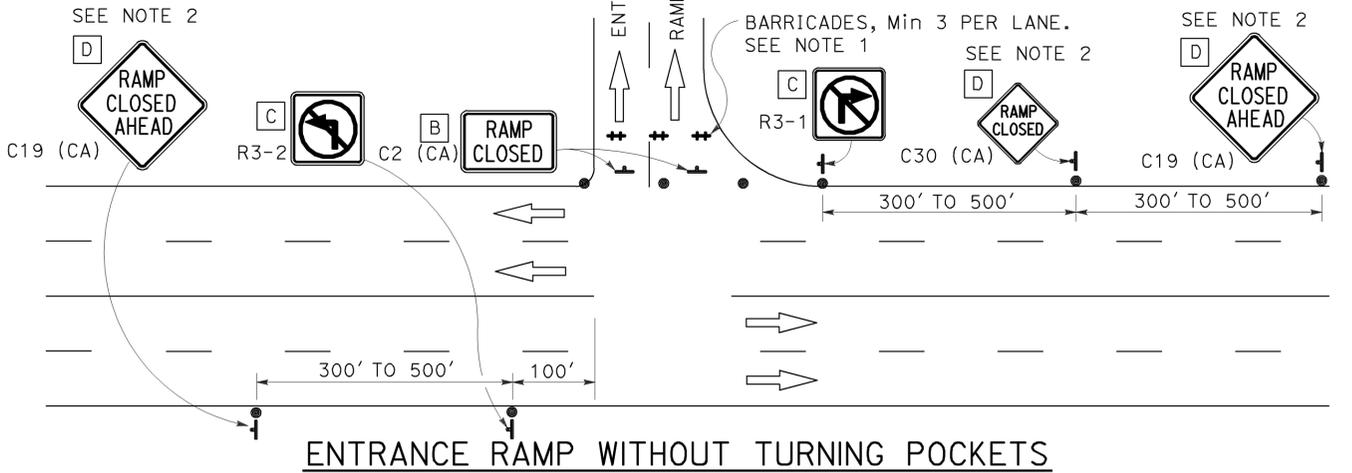
EXIT RAMP OR CONNECTOR



EXIT RAMP OR CONNECTOR WITH ADDITIONAL LANE



ENTRANCE RAMP WITH TURNING POCKETS



ENTRANCE RAMP WITHOUT TURNING POCKETS

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.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL SYSTEM FOR RAMP CLOSURE

NO SCALE

TCS-2

REVISOR BY
DATE

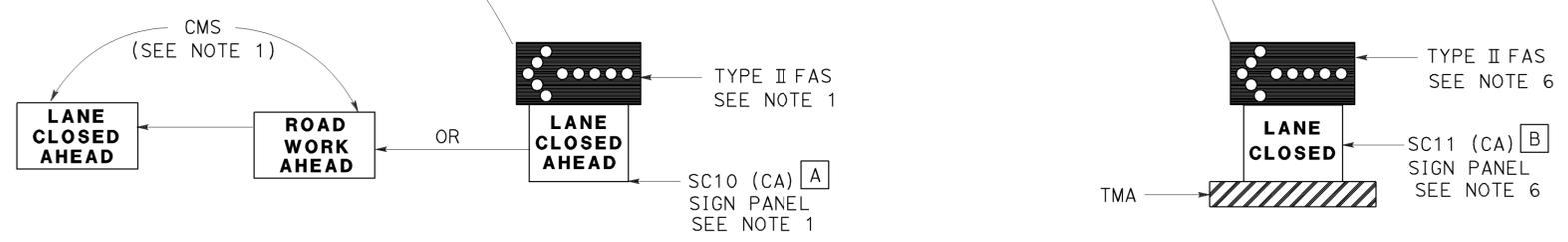
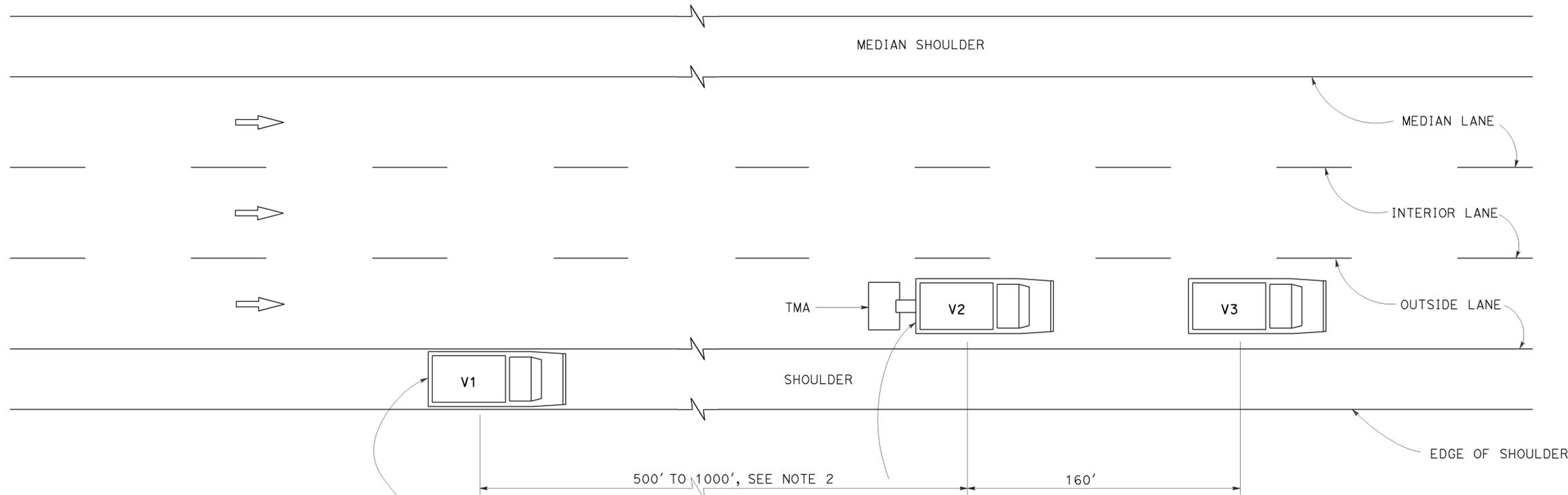
CALCULATED BY
DESIGNED BY
CHECKED BY

FUNCTIONAL SUPERVISOR

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Et-Trans

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SCI	82	14.3/19.2	36	39

REGISTERED CIVIL ENGINEER: *Gurinderpal Bhullar* 12-7-12 DATE
 2-11-2013 PLANS APPROVAL DATE
 No. C48815 Exp. 9-30-14 CIVIL
 THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.



SIGN PANEL SIZE (Min)

- A 66" x 36"
- B 54" x 42"

LEGEND

- V1 SIGN VEHICLE
- V2 SHADOW VEHICLE
- V3 WORK/APPLICATION VEHICLE
- FLASHING ARROW SIGN (FAS)
- CMS CHANGEABLE MESSAGE SIGN
- TMA TRUCK-MOUNTED ATTENUATOR

MOVING LANE CLOSURE ON MEDIAN LANE OR OUTSIDE LANE OF MULTILANE HIGHWAYS

NOTES:

- Either a changeable message sign or a SC10 (CA) sign panel and a Type II flashing arrow sign shall be mounted on the rear of sign vehicle V1. A Type II flashing arrow sign shall be mounted on the rear of sign vehicle V1 and used with the SC10 (CA) sign panel. A Type II flashing arrow sign will not be required with the changeable message sign provided the flashing arrow sign symbol is displayed on the changeable message sign board. The changeable message sign shall be sequenced to show the "ROAD WORK AHEAD" message first, followed by the "LANE CLOSED AHEAD" message and then the flashing arrow sign symbol. For median lane closure, the flashing arrow sign symbol shall be reversed with the arrowhead on the right.
- If traffic queues develop, sign vehicle V1 should be positioned upstream from the end of queue. Sign vehicle V1 shall be positioned where highly visible when shoulders are not available.
- A minimum sight distance of 1500' should be provided in advance of sign vehicle V1.
- Sign vehicle V1 should remain at the beginning of horizontal or vertical curves until the other vehicles (V2 and V3) are far enough beyond the curve to resume the minimum sight distance of 1500'.
- Vehicle-mounted sign panels shall be Type III, IV, VII, VIII or IX retroreflective sheeting, black on white, black on orange, or black on fluorescent orange, with 6" minimum series D letters per Caltrans sign specifications.
- Gross Vehicle Weight of shadow vehicle V2 shall be a minimum of 20,000 pounds and shall be equipped with a truck-mounted attenuator. The sign panel shown and a Type II flashing arrow sign shall be mounted on the rear of shadow vehicle V2. For median lane closure the flashing arrow sign symbol shall be displayed with the arrowhead on the right.
- All vehicles used for lane closures shall be equipped with two-way radios, and the vehicle operators shall maintain communication during the work or application operation.
- Where sufficient shoulder width is not available, sign vehicle V1 may encroach into the traffic lane staying as close to the edge of shoulder as practicable. Both V1 and V2 shall be equipped with a truck-mounted attenuator. The Gross Vehicle Weight of V1 and V2 shall be at least 20,000 pounds, respectively.
- When multiple work vehicles are used in close proximity to each other, only one shadow vehicle is required, and spacing between work vehicles shall be minimized in order to deter traffic from entering the closed lane.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

**TRAFFIC CONTROL SYSTEM
FOR MOVING LANE CLOSURE
ON MULTILANE HIGHWAYS
(OUTSIDE AND MEDIAN LANES)**

NO SCALE

TCS-3

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
 Et Caltrans®
 BORDER LAST REVISED 7/2/2010

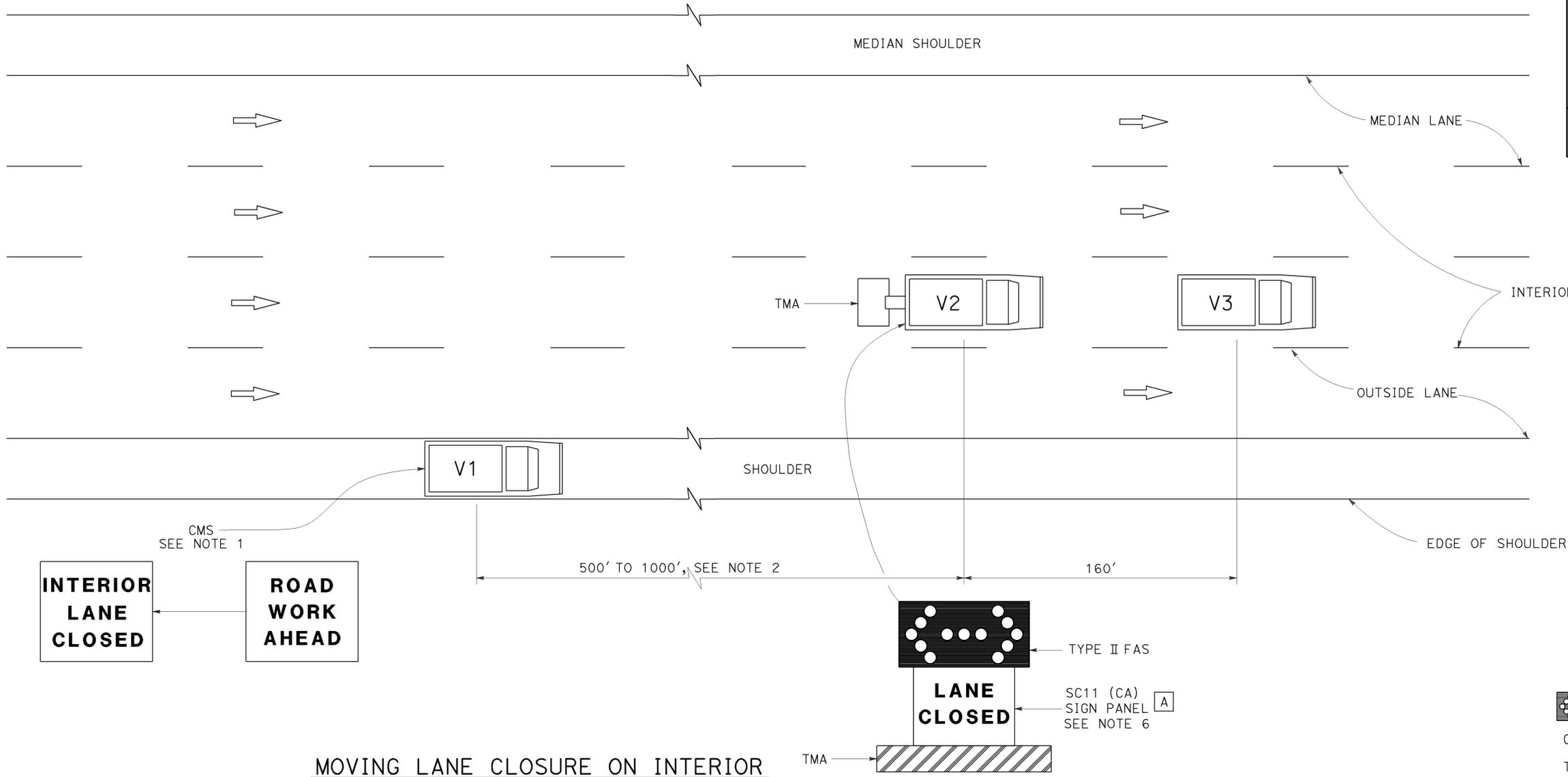


LAST REVISION DATE PLOTTED => 10-DEC-2012
 00-00-00 TIME PLOTTED => 09:45

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SCI	82	14.3/19.2	37	39

<i>Gurinderpal Bhullar</i>	12-7-12
REGISTERED CIVIL ENGINEER	DATE
2-11-2013	
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.



LEGEND

V1	SIGN VEHICLE
V2	SHADOW VEHICLE
V3	WORK/APPLICATION VEHICLE
	FLASHING ARROW SIGN (FAS) IN FLASHING DOUBLE ARROW MODE
CMS	CHANGEABLE MESSAGE SIGN
TMA	TRUCK-MOUNTED ATTENUATOR

MOVING LANE CLOSURE ON INTERIOR LANE OF MULTILANE HIGHWAYS

NOTES:

1. A changeable message sign shall be mounted on the rear of sign vehicle V1. The changeable message sign shall be sequenced to show the "ROAD WORK AHEAD" message first, followed by the "INTERIOR LANE CLOSED" message. The message "CENTER LANE CLOSED" may be used in place of the "INTERIOR LANE CLOSED" message.
2. If traffic queues develop, sign vehicle V1 should be positioned upstream from the end of queue. Sign vehicle V1 shall be positioned where highly visible when shoulders are not available.
3. A minimum sight distance of 1500' should be provided in advance of sign vehicle V1.
4. Sign vehicle V1 should remain at the beginning of horizontal or vertical curves until the other vehicles (V2 and V3) are far enough beyond the curve to resume the minimum sight distance of 1500'.
5. Vehicle-mounted sign panels shall be Type III, IV, VII, VIII, or IX retroreflective sheeting, black on white, black on orange, or black on fluorescent orange, with 6" minimum series D letters per Caltrans sign specifications.
6. Gross Vehicle Weight of shadow vehicle V2 shall be a minimum of 20,000 pounds and shall be equipped with a truck-mounted attenuator. The sign panel shown and a Type II flashing arrow sign shall be mounted on the rear of shadow vehicle V2.
7. All vehicles used for lane closures shall be equipped with two-way radios, and the vehicle operators shall maintain communication during the work or application operation.
8. All vehicles shall be equipped with flashing or rotating amber lights.
9. Where sufficient shoulder width is not available, sign vehicle V1 may encroach into the traffic lane staying as close to the edge of shoulder as practicable. Both V1 and V2 shall be equipped with a truck-mounted attenuator. The Gross Vehicle Weight of V1 and V2 shall be at least 20,000 pounds, respectively.
10. When multiple work vehicles are used in close proximity to each other, only one shadow vehicle is required, and spacing between work vehicles shall be minimized in order to deter traffic from entering the closed lane.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

**TRAFFIC CONTROL SYSTEM
FOR MOVING LANE CLOSURE
ON MULTILANE HIGHWAYS
(INTERIOR LANES)**

NO SCALE

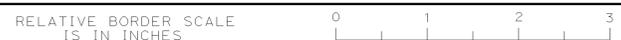
TCS-4

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans

REVISOR BY
DATE

CALCULATED/DESIGNED BY
CHECKED BY

BORDER LAST REVISED 7/2/2010



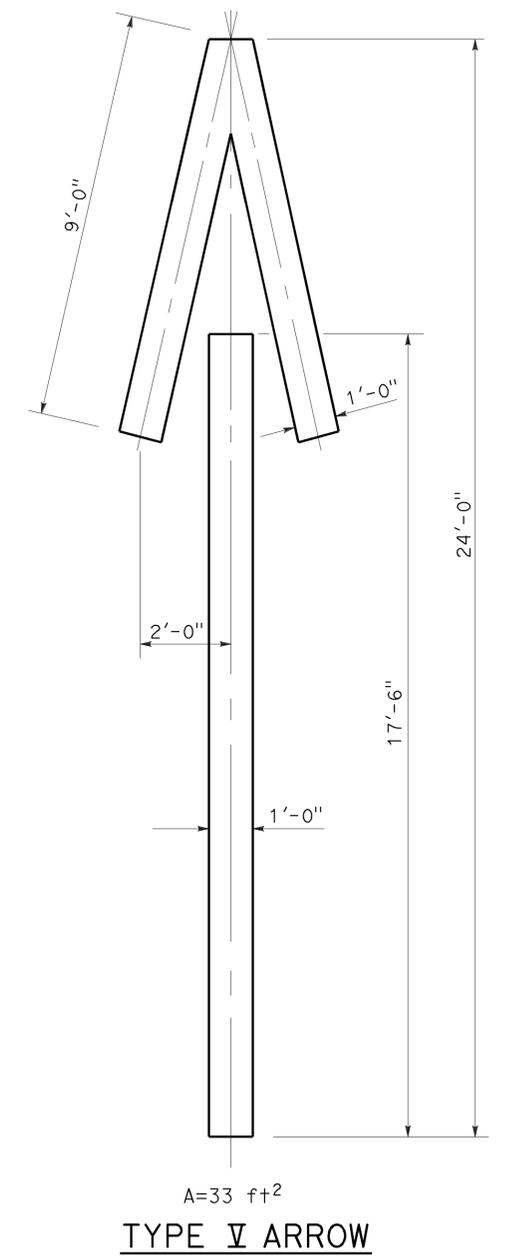
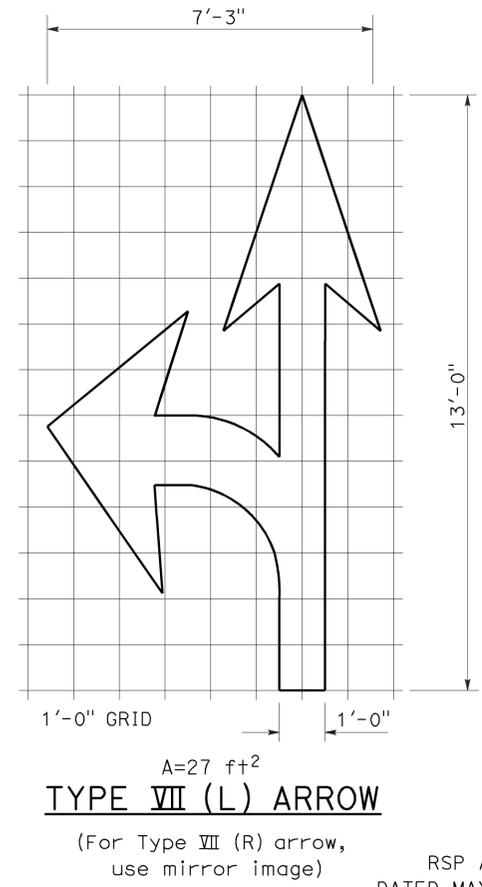
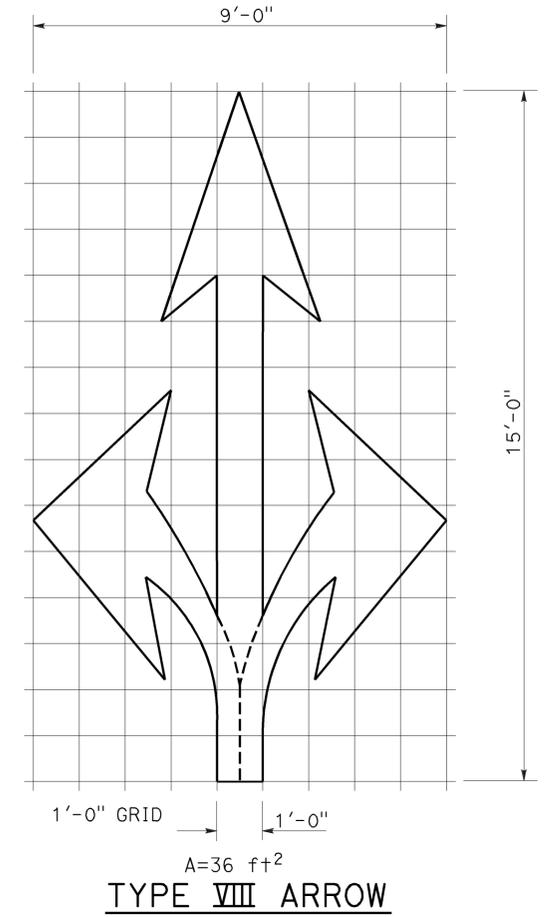
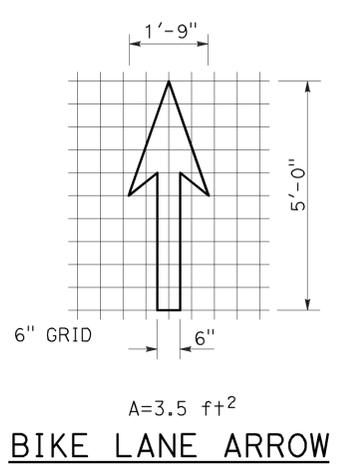
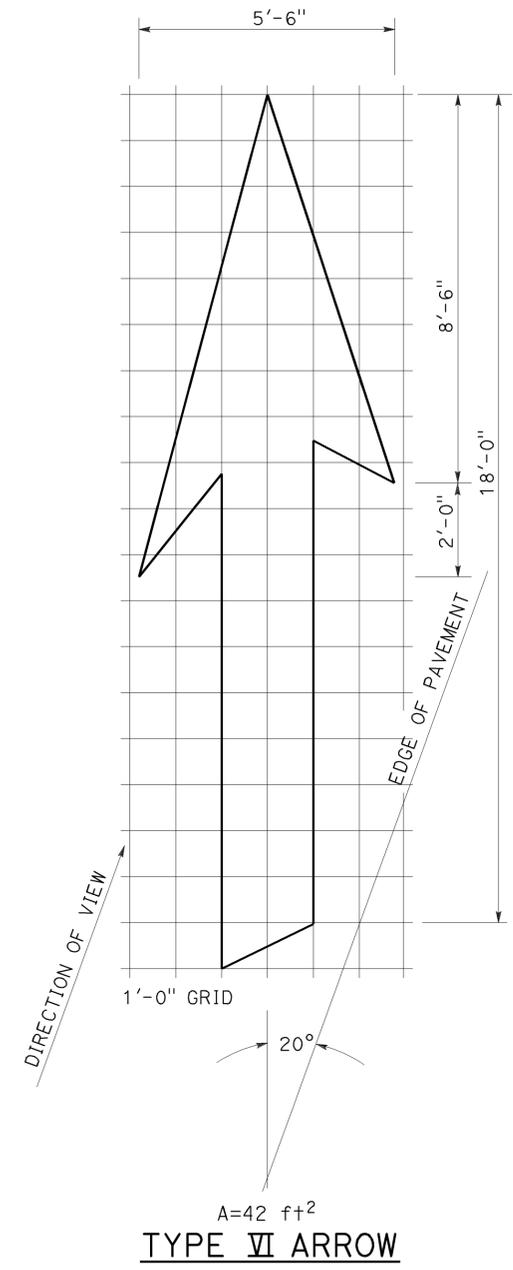
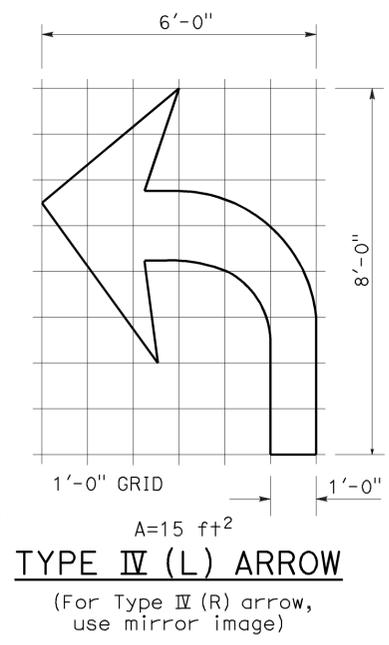
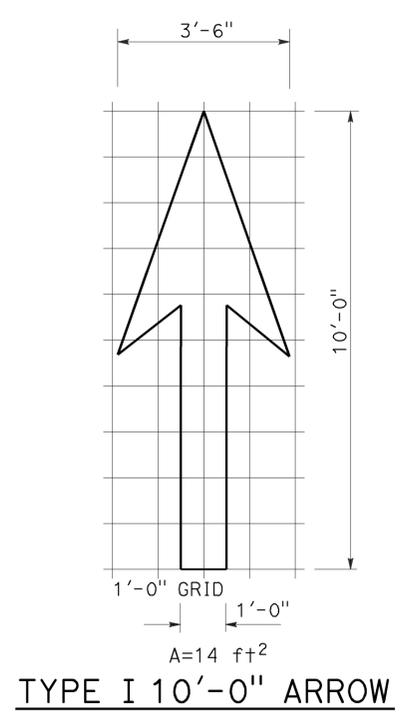
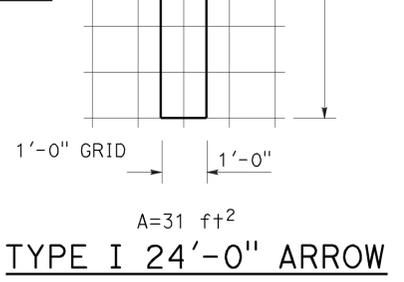
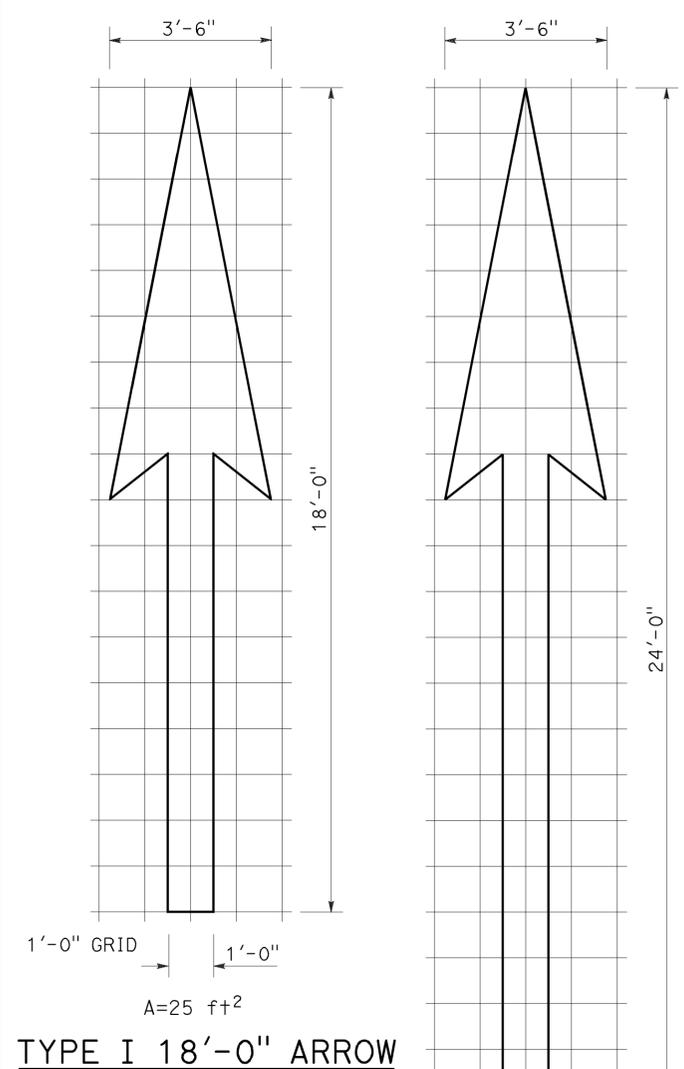
LAST REVISION DATE PLOTTED => 10-DEC-2012
00-00-00 TIME PLOTTED => 09:45

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
04	SCI	82	14.3/19.2	38	39

Roberta L. McLaughlin
 REGISTERED CIVIL ENGINEER
 April 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.

REGISTERED PROFESSIONAL ENGINEER
 Roberta L. McLaughlin
 No. C40375
 Exp. 3-31-13
 CIVIL
 STATE OF CALIFORNIA

TO ACCOMPANY PLANS DATED 2-11-2013



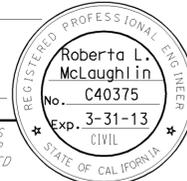
NOTE:
Minor variations in dimensions may be accepted by the Engineer.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
**PAVEMENT MARKINGS
ARROWS**
NO SCALE

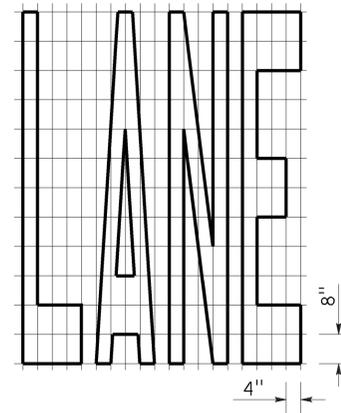
RSP A24A DATED APRIL 20, 2012 SUPERSEDES STANDARD PLAN A24A DATED MAY 20, 2011 - PAGE 13 OF THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP A24A

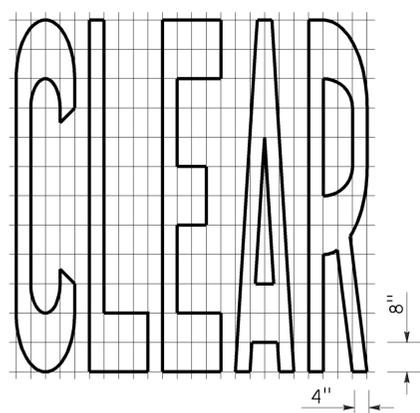
2010 REVISED STANDARD PLAN RSP A24A



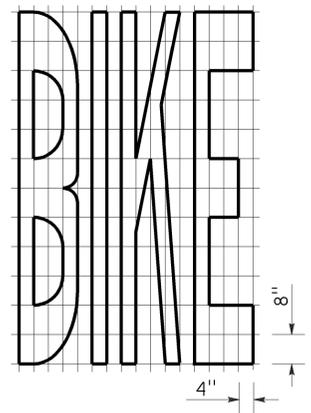
TO ACCOMPANY PLANS DATED 2-11-2013



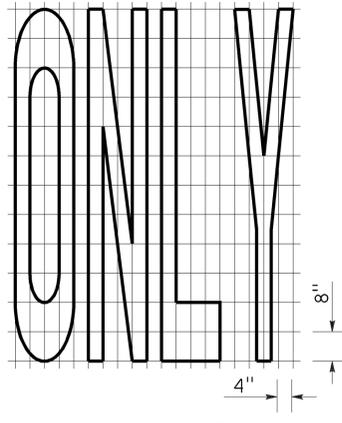
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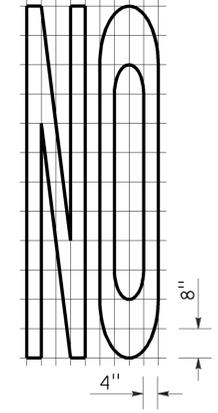
A=27 ft²



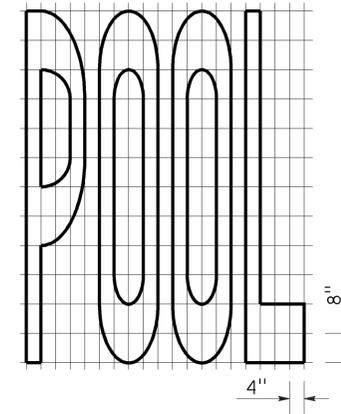
A=21 ft²



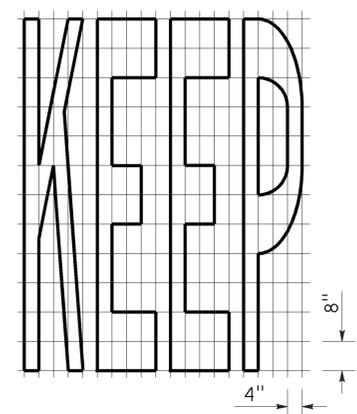
A=22 ft²



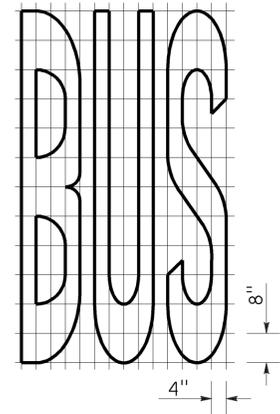
A=14 ft²



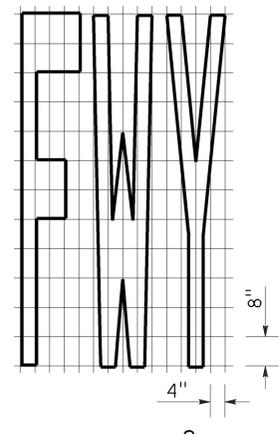
A=23 ft²



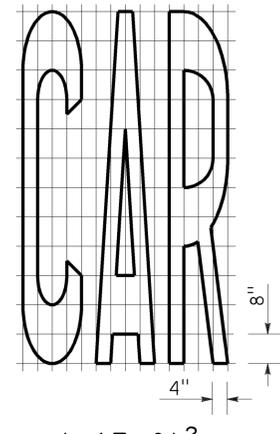
A=24 ft²



A=20 ft²

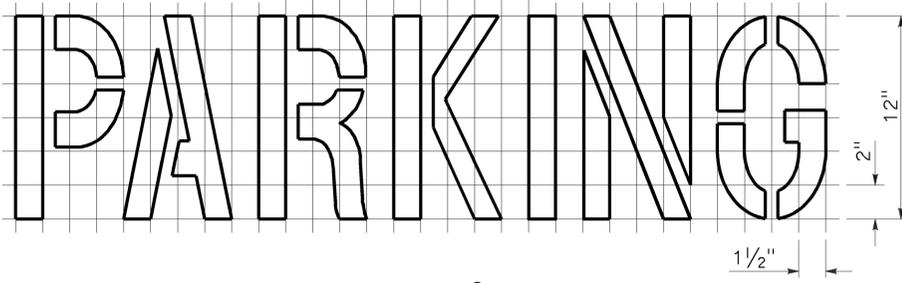
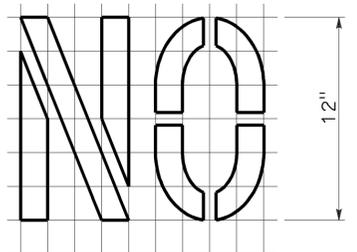


A=16 ft²

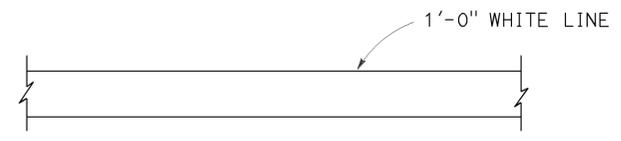


A=17 ft²

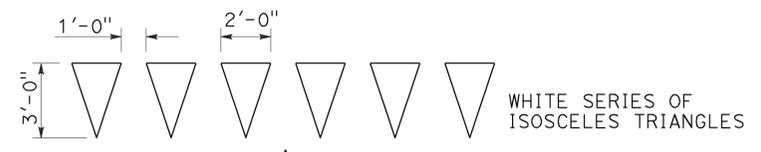
WORD MARKINGS			
ITEM	ft ²	ITEM	ft ²
LANE	24	NO	14
POOL	23	BIKE	21
CAR	17	BUS	20
CLEAR	27	ONLY	22
KEEP	24	FWY	16



A=2 ft²
See Notes 6 and 7



LIMIT LINE (STOP LINE)



YIELD LINE

NOTES:

1. If a message consists of more than one word, it should read "UP", i.e., the first word should be nearest the driver.
2. The space between words should be at least four times the height of the characters for low speed roads, but not more than ten times the height of the characters. The space may be reduced appropriately where there is limited space because of local conditions.
3. Minor variations in dimensions may be accepted by the Engineer.
4. Portions of a letter, number or symbol may be separated by connecting segments not to exceed 2" in width.
5. The words "NO PARKING" pavement marking is to be used for parking facilities. For typical locations of markings, see Standard Plans A90A and A90B.
6. The words "NO PARKING", shall be painted in white letters no less than 1'-0" high on a contrasting background and located so that it is visible to traffic enforcement officials.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
**PAVEMENT MARKINGS
WORDS, LIMIT AND YIELD LINES**

NO SCALE

RSP A24E DATED JULY 20, 2012 SUPERSEDES STANDARD PLAN A24E
DATED MAY 20, 2011 - PAGE 17 OF THE STANDARD PLANS BOOK DATED 2010.