

INDEX OF PLANS

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

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

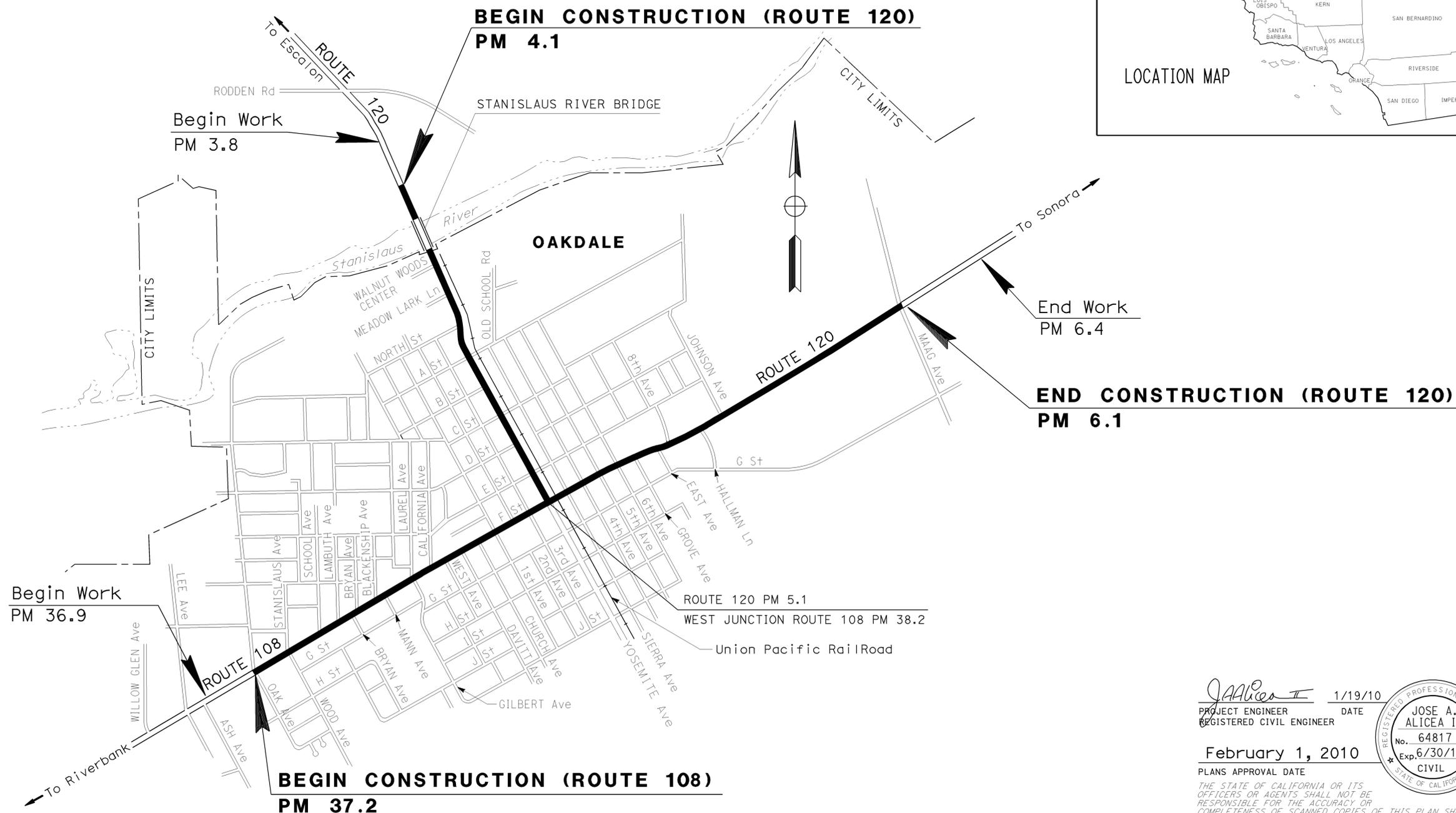
PROJECT PLANS FOR CONSTRUCTION ON
STATE HIGHWAY
IN STANISLAUS COUNTY
IN AND NEAR OAKDALE
ON ROUTE 108 FROM OAK AVENUE TO ROUTE 120
AND ON ROUTE 120
FROM 0.2 MILE WEST OF STANISLAUS RIVER BRIDGE
TO MAAG AVENUE

TO BE SUPPLEMENTED BY STANDARD PLANS DATED MAY 2006

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
10	Sta	108, 120	37.2/38.2, 4.1/6.1	1	27

Caltrans

LOCATION MAP



PROJECT MANAGER	ALVIN MANGINDIN
DESIGN ENGINEER	ALVIN MANGINDIN

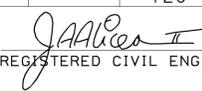
PROJECT ENGINEER DATE 1/19/10
REGISTERED CIVIL ENGINEER

February 1, 2010
PLANS APPROVAL DATE

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

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

NO SCALE

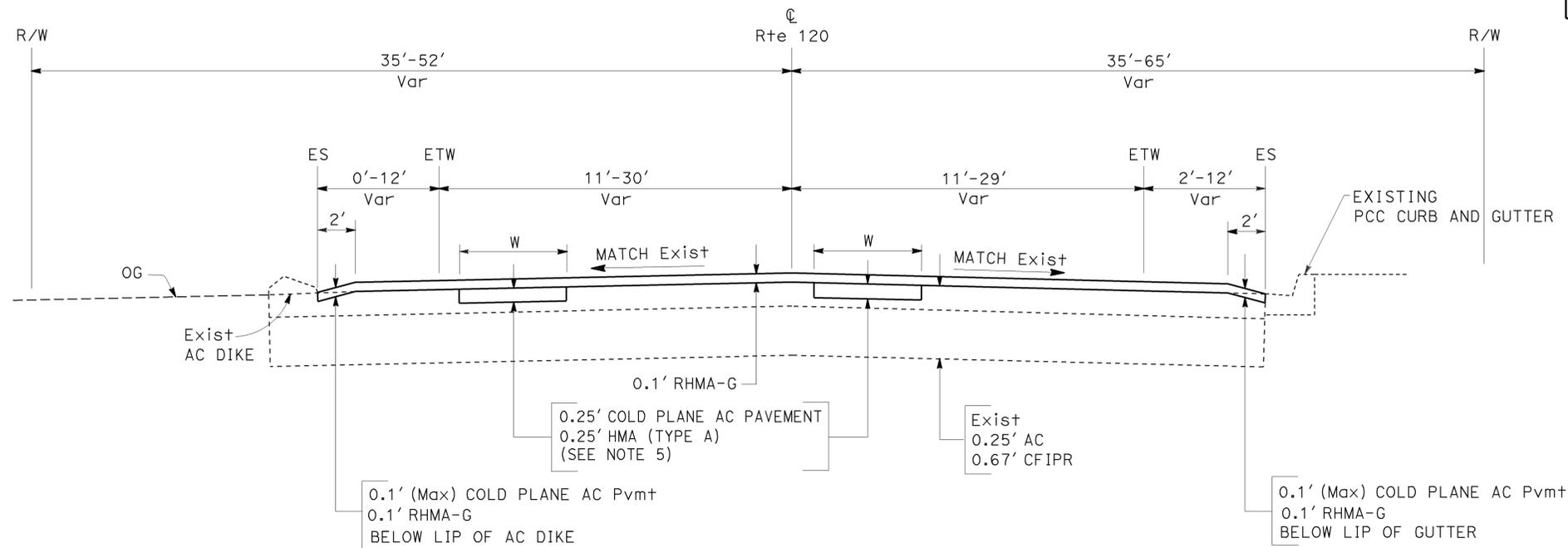
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
10	Sta	108, 120	37.2/38.2, 4.1/6.1	2	27
			1/19/10		
REGISTERED CIVIL ENGINEER			DATE		
			2/1/10		
			PLANS APPROVAL DATE		
<small>THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.</small>					
					

NOTES:

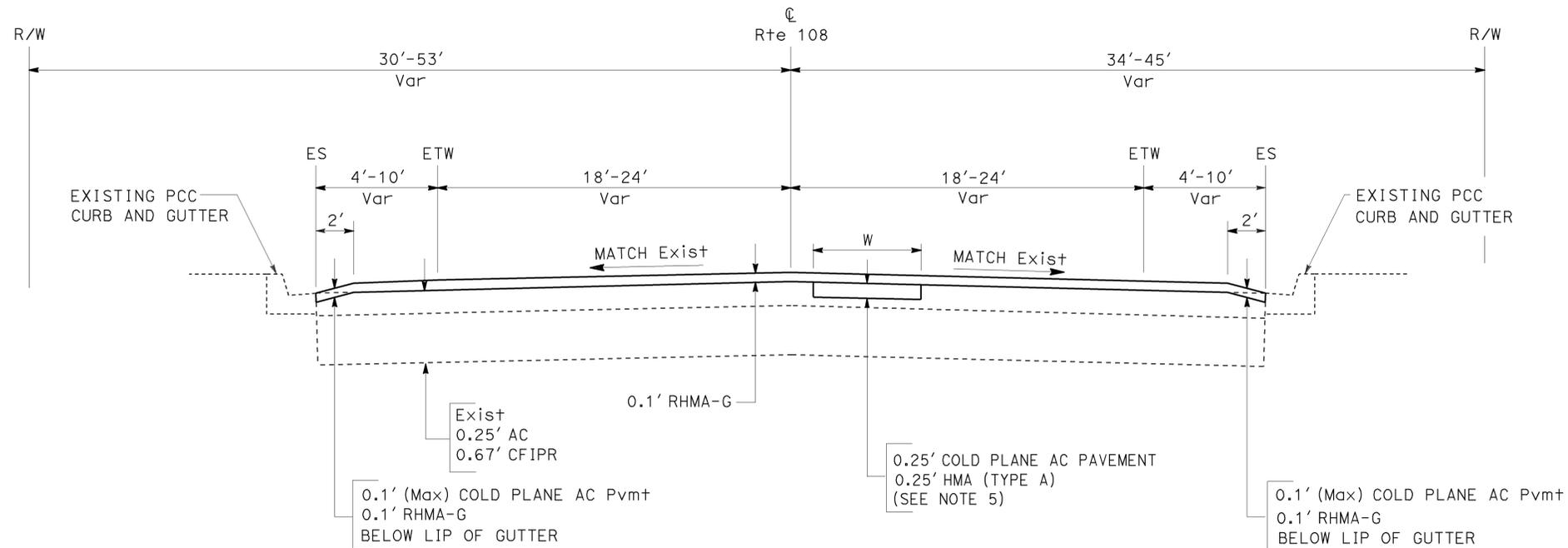
1. DIMENSIONS OF THE PAVEMENT STRUCTURES (STRUCTURAL SECTIONS) ARE SUBJECT TO TOLERANCES SPECIFIED IN THE STANDARD SPECIFICATIONS.
2. SUPERELEVATION AS SHOWN OR AS DIRECTED BY THE ENGINEER.
3. FOR ACCURATE R/W DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
4. EXISTING UTILITY FACILITIES HAVE NOT BEEN PLOTTED ON THESE PLANS
5. FOR COLD PLANE AC PAVEMENT DIMENSIONS AND LOCATIONS, SEE SUMMARY OF QUANTITIES.

ABBREVIATIONS

- RHMA-G - RUBBERIZED HOT MIX ASPHALT (GAP GRADED)
 CFIPR - COLD FOAM IN PLACE RECYCLE



Sta-PM 4.2/6.1
ROUTE 120



Sta-PM 37.2/38.2
ROUTE 108

TYPICAL CROSS SECTIONS

NO SCALE

X-1



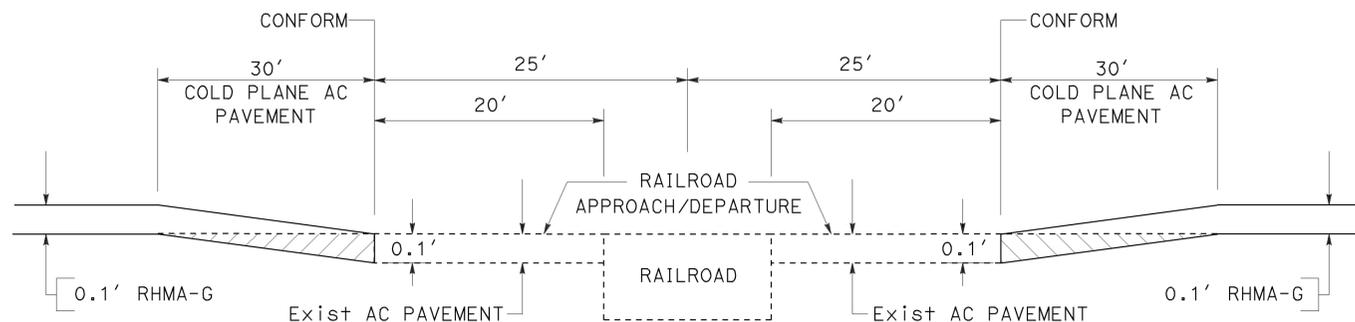
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
 MAINTENANCE
 FUNCTIONAL SUPERVISOR
 ALVIN MANGINDIN
 CALCULATED-DESIGNED BY
 CHECKED BY
 JOSE A ALICEA II
 RHODEL DE CLARO
 REVISED BY
 DATE REVISED
 JAA
 12/01/08

ABBREVIATIONS

RHMA-G - RUBBERIZED HOT MIX ASPHALT (GAP GRADED)
 AT&T - AMERICAN TELEPHONE AND TELEGRAPH COMPANY
 PG&E - PACIFIC GAS AND ELECTRIC

LEGEND

 - COLD PLANE AC PAVEMENT
 RHMA-G



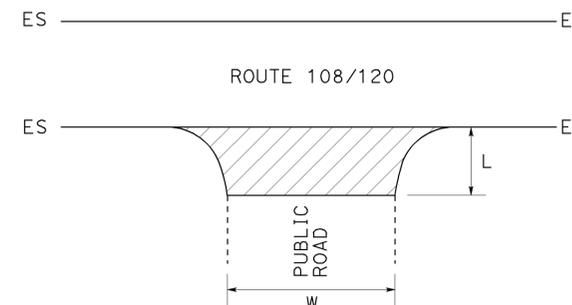
OAKDALE RAILROAD CROSSING - R+e 120 PM 5.2
CONFORM TAPER AT RAILROAD APPROACH/DEPARTURE

TABLE OF BRIDGES

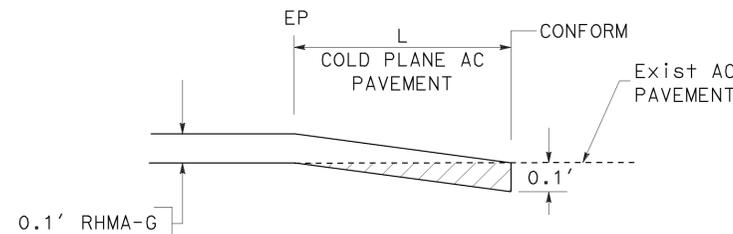
ROUTE	PM	BRIDGE NAME	BRIDGE No.
120	4.3	STANISLAUS RIVER BRIDGE	38-0023

PUBLIC ROAD INTERSECTIONS

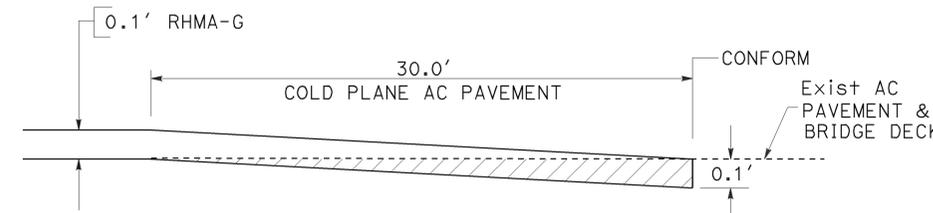
ROUTE	PM	SIDE	ROAD NAME	L	W	ROUTE	PM	SIDE	ROAD NAME	L	W
108	37.3	L+	OAK Ave	20'	69'	120	4.9	R+	D St	17'	54'
108	37.3	R+	OAK Ave	20'	38'	120	5.0	L+	E St	12'	61'
108	37.4	R+	WOOD Ave	22'	53'	120	5.0	R+	E St	13'	53'
108	37.6	R+	BRYAN Ave	14'	54'	120	5.2	L+	SIERRA Ave	13'	54'
108	38.1	L+	2nd Ave	15'	53'	120	5.3	L+	4th Ave	13'	54'
108	38.2	L+	3rd Ave	13'	54'	120	5.3	R+	4th Ave	13'	53'
108	38.2	R+	3rd Ave	13'	54'	120	5.3	L+	6th Ave	15'	58'
108	38.2	R+	YOSEMITE Ave	32'	65'	120	5.4	R+	EAST Ave	20'	35'
120	4.4	R+	WALNUT WOODS Ctr	12'	85'	120	5.6	R+	HALLMAN Ln	22'	36'
120	4.8	R+	B St	10'	53'	120	6.0	L+	MAAG Ave	27'	80'
120	4.8	L+	C St	21'	71'	120	6.0	R+	MAAG Ave	25'	80'
120	4.8	R+	C St	15'	57'						



PAVING LIMITS AT PUBLIC ROAD INTERSECTIONS
 SEE PUBLIC ROAD INTERSECTIONS TABLES



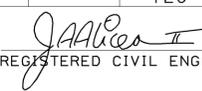
PUBLIC ROAD CONFORM TAPER



LONGITUDINAL CONFORM TAPER FOR EXISTING PAVEMENT AND APPROACH/DEPARTURE BRIDGE DECK

CONSTRUCTION DETAILS
 NO SCALE **C-1**

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
10	Sta	108, 120	37.2/38.2, 4.1/6.1	3	27

 1/19/10
 REGISTERED CIVIL ENGINEER DATE
 2/1/10
 PLANS APPROVAL DATE
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

REGISTERED PROFESSIONAL ENGINEER
 JOSE A. ALICEA II
 No. 64817
 Exp. 6/30/11
 CIVIL
 STATE OF CALIFORNIA

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION - MAINTENANCE
 ALVIN MANGINDIN
 FUNCTIONAL SUPERVISOR
 JOSE A ALICEA II
 RHODEL DE CLARO
 REVISOR BY DATE
 JAA 12/01/09
 CALCULATED/DESIGNED BY
 CHECKED BY

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION - MAINTENANCE

Caltrans

FUNCTIONAL SUPERVISOR: ALVIN MANGINDIN

CALCULATED-DESIGNED BY: JOSE A ALICEA II

CHECKED BY: RHODEL DE CLARO

REVISOR: JAA

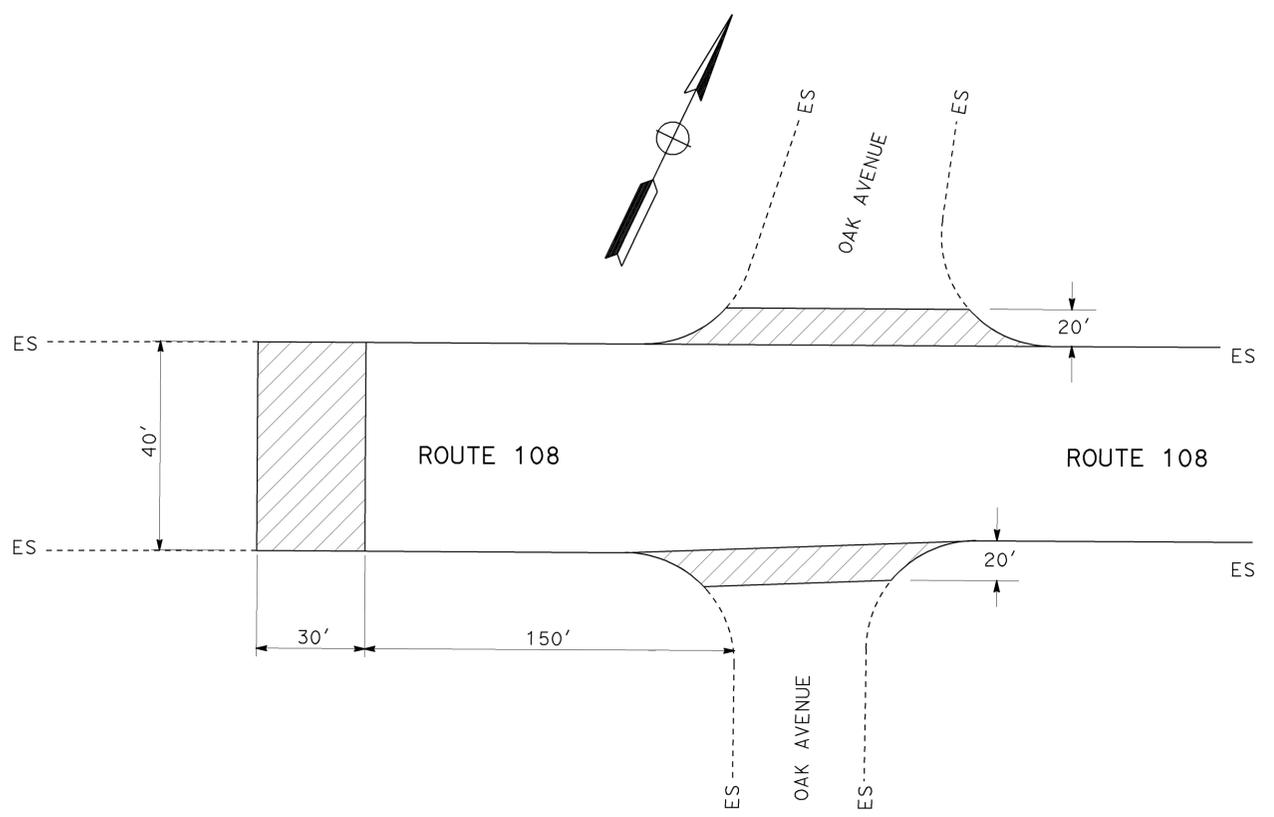
DATE: 12/21/09

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
10	Sta	108, 120	37.2/38.2, 4.1/6.1	4	27

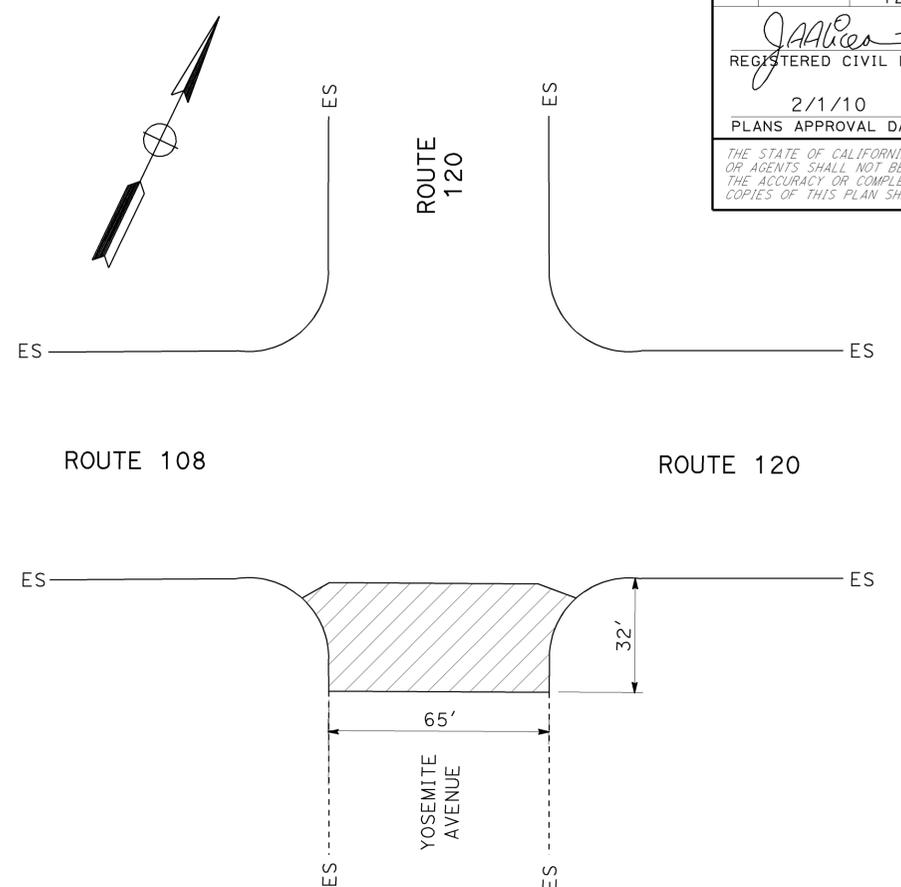
REGISTERED CIVIL ENGINEER: JOSE A. ALICEA II
 No. 64817
 Exp. 6/30/11
 CIVIL

DATE: 1/19/10
 PLANS APPROVAL DATE: 2/1/10

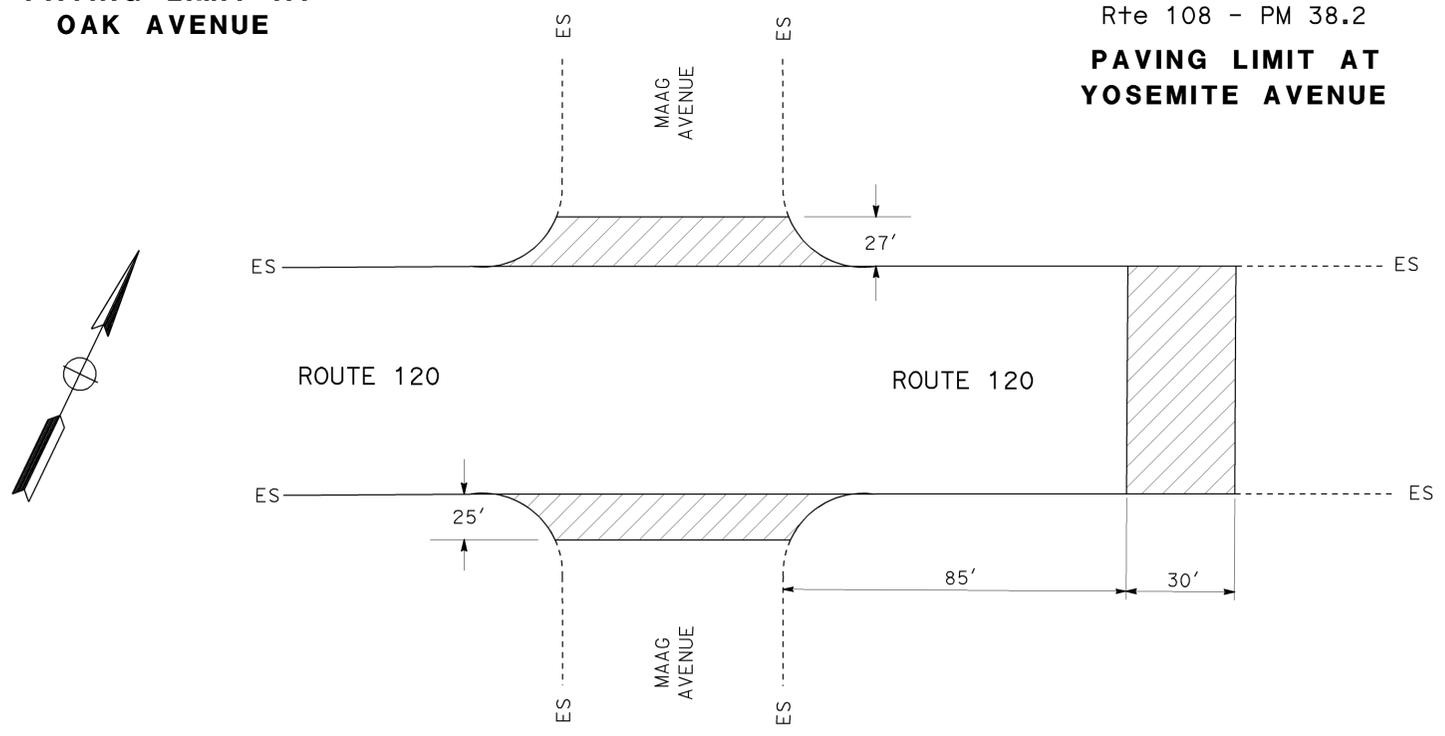
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.



Rte 108 - PM 37.2
PAVING LIMIT AT OAK AVENUE



Rte 108 - PM 38.2
PAVING LIMIT AT YOSEMITE AVENUE



Rte 120 - PM 6.1
PAVING LIMIT AT MAAG AVENUE

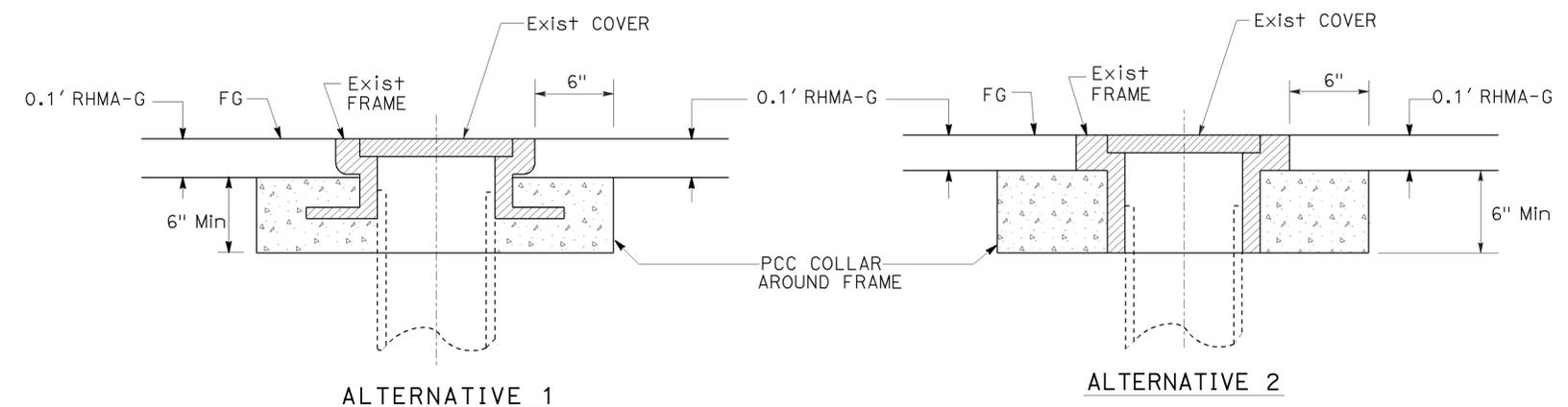
CONSTRUCTION DETAILS
 NO SCALE
C-2

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
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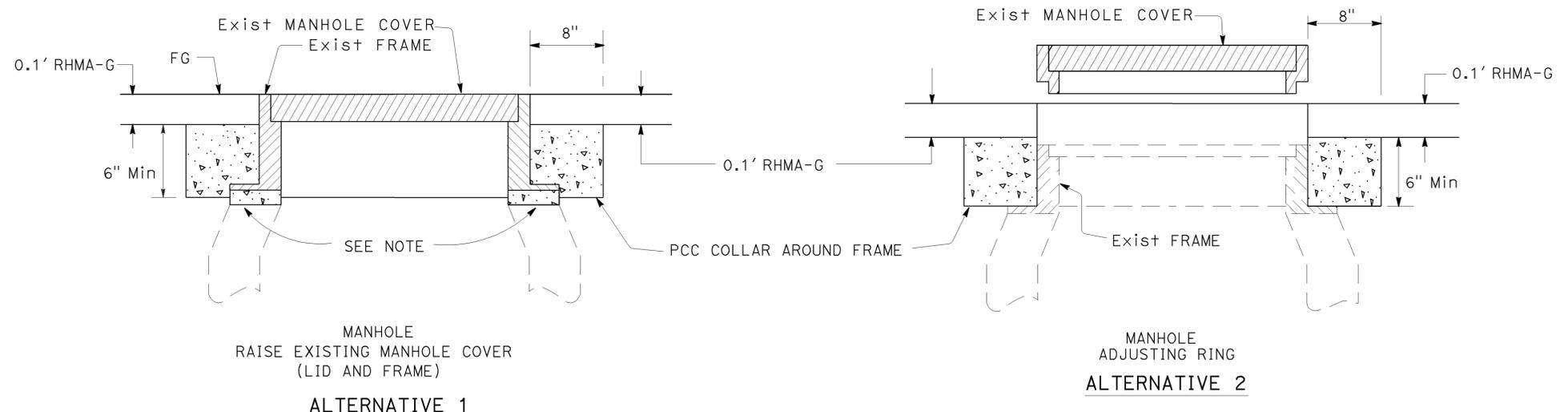
JAAlicea II 1/19/10
 REGISTERED CIVIL ENGINEER DATE
 2/1/10
 PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
 JOSE A. ALICEA II
 No. 64817
 Exp. 6/30/11
 CIVIL
 STATE OF CALIFORNIA

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



WATER VALVE



UTILITY MANHOLES

NOTE: RHMA THICKNESS VARIES TO MEET FIELD CONDITION. MINIMUM THICKNESS 0.75" TO MAXIMUM OF 2.5". FOR ADJUSTMENTS OF MORE THAN 2.5" USE STANDARD PRECAST CONCRETE RINGS.

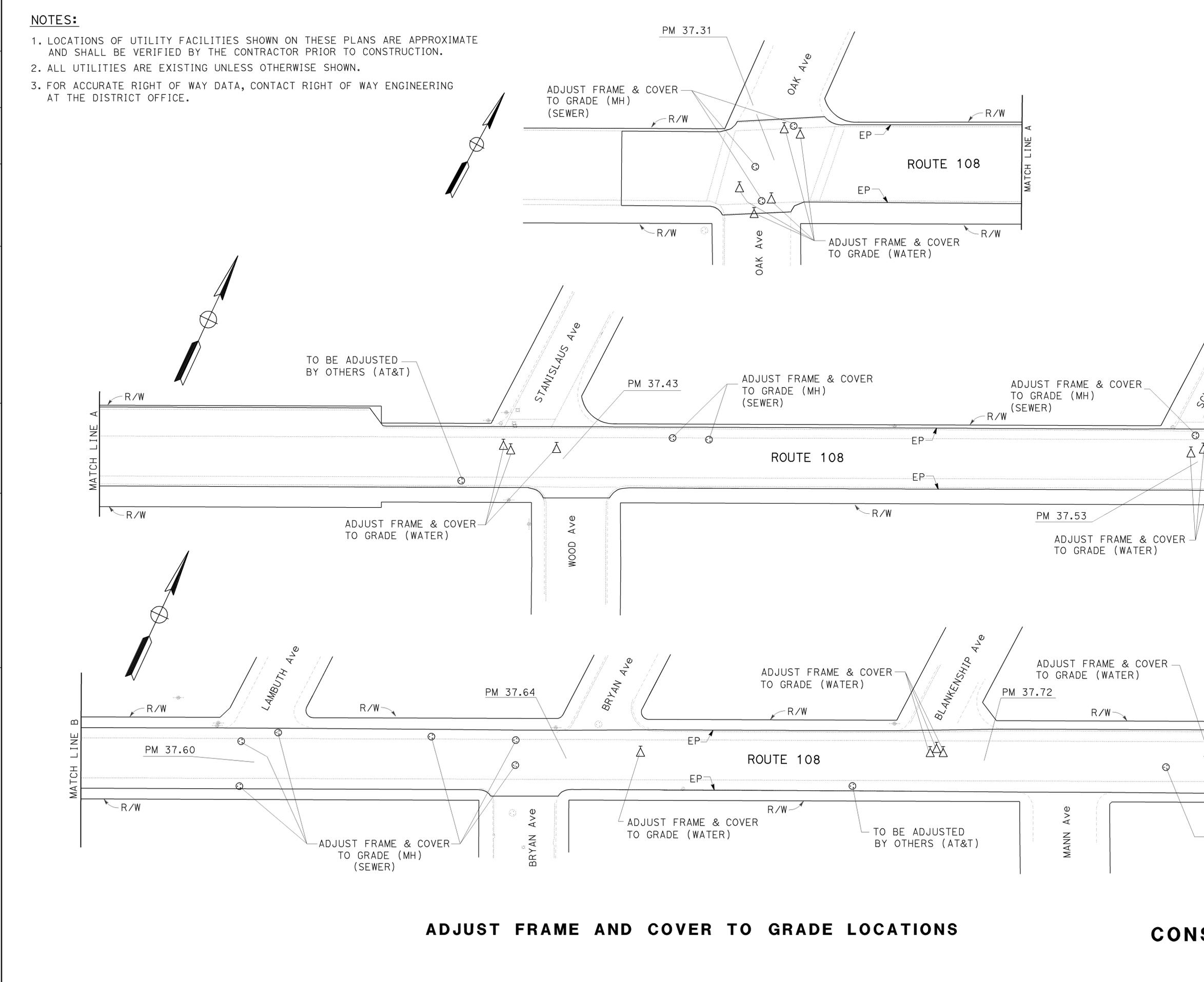
ADJUST FRAME AND COVER TO GRADE

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION - MAINTENANCE
 CALTRANS
 FUNCTIONAL SUPERVISOR: ALVIN MANGINDIN
 CHECKED BY: RHODEL DE CLARO
 DESIGNED BY: JOSE A ALICEA II
 REVISIONS: JAA 12/21/09
 REVISIONS: JAA 12/21/09

CONSTRUCTION DETAILS

NO SCALE **C-3**

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans MAINTENANCE



NOTES:

1. LOCATIONS OF UTILITY FACILITIES SHOWN ON THESE PLANS ARE APPROXIMATE AND SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION.
2. ALL UTILITIES ARE EXISTING UNLESS OTHERWISE SHOWN.
3. 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
10	Sta	120,108	4.1/6.1, 37.2/38.2	6	27

REGISTERED CIVIL ENGINEER DATE 1/19/10
 JOSE A. ALICEA II No. 64817 Exp. 6/30/11 CIVIL
 PLANS APPROVAL DATE 2/1/10
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.

JAA
12/01/09

REVISED BY
DATE REVISED

JOSE A ALICEA II
RHODEL DE CLARO

CALCULATED-DESIGNED BY
CHECKED BY

FUNCTIONAL SUPERVISOR
ALVIN MANGINDIN

ADJUST FRAME AND COVER TO GRADE LOCATIONS

CONSTRUCTION DETAILS

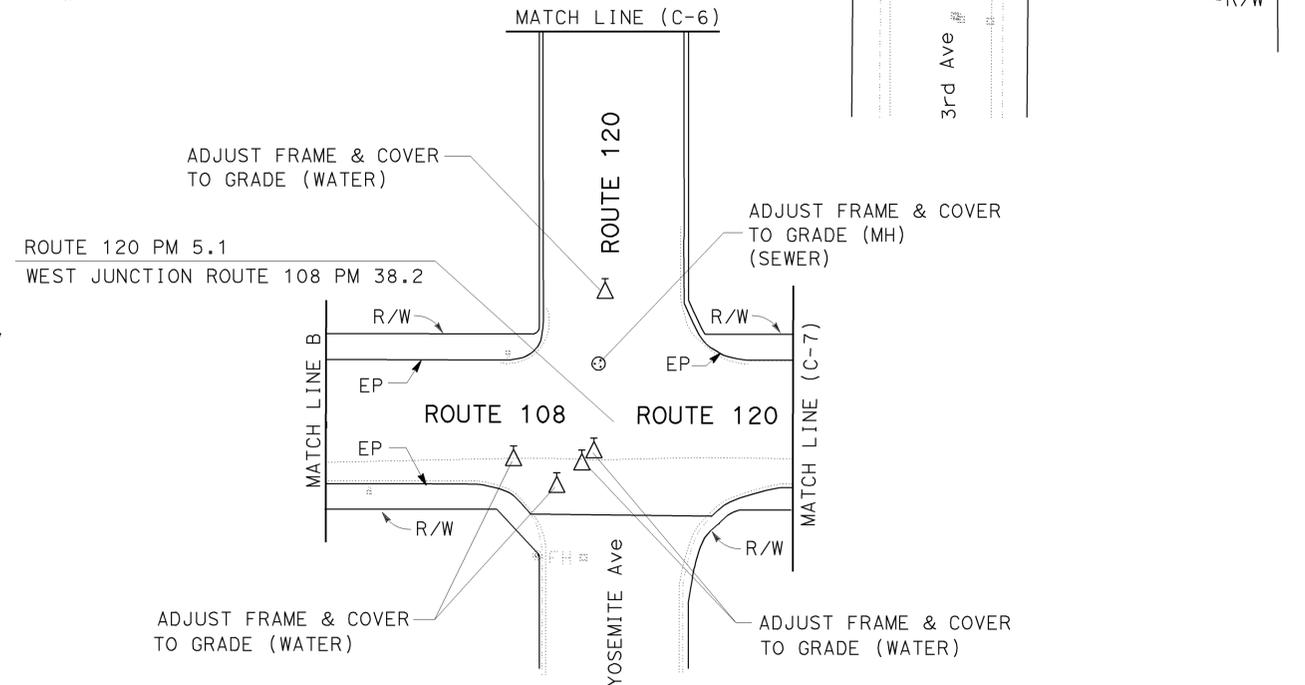
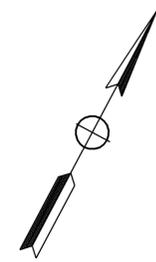
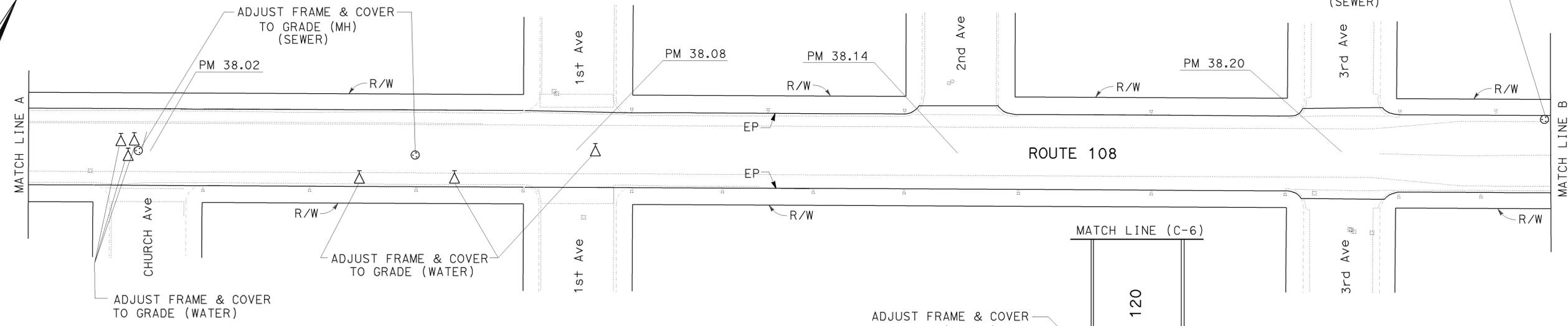
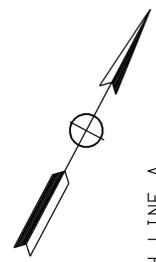
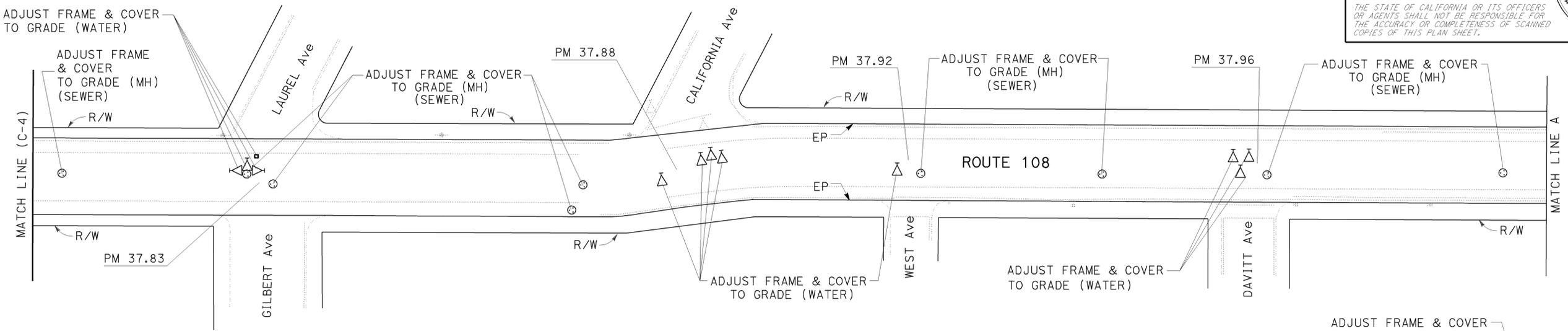
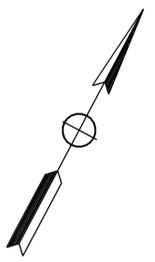
NO SCALE **C-4**

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans MAINTENANCE

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
10	Sta	108, 120	37.2/38.2, 4.1/6.1	7	27

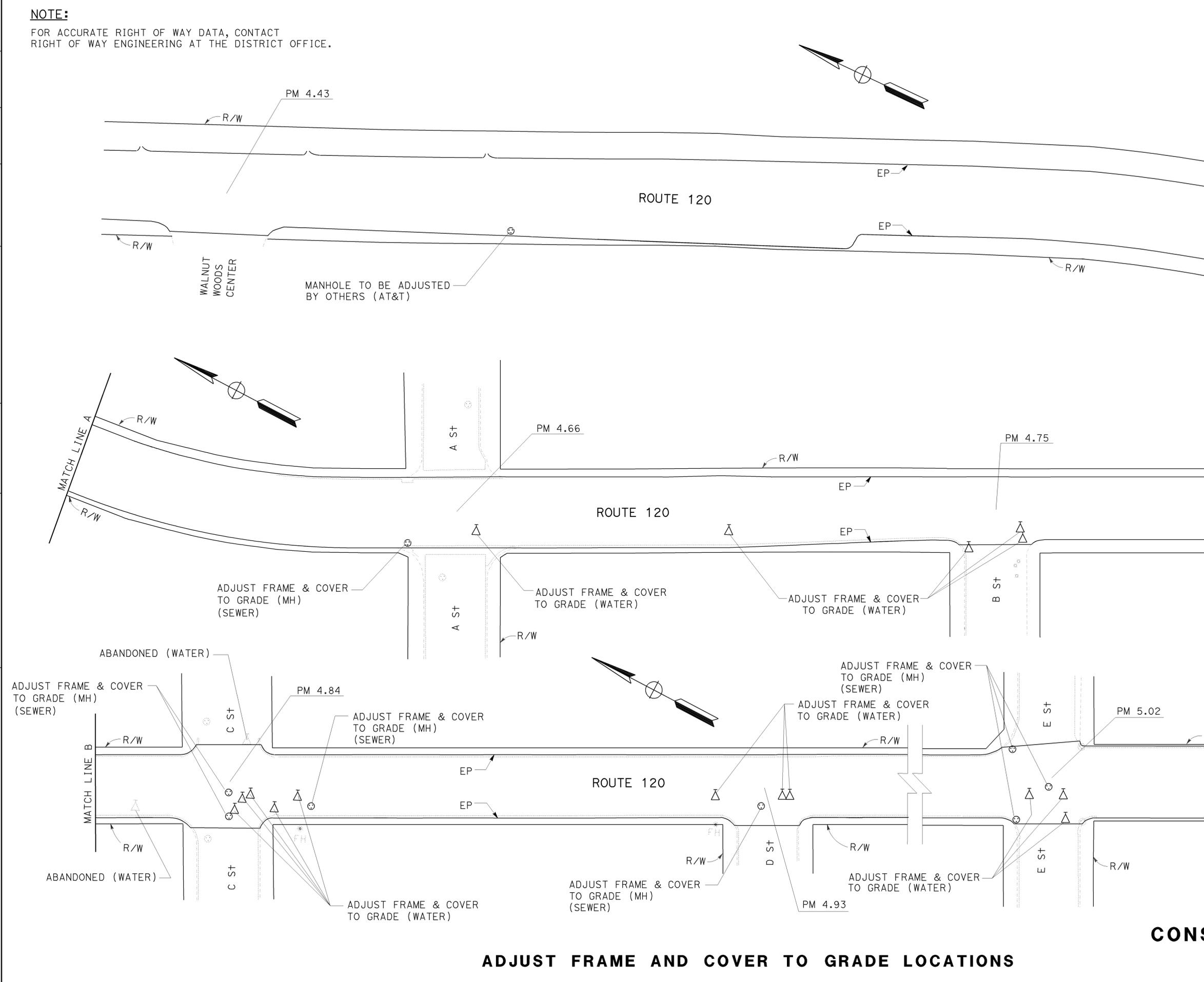
REGISTERED CIVIL ENGINEER: *Jose A. Alicea II* DATE: 1/19/10
 PLANS APPROVAL DATE: 2/1/10
 No. 64817 Exp. 6/30/11
 REGISTERED PROFESSIONAL ENGINEER: JOSE A. ALICEA II
 No. 64817 Exp. 6/30/11
 CIVIL
 STATE OF CALIFORNIA
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ADJUST FRAME AND COVER TO GRADE LOCATIONS

CONSTRUCTION DETAILS
 NO SCALE
C-5

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans MAINTENANCE



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
10	Sta	108, 120	37.2/38.2, 4.1/6.1	8	27

<i>JAlicea</i>	1/19/10
REGISTERED CIVIL ENGINEER	DATE
2/1/10	
PLANS APPROVAL DATE	

REGISTERED PROFESSIONAL ENGINEER
 JOSE A. ALICEA II
 No. 64817
 Exp. 6/30/11
 CIVIL
 STATE OF CALIFORNIA

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JAA
 12/23/09
 REVISED BY
 DATE REVISED
 JOSE A ALICEA II
 RHODEL DE CLARO
 CALCULATED-DESIGNED BY
 CHECKED BY

ALVIN MANGINDIN
 FUNCTIONAL SUPERVISOR

ADJUST FRAME AND COVER TO GRADE LOCATIONS

CONSTRUCTION DETAILS

NO SCALE **C-6**

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

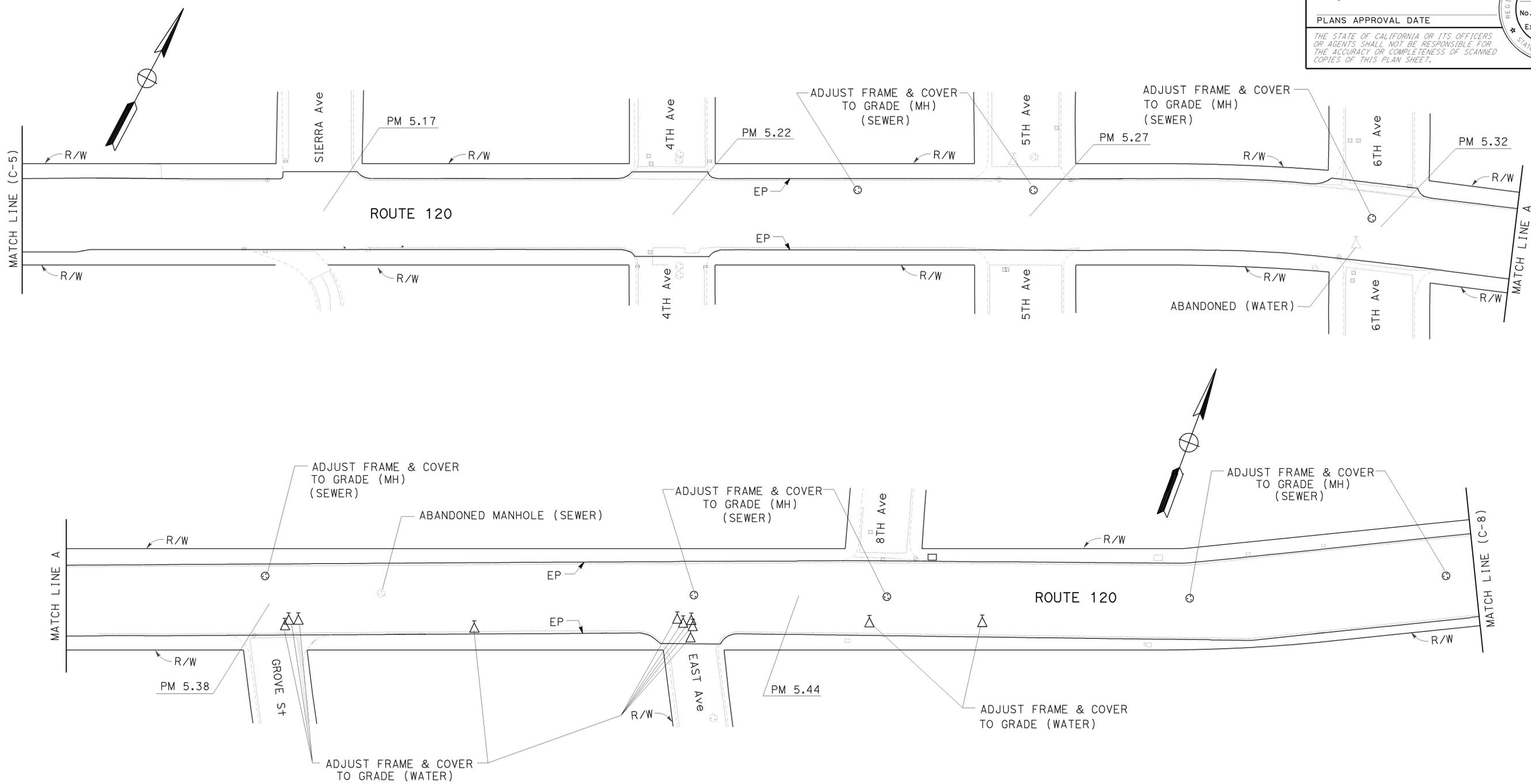
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
10	Sta	108, 120	37.2/38.2, 4.1/6.1	9	27

REGISTERED CIVIL ENGINEER DATE 1/19/10
 JOSE A. ALICEA II
 No. 64817
 Exp. 6/30/11
 CIVIL
 STATE OF CALIFORNIA

PLANS APPROVAL DATE

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JAA
 12/28/09
 REVISOR BY DATE REVISOR
 JOSE A ALICEA II
 RHODEL DE CLARO
 CALCULATED-DESIGNED BY
 CHECKED BY
 FUNCTIONAL SUPERVISOR
 ALVIN MANGINDIN
 STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans MAINTENANCE



ADJUST FRAME AND COVER TO GRADE LOCATIONS

CONSTRUCTION DETAILS

NO SCALE **C-7**

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans MAINTENANCE

FUNCTIONAL SUPERVISOR
 ALVIN MANGINDIN

CALCULATED-DESIGNED BY
 CHECKED BY

JOSE A ALICEA II
 RHODEL DE CLARO

REVISED BY
 DATE REVISED

JAA
 12/28/09

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

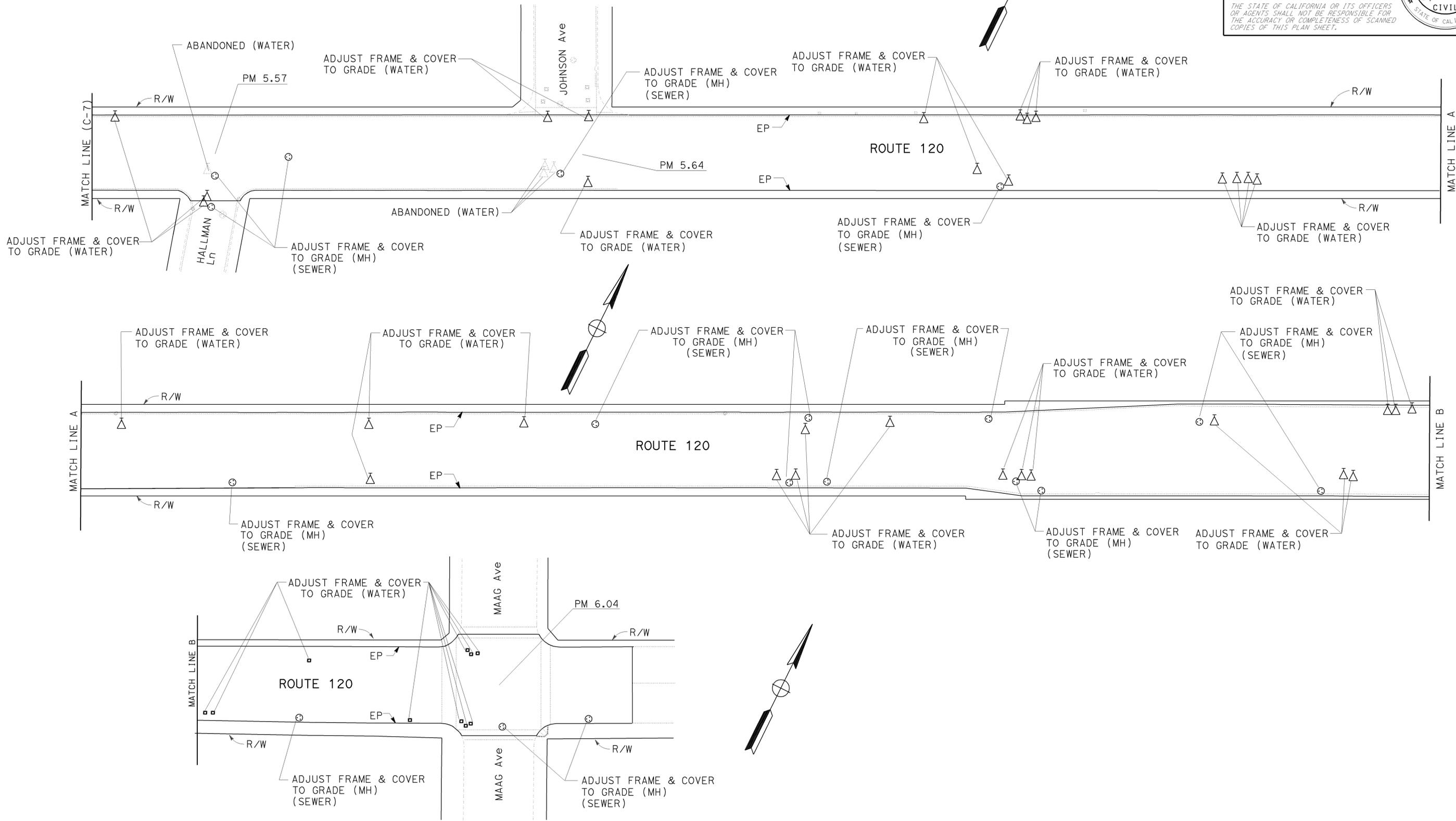
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
10	Sta	108, 120	37.2/38.2, 4.1/6.1	10	27

REGISTERED CIVIL ENGINEER
 1/19/10
 DATE

2/1/10
 PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
 JOSE A. ALICEA II
 No. 64817
 Exp. 6/30/11
 CIVIL
 STATE OF CALIFORNIA

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ADJUST FRAME AND COVER TO GRADE LOCATIONS

CONSTRUCTION DETAILS
 NO SCALE
C-8

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION - MAINTENANCE

FUNCTIONAL SUPERVISOR: ALVIN MANGINDIN

DESIGNED BY: JOSE A ALICEA II

CHECKED BY: RHODEL DE CLARO

REVISOR: JAA

DATE: 12/28/09

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
10	Sta	108, 120	37.2/38.2, 4.1/6.1	11	27

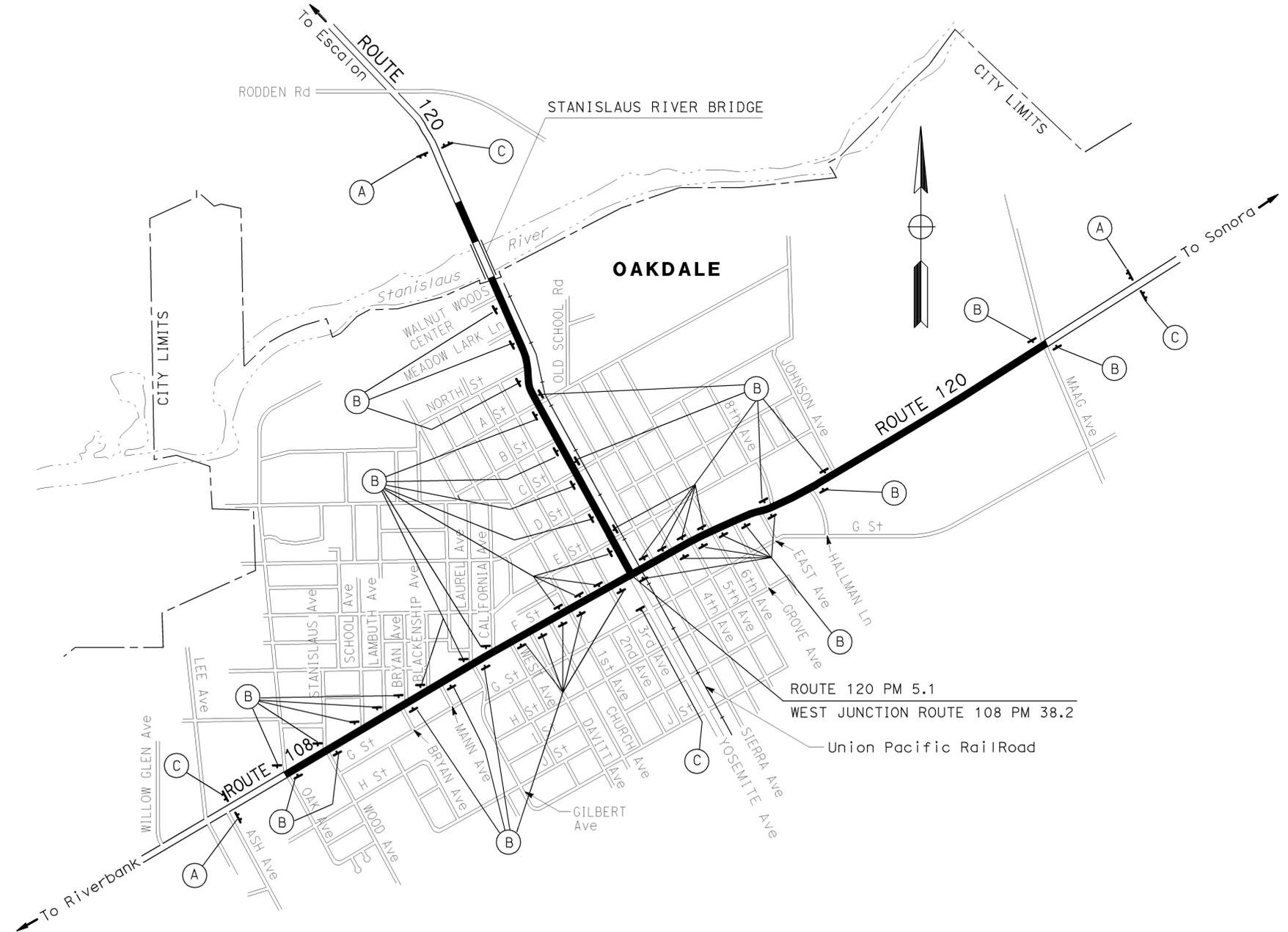
REGISTERED CIVIL ENGINEER: JOSE A. ALICEA II
 No. 64817
 Exp. 6/30/11
 DATE: 1/19/10
 PLANS APPROVAL DATE: 2/1/10

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 No. (#)	SIGN CODE	PANEL SIZE	No. OF POSTS AND SIZE	No. OF SIGNS	SIGN MESSAGE
A	W20-1	48" x 48"	1 - 4" x 6"	3	ROAD WORK AHEAD
B	W20-1	30" x 30"	1 - 4" x 4"	47	ROAD WORK AHEAD
C	G20-2	36" x 18"	1 - 4" x 4"	4	END ROAD WORK

NOTE: EXACT SIGN LOCATIONS TO BE DETERMINED BY THE ENGINEER.



CONSTRUCTION AREA SIGNS
 NO SCALE
CS-1

THIS PLAN ACCURATE FOR CONSTRUCTION AREA SIGN WORK ONLY.

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans MAINTENANCE
 FUNCTIONAL SUPERVISOR ALVIN MANGINDIN
 CALCULATED-DESIGNED BY CHECKED BY
 JOSE A ALICEA II RHODEL DE CLARO
 REVISED BY DATE REVISED
 JAA 12/28/09

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
10	Sta	108, 120	37.2/38.2, 4.1/6.1	12	27

REGISTERED CIVIL ENGINEER DATE 1/19/10
 JOSE A. ALICEA II No. 64817 Exp. 6/30/11 CIVIL
 PLANS APPROVAL DATE 2/1/10
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.

ABBREVIATIONS

RHMA-G - RUBBERIZED HOT MIX ASPHALT (GAP GRADED)

NOTES:

- (N) - NOT A SEPARATE PAY ITEM, FOR INFORMATION ONLY
- * - TOTAL INCLUDED IN ROADWAY ITEMS TABLE
- TRAFFIC MANAGEMENT SYSTEM ELEMENT LOCATIONS ARE APPROXIMATE.

COLD PLANE AC PAVEMENT, RHMA-G, AC DIKE (CONFORM TAPERS AT CURB & GUTTER)

ROUTE	Dir	PM / PM	LENGTH (N)	WIDTH (N)	DEPTH (N)	COLD PLANE AC Pvmt & AC DIKE	RHMA-G
						SQYD	TON
108	EB	37.2/38.2	5280'	2'	0.10'	1174	79
108	WB	37.2/38.2	5280'	2'	0.08'	1174	79
120	EB	4.1/6.1	10,560'	2'	0.10'	2347	157
120	WB	4.1/6.1	10,560'	2'	0.10'	2347	157
TOTAL						7042*	472*

COLD PLANE AC PAVEMENT, HMA (TYPE A) (TRAVEL LANES)

ROUTE	Dir	PM	DEPTH (N)	LENGTH (N)	WIDTH (N)	COLD PLANE AC Pvmt	HMA (TYPE A)
						SQYD	TON
120	EB	5.08	0.25'	400'	24'	1067	180
120	WB	5.12	0.25'	90'	35'	350	60
120	WB	5.15	0.25'	100'	20'	223	38
120	EB	5.60	0.25'	400'	24'	1067	180
120	WB	5.60	0.25'	400'	24'	1067	180
120	EB	5.96	0.25'	300'	24'	800	135
120	WB	5.96	0.25'	300'	24'	800	135
TOTAL						5374*	908*

TRAFFIC MANAGEMENT SYSTEM ELEMENTS (EXISTING)

ROUTE	PM	DIRECTION	LOCATION	TYPE	DESCRIPTION
108	37.31	BOTH	FIRST Ave	SL	SIGNAL LOOPS
108	38.24	BOTH	YOSEMITE Ave / F St	SL	SIGNAL LOOPS
120	3.79	BOTH	RIVER Rd	SL	SIGNAL LOOPS
120	4.35	BOTH	A St, EAST OF OAKDALE	TMS	TRAFFIC MONITORING STATION
120	4.35	BOTH	A St, WEST OF OAKDALE	TMS	TRAFFIC MONITORING STATION
120	4.66	BOTH	A St / YOSEMITE Ave	SL	SIGNAL LOOPS
120	5.12	BOTH	W Jct 108 EAST OF OAKDALE	TMS	TRAFFIC MONITORING STATION
120	5.12	BOTH	W Jct 108 WEST OF OAKDALE	TMS	TRAFFIC MONITORING STATION
120	5.64	BOTH	JOHNSON St / F St	SL	SIGNAL LOOPS
120	6.04	BOTH	MAGG Ave / F St	SL	SIGNAL LOOPS

COLD PLANE AC PAVEMENT, RHMA-G (CONFORM TAPERS)

ROUTE	PM	SIDE	LOCATION	LENGTH (N)	WIDTH (N)	DEPTH (N)	COLD PLANE AC Pvmt	RHMA (GAP GRADED)
							SQYD	TON
108	37.2		Rte 108 (150' W OF OAK Ave)	30'	56'	0.1'	187	13
	37.3	Rt	OAK Ave	20'	69'	0.1'	154	11
	37.3	Lt	OAK Ave	20'	38'	0.1'	85	6
	37.4	Rt	WOOD Ave	22'	53'	0.1'	130	9
	37.6	Rt	BRYAN Ave	14'	54'	0.1'	84	6
	38.1	Lt	SECOND Ave	15'	53'	0.1'	89	6
	38.2	Lt	THIRD Ave	13'	54'	0.1'	78	6
	38.2	Rt	THIRD Ave	13'	54'	0.1'	78	6
	38.2	Rt	YOSEMITE Ave	32'	65'	0.1'	232	16
120	4.1		ROUTE 120	30'	40'	0.1'	134	9
	4.3		STANISLAUS RIVER Br	30'	40'	0.1'	134	9
	4.3		STANISLAUS RIVER Br	30'	40'	0.1'	134	9
	4.4	Rt	WALNUT WOODS CENTER	12'	85'	0.1'	114	8
	4.8	Rt	B St	17'	53'	0.1'	101	7
	4.8	Lt	C St	21'	71'	0.1'	166	12
	4.8	Rt	C St	15'	57'	0.1'	95	7
	4.9	Rt	D St	17'	54'	0.1'	102	7
	5.0	Lt	E St	12'	61'	0.1'	82	6
	5.0	Rt	E St	13'	53'	0.1'	77	6
	5.1		OAKDALE RR XING	60'	56'	0.1'	374	25
	5.2	Lt	SIERRA Ave	12'	50'	0.1'	67	5
	5.3	Lt	4TH Ave	13'	54'	0.1'	78	6
	5.3	Rt	4TH Ave	13'	53'	0.1'	77	6
	5.3	Lt	6TH Ave	15'	58'	0.1'	97	7
5.4	Rt	EAST Ave	30'	40'	0.1'	134	9	
5.6	Rt	HALLMAN Ln	22'	36'	0.1'	88	6	
6.0	Lt	MAAG Ave	27'	80'	0.1'	240	16	
6.0	Rt	MAAG Ave	25'	80'	0.1'	223	15	
6.1		Rte 120 (85' E OF MAAG Ave)	30'	55'	0.1'	184	13	
TOTAL							3818*	267*

SUMMARY OF QUANTITIES Q-1

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
10	Sta	108, 120	37.2/38.2, 4.1/6.1	13	27

Jose A. Alicea II 1/19/10
 REGISTERED CIVIL ENGINEER DATE

2/1/10
 PLANS APPROVAL DATE

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

REGISTERED PROFESSIONAL ENGINEER
JOSE A. ALICEA II
 No. 64817
 Exp. 6/30/11
 CIVIL
 STATE OF CALIFORNIA

ADJUST FRAME AND COVER TO GRADE

ROUTE	PM	DESCRIPTION	EA	ROUTE	PM	DESCRIPTION	EA	ROUTE	PM	DESCRIPTION	EA	ROUTE	PM	DESCRIPTION	EA	
108	37.37	WATER	5	108	38.00	SEWER	1	120	5.32	SEWER	1	120	5.91	WATER	5	
	37.37	SEWER	3		38.02	WATER	3		5.38	WATER	3		5.91	SEWER	3	
	37.42	WATER	3		38.02	SEWER	1		5.38	SEWER	1		5.93	WATER	3	
	37.45	SEWER	2		38.06	WATER	2		5.44	WATER	5		5.93	SEWER	3	
	37.53	WATER	3		38.06	SEWER	1		5.44	SEWER	1		5.95	WATER	1	
	37.53	SEWER	1		38.08	WATER	1		5.48	WATER	1		5.95	SEWER	1	
	37.60	SEWER	3		38.24	SEWER	1		5.49	SEWER	1		5.97	WATER	7	
	37.64	SEWER	3		120	4.66	SEWER		1	5.49	WATER		1	5.97	SEWER	1
	37.66	WATER	1			4.66	WATER		1	5.53	SEWER		1	6.01	WATER	1
	37.72	WATER	3			4.71	WATER		1	5.56	SEWER		1	6.01	SEWER	1
	37.76	WATER	1	4.75		WATER	3		5.57	WATER	3		6.04	WATER	7	
	37.76	SEWER	1	4.84		WATER	5		5.57	SEWER	3		6.04	SEWER	2	
	37.81	SEWER	1	4.84		SEWER	3		5.64	WATER	3					
	37.83	WATER	4	4.93		WATER	3		5.64	SEWER	1					
	37.83	SEWER	2	4.93		SEWER	1		5.70	WATER	3					
	37.87	SEWER	2	5.02		WATER	3		5.70	SEWER	1					
	37.88	WATER	4	5.02		SEWER	3		5.76	WATER	4					
	37.92	WATER	1	5.07	SEWER	1	5.79		WATER	1						
	37.94	SEWER	1	5.12	WATER	5	5.82		SEWER	1						
	37.94	SEWER	1	5.12	SEWER	1	5.84		WATER	2						
37.96	WATER	3	5.25	SEWER	1	5.86	WATER	1								
37.96	SEWER	1	5.27	SEWER	1	5.87	SEWER	1								
SUBTOTAL			49				43				40				35	
TOTAL															167	

NOTE: ALL WATER AND SEWER COVERS OWNED BY CITY OF OAKDALE.

ROADWAY ITEMS

LOCATION	RHMA (GAP GRADED)	HMA (TYPE A)	TACK COAT	COLD PLANE AC PAVEMENT
ROUTE 108/120				
	TON			SOYD
TRAVEL LANES	6911	908	41	5374
CONFORM TAPERS	267		2	3818
CONFORM TAPERS AT CURB & GUTTER	472		2	7042
TOTAL	7650	908	45	16,234

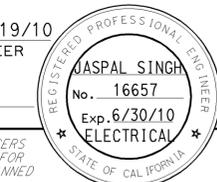
PAVEMENT DELINEATION ITEMS

LOCATION	REMOVE THERMOPLASTIC PAVEMENT MARKING	THERMOPLASTIC PAVEMENT MARKING																	REMOVE THERMOPLASTIC TRAFFIC STRIPE	THERMOPLASTIC TRAFFIC STRIPE (SPRAYABLE)					REMOVE PAVEMENT MARKERS (N)	PAVEMENT MARKERS (RETROREFLECTIVE)					
		TYPE II ARROW (R)	TYPE III ARROW (R)	TYPE III ARROW (L)	TYPE IV ARROW	TYPE IV ARROW	TYPE V ARROW	TYPE VI ARROW	LIMIT LINE	X-WALK	PED	XING	SIGNAL	AHEAD	KEEP	CLEAR	SLOW	SCHOOL		RR	4" PARKING STALL	4" WHITE	4" YELLOW	8" WHITE		TYPE D	TYPE G				
		DETAIL 12	DETAIL 27B	DETAIL 22	DETAIL 32	DETAIL 38	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA		EA	EA	EA	EA	EA		EA	EA				
ROUTE 108	3650				1260		66		27	1810		42	32	31	72	81	46	70		118	191			332	6897	191	3976	30	318		9
ROUTE 120	8619	90	45	126	2184	126	132	252	509	3947	108	128		124	168	189	46		280	39	1624	15,540	4034	4894	9969	1624	1861	420	1053	333	75
TOTAL	12,269	12,274																	1815	43,481						2238					

SUMMARY OF QUANTITIES Q-2

LAST REVISION DATE PLOTTED => 09-FEB-2010
 00-00-00 TIME PLOTTED => 11:46

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
10	Sta	108, 120	37.2/38.2 4.1/6.1	14	27

 1/19/10 REGISTERED ELECTRICAL ENGINEER		
2/1/10 PLANS APPROVAL DATE		

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

LEGEND: (FOR SHEETS E-1 THROUGH E-6)

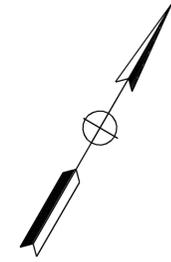
- 1 1 Exist 120/240 V, 1Ø, 3-WIRE, TYPE III-AF SERVICE EQUIPMENT ENCLOSURE.
- 2 Exist MODEL 170 CONTROLLER ASSEMBLY WITH MODEL 332 CABINET.
- 3 RAISE Exist DETECTOR HANDHOLES TO FINISHED GRADE LEVEL.
- 4 Exist TYPE III-AF SERVICE EQUIPMENT ENCLOSURE WITH ATTACHED IRWL CONTROLLER CABINET.
- 5 RS Exist IRWL FIXTURES PRIOR TO GRINDING OPERATION. INSTALL NEW IRWL FIXTURES AT THE SAME LOCATION AFTER AC OVERLAY.
SEE INSTALLATION DETAIL ON SHEET E-6. NEW IRWL FIXTURES SHALL BE OPERABLE WITH THE Exist CONTROL UNIT.

NOTES: (FOR SHEETS E-1 THROUGH E-6)

- 1 AB Exist LOOP DETECTORS AND INSTALL LOOP DETECTORS AS SHOWN.
- 2 DETAILS OF Exist TRAFFIC SIGNAL NOT SHOWN.
- 3 PREVENT DAMAGE TO Exist TERMINATION CONDUITS FOR LOOP DETECTORS.
- 4 FOR ACCURATE RIGHT OF WAY AND ACCESS DATA, CONTACT RIGHT OF WAY ENGINEERING AT DISTRICT OFFICE.

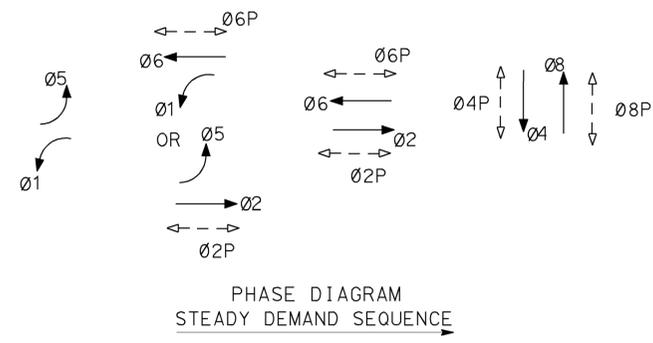
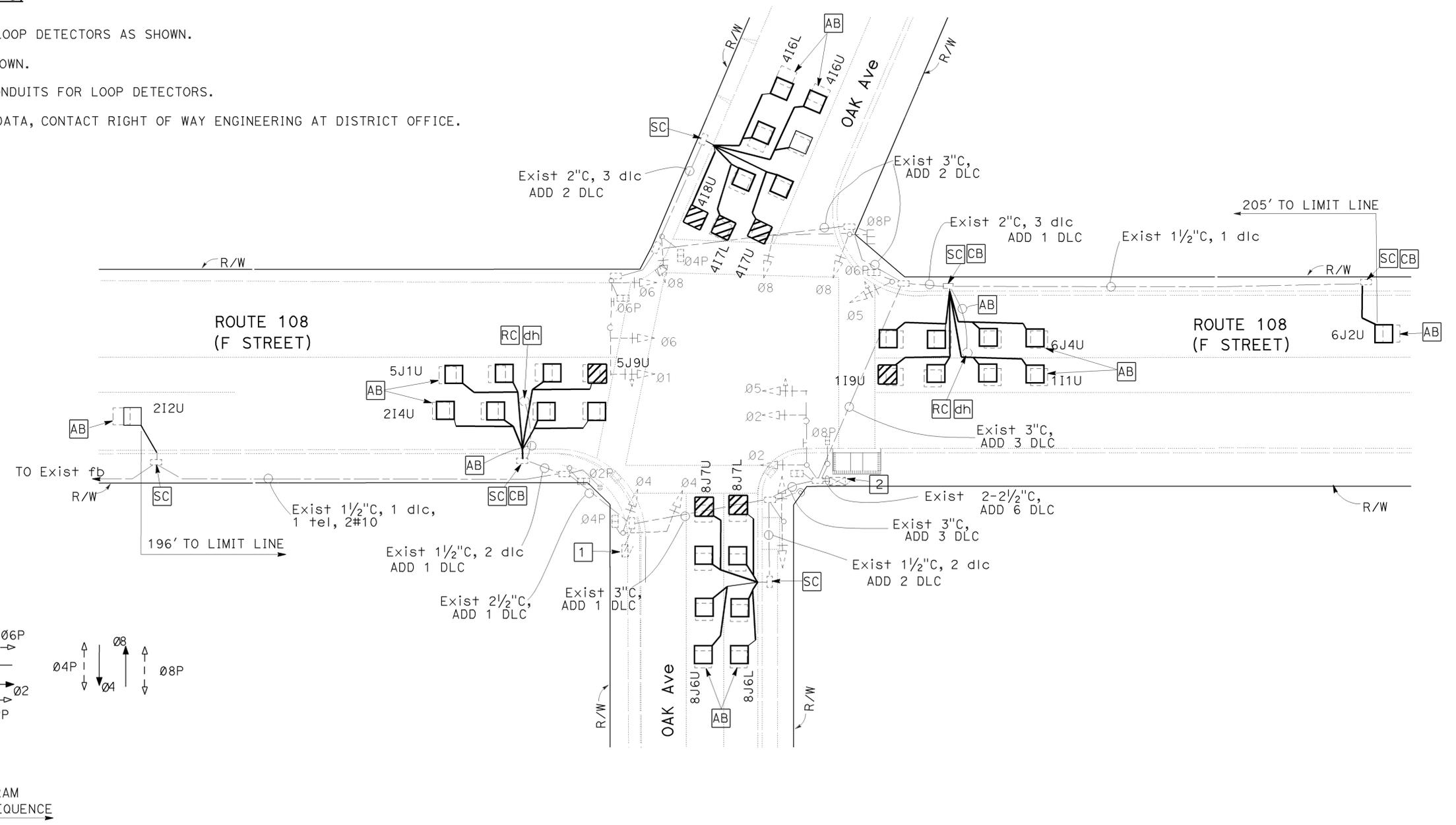
LEGEND:

 - IN-ROADWAY WARNING LIGHT



ABBREVIATIONS:

IRWL - IN-ROADWAY WARNING LIGHT



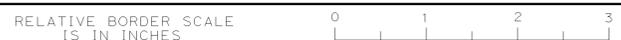
**MODIFY IN-ROADWAY WARNING LIGHTS
MODIFY SIGNAL
(LOCATION 1)**

THIS PLAN IS ACCURATE FOR ELECTRICAL WORK ONLY.

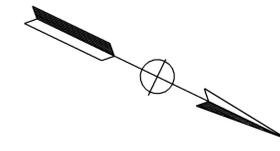
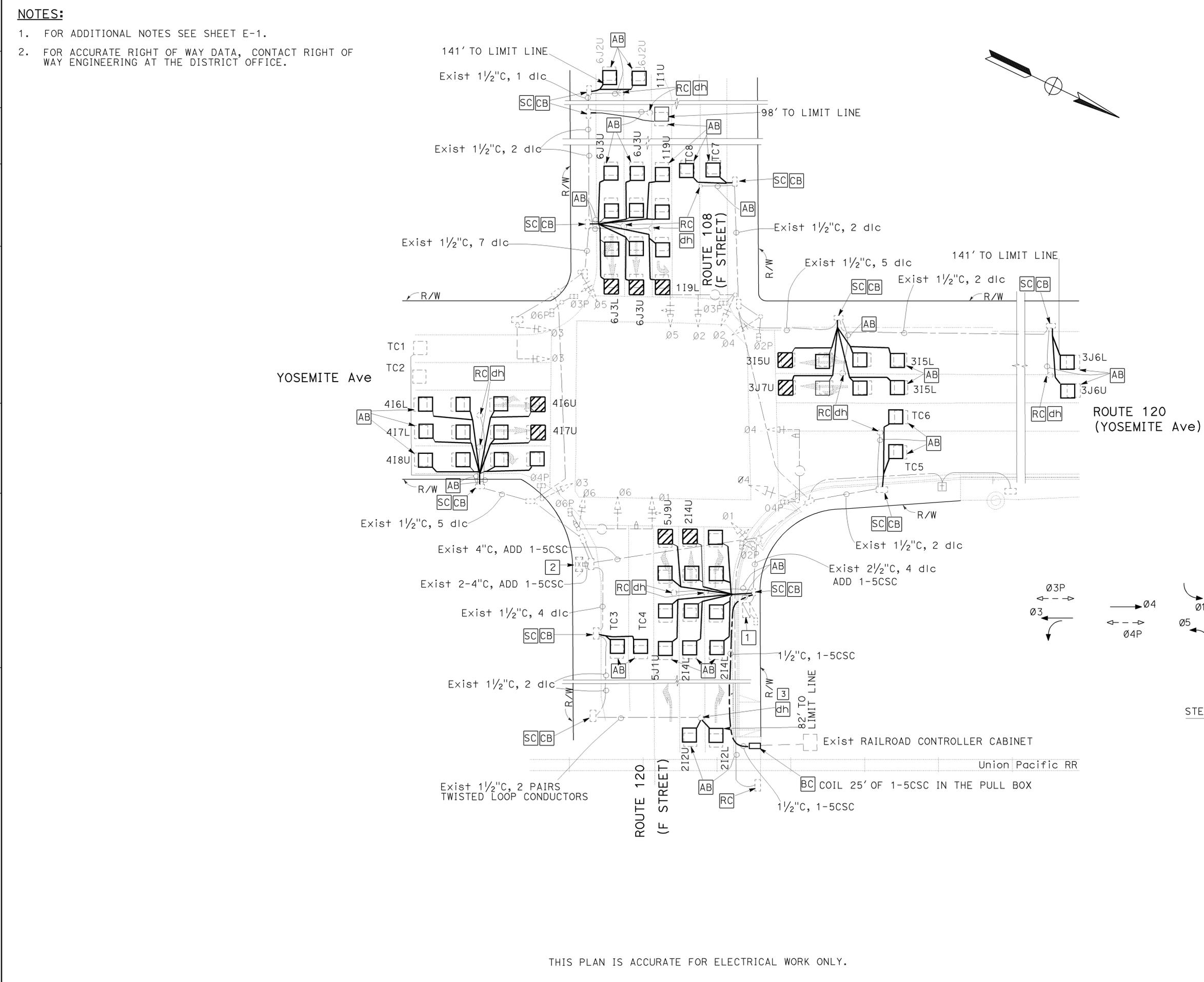
NO SCALE

E-1

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans ELECTRICAL DESIGN
 FUNCTIONAL SUPERVISOR: ALI BAKHOUD
 CALCULATED/DESIGNED BY: JASPAL SINGH
 CHECKED BY: FRED IYASERE
 REVISED BY: JS
 DATE REVISED: 1/21/10
 BORDER LAST REVISED 4/11/2008



STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans ELECTRICAL DESIGN



- NOTES:**
- FOR ADDITIONAL NOTES SEE SHEET E-1.
 - 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
10	Sta	108, 120	37.2/38.2 4.1/6.1	15	27

1/19/10
 REGISTERED ELECTRICAL ENGINEER
JASPAL SINGH
 No. 16657
 Exp. 6/30/10
 ELECTRICAL
 STATE OF CALIFORNIA

2/1/10
 PLANS APPROVAL DATE

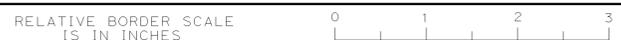
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

DESIGNED BY: JASPAL SINGH
 CHECKED BY: FRED IYASERE

REVISIONS BY: JS
 DATE REVISED: 1/21/10

FUNCTIONAL SUPERVISOR: ALI BAKHOUD

THIS PLAN IS ACCURATE FOR ELECTRICAL WORK ONLY.



USERNAME => s123936
 DGN FILE => a0u040u002.dgn

CU06391 EA 0U0401

MODIFY SIGNAL
 (LOCATION 2)
 NO SCALE **E-2**

LAST REVISION: DATE PLOTTED => 09-FEB-2010
 01-21-10 TIME PLOTTED => 11:50

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans ELECTRICAL DESIGN

- NOTES:**
- FOR ADDITIONAL NOTES SEE SHEET E-1.
 - 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
10	Sta	108, 120	37.2/38.2 4.1/6.1	17	27

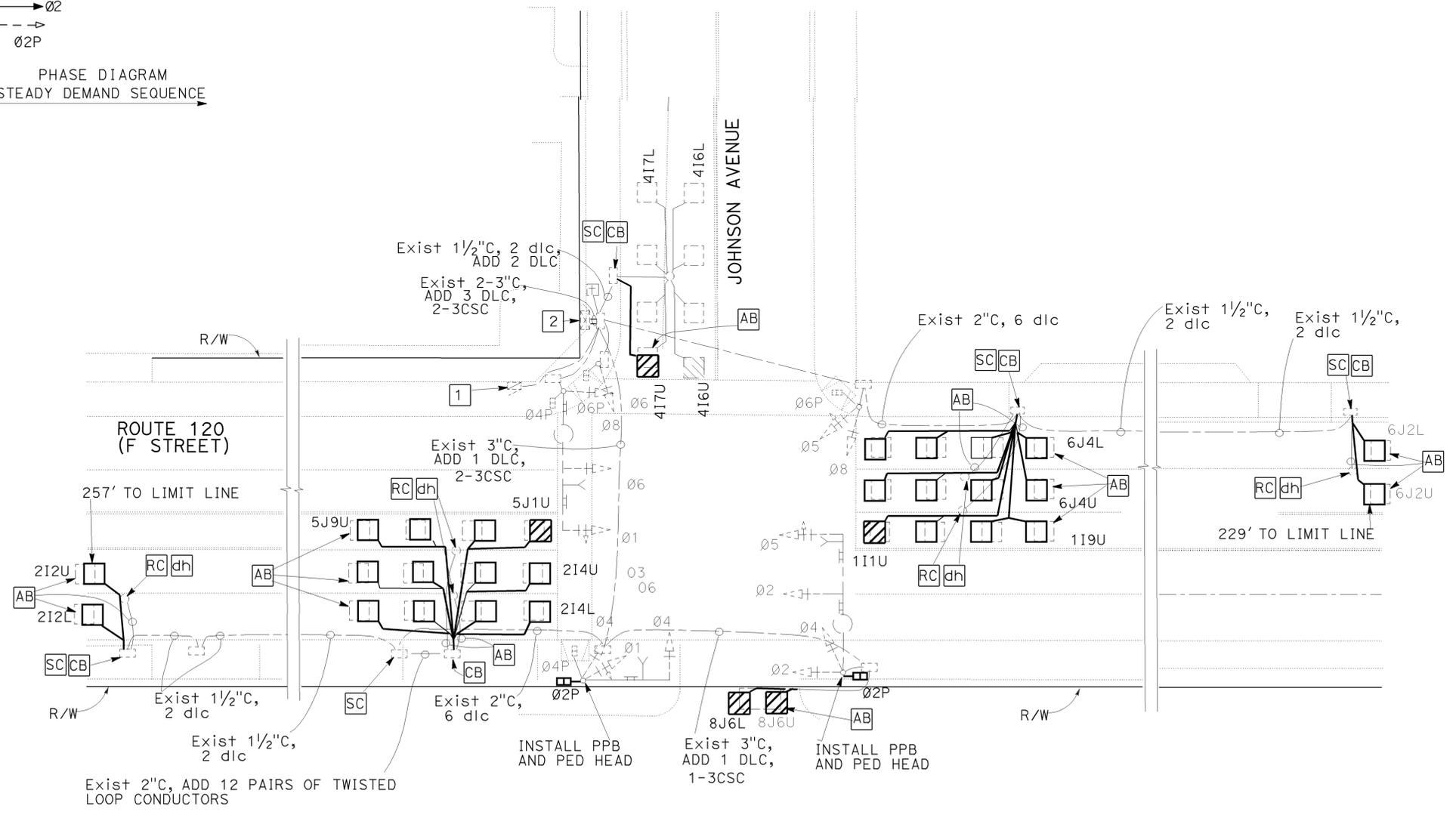
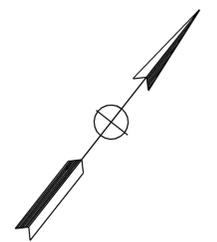
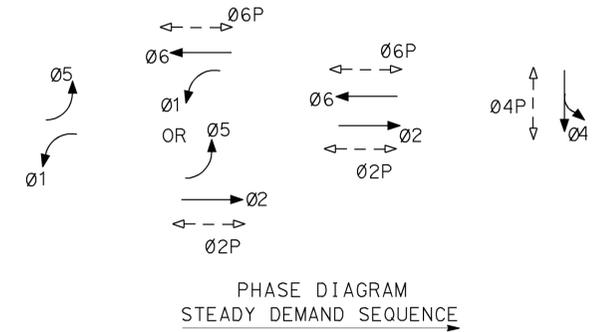
1/19/10
 REGISTERED ELECTRICAL ENGINEER
JASPAL SINGH
 No. 16657
 Exp. 6/30/10
 ELECTRICAL
 PLANS APPROVAL DATE

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.

REVISOR: JS
 DATE: 1/19/10

DESIGNER: JASPAL SINGH
 CHECKER: FRED IYASERE

FUNCTIONAL SUPERVISOR: ALI BAKHDOUD



THIS PLAN IS ACCURATE FOR ELECTRICAL WORK ONLY.

**MODIFY SIGNAL
 (LOCATION 4)**

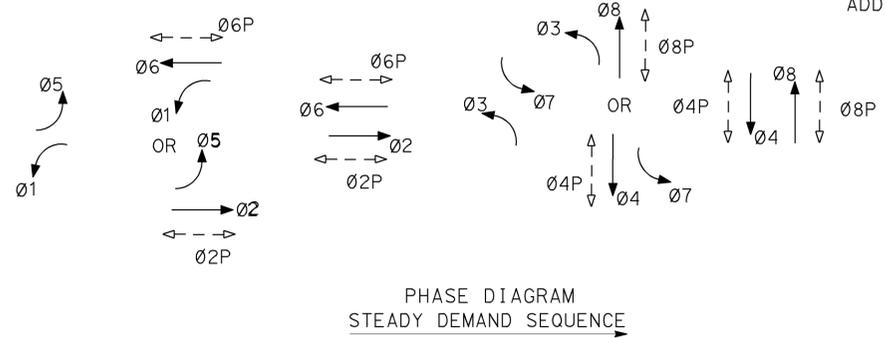
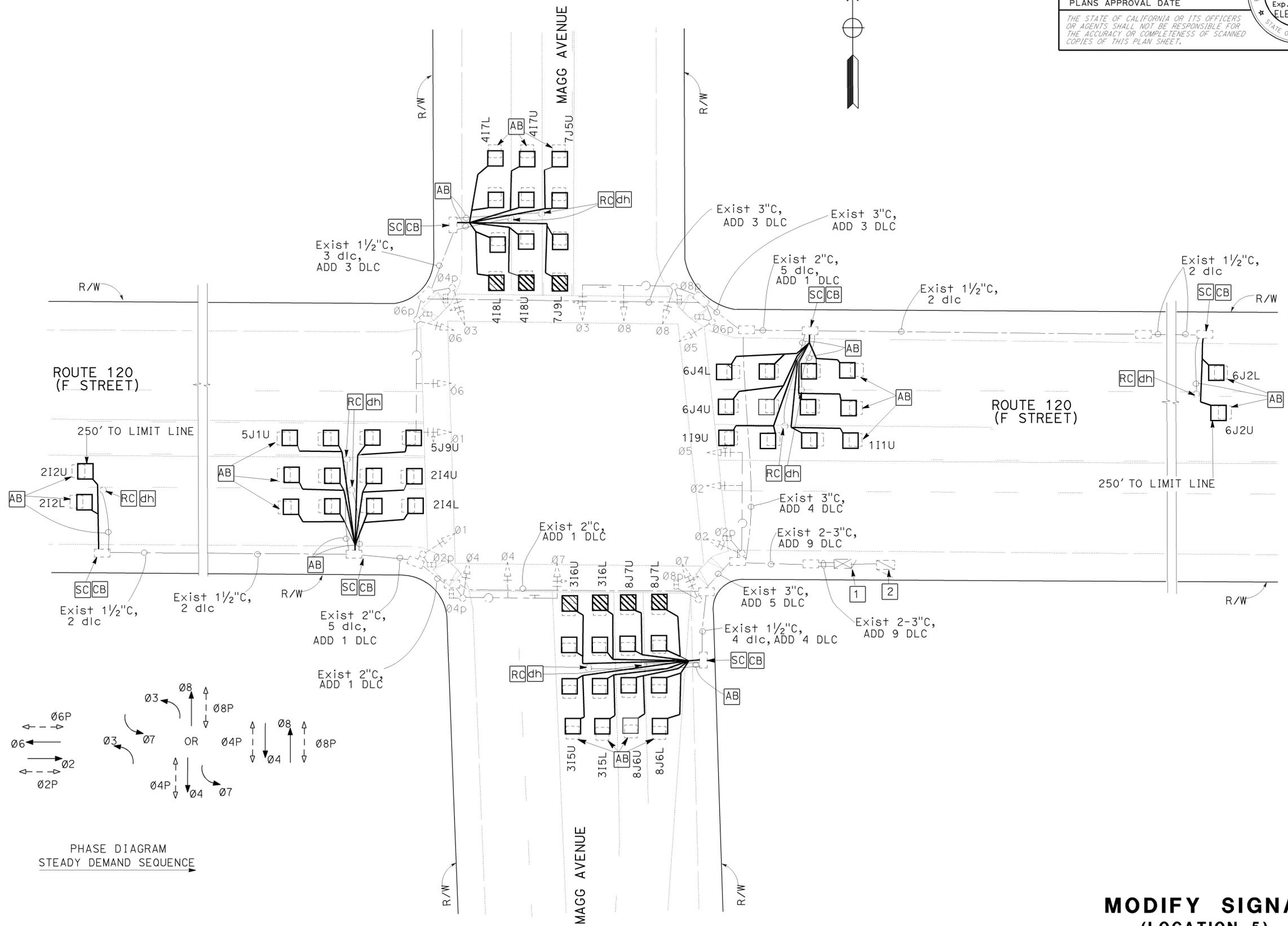
NO SCALE

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans ELECTRICAL DESIGN
 FUNCTIONAL SUPERVISOR: ALI BAKHOUD
 CALCULATED/DESIGNED BY: JASPAL SINGH
 CHECKED BY: FRED IYASERE
 REVISED BY: JS
 DATE REVISED: 1/21/10

- NOTES:**
- FOR ADDITIONAL NOTES SEE SHEET E-1.
 - 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
10	Sta	108, 120	37.2/38.2 4.1/6.1	18	27

1/19/10
 REGISTERED ELECTRICAL ENGINEER
 JASPAL SINGH
 No. 16657
 Exp. 6/30/10
 ELECTRICAL
 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.



THIS PLAN IS ACCURATE FOR ELECTRICAL WORK ONLY.

**MODIFY SIGNAL
 (LOCATION 5)**

NO SCALE **E-5**

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
10	Sta	108, 120'	37.2/38.2 4.1/6.1	19	27

1/19/10	
REGISTERED ELECTRICAL ENGINEER	
2/1/10	
PLANS APPROVAL DATE	

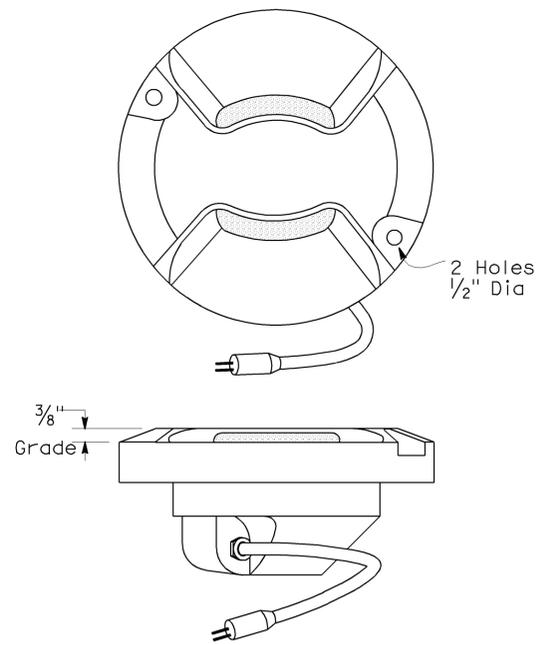
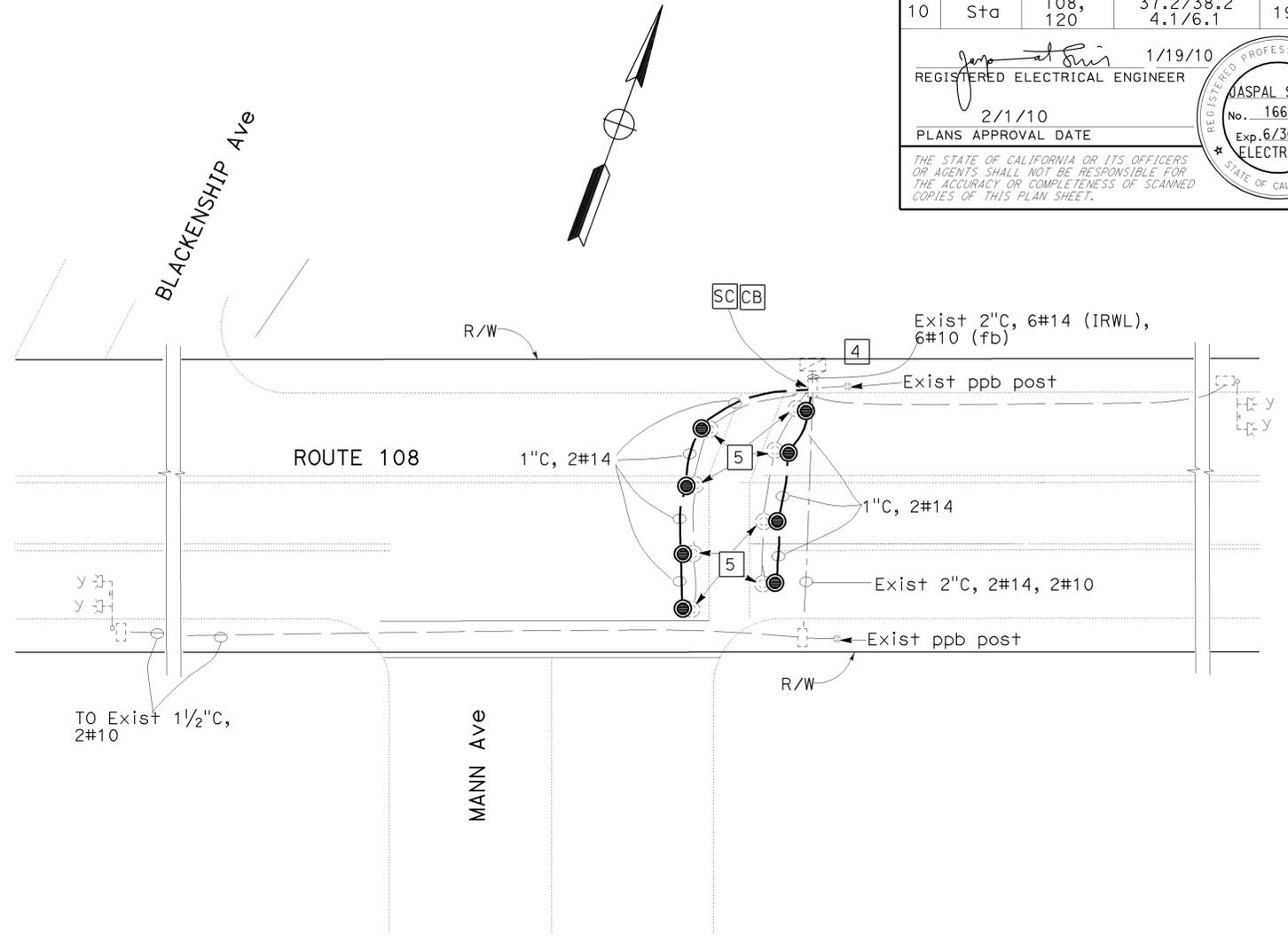
REGISTERED PROFESSIONAL ENGINEER	
JASPAL SINGH	
No. 16657	
Exp. 6/30/10	
ELECTRICAL	

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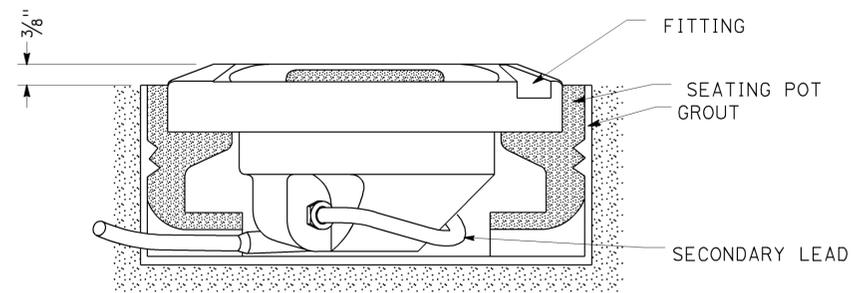
NOTES:

- FOR ADDITIONAL NOTES SEE SHEET E-1.
- FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.

JS	1/21/10
REVISOR	DATE
JASPAL SINGH	FRED IYASERE
DESIGNER	CHECKED BY
ALLI BAKHOUD	
FUNCTIONAL SUPERVISOR	
DEPARTMENT OF TRANSPORTATION	ELECTRICAL DESIGN
STATE OF CALIFORNIA	Caltrans



GENERAL ARRANGEMENT



INSTALLATION DETAIL

MODIFY IN-ROADWAY WARNING LIGHTS

NO SCALE

E-6

THIS PLAN IS ACCURATE FOR ELECTRICAL WORK ONLY.



DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
10	Sta	108, 120	37.2/38.2, 4.1/6.1	20	27

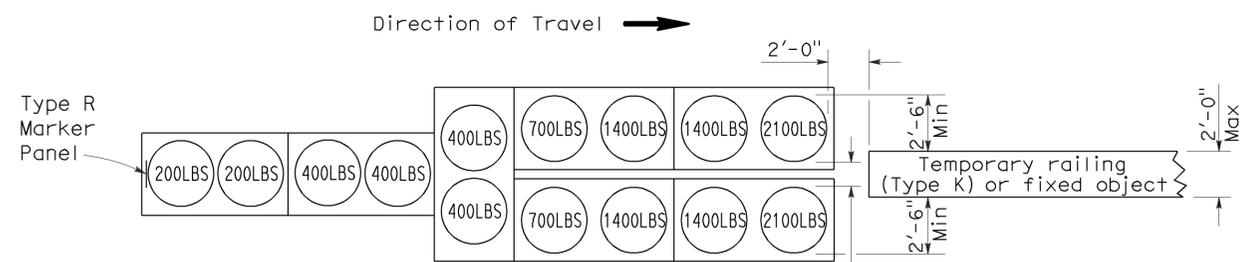
Randell D. Hiatt
REGISTERED CIVIL ENGINEER

June 6, 2008
PLANS APPROVAL DATE

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

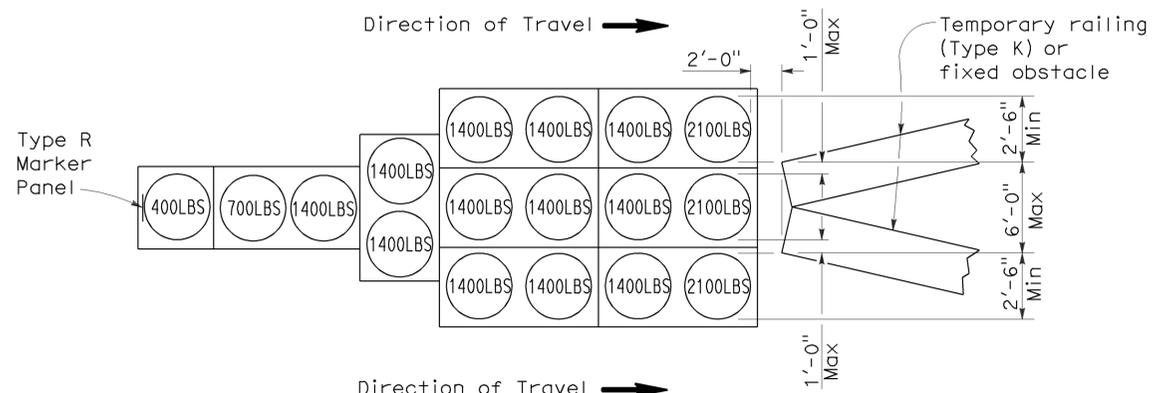
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To accompany plans dated 2/1/10



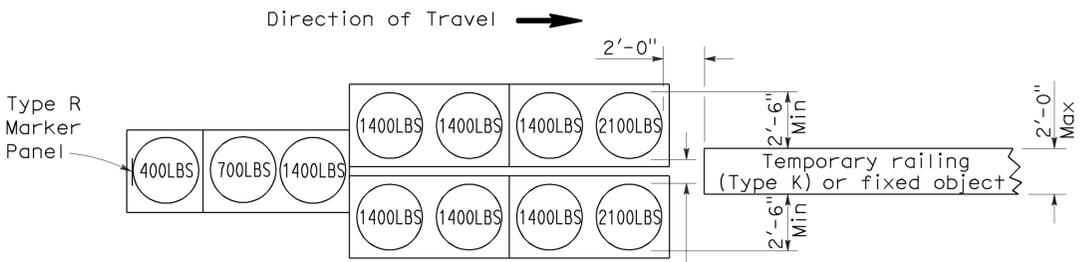
ARRAY 'TU14'

Approach speed 45 mph or more



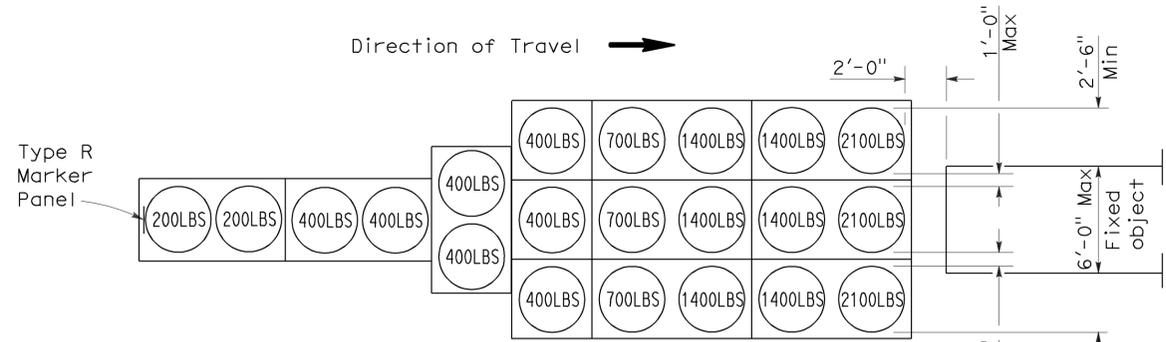
ARRAY 'TU17'

Approach speed less than 45 mph



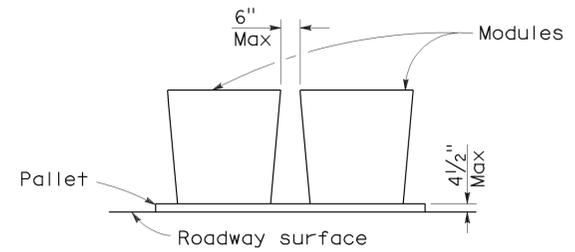
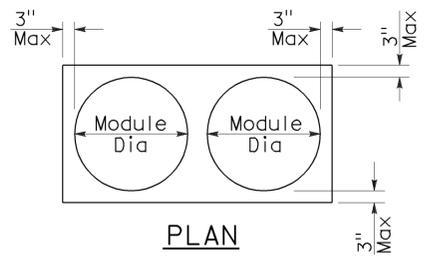
ARRAY 'TU11'

Approach speed less than 45 mph



ARRAY 'TU21'

Approach speed 45 mph or more



CRASH CUSHION PALLET DETAIL

See Note 7

NOTES:

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

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

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

NO SCALE

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

REVISED STANDARD PLAN RSP T1A

2006 REVISED STANDARD PLAN RSP T1A

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
10	Sta	108, 120	37.2/38.2, 4.1/6.1	21	27

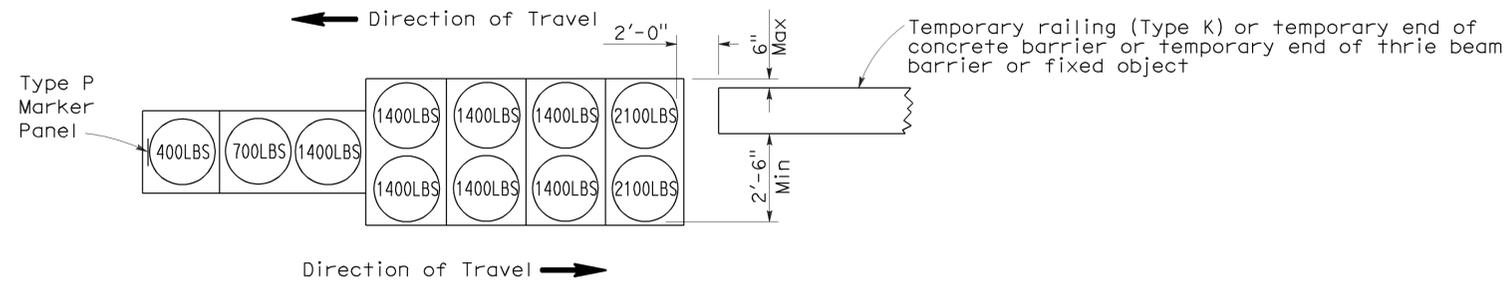
Randell D. Hiatt
REGISTERED CIVIL ENGINEER

June 6, 2008
PLANS APPROVAL DATE

Randell D. Hiatt
No. C50200
Exp. 6-30-09
CIVIL
STATE OF CALIFORNIA

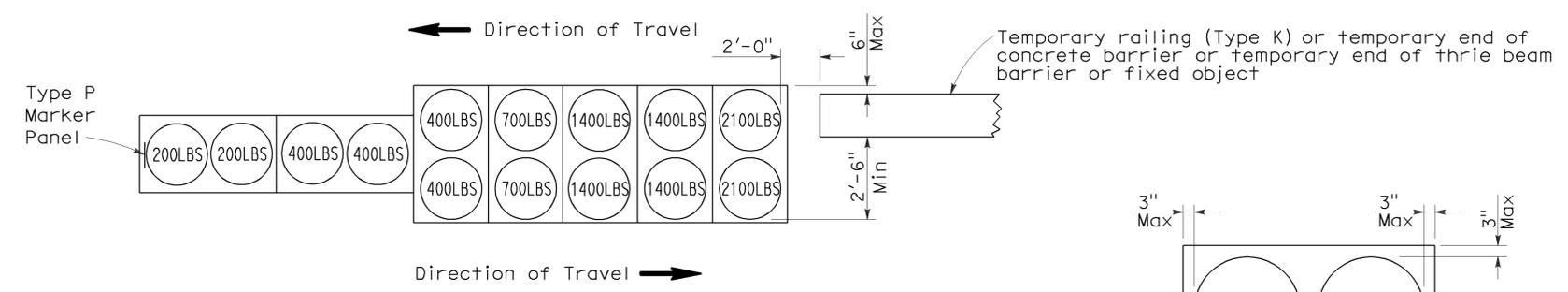
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To accompany plans dated 2/1/10



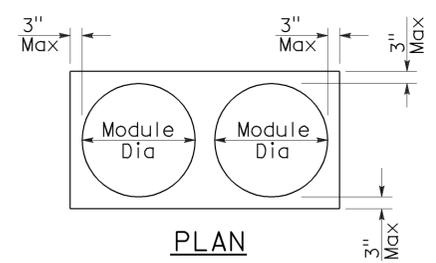
ARRAY 'TB11'

Approach speed less than 45 mph

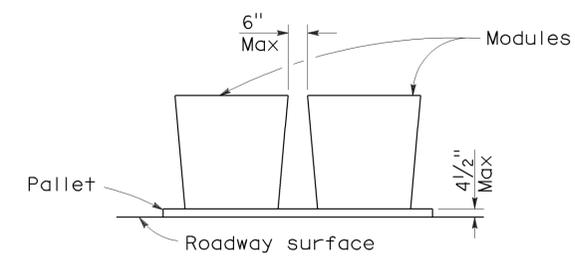


ARRAY 'TB14'

Approach speed 45 mph or more



PLAN



ELEVATION

CRASH CUSHION PALLET DETAIL

See Note 7

NOTES:

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

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

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

NO SCALE

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

REVISED STANDARD PLAN RSP T1B

2006 REVISED STANDARD PLAN RSP T1B

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
10	Sta	108, 120	37.2/38.2, 4.1/6.1	22	27

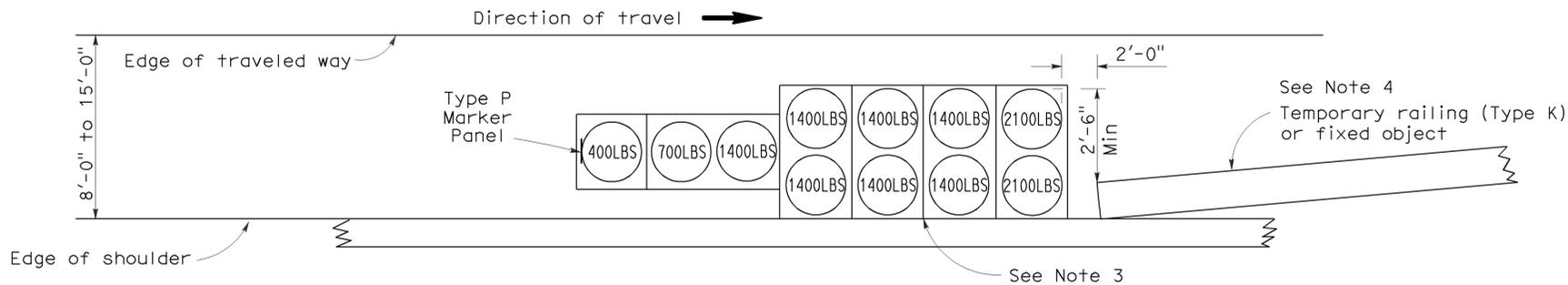
Randell D. Hiatt
REGISTERED CIVIL ENGINEER

June 6, 2008
PLANS APPROVAL DATE

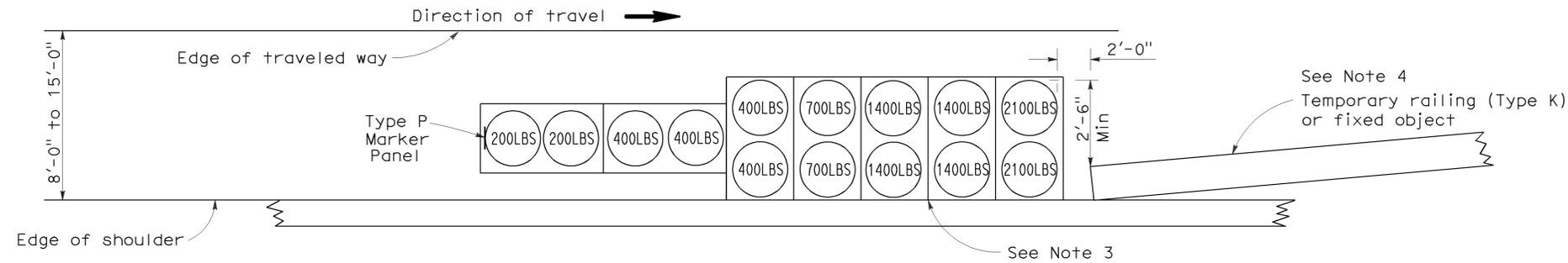
Randell D. Hiatt
REGISTERED PROFESSIONAL ENGINEER
No. C50200
Exp. 6-30-09
CIVIL
STATE OF CALIFORNIA

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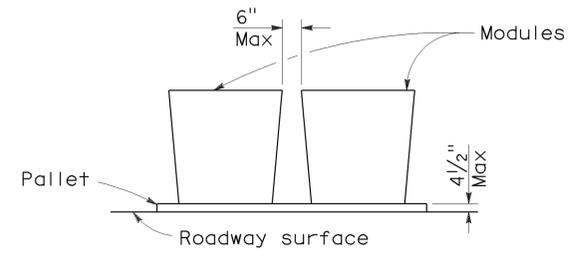
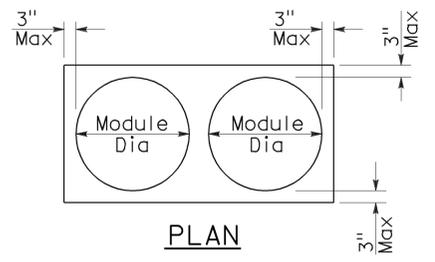
To accompany plans dated 2/1/10



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



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



CRASH CUSHION PALLET DETAIL
See Note 11

NOTES:

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

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

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

REVISED STANDARD PLAN RSP T2

2006 REVISED STANDARD PLAN RSP T2

ELECTROLIERS

STANDARD TYPES		
15, 15D		High mast light pole
15 STRUCTURE		Double Arm lighting standard
21, 21D STRUCTURE		Existing electrolier
30		Electrolier foundation (Future installation)
31		
32		
35		
36-20A		

NOTES:

- Luminaires shall be 310 W HPS when installed on Type 21, 21D, 30, 31, 32, 35 and 36-20A Standards, unless otherwise specified. Luminaires shall be 200 W HPS when installed on other type standards or poles, unless otherwise specified.
- Luminaires shall be the cutoff type, ANSI Type III medium cutoff lighting distribution, unless otherwise specified.
- Variations noted adjacent to symbol on project plans.

- Electrolier (see project notes or project plans)
- Luminaire on wood pole

STANDARD NOTES:

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

ABBREVIATIONS AND EQUIPMENT DESIGNATIONS

PROPOSED EXISTING

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

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
10	Sta	108, 120	37.2/38.2, 4.1/6.1	23	27

Jeffery G. McRae
REGISTERED ELECTRICAL ENGINEER

October 5, 2007
PLANS APPROVAL DATE

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

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

To accompany plans dated 2/1/10

SOFFIT AND WALL MOUNTED LUMINAIRES

- Pendant, 70 W HPS unless otherwise specified.
- Flush, 70 W HPS unless otherwise specified.
- Wall surface, 70 W HPS unless otherwise specified.
- Existing soffit or wall luminaire to remain unmodified.
- Existing soffit or wall luminaire to be modified as specified.

NOTE:

Arrow indicates "street side" of luminaire.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

ELECTRICAL SYSTEMS (SYMBOLS AND ABBREVIATIONS)

NO SCALE

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

REVISED STANDARD PLAN RSP ES-1A

2006 REVISED STANDARD PLAN RSP ES-1A

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
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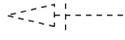
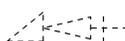
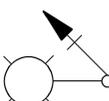
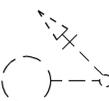
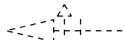
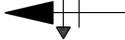
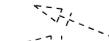
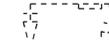
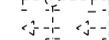
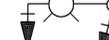
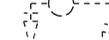
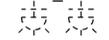
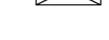
Jeffrey B. McRae
 REGISTERED ELECTRICAL ENGINEER
 October 5, 2007
 PLANS APPROVAL DATE
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REGISTERED PROFESSIONAL ENGINEER
 Jeffrey G. McRae
 No. E14512
 Exp. 6-30-08
 ELECTRICAL
 STATE OF CALIFORNIA

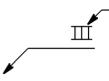
CONDUIT

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

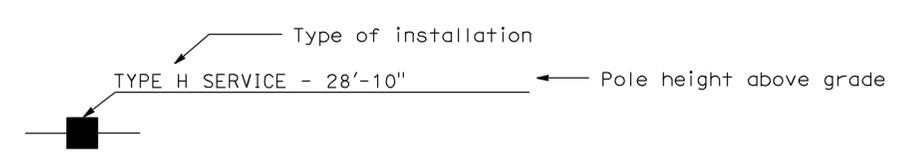
SIGNAL EQUIPMENT

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

SERVICE EQUIPMENT

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

POLE-MOUNTED SERVICE DESIGNATION



ILLUMINATED OVERHEAD SIGN

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

SIGNAL EQUIPMENT Cont

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

NOTES:

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

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

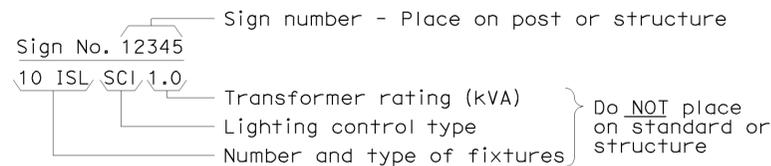
RSP ES-1B DATED OCTOBER 5, 2007 SUPERCEDES STANDARD PLAN ES-1B
 DATED MAY 1, 2006 - PAGE 401 OF THE STANDARD PLANS BOOK DATED MAY 2006.

REVISED STANDARD PLAN RSP ES-1B

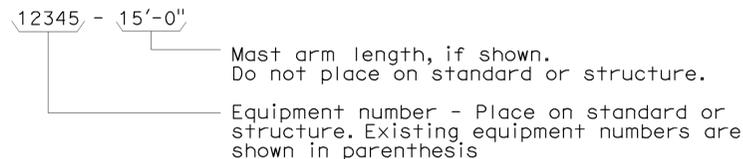
2006 REVISED STANDARD PLAN RSP ES-1B

EQUIPMENT IDENTIFICATION

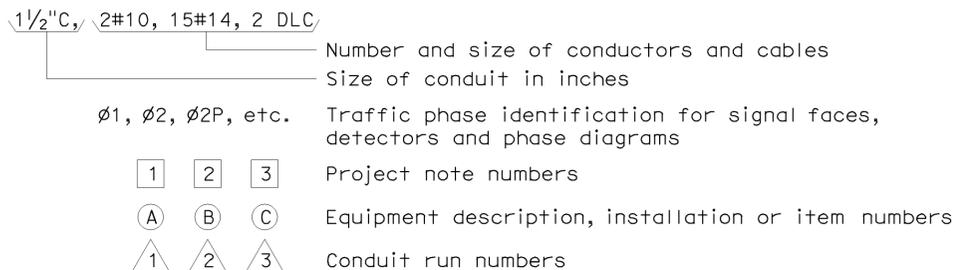
ILLUMINATED SIGN IDENTIFICATION NUMBER:



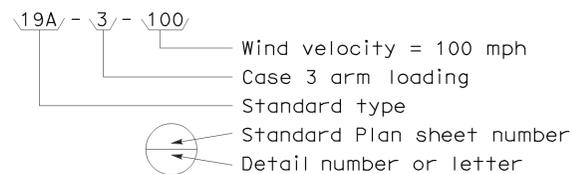
ELECTROLIER OR EQUIPMENT IDENTIFICATION NUMBER:



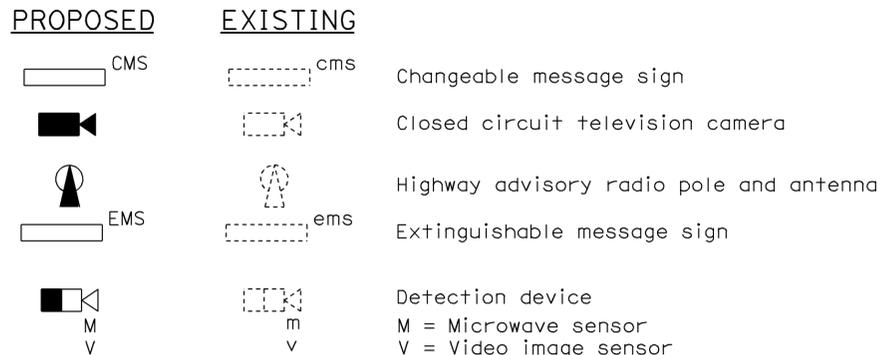
CONDUIT AND CONDUCTOR IDENTIFICATION:



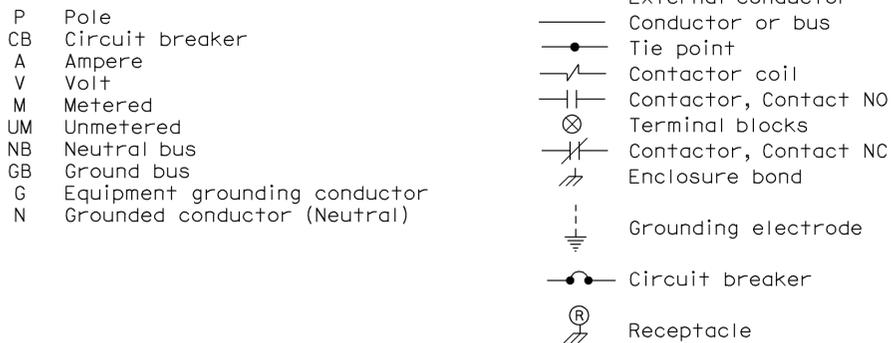
SIGNAL AND LIGHTING STANDARD (TYPICAL DESIGNATION):



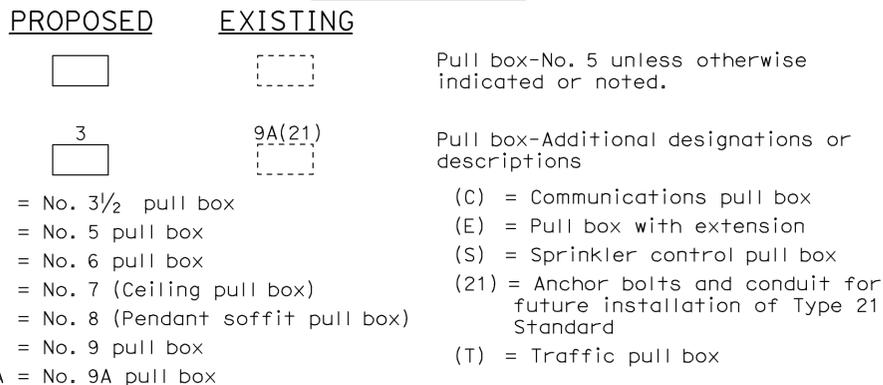
MISCELLANEOUS EQUIPMENT



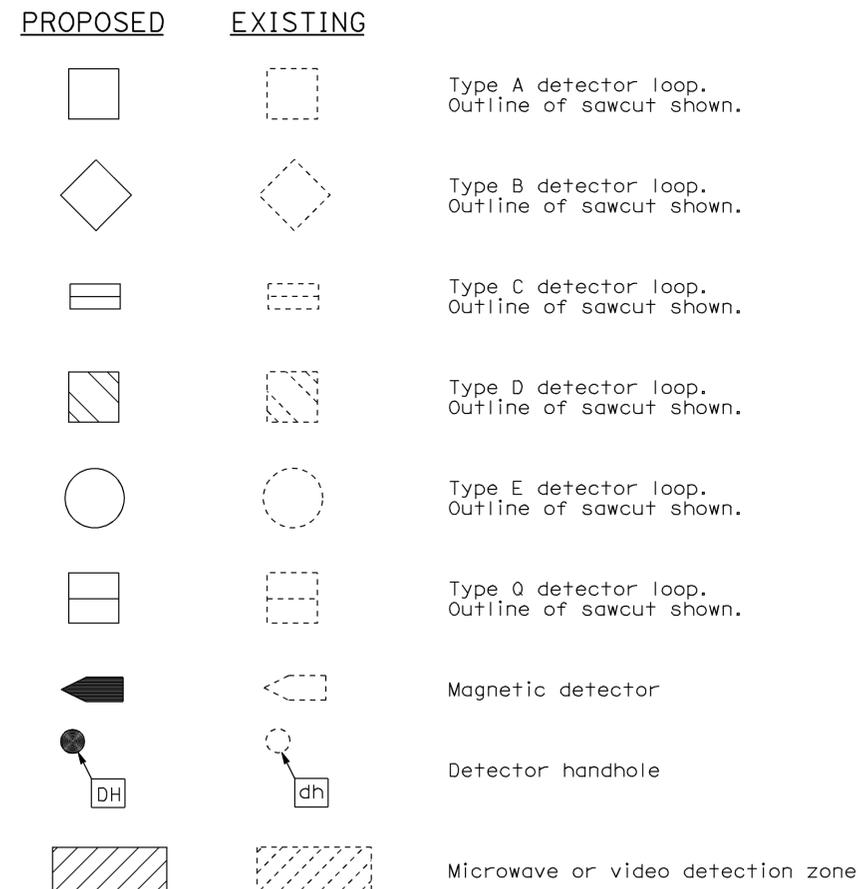
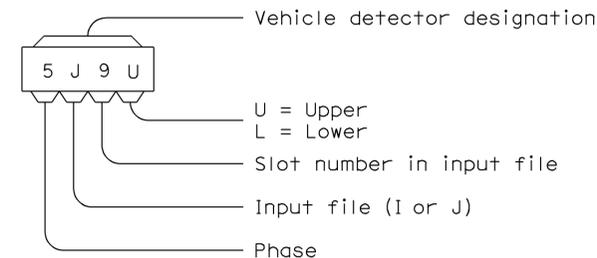
WIRING DIAGRAM LEGEND



PULL BOXES



VEHICLE DETECTORS



STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION

ELECTRICAL SYSTEMS (SYMBOLS AND ABBREVIATIONS)

NO SCALE

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

REVISED STANDARD PLAN RSP ES-1C

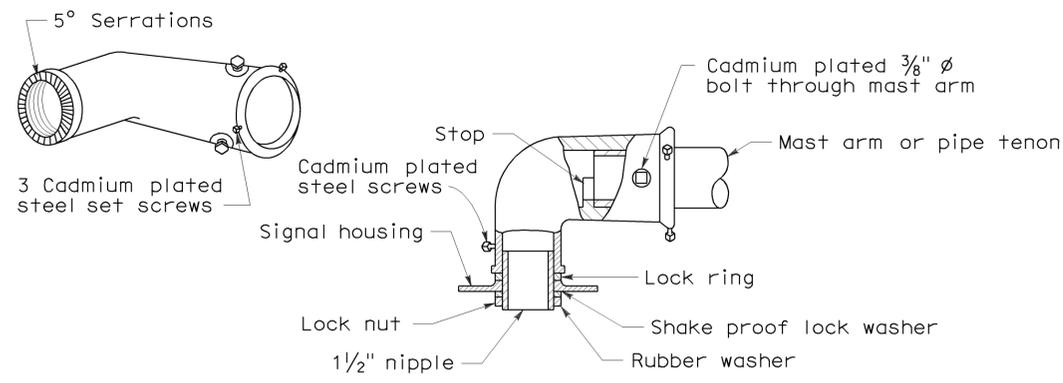
2006 REVISED STANDARD PLAN RSP ES-1C

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
10	Sta	108, 120	37.2/38.2, 4.1/6.1	26	27

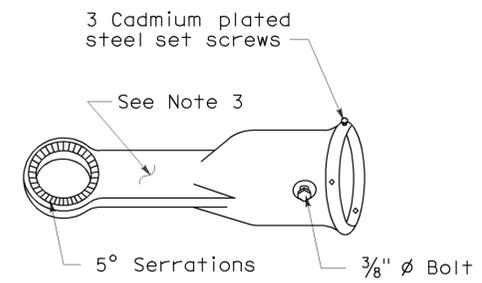
Jeffery G. McRae
 REGISTERED ELECTRICAL ENGINEER
 No. E14512
 Exp. 6-30-10
 STATE OF CALIFORNIA

June 6, 2008
 PLANS APPROVAL DATE

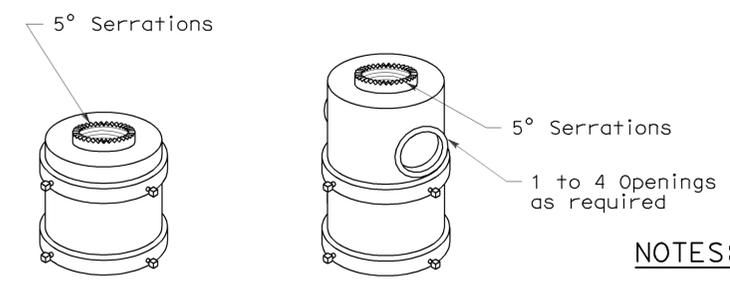
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MAST ARM MOUNTING - TYPE "MAT"
For 2 NPS pipe, see Note 1.

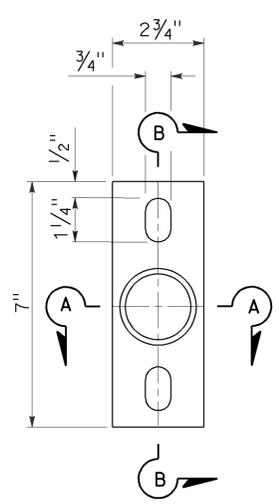


MAST ARM MOUNTING - TYPE "MAS"
For 2 NPS pipe. See Note 1.

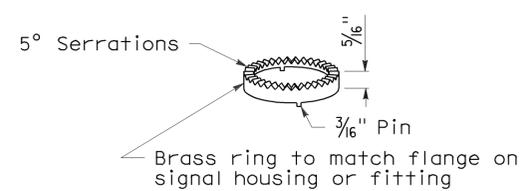


For one mounting For multiple mountings
TOP MOUNTINGS
For 4 NPS pipe, see Note 2.

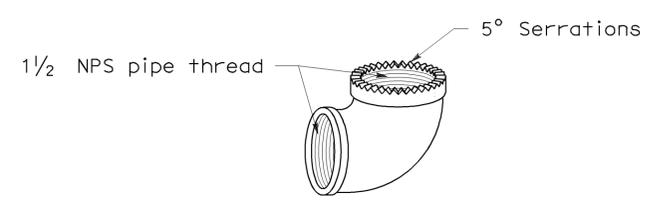
SIGNAL SLIP FITTERS



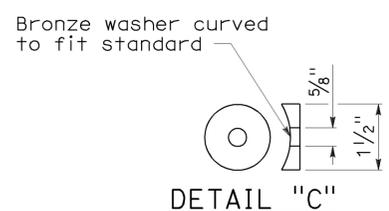
POLE PLATE
For side mountings



LOCK RING
Use where locking ring is not integral with signal housing or fitting.

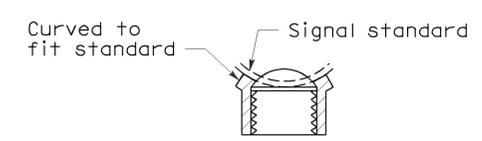


SPECIAL 90° ELBOW
One for each signal head, except those with special slip fitter mounting

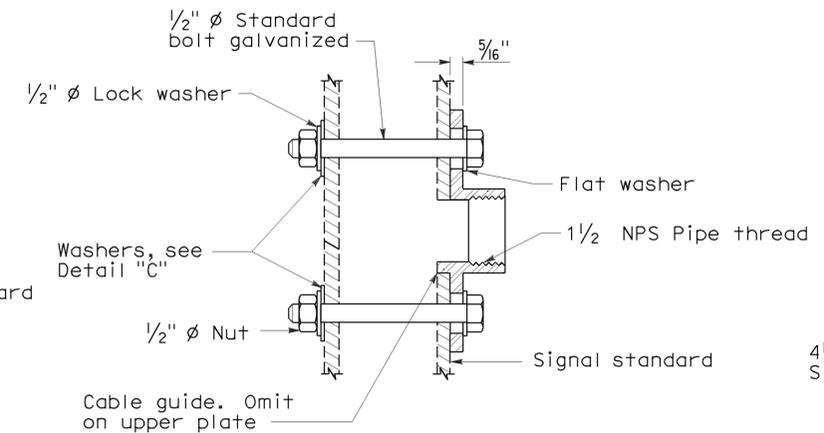


DETAIL "C"

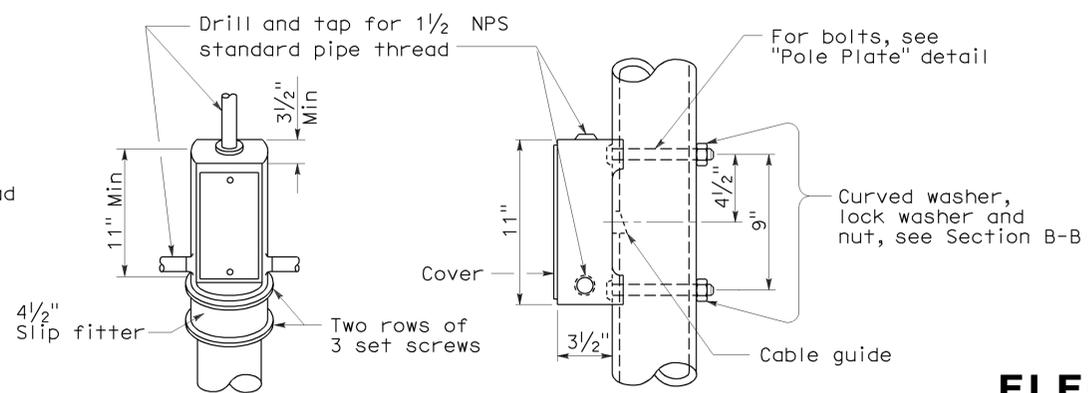
MISCELLANEOUS MOUNTING HARDWARE



SECTION A-A



SECTION B-B



TOP MOUNTING
SIDE MOUNTING
TERMINAL COMPARTMENTS

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
ELECTRICAL SYSTEMS (SIGNAL HEADS AND MOUNTINGS)

NO SCALE

RSP ES-4D DATED June 6, 2008 SUPERSEDES STANDARD PLAN ES-4D DATED MAY 1, 2006 - PAGE 421 OF THE STANDARD PLANS BOOK DATED MAY 2006.

REVISED STANDARD PLAN RSP ES-4D

2006 REVISED STANDARD PLAN RSP ES-4D

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
10	Sta	108, 120	37.2/38.2, 4.1/6.1	27	27

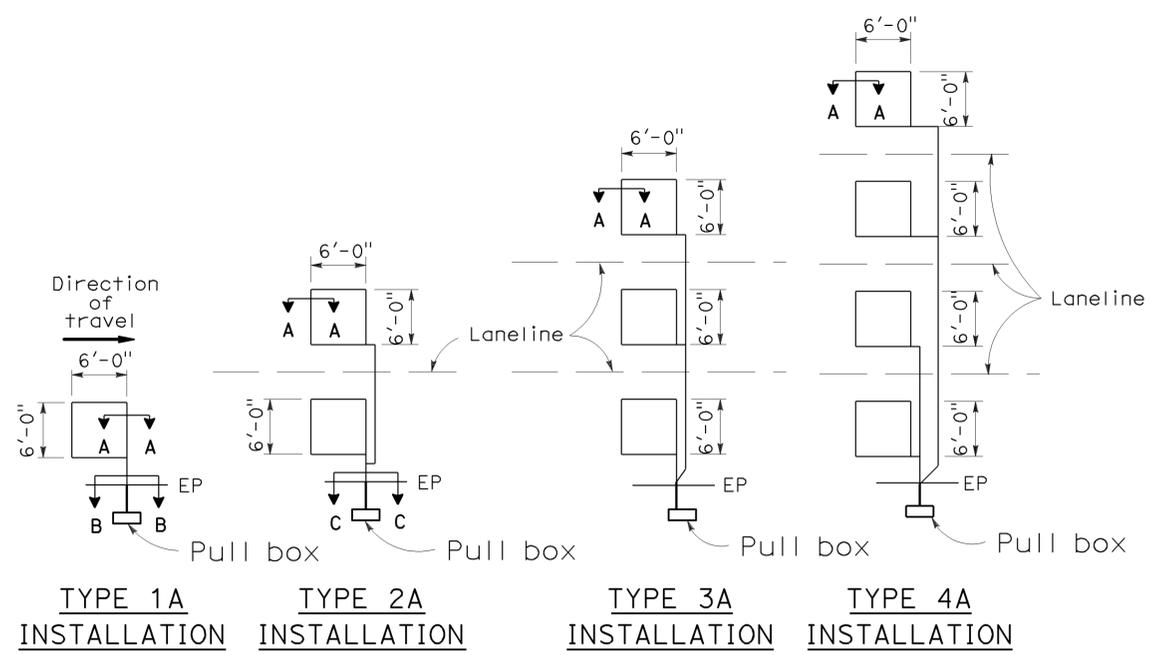
Jeffery G. McRae
 REGISTERED ELECTRICAL ENGINEER
 October 5, 2007
 PLANS APPROVAL DATE
The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

To accompany plans dated 2/1/10

2006 REVISED STANDARD PLAN RSP ES-5A

LOOP INSTALLATION PROCEDURE

- Loops shall be centered in lanes.
- Saw slots in pavement for loop conductors as shown in details.
- Distance between side of loop and a lead-in saw cut from adjacent detectors shall be 2'-0" minimum. Distance between lead-in saw cuts shall be 6" minimum.
- Bottom of saw slot shall be smooth with no sharp edges.
- Slots shall be washed until clean, blown out and thoroughly dried before installing loop conductors.
- Adjacent loops on the same sensor unit channel shall be wound in opposite directions.
- Identify and tag loop circuit pairs in the pull box with loop number, start (S) and finish (F) of conductor. Identify and tag lead-in-cable with sensor number and phase.
- Install loop conductor in slot using a 3/16" to 1/4" thick wood paddle. Hold loop conductors with wood paddles (at the bottom of the sawed slot) during sealant placement.
- No more than 2 twisted pairs shall be installed in one sawed slot.
- Allow additional 5'-0" of slack length of conductor for the lead-in run to pull box.
- The additional length of each conductor for each loop shall be twisted together into a pair (6 turns per 3'-4" minimum) before being placed in the slot and conduit leading to pull box.
- Test each loop circuit for continuity, circuit resistance and insulation resistance at the pull box before filling slots.
- Fill slots as shown in details.
- Splice loop conductors to lead-in-cable. Splices shall be soldered.
- End of lead-in-cable and Type 2 loop conductor shall be waterproofed prior to installing in conduit to prevent moisture from entering the cable.
- Lead-in-cable shall not be spliced between the pull box and the controller cabinet terminals.
- Test each loop circuit for continuity, circuit resistance and insulation resistance at the controller cabinet location.
- Where loop conductors are not to be spliced to a lead-in-cable, the ends of the conductors shall be taped and waterproofed with electrical insulating coating.

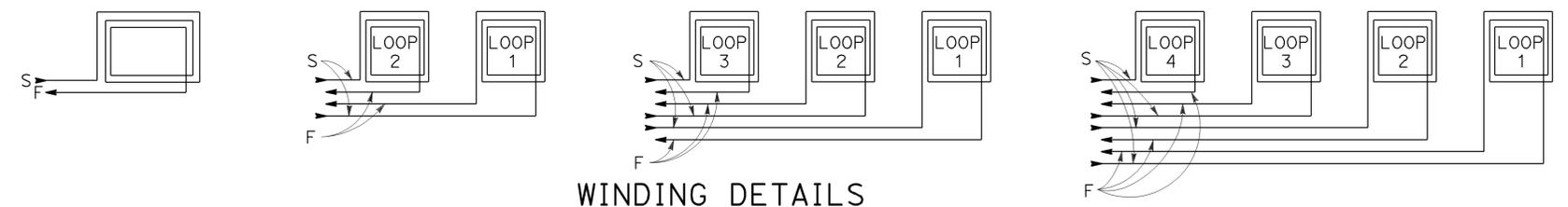


TYPE 1A INSTALLATION TYPE 2A INSTALLATION TYPE 3A INSTALLATION TYPE 4A INSTALLATION

SAWCUT DETAILS

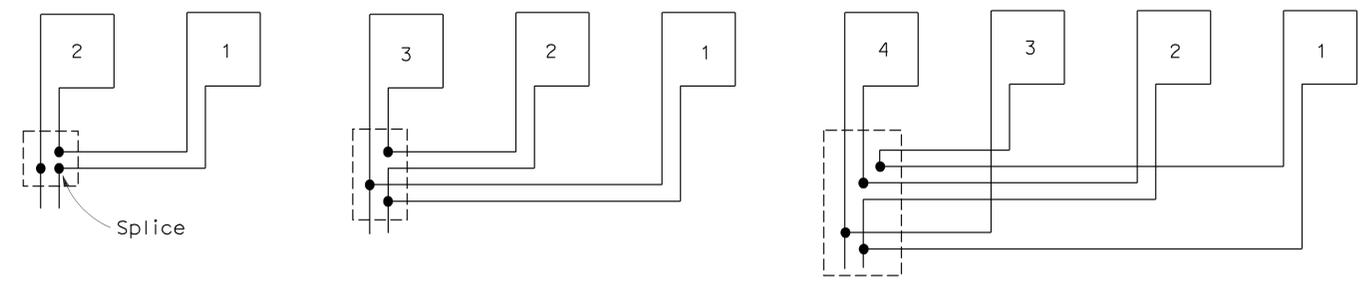
(Type A loop detector configurations illustrated)

- 1A thru 4A = 1 Type A loop configuration in each lane.
 - 1B thru 4B = 1 Type B loop configuration in each lane.
 - 1C = 1 Type C loop configuration entering lanes as required.
 - 1D thru 4D = 1 Type D loop configuration in each lane.
 - 1E thru 4E = 1 Type E loop configuration in each lane.
 - 1Q thru 4Q = 1 Type Q loop configuration in each lane.
- (Use Type A, B, C, D, E or Q loop detector configurations only when specified or shown on plans)



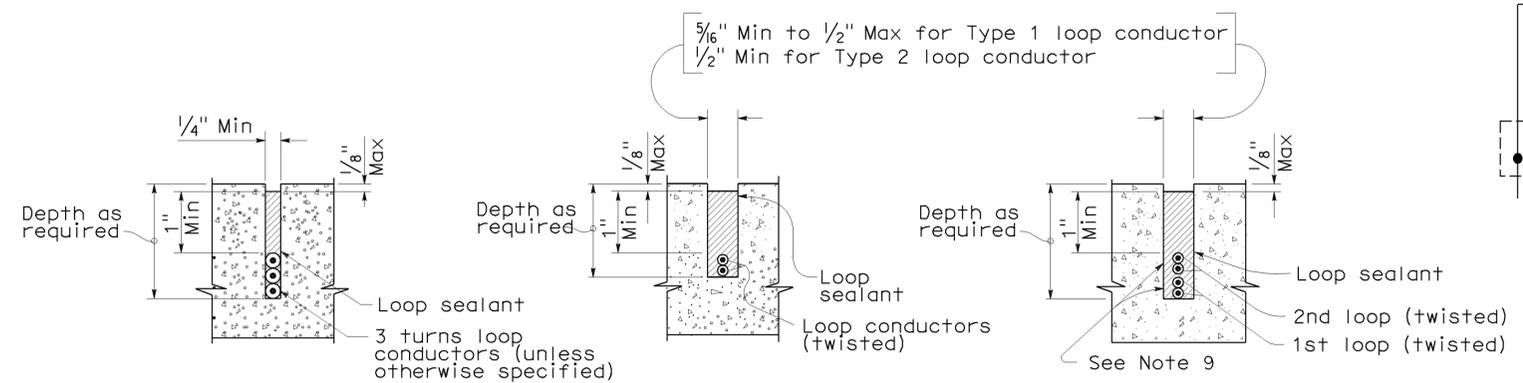
WINDING DETAILS

See Notes 6 and 7



TYPICAL LOOP CONNECTIONS

(Dashed lines represent the pull box)



SECTION A-A SECTION B-B SECTION C-C
 SLOT DETAILS - TYPE 1 AND TYPE 2 LOOP CONDUCTOR

ELECTRICAL SYSTEMS (DETECTORS)

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION

NO SCALE

RSP ES-5A DATED OCTOBER 5, 2007 SUPERCEDES STANDARD PLAN ES-5A
 DATED MAY 1, 2006 - PAGE 423 OF THE STANDARD PLANS BOOK DATED MAY 2006.

REVISED STANDARD PLAN RSP ES-5A