

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	LA	5	54.4	15	49

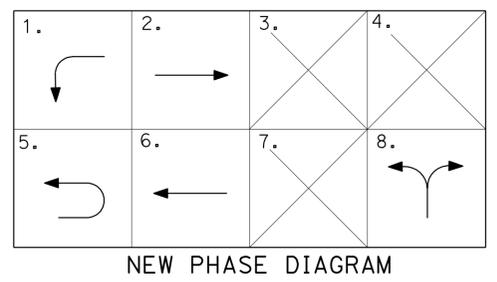
  

<i>Cesar Hernandez</i>	5/18/12
REGISTERED ELECTRICAL ENGINEER	DATE
6-11-12	
PLANS APPROVAL DATE	

REGISTERED PROFESSIONAL ENGINEER	CESAR HERNANDEZ
No. 15805	Exp! 2/31/12
ELECTRICAL	

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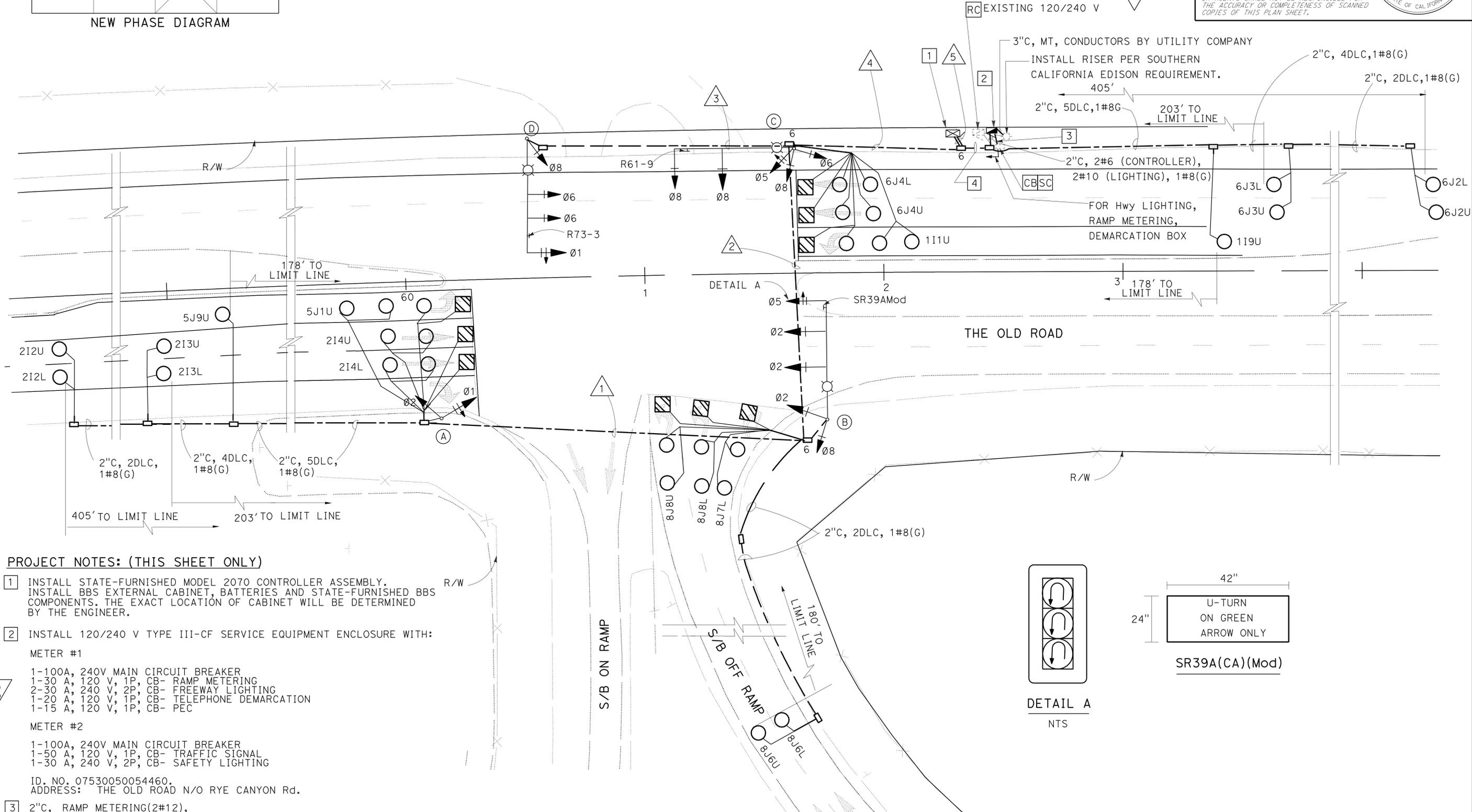


**NOTE:**

- FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
- FOR POLE AND EQUIPMENT SCHEDULE, CONDUIT AND CONDUCTOR SCHEDULE, AND BICYCLE LOOP DETECTOR DETAILS SEE SHEET E-3.

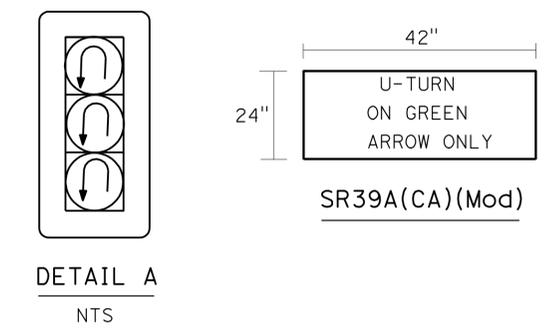
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**Caltrans** TRAFFIC DESIGN

FUNCTIONAL SUPERVISOR: HASSAN MANNA  
 CALCULATED/DESIGNED BY: CESAR HERNANDEZ  
 CHECKED BY: YAGHOUB SHADROOZ  
 REVISOR: CESAR HERNANDEZ  
 DATE: 5/18/12



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

- INSTALL STATE-FURNISHED MODEL 2070 CONTROLLER ASSEMBLY. INSTALL BBS EXTERNAL CABINET, BATTERIES AND STATE-FURNISHED BBS COMPONENTS. THE EXACT LOCATION OF CABINET WILL BE DETERMINED BY THE ENGINEER.
- INSTALL 120/240 V TYPE III-CF SERVICE EQUIPMENT ENCLOSURE WITH:
  - METER #1
    - 1-100A, 240V MAIN CIRCUIT BREAKER
    - 1-30 A, 120 V, 1P, CB- RAMP METERING
    - 2-30 A, 240 V, 2P, CB- FREEWAY LIGHTING
    - 1-20 A, 120 V, 1P, CB- TELEPHONE DEMARCATION
    - 1-15 A, 120 V, 1P, CB- PEC
  - METER #2
    - 1-100A, 240V MAIN CIRCUIT BREAKER
    - 1-50 A, 120 V, 1P, CB- TRAFFIC SIGNAL
    - 1-30 A, 240 V, 2P, CB- SAFETY LIGHTING
- 2" C, RAMP METERING (2#12), Fwy LIGHTING (2#8), TDC (2#12).
- 2" C, 5DLC, 1#8G, 2#6, 2#10.



**2 REVISED PER ADDENDUM NO. 2 DATED OCTOBER 25, 2012 SIGNAL AND LIGHTING**

APPROVED FOR ELECTRICAL WORK ONLY

SCALE: 1" = 20'

E-1

POLE AND EQUIPMENT SCHEDULE FOR E-1

No.	STANDARD			VEH SIG MTG		PED SIGNAL		PPB		HPS LUMINAIRE	REFLECTORIZED SNS
	Type	SMA (F+)	LMA (F+)	Mast Arm	Pole	MTG	Ø	ARROW			
(A)	1A	—	—	—	TV-2-T	—	—	—	—		
(B)	29A-5-100	50	12	2 MAS 1 MAT	SV-2-T	—	—	—	310W		
(C)	29-5-100*	55	12	1 MAS 1 MAT	SV-3-T	—	—	—	200W		THE OLD ROAD
(D)	29-5-100**	50	12	2 MAS 1 MAT	SV-1-T	—	—	—	200W		

\* — MODIFIED, SEE SHEET SES-1  
 \*\* — MODIFIED, SEE SHEET SES-2

CONDUIT AND CONDUCTOR SCHEDULE FOR E-1

CONDUIT RUN		△1	△2	△3	△4	△5
28 CONDUCTOR CABLE		1	2	2	2	2
#10	LUMINAIRES	—	2	2	2	—
#6	SIGNAL SERVICE	—	—	—	—	2
#8	GROUND	1	1	1	1	1
DLC	Ø1	—	—	—	1	2
	Ø2	6	6	—	6	6
	Ø5	2	2	—	2	2
	Ø6	—	—	—	2	6
	Ø8	—	5	—	5	5
CONDUIT SIZE		3"	3"	3"	3"	2-3"



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5/18/12  
 REGISTERED ELECTRICAL ENGINEER DATE

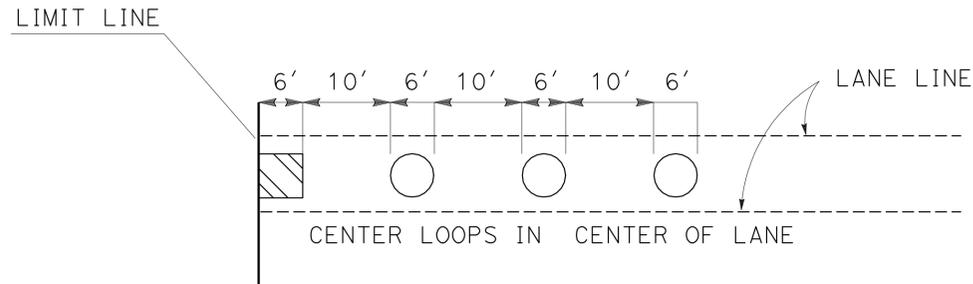
6-11-12  
 PLANS APPROVAL DATE

CESAR HERNANDEZ  
 No. 15805  
 Exp. 12/31/12  
 ELECTRICAL

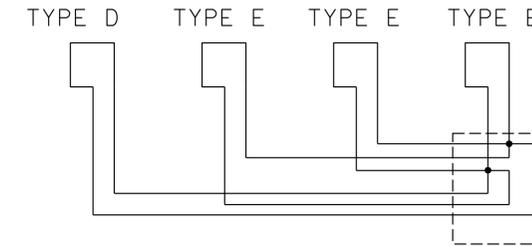
REGISTERED PROFESSIONAL ENGINEER  
 STATE OF CALIFORNIA

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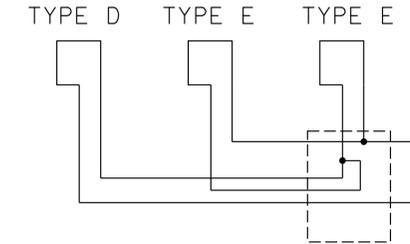
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 REVISIONS: 2



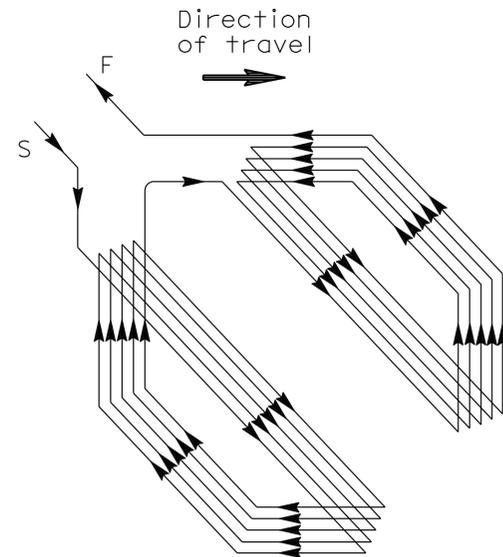
TYPICAL LOOP DETAIL



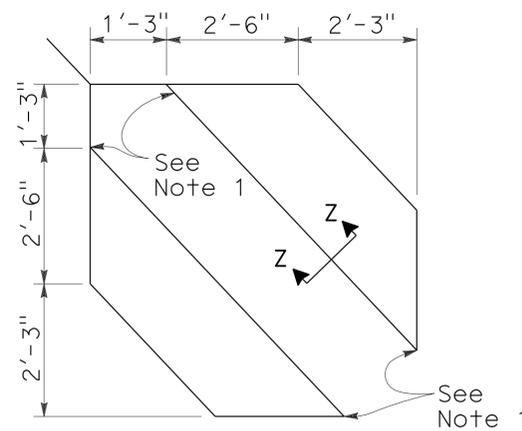
LOOP CONNECTION



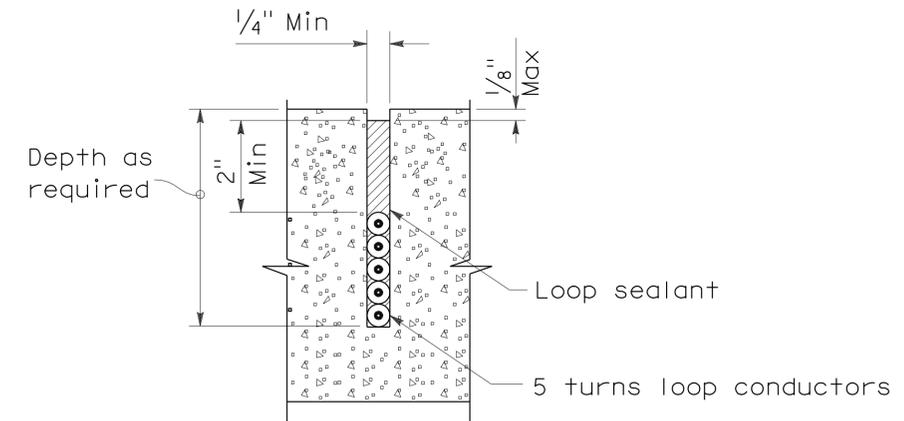
LOOP CONNECTION



WINDING DETAIL



SAWCUT DETAIL



SECTION Z-Z (FOR TYPE D LOOP DETECTOR)

SLOT DETAILS - TYPE 2 LOOP CONDUCTOR

NOTES:

1. Round corners of acute angle sawcuts to prevent damage to conductors.
2. Use section Z-Z instead of A-A in ES-5A for Type D loop detector.
3. Install 5 turns for all Type D loops.

APPROVED FOR ELECTRICAL WORK ONLY

**2** REVISED PER ADDENDUM NO. 2  
 DATED OCTOBER 25, 2012

**SIGNAL AND LIGHTING**  
 NO SCALE  
**E-3**