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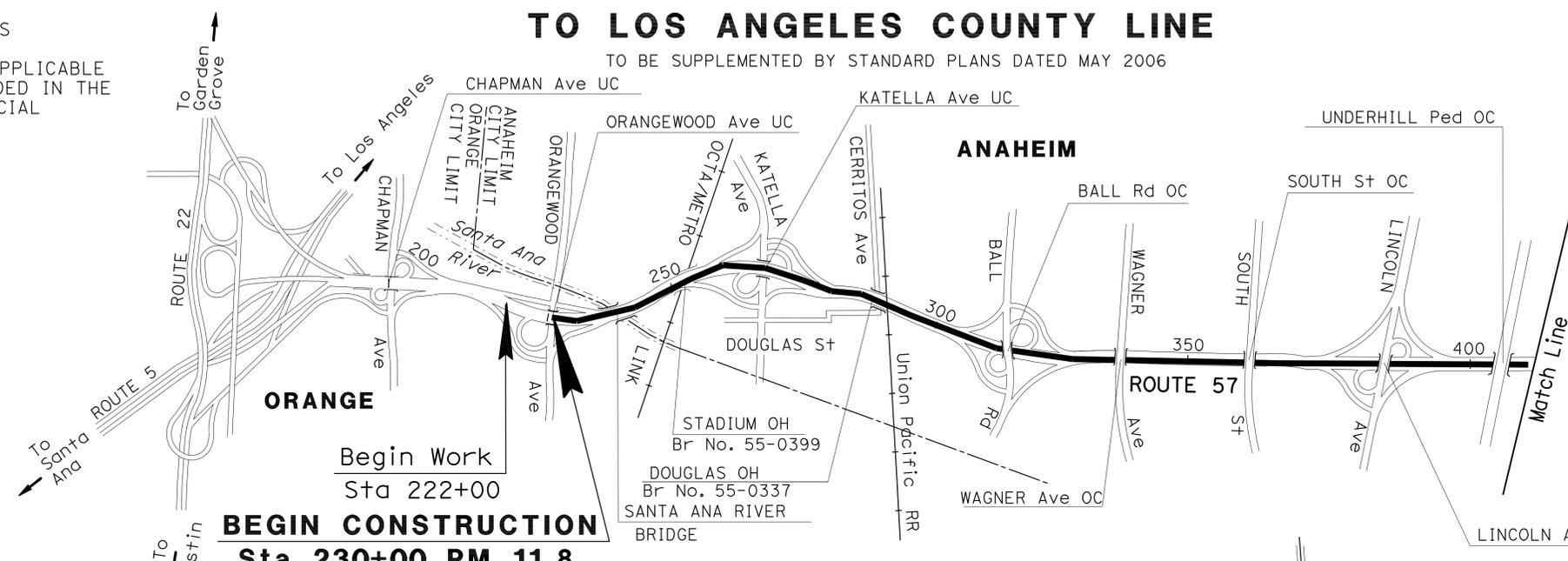
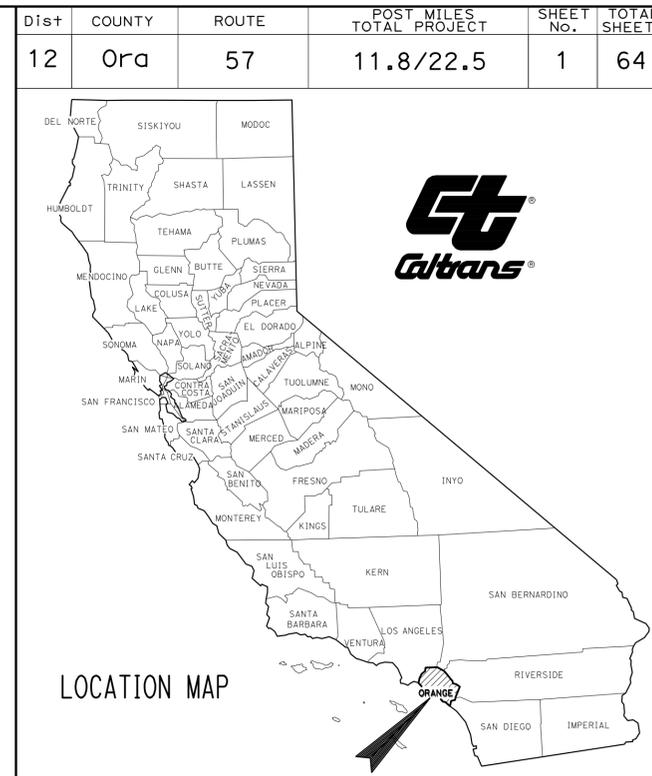
62-64 ROUTE 57 BRIDGES

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

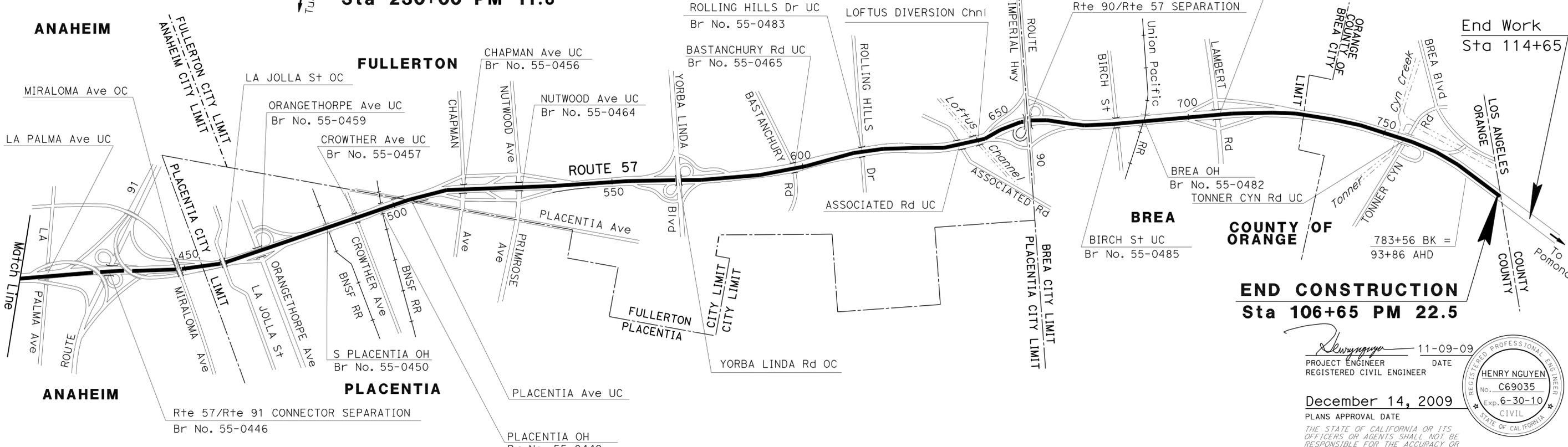
STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION

PROJECT PLANS FOR CONSTRUCTION ON  
STATE HIGHWAY  
IN ORANGE COUNTY  
IN ANAHEIM, BREA, FULLERTON, ORANGE, AND PLACENTIA  
FROM ORANGEWOOD AVENUE  
TO LOS ANGELES COUNTY LINE

TO BE SUPPLEMENTED BY STANDARD PLANS DATED MAY 2006



**BEGIN CONSTRUCTION**  
Sta 230+00 PM 11.8



**END CONSTRUCTION**  
Sta 106+65 PM 22.5

PROJECT MANAGER  
MASSOUD TAJIK

DESIGN ENGINEER  
HENRY NGUYEN

11-09-09  
PROJECT ENGINEER DATE  
REGISTERED CIVIL ENGINEER



December 14, 2009  
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

CONTRACT No. **12-OJ7304**

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

FUNCTIONAL SUPERVISOR  
 MATTHEW O. CUGINI

CALCULATED-DESIGNED BY  
 CHECKED BY

HENRY NGUYEN  
 M. O. CUGINI

REVISED BY  
 DATE REVISED

HN  
 10-08-09

**NOTE:**

- DIMENSIONS OF THE STRUCTURAL SECTIONS ARE SUBJECT TO TOLERANCES SPECIFIED IN THE STANDARD SPECIFICATIONS.
- SUPERELEVATION AS SHOWN OR AS DIRECTED BY THE ENGINEER.
- SEE CONSTRUCTION DETAILS FOR LIMITS OF PCC PAVEMENT REPLACEMENT.
- SEE SUMMARY OF QUANTITIES FOR LOCATIONS OF REPLACE CONCRETE PAVEMENT, THE EXACT LOCATIONS AND DIMENSIONS OF SLAB REPLACEMENT WILL BE DETERMINED BY THE ENGINEER.
- CONCRETE PAVEMENT DOWELS SHALL BE INSTALLED ONLY IN TRANSVERSE JOINS BETWEEN TWO OR MORE NEW ADJACENT PCC SLABS.
- FOR COMPLETE RIGHT OF WAY AND ACCURATE ACCESS DATA, SEE RIGHT OF WAY RECORD MAPS AT DISTRICT OFFICE.

**LEGEND:**

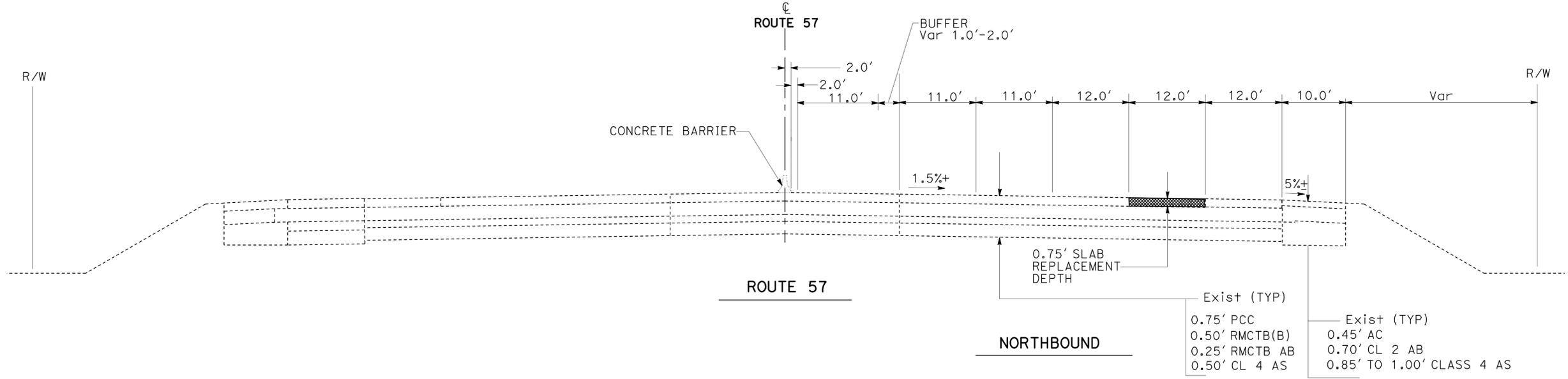
▨ - REPLACE CONCRETE PAVEMENT (RAPID STRENGTH CONCRETE)

**ABBREVIATIONS:**

HOV - HIGH OCCUPANCY VEHICLE

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	57	11.8/22.5	2	64

REGISTERED CIVIL ENGINEER DATE 11-09-09  
 HENRY NGUYEN No. C69035  
 PLANS APPROVAL DATE 12-14-09 EXP. 6-30-10  
 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.



**TYPICAL CROSS SECTION**

NO SCALE

**X-1**

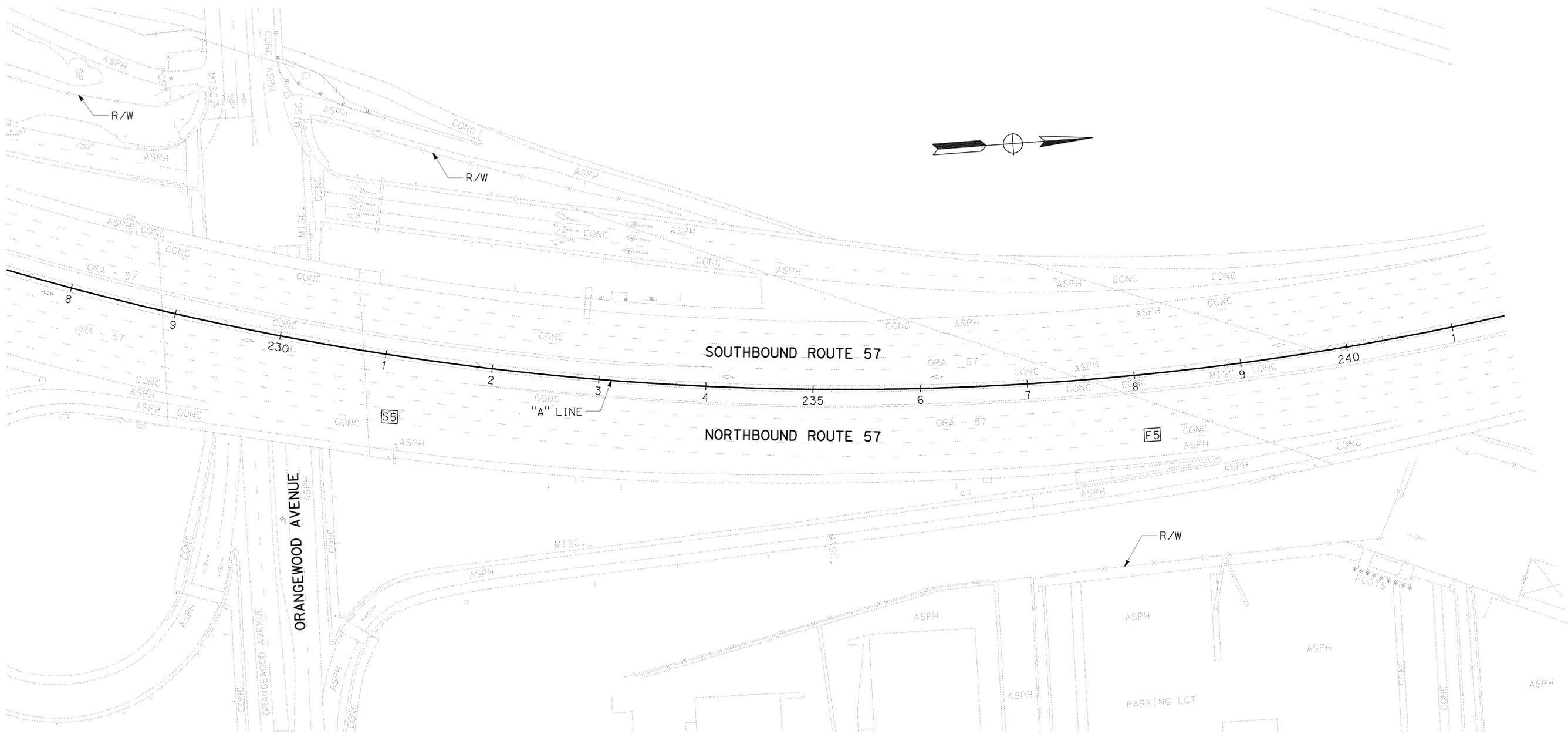
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	57	11.8/22.5	3	64
			11-09-09	REGISTERED CIVIL ENGINEER DATE	
			12-14-09	PLANS APPROVAL DATE	
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.					



**NOTES:**

1. FOR COMPLETE RIGHT OF WAY AND ACCURATE ACCESS DATA, SEE RIGHT OF WAY RECORD MAPS AT DISTRICT OFFICE.
2. EXISTING UTILITY FACILITIES HAVE NOT BEEN PLOTTED ON THESE PLANS.
3. THE EXACT LOCATIONS AND DIMENSIONS OF CONCRETE SLAB REPLACEMENT WILL BE DETERMINED BY THE ENGINEER.
4. SEE SHEET C-1 FOR SLAB REPLACEMENT DETAILS.

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	DESIGN
FUNCTIONAL SUPERVISOR	MATTHEW Q. CUGINI
CALCULATED-DESIGNED BY	CHECKED BY
HENRY NGUYEN	M. Q. CUGINI
REVISOR BY	DATE REVISED
HN	10-08-09



**LEGEND:**

- [S#] SPALLING SLAB ON LANE # - REPLACE CONCRETE PAVEMENT (RAPID STRENGTH CONCRETE)
- [P#] PARTIAL SLAB ON LANE # - REPLACE CONCRETE PAVEMENT (RAPID STRENGTH CONCRETE)
- [F#] FULL SLAB ON LANE # - REPLACE CONCRETE PAVEMENT (RAPID STRENGTH CONCRETE)

**LAYOUT**

SCALE: 1" = 50'

**L-1**

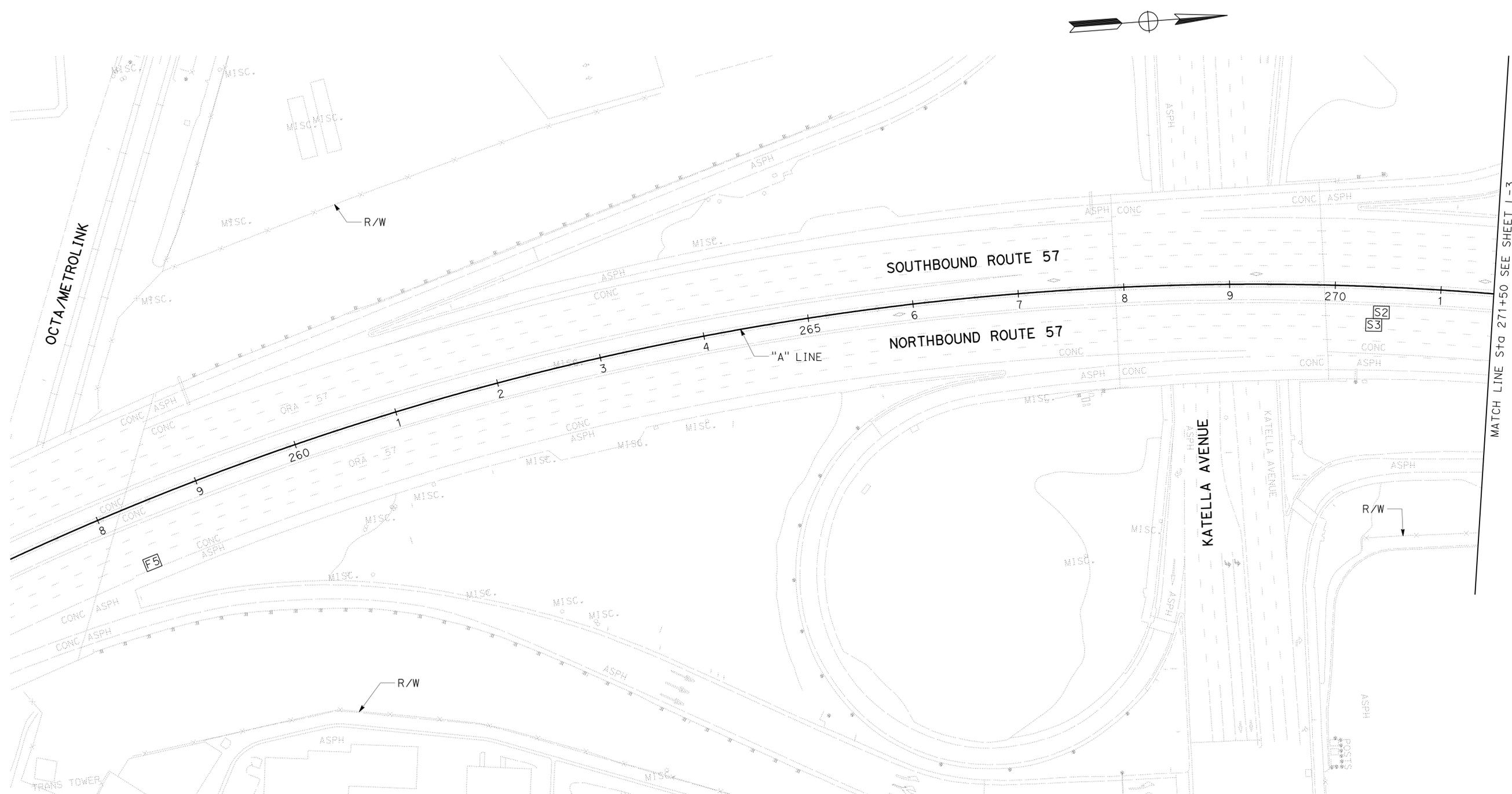


Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	57	11.8/22.5	4	64
			REGISTERED CIVIL ENGINEER	DATE	
			11-09-09		
			REGISTERED CIVIL ENGINEER	DATE	
			12-14-09		
			PLANS APPROVAL DATE		
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.					
REGISTERED PROFESSIONAL ENGINEER HENRY NGUYEN No. C69035 Exp. 6-30-10 CIVIL STATE OF CALIFORNIA					

**NOTES:**

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- EXISTING UTILITY FACILITIES HAVE NOT BEEN PLOTTED ON THESE PLANS.

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	FUNCTIONAL SUPERVISOR	CALCULATED-DESIGNED BY	REVISOR	DATE
<b>Caltrans</b>	MATTHEW Q. CUGINI	CHECKED BY	HENRY NGUYEN	10-08-09
<b>DESIGN</b>			M. Q. CUGINI	



MATCH LINE Sta 271+50 SEE SHEET L-3

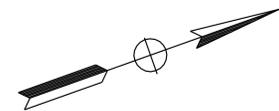
**LAYOUT**

SCALE: 1" = 50'

**L-2**



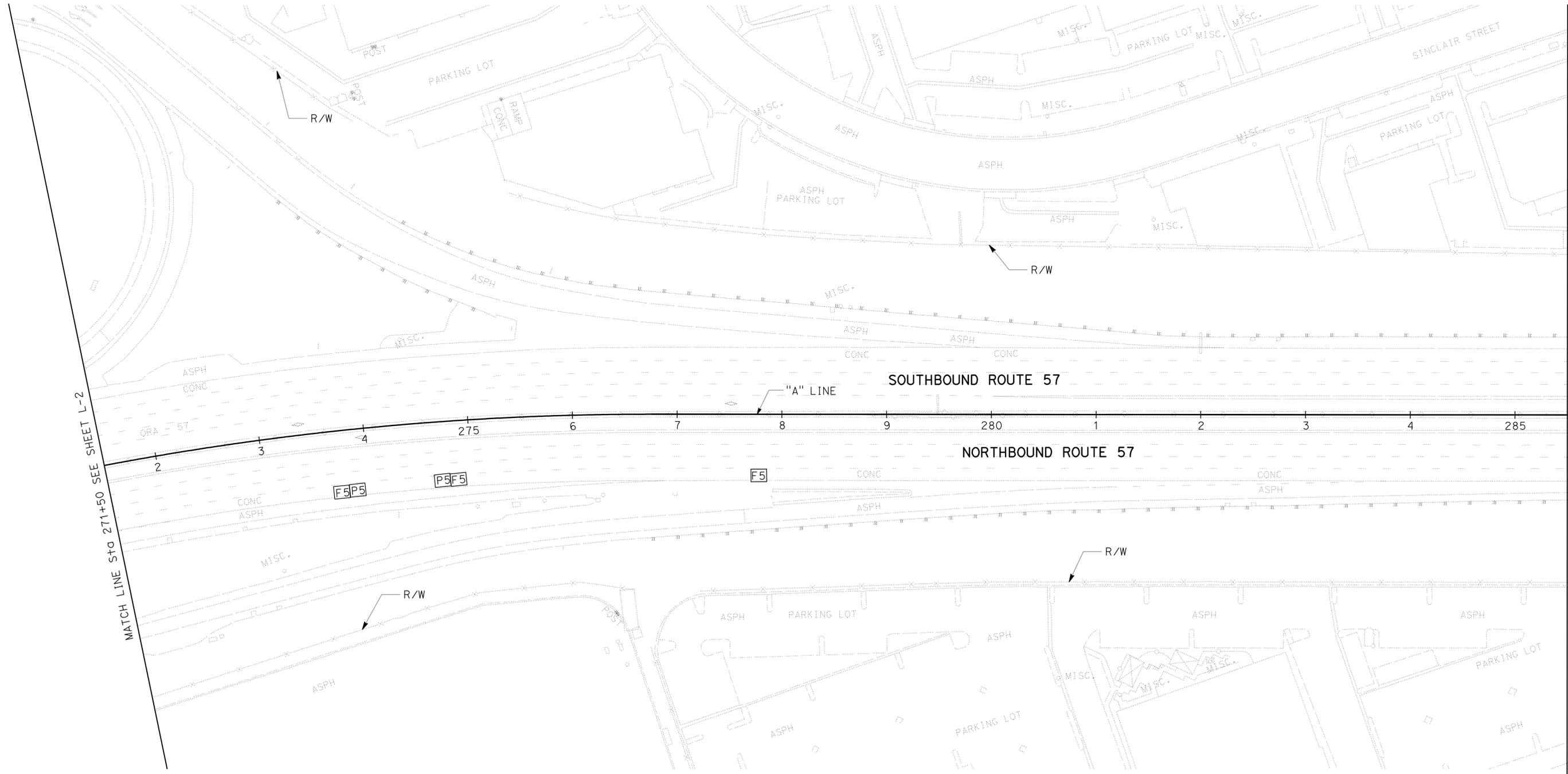
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	57	11.8/22.5	5	64
			11-09-09	REGISTERED CIVIL ENGINEER DATE	
			12-14-09	PLANS APPROVAL DATE	
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.					



**NOTES:**

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STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	FUNCTIONAL SUPERVISOR	CALCULATED-DESIGNED BY	REVISOR	DATE
<b>Caltrans</b>	MATTHEW Q. CUGINI	HENRY NGUYEN	HN	10-08-09
<b>DESIGN</b>		M. Q. CUGINI		



**LAYOUT**  
SCALE: 1" = 50'  
**L-3**

LAST REVISION: DATE PLOTTED => 22-DEC-2009      TIME PLOTTED => 09:36

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	57	11.8/22.5	6	64

<i>Henry Nguyen</i>	11-09-09
REGISTERED CIVIL ENGINEER	DATE
12-14-09	
PLANS APPROVAL DATE	

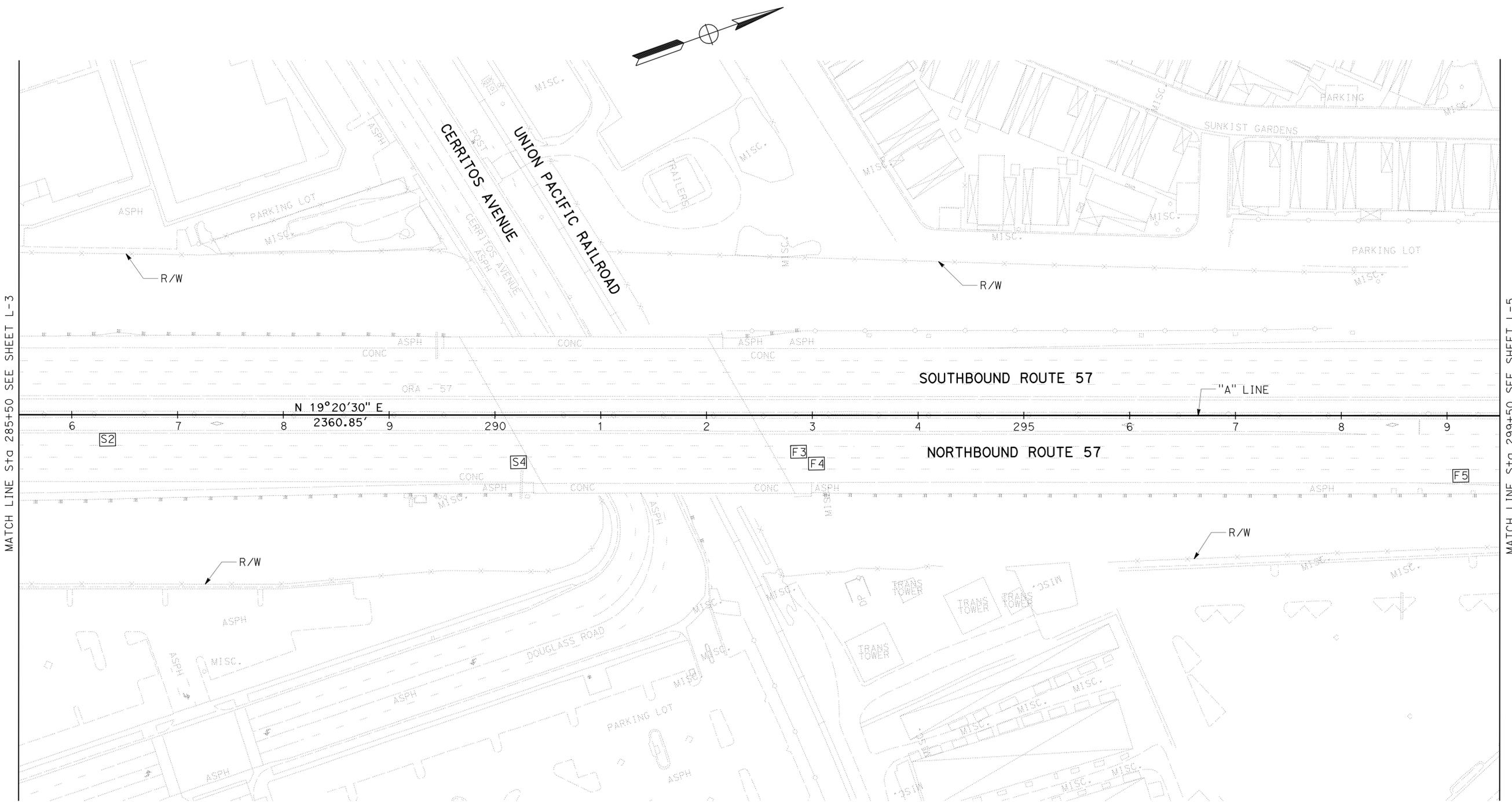
REGISTERED PROFESSIONAL ENGINEER
HENRY NGUYEN
No. C69035
Exp. 6-30-10
CIVIL
STATE OF CALIFORNIA

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.

**NOTES:**

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- EXISTING UTILITY FACILITIES HAVE NOT BEEN PLOTTED ON THESE PLANS.

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	FUNCTIONAL SUPERVISOR	CALCULATED-DESIGNED BY	REVISOR	DATE
<b>Caltrans</b>	MATTHEW Q. CUGINI	HENRY NGUYEN	HN	10-08-09
<b>DESIGN</b>		CHECKED BY		
		M. Q. CUGINI		



**LAYOUT**  
SCALE: 1" = 50'  
**L-4**



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

FUNCTIONAL SUPERVISOR: MATTHEW Q. CUGINI  
 CHECKED BY: M. Q. CUGINI  
 DESIGNED BY: HENRY NGUYEN  
 DATE REVISION: 10-08-09  
 REVISIONS: HN

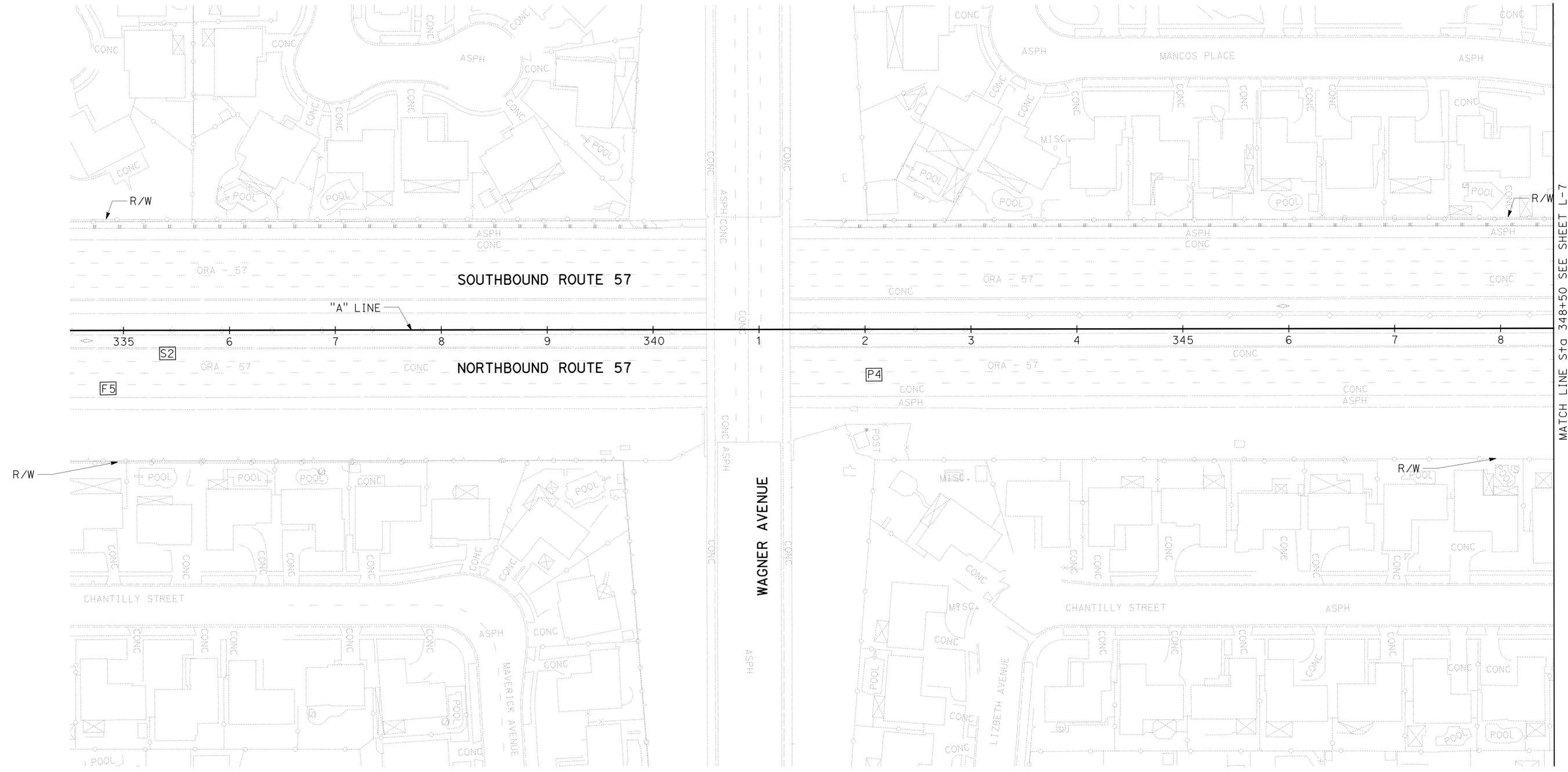
**NOTES:**

- FOR COMPLETE RIGHT OF WAY AND ACCURATE ACCESS DATA, SEE RIGHT OF WAY RECORD MAPS AT DISTRICT OFFICE.
- EXISTING UTILITY FACILITIES HAVE NOT BEEN PLOTTED ON THESE PLANS.

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	57	11.8/22.5	8	64

REGISTERED CIVIL ENGINEER: HENRY NGUYEN  
 No. C69035  
 Exp. 6-30-10  
 DATE: 11-09-09  
 PLANS APPROVAL DATE: 12-14-09

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MATCH LINE Sta 348+50 SEE SHEET L-7

**LAYOUT**  
 SCALE: 1" = 50'  
**L-6**

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

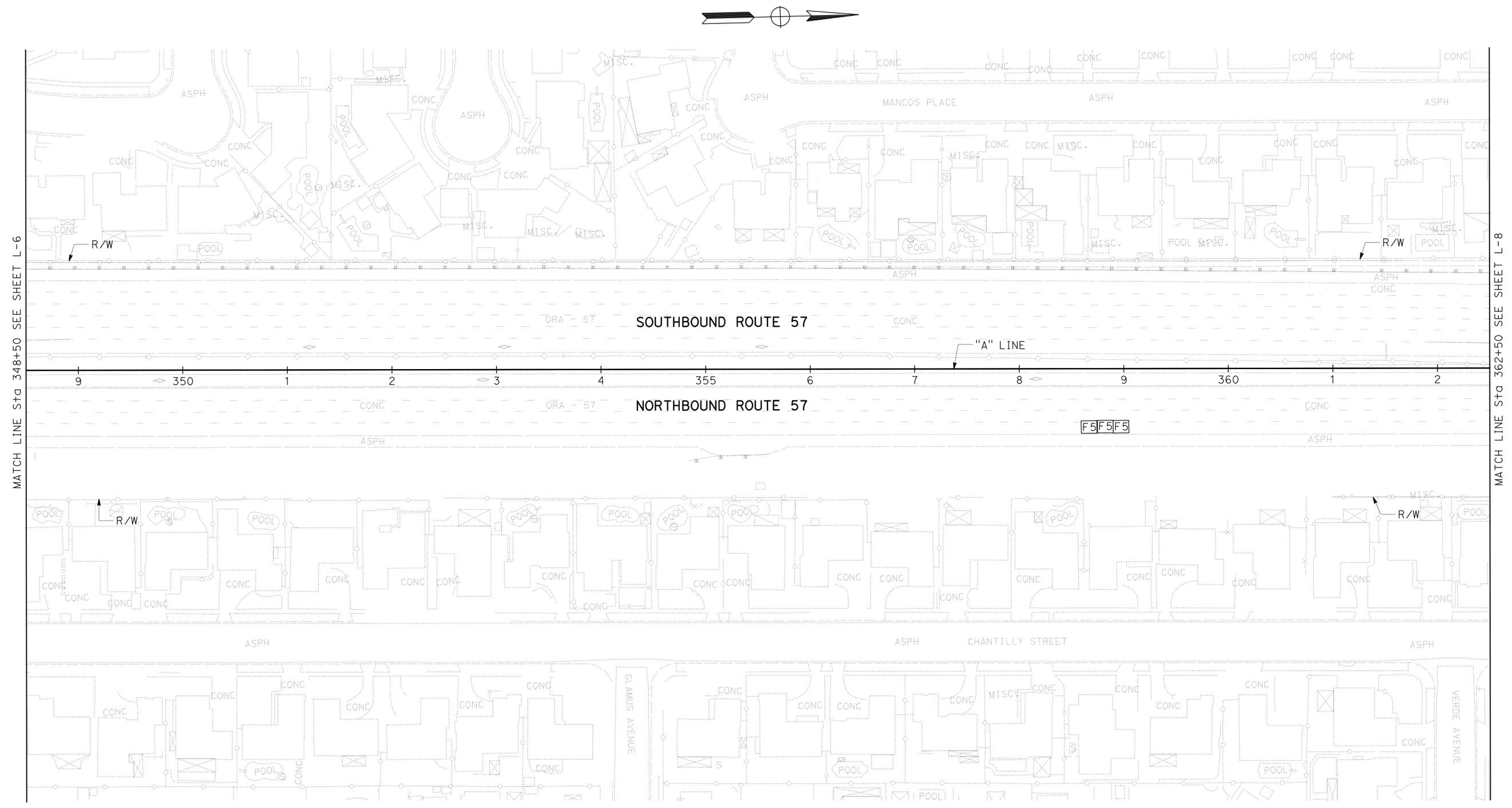
FUNCTIONAL SUPERVISOR: MATTHEW Q. CUGINI  
 CHECKED BY: M. Q. CUGINI  
 CALCULATED-DESIGNED BY: HENRY NGUYEN  
 REVISOR: HENRY NGUYEN  
 DATE REVISOR: 10-08-09

**NOTES:**

- FOR COMPLETE RIGHT OF WAY AND ACCURATE ACCESS DATA, SEE RIGHT OF WAY RECORD MAPS AT DISTRICT OFFICE.
- EXISTING UTILITY FACILITIES HAVE NOT BEEN PLOTTED ON THESE PLANS.

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	57	11.8/22.5	9	64

REGISTERED CIVIL ENGINEER: *Henry Nguyen*  
 DATE: 11-09-09  
 PLANS APPROVAL DATE: 12-14-09  
 No. C69035  
 Exp. 6-30-10  
 CIVIL  
 THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.



**LAYOUT**  
 SCALE: 1" = 50'  
**L-7**

LAST REVISION | DATE PLOTTED => 22-DEC-2009 | 11-03-09 | TIME PLOTTED => 09:37

FUNCTIONAL SUPERVISOR  
 MATTHEW Q. CUGINI

CALCULATED-DESIGNED BY  
 CHECKED BY

HENRY NGUYEN  
 M. Q. CUGINI

REVISED BY  
 DATE REVISED

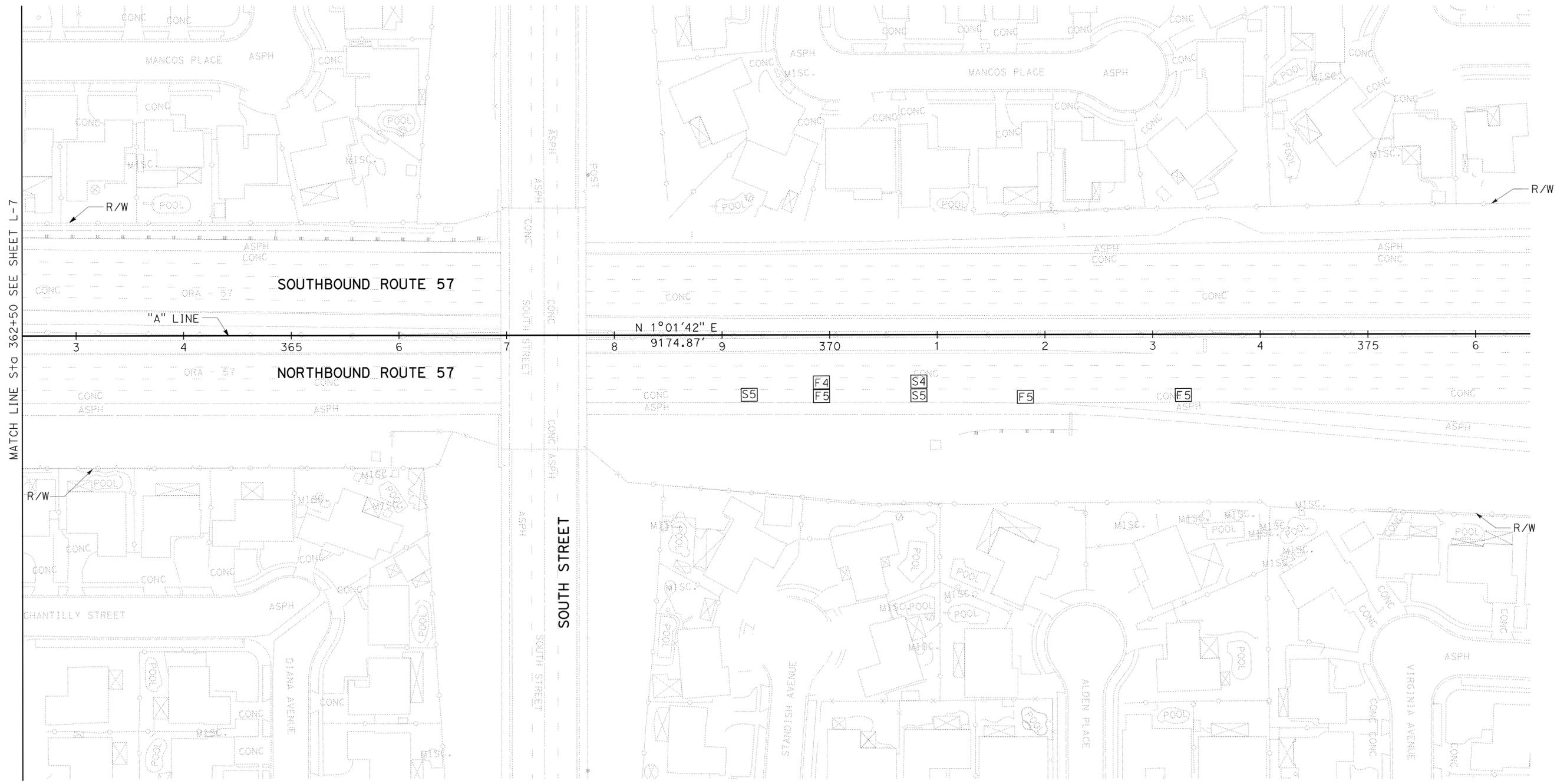
HN  
 10-08-09

**NOTES:**

- FOR COMPLETE RIGHT OF WAY AND ACCURATE ACCESS DATA, SEE RIGHT OF WAY RECORD MAPS AT DISTRICT OFFICE.
- EXISTING UTILITY FACILITIES HAVE NOT BEEN PLOTTED ON THESE PLANS.

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	57	11.8/22.5	10	64

REGISTERED CIVIL ENGINEER DATE 11-09-09  
 HENRY NGUYEN No. C69035 Exp. 6-30-10  
 PLANS APPROVAL DATE 12-14-09  
 THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.



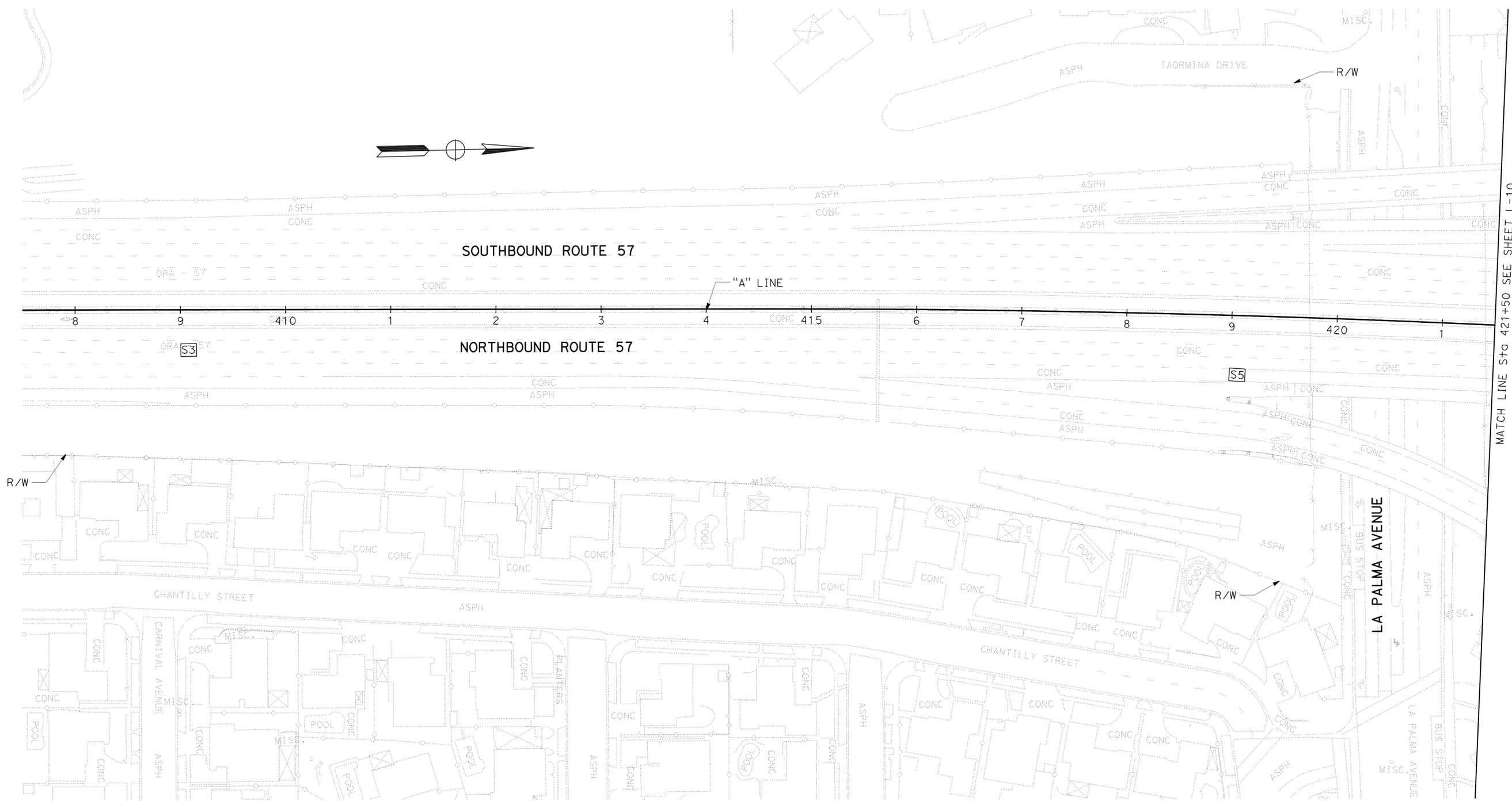
**LAYOUT**  
 SCALE: 1" = 50'  
**L-8**

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	57	11.8/22.5	11	64
			11-09-09	REGISTERED CIVIL ENGINEER DATE	
			12-14-09	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:**

- FOR COMPLETE RIGHT OF WAY AND ACCURATE ACCESS DATA, SEE RIGHT OF WAY RECORD MAPS AT DISTRICT OFFICE.
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STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	FUNCTIONAL SUPERVISOR	CALCULATED-DESIGNED BY	REVISOR	DATE
<b>Caltrans</b>	MATTHEW Q. CUGINI	CHECKED BY	HENRY NGUYEN	10-08-09
<b>DESIGN</b>			M. Q. CUGINI	



MATCH LINE Sta 421+50 SEE SHEET L-10

**LAYOUT**  
SCALE: 1" = 50'  
**L-9**

LAST REVISION DATE PLOTTED => 22-DEC-2009 11-03-09 TIME PLOTTED => 09:37

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

FUNCTIONAL SUPERVISOR: MATTHEW Q. CUGINI  
 CALCULATED/DESIGNED BY: HENRY NGUYEN  
 CHECKED BY: M. Q. CUGINI  
 REVISED BY: HENRY NGUYEN  
 DATE REVISED: 10-08-09

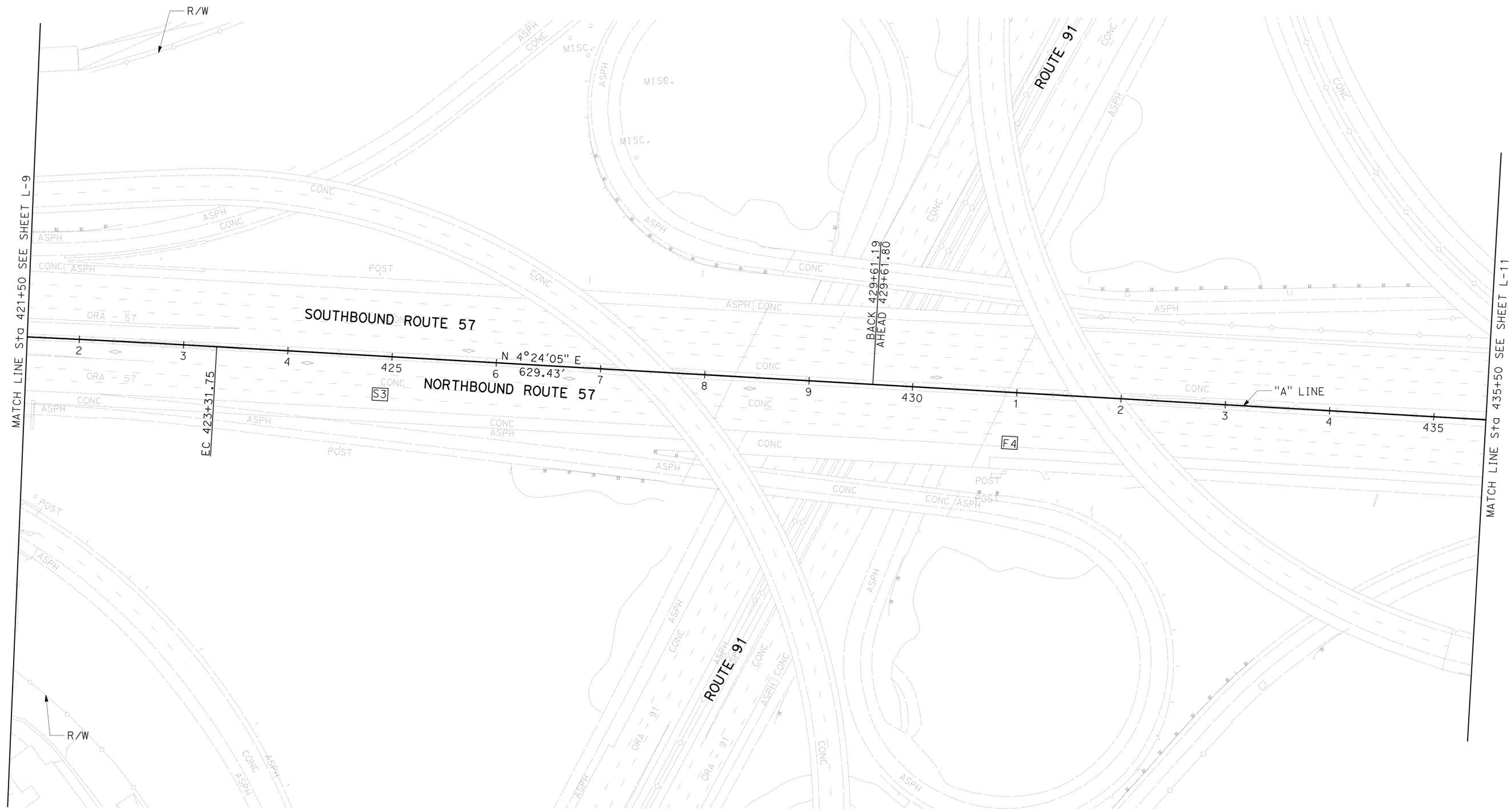
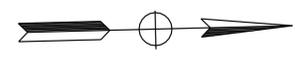
**NOTES:**

- FOR COMPLETE RIGHT OF WAY AND ACCURATE ACCESS DATA, SEE RIGHT OF WAY RECORD MAPS AT DISTRICT OFFICE.
- EXISTING UTILITY FACILITIES HAVE NOT BEEN PLOTTED ON THESE PLANS.

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	57	11.8/22.5	12	64

REGISTERED CIVIL ENGINEER: HENRY NGUYEN  
 No. C69035  
 Exp. 6-30-10  
 DATE: 11-09-09  
 PLANS APPROVAL DATE: 12-14-09

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**LAYOUT**  
 SCALE: 1" = 50' L-10

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	FUNCTIONAL SUPERVISOR	REVISOR	DATE
	MATTHEW Q. CUGINI	HENRY NGUYEN	10-08-09
CALTRANS	CHECKED BY	DESIGNED BY	DATE
	M. Q. CUGINI	M. Q. CUGINI	10-08-09

**NOTES:**

- FOR COMPLETE RIGHT OF WAY AND ACCURATE ACCESS DATA, SEE RIGHT OF WAY RECORD MAPS AT DISTRICT OFFICE.
- EXISTING UTILITY FACILITIES HAVE NOT BEEN PLOTTED ON THESE PLANS.

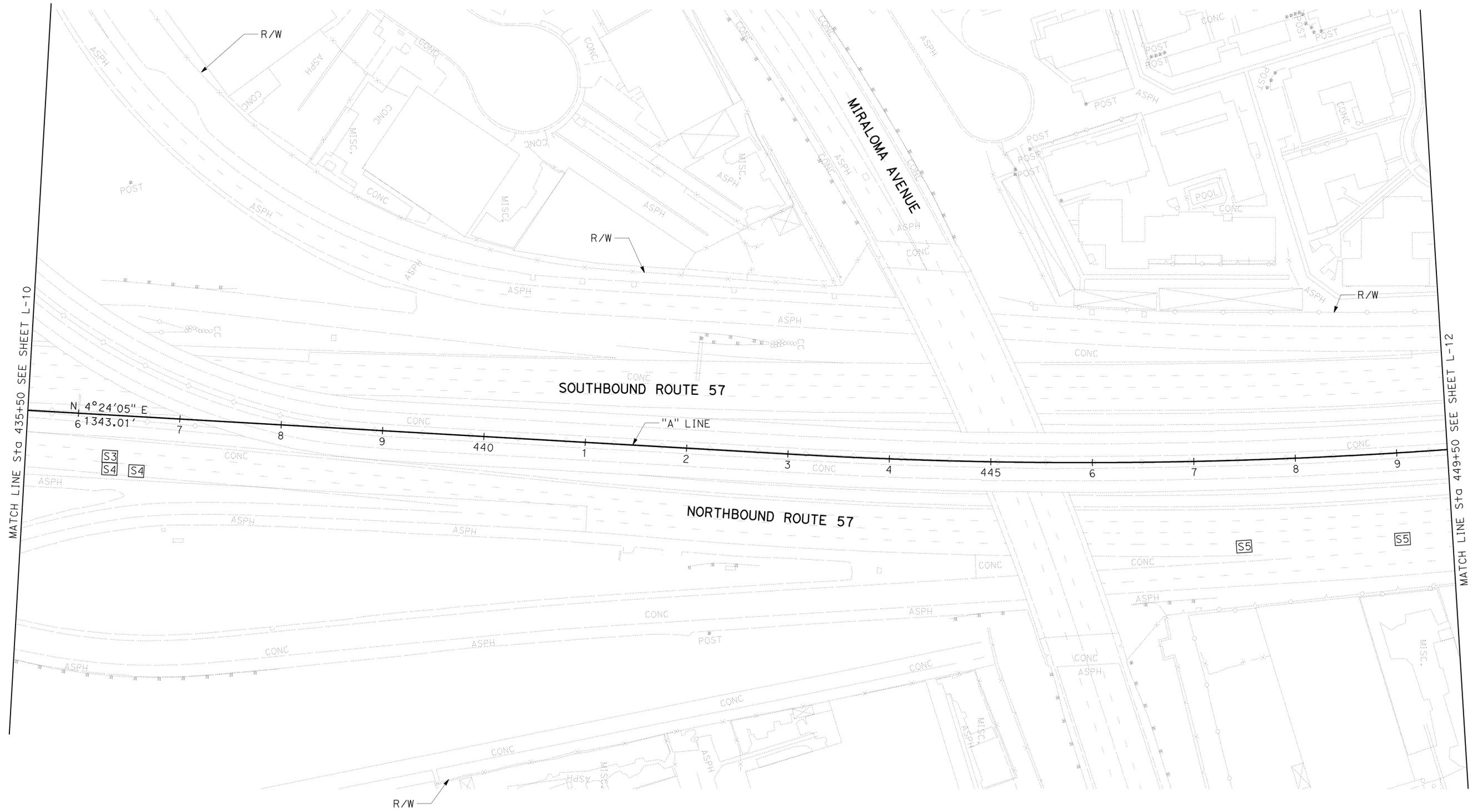
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	57	11.8/22.5	13	64

REGISTERED CIVIL ENGINEER DATE 11-09-09

12-14-09 PLANS APPROVAL DATE

HENRY NGUYEN No. C69035 Exp. 6-30-10 CIVIL

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**LAYOUT**  
SCALE: 1" = 50' **L-11**

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

FUNCTIONAL SUPERVISOR: MATTHEW Q. CUGINI  
 CALCULATED-DESIGNED BY: MATTHEW Q. CUGINI  
 CHECKED BY: M. Q. CUGINI  
 HENRY NGUYEN  
 REVISOR: HENRY NGUYEN  
 DATE REVISOR: 10-08-09  
 H.N.

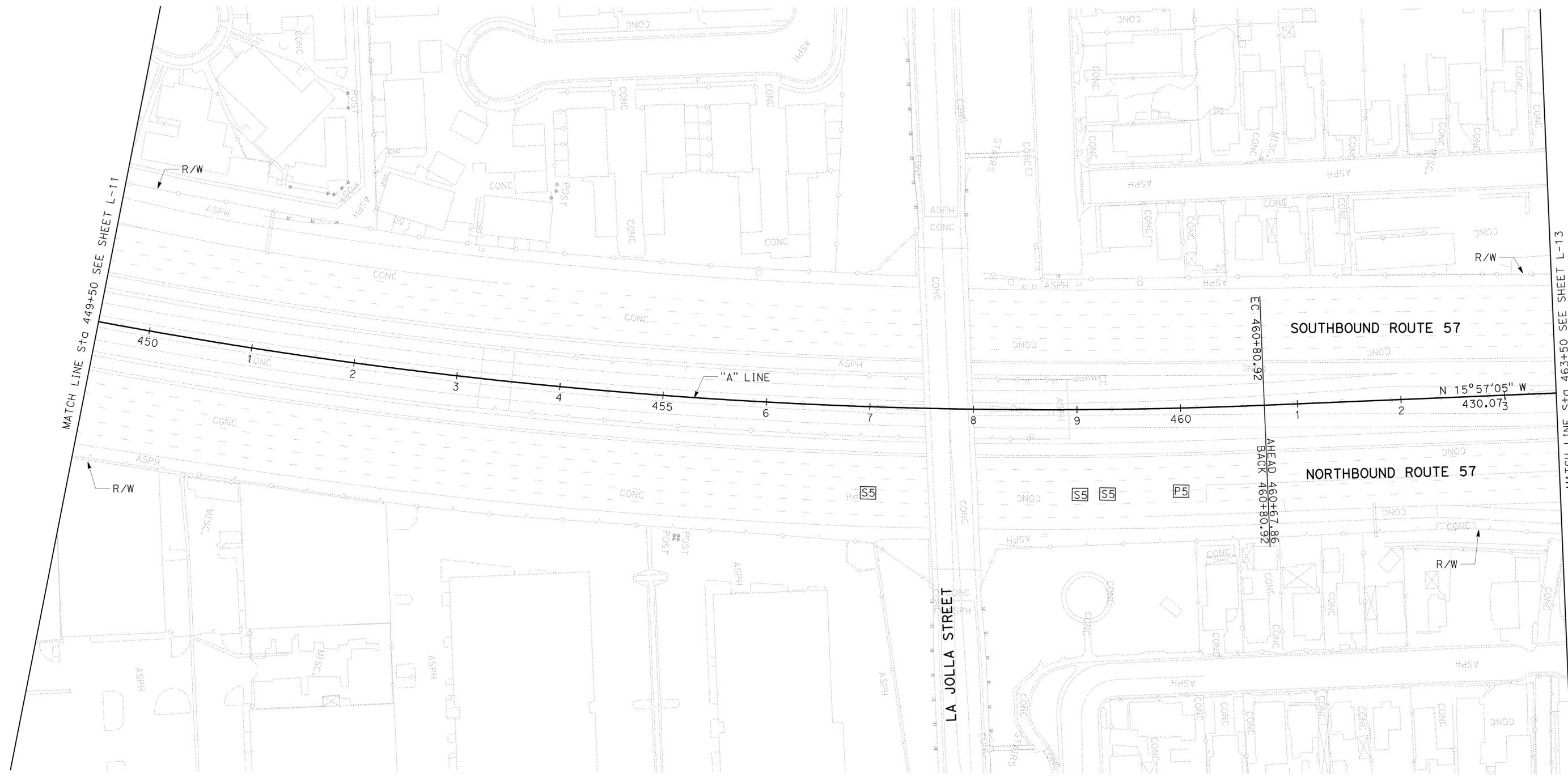
**NOTES:**

- FOR COMPLETE RIGHT OF WAY AND ACCURATE ACCESS DATA, SEE RIGHT OF WAY RECORD MAPS AT DISTRICT OFFICE.
- EXISTING UTILITY FACILITIES HAVE NOT BEEN PLOTTED ON THESE PLANS.

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	57	11.8/22.5	14	64

REGISTERED CIVIL ENGINEER: HENRY NGUYEN  
 No. C69035  
 Exp. 6-30-10  
 DATE: 11-09-09  
 PLANS APPROVAL DATE: 12-14-09

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**LAYOUT**  
 SCALE: 1" = 50' L-12

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

FUNCTIONAL SUPERVISOR  
 MATTHEW Q. CUGINI

CALCULATED-DESIGNED BY  
 CHECKED BY

HENRY NGUYEN  
 M. Q. CUGINI

REVISED BY  
 DATE REVISED

HN  
 10-08-09

**NOTES:**

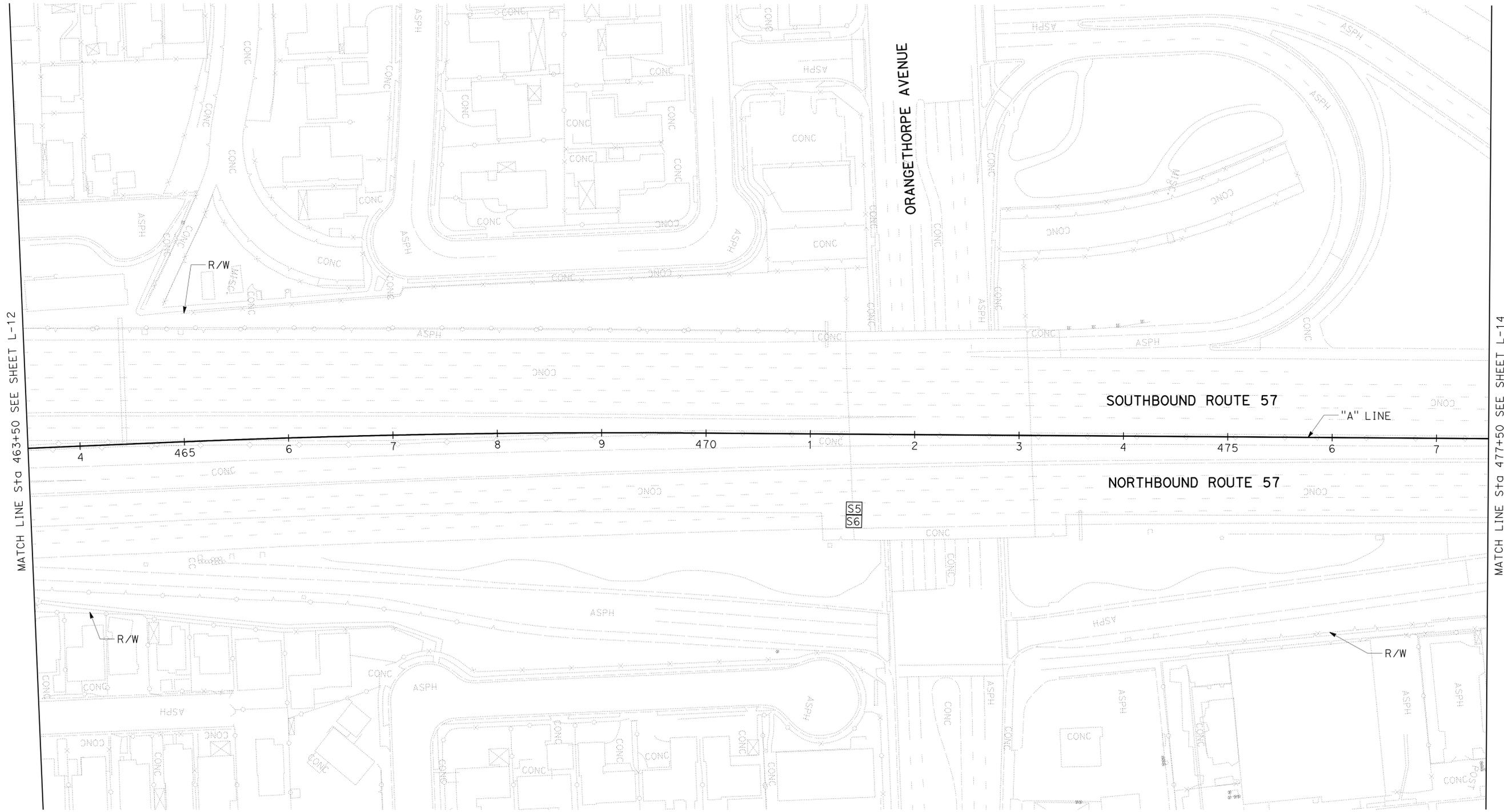
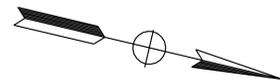
- FOR COMPLETE RIGHT OF WAY AND ACCURATE ACCESS DATA, SEE RIGHT OF WAY RECORD MAPS AT DISTRICT OFFICE.
- EXISTING UTILITY FACILITIES HAVE NOT BEEN PLOTTED ON THESE PLANS.

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	57	11.8/22.5	15	64

11-09-09  
 REGISTERED CIVIL ENGINEER DATE  
 HENRY NGUYEN  
 No. C69035  
 Exp. 6-30-10  
 CIVIL  
 STATE OF CALIFORNIA

12-14-09  
 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.



**LAYOUT**  
 SCALE: 1" = 50'  
**L-13**

FUNCTIONAL SUPERVISOR  
 MATTHEW Q. CUGINI

CALCULATED-DESIGNED BY  
 CHECKED BY

HENRY NGUYEN  
 M. Q. CUGINI

REVISED BY  
 DATE REVISED

HN  
 10-08-09

**NOTES:**

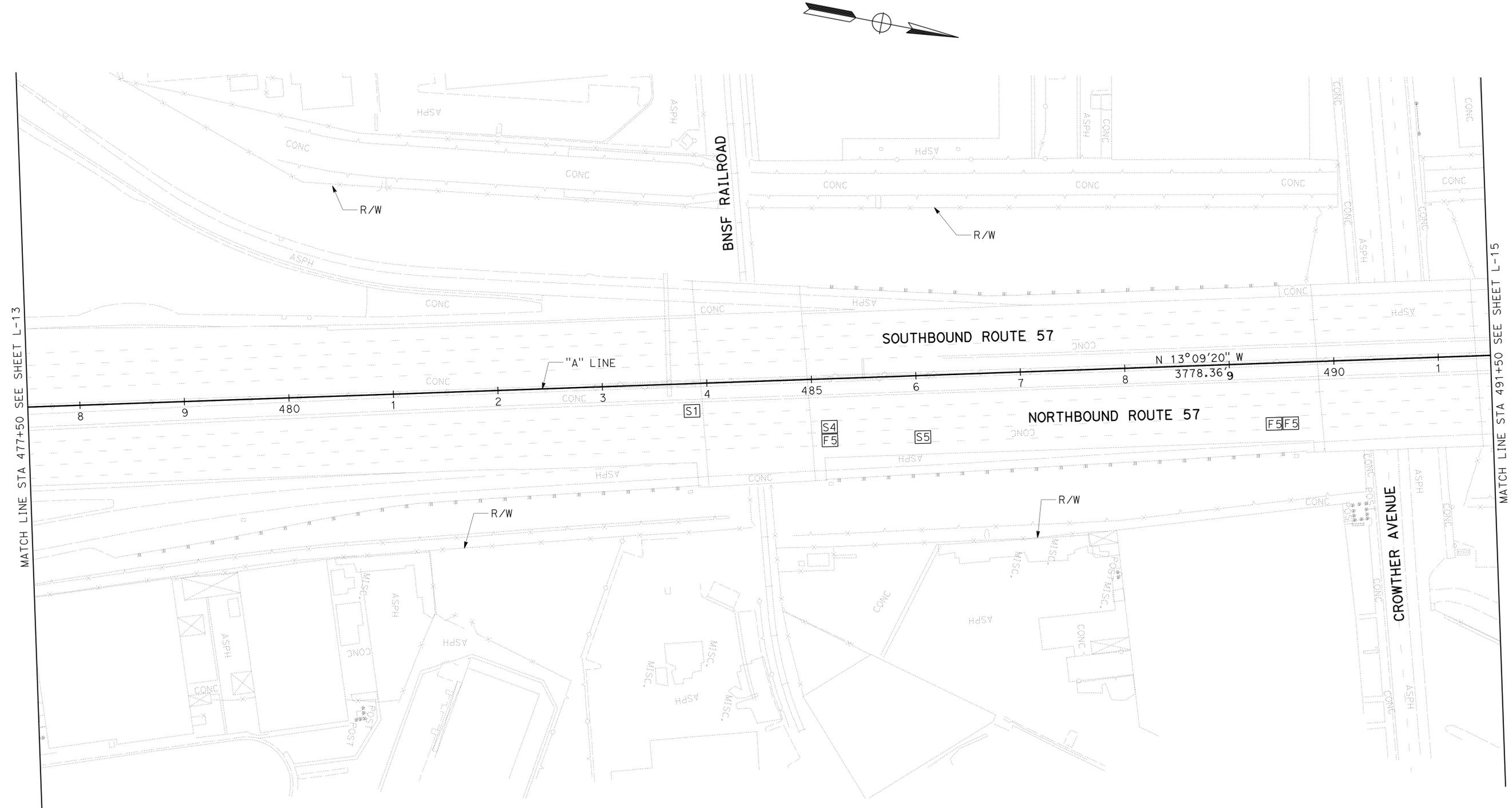
- FOR COMPLETE RIGHT OF WAY AND ACCURATE ACCESS DATA, SEE RIGHT OF WAY RECORD MAPS AT DISTRICT OFFICE.
- EXISTING UTILITY FACILITIES HAVE NOT BEEN PLOTTED ON THESE PLANS.

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	57	11.8/22.5	16	64

REGISTERED CIVIL ENGINEER DATE 11-09-09  
 HENRY NGUYEN  
 No. C69035  
 Exp. 6-30-10  
 CIVIL  
 STATE OF CALIFORNIA

12-14-09  
 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.



**LAYOUT**  
 SCALE: 1" = 50' **L-14**

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

FUNCTIONAL SUPERVISOR  
 MATTHEW Q. CUGINI

CALCULATED-DESIGNED BY  
 CHECKED BY

HENRY NGUYEN  
 M. Q. CUGINI

REVISED BY  
 DATE REVISED

HN  
 10-08-09

**NOTES:**

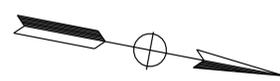
1. FOR COMPLETE RIGHT OF WAY AND ACCURATE ACCESS DATA, SEE RIGHT OF WAY RECORD MAPS AT DISTRICT OFFICE.
2. EXISTING UTILITY FACILITIES HAVE NOT BEEN PLOTTED ON THESE PLANS.

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	57	11.8/22.5	17	64

REGISTERED CIVIL ENGINEER DATE 11-09-09  
 HENRY NGUYEN  
 No. C69035  
 Exp. 6-30-10  
 CIVIL  
 STATE OF CALIFORNIA

12-14-09  
 PLANS APPROVAL DATE

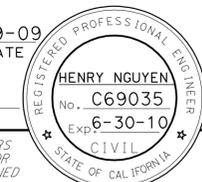
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MATCH LINE STA 491+50 SEE SHEET L-14

MATCH LINE STA 505+50 SEE SHEET L-16

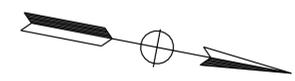
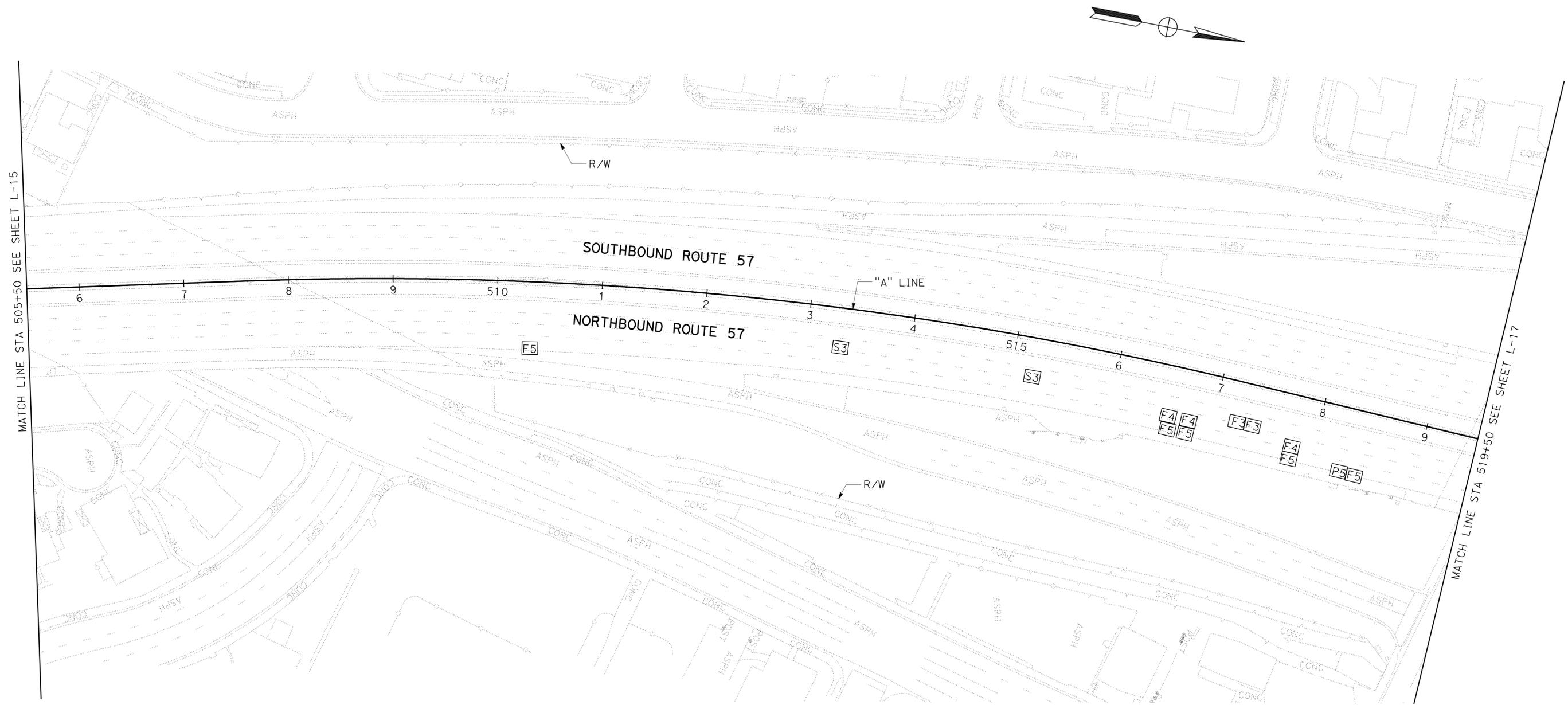
**LAYOUT**  
 SCALE: 1" = 50'  
**L-15**

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	57	11.8/22.5	18	64
			 REGISTERED CIVIL ENGINEER DATE 11-09-09		
			12-14-09 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:**

- FOR COMPLETE RIGHT OF WAY AND ACCURATE ACCESS DATA, SEE RIGHT OF WAY RECORD MAPS AT DISTRICT OFFICE.
- EXISTING UTILITY FACILITIES HAVE NOT BEEN PLOTTED ON THESE PLANS.

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	FUNCTIONAL SUPERVISOR	CALCULATED-DESIGNED BY	REVISOR	DATE
<b>Caltrans</b>	MATTHEW Q. CUGINI	CHECKED BY	HENRY NGUYEN	10-08-09
DESIGN			M. Q. CUGINI	



**LAYOUT**  
 SCALE: 1" = 50'  
**L-16**

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	DESIGN	FUNCTIONAL SUPERVISOR	CALCULATED-DESIGNED BY	HENRY NGUYEN	REVISED BY	HN
		MATTHEW Q. CUGINI	CHECKED BY	M. Q. CUGINI	DATE REVISED	10-08-09

**NOTES:**

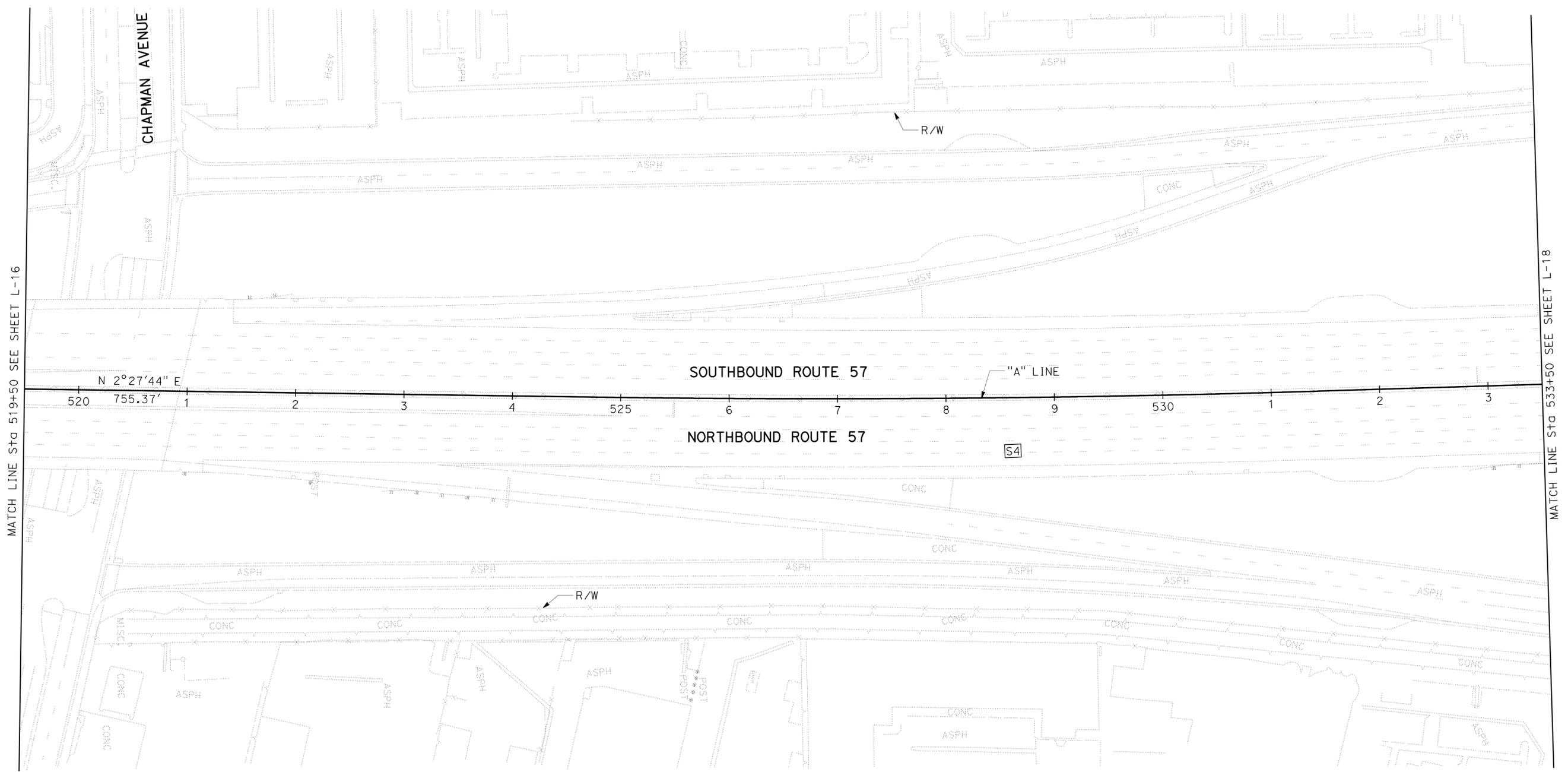
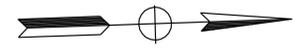
- FOR COMPLETE RIGHT OF WAY AND ACCURATE ACCESS DATA, SEE RIGHT OF WAY RECORD MAPS AT DISTRICT OFFICE.
- EXISTING UTILITY FACILITIES HAVE NOT BEEN PLOTTED ON THESE PLANS.

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Oran	57	11.8/22.5	19	64

REGISTERED CIVIL ENGINEER DATE 11-09-09  
 HENRY NGUYEN  
 No. C69035  
 Exp. 6-30-10  
 CIVIL  
 STATE OF CALIFORNIA

12-14-09  
 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.



**LAYOUT**  
SCALE: 1" = 50'  
**L-17**

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

FUNCTIONAL SUPERVISOR  
 MATTHEW Q. CUGINI

CALCULATED-DESIGNED BY  
 CHECKED BY

HENRY NGUYEN  
 M. Q. CUGINI

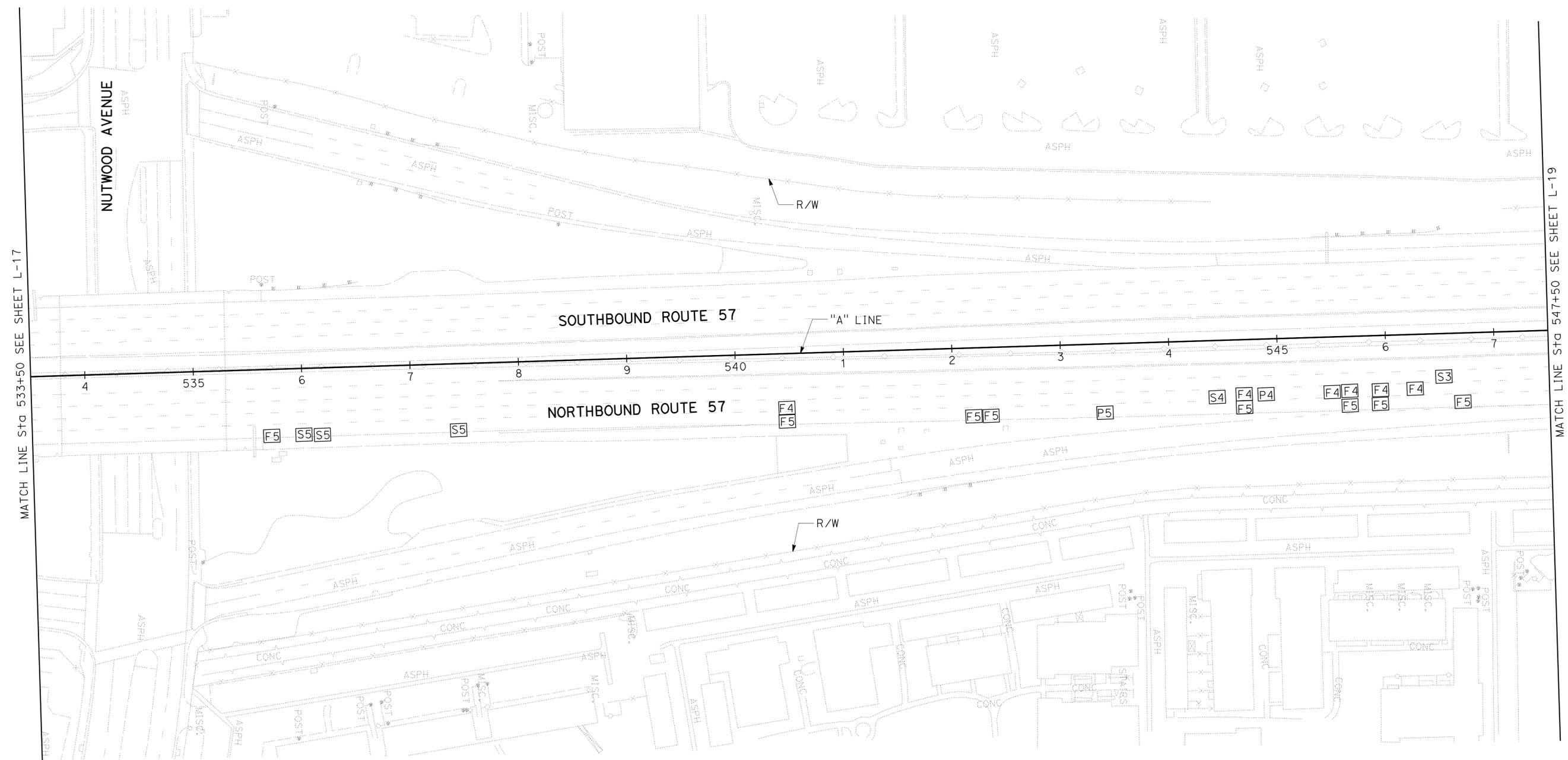
REVISOR BY  
 DATE REVISED

HN  
 10-08-09

**NOTES:**

- FOR COMPLETE RIGHT OF WAY AND ACCURATE ACCESS DATA, SEE RIGHT OF WAY RECORD MAPS AT DISTRICT OFFICE.
- EXISTING UTILITY FACILITIES HAVE NOT BEEN PLOTTED ON THESE PLANS.

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	57	11.8/22.5	20	64
			REGISTERED CIVIL ENGINEER	DATE	
			11-09-09		
			PLANS APPROVAL DATE		
			12-14-09		
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.					



**LAYOUT**  
 SCALE: 1" = 50'  
**L-18**

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

FUNCTIONAL SUPERVISOR  
 MATTHEW Q. CUGINI

CALCULATED-DESIGNED BY  
 CHECKED BY

HENRY NGUYEN  
 M. Q. CUGINI

REVISED BY  
 DATE REVISED

HN  
 10-08-09

**NOTES:**

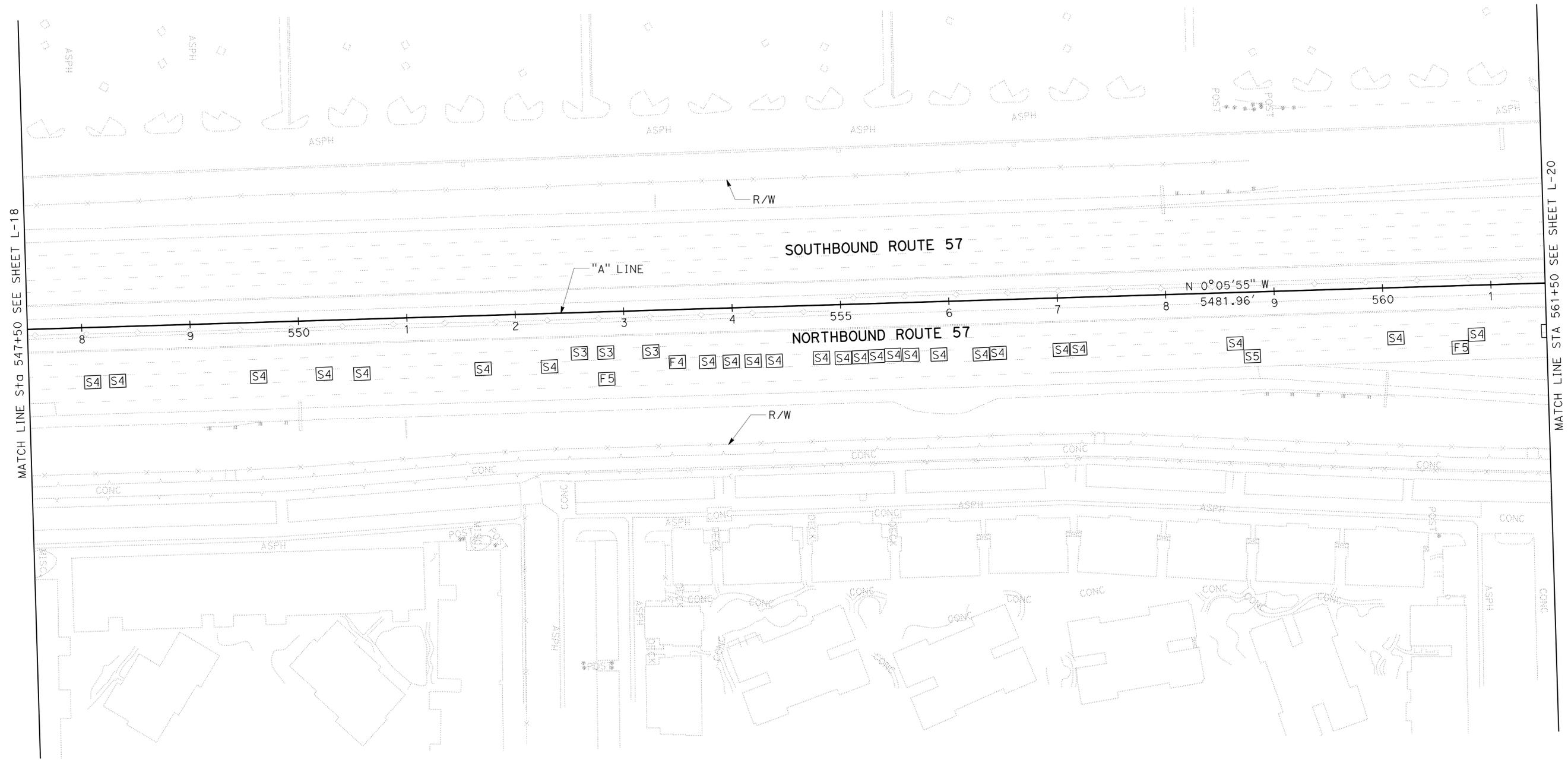
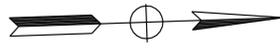
- FOR COMPLETE RIGHT OF WAY AND ACCURATE ACCESS DATA, SEE RIGHT OF WAY RECORD MAPS AT DISTRICT OFFICE.
- EXISTING UTILITY FACILITIES HAVE NOT BEEN PLOTTED ON THESE PLANS.

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Oran	57	11.8/22.5	21	64

 11-09-09  
 REGISTERED CIVIL ENGINEER DATE

12-14-09  
 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.

**LAYOUT**  
 SCALE: 1" = 50' **L-19**

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

FUNCTIONAL SUPERVISOR: MATTHEW Q. CUGINI  
 CALCULATED/DESIGNED BY: HENRY NGUYEN  
 CHECKED BY: M. Q. CUGINI  
 REVISOR: HN  
 DATE REVISED: 10-08-09

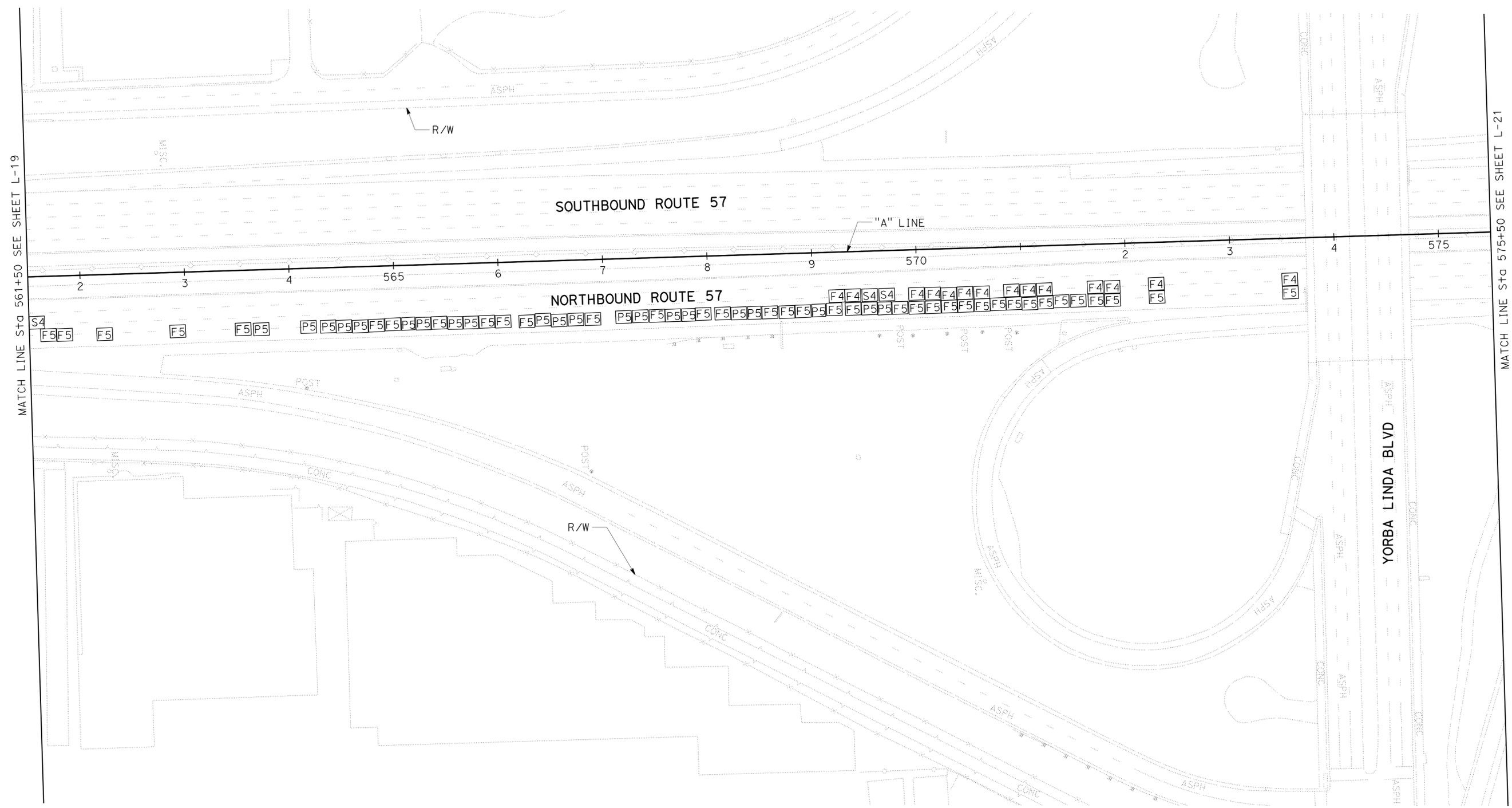
**NOTES:**

- FOR COMPLETE RIGHT OF WAY AND ACCURATE ACCESS DATA, SEE RIGHT OF WAY RECORD MAPS AT DISTRICT OFFICE.
- EXISTING UTILITY FACILITIES HAVE NOT BEEN PLOTTED ON THESE PLANS.

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	57	11.8/22.5	22	64

REGISTERED CIVIL ENGINEER: *Henry Nguyen*  
 DATE: 11-09-09  
 PLANS APPROVAL DATE: 12-14-09  
 No. C69035  
 Exp. 6-30-10  
 CIVIL  
 STATE OF CALIFORNIA

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



**LAYOUT**  
 SCALE: 1" = 50'  
**L-20**

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

FUNCTIONAL SUPERVISOR: MATTHEW Q. CUGINI  
 CALCULATED/DESIGNED BY: HENRY NGUYEN  
 CHECKED BY: M. Q. CUGINI  
 REVISED BY: HN  
 DATE REVISED: 10-08-09

**NOTES:**

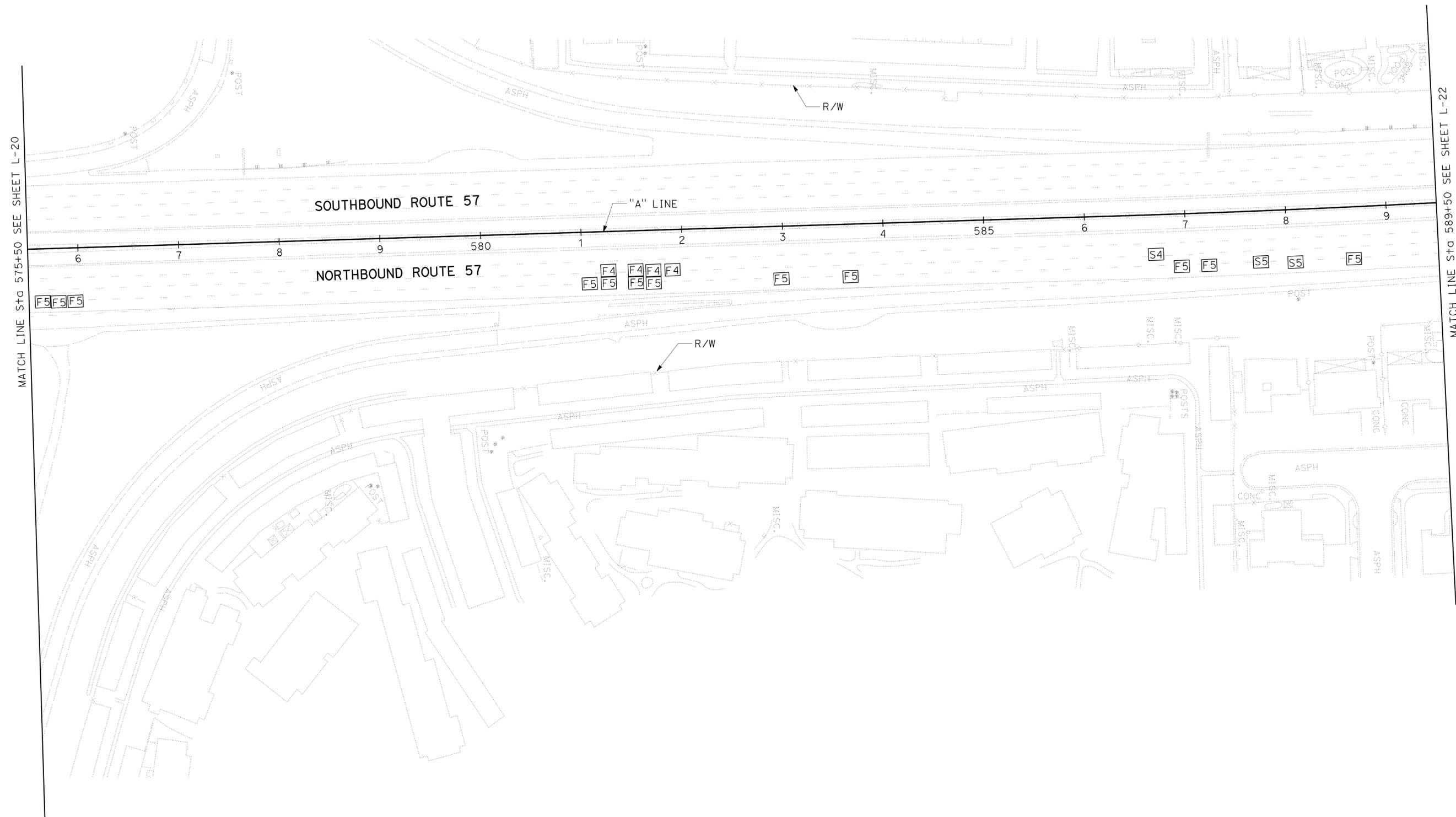
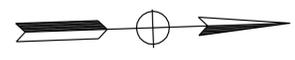
- FOR COMPLETE RIGHT OF WAY AND ACCURATE ACCESS DATA, SEE RIGHT OF WAY RECORD MAPS AT DISTRICT OFFICE.
- EXISTING UTILITY FACILITIES HAVE NOT BEEN PLOTTED ON THESE PLANS.

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Oran	57	11.8/22.5	23	64

REGISTERED CIVIL ENGINEER: *Henry Nguyen* DATE: 11-09-09  
 PLANS APPROVAL DATE: 12-14-09

REGISTERED PROFESSIONAL ENGINEER: HENRY NGUYEN  
 No. C69035  
 Exp. 6-30-10  
 CIVIL  
 STATE OF CALIFORNIA

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



**LAYOUT**  
 SCALE: 1" = 50'  
**L-21**

LAST REVISION: 11-03-09  
 DATE PLOTTED => 22-DEC-2009  
 TIME PLOTTED => 09:38



Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	57	11.8/22.5	25	64

<i>Henry Nguyen</i>	11-09-09
REGISTERED CIVIL ENGINEER	DATE
12-14-09	
PLANS APPROVAL DATE	

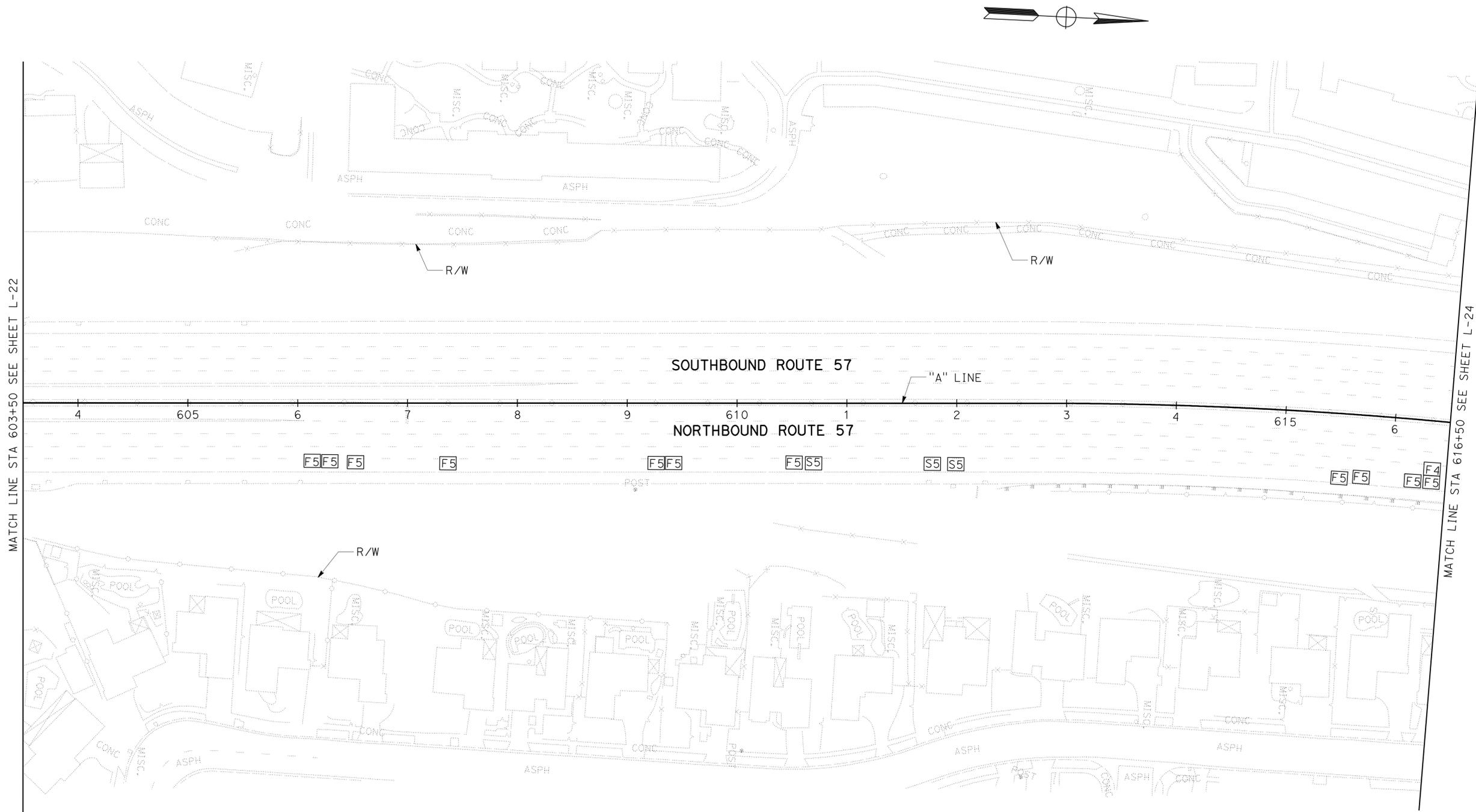
REGISTERED PROFESSIONAL ENGINEER
HENRY NGUYEN
No. C69035
Exp. 6-30-10
CIVIL
STATE OF CALIFORNIA

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.

**NOTES:**

- FOR COMPLETE RIGHT OF WAY AND ACCURATE ACCESS DATA, SEE RIGHT OF WAY RECORD MAPS AT DISTRICT OFFICE.
- EXISTING UTILITY FACILITIES HAVE NOT BEEN PLOTTED ON THESE PLANS.

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	FUNCTIONAL SUPERVISOR	CALCULATED-DESIGNED BY	REVISOR	DATE
<b>Caltrans</b>	MATTHEW Q. CUGINI	CHECKED BY	HENRY NGUYEN	10-08-09
<b>DESIGN</b>			M. Q. CUGINI	



**LAYOUT**  
SCALE: 1" = 50'  
**L-23**

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	57	11.8/22.5	26	64

REGISTERED CIVIL ENGINEER DATE 11-09-09  
 HENRY NGUYEN  
 No. C69035  
 Exp. 6-30-10  
 CIVIL  
 STATE OF CALIFORNIA  
 REGISTERED PROFESSIONAL ENGINEER

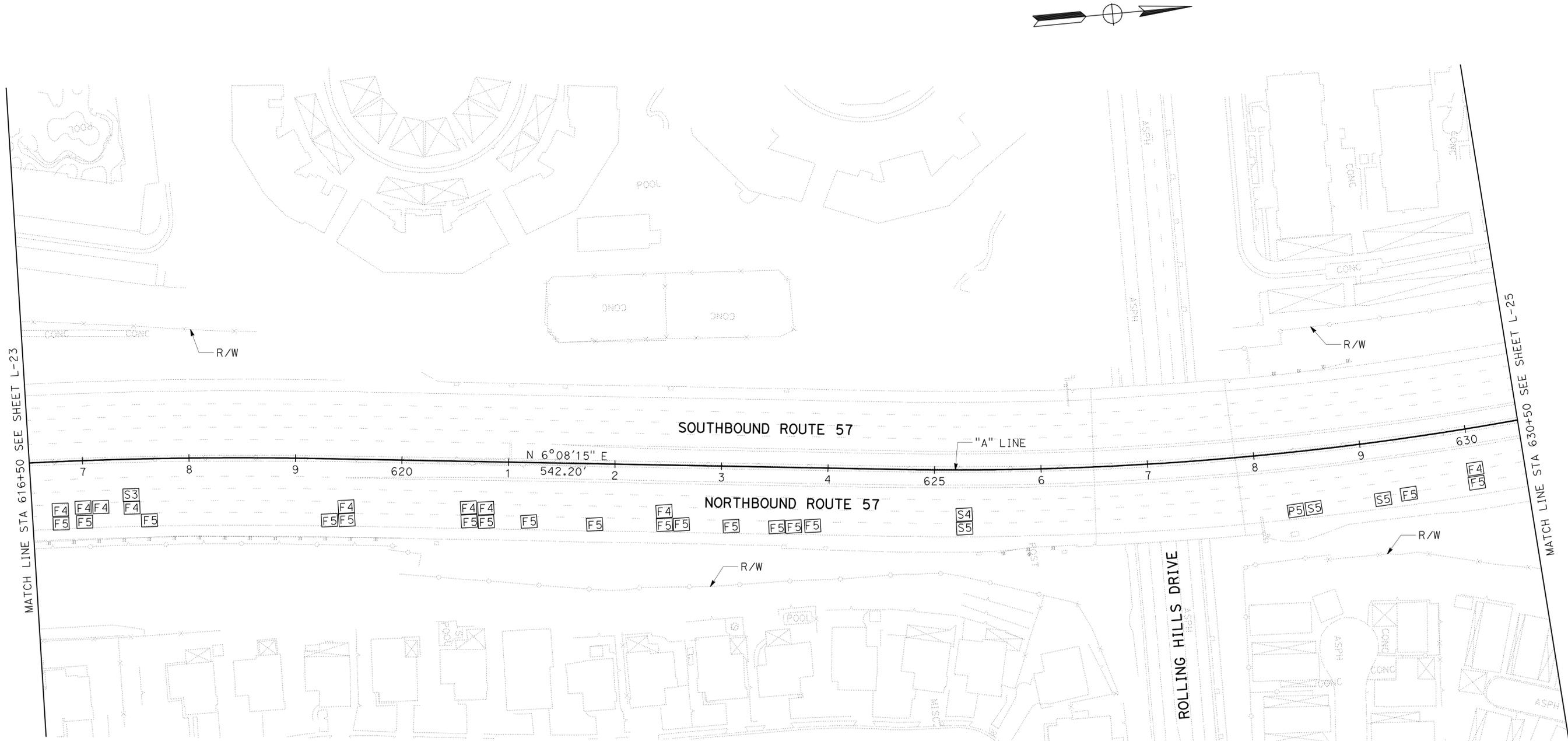
12-14-09  
 PLANS APPROVAL DATE

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.

**NOTES:**

- FOR COMPLETE RIGHT OF WAY AND ACCURATE ACCESS DATA, SEE RIGHT OF WAY RECORD MAPS AT DISTRICT OFFICE.
- EXISTING UTILITY FACILITIES HAVE NOT BEEN PLOTTED ON THESE PLANS.

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	FUNCTIONAL SUPERVISOR	CALCULATED-DESIGNED BY	REVISOR	DATE
<b>Caltrans</b>	MATTHEW Q. CUGINI	CHECKED BY	HN	10-08-09
<b>DESIGN</b>				



**LAYOUT**  
 SCALE: 1" = 50' **L-24**



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

FUNCTIONAL SUPERVISOR MATTHEW Q. CUGINI	CALCULATED-DESIGNED BY CHECKED BY	HENRY NGUYEN M. Q. CUGINI	REVISED BY DATE REVISED	HN 10-08-09
--	--------------------------------------	------------------------------	----------------------------	----------------

**NOTES:**

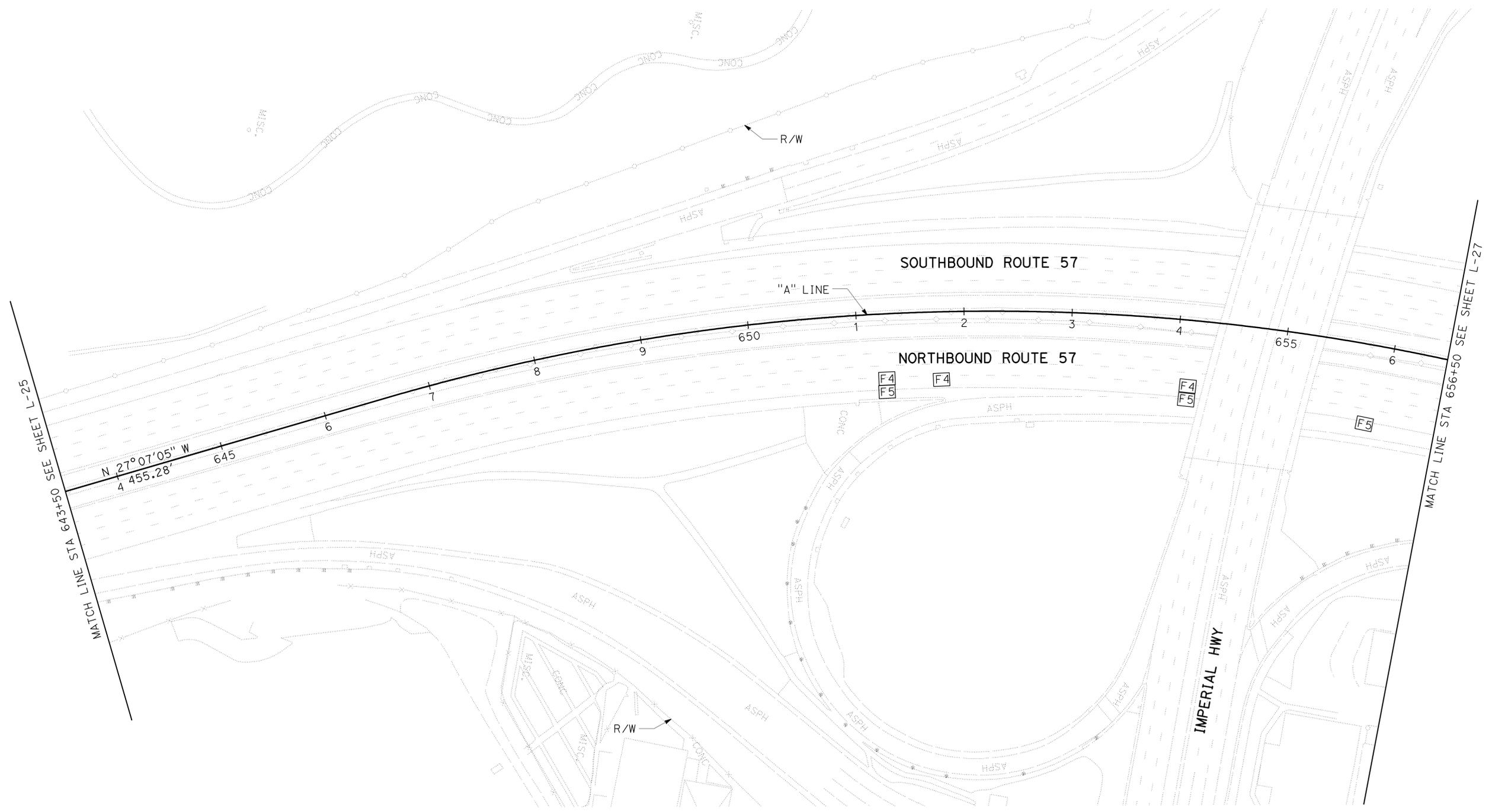
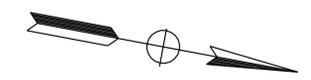
- FOR COMPLETE RIGHT OF WAY AND ACCURATE ACCESS DATA, SEE RIGHT OF WAY RECORD MAPS AT DISTRICT OFFICE.
- EXISTING UTILITY FACILITIES HAVE NOT BEEN PLOTTED ON THESE PLANS.

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	57	11.8/22.5	28	64

REGISTERED CIVIL ENGINEER DATE 11-09-09  
 HENRY NGUYEN  
 No. C69035  
 Exp. 6-30-10  
 CIVIL  
 STATE OF CALIFORNIA

12-14-09  
 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.

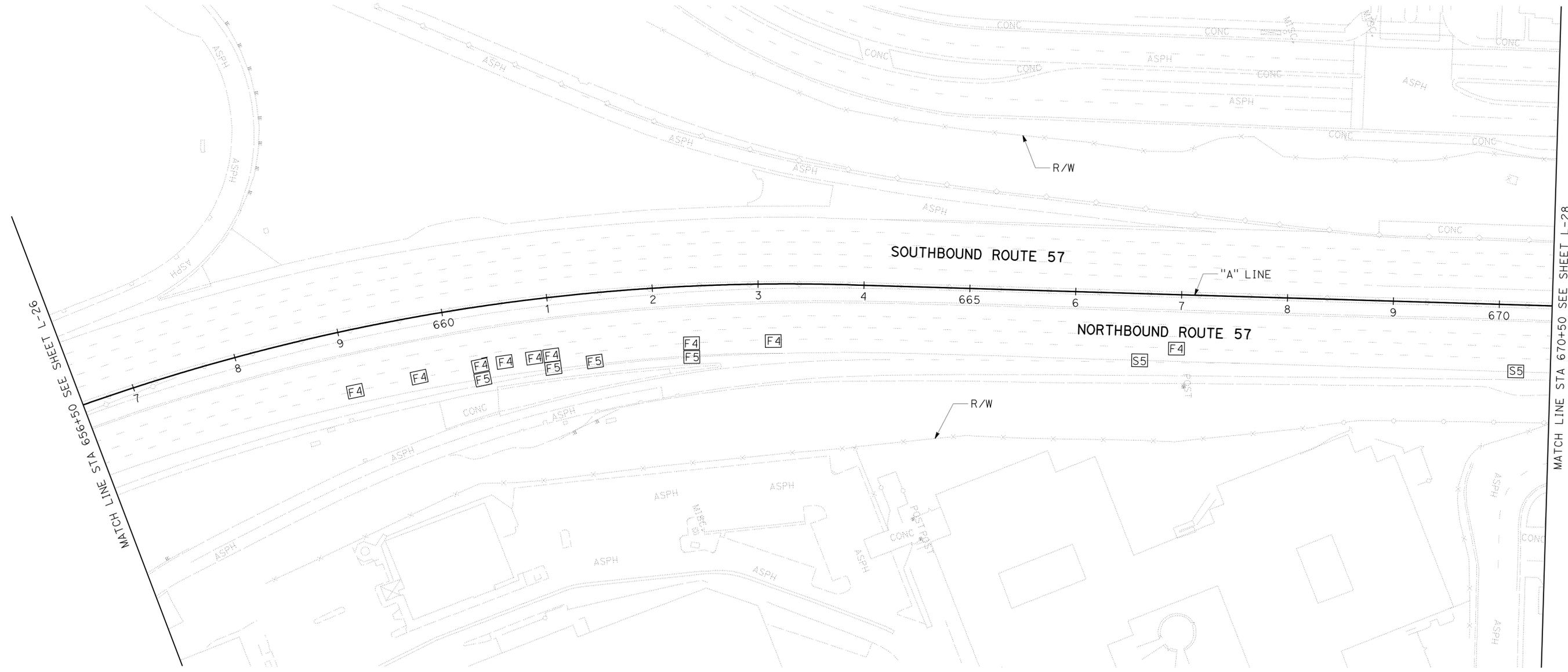
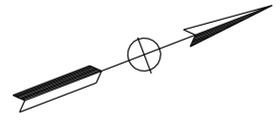


**LAYOUT**  
 SCALE: 1" = 50'  
**L-26**

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	57	11.8/22.5	29	64
			REGISTERED CIVIL ENGINEER	DATE	
			HENRY NGUYEN	11-09-09	
			No. C69035		
			PLANS APPROVAL DATE	12-14-09	
			<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:**
- FOR COMPLETE RIGHT OF WAY AND ACCURATE ACCESS DATA, SEE RIGHT OF WAY RECORD MAPS AT DISTRICT OFFICE.
  - EXISTING UTILITY FACILITIES HAVE NOT BEEN PLOTTED ON THESE PLANS.



STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	FUNCTIONAL SUPERVISOR	DESIGN
<b>Caltrans</b>	MATTHEW Q. CUGINI	
	CHECKED BY	
	DESIGNED BY	
	HENRY NGUYEN	
	REVISOR	
	DATE	
	10-08-09	

MATCH LINE STA 670+50 SEE SHEET L-28

MATCH LINE STA 656+50 SEE SHEET L-26

**LAYOUT**  
SCALE: 1" = 50'  
**L-27**

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

FUNCTIONAL SUPERVISOR: MATTHEW Q. CUGINI  
 CALCULATED-DESIGNED BY: MATTHEW Q. CUGINI  
 CHECKED BY: M. Q. CUGINI  
 HENRY NGUYEN  
 REVISOR: HENRY NGUYEN  
 DATE REVISOR: 10-08-09

**NOTES:**

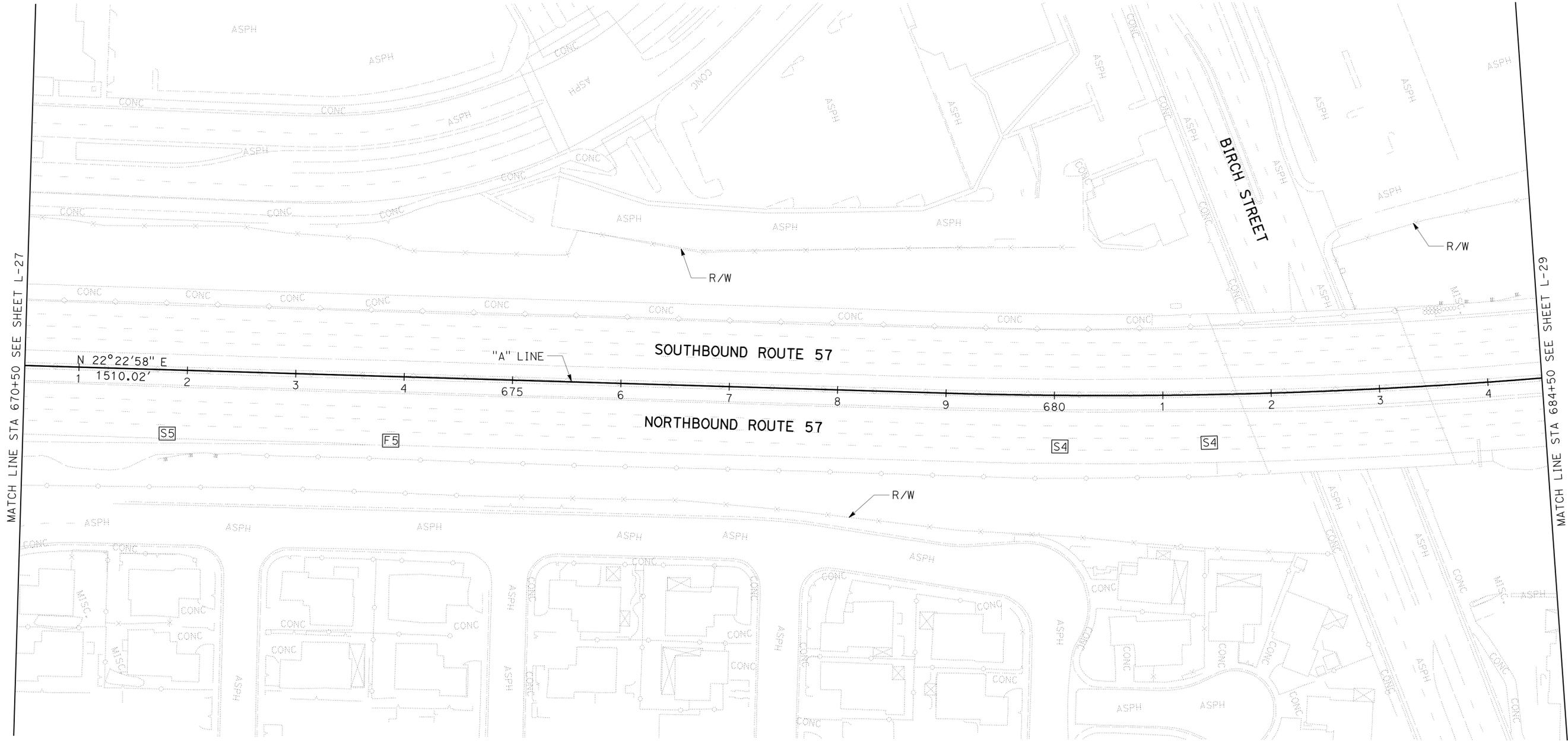
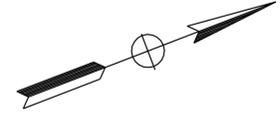
- FOR COMPLETE RIGHT OF WAY AND ACCURATE ACCESS DATA, SEE RIGHT OF WAY RECORD MAPS AT DISTRICT OFFICE.
- EXISTING UTILITY FACILITIES HAVE NOT BEEN PLOTTED ON THESE PLANS.

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	57	11.8/22.5	30	64

REGISTERED CIVIL ENGINEER: *Henry Nguyen* DATE: 11-09-09  
 PLANS APPROVAL DATE: 12-14-09

REGISTERED PROFESSIONAL ENGINEER: HENRY NGUYEN  
 No. C69035  
 Exp. 6-30-10  
 CIVIL  
 STATE OF CALIFORNIA

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



**LAYOUT**  
 SCALE: 1" = 50'  
**L-28**

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	57	11.8/22.5	31	64

<i>Henry Nguyen</i>	11-09-09
REGISTERED CIVIL ENGINEER	DATE
12-14-09	
PLANS APPROVAL DATE	

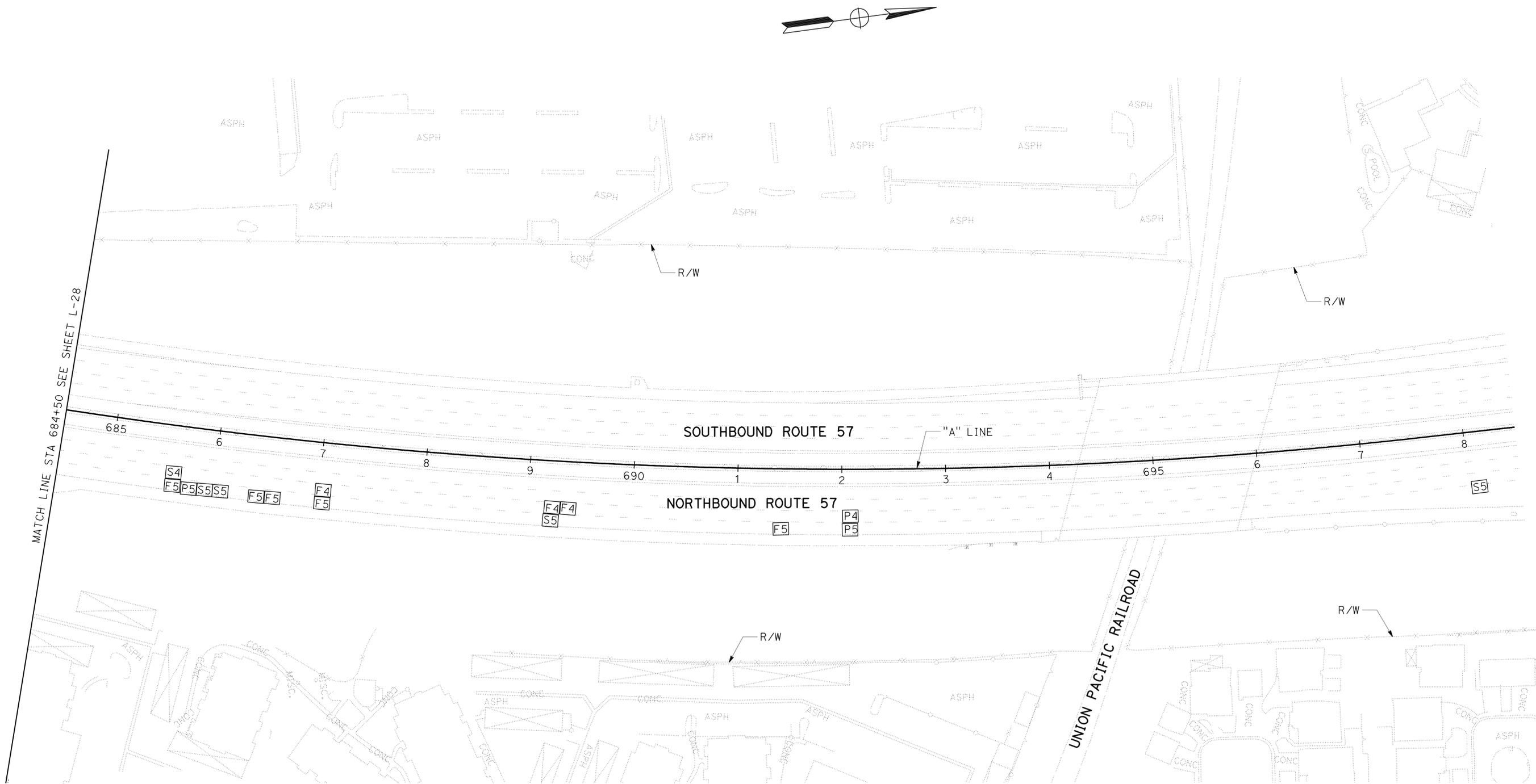
REGISTERED PROFESSIONAL ENGINEER
HENRY NGUYEN
No. C69035
Exp. 6-30-10
CIVIL
STATE OF CALIFORNIA

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.

**NOTES:**

- FOR COMPLETE RIGHT OF WAY AND ACCURATE ACCESS DATA, SEE RIGHT OF WAY RECORD MAPS AT DISTRICT OFFICE.
- EXISTING UTILITY FACILITIES HAVE NOT BEEN PLOTTED ON THESE PLANS.

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	DESIGN
FUNCTIONAL SUPERVISOR	MATTHEW Q. CUGINI
CALCULATED-DESIGNED BY	CHECKED BY
HENRY NGUYEN	M. Q. CUGINI
REVISOR BY	DATE REVISED
HN	10-08-09



**LAYOUT**

SCALE: 1" = 50'

**L-29**

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

FUNCTIONAL SUPERVISOR  
 MATTHEW Q. CUGINI

CALCULATED-DESIGNED BY  
 CHECKED BY

HENRY NGUYEN  
 M. Q. CUGINI

REVISED BY  
 DATE REVISED

HN  
 10-08-09

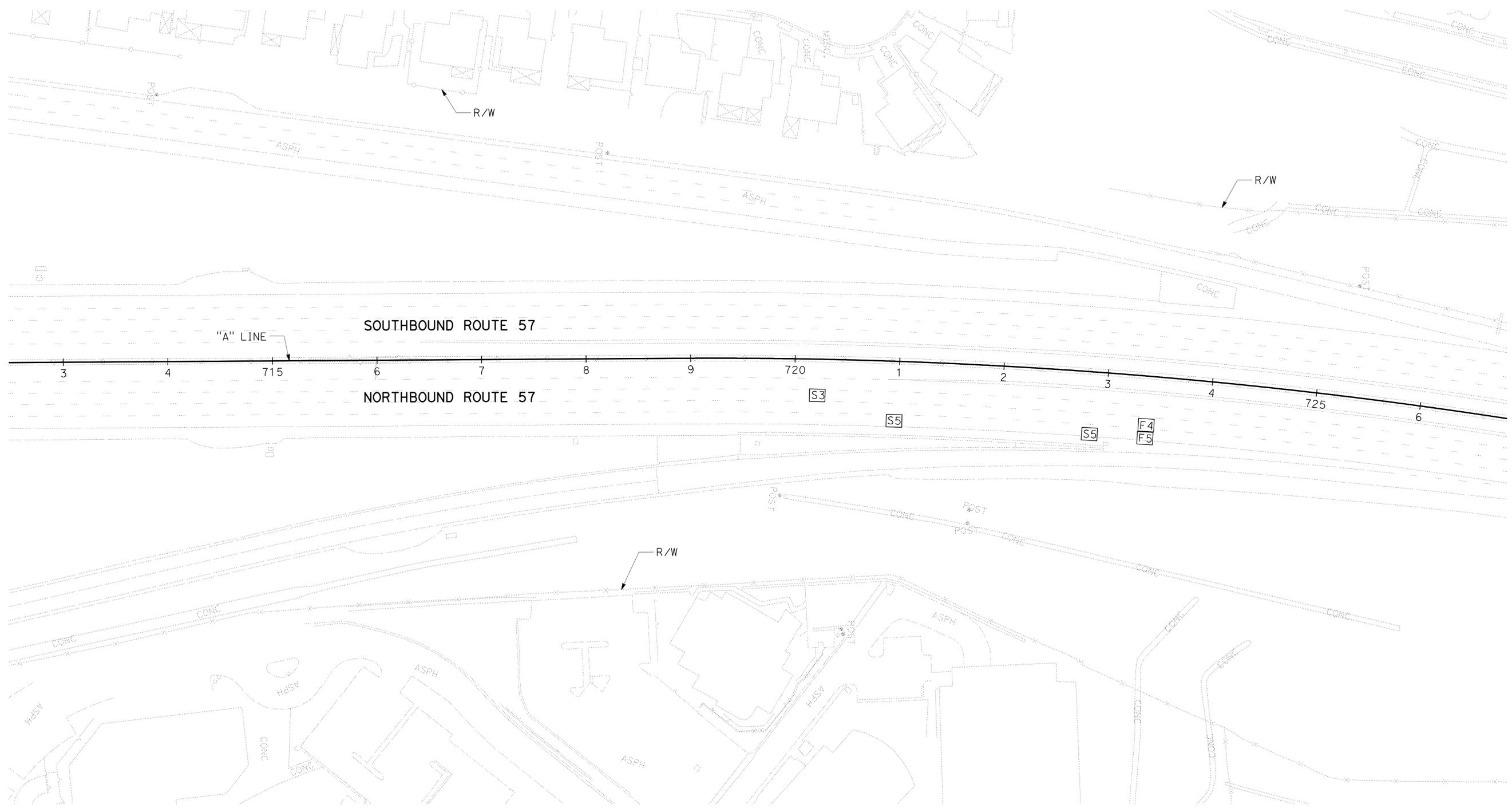
**NOTES:**

1. FOR COMPLETE RIGHT OF WAY AND ACCURATE ACCESS DATA, SEE RIGHT OF WAY RECORD MAPS AT DISTRICT OFFICE.
2. EXISTING UTILITY FACILITIES HAVE NOT BEEN PLOTTED ON THESE PLANS.

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	57	11.8/22.5	32	64

 11-09-09  
 REGISTERED CIVIL ENGINEER DATE  
 12-14-09  
 PLANS APPROVAL DATE  
 HENRY NGUYEN  
 No. C69035  
 Exp. 6-30-10  
 CIVIL  
 STATE OF CALIFORNIA  
 REGISTERED PROFESSIONAL ENGINEER

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



**LAYOUT**  
 SCALE: 1" = 50'  
**L-30**

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	57	11.8/22.5	33	64

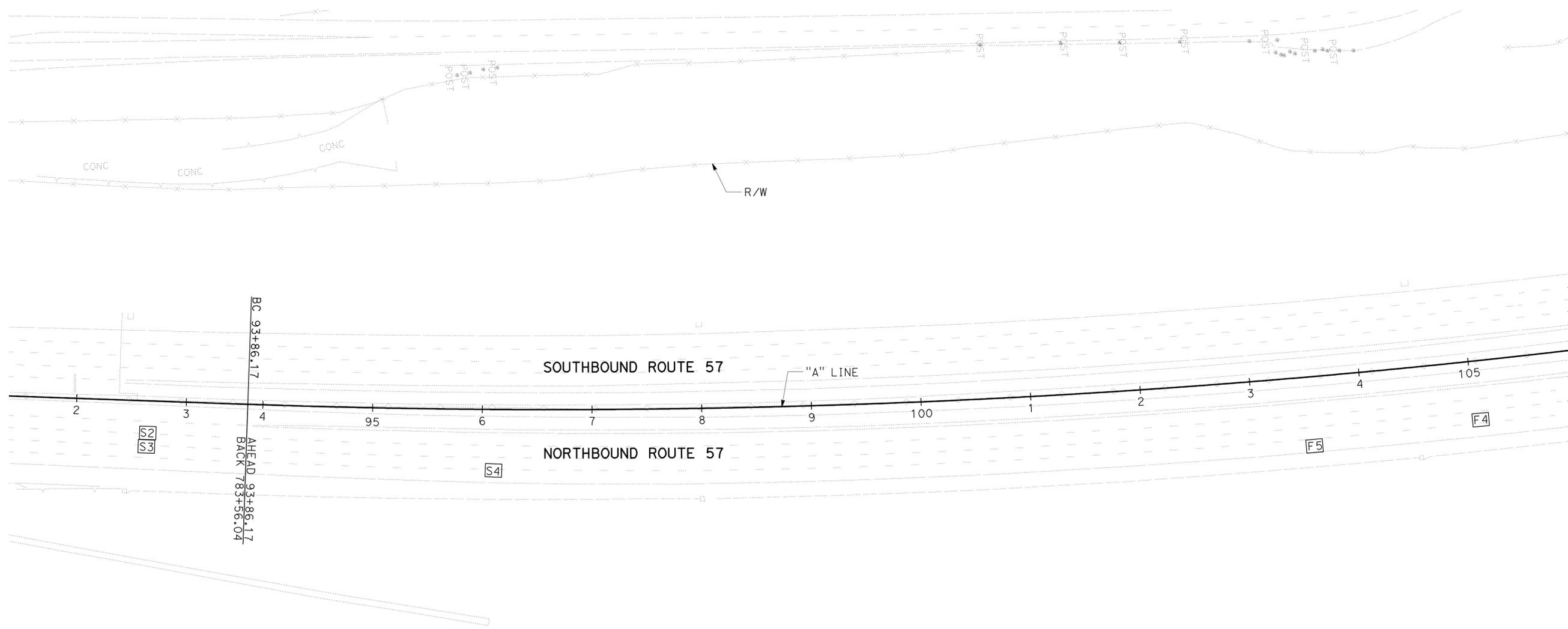
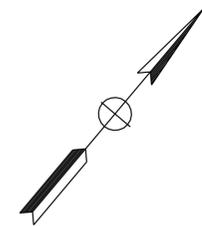
*Henry Nguyen* 11-09-09  
 REGISTERED CIVIL ENGINEER DATE  
 12-14-09  
 PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER  
 HENRY NGUYEN  
 No. C69035  
 Exp. 6-30-10  
 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.

**NOTES:**

- FOR COMPLETE RIGHT OF WAY AND ACCURATE ACCESS DATA, SEE RIGHT OF WAY RECORD MAPS AT DISTRICT OFFICE.
- EXISTING UTILITY FACILITIES HAVE NOT BEEN PLOTTED ON THESE PLANS.



STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	DESIGN
FUNCTIONAL SUPERVISOR	MATTHEW Q. CUGINI
CALCULATED-DESIGNED BY	CHECKED BY
HENRY NGUYEN	M. Q. CUGINI
REVISOR BY	DATE REVISED
HN	10-08-09



**LAYOUT**

SCALE: 1" = 50'

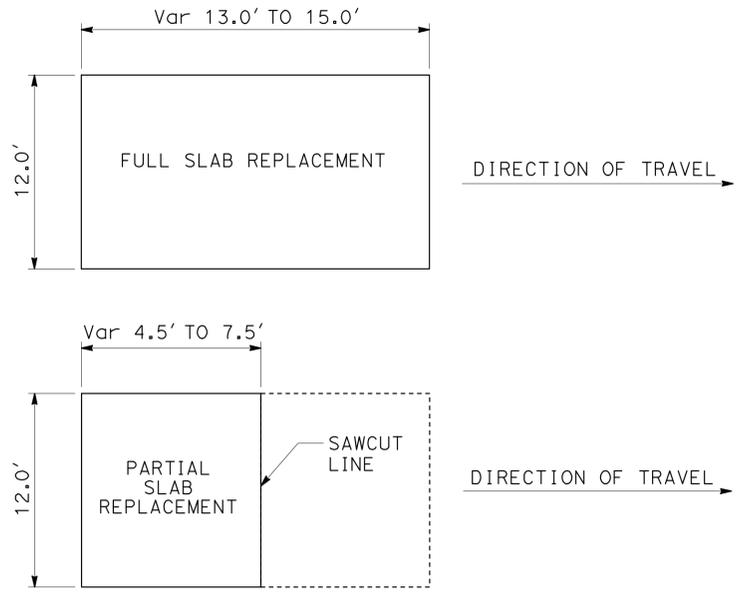
**L-31**

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	57	11.8/22.5	34	64
			11-09-09	REGISTERED CIVIL ENGINEER DATE	
			12-14-09	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.					

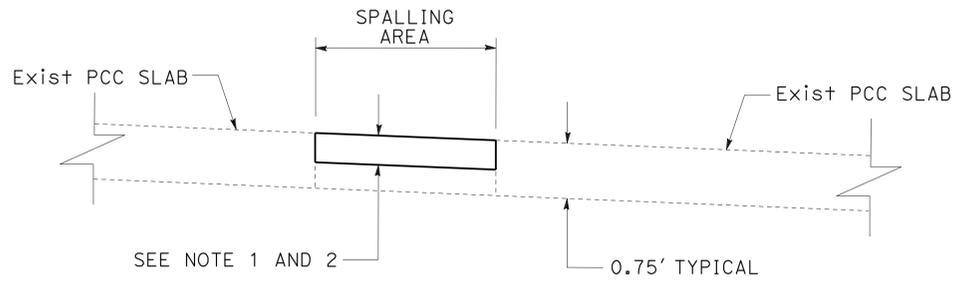


**NOTES:**

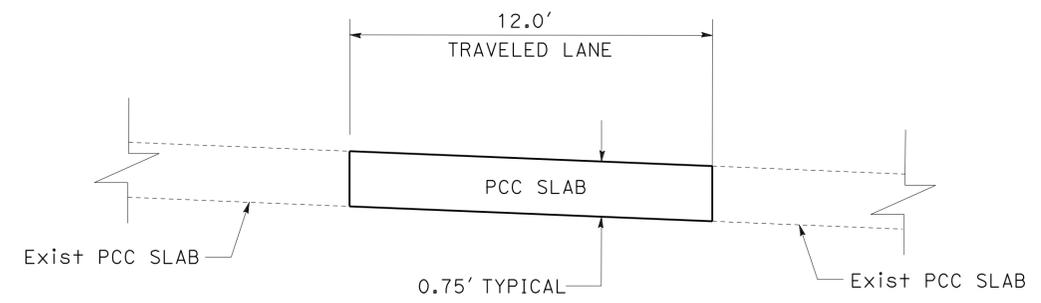
1. IF DEPTH OF SPALLING IS LESS THAN HALF OF THE DEPTH OF Exist SLAB, REMOVE 2 MORE INCHES OF PCC AND BACKFILL WITH NEW PCC.
2. IF DEPTH OF SPALLING IS GREATER THAN HALF OF THE DEPTH OF Exist SLAB, REMOVE FULL DEPTH OF Exist SLAB AND BACKFILL WITH NEW PCC.



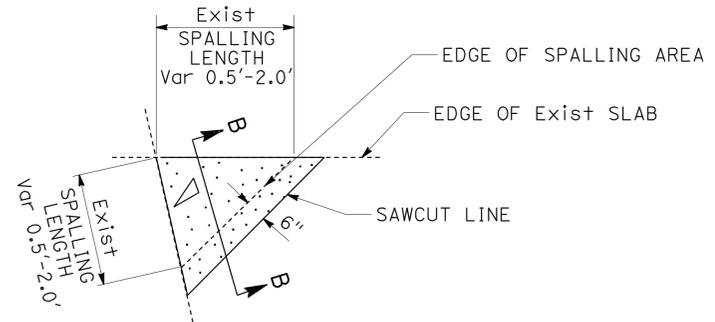
**TYPICAL SLAB DIMENSIONS**



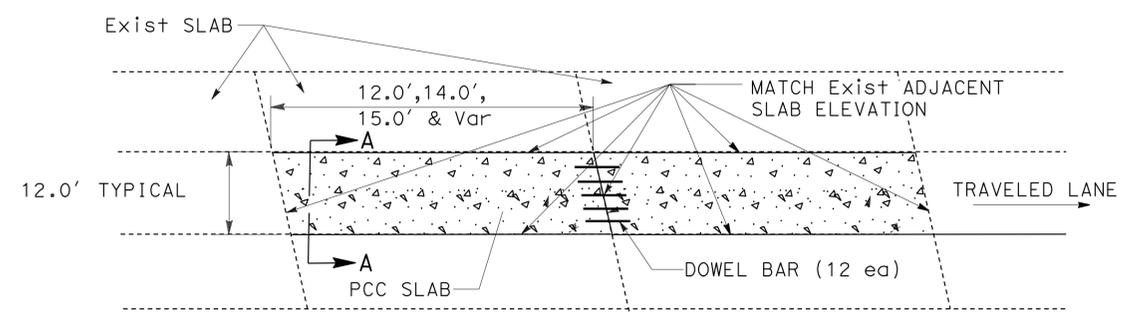
**SECTION B-B**



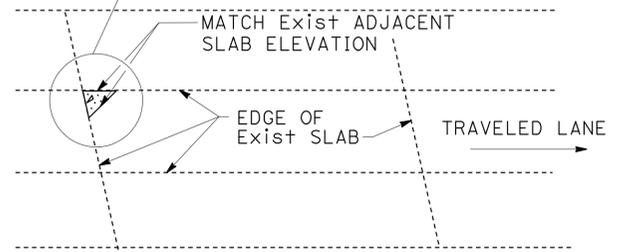
**SECTION A-A**



**PLAN SPALLING SLAB**



**LIMITS OF REPLACE CONCRETE PAVEMENT**



**CONSTRUCTION DETAILS**

NO SCALE

**C-1**

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
 DESIGN  
 Matthew Q. Cugini  
 Functional Supervisor  
 Henry Nguyen  
 Revised By  
 HN  
 10-08-09  
 Date Revised

**NOTE:**

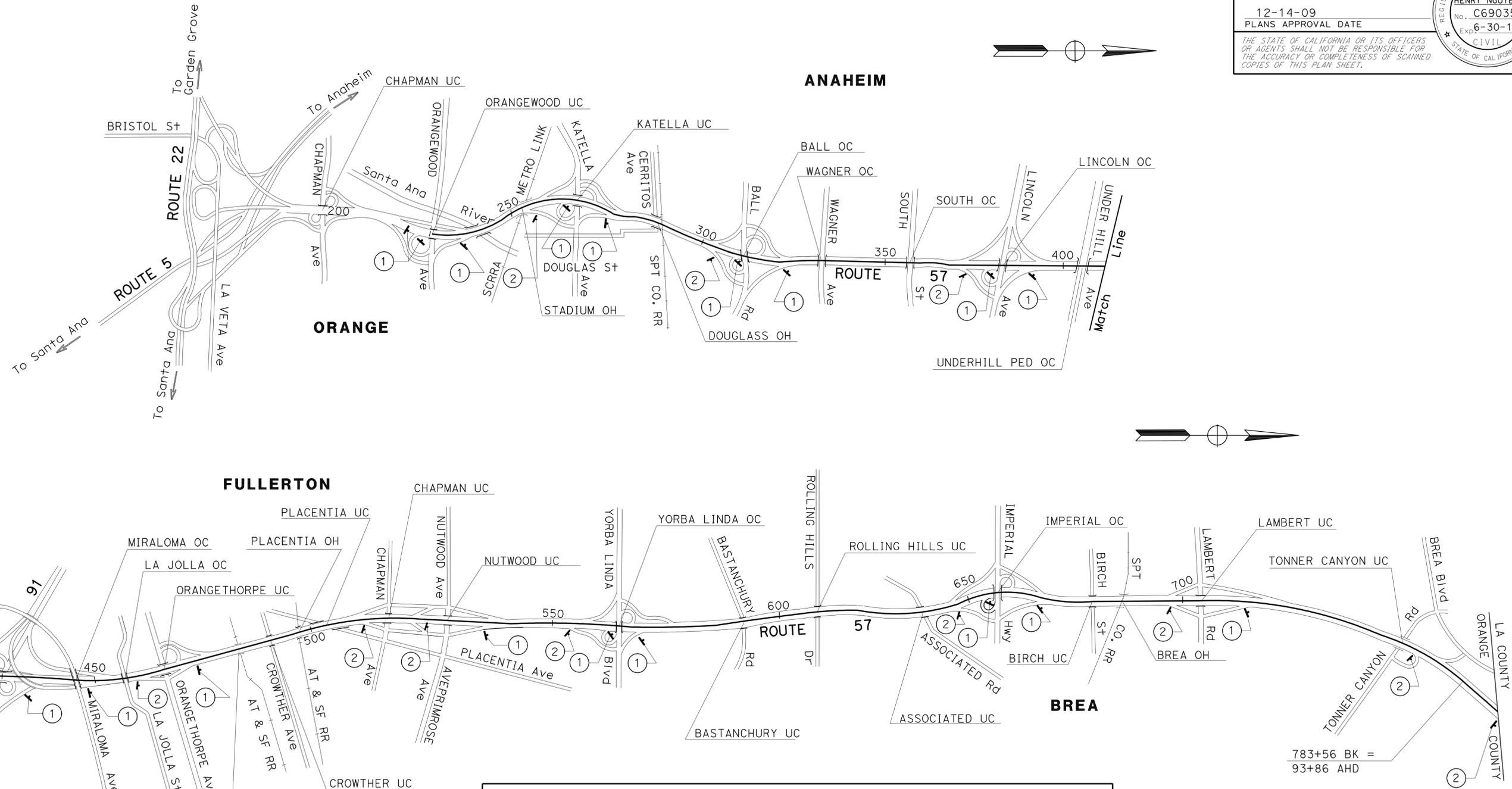
1. LOCATIONS OF CONSTRUCTION AREA SIGNS SHOWN HERE ARE APPROXIMATE.  
EXACT LOCATIONS WILL BE DETERMINED BY THE ENGINEER.

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	57	11.8/22.5	35	64

REGISTERED CIVIL ENGINEER DATE 11-09-09  
 HENRY NGUYEN  
 No. C69035  
 Exp. 6-30-10  
 CIVIL  
 STATE OF CALIFORNIA

12-14-09  
 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.



STATIONARY MOUNTED CONSTRUCTION AREA SIGNS						
SIGN NUMBER	SIGN CODE	No. OF SIGNS	PANEL SIZE	WOOD POST		SIGN MESSAGE
				No. POST	POST SIZE	
①	W20-1	18	48" x 18"	1	4" x 6"	ROAD WORK AHEAD
②	G20-2	12	48" x 18"	1	4" x 6"	END ROAD WORK

783+56 BK =  
93+86 AHD

**CONSTRUCTION AREA SIGNS**

NO SCALE

**CS-1**

THIS PLAN ACCURATE FOR CONSTRUCTION AREA SIGNS WORK ONLY

RELATIVE BORDER SCALE  
IS IN INCHES



USERNAME => trlenard  
DGN FILE => c0j730ma001.dgn

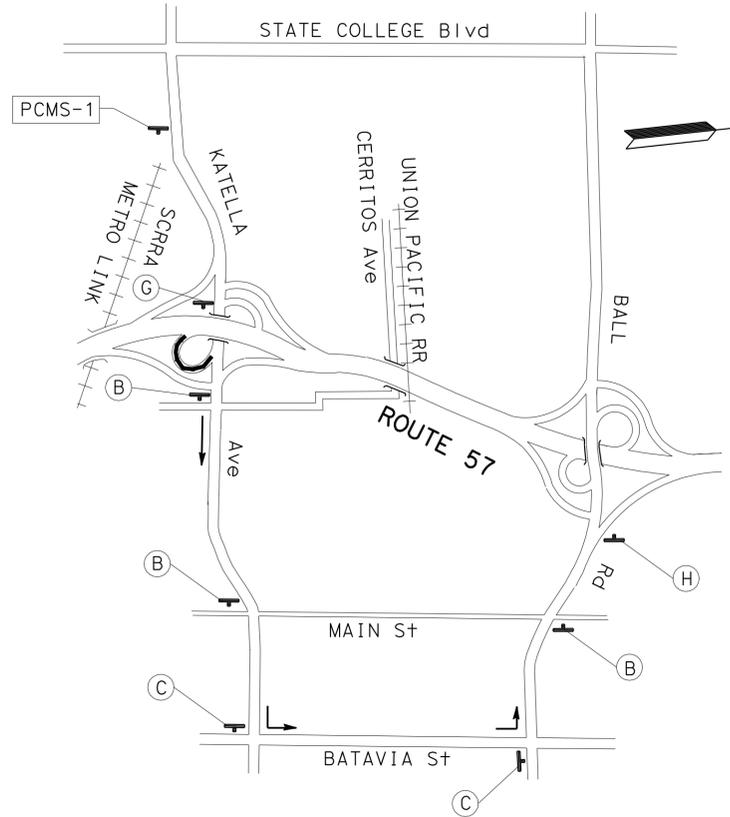
CU 12222

EA 0J7301

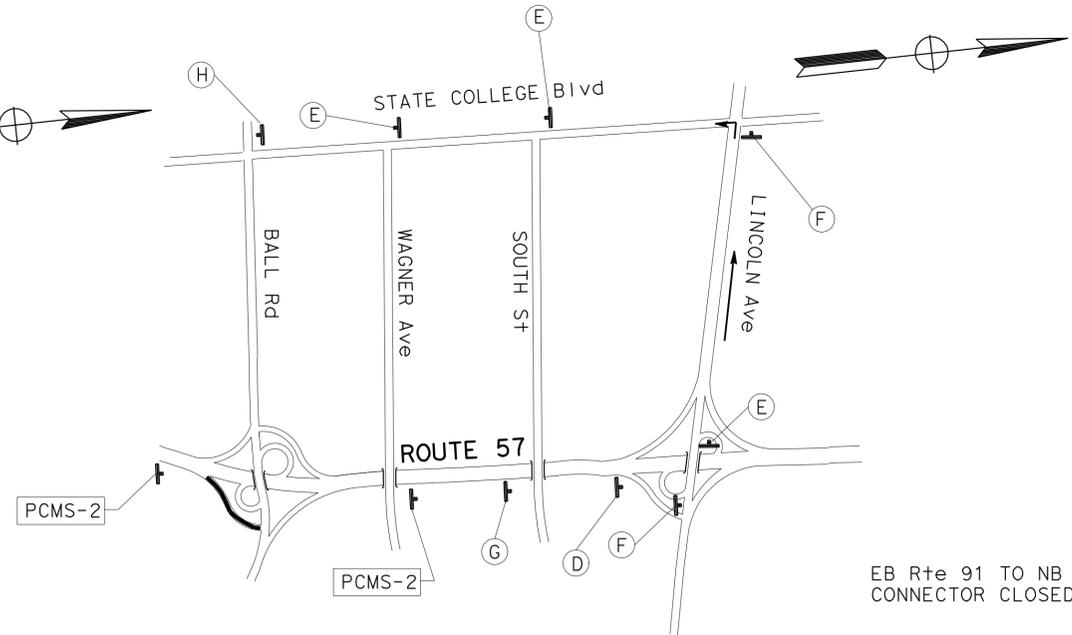
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	57	11.8/22.5	36	64
			11-09-09	REGISTERED CIVIL ENGINEER DATE	
			12-14-09	PLANS APPROVAL DATE	
<small>THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.</small>					



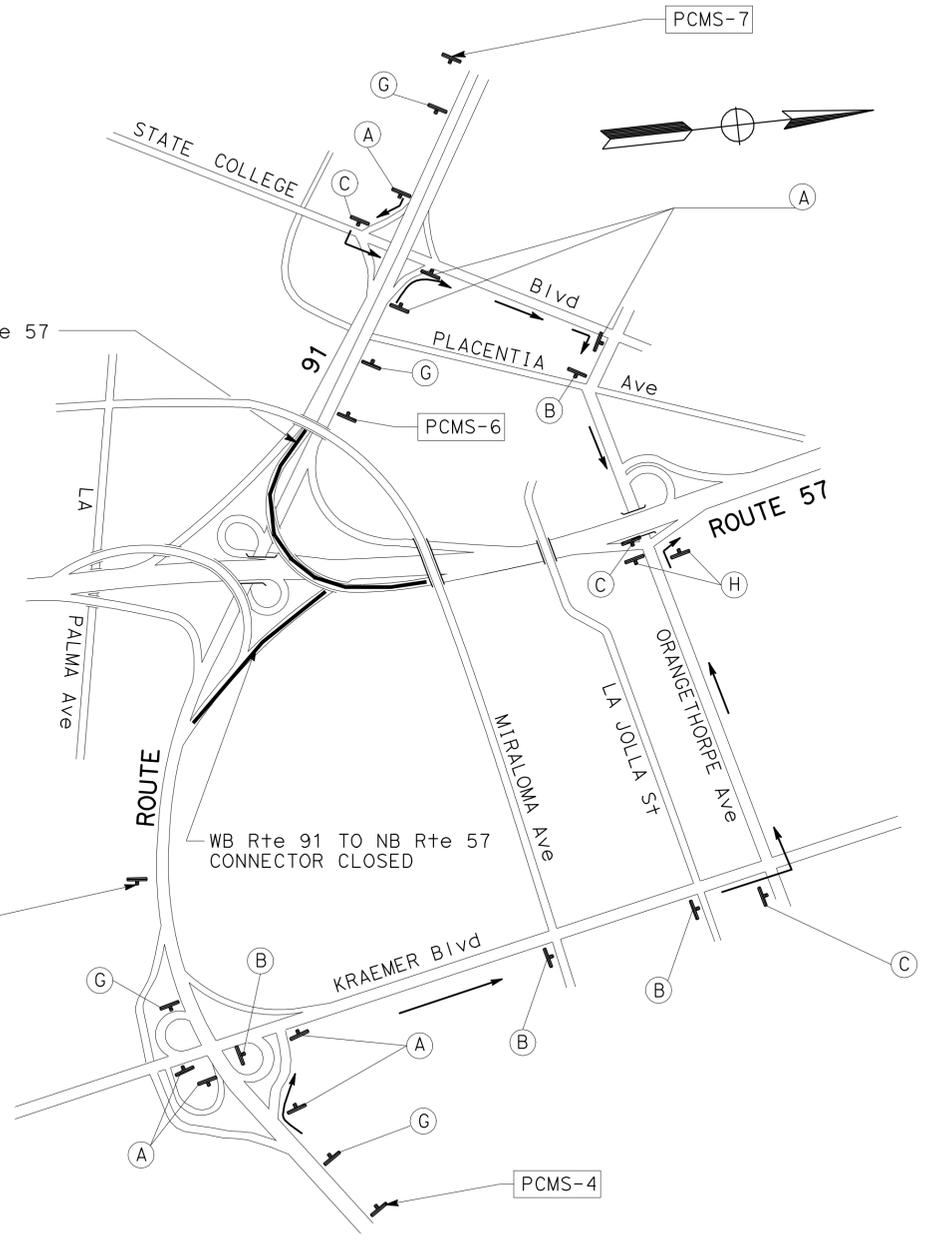
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**Caltrans**  
 DESIGN  
 FUNCTIONAL SUPERVISOR: MATTHEW Q. CUGINI  
 CHECKED BY: M. Q. CUGINI  
 DESIGNED BY: HENRY NGUYEN  
 REVISIONS: HN 10-08-09  
 DATE REVISOR: 10-08-09



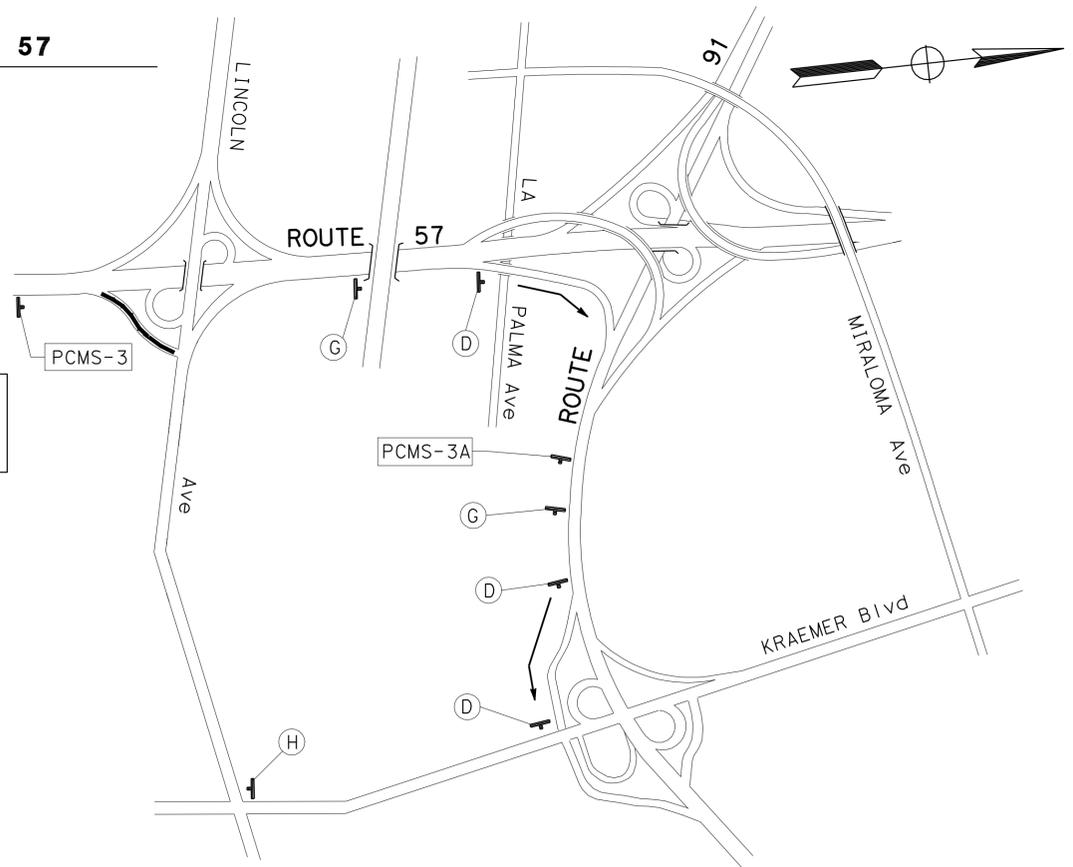
**CLOSURE DETOUR FOR  
EB KATELLA ON-RAMP TO NB Rte 57**



**CLOSURE DETOUR FOR  
NB Rte 57 OFF-RAMP  
TO BALL ROAD**



**CLOSURE DETOURS FOR WB AND EB Rte 91  
CONNECTORS TO NB Rte 57**



**CLOSURE DETOUR FOR NB Rte 57  
OFF-RAMP TO LINCOLN Ave**

- |  |  |
|--|--|
| NB 57 ON-RAMP CLOSED<br>USE BATAVIA ST<br>PCMS 1                   | NB ROUTE 57 CONNECTOR CLOSED<br>USE KRAEMER EXIT<br>PCMS 4 |
| BALL ROAD OFF-RAMP CLOSED<br>USE LINCOLN EXIT<br>PCMS 2            | NB 57 DETOUR<br>USE NB KRAEMER EXIT<br>PCMS 5              |
| LINCOLN AVENUE OFF-RAMP CLOSED<br>USE EB 91 EXIT KRAEMER<br>PCMS 3 | NB ROUTE 57 DETOUR<br>USE STATE COLLEGE EXIT<br>PCMS 6     |
| LINCOLN AVENUE DETOUR<br>USE SB KRAEMER EXIT<br>PCMS 3A            | NB 57 CONNECTOR CLOSED<br>USE STATE COLLEGE EXIT<br>PCMS 7 |

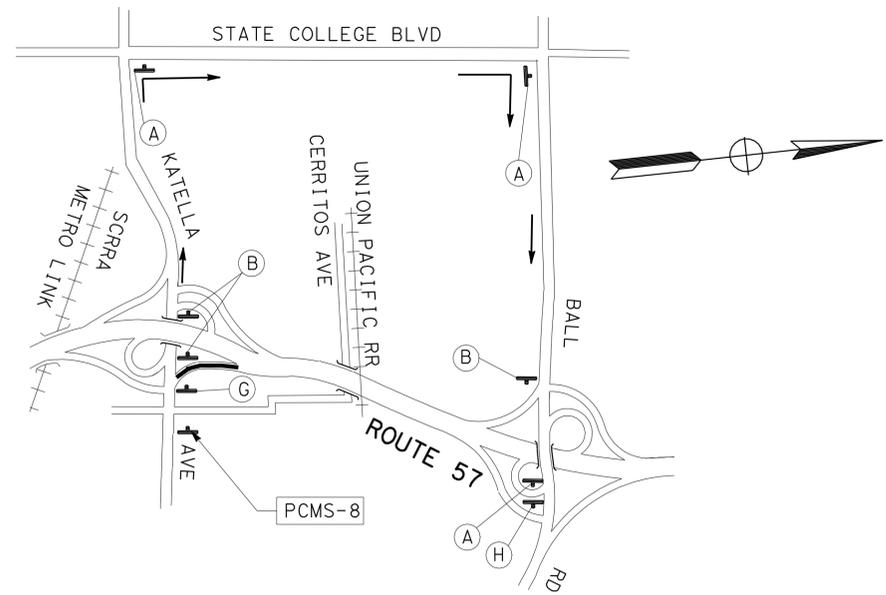
THIS PLAN ACCURATE FOR TRAFFIC HANDLING WORK ONLY

NO SCALE

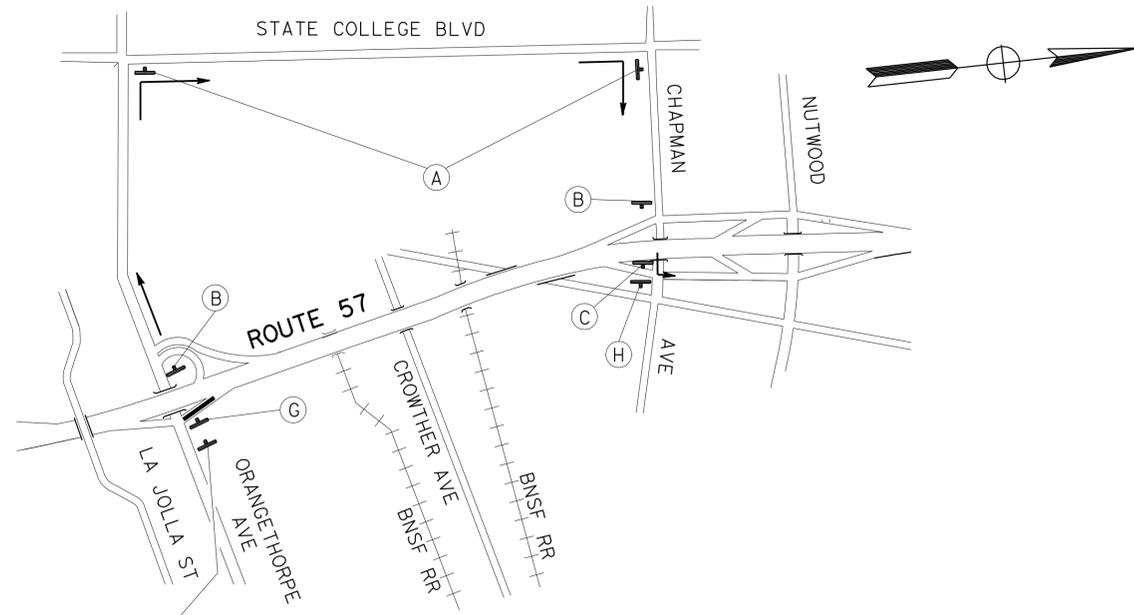
**TH-1**



Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	57	11.8/22.5	37	64
			11-09-09	REGISTERED CIVIL ENGINEER DATE	
			12-14-09	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>					



**CLOSURE DETOUR FOR  
KATELLA WB ON-RAMP TO NB RTE 57**



**CLOSURE DETOUR FOR  
ORANGETHORPE AVE WB ON-RAMP  
TO NB RTE 57**

NB 57  
ON-RAMP CLOSED  
USE STATE COLLEGE

PCMS 8

CHAPMAN/NUTWOOD AVE  
OFF-RAMPS CLOSED  
USE YORBA LINDA EXIT

PCMS 9

CHAPMAN/NUTWOOD AVE  
DETOUR AHEAD  
USE YORBA LINDA EXIT

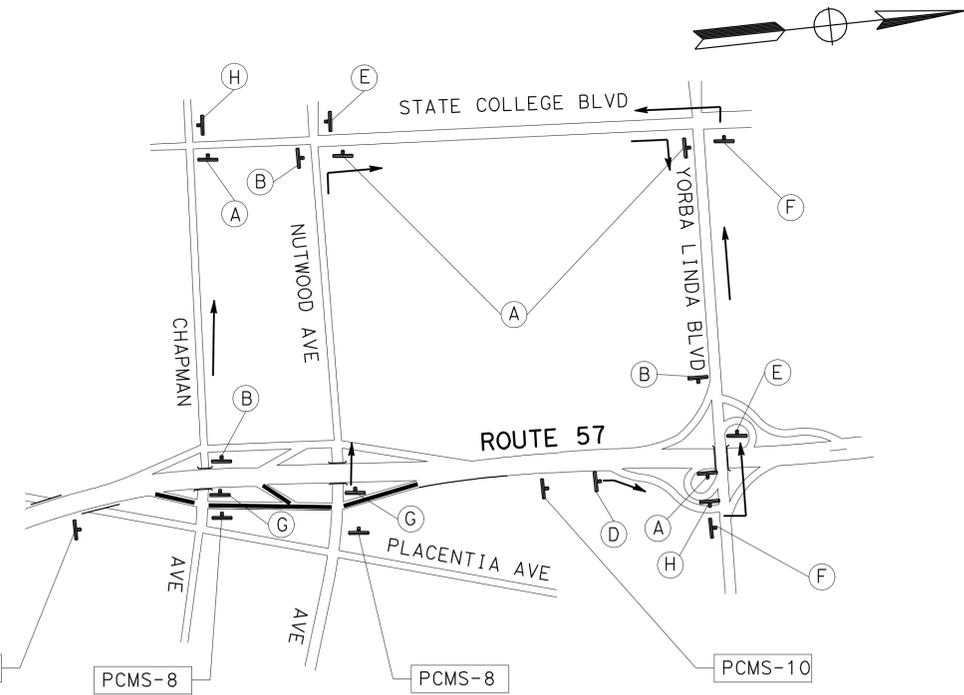
PCMS 10

YORBA LINDA BLVD  
OFF-RAMP CLOSED  
USE IMPERIAL EXIT

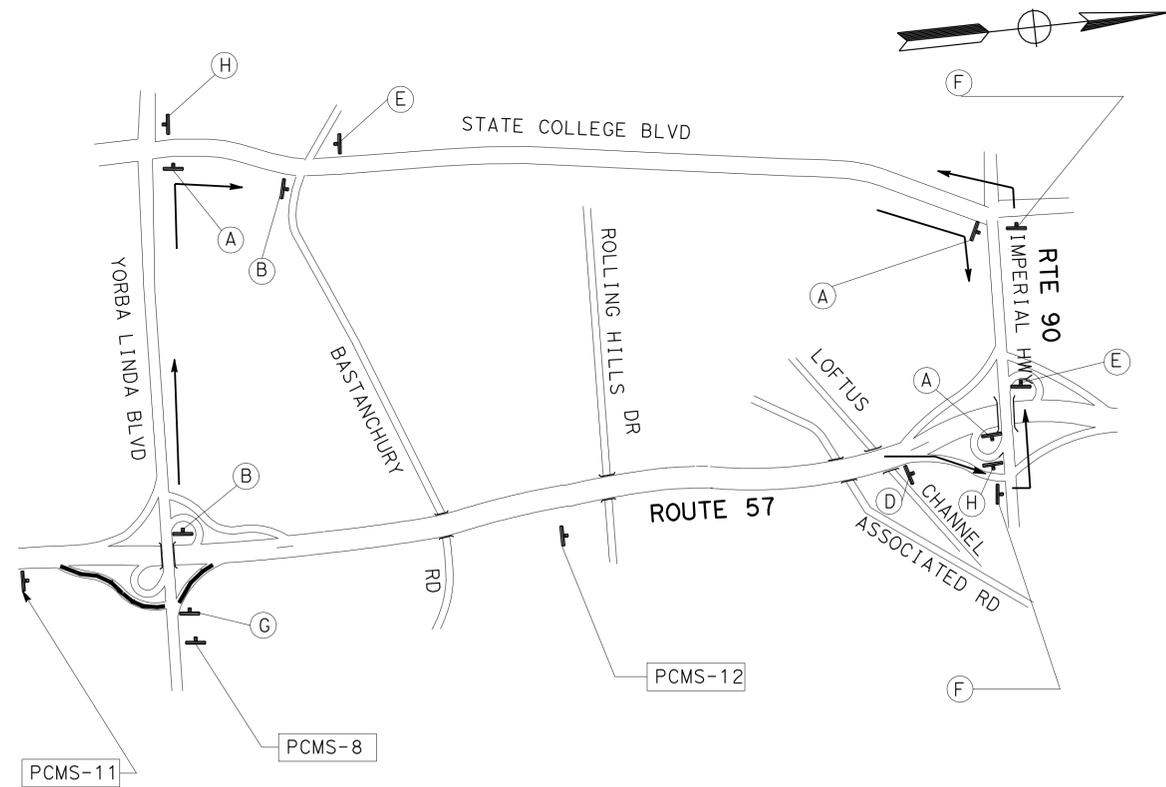
PCMS 11

YORBA LINDA BLVD  
DETOUR AHEAD  
USE IMPERIAL EXIT

PCMS 12



**CLOSURE DETOURS FOR  
WB NUTWOOD AND WB CHAPMAN AVENUE  
ON-RAMPS AND NB RTE 57 OFF-RAMPS  
TO CHAPMAN AND NUTWOOD AVENUE**



**CLOSURE DETOUR FOR  
YORBA LINDA AVE ON- AND  
OFF-RAMPS TO NB RTE 57**

**TRAFFIC HANDLING PLAN  
(DETOUR ROUTE)**

**TH-2**

THIS PLAN ACCURATE FOR TRAFFIC HANDLING WORK ONLY

NO SCALE

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
DESIGN  
Matthew Q. Cugini  
FUNCTIONAL SUPERVISOR  
MATTHEW Q. CUGINI  
CHECKED BY  
HENRY NGUYEN  
M. Q. CUGINI  
REVISOR  
HENRY NGUYEN  
M. Q. CUGINI  
DATE REVISOR  
10-08-09  
DATE REVISOR  
10-08-09  
H.N.





FUNCTIONAL SUPERVISOR MATTHEW Q. CUGINI	DESIGNED BY HENRY NGUYEN	REVISOR M. Q. CUGINI	DATE 10-08-09
CHECKED BY	DESIGNED BY	REVISOR	DATE
CALCULATED-DESIGNED BY	DESIGNED BY	REVISOR	DATE
CHECKED BY	DESIGNED BY	REVISOR	DATE

### PAVEMENT DELINEATION QUANTITIES

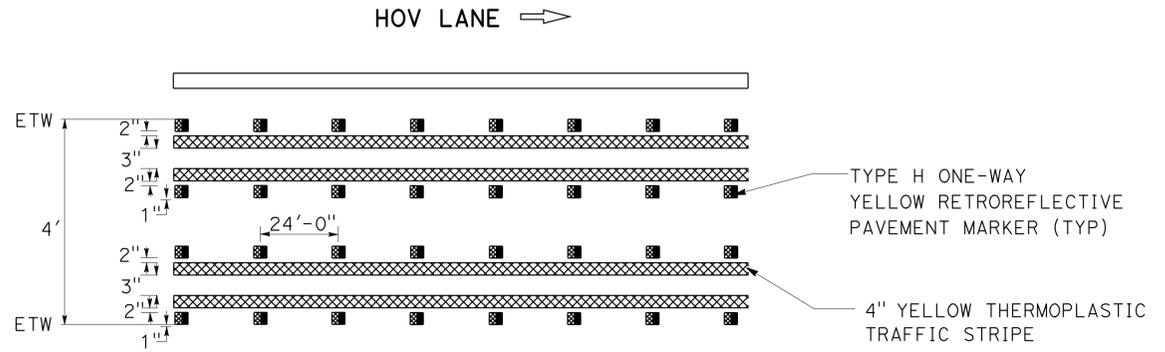
SHEET No.	PAINT TRAFFIC STRIPE (2-COAT)	THERMOPLASTIC TRAFFIC STRIPE				PAVEMENT MARKER				REMOVE YELLOW THERMO-PLASTIC TRAFFIC STRIPE
		4"		8"		RETRO-REFLECTIVE				
		WHITE	WHITE	YELLOW	WHITE	WHITE	(NON-REFLECTIVE) TYPE A	TYPE C	TYPE G	
L-1	24					4		2		
L-2	12	14				2		2		
L-3	60	42				10		5		
L-4	72	44				12	12	6		
L-6	24	14				6	12	3		
L-7	24	42				6		3		
L-8	24	28				6	12	3		
L-10	24	74				6		4		
L-12	6					2	16	2		
L-14	24					6		4		
L-15	300	30	40			100	16	50	4	40
L-16	60	63			14	20	12	10		
L-18	72	77				24		12		
L-19	24				14	8	12	4		
L-20	216	616			42	72		36		
L-21	72	84		70		20		10		
L-22	192	224				64		32		
L-23	48	154				16	12	8		
L-24	120	245	120			40		20	8	120
L-25	60	70	120			20	12	10	8	120
L-26	24	14		14		8		4		
L-27	72	56				24		12		
L-28	12	14				4		2		
L-29	48	114				16		8		
L-30	12	14				4		2		
L-31	12	14				4		2		
SUBTOTAL	1638	2047	280	84	70	504	116	256	20	280
TOTAL	1638	2327	84	70	504		392			280

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	57	11.8/22.5	40	64

REGISTERED CIVIL ENGINEER DATE 11-09-09  
 HENRY NGUYEN  
 No. C69035  
 Exp. 6-30-10  
 CIVIL  
 STATE OF CALIFORNIA

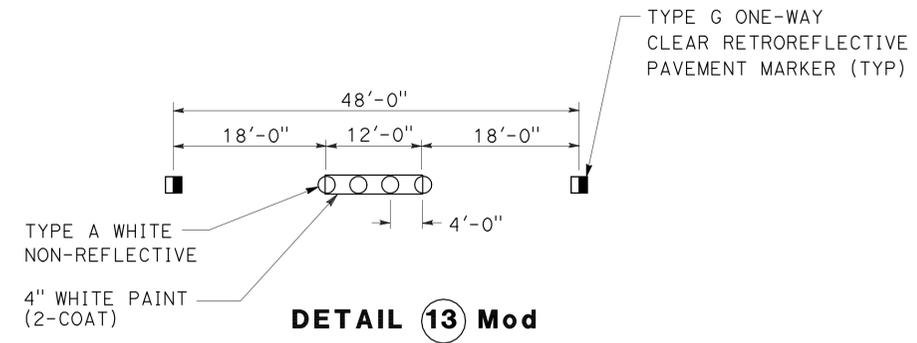
12-14-09  
 PLANS APPROVAL DATE

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MIXED FLOW LANE →

**DETAIL B**  
HOV



### PAVEMENT DELINEATION DETAILS AND QUANTITIES

NO SCALE

PDQ-1

**ROADWAY QUANTITIES**

SHEET No.	REPLACE CONCRETE PAVEMENT (RAPID STRENGTH CONCRETE) (SPALLING SLAB REPLACEMENT)	REPLACE CONCRETE PAVEMENT (RAPID STRENGTH CONCRETE) (PARTIAL SLAB REPLACEMENT)	REPLACE CONCRETE PAVEMENT (RAPID STRENGTH CONCRETE) (FULL SLAB REPLACEMENT)	REPLACE CONCRETE PAVEMENT (RAPID STRENGTH CONCRETE)	DOWEL BAR
	EA (N)	EA (N)	EA (N)	CY	EA
L-1	1		1	4.87	
L-2	2		1	4.91	
L-3		2	3	19.32	24
L-4	2		3	14.57	
L-5	1			0.04	
L-6	1	1	1	7.29	
L-7			3	14.49	24
L-8	3		4	19.44	
L-9	2			0.08	
L-10	1		1	4.87	12
L-11	5			0.20	
L-12	3	1		2.54	
L-13	2			0.08	
L-14	3		3	14.61	12
L-15	9	1	46	224.96	360
L-16	2	1	10	50.80	36
L-17	1			0.04	
L-18	5	2	14	72.65	24
L-19	29		3	15.65	
L-20	3	21	51	297.27	336
L-21	3		16	77.40	72
L-22	1		33	159.43	132
L-23	3		12	58.08	48
L-24	5	1	26	128.20	72
L-25	4		10	48.46	12
L-26			6	28.98	
L-27	2		13	62.87	12
L-28	3		1	4.95	
L-29	5	3	8	46.10	24
L-30	3		2	9.78	
L-31	3		2	9.78	
TOTAL	107	33	273	1402.71	1200

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

**TEMPORARY WATER POLLUTION CONTROL SUMMARY OF QUANTITIES**

STATION	TEMPORARY DRAINAGE INLET PROTECTION
	EA
"A" 230+00 TO 783+56	33
TOTAL	33

**SUMMARY OF QUANTITIES**

**Q-1**

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	57	11.8/22.5	41	64

 11-09-09  
 REGISTERED CIVIL ENGINEER DATE

12-14-09  
 PLANS APPROVAL DATE

HENRY NGUYEN  
 No. C69035  
 Exp. 6-30-10  
 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.



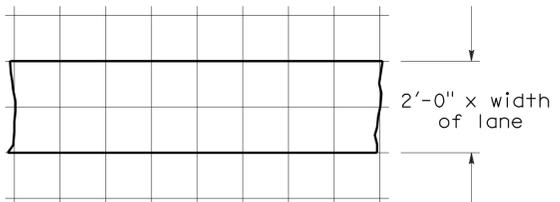


DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
12	Ora	57	11.8/22.5	44	64

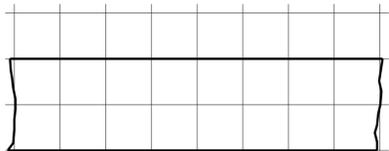
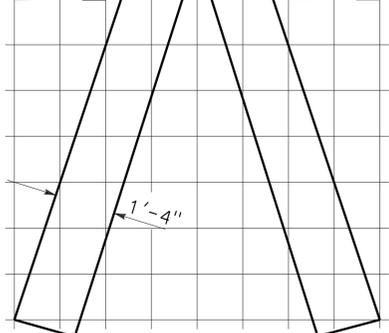
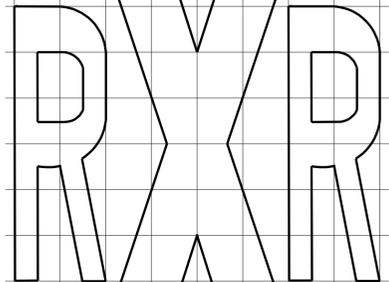
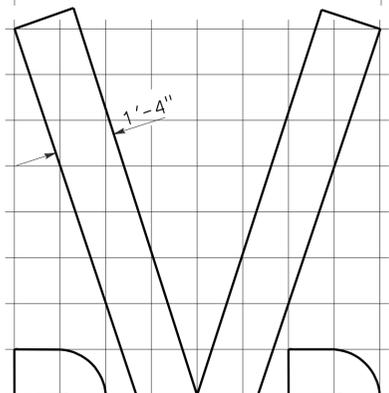
Donald E. Howe  
 REGISTERED CIVIL ENGINEER  
 June 6, 2008  
 PLANS APPROVAL DATE  
 The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

REGISTERED PROFESSIONAL ENGINEER  
 Donald E. Howe  
 No. C46402  
 Exp. 3-31-09  
 CIVIL  
 STATE OF CALIFORNIA

To accompany plans dated 12-14-09



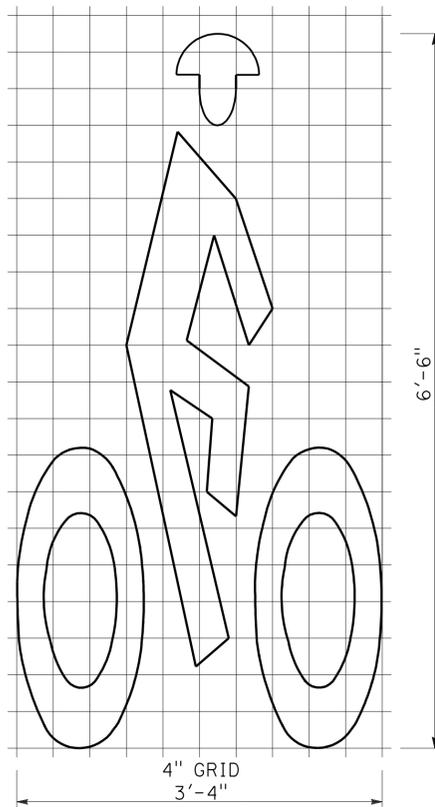
8'-0"



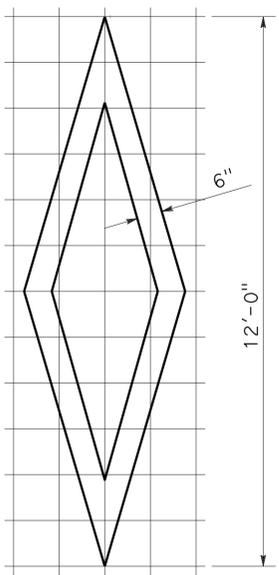
1'-0" GRID  
A=70 sq ft \*

**RAILROAD CROSSING SYMBOL**

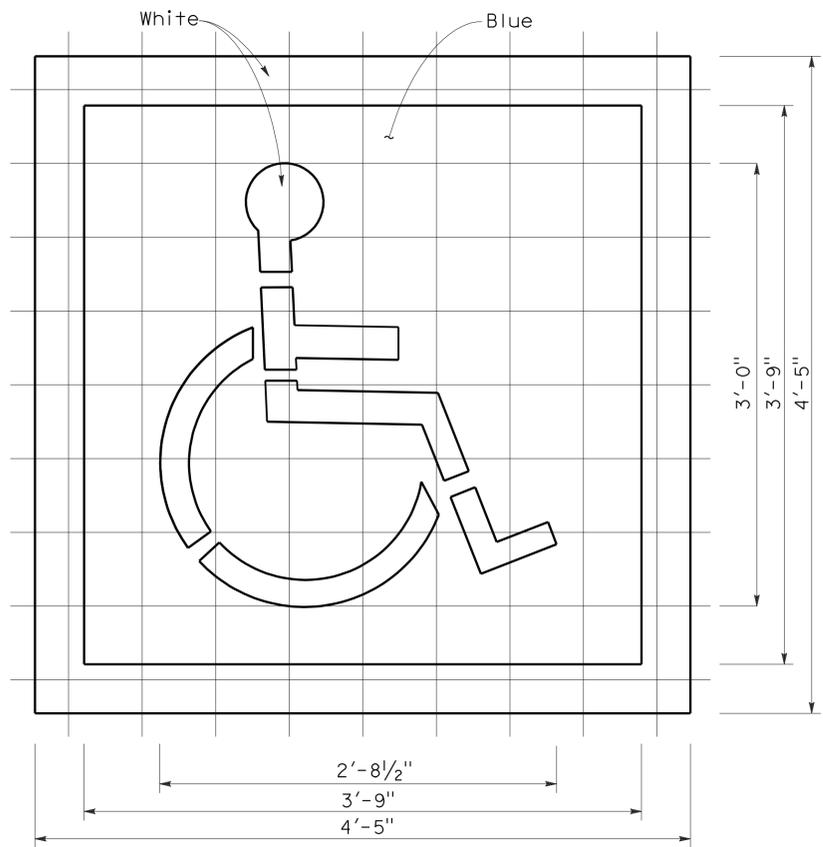
\*70 sq ft DOES NOT INCLUDE THE 2'-0" x VARIABLE WIDTH TRANSVERSE LINES.



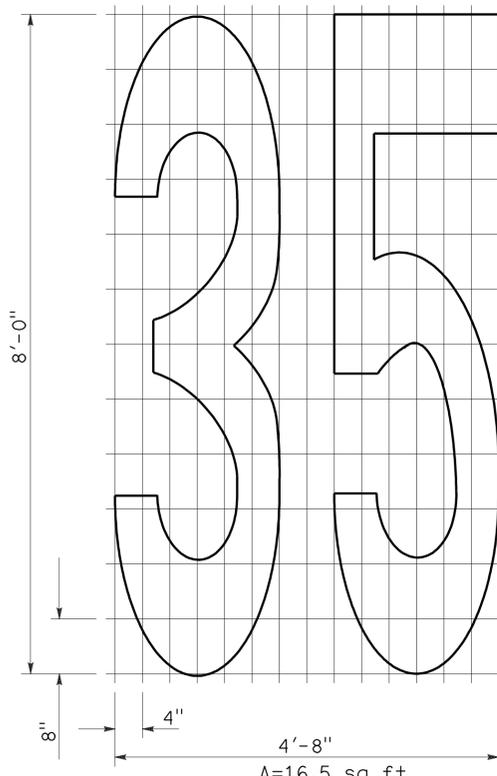
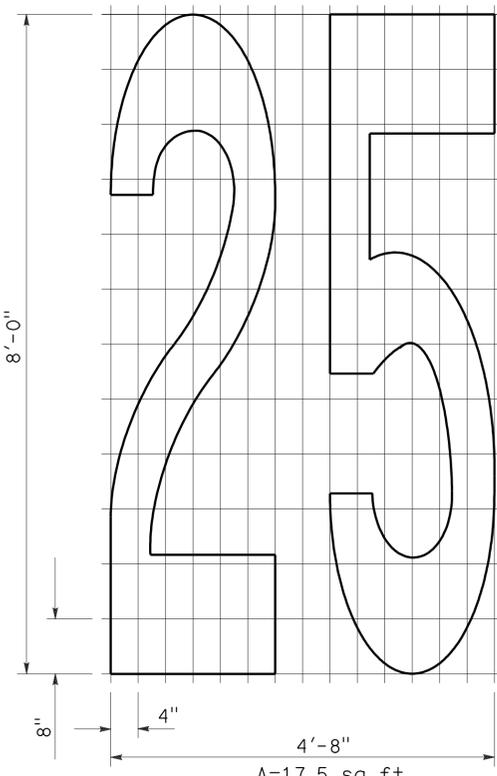
**BIKE LANE SYMBOL**



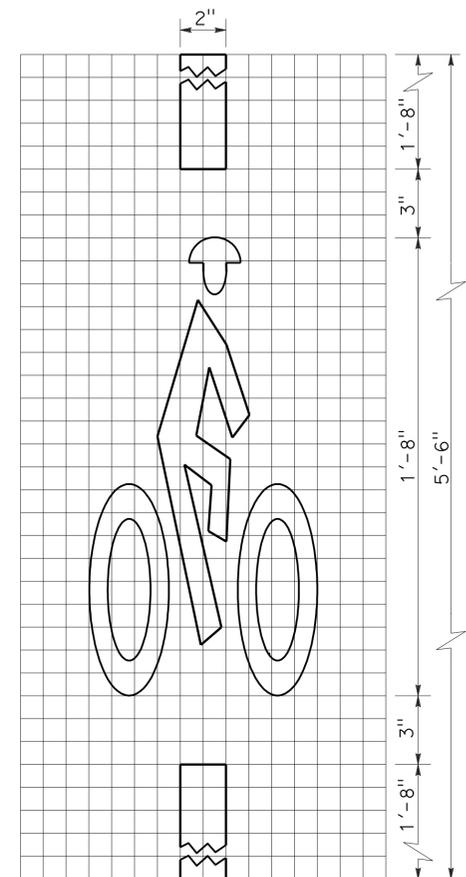
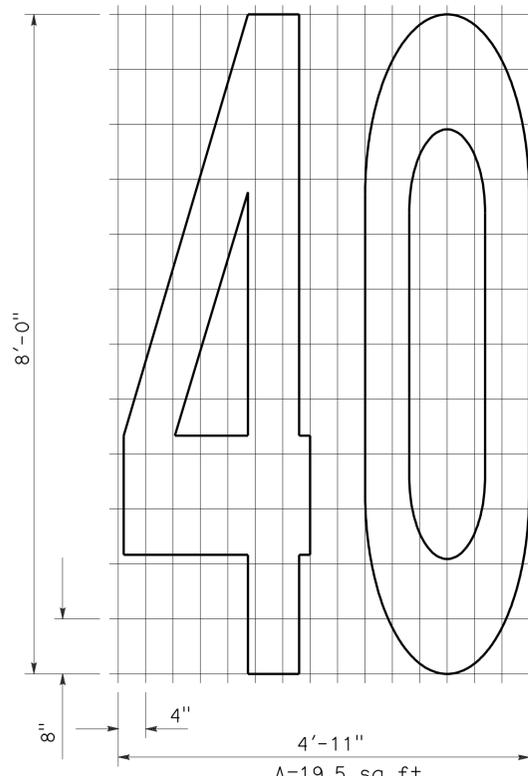
**DIAMOND SYMBOL**



**INTERNATIONAL SYMBOL OF ACCESSIBILITY MARKING**



**NUMERALS**



**BICYCLE LOOP DETECTOR SYMBOL**

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

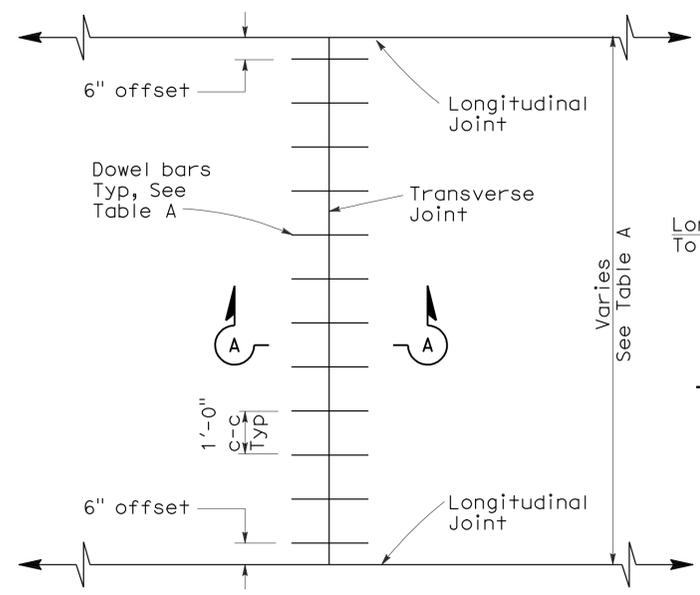
STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION  
**PAVEMENT MARKINGS SYMBOLS AND NUMERALS**

NO SCALE

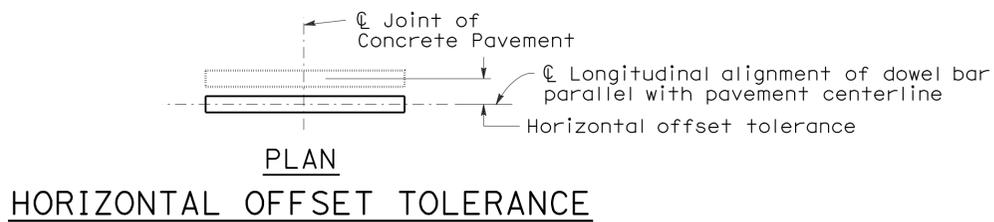
**REVISED STANDARD PLAN RSP A24C**

RSP A24C DATED JUNE 6, 2008 SUPERSEDES STANDARD PLAN A24C DATED MAY 1, 2006 - PAGE 11 OF THE STANDARD PLANS BOOK DATED MAY 2006.

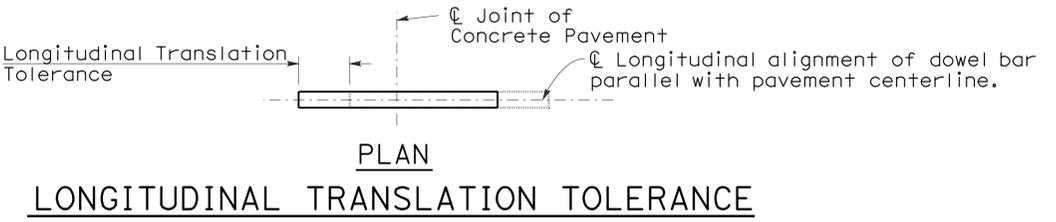
2006 REVISED STANDARD PLAN RSP A24C



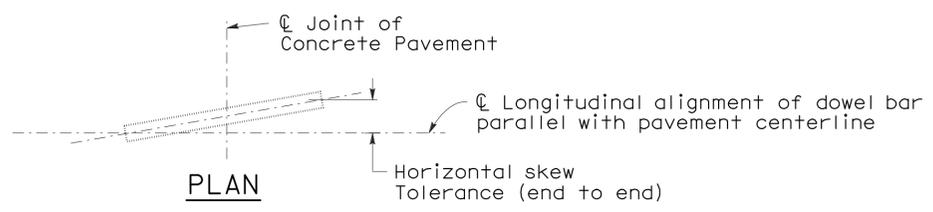
**TRANSVERSE JOINT DOWEL BAR LAYOUT**



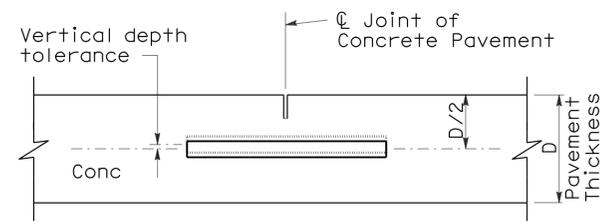
**HORIZONTAL OFFSET TOLERANCE**



**LONGITUDINAL TRANSLATION TOLERANCE**

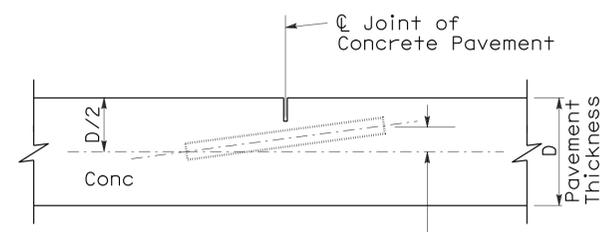


**HORIZONTAL SKEW TOLERANCE**



**ELEVATION**

**VERTICAL DEPTH TOLERANCE**



**ELEVATION**

**VERTICAL SKEW TOLERANCE**

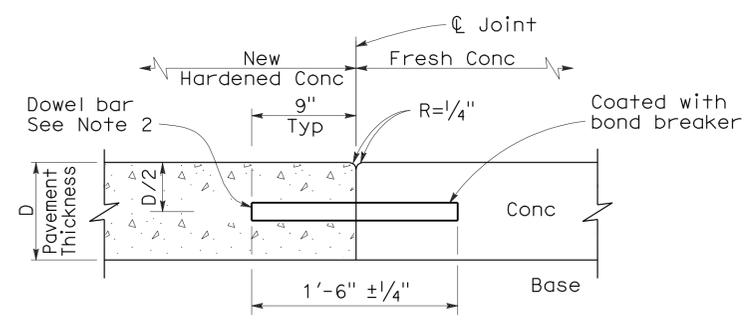
To accompany plans dated 12-14-09

**NOTES:**

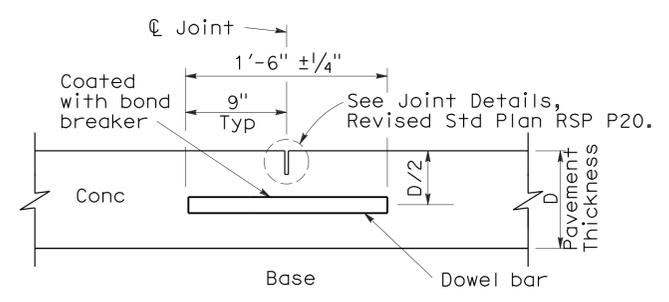
- See Revised Standard Plan RSP P1 for typical dowel bar placement and locations.
- 1 1/2" Dia smooth dowel bars are to be used with a pavement thickness, D, equal to or greater than 0.70 feet. For pavement thickness, D, less than 0.70 feet, use 1 1/4" Dia smooth dowel bars.
- For widths not shown, see Project Plans.
- If fresh concrete pavement is placed adjacent to existing concrete pavement, the top corner of the existing concrete pavement does not need to be rounded to the 1/4" radius, as shown.

**TABLE A (See Note 3)**

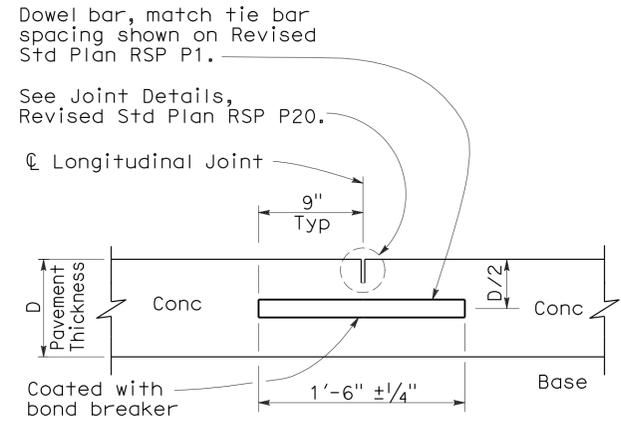
Dowel Bar Transverse Spacing Table	
Width between Longitudinal Joints	Number of Dowels between Longitudinal Joints
14'-0"	14
13'-0"	13
12'-0"	12
11'-0"	11
10'-0"	10
8'-0"	8
5'-0"	5
4'-0"	4



**SECTION A-A TRANSVERSE CONSTRUCTION JOINT DETAIL**

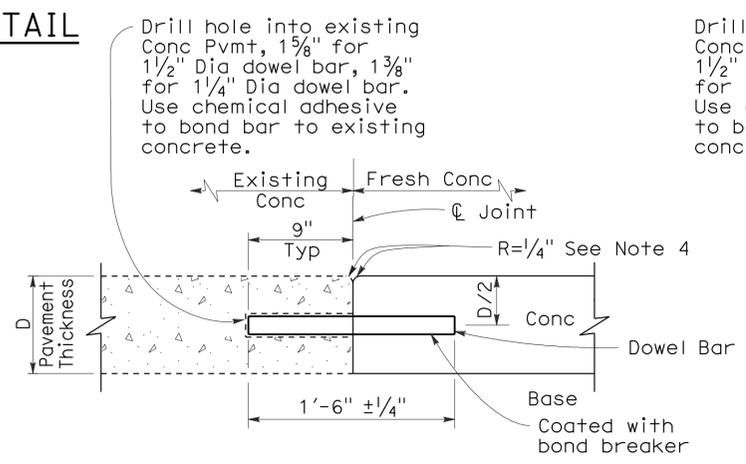


**TRANSVERSE CONTRACTION JOINT**



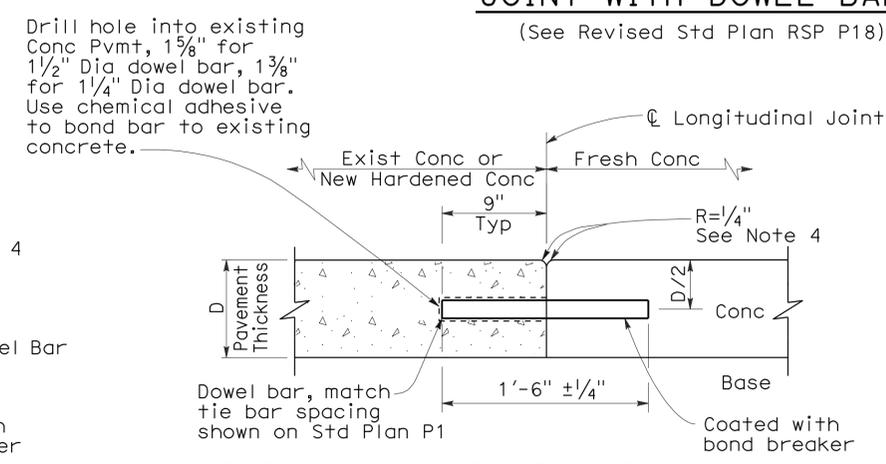
**LONGITUDINAL CONTRACTION JOINT WITH DOWEL BARS**

(See Revised Std Plan RSP P18)



**TRANSVERSE CONSTRUCTION JOINT FOR EXISTING CONCRETE PAVEMENT**

(Drill and bond locations)



**LONGITUDINAL CONSTRUCTION JOINT WITH DOWEL BARS**

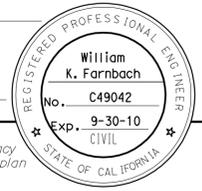
(See Revised Std Plan RSP P18)

STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION  
**CONCRETE PAVEMENT-DOWEL BAR DETAILS**  
NO SCALE

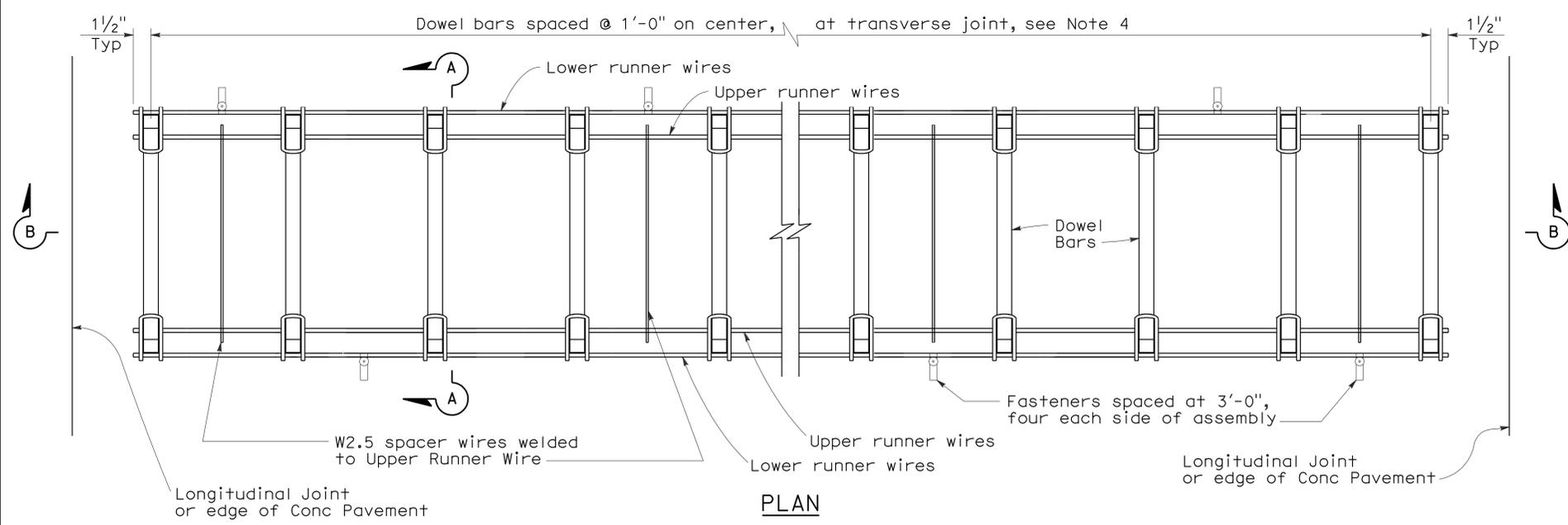
RSP P10 DATED MAY 15, 2009 SUPERSEDES STANDARD PLAN P10 DATED MAY 1, 2006 - PAGE 124 OF THE STANDARD PLANS BOOK DATED MAY 2006.

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
12	Ora	57	11.8/22.5	46	64

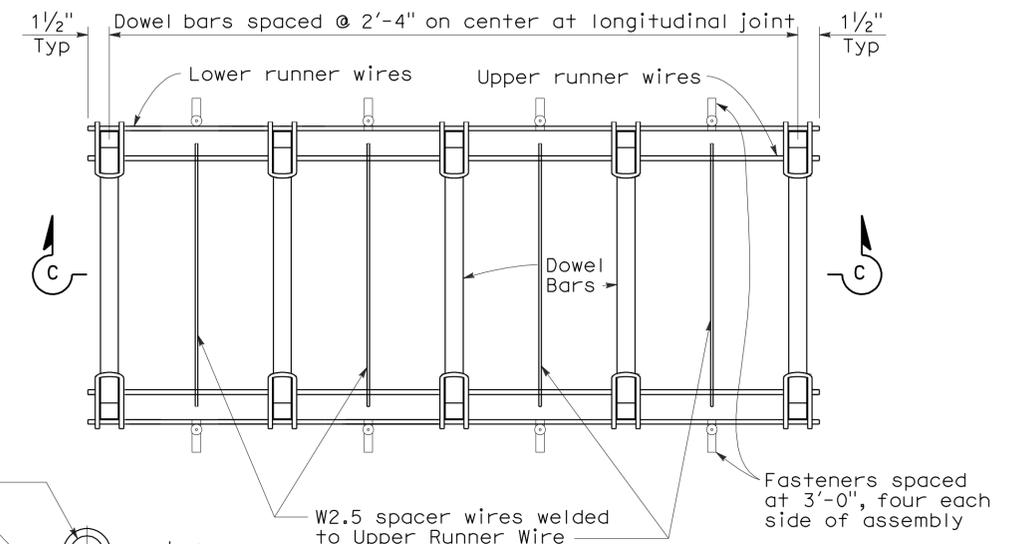
William K. Farnbach  
 REGISTERED CIVIL ENGINEER  
 May 15, 2009  
 PLANS APPROVAL DATE  
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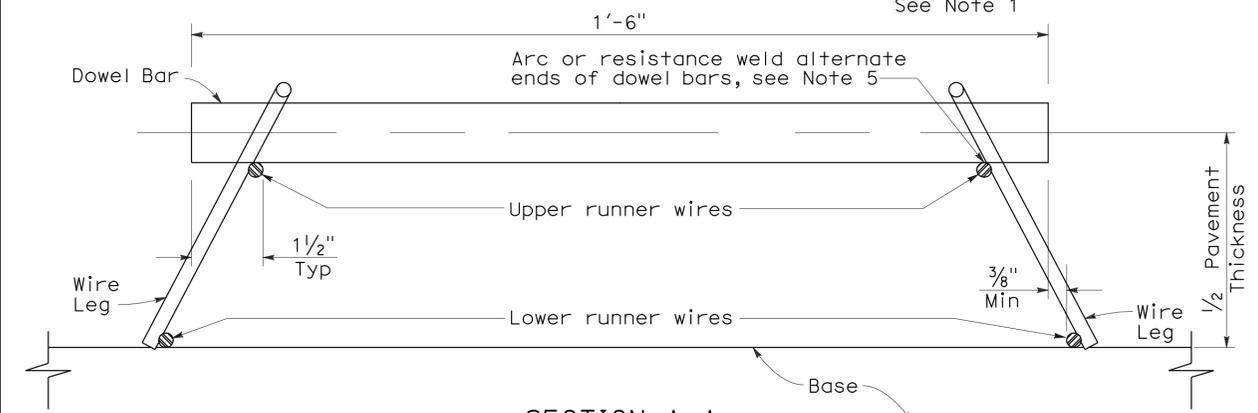
To accompany plans dated 12-14-09



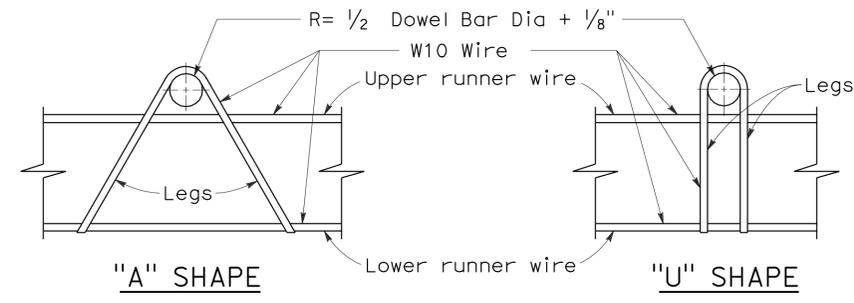
**PLAN  
DOWEL BAR BASKET  
(TRANSVERSE JOINT)**  
See Note 1



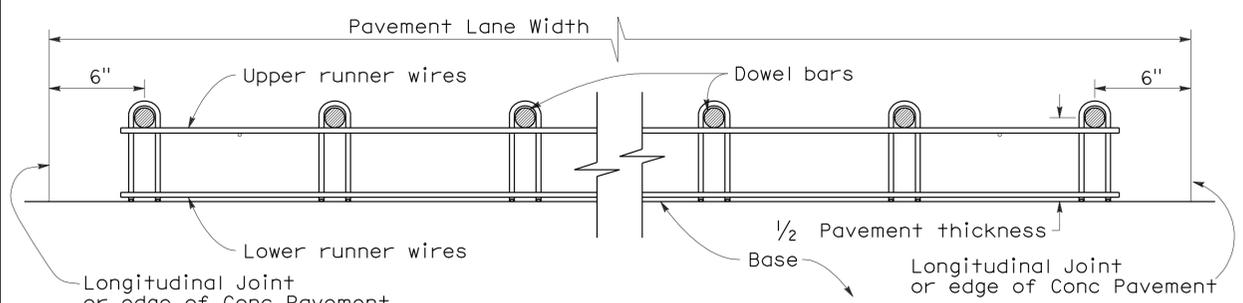
**PLAN  
DOWEL BAR BASKET  
(LONGITUDINAL JOINT)**  
See Note 1



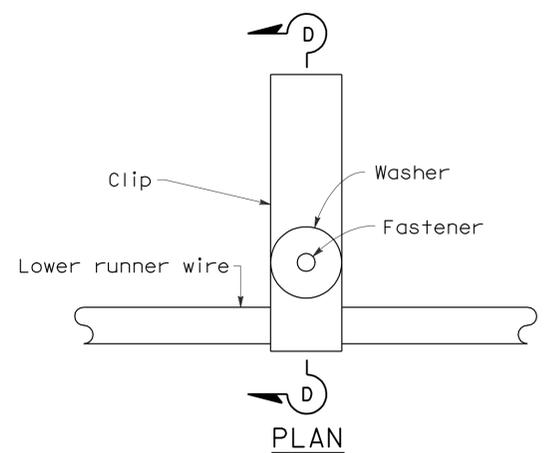
**SECTION A-A**



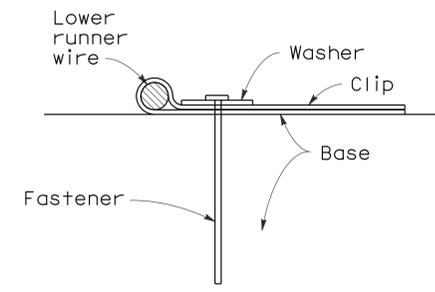
**ASSEMBLY FRAME DETAILS**



**SECTION B-B**  
See Note 1



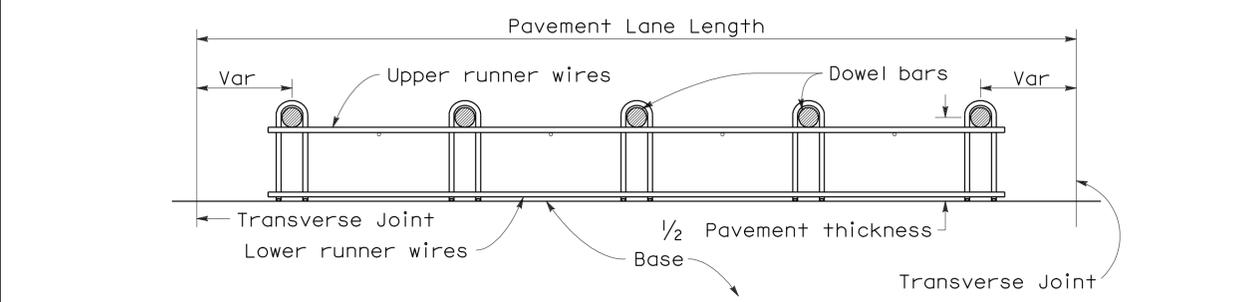
**FASTENER DETAIL**



**SECTION D-D**

**NOTES:**

- "U" frame shape assembly shown. "U" frame shape or "A" frame shape are acceptable.
- Wire sizes shown are minimum required.
- All wire intersections are to be resistance welded.
- Use tie bar spacing for longitudinal dowel bar locations. See Revised Std Plans RSPs P1, P2, and P3 for tie bar requirements.
- Weld may be at top or bottom of dowel bar.



**SECTION C-C**  
See Notes 1 and 4

STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION

**CONCRETE PAVEMENT-  
DOWEL BAR BASKET  
DETAILS**

NO SCALE

RSP P12 DATED MAY 15, 2009 SUPERSEDES RSP P12 DATED NOVEMBER 17, 2006 AND STANDARD PLAN P12 DATED MAY 1, 2006 - PAGE 125 OF THE STANDARD PLANS BOOK DATED MAY 2006.

**REVISED STANDARD PLAN RSP P12**

2006 REVISED STANDARD PLAN RSP P12

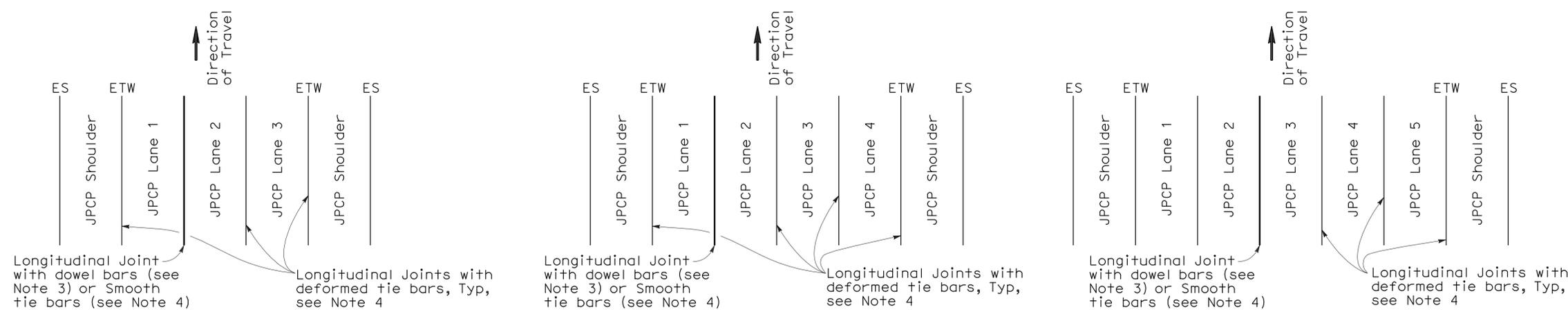
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
12	Ora	57	11.8/22.5	47	64

William K. Farnbach  
 REGISTERED CIVIL ENGINEER  
 June 5, 2009  
 PLANS APPROVAL DATE

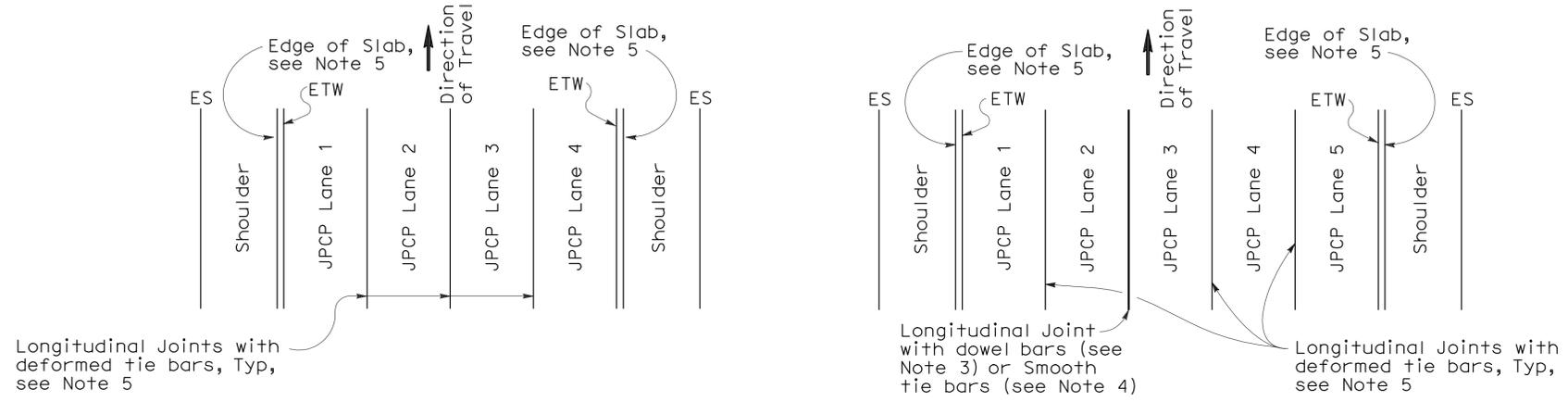
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REGISTERED PROFESSIONAL ENGINEER  
 William K. Farnbach  
 No. C49042  
 Exp. 9-30-10  
 CIVIL  
 STATE OF CALIFORNIA

To accompany plans dated 12-14-09

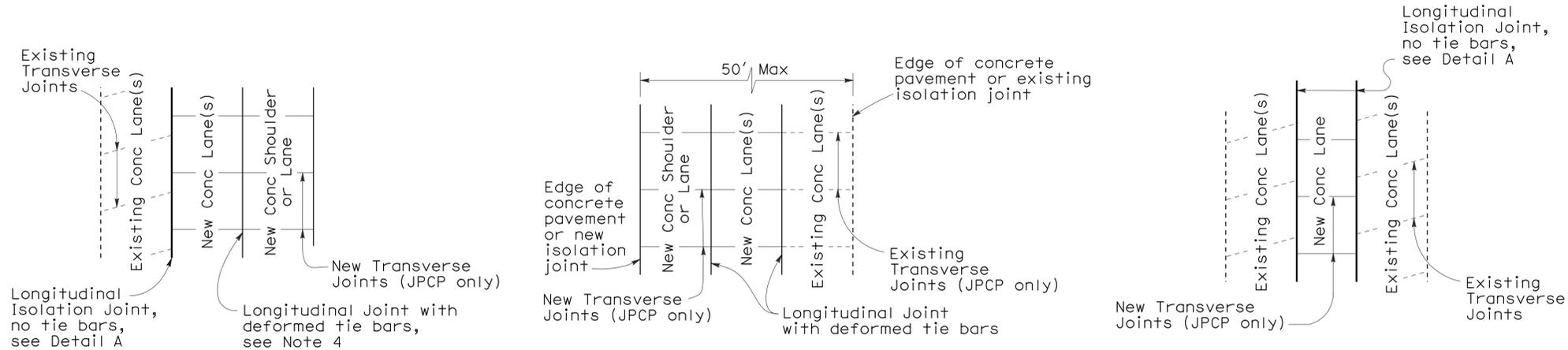


**3 LANES WITH TIED CONCRETE SHOULDERS PLAN**      **4 LANES WITH TIED CONCRETE SHOULDERS PLAN**      **5 LANES WITH TIED CONCRETE SHOULDERS PLAN**



**4 LANES OR LESS WITH WIDENED SLAB PLAN**      **5 LANES WITH WIDENED SLAB PLAN**

**NEW CONSTRUCTION**  
Location of Longitudinal Joints (For JPCP)



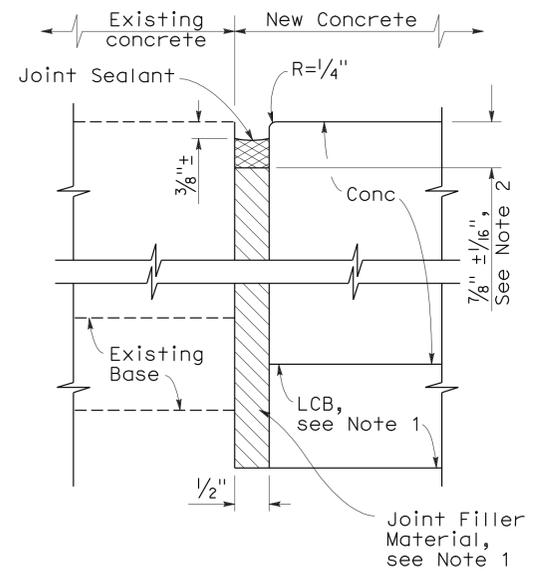
**CASE 1 PLAN**      **CASE 2 PLAN**      **CASE 3 (INTERIOR LANE REPLACEMENT) PLAN**

Transverse Joints do not align between new and existing      Transverse Joints align between new and existing      Transverse Joints do not align between new and existing

**LANE/SHOULDER ADDITION OR RECONSTRUCTION**  
(For JPCP and CRCP)

**NOTES:**

- Where Lean Concrete Base is not used as base material, the joint filler material used for the longitudinal isolation joint shall only extend to the bottom of the new concrete slab. See Detail A.
- Use  $5/8" \pm 1/16"$  dimension for silicone sealant.
- See Revised Standard Plan RSP P10 for longitudinal joint with dowel bars.
- See Revised Standard Plan RSP P1.
- See Revised Standard Plan RSP P2.



**DETAIL A**  
**ISOLATION JOINT**

STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION  
**CONCRETE PAVEMENT-LANE SCHEMATICS AND ISOLATION JOINT DETAIL**

NO SCALE

RSP P18 DATED JUNE 5, 2009 SUPERSEDES RSP P18 DATED MAY 15, 2009, RSP P18 DATED NOVEMBER 17, 2006 AND STANDARD PLAN P18 DATED MAY 1, 2006 - PAGE 127 OF THE STANDARD PLANS BOOK DATED MAY 2006.

**REVISED STANDARD PLAN RSP P18**

**2006 REVISED STANDARD PLAN RSP P18**

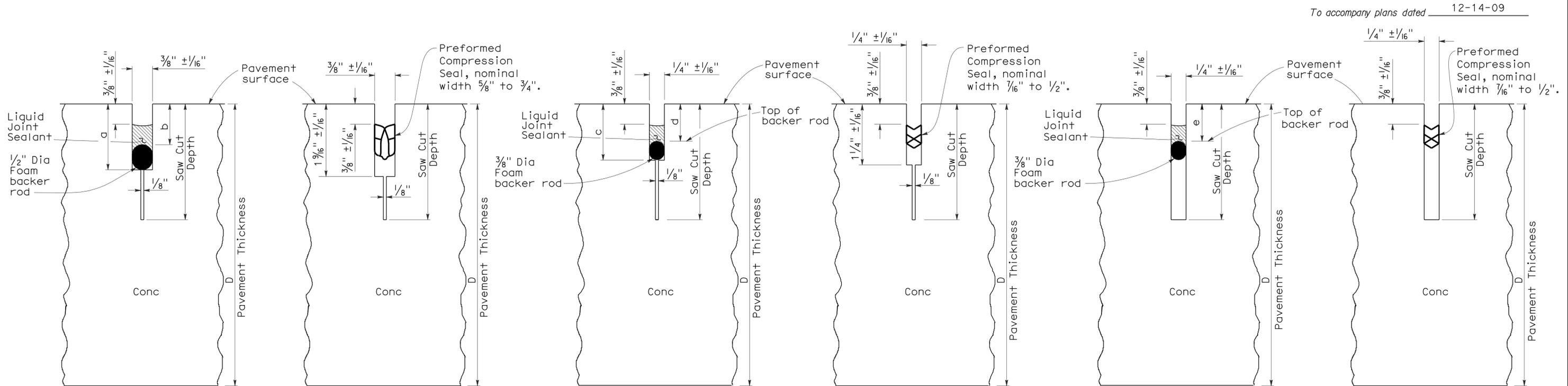
**NOTE:**

1. Tie bars, dowel bars, and reinforcement are not shown in joint seal details, see Revised Standard Plans RSP P1, RSP P3, RSP P10, RSP P35, RSP P45, or RSP P46 as applicable.

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
12	Ora	57	11.8/22.5	48	64

William K. Farnbach  
 REGISTERED CIVIL ENGINEER  
 May 15, 2009  
 PLANS APPROVAL DATE

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LIQUID SEALANT      COMPRESSION SEAL      LIQUID SEALANT      COMPRESSION SEAL      LIQUID SEALANT      COMPRESSION SEAL

**TYPE A1**      **TYPE A2**      **TYPE B**

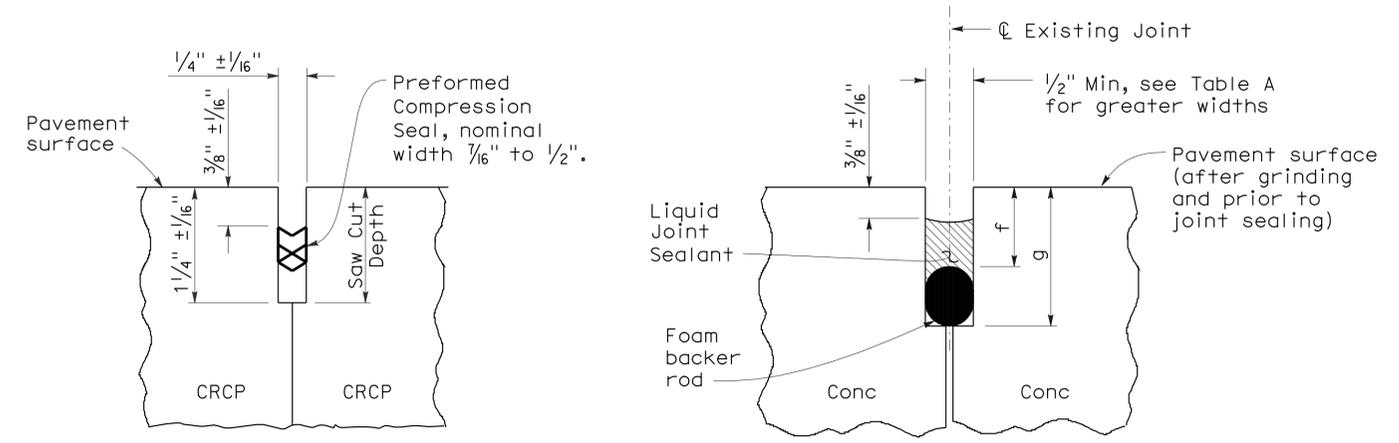
Transverse Contraction Joints      Longitudinal Contraction Joints      Longitudinal or Transverse Contraction Joint

**LIQUID SEALANT RESERVOIR DEPTH**

LIQUID SEALANT MATERIAL	3/8" Joint Width Type A1		1/4" Joint Width Type A2		1/4" Joint Width Type B
	DIMENSION		DIMENSION		DIMENSION
	a	b	c	d	e
SILICONE	1" ± 1/16"	5/8" ± 1/16"	15/16" ± 1/16"	9/16" ± 1/16"	9/16" ± 1/16"
ASPHALT RUBBER	1 3/16" ± 1/16"	3/4" ± 1/16"	1 1/16" ± 1/16"	11/16" ± 1/16"	11/16" ± 1/16"

**TABLE A (TYPE R JOINT)**

Sawn Joint Width	Backer Rod Diameter ± 1/16"	DIMENSION "f"	DIMENSION "g"
1"	1 5/16"	7/8"	2 1/4"
7/8"	1 3/16"	13/16"	2"
3/4"	1"	3/4"	1 3/4"
5/8"	7/8"	11/16"	1 1/2"
1/2"	11/16"	5/8"	1 1/4"



COMPRESSION SEAL      LIQUID SEALANT

**TYPE C**      **TYPE R**

Transverse and Longitudinal Construction Joints (For CRCP)      Retrofit Transverse and Longitudinal Joints

STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION  
**CONCRETE PAVEMENT-JOINT DETAILS**  
NO SCALE

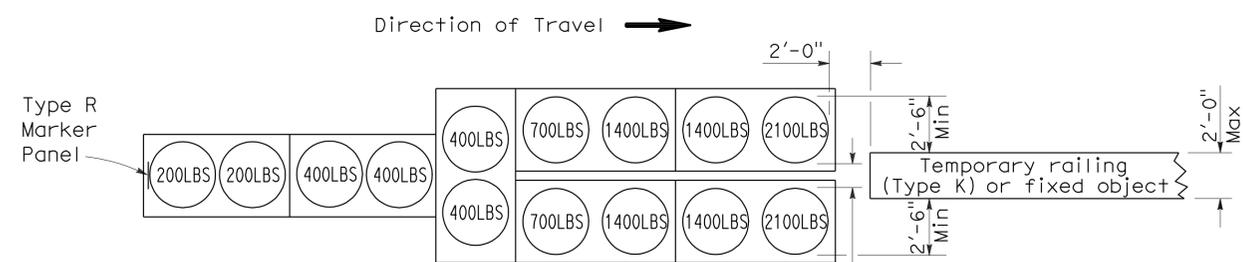
RSP P20 DATED MAY 15, 2009 SUPERSEDES STANDARD PLAN P20  
DATED MAY 1, 2006 - PAGE 128 OF THE STANDARD PLANS BOOK DATED MAY 2006.

**REVISED STANDARD PLAN RSP P20**

2006 REVISED STANDARD PLAN RSP P20

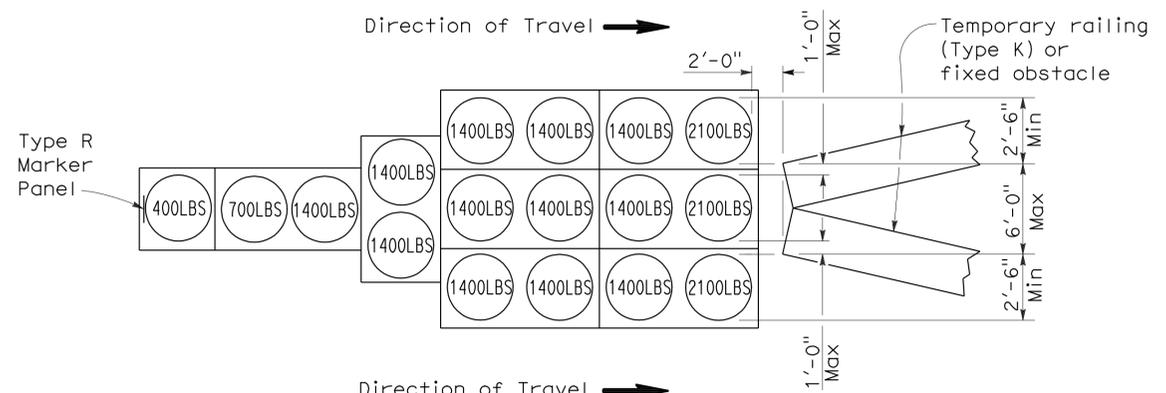
To accompany plans dated 12-14-09

2006 REVISED STANDARD PLAN RSP T1A



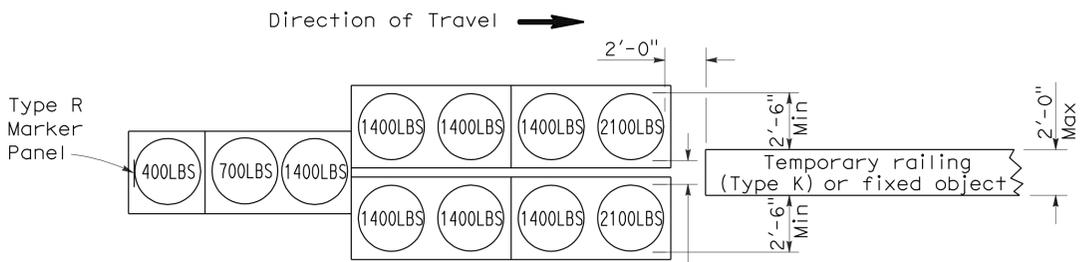
**ARRAY 'TU14'**

Approach speed 45 mph or more



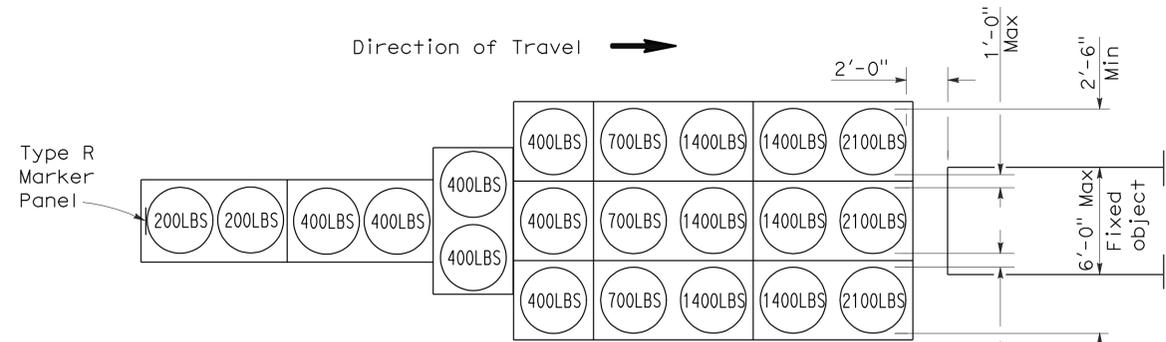
**ARRAY 'TU17'**

Approach speed less than 45 mph



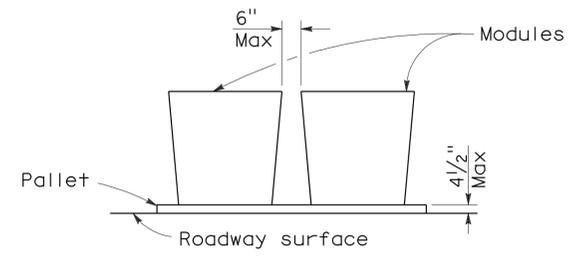
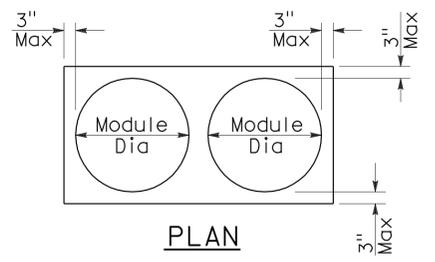
**ARRAY 'TU11'**

Approach speed less than 45 mph



**ARRAY 'TU21'**

Approach speed 45 mph or more



**CRASH CUSHION PALLET DETAIL**

See Note 7

**NOTES:**

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

STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION

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

NO SCALE

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

**REVISED STANDARD PLAN RSP T1A**

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
12	Ora	57	11.8/22.5	50	64

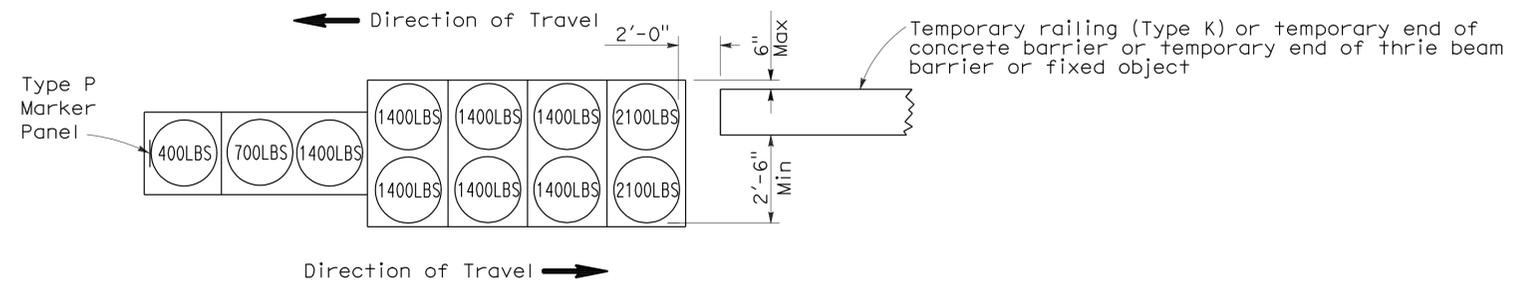
*Randell D. Hiatt*  
REGISTERED CIVIL ENGINEER

June 6, 2008  
PLANS APPROVAL DATE

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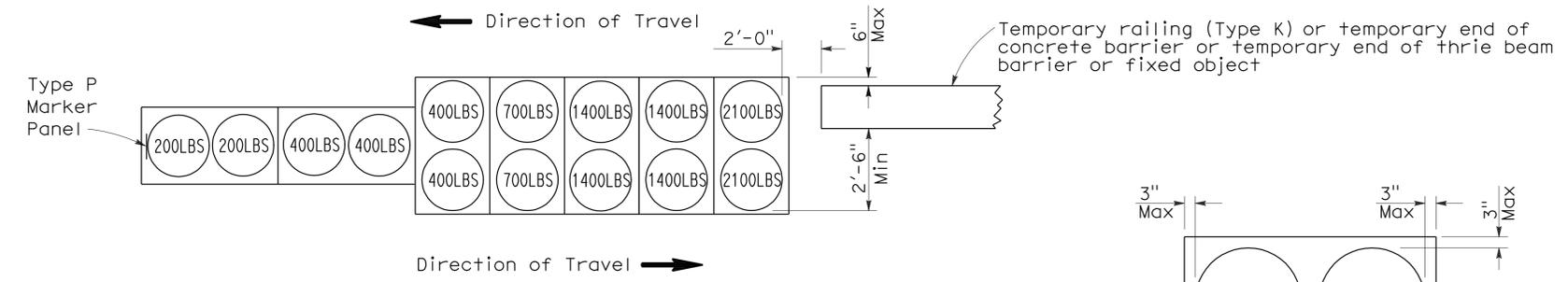
REGISTERED PROFESSIONAL ENGINEER  
No. C50200  
Exp. 6-30-09  
CIVIL  
STATE OF CALIFORNIA

To accompany plans dated 12-14-09



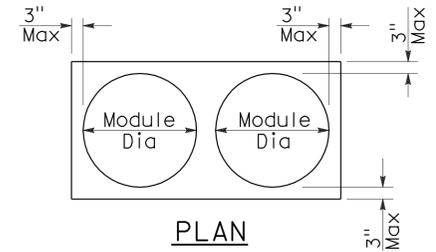
**ARRAY 'TB11'**

Approach speed less than 45 mph

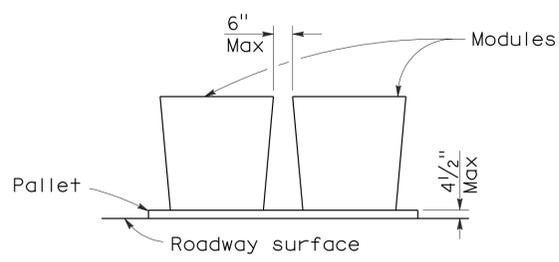


**ARRAY 'TB14'**

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
12	Ora	57	11.8/22.5	51	64

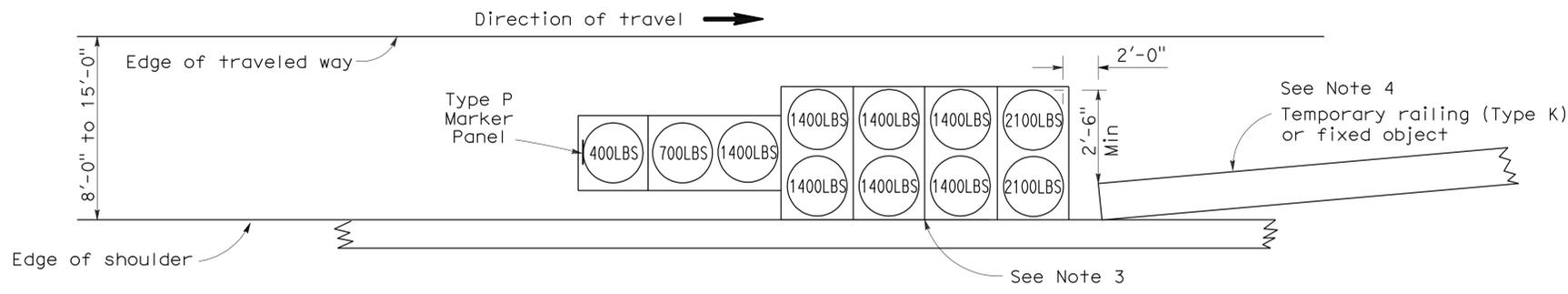
*Randell D. Hiatt*  
REGISTERED CIVIL ENGINEER

June 6, 2008  
PLANS APPROVAL DATE

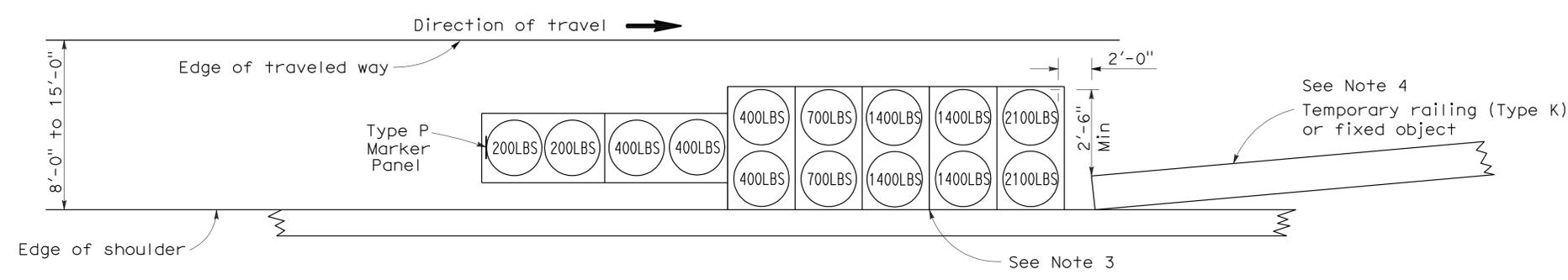
*Randell D. Hiatt*  
REGISTERED PROFESSIONAL ENGINEER  
No. C50200  
Exp. 6-30-09  
CIVIL  
STATE OF CALIFORNIA

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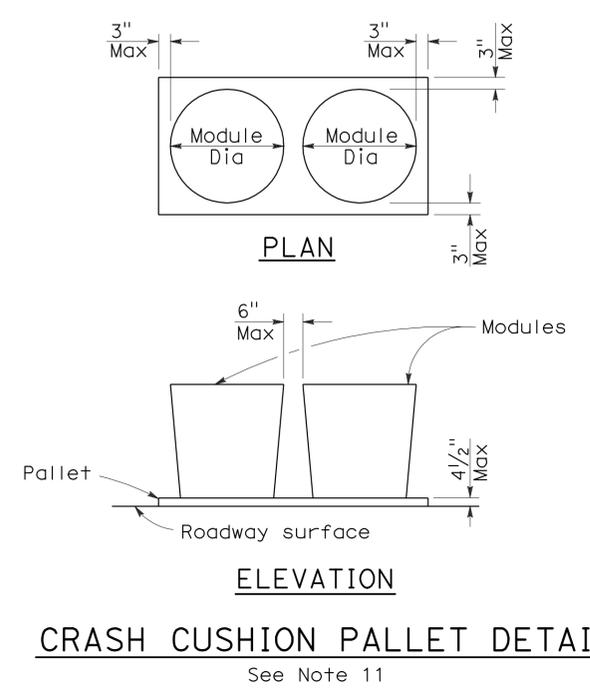
To accompany plans dated 12-14-09



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



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



**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. 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.
4. 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.
5. Temporary crash cushion arrays shall not encroach on the traveled way.
6. Arrays for median shoulders shall conform to details shown on this plan for outside shoulders.
7. Place the Type P marker panel so that the bottom of the panel rests upon the pallet and faces traffic.
8. Refer to Standard Plan A73B for marker details.
9. 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.
10. Approach speeds indicated conform to NCHRP 350 Report criteria.
11. Use of pallets is optional.

STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION

**TEMPORARY CRASH CUSHION,  
SAND FILLED  
(SHOULDER INSTALLATIONS)**

NO SCALE

RSP T2 DATED JUNE 6, 2008 SUPERSEDES STANDARD PLAN T2  
DATED MAY 1, 2006 - PAGE 213 OF THE STANDARD PLANS BOOK DATED MAY 2006.

**REVISED STANDARD PLAN RSP T2**

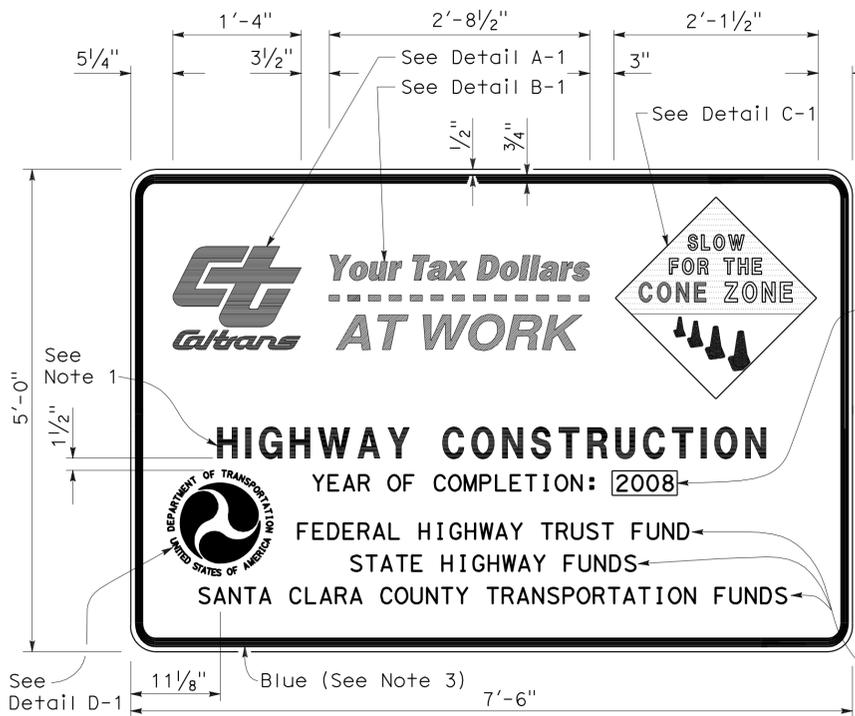
2006 REVISED STANDARD PLAN RSP T2

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
12	Ora	57	11.8/22.5	52	64

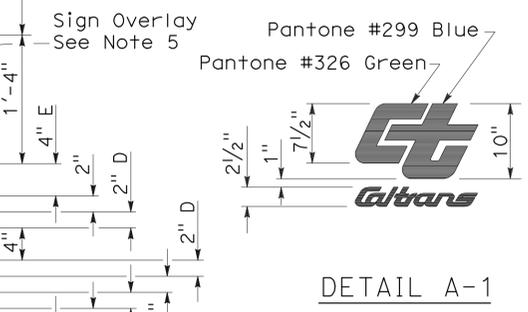
*Greg W. Edwards*  
 REGISTERED CIVIL ENGINEER  
 November 17, 2006  
 PLANS APPROVAL DATE  
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REGISTERED PROFESSIONAL ENGINEER  
 Greg W. Edwards  
 No. C36386  
 Exp. 6-30-08  
 CIVIL  
 STATE OF CALIFORNIA

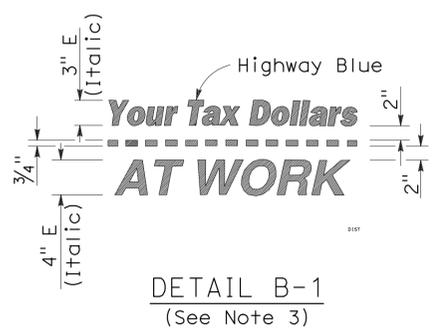
To accompany plans dated 12-14-09



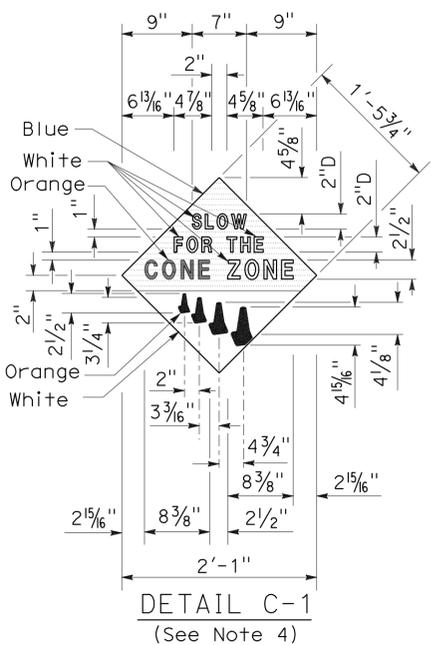
**TYPE 1**



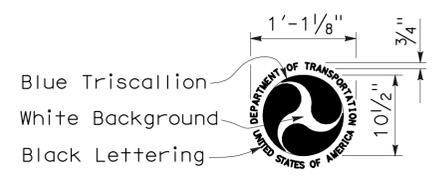
**DETAIL A-1**



**DETAIL B-1**  
(See Note 3)



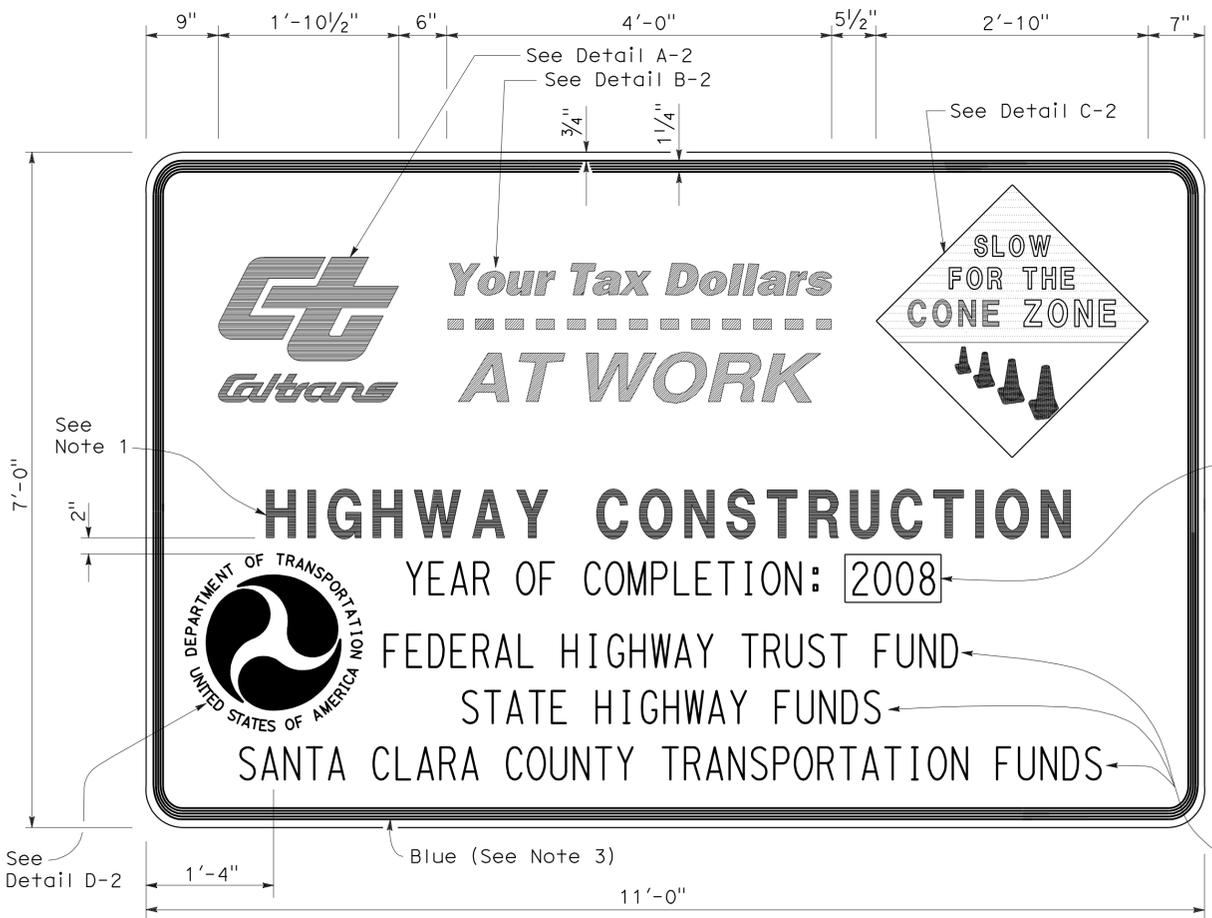
**DETAIL C-1**  
(See Note 4)



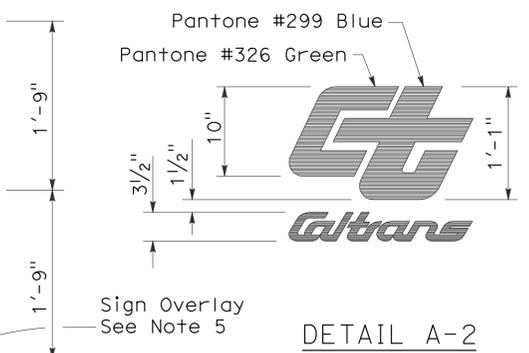
**DETAIL D-1**  
(See Note 6)

**NOTES:**

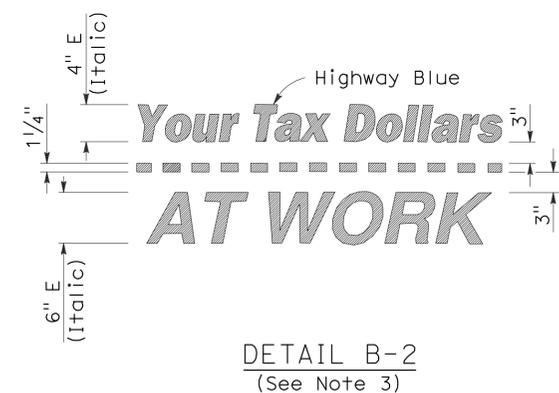
1. The sign messages shown for type of project and fund types are examples only. See the Special Provisions for the applicable type of project and fund type messages to be used.
2. Except as otherwise shown, the legend of sign shall be black on a white background (non-reflective).
3. The border of the signs and details "B-1" and "B-2" shall be blue (non-reflective).
4. The diamond in details "C-1" and "C-2" shall be blue for the background of message, "SLOW FOR THE CONE ZONE", and white background for the orange cones. The color and type of font for the "SLOW FOR THE CONE ZONE" message shall be: "SLOW" white D; "FOR THE" white D; "CONE" orange Arial font; "ZONE" white Arial font.
5. Year of completion of project construction shown on the overlay is an example only. See the Special Provisions.
6. Use when the Project involves Federal Highway Trust Fund.



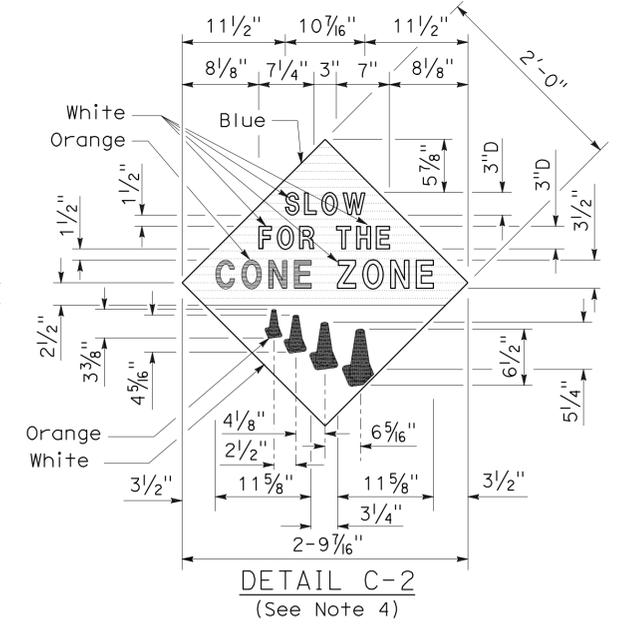
**TYPE 2**



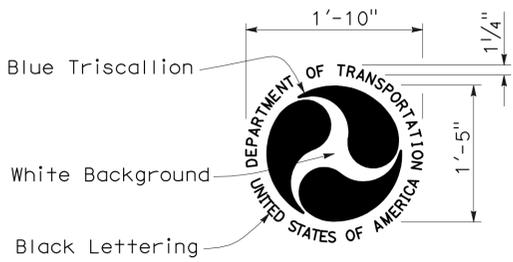
**DETAIL A-2**



**DETAIL B-2**  
(See Note 3)



**DETAIL C-2**  
(See Note 4)



**DETAIL D-2**  
(See Note 6)

STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION  
**CONSTRUCTION PROJECT FUNDING IDENTIFICATION SIGNS**

NO SCALE

RSP T7 DATED NOVEMBER 17, 2006 SUPERSEDES STANDARD PLAN T7  
DATED MAY 1, 2006 - PAGE 217 OF THE STANDARD PLANS BOOK DATED MAY 2006.

**REVISED STANDARD PLAN RSP T7**

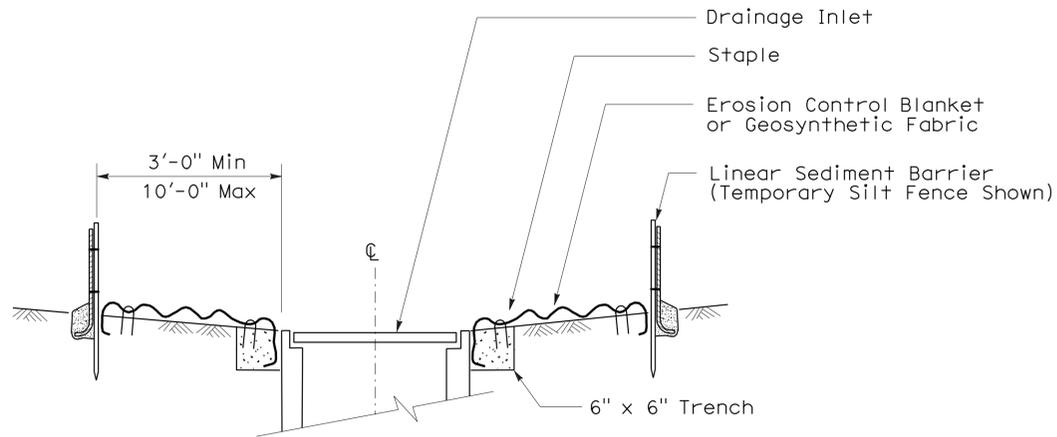
**2006 REVISED STANDARD PLAN RSP T7**

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
12	Ora	57	11.8/22.5	53	64

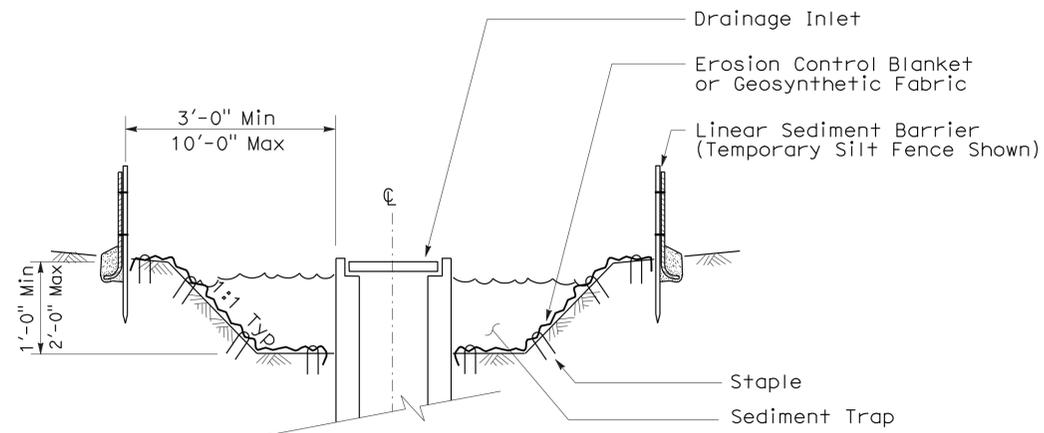
Robert B. Schott  
 LICENSED LANDSCAPE ARCHITECT  
 August 15, 2008  
 PLANS Approval DATE

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To accompany plans dated 12-14-09



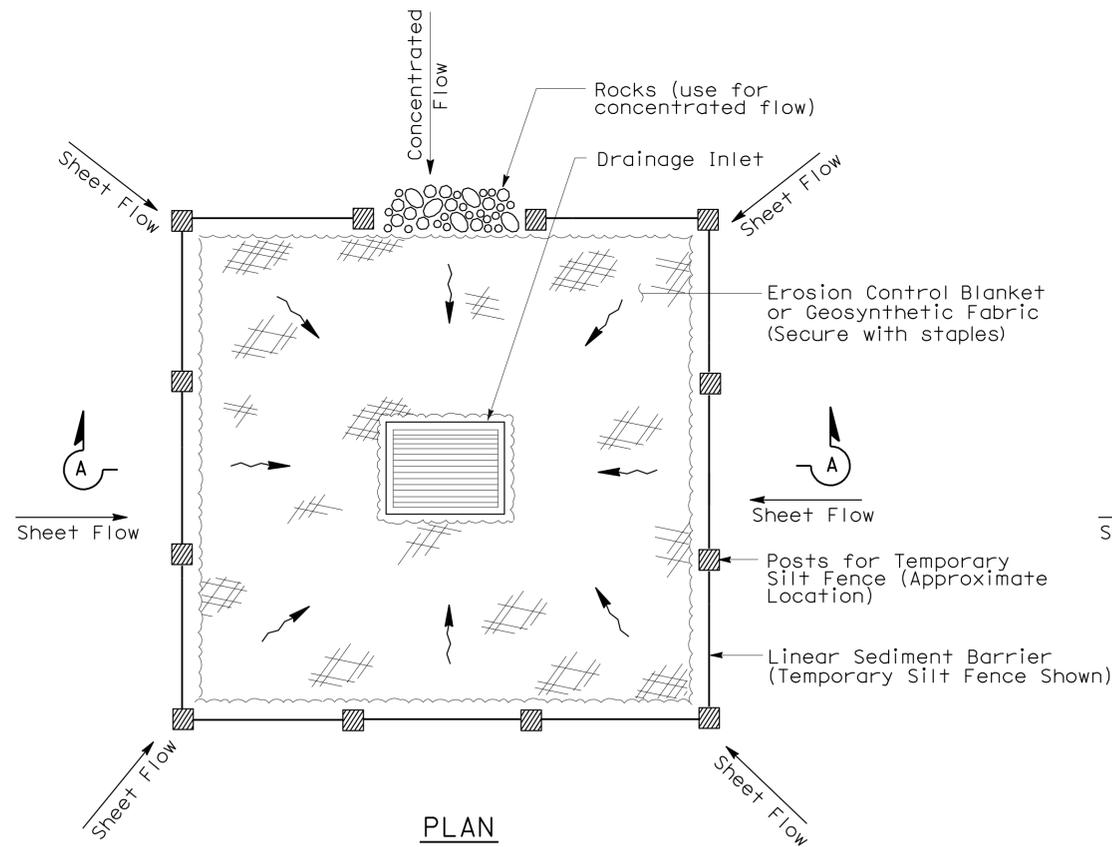
SECTION A-A



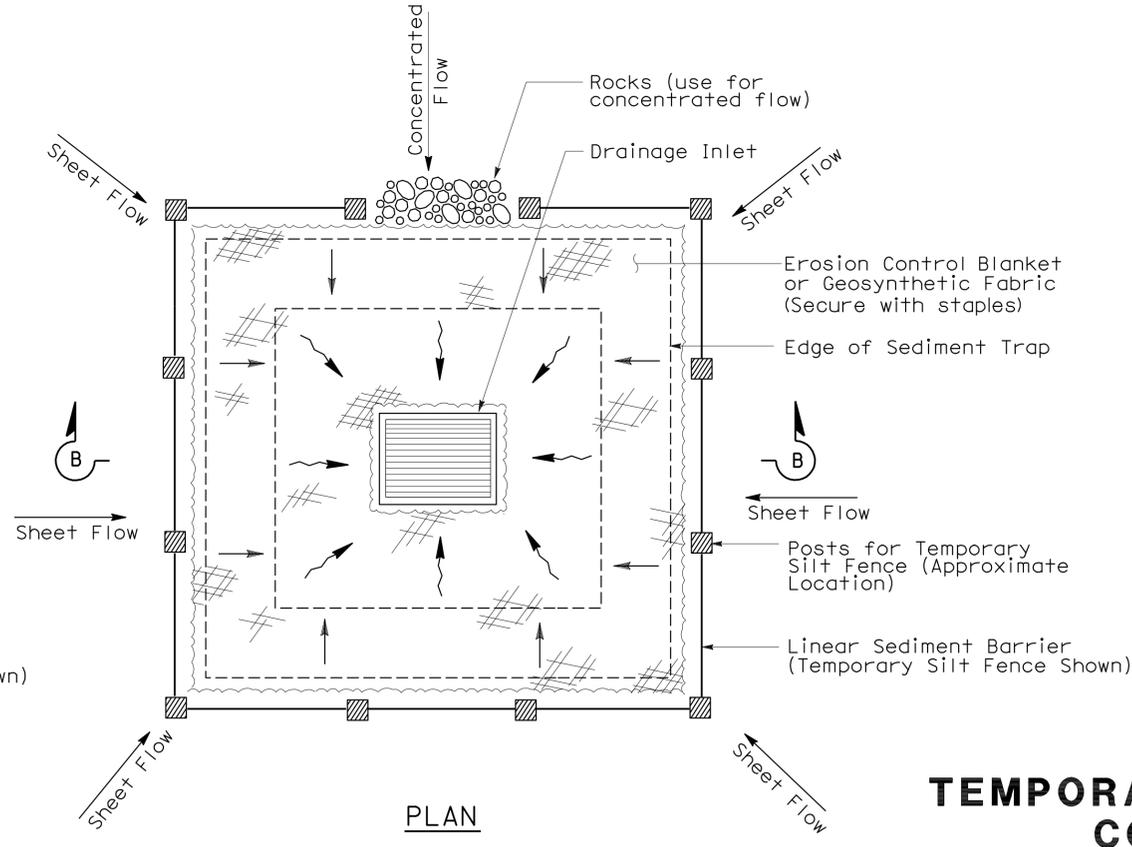
SECTION B-B

**NOTES:**

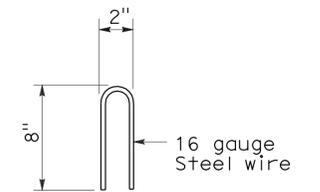
1. See Standard Plan T51 for Temporary Silt Fence.
2. Dimensions may vary to fit field conditions.



TEMPORARY DRAINAGE INLET PROTECTION (TYPE 1)



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



STAPLE DETAIL

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

NO SCALE

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

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
12	Ora	57	11.8/22.5	54	64

Robert B. Schott  
 LICENSED LANDSCAPE ARCHITECT  
 August 15, 2008  
 PLANS APPROVAL DATE  
 The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

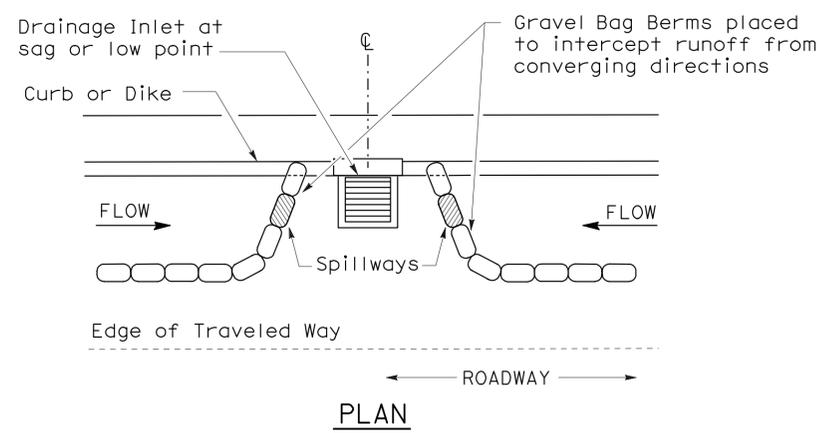


To accompany plans dated 12-14-09

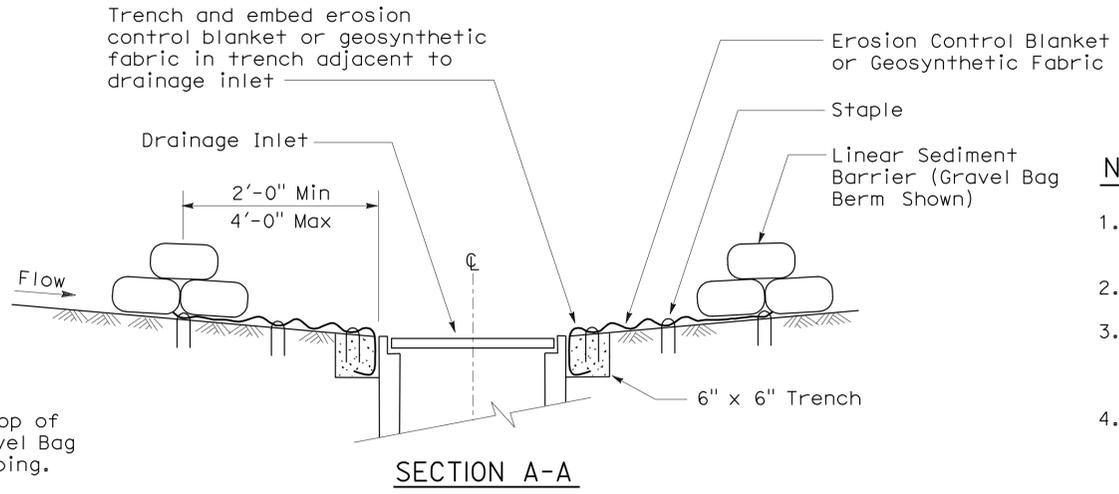
### GRAVEL BAG BERM (TYPE 3A) SPACING TABLE

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

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



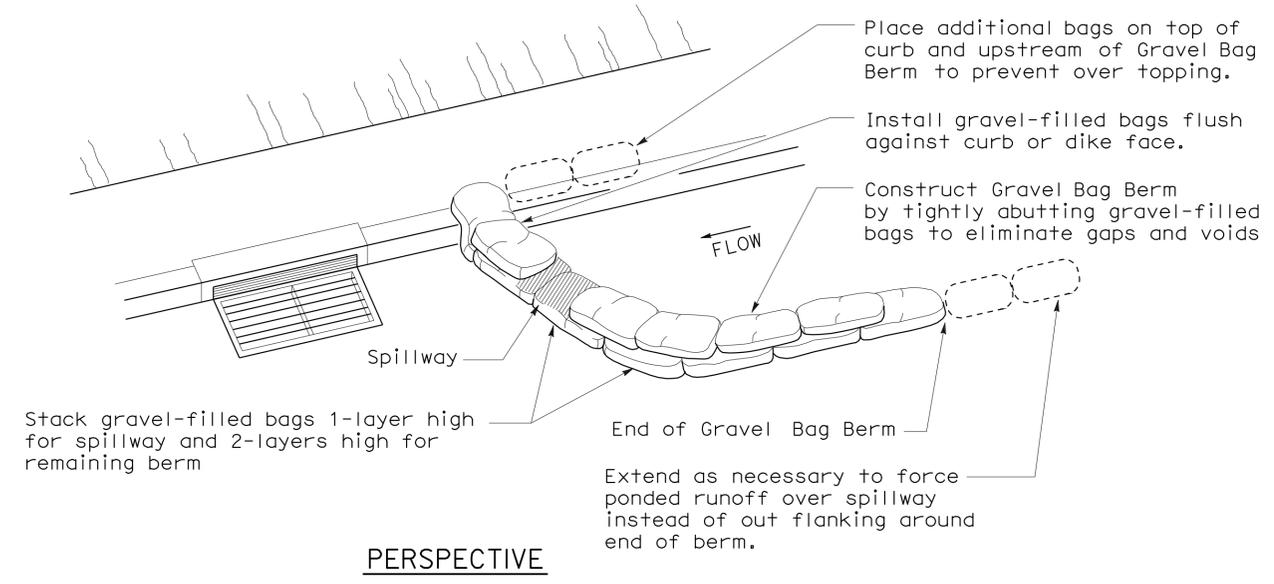
**PLAN**  
**CONFIGURATION FOR SAG POINT INLET (GRAVEL BAG BERM)**



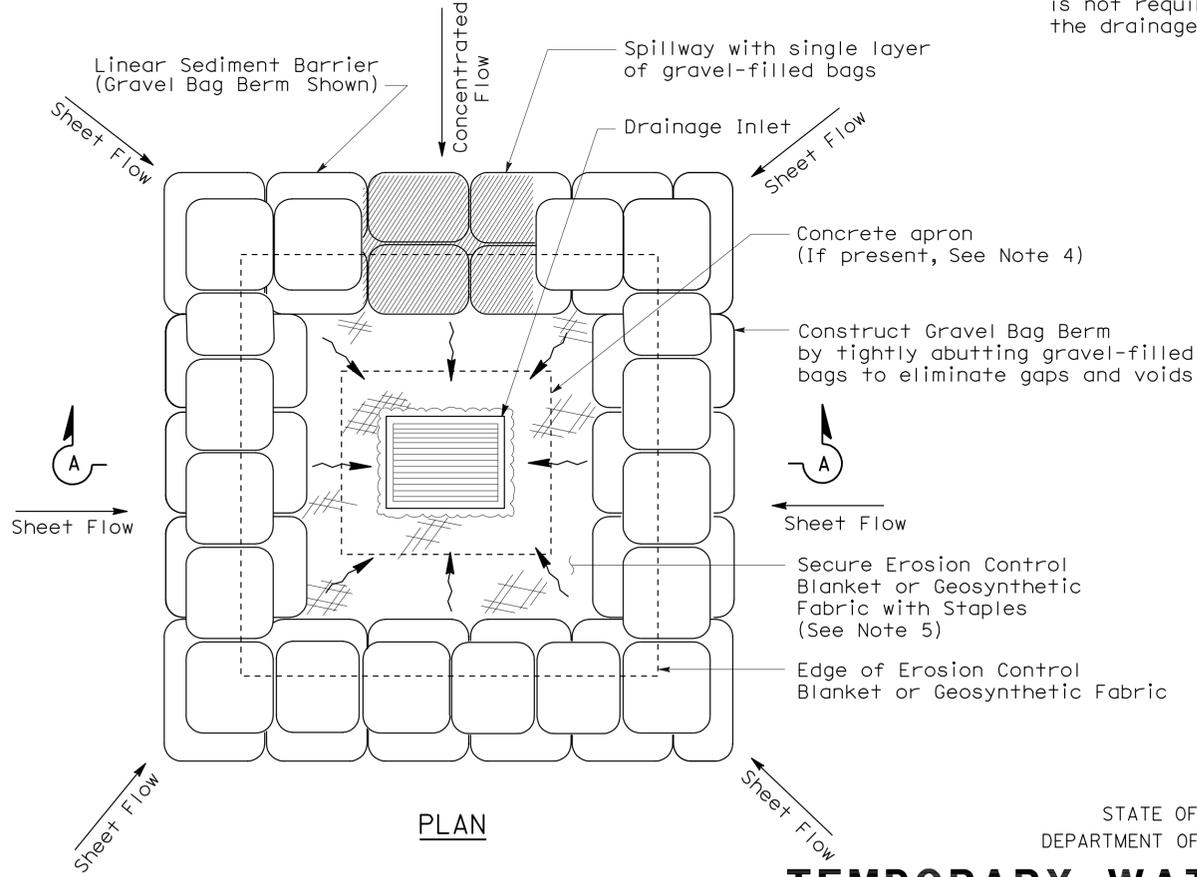
**SECTION A-A**

**NOTES:**

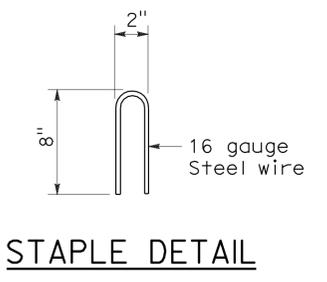
1. Place safety cones adjacent to drainage inlet protection.
2. Dimensions may vary to fit field conditions.
3. Install a minimum of 3 gravel bag berms upstream of each drainage inlet to be protected.
4. Position erosion control blanket or geosynthetic fabric at edge of concrete apron and secure in trench.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



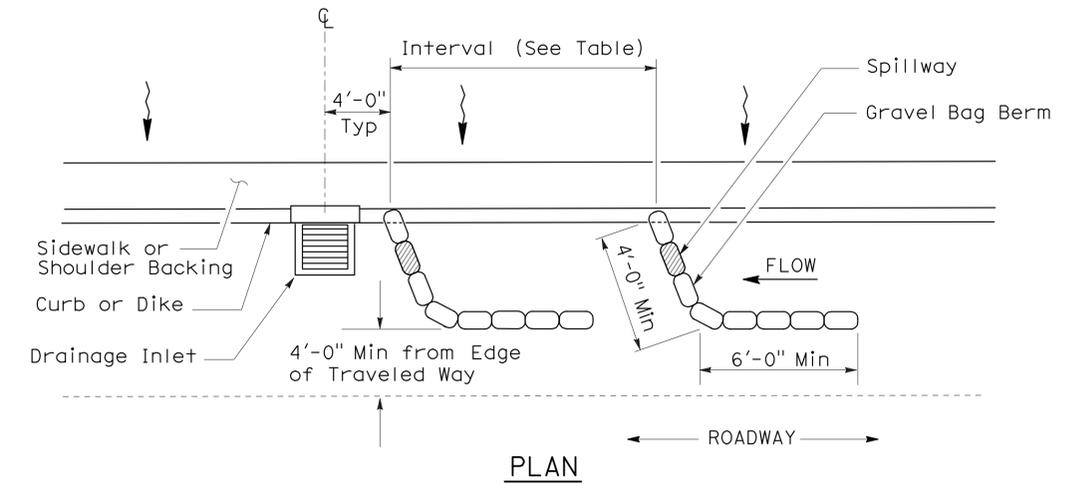
**PERSPECTIVE**



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



**STAPLE DETAIL**



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

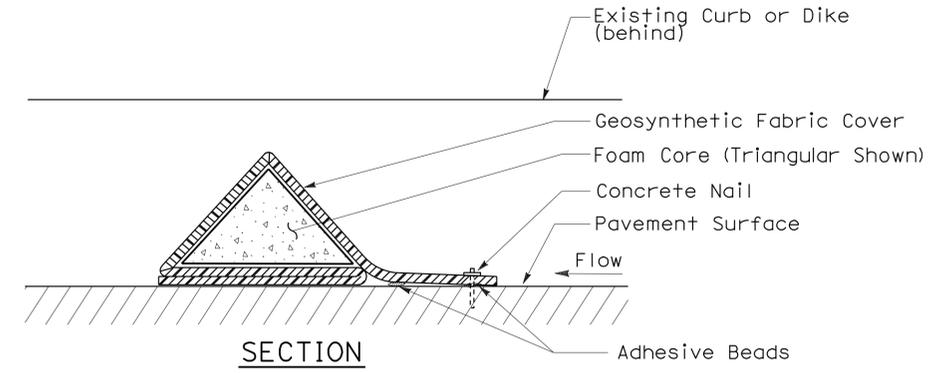
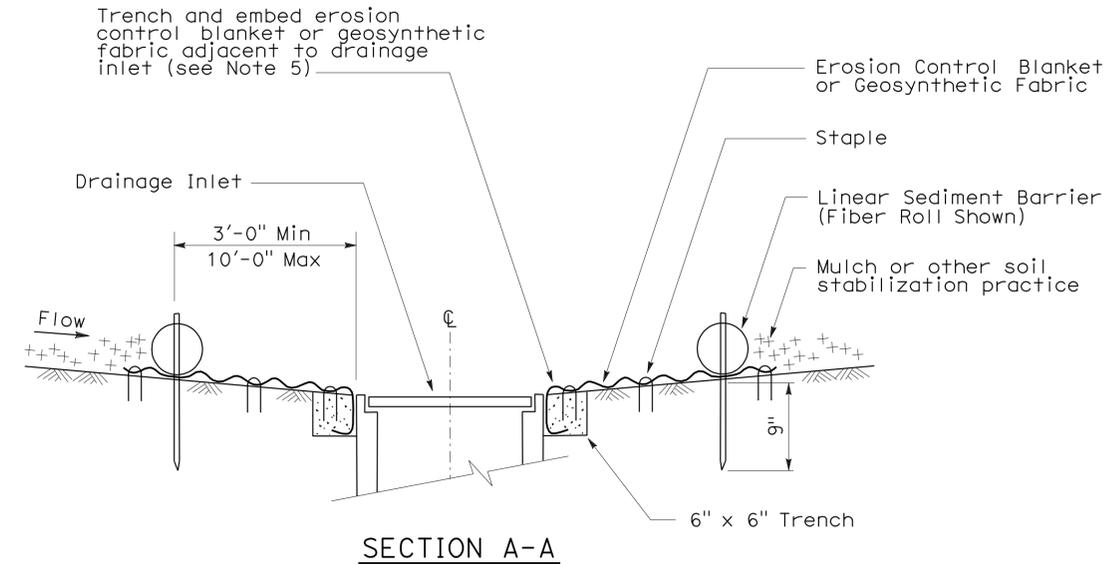
STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION  
**TEMPORARY WATER POLLUTION CONTROL DETAILS (TEMPORARY DRAINAGE INLET PROTECTION)**

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

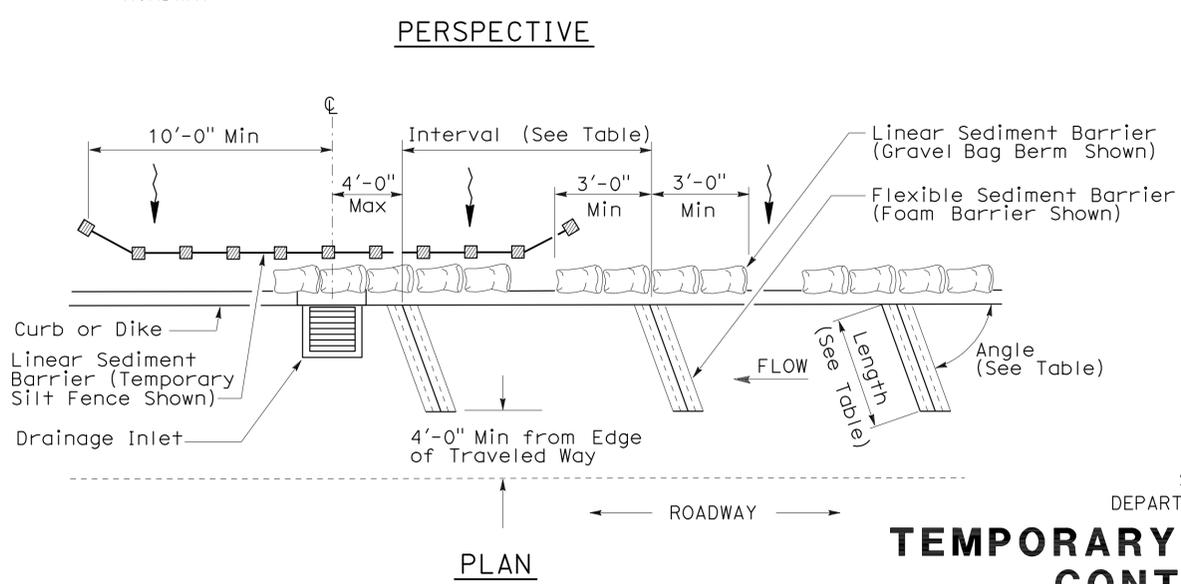
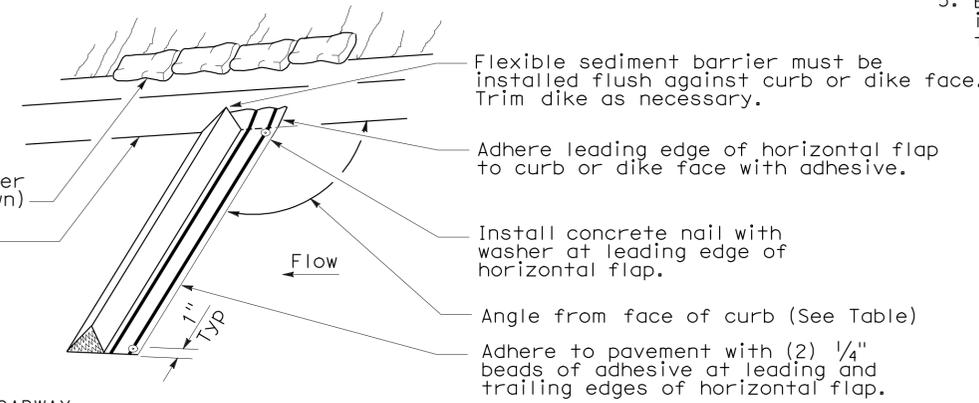
2006 NEW STANDARD PLAN NSP T62

**FLEXIBLE SEDIMENT BARRIER SPACING TABLE**

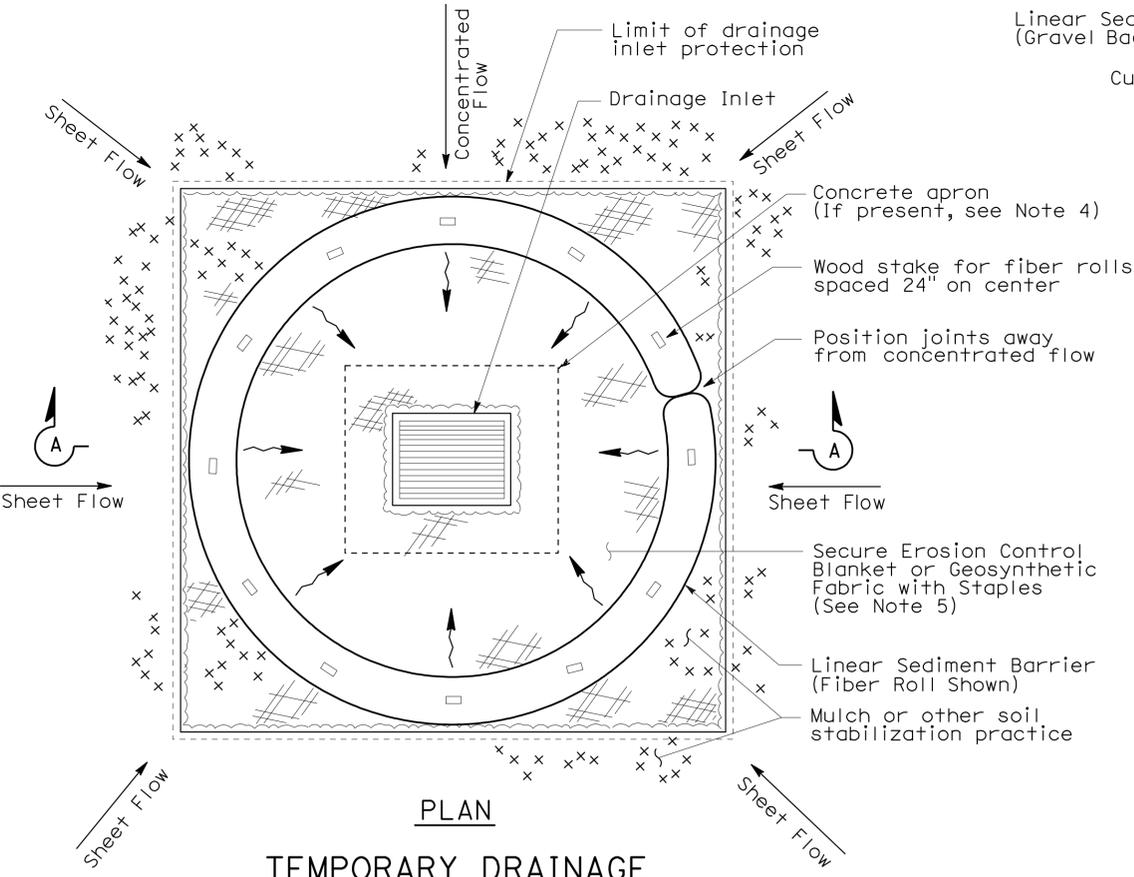
SLOPE OF ROADWAY (PERCENT)	0 to 0.9	1 to 1.9	2 to 2.9	3 to 4	5+
INTERVAL BETWEEN BARRIERS	50'	35'	30'	25'	20'
ANGLE FROM FACE OF CURB	70°	70°	70°	45°	45°
SUGGESTED BARRIER LENGTH	6'	6'	6'	6'	6'



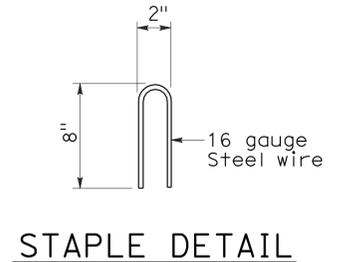
**FLEXIBLE SEDIMENT BARRIER DETAIL (FOAM BARRIER SHOWN)**



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



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



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

STATE OF CALIFORNIA  
 DEPARTMENT OF TRANSPORTATION  
**TEMPORARY WATER POLLUTION CONTROL DETAILS (TEMPORARY DRAINAGE INLET PROTECTION)**  
 NO SCALE  
 NSP T63 DATED AUGUST 15, 2008 SUPPLEMENTS THE STANDARD PLANS BOOK DATED MAY 2006.

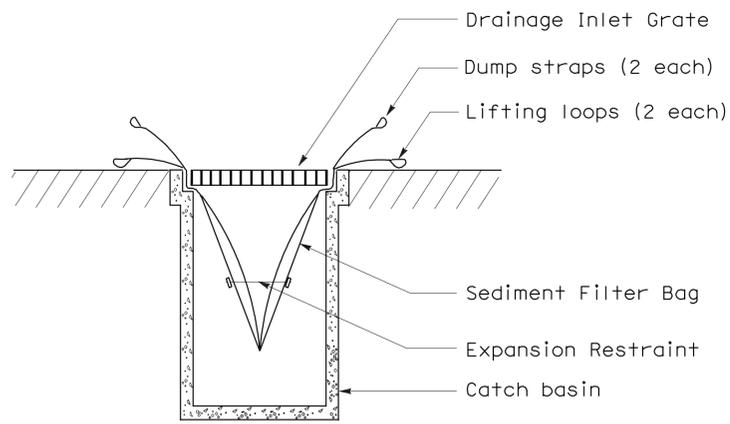
2006 NEW STANDARD PLAN NSP T63

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
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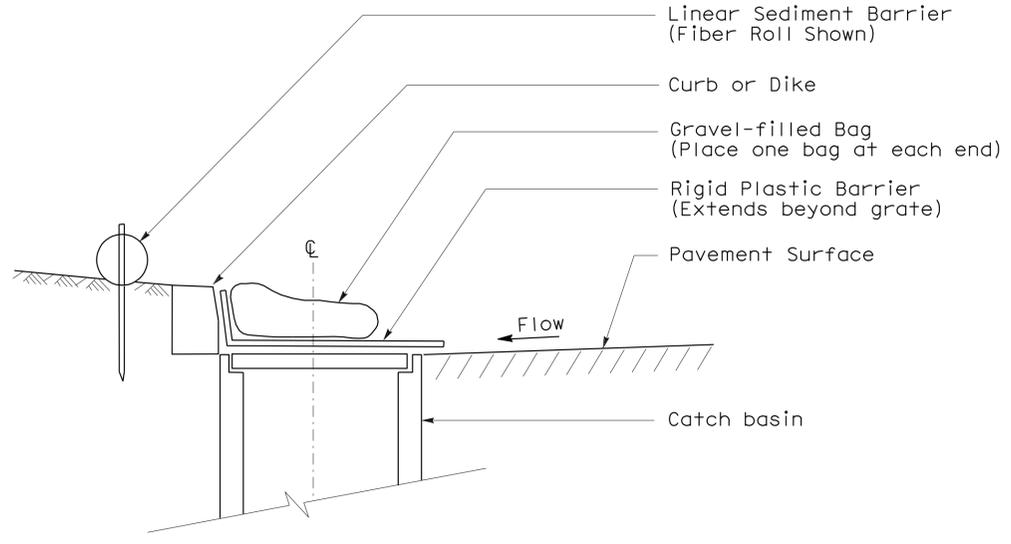
*Robert B. Schott*  
 LICENSED LANDSCAPE ARCHITECT  
 August 15, 2008  
 PLANS APPROVAL DATE  
The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.



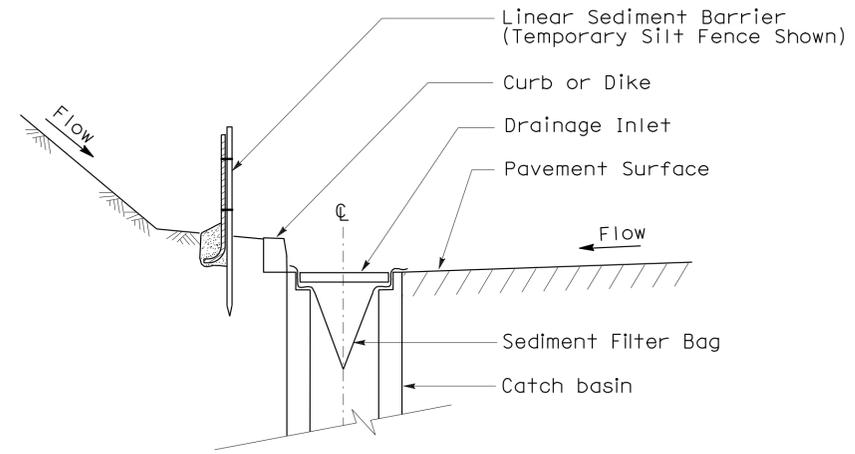
To accompany plans dated 12-14-09



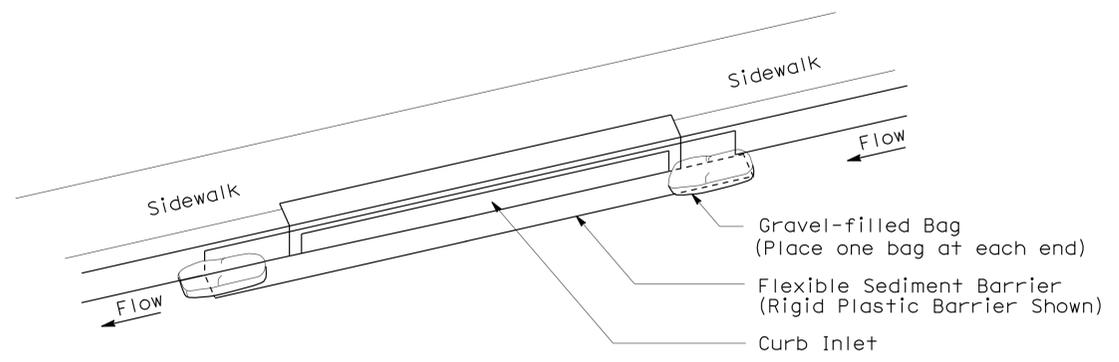
**SECTION B-B**  
**SEDIMENT FILTER BAG DETAIL**



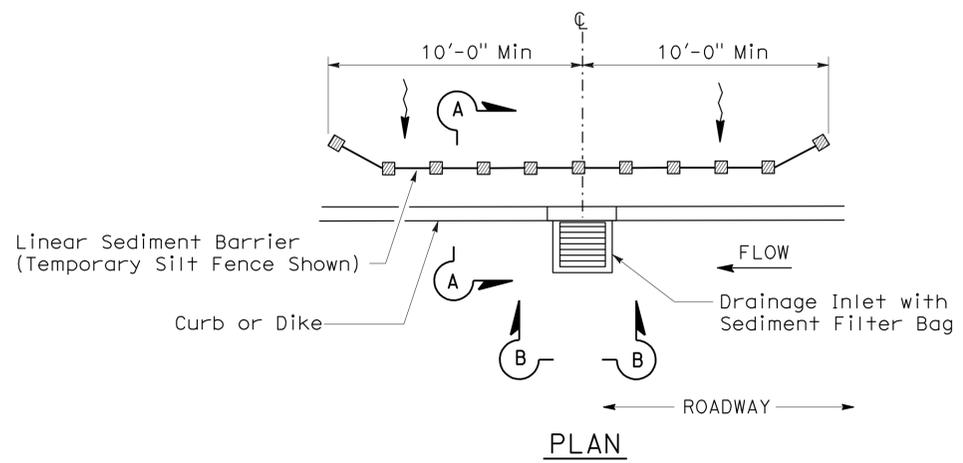
**SECTION**  
**TEMPORARY DRAINAGE**  
**INLET PROTECTION (TYPE 6A)**  
**(CATCH BASIN WITH GRATE)**



**SECTION A-A**



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



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

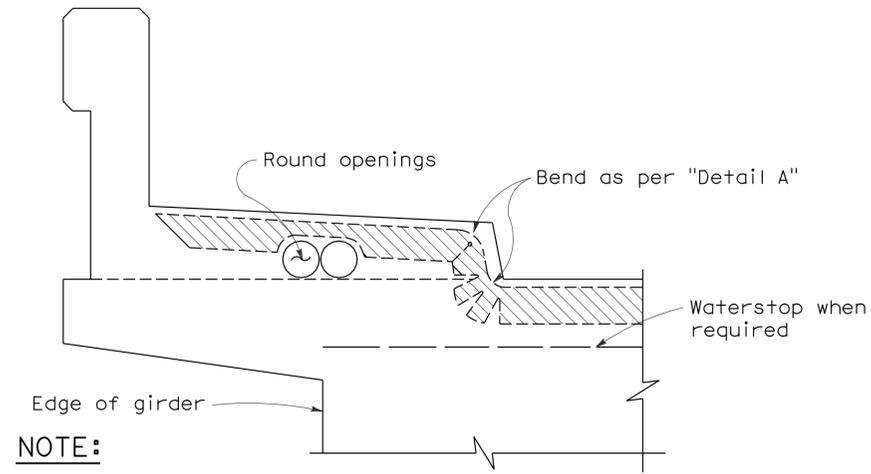
**NOTES:**

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

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

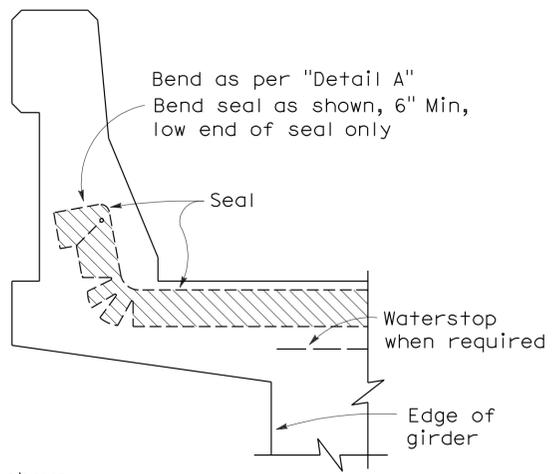
NSP T64 DATED AUGUST 15, 2008 SUPPLEMENTS THE STANDARD PLANS BOOK DATED MAY 2006.

**2006 NEW STANDARD PLAN NSP T64**

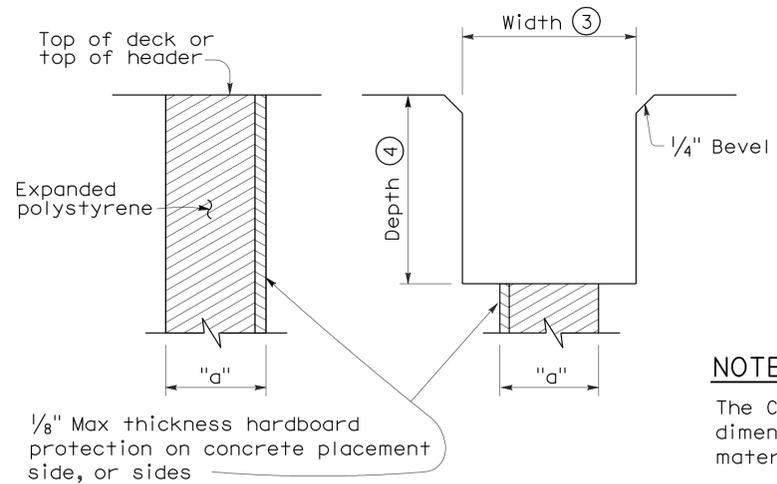


**NOTE:**  
 Type "B" seal shown. Type "A" seals to conform to the general path of seal shown, cuts for bending not required. Bend Type "A" seals 3" up into curb or barrier rail on only the low end of the seal.

**CONCRETE BARRIER AND SIDEWALK**



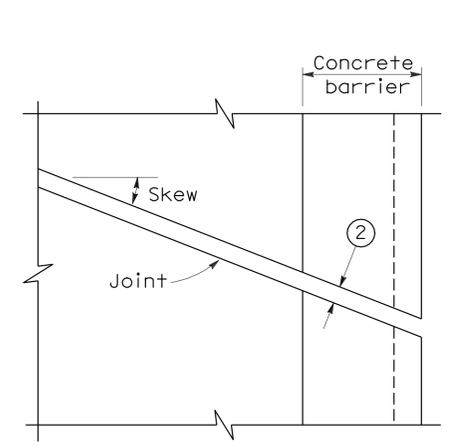
**CONCRETE BARRIER**



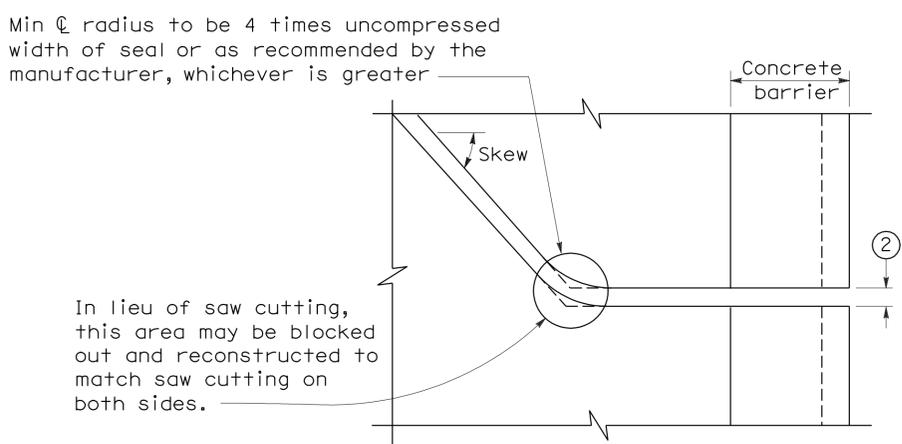
**FORMING DETAIL SAWCUT DETAIL**

**NOTE:**  
 The Contractor shall verify all controlling field dimensions before ordering or fabricating any material.

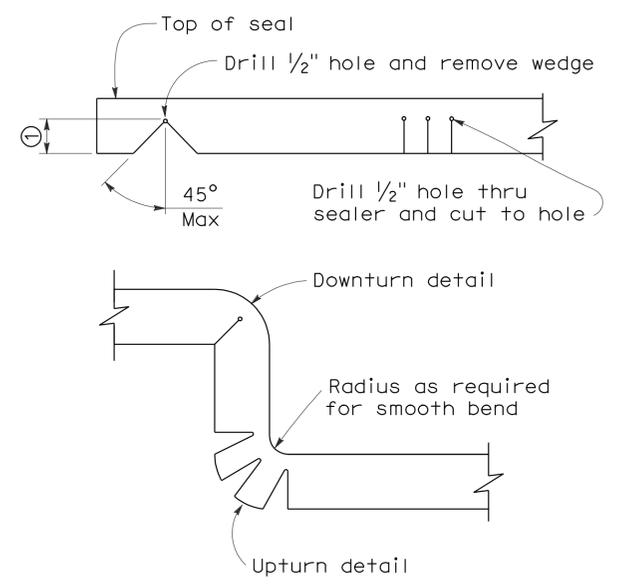
**JOINT SEALS DETAILS**



**PLAN OF JOINT (SKEW  $\leq 20^\circ$ )**



**PLAN OF JOINT (SKEW  $> 20^\circ$ )**



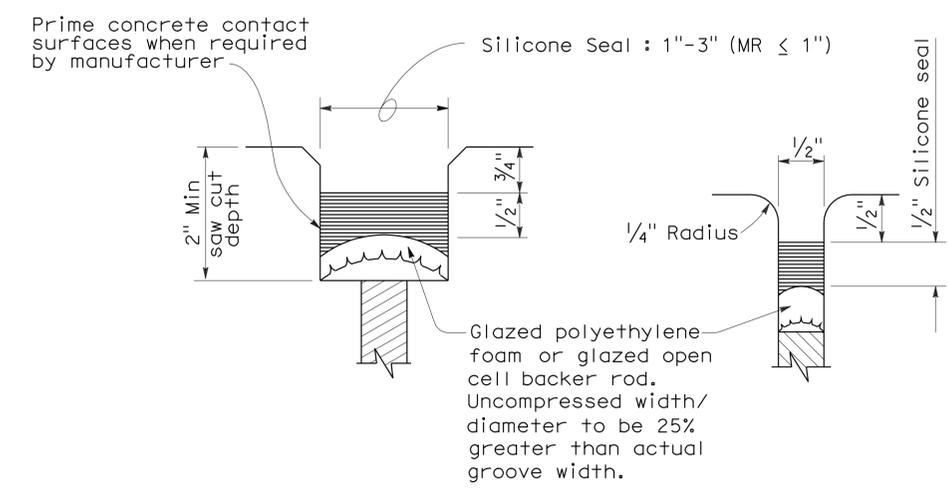
**DETAIL A**

- NOTES:**
- Make smooth cuts from the bottom of seal to 1 1/2" clear of top leaving at least one complete cell between the top of the cut and top of the seal. When necessary cut back of seal to clear conduit and round openings.
  - Opening in barrier to match width of sawn deck joint.
  - Sawcut groove widths shall be as ordered by the Engineer.
  - Depth of sawcut: Type A - Depth to be 2" minimum.  
 Type B - Depth to be equal to or greater than the depth of seal measured along the contact surface, when compressed to minimum width position (W<sub>2</sub>) plus dimensions shown.
  - MR (movement rating) as shown on other plan sheets.
  - Other depths must be approved by the Engineer.

**DIMENSIONS "a" OF JOINT REQUIRED**

Movement Rating (MR) ⑤	Bridge Type	"a" Dimension		
		Deck Concrete Placed		
		Winter	Fall-Spring	Summer
2"	All except CIP/PS	1 1/2"	1 1/4"	3/4"
	CIP/PS	1 1/4"	1"	1/2"
1 1/2"	All except CIP/PS	1 1/4"	1"	1/2"
	CIP/PS	1"	3/4"	1/2"
1"	All except CIP/PS	1"	3/4"	1/2"
	CIP/PS	3/4"	1/2"	1/2"
1/2"	All except CIP/PS	3/4"	3/4"	1/2"
	CIP/PS	1/2"	1/2"	1/2"

STATE OF CALIFORNIA  
 DEPARTMENT OF TRANSPORTATION  
**JOINT SEALS**  
**(MAXIMUM MOVEMENT RATING = 2")**  
 NO SCALE

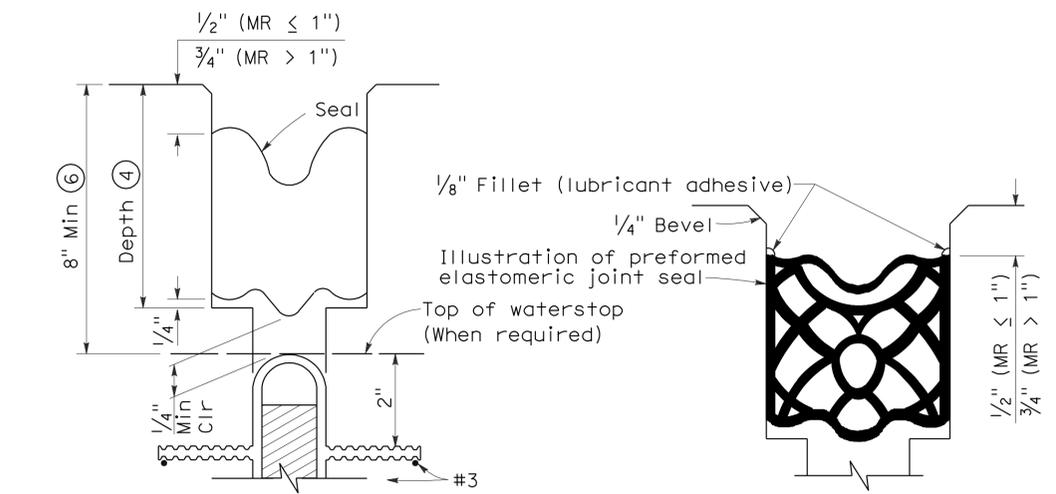


**TYPE A SEAL**

Movement rating : Silicone = 1" Max

**TYPE AL SEAL**

Longitudinal joints only



**TYPE B JOINT SEAL IN MINIMUM WIDTH POSITION (W<sub>2</sub>)**

**TYPE B SEAL**

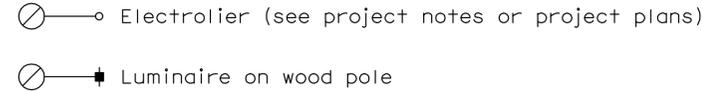
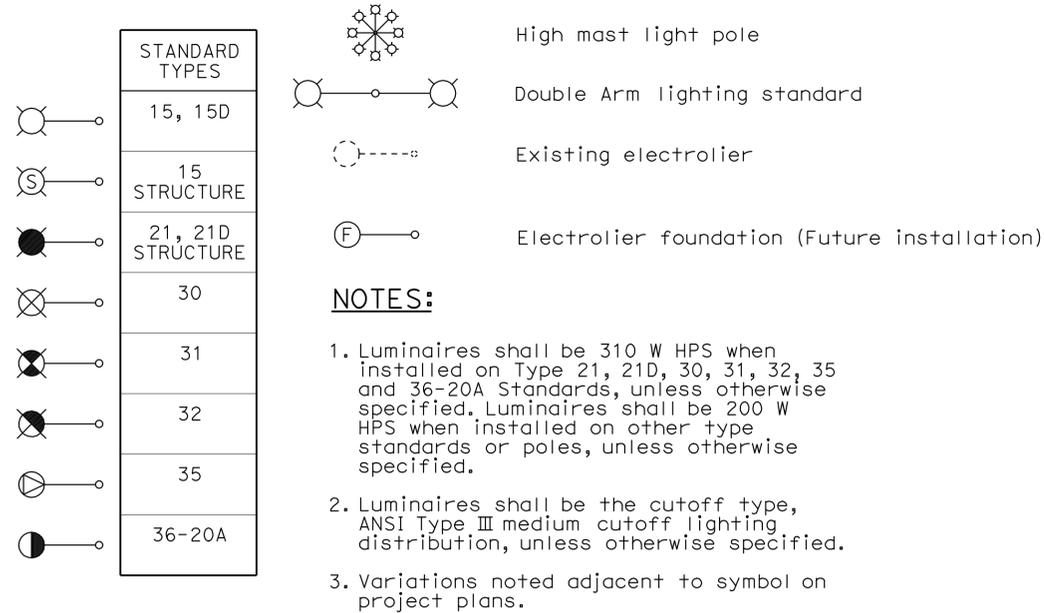
Movement Rating  $\leq 2"$

RSP B6-21 DATED OCTOBER 5, 2007 SUPERSEDES STANDARD PLAN B6-21 DATED MAY 1, 2006 - PAGE 258 OF THE STANDARD PLANS BOOK DATED MAY 2006.

**REVISED STANDARD PLAN RSP B6-21**

2006 REVISED STANDARD PLAN RSP B6-21

# ELECTROLIERS



## STANDARD NOTES:

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

# ABBREVIATIONS AND EQUIPMENT DESIGNATIONS

## PROPOSED EXISTING

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

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
12	Ora	57	11.8/22.5	58	64

*Jeffery G. McRae*  
REGISTERED ELECTRICAL ENGINEER

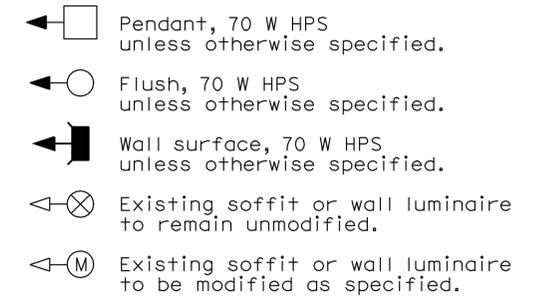
October 5, 2007  
PLANS APPROVAL DATE

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

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To accompany plans dated 12-14-09

## SOFFIT AND WALL MOUNTED LUMINAIRES



### NOTE:

Arrow indicates "street side" of luminaire.

STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION

# ELECTRICAL SYSTEMS (SYMBOLS AND ABBREVIATIONS)

NO SCALE

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

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

2006 REVISED STANDARD PLAN RSP ES-1A

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
12	Ora	57	11.8/22.5	59	64

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

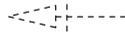
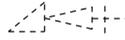
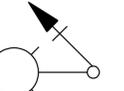
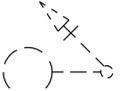
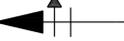
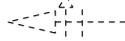
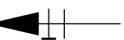
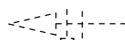
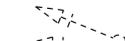
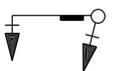
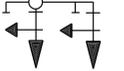
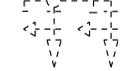
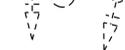
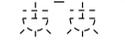
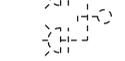
October 5, 2007  
 PLANS APPROVAL DATE

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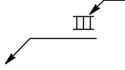
### CONDUIT

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

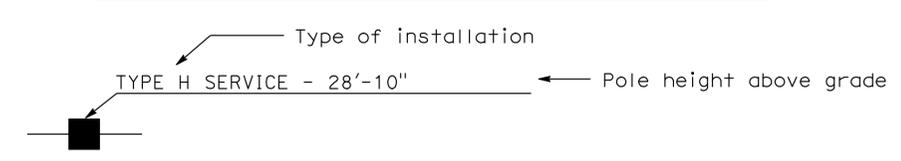
### SIGNAL EQUIPMENT

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

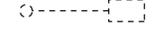
### POLE-MOUNTED SERVICE DESIGNATION



### 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

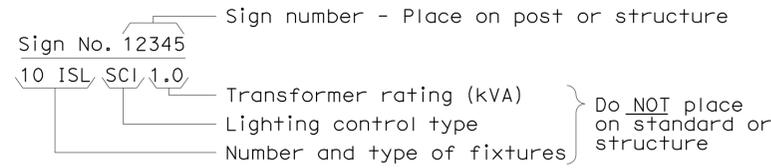
RSP ES-1B DATED OCTOBER 5, 2007 SUPERCEDES STANDARD PLAN ES-1B  
 DATED MAY 1, 2006 - PAGE 401 OF THE STANDARD PLANS BOOK DATED MAY 2006.

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

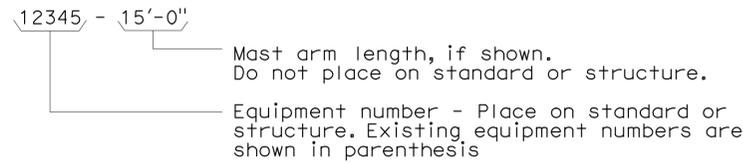
2006 REVISED STANDARD PLAN RSP ES-1B

### EQUIPMENT IDENTIFICATION

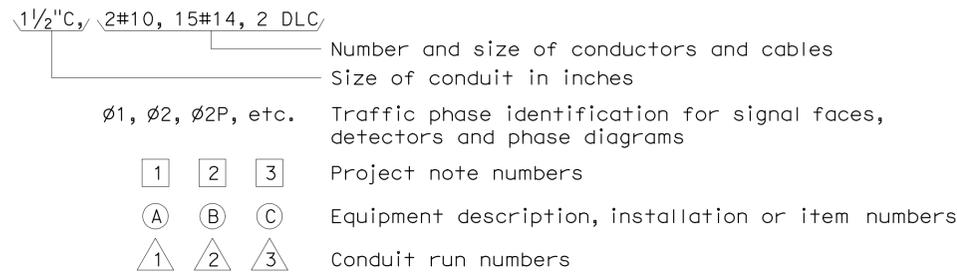
#### ILLUMINATED SIGN IDENTIFICATION NUMBER:



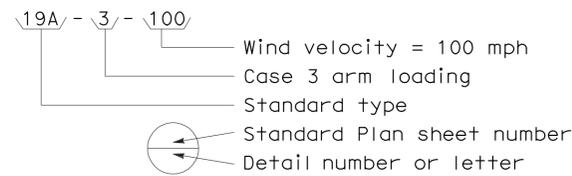
#### ELECTROLIER OR EQUIPMENT IDENTIFICATION NUMBER:



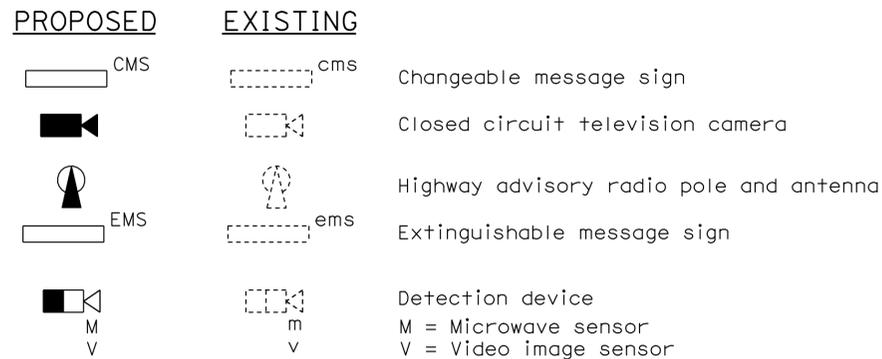
#### CONDUIT AND CONDUCTOR IDENTIFICATION:



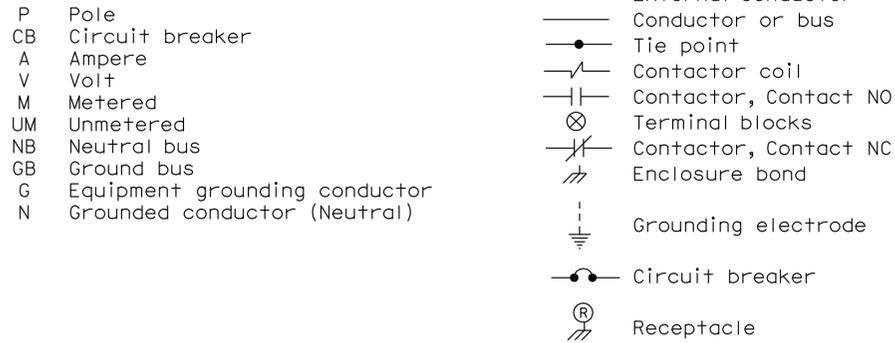
#### SIGNAL AND LIGHTING STANDARD (TYPICAL DESIGNATION):



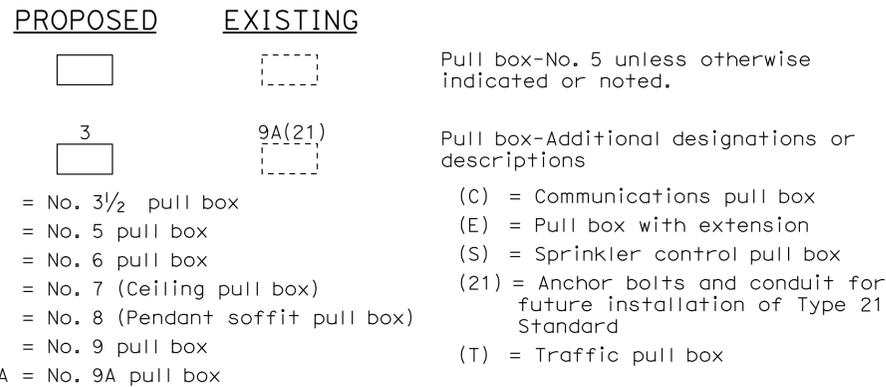
### MISCELLANEOUS EQUIPMENT



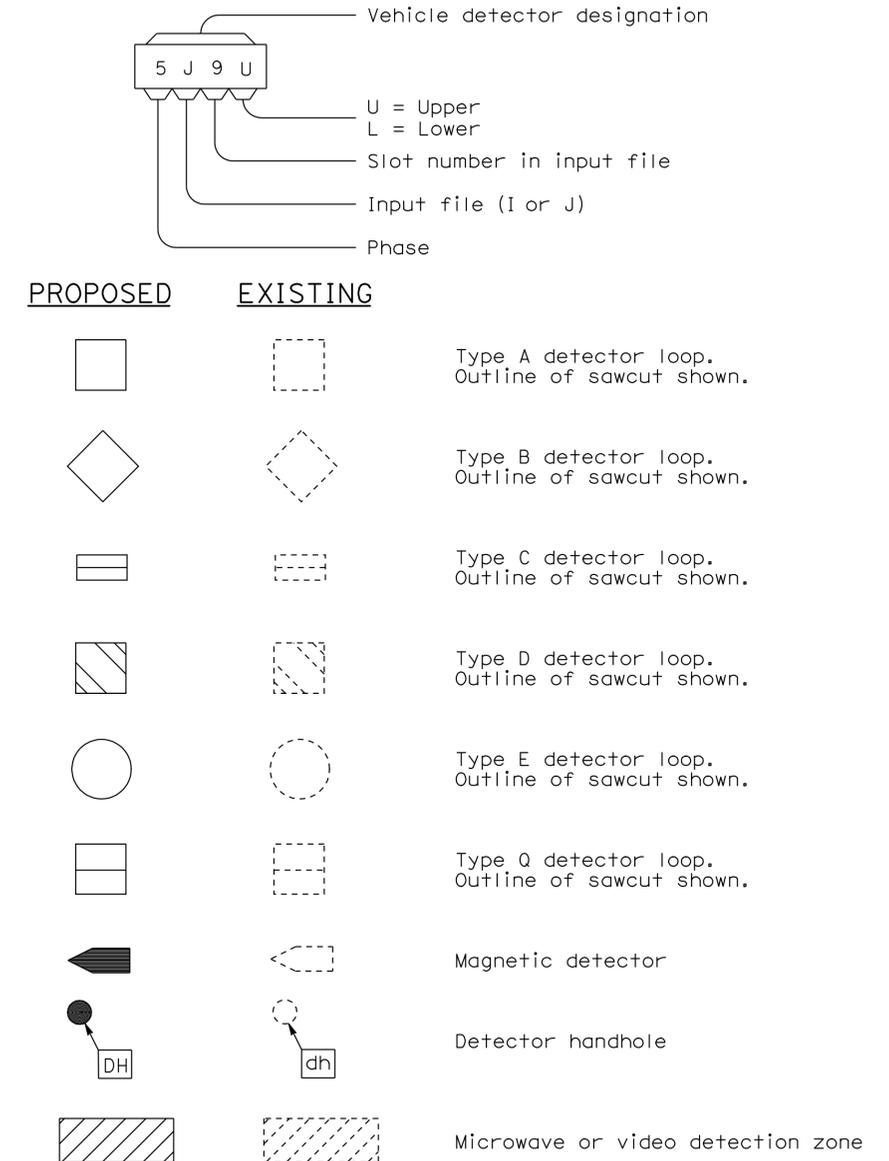
### WIRING DIAGRAM LEGEND



### PULL BOXES



### VEHICLE DETECTORS



STATE OF CALIFORNIA  
 DEPARTMENT OF TRANSPORTATION

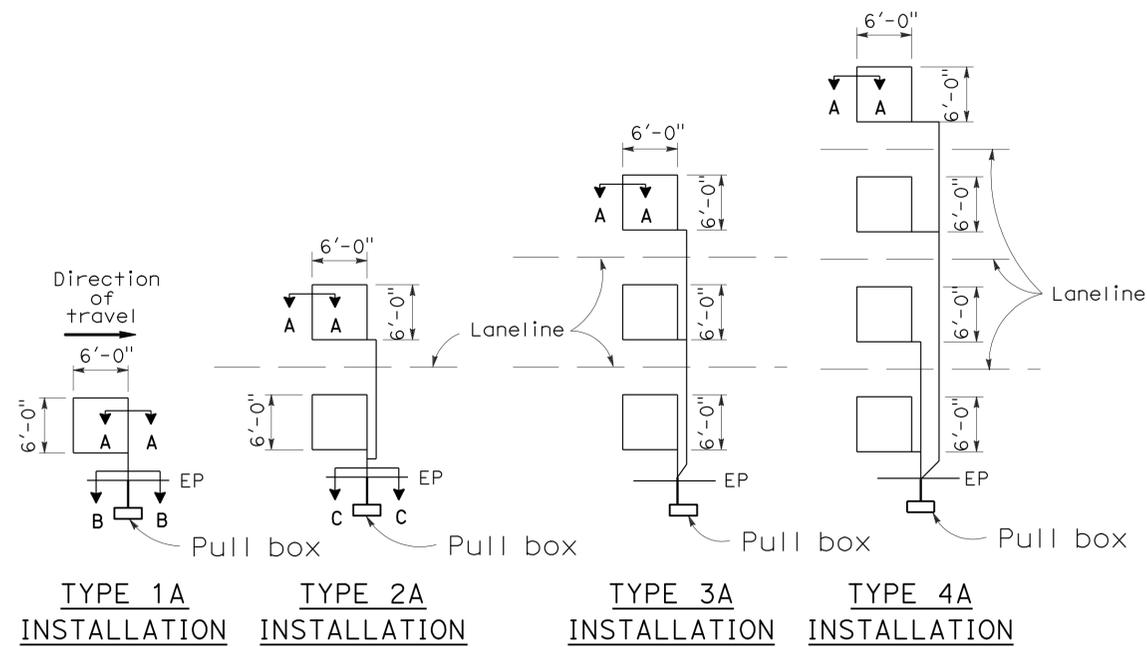
## ELECTRICAL SYSTEMS (SYMBOLS AND ABBREVIATIONS)

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.

# 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.

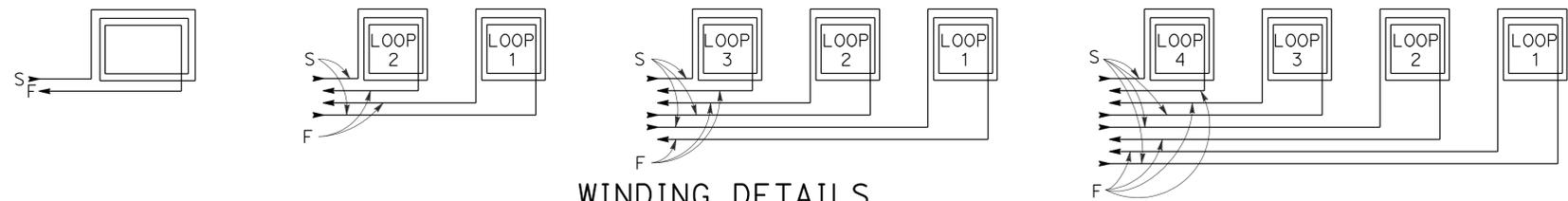


TYPE 1A INSTALLATION    TYPE 2A INSTALLATION    TYPE 3A INSTALLATION    TYPE 4A INSTALLATION

## SAWCUT DETAILS

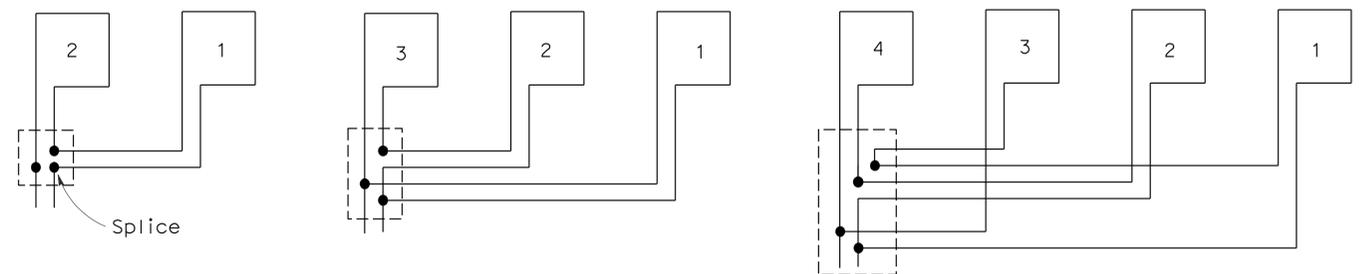
(Type A loop detector configurations illustrated)

- 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)



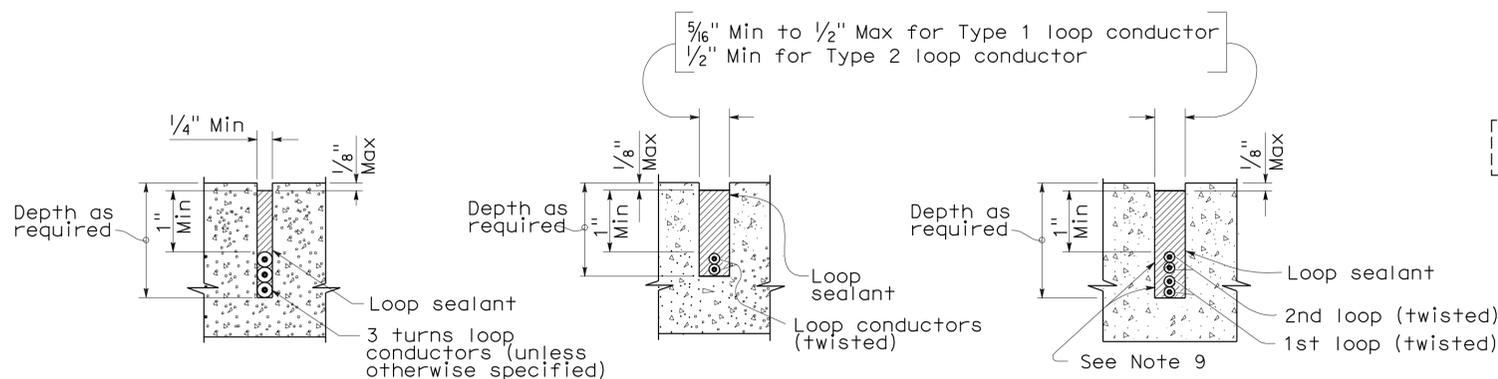
## WINDING DETAILS

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)

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

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
12	Ora	57	11.8/22.5	61	64

*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.

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

To accompany plans dated 12-14-09

2006 REVISED STANDARD PLAN RSP ES-5A

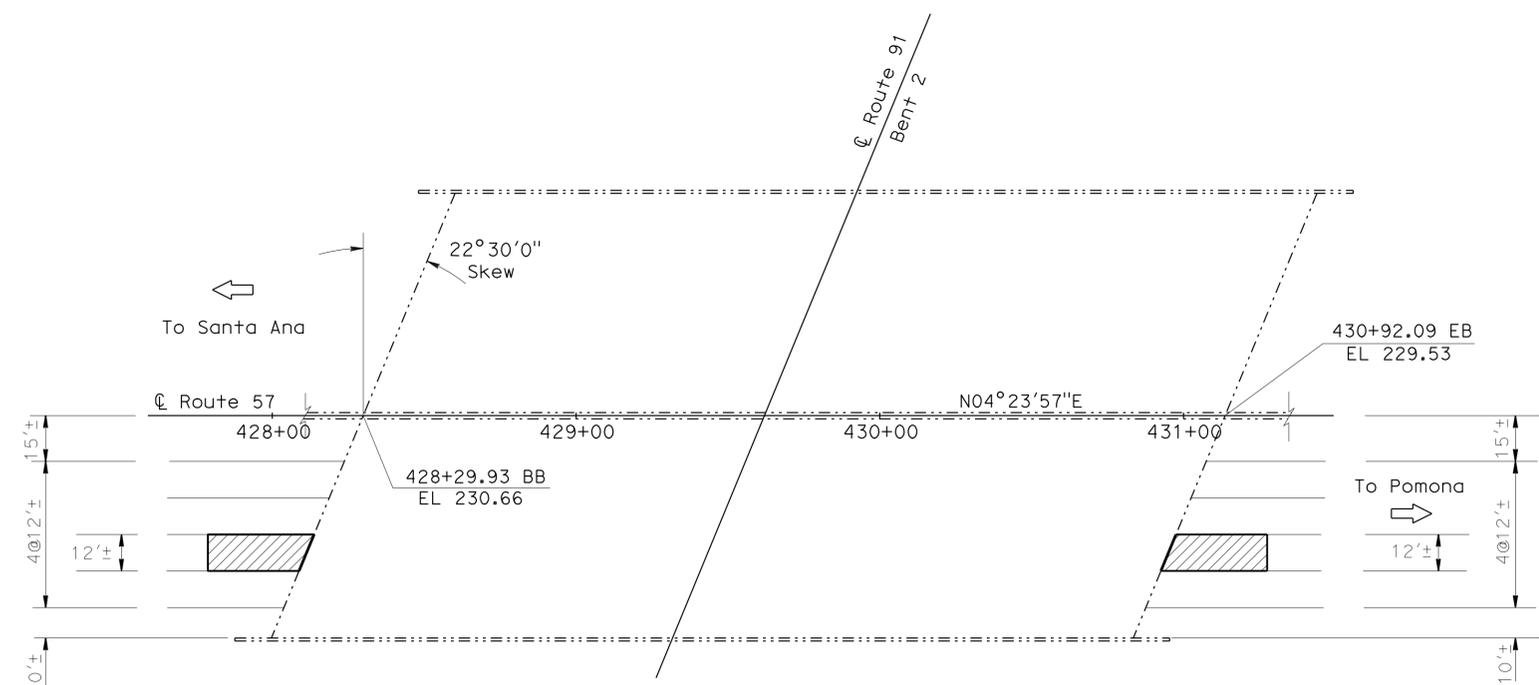
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
12	Ora	57	11.8/22.5	62	64

Rui Wang  
REGISTERED CIVIL ENGINEER DATE 10-29-09

12-14-09  
PLANS APPROVAL DATE

RUI WANG  
No. C52910  
Exp. 12/31/2010  
CIVIL  
STATE OF CALIFORNIA

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



**ROUTE 57/91 SEPARATION**  
BR. NO 55-0446 PM 15.58

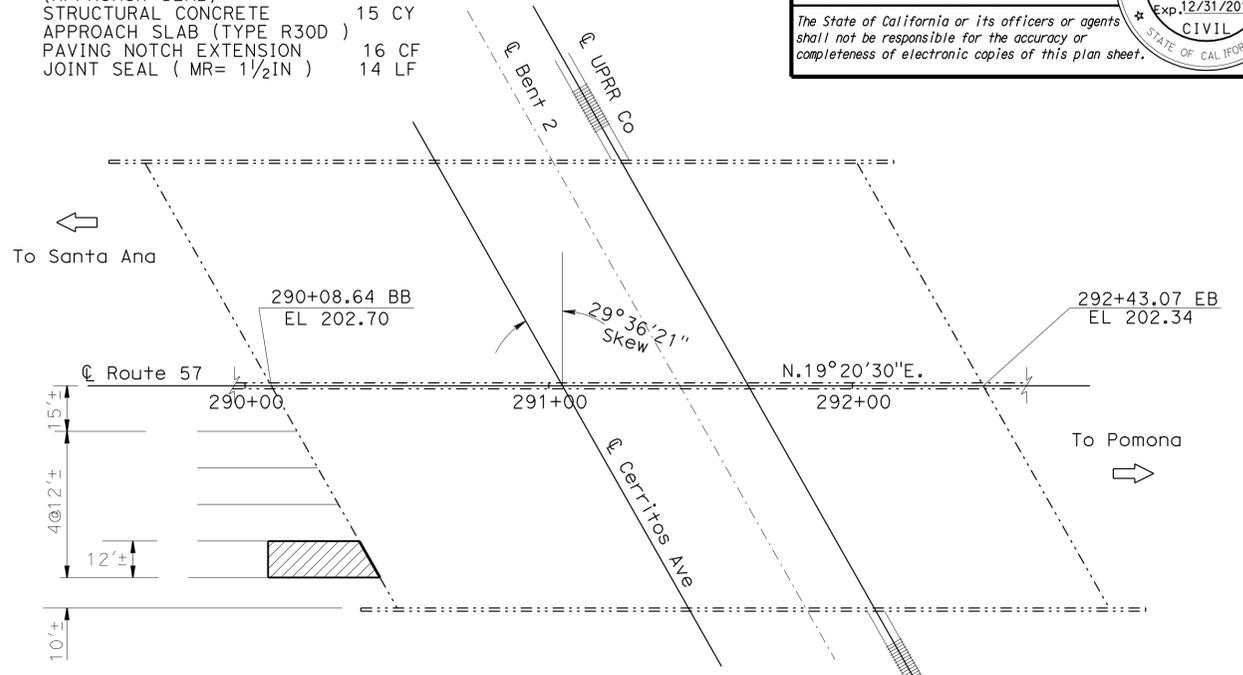
1"=30'

**QUANTITIES**  
ROUTE 57/91 SEPARATION BR NO 55-0446

AGGREGATE BASE (APPROACH SLAB)	3 CY
STRUCTURAL CONCRETE	30 CY
APPROACH SLAB (TYPE R30D)	30 CF
PAVING NOTCH EXTENSION	27 LF
JOINT SEAL (MR=1 1/2 IN)	27 LF

**QUANTITIES**  
DOUGLASS OVERHEAD BR NO 55-0337

AGGREGATE BASE (APPROACH SLAB)	2 CY
STRUCTURAL CONCRETE	15 CY
APPROACH SLAB (TYPE R30D)	16 CF
PAVING NOTCH EXTENSION	14 LF
JOINT SEAL (MR= 1 1/2 IN)	14 LF

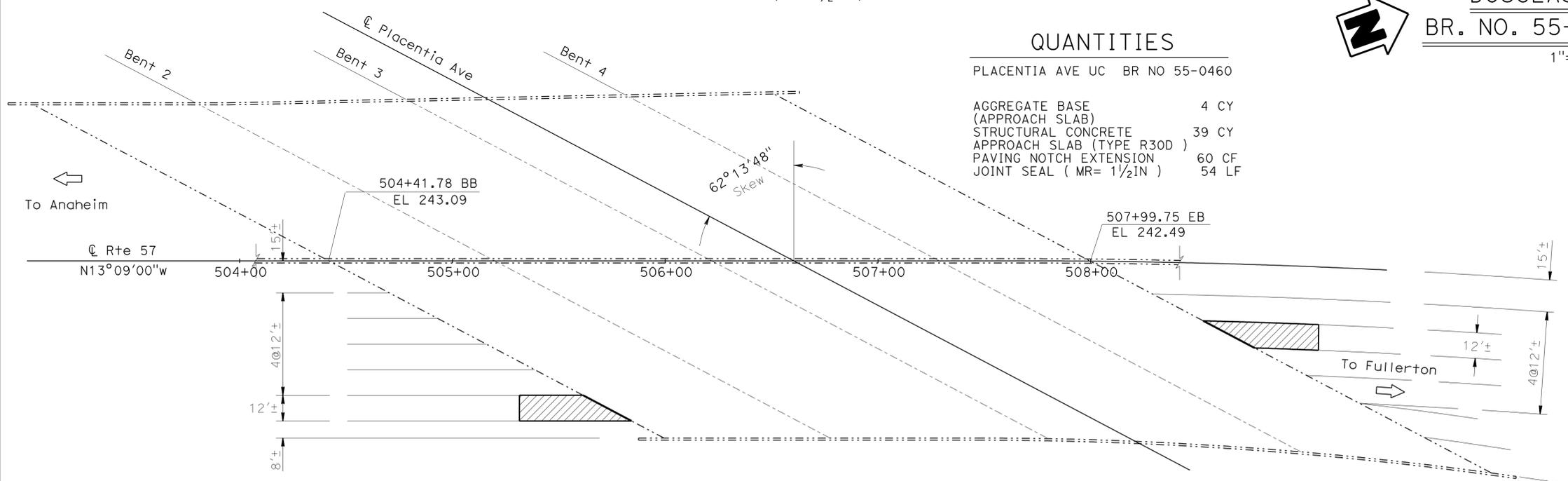


**DOUGLASS OVERHEAD**  
BR. NO. 55-0337 PM 12.98

1"=30'

**QUANTITIES**  
PLACENTIA AVE UC BR NO 55-0460

AGGREGATE BASE (APPROACH SLAB)	4 CY
STRUCTURAL CONCRETE	39 CY
APPROACH SLAB (TYPE R30D)	60 CF
PAVING NOTCH EXTENSION	54 LF
JOINT SEAL (MR= 1 1/2 IN)	54 LF



**PLACENTIA AVENUE UNDERCROSSING**  
BR. NO. 55-0460 RTE 57 PM 17.02

1"=30'

**LEGEND**

- Indicates Existing structure
- Location of existing joint seal removal and placement of new joint seal. Install paving notch extension.
- ▨ Indicated limits of new structure approach slab Type R(30D)

**NOTES**

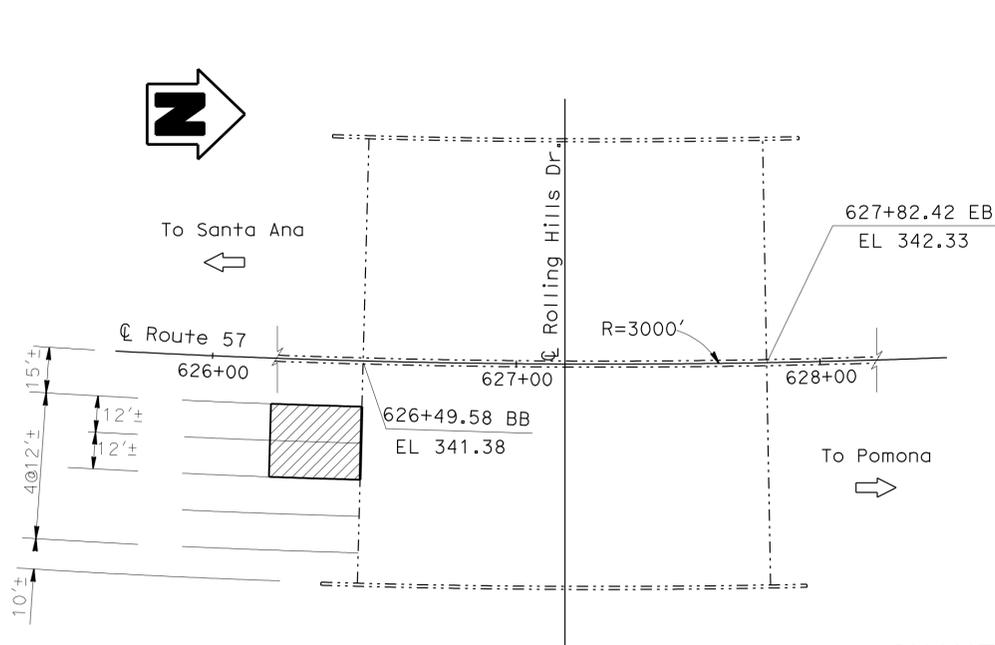
1. Seal must satisfy minimum Movement Rating (MR)
2. For details not shown, see RSP B6-21
3. FOR "JOINT SEAL TABLE" SEE "GENERAL PLAN NO 2"

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

X DESIGN ENGINEER	DESIGN	BY Rui Wang	CHECKED Mamunur Rahman	LOAD & RESISTANCE FACTOR DESIGN	LIVE LOADING: HL93 W/"LOW-BOY"; PERMIT DESIGN VEHICLE	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 19	BRIDGE NO.	ROUTE 57 BRIDGES MP 12.9-20.7 GENERAL PLAN NO 1	
	DETAILS	BY Hemant Barbhajya	CHECKED Rui Wang	LAYOUT	BY Rui Wang			CHECKED Mamunur Rahman		Various
	QUANTITIES	BY Rui Wang	CHECKED Mamunur Rahman	SPECIFICATIONS	BY X			CHECKED X		POST MILE 12.9-20.7

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No	TOTAL SHEETS
12	Ora	57	11.8/22.5	63	64

REGISTERED CIVIL ENGINEER **Rui Wang** DATE 10-29-09  
 PLANS APPROVAL DATE 12-14-09  
 No. C52910 Exp. 12/31/2010  
 RUI WANG  
 CIVIL  
 STATE OF CALIFORNIA

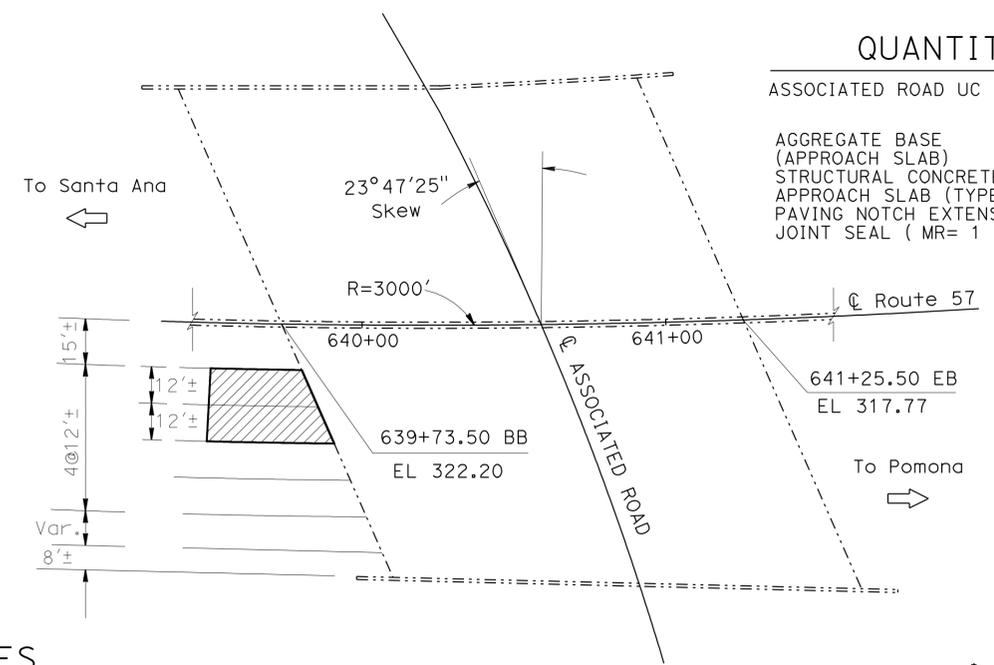


**ROLLING HILLS DRIVE UNDERCROSSING**  
BR. NO. 55 0483 MP 19.33

1'=30'

**QUANTITIES**  
ROLLING HILL DRIVE BR NO 55-0483

AGGREGATE BASE (APPROACH SLAB)	3 CY
STRUCTURAL CONCRETE	28 CY
APPROACH SLAB (TYPE R30D)	27 CF
PAVING NOTCH EXTENSION	24 LF
JOINT SEAL (MR= 1 IN)	24 LF

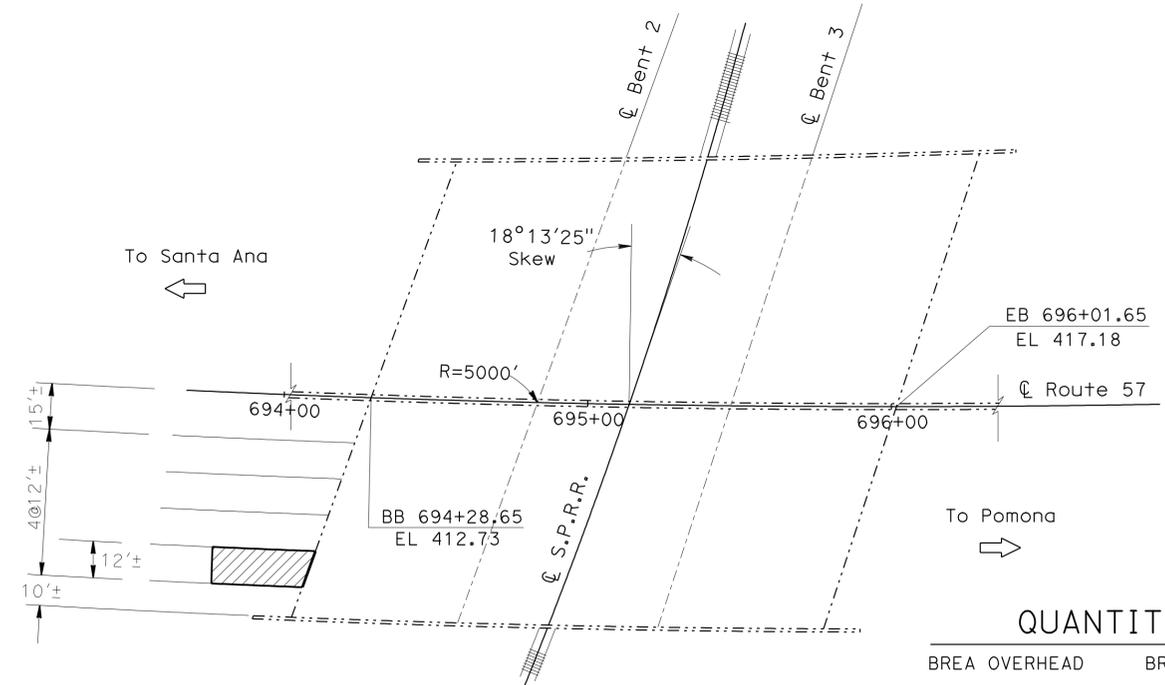


**ASSOCIATED ROAD UNDERCROSSING**  
BR. NO. 55 0466 MP 19.58

1'=30'

**QUANTITIES**  
ASSOCIATED ROAD UC BR NO 55-0466

AGGREGATE BASE (APPROACH SLAB)	3 CY
STRUCTURAL CONCRETE	30 CY
APPROACH SLAB (TYPE R30D)	29 CF
PAVING NOTCH EXTENSION	27 LF
JOINT SEAL (MR= 1 IN)	27 LF



**BREA OVERHEAD**  
BR. NO. 55 0482 MP 20.61

1'=30'

**QUANTITIES**  
BREA OVERHEAD BR NO 55-0482

AGGREGATE BASE (APPROACH SLAB)	2 CY
STRUCTURAL CONCRETE	15 CY
APPROACH SLAB (TYPE R30D)	14 CF
PAVING NOTCH EXTENSION	13 LF
JOINT SEAL (MR= 1 IN)	13 LF

**JOINT SEAL TABLE**

LOCATION	Min "MR" (in)	APPROX LENGTH (ft)	
Douglass OH	Abut 1	1.5	14.0
Route 57/91 SEP	Abut 1	1.5	13.5
	Abut 2	1.5	13.5
PLACENTIA AVE UC	Abut 1	1.5	27.0
	Abut 2	1.5	27.0
ROLLING HILLS DR UC	Abut 1	match existing 1.0	24.0
ASSOCIATED ROAD UC	Abut 1	match existing 1.0	27.0
BREA OH	Abut 1	1.0	13.0

**INDEX TO PLANS**

- GENERAL PLAN NO. 1
- GENERAL PLAN NO. 2
- STRUCTURE APPROACH TYPE R(30D)

**LEGEND**

- Indicates Existing Structure
- Location of existing joint seal removal and placement of new joint seal. Paving notch extension at new approach slab only
- ▨ Indicated limits of new structure approach slab Type R(30D)

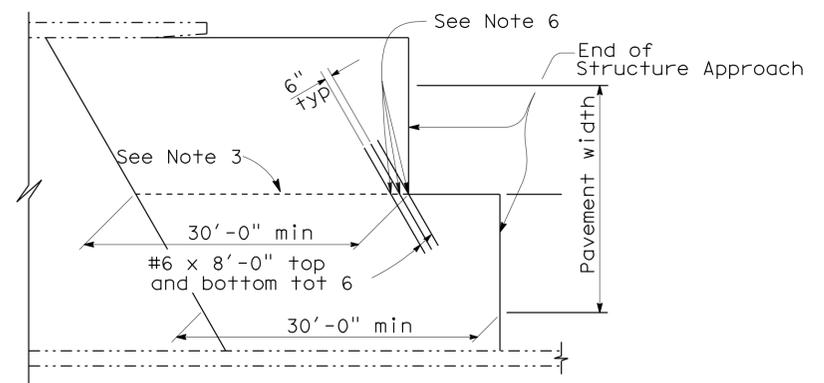
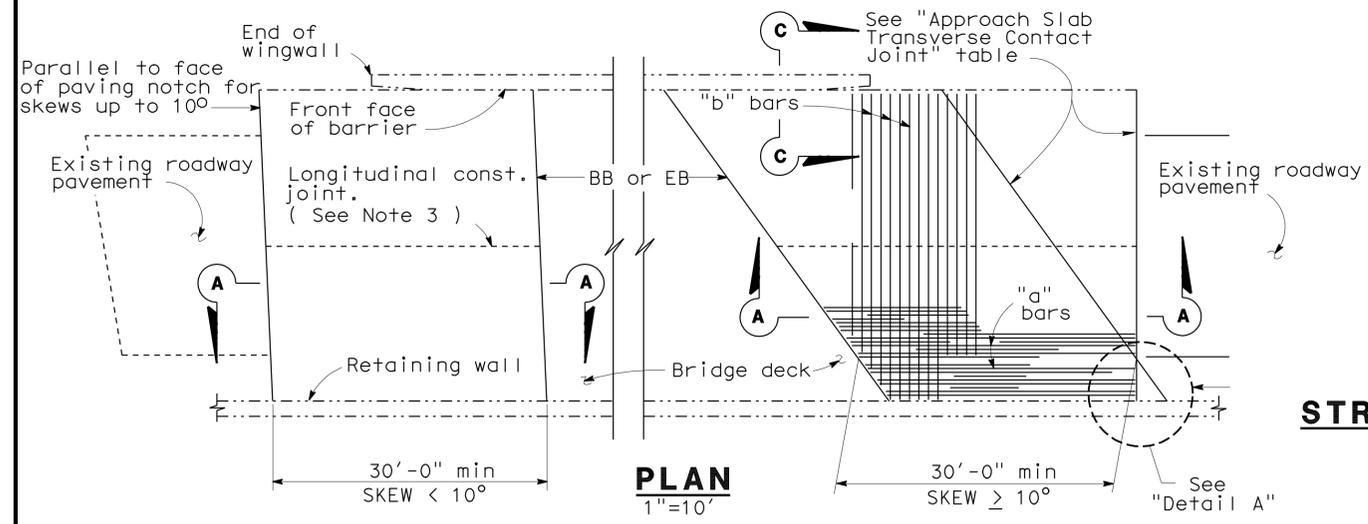
X DESIGN ENGINEER	DESIGN	BY Rui Wang	CHECKED Mamunur Rahman	LOAD & RESISTANCE FACTOR DESIGN	LIVE LOADING: HL93 W/"LOW-BOY"; PERMIT DESIGN VEHICLE	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES STRUCTURE DESIGN DESIGN BRANCH 19	BRIDGE NO.	Various	ROUTE 57 BRIDGES MP 12.9-20.7 GENERAL PLAN NO 2
	DETAILS	BY Hemant Barbhaiya	CHECKED Rui Wang	LAYOUT	BY Rui Wang			POST MILE	12.9-20.7	
	QUANTITIES	BY Rui Wang	CHECKED Mamunur Rahman	SPECIFICATIONS	BY X			PLANS AND SPECS COMPARED X	REVISION DATES	

STRUCTURES DESIGN GENERAL PLAN SHEET (ENGLISH) (REV. 10/25/05) ORIGINAL SCALE IN INCHES FOR REDUCED PLANS 0 1 2 3  
 CU 12 EA OJ7301 DISREGARD PRINTS BEARING EARLIER REVISION DATES  
 FILE => 57-var-a-gp02.dgn STRUCTURES DESIGN GENERAL PLAN SHEET (ENGLISH) (REV.07-24-06)

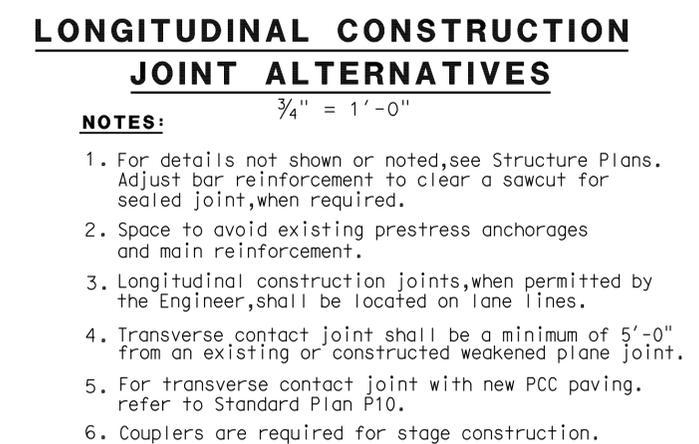
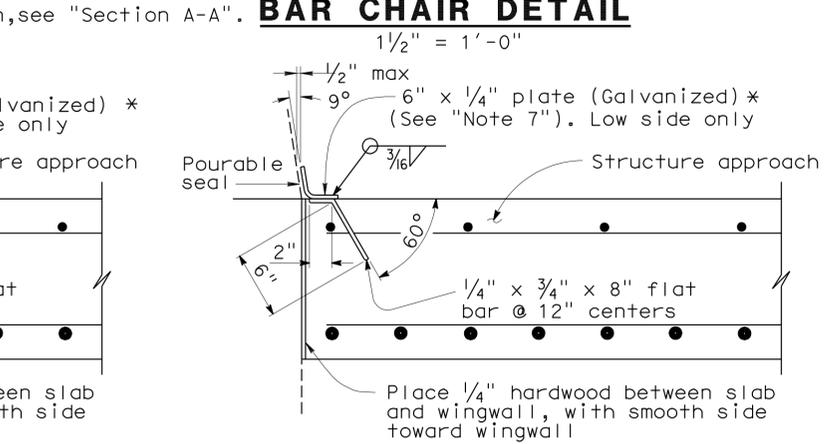
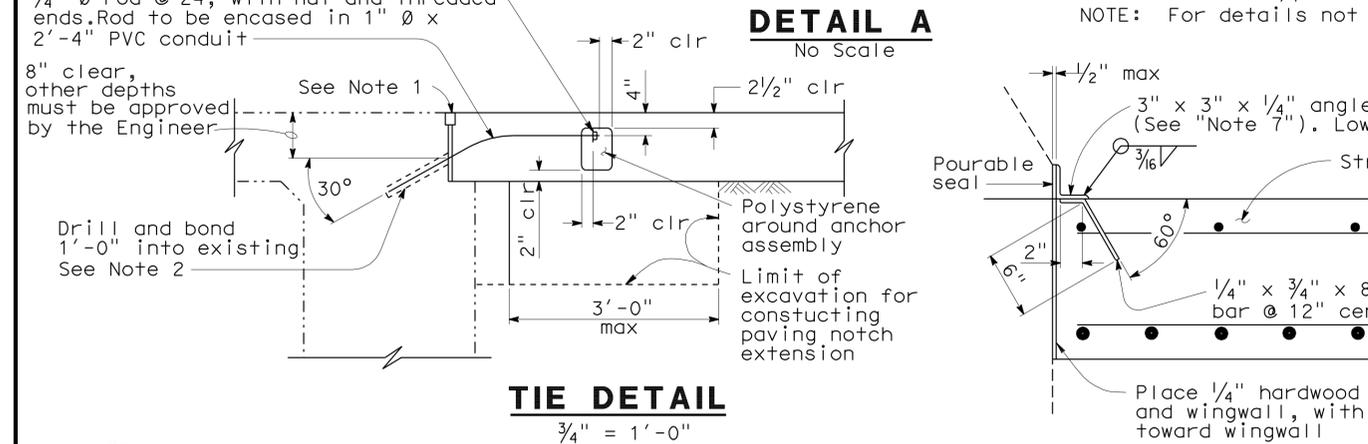
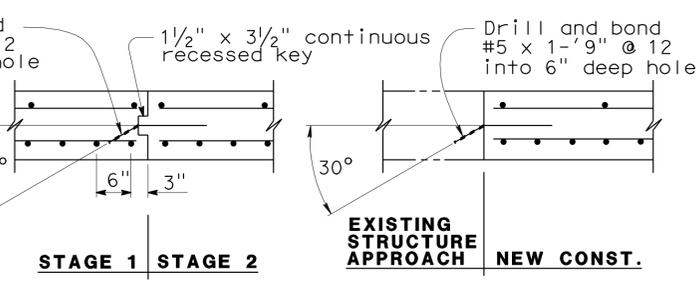
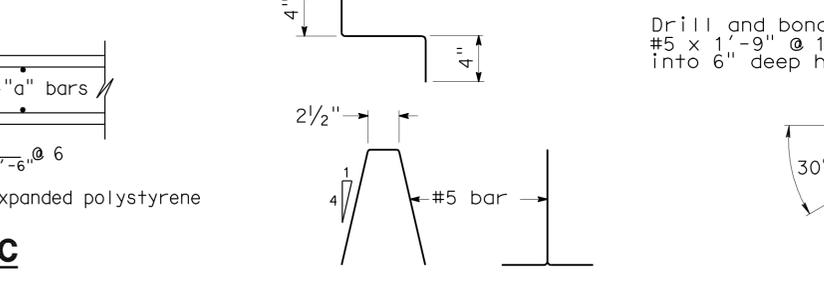
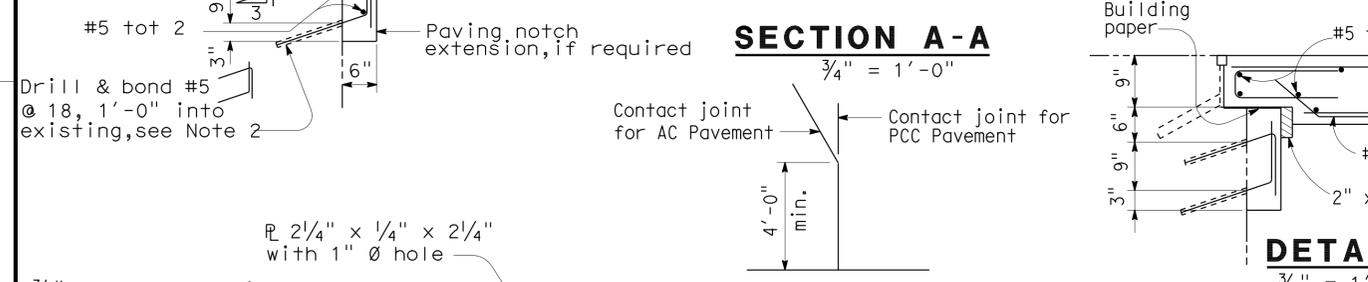
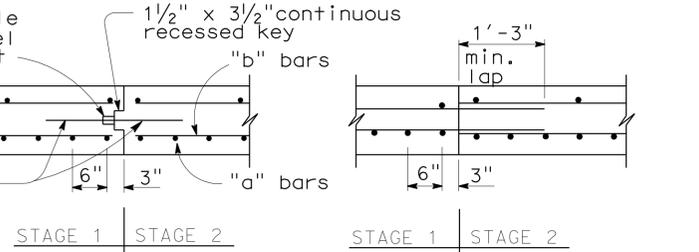
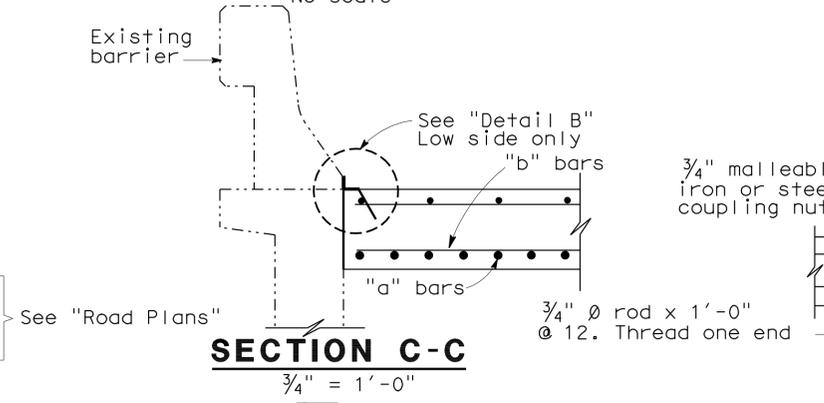
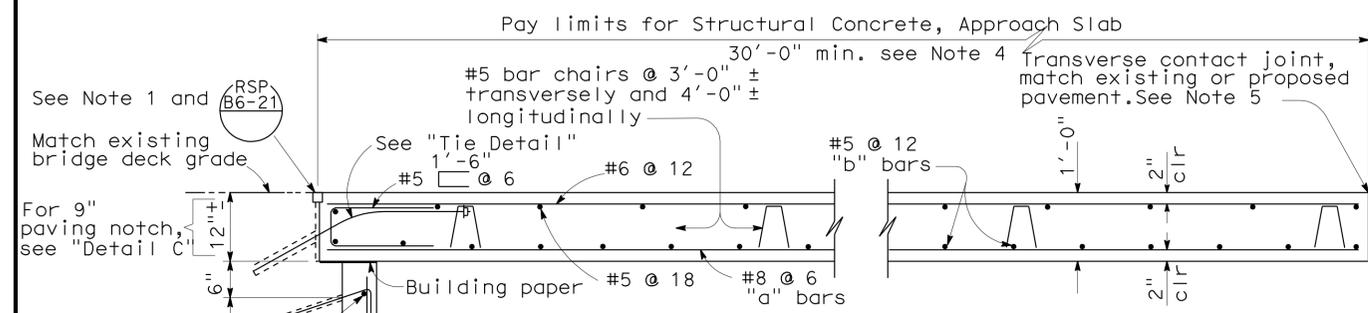
DIST.	COUNTY	ROUTE	MILE POST TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
12	Ora	57	11.8/22.5	64	64

REGISTERED ENGINEER - CIVIL  
 RUI WANG  
 No. C52910  
 Exp. 12/31/2010  
 CIVIL  
 STATE OF CALIFORNIA

10-29-09  
 PLANS APPROVAL DATE  
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APPROACH SLAB TRANSVERSE CONTACT JOINT		
APPROACH SKEW	WITH AC ROADWAY PAVEMENT	WITH PCC ROADWAY PAVEMENT
< 10°	Parallel to face of paving notch	Parallel to face of paving notch
10° - 45°	Parallel to face of P N use (Detail A)	Stagger lines 24' to 36' apart
> 45°	Parallel to face of P N use (Detail A)	Stagger at each lane line



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

NOTE: For details not shown, see "Section A-A".

- NOTES:**
- For details not shown or noted, see Structure Plans. Adjust bar reinforcement to clear a sawcut for sealed joint, when required.
  - Space to avoid existing prestress anchorages and main reinforcement.
  - Longitudinal construction joints, when permitted by the Engineer, shall be located on lane lines.
  - Transverse contact joint shall be a minimum of 5'-0" from an existing or constructed weakened plane joint.
  - For transverse contact joint with new PCC paving, refer to Standard Plan P10.
  - Couplers are required for stage construction.
  - End angle or plate at beginning of barrier transition, end of wingwall or end of structure approach as applicable.

STANDARD DRAWING			
RELEASE DATE 3/14/05	DESIGN BY M. TRAFFALIS	CHECKED E. THORKILDSEN	RELEASED BY
FILE NO. xs3-140e	DETAILS BY R. YEE	CHECKED E. THORKILDSEN	
	SUBMITTED BY M. HA	DRAWING DATE 8/92	OFFICE CHIEF

STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES	BRIDGE NO. Various	ROUTE 57 BRIDGES MP 12.98-20.75
		MILE POST 12.9-20.7	STRUCTURE APPROACH TYPE R(30D)

CU 12 EA 0J7301	DISREGARD PRINTS BEARING EARLIER REVISION DATES	REVISION DATES (PRELIMINARY STAGE ONLY)	SHEET 3 OF 3
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