

INDEX OF PLANS

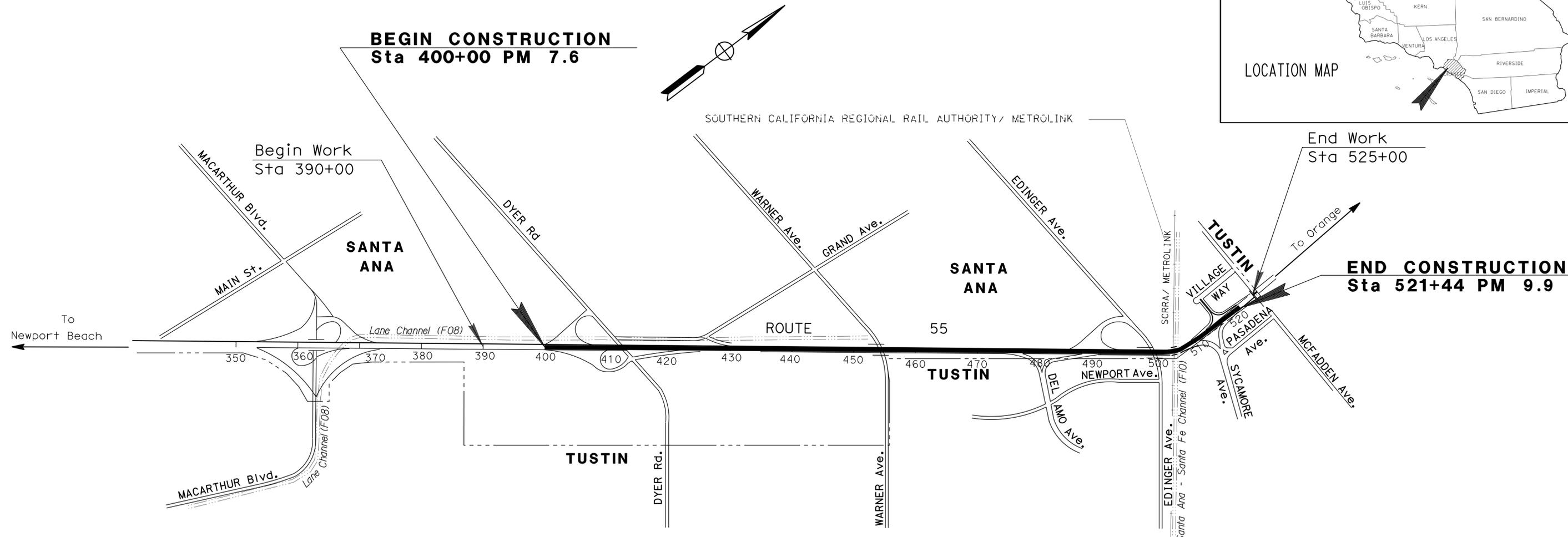
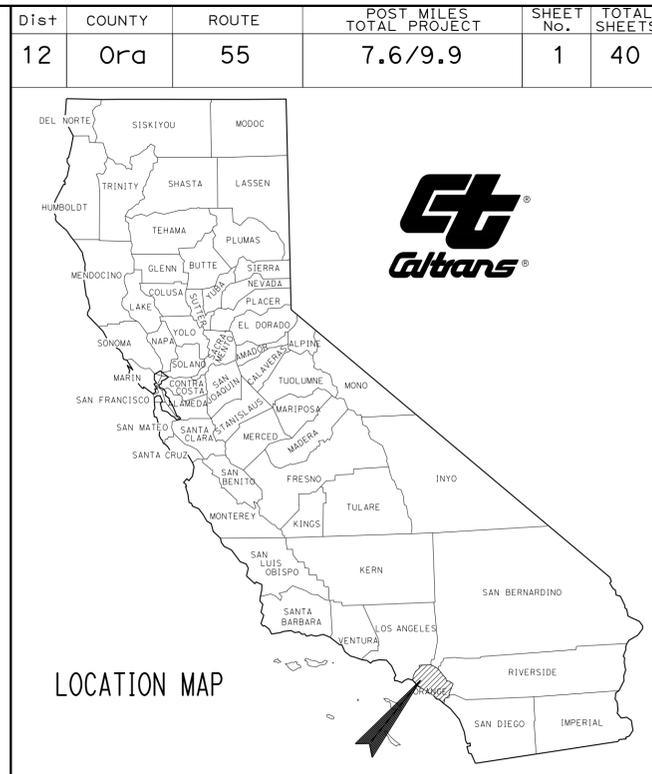
SHEET NO.	DESCRIPTION
1	TITLE AND LOCATION MAP
2-3	DRAINAGE PLANS, PROFILES, DETAILS AND QUANTITIES
4-10	UTILITY PLANS
11	CONSTRUCTION AREA SIGNS
12-14	TRAFFIC HANDLING PLANS
15-21	IRRIGATION PLANS AND QUANTITIES
22-31	PLANTING LEGEND, PLANS, DETAILS, AND QUANTITIES
32-40	REVISED AND NEW STANDARD PLANS

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

STATE OF CALIFORNIA **ACNHP-P055(057)E**  
**DEPARTMENT OF TRANSPORTATION**  
**PROJECT PLANS FOR CONSTRUCTION ON**  
**STATE HIGHWAY**

**IN ORANGE COUNTY**  
**IN SANTA ANA AND TUSTIN**  
**FROM 0.2 MILE SOUTH OF DYER ROAD UNDERCROSSING**  
**TO 0.1 MILE SOUTH OF MCFADDEN AVENUE OVERCROSSING**

TO BE SUPPLEMENTED BY STANDARD PLANS DATED 2010



PROJECT MANAGER  
**ERIC DICKSON**  
 SENIOR LANDSCAPE ARCHITECT  
**ERIC DICKSON**

*Uthmaniyah* 05/14/14  
 PROJECT ENGINEER DATE  
 LICENSED LANDSCAPE ARCHITECT  
 05/29/14  
 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.	<b>12-OJ6404</b>
PROJECT ID	<b>1212000103</b>

DATE PLOTTED => 04-SEP-2014  
 TIME PLOTTED => 09:50  
 LAST REVISION 08-25-14

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

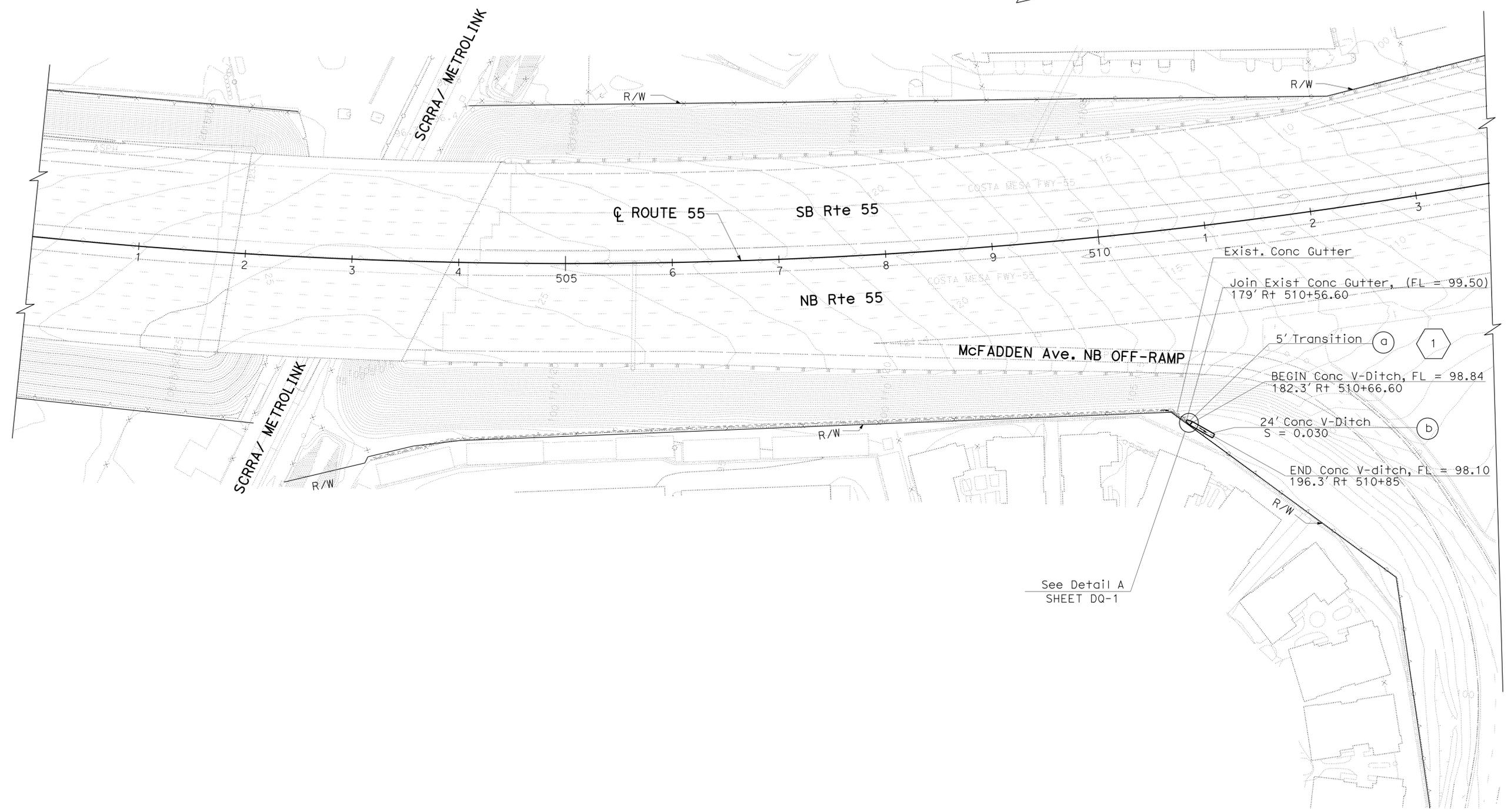
FUNCTIONAL SUPERVISOR: KATHY LOWE  
 CALCULATED-DRAWN BY: MY-LINH DUVAN  
 CHECKED BY: TAN T NGUYEN  
 REVISIONS:  
 MLD: 05/14/14  
 REVISOR: MY-LINH DUVAN  
 DATE: 05/14/14

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

**LEGEND:**  
 DRAINAGE SYSTEM No.  
 DRAINAGE UNIT

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	55	7.6/9.9	2	40

REGISTERED CIVIL ENGINEER: *My Linh Duvan* DATE: 05/14/14  
 PLANS APPROVAL DATE: 05/29/14  
 REGISTERED PROFESSIONAL ENGINEER: MY-LINH DUVAN  
 No. C54928 Exp. 6/30/2016  
 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.



See Detail A  
 SHEET DQ-1

**DRAINAGE PLAN**  
 SCALE 1" = 50'

APPROVED FOR DRAINAGE WORK ONLY

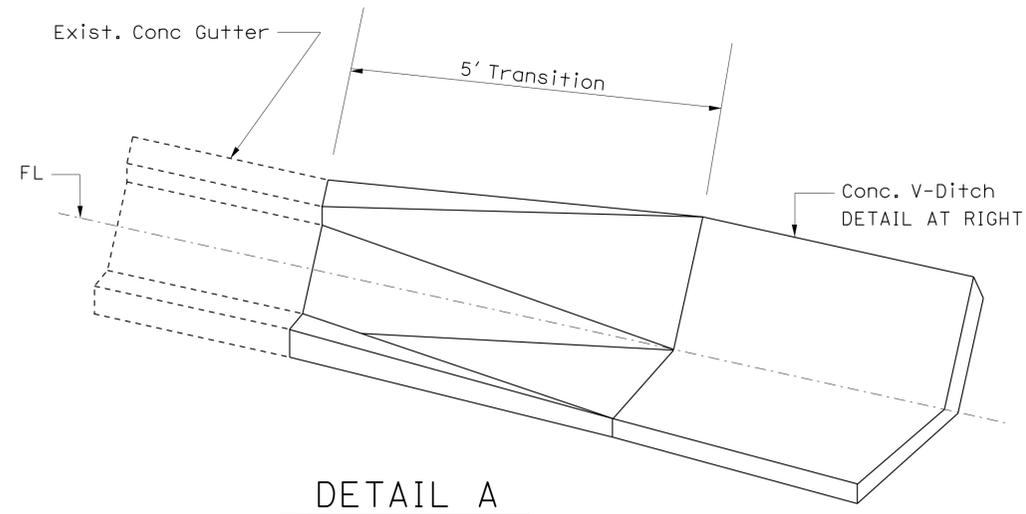
**D-1**

LAST REVISION: 05-14-14 09:50  
 DATE PLOTTED => 04-SEP-2014  
 TIME PLOTTED => 09:50

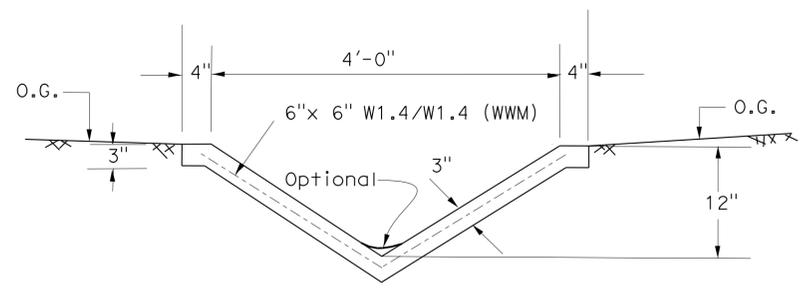
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	55	7.6/9.9	3	40

My Linh Duvan 05/14/14  
 REGISTERED CIVIL ENGINEER DATE  
 05/29/14  
 PLANS APPROVAL DATE

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 OR AGENTS SHALL NOT BE RESPONSIBLE FOR  
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**DETAIL A**  
 DRAINAGE SYSTEM No. 1 a



**TYPICAL SECTION  
 Conc V-DITCH**  
 DRAINAGE SYSTEM No. 1 b

**DRAINAGE DETAILS**

NO SCALE

**DRAINAGE QUANTITIES**

DRAINAGE SHEET No.	DRAINAGE SYSTEM No.	DRAINAGE UNIT	CONCRETE (DITCH LINING)		DESCRIPTION	STATION	DRAINAGE UNIT	DRAINAGE SYSTEM No.	DRAINAGE SHEET No.
			CY	CY					
D-1	1	a	0.24	0.58	5' Transition	From 179' Rt 510+56.60 To 182.3' Rt 510+66.60	a	1	D-1
		b	1.19	2.75	24' Conc V-ditch	From 182.3' Rt 510+66.60 To 196.3' Rt 510+85	b		
	SHEET TOTAL			1.43	3.33				

**DRAINAGE DETAILS AND QUANTITIES**

**DQ-1**

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**Caltrans**  
 HYDRAULICS  
 FUNCTIONAL SUPERVISOR: KATHY LOWE  
 MY-LINH DUVAN  
 TAN T NGUYEN  
 MLD  
 05/14/14  
 REVISIONS: 05/14/14

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	55	7.6/9.9	4	40
Kevin D. Pham 05/14/14 REGISTERED CIVIL ENGINEER DATE 05/29/14 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>					

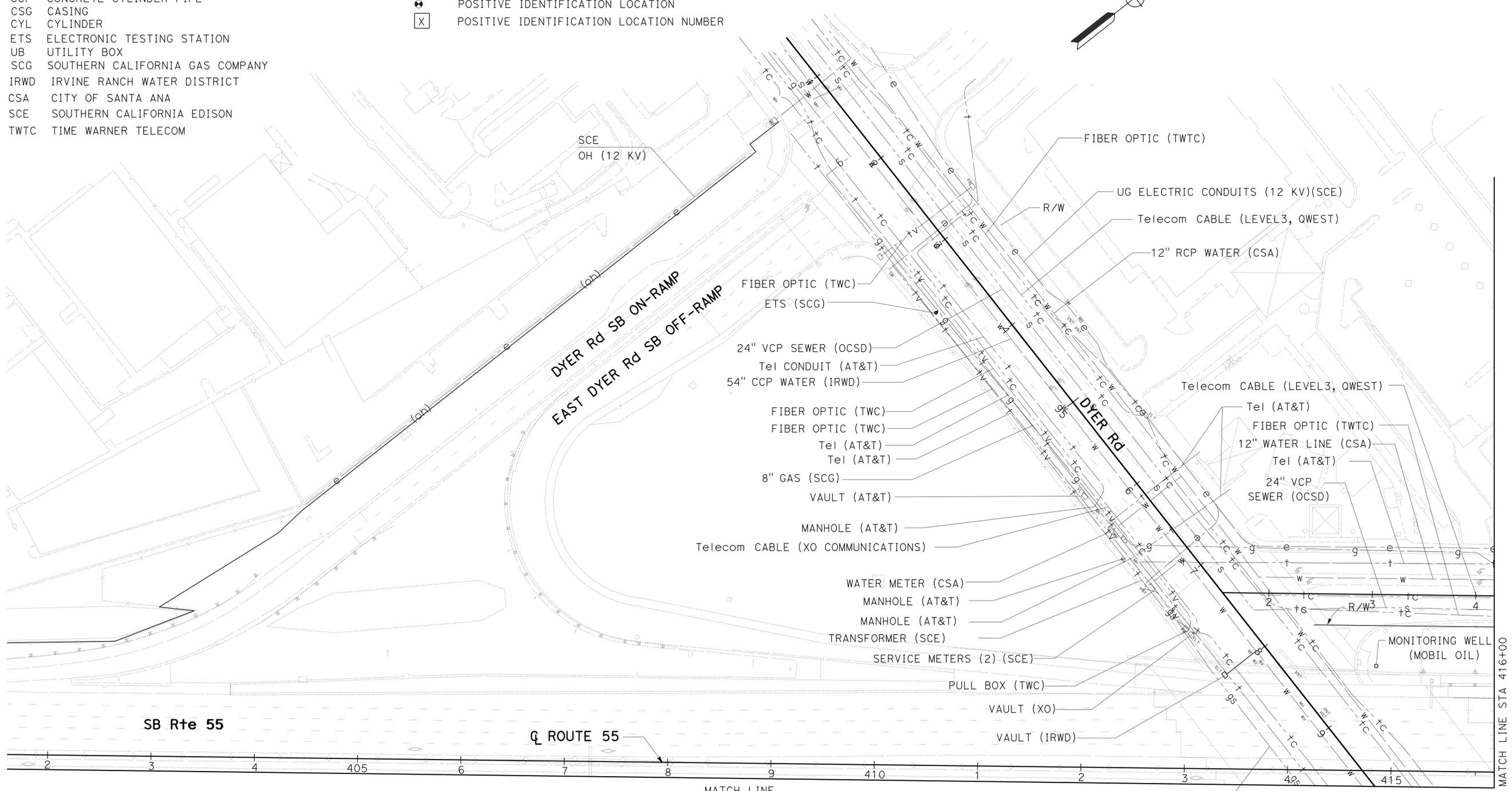
- NOTES:**
- FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
  - LOCATIONS OF UTILITY FACILITIES SHOWN ON THESE PLANS ARE APPROXIMATE AND SHALL BE VERIFIED BY CONTRACTOR PRIOR TO CONSTRUCTION.
  - ALL EXISTING UTILITY FACILITIES NOT SHOWN SHALL BE REMAIN IN PLACE.

- ABBREVIATIONS:**
- MWD METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA
  - AT&T AMERICAN TELEGRAPH AND TELEPHONE COMPANY
  - OCSD ORANGE COUNTY SANITATION DISTRICT
  - TWC TIME WARNER CABLE
  - XO XO COMMUNICATIONS
  - LEVEL 3 LEVEL 3 COMMUNICATIONS
  - Telecom TELECOMMUNICATIONS

- ABBREVIATIONS:**
- S+I STEEL
  - CCP CONCRETE CYLINDER PIPE
  - CSG CASING
  - CYL CYLINDER
  - ETS ELECTRONIC TESTING STATION
  - UB UTILITY BOX
  - SCG SOUTHERN CALIFORNIA GAS COMPANY
  - IRWD IRVINE RANCH WATER DISTRICT
  - CSA CITY OF SANTA ANA
  - SCE SOUTHERN CALIFORNIA EDISON
  - TWTC TIME WARNER TELECOM

- LEGENDS:**
- ⊕ POSITIVE IDENTIFICATION LOCATION
  - ⊗ POSITIVE IDENTIFICATION LOCATION NUMBER

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**Caltrans** UTILITY ENGINEERING  
 FUNCTIONAL SUPERVISOR: CHRISTOPHER LE  
 CHECKED BY: KEVIN PHAM  
 DESIGNED BY: KEVIN PHAM  
 REVISIONS: M PHAM 4-11-14  
 DATE REVISED: 4-11-14



MATCH LINE STA 416+00  
 SEE SHEET U-3

**UTILITY PLAN**  
 SCALE 1"=50'  
**U-1**

APPROVED FOR UTILITY INFORMATION ONLY

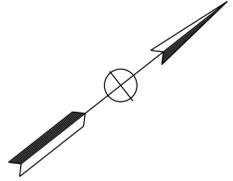
NOTE:  
 FOR ACCURATE RIGHT OF WAY DATA, CONTACT  
 RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	55	7.6/9.9	5	40

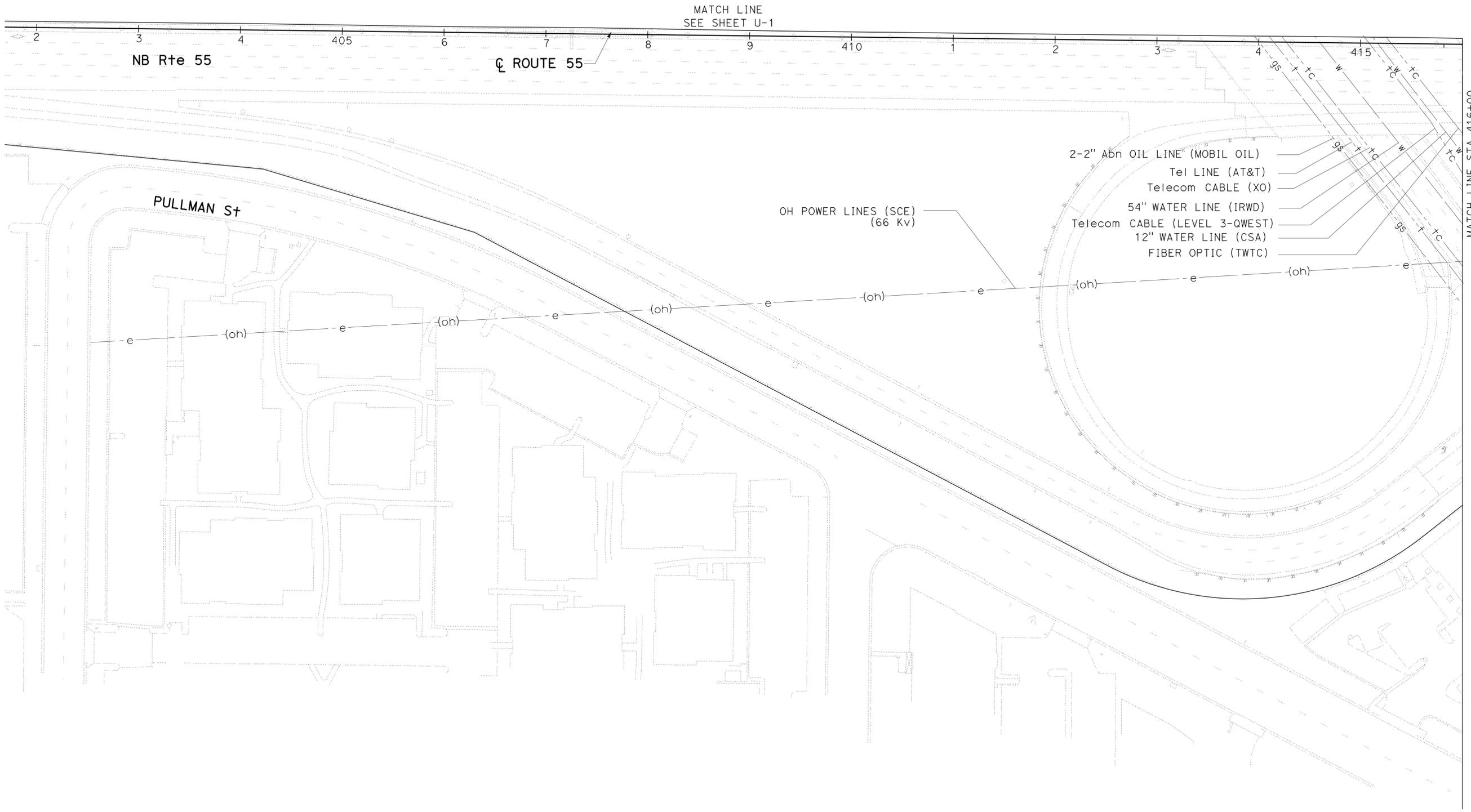
Kevin D. Pham 05/14/14  
 REGISTERED CIVIL ENGINEER DATE  
 05/29/14  
 PLANS APPROVAL DATE

KEVIN D. PHAM  
 No. C61965  
 Exp. 9/30/15  
 CIVIL  
 STATE OF CALIFORNIA

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STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**Caltrans** UTILITY ENGINEERING  
 FUNCTIONAL SUPERVISOR: CHRISTOPHER LE  
 CHECKED BY: KEVIN PHAM  
 DESIGNED BY: MINH PHAM  
 REVISIONS: M PHAM 4-11-14  
 DATE REVISED:



APPROVED FOR UTILITY INFORMATION ONLY

**UTILITY PLAN**  
 SCALE 1"=50'  
**U-2**

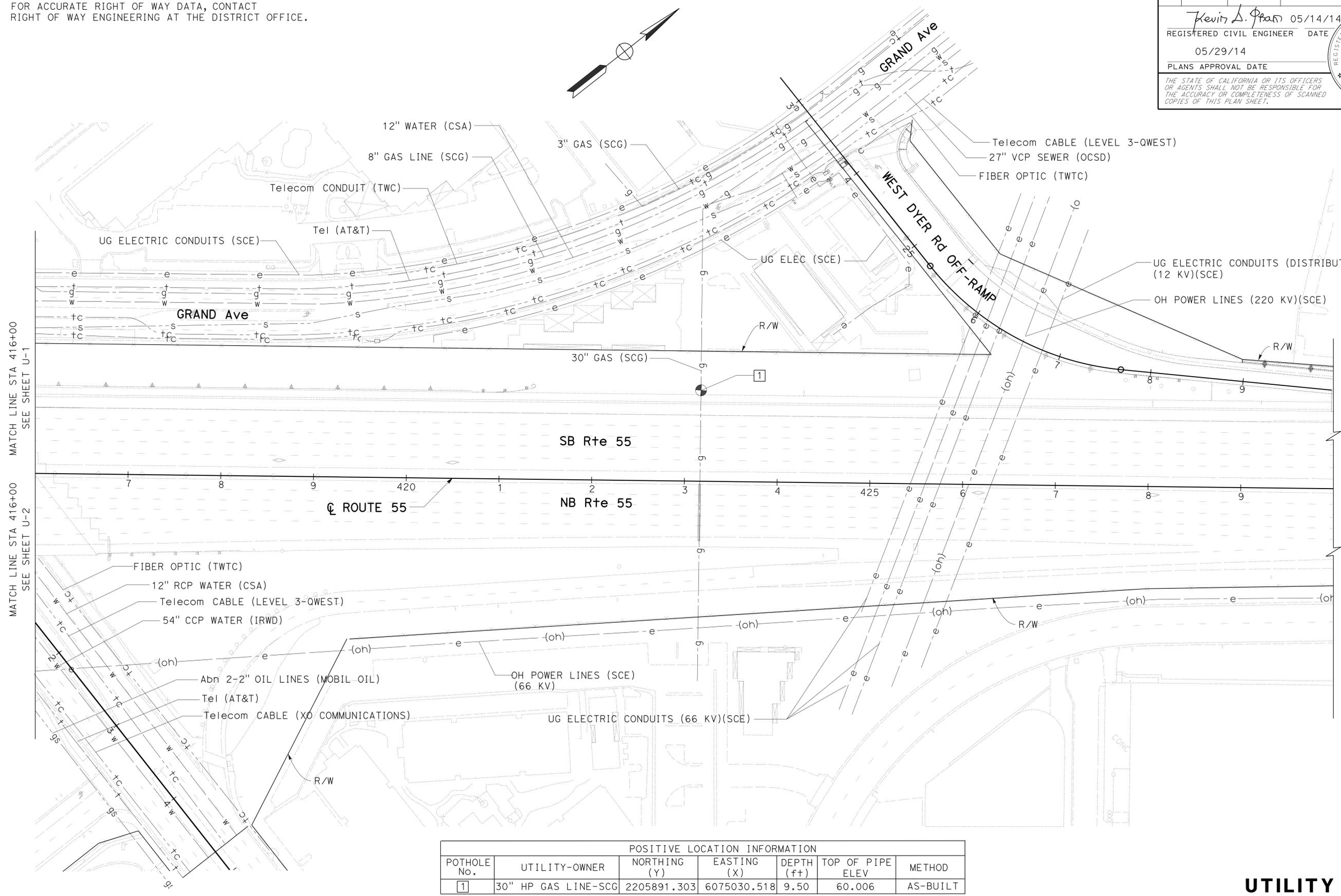
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	55	7.6/9.9	6	40

Kevin D. Pham 05/14/14  
 REGISTERED CIVIL ENGINEER DATE  
 05/29/14  
 PLANS APPROVAL DATE

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**NOTE:**  
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STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**Utah** UTILITY ENGINEERING  
 FUNCTIONAL SUPERVISOR: CHRISTOPHER LE  
 CALCULATED/DESIGNED BY: KEVIN PHAM  
 CHECKED BY: KEVIN PHAM  
 REVISIONS: M PHAM 4-11-14  
 DATE REVISED: 4-11-14



POSITIVE LOCATION INFORMATION						
POTHOLE No.	UTILITY-OWNER	NORTHING (Y)	EASTING (X)	DEPTH (ft)	TOP OF PIPE ELEV	METHOD
1	30" HP GAS LINE-SCG	2205891.303	6075030.518	9.50	60.006	AS-BUILT

**UTILITY PLAN**  
 SCALE 1"=50'  
**U-3**

APPROVED FOR UTILITY INFORMATION ONLY

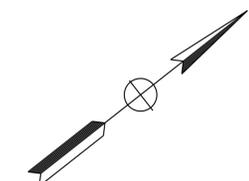
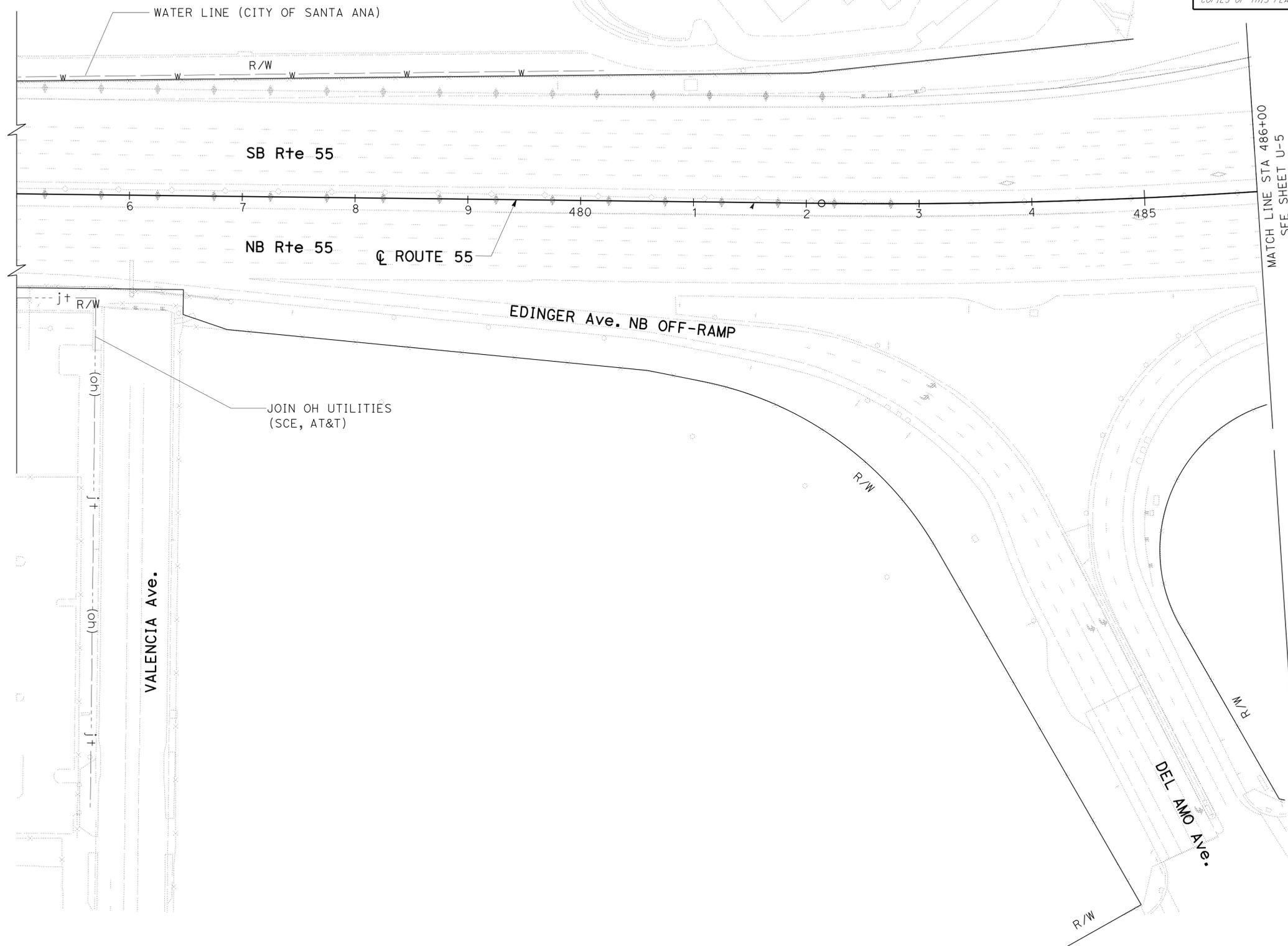
NOTE:  
 FOR ACCURATE RIGHT OF WAY DATA, CONTACT  
 RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	55	7.6/9.9	7	40

Kevin D. Pham 05/14/14  
 REGISTERED CIVIL ENGINEER DATE  
 05/29/14  
 PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER  
 KEVIN D. PHAM  
 No. C61965  
 Exp. 9/30/15  
 CIVIL  
 STATE OF CALIFORNIA

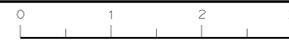
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STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	FUNCTIONAL SUPERVISOR	CHECKED BY	MINH PHAM	REVISOR BY	M PHAM
UTILITY ENGINEERING	CHRISTOPHER LE	CALCULATED-DESIGNED BY	KEVIN PHAM	DATE REVISED	4-11-14

APPROVED FOR UTILITY INFORMATION ONLY

**UTILITY PLAN**  
 SCALE 1"=50'  
**U-4**

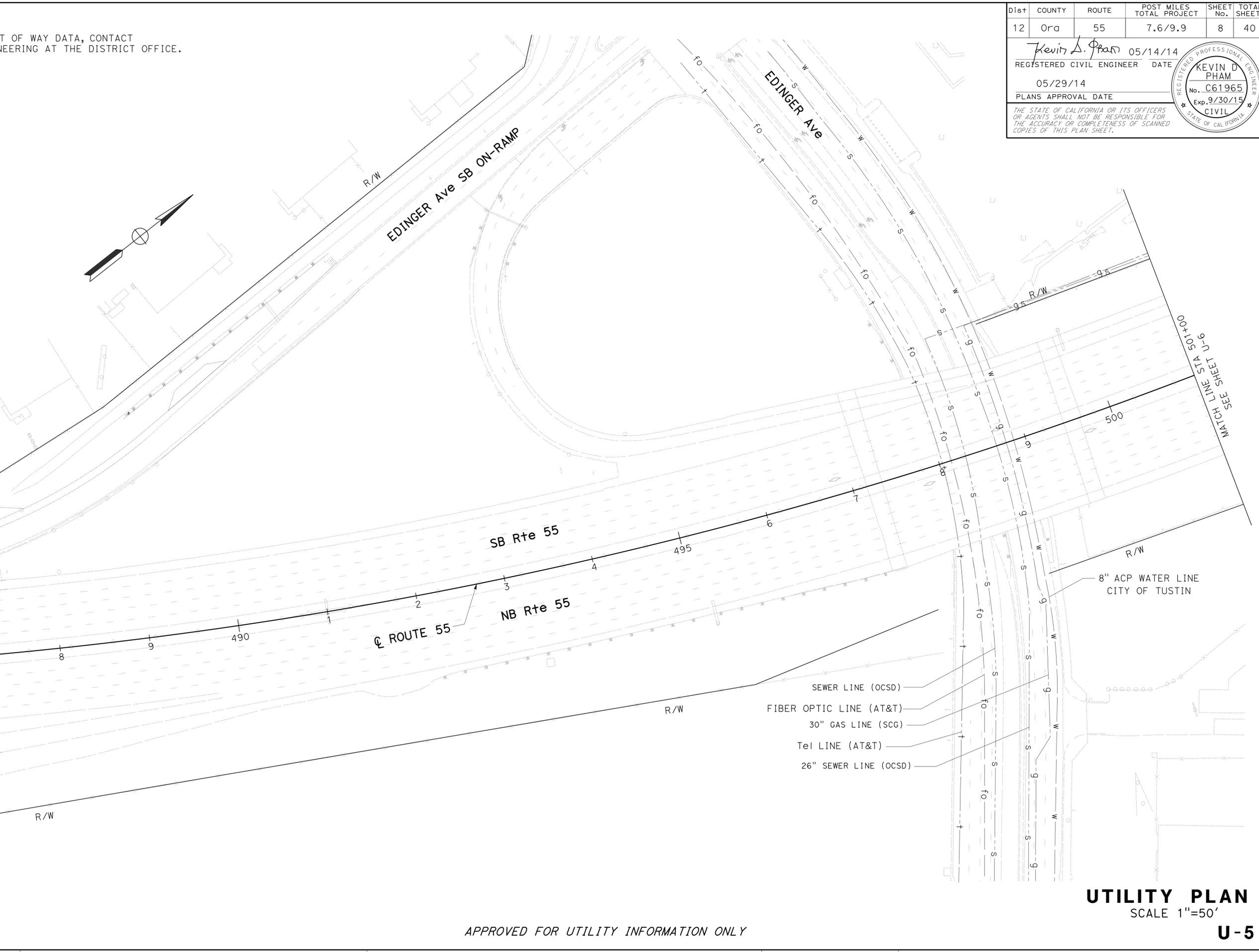


STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**Caltrans** UTILITY ENGINEERING

FUNCTIONAL SUPERVISOR: CHRISTOPHER LE  
 CHECKED BY: KEVIN PHAM  
 DESIGNED BY: M PHAM  
 DATE REVISED: 4-11-14

REVISIONS:  
 1. DATE: 05/29/14  
 BY: KEVIN PHAM  
 DESCRIPTION: PLANS APPROVAL DATE

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



Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	55	7.6/9.9	8	40

Kevin D. Pham 05/14/14  
 REGISTERED CIVIL ENGINEER DATE  
 05/29/14  
 PLANS APPROVAL DATE

KEVIN D. PHAM  
 No. C61965  
 Exp. 9/30/15  
 CIVIL  
 STATE OF CALIFORNIA

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APPROVED FOR UTILITY INFORMATION ONLY

**UTILITY PLAN**  
 SCALE 1"=50'

**U-5**

**NOTE:**

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

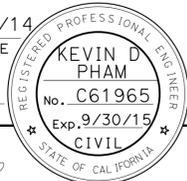
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	55	7.6/9.9	9	40

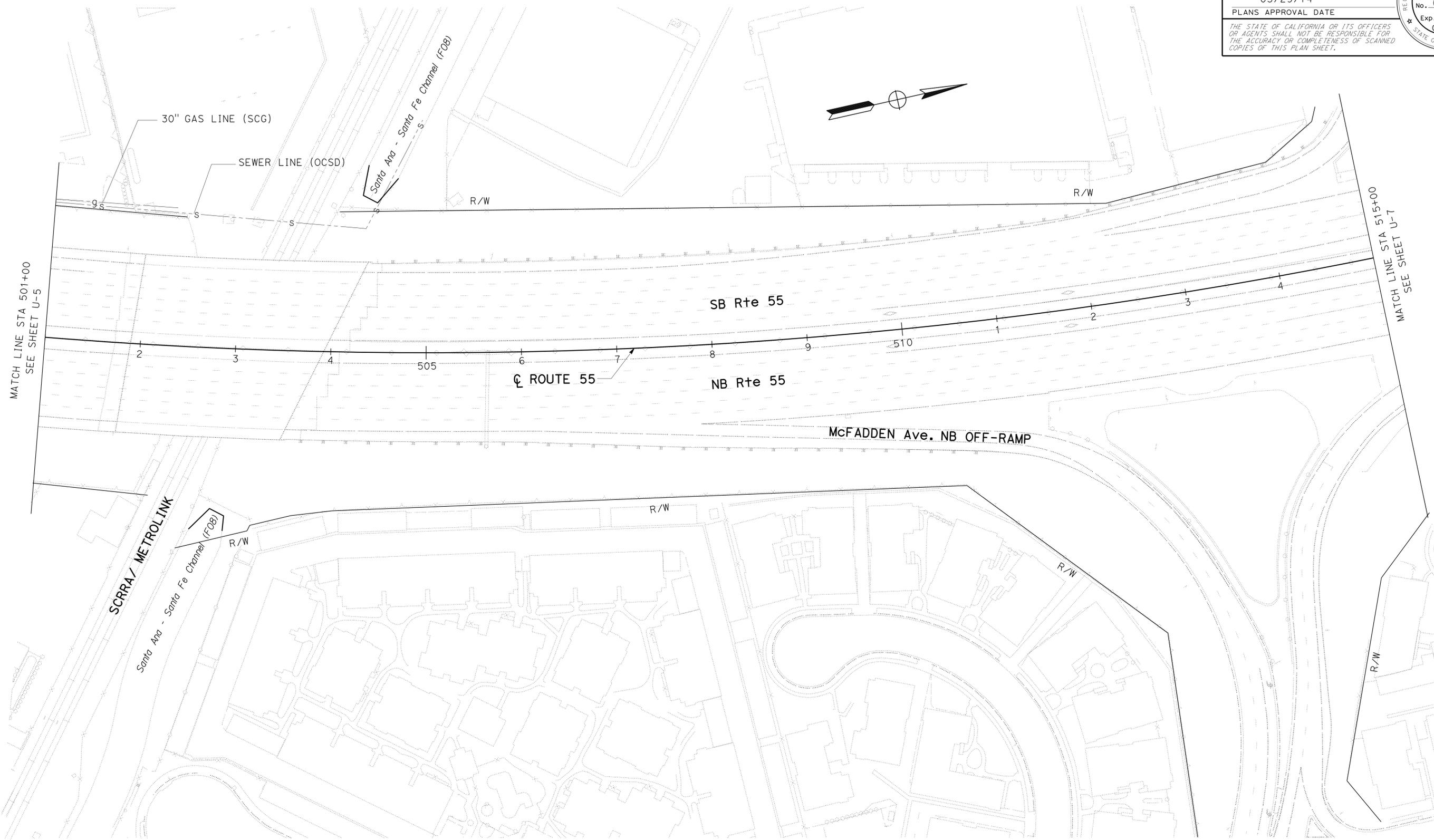
<i>Kevin D. Pham</i>	05/14/14
REGISTERED CIVIL ENGINEER	DATE
05/29/14	
PLANS APPROVAL DATE	

THE STATE OF CALIFORNIA OR ITS OFFICERS  
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STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	FUNCTIONAL SUPERVISOR	CALCULATED/DESIGNED BY	MINH PHAM	REVISED BY	M PHAM
<b>Caltrans</b> UTILITY ENGINEERING	CHRISTOPHER LE	CHECKED BY	KEVIN PHAM	DATE REVISED	4-11-14



APPROVED FOR UTILITY INFORMATION ONLY

**UTILITY PLAN  
U-6**

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**Caltrans** UTILITY ENGINEERING

FUNCTIONAL SUPERVISOR: CHRISTOPHER LE  
 CALCULATED/DESIGNED BY: CHECKED BY:  
 MINH PHAM KEVIN PHAM  
 REVISED BY: DATE REVISED: M PHAM 4-11-14

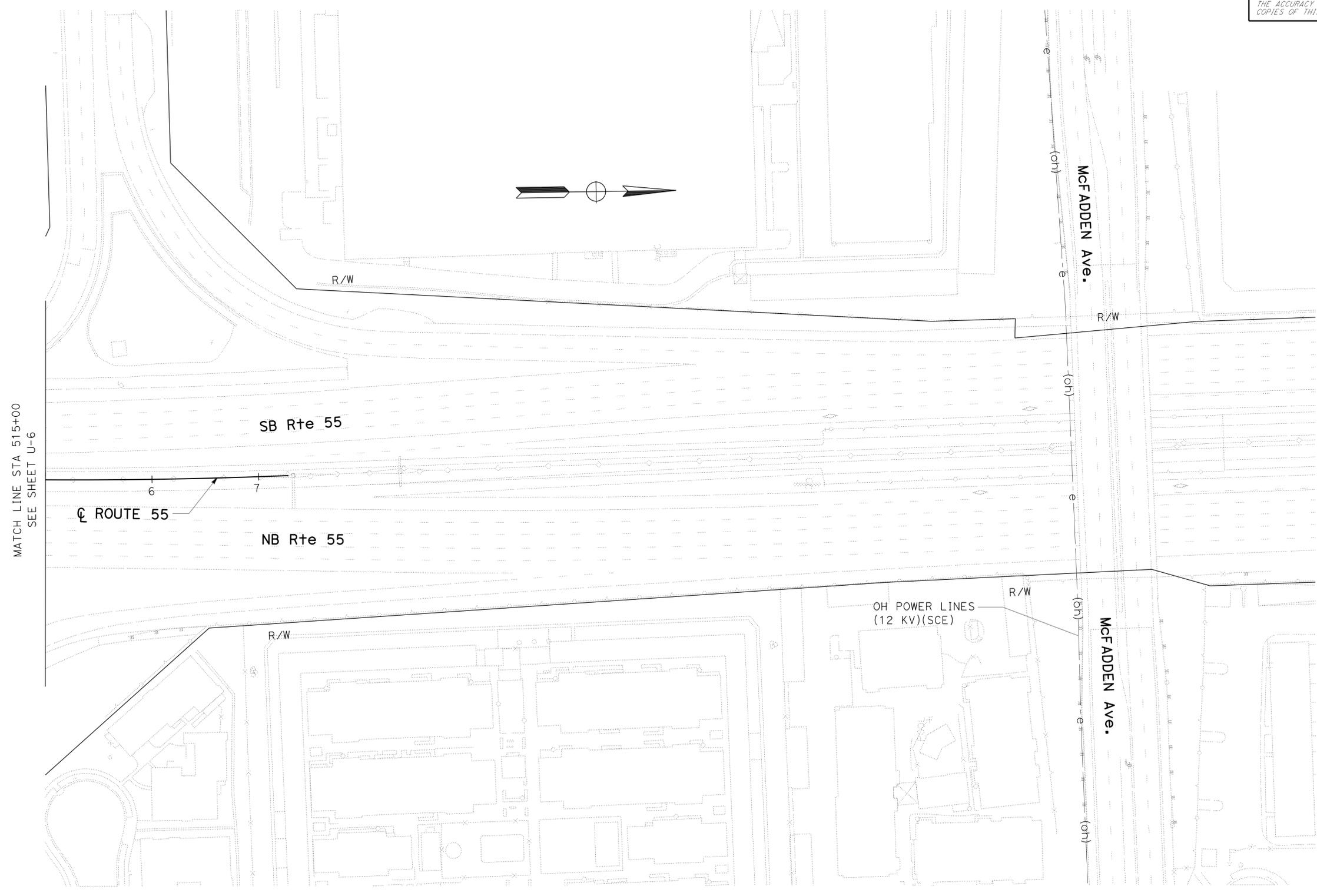
**NOTE:**  
 FOR ACCURATE RIGHT OF WAY DATA, CONTACT  
 RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Orca	55	7.6/9.9	10	40

Kevin D. Pham 05/14/14  
 REGISTERED CIVIL ENGINEER DATE  
 05/29/14  
 PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER  
 KEVIN D. PHAM  
 No. C61965  
 Exp. 9/30/15  
 CIVIL  
 STATE OF CALIFORNIA

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APPROVED FOR UTILITY INFORMATION ONLY

**UTILITY PLAN**  
**U-7**

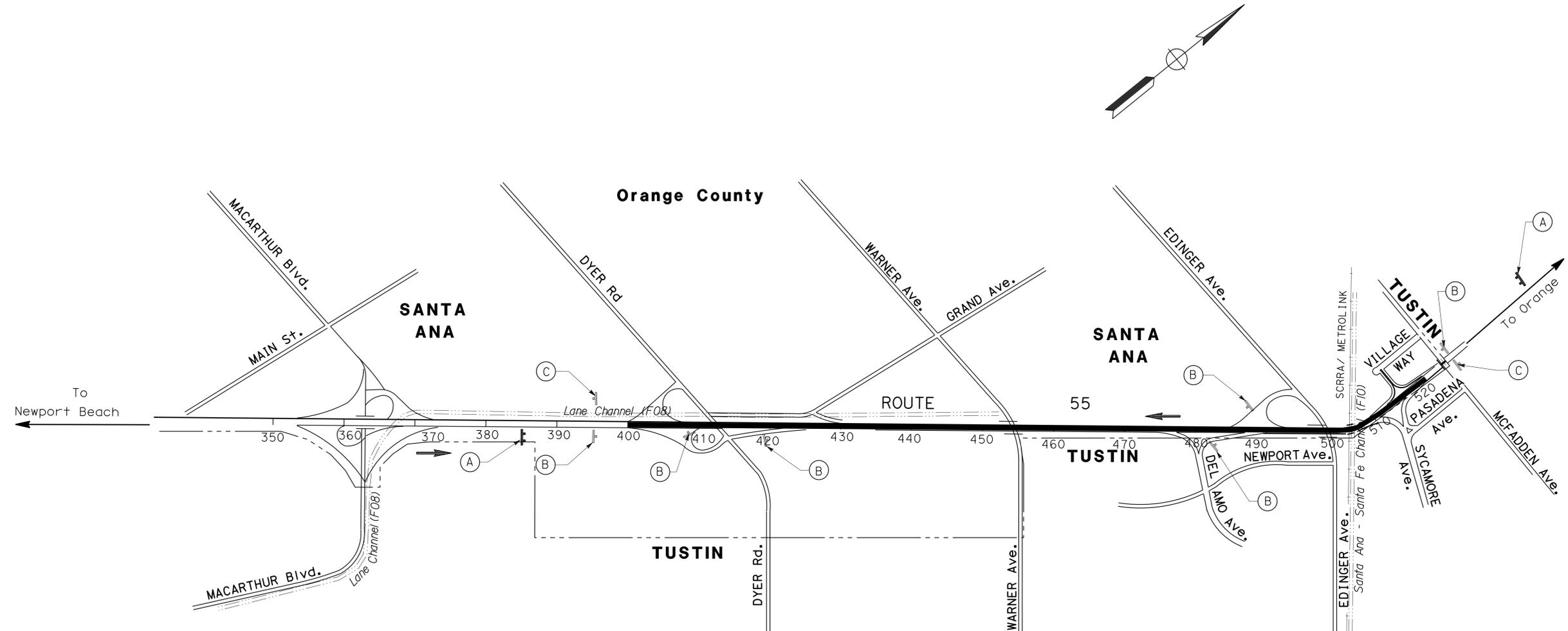
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	55	7.6/9.9	11	40

*Bang Q. Hua* 05/14/14  
 REGISTERED CIVIL ENGINEER DATE  
 05/29/14  
 PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER  
**BANG Q. HUA**  
 No. C71273  
 Exp. 12-31-15  
 CIVIL  
 STATE OF CALIFORNIA

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



**LEGEND:**

- CONSTRUCTION AREA SIGN - ONE POST
- CONSTRUCTION AREA SIGN - TWO POST
- CONSTRUCTION AREA SIGN No.
- DIRECTION OF TRAVEL

**STATIONARY MOUNTED CONSTRUCTION AREA SIGNS**

SIGN No.	SIGN CODE	PANEL SIZE (in x in)	SIGN MESSAGE	No. OF POSTS AND SIZE	No. OF SIGNS (EA)
(A)	W20-1	60 x 60	ROAD WORK AHEAD	2- 6 x 6	2
(B)	W20-1	48 x 48	ROAD WORK AHEAD	1- 6 x 6	6
(C)	G20-2	48 x 24	END ROAD WORK	1- 6 x 6	2

\* FOR ADDITIONAL QUANTITIES AND CONSTRUCTION AREA SIGNS, SEE SHEET TH-1

**CONSTRUCTION AREA SIGNS**

NO SCALE

**CS-1**

APPROVED FOR CONSTRUCTION AREA SIGN WORK ONLY

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**Caltrans** TRAFFIC DESIGN  
 FUNCTIONAL SUPERVISOR: KAMRAN MAZHAR  
 CALCULATED/DESIGNED BY: RICHARD DANG  
 CHECKED BY: BANG HUA  
 REVISED BY: BANG HUA  
 DATE REVISED:

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**Caltrans** LANDSCAPE ARCHITECTURE

SENIOR LANDSCAPE ARCHITECT  
 ERIC DICKSON

CHECKED BY

DESIGNED BY

CALCULATED BY

PAUL SUN

VATHANA CHY

DATE REVISIED

REVISIED BY

DATE REVISIED

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

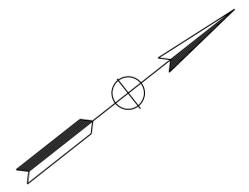
**CONSTRUCTION AREA SIGNS**

SIGN No.	SIGN CODE	SIGN MESSAGE	Quantity (EA)
1	R9-11	SIDEWALK CLOSED AHEAD CROSS HERE	1
2	R9-10	SIDEWALK CLOSED USE OTHER SIDE	1
3	R9-9	SIDEWALK CLOSED	2
4	G20-2	END ROAD WORK	1
5	W20-1	ROAD WORK AHEAD	4
6	C30(CA)	LANE CLOSED	7
TOTAL			18 *

\* FOR ADDITIONAL QUANTITIES AND CONSTRUCTION AREA SIGNS, SEE SHEET CS-1

**NOTES:**  
 1. LOCATIONS OF CONSTRUCTION AREA SIGNS ARE APPROXIMATE. EXACT LOCATIONS TO BE DETERMINED BY THE ENGINEER.  
 2. STANDARD PLAN T-11 SHALL BE USED CONCURRENTLY WITH TRAFFIC HANDLING PLAN TH-1 AND TH-2.

- LEGEND:**
- 1 CONSTRUCTION AREA SIGN No.
  - ➔ TYPE III BARRICADE WITH SIGN
  - ▨ CONSTRUCTION AREA
  - • • TRAFFIC CONES

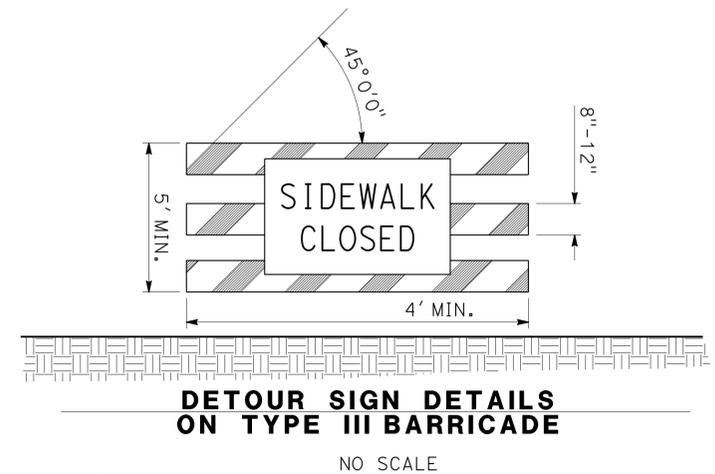
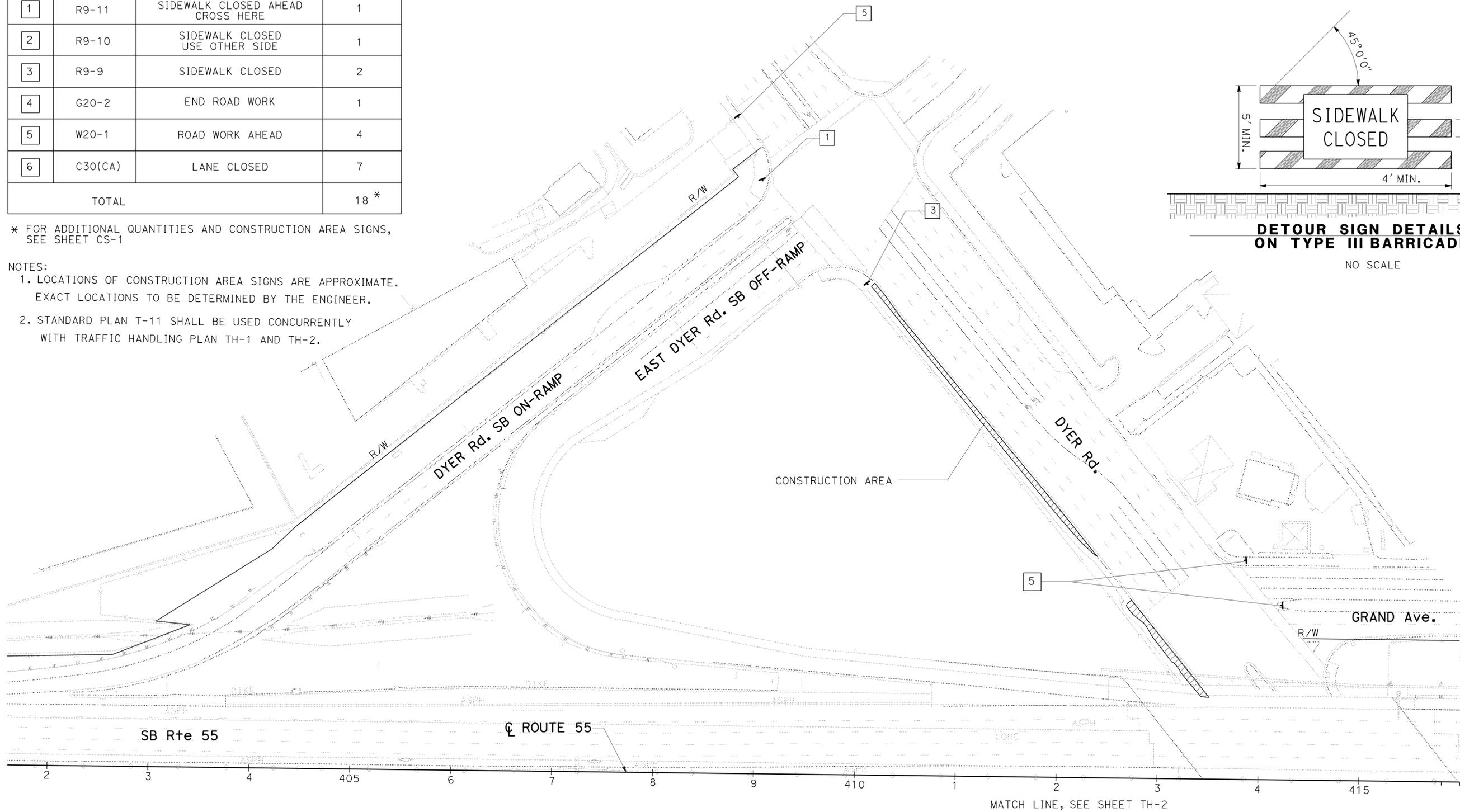


Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	55	7.6/9.9	12	40

05/14/14  
 REGISTERED CIVIL ENGINEER DATE  
 05/29/14  
 PLANS APPROVAL DATE

ESSY MOHAMMADI  
 No. C55085  
 Exp. 6/30/16  
 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.



APPROVED FOR TRAFFIC HANDLING (PEDESTRIAN DETOUR) ONLY

**TRAFFIC HANDLING PLAN  
 (PEDESTRIAN DETOUR)  
 SCALE 1"=50'  
 TH-1**

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**Caltrans** LANDSCAPE ARCHITECTURE

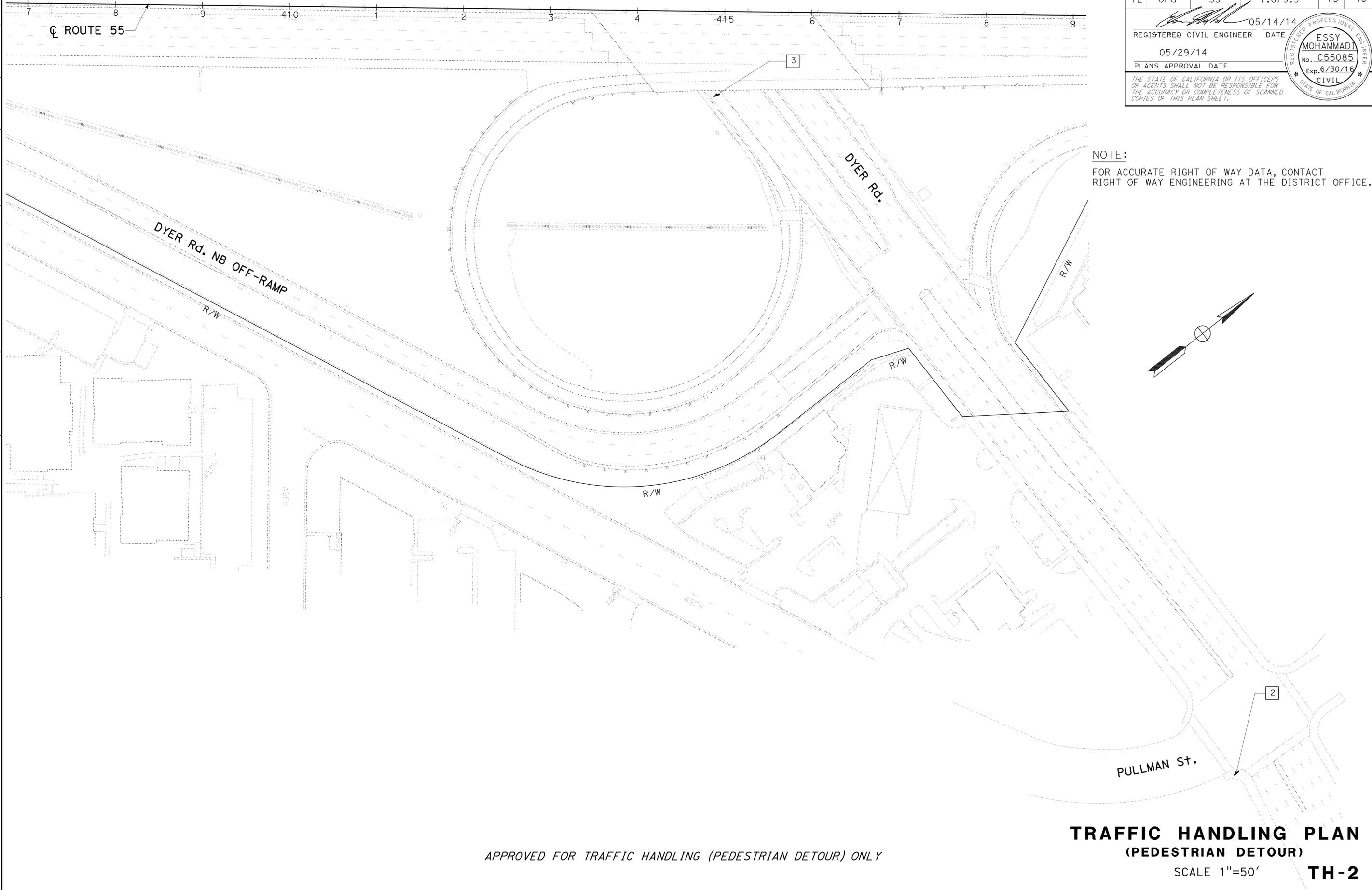
SENIOR LANDSCAPE ARCHITECT  
 ERIC DICKSON

CALCULATED-DESIGNED BY  
 CHECKED BY

VATHANA CHY  
 PAUL SUN

REVISED BY  
 DATE REVISED

MATCH LINE, SEE SHEET TH-1



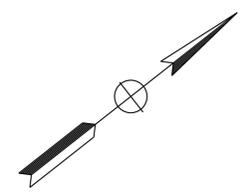
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	55	7.6/9.9	13	40

05/14/14  
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 05/29/14  
 PLANS APPROVAL DATE

ESSY MOHAMMADI  
 No. C55085  
 Exp. 6/30/16  
 CIVIL  
 STATE OF CALIFORNIA

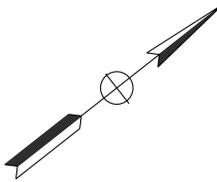
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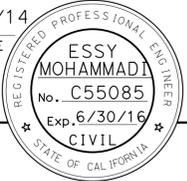


**TRAFFIC HANDLING PLAN  
 (PEDESTRIAN DETOUR)**  
 SCALE 1"=50'  
**TH-2**

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



DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	55	7.6/9.9	14	40
			05/14/14		
REGISTERED CIVIL ENGINEER			DATE		
			05/29/14		
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>					



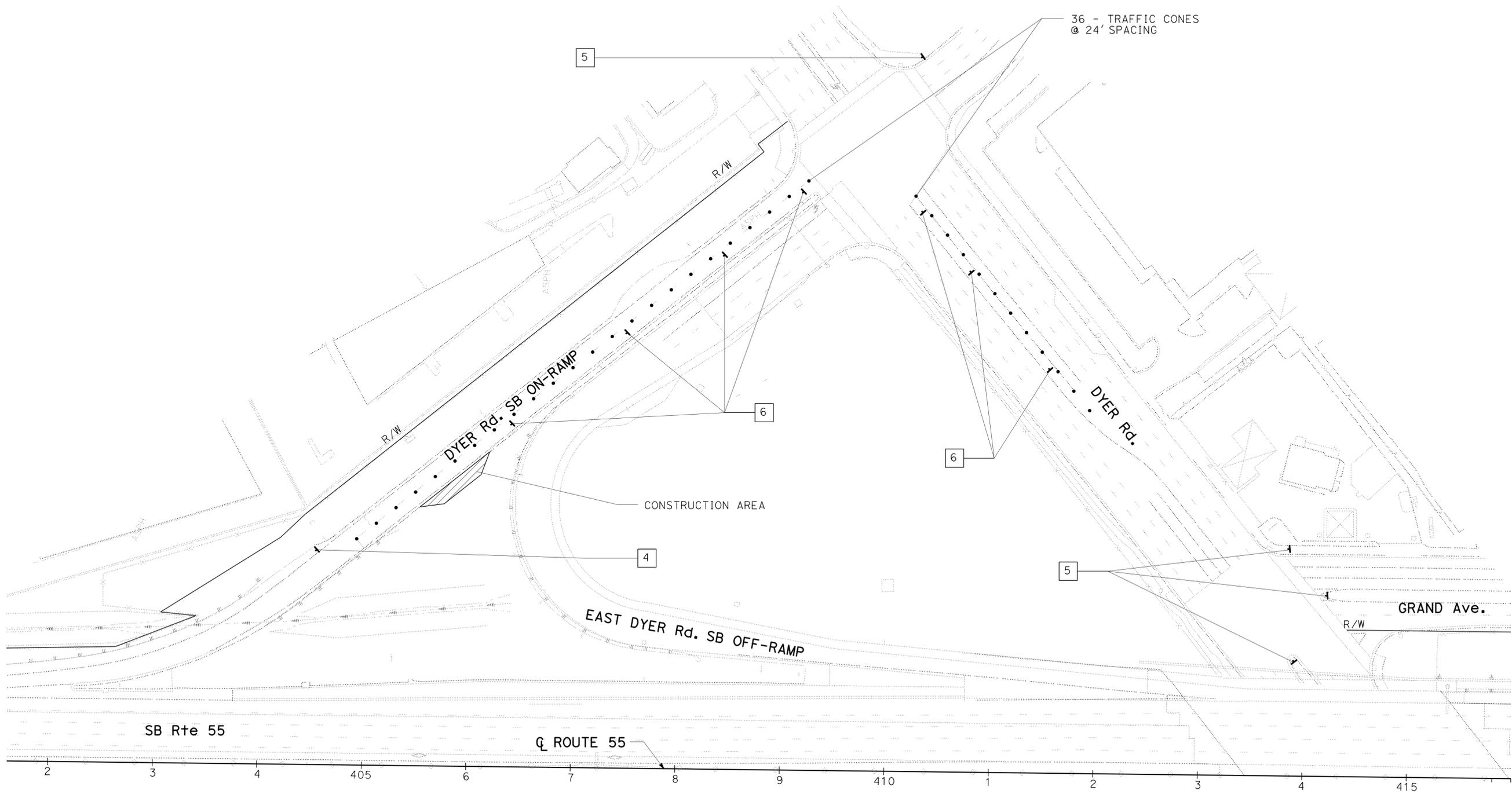
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
LANDSCAPE ARCHITECTURE

REVISOR  
DATE

VATHANA CHY  
PAUL SUN

CALCULATED-DESIGNED BY  
CHECKED BY

SENIOR LANDSCAPE ARCHITECT  
ERIC DICKSON

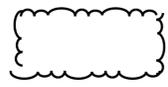


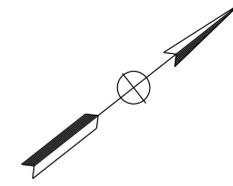
APPROVED FOR TRAFFIC HANDLING ONLY

**TRAFFIC HANDLING PLAN**  
**(MVP CONSTRUCTION)**  
SCALE 1"=50'  
**TH-3**

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

**LEGEND:**

-  OPERATE EXISTING IRRIGATION FACILITIES
-  CONTROL AND NEUTRAL CONDUCTORS
-  REPLACE IRRIGATION CONTROLLER (UTILIZE EXISTING ENCLOSURE CABINET)



DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
12	Ora	55	7.6/9.9	15	40

05/14/14

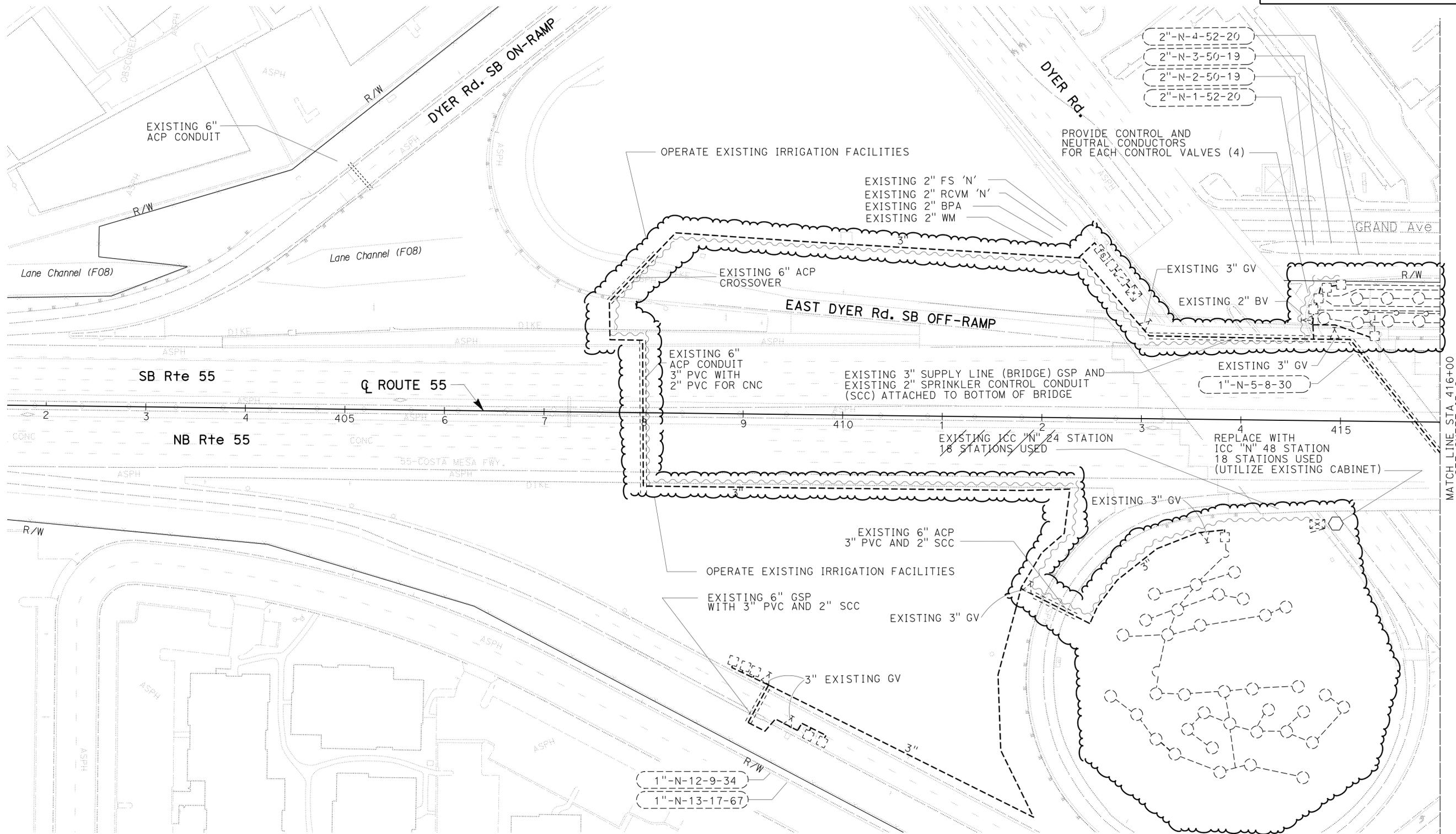
*Vathana Chy*  
LICENSED LANDSCAPE ARCHITECT  
05/29/14

PLANS APPROVAL DATE

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



STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**Caltrans** LANDSCAPE ARCHITECTURE  
 SENIOR LANDSCAPE ARCHITECT  
 ERIC DICKSON  
 CALCULATED/DESIGNED BY  
 CHECKED BY  
 VATHANA CHY  
 PAUL SUN  
 REVISED BY  
 DATE REVISED



APPROVED FOR IRRIGATION WORK ONLY

**IRRIGATION PLAN**  
SCALE 1"=50'  
**IP-1**

DATE PLOTTED => 04-SEP-2014  
 TIME PLOTTED => 09:50  
 LAST REVISION: 05-14-14



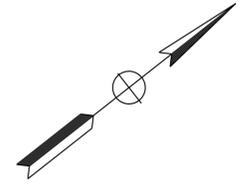
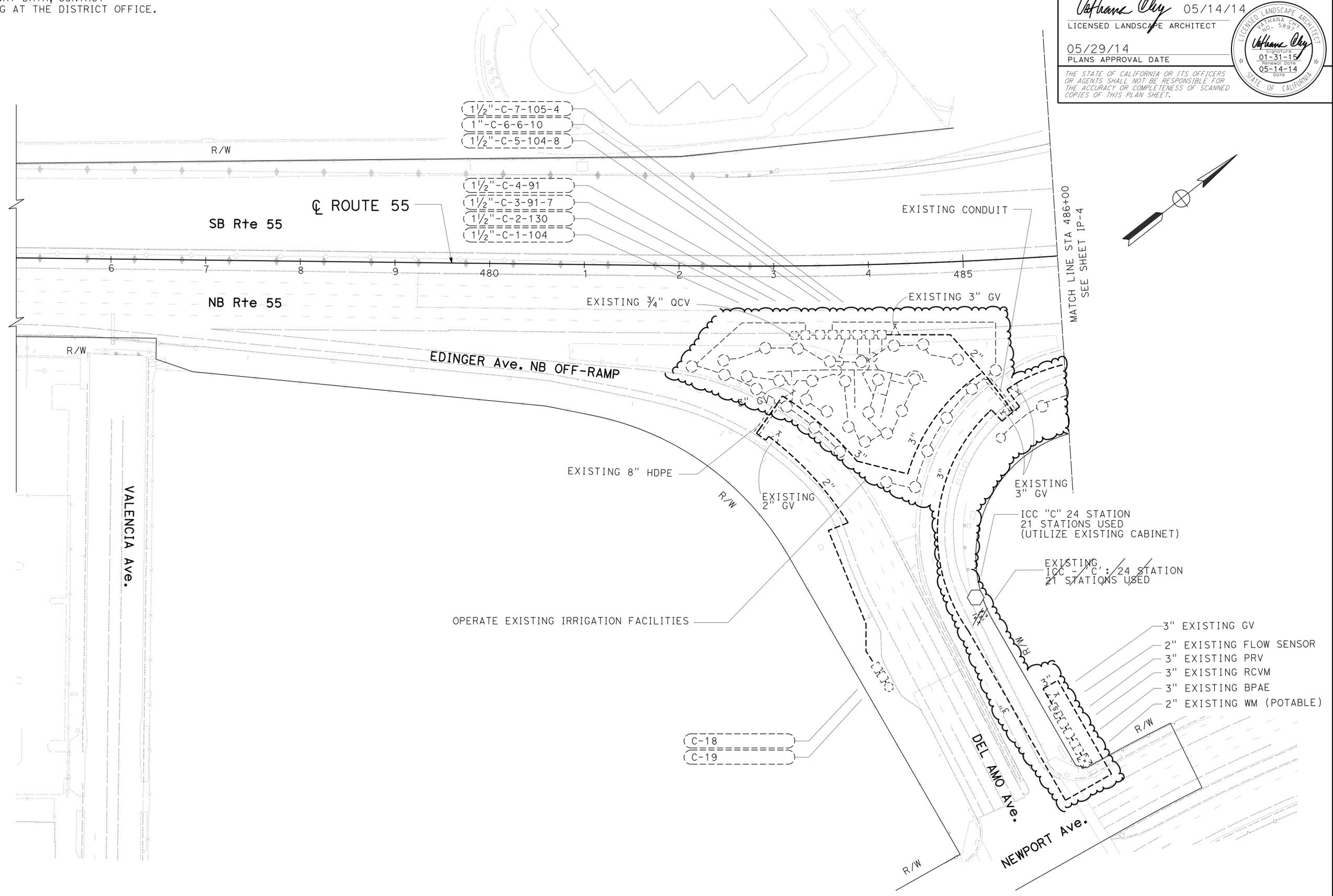
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**Eric Gilbrun** LANDSCAPE ARCHITECTURE  
 SENIOR LANDSCAPE ARCHITECT  
 VATHANA CHY  
 PAUL SUN  
 CALCULATED-DESIGNED BY  
 CHECKED BY  
 ERIC DICKSON  
 REVISIONS:  
 REVISION NO. | DATE | BY | DESCRIPTION  
 1 | 05/29/14 | VATHANA CHY | PAUL SUN |  
 2 | 05/29/14 | VATHANA CHY | PAUL SUN |  
 3 | 05/29/14 | VATHANA CHY | PAUL SUN |  
 4 | 05/29/14 | VATHANA CHY | PAUL SUN |  
 5 | 05/29/14 | VATHANA CHY | PAUL SUN |  
 6 | 05/29/14 | VATHANA CHY | PAUL SUN |  
 7 | 05/29/14 | VATHANA CHY | PAUL SUN |  
 8 | 05/29/14 | VATHANA CHY | PAUL SUN |  
 9 | 05/29/14 | VATHANA CHY | PAUL SUN |  
 10 | 05/29/14 | VATHANA CHY | PAUL SUN |  
 11 | 05/29/14 | VATHANA CHY | PAUL SUN |  
 12 | 05/29/14 | VATHANA CHY | PAUL SUN |  
 13 | 05/29/14 | VATHANA CHY | PAUL SUN |  
 14 | 05/29/14 | VATHANA CHY | PAUL SUN |  
 15 | 05/29/14 | VATHANA CHY | PAUL SUN |  
 16 | 05/29/14 | VATHANA CHY | PAUL SUN |  
 17 | 05/29/14 | VATHANA CHY | PAUL SUN |  
 18 | 05/29/14 | VATHANA CHY | PAUL SUN |  
 19 | 05/29/14 | VATHANA CHY | PAUL SUN |  
 20 | 05/29/14 | VATHANA CHY | PAUL SUN |  
 21 | 05/29/14 | VATHANA CHY | PAUL SUN |  
 22 | 05/29/14 | VATHANA CHY | PAUL SUN |  
 23 | 05/29/14 | VATHANA CHY | PAUL SUN |  
 24 | 05/29/14 | VATHANA CHY | PAUL SUN |  
 25 | 05/29/14 | VATHANA CHY | PAUL SUN |  
 26 | 05/29/14 | VATHANA CHY | PAUL SUN |  
 27 | 05/29/14 | VATHANA CHY | PAUL SUN |  
 28 | 05/29/14 | VATHANA CHY | PAUL SUN |  
 29 | 05/29/14 | VATHANA CHY | PAUL SUN |  
 30 | 05/29/14 | VATHANA CHY | PAUL SUN |  
 31 | 05/29/14 | VATHANA CHY | PAUL SUN |  
 32 | 05/29/14 | VATHANA CHY | PAUL SUN |  
 33 | 05/29/14 | VATHANA CHY | PAUL SUN |  
 34 | 05/29/14 | VATHANA CHY | PAUL SUN |  
 35 | 05/29/14 | VATHANA CHY | PAUL SUN |  
 36 | 05/29/14 | VATHANA CHY | PAUL SUN |  
 37 | 05/29/14 | VATHANA CHY | PAUL SUN |  
 38 | 05/29/14 | VATHANA CHY | PAUL SUN |  
 39 | 05/29/14 | VATHANA CHY | PAUL SUN |  
 40 | 05/29/14 | VATHANA CHY | PAUL SUN |

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

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	55	7.6/9.9	17	40

05/14/14  
 LICENSED LANDSCAPE ARCHITECT  
 05/29/14  
 PLANS APPROVAL DATE

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



APPROVED FOR IRRIGATION WORK ONLY

**IRRIGATION PLAN**  
 SCALE 1"=50'  
**IP-3**

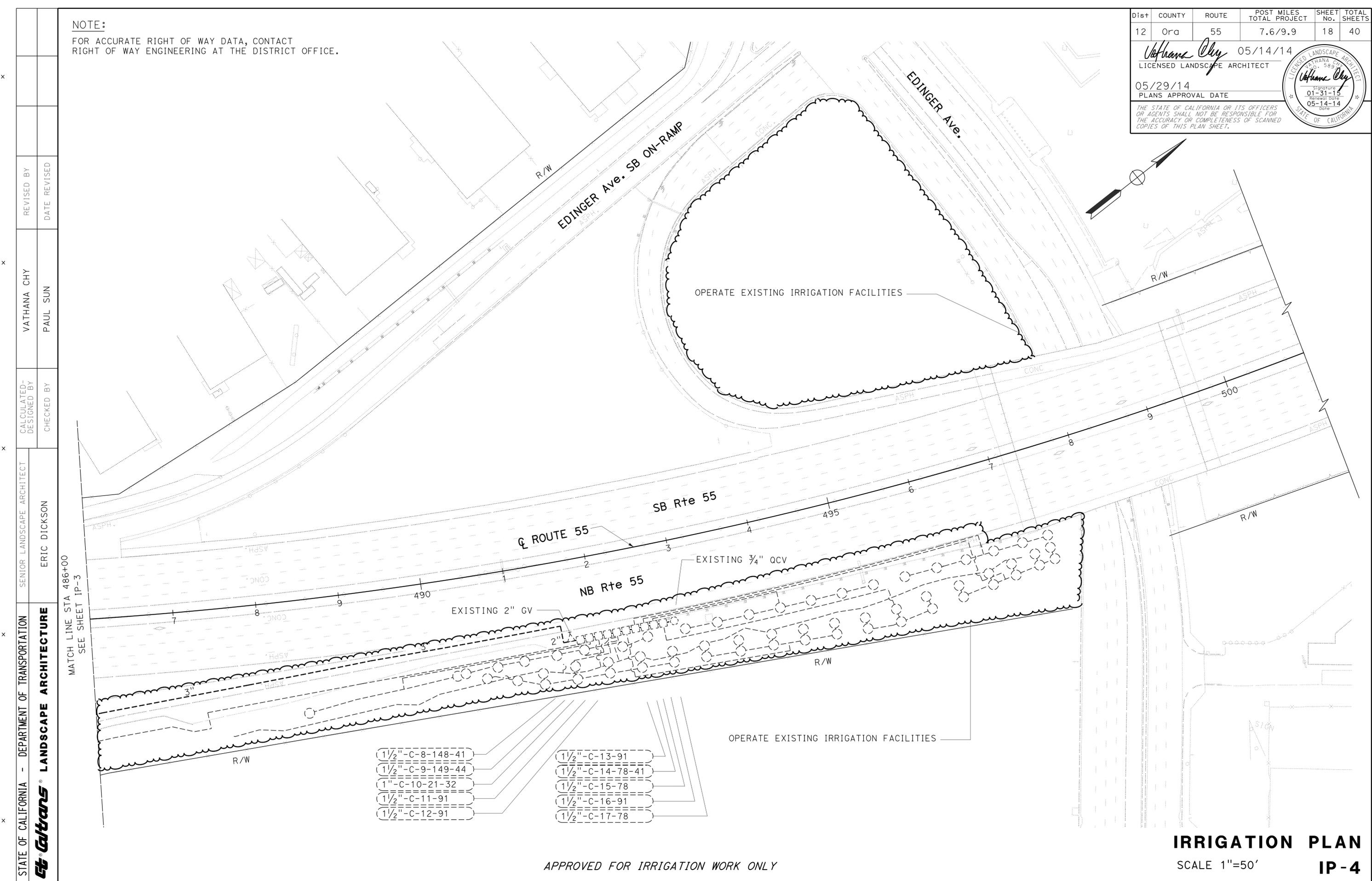
NOTE:  
FOR ACCURATE RIGHT OF WAY DATA, CONTACT  
RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	55	7.6/9.9	18	40

*Vathana Chy* 05/14/14  
LICENSED LANDSCAPE ARCHITECT

05/29/14  
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.



- |                     |                     |
|---------------------|---------------------|
| 1 1/2" - C-8-148-41 | 1 1/2" - C-13-91    |
| 1 1/2" - C-9-149-44 | 1 1/2" - C-14-78-41 |
| 1" - C-10-21-32     | 1 1/2" - C-15-78    |
| 1 1/2" - C-11-91    | 1 1/2" - C-16-91    |
| 1 1/2" - C-12-91    | 1 1/2" - C-17-78    |

APPROVED FOR IRRIGATION WORK ONLY

**IRRIGATION PLAN**  
SCALE 1"=50'  
**IP-4**

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**Caltrans** LANDSCAPE ARCHITECTURE

SENIOR LANDSCAPE ARCHITECT  
ERIC DICKSON

CHECKED BY  
PAUL SUN

DESIGNED BY  
VATHANA CHY

REVISOR  
DATE REVISOR

BORDER LAST REVISED 7/2/2010

USERNAME => s129866  
DGN FILE => 1212000103sp004.dgn

RELATIVE BORDER SCALE  
IS IN INCHES

0 1 2 3

UNIT 3014

PROJECT NUMBER & PHASE  
12120001031

LAST REVISION  
05-14-14  
DATE PLOTTED => 04-SEP-2014  
TIME PLOTTED => 09:51



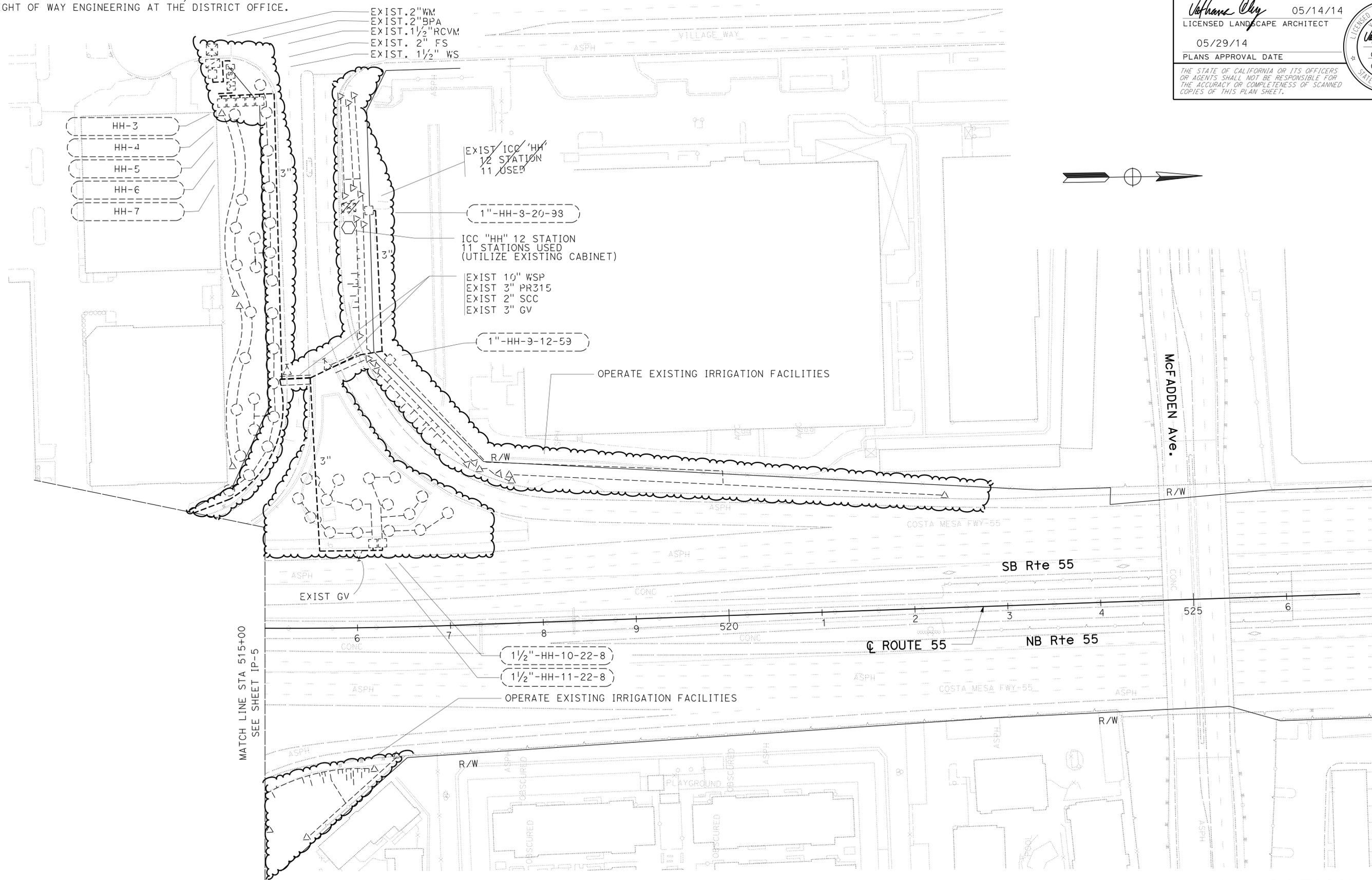
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	55	7.6/9.9	20	40

<i>Vathana Chy</i>	05/14/14
LICENSED LANDSCAPE ARCHITECT	
05/29/14	
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>	



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



STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**Caltrans** LANDSCAPE ARCHITECTURE  
 SENIOR LANDSCAPE ARCHITECT  
 ERIC DICKSON  
 CALCULATED-DESIGNED BY  
 CHECKED BY  
 VATHANA CHY  
 PAUL SUN  
 REVISED BY  
 DATE REVISED

MATCH LINE STA 515+00  
SEE SHEET IP-5

APPROVED FOR IRRIGATION WORK ONLY

**IRRIGATION PLAN**  
SCALE 1"=50'  
**IP-6**



Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Oran	55	7.6/9.9	22	40
<i>Vathana Chy</i> LICENSED LANDSCAPE ARCHITECT 05/29/14 PLANS APPROVAL DATE			05/14/14		
<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>					

**APPLICABLE WHEN CIRCLED:**

- |   |   |
|---|---|
| 1 - QUANTITIES SHOWN ARE "PER PLANT" UNLESS SHOWN AS SQFT OR SQYD APPLICATION RATES | 8 - UNLESS OTHERWISE SHOWN ON PLANS                 |
| 2 - BASIN MULCH IS INCLUDED WITH MULCH QUANTITIES SHOWN ON PLANTING PLAN            | 9 - FOLIAGE PROTECTOR REQUIRED                      |
| 3 - SUFFICIENT TO RECEIVE ROOT BALL AND AMENDMENTS IF REQUIRED                      | 10 - ROOT PROTECTOR REQUIRED                        |
| 4 - SEE DETAIL  | 11 - ROOT BARRIER REQUIRED                          |
| 5 - SEE SPECIAL PROVISIONS  | 12 - DEPARTMENT-FURNISHED                           |
| 6 - SEE STANDARD SPECIFICATIONS   | 13 - EROSION CONTROL WILL RECEIVE ROADSIDE CLEARING |
| 7 - AS SHOWN ON PLANS   |   |

**LEGENDS:**

INERT MATERIAL AND PAVEMENT

- ROADSIDE PAVING (MISC. AREA) - (MAINTENANCE VEHICLE PULLOUT)
- ROCK BLANKET
- DECOMPOSED GRANITE
- SLOPE PAVING (CONCRETE)
- GRAVEL MULCH

EROSION CONTROL TREATMENT 13

- EROSION CONTROL TYPE 1

MISCELLANEOUS

- MAINTAIN EXISTING PLANTED AREA
- ROADWAY EXCAVATION (TYPE Y-1) (AERIALY DEPOSITED LEAD)

**EROSION CONTROL TYPE 1**

SEQUENCE	ITEM	MATERIAL		APPLICATION RATE
		DESCRIPTION	TYPE	
STEP 1	EROSION CONTROL (DRY SEED)	SEED	MIX 1	24 LB/ACRE
STEP 2	COMPOST	COMPOST	FINE	3 CY/1000 SQFT
STEP 3	EROSION CONTROL (BONDED FIBER MATRIX)	FIBER	WOOD	3000 LB/ACRE
		TACKIFIER *	---	

\* PREPACKAGED WITH FIBER BY THE MANUFACTURER

**SEED MIX 1 TABLE**

SEED	BOTANICAL NAME (COMMON NAME)	PERCENT GERMINATION (MINIMUM)	POUNDS PURE LIVE SEED PER ACRE (SLOPE MEASUREMENT)
MIX 1 ①②	AGROSTIS PALLENS (BENT GRASS)	25%	4.0
	DESCHAMPSIA CESPITOSA (TUFTED HAIRGRASS)	20%	1.0
	HORDEUM BRACHYANTHERUM (MEADOW BARLEY)	20%	6.0
	LEYMUS TRITICOIDES "RIO" (RIO CREEPING WILDRIE)	20%	5.0
	MELICA IMPERFECTA (COAST MELIC)	20%	1.5
	MUHLENBERGIA RIGENS (DEERGRASS)	15%	0.5
	NASELLA LEPIDA (FOOTHILL NEEDLE GRASS)	20%	1.0
	NASELLA PULCHRA (PURPLE NEEDLEGRASS)	20%	5.0
	TOTAL		

- ① SEED PRODUCED IN CALIFORNIA ONLY.
- ② SEED SOURCE FROM COASTAL REGION OF ORANGE COUNTY, SAN DIEGO COUNTY, AND LOS ANGELES COUNTY ONLY.
- 3 SEED SOURCE FROM ABOVE/BELOW THE \_\_\_\_\_ FOOT ELEVATION LEVEL.

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
 VATHANA CHY  
 PAUL SUN  
 CALCULATED-DESIGNED BY  
 CHECKED BY  
 SENIOR LANDSCAPE ARCHITECT  
 ERIC DICKSON  
 LANDSCAPE ARCHITECTURE

**PLANT LIST AND LEGEND**  
NO SCALE **PL-1**

LAST REVISION   
 DATE PLOTTED => 04-SEP-2014   
 TIME PLOTTED => 09:51

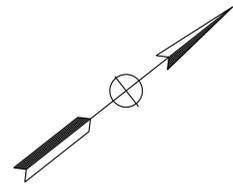
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Orca	55	7.6/9.9	23	40

<i>Vafhana Oly</i>	05/14/14
LICENSED LANDSCAPE ARCHITECT	
05/29/14	
PLANS APPROVAL DATE	

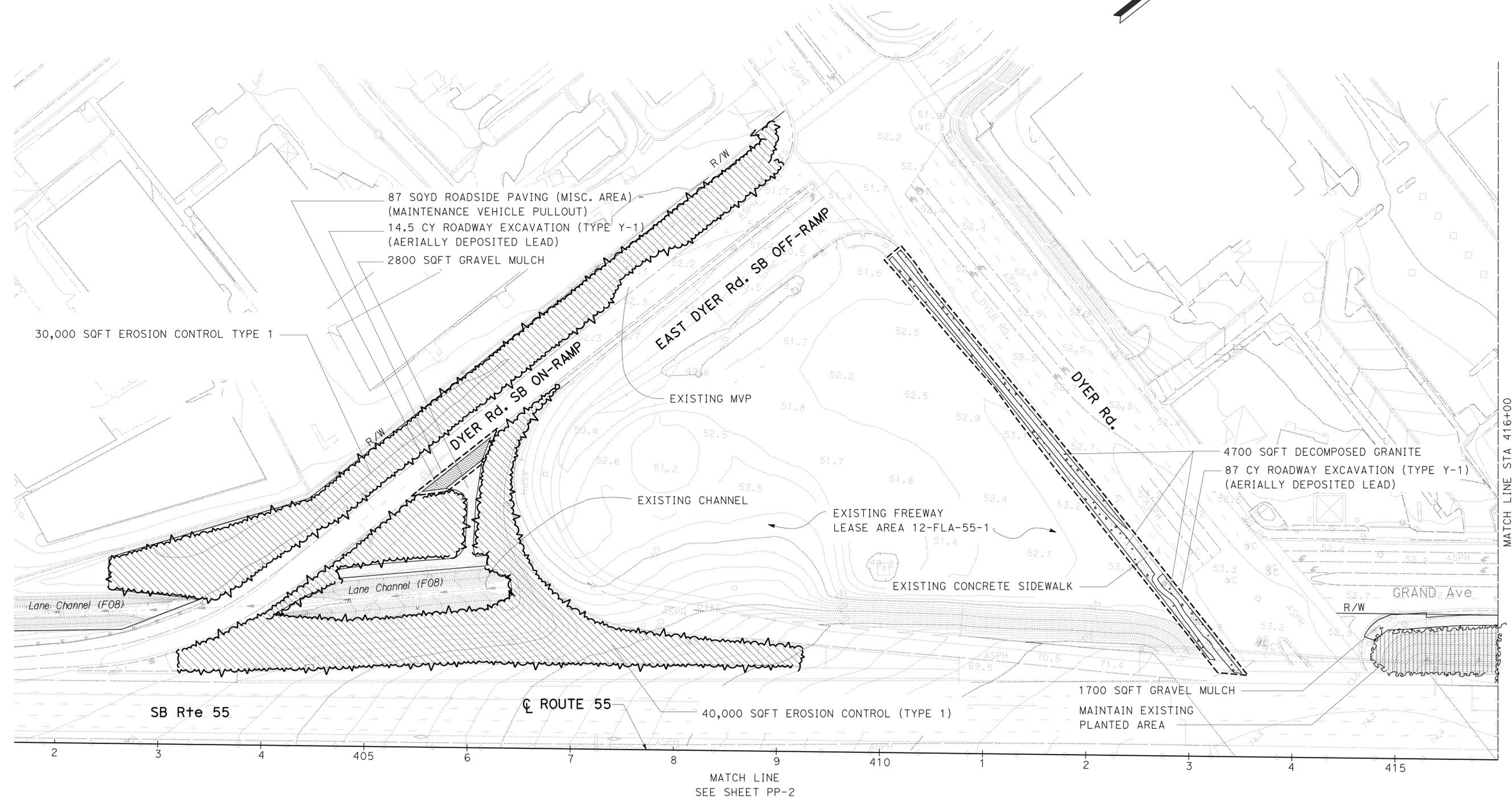
  

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**NOTE:**  
FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	LANDSCAPE ARCHITECTURE
SENIOR LANDSCAPE ARCHITECT	ERIC DICKSON
CALCULATED-D-DESIGNED BY	CHECKED BY
VATHANA CHY	PAUL SUN
REVISED BY	DATE REVISED



MATCH LINE STA 416+00  
SEE SHEET PP-3

MATCH LINE  
SEE SHEET PP-2

APPROVED FOR PLANTING WORK ONLY

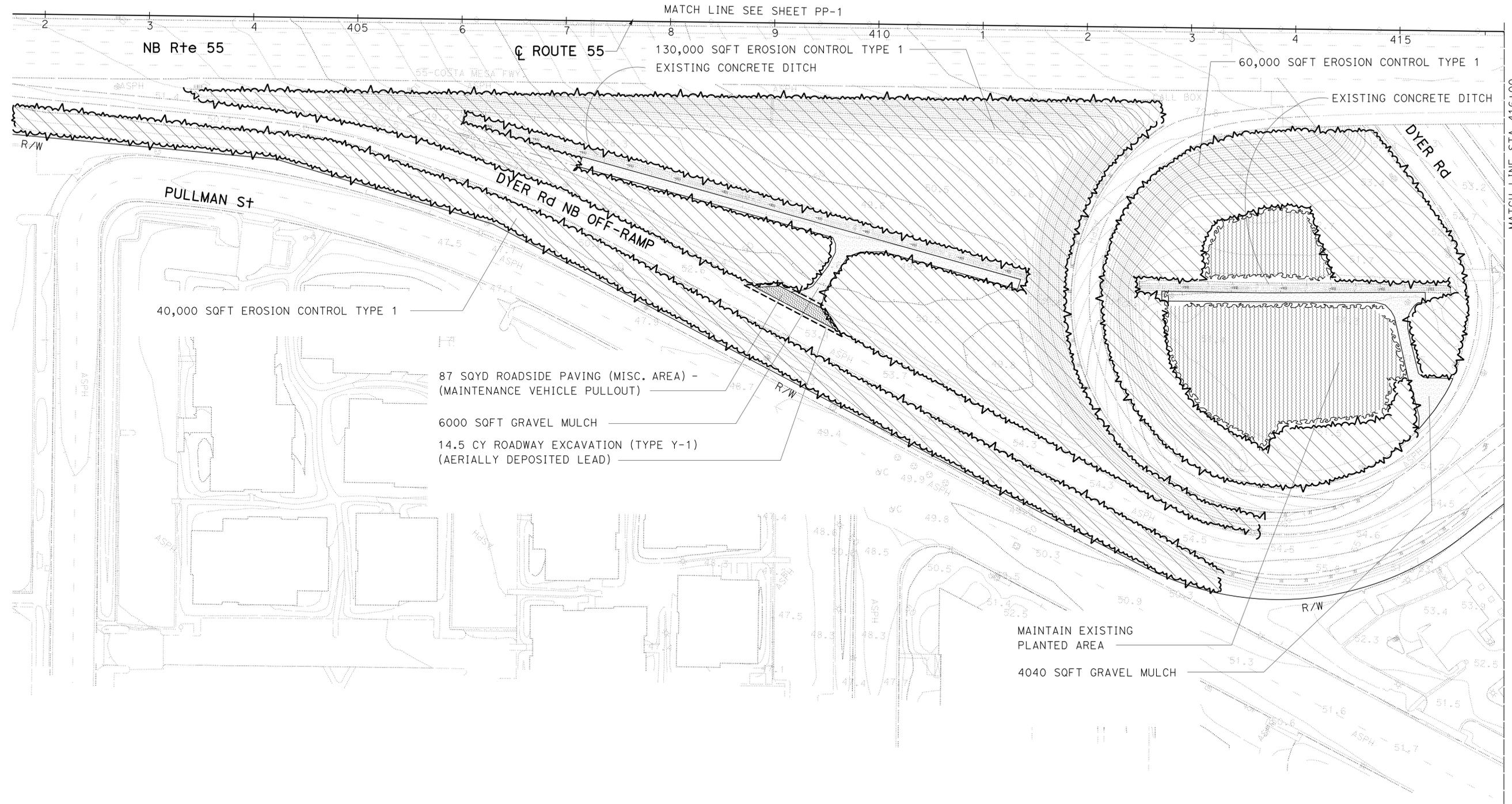
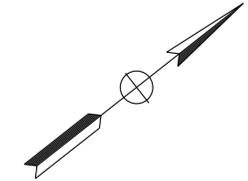
**PLANTING PLAN**  
SCALE 1"=50'  
**PP-1**

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

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	55	7.6/9.9	24	40

*Vathana Chy* 05/14/14  
 LICENSED LANDSCAPE ARCHITECT  
 05/29/14  
 PLANS APPROVAL DATE

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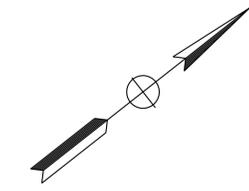
MATCH LINE STA 416+00  
SEE SHEET PP-3

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**Caltrans** LANDSCAPE ARCHITECTURE  
 SENIOR LANDSCAPE ARCHITECT  
 ERIC DICKSON  
 CALCULATED-DESIGNED BY  
 CHECKED BY  
 VATHANA CHY  
 PAUL SUN  
 REVISED BY  
 DATE REVISED

APPROVED FOR PLANTING WORK ONLY

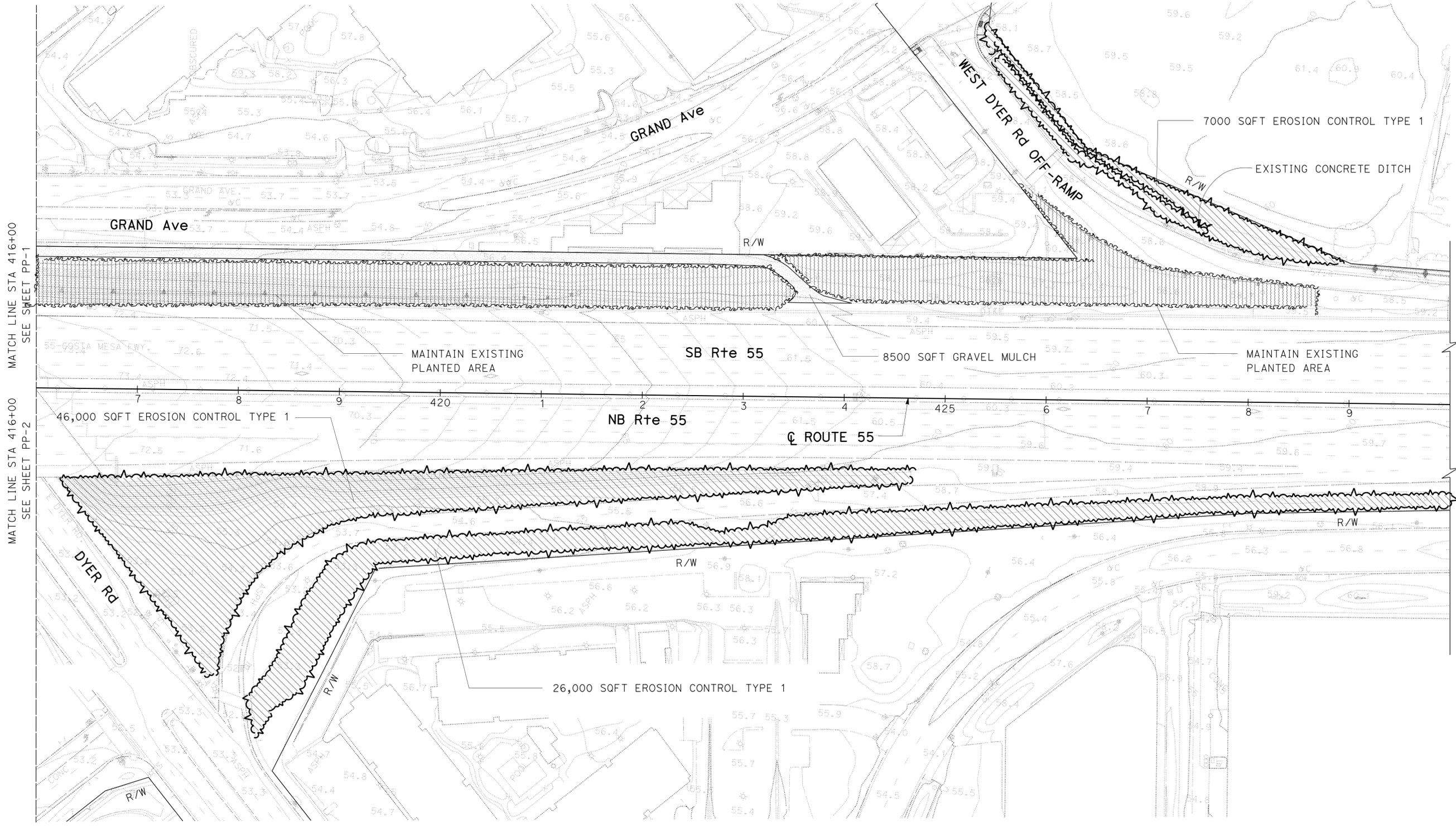
**PLANTING PLAN**  
SCALE 1"=50'  
**PP-2**

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	55	7.6/9.9	25	40
<i>Vathana Chy</i> LICENSED LANDSCAPE ARCHITECT 05/29/14 PLANS APPROVAL DATE			05/14/14 SIGNATURE <i>Vathana Chy</i> 01-31-15 RENEWAL DATE 05-14-14 DATE STATE OF CALIFORNIA		
<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>					



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

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	LANDSCAPE ARCHITECTURE	SENIOR LANDSCAPE ARCHITECT	CHECKED BY	DESIGNED BY	REVISOR	DATE REVISED
<b>Caltrans</b>	<b>LANDSCAPE ARCHITECTURE</b>	ERIC DICKSON		VATHANA CHY	PAUL SUN	



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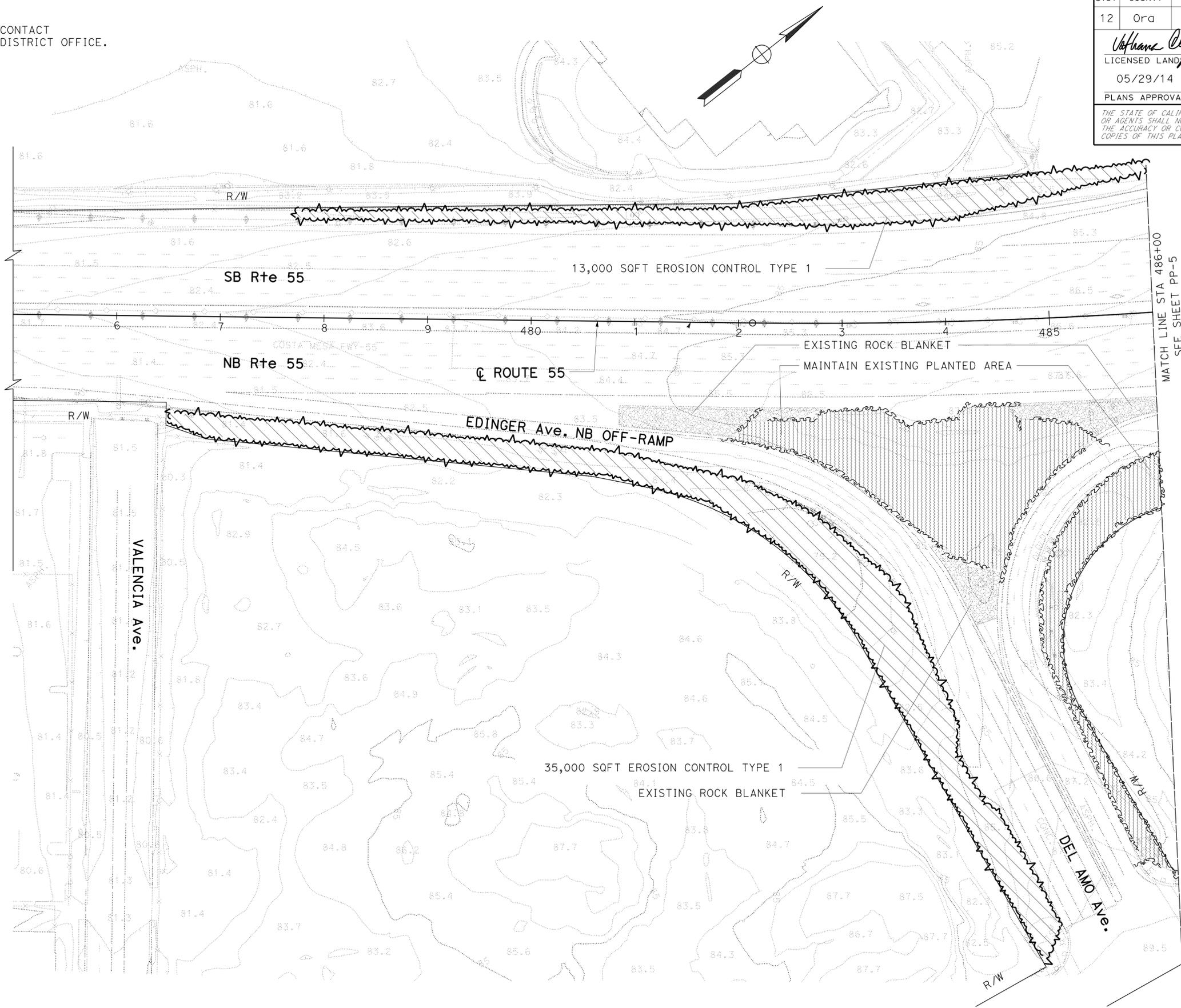
**PLANTING PLAN**  
 SCALE 1"=50'  
**PP-3**

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

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	55	7.6/9.9	26	40

*Vathana Chy* 05/14/14  
 LICENSED LANDSCAPE ARCHITECT  
 05/29/14  
 PLANS APPROVAL DATE

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MATCH LINE STA 486+00  
SEE SHEET PP-5

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	SENIOR LANDSCAPE ARCHITECT	CALCULATED-DESIGNED BY	VATHANA CHY	REVISED BY
<b>Eric Dickson</b>	ERIC DICKSON	CHECKED BY	PAUL SUN	DATE REVISED
<b>Coltrane</b> LANDSCAPE ARCHITECTURE				

APPROVED FOR PLANTING WORK ONLY

**PLANTING PLAN**  
SCALE 1"=50'  
**PP-4**

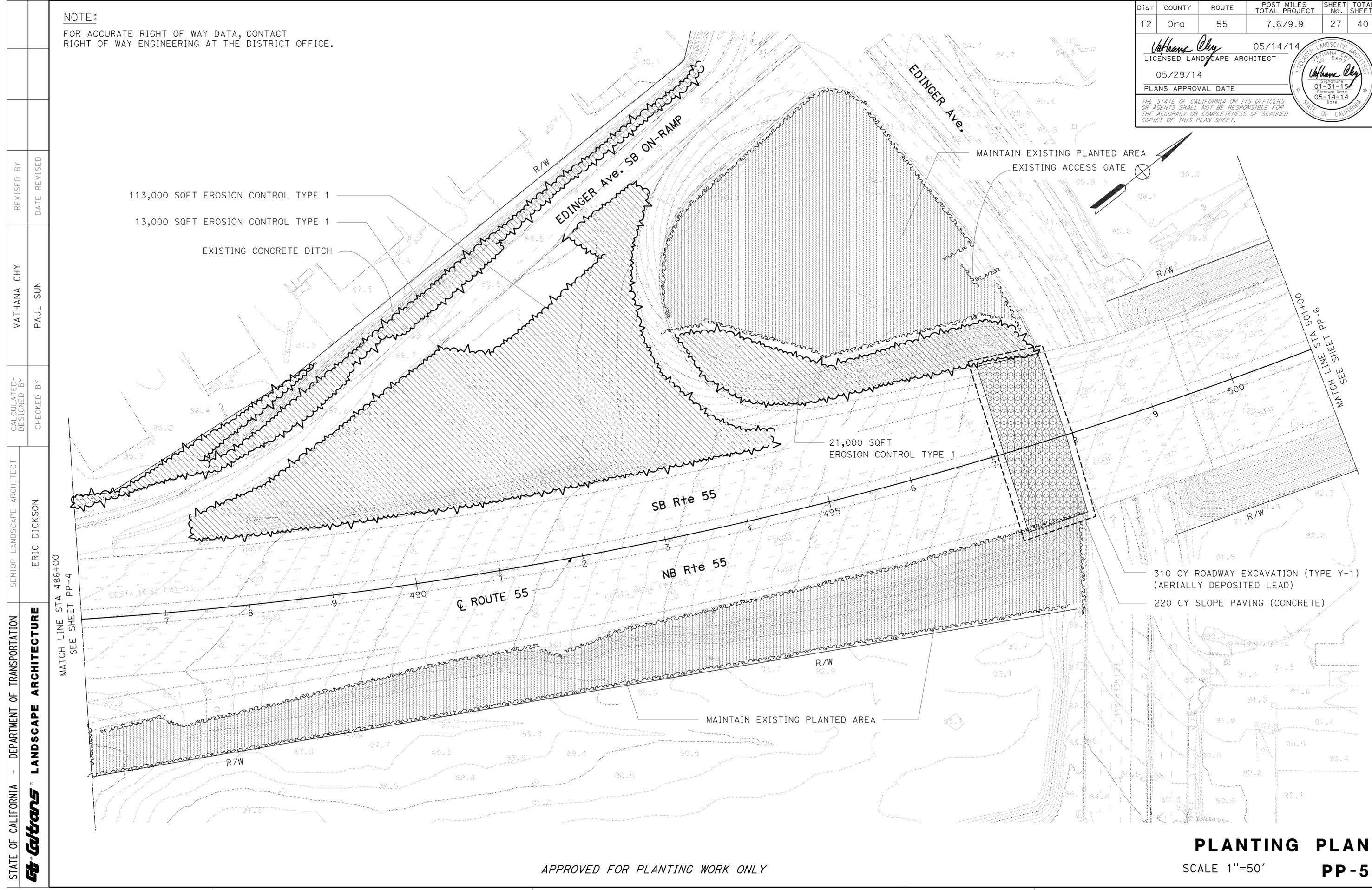
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	55	7.6/9.9	27	40

<i>Vathana Chy</i> 05/14/14	
LICENSED LANDSCAPE ARCHITECT	
05/29/14	
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>	



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



STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	SENIOR LANDSCAPE ARCHITECT	CALCULATED-DESIGNED BY	REVISED BY
<b>Eric Dickson</b>	ERIC DICKSON	CHECKED BY	VATHANA CHY
<b>Paul Sun</b>	PAUL SUN	DATE REVISED	

BORDER LAST REVISED 7/2/2010

USERNAME => s129866  
DGN FILE => 1212000103su005.dgn

RELATIVE BORDER SCALE IS IN INCHES

UNIT 3014

PROJECT NUMBER & PHASE

12120001031

APPROVED FOR PLANTING WORK ONLY

**PLANTING PLAN**  
SCALE 1"=50'  
**PP-5**

DATE PLOTTED => 04-SEP-2014  
TIME PLOTTED => 09:51  
LAST REVISION  
05-14-14

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**Caltrans** LANDSCAPE ARCHITECTURE

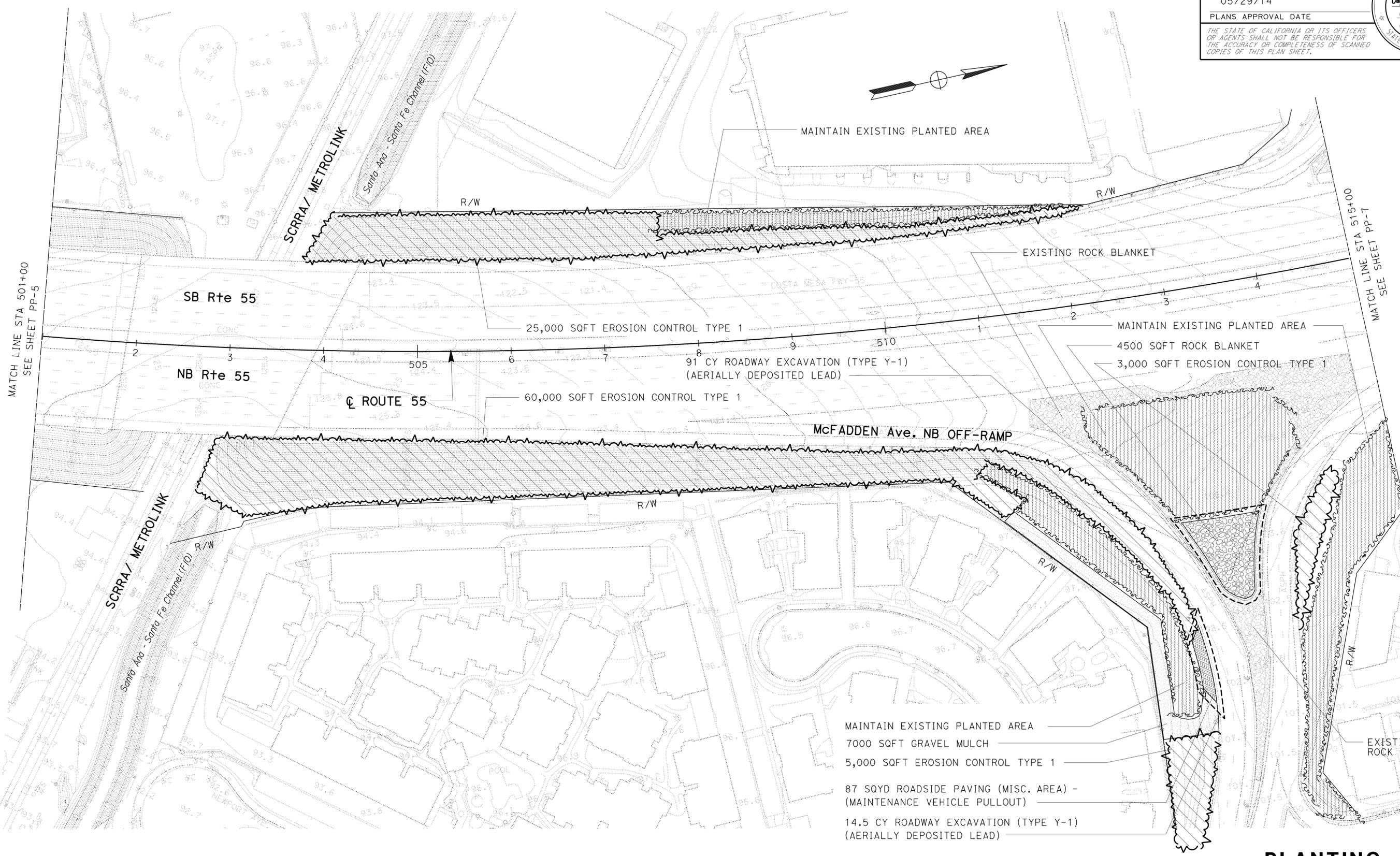
SENIOR LANDSCAPE ARCHITECT: ERIC DICKSON  
 CHECKED BY: PAUL SUN  
 VATHANA CHY  
 DESIGNED BY: VATHANA CHY  
 REVISIONS: 01-31-15  
 05-14-14

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

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	55	7.6/9.9	28	40

05/14/14  
 LICENSED LANDSCAPE ARCHITECT  
 05/29/14  
 PLANS APPROVAL DATE

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APPROVED FOR PLANTING WORK ONLY

**PLANTING PLAN**  
 SCALE 1"=50'  
**PP-6**

DATE PLOTTED => 04-SEP-2014  
 TIME PLOTTED => 09:51  
 LAST REVISION: 05-14-14

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
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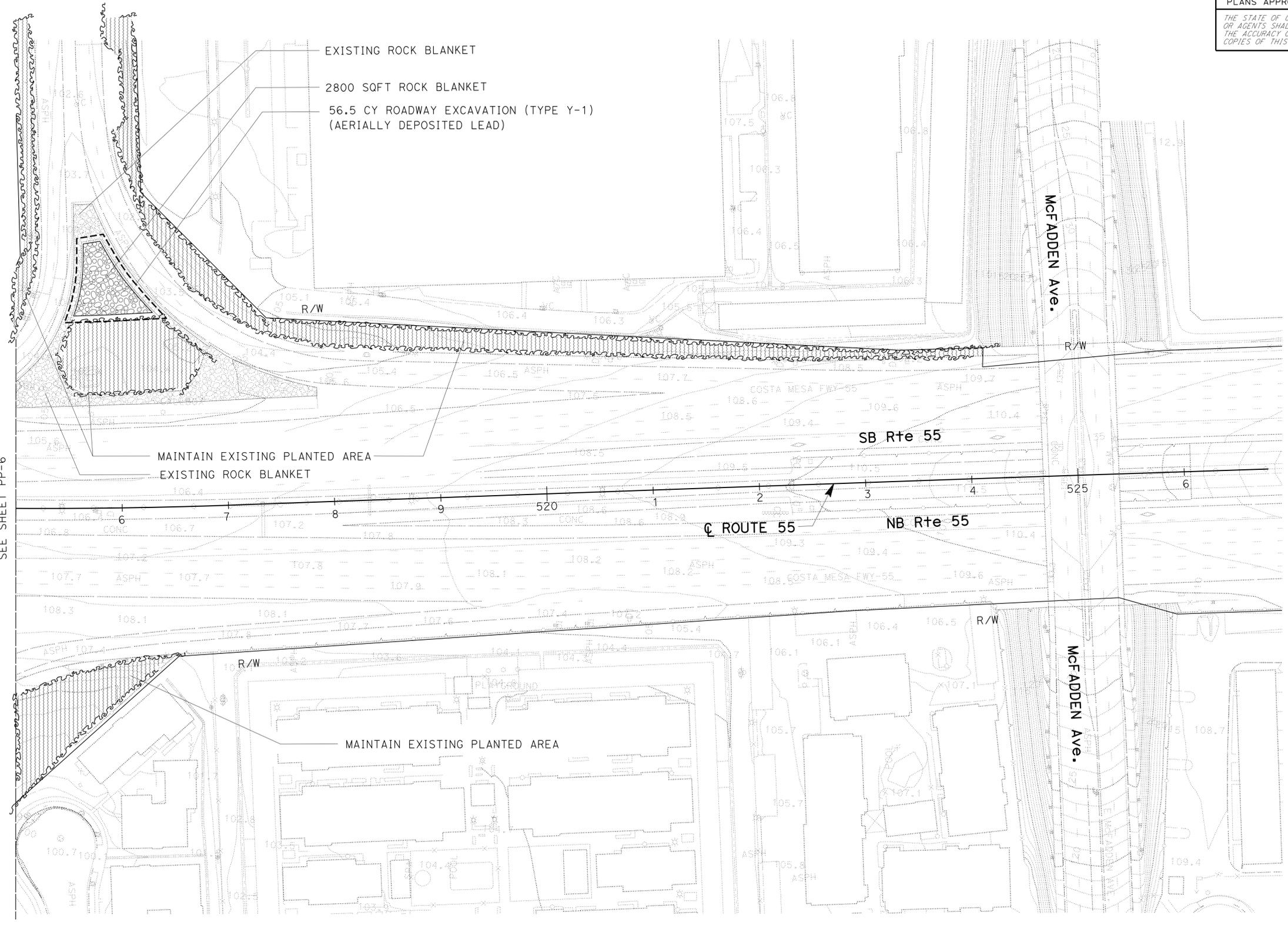
  

<i>Vathana Chy</i> 05/14/14	
LICENSED LANDSCAPE ARCHITECT	
05/29/14	
PLANS APPROVAL DATE	

LICENSED LANDSCAPE ARCHITECT VATHANA CHY NO. 589 <i>Vathana Chy</i> Signature 01-31-15 Renewal Date 05-14-14 Date 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.
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NOTE:  
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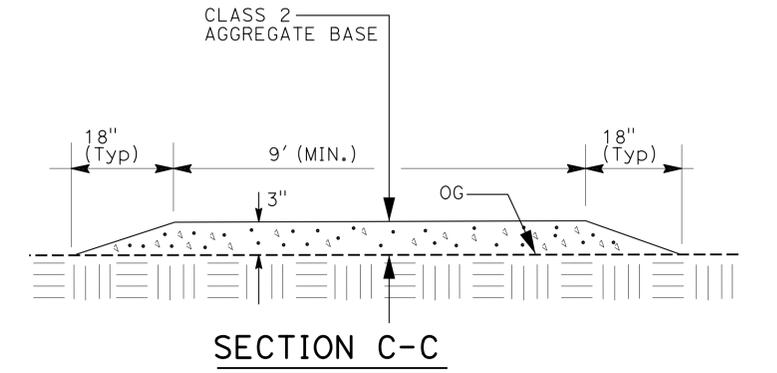
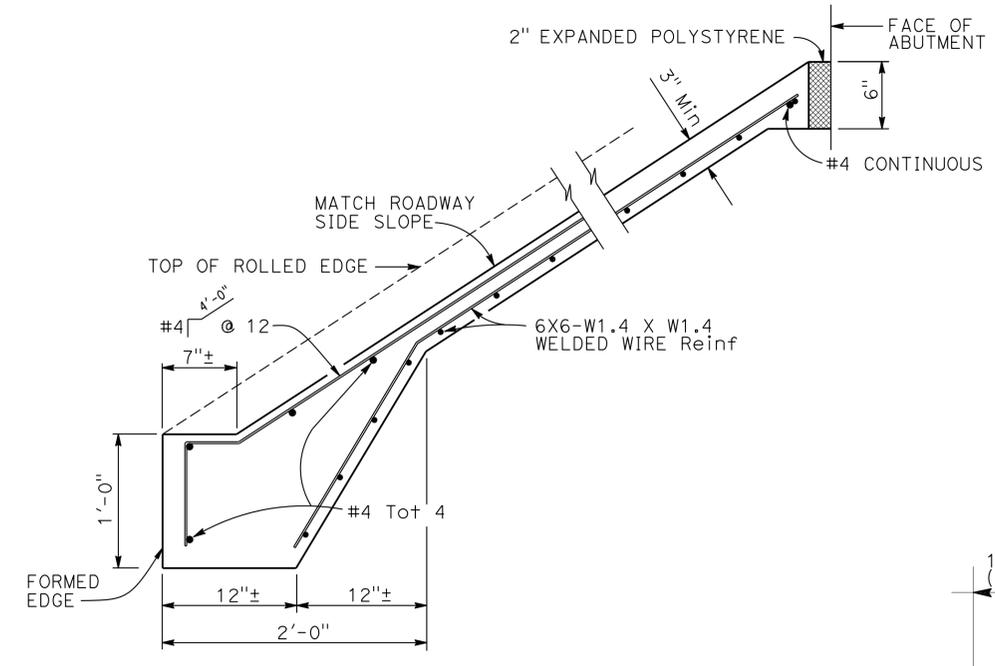
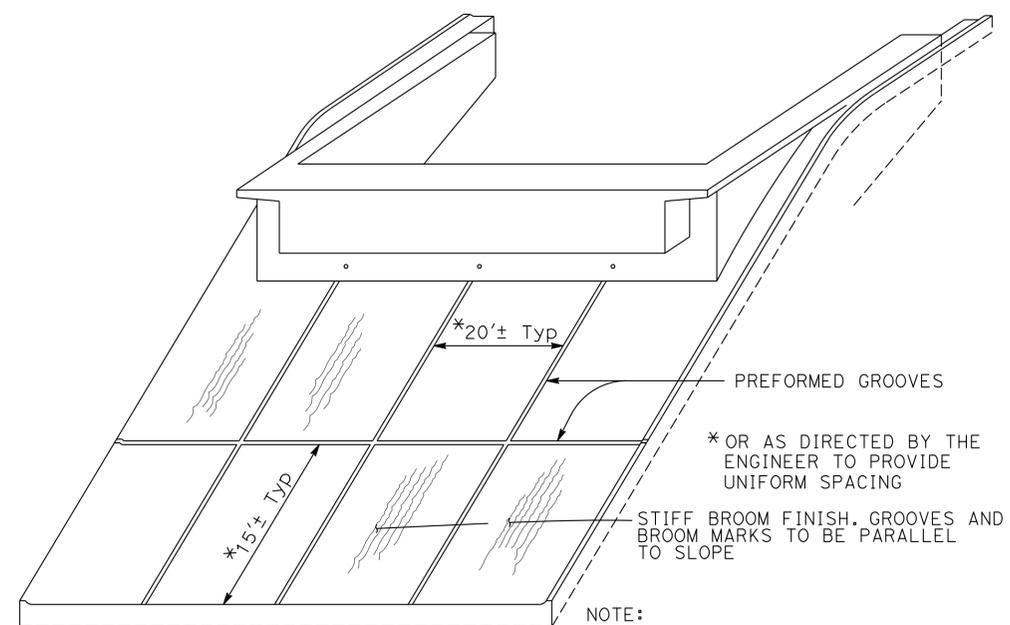


STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	LANDSCAPE ARCHITECTURE	SENIOR LANDSCAPE ARCHITECT	CALCULATED-DESIGNED BY	VATHANA CHY	REVISOR
<b>Caltrans</b>	LANDSCAPE ARCHITECTURE	ERIC DICKSON	CHECKED BY	PAUL SUN	DATE REVISED

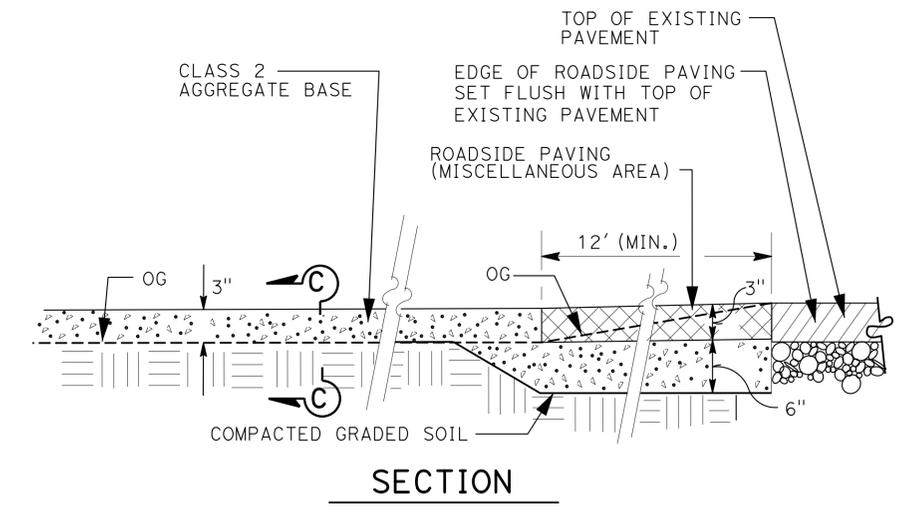
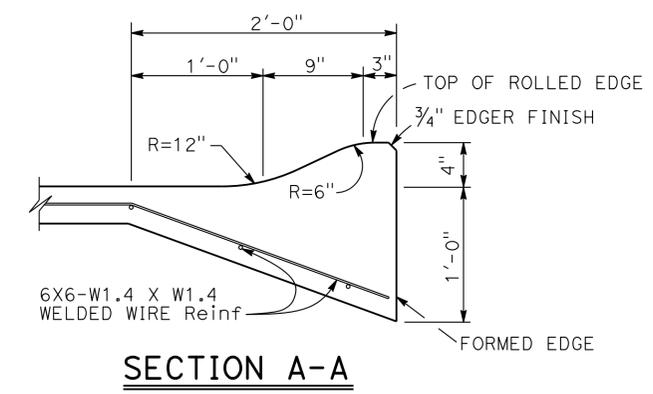
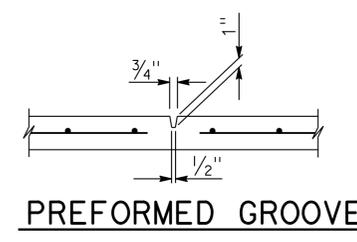
APPROVED FOR PLANTING WORK ONLY

**PLANTING PLAN**  
 SCALE 1"=50'  
**PP-7**

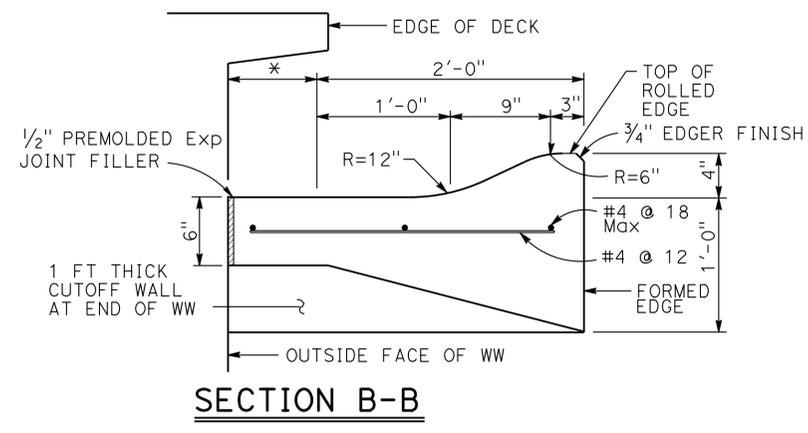
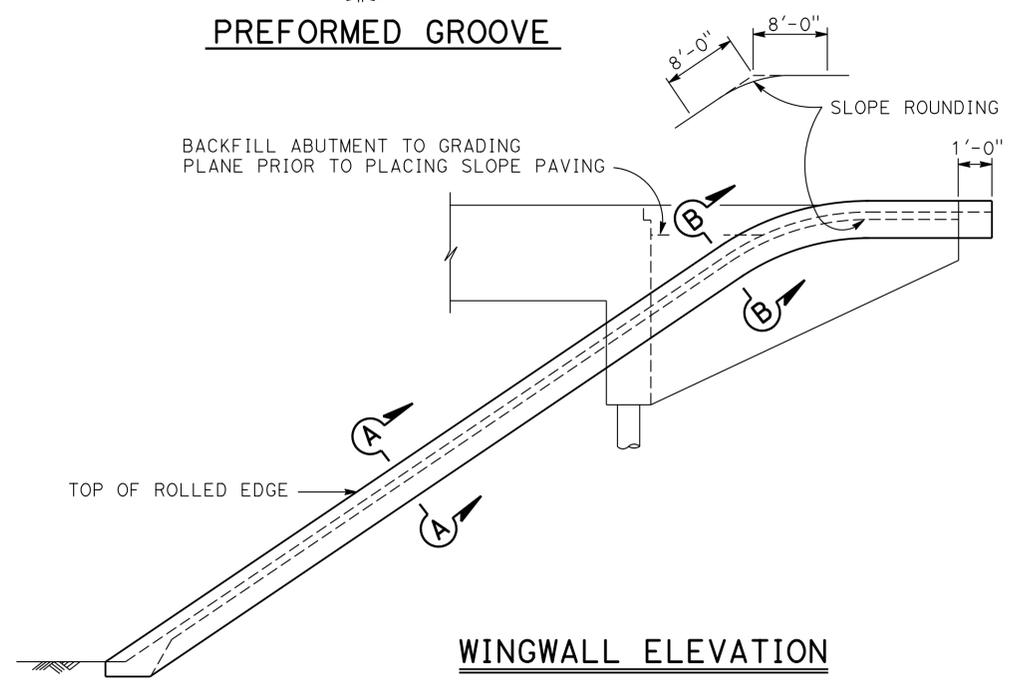
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	55	7.6/9.9	30	40
<i>Vathana Chy</i> LICENSED LANDSCAPE ARCHITECT 05/29/14 PLANS APPROVAL DATE			05/14/14 LICENSED LANDSCAPE ARCHITECT <i>Vathana Chy</i> Signature 01-31-15 EXPIRES DATE 05-14-14 STATE OF CALIFORNIA		
<small>THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.</small>					



**PICTORIAL VIEW OF TYPICAL INSTALLATION**



**GRAVEL MULCH MAINTENANCE ACCESS ROAD**



\* THIS DIMENSION BECOMES ZERO WHEN EDGE OF DECK IS AT OUTSIDE FACE OF WW

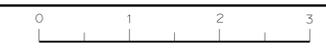
**SLOPE PAVING (CONCRETE)**

**PLANTING DETAILS**

NO SCALE

PD-1

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**Eric Dickson** LANDSCAPE ARCHITECTURE  
 SENIOR LANDSCAPE ARCHITECT  
 VATHANA CHY  
 PAUL SUN  
 REVISOR  
 DATE REVISED



DATE PLOTTED => 04-SEP-2014  
 TIME PLOTTED => 09:51  
 LAST REVISION: 05-14-14

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION  
**Caltrans** LANDSCAPE ARCHITECTURE

SENIOR LANDSCAPE ARCHITECT  
ERIC DICKSON

CALCULATED-DESIGNED BY  
CHECKED BY

VATHANA CHY  
PAUL SUN

REVISED BY  
DATE REVISED

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	55	7.6/9.9	31	40

05/14/14  
 LICENSED LANDSCAPE ARCHITECT  
 05/29/14  
 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.

## TEMPORARY WATER POLLUTION CONTROL QUANTITIES

DESCRIPTION	UNIT	SHEET NO. PP-							TOTAL
		1	2	3	4	5	6	7	
TEMPORARY GRAVEL BAG BERM	LF	600	2200	350	—	100	250	—	3500
TEMPORARY FIBER ROLL	LF	2200	—	—	1500	1600	—	—	5300
TEMPORARY DRAINAGE INLET PROTECTION	EA	5	3	6	5	3	4	1	27
TEMPORARY CONSTRUCTION ENTRANCE (TYPE 2)	EA	—	—	1	—	—	—	—	1
TEMPORARY CHECK DAM (TYPE 2)	LF	80	80	80	80	120	40	40	520
MOVE-IN/ MOVE-OUT (EROSION CONTROL)	EA	6							6

## LANDSCAPE QUANTITIES

DESCRIPTION	UNIT	SHEET NO. PP-							TOTAL
		1	2	3	4	5	6	7	
ROADSIDE PAVING (MISCELLANEOUS AREA) (MAINTENANCE VEHICLE PULLOUT)	SOYD	87	87	—	—	—	87	—	261
ROCK BLANKET	SOFT	—	—	—	—	—	4500	2800	7300
DECOMPOSED GRANITE	SOFT	4700	—	—	—	—	—	—	4700
SLOPE PAVING (CONCRETE)	CY	—	—	—	—	220	—	—	220
GRAVEL MULCH (ACCESS ROAD)	SOFT	4500	10,040	8500	—	—	7000	—	30,040
ROADWAY EXCAVATION (TYPE Y-1) (AERIALY DEPOSITED LEAD)	CY	101.5	14.5	—	—	310	14.5	56.5	497

## EROSION CONTROL QUANTITIES

EROSION CONTROL TYPES	UNIT	SHEET NO. PP-							TOTAL QUANTITY (SQFT)	EROSION CONTROL (DRY SEED) (LB) *	COMPOST (CY) *	EROSION CONTROL (BONDED FIBER MATRIX) (LB) *
		1	2	3	4	5	6	7				
EROSION CONTROL TYPE 1	SOFT	70,000	230,000	79,000	48,000	147,000	93,000	—	667,000	370	2000	46,000

\* UNIT OF MEASUREMENT FOR INFORMATION ONLY

## PLANTING QUANTITIES PQ-1

DATE PLOTTED => 04-SEP-2014  
 TIME PLOTTED => 09:51  
 LAST REVISION 05-14-14

	<b>M</b>	
Maint	MAINTENANCE	
Max	MAXIMUM	
MB	METAL BEAM	
MBB	METAL BEAM BARRIER	
MBGR	METAL BEAM GUARD RAILING	
Med	MEDIAN	
MGS	MIDWEST GUARDRAIL SYSTEM	
MH	MANHOLE	
Min	MINIMUM	
Misc	MISCELLANEOUS	
Misc I & S	MISCELLANEOUS IRON AND STEEL	
Mkr	MARKER	
Mod	MODIFIED, MODIFY	
Mon	MONUMENT	
MP	METAL PLATE	
MPGR	METAL PLATE GUARD RAILING	
MR	MOVEMENT RATING	
MSE	MECHANICALLY STABILIZED EMBANKMENT	
Mt	MOUNTAIN, MOUNT	
MtI	MATERIAL	
MVP	MAINTENANCE VEHICLE PULLOUT	
	<b>N</b>	
N	NORTH	
NB	NORTHBOUND	
No.	NUMBER (MUST HAVE PERIOD)	
Nos.	NUMBERS (MUST HAVE PERIOD)	
NPS	NOMINAL PIPE SIZE	
NS	NEAR SIDE	
NSP	NEW STANDARD PLAN	
NTS	NOT TO SCALE	
	<b>O</b>	
Obir	OBLITERATE	
OC	OVERCROSSING	
OD	OUTSIDE DIAMETER	
OF	OUTSIDE FACE	
OG	ORIGINAL GROUND	
OGAC	OPEN GRADED ASPHALT CONCRETE	
OGFC	OPEN GRADED FRICTION COURSE	
OH	OVERHEAD	
OHWM	ORDINARY HIGH WATER MARK	
O-O	OUT TO OUT	
Opp	OPPOSITE	
OSD	OVERSIDE DRAIN	
	<b>P</b>	
p	PAGE	
PAP	PERFORATED ALUMINUM PIPE	
PB	PULL BOX	
PC	POINT OF CURVATURE, PRECAST	
PCC	POINT OF COMPOUND CURVE, PORTLAND CEMENT CONCRETE	
PCMS	PORTABLE CHANGEABLE MESSAGE SIGN	
PCP	PERFORATED CONCRETE PIPE, PRESTRESSED CONCRETE PIPE	
PCVC	POINT OF COMPOUND VERTICAL CURVE	
PEC	PERMIT TO ENTER AND CONSTRUCT	
Ped	PEDESTRIAN	
Ped OC	PEDESTRIAN OVERCROSSING	
Ped UC	PEDESTRIAN UNDERCROSSING	
Perm MtI	PERMEABLE MATERIAL	

	<b>P continued</b>	
PG	PROFILE GRADE	
PI	POINT OF INTERSECTION	
PJP	PARTIAL JOINT PENETRATION	
Pkwy	PARKWAY	
PL, PL	PLATE	
P/L	PROPERTY LINE	
PM	POST MILE, TIME FROM NOON TO MIDNIGHT	
PN	PAVING NOTCH	
POC	POINT OF HORIZONTAL CURVE	
POT	POINT OF TANGENT	
POVC	POINT OF VERTICAL CURVE	
PP	PIPE PILE, PLASTIC PIPE, POWER POLE	
PPL	PREFORMED PERMEABLE LINER	
PPP	PERFORATED PLASTIC PIPE	
PRC	POINT OF REVERSE CURVE	
PRF	PAVEMENT REINFORCING FABRIC	
PRVC	POINT OF REVERSE VERTICAL CURVE	
PS&E	PLANS, SPECIFICATIONS AND ESTIMATES	
PS, P/S	PRESTRESSED	
PSP	PERFORATED STEEL PIPE	
PT	POINT OF TANGENCY	
PVC	POLYVINYL CHLORIDE	
Pvmt	PAVEMENT	
	<b>Q</b>	
Qty	QUANTITY	
	<b>R</b>	
R	RADIUS	
R & D	REMOVE AND DISPOSE	
R & S	REMOVE AND SALVAGE	
R/C	RATE OF CHANGE	
RCA	REINFORCED CONCRETE ARCH	
RCB	REINFORCED CONCRETE BOX	
RCP	REINFORCED CONCRETE PIPE	
RCPA	REINFORCED CONCRETE PIPE ARCH	
Rd	ROAD	
Reinf	REINFORCED, REINFORCEMENT, REINFORCING	
Rel	RELOCATE	
Repl	REPLACEMENT	
Ret	RETAINING	
Rev	REVISED, REVISION	
Rdwy	ROADWAY	
RHMA	RUBBERIZED HOT MIX ASPHALT	
Riv	RIVER	
RM	ROAD-MIXED	
RP	RADIUS POINT, REFERENCE POINT	
RR	RAILROAD	
RSP	ROCK SLOPE PROTECTION, REVISED STANDARD PLAN	
Rt	RIGHT	
Rte	ROUTE	
RW	REDWOOD, RETAINING WALL	
R/W	RIGHT OF WAY	
Rwy	RAILWAY	

	<b>S</b>	
S	SOUTH, SUPPLEMENT	
SAE	STRUCTURE APPROACH EMBANKMENT	
Salv	SALVAGE	
SAPP	STRUCTURAL ALUMINUM PLATE PIPE	
SB	SOUTHBOUND	
SC	SAND CUSHION	
SCSP	SLOTTED CORRUGATED STEEL PIPE	
SD	STORM DRAIN	
Sec	SECOND, SECTION	
Sep	SEPARATION	
SG	SUBGRADE	
Shld	SHOULDER	
Sht	SHEET	
Sim	SIMILAR	
±	STATION LINE	
SM	SELECTED MATERIAL	
Spec	SPECIAL, SPECIFICATIONS	
SPP	SLOTTED PLASTIC PIPE	
SS	SLOPE STAKE	
SSBM	STRAP AND SADDLE BRACKET METHOD	
SSD	STRUCTURAL SECTION DRAIN	
SSPA	STRUCTURAL STEEL PLATE ARCH	
SSPP	STRUCTURAL STEEL PLATE PIPE	
SSPPA	STRUCTURAL STEEL PLATE PIPE ARCH	
SSRP	STEEL SPIRAL RIB PIPE	
St	STREET	
Sta	STATION	
STBB	SINGLE THRIE BEAM BARRIER	
Std	STANDARD	
Str	STRUCTURE	
Surf	SURFACING	
SW	SIDEWALK, SOUND WALL	
Swr	SEWER	
Sym	SYMMETRICAL	
S4S	SURFACE 4 SIDES	
	<b>T</b>	
T	SEMI-TANGENT	
Tan	TANGENT	
TBB	THRIE BEAM BARRIER	
Tbr	TIMBER	
TC	TOP OF CURB	
TCB	TRAFFIC CONTROL BOX	
TCE	TEMPORARY CONSTRUCTION EASEMENT	
TeI	TELEPHONE	
Temp	TEMPORARY	
TG	TOP OF GRADE	
Tot	TOTAL	
TP	TELEPHONE POLE	
TPB	TREATED PERMEABLE BASE	
TPM	TREATED PERMEABLE MATERIAL	
Trans	TRANSITION	

	<b>T continued</b>	
TS	TRANSVERSE, TRAFFIC SIGNAL, TUBULAR STEEL	
Typ	TYPICAL	<b>U</b>
UC	UNDERCROSSING	
UD	UNDERDRAIN	
UG	UNDERGROUND	
UON	UNLESS OTHERWISE NOTED	
UP	UNDERPASS	<b>V</b>
V	VALVE, DESIGN SPEED	
Var	VARIABLE, VARIES	
VC	VERTICAL CURVE	
VCP	VITRIFIED CLAY PIPE	
Vert	VERTICAL	
Via	VIADUCT	
Vol	VOLUME	<b>W</b>
W	WEST, WIDTH	
WB	WESTBOUND	
WH	WEEP HOLE	
WM	WIRE MESH	
WS	WATER SURFACE	
WSP	WELDED STEEL PIPE	
Wt	WEIGHT	
WV	WATER VALVE	
WW	WINGWALL	
WWLOL	WINGWALL LAYOUT LINE	<b>X</b>
X Sec	CROSS SECTION	
Xing	CROSSING	<b>Y</b>
Yr	YEAR	
Yrs	YEARS	

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	55	7.6/9.9	32	40

*Grace M. Tsushima*  
REGISTERED CIVIL ENGINEER

July 19, 2013  
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER  
 Grace M. Tsushima  
 No. C49814  
 Exp. 9-30-14  
 CIVIL  
 STATE OF CALIFORNIA

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

TO ACCOMPANY PLANS DATED 05-29-14

**UNIT OF MEASUREMENT SYMBOLS:**  
Some of the symbols used in the project plan quantity tables and in the Bid Item List are:

**TABLE A**

SYMBOL USED	DEFINITIONS
ACRE	ACRE
CF	CUBIC FOOT
CY	CUBIC YARD
EA	EACH
GAL	GALLON
LB	POUND
LF	LINEAR FOOT
SQFT	SQUARE FOOT
SQYD	SQUARE YARD
STA	100 FEET
TAB	TABLET
TON	2,000 POUNDS

Some of the symbols used in the plans other than in the project plan quantity tables are:

**TABLE B**

SYMBOL USED	DEFINITIONS
ksi	KIPS PER SQUARE INCH
ksf	KIPS PER SQUARE FOOT
psi	POUNDS PER SQUARE INCH
psf	POUNDS PER SQUARE FOOT
lb/ft <sup>3</sup> , pcf	POUNDS PER CUBIC FOOT
tsf	TONS PER SQUARE FOOT
mph, MPH *	MILES PER HOUR
∅	NOMINAL DIAMETER
oz	OUNCE
lb	POUND
kíp	1,000 POUNDS
cal	CALORIE
ft	FOOT OR FEET
gal	GALLON

\* For use on a sign panel only

STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION

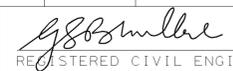
**ABBREVIATIONS  
(SHEET 2 OF 2)**

NO SCALE

RSP A10B DATED JULY 19, 2013 SUPERSEDES STANDARD PLAN A10B  
DATED MAY 20, 2011 - PAGE 2 OF THE STANDARD PLANS BOOK DATED 2010.

2010 REVISED STANDARD PLAN RSP A10B

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	55	7.6/9.9	33	40

  
 REGISTERED CIVIL ENGINEER  
 July 19, 2013  
 PLANS APPROVAL DATE



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TO ACCOMPANY PLANS DATED 05-29-14

TABLE 1

TAPER LENGTH CRITERIA AND CHANNELIZING DEVICE SPACING							
SPEED (S)	MINIMUM TAPER LENGTH * FOR WIDTH OF OFFSET 12 FEET (W)				MAXIMUM CHANNELIZING DEVICE SPACING		
	TANGENT 2L	MERGING L	SHIFTING L/2	SHOULDER L/3	X	Y	Z **
					TAPER	TANGENT	CONFLICT
mph	ft	ft	ft	ft	ft	ft	ft
20	160	80	40	27	20	40	10
25	250	125	63	42	25	50	12
30	360	180	90	60	30	60	15
35	490	245	123	82	35	70	17
40	640	320	160	107	40	80	20
45	1080	540	270	180	45	90	22
50	1200	600	300	200	50	100	25
55	1320	660	330	220	55	110	27
60	1440	720	360	240	60	120	30
65	1560	780	390	260	65	130	32
70	1680	840	420	280	70	140	35

\* - For other offsets, use the following merging taper length formula for L:  
 For speed of 40 mph or less,  $L = WS^2/60$   
 For speed of 45 mph or more,  $L = WS$

Where: L = Taper length in feet  
 W = Width of offset in feet  
 S = Posted speed limit, off-peak 85th-percentile speed prior to work starting, or the anticipated operating speed in mph

\*\* - Use for taper and tangent sections where there are no pavement markings or where there is a conflict between existing pavement markings and channelizers (CA).

TABLE 2

LONGITUDINAL BUFFER SPACE AND FLAGGER STATION SPACING				
SPEED *	Min D **	DOWNGRADE Min D ***		
		-3%	-6%	-9%
		ft	ft	ft
20	115	116	120	126
25	155	158	165	173
30	200	205	215	227
35	250	257	271	287
40	305	315	333	354
45	360	378	400	427
50	425	446	474	507
55	495	520	553	593
60	570	598	638	686
65	645	682	728	785
70	730	771	825	891

\* - Speed is posted speed limit, off-peak 85th-percentile speed prior to work starting, or the anticipated operating speed in mph  
 \*\* - Longitudinal buffer space or flagger station spacing  
 \*\*\* - Use on sustained downgrade steeper than -3 percent and longer than 1 mile.

TABLE 3

ADVANCE WARNING SIGN SPACING			
ROAD TYPE	DISTANCE BETWEEN SIGNS *		
	A	B	C
	ft	ft	ft
URBAN - 25 mph OR LESS	100	100	100
URBAN - MORE THAN 25 mph TO 40 mph	250	250	250
URBAN - MORE THAN 40 mph	350	350	350
RURAL	500	500	500
EXPRESSWAY / FREEWAY	1000	1500	2640

\* - The distances are approximate, are intended for guidance purposes only, and should be applied with engineering judgment. These distances should be adjusted by the Engineer for field conditions, if necessary, by increasing or decreasing the recommended distances.

STATE OF CALIFORNIA  
 DEPARTMENT OF TRANSPORTATION  
**TRAFFIC CONTROL SYSTEM TABLES  
 FOR LANE AND RAMP CLOSURES**  
 NO SCALE

RSP T9 DATED JULY 19, 2013 SUPERSEDES RSP T9 DATED APRIL 19, 2013 THAT SUPPLEMENTS THE STANDARD PLANS BOOK DATED 2010.

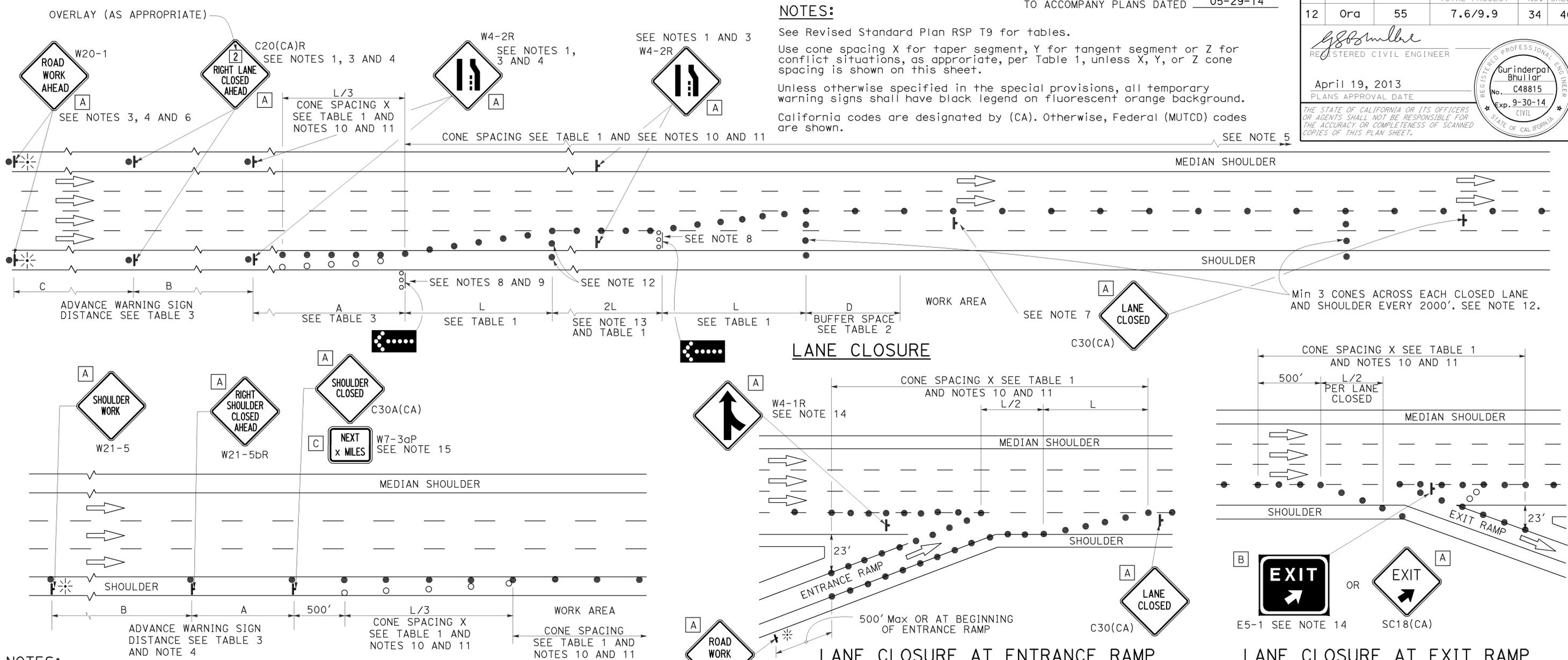
**REVISED STANDARD PLAN RSP T9**

2010 REVISED STANDARD PLAN RSP T9

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	55	7.6/9.9	34	40

REGISTERED CIVIL ENGINEER  
 April 19, 2013  
 PLANS APPROVAL DATE  
 THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

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



**NOTES:**

1. Median lane closures shall conform to the details as shown except that C20(CA)L and W4-2L signs shall be used.
2. At least one person shall be assigned to provide full time maintenance of traffic control devices for lane closures.
3. Duplicate sign installations are not required:
  - a) On opposite shoulder if at least one-half of the available lanes remain open to traffic.
  - b) In the median if the width of the median shoulder is less than 8' and the outside lanes are to be closed.
4. Each advance warning sign on each side of the roadway shall be equipped with at least two flags for daytime closure. Each flag shall be at least 16" x 16" in size and shall be orange or fluorescent red-orange in color. Flashing beacons shall be placed at the locations indicated for lane closure during hours of darkness.
5. A G20-2 "END ROAD WORK" sign, with minimum size of 48" x 24" as appropriate, shall be placed at the end of the lane closure unless the end of work area is obvious or ends within a larger project's limits.

**SHOULDER CLOSURE**

6. If the W20-1 sign would follow within 2000' of a stationary W20-1 or G20-1 "ROAD WORK NEXT \_\_\_\_\_ MILES", use a C20(CA) "NEXT x MILES" sign for the first advance warning sign.
7. Place a C30(CA) sign every 2000' throughout length of lane closure.
8. One flashing arrow sign for each lane closed. The flashing arrow signs shall be Type I.
9. A minimum 1500' of sight distance shall be provided where possible for vehicles approaching the first flashing arrow sign. Lane closures shall not begin at top of crest vertical curve or on a horizontal curve.
10. All cones used for lane closures during the hours of darkness shall be fitted with retroreflective bands (or sleeves) as specified in the specifications.
11. Portable delineators, placed at one-half the spacing indicated for traffic cones may be used instead of cones for daytime closures only.

W20-1 SEE NOTE 4

12. Unless otherwise specified in the special provisions, a minimum of 3 cones shall be placed transversely across each closed lane and shoulder at each location where a taper across a traffic lane ends and every 2000' as shown on the "Lane Closure" detail. Two Type II barricades may be used instead of the 3 cones. The transverse alignment of the cones or barricades on the closed shoulder may be shifted from the transverse alignment to provide access to the work.
13. Unless otherwise specified in the special provisions, the 2L tangent shown along lane lines shall be used between the L tapers required for each closed traffic lane.
14. Unless otherwise specified in the special provisions, the E5-1 or SC18(CA) and W4-1 signs shall be used as shown.
15. A W7-3aP "NEXT \_\_\_\_\_ MILES" plaque must be used if the shoulder closure extends beyond the distance that can be perceived by road users.

**NOTES:**

See Revised Standard Plan RSP T9 for tables.  
 Use cone spacing X for taper segment, Y for tangent segment or Z for conflict situations, as appropriate, per Table 1, unless X, Y, or Z cone spacing is shown on this sheet.  
 Unless otherwise specified in the special provisions, all temporary warning signs shall have black legend on fluorescent orange background.  
 California codes are designated by (CA). Otherwise, Federal (MUTCD) codes are shown.

**LANE CLOSURE**

**LEGEND**

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

**SIGN PANEL SIZE (Min)**

A	48" x 48"
B	72" x 60"
C	36" x 30"

**TRAFFIC CONTROL SYSTEM FOR LANE CLOSURE ON FREEWAYS AND EXPRESSWAYS**

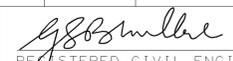
NO SCALE

RSP T10 DATED APRIL 19, 2013 SUPERSEDES STANDARD PLAN T10 DATED MAY 20, 2011 - PAGE 237 OF THE STANDARD PLANS BOOK DATED 2010.

**REVISED STANDARD PLAN RSP T10**

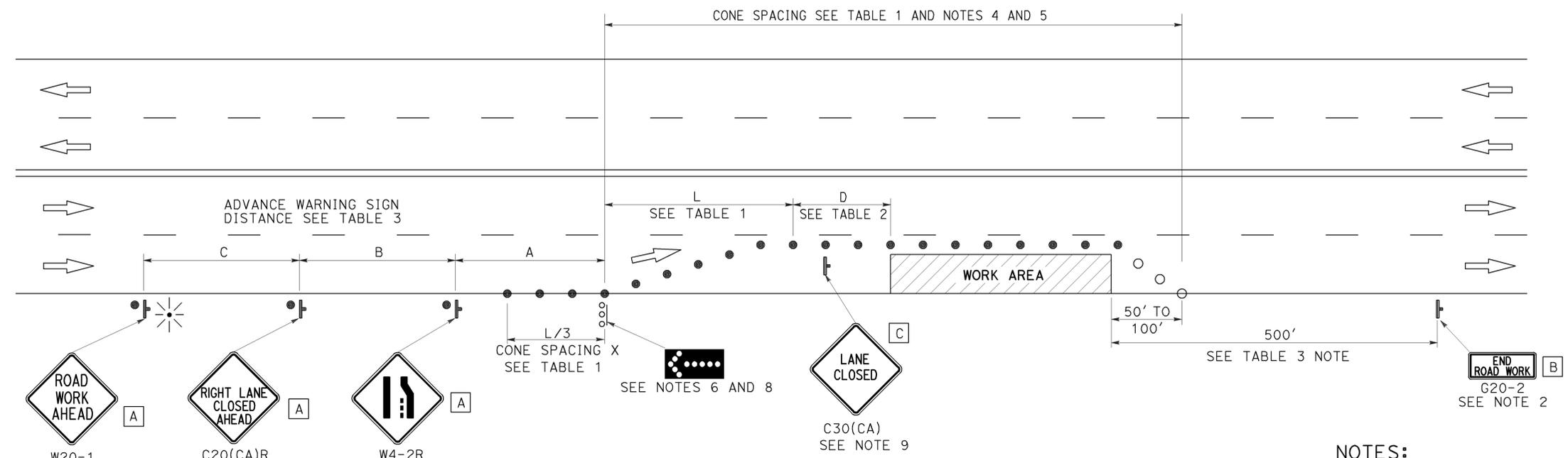
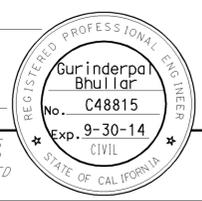
2010 REVISED STANDARD PLAN RSP T10

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	55	7.6/9.9	35	40

  
 REGISTERED CIVIL ENGINEER  
 April 19, 2013  
 PLANS APPROVAL DATE

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

TO ACCOMPANY PLANS DATED 05-29-14



**TYPICAL LANE CLOSURE**

**NOTES:**

See Revised Standard Plan RSP T9 for tables.

Use cone spacing X for taper segment, Y for tangent segment or Z for conflict situations, as appropriate, per Table 1, unless X, Y, or Z cone spacing is shown on this sheet.

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

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

**NOTES:**

- Each advance warning sign shall be equipped with at least two flags for daytime closure. Each flag shall be at least 16" x 16" in size and shall be orange or fluorescent red-orange in color. Flashing beacons shall be placed at the locations indicated for lane closure during hours of darkness.
- A G20-2 "END ROAD WORK" sign, as appropriate, shall be placed at the end of the lane closure unless the end of work area is obvious, or ends within a larger project's limits.
- If the W20-1 sign would follow within 2000' of a stationary W20-1 or G20-1 "ROAD WORK NEXT \_\_\_\_\_ MILES", use a C20(CA) sign for the first advance warning sign.
- All cones used for lane closures during the hours of darkness shall be fitted with retroreflective bands (or sleeves) as specified in the specifications.
- Portable delineators, placed at one-half the spacing indicated for traffic cones, may be used instead of cones for daytime closures only.
- Flashing arrow sign shall be either Type I or Type II.
- For approach speeds over 50 mph, use the "Traffic Control System for Lane Closure On Freeways And Expressways" plan for lane closure details and requirements.
- A minimum 1500' of sight distance shall be provided where possible for vehicles approaching the first flashing arrow sign. Lane closures shall not begin at the top of crest vertical curve or on a horizontal curve.
- Place a C30(CA) sign every 2000' throughout length of lane closure.
- Median lane closures shall conform to the details as shown except that C20(CA)L and W4-2L signs shall be used.
- At least one person shall be assigned to provide full time maintenance of traffic control devices for lane closure unless, otherwise directed by the Engineer.

**LEGEND**

- TRAFFIC CONE
- TRAFFIC CONE (OPTIONAL TAPER)
- ⌋ TEMPORARY TRAFFIC CONTROL SIGN
- ⬢ FLASHING ARROW SIGN (FAS)
- ⊞ FAS SUPPORT OR TRAILER
- ⊛ PORTABLE FLASHING BEACON

**SIGN PANEL SIZE (Min)**

- A 48" x 48"
- B 36" x 18"
- C 30" x 30"

STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION

**TRAFFIC CONTROL SYSTEM  
FOR LANE CLOSURE ON  
MULTILANE CONVENTIONAL  
HIGHWAYS**

NO SCALE

RSP T11 DATED APRIL 19, 2013 SUPERSEDES STANDARD PLAN T11  
DATED MAY 20, 2011 - PAGE 239 OF THE STANDARD PLANS BOOK DATED 2010.

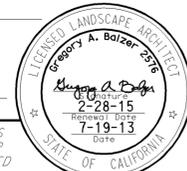
**REVISED STANDARD PLAN RSP T11**

2010 REVISED STANDARD PLAN RSP T11

*Gregory A. Balzer*  
LICENSED LANDSCAPE ARCHITECT

July 19, 2013  
PLANS APPROVAL DATE

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TO ACCOMPANY PLANS DATED 05-29-14

2010 REVISED STANDARD PLAN RSP H1

**A**

AB AGGREGATE BASE  
 ABS ACRYLONITRILE-BUTADIENE-STYRENE  
 AC ASPHALT CONCRETE  
 ACC ARMOR-CLAD CONDUCTORS  
 Adj ADJACENT/ADJUSTABLE  
 AIC AUXILIARY IRRIGATION CONTROLLER  
 Alt ALTERNATIVE  
 AMEND AMENDMENT  
 ARV AIR RELEASE VALVE  
 AUTO AUTOMATIC  
 AUX AUXILIARY  
 AVB ATMOSPHERIC VACUUM BREAKER

**B**

B&B BALLED AND BURLAPPED  
 B/B BRASS/BRONZE  
 B/B/PL BRASS/BRONZE/PLASTIC  
 B/PL BRASS/PLASTIC  
 BFM BONDED FIBER MATRIX  
 Bit Ctd BITUMINOUS COATED  
 BP BOOSTER PUMP  
 BPA BACKFLOW PREVENTER ASSEMBLY  
 BPE BACKFLOW PREVENTER ENCLOSURE  
 BV BALL VALVE

**C**

C CONDUIT  
 CAP CORRUGATED ALUMINUM PIPE  
 CARV COMBINATION AIR RELEASE VALVE  
 CB COUPLING BAND  
 CCA CAM COUPLER ASSEMBLY  
 CEC CONTROLLER ENCLOSURE CABINET  
 CHDPE CORRUGATED HIGH DENSITY POLYETHYLENE  
 CL CHAIN LINK  
 CNC CONTROL AND NEUTRAL CONDUCTORS  
 Conc CONCRETE  
 CP COPPER PIPE  
 CS COMPOST SOCK  
 CSP CORRUGATED STEEL PIPE  
 CST CENTER STRIP  
 CV CHECK VALVE

**D**

Dia DIAMETER  
 DIP DUCTILE IRON PIPE  
 DIT DRIP IRRIGATION TUBING  
 DG DECOMPOSED GRANITE  
 DN DIAMETER NOMINAL  
 DVA DRIP VALVE ASSEMBLY

**E**

EC EROSION CONTROL  
 ECTC EROSION CONTROL TECHNOLOGY COUNCIL  
 ElecT ELECTRIC/ELECTRICAL  
 Elev ELEVATION  
 ELL ELBOW  
 ENCL ENCLOSURE  
 EP EDGE OF PAVEMENT  
 ES EDGE OF SHOULDER  
 EST END STRIP  
 ESTB ESTABLISHMENT  
 ETW EDGE OF TRAVELED WAY

**F**

F FULL CIRCLE  
 F/P FULL/PART CIRCLE  
 FCV FLOW CONTROL VALVE  
 FERT FERTILIZER  
 FG FINISHED GRADE  
 FH FLEXIBLE HOSE  
 FIPT FEMALE IRON PIPE THREAD  
 FIS FERTILIZER INJECTOR SYSTEM  
 FL FLOW LINE  
 FR FIBER ROLL  
 FS FLOW SENSOR  
 FSC FLOW SENSOR CABLE  
 FV FLUSH VALVE

**G**

Galv GALVANIZED  
 GARV GARDEN VALVE  
 GARVA GARDEN VALVE ASSEMBLY  
 GM GRAVEL MULCH  
 GPH GALLONS PER HOUR  
 GPM GALLONS PER MINUTE  
 GSP GALVANIZED STEEL PIPE  
 GV GATE VALVE

**H**

H HALF CIRCLE  
 HDPE HIGH DENSITY POLYETHYLENE  
 HP HORSEPOWER/HINGE POINT  
 HPL HIGH PRESSURE LINE  
 Hwy HIGHWAY

**I**

IC IRRIGATION CONTROLLER  
 ICC IRRIGATION CONTROLLER(S)  
 IN CONTROLLER ENCLOSURE CABINET  
 ID INSIDE DIAMETER  
 IFS IRRIGATION FILTRATION SYSTEM  
 IPS IRON PIPE SIZE  
 IPT IRON PIPE THREAD  
 Irr IRRIGATION

**L**

L LENGTH

**M**

Max MAXIMUM  
 MBGR METAL BEAM GUARD RAILING  
 MCV MANUAL CONTROL VALVE  
 MIC MASTER IRRIGATION CONTROLLER  
 Min MINIMUM  
 MIPT MALE IRON PIPE THREAD  
 Misc MISCELLANEOUS  
 MtI MATERIAL  
 MVP MAINTENANCE VEHICLE PULLOUT

**N**

NCN NO COMMON NAME  
 NL NOZZLE LINE  
 No. NUMBER  
 NPT NATIONAL PIPE THREAD

**O**

O/C ON CENTER  
 OD OUTSIDE DIAMETER  
 OL OVERLAP

**P**

P PART CIRCLE  
 PB PULL BOX  
 PCC PORTLAND CEMENT CONCRETE  
 PE POLYETHYLENE  
 Pkt+ PACKET  
 PL PLASTIC  
 PLS PURE LIVE SEED  
 PLT PLANT/PLANTING  
 PLT ESTB PLANT ESTABLISHMENT  
 PM POST MILE  
 PR PRESSURE RATED  
 PRLV PRESSURE RELIEF VALVE  
 PRV PRESSURE REGULATING VALVE  
 PVC POLYVINYL CHLORIDE  
 Pvm+ PAVEMENT

**Q**

Q QUARTER CIRCLE  
 QCV QUICK COUPLING VALVE

**R**

R RADIUS  
 RCP REINFORCED CONCRETE PIPE  
 RCV REMOTE CONTROL VALVE  
 RCVM REMOTE CONTROL VALVE (MASTER)  
 RCVMF REMOTE CONTROL VALVE (MASTER) W/FLOW SENSOR  
 RCVP REMOTE CONTROL VALVE W/PRESSURE REGULATOR  
 RCW RECYCLED WATER  
 RECP ROLLED EROSION CONTROL PRODUCT  
 REQ REQUIRED  
 RICS REMOTE IRRIGATION CONTROL SYSTEM  
 R/W RIGHT OF WAY

**S**

S SLIP  
 SCH SCHEDULE  
 SF STATE-FURNISHED  
 Shld SHOULDER  
 Sq SQUARE  
 SST SIDE STRIP  
 Sta STATION  
 Std STANDARD  
 SW SIDEWALK/SOUND WALL

**T**

T THIRD CIRCLE/THREAD  
 TLS TRUCK LOADING STANDPIPE  
 TQ THREE QUARTER CIRCLE  
 TRM TURF REINFORCEMENT MAT  
 TT TWO-THIRDS CIRCLE  
 TWSA TREE WELL SPRINKLER ASSEMBLY  
 Typ TYPICAL

**U**

UG UNDERGROUND

**W**

W WIDTH  
 W/ WITH  
 WM WATER METER  
 WS WYE STRAINER  
 WSA WYE STRAINER ASSEMBLY  
 WSP WELDED STEEL PIPE  
 WWM WELDED WIRE MESH

**NOTE:**  
 For additional abbreviations,  
 see Standard Plans A10A and A10B.

STATE OF CALIFORNIA  
 DEPARTMENT OF TRANSPORTATION  
**LANDSCAPE AND  
 EROSION CONTROL ABBREVIATIONS**  
 NO SCALE

RSP H1 DATED JULY 19, 2013 SUPERSEDES STANDARD PLAN H1  
 DATED MAY 20, 2011 - PAGE 218 OF THE STANDARD PLANS BOOK DATED 2010.

**REVISED STANDARD PLAN RSP H1**

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	55	7.6/9.9	37	40

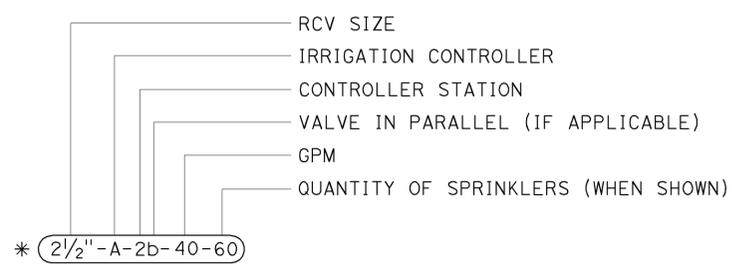
*Gregory A. Balzer*  
 LICENSED LANDSCAPE ARCHITECT  
 November 15, 2013  
 PLANS APPROVAL DATE  
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

TO ACCOMPANY PLANS DATED 05-29-14

2010 REVISED STANDARD PLAN RSP H2

EXISTING	NEW	ITEM DESCRIPTION
		WATER METER (WM)
		BACKFLOW PREVENTER ASSEMBLY (BPA)
		BACKFLOW PREVENTER ENCLOSURE (BPE)
		BOOSTER PUMP (BP)
		TRUCK LOADING STANDPIPE (TLS)
		FLOW SENSOR (FS)
		MASTER IRRIGATION CONTROLLER (MIC)
		AUXILIARY IRRIGATION CONTROLLER (AIC)
		IRRIGATION CONTROLLER (IC) IRRIGATION CONTROLLER (IC) (BATTERY) IRRIGATION CONTROLLER (IC) (SOLAR) IRRIGATION CONTROLLER (IC) (TWO WIRE) IRRIGATION CONTROLLER(S) IN CONTROLLER ENCLOSURE CABINET (ICC)
		ARMOR-CLAD CONDUCTORS (ACC)
		CONTROL AND NEUTRAL CONDUCTORS (CNC)
		IRRIGATION CONDUIT
		EXTEND IRRIGATION CONDUIT
		DUCTILE IRON PIPE (SUPPLY LINE) (MAIN) (DIP)
		GALVANIZED STEEL PIPE (SUPPLY LINE) (MAIN) (GSP)
		GALVANIZED STEEL PIPE (SUPPLY LINE) (LATERAL) (GSP)
		PLASTIC PIPE (SUPPLY LINE) (MAIN)
		PLASTIC PIPE (SUPPLY LINE) (LATERAL)
		COPPER PIPE (SUPPLY LINE)
		DRIP IRRIGATION TUBING
		REMOTE CONTROL VALVE (RCV) REMOTE CONTROL VALVE (MASTER) (RCVM) REMOTE CONTROL VALVE (MASTER) W/FLOW METER (RCVMF)
		REMOTE CONTROL VALVE W/PRESSURE REGULATOR (RCVP)
		EXISTING MANUAL CONTROL VALVE (MCV)
		DRIP VALVE ASSEMBLY (DVA)
		WYE STRAINER ASSEMBLY (WSA)

EXISTING	NEW	ITEM DESCRIPTION
		GATE VALVE (GV)
		BALL VALVE (BV)
		QUICK COUPLING VALVE (QCV)
		CAM COUPLER ASSEMBLY (CCA)
		GARDEN VALVE ASSEMBLY (GARVA)
		PRESSURE REGULATING VALVE (PRV)
		PRESSURE RELIEF VALVE (PRLV)
		FLOW CONTROL VALVE (FCV)
		COMBINATION AIR RELEASE VALVE (CARV)
		CHECK VALVE (CV)
		FLUSH VALVE (FV)
		EXISTING NOZZLE LINE W/TURNING UNION
		EXISTING IRRIGATION SYSTEM
		EXISTING IRRIGATION SYSTEM TO BE REMOVED
		CHAIN LINK GATE
		QUICK COUPLING VALVE W/SPRINKLER PROTECTOR
		SPRINKLER W/SPRINKLER PROTECTOR
		CONNECT TO EXISTING SYSTEM
		CAP
		CAP EXISTING
		FIBER ROLL
		COMPOST SOCK



**VALVE CODE**

\* VALVE CODES FOR EXISTING VALVES ARE SHOWN IN A DASHED ENCLOSURE.

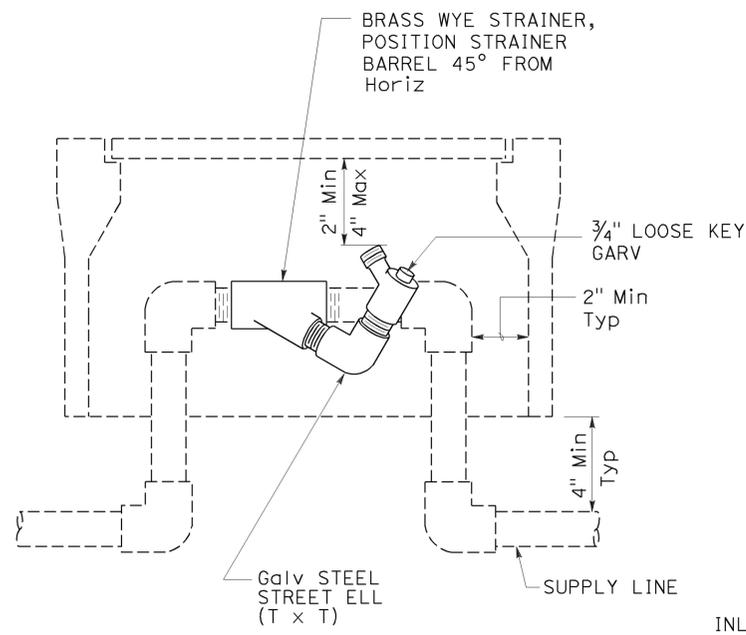
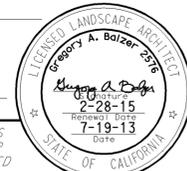
RSP H2 DATED NOVEMBER 15, 2013 SUPERSEDES RSP H2 DATED JULY 19, 2013 AND STANDARD PLAN H2 DATED MAY 20, 2011 - PAGE 219 OF THE STANDARD PLANS BOOK DATED 2010.

STATE OF CALIFORNIA  
 DEPARTMENT OF TRANSPORTATION  
**LANDSCAPE AND EROSION CONTROL SYMBOLS**  
 NO SCALE

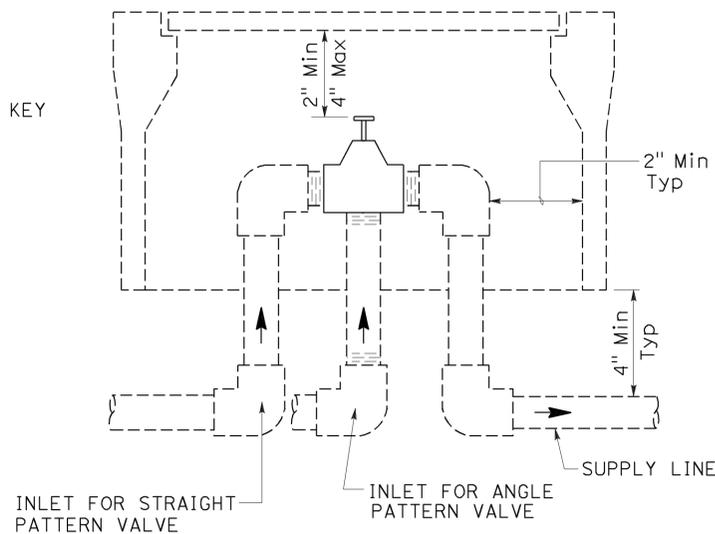
**REVISED STANDARD PLAN RSP H2**

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12	Ora	55	7.6/9.9	38	40

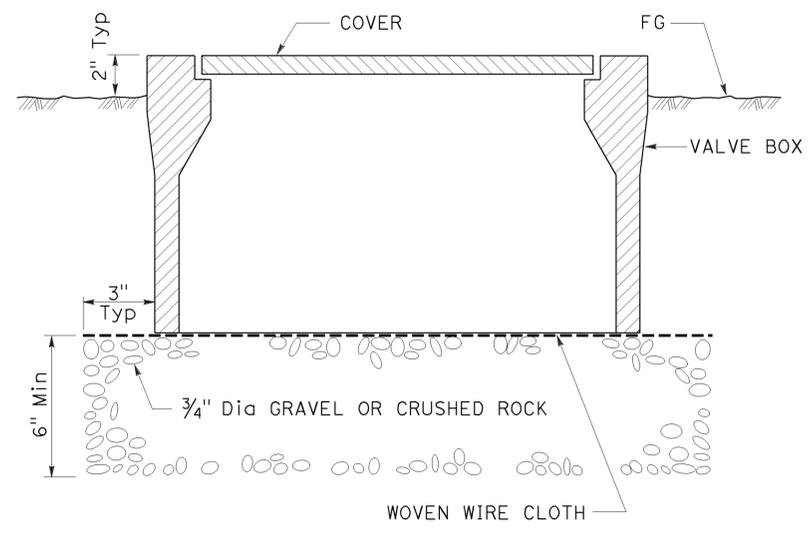
July 19, 2013  
 PLANS APPROVAL DATE  
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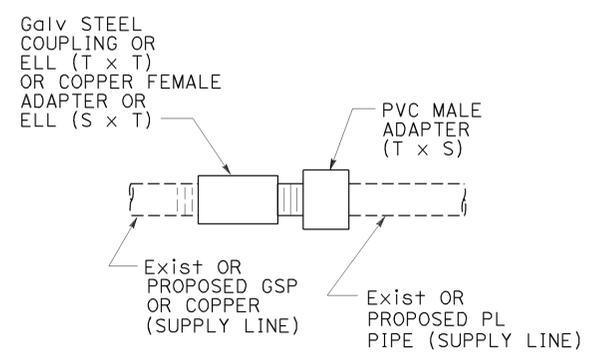
**ELEVATION**  
**WYE STRAINER ASSEMBLY**



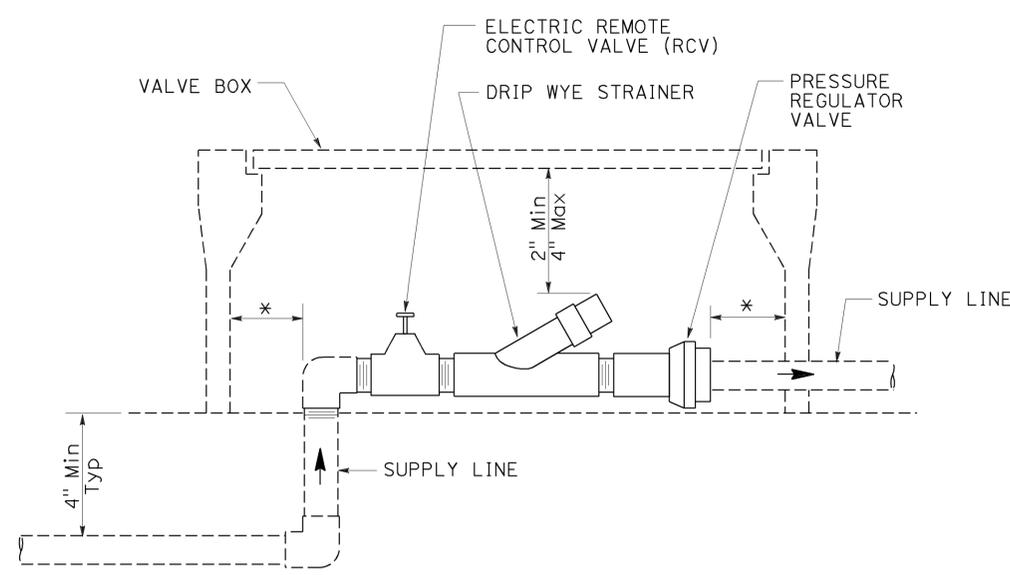
**ELEVATION**  
**VALVE**



**SECTION**  
**VALVE BOX**



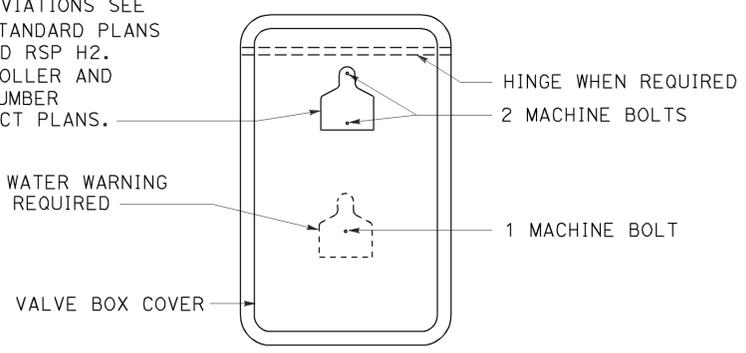
**GALVANIZED OR COPPER PIPE CONNECTION TO PLASTIC PIPE**



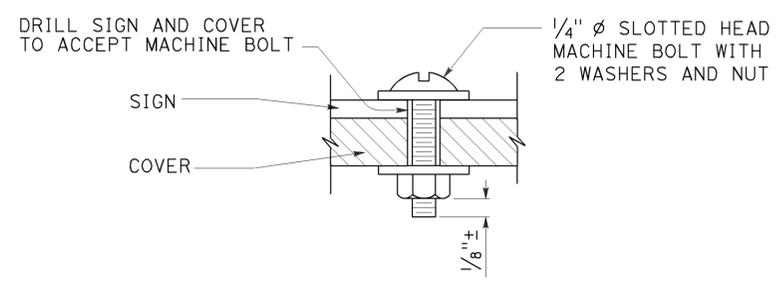
**ELEVATION**  
**DRIP VALVE ASSEMBLY**

IDENTIFICATION LABEL:  
FOR ABBREVIATIONS SEE  
REVISED STANDARD PLANS  
RSP H1 AND RSP H2.  
FOR CONTROLLER AND  
STATION NUMBER  
SEE PROJECT PLANS.

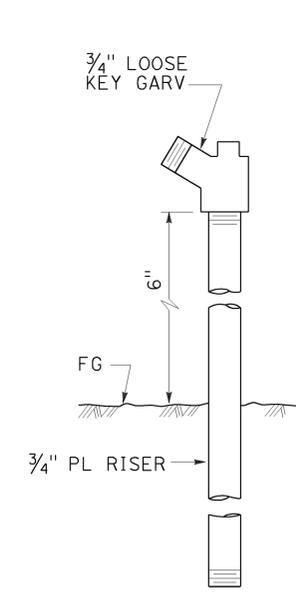
RECYCLED WATER WARNING  
SIGN WHEN REQUIRED



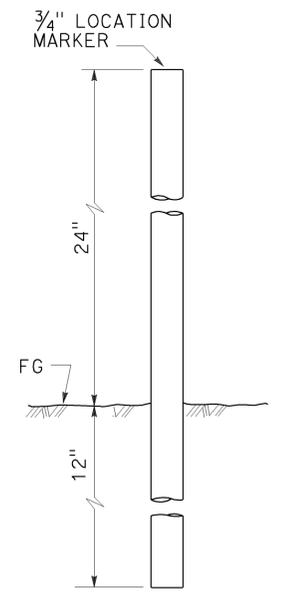
**PLAN**



**SECTION**  
**VALVE BOX IDENTIFICATION**



**ELEVATION**  
**GARDEN VALVE ASSEMBLY**



**ELEVATION**  
**LOCATION MARKER**

**GARDEN VALVE ASSEMBLY**

STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION

**LANDSCAPE DETAILS**

NO SCALE

RSP H7 DATED JULY 19, 2013 SUPERSEDES STANDARD PLAN H7  
DATED MAY 20, 2011 - PAGE 224 OF THE STANDARD PLANS BOOK DATED 2010.

**REVISED STANDARD PLAN RSP H7**

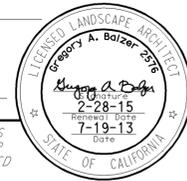
2010 REVISED STANDARD PLAN RSP H7

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	55	7.6/9.9	39	40

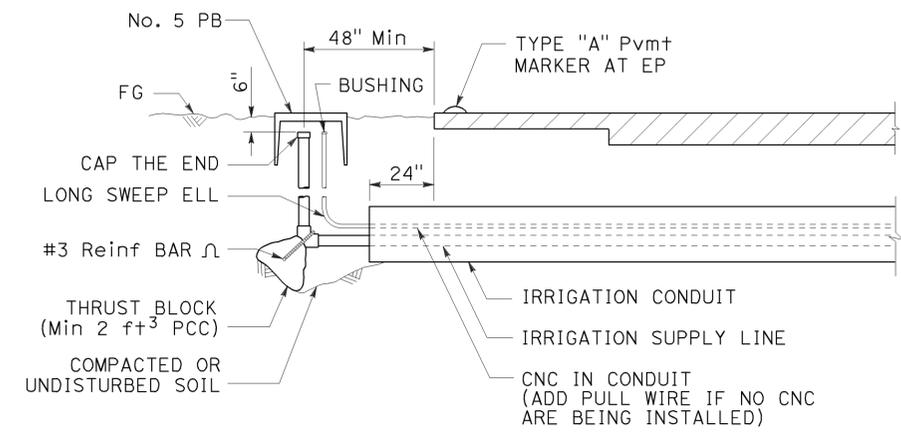
*Gregory A. Balzer*  
 LICENSED LANDSCAPE ARCHITECT

July 19, 2013  
 PLANS APPROVAL DATE

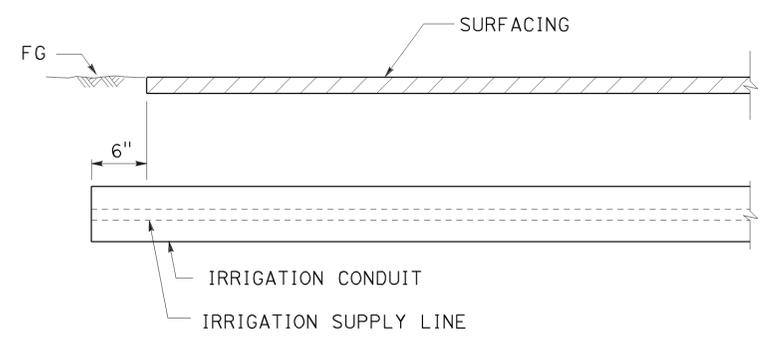
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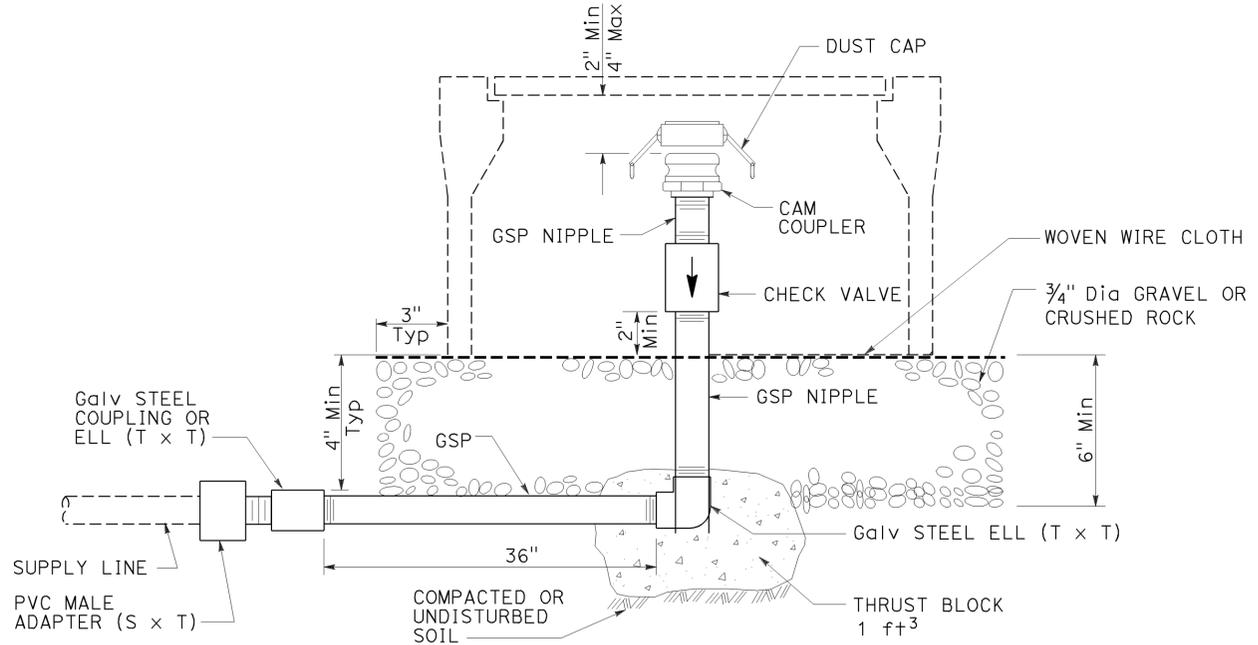
TO ACCOMPANY PLANS DATED 05-29-14



**SECTION**  
**IRRIGATION CONDUIT**  
UNDER TRAVELED WAY



**SECTION**  
**IRRIGATION CONDUIT**  
UNDER SIDEWALKS, DRIVEWAYS AND PATHS



**ELEVATION**  
**CAM COUPLER ASSEMBLY**

STATE OF CALIFORNIA  
DEPARTMENT OF TRANSPORTATION  
**LANDSCAPE DETAILS**  
NO SCALE

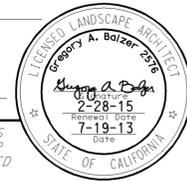
RSP H9 DATED JULY 19, 2013 SUPERSEDES STANDARD PLAN H9 DATED MAY 20, 2011 - PAGE 226 OF THE STANDARD PLANS BOOK DATED 2010.

**REVISED STANDARD PLAN RSP H9**

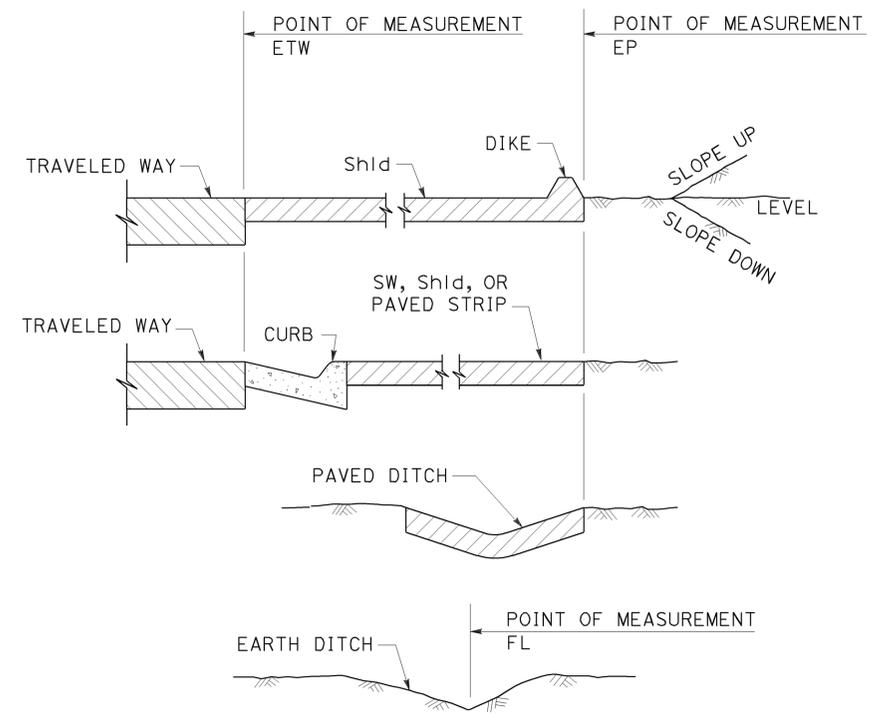
2010 REVISED STANDARD PLAN RSP H9

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
12	Ora	55	7.6/9.9	40	40

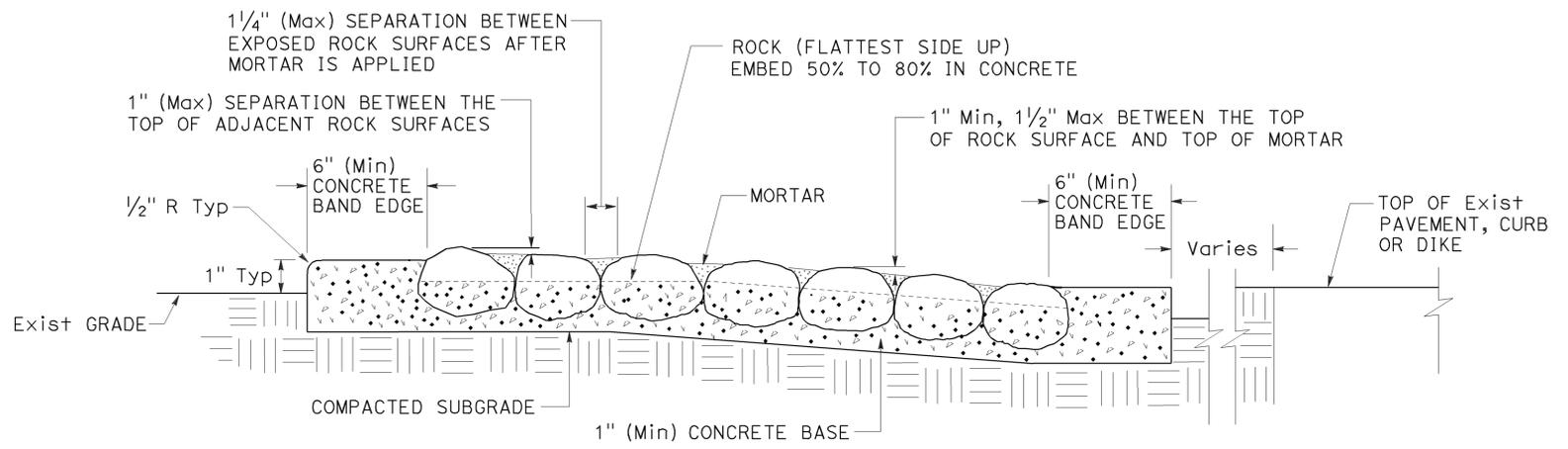
*Gregory A. Balzer*  
 LICENSED LANDSCAPE ARCHITECT  
 July 19, 2013  
 PLANS APPROVAL DATE  
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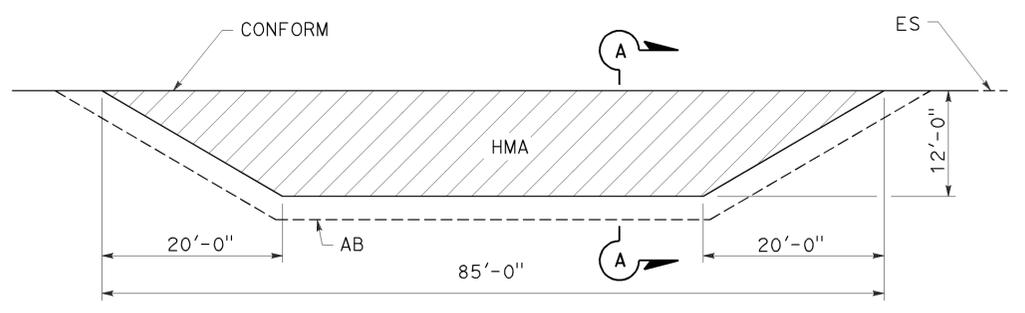
TO ACCOMPANY PLANS DATED 05-29-14



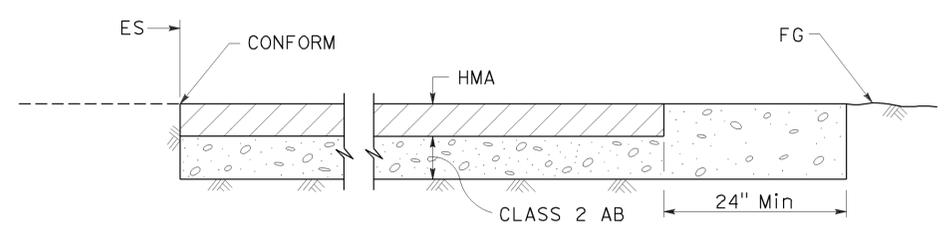
**SECTION  
POINTS OF MEASUREMENT**



**SECTION  
ROCK BLANKET**



**PLAN**



**SECTION A-A  
MAINTENANCE VEHICLE PULLOUT**

STATE OF CALIFORNIA  
 DEPARTMENT OF TRANSPORTATION  
**LANDSCAPE DETAILS**  
 NO SCALE

RSP H9A DATED JULY 19, 2013 SUPPLEMENTS THE STANDARD PLANS BOOK DATED 2010.

**REVISED STANDARD PLAN RSP H9A**

2010 REVISED STANDARD PLAN RSP H9A