INDEX OF PLANS

SHEET No.	DESCRIPTION
1	TITLE AND LOCATION MAP
2-5	WATER POLLUTION CONTROL PLANS
6-9	UTILITY PLANS
10	CONSTRUCTION AREA SIGNS
11	IRRIGATION SPRINKLER SCHEDULE
12-17	IRRIGATION PLANS AND QUANTITIES
18-19	PLANT LIST
20-24	PLANTING PLANS AND QUANTITIES
25-38	REVISED STANDARD PLANS

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

STATE OF CALIFORNIA

DEPARTMENT OF TRANSPORTATION

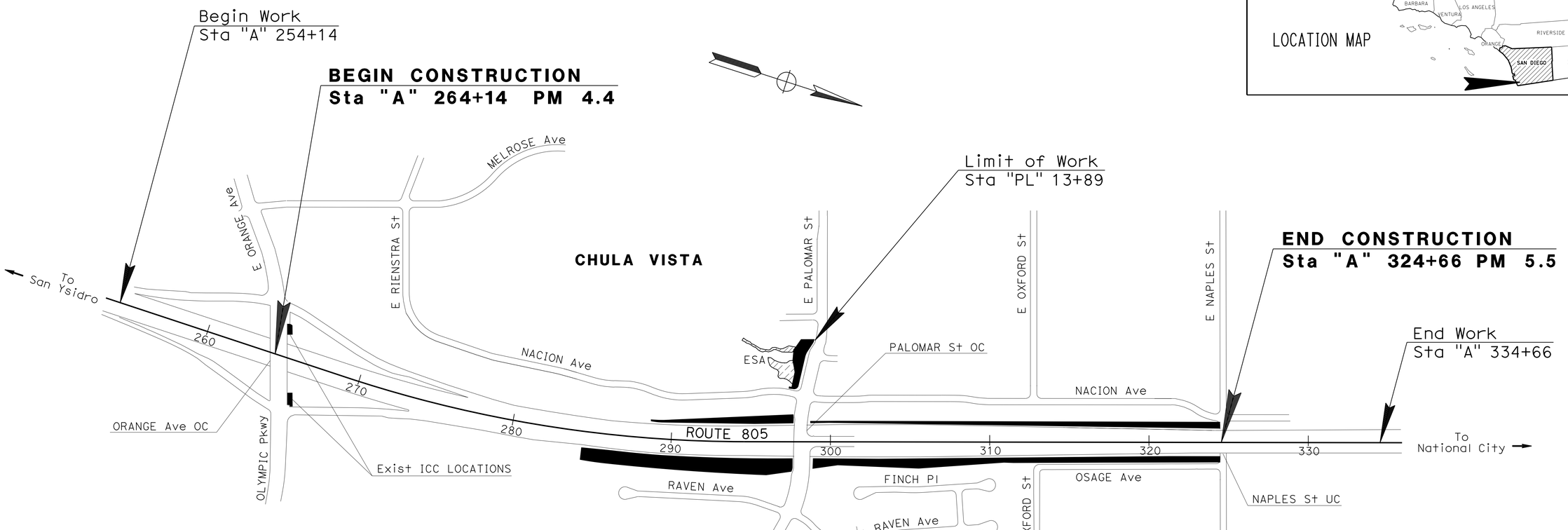
PROJECT PLANS FOR CONSTRUCTION ON

STATE HIGHWAY

IN SAN DIEGO COUNTY IN CHULA VISTA FROM ORANGE AVENUE OVERCROSSING TO NAPLES STREET UNDERCROSSING

TO BE SUPPLEMENTED BY STANDARD PLANS DATED 2010

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	805	4.4/5.5	1	38



LICENSED LANDSCAPE ARCHITECT

September 2, 2014
PLANS APPROVAL DATE

LICENSED LANDSCAPE ARCHITECT
KENNETH L. MAH No. 5042
Signature
02-29-16
Renewal Date
08-15-14
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.

PROJECT MANAGER: RAMON MARTINEZ

SENIOR LANDSCAPE ARCHITECT: STEPHEN ALVAREZ

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

NO SCALE

CONTRACT No.	11-2T2514
PROJECT ID	1113000035

LAST REVISION: DATE PLOTTED => 08-SEP-2014
07-16-14 TIME PLOTTED => 14:08

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	805	4.4/5.5	2	38

Kenneth A Mah
LICENSED LANDSCAPE ARCHITECT

09-02-14
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.

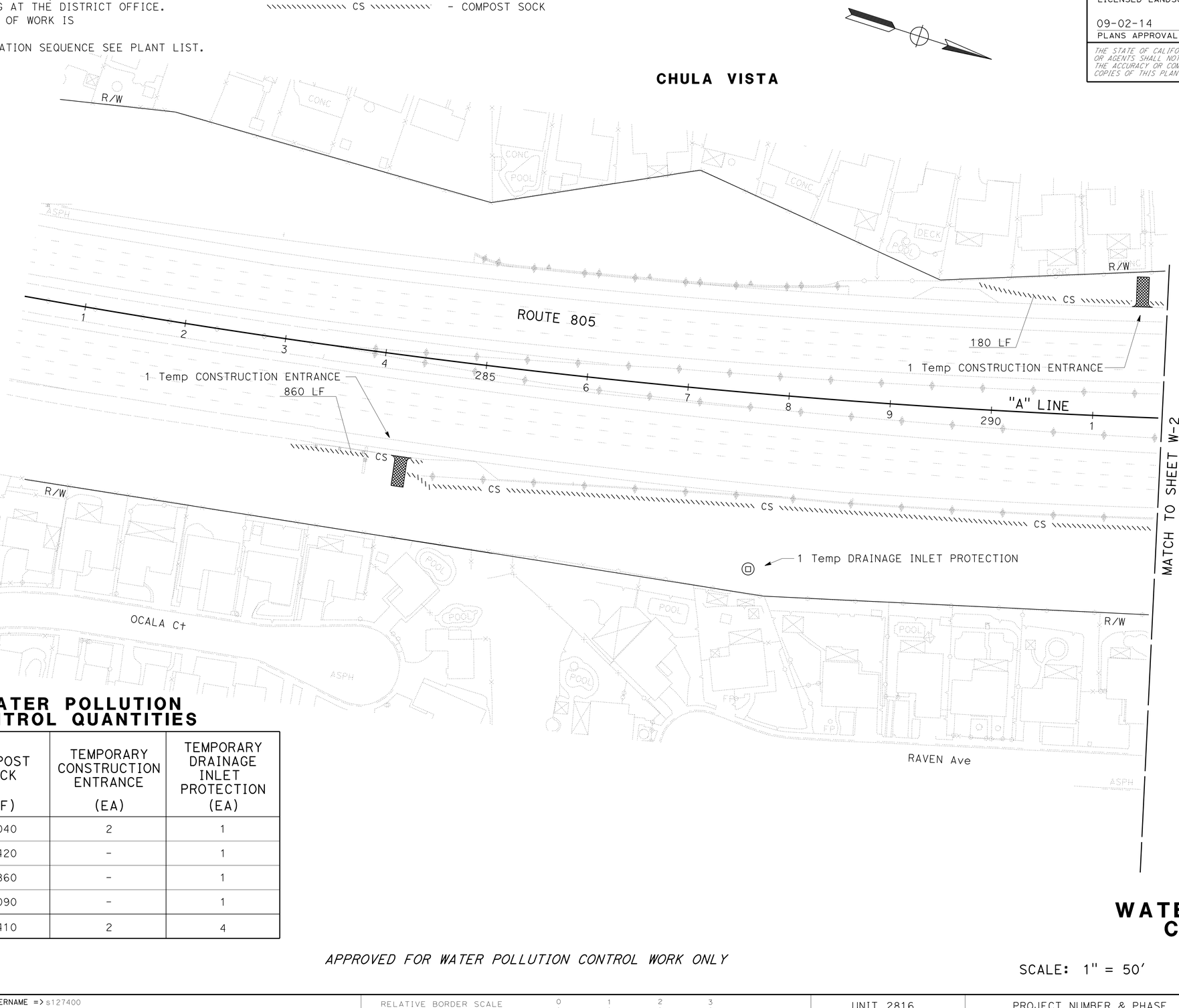
LICENSED LANDSCAPE ARCHITECT
KENNETH L. MAH No. 5427
RENEWAL DATE 02-29-16
EXPIRATION DATE 08-15-14
STATE OF CALIFORNIA

NOTES:

1. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
2. THE ONLY PERMANENT ITEM OF WORK IS COMPOST SOCK.
3. FOR COMPOST SOCK APPLICATION SEQUENCE SEE PLANT LIST.

LEGEND:

CS - COMPOST SOCK



WATER POLLUTION CONTROL QUANTITIES

SHEET	COMPOST SOCK (LF)	TEMPORARY CONSTRUCTION ENTRANCE (EA)	TEMPORARY DRAINAGE INLET PROTECTION (EA)
W-1	1,040	2	1
W-2	1,420	-	1
W-3	860	-	1
W-4	1,090	-	1
TOTAL	4,410	2	4

APPROVED FOR WATER POLLUTION CONTROL WORK ONLY

WATER POLLUTION CONTROL PLAN

SCALE: 1" = 50'

W-1

REVISED BY | DATE REVISED
KENNY MAH | MARLENE GROS
CALCULATED-DESIGNED BY | CHECKED BY
SENIOR LANDSCAPE ARCHITECT | STEPHEN ALVAREZ
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans® LANDSCAPE ARCHITECTURE

LAST REVISION | DATE PLOTTED => 08-SEP-2014
05-30-14 | TIME PLOTTED => 14:08

BORDER LAST REVISED 7/2/2010 | USERNAME => s127400 | DGN FILE => 1113000035gi001.dgn | RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3 | UNIT 2816 | PROJECT NUMBER & PHASE 11130000351

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	805	4.4/5.5	3	38

LICENSED LANDSCAPE ARCHITECT

09-02-14
PLANS APPROVAL DATE

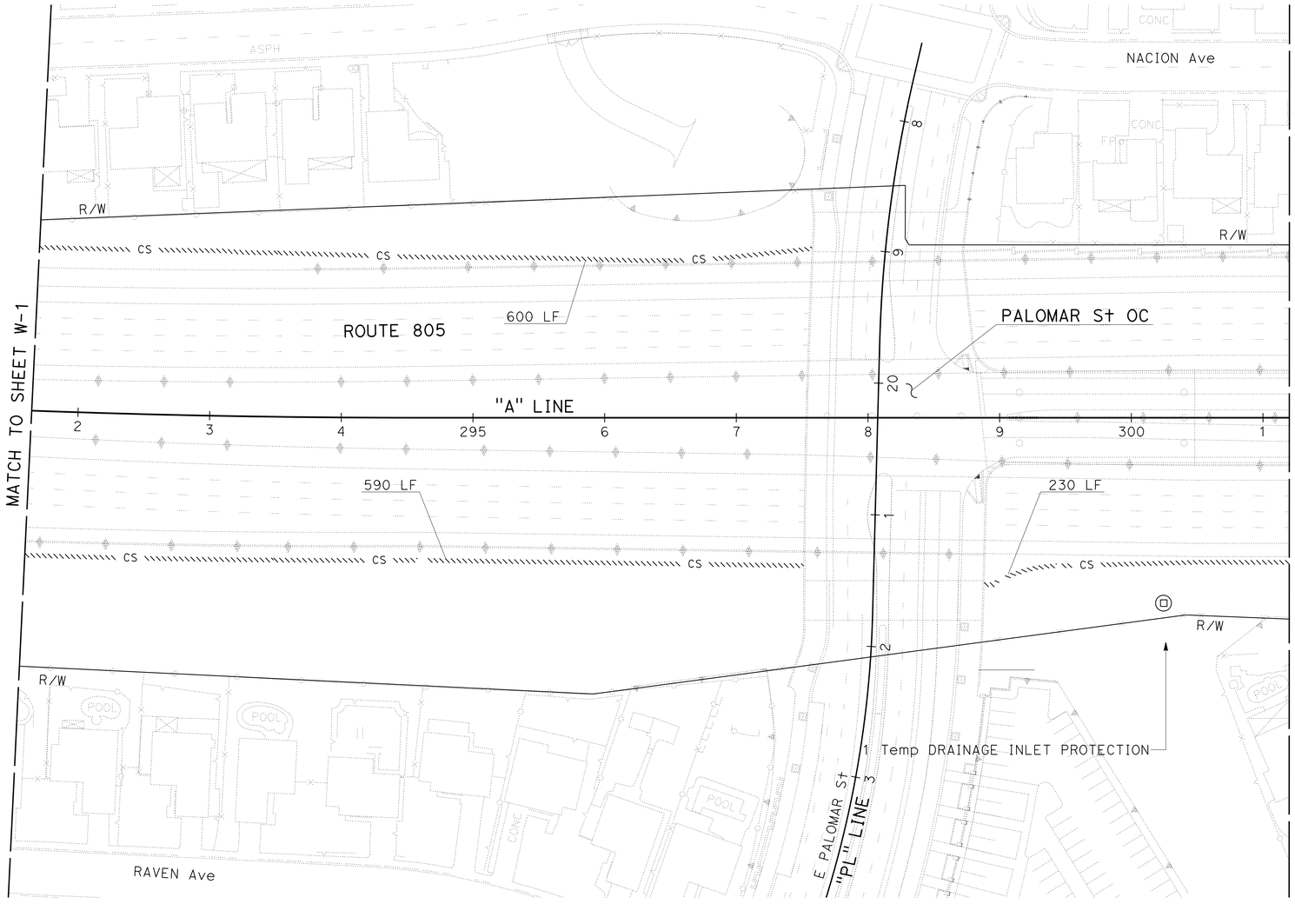
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

LICENSED LANDSCAPE ARCHITECT
KENNETH L. MAH No. 5047
REGISTRATION DATE 02-29-16
RENEWAL DATE 08-15-14
STATE OF CALIFORNIA

NOTE:

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

CHULA VISTA



WATER POLLUTION CONTROL PLAN

APPROVED FOR WATER POLLUTION CONTROL WORK ONLY

SCALE: 1" = 50'

W-2

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans® LANDSCAPE ARCHITECTURE

SENIOR LANDSCAPE ARCHITECT: STEPHEN ALVAREZ

CALCULATED-DESIGNED BY: KENNY MAH
CHECKED BY: MARLENE GROS

REVISED BY | DATE REVISED

LAST REVISION: DATE PLOTTED => 08-SEP-2014
05-30-14 TIME PLOTTED => 14:08

BORDER LAST REVISED 7/2/2010

USERNAME => s127400
DGN FILE => 1113000035gi002.dgn

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

UNIT 2816

PROJECT NUMBER & PHASE 11130000351

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
11	SD	805	4.4/5.5	4	38

KENNETH L. MAH

LICENSED LANDSCAPE ARCHITECT

09-02-14

PLANS APPROVAL DATE

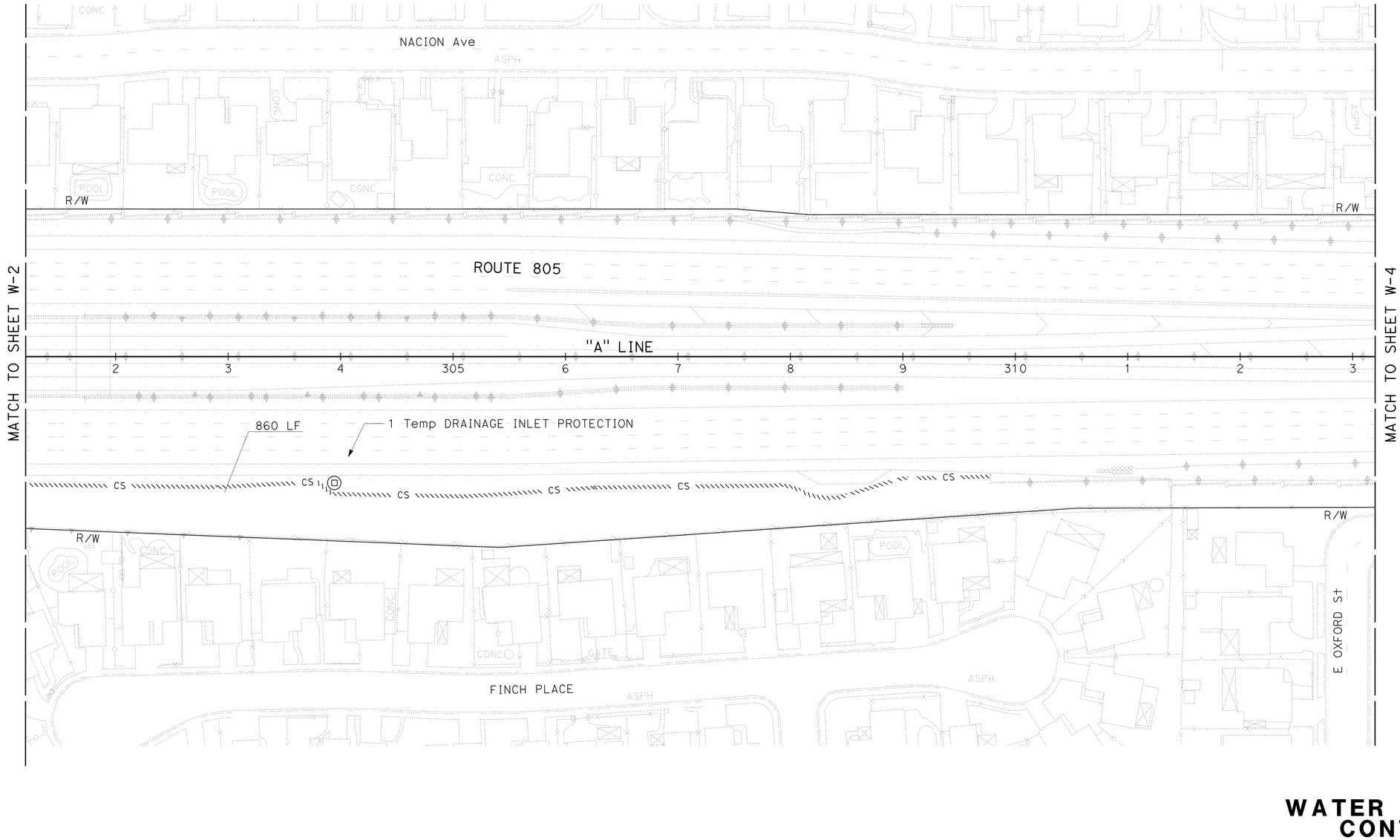
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

LICENSED LANDSCAPE ARCHITECT — KENNETH L. MAH — No. 5047 — STATE OF CALIFORNIA

Expiration Date 02-29-16

Date 08-15-14

CHULA VISTA



APPROVED FOR WATER POLLUTION CONTROL WORK ONLY

WATER POLLUTION CONTROL PLAN

SCALE: 1" = 50'

W-3

REVISED BY | DATE REVISED

KENNY MAH | MARLENE GROS

CALCULATED-DESIGNED BY | CHECKED BY

SENIOR LANDSCAPE ARCHITECT

STEPHEN ALVAREZ

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

Caltrans® LANDSCAPE ARCHITECTURE

LAST REVISION | DATE PLOTTED => 08-SEP-2014
05-30-14 | TIME PLOTTED => 14:08

BORDER LAST REVISED 7/2/2010

USERNAME => s127400
DGN FILE => 1113000035gi003.dgn

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

UNIT 2816

PROJECT NUMBER & PHASE 11130000351

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
11	SD	805	4.4/5.5	5	38

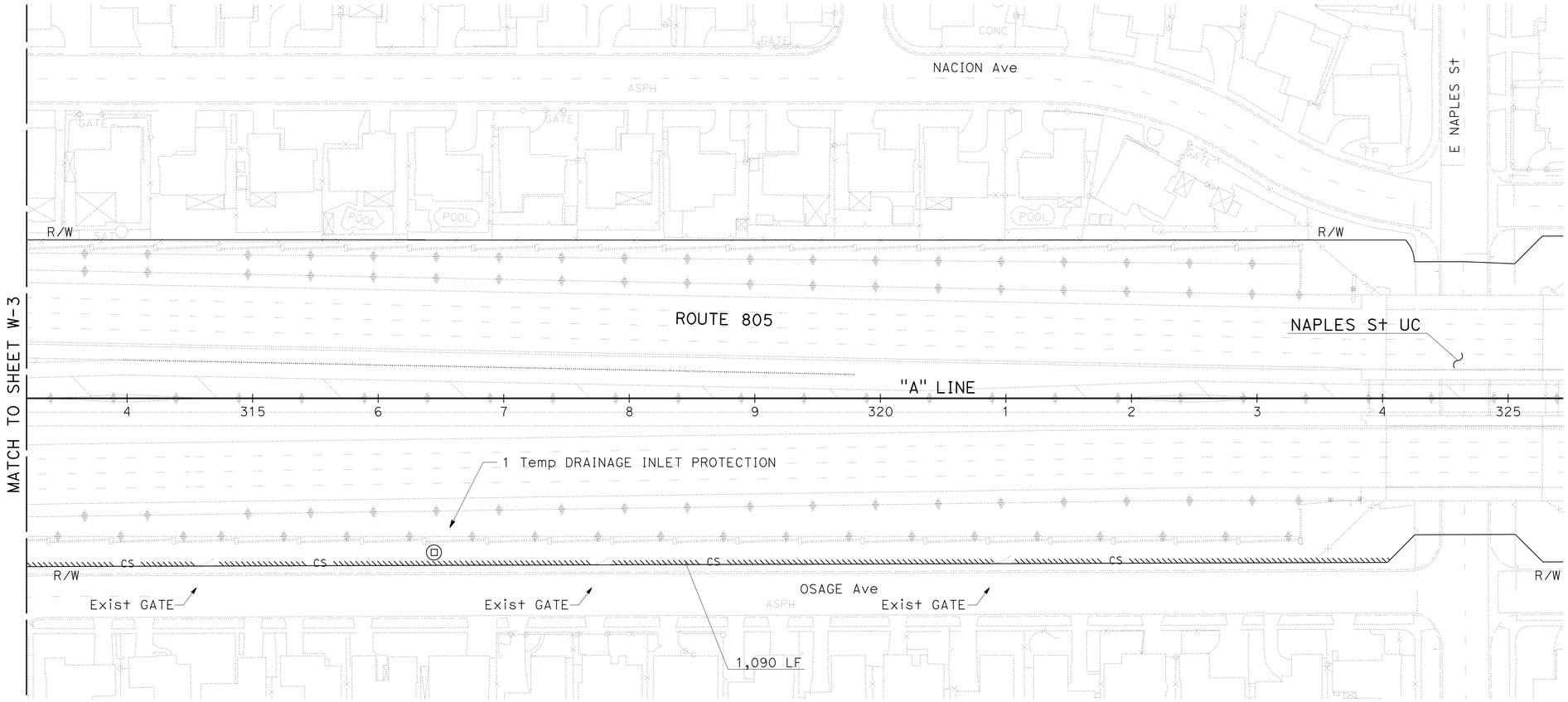
Kenneth L. Mah
LICENSED LANDSCAPE ARCHITECT

09-02-14
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.

LICENSED LANDSCAPE ARCHITECT
KENNETH L. MAH No. 2816
Kenneth Mah
RENEWAL DATE 02-29-16
EXPIRATION DATE 08-15-14
STATE OF CALIFORNIA

CHULA VISTA



APPROVED FOR WATER POLLUTION CONTROL WORK ONLY

WATER POLLUTION CONTROL PLAN

SCALE: 1" = 50'

W-4

CALCULATED-DESIGNED BY: KENNY MAH
CHECKED BY: MARLENE GROS
REVISED BY
DATE REVISED

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans® LANDSCAPE ARCHITECTURE
SENIOR LANDSCAPE ARCHITECT
STEPHEN ALVAREZ

LAST REVISION 05-30-14
DATE PLOTTED => 08-SEP-2014
TIME PLOTTED => 14:08

BORDER LAST REVISED 7/2/2010
USERNAME => s127400
DGN FILE => 1113000035gi004.dgn
RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3
UNIT 2816
PROJECT NUMBER & PHASE 11130000351

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	805	4.4/5.5	6	38

08-18-14
REGISTERED CIVIL ENGINEER DATE

09-02-14
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
MICHAEL PEDERSEN
No. C74073
Exp 06-30-15
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:

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

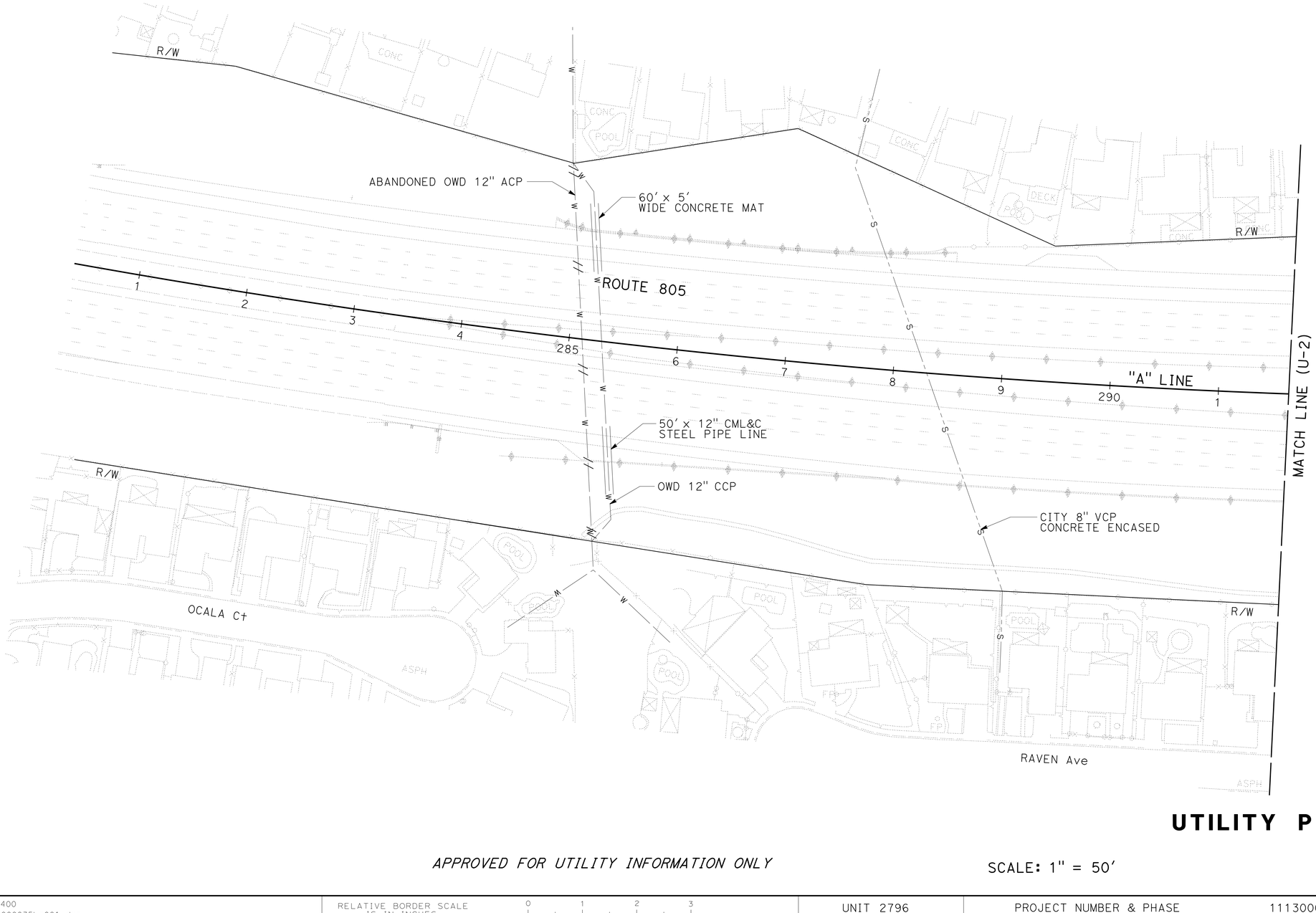
2. UTILITY OWNERSHIP ON THIS PROJECT:

GAS -	SAN DIEGO GAS AND ELECTRIC (SDGE)
ELECTRIC -	SAN DIEGO GAS AND ELECTRIC (SDGE)
SEWER -	CITY OF CHULA VISTA (CITY)
TELECOMMUNICATION -	AMERICAN TELEPHONE AND TELEGRAPH (AT&T)
	COX COMMUNICATIONS (COX)
	SPRINT (SPRINT)
WATER -	OTAY WATER DISTRICT (OWD)
RECYCLED WATER-	OTAY WATER DISTRICT (OWD)

ABBREVIATIONS:

HP	HIGH PRESSURE PIPE
kV	KILOVOLT
CML&C	CEMENT MORTAR LINED & COATED
RCW	RECYCLED WATER
CCP	CONCRETE CYLINDER PIPE

CHULA VISTA



UTILITY PLAN

APPROVED FOR UTILITY INFORMATION ONLY

SCALE: 1" = 50'

U-1

REVISED BY | DATE REVISED

CALCULATED-DESIGNED BY: MICHAEL PEDERSEN
CHECKED BY: ARTURO REYES

FUNCTIONAL SUPERVISOR: ABU-BAKR AL-JAFRI

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans® PROJECT DEVELOPMENT

LAST REVISION: DATE PLOTTED => 08-SEP-2014
01-07-14 TIME PLOTTED => 14:08

BORDER LAST REVISED 7/2/2010

USERNAME => s127400
DGN FILE => 1113000035ka001.dgn

RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3

UNIT 2796

PROJECT NUMBER & PHASE 11130000351

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	805	4.4/5.5	7	38

08-18-14
REGISTERED CIVIL ENGINEER DATE

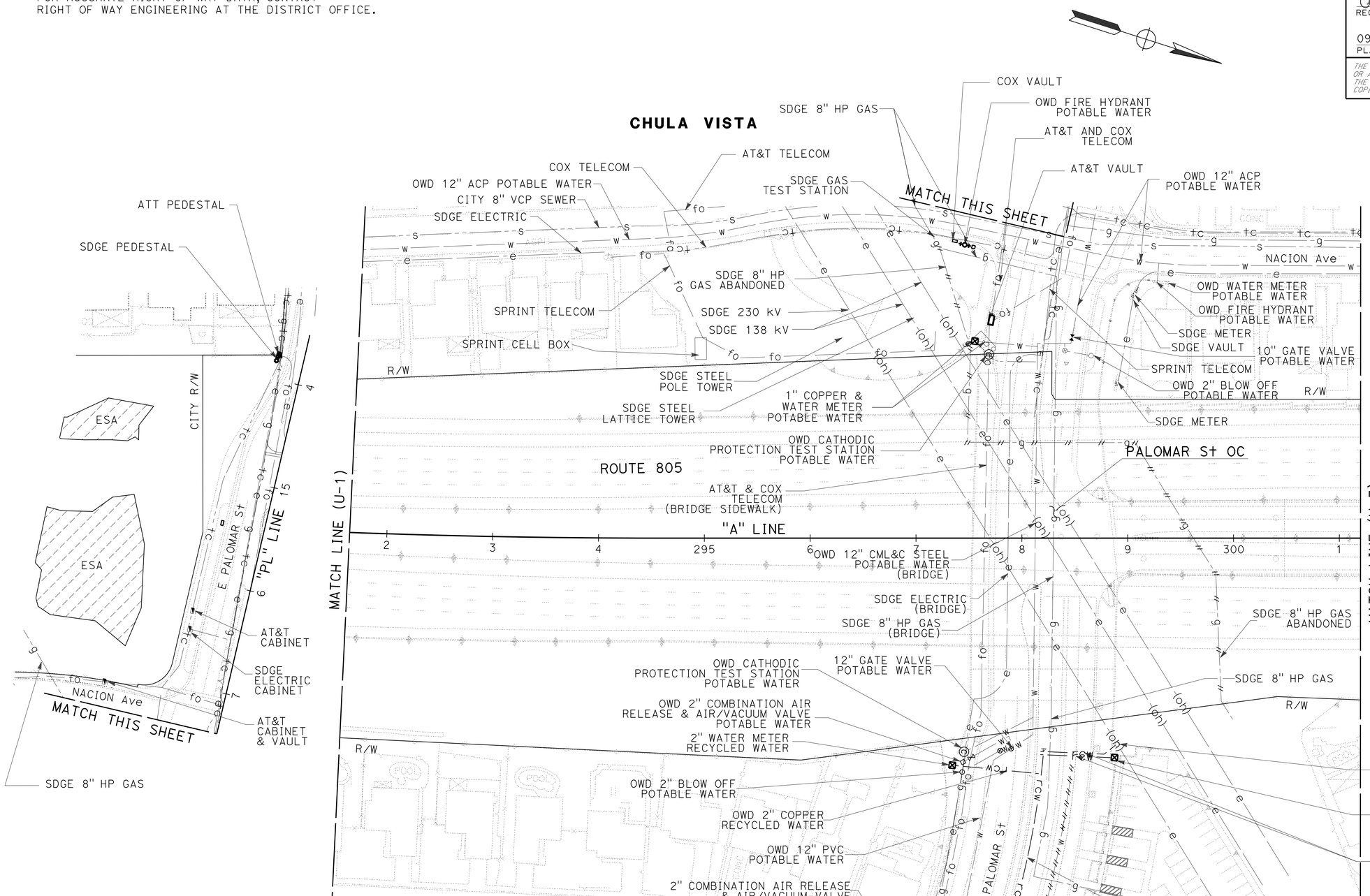
09-02-14
PLANS APPROVAL DATE

MICHAEL PEDERSEN No. C74073 Exp. 06-30-15 CIVIL — REGISTERED PROFESSIONAL ENGINEER — 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.

NOTE:

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



UTILITY PLAN

APPROVED FOR UTILITY INFORMATION ONLY

SCALE: 1" = 50'

U-2

REVISED BY | DATE REVISED
MICHAEL PEDERSEN | ARTURO REYES
CALCULATED-DESIGNED BY | CHECKED BY
FUNCTIONAL SUPERVISOR | ABU-BAKR AL-JAFRI
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans® PROJECT DEVELOPMENT

LAST REVISION | DATE PLOTTED => 08-SEP-2014
01-07-14 | TIME PLOTTED => 14:08

BORDER LAST REVISED 7/2/2010 | USERNAME => s127400 | DGN FILE => 1113000035ka002.dgn | RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3 | UNIT 2796 | PROJECT NUMBER & PHASE 11130000351

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	805	4.4/5.5	8	38

08-18-14
REGISTERED CIVIL ENGINEER DATE

09-02-14
PLANS APPROVAL DATE

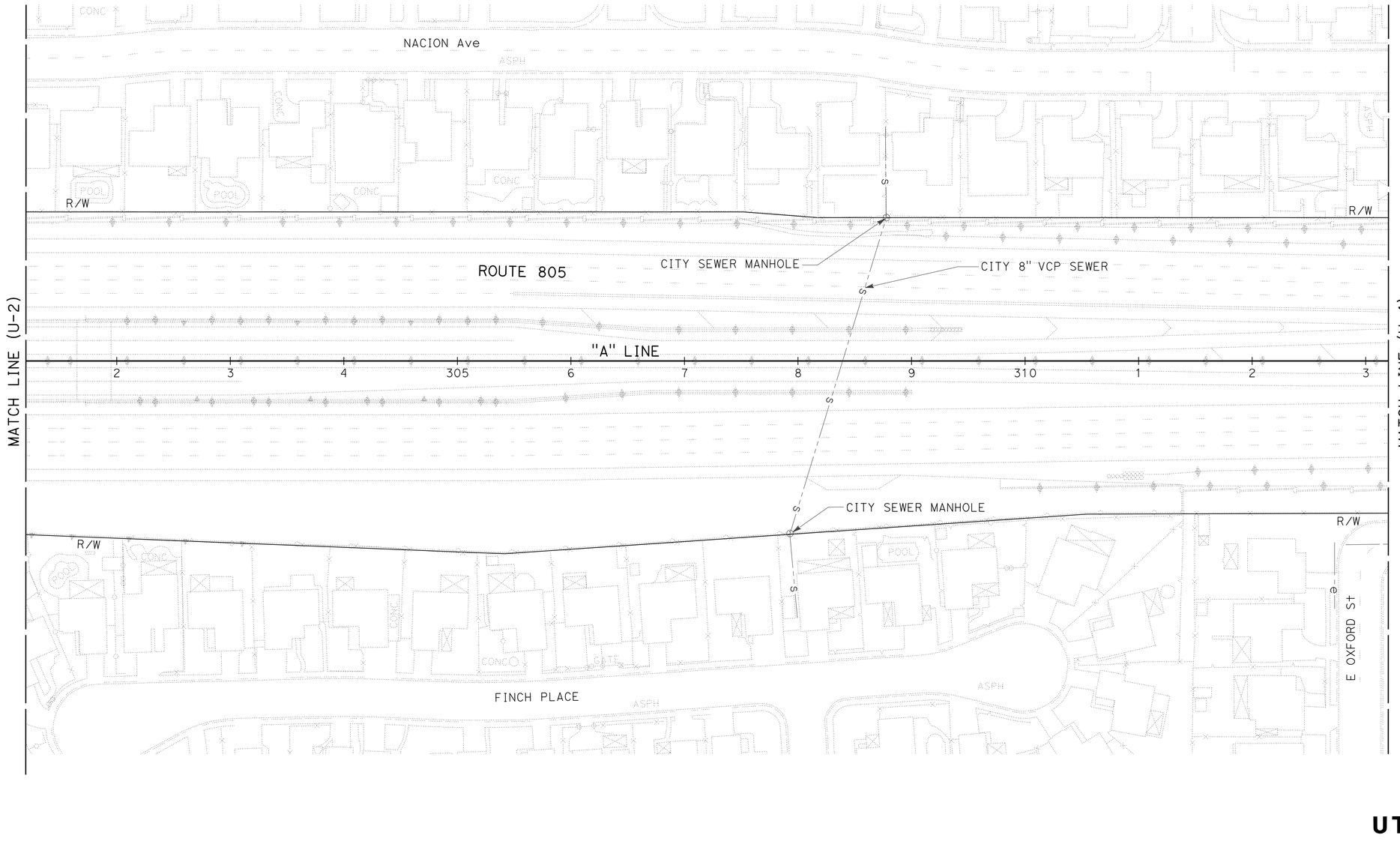
REGISTERED PROFESSIONAL ENGINEER
MICHAEL PEDERSEN
No. C74073
Exp. 06-30-15
CIVIL
STATE OF CALIFORNIA

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.

NOTE:

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

CHULA VISTA



UTILITY PLAN

APPROVED FOR UTILITY INFORMATION ONLY

SCALE: 1" = 50'

U-3

REVISED BY | DATE REVISED

MICHAEL PEDERSEN | ARTURO REYES

CALCULATED-DESIGNED BY | CHECKED BY

FUNCTIONAL SUPERVISOR: ABU-BAKR AL-JAFRI

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans® PROJECT DEVELOPMENT

LAST REVISION | DATE PLOTTED => 08-SEP-2014
01-07-14 | TIME PLOTTED => 14:08

BORDER LAST REVISED 7/2/2010 | USERNAME => s127400 | DGN FILE => 1113000035ka003.dgn | RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3 | UNIT 2796 | PROJECT NUMBER & PHASE 11130000351

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	805	4.4/5.5	9	38

08-18-14
REGISTERED CIVIL ENGINEER DATE

09-02-14
PLANS APPROVAL DATE

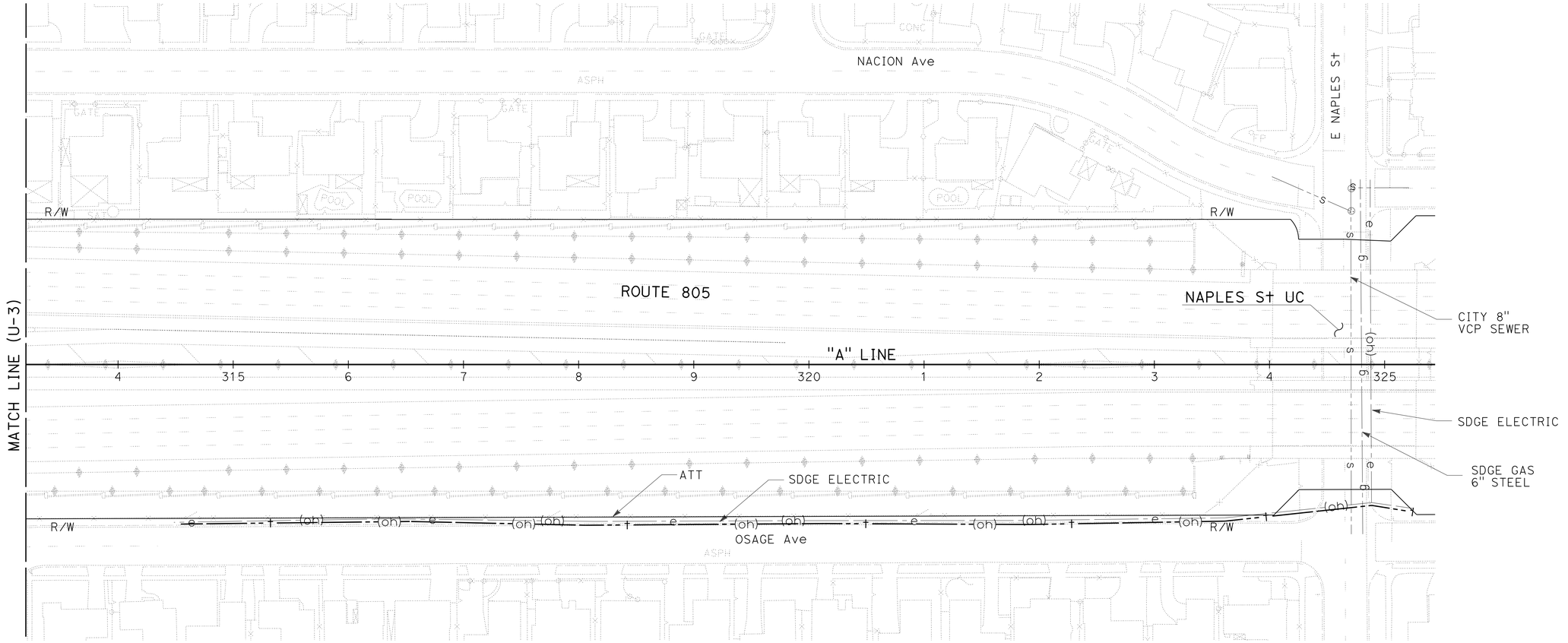
MICHAEL PEDERSEN No. C74073 Exp. 06-30-15 CIVIL — REGISTERED PROFESSIONAL ENGINEER — STATE OF CALIFORNIA

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.

NOTE:

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

CHULA VISTA



APPROVED FOR UTILITY INFORMATION ONLY

UTILITY PLAN

SCALE: 1" = 50'

U-4

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	FUNCTIONAL SUPERVISOR	CALCULATED-DESIGNED BY	REVISED BY	LAST REVISION
Caltrans PROJECT DEVELOPMENT	ABU-BAKR AL-JAFRI	MICHAEL PEDERSEN		DATE PLOTTED => 08-SEP-2014
		ARTURO REYES	DATE REVISED	TIME PLOTTED => 14:08
		CHECKED BY		01-07-14

BORDER LAST REVISED 7/2/2010 | USERNAME => s127400 | DGN FILE => 1113000035ka004.dgn | RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3 | UNIT 2796 | PROJECT NUMBER & PHASE 11130000351

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	805	4.4/5.5	10	38

08-18-14
REGISTERED CIVIL ENGINEER DATE

09-02-14
PLANS APPROVAL DATE

SHAHIN T. ADIBI No. 54839 Exp. 06-30-16 CIVIL — REGISTERED PROFESSIONAL ENGINEER — 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.

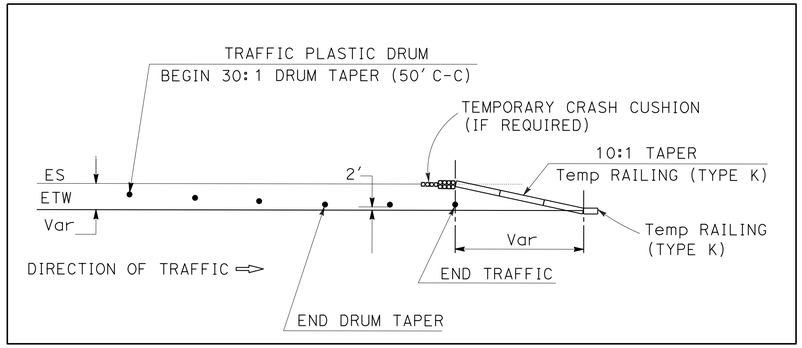
NOTES:

1. EXACT LOCATION OF CONSTRUCTION AREA SIGNS WILL BE DETERMINED BY THE ENGINEER.
2. FEDERAL MUTCD SIGN CODES ARE SHOWN UNLESS DESIGNATED BY (CA) INDICATING STANDARD CALIFORNIA SIGN SPECIFICATIONS ARE USED.
3. EXISTING UTILITIES ARE NOT SHOWN ON THESE PLAN SHEETS. THE CONTRACTOR SHALL VERIFY LOCATIONS OF EXISTING UTILITIES AND ADJUST THE FIELD LOCATION OF SIGN POSTS IN CONSULTATION WITH THE ENGINEER.

LEGEND:

XX = CONSTRUCTION AREA SIGN

TYPICAL PLACEMENT OF TRAFFIC PLASTIC DRUM



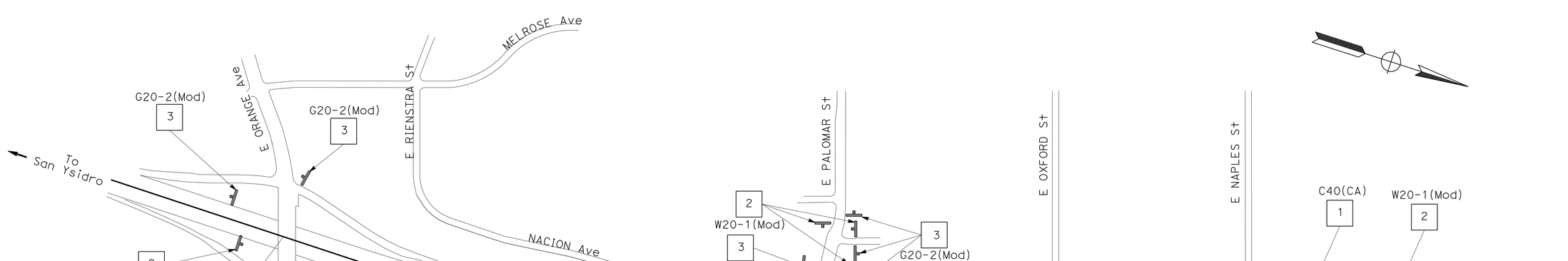
CONSTRUCTION AREA SIGNS

SIGN No.	TYPE	PANEL SIZE (INCH)	No. OF POST AND SIZE (INCH)	No. OF SIGNS
1	C40(CA)	108 X 42	2-4 X 6 (s)	2
2	W20-1(Mod)	48 X 48	1-4 X 6 (s)	10
3	G20-2(Mod)	48 X 24	1-4 X 4 (s)	10

(s) DENOTES STATIONARY MOUNTED SIGN

LANDSCAPING AHEAD
W20-1(Mod)
2

END LANDSCAPING
G20-2(Mod)
3



CHULA VISTA

APPROVED FOR CONSTRUCTION AREA SIGN WORK ONLY

CONSTRUCTION AREA SIGNS
NO SCALE
CS-1

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
TRAFFIC DESIGN
FUNCTIONAL SUPERVISOR: SHAHIN T. ADIBI
CALCULATED-DESIGNED BY: KENNY MAH
CHECKED BY: RYAN CHAO
REVISED BY | DATE REVISED

LAST REVISION | DATE PLOTTED => 08-SEP-2014
07-23-14 | TIME PLOTTED => 14:08

BORDER LAST REVISED 7/2/2010
USERNAME => s127400
DGN FILE => 11130000351a001.dgn
RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3
UNIT 2816
PROJECT NUMBER & PHASE 11130000351

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	805	4.4/5.5	11	38

Kenneth A Mah
LICENSED LANDSCAPE ARCHITECT

09-02-14
PLANS APPROVAL DATE

LICENSED LANDSCAPE ARCHITECT — KENNETH L. MAH — No. 5447 — RENEWAL 02-29-16 — EXPIRATION DATE 08-15-14 — 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.

SPRINKLER SCHEDULE

SYMBOL	ITEM DESCRIPTION	SPRINKLER TYPE	SPRAY PATTERN	OPERATING PRESSURE (psi)	PRESSURE COMPENSATING	PLUS/MINUS 5% ② DISCHARGE GALLONS PER MINUTE (GPM)	DISCHARGE GALLONS PER HOUR (GPH)	RADIUS (ft)	WIDTH x LENGTH (ft)	FLOW SHUTOFF DEVICE	SPRINKLER ASSEMBLY: INLET CONNECTION (NPT INCH)	POSITIVE-LOCKING Adj ARC STOP	BACKSPLASH PREVENTER	DIFFUSER PIN	DISTANCE CONTROL FLAP	Adj DISCHARGE	RISER: TYPE	RISER: MATERIAL: PLASTIC	RISER: MATERIAL: GALVANIZED	RISER: SIZE (IPS INCH)	RISER: HEIGHT (INCH)	RISER: ⑥ SWING JOINT (INCH)	RISER SUPPORT	POP-UP: INLET CONNECTION (NPT INCH)	POP-UP: SPRINKLER PROTECTOR (TYPE)	POP-UP: POP-UP HEIGHT (INCH)	POP-UP: ⑥ SWING JOINT (INCH)	TREE WELL: ⑥ SWING JOINT (INCH)	REMARKS
5	RISER SPRINKLER ASSEMBLY (GEAR DRIVEN)	GEAR DRIVE	F	50	-	3.5	-	40	-	-	¾	-	-	X	-	-	I	X	-	¾	10	¾	-	-	-	-	-	-	③⑧
⑤	RISER SPRINKLER ASSEMBLY (GEAR DRIVEN)	GEAR DRIVE	P	50	-	3.5	-	40	-	-	¾	-	-	X	-	-	I	X	-	¾	10	¾	-	-	-	-	-	-	③⑦⑧
⑥	POP-UP SPRINKLER ASSEMBLY (GEAR DRIVEN)	GEAR DRIVE	P	50	X	3.5	-	40	-	-	¾	-	-	X	-	-	-	-	-	-	-	-	-	¾	I	12	¾	-	③⑦⑧
⑪	RISER SPRINKLER ASSEMBLY (GEAR DRIVEN)	GEAR DRIVE	P	50	-	1.8	-	25	-	-	¾	-	-	X	-	-	I	X	-	¾	10	¾	-	-	-	-	-	-	③⑦⑧
⑫	POP-UP SPRINKLER ASSEMBLY (GEAR DRIVEN)	GEAR DRIVE	P	50	X	1.8	-	25	-	-	¾	-	-	X	-	-	-	-	-	-	-	-	-	¾	I	12	¾	-	③⑦⑧
●	RISER SPRINKLER ASSEMBLY	FLOOD BUBBLER	-	30	X	0.5	-	-	-	-	½	-	-	-	-	-	V	X	-	½	-	-	-	-	-	-	-	-	④⑥⑨⑩

X IN BOX DENOTES REQUIREMENT

APPLICABLE WHEN CIRCLED BELOW:

1 - SEE SPECIAL PROVISIONS.
② - IF A PRESSURE COMPENSATING DEVICE IS SPECIFIED, THE DISCHARGE AND RADII SHOWN REFLECT ITS USE.
③ - SHALL HAVE AN INTERNAL OR EXTERNAL CHECK VALVE.
④ - NON-ADJUSTABLE DISCHARGE RATE.
5 - REQUIRED ADJACENT TO SHOULDERS, CURBS, SIDEWALKS, AND DIKES.
⑥ - SEE DETAIL.
⑦ - ADJUSTABLE ARC.
⑧ - MATCHED PRECIPITATION RATE NOZZLES
⑨ - REFER TO PIPE SIZING CHARTS.
⑩ - PROVIDE ONE FLOOD BUBBLER PER VINE AND SHRUB (AS SHOWN) AND TWO FLOOD BUBBLERS PER TREE.

ABBREVIATIONS

Adj — ADJUSTABLE
psi — POUNDS PER SQUARE INCH

NOTES:

1. ALL LATERAL PLASTIC PIPE (SUPPLY LINE) NOT LABELED MUST BE 1 INCH, OR AS SHOWN ON PIPE SIZING CHARTS.

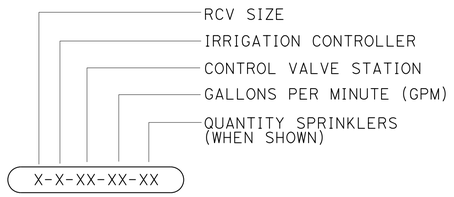
2. ALL SPRINKLER HEADS, VALVES AND PLASTIC PIPE (SUPPLY LINE) SHOWN NEAR MVP LOCATIONS ARE TO BE INSTALLED OUTSIDE OF THE PAVED MVP AREA. VALVES TO BE INSTALLED AT EXITING END OF THE MVP.

3. PULL ONE ADDITIONAL CNC WIRE FROM EACH CONTROLLER TO THE LAST VALVE BOX AT EACH VALVE MANIFOLD. (FOR FUTURE USE)

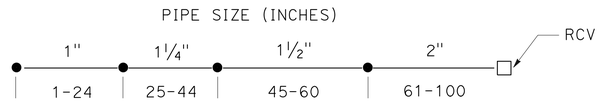
LEGEND:

[R] - REPLACE VALVE BOX COVER
[CCTS] - Exist CROSS CONNECTION TESTING STATION
(R) - Exist RECYCLED WATER WARNING SIGN (RWWS)

VALVE CODE:

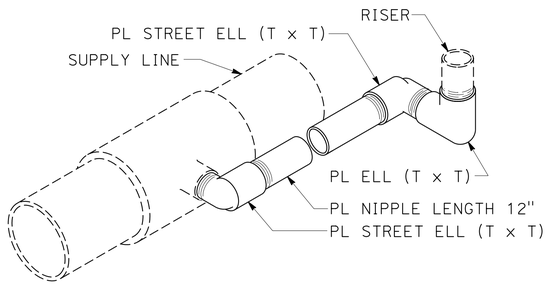


EXISTING VALVE CODE:



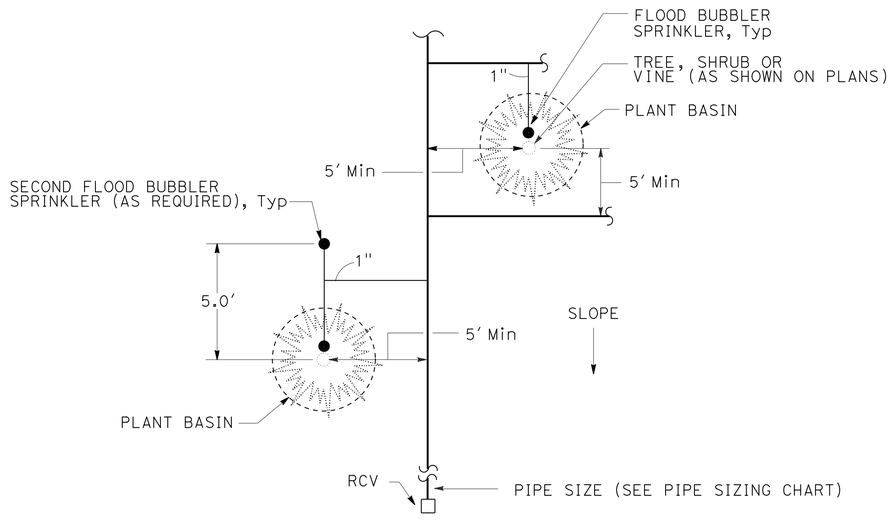
NUMBER OF HEADS @ 0.5 GPM

PIPE SIZING CHART
FLOOD BUBBLER SPRINKLER



ISOMETRIC

SWING JOINT (Mod)



PLAN

FLOOD BUBBLER SPRINKLER INSTALLATION

IRRIGATION SPRINKLER SCHEDULE

ISS-1

LAST REVISION: DATE PLOTTED => 08-SEP-2014
07-18-14 TIME PLOTTED => 14:08

REVISED BY | DATE REVISED
KENNY MAH | MARLENE GROS
CALCULATED-DESIGNED BY | CHECKED BY
SENIOR LANDSCAPE ARCHITECT | STEPHEN ALVAREZ

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans® LANDSCAPE ARCHITECTURE

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	805	4.4/5.5	12	38

Kenneth Mah
LICENSED LANDSCAPE ARCHITECT

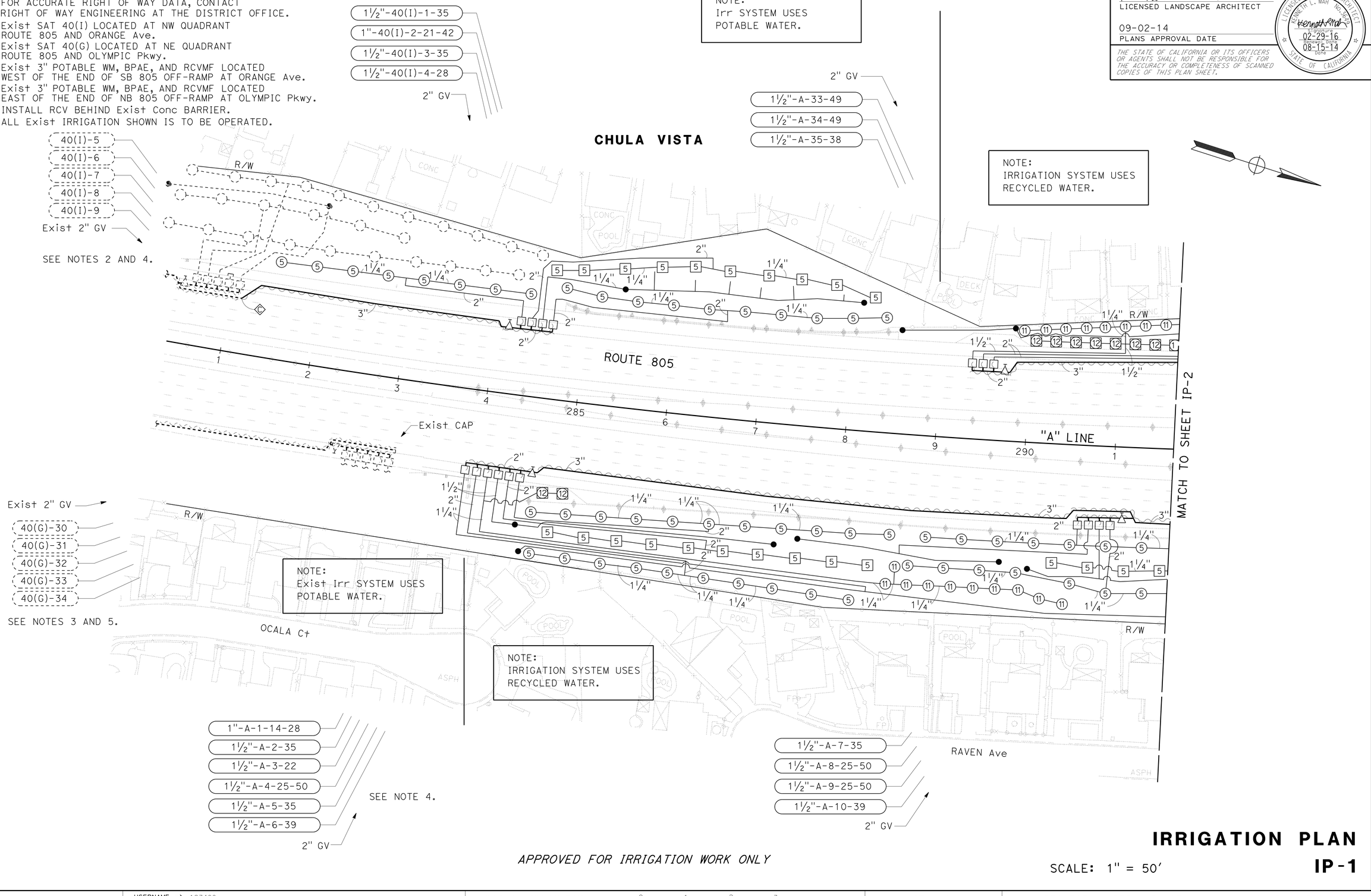
09-02-14
PLANS APPROVAL DATE

LICENSED LANDSCAPE ARCHITECT KENNETH L. MAH No. 5127 STATE OF CALIFORNIA
RENEWAL DATE 02-29-16
EXPIRATION DATE 08-15-14

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 ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
2. Exist SAT 40(I) LOCATED AT NW QUADRANT ROUTE 805 AND ORANGE Ave.
3. Exist SAT 40(G) LOCATED AT NE QUADRANT ROUTE 805 AND OLYMPIC Pkwy.
4. Exist 3" POTABLE WM, BPAE, AND RCVMF LOCATED WEST OF THE END OF SB 805 OFF-RAMP AT ORANGE Ave.
5. Exist 3" POTABLE WM, BPAE, AND RCVMF LOCATED EAST OF THE END OF NB 805 OFF-RAMP AT OLYMPIC Pkwy.
6. INSTALL RCV BEHIND Exist Conc BARRIER.
7. ALL Exist IRRIGATION SHOWN IS TO BE OPERATED.



APPROVED FOR IRRIGATION WORK ONLY

IRRIGATION PLAN

SCALE: 1" = 50'

IP-1

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans® LANDSCAPE ARCHITECTURE
SENIOR LANDSCAPE ARCHITECT STEPHEN ALVAREZ
CHECKED BY
CALCULATED-DESIGNED BY KENNY MAH MARLENE GROS
REVISED BY DATE REVISED

LAST REVISION DATE PLOTTED => 08-SEP-2014
TIME PLOTTED => 14:08
07-01-14

BORDER LAST REVISED 7/2/2010
USERNAME => s127400
DGN FILE => 1113000035sp001.dgn
RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3
UNIT 2816
PROJECT NUMBER & PHASE 11130000351

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	805	4.4/5.5	13	38

Kenneth Mah
LICENSED LANDSCAPE ARCHITECT

09-02-14
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.

LICENSED LANDSCAPE ARCHITECT
KENNETH L. MAH No. 2612
Kenneth Mah
Signature
02-29-16
Renewal Date
08-15-14
Date
STATE OF CALIFORNIA

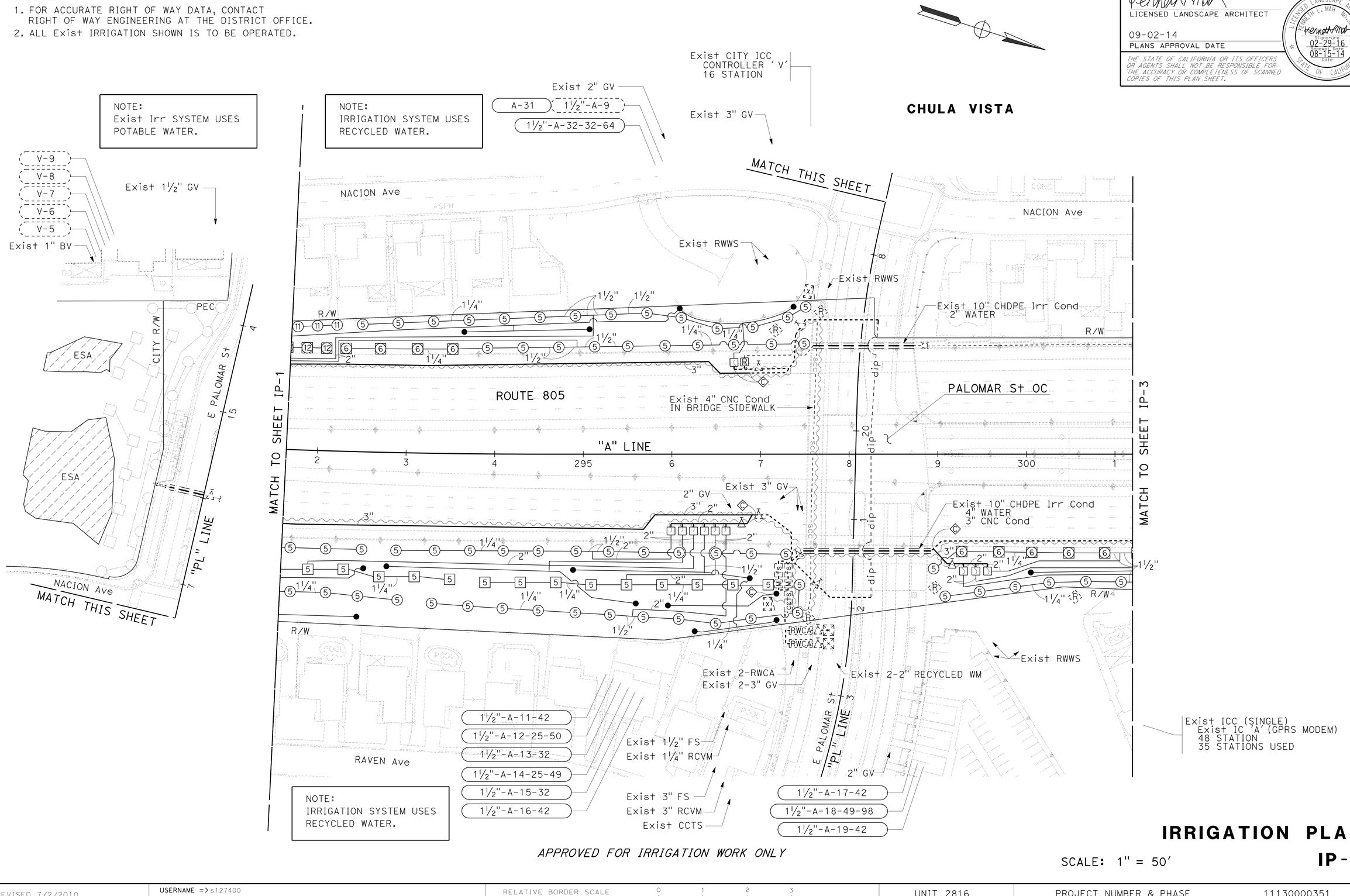
NOTES:

1. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
2. ALL Exist IRRIGATION SHOWN IS TO BE OPERATED.

NOTE:
Exist Irr SYSTEM USES POTABLE WATER.

NOTE:
IRRIGATION SYSTEM USES RECYCLED WATER.

CHULA VISTA



NOTE:
IRRIGATION SYSTEM USES RECYCLED WATER.

APPROVED FOR IRRIGATION WORK ONLY

IRRIGATION PLAN

SCALE: 1" = 50'

IP-2

LAST REVISION 07-01-14
DATE PLOTTED => 08-SEP-2014
TIME PLOTTED => 14:08

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
LANDSCAPE ARCHITECTURE
SENIOR LANDSCAPE ARCHITECT: STEPHEN ALVAREZ
CALCULATED-DESIGNED BY: KENNY MAH
CHECKED BY: MARLENE GROS
REVISED BY
DATE REVISED

BORDER LAST REVISED 7/2/2010
USERNAME => s127400
DGN FILE => 1113000035sp002.dgn
RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3
UNIT 2816
PROJECT NUMBER & PHASE 11130000351

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	805	4.4/5.5	14	38

LICENSED LANDSCAPE ARCHITECT

09-02-14
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.

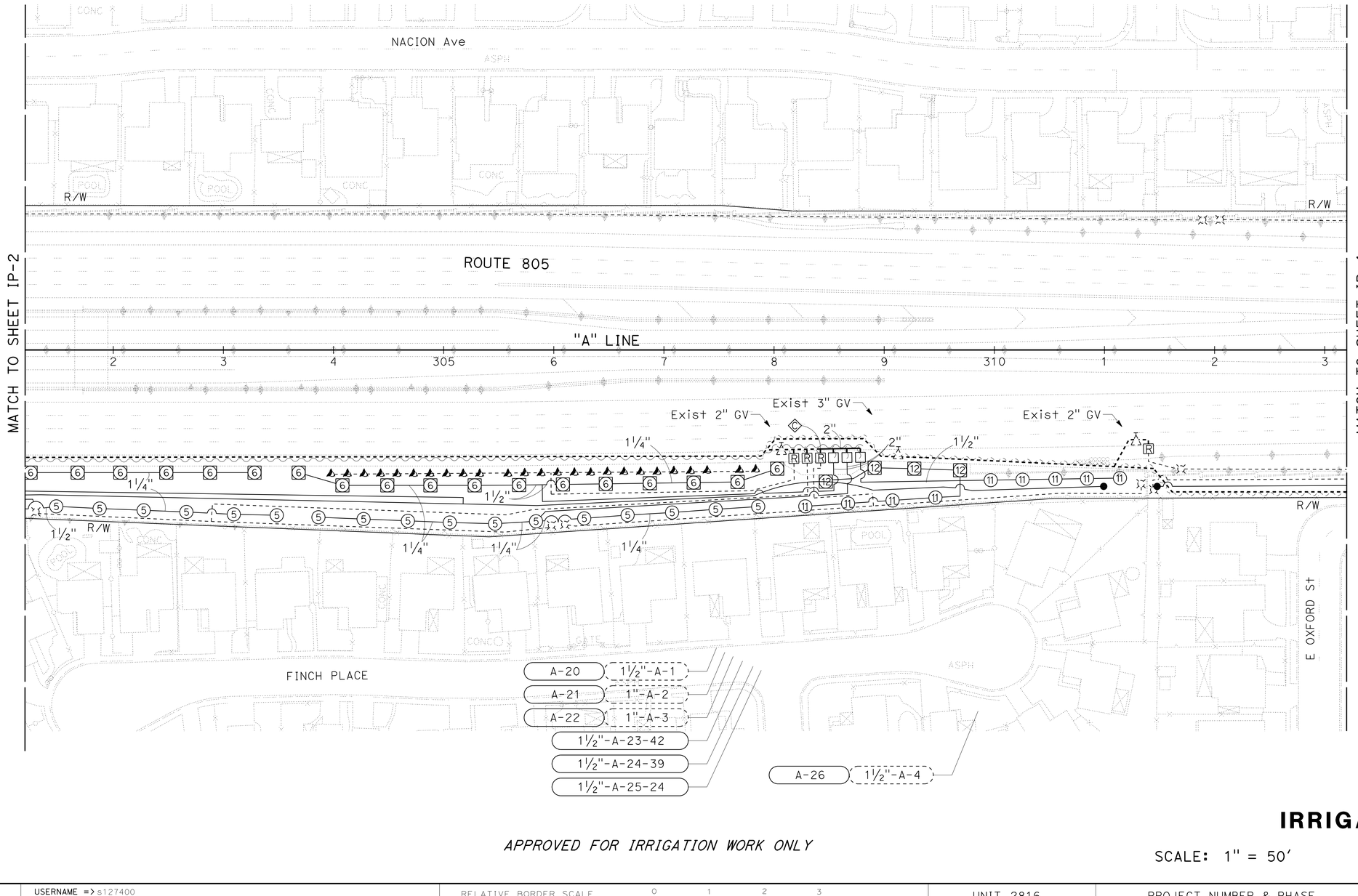
LICENSED LANDSCAPE ARCHITECT
KENNETH L. MAH No. 2612
Renewal Date 02-29-16
Expiration Date 08-15-14
STATE OF CALIFORNIA

NOTES:

1. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
2. ALL Exist IRRIGATION SHOWN IS TO BE OPERATED.

NOTE:
IRRIGATION SYSTEM USES RECYCLED WATER.

CHULA VISTA



APPROVED FOR IRRIGATION WORK ONLY

IRRIGATION PLAN

SCALE: 1" = 50'

IP-3

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans® LANDSCAPE ARCHITECTURE
SENIOR LANDSCAPE ARCHITECT: STEPHEN ALVAREZ
CALCULATED-DESIGNED BY: KENNY MAH
CHECKED BY: MARLENE GROS
REVISED BY | DATE REVISED

LAST REVISION: DATE PLOTTED => 08-SEP-2014; TIME PLOTTED => 14:08
07-01-14

BORDER LAST REVISED 7/2/2010 | USERNAME => s127400 | DGN FILE => 1113000035sp003.dgn | RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3 | UNIT 2816 | PROJECT NUMBER & PHASE 11130000351

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	805	4.4/5.5	15	38

Kenneth A Mah
LICENSED LANDSCAPE ARCHITECT

09-02-14
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.

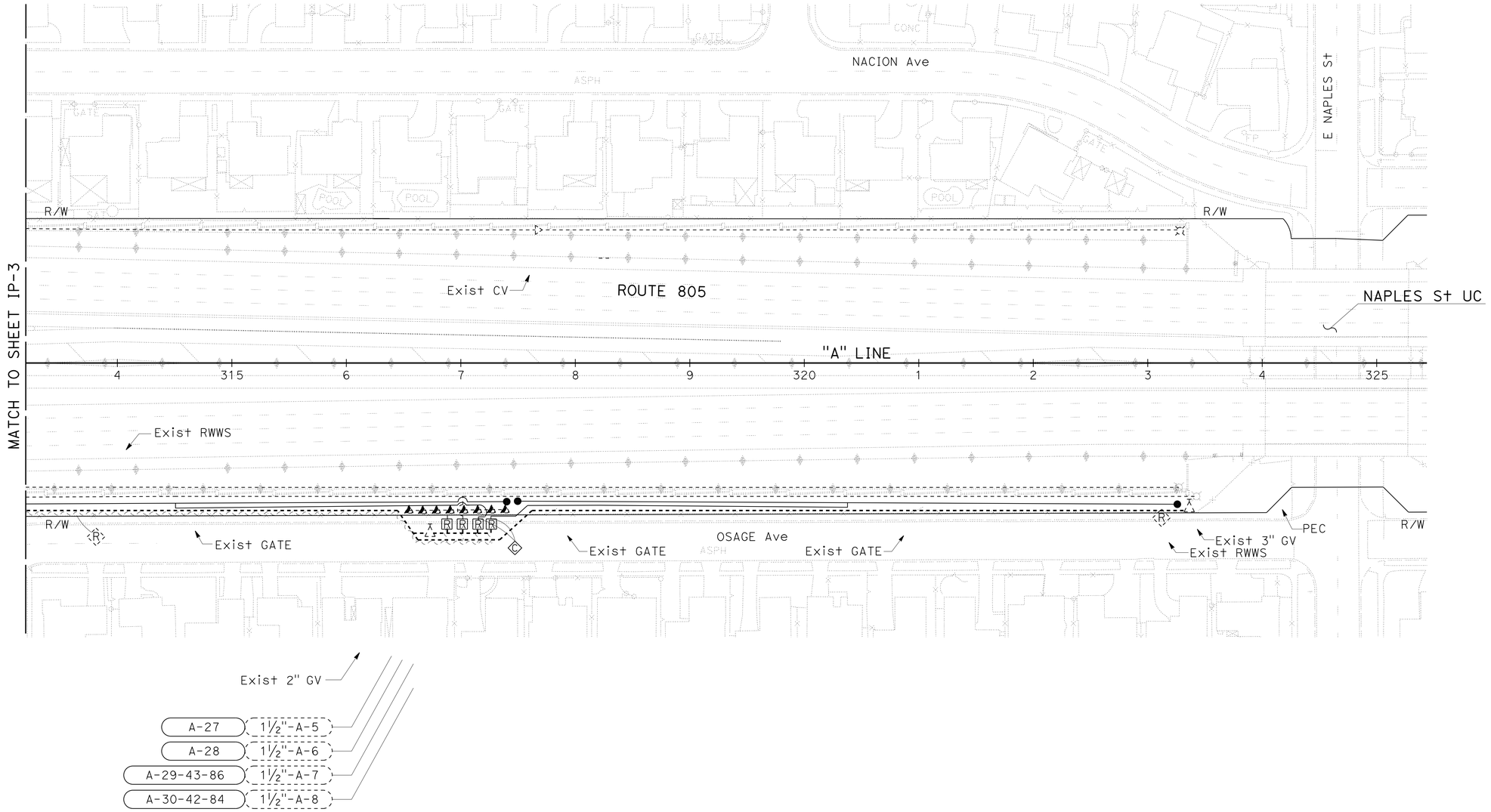
LICENSED LANDSCAPE ARCHITECT
KENNETH L. MAH No. 5047
RENEWAL DATE 02-29-16
EXPIRATION DATE 08-15-14
STATE OF CALIFORNIA

NOTES:

1. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
2. ALL Exist IRRIGATION SHOWN IS TO BE OPERATED.

NOTE:
IRRIGATION SYSTEM USES RECYCLED WATER.

CHULA VISTA



APPROVED FOR IRRIGATION WORK ONLY

IRRIGATION PLAN

SCALE: 1" = 50'

IP-4

LAST REVISION | DATE PLOTTED => 08-SEP-2014
07-01-14 | TIME PLOTTED => 14:08

REVISED BY	DATE REVISED

CALCULATED-DESIGNED BY: KENNY MAH
CHECKED BY: MARLENE GROS

SENIOR LANDSCAPE ARCHITECT: STEPHEN ALVAREZ

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans® LANDSCAPE ARCHITECTURE

BORDER LAST REVISED 7/2/2010 | USERNAME => s127400 | DGN FILE => 1113000035sp004.dgn | RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3 | UNIT 2816 | PROJECT NUMBER & PHASE 11130000351

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	805	4.4/5.5	16	38

LICENSED LANDSCAPE ARCHITECT

09-02-14
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.

LICENSED LANDSCAPE ARCHITECT KENNETH L. MAH No. 3634 Signature 02-29-16 Renewal Date 08-15-14 Date STATE OF CALIFORNIA

SUBTOTALS PER VALVE ON LATERAL SUPPLY SIDE OF CONTROL VALVE

VALVE OR ASSEMBLY NUMBER FOR CONTROLLER 'A'

	DESCRIPTION	UNIT	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	SUBTOTALS	UNIT	DESCRIPTION
PLASTIC PIPE SUPPLY LINE SCH 40	1 INCH	LF	815	160	150	250	160	160	160	325	360	160	160	285	160	450	160	160	160	510	160	–	–	–	160	160	300	–	–	–	290	340	–	765	160	140	475	7,695	LF	1 INCH
	1¼ INCH	LF	520	200	555	140	200	240	200	30	30	260	240	30	160	30	160	240	240	450	240	–	–	–	240	240	–	–	–	–	320	280	–	365	240	240	28	6,118	LF	1¼ INCH
	1½ INCH	LF	–	–	20	170	–	–	–	235	45	–	40	250	–	70	–	40	40	140	40	–	–	–	40	–	125	–	–	–	–	–	–	–	120	120	135	1,630	LF	1½ INCH
	2 INCH	LF	–	280	–	–	265	240	10	–	–	65	175	–	420	–	210	240	260	590	190	–	–	–	255	285	–	–	–	–	–	–	–	–	520	540	–	4,545	LF	2 INCH
	2½ INCH	LF	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	LF	2½ INCH
GSP																																								GSP
DIP																																								DIP
SPRINKLER TYPE	⑤ [5]	EA	–	10	–	–	10	11	10	–	–	11	12	–	9	–	9	12	12	–	1	–	–	–	–	11	–	–	–	–	–	–	–	–	10	14	–	142	EA	⑤ [5]
	⑥ [6]	EA	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	11	–	–	–	12	–	–	–	–	–	–	–	–	–	4	–	–	27	EA	⑥ [6]
	⑪	EA	–	–	10	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	9	–	–	–	–	–	–	–	–	–	11	30	EA	⑪
	⑫	EA	–	–	2	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	4	–	–	–	–	–	–	–	–	–	10	16	EA	⑫
	●	EA	28	–	–	50	–	–	–	50	50	–	–	50	–	49	–	–	–	98	–	–	–	–	–	–	–	–	–	–	86	84	–	64	–	–	–	609	EA	●

VALVE OR ASSEMBLY NUMBER FOR CONTROLLER '40(I)'

	DESCRIPTION	UNIT	1	2	3	4	SUBTOTALS	UNIT	DESCRIPTION
PLASTIC PIPE SUPPLY LINE SCH 40	1 INCH	LF	160	280	160	160	760	LF	1 INCH
	1¼ INCH	LF	200	100	200	120	620	LF	1¼ INCH
	1½ INCH	LF	–	–	–	–	–	LF	1½ INCH
	2 INCH	LF	230	–	230	130	590	LF	2 INCH
	2½ INCH	LF	–	–	–	–	–	LF	2½ INCH
GSP									GSP
DIP									DIP
SPRINKLER TYPE	⑤ [5]	EA	10	–	10	8	28	EA	⑤ [5]
	⑥ [6]	EA	–	–	–	–	–	EA	⑥ [6]
	⑪	EA	–	–	–	–	–	EA	⑪
	⑫	EA	–	–	–	–	–	EA	⑫
	●	EA	–	42	–	–	42	EA	●

REVISED BY	DATE REVISED
KENNY MAH	MARLENE GROS

CALCULATED-DESIGNED BY / CHECKED BY

SENIOR LANDSCAPE ARCHITECT: STEPHEN ALVAREZ

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans® LANDSCAPE ARCHITECTURE

IRRIGATION QUANTITIES

IQ-1

DATE PLOTTED => 08-SEP-2014
TIME PLOTTED => 14:08
LAST REVISION 07-01-14

LICENSED LANDSCAPE ARCHITECT

09-02-14
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.

LICENSED LANDSCAPE ARCHITECT KENNETH L. MAH No. 3642 Signature 02-29-16 Renewal Date 08-15-14 Date STATE OF CALIFORNIA

SUBTOTALS PER PLAN SHEET ON MAIN SUPPLY SIDE OF CONTROL VALVE

DESCRIPTION			UNIT	SHEET NUMBER IP-1	IP-2	IP-3	IP-4							SUBTOTALS
BPA		1 INCH	EA											
BPA		2 INCH	EA											
BPA		3 INCH	EA											
BPA		ENCLOSURE	EA											
WATER METER		1 INCH	EA											
WATER METER		2 INCH	EA											
WATER METER		3 INCH	EA											
BOOSTER PUMP			EA											
IRRIGATION CONTROLLER	CCU	6 CHANNEL	EA											
IRRIGATION CONTROLLER	CCU	28 CHANNEL	EA											
IRRIGATION CONTROLLER	SAT	16 STATION	EA											
IRRIGATION CONTROLLER	SAT	24 STATION	EA											
IRRIGATION CONTROLLER	SAT	32 STATION	EA											
IRRIGATION CONTROLLER	SAT	40 STATION	EA											
IRRIGATION CONTROLLER	CEC	SINGLE	EA											
IRRIGATION CONTROLLER	CEC	DOUBLE	EA											
VALVES AND ASSEMBLIES	RCVM	2 INCH	EA											
VALVES AND ASSEMBLIES	RCVM	3 INCH	EA											
VALVES AND ASSEMBLIES	RCVM													
VALVES AND ASSEMBLIES	RCV	1 INCH	EA	2	-	-	-							2
VALVES AND ASSEMBLIES	RCV	1 1/4 INCH	EA	-	-	-	-							-
VALVES AND ASSEMBLIES	RCV	1 1/2 INCH	EA	15	10	3	-							28
VALVES AND ASSEMBLIES	GV	1 INCH	EA											
VALVES AND ASSEMBLIES	GV	1 1/4 INCH	EA											
VALVES AND ASSEMBLIES	GV	1 1/2 INCH	EA											
VALVES AND ASSEMBLIES	GV	2 INCH	EA	4	2	-	-							6
VALVES AND ASSEMBLIES	GV	3 INCH	EA	-	-	-	-							-
VALVES AND ASSEMBLIES	QCV	1 INCH	EA											
VALVES AND ASSEMBLIES	QCV	1 1/2 INCH	EA											
VALVES AND ASSEMBLIES	FIA													
VALVES AND ASSEMBLIES	FIA													
VALVES AND ASSEMBLIES	FS	2 INCH	EA	-	-	-	-							-
VALVES AND ASSEMBLIES	FS	3 INCH	EA	-	-	-	-							-
CONDUIT	SCC (N)	1 INCH	LF	-	-	-	-							-
CONDUIT	SCC (N)													
CONDUIT	SCC (N)													
CONDUIT	SCC (N)													
PLASTIC PIPE SUPPLY LINE	SCH 40	1 INCH	LF	-	-	-	-							-
PLASTIC PIPE SUPPLY LINE	SCH 40	1 1/4 INCH	LF	-	-	-	-							-
PLASTIC PIPE SUPPLY LINE	SCH 40	1 1/2 INCH	LF	-	-	-	-							-
PLASTIC PIPE SUPPLY LINE	SCH 40	2 INCH	LF	-	-	-	-							-
PLASTIC PIPE SUPPLY LINE	SCH 40	2 1/2 INCH	LF	-	-	-	-							-
PLASTIC PIPE SUPPLY LINE	SCH 40													
PLASTIC PIPE SUPPLY LINE	SCH 40													
PLASTIC PIPE SUPPLY LINE	SCH 40													
PLASTIC PIPE SUPPLY LINE	PR 315	2 1/2 INCH	LF	-	-	-	-							-
PLASTIC PIPE SUPPLY LINE	PR 315	3 INCH	LF	878	1070	-	-							1948
PLASTIC PIPE SUPPLY LINE	PR 315													
PLASTIC PIPE SUPPLY LINE	PR 315													
PLASTIC PIPE SUPPLY LINE	PR 315													
PLASTIC PIPE SUPPLY LINE	PR 315													
PLASTIC PIPE SUPPLY LINE	PR 315													
PLASTIC PIPE SUPPLY LINE	PR 315													
GSP														
GSP														
DIP														
DIP														

TOTAL QUANTITIES

TOTALS	UNIT	DESCRIPTION		
	EA	1 INCH		BPA
	EA	2 INCH		BPA
	EA	3 INCH		BPA
	EA	ENCLOSURE		BPA
	EA	1 INCH		WATER METER
	EA	2 INCH		WATER METER
	EA	3 INCH		WATER METER
	EA	BOOSTER PUMP		
	EA	6 CHANNEL	CCU	IRRIGATION CONTROLLER
	EA	28 CHANNEL	CCU	IRRIGATION CONTROLLER
	EA	16 STATION	SAT	IRRIGATION CONTROLLER
	EA	24 STATION	SAT	IRRIGATION CONTROLLER
	EA	32 STATION	SAT	IRRIGATION CONTROLLER
	EA	40 STATION	SAT	IRRIGATION CONTROLLER
	EA	SINGLE	CEC	IRRIGATION CONTROLLER
	EA	DOUBLE	CEC	IRRIGATION CONTROLLER
	EA	2 INCH	RCVM	VALVES AND ASSEMBLIES
	EA	3 INCH	RCVM	VALVES AND ASSEMBLIES
			RCVM	VALVES AND ASSEMBLIES
2	EA	1 INCH	RCV	VALVES AND ASSEMBLIES
-	EA	1 1/4 INCH	RCV	VALVES AND ASSEMBLIES
28	EA	1 1/2 INCH	RCV	VALVES AND ASSEMBLIES
	EA	1 INCH	GV	VALVES AND ASSEMBLIES
	EA	1 1/4 INCH	GV	VALVES AND ASSEMBLIES
	EA	1 1/2 INCH	GV	VALVES AND ASSEMBLIES
6	EA	2 INCH	GV	VALVES AND ASSEMBLIES
-	EA	3 INCH	GV	VALVES AND ASSEMBLIES
	EA	1 INCH	QCV	VALVES AND ASSEMBLIES
	EA	1 1/2 INCH	QCV	VALVES AND ASSEMBLIES
			FIA	VALVES AND ASSEMBLIES
			FIA	VALVES AND ASSEMBLIES
-	EA	2 INCH	FS	VALVES AND ASSEMBLIES
-	EA	3 INCH	FS	VALVES AND ASSEMBLIES
-	LF	1 INCH	SCC (N)	CONDUIT
			SCC (N)	CONDUIT
			SCC (N)	CONDUIT
			SCC (N)	CONDUIT
8,455	LF	1 INCH	SCH 40	PLASTIC PIPE SUPPLY LINE
6,738	LF	1 1/4 INCH	SCH 40	PLASTIC PIPE SUPPLY LINE
1,630	LF	1 1/2 INCH	SCH 40	PLASTIC PIPE SUPPLY LINE
5,135	LF	2 INCH	SCH 40	PLASTIC PIPE SUPPLY LINE
-	LF	2 1/2 INCH	SCH 40	PLASTIC PIPE SUPPLY LINE
			SCH 40	PLASTIC PIPE SUPPLY LINE
			SCH 40	PLASTIC PIPE SUPPLY LINE
			SCH 40	PLASTIC PIPE SUPPLY LINE
-	LF	2 1/2 INCH	PR 315	PLASTIC PIPE SUPPLY LINE
1948	LF	3 INCH	PR 315	PLASTIC PIPE SUPPLY LINE
			PR 315	PLASTIC PIPE SUPPLY LINE
			PR 315	PLASTIC PIPE SUPPLY LINE
			PR 315	PLASTIC PIPE SUPPLY LINE
			PR 315	PLASTIC PIPE SUPPLY LINE
			PR 315	PLASTIC PIPE SUPPLY LINE
			PR 315	PLASTIC PIPE SUPPLY LINE
				GSP
				GSP
				DIP
				DIP

TOTAL QUANTITIES SPRINKLER ASSEMBLIES

SPRINKLER SYMBOL	SPRINKLER ASSEMBLY (EA) RISER (GEAR DRIVEN)	RISER	POP-UP (GEAR DRIVEN)	POP-UP	TREE WELL
⑤ 5	170	-	-	-	-
⑥	-	-	27	-	-
⑪	30	-	-	-	-
⑫	-	-	16	-	-
●	-	651	-	-	-
TOTALS	200	651	43	-	-

REPLACE VALVE BOX COVER

SHEET NUMBER	EA
IP-2	1
IP-3	4
IP-4	4
TOTAL	9

IRRIGATION QUANTITIES

IQ-2

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans® LANDSCAPE ARCHITECTURE

SENIOR LANDSCAPE ARCHITECT: STEPHEN ALVAREZ
CALCULATED-DESIGNED BY: KENNY MAH
CHECKED BY: MARLENE GROS
REVISED BY
DATE REVISED

LAST REVISION 07-01-14 | DATE PLOTTED => 08-SEP-2014 | TIME PLOTTED => 14:08

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	805	4.4/5.5	18	38

LICENSED LANDSCAPE ARCHITECT

09-02-14
PLANS APPROVAL DATE

LICENSED LANDSCAPE ARCHITECT — KENNETH L. MAH — No. 5047 — 02-29-16 Renewal Date — 08-15-14 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.

ABBREVIATIONS

RTD CUT — ROOTED CUTTING(S)

APPLICABLE WHEN CIRCLED:

① - QUANTITIES SHOWN ARE 'PER PLANT' UNLESS SHOWN AS SQFT APPLICATION RATES.
② - SUFFICIENT TO RECEIVE ROOT BALL.
③ - WOOD CHIP MULCH.
④ - AS SHOWN ON PLANS.
5 - UNLESS OTHERWISE SHOWN ON PLANS.
⑥ - SEE STANDARD DETAIL.
7 - SEE SPECIAL PROVISIONS.
8 - SEE STANDARD SPECIFICATIONS.
⑨ - RANDOMLY PLANTED IN GROUPS OF THREE AND FIVE THROUGHOUT DESIGNATED AREA.
⑩ - RANDOMLY PLANTED AS SINGLES AND GROUPS OF THREE THROUGHOUT DESIGNATED AREA.
11 - 60 INCH Dia BASIN.
⑫ - 2X ROOT BALL WIDTH.
⑬ - INCLUDED WITH AREA MULCH UNLESS PLANTED IN EC AREA.

PLANT LIST AND PLANTING SPECIFICATIONS

PLANT GROUP	PLANT No.	SYMBOL	BOTANICAL NAME	COMMON NAME	SIZE	QUANTITY EACH	HOLE SIZE (INCH) Dia	HOLE SIZE (INCH) DEPTH	BASIN TYPE	IRON SULFATE ①	SOIL AMEND ①	FERTILIZER ① PLANTING	FERTILIZER ① PLT ESTB	WOOD MULCH BASIN ①③ (CY)	STAKING	PLANTING LIMITS MINIMUM DISTANCE (ft) FROM ETW	Pvmt	FENCE	WALL	PAVED DITCH	EARTH DITCH	ON CENTER (ft)	REMARKS
A	1		ACACIA REDOLENS "LOW BOY"	PROSTRATE ACACIA	No. 1	570	②	②	II	-	-	1 Pkt	-	0.06 ⑬	-	-	10	10	10	10	12	6.0	SHRUB ⑨
	2		AEONIUM HAWORTHII	PINWHEEL	No. 1	190	②	②	II	-	-	1 Pkt	-	⑬	-	-	3	3	3	3	4	6.0	SHRUB ⑨
	3		ALOE 'BLUE ELF'	BLUE ELF ALOE	No. 1	190	②	②	II	-	-	1 Pkt	-	⑬	-	-	3	3	3	3	4	6.0	SHRUB ⑨
	4		ARCTOSTAPHYLOS FRANCISCANA	MANZANITA 'FRANCISCANA'	No. 1	570	②	②	II	-	-	1 Pkt	-	0.06 ⑬	-	-	3	3	3	3	3	3.0	SHRUB ⑨
	5		BACCHARIS PILULARIS 'PIGEON POINT'	DWARF COYOTE BRUSH	No. 1	570	②	②	II	-	-	1 Pkt	-	0.06 ⑬	-	-	10	10	10	10	12	6.0	SHRUB ⑨
	6		BACCHARIS PILULARIS 'PIGEON POINT'	DWARF COYOTE BRUSH	No. 1	190	②	②	II	-	-	1 Pkt	-	⑬	-	-	10	10	10	10	12	6.0	SHRUB ⑨
	7		COTYLEDON ORBICULATA V. ORBICULATA OR FLAVIDA	PIG'S EAR	No. 1	190	②	②	II	-	-	1 Pkt	-	⑬	-	-	3	3	3	3	4	6.0	SHRUB ⑨
	8		CRASSULA ARBORESCENS	SILVER JADE PLANT	No. 1	190	②	②	II	-	-	1 Pkt	-	⑬	-	-	3	3	3	3	4	6.0	SHRUB ⑨
	9		CRASSULA OVATA 'GOLLUM'	GOLLUM JADE PLANT	No. 1	190	②	②	II	-	-	1 Pkt	-	⑬	-	-	3	3	3	3	4	6.0	SHRUB ⑨
	10		EPILOBIUM CALIFORNIA	DWARF CALIFORNIA FUCHSIA	No. 1	570	②	②	II	-	-	1 Pkt	-	0.06 ⑬	-	-	6	6	6	4	4	3.0	SHRUB ⑨
	11		ERIOGONUM 'WARRINER LYTLE'	WARRINER LYTLE BUCKWHEAT	No. 1	570	②	②	II	-	-	1 Pkt	-	0.06 ⑬	-	-	6	6	6	6	4	6.0	SHRUB ⑨
	12		PARTHENOCISSUS TRICUSPIDATA	BOSTON IVY	No. 1	31	②	②	II	-	-	1 Pkt	-	0.06	-	-	-	-	-	-	-	④	SHRUB
	13	⊕	ROMNEYA COULTERI 'WHITE CLOUD'	MATILIJA POPPY	No. 1	122	②	②	II	-	-	1 Pkt	-	0.06 ⑬	-	-	15	10	10	10	8	④	SHRUB
	14	◬	RHUS INTEGRIFOLIA	LEMONADE BERRY	No. 1	129	②	②	II	-	-	1 Pkt	-	0.06 ⑬	-	-	15	15	12	10	12	④	SHRUB
	15		SALVIA LEUCOPHILA 'POINT SAL SPREADER'	POINT SAL SPREADER SAGE	No. 1	570	②	②	II	-	-	1 Pkt	-	0.06 ⑬	-	-	6	6	6	6	3	6.0	SHRUB ⑨
	16		SALVIA MELLIFERA 'TERRA SECA'	TERA SECA SAGE	No. 1	570	②	②	II	-	-	1 Pkt	-	0.06 ⑬	-	-	6	6	6	6	3	6.0	SHRUB ⑨
	17		SALVIA SONOMENSIS 'GRACIAS'	GRACIAS CREEPING SAGE	No. 1	570	②	②	II	-	-	1 Pkt	-	0.06 ⑬	-	-	6	6	6	6	3	6.0	SHRUB ⑨
	18		SENECIO VITALIS	NARROW LEAF CHALK FINGERS	No. 1	190	②	②	II	-	-	1 Pkt	-	⑬	-	-	6	6	6	6	6	6.0	SHRUB ⑨
B	19	○	AGAVE ATTENUATA	FOXTAIL AGAVE	No. 5	45	②	②	II	-	-	3 Pkt	-	⑬	-	-	4	4	12	12	3	④	SHRUB
	20		ALOE CAMERONII	STARFISH ALOE	No. 5	190	②	②	II	-	-	3 Pkt	-	⑬	-	-	4	3	6	3	4	6.0	SHRUB ⑩
	21		ALOE STRIATA 'GHOST ALOE'	GHOST ALOE	No. 5	190	②	②	II	-	-	3 Pkt	-	⑬	-	-	4	3	6	3	4	6.0	SHRUB ⑩
	22		ALOE VERA	BARBADOS ALOE	No. 5	190	②	②	II	-	-	3 Pkt	-	⑬	-	-	4	4	4	4	4	6.0	SHRUB ⑨
	23	⊙	CRASSULA ARGENTEA	JADE PLANT	No. 5	81	②	②	II	-	-	3 Pkt	-	⑬	-	-	6	4	8	6	4	④	SHRUB
	24	◆	HESPARALOE PARVIFLORA	RED ALOE	No. 5	111	②	②	II	-	-	3 Pkt	-	0.2 ⑬	-	-	6	4	8	6	4	④	SHRUB
	25	◉	HETEROMELES ARBUTIFOLIA	TOYON	No. 5	219	②	②	II	-	-	3 Pkt	-	0.2 ⑬	-	-	6	4	12	10	6	④	SHRUB

NOTE:
UNDERLINED PORTIONS OF BOTANICAL NAME INDICATE ABBREVIATIONS USED ON PLANTING PLANS.

PLANT LIST
PL-1

REVISED BY | DATE REVISED
KENNY MAH | MARLENE GROS
CALCULATED-DESIGNED BY | CHECKED BY
SENIOR LANDSCAPE ARCHITECT | STEPHEN ALVAREZ
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans® LANDSCAPE ARCHITECTURE

LAST REVISION | DATE PLOTTED => 08-SEP-2014
05-30-14 | TIME PLOTTED => 14:08

LICENSED LANDSCAPE ARCHITECT

09-02-14
PLANS APPROVAL DATE

LICENSED LANDSCAPE ARCHITECT KENNETH L. MAH No. 5626 Signature 02-29-16 Renewal Date 08-15-14 Date STATE OF CALIFORNIA

NOTES:

1. ALL SEED PRODUCED IN CALIFORNIA ONLY
2. SEED MUST BE FREE OF THE FOLLOWING WEED SPECIES:
   BRASSICA NIGRA (BLACK MUSTARD)
   CHRYSANTHEMUM CORONARIUM (CROWN DAISY)
   MELILOTUS INDICA (INDIAN SWEET CLOVER)
   ERODIUM BOTRYS (FILAREE)

PLANT LIST AND PLANTING SPECIFICATIONS

PLANT GROUP	PLANT No.	SYMBOL	BOTANICAL NAME	COMMON NAME	SIZE	QUANTITY EACH	HOLE SIZE (INCH)		BASIN TYPE	IRON SULFATE ①	SOIL AMEND ①	FERTILIZER ①		WOOD MULCH BASIN ①③ (CY)	STAKING	PLANTING LIMITS: MINIMUM DISTANCE (ft) FROM						ON CENTER (ft)	REMARKS
							Dia	DEPTH				PLANTING	PLT ESTB			ETW	Pvmt	FENCE	WALL	PAVED DITCH	EARTH DITCH		
I	26		DUDLEYA HASSEI	SANTA CATALINA LIVE-FOREVER	4" POT	27,360	②	②	-	-	-	-	-	⑬	-	-	-	4	4	4	4	1.5	GROUND COVER
U	27		EUCALYPTUS CLADOCALYX	SUGAR GUM	No. 15	24	⑫	②	II	-	-	5 Pkt	-	0.2	⑥	30	-	20	20	15	17	④	TREE
	28		PINUS CANARIENSIS	CANARY ISLAND PINE	No. 15	24	⑫	②	II	-	-	5 Pkt	-	0.2	⑥	30	-	20	15	15	15	④	TREE
	29		PINUS TORREYANA	TORREY PINE	No. 15	40	⑫	②	II	-	-	5 Pkt	-	0.2	⑥	30	-	20	15	15	12	④	TREE
	30		PLATANUS RACEMOSA	CALIFORNIA SYCAMORE	No. 15	27	⑫	②	II	-	-	5 Pkt	-	0.2	⑥	30	-	20	20	10	12	④	TREE
	31		QUERCUS AGRIFOLIA	COAST LIVE OAK	No. 15	49	⑫	②	II	-	-	5 Pkt	-	0.2	⑥	30	-	20	15	15	15	④	TREE
	32		TIPUANA TIPU	TIPU TREE	No. 15	34	⑫	②	II	-	-	5 Pkt	-	0.2	⑥	30	-	30	25	20	22	④	TREE
	33		XYLOSMA CONGESTA	SHINY XYLOSMA	No. 15	98	②	②	II	-	-	5 Pkt	-	0.2⑬	-	-	15	15	10	10	12	10	SHRUB

LEGEND:

- Exist TREE
- COMPOST (EC)
- COMPOST (EC) OR WOOD MULCH AS SHOWN
- WEED GERMINATION
- COMPOST
- WOOD MULCH
- WOOD MULCH
- MAINTAIN Exist PLANTED AREAS

SEED MIX

BOTANICAL NAME (COMMON NAME)	PERCENT GERMINATION (MINIMUM)	POUNDS PURE LIVE SEED PER ACRE (SLOPE MEASUREMENT)
ERIOPHYLLUM CONFERTIFLORUM (GOLDEN YARROW)	50	1.5
ESCHSCHOLZIA CALIFORNICA (CALIFORNIA POPPY)	60	3.0
LASTHENIA CALIFORNICA (GOLDFIELDS)	35	2.0
LUPINUS BICOLOR (PIGMY-LEAVED LUPINE)	65	4.0
NASELLA PULCHRA (PURPLE NEEDLEGRASS)	60	8.0
PLANTAGO ERECTA (DOTSEED PLANTAIN)	60	3.0
SALVIA APIANA (WHITE SAGE)	35	1.5
	TOTAL	23.0

APPLICATION AND SEQUENCE OF WORK

SEQUENCE	ITEM	MATERIAL DESCRIPTION	MATERIAL TYPE	APPLICATION RATE	REMARKS
STEP 1	IRRIGATION	-	-	-	SEE IP SHEETS
STEP 2	COMPOST SOCK	12" Dia	COARSE	-	TYPE 2 INSTALLATION AT TOE OF SLOPE (SEE W SHEETS)
STEP 3	WEED GERMINATION	-	-	-	SEE PP SHEETS
STEP 4	COMPOST (EC)	COMPOST	MEDIUM	135 CY/ACRE	SEE PP SHEETS
		SEED	-	23.0 LB/ACRE	
STEP 5	PLANTING	-	-	-	SEE PP SHEETS
STEP 6	COMPOST	COMPOST	MEDIUM	200 CY/ACRE	SEE PP SHEETS
STEP 7	WOOD MULCH	-	-	-	SEE PP SHEETS

PLANT LIST
PL-2

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans® LANDSCAPE ARCHITECTURE

SENIOR LANDSCAPE ARCHITECT: STEPHEN ALVAREZ
CALCULATED-DESIGNED BY: KENNY MAH
CHECKED BY: MARLENE GROS
REVISED BY / DATE REVISED

LAST REVISION 07-30-14
DATE PLOTTED => 08-SEP-2014
TIME PLOTTED => 14:08

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	805	4.4/5.5	20	38

LICENSED LANDSCAPE ARCHITECT

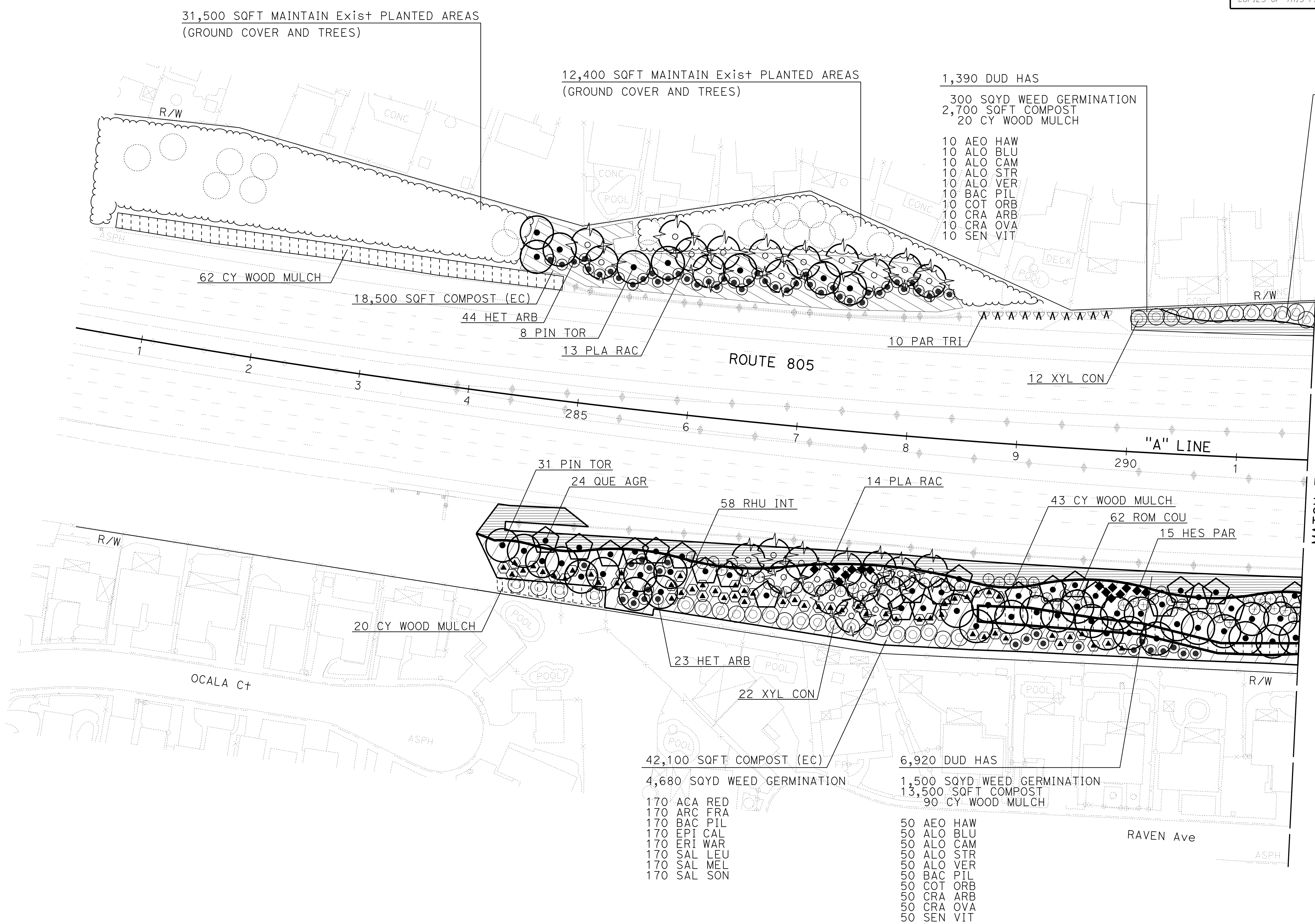
09-02-14
PLANS APPROVAL DATE

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.

LICENSED LANDSCAPE ARCHITECT KENNETH L. MAH No. 3649
02-29-16 Renewal Date
08-15-14 Date
STATE OF CALIFORNIA

NOTE:

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



APPROVED FOR PLANTING AND EROSION WORK ONLY

PLANTING PLAN
PP-1

SCALE: 1" = 50'

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans® LANDSCAPE ARCHITECTURE

SENIOR LANDSCAPE ARCHITECT: STEPHEN ALVAREZ
CALCULATED-DESIGNED BY: KENNY MAH
CHECKED BY: MARLENE GROS
REVISED BY / DATE REVISED

LAST REVISION 07-01-14
DATE PLOTTED => 08-SEP-2014
TIME PLOTTED => 14:08

BORDER LAST REVISED 7/2/2010
USERNAME => s127400
DGN FILE => 1113000035su001.dgn
RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3
UNIT 2816
PROJECT NUMBER & PHASE 11130000351

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	805	4.4/5.5	21	38

Kenneth L. Mah
LICENSED LANDSCAPE ARCHITECT

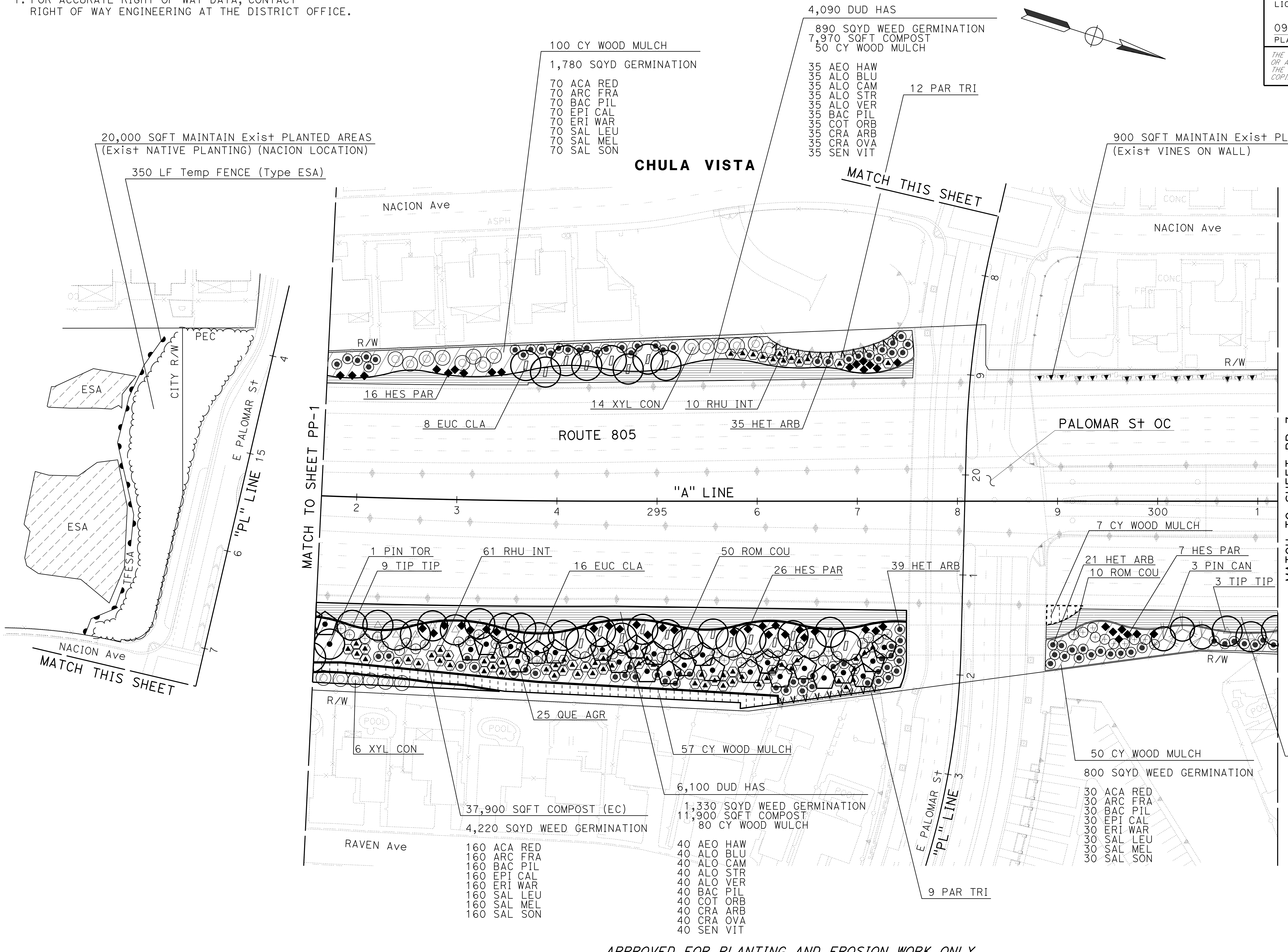
09-02-14
PLANS APPROVAL DATE

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.

LICENSED LANDSCAPE ARCHITECT · KENNETH L. MAH · Signature · 02-29-16 Renewal Date · 08-15-14 Date · STATE OF CALIFORNIA

NOTES:

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



APPROVED FOR PLANTING AND EROSION WORK ONLY

PLANTING PLAN

SCALE: 1" = 50'

PP-2

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans LANDSCAPE ARCHITECTURE

SENIOR LANDSCAPE ARCHITECT	STEPHEN ALVAREZ
CALCULATED-DESIGNED BY	KENNY MAH
CHECKED BY	MARLENE GROS
REVISED BY	
DATE REVISED	

DATE PLOTTED => 08-SEP-2014
TIME PLOTTED => 14:08
LAST REVISION 07-01-14

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	805	4.4/5.5	22	38

LICENSED LANDSCAPE ARCHITECT

09-02-14
PLANS APPROVAL DATE

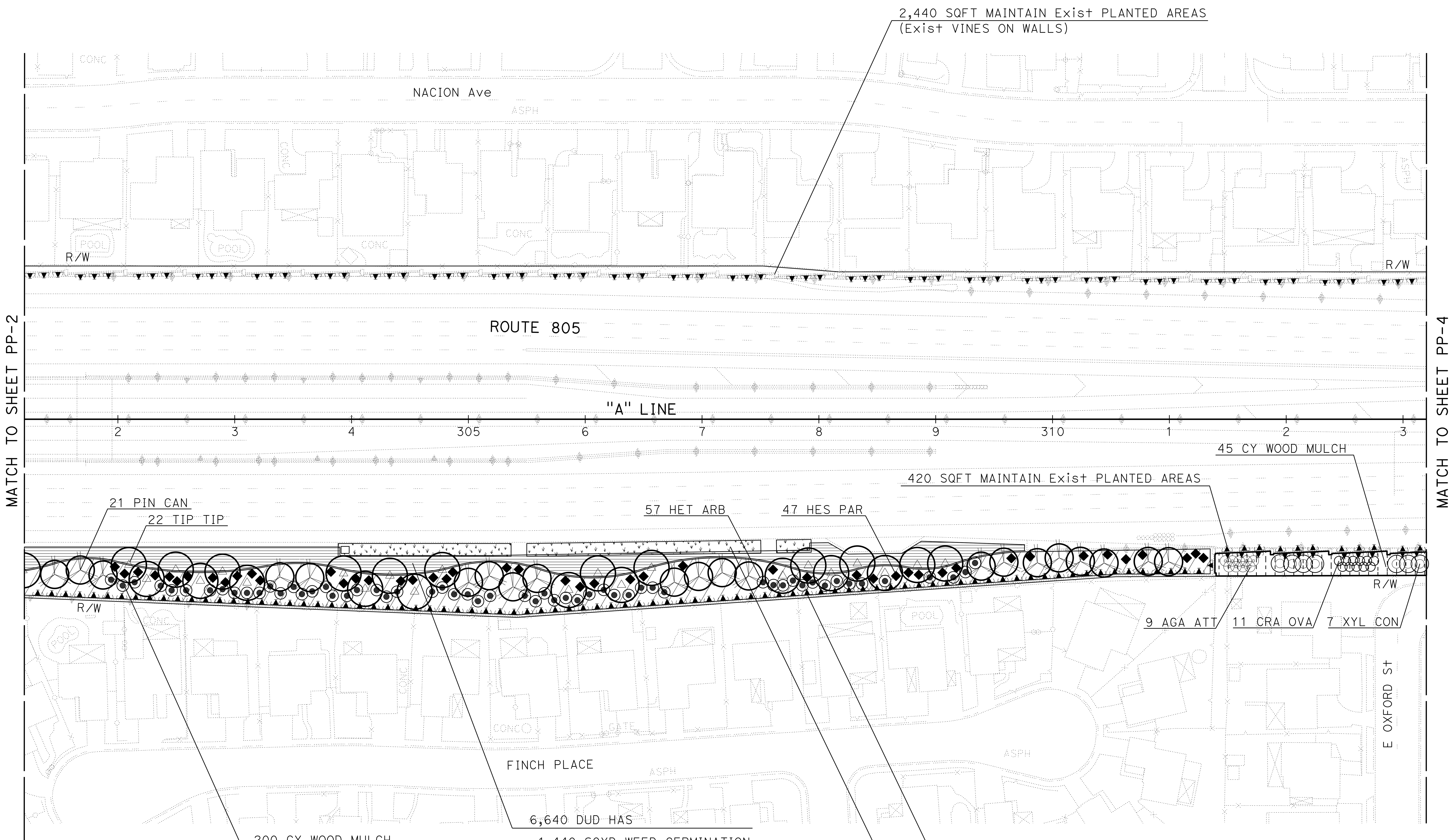
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

LICENSED LANDSCAPE ARCHITECT KENNETH L. MAH No. 3646
02-29-16 Renewal Date
08-15-14 Date
STATE OF CALIFORNIA

NOTE:

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

CHULA VISTA



3,550 SQYD WEED GERMINATION

130 ACA RED
130 ARC FRA
130 BAC PIL
130 EPI CAL
130 ERI WAR
130 SAL LEU
130 SAL MEL
130 SAL SON

1,440 SQYD WEED GERMINATION
12,960 SQFT COMPOST
80 CY WOOD MULCH

40 AEO HAW
40 ALO BLU
40 ALO CAM
40 ALO STR
40 ALO VER
40 BAC PIL
40 COT ORB
40 CRA ARB
40 CRA OVA
40 SEN VIT

APPROVED FOR PLANTING AND EROSION WORK ONLY

PLANTING PLAN

PP-3

SCALE: 1" = 50'

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans® LANDSCAPE ARCHITECTURE

SENIOR LANDSCAPE ARCHITECT: STEPHEN ALVAREZ
CALCULATED-DESIGNED BY: KENNY MAH
CHECKED BY: MARLENE GROS
REVISED BY
DATE REVISED

LAST REVISION 07-01-14 | DATE PLOTTED => 08-SEP-2014 | TIME PLOTTED => 14:08

BORDER LAST REVISED 7/2/2010 | USERNAME => s127400 | DGN FILE => 1113000035su003.dgn | RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3 | UNIT 2816 | PROJECT NUMBER & PHASE 11130000351

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	805	4.4/5.5	23	38

Kenneth A Mah
LICENSED LANDSCAPE ARCHITECT

09-02-14
PLANS APPROVAL DATE

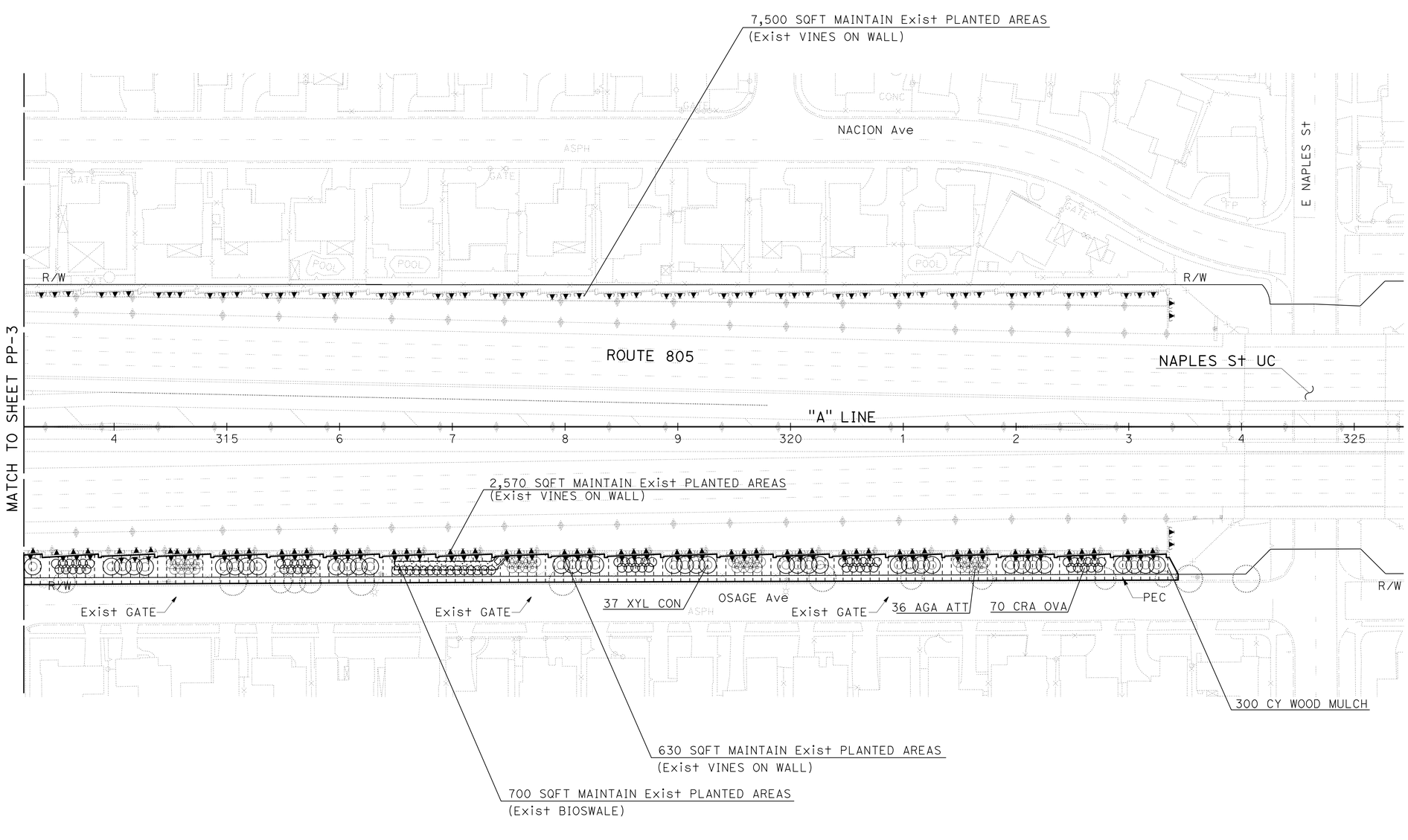
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

LICENSED LANDSCAPE ARCHITECT
KENNETH L. MAH No. 5616
STATE OF CALIFORNIA
RENEWAL DATE 02-29-16
ADDENDUM DATE 08-15-14

NOTES:

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

CHULA VISTA



APPROVED FOR PLANTING AND EROSION WORK ONLY

PLANTING PLAN

SCALE: 1" = 50'

PP-4

REVISED BY | DATE REVISED
KENNY MAH | MARLENE GROS
CALCULATED-DESIGNED BY | CHECKED BY
SENIOR LANDSCAPE ARCHITECT | STEPHEN ALVAREZ
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
LANDSCAPE ARCHITECTURE

LAST REVISION 05-30-14 | DATE PLOTTED => 08-SEP-2014 | TIME PLOTTED => 14:08

BORDER LAST REVISED 7/2/2010 | USERNAME => s127400 | DGN FILE => 1113000035su004.dgn | RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3 | UNIT 2816 | PROJECT NUMBER & PHASE 11130000351

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	805	4.4/5.5	24	38

LICENSED LANDSCAPE ARCHITECT

09-02-14
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.

LICENSED LANDSCAPE ARCHITECT
KENNETH L. MAH No. 5047
kenneth mah
02-29-16
RENEWAL DATE
08-15-14
DATE
STATE OF CALIFORNIA

Temp FENCE (TYPE ESA)

SHEET NUMBER	LF
PP-2	350
TOTAL	350

WEED GERMINATION

SHEET NUMBER	SQYD
PP-1	6,720
PP-2	9,510
PP-3	4,990
TOTAL	21,220

COMPOST (EROSION CONTROL)

SHEET NUMBER	SQFT
PP-1	60,600
PP-2	37,900
TOTAL	98,500

COMPOST

SHEET NUMBER	SQFT
PP-1	16,200
PP-2	24,200
PP-3	12,960
TOTAL	53,360

WOOD MULCH

SHEET NUMBER	CY
PP-1	255
PP-2	374
PP-3	325
PP-4	300
BASIN	225
TOTAL	1,479

MAINTAIN Exist PLANTED AREAS

SHEET NUMBER	SQFT (N)
PP-1	43,900
PP-2	20,900
PP-3	7,060
PP-4	11,400
TOTAL	83,260

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

PLANTING QUANTITIES

PQ-1

REVISED BY | DATE REVISED
KENNY MAH | MARLENE GROS
CALCULATED-DESIGNED BY | CHECKED BY
SENIOR LANDSCAPE ARCHITECT | STEPHEN ALVAREZ
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans® LANDSCAPE ARCHITECTURE

LAST REVISION | DATE PLOTTED => 08-SEP-2014
07-01-14 | TIME PLOTTED => 14:08

BORDER LAST REVISED 7/2/2010
USERNAME => s127400
DGN FILE => 1113000035sw001.dgn
RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3
UNIT 2816
PROJECT NUMBER & PHASE 11130000351

M

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
Mtl	MATERIAL
MVP	MAINTENANCE VEHICLE PULLOUT

N

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

O

Oblr	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

P

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 Mtl	PERMEABLE MATERIAL

P continued

PG	PROFILE GRADE
PI	POINT OF INTERSECTION
PJP	PARTIAL JOINT PENETRATION
Pkwy	PARKWAY
℄,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

Q

Qty	QUANTITY

R

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

S

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

T

T	SEMI-TANGENT
Tan	TANGENT
TBB	THRIE BEAM BARRIER
Tbr	TIMBER
TC	TOP OF CURB
TCB	TRAFFIC CONTROL BOX
TCE	TEMPORARY CONSTRUCTION EASEMENT
Tel	TELEPHONE
Temp	TEMPORARY
TG	TOP OF GRADE
Tot	TOTAL
TP	TELEPHONE POLE
TPB	TREATED PERMEABLE BASE
TPM	TREATED PERMEABLE MATERIAL
Trans	TRANSITION

T continued

TS	TRANSVERSE, TRAFFIC SIGNAL, TUBULAR STEEL
Typ	TYPICAL

U

UC	UNDERCROSSING
UD	UNDERDRAIN
UG	UNDERGROUND
UON	UNLESS OTHERWISE NOTED
UP	UNDERPASS

V

V	VALVE, DESIGN SPEED
Var	VARIABLE, VARIES
VC	VERTICAL CURVE
VCP	VITRIFIED CLAY PIPE
Vert	VERTICAL
Via	VIADUCT
Vol	VOLUME

W

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

X

X Sec	CROSS SECTION
Xing	CROSSING

Y

Yr	YEAR
Yrs	YEARS

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	805	4.4/5.5	25	38

Grace M. Tsushima
REGISTERED CIVIL ENGINEER

July 19, 2013
PLANS APPROVAL DATE

Grace M. Tsushima No. C49814 Exp. 9-30-14 CIVIL — REGISTERED PROFESSIONAL ENGINEER — 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 09-02-14

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^3, pcf	POUNDS PER CUBIC FOOT
tsf	TONS PER SQUARE FOOT
mph, MPH *	MILES PER HOUR
ø	NOMINAL DIAMETER
oz	OUNCE
lb	POUND
kip	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.

REVISED STANDARD PLAN RSP A10B

2010 REVISED STANDARD PLAN RSP A10B

6-7-13

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	805	4.4/5.5	26	38

Gregory A. Balzer
LICENSED LANDSCAPE ARCHITECT

July 19, 2013
PLANS APPROVAL DATE

Gregory A. Balzer 2015 — 10 Expires — 2-28-15 — Renewal Date — 7-19-13 — Date — LICENSED LANDSCAPE ARCHITECT — 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 09-02-14

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
Mtl	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
Pvmt	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

2010 REVISED STANDARD PLAN RSP H1

6-28-13

EXISTING	NEW	ITEM DESCRIPTION
		WATER METER (WM)
		BACKFLOW PREVENTER ASSEMBLY (BPA)
		BACKFLOW PREVENTER ENCLOSURE (BPE)
		BOOSTER PUMP (BP)
		TRUCK LOADING STANDPIPE (TLS)
	FS	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)
acc	ACC	ARMOR-CLAD CONDUCTORS (ACC)
cnc	CNC	CONTROL AND NEUTRAL CONDUCTORS (CNC)
		IRRIGATION CONDUIT
		EXTEND IRRIGATION CONDUIT
dip	DIP	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)
cp	CP	COPPER PIPE (SUPPLY LINE)
dit	DIT	DRIP IRRIGATION TUBING
		REMOTE CONTROL VALVE (RCV) REMOTE CONTROL VALVE (MASTER) (RCVM) REMOTE CONTROL VALVE (MASTER) W/FLOW METER (RCVMF)
	P	REMOTE CONTROL VALVE W/PRESSURE REGULATOR (RCVP)
		EXISTING MANUAL CONTROL VALVE (MCV)
	V	DRIP VALVE ASSEMBLY (DVA)
	Y	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
3	3	SPRINKLER W/SPRINKLER PROTECTOR
	C	CONNECT TO EXISTING SYSTEM
		CAP
		CAP EXISTING
	FR	FIBER ROLL
	CS	COMPOST SOCK

RCV SIZE
IRRIGATION CONTROLLER
CONTROLLER STATION
VALVE IN PARALLEL (IF APPLICABLE)
GPM
QUANTITY OF SPRINKLERS (WHEN SHOWN)

* 2½"-A-2b-40-60

VALVE CODE

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

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	805	4.4/5.5	27	38

Gregory A. Balzer
LICENSED LANDSCAPE ARCHITECT

November 15, 2013
PLANS APPROVAL DATE

Gregory A. Balzer 2515 — 10-31-14 — 2-28-15 — 11-15-13 — LICENSED LANDSCAPE ARCHITECT — 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 09-02-14

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

LANDSCAPE AND EROSION CONTROL SYMBOLS

NO SCALE

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.

REVISED STANDARD PLAN RSP H2

2010 REVISED STANDARD PLAN RSP H2

10-9-13

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	805	4.4/5.5	28	38

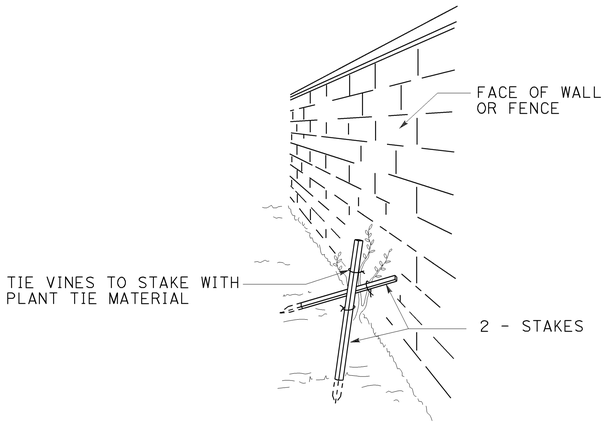
Gregory A Balzer
LICENSED LANDSCAPE ARCHITECT

July 19, 2013
PLANS APPROVAL DATE

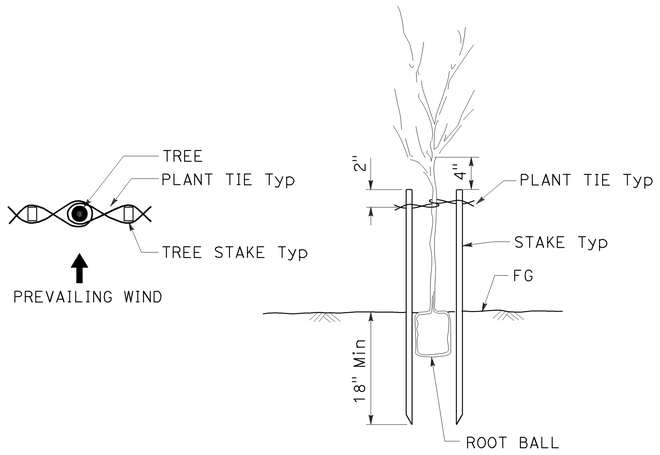
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

LICENSED LANDSCAPE ARCHITECT
Gregory A. Balzer 2515
09
Renewal Date
2-28-15
Renewal Date
7-19-13
Date
STATE OF CALIFORNIA

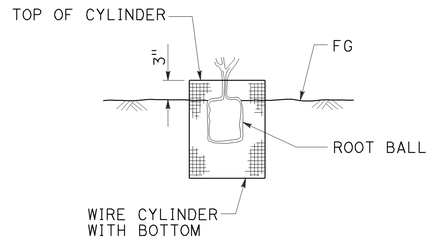
TO ACCOMPANY PLANS DATED 09-02-14



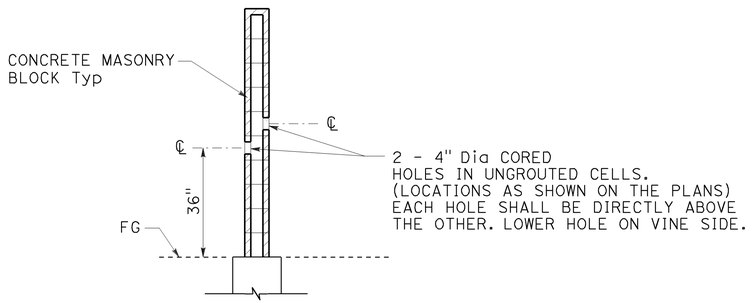
PERSPECTIVE
VINE STAKING



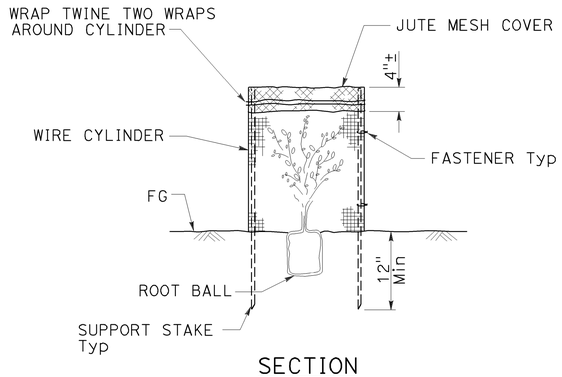
TREE STAKING



SECTION
ROOT PROTECTOR



SECTION
CORE HOLE (VINE)



SECTION
FOLIAGE PROTECTOR

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

LANDSCAPE DETAILS

NO SCALE

RSP H4 DATED JULY 19, 2013 SUPERSEDES STANDARD PLAN H4
DATED MAY 20, 2011 - PAGE 221 OF THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP H4

2010 REVISED STANDARD PLAN RSP H4

6-28-13

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	805	4.4/5.5	29	38

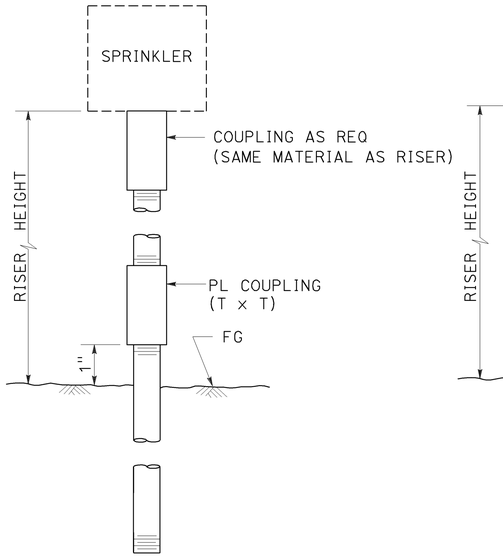
Gregory A Balzer
LICENSED LANDSCAPE ARCHITECT

July 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.

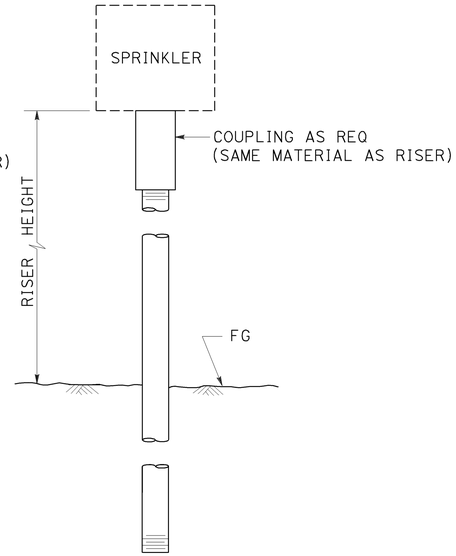
LICENSED LANDSCAPE ARCHITECT
Gregory A. Balzer 2576
10 Renewal Date 2-28-15
Renewal Date 7-19-13
Date
STATE OF CALIFORNIA

TO ACCOMPANY PLANS DATED 09-02-14



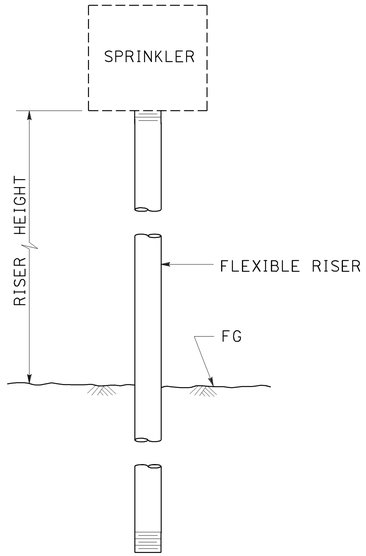
ELEVATION

RISER SPRINKLER
ASSEMBLY TYPE I



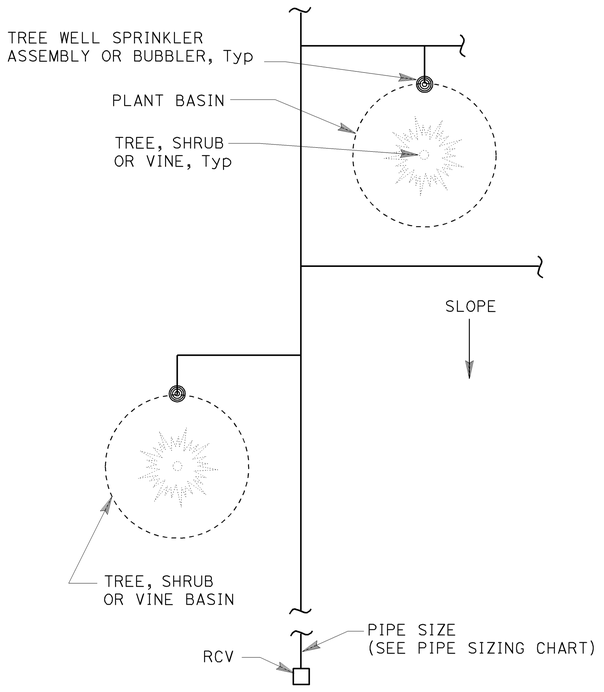
ELEVATION

RISER SPRINKLER
ASSEMBLY TYPE II



ELEVATION

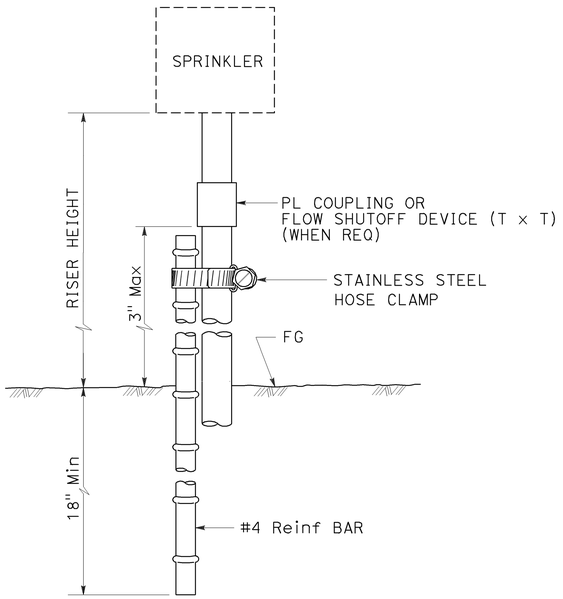
RISER SPRINKLER
ASSEMBLY TYPE III



PLAN

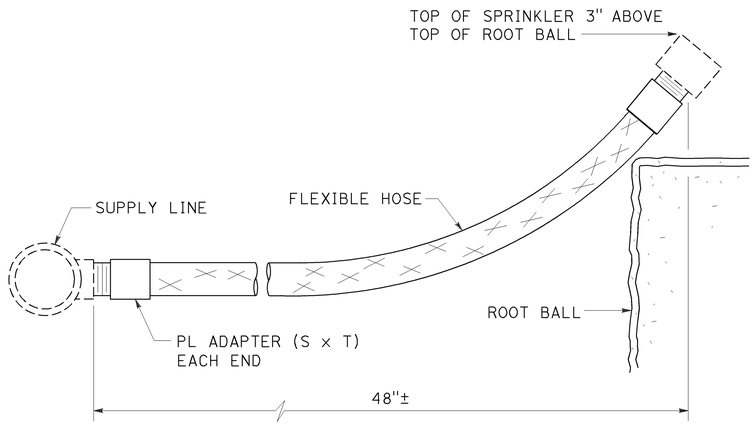
NOTES:

1. Install tree well sprinkler assembly on up-hill side of plant when on slope.
2. Install bubbler within basin.



ELEVATION

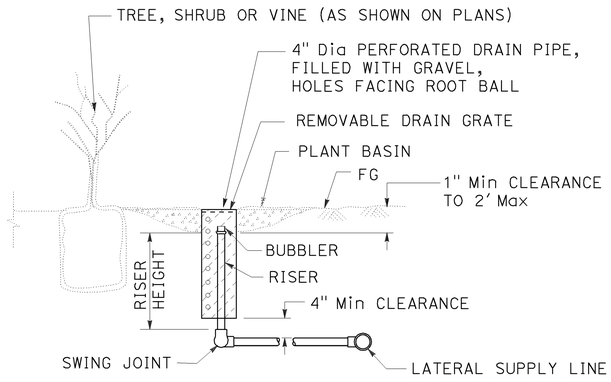
RISER SPRINKLER
ASSEMBLY TYPE IV



ELEVATION

RISER SPRINKLER
ASSEMBLY TYPE V

PLAN



SECTION

TREE WELL SPRINKLER ASSEMBLY

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

LANDSCAPE DETAILS

NO SCALE

RSP H5 DATED JULY 19, 2013 SUPERSEDES STANDARD PLAN H5
DATED MAY 20, 2011 - PAGE 222 OF THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP H5

2010 REVISED STANDARD PLAN RSP H5

6-28-13

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	805	4.4/5.5	30	38

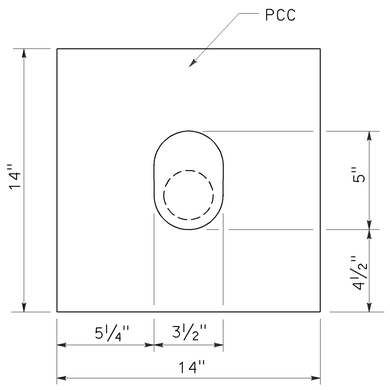
LICENSED LANDSCAPE ARCHITECT

July 19, 2013
PLANS APPROVAL DATE

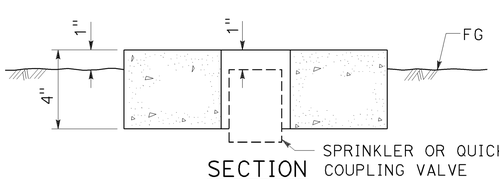
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

LICENSED LANDSCAPE ARCHITECT
Gregory A. Balzer 2515
10-31-14
Birthday
2-28-15
Renewal Date
7-19-13
Date
STATE OF CALIFORNIA

TO ACCOMPANY PLANS DATED 09-02-14

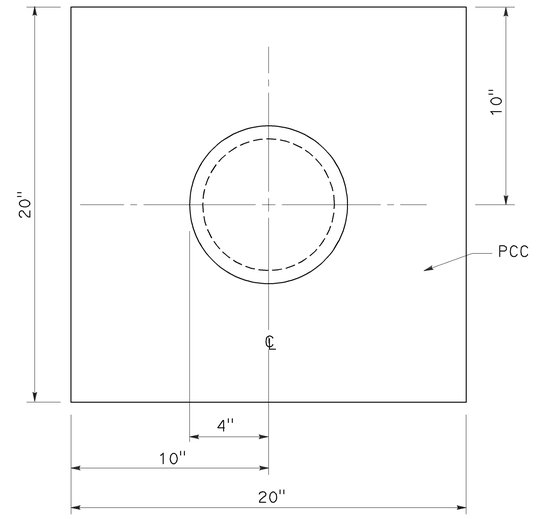


PLAN

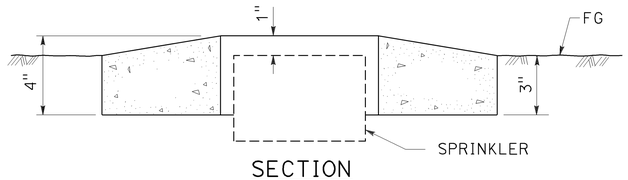


SECTION

SPRINKLER PROTECTOR TYPE I

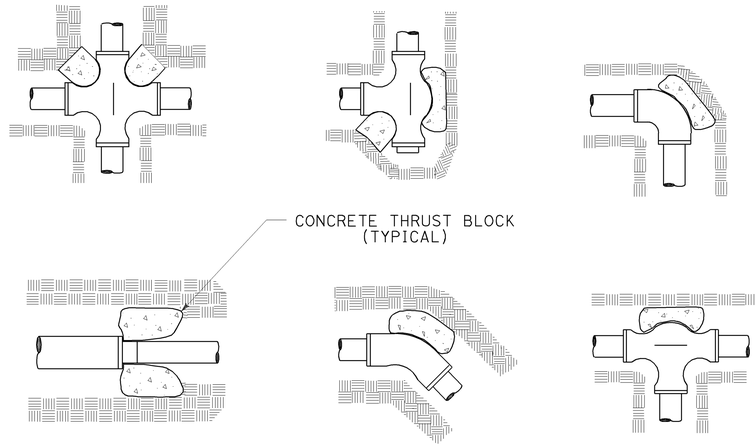


PLAN

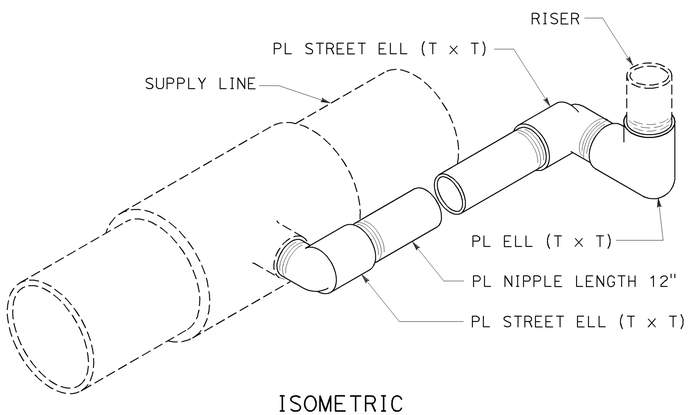


SECTION

SPRINKLER PROTECTOR TYPE II

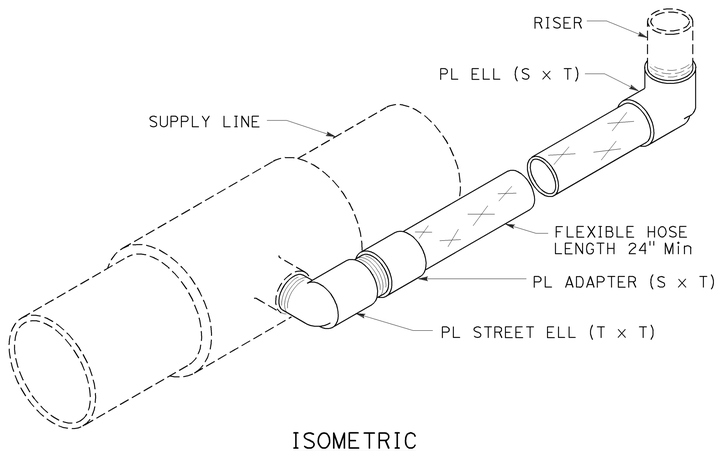


TYPICAL THRUST BLOCKS



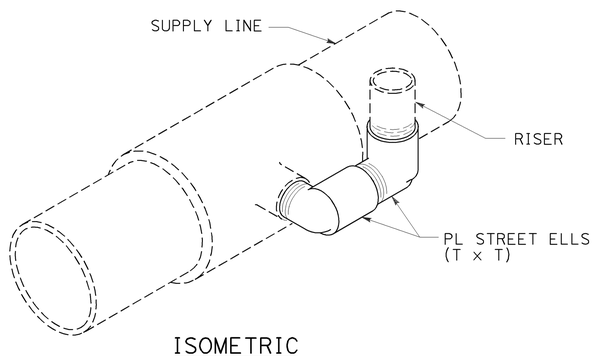
ISOMETRIC

POP-UP SPRINKLER ASSEMBLY TYPE I



ISOMETRIC

POP-UP SPRINKLER ASSEMBLY TYPE II



ISOMETRIC

POP-UP SPRINKLER ASSEMBLY TYPE III

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

LANDSCAPE DETAILS

NO SCALE

RSP H6 DATED JULY 19, 2013 SUPERSEDES STANDARD PLAN H6
DATED MAY 20, 2011 - PAGE 223 OF THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP H6

2010 REVISED STANDARD PLAN RSP H6

6-28-13

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	805	4.4/5.5	31	38

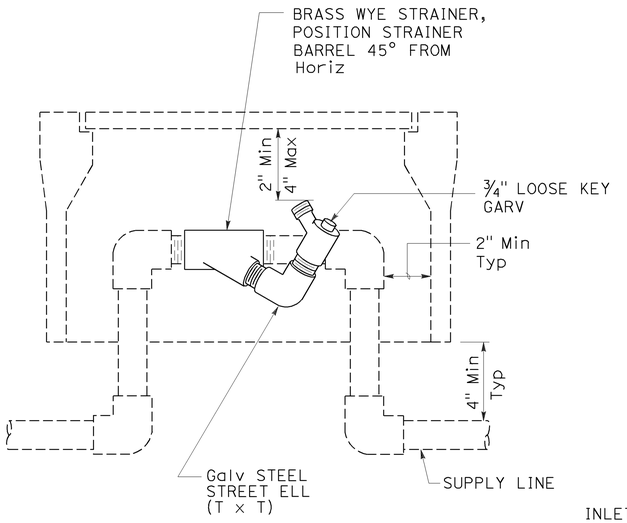
LICENSED LANDSCAPE ARCHITECT

July 19, 2013
PLANS APPROVAL DATE

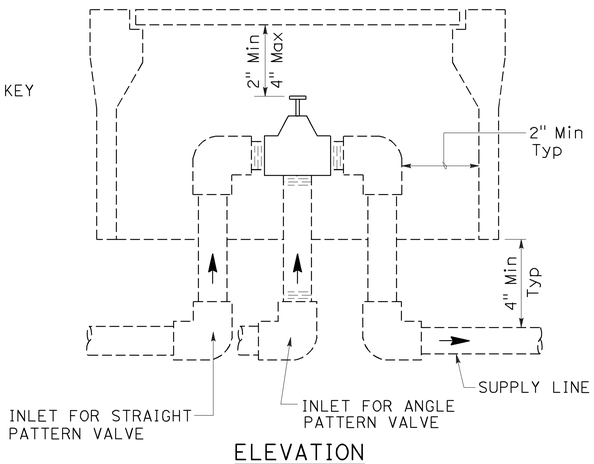
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

LICENSED LANDSCAPE ARCHITECT
Gregory A. Balzer 2576
09-30-13
Renewal Date
7-19-13
Date
STATE OF CALIFORNIA

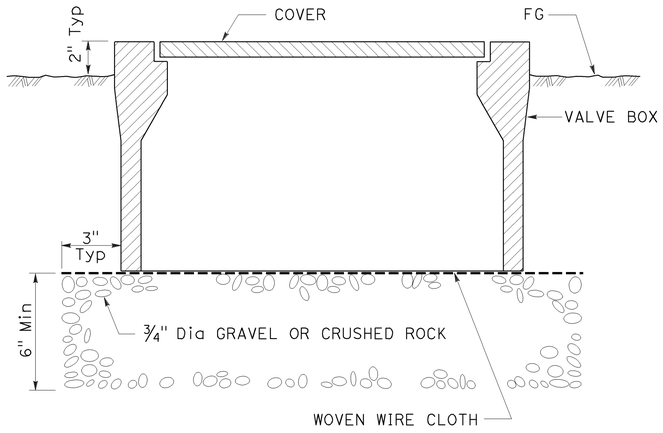
TO ACCOMPANY PLANS DATED 09-02-14



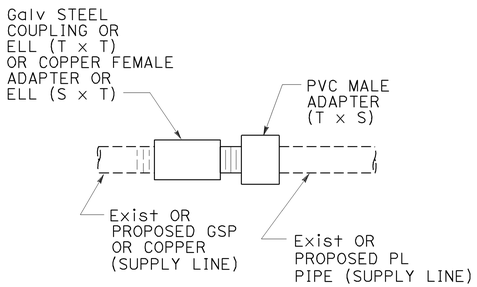
ELEVATION
WYE STRAINER ASSEMBLY



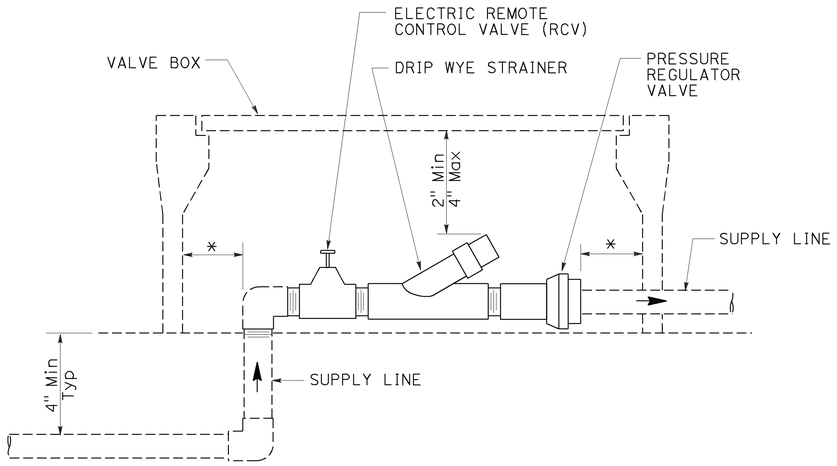
ELEVATION
VALVE



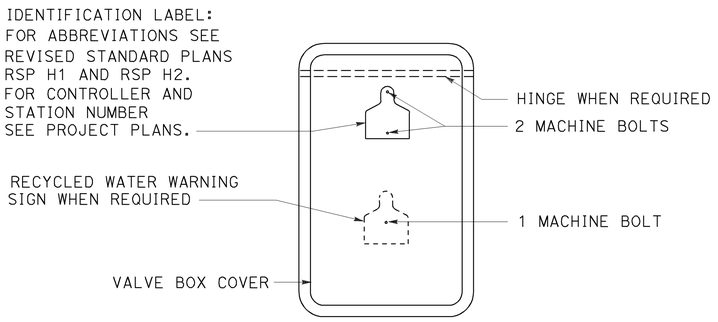
SECTION
VALVE BOX



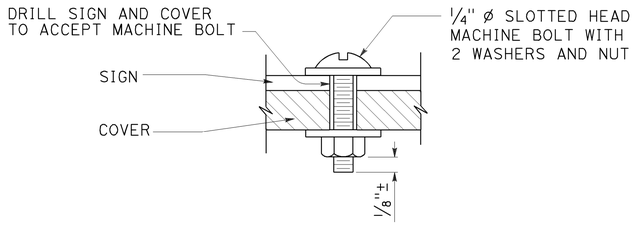
GALVANIZED OR COPPER PIPE CONNECTION TO PLASTIC PIPE



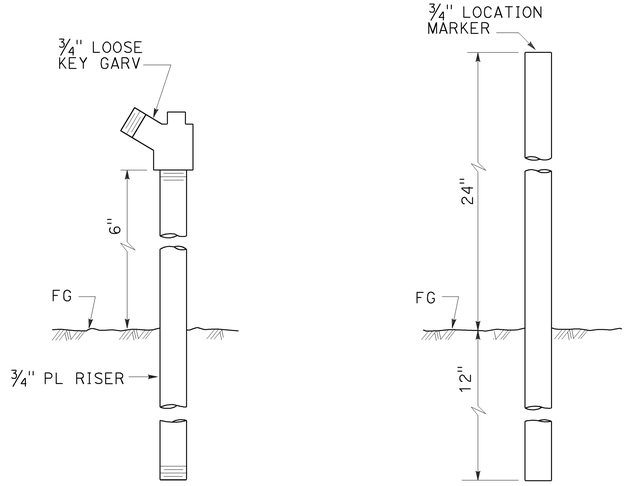
ELEVATION
DRIP VALVE ASSEMBLY



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

6-20-13

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	805	4.4/5.5	32	38

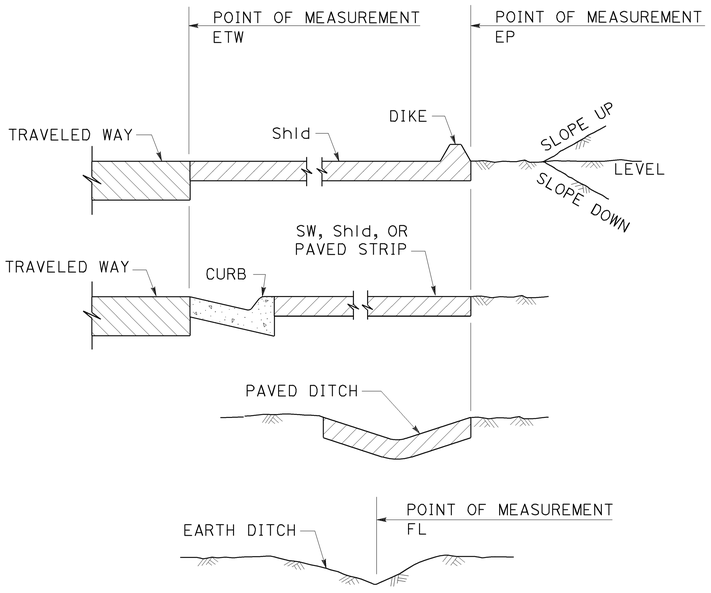
Gregory A Balzer
LICENSED LANDSCAPE ARCHITECT

July 19, 2013
PLANS APPROVAL DATE

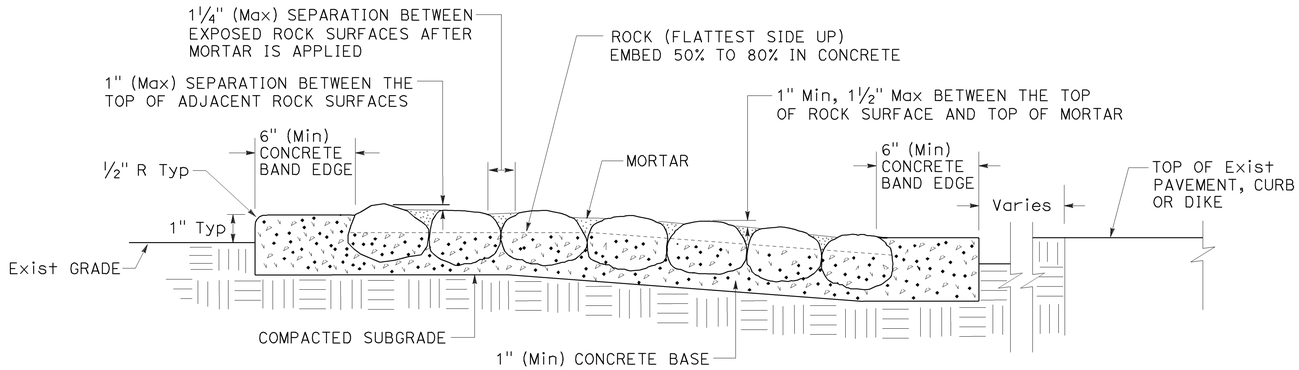
LICENSED LANDSCAPE ARCHITECT
Gregory A. Balzer 2515
10-31-13
Renewal Date
2-28-15
Renewal Date
7-19-13
Date
STATE OF CALIFORNIA

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.

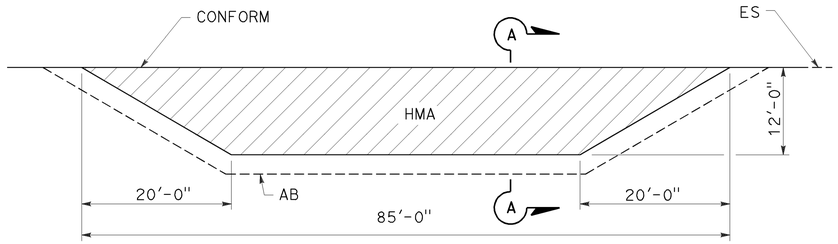
TO ACCOMPANY PLANS DATED 09-02-14



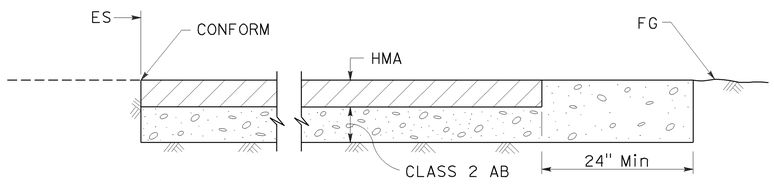
SECTION
POINTS OF MEASUREMENT



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

6-21-13

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	805	4.4/5.5	33	38

REGISTERED CIVIL ENGINEER

July 19, 2013
PLANS APPROVAL DATE

Gurinderpal Bhullar
No. C48815
Exp. 9-30-14
CIVIL
REGISTERED PROFESSIONAL ENGINEER
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 09-02-14

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		
					X	Y	Z **
	TANGENT 2L	MERGING L	SHIFTING L/2	SHOULDER L/3	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%
mph	ft	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 recommmended distances.

2010 REVISED STANDARD PLAN RSP T9

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

4-30-13

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	805	4.4/5.5	34	38

REGISTERED CIVIL ENGINEER

April 19, 2013
PLANS APPROVAL DATE

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

TO ACCOMPANY PLANS DATED 09-02-14

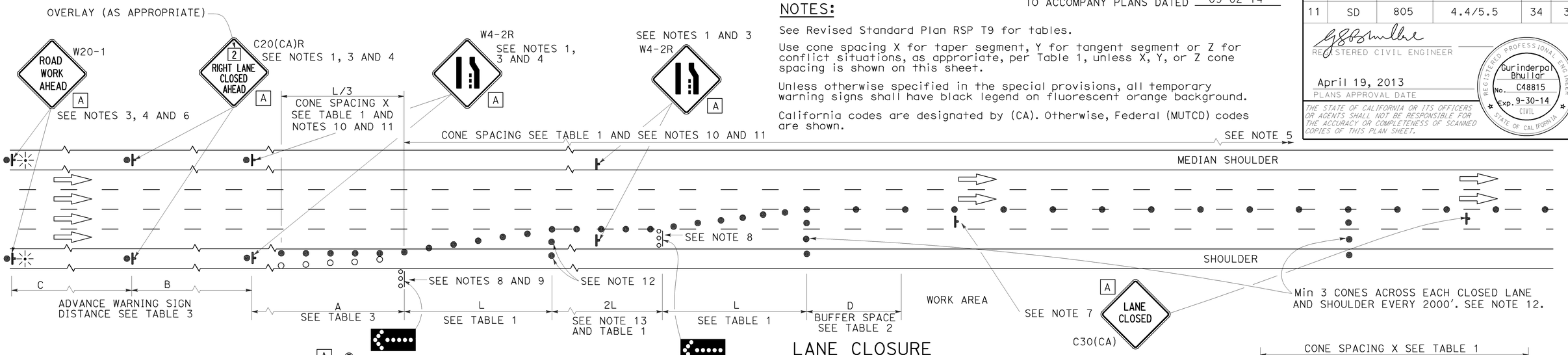
NOTES:

See Revised Standard Plan RSP T9 for tables.

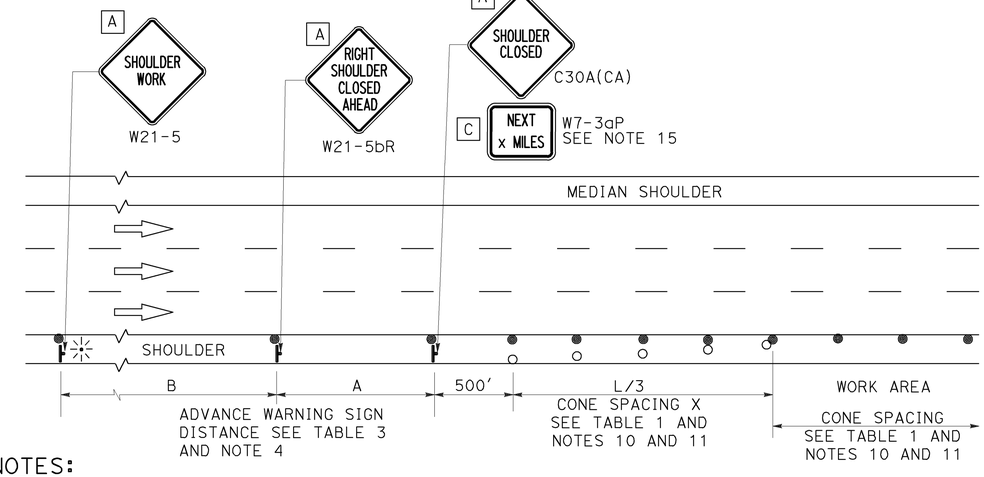
Use cone spacing X for taper segment, Y for tangent segment or Z for conflict situations, as approriate, per Table 1, unless X, Y, or Z cone spacing is shown on this sheet.

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

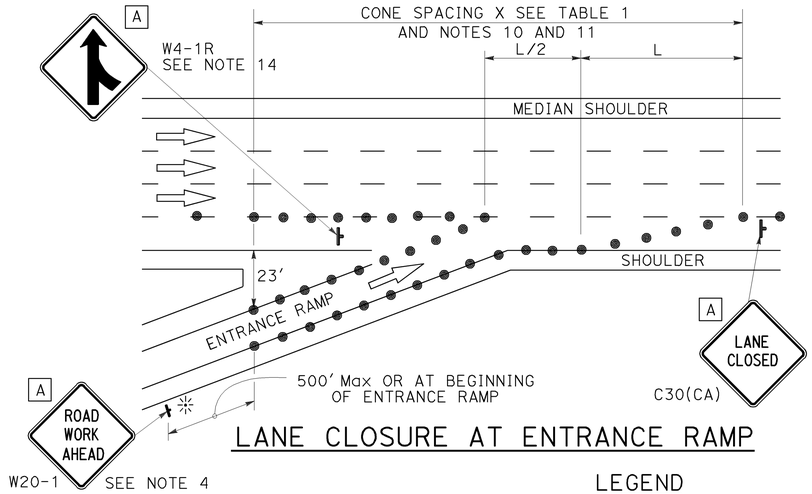
California codes are designated by (CA). Otherwise, Federal (MUTCD) codes are shown.



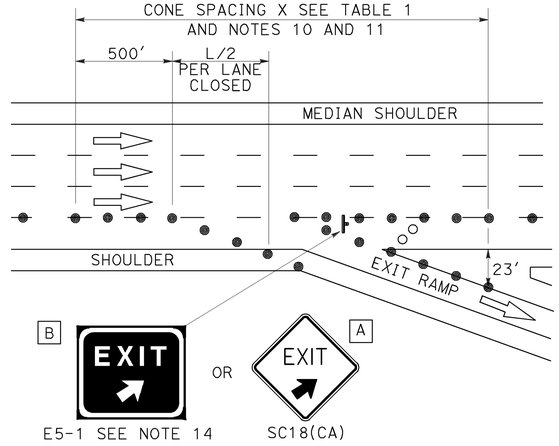
LANE CLOSURE



SHOULDER CLOSURE



LANE CLOSURE AT ENTRANCE RAMP



LANE CLOSURE AT EXIT RAMP

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.
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) 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.
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 theshoulder closure extends beyond the distance that can be perceived by road users.

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"

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

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

12-18-12

LEGEND:

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 TAPE
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
TSP	TELEPHONE SERVICE POINT

ABBREVIATIONS

APS	ACCESSIBLE PEDESTRIAN SIGNAL
BBS	BATTERY BACKUP SYSTEM
BC	BOLT CIRCLE
BPB	BICYCLE PUSH BUTTON
C	CONDUIT
CB	CIRCUIT BREAKER
CCTV	CLOSED CIRCUIT TELEVISION
Ckt	CIRCUIT
CMS	CHANGEABLE MESSAGE SIGN
Ctid	CALTRANS IDENTIFICATION
Comm	COMMUNICATION
DLC	LOOP DETECTOR LEAD-IN CABLE
EMS	EXTINGUISHABLE MESSAGE SIGN
EVUC	EMERGENCY VEHICLE UNIT CABLE
EVUD	EMERGENCY VEHICLE UNIT DETECTOR
FB	FLASHING BEACON
FBCA	FLASHING BEACON CONTROL ASSEMBLY
FBS	FLASHING BEACON WITH SLIP BASE
FO	FIBER OPTIC
G	EQUIPMENT GROUNDING CONDUCTOR
GB	GROUND BUS
GFCI	GROUND FAULT CIRCUIT INTERRUPTER
HAR	HIGHWAY ADVISORY RADIO
Hex	HEXAGONAL
HPS	HIGH PRESSURE SODIUM
IISNS	INTERNALLY ILLUMINATED STREET NAME SIGN
ISL	INDUCTION SIGN LIGHTING
LED	LIGHT EMITTING DIODE
LMA	LUMINAIRE MAST ARM
LPS	LOW PRESSURE SODIUM
Ltg	LIGHTING
Lum	LUMINAIRE
M	METERED
MAT	MAST ARM MOUNTING TOP ATTACHMENT
MAS	MAST ARM MOUNTING SIDE ATTACHMENT
M/M	MULTIPLE TO MULTIPLE TRANSFORMER
Mtg	MOUNTING
MV	MERCURY VAPOR LIGHTING FIXTURE
MVDS	MICROWAVE VEHICLE DETECTION SYSTEM
N	NEUTRAL (GROUNDED CONDUCTOR)
NB	NEUTRAL BUS
NC	NORMALLY CLOSE
NO	NORMALLY OPEN
P	CIRCUIT BREAKER'S POLE
PB	PULL BOX
PBA	PUSH BUTTON ASSEMBLY
PEC	PHOTOELECTRIC CONTROL
Ped	PEDESTRIAN
PEU	PHOTOELECTRIC UNIT
PT	CONDUIT WITH PULL TAPE
RE	RELOCATED EQUIPMENT
RM	RAMP METERING
RWIS	ROADSIDE WEATHER INFORMATION SYSTEM
SB	SLIP BASE
SIC	SIGNAL INTERCONNECT CABLE
Sig	SIGNAL
SMA	SIGNAL MAST ARM
SNS	STREET NAME SIGN
SP	SERVICE POINT
TDC	TELEPHONE DEMARCATION CABINET
TMS	TRAFFIC MONITORING STATION
TOS	TRAFFIC OPERATIONS SYSTEM
Veh	VEHICLE
VIVDS	VIDEO IMAGE VEHICLE DETECTION SYSTEM
WIM	WEIGH-IN-MOTION
Xfmr	TRANSFORMER

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	805	4.4/5.5	35	38

Theresa Gabriel
REGISTERED ELECTRICAL ENGINEER

Theresa Aziz Gabriel No. E15129 Exp. 6-30-14 ELECTRICAL — REGISTERED PROFESSIONAL ENGINEER — STATE OF CALIFORNIA

July 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 09-02-14

SOFFIT AND WALL MOUNTED LUMINAIRES

- PENDANT, 70 W HPS UNLESS OTHERWISE SPECIFIED
- FLUSH, 70 W HPS UNLESS OTHERWISE SPECIFIED
- WALL SURFACE, 70 W HPS UNLESS OTHERWISE SPECIFIED
- EXISTING SOFFIT OR WALL LUMINAIRE TO REMAIN UNMODIFIED
- (M) EXISTING SOFFIT OR WALL LUMINAIRE TO BE MODIFIED AS SPECIFIED

NOTE:
Arrow indicates "street side" of luminaire.

COMMONLY USED SYMBOLS FOR UNITED STATES CUSTOMARY UNITS OF MEASUREMENT:

SYMBOL USED	DEFINITIONS
Ω	OHMS
min	MINUTE
s	SECOND
bps	BITS PER SECOND
Bps	BYTES PER SECOND
A	AMPERE
V	VOLT
V(dc)	VOLT (DIRECT CURRENT)
V(ac)	VOLT (ALTERNATING CURRENT)
FC	FOOT - CANDLE
W	WATTS
VA	VOLT-AMPERE
M	MEGA
k	KILO
m	MILLI
μ	MICRO
P	PICO
Hz	HERTZ

MISCELLANEOUS ELECTROLIERS

NEW	EXISTING	
		LUMINAIRE ON WOOD POLE
		NON-STANDARD ELECTROLIER (SEE PROJECT NOTES OR PROJECT PLANS)
		CITY ELECTROLIER
		ELECTROLIER FOUNDATION (FUTURE INSTALLATION)

NOTES:

1. HPS luminaires shall be 310 W HPS when installed on Type 21, 21D, 30, 31 and 32 Standards, unless otherwise specified. HPS luminaires shall be 200 W when installed on other type standards or poles, unless otherwise specified.
2. LED luminaires shall be 235 W when installed on Type 21, 21D, 30, 31 and 32 Standards, unless otherwise specified. LED luminaires shall be 165 W when installed on other type standards or poles, unless otherwise specified.
3. Luminaires shall be the cutoff type, ANSI Type III medium cutoff lighting distribution, unless otherwise specified.

STANDARD ELECTROLIER

NEW	EXISTING	STANDARD TYPE
		15
		15D
S	S	15 STRUCTURE
S	S	15D STRUCTURE
		21
		21D
		21 STRUCTURE
		21D STRUCTURE
		30
		31
		32

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

ELECTRICAL SYSTEMS (LEGEND AND ABBREVIATIONS)

NO SCALE

RSP ES-1A DATED JULY 19, 2013 SUPERSEDES STANDARD PLAN ES-1A DATED MAY 20, 2011 - PAGE 425 OF THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP ES-1A

2010 REVISED STANDARD PLAN RSP ES-1A

7-15-13

CONDUIT

NEW	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
R	r	CONDUIT RISER ATTACHED TO THE STRUCTURE OR SERVICE POLE

SERVICE EQUIPMENT

NEW	EXISTING	
OH	oh	OVERHEAD LINES
U	U	WOOD POLE, "U" INDICATES UTILITY OWNED
		POLE GUY WITH ANCHOR
		UTILITY TRANSFORMER - GROUND MOUNTED
III	III	SERVICE EQUIPMENT ENCLOSURE TYPE. DOOR INDICATES FRONT OF ENCLOSURE
T	t	TELEPHONE DEMARCATION CABINET

POLE-MOUNTED SERVICE DESIGNATION

TYPE H SERVICE, 28'-10" — TYPE OF INSTALLATION AND POLE HEIGHT ABOVE GRADE

FLASHING BEACON

NEW	EXISTING	
R	R	FLASHING BEACON (ONE VEHICLE SIGNAL HEAD WITH BACKPLATE AND VISOR) "R" INDICATES RED INDICATION, "Y" INDICATES YELLOW INDICATION
Y Y	Y Y	FLASHING BEACON WITH TYPE 15-FBS STANDARD AND A SIGN.
R R	R R	FLASHING BEACON WITH TYPES 9, 9A OR 9B SIGN UNLESS OTHERWISE SPECIFIED OR INDICATED

SIGNAL EQUIPMENT

NEW	EXISTING	
C	C	PEDESTRIAN SIGNAL HEAD "C" INDICATES COUNTDOWN PEDESTRIAN HEAD
		PUSH BUTTON ASSEMBLY POST
		PEDESTRIAN BARRICADE
		VEHICLE SIGNAL HEAD (WITH BACKPLATE AND 3-SECTIONS: RED, YELLOW AND GREEN)
		VEHICLE SIGNAL HEAD WITH ANGLE VISOR
PV	PV	MODIFICATIONS OF BASIC SYMBOL: "L" INDICATES ALL NON-ARROW SECTIONS LOUVERED "LG" INDICATES LOUVERED GREEN SECTION ONLY "PV" INDICATES ALL 12" SECTIONS PROGRAMMED VISIBILITY "8" INDICATES ALL 8" SECTIONS (ONLY WHEN SPECIFIED)
		VEHICLE SIGNAL HEAD CONSISTING OF RED, YELLOW AND GREEN LEFT ARROW SECTIONS
		VEHICLE SIGNAL HEAD CONSISTING OF RED AND YELLOW SECTIONS WITH AN UP GREEN ARROW SECTION
		VEHICLE SIGNAL HEAD (5 SECTION) CONSISTING OF RED, YELLOW AND GREEN SECTIONS WITH YELLOW AND GREEN RIGHT ARROW SECTIONS
		TYPE 15TS STANDARD WITH VEHICLE SIGNAL HEAD AND LUMINAIRE
		TYPE 21TS STANDARD WITH VEHICLE SIGNAL HEAD AND LUMINAIRE
		STANDARD WITH LUMINAIRE AND SIGNAL MAST ARMS AND ATTACHED VEHICLE SIGNAL HEADS
		TYPE 1 STANDARD WITH ATTACHED VEHICLE SIGNAL HEADS
		STANDARD WITH A SIGNAL MAST ARM, ATTACHED VEHICLE SIGNAL HEADS AND INTERNALLY ILLUMINATED STREET NAME SIGN
		CONTROLLER ASSEMBLY. DOOR INDICATES FRONT OF CABINET

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	805	4.4/5.5	36	38

Theresa Gabriel
REGISTERED ELECTRICAL ENGINEER

Theresa Aziz Gabriel No. E15129 Exp. 6-30-14 ELECTRICAL — REGISTERED PROFESSIONAL ENGINEER — STATE OF CALIFORNIA

July 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 09-02-14

SIGNAL EQUIPMENT Cont

NEW	EXISTING	
		GUARD POST
		TYPE 1 STANDARD WITH RAMP METERING SIGN
		OPTICAL DETECTOR FOR THE EMERGENCY VEHICLE DETECTION SYSTEM

NOTES:

1. All signal sections shall be 12" unless shown otherwise.
2. Signal heads shall be provided with backplates unless shown otherwise.

ILLUMINATED OVERHEAD SIGN

NEW	EXISTING	
		SINGLE POST, SINGLE ILLUMINATED SIGN, BALANCED BUTTERFLY
		SINGLE POST, DOUBLE ILLUMINATED SIGN, BALANCED BUTTERFLY
		SINGLE POST, SINGLE ILLUMINATED SIGN, FULL CANTILEVER
		DOUBLE POST, SINGLE ILLUMINATED SIGN
		SINGLE ILLUMINATED SIGN MOUNTED ON STRUCTURE
		DOUBLE POST, SINGLE ILLUMINATED SIGN WITH ELECTROLIER

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

ELECTRICAL SYSTEMS (LEGEND AND ABBREVIATIONS)

NO SCALE

RSP ES-1B DATED JULY 19, 2013 SUPERSEDES STANDARD PLAN ES-1B DATED MAY 20, 2011 - PAGE 426 OF THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP ES-1B

2010 REVISED STANDARD PLAN RSP ES-1B

7-15-13

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	SD	805	4.4/5.5	37	38

Theresa Gabriel
REGISTERED ELECTRICAL ENGINEER

July 19, 2013
PLANS APPROVAL DATE

Theresa Aziz Gabriel No. E15129 Exp. 6-30-14 ELECTRICAL — REGISTERED PROFESSIONAL ENGINEER — STATE OF CALIFORNIA

TO ACCOMPANY PLANS DATED 09-02-14

EQUIPMENT IDENTIFICATION

ILLUMINATED SIGN IDENTIFICATION NUMBER:

SIGN No. 12345
10 ISL SCI 1.0

- SIGN NUMBER - PLACE ON POST OR STRUCTURE
- TRANSFORMER RATING (kVA)
- LIGHTING CONTROL TYPE
- NUMBER AND TYPE OF FIXTURES

DO NOT PLACE ON STANDARD OR STRUCTURE

ELECTROLIER OR EQUIPMENT IDENTIFICATION NUMBER:

12345 - 15'-0"

- MAST ARM LENGTH, IF SHOWN. DO NOT PLACE ON STANDARD OR STRUCTURE
- EQUIPMENT NUMBER - PLACE ON STANDARD OR STRUCTURE. EXISTING EQUIPMENT NUMBERS ARE SHOWN IN PARENTHESIS

CONDUIT AND CONDUCTOR IDENTIFICATION:

1½"C, 2#10, 15#14, 2 DLC, 12P#18 (PAIR)

- NUMBER AND SIZE OF CONDUCTORS AND CABLES
- SIZE OF CONDUIT IN INCHES
- ø1, ø2, ø2P, etc. — TRAFFIC PHASE IDENTIFICATION FOR SIGNAL FACES, DETECTORS AND PHASE DIAGRAMS
- 1 2 3 — LEGEND NUMBERS
- (A) (B) (C) — EQUIPMENT, SIGNAL POLES, INSTALLATION OR ITEMS
- 1 2 3 — CONDUIT RUN NUMBERS

SIGNAL AND LIGHTING STANDARD (TYPICAL DESIGNATION):

19A - 3 - 100

- WIND VELOCITY = 100 mph
- CASE 3 ARM LOADING
- STANDARD TYPE
- STANDARD PLAN SHEET NUMBER
- DETAIL, NUMBER, SECTION, TYPE OR ELEVATION

MISCELLANEOUS EQUIPMENT

NEW	EXISTING	
CMS	cms	CHANGEABLE MESSAGE SIGN
		CLOSED CIRCUIT TELEVISION CAMERA
		HIGHWAY ADVISORY RADIO POLE AND ANTENNA
EMS	ems	EXTINGUISHABLE MESSAGE SIGN
M V	m v	DETECTION DEVICE M = MICROWAVE SENSOR V = VIDEO IMAGE SENSOR

WIRING DIAGRAM LEGEND

- EXTERNAL CONDUCTOR
- CONDUCTOR OR BUS
- TIE POINT
- CONTACTOR COIL
- CONTACTOR, NO CONTACT
- TERMINAL BLOCKS
- CONTACTOR, NC CONTACT
- ENCLOSURE BOND
- GROUNDING ELECTRODE
- CIRCUIT BREAKER
- RECEPTACLE

PULL BOXES

NEW	EXISTING	
		PULL BOX, No. 5 UNLESS OTHERWISE INDICATED OR NOTED
3	9A(21)	PULL BOX, ADDITIONAL DESIGNATIONS OR DESCRIPTIONS

3 No. 3½ PULL BOX
5 No. 5 PULL BOX
6 No. 6 PULL BOX
7 No. 7 (CEILING PULL BOX)
8 No. 8 (PENDANT SOFFIT PULL BOX)
9 No. 9 PULL BOX
9A No. 9A PULL BOX

(C) COMMUNICATIONS PULL BOX
(E) PULL BOX WITH EXTENSION
(S) SPRINKLER CONTROL PULL BOX
(21) ANCHOR BOLTS AND CONDUIT FOR FUTURE INSTALLATION OF TYPE 21 STANDARD
(T) TRAFFIC PULL BOX

VEHICLE DETECTORS

5 J 9 U

- VEHICLE DETECTOR DESIGNATION
- U = UPPER, L = LOWER
- SLOT NUMBER IN INPUT FILE
- INPUT FILE (I OR J)
- PHASE

NEW	EXISTING	
		TYPE A DETECTOR LOOP. OUTLINE OF SAWCUT SHOWN
		TYPE B DETECTOR LOOP. OUTLINE OF SAWCUT SHOWN
		TYPE C DETECTOR LOOP. OUTLINE OF SAWCUT SHOWN
		TYPE D DETECTOR LOOP. OUTLINE OF SAWCUT SHOWN
		TYPE E DETECTOR LOOP. OUTLINE OF SAWCUT SHOWN
		TYPE Q DETECTOR LOOP. OUTLINE OF SAWCUT SHOWN
		MAGNETIC DETECTOR
DH	dh	DETECTOR HANDHOLE
		MICROWAVE OR VIDEO DETECTION ZONE

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

ELECTRICAL SYSTEMS (LEGEND AND ABBREVIATIONS)

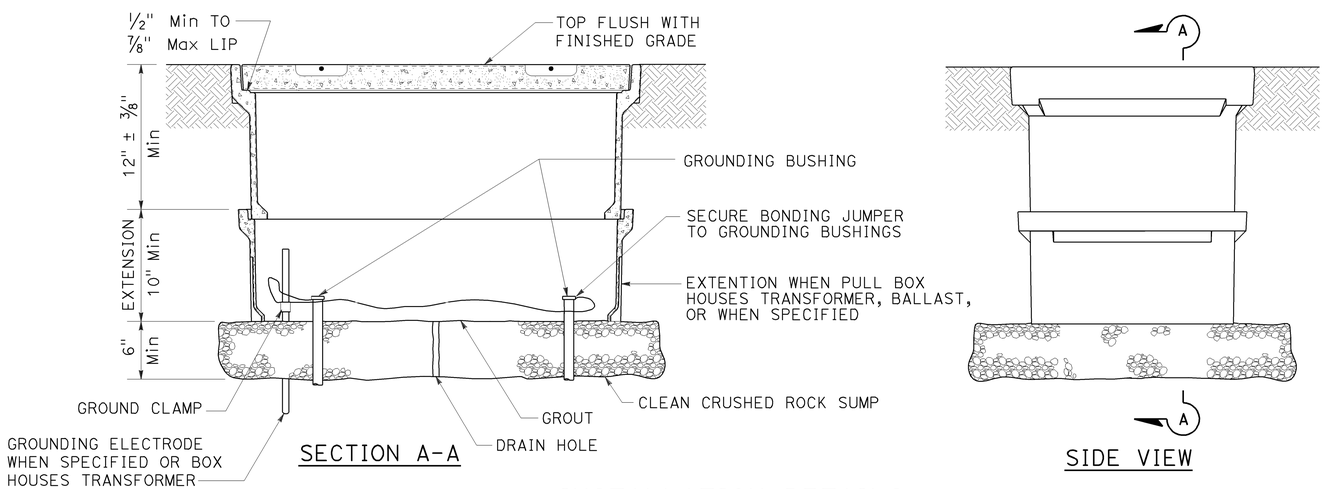
NO SCALE

RSP ES-1C DATED JULY 19, 2013 SUPERSEDES STANDARD PLAN ES-1C DATED MAY 20, 2011 - PAGE 427 OF THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP ES-1C

2010 REVISED STANDARD PLAN RSP ES-1C

7-11-13

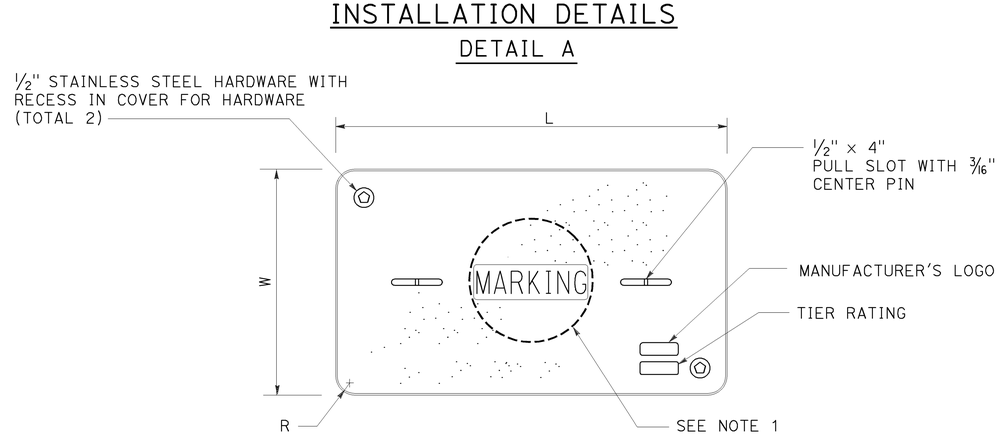


SECTION A-A

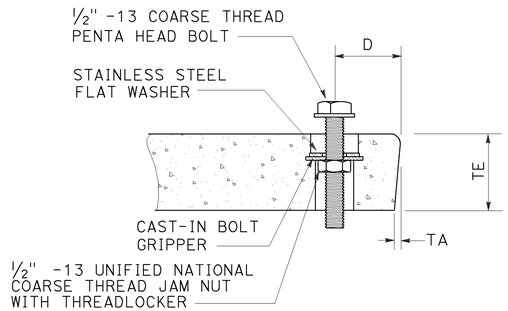
SIDE VIEW

INSTALLATION DETAILS

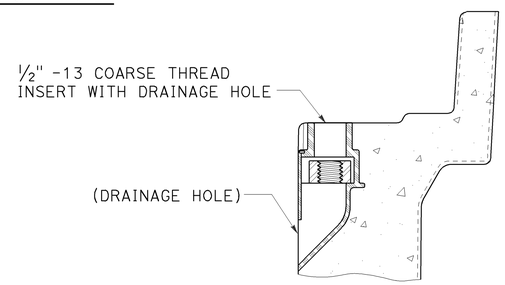
DETAIL A



COVER TOP VIEW



TYPICAL COVER CAPTIVE BOLT
OR SIMILAR



TYPICAL THREADED INSERT
OR SIMILAR

DIMENSION TABLE

PULL BOX	PULL BOX			COVER						
	MINIMUM DEPTH BOX	MINIMUM DEPTH EXTENSION	MAXIMUM WEIGHT	L	W	R	TE	TA	D	MAXIMUM WEIGHT
No. 3½	12"	N/A	40 lb	1′ - 3⅜"	10⅛"	1⅜"	2"	⅛"	1¾"	30 lb
No. 5	12"	10"	55 lb	1′ - 11¼"	1′ - 1¾"	1⅜"	2"	⅛"	1¾"	60 lb
No. 6	12"	10"	70 lb	2′ - 6½"	1′ - 5½"	1⅜"	2"	⅛"	2"	85 lb

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
11	SD	805	4.4/5.5	38	38

Theresa Gabriel
REGISTERED ELECTRICAL ENGINEER

Theresa Aziz Gabriel
No. E15129
Exp. 6-30-14
ELECTRICAL
REGISTERED PROFESSIONAL ENGINEER
STATE OF CALIFORNIA

July 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 09-02-14

NOTES:

1. Pull box covers shall be marked as follows: "SERVICE" Service circuits between service point and service disconnect; "SPRINKLER-CONTROL" sprinkler control circuits, 50 V or less; "CALTRANS" on all pull boxes, except pull boxes marked "SPRINKLER-CONTROL"; and "TELEPHONE" Telephone service;

   A) No. 3½ pull box.
      1) "SIGNAL" - Traffic signal circuits with or without lighting or sign lighting circuits.
      2) "LIGHTING" - Lighting or sign lighting circuits where voltage is under 600 V.

   B) No. 5, 6, 9 or 9A pull box.
      1) "TRAFFIC SIGNAL" - Traffic signal circuits with or without lighting or sign lighting circuits.
      2) "LIGHTING" - Lighting or sign lighting circuits where voltage is under 600 V.
      3) "LIGHTING-HIGH VOLTAGE" - Lighting or sign lighting circuits where voltage is above 600 V.
      4) "IRRIGATION" - Circuits to irrigation controller 120 V or more.
      5) "RAMP METER" - Ramp meter circuits.
      6) "COUNT STATION" - Count or speed monitor circuits.
      7) "COMMUNICATIONS" - Communication circuits.
      8) "TOS COMMUNICATIONS" - TOS communication line.
      9) "TOS POWER" - TOS power.
      10) "TDC POWER" - Telephone demarcation cabinet power.
      11) "CCTV" - Closed circuit television circuits.
      12) "TMS" - Traffic monitoring station circuits.
      13) "CMS" - Changeable message sign circuits.
      14) "HAR" - Highway advisory radio circuits.
      15) "BOOSTER PUMP" - Booster pump circuit.

2. The nominal dimensions of the opening in which the cover sets shall be the same as the cover dimensions except the length and width dimensions shall be ⅛" greater.
3. Covers and boxes shall be interchangeable with California standard male and female gages. When interchanged with a standard male or female gage, the top surfaces shall be flush within ⅛". Top outside radius of covers and pull boxes shall have a ⅛" radius.
4. Pull box extension may be another pull box as long as the bottom edge of the pull box can fit into the cover opening.
5. All dimensions for the cover for non-traffic pull box are nominal values.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

ELECTRICAL SYSTEMS (NON-TRAFFIC PULL BOX)

NO SCALE

RSP ES-8A DATED JULY 19, 2013 SUPERSEDES RSP ES-8A DATED JANUARY 20, 2012 THAT SUPPLEMENTS THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP ES-8A

2010 REVISED STANDARD PLAN RSP ES-8A

7-15-13