

INDEX OF PLANS

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

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

DEM05-6211(125)E

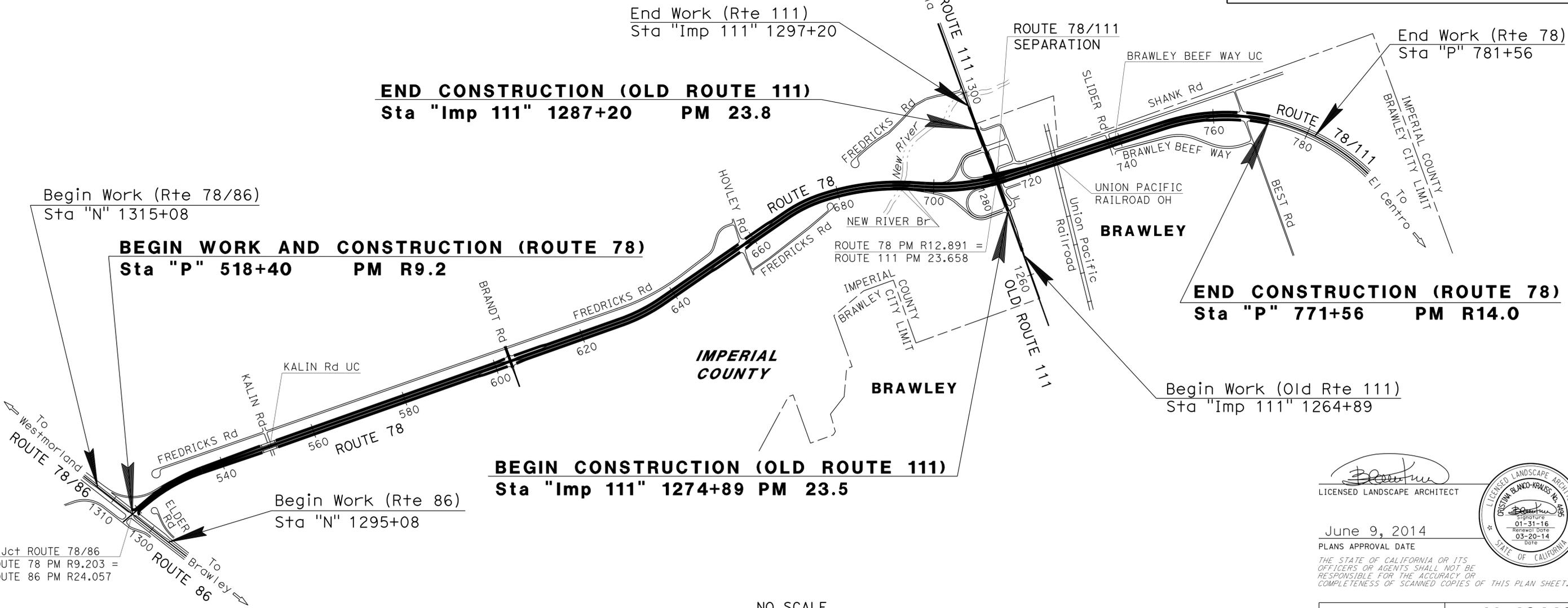
PROJECT PLANS FOR CONSTRUCTION ON
STATE HIGHWAY
IN IMPERIAL COUNTY IN AND NEAR BRAWLEY
ON ROUTE 78 AT VARIOUS LOCATIONS FROM
ROUTE 86 TO 0.1 MILE EAST OF BEST ROAD
AND ON OLD ROUTE 111 FROM 0.2 MILE SOUTH
TO 0.1 MILE NORTH OF ROUTE 78/111 SEPARATION

TO BE SUPPLEMENTED BY STANDARD PLANS DATED 2010

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	Imp	78, 111	R9.2/R14.0, 23.5/23.8	1	63



IMPERIAL COUNTY



PROJECT MANAGER
SAM AMEN

SENIOR LANDSCAPE ARCHITECT
STEPHEN ALVAREZ

S Jct ROUTE 78/86
ROUTE 78 PM R9.203 =
ROUTE 86 PM R24.057

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

NO SCALE

[Signature]
LICENSED LANDSCAPE ARCHITECT

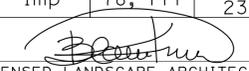
June 9, 2014
PLANS APPROVAL DATE

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.



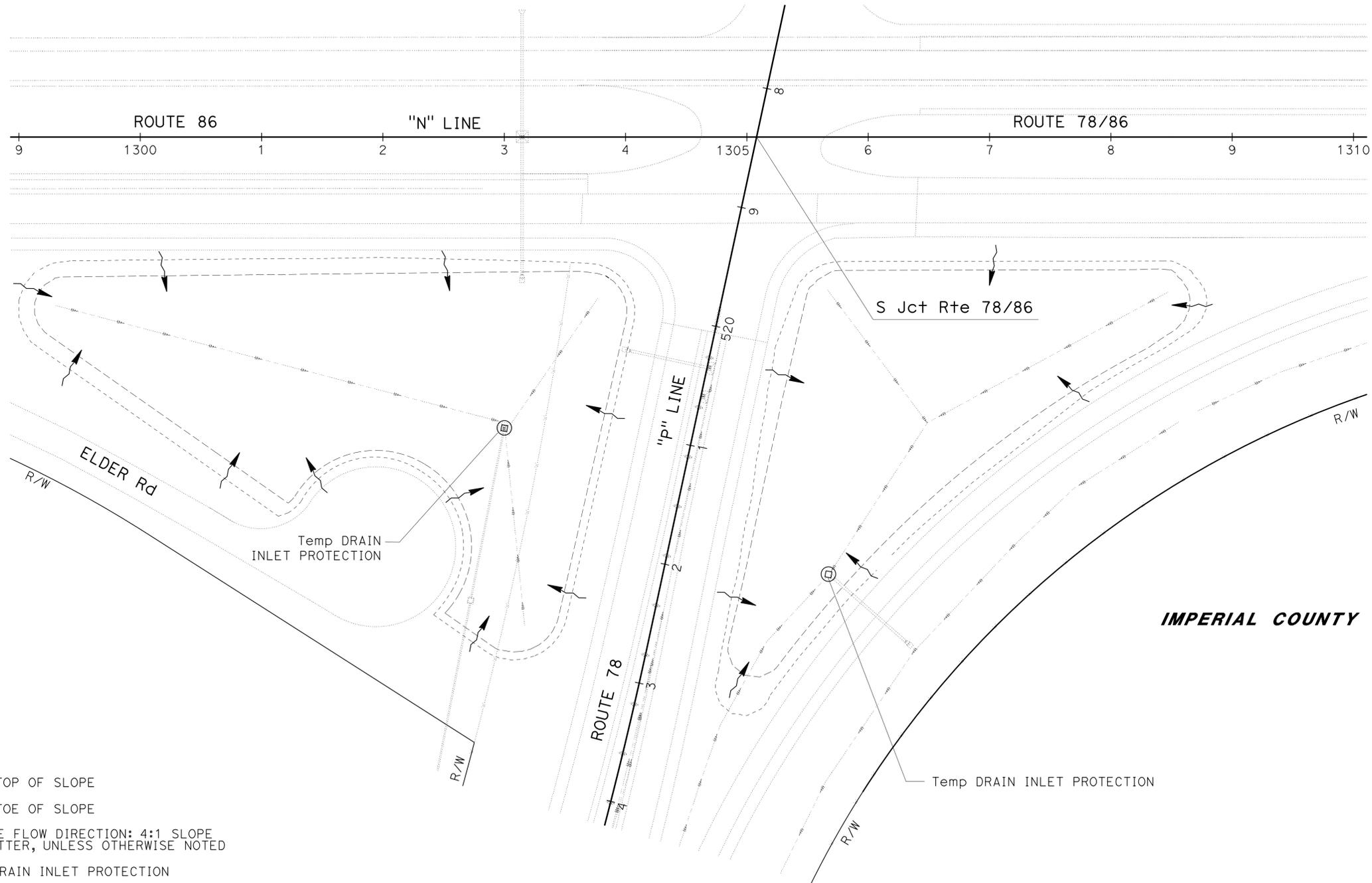
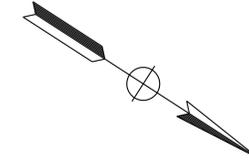
CONTRACT No.	11-404404
PROJECT ID	1100020352

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	Imp	78, 111	R9.2/R14.0, 23.5/23.8	3	63

 LICENSED LANDSCAPE ARCHITECT		
06-09-14 PLANS APPROVAL DATE		
<small>THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.</small>		

NOTES:

1. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
2. FIBER ROLLS IS THE ONLY PERMANENT ITEM OF WORK.
3. FOR LOCATION OF FIBER ROLLS TYPE B (TREE BASIN PROTECTION) SEE PLANTING SHEET PP-3.



LEGEND:

-  Exist TOP OF SLOPE
-  Exist TOE OF SLOPE
-  SURFACE FLOW DIRECTION: 4:1 SLOPE OR FLATTER, UNLESS OTHERWISE NOTED
-  Temp DRAIN INLET PROTECTION
-  Temp CONSTRUCTION ENTRANCE (TYPE 2)

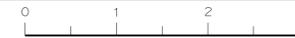
WATER POLLUTION CONTROL PLAN

APPROVED FOR WATER POLLUTION CONTROL WORK ONLY

SCALE: 1" = 50'

W-1

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	CRISTINA BLANCO-KRAUSS	REVISER BY
Caltrans LANDSCAPE ARCHITECTURE	BETH HALL	DATE REVISED
SENIOR LANDSCAPE ARCHITECT		
STEPHEN ALVAREZ		
CALCULATED/DESIGNED BY		
CHECKED BY		



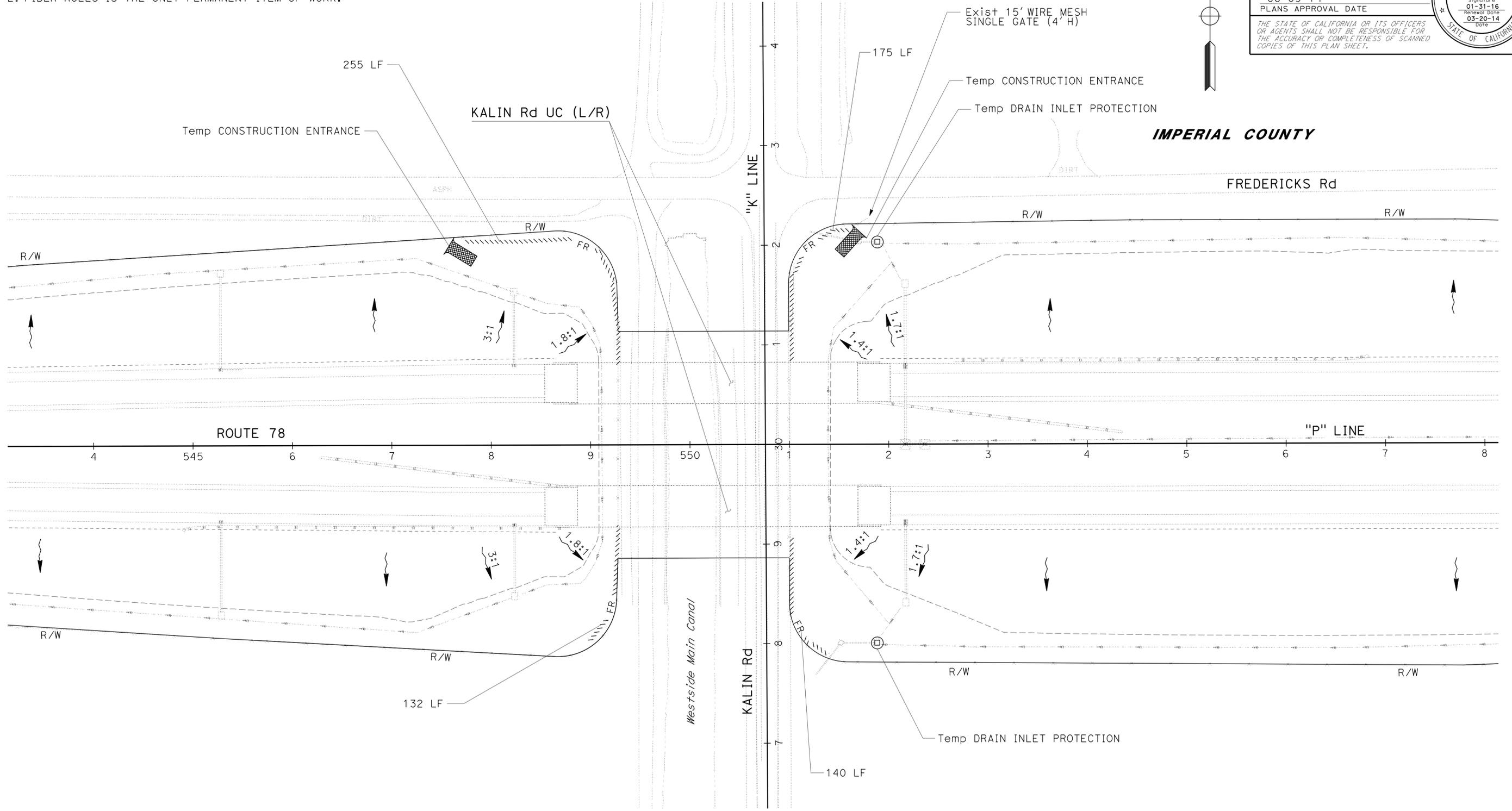
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans LANDSCAPE ARCHITECTURE
 SENIOR LANDSCAPE ARCHITECT: STEPHEN ALVAREZ
 CALCULATED/DESIGNED BY: CHECKED BY:
 CRISTINA BLANCO-KRAUSS BETH HALL
 REVISED BY: DATE REVISED:

NOTES:

- FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
- FIBER ROLLS IS THE ONLY PERMANENT ITEM OF WORK.

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	Imp	78, 111	R9.2/R14.0, 23.5/23.8	4	63

LICENSED LANDSCAPE ARCHITECT
 Signature: [Signature]
 06-09-14
 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
 CRISTINA BLANCO-KRAUSS No. 10595
 Signature: [Signature]
 01-31-16
 Renewal Date
 03-20-14
 DGE
 STATE OF CALIFORNIA



IMPERIAL COUNTY

APPROVED FOR WATER POLLUTION CONTROL WORK ONLY

WATER POLLUTION CONTROL PLAN

SCALE: 1" = 50'

W-2

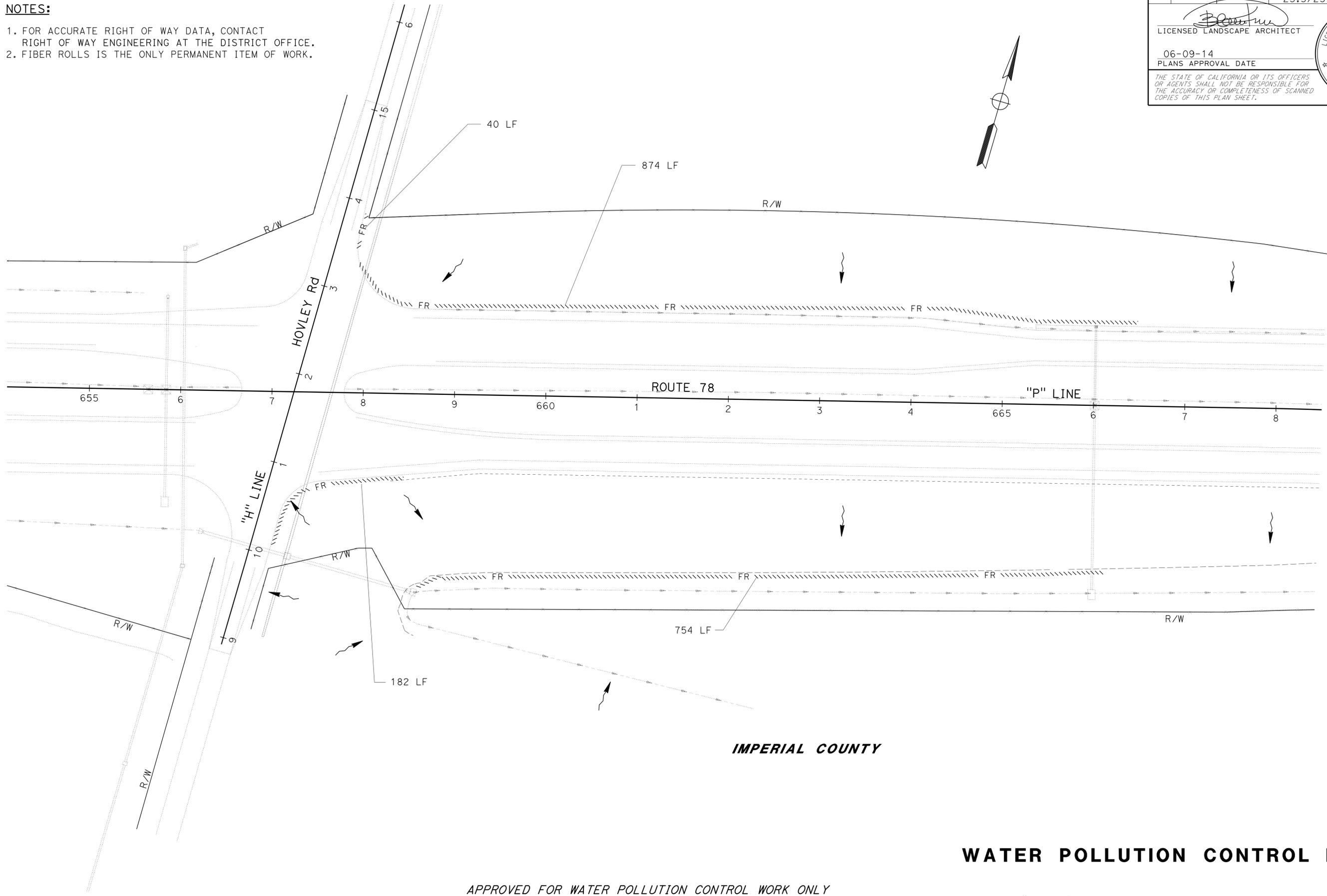
LAST REVISION: DATE PLOTTED => 09-JUN-2014 TIME PLOTTED => 14:18

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	Imp	78, 111	R9.2/R14.0, 23.5/23.8	5	63


 LICENSED LANDSCAPE ARCHITECT
 06-09-14
 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.



- NOTES:**
1. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
 2. FIBER ROLLS IS THE ONLY PERMANENT ITEM OF WORK.



STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans LANDSCAPE ARCHITECTURE
 SENIOR LANDSCAPE ARCHITECT: STEPHEN ALVAREZ
 CALCULATED/DESIGNED BY: CHECKED BY:
 CRISTINA BLANCO-KRAUSS BETH HALL
 REVISED BY: DATE REVISED:

APPROVED FOR WATER POLLUTION CONTROL WORK ONLY

WATER POLLUTION CONTROL PLAN

SCALE: 1" = 50'

W-3

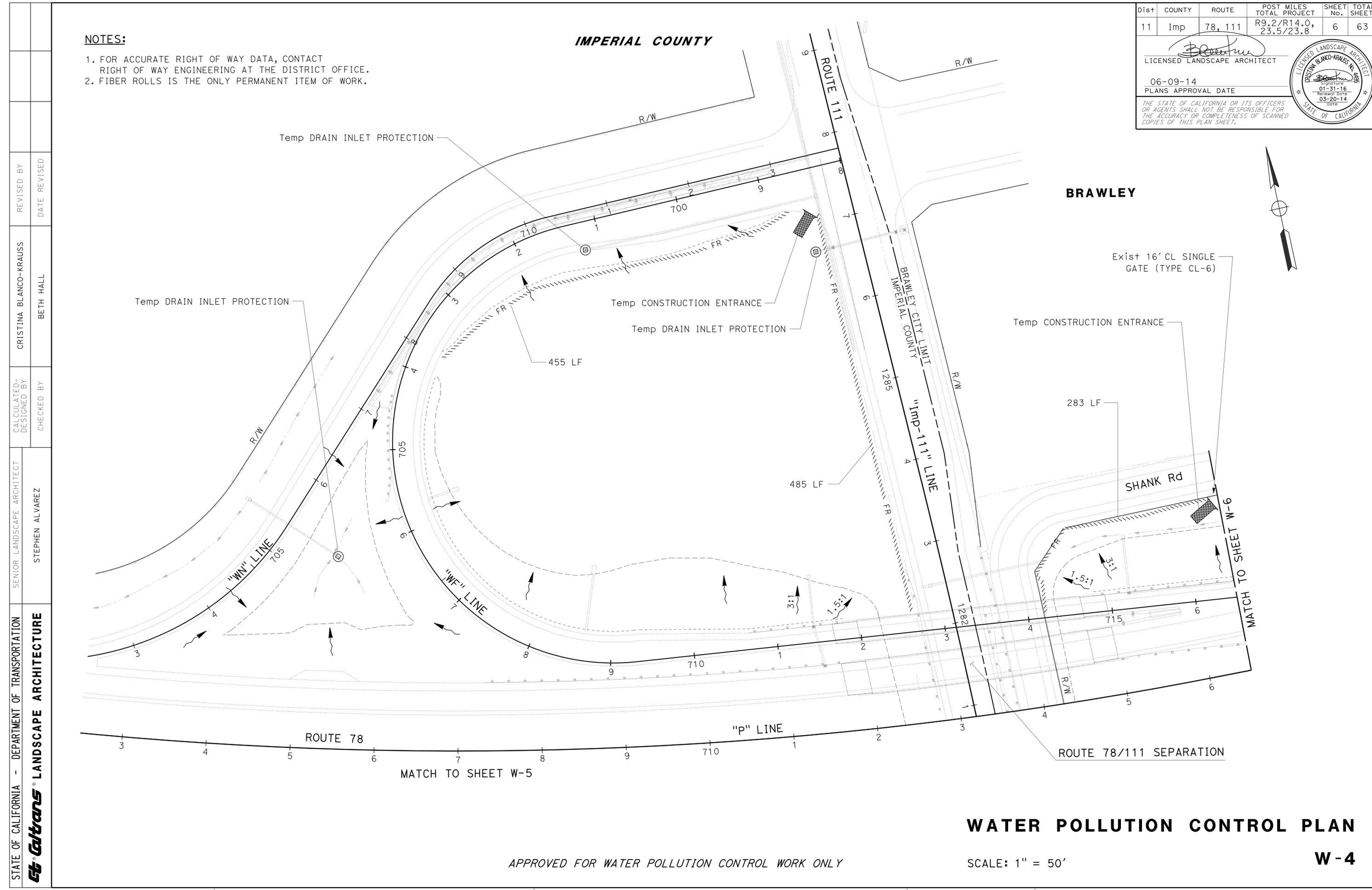
LAST REVISION DATE PLOTTED => 09-JUN-2014 04-01-14 TIME PLOTTED => 14:18

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	Imp	78, 111	R9.2/R14.0, 23.5/23.8	6	63

LICENSED LANDSCAPE ARCHITECT
 06-09-14
 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.

NOTES:

- FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
- FIBER ROLLS IS THE ONLY PERMANENT ITEM OF WORK.



STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	SENIOR LANDSCAPE ARCHITECT	CALCULATED/DESIGNED BY	REVISOR
Caltrans LANDSCAPE ARCHITECTURE	STEPHEN ALVAREZ	CHECKED BY	DATE
		CRISTINA BLANCO-KRAUSS	BETH HALL
			DATE

APPROVED FOR WATER POLLUTION CONTROL WORK ONLY

WATER POLLUTION CONTROL PLAN

SCALE: 1" = 50'

W-4

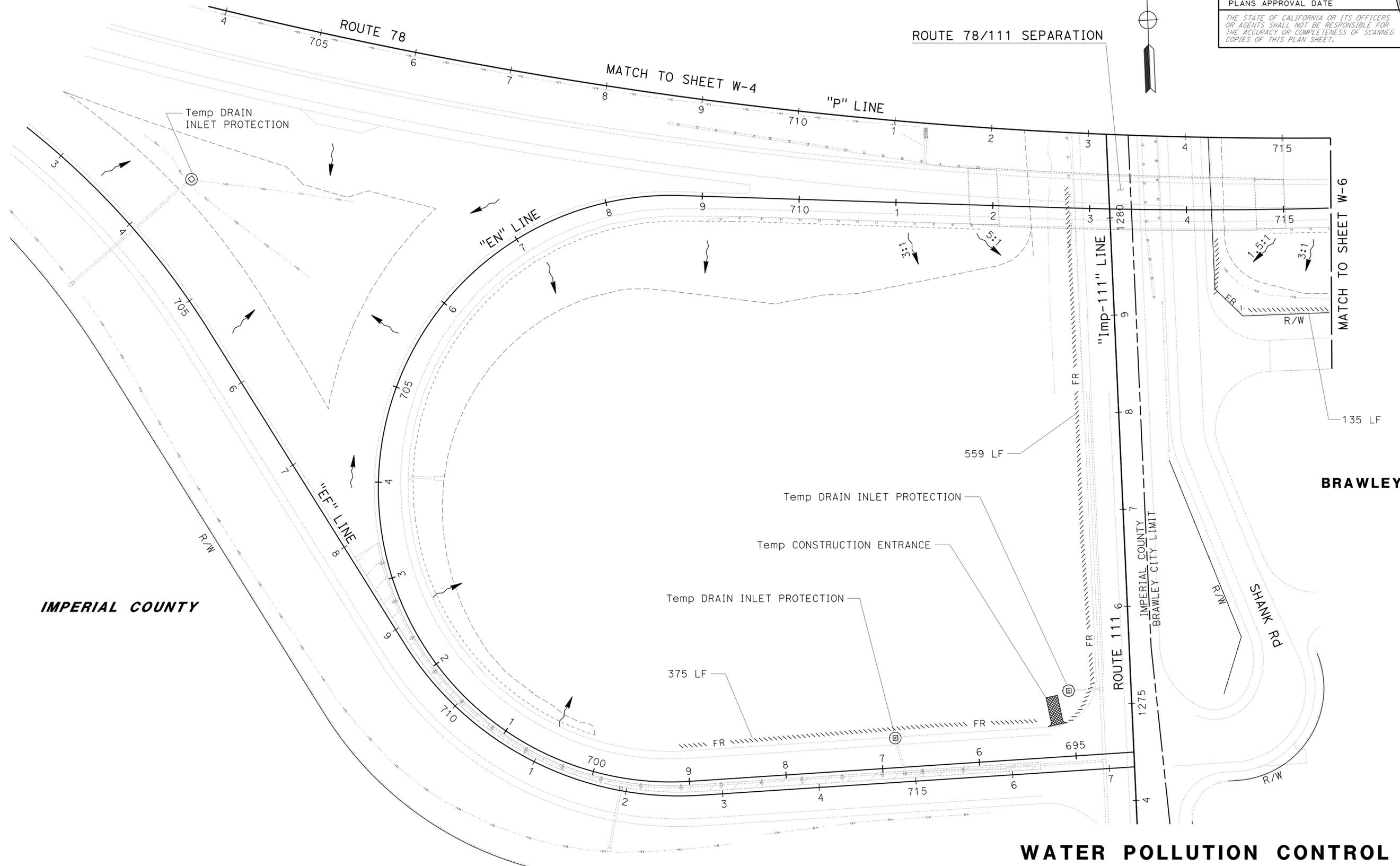
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Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	Imp	78, 111	R9.2/R14.0, 23.5/23.8	7	63

 LICENSED LANDSCAPE ARCHITECT		
06-09-14 PLANS APPROVAL DATE		
<small>THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.</small>		

NOTES:

1. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
2. FIBER ROLLS IS THE ONLY PERMANENT ITEM OF WORK.



STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	SENIOR LANDSCAPE ARCHITECT	DESIGNED BY	REVISOR
Caltrans LANDSCAPE ARCHITECTURE	STEPHEN ALVAREZ	CHECKED BY	DATE
		CRISTINA BLANCO-KRAUSS	BETH HALL

APPROVED FOR WATER POLLUTION CONTROL WORK ONLY

WATER POLLUTION CONTROL PLAN
W-5

SCALE: 1" = 50'

LAST REVISION DATE PLOTTED => 09-JUN-2014 04-01-14 TIME PLOTTED => 14:18

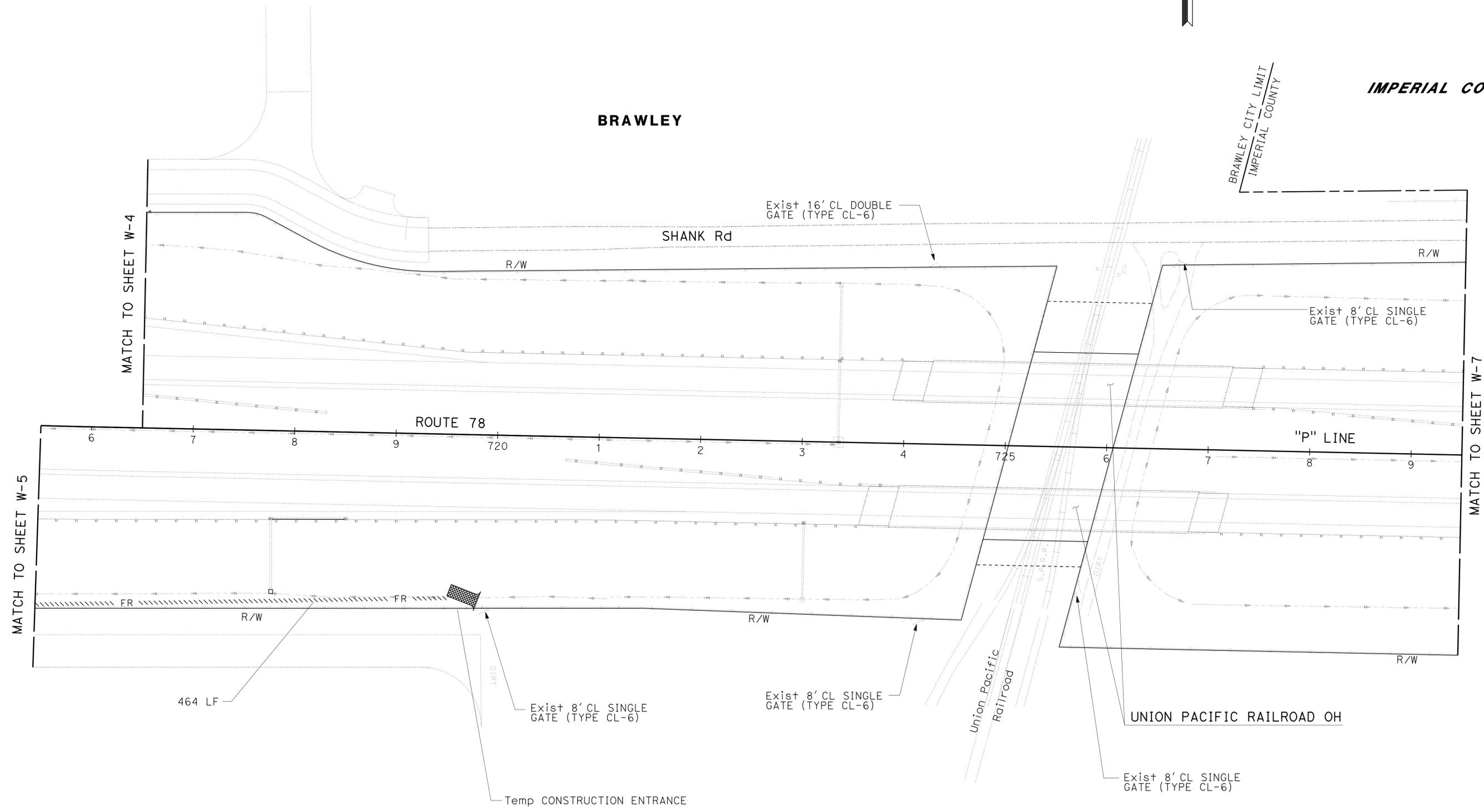
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans LANDSCAPE ARCHITECTURE
 SENIOR LANDSCAPE ARCHITECT: STEPHEN ALVAREZ
 CALCULATED/DESIGNED BY: CHECKED BY:
 CRISTINA BLANCO-KRAUSS BETH HALL
 REVISED BY: DATE REVISED:

NOTES:

1. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
2. FIBER ROLLS IS THE ONLY PERMANENT ITEM OF WORK.

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	Imp	78, 111	R9.2/R14.0, 23.5/23.8	8	63

LICENSED LANDSCAPE ARCHITECT
 CRISTINA BLANCO-KRAUSS No. 10596
 Signature: [Signature]
 06-09-14
 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.



BRAWLEY CITY LIMIT
 IMPERIAL COUNTY
IMPERIAL COUNTY

WATER POLLUTION CONTROL PLAN

W-6

APPROVED FOR WATER POLLUTION CONTROL WORK ONLY

SCALE: 1" = 50'

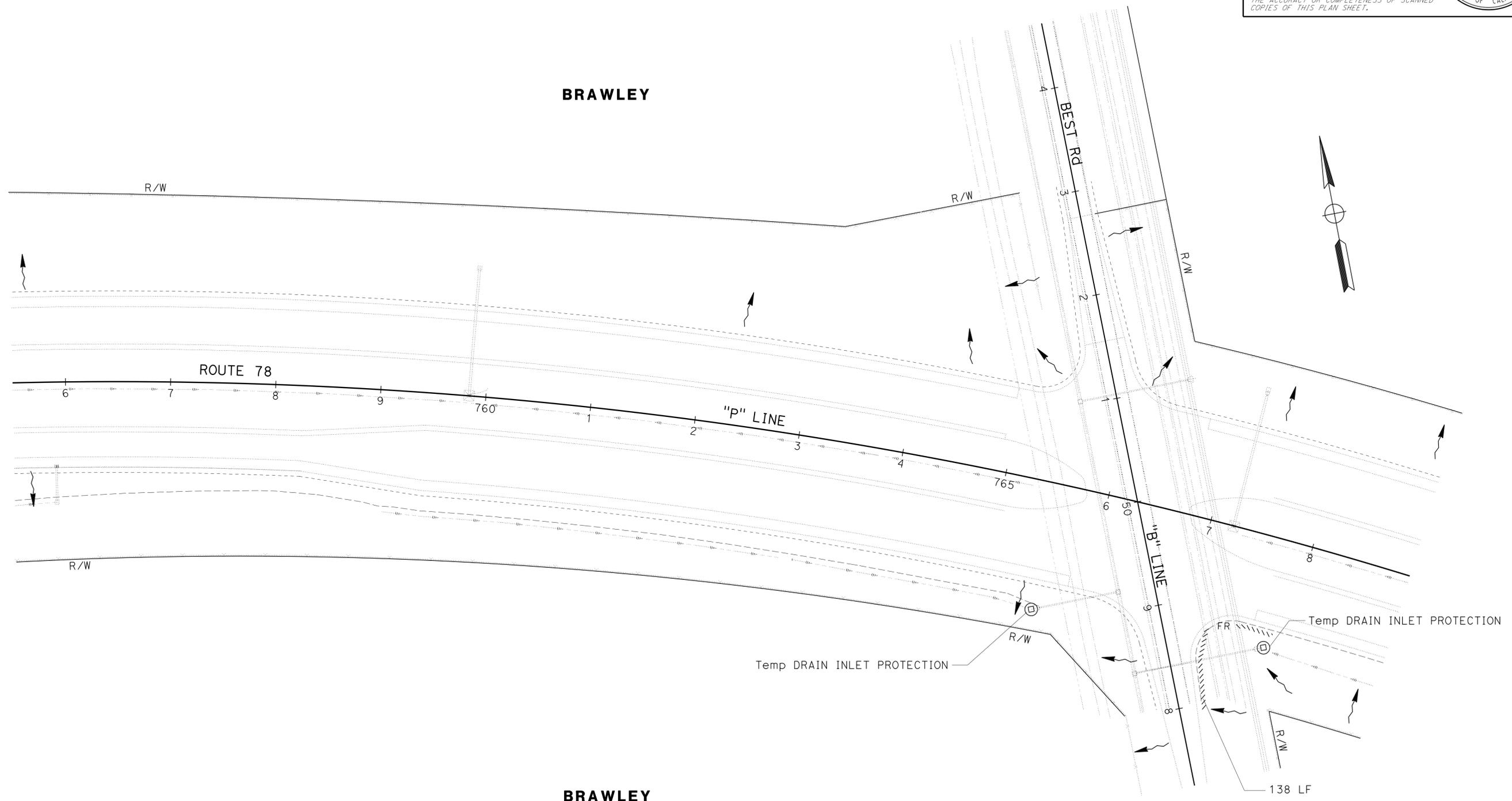
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	Imp	78, 111	R9.2/R14.0, 23.5/23.8	10	63

 LICENSED LANDSCAPE ARCHITECT		
06-09-14 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.

NOTES:

1. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
2. FIBER ROLLS IS THE ONLY PERMANENT ITEM OF WORK.



BRAWLEY

BRAWLEY

WATER POLLUTION CONTROL PLAN

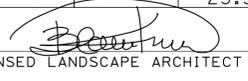
W-8

APPROVED FOR WATER POLLUTION CONTROL WORK ONLY

SCALE: 1" = 50'

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	SENIOR LANDSCAPE ARCHITECT	CALCULATED/DESIGNED BY	CRISTINA BLANCO-KRAUSS	REVISED BY	
Caltrans LANDSCAPE ARCHITECTURE	STEPHEN ALVAREZ	CHECKED BY	BETH HALL	DATE REVISED	

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	Imp	78, 111	R9.2/R14.0, 23.5/23.8	11	63


 LICENSED LANDSCAPE ARCHITECT
 06-09-14
 PLANS APPROVAL DATE



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

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans LANDSCAPE ARCHITECTURE
 SENIOR LANDSCAPE ARCHITECT
 CRISTINA BLANCO-KRAUSS
 BETH HALL
 CHECKED BY
 DESIGNED BY
 REVISIONS: 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, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100

WATER POLLUTION CONTROL QUANTITIES

SHEET	FIBER ROLLS	FIBER ROLLS *	TEMPORARY CONSTRUCTION ENTRANCE	TEMPORARY DRAIN INLET PROTECTION
	TYPE A (LF)	TYPE B (LF)	TYPE 2 (EA)	(EA)
W-1	-	-	-	2
W-2	702	-	2	2
W-3	1,850	-	-	-
W-4	1,223	-	2	3
W-5	1,069	-	1	3
W-6	464	-	1	-
W-7	1,108	-	4	-
W-8	138	-	-	2
PP-3	-	225	-	-
SUBTOTAL	6,554	225	10	12
TOTAL	6,779		10	12

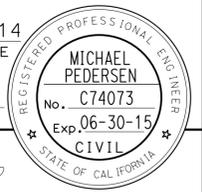
* SEE NOTES ON PP-3 FOR LANDSCAPE FIBER ROLLS REQUIREMENTS.

WATER POLLUTION CONTROL QUANTITIES

WQ-1

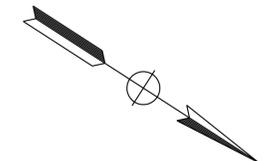
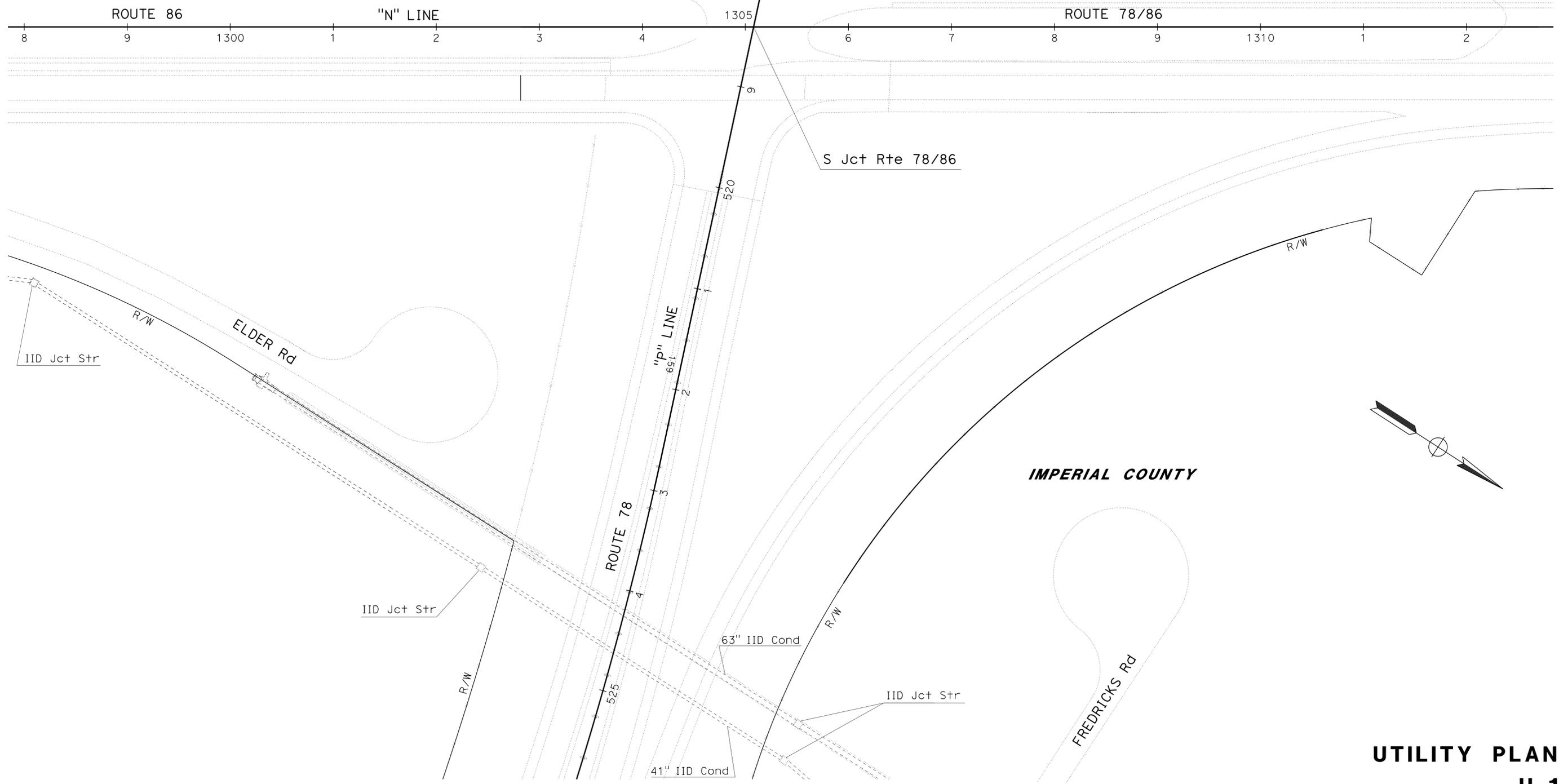
LAST REVISION: 04-01-14 DATE PLOTTED => 09-JUN-2014 TIME PLOTTED => 14:18

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	Imp	78, 111	R9.2/R14.0, 23.5/23.8	12	63
			03-20-14	DATE	
			06-09-14	PLANS APPROVAL DATE	
<small>THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.</small>					



NOTES:

- FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE
- UTILITY OWNERSHIP:
 NATURAL GAS - SOCAL GAS
 ELECTRIC - IMPERIAL IRRIGATION DISTRICT (IID)
 WATER - CITY OF BRAWLEY
 WATER - IID
 SEWER - CITY OF BRAWLEY
 TELEPHONE - ATT
 GAS - SANTA FE PACIFIC PIPELINE



APPROVED FOR UTILITY INFORMATION ONLY

SCALE: 1" = 50'

**UTILITY PLAN
U-1**

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	DESIGN
Caltrans	
FUNCTIONAL SUPERVISOR	ABU-BAKR AL-JAFRI
CALCULATED/DESIGNED BY	CHECKED BY
REVISOR	DATE
MICHAEL PEDERSEN	ARTURO REYES
REVISOR	DATE

LAST REVISION | DATE PLOTTED => 09-JUN-2014
04-02-14 | TIME PLOTTED => 14:18

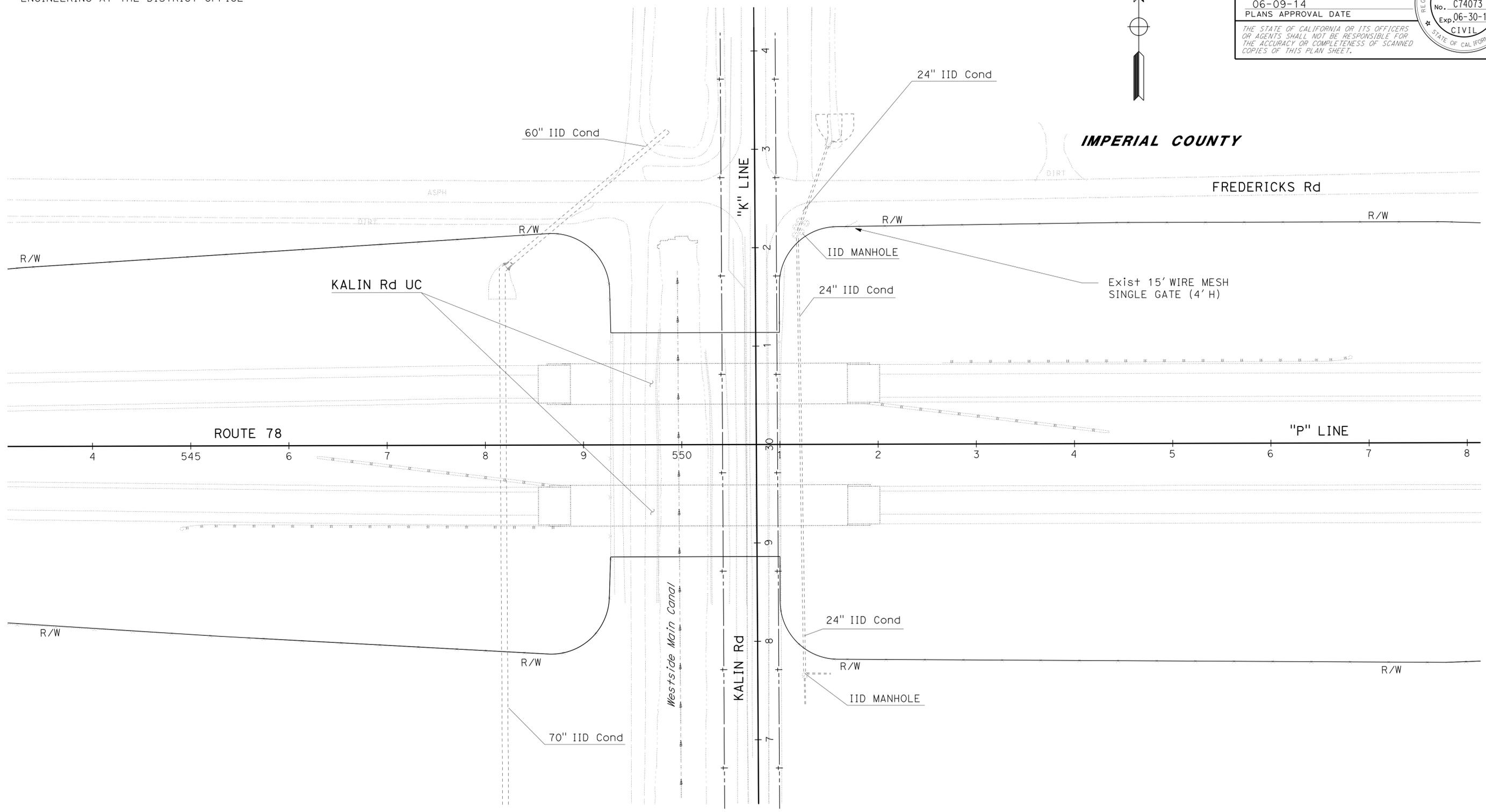
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	Imp	78, 111	R9.2/R14.0, 23.5/23.8	13	63
			03-20-14	DATE	
			06-09-14	PLANS APPROVAL DATE	
REGISTERED CIVIL ENGINEER No. C74073 Exp. 06-30-15 CIVIL STATE OF CALIFORNIA					
<small>THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.</small>					

NOTE:

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



IMPERIAL COUNTY



STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	DESIGN
FUNCTIONAL SUPERVISOR	ABU-BAKR AL-JAFRI
CALCULATED/DESIGNED BY	CHECKED BY
MICHAEL PEDERSEN	ARTURO REYES
REVISOR BY	DATE REVISED

BORDER LAST REVISED 7/2/2010

USERNAME => s127400
DGN FILE => 1100020352ka002.dgn

RELATIVE BORDER SCALE IS IN INCHES

UNIT 2796

PROJECT NUMBER & PHASE

11000203521

UTILITY PLAN
U-2

SCALE: 1" = 50'

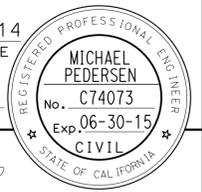
APPROVED FOR UTILITY INFORMATION ONLY

LAST REVISION DATE PLOTTED => 09-JUN-2014
04-02-14 TIME PLOTTED => 14:18

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	Imp	78, 111	R9.2/R14.0, 23.5/23.8	14	63

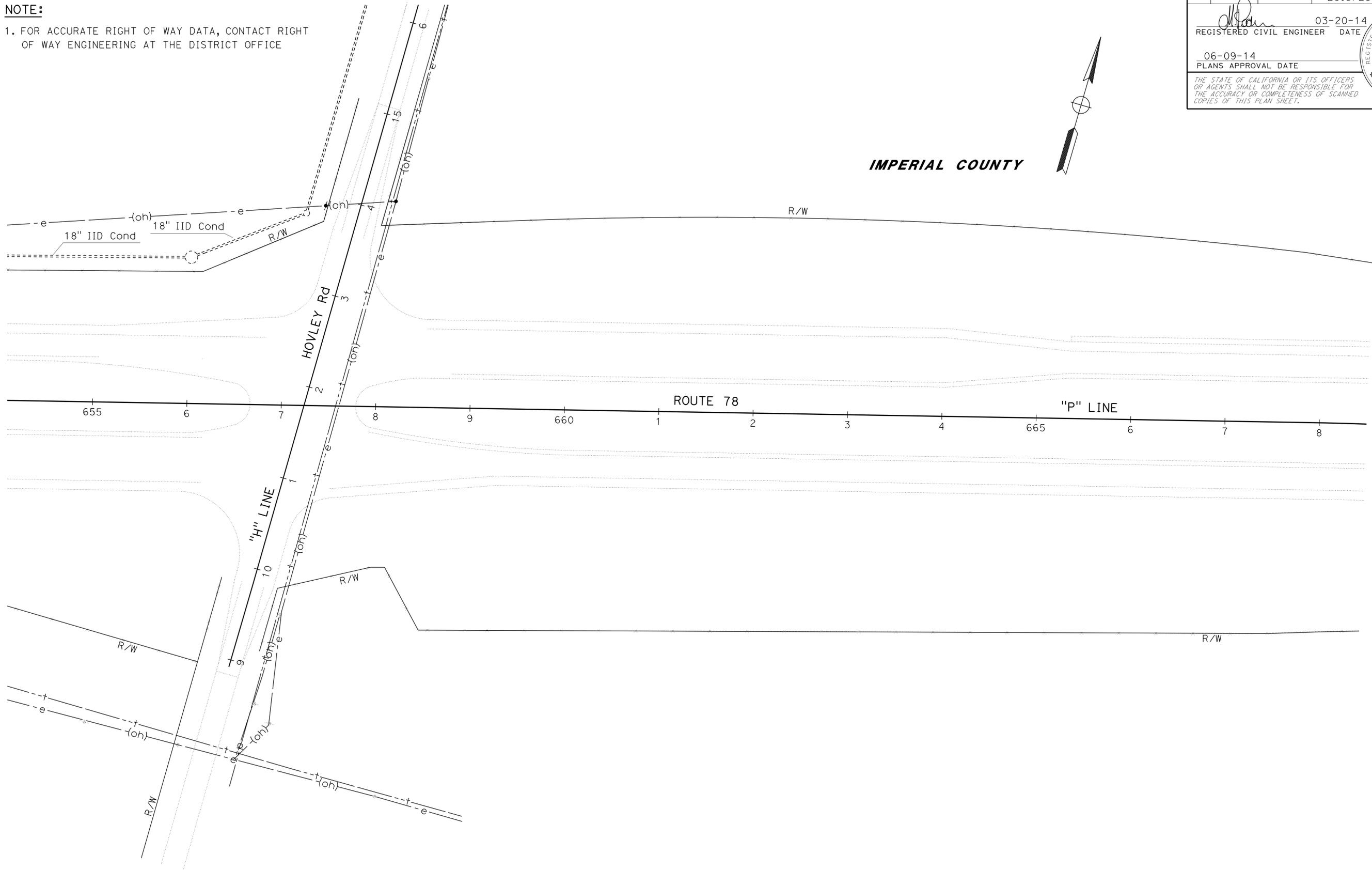
<i>M. Pedersen</i>	03-20-14
REGISTERED CIVIL ENGINEER	DATE
06-09-14	
PLANS APPROVAL DATE	

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.



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

IMPERIAL COUNTY



STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
DESIGN
FUNCTIONAL SUPERVISOR: ABU-BAKR AL-JAFRI
CALCULATED/DESIGNED BY: MICHAEL PEDERSEN
CHECKED BY: ARTURO REYES
REVISED BY: [blank]
DATE REVISED: [blank]

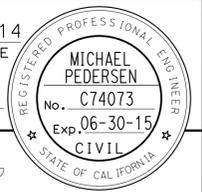
APPROVED FOR UTILITY INFORMATION ONLY

SCALE: 1" = 50'

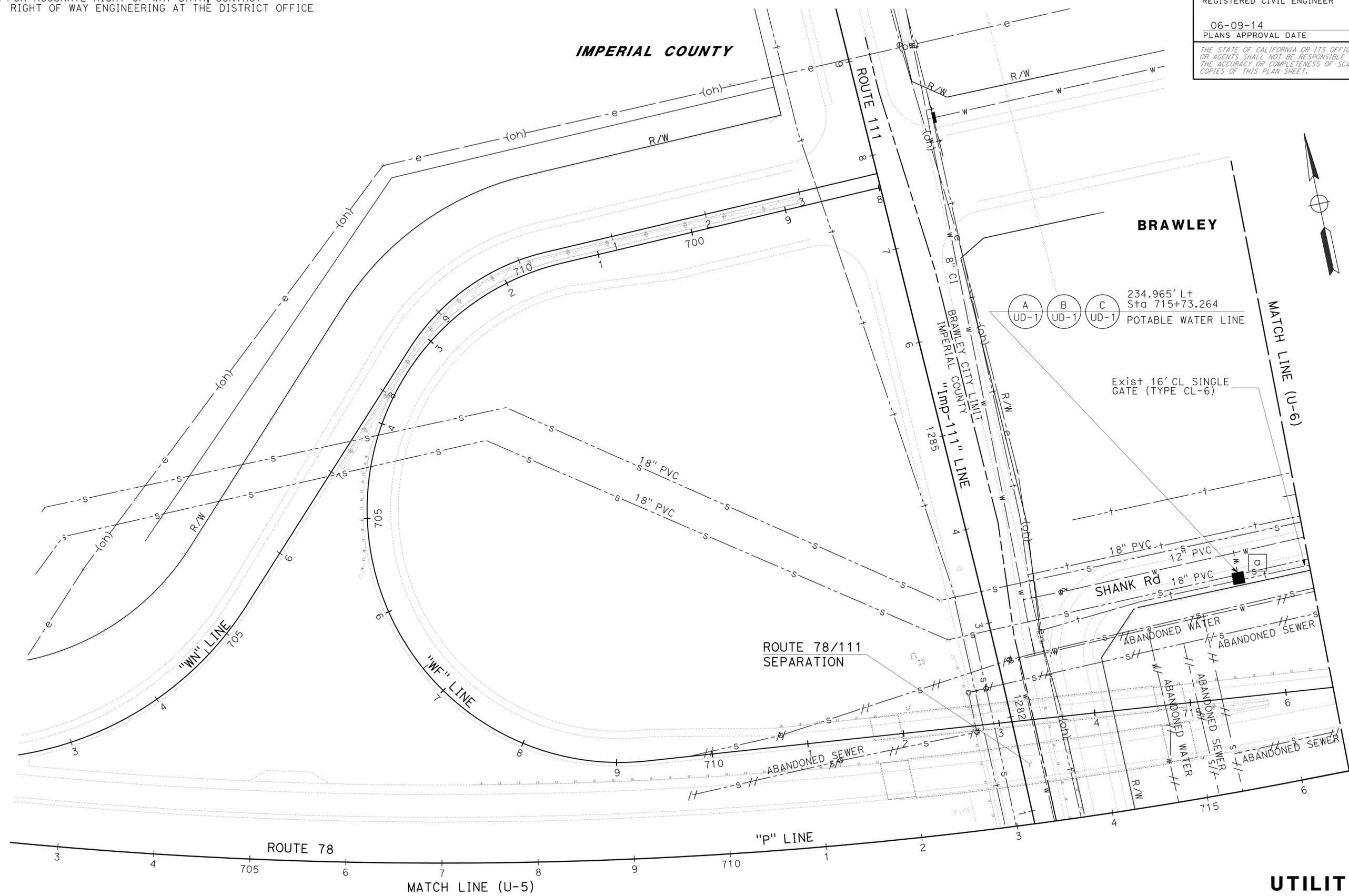
UTILITY PLAN
U-3

LAST REVISION: 04-02-14 DATE PLOTTED => 09-JUN-2014 TIME PLOTTED => 14:18

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	Imp	78, 111	R9.2/R14.0, 23.5/23.8	15	63
			03-20-14	REGISTERED CIVIL ENGINEER DATE	
			06-09-14	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.					



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



STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
 DESIGN

FUNCTIONAL SUPERVISOR
 ABU-BAKR AL-JAFRI

CALCULATED-DESIGNED BY
 CHECKED BY

MICHAEL PEDERSEN
 ARTURO REYES

REVISED BY
 DATE REVISED

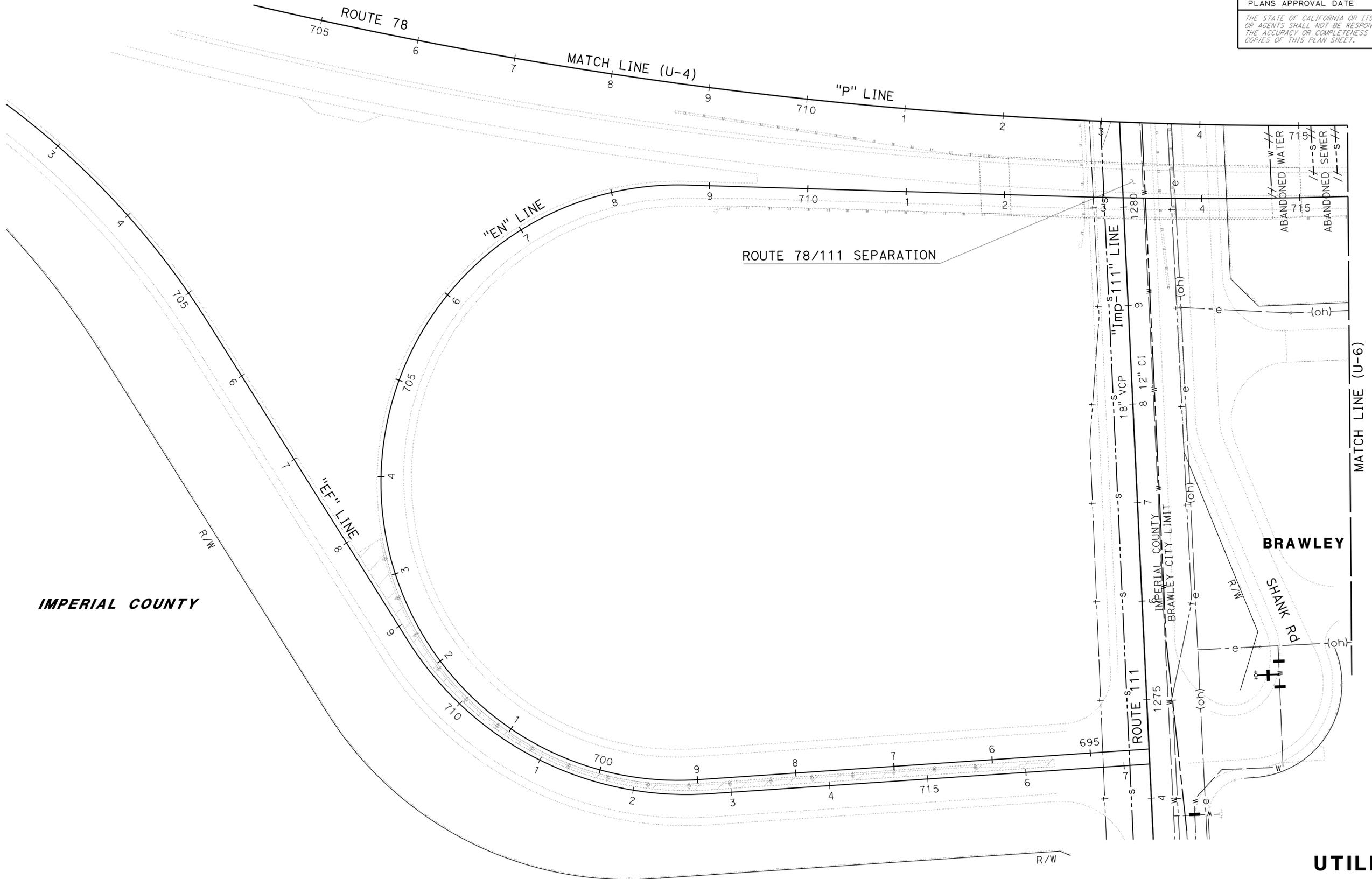
APPROVED FOR UTILITY INFORMATION ONLY

SCALE: 1" = 50'

UTILITY PLAN
U-4

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	Imp	78, 111	R9.2/R14.0, 23.5/23.8	16	63
			03-20-14	DATE	
			06-09-14	PLANS APPROVAL DATE	
REGISTERED CIVIL ENGINEER No. C74073 Exp. 06-30-15 CIVIL					
<small>THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.</small>					

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



STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	DESIGN
Caltrans	
FUNCTIONAL SUPERVISOR	ABU-BAKR AL-JAFRI
CALCULATED/DESIGNED BY	CHECKED BY
MICHAEL PEDERSEN	ARTURO REYES
REVISED BY	DATE REVISED

IMPERIAL COUNTY

BRAWLEY

UTILITY PLAN

U-5

APPROVED FOR UTILITY INFORMATION ONLY

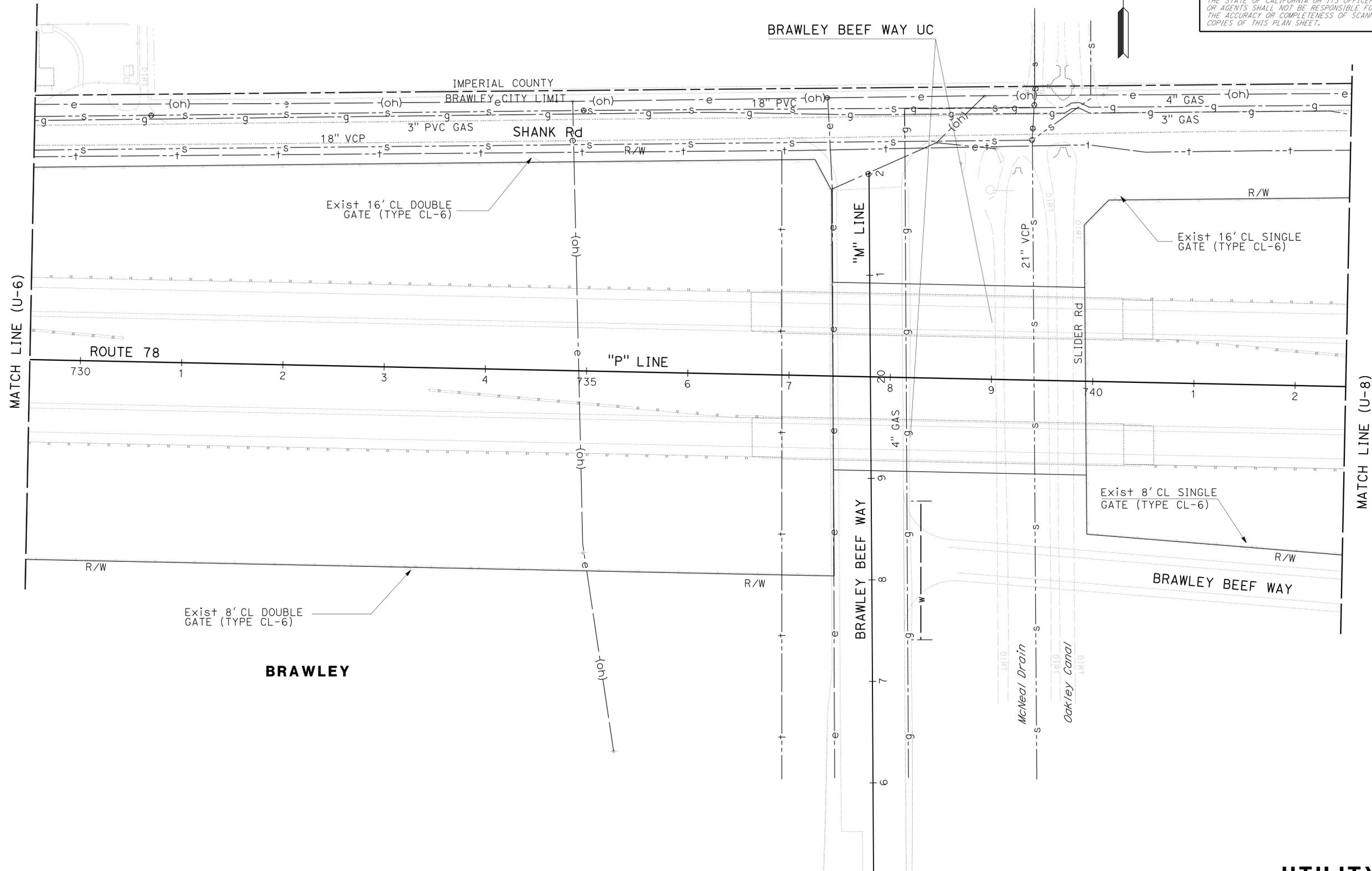
SCALE: 1" = 50'

LAST REVISION DATE PLOTTED => 09-JUN-2014 04-02-14 TIME PLOTTED => 14:18

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	Imp	78, 111	R9.2/R14.0, 23.5/23.8	18	63
			03-20-14	DATE	
			06-09-14	PLANS APPROVAL DATE	
REGISTERED CIVIL ENGINEER No. C74073 Exp. 06-30-15 CIVIL					
<small>THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.</small>					

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

IMPERIAL COUNTY



STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	DESIGN
FUNCTIONAL SUPERVISOR	ABU-BAKR AL-JAFRI
CALCULATED/DESIGNED BY	CHECKED BY
MICHAEL PEDERSEN	ARTURO REYES
REVISOR BY	DATE REVISED

APPROVED FOR UTILITY INFORMATION ONLY

SCALE: 1" = 50'

UTILITY PLAN

U-7

LAST REVISION DATE PLOTTED => 09-JUN-2014
 04-02-14 TIME PLOTTED => 14:18

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans DESIGN

FUNCTIONAL SUPERVISOR
 ABU-BAKR AL-JAFRI

CALCULATED/DESIGNED BY
 CHECKED BY

MICHAEL PEDERSEN
 ARTURO REYES

REVISED BY
 DATE REVISED

NOTE:

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

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	Imp	78, 111	R9.2/R14.0, 23.5/23.8	19	63

03-20-14
 REGISTERED CIVIL ENGINEER DATE

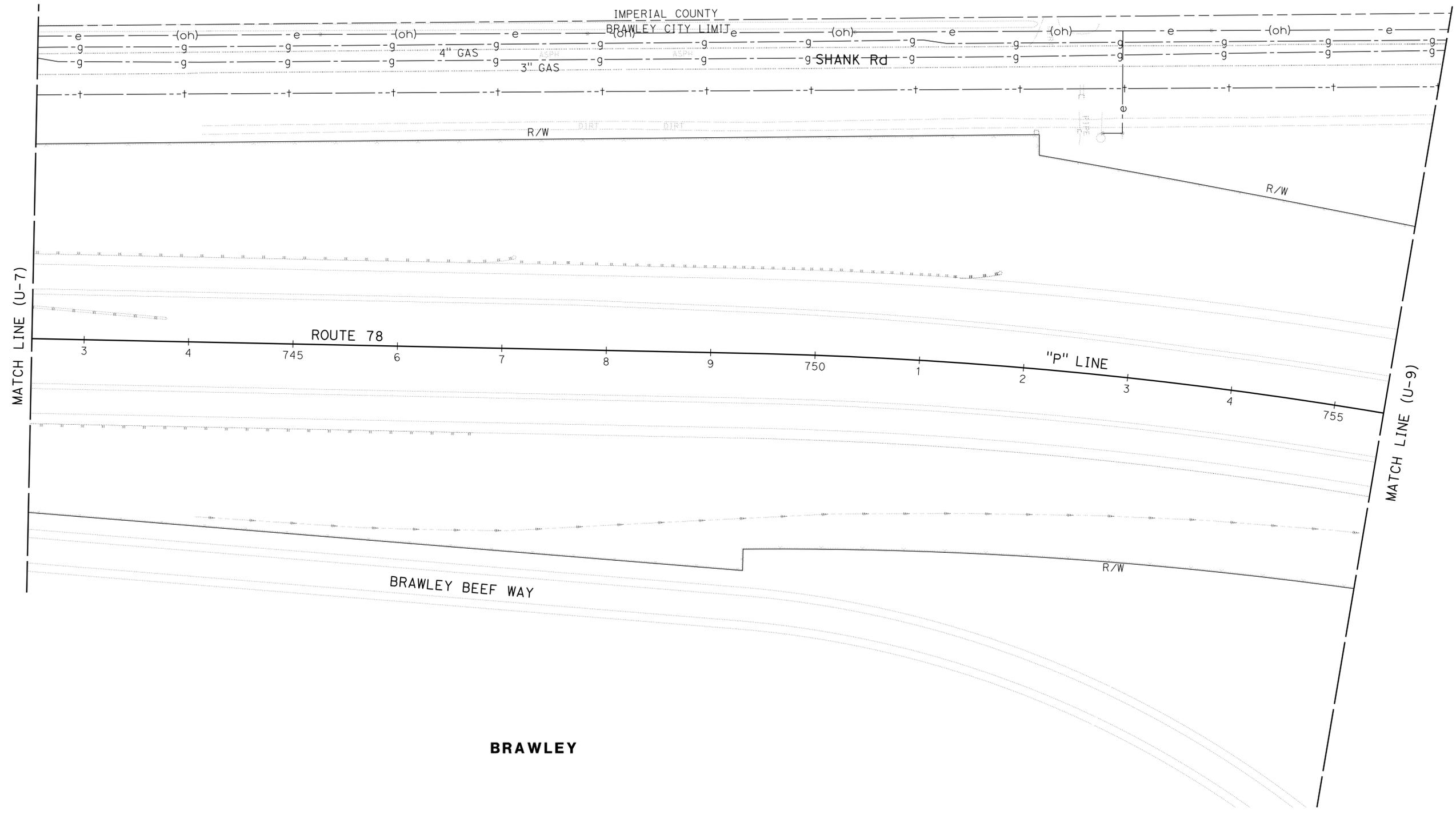
06-09-14
 PLANS APPROVAL DATE

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.



IMPERIAL COUNTY



APPROVED FOR UTILITY INFORMATION ONLY

SCALE: 1" = 50'

UTILITY PLAN

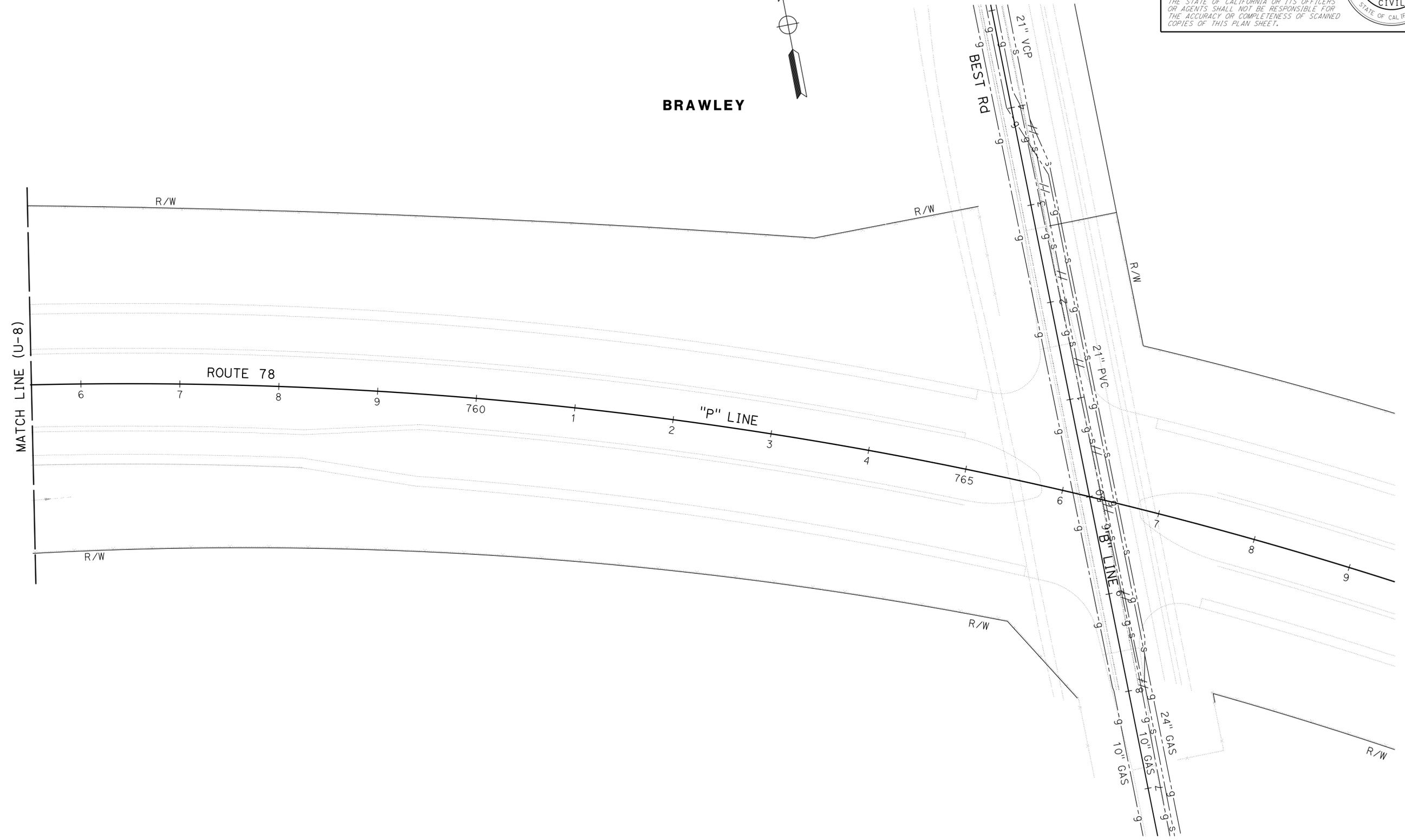
U-8

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	Imp	78, 111	R9.2/R14.0, 23.5/23.8	20	63
			03-20-14	DATE	
			06-09-14	PLANS APPROVAL DATE	
REGISTERED CIVIL 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:

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

BRAWLEY



UTILITY PLAN

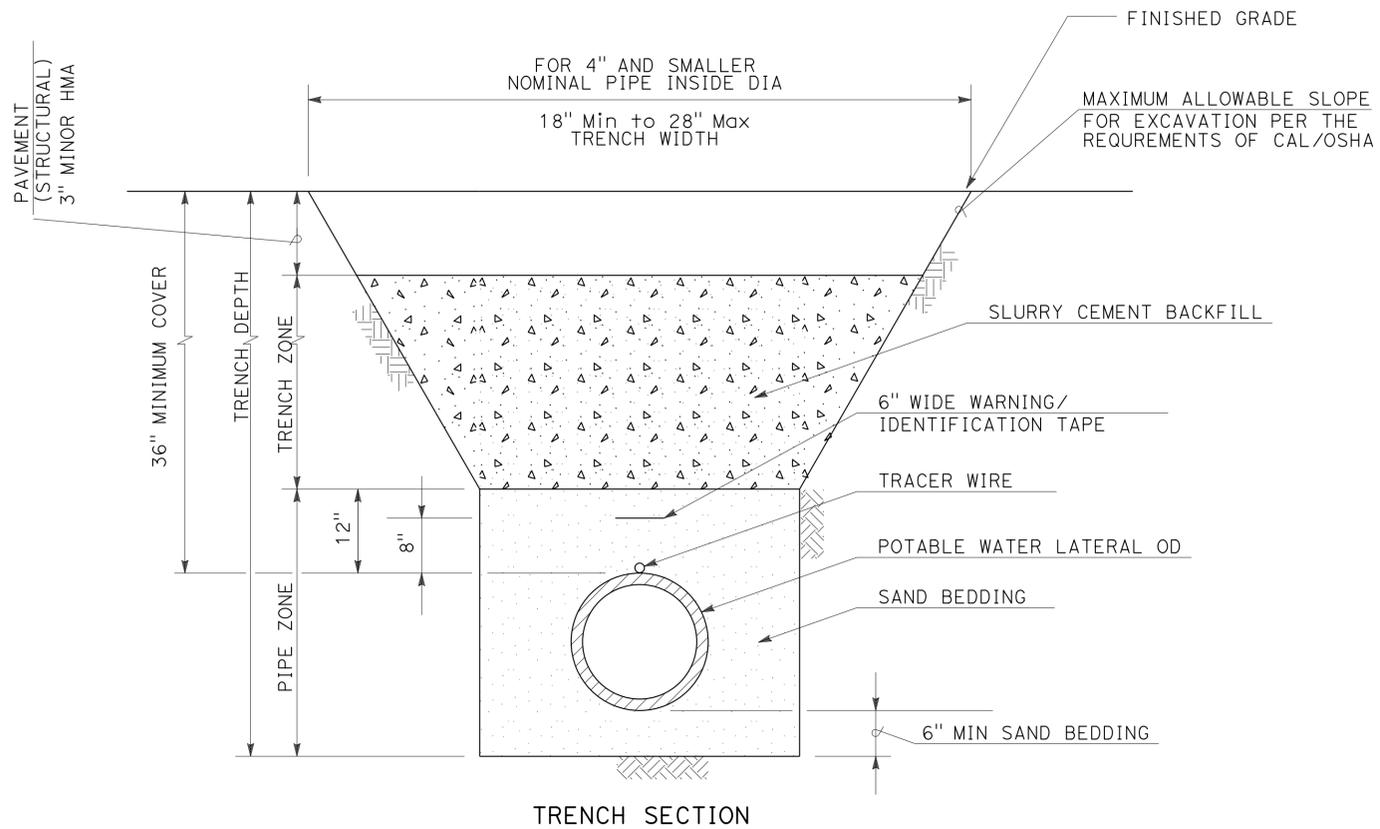
U-9

SCALE: 1" = 50'

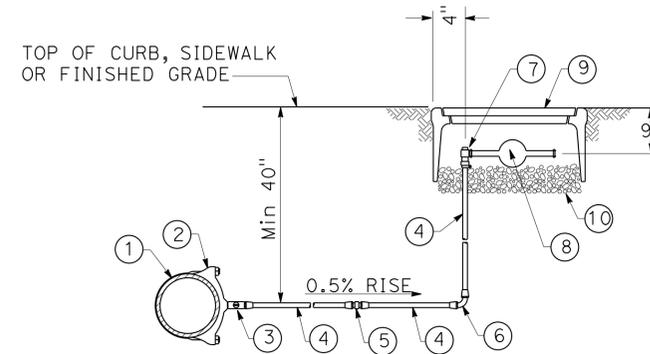
APPROVED FOR UTILITY INFORMATION ONLY

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	FUNCTIONAL SUPERVISOR	CALCULATED/DESIGNED BY	REVISOR
Caltrans	ABU-BAKR AL-JAFRI	CHECKED BY	MICHAEL PEDERSEN
			ARTURO REYES
			DATE REVISED

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	Imp	78, 111	R9.2/R14.0, 23.5/23.8	21	63
			03-20-14	DATE	
			06-09-14	PLANS APPROVAL DATE	
REGISTERED CIVIL ENGINEER 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.					



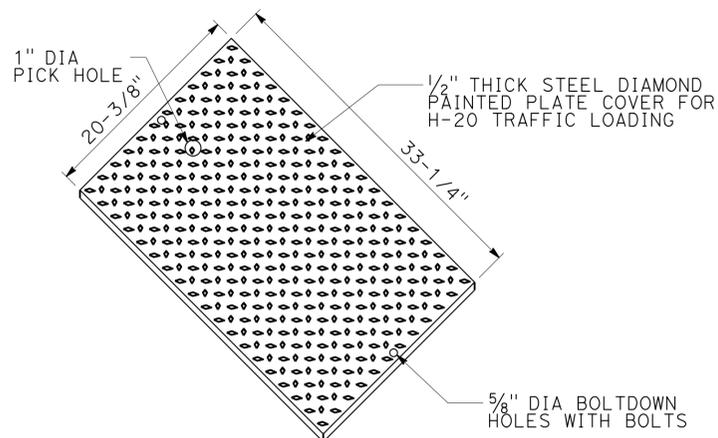
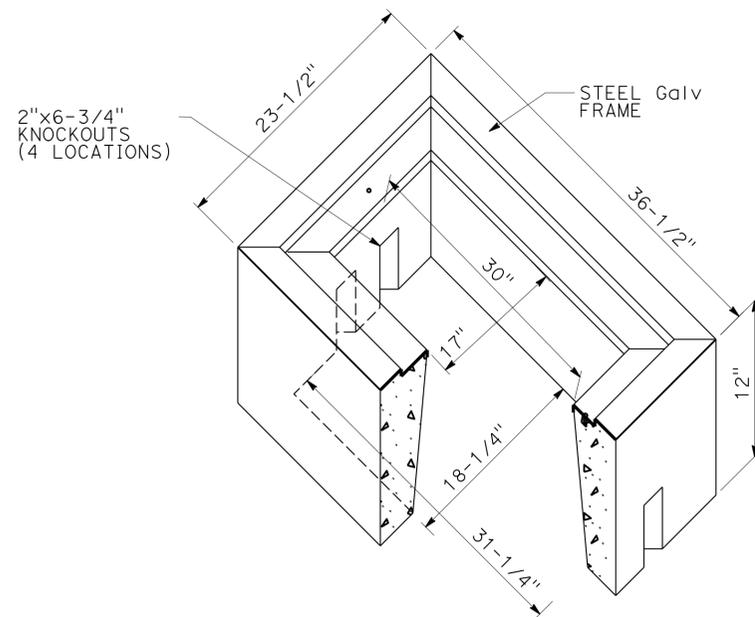
PIPE BEDDING AND TRENCH BACKFILL FOR POTABLE WATER LINE



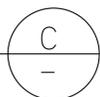
LEGEND:

- ① WATER MAIN
- ② BRONZE SERVICE SADDLE (DOUBLE STRAP) ON POLYVINYL CHLORIDE (PVC) PIPES. WELD-ON COUPLINGS ON STEEL PIPES WITH INSULATING BUSHINGS.
- ③ BRONZE CORPORATION STOP (INSTALLED WITH KEY ON SIDE AND OPEN TAP)
- ④ COPPER TUBING
- ⑤ BRASS COUPLING FOR COPPER TUBING
- ⑥ 90° COPPER ELL
- ⑦ BRONZE ANGLE SERVICE STOP WITH LOCKING DEVICE AND ADAPTABLE TO 2 INCH METER FLANGE
- ⑧ 2" MASTER METER DIALOG 3G-DS WIRELESS RF WATER METER
- ⑨ METER BOX AND METER BOX LID
- ⑩ 1/4" ROCK, 4" TO 6" DEEP

POTABLE WATER LINE



METER BOX



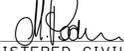
UTILITY DETAILS

NO SCALE

UD-1

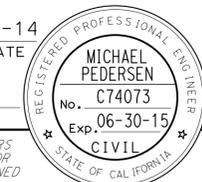
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	DESIGN
Caltrans	
FUNCTIONAL SUPERVISOR	ABU-BAKR AL-JAFRI
CALCULATED/DESIGNED BY	CHECKED BY
MICHAEL PEDERSEN	ARTURO REYES
REVISED BY	DATE

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	Imp	78, 111	R9.2/R14.0, 23.5/23.8	22	63

 03-20-14
 REGISTERED CIVIL ENGINEER DATE

06-09-14
 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.



WATER LINE QUANTITIES

UTILITY PLAN SHEET No.	IDENTIFICATION No. <input type="checkbox"/>											DESCRIPTION
		POTABLE WATER LINE	BRONZE SERVICE SADDLE (N)	WATER METER BOX AND LID (N)	EXCAVATION (N)	WARNING TAPE (N)	TRACER WIRE (N)	SLURRY CEMENT BACKFILL (N)	HMA TYPE A (N)	WATER METER (N)	SAND BEDDING (N)	
LF	EA	EA	CY	LF	LF	CY	TONS	EA	CY			
U-4	a	30	1	1	6	30	30	3	4	1	2	2 INCH WATER SERVICE
TOTAL		30										

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

UTILITY QUANTITIES
UQ-1

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	Imp	78, 111	R9.2/R14.0, 23.5/23.8	23	63

Signature: *[Signature]*
 LICENSED LANDSCAPE ARCHITECT
 06-09-14
 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
 CRISTINA BLANCO-KRAUSS No. 10599
 Signature: *[Signature]*
 Renewal Date: 01-31-16
 Date: 03-20-14
 STATE OF CALIFORNIA

CONSTRUCTION AREA SIGNS

SIGN No.	TYPE	PANEL SIZE (In)	No. OF POST AND SIZE (In)	No. OF SIGNS
1	C40 (CA)	108 X 42	2-4 X 6 (s)	5
2	W20-1 (Mod)	48 X 48	1-4 X 6 (s)	14
3	G20-2 (Mod)	48 X 24	1-4 X 4 (s)	14

(s) DENOTES STATIONARY MOUNTED SIGN

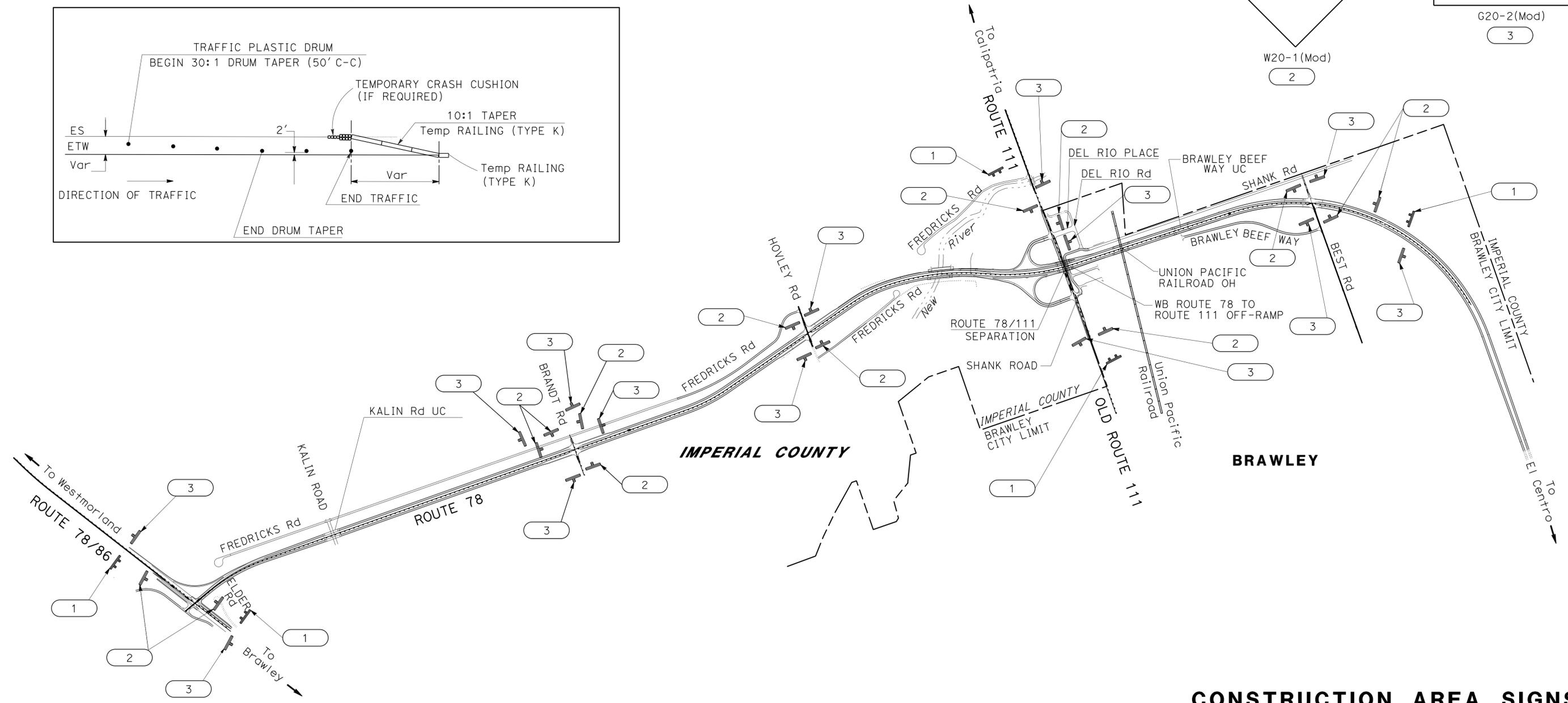
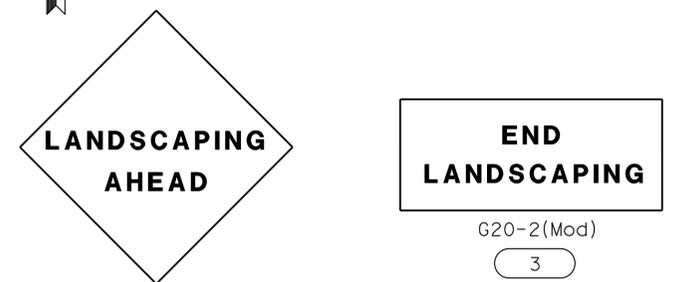
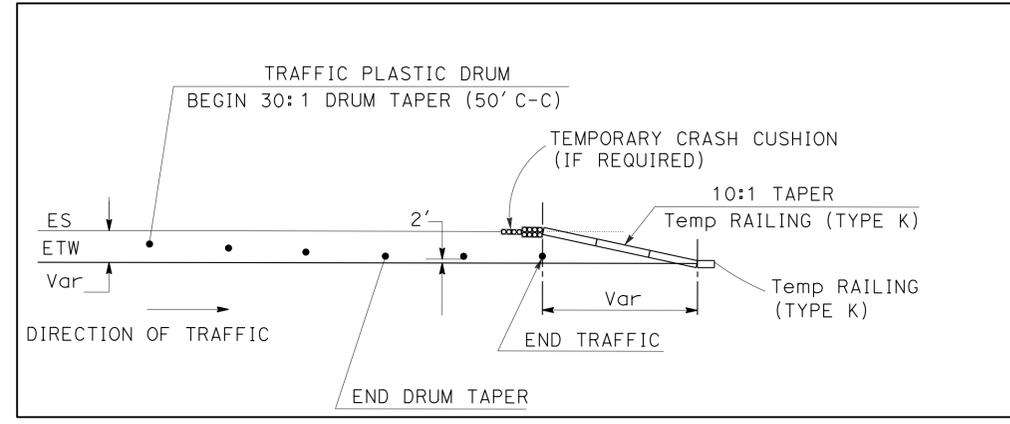
NOTES:

- EXACT LOCATION OF CONSTRUCTION AREA SIGNS WILL BE DETERMINED BY THE ENGINEER.
- FEDERAL MUTCD SIGN CODES ARE SHOWN UNLESS DESIGNATED BY (CA) INDICATING STANDARD CALIFORNIA SIGN SPECIFICATIONS ARE USED.
- 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

NO SCALE

CS-1

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans LANDSCAPE ARCHITECTURE
 SENIOR LANDSCAPE ARCHITECT: STEPHEN ALVAREZ
 CALCULATED/DESIGNED BY: [Blank]
 CHECKED BY: [Blank]
 CRISTINA BLANCO-KRAUSS
 DEVANGI DAVE
 REVISED BY: [Blank]
 DATE REVISED: [Blank]

IRRIGATION LEGEND

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	Imp	78, 111	R9.2/R14.0, 23.5/23.8	24	63

LICENSED LANDSCAPE ARCHITECT
 06-09-14
 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.

SYMBOL	DESCRIPTION	SPRAY PATTERN	OPERATING PRESSURE (psi)	PRESSURE COMPENSATING	PLUS/MINUS 5% ②					SPRINKLER ASSEMBLY														REMARKS					
					DISCHARGE		RADIUS (ft)	WIDTH x LENGTH (ft)	FLOW SHUTOFF DEVICE	INLET CONNECTION (NPT INCH)	POSITIVE-LOCKING Adj ARC STOP	BACKSPLASH PREVENTER	DIFFUSER PIN	DISTANCE CONTROL FLAP	Adj DISCHARGE	RISER			POP-UP			TREE WELL							
					GALLONS PER MINUTE (GPM)	GALLONS PER HOUR (GPH)										TYPE	PLASTIC	GALVANIZED	SIZE (IPS INCH)	HEIGHT (INCH)	SWING JOINT ⑦	RISER SUPPORT	TYPE		INLET CONNECTION (NPT INCH)	SPRINKLER PROTECTOR (TYPE)	POP-UP HEIGHT (INCH)	RISER HEIGHT (INCH)	SWING JOINT
																					MATERIAL	SIZE (IPS INCH)	HEIGHT (INCH)		SWING JOINT ⑦	RISER SUPPORT	TYPE	INLET CONNECTION (NPT INCH)	SPRINKLER PROTECTOR (TYPE)
⊗	FLOOD BUBBLER	-	20	X	0.5	-	-	-	-	1/2	-	-	-	-	-	-	III	-	1/2	8	X	-	-	-	-	-	-	-	④⑥⑩⑨
●	FLOOD BUBBLER	-	20	X	1.0	-	-	-	-	1/2	-	-	-	-	-	-	III	-	1/2	8	X	-	-	-	-	-	-	-	④⑨⑩
○	FLOOD BUBBLER	-	20	X	2.0	-	-	-	-	1/2	-	-	-	-	-	-	III	-	1/2	8	X	-	-	-	-	-	-	-	④⑨⑩

X IN BOX DENOTES REQUIREMENT

APPLICABLE WHEN CIRCLED BELOW:

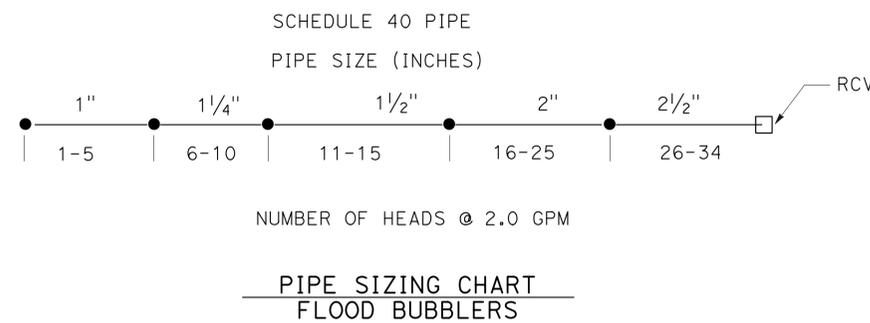
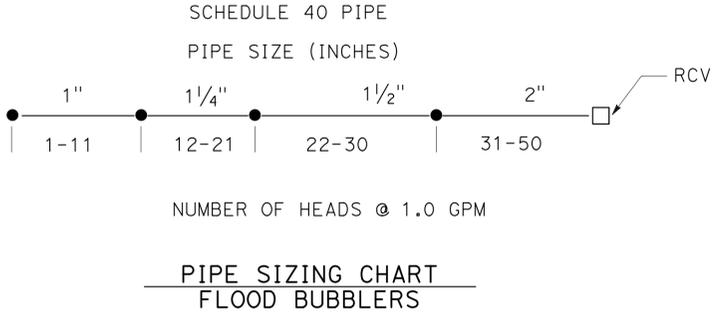
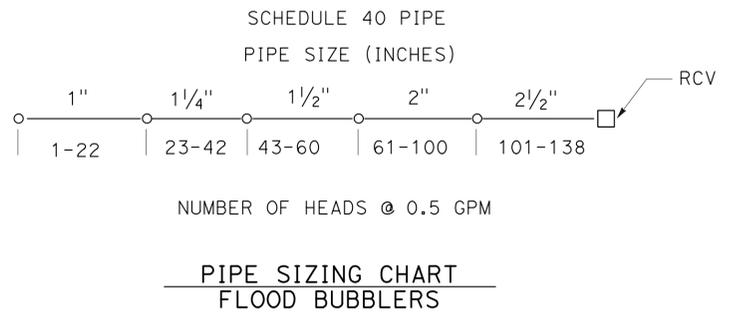
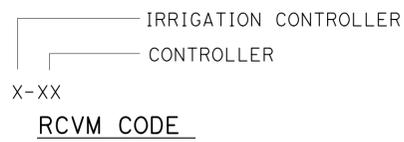
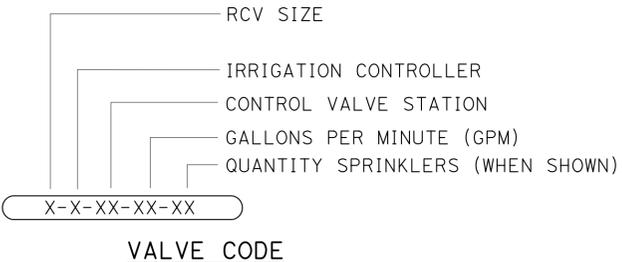
- | | |
|---|---|
| <ul style="list-style-type: none"> 1 - SEE SPECIAL PROVISIONS. ② - IF A PRESSURE COMPENSATING DEVICE IS SPECIFIED, THE DISCHARGE AND RADII SHOWN REFLECT ITS USE. 3 - MUST HAVE AN INTERNAL OR EXTERNAL CHECK VALVE. ④ - NON-ADJUSTABLE DISCHARGE RATE. 5 - REQUIRED ADJACENT TO SHOULDERS, CURBS, SIDEWALKS, AND DIKES. ⑥ - SEE RISER SPRINKLER ASSEMBLY (LAY OUT AT PALM TREES) DETAIL. | <ul style="list-style-type: none"> ⑦ - SEE DETAIL. 8 - MATCHED PRECIPITATION RATE NOZZLES. ⑨ - REFER TO PIPE SIZING CHARTS. ⑩ - INSTALL ONE FLOOD BUBBLER PER No. 15 TREE ⑪ - INSTALL FOUR FLOOD BUBBLER PER PALM TREE |
|---|---|

ABBREVIATIONS:

- Adj — ADJUSTABLE
- ft — FEET
- GPS — GALLONS PER SECOND
- psi — POUNDS PER SQUARE INCH

NOTES:

1. ALL LATERAL PIPE NOT LABELED SHALL BE 1 INCH, OR AS SHOWN ON PIPE SIZING CHARTS.
2. PULL ONE ADDITIONAL CNC WIRE FROM EACH DESIGNATED CONTROLLER TO THE LAST VALVE BOX AT EACH VALVE MANIFOLD. (FOR FUTURE USE)



IRRIGATION SPRINKLER SCHEDULE

ISS-1

APPROVED FOR IRRIGATION WORK ONLY

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION - LANDSCAPE ARCHITECTURE
 SENIOR LANDSCAPE ARCHITECT: STEPHEN ALVAREZ
 CALCULATED/DESIGNED BY: CRISTINA BLANCO-KRAUSS
 CHECKED BY: KENNY MAH
 REVISED BY: []
 DATE REVISED: []

LAST REVISION: 04-03-14
 DATE PLOTTED => 09-JUN-2014
 TIME PLOTTED => 14:18

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	Imp	78, 111	R9.2/R14.0, 23.5/23.8	26	63

Signature: *[Signature]*
 LICENSED LANDSCAPE ARCHITECT
 06-09-14
 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.



NOTES:

- FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
- Exist Irr CONDUITS SHOWN ON PLAN ARE:
 3.0" CHDPE
 3.0" WATER
 2" Cond FOR CNC

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans LANDSCAPE ARCHITECTURE

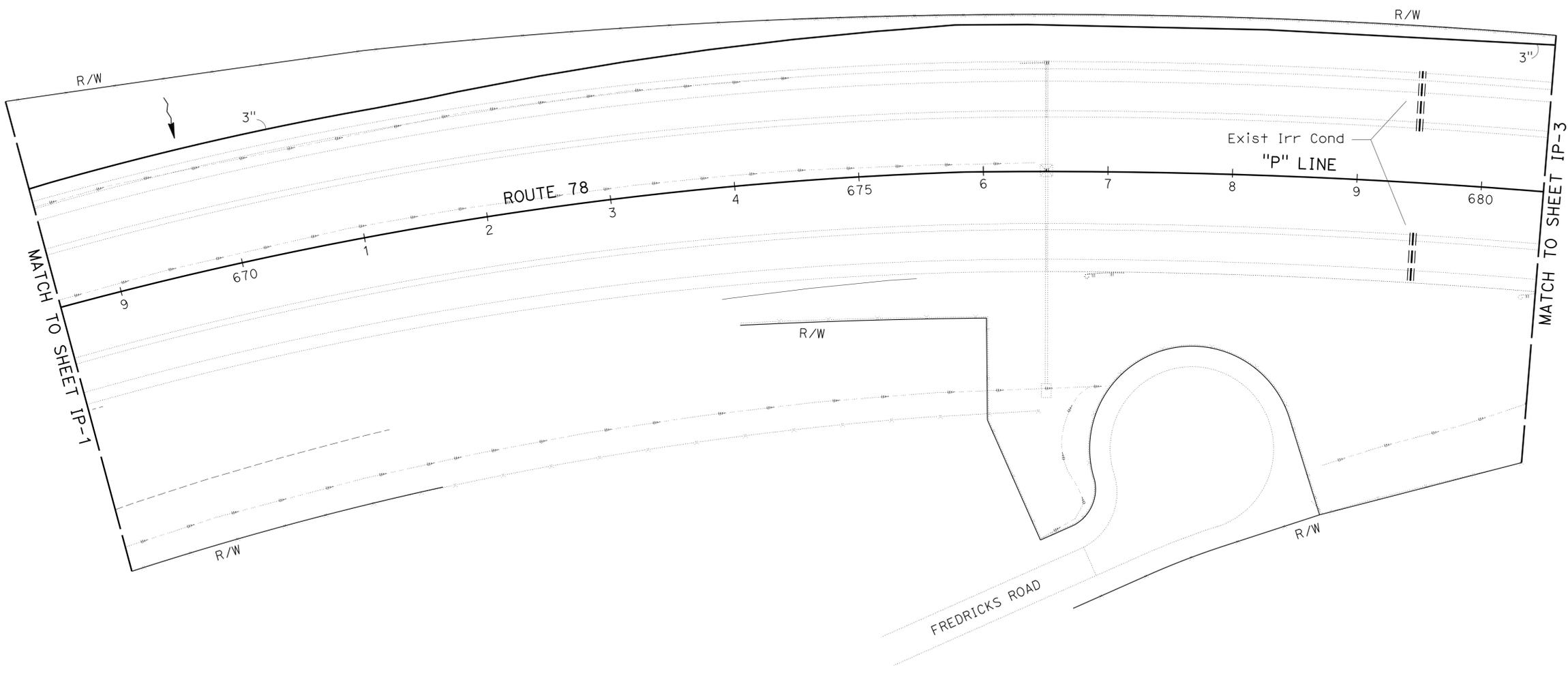
SENIOR LANDSCAPE ARCHITECT
 STEPHEN ALVAREZ

CALCULATED/DESIGNED BY
 CHECKED BY

CRISTINA BLANCO-KRAUSS
 BETH HALL

REVISED BY
 DATE REVISED

IMPERIAL COUNTY



APPROVED FOR IRRIGATION WORK ONLY

SCALE: 1" = 50'

IRRIGATION PLAN

IP-2

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans LANDSCAPE ARCHITECTURE

SENIOR LANDSCAPE ARCHITECT
 STEPHEN ALVAREZ

CALCULATED/DESIGNED BY
 CHECKED BY

CRISTINA BLANCO-KRAUSS
 KENNY MAH

REVISED BY
 DATE REVISED

NOTES:

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

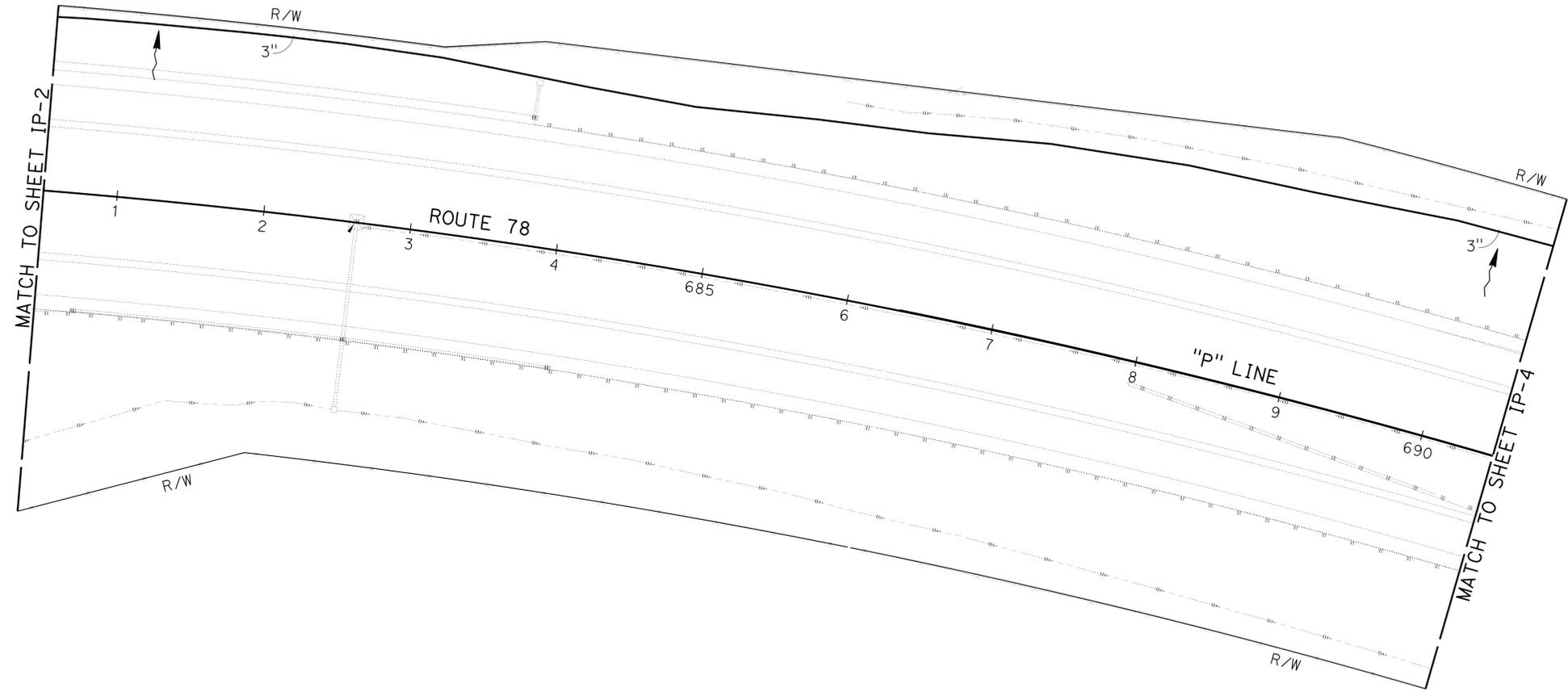
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	Imp	78, 111	R9.2/R14.0, 23.5/23.8	27	63

LICENSED LANDSCAPE ARCHITECT
 06-09-14
 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.



IMPERIAL COUNTY



IRRIGATION PLAN

APPROVED FOR IRRIGATION WORK ONLY

SCALE: 1" = 50'

IP-3

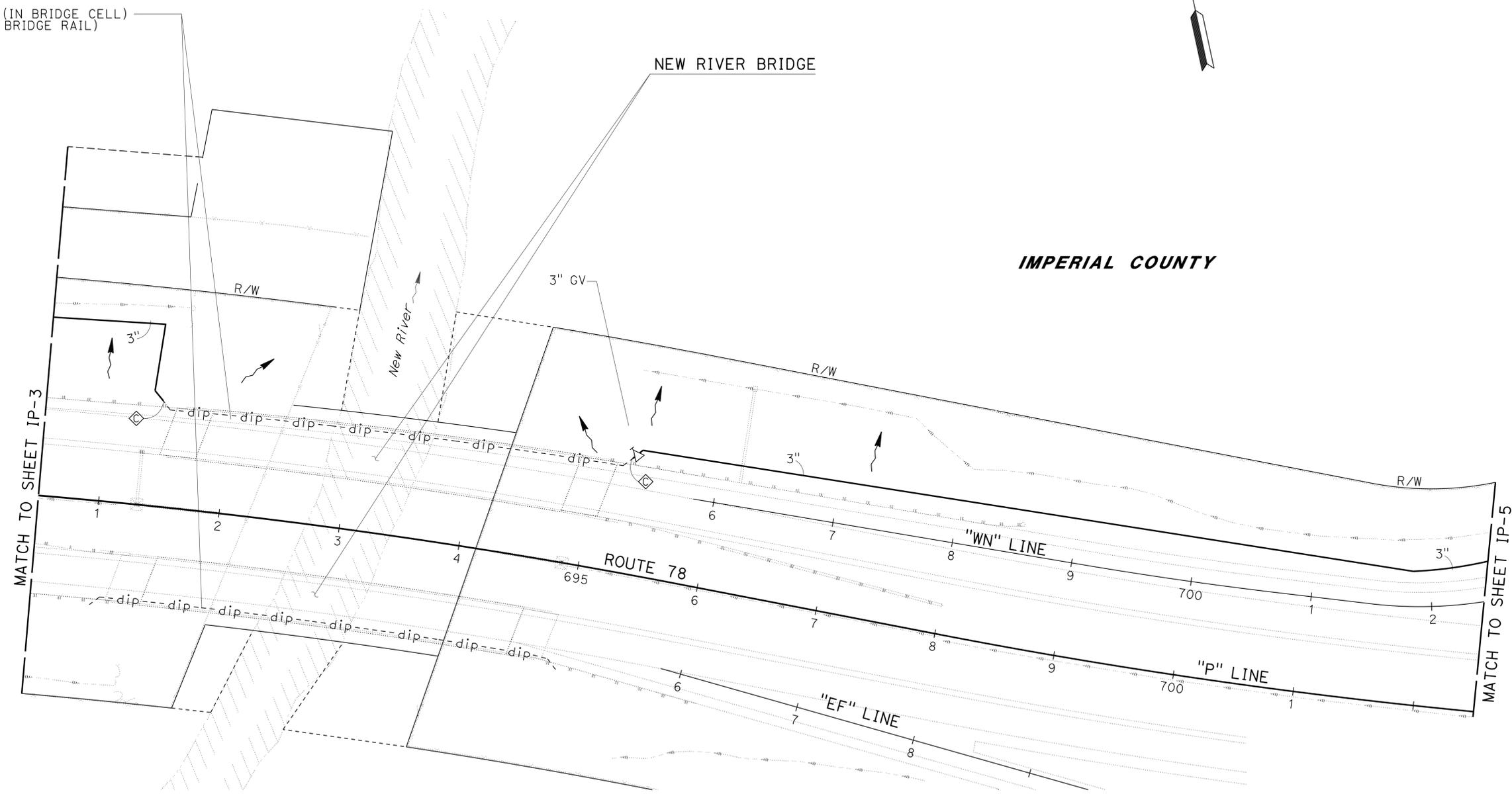
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	Imp	78, 111	R9.2/R14.0, 23.5/23.8	28	63

Signature: *[Signature]*
 LICENSED LANDSCAPE ARCHITECT
 06-09-14
 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.

NOTES:

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

Exist
 3" DIP (SUPPLY LINE)(MAIN) (IN BRIDGE CELL)
 2" Elect Cond FOR CNC (IN BRIDGE RAIL)



STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	REVISOR	DATE
Caltrans LANDSCAPE ARCHITECTURE	CRISTINA BLANCO-KRAUSS	06-09-14
	KENNY MAH	
	STEPHEN ALVAREZ	

APPROVED FOR IRRIGATION WORK ONLY

SCALE: 1" = 50'

IRRIGATION PLAN

IP-4

LAST REVISION: 04-03-14 DATE PLOTTED => 09-JUN-2014 TIME PLOTTED => 14:18

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans LANDSCAPE ARCHITECTURE
 SENIOR LANDSCAPE ARCHITECT: STEPHEN ALVAREZ
 CALCULATED/DESIGNED BY: [blank]
 CHECKED BY: [blank]
 CRISTINA BLANCO-KRAUSS
 BETH HALL
 REVISED BY: [blank]
 DATE REVISED: [blank]

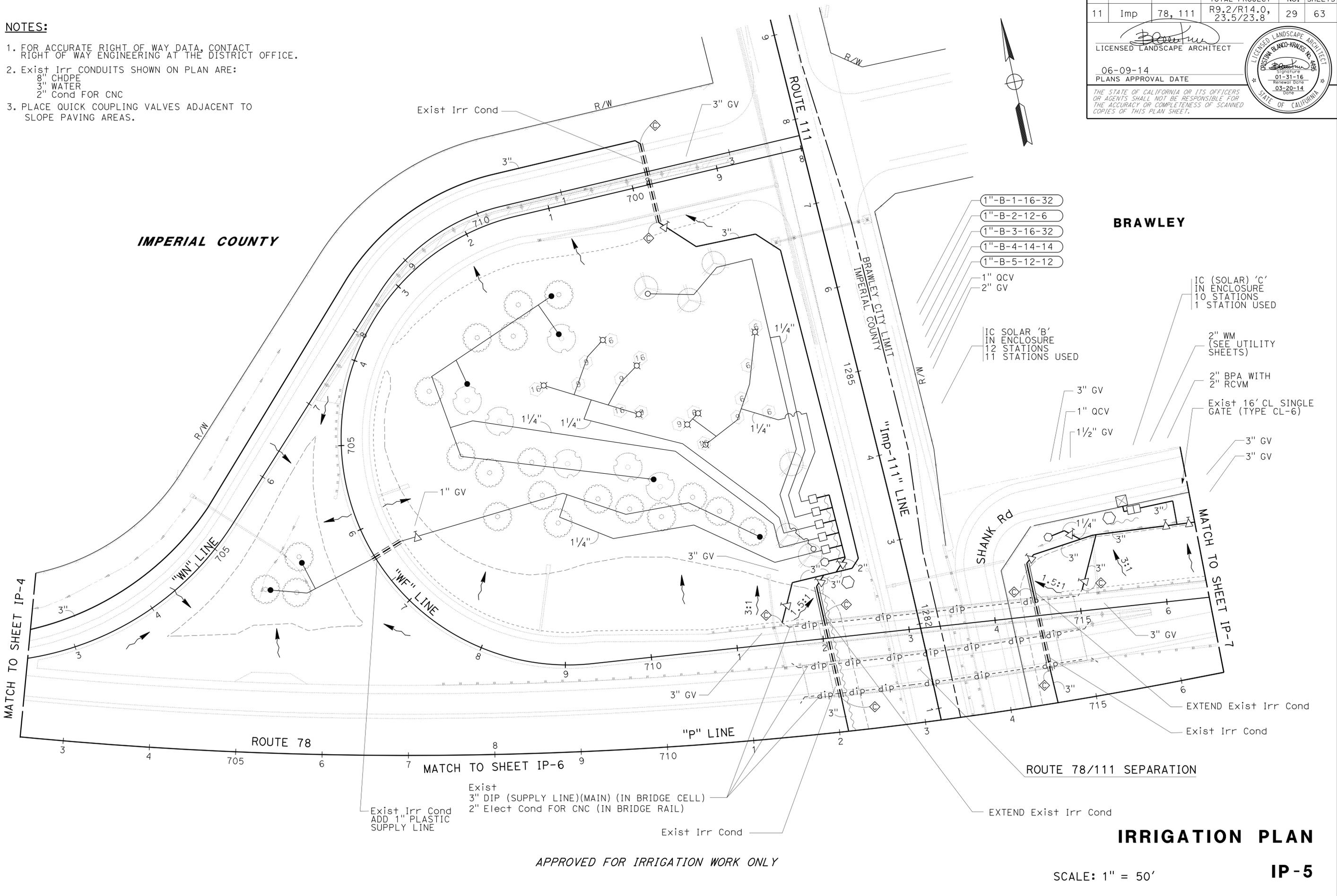
NOTES:

- FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
- Exist Irr CONDUITS SHOWN ON PLAN ARE:
 8" CHDPE
 3" WATER
 2" Cond FOR CNC
- PLACE QUICK COUPLING VALVES ADJACENT TO SLOPE PAVING AREAS.

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	Imp	78, 111	R9.2/R14.0, 23.5/23.8	29	63

06-09-14
 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.



BRAWLEY

- 1"-B-1-16-32
- 1"-B-2-12-6
- 1"-B-3-16-32
- 1"-B-4-14-14
- 1"-B-5-12-12

1" QCV
 2" GV
 IC SOLAR 'B'
 IN ENCLOSURE
 12 STATIONS
 11 STATIONS USED

IC (SOLAR) 'C'
 IN ENCLOSURE
 10 STATIONS
 1 STATION USED

2" WM
 (SEE UTILITY SHEETS)

2" BPA WITH
 2" RCVM
 Exist 16' CL SINGLE
 GATE (TYPE CL-6)

3" GV
 3" GV

APPROVED FOR IRRIGATION WORK ONLY

IRRIGATION PLAN

IP-5

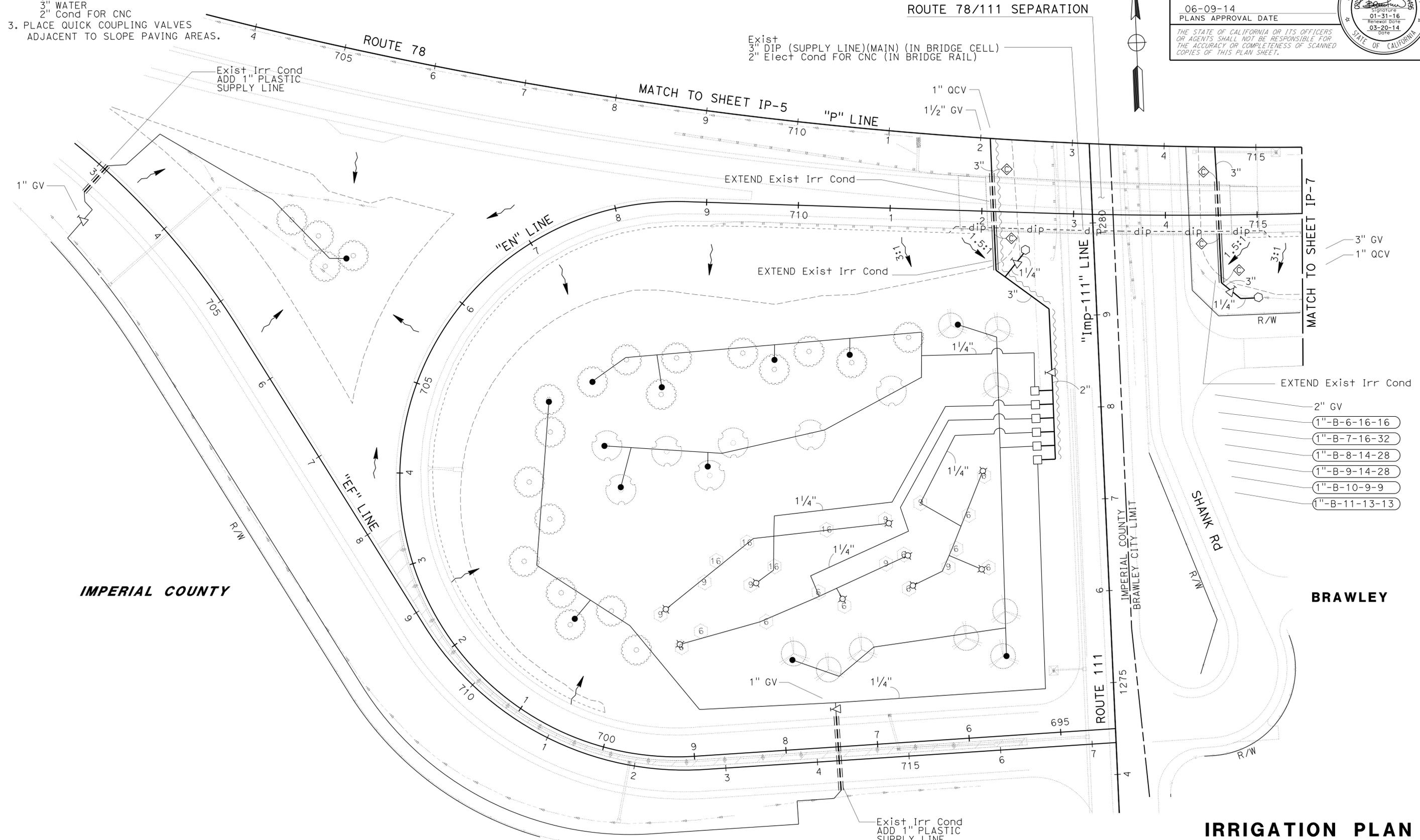
SCALE: 1" = 50'

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	Imp	78, 111	R9.2/R14.0, 23.5/23.8	30	63

 LICENSED LANDSCAPE ARCHITECT	
06-09-14	PLANS APPROVAL DATE
<small>THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.</small>	

	
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- NOTES:**
- FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
 - Exist Irr CONDUITS SHOWN ON PLAN ARE:
 8" CHDPE
 3" WATER
 2" Cond FOR CNC
 - PLACE QUICK COUPLING VALVES ADJACENT TO SLOPE PAVING AREAS.



- EXTEND Exist Irr Cond
- 2" GV
 - 1"-B-6-16-16
 - 1"-B-7-16-32
 - 1"-B-8-14-28
 - 1"-B-9-14-28
 - 1"-B-10-9-9
 - 1"-B-11-13-13

IMPERIAL COUNTY

BRAWLEY

APPROVED FOR IRRIGATION WORK ONLY

IRRIGATION PLAN

IP-6

SCALE: 1" = 50'

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	REVISOR	DATE
LANDSCAPE ARCHITECTURE	CRISTINA BLANCO-KRAUSS	BETH HALL
DESIGNED BY	CALCULATED BY	CHECKED BY
STEPHEN ALVAREZ		

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	Imp	78, 111	R9.2/R14.0, 23.5/23.8	31	63

Signature: *[Signature]*
 LICENSED LANDSCAPE ARCHITECT
 06-09-14
 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.

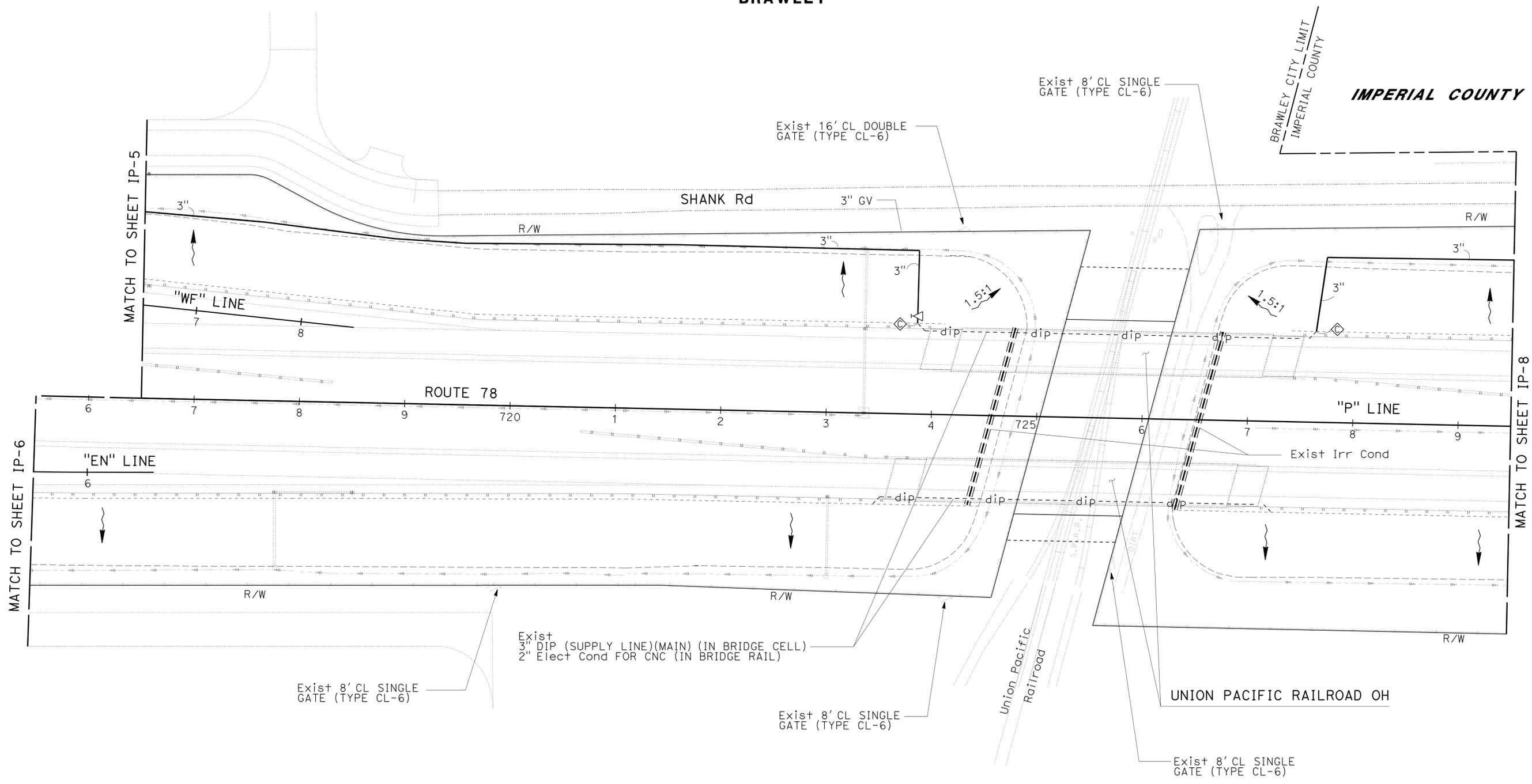
NOTES:

- FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
- Exist Irr CONDUITS SHOWN ON PLAN ARE:
 8" CHDPE
 4" WATER
 2" Cond FOR CNC



BRAWLEY

IMPERIAL COUNTY



APPROVED FOR IRRIGATION WORK ONLY

IRRIGATION PLAN

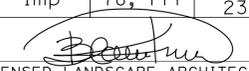
SCALE: 1"=50'

IP-7

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	LANDSCAPE ARCHITECTURE	SENIOR LANDSCAPE ARCHITECT	STEPHEN ALVAREZ	CALCULATED/DESIGNED BY	CRISTINA BLANCO-KRAUSS	REVISOR	BETH HALL
LANDSCAPE ARCHITECT	ARCHITECT	ARCHITECT	ARCHITECT	CHECKED BY	BETH HALL	DATE	REVISOR

LAST REVISION: 04-04-14 14:18 DATE PLOTTED => 09-JUN-2014 14:18

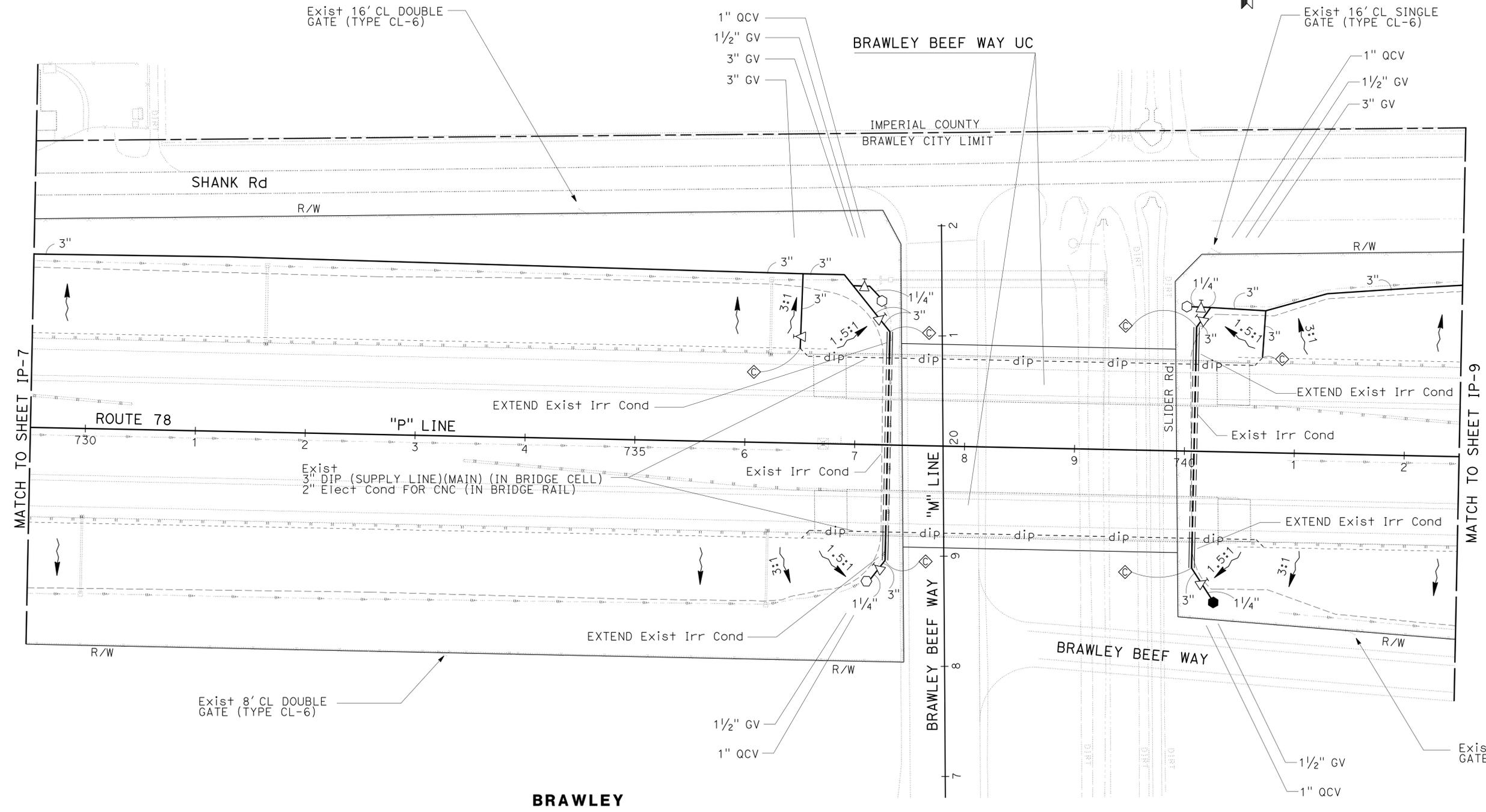
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	Imp	78, 111	R9.2/R14.0, 23.5/23.8	32	63

 LICENSED LANDSCAPE ARCHITECT		
06-09-14 PLANS APPROVAL DATE		
<small>THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.</small>		

NOTES:

- FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
- Exist Irr CONDUITS SHOWN ON PLAN ARE:
 8" CHDPE
 3" WATER
 2" Cond FOR CNC
- PLACE QUICK COUPLING VALVES ADJACENT TO SLOPE PAVING AREAS.

IMPERIAL COUNTY



MATCH TO SHEET IP-7

MATCH TO SHEET IP-9

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans LANDSCAPE ARCHITECTURE
 SENIOR LANDSCAPE ARCHITECT
 CRISTINA BLANCO-KRAUSS
 BETH HALL
 REVISOR BY
 DATE REVISOR
 CHECKED BY
 DESIGNED BY
 CALCULATED BY
 STEPHEN ALVAREZ

APPROVED FOR IRRIGATION WORK ONLY

IRRIGATION PLAN

IP-8

SCALE: 1" = 50'

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	Imp	78, 111	R9.2/R14.0, 23.5/23.8	33	63

 LICENSED LANDSCAPE ARCHITECT		
06-09-14 PLANS APPROVAL DATE		

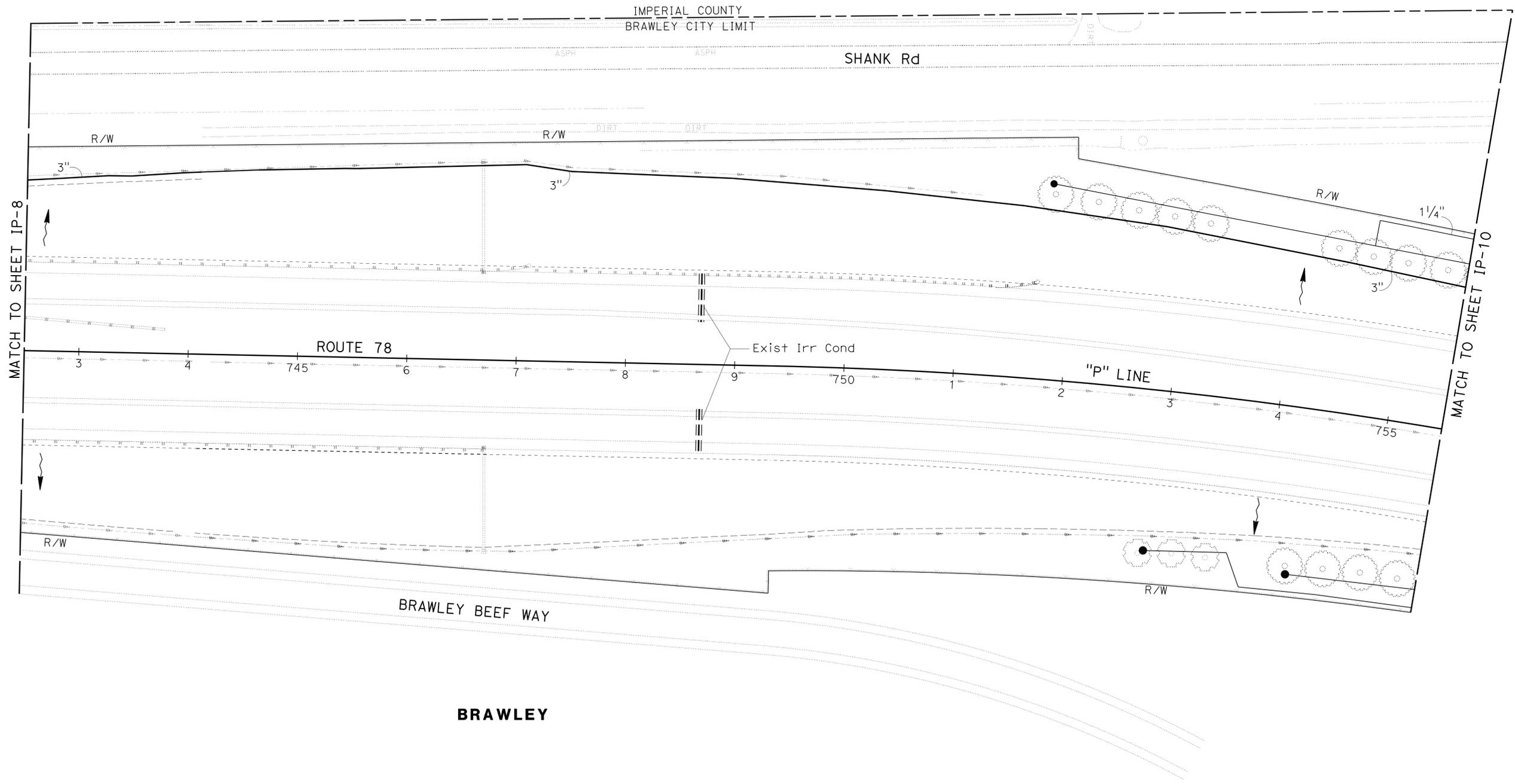
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.



NOTES:

- FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
- Exist Irr CONDUITS SHOWN ON PLAN ARE:
 8" CHDPE
 3" WATER
 2" Cond FOR CNC

IMPERIAL COUNTY



MATCH TO SHEET IP-8

MATCH TO SHEET IP-10

BRAWLEY

APPROVED FOR IRRIGATION WORK ONLY

IRRIGATION PLAN

SCALE: 1" = 50'

IP-9

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	REVISOR	DATE
Caltrans LANDSCAPE ARCHITECTURE	CRISTINA BLANCO-KRAUSS	BETH HALL
SENIOR LANDSCAPE ARCHITECT	CHECKED BY	DESIGNED BY
STEPHEN ALVAREZ		
	REVISOR	DATE

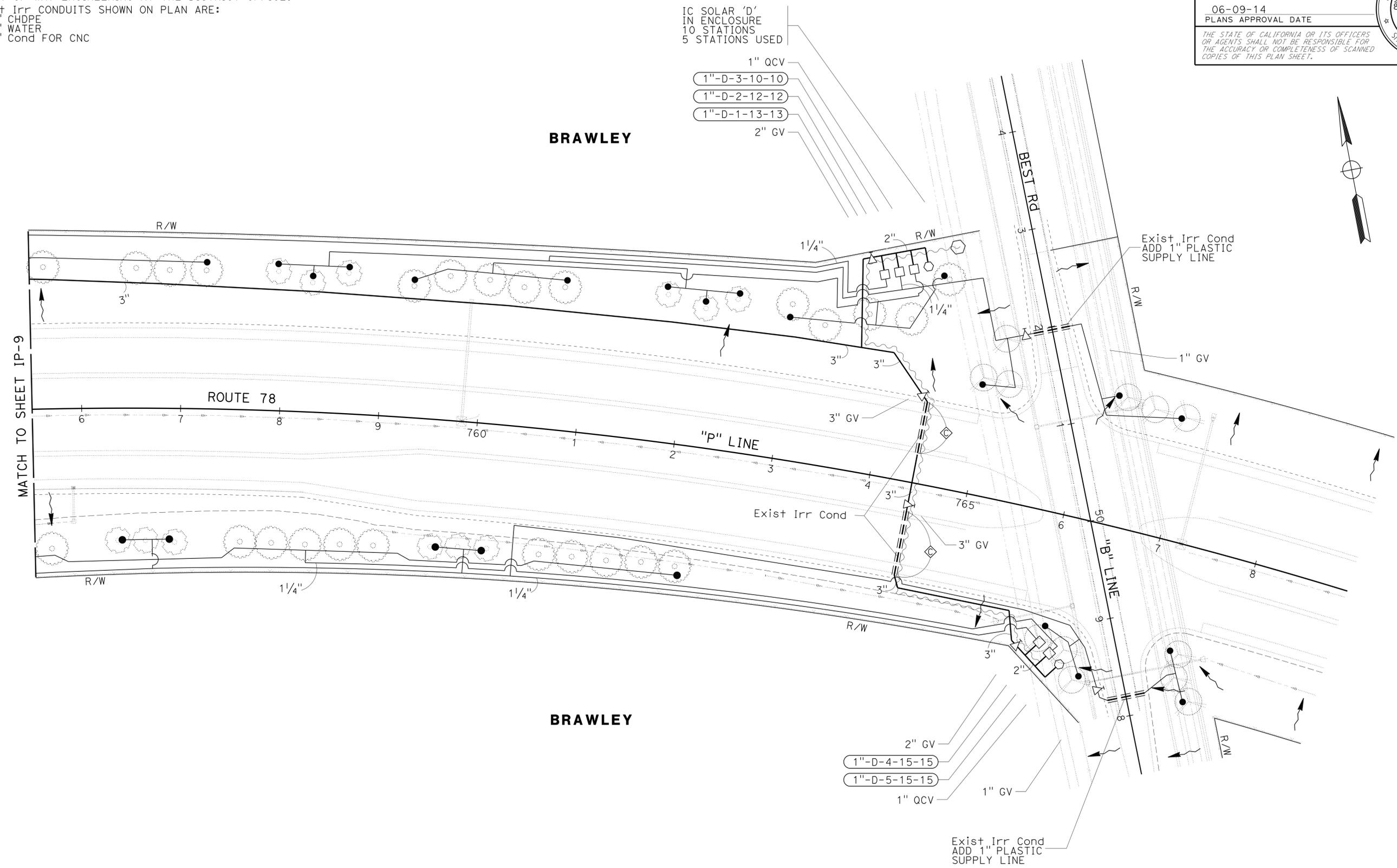
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	Imp	78, 111	R9.2/R14.0, 23.5/23.8	34	63

 LICENSED LANDSCAPE ARCHITECT		
06-09-14 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.

NOTES:

- FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
- Exist Irr CONDUITS SHOWN ON PLAN ARE:
 8" CHDPE
 3" WATER
 2" Cond FOR CNC



STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	LANDSCAPE ARCHITECTURE	SENIOR LANDSCAPE ARCHITECT	STEPHEN ALVAREZ	CALCULATED/DESIGNED BY	CHECKED BY	CRISTINA BLANCO-KRAUSS	BETH HALL	REVISED BY	DATE	REVISED
--	------------------------	----------------------------	-----------------	------------------------	------------	------------------------	-----------	------------	------	---------

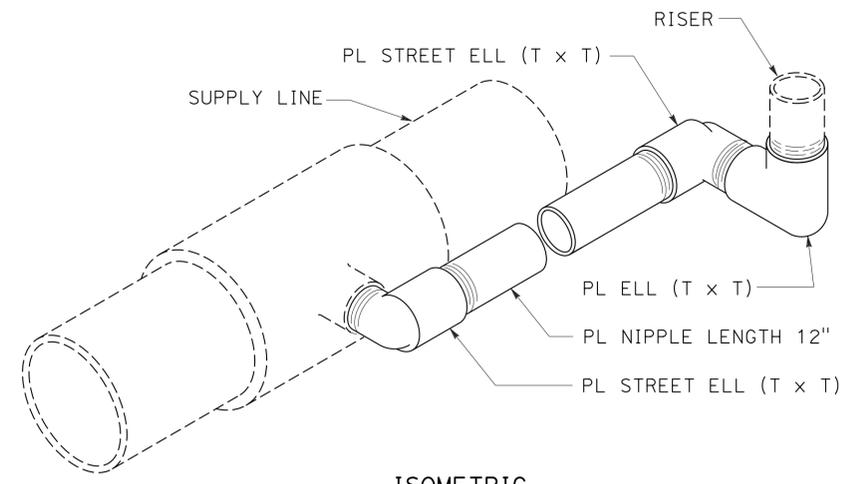
APPROVED FOR IRRIGATION WORK ONLY

IRRIGATION PLAN

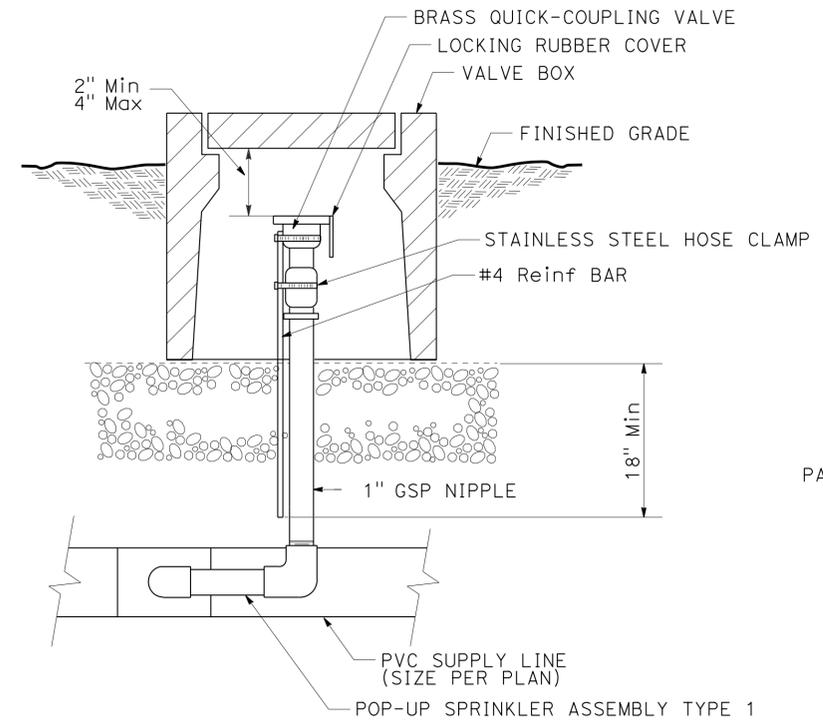
IP-10

SCALE: 1" = 50'

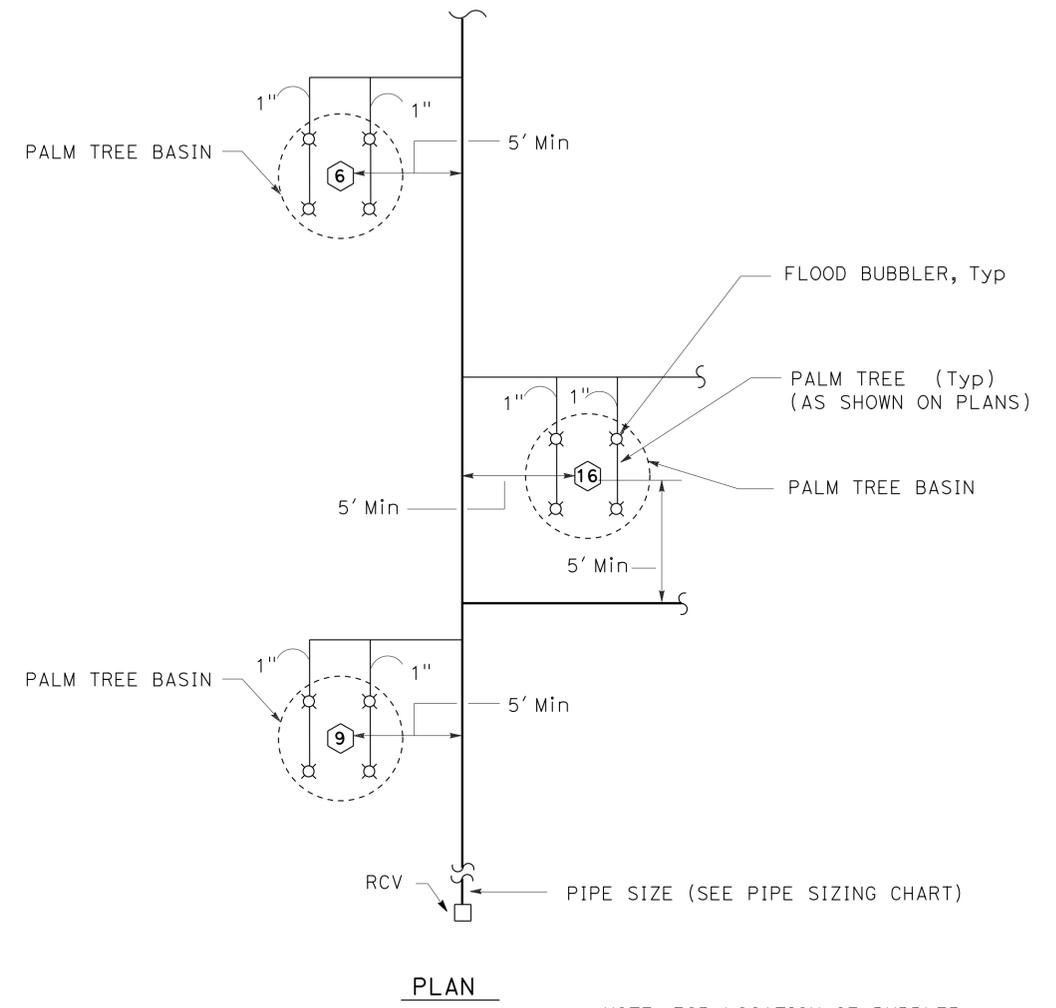
LAST REVISION: DATE PLOTTED => 09-JUN-2014 TIME PLOTTED => 14:18



ISOMETRIC
SWING JOINT (Mod)



SECTION
QUICK COUPLING VALVE



RISER SPRINKLER ASSEMBLY (LAYOUT AT PALM TREES)

NOTE: FOR LOCATION OF BUBBLER WITHIN PALM TREE BASIN SEE PALM TREE PLANTING IN LANDSCAPE DETAILS SHEET.

INSTALLATION	TYPE FITTING	INSTALLATION	TYPE FITTING
	90° ELL		DEAD END
	45° BEND		GATE VALVE
	22.5° BEND		
	11.25° BEND		VERTICAL BEND 45° (TYPE I)
			22.5° BEND (TYPE I)
	TEE		11.25° BEND (TYPE II)
			OR
			22.5° BEND (TYPE II)
			11.25° BEND (TYPE II)

NOTES:
 Min 1 CF PCC FOR 1/2" PIPE SIZE AND SMALLER.
 Min 2 CF PCC FOR 2" PIPE SIZE.
 Min 2 CF PCC FOR 3" AND 4" PIPE SIZE.
 Min 3 CF PCC FOR 6" PIPE SIZE.
 Min 4 CF PCC FOR 8" PIPE SIZE.
 USE #3 REINFORCING BAR WHERE SHOWN.

TYPICAL THRUST BLOCKS (MODIFIED)

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION - LANDSCAPE ARCHITECTURE
 SENIOR LANDSCAPE ARCHITECT: STEPHEN ALVAREZ
 CALCULATED/DESIGNED BY: [Blank]
 CHECKED BY: [Blank]
 CRISTINA BLANCO-KRAUSS
 BETH HALL
 REVISED BY: [Blank] DATE: [Blank]
 DATE: [Blank] REVISED: [Blank]

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	Imp	78, 111	R9.2/R14.0, 23.5/23.8	38	63


 LICENSED LANDSCAPE ARCHITECT
 Signature: [Signature]
 01-31-16
 Renewal Date: 03-20-14
 06-09-14
 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.



SUBTOTALS PER PLAN SHEET ON MAIN SUPPLY SIDE OF CONTROL VALVE

DESCRIPTION	UNIT	SHEET NUMBER										SUBTOTALS	TOTALS	UNIT	DESCRIPTION		
		IP-1	IP-2	IP-3	IP-4	IP-5	IP-6	IP-7	IP-8	IP-9	IP-10						
BPA	2 INCH	EA	-	-	-	-	1	-	-	-	-	-	1	1	EA	2 INCH	
ENCLOSURE	EA	-	-	-	-	1	-	-	-	-	-	-	1	1	EA	ENCLOSURE	
WATER METER	2 INCH	-	-	-	-	-	-	-	-	-	-	-	-	-	-	EA	2 INCH
IRRIGATION CONTROLLER	ENCLOSURE	EA	1	-	-	-	2	-	-	-	-	1	4	4	EA	ENCLOSURE	
	10 STATION	EA	1	-	-	-	1	-	-	-	-	1	3	3	EA	10 STATION	
	12 STATION	EA	-	-	-	-	1	-	-	-	-	-	1	1	EA	12 STATION	
VALVES AND ASSEMBLIES	2 INCH	EA	-	-	-	-	1	-	-	-	-	-	1	1	EA	2 INCH	
RCV	1 INCH	EA	4	0	-	-	5	6	-	-	-	5	20	20	EA	1 INCH	
	1 1/2 INCH	EA	-	-	-	-	-	-	-	-	-	-	-	-	EA	1 1/2 INCH	
	2 INCH	EA	-	-	-	-	-	-	-	-	-	-	-	-	EA	2 INCH	
	1 INCH	EA	-	-	-	-	1	2	-	-	-	2	5	5	EA	1 INCH	
	1 1/4 INCH	EA	-	-	-	-	-	-	-	-	-	-	-	-	EA	1 1/4 INCH	
	1 1/2 INCH	EA	-	-	-	-	1	1	-	4	-	-	6	6	EA	1 1/2 INCH	
	2 INCH	EA	2	-	-	-	1	1	-	-	-	2	6	6	EA	2 INCH	
3 INCH	EA	2	-	-	1	7	1	1	3	-	2	17	17	EA	3 INCH		
1 INCH	EA	2	-	-	-	2	2	-	4	-	2	12	12	EA	1 INCH		
PLASTIC PIPE SUPPLY LINE	1 INCH	LF	-	-	-	-	-	-	-	-	-	-	-	14,343	LF	1 INCH	
SCH 40	1 1/4 INCH	LF	-	-	-	-	41	40	-	120	-	-	201	7,341	LF	1 1/4 INCH	
	1 1/2 INCH	LF	-	-	-	-	-	-	-	-	-	-	-	-	LF	1 1/2 INCH	
	2 INCH	LF	-	-	-	-	-	-	-	-	-	-	-	-	LF	2 INCH	
	2 1/2 INCH	LF	-	-	-	-	-	-	-	-	-	-	-	-	LF	2 1/2 INCH	
	3 INCH	LF	-	-	-	-	-	-	-	-	-	-	-	-	LF	3 INCH	
PR 315	2 INCH	LF	30	-	-	-	30	30	-	-	-	30	120	120	LF	2 INCH	
	3 INCH	LF	1340	1240	1030	900	2056	272	1130	1194	1330	1170	11,662	11,662	LF	3 INCH	
DIP CP	2 INCH	LF	-	-	-	-	8	-	-	-	-	8	8	LF	2 INCH		

TOTAL QUANTITIES SPRINKLER ASSEMBLIES

SPRINKLER SYMBOL	SPRINKLER ASSEMBLY (EA)				
	RISER		POP-UP		TREE WELL SPRINKLER ASSEMBLY
	GEAR DRIVEN	FLOOD BUBBLER	GEAR DRIVEN	SHRUB SPRAY	
⊕	-	152	-	-	-
●	-	165	-	-	-
○	-	11	-	-	-
TOTAL	-	328	-	-	-

IRRIGATION QUANTITIES IQ-2

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
 SENIOR LANDSCAPE ARCHITECT
 CRISTINA BLANCO-KRAUSS
 BETH HALL
 REVISOR BY
 DATE REVISED
 CALCULATED/DESIGNED BY
 CHECKED BY
 LANDSCAPE ARCHITECTURE
 STEPHEN ALVAREZ

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	Imp	78, 111	R9.2/R14.0, 23.5/23.8	39	63


 LICENSED LANDSCAPE ARCHITECT
 06-09-14
 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.



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

ABBREVIATIONS:

- WC - WOOD MULCH (WOOD CHIP)
- CPST - COMPOST
- F+ - FOOT/FEET

PLANTING LEGEND

PLANT GROUP	PLANT No.	SYMBOL	BOTANICAL NAME	COMMON NAME	SIZE	QUANTITY EACH	HOLE SIZE (INCH)		BASIN TYPE	SOIL AMENDMENT		IRON SULFATE		FERTILIZER		BASIN MULCH		STAKING	PLANTING LIMITS							REMARKS
							Dia	DEPTH		TYPE	CY	RATE	①		TYPE	CY	MINIMUM DISTANCE (ft) FROM									
													PLANTING	PLT ESTB			ETW		Pvmt	FENCE	WALL	PAVED DITCH	EARTH DITCH	ON CENTER (ft)		
C-1	1	⑥	WASHINGTONIA <u>FILIFERA</u>	CALIFORNIA FAN PALM	B & B	17	④	④	④	-	-	-	-	16 oz	CPST	0.12	-	40	48	30	-	-	-	⑦	PALM TREE: ⑧ ⑬ H=6'	
C-2	2	⑨	WASHINGTONIA <u>FILIFERA</u>	CALIFORNIA FAN PALM	B & B	13	④	④	④	-	-	-	-	16 oz	CPST	0.12	-	40	48	30	-	-	-	⑦	PALM TREE: ⑧ ⑬ H=9'	
C-3	3	⑩	WASHINGTONIA <u>FILIFERA</u>	CALIFORNIA FAN PALM	B & B	8	④	④	④	-	-	-	-	16 oz	CPST	0.12	-	40	25	25	-	-	-	⑦	PALM TREE: ⑧ ⑬ H=16'	
U	4	⑪	EUCALYPTUS <u>CAMALDULENSIS</u> 'SILVERTON'	RED RIVER GUM	No. 15	124	③	③	⑨	-	-	8 oz	4 Pk+	16 oz	WC	0.20	⑥	40	25	25	-	-	-	⑦	SINGLE TRUNK TREE	
	5	⑫	EUCALYPTUS <u>LEUCOXYLON</u> 'ROSEA'	WHITE IRONBARK	No. 15	13	③	③	⑨	-	-	8 oz	4 Pk+	16 oz	WC	0.20	⑥	40	90	-	-	-	-	⑦	SINGLE TRUNK TREE	
	6	⑬	PARKINSONIA X 'DESERT MUSEUM'	THORNLESS HYBRID PALO VERDE	No. 15	35	③	③	⑤	-	-	8 oz	4 Pk+	16 oz	CPST	0.06	⑥	30	90	-	-	-	-	⑦	2-3 TRUNK TREE, HIGH BRANCHING	
	7	⑭	PROSOPIS <u>GLANDULOSA</u> 'MAVERICK'	THORNLESS TEXAS HONEY MESQUITE	No. 15	22	③	③	⑤	-	-	8 oz	4 Pk+	16 oz	CPST	0.06	⑥	30	90	-	-	-	-	⑦	2-3 TRUNK TREE, HIGH BRANCHING	

APPLICABLE WHEN CIRCLED:

- ① - QUANTITIES SHOWN ARE "PER PLANT" UNLESS SHOWN AS SQFT OR SQYD APPLICATION RATES
- 2 - BASIN MULCH IS INCLUDED WITH MULCH QUANTITIES SHOWN ON PLANTING PLAN
- ③ - SUFFICIENT TO RECEIVE ROOT BALL AND AMENDMENTS IF REQUIRED
- ④ - SEE PALM TREE PLANTING DETAIL
- ⑤ - SEE DESERT TREE BASIN DETAIL
- ⑥ - SEE STANDARD PLANS
- ⑦ - AS SHOWN ON PLANS
- ⑧ - PREPARE HOLE
- ⑨ - 5' Dia BASIN TYPE II
- 10 - ROOT PROTECTOR REQUIRED
- 11 - ROOT BARRIER REQUIRED
- 12 - DEPARTMENT-FURNISHED
- ⑬ - HEIGHT OF PALM TREE SHALL BE FROM THE TOP OF ROOT BALL TO THE BOTTOM OF THE FIRST FROND.

LEGEND:

-  SLOPE PAVING (ROCK COBBLE)
-  FIBER ROLLS (TREE BASIN PROTECTION)

**PLANT LIST
 PL-1**

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION - LANDSCAPE ARCHITECTURE
 SENIOR LANDSCAPE ARCHITECT
 CRISTINA BLANCO-KRAUSS
 BETH HALL
 CHECKED BY
 STEPHEN ALVAREZ
 REVISED BY
 DATE REVISED

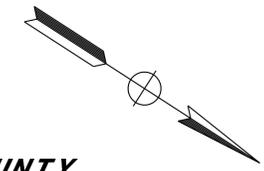
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	Imp	78, 111	R9.2/R14.0, 23.5/23.8	40	63

LICENSED LANDSCAPE ARCHITECT
 Signature: *[Signature]*
 06-09-14
 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.

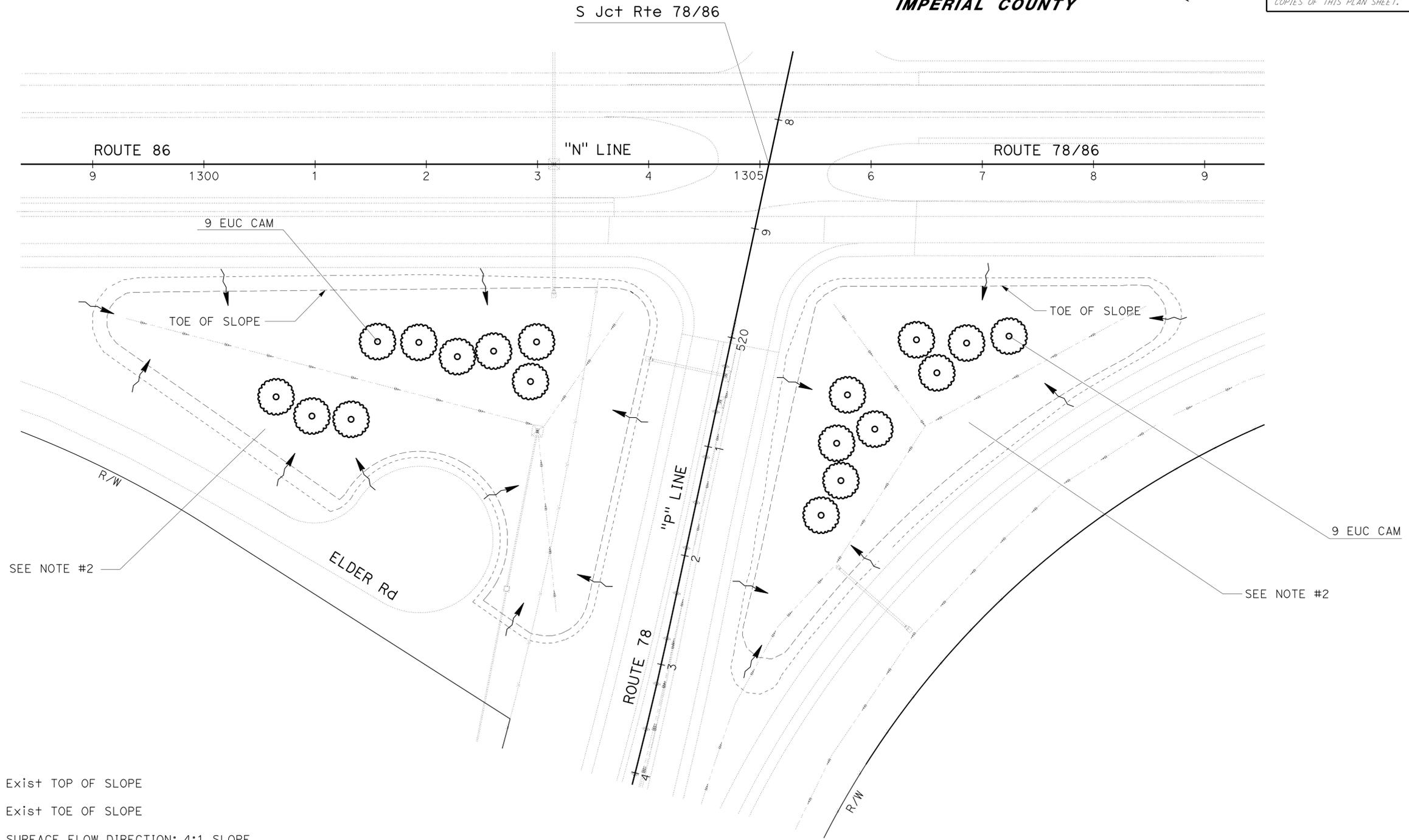
LICENSED LANDSCAPE ARCHITECT
 CRISTINA BLANCO-KRAUSS No. 10596
 Signature: *[Signature]*
 01-31-16
 Renewal Date
 03-20-14
 06%
 STATE OF CALIFORNIA

NOTES:

- FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
- TREE PLANTING LIMITS WITHIN EXIST+ DETENTION BASINS:
 Min DISTANCE FROM FLOWLINE: 35 FT TO TREE TRUNK.
 Min DISTANCE FROM TOE OF SLOPE: 45 FT TO TREE TRUNK.



IMPERIAL COUNTY



LEGEND:

- Exist+ TOP OF SLOPE
- Exist+ TOE OF SLOPE
- SURFACE FLOW DIRECTION: 4:1 SLOPE OR FLATTER, UNLESS OTHERWISE NOTED

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans LANDSCAPE ARCHITECTURE
 SENIOR LANDSCAPE ARCHITECT: STEPHEN ALVAREZ
 CALCULATED/DESIGNED BY: CHECKED BY:
 CRISTINA BLANCO-KRAUSS KENNY MAH
 REVISED BY: DATE REVISED:

APPROVED FOR PLANTING WORK ONLY

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

LAST REVISION: DATE PLOTTED => 09-JUN-2014
 04-07-14 TIME PLOTTED => 14:18

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	Imp	78, 111	R9.2/R14.0, 23.5/23.8	41	63

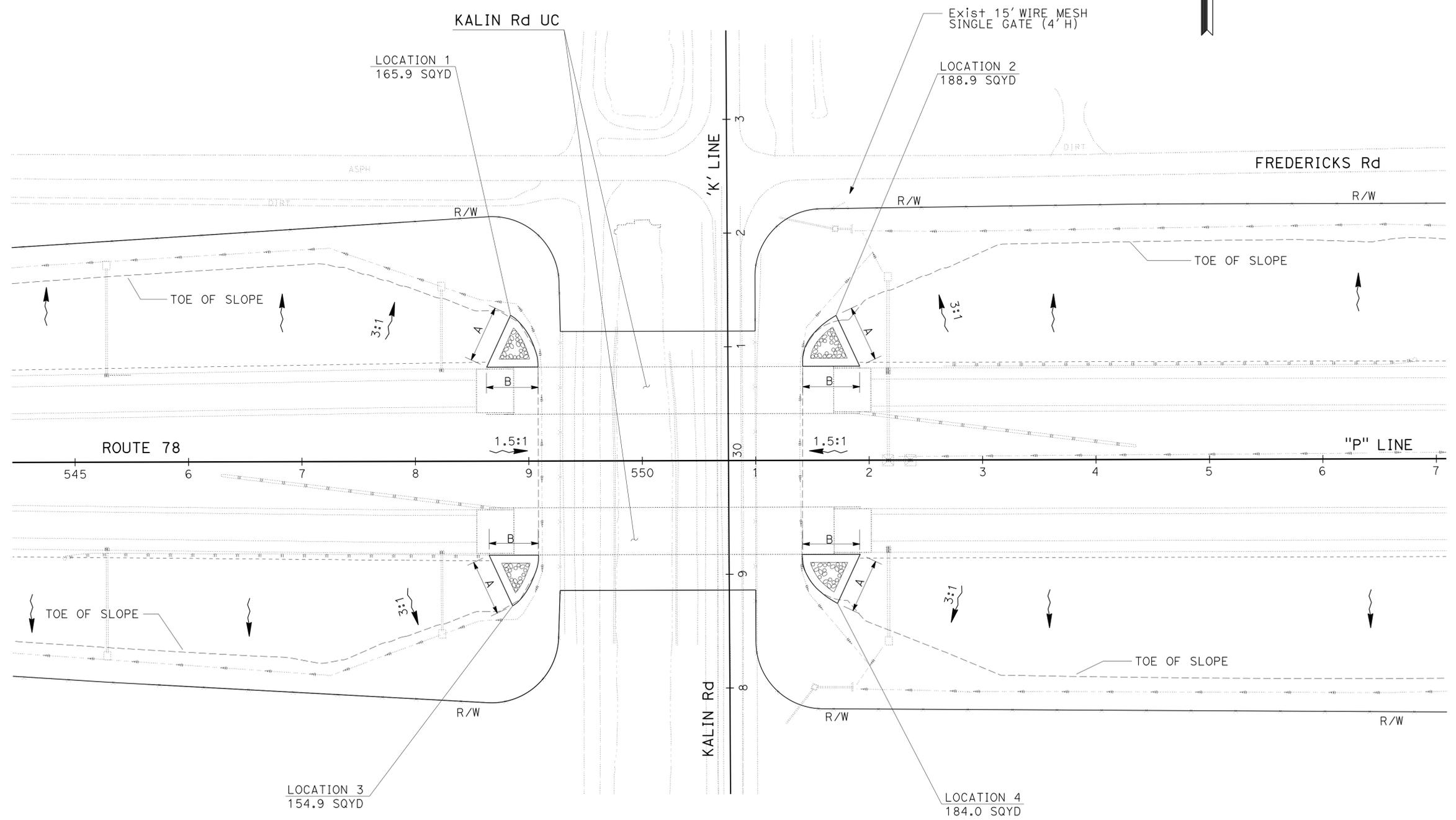
 LICENSED LANDSCAPE ARCHITECT		
06-09-14 PLANS APPROVAL DATE		

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.

NOTES:

1. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
2. FOR SLOPE PAVING (ROCK COBBLE) DETAIL, SLOPE RATIO AND DIMENSIONS, SEE LANDSCAPE QUANTITIES SHEETS.

IMPERIAL COUNTY



STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	CRISTINA BLANCO-KRAUSS	REVISOR	DATE
Caltrans LANDSCAPE ARCHITECTURE	BETH HALL	BY	REVISED
SENIOR LANDSCAPE ARCHITECT	STEPHEN ALVAREZ	CHECKED BY	DESIGNED BY

APPROVED FOR PLANTING WORK ONLY

PLANTING PLAN

SCALE: 1" = 50'

PP-2

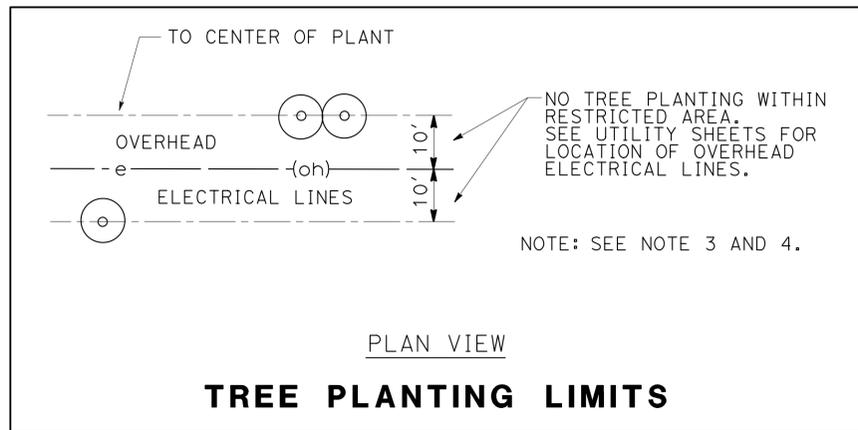
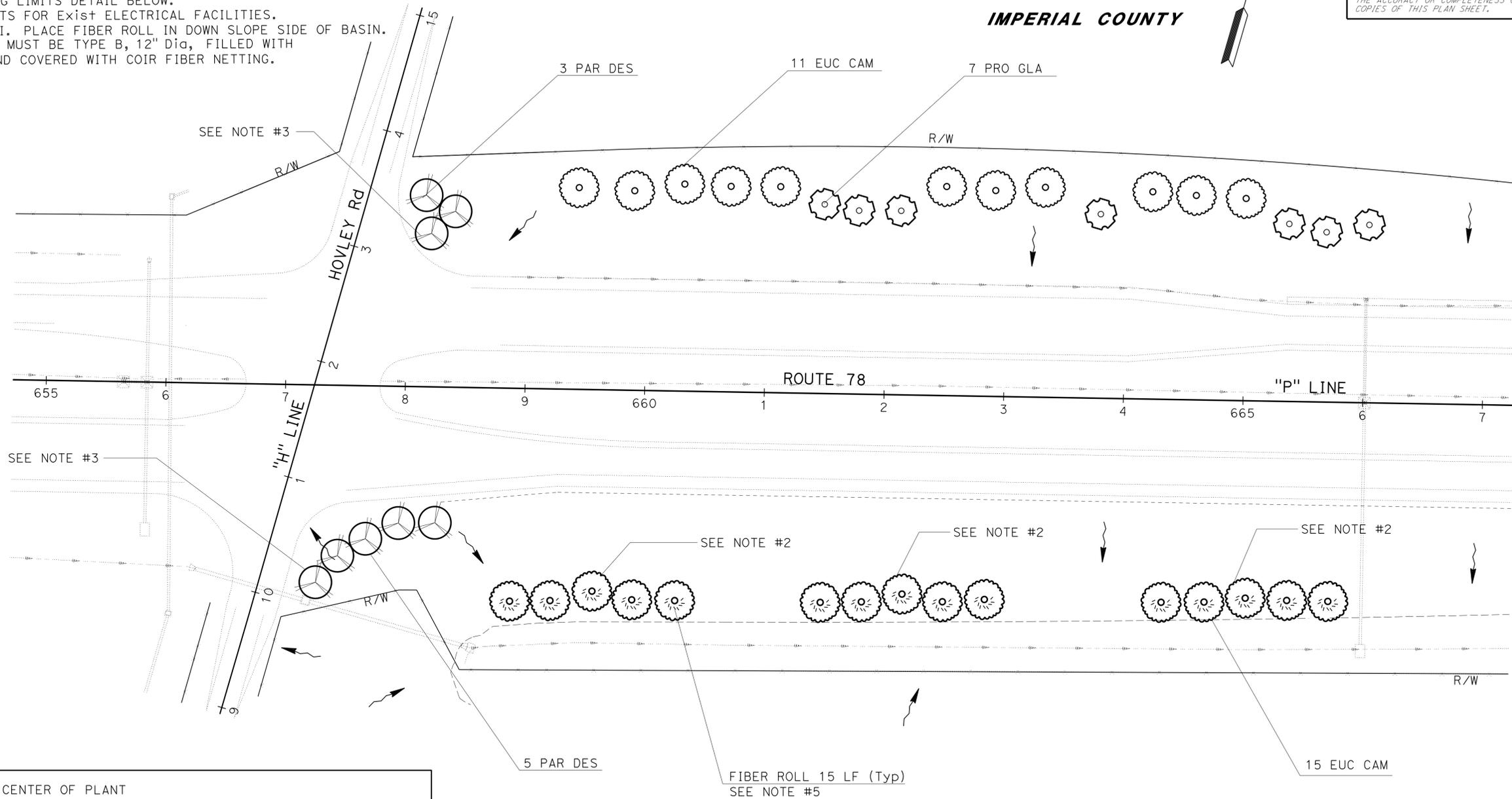
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	Imp	78, 111	R9.2/R14.0, 23.5/23.8	42	63

LICENSED LANDSCAPE ARCHITECT
 Signature: [Signature]
 06-09-14
 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
 CRISTINA BLANCO-KRAUSS No. 1056
 Signature: [Signature]
 01-31-16
 Renewal Date: 03-20-14
 06%
 STATE OF CALIFORNIA

NOTES:

- FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
- Exist EARTH DITCH FLOWLINE TREE PLANTING LIMIT: Min DISTANCE = 30 Ft TO TREE TRUNK.
- Exist ELECTRICAL FACILITY TREE PLANTING LIMIT. SEE TREE PLANTING LIMITS DETAIL BELOW.
- SEE UTILITY SHEETS FOR Exist ELECTRICAL FACILITIES.
- USE BASIN TYPE II. PLACE FIBER ROLL IN DOWN SLOPE SIDE OF BASIN. BASIN FIBER ROLL MUST BE TYPE B, 12" Dia, FILLED WITH COCONUT FIBER, AND COVERED WITH COIR FIBER NETTING.



IMPERIAL COUNTY



STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION - LANDSCAPE ARCHITECTURE

CRISTINA BLANCO-KRAUSS
BETH HALL

STEPHEN ALVAREZ

APPROVED FOR PLANTING WORK ONLY

SCALE: 1" = 50'

PLANTING PLAN
PP-3

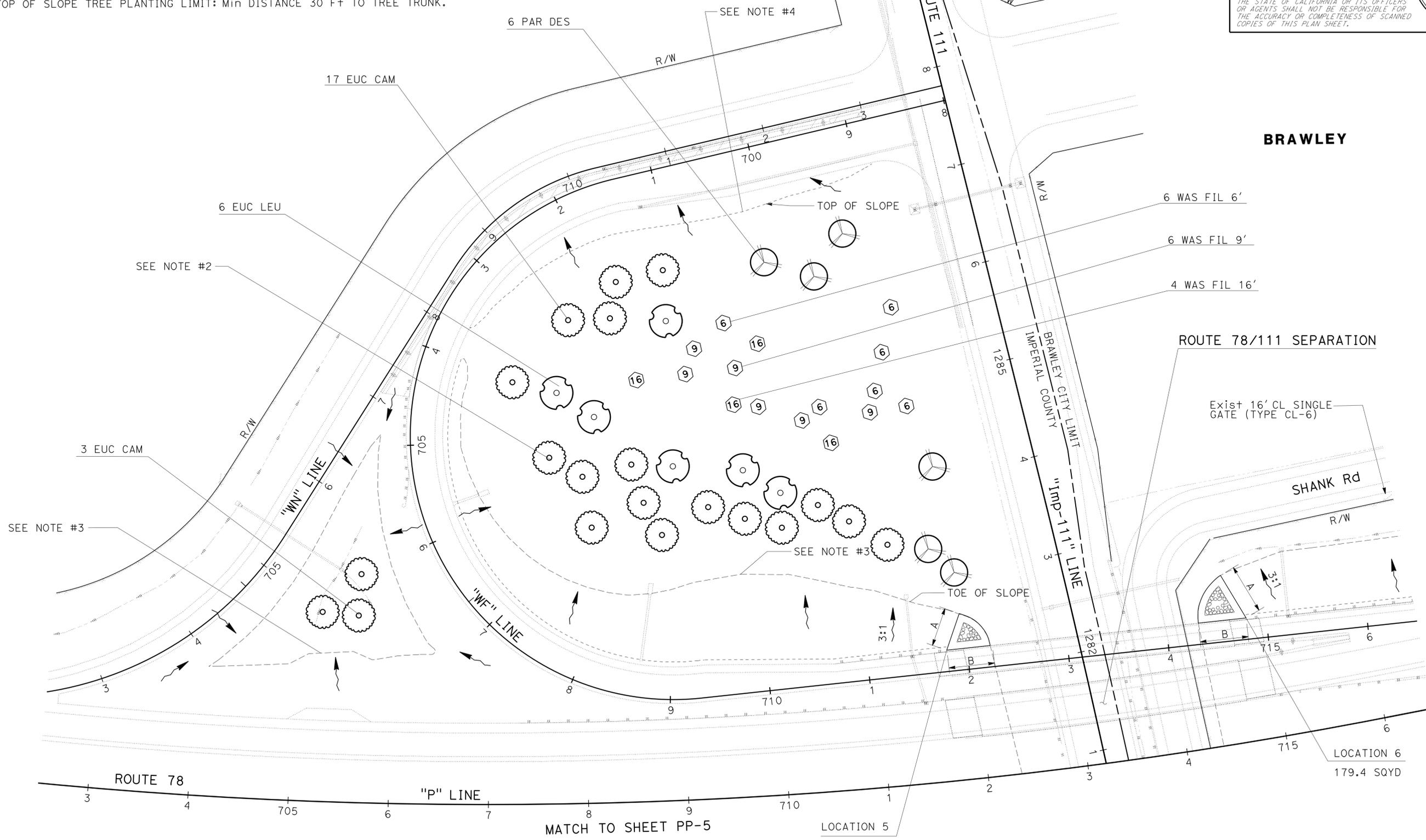
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	Imp	78, 111	R9.2/R14.0, 23.5/23.8	43	63

LICENSED LANDSCAPE ARCHITECT
 CRISTINA BLANCO-KRAUSS No. 10959
 Signature: [Signature]
 01-31-16
 Renewal Date: 03-20-14
 06-09-14
 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.

NOTES:

1. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
2. EXIST SEWER FACILITY TREE PLANTING LIMIT: Min DISTANCE 10 FT+. SEE UTILITY SHEETS FOR EXIST SEWER FACILITIES.
3. TOE OF SLOPE TREE PLANTING LIMIT: Min DISTANCE 40 FT+ TO TREE TRUNK.
4. TOP OF SLOPE TREE PLANTING LIMIT: Min DISTANCE 30 FT+ TO TREE TRUNK.

IMPERIAL COUNTY



BRAWLEY

ROUTE 78/111 SEPARATION

Exist 16' CL SINGLE GATE (TYPE CL-6)

SHANK Rd

PLANTING PLAN

PP-4

APPROVED FOR PLANTING WORK ONLY

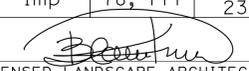
SCALE: 1" = 50

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	LANDSCAPE ARCHITECTURE	SENIOR LANDSCAPE ARCHITECT	DESIGNED BY	CRISTINA BLANCO-KRAUSS	REVISOR	DATE
		STEPHEN ALVAREZ	CHECKED BY	BETH HALL		

USERNAME => s127400
DGN FILE => 1100020352su004.dgn



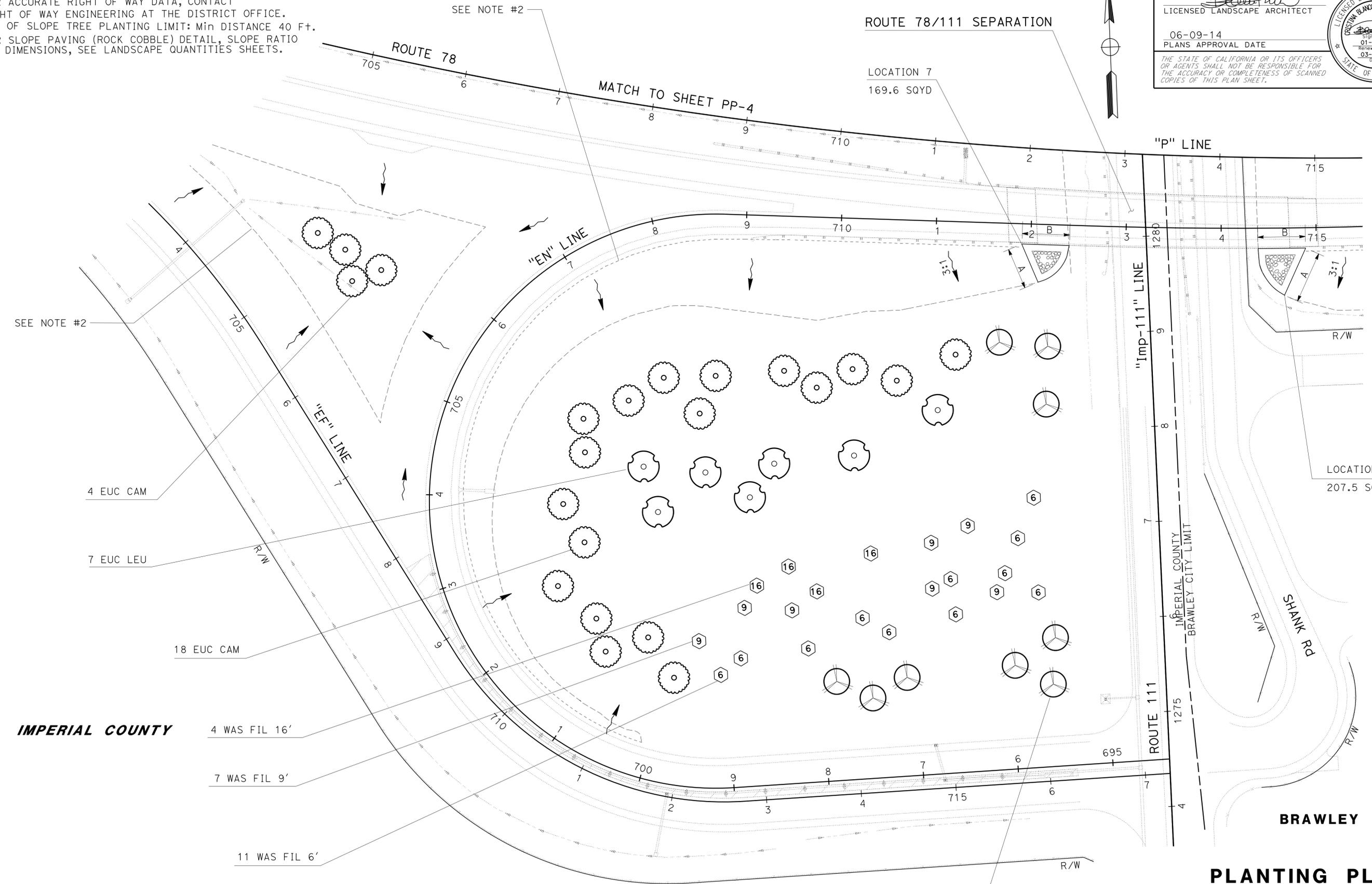
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	Imp	78, 111	R9.2/R14.0, 23.5/23.8	44	63

 LICENSED LANDSCAPE ARCHITECT		
06-09-14 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.

NOTES:

1. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
2. TOE OF SLOPE TREE PLANTING LIMIT: Min DISTANCE 40 Ft.
3. FOR SLOPE PAVING (ROCK COBBLE) DETAIL, SLOPE RATIO AND DIMENSIONS, SEE LANDSCAPE QUANTITIES SHEETS.



STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	LANDSCAPE ARCHITECTURE	SENIOR LANDSCAPE ARCHITECT	DESIGNED BY	REVISOR
Caltrans	LANDSCAPE ARCHITECTURE	STEPHEN ALVAREZ	STEPHEN ALVAREZ	BETH HALL
			CHECKED BY	DATE REVISED

IMPERIAL COUNTY

BRAWLEY

APPROVED FOR PLANTING WORK ONLY

PLANTING PLAN
PP-5

SCALE: 1" = 50'

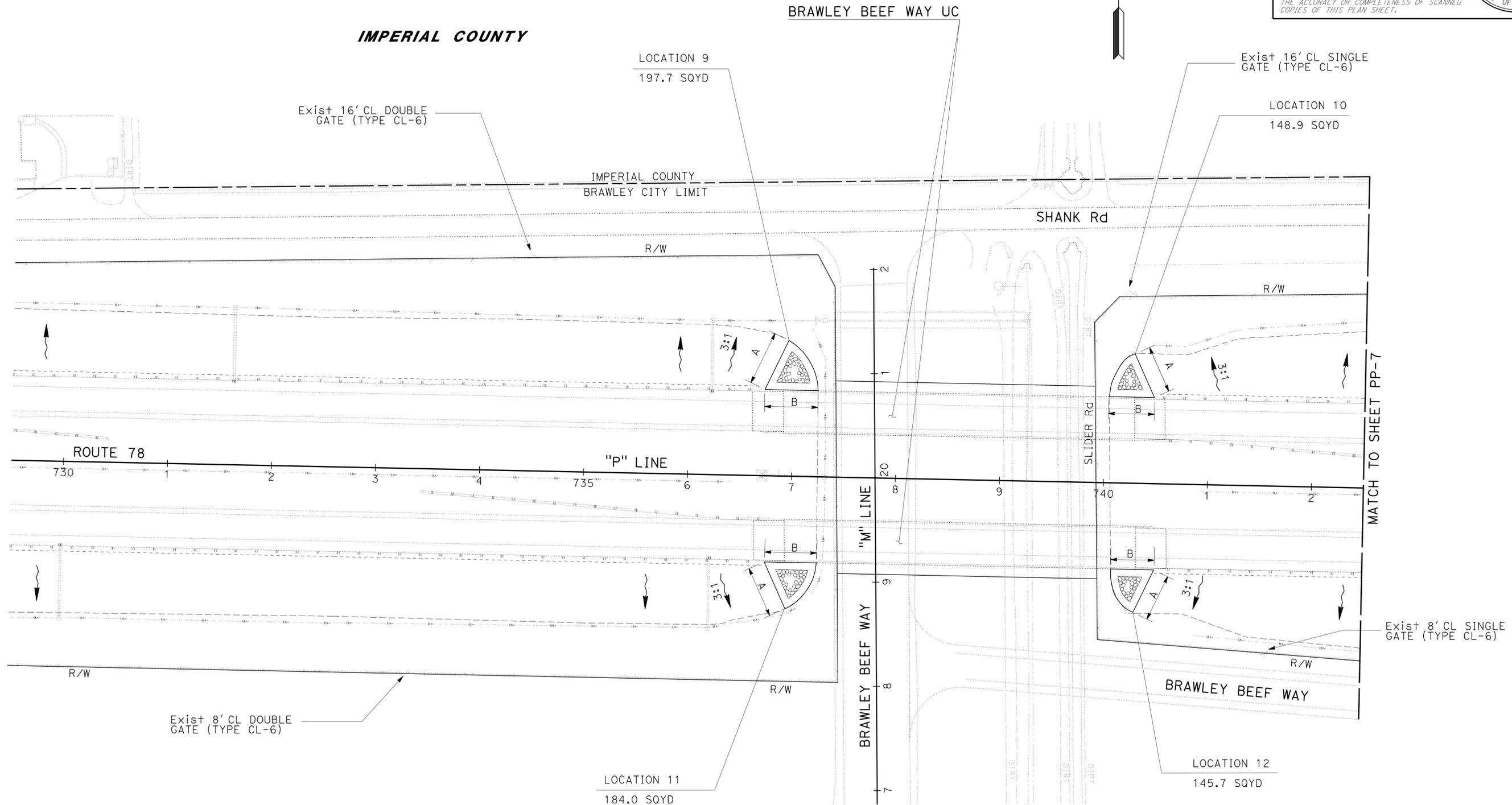
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	Imp	78, 111	R9.2/R14.0, 23.5/23.8	45	63

Signature: *[Signature]*
 LICENSED LANDSCAPE ARCHITECT
 06-09-14
 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.

NOTES:

- FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
- FOR SLOPE PAVING (ROCK COBBLE) DETAIL, SLOPE RATIO AND DIMENSIONS, SEE LANDSCAPE QUANTITIES SHEETS.

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	LANDSCAPE ARCHITECTURE	SENIOR LANDSCAPE ARCHITECT	STEPHEN ALVAREZ	CALCULATED/DESIGNED BY	CHECKED BY	CRISTINA BLANCO-KRAUSS	BETH HALL	REVISED BY	DATE	REVISED
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PLANTING PLAN
PP-6

APPROVED FOR PLANTING WORK ONLY

SCALE: 1" = 50'

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	Imp	78, 111	R9.2/R14.0, 23.5/23.8	46	63

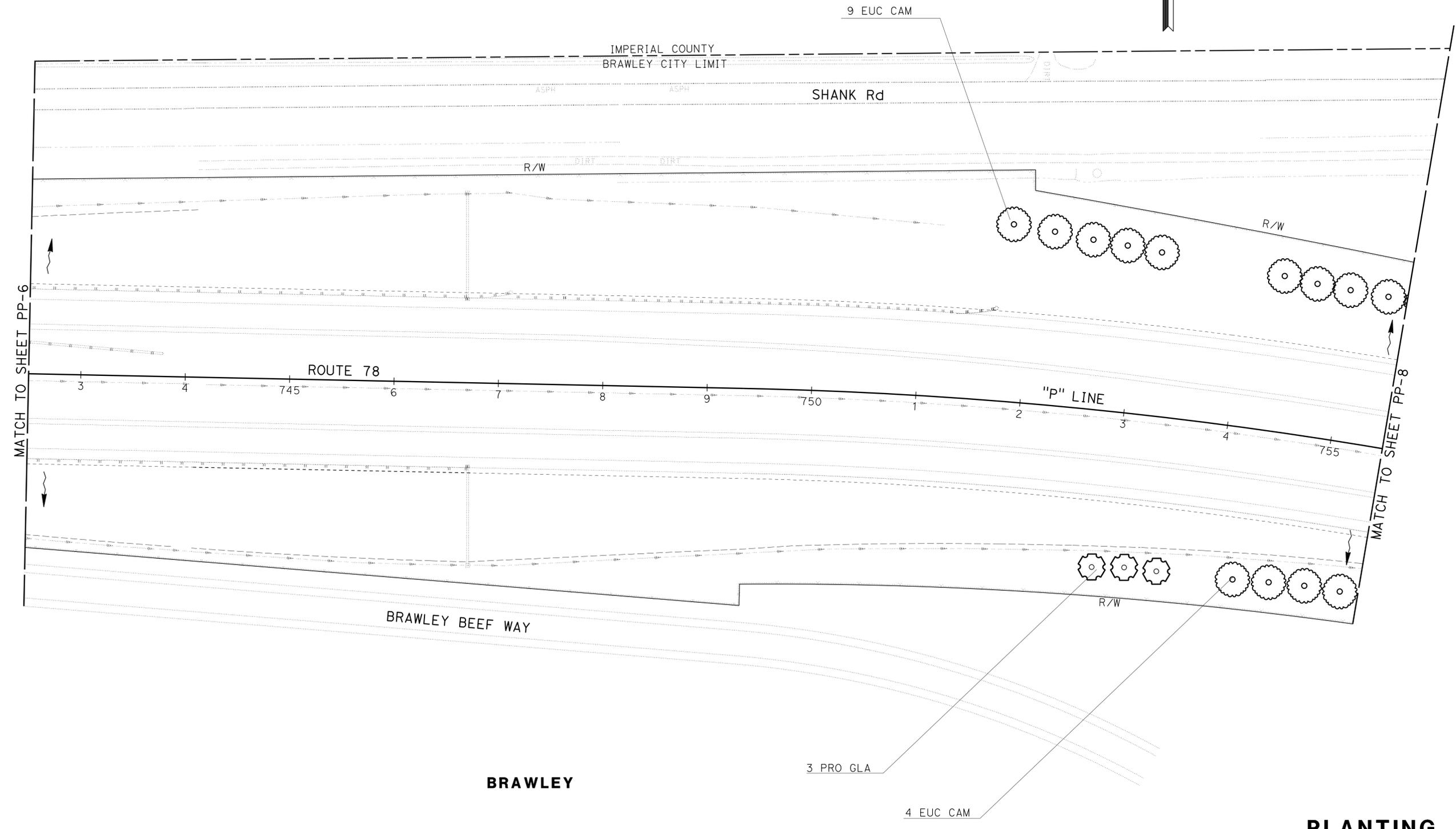
Signature: *[Signature]*
 LICENSED LANDSCAPE ARCHITECT
 06-09-14
 PLANS APPROVAL DATE
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

NOTES:

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



IMPERIAL COUNTY



BRAWLEY

PLANTING PLAN

PP-7

APPROVED FOR PLANTING WORK ONLY

SCALE: 1" = 50'

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	REVISOR	DATE
Caltrans LANDSCAPE ARCHITECTURE	CRISTINA BLANCO-KRAUSS	BETH HALL
SENIOR LANDSCAPE ARCHITECT	CALCULATED/DESIGNED BY	CHECKED BY
STEPHEN ALVAREZ		
	REVISOR	DATE

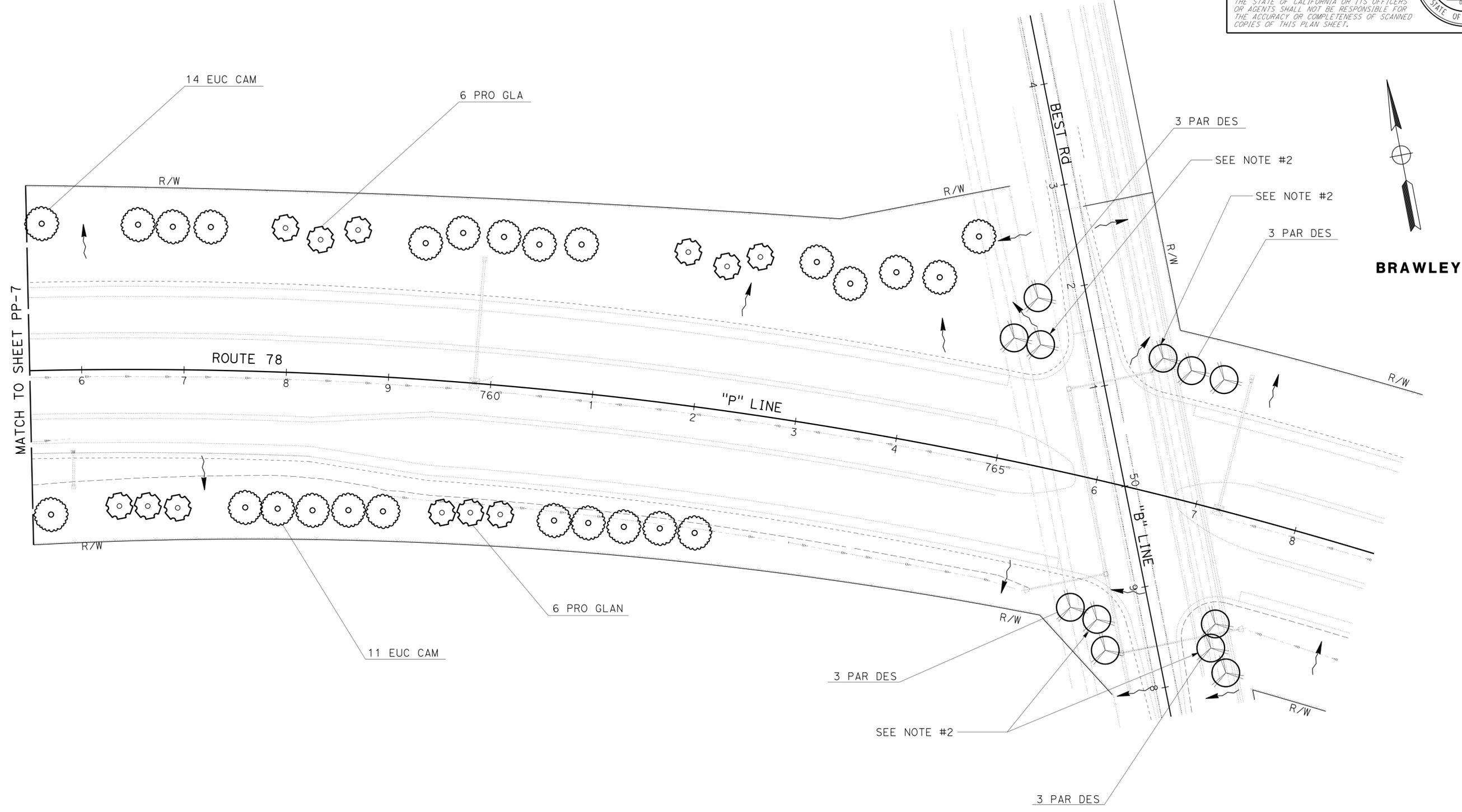
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	Imp	78, 111	R9.2/R14.0, 23.5/23.8	47	63

 LICENSED LANDSCAPE ARCHITECT		
06-09-14 PLANS APPROVAL DATE		

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NOTES:

- FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
- EDGE OF Pvm+ TREE PLANTING LIMIT: Min DISTANCE 30 Ft.



STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans LANDSCAPE ARCHITECTURE
 SENIOR LANDSCAPE ARCHITECT: STEPHEN ALVAREZ
 CALCULATED/DESIGNED BY: CHECKED BY:
 CRISTINA BLANCO-KRAUSS BETH HALL
 REVISED BY: DATE REVISED:

APPROVED FOR PLANTING WORK ONLY

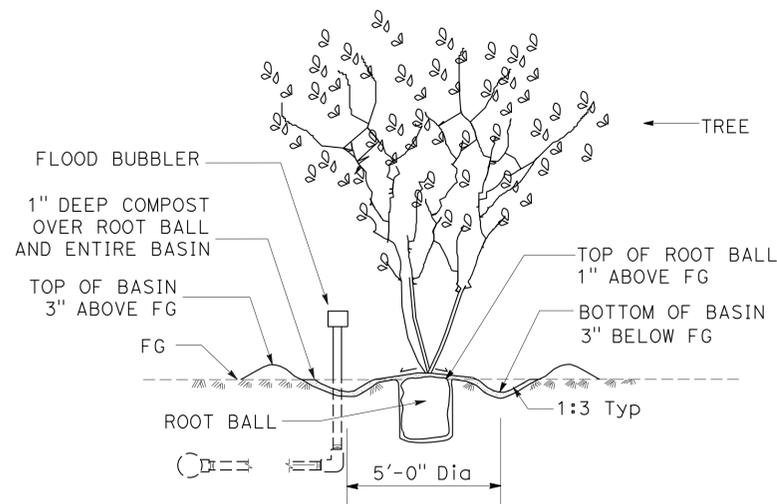
SCALE: 1" = 50'

PLANTING PLAN
PP-8

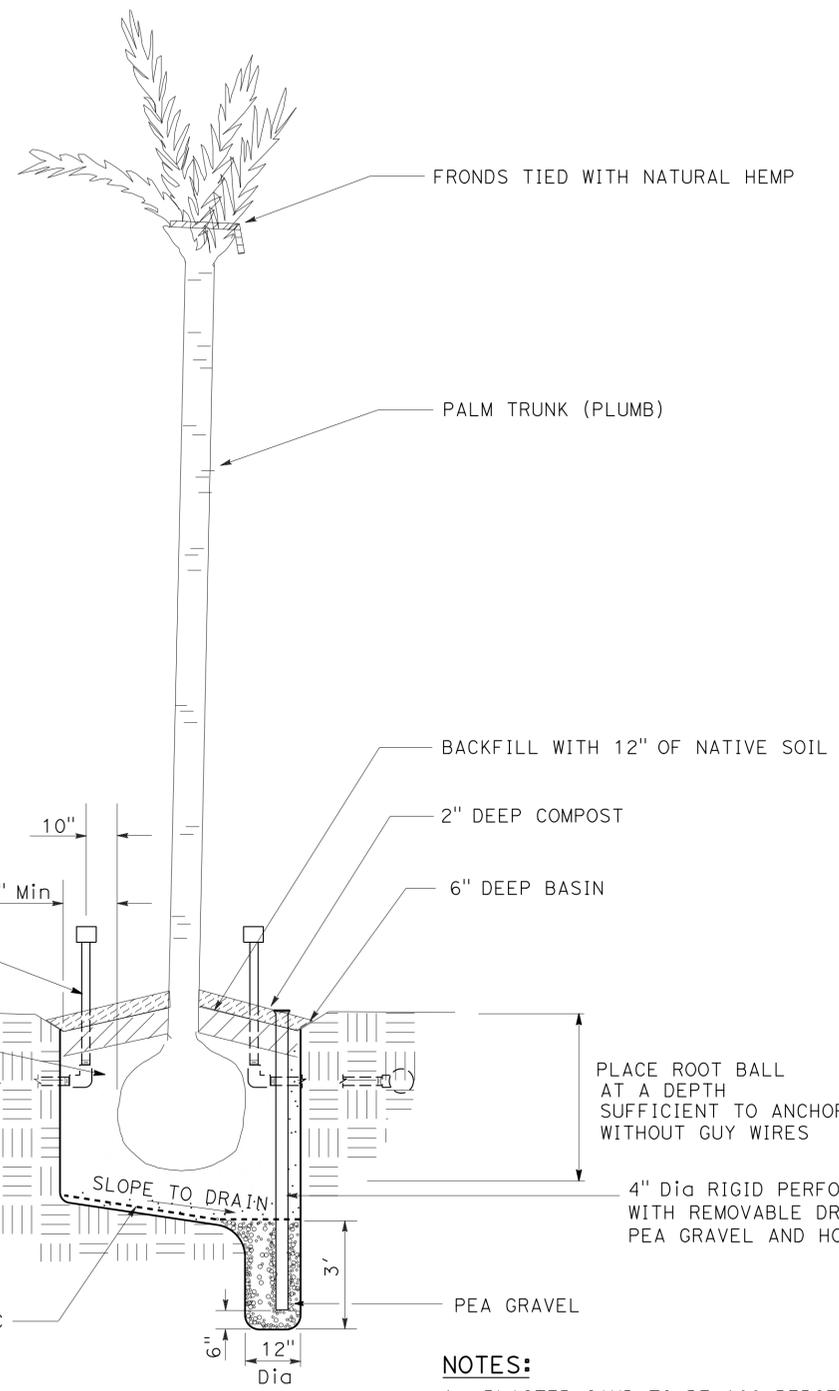
LAST REVISION: DATE PLOTTED => 09-JUN-2014 TIME PLOTTED => 14:18

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	Imp	78, 111	R9.2/R14.0, 23.5/23.8	49	63

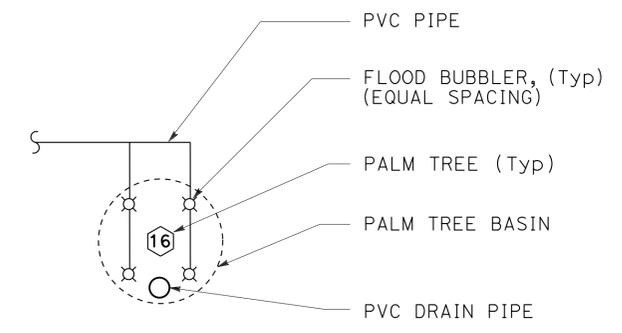
LICENSED LANDSCAPE ARCHITECT
 06-09-14
 PLANS APPROVAL DATE
 THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.



SECTION
DESERT TREE BASIN



SECTION
**PALM TREE PLANTING
PREPARE HOLE**



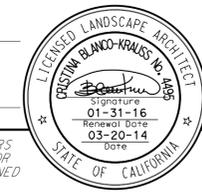
PLAN

- NOTES:**
1. PLASTER SAND TO BE 100 PERCENT COMMERCIAL QUALITY WASHED PLASTER SAND.
 2. BACKFILLED PLASTER SAND IS TO BE WATER JETTED WHILE BACKFILLING PLANT HOLE.

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans LANDSCAPE ARCHITECTURE
 SENIOR LANDSCAPE ARCHITECT: STEPHEN ALVAREZ
 CALCULATED/DESIGNED BY: [blank]
 CHECKED BY: [blank]
 CRISTINA BLANCO-KRAUSS
 KENNY MAH
 REVISED BY: [blank]
 DATE REVISED: [blank]

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	Imp	78, 111	R9.2/R14.0, 23.5/23.8	50	63


 LICENSED LANDSCAPE ARCHITECT
 06-09-14
 PLANS APPROVAL DATE



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STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans LANDSCAPE ARCHITECTURE
 SENIOR LANDSCAPE ARCHITECT
 CRISTINA BLANCO-KRAUSS
 BETH HALL
 CALCULATED/DESIGNED BY
 CHECKED BY
 REVISOR BY
 DATE REVISED

SLOPE PAVING (ROCK COBBLE) QUANTITIES

SHEET	LOCATION	SLOPE RATIO	DIMENSION	DIMENSION	BROOM FINISH	ROCK COBBLE FINISH	SLOPE PAVING
			A (N)	B (N)	AREA (N)	AREA (N)	(ROCK COBBLE)
			(LF)	(LF)	(SQYD)	(SQYD)	(SQYD)
PP-2	1	1.8:1	50.0	45.0	111.2	54.7	165.9
PP-2	2	1.4:1	45.0	50.0	118.6	70.3	188.9
PP-2	3	1.8:1	49.0	43.5	107.0	47.9	154.9
PP-2	4	1.4:1	47.5	51.0	117.2	66.8	184.0
PP-4	5	1.5:1	38.5	43.5	93.3	35.9	129.2
PP-4	6	1.5:1	49.5	48.0	115.2	64.2	179.4
PP-5	7	1.5:1	43.5	50.0	110.6	59.0	169.6
PP-5	8	1.5:1	54.0	50.0	125.7	81.8	207.5
PP-6	9	1.5:1	52.0	51.0	123.0	74.7	197.7
PP-6	10	1.5:1	45.5	43.0	103.1	45.8	148.9
PP-6	11	1.5:1	49.0	50.0	117.3	66.7	184.0
PP-6	12	1.5:1	45.0	41.0	100.6	45.1	145.7
TOTAL							2,055.7

(N) NOT A PAY ITEM. FOR INFORMATION ONLY.

LANDSCAPE QUANTITIES

LQ-1

LAST REVISION | DATE PLOTTED => 09-JUN-2014
 04-07-14 | TIME PLOTTED => 1:4:18

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	Imp	78, 111	R9.2/R14.0 23.5/23.8	51	63

Grace M. Tsushima
REGISTERED CIVIL ENGINEER

July 19, 2013
PLANS APPROVAL DATE

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

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

TO ACCOMPANY PLANS DATED 06-09-14

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
∅	NOMINAL DIAMETER
oz	OUNCE
lb	POUND
kíp	1,000 POUNDS
cal	CALORIE
ft	FOOT OR FEET
gal	GALLON

* For use on a sign panel only

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

**ABBREVIATIONS
(SHEET 2 OF 2)**

NO SCALE

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

REVISED STANDARD PLAN RSP A10B

Maint	MAINTENANCE
Max	MAXIMUM
MB	METAL BEAM
MBB	METAL BEAM BARRIER
MBGR	METAL BEAM GUARD RAILING
Med	MEDIAN
MGS	MIDWEST GUARDRAIL SYSTEM
MH	MANHOLE
Min	MINIMUM
Misc	MISCELLANEOUS
Misc I & S	MISCELLANEOUS IRON AND STEEL
Mkr	MARKER
Mod	MODIFIED, MODIFY
Mon	MONUMENT
MP	METAL PLATE
MPGR	METAL PLATE GUARD RAILING
MR	MOVEMENT RATING
MSE	MECHANICALLY STABILIZED EMBANKMENT
Mt	MOUNTAIN, MOUNT
MtI	MATERIAL
MVP	MAINTENANCE VEHICLE PULLOUT
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
Obir	OBLITERATE
OC	OVERCROSSING
OD	OUTSIDE DIAMETER
OF	OUTSIDE FACE
OG	ORIGINAL GROUND
OGAC	OPEN GRADED ASPHALT CONCRETE
OGFC	OPEN GRADED FRICTION COURSE
OH	OVERHEAD
OHWM	ORDINARY HIGH WATER MARK
O-O	OUT TO OUT
Opp	OPPOSITE
OSD	OVERSIDE DRAIN
p	PAGE
PAP	PERFORATED ALUMINUM PIPE
PB	PULL BOX
PC	POINT OF CURVATURE, PRECAST
PCC	POINT OF COMPOUND CURVE, PORTLAND CEMENT CONCRETE
PCMS	PORTABLE CHANGEABLE MESSAGE SIGN
PCP	PERFORATED CONCRETE PIPE, PRESTRESSED CONCRETE PIPE
PCVC	POINT OF COMPOUND VERTICAL CURVE
PEC	PERMIT TO ENTER AND CONSTRUCT
Ped	PEDESTRIAN
Ped OC	PEDESTRIAN OVERCROSSING
Ped UC	PEDESTRIAN UNDERCROSSING
Perm MtI	PERMEABLE MATERIAL

PG	PROFILE GRADE
PI	POINT OF INTERSECTION
PJP	PARTIAL JOINT PENETRATION
Pkwy	PARKWAY
PL, PL	PLATE
P/L	PROPERTY LINE
PM	POST MILE, TIME FROM NOON TO MIDNIGHT
PN	PAVING NOTCH
POC	POINT OF HORIZONTAL CURVE
POT	POINT OF TANGENT
POVC	POINT OF VERTICAL CURVE
PP	PIPE PILE, PLASTIC PIPE, POWER POLE
PPL	PREFORMED PERMEABLE LINER
PPP	PERFORATED PLASTIC PIPE
PRC	POINT OF REVERSE CURVE
PRF	PAVEMENT REINFORCING FABRIC
PRVC	POINT OF REVERSE VERTICAL CURVE
PS&E	PLANS, SPECIFICATIONS AND ESTIMATES
PS, P/S	PRESTRESSED
PSP	PERFORATED STEEL PIPE
PT	POINT OF TANGENCY
PVC	POLYVINYL CHLORIDE
Pvmt	PAVEMENT
Qty	QUANTITY
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	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
SL	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	SEMI-TANGENT
Tan	TANGENT
TBB	THRIE BEAM BARRIER
Tbr	TIMBER
TC	TOP OF CURB
TCB	TRAFFIC CONTROL BOX
TCE	TEMPORARY CONSTRUCTION EASEMENT
TeI	TELEPHONE
Temp	TEMPORARY
TG	TOP OF GRADE
Tot	TOTAL
TP	TELEPHONE POLE
TPB	TREATED PERMEABLE BASE
TPM	TREATED PERMEABLE MATERIAL
Trans	TRANSITION

TS	TRANSVERSE, TRAFFIC SIGNAL, TUBULAR STEEL
Typ	TYPICAL
UC	UNDERCROSSING
UD	UNDERDRAIN
UG	UNDERGROUND
UON	UNLESS OTHERWISE NOTED
UP	UNDERPASS
V	VALVE, DESIGN SPEED
Var	VARIABLE, VARIES
VC	VERTICAL CURVE
VCP	VITRIFIED CLAY PIPE
Vert	VERTICAL
Via	VIADUCT
Vol	VOLUME
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 Sec	CROSS SECTION
Xing	CROSSING
Yr	YEAR
Yrs	YEARS

P continued

S

T continued

M

Q

R

U

V

W

X

Y

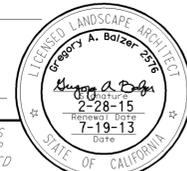
T

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	Imp	78, 111	R9.2/R14.0 23.5/23.8	52	63

Gregory A. Balzer
LICENSED LANDSCAPE ARCHITECT

July 19, 2013
PLANS APPROVAL DATE

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TO ACCOMPANY PLANS DATED 06-09-14

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
 MtI MATERIAL
 MVP MAINTENANCE VEHICLE PULLOUT

N

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

O

O/C ON CENTER
 OD OUTSIDE DIAMETER
 OL OVERLAP

P

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

Q

Q QUARTER CIRCLE
 QCV QUICK COUPLING VALVE

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

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

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

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	Imp	78, 111	R9.2/R14.0 23.5/23.8	53	63

Gregory A. Balzer
 LICENSED LANDSCAPE ARCHITECT
 JULY 19, 2013
 PLANS APPROVAL DATE
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TO ACCOMPANY PLANS DATED 06-09-14

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

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



* 2 1/2" - A - 2b - 40 - 60

VALVE CODE

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

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

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

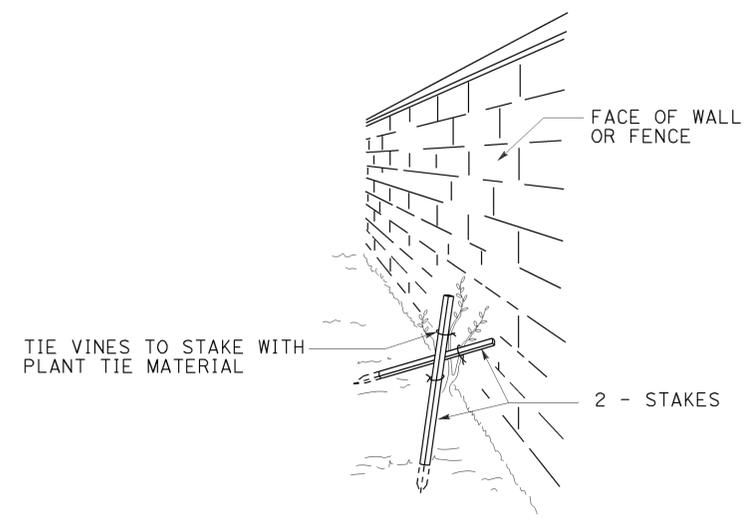
REVISED STANDARD PLAN RSP H2

2010 REVISED STANDARD PLAN RSP H2

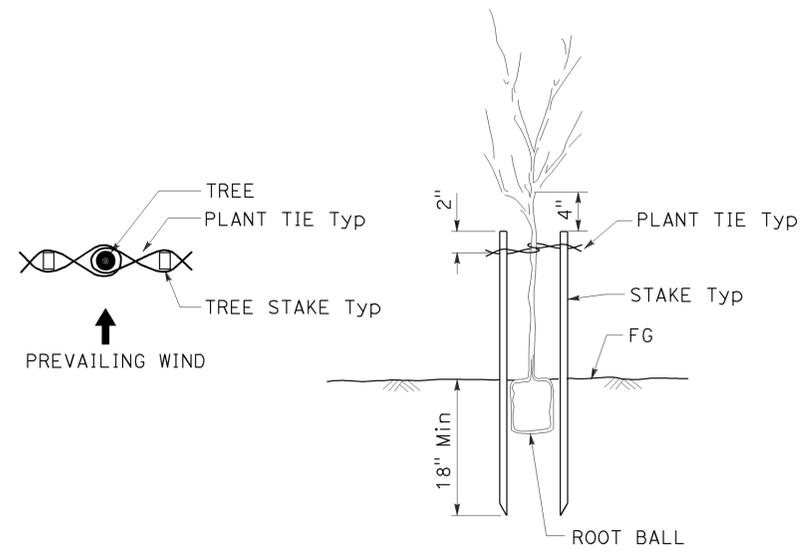
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	Imp	78, 111	R9.2/R14.0 23.5/23.8	54	63

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.

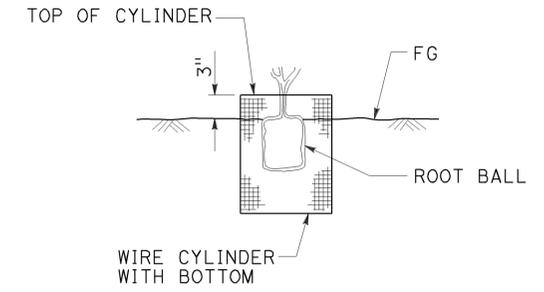
TO ACCOMPANY PLANS DATED 06-09-14



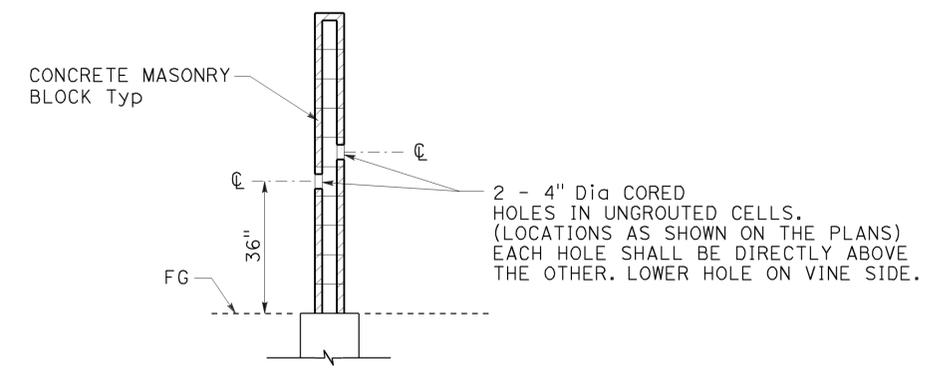
PERSPECTIVE VINE STAKING



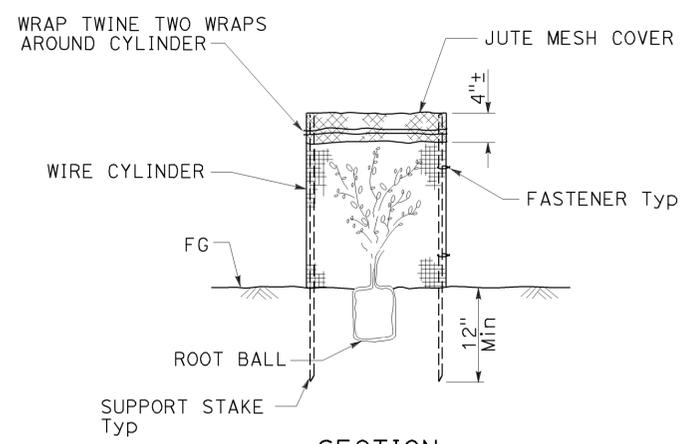
TREE STAKING



SECTION ROOT PROTECTOR



SECTION CORE HOLE (VINE)



SECTION FOLIAGE PROTECTOR

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION
LANDSCAPE DETAILS
 NO SCALE

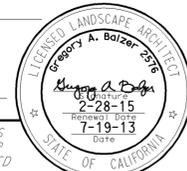
RSP H4 DATED JULY 19, 2013 SUPERSEDES STANDARD PLAN H4 DATED MAY 20, 2011 - PAGE 221 OF THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP H4

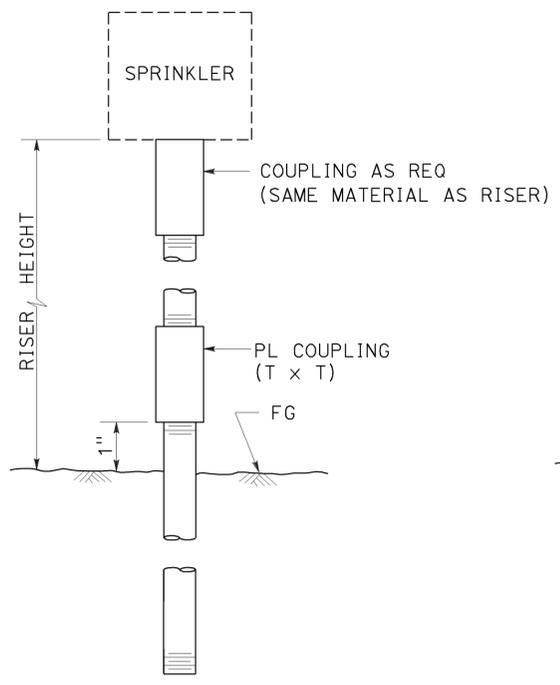
2010 REVISED STANDARD PLAN RSP H4

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	Imp	78, 111	R9.2/R14.0 23.5/23.8	55	63

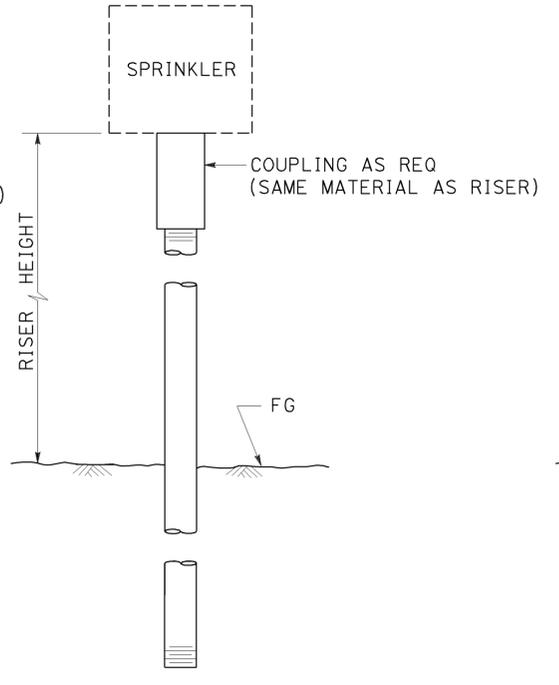
Gregory A. Balzer
 LICENSED LANDSCAPE ARCHITECT
 July 19, 2013
 PLANS APPROVAL DATE
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.



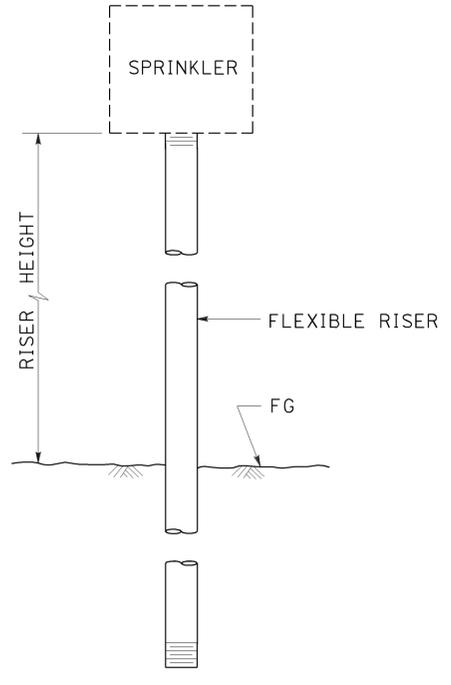
TO ACCOMPANY PLANS DATED 06-09-14



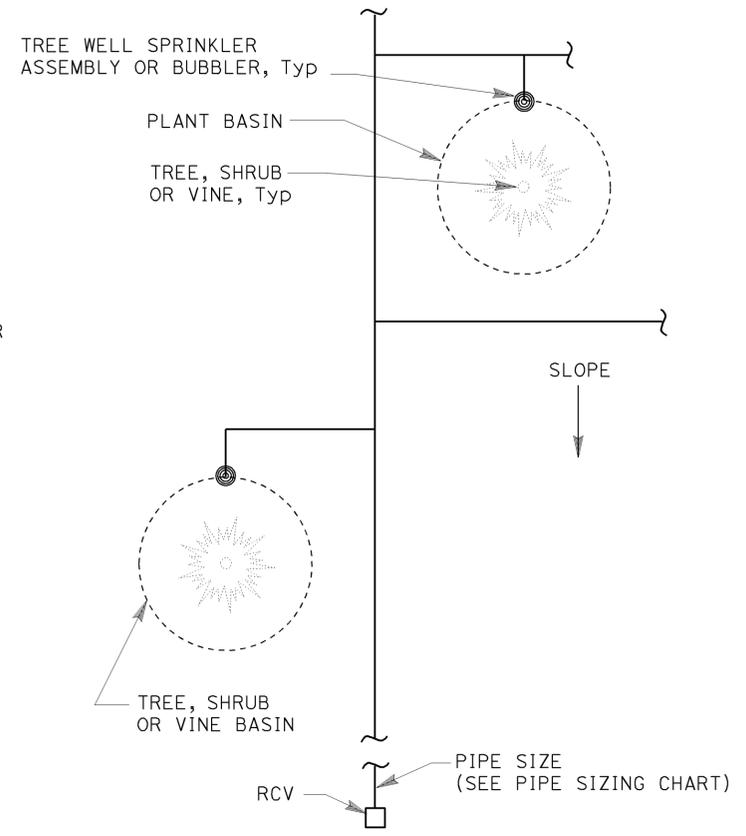
ELEVATION
RISER SPRINKLER ASSEMBLY TYPE I



ELEVATION
RISER SPRINKLER ASSEMBLY TYPE II



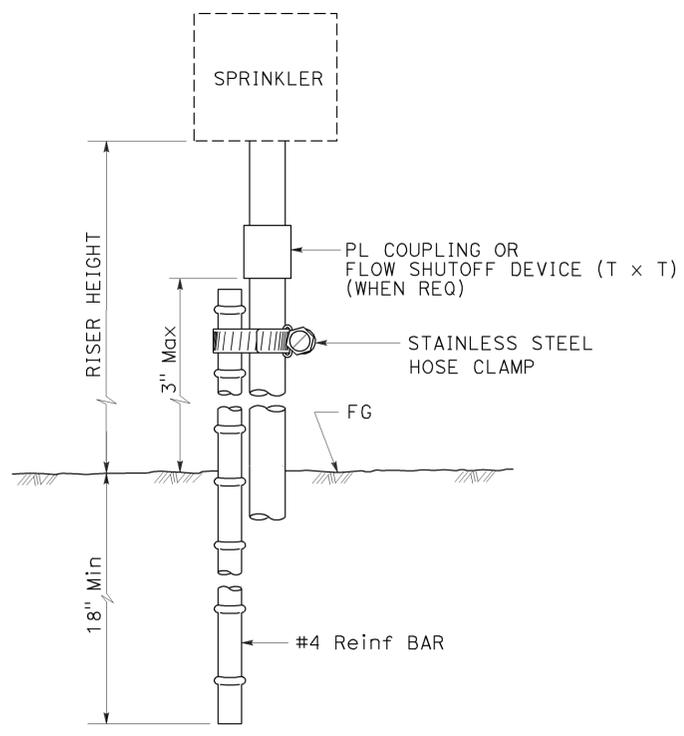
ELEVATION
RISER SPRINKLER ASSEMBLY TYPE III



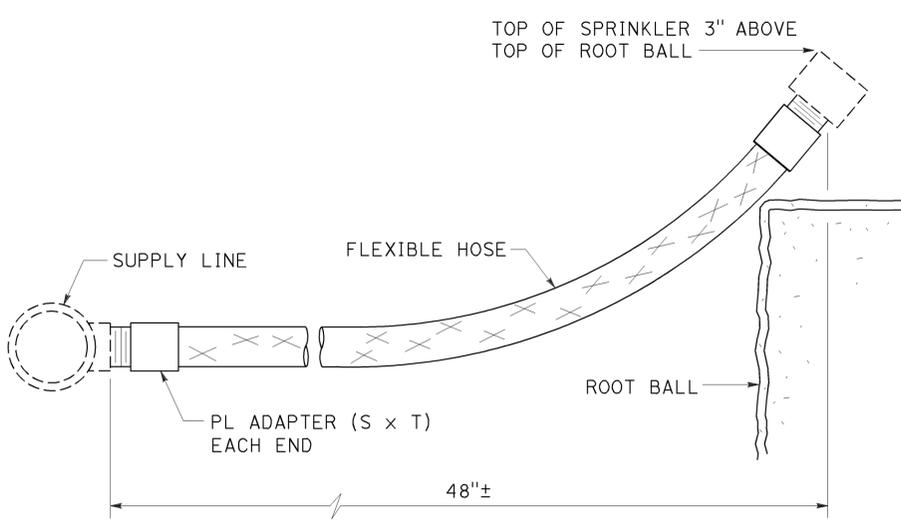
PLAN

NOTES:

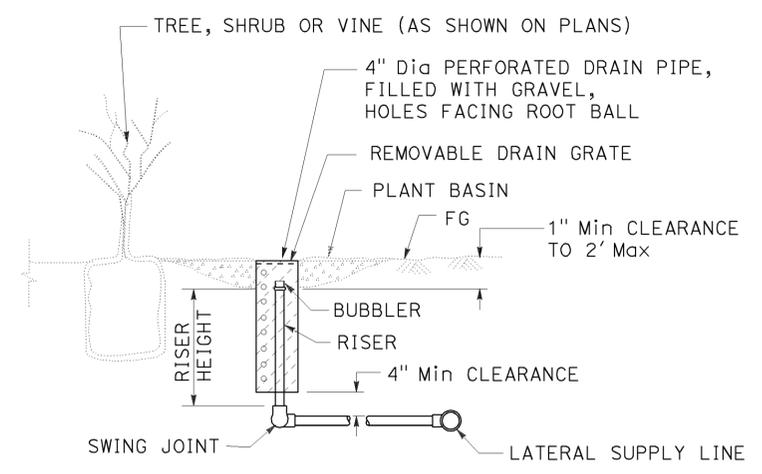
1. Install tree well sprinkler assembly on up-hill side of plant when on slope.
2. Install bubbler within basin.



ELEVATION
RISER SPRINKLER ASSEMBLY TYPE IV



ELEVATION
RISER SPRINKLER ASSEMBLY TYPE V



SECTION
TREE WELL SPRINKLER ASSEMBLY

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
LANDSCAPE DETAILS
NO SCALE

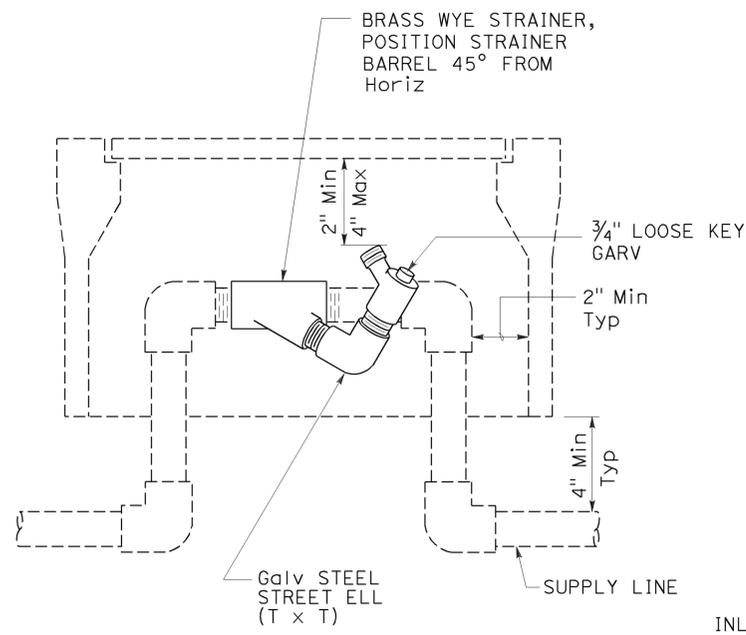
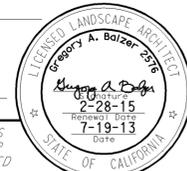
RSP H5 DATED JULY 19, 2013 SUPERSEDES STANDARD PLAN H5 DATED MAY 20, 2011 - PAGE 222 OF THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP H5

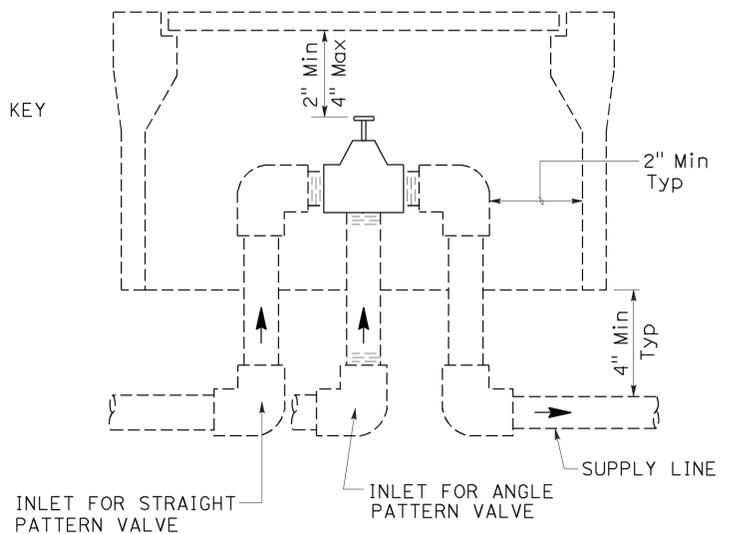
2010 REVISED STANDARD PLAN RSP H5

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	Imp	78, 111	R9.2/R14.0 23.5/23.8	56	63

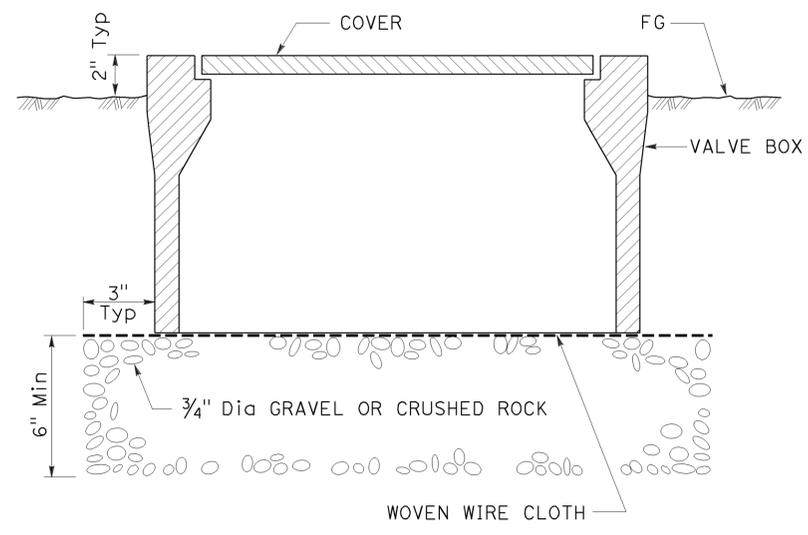
Gregory A. Balzer
 LICENSED LANDSCAPE ARCHITECT
 July 19, 2013
 PLANS APPROVAL DATE
 THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.



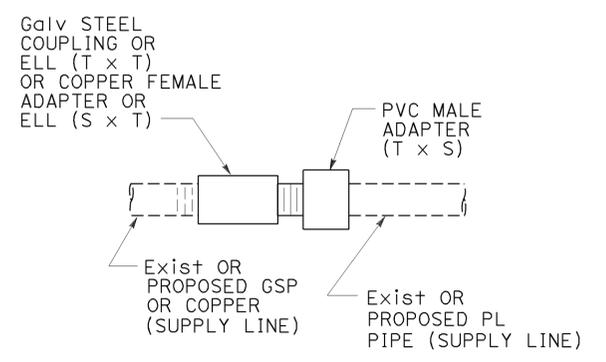
ELEVATION
WYE STRAINER ASSEMBLY



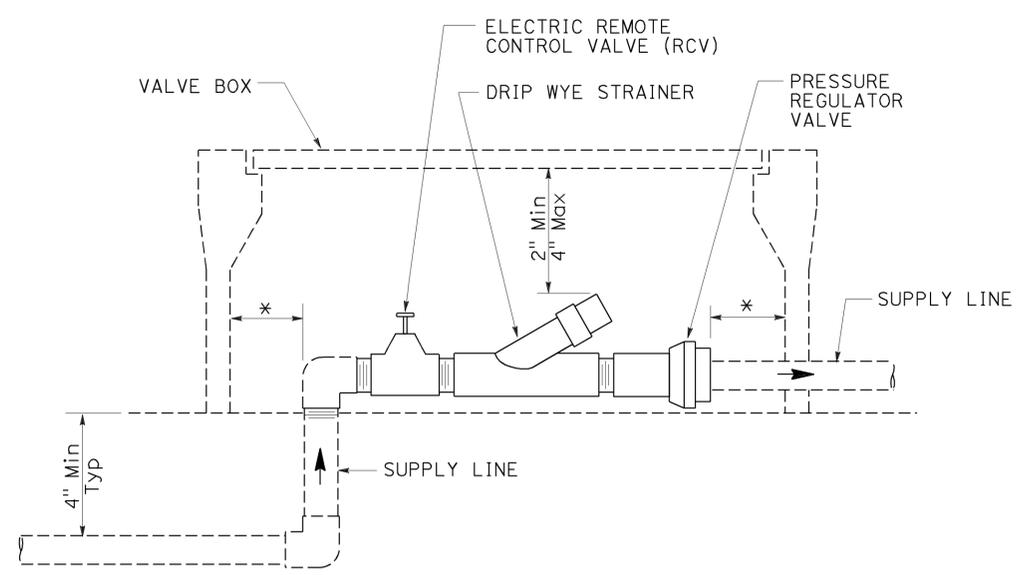
ELEVATION
VALVE



SECTION
VALVE BOX



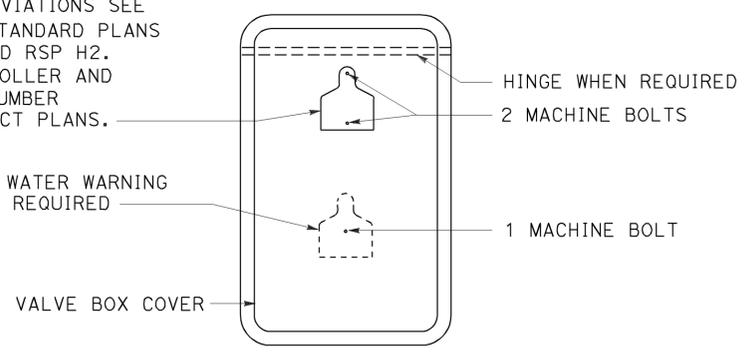
GALVANIZED OR COPPER PIPE CONNECTION TO PLASTIC PIPE



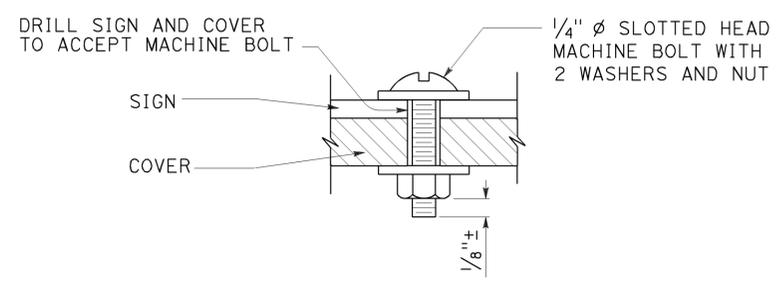
ELEVATION
DRIP VALVE ASSEMBLY

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

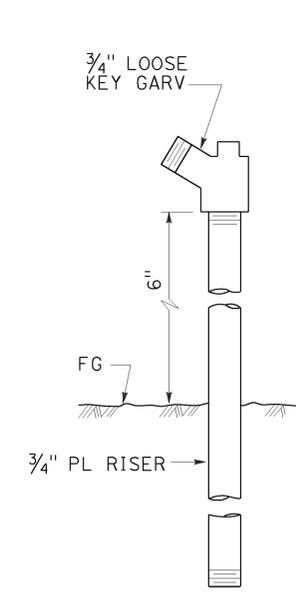
RECYCLED WATER WARNING
SIGN WHEN REQUIRED



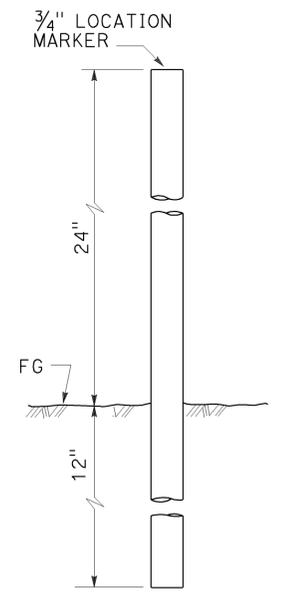
PLAN



SECTION
VALVE BOX IDENTIFICATION



ELEVATION
GARDEN VALVE ASSEMBLY



ELEVATION
LOCATION MARKER

GARDEN VALVE ASSEMBLY

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

LANDSCAPE DETAILS

NO SCALE

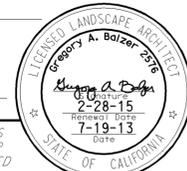
RSP H7 DATED JULY 19, 2013 SUPERSEDES STANDARD PLAN H7
DATED MAY 20, 2011 - PAGE 224 OF THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP H7

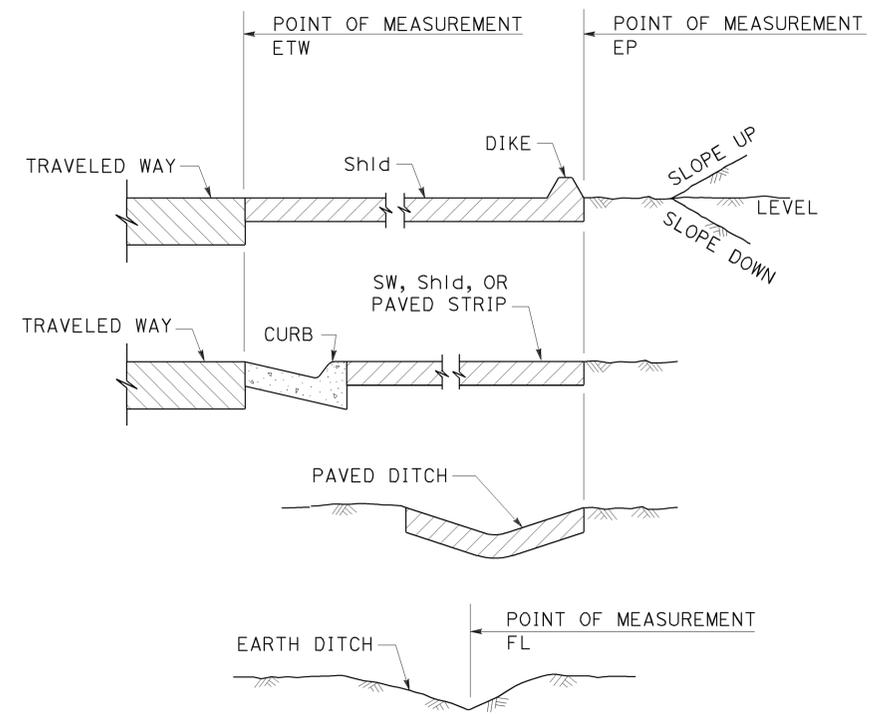
2010 REVISED STANDARD PLAN RSP H7

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	Imp	78, 111	R9.2/R14.0 23.5/23.8	57	63

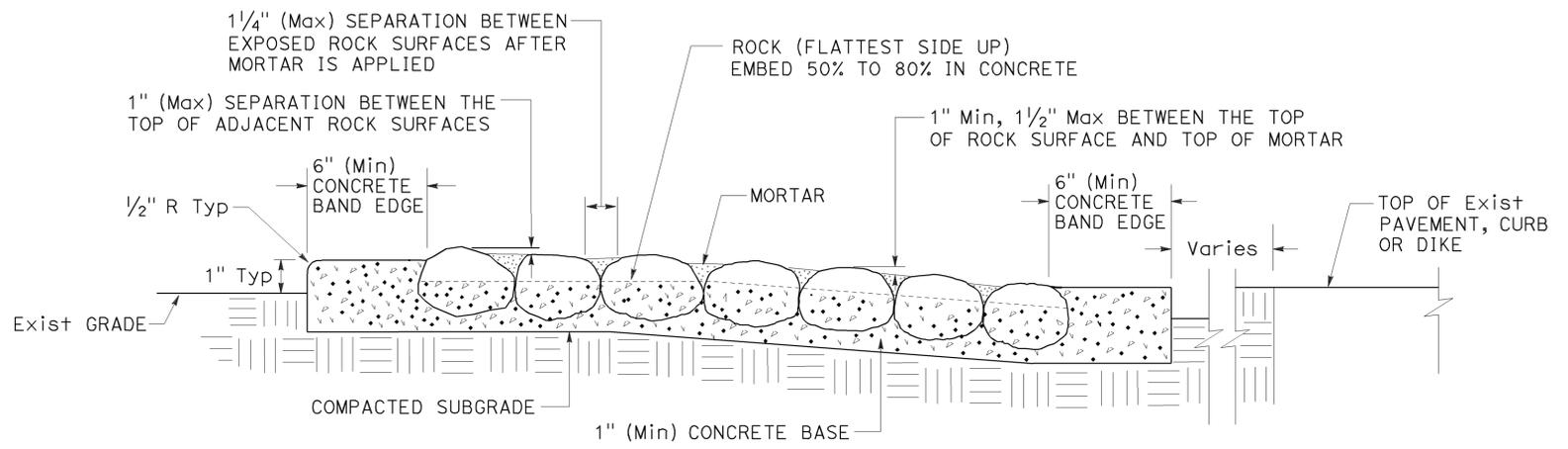
Gregory A. Balzer
 LICENSED LANDSCAPE ARCHITECT
 July 19, 2013
 PLANS APPROVAL DATE
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.



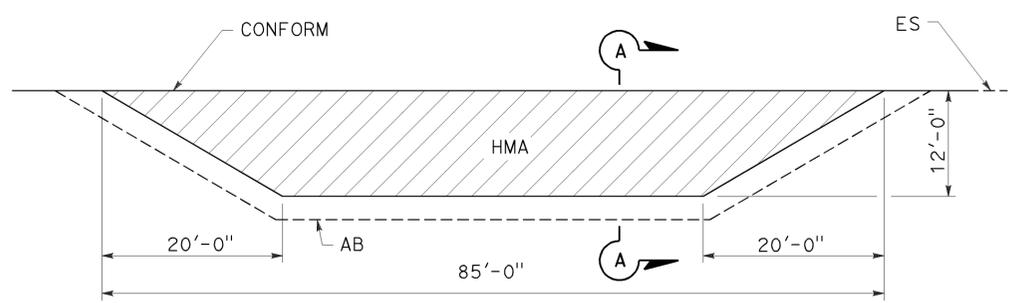
TO ACCOMPANY PLANS DATED 06-09-14



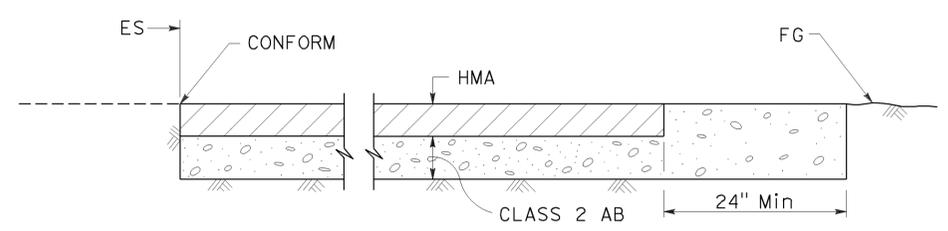
**SECTION
POINTS OF MEASUREMENT**



**SECTION
ROCK BLANKET**



PLAN



**SECTION A-A
MAINTENANCE VEHICLE PULLOUT**

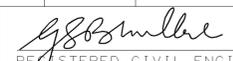
STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION
LANDSCAPE DETAILS
 NO SCALE

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

REVISED STANDARD PLAN RSP H9A

2010 REVISED STANDARD PLAN RSP H9A

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	Imp	78, 111	R9.2/R14.0 23.5/23.8	58	63


 REGISTERED CIVIL ENGINEER
 July 19, 2013
 PLANS APPROVAL DATE



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TO ACCOMPANY PLANS DATED 06-09-14

TABLE 1

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

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

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

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

TABLE 2

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

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

TABLE 3

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

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

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION
**TRAFFIC CONTROL SYSTEM TABLES
 FOR LANE AND RAMP CLOSURES**

NO SCALE

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

REVISED STANDARD PLAN RSP T9

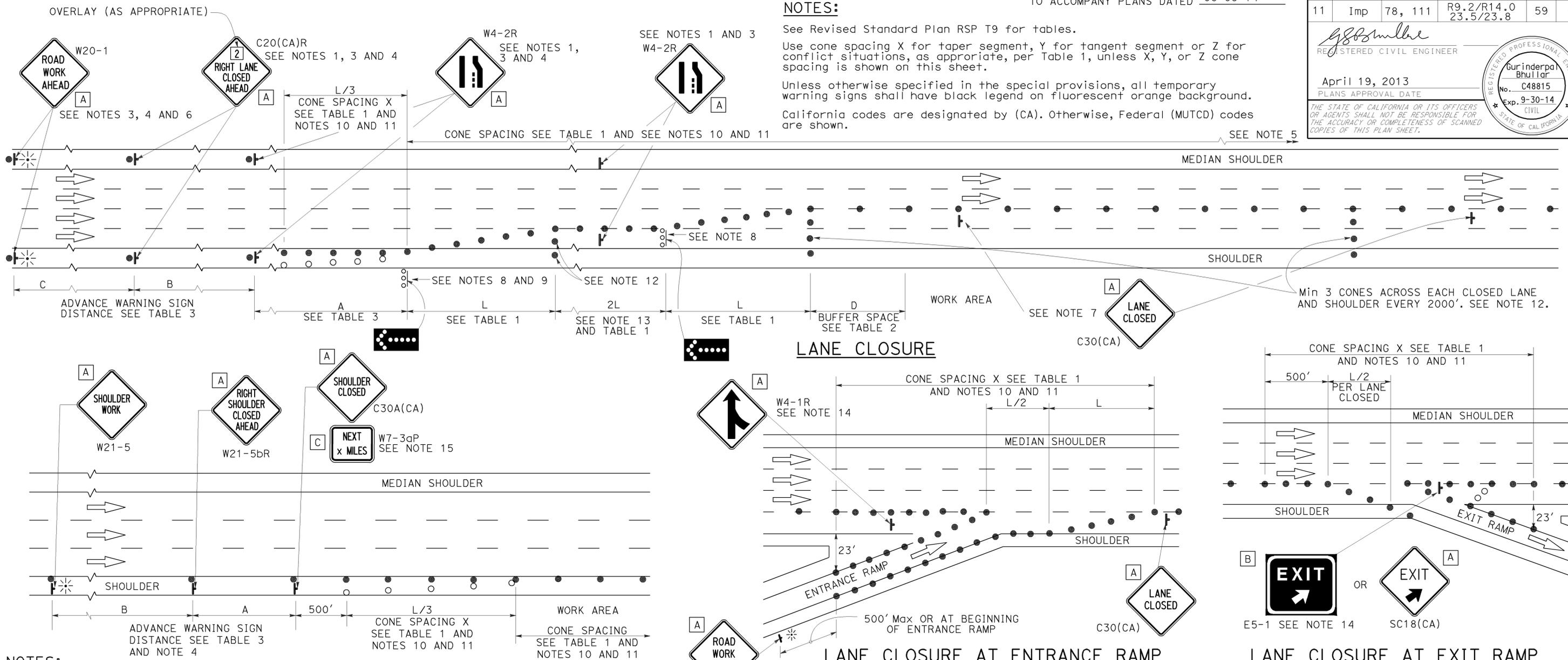
2010 REVISED STANDARD PLAN RSP T9

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	Imp	78, 111	R9.2/R14.0 23.5/23.8	59	63

REGISTERED CIVIL ENGINEER
 April 19, 2013
 PLANS APPROVAL DATE

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

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NOTES:

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

NOTES:

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

SHOULDER CLOSURE

6. If the W20-1 sign would follow within 2000' of a stationary W20-1 or G20-1 "ROAD WORK NEXT _____ MILES", use a C20(CA)L and W4-2L signs shall be used.
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.

LANE CLOSURE AT ENTRANCE RAMP

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

LEGEND

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

SIGN PANEL SIZE (Min)

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

TRAFFIC CONTROL SYSTEM FOR LANE CLOSURE ON FREEWAYS AND EXPRESSWAYS

NO SCALE
 RSP T10 DATED APRIL 19, 2013 SUPERSEDES STANDARD PLAN T10 DATED MAY 20, 2011 - PAGE 237 OF THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP T10

2010 REVISED STANDARD PLAN RSP T10

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	Imp	78, 111	R9.2/R14.0 23.5/23.8	60	63

Theresa Gabriel
REGISTERED ELECTRICAL ENGINEER

July 19, 2013
PLANS APPROVAL DATE

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

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TO ACCOMPANY PLANS DATED 06-09-14

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

SOFFIT AND WALL MOUNTED LUMINAIRES

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

NOTE:

Arrow indicates "street side" of luminaire.

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:

- 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.
- 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.
- Luminaires shall be the cutoff type, ANSI Type III medium cutoff lighting distribution, unless otherwise specified.

STANDARD ELECTROLIER

NEW	EXISTING	STANDARD TYPE
		15
		15D
		15 STRUCTURE
		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

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
11	Imp	78, 111	R9.2/R14.0 23.5/23.8	61	63

Theresa Gabriel
 REGISTERED ELECTRICAL ENGINEER
 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 06-09-14

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
		CONDUIT RISER ATTACHED TO THE STRUCTURE OR SERVICE POLE

SIGNAL EQUIPMENT

NEW	EXISTING	
		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
		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

SERVICE EQUIPMENT

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

POLE-MOUNTED SERVICE DESIGNATION

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

FLASHING BEACON

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

SIGNAL EQUIPMENT Cont

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

NOTES:

- All signal sections shall be 12" unless shown otherwise.
- 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

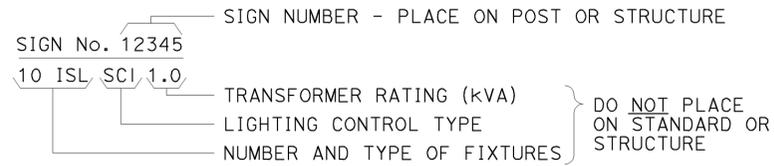
RSP ES-1B DATED JULY 19, 2013 SUPERSEDES STANDARD PLAN ES-1B DATED MAY 20, 2011 - PAGE 426 OF THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP ES-1B

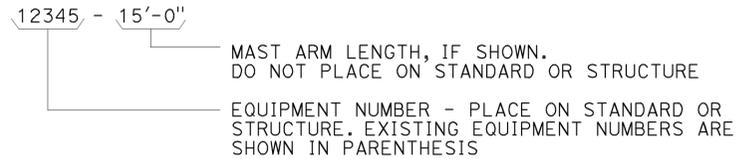
2010 REVISED STANDARD PLAN RSP ES-1B

EQUIPMENT IDENTIFICATION

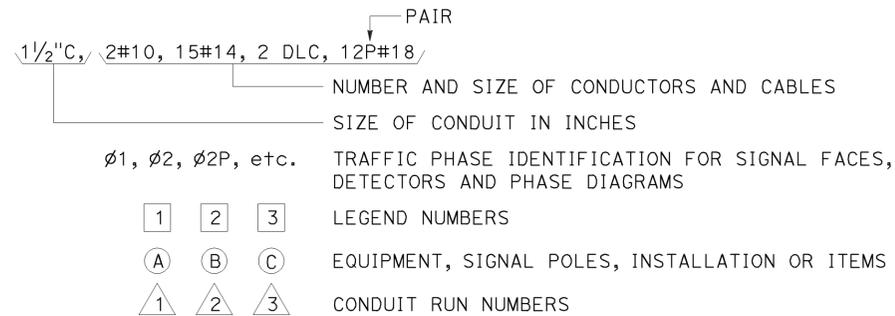
ILLUMINATED SIGN IDENTIFICATION NUMBER:



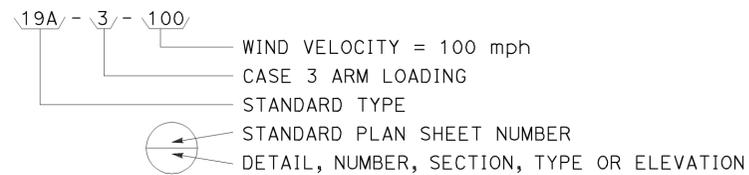
ELECTROLIER OR EQUIPMENT IDENTIFICATION NUMBER:



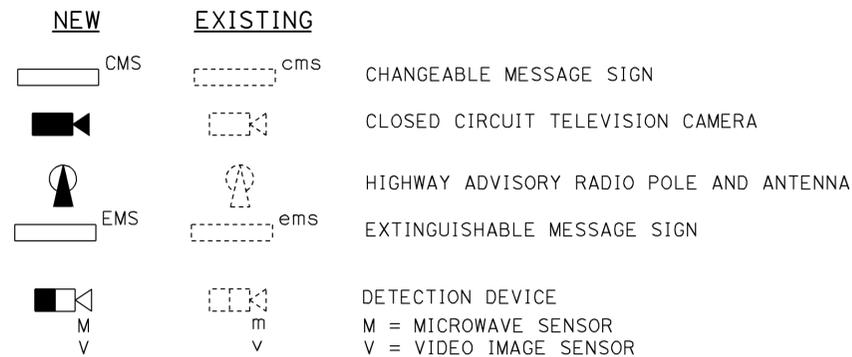
CONDUIT AND CONDUCTOR IDENTIFICATION:



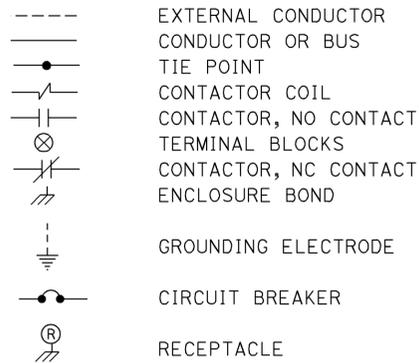
SIGNAL AND LIGHTING STANDARD (TYPICAL DESIGNATION):



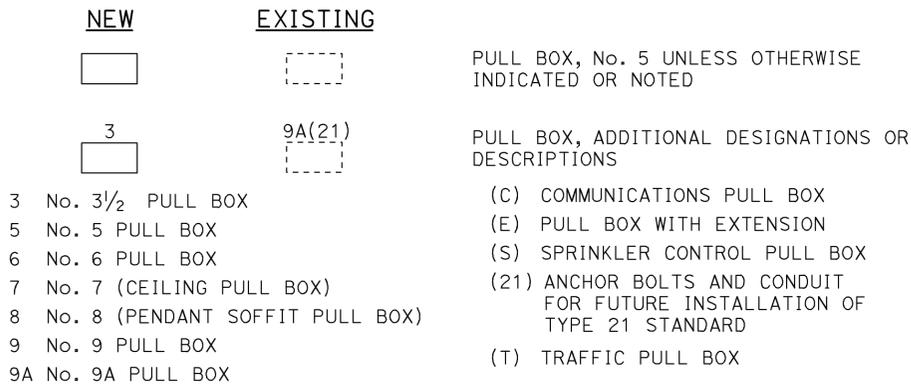
MISCELLANEOUS EQUIPMENT



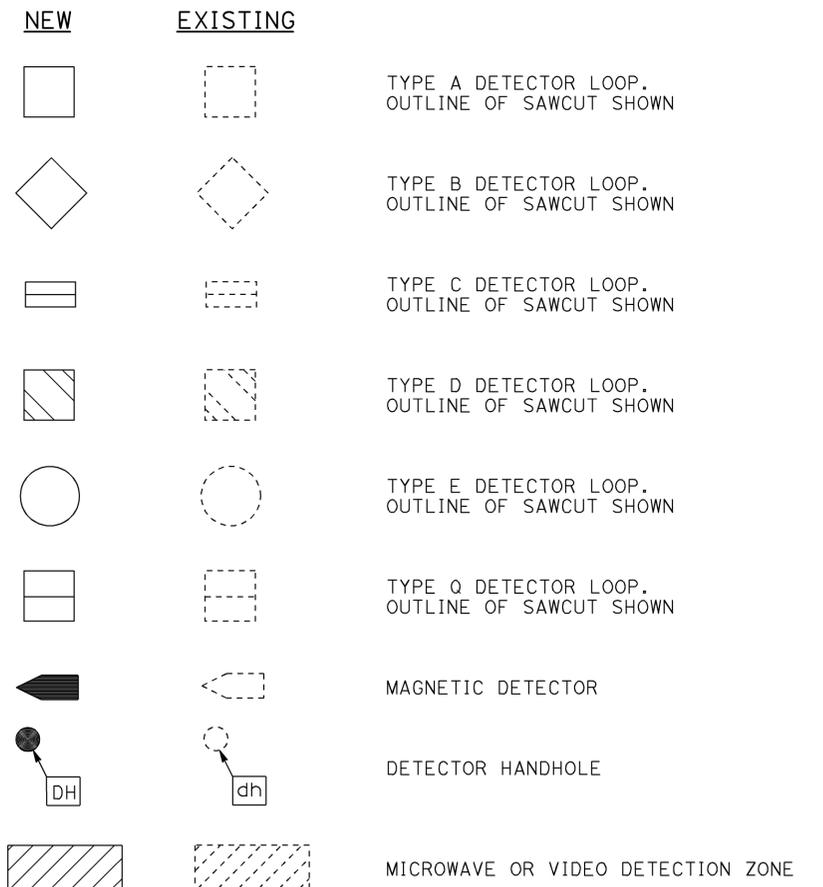
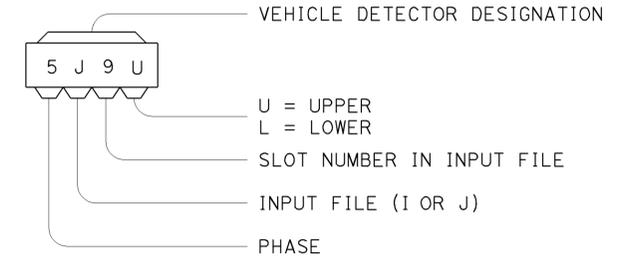
WIRING DIAGRAM LEGEND



PULL BOXES



VEHICLE DETECTORS



STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

ELECTRICAL SYSTEMS (LEGEND AND ABBREVIATIONS)

NO SCALE

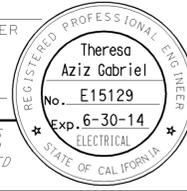
RSP ES-1C DATED JULY 19, 2013 SUPERSEDES STANDARD PLAN ES-1C DATED MAY 20, 2011 - PAGE 427 OF THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP ES-1C

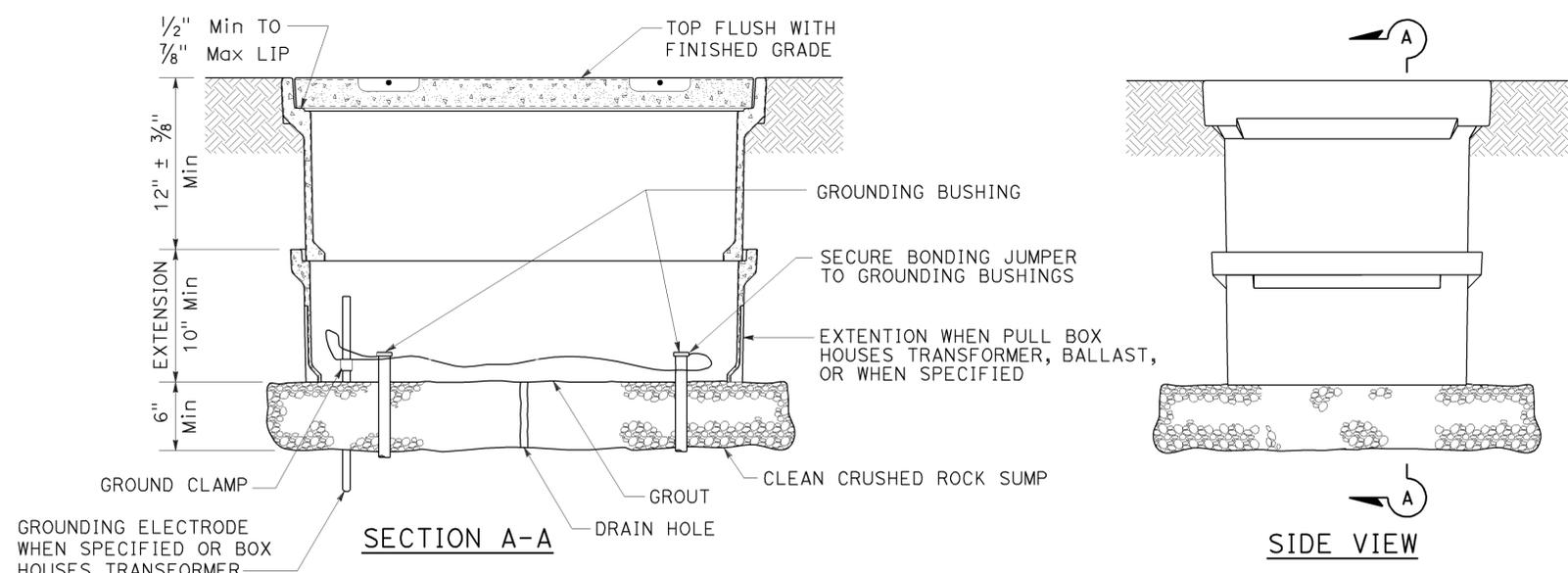
2010 REVISED STANDARD PLAN RSP ES-1C

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
11	Imp	78, 111	R9.2/R14.0 23.5/23.8	63	63

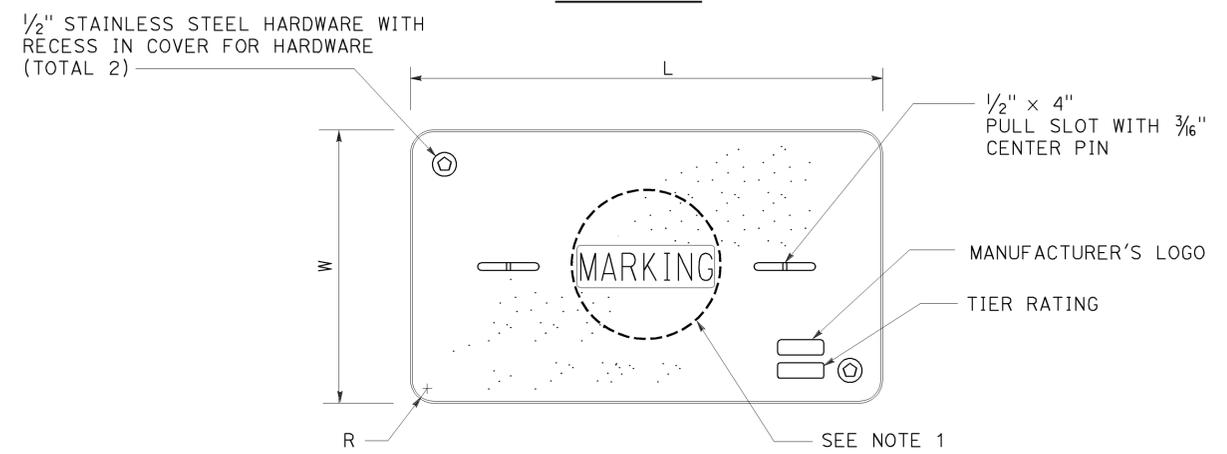
Theresa Gabriel
 REGISTERED ELECTRICAL ENGINEER
 July 19, 2013
 PLANS APPROVAL DATE
 THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.



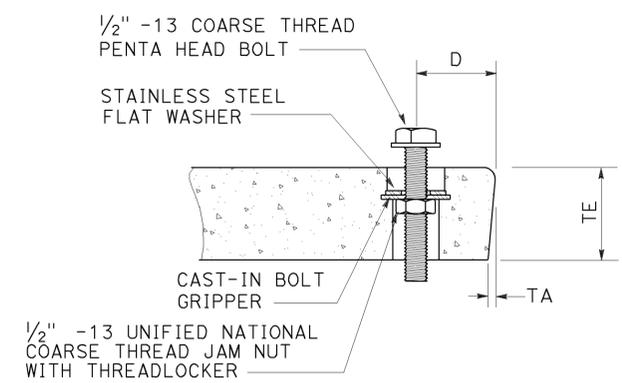
TO ACCOMPANY PLANS DATED 06-09-14



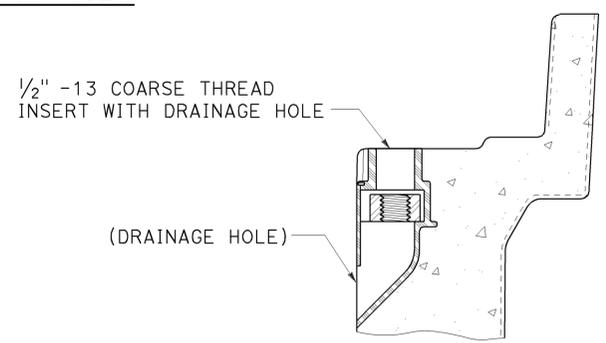
INSTALLATION DETAILS
DETAIL A



COVER TOP VIEW



TYPICAL COVER CAPTIVE BOLT
OR SIMILAR



TYPICAL THREADED INSERT
OR SIMILAR

NOTES:

- 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;
 - No. 3 1/2 pull box.
 - "SIGNAL" - Traffic signal circuits with or without lighting or sign lighting circuits.
 - "LIGHTING" - Lighting or sign lighting circuits where voltage is under 600 V.
 - No. 5, 6, 9 or 9A pull box.
 - "TRAFFIC SIGNAL" - Traffic signal circuits with or without lighting or sign lighting circuits.
 - "LIGHTING" - Lighting or sign lighting circuits where voltage is under 600 V.
 - "LIGHTING-HIGH VOLTAGE" - Lighting or sign lighting circuits where voltage is above 600 V.
 - "IRRIGATION" - Circuits to irrigation controller 120 V or more.
 - "RAMP METER" - Ramp meter circuits.
 - "COUNT STATION" - Count or speed monitor circuits.
 - "COMMUNICATIONS" - Communication circuits.
 - "TOS COMMUNICATIONS" - TOS communication line.
 - "TOS POWER" - TOS power.
 - "TDC POWER" - Telephone demarcation cabinet power.
 - "CCTV" - Closed circuit television circuits.
 - "TMS" - Traffic monitoring station circuits.
 - "CMS" - Changeable message sign circuits.
 - "HAR" - Highway advisory radio circuits.
 - "BOOSTER PUMP" - Booster pump circuit.
- 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 1/8" greater.
- 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 1/8". Top outside radius of covers and pull boxes shall have a 1/8" radius.
- Pull box extension may be another pull box as long as the bottom edge of the pull box can fit into the cover opening.
- All dimensions for the cover for non-traffic pull box are nominal values.

DIMENSION TABLE										
PULL BOX	PULL BOX			COVER						
	MINIMUM DEPTH BOX	MINIMUM DEPTH EXTENSION	MAXIMUM WEIGHT	L	W	R	TE	TA	D	MAXIMUM WEIGHT
No. 3 1/2	12"	N/A	40 lb	1' - 3 3/8"	10 1/8"	1 3/8"	2"	1/8"	1 3/4"	30 lb
No. 5	12"	10"	55 lb	1' - 11 1/4"	1' - 1 3/4"	1 3/8"	2"	1/8"	1 3/4"	60 lb
No. 6	12"	10"	70 lb	2' - 6 1/2"	1' - 5 1/2"	1 3/8"	2"	1/8"	2"	85 lb

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