INDEX OF PLANS

SHEET No.	DESCRIPTION
1	TITLE AND LOCATION MAP
2	TYPICAL CROSS SECTION
3-5	CONSTRUCTION DETAILS
6	CONSTRUCTION AREA SIGNS
7-8	PAVEMENT DELINEATION DETAILS AND QUANTITIES
9	SUMMARY OF QUANTITIES
10	ELECTRICAL PLANS
11-19	REVISED STANDARD PLANS

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

STATE OF CALIFORNIA

DEPARTMENT OF TRANSPORTATION

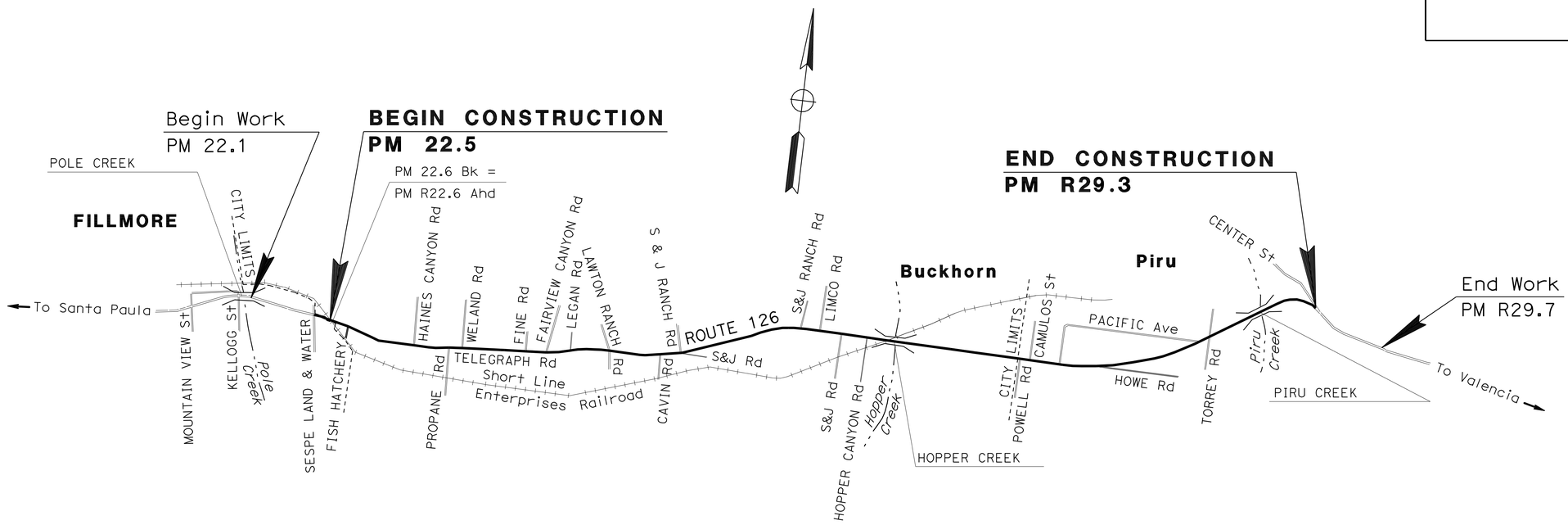
PROJECT PLANS FOR CONSTRUCTION ON

STATE HIGHWAY

IN VENTURA COUNTY
AT BUCKHORN AND PIRU
FROM SHORTLINE RAILROAD CROSSING
TO CENTER STREET

TO BE SUPPLEMENTED BY STANDARD PLANS DATED MAY 2006

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	Ven	126	22.5/R29.3	1	19



NO SCALE

PROJECT MANAGER: GARY KEVORKIAN

DESIGN ENGINEER: PAUL CRISPI

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

JERRY CHEN
PROJECT ENGINEER
REGISTERED CIVIL ENGINEER

1-10-12
DATE

REGISTERED PROFESSIONAL ENGINEER
JERRY CHEN
No. C65548
Exp. 9-30-13
CIVIL
STATE OF CALIFORNIA

January 30, 2012
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.

DATE PLOTTED => 09-FEB-2012
TIME PLOTTED => 14:18

LAST REVISION 12-1-11

CONTRACT No.	07-4Y0904
PROJECT ID	0700020233

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	Ven	126	22.5/R29.3	2	19

1-10-12
REGISTERED CIVIL ENGINEER DATE

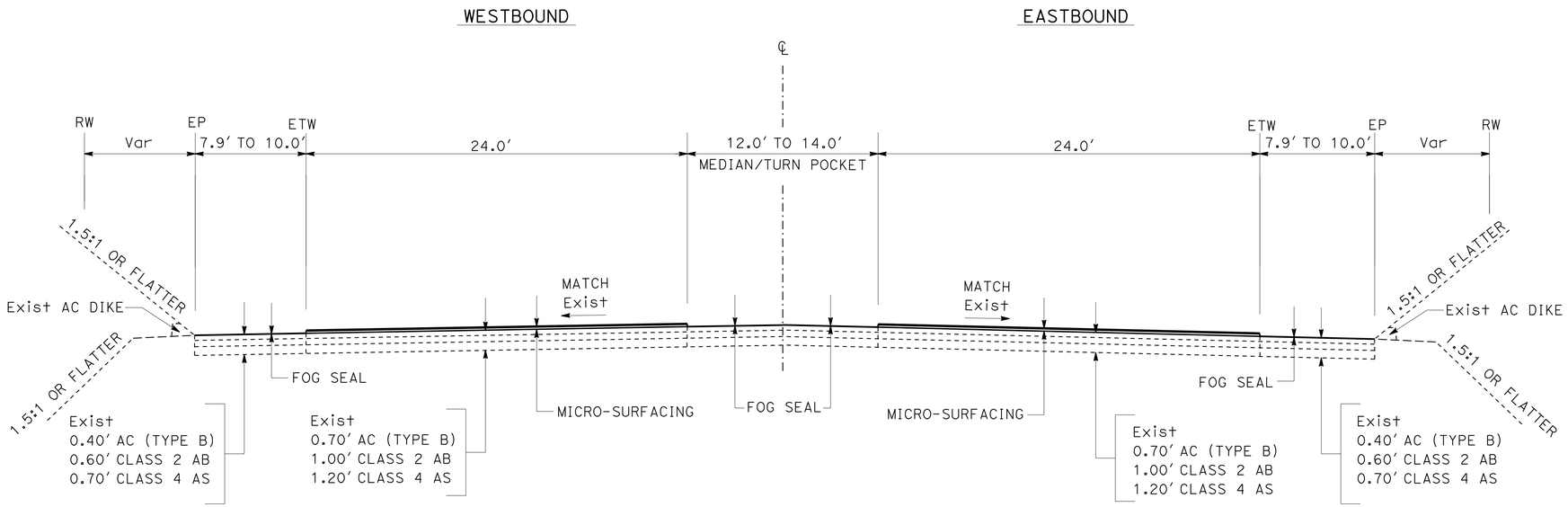
JERRY CHEN No. C65548 Exp. 9-30-13 CIVIL — REGISTERED PROFESSIONAL ENGINEER — STATE OF CALIFORNIA

1-30-12
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. DIMENSIONS OF THE PAVEMENT STRUCTURES (STRUCTURAL SECTIONS) ARE SUBJECT TO TOLERANCES SPECIFIED IN THE STANDARD SPECIFICATIONS.
2. SUPERELEVATION AS SHOWN OR AS DIRECTED BY THE ENGINEER.
3. FOR COMPLETE RIGHT OF WAY AND ACCESS DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
4. EXISTING DRAINAGE INLETS HAVE NOT BEEN PLOTTED ON THESE PLANS.
5. OMIT MICRO-SURFACING AND FOG SEALING ON BRIDGE DECKS.
6. EXISTING UTILITY FACILITIES HAVE NOT BEEN PLOTTED ON THESE PLANS.



ROUTE 126
PM R22.5/R29.3

TYPICAL CROSS SECTION
NO SCALE

X-1

CALCULATED-DESIGNED BY: JERRY CHEN
CHECKED BY: PAUL J CRISPI
FUNCTIONAL SUPERVISOR: PAUL J CRISPI
REVISED BY
DATE REVISED

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans® MAINTENANCE ENGINEERING

LAST REVISION 12-1-11
DATE PLOTTED => 09-FEB-2012
TIME PLOTTED => 14:19

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	Ven	126	22.5/R29.3	3	19

REGISTERED CIVIL ENGINEER — DATE: 1-10-12

PLANS APPROVAL DATE: 1-30-12

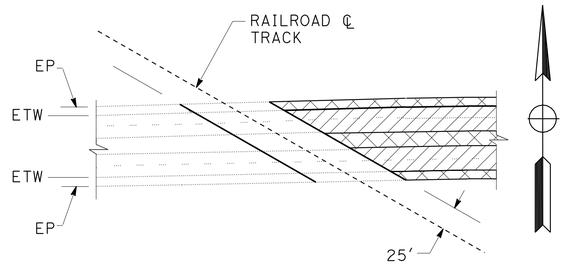
REGISTERED PROFESSIONAL ENGINEER — JERRY CHEN — No. C65548 — Exp. 9-30-13 — CIVIL — STATE OF CALIFORNIA

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.

LEGEND:

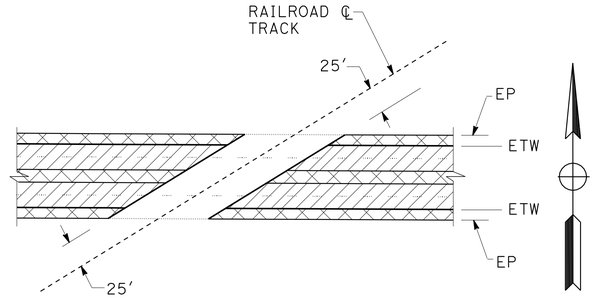
MICRO-SURFACING
SEE TYPICAL CROSS SECTIONS AND SUMMARY OF QUANTITIES FOR MORE DETAILS

FOG SEAL



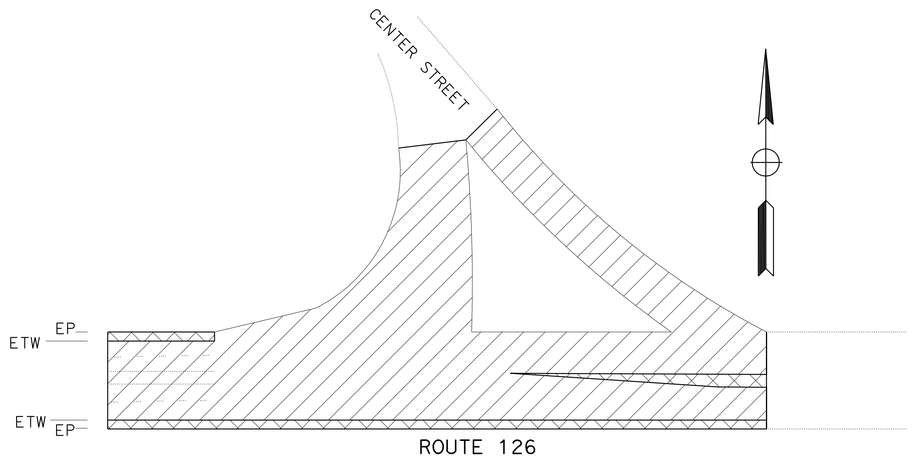
PAVING LIMITS AT SHORT LINE RAILROAD CROSSING

PM 22.5



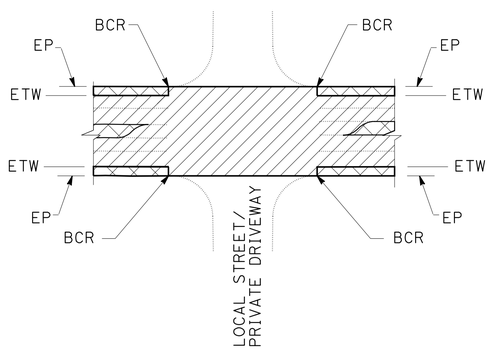
PAVING LIMITS AT SHORT LINE RAILROAD CROSSING

PM R26.4

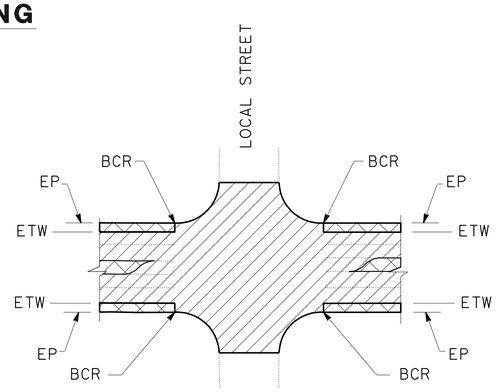


PAVING LIMITS AT END CONSTRUCTION

PM R29.3

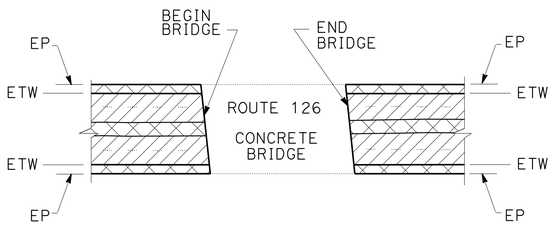


TYPICAL PAVING LIMITS AT INTERSECTIONS



PAVING LIMITS AT INTERSECTIONS

HOPPER CANYON ROAD
POWELL ROAD
PACIFIC AVENUE
HOWE ROAD
TORREY ROAD



TYPICAL PAVING LIMITS AT BRIDGE DECKS

CONSTRUCTION DETAILS

NO SCALE

C-1

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans MAINTENANCE ENGINEERING

FUNCTIONAL SUPERVISOR: PAUL J CRISPI

CALCULATED-DESIGNED BY: JERRY CHEN

CHECKED BY: PAUL J CRISPI

REVISED BY	DATE REVISED

LAST REVISION: 12-1-11

DATE PLOTTED => 09-FEB-2012
TIME PLOTTED => 14:19

BORDER LAST REVISED 7/2/2010

USERNAME => s115484
DGN FILE => 74y090ga01.dgn

RELATIVE BORDER SCALE IS IN INCHES: 0 1 2 3

UNIT 1965

PROJECT NUMBER & PHASE: 07000202331

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	Ven	126	22.5/R29.3	4	19

1-10-12
REGISTERED CIVIL ENGINEER DATE

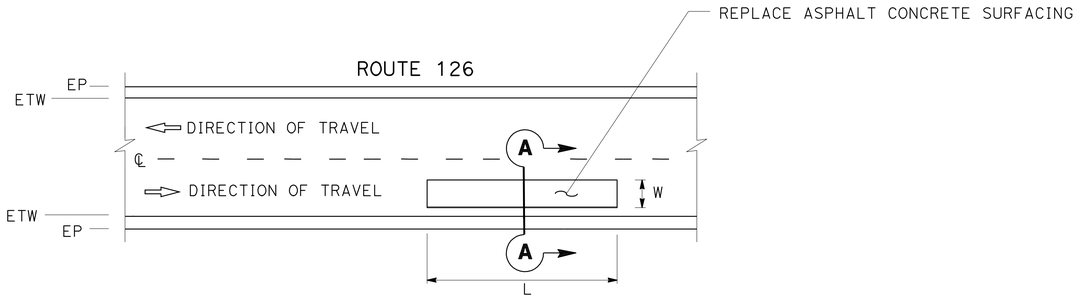
JERRY CHEN No. C65548 Exp. 9-30-13 CIVIL
REGISTERED PROFESSIONAL ENGINEER
STATE OF CALIFORNIA

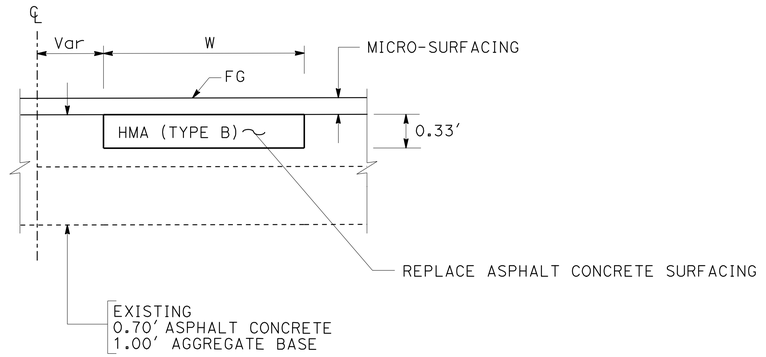
1-30-12
PLANS APPROVAL DATE

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.

REPLACE ASPHALT CONCRETE SURFACING

LOCATION	LANE No.	DIMENSIONS W x L	DEPTH	VOLUME (CY)
EB PM 22.67	2	11′ x 380′	0.33′	51.1
EB PM 22.79	2	4′ x 86′	0.33′	4.2
EB PM 23.13	1	5′ x 15′	0.33′	1.0
EB PM 25.88	1	11′ x 23′	0.33′	3.1
EB PM 27.00	1	11′ x 26′	0.33′	3.5
WB PM 25.60	2	11′ x 57′	0.33′	7.7
			TOTAL	70.6





SECTION A-A

CONSTRUCTION DETAILS

NO SCALE

C-2

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans® MAINTENANCE ENGINEERING
FUNCTIONAL SUPERVISOR: PAUL J CRISPI
CALCULATED-DESIGNED BY: JERRY CHEN
CHECKED BY: PAUL J CRISPI
REVISED BY / DATE REVISED

LAST REVISION DATE PLOTTED => 09-FEB-2012
TIME PLOTTED => 14:19
12-1-11

BORDER LAST REVISED 7/2/2010
USERNAME => s115484
DGN FILE => 74y090ga02.dgn
RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3
UNIT 1965
PROJECT NUMBER & PHASE 07000202331

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	Ven	126	22.5/R29.3	5	19

1-10-12
REGISTERED CIVIL ENGINEER DATE

1-30-12
PLANS APPROVAL DATE

JERRY CHEN No. C65548 Exp. 9-30-13 CIVIL
REGISTERED PROFESSIONAL ENGINEER
STATE OF CALIFORNIA

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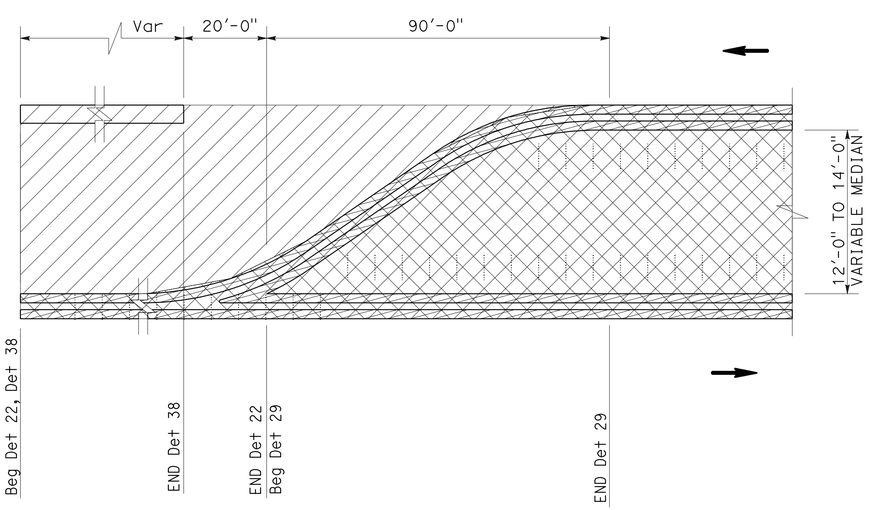
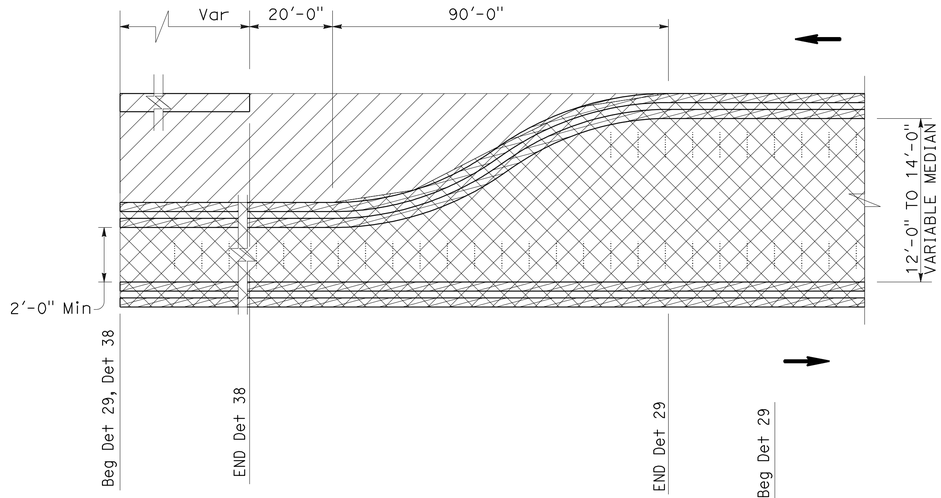
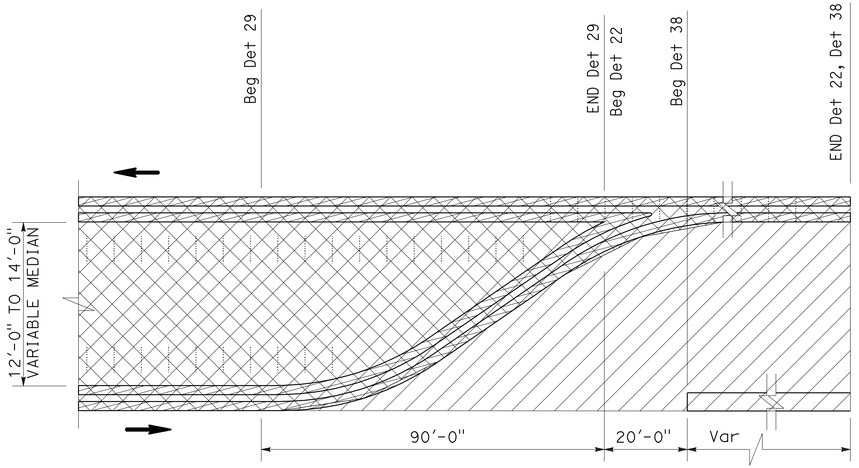
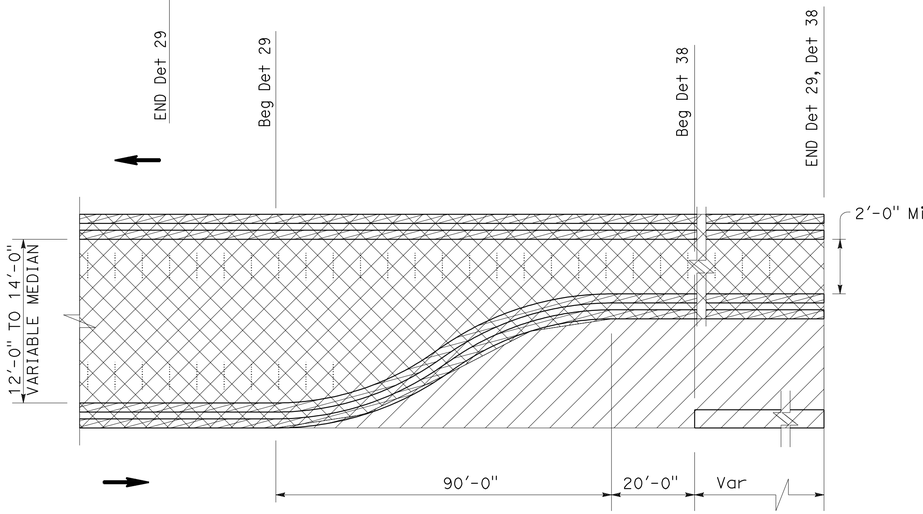
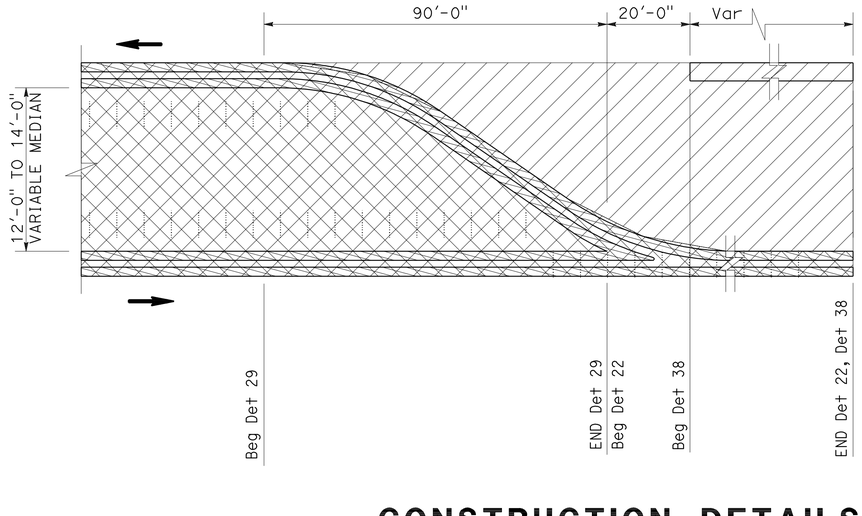






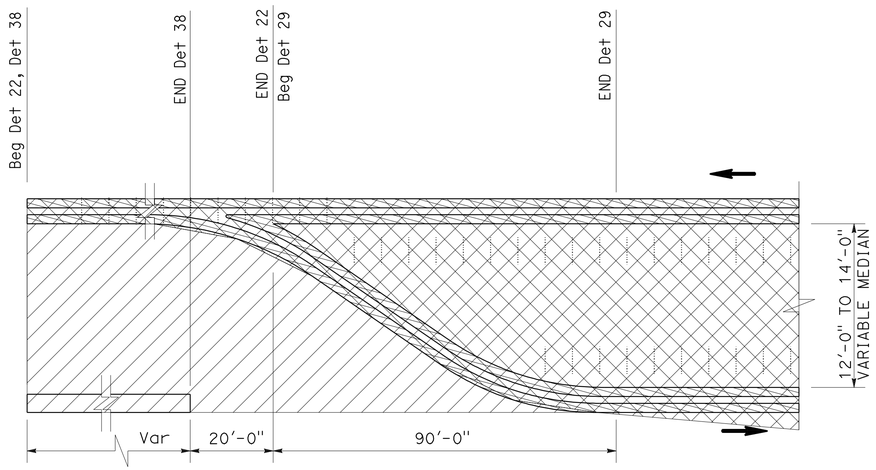


TYPICAL LIMITS AT INTERSECTIONS



LEGEND

- 4" YELLOW THERMOPLASTIC STRIPE
- 8" WHITE THERMOPLASTIC STRIPE
- DIRECTION OF TRAVEL
- MICRO-SURFACING LIMITS
- FOG SEAL LIMITS



CONSTRUCTION DETAILS

NO SCALE

C-3

LAST REVISION: DATE PLOTTED => 09-FEB-2012 TIME PLOTTED => 14:19
12-1-11

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans® MAINTENANCE ENGINEERING

		REVISED BY	
CALCULATED-DESIGNED BY	JERRY CHEN	DATE REVISED	
CHECKED BY	PAUL J CRISPI	FUNCTIONAL SUPERVISOR	PAUL J CRISPI

BORDER LAST REVISED 7/2/2010 | USERNAME => s115484 DGN FILE => 74y090ga03.dgn | RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3 | UNIT 1965 | PROJECT NUMBER & PHASE 07000202331

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	Ven	126	22.5/R29.3	6	19

1-10-12
REGISTERED CIVIL ENGINEER DATE

1-30-12
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
JERRY CHEN
No. C65548
Exp. 9-30-13
CIVIL
STATE OF CALIFORNIA

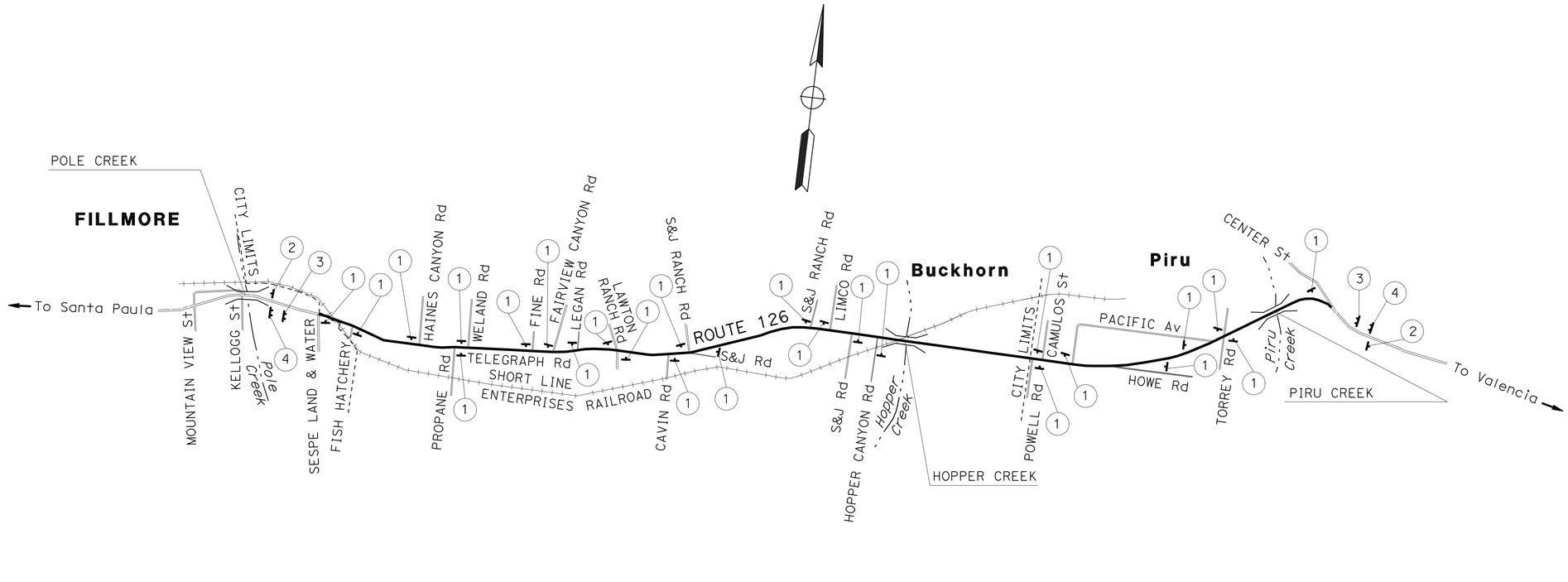
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

NOTES:

1. LOCATIONS OF CONSTRUCTION AREA SIGNS SHOWN ARE APPROXIMATE. EXACT LOCATIONS WILL BE DETERMINED BY THE ENGINEER.
2. "TRAFFIC FINES DOUBLED IN CONSTRUCTION ZONES" SIGNS SHALL BE PLACED APPROXIMATELY 500 FEET IN ADVANCE OF "ROAD WORK AHEAD" SIGNS OR AS DETERMINED BY THE ENGINEER.

STATIONARY MOUNTED CONSTRUCTION AREA SIGNS

SIGN NUMBER	CODE	SIGN MESSAGE	PANEL SIZE	NUMBER OF POSTS AND SIZE	NUMBER OF SIGNS
(1)	W20-1	ROAD WORK AHEAD	36" x 36"	1 - 6" x 6"	25
(2)	G20-2	END ROAD WORK	36" x 18"	1 - 4" x 4"	2
(3)	C40(CA)	TRAFFIC FINES DOUBLED IN CONSTRUCTION ZONES	72" x 36"	2 - 4" x 6"	2
(4)	W20-1	ROAD WORK AHEAD	48" x 48"	2 - 4" x 6"	2
				TOTAL	31



CONSTRUCTION AREA SIGNS

NO SCALE

CS-1

APPROVED FOR CONSTRUCTION AREA SIGN WORK ONLY.

JERRY CHEN — CALCULATED-DESIGNED BY
PAUL J CRISPI — CHECKED BY
REVISED BY — DATE REVISED
PAUL J CRISPI — FUNCTIONAL SUPERVISOR

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans® MAINTENANCE ENGINEERING

LAST REVISION 12-1-11
DATE PLOTTED => 09-FEB-2012
TIME PLOTTED => 14:19

BORDER LAST REVISED 7/2/2010
USERNAME => s115484
DGN FILE => 74y0901a01.dgn
RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3
UNIT 1965
PROJECT NUMBER & PHASE 07000202331

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	Ven	126	22.5/R29.3	7	19

1-10-12
REGISTERED CIVIL ENGINEER DATE

1-30-12
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
JERRY CHEN
No. C65548
Exp. 9-30-13
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.

LOCATION BOTH DIRECTIONS	REMOVE PAVEMENT MARKER			REMOVE THERMOPLASTIC TRAFFIC STRIPE									REMOVE THERMOPLASTIC PAVEMENT MARKING			
	(NON-REFLECTIVE)	(RETROREFLECTIVE)		4" SOLID YELLOW	4" SOLID YELLOW	4" (BROKEN 36-12) YELLOW	4" SOLID YELLOW	4" SOLID YELLOW	4" SOLID YELLOW	4" SOLID WHITE	8" SOLID WHITE	4" (BROKEN 36-12) WHITE	CROSSWALKS AND LIMIT LINES	WORDS AND SYMBOLS	ARROWS	YELLOW DIAGONALS
	TYPE AY	TYPE D	TYPE G	Det 30 (Mod)	Det 31 (Mod)		Det 22	Det 29	Det 32	Det 27B	Det 38	Det 12				
	EA	EA	EA	LF	LF	LF	LF	LF	LF	LF	LF	LF	SQFT	SQFT	SQFT	
NEAR RAILROAD CROSSING TO CALIFORNIA WATERCRESS INC ENTRANCE PM 22.5-R23.1	1,540	388	62		5,280	1,320	240	760		5,280	100	1,320	60	188	42	
CALIFORNIA WATERCRESS INC ENTRANCE TO HAINES CANYON ROAD PM R23.1-R23.6	1,936	569	65	6,336	2,112	528	240	760		5,280	100	1,320			45	180
HAINES CANYON ROAD TO CAVIN ROAD PM R23.6-R25.1	4,708	1,183	158	6,336	11,616	2,904				14,784		3,696				180
CAVIN ROAD TO HOPPER CANYON ROAD PM R25.1-R26.1	3,564	1,036	112	12,672	3,168	792	240	760		9,504	100	2,376			30	380
HOPPER CANYON ROAD TO ENTRANCE BEFORE POWELL ROAD PM R26.1-R26.7	2,112	581	76	4,224	4,224	1,056	240	360	124	6,336	100	1,584	96	376	75	
ENTRANCE BEFORE POWELL ROAD TO POWELL ROAD PM R26.7-R27.2	1,364	377	52	2,112	3,168	792	240	760		4,224	100	1,056			114	
POWELL ROAD TO OLD TELEGRAPH/EDWARD CANYON ROAD PM R27.2-R27.4	880	330	35	4,224			240	2,320		2,112	200	528			45	
OLD TELEGRAPH/EDWARD CANYON ROAD TO HOWE ROAD PM R27.4-R27.7	1,188	336	36	4,224	1,056	264				3,168		792				
HOWE ROAD TO TORREY/MAIN STREET PM R27.7-R28.4	2,552	759	102	6,336	4,224	1,056		3,480		7,392	460	1,848		126	60	500
TORREY/MAIN STREET TO CENTER STREET PM R28.4-R29.3	2,860	865	129	6,336	5,280	1,320	920	3,080		8,448	820	2,112		126	105	
SUBTOTAL	22,704	6,424	827	52,800	40,128	10,032	2,360	12,280	124	66,528	1,980	16,632	156	816	516	1,240
TOTAL	29,955			117,724						85,140			2,728			1,240

PAVEMENT DELINEATION QUANTITIES

PDQ-1

REVISED BY | DATE REVISED
JERRY CHEN | PAUL J CRISPI
CALCULATED-DESIGNED BY | CHECKED BY
FUNCTIONAL SUPERVISOR | PAUL J CRISPI
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans MAINTENANCE ENGINEERING

LAST REVISION 12-1-11
DATE PLOTTED => 09-FEB-2012
TIME PLOTTED => 14:19

BORDER LAST REVISED 7/2/2010
USERNAME => s115484
DGN FILE => 74y090nc01.dgn
RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3
UNIT 1965
PROJECT NUMBER & PHASE 07000202331

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	Ven	126	22.5/R29.3	8	19

1-10-12
REGISTERED CIVIL ENGINEER DATE

1-30-12
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
JERRY CHEN
No. C65548
Exp. 9-30-13
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.

LOCATION BOTH DIRECTIONS	PAVEMENT MARKER			THERMOPLASTIC TRAFFIC STRIPE									THERMOPLASTIC PAVEMENT MARKING		
	(NON-REFLECTIVE)	(RETROREFLECTIVE)		4" SOLID YELLOW	4" SOLID YELLOW	4" (BROKEN 36-12) YELLOW	4" SOLID YELLOW	4" SOLID YELLOW	4" SOLID YELLOW	6" SOLID WHITE	8" SOLID WHITE	4" (BROKEN 36-12) WHITE	CROSSWALKS/DIAGONALS/ LIMIT LINES	WORDS AND SYMBOLS	ARROWS
	TYPE AY	TYPE D	TYPE G	Det 30 (Mod)	Det 31 (Mod)		Det 22	Det 29	Det 32	Det 39	Det 38	Det 12			
	EA	EA	EA	LF	LF	LF	LF	LF	LF	LF	LF	LF	SQFT	SQFT	SQFT
NEAR RAILROAD CROSSING TO CALIFORNIA WATERCRESS INC ENTRANCE PM 22.5-R23.1	1,540	388	62		5,280	5,280	240	760		7,920	100	5,280	60	188	42
CALIFORNIA WATERCRESS INC ENTRANCE TO HAINES CANYON ROAD PM R23.1-R23.6	1,936	569	65	6,336	2,112	2,112	240	760		7,920	100	5,280	180		45
HAINES CANYON ROAD TO CAVIN ROAD PM R23.6-R25.1	4,708	1,183	158	6,336	11,616	11,616				22,176		14,784	180		
CAVIN ROAD TO HOPPER CANYON ROAD PM R25.1-R26.1	3,564	1,036	112	12,672	3,168	3,168	240	760		14,256	100	9,504	380		30
HOPPER CANYON ROAD TO ENTRANCE BEFORE POWELL ROAD PM R26.1-R26.7	2,112	581	76	4,224	4,224	4,224	240	360	124	9,504	100	6,336	96	376	75
ENTRANCE BEFORE POWELL ROAD TO POWELL ROAD PM R26.7-R27.2	1,364	377	52	2,112	3,168	3,168	240	760		6,336	100	4,224			114
POWELL ROAD TO OLD TELEGRAPH/EDWARD CANYON ROAD PM R27.2-R27.4	880	330	35	4,224			240	2,320		3,168	200	2,112			45
OLD TELEGRAPH/EDWARD CANYON ROAD TO HOWE ROAD PM R27.4-R27.7	1,188	336	36	4,224	1,056	1,056				4,752		3,168			
HOWE ROAD TO TORREY/MAIN STREET PM R27.7-R28.4	2,552	759	102	6,336	4,224	4,224		3,480		11,088	460	7,392	500	126	60
TORREY/MAIN STREET TO CENTER STREET PM R28.4-R29.3	2,860	865	129	6,336	5,280	5,280	920	3,080		12,672	820	8,448		126	105
SUBTOTAL	22,704	6,424	827	52,800	40,128	40,128	2,360	12,280	124	99,792	1,980	66,528	1,396	816	516
TOTAL	22,704	7,251		147,820						99,792	1,980	66,528	2,728		

PAVEMENT DELINEATION QUANTITIES

PDQ-2

REVISED BY | DATE REVISED
JERRY CHEN | PAUL J CRISPI
CALCULATED-DESIGNED BY | CHECKED BY
FUNCTIONAL SUPERVISOR: PAUL J CRISPI
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans MAINTENANCE ENGINEERING

LAST REVISION 12-1-11 | DATE PLOTTED => 09-FEB-2012 | TIME PLOTTED => 14:20

BORDER LAST REVISED 7/2/2010 | USERNAME => s115484 | DGN FILE => 74y090nc02.dgn | RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3 | UNIT 1965 | PROJECT NUMBER & PHASE 07000202331

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	Ven	126	22.5/R29.3	9	19

1-10-12
REGISTERED CIVIL ENGINEER DATE

JERRY CHEN No. C65548 Exp. 9-30-13 CIVIL
REGISTERED PROFESSIONAL ENGINEER
STATE OF CALIFORNIA

1-30-12
PLANS APPROVAL DATE

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ROADWAY QUANTITIES

POST MILE	ASPHALTIC EMULSION (FOG SEAL COAT)	MICRO-SURFACING	REPAIR WHEEL PATH DEPRESSION	REPLACE ASPHALT CONCRETE SURFACING
	TON	TON	TON	CY
22.5/R29.3	42.9	2,873	122	70.6

SUMMARY OF QUANTITIES

Q-1

REVISED BY
DATE REVISED
CALCULATED-DESIGNED BY JERRY CHEN
CHECKED BY PAUL J CRISPI
FUNCTIONAL SUPERVISOR PAUL J CRISPI
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans® MAINTENANCE ENGINEERING

LAST REVISION 12-1-11
DATE PLOTTED => 09-FEB-2012
TIME PLOTTED => 14:20

BORDER LAST REVISED 7/2/2010
USERNAME => s115484
DGN FILE => 74y090pa01.dgn
RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3
UNIT 1965
PROJECT NUMBER & PHASE 07000202331

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	Ven	126	22.5/R29.3	10	19

G.S. Toor 1-10-12
REGISTERED ELECTRICAL ENGINEER DATE

1-30-12
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
G.S. TOOR
No. E15613
Exp. 12/31/11
ELECTRICAL
STATE OF CALIFORNIA

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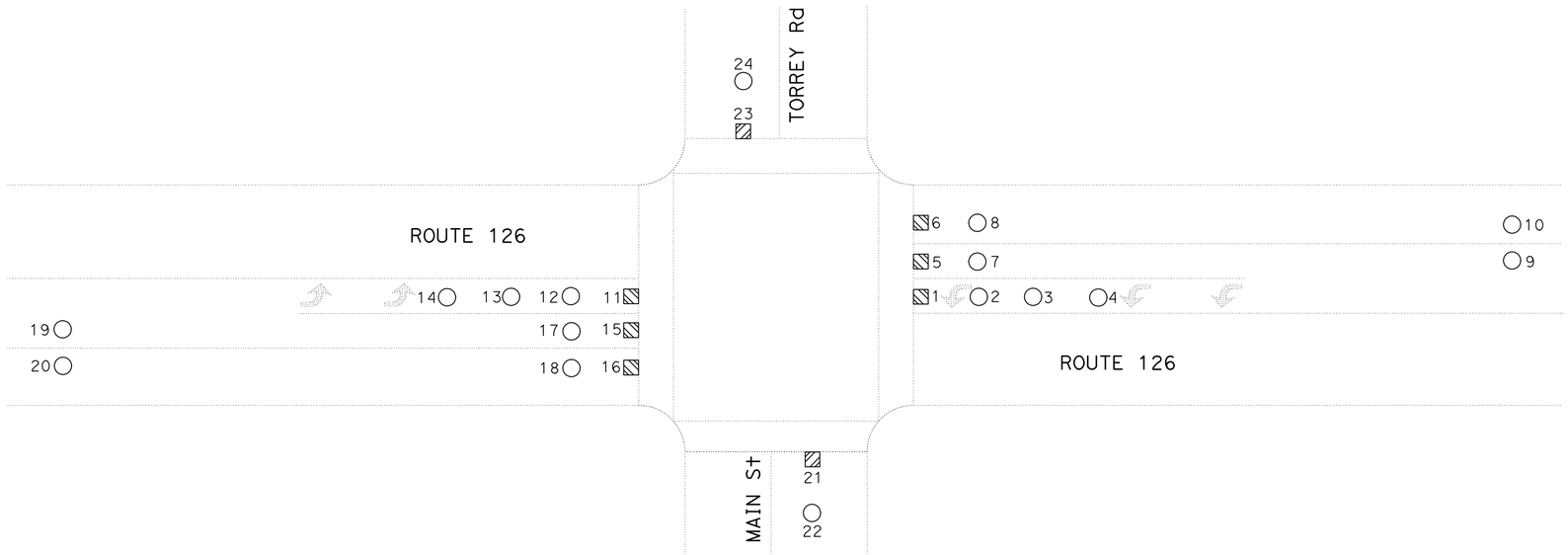
ROUTE 126 AT	LOOP DETECTORS TO BE REPLACED. SEE DETAIL A																								NUMBER OF STUB-OUTS	NUMBER OF LOOP DETECTORS
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
MAIN St/ TORREY Rd	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	6	24



DETAIL A
LOOP DETECTOR LAYOUT

NOTES:

1. ABANDON EXISTING INDUCTIVE LOOP DETECTORS. INSTALL NEW INDUCTIVE LOOP DETECTORS AT THE SAME LOCATION.
2. SPLICE NEW LOOP DETECTOR CONDUCTORS TO EXISTING dlc IN ADJACENT PULL BOX.
3. ABANDON EXISTING STUBOUTS. INSTALL NEW 2"C STUBOUT FOR NEW INDUCTIVE LOOP DETECTORS.
4. TAG EXISTING dlc IN ADJACENT PULL BOX AND AT CONTROLLER CABINET.

INDUCTIVE LOOP DETECTOR
(REPLACEMENT)

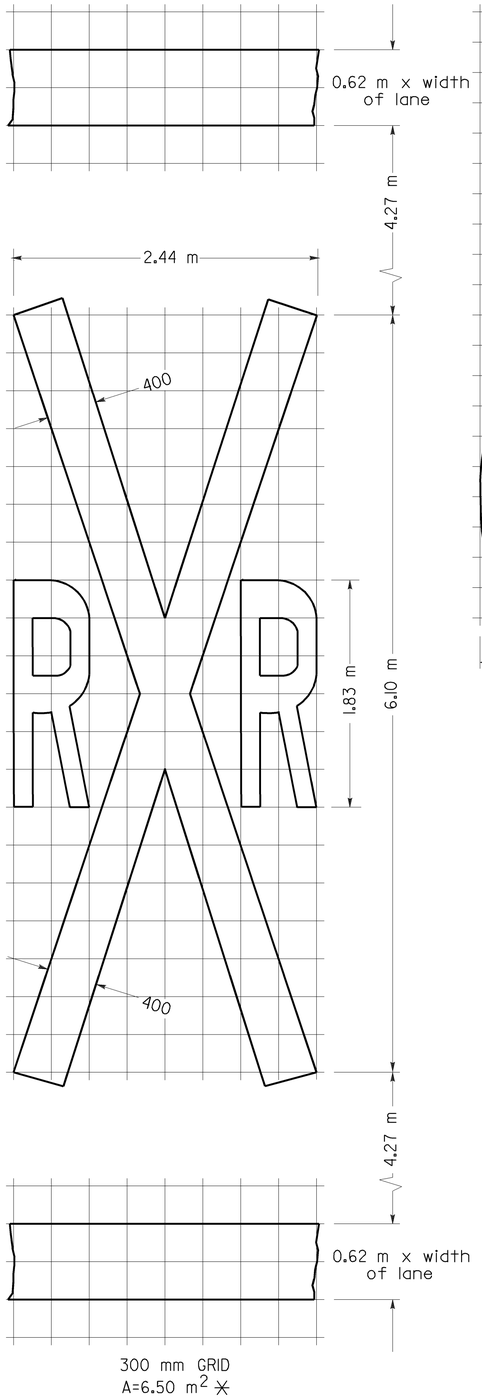
NO SCALE

E-1

REVISED BY | DATE REVISED
FARID REKABI | GARY TOOR
CALCULATED-DESIGNED BY | CHECKED BY
FUNCTIONAL SUPERVISOR
OSWALD ELIZONDO
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
TRAFFIC DESIGN
Caltrans

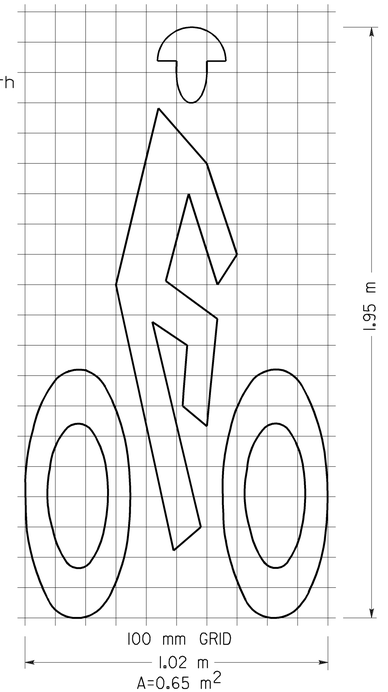
LAST REVISION | DATE PLOTTED => 09-FEB-2012 | TIME PLOTTED => 14:20 | 00-00-00

BORDER LAST REVISED 7/1/2010
USERNAME => s115484
DGN FILE => 74y090ua01.dgn
RELATIVE BORDER SCALE IS IN INCHES 0 1 2 3
UNIT 1878
PROJECT NUMBER & PHASE 07000202331

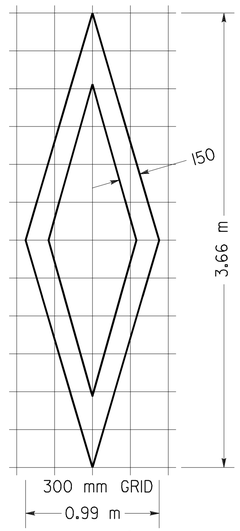


RAILROAD CROSSING SYMBOL

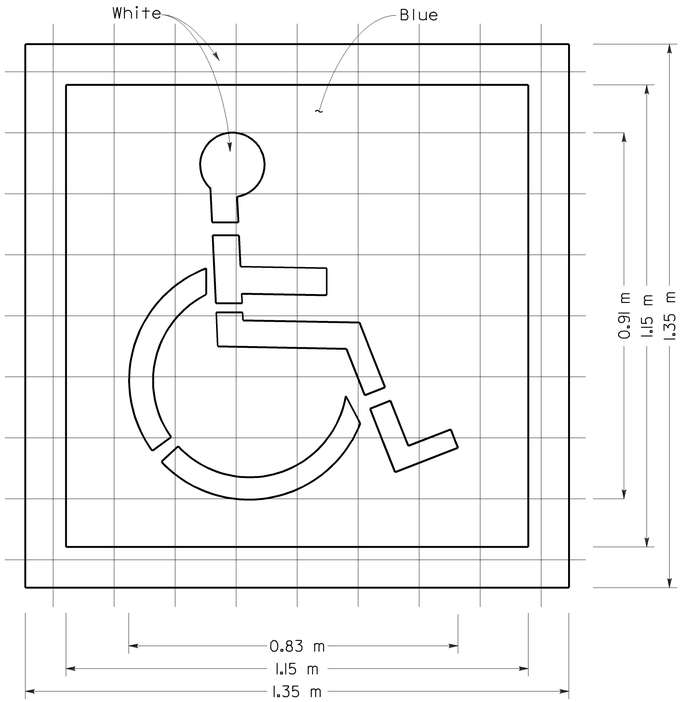
✳6.5 m² DOES NOT INCLUDE THE 0.6 m x VARIABLE WIDTH TRANSVERSE LINES.



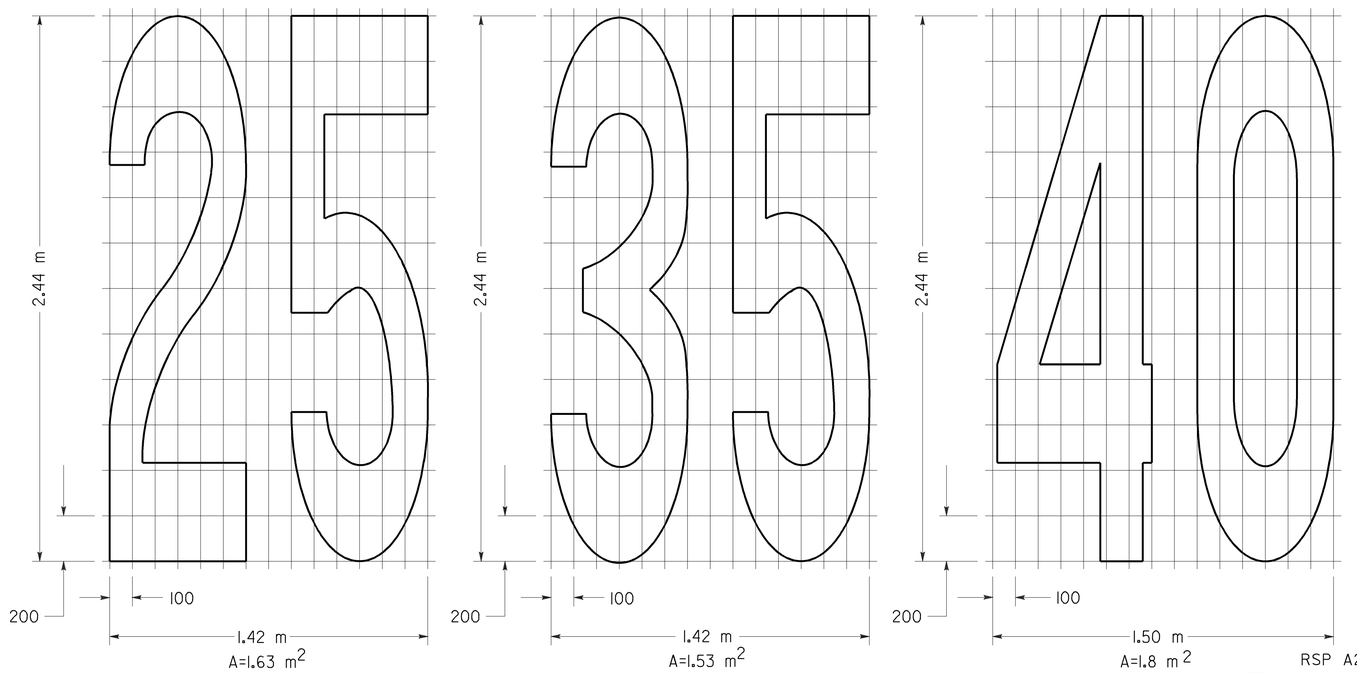
BIKE LANE SYMBOL



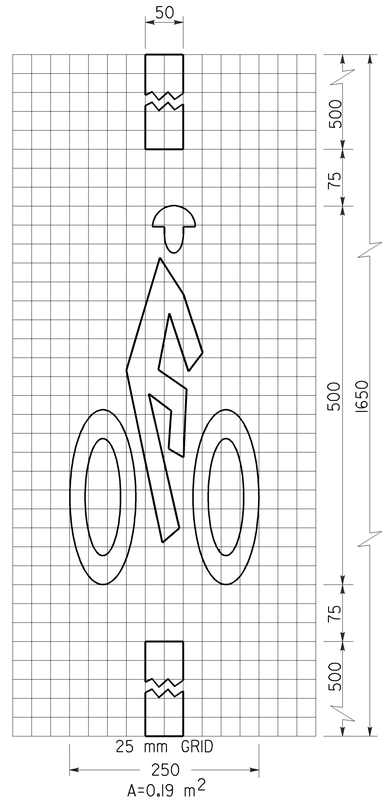
DIAMOND SYMBOL



INTERNATIONAL SYMBOL
OF ACCESSIBILITY MARKING



NUMERALS



BICYCLE LOOP
DETECTOR SYMBOL

NOTE:

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

DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	Ven	126	22.5/R29.3	11	19

Donald E Howe
REGISTERED CIVIL ENGINEER

June 6, 2008
PLANS APPROVAL DATE

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

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To accompany plans dated 1-30-12

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKINGS SYMBOLS AND NUMERALS

NO SCALE

ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN

RSP A24C DATED JUNE 6, 2008 SUPERSEDES STANDARD PLAN A24C DATED July 1, 2004 - PAGE 11 OF THE STANDARD PLANS BOOK DATED July 2004.

REVISED STANDARD PLAN RSP A24C

2004 REVISED Std PLAN RSP A24C

5-27-08

DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	Ven	126	22.5/R29.3	12	19

Randell D. Hiatt
REGISTERED CIVIL ENGINEER

June 6, 2008
PLANS APPROVAL DATE

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

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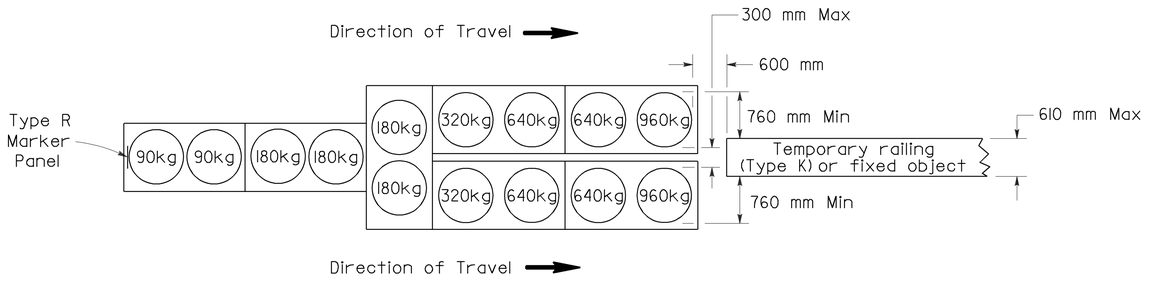
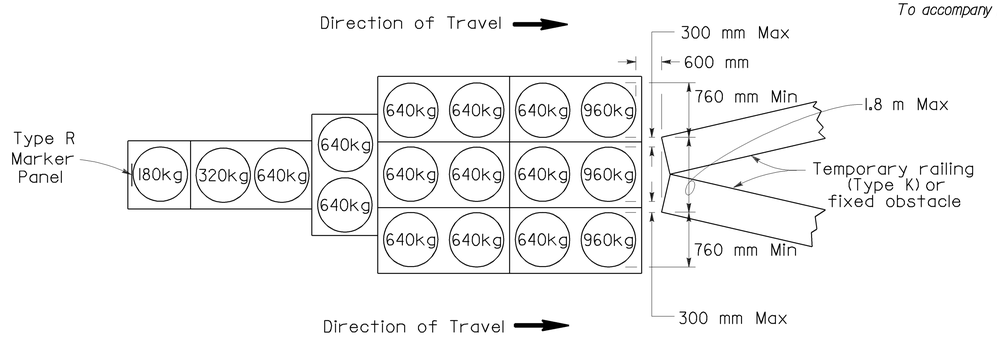
To accompany plans dated 1-30-12



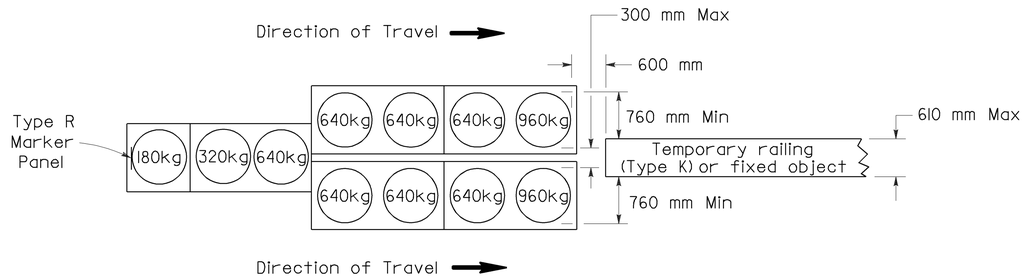
ARRAY 'TUI4'

Approach speed 70 km/h or more



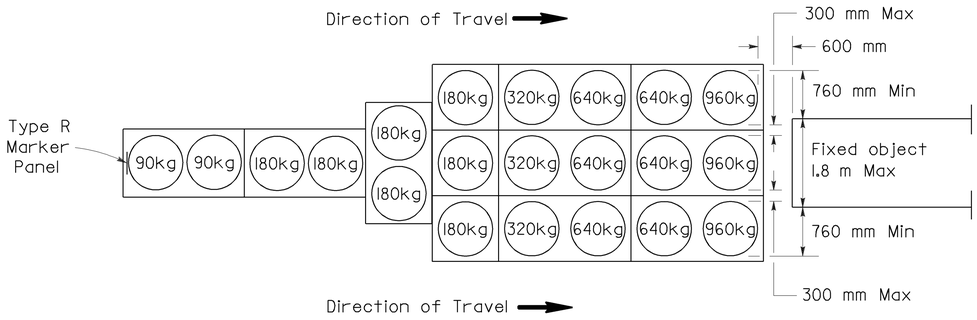
ARRAY 'TUI7'

Approach speed less than 70 km/h



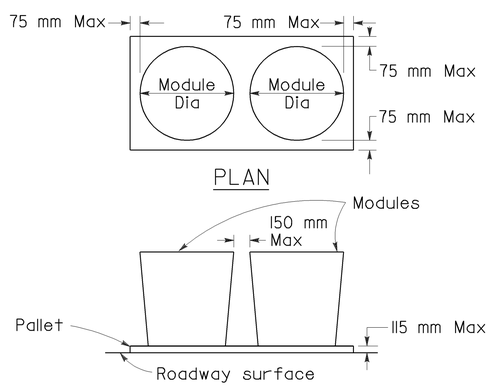
ARRAY 'TUII'

Approach speed less than 70 km/h



ARRAY 'TU2I'

Approach speed 70 km/h or more



CRASH CUSHION PALLET DETAIL

See Note 7

NOTES

1. (XXX) Indicates sand filled module location and mass of sand in kilograms for each module. Module spacing is based on the greater diameter of the module.
2. All sand masses are nominal.
3. Temporary crash cushion arrays shall not encroach on the traveled way.
4. Place the top of Type R marker panel 25 mm below the module lid.
5. Refer to Standard Plan A73B for marker details.
6. Approach speeds indicated conform to NCHRP 350 Report criteria.
7. Use of Pallets is optional.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

TEMPORARY CRASH CUSHION, SAND FILLED (UNIDIRECTIONAL)

NO SCALE

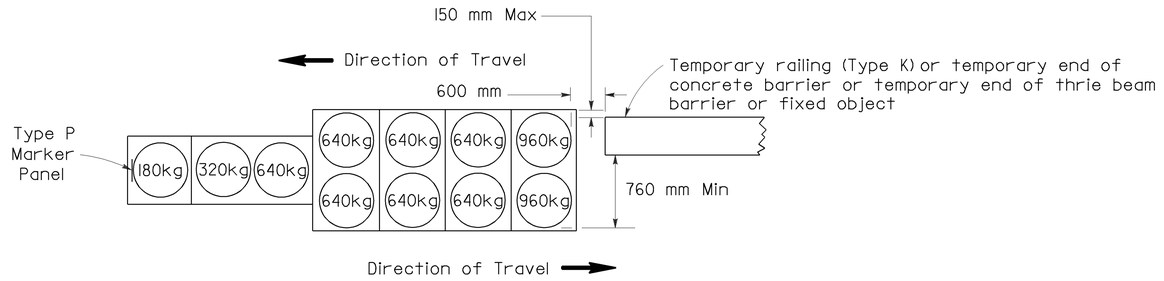
ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN

RSP T1A DATED JUNE 6, 2008 SUPERSEDES STANDARD PLAN T1A
DATED July 1, 2004 - PAGE 211 OF THE STANDARD PLANS BOOK DATED July 2004.

REVISED STANDARD PLAN RSP T1A

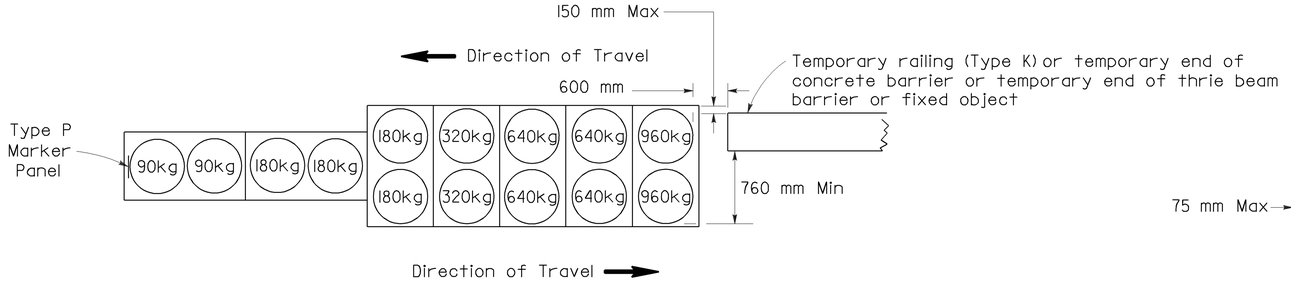
2004 REVISED Std PLAN RSP T1A

5-16-08



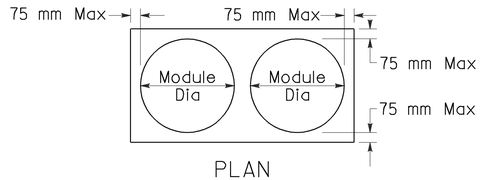
ARRAY 'TBI1'

Approach speed less than 70 km/h

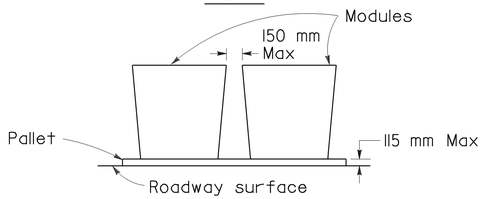


ARRAY 'TBI4'

Approach speed 70 km/h or more



PLAN



ELEVATION

CRASH CUSHION PALLET DETAIL

See Note 7

NOTES

1. (XXX) Indicates sand filled module location and mass of sand in kilograms for each module. Module spacing is based on the greater diameter of the module.
2. All sand masses are nominal.
3. Temporary crash cushion arrays shall not encroach on the traveled way.
4. Place the Type P marker panel so that the bottom of the panel rests upon the pallet.
5. Refer to Standard Plan A73B for marker details.
6. Approach speeds indicated conform to NCHRP 350 Report criteria.
7. Use of Pallets is optional.

Caltrans Metric

DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	Ven	126	22.5/R29.3	13	19

Randell D. Hiatt
REGISTERED CIVIL ENGINEER

June 6, 2008
PLANS APPROVAL DATE

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

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To accompany plans dated 1-30-12

2004 REVISED Std PLAN RSP T1B

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

TEMPORARY CRASH CUSHION, SAND FILLED (BIDIRECTIONAL)

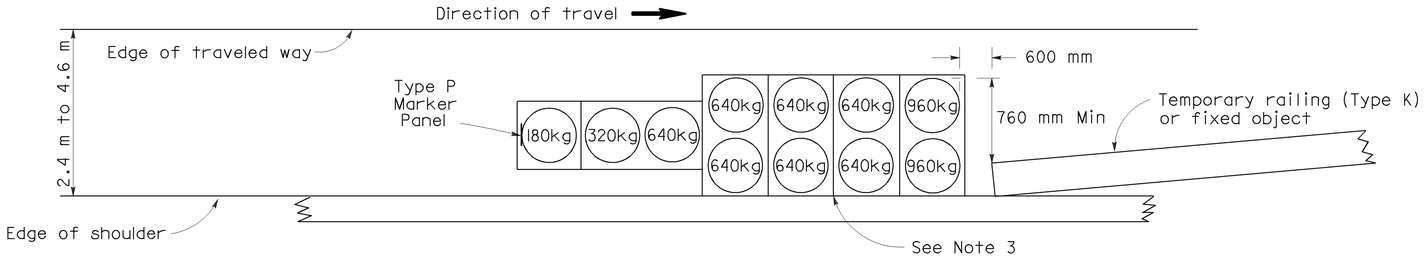
NO SCALE

ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN

RSP T1B DATED JUNE 6, 2008 SUPERSEDES STANDARD PLAN T1B DATED July 1, 2004 - PAGE 212 OF THE STANDARD PLANS BOOK DATED July 2004.

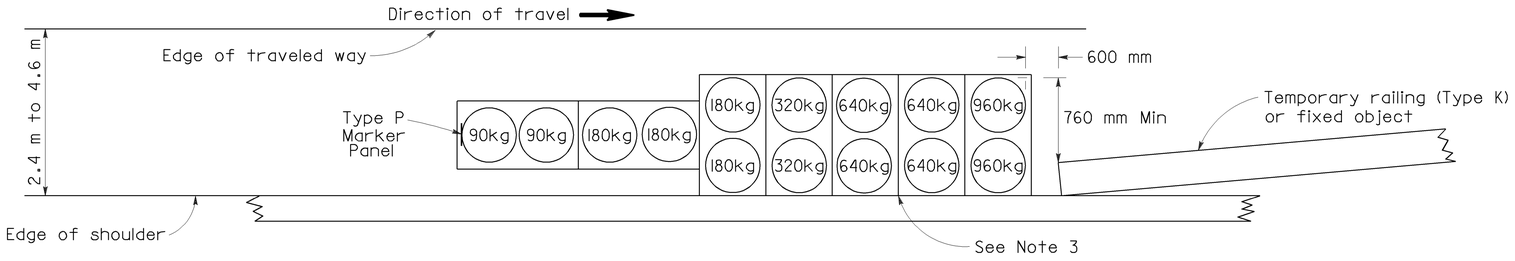
REVISED STANDARD PLAN RSP T1B

5-16-08



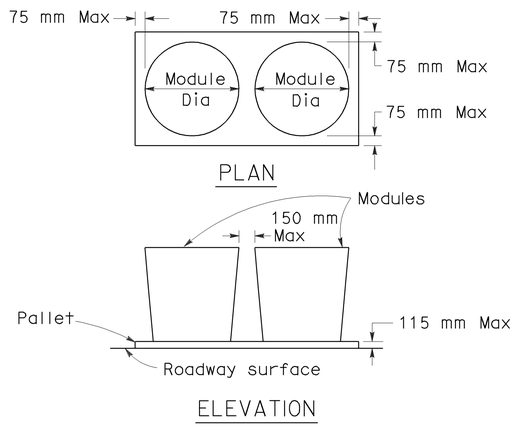
ARRAY 'TSI1'

Approach speed less than 70 km/h
See Note 9



ARRAY 'TSI4'

Approach speed 70 km/h or more
See Note 9



CRASH CUSHION PALLET DETAIL

See Note 11

Caltrans Metric

DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	Ven	126	22.5/R29.3	14	19

Randell D. Hiatt
REGISTERED CIVIL ENGINEER

June 6, 2008
PLANS APPROVAL DATE

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

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To get to the Caltrans web site, go to: http://www.dot.ca.gov

To accompany plans dated 1-30-12

NOTES

1. (XXX) Indicates sand filled module location and mass of sand in kilograms for each module. Module spacing is based on the greater diameter of the module.
2. All sand masses are nominal.
3. The temporary crash cushion arrays shown on this plan shall be used only in locations where there will be traffic on one side of the temporary crash cushion array.
4. If the fixed object or approach end of the temporary railing is less than 4.60 meters from the edge of traveled way, a temporary crash cushion is required.
5. Temporary crash cushion arrays shall not encroach on the traveled way.
6. Arrays for median shoulders shall conform to details shown on this plan for outside shoulders.
7. Place the Type P marker panel so that the bottom of the panel rest upon the pallet and faces traffic.
8. Refer to Standard Plan A73B for marker details.
9. For shoulder widths less than 2.4 m, appropriate approved crash cushion protection, other than sand filled modules, shall be provided at fixed objects and at approach ends of temporary railing. The specific type of crash cushion shall be as shown on the project plans or as specified in the Special Provisions, or if not shown on the project plans or specified in the Special Provisions, shall be as approved by the Engineer.
10. Approach speeds indicated conform to NCHRP 350 Report criteria.
11. Use of Pallets is optional.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

TEMPORARY CRASH CUSHION, SAND FILLED (SHOULDER INSTALLATIONS)

NO SCALE

ALL DIMENSIONS ARE IN
MILLIMETERS UNLESS OTHERWISE SHOWN

RSP T2 DATED JUNE 6, 2008 SUPERSEDES STANDARD PLAN T2
DATED July 1, 2004 - PAGE 213 OF THE STANDARD PLANS BOOK DATED July 2004.

REVISED STANDARD PLAN RSP T2

2004 REVISED Std PLAN RSP T2

5-16-08

ELECTROLIERS

STANDARD TYPES
15, 15D
15 STRUCTURE
21, 21D STRUCTURE
30
31
32
35
36-20A

High mast lighting standard

Double arm lighting standard

Existing electrolier

Electrolier foundation (Future installation)

NOTES

1. Luminaires shall be 310 W HPS when installed on Type 21, 21D, 30, 31, 32, 35 and 36-20A Standards, unless otherwise specified. Luminaires shall be 200 W HPS when installed on other type standards or poles, unless otherwise specified.
2. Luminaires shall be the cutoff type, ANSI Type III medium cutoff lighting distribution, unless otherwise specified.
3. Variations noted adjacent to symbol on project plans.

Electrolier (see project notes or project plans)

Luminaire on wood pole

STANDARD NOTES

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

ABBREVIATIONS AND EQUIPMENT DESIGNATIONS

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

Caltrans Metric

DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	Ven	126	22.5/R29.3	15	19

Jeffery G. McRae
REGISTERED ELECTRICAL ENGINEER

October 5, 2007
PLANS APPROVAL DATE

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

To accompany plans dated 1-30-12

SOFFIT AND WALL MOUNTED LUMINAIRES

- Pendant, 70 W HPS unless otherwise specified.
- Flush, 70 W HPS unless otherwise specified.
- Wall surface, 70 W HPS unless otherwise specified.
- Existing soffit or wall luminaire to remain unmodified.
- (M) Existing soffit or wall luminaire to be modified as specified.

NOTE

Arrow indicates "street side" of luminaire.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

ELECTRICAL SYSTEMS (SYMBOLS AND ABBREVIATIONS)

NO SCALE

ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN

RSP ES-1A DATED OCTOBER 5, 2007 SUPERSEDES STANDARD PLAN ES-1A DATED JULY 1, 2004-PAGE 413 OF THE STANDARD PLANS BOOK DATED JULY 2004.

REVISED STANDARD PLAN RSP ES-1A

2004 REVISED Std PLAN RSP ES-1A

6-27-07

CONDUIT

PROPOSED	EXISTING	
— — —	— — —	Lighting conduit, unless otherwise indicated or noted
— - — - —	— - — - —	Traffic signal conduit
—C— —	—c— —	Communication conduit
—T— —	—t— —	Telephone conduit
—F— —	—f— —	Fire alarm conduit
—FO— —	—fo— —	Fiber optic conduit
— — —┐	— — —┐	Conduit termination (RSP ES-9A C)
R	r	Conduit riser in/on structure or Service pole

SERVICE EQUIPMENT

PROPOSED	EXISTING	
—OH—	—oh—	Overhead lines
U	u	Wood pole "U" indicates utility owned
		Pole guy-with anchor
		Utility transformer-ground mounted
		Service equipment enclosure type
		Service equipment enclosure door indicates front of enclosure
T	t	Telephone demarcation cabinet

POLE-MOUNTED SERVICE DESIGNATION

Type of installation

TYPE H SERVICE - 8.8 m ← Pole height above grade

ILLUMINATED OVERHEAD SIGN

PROPOSED	EXISTING	
		Overhead sign - Single post
		Overhead sign - Two post
		Overhead sign - Mounted on structure
		Overhead sign with electrolier

SIGNAL EQUIPMENT

PROPOSED	EXISTING	
		Pedestrian signal face
		Pedestrian push button post
		Pedestrian barricade
		Vehicle signal face (with backplate, 3-Section: red, yellow and green)
		Vehicle signal face with angle visors
PV	PV	Modifications of basic symbols: "L" Indicates all non-arrow sections louvered "LG" Indicates louvered green section only "PV" indicates 300 mm programmed visibility sections "200" indicates all 200 mm sections (only when specified)
		Type 15TS and Vehicle signal face
		Vehicle signal face with red, yellow and green left arrow sections
		Vehicle signal face with red and yellow sections and up green arrow
		Vehicle signal face (5 Section) with red, yellow and green sections and yellow and green right arrows
		Type 1 Standard and attached vehicle signal faces
		Standard with signal mast arm only and attached vehicle signal faces and internally illuminated street name sign
		Type 33 Standard, Left-turn vehicle signal face and sign
		Standard with luminaire and signal mast arms and attached vehicle signal faces
		Cantilever flashing beacon Type 9 Frame, with a sign unless otherwise specified or indicated
Y Y	Y Y	Type 15-FBS Standard with two vehicle signal face sections with lens, backplate and visor with a sign
R	Y	Flashing beacon. One vehicle signal face section with lens, backplate and visor. "R" indicates red indication, "Y" indicates yellow indication
		Controller assembly. Door indicates front of cabinet
		Guard post
		Type 1 Standard with "Meter On" sign
		Emergency vehicle detector

Caltrans Metric

DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	Ven	126	22.5/R29.3	16	19

Jeffery G. McRae
REGISTERED ELECTRICAL ENGINEER

October 5, 2007
PLANS APPROVAL DATE

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

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To accompany plans dated 1-30-12

NOTES

1. All signal sections shall be 300 mm unless shown otherwise.
2. Signal heads shall be provided with backplates unless shown otherwise.
3. Signal indication shall be LED.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

ELECTRICAL SYSTEMS (SYMBOLS AND ABBREVIATIONS)

NO SCALE

ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN

RSP ES-1B DATED OCTOBER 5, 2007 SUPERSEDES STANDARD PLAN ES-1B DATED JULY 1, 2004-PAGE 414 OF THE STANDARD PLANS BOOK DATED JULY 2004.

REVISED STANDARD PLAN RSP ES-1B

2004 REVISED Std PLAN RSP ES-1B

8-9-07

DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	Ven	126	22.5/R29.3	17	19

Jeffery G. McRae
REGISTERED ELECTRICAL ENGINEER

October 5, 2007
PLANS APPROVAL DATE

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

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To accompany plans dated 1-30-12

EQUIPMENT IDENTIFICATION

ILLUMINATED SIGN IDENTIFICATION NUMBER:

Sign number - Place on post or structure

Sign No. 12345

10 ISL SCI 1.0

- Transformer rating (kVA)
- Lighting control type
- Number and type of fixtures

} Do NOT place on standard or structure

ELECTROLIER OR EQUIPMENT IDENTIFICATION NUMBER:

12345 - 4.6

- Mast arm length in meters, if shown. Do not place on standard or structure.
- Equipment number - Place on standard or structure. Existing equipment numbers are shown in parenthesis

CONDUIT AND CONDUCTOR IDENTIFICATION:

41C, 2#10, 15#14, 2 DLC

- Number and size of conductors and cables
- Size of conduit in millimeters

ø1, ø2, ø2P, etc. — Traffic phase identification for signal faces, detectors and phase diagrams

1 2 3 — Project note numbers

(A) (B) (C) — Equipment description, installation or item numbers

△1 △2 △3 — Conduit run numbers

SIGNAL AND LIGHTING STANDARD (TYPICAL DESIGNATION):

19A - 3 - 161

- Wind velocity=161 km/h
- Case 3 arm loading
- Standard type
- Standard Plan sheet number
- Detail number or letter

WIRING DIAGRAM LEGEND

P	Pole
CB	Circuit breaker
A	Ampere
V	Volt
M	Metered
UM	Unmetered
NB	Neutral bus
GB	Ground bus
G	Equipment grounding conductor
N	Grounded conductor (Neutral)

- External conductor
- Conductor or bus
- Tie point
- Contactor coil
- Contactor, Contact NO
- Terminal blocks
- Contactor, Contact NC
- Enclosure bond
- Grounding electrode
- Circuit breaker
- Receptacle

PULL BOXES

PROPOSED EXISTING

Pull box-No. 5 unless otherwise indicated or noted.

3 / 9A(21)

Pull box-Additional designations or descriptions

3 = No. 3½ pull box
5 = No. 5 pull box
6 = No. 6 pull box
7 = No. 7 (Ceiling pull box)
8 = No. 8 (Pendant soffit pull box)
9 = No. 9 pull box
9A = No. 9A pull box

(C) = Communications pull box
(E) = Pull box with extension
(S) = Sprinkler control pull box
(21) = Anchor bolts and conduit for future installation of Type 21 Standard
(T) = Traffic pull box

MISCELLANEOUS EQUIPMENT

PROPOSED	EXISTING	
CMS	cms	Changeable message sign
		Closed circuit television camera
		Highway advisory radio pole and antenna
EMS	ems	Extinguishable message sign
		Detection device
M V	m v	M = Microwave sensor V = Video image sensor

VEHICLE DETECTORS

5 J 9 U

- Vehicle detector designation
- U = Upper, L = Lower
- Slot number in input file
- Input file (I or J)
- Phase

PROPOSED	EXISTING	
		Type A detector loop. Outline of sawcut shown.
		Type B detector loop. Outline of sawcut shown.
		Type C detector loop. Outline of sawcut shown.
		Type D detector loop. Outline of sawcut shown.
		Type E detector loop. Outline of sawcut shown.
		Type Q detector loop. Outline of sawcut shown.
		Magnetic detector
DH	dh	Detector handhole
		Microwave or video detection zone

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

ELECTRICAL SYSTEMS (SYMBOLS AND ABBREVIATIONS)

NO SCALE

ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN

RSP ES-1C DATED OCTOBER 5, 2007 SUPERSEDES STANDARD PLAN ES-1C DATED JULY 1, 2004-PAGE 415 OF THE STANDARD PLANS BOOK DATED JULY 2004.

REVISED STANDARD PLAN RSP ES-1C

2004 REVISED Std PLAN RSP ES-1C

10-1-07

DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
07	Ven	126	22.5/R29.3	18	19

Jeffery G. McRae
REGISTERED ELECTRICAL ENGINEER

October 5, 2007
PLANS APPROVAL DATE

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

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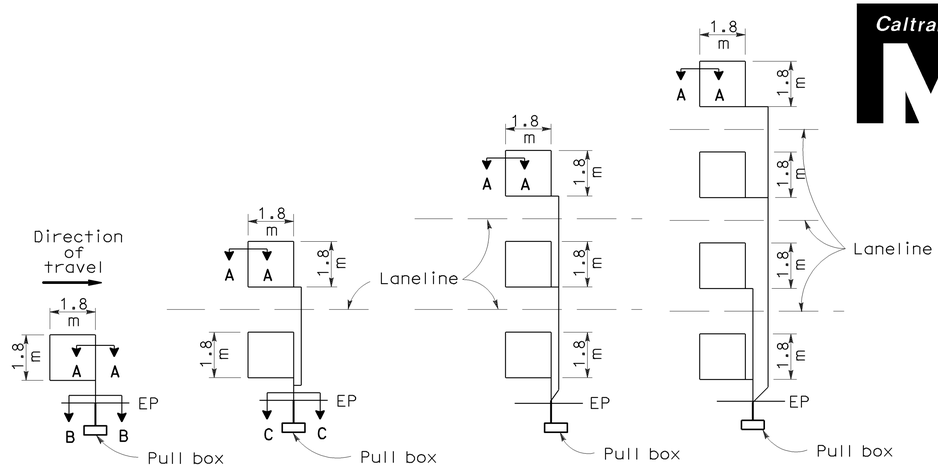
To get to the Caltrans web site, go to: http://www.dot.ca.gov

To accompany plans dated 1-30-12

LOOP INSTALLATION PROCEDURE

1. Loops shall be centered in lanes.
2. Saw slots in pavement for loop conductors as shown in details.
3. Distance between side of loop and a lead-in saw cut from adjacent detectors shall be 600 mm minimum. Distance between lead-in saw cuts shall be 150 mm minimum.
4. Bottom of saw slot shall be smooth with no sharp edges.
5. Slots shall be washed until clean, blown out and thoroughly dried before installing loop conductors.
6. Adjacent loops on the same sensor unit channel shall be wound in opposite directions.
7. Identify and tag loop circuit pairs in the pull box with loop number, start (S) and finish (F) of conductor. Identify and tag lead-in-cable with sensor number and phase.
8. Install loop conductor in slot using a 5 mm to 6 mm thick wood paddle. Hold loop conductors with wood paddles (at the bottom of the sawed slot) during sealant placement.
9. No more than 2 twisted pairs shall be installed in one sawed slot.
10. Allow additional 1.5 m of slack length of conductor for the lead-in run to pull box.
11. The additional length of each conductor for each loop shall be twisted together into a pair (6 turns per meter minimum) before being placed in the slot and conduit leading to pull box.
12. Test each loop circuit for continuity, circuit resistance and insulation resistance at the pull box before filling slots.
13. Fill slots as shown in details.
14. Splice loop conductors to lead-in cable. Splices shall be soldered.
15. End of lead-in-cable and Type 2 loop conductor shall be waterproofed prior to installing in conduit to prevent moisture from entering the cable.
16. Lead-in-cable shall not be spliced between the pull box and the controller cabinet terminals.
17. Test each loop circuit for continuity, circuit resistance and insulation resistance at the controller cabinet location.
18. Where loop conductors are not to be spliced to a lead-in-cable, the ends of the conductors shall be taped and waterproofed with electrical insulating coating.

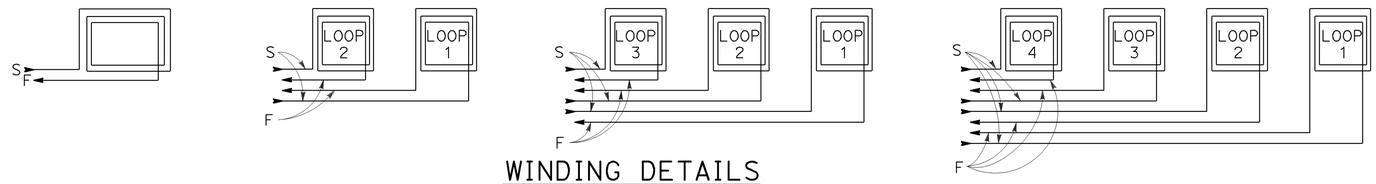


TYPE 1A INSTALLATION | TYPE 2A INSTALLATION | TYPE 3A INSTALLATION | TYPE 4A INSTALLATION

SAWCUT DETAILS

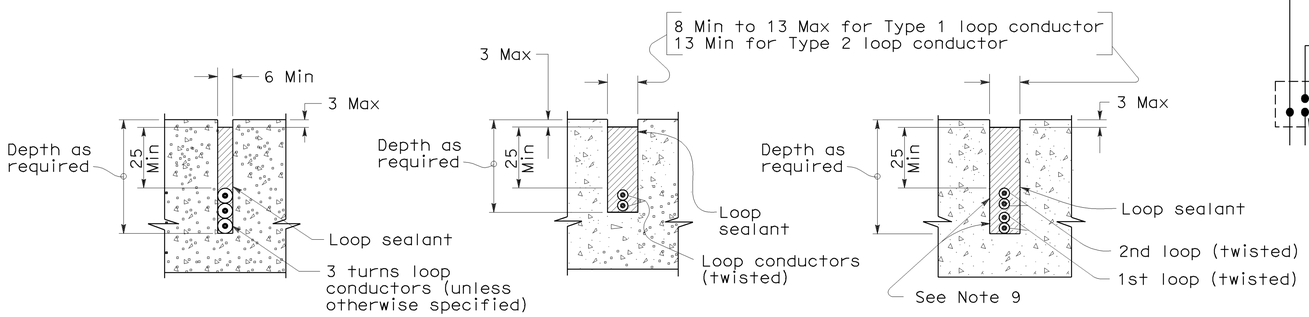
(Type A loop detector configurations illustrated)

1. 1A thru 4A = 1 Type A loop configuration in each lane.
2. 1B thru 4B = 1 Type B loop configuration in each lane.
3. 1C = 1 Type C loop configuration entering lanes as required.
4. 1D thru 4D = 1 Type D loop configuration in each lane.
5. 1E thru 4E = 1 Type E loop configuration in each lane.
6. 1Q thru 4Q = 1 Type Q loop configuration in each lane.
   (Use Type A, B, C, D, E or Q loop detector configurations only when specified or shown on plans)



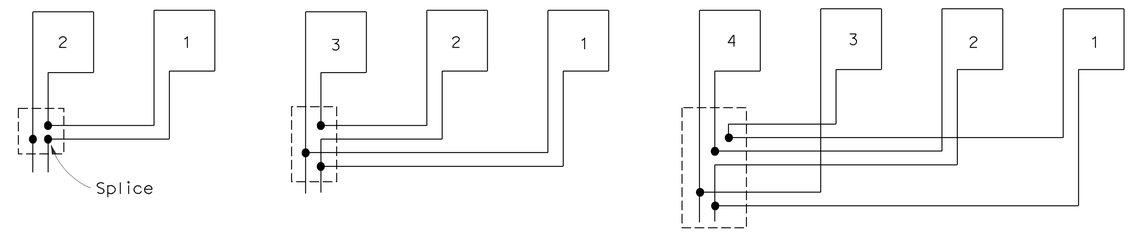
WINDING DETAILS

See Notes 6 and 7



SECTION A-A | SECTION B-B | SECTION C-C

SLOT DETAILS - TYPE 1 AND TYPE 2 LOOP CONDUCTOR



TYPICAL LOOP CONNECTIONS

(Dashed lines represent the pull box)

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

ELECTRICAL SYSTEMS (DETECTORS)

NO SCALE

ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SHOWN

RSP ES-5A DATED OCTOBER 5, 2007 SUPERSEDES STANDARD PLAN ES-5A DATED JULY 1, 2004-PAGE 436 OF THE STANDARD PLANS BOOK DATED JULY 2004.

REVISED STANDARD PLAN RSP ES-5A

2004 REVISED Std PLAN RSP ES-5A

8-9-07

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
07	Ven	126	22.5/R29.3	19	19

Randell D. Hiatt
REGISTERED CIVIL ENGINEER

May 20, 2011
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
Randell D. Hiatt
No. C50200
Exp. 6-30-11
CIVIL
STATE OF CALIFORNIA

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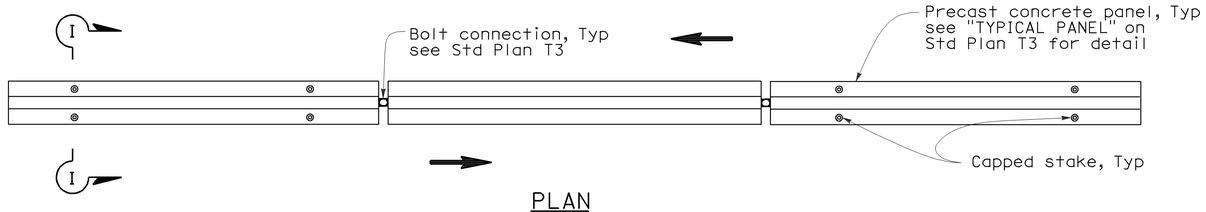
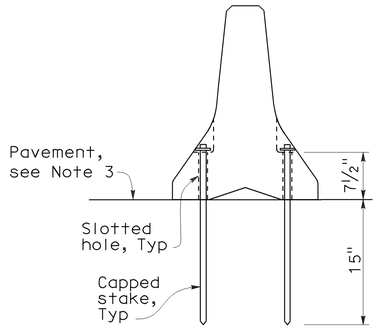
To accompany plans dated 1-30-12



PLAN

RAILING STAKING CONFIGURATION FOR TWO-WAY TRAFFIC

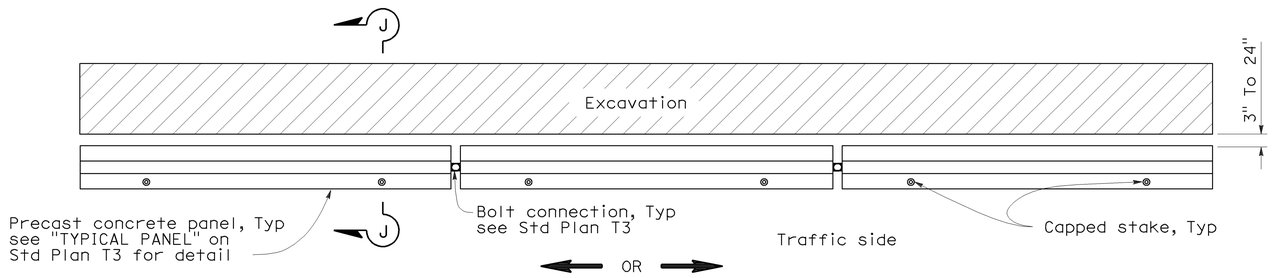
See Note 1



SECTION I-I

NOTES:

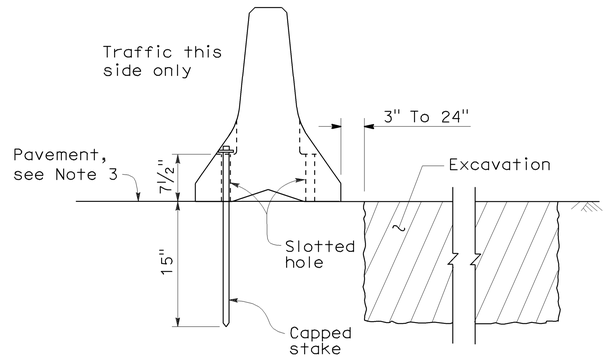
1. Where Type K Temporary Railing is placed as a temporary or long term barrier in two-way traffic on highways with less than 24" from the edge of traveled way, use four capped stakes per every other panel with end panels staked.
2. Where Type K Temporary Railing is placed 3" to 24" from the edge of an excavation on highways, use two capped stakes per panel along the traffic side.
3. Staked Type K Temporary Railing must be supported by at least 4" thick concrete, hot mix asphalt or existing asphalt concrete pavement.
4. The minimum yield strength for the washer must be 60,000 psi.
5. Direction of adjacent traffic indicated by ⟹.



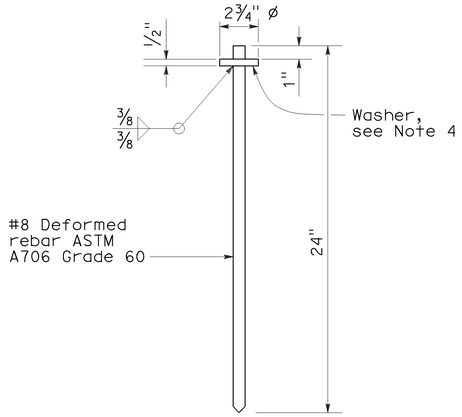
PLAN

RAILING STAKING CONFIGURATION ADJACENT TO AN EXCAVATION

See Note 2



SECTION J-J



CAPPED STAKE DETAIL

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

TEMPORARY RAILING (TYPE K)

NO SCALE

NSP T3A DATED MAY 20, 2011 SUPPLEMENTS
THE STANDARD PLANS BOOK DATED MAY 2006.

NEW STANDARD PLAN NSP T3A

2006 NEW STANDARD PLAN NSP T3A

8-31-10