Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	Hum	254	12.7/20.6	1	20

ACSTP-S254(007)E

STATE OF CALIFORNIA

DEPARTMENT OF TRANSPORTATION

PROJECT PLANS FOR CONSTRUCTION ON

STATE HIGHWAY

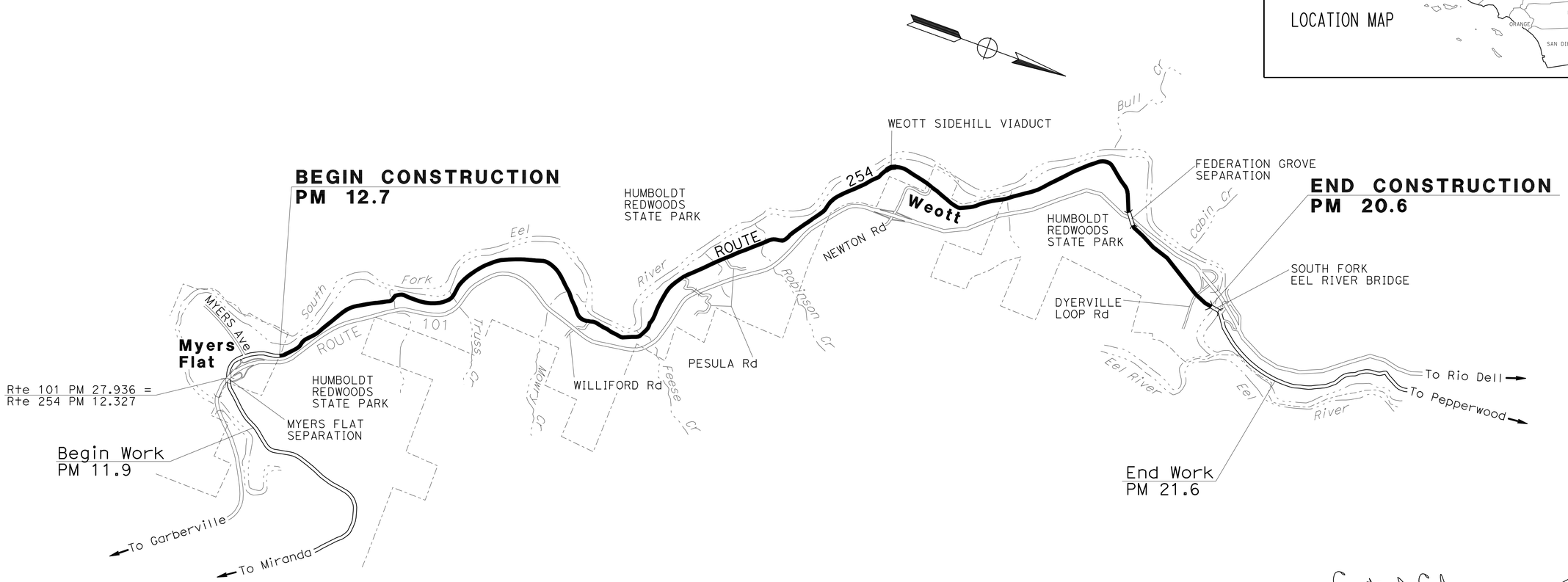
IN HUMBOLDT COUNTY NEAR MYERS FLAT FROM 0.2 MILE NORTH OF MYERS AVENUE TO SOUTH FORK EEL RIVER BRIDGE

TO BE SUPPLEMENTED BY STANDARD PLANS DATED MAY 2006

INDEX OF PLANS

SHEET No	DESCRIPTION
1	TITLE AND LOCATION MAP
2	TYPICAL CROSS SECTION
3-7	CONSTRUCTION DETAILS
8	CONSTRUCTION AREA SIGNS
9-10	SUMMARY OF QUANTITIES
11-20	NEW OR REVISED STANDARD PLANS

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



NO SCALE

Curtis D. Coburn 2/7/11
PROJECT ENGINEER DATE
REGISTERED CIVIL ENGINEER

February 7, 2011
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
CURTIS D. COBURN
No. 58431
Exp. 12-31-12
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.

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

PROJECT MANAGER: Royal B. McCarthy
DESIGN ENGINEER: Royal B. McCarthy

CONTRACT No.	01-498404
PROJECT ID	0100020120

LAST REVISION 00-00-00
DATE PLOTTED => 22-FEB-2011
TIME PLOTTED => 14:37

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	Hum	254	12.7/20.6	2	20

Curtis D. Coburn 2/7/11
REGISTERED CIVIL ENGINEER DATE

February 7, 2011
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
CURTIS D. COBURN
No. 58431
Exp. 12-31-12
CIVIL
STATE OF CALIFORNIA

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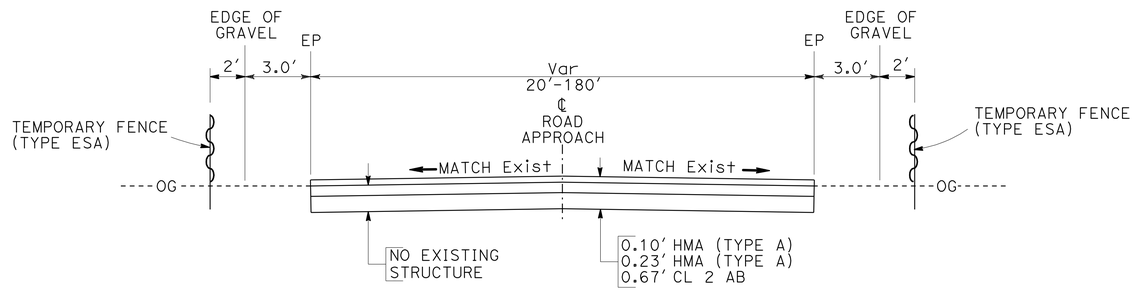
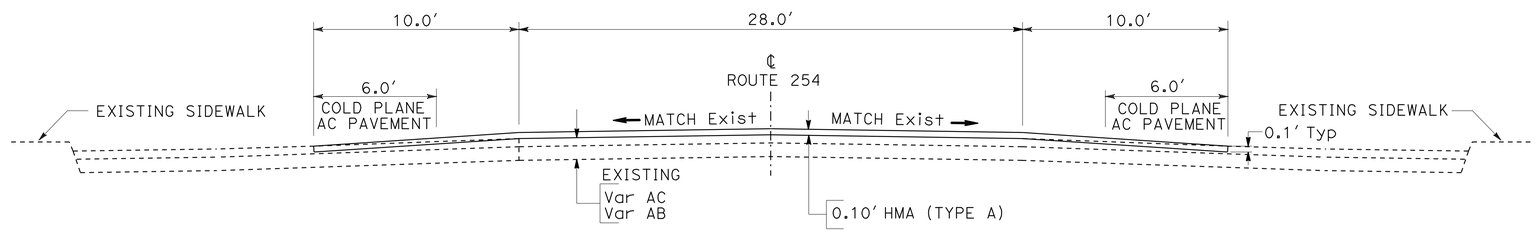
NOTES

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

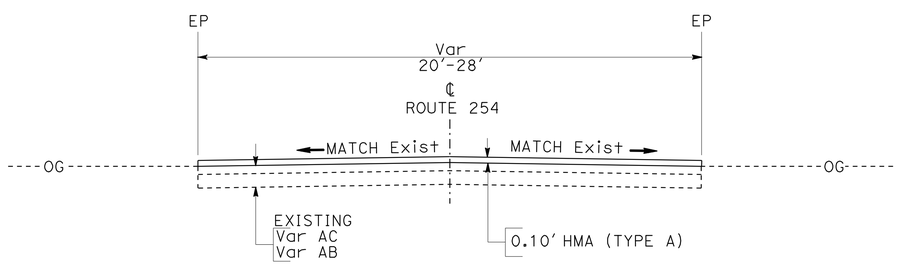


NEW STRUCTURAL SECTIONS

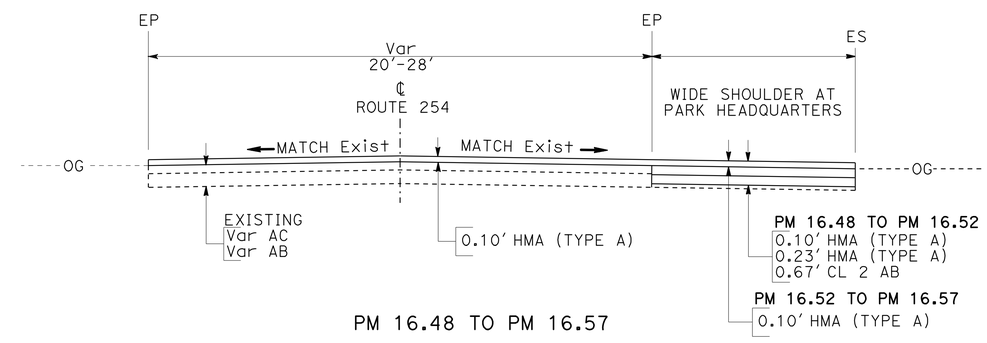
PM 15.35 WILLIFORD ROAD APPROACH
PM 16.24 PESULA ROAD APPROACH
PM 18.38 MARIN GARDEN GROVE ROAD APPROACH



PM 18.10 TO PM 18.31



PM 12.74 TO PM 16.48
PM 16.57 TO PM 18.10
PM 18.31 TO PM 20.64



PM 16.48 TO PM 16.57

TYPICAL CROSS SECTIONS X-1

NO SCALE

REVISED BY | DATE REVISED
Greg Thorne | X
CALCULATED-DESIGNED BY | CHECKED BY
FUNCTIONAL SUPERVISOR
Royal B. McCarthy

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans® MAINTENANCE DESIGN

LAST REVISION 00-00-00 | DATE PLOTTED => 22-FEB-2011 | TIME PLOTTED => 14:37

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	Hum	254	12.7/20.6	3	20

REGISTERED CIVIL ENGINEER — DATE 2/7/11

February 7, 2011
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — CURTIS D. COBURN No. 58431 Exp. 12-31-12 CIVIL — STATE OF CALIFORNIA

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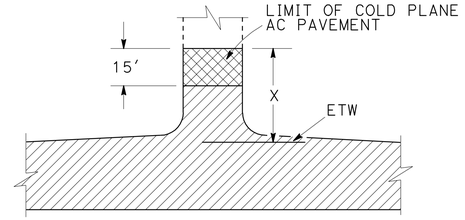
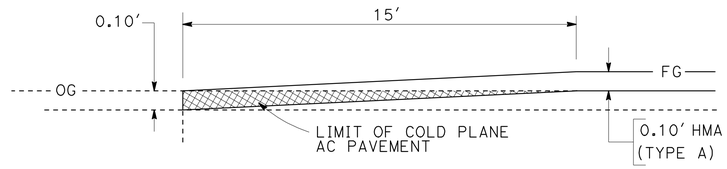
NOTES

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

LEGEND

LIMITS OF PAVING

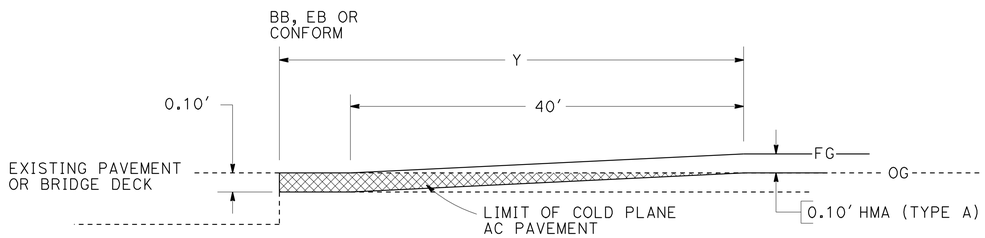




LIMITS OF PAVING

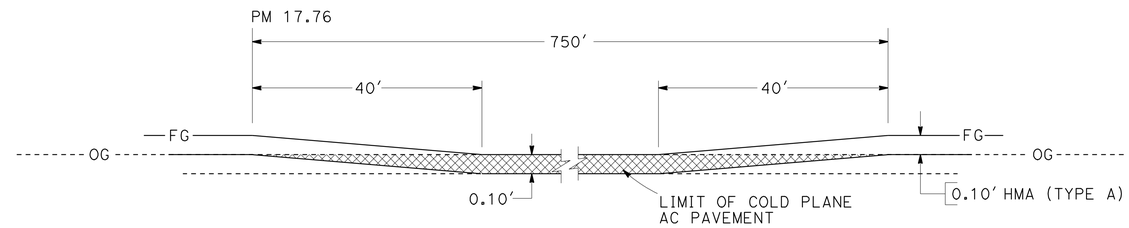
LOCATION	PM	X FT
WILLIAMS GROVE ROAD	13.47 L†	30
GARDEN CLUB ROAD	14.74 L†	35
PARK HQ ROAD	16.47 R†	40
BURLINGTON CAMPGROUND ROAD	16.58 R†	34
EMPLOYEE RESIDENCE ROAD	16.89 R†	25
NEWTON ROAD	18.23 R†	38
WOMANS CLUB GROVE ROAD	19.81 L†	30
DYERVILLE LOOP ROAD	20.53 R†	30
ROUTE 101 ON-RAMP ROAD	20.53 L†	35

PUBLIC ROAD CONNECTIONS



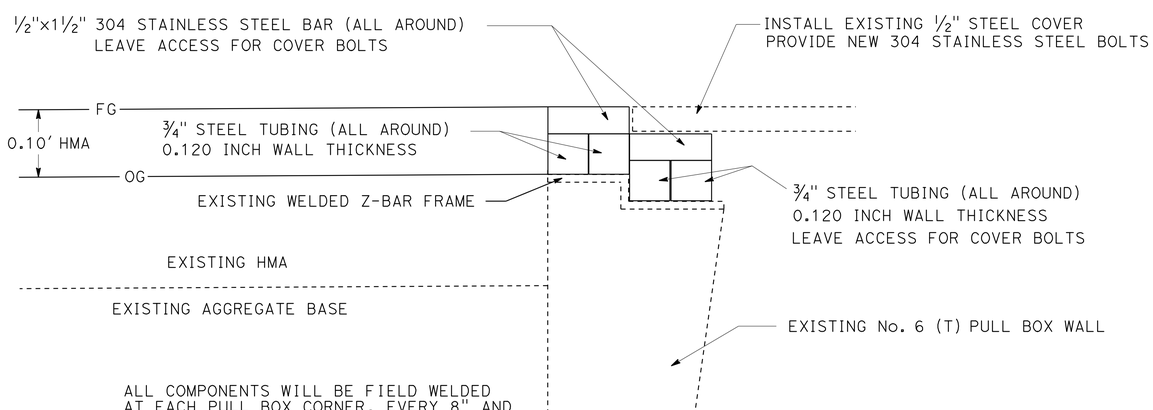
COLD PLANE AC PAVEMENT

LOCATION	PM	Y FT	DETAIL SHEET
BEGIN CONSTRUCTION	12.74	132	C-2
FEDERATION GROVE SEPARATION	19.90	215	C-4
FEDERATION GROVE SEPARATION	20.19	1140	C-4
END CONSTRUCTION	20.84	125	C-5

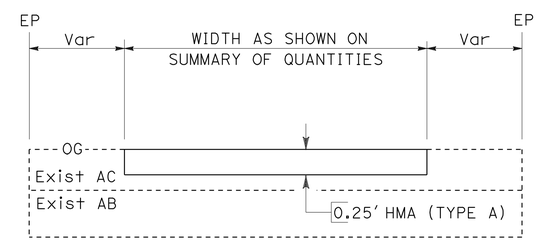


COLD PLANE AC PAVEMENT

PM 17.83 WEOTT VIADUCT DETAIL SHEET C-3



ADJUST PULL BOX COVER TO GRADE



REPLACE ASPHALT CONCRETE SURFACING

CONSTRUCTION DETAILS
C-1

NO SCALE

REVISED BY | DATE REVISED
Greg Thorne | X
CALCULATED-DESIGNED BY | CHECKED BY
FUNCTIONAL SUPERVISOR
Royal B. McCarthy

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans® MAINTENANCE DESIGN

LAST REVISION 00-00-00 | DATE PLOTTED => 22-FEB-2011 | TIME PLOTTED => 14:37

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	Hum	254	12.7/20.6	4	20

Curtis D. Coburn 2/7/11
REGISTERED CIVIL ENGINEER DATE

February 7, 2011
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER CURTIS D. COBURN No. 58431 Exp. 12-31-12 CIVIL STATE OF CALIFORNIA

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NOTES

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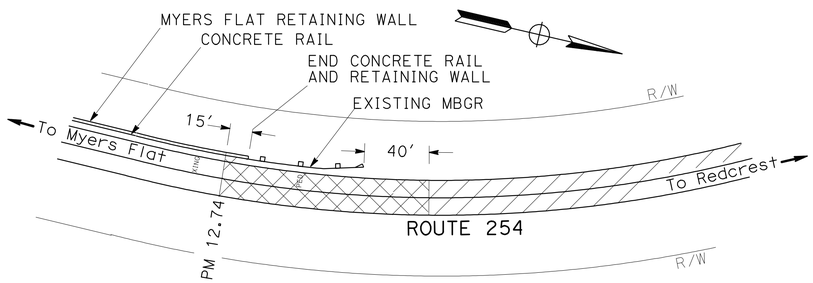
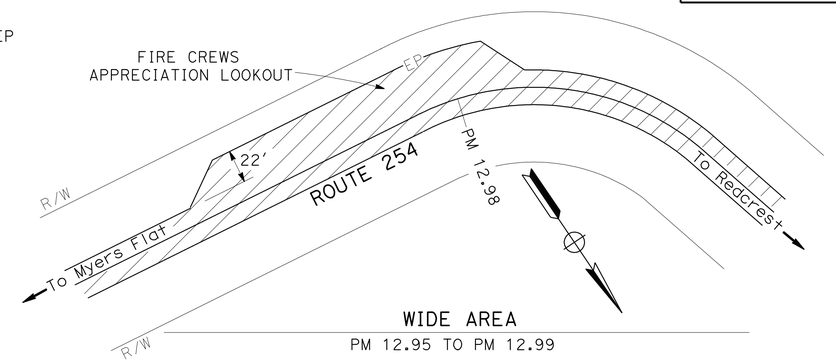
2. EXISTING UTILITY FACILITIES HAVE NOT BEEN PLOTTED ON THESE PLANS.

LEGEND

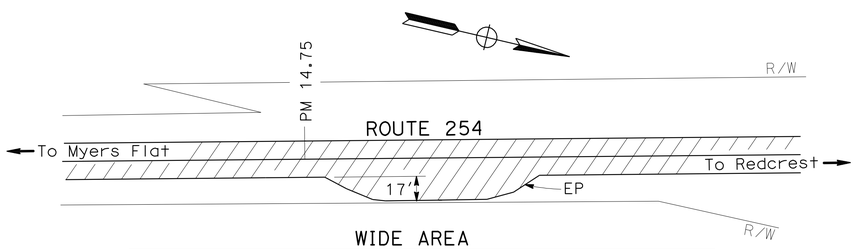
- 0.10' HMA (TYPE A) OVERLAY
- COLD PLANE AC SURFACING
- NEW STRUCTURAL SECTION
- REPLACE AC SURFACING 0.25' DEEP



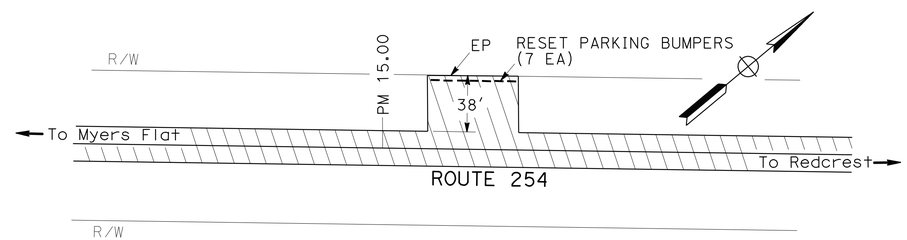
BEGIN CONSTRUCTION
MYERS FLAT RETAINING WALL
PM 12.74



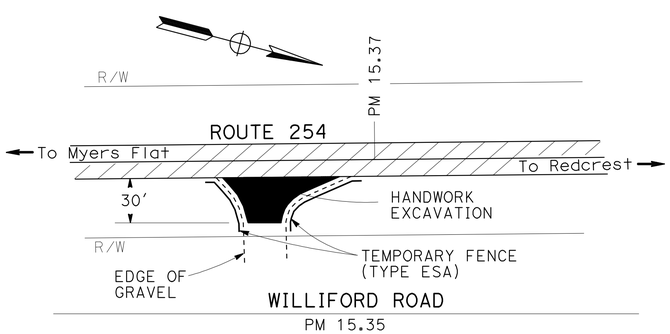
WIDE AREA
PM 12.95 TO PM 12.99



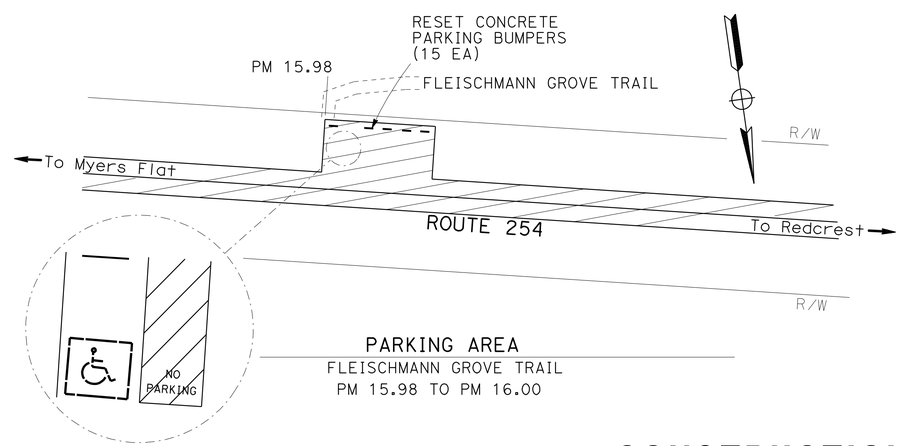
WIDE AREA
PM 14.75 TO PM 14.78



PARKING AREA
PM 15.00 TO PM 15.02



WILLIFORD ROAD
PM 15.35



PARKING AREA
FLEISCHMANN GROVE TRAIL
PM 15.98 TO PM 16.00

CONSTRUCTION DETAILS
C-2

NO SCALE

REVISED BY	DATE REVISED

CALCULATED-DESIGNED BY	CHECKED BY
Greg Thorne	X

FUNCTIONAL SUPERVISOR: Royal B. McCarthy

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans® MAINTENANCE DESIGN

LAST REVISION 00-00-00 | DATE PLOTTED => 22-FEB-2011 | TIME PLOTTED => 14:37

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	Hum	254	12.7/20.6	5	20

Curtis D. Coburn 2/7/11
REGISTERED CIVIL ENGINEER DATE

February 7, 2011
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
CURTIS D. COBURN
No. 58431
Exp. 12-31-12
CIVIL
STATE OF CALIFORNIA

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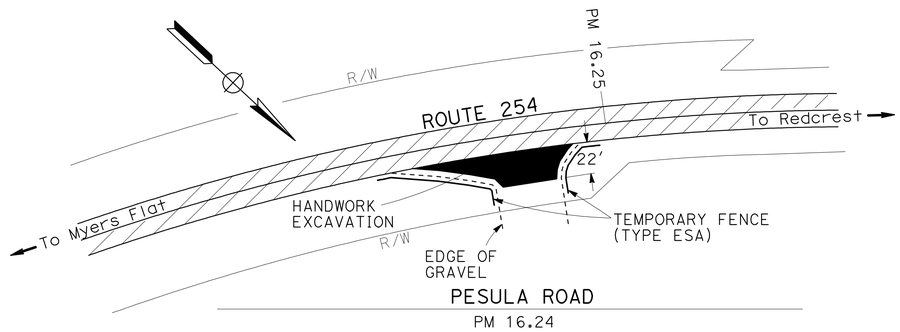
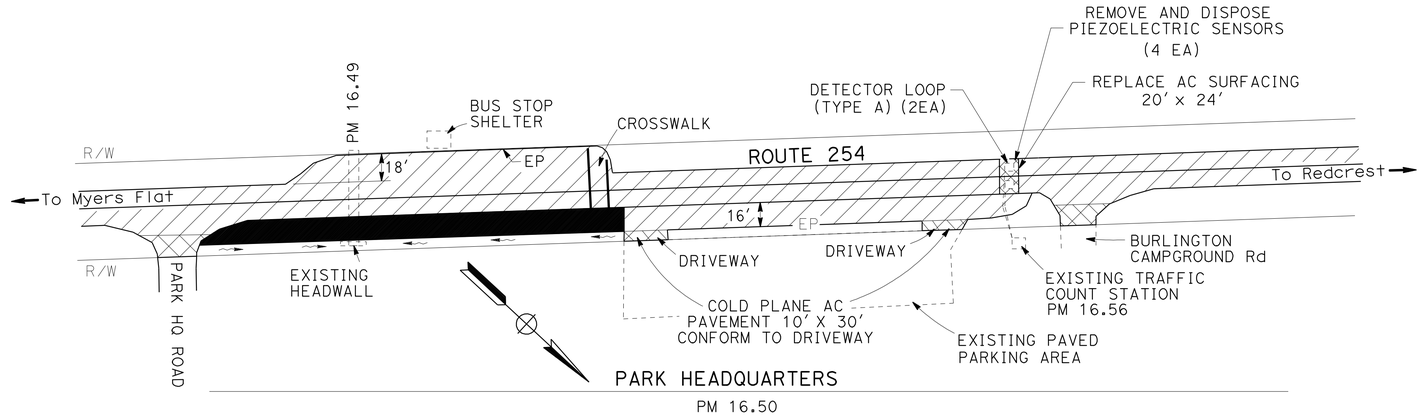
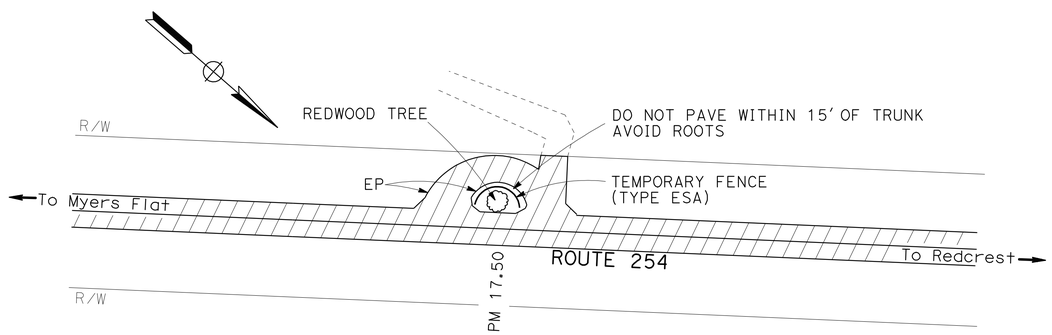


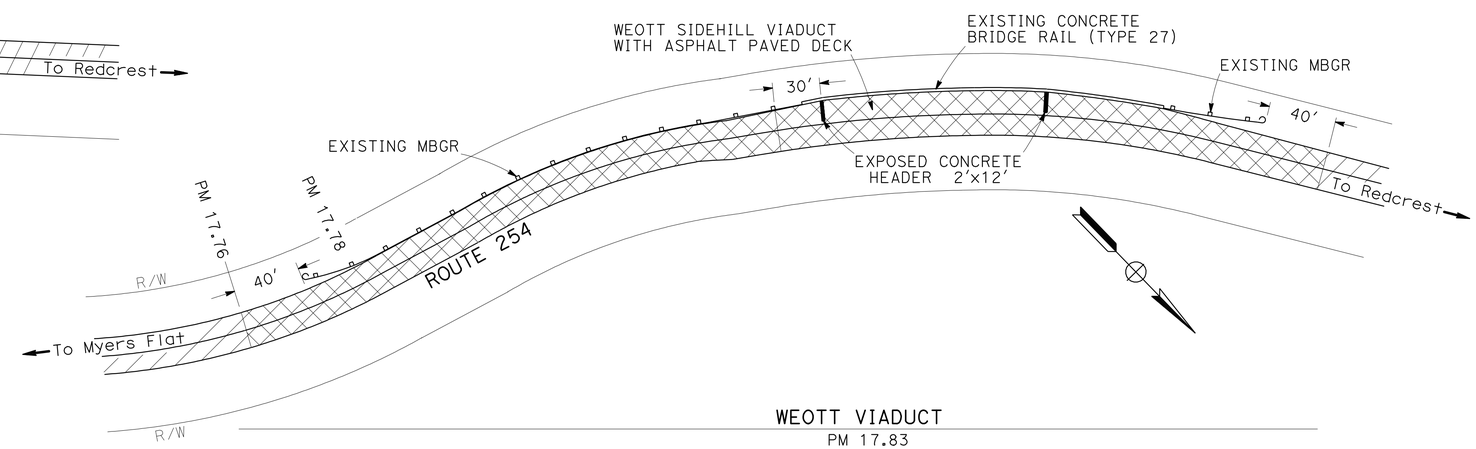
PESULA ROAD
PM 16.24



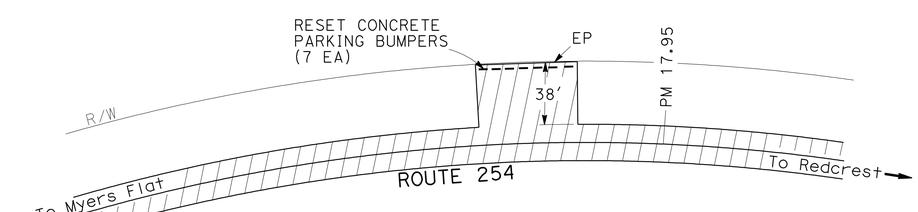
PARK HEADQUARTERS
PM 16.50



GOULD'S BAR
PM 17.49 TO PM 17.52



WEOTT VIADUCT
PM 17.83



PARKING AREA
PIONEERS OF CALIFORNIA
PM 17.93 TO PM 17.94

CONSTRUCTION DETAILS
C-3

NO SCALE

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans MAINTENANCE DESIGN

FUNCTIONAL SUPERVISOR: Royal B. McCarthy
CALCULATED-DESIGNED BY: Greg Thorne
CHECKED BY: X
REVISED BY
DATE REVISED

LAST REVISION 00-00-00
DATE PLOTTED => 22-FEB-2011
TIME PLOTTED => 14:37

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	Hum	254	12.7/20.6	6	20

Curtis D. Coburn 2/7/11
REGISTERED CIVIL ENGINEER DATE

February 7, 2011
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
CURTIS D. COBURN
No. 58431
Exp. 12-31-12
CIVIL
STATE OF CALIFORNIA

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NOTES

1. FOR COMPLETE RIGHT OF WAY DATA, SEE RIGHT OF WAY RECORD MAPS AT DISTRICT OFFICE.
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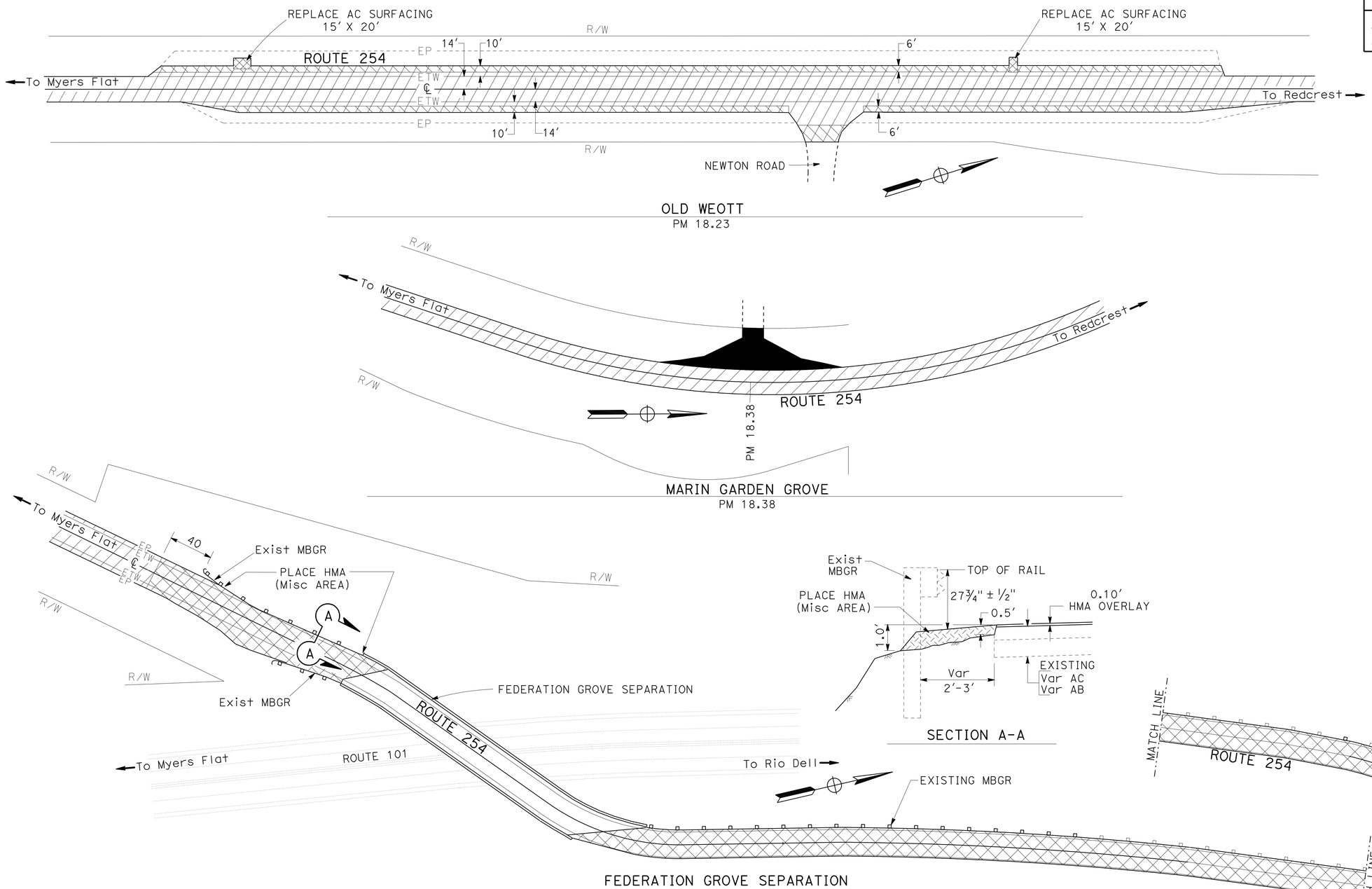

CONSTRUCTION DETAILS
C-4

NO SCALE

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans® MAINTENANCE DESIGN

FUNCTIONAL SUPERVISOR: Royal B. McCarthy
CALCULATED-DESIGNED BY: Greg Thorne
CHECKED BY: X
REVISED BY
DATE REVISED

LAST REVISION 00-00-00
DATE PLOTTED => 22-FEB-2011
TIME PLOTTED => 14:37

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	Hum	254	12.7/20.6	7	20

Curtis D. Coburn 2/7/11
REGISTERED CIVIL ENGINEER DATE

February 7, 2011
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
CURTIS D. COBURN
No. 58431
Exp. 12-31-12
CIVIL
STATE OF CALIFORNIA

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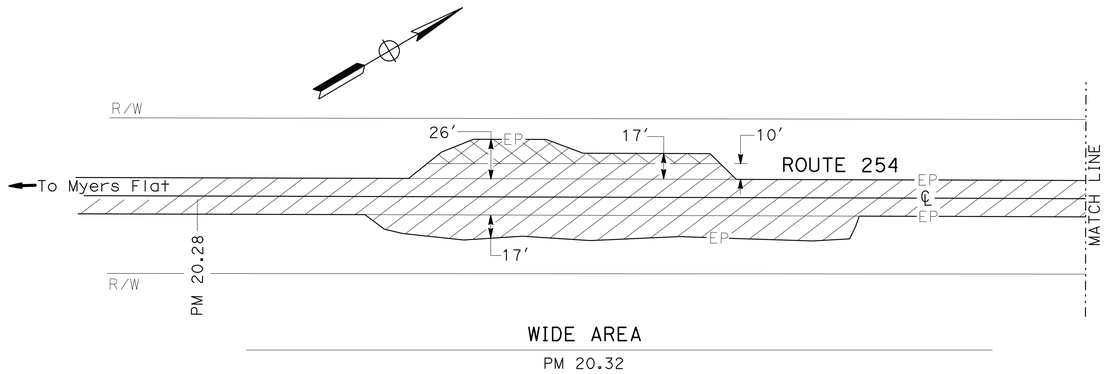
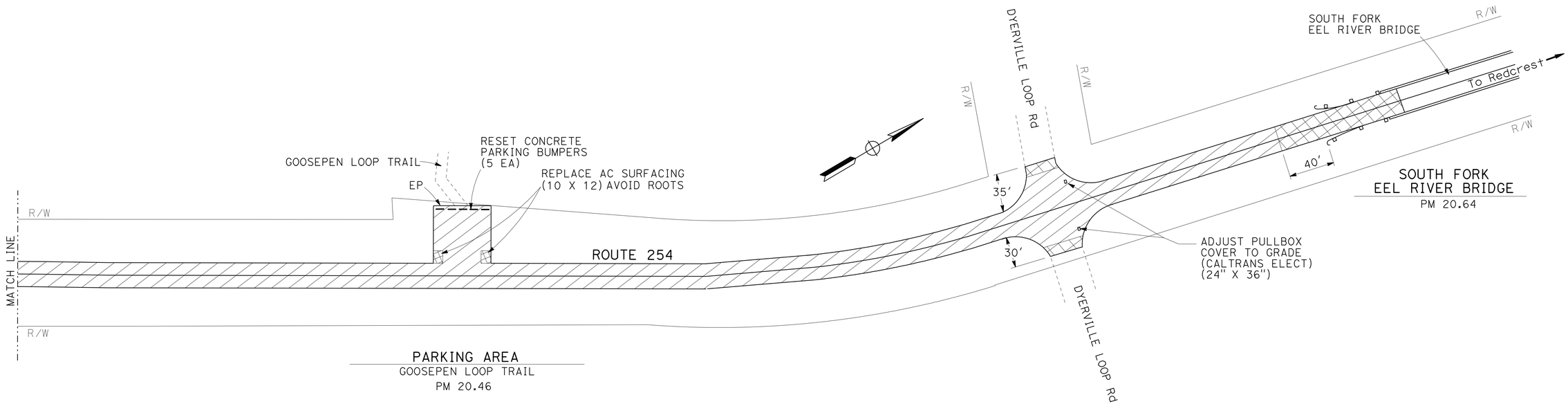


WIDE AREA
PM 20.32



CONSTRUCTION DETAILS
C-5

NO SCALE

REVISED BY	DATE REVISED
Greg Thorne	X

CALCULATED-DESIGNED BY
CHECKED BY

FUNCTIONAL SUPERVISOR
Royal B. McCarthy

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans
MAINTENANCE DESIGN

LAST REVISION 00-00-00
DATE PLOTTED => 22-FEB-2011
TIME PLOTTED => 14:37

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	Hum	254	12.7/20.6	8	20

Curtis D. Coburn 2/7/11
REGISTERED CIVIL ENGINEER DATE

February 7, 2011
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
CURTIS D. COBURN
No. 58431
Exp. 12-31-12
CIVIL
STATE OF CALIFORNIA

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STATIONARY MOUNTED CONSTRUCTION AREA SIGNS

SIGN No.	SIGN CODE	SIGN MESSAGE	PANEL SIZE	NO OF POSTS AND SIZE	NO. OF SIGNS
A	G20-1	ROAD WORK NEXT 9 MILES	60"x36"	2-4"x6"	2
	C23B (CA)	RESURFACING	52"x12"		
B	G20-2	END ROAD WORK	36"x18"	1-4"x4"	2
C	W11-1	BICYCLE SYMBOL	30"x30"	1-4"x6"	2
	W16-1	SHARE THE ROAD	24"x30"		
D	W20-1	ROAD WORK AHEAD	36"x36"	1-4"x6"	8
E	C40 (CA)	TRAFFIC FINES DOUBLED IN CONSTRUCTION ZONES	72"x36"	2-4"x6"	2

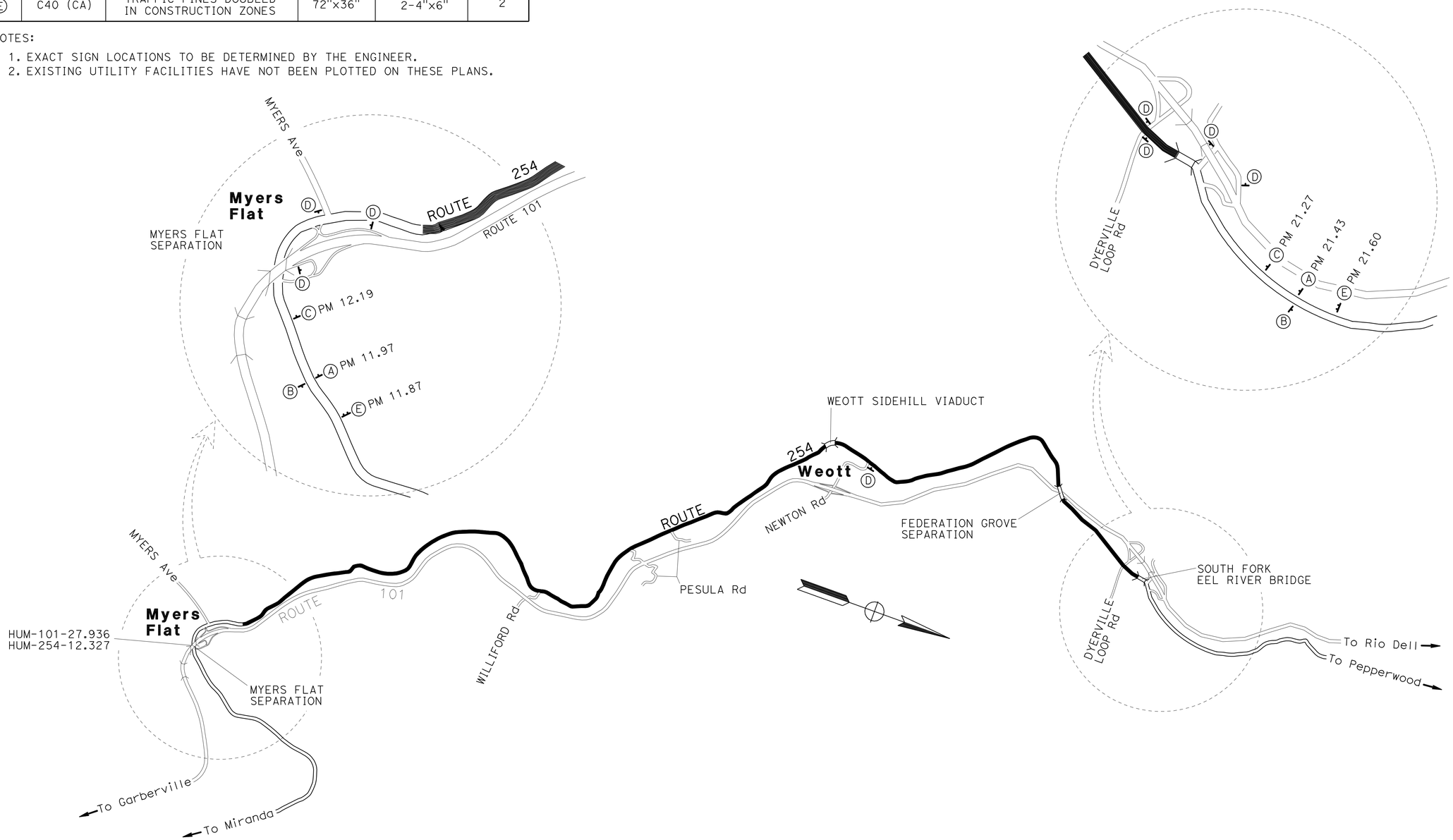
NOTES:

1. EXACT SIGN LOCATIONS TO BE DETERMINED BY THE ENGINEER.
2. EXISTING UTILITY FACILITIES HAVE NOT BEEN PLOTTED ON THESE PLANS.

52"x12"
4" CAPS
BLACK/ORANGE

RESURFACING

C23B(CA)



CONSTRUCTION AREA SIGNS
CS-1

NO SCALE

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans MAINTENANCE DESIGN

FUNCTIONAL SUPERVISOR: Royal B. McCarthy
CALCULATED-DESIGNED BY: Greg Thorne
CHECKED BY: X
REVISED BY
DATE REVISED

LAST REVISION 00-00-00
DATE PLOTTED => 22-FEB-2011
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Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	Hum	254	12.7/20.6	9	20

Curtis D. Coburn 2/7/11
REGISTERED CIVIL ENGINEER DATE

February 7, 2011
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER CURTIS D. COBURN No. 58431 Exp. 12-31-12 CIVIL STATE OF CALIFORNIA

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ROADWAY

LOCATION (PM)			TEMPORARY FENCE (TYPE ESA)	TEMPORARY FIBER ROLL	HOT MIX ASPHALT (TYPE A)	TACK COAT	COLD PLANE ASPHALT CONCRETE PAVEMENT	PLACE HMA (Misc AREA)	REPLACE ASPHALT CONCRETE SURFACING	ROADWAY EXCAVATION	ROADWAY EXCAVATION (HANDWORK)	CLASS 2 AGGREGATE BASE	ADJUST PULLBOX COVER TO GRADE	RESET CONCRETE PARKING BUMPER	DETECTOR LOOP (TYPE A)	
FROM	TO	L+/R+	LF		TON		SQYD		CY					EA		
12.74	12.76						352.0									BEGIN PAVING - MYERS FLAT VIADUCT
12.74	19.94				9014.4	42.2										MAINLINE
12.95	12.99				51.5	0.2										WIDE AREA AT FIRE CREWS LOOKOUT
13.47		L+			30.1	0.1	73.3		2.9							WILLIAMS GROVE ROAD
13.76		R+					13.3									REMOVE BUMP BY TREE
14.74		L+			26.5	0.1	68.3									GARDEN CLUB ROAD
14.75	14.78	R+			23.9	0.1										WIDE AREA
15.00	15.02	L+			26.7	0.1								7		PAVED PARKING AREA
15.35		R+	100	100	36.1	0.1					52.8	35.2				WILLIFORD ROAD
15.98	16.00	L+			25.2	0.1								5		FLEISCHMANN GROVE PARKING AREA
16.24		R+	125	100	36.7	0.1					53.7	35.8				PESULA ROAD
16.47		R+			17.3	0.1	40.0									PARK HQ ROAD
16.48	16.52	R+		250	110.4	0.2				163.0		109.2				WIDE AREA AT PARK HQ
16.49	16.52	L+			27.4	0.1										WIDE AREA ACROSS FROM PARK HQ
16.52	16.57				38.7	0.2	66.7									VISITORS CENTER WIDE AREA
16.56						0.1			4.4						2	TRAFFIC COUNT STATION
16.58		R+			16.3	0.1	40.0									BURLINGTON CAMPGROUND ROAD
16.83		R+							1.5							REMOVE BUMP BY TREE
16.89		R+			11.1	0.1	45.0									STATE PARK EMPLOYEE RESIDENCE ROAD
17.49	17.52	L+	100		29.8	0.2										GOULD'S BAR ROAD
17.78	17.91						2333.3									WEOTT VIADUCT
17.93	17.94	L+			28.9	0.1								7		PIONEERS OF CA
18.10	18.30	L+			149.2	0.5			7.4							OLD WEOTT SHOULDER L+
18.12	18.31	R+			155.6	0.5										OLD WEOTT SHOULDER R+
18.23		R+			17.1	0.1	250.4									NEWTON ROAD
18.38		L+		100	70.2	0.1				103.7		69.5				MARIN GARDEN GROVE ROAD
18.95	18.96	R+			33.8	0.2			1.9					8		SHERLOCK GROVE PARKING AREA
19.06		R+					13.3									REMOVE BUMP BY TREE
19.81		L+			11.7	0.1	46.7									WOMENS CLUB GROVE ROAD
19.90	19.94				31.8	0.1	955.6	85								FEDERATION GROVE SEPARATION SOUTH END
19.98	20.19						3040.0									FEDERATION GROVE SEPARATION NORTH END
19.98	20.53				688.6	3.2										MAINLINE
20.31	20.36	R+			45.0	0.2										WIDE AREA
20.31	20.35	L+			46.9	0.2										WIDE AREA
20.45	20.46	L+			29.9	0.1			2.8					5		GOOSEPEN TRAIL PARKING AREA
20.53		R+			17.2	0.1	60.0						1			DYERVILLE LOOP ROAD R+
20.53		L+			18.8	0.1	63.3						1			ROUTE 101 ON-RAMP ROAD L+
20.53	20.64				160.7	0.8										MAINLINE
20.62	20.64						388.9									END PAVING-SOUTH FORK EEL RIVER BRIDGE
		TOTAL	325	550	11027.5	50.6	7850.1	85	20.9	266.7	106.5	249.7	2	32	2	

SUMMARY OF QUANTITIES
Q-1

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans® MAINTENANCE DESIGN

FUNCTIONAL SUPERVISOR: Royal B. McCarthy
CALCULATED-DESIGNED BY: Greg Thorne
CHECKED BY: X
REVISED BY
DATE REVISED

LAST REVISION 00-00-00
DATE PLOTTED => 22-FEB-2011
TIME PLOTTED => 14:37

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	Hum	254	12.7/20.6	10	20

REGISTERED CIVIL ENGINEER — DATE 2/7/11

February 7, 2011
PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER CURTIS D. COBURN No. 58431 Exp. 12-31-12 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.

REMOVE THERMOPLASTIC PAVEMENT MARKING

LOCATION PM	Lt/Rt	ORIENTATION	TYPE/LEGEND	AREA SQFT	REMARKS
16.34	Rt	FNBT	PED	18	
16.35	Rt	FNBT	XING	21	
20.54	Rt	FWBT	STOP	22	DYERVILLE LOOP ROAD
20.54	Rt	FWBT	LIMIT LINE	23	DYERVILLE LOOP ROAD
20.54	Lt	FEBT	STOP	22	ROUTE 101 RAMP CONNECTOR
20.54	Lt	FEBT	LIMIT LINE	23	ROUTE 101 RAMP CONNECTOR
19.82	Lt	FEBT	STOP	22	WOMANS GROVE
19.82	Lt	FEBT	LIMIT LINE	23	WOMANS GROVE
18.23	Rt	FWBT	STOP	22	NEWTON RD
18.23	Rt	FWBT	LIMIT LINE	20	NEWTON RD
16.69	Lt	FSBT	PED	18	
16.80	Lt	FSBT	XING	21	
16.52			XWALK	60	BURLINGTON VISITORS CENTER
16.57	Rt	FWBT	STOP	22	BURLINGTON CAMPGROUND
16.57	Rt	FWBT	LIMIT LINE	26	BURLINGTON CAMPGROUND
16.47	Rt	FWBT	STOP	22	PARK HQ
16.47	Rt	FWBT	LIMIT LINE	23	PARK HQ
14.72	Lt	FEBT	STOP	22	GARDEN CLUB
14.72	Lt	FEBT	LIMIT LINE	25	GARDEN CLUB
13.47	Lt	FEBT	STOP	22	WILLIAMS GROVE
13.47	Lt	FEBT	LIMIT LINE	32	WILLIAMS GROVE
12.74		FSBT	PED	18	
12.75		FSBT	XING	21	
15.98	Lt		ISOAM	25	BLUE BACKGROUND/WHITE SYMBOL
15.98	Lt		NO PARKING	2	1' LETTERS/WHITE
			TOTAL	575	

THERMOPLASTIC PAVEMENT MARKING

LOCATION PM	Lt/Rt	ORIENTATION	TYPE/LEGEND	AREA SQFT	REMARKS
16.34	Rt	FNBT	PED	18	
16.35	Rt	FNBT	XING	21	
20.54	Rt	FWBT	STOP	22	DYERVILLE LOOP ROAD
20.54	Rt	FWBT	LIMIT LINE	23	DYERVILLE LOOP ROAD
20.54	Lt	FEBT	STOP	22	ROUTE 101 RAMP CONNECTOR
20.54	Lt	FEBT	LIMIT LINE	23	ROUTE 101 RAMP CONNECTOR
19.82	Lt	FEBT	STOP	22	WOMANS GROVE
19.82	Lt	FEBT	LIMIT LINE	23	WOMANS GROVE
18.23	Rt	FWBT	STOP	22	NEWTON RD
18.23	Rt	FWBT	LIMIT LINE	20	NEWTON RD
16.69	Lt	FSBT	PED	18	
16.80	Lt	FSBT	XING	21	
16.52			XWALK	60	BURLINGTON VISITORS CENTER
16.57	Rt	FWBT	STOP	22	BURLINGTON CAMPGROUND
16.57	Rt	FWBT	LIMIT LINE	26	BURLINGTON CAMPGROUND
16.47	Rt	FWBT	STOP	22	PARK HQ
16.47	Rt	FWBT	LIMIT LINE	23	PARK HQ
14.72	Lt	FEBT	STOP	22	GARDEN CLUB
14.72	Lt	FEBT	LIMIT LINE	25	GARDEN CLUB
13.47	Lt	FEBT	STOP	22	WILLIAMS GROVE
13.47	Lt	FEBT	LIMIT LINE	32	WILLIAMS GROVE
12.74		FSBT	PED	18	
12.75		FSBT	XING	21	
15.98	Lt		ISOAM	25	BLUE BACKGROUND/WHITE SYMBOL
15.98	Lt		NO PARKING	2	1' LETTERS/WHITE
			TOTAL	575	

LEGEND

ISOAM = INTERNATIONAL SYMBOL OF ACCESSIBILITY MARKING

THERMOPLASTIC TRAFFIC STRIPING AND PAVEMENT MARKERS

LOCATION PM FROM	LOCATION PM TO	DETAIL No.	DETAIL LENGTH	THERMOPLASTIC TRAFFIC STRIPE: 4" WHITE BROKEN (12-3)	4" SOLID: WHITE	4" SOLID: YELLOW	4" SOLID: BLUE	PAVEMENT MARKER (RETROREFLECTIVE): TYPE D YELLOW (TWO WAY)	REMARKS
			LF					EA	
12.73	13.47	22	3907.2			7814		328	
12.73	16.46	27B	19694.4		19694				
12.73	13.46	27B	3854.4		3854				
13.46	13.49	27C	158.4	158					
13.47		22	38			76		4	WILLIAMS GROVE
13.48	14.72	22	6547.2			13094		548	
13.49	14.72	27B	6494.4		6494				
14.72	14.74	27C	105.6	106					
14.72		22	17			34		4	GARDEN CLUB
14.74	16.46	22	9081.6			18163		758	
14.74	19.80	27B	26716.8		26717				
15.98			65.0				65		PARKING STALL
15.98			48		48				HATCHING
16.46	16.48	27C	105.6	106					
16.47	16.57	22	528.0			1056		46	
16.47		22	34			68		4	PARK HQ
16.48	16.57	27B	475.2		475				
16.57	16.59	27C	105.6	106					
16.57		22	25			50		4	BURLINGTON
16.58	18.23	22	8712.0			17424		728	
16.59	18.22	27B	8606.4		8606				
18.22	18.25	27C	158.4	158					
18.24	19.82	22	8342.4			16685		698	
18.25	20.50	27B	11880.0		11880				
19.80	19.83	27C	158.4	158					
19.82		22	22			44		4	WOMANS GROVE
19.83	20.53	22	3696.0			7392		310	
19.83	20.52	27B	3643.2		3643				
20.50	20.55	27C	264.0	264					
20.52	20.54	27C	105.6	106					
20.54	20.60	22	316.8			634		28	
20.54	20.60	27B	316.8		317				
20.54		22	24			48		4	DYERVILLE LOOP RD
20.54		22	24			48		4	RTE 101 CONNECTOR
20.55	20.60	27B	264.0		264				
SUBTOTAL					81992	82630	65		
TOTAL				1162	164687			3472	

SUMMARY OF QUANTITIES
Q-2

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans® MAINTENANCE DESIGN

FUNCTIONAL SUPERVISOR: Royal B. McCarthy
CALCULATED-DESIGNED BY: Greg Thorne
CHECKED BY: X
REVISED BY
DATE REVISED

LAST REVISION 00-00-00
DATE PLOTTED => 22-FEB-2011
TIME PLOTTED => 14:37

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
01	Hum	254	12.7/20.6	11	20

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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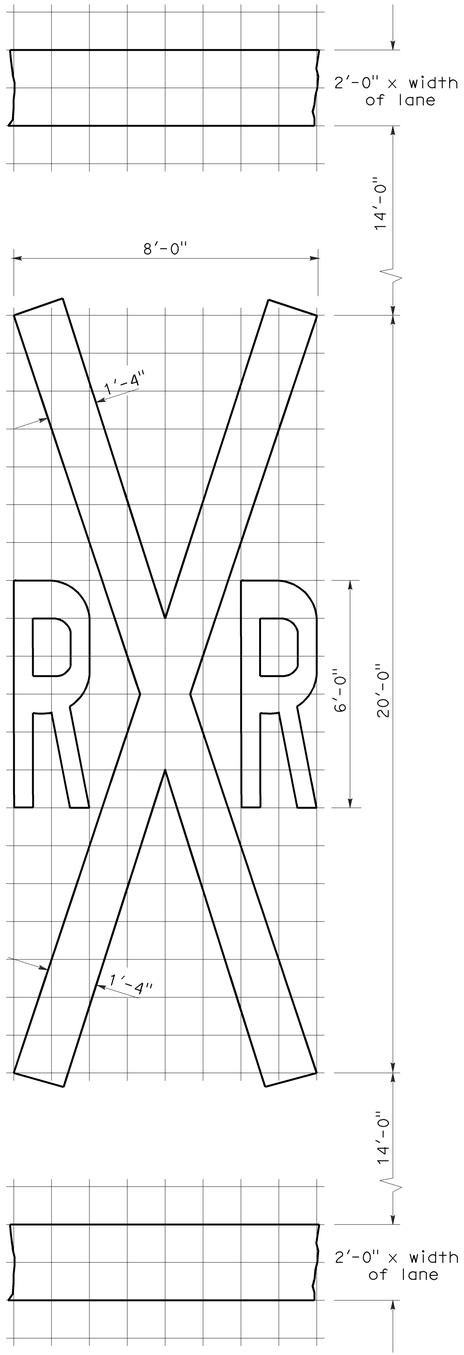
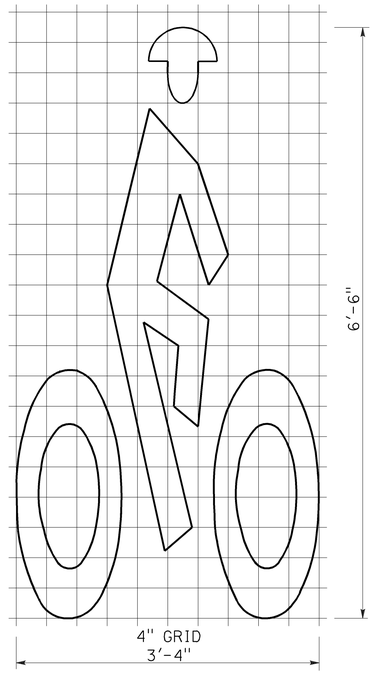
To accompany plans dated February 7, 2011



1'-0" GRID
A=70 sq ft ✳

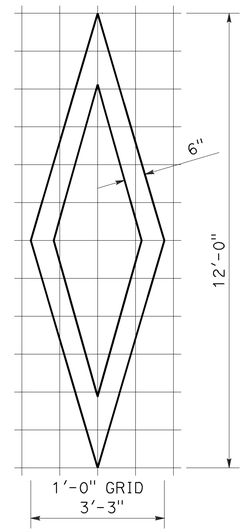
RAILROAD CROSSING SYMBOL

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



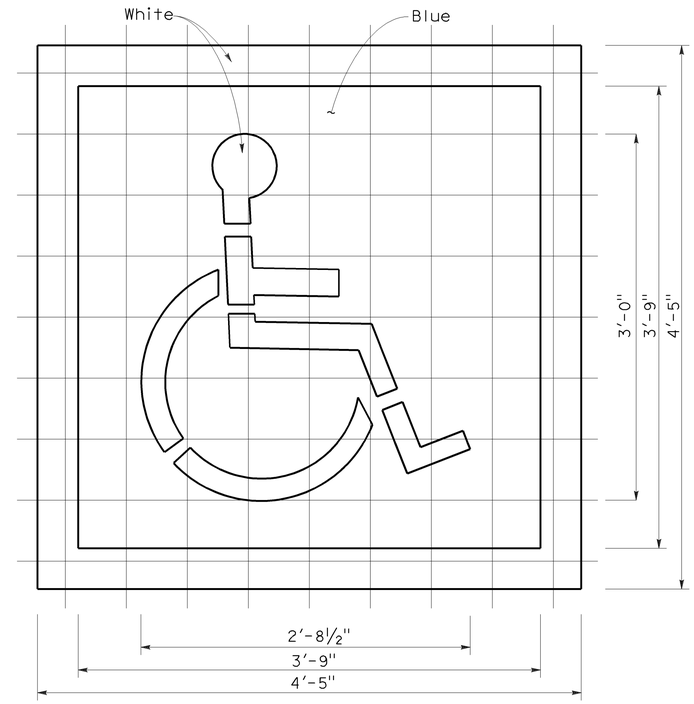
A=7 sq ft

BIKE LANE SYMBOL



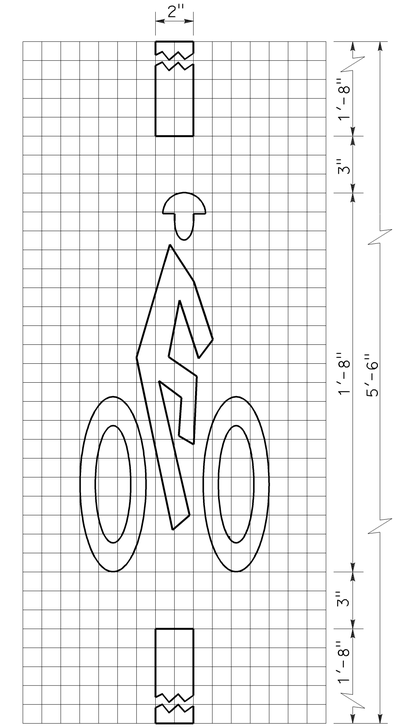
A=11 sq ft

DIAMOND SYMBOL



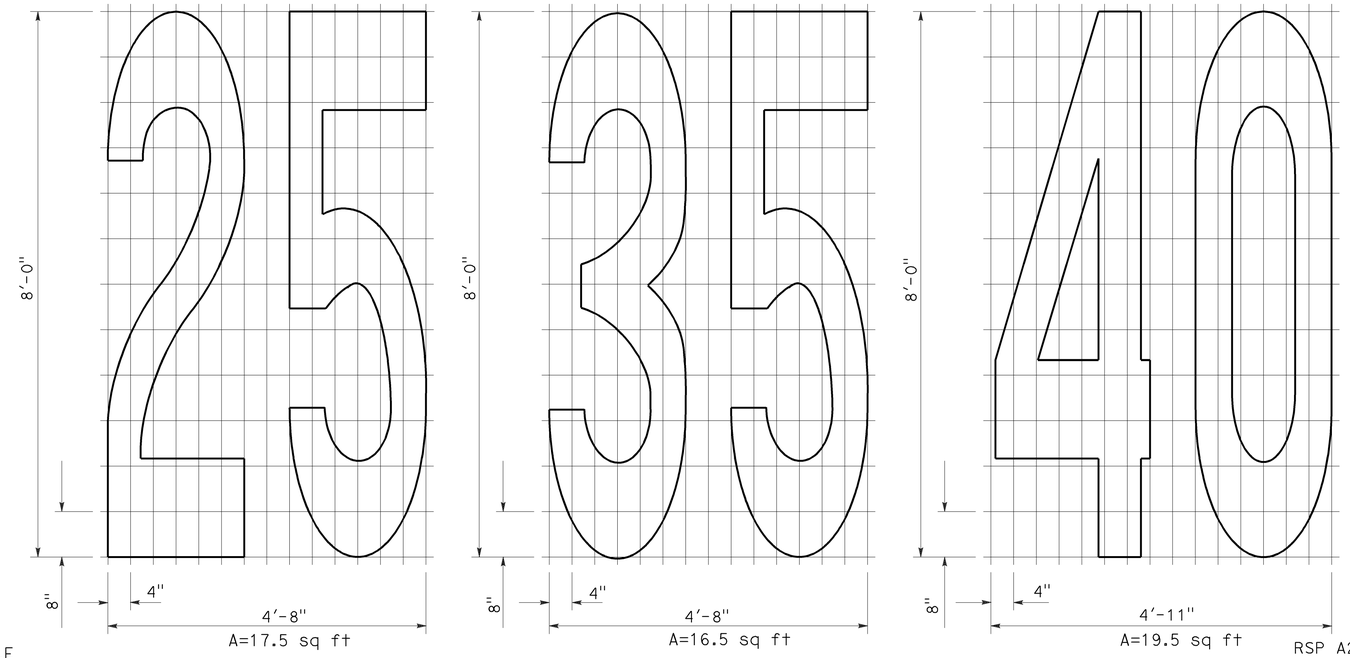
6" GRID
A (White) =9 sq ft
A (Blue) =14 sq ft

INTERNATIONAL SYMBOL OF ACCESSIBILITY MARKING



1" GRID
10"
A=2 sq ft

BICYCLE LOOP DETECTOR SYMBOL



A=17.5 sq ft
A=16.5 sq ft
A=19.5 sq ft

NUMERALS

NOTE:

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

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKINGS SYMBOLS AND NUMERALS

NO SCALE

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

REVISED STANDARD PLAN RSP A24C

2006 REVISED STANDARD PLAN RSP A24C

5-27-08

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
01	Hum	254	12.7/20.6	12	20

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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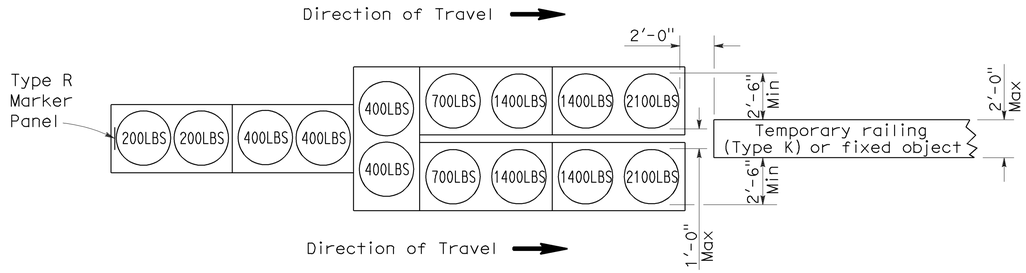
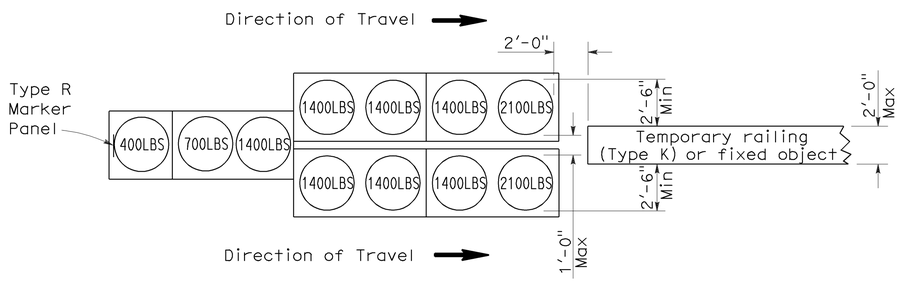
To accompany plans dated February 7, 2011



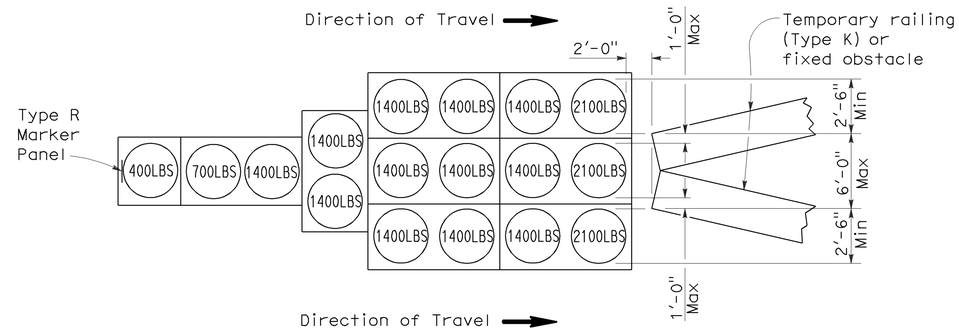
ARRAY 'TU14'

Approach speed 45 mph or more



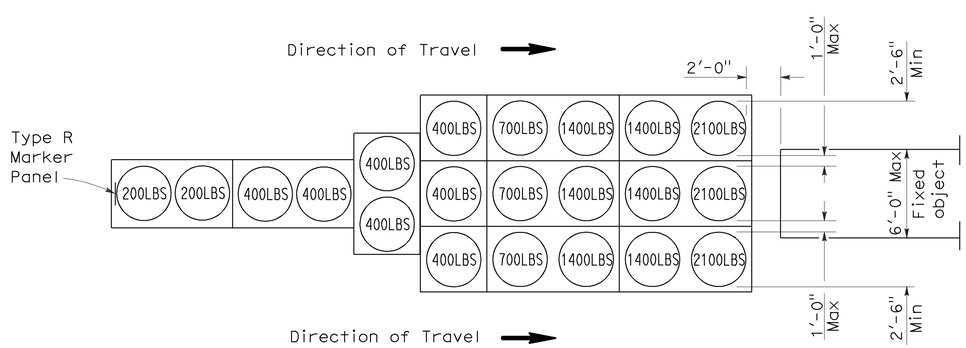
ARRAY 'TU11'

Approach speed less than 45 mph



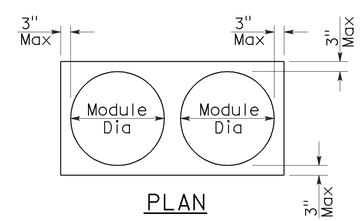
ARRAY 'TU17'

Approach speed less than 45 mph

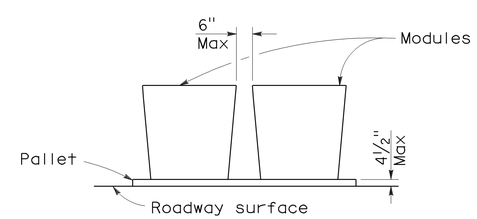


ARRAY 'TU21'

Approach speed 45 mph or more



PLAN



ELEVATION

CRASH CUSHION PALLET DETAIL

See Note 7

NOTES:

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

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

TEMPORARY CRASH CUSHION, SAND FILLED (UNIDIRECTIONAL)

NO SCALE

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

REVISED STANDARD PLAN RSP T1A

2006 REVISED STANDARD PLAN RSP T1A

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
01	Hum	254	12.7/20.6	13	20

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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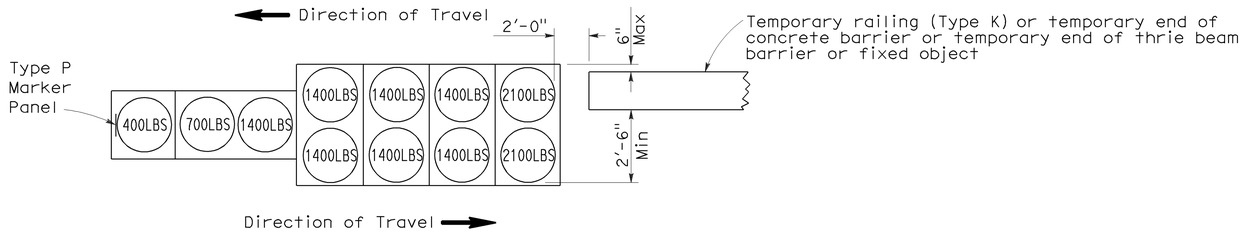
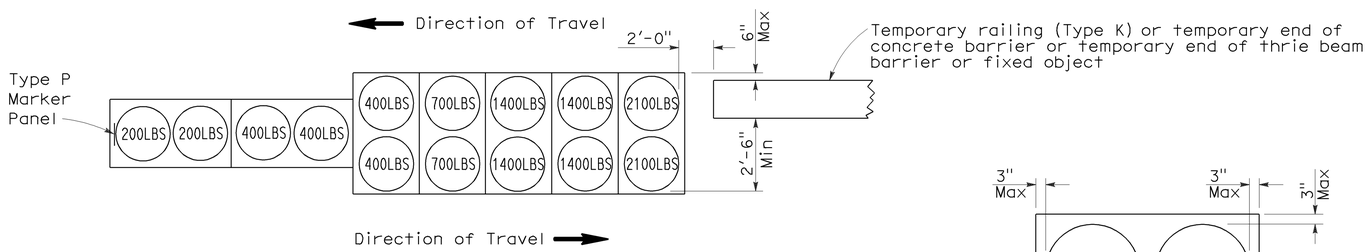
To accompany plans dated February 7, 2011



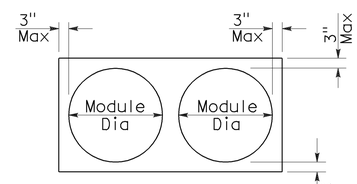
ARRAY 'TB11'

Approach speed less than 45 mph

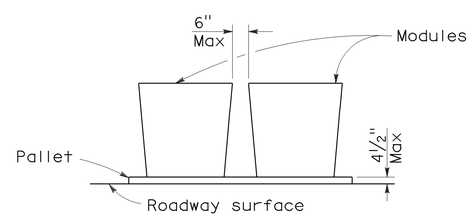


ARRAY 'TB14'

Approach speed 45 mph or more



PLAN



ELEVATION

CRASH CUSHION PALLET DETAIL

See Note 7

NOTES:

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

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

TEMPORARY CRASH CUSHION, SAND FILLED (BIDIRECTIONAL)

NO SCALE

RSP T1B DATED JUNE 6, 2008 SUPERSEDES STANDARD PLAN T1B
DATED MAY 1, 2006 - PAGE 212 OF THE STANDARD PLANS BOOK DATED MAY 2006.

REVISED STANDARD PLAN RSP T1B

2006 REVISED STANDARD PLAN RSP T1B

5-15-08

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
01	Hum	254	12.7/20.6	14	20

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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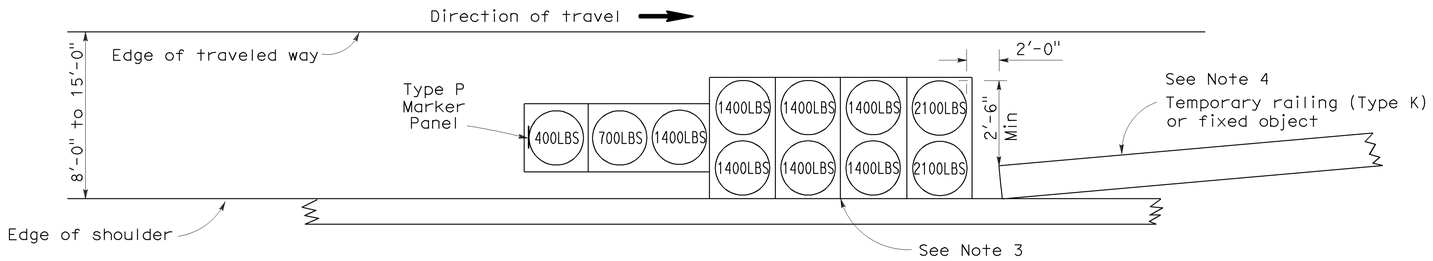
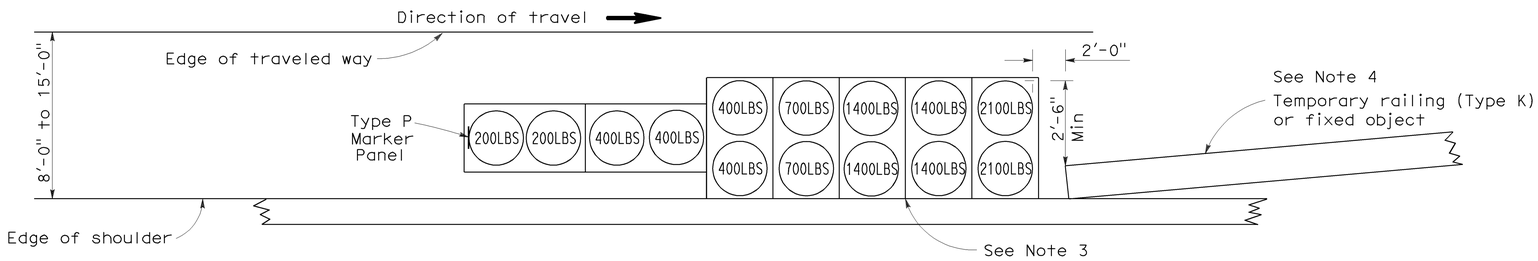
To accompany plans dated February 7, 2011



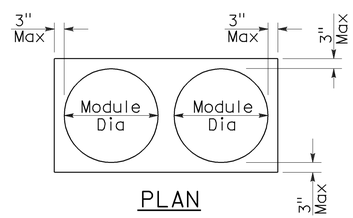
ARRAY 'TS11'

Approach speed less than 45 mph
See Note 9

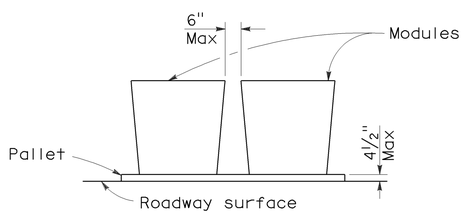


ARRAY 'TS14'

Approach speed 45 mph or more
See Note 9



PLAN



ELEVATION

CRASH CUSHION PALLET DETAIL

See Note 11

NOTES:

1. (XXX) Indicates sand filled module location and weight of sand in pounds for each module. Module spacing is based on the greater diameter of the module.
2. All sand weights are nominal.
3. The temporary crash cushion arrays shown on this plan shall be used only in locations where there will be traffic on one side of the temporary crash cushion array.
4. If the fixed object or approach end of the temporary railing is less than 15'-0" from the edge of traveled way, a temporary crash cushion is required in a construction or work zone.
5. Temporary crash cushion arrays shall not encroach on the traveled way.
6. Arrays for median shoulders shall conform to details shown on this plan for outside shoulders.
7. Place the Type P marker panel so that the bottom of the panel rests upon the pallet and faces traffic.
8. Refer to Standard Plan A73B for marker details.
9. For shoulder widths less than 8'-0", appropriate approved crash cushion protection, other than sand filled modules, shall be provided at fixed objects and at approach ends of temporary railing. The specific type of crash cushion shall be as shown on the project plans or as specified in the Special Provisions, or if not shown on the project plans or specified in the Special Provisions, shall be as approved by the Engineer.
10. Approach speeds indicated conform to NCHRP 350 Report criteria.
11. Use of pallets is optional.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

TEMPORARY CRASH CUSHION, SAND FILLED (SHOULDER INSTALLATIONS)

NO SCALE

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

REVISED STANDARD PLAN RSP T2

2006 REVISED STANDARD PLAN RSP T2

5-15-08

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
01	Hum	254	12.7/20.6	15	20

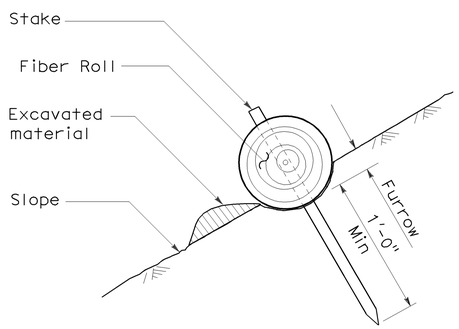
Robert B Schott
LICENSED LANDSCAPE ARCHITECT

April 3, 2009
PLANS APPROVAL DATE

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

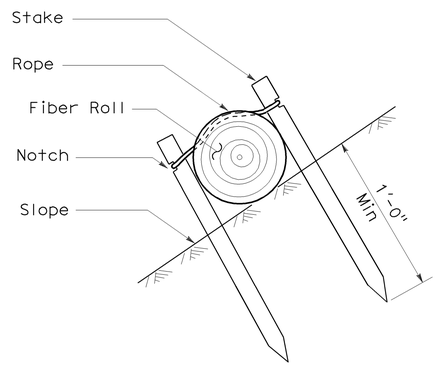
LICENSED LANDSCAPE ARCHITECT
Robert B. Schott 3635
Robert B Schott
11-30-10
Renewal Date
2-25-09
Date
STATE OF CALIFORNIA

To accompany plans dated February 7, 2011

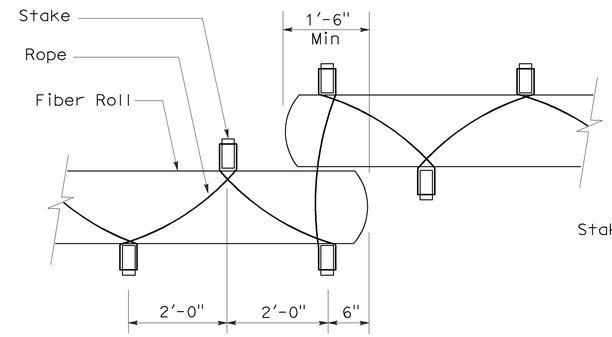


SECTION

TEMPORARY FIBER ROLL (TYPE 1)

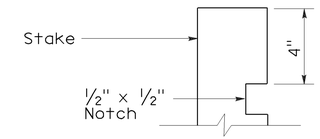


SECTION



PLAN

TEMPORARY FIBER ROLL (TYPE 2)

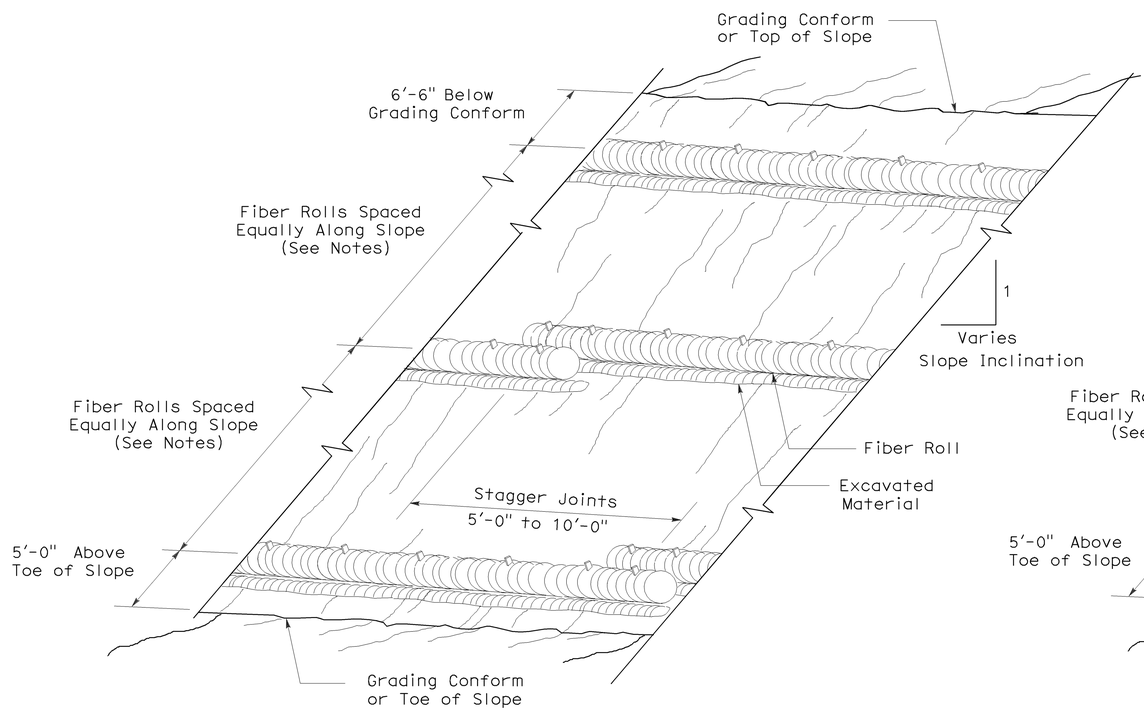


ELEVATION

STAKE NOTCH DETAIL

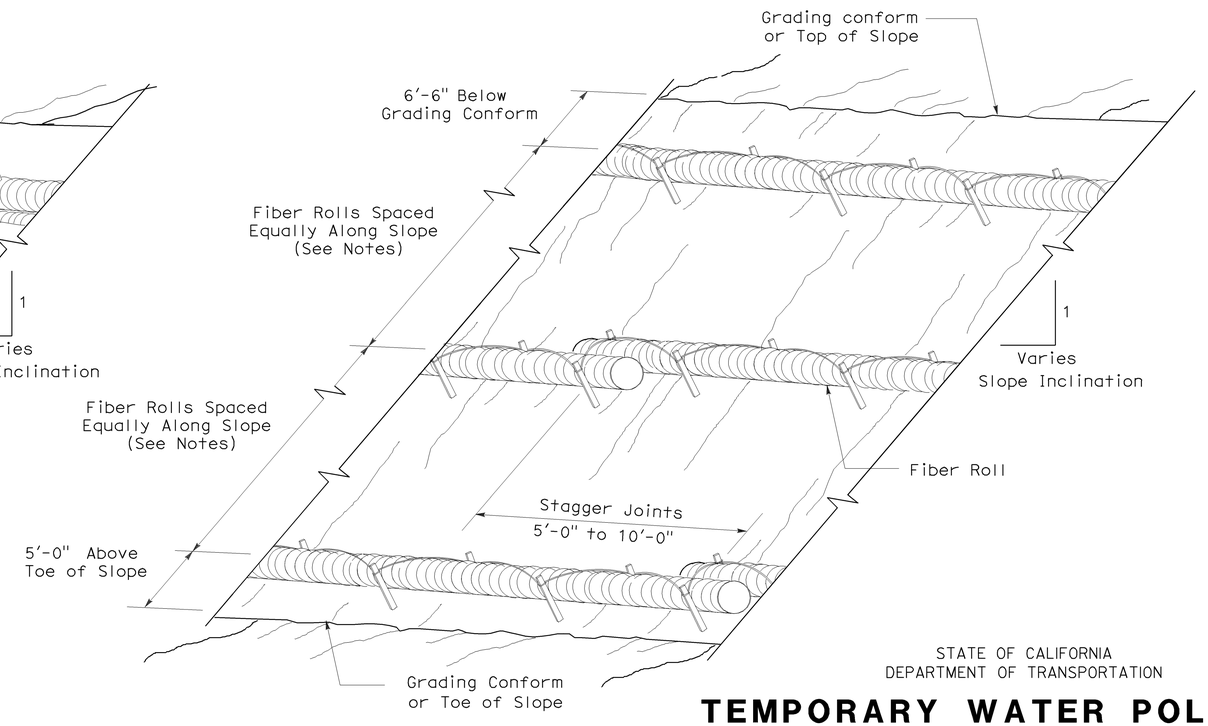
NOTES:

1. Temporary fiber roll spacing varies depending upon slope inclination.
2. Installations shown in the perspectives are for slope inclination of 10:1 and steeper.



PERSPECTIVE

TEMPORARY FIBER ROLL (TYPE 1)



PERSPECTIVE

TEMPORARY FIBER ROLL (TYPE 2)

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

TEMPORARY WATER POLLUTION CONTROL DETAILS (TEMPORARY FIBER ROLL)

NO SCALE

RSP T56 DATED APRIL 3, 2009 SUPERSEDES STANDARD PLAN T56
DATED MAY 1, 2006 - PAGE 232 OF THE STANDARD PLANS BOOK DATED MAY 2006.

REVISED STANDARD PLAN RSP T56

2006 REVISED STANDARD PLAN RSP T56

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
01	Hum	254	12.7/20.6	16	20

Robert B Schott
LICENSED LANDSCAPE ARCHITECT

April 3, 2009
PLANS APPROVAL DATE

LICENSED LANDSCAPE ARCHITECT
Robert B. Schot 3695
Robert B Schott
Signature
11-30-10
Renewal Date
2-25-09
Date
STATE OF CALIFORNIA

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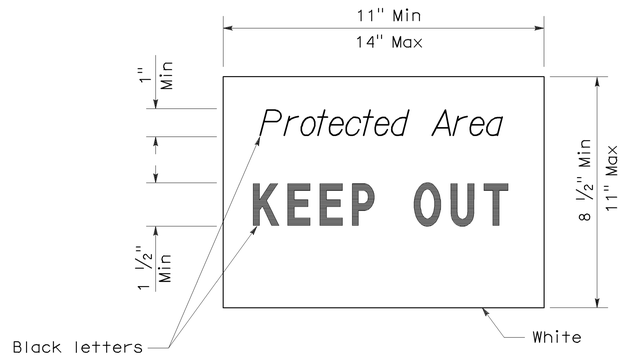
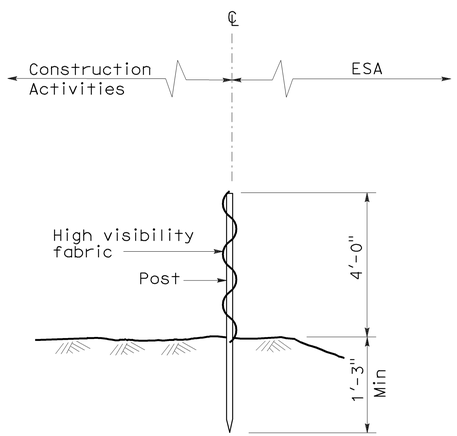
To accompany plans dated February 7, 2011

NOTE:

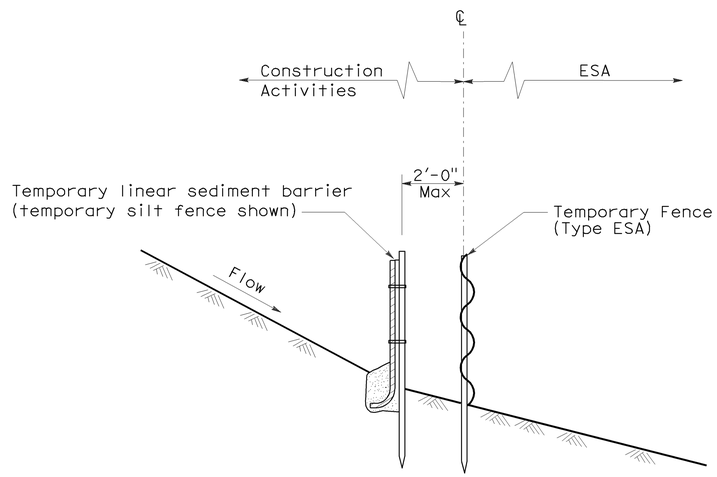
1. Temporary silt fence and temporary straw bale barrier shown for reference purposes only.



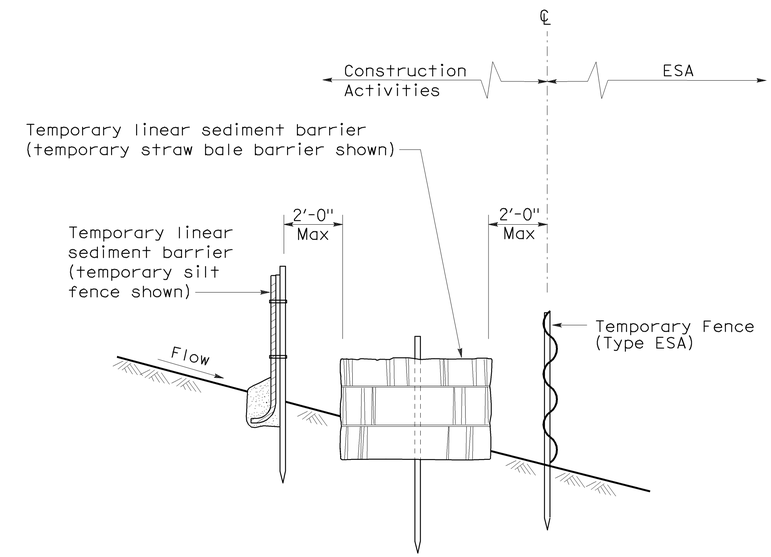
SIGN DETAIL



SECTION
TEMPORARY FENCE (TYPE ESA)



SECTION
PLACEMENT DETAIL
FOR TEMPORARY LINEAR SEDIMENT BARRIER
USED WITH TEMPORARY
FENCE (TYPE ESA)
(See Note 1)



SECTION
PLACEMENT DETAIL
FOR TEMPORARY SILT FENCE
AND TEMPORARY STRAW BALE BARRIER
USED WITH TEMPORARY FENCE (TYPE ESA)
(See Note 1)

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

TEMPORARY WATER POLLUTION CONTROL DETAILS [TEMPORARY FENCE (TYPE ESA)]

NO SCALE

NSP T65 DATED APRIL 3, 2009 SUPPLEMENTS
THE STANDARD PLANS BOOK DATED MAY 2006.

NEW STANDARD PLAN NSP T65

2006 NEW STANDARD PLAN NSP T65

1-7-09

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
01	Hum	254	12.7/20.6	17	20

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

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

To accompany plans dated February 7, 2011

ELECTROLIERS

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

High mast light pole

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.
- TSP — Telephone service point.

ABBREVIATIONS AND EQUIPMENT DESIGNATIONS

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

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.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

ELECTRICAL SYSTEMS (SYMBOLS AND ABBREVIATIONS)

NO SCALE

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

REVISED STANDARD PLAN RSP ES-1A

2006 REVISED STANDARD PLAN RSP ES-1A

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
01	Hum	254	12.7/20.6	18	20

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 February 7, 2011

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
III		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 - 28'-10" ← 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 12" programmed visibility sections "8" indicates all 8" sections (only when specified)
		Type 15TS and Vehicle signal face
		Vehicle signal face with red, yellow and green left arrow sections
		Vehicle signal face with red and yellow sections and up green arrow
		Vehicle signal face (5 Section) with red, yellow and green sections and yellow and green right arrows
		Type 1 Standard and attached vehicle signal faces
		Standard with signal mast arm only and attached vehicle signal faces and internally illuminated street name sign
		Type 33 Standard, Left-turn vehicle signal face and sign
		Standard with luminaire and signal mast arms and attached vehicle signal faces
		Cantilever flashing beacon Type 9 Frame, with a sign unless otherwise specified or indicated
		Type 15-FBS Standard with two vehicle signal face sections with lens, backplate and visor with a sign
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

SIGNAL EQUIPMENT Cont

PROPOSED	EXISTING	
		Guard post
		Type 1 Standard with "Meter On" sign
		Emergency Vehicle detector

NOTES:

1. All signal sections shall be 12" 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

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

REVISED STANDARD PLAN RSP ES-1B

2006 REVISED STANDARD PLAN RSP ES-1B

7-10-07

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
01	Hum	254	12.7/20.6	19	20

REGISTERED ELECTRICAL ENGINEER

October 5, 2007
PLANS APPROVAL DATE

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

To accompany plans dated February 7, 2011

EQUIPMENT IDENTIFICATION

ILLUMINATED SIGN IDENTIFICATION NUMBER:

Sign No. 12345

- Sign number - Place on post or structure

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 - 15'-0"

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

CONDUIT AND CONDUCTOR IDENTIFICATION:

1½"C, 2#10, 15#14, 2 DLC

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

Ø1, Ø2, Ø2P, etc.	Traffic phase identification for signal faces, detectors and phase diagrams
1 2 3	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 - 100

- Wind velocity = 100 mph
- Case 3 arm loading
- Standard type
- Standard Plan sheet number
- Detail number or letter

MISCELLANEOUS EQUIPMENT

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

WIRING DIAGRAM LEGEND

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

VEHICLE DETECTORS

5 J 9 U

- 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

RSP ES-1C DATED OCTOBER 5, 2007 SUPERCEDES STANDARD PLAN ES-1C DATED MAY 1, 2006 - PAGE 402 OF THE STANDARD PLANS BOOK DATED MAY 2006.

REVISED STANDARD PLAN RSP ES-1C

2006 REVISED STANDARD PLAN RSP ES-1C

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
01	Hum	254	12.7/20.6	20	20

REGISTERED ELECTRICAL ENGINEER

October 5, 2007
PLANS APPROVAL DATE

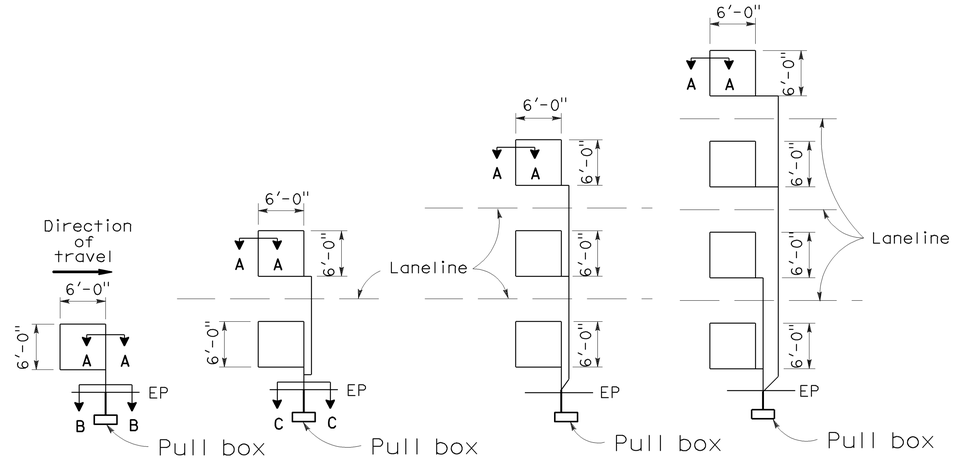
REGISTERED PROFESSIONAL ENGINEER Jeffery G. McRae No. E14512 Exp. 6-30-08 ELECTRICAL STATE OF CALIFORNIA

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

To accompany plans dated February 7, 2011

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 2'-0" minimum. Distance between lead-in saw cuts shall be 6" 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 3/16" to 1/4" 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 5'-0" 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 3'-4" 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.

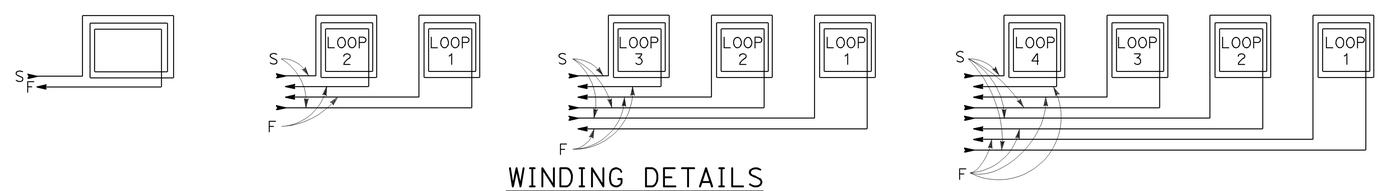


TYPE 1A INSTALLATION | TYPE 2A INSTALLATION | TYPE 3A INSTALLATION | TYPE 4A INSTALLATION

SAWCUT DETAILS

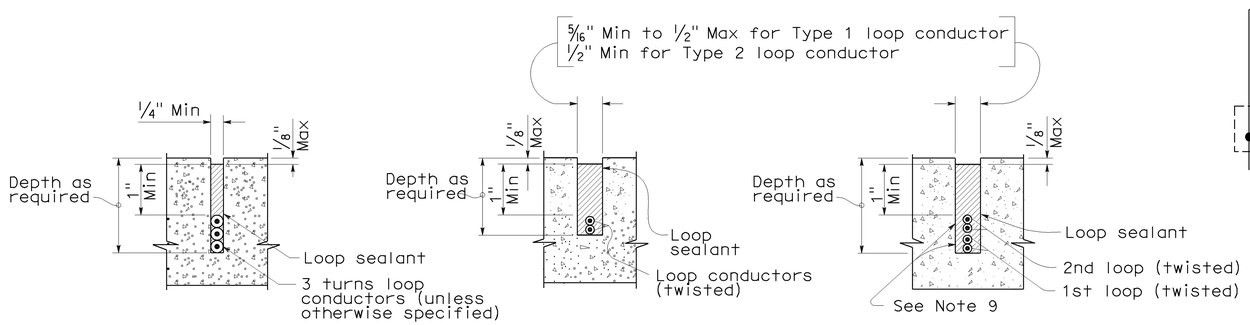
(Type A loop detector configurations illustrated)

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)



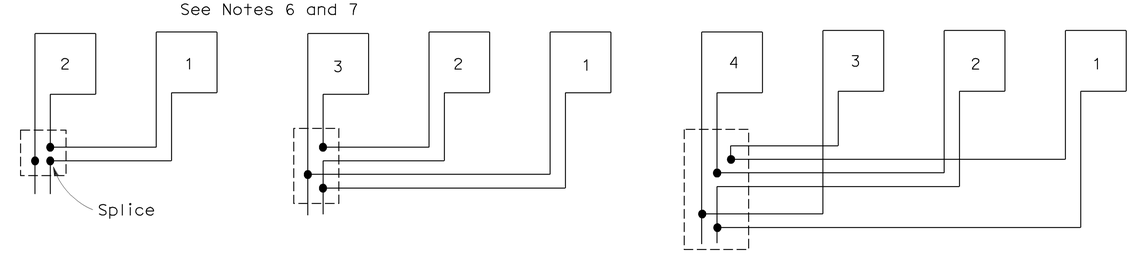
WINDING DETAILS

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

RSP ES-5A DATED OCTOBER 5, 2007 SUPERCEDES STANDARD PLAN ES-5A DATED MAY 1, 2006 - PAGE 423 OF THE STANDARD PLANS BOOK DATED MAY 2006.

REVISED STANDARD PLAN RSP ES-5A

2006 REVISED STANDARD PLAN RSP ES-5A

8-17-07