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

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION
**PROJECT PLANS FOR CONSTRUCTION ON
 STATE HIGHWAY**
**IN MODOC COUNTY NEAR CEDARVILLE
 FROM 0.5 MILE EAST OF HAYS STREET
 TO NEVADA STATE LINE**

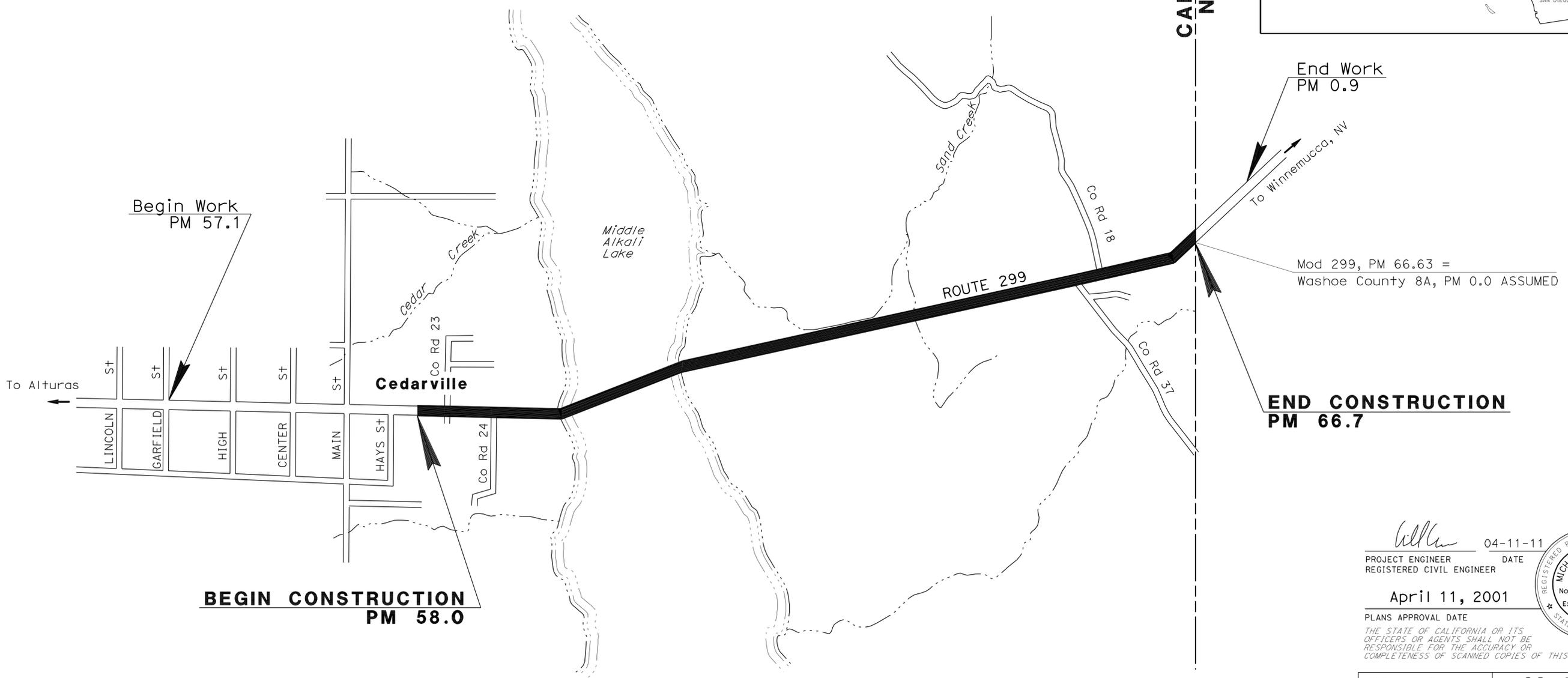
TO BE SUPPLEMENTED BY STANDARD PLANS DATED MAY 2006

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
02	Mod	299	58.0/66.7	1	14





LOCATION MAP



PROJECT MANAGER
ERIC AKANA
 DESIGN ENGINEER
LANCE BROWN

**BEGIN CONSTRUCTION
PM 58.0**

**END CONSTRUCTION
PM 66.7**

Mod 299, PM 66.63 =
Washoe County 8A, PM 0.0 ASSUMED

 04-11-11
 PROJECT ENGINEER DATE
 REGISTERED CIVIL ENGINEER
 April 11, 2001



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

CONTRACT No.	02-4E2404
PROJECT ID	0200020241

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

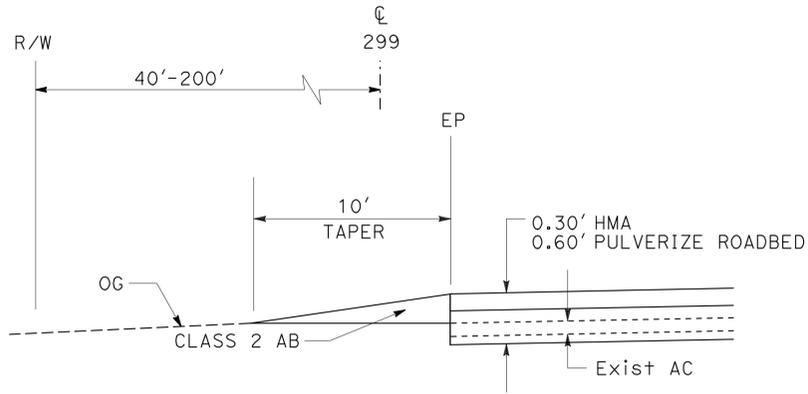
NO SCALE

LAST REVISION: 04-11-11
 DATE PLOTTED => 13-APR-2011
 TIME PLOTTED => 08:36

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
02	Mod	299	58.0/66.7	3	14
			04-11-11	DATE	
			04-11-11	PLANS APPROVAL DATE	
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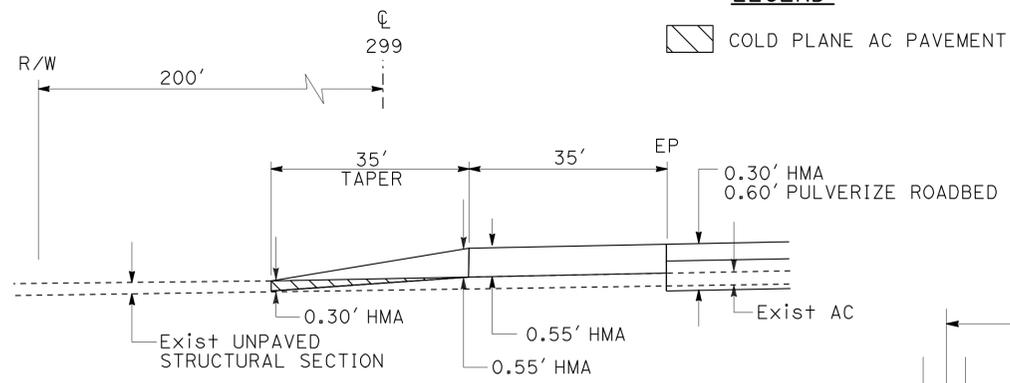


LEGEND:
 COLD PLANE AC PAVEMENT



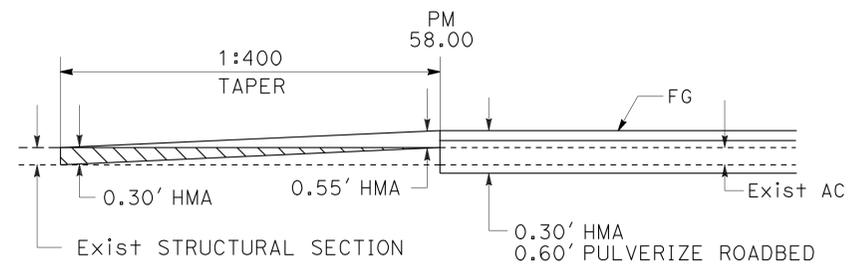
CONFORM TAPER AT NON-PAVED DRIVEWAYS

20 TOTAL

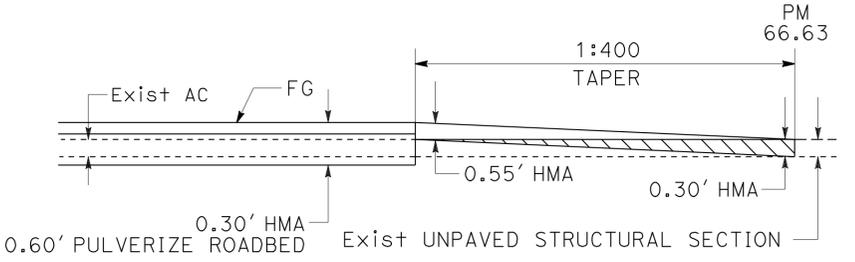


UNPAVED ROAD CONNECTIONS DETAIL

PM 61.75 R+
 PM 65.28 L+
 PM 65.63 R+

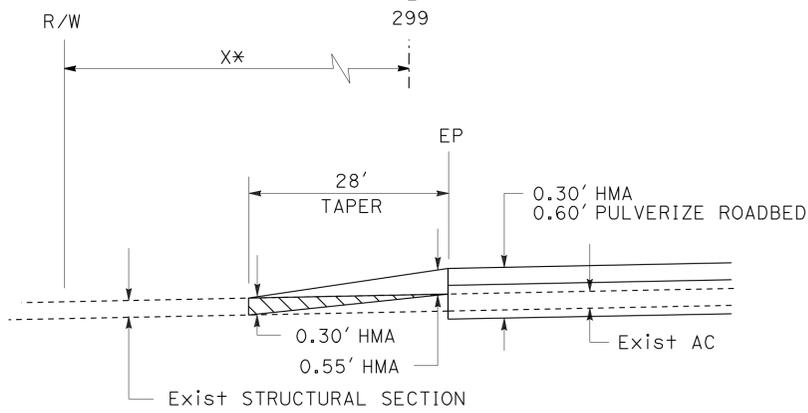


BEGIN OF JOB



END OF JOB

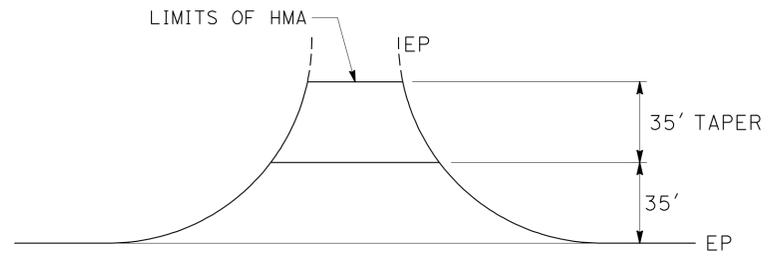
MAINLINE CONFORM TAPERS



CONFORM TAPER AT PAVED ROAD CONNECTIONS

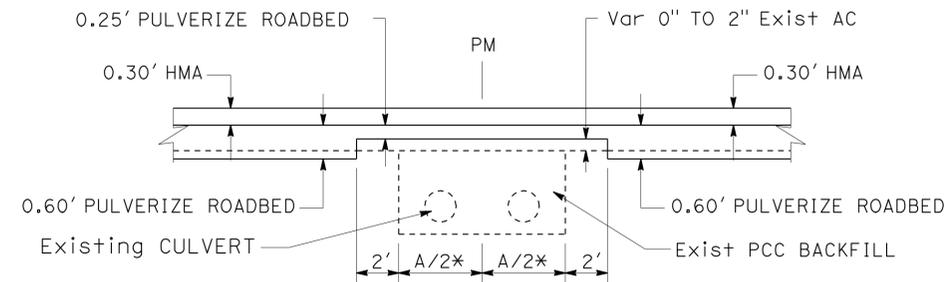
*SEE BELOW FOR DISTANCE TO R/W

PM 58.37 L+ X=40'
 PM 58.85 R+ X=40'
 PM 62.88 L+ X=120'



UNPAVED ROAD CONNECTIONS DETAIL

PLAN VIEW



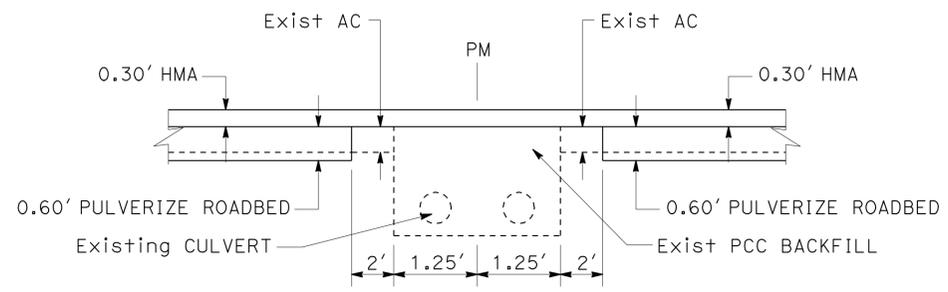
*SEE TABLE FOR EXACT WIDTH A AT EACH CULVERT

DETAIL NEAR CULVERTS

PM 59.66	PM 60.42	PM 62.29
PM 59.80	PM 60.61	PM 62.44
PM 59.88	PM 61.02	PM 63.31
PM 60.12	PM 61.23	PM 63.37
PM 60.26	PM 61.70	PM 66.30
PM 60.35	PM 62.08	PM 66.43

WIDTH OF Exist PCC BACKFILL

PM	A
59.66	12.0'
59.80	10.0'
59.88	12.0'
60.12	12.0'
60.26	12.0'
60.35	12.0'
60.42	12.0'
60.61	12.0'
61.23	2.5'
61.70	18.0'
62.08	2.5'
62.29	2.5'
62.44	2.5'
63.31	2.5'
63.37	12.0'
66.30	2.5'
66.43	2.5'



DETAIL NEAR CULVERTS

PM 61.79 PM 62.80
 PM 61.85 PM 63.63

CONSTRUCTION DETAILS

NO SCALE

C-1

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION - MAINTENANCE
 Michael Conner, Karlie Smith, Lance Brown
 USERNAME => s115152
 DGN FILE => 24E240ga001.dgn

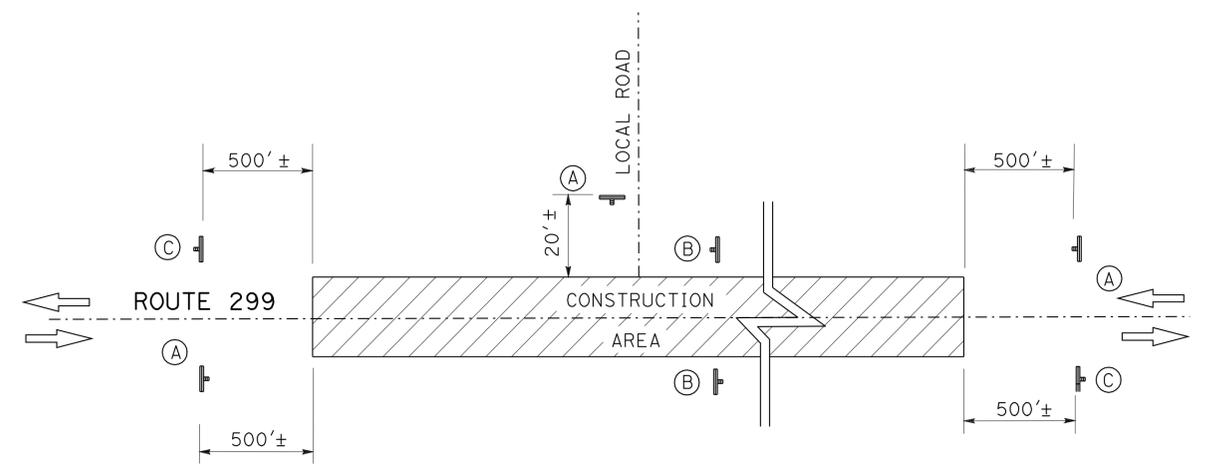
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
02	Mod	299	58.0/66.7	4	14
			04-11-11	DATE	
			04-11-11	PLANS APPROVAL DATE	
<small>THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.</small>					

NOTES:

1. EXACT LOCATION OF ALL SIGNS TO BE DETERMINED BY THE ENGINEER.
2. CALIFORNIA CODES ARE DESIGNATED BY (CA), OTHERWISE FEDERAL CODES ARE SHOWN.
3. INTERMEDIATE G20-1 SIGNS SHOULD BE PLACED EVERY 3 TO 5 MILES AS NECESSARY.

LEGEND:

- ↑ ONE POST STATIONARY MOUNTED SIGN
- ← DIRECTION OF TRAFFIC



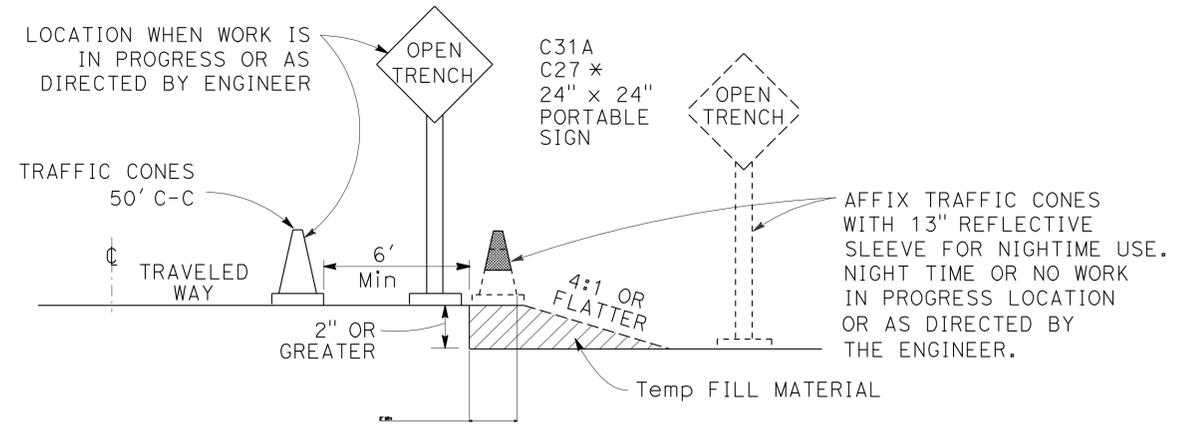
CONSTRUCTION AREA SIGNS (STATIONARY MOUNTED)

ROAD CONNECTIONS

PM	DESCRIPTION
58.37	PAVED COUNTY Rd #23 - Lt
58.85	PAVED COUNTY Rd #24 - Rt
61.75	DIRT Rd - Rt
62.88	PAVED Rd - Lt
65.28	DIRT COUNTY Rd #37 - Rt
65.63	DIRT COUNTY Rd #18 - Lt

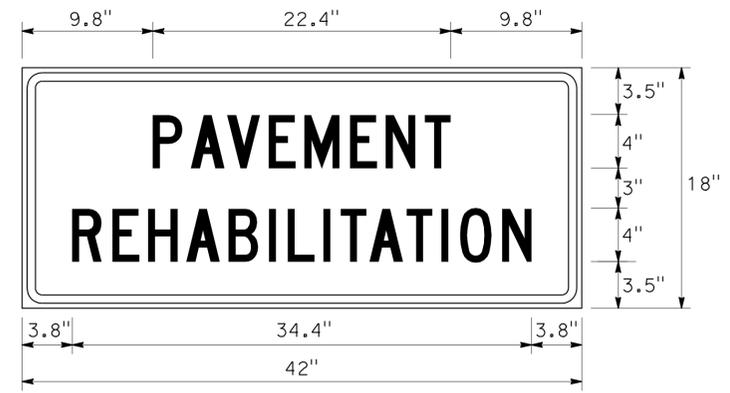
CONSTRUCTION AREA SIGNS (STATIONARY MOUNTED)

TYPE	CODE	PANEL SIZE	SIGN MESSAGE	NUMBER AND SIZE OF POST	No. OF SIGNS
(A)	W20-1 C23B(CA)	48" x 48" 42" x 18"	ROAD WORK AHEAD PAVEMENT REHABILITATION	1-4" x 6"	8
(B)	G20-1	36" x 18"	ROAD WORK NEXT XX MILES	1-4" x 4"	2
(C)	G20-2	36" x 18"	END ROAD WORK	1-4" x 4"	2



OPEN TRENCH SIGNING AND MARKING
NO SCALE

* PLACE AT 250' INTERVALS THROUGH THE OPEN TRENCH AREA, ALTERNATE C27 (OPEN TRENCH) AND C31A (NO SHOULDER) SIGNS



C23B(CA) SIGN PANEL DETAIL

CONSTRUCTION AREA SIGNS
NO SCALE **CS-1**

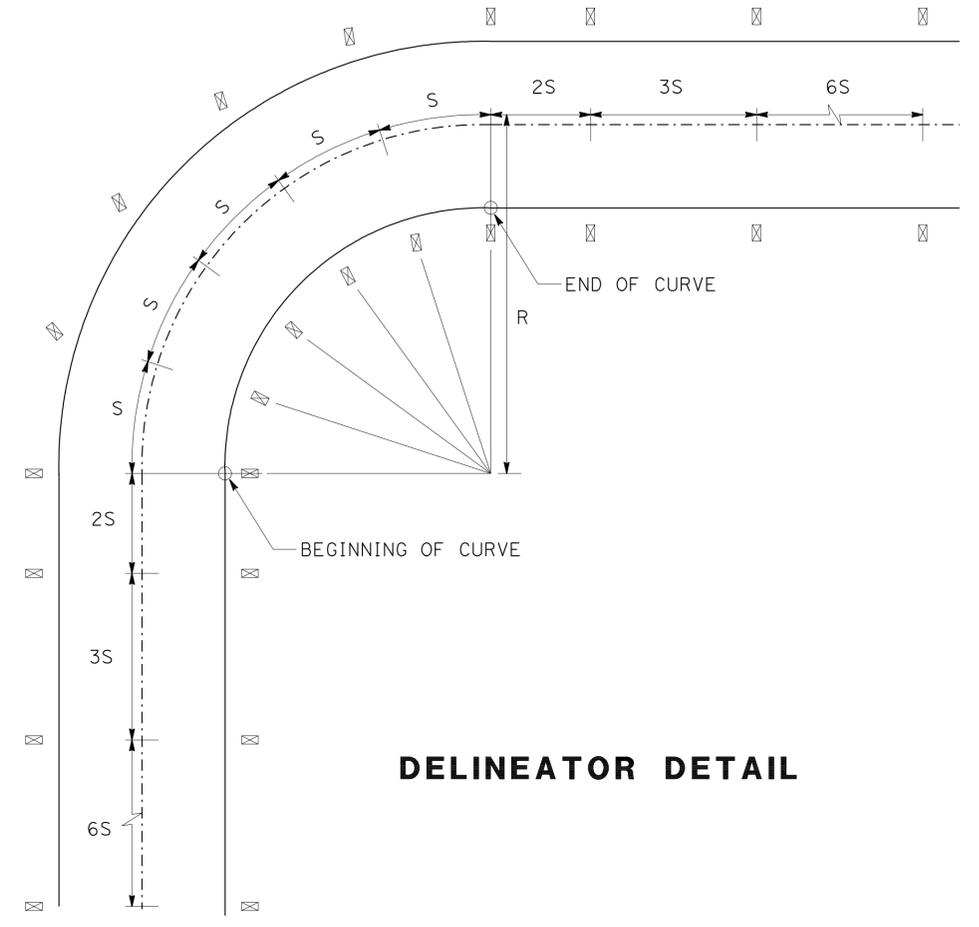
STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION - MAINTENANCE
 Michael Conner
 Karlie Smith
 Lance Brown
 04-11-11

NOTES:

- EXISTING UTILITY FACILITIES HAVE NOT BEEN PLOTTED ON THESE PLANS.
- INSTALL DELINEATORS PERPENDICULAR TO ONCOMING TRAFFIC.
- DELINEATOR SPACING ON TANGENT IS 525'.

LEGEND:

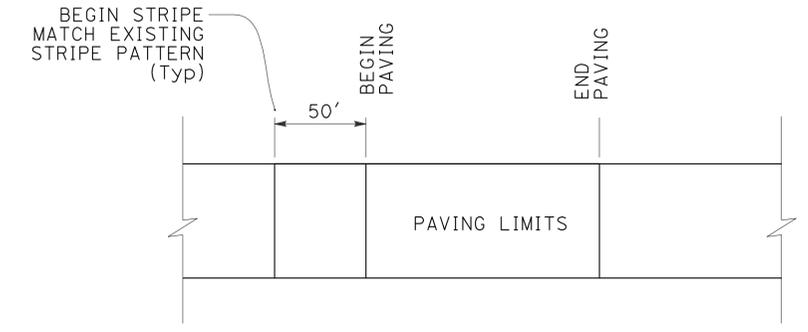
- Dir OF TRAFFIC
- S DELINEATOR SPACING
- R CENTERLINE CURVE RADIUS
- ☒ DELINEATOR



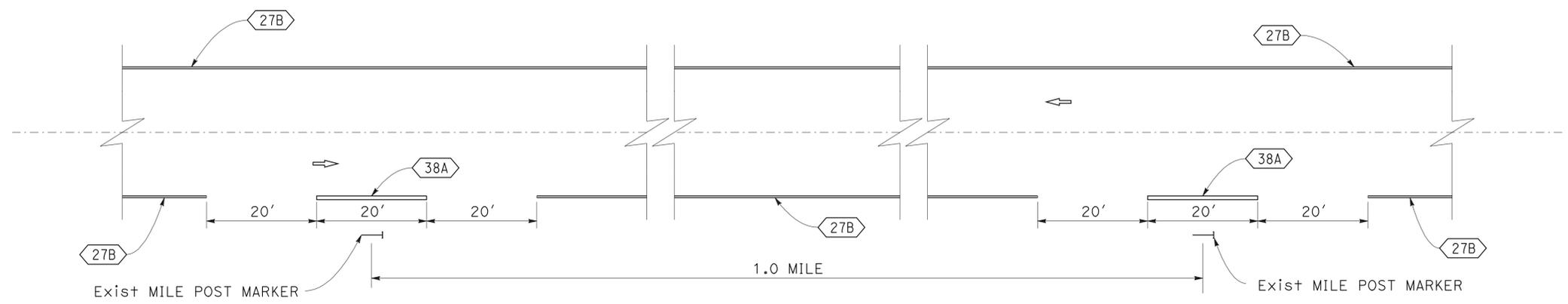
DELINEATOR DETAIL

DELINEATOR SPACING ON CURVES

POST MILE	CURVE RADIUS		LENGTH			
	LF	LF	S	2S	3S	6S
59.48	2000	767	132	265	300	300
60.87	5000	803	211	300	300	300
65.95	5900	3620	229	300	300	300



TRAFFIC STRIPE MATCH DETAIL



TYPICAL MILE POST STRIPE

PAVEMENT DELINEATION DETAILS
NO SCALE
PDD-1

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
 MAINTENANCE
 LANCE BROWN
 FUNCTIONAL SUPERVISOR
 CHECKED BY
 MICHAEL CONNER
 KARLIE SMITH
 REVISOR BY
 DATE REVISED

LAST REVISION DATE PLOTTED => 13-APR-2011
 04-11-11 TIME PLOTTED => 08:36

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
02	Mod	299	58.0/66.7	6	14

04-11-11
 REGISTERED CIVIL ENGINEER DATE
 04-11-11
 PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
 MICHAEL A. CONNER
 No. C73123
 Exp. 12-31-12
 CIVIL
 STATE OF CALIFORNIA

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NOTE:

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

DELINEATOR (CLASS 2)

POST MILE LIMITS	L+	R+	EA
58.00-66.63	X	X	208
TOTAL			208

COLD PLANE ASPHALT CONCRETE PAVEMENT

POST MILE	(N) LENGTH	(N) WIDTH	AREA	REMARKS
	LF	LF	SQYD	
58.00	220	24	587	MAINLINE CONFORM TAPER AT BEGINNING OF JOB
58.37	28	57	177	CONFORM AT ROAD CONNECTION
58.85	28	50	156	CONFORM AT ROAD CONNECTION
61.75	35	63	245	CONFORM AT ROAD CONNECTION
62.88	28	65	202	CONFORM AT ROAD CONNECTION
65.28	35	38	148	CONFORM AT ROAD CONNECTION
65.63	35	38	148	CONFORM AT ROAD CONNECTION
66.63	220	24	587	MAINLINE CONFORM TAPER AT END OF JOB
TOTAL			2250	

REMOVE THERMOPLASTIC PAVEMENT MARKING

POST MILE	L+	R+	EA	SQFT	REMARKS
58.37	X		1	27.0	ROAD CONNECTION LIMIT LINE
58.37	X		1	22.0	STOP
58.85		X	1	17.0	ROAD CONNECTION LIMIT LINE
58.85		X	1	22.0	STOP
TOTAL				88.0	

THERMOPLASTIC PAVEMENT MARKING

POST MILE	L+	R+	EA	SQFT	REMARKS
58.37	X		1	27.0	ROAD CONNECTION LIMIT LINE
58.37	X		1	22.0	STOP
58.85		X	1	17.0	ROAD CONNECTION LIMIT LINE
58.85		X	1	22.0	STOP
TOTAL				88.0	

THERMOPLASTIC TRAFFIC STRIPE (SPRAYABLE)

POST MILE LIMITS	DETAIL 5	DETAIL 18	DETAIL 21	DETAIL 27B	DETAIL 27C	DETAIL 38A
	LF	LF	LF	LF	LF	LF
58.00-66.63	39,072	5175	1320	90,687	446	200
TOTAL				136,900		

ROADWAY QUANTITY SUMMARY

POST MILE LIMITS	(N) LENGTH	(N) WIDTH	HOT MIX ASPHALT	IMPORTED MATERIAL (SHOULDER BACKING)	TACK COAT	CLASS 2 AB	PULVERIZE ROADBED
	LF	LF	TON	TON	TON	TON	Sta
58.00-59.00	5280	24					
59.00-60.00	5280	24					
60.00-61.00	5280	24					
61.00-62.00	5280	24					
62.00-63.00	5280	24	24,606	25,062	81	18,454	456
63.00-64.00	5280	24					
64.00-65.00	5280	24					
65.00-66.00	5280	24					
66.00-66.63	3327	24					
6 ROAD CONNECTIONS			696	84	0.1		
20 DRIVEWAYS						112	
TOTAL			25,302	25,146	81.1	18,566	456

SUMMARY OF QUANTITIES Q-1

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
 MAINTENANCE
 Michael Conner
 Karlie Smith
 Lance Brown

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
02	Mod	299	58.0/66.7	8	14

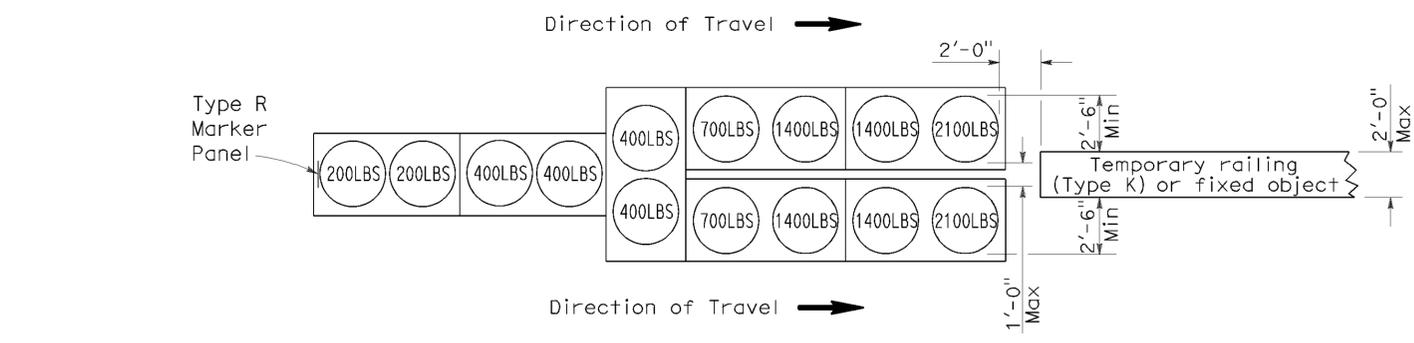
Randell D. Hiatt
REGISTERED CIVIL ENGINEER

June 6, 2008
PLANS APPROVAL DATE

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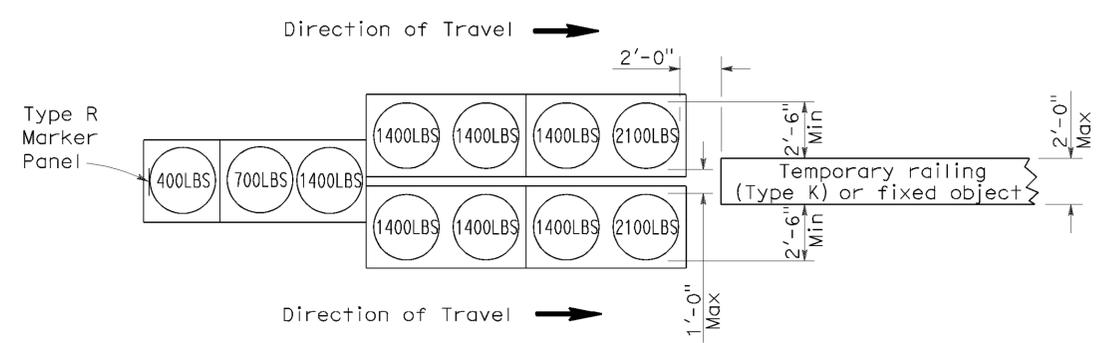
REGISTERED PROFESSIONAL ENGINEER
No. C50200
Exp. 6-30-09
CIVIL
STATE OF CALIFORNIA

To accompany plans dated 04-11-11



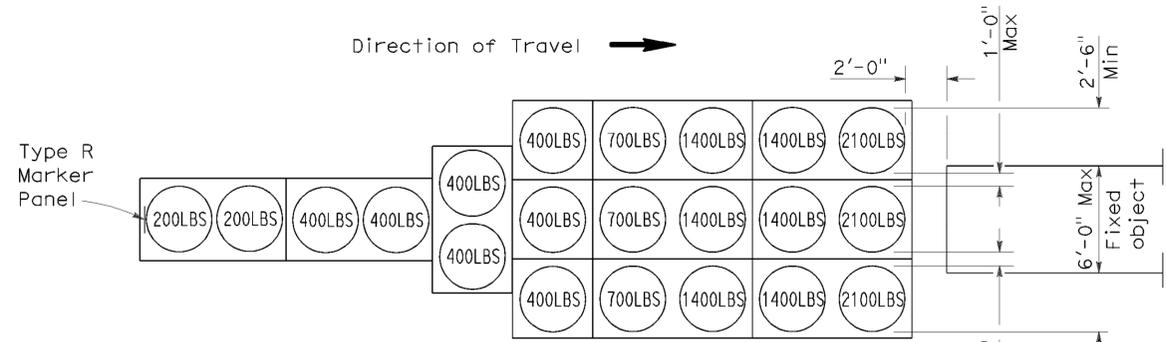
ARRAY 'TU14'

Approach speed 45 mph or more



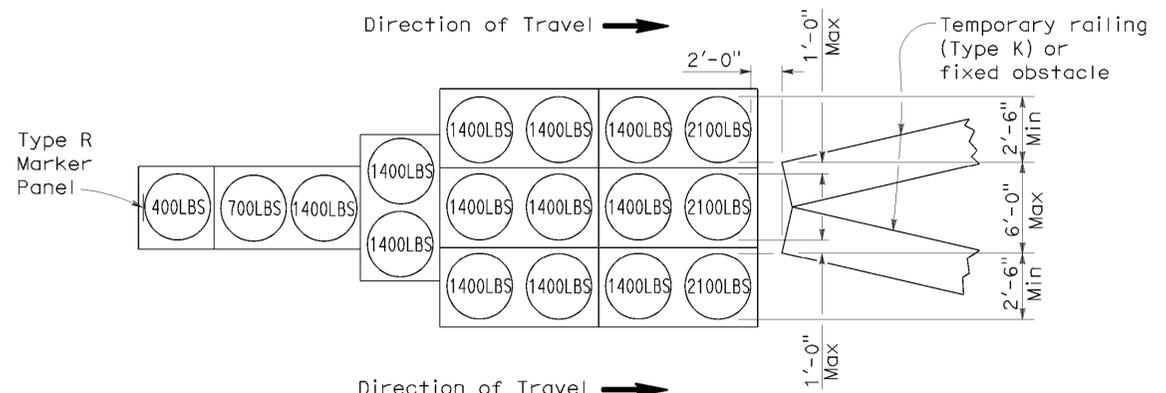
ARRAY 'TU11'

Approach speed less than 45 mph



ARRAY 'TU21'

Approach speed 45 mph or more

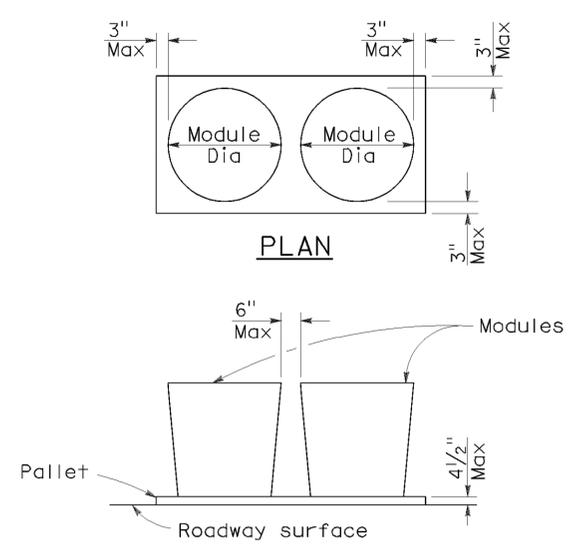


ARRAY 'TU17'

Approach speed less than 45 mph

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.



PLAN

ELEVATION

CRASH CUSHION PALLET DETAIL

See Note 7

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

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2006 REVISED STANDARD PLAN RSP T1A

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
02	Mod	299	58.0/66.7	9	14

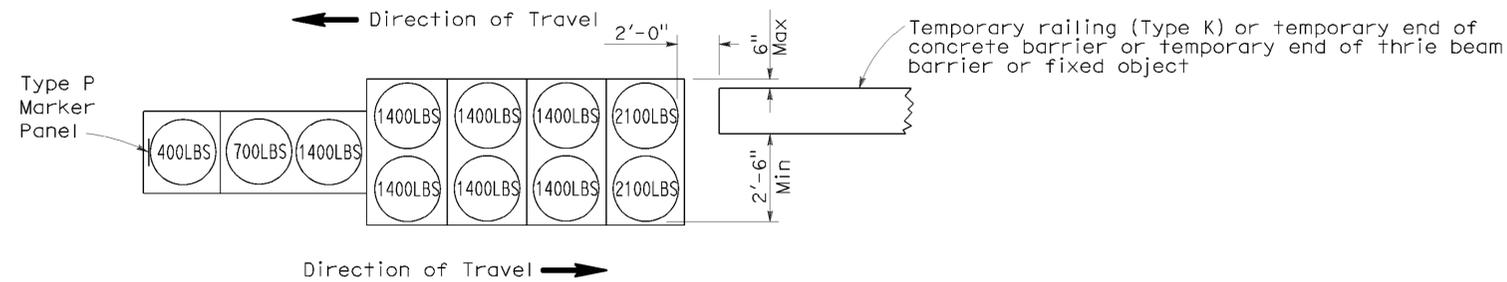
Randell D. Hiatt
REGISTERED CIVIL ENGINEER

June 6, 2008
PLANS APPROVAL DATE

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

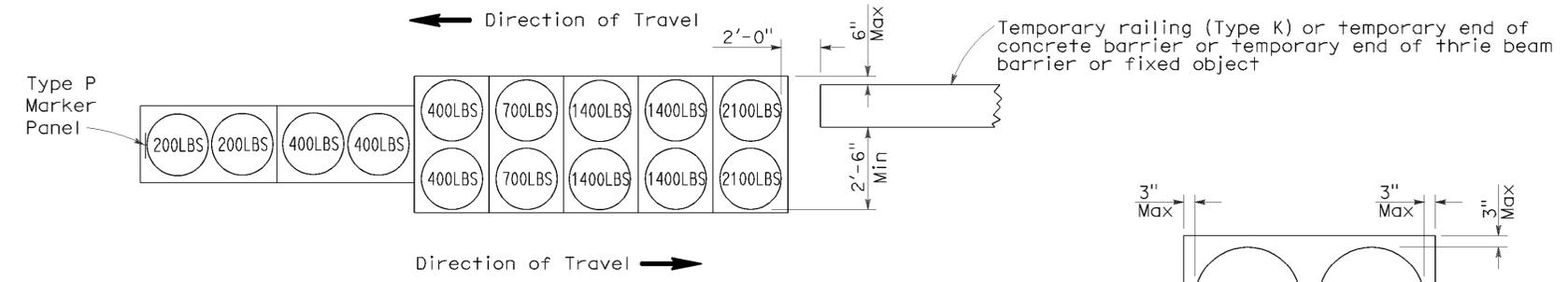
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To accompany plans dated 04-11-11



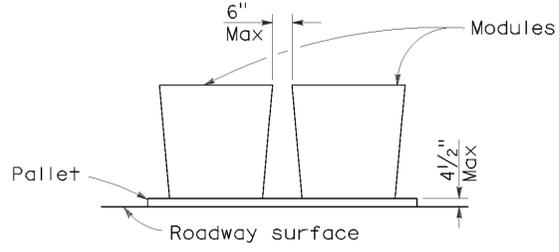
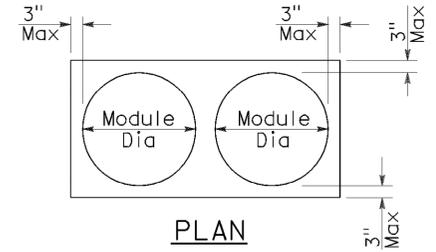
ARRAY 'TB11'

Approach speed less than 45 mph



ARRAY 'TB14'

Approach speed 45 mph or more



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

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
02	Mod	299	58.0/66.7	10	14

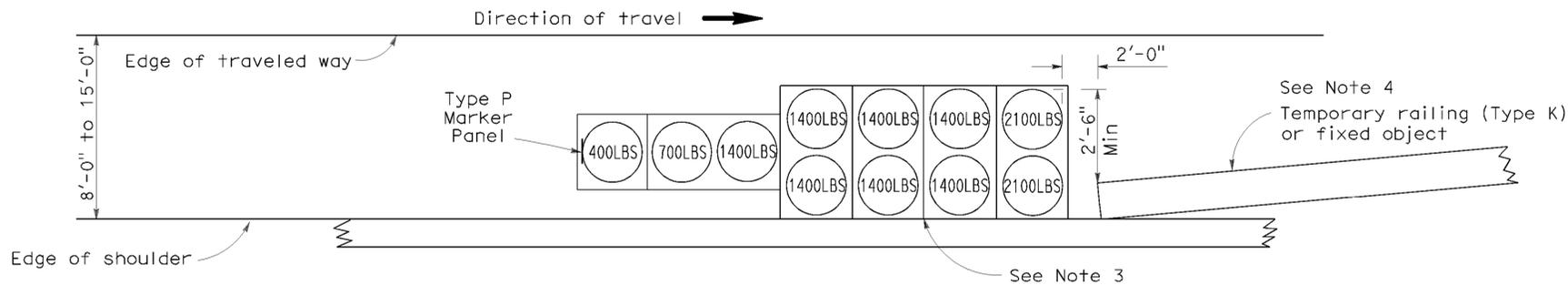
Randell D. Hiatt
REGISTERED CIVIL ENGINEER

June 6, 2008
PLANS APPROVAL DATE

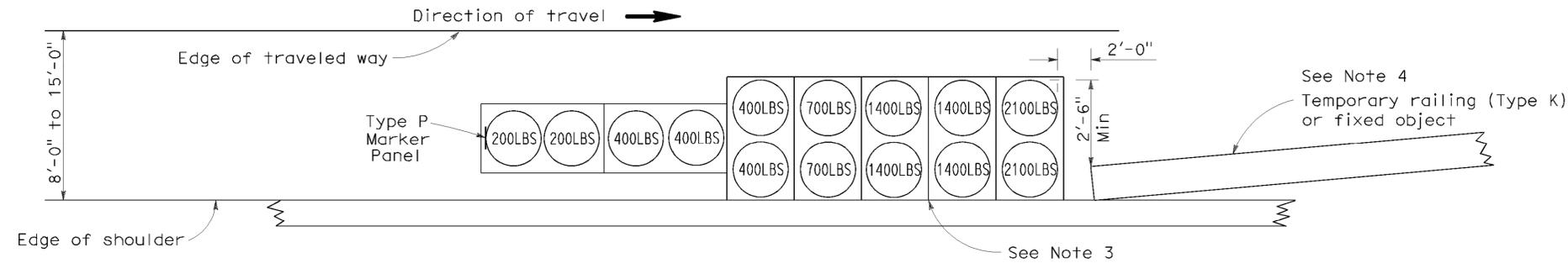
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REGISTERED PROFESSIONAL ENGINEER
Randell D. Hiatt
No. C50200
Exp. 6-30-09
CIVIL
STATE OF CALIFORNIA

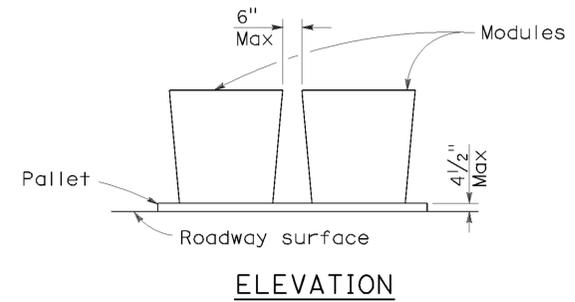
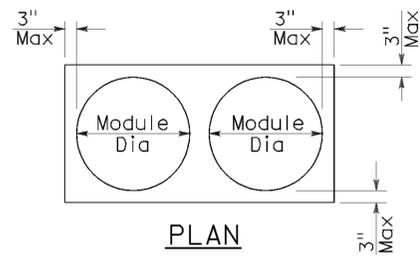
To accompany plans dated 04-11-11



ARRAY 'TS11'
Approach speed less than 45 mph
See Note 9



ARRAY 'TS14'
Approach speed 45 mph or more
See Note 9



CRASH CUSHION PALLET DETAIL
See Note 11

NOTES:

- (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.
- All sand weights are nominal.
- 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.
- 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.
- Temporary crash cushion arrays shall not encroach on the traveled way.
- Arrays for median shoulders shall conform to details shown on this plan for outside shoulders.
- Place the Type P marker panel so that the bottom of the panel rests upon the pallet and faces traffic.
- Refer to Standard Plan A73B for marker details.
- 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.
- Approach speeds indicated conform to NCHRP 350 Report criteria.
- Use of pallets is optional.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

**TEMPORARY CRASH CUSHION,
SAND FILLED
(SHOULDER INSTALLATIONS)**

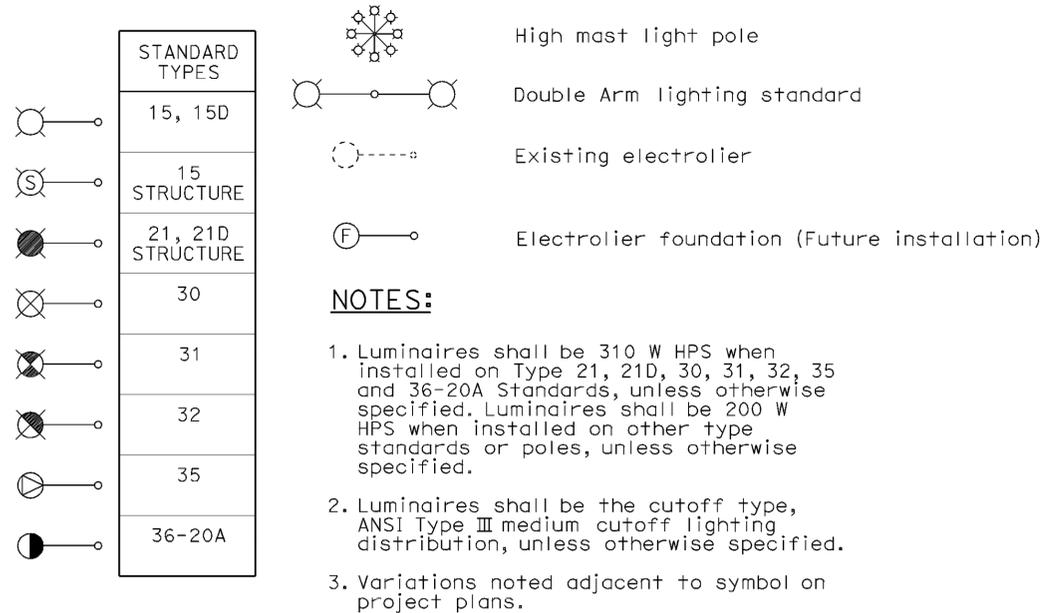
NO SCALE
RSP T2 DATED JUNE 6, 2008 SUPERSEDES STANDARD PLAN T2
DATED MAY 1, 2006 - PAGE 213 OF THE STANDARD PLANS BOOK DATED MAY 2006.

REVISED STANDARD PLAN RSP T2

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2006 REVISED STANDARD PLAN RSP T2

ELECTROLIERS



- Electrolier (see project notes or project plans)
- Luminaire on wood pole

STANDARD NOTES:

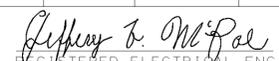
- AB** Abandon. If applied to conduit, remove conductors.
- BC** Install pull box in existing conduit run.
- BP** Pedestrian barricade, type as indicated on plan.
- CB** Install conduit into existing pull box.
- CC** Connect new and existing conduit. Remove existing conductors and install conductors 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

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
02	Mod	299	58.0/66.7	11	14


 REGISTERED ELECTRICAL ENGINEER
 No. E14512
 Exp. 6-30-08
 ELECTRICAL
 STATE OF CALIFORNIA

October 5, 2007
 PLANS APPROVAL DATE

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To accompany plans dated 04-11-11

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

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
02	Mod	299	58.0/66.7	12	14

Jeffrey G. McRae
 REGISTERED ELECTRICAL ENGINEER
 October 5, 2007
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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
		Conduit riser in/on structure or service pole

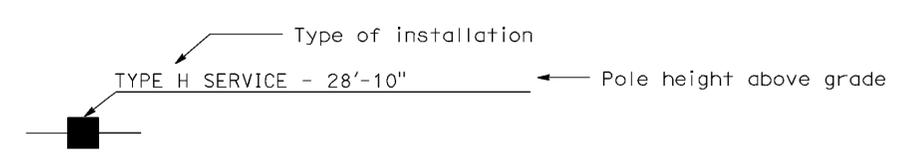
SIGNAL EQUIPMENT

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
		Modifications of basic symbols: "L" Indicates all non-arrow sections lowered "LG" Indicates lowered 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
		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

SERVICE EQUIPMENT

PROPOSED	EXISTING	
OH	oh	Overhead lines
		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



ILLUMINATED OVERHEAD SIGN

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

SIGNAL EQUIPMENT Cont

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

NOTES:

- All signal sections shall be 12" unless shown otherwise.
- Signal heads shall be provided with backplates unless shown otherwise.
- Signal indication shall be LED.

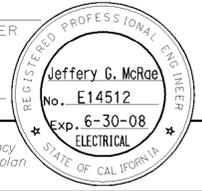
STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION
**ELECTRICAL SYSTEMS
 (SYMBOLS AND ABBREVIATIONS)**
 NO SCALE

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

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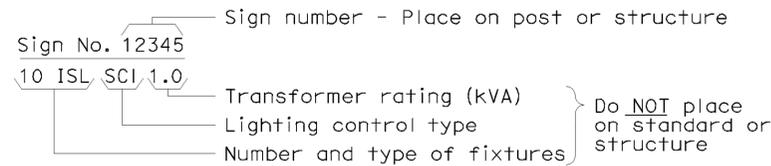
2006 REVISED STANDARD PLAN RSP ES-1B



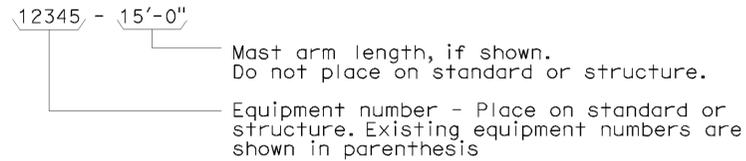
To accompany plans dated 04-11-11

EQUIPMENT IDENTIFICATION

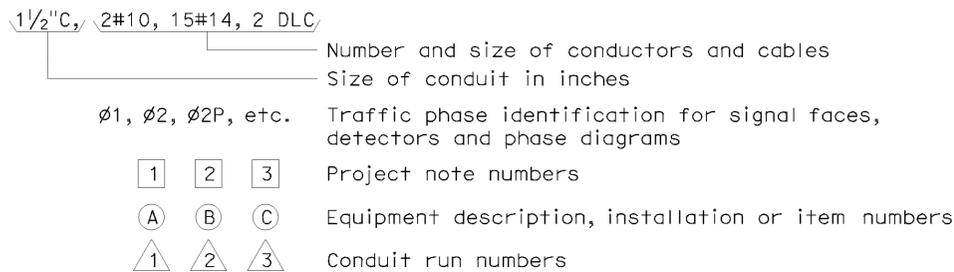
ILLUMINATED SIGN IDENTIFICATION NUMBER:



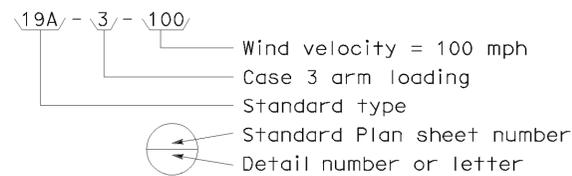
ELECTROLIER OR EQUIPMENT IDENTIFICATION NUMBER:



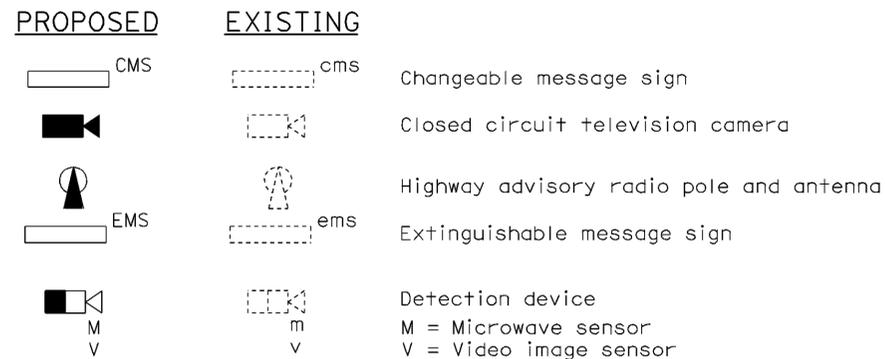
CONDUIT AND CONDUCTOR IDENTIFICATION:



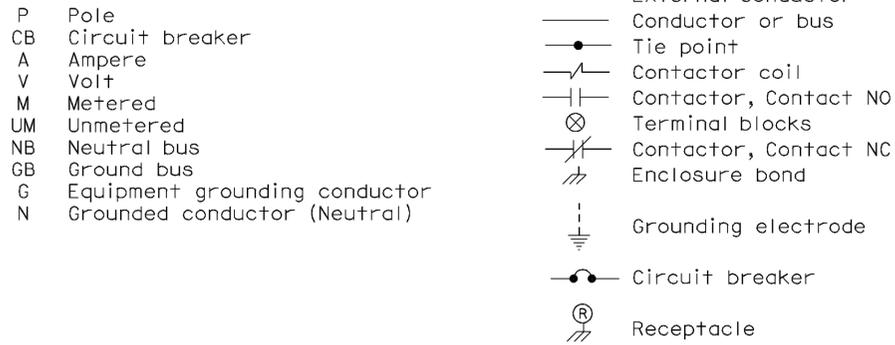
SIGNAL AND LIGHTING STANDARD (TYPICAL DESIGNATION):



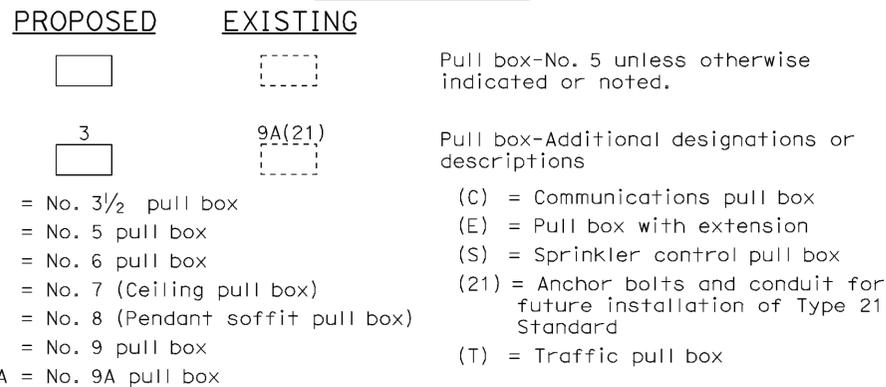
MISCELLANEOUS EQUIPMENT



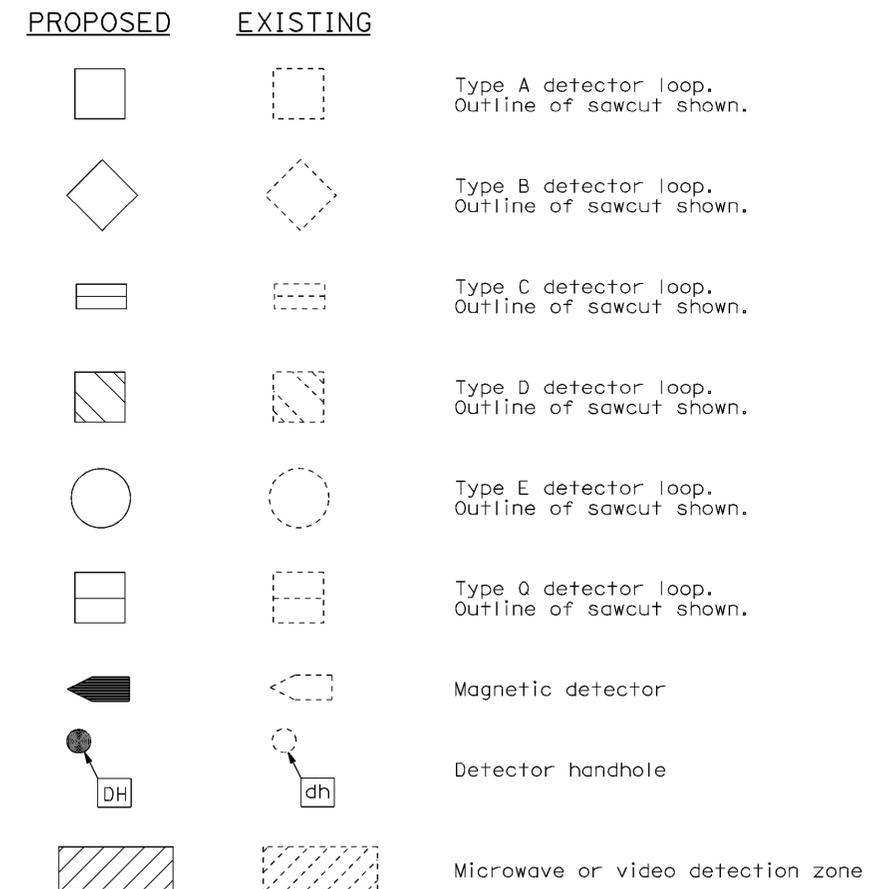
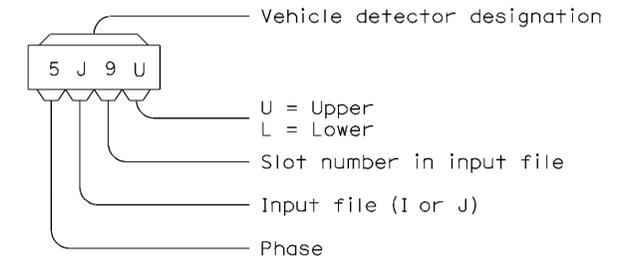
WIRING DIAGRAM LEGEND



PULL BOXES



VEHICLE DETECTORS



STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION

ELECTRICAL SYSTEMS (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

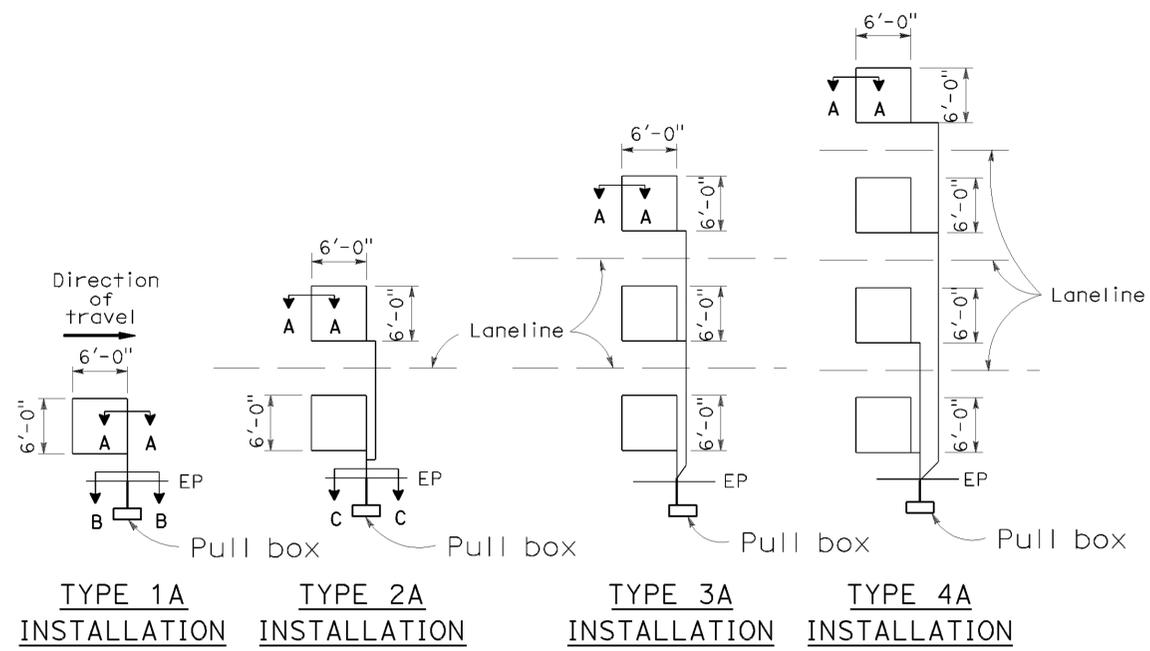
DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
02	Mod	299	58.0/66.7	14	14

Jeffrey B. McRae
 REGISTERED ELECTRICAL ENGINEER
 October 5, 2007
 PLANS APPROVAL DATE
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REGISTERED PROFESSIONAL ENGINEER
 Jeffrey G. McRae
 No. E14512
 Exp. 6-30-08
 ELECTRICAL
 STATE OF CALIFORNIA

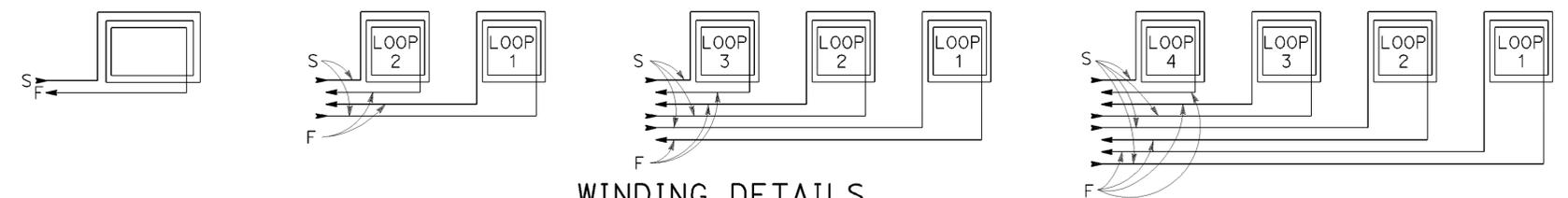
LOOP INSTALLATION PROCEDURE

- Loops shall be centered in lanes.
- Saw slots in pavement for loop conductors as shown in details.
- 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.
- Bottom of saw slot shall be smooth with no sharp edges.
- Slots shall be washed until clean, blown out and thoroughly dried before installing loop conductors.
- Adjacent loops on the same sensor unit channel shall be wound in opposite directions.
- 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.
- 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.
- No more than 2 twisted pairs shall be installed in one sawed slot.
- Allow additional 5'-0" of slack length of conductor for the lead-in run to pull box.
- 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.
- Test each loop circuit for continuity, circuit resistance and insulation resistance at the pull box before filling slots.
- Fill slots as shown in details.
- Splice loop conductors to lead-in-cable. Splices shall be soldered.
- 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.
- Lead-in-cable shall not be spliced between the pull box and the controller cabinet terminals.
- Test each loop circuit for continuity, circuit resistance and insulation resistance at the controller cabinet location.
- 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.

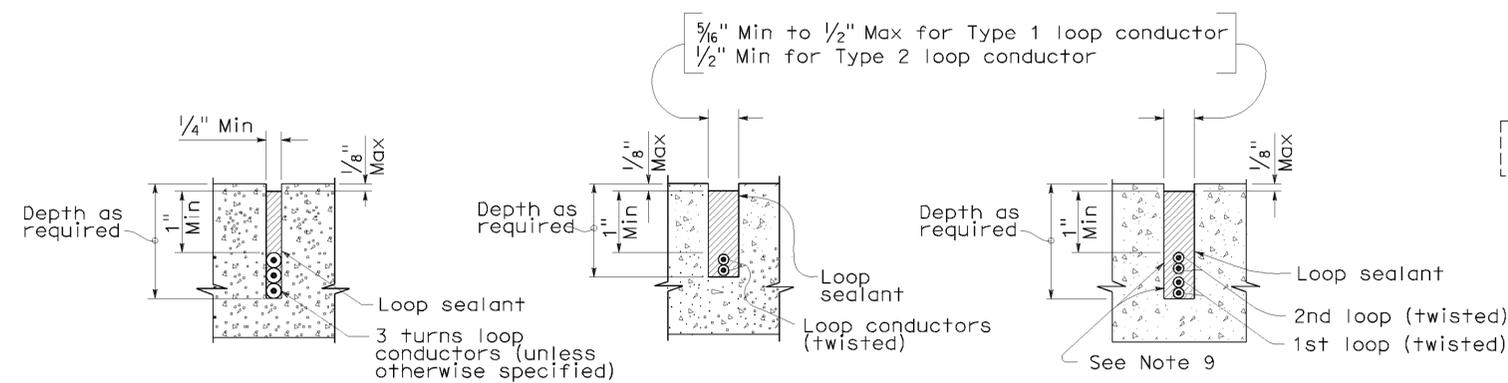
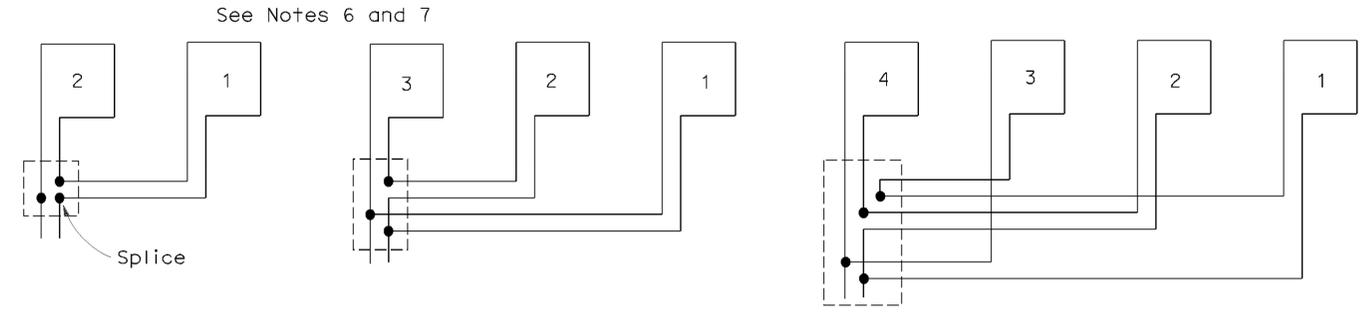


SAWCUT DETAILS

- (Type A loop detector configurations illustrated)
- 1A thru 4A = 1 Type A loop configuration in each lane.
 - 1B thru 4B = 1 Type B loop configuration in each lane.
 - 1C = 1 Type C loop configuration entering lanes as required.
 - 1D thru 4D = 1 Type D loop configuration in each lane.
 - 1E thru 4E = 1 Type E loop configuration in each lane.
 - 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)



TYPICAL LOOP CONNECTIONS



ELECTRICAL SYSTEMS (DETECTORS)

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

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

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2006 REVISED STANDARD PLAN RSP ES-5A