

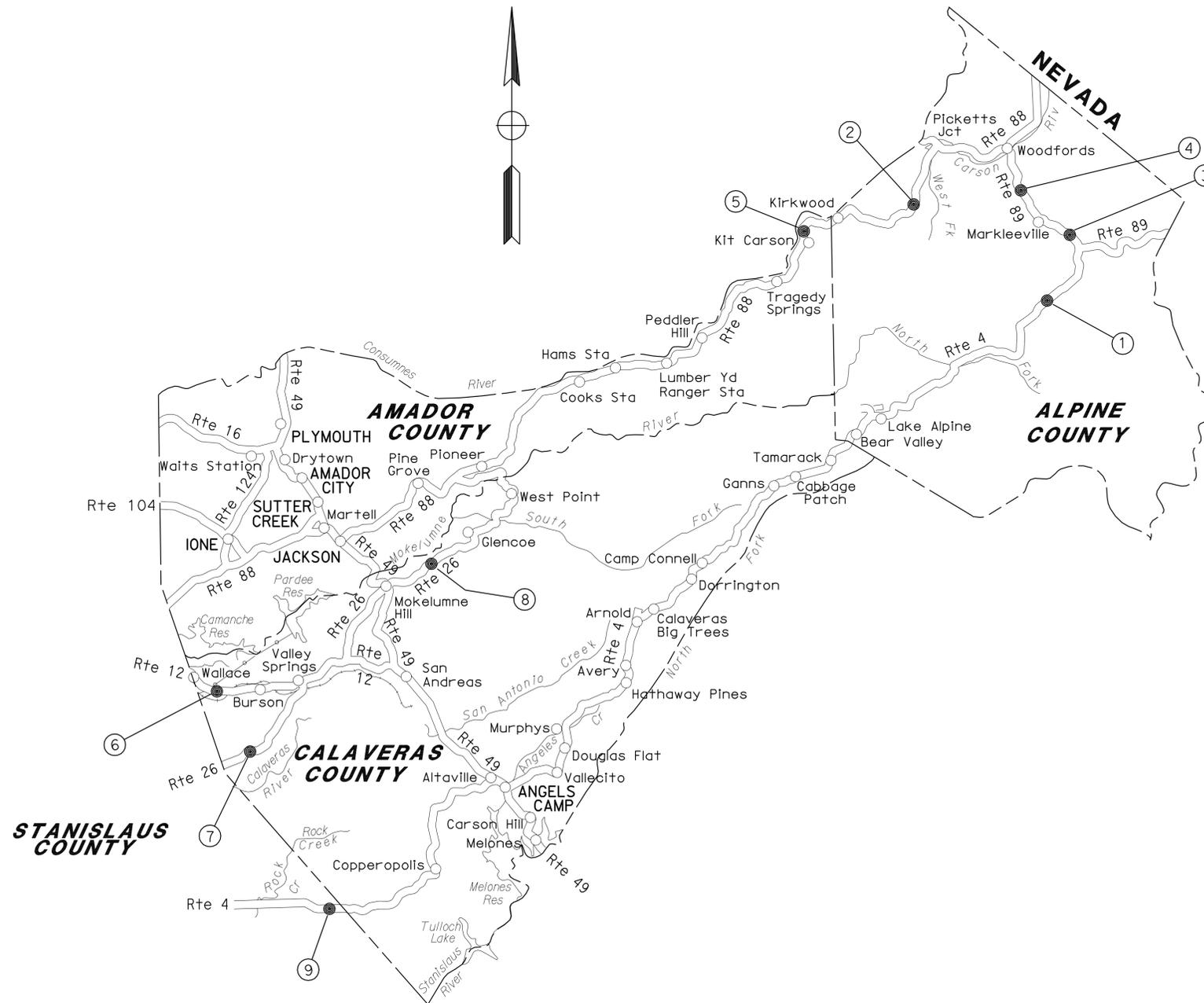
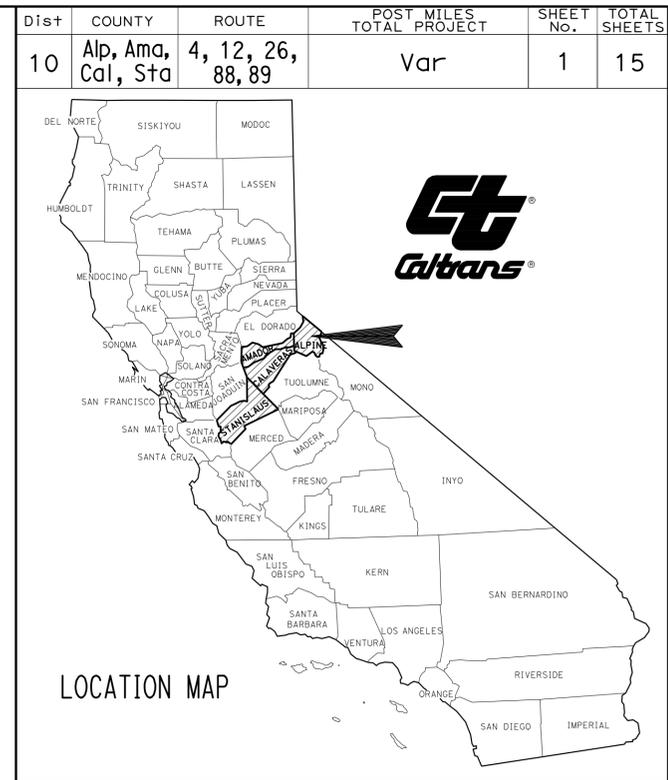
INDEX OF PLANS

SHEET No.	DESCRIPTION
1	TITLE AND LOCATION MAP
2-6	LAYOUTS
7-9	ELECTRICAL PLANS
10-15	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 ALPINE, AMADOR,
CALAVERAS, AND STANISLAUS COUNTIES
AT VARIOUS LOCATIONS

TO BE SUPPLEMENTED BY STANDARD PLANS DATED MAY 2006



LOCATION OF CONSTRUCTION

Loc	Co	ROUTE	PM	DESCRIPTION
①		4	23.0	1.2 MILES W OF SILVER CREEK CAMPGROUNDS
②	Alp	88	R5.4	0.1 MILE E OF OLD HIGHWAY, WEST Conn
③		89	10.9	0.9 MILE N OF ROUTE 4
④		89	R17.3	TURTLE ROCK PARK Rd
⑤	Ama	88	R65.8	KAYS Rd
⑥		12	4.6	0.2 MILE E OF PETTINGER Rd
⑦	Cal	26	2.0	Conn TO GREGORY-MILTON
⑧		26	23.5	3.3 MILES W OF RIDGE Rd
⑨	Sta	4	R8.8	0.1 MILE W OF CALAVERAS COUNTY LINE

PROJECT MANAGER
ALVIN MANGINDIN

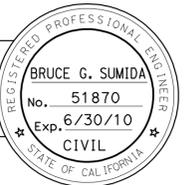
DESIGN ENGINEER
ALVIN MANGINDIN

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

Bruce G. Sumida 1/4/10
 PROJECT ENGINEER DATE
 REGISTERED CIVIL ENGINEER

February 22, 2010
 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. **10-OU6904**

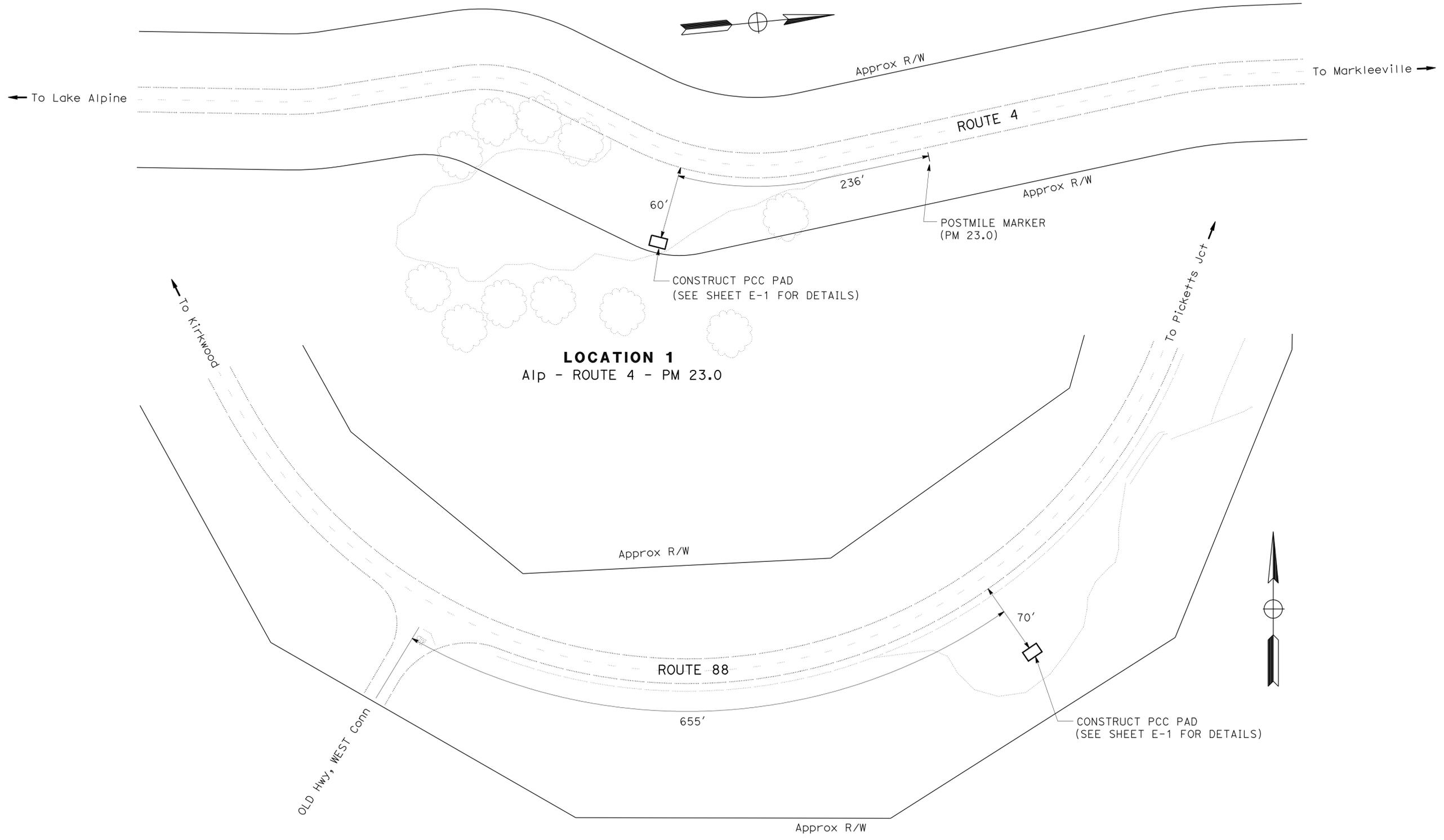


STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION Caltrans MAINTENANCE	FUNCTIONAL SUPERVISOR ALVIN MANGINDIN	CALCULATED-DESIGNED BY CHECKED BY	BRUCE SUMIDA THOA HUYNH	REVISED BY DATE REVISED	BS 12/30/09

NOTE:

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

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
10	Alp, Ama, Cal, Sta	4, 12, 26, 88, 89	Var	2	15
 REGISTERED CIVIL ENGINEER			DATE	1/4/10	
PLANS APPROVAL DATE			2-22-10		
REGISTERED PROFESSIONAL ENGINEER BRUCE G. SUMIDA No. 51870 Exp. 6/30/10 CIVIL STATE OF CALIFORNIA					
<small>THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.</small>					



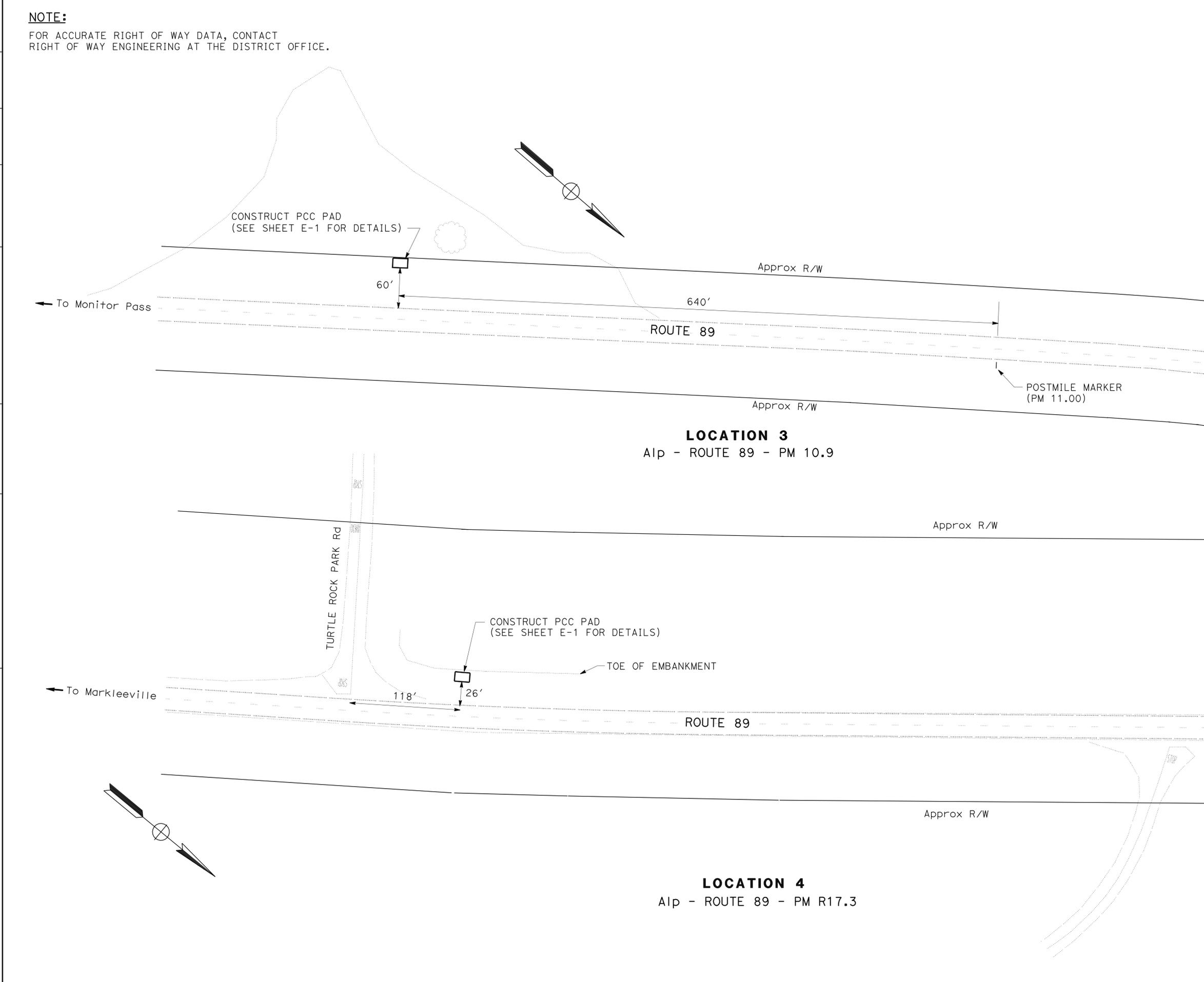
LOCATION 1
Alp - ROUTE 4 - PM 23.0

LOCATION 2
Alp - ROUTE 88 - PM R5.4

LAYOUT
NO SCALE **L-1**

LAST REVISION | DATE PLOTTED => 01-MAR-2010
 00-00-00 | TIME PLOTTED => 09:22

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans MAINTENANCE



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

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
10	Alp, Ama, Cal, Sta	4, 12, 26, 88, 89	Var	3	15

Bruce G. Sumida 1/4/10
 REGISTERED CIVIL ENGINEER DATE
 2-22-10
 PLANS APPROVAL DATE

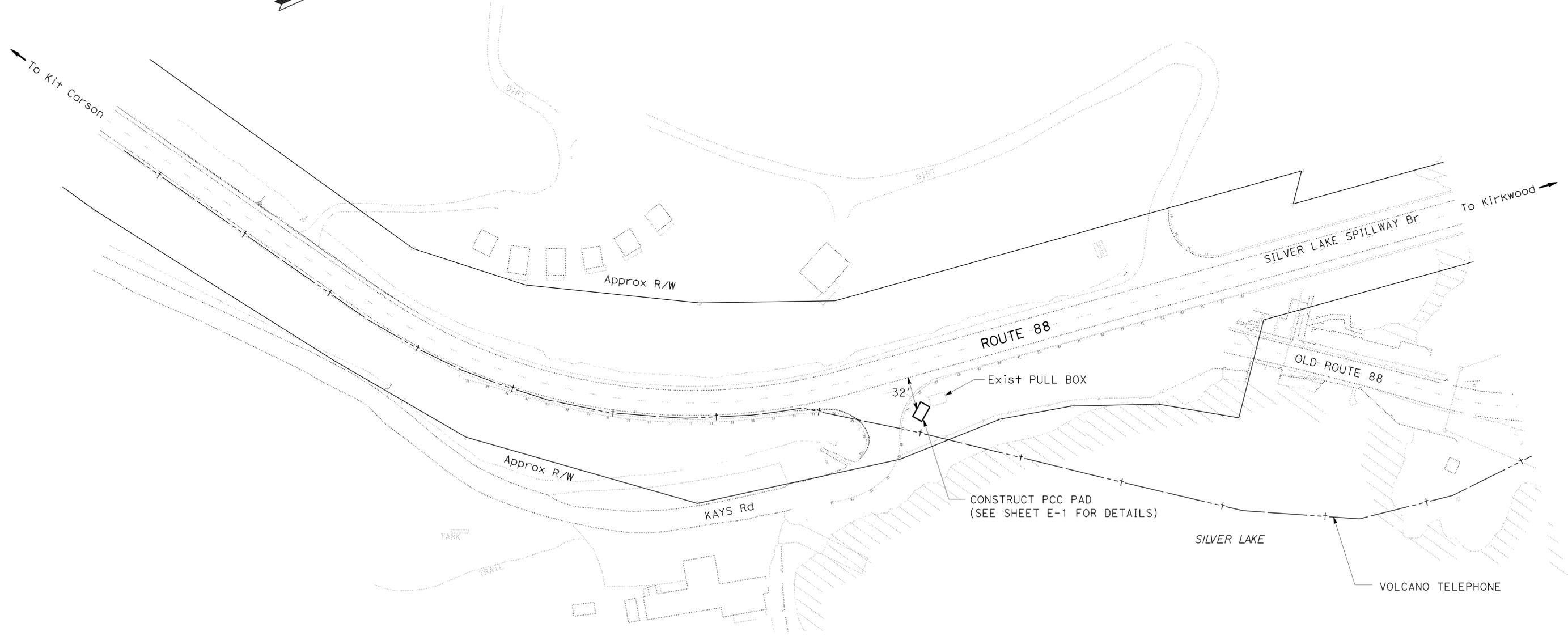
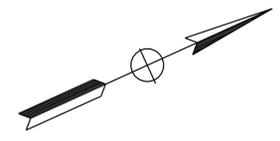
REGISTERED PROFESSIONAL ENGINEER
BRUCE G. SUMIDA
 No. 51870
 Exp. 6/30/10
 CIVIL
 STATE OF CALIFORNIA

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.

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans MAINTENANCE

FUNCTIONAL SUPERVISOR	ALVIN MANGINDIN
CALCULATED-DESIGNED BY	CHECKED BY
BRUCE SUMIDA	THOA HUYNH
REVISOR BY	DATE REVISED
BS	12/31/09

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



DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
10	Alp, Ama, Cal, Sta	4, 12, 26, 88, 89	Var	4	15

1/4/10 DATE
 REGISTERED CIVIL ENGINEER
 BRUCE G. SUMIDA
 No. 51870
 Exp. 6/30/10
 CIVIL
 STATE OF CALIFORNIA
 REGISTERED PROFESSIONAL ENGINEER

2-22-10
 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.

LOCATION 5
 Ama - ROUTE 88 - PM R65.8

LAYOUT
 NO SCALE **L-3**

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
10	Alp, Amo, Cal, Sta	4, 12, 26, 88, 89	Var	5	15

<i>Bruce G. Sumida</i>	1/4/10
REGISTERED CIVIL ENGINEER	DATE
2-22-10	
PLANS APPROVAL DATE	

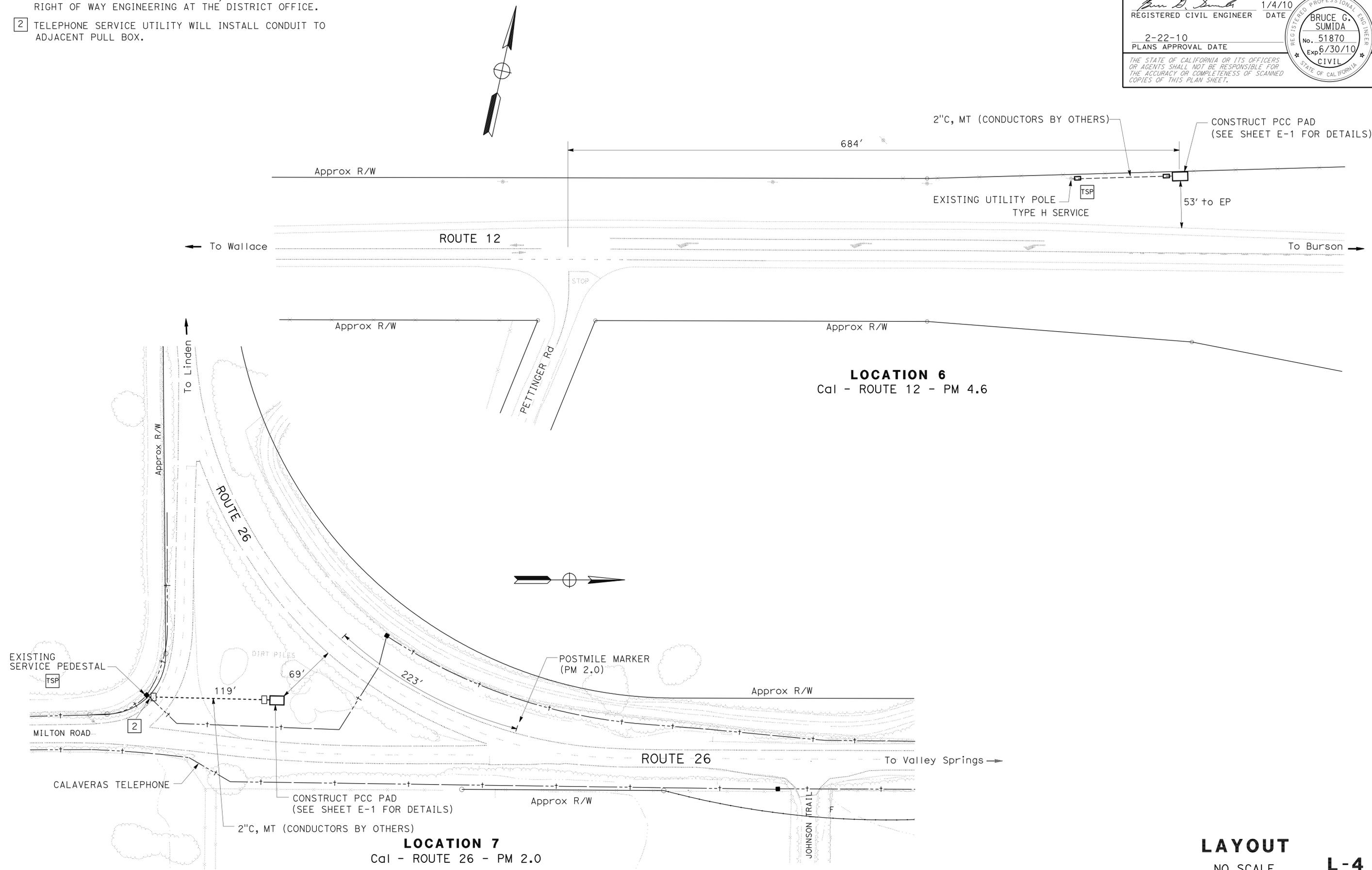
REGISTERED PROFESSIONAL ENGINEER
BRUCE G. SUMIDA
No. 51870
Exp. 6/30/10
CIVIL

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

NOTES:

- FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
- TELEPHONE SERVICE UTILITY WILL INSTALL CONDUIT TO ADJACENT PULL BOX.

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	MAINTENANCE
FUNCTIONAL SUPERVISOR	ALVIN MANGINDIN
CALCULATED-DESIGNED BY	CHECKED BY
BRUCE SUMIDA	THOA HUYNH
REVISOR	DATE REVISED
BS	12/31/09



LAYOUT
NO SCALE **L-4**

LAST REVISION DATE PLOTTED => 01-MAR-2010
00-00-00 TIME PLOTTED => 09:22

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans MAINTENANCE

FUNCTIONAL SUPERVISOR
 ALVIN MANGINDIN

CALCULATED-DESIGNED BY
 CHECKED BY

BRUCE SUMIDA
 THOA HUYNH

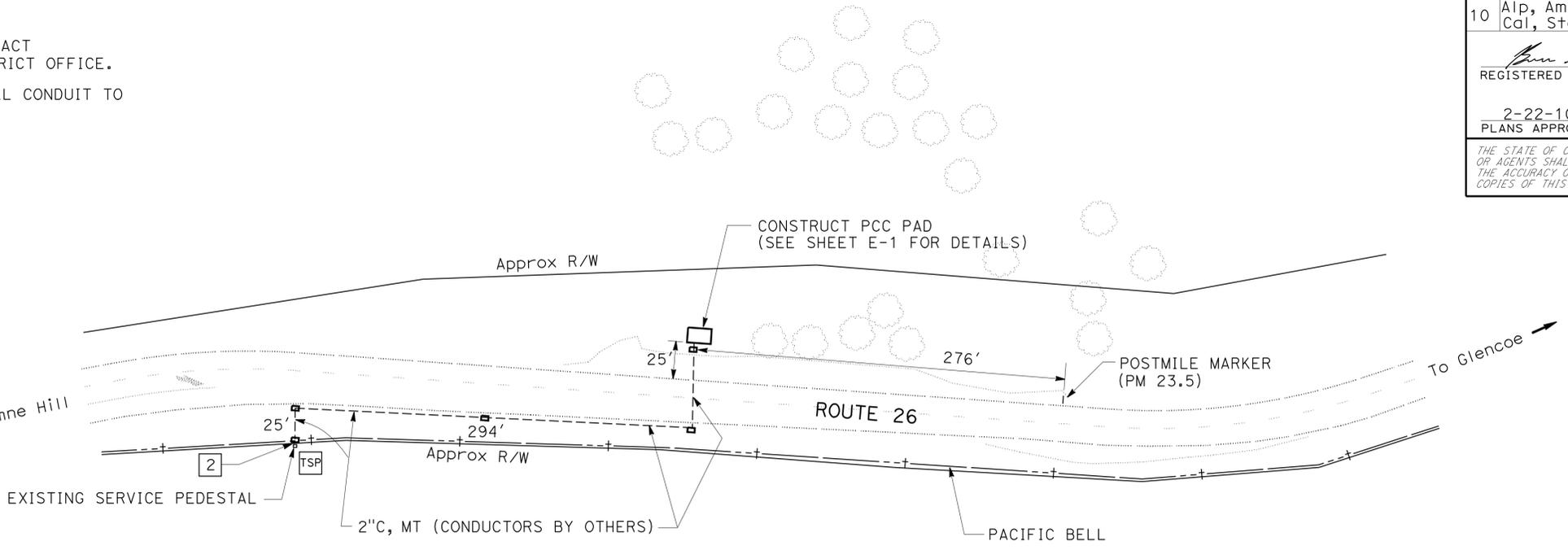
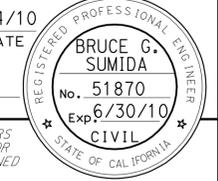
REVISED BY
 DATE REVISED

BS
 12/31/09

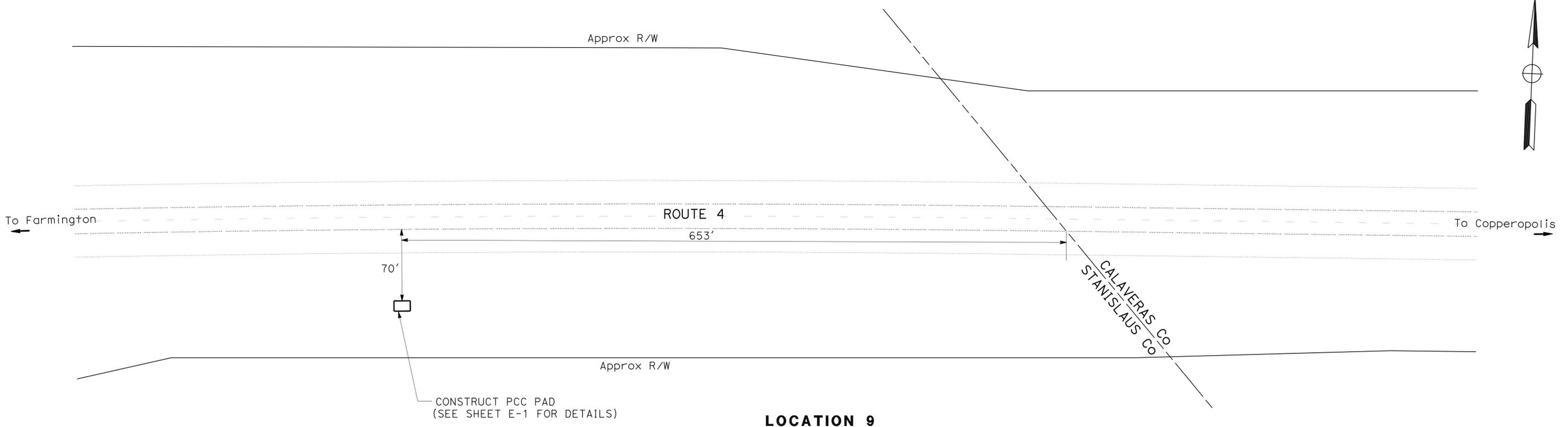
NOTES:

1. FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
2. TELEPHONE SERVICE UTILITY WILL INSTALL CONDUIT TO ADJACENT PULL BOX.

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
10	Alp, Ama, Cal, Sta	4, 12, 26, 88, 89	Var	6	15
 REGISTERED CIVIL ENGINEER			DATE	1/4/10	
PLANS APPROVAL DATE			2-22-10		
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 8
 Cal - ROUTE 26 - PM 23.5



LOCATION 9
 Sta - ROUTE 4 - PM R8.8

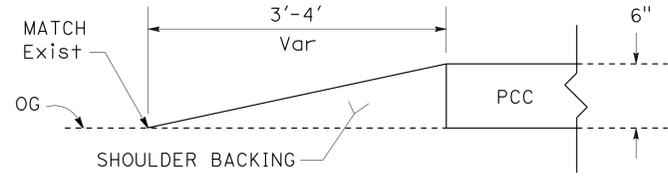


LAYOUT
 NO SCALE
L-5

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
10	Alp, Ama, Cal,	4, 12, 26, 88, 89	Var	7	15
<i>Bruce G. Sumida</i> REGISTERED CIVIL ENGINEER			DATE	1/4/10 2-22-10 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.					

GENERAL NOTES

1. ALL CONDUITS ARE 3"Ø UNLESS OTHERWISE SPECIFIED.
2. ANY DEVIATION OF THE PLANS DUE TO FIELD CONDITIONS SHALL BE APPROVED BY THE ENGINEER.
3. CABINET FURTHEST AWAY FROM THE FIBERGLASS ANTENNA POLE SHALL BE USED FOR TELEPHONE SERVICE TERMINATION. INSTALL A 2' x 1'3/4" PLYWOOD BACKBOARD FOR TELCO DEMARCATION.
4. CONCRETE PAD SHALL BE 6" THICK, AND CONTAIN A 4000 psi RATING MIX.



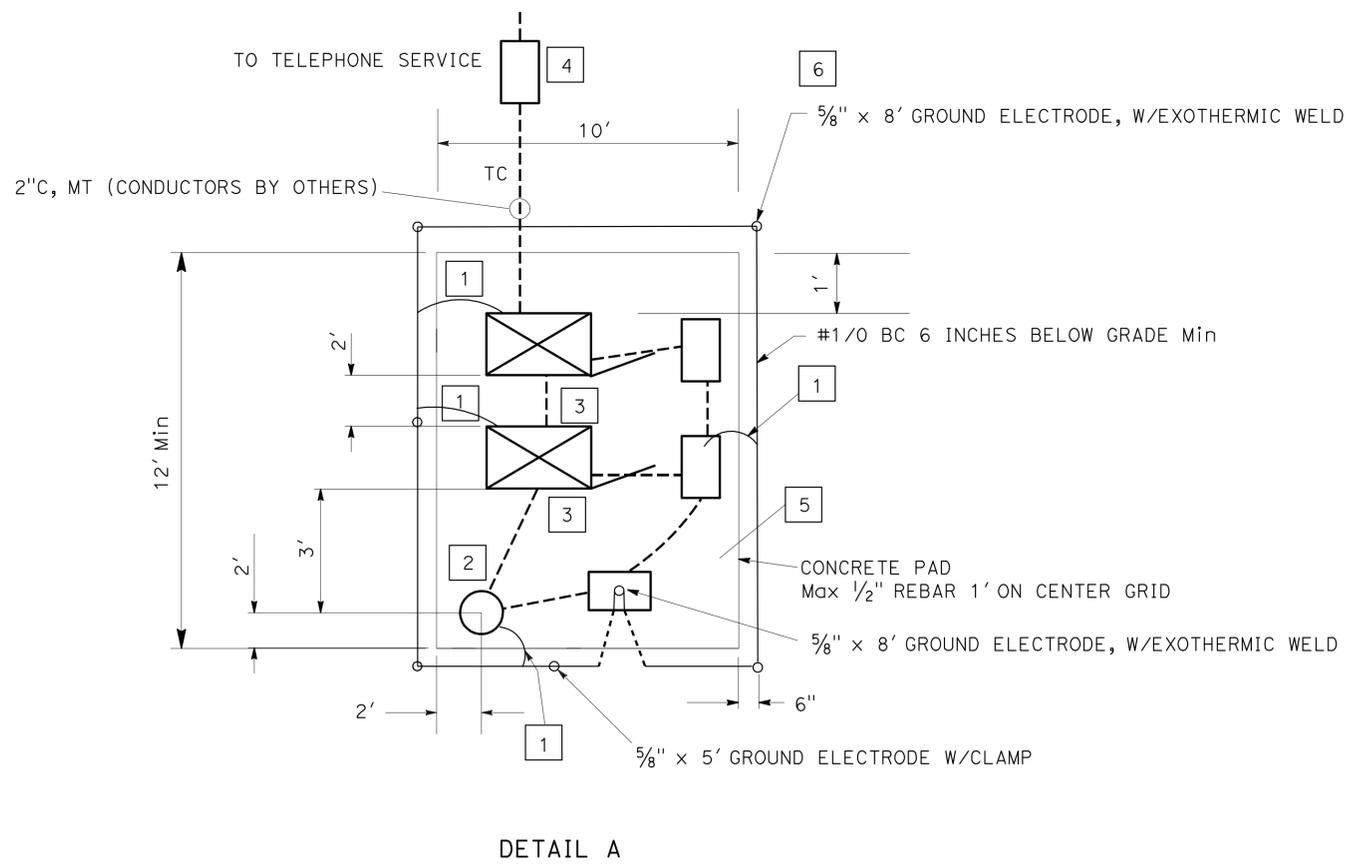
SHOULDER BACKING DETAIL

PROJECT NOTES

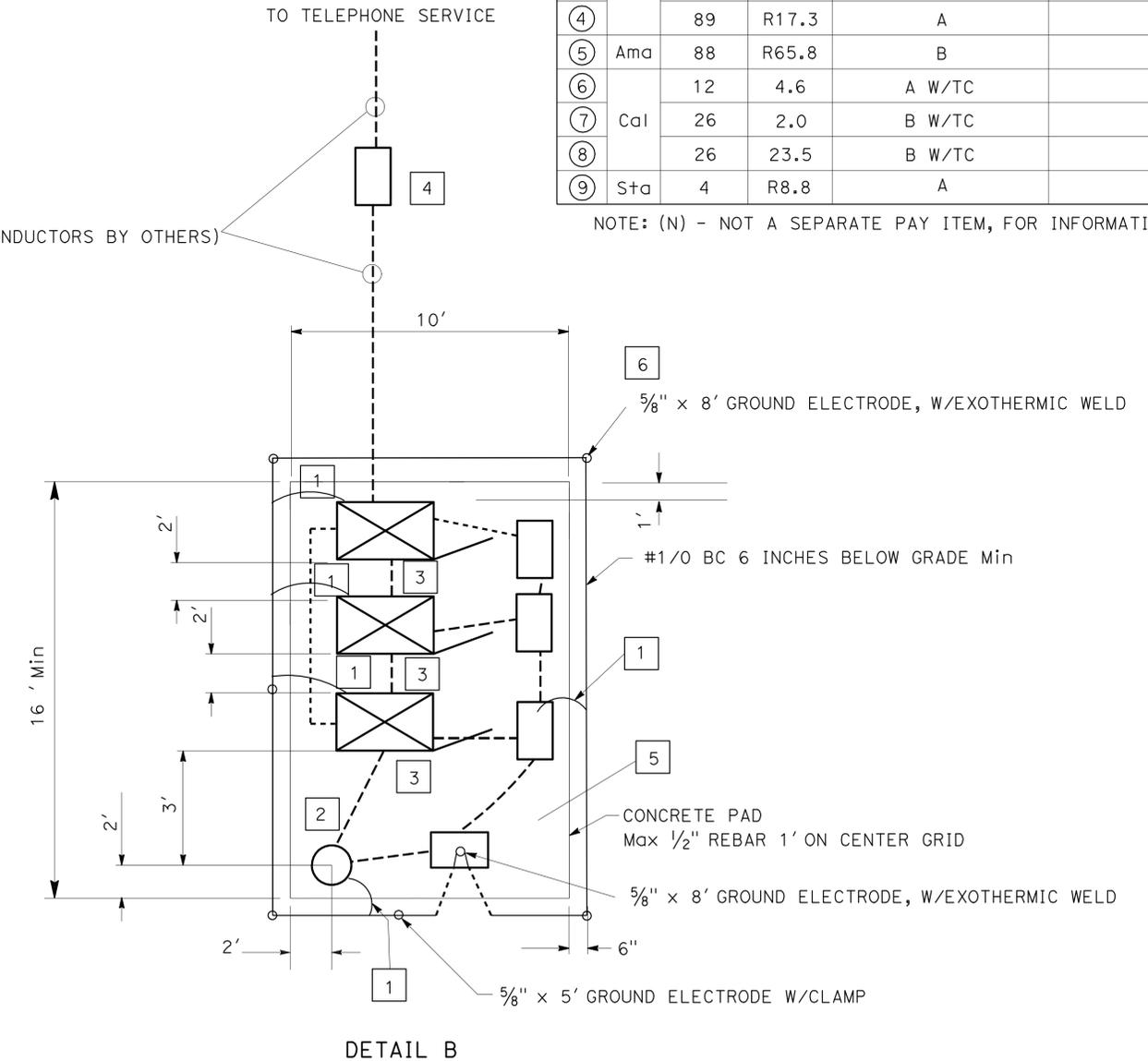
- 1 ALL METAL PARTS OF CABINETS AND CONDUIT ARE BONDED TO THE SYSTEM LOOP GROUND USING BC #6. ALL TERMINATIONS TO BE APPROVED BY THE ENGINEER.
- 2 35' FIBERGLASS ANTENNA POLE, STATE-FURNISHED. SEE SHEET SES-1 FOR POLE FOUNDATION DETAIL.
- 3 CABINETS MODEL 332, STATE-FURNISHED.
- 4 TELEPHONE SERVICE TO BE INSTALLED BY THE TELCO UTILITY PROVIDER FROM A SERVICE POINT TO A No. 5 PULL BOX WITH A METAL COVER INSTALLED WITHIN STATE R/W.
- 5 CONCRETE PAD SHALL BE STAINED TO FEDERAL STANDARD 595B, No. 31090 WITH ENGINEER'S APPROVAL PRIOR TO THE COMPLETION OF EACH SITE.
- 6 VALVE BOX TO BE INSTALLED AT EACH GROUND ELECTRODE JUNCTION. SEE SHEET E-2 FOR DETAIL.

Loc	Co	ROUTE	PM	CABINET DETAIL	IMPORTED MATERIAL (SHOULDER BACKING) (N) TON
①	Alp	4	23.0	A	2.8
②		88	R5.4	B	
③		89	10.9	B	3.3
④		89	R17.3	A	2.8
⑤	Ama	88	R65.8	B	
⑥	Cal	12	4.6	A W/TC	
⑦		26	2.0	B W/TC	
⑧		26	23.5	B W/TC	
⑨	Sta	4	R8.8	A	

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



DETAIL A



DETAIL B

ABBREVIATION

BC - BARE COPPER

ROADSIDE REPEATER LAYOUT

**RADIO COMMUNICATION
(800 MHz RADIO REPEATER SITE)**

NO SCALE **E-1**

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION MAINTENANCE
 FUNCTIONAL SUPERVISOR ALVIN MANGINDIN
 CALCULATED-DESIGNED BY THOA HUYNH
 REVISOR BY THOA HUYNH
 BRUCE SUMIDA
 BS
 12/31/09

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans MAINTENANCE

FUNCTIONAL SUPERVISOR
 ALVIN MANGINDIN

CALCULATED-DESIGNED BY
 CHECKED BY

BRUCE SUMIDA
 THOA HUYNH

REVISED BY
 DATE REVISED

BS
 12/31/09

NOTES:

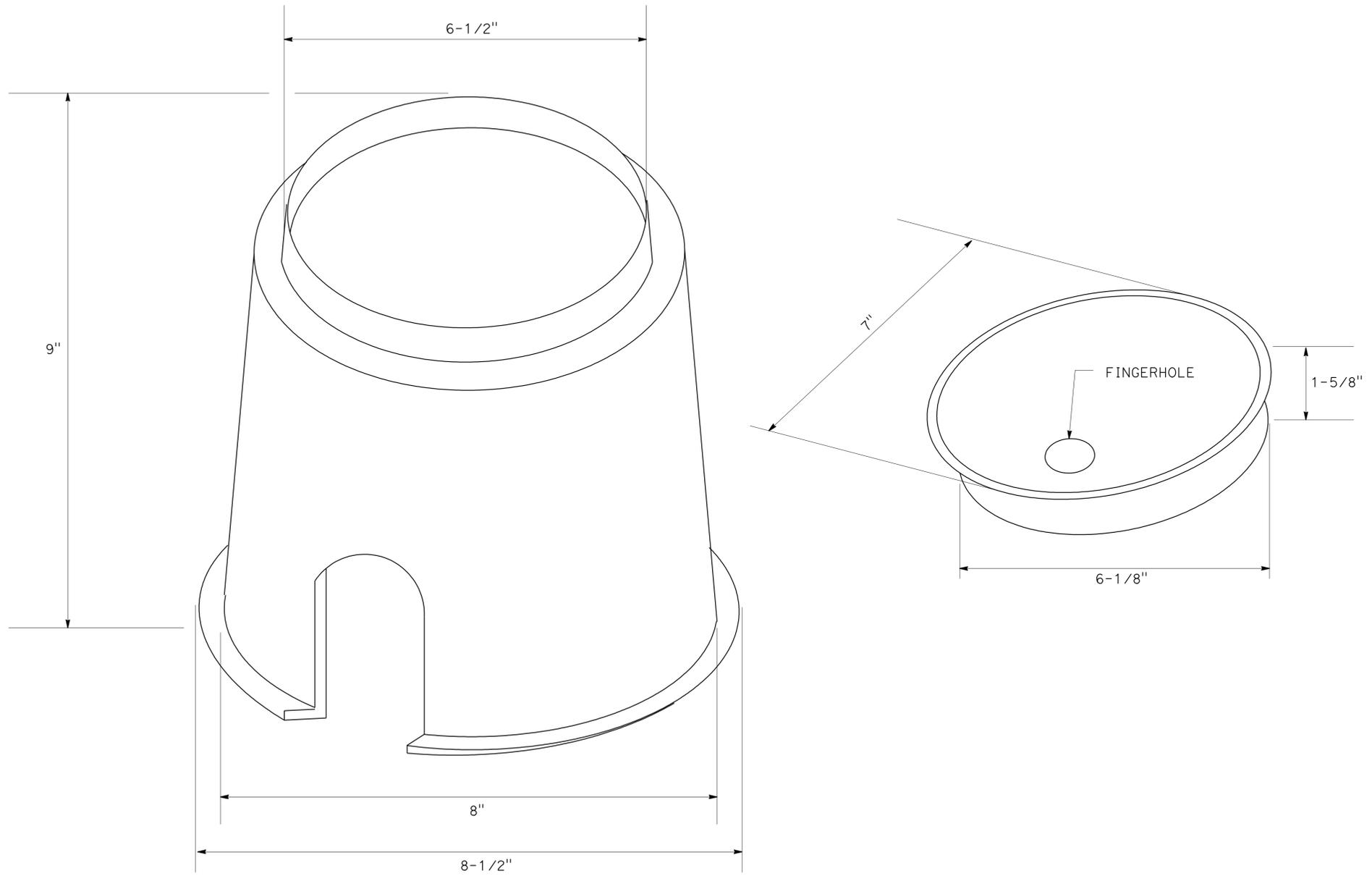
1. ALL DIMENSIONS ± 1"
2. TOP OF VALVE COVER TO BE SET AT GRADE LEVEL FOR INSTALLATION AT EACH GROUND ELECTRODE.

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
10	Alp, Ama, Cal, Sta	4, 12, 26, 88, 89	Var	8	15

Bruce G. Sumida 1/4/10
 REGISTERED CIVIL ENGINEER DATE
 2-22-10
 PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
 BRUCE G. SUMIDA
 No. 51870
 Exp. 6/30/10
 CIVIL
 STATE OF CALIFORNIA

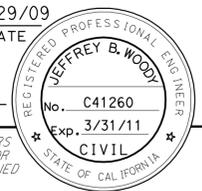
THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.



**RADIO COMMUNICATION
 (VALVE BOX)**

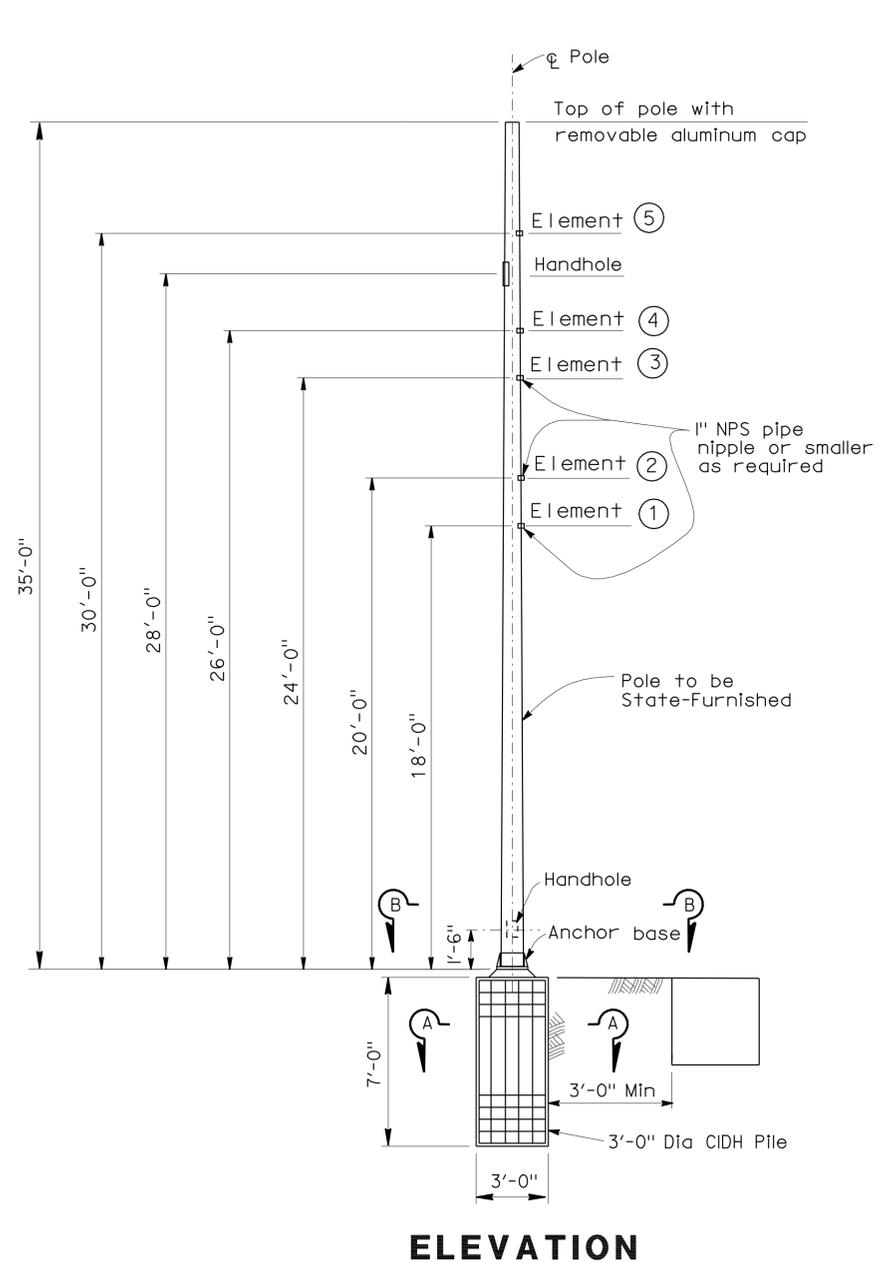
NO SCALE

E-2

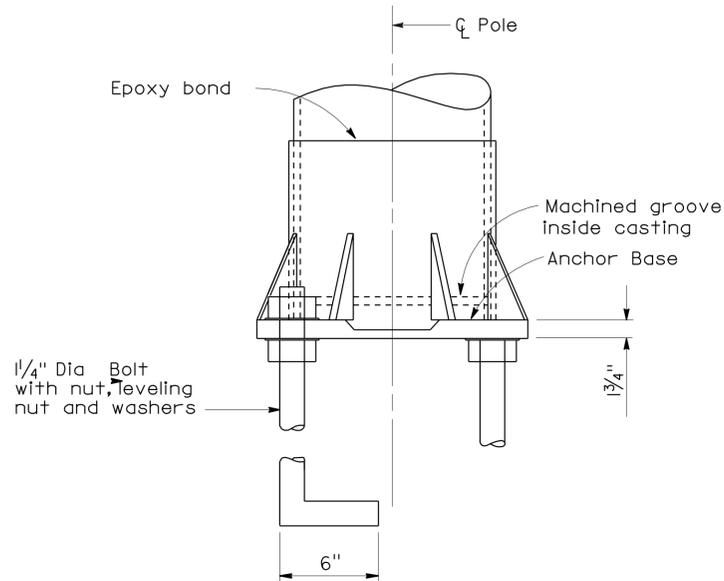


Fiberglass Pole Type	Pole Data					Anchor Base		
	"A" Height (ft)	Min. OD (in)		Thick-ness (in)	Weight (lbs)	Thickness "+" (in)	Anchor Bolts	
		Base	Top				Size	Bolt Circle
35 F	35'	11 1/4	6 7/8	0.3310	282	1 3/4	1 1/4" x 3'-0" x 6"	1'-5"

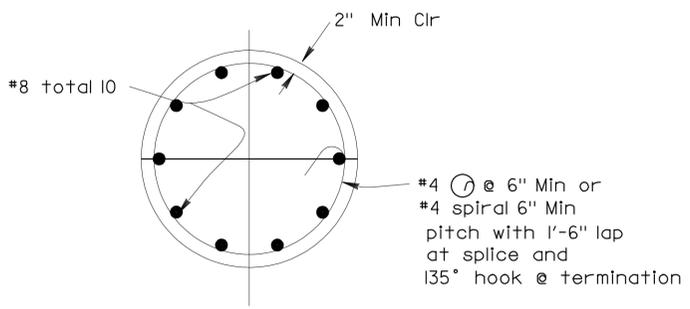
Element No.	Height above base plate	Element Type	Total	Area per Element ft ²
①	18'-0"	Dish antenna	1	3.25
②	20'-0"	Dish antenna	1	3.25
③	24'-0"	Antenna (400 MHz)	1	5.60
④	26'-0"	Solar Panel	1	3.25
⑤	30'-0"	Antenna (800 MHz)	2	6.25



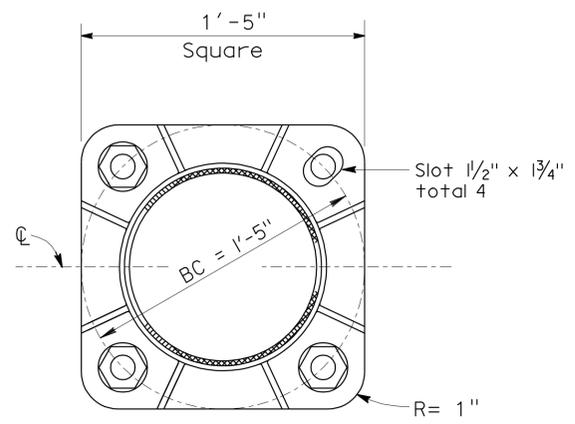
ELEVATION



ALUMINUM ANCHOR BASE ELEVATION



SECTION A-A



SECTION B-B

GENERAL NOTES:

- Specifications
- Design: AASHTO specifications for the design and construction of structural supports for highway signs, dated 2001.
- Construction: Standard specifications and the special provisions.
- Wind Loading: 85 mph AASHTO

Notes:

- During pole erection, the post shall be raked as necessary with the use of leveling nuts to provide a plumb pole.
- For locations, see "Layouts."
- All connections to fiberglass pole to be epoxy bond except when noted otherwise.
- The contractor shall verify all controlling field dimensions before ordering or fabricating any material.

**RADIO COMMUNICATION POLE
NO SCALE**

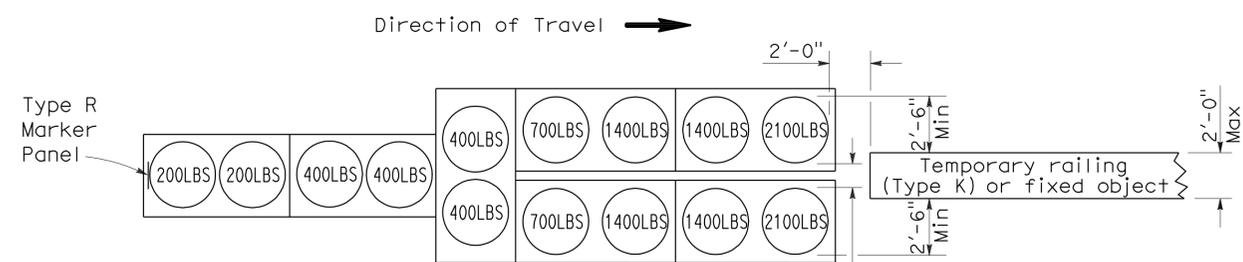
BRANCH CHIEF <i>Jeffrey B. Woody</i>	DESIGN	BY J WOODY	CHECKED X	STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION	DIVISION OF ENGINEERING SERVICES DESIGN AND TECHNICAL SERVICES SPECIAL DESIGNS BRANCH	BRIDGE NO.	N/A	RADIO COMMUNICATION POLE 800 MHz RADIO REPEATER SITE	SES-1
	DETAILS	BY D W JUSTICE Jr	CHECKED J WOODY			POST MILE	Var		
	QUANTITIES	BY X	CHECKED X			POST MILE	Var		

ORIGINAL SCALE IN INCHES FOR REDUCED PLANS: 0 1 2 3
 CU 10 EA 0U6901
 DISREGARD PRINTS BEARING EARLIER REVISION DATES
 REVISION DATES: 12-3-09, 1-27-10
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DATE PLOTTED => 01-MAR-2010
TIME PLOTTED => 09:23

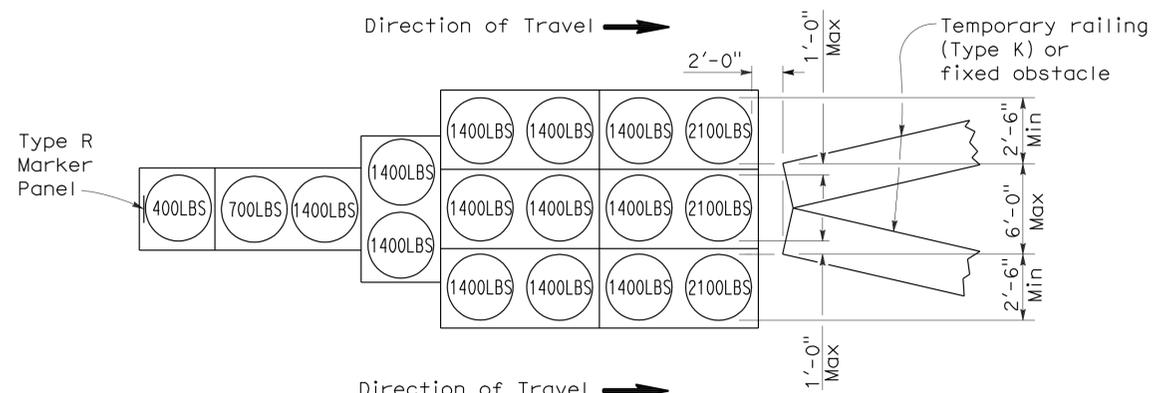
To accompany plans dated 2-22-10

2006 REVISED STANDARD PLAN RSP T1A



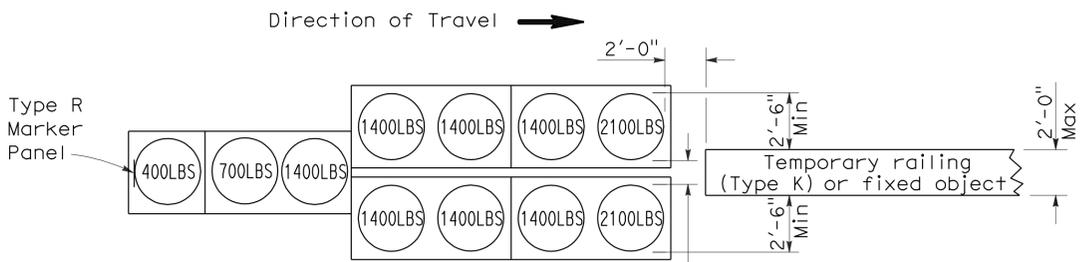
ARRAY 'TU14'

Approach speed 45 mph or more



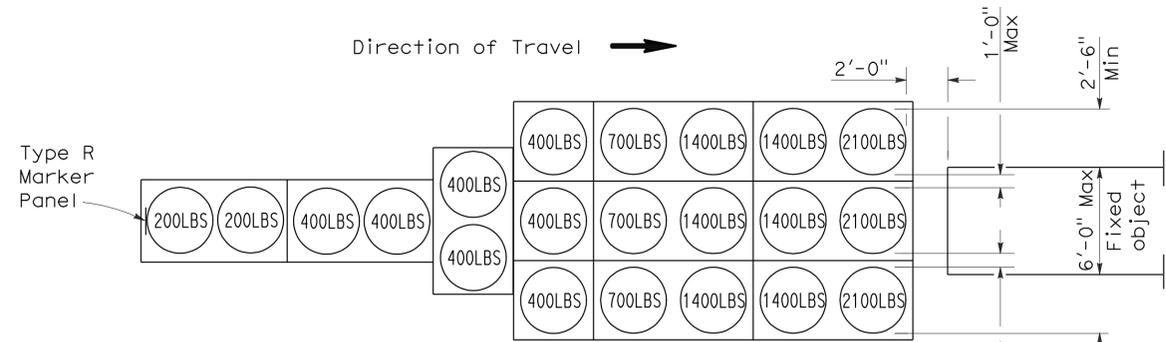
ARRAY 'TU17'

Approach speed less than 45 mph



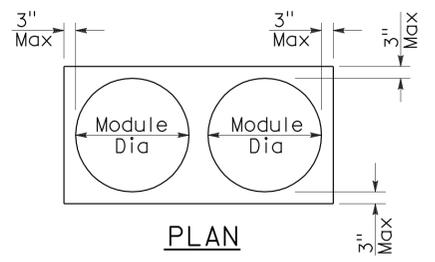
ARRAY 'TU11'

Approach speed less than 45 mph

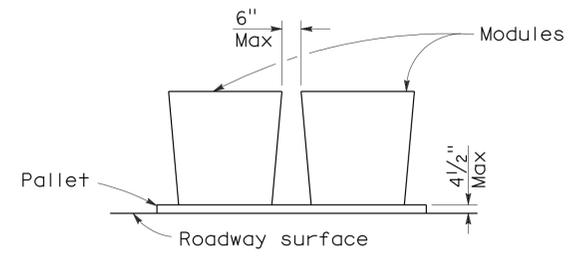


ARRAY 'TU21'

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

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
10	Alp, Ama, Cal, Sta	4, 12, 26, 88, 89	Var	11	15

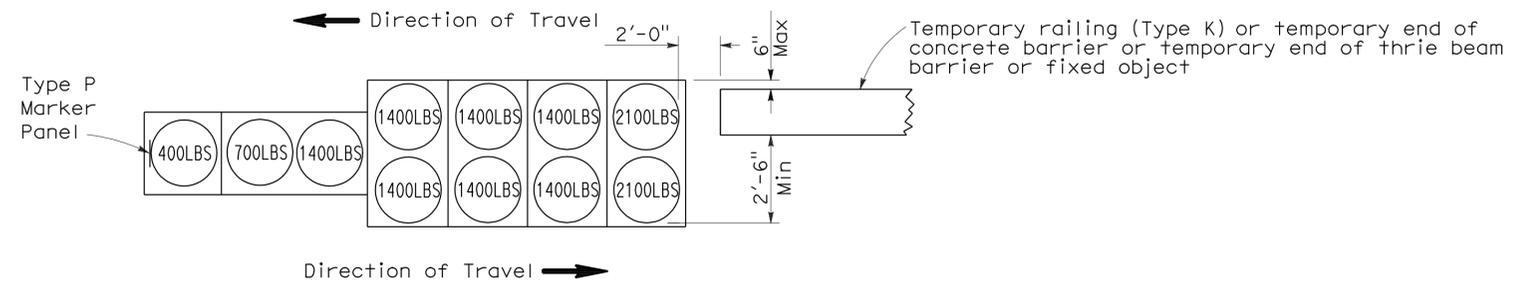
Randell D. Hiatt
REGISTERED CIVIL ENGINEER

June 6, 2008
PLANS APPROVAL DATE

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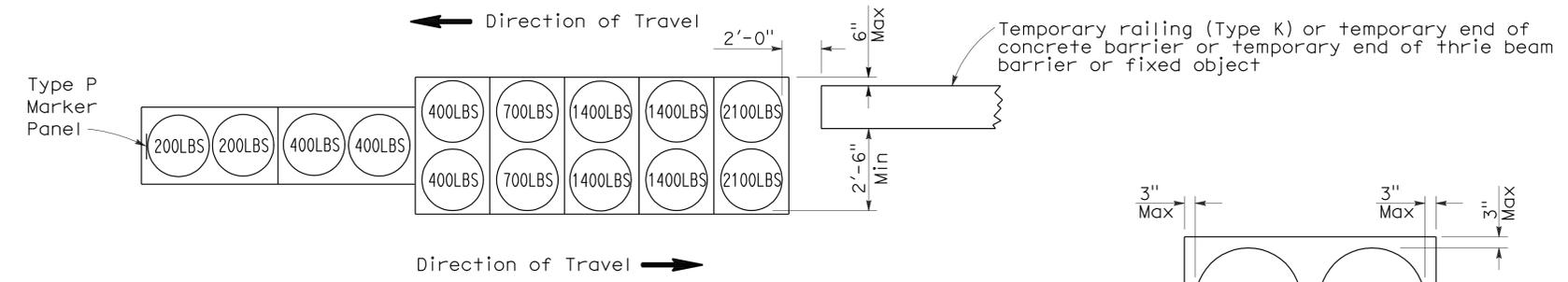
REGISTERED PROFESSIONAL ENGINEER
Randell D. Hiatt
No. C50200
Exp. 6-30-09
CIVIL
STATE OF CALIFORNIA

To accompany plans dated 2-22-10



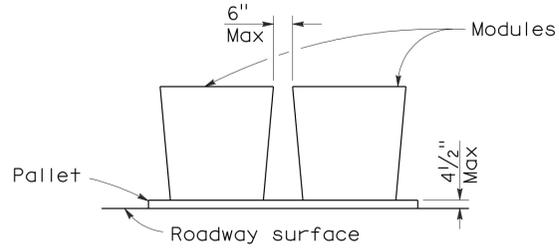
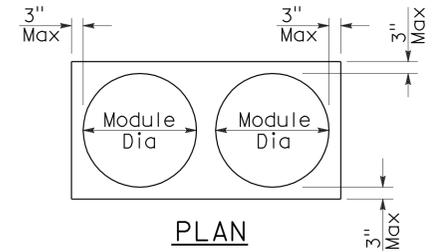
ARRAY 'TB11'

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
10	Alp, Ama, Cal, Sta	4, 12, 26, 88, 89	Var	12	15

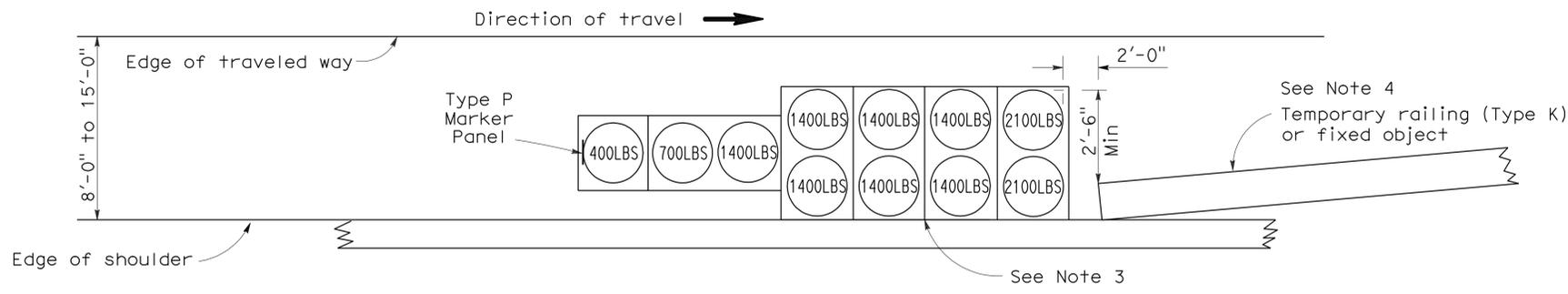
Randell D. Hiatt
REGISTERED CIVIL ENGINEER

June 6, 2008
PLANS APPROVAL DATE

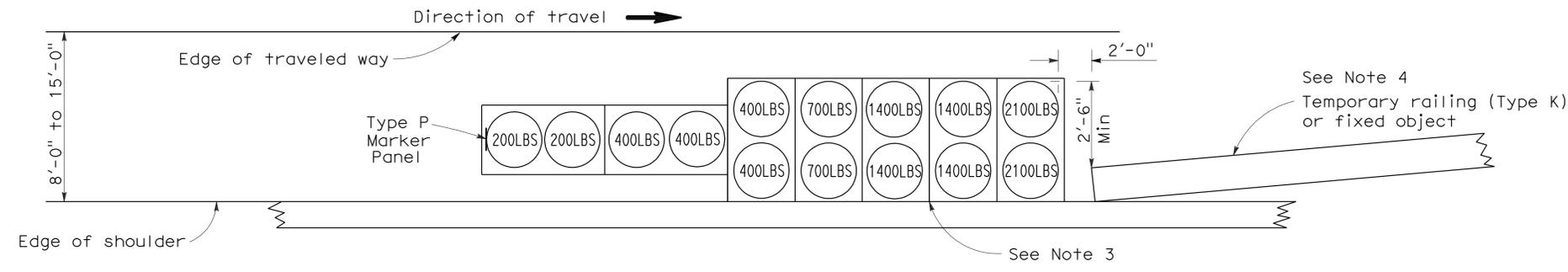
Randell D. Hiatt
REGISTERED PROFESSIONAL ENGINEER
No. C50200
Exp. 6-30-09
CIVIL
STATE OF CALIFORNIA

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To accompany plans dated 2-22-10



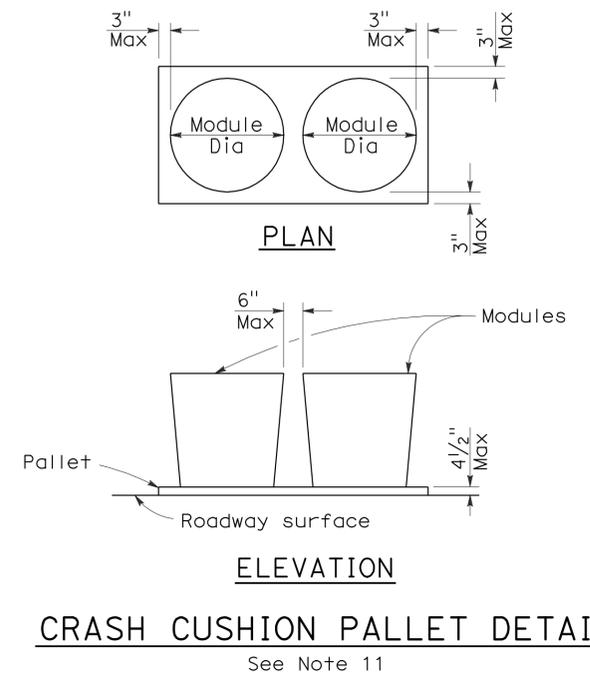
ARRAY 'TS11'
Approach speed less than 45 mph
See Note 9



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

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.



CRASH CUSHION PALLET DETAIL
See Note 11

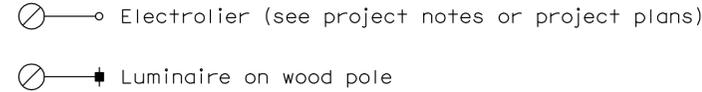
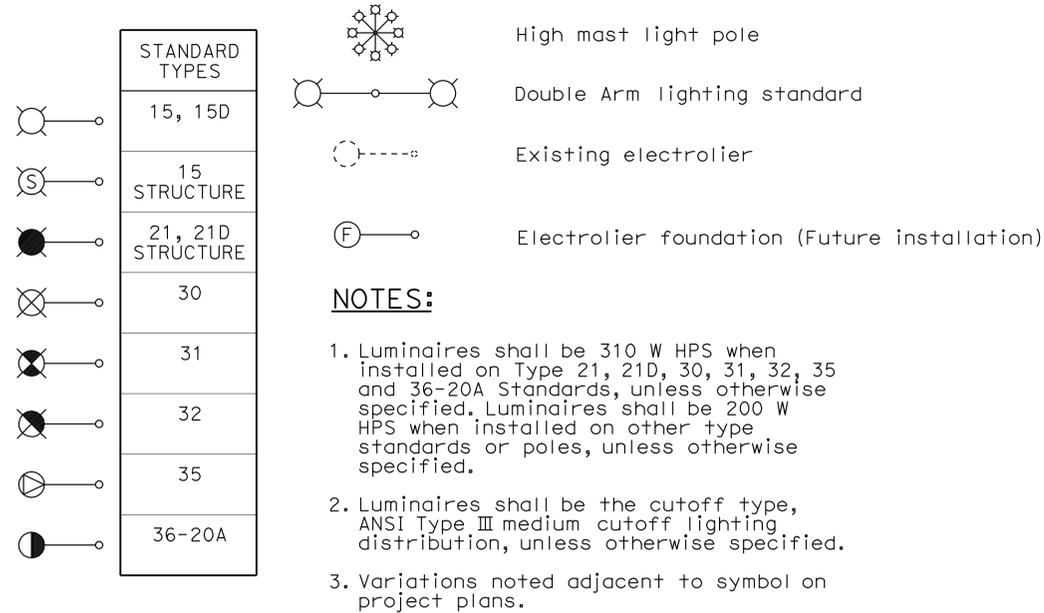
STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
**TEMPORARY CRASH CUSHION,
SAND FILLED
(SHOULDER INSTALLATIONS)**
NO SCALE

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

ELECTROLIERS



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
10	Alp, Ama, Cal, Sta	4, 12, 26, 88, 89	Var	13	15

Jeffery G. McRae
REGISTERED ELECTRICAL ENGINEER

October 5, 2007
PLANS APPROVAL DATE

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 2-22-10

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
10	Alp, Ama, Cal, Sta	4, 12, 26, 88, 89	Var	14	15

Jeffrey G. McRae
 REGISTERED ELECTRICAL ENGINEER
 October 5, 2007
 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.

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

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
		Conduit riser in/on structure or service pole

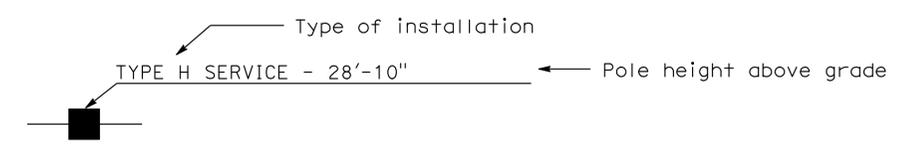
SIGNAL EQUIPMENT

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 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
		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
		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

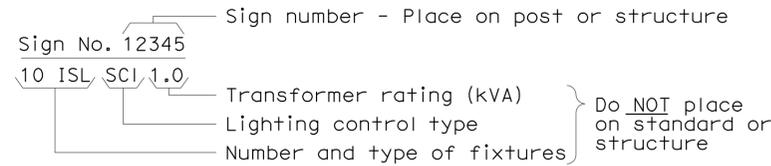
RSP ES-1B DATED OCTOBER 5, 2007 SUPERCEDES STANDARD PLAN ES-1B
 DATED MAY 1, 2006 - PAGE 401 OF THE STANDARD PLANS BOOK DATED MAY 2006.

REVISED STANDARD PLAN RSP ES-1B

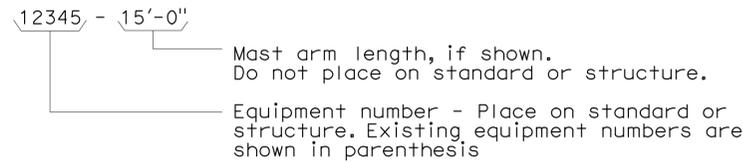
2006 REVISED STANDARD PLAN RSP ES-1B

EQUIPMENT IDENTIFICATION

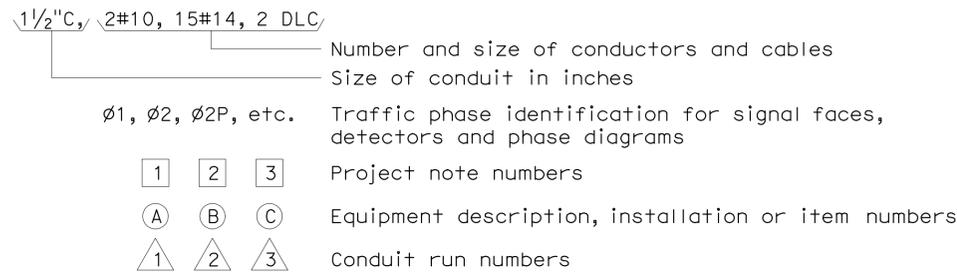
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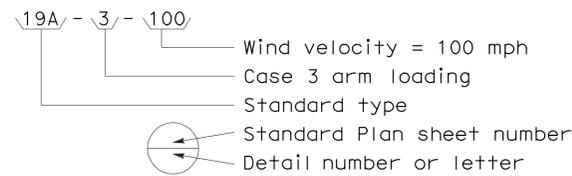
ELECTROLIER OR EQUIPMENT IDENTIFICATION NUMBER:



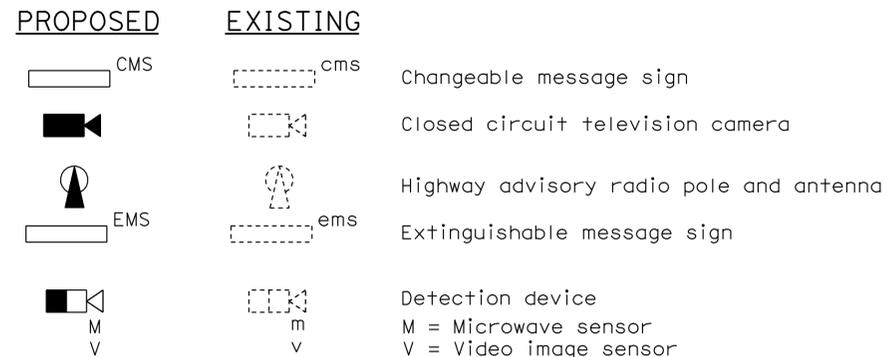
CONDUIT AND CONDUCTOR IDENTIFICATION:



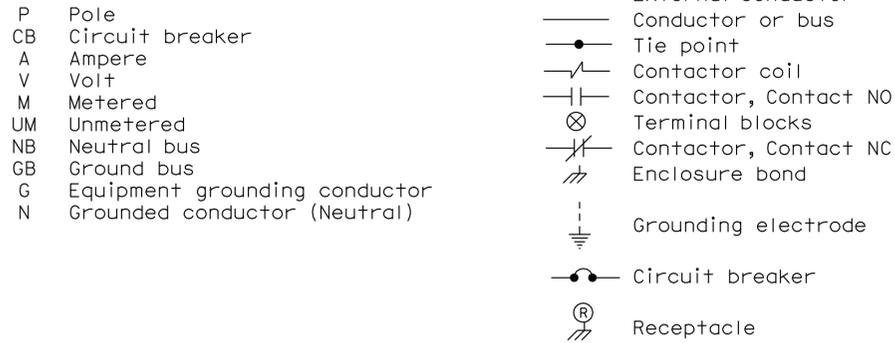
SIGNAL AND LIGHTING STANDARD (TYPICAL DESIGNATION):



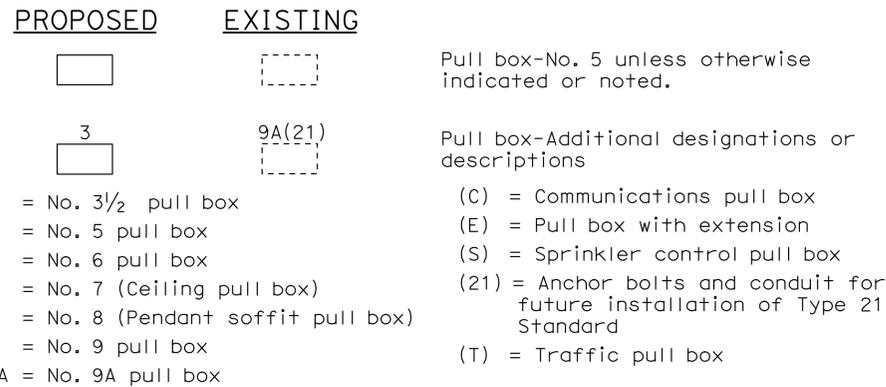
MISCELLANEOUS EQUIPMENT



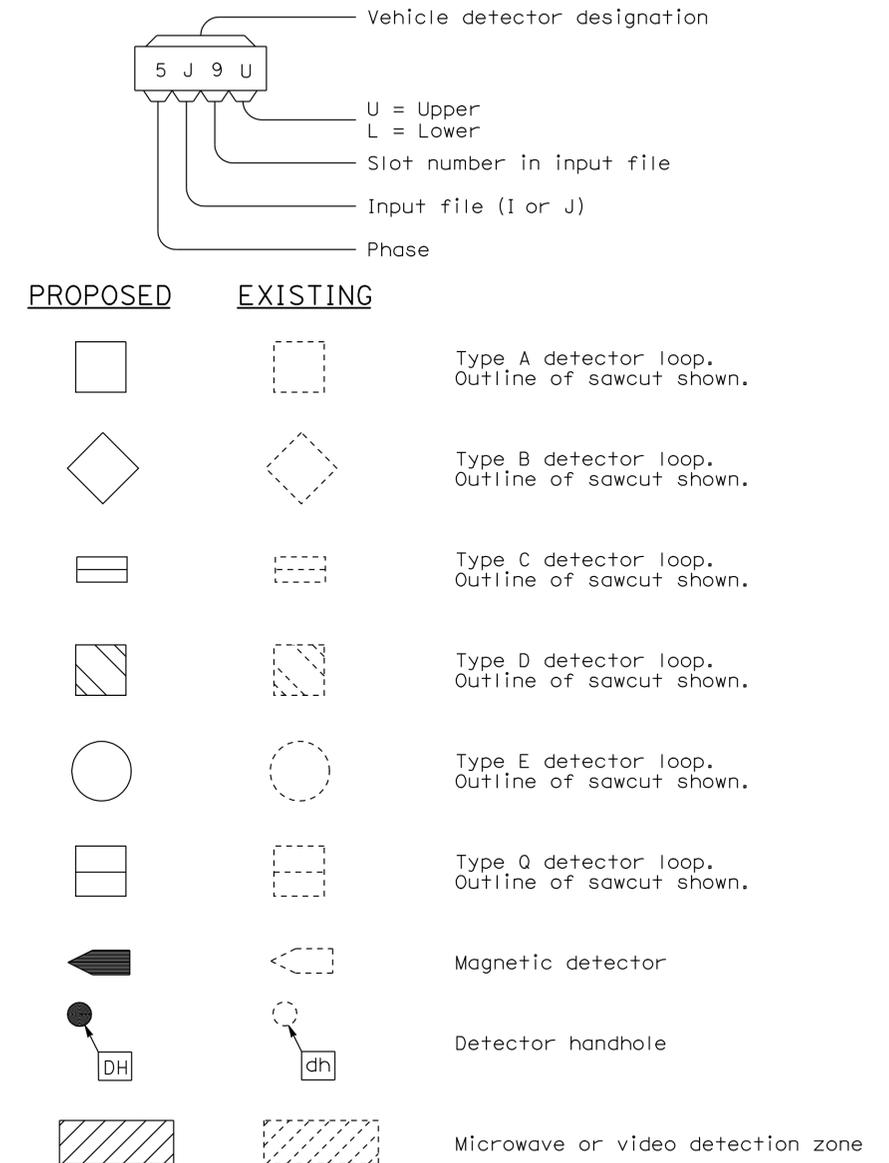
WIRING DIAGRAM LEGEND



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

2006 REVISED STANDARD PLAN RSP ES-1C