

INDEX OF PLANS

SHEET No.	DESCRIPTION
1	TITLE AND LOCATION MAP
2	TYPICAL CROSS SECTION
3-7	LAYOUT
8-11	CONSTRUCTION DETAILS
12	EROSION CONTROL PLANS
13	EROSION CONTROL QUANTITIES
14	SUMMARY OF QUANTITIES
15	TRAFFIC CONTROL SYSTEM
16	REVISED STANDARD PLAN

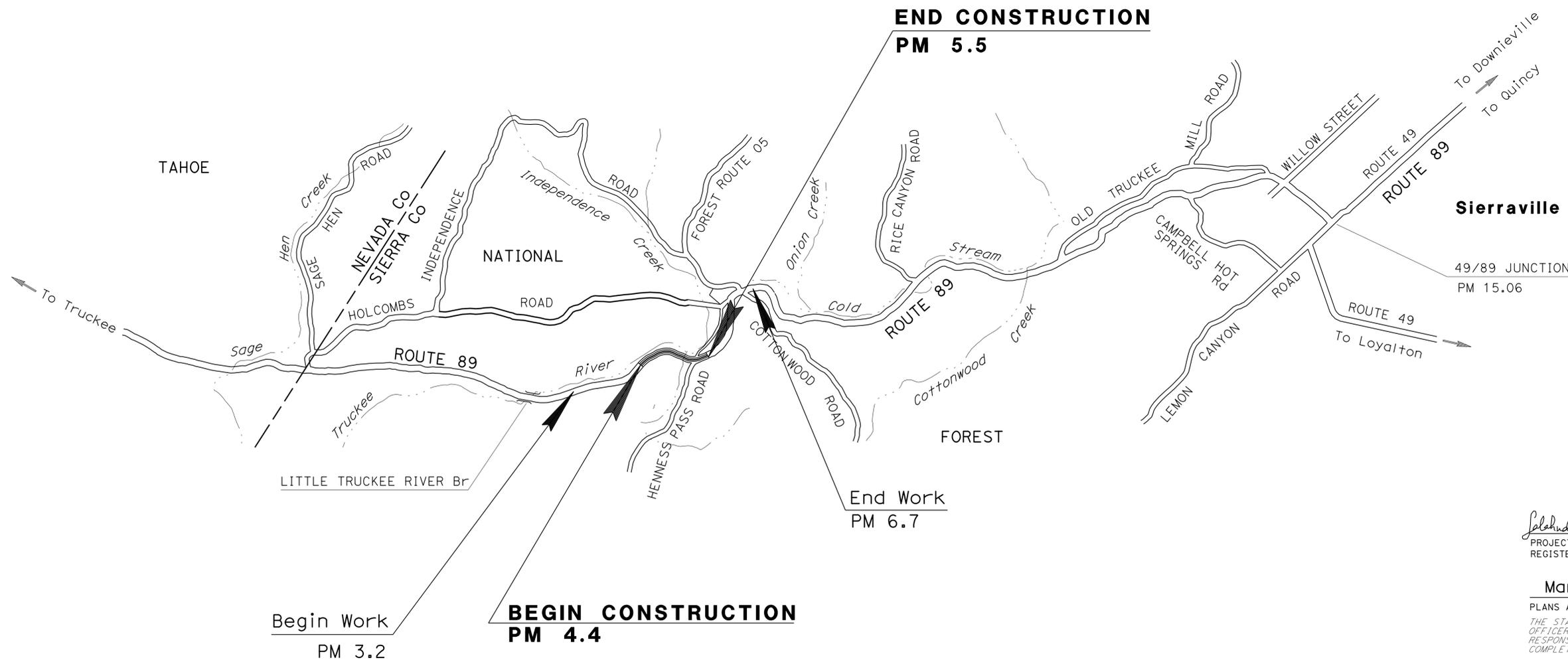
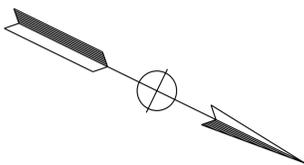
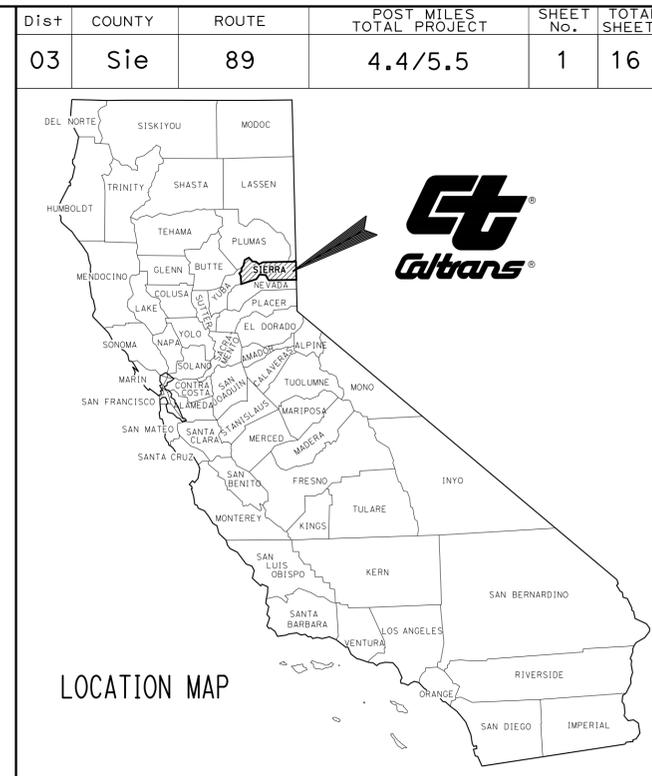
THE STANDARD PLANS LIST APPLICABLE TO THIS CONTRACT IS INCLUDED IN THE NOTICE TO BIDDERS AND SPECIAL PROVISIONS BOOK.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

STPE-P089(106)E

PROJECT PLANS FOR CONSTRUCTION ON
STATE HIGHWAY
IN SIERRA COUNTY ABOUT 12 MILES NORTH
OF TRUCKEE FROM 1.6 MILES NORTH OF LITTLE TRUCKEE
RIVER BRIDGE TO 1.0 MILE SOUTH OF COTTONWOOD ROAD

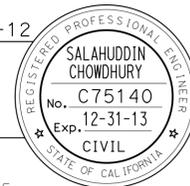
TO BE SUPPLEMENTED BY STANDARD PLANS DATED 2010



PROJECT MANAGER
SUKHWINDER BAJWA

DESIGN ENGINEER
FERMIN BARRIGA

Salahuddin Chowdhury 12-10-12
PROJECT ENGINEER DATE
REGISTERED CIVIL ENGINEER



March 11, 2013
PLANS APPROVAL DATE

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

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

NO SCALE

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Sie	89	4.4/5.5	2	16

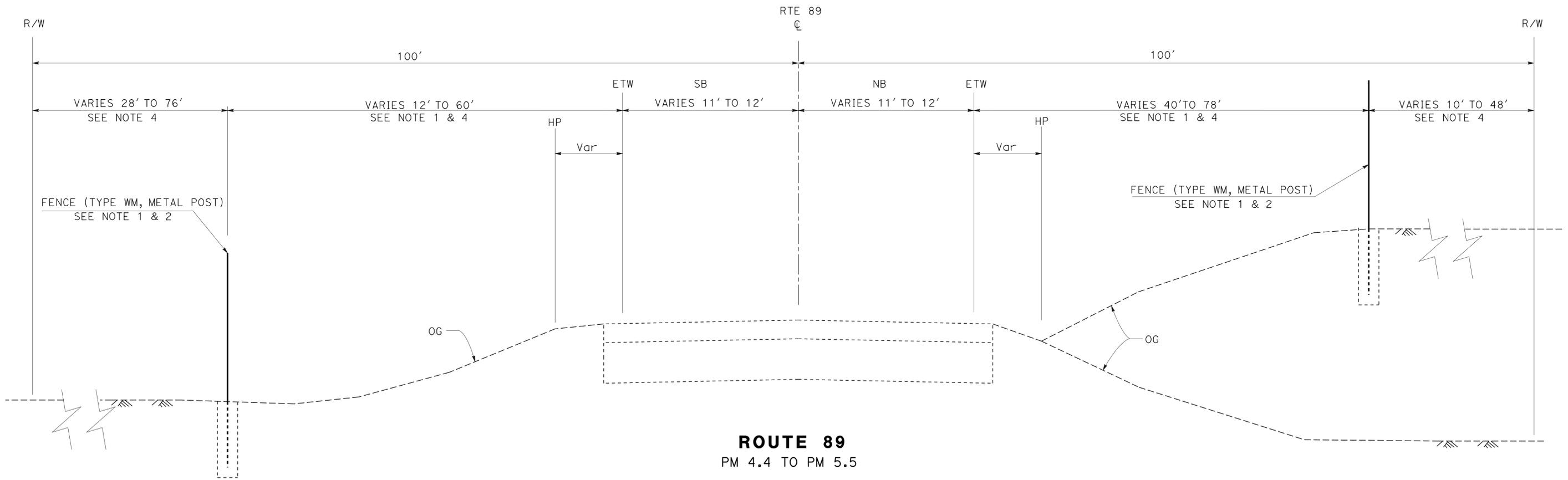
Salahuddin Chowdhury	12-10-12
REGISTERED CIVIL ENGINEER	DATE
3-11-13	
PLANS APPROVAL DATE	

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

NOTES:

1. EXACT LOCATION AND ALIGNMENT OF FENCE (TYPE WM, METAL POST) TO BE DETERMINED BY THE ENGINEER.
2. SEE CONSTRUCTION DETAIL C-1 FOR 8' HIGH FENCE (TYPE WM, METAL POST) AND C-2 FOR WIRE MESH GATE DETAILS.
3. FOR Exist WILDLIFE UNDERCROSSING AND Exist FENCE (TYPE WM, METAL POST) AT PM 5.04, SEE L-4.
4. SEE LAYOUT SHEETS FOR LOCATION OF FENCE (TYPE WM, METAL POST).
5. SEE LAYOUT SHEETS (L-1, L-2, L-3) AND CONSTRUCTION DETAILS (C-3) FOR RSP PLACEMENT AS A WILDLIFE BARRIER (NOT SHOWN).

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION	FUNCTIONAL SUPERVISOR	CALCULATED/DESIGNED BY	REVISOR
Caltrans	FERMIN BARRIGA	CHECKED BY	DATE
NORTH REGION DIVISION OF ENGINEERING	FERMIN BARRIGA		



ROUTE 89
PM 4.4 TO PM 5.5

TYPICAL CROSS SECTION

NO SCALE

X-1

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans NORTH REGION DIVISION OF ENGINEERING

FUNCTIONAL SUPERVISOR: FERMIN BARRICA
 CALCULATED/DESIGNED BY: FERMIN BARRICA
 CHECKED BY: FERMIN BARRICA
 SALAHUDDIN CHOWDHURY
 REVISOR: FERMIN BARRICA
 DATE: 12-10-12

NOTES:

- FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
- FENCE (TYPE WM, METAL POST) OFFSET MAY VARY FROM 40' TO 50' TO AVOID OBSTRUCTIONS SUCH AS TREES AND EXISTING ROADSIDE FEATURES.
- EXACT LOCATION AND ALIGNMENT OF FENCE (TYPE WM, METAL POST) TO BE DETERMINED BY THE ENGINEER.
- SEE CONSTRUCTION DETAILS C-1 FOR FENCE (TYPE WM, METAL POST) DETAILS.
- IN CLOSE PROXIMITY TO LITTLE TRUCKEE RIVER, PLACE RSP (1/2 TON, METHOD A) MANUALLY WITHOUT DUMPING ON EXISTING RSP AND SLOPE TO FILL GAPS TO FUNCTION AS A WILDLIFE BARRIER. TO PROTECT THE RIVER, NO EXCAVATION OF FOOTING TRENCH AND SOIL DISTURBANCE WILL BE ALLOWED.
- SEE CONSTRUCTION DETAILS C-4 FOR WILDLIFE ESCAPE RAMPS DETAILS.
- EXACT LOCATION OF WILDLIFE ESCAPE RAMP WILL BE DETERMINED BY THE ENGINEER.
- SEE CONSTRUCTION DETAILS C-2 FOR DEER FENCE (TYPE G, WOOD POST).
- INSTALL 8" FIBER ROLL AROUND PERIMETER OF IMPORTED BORROW AT WILDLIFE ESCAPE RAMPS, FENCE (TYPE WM, METAL POST) ON SLOPE CLOSE PROXIMITY TO LITTLE TRUCKEE RIVER AND TWO EARTHEN MOUNDS.
- FENCE (TYPE WM, METAL POST) OFFSET MAY VARY FROM 50' TO 60' TO AVOID OBSTRUCTION AS DIRECTED BY THE ENGINEER.
- SEE CONSTRUCTION DETAILS C-2 FOR WIRE MESH GATE DETAILS.
- ALL EXISTING CULVERTS SHOWN FOR REFERENCE ONLY.

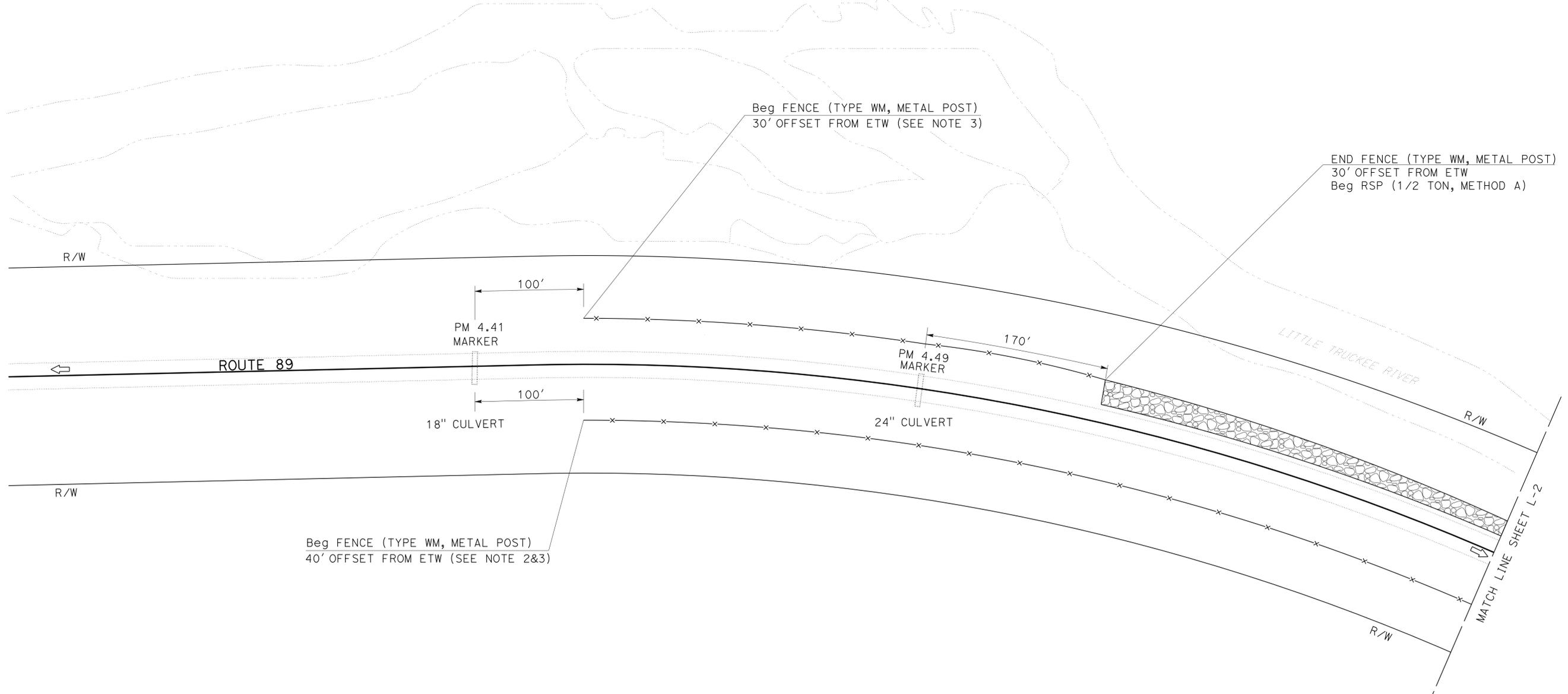
LEGEND

- EARTHEN MOUND
- FENCE (TYPE WM, METAL POST)
- ROCK SLOPE PROTECTION (1/2 TON, METHOD A)
- Exist WILDLIFE UNDERCROSSING (UC)



Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Sie	89	4.4/5.5	3	16

Salahuddin Chowdhury 12-10-12
 REGISTERED CIVIL ENGINEER DATE
 3-11-13
 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.



LAYOUT
 SCALE: 1"=50'
L-1

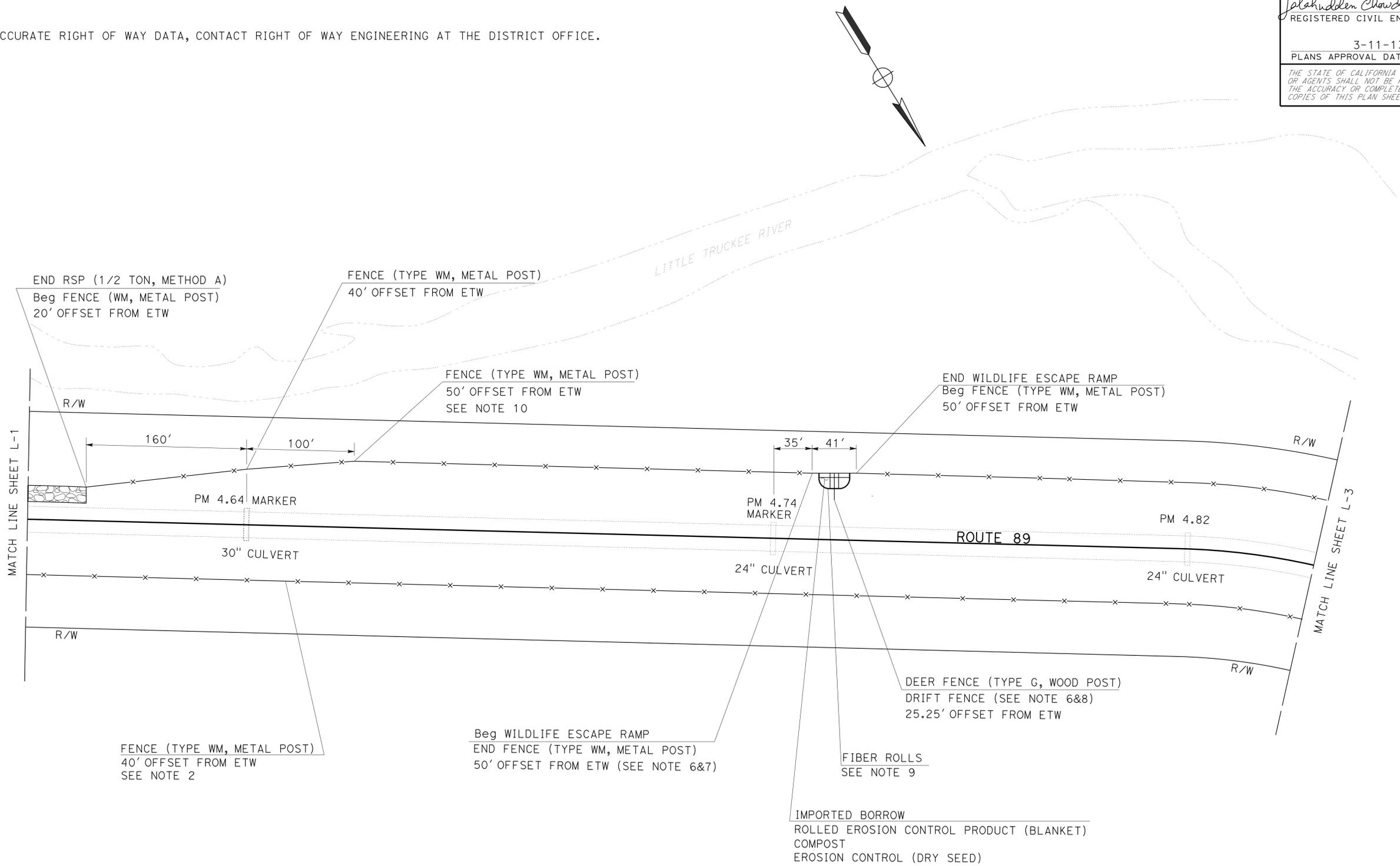
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Sie	89	4.4/5.5	4	16

Salahuddin Chowdhury 12-10-12
 REGISTERED CIVIL ENGINEER DATE
 3-11-13
 PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
 SALAHUDDIN CHOWDHURY
 No. C75140
 Exp. 12-31-13
 CIVIL
 STATE OF CALIFORNIA

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

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



SALAHUDDIN CHOWDHURY
 FERMIN BARRIGA
 FERMIN BARRIGA
 FERMIN BARRIGA
 NORTH REGION DIVISION OF ENGINEERING

LAYOUT
 SCALE: 1"=50'
L-2

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans NORTH REGION DIVISION OF ENGINEERING

NOTES: (THIS SHEET ONLY)

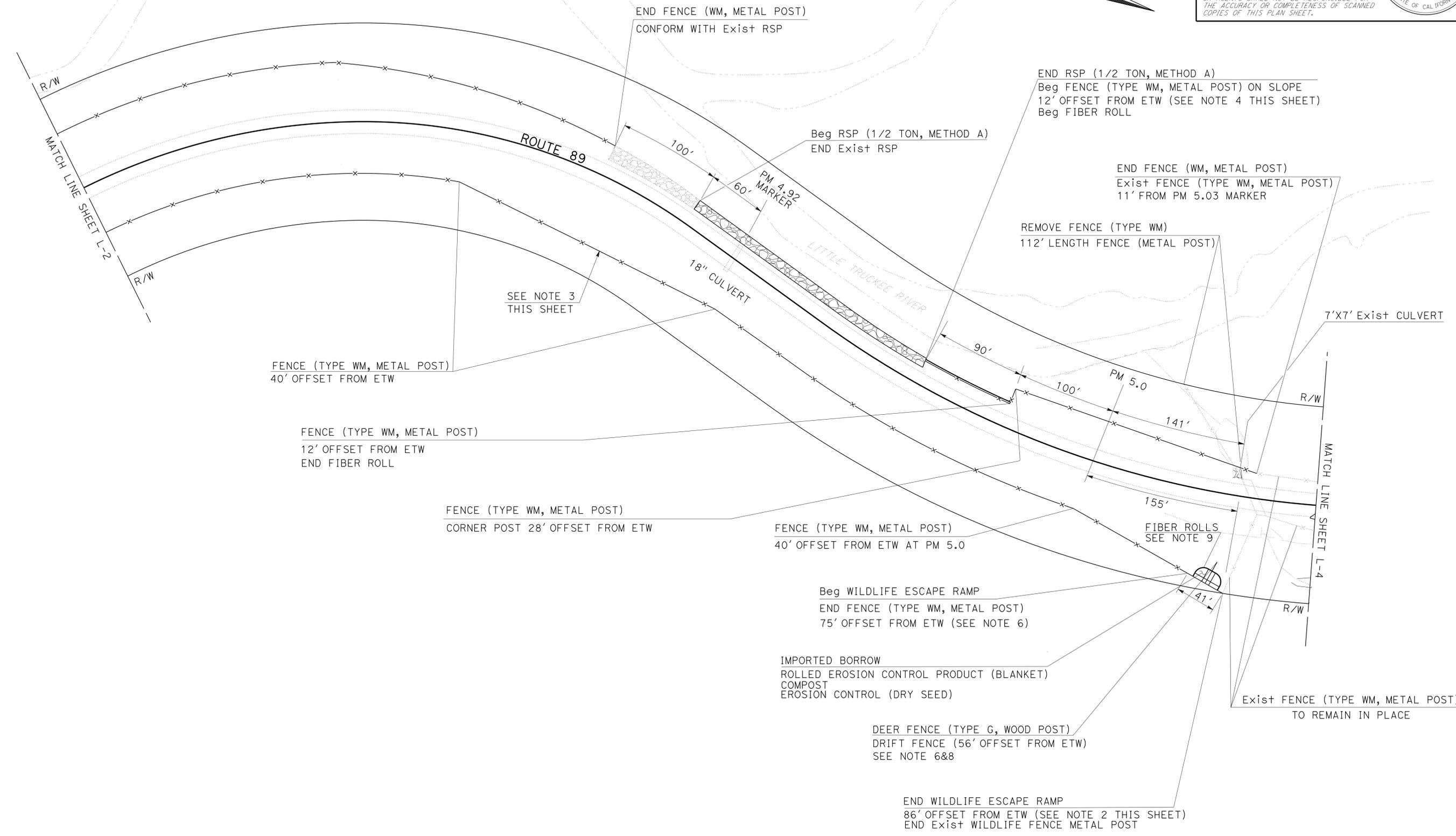
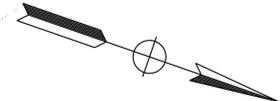
- FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
- DEER FENCE (TYPE G, WOOD POST) WILL CONNECT/TIE WITH Exist FENCE (TYPE WM) METAL END POST.
- FENCE (TYPE WM, METAL POST) WILL CONTINUE BEHIND THE TOP OF HILL.
- TO PROTECT LITTLE TRUCKEE RIVER, FENCE (TYPE WM, METAL POST) AND 8" FIBER ROLL WILL BE INSTALLED ON STEEP SLOPE (12 FT OFFSET FROM ETW) INSTEAD OF RSP (1/2 TON, METHOD A).

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Sie	89	4.4/5.5	5	16

REGISTERED CIVIL ENGINEER: *Salahuddin Chowdhury* 12-10-12
 DATE: 3-11-13
 PLANS APPROVAL DATE: 3-11-13

REGISTERED PROFESSIONAL ENGINEER: SALAHUDDIN CHOWDHURY
 No. C75140
 Exp. 12-31-13
 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.



LAYOUT
 SCALE: 1"=50'
L-3

LAST REVISION DATE PLOTTED => 18-MAR-2013 12-10-12 TIME PLOTTED => 09:40

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Sie	89	4.4/5.5	6	16

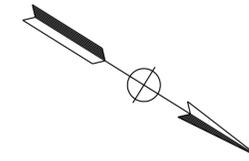
Salahuddin Chowdhury 12-10-12
 REGISTERED CIVIL ENGINEER DATE
 3-11-13
 PLANS APPROVAL DATE

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.

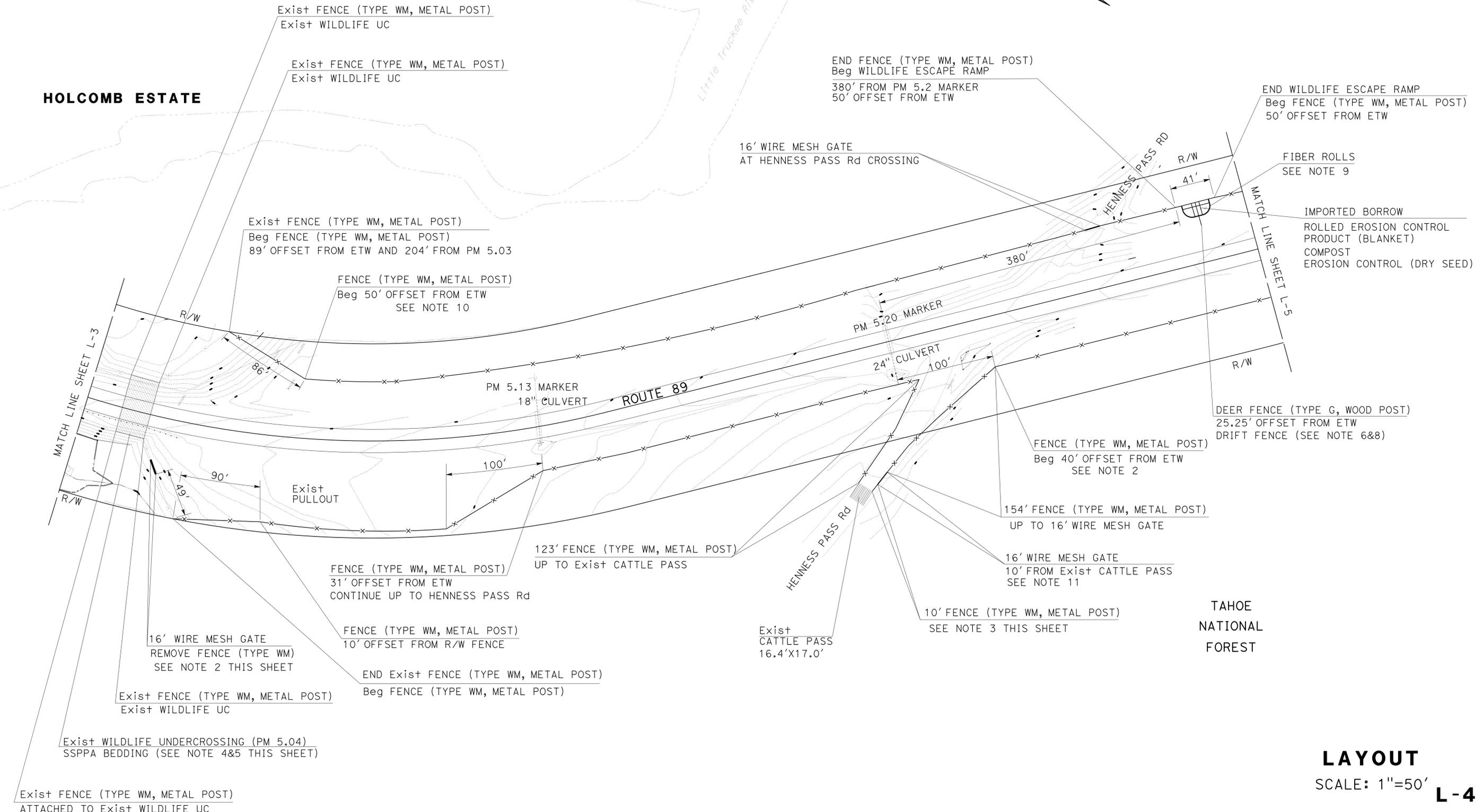
REGISTERED PROFESSIONAL ENGINEER
 SALAHUDDIN CHOWDHURY
 No. C75140
 Exp. 12-31-13
 CIVIL
 STATE OF CALIFORNIA

NOTES: (THIS SHEET ONLY)

- FOR ACCURATE RIGHT OF WAY DATA, CONTACT RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
- REMOVE 16' Exist FENCE (TYPE WM, METAL POST) TO INSTALL 16' WIRE MESH GATE ON Exist WILDLIFE FENCE.
- SEE CONSTRUCTION DETAILS C-3 FOR FENCE DETAILS AT CATTLE PASS.
- PLACE STRUCTURAL STEEL PLATE PIPE ARCH (SSPPA) BEDDING AND BERM INSIDE EXISTING WILDLIFE UNDERCROSSING TO REPAIR AND PREVENT EROSION AS DIRECTED BY THE ENGINEER.
- SEE QUANTITY SHEET Q-1 FOR SSPPA BEDDING AND BERM (IMPORTED BORROW) QUANTITY.



STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans NORTH REGION DIVISION OF ENGINEERING
 FUNCTIONAL SUPERVISOR: FERMIN BARRIGA
 CALCULATED/DESIGNED BY: FERMIN BARRIGA
 CHECKED BY: FERMIN BARRIGA
 REVISIONS: REVISED BY: SALAHUDDIN CHOWDHURY, DATE: FERMIN BARRIGA



LAYOUT
SCALE: 1"=50'
L-4

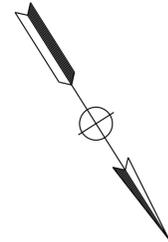
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Sie	89	4.4/5.5	7	16

<i>Salahuddin Chowdhury</i> REGISTERED CIVIL ENGINEER DATE 12-10-12	
3-11-13 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>	

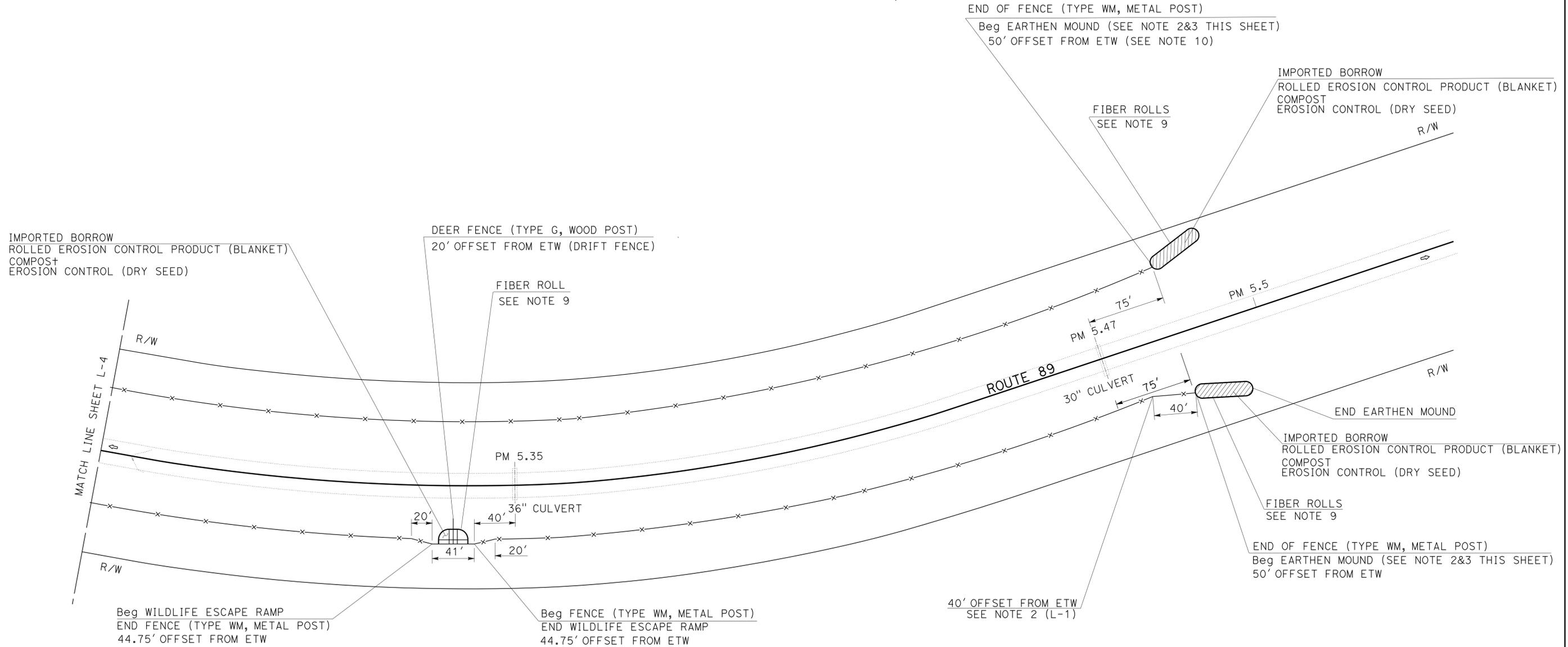
REGISTERED PROFESSIONAL ENGINEER
SALAHUDDIN CHOWDHURY
 No. C75140
 Exp. 12-31-13
 CIVIL
STATE OF CALIFORNIA

NOTES: (THIS SHEET ONLY)

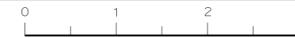
- FOR ACCURATE RIGHT OF WAY DATA, CONTACTN RIGHT OF WAY ENGINEERING AT THE DISTRICT OFFICE.
- EACH EARTHEN MOUND IS 40' LONG, 20' WIDE AND 8' HIGH. SEE CONSTRUCTION DETAILS C-3 FOR EARTHEN MOUND DIMENSIONS.
- EXACT LOCATION OF EARTHEN MOUNDS WILL BE DETERMINED BY THE ENGINEER.



STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
NORTH REGION DIVISION OF ENGINEERING
FUNCTIONAL SUPERVISOR
FERMIN BARRIGA
CALCULATED/DESIGNED BY
CHECKED BY
SALAHUDDIN CHOWDHURY
FERMIN BARRIGA
REVISED BY
DATE REVISED



LAYOUT
SCALE: 1"=50'
L-5



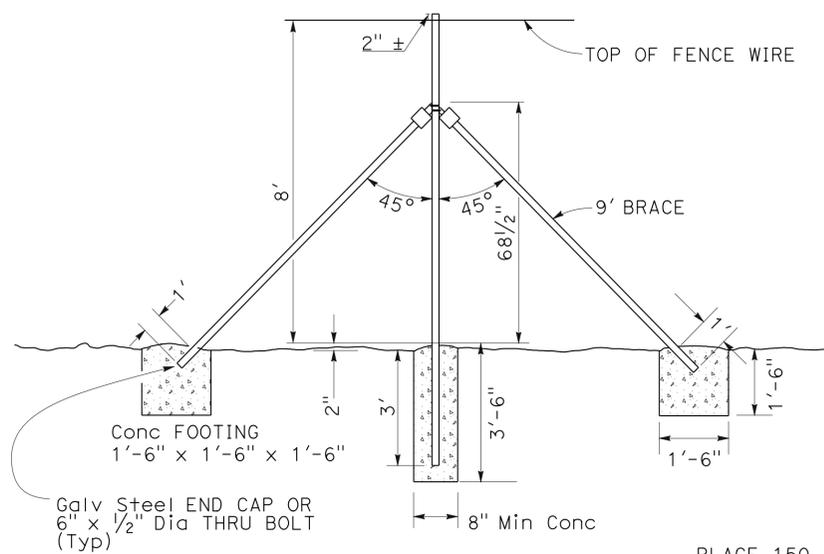
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Sie	89	4.4/5.5	8	16

12-10-12
 REGISTERED CIVIL ENGINEER DATE
 3-11-13
 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.

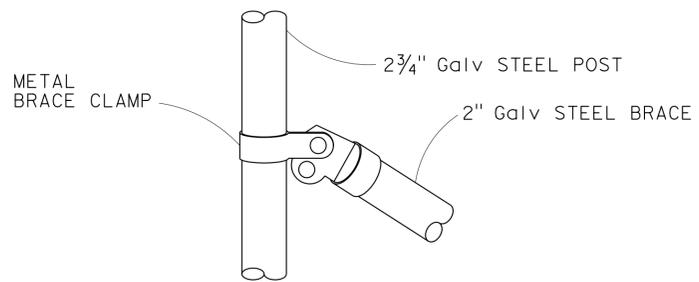
REGISTERED PROFESSIONAL ENGINEER
 SALAHUDDIN CHOWDHURY
 No. C75140
 Exp. 12-31-13
 CIVIL
 STATE OF CALIFORNIA

NOTES: (THIS SHET ONLY)

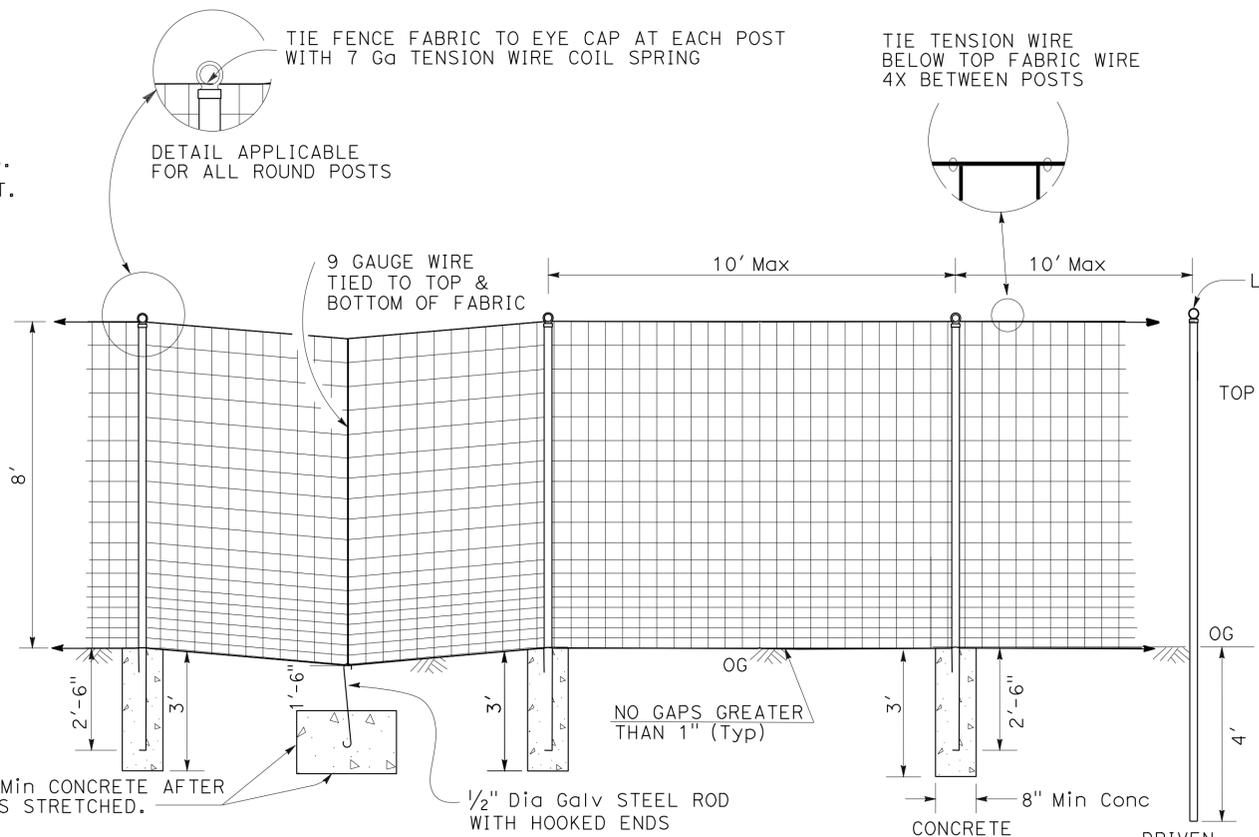
1. LINE POSTS SHALL BE 2 3/8" Galv STEEL, AND SHALL, AT THE OPTION OF THE CONTRACTOR, EITHER BE DRIVEN 4' DEEP OR EMBEDDED Min 2'-6" INTO 8" Dia x 3' DEEP CONCRETE FOOTING.
2. UNLESS OTHERWISE SPECIFIED BY THE ENGINEER THE FABRIC SHALL BE ATTACHED ON THE SIDE OF THE POSTS AWAY FROM THE ROADWAY.
3. FABRIC ROLL ENDS SHALL TERMINATE AT AND BE SECURELY ATTACHED TO POSTS.
4. WHEN VERTICAL ALIGNMENT CHANGES OVER 3 FT IN 10 FT USE LINE BRACE POST.
5. INSTALL BRACE POST ASSEMBLY AT 400' INTERVALS.



PULL POST ASSEMBLY (Mod)

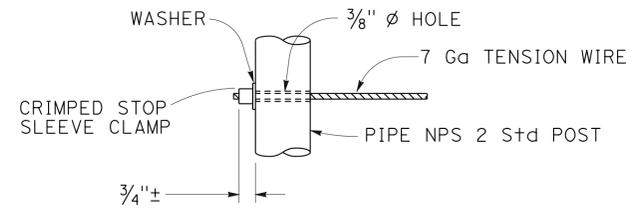


BRACKET DETAIL

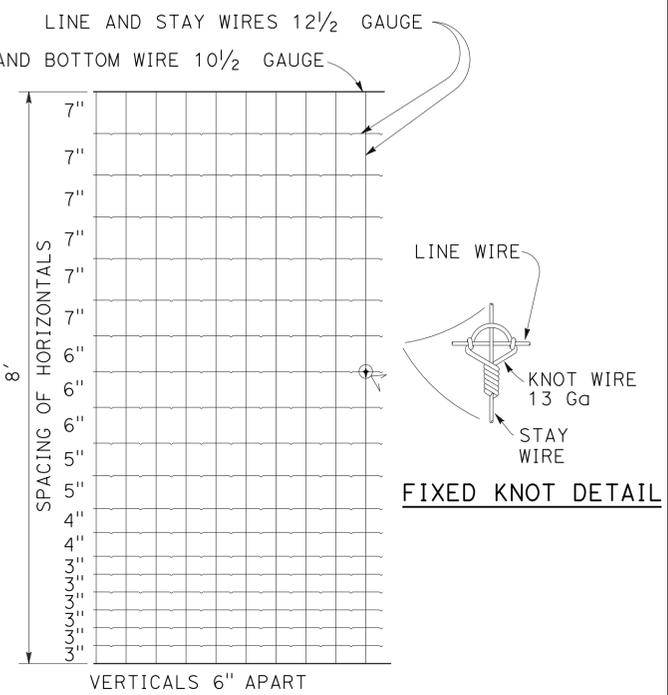


SAG CLOSURE

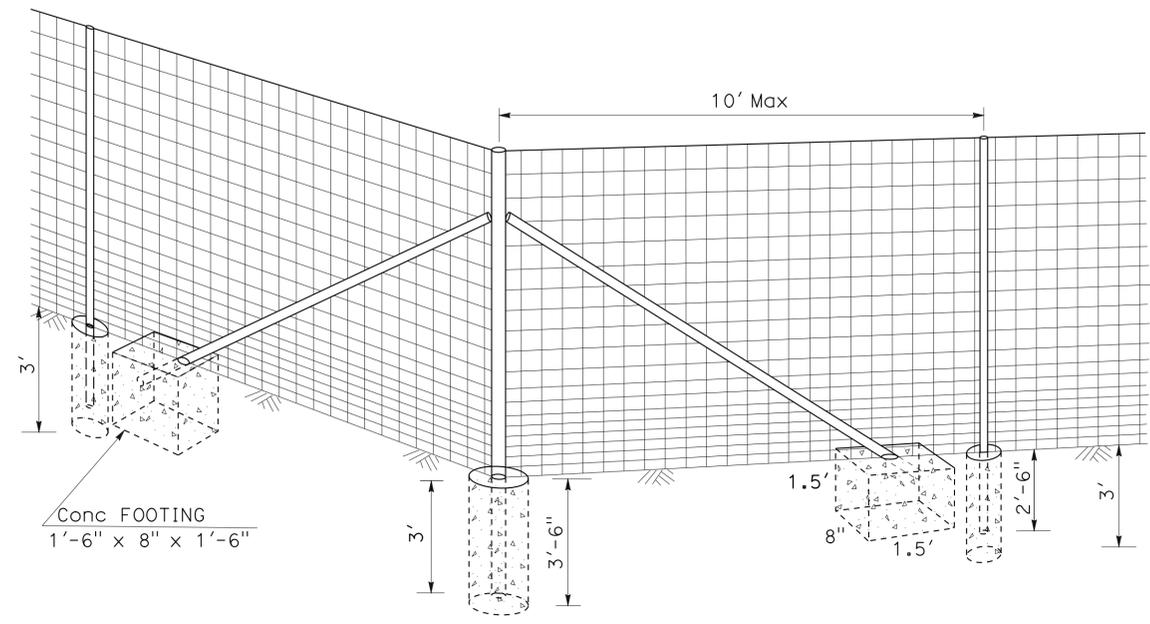
Std LINE POSTS



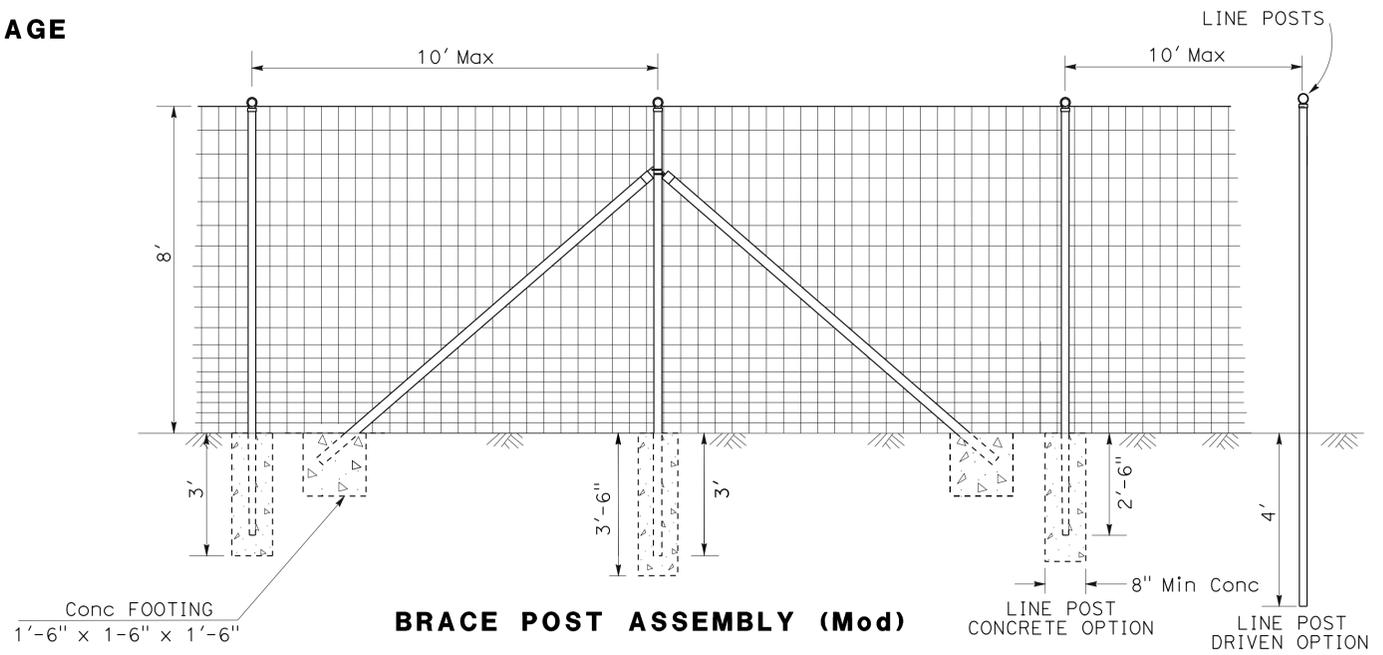
ALTERNATIVE DEAD END ANCHORAGE



FENCE FABRIC - TYPICAL



CORNER POST ASSEMBLY (Mod)



BRACE POST ASSEMBLY (Mod)

FENCE (TYPE WM, METAL POST)

CONSTRUCTION DETAILS

NO SCALE

C-1

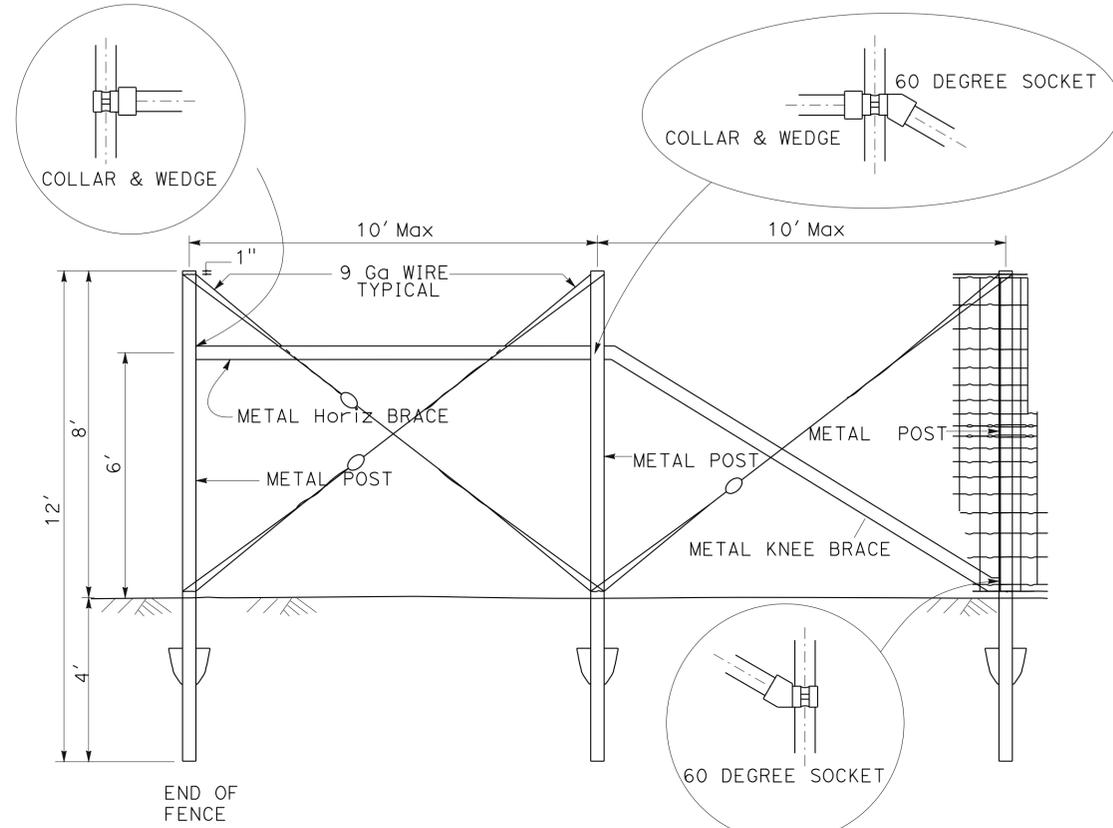
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	SIE	89	4.4/5.5	9	16

<i>Salahuddin Chowdhury</i> REGISTERED CIVIL ENGINEER		12-10-12
3-11-13 PLANS APPROVAL DATE		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>		

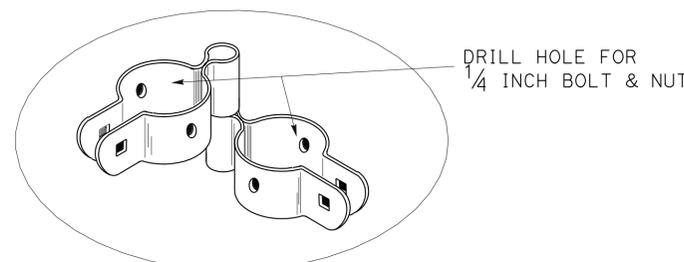
REGISTERED PROFESSIONAL ENGINEER
SALAHUDDIN CHOWDHURY
 No. C75140
 Exp. 12-31-13
 CIVIL
STATE OF CALIFORNIA

NOTES:

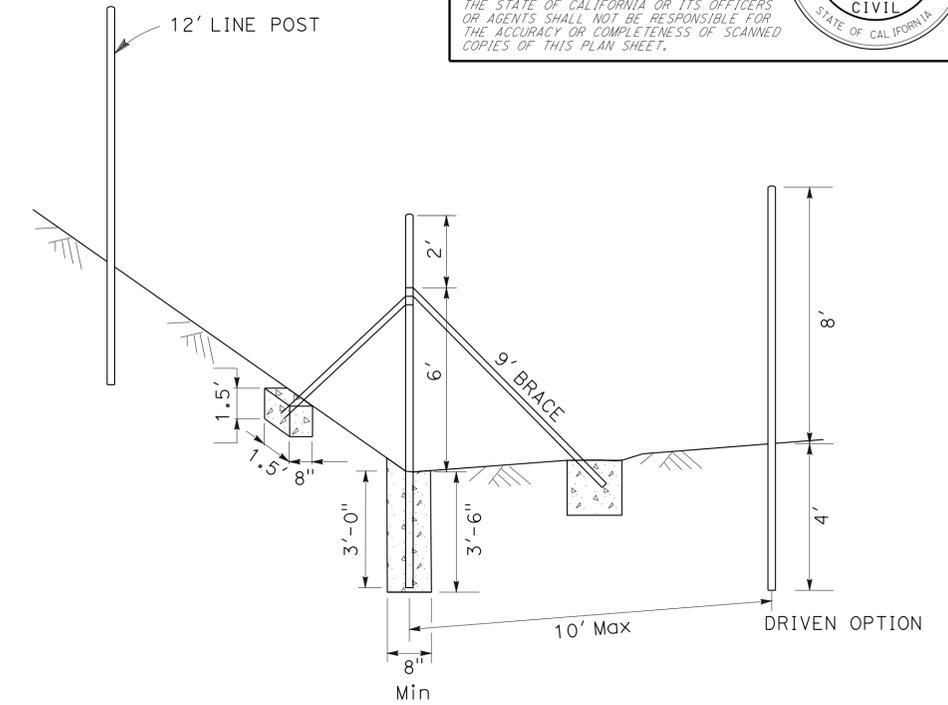
- FOR DEER FENCE (TYPE G, WOOD POST), TIE OR CLAMP THE 50 INCHES TOGETHER EVERY 12 INCHES USING HOG RINGS OR OTHER TYPES OF TIES OR CLAMPS.
- AT THE OPTION OF THE CONTRACTOR, FOR DEER FENCE (TYPE G, WOOD POST), RECTANGULAR WIRE MESH FABRIC CAN BE USED. SEE CONSTRUCTION DETAILS (C-1) FOR FENCE (TYPE WM, METAL POST) WIRE MESH FABRIC DETAILS.
- PLACE BOTTOM WIRE NO MORE THAN 1 INCH ABOVE THE GROUND, OR BURY IT AS NEEDED. TERMINATE MESH WIRE AT EACH CORNER POST.
- FOR ADDITIONAL INFORMATION SEE STANDARD PLANS A86, A86A, A86B AND A86C.
- 5 FT SPACE BETWEEN POSTS ADJACENT TO CATTLE PASS. SEE SHEET C-3 FOR FENCE DETAIL AT Exist CATTLE PASS.



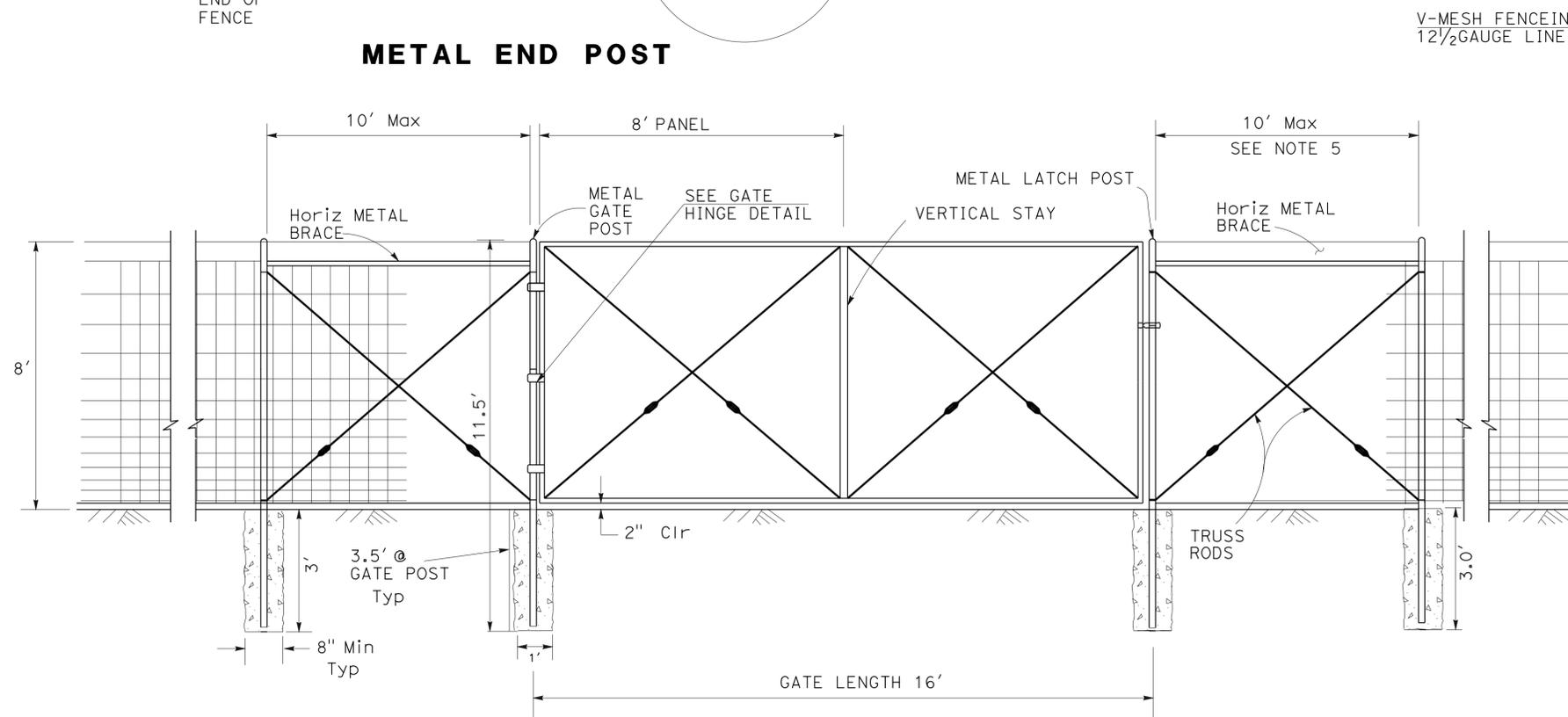
METAL END POST



GATE HINGE DETAIL

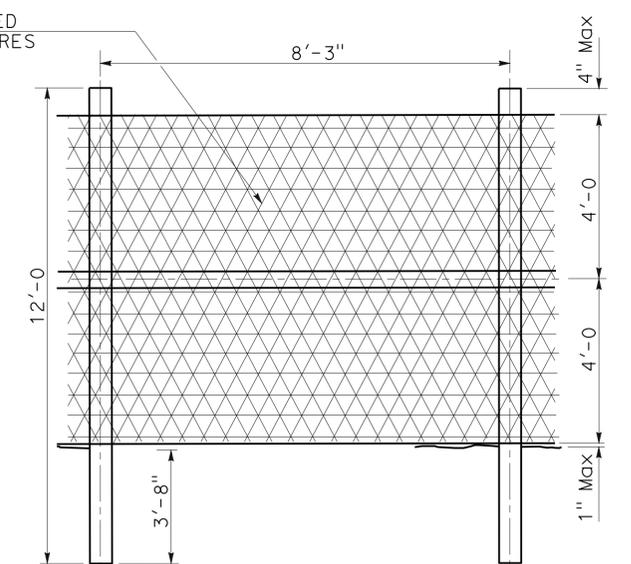


CORNER AND ENDPOST ASSEMBLY



16' WIRE MESH GATE

V-MESH FENCING WITH DOUBLED AND TWISTED 12 1/2 GAUGE LINE WIRES WITH 14 GAUGE V-WIRES



DEER FENCE (TYPE G, WOOD POST) AT WILDLIFE ESCAPE RAMPS

SEE NOTES

CONSTRUCTION DETAILS

NO SCALE

C-2

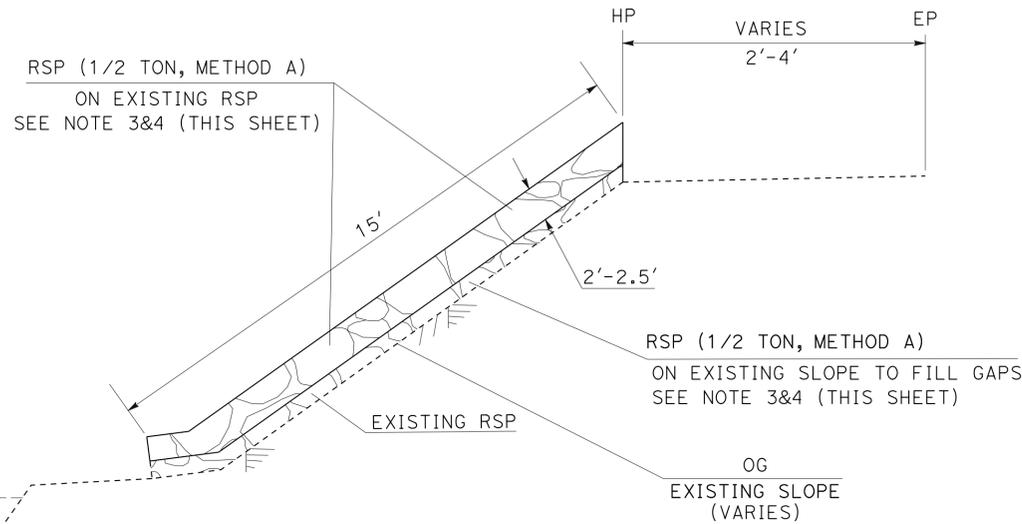
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	SIE	89	4.4/5.5	10	16

Salahuddin Chowdhury 12-10-12
 REGISTERED CIVIL ENGINEER DATE
 3-11-13
 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.

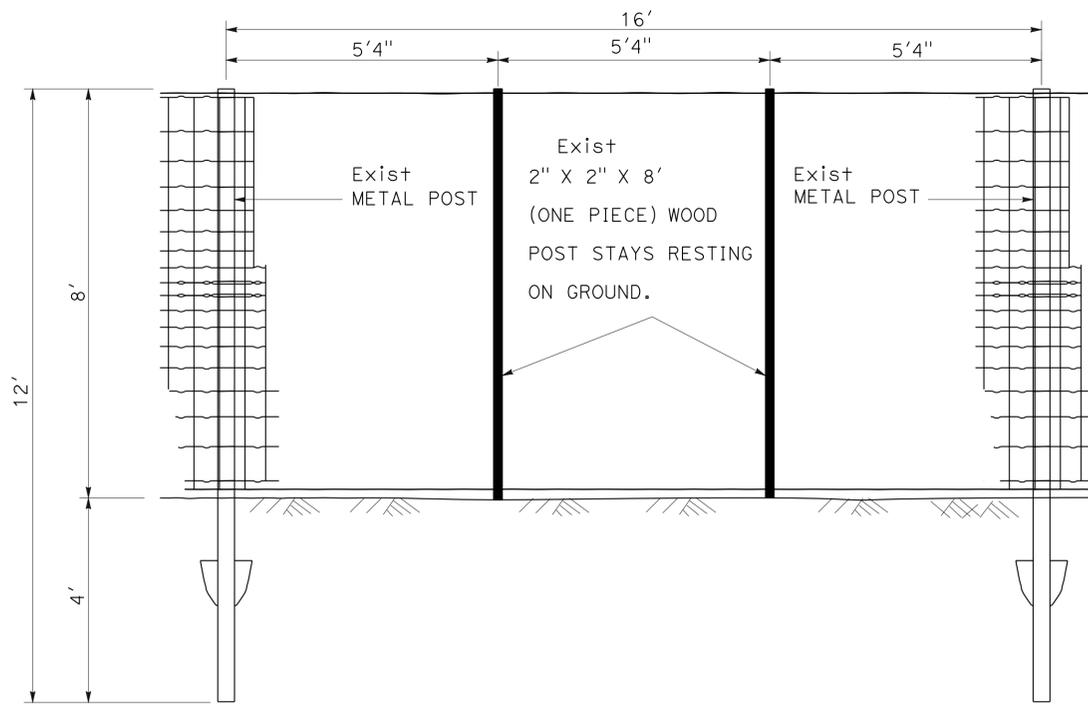
REGISTERED PROFESSIONAL ENGINEER
 SALAHUDDIN CHOWDHURY
 No. C75140
 Exp. 12-31-13
 CIVIL
 STATE OF CALIFORNIA

NOTES: (THIS SHEET ONLY)

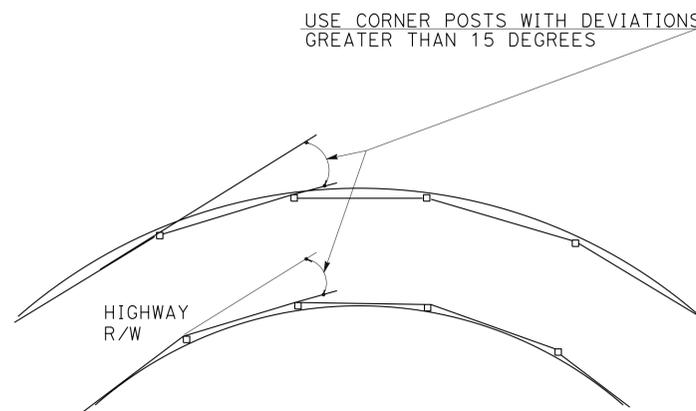
- FOR FENCE (TYPE WM, METAL POST), USE CORNER POST BRACES ON FENCE LINE DEVIATIONS GREATER THAN 3 FEET IN 10 FEET.
- SEE CONSTRUCTION DETAILS C-1 AND C-2 FOR FENCE (TYPE WM, METAL POST) AND WIRE MESH GATE.
- SEE LAYOUT SHEETS (L-1, L-2, L-3) FOR RSP (1/2 TON, METHOD A) LOCATIONS.
- IN CLOSE PROXIMITY TO LITTLE TRUCKEE RIVER, PLACE RSP (1/2 TON, METHOD A) MANUALLY WITHOUT DUMPING ON EXISTING RSP AND SLOPE TO FILL GAPS AS DIRECTED BY THE ENGINEER. EXCAVATION OF FOOTING TRENCH ALONG THE TOE OF THE SLOPE AND SOIL DISTURBANCE WILL NOT BE ALLOWED TO PROTECT THE RIVER.
- 8" FIBER ROLLS WILL BE INSTALLED AROUND PERIMETER OF EARTHEN MOUNDS (IMPORTED BORROW).
- SEE LAYOUT SHEET L-3 AND L-4 FOR EXISTING FENCE (TYPE WM, METAL POST) LOCATIONS.



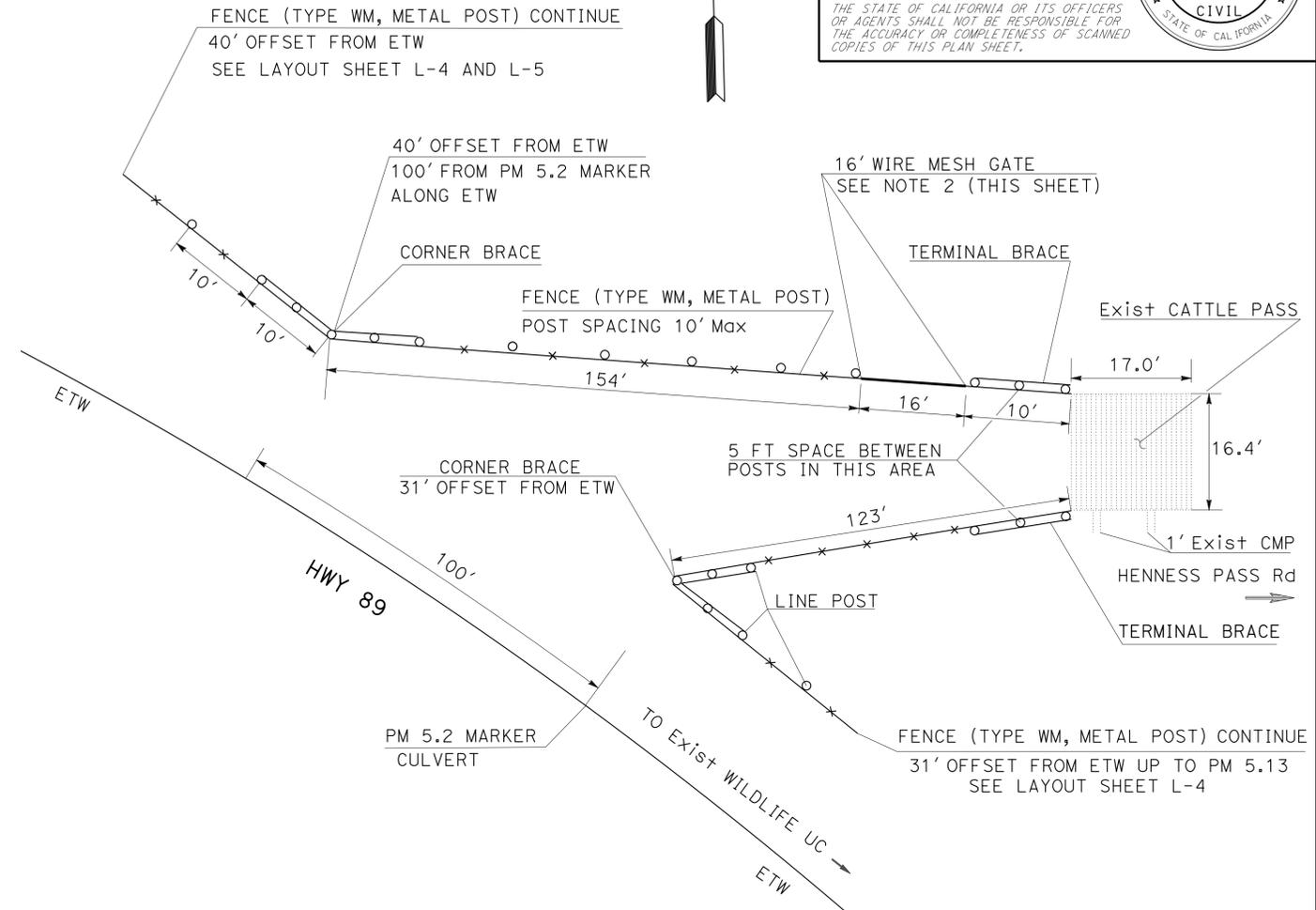
RSP DETAIL



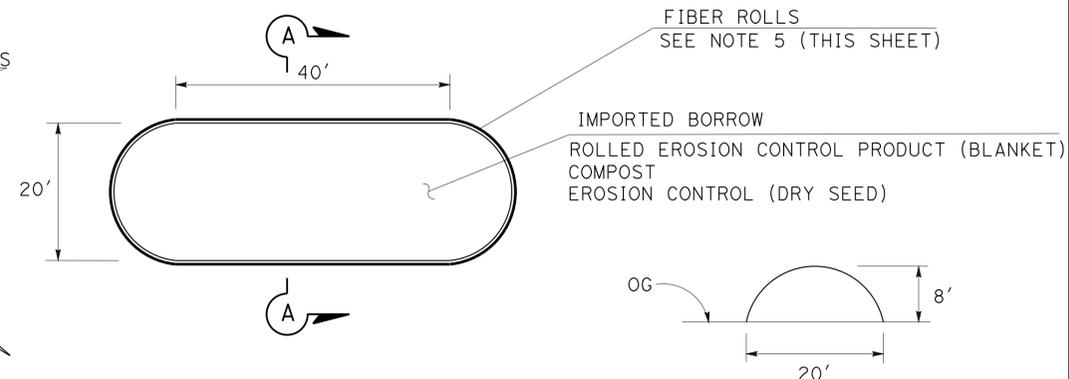
**EXISTING FENCE (TYPE WM)
AT Exist WILDLIFE UNDERCROSSING
PM 5.03/5.05
SEE NOTE 6 (THIS SHEET)**



**WILDLIFE FENCE ON CURVES
TYPICAL**



FENCE DETAILS AT CATTLE PASS



**EARTHEN MOUND
PM 5.48**

SECTION A-A

CONSTRUCTION DETAILS

NO SCALE

C-3

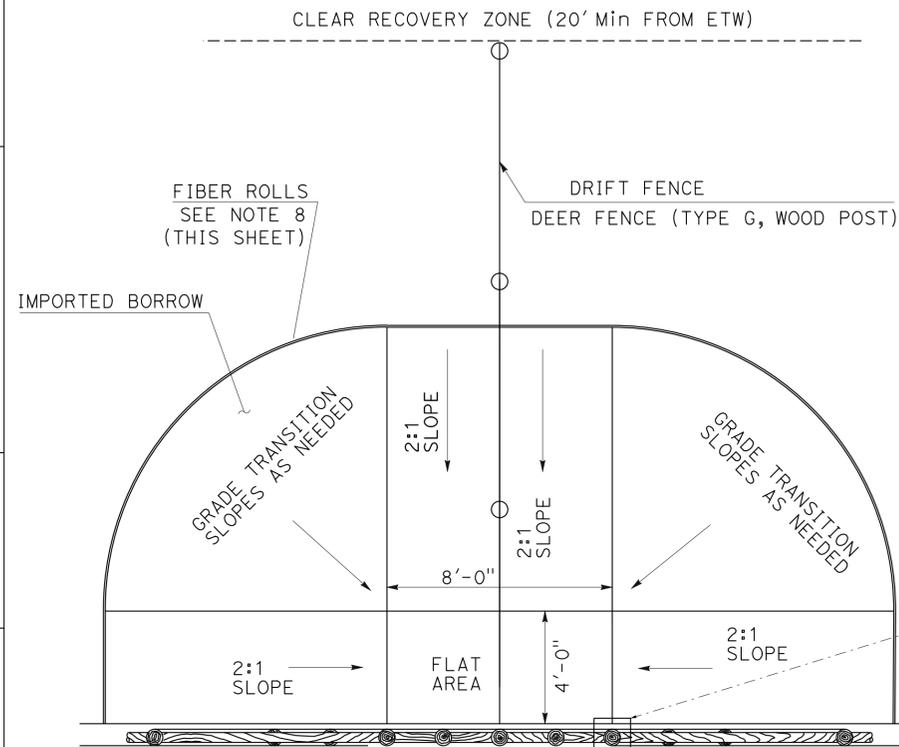
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	SIE	89	4.4/5.5	11	16

12-10-12
 REGISTERED CIVIL ENGINEER DATE
 3-11-13
 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.

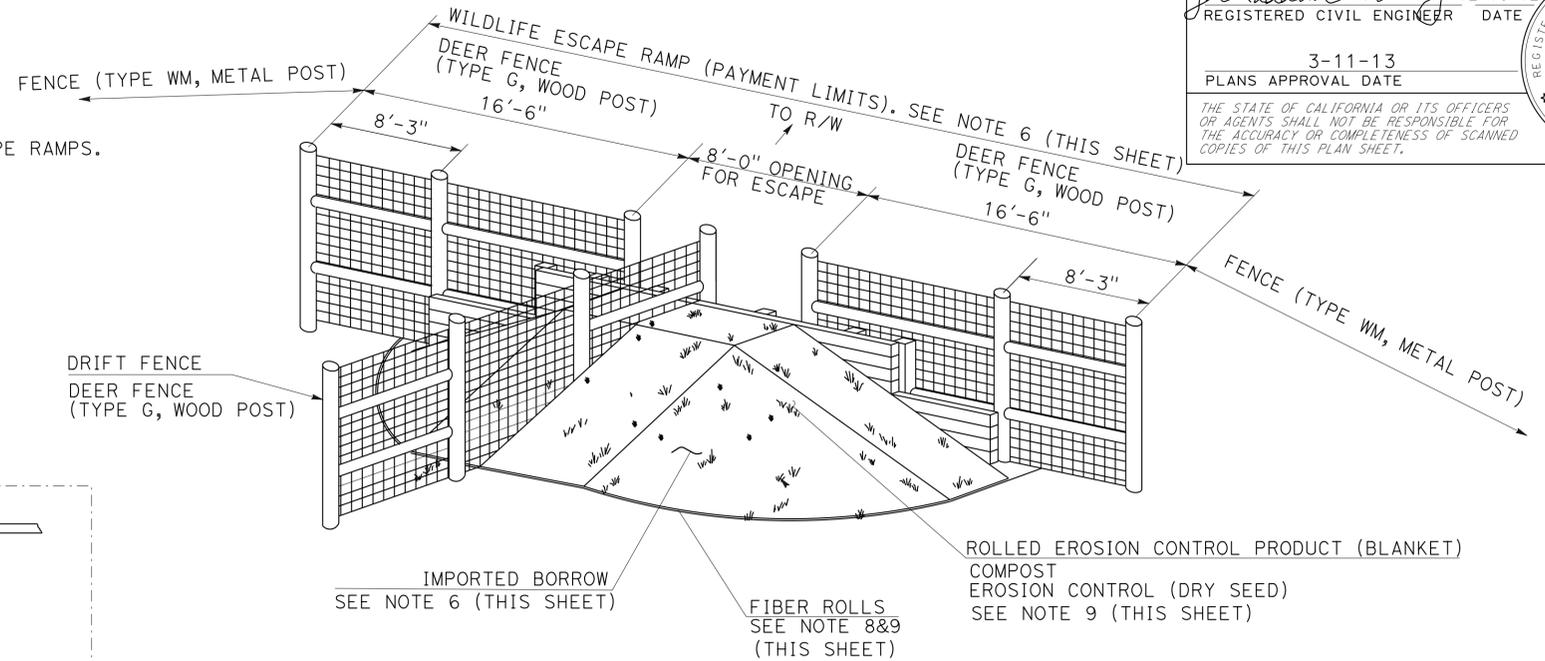
REGISTERED PROFESSIONAL ENGINEER
 SALAHUDDIN CHOWDHURY
 No. C.75140
 Exp. 12-31-13
 CIVIL
 STATE OF CALIFORNIA

NOTES: (THIS SHEET ONLY)

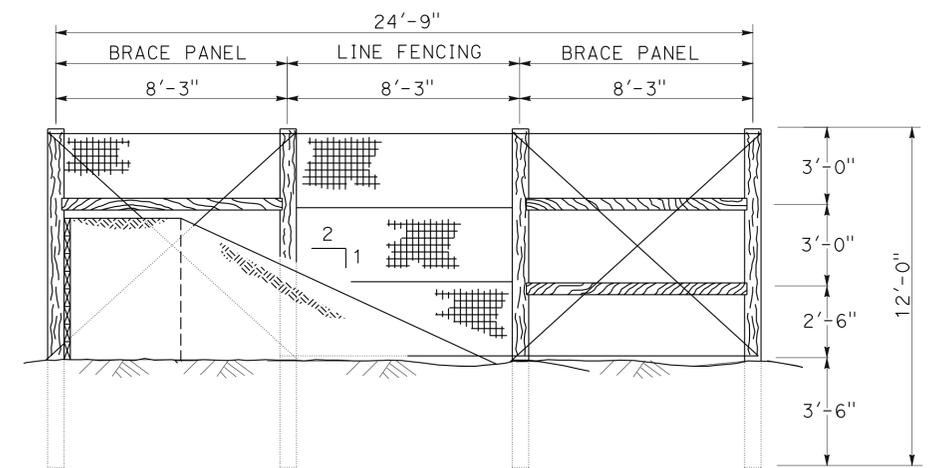
1. ATTACH LOWER PLANKS TO POSTS USING 2 20d (4-INCH) NAILS.
2. ATTACH THE UPPER 2 PLANKS USING 2 LAG BOLTS 5/8 INCH x 4 INCH ZINC PLATED STEEL.
3. SEE CONSTRUCTION DETAIL C-1 FOR FENCE (TYPE WM, METAL POST) DETAILS.
4. USE 2 x 8 INCH NOM TIMBER PLANKS FOR ALL HORIZONTAL AND LONGITUDINAL BACKING.
5. SEE LAYOUT SHEETS FOR EXACT LOCATIONS AND OFFSET OF WILDLIFE ESCAPE RAMPS.
6. EACH WILDLIFE ESCAPE RAMP CONSISTS OF ALL ITEMS/COMPONENTS SHOWN ON THE ISOMETRIC VIEW AND DETAILS, EXCEPT FOR EROSION CONTROL ITEMS.
7. SEE CONSTRUCTION DETAIL C-2 FOR DEER FENCE (TYPE G, WOOD POST).
8. 8" FIBER ROLLS WILL BE INSTALLED AROUND PERIMETER OF IMPORTED BORROW AT WILDLIFE ESCAPE RAMPS.
9. FOR EROSION CONTROL ITEMS AND QUANTITIES, SEE PLAN SHEETS ECL-1 AND ECQ-1.



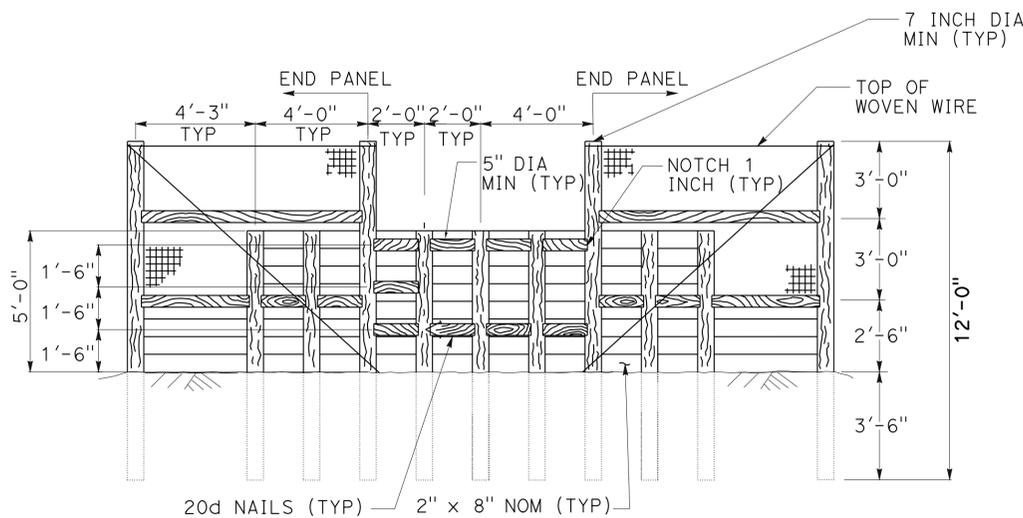
PLAN



ISOMETRIC VIEW



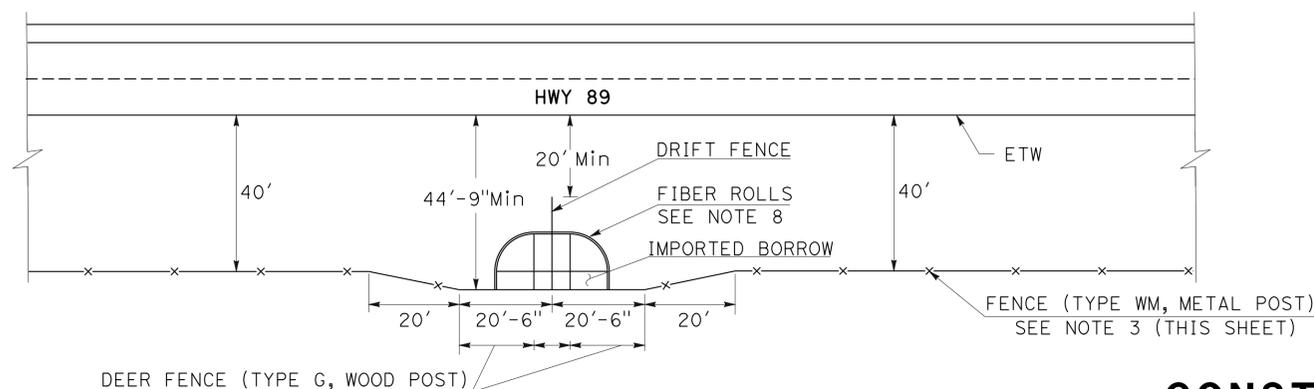
DRIFT FENCE DETAIL DEER FENCE (TYPE G, WOOD POST)



ELEVATION

WILDLIFE ESCAPE RAMP DETAIL

PM 4.75, PM 5.02, PM 5.27, PM 5.34



WILDLIFE ESCAPE RAMP PLAN

CONSTRUCTION DETAILS

NO SCALE

C-4

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans LANDSCAPE ARCHITECTURE

SENIOR LANDSCAPE ARCHITECT
 T. CHRIS JOHNSON

CALCULATED/DESIGNED BY
 CHECKED BY

JANE H. DONOHUE

REVISED BY
 DATE REVISED

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Sie	89	4.42/4.49	12	16

LICENSED LANDSCAPE ARCHITECT
 JANE H. DONOHUE
 No. 58270
 Signature
 3-11-13
 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.

EROSION CONTROL TYPE 1

SEQUENCE	ITEM	MATERIAL		APPLICATION RATE
		DESCRIPTION	TYPE	
STEP 1	COMPOST	COMPOST	MEDIUM	2" Depth
STEP 2	EROSION CONTROL (DRY SEED) (SQFT)	SEED	MIX 1	54 LB/ACRE
STEP 3	ROLLED EROSION CONTROL PRODUCT (BLANKET)	Erosion Control Blanket	C	

SEED MIX

SEED	BOTANICAL NAME (COMMON NAME)	PERCENT GERMINATION (MINIMUM)	POUNDS PURE LIVE SEED PER ACRE (SLOPE MEASUREMENT)
MIX 1	Elymus glaucus Blue Wildrye	70	22
	Eschscholzia California Poppy	50	10
	Hordeum brachyantherum Meadow Barley	70	4
	Linum lewisii Blue Flax	70	13
	Poa secunda Pine Bluegrass	60	5

¹ SEED PRODUCED IN CALIFORNIA ONLY.
² SEED SOURCE FROM (Enter County Name) COUNTY ONLY.
³ SEED SOURCE FROM (Enter "ABOVE" or "BELOW") THE (Enter Elevation) FOOT ELEVATION LEVEL.

**EROSION CONTROL LEGEND
 ECL-1**

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Sie	89	4.42/4.49	13	16


 LICENSED LANDSCAPE ARCHITECT
 3-11-13
 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.

EROSION CONTROL TYPE 1 QUANTITIES

POST MILE	DESCRIPTION	COMPOST	EROSION CONTROL (DRY SEED)	ROLLED EROSION CONTROL PRODUCT (BLANKET)
		SQFT	SQFT	SQFT
4.75	SB RT SIDE	320	320	320
5.03	NB RT SIDE	320	320	320
5.27	SB RT SIDE	320	320	320
5.34	SB RT SIDE	320	320	320
5.48	SB RT SIDE	1520	1520	1520
5.48	NB RT SIDE	1520	1520	1520
TOTAL		4320	4320	4320

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans LANDSCAPE ARCHITECTURE
 SENIOR LANDSCAPE ARCHITECT
 T. CHRIS JOHNSON
 CALCULATED/DESIGNED BY
 CHECKED BY
 JANE H. DONOHOE
 REVISED BY
 DATE REVISED

EROSION CONTROL QUANTITIES
ECQ-1



Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Sie	89	4.4/4.5	14	16

12-10-12
 REGISTERED CIVIL ENGINEER DATE
 3-11-13
 PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER
 SALAHUDDIN CHOWDHURY
 No. C75140
 Exp. 12-31-13
 CIVIL
 STATE OF CALIFORNIA

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

NOTES:

1. APPLY STAIN TO ALL VISIBLE GALVANIZED SURFACES OF FENCE (TYPE WM, METAL POST), 16' WIRE MESH GATE AND WILDLIFE ESCAPE RAMP IS NOT A SEPARATE PAY ITEM.
2. IMPORTED BORROW TO BUILD WILDLIFE ESCAPE RAMP IS NOT A SEPARATE PAY ITEM. IMPORTED BORROW (31 CY) WILL BE REQUIRED TO BUILD EACH WILDLIFE ESCAPE RAMP. IMPORTED BORROW WILL BE PAID UNDER WILDLIFE ESCAPE RAMP (EA) PAY ITEM.

IMPORTED BORROW

POST MILE	DIRECTION	IMPORTED BORROW (CY)	COMMENTS
		LF	
5.04	NB R+ SIDE	20	PLACE SSPPA BEDDING AND BERM INSIDE EXISTING WILDLIFE UC TO REPAIR AND PREVENT EROSION.
5.48	NB R+ SIDE	237	EARTHEN MOUND (L=40', W=20' H=8') AT END OF FENCE. SEE L-5 AND C-3 FOR LOCATIONS AND DETAILS.
5.48	SB R+ SIDE	237	EARTHEN MOUND (L=40', W=20' H=8') AT END OF FENCE. SEE L-5 AND C-3 FOR LOCATIONS AND DETAILS.
TOTAL		494	

REMOVE FENCE (TYPE WM)

POST MILE	DIRECTION	REMOVE FENCE (TYPE WM)	COMMENTS
		LF	
5.03	SB R+ SIDE	112	SEE LAYOUT SHEET L-3 FOR REMOVE Exist FENCE (TYPE WM, METAL POST) LOCATION.
5.05	NB R+ SIDE	16	REMOVE Exist FENCE TO INSTALL 16' WIRE MESH GATE. SEE LAYOUT SHEET L-4.
TOTAL		128	

FIBER ROLLS

POST MILE	DIRECTION	FIBER ROLLS	COMMENTS
		LF	
4.75	SB R+ SIDE	50	SEE LAYOUT SHEET L-2 AND CONSTRUCTION DETAILS C-4 FOR LOCATION AT WILDLIFE ESCAPE RAMP.
4.97	SB R+ SIDE	90	BEHIND 90 FT FENCE ON SLOPE TO PROTECT LITTLE TRUCKEE RIVER. SEE LAYOUT SHEET L-3.
5.02	NB R+ SIDE	50	SEE LAYOUT SHEET L-3 AND CONSTRUCTION DETAILS C-4 FOR LOCATION AT WILDLIFE ESCAPE RAMP.
5.27	SB R+ SIDE	50	SEE LAYOUT SHEET L-4 AND CONSTRUCTION DETAILS C-4 FOR LOCATION AT WILDLIFE ESCAPE RAMP.
5.34	NB R+ SIDE	50	SEE LAYOUT SHEET L-5 AND CONSTRUCTION DETAILS C-4 FOR LOCATION AT WILDLIFE ESCAPE RAMP.
5.48	NB R+ SIDE	130	SEE LAYOUT SHEET L-5 AND CONSTRUCTION DETAILS C-3 FOR LOCATION AT EARTHEN MOUND.
5.48	SB R+ SIDE	130	SEE LAYOUT SHEET L-5 AND CONSTRUCTION DETAILS C-3 FOR LOCATION AT EARTHEN MOUND.
TOTAL		550	

WILDLIFE ESCAPE RAMP

POST MILE	DIRECTION	WILDLIFE ESCAPE RAMP	COMMENTS
		EA	
4.75	SB R+ SIDE	1	SEE LAYOUT SHEET L-2 AND CONSTRUCTION DETAILS C-4 FOR LOCATION/DETAILS AND PAYMENT LIMIT.
5.02	NB R+ SIDE	1	SEE LAYOUT SHEET L-3 AND CONSTRUCTION DETAILS C-4 FOR LOCATION/DETAILS AND PAYMENT LIMIT.
5.27	SB R+ SIDE	1	SEE LAYOUT SHEET L-4 AND CONSTRUCTION DETAILS C-4 FOR LOCATION/DETAILS AND PAYMENT LIMIT.
5.34	NB R+ SIDE	1	SEE LAYOUT SHEET L-5 AND CONSTRUCTION DETAILS C-4 FOR LOCATION/DETAILS AND PAYMENT LIMIT.
TOTAL		4	

FENCE (TYPE WM, METAL POST)

POST MILE	DIRECTION	FENCE (TYPE WM, METAL POST)	COMMENTS
		LF	
4.42 TO 5.48	NB R+ SIDE	6,080	SEE LAYOUTS SHEETS FOR OFFSET, BEGIN AND END OF FENCE
4.42 TO 5.48	SB R+ SIDE	4,890	NO FENCE AT RSP (1/2 TON, METHOD A) LOCATION. SEE LAYOUT SHEETS.
TOTAL		10,970	

16' WIRE MESH GATE

POST MILE	DIRECTION	16' WIRE MESH GATE	COMMENTS
		EA	
5.05	NB R+ SIDE	1	SEE LAYOUT SHEET L-4 FOR 16' WIRE MESH GATE ON Exist FENCE (TYPE WM, METAL POST).
5.20	NB R+ SIDE	1	AT Exist CATTLE PASS ON HENNESS PASS Rd SEE LAYOUT L-4 AND DETAILS IN C-2/C-3.
5.24	SB R+ SIDE	1	AT CROSSING OF HENNESS PASS Rd. SEE LAYOUT SHEET L-4. (50' OFFSET FROM ETW)
TOTAL		3	

DEER FENCE (TYPE G, WOOD POST)

POST MILE	DIRECTION	(N) DEER FENCE (TYPE G, WOOD POST)	COMMENTS
		LF	
4.75	SB R+ SIDE	57.75	INCLUDED IN WILDLIFE ESCAPE RAMP (EA) PAY ITEM. SEE CONSTRUCTION DETAILS C-4, C-2 FOR LOCATION AND DETAILS.
5.02	NB R+ SIDE	57.75	
5.27	SB R+ SIDE	57.75	
5.34	NB R+ SIDE	57.75	
SUBTOTAL		231	
TOTAL			NOT A SEPARATE PAY QUANTITY

ROCK SLOPE PROTECTION (1/2 TON, METHOD A)

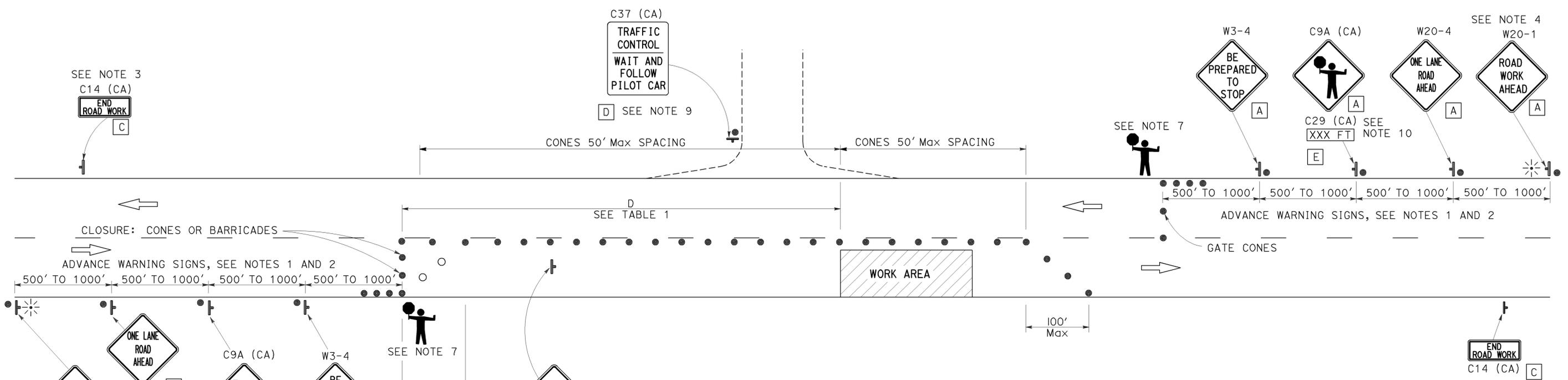
POST MILE	DIRECTION	ROCK SLOPE PROTECTION (1/2 TON, METHOD A) (CY)	COMMENTS
		LF	
4.52 TO 4.61	SB R+ SIDE	631	NO DUMPING. SEE LAYOUT SHEETS L-1, L-2, L-3 AND CONSTRUCTION DETAILS C-3 FOR LOCATION AND DETAILS.
4.91 TO 4.97	SB R+ SIDE	417	
TOTAL		1,048	

SUMMARY OF QUANTITIES

Q-1

NOTES:
 Unless otherwise specified in the special provisions, all temporary warning signs shall have black legend on orange background.
 California code are designated by (CA).
 Otherwise, Federal (MUTCD) codes are shown.

TYPICAL LANE CLOSURE WITH REVERSIBLE CONTROL



SIGN PANEL SIZE (MINIMUM)

- A 48" x 48" - SPEED OF 45 mph OR MORE
- 36" x 36" - SPEED LESS THAN 45 mph
- B 30" x 30"
- C 36" x 18"
- D 36" x 42"
- E 36" x 9"

LEGEND

- TRAFFIC CONE
- TRAFFIC CONE (OPTIONAL TAPER)
- ⊢ TEMPORARY SIGN
- ☁ PORTABLE FLASHING BEACON
- 👤 FLAGGER

TABLE 1

APPROACH SPEED	MINIMUM D	DOWNGRADE MINIMUM D *		
		-3%	-6%	-9%
25 AND BELOW	155	158	165	173
30	200	205	215	227
35	250	257	271	287
40	305	315	333	354
45	360	378	400	427
50	425	446	474	507
55	495	520	553	593
60	570	598	638	686
65	645	682	728	785

* USE ON SUSTAINED DOWNGRADE STEEPER THAN -3 PERCENT AND LONGER THAN 1 MILE.

NOTES:

- Where approach speeds are low, advance warning signs may be placed at 300' spacing, and closer in urban areas.
- Each advance warning sign in each direction of travel shall be equipped with at least two flags for daytime closure. Each flag shall be at least 16" x 16" in size and shall be orange or fluorescent red-orange in color. Flashing beacons shall be placed at the locations indicated for lane closure during hours of darkness.
- A C14 (CA) "END ROAD WORK" sign, as appropriate, shall be placed at the end of the lane control unless the end of work area is obvious, or ends within a larger project's limits.
- If the W20-1 sign would follow within 2000' of a stationary W20-1 or C11 (CA) "ROAD WORK NEXT _____ MILES", use a W20-4 sign for the first advance warning sign.
- All cones used for lane closures during the hours of darkness shall be fitted with retroreflective bands (or sleeves) as specified in the specifications.
- Portable delineators, placed at one-half the spacing indicated for traffic cones, may be used instead of cones for daytime closures only.
- Additional advance flaggers may be required. Flagger should stand in a conspicuous place, be visible to approaching traffic as well as approaching vehicles after the first vehicle has stopped. During the hours of darkness, the flagging-station and flagger shall be illuminated and clearly visible to approaching traffic. The illumination footprint of the lighting on the ground shall be at least 20' in diameter. Place a minimum of four cones at 50' intervals in advance of flagger station as shown.
- Place C30 (CA) "LANE CLOSED" sign at 500' to 1000' intervals throughout extended work areas. They are optional if the work area is visible from the flagger station.
- When a pilot car is used, place a C37 (CA) "TRAFFIC CONTROL-WAIT AND FOLLOW PILOT CAR" sign at all intersections within traffic control area. Signs shall be clean and visible at all times.
- An optional C29 (CA) sign may be placed below the C9A (CA) sign.
- Traffic cones or barricades may be placed on the optional taper as shown, barricades shall be Type I, II, or III.

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION

**TRAFFIC CONTROL SYSTEM
 FOR LANE CLOSURE ON
 TWO LANE CONVENTIONAL
 HIGHWAYS**

NO SCALE

TCS-1

REVISIONS: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100
 STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
 Et Caltrans®
 FUNCTIONAL SUPERVISOR
 CALCULATED/DESIGNED BY
 CHECKED BY
 REVISED BY
 DATE REVISED
 USERNAME => s114640
 DGN FILE => tcs13.dgn
 BORDER LAST REVISED 7/2/2010
 RELATIVE BORDER SCALE IS IN INCHES
 UNIT 0305
 PROJECT NUMBER & PHASE
 03000205721

LAST REVISION: DATE PLOTTED => 10-DEC-2012
 TIME PLOTTED => 09:45

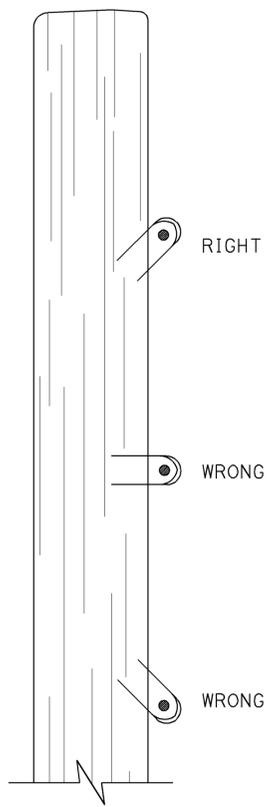
Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
03	Sie	89	4.4/5.5	16	16

Raymond Don Tsztoo
 REGISTERED CIVIL ENGINEER
 October 19, 2012
 PLANS APPROVAL DATE

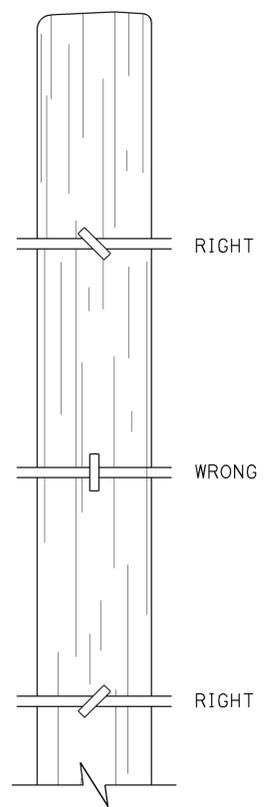
REGISTERED PROFESSIONAL ENGINEER
 Raymond
 Don Tsztoo
 No. C37332
 Exp. 6-30-14
 CIVIL
 STATE OF CALIFORNIA

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

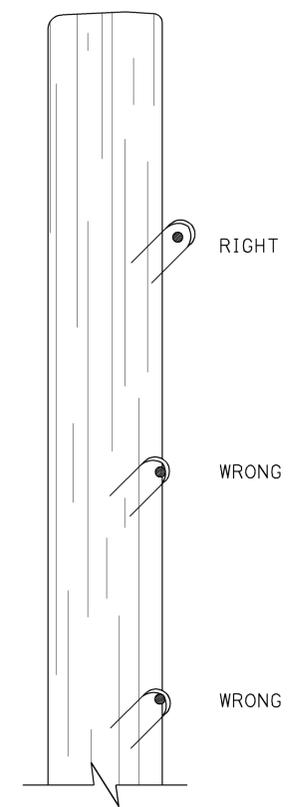
TO ACCOMPANY PLANS DATED 3-11-13



DRIVE STAPLES
AT ANGLE

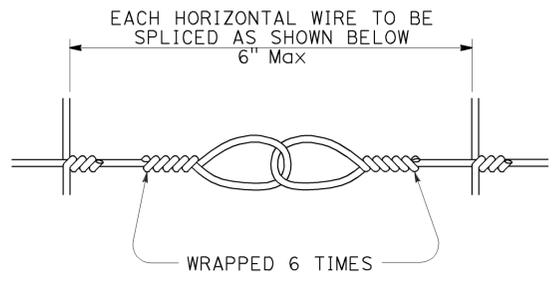


DO NOT DRIVE
STAPLES PARALLEL
TO SIDE OF POST

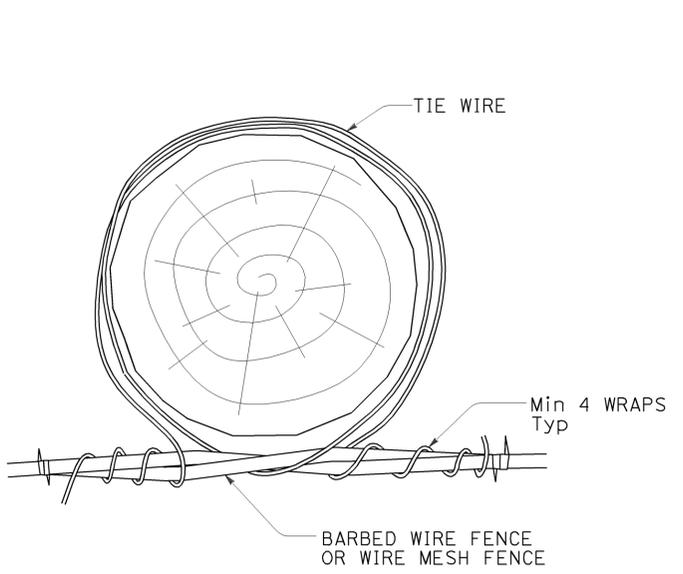


LEAVE WIRE
LOOSE IN STAPLE

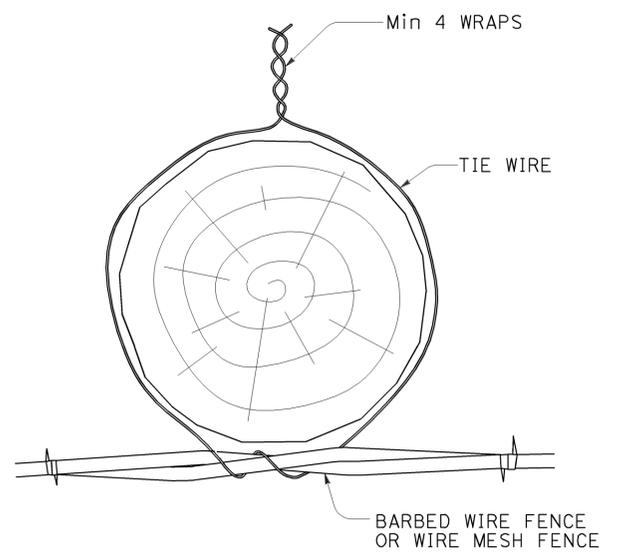
LINE POST STAPLING DETAILS
 (Apply to rectangular/square and round posts)
 Do not staple vertical wire in wire mesh.



SPLICE DETAIL FOR
BARBED WIRE/WIRE MESH FENCE

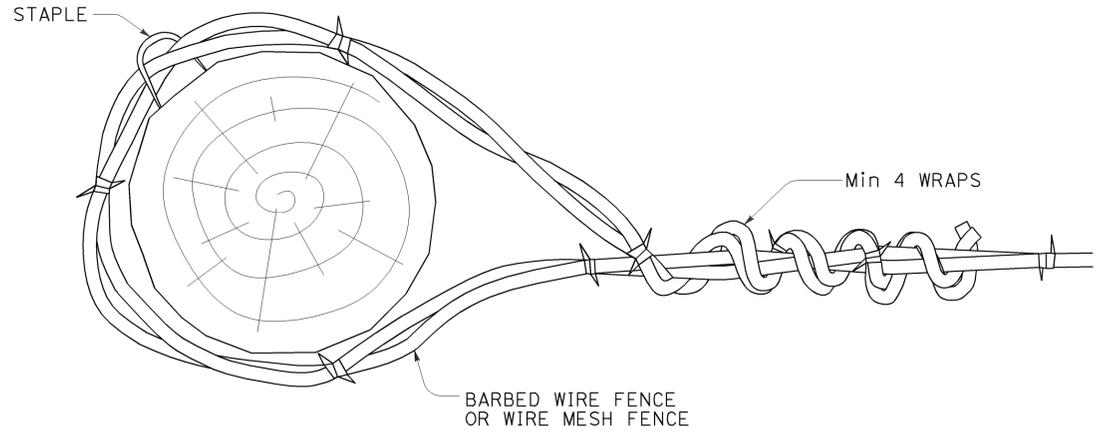


OPTION A



OPTION B

LINE POST WIRE TIE OPTION DETAILS
 (Option details also apply to rectangular/square posts)



END, LATCH, PULL, AND CORNER POST DETAIL
 (Also applies to rectangular/square posts)

STATE OF CALIFORNIA
 DEPARTMENT OF TRANSPORTATION
**BARBED WIRE AND WIRE MESH
 FENCE - MISCELLANEOUS DETAILS**

NO SCALE

RSP A86D DATED OCTOBER 19, 2012 SUPPLEMENTS THE STANDARD PLANS BOOK DATED 2010.

REVISED STANDARD PLAN RSP A86D

2010 REVISED STANDARD PLAN RSP A86D