

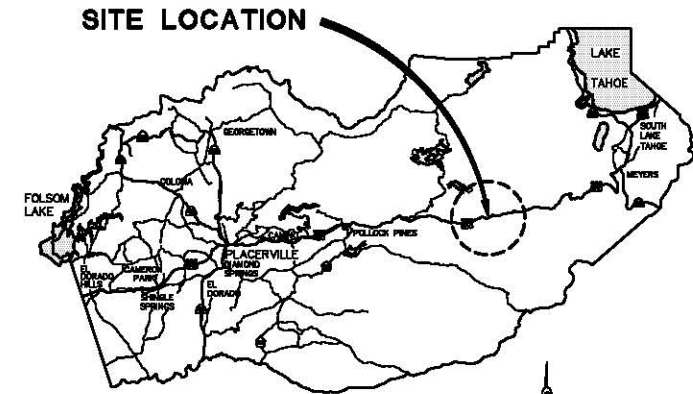
COUNTY OF EL DORADO, CA COMMUNITY DEVELOPMENT SERVICES DEPARTMENT OF TRANSPORTATION

PROJECT PLANS FOR THE CONSTRUCTION OF SILVER FORK ROAD AT SOUTH FORK AMERICAN RIVER – BRIDGE REHABILITATION

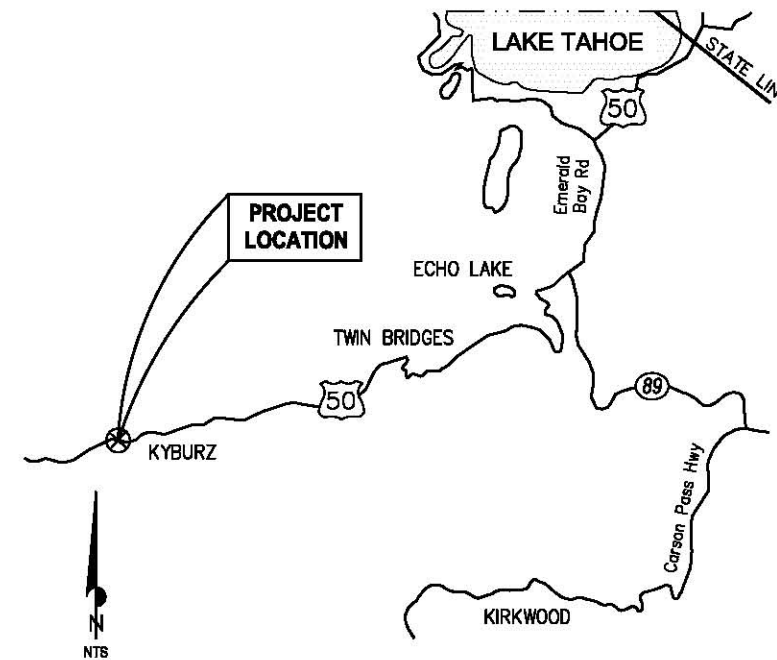
IN THE COUNTY OF EL DORADO, DISTRICT 3
KYBURZ, CA

To be supplemented with Standard Plans and Specifications dated 2010, including
2010 Revised Standard Specifications, of the California Department of
Transportation, unless otherwise noted.

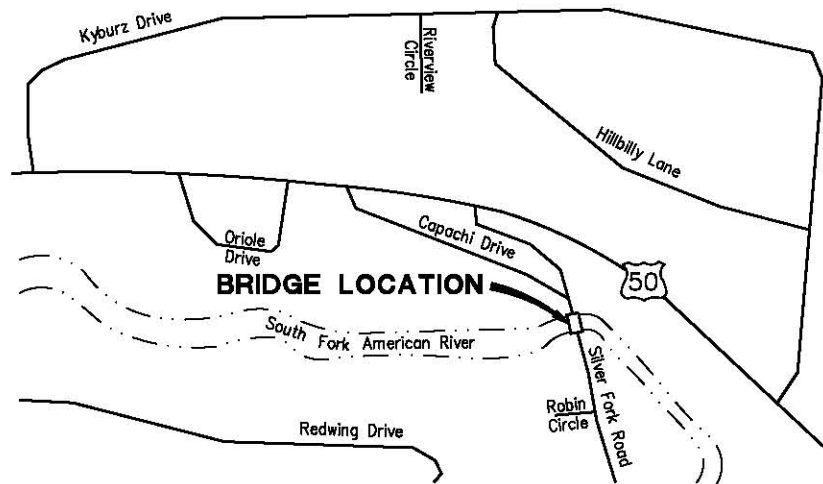
SHEET	PLAN SHEET	TITLE
1		TITLE SHEET
2	GN-1	GENERAL NOTES
3	X-1	TYPICAL CROSS SECTIONS
4	RD-1	ROADWAY PLAN & PROFILE
5	C-1	CONSTRUCTION DETAILS
6	EC-1	EROSION CONTROL PLAN
7	D-1	DRAINAGE PLAN & PROFILES
8	D-2	DRAINAGE DETAILS
9	D-3	DRAINAGE DETAILS & QUANTITIES
10	U-1	UTILITY PLAN
11	SC-1	STAGE CONSTRUCTION & TRAFFIC HANDLING PLAN
12	SC-2	ROAD CLOSURE DETOUR PLAN
13	SPD-1	SIGNING & PAVEMENT DELINEATION PLAN
14	RW-1	RIGHT-OF-WAY, EASEMENTS, & TREE REMOVAL PLAN
15	R-1	RETAINING WALL NO.1
16	R-2	LOG OF TEST BORING
17-30	ST-1 - ST-14	STRUCTURAL PLANS



VICINITY MAP
COUNTY OF EL DORADO
NOT TO SCALE



LOCATION MAP
NOT TO SCALE



PROJECT SITE MAP
NOT TO SCALE



CALIFORNIA STATE MAP
NOT TO SCALE

BOARD OF SUPERVISORS

—	I	—	II	—	III	—	IV	—	V
JOHN HIDAHL		SHIVA FRENTZEN		BRIAN VEERKAMP		MICHAEL RANALLI		SUE NOVASEL	

**COUNTY OF EL DORADO
COMMUNITY DEVELOPMENT SERVICES
DEPARTMENT OF TRANSPORTATION**

(530) 621-5900
2850 FAIRLANE CT
PLACERVILLE, CA 95667

ADOPTED AND APPROVED BY:

SHIVA FRENTZEN
CHIEF, EL DORADO COUNTY BOARD OF SUPERVISORS

APPROVED BY:

RAFAEL MARTINEZ, DIRECTOR
DEPARTMENT OF TRANSPORTATION

MATTHEW D. SNEITZER, P.E. NO. C56932
DEPUTY DIRECTOR, ENGINEERING

DATE: _____

**FEDERAL AID PROJECT
BRLO-5925(095)**



SUBMITTED BY:
CIVIL ENGINEER
STATE OF CALIFORNIA NO. _____

DATE: 11-22-17

CONTRACTOR'S LICENSE CLASSIFICATION: Bidders shall be properly licensed to perform the Work pursuant to the State Contractor's License Act (Business and Professions Code section 7000 et seq.) and shall possess a CLASS A LICENSE or equivalent combination of Classes required by the categories and type of Work included in the Contract Documents and Plans. Failure of the successful Bidder to obtain proper and adequate licensing at the time bids are submitted shall constitute a failure to execute the Contract, and forfeiture as provided under that section.

REVISIONS		
MARK	DATE	BY



PW NO. 16-31152 PROJECT NO. 77124

SILVER FORK ROAD AT SOUTH FORK AMERICAN RIVER BRIDGE REHABILITATION

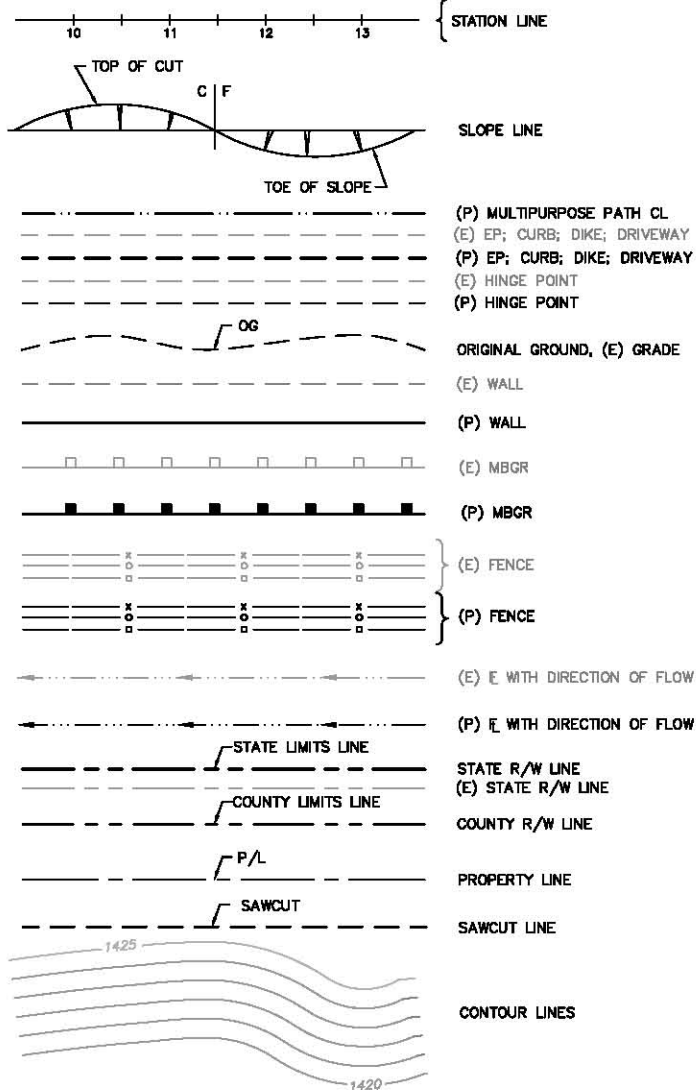
TITLE SHEET

SHEET 1 OF 30

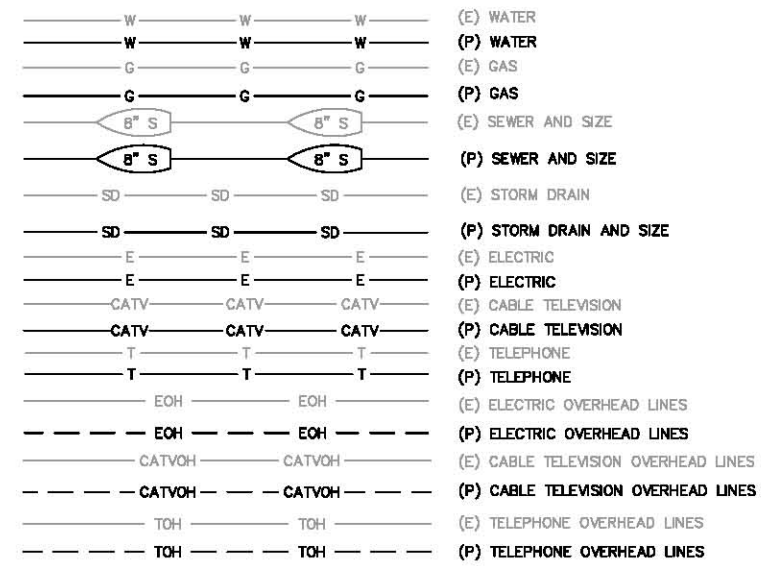
STANDARD ABBREVIATIONS

AB	aggregate base	FC	face of curb	R	radius
ABN	abandon	FES	flared end section	RCA	reinforced concrete arch
ABUT	abutment	FF	filter fabric	RCB	reinforced concrete box
AC	asphalt concrete	FR & GR	frame and grate	RCP	reinforced concrete pipe
ACB	asphalt concrete base	FG	finished grade	RCPA	reinforced concrete pipe arch
ACP	asbestos cement pipe	FH	fire hydrant	R & D	remove and dispose
AFES	alternate flared end section	FL or FL	flow line	RD	road
AHD	ahead	FT	foot; feet	RECONSTR	reconstruct
ADJ	adjust	FTG	footing	REINF	reinforced; reinforcing
ALT	alternate	FWY	freeway	REL	relocate
AP	alternative pipe	G	gas	REM	remove
APC	alternative pipe culvert	GA	gauge	RET	retaining
APP'D	approved	GAL	gallon	RP	reference point
APU	alternative pipe underdrain	GALV	galvanized	RR	railroad
ARV	air release valve	GB	grade break	R & R	remove & replace
AS	aggregate subbase	GP	grading plane	R & S	remove and salvage
ASRP	aluminum spiral rib pipe	GR	grate; guard railing	RSP	rock slope protection
ASSY	assembly	GSP	galvanized steel pipe	RT	right
ATPB	asphalt treated permeable base	GV	gate valve, gas valve	RTE	route
ATPM	asphalt treated permeable material	H	height	RW	retaining wall
AVE	avenue	HC	handicap parking space	RW LOL	retaining wall layout line
		HORIZ	horizontal	R/W	right of way
BC	begin horizontal curve	HMA	hot mix asphalt	S	slope
BCR	begin curb return	HP	hinge point; horsepower	SAE	structural approach embankment
BEG	begin	HW	headwall	SALV	salvage
BIT	bituminous coated	HWY	highway	SB	shoulder backing
BIT CTD	back	ID	inside diameter	SCSP	slotted corrugated steel pipe;
BK	backfill	IMP IMP'TS	imported improvements	SD	sloated concrete slope protection
BKF	building	INFO	information	SEC	section
BLDG	boulevard	INTX	intersection	SEP	separation
BLVD	bench mark	INV	invert	SG	subgrade
BM	blowoff valve	IB	irrigation box	SHLD	shoulder
BOV	bridge	IRR	irrigation	SHT	sheet
BR	begin vertical curve	JP	joint pole	SL or S	station line
BVC	back of walk	JS	junction structure	SPEC(S)	special; specific; specification(s)
BW		JT	joint	SP's	Special Provisions
C,G,&SW	curb, gutter, and sidewalk	L	length, line	SPP	slotted plastic pipe
CAA	cable anchor assembly	LB	length, line	SQFT	square foot
CAP	corrugated aluminum pipe	LF	linear foot	SQYD	square yard
CAPA	corrugated aluminum pipe arch	LOC	location	SS	sanitary sewer;
C-C	center to center	LN	lane	SSPA	structural steel plate arch
CF	cubic foot	LS	lane	SSPP	structural steel plate pipe arch
CHNL	channel	LT	lump sum	SSRP	steel spiral rib pipe
CI	cast iron	M	meters	ST	street
CIP	cast iron pipe	MAX	maximum	STA	station
CIPCP	cast-in-place concrete pipe	MB	metal beam; mail box	STBB	single thrie beam barrier
CL or CL	centerline; chain link; class centerline	MBB	metal beam barrier	STD	standard
CLR	clear; clearance	MED	median	STR	structure
CM	centimeters	MGS	midwest guardrail system	SURF	surfacing
CO	county	MH	manhole	SW	sidewalk; sound wall
COL	column	MI	mile(s)	SWR	sewer
COM'L	commercial	MIDPT	midpoint	T	tangent, telephone
CONC	concrete	MIN	minimum; minutes	TAB	tablet
COND	conduit	MISC	miscellaneous	TBB	thrie beam barrier
CONN	connector	MM	millimeters	TBC	top back of curb
CONST	construct; construction	MOD	modified; modify	TBM	temporary bench mark
COORD	coordinate	MON	monument	TBR	timber
CR	creak, circle	MP	metal plate	TBW	top back of walk
CRSP	concreted rock slope protection	MPGR	metal plate guard rail	TC	top of curb
CSP	corrugated steel pipe	MTL	material	TEMP	temporary
CSPA	corrugated steel pipe arch	NB	northbound	TG	top of grate
CTB	cement treated base	NO	number	TP	telephone pole
CTR	center	NTS	not to scale	TPB	treated permeable base
CTPB	cement treated permeable material	OD	outside diameter	TPM	treated permeable material
CULV	culvert	OG	original ground	TRANS	transition
CY	cubic yard	OH	open graded asphalt concrete	TS	traffic signal
		OXING	overcrossing	TYP	typical
				TYP SEC	typical section
D	depth			TUG	telephone underground
DBL	double			TV	television, television service
DD	down drain	PAP	perforated aluminum pipe	UXING	undercrossing
DEL	delineator	PB	pull box	UD	underdrain
DEPT	Department	PC	point of curvature	UP	underpass
DET	detour; detail	PCC	point of compound curve;	UT or UTIL	utility
DF	douglas fir		partland cement concrete	V	design speed; valve
DI	drainage inlet, ductile iron		perforated concrete pipe	VAR	variable; varies
DIA	diameter		point of compound vertical curve	VC	vertical curve
DIP	ductile iron pipe		pedestrian	VCP	vitrified clay pipe
DIST	distance		permeable material	VERT	vertical
DMBB	double metal beam barrier		profile grade	W	width; water; water service
DR	drive		point of intersection, angle point	WH	weep hole
DTTB	double thrie beam barrier		property line	WM	wire mesh, water meter
DWY	driveway		plate	WSP	welded steel pipe
			post mile	WV	water valve
E	electric		paving notch	WW	wing wall
EA	each		point of beginning	WWM	welded wire mesh
EASE	easement		point on horizontal curve	XING	crossing
EC	end horizontal curve		point of ending	X SEC	cross section
EDR	edge drain		point on tangent		
EDC	edge drain cleanout		point on vertical curve		
EDO	edge drain outlet		power pole		
EDV	edge drain vent		perforated plastic pipe		
ELEV	elevation		performed permeable liner		
EMB	embankment		point of reverse curve		
EP	edge of pavement		pavement reinforcing fabric		
EPLT	edge of pavement left		proposed		
EPRT	edge of pavement right		point of reverse vertical curve		
EQ	equation		pounds per square inch		
ES	edge of shoulder		perforated steel pipe		
ETW	edge of traveled way		point		
EVC	end vertical curve		public utility easement		
EW	endwall				
EXC	excavation				
(E) or EXIST	existing				
EXP JT	expansion joint				

CONSTRUCTION AND TOPOGRAPHIC LINES

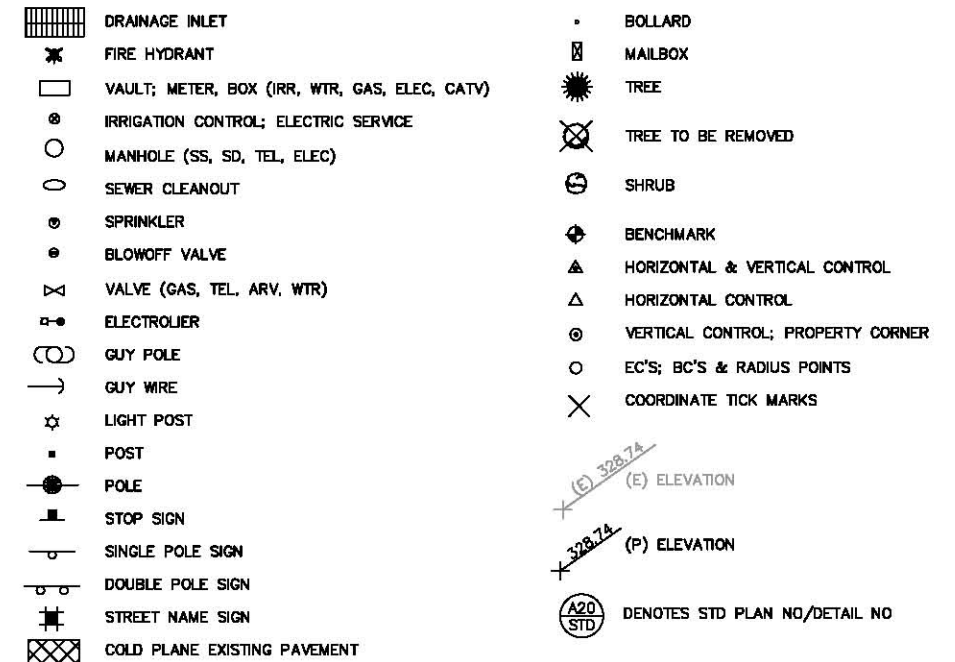


EXISTING AND PROPOSED UNDERGROUND UTILITIES



CONSTRUCTION AND TOPOGRAPHIC SYMBOLS

NOTE: SYMBOLS FOR EXISTING ITEMS ARE SHOWN LIGHTER ON THE PLANS. SYMBOLS FOR PROPOSED ITEMS ARE SHOWN DARKER (AS BELOW) ON THE PLANS.



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FOR REDUCED PLANS

REVISION	NUMBER	DATE	DESCRIPTION	BY



PREPARED UNDER THE SUPERVISION OF:
EDWIN J. HENDERSON
REGISTERED CIVIL ENGINEER
DATE: 06/30/2018

DESIGNED: A. MITCHELL
DRAWN: A. MITCHELL
CHECKED: E. HENDERSON
DATE: 12/16/2016
ROAD NUMBER: 2130

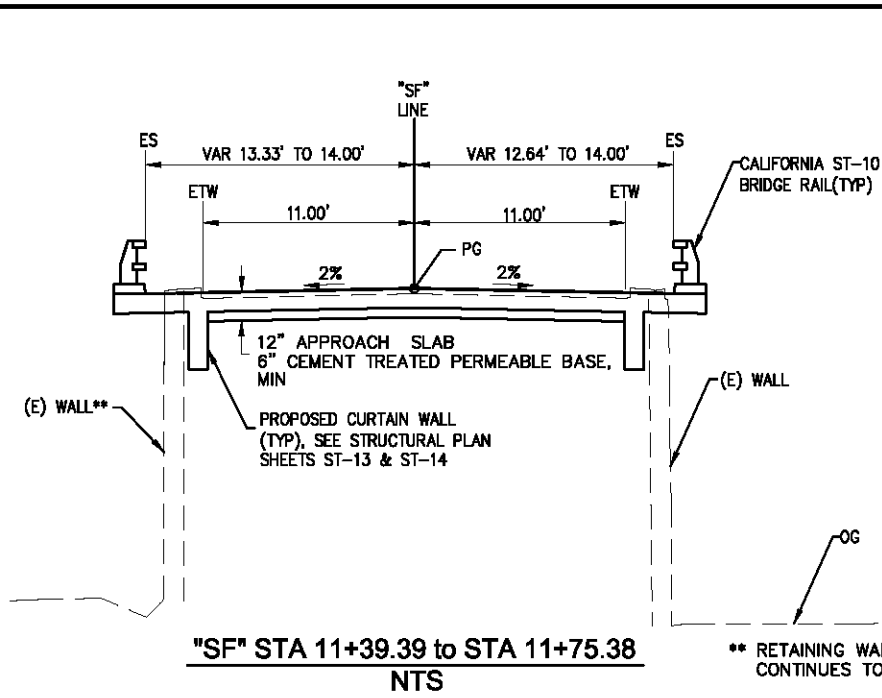


COUNTY OF EL DORADO
COMMUNITY DEVELOPMENT SERVICES
DEPARTMENT OF TRANSPORTATION

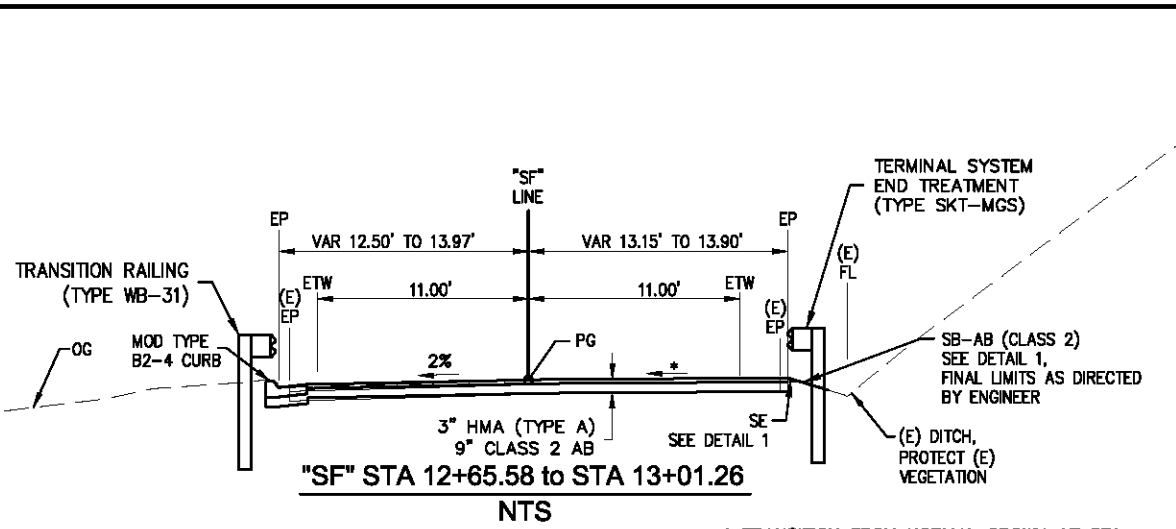
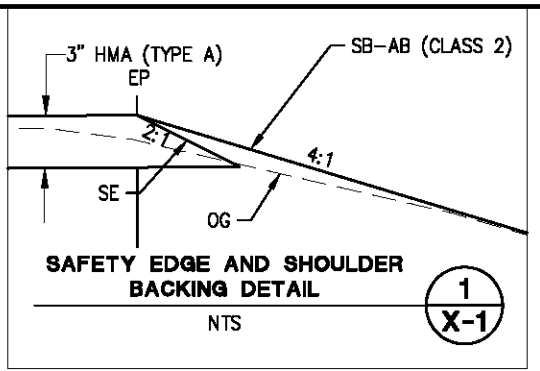
SILVER FORK ROAD AT SOUTH FORK AMERICAN RIVER
BRIDGE REHABILITATION
GENERAL NOTES

SHEET
GN-1
2 OF 30
W.G. No. **77124**

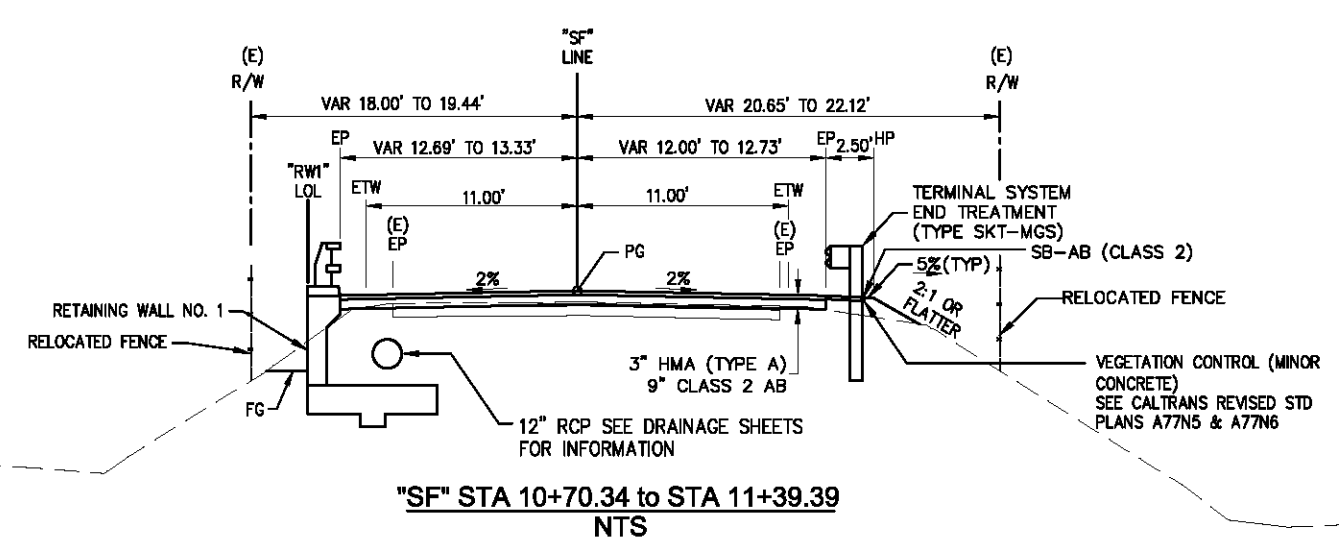
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 FOR REDUCED PLANS



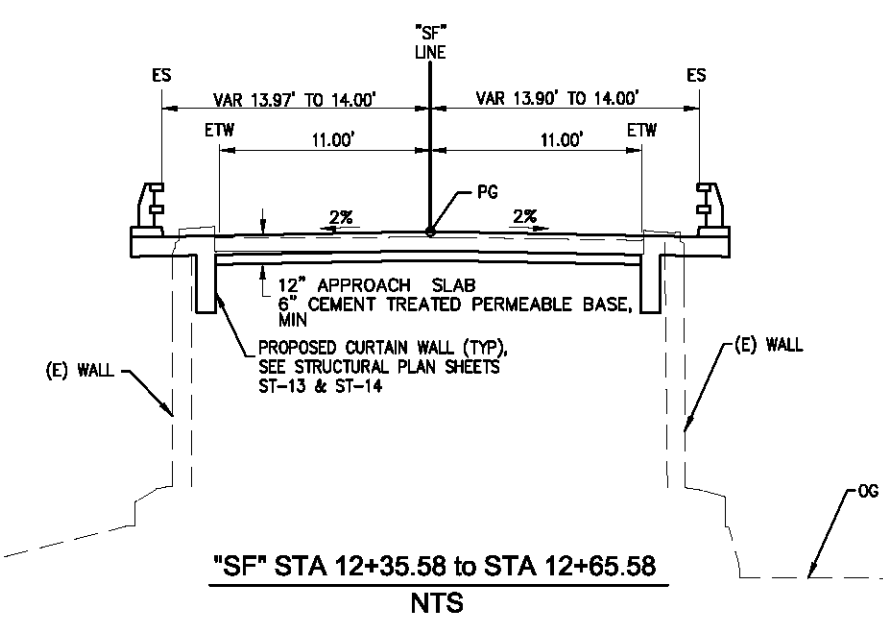
"SF" STA 11+39.39 to STA 11+75.38
 NTS
 ** RETAINING WALL NO. 1 CONTINUES TO "SF" STA 11+54.23



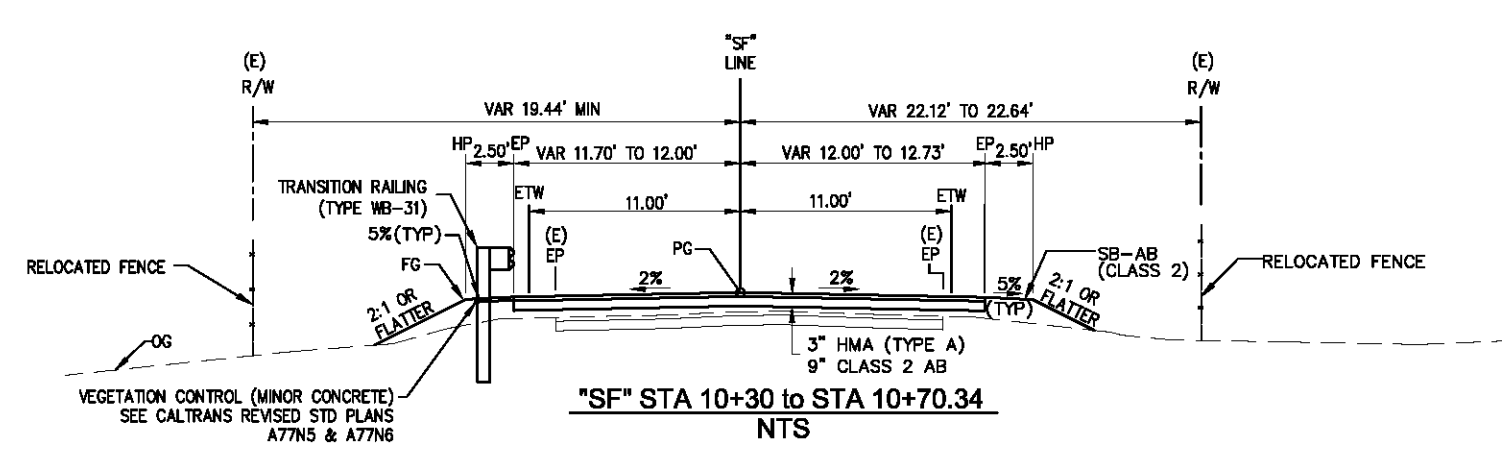
"SF" STA 12+65.58 to STA 13+01.26
 NTS
 * TRANSITION FROM NORMAL CROWN AT STA 12+60 TO MATCH EXISTING CROSS SLOPE AT CONFORM STA 13+01.26.



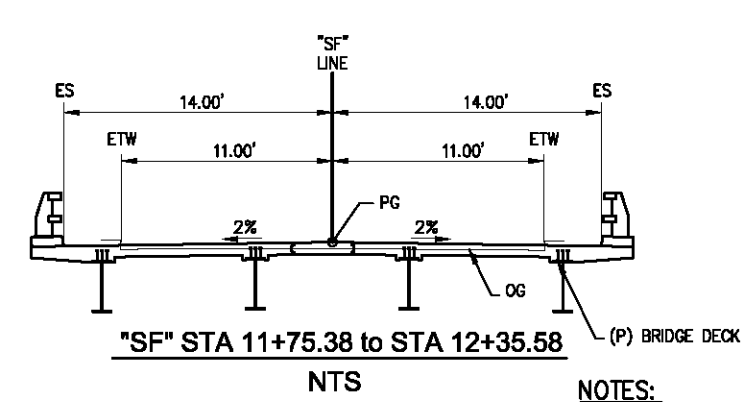
"SF" STA 10+70.34 to STA 11+39.39
 NTS



"SF" STA 12+35.58 to STA 12+65.58
 NTS



"SF" STA 10+30 to STA 10+70.34
 NTS



"SF" STA 11+75.38 to STA 12+35.58
 NTS
 (P) BRIDGE DECK

- NOTES:**
- SE (SAFETY EDGE) IS ASPHALT CONCRETE PAVED FROM EP AT A 2:1 SLOPE TO ORIGINAL GROUND.
 - SB-AB (AGGREGATE BASE) SLOPES AT 4:1 FROM EP TO ORIGINAL GROUND.

REVISION	NUMBER	DATE	DESCRIPTION	BY

DESIGNED: A. MITCHELL
 DRAWN: A. MITCHELL
 CHECKED: E. HENDERSON
 DATE: 12/16/2016
 ROAD NUMBER: 2130

PREPARED UNDER THE SUPERVISION OF:
 EDWIN J. HENDERSON
 REGISTERED CIVIL ENGINEER
 DATE: 06/30/2018

DESIGNED: A. MITCHELL
 DRAWN: A. MITCHELL
 CHECKED: E. HENDERSON
 DATE: 12/16/2016
 ROAD NUMBER: 2130

EL DORADO COUNTY
 CALIFORNIA

COUNTY OF EL DORADO
 COMMUNITY DEVELOPMENT SERVICES
 DEPARTMENT OF TRANSPORTATION

SILVER FORK ROAD AT SOUTH FORK AMERICAN RIVER
 BRIDGE REHABILITATION
 TYPICAL CROSS SECTIONS

SHEET
 X-1
 3 OF 30
 W.G. No.
 77124

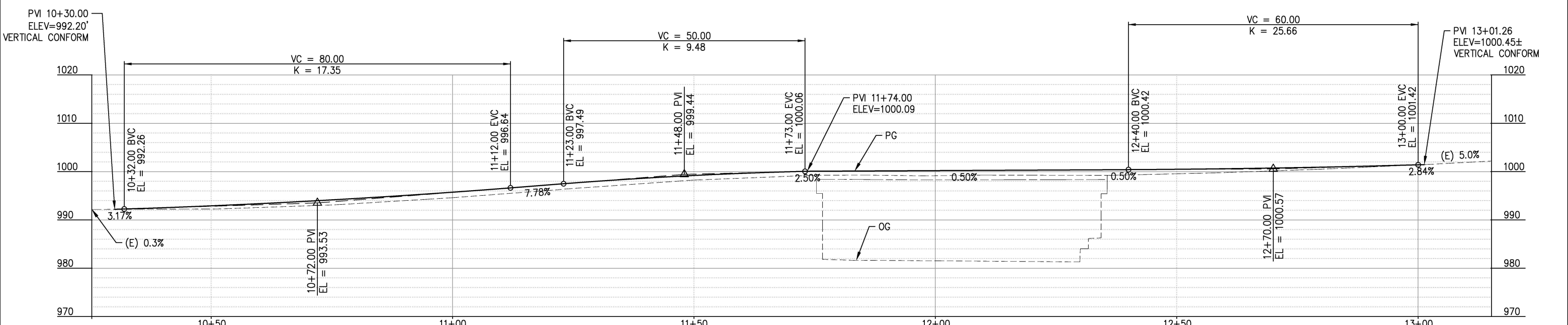
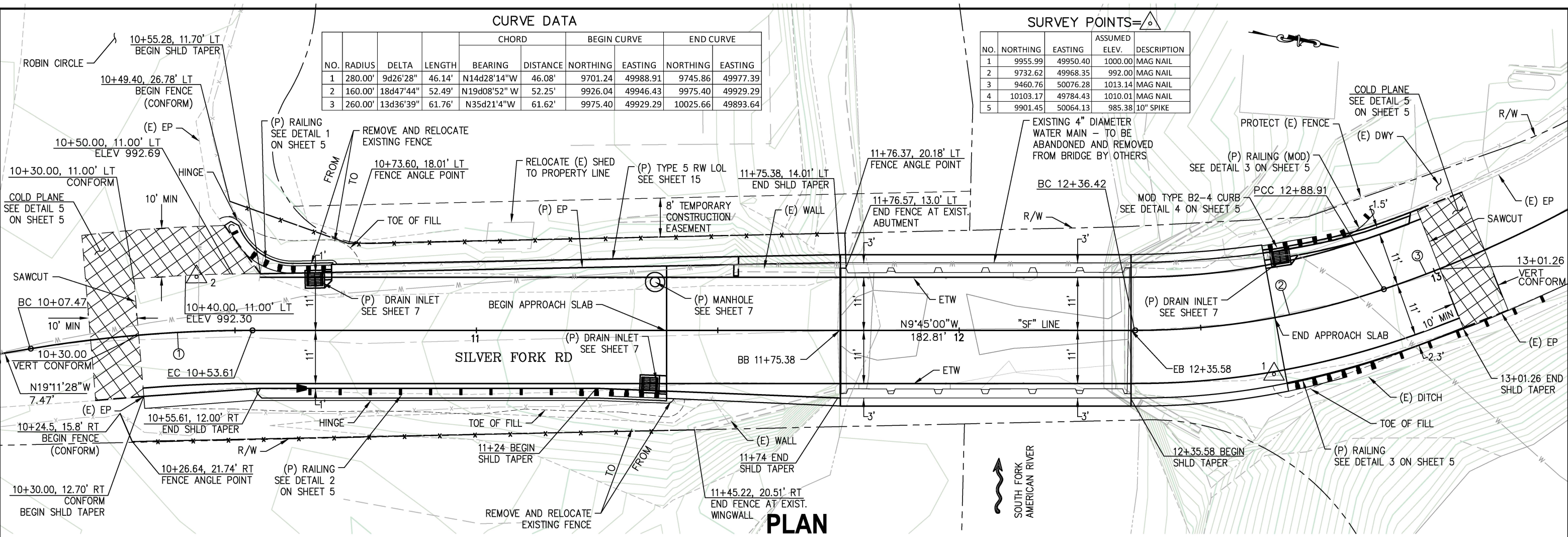
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FOR REDUCED PLANS

CURVE DATA

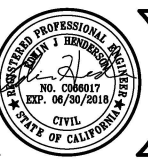
NO.	RADIUS	DELTA	LENGTH	CHORD		BEGIN CURVE		END CURVE	
				BEARING	DISTANCE	NORTHING	EASTING	NORTHING	EASTING
1	280.00'	9d26'28"	46.14'	N14d28'14"W	46.08'	9701.24	49988.91	9745.86	49977.39
2	160.00'	18d47'44"	52.49'	N19d08'52"W	52.25'	9926.04	49946.43	9975.40	49929.29
3	260.00'	13d36'39"	61.76'	N35d21'4"W	61.62'	9975.40	49929.29	10025.66	49893.64

SURVEY POINTS

NO.	NORTHING	EASTING	ASSUMED ELEV.	DESCRIPTION
1	9955.99	49950.40	1000.00	MAG NAIL
2	9732.62	49968.35	992.00	MAG NAIL
3	9460.76	50076.28	1013.14	MAG NAIL
4	10103.17	49784.43	1010.01	MAG NAIL
5	9901.45	50064.13	985.38	10" SPIKE



REVISION	NUMBER	DATE	DESCRIPTION	BY



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EDWIN J. HENDERSON
REGISTERED CIVIL ENGINEER
DATE: 11/22/2017

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DRAWN: A. MITCHELL
CHECKED: E. HENDERSON
DATE: 12/16/2016
ROAD NUMBER: 2130

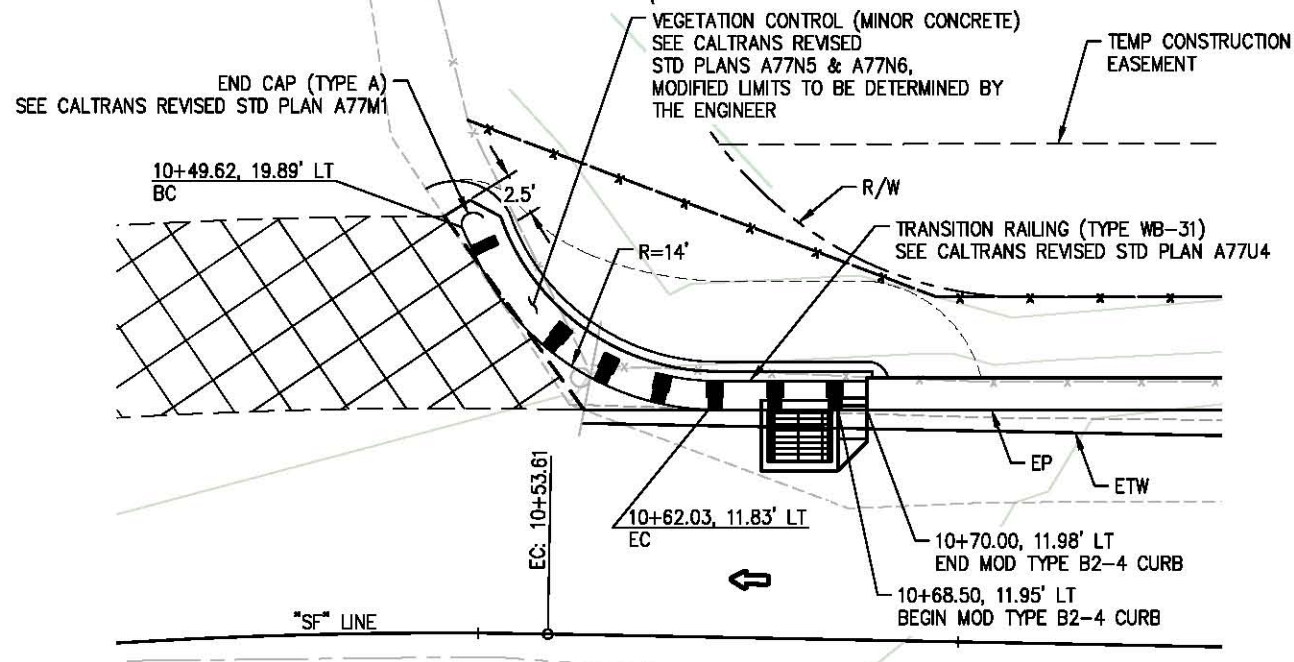


COUNTY OF EL DORADO
COMMUNITY DEVELOPMENT SERVICES
DEPARTMENT OF TRANSPORTATION

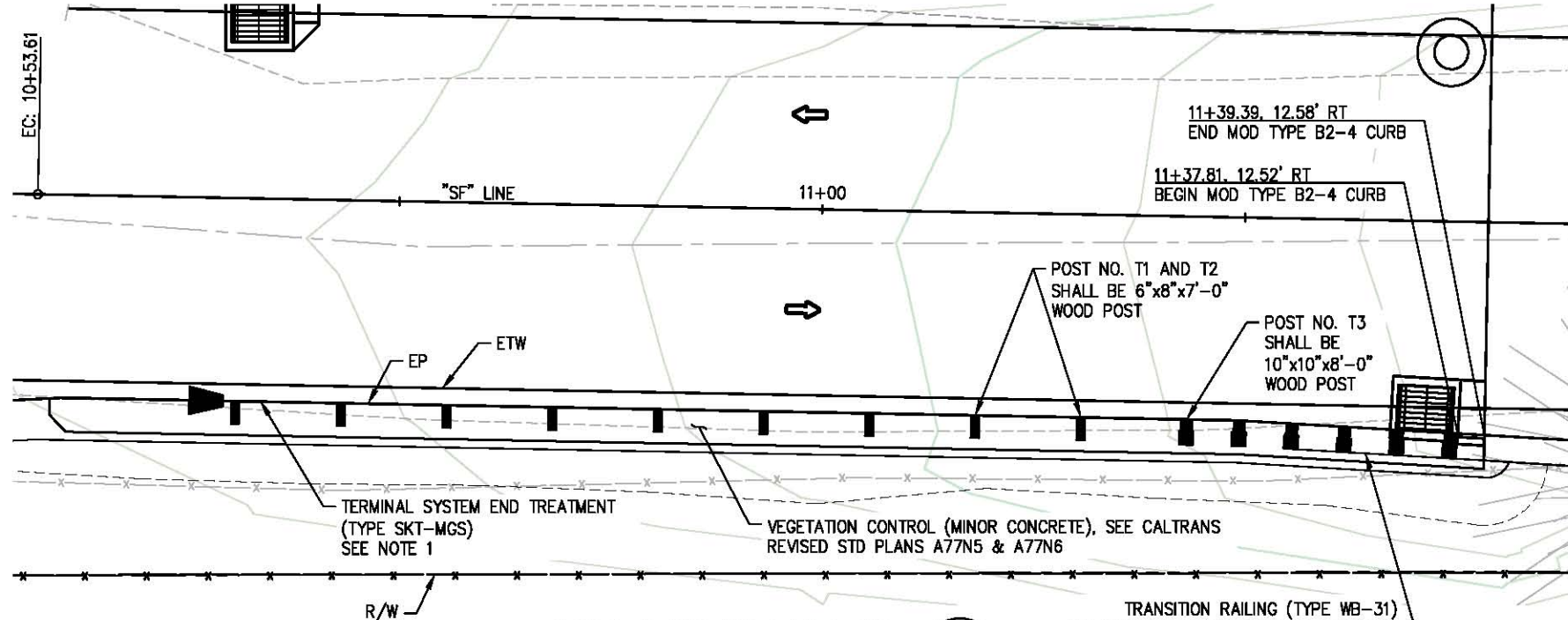
SILVER FORK ROAD AT SOUTH FORK AMERICAN RIVER
BRIDGE REHABILITATION
ROADWAY PLAN & PROFILE

SHEET
RD-1
4 OF 30
W.O. No.
77124

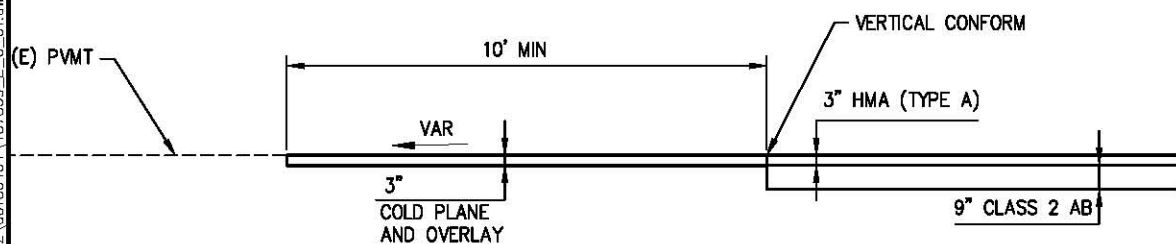
NOTE 1: CONTRACTOR TO INSTALL TERMINAL SYSTEM END TREATMENT POST LENGTHS AS SPECIFIED BY MANUFACTURER ACCOUNTING FOR REDUCED WIDTH (2.5') BETWEEN EDGE OF PAVEMENT AND HINGE POINT.



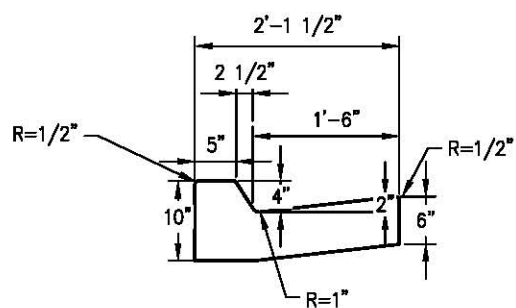
MGS LAYOUT DETAIL 1
SCALE: 1"=5'
C-1



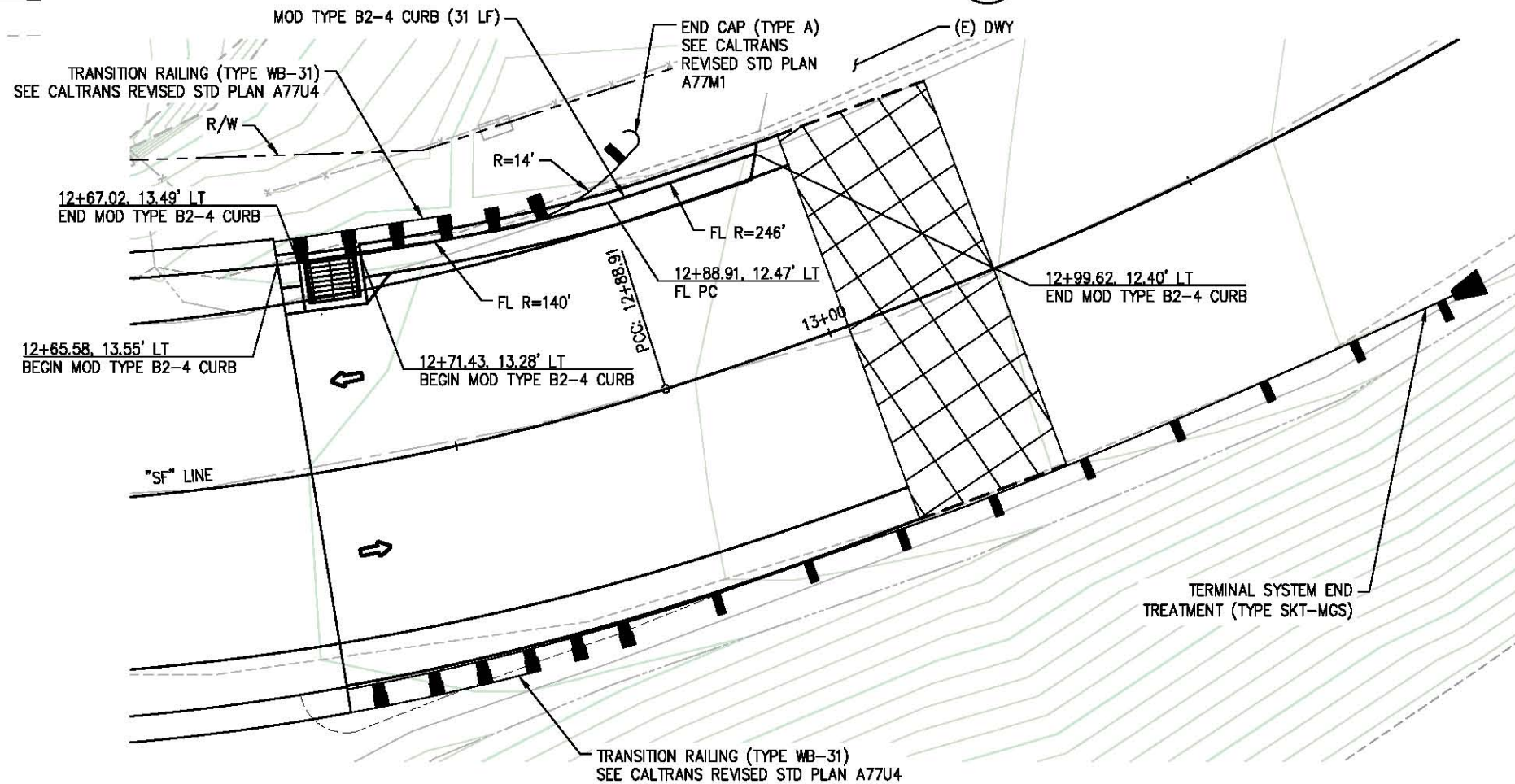
MGS LAYOUT DETAIL 2
SCALE: 1"=5'
C-1



PAVEMENT CONFORM AND HMA OVERLAY 5
NTS
C-1



NOTE:
SEE CALTRANS REVISED STD PLAN A87A FOR ALL OTHER REQUIREMENTS
MODIFIED TYPE B2-4 CURB SECTION 4
SCALE: 1"=1'
C-1



MGS LAYOUT DETAIL 3
SCALE: 1"=5'
C-1

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REVISION	NUMBER	DATE	DESCRIPTION	BY



PREPARED UNDER THE SUPERVISION OF:
EDWIN J. HENDERSON
REGISTERED CIVIL ENGINEER
DATE: 11/22/2017

DESIGNED: A. MITCHELL
DRAWN: A. MITCHELL
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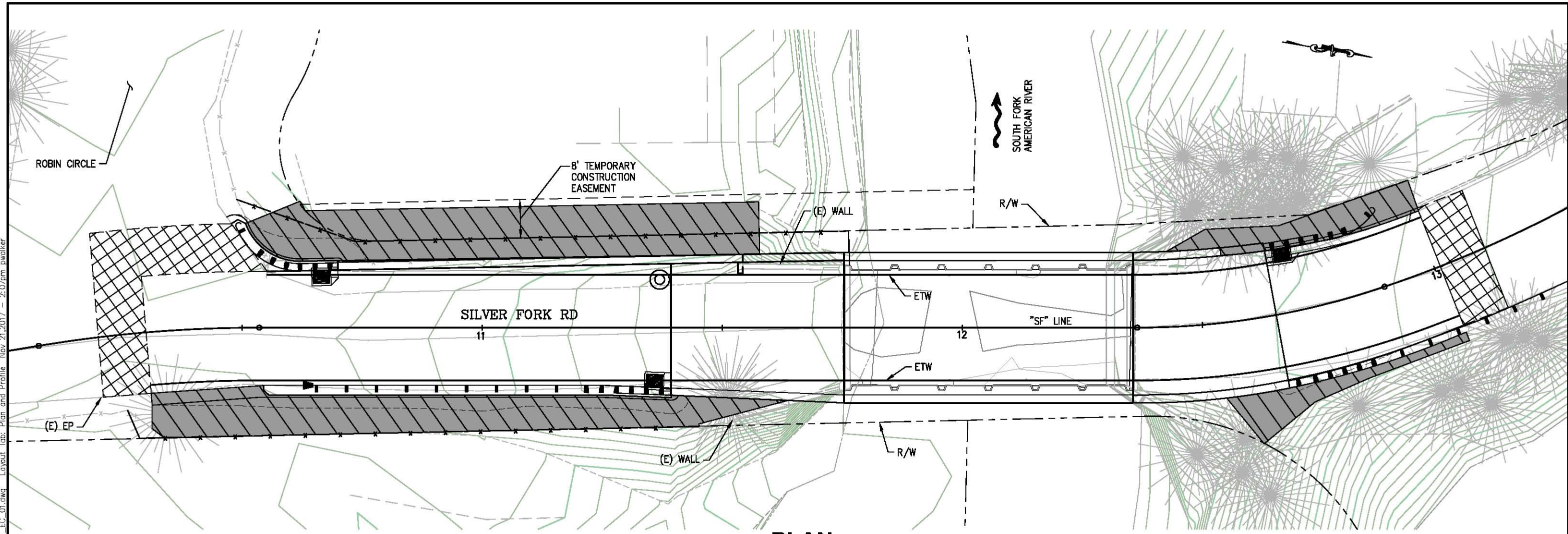


COUNTY OF EL DORADO
COMMUNITY DEVELOPMENT SERVICES
DEPARTMENT OF TRANSPORTATION

SILVER FORK ROAD AT SOUTH FORK AMERICAN RIVER
BRIDGE REHABILITATION
CONSTRUCTION DETAILS

SHEET
C-1
5 OF 30
W.G. No.
77124

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FOR REDUCED PLANS



PLAN
1" = 10'

LEGEND:

— APPROXIMATE LIMITS OF HYDROSEED AND ROLLED EROSION CONTROL PRODUCT (BLANKET)

HYDROSEED			
SEQUENCE	ITEM	MATERIAL DESCRIPTION	APPLICATION RATE
STEP 1	HYDROSEED	SEED	41 LB/ACRE
		FIBER	500 LB/ACRE
		ORGANIC FERTILIZER	500 LB/ACRE
STEP 2	STRAW	STRAW	4,000 LB/ACRE
STEP 3	HYDROMULCH	FIBER	500 LB/ACRE
		TACKIFIER	120 LB/ACRE

GENERAL NOTES:

1. THIS PLAN IS FOR FINAL STABILIZATION ONLY. TEMPORARY BMP'S MUST BE IMPLEMENTED AND MAINTAINED PER THE PROJECT APPROVED SWPPP.
2. INSTALL ROLLED EROSION CONTROL PRODUCT (BLANKET) PER CALTRANS STD PLAN H52.

REVISION	NUMBER	DATE	DESCRIPTION	BY



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REGISTERED CIVIL ENGINEER
DATE: 06/30/2018

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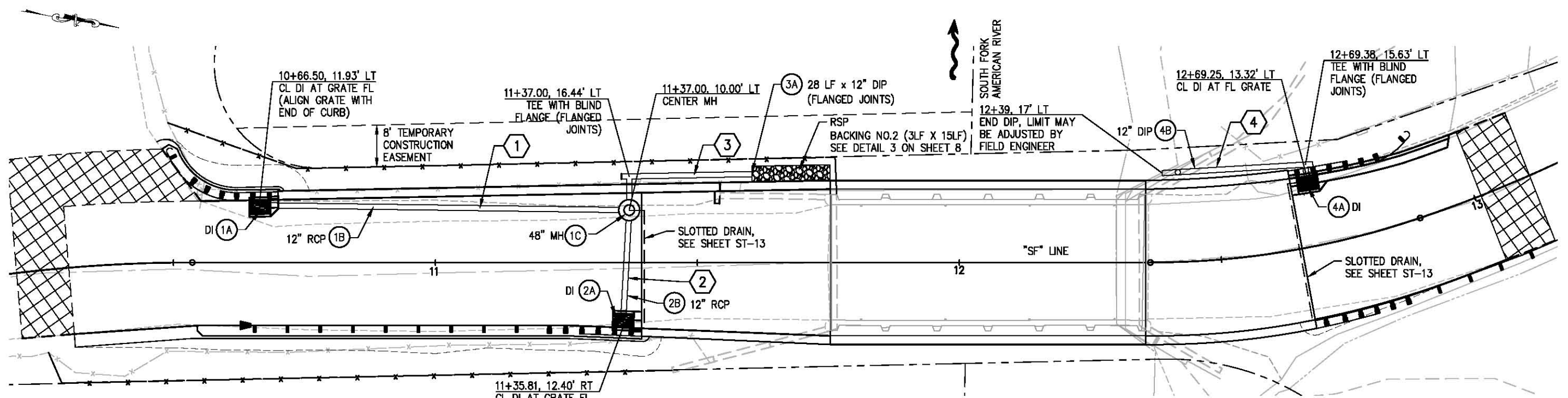


COUNTY OF EL DORADO
COMMUNITY DEVELOPMENT SERVICES
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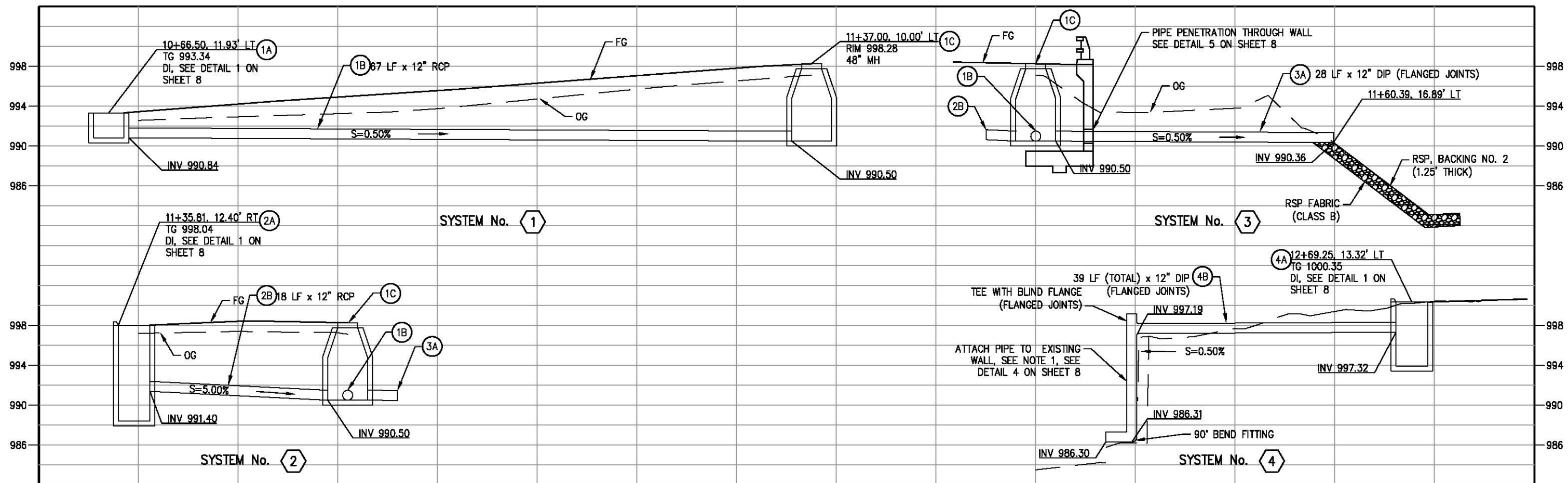
SILVER FORK ROAD AT SOUTH FORK AMERICAN RIVER
BRIDGE REHABILITATION
EROSION CONTROL PLAN

SHEET
EC-1
6 OF 30
W.G. No.
77124

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 FOR REDUCED PLANS



PLAN
SCALE: 1"=10'



PROFILE
SCALE: 1"=5' H,V

NOTE:
1. ATTACH PIPE TO EXISTING WALL USING MECHANICAL EXPANSION ANCHORS AND PIPE STRAPS.

REVISION	NUMBER	DATE	DESCRIPTION	BY



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EDWIN J. HENDERSON
 REGISTERED CIVIL ENGINEER
 DATE: 06/30/2018

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 DRAWN: A. MITCHELL
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 DATE: 12/16/2016
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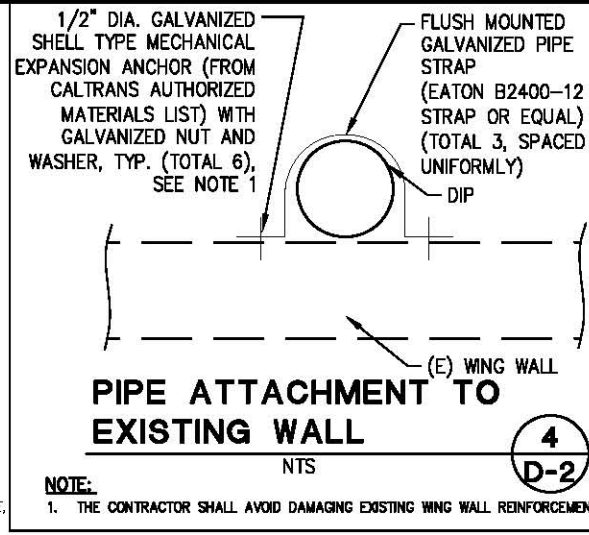
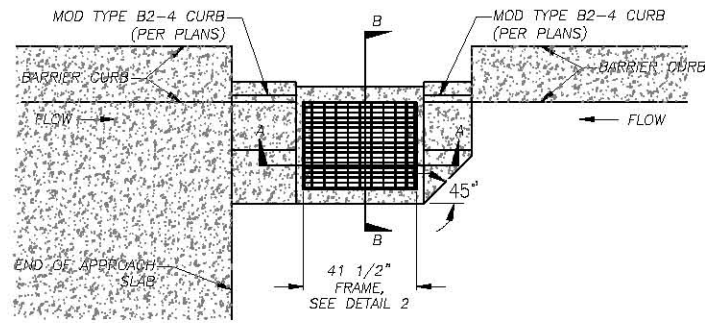


COUNTY OF EL DORADO
COMMUNITY DEVELOPMENT SERVICES
DEPARTMENT OF TRANSPORTATION

SILVER FORK ROAD AT SOUTH FORK AMERICAN RIVER
BRIDGE REHABILITATION
DRAINAGE PLAN AND PROFILES

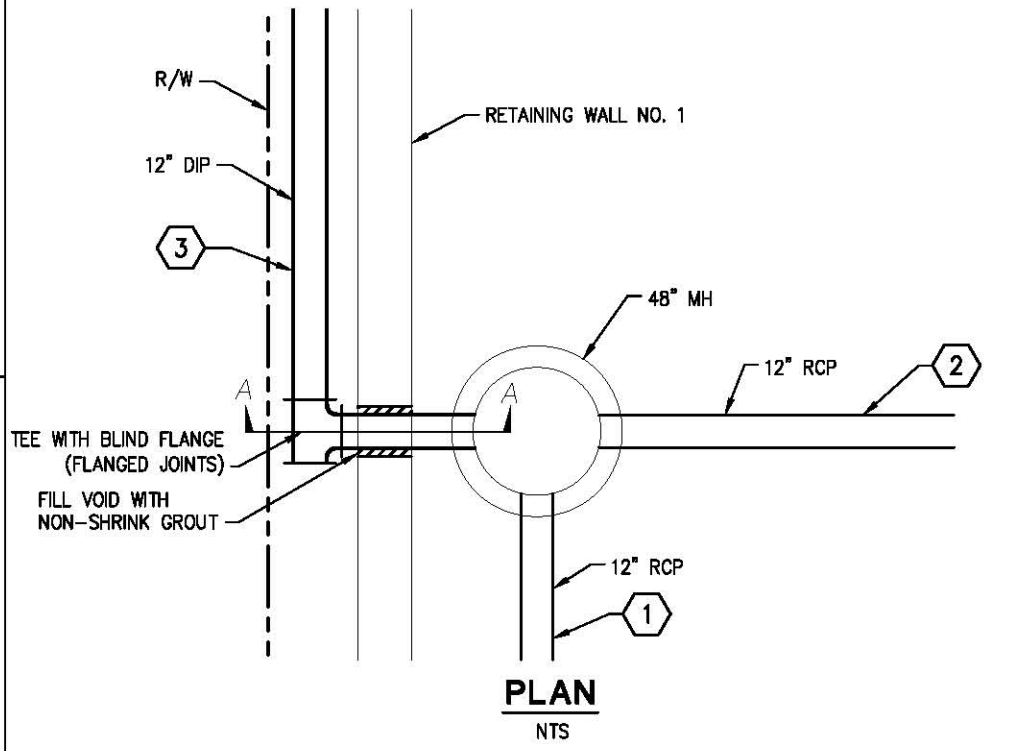
SHEET
D-1
 7 OF 30
 W.G. No.
77124

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 FOR REDUCED PLANS

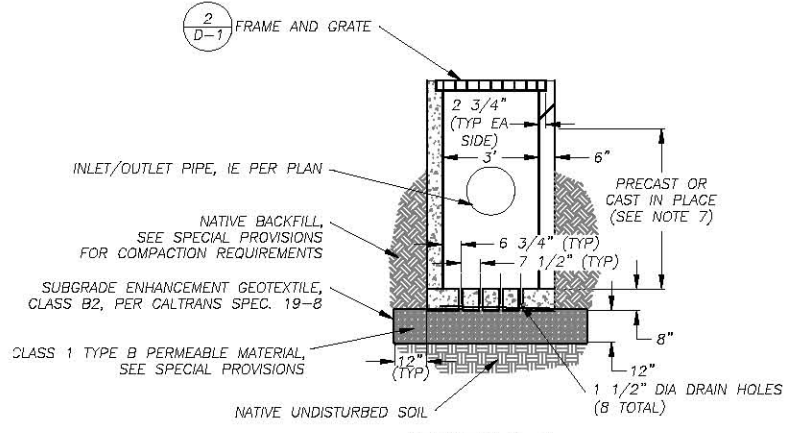


PIPE ATTACHMENT TO EXISTING WALL
 NTS (E) WING WALL
4
 D-2

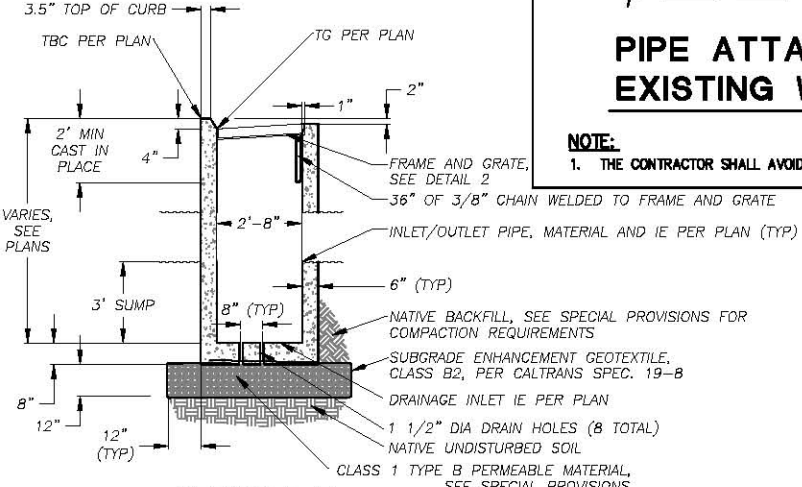
NOTE:
 1. THE CONTRACTOR SHALL AVOID DAMAGING EXISTING WING WALL REINFORCEMENT.



RETAINING WALL NO. 1
 NTS
5
 D-2

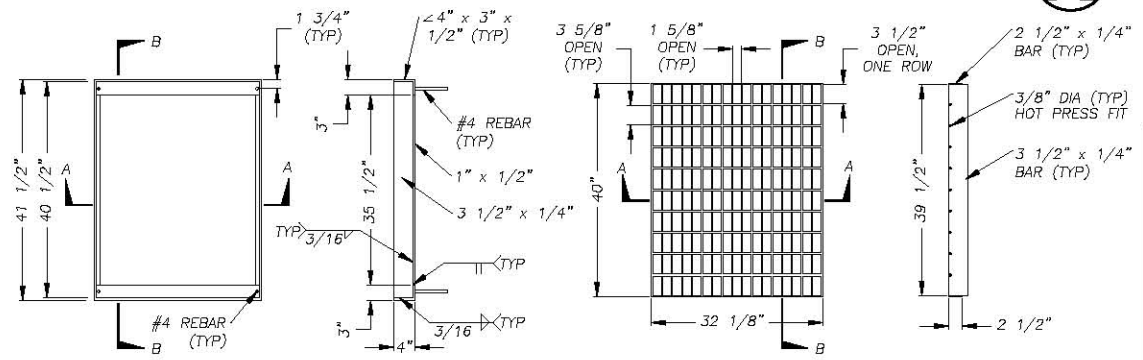


SECTION A-A

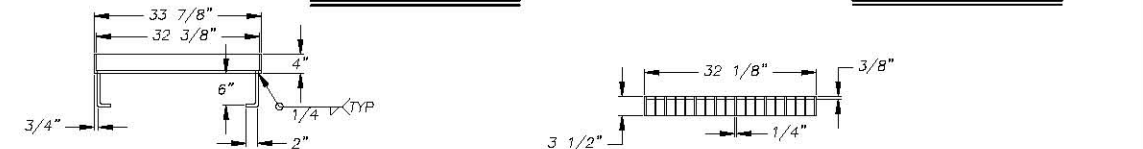


SECTION B-B

DRAINAGE INLET
 NTS
1
 D-2



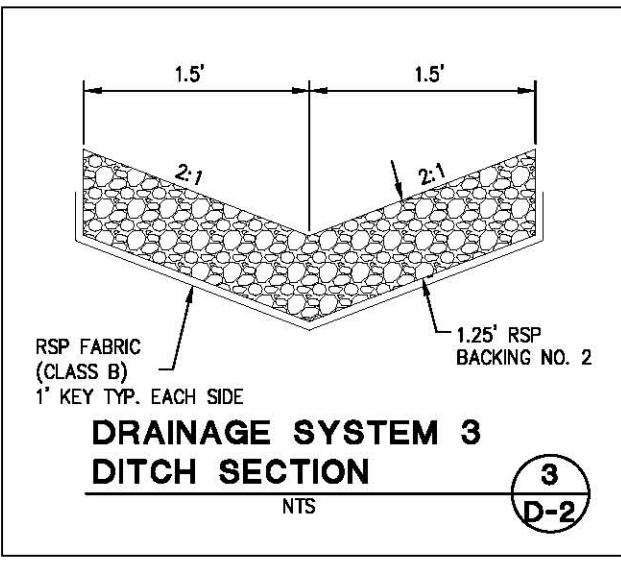
SECTION B-B



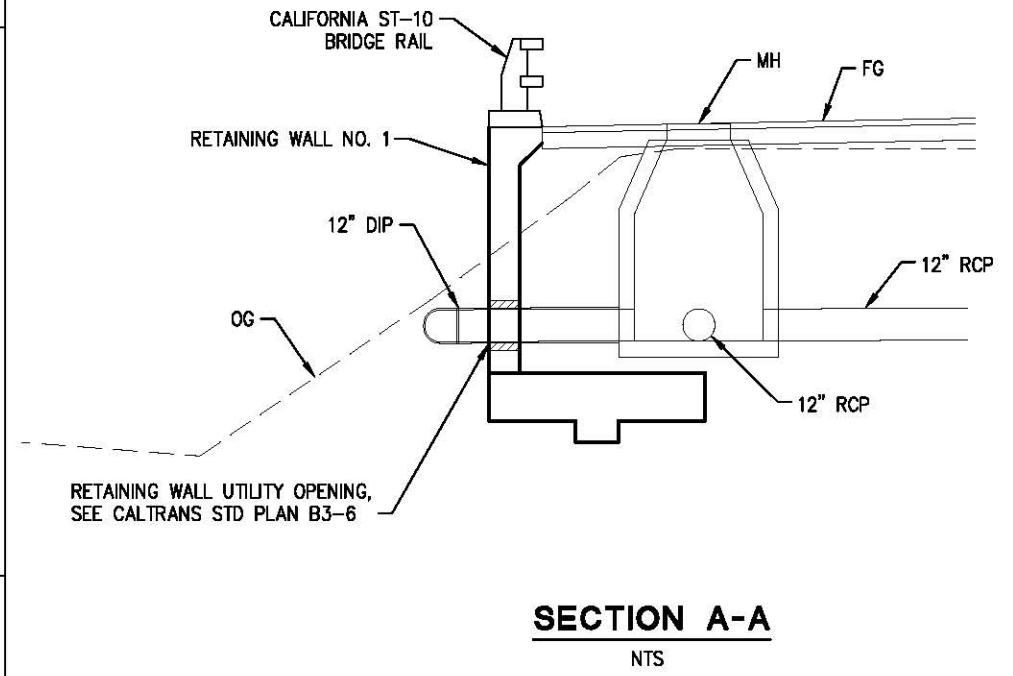
SECTION A-A

FRAME **GRATE**

DRAINAGE INLET FRAME & GRATE
 NTS
2
 D-2



DRAINAGE SYSTEM 3 DITCH SECTION
 NTS
3
 D-2



SECTION A-A
 NTS
5
 D-2

DRAINAGE PIPE PENETRATION THROUGH RETAINING WALL
 NTS
5
 D-2

- DRAINAGE INLET NOTES:**
1. THE 1:1 SLOPED CONCRETE SECTION IS TO BE POSITIONED ON THE UP SLOPE SIDE OF THE DRAINAGE INLET. AT SAG LOCATIONS THE 1:1 SLOPED CONCRETE SECTION IS TO BE ON BOTH SIDES OF THE DRAINAGE INLET.
 2. DRAINAGE INLET 1A TO BE BUILT WITHOUT 3' SUMP AND 1 1/2" DIA DRAIN HOLES.
 3. FLOOR OF THE DRAINAGE INLET SHALL BE PLACED PRIOR TO OR AT THE SAME TIME AS THE SIDE WALLS, OR TIED WITH REBAR.
 4. FRAME AND GRATE SHALL CONFORM TO THE FRAME AND GRATE DETAIL ON THE PLANS, D&L 1-3542, OR EQUAL.
 5. WALL REINFORCING (NOT SHOWN) SHALL BE #4 BARS @ 18" OC EACH WAY, PLACED 1 1/2" CLEAR FROM INSIDE OF BOX. INLET BOTTOM REINFORCING NOT REQUIRED EXCEPT AS NOTED IN NOTE 3, ABOVE.
 6. A PRECAST UNIT WITH CAST-IN-PLACE TOP SECTION TO RECEIVE GRATE AND FRAME WILL BE AN ACCEPTABLE ALTERNATIVE TO CAST-IN-PLACE UNITS. DRAINAGE INLETS THAT ARE ENTIRELY PRECAST ARE NOT ACCEPTABLE. CAST-IN-PLACE TOP SECTIONS SHALL BE DOWELED INTO THE CURB AND GUTTER WITH 3-#4 BARS, 18" LONG, ON EACH SIDE OF DRAINAGE INLET.

REVISION	NUMBER	DATE	DESCRIPTION	BY



PREPARED UNDER THE SUPERVISION OF:
EDWIN J. HENDERSON
 REGISTERED CIVIL ENGINEER
 DATE: **06/30/2018**

DESIGNED: **A. MITCHELL**
 DRAWN: **A. MITCHELL**
 CHECKED: **E. HENDERSON**
 DATE: **12/16/2016**
 ROAD NUMBER: **2130**



COUNTY OF EL DORADO
COMMUNITY DEVELOPMENT SERVICES
DEPARTMENT OF TRANSPORTATION

SILVER FORK ROAD AT SOUTH FORK AMERICAN RIVER
BRIDGE REHABILITATION
DRAINAGE DETAILS

SHEET **D-2**
 8 OF 30
 W.G. No. **77124**

ORIGINAL SCALE IS IN INCHES
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 Layout Tab: 457839_I.D_03 Nov 21, 2017 - 2:08pm pwalker
 FOR REDUCED PLANS
 2
 1
 0

NOTES:

- ON ALL PIPE UP TO 30" I.D. USE FLEXIBLE COMPRESSION GASKET OR BOOT CONNECTOR CONFORMING TO ASTM C-923. CONNECTION SHALL BE WATER AND SOIL TIGHT. FOR PIPES GREATER THAN 30" I.D., BASE MAY BE CAST-IN-PLACE AND A WATER STOP CONFORMING TO ASTM C-923 SHALL BE USED.
- SUMP SHALL BE 1'-0" DEEP, MEASURED FROM INVERT OF OUTFALL PIPE. SUMP NOT REQUIRED IF OUTFALL PIPE IS 24" I.D. OR LARGER.
- RISER SECTION, CONES, AND ADJUSTING RINGS SHALL CONFORM TO ASTM C-478.
- ALL JOINTS SHALL BE MADE WITH PREFORMED PLASTIC JOINT SEALING COMPOUND. FOLLOWING INSTALLATION GROUT ALL INTERIOR AND EXTERIOR JOINTS.
- CONCENTRIC COMPONENTS SHALL BE USED UNLESS OTHERWISE SPECIFIED ON THE PLANS.
- PRECAST MANHOLES SHALL BE SIZED TO PROVIDE THE FOLLOWING: THE ANNULAR SPACE ON THE INSIDE OF THE MANHOLE BARREL BETWEEN CORED PIPE CONNECTION HOLES SHALL BE A MINIMUM OF 10-INCHES. IF THE CONNECTION HOLE IS CAST MONOLITHICALLY WITH THE MANHOLE BARREL THE MEASUREMENT SHALL BE TAKEN FROM THE FINISHED CONCRETE CONNECTION SURFACE.

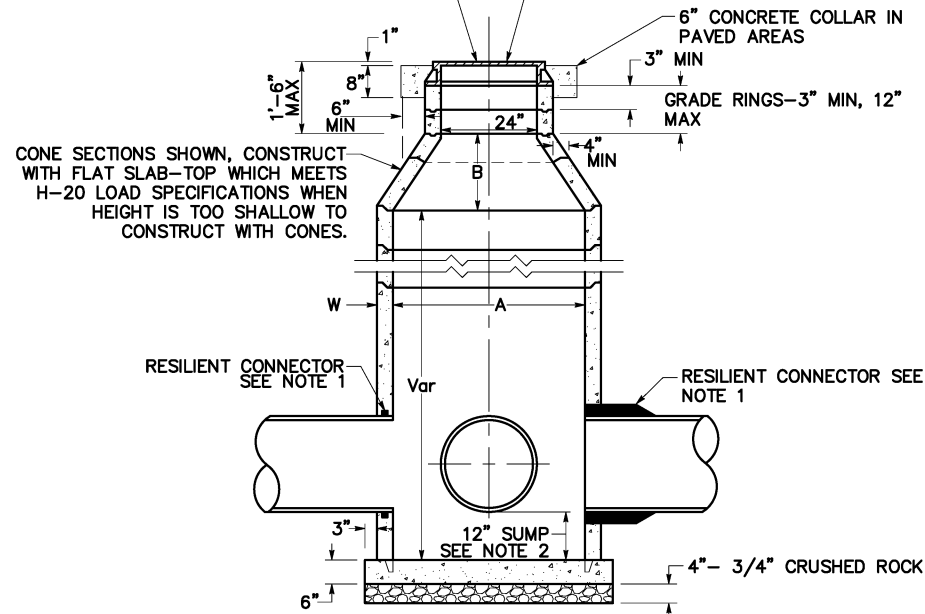
TABLE OF MINIMUM DIMENSIONS

M.H.	A	B	W
48"	48"	18"	4"
60"	60"	30"	6"
72"	72"	**	7"
84"	84"	54"	8"
96"	96"	---	9"

** - TRANSITION SLAB REDUCES THE INSIDE DIAMETER FROM 72" TO 60"

IN PAVED AREAS SET FLUSH WITH PAVEMENT, IN UNPAVED AREAS SET 1" BELOW ADJACENT GRADE.

PROVIDE FRAME AND COVER PER DETAIL ON THIS SHEET. USE GRATE TYPE COVER IN UNPAVED AREAS.



STORM DRAIN MANHOLE

- (18) (18) (65) (65) (65) (65)

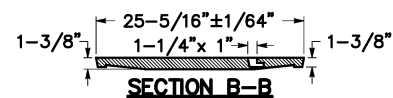
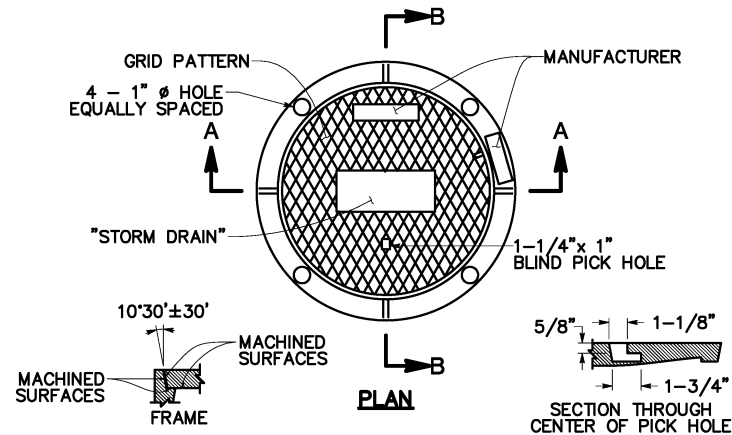
STORM DRAIN MANHOLE

NTS



NOTES:

- ALL CASTINGS TO CONFORM TO ASTM A48, CLASS 35B
- FRAME AND COVER TO MEET H-20 LOAD SPECIFICATIONS.
- MACHINED HORIZONTAL AND VERTICAL BEARING SURFACES NOT TO EXCEED 1/64" TOLERANCE.
- FRAME AND COVER SHALL HAVE A COATING OF BLACK BITUMINOUS MATERIAL.
- LOCKING COVER TYPE FRAME AND COVERS SHALL BE USED IN EASEMENT AREAS UNLESS OTHERWISE APPROVED.



**SECTION A-A
FRAME AND COVER DETAIL**

NOTES:

- MANHOLE COVER SHALL FIT FRAME SHOWN ON FRAME AND COVER DETAIL.
- SEATING SURFACES SHALL BE MACHINED AS SHOWN IN FRAME AND COVER DETAIL.
- GALVANIZE AFTER FABRICATION

DRAINAGE PLAN SHEET NO.	DRAINAGE SYSTEM NO.	DRAINAGE UNIT	DRAINAGE INLET	48" MAN HOLE	INLET (OR MH) DEPTH (FOR INFORMATION ONLY)	12" RCP	12" DIP	TEE W/ BLIND FLANGE	90° DIP BEND FITTING	RSP (BACKING NO. 2)	RSP FABRIC (CLASS 8)
			EA	EA	LF	LF	LF	EA	EA	CY	SQYD
D-1	1	1A	1		2.80						
		1B				67					
		1C		1	7.80						
D-1	2	2A	1		6.84						
		2B				18					
D-1	3	3A					28	1			
		3B								3	12
D-1	4	4A	1		3.11						
		4B					39	2	1		
TOTAL			3	1		85	67	3	1	3	12

DRAINAGE QUANTITY TABLE

REVISION	NUMBER	DATE	DESCRIPTION	BY



PREPARED UNDER THE SUPERVISION OF:
 EDWIN J. HENDERSON
 REGISTERED CIVIL ENGINEER
 DATE: 06/30/2018

DESIGNED: A. MITCHELL
 DRAWN: A. MITCHELL
 CHECKED: E. HENDERSON
 DATE: 12/16/2016
 ROAD NUMBER: 2130

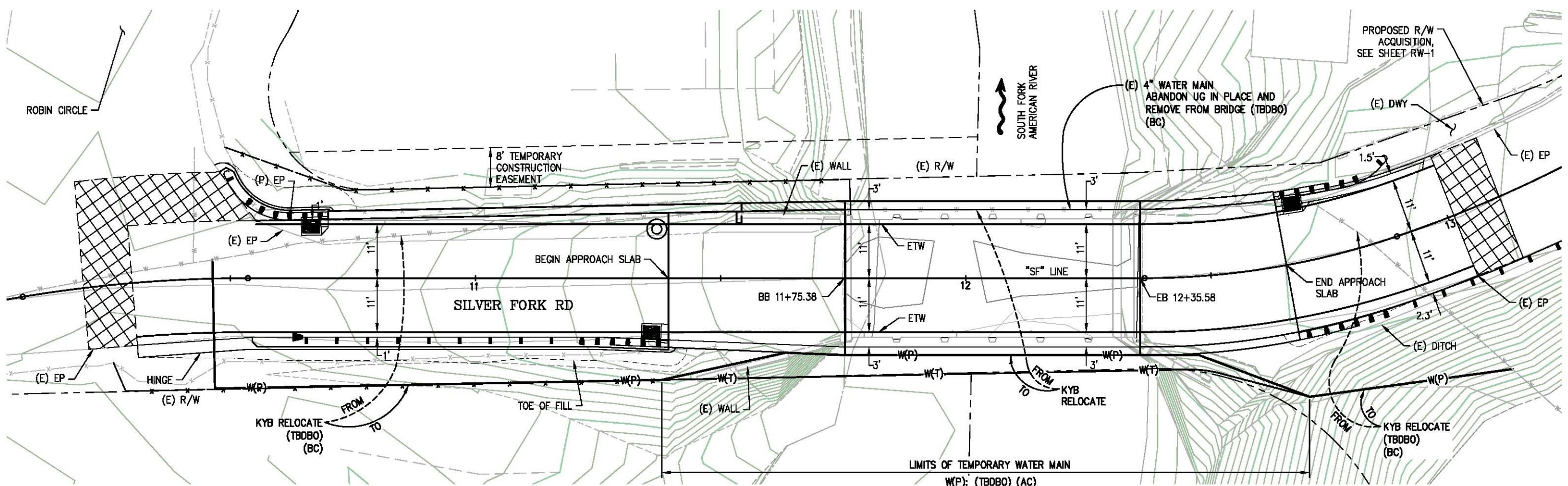


COUNTY OF EL DORADO
 COMMUNITY DEVELOPMENT SERVICES
 DEPARTMENT OF TRANSPORTATION

SILVER FORK ROAD AT SOUTH FORK AMERICAN RIVER
 BRIDGE REHABILITATION
 DRAINAGE DETAILS & QUANTITIES

SHEET
D-3
 9 OF 30
 W.O. No. 77124

ORIGINAL SCALE IS IN INCHES
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 FOR REDUCED PLANS

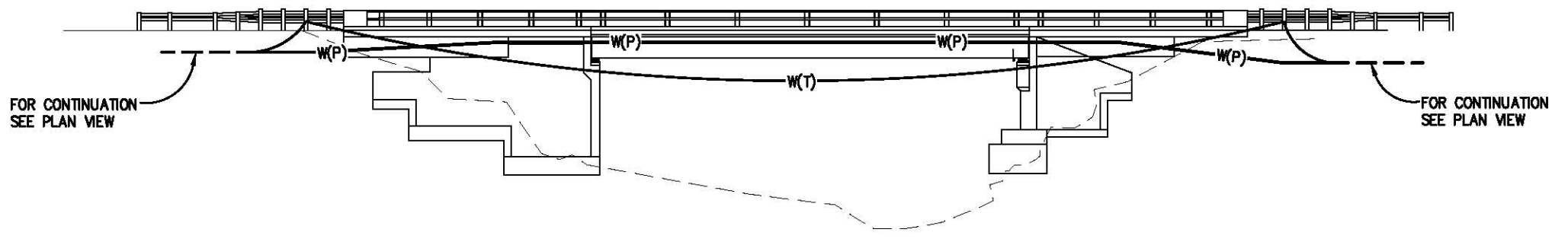


- LEGEND:**
- EXISTING WATER
 - W(P) --- PROPOSED WATER
 - W(T) --- TEMPORARY WATER

PLAN
1" = 10'

- ABBREVIATIONS:**
- AC --- AFTER CONSTRUCTION
 - BC --- BEFORE CONSTRUCTION
 - TBDBO --- TO BE DONE BY OTHERS
 - UG --- UNDERGROUND

- GENERAL NOTES:**
- LOCATIONS OF UTILITY FACILITIES SHOWN ON THESE PLANS ARE APPROXIMATE AND MUST BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION.
 - UTILITY OWNERSHIP ON THIS PROJECT:
WATER - KYBURZ MUTUAL WATER COMPANY (KYB)
 - THE CONTRACTOR MUST PROVIDE ACCESS TO THE UTILITY OWNERS DURING CONSTRUCTION AS NEEDED FOR MAINTENANCE, REPAIRS, AND THE PLANNING/DESIGN OF THEIR RELOCATION WORK
 - CONTRACTOR MUST REMOVE CONFLICTING PORTIONS OF (E)UG 4" WATER MAIN IN ORDER TO CONSTRUCT PROPOSED IMPROVEMENTS.



BRIDGE ELEVATION
1" = 10' H,V

REVISION	NUMBER	DATE	DESCRIPTION	BY



PREPARED UNDER THE SUPERVISION OF:
 EDWIN J. HENDERSON
 REGISTERED CIVIL ENGINEER
 DATE: 06/30/2018

DESIGNED: A. MITCHELL
 DRAWN: A. MITCHELL
 CHECKED: E. HENDERSON
 DATE: 12/16/2016
 ROAD NUMBER: 2130

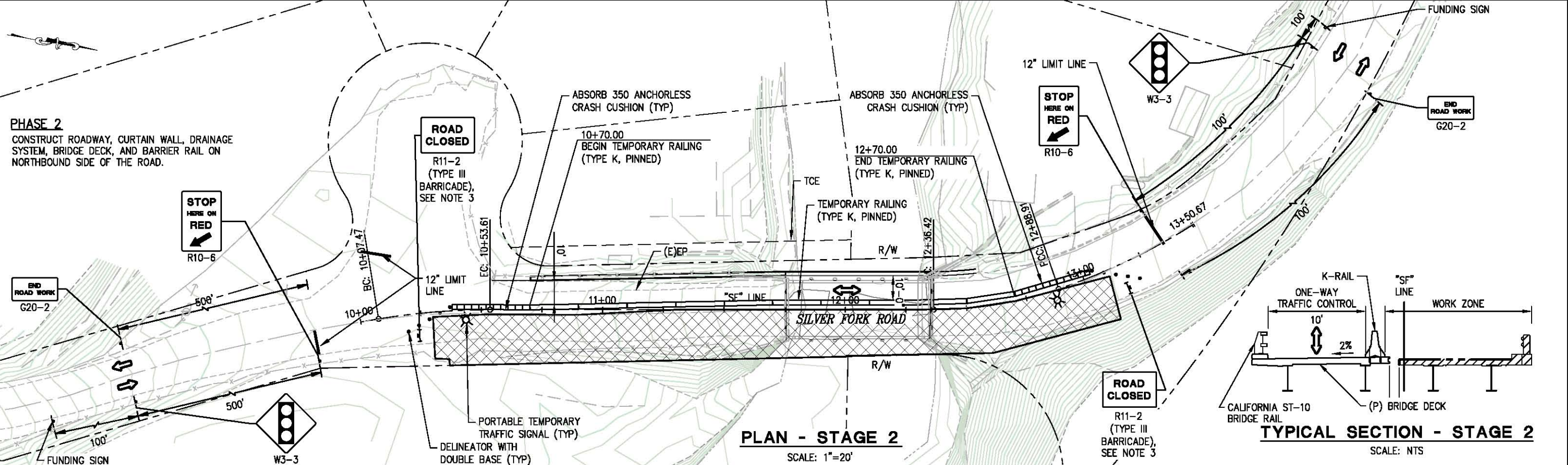
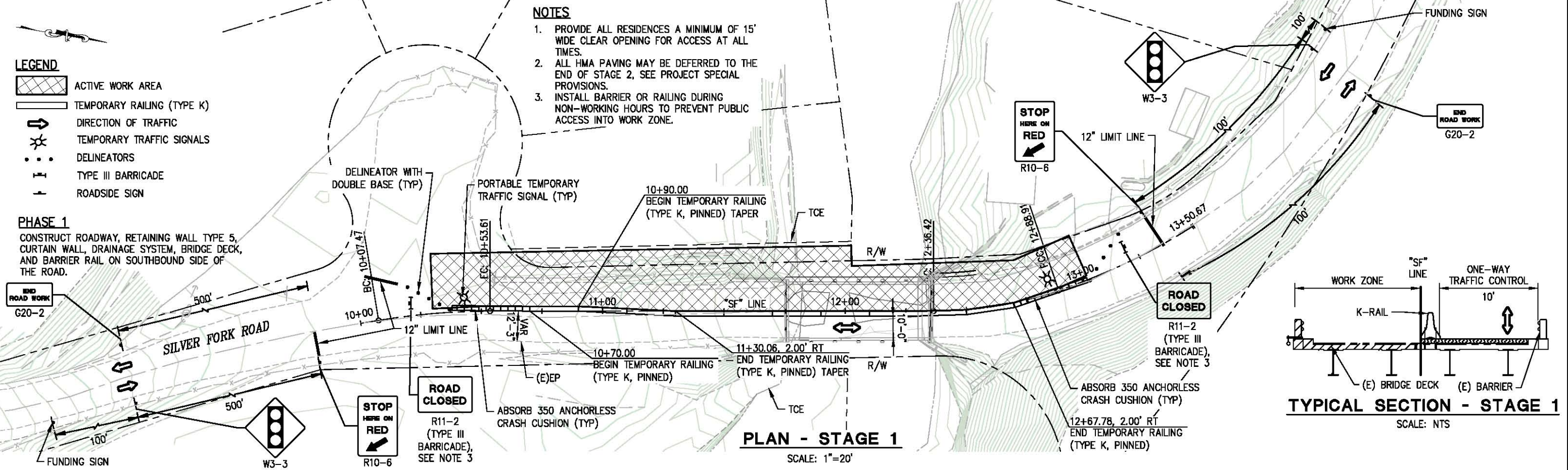


COUNTY OF EL DORADO
COMMUNITY DEVELOPMENT SERVICES
DEPARTMENT OF TRANSPORTATION

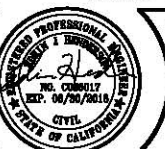
SILVER FORK ROAD AT SOUTH FORK AMERICAN RIVER
BRIDGE REHABILITATION
UTILITY PLAN

SHEET
U-1
 10 OF 30
 W.G. No.
77124

ORIGINAL SCALE IS IN INCHES
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Layout Tab: Layout - Nov 22, 2017 - 1:33pm casquil2



REVISION	NUMBER	DATE	DESCRIPTION	BY



PREPARED UNDER THE SUPERVISION OF:
EDWIN J. HENDERSON
REGISTERED CIVIL ENGINEER
DATE: 11/22/2017

DESIGNED: A. MITCHELL
DRAWN: A. MITCHELL
CHECKED: E. HENDERSON
DATE: 12/16/2016
ROAD NUMBER: 2130



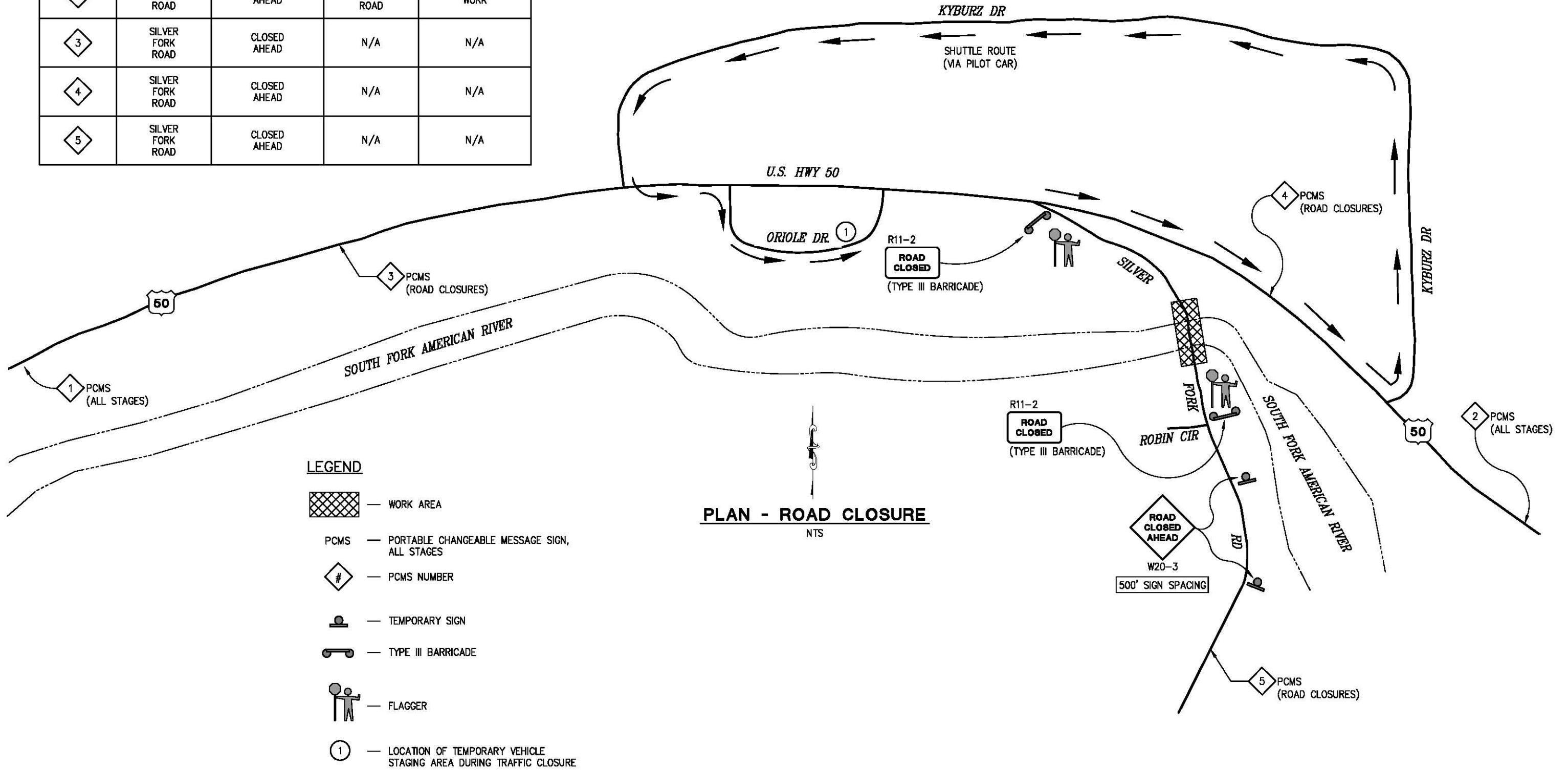
COUNTY OF EL DORADO
COMMUNITY DEVELOPMENT SERVICES
DEPARTMENT OF TRANSPORTATION

SILVER FORK ROAD AT SOUTH FORK AMERICAN RIVER
BRIDGE REHABILITATION
STAGE CONSTRUCTION & TRAFFIC HANDLING PLAN

SHEET
SC-1
11 OF 30
W.G. No. 77124

ORIGINAL SCALE IS IN INCHES
Drawing name: C:\pwworkdir\eden001\walker\00136464\457839_1_SC_02.dwg Layout Tab: Plan and Profile Nov 21, 2017 - 2:08pm ewalker

PCMS No.	ROAD CLOSURE		ALL OTHER STAGES	
	FIRST FLASH	SECOND FLASH	FIRST FLASH	SECOND FLASH
1	SILVER FORK ROAD	CLOSED AHEAD	SILVER FORK ROAD	ROAD WORK
2	SILVER FORK ROAD	CLOSED AHEAD	SILVER FORK ROAD	ROAD WORK
3	SILVER FORK ROAD	CLOSED AHEAD	N/A	N/A
4	SILVER FORK ROAD	CLOSED AHEAD	N/A	N/A
5	SILVER FORK ROAD	CLOSED AHEAD	N/A	N/A



LEGEND

- WORK AREA
- PORTABLE CHANGEABLE MESSAGE SIGN, ALL STAGES
- PCMS NUMBER
- TEMPORARY SIGN
- TYPE III BARRICADE
- FLAGGER
- LOCATION OF TEMPORARY VEHICLE STAGING AREA DURING TRAFFIC CLOSURE

REVISION	NUMBER	DATE	DESCRIPTION	BY



PREPARED UNDER THE SUPERVISION OF:
EDWIN J. HENDERSON
 REGISTERED CIVIL ENGINEER
 DATE: **06/30/2018**

DESIGNED: A. MITCHELL
 DRAWN: A. MITCHELL
 CHECKED: E. HENDERSON
 DATE: 12/16/2016
 ROAD NUMBER: 2130

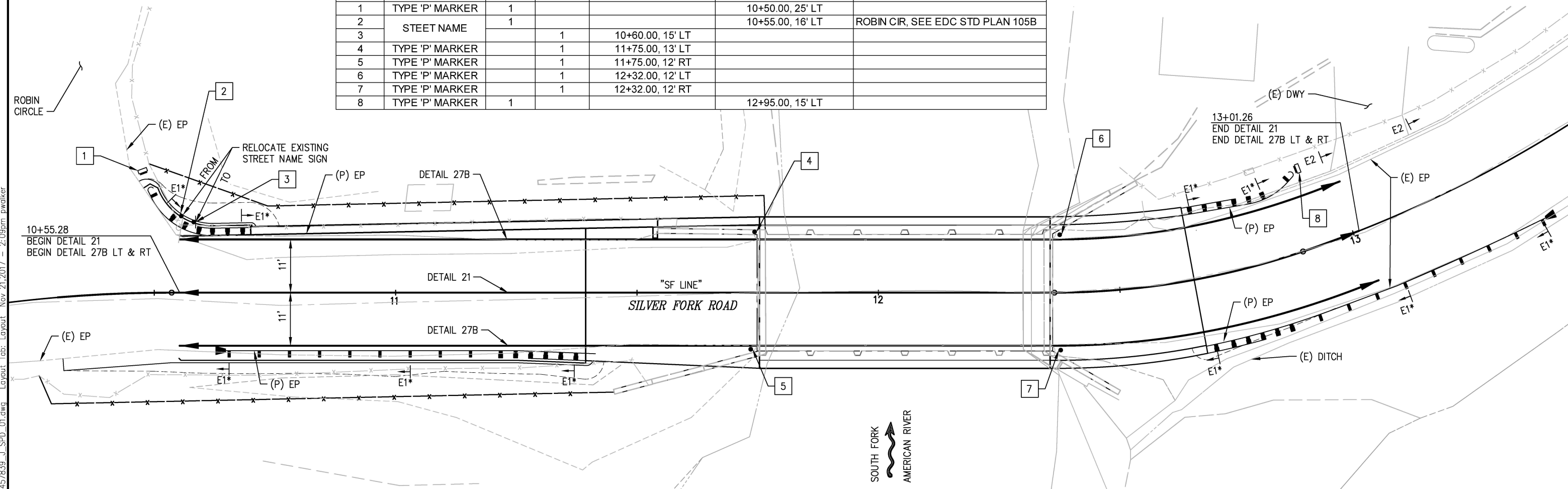


COUNTY OF EL DORADO
COMMUNITY DEVELOPMENT SERVICES
DEPARTMENT OF TRANSPORTATION

SILVER FORK ROAD AT SOUTH FORK AMERICAN RIVER
BRIDGE REHABILITATION
ROAD CLOSURE DETOUR PLAN

SHEET
SC-2
 12 OF 30
 W.G. No. **77124**

ROADSIDE SIGNS AND OBJECT MARKERS						
SIGN NO.	SIGN	ROADSIDE SIGN		EXISTING LOCATION	PROPOSED LOCATION (APPROXIMATE)	REMARKS
		INSTALL (EA)	SALVAGE (EA)			
1	TYPE 'P' MARKER	1			10+50.00, 25' LT	
2	STEET NAME	1			10+55.00, 16' LT	ROBIN CIR, SEE EDC STD PLAN 105B
3			1	10+60.00, 15' LT		
4	TYPE 'P' MARKER		1	11+75.00, 13' LT		
5	TYPE 'P' MARKER		1	11+75.00, 12' RT		
6	TYPE 'P' MARKER		1	12+32.00, 12' LT		
7	TYPE 'P' MARKER		1	12+32.00, 12' RT		
8	TYPE 'P' MARKER	1			12+95.00, 15' LT	



PLAN

SCALE: 1"=10'

DELINEATORS - SEE STD PLAN A73C		
LOCATION	QUANTITY	
	TYPE E, CLASS 1	TYPE E, CLASS 2
'SF' 10+53.50 LT	1	
'SF' 10+65.50 RT	1	
'SF' 10+68.00 LT	1	
'SF' 11+03.00 RT	1	
'SF' 11+37.00 RT	1	
'SF' 12+67.50 LT & RT	2	
'SF' 12+84.00 LT	1	
'SF' 12+99.00 LT		1
'SF' 13+06.00 RT	1	
'SF' 13+20.00 LT		1
'SF' 13+35.50 RT	1	
	10	2

4" TWO-COMPONENT PAINT TRAFFIC STRIPE					
DETAIL No. / STANDARD PLAN	BEGIN STATION	END STATION	WHITE	YELLOW	TOTAL
			LF	LF	LF
21 - A20A	SF-LINE - 10+55.28	SF-LINE - 13+01.26		492	
27B - A20B	SF-LINE - 10+55.28 LT	SF-LINE - 13+01.26 LT	246		
	SF-LINE - 10+55.28 RT	SF-LINE - 13+01.26 RT	246		
TOTAL			492	492	984

STRIPING QUANTITY TABLE

LEGEND

- EXISTING SIGN ONE-POST
- PROPOSED SIGN ONE-POST
- MARKER
- SALVAGE SIGN
- SIGN NUMBER
- DELINEATOR
- E1 = TYPE E, CLASS 1
- E2 = TYPE E, CLASS 2
- * = ATTACH TO MGS POST PER RSP A77N4

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FOR REDUCED PLANS

REVISION	NUMBER	DATE	DESCRIPTION	BY



PREPARED UNDER THE SUPERVISION OF:
EDWIN J. HENDERSON
REGISTERED CIVIL ENGINEER
DATE: 06/30/2018

DESIGNED: A. MITCHELL
DRAWN: A. MITCHELL
CHECKED: E. HENDERSON
DATE: 12/16/2016
ROAD NUMBER: 2130

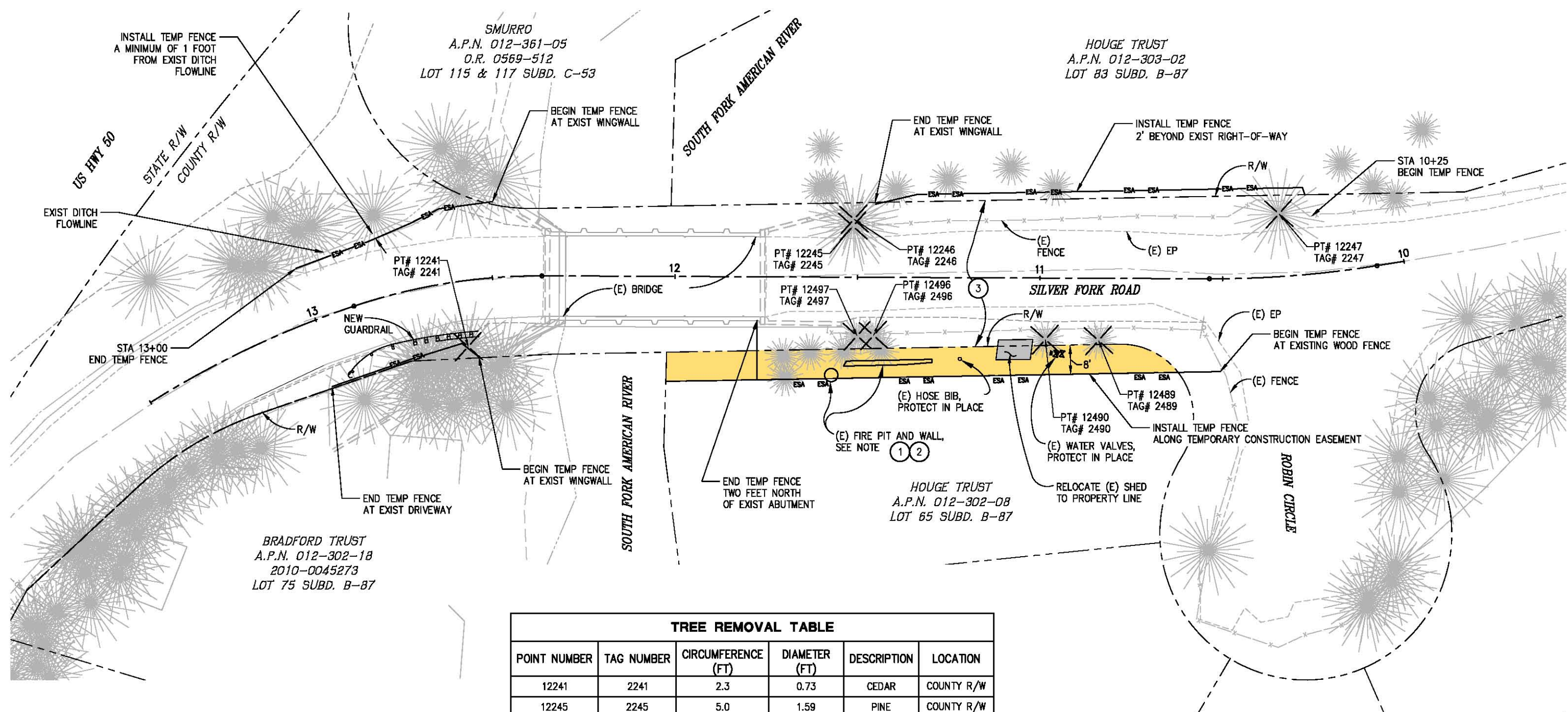


COUNTY OF EL DORADO
COMMUNITY DEVELOPMENT SERVICES
DEPARTMENT OF TRANSPORTATION

SILVER FORK ROAD AT SOUTH FORK AMERICAN RIVER
BRIDGE REHABILITATION
SIGNING & PAVEMENT DELINEATION PLAN

SHEET
SPD-1
13 OF 30
W.O. No. 77124

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 Drawing name: C:\pwworkdir\user001\casquil2\0136464\57839_K_RW_01.dwg
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 Nov 22, 2017 - 1:34pm casquil2



CONSTRUCTION NOTES:

- ① — FIRE PIT (CAST IRON) MAY BE REMOVED DURING CONSTRUCTION AND REINSTALLED AFTER IMPROVEMENTS ARE COMPLETED.
- ② — PROTECT (E) WALL IN PLACE AND STABILIZE AS DIRECTED BY ENGINEER.
- ③ — RELOCATE (E) FENCE TO R/W AS SHOWN.

TREE REMOVAL TABLE					
POINT NUMBER	TAG NUMBER	CIRCUMFERENCE (FT)	DIAMETER (FT)	DESCRIPTION	LOCATION
12241	2241	2.3	0.73	CEDAR	COUNTY R/W
12245	2245	5.0	1.59	PINE	COUNTY R/W
12246	2246	1.60	0.51	CEDAR	COUNTY R/W
12247	2247	2.30	0.73	CEDAR	COUNTY R/W
12489	2489	4.30	1.37	OAK (FORKED)	COUNTY R/W
12490	2490	1.20	0.38	PINE	COUNTY R/W
12496	2496	1.10	0.35	OAK	COUNTY R/W
12497	2497	2.20	0.70	CEDAR	COUNTY R/W

NOTE:
 ALL OTHER TREES, NOT SHOWN IN TABLE FOR REMOVAL, WILL BE PROTECTED IN PLACE.

LEGEND:

- TEMPORARY CONSTRUCTION EASEMENT
- TREE TO BE REMOVED (REFER TO TAG NUMBER AND TABLE)
- INSTALL TEMPORARY FENCE (TYPE ESA) SEE CALTRANS STD PLAN T65

SCALE: NONE

REVISION	NUMBER	DATE	DESCRIPTION	BY



PREPARED UNDER THE SUPERVISION OF:
EDWIN J. HENDERSON
 REGISTERED CIVIL ENGINEER
 DATE: 11/22/2017

DESIGNED: A. MITCHELL
 DRAWN: A. MITCHELL
 CHECKED: E. HENDERSON
 DATE: 12/16/2016
 ROAD NUMBER: 2130

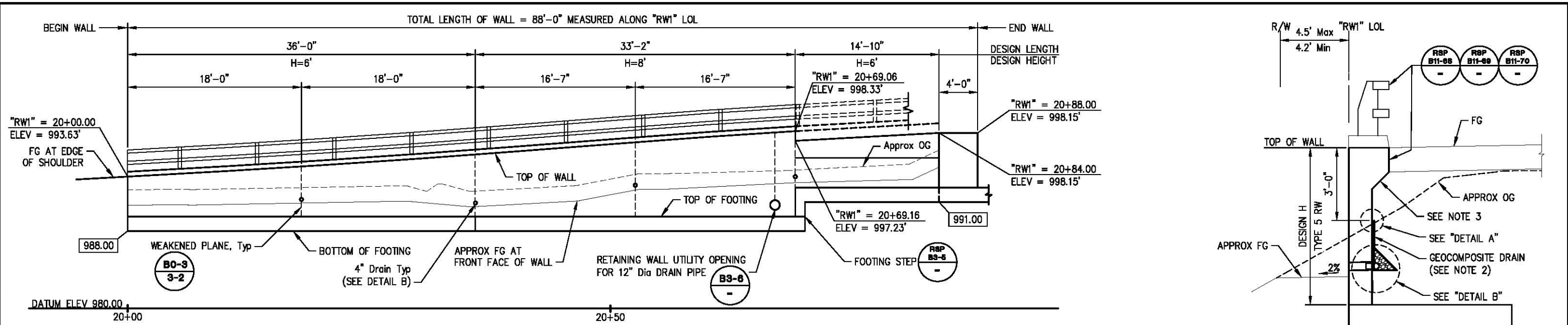


COUNTY OF EL DORADO
COMMUNITY DEVELOPMENT SERVICES
DEPARTMENT OF TRANSPORTATION

SILVER FORK ROAD AT SOUTH FORK AMERICAN RIVER
BRIDGE REHABILITATION
RIGHT-OF-WAY, EASEMENTS, &
TREE REMOVAL PLAN

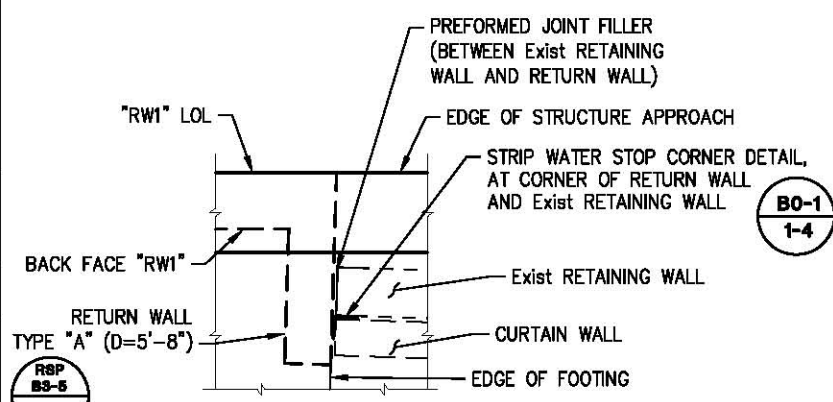
SHEET
RW-1
 14 OF 30
 W.G. No. 77124

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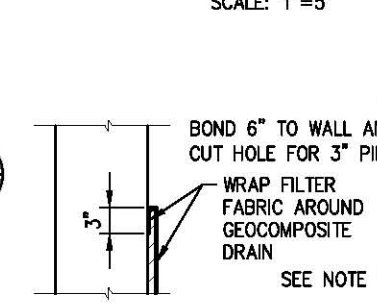
DEVELOPED ELEVATION

SCALE: 1"=5'



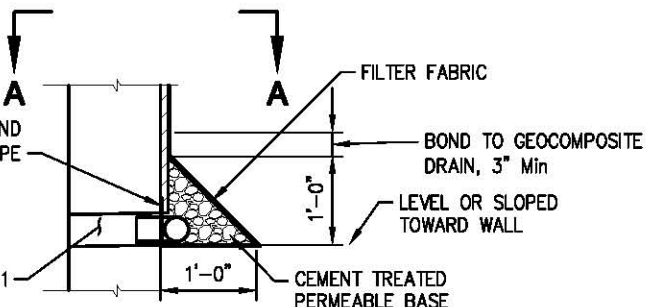
RETURN WALL DETAIL

SCALE: 1"=2'



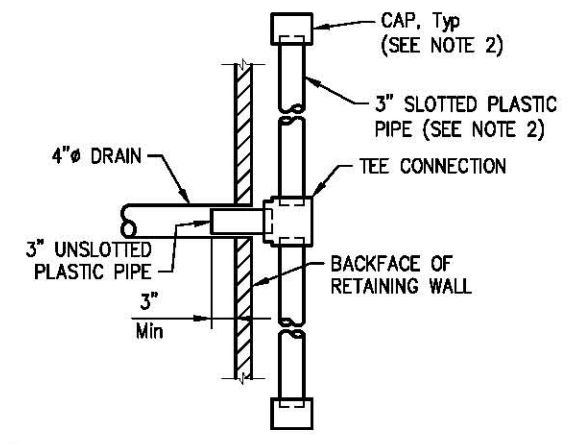
DETAIL A

SCALE: 1"=1'



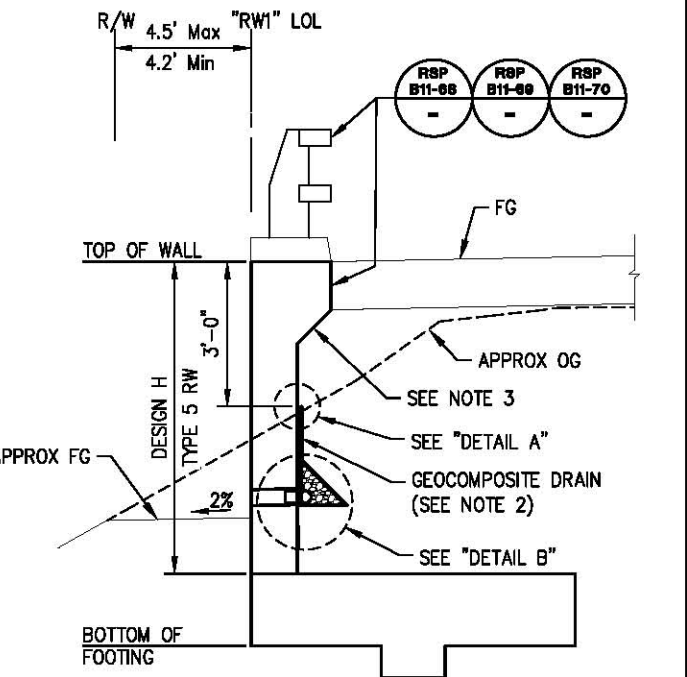
DETAIL B

SCALE: 1"=1'



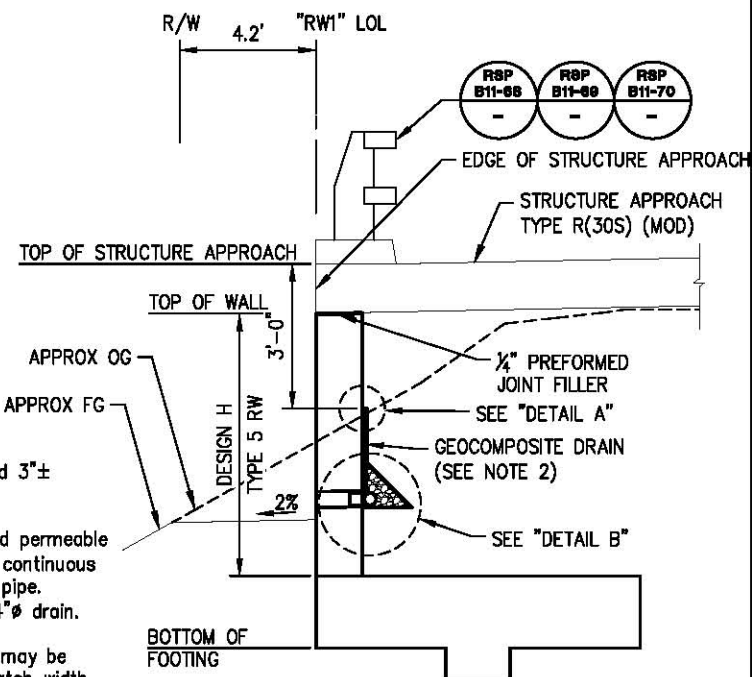
SECTION A-A

SCALE: 1"=1'



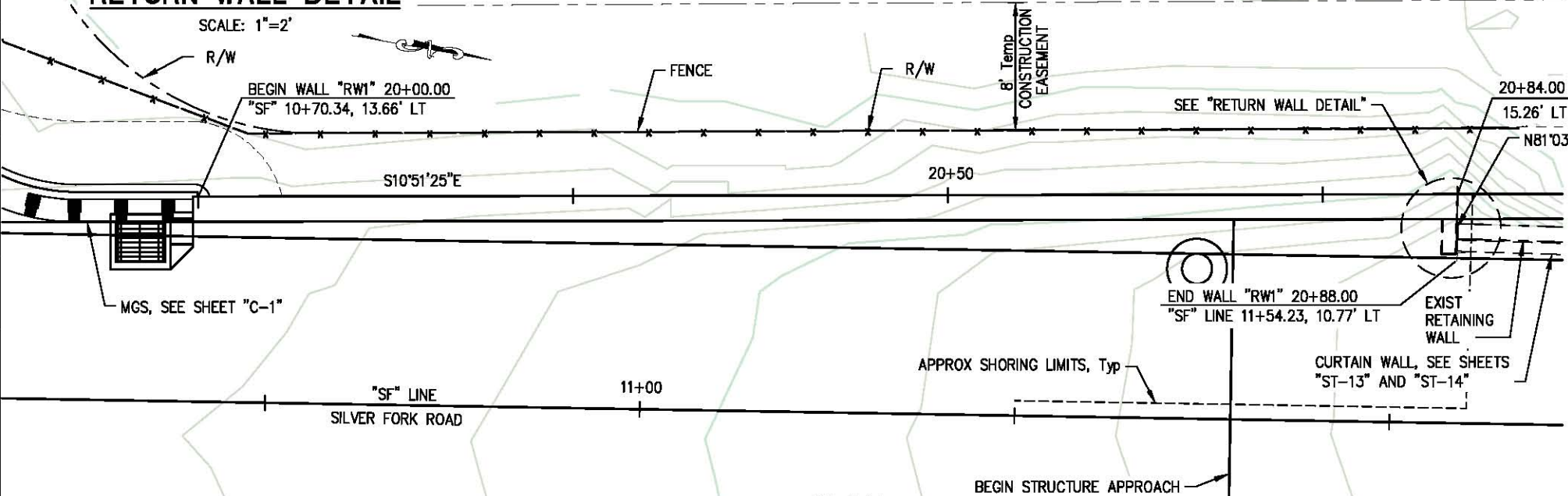
TYPICAL SECTION

("RW1" STA 20.00 TO 20+69.06)
SCALE: N.T.S.



TYPICAL SECTION

("RW1" STA 20+69.06 TO 20+88.00)
SCALE: N.T.S.



PLAN

SCALE: 1"=5'

NOTES:

- Exposed wall drains shall be located 3"± above finished grade.
- Geocomposite drain, cement treated permeable base, and 3"Ø slotted plastic pipe continuous behind retaining wall. Cap ends of pipe. provide "tee" connection at each 4"Ø drain.
- Retaining wall haunch alternatively may be eliminated by thickening wall to match width of barrier (1'-8"). Negative batter along the back face of the wall is not allowed. Concrete cover to backface reinforcement shall remain 2" entire height of wall. This alternative shall be at the contractor's expense and no additional compensation will be allowed.
- Contractor to protect adjacent property and structures from damage during construction.

REVISION	NUMBER	DATE	DESCRIPTION	BY



PREPARED UNDER THE SUPERVISION OF:
JEFFREY L. THOMURE
REGISTERED CIVIL ENGINEER
DATE: 11/22/2017

DESIGNED: A. MITCHELL
DRAWN: A. MITCHELL
CHECKED: J. THOMURE
DATE: 12/16/2016
ROAD NUMBER: 2130



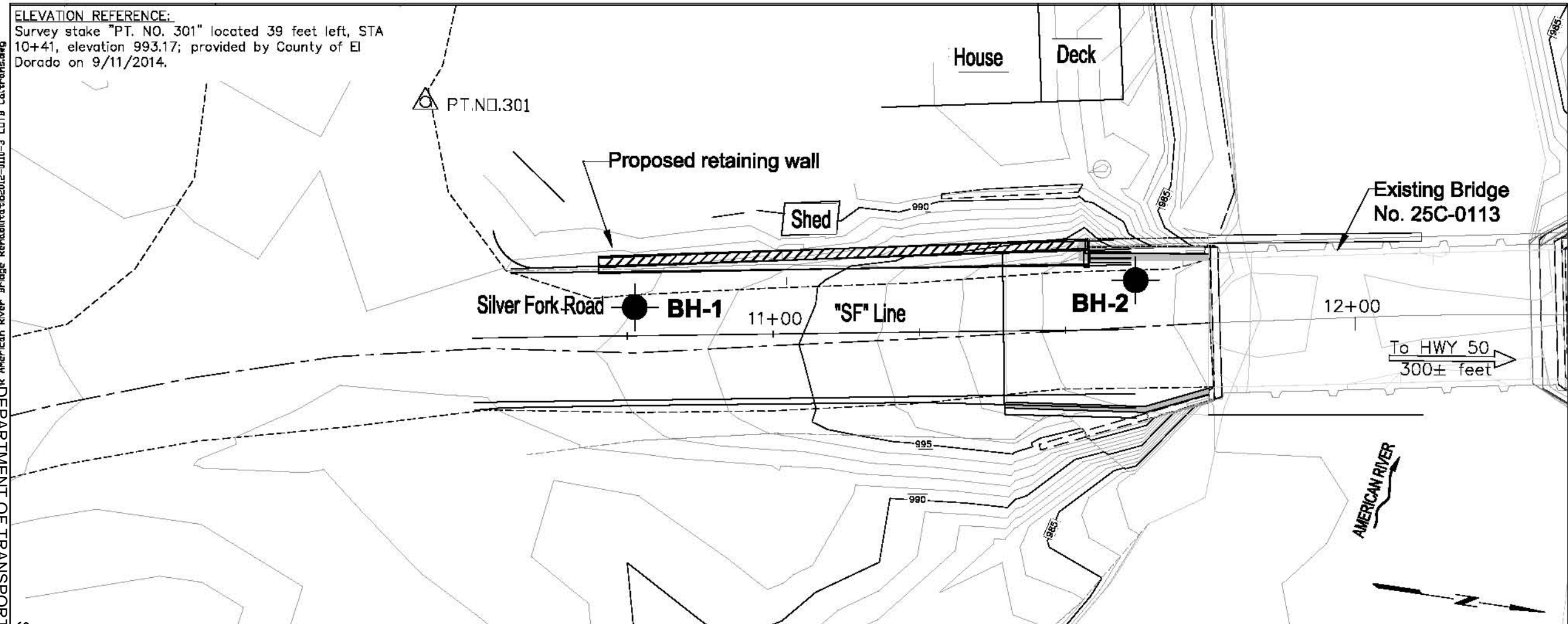
COUNTY OF EL DORADO
COMMUNITY DEVELOPMENT SERVICES
DEPARTMENT OF TRANSPORTATION

SILVER FORK ROAD AT SOUTH FORK AMERICAN RIVER
BRIDGE REHABILITATION
RETAINING WALL NO. 1

SHEET
R-1
15 OF 30
W.G. No.
77124

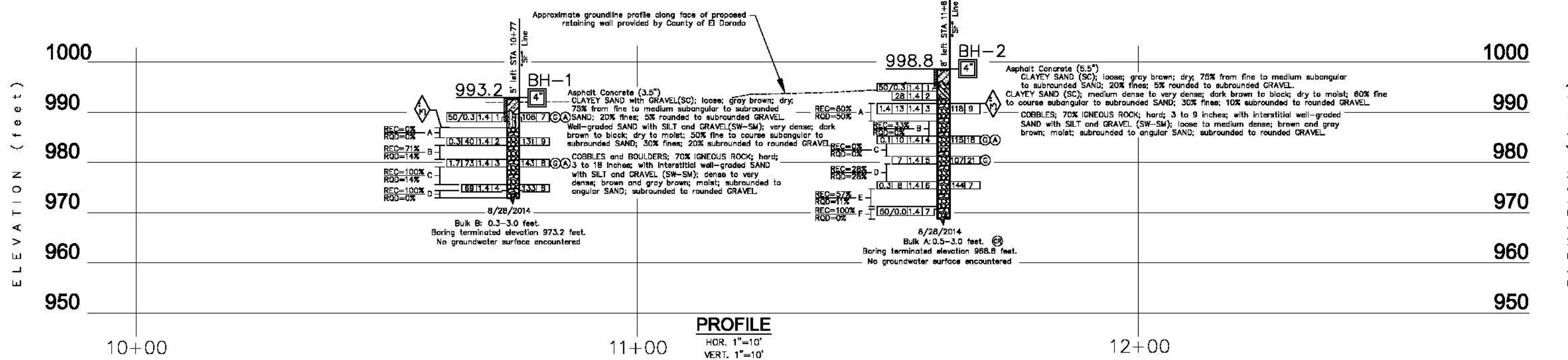
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 DEPARTMENT OF TRANSPORTATION SERVICES
 FOR REDUCED PLANS
 1/6 OF 30

ELEVATION REFERENCE:
 Survey stake "PT. NO. 301" located 39 feet left, STA 10+41, elevation 993.17; provided by County of El Dorado on 9/11/2014.



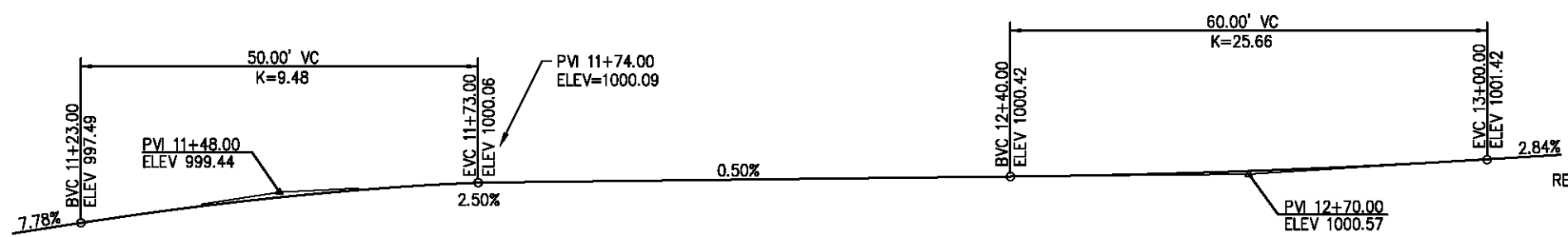
- Notes:**
1. Field classification of soils was in accordance with the Caltrans Soil & Rock Logging, Classification, and Presentation Manual (2010). See Log of Test Borings No. 2, and 3, "Soil Legend" and 4, "Rock Legend".
 2. Standard Penetration tests (SPTs) were performed in accordance with ASTM D 1586-11 using hammer operated with an automated drop system. Drill rods were 1 5/8-inch diameter "A"-rods; sampler was driven with brass liners. SPT hammer energy ratio (ETR) measurements indicate an ETR=74% as of 10/08/2013.
 3. The length of each sampled interval is shown graphically on the boring log. Whole number blow counts ("N") represent the "standard penetration resistance" interval in accordance with ASTM D1586-11. Where less than 1 foot of penetration is achieved, the blow count shown is for that fraction of the "standard penetration resistance" interval actually penetrated. Where indicated by an asterisk (*) the number of blows shown is for only that fraction of the initial 0.5 ft "seating drive" interval penetration.
 4. Approximate boring elevations were surveyed by Taber Consultants in the field at the time of subsurface exploration and correlated to topographic survey provided by County of El Dorado. Boring BH-1 and BH-2 elevation was estimated based on topography provided by County of El Dorado.
 5. Electronic media for plan view provided by County of El Dorado on September 11, 2014.
 6. Ground line profile is estimated from topography provided by County of El Dorado.

PLAN
 1"=10'

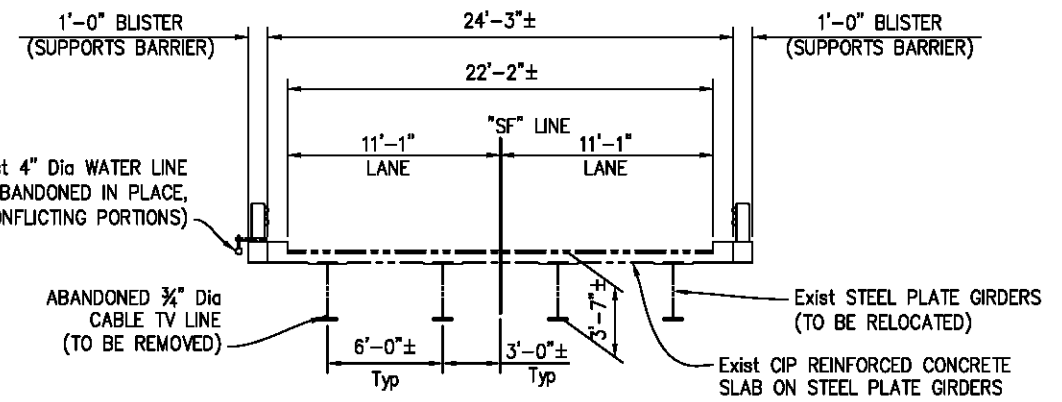


		PREPARED UNDER THE SUPERVISION OF: REGISTERED CIVIL ENGINEER DATE: 1/14/2015		COUNTY OF EL DORADO COMMUNITY DEVELOPMENT AGENCY TRANSPORTATION DIVISION		SHEET R-2 12 OF 26 LOG. No.	
DESIGNED:	DRAWN:	CHECKED:	DATE:	COUNTY OF EL DORADO COMMUNITY DEVELOPMENT AGENCY TRANSPORTATION DIVISION			
D. KITZMANN	X. VANG	D. KITZMANN	1/14/2015	SILVER FORK ROAD AT SOUTH FORK AMERICAN RIVER BRIDGE REHABILITATION PROJECT LOG OF TEST BORING			
ROAD NUMBER:				17-0066 C 16 of 30			

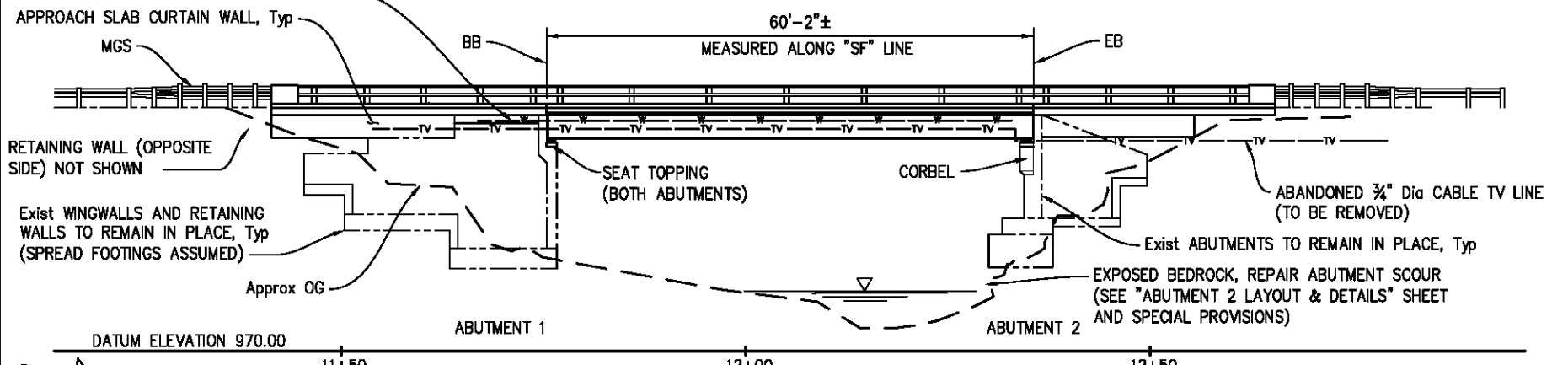
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FOR REDUCED PLANS



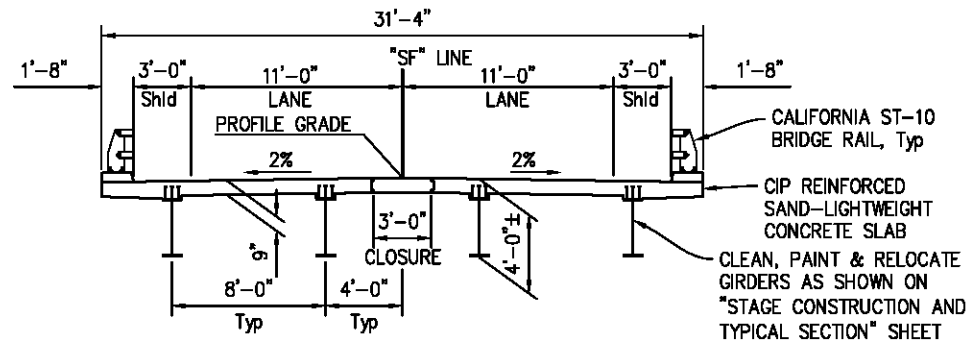
PROFILE
SCALE: 1"=10'



EXISTING TYPICAL SECTION
SCALE: 1"=5'



DEVELOPED ELEVATION
SCALE: 1"=10'



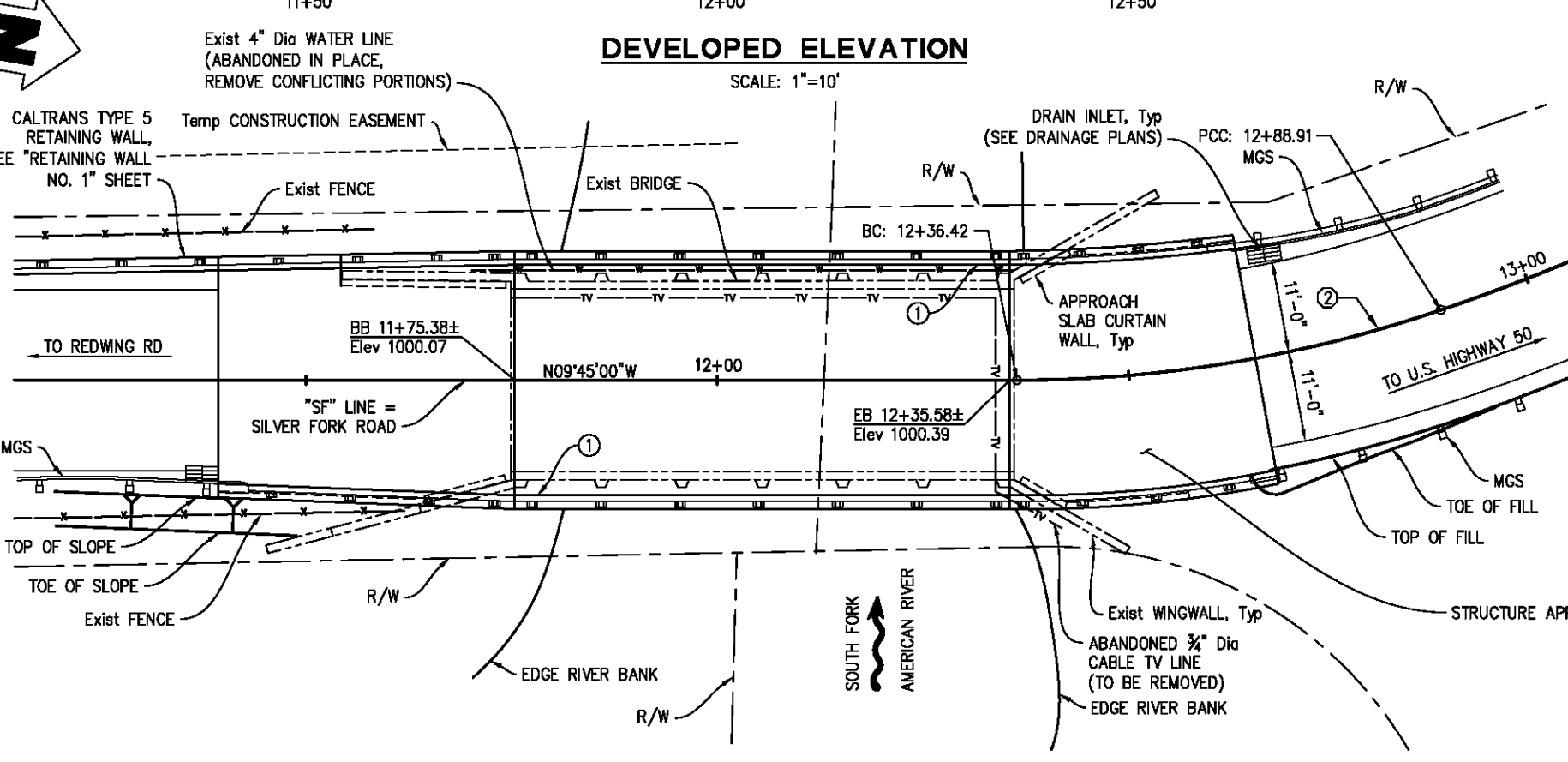
FINAL TYPICAL SECTION
SCALE: 1"=5'

NOTE:
For Stage Construction details, see "STAGE CONSTRUCTION AND TYPICAL SECTION" sheet.

- LEGEND:**
- Indicates Existing Structure
 - Indicates New Construction
 - Direction of Traffic
 - ① Paint Bridge No. "25C-0113" and bridge name "SOUTH FORK AMERICAN RIVER BRIDGE AT SILVER FORK ROAD"

- BENCHMARKS:**
- Benchmark #1 Elev 1000.00'
Mag Spike Survey Nail set in existing asphalt pavement North of existing BB.
 - Benchmark #2 Elev 992.00'
Mag Spike Survey Nail set in existing asphalt pavement South of existing EB and East of Robin Circle.

NOTE:
FOR WATER LINE RELOCATION DETAILS, SEE "UTILITY PLAN" SHEET.



CURVE DATA

NO.	R	DELTA	L	T
②	160.00'	18°47'44"	52.49'	26.48'

PLAN
SCALE: 1"=10'

NOTE:
THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIALS

REVISION	NUMBER	DATE	DESCRIPTION	BY



PREPARED UNDER THE SUPERVISION OF:
JEFFREY L. THOMURE
REGISTERED CIVIL ENGINEER
DATE: 06/30/2018

DESIGNED: J. THOMURE
DRAWN: P. WALKER
CHECKED: D. FREDERICKS
DATE: 12/16/2016
ROAD NUMBER: 2130



COUNTY OF EL DORADO
COMMUNITY DEVELOPMENT SERVICES
DEPARTMENT OF TRANSPORTATION

SILVER FORK ROAD AT SOUTH FORK AMERICAN RIVER
BRIDGE REHABILITATION
GENERAL PLAN

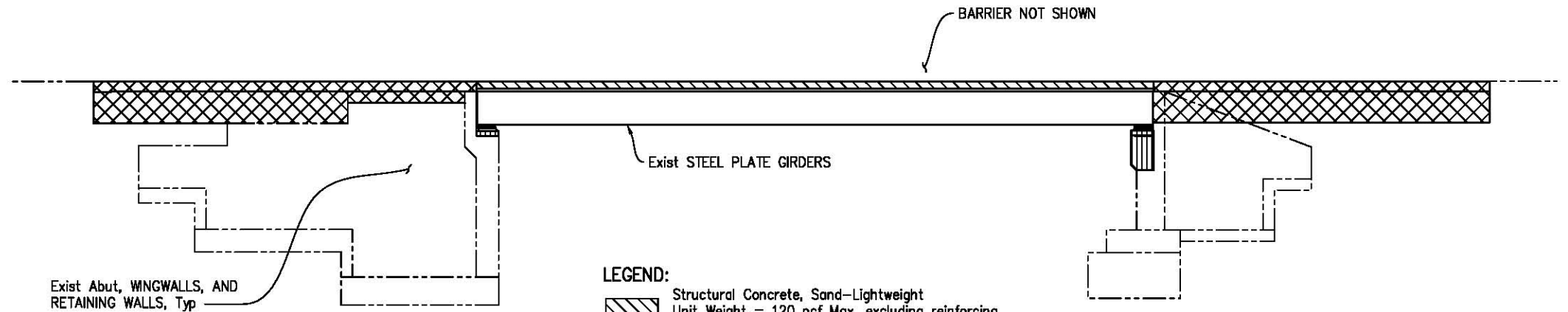
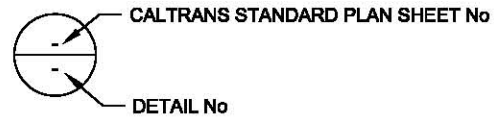
BRIDGE NO. 25C-0113
SHEET
ST-1
17 OF 30
W.G. No.
77124

INDEX TO PLANS

SHEET NO.	DWG NO.	TITLE
17	ST-1	GENERAL PLAN
18	ST-2	INDEX TO PLANS
19	ST-3	GENERAL NOTES
20	ST-4	BRIDGE REMOVAL DETAILS
21	ST-5	ABUTMENT 1 LAYOUT AND DETAILS
22	ST-6	ABUTMENT 2 LAYOUT AND DETAILS
23	ST-7	ABUTMENT 2 CORBEL DETAILS
24	ST-8	STAGE CONSTRUCTION AND TYPICAL SECTION
25	ST-9	GIRDER LAYOUT
26	ST-10	GIRDER DETAILS
27	ST-11	DECK DETAILS
28	ST-12	BEARING DETAILS
29	ST-13	STRUCTURE APPROACH TYPE R(30S) (MOD) LAYOUT
30	ST-14	APPROACH SLAB DETAILS

CALTRANS 2010 STANDARD PLANS

SHEET	TITLE
A10A	ABBREVIATIONS (SHEET 1 OF 2)
RSP A10B	ABBREVIATIONS (SHEET 2 OF 2)
A10C	LINES AND SYMBOLS (SHEET 1 OF 3)
A10D	LINES AND SYMBOLS (SHEET 2 OF 3)
A10E	LINES AND SYMBOLS (SHEET 3 OF 3)
A62C	LIMITS OF PAYMENT FOR EXCAVATION AND BACKFILL - BRIDGE
B0-1	BRIDGE DETAILS
B0-3	BRIDGE DETAILS
RSP B3-4A	RETAINING WALL TYPE 5 (CASE 1)
RSP B3-5	RETAINING WALL DETAILS No. 1
B3-6	RETAINING WALL DETAILS No. 2
B6-21	JOINT SEALS (MAXIMUM MOVEMENT RATING = 2")
RSP B11-68	CALIFORNIA ST-10 BRIDGE RAIL (SHEET 1 OF 3)
B11-69	CALIFORNIA ST-10 BRIDGE RAIL (SHEET 2 OF 3)
RSP B11-70	CALIFORNIA ST-10 BRIDGE RAIL (SHEET 3 OF 3)
T3A	TEMPORARY RAILING TYPE K
T3B	TEMPORARY RAILING TYPE K



LEGEND:

	Structural Concrete, Sand-Lightweight Unit Weight = 120 pcf Max, excluding reinforcing (f'c=4.5 ksi @ 28 days)
	Structural Concrete, Approach Slab Type R(30S) (Mod) (f'c=3.6 ksi @ 28 days)
	Structural Concrete, Bridge (f'c=3.6 ksi @ 28 days)

CONCRETE STRENGTH AND TYPE LIMITS

NO SCALE

QUANTITIES

LEAD COMPLIANCE PLAN	1	LS
TEMPORARY RAILING (TYPE K)	400	LF
WORK AREA MONITORING (BRIDGE)	1	LS
CORE CONCRETE (2")	35	LF
BRIDGE REMOVAL (PORTION)	1	LS
STRUCTURE EXCAVATION (BRIDGE)	91	CY
STRUCTURE EXCAVATION (RETAINING WALL)	202	CY
STRUCTURE BACKFILL (RETAINING WALL)	156	CY
CEMENT TREATED PERMEABLE BASE	46	CY
STRUCTURAL CONCRETE, BRIDGE	2	CY
STRUCTURAL CONCRETE, RETAINING WALL	63	CY
STRUCTURAL CONCRETE, APPROACH SLAB TYPE R(30S) (MOD)	83	CY
ABUTMENT SCOUR REPAIR	1	LS
LIGHTWEIGHT CONCRETE	56	CY
DRILL AND BOND DOWEL	103	LF
JOINT SEAL (MR=1")	63	LF
BAR REINFORCING STEEL (BRIDGE)	1205	LB
BAR REINFORCING STEEL (RETAINING WALL)	8112	LB
BAR REINFORCING STEEL (EPOXY COATED) (BRIDGE)	13709	LB
FURNISH STRUCTURAL STEEL (BRIDGE)	9702	LB
RELOCATE EXISTING GIRDERS	1	LS
ERECT STRUCTURAL STEEL (BRIDGE)	9702	LB
CLEAN AND PAINT STRUCTURAL STEEL	1	LS
MISCELLANEOUS METAL (BRIDGE)	36	LB
CALIFORNIA ST-10 BRIDGE RAIL	326	LF

NOTE:
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FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES Drawing name: C:\pwworkdir\user001\walker\00136485\457839-a-11p01.dwg Layout Tab: L-1 Nov 21, 2017 - 2:40pm Pwalker

REVISION	NUMBER	DATE	DESCRIPTION	BY



PREPARED UNDER THE SUPERVISION OF:
JEFFREY L. THOMURE
REGISTERED CIVIL ENGINEER
DATE: **06/30/2018**

DESIGNED: **J. THOMURE**
DRAWN: **P. WALKER**
CHECKED: **D. FREDERICKS**
DATE: **12/16/2016**
ROAD NUMBER: **2130**



COUNTY OF EL DORADO
COMMUNITY DEVELOPMENT SERVICES
DEPARTMENT OF TRANSPORTATION

SILVER FORK ROAD AT SOUTH FORK AMERICAN RIVER
BRIDGE REHABILITATION
INDEX TO PLANS

BRIDGE NO. 25C-0113
SHEET
ST-2
18 OF 30
W.G. No.
77124

ORIGINAL SCALE IS IN INCHES
 Drawing name: C:\pwworkdir\aden001\walker\00136485\457839-b-gn01.dwg Layout Tab: L-1 Nov 21, 2017 2:40pm Pwalker
 FOR REDUCED PLANS
 REVISION

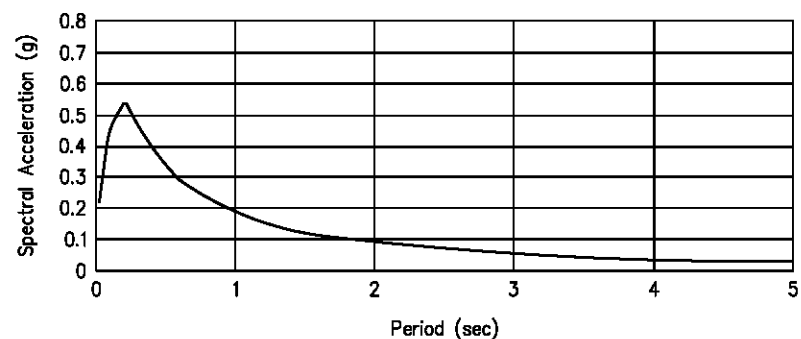
GENERAL NOTES:

- It shall be the Contractor's responsibility to verify the location of any underground utilities prior to starting construction. The utility information shown on the Contract Plans is not guaranteed to be accurate or all inclusive.
- The existing structure geometry and alignment are approximate and based on preliminary survey data performed by the County. The Contractor shall verify all controlling field dimensions before ordering or fabricating any material.
- Traffic will be carried on the structure and stage construction will be required. See "STAGE CONSTRUCTION AND TYPICAL SECTION" sheet for stage construction details and girder relocation.
- Stability of the bridge and approach slab during stage construction is adequate for design vehicular (HS20 or HL93) and pedestrian (75 psf) loads. The Contractor shall verify stability of the structure for construction loads greater than that specified herein.
- Excavations shall be shored to prevent subsidence or damage to adjacent existing structures, utilities, or other apparatuses.
- Use of overhang brackets supported by the existing wingwalls or retaining walls is not allowed.
- All construction joints shall be cleaned and roughened to 1/4" amplitude minimum unless otherwise noted. No construction joints except those shown on the Contract Plans will be allowed unless otherwise approved by the Engineer.
- All reinforcing bars located in the concrete deck, barrier, approach slabs, and curtain walls shall be epoxy coated. Any damage to the epoxy coating during construction shall be repaired.
- Reinforcing bar spacing is the distance from center to center of bars.
- Reinforcing bar cover is the clear distance between the surface of the bar and the face of the concrete. Minimum bar cover shall be 2" and reinforcing bars shall terminate 2" clear from concrete surfaces unless otherwise noted.
- All reinforcing bar hooks shall be standard hooks unless otherwise noted.
- Splices in reinforcing bars shall be staggered at least one splice length unless shown otherwise.
- Reinforcing bars shall be continuous through all construction joints unless shown otherwise.
- All dimensions are in feet and inches unless otherwise noted.
- No welding of reinforcing bars shall be permitted, unless approved by the Engineer or noted otherwise. If welding of reinforcing bars is approved or noted in the Contract Plans, it shall conform to AWS D1.4.
- No field welding is permitted except as noted in the Contract Plans or approved by the engineer.
- Welding of structural steel shall conform to the requirements of the American Welding Society (AWS) Bridge Welding Code D1.5, 2008 Edition, and the Project Specifications.
- These General Notes supplement the Project Specifications, which contain additional requirements and information.

**DESIGN CRITERIA:
LOAD AND RESISTANCE FACTOR DESIGN (LRFD)**

- Design Criteria: AASHTO LRFD Bridge Design Specifications, 6th Edition, with the California Amendments dated January 2014
 AASHTO Manual for Bridge Evaluations (MBE), 2nd Edition
 Caltrans Construction Standard Specifications, 2010
- Dead Load: Deck concrete, including reinforcement - 125 pcf
 Other concrete, including reinforcement - 150 pcf
 Future wearing surface - 35 psf
- Live Load: HS20-44 and alternative design loads (existing bridge during stage construction)
 HL-93 with "Low Boy" and Permit Design Vehicle (rehabilitation bridge)
- Wind Load: 50 psf
- Thermal Load: Thermal coefficient - $6.5 \times 10^{-6}/F$
 Maximum temperature - 120 F
 Minimum temperature - -30 F
 Temperature Variation - 97.5 F
- Collision Load: TL-2 Barrier load
- Seismic Load: V_{s30} - 1840 ft/sec
 Liquefaction potential - low
 Peak ground acceleration - 0.28g
 Dampening - 5%

ARS Curve



MATERIALS

- Existing Concrete: $f'c$ = 5 ksi (deck, per compressive testing) and $f'c$ = 2.5 ksi (other, per MBE for 1953 construction)
 Existing Reinforcing Steel: f_y = 33 ksi (per MBE for 1953 construction)
 Existing Structural Steel: f_y = 33 ksi and f_u = 66 ksi (per MBE for 1953 construction)
- Structural Concrete: Varies, see "CONCRETE STRENGTH AND TYPE LIMITS" on "INDEX TO PLANS" sheet
 Reinforcing Steel: ASTM A706 Grade 60 (f_y = 60 ksi)
 Structural Steel: ASTM A709 Grade 36 minimum
 Structural Bolts: ASTM A325
 Shear Connectors: ASTM A108 (f_y = 60 ksi)
 Anchor Bolts: ASTM F1554 Grade 55
 Electrode: E70 minimum
 Galvanizing: In accordance with ASTM A153 (Where specified in Contract Plans)

NOTE:
 THE CONTRACTOR SHALL VERIFY ALL
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REVISION	NUMBER	DATE	DESCRIPTION	BY



PREPARED UNDER THE SUPERVISION OF:
JEFFREY L. THOMURE
 REGISTERED CIVIL ENGINEER
 DATE: 06/30/2018

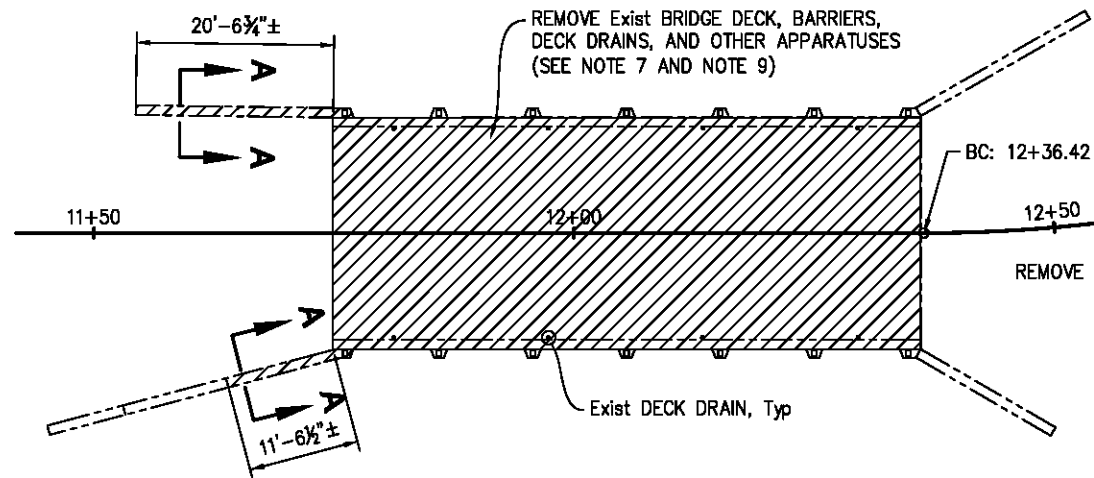
DESIGNED: J. THOMURE
 DRAWN: P. WALKER
 CHECKED: D. FREDERICKS
 DATE: 12/16/2016
 ROAD NUMBER: 2130



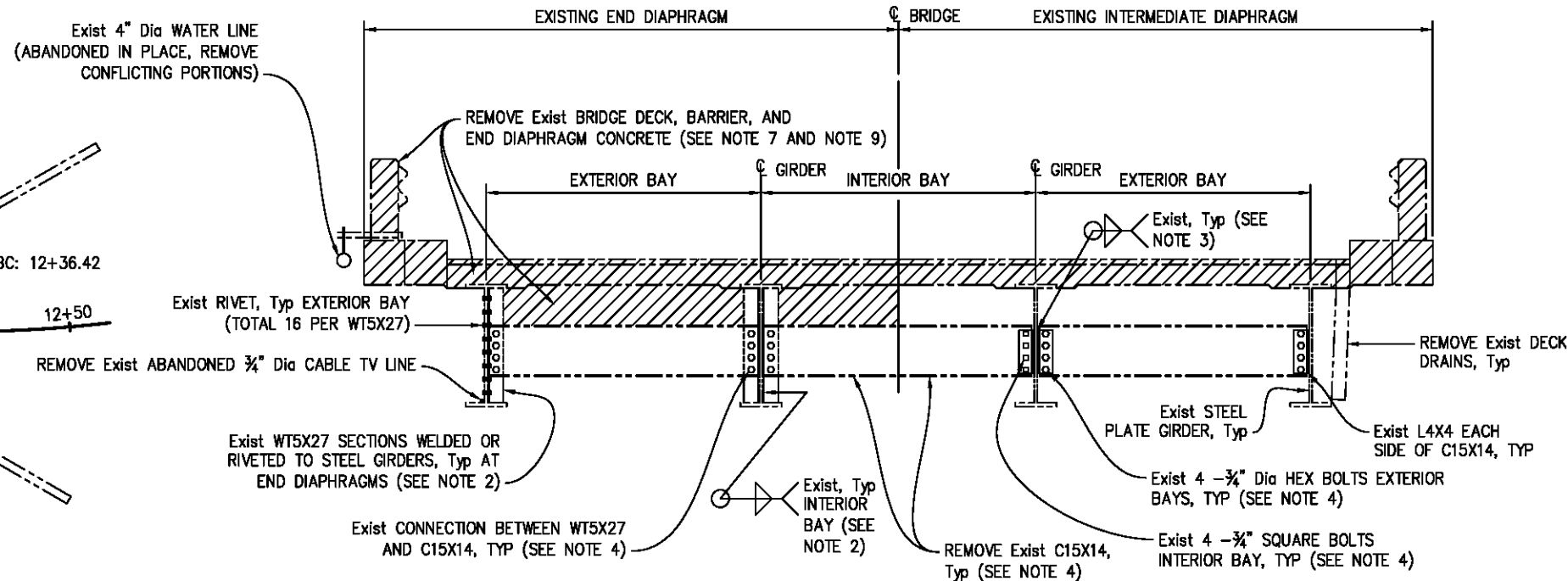
**COUNTY OF EL DORADO
 COMMUNITY DEVELOPMENT SERVICES
 DEPARTMENT OF TRANSPORTATION**

**SILVER FORK ROAD AT SOUTH FORK AMERICAN RIVER
 BRIDGE REHABILITATION
 GENERAL NOTES**

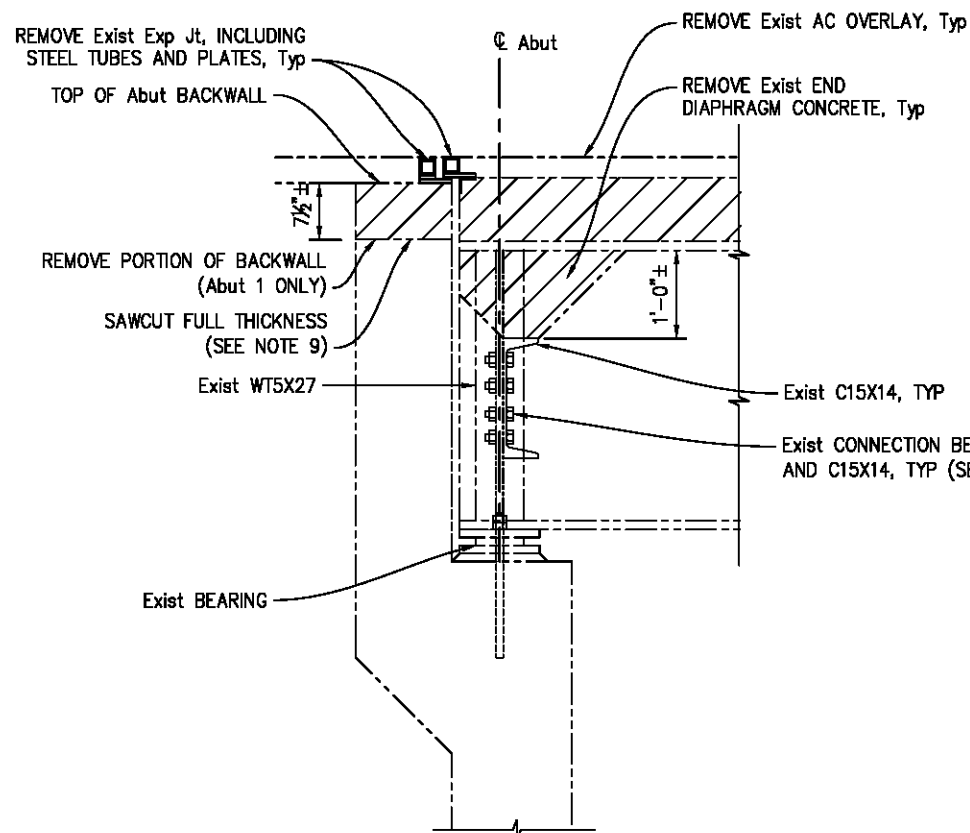
BRIDGE NO. 25C-0113
 SHEET
ST-3
 19 OF 30
 W.G. No.
77124



PLAN
SCALE: 1"=10'



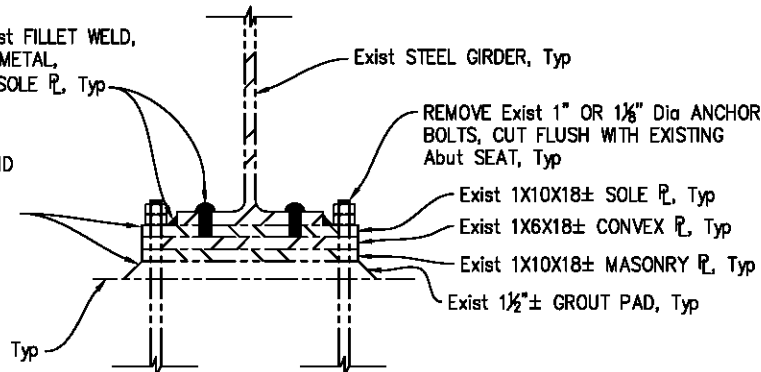
SECTION AT DIAPHRAGM
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(Abut 2 shown, Abut 1 similar)



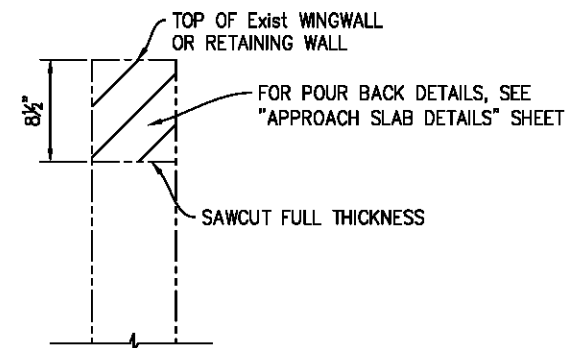
SECTION AT ABUTMENT
SCALE: 1"=1'-0"
(Abut 1 shown, Abut 2 similar)

REMOVE Exist RIVET OR GRIND Exist FILLET WELD, WITHOUT DAMAGING GIRDER BASE METAL, AS NEEDED TO REMOVE EXISTING SOLE PLATE, Typ (SEE NOTE 1)

REMOVE PLATES AND GROUT PAD, Typ (SEE NOTE 8)



BEARING SECTION
SCALE: 1 1/2"=1'-0"
(Abut 1 shown, Abut 2 similar)



SECTION A-A
SCALE: 1 1/2"=1'-0"

NOTES:

- Existing connections consist of a mixture of welds, bolts, and rivets. See Field Inspection Report by CH2MHILL dated September 25, 2012 for details not shown.
- Remove existing WT5X27 section by either grinding weld without damaging girder base metal or drilling out rivets. WT5X27 sections are typically riveted to steel girders in exterior bays and welded to steel girders in interior bay.
- Remove existing L4X4 by grinding weld without damaging girder web base metal.
- Remove existing C15X14 by either unbolting connection or grinding weld as needed.
- Diaphragms & bearing stiffeners to remain in place during stage construction until deck above girders is removed.
- Install new stiffener plates against undisturbed girder base metal. End diaphragms to be placed as close as possible to center bearing. Interior diaphragms may be relocated 6" Max only as needed.
- See "STAGE CONSTRUCTION AND TYPICAL SECTION" sheet for removal sequence and details not shown.
- At Abut 2 bearing, remove bearing pad and sole plate.
- Bridge Removal operations shall not damage existing structure. Full-depth saw cuts shall not damage existing girders.

LEGEND:

Bridge Removal (Portion) - Concrete

NOTE:
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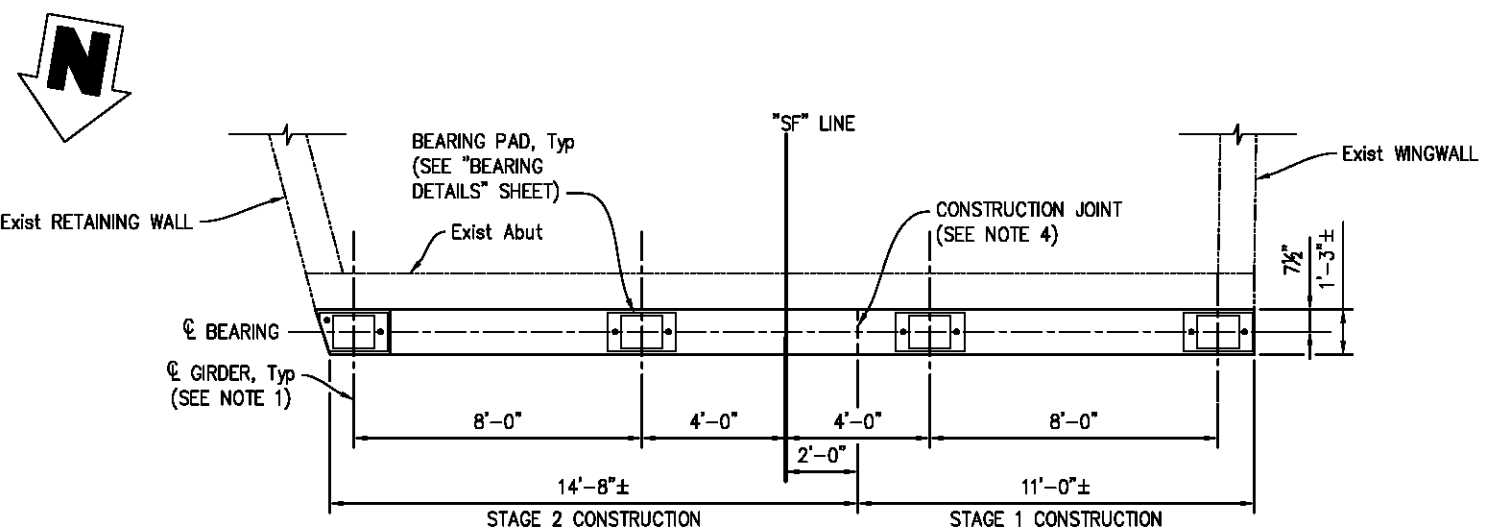


COUNTY OF EL DORADO
COMMUNITY DEVELOPMENT SERVICES
DEPARTMENT OF TRANSPORTATION

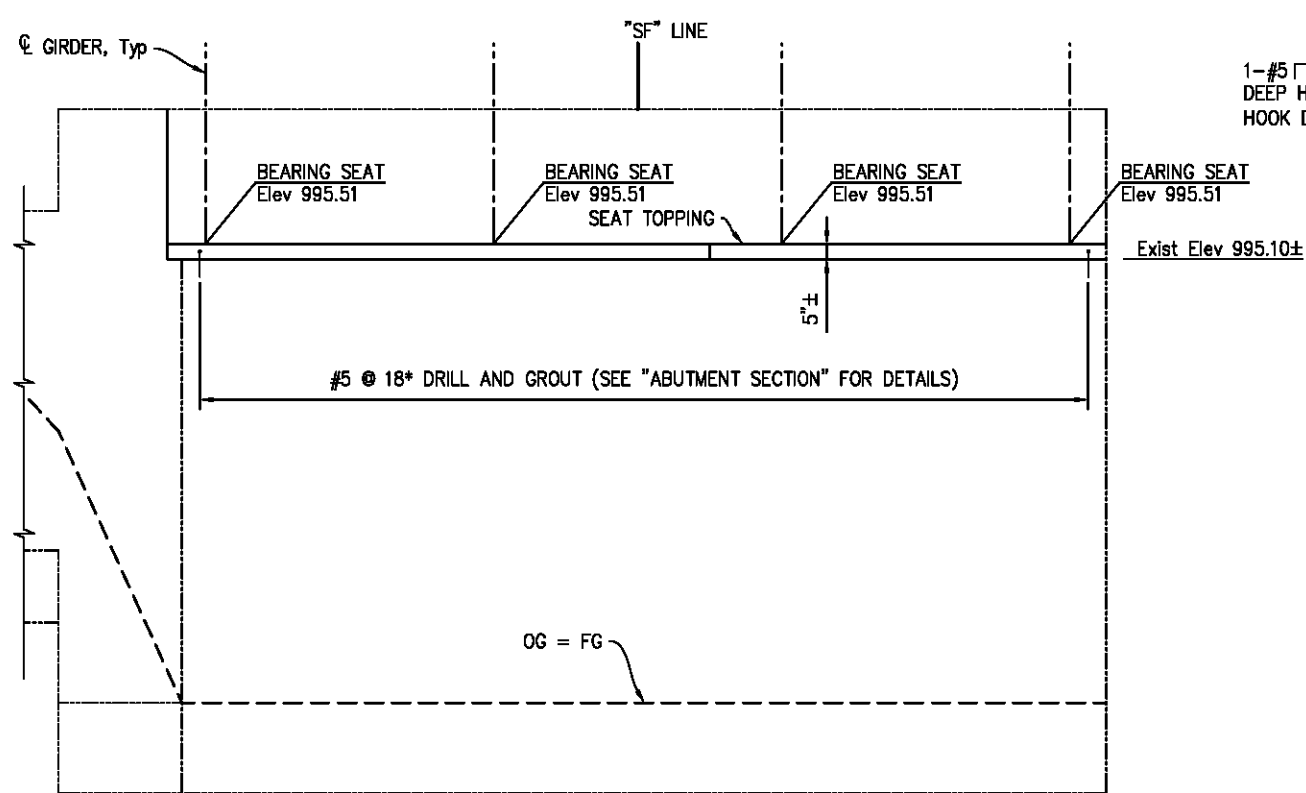
SILVER FORK ROAD AT SOUTH FORK AMERICAN RIVER
BRIDGE REHABILITATION
BRIDGE REMOVAL DETAILS

BRIDGE NO. 25C-0113
SHEET
ST-4
20 OF 30
W.G. No.
77124

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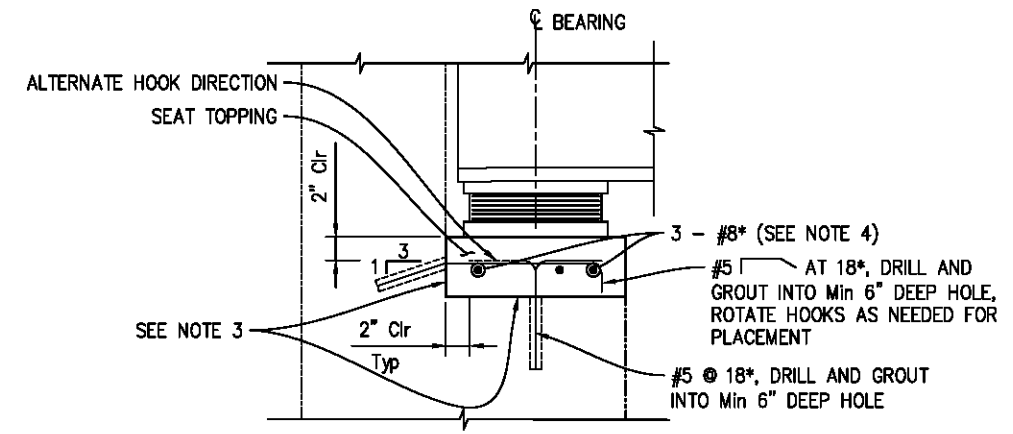


ABUTMENT PLAN
SCALE: 3/8"=1'-0"

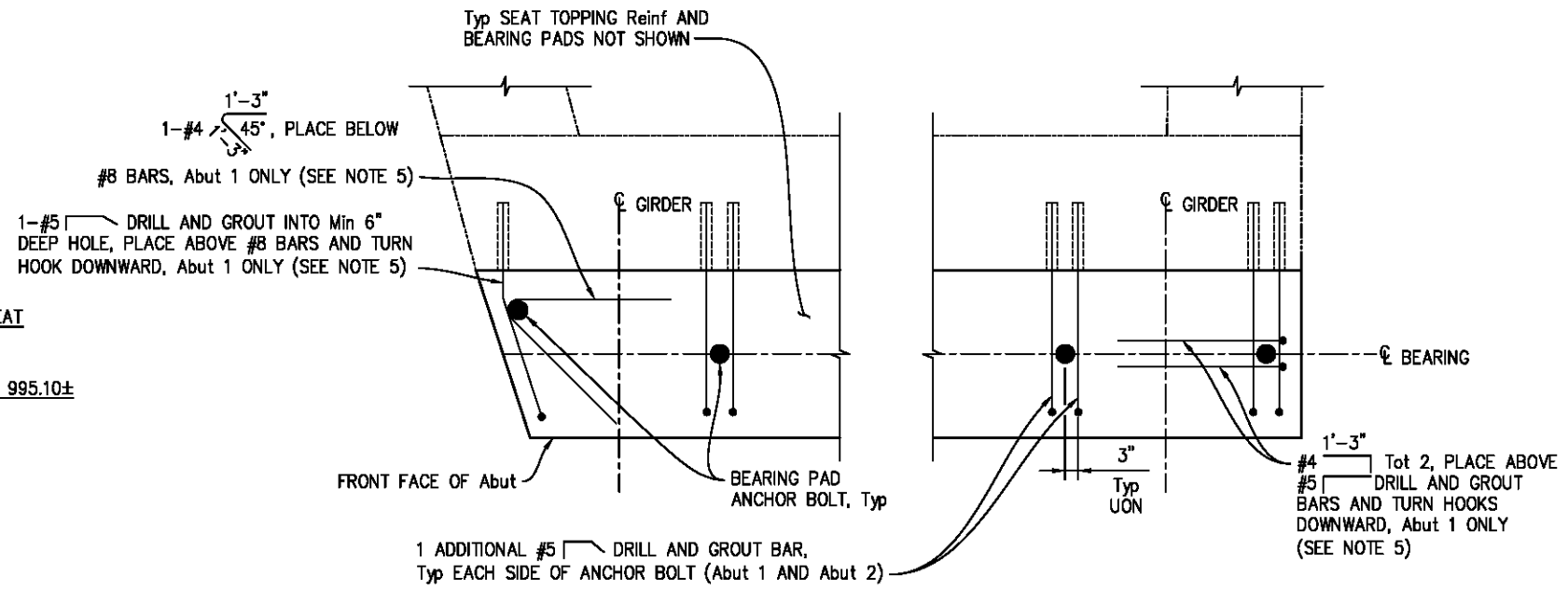


ABUTMENT ELEVATION
SCALE: 3/8"=1'-0"

NOTE:
THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIALS



ABUTMENT SECTION
SCALE: 1 1/2"=1'-0"



ANCHOR BOLT REINFORCING
SCALE: 1 1/2"=1'-0"

- NOTES:
- Existing bearings and girder locations not shown. For girder locations, see "STAGE CONSTRUCTION AND TYPICAL SECTION" sheet.
 - See "BRIDGE REMOVAL DETAILS" sheet for concrete removal and replacement limits at abutment backwall, wingwall, and retaining wall.
 - Remove and replace any unsound concrete prior to constructing seat topping. Clean and roughen surface to 1/4" amplitude.
 - Lap splice #8 transverse bars in seat topping and extend full length of seat. Lap splices may not be staggered and shall be a minimum length of 4'-0".
 - Place #4 and #5 bars located at edge of abutment seat adjacent to anchor bolts and adjust anchor bolt sleeve (optional) as needed to maintain a minimum reinforcing clear cover of 1 1/2".
 - The contractor shall locate and avoid damaging existing abutment reinforcement. Re-drilling shall be performed as needed to avoid existing reinforcement, if encountered.

REVISION	NUMBER	DATE	DESCRIPTION	BY



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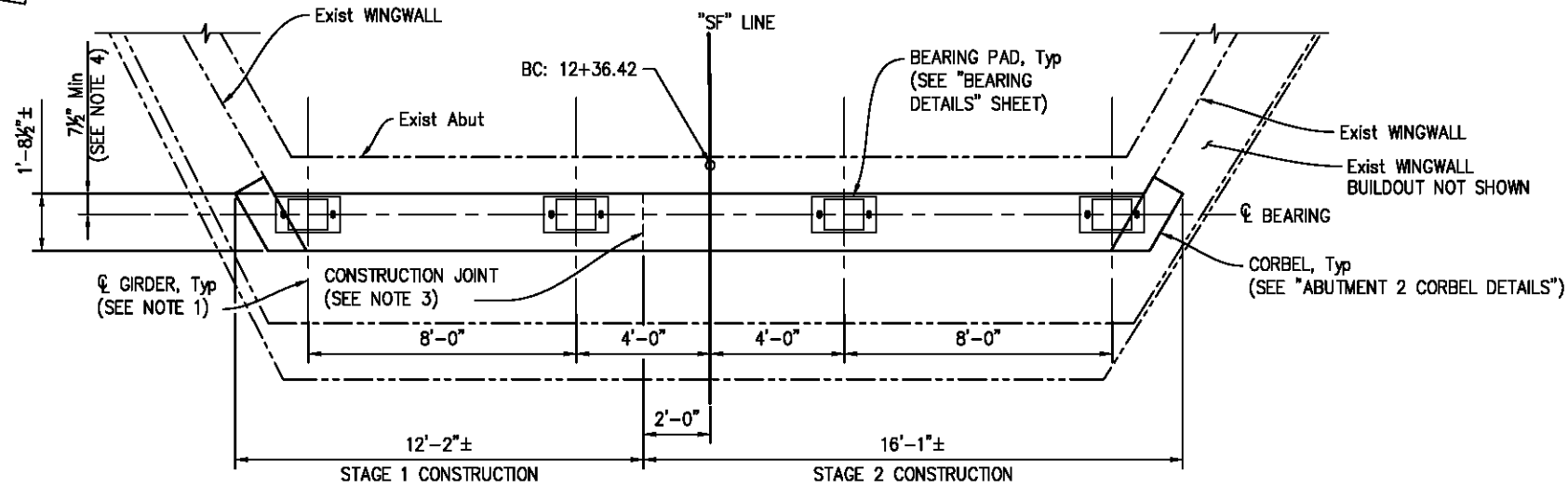
DESIGNED: J. THOMURE
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COUNTY OF EL DORADO
COMMUNITY DEVELOPMENT SERVICES
DEPARTMENT OF TRANSPORTATION

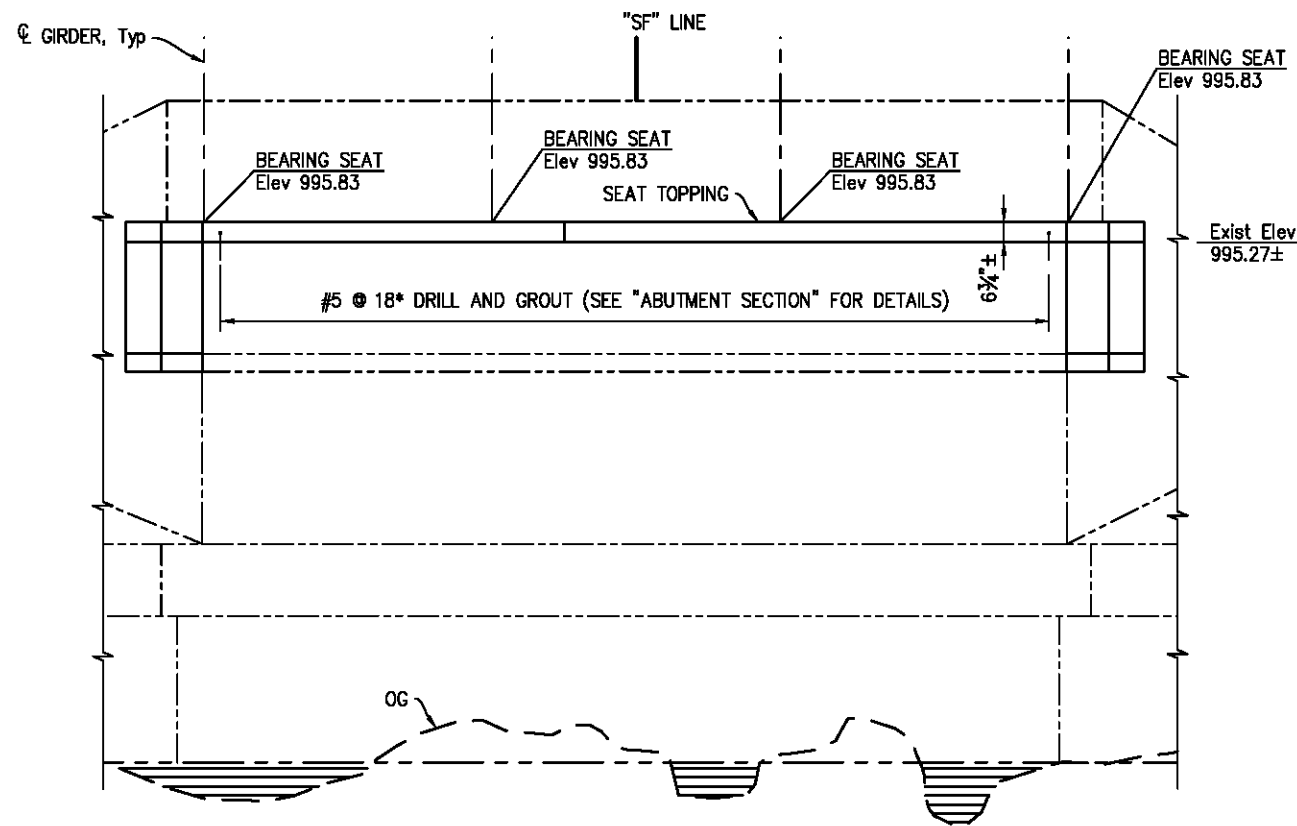
SILVER FORK ROAD AT SOUTH FORK AMERICAN RIVER
BRIDGE REHABILITATION
ABUTMENT 1 LAYOUT & DETAILS

BRIDGE NO. 25C-0113
SHEET
ST-5
21 OF 30
W.G. No. 77124



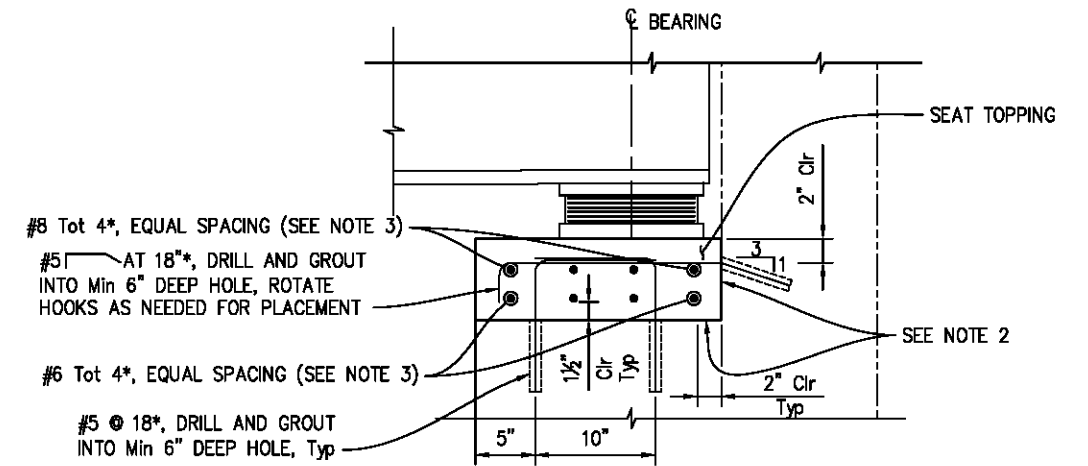
ABUTMENT PLAN

SCALE: 3/8"=1'-0"



ABUTMENT ELEVATION

SCALE: 3/8"=1'-0"



ABUTMENT SECTION

SCALE: 1 1/2"=1'-0"

NOTES:

- Existing bearings and girder locations not shown. For girder locations, see "STAGE CONSTRUCTION AND TYPICAL SECTION" sheet.
- Remove and replace any unsound concrete prior to constructing seat topping. Clean and roughen surface to 1/4" amplitude.
- Lap splice #6 and #8 transverse bars in seat topping and extend full length of seat. Lap splices may not be staggered and shall be a minimum length of 2'-6" for #6 bars and 4'-0" for #8 bars.
- Dimension between front face of abutment backwall and centerline of bearing may vary depending on actual length of girder. Centerline of bearing shall be 6 1/2" from end of girder.
- See "ABUTMENT 2 CORBEL DETAILS" sheet for corbel reinforcement at edges of abutment seat.
- See "ABUTMENT BOLT REINFORCING" detail on "ABUTMENT 1 LAYOUT AND DETAILS" sheet for additional #5 drill and grout reinforcing bars at anchor bolts.
- Remove any unsound concrete and clean surfaces prior to abutment scour repair. Fill all undermined regions that are not in direct contact with rock foundation with minor concrete. Place minor concrete under pressure, either by hydraulic head or other pressurized method, to fill all voids in foundation. Minor concrete placement shall extend 1" beyond perimeter of abutment foundation footprint. See Special Provisions for additional requirements.
- Drill and Bond (Chemical Adhesive) #5 dowels into bottom of exposed abutment at 1'-6" Max spacing, as access permits. Drill holes as vertical as possible and embed dowels 5" Min into footing. Use dowels with 90° standard hooks and embed hooks 3" Min into minor concrete. Install dowels 3" Min inside edge of footing.
- Install 1/2" Diameter Rock Bolt Anchors into rock below undermined regions at 1'-6" Max spacing, as access permits. Install bolts as vertical as possible and 3" Min inside edge of footing. Embed bolts 4" Min into rock and 6" Min into minor concrete.

LEGEND:

Abutment Scour Repair (see Notes 7 thru 9)

NOTE:
THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIALS

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REVISION	NUMBER	DATE	DESCRIPTION	BY



PREPARED UNDER THE SUPERVISION OF:
JEFFREY L. THOMURE
REGISTERED CIVIL ENGINEER
DATE: 06/30/2018

DESIGNED: J. THOMURE
DRAWN: P. WALKER
CHECKED: D. FREDERICKS
DATE: 12/16/2016
ROAD NUMBER: 2130

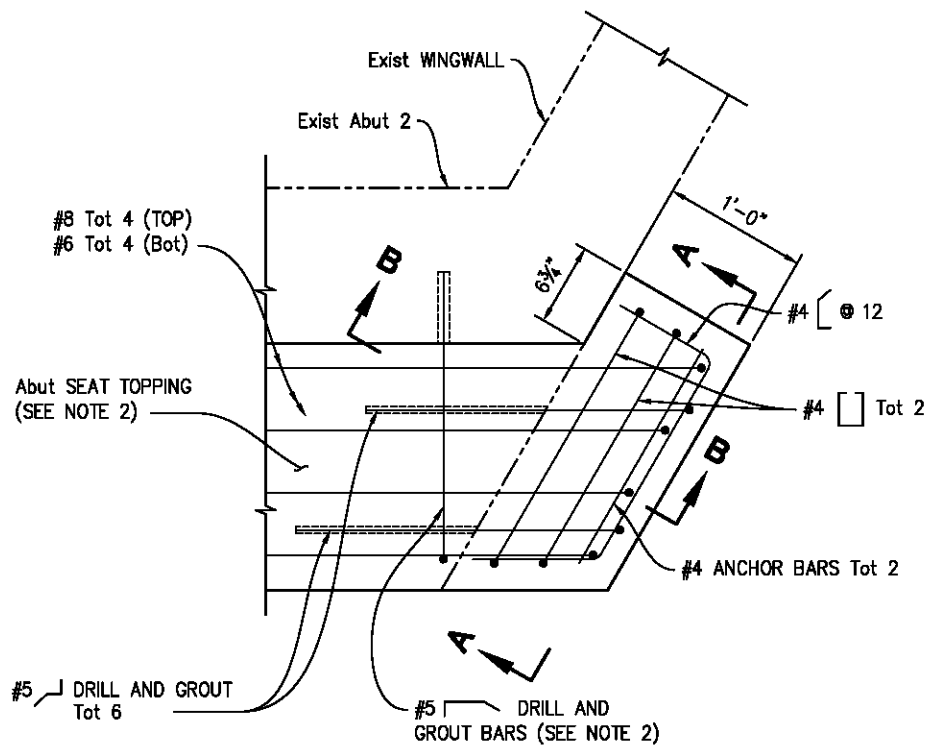


COUNTY OF EL DORADO
COMMUNITY DEVELOPMENT SERVICES
DEPARTMENT OF TRANSPORTATION

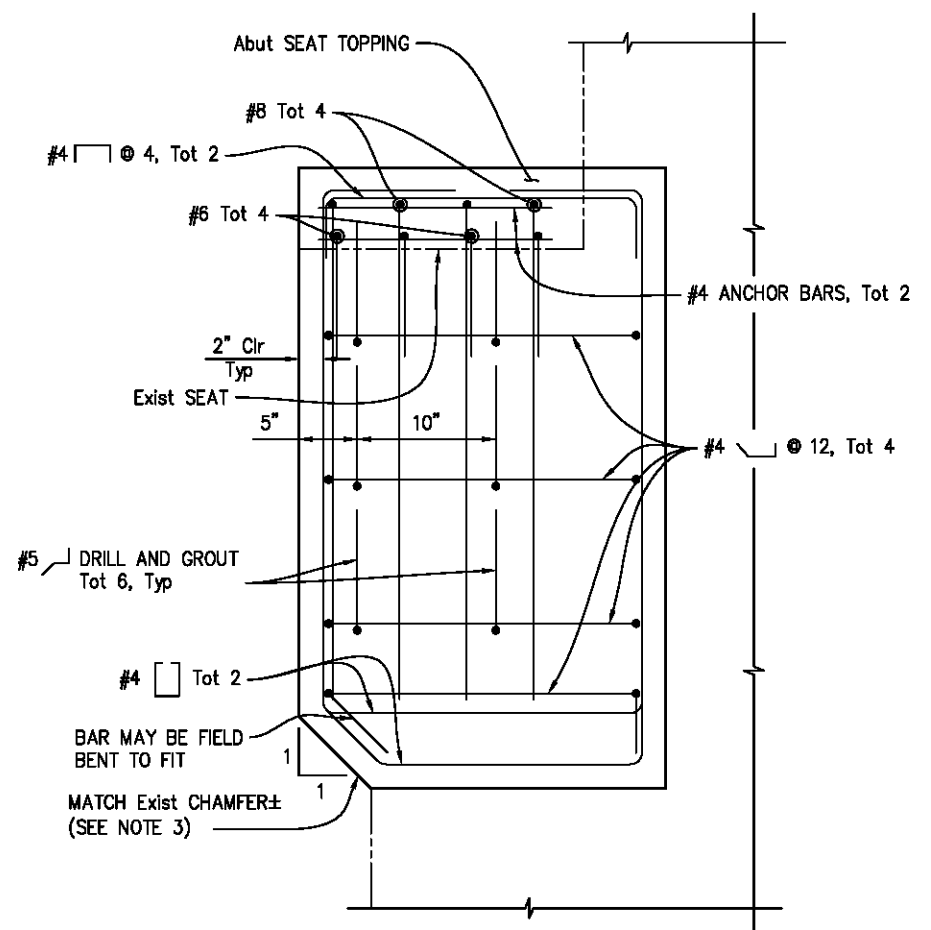
SILVER FORK ROAD AT SOUTH FORK AMERICAN RIVER
BRIDGE REHABILITATION
ABUTMENT 2 LAYOUT & DETAILS

BRIDGE NO. 25C-0113
SHEET
ST-6
22 of 30
W.G. No.
77124

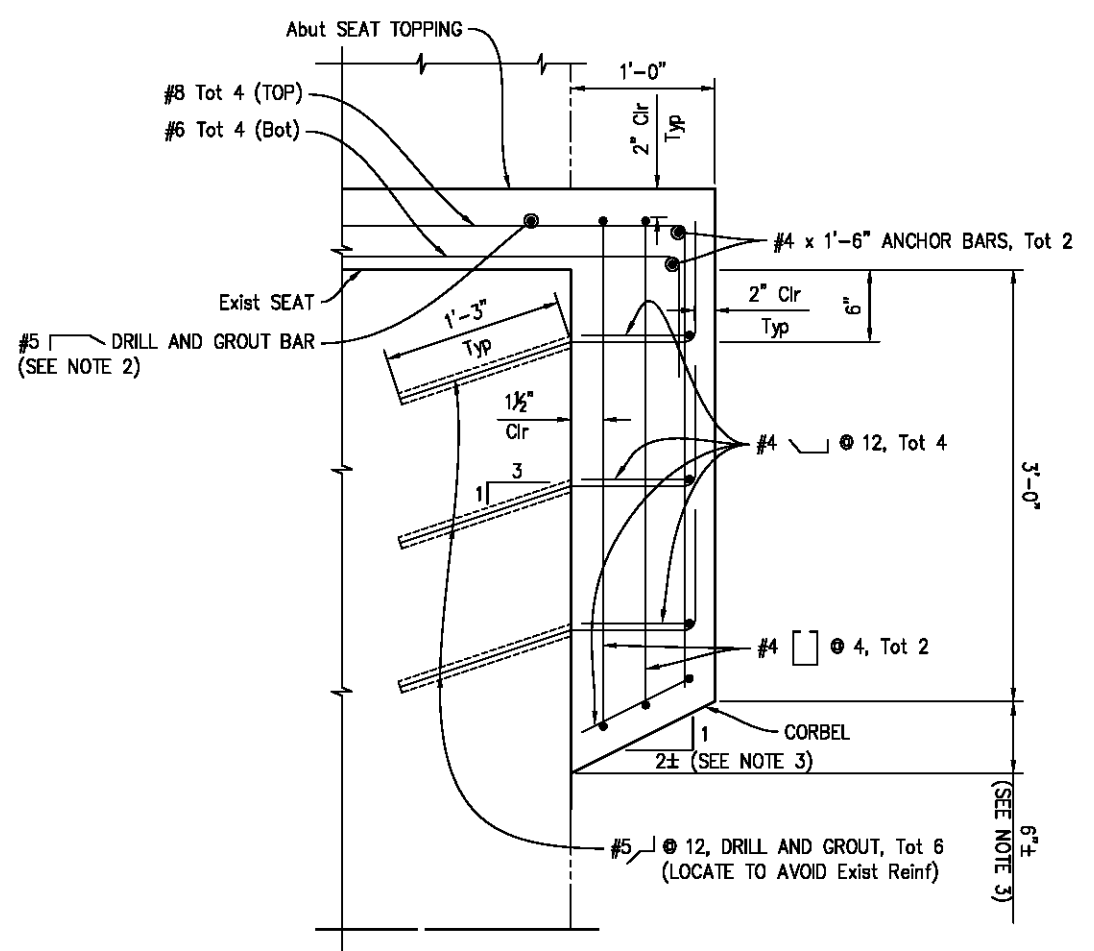
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CORBEL PLAN
SCALE: 1 1/2"=1'-0"
Right Corbel shown, Left Corbel similar



SECTION A-A
SCALE: 1 1/2"=1'-0"



SECTION B-B
SCALE: 1 1/2"=1'-0"

NOTES:

1. Remove and replace any unsound concrete prior to constructing seat topping and corbels. Clean and roughen surface to 1/4" amplitude.
2. Not all Abutment Seat Topping and Anchor Bearing Pad Bolt details shown for clarity. See "ABUTMENT 2 LAYOUT AND DETAILS" sheet.
3. The corbel dimensions shown are approximate and shall match the existing abutment chamfer geometry.

NOTE:
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REGISTERED CIVIL ENGINEER
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DESIGNED: J. THOMURE
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DATE: 12/16/2016
ROAD NUMBER: 2130

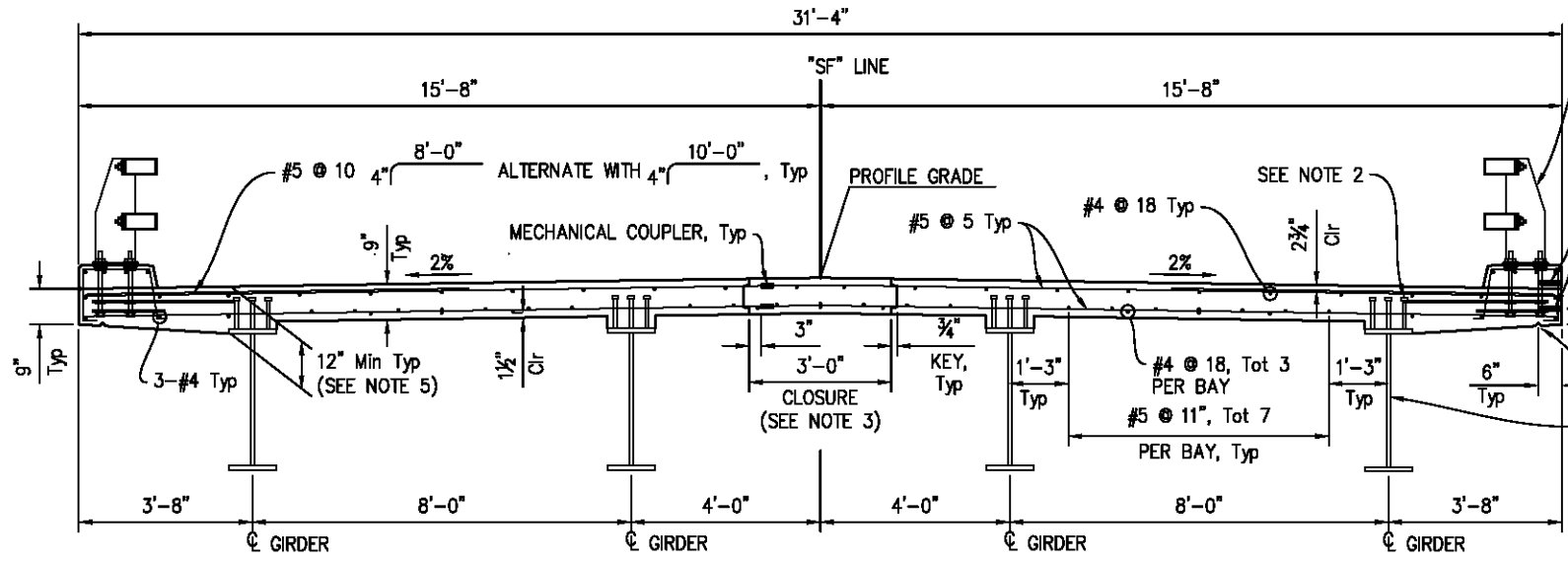


COUNTY OF EL DORADO
COMMUNITY DEVELOPMENT SERVICES
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SILVER FORK ROAD AT SOUTH FORK AMERICAN RIVER
BRIDGE REHABILITATION
ABUTMENT 2 CORBEL DETAILS

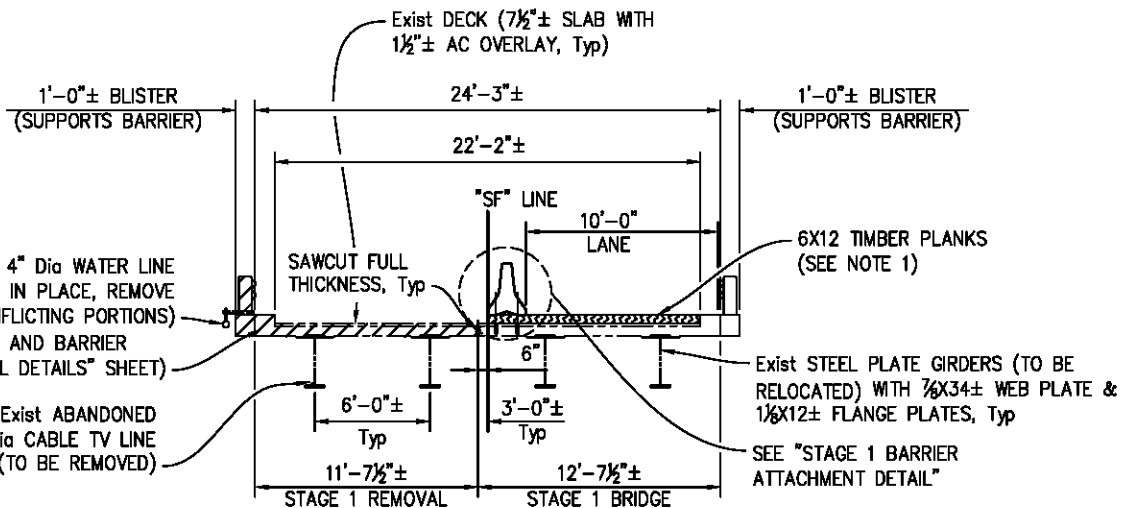
BRIDGE NO. 25C-0113
SHEET
ST-7
23 OF 30
W.G. No.
77124

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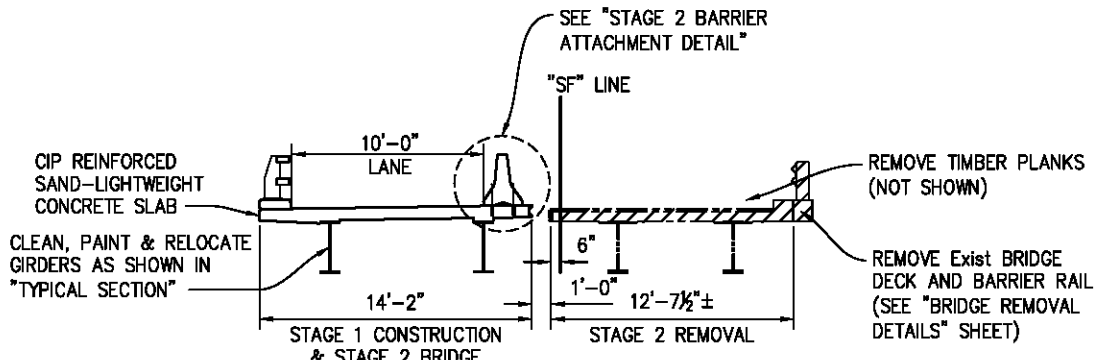


TYPICAL SECTION
 SCALE: 1/2"=1'-0"

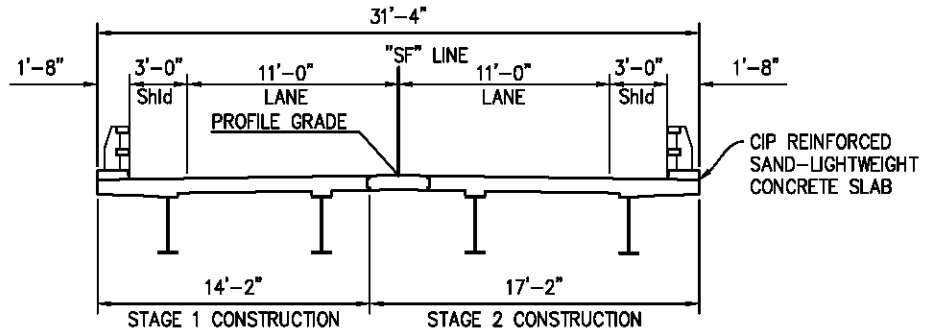
CALIFORNIA ST-10 BRIDGE RAIL
 STAINLESS STEEL FERRULE LOOP INSERTS WITH 6" MIN EMBEDMENT FOR 1/2" Dia BOLTS, Typ. SPACE AT 5'-0" Max (SEE NOTES 12 THRU 14)
 MECHANICAL COUPLER, Typ
 PROFILE GRADE
 SEE NOTE 2
 2 3/4" Clr
 2%
 4" Min
 6 1/2"
 3/4" DRIP GROOVE, Typ
 CLEAN, PAINT, & RELOCATE GIRDERS AS SHOWN (SEE NOTE 9)
 Exist 4" Dia WATER LINE (ABANDONED IN PLACE, REMOVE CONFLICTING PORTIONS)
 REMOVE Exist BRIDGE DECK AND BARRIER RAIL (SEE "BRIDGE REMOVAL DETAILS" SHEET)
 Exist ABANDONED 3/4" Dia CABLE TV LINE (TO BE REMOVED)



STAGE 1
 SCALE: 1"=5'



STAGE 2
 SCALE: 1"=5'



FINAL CONDITION
 SCALE: 1"=5'

LEGEND:

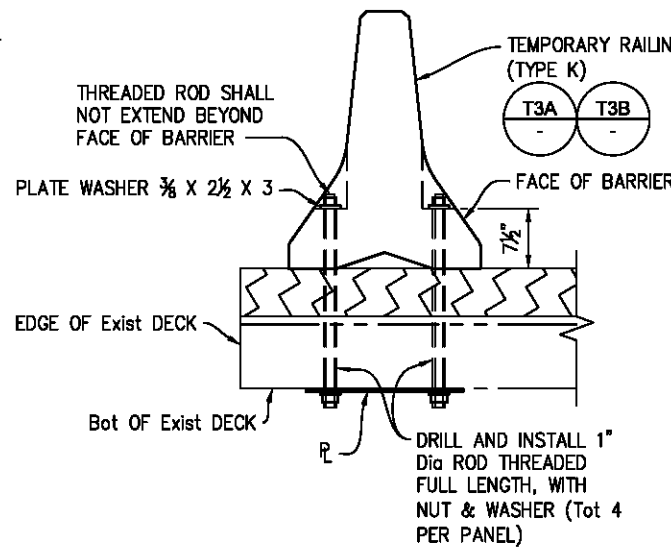
Bridge Removal (Portion)

NOTES:

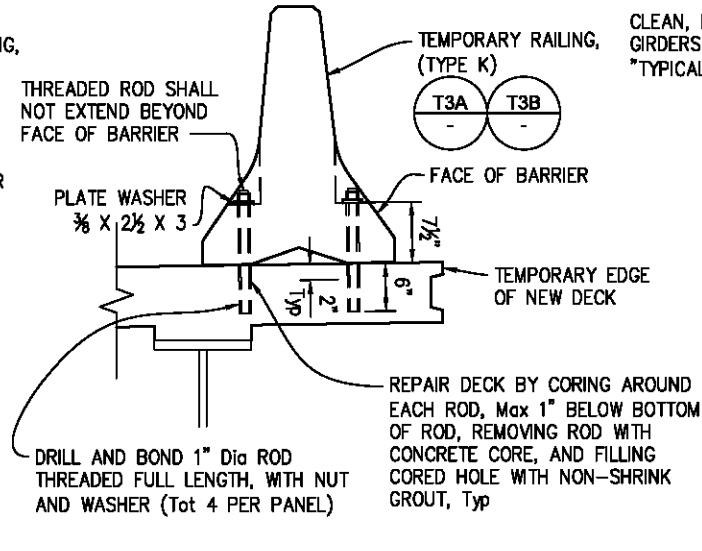
1. Install timber planks along entire bridge span with positive connection between planks such as metal straps. Install ramps at ends of structure to provide smooth transition onto Stage 1 Bridge.
2. Adjust barrier post spacing to avoid conflict between barrier anchor bars and girder studs.
3. The deck closure shall not be placed until construction of the bridge railing is complete and for at least 14 days after placement of Stage 2 deck concrete. Place the deck closure in the evening after commuter traffic when traffic volume is very low, as approved by the Engineer.
4. The Contractor shall brace girders as necessary to maintain stability while diaphragms are removed. Diaphragms shall be constructed prior to placing concrete deck above girder.
5. Overhang thickness varies to match flush with bottom of girder top flange as required for camber. See "GIRDER LAYOUT" sheet for "DEAD LOAD DEFLECTIONS".
6. All reinforcing bars located in the concrete deck and barrier curb shall be epoxy coated.
7. The Contractor shall coordinate relocation of the 4" diameter water line with the County and the Kyburz Mutual Water Company if necessary during construction.
8. The Contractor shall maintain a minimum of one traffic lane at all times during construction, except for short closures allowed by the Special Provisions or approved by the County.
9. Clean and paint Exist steel girders. Apply green top coat to match Exist color. See Special Provisions.
10. See "BRIDGE REMOVAL DETAILS" sheet for removal details.
11. For additional traffic staging details, see "STAGE CONSTRUCTION AND TRAFFIC HANDLING PLAN" sheet.

NOTE:
 THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIALS

12. Ferrule Loop Inserts are for future waterline relocation by others after bridge construction. The Engineer will furnish a template for the connecting bracket to be used to locate the inserts. The Contractor shall place the inserts with sufficient accuracy to allow post installation of the brackets. The inserts shall be located vertically to prevent kinks or bends in the future water line. Place the inserts to avoid barrier anchor bars and deck reinforcement.
13. Ferrule Loop Inserts shall extend along Approach Slabs as directed by the Engineer. See "UTILITY PLAN" sheet for Approx. limits.
14. 1/2" Dia. stainless steel anchor bolts with nuts and washers may be installed instead of Ferrule Loop inserts if approved by the Engineer.



STAGE 1 BARRIER ATTACHMENT DETAIL
 SCALE: 1"=1'



STAGE 2 BARRIER ATTACHMENT DETAIL
 SCALE: 1"=1'

REVISION	NUMBER	DATE	DESCRIPTION	BY



PREPARED UNDER THE SUPERVISION OF:
JEFFREY L. THOMURE
 REGISTERED CIVIL ENGINEER
 DATE: 06/30/2018

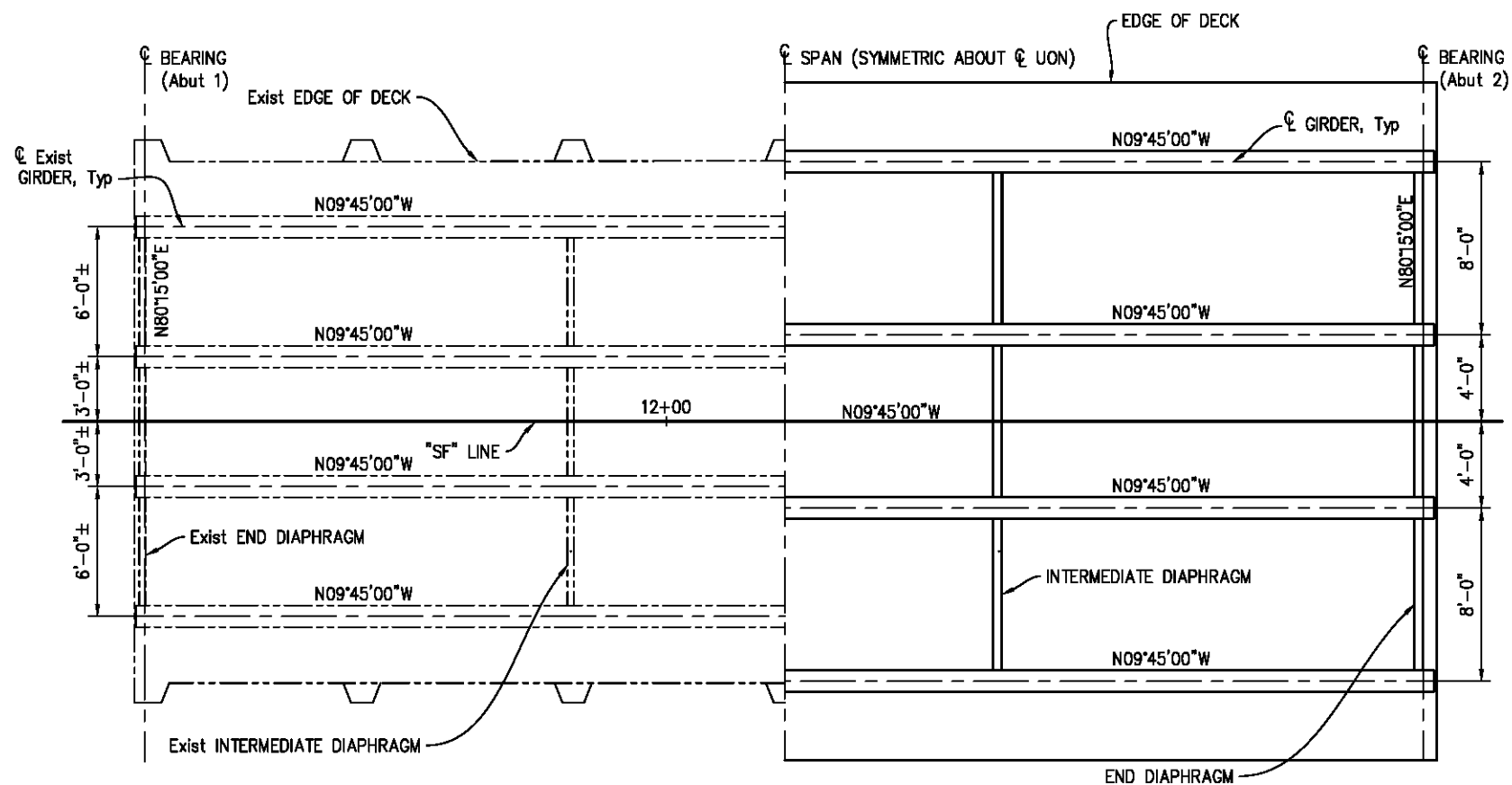
DESIGNED: J. THOMURE
 DRAWN: P. WALKER
 CHECKED: D. FREDERICKS
 DATE: 12/16/2016
 ROAD NUMBER: 2130



COUNTY OF EL DORADO
COMMUNITY DEVELOPMENT SERVICES
DEPARTMENT OF TRANSPORTATION

SILVER FORK ROAD AT SOUTH FORK AMERICAN RIVER
BRIDGE REHABILITATION
STAGE CONSTRUCTION AND TYPICAL SECTION

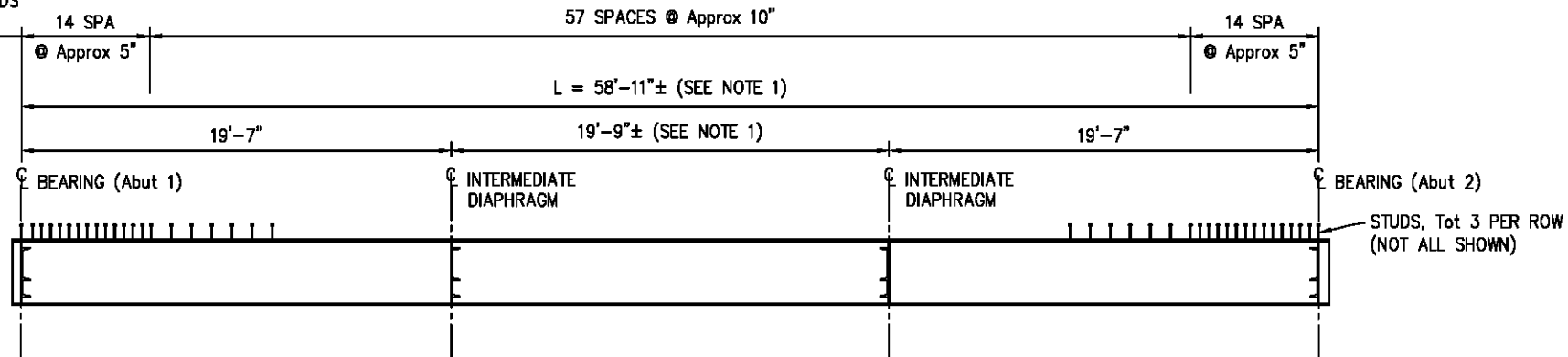
BRIDGE NO. 25C-0113
SHEET
ST-8
24 OF 30
W.G. No. 77124



GIRDER LAYOUT

SCALE: 1/4"=1'-0"

STUD SPACING
(Tot 258 STUDS
PER GIRDER)
(SEE NOTE 2)



GIRDER ELEVATION

SCALE: 1/4"=1'-0"

NOTE:
THE CONTRACTOR SHALL VERIFY ALL
CONTROLLING FIELD DIMENSIONS BEFORE
ORDERING OR FABRICATING ANY MATERIALS

NOTES:

1. Location of the centerline of bearing at Abut 2 may vary depending on the actual girder length (see Note 4 on "ABUTMENT 2 LAYOUT AND DETAILS" sheet).
2. For stud locations on top flange, see "STUD DETAIL" on "GIRDER DETAILS" sheet.
3. Stud installation shall be performed in the field.
4. See Notes on "GIRDER DETAILS" sheet for additional stud installation details.

FOR REDUCED PLANS

ORIGINAL SCALE IS IN INCHES
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REVISION	NUMBER	DATE	DESCRIPTION	BY



PREPARED UNDER THE SUPERVISION OF:
JEFFREY L. THOMURE
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DESIGNED: J. THOMURE
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CHECKED: D. FREDERICKS
DATE: 12/16/2016
ROAD NUMBER: 2130

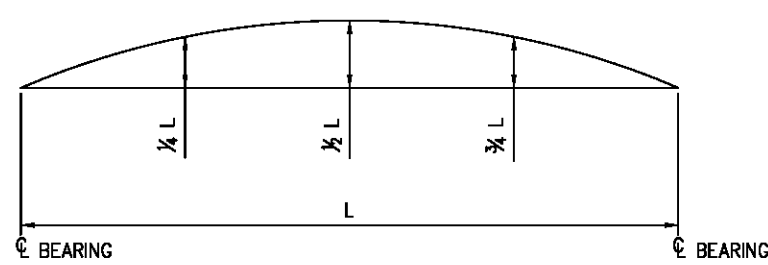
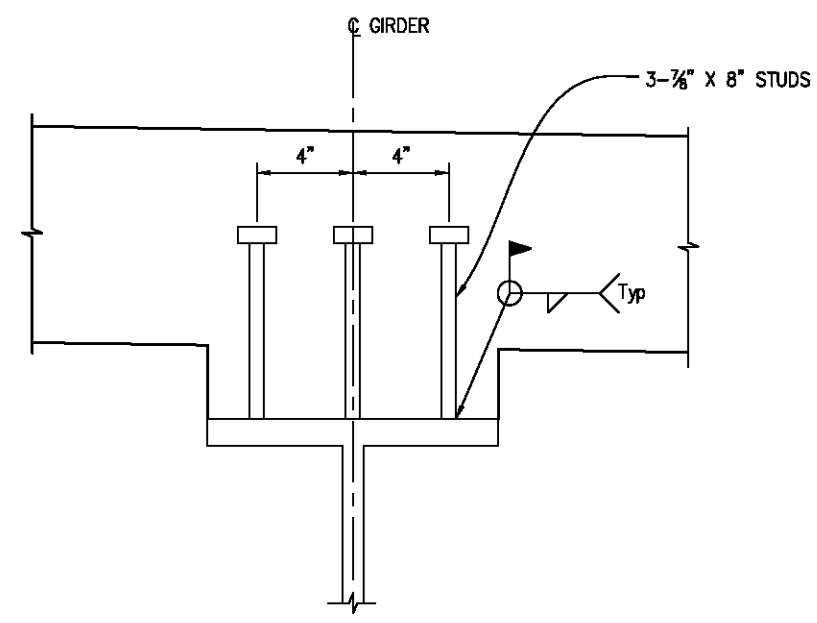
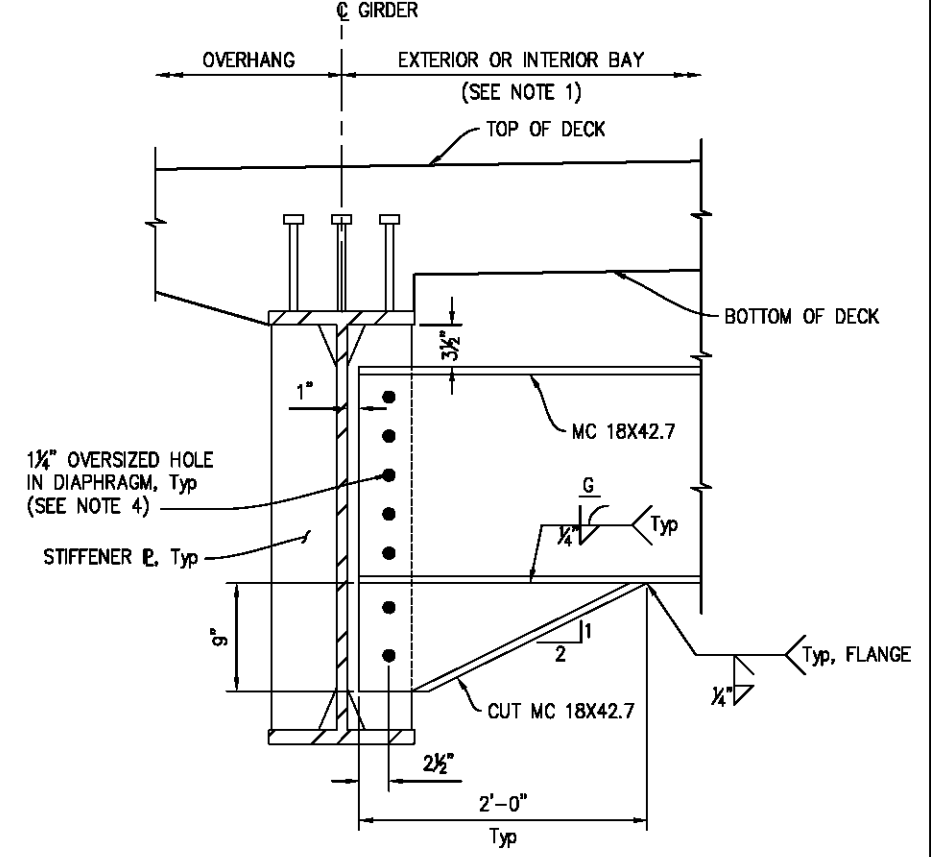
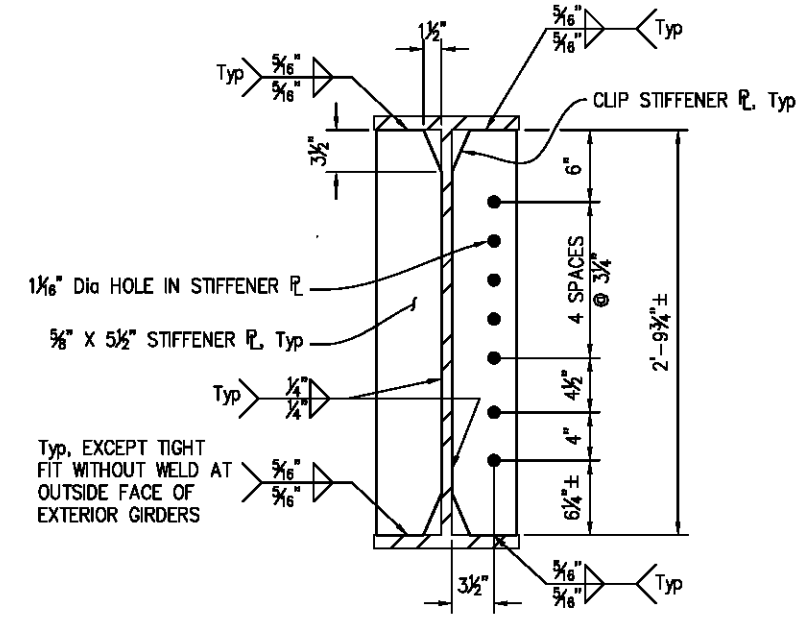
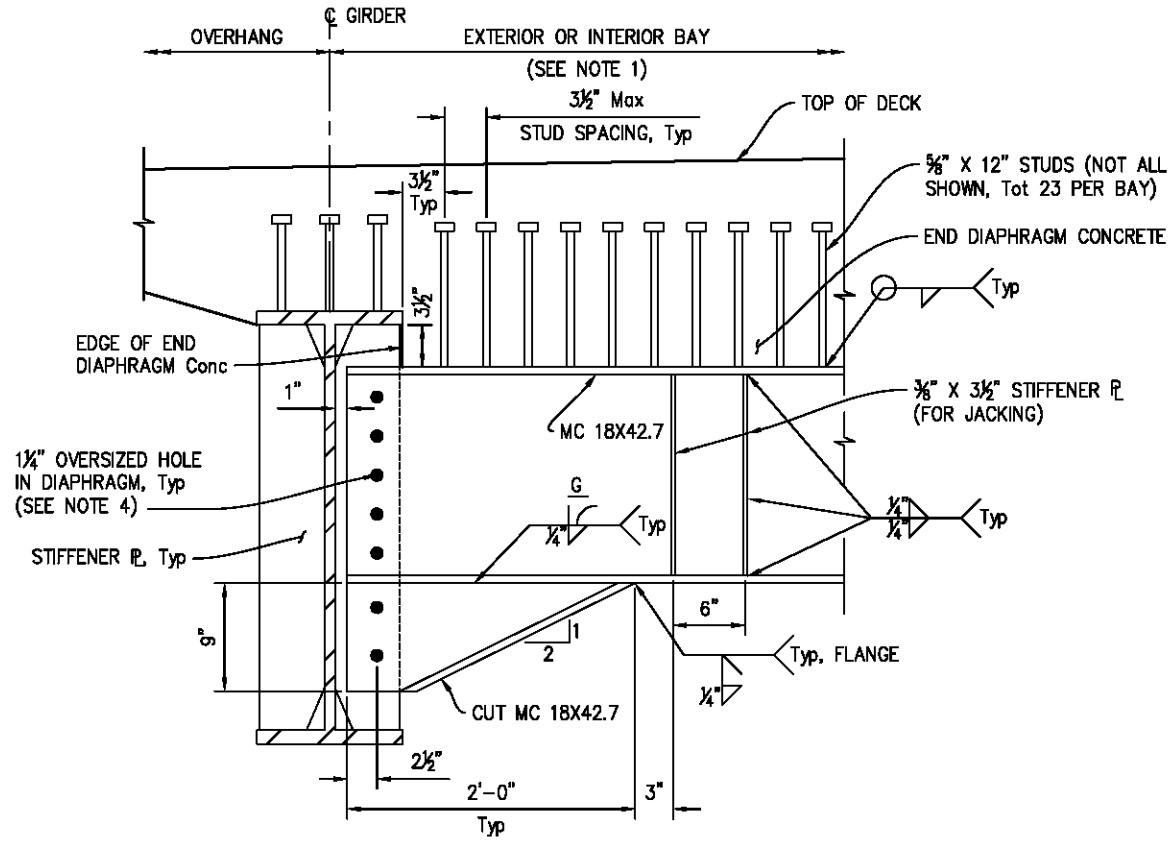


COUNTY OF EL DORADO
COMMUNITY DEVELOPMENT SERVICES
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SILVER FORK ROAD AT SOUTH FORK AMERICAN RIVER
BRIDGE REHABILITATION
GIRDER LAYOUT

BRIDGE NO. 25C-0113
SHEET
ST-9
25 OF 30
W.G. No. 77124

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SPAN LOCATION	DECK SLAB (ft)	GIRDER (ft)	SDL (ft)	TOTAL (ft)	FWS (ft)
1/4 L	0.042	0.011	0.004	0.056	0.007
1/2 L	0.059	0.016	0.005	0.080	0.010
3/4 L	0.042	0.011	0.004	0.056	0.007

DEAD LOAD DEFLECTION TABLE

NOTES:

- Exterior Girders shown, Interior Girders similar and symmetric.
- Welds between Steel Girder and Stiffener Plate may be shop welds or field welds per Contractor's preference. Weld between studs and girder top flanges shall be field welds.
- Welds shall terminate 1/4" from edge of Stiffener Plate, Typ all locations.
- Use 1" Dia high strength A325 bolts to connect MC 18X42.7 to Stiffener Plate.
- AASHTO Class B paint coating required for base metal near bolts.
- See "GIRDER LAYOUT" sheet for Diaphragm locations.
- The "DEAD LOAD DEFLECTION TABLE" is provided for information only. Based on the preliminary survey by the County, it appears that the girders were originally fabricated level (i.e. without any camber). The Contractor shall survey the profile elevation of the girders after removal of the existing deck and barriers. The actual girder buildup shall be based on the "DEAD LOAD DEFLECTION DIAGRAM" and Contractor's field survey data to ensure the final profile grade shown in the Contract Plans is achieved.
- Top surface of top flanges shall not be painted with undercoat nor final coat in vicinity of studs until after studs are welded and tested in accordance with AWS Bridge Welding Code D1.5 requirements (Section 7).
- Studs shall not be painted and bare metal shall be maintained other than incidental paint applied to base of studs.
- Bolts and bolt holes shall be painted in accordance with the project specifications and Special Provisions.

NOTE:
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PREPARED UNDER THE SUPERVISION OF:
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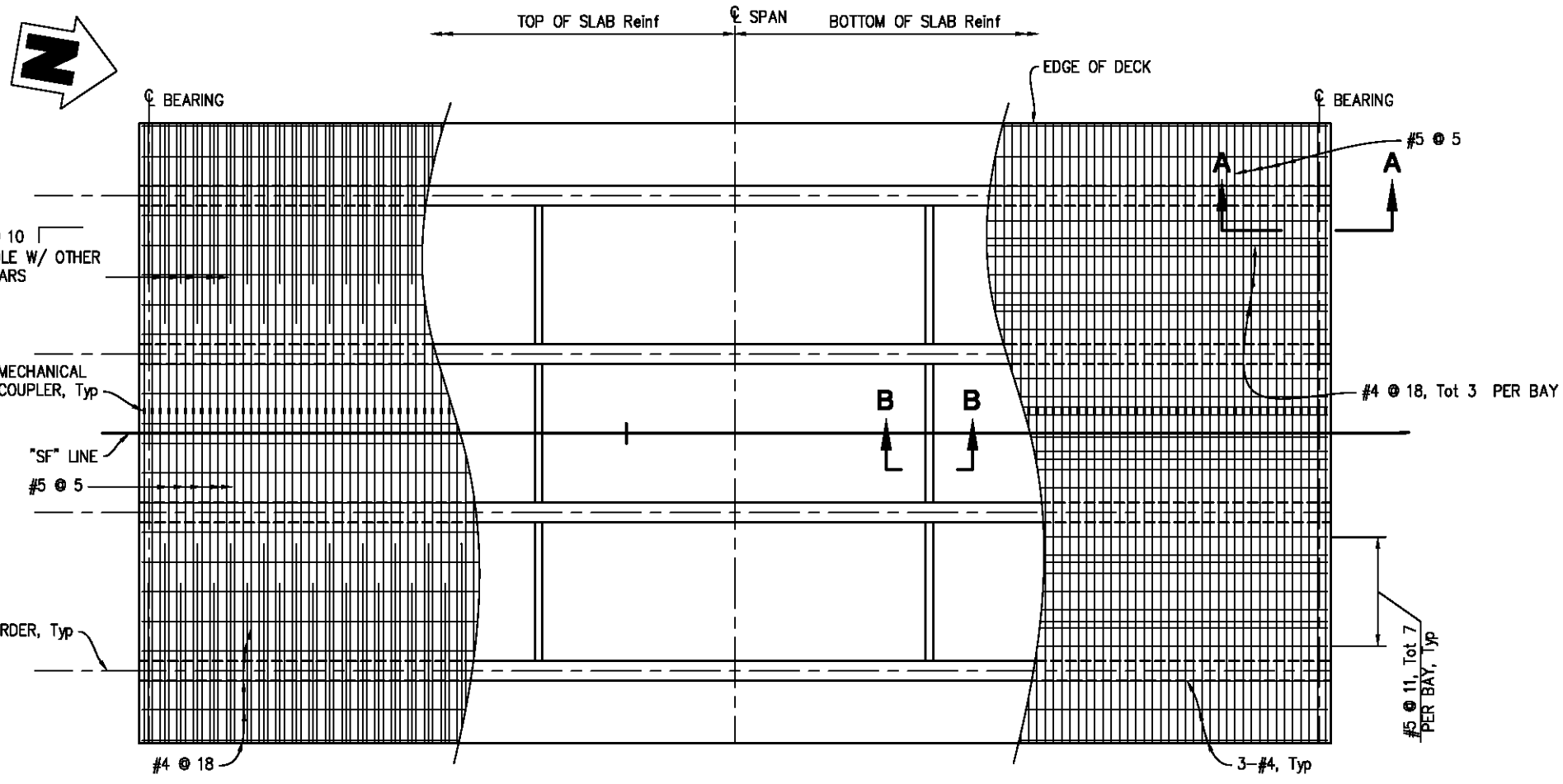


COUNTY OF EL DORADO
 COMMUNITY DEVELOPMENT SERVICES
 DEPARTMENT OF TRANSPORTATION

SILVER FORK ROAD AT SOUTH FORK AMERICAN RIVER
 BRIDGE REHABILITATION
 GIRDER DETAILS

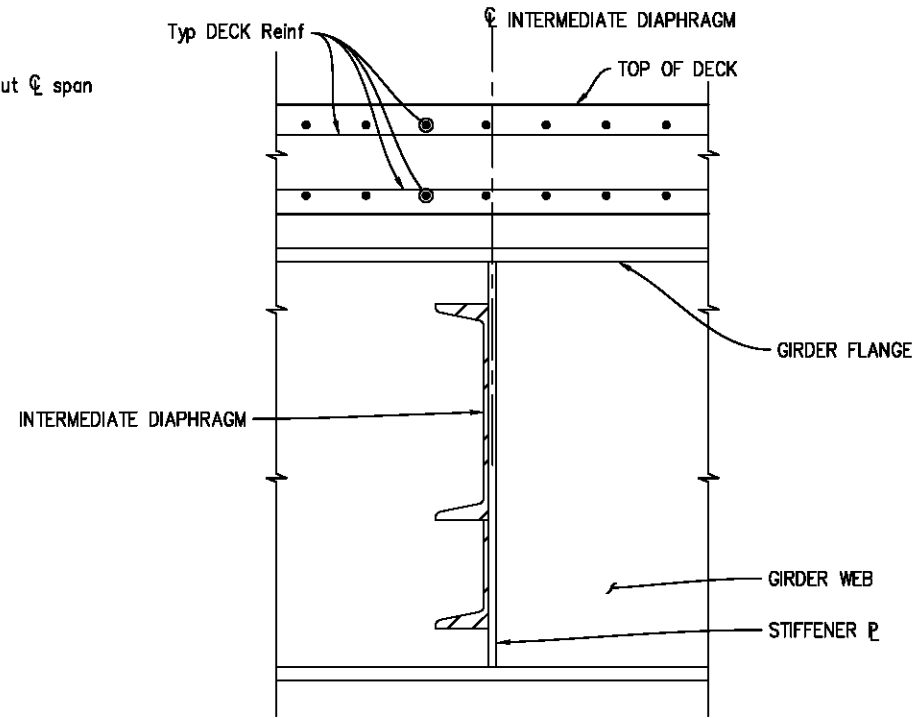
BRIDGE NO. 25C-0113
SHEET
ST-10
26 OF 30
W.G. No. 77124

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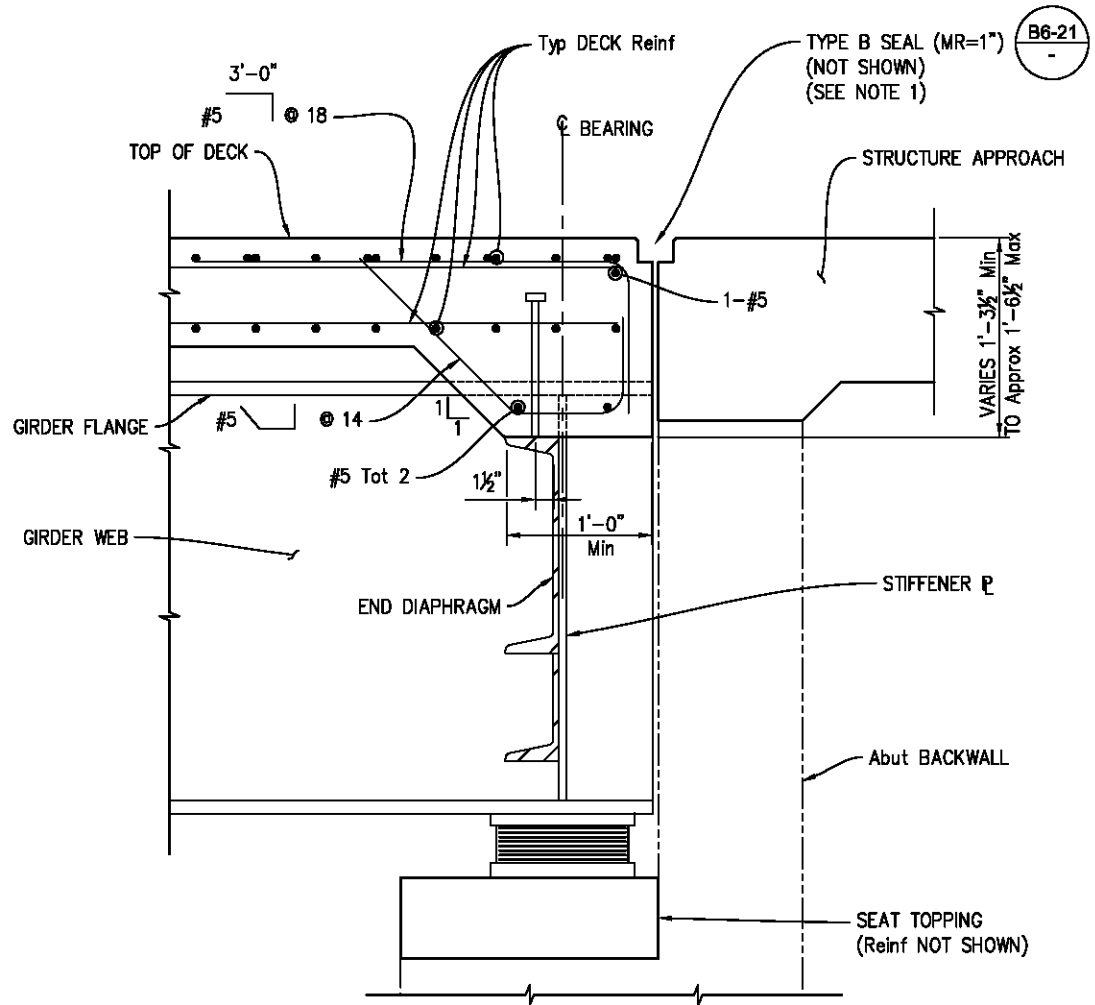
DECK PLAN

SCALE: 1/4" = 1'-0"
 NOTE: Reinforcement symmetric about ϕ span



SECTION B-B

SCALE: 1 1/2" = 1'-0"



SECTION A-A

SCALE: 1 1/2" = 1'-0"

- NOTES:
 1. Adjust reinforcing bars to clear sawcut for sealed joint.

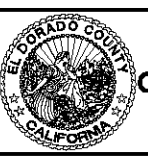
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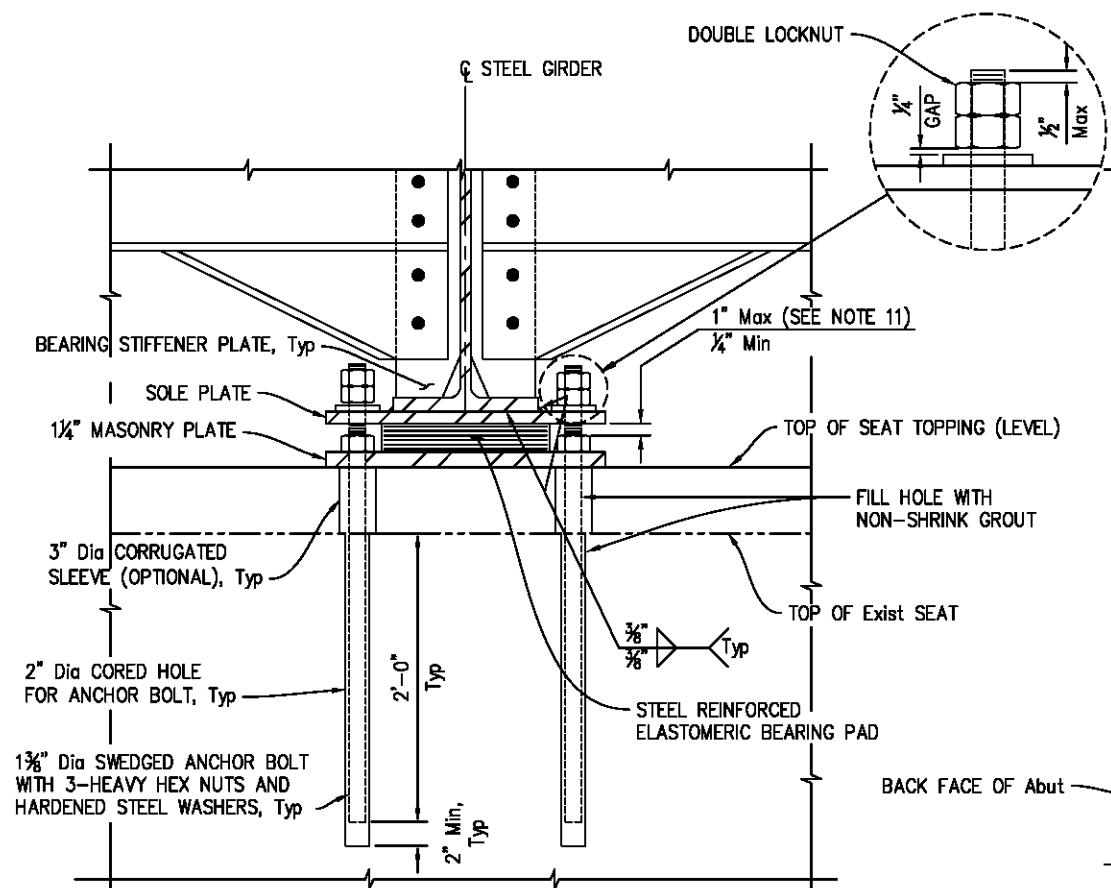


COUNTY OF EL DORADO
 COMMUNITY DEVELOPMENT SERVICES
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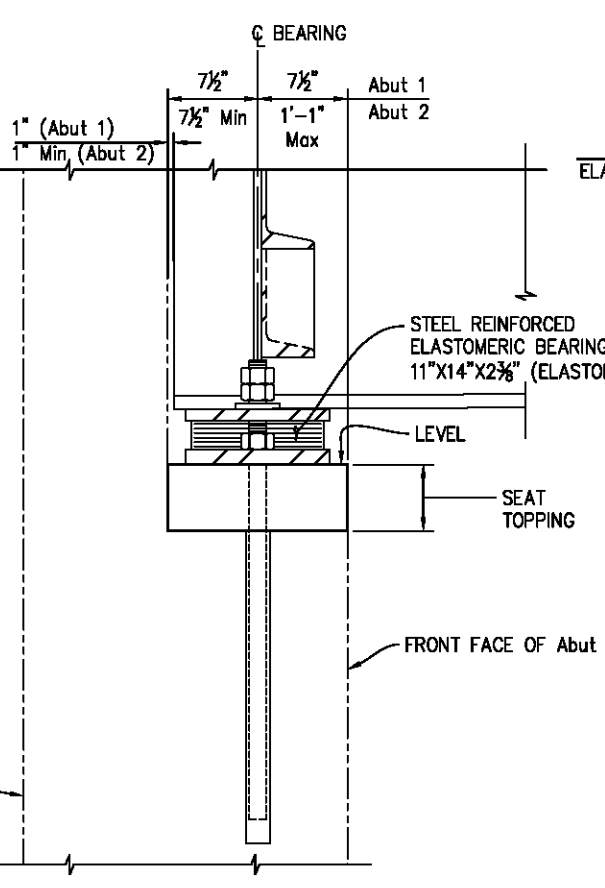
SILVER FORK ROAD AT SOUTH FORK AMERICAN RIVER
 BRIDGE REHABILITATION
 DECK DETAILS

BRIDGE NO. 25C-0113
 SHEET
ST-11
 27 OF 30
 W.G. No.
77124

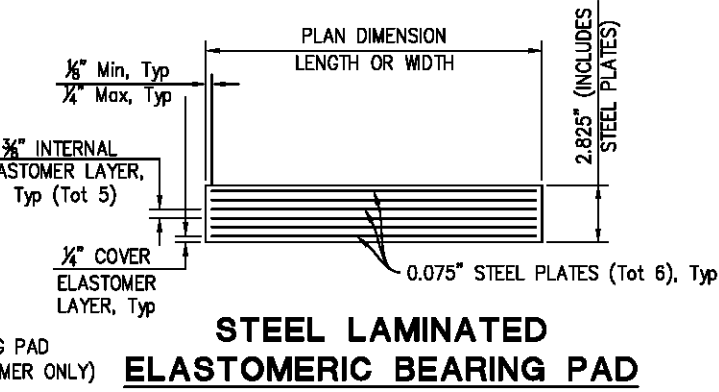
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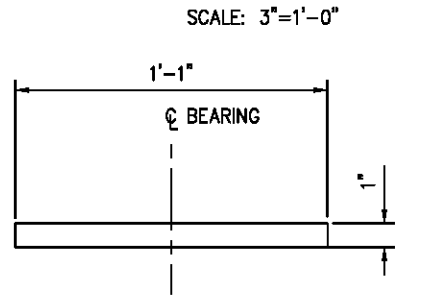
SECTION THROUGH BEARING
SCALE: 1 1/2"=1'-0"



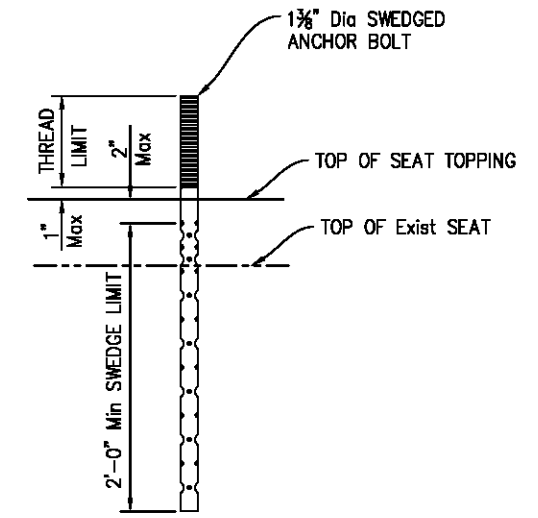
ELEVATION AT ABUTMENT
SCALE: 1 1/2"=1'-0"



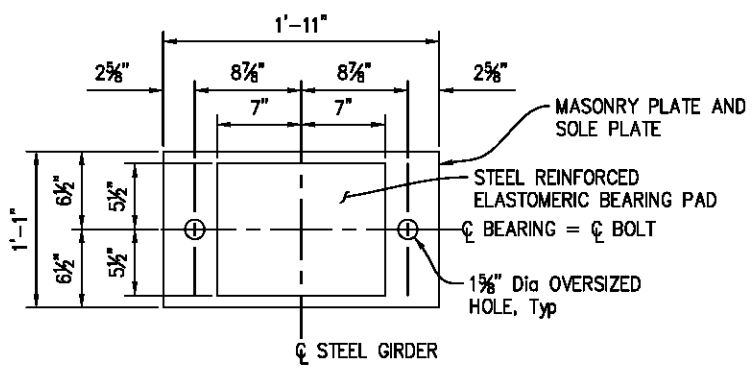
STEEL LAMINATED ELASTOMERIC BEARING PAD
SCALE: 3"=1'-0"



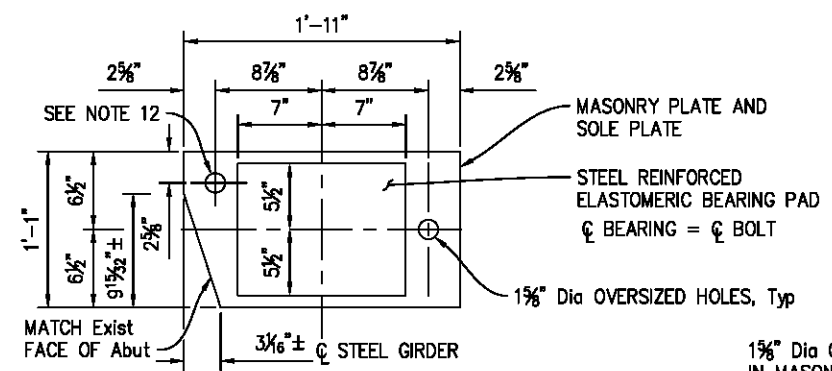
SOLE PLATE - ELEVATION
SCALE 3"=1'-0"



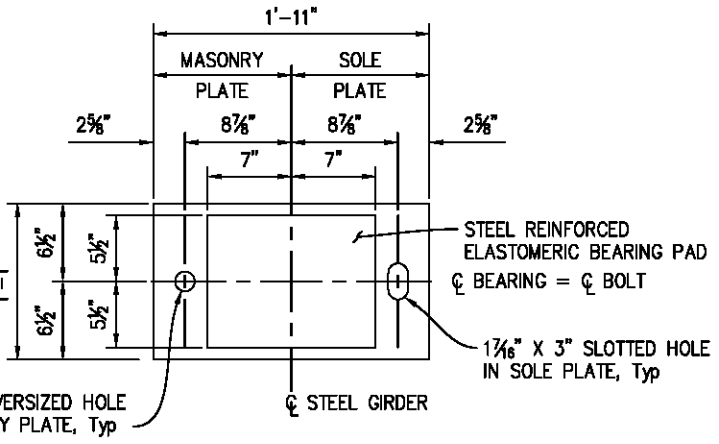
ANCHOR BOLT DETAIL
SCALE: 1 1/2"=1'-0"



BEARING PLAN - ABUTMENT 1
SCALE: 1 1/2"=1'-0"



BEARING PLAN - ABUTMENT 1 RIGHT
SCALE: 1 1/2"=1'-0"



BEARING PLAN - ABUTMENT 2
SCALE: 1 1/2"=1'-0"
SYMMETRIC ABOUT C BEARING

- NOTES:**
- Bearing pads shall be set level.
 - The compressive design load and design stress on the bearing pads for the Service II Limit State are 150 kips and 0.97 ksi, respectively.
 - The elastomeric compound shall be neoprene and conform to section 51-3.02B (3) of the Standard Specifications except the internal elastomer laminates shall be 3/8" thick.
 - All edges of the bearing steel plates shall be ground or otherwise treated to ensure no sharp edges remain.
 - The fillet weld between the girder bottom flange and the sole plate may be field welded.
 - If steel girders are field welded to sole plates, temperature of the base metal adjacent to elastomer shall not exceed 200 F.
 - The bearing pad shall be bonded to the masonry plate by vulcanization in accordance with ASTM D429 Method B.
 - Shim plates may be used below the masonry plate if necessary to achieve the required bearing seat elevations.
 - Sole plates, masonry plates, and shim plates shall conform to the requirements of ASTM A709 Grade 36, and shall be hot-dip galvanized in accordance with ASTM A153.
 - Anchor bolts, nuts, and washers shall conform to ASTM F1554 Grade 55 and shall be hot-dip galvanized in accordance with ASTM A153.
 - Multiple nuts may be used on anchor bolt above masonry plate.
 - Contractor shall avoid damaging existing surface reinforcement when drilling exterior anchor bolt hole by tilting anchor bolt a maximum of 1:6 (H:V) toward the C bearing. Hole in masonry plate must be shifted to match anchor bolt angle.
 - For bearing seat elevations, see "ABUTMENT LAYOUT AND DETAILS" sheets.

NOTE:
THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIALS

REVISION	NUMBER	DATE	DESCRIPTION	BY



PREPARED UNDER THE SUPERVISION OF:
JEFFREY L. THOMURE
REGISTERED CIVIL ENGINEER
DATE: 11/22/2017

DESIGNED: J. THOMURE
DRAWN: P. WALKER
CHECKED: D. FREDERICKS
DATE: 12/16/2016
ROAD NUMBER: 2130

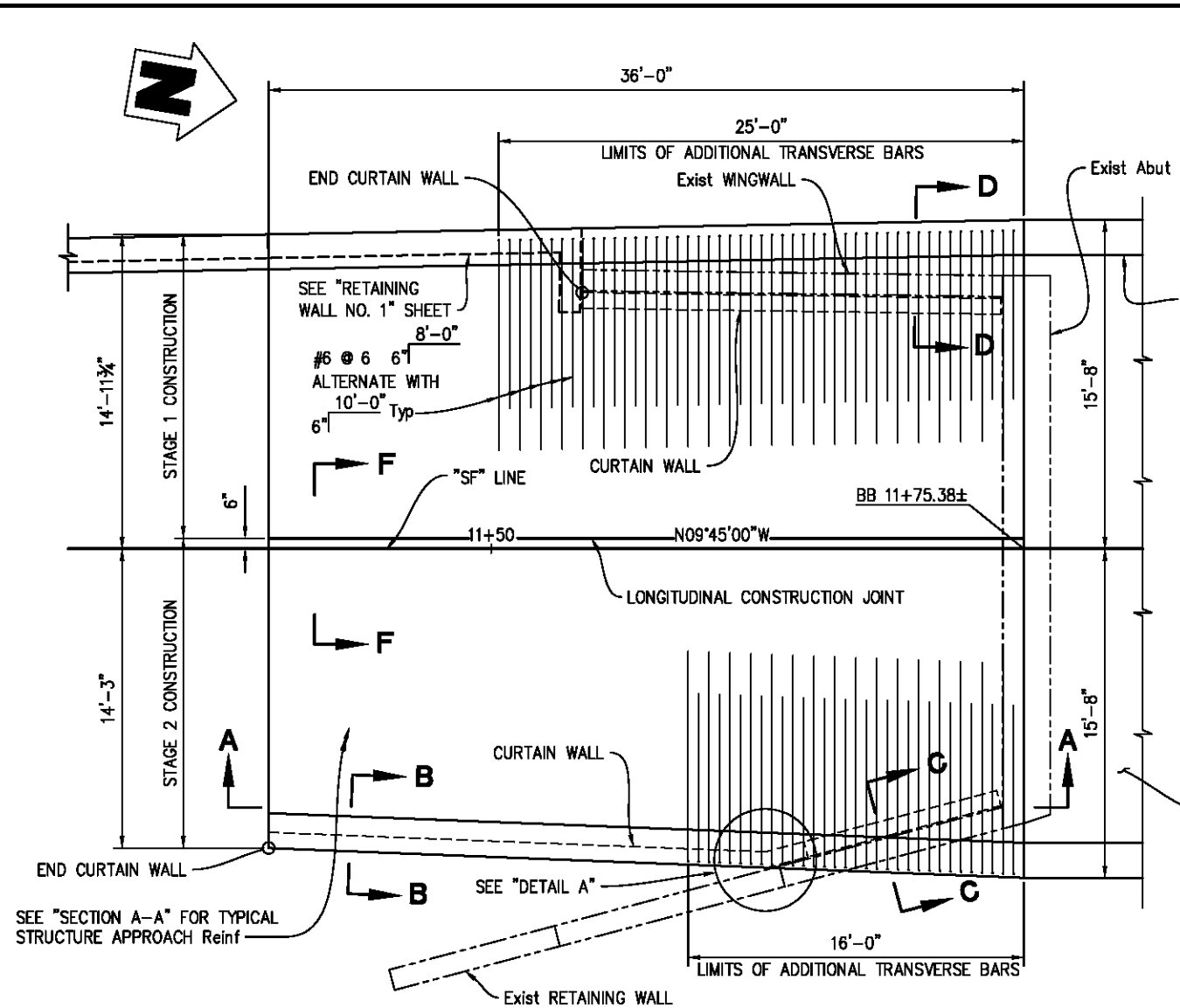


COUNTY OF EL DORADO
COMMUNITY DEVELOPMENT SERVICES
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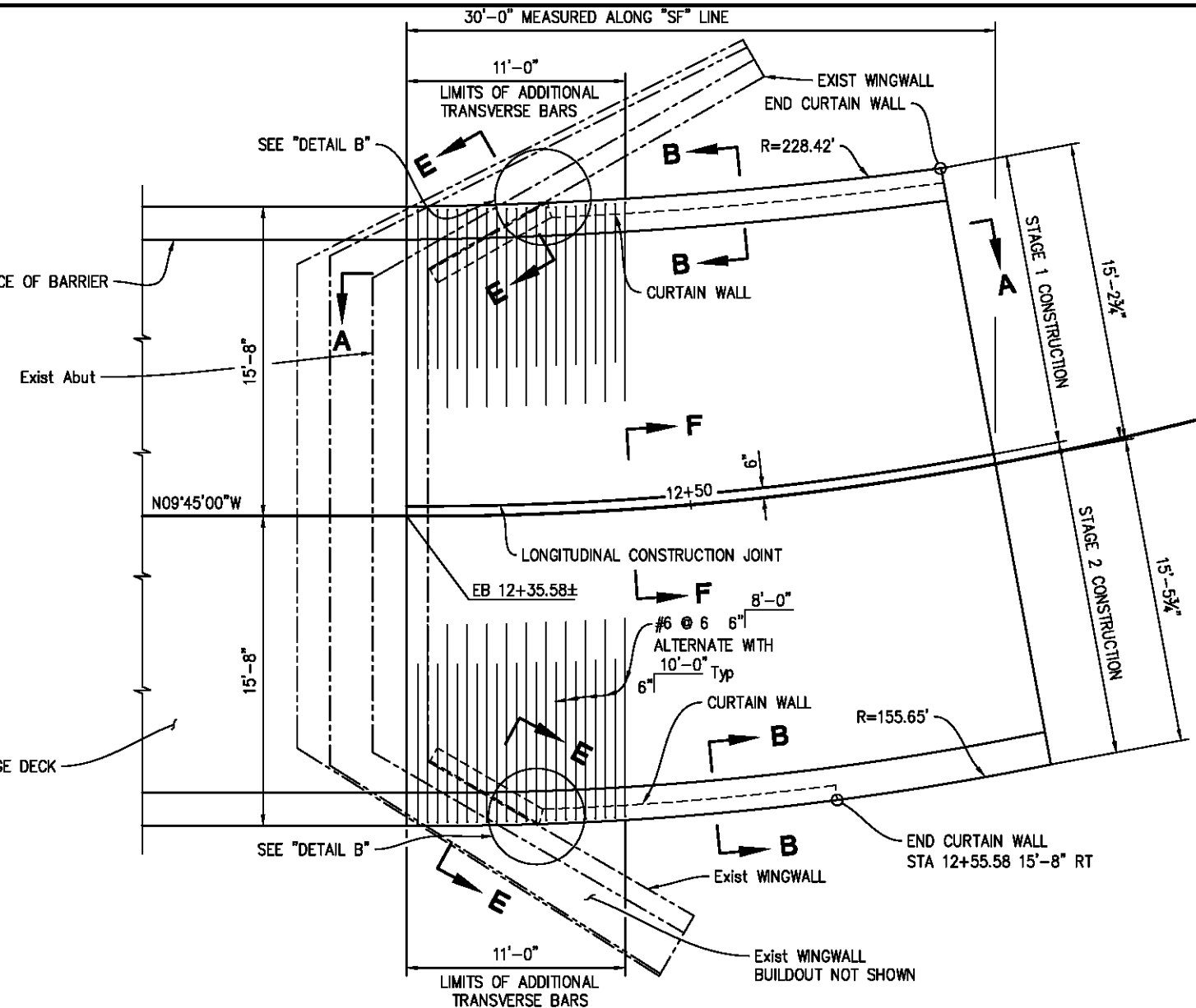
SILVER FORK ROAD AT SOUTH FORK AMERICAN RIVER
BRIDGE REHABILITATION
BEARING DETAILS

BRIDGE NO. 25C-0113
SHEET
ST-12
28 OF 30
W.G. No. 77124

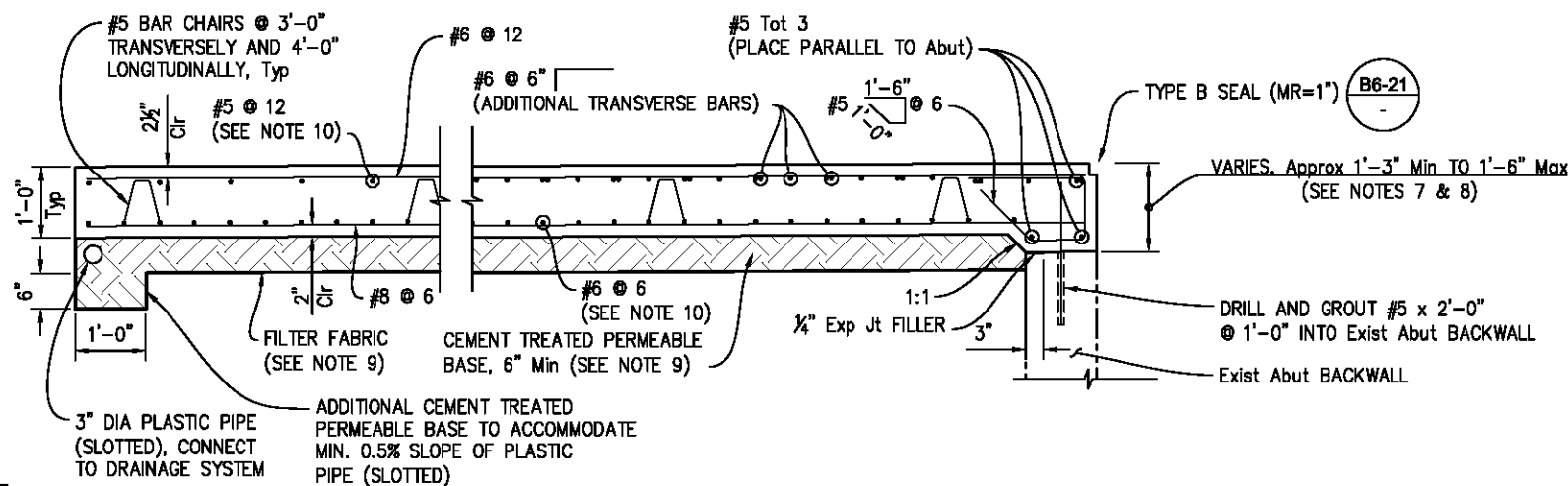
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SOUTH APPROACH LAYOUT
SCALE: 1/4"=1'-0"



NORTH APPROACH LAYOUT
SCALE: 1/4"=1'-0"



SECTION A-A

NOTE:
THE CONTRACTOR SHALL VERIFY ALL CONTROLLING FIELD DIMENSIONS BEFORE ORDERING OR FABRICATING ANY MATERIALS

NOTES:

- For details and sections not shown, see "APPROACH SLAB DETAILS" sheet.
- Stage construction of structure approaches required. For reinforcing details, see "SECTION F-F" on "APPROACH SLAB DETAILS" sheet. Mechanical couplers are required to splice transverse reinforcing bars for stage construction.
- All reinforcing bars located in the approach slabs, curtain walls, and barrier curbs shall be epoxy coated.
- For abutment backwall, wingwall, and retaining wall removal details, see "BRIDGE REMOVAL DETAILS" sheet.
- The Contractor is responsible for maintaining stability of the curtain walls prior to casting and curing the connected portion of the approach slabs during construction.
- Applying additional lateral loads on the existing wingwalls or retaining walls during construction is not allowed unless the existing walls are supported for the imposed loads. This requirement applies to all lateral loads, including lateral earth pressure, except surcharge earth pressure caused by raising the existing profile grade to the finish grade.
- Thickness of Structure Approach above existing abutment backwalls varies due to superelevation of roadway.
- For limits of removal of Abutment 1 backwall, wingwall, and retaining wall, see "BRIDGE REMOVAL DETAILS" sheet. Removal of Abutment 2 backwall and wingwalls is not required.
- All backfill material below structure approach shall be cement treated permeable base. Existing draining system for abutments, wingwalls, and retaining walls to be protected in place, repaired, and extended upward as necessary during construction.
- Typical transverse reinforcing bars placed perpendicular to station line and spaced along right edge of approach slab.

REVISION	NUMBER	DATE	DESCRIPTION	BY



PREPARED UNDER THE SUPERVISION OF:
JEFFREY L. THOMURE
 REGISTERED CIVIL ENGINEER
 DATE: 06/30/2018

DESIGNED: J. THOMURE
 DRAWN: P. WALKER
 CHECKED: D. FREDERICKS
 DATE: 12/16/2016
 ROAD NUMBER: 2130



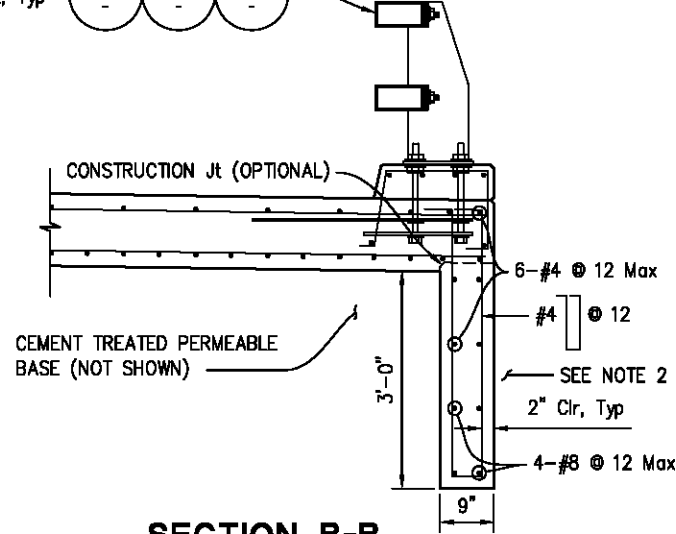
COUNTY OF EL DORADO
COMMUNITY DEVELOPMENT SERVICES
DEPARTMENT OF TRANSPORTATION

SILVER FORK ROAD AT SOUTH FORK AMERICAN RIVER
BRIDGE REHABILITATION
STRUCTURE APPROACH TYPE R(30S) (MOD) LAYOUT

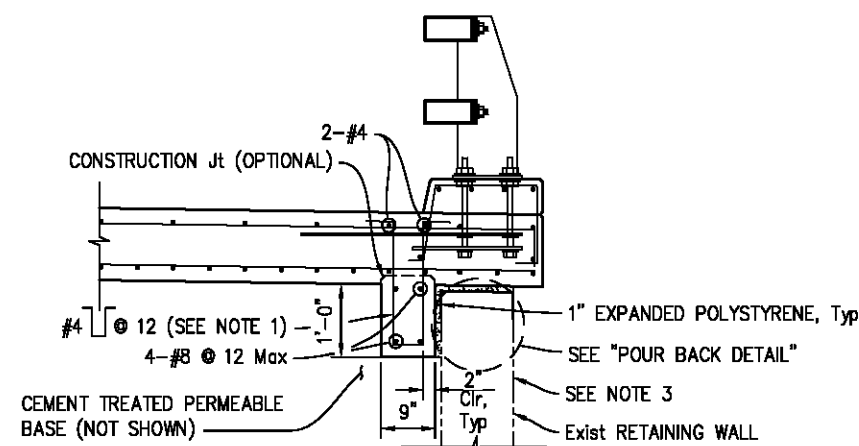
BRIDGE NO. 25C-0113
 SHEET
ST-13
 29 OF 30
 W.G. No.
77124

CALIFORNIA ST-10
BRIDGE RAIL, Typ

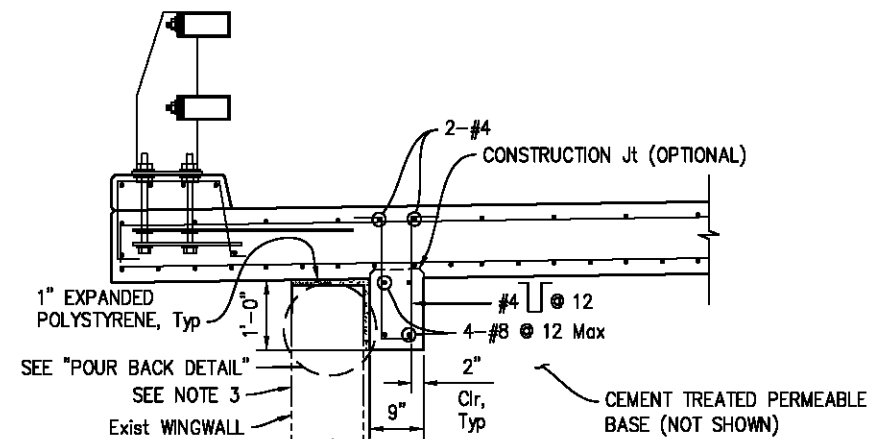
B11-68 B11-69 B11-70



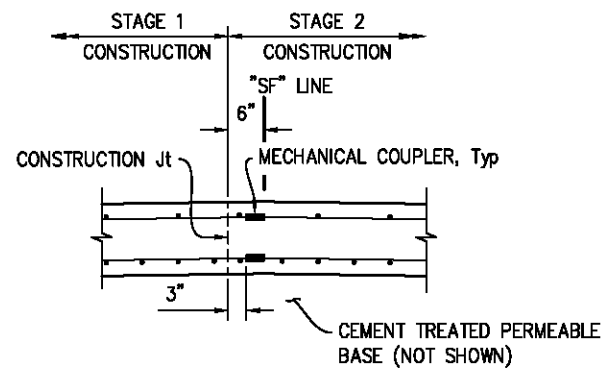
SECTION B-B
SCALE: 3/4"=1'-0"



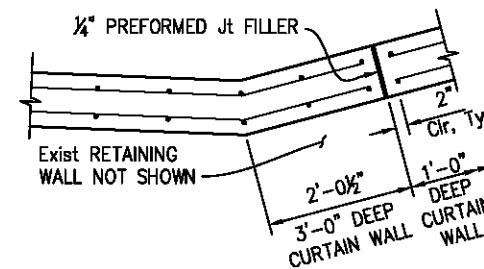
SECTION C-C
SCALE: 3/4"=1'-0"



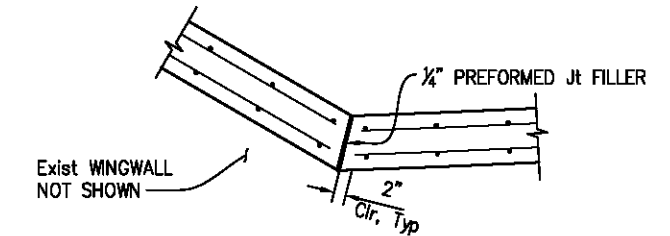
SECTION D-D
SCALE: 3/4"=1'-0"



SECTION F-F
SCALE: 3/4"=1'-0"

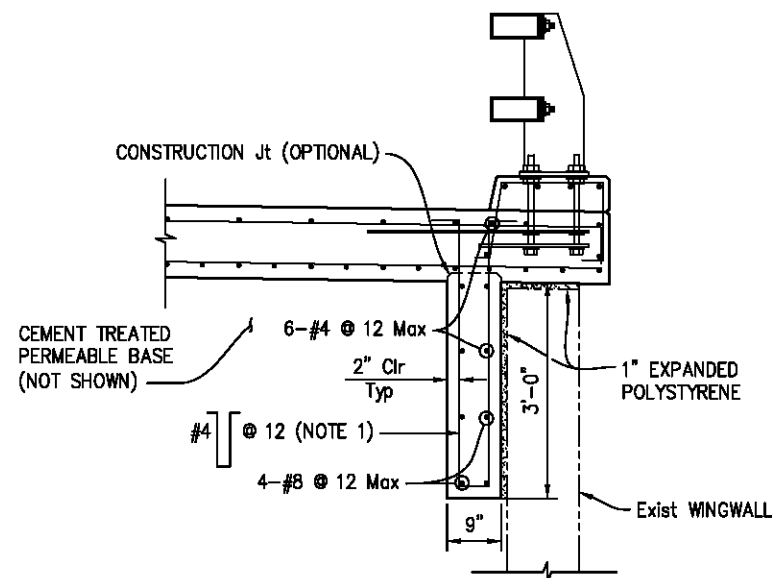


DETAIL A
SCALE: 3/4"=1'-0"

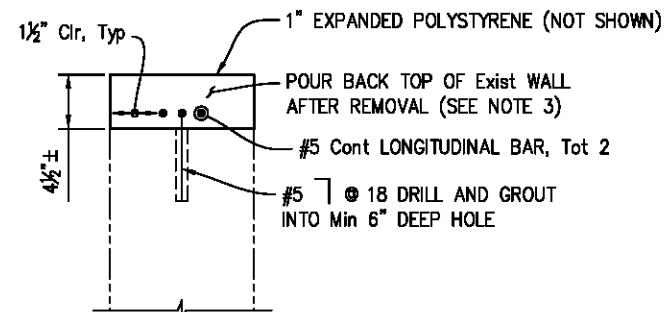


DETAIL B
SCALE: 3/4"=1'-0"

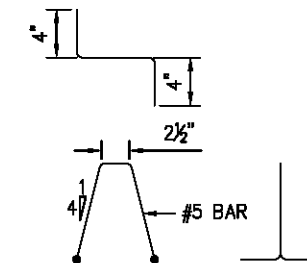
(Right Curtain Wall shown,
Left Curtain Wall similar)



SECTION E-E
SCALE: 3/4"=1'-0"



POUR BACK DETAIL
SCALE: 1 1/2"=1'-0"



BAR CHAIR DETAIL
SCALE: 1 1/2"=1'-0"

NOTES:

1. Turn #4 hooks inward as needed to fit in Structure Approach.
2. Section B-B shown for typical curtain wall not adjacent to existing wall. Where curtain wall is located next to existing retaining wall, details in Section C-C apply, including 1" expanded polystyrene and removal and "POUR BACK DETAIL" for existing wall as applicable.
3. For limits of removal of Abutment 1 backwall, wingwall, and retaining wall, see "BRIDGE REMOVAL DETAILS" sheet. Removal of Abutment 2 backwall and wingwalls is not required.
4. For additional notes, see "STRUCTURE APPROACH TYPE R(30S) (MOD) LAYOUT" sheet.
5. Ferrule Loop inserts not shown. See Notes 12 thru 14 on "STAGE CONSTRUCTION AND TYPICAL SECTION" sheet for details.

NOTE:
THE CONTRACTOR SHALL VERIFY ALL
CONTROLLING FIELD DIMENSIONS BEFORE
ORDERING OR FABRICATING ANY MATERIALS

ORIGINAL SCALE IS IN INCHES
Drawing name: C:\pwworkdir\user001\walker\00136485\457839-s-aps02.dwg Layout Tab: L-1 Nov 21, 2017 - 2:28pm pwalker
FOR REDUCED PLANS

REVISION	NUMBER	DATE	DESCRIPTION	BY



PREPARED UNDER THE SUPERVISION OF:
JEFFREY L. THOMURE
REGISTERED CIVIL ENGINEER
DATE: **06/30/2018**

DESIGNED: **J. THOMURE**
DRAWN: **P. WALKER**
CHECKED: **D. FREDERICKS**
DATE: **12/16/2016**
ROAD NUMBER: **2130**



COUNTY OF EL DORADO
COMMUNITY DEVELOPMENT SERVICES
DEPARTMENT OF TRANSPORTATION

SILVER FORK ROAD AT SOUTH FORK AMERICAN RIVER
BRIDGE REHABILITATION
APPROACH SLAB DETAILS

BRIDGE NO. 25C-0113
SHEET
ST-14
30 OF 30
W.G. No.
77124