

GENERAL NOTES

Except as shown in the plans, structure excavation and backfill shall be in accordance with M-206-2 for bridges.

Temporary shoring may be required for excavation adjacent to the existing roadway.

Expansion joint material shall meet AASHTO Specification M213.

The final finish for the surfaces of the Type 10MASH bridge rail curbs shall be Class 2. All other exposed concrete surfaces shall receive a Class 1 final finish to one foot below the ground line.

The following structural steel shall be AASHTO M270 Grade 50 (ASTM A-709): H-piles

Leveling pads are unlaminated bearings. They shall be cut or molded from AASHTO elastomer grade 3,4, or 5 as described in tables 705-1 and 705-2 with durometer (shore "A") hardness of 60.

Grade 60 reinforcing steel is required (except for Bridge Rail Type 10MASH).

All reinforcing steel shall be epoxy coated unless otherwise noted. (N) denotes non coated reinforcing steel.

All the provisions for bridge deck concrete shall also apply to approach slab concrete.

The Contractor shall be responsible for the stability of the structure during construction, and for providing stable slopes during construction.

For structure number installation, see Standard S-614-12.

Stations, elevations, and dimensions contained in these plans are calculated from a recent field survey. The contractor shall verify all dependent dimensions in the field before ordering or fabricating any material.

All longitudinal and transverse dimensions are measured horizontally and include no correction for grade.

The information shown on these plans concerning the type and location of underground utilities is not guaranteed to be accurate or all inclusive. The contractor is responsible for making his own determination as to the type and location of underground utilities as may be necessary to avoid damage thereto. The contractor shall contact the utility notification center of Colorado at 1-800-922-1987 at least 2 days (not including the day of notification) prior to any excavation or other earthwork.

The location of all construction joints shall be approved by the engineer.

Structural concrete exposed to soil shall conform to cementitious material Class 0, corresponding to sulfate exposure Class 0.

DESIGN DATA

AASHTO, Ninth Edition LRFD, 2020

Design Method: Load and Resistance Factor Design

Live Load: HL-93 (design truck or tandem, and design lane load)
Dead Load: Assumes 36 lbs. per sq. ft. for bridge deck overlay

Reinforced Concrete:
Class D Concrete: $f'c = 4,500$ psi
Reinforcing Steel: $f_y = 60,000$ psi

Structural Steel:
AASHTO M270 (ASTM A709) Grade 50 $f_y = 50,000$ psi

Precast prestressed concrete:
Class PS concrete $f'c =$ (see details)
 $f's = 270,000$ psi

SEISMIC DESIGN CRITERIA

Earthquake Design method: Force Based
Latitude = 40.196385° N
Longitude = -102.965459° W

AASHTO Spectrum for 7% PE in 75 years (1000yr Return Period)
Period (sec) S_a (g)
0.0 0.039 PGA - Site Class D
0.2 0.086 Ss - Site Class D
1.0 0.037 S1 - Site Class D

Spectral Response Accelerations:
 $A_s = F_{pga} * PGA$, $S_Ds = F_a * S_s$, and $S_{D1} = F_v * S_1$
 $F_{pga} = 1.6$, $F_a = 1.6$, $F_v = 2.4$
Period (sec) S_a (g)
0.0 0.063 A_s - Site Class D
0.2 0.092 S_Ds - Site Class D
1.0 0.089 S_{D1} - Site Class D

Operational Class:

Seismic Zone or Seismic Design Category: Zone= 1 or Category= A

Response Modification Factors:
R-Factor: 1.0 (Substructure type)

ABBREVIATIONS

(Per M-100-2 or as shown below)

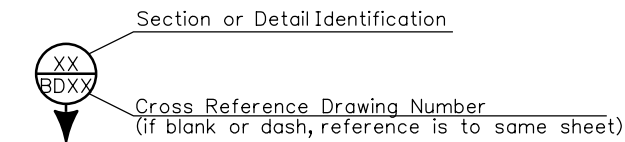
- EA = Each
- BF = Back Face
- FF = Front Face
- EL = Elevation
- Elev = Elevation
- DH = Design Height
- WSEL = Water Surface Elevation

INDEX OF DRAWINGS

- B01 GENERAL INFORMATION
- B02 SUMMARY OF QUANTITIES
- B03 GENERAL LAYOUT
- B04 TYPICAL SECTION
- B05 ENGINEERING GEOLOGY (1 OF 2)
- B06 ENGINEERING GEOLOGY (2 OF 2)
- B07 HYDRAULIC INFORMATION SHEET 1 OF 2
- B08 HYDRAULIC INFORMATION SHEET 2 OF 2
- B09 CONSTRUCTION LAYOUT
- B10 STAGE 1 PHASING
- B11 STAGE 2 PHASING
- B12 STAGE 3 PHASING
- B13 STAGE 4 PHASING
- B14 FOUNDATION LAYOUT DETAILS
- B15 ABUTMENT CONSTRUCTION PLAN AND ELEVATION
- B16 ABUTMENT REINFORCING PLAN AND ELEVATION
- B17 ABUTMENT SECTIONS
- B18 ABUTMENT DETAILS
- B19 PRECAST WINGWALL AND CLOSURE DETAILS
- B20 PRESTRESSED CONCRETE BOX GIRDER DETAILS
- B21 DECK REINFORCING PLAN
- B22 DECK REINFORCING DETAILS
- B23 APPROACH SLAB DETAILS (1 OF 2)
- B24 APPROACH SLAB DETAILS (2 OF 2)
- B25 BRIDGE RAIL TYPE 10MASH
- B26 TRANSITION TYPE BR10M-GR3 CURB, TUBE AND PLATE DETAILS SLEEPER VERSION
- B27 EXCAVATION AND BACKFILL
- B28 STRUCTURE BACKFILL DETAILS
- B29 BRIDGE DECK ELEVATIONS (SHEET 1 OF 3)
- B30 BRIDGE DECK ELEVATIONS (SHEET 2 OF 3)
- B31 BRIDGE DECK ELEVATIONS (SHEET 3 OF 3)
- B32 ROADWAY APPROACHES

BRIDGE DESCRIPTION

1-Span (112'-0") bridge, concrete box girder prestressed CD 61 over Surveyor Creek
40'-0" roadway curb to curb, 1'-6" Bridge Rail Type 10 MASH, with 00° 00' 00" skew



INITIALS	DESIGN	DATE	DETAIL	QUANTITY	DATE
By	SNH	11/22	MP	SNH	11/22
Checked By	JTK	11/22	JTK	JTK	11/22

jeremy 12/22/15 PM pw:\pwworking\pwworking.com\AECOM_DS20_NA_2019\Documents\60626605-CDDT_R4_Timber_BE_23010\Bridges\Drawings\D-25-EA_B01_GenInfo.dgn

All seals for this set of drawings are applied to the cover page(s)	Print Date: 2/27/2023		Sheet Revisions	Colorado Department of Transportation 120 North Riverview Road Sterling, CO 80751 Phone: 970-522-0481 FAX: 970-521-9729 Region 4	As Constructed	GENERAL INFORMATION			Project No./Code		
	File Name: 23010_D-25-EA_B01_GenInfo.dgn		Date:		Comments	Init.	No Revisions:				FBR R400-371/23010
	Horiz. Scale: 1:1 Vert. Scale: As Noted						Revised:	Designer: S. Huson	Structure Numbers	D-25-EA	FBR 061A-003/25447
	Unit Information 0222 Unit Leader Initials AAH						Void:	Detailer: M. Purdy	Subset Sheets: B01 of B32	Sheet Number	

SUMMARY OF QUANTITIES

Summary of Quantities

D-25-EA

ITEM NO.	DESCRIPTION	UNIT	APP SLAB	SUPER STR	ABUT 1	ABUT 2	TOTAL	AS CONSTRUCTED
202-00400	Removal of Bridge	EACH		1			1	
206-00000	Structure Excavation	CY			415	443	858	
206-00065	Structure Backfill (Flow-Fill)	CY			272	271	543	
206-00200	Structure Backfill (Class 2)	CY			29	29	58	
403-34751	Hot Mix Asphalt (Grading SX) (75) (PG 64-28)	TON	30	86			116	
408-01100	Joint Sealant	LF	160				160	
502-00500	Complete Joint Penetration (CJP) Splice	EACH			1	1	2	
502-02010	Dynamic Pile Test	EACH			1	1	2	
502-11253	Steel Piling (HP 12x53)	LF			55	52	107	
① 502-14117	Steel Piling (HP 14x117)	LF			389	382	771	
515-00120	Waterproofing (Membrane)	SY	182	520			702	
② 601-03040	Concrete Class D (Bridge)	CY	10	148	33	33	224	
602-00020	Reinforcing Steel (Epoxy Coated)	LB	822	21583	5353	5353	33111	
606-01400	Transition Type BR10M-GR3	EACH	4				4	
606-11035	Bridge Rail Type 10 MASH	LF	60	236			296	
618-01994	Prestressed Concrete Box (Depth 32 Through 48)	SF		4583			4583	
618-06034	Prestressed Concrete Slab (Depth 6 Through 13)	SF	1804				1804	
618-30000	Move Bridge	L S		1			1	

NOTES

- ① Includes an additional 36LF for 12 PJP splices.
- ② Includes 24.3 CY for the total superstructure haunch quantity.

See Roadway plans for riprap and geotextile quantities.

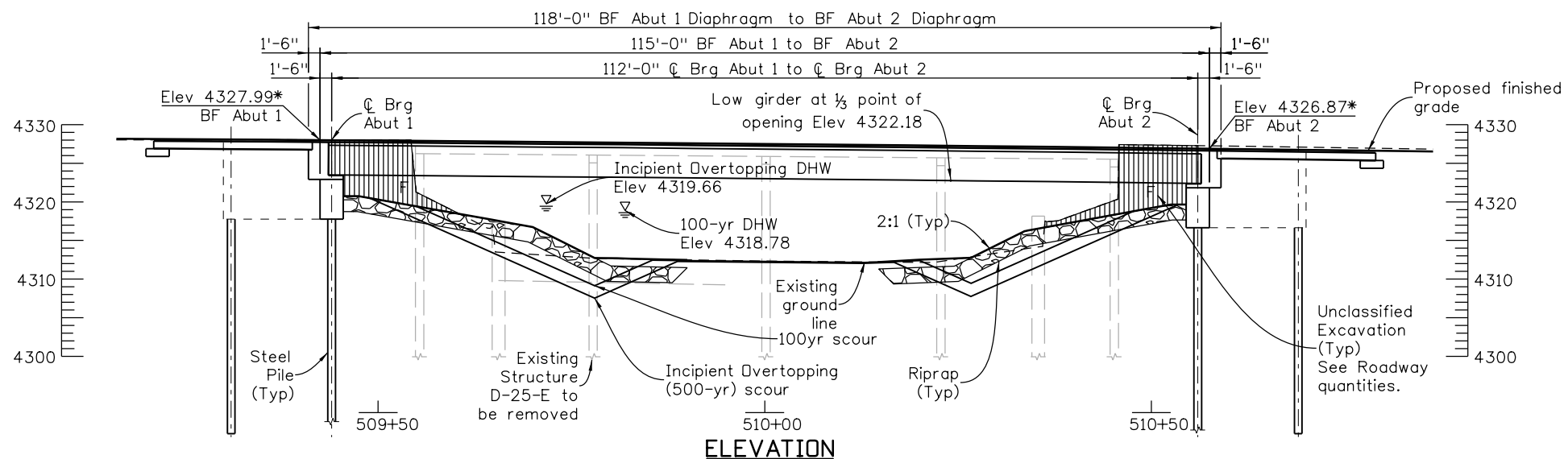
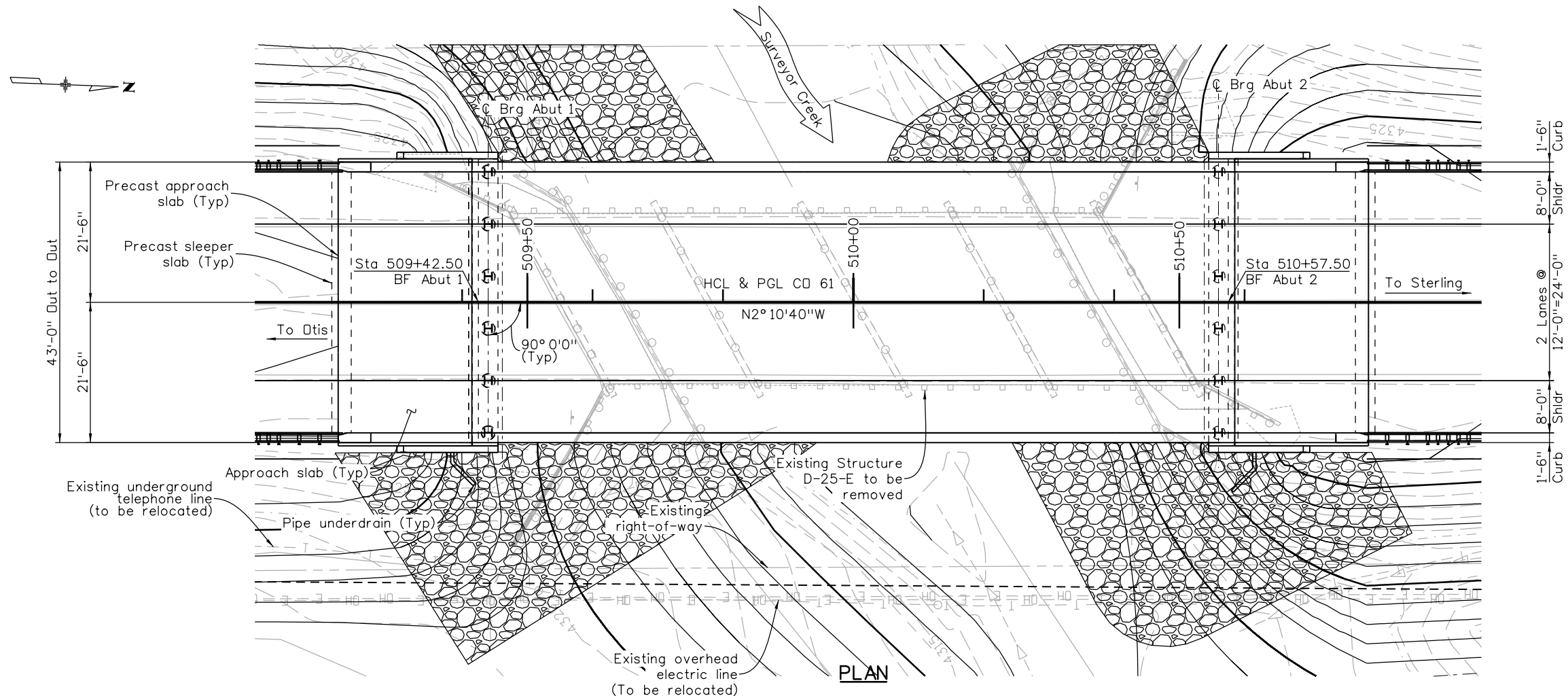
INITIALS	DESIGN	DATE	DETAIL	DATE	QUANTITY	DATE
By	SNH	11/22	MP	11/22	SNH	11/22
Checked By	JTK	11/22	SNH	11/22	JTK	11/22

jeremy 12/24/25 PM pww:\asecom-10-bw.bentley.com\AFCOM_DS20_NA_2019\Documents\60626605-CDDT-R4_Timber_BE_(23010)\Bridge\Drawings\D-25-EA\B02_S00.dgn

All seals for this set of drawings are applied to the cover page(s)	Print Date: 2/27/2023	Sheet Revisions			Colorado Department of Transportation  120 North Riverview Road Sterling, CO 80751 Phone: 970-522-0481 FAX: 970-521-9729 Region 4	As Constructed No Revisions: Revised: Void:	SUMMARY OF QUANTITIES			Project No./Code	
	File Name: 23010_D-25-EA_B02_S00.dgn	Date:	Comments	Init.						FBR R400-371/23010	
	Horiz. Scale: 1:1 Vert. Scale: As Noted Unit Information 0222 Unit Leader Initials AAH						Designer: S. Huson Detailer: M. Purdy	Structure Numbers: D-25-EA Sheet Subset: Bridge	Subset Sheets: B02 of B32 Sheet Number		

JTD

jeremy 12:28:56 PM p:\w\secom-10-tw-bentley.com\ACDM_DS20_NA_2019\Documents\60626605-CDOT_R4_Timber_BE_23010\Bridges\Drawings\25-EA\23010_D-25-EA_B03_GenLayout.dgn
 INITIALS DESIGN DATE DETAIL DATE QUANTITY DATE
 By SNH 11/22 MP 11/22 SNH 11/22
 Checked By JTK 11/22 SNH 11/22 JTK 11/22



* Elevations shown at finished grade (Taken at HCL CD 61)

All seals for this set of drawings are applied to the cover page(s)

Print Date: 2/27/2023
 File Name: 23010_D-25-EA_B03_GenLayout.dgn
 Horiz. Scale: 1:20 Vert. Scale: As Noted
 Unit Information 0222 Unit Leader Initials AAH

Sheet Revisions		
Date:	Comments	Init.

Colorado Department of Transportation
 120 North Riverview Road
 Sterling, CO 80751
 Phone: 970-522-0481
 FAX: 970-521-9729
Region 4



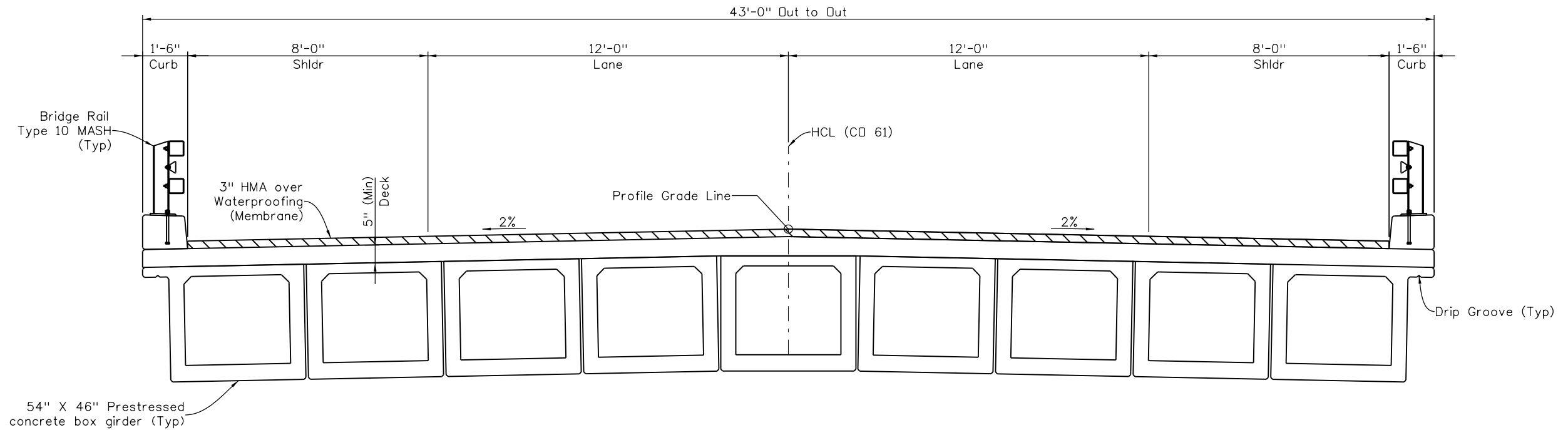
JTD

As Constructed
 No Revisions:
 Revised:
 Void:

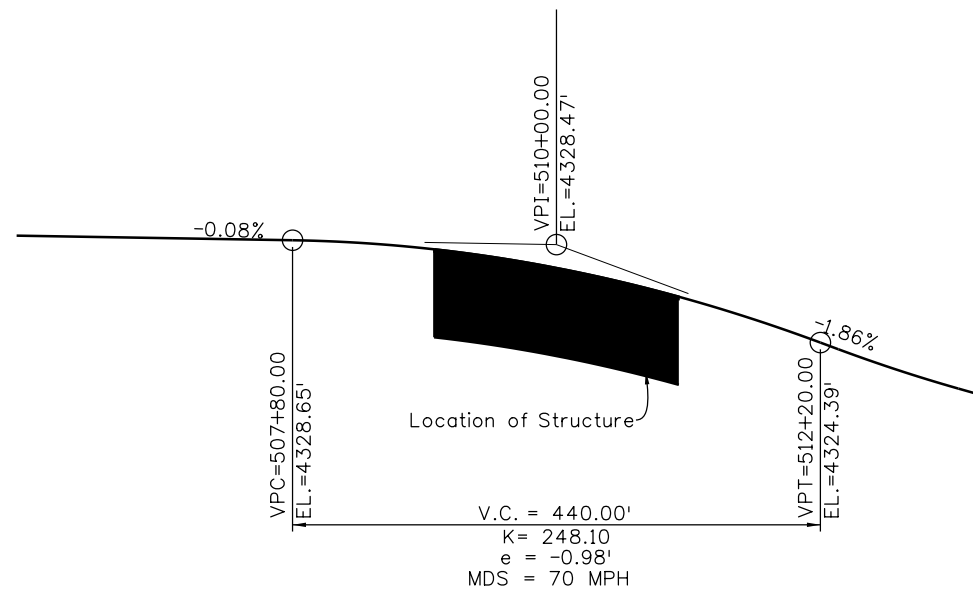
GENERAL LAYOUT

Designer: S. Huson
 Detailer: M. Purdy
 Sheet Subset: Bridge
 Structure Numbers: D-25-EA
 Subset Sheets: B03 of B32

Project No./Code
 FBR R400-371/23010
 FBR 061A-003/25447
 Sheet Number



TYPICAL SECTION



PROFILE GRADE

INITIALS	DESIGN	DATE	DETAIL	DATE	QUANTITY	DATE
By	SNH	11/22	MP	11/22	SNH	11/22
Checked By	JTK	11/22	SNH	11/22	JTK	11/22

c:\compw\515024_10:32:58 PM \\compw\51501\CS-pdf_work_dir\76941\49302_3\23010_D-25-EA_B04_TypicalSection.dgn

All seals for this set of drawings are applied to the cover page(s)

Print Date: 2/27/2023
 File Name: 23010_D-25-EA_B04_TypicalSection.dgn
 Horiz. Scale: 1:2 Vert. Scale: As Noted
 Unit Information 0222 Unit Leader Initials AAH

Sheet Revisions		
Date:	Comments	Init.

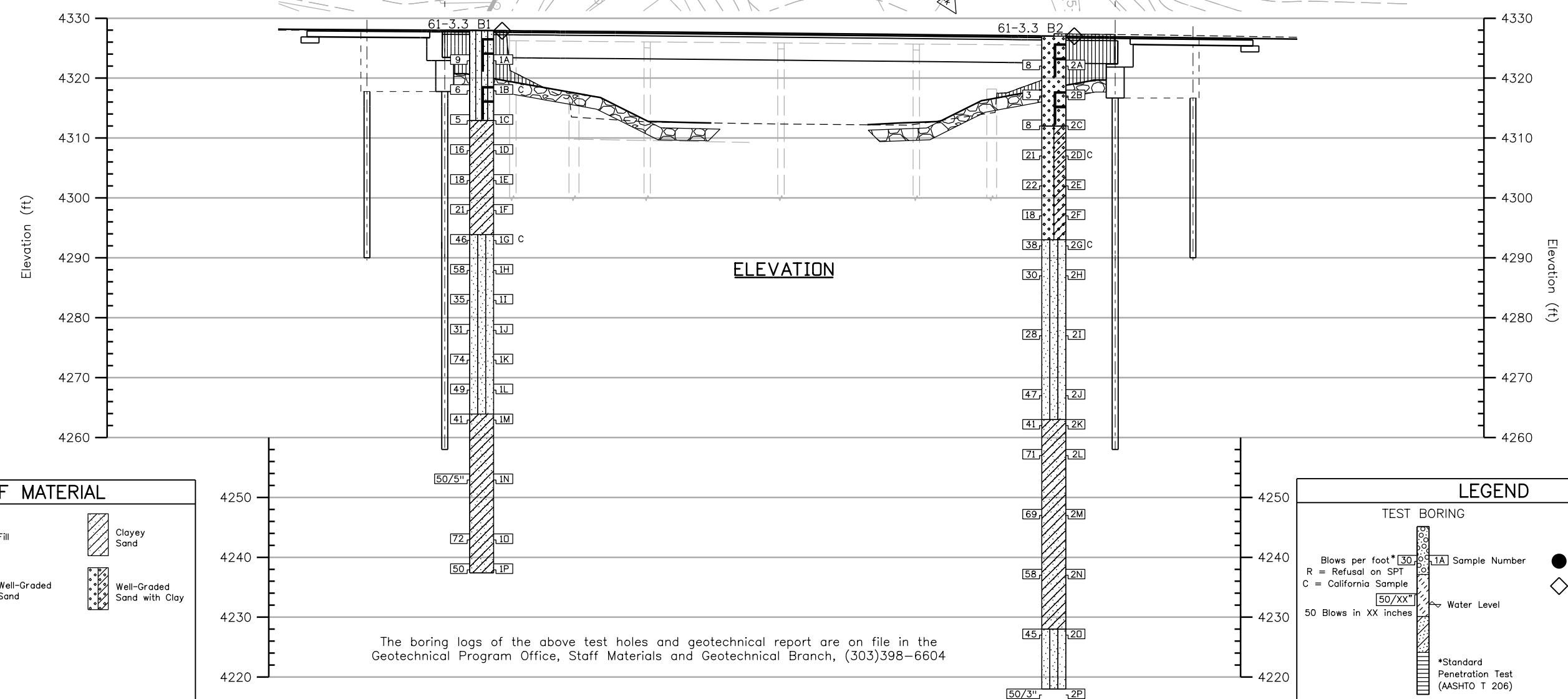
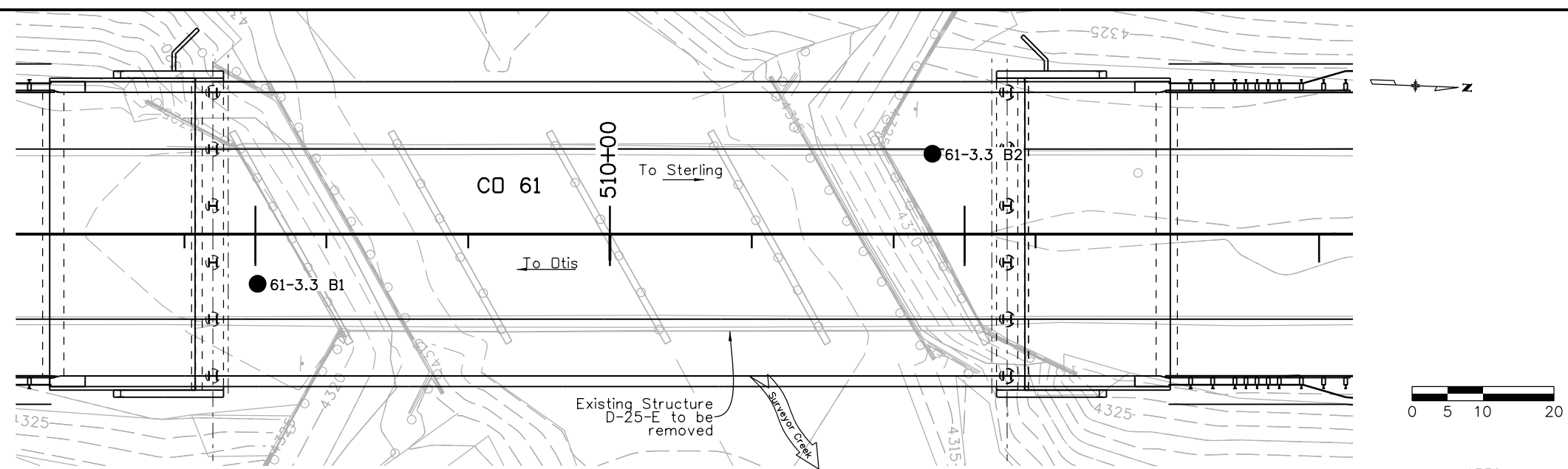
Colorado Department of Transportation
 120 North Riverview Road
 Sterling, CO 80751
 Phone: 970-522-0481
 FAX: 970-521-9729
 Region 4 JTD

As Constructed
No Revisions:
Revised:
Void:

TYPICAL SECTION			
Designer:	S. Huson	Structure Numbers	D-25-EA
Detailer:	M. Purdy	Subset Sheets:	B04 of B32
Sheet Subset:	Bridge		

Project No./Code
FBR R400-371/23010
FBR 061A-003/25447
Sheet Number

jeremy 12/31/25 PM PW: \\pccom-np-pw.bentley.com\jlm_us\jlm_us\2010\Documents\Bridges\CDOT_R4_Timber_BE_23010\Bridges\Drawings\D-25-EA\23010_D-25-EA_B05_Eng_Geology01.dgn



TYPE OF MATERIAL		
	Clayey, Silty Sand	
	Silty Sand	
	Clayey Sand	

LEGEND	
	TEST BORING
	Blows per foot* [30]
	R = Refusal on SPT
	C = California Sample
	50 Blows in XX inches
	Water Level
	[1A] Sample Number
	● Location of Test Boring
	◇ Auger Boring
	*Standard Penetration Test (AASHTO T 206)

The boring logs of the above test holes and geotechnical report are on file in the Geotechnical Program Office, Staff Materials and Geotechnical Branch, (303)398-6604

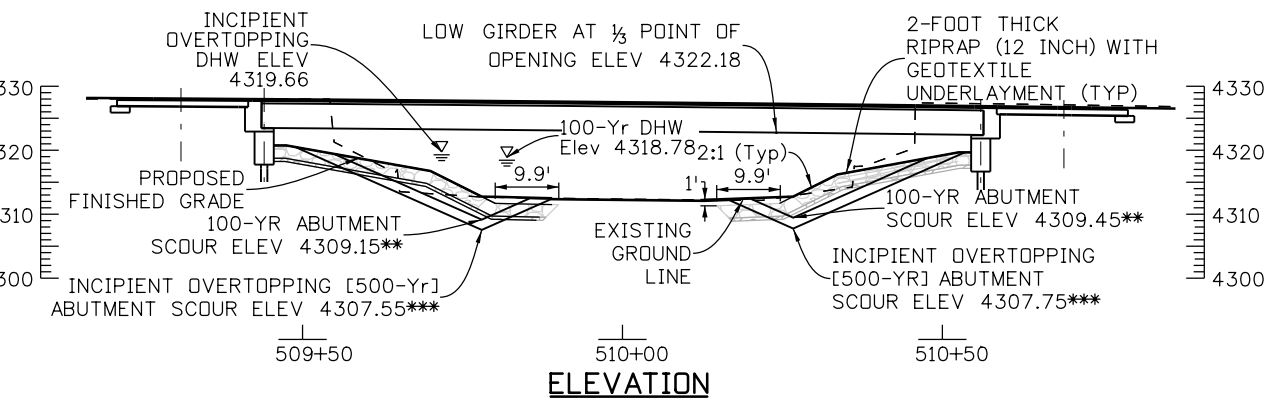
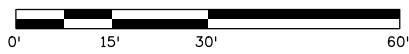
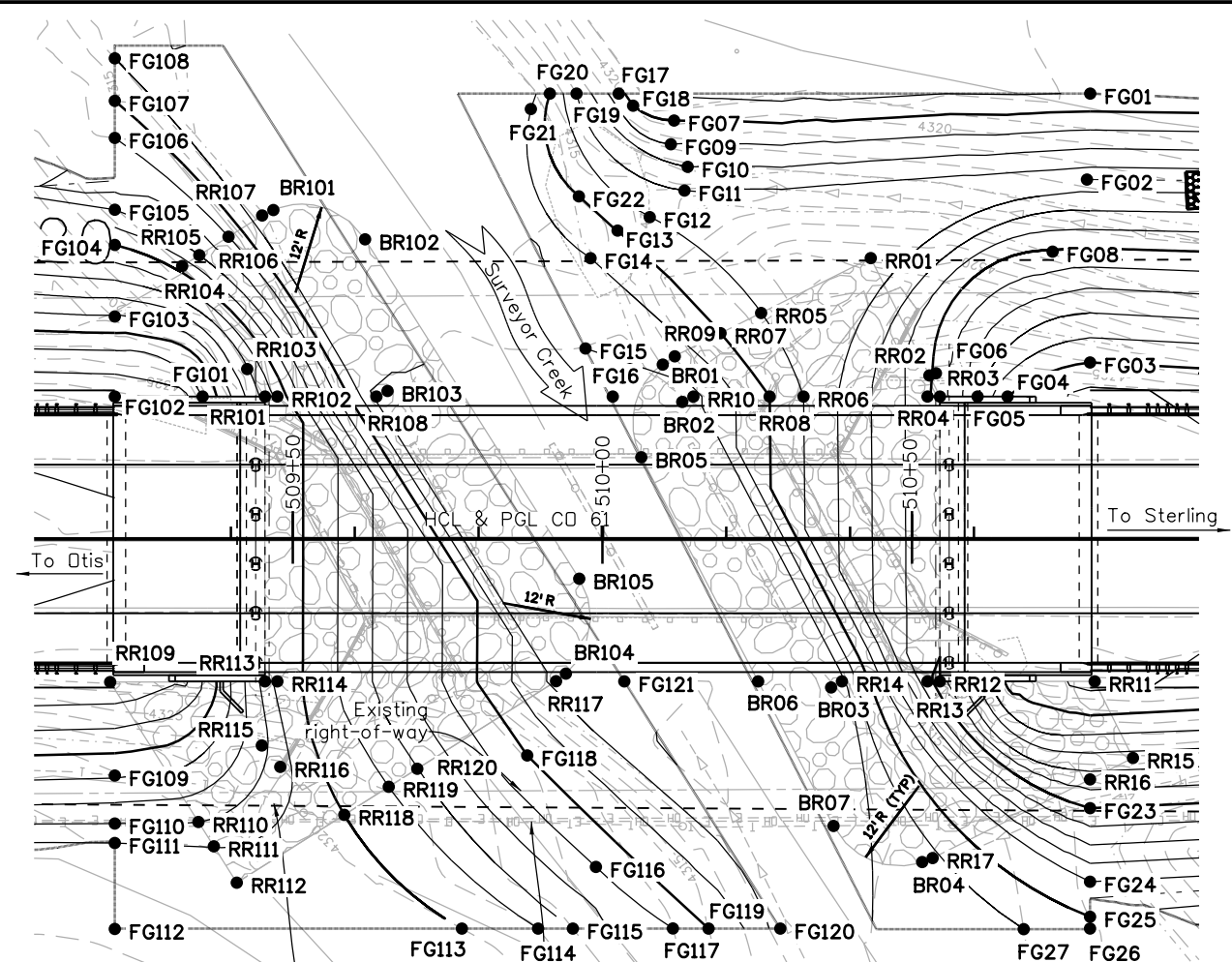
All seals for this set of drawings are applied to the cover page(s)	Print Date: 2/27/2023 File Name: 23010_D-25-EA_B05_Eng_Geology01.dgn	Sheet Revisions <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Date:</th> <th>Comments</th> <th>Init.</th> </tr> </thead> <tbody> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> </tbody> </table>	Date:	Comments	Init.										Colorado Department of Transportation 120 North Riverview Road Sterling, CO 80751 Phone: 970-522-0481 FAX: 970-521-9729 Region 4	As Constructed No Revisions: Revised: Void:	ENGINEERING GEOLOGY (1 of 2) Designer: J. Pomeroy Detailer: M. Walz Sheet Subset: Bridge	Project No./Code FBR R400-371/23010 FBR 061A-003/25447 Sheet Number
	Date:	Comments	Init.															
	Unit Information 0222 Unit Leader Initials AAH	JTD	Structure Numbers: D-25-EA Subset Sheets: B05 of B32															

c:\ecompw\5ics02\10:32:49 PM \\ecompw\5ics01\CS-pdf-work_dir\76941\49302_40\23010_D-25-EA_B06_Eng_Geology02.dgn

SUMMARY OF TEST RESULTS																						
Sample Number	Depth (feet)	Classification			Grading Analysis (AASHTO)				Atterberg Limits			Water Content W %	Dry Density (pcf)	Peak		Large Displacement		Uniaxial Compressive Strength (psf)	Chlorides (% mass)	Water Soluble Sulfates (% mass)	Soil pH	Resistivity ohm-cm Saturated
					Percent				L.L. L _w	P.L. P _w	P.I. I _w			Friction Angle	Cohesion (psf)	Friction Angle	Cohesion (psf)					
		USCS or Visual	USCS	AASHTO	Gravel	Coarse Sand	Fine Sand	Silt and Clay														
1B	9.0-10.0	Clayey, Silty Sand	SC-SM	A-4 (0)	2.5	18.7	40.8	38.0	20	16	4	9.6	104.3	-	-	-	-	1,398	-	-	-	-
1E	24.0-25.5	Clayey Sand	SC	A-2-6 (0)	40.4	34.3	12.1	13.3	33	13	20	11.1	-	-	-	-	-	-	-	-	-	-
1G	34.0-35.5	Silty Sand	SM	A-4 (0)	7.5	20.6	29.2	42.7	NV	NV	NP	8.8	100.2	-	-	-	-	1,533	-	-	-	-
1I	44.0-45.5	Silty Sand	SM	A-2-4 (0)	5.1	23.9	36.4	34.6	NV	NV	NP	8.9	-	-	-	-	-	-	-	-	-	-
1J	49.0-50.5	Silty Sand	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.017	0.011	8.77	2850
1K	54.0-55.5	Silty Sand	SM	A-2-4 (0)	3.4	20.4	43.2	33.0	NV	NV	NP	10.1	-	-	-	-	-	-	-	-	-	-
1N	74.0-75.5	Clayey Sand	SC	A-2-6 (0)	29.0	37.2	13.6	20.2	31	15	16	5.9	-	-	-	-	-	-	-	-	-	-
1P	89.0-90.5	Clayey Sand	SC	A-2-6 (0)	27.9	39.4	15.4	17.3	29	14	15	9.8	-	-	-	-	-	-	-	-	-	-
2A	4.0-5.5	Well Graded Sand	SW	A-1-b (0)	37.8	47.3	10.0	4.8	NV	NV	NP	1.8	-	-	-	-	-	-	-	-	-	-
2D	19.0-20.0	Well Graded Sand with Clay	SW-SC	A-2-6 (0)	41.0	40.0	10.0	9.0	40	15	25	9.8	115.0	29	1300	30	890	-	-	-	-	-
2G	34.0-35.5	Silty Sand	SM	A-2-4 (0)	6.0	25.0	48.0	21.0	NV	NV	NP	7.9	99.0	35	440	37	90	-	-	-	-	-
2K	64.0-65.5	Clayey Sand	SC	A-2-6 (0)	21.2	21.3	30.5	27.0	28	16	12	10.8	-	-	-	-	-	-	-	-	-	-
2M	79.0-80.5	Clayey Sand	SC	A-2-4 (0)	35.1	23.8	24.7	16.4	24	15	9	6.8	-	-	-	-	-	-	-	-	-	-
2N	89.0-90.5	Clayey Sand	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.008	0.002	8.37	2700
2O	99.0-100.5	Silty Sand	SM	A-2-4 (0)	1.2	35.7	48.8	14.4	NV	NV	NP	7.3	-	-	-	-	-	-	-	-	-	-

All seals for this set of drawings are applied to the cover page(s)	Print Date: 2/27/2023	Sheet Revisions			Colorado Department of Transportation 120 North Riverview Road Sterling, CO 80751 Phone: 970-522-0481 FAX: 970-521-9729				As Constructed		ENGINEERING GEOLOGY (2 of 2)				Project No./Code	
	File Name: 23010_D-25-EA_B06_Eng_Geology02.dgn	Date:	Comments	Init.					No Revisions:						FBR R400-371/23010	
	Horiz. Scale: 1:25 Vert. Scale: As Noted				Revised:		Designer: J. Pomeroy	Structure Numbers	D-25-EA	FBR 061A-003/25447						
	Unit Information 0222 Unit Leader Initials AAH				Void:		Detailer: M. Walz	Subset Sheets: B06 of B32	Sheet Number							

JTD



* Elevations shown at finished grade (Taken at HCL CD 61)
 ** No 100-yr scour expected at abutments because 100-yr riprap protection provided. 100-yr scour at abutments shown for information only and represents scour that could occur if the riprap reventment was not provided.
 ***500-yr scour not provided because incipient overtopping exceeds 500-year scour. In this case, incipient overtopping occurs when flow just starts to spill north into the northwesterly roadside ditch.

STATION AND OFFSET TABLE							
ID	STATION / OFFSET (FT)		FINISHED GRADE ELEVATION	TOP OF RIPRAP ELEVATION	DESCRIPTION		
BR01	510+09.74	28.2	LT	4313.22	4312.22	NORTH ABUTMENT RIPRAP BURIED 1 FOOT DEEP	
BR02	510+12.89	22.1	LT	4312.69	4311.69		
BR03	510+36.93	24	RT	4312.71	4311.71		
BR04	510+51.64	52.2	RT	4313.71	4312.71		
BR05	510+06.27	13.2	LT	4312.47	4311.47		
BR06	510+25.15	23	RT	4312.19	4311.19		
BR07	510+37.32	46.3	RT	4312.63	4311.63		
BR101	509+46.86	53.1	LT	4313.74	4312.74	SOUTH ABUTMENT RIPRAP BURIED 1 FOOT DEEP	
BR102	509+61.67	48.4	LT	4313.32	4312.32		
BR103	509+65.29	23.9	LT	4312.8	4311.8		
BR104	509+94.10	21.7	RT	4312.68	4311.68		
BR105	509+96.25	6.4	RT	4312.46	4311.46		
RR01	510+43.33	45.4	LT	4316.79	4316.79		NORTH ABUTMENT RIPRAP AT FINISHED GRADE
RR02	510+52.80	26.4	LT	4319.78	4319.78		
RR03	510+54.50	23	LT	4320.49	4320.49		
RR04	510+52.50	23	LT	4319.66	4319.66		
RR05	510+25.63	36.5	LT	4316	4316		
RR06	510+32.47	23	LT	4316	4316		
RR07	510+19.07	33.2	LT	4315	4315		
RR08	510+27.00	23	LT	4315	4315		
RR09	510+11.55	29.5	LT	4313.47	4313.47	SOUTH ABUTMENT RIPRAP AT FINISHED GRADE	
RR10	510+14.69	23	LT	4312.75	4312.75		
RR11	510+79.50	23	RT	4326.14	4326.14		
RR12	510+54.50	23	RT	4320.52	4320.52		
RR13	510+52.50	23	RT	4319.66	4319.66		
RR14	510+38.68	23	RT	4312.75	4312.75		
RR15	510+85.68	35.4	RT	4322.63	4322.63		
RR16	510+78.75	38.8	RT	4321.56	4321.56		
RR17	510+53.33	51.5	RT	4313.89	4313.89		
RR101	509+45.50	23	LT	4320.74	4320.74	SOUTH ABUTMENT RIPRAP AT FINISHED GRADE	
RR102	509+47.50	23	LT	4320.74	4320.74		
RR103	509+42.63	27.4	LT	4322.08	4322.08		
RR104	509+32.13	44.1	LT	4319.55	4319.55		
RR105	509+34.90	45.8	LT	4318	4318		
RR106	509+39.61	48.8	LT	4316	4316		
RR107	509+45.05	52.2	LT	4313.88	4313.88		
RR108	509+63.50	23	LT	4312.74	4312.74		
RR109	509+20.50	23.1	RT	4327.68	4327.68		
RR110	509+34.75	45.7	RT	4322	4322		
RR111	509+37.24	49.6	RT	4321	4321		
RR112	509+40.94	55.5	RT	4320.73	4320.73		
RR113	509+45.50	23	RT	4321.61	4321.61		
RR114	509+47.50	23	RT	4320.74	4320.74		
RR115	509+44.99	33.4	RT	4322	4322		
RR116	509+47.97	36.8	RT	4321.32	4321.32		
RR117	509+92.51	23	RT	4312.74	4312.74		
RR118	509+58.31	44.6	RT	4320	4320		
RR119	509+65.49	40	RT	4319	4319		
RR120	509+70.10	37.1	RT	4318	4318		

STATION AND OFFSET TABLE					
ID	STATION / OFFSET (FT)		FINISHED GRADE ELEVATION	TOP OF RIPRAP ELEVATION	DESCRIPTION
FG01	510+78.78	71.9	LT	4320.96	NORTH ABUTMENT FINISHED GRADE, NO RIPRAP
FG02	510+78.25	58	LT	4316.35	
FG03	510+78.78	28.5	LT	4325	
FG04	510+65.43	23	LT	4325	
FG05	510+60.59	23	LT	4323	
FG06	510+53.85	26.8	LT	4320	
FG07	510+11.57	67.6	LT	4320	
FG08	510+72.70	46.4	LT	4320	
FG09	510+11.05	63.7	LT	4319	
FG10	510+13.77	60.1	LT	4318	
FG11	510+13.25	56.3	LT	4317	
FG12	510+07.64	52	LT	4315.98	
FG13	510+02.45	49.8	LT	4315	
FG14	509+98.08	45.3	LT	4314	
FG15	509+97.26	30.8	LT	4313	
FG16	510+01.67	23	LT	4312.29	
FG17	510+02.63	71.9	LT	4319.64	
FG18	510+04.95	70	LT	4320	
FG19	509+95.82	71.9	LT	4317	
FG20	509+91.51	71.9	LT	4315	
FG21	509+88.44	69.4	LT	4314	
FG22	509+96.20	55.3	LT	4315	
FG23	510+78.75	43.5	RT	4320	
FG24	510+78.75	55.4	RT	4316	
FG25	510+78.75	61	RT	4315	
FG26	510+78.75	62.9	RT	4314.9	
FG27	510+68.04	63	RT	4314	
FG101	509+35.42	23	LT	4326	SOUTH ABUTMENT FINISHED GRADE, NO RIPRAP
FG102	509+21.25	23	LT	4327.67	
FG103	509+21.25	35.9	LT	4324.07	
FG104	509+21.25	47.5	LT	4320	
FG105	509+21.25	53.2	LT	4318	
FG106	509+21.25	64.8	LT	4316	
FG107	509+21.25	70.8	LT	4315	
FG108	509+21.25	77.6	LT	4314	
FG109	509+21.24	38.2	RT	4324.1	
FG110	509+21.24	46	RT	4322	
FG111	509+21.24	49.1	RT	4321	
FG112	509+21.24	63	RT	4320.13	
FG113	509+77.30	62.9	RT	4320	
FG114	509+89.61	62.9	RT	4319	
FG115	509+95.22	62.9	RT	4318	
FG116	509+98.95	53	RT	4316	
FG117	510+11.38	62.9	RT	4316	
FG118	509+87.85	35	RT	4315	
FG119	510+17.14	62.9	RT	4315	
FG120	510+28.73	62.9	RT	4312.55	
FG121	510+03.53	23	RT	4312.38	

INITIALS	DESIGN	DATE	DETAIL	DATE	QUANTITY	DATE
By	SNH	11/22	MP	11/22	SNH	11/22
Checked By	JTK	11/22	SNH	11/22	JTK	11/22

All seals for this set of drawings are applied to the cover page(s)

Print Date: 3/1/2023	
File Name: 23010_D-25-EA_B07_HydInfo1.dgn	
Horiz. Scale: 1:30	Vert. Scale: As Noted
Unit Information: 0222	Unit Leader Initials: AAH

Sheet Revisions		
Date:	Comments	Init.

Colorado Department of Transportation
 120 North Riverview Road
 Sterling, CO 80751
 Phone: 970-522-0481
 FAX: 970-521-9729
 Region 4 JTD

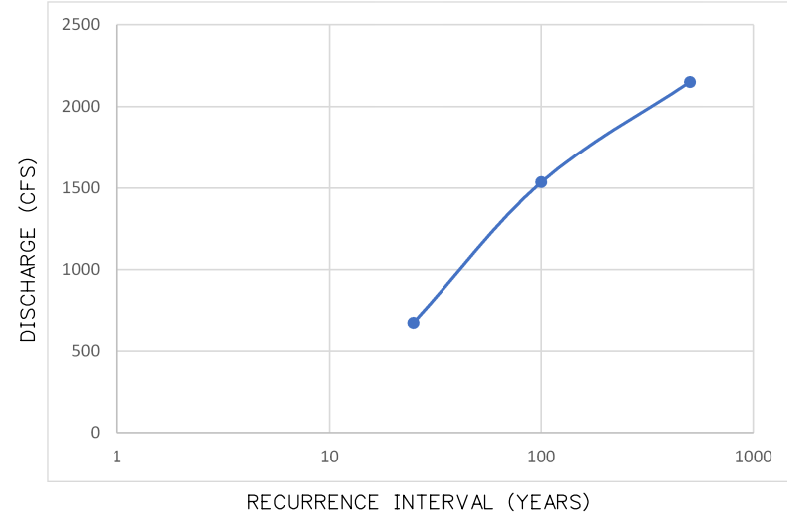
As Constructed
No Revisions:
Revised:
Void:

HYDRAULIC INFORMATION			
SHEET 1 OF 2			
Designer:	C. KENNEDY	Structure Numbers	D-25-EA
Detailer:	C. KENNEDY	Subset Sheets:	B07 of B32
Sheet Subset:	Bridge	Subset Sheets:	B07 of B32

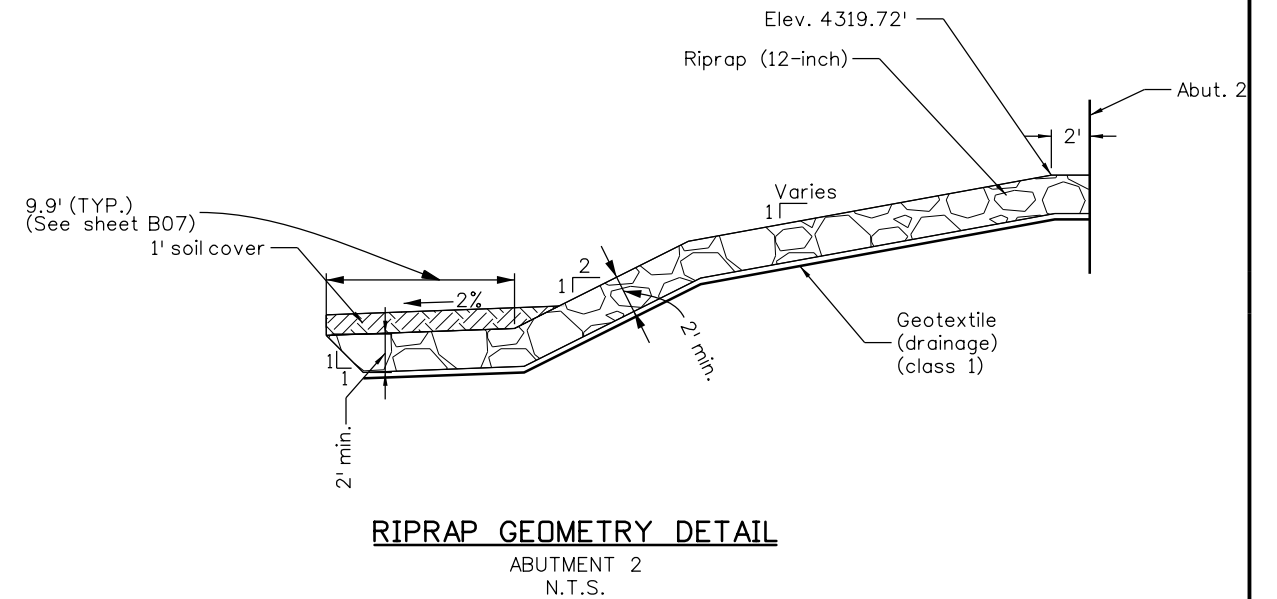
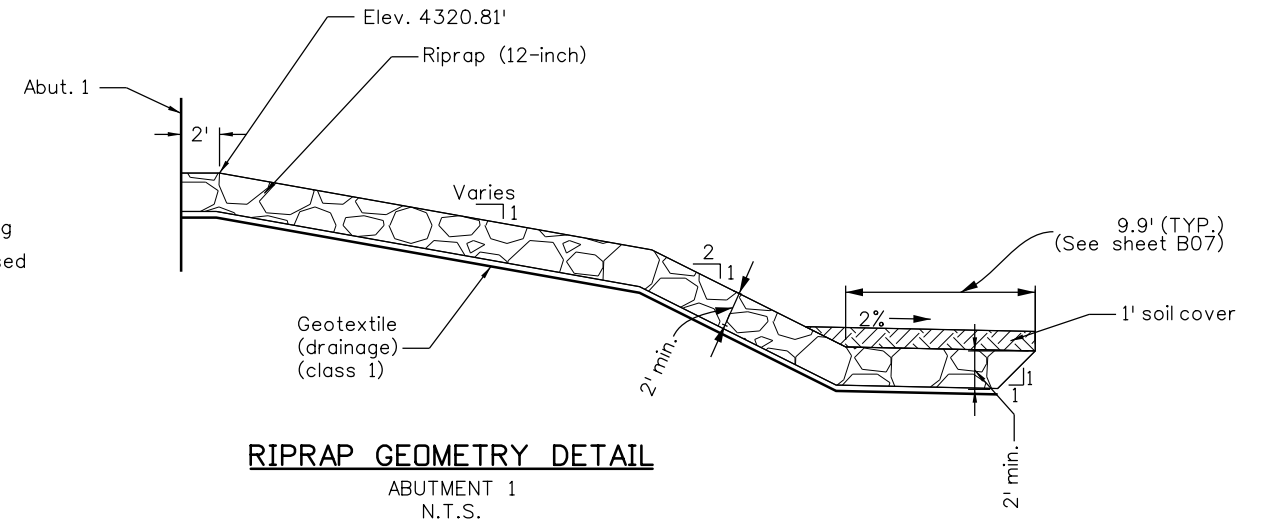
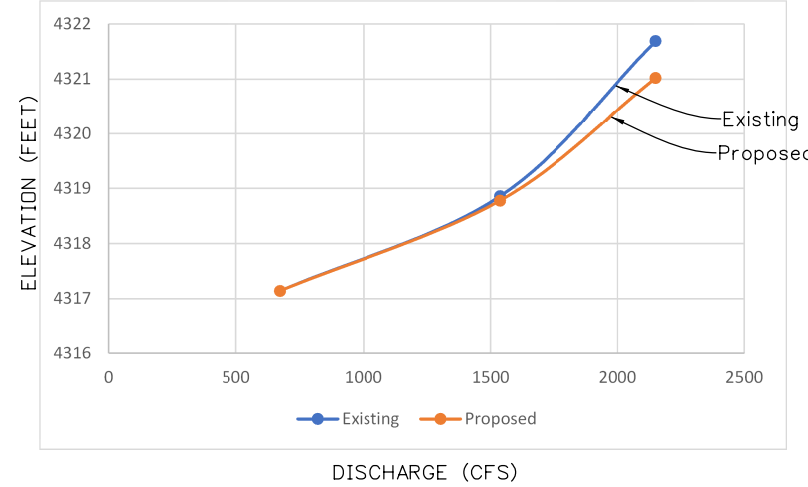
Project No./Code	
FBR R400-371/23010	
FBR 061A-003/25447	
Sheet Number	

BRIDGE HYDRAULIC INFORMATION

FLOOD FREQUENCY CURVE



STAGE - DISCHARGE CURVE



COMPARISON OF HYDRAULICS DURING 25-YEAR EVENT*

TYPE	AVERAGE VELOCITY (FPS)	FREEBOARD (FT)	WS ELEV. (FT)
EXISTING	3.7	7.9	4317.14
PROPOSED	3.7	4.9	4317.14

25-YR REQUIRED FREEBOARD = 2 FT

*COMPARISON OF HYDRAULICS MADE AT UPSTREAM BRIDGE FACE. FREEBOARD COMPUTED RELATIVE TO WATER SURFACE ELEVATION AT APPROXIMATE LOCATION OF MAXIMUM BACKWATER (50 FT US)

100-YEAR RECURRENCE INTERVAL

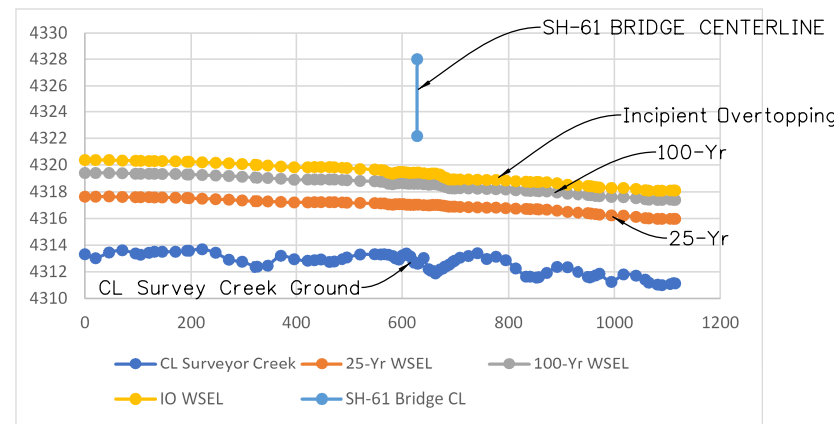
FLOW UPSTREAM OF BRIDGE: = 1538 CFS
DRAINAGE AREA: = 106 SQ.MI.

SCOUR ANALYSIS RESULTS

Scour Summary at D-25-E			
Scour Type	Left Abutment	Channel	Right Abutment
100-Year (Live Load)			
Abutment	3.6		3.3
Contraction Scour	0.0	0.1	0.0
Long Term Scour	0.0	0.0	0.0
Total	3.6	0.1	3.3
Incipient Overtopping (Static Load)			
Abutment	5.2		5.0
Contraction Scour	0.0	0.2	0.0
Long Term Scour	0.0	0.0	0.0
Total	5.2	0.2	5.0

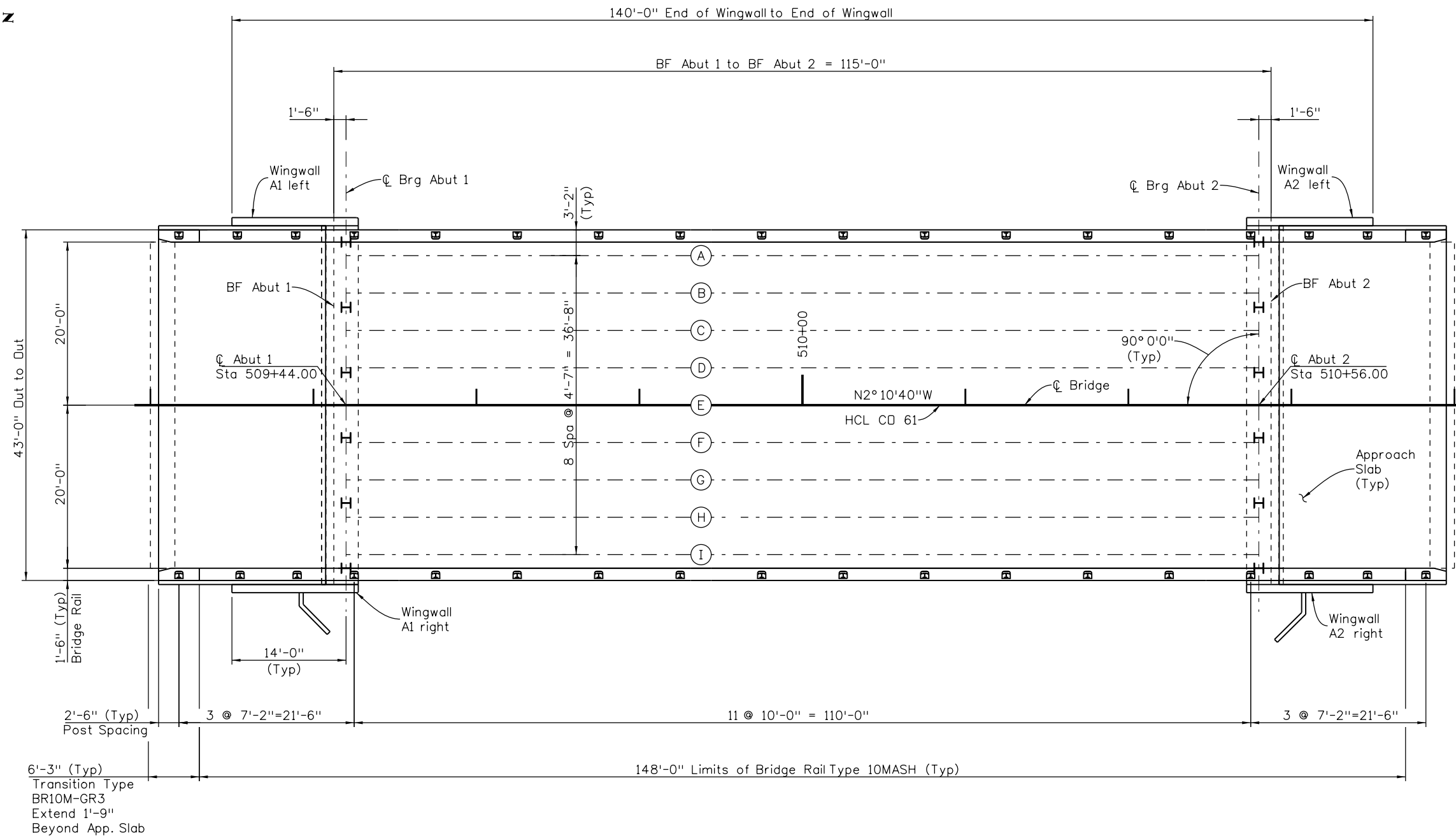
CHANNEL DESCRIPTION

BOTTOM MATERIAL SIZE: = CLAY SILT SAND GRAVEL COBBLES OTHER _____
 STREAM FORM: = STRAIGHT MEANDERING BRAIDED
 MANNING'S "n" FOR DESIGN: CHANNEL 0.030 OVERBANK 0.035
 DEBRIS POTENTIAL: LOW



INITIALS DESIGN DATE DETAIL DATE QUANTITY DATE
 By SNH 11/22 MP 11/22 SNH 11/22
 Checked By JTK 11/22 SNH 11/22 JTK 11/22
 jceramy 12:35:11 PM pww \sagecom-tp-pw-bentley.com\AECOM_DS20_NA_2019\Documents\60626605-CDOT_R4_Timber_BE (23010)\Bridges\Drawings\D-25-EA\23010_D-25-EA_B08_HydInfo2.dgn

All seals for this set of drawings are applied to the cover page(s)	Print Date: 2/27/2023 File Name: 23010_D-25-EA_B08_HydInfo2.dgn Horiz. Scale: 1:1 Vert. Scale: As Noted Unit Information 0222 Unit Leader Initials AAH	Sheet Revisions <table border="1"> <thead> <tr> <th>Date:</th> <th>Comments</th> <th>Init.</th> </tr> </thead> <tbody> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> </tbody> </table>	Date:	Comments	Init.										Colorado Department of Transportation 120 North Riverview Road Sterling, CO 80751 Phone: 970-522-0481 FAX: 970-521-9729 Region 4	As Constructed No Revisions: Revised: Void:	HYDRAULIC INFORMATION SHEET 2 OF 2	Project No./Code FBR R400-371/23010 FBR 061A-003/25447 Sheet Number
	Date:	Comments	Init.															
Designer: C. KENNEDY Detailer: C. KENNEDY Sheet Subset: Bridge	Structure Numbers: D-25-EA Subset Sheets: B08 of B32	JTD																



CONSTRUCTION LAYOUT

NOTES

1. Refer to sheets B23 to B26 for additional information on Bridge Rail Type 10MASH and Approach Slab.

INITIALS	DESIGN	DATE	DETAIL	DATE	QUANTITY	DATE
By	SNH	11/22	MP	11/22	SNH	11/22
Checked By	JTK	11/22	SNH	11/22	JTK	11/22

c:\ecomp\15ics03\10-33\14 PM \ecomp\15ics01\CS_pdf_work_dir\76941\49302_6\23010_D-25-EA_B09_ConstLayout.dgn

Print Date: 2/27/2023
File Name: 23010_D-25-EA_B09_ConstLayout.dgn
Horiz. Scale: 1:15 Vert. Scale: As Noted
Unit Information 0222 Unit Leader Initials AAH

Sheet Revisions		
Date:	Comments	Init.

Colorado Department of Transportation
 120 North Riverview Road
 Sterling, CO 80751
 Phone: 970-522-0481
 FAX: 970-521-9729
Region 4

JTD

As Constructed
No Revisions:
Revised:
Void:

CONSTRUCTION LAYOUT			
Designer:	S. Huson	Structure Numbers	D-25-EA
Detailer:	M. Purdy	Subset Sheets:	Bridge
Sheet Subset:	Bridge	Subset Sheets:	B09 of B32

Project No./Code
FBR R400-371/23010
FBR 061A-003/25447
Sheet Number

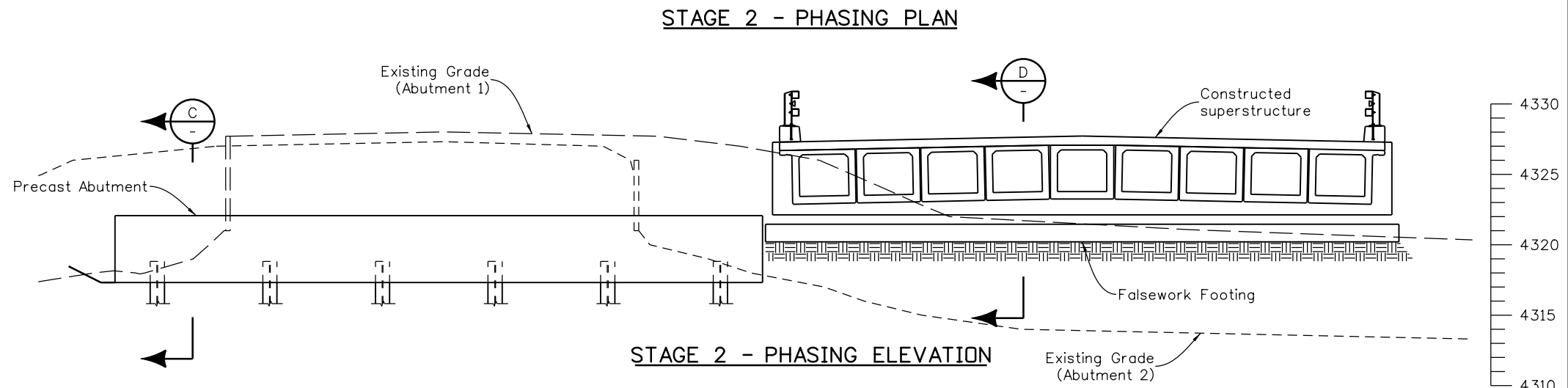
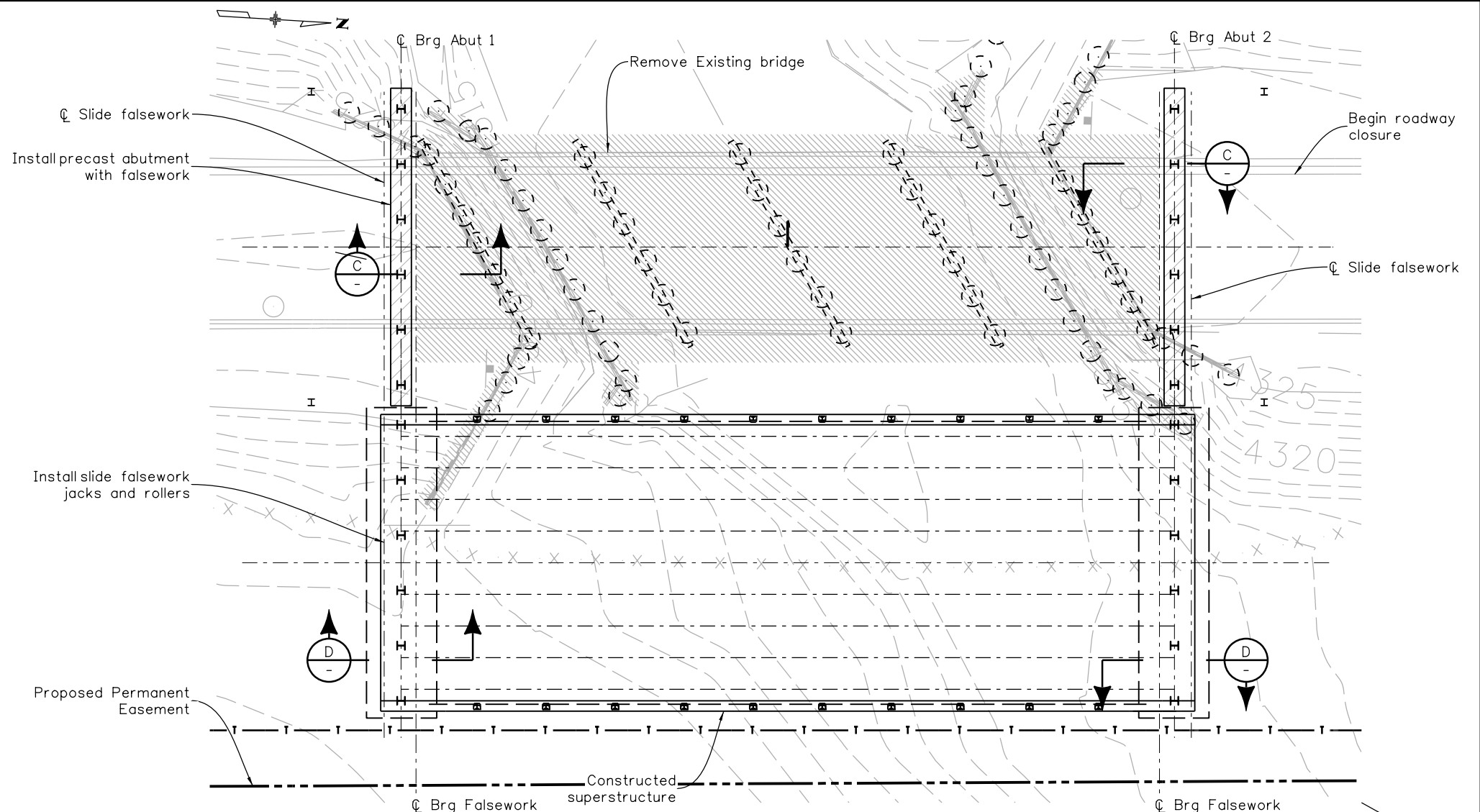
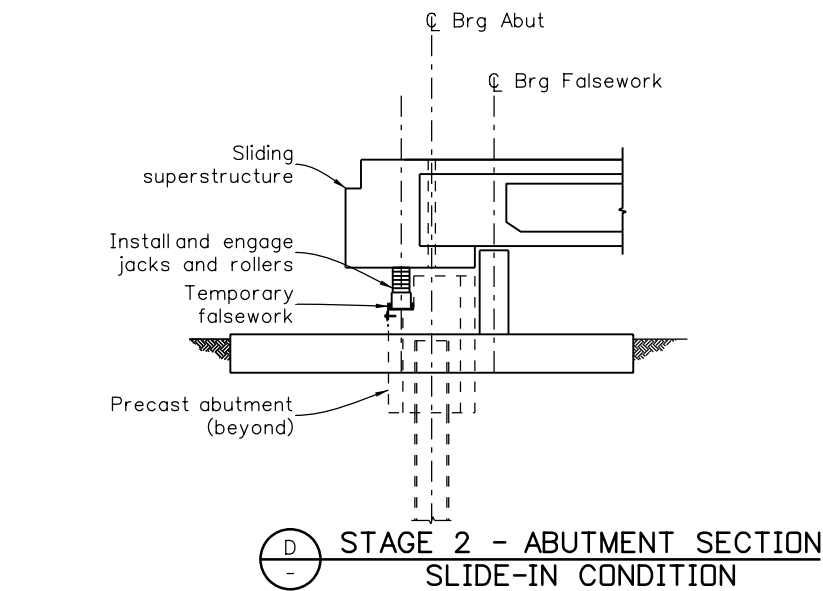
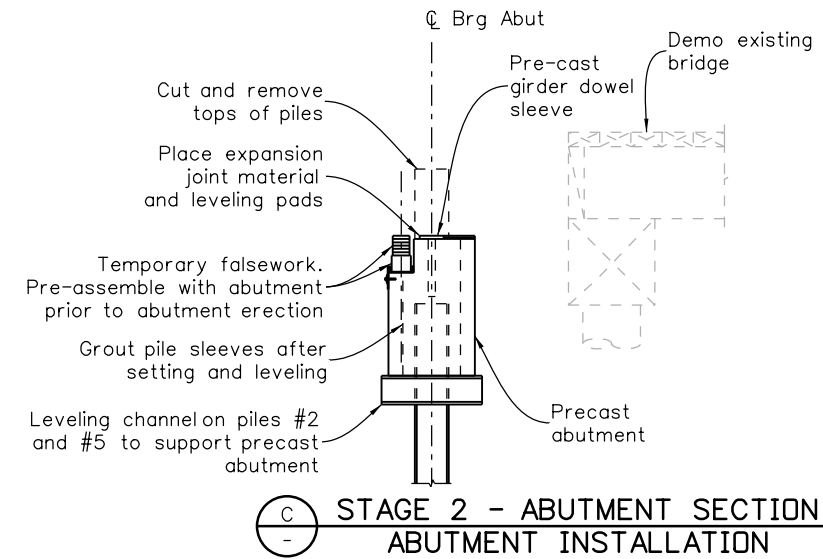
All seals for this set of drawings are applied to the cover page(s)

STAGE 2 DESCRIPTION

- Install full traffic control closure and detour signing.
- Remove existing bridge and install any remaining driven piles. Install precast abutment caps and fill CMP voids with Concrete Class PS, as shown in plans.
- Construct channel grading and slope protection at new bridge location.
- Install channel rip-rap.
- Install slide falsework, jacks, and rollers.

LEGEND

- Construction/Grading
- Removal/Demolition



INITIALS	DESIGN	DATE	DETAIL	DATE	QUANTITY	DATE
By	SNH	11/22	MP	11/22	SNH	11/22
Checked By	JTK	11/22	JTK	11/22	JTK	11/22

jeremy_7:33:01 AM pwt\\gescom-na-pw.bentley.com:AFCDM_DS20_NA_2019\Documents\60626805-0001_B4_Timber_BE (23010)\Bridge\Drawings\25-EA\B11_PhasPlan_2.dgn

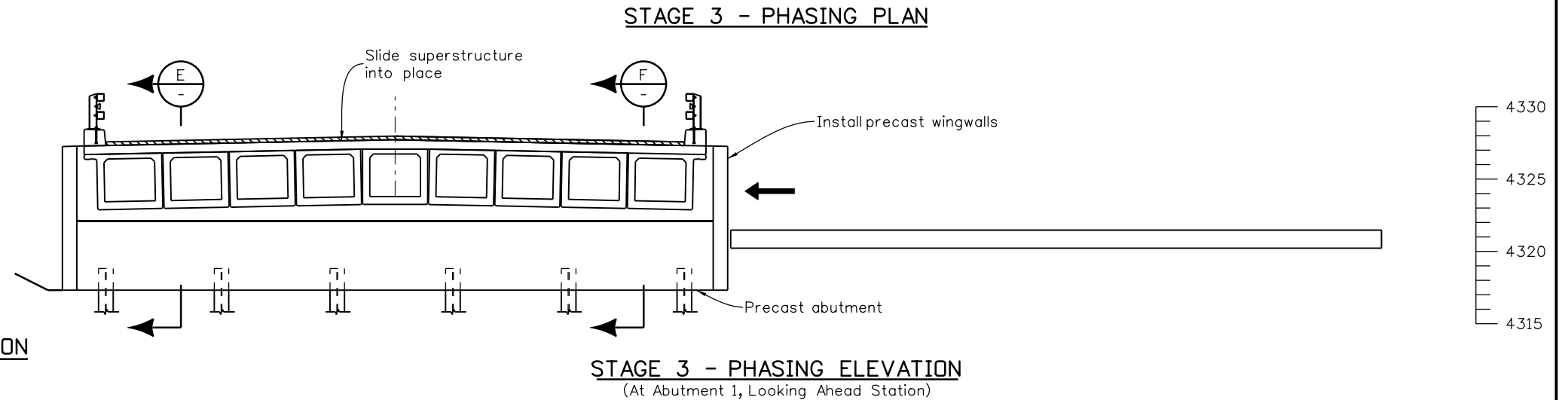
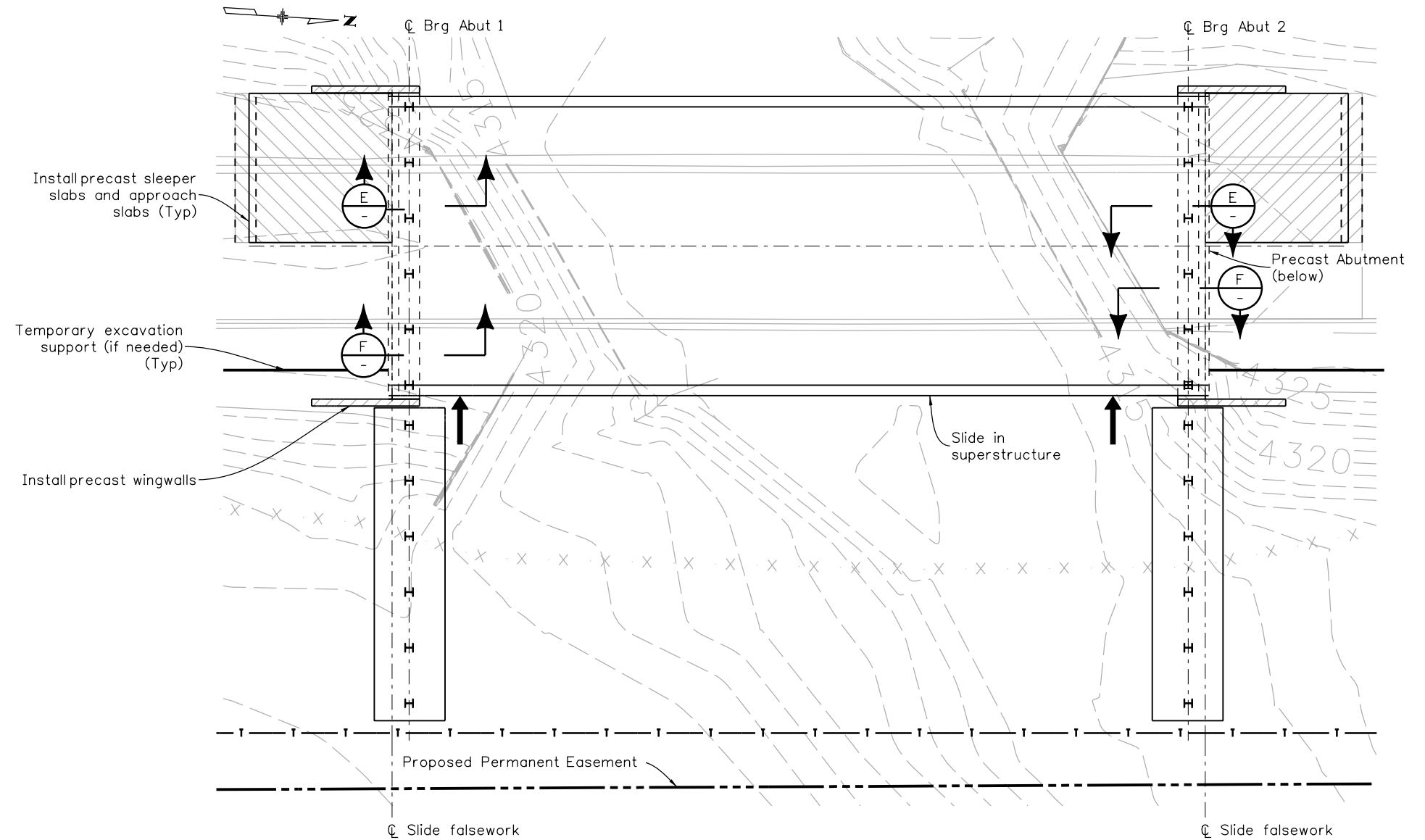
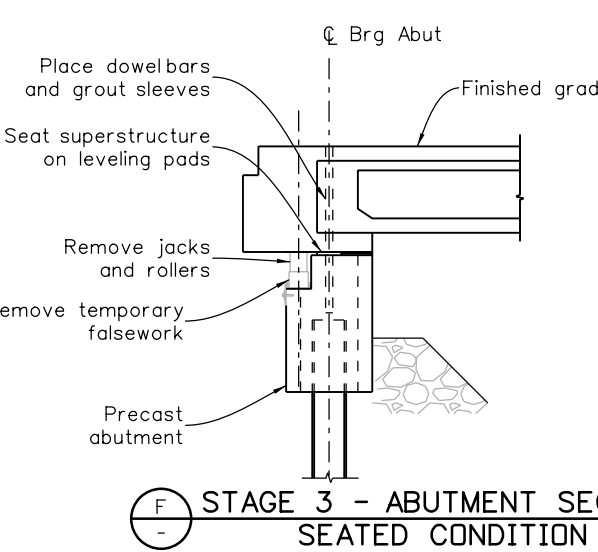
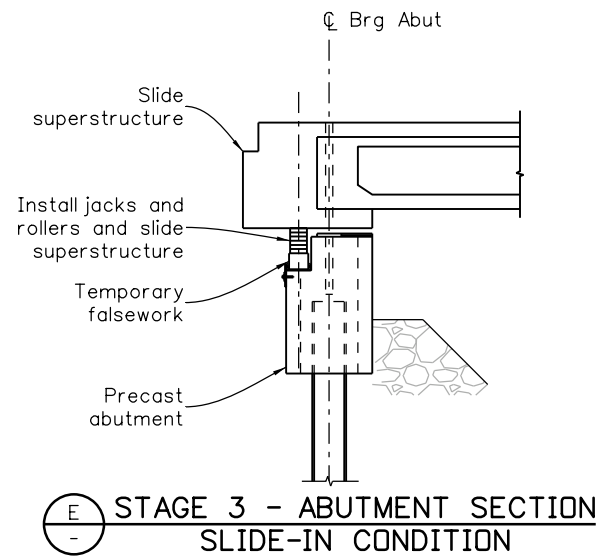
All seals for this set of drawings are applied to the cover page(s)	Print Date: 2/28/2023 File Name: 23010_D-25-EA_B11_PhasPlan 2.dgn Horiz. Scale: 1:20 Vert. Scale: As Noted Unit Information 0222 Unit Leader Initials AAH	Sheet Revisions <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Date:</th> <th>Comments</th> <th>Init.</th> </tr> </thead> <tbody> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> </tbody> </table>	Date:	Comments	Init.										Colorado Department of Transportation 120 North Riverview Road Sterling, CO 80751 Phone: 970-522-0481 FAX: 970-521-9729 Region 4	As Constructed No Revisions: Revised: Void:	STAGE 2 PHASING Designer: S. Huson Detailer: M. Purdy Sheet Subset: Bridge Structure Numbers: D-25-EA Subset Sheets: B11 of B32	Project No./Code FBR R400-371/23010 FBR 061A-003/25447 Sheet Number
	Date:	Comments	Init.															
JTD																		

STAGE 3 DESCRIPTION

- Move bridge superstructure into place.
- Install horizontal joint seal.
- Install precast wingwalls.
- Place Structure Backfill (Flow-Fill) behind abutments.
- Install precast sleeper slabs and approach slabs, as shown in plans.
- Install temporary approaches on new alignment.
- Install temporary striping.
- Install temporary barrier in shoulders.

LEGEND

Construction/Grading



INITIALS	DESIGN	DATE	DETAIL	DATE	QUANTITY	DATE
By	SNH	11/22	MP	11/22	SNH	11/22
Checked By	JTK	11/22	SNH	11/22	JTK	11/22

jeremy 7:36:18 AM 2/28/2023 \\sawcom-tor-pw-bentley.com\AECOM_DS20_NA_2019\Documents\60626805-CDOT_R4_Timber_BE (23010)\Bridges\Drawings\D-25-EA-B12_PhasePlan_3.dgn

All seals for this set of drawings are applied to the cover page(s)	Print Date: 2/28/2023 File Name: 23010_D-25-EA_B12_PhasePlan 3.dgn Horiz. Scale: 1:20 Vert. Scale: As Noted Unit Information 0222 Unit Leader Initials AAH	Sheet Revisions <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Date:</th> <th>Comments</th> <th>Init.</th> </tr> </thead> <tbody> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> </tbody> </table>	Date:	Comments	Init.										Colorado Department of Transportation 120 North Riverview Road Sterling, CO 80751 Phone: 970-522-0481 FAX: 970-521-9729 Region 4	As Constructed No Revisions: Revised: Void:	STAGE 3 PHASING Designer: S. Huson Detailer: M. Purdy Sheet Subset: Bridge Structure Numbers: D-25-EA Subset Sheets: B12 of B32	Project No./Code FBR R400-371/23010 FBR 061A-003/25447 Sheet Number
	Date:	Comments	Init.															
JTD																		

STAGE 4 DESCRIPTION

Open to two lanes of traffic on new alignment.

Install sleeper slabs and approach slabs, as shown in plans.



Complete grading and slope protection, construct roadway subgrade and flashfill behind wingwall.

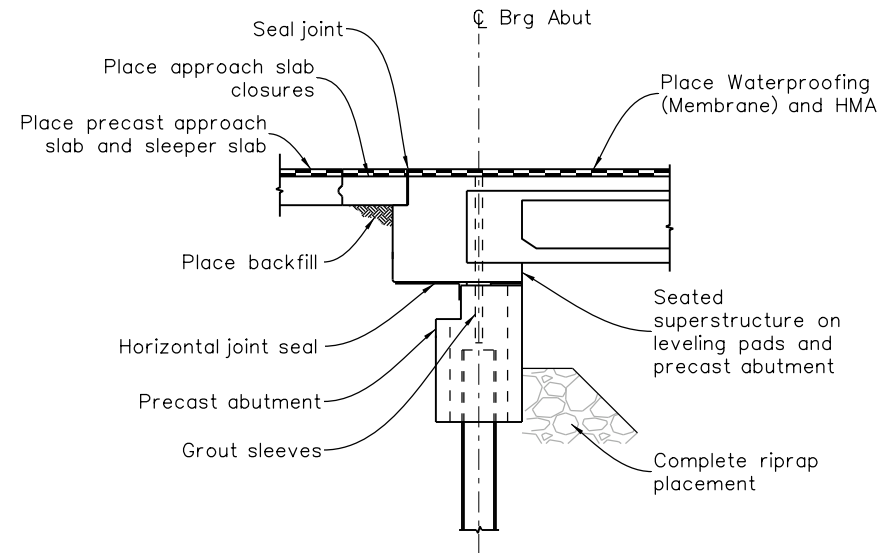
Construct roadway embankments.

Place HMA and final striping.

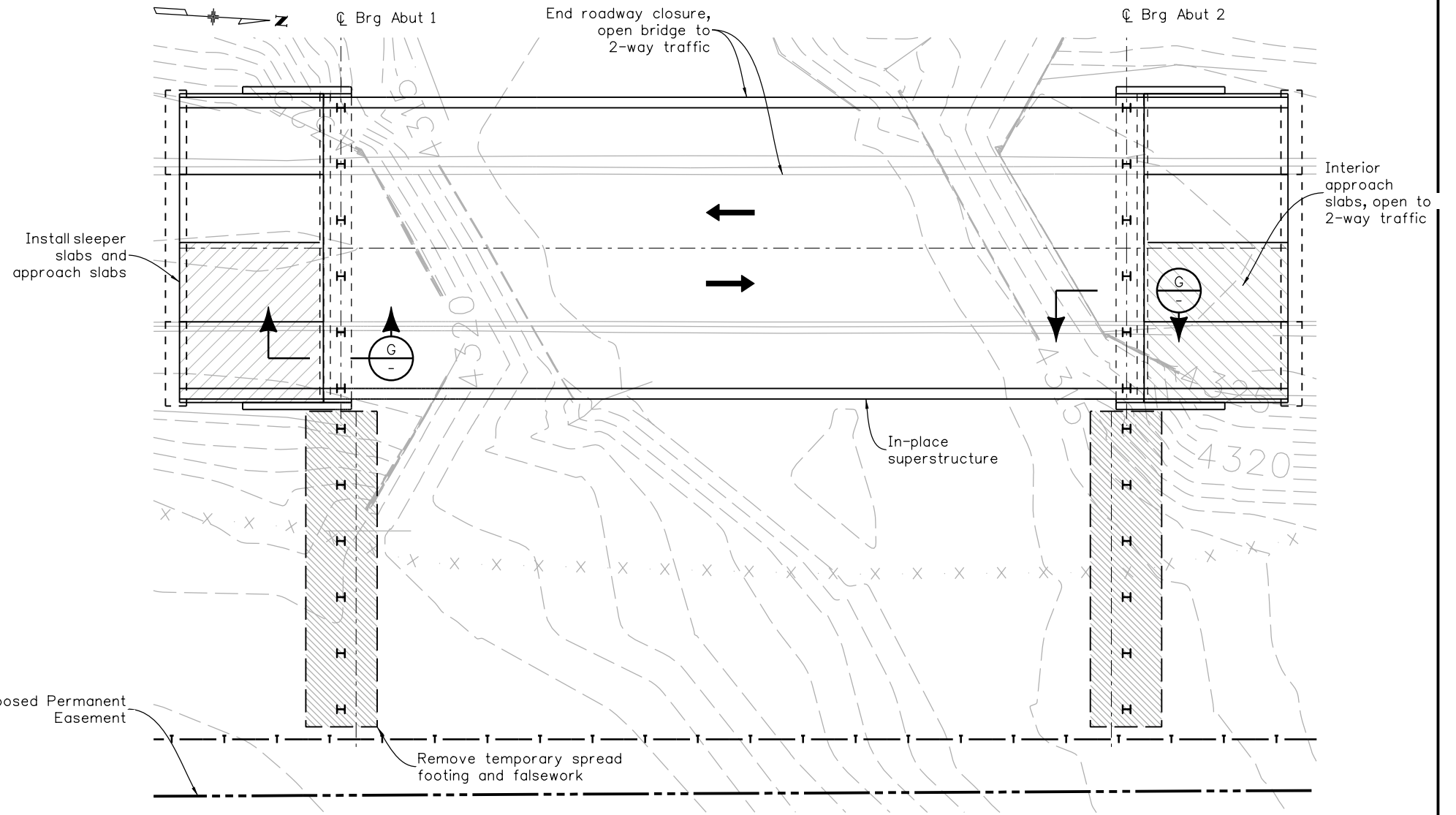
Complete grading and slope protection, construct roadway shoulders, and install permanent guardrail at bridge approaches.

LEGEND

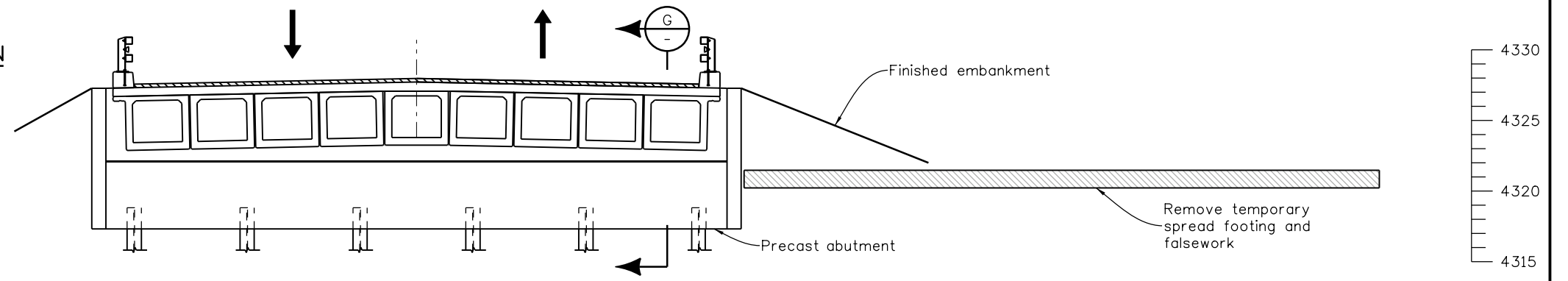
-  Construction/Grading
-  Removal/Demolition



STAGE 4 - ABUTMENT SECTION FINAL CONDITION



STAGE 4 - PHASING PLAN



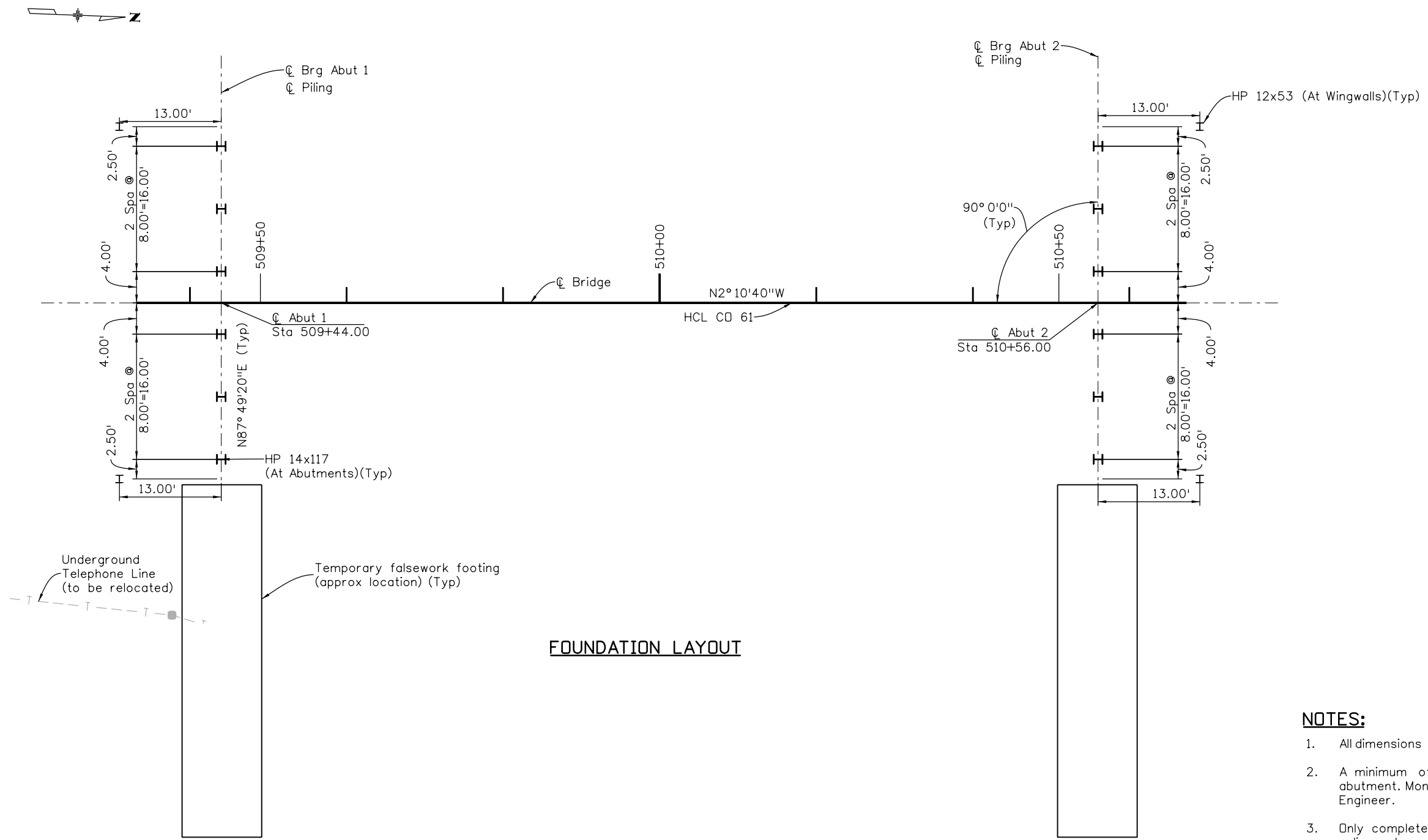
STAGE 4 - PHASING ELEVATION
(At Abutment 1, Looking Ahead Station)

INITIALS	DESIGN	DATE	DETAIL	DATE	QUANTITY	DATE
By	SNH	11/22	MP	11/22	SNH	11/22
Checked By	JTK	11/22	JTK	11/22	JTK	11/22

jeremy 7:37:51 AM pwt \\cescom-na-pw.bentley.com:AFCDM_DS20_NA_2019\Documents\60626805-0001_E4_Timber_BE (23010)\Bridge Drawings\25-EA\23010_D-25-EA_B13_PhasePlan_4.dgn

All seals for this set of drawings are applied to the cover page(s)	Print Date: 2/28/2023 File Name: 23010_D-25-EA_B13_PhasePlan 4.dgn Horiz. Scale: 1:20 Vert. Scale: As Noted Unit Information 0222 Unit Leader Initials AAH	Sheet Revisions <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Date:</th> <th>Comments</th> <th>Init.</th> </tr> </thead> <tbody> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> </tbody> </table>	Date:	Comments	Init.										Colorado Department of Transportation  120 North Riverview Road Sterling, CO 80751 Phone: 970-522-0481 FAX: 970-521-9729 Region 4	JTD	As Constructed No Revisions: Revised: Void:	STAGE 4 PHASING Designer: S. Huson Detailer: M. Purdy Sheet Subset: Bridge	Structure Numbers: D-25-EA Subset Sheets: B13 of B32	Project No./Code FBR R400-371/23010 FBR 061A-003/25447 Sheet Number
	Date:	Comments	Init.																	

j:\eremy_101568_PN_pwr\1\geocom-nw-bentley.com\AECOM_DS20_NA_2019\Documents\60692605-cdot\B4_Timber_BE_(23010)\Bridges\Drawings\D-25-EA-B14_FoundLayout.dgn



FOUNDATION LAYOUT

NOTES:

- All dimensions are horizontal.
- A minimum of one pile dynamic test shall be required per abutment. Monitoring shall be conducted by the Contractor's Engineer.
- Only complete joint penetration (CJP) welds shall be used for pile splices above Elevation 4297.
- Minimum pile tip elevations shown are approximate and shall be verified at the time of construction in accordance with the specifications.
- Pile capacities are based on a resistance factor of 0.65.

PILING DATA							
Location	Steel Pile Size	Estimated Top of Competent Bedrock Elevation (Ft)▲	Minimum Penetration into Competent Bedrock (Ft)	Estimated Min Tip Elevation (Ft)▲	Estimated Tip Elevation (For quantities) (Ft)	Max. Axial Factored Load (Kip)	Max. Axial Unfactored Load (Kip)
Abut 1	HP 14x117	N/A	N/A	4278	4258	390	280
Abut 2	HP 14x117	N/A	N/A	4278	4258	390	280
Wingwalls	HP 12x53	N/A	N/A	4290	4290	-	-

▲Elevations shown shall be verified at time of construction by the Engineer

INITIALS	DESIGN	DATE	DETAIL	DATE	QUANTITY	DATE
By	SNH	11/22	MP	11/22	SNH	11/22
Checked By	JTK	11/22	SNH	11/22	JTK	11/22

All seals for this set of drawings are applied to the cover page(s)

Print Date: 2/27/2023
File Name: 23010_D-25-EA_B14_FoundLayout.dgn
Horiz. Scale: 1:15 Vert. Scale: As Noted
Unit Information 0222 Unit Leader Initials AAH

Sheet Revisions		
Date:	Comments	Init.

Colorado Department of Transportation
 120 North Riverview Road
 Sterling, CO 80751
 Phone: 970-522-0481
 FAX: 970-521-9729
Region 4 **JTD**

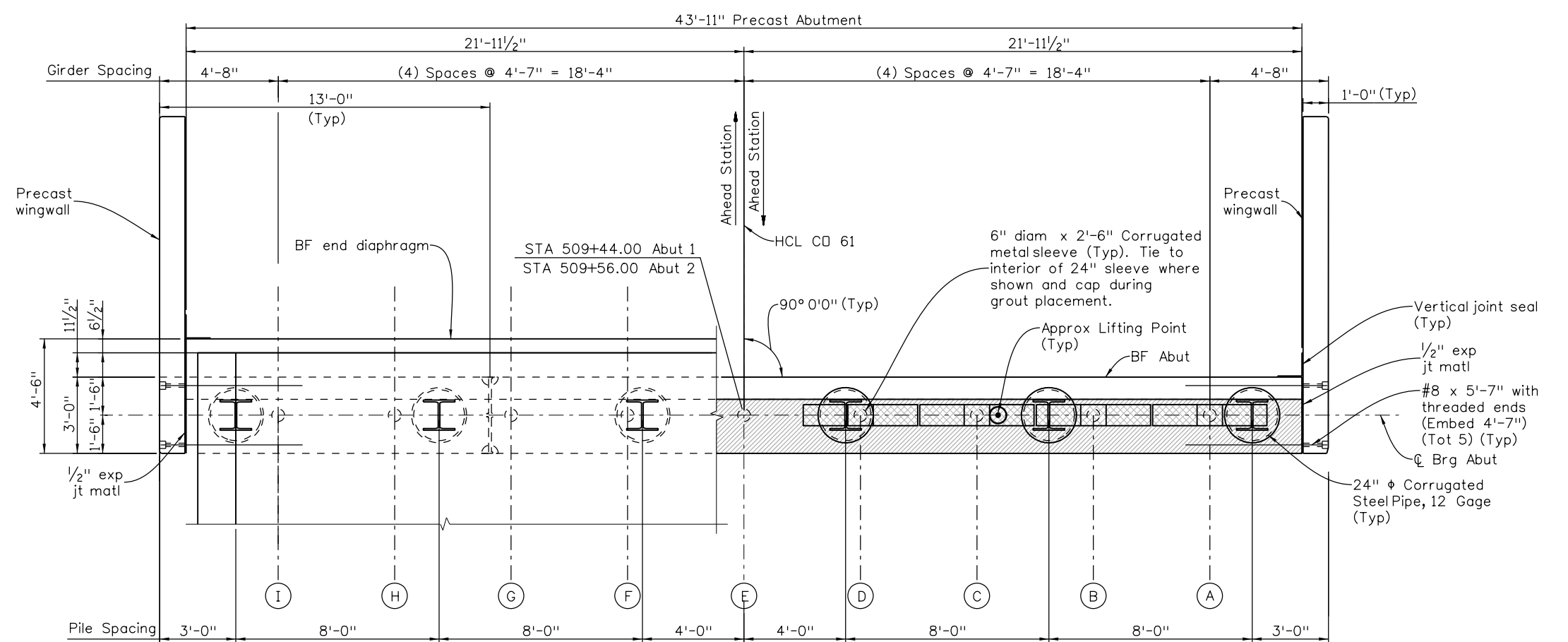
As Constructed
No Revisions:
Revised:
Void:

FOUNDATION LAYOUT DETAILS			
Designer:	S. Huson	Structure Numbers	D-25-EA
Detailer:	M. Purdy	Subset Sheets:	B14 of B32
Sheet Subset:	Bridge		

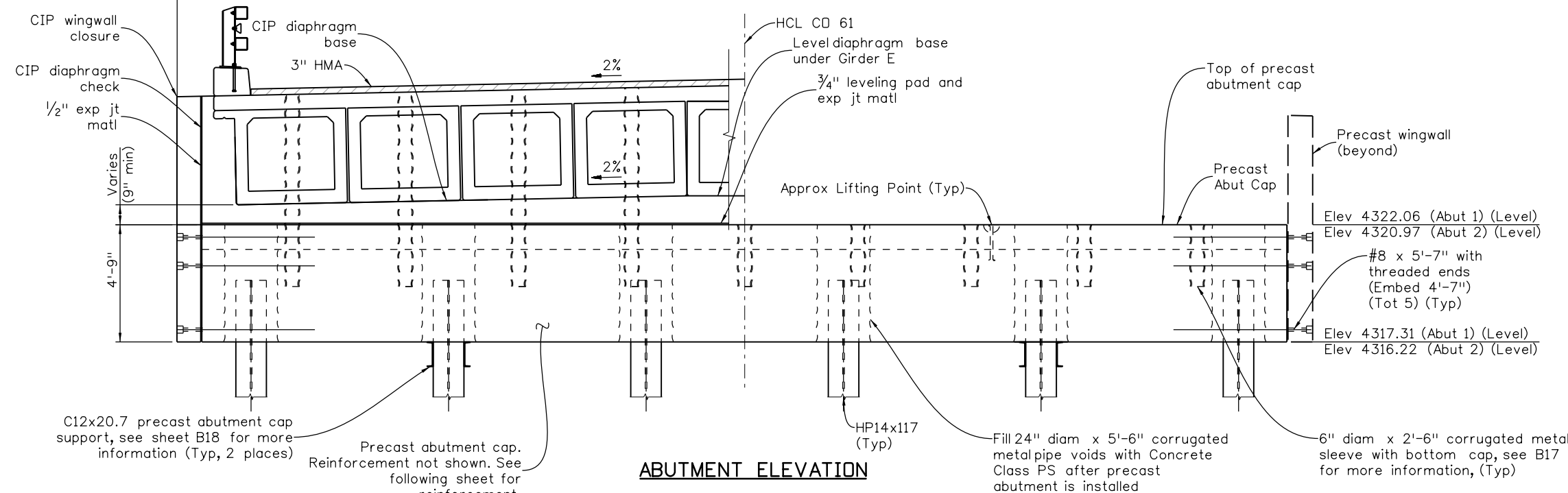
Project No./Code
FBR R400-371/23010
FBR 061A-003/25447
Sheet Number

jeremy.106:48 PM 2/27/2023 \\pww\benitez\com\AECOM_DS20_NA_2019\Documents\60626605-CDDT_R4_Timber_BE (23010)\Bridges\Drawings\D-25-EA-B15_Abut 1 of 2.dgn

INITIALS	DESIGN	DATE	DETAIL	DATE	QUANTITY	DATE
By	SNH	11/22	MP	11/22	SNH	11/22
Checked By	JTK	11/22	SNH	11/22	JTK	11/22



ABUTMENT PLAN



ABUTMENT ELEVATION

ABUTMENT NOTES

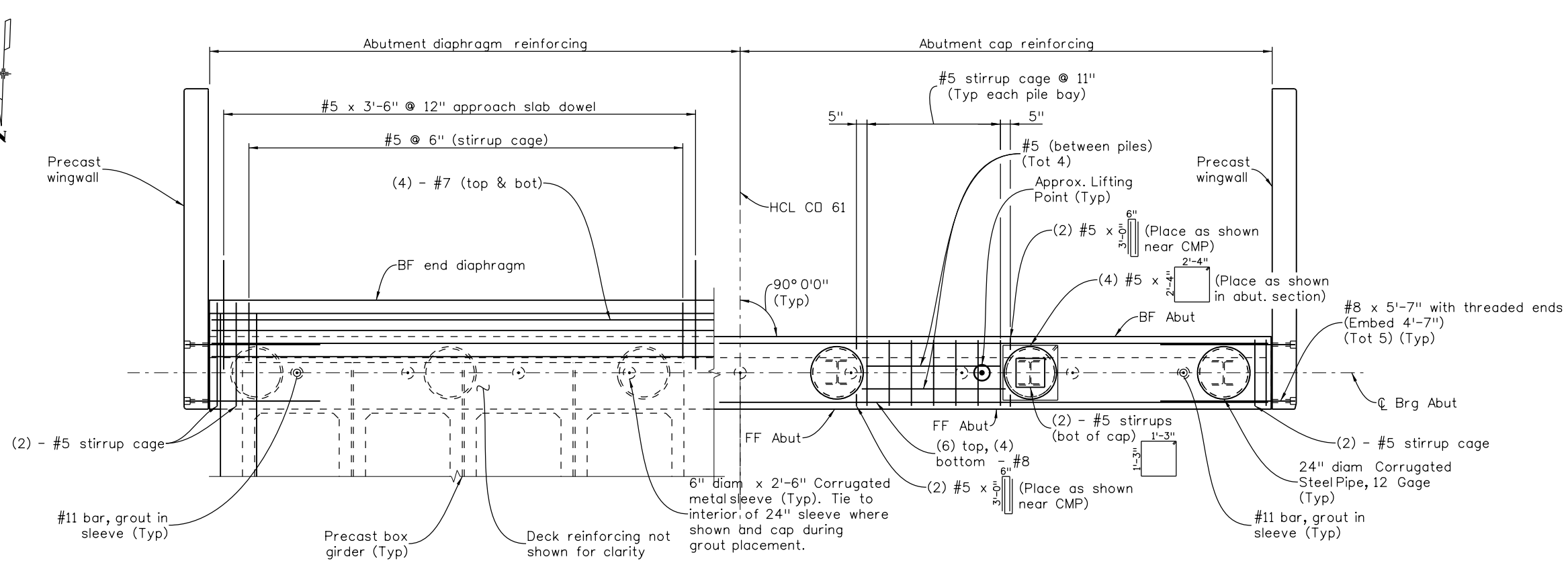
- Omit 24" ϕ CMP for cast in place option. Cost of CMP and Concrete Class PS shall be included in item 601 Concrete Class D for precast option.
- Abutment reinforcement not shown for clarity.
- Lift points may be shifted from locations shown. Lift points shall be designed by the contractor. Working drawings and structural calculations shall be submitted.
- Grout lifting points with structural non-shrink grout after components have been leveled.
- Requirements of Section 107.06 Performance of Safety Critical Work apply.
- Coat or galvanize all miscellaneous structural steel placed in the structure concrete unless otherwise noted. Payment to be included with item 601 Concrete Class D.
- For lifting hardware that is to be left in place, provide 2 1/2" top cover and 1" bottom cover after installation of hardware.
- Subgrade below abutment shall be compacted to 95% maximum density in accordance with AASHTO T180.
- Details shown are similar for Abutment 1 and Abutment 2.

Girder	Abut 1	Abut 2
GA	4322.88	4321.79
GB	4322.97	4321.88
GC	4323.06	4321.98
GD	4323.15	4322.07
GE	4323.20	4322.11
GF	4323.15	4322.07
GG	4323.06	4321.98
GH	4322.97	4321.88
GI	4322.88	4321.79

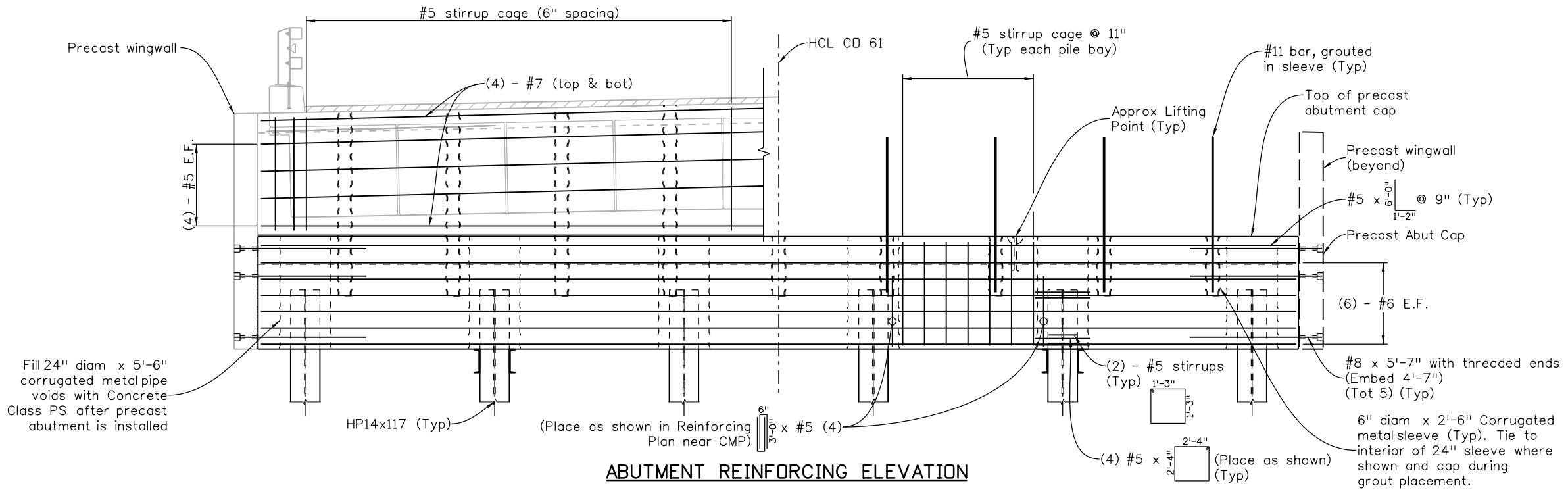
All seals for this set of drawings are applied to the cover page(s)	Print Date: 2/27/2023 File Name: 23010_D-25-EA_B15_Abut 1 of 2.dgn Horiz. Scale: 1:5.33333 Vert. Scale: As Noted Unit Information 0222 Unit Leader Initials AAH	<table border="1"> <thead> <tr> <th colspan="3">Sheet Revisions</th> </tr> <tr> <th>Date:</th> <th>Comments</th> <th>Init.</th> </tr> </thead> <tbody> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> </tbody> </table>	Sheet Revisions			Date:	Comments	Init.										Colorado Department of Transportation 120 North Riverview Road Sterling, CO 80751 Phone: 970-522-0481 FAX: 970-521-9729 Region 4	As Constructed No Revisions: Revised: Void:	ABUTMENT CONSTRUCTION PLAN AND ELEVATION	Project No./Code FBR R400-371/23010 FBR 061A-003/25447 Sheet Number
	Sheet Revisions																				
	Date:	Comments	Init.																		
Designer: S. Huson Detailer: M. Purdy Sheet Subset: Bridge		Structure Numbers: D-25-EA Subset Sheets: B15 of B32		JTD																	

j:\eremy_3-14-18 PM.dwg \v:\ecom-nr-pw-bentley.com\AECOM_DS20_NA-2019\Documents\60626605-CDOT_R4_Timber_BE (23010)\Bridges\Drawings\D-25-EA-B16_Abut 2 of 2.dgn

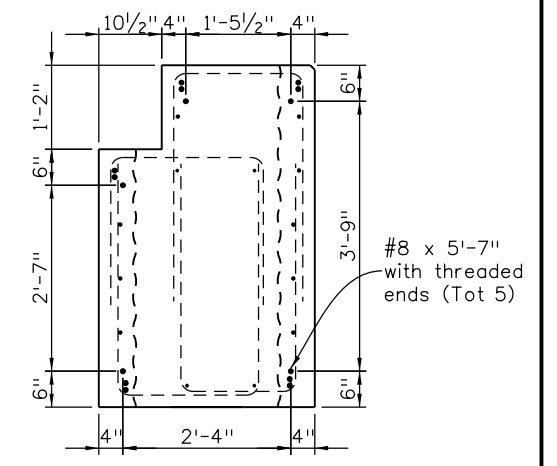
INITIALS	DESIGN	DATE	DETAIL	DATE	QUANTITY	DATE
By	SNH	11/22	MP	11/22	SNH	11/22
Checked By	JTK	11/22	SNH	11/22	JTK	11/22



ABUTMENT REINFORCING PLAN



ABUTMENT REINFORCING ELEVATION



ABUTMENT END ELEVATION

All seals for this set of drawings are applied to the cover page(s)

Print Date: 2/27/2023
File Name: 23010_D-25-EA_B16_Abut 2 of 2.dgn
Horiz. Scale: 1:5.33333 Vert. Scale: As Noted
Unit Information 0222 Unit Leader Initials AAH

Sheet Revisions		
Date:	Comments	Init.

Colorado Department of Transportation

120 North Riverview Road
Sterling, CO 80751
Phone: 970-522-0481
FAX: 970-521-9729

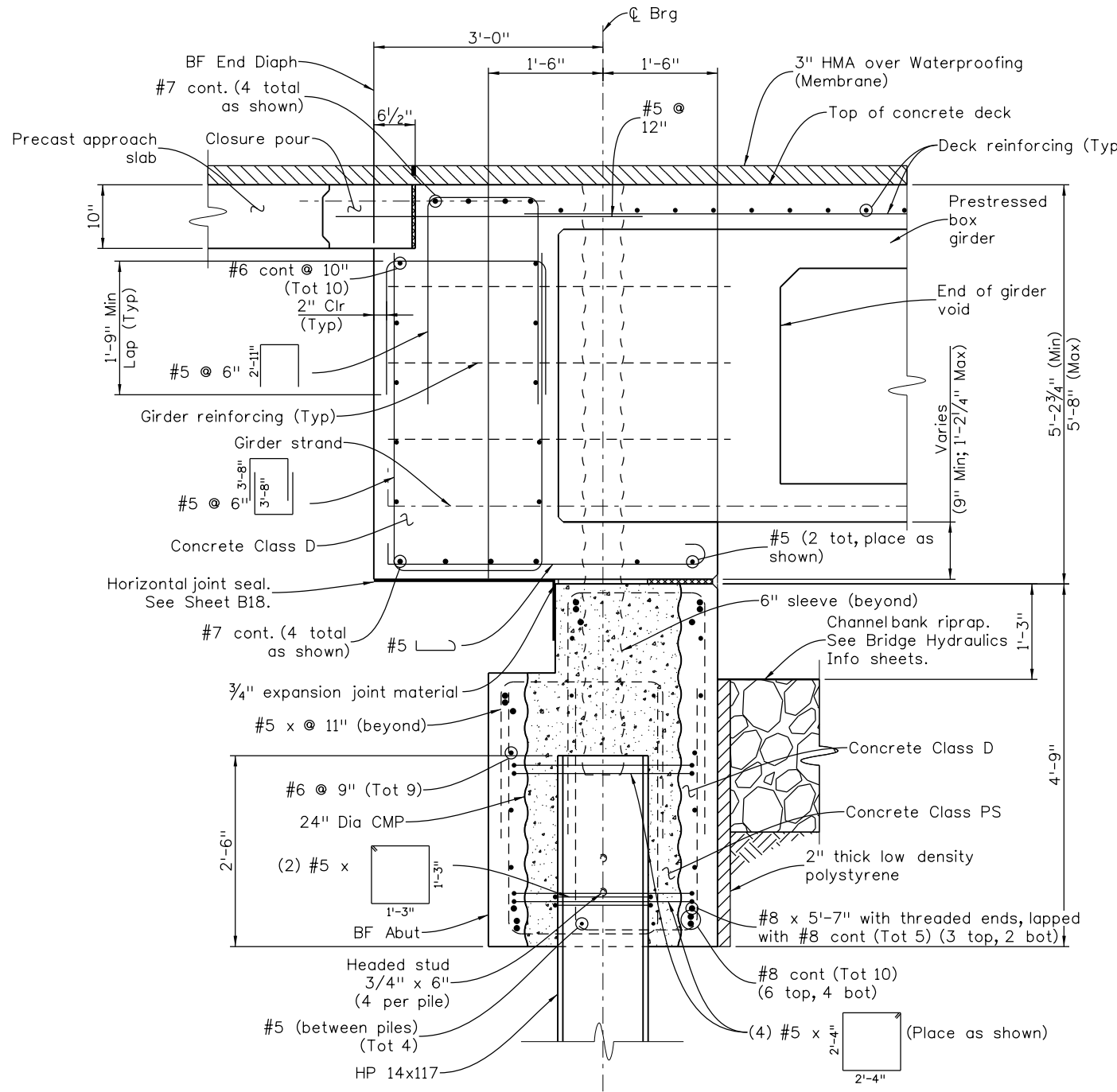
Region 4 JTD

As Constructed
No Revisions:
Revised:
Void:

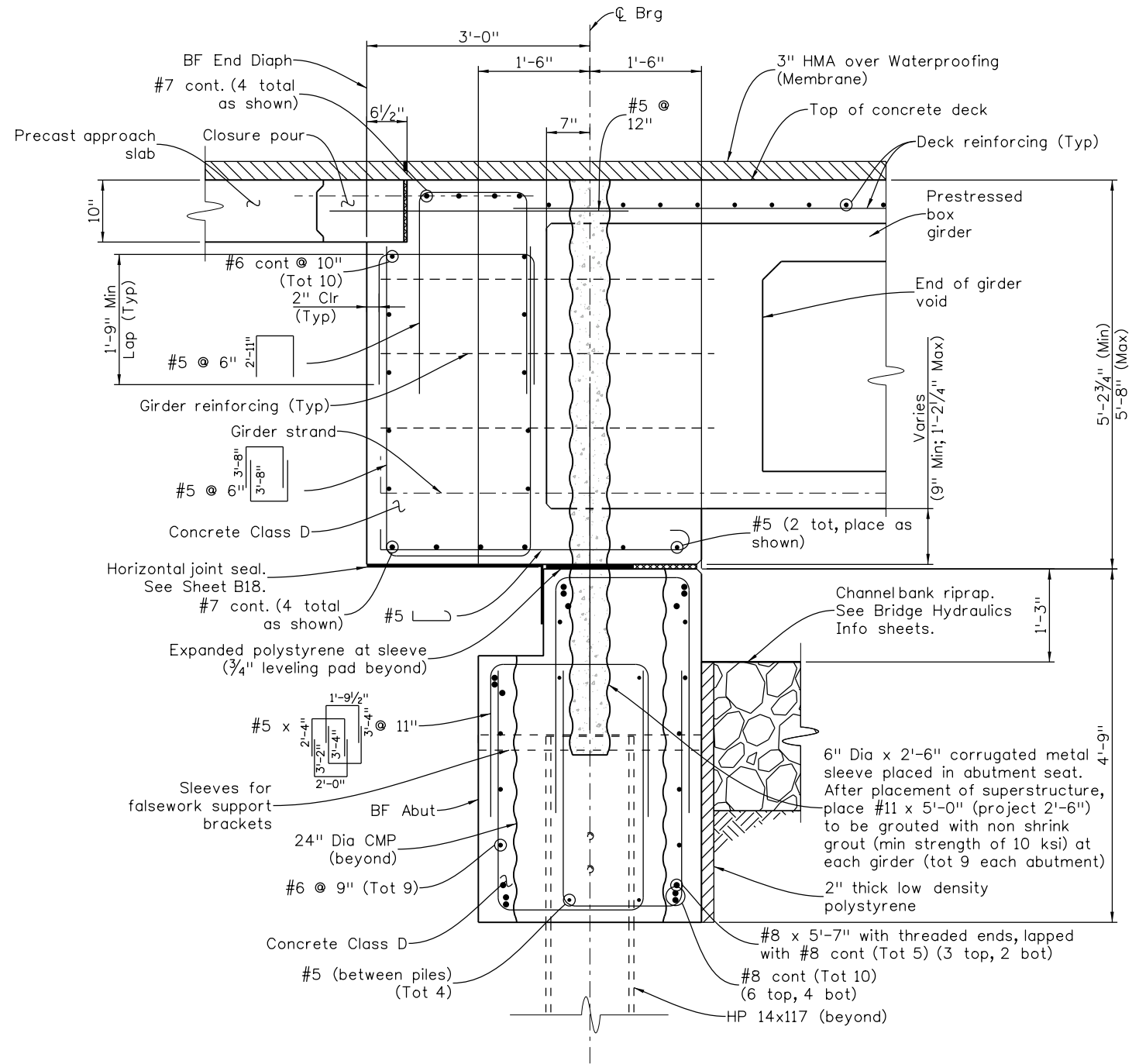
ABUTMENT REINFORCING PLAN AND ELEVATION			
Designer:	S. Huson	Structure Numbers	D-25-EA
Detailer:	M. Purdy	Subset Sheets:	B16 of B32
Sheet Subset:	Bridge		

Project No./Code
FBR R400-371/23010
FBR 061A-003/25447
Sheet Number

INITIALS DESIGN DATE DETAIL DATE QUANTITY DATE
 By SNH 11/22 SNH 11/22 SNH 11/22 SNH 11/22
 Checked By JTK 11/22 JTK 11/22 JTK 11/22 JTK 11/22
 iason_10/2/2000 AM pvt\\cescom-na-wbentley.com\AFCOM_DS20_NA_2019\Documents\60626805-cdot\14_Timber_BE_(23010)\Bridge\Drawings\25-EA\23010_D-25-EA-B17_AbutSec.dgn



TYPICAL ABUTMENT SECTION
(At Pile)



TYPICAL ABUTMENT SECTION
(Between Piles, at Girder Bearing)

All seals for this set of drawings are applied to the cover page(s)

Print Date: 3/1/2023
 File Name: 23010_D-25-EA_B17_AbutSec.dgn
 Horiz. Scale: 1:1 Vert. Scale: As Noted
 Unit Information 0222 Unit Leader Initials AAH

Sheet Revisions		
Date:	Comments	Init.

Colorado Department of Transportation

120 North Riverview Road
 Sterling, CO 80751
 Phone: 970-522-0481
 FAX: 970-521-9729

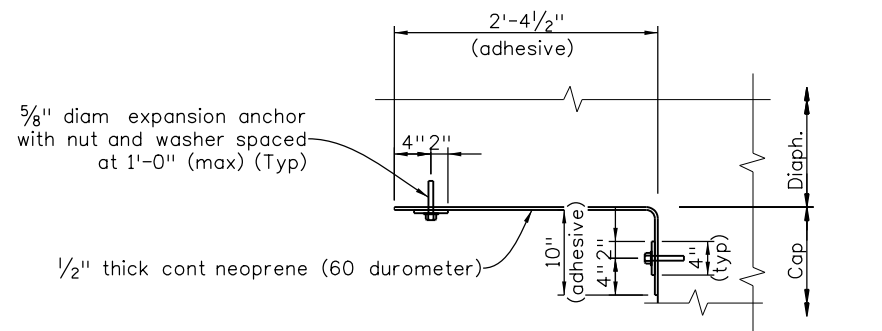
Region 4 JTD

As Constructed
No Revisions:
Revised:
Void:

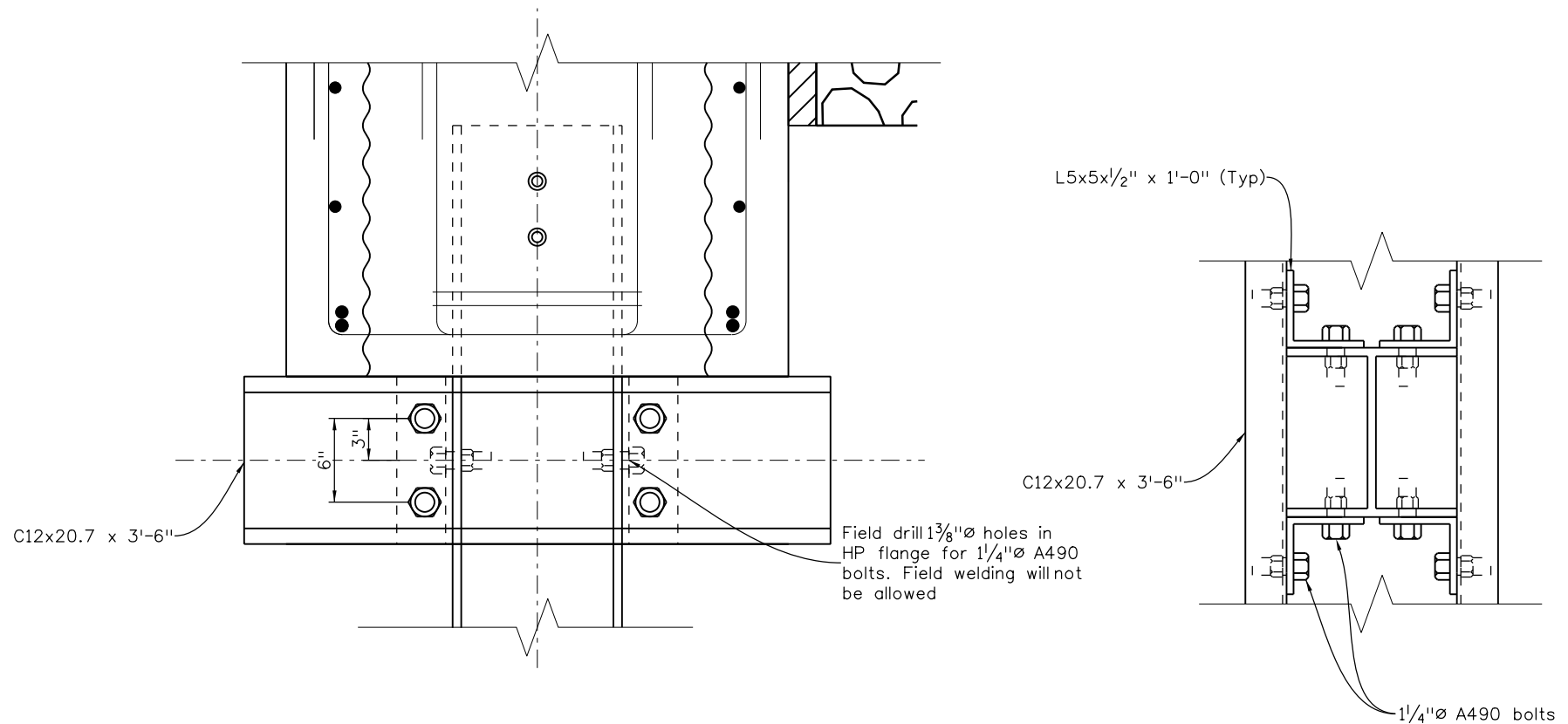
ABUTMENT SECTIONS			
Designer:	S. Huson	Structure Numbers	D-25-EA
Detailer:	M. Purdy	Subset Sheets:	B17 of B32
Sheet Subset:	Bridge		

Project No./Code
FBR R400-371/23010
FBR 061A-003/25447
Sheet Number

j:\eremy_244838.PM_pw:\saccon-ma-pw.bentley.com\AECOM_DS20_NA_2019\Documents\60626605-CDDT_R4_Timber_BE_(23010)\Bride\Drawings\D-25-EA_B18_AbutDet.dgn
 INITIALS DESIGN DATE DETAIL DATE QUANTITY DATE
 By SNH 11/22 MP 11/22 SNH 11/22
 Checked By JTK 11/22 SNH 11/22 JTK 11/22



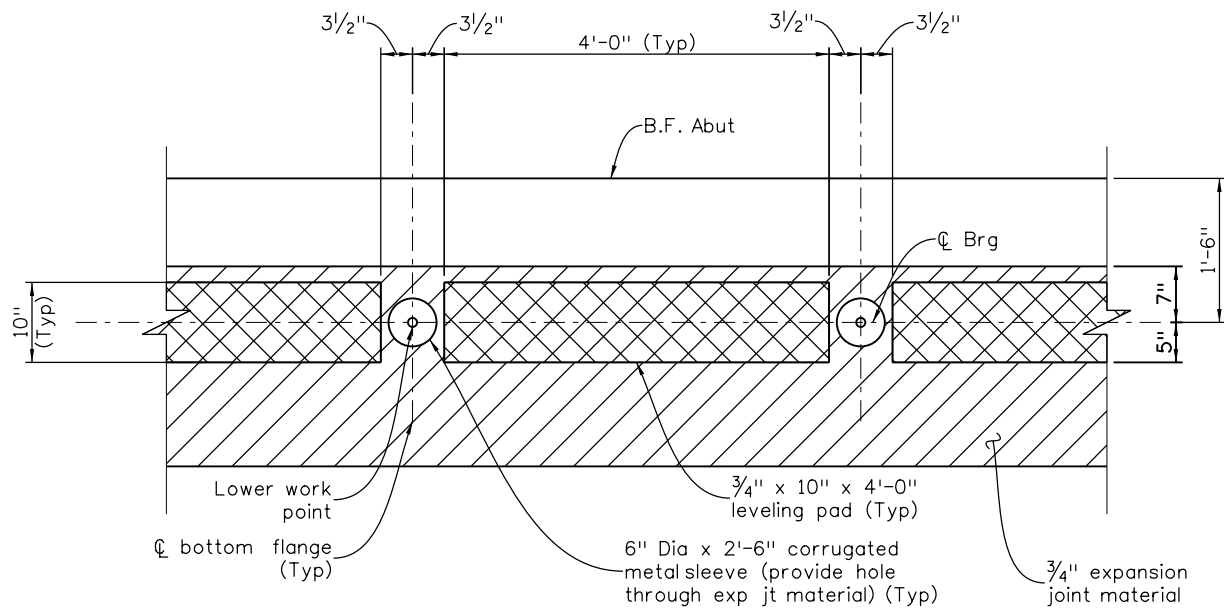
HORIZONTAL JOINT SEAL DETAIL



CHANNEL ATTACHMENT DETAIL

Bolts are a slip critical connection with a Class A faying surface, $\mu=0.3$ (unpainted clean mill scale). Bolts shall be tensioned to the required minimum bolt tension of 102 kips.

PRECAST SUPPORT DETAIL



BEARING SEAT DETAIL

NOTES

- The cost of all work and materials necessary for installation of the Horizontal Joint Seal shall be included in Item 601, Concrete Class D.
- The cost of all work and materials for the precast support detail shall be included in Item 601, Concrete Class D.

All seals for this set of drawings are applied to the cover page(s)

Print Date: 2/27/2023
 File Name: 23010_D-25-EA_B18_AbutDet.dgn
 Horiz. Scale: 1:1 Vert. Scale: As Noted
 Unit Information 0222 Unit Leader Initials AAH

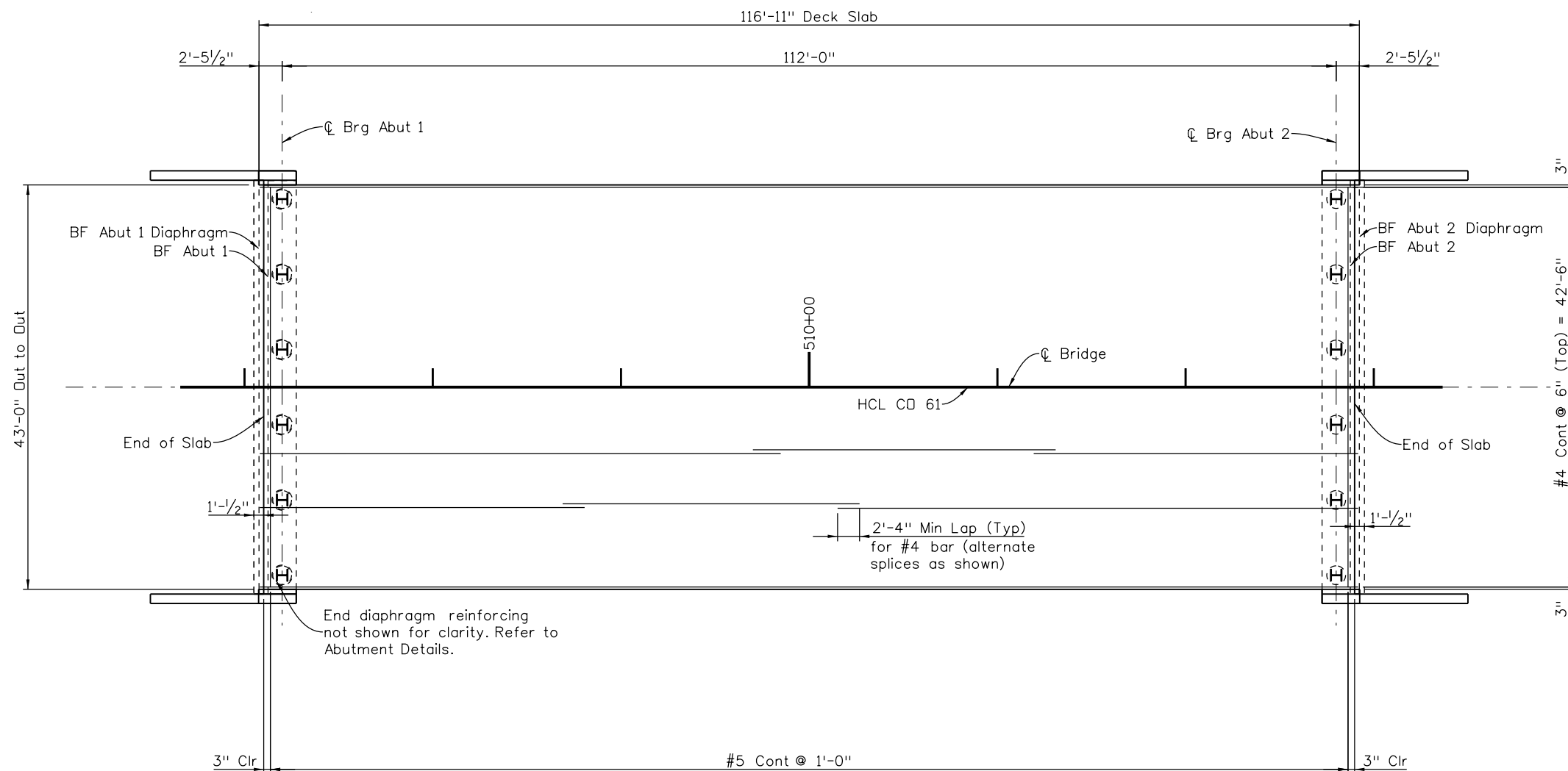
Sheet Revisions		
Date:	Comments	Init.

Colorado Department of Transportation
 120 North Riverview Road
 Sterling, CO 80751
 Phone: 970-522-0481
 FAX: 970-521-9729
 Region 4 JTD

As Constructed
No Revisions:
Revised:
Void:

ABUTMENT DETAILS			
Designer:	S. Huson	Structure Numbers	D-25-EA
Detailer:	M. Purdy	Subset Sheets:	B18 of B32
Sheet Subset:	Bridge		

Project No./Code
FBR R400-371/23010
FBR 061A-003/25447
Sheet Number



DECK REINFORCING PLAN

INITIALS	DESIGN	DATE	DETAIL	DATE	QUANTITY	DATE
By	SNH	11/22	MP	11/22	SNH	11/22
Checked By	JTK	11/22	SNH	11/22	JTK	11/22

c:\ecomp\15ics018_10:32:47 PM \\ecomp\15ics01\15cs_001\work_dir\76941\49302_8\23010_D-25-EA_B21_Deck_Plan.dgn

All seals for this set of drawings are applied to the cover page(s)

Print Date: 2/27/2023
File Name: 23010_D-25-EA_B21_Deck Plan.dgn
Horiz. Scale: 1:15 Vert. Scale: As Noted
Unit Information 0222 Unit Leader Initials AAH

Sheet Revisions		
Date:	Comments	Init.

Colorado Department of Transportation

120 North Riverview Road
Sterling, CO 80751
Phone: 970-522-0481
FAX: 970-521-9729

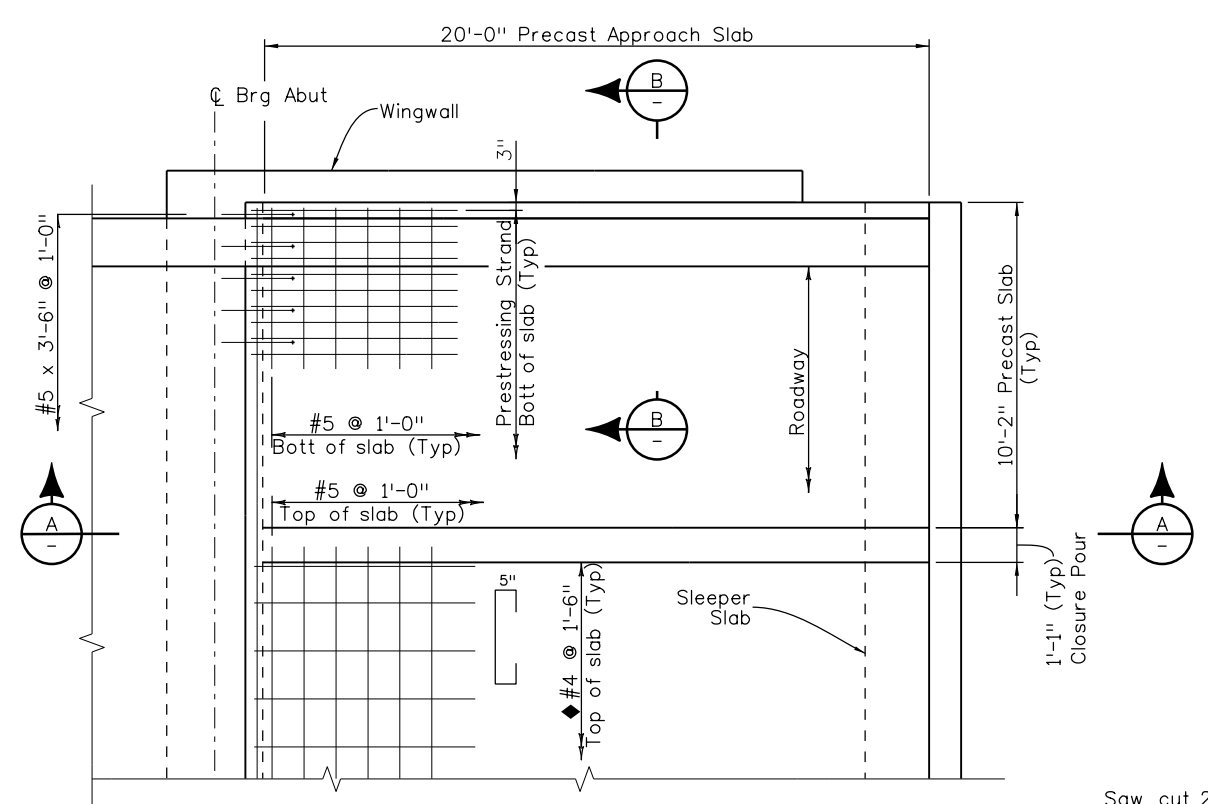
Region 4 **JTD**

As Constructed
No Revisions:
Revised:
Void:

DECK REINFORCING PLAN			
Designer:	S. Huson	Structure Numbers	D-25-EA
Detailer:	M. Purdy	Subset Sheets:	B21 of B32
Sheet Subset:	Bridge		

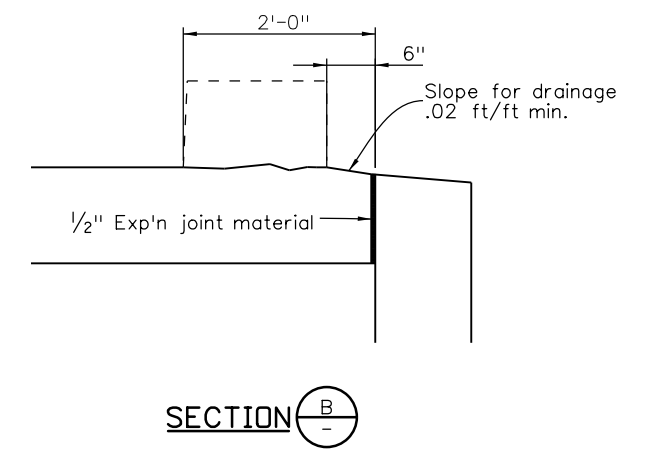
Project No./Code
FBR R400-371/23010
FBR 061A-003/25447
Sheet Number

jeremy_3/09/19 PM PW: \\scom-nq-pw.bentley.com:FCOM_DS20_NA_2019\Documents\60626605-CDDT_R4_Timber_BE (23010)\Bridges\Drawings\D-25-EA_B23_App_Slab_1.dgn

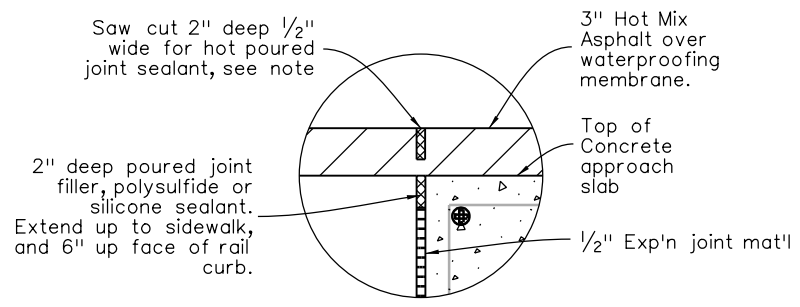


PARTIAL PLAN

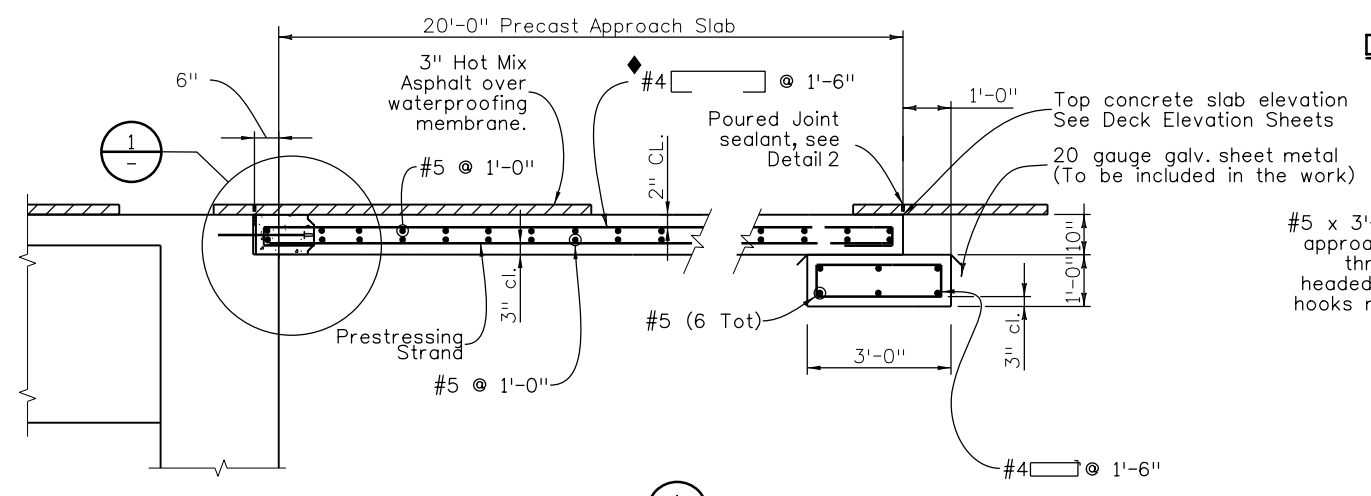
Stagger transverse reinforcing in adjacent slabs to avoid interferences.



SECTION B-B



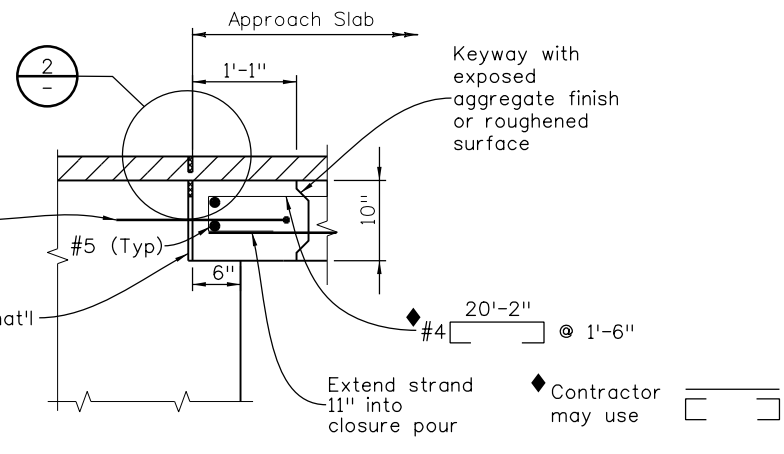
DETAIL 2-2



SECTION A-A

With asphalt roadway

#5 x 3'-6" project 1'-0" into approach slab and end with threaded end anchor or headed rebar (standard end hooks may be substituted).



DETAIL 1-1

NOTES:

Saw cut 2" deep of new HMA for 1/2" wide hot poured joint sealant. The hot poured joint shall be included in Item 408, Joint Sealant, LF.

The precast sleeper slab shall be included in Pay item 601-03040 Concrete Class D and 602-00020 Reinforcing Steel (Epoxy Coated). The precast approach slab shall be paid for as Item 618-06034 Prestressed Concrete Slab (Depth 6" Through 13"). The closure pours shall be included in these pay items.

INITIALS	DESIGN	DATE	DETAIL	DATE	QUANTITY	DATE
By	JTK	11/22	MP	11/22	SNH	11/22
Checked By	JTK	11/22	SNH	11/22	JTK	11/22

Print Date: 2/27/2023
 File Name: 23010_D-25-EA_B23_App Slab 1.dgn
 Horiz. Scale: 1:1 Vert. Scale: As Noted
 Unit Information 0222 Unit Leader Initials AAH

Sheet Revisions		
Date:	Comments	Init.

Colorado Department of Transportation

120 North Riverview Road
 Sterling, CO 80751
 Phone: 970-522-0481
 FAX: 970-521-9729

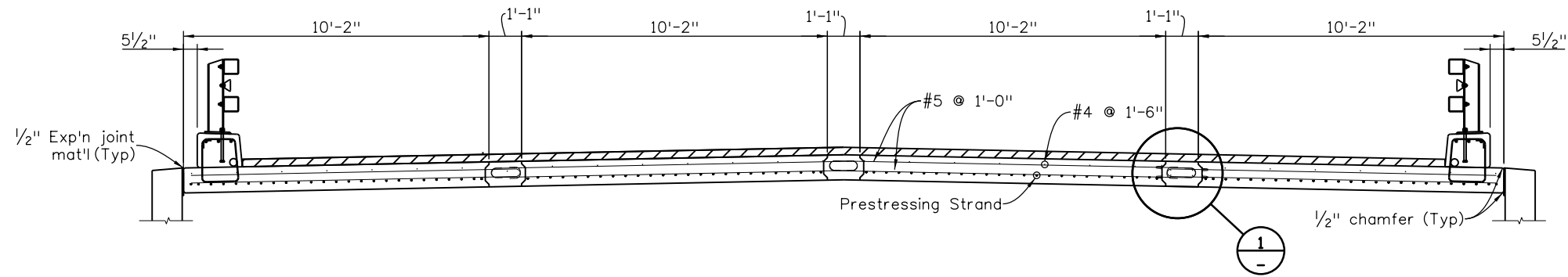
Region 4 JTD

As Constructed
No Revisions:
Revised:
Void:

APPROACH SLAB DETAILS (1 OF 2)			
Designer:	S. Huson	Structure Numbers	D-25-EA
Detailer:	M. Purdy	Subset Sheets:	B23 of B32

Project No./Code
FBR R400-371/23010
FBR 061A-003/25447
Sheet Number

All seals for this set of drawings are applied to the cover page(s)



TYPICAL SECTION

NOTES:

All reinforcing Steel shall be epoxy coated except for the bridge rail reinforcement, see bridge rail sheet.

At the slab end not embedded in concrete, cut strands off 1" below the surface of the concrete and finish with an approved epoxy grout.

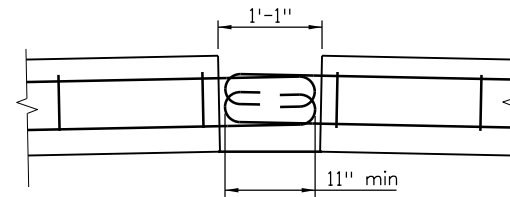
Use low relaxation strands meeting the requirements of ASTM A-416 Grade 270. The minimum cover for prestressing steel is 1/2".

- A_s^* = minimum area of the prestressing steel.
- d_s = nominal strand diameter.
- f_s^u = ultimate strength of prestressing steel.
- F_j = jacking force.
- F_f = final force after all losses.
- f_{ci}^r = required concrete strength at release of prestress force.
- f_c^r = required concrete strength at 28 days of age.
- θ = bridge skew angle

Concrete shall be Class PS.

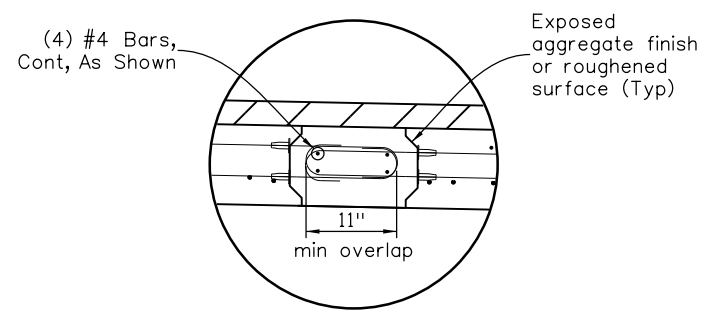
Entrained air is not required for Class PS concrete.

Closure pours shown on this sheet shall use Concrete Class PS.



SLEEPER SLAB CLOSURE POUR

PRECAST APPROACH SLAB												
Span No.	Girder No.	L (Ft)	W (In.)	D (In.)	θ (Deg.)	A_s^* (Sq In)	Debonded Strands (percent)	E (In.)	F_j (Kips)	F_f (Kips)	Concrete Strength	
											f_{ci} (psi)	f_c (psi)
1	All	19.4167	122	10	90	5.425	0	3.5	1099	987	6,500	8,500

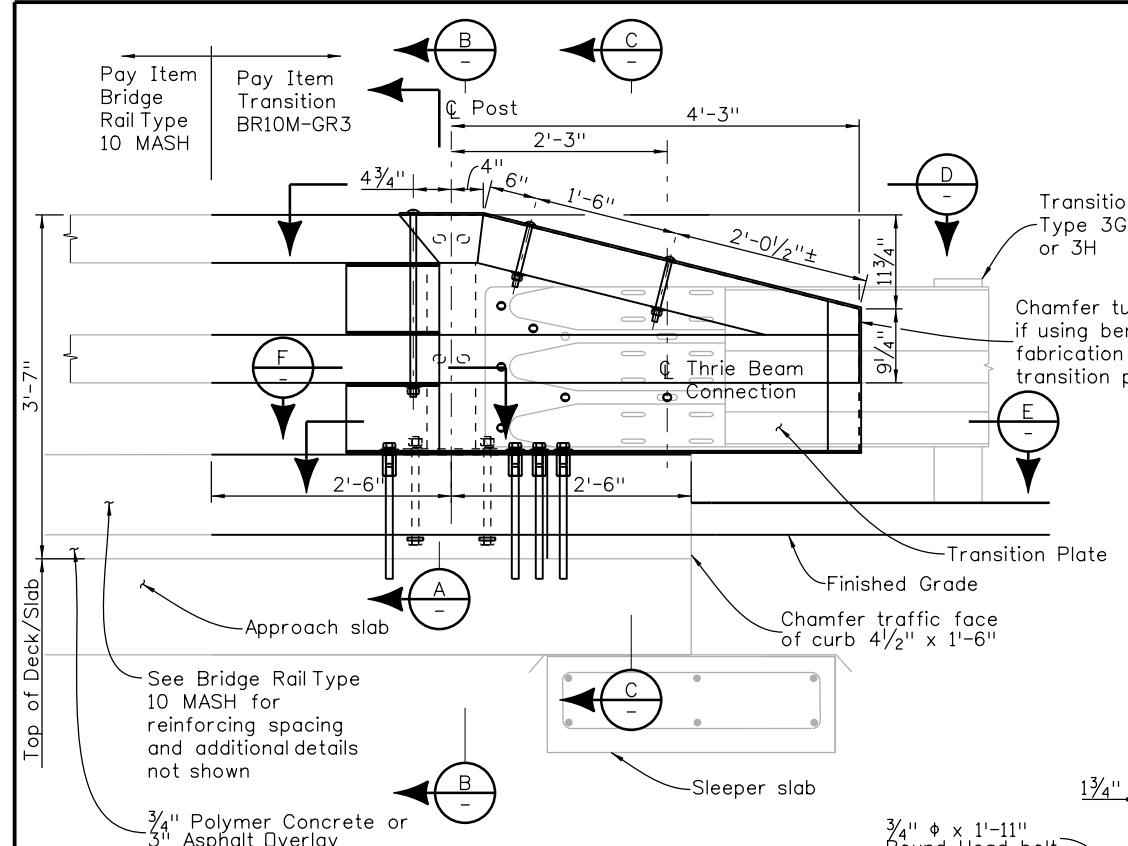


DETAIL 1

INITIALS	DESIGN	DATE	DETAIL	DATE	QUANTITY	DATE
By	SNH	11/22	MP	11/22	SNH	11/22
Checked By	JTK	11/22	SNH	11/22	JTK	11/22

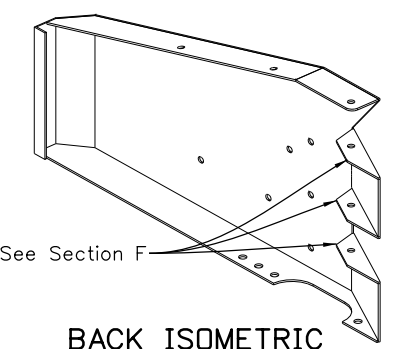
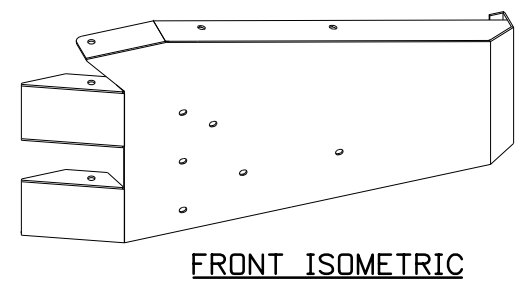
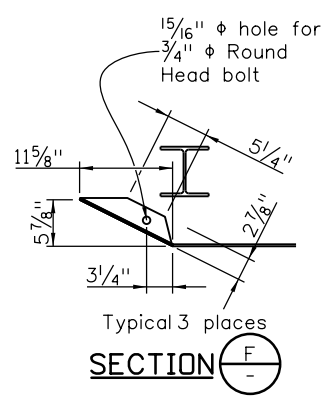
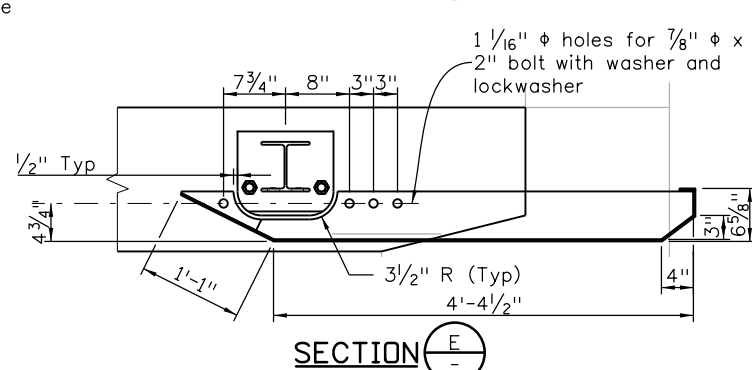
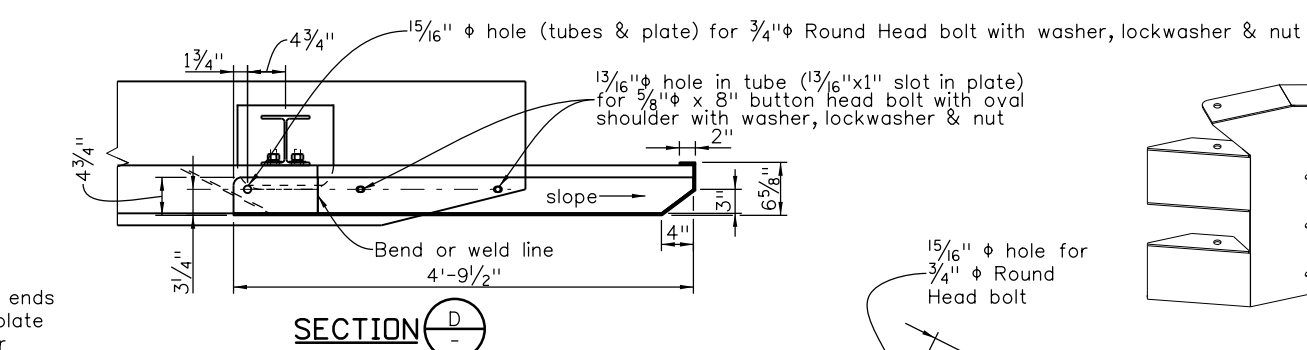
oecompw15ics018 10:32:58 PM \\oecompw15ics01\ics_pdf_work_dir\76941\149302_42\23010_D-25-EA_B24_App_Slab_2.dgn

All seals for this set of drawings are applied to the cover page(s)	Print Date: 2/27/2023 File Name: 23010_D-25-EA_B24_App_Slab_2.dgn Horiz. Scale: 1:1 Vert. Scale: As Noted Unit Information 0222 Unit Leader Initials AAH	Sheet Revisions <table border="1" style="width: 100%;"> <thead> <tr> <th>Date:</th> <th>Comments</th> <th>Init.</th> </tr> </thead> <tbody> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> </tbody> </table>	Date:	Comments	Init.										Colorado Department of Transportation 120 North Riverview Road Sterling, CO 80751 Phone: 970-522-0481 FAX: 970-521-9729 Region 4	As Constructed No Revisions: Revised: Void:	APPROACH SLAB DETAILS (2 OF 2) Designer: S. Huson Structure Numbers: D-25-EA Detailer: M. Purdy Sheet Subset: Bridge Subset Sheets: B24 of B32	Project No./Code FBR R400-371/23010 FBR 061A-003/25447 Sheet Number
	Date:	Comments	Init.															

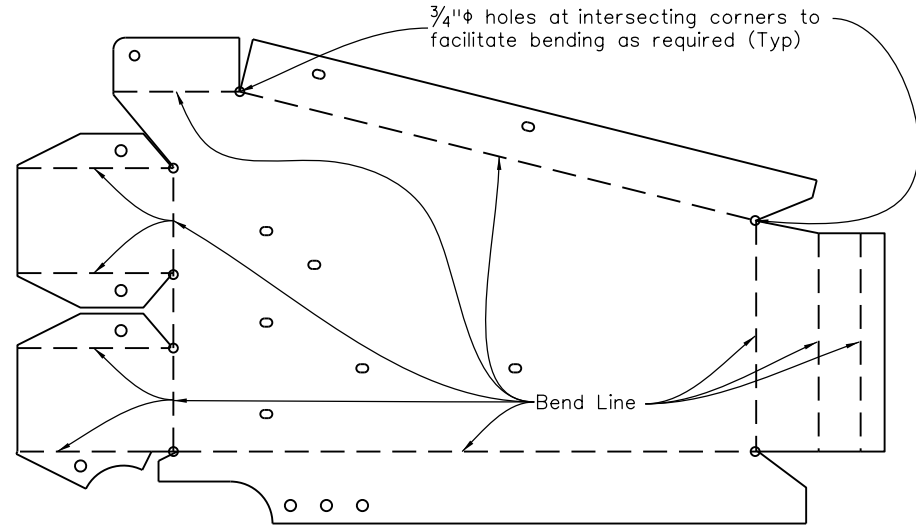
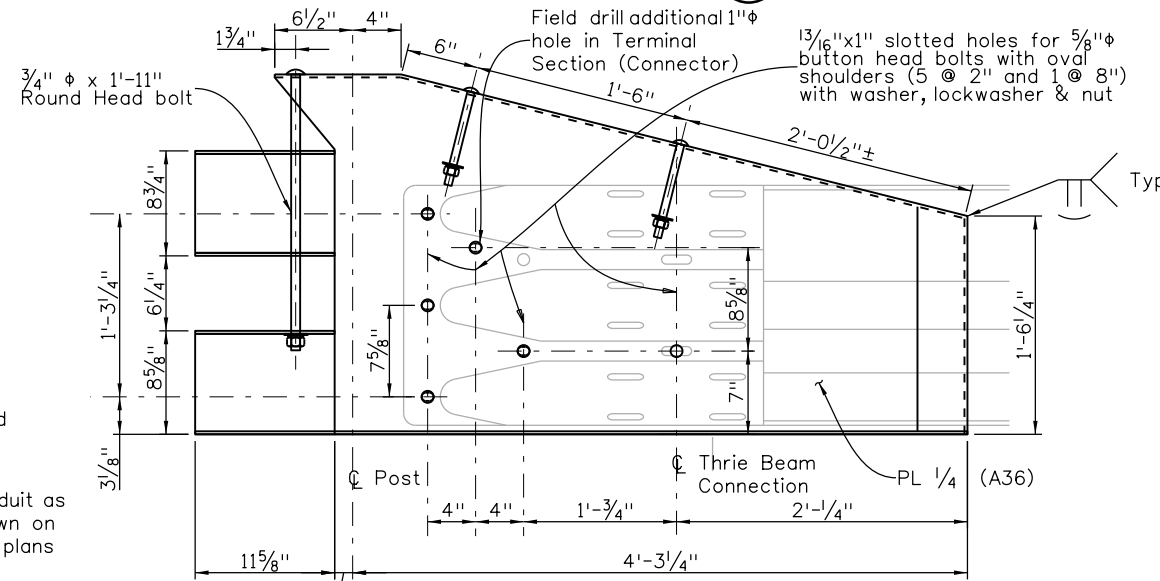


RAIL TUBE DETAILS

Thrie Beam shaded for clarity



Note: Transition Plate may be fabricated with bent plates and/or welded construction. All welds shall be square root with convex contouring.



NOTES:

- See Bridge Rail Type 10 MASH for notes and design data.
- Payment will be made under item 606, Transition Type BR10M-GR3, for all anchor bolts, miscellaneous bolts, nuts, washers, tubes, concrete (Class DF), reinforcing steel, and concrete sealer.

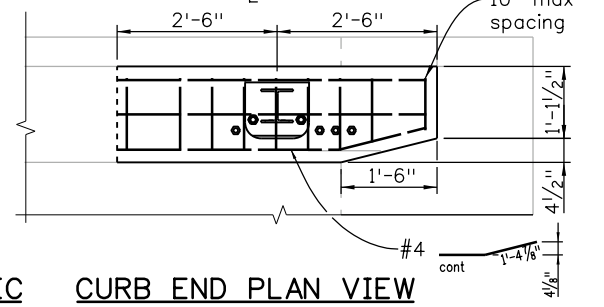
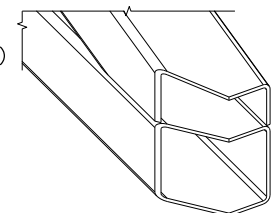
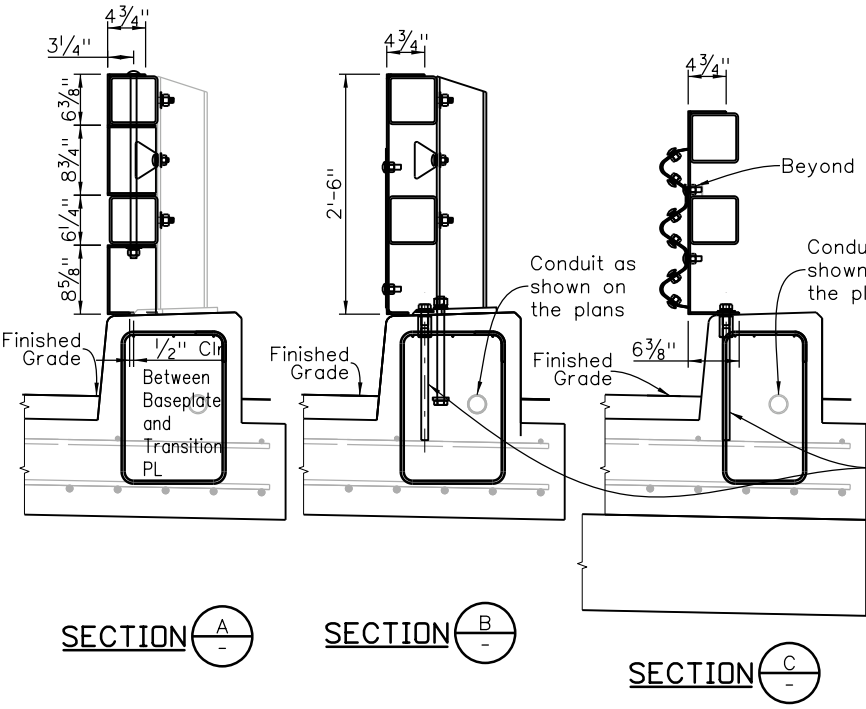
INFORMATION ONLY

DESCRIPTION	UNIT	QUANTITY
Structural Steel (Galvanized)	LB	540
Concrete Sealer	SY	1.4
Concrete Class DF	CY	0.27
Reinforcing Steel (AASHTO M334 or ASTM A1035) ▲	LB	47

▲ See notes on Bridge Rail Type 10MASH sheet.

INITIALS	DESIGN	DATE	DETAIL	DATE	QUANTITY	DATE
By	SNH	11/22	MP	11/22	SNH	11/22
Checked By	JTK	11/22	SNH	11/22	JTK	11/22

10:32:53 PM \\geocomp\files018\103253 PM \geocomp\files01\ics_pdf_work_dir\7694149302_48\23010_D-25-EA_B26_BR10M-GR3.dgn



Print Date: 2/27/2023
File Name: 23010_D-25-EA_B26_BR10M-GR3.dgn
Horiz. Scale: 1:1 Vert. Scale: As Noted
Unit Information 0222 Unit Leader Initials AAH

Sheet Revisions		
Date:	Comments	Init.

Colorado Department of Transportation
120 North Riverview Road
Sterling, CO 80751
Phone: 970-522-0481
FAX: 970-521-9729

Region 4

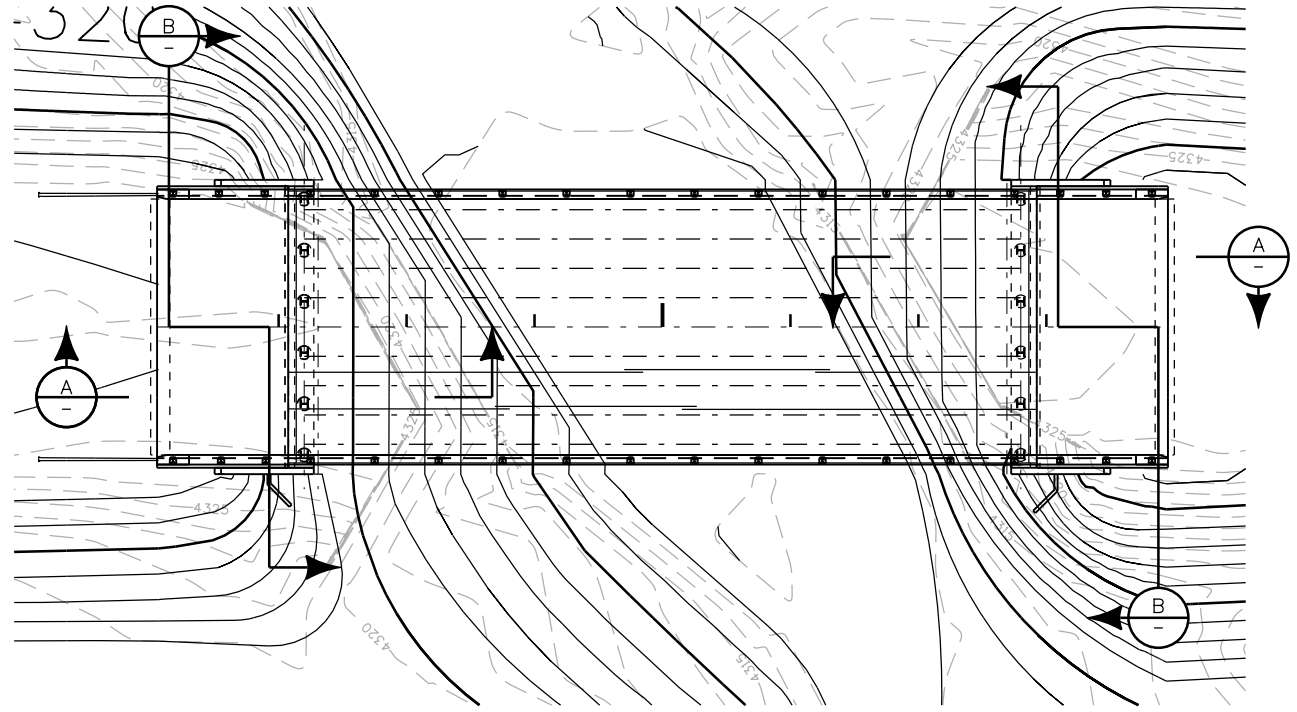
JTD

As Constructed
No Revisions:
Revised:
Void:

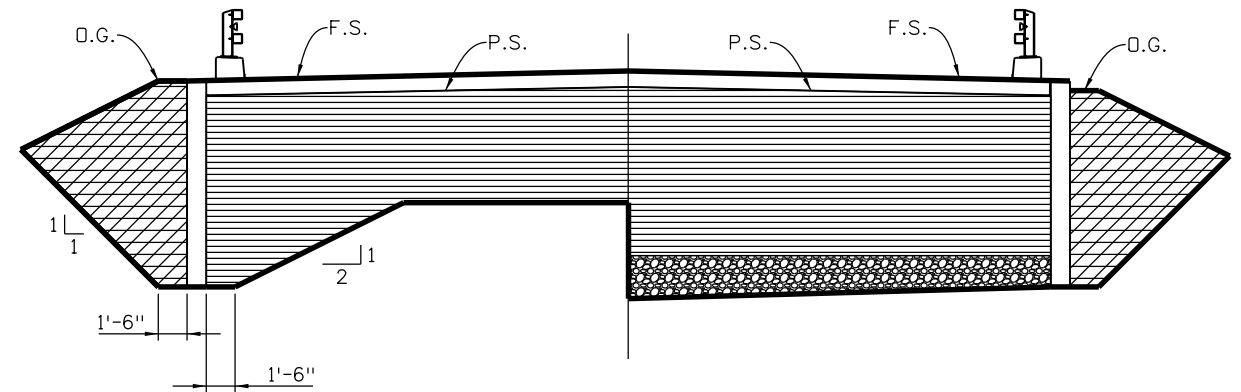
TRANSITION TYPE BR10M-GR3 CURB, TUBE AND PLATE DETAILS SLEEPER VERSION			
Designer:	S. Huson	Structure Numbers	D-25-EA
Detailer:	M. Purdy	Subset Sheets:	B26 of B32

Project No./Code
FBR R400-371/23010
FBR 061A-003/25447
Sheet Number

All seals for this set of drawings are applied to the cover page(s)






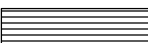

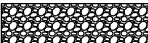
PLAN VIEW



NEAR END OF WINGWALL NEAR B.F. ABUTMENT

SECTION $\frac{B}{-}$

LEGENDS

-  Structure Excavation
-  Roadway Excavation
-  Structure Excavation
-  Structure Backfill (flowfill), or Structure Backfill (Class 1) with Mechanical Reinforcement of Soil, as shown elsewhere in the plans.
-  Structure Backfill (Class 2)
-  Filter Material

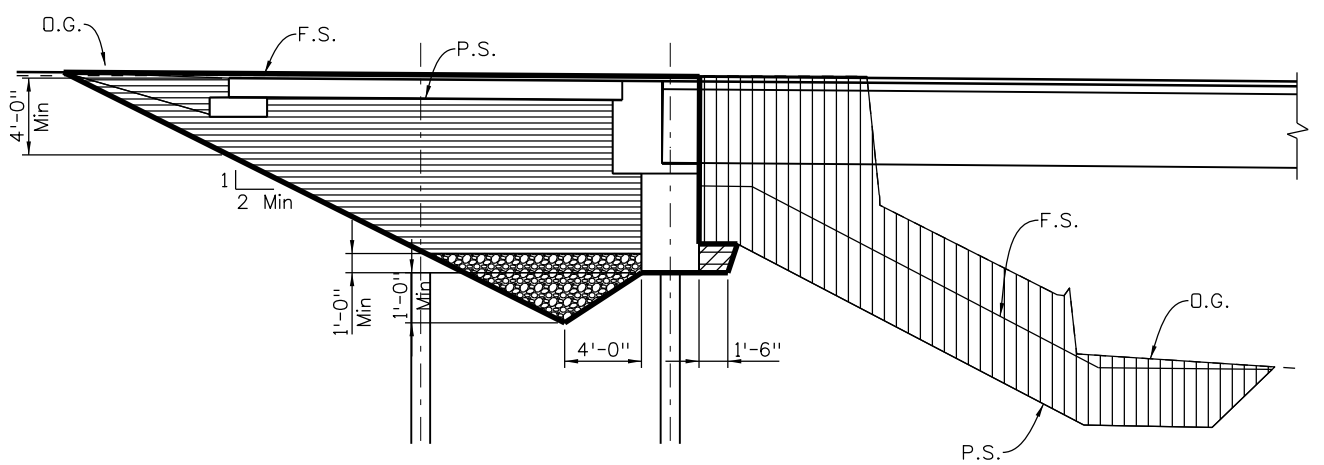
ABBREVIATIONS

- D.G. Original Ground
- P.S. Planned Subgrade
- F.S. Planned Finished Surface

NOTES

Unless shown otherwise in the plans, this drawing gives the minimum extent of Structure Excavation and Structure Backfill. The Contractor may elect to extend the Structure Excavation and Structure Backfill beyond the limits shown here. Any additional Excavation or Backfill beyond these limits will not be measured nor paid for.

"Section A" applied to full width of bridge.



SECTION $\frac{A}{-}$

INITIALS	DESIGN	DATE	DETAIL	DATE	QUANTITY	DATE
By	SNH	11/22	MP	11/22	SNH	11/22
Checked By	JTK	11/22	SNH	11/22	JTK	11/22

c:\compw\5150248_10:32:49 PM \\compw\51501\CS.pdf -work_dir\76941\149302-15\23010_D-25-EA_B27_Backfill1.dgn

All seals for this set of drawings are applied to the cover page(s)

Print Date: 2/27/2023
 File Name: 23010_D-25-EA_B27_Backfill1.dgn
 Horiz. Scale: 1:1 Vert. Scale: As Noted
 Unit Information 0222 Unit Leader Initials AAH

Sheet Revisions		
Date:	Comments	Init.

Colorado Department of Transportation

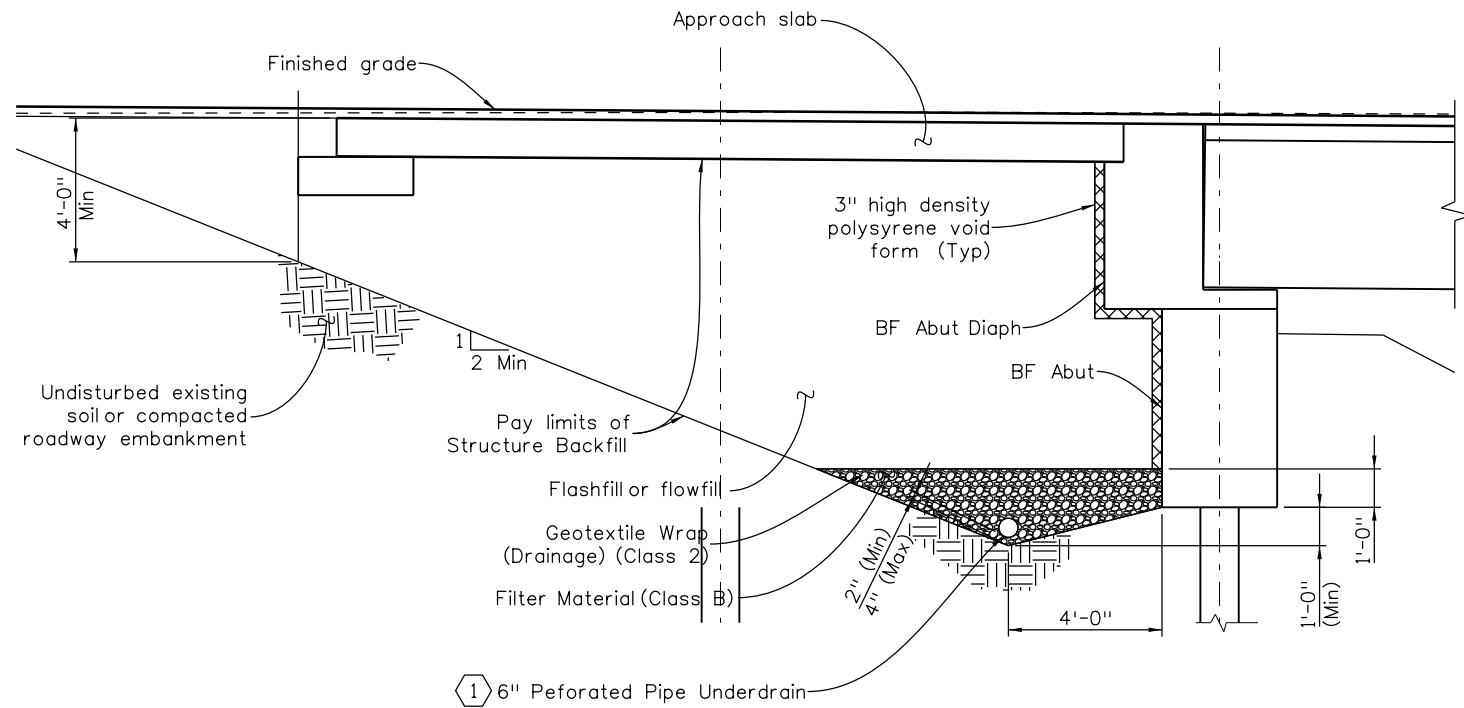
120 North Riverview Road
 Sterling, CO 80751
 Phone: 970-522-0481
 FAX: 970-521-9729

Region 4 JTD

As Constructed
No Revisions:
Revised:
Void:

EXCAVATION AND BACKFILL			
Designer:	S. Huson	Structure Numbers	D-25-EA
Detailer:	M. Purdy	Subset Sheets:	B27 of B32

Project No./Code
FBR R400-371/23010
FBR 061A-003/25447
Sheet Number



NOTES

The inside face and outside face of each wingwall shall be backfilled equally (2 feet) to ensure even pressure on the wall.

Installation of the 6 Inch Perforated Pipe Underdrain, Subsurface Drain Outlet, and Geocomposite Drain shall conform to the construction requirements of Section 605.03, 605.06, and 605.04, respectively.

Payment for all work items shown will be made under Item 206 Structure Backfill (Flow-Fill) and shall include the cost for the 6" \varnothing perforated pipe underdrain, the subsurface drain outlet, and outlet pipe end treatment.

KEY NOTES

① Slope to drain (2% minimum) toward the east. After clearing the north wingwall, continue run with 6 Inch Non-perforated Pipe to daylight. Bends in pipe shall not exceed 45°. Provide animalguard, erosion controlpad and delineator post in accordance with Outlet Pipe End Treatment detail on Standard Plan M-605-1.

INITIALS	DESIGN	DATE	DETAIL	DATE	QUANTITY	DATE
By	SNH	11/22	MP	11/22	SNH	11/22
Checked By	JTK	11/22	SNH	11/22	JTK	11/22

c:\compw\51502\10-33-03 PM \compw\51502\10-33-03 PM \work_dir\76941\149302_35\23010_D-25-EA_B28_Backfill2.dgn

All seals for this set of drawings are applied to the cover page(s)	Print Date: 2/27/2023 File Name: 23010_D-25-EA_B28_Backfill2.dgn Horiz. Scale: 1:1 Vert. Scale: As Noted Unit Information 0222 Unit Leader Initials AAH	Sheet Revisions <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Date:</th> <th>Comments</th> <th>Init.</th> </tr> </thead> <tbody> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> </tbody> </table>	Date:	Comments	Init.													Colorado Department of Transportation 120 North Riverview Road Sterling, CO 80751 Phone: 970-522-0481 FAX: 970-521-9729 Region 4	As Constructed No Revisions: Revised: Void:	STRUCTURAL BACKFILL DETAILS Designer: S. Huson Detailer: M. Purdy Sheet Subset: Bridge Subset Sheets: B28 of B32	Project No./Code FBR R400-371/23010 FBR 061A-003/25447 Sheet Number
	Date:	Comments	Init.																		
JTD																					

State of Colorado
 Department of Transportation
 Staff Bridge Design
 Bridge Geometry Project Coordinate Converter
 Version 1.00

Run date & time = Mon Nov 28 09:15:38 2022

Input Northing Offset = 340215.491000
 Input Easting Offset = 755181.321000
 Input Bearing = N 2 10 39.9500 W

DESCRIPTION

Units: feet;
 Project: FBR R400-371; Subaccount: 23010;
 Designer: SNH; Detailer: SNH;
 Location: SH 61;

HORIZONTAL ALIGNMENT DATA

HORIZONTAL TANGENT

VERTICAL ALIGNMENT DATA

ELEVATION AT PI	ELEVATION AT GRADE	STATION	ELEVATION AT GRADE	ELEVATION AT PI	PERCENT GRADE
		507+80.0000	PC 4328.6518		-0.082864
		510+00.0000	PI 4327.4941	4328.4695	
		512+20.0000	PT 4324.3856		
4324.1072	4324.1072	PI 512+35.0000			-1.856298
					-1.856298

TABLE OF ROADWAY CROSS-SLOPES (SUPERELEVATION: E = -NC-)

STATION (ON TANGENT)	SLOPE LEFT	SLOPE RIGHT	VC LENGTH
	-0.0200	-0.0200	50.00 (MAX)

OFFSET PROFILE CONTROL TO PIVOT POINT = 0.0000 FEET

LIMITS OF VALID ELEVATION AND CROSS-SLOPE DATA

BEGIN * UNLIMITED * END * UNLIMITED *

LAYOUT LINE DATA

LAYOUT LINE DEFINED TO BE COINCIDENT WITH HORIZONTAL CONTROL

LAYOUT LINE INTERSECTS REF LINE AT HCL STA 509+44.0000 OFFSET 0.00000000 X 0.0000 Y 0.0000

DEAD LOAD DEFLECTION DATA

DEFLECTIONS AT TENTH POINTS FROM FITTED CURVE

0.0 0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0

FOR BENT LINE: CL Brg A1 07 CARD(S): 1 GIRDER LINES REFERENCED BY: A
 INCH 0.0000 0.3696 0.7028 0.9652 1.1325 1.1899 1.1325 0.9652 0.7028 0.3696 0.0000 INCH A4= 0.00000
 FOOT 0.0000 0.0308 0.0586 0.0804 0.0944 0.0992 0.0944 0.0804 0.0586 0.0308 0.0000 FOOT A3= 0.00000
 A2= 4.08180
 A1=-4.08180
 A0=-3.73911
 SLOPE 0.311593 -0.311593 SLOPE

FOR BENT LINE: CL Brg A1 07 CARD(S): 1 GIRDER LINES REFERENCED BY: B
 INCH 0.0000 0.3407 0.6477 0.8896 1.0437 1.0966 1.0437 0.8896 0.6477 0.3407 0.0000 INCH A4= 0.00000
 FOOT 0.0000 0.0284 0.0540 0.0741 0.0870 0.0914 0.0870 0.0741 0.0540 0.0284 0.0000 FOOT A3= 0.00000
 A2= 3.75674
 A1=-3.75674
 A0=-3.44720
 SLOPE 0.287267 -0.287267 SLOPE

BENT LINE : INTERSECTION POINT : FROM LAYOUT LINE : PROJECT COORDINATES BENT LINE : GIRDER LINE : ROADWAY
 DESCRIPTION : : : OFFSET ORDINATE : : NORTHING EASTING LENGTH FROM SKEW : : LENGTH FROM : CROSS-
 : : STATION OFFSET ELEVATION : : X Y : : Y-AXIS D M S : : REF LINE SLOPE

* HORIZONTAL CONTROL LINE * AT FINISHED GRADE

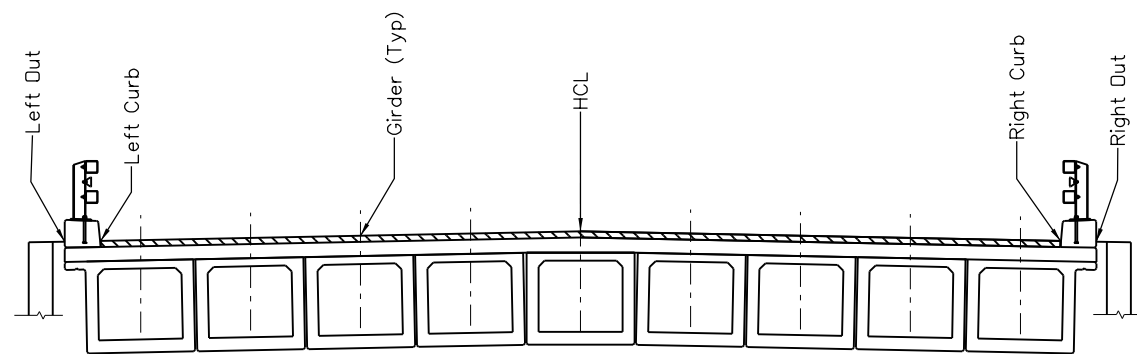
End	Station	Offset	Elevation	Elev+DL	X	Y	Northing	Easting	Bent Lnth	SKEW	Girder Lnth	CRS-SLP
End AS1	509+21.0000	0.0000	4328.1343	1	0.0000	-23.0000	340192.5076	755182.1950	0.0000	0 00 00.00	-23.0000	-0.020000
End WwA1	509+30.0000	0.0000	4328.0741	4	0.0000	-14.0000	340201.5011	755181.8530	0.0000	0 00 00.00	-14.0000	-0.020000
BFDiaph1	509+41.0000	0.0000	4327.9960	1	0.0000	-3.0000	340212.4932	755181.4350	0.0000	0 00 00.00	-3.0000	-0.020000
BFABut1	509+42.5000	0.0000	4327.9850	1	0.0000	-1.5000	340213.9921	755181.3780	0.0000	0 00 00.00	-1.5000	-0.020000
CL Brg A1	509+44.0000	0.0000	4327.9739	10	0.0000	0.0000	340215.4910	755181.3210	0.0000	0 00 00.00	0.0000	-0.020000
CL Brg A2	510+56.0000	0.0000	4326.8879	1	0.0000	112.0000	340327.4101	755177.0650	0.0000	0 00 00.00	112.0000	-0.020000
BFABut2	510+57.5000	0.0000	4326.8700	1	0.0000	113.5000	340328.9090	755177.0080	0.0000	0 00 00.00	113.5000	-0.020000
BFDiaph2	510+59.0000	0.0000	4326.8519	4	0.0000	115.0000	340330.4079	755176.9510	0.0000	0 00 00.00	115.0000	-0.020000
End WwA2	510+70.0000	0.0000	4326.7167	1	0.0000	126.0000	340341.4000	755176.5330	0.0000	0 00 00.00	126.0000	-0.020000
End AS2	510+79.0000	0.0000	4326.6024	1	0.0000	135.0000	340350.3935	755176.1910	0.0000	0 00 00.00	135.0000	-0.020000

Left Out

PARALLEL TO HORIZONTAL CONTROL

0.250000 FEET BELOW FINISHED GRADE

Bent Line	Station	Offset	Elevation	Elev+DL	X	Y	Northing	Easting	Bent Lnth	SKEW	Girder Lnth	CRS-SLP
End AS1	509+21.0000	-21.5000	4327.4543		-21.5000	-23.0000	340191.6906	755160.7105	-21.5000	0 00 00.00	-23.0000	-0.020000
End WwA1	509+30.0000	-21.5000	4327.3941		-21.5000	-14.0000	340200.6841	755160.3685	-21.5000	0 00 00.00	-14.0000	-0.020000
F-1	509+32.7500	-21.5000	4327.3750		-21.5000	-11.2500	340203.4321	755160.2640			-11.2500	-0.020000
F-2	509+35.5000	-21.5000	4327.3557		-21.5000	-8.5000	340206.1801	755160.1595			-8.5000	-0.020000
F-3	509+38.2500	-21.5000	4327.3360		-21.5000	-5.7500	340208.9282	755160.0550			-5.7500	-0.020000
BFDiaph1	509+41.0000	-21.5000	4327.3160		-21.5000	-3.0000	340211.6762	755159.9505	-21.5000	0 00 00.00	-3.0000	-0.020000
BFABut1	509+42.5000	-21.5000	4327.3050		-21.5000	-1.5000	340213.1751	755159.8935	-21.5000	0 00 00.00	-1.5000	-0.020000
CL Brg A1	509+44.0000	-21.5000	4327.2939	327.2939	-21.5000	0.0000	340214.6740	755159.8365	-21.5000	0 00 00.00	0.0000	-0.020000
F-1	509+55.2000	-21.5000	4327.2080	327.2388	-21.5000	11.2000	340225.8659	755159.4109			11.2000	-0.020000
F-2	509+66.4000	-21.5000	4327.1171	327.1757	-21.5000	22.4000	340237.0578	755158.9853			22.4000	-0.020000
F-3	509+77.6000	-21.5000	4327.0212	327.1016	-21.5000	33.6000	340248.2497	755158.5597			33.6000	-0.020000
F-4	509+88.8000	-21.5000	4326.9202	327.0146	-21.5000	44.8000	340259.4416	755158.1341			44.8000	-0.020000
F-5	510+00.0000	-21.5000	4326.8141	326.9133	-21.5000	56.0000	340270.6336	755157.7085			56.0000	-0.020000
F-6	510+11.2000	-21.5000	4326.7030	326.7974	-21.5000	67.2000	340281.8255	755157.2829			67.2000	-0.020000
F-7	510+22.4000	-21.5000	4326.5868	326.6672	-21.5000	78.4000	340293.0174	755156.8573			78.4000	-0.020000
F-8	510+33.6000	-21.5000	4326.4656	326.5241	-21.5000	89.6000	340304.2093	755156.4317			89.6000	-0.020000
F-9	510+44.8000	-21.5000	4326.3393	326.3701	-21.5000	100.8000	340315.4012	755156.0061			100.8000	-0.020000
CL Brg A2	510+56.0000	-21.5000	4326.2079	326.2079	-21.5000	112.0000	340326.5931	755155.5805	-21.5000	0 00 00.00	112.0000	-0.020000
BFABut2	510+57.5000	-21.5000	4326.1900		-21.5000	113.5000	340328.0920	755155.5235	-21.5000	0 00 00.00	113.5000	-0.020000
BFDiaph2	510+59.0000	-21.5000	4326.1719		-21.5000	115.0000	340329.5909	755155.4665	-21.5000	0 00 00.00	115.0000	-0.020000
F-1	510+61.7500	-21.5000	4326.1386		-21.5000	117.7500	340332.3390	755155.3620			117.7500	-0.020000
F-2	510+64.5000	-21.5000	4326.1049		-21.5000	120.5000	340335.0870	755155.2575			120.5000	-0.020000
F-3	510+67.2500	-21.5000	4326.0709		-21.5000	123.2500	340337.8350	755155.1530			123.2500	-0.020000
End WwA2	510+70.0000	-21.5000	4326.0367		-21.5000	126.0000	340340.5830	755155.0485	-21.5000	0 00 00.00	126.0000	-0.020000
End AS2	510+79.0000	-21.5000	4325.9224		-21.5000	135.0000	340349.5765	755154.7065	-21.5000	0 00 00.00	135.0000	-0.020000



This information is relative to the final position of the bridge after moving operations. The contractor shall be responsible for adjusting all information for construction on the falsework.

Note: Elevations are at top of concrete deck 3 Inches below Finished Grade. Negative Roadway Cross Slope is Downwards from the Profile Grade Line. These Stations, Coordinates, Offsets and Lengths define the layout of the structure in a two dimensional horizontal plane. Elevations define the final grade of the finished concrete deck. Fabrication of structural components through the direct use of this information is not intended or advisable.

INITIALS	DESIGN	DATE	DETAIL	DATE	QUANTITY	DATE
By	SNH	11/22	MP	11/22	SNH	11/22
Checked By	JTK	11/22	SNH	11/22	JTK	11/22

All seals for this set of drawings are applied to the cover page(s)	Print Date: 2/27/2023	Sheet Revisions			Colorado Department of Transportation 120 North Riverview Road Sterling, CO 80751 Phone: 970-522-0481 FAX: 970-521-9729 Region 4	As Constructed No Revisions: Revised: Void:	BRIDGE DECK ELEVATIONS (SHEET 1 OF 3)				Project No./Code FBR R400-371/23010 FBR 061A-003/25447 Sheet Number
	File Name: 23010_D-25-EA_B29-32_DeckElev.dgn	Date:	Comments	Init.			Designer: S. Huson	Structure Numbers	D-25-EA		
	Horiz. Scale: 1:1 Vert. Scale: As Noted						Detailer: S. Huson	Sheet Subst: Bridge Subst Sheets: B29 of B32			
Unit Information 0222 Unit Leader Initials AAH				JTD							

jeremy_344018_PM.dwg \\pww.bentley.com\AECOM_DS20_NA-2019\Documents\606926605-CDDT_R4_Timber_BE (23010)\Bridges\Drawings\D-25-EA\23010_D-25-EA_B29-32_DeckElev.dgn

INITIALS
DESIGN DATE DATE QUANTITY DATE
By SNH 11/22 JTK 11/22
Checked By JTK 11/22 MP 11/22

jeremy_3:44:21 PM p:\a\ecomm-rq-pw.bentley.com\AECOM_DS20_NA_2019\Documents\60626605-CDDT_R4_Timber_BE_(23010)\Bridges\Drawings\25-EA-B29-32_DeckElev.dgn

Left Curb										Girder C															
PARALLEL TO HORIZONTAL CONTROL										PARALLEL TO HORIZONTAL CONTROL															
0.250000 FEET BELOW FINISHED GRADE										0.250000 FEET BELOW FINISHED GRADE															
BENT LINE	STATION	OFFSET	ELEVATION	ELEV+DL	X	Y	NORTHING	EASTING	BENT LNTH	SKEW	GIRDER LNTH	CRS-SLP	BENT LINE	STATION	OFFSET	ELEVATION	ELEV+DL	X	Y	NORTHING	EASTING	BENT LNTH	SKEW	GIRDER LNTH	CRS-SLP
End AS1	509+21.0000	-20.0000	4327.4843	-20.0000	-23.0000	-23.0000	340191.7476	755162.2094	-20.0000	0 00 00.00	-23.0000	-0.020000	End AS1	509+21.0000	-9.1670	4327.7010	-9.1670	-23.0000	-23.0000	340192.1593	755173.0346	-9.1670	0 00 00.00	-23.0000	-0.020000
End WMA1	509+30.0000	-20.0000	4327.4241	-20.0000	-14.0000	-14.0000	340200.7411	755161.8674	-20.0000	0 00 00.00	-14.0000	-0.020000	End WMA1	509+30.0000	-9.1670	4327.6407	-9.1670	-14.0000	-14.0000	340201.1528	755172.6926	-9.1670	0 00 00.00	-14.0000	-0.020000
F-1	509+32.7500	-20.0000	4327.4050	-20.0000	-11.2500	-11.2500	340203.4891	755161.7629	-20.0000	0 00 00.00	-11.2500	-0.020000	F-1	509+32.7500	-9.1670	4327.6217	-9.1670	-11.2500	-11.2500	340203.9008	755172.5881	-9.1670	0 00 00.00	-11.2500	-0.020000
F-2	509+35.5000	-20.0000	4327.3857	-20.0000	-8.5000	-8.5000	340206.2371	755161.6584	-20.0000	0 00 00.00	-8.5000	-0.020000	F-2	509+35.5000	-9.1670	4327.6023	-9.1670	-8.5000	-8.5000	340206.6488	755172.4836	-9.1670	0 00 00.00	-8.5000	-0.020000
F-3	509+38.2500	-20.0000	4327.3660	-20.0000	-5.7500	-5.7500	340208.9852	755161.5539	-20.0000	0 00 00.00	-5.7500	-0.020000	F-3	509+38.2500	-9.1670	4327.5826	-9.1670	-5.7500	-5.7500	340209.3968	755172.3791	-9.1670	0 00 00.00	-5.7500	-0.020000
BFDiaph1	509+41.0000	-20.0000	4327.3460	-20.0000	-3.0000	-3.0000	340211.7332	755161.4494	-20.0000	0 00 00.00	-3.0000	-0.020000	BFDiaph1	509+41.0000	-9.1670	4327.5627	-9.1670	-3.0000	-3.0000	340212.1448	755172.2746	-9.1670	0 00 00.00	-3.0000	-0.020000
BFAbut1	509+42.5000	-20.0000	4327.3350	-20.0000	-1.5000	-1.5000	340213.2321	755161.3924	-20.0000	0 00 00.00	-1.5000	-0.020000	BFAbut1	509+42.5000	-9.1670	4327.5517	-9.1670	-1.5000	-1.5000	340213.6437	755172.2176	-9.1670	0 00 00.00	-1.5000	-0.020000
CL Brg A1	509+44.0000	-20.0000	4327.3239	327.3239	0.0000	0.0000	340214.7319	755161.3354	-20.0000	0 00 00.00	0.0000	-0.020000	CL Brg A1	509+44.0000	-9.1670	4327.5405	327.5405	0.0000	0.0000	340215.1427	755172.1606	-9.1670	0 00 00.00	0.0000	-0.020000
F-1	509+55.2000	-20.0000	4327.2380	327.2688	-20.0000	11.2000	340225.9220	755160.9098	-20.0000	0 00 00.00	11.2000	-0.020000	F-1	509+55.2000	-9.1670	4327.4547	327.4831	-9.1670	11.2000	340226.3346	755171.7350	-9.1670	0 00 00.00	11.2000	-0.020000
F-2	509+66.4000	-20.0000	4327.1471	327.2057	-20.0000	22.4000	340237.1148	755160.4842	-20.0000	0 00 00.00	22.4000	-0.020000	F-2	509+66.4000	-9.1670	4327.3638	327.4178	-9.1670	22.4000	340237.5265	755171.3094	-9.1670	0 00 00.00	22.4000	-0.020000
F-3	509+77.6000	-20.0000	4327.0512	327.1316	-20.0000	33.6000	340248.3067	755160.0586	-20.0000	0 00 00.00	33.6000	-0.020000	F-3	509+77.6000	-9.1670	4327.2678	327.3420	-9.1670	33.6000	340248.7184	755170.8838	-9.1670	0 00 00.00	33.6000	-0.020000
F-4	509+88.8000	-20.0000	4326.9502	327.0446	-20.0000	44.8000	340259.4586	755159.6330	-20.0000	0 00 00.00	44.8000	-0.020000	F-4	509+88.8000	-9.1670	4327.1668	327.2538	-9.1670	44.8000	340259.9103	755170.4582	-9.1670	0 00 00.00	44.8000	-0.020000
F-5	510+00.0000	-20.0000	4326.8441	326.9433	-20.0000	56.0000	340270.6906	755159.2074	-20.0000	0 00 00.00	56.0000	-0.020000	F-5	510+00.0000	-9.1670	4327.0608	327.1522	-9.1670	56.0000	340271.1022	755170.0326	-9.1670	0 00 00.00	56.0000	-0.020000
F-6	510+11.2000	-20.0000	4326.7330	326.8274	-20.0000	67.2000	340281.8625	755158.7818	-20.0000	0 00 00.00	67.2000	-0.020000	F-6	510+11.2000	-9.1670	4326.9497	327.0366	-9.1670	67.2000	340282.2941	755169.6070	-9.1670	0 00 00.00	67.2000	-0.020000
F-7	510+22.4000	-20.0000	4326.6168	326.6972	-20.0000	78.4000	340293.0744	755158.3562	-20.0000	0 00 00.00	78.4000	-0.020000	F-7	510+22.4000	-9.1670	4326.8335	326.9076	-9.1670	78.4000	340293.4860	755169.1814	-9.1670	0 00 00.00	78.4000	-0.020000
F-8	510+33.6000	-20.0000	4326.4956	326.5541	-20.0000	89.6000	340304.2663	755157.9306	-20.0000	0 00 00.00	89.6000	-0.020000	F-8	510+33.6000	-9.1670	4326.7122	326.7662	-9.1670	89.6000	340304.6779	755168.7558	-9.1670	0 00 00.00	89.6000	-0.020000
F-9	510+44.8000	-20.0000	4326.3693	326.4091	-20.0000	100.8000	340315.4582	755157.5050	-20.0000	0 00 00.00	100.8000	-0.020000	F-9	510+44.8000	-9.1670	4326.5860	326.6143	-9.1670	100.8000	340315.8699	755168.3302	-9.1670	0 00 00.00	100.8000	-0.020000
CL Brg A2	510+56.0000	-20.0000	4326.2379	326.2379	-20.0000	112.0000	340326.6501	755157.0794	-20.0000	0 00 00.00	112.0000	-0.020000	CL Brg A2	510+56.0000	-9.1670	4326.4546	326.4546	-9.1670	112.0000	340327.0618	755167.9046	-9.1670	0 00 00.00	112.0000	-0.020000
BFAbut2	510+57.5000	-20.0000	4326.2200	-20.0000	-113.5000	-113.5000	340328.1490	755157.0224	-20.0000	0 00 00.00	-113.5000	-0.020000	BFAbut2	510+57.5000	-9.1670	4326.4366	-20.0000	-113.5000	-113.5000	340328.5607	755167.8476	-9.1670	0 00 00.00	-113.5000	-0.020000
BFDiaph2	510+59.0000	-20.0000	4326.2019	-20.0000	-115.0000	-115.0000	340329.6479	755156.9654	-20.0000	0 00 00.00	-115.0000	-0.020000	BFDiaph2	510+59.0000	-9.1670	4326.4186	-20.0000	-115.0000	-115.0000	340330.0596	755167.7906	-9.1670	0 00 00.00	-115.0000	-0.020000
F-1	510+61.7500	-20.0000	4326.1686	-20.0000	-117.7500	-117.7500	340332.3960	755156.8609	-20.0000	0 00 00.00	-117.7500	-0.020000	F-1	510+61.7500	-9.1670	4326.3852	-20.0000	-117.7500	-117.7500	340332.8076	755167.6861	-9.1670	0 00 00.00	-117.7500	-0.020000
F-2	510+64.5000	-20.0000	4326.1349	-20.0000	-120.5000	-120.5000	340335.1440	755156.7564	-20.0000	0 00 00.00	-120.5000	-0.020000	F-2	510+64.5000	-9.1670	4326.3516	-20.0000	-120.5000	-120.5000	340335.5556	755167.5816	-9.1670	0 00 00.00	-120.5000	-0.020000
F-3	510+67.2500	-20.0000	4326.1009	-20.0000	-123.2500	-123.2500	340337.8920	755156.6519	-20.0000	0 00 00.00	-123.2500	-0.020000	F-3	510+67.2500	-9.1670	4326.3176	-20.0000	-123.2500	-123.2500	340338.3036	755167.4771	-9.1670	0 00 00.00	-123.2500	-0.020000
End WMA2	510+70.0000	-20.0000	4326.0667	-20.0000	-126.0000	-126.0000	340340.6400	755156.5474	-20.0000	0 00 00.00	-126.0000	-0.020000	End WMA2	510+70.0000	-9.1670	4326.2833	-20.0000	-126.0000	-126.0000	340341.0516	755167.3726	-9.1670	0 00 00.00	-126.0000	-0.020000
End AS2	510+79.0000	-20.0000	4325.9524	-20.0000	-135.0000	-135.0000	340349.6335	755156.2054	-20.0000	0 00 00.00	-135.0000	-0.020000	End AS2	510+79.0000	-9.1670	4326.1690	-20.0000	-135.0000	-135.0000	340350.0451	755167.0306	-9.1670	0 00 00.00	-135.0000	-0.020000

Girder A										Girder D															
PARALLEL TO HORIZONTAL CONTROL										PARALLEL TO HORIZONTAL CONTROL															
0.250000 FEET BELOW FINISHED GRADE										0.250000 FEET BELOW FINISHED GRADE															
BENT LINE	STATION	OFFSET	ELEVATION	ELEV+DL	X	Y	NORTHING	EASTING	BENT LNTH	SKEW	GIRDER LNTH	CRS-SLP	BENT LINE	STATION	OFFSET	ELEVATION	ELEV+DL	X	Y	NORTHING	EASTING	BENT LNTH	SKEW	GIRDER LNTH	CRS-SLP
End AS1	509+21.0000	-18.3330	4327.5176	-18.3330	-18.3330	-23.0000	340191.8110	755163.8752	-18.3330	0 00 00.00	-23.0000	-0.020000	End AS1	509+21.0000	-4.5830	4327.7926	-4.5830	-23.0000	-23.0000	340192.3335	755177.6153	-4.5830	0 00 00.00	-23.0000	-0.020000
End WMA1	509+30.0000	-18.3330	4327.4574	-18.3330	-14.0000	-14.0000	340200.8045	755163.5332	-18.3330	0 00 00.00	-14.0000	-0.020000	End WMA1	509+30.0000	-4.5830	4327.7324	-4.5830	-14.0000	-14.0000	340201.3270	755177.2733	-4.5830	0 00 00.00	-14.0000	-0.020000
F-1	509+32.7500	-18.3330	4327.4384	-18.3330	-11.2500	-11.2500	340203.5525	755163.4287	-18.3330	0 00 00.00	-11.2500	-0.020000	F-1	509+32.7500	-4.5830	4327.7134	-4.5830	-11.2500	-11.2500	340204.0750	755177.1688	-4.5830	0 00 00.00	-11.2500	-0.020000
F-2	509+35.5000	-18.3330	4327.4190	-18.3330	-8.5000	-8.5000	340206.3005	755163.3242	-18.3330	0 00 00.00	-8.5000	-0.020000	F-2	509+35.5000	-4.5830	4327.6940	-4.5830	-8.5000	-8.5000	340206.8230	755177.0643	-4.5830	0 00 00.00	-8.5000	-0.020000
F-3	509+38.2500	-18.3330	4327.3993	-18.3330	-5.7500	-5.7500	340209.0485	755163.2197	-18.3330	0 00 00.00	-5.7500	-0.020000	F-3	509+38.2500	-4.5830	4327.6743	-4.5830	-5.7500	-5.7500	340209.5710	755176.9598	-4.5830	0 00 00.00	-5.7500	-0.020000
BFDiaph1	509+41.0000	-18.3330	4327.3794	-18.3330	-3.0000	-3.0000	340211.7965	755163.1152	-18.3330	0 00 00.00	-3.0000	-0.020000	BFDiaph1	509+41.0000	-4.5830	4327.6544	-4.5830	-3.0000	-3.0000	340212.3190	755176.8553	-4.5830	0 00 00.00	-3.0000	-0.020000
BFAbut1	509+42.5000	-18.3330	4327.3683	-18.3330	-1.5000	-1.5000	340213.2954	755163.0582	-18.3330	0 00 00.00	-1.5000	-0.020000	BFAbut1	509+42.5000	-4.5830	4327.6333	-4.5830	-1.5000	-1.5000	340213.8179	755176.7983	-4.5830	0 00 00.00	-1.5000	-0.020000
CL Brg A1	509+44.0000	-18.3330	4327.3572	327.3572	-18.3330	0.0000	340214.7943	755163.0012	-18.3330	0 00 00.00	0.0000	-0.020000	CL Brg A1	509+44.0000	-4.5830	4327.6122	327.6122	-18.3330	0.0000	340215.3168	755176.7413	-4.5830	0 00 00.00	0.0000	-0.020000
F-1	509+55.2000	-18.3330	4327.2714	327.3022	-18.3330	11.2000	340225.9863	755162.5756	-18.333																

INITIALS	DESIGN	DATE	DETAIL	DATE	QUANTITY	DATE
By	SNH	11/22	SNH	11/22	JTK	11/22
Checked By	JTK	11/22	MP	11/22	JTK	11/22

jeremy_3:45:30 PM p:\aecom-tran-pw-bentley.com\ACDM_DS20_NA_2019\Documents\60626605-CDDT_R4_Timber_BE_(23010)\Bridge\Drawings\D-25-EA-B29-32_DeckElev.dgn

Girder F PARALLEL TO HORIZONTAL CONTROL 0.250000 FEET BELOW FINISHED GRADE											Girder I PARALLEL TO HORIZONTAL CONTROL 0.250000 FEET BELOW FINISHED GRADE																
BENT LINE	STATION	OFFSET	ELEVATION	ELEV+DL	X	Y	NORTHING	EASTING	BENT LNTH	SKEW	GIRDER LNTH	CRS-SLP	BENT LINE	STATION	OFFSET	ELEVATION	ELEV+DL	X	Y	NORTHING	EASTING	BENT LNTH	SKEW	GIRDER LNTH	CRS-SLP		
End AS1	509+21.0000	4.5830	4327.7926		4.5830	-23.0000	340192.6818	755186.7747	4.5830	0 00 00.00	-23.0000	-0.020000	End AS1	509+21.0000	18.3330	4327.5176		18.3330	-23.0000	340193.2043	755200.5148	18.3330	0 00 00.00	-23.0000	-0.020000		
End WMA1	509+30.0000	4.5830	4327.7324		4.5830	-14.0000	340201.6753	755186.4327	4.5830	0 00 00.00	-14.0000	-0.020000	End WMA1	509+30.0000	18.3330	4327.4574		18.3330	-14.0000	340202.1978	755200.1728	18.3330	0 00 00.00	-14.0000	-0.020000		
F-1	509+32.7500	4.5830	4327.7134		4.5830	-11.2500	340204.4233	755186.3282					F-1	509+32.7500	18.3330	4327.4384		18.3330	-11.2500	340204.9458	755200.0683					-11.2500	-0.020000
F-2	509+35.5000	4.5830	4327.6940		4.5830	-8.5000	340207.1713	755186.2237					F-2	509+35.5000	18.3330	4327.4190		18.3330	-8.5000	340207.6938	755199.9638					-8.5000	-0.020000
F-3	509+38.2500	4.5830	4327.6743		4.5830	-5.7500	340209.9193	755186.1192					F-3	509+38.2500	18.3330	4327.3993		18.3330	-5.7500	340210.4418	755199.8593					-5.7500	-0.020000
BFDiaph1	509+41.0000	4.5830	4327.6544		4.5830	-3.0000	340212.6673	755186.0147	4.5830	0 00 00.00	-3.0000	-0.020000	BFDiaph1	509+41.0000	18.3330	4327.3794		18.3330	-3.0000	340213.1898	755199.7548	18.3330	0 00 00.00	-3.0000	-0.020000		
BFAbut1	509+42.5000	4.5830	4327.6433		4.5830	-1.5000	340214.1662	755185.9577	4.5830	0 00 00.00	-1.5000	-0.020000	BFAbut1	509+42.5000	18.3330	4327.3683		18.3330	-1.5000	340214.6887	755199.6978	18.3330	0 00 00.00	-1.5000	-0.020000		
CL Brg A1	509+44.0000	4.5830	4327.6322	327.6322	4.5830	0.0000	340215.6652	755185.9087	4.5830	0 00 00.00	0.0000	-0.020000	CL Brg A1	509+44.0000	18.3330	4327.3572	327.3572	18.3330	0.0000	340216.1877	755199.6408	18.3330	0 00 00.00	0.0000	-0.020000		
F-1	509+55.2000	4.5830	4327.5464	327.5748	4.5830	11.2000	340226.8471	755185.4751					F-1	509+55.2000	18.3330	4327.2714	327.3022	18.3330	11.2000	340227.3796	755199.2152					11.2000	-0.020000
F-2	509+66.4000	4.5830	4327.4555	327.5095	4.5830	22.4000	340238.0470	755185.0495					F-2	509+66.4000	18.3330	4327.1805	327.2390	18.3330	22.4000	340238.5715	755198.7896					22.4000	-0.020000
F-3	509+77.6000	4.5830	4327.3595	327.4337	4.5830	33.6000	340249.2409	755184.6239					F-3	509+77.6000	18.3330	4327.0845	327.1650	18.3330	33.6000	340249.7634	755198.3640					33.6000	-0.020000
F-4	509+88.8000	4.5830	4327.2585	327.3455	4.5830	44.8000	340260.4328	755184.1983					F-4	509+88.8000	18.3330	4326.9835	327.0779	18.3330	44.8000	340260.9553	755197.9384					44.8000	-0.020000
F-5	510+00.0000	4.5830	4327.1525	327.2438	4.5830	56.0000	340271.6247	755183.7727					F-5	510+00.0000	18.3330	4326.8775	326.9766	18.3330	56.0000	340272.1472	755197.5128					56.0000	-0.020000
F-6	510+11.2000	4.5830	4327.0413	327.1283	4.5830	67.2000	340282.8166	755183.3471					F-6	510+11.2000	18.3330	4326.7663	326.8607	18.3330	67.2000	340283.3391	755197.0872					67.2000	-0.020000
F-7	510+22.4000	4.5830	4326.9252	326.9993	4.5830	78.4000	340294.0085	755182.9215					F-7	510+22.4000	18.3330	4326.6502	326.7306	18.3330	78.4000	340294.5310	755196.6616					78.4000	-0.020000
F-8	510+33.6000	4.5830	4326.8039	326.8579	4.5830	89.6000	340305.2904	755182.4959					F-8	510+33.6000	18.3330	4326.5289	326.5875	18.3330	89.6000	340305.7229	755196.2360					89.6000	-0.020000
F-9	510+44.8000	4.5830	4326.6776	326.7060	4.5830	100.8000	340316.3924	755182.0703					F-9	510+44.8000	18.3330	4326.4026	326.4334	18.3330	100.8000	340316.9149	755195.8104					100.8000	-0.020000
CL Brg A2	510+56.0000	4.5830	4326.5463	326.5463	4.5830	112.0000	340327.5843	755181.6447	4.5830	0 00 00.00	112.0000	-0.020000	CL Brg A2	510+56.0000	18.3330	4326.2713	326.2713	18.3330	112.0000	340328.1068	755195.3848			18.3330	0 00 00.00	112.0000	-0.020000
BFAbut2	510+57.5000	4.5830	4326.5283		4.5830	113.5000	340329.0832	755181.5877	4.5830	0 00 00.00	113.5000	-0.020000	BFAbut2	510+57.5000	18.3330	4326.2533		18.3330	113.5000	340329.6057	755195.3278			18.3330	0 00 00.00	113.5000	-0.020000
BFDiaph2	510+59.0000	4.5830	4326.5102		4.5830	115.0000	340330.5821	755181.5307	4.5830	0 00 00.00	115.0000	-0.020000	BFDiaph2	510+59.0000	18.3330	4326.2352		18.3330	115.0000	340331.1046	755195.2708			18.3330	0 00 00.00	115.0000	-0.020000
F-1	510+61.7500	4.5830	4326.4769		4.5830	117.7500	340333.3301	755181.4262					F-1	510+61.7500	18.3330	4326.2199		18.3330	117.7500	340333.8526	755195.1663					117.7500	-0.020000
F-2	510+64.5000	4.5830	4326.4432		4.5830	120.5000	340336.0781	755181.3217					F-2	510+64.5000	18.3330	4326.1682		18.3330	120.5000	340336.6006	755195.0618					120.5000	-0.020000
F-3	510+67.2500	4.5830	4326.4093		4.5830	123.2500	340338.8261	755181.2172					F-3	510+67.2500	18.3330	4326.1343		18.3330	123.2500	340339.3486	755194.9573					123.2500	-0.020000
End WMA2	510+70.0000	4.5830	4326.3759		4.5830	126.0000	340341.5741	755181.1127	4.5830	0 00 00.00	126.0000	-0.020000	End WMA2	510+70.0000	18.3330	4326.1009		18.3330	126.0000	340342.0966	755194.8528			18.3330	0 00 00.00	126.0000	-0.020000
End AS2	510+79.0000	4.5830	4326.2607		4.5830	135.0000	340350.5676	755180.7707	4.5830	0 00 00.00	135.0000	-0.020000	End AS2	510+79.0000	18.3330	4325.9857		18.3330	135.0000	340351.0901	755194.5108			18.3330	0 00 00.00	135.0000	-0.020000

Girder G PARALLEL TO HORIZONTAL CONTROL 0.250000 FEET BELOW FINISHED GRADE											Right Curb PARALLEL TO HORIZONTAL CONTROL 0.250000 FEET BELOW FINISHED GRADE																
BENT LINE	STATION	OFFSET	ELEVATION	ELEV+DL	X	Y	NORTHING	EASTING	BENT LNTH	SKEW	GIRDER LNTH	CRS-SLP	BENT LINE	STATION	OFFSET	ELEVATION	ELEV+DL	X	Y	NORTHING	EASTING	BENT LNTH	SKEW	GIRDER LNTH	CRS-SLP		
End AS1	509+21.0000	9.1670	4327.7010		9.1670	-23.0000	340192.8560	755191.3554	9.1670	0 00 00.00	-23.0000	-0.020000	End AS1	509+21.0000	20.0000	4327.4843		20.0000	-23.0000	340193.2676	755202.1806	20.0000	0 00 00.00	-23.0000	-0.020000		
End WMA1	509+30.0000	9.1670	4327.6407		9.1670	-14.0000	340201.8495	755191.0134	9.1670	0 00 00.00	-14.0000	-0.020000	End WMA1	509+30.0000	20.0000	4327.4241		20.0000	-14.0000	340202.2611	755201.8386	20.0000	0 00 00.00	-14.0000	-0.020000		
F-1	509+32.7500	9.1670	4327.6217		9.1670	-11.2500	340204.5975	755190.9089					F-1	509+32.7500	20.0000	4327.4050		20.0000	-11.2500	340205.0091	755201.7341					-11.2500	-0.020000
F-2	509+35.5000	9.1670	4327.6023		9.1670	-8.5000	340207.3455	755190.8044					F-2	509+35.5000	20.0000	4327.3857		20.0000	-8.5000	340207.7571	755201.6296					-8.5000	-0.020000
F-3	509+38.2500	9.1670	4327.5826		9.1670	-5.7500	340210.0935	755190.6999					F-3	509+38.2500	20.0000	4327.3660		20.0000	-5.7500	340210.5052	755201.5251					-5.7500	-0.020000
BFDiaph1	509+41.0000	9.1670	4327.5627		9.1670	-3.0000	340212.8415	755190.5954	9.1670	0 00 00.00	-3.0000	-0.020000	BFDiaph1	509+41.0000	20.0000	4327.3460		20.0000	-3.0000	340213.2532	755201.4206	20.0000	0 00 00.00	-3.0000	-0.020000		
BFAbut1	509+42.5000	9.1670	4327.5517		9.1670	-1.5000	340214.3404	755190.5384	9.1670	0 00 00.00	-1.5000	-0.020000	BFAbut1	509+42.5000	20.0000	4327.3259		20.0000	-1.5000	340214.7521	755201.3636	20.0000	0 00 00.00	-1.5000	-0.020000		
CL Brg A1	509+44.0000	9.1670	4327.5405	327.5405	9.1670	0.0000	340215.8393	755190.4814	9.1670	0 00 00.00	0.0000	-0.020000	CL Brg A1	509+44.0000	20.0000	4327.3239	327.3239	20.0000	0.0000	340216.2510	755201.3066	20.0000	0 00 00.00	0.0000	-0.020000		
F-1	509+55.2000	9.1670	4327.4547	327.4831	9.1670	11.2000	340227.0313	755190.0558					F-1	509+55.2000	20.0000	432											

jeremy_3:59:28 PM p:\w\secom-no-pw.bentley.com\AECOM_DS20_NA_2019\Documents\60626605-CDDT_R4_Timber_BE (23010)\Bridge\Drawings\D-25-EA-B29-32_DeckElev.dgn

INITIALS	DESIGN	DATE	DETAIL	DATE	QUANTITY	DATE
By	SNH	11/22	MP	11/22	SNH	11/22
Checked By	JTK	11/22	SNH	11/22	JTK	11/22

STATION	OFFSET	ELEVATION	CROSS-SLOPE	* ROADWAY APPROACHES *	STATION	OFFSET	ELEVATION	CROSS-SLOPE
507+90	-20.0000	4328.2415	-0.020000		510+60	-20.0000	4326.4398	-0.020000
508+00	-20.0000	4328.2272	-0.020000		510+70	-20.0000	4326.3167	-0.020000
508+10	-20.0000	4328.2088	-0.020000		510+80	-20.0000	4326.1895	-0.020000
508+20	-20.0000	4328.1864	-0.020000		510+90	-20.0000	4326.0583	-0.020000
508+30	-20.0000	4328.1600	-0.020000		511+00	-20.0000	4325.9230	-0.020000
508+40	-20.0000	4328.1295	-0.020000		511+10	-20.0000	4325.7837	-0.020000
508+50	-20.0000	4328.0950	-0.020000		511+20	-20.0000	4325.6404	-0.020000
508+60	-20.0000	4328.0565	-0.020000		511+30	-20.0000	4325.4931	-0.020000
508+70	-20.0000	4328.0140	-0.020000		511+40	-20.0000	4325.3417	-0.020000
508+80	-20.0000	4327.9674	-0.020000		511+50	-20.0000	4325.1863	-0.020000
508+90	-20.0000	4327.9168	-0.020000		511+60	-20.0000	4325.0269	-0.020000
509+00	-20.0000	4327.8622	-0.020000		511+70	-20.0000	4324.8634	-0.020000
509+10	-20.0000	4327.8035	-0.020000		511+80	-20.0000	4324.6959	-0.020000
509+20	-20.0000	4327.7408	-0.020000		511+90	-20.0000	4324.5244	-0.020000
509+30	-20.0000	4327.6741	-0.020000		512+00	-20.0000	4324.3488	-0.020000
509+40	-20.0000	4327.6033	-0.020000		512+10	-20.0000	4324.1693	-0.020000
507+90	-12.0000	4328.4015	-0.020000		510+60	-12.0000	4326.5998	-0.020000
508+00	-12.0000	4328.3872	-0.020000		510+70	-12.0000	4326.4767	-0.020000
508+10	-12.0000	4328.3688	-0.020000		510+80	-12.0000	4326.3495	-0.020000
508+20	-12.0000	4328.3464	-0.020000		510+90	-12.0000	4326.2183	-0.020000
508+30	-12.0000	4328.3200	-0.020000		511+00	-12.0000	4326.0830	-0.020000
508+40	-12.0000	4328.2895	-0.020000		511+10	-12.0000	4325.9437	-0.020000
508+50	-12.0000	4328.2550	-0.020000		511+20	-12.0000	4325.8004	-0.020000
508+60	-12.0000	4328.2165	-0.020000		511+30	-12.0000	4325.6531	-0.020000
508+70	-12.0000	4328.1740	-0.020000		511+40	-12.0000	4325.5017	-0.020000
508+80	-12.0000	4328.1274	-0.020000		511+50	-12.0000	4325.3463	-0.020000
508+90	-12.0000	4328.0768	-0.020000		511+60	-12.0000	4325.1869	-0.020000
509+00	-12.0000	4328.0222	-0.020000		511+70	-12.0000	4325.0234	-0.020000
509+10	-12.0000	4327.9635	-0.020000		511+80	-12.0000	4324.8559	-0.020000
509+20	-12.0000	4327.9008	-0.020000		511+90	-12.0000	4324.6844	-0.020000
509+30	-12.0000	4327.8341	-0.020000		512+00	-12.0000	4324.5088	-0.020000
509+40	-12.0000	4327.7633	-0.020000		512+10	-12.0000	4324.3293	-0.020000
507+90	0.0000	4328.6415			510+60	0.0000	4326.8398	
508+00	0.0000	4328.6272			510+70	0.0000	4326.7167	
508+10	0.0000	4328.6088			510+80	0.0000	4326.5895	
508+20	0.0000	4328.5864			510+90	0.0000	4326.4583	
508+30	0.0000	4328.5600			511+00	0.0000	4326.3230	
508+40	0.0000	4328.5295			511+10	0.0000	4326.1837	
508+50	0.0000	4328.4950			511+20	0.0000	4326.0404	
508+60	0.0000	4328.4565			511+30	0.0000	4325.8931	
508+70	0.0000	4328.4140			511+40	0.0000	4325.7417	
508+80	0.0000	4328.3674			511+50	0.0000	4325.5863	
508+90	0.0000	4328.3168			511+60	0.0000	4325.4269	
509+00	0.0000	4328.2622			511+70	0.0000	4325.2634	

STATION	OFFSET	ELEVATION	CROSS-SLOPE	* ROADWAY APPROACHES *	STATION	OFFSET	ELEVATION	CROSS-SLOPE
509+10	0.0000	4328.2035			511+80	0.0000	4325.0959	
509+20	0.0000	4328.1408			511+90	0.0000	4324.9244	
509+30	0.0000	4328.0741			512+00	0.0000	4324.7488	
509+40	0.0000	4328.0033			512+10	0.0000	4324.5693	
507+90	12.0000	4328.4015	-0.020000		510+60	12.0000	4326.5998	-0.020000
508+00	12.0000	4328.3872	-0.020000		510+70	12.0000	4326.4767	-0.020000
508+10	12.0000	4328.3688	-0.020000		510+80	12.0000	4326.3495	-0.020000
508+20	12.0000	4328.3464	-0.020000		510+90	12.0000	4326.2183	-0.020000
508+30	12.0000	4328.3200	-0.020000		511+00	12.0000	4326.0830	-0.020000
508+40	12.0000	4328.2895	-0.020000		511+10	12.0000	4325.9437	-0.020000
508+50	12.0000	4328.2550	-0.020000		511+20	12.0000	4325.8004	-0.020000
508+60	12.0000	4328.2165	-0.020000		511+30	12.0000	4325.6531	-0.020000
508+70	12.0000	4328.1740	-0.020000		511+40	12.0000	4325.5017	-0.020000
508+80	12.0000	4328.1274	-0.020000		511+50	12.0000	4325.3463	-0.020000
508+90	12.0000	4328.0768	-0.020000		511+60	12.0000	4325.1869	-0.020000
509+00	12.0000	4328.0222	-0.020000		511+70	12.0000	4325.0234	-0.020000
509+10	12.0000	4327.9635	-0.020000		511+80	12.0000	4324.8559	-0.020000
509+20	12.0000	4327.9008	-0.020000		511+90	12.0000	4324.6844	-0.020000
509+30	12.0000	4327.8341	-0.020000		512+00	12.0000	4324.5088	-0.020000
509+40	12.0000	4327.7633	-0.020000		512+10	12.0000	4324.3293	-0.020000
507+90	20.0000	4328.2415	-0.020000		510+60	20.0000	4326.4398	-0.020000
508+00	20.0000	4328.2272	-0.020000		510+70	20.0000	4326.3167	-0.020000
508+10	20.0000	4328.2088	-0.020000		510+80	20.0000	4326.1895	-0.020000
508+20	20.0000	4328.1864	-0.020000		510+90	20.0000	4326.0583	-0.020000
508+30	20.0000	4328.1600	-0.020000		511+00	20.0000	4325.9230	-0.020000
508+40	20.0000	4328.1295	-0.020000		511+10	20.0000	4325.7837	-0.020000
508+50	20.0000	4328.0950	-0.020000		511+20	20.0000	4325.6404	-0.020000
508+60	20.0000	4328.0565	-0.020000		511+30	20.0000	4325.4931	-0.020000
508+70	20.0000	4328.0140	-0.020000		511+40	20.0000	4325.3417	-0.020000
508+80	20.0000	4327.9674	-0.020000		511+50	20.0000	4325.1863	-0.020000
508+90	20.0000	4327.9168	-0.020000		511+60	20.0000	4325.0269	-0.020000
509+00	20.0000	4327.8622	-0.020000		511+70	20.0000	4324.8634	-0.020000
509+10	20.0000	4327.8035	-0.020000		511+80	20.0000	4324.6959	-0.020000
509+20	20.0000	4327.7408	-0.020000		511+90	20.0000	4324.5244	-0.020000
509+30	20.0000	4327.6741	-0.020000		512+00	20.0000	4324.3488	-0.020000
509+40	20.0000	4327.6033	-0.020000		512+10	20.0000	4324.1693	-0.020000



* THESE DRAWINGS ARE SCHEMATICS ONLY AND DO NOT NECESSARILY REFLECT THE ACTUAL BRIDGE LAYOUT.

All seals for this set of drawings are applied to the cover page(s)	Print Date: 2/27/2023	Sheet Revisions		Colorado Department of Transportation 120 North Riverview Road Sterling, CO 80751 Phone: 970-522-0481 FAX: 970-521-9729 Region 4	As Constructed	ROADWAY APPROACHES			Project No./Code	
	File Name: 23010_D-25-EA_B29-32_DeckElev.dgn	Date:	Comments		Init.	No Revisions:				FBR R400-371/23010
	Horiz. Scale: 1:1 Vert. Scale: As Noted					Revised:	Designer: S. Huson	Structure Numbers	D-25-EA	FBR 061A-003/25447
	Unit Information 0222 Unit Leader Initials AAH					Void:	Detailer: S. Huson	Subset Sheets: B32 of B32	Sheet Number	