

STATE OF MAINE DEPARTMENT OF TRANSPORTATION



SPECIFICATIONS

Design: Load and Resistance Factor Design per AASHTO LRFD Bridge Design Specifications, Eighth Edition 2017.

DESIGN LOADING

Live Load HL - 93 Modified for Strength I

TRAFFIC DATA

Current (2019) AADT 670
 Future (2039) AADT 800
 DHV - % of AADT 12%
 Design Hour Volume 96
 Heavy Trucks (% of AADT) 22%
 Heavy Trucks (% of DHV) 22%
 Directional Distribution (% of DHV) 54%
 18 kip Equivalent P 2.0 115
 18 kip Equivalent P 2.5 110
 Design Speed (mph) 50 mph

HYDROLOGIC DATA

Drainage Area 10.5 sq mi
 Design Discharge (Q50) 729.4 cfs
 Check Discharge (Q100) 855.0 cfs
 Headwater Elevation (Q1.1) 100.59 ft
 Headwater Elevation (Q25) 103.42 ft
 Headwater Elevation (Q50) 103.71 ft
 Headwater Elevation (Q100) 104.03 ft
 Discharge Velocity (Q1.1) 2.33 fps
 Discharge Velocity (Q50) 4.85 fps
 Discharge Velocity (Q100) 5.24 fps

MATERIALS

Concrete:
 Curbs Class "LP"
 Precast Class "P"
 All Other Class "A"
 Reinforcing:
 Plain Reinforcing Steel ASTM A 615, Grade 60
 Stainless Steel Reinforcing ASTM A955 Grade 75 (S.S.)
 Glass Fiber Reinforced Polymer ASTM D7957
 Prestressing Strands AASHTO M 203 (ASTM A 416),
 Grade 270, Low Relaxation

BASIC DESIGN STRESSES

Concrete
 Class "A" $f'c = 4,000$ psi
 Class "LP" $f'c = 5,000$ psi
 Precast Concrete $f'c = 8,000$ psi
 $f'ci = 6,500$ psi
 Reinforcing:
 Plain Reinforcing Steel $f_y = 60,000$ psi
 Stainless Steel Reinforcing $f_y = 75,000$ psi
 Glass Fiber Reinforced Polymer $f_{fu} = 100,000$ psi
 Minimum Elastic Modulus: $E_f = 6,500,000$ psi
 Minimum Nominal Design Tensile Strain: $\epsilon_{fu} = 1.1\%$
 Prestressing Strand $F_u = 270,000$ psi

CHERRYFIELD WASHINGTON COUNTY SCHOODIC BRIDGE OVER SCHOODIC BROOK ROUTE 193 FEDERAL AID PROJECT NO. 2223000 PROJECT LENGTH 0.090 mi. BRIDGE NO. 3649

LIST OF DRAWINGS

Title Sheet	1
Estimated Quantities & General Construction Notes	2
General Plan	3
Profile	4
Boring Location Plan	5
Interpretive Subsurface Profile	6
Boring Logs	7-8
Highway Approach Cross - Sections	9-15
Abutment Nos. 1 and 2	16
Abutment Nos. 1 and 2 Reinforcement	17-18
Precast NEXT Beam	19-20
Superstructure	21
Superstructure Details	22
Reinforcing Steel Schedule	23
Right of Way Map	24

UTILITIES

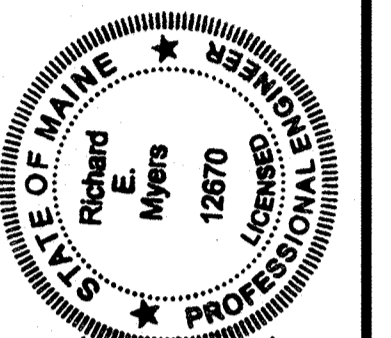
Charter Communications - Ericson Estes
Versa

MAINTENANCE OF TRAFFIC

Maintain one lane of alternating one-way traffic using traffic signals with a special detour.

PROJECT LOCATION	Schoodic Bridge (#3649) over Schoodic Brook. Located 0.32 of a mile south of the Deblois town line. Lat./Long. 44°41'05.71" N 67°56'59.4" W
PROGRAM AREA	Highway Bridges-Traditional
OUTLINE OF WORK	Bridge Replacement

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
APPROVED
COMMISSIONER: [Signature]
CHIEF ENGINEER: [Signature]



SIGNATURE: [Signature]
12670
P.E. NUMBER
JULY 30, 2020
DATE

PROGRAM	BRIDGE	PROJECT INFORMATION
PROJECT MANAGER	M. PARLIN	
DESIGNER	B. BARTLETT	
CONSULTANT		
PROJECT RESIDENT		
CONTRACTOR		
		PROJECT COMPLETION DATE

CHERRYFIELD
SCHOODIC BRIDGE
TITLE SHEET

SHEET NUMBER
1
OF 24

Date: 7/29/2020
Username: David.Shaw
Division: BRIDGE
Filename: \\00\BRIDGE\MSTA\001_Title.dgn

WIN 022230.00

2223000

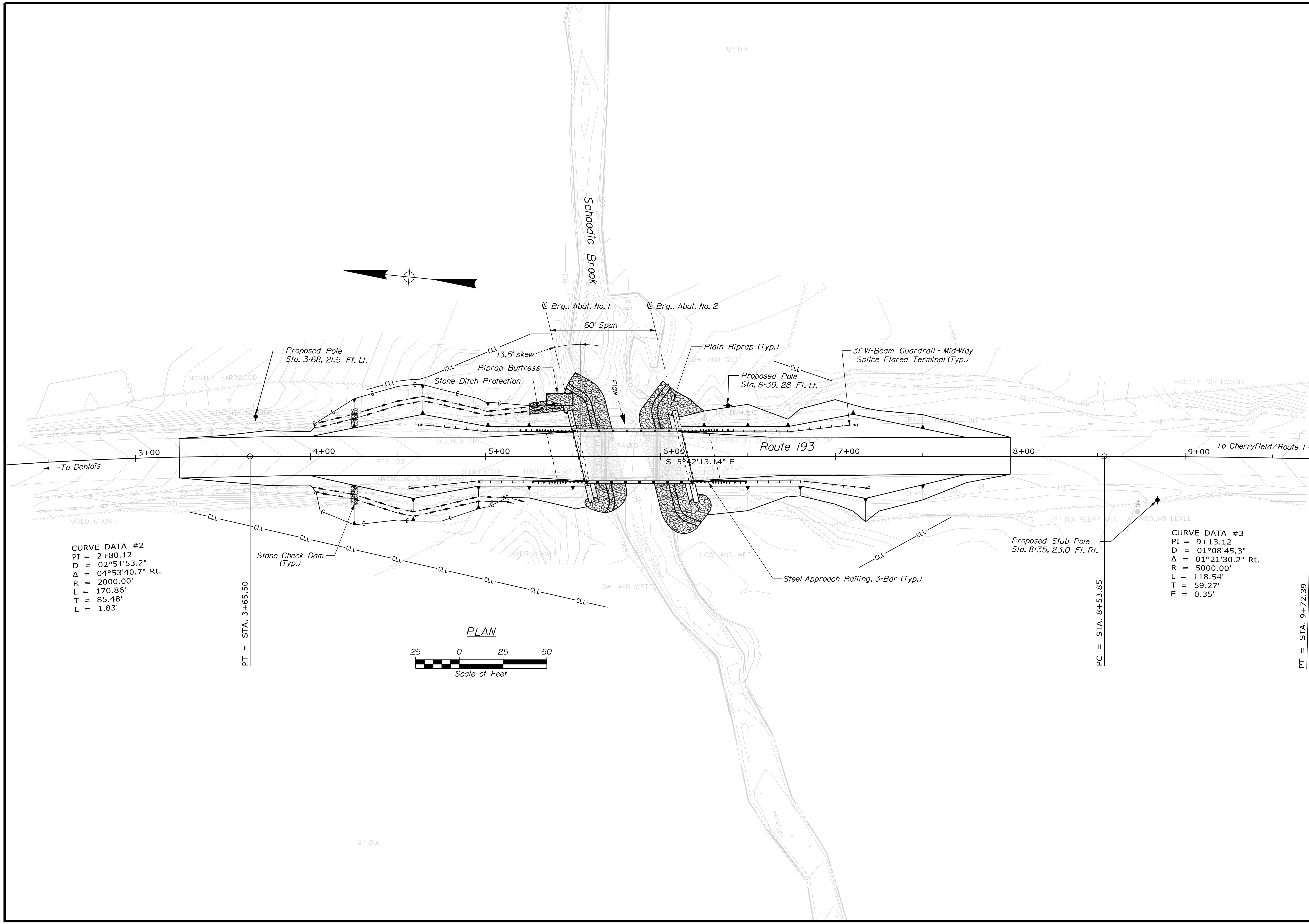
ESTIMATED QUANTITIES			
ITEM NO.	DESCRIPTION	QUANTITY	UNIT
202.19	REMOVING EXISTING BRIDGE (140 CY)	1	LS
202.202	REMOVING PAVEMENT SURFACE	310	SY
203.20	COMMON EXCAVATION	650	CY
203.24	COMMON BORROW	80	CY
203.25	GRANULAR BORROW	370	CY
206.082	STRUCTURAL EARTH EXCAVATION - MAJOR STRUCTURES	700	CY
304.10	AGGREGATE SUBBASE COURSE - GRAVEL	550	CY
403.208	HOT MIX ASPHALT 12.5 MM HMA SURFACE	125	T
403.213	HOT MIX ASPHALT 12.5 MM BASE	163	T
409.15	BITUMINOUS TACK COAT - APPLIED	51	G
461.131	TEMPORARY PAVEMENT	110	T
501.231	DYNAMIC LOADING TEST	2	EA
501.50	STEEL H-BEAM PILES 89 LBS/FT, DELIVERED	358	LF
501.501	STEEL H-BEAM PILES 89 LBS/FT, IN PLACE	358	LF
501.90	PILE TIPS	8	EA
501.91	PILE SPLICES	4	EA
501.92	PILE DRIVING EQUIPMENT MOBILIZATION	1	LS
502.219	STRUCTURAL CONC, ABUT'S AND RETAINING WALLS (85 CY)	1	LS
502.261	STRUCTURAL CONC, RDWAY & SK SLAB ON CONC. BRID GE (74 CY)	1	LS
502.291	SAW CUT GROOVING (1740 SF)	1	LS
502.31	STRUCTURAL CONCRETE APPROACH SLABS (21 CY)	1	LS
502.49	STRUCTURAL CONCRETE CURBS AND SIDEWALKS (6 CY)	1	LS
503.12	REINFORCING STEEL, FABRICATED AND DELIVERED	18800	LB
503.13	REINFORCING STEEL, PLACING	18800	LB
503.26	STAINLESS STEEL REINFORCEMENT - FABRICATED & DELIVERED	5040	LB
503.27	STAINLESS STEEL REINFORCEMENT - PLACING	5040	LB
507.0821	STEEL BRIDGE RAILING, 3 BAR (158 LF)	1	LS
510.10	SPECIAL DET 15 FOOT WIDE VEHIC. & PED. TRAF FIC NOT SEP.	1	LS
511.07	COFFERDAM: ABUTMENT 1	1	LS
511.07	COFFERDAM: ABUTMENT 2	1	LS
515.21	PROTECTIVE COATING FOR CONCRETE SURFACES (261 SY)	1	LS
526.301	TEMPORARY CONCRETE BARRIER TYPE 1 (50 LF)	1	LS
527.34	WORK ZONE CRASH CUSHIONS	2	UN
530.30	GFRP, REINFORCEMENT BARS, FAB & DEL	12980	LF
530.31	GFRP, REINFORCEMENT BARS, PLACING	12980	LF
535.622	PRESTRESSED STRUCTURAL CONCRETE NEXT BEAM (65 CY)	1	LS
606.1301	3" W-BM GR, MID-WAY SPLICE-SGL FACED	113	LF
606.1305	3" W-BM GR, MID-WAY SPLICE FLARED TERMINAL	4	EA
606.1721	BRIDGE TRANSITION - TYPE 1	4	EA
606.353	REFLECTORIZED FLEXIBLE GUARDRAIL MARKER	8	EA
610.08	PLAIN RIPRAP	416	CY
610.18	STONE DITCH PROTECTION	12	CY
613.319	EROSION CONTROL BLANKET	89	SY
615.10	DIRTY BORROW	53	CY
618.14	SEEDING METHOD NUMBER 2	9	UN
619.12	MULCH	9	UN
619.14	EROSION CONTROL MIX	105	CY
620.58	EROSION CONTROL GEOTEXTILE	620	SY
620.66	DRAINAGE GEOCOMPOSITE	75	SY
627.733	4" WHITE OR YELLOW PAINTED PAVEMENT MARKING LINE	1425	LF
627.77	REMOVING EXISTING PAVEMENT MARKINGS	358	SF
627.78	TEMPORARY PAVEMENT MARKING LINE, WHITE OR YELLOW	1000	LF
629.05	HAND LABOR, STRAIGHT TIME	10	HR
631.12	ALL PURPOSE EXCAVATOR (INCLUDING OPERATOR)	10	HR
631.172	TRUCK - LARGE (INCLUDING OPERATOR)	10	HR
639.19	FIELD OFFICE TYPE B	0.5	EA
643.72	TEMPORARY TRAFFIC SIGNAL	1	LS
652.312	TYPE III BARRICADE	4	EA
652.33	DRUM	25	EA
652.34	CONE	50	EA
652.35	CONSTRUCTION SIGNS	400	SF
652.361	MAINTENANCE OF TRAFFIC CONTROL DEVICES	1	LS
652.38	FLAGGER	400	HR
656.75	TEMPORARY SOIL EROSION AND WATER POLLUTION CONTROL	1	LS
659.10	MOBILIZATION	1	LS

GENERAL CONSTRUCTION NOTES

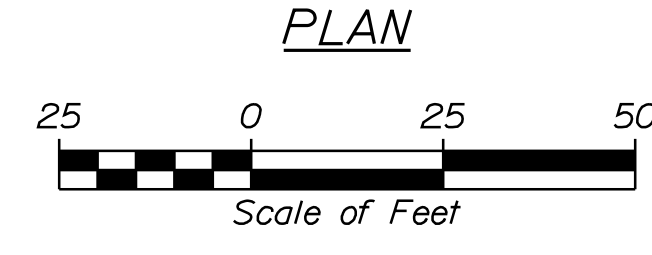
- For easements, construction limits and right of way lines, refer to Right of Way Map.
- The clearing limits as shown on the plans are approximate. The exact limits will be established in the field by the Resident. Payment for clearing will be considered incidental to Contract items.
- All utility facilities shall be adjusted by the respective utilities unless otherwise noted.
- Do not excavate for Aggregate Subbase Course where existing material is suitable as determined by the Resident.
- In areas where the Resident directs the Contractor not to excavate to the subgrade line shown on the plans, payment for removing existing pavement, grubbing, shaping, ditching, and compacting the existing subbase and layers of new subbase 6 inches or less thick will be made under appropriate equipment rental items.
- All embankment material, except as otherwise shown, placed below EL 106 shall be Granular Borrow meeting the requirements of Subsection 703.19, Material for Underwater Backfill.
- Construct the riprap shelf at each abutment at EL 106.
- Place Dirty Borrow 2 inches deep on all new or reconstructed sideslopes or as directed by the Resident.
- Erosion Control Mix may be substituted in those areas normally receiving Dirty Borrow and seed as directed by the Resident. Placement shall be in accordance with Standard Specifications Section 619, Mulch. Payment will be made under Item No. 619.14, Erosion Control Mix.
- Place a 24-in. wide strip of Temporary Erosion Control Blanket on the sideslopes along the top of the riprap and behind the wingwalls.
- A MASH compliant guardrail end treatment shall be installed concurrently with the placement of each section of beam guardrail.
- Extended-use Erosion Control Blanket, seeded gutters, riprap downspouts, and other gutters lined with Stone Ditch Protection shall be constructed after paving and shoulder work is completed, where it is apparent that runoff will cause continual erosion. Payment will be made under the appropriate Contract items.
- Protective Coating for Concrete Surfaces shall be applied to the following areas:
 - All exposed surfaces of concrete curbs.
 - Fascias down to the drip notch.
 - Concrete wearing surfaces.
 - Backside of End Diaphragm
 - Top of wingwalls and to one foot below the top of wingwall on the back side.
- Project information referred to below may be accessed at the following MaineDOT web address: <http://www.maine.gov/mdot/contractors/>.
- The existing bridge plans may be accessed at the MaineDOT web address. The plans are reproductions of the original drawings as prepared for the construction of the bridge. It is very unlikely that the plans will show any construction field changes or any alterations which may have been made to the bridge during its life span.
- The hydrologic report of the bridge site may be accessed at the MaineDOT web address. The hydrologic report is based on MaineDOT's interpretation of the information obtained for the subject site. No assurance is given that the information or the conclusions of the report will be representative of actual conditions at the time of construction.
- The project geotechnical report titled: Geotechnical Design Report for Schoodic Bridge #3649 Replacement, State Route 193 over Schoodic Brook, Cherryfield, Maine, Soils Report 2020-06, January 7, 2020
- Geotechnical information furnished or referred to in this plan set is for the use of the Bidders and the Contractor. No assurance is given that the information or interpretations will be representative of actual subsurface conditions at the construction site. MaineDOT will not be responsible for the Bidders' or Contractor's interpretations of, or conclusions drawn from, the geotechnical information. The boring logs contained in the plan set present factual and interpretive subsurface information collected at discrete locations. Data provided may not be representative of the subsurface conditions between the boring locations.

- Quantities included for pay items measured and paid for by Lump Sum are estimated quantities and are provided by MaineDOT for informational purposes only. Lump Sum pay items will be paid for at the Contract Bid amount, with no addition or reduction in payment to the Contractor if the actual final quantities are different from the MaineDOT provided estimated quantities, except as follows:
 - If a Lump Sum pay item is eliminated, the requirements of Standard Specifications Section 109.2, Elimination of Items, will take precedence.
 - If other Contract Documents specifically allow a change in payment for a Lump Sum pay item, those requirements will be followed.
 - If a design change results in changes to estimated quantities for Lump Sum pay items, price adjustments will be made in accordance with Standard Specifications Section 109.7, Equitable Adjustments to Compensation.
- Excavation required between the backside of the existing abutments and the front side of the proposed abutment shall be paid for as Structural Earth Excavation.
- Steel Approach Railing, 3-Bar, shall be paid for under 507.0821, Steel Bridge Railing, 3 Bar.

STATE OF MAINE		DEPARTMENT OF TRANSPORTATION	
2223000		WIN 022230.00	
BRIDGE NO. 3649		BRIDGE PLANS	
PROJ. MANAGER	BY	DATE	SIGNATURE
M. PARLIN	D. SHAW	MAY 2020	
DESIGN-DETAILED	B. BARTLETT		
CHECKED-REVIEWED	A. PARADIS		
DESIGN-DETAILED	L. KRUSINSKI	DEC. 2019	
DESIGN-DETAILED	T. WHITE		
REVISIONS 1			P.E. NUMBER
REVISIONS 2			DATE
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			
SCHOODIC BRIDGE			
SCHOODIC BROOK			
WASHINGTON COUNTY			
CHERRYFIELD			
ESTIMATED QUANTITIES AND GENERAL CONSTRUCTION NOTES			
SHEET NUMBER			
2			
OF 24			

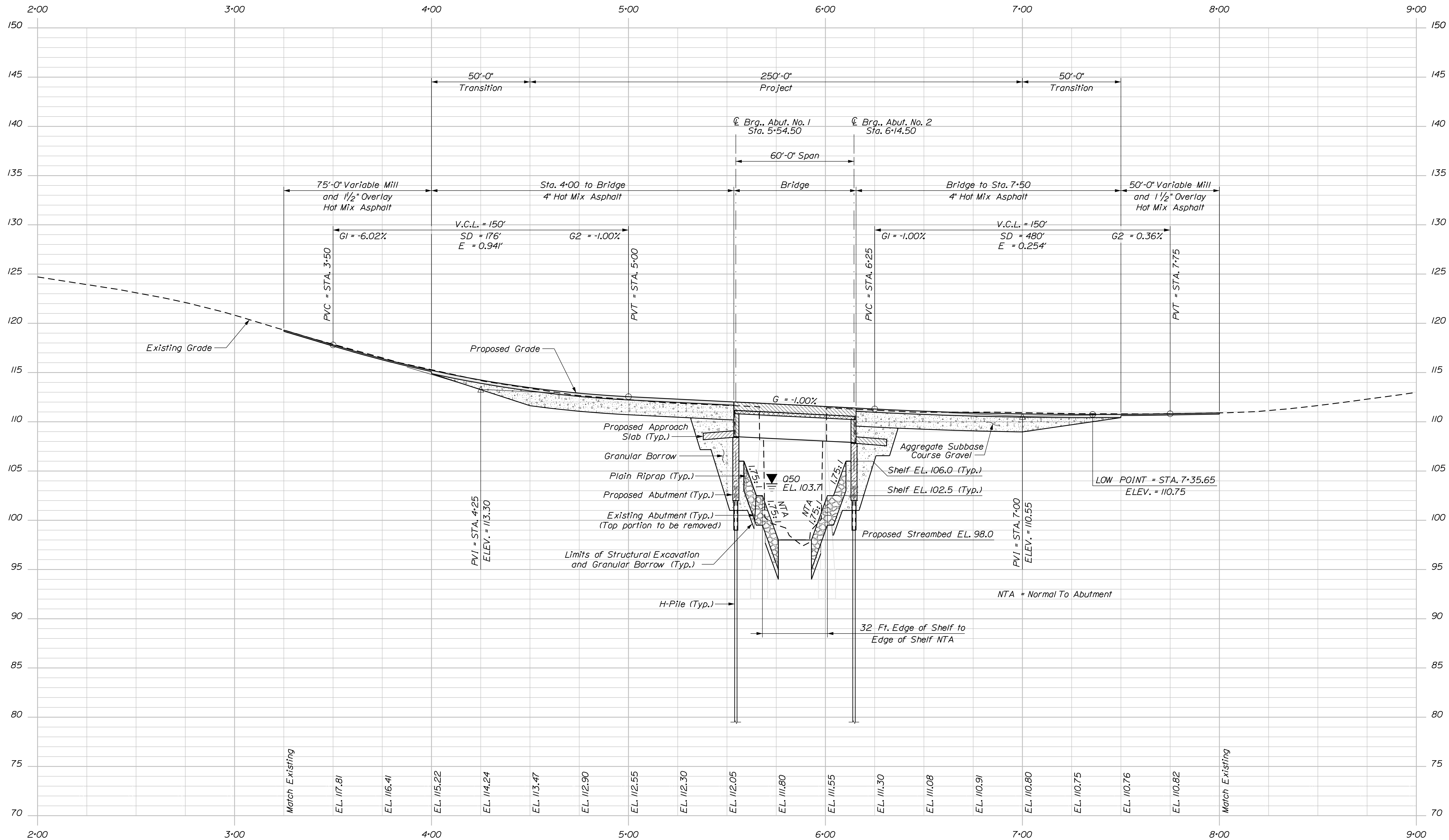


CURVE DATA #2
 PI = 2+80.12
 D = 02°51'53.2"
 Δ = 04°53'40.7" Rt.
 R = 2000.00'
 L = 170.86'
 T = 85.48'
 E = 1.83'



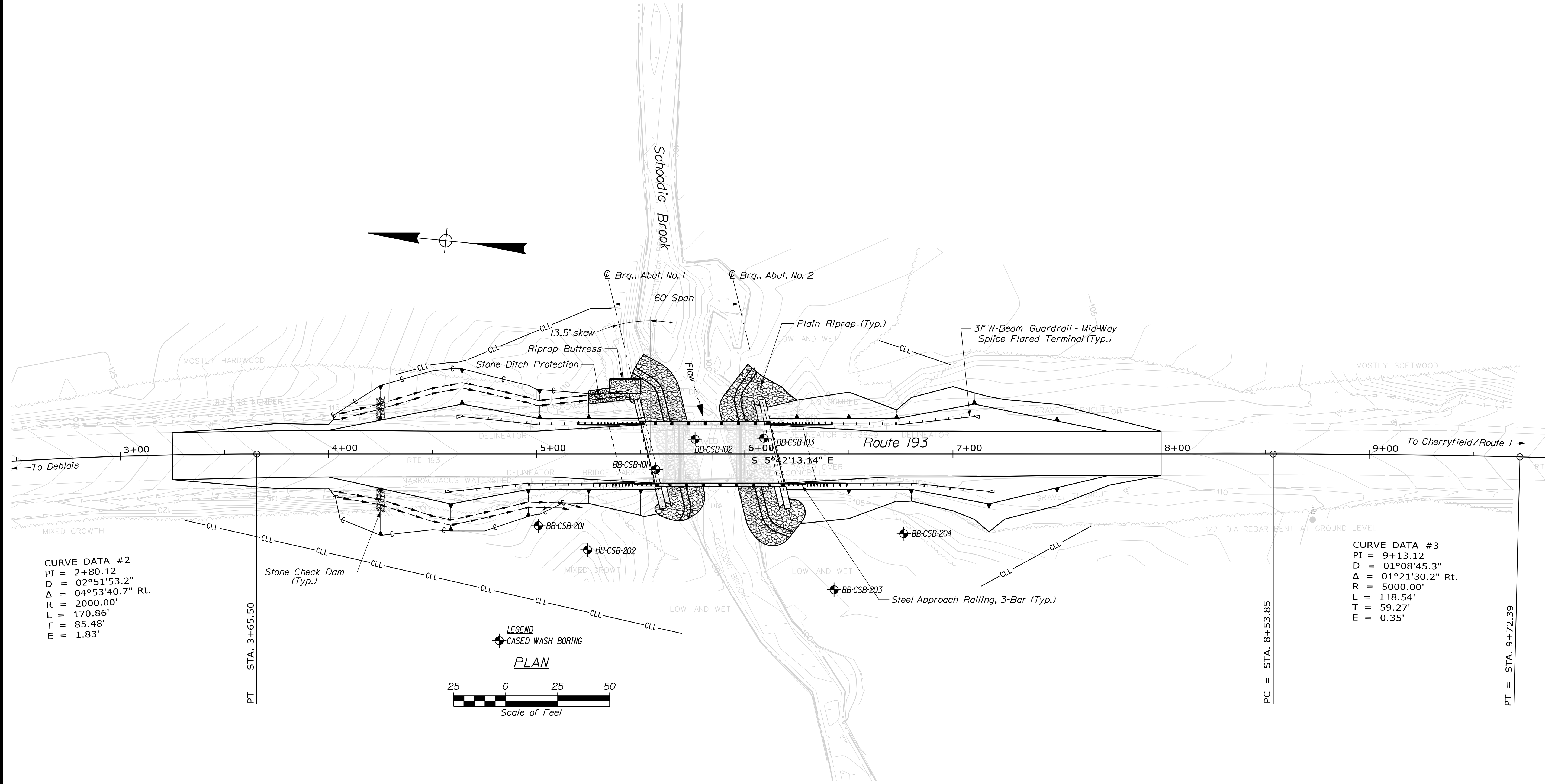
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 Δ = 01°21'30.2" Rt.
 R = 5000.00'
 L = 118.54'
 T = 59.27'
 E = 0.35'

STATE OF MAINE		DEPARTMENT OF TRANSPORTATION		2223000		WIN		022230.00		BRIDGE NO. 3649		BRIDGE PLANS	
SCHOODIC BRIDGE		SCHOODIC BROOK		WASHINGTON COUNTY		CHERRYFIELD		GENERAL PLAN		SHEET NUMBER		3	
PT = STA. 3+65.50		PC = STA. 8+53.85		PT = STA. 9+72.39		To Deblois		To Cherryfield/Route 1		SIGNATURE		P.E. NUMBER	
DESIGN-DETAILED		BY		DATE		DESIGNED		CHECKED		REVISIONS		DATE	
M. PARLIN		D. SHAW		MAY 2020		J. HASBROUCK		I. WHITE		DEC 2019		DATE	
REVISIONS 1		REVISIONS 2		REVISIONS 3		REVISIONS 4		FIELD CHANGES		DATE		DATE	



PROFILE

STATE OF MAINE		DEPARTMENT OF TRANSPORTATION		2223000	
SCHOODIC BRIDGE		SCHOODIC BROOK		WASHINGTON COUNTY	
CHERRYFIELD		WASHINGTON COUNTY		PROFILE	
SHEET NUMBER		4		OF 24	
PROJ. MANAGER		M. PARLIN		BRIDGE NO. 3649	
DESIGN-DETAILED		B. BARTLETT		WIN	
CHECKED-REVIEWED		D. SHAW		022230.00	
DESIGN-DETAILED		J. HASBROUCK		DATE	
DESIGN-DETAILED		L. KRUSINSKI		SIGNATURE	
REVISIONS 1		I. WHITE		P.E. NUMBER	
REVISIONS 2				DATE	
REVISIONS 3					
REVISIONS 4					
FIELD CHANGES					



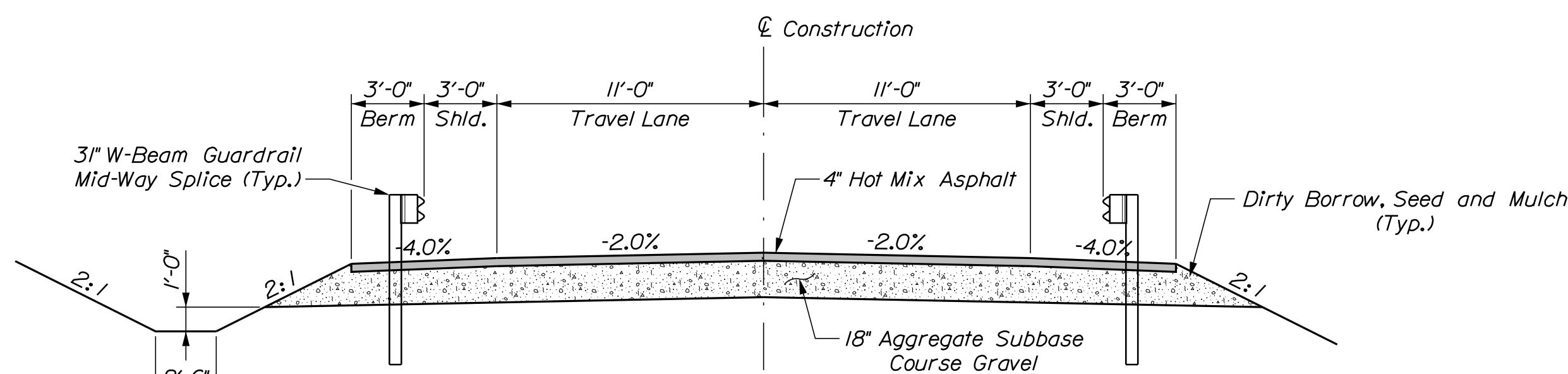
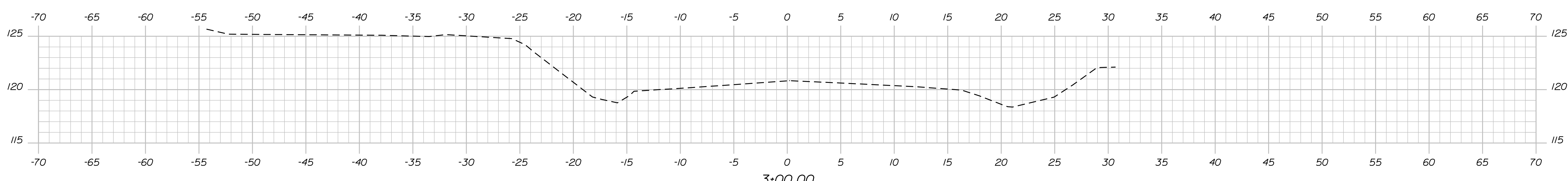
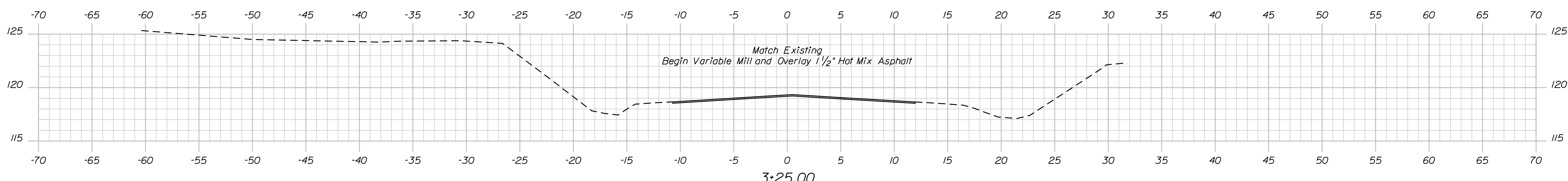
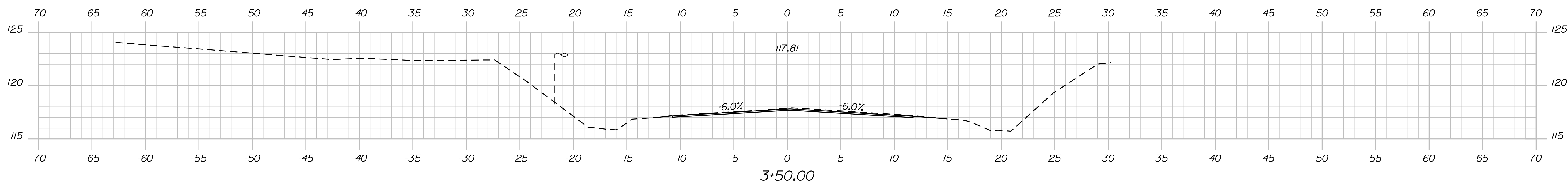
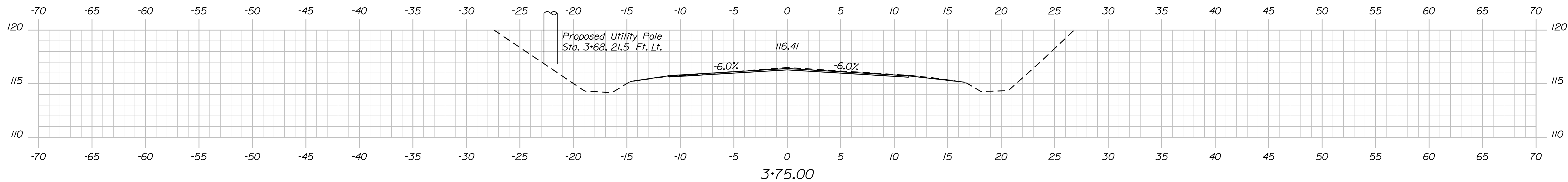
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2223000		WIN	
BRIDGE NO. 3649		22230.00	
BRIDGE PLANS			
PROJ. MANAGER	BY	DATE	SIGNATURE
CHECKED/REVIEWED	LARUSINSKI, T. WHITE	AUG 2020	
DESIGN/DETAILED			P.E. NUMBER
REVISIONS 1			DATE
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			
SCHOODIC BRIDGE		CHERRYFIELD WASHINGTON COUNTY	
SCHOODIC BROOK		BORING LOCATION PLAN	
SHEET NUMBER			
5			
OF 24			

Date: 8/10/2020

Username: David.Shaw

Division: BRIDGE

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TYPICAL APPROACH SECTION

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
2223000
WIN
022230.00
BRIDGE NO. 3649
BRIDGE PLANS

DESIGN DETAILED	DATE	SIGNATURE
CHECKED/REVIEWED	MAY 2020	
DESIGN DETAILED	DEC 2019	
REVISIONS 1		P.E. NUMBER
REVISIONS 2		DATE
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

PROJ. MANAGER	BY	DATE
M. PARIN	D. SHAW	MAY 2020
DESIGN DETAILED	J. HASBROUCK	
DESIGN DETAILED	L. KRUSINSKI	
REVISIONS 1	T. WHITE	
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SCHOODIC BRIDGE
SCHOODIC BROOK
CHERRYFIELD WASHINGTON COUNTY
CROSS SECTIONS

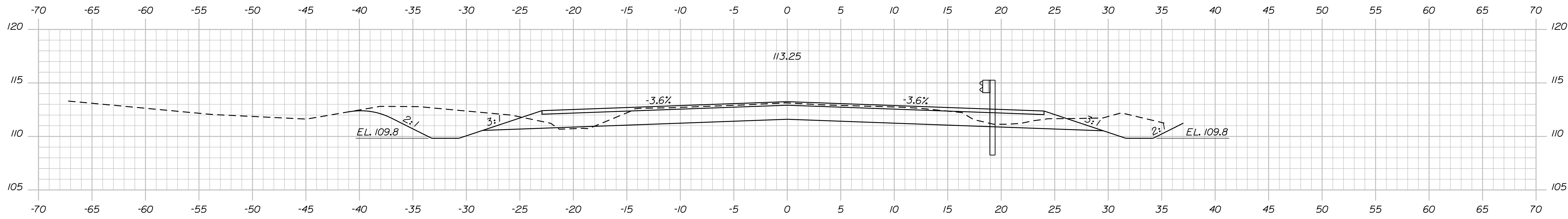
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OF 24

Date: 8/10/2020

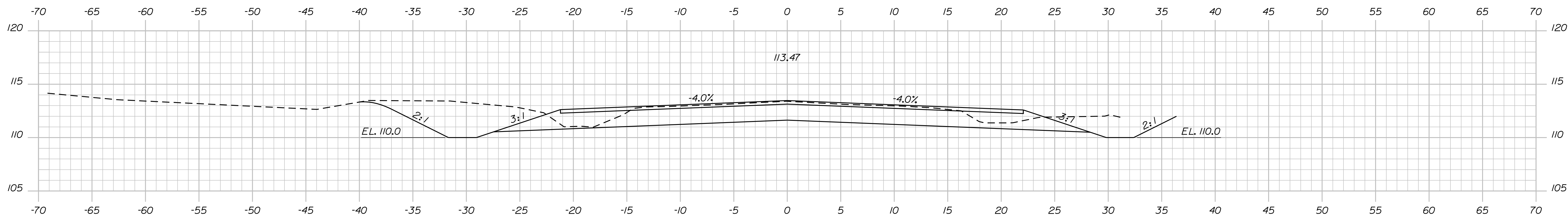
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Division: BRIDGE

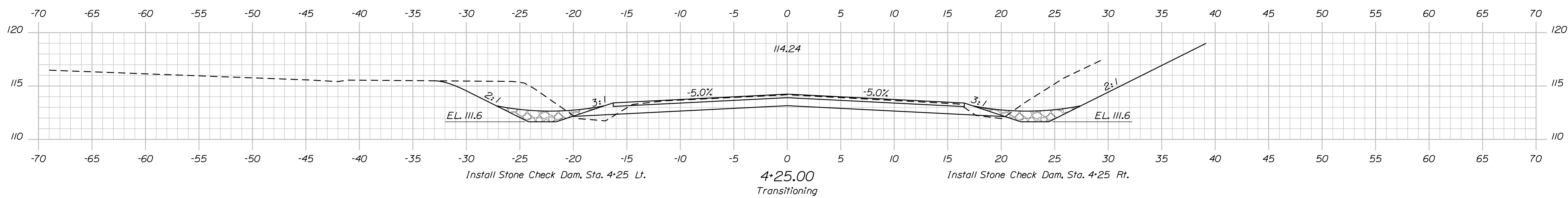
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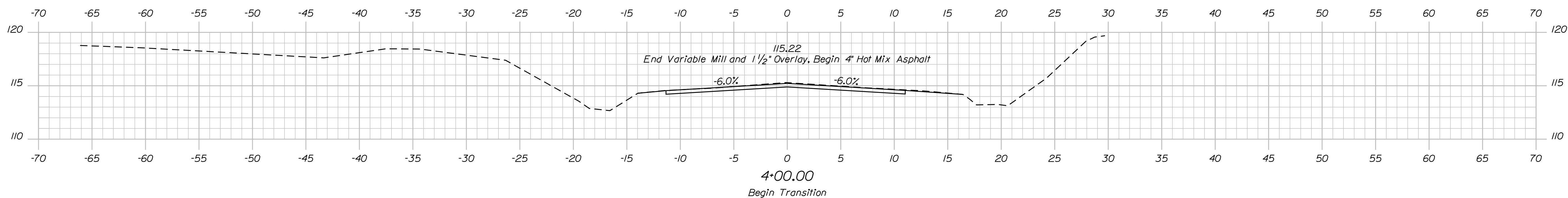
4+58.75
 Sta. 4+58.8±, 18.0 Ft. Rt. to Sta. 4+96.0±, 14.0 Ft. Rt.
 Install 3" W-Beam Guardrail - Mid-Way Splice Flared Terminal



4+50.00
 End Transition / Begin Project



4+25.00
 Transitioning
 Install Stone Check Dam, Sta. 4+25 Lt.
 Install Stone Check Dam, Sta. 4+25 Rt.



4+00.00
 Begin Transition

DESIGN DETAILED	B. BARTLETT	DATE	MAY 2020
CHECKED/REVIEWED	J. HASBROUCK	SIGNATURE	
DESIGN DETAILED	L. KRUSINSKI	P.E. NUMBER	
REVISIONS 1		DATE	
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

PROJ. MANAGER	M. PARLIN	DATE	
DESIGN DETAILED	B. BARTLETT	DATE	
CHECKED/REVIEWED	J. HASBROUCK	DATE	
DESIGN DETAILED	L. KRUSINSKI	DATE	
REVISIONS 1		DATE	
REVISIONS 2		DATE	
REVISIONS 3		DATE	
REVISIONS 4		DATE	
FIELD CHANGES		DATE	

SCHOODIC BRIDGE
 SCHOODIC BROOK
 CHERRYFIELD WASHINGTON COUNTY
 CROSS SECTIONS

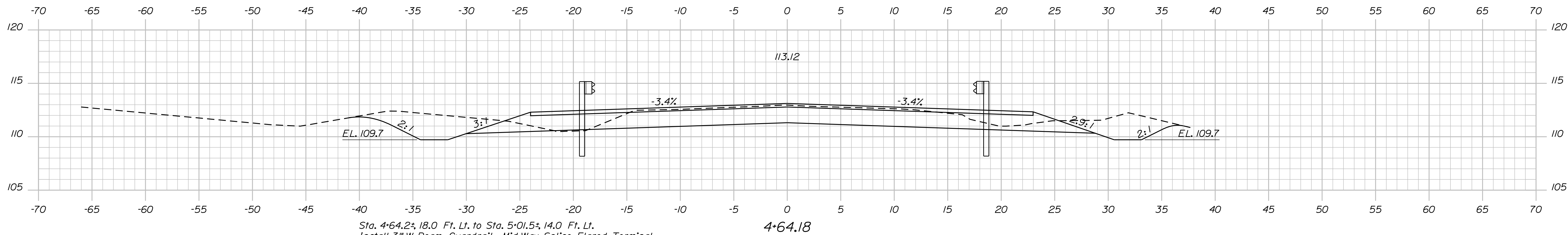
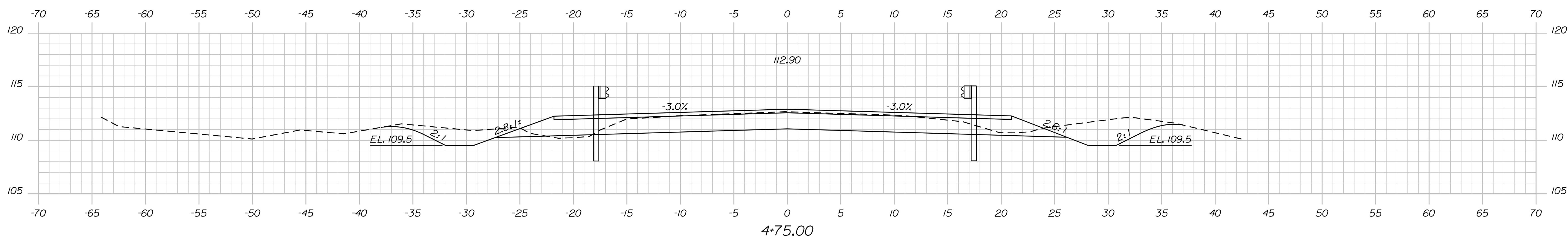
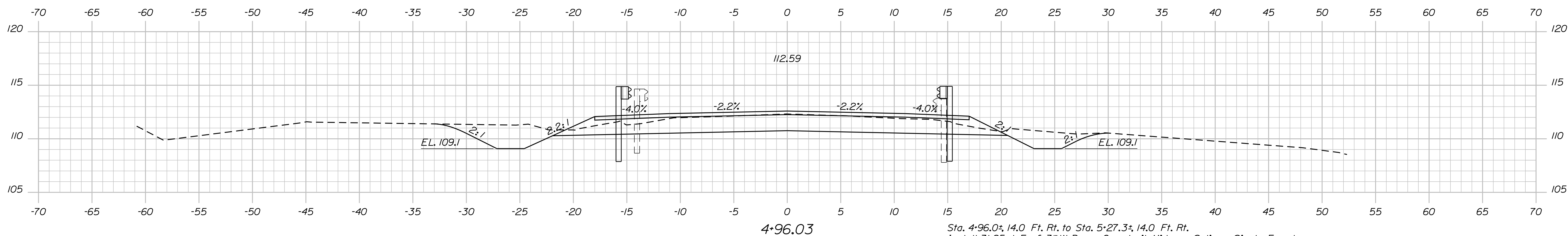
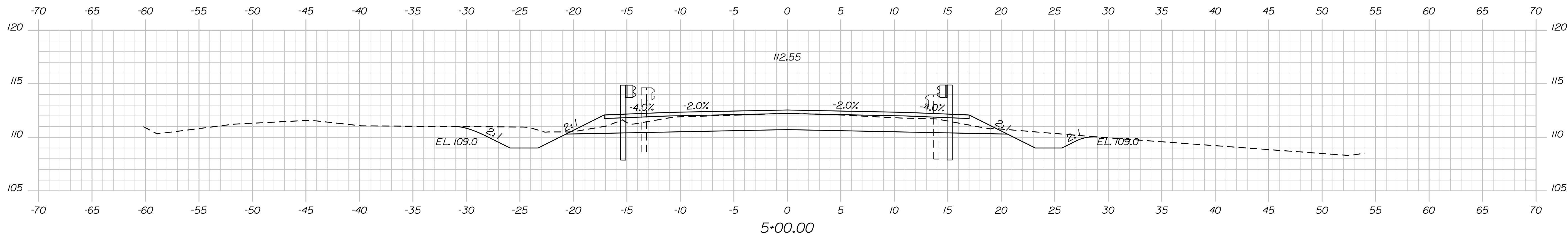
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 OF 24

Date: 8/10/2020

Username: David.Shaw

Division: BRIDGE

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Sta. 4+64.2±, 18.0 Ft. Lt. to Sta. 5+01.5±, 14.0 Ft. Lt.
Install 3' W-Beam Guardrail - Mid-Way Splice Flared Terminal

Sta. 4+96.0±, 14.0 Ft. Rt. to Sta. 5+27.3±, 14.0 Ft. Rt.
Install 31.25 L.F. of 3' W-Beam Guardrail, Mid-way Splice - Single Faced

STATE OF MAINE
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2223000
WIN
022230.00
BRIDGE NO. 3649
BRIDGE PLANS

PROJ. MANAGER	BY	DATE	SIGNATURE	P.E. NUMBER	DATE
M. PARIN	D. SHAW	MAY 2020			
DESIGN-DETAILED	J. HASBROUCK				
CHECKED-REVIEWED	L. KRUSINSKI	DEC 2019			
DESIGN-DETAILED	T. WHITE				
DESIGN-DETAILED					
REVISIONS 1					
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FIELD CHANGES					

SCHOODIC BRIDGE
SCHOODIC BROOK
CHERRYFIELD WASHINGTON COUNTY
CROSS SECTIONS

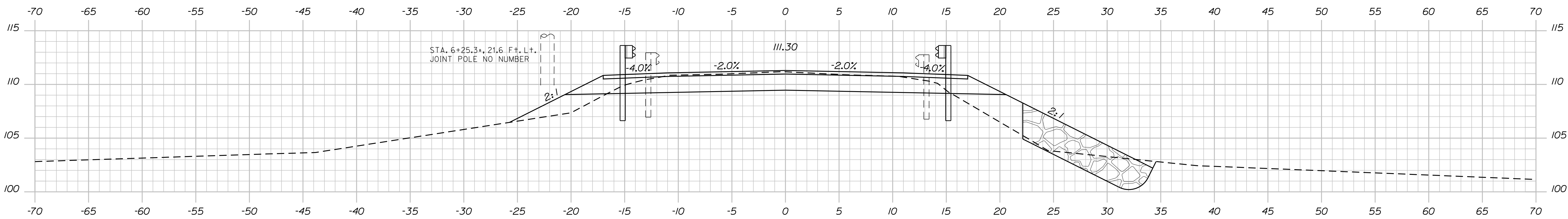
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OF 24

Date: 8/10/2020

Username: David.Shaw

Division: BRIDGE

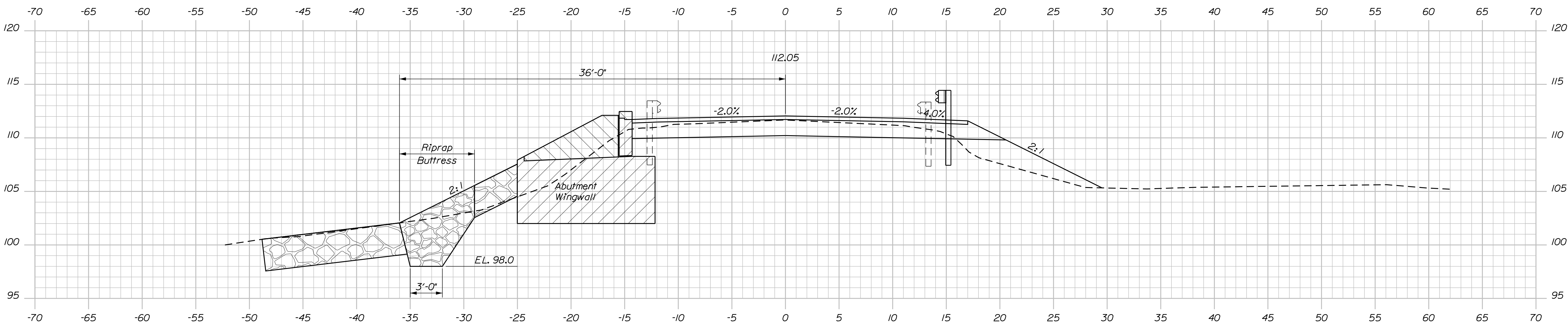
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Bridge to Sta. 6+41.7±, 14.0 Ft. Lt.
Install Standard Bridge Transition Type "I"
and Steel Approach Railing, 3-Bar

6+25.00
BRIDGE

Bridge to Sta. 6+48.8±, 14.0 Ft. Rt.
Install Standard Bridge Transition Type "I"
and Steel Approach Railing, 3-Bar

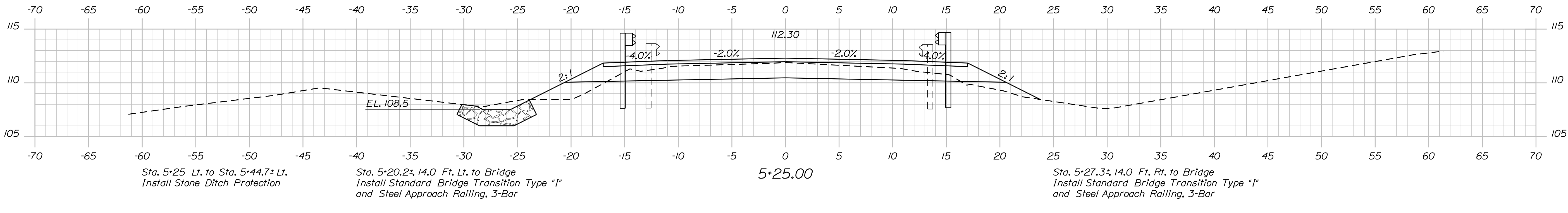


Sta. 5+35 to Sta. 5+50
Install Riprap Buttress

5+50.00

Abutment Wingwall

EL. 98.0



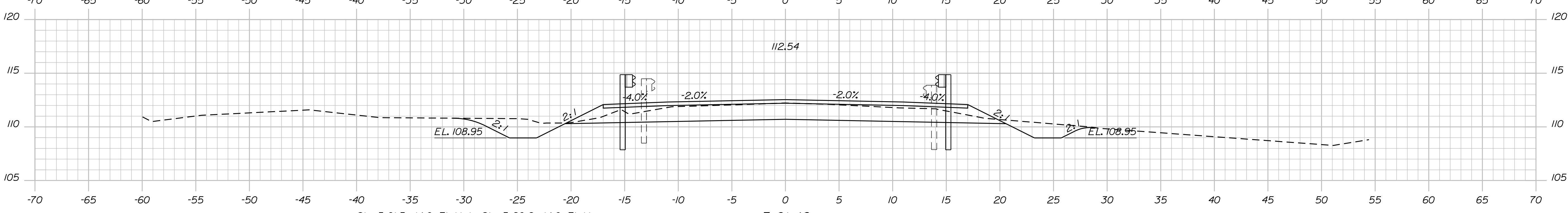
Sta. 5+25 Lt. to Sta. 5+44.7± Lt.
Install Stone Ditch Protection

5+25.00

Sta. 5+20.2±, 14.0 Ft. Lt. to Bridge
Install Standard Bridge Transition Type "I"
and Steel Approach Railing, 3-Bar

Sta. 5+27.3±, 14.0 Ft. Rt. to Bridge
Install Standard Bridge Transition Type "I"
and Steel Approach Railing, 3-Bar

EL. 108.5



Sta. 5+01.5±, 14.0 Ft. Lt. to Sta. 5+20.2±, 14.0 Ft. Lt.
Install 18.75 L.F. of 31" W-Beam Guardrail, Mid-way Splice - Single Faced

5+01.46

EL. 108.95

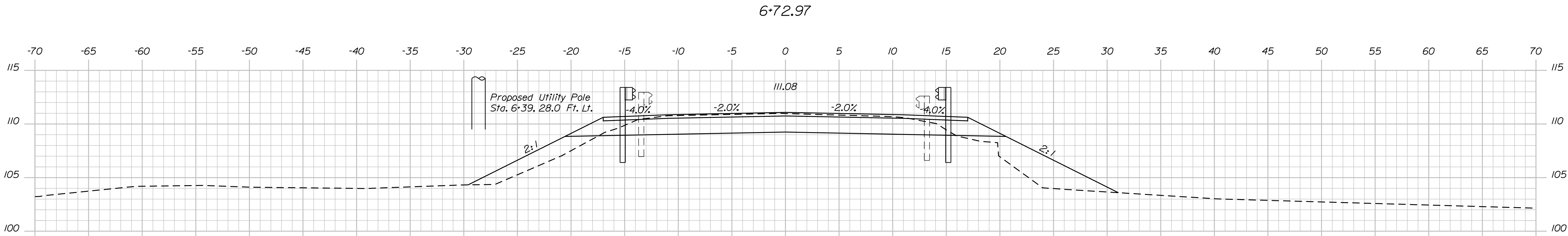
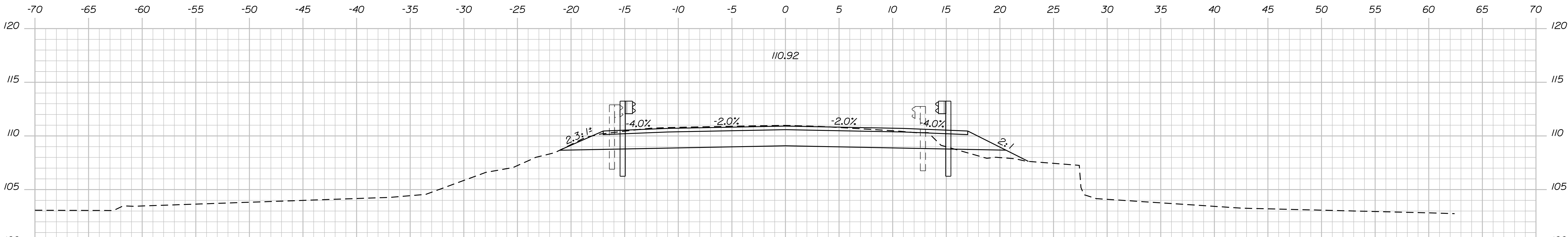
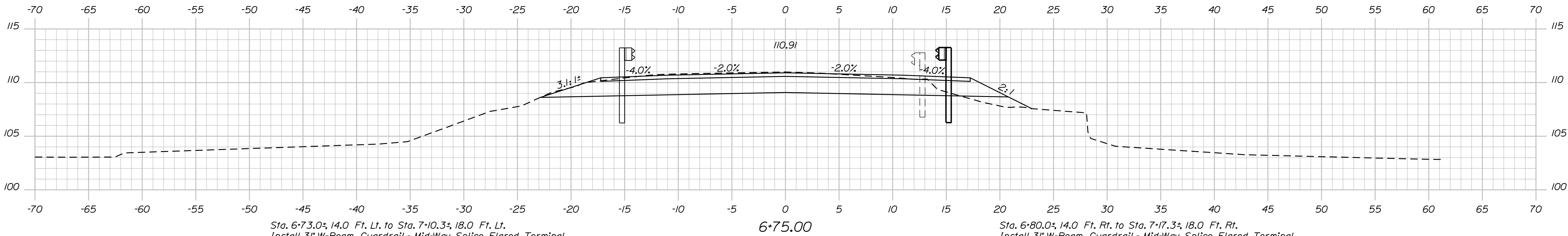
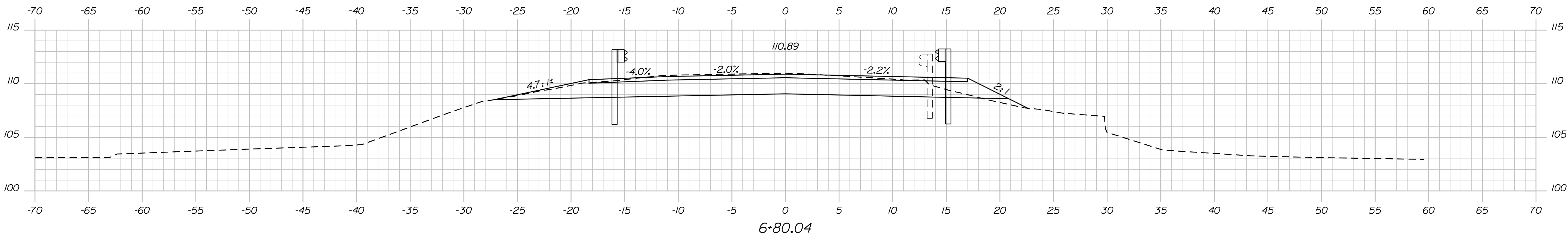
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BRIDGE NO. 3649		BRIDGE PLANS			
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DESIGN DETAILED	B. BARTLETT	CHECKED/REVIEWED	J. HASBROUCK	SIGNATURE	
DESIGNS DETAILED	L. KRUSINSKI	DESIGNS DETAILED	L. KRUSINSKI	P.E. NUMBER	
REVISIONS 1		REVISIONS 1		DATE	
REVISIONS 2		REVISIONS 2			
REVISIONS 3		REVISIONS 3			
REVISIONS 4		REVISIONS 4			
FIELD CHANGES					
SCHOOIDC BROOK SCHOOIDC BROOK CHERRYFIELD WASHINGTON COUNTY			CROSS SECTIONS		
SHEET NUMBER					
12					
OF 24					

Date: 8/10/2020

Username: David.Shaw

Division: BRIDGE

Filename: ... \013_XSECT_6+50-6+80.04.dgn



STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
2223000
WIN
022230.00
BRIDGE NO. 3649
BRIDGE PLANS

DESIGN DETAILED	B. BARTLETT	MAY 2020	SIGNATURE
CHECKED/REVIEWED	J. HASBROUCK	DEC 2019	P.E. NUMBER
DESIGN DETAILED	L. KRUSINSKI		DATE
DESIGN DETAILED	T. WHITE		
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

PROJ. MANAGER	M. PARLIN
BY	D. SHAW
DATE	MAY 2020

SCHOODIC BRIDGE
SCHOODIC BROOK
CHERRYFIELD WASHINGTON COUNTY
CROSS SECTIONS

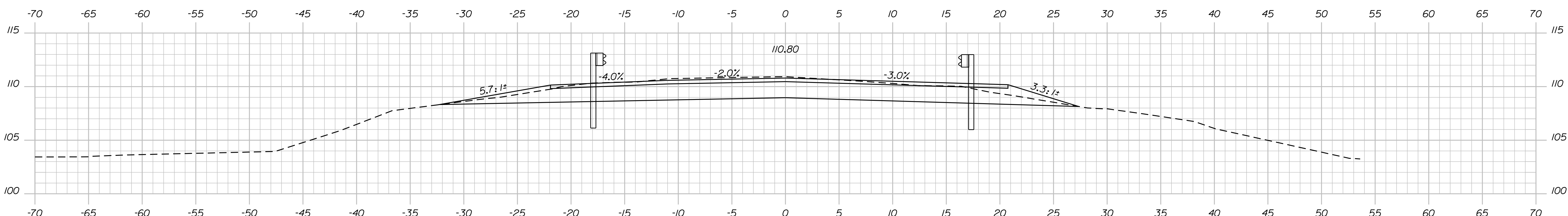
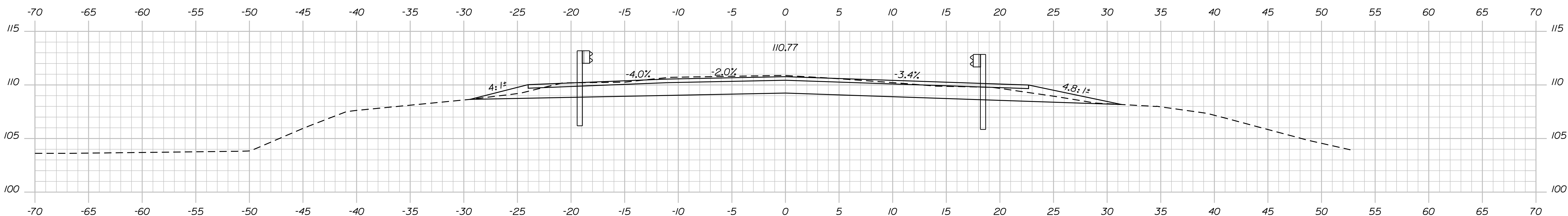
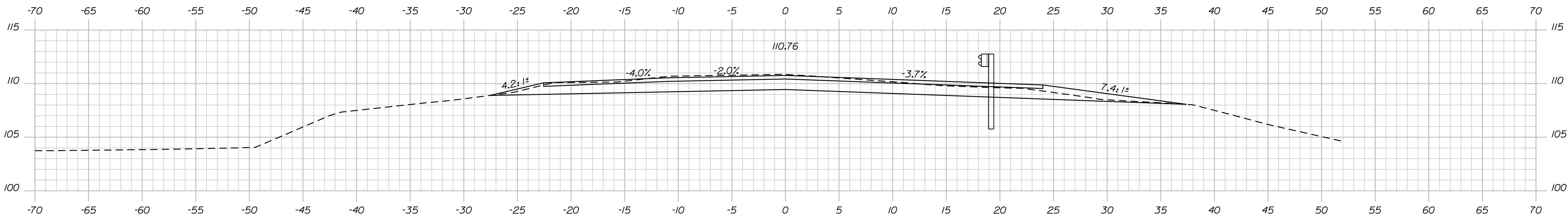
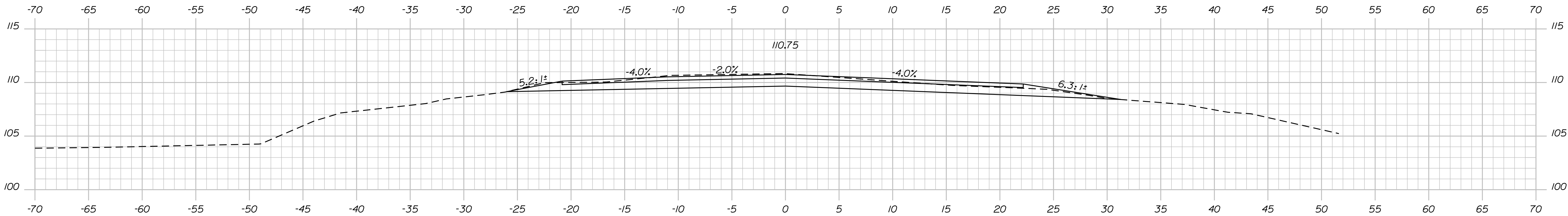
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Date: 8/10/2020

Username: David.Shaw

Division: BRIDGE

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STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
2223000
WIN
022230.00
BRIDGE NO. 3649
BRIDGE PLANS

PROJ. MANAGER	M. PARIN	BY	D. SHAW	DATE	MAY 2020
DESIGN DETAILED	B. BARTLETT	CHECKED-REVIEWED	L. KRUSINSKI	SIGNATURE	
DESIGNS DETAILED	L. KRUSINSKI	DESIGNS DETAILED	L. WHITE	P.E. NUMBER	
REVISIONS 1		REVISIONS 1		DATE	
REVISIONS 2		REVISIONS 2			
REVISIONS 3		REVISIONS 3			
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FIELD CHANGES					

SCHOODIC BRIDGE
SCHOODIC BROOK
CHERRYFIELD WASHINGTON COUNTY
CROSS SECTIONS

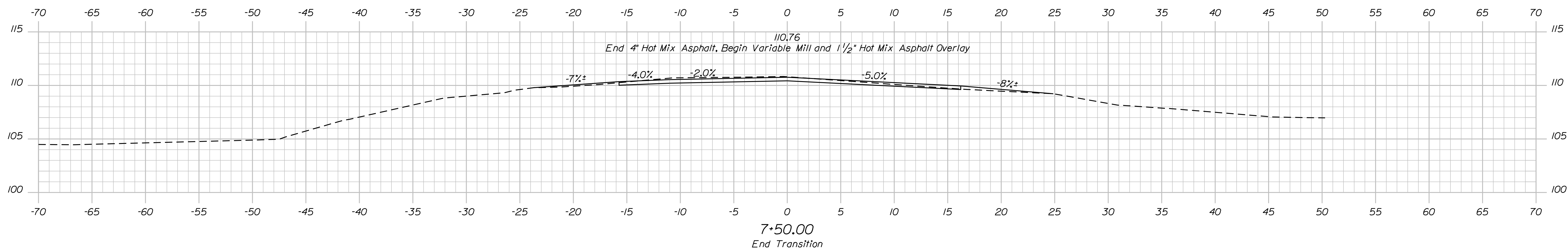
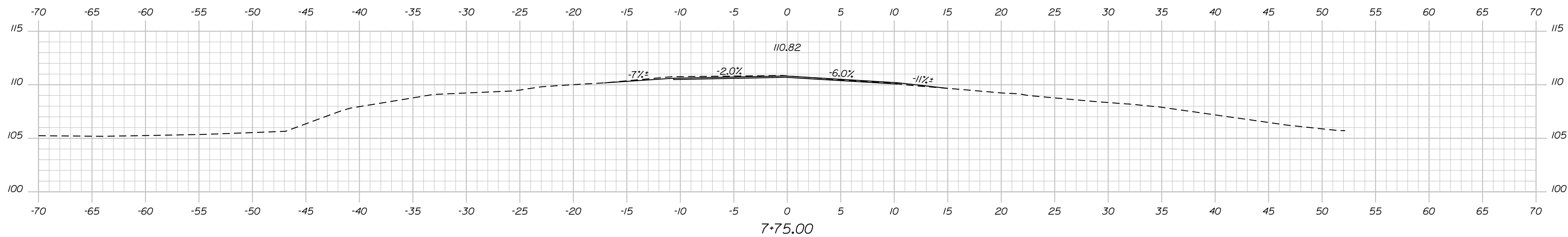
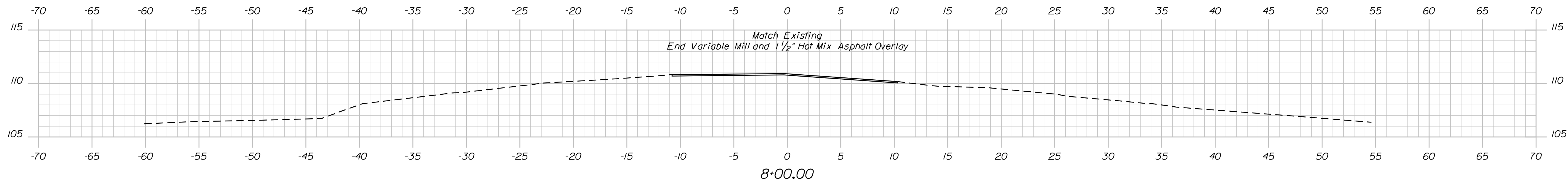
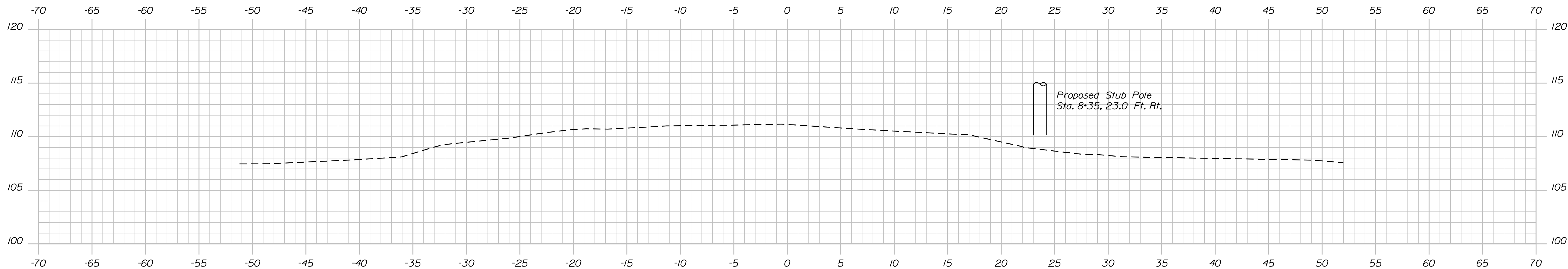
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OF 24

Date: 8/10/2020

Username: David.Shaw

Division: BRIDGE

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STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
2223000
WIN 022230.00
BRIDGE NO. 3649
BRIDGE PLANS

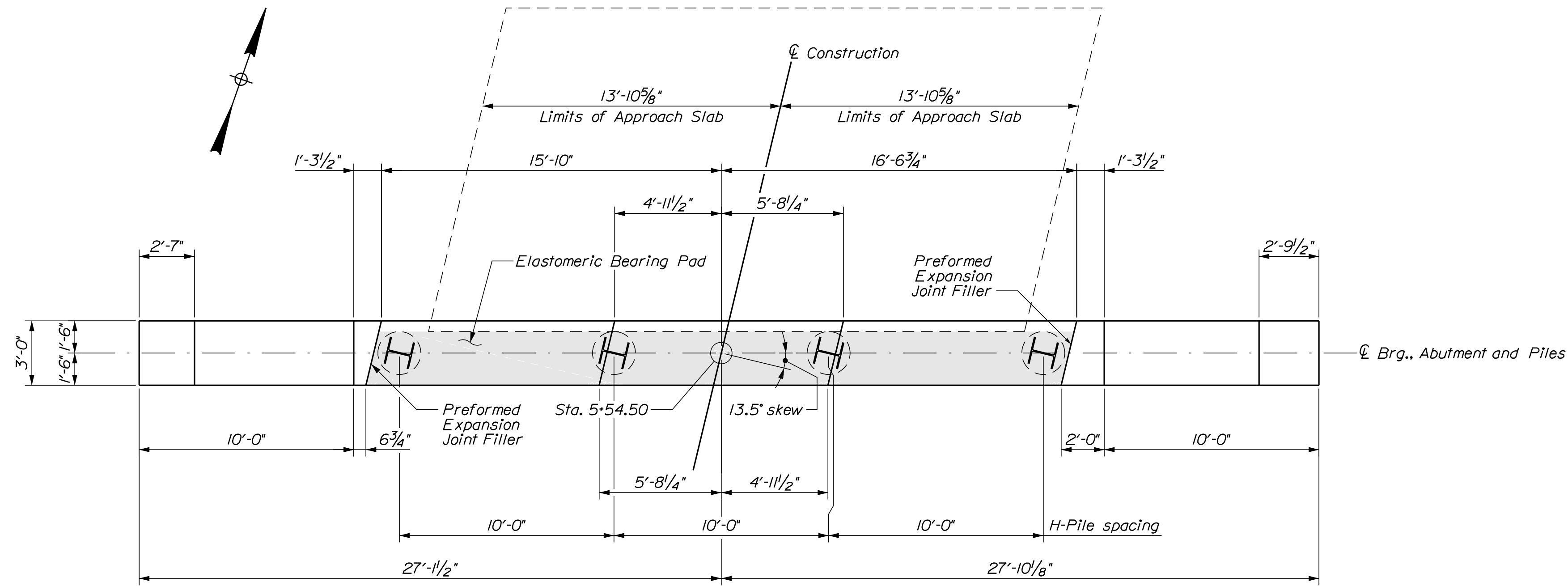
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CHECKED/REVIEWED: J. HASBROUCK
DESIGN DETAILED: L. KRUSINSKI
DESIGN DETAILED: I. KRUSINSKI
REVISIONS 1
REVISIONS 2
REVISIONS 3
REVISIONS 4
FIELD CHANGES

BY: D. SHAW
DATE: MAY 2020

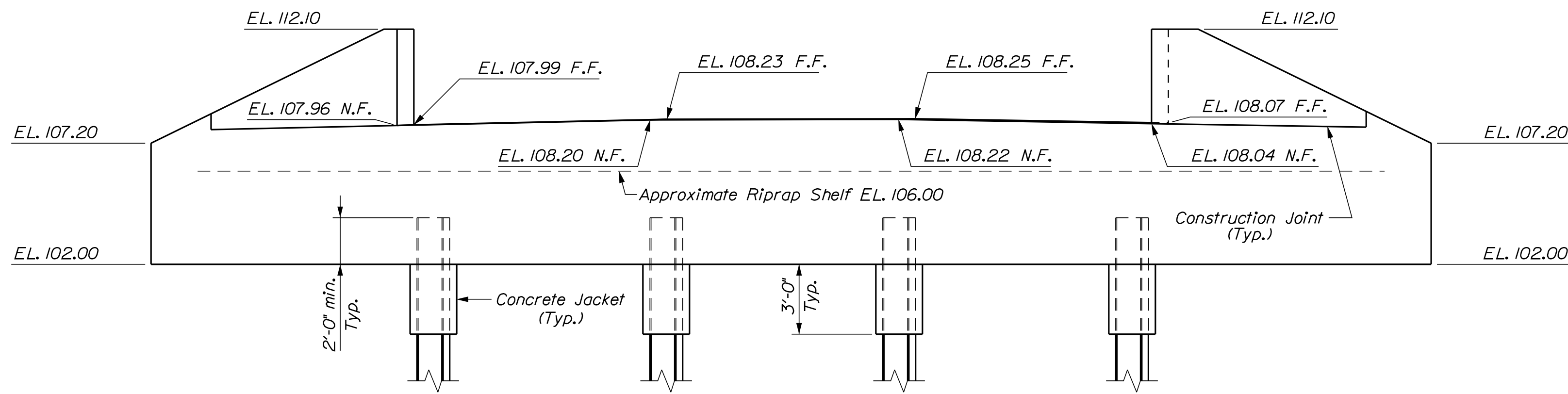
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DATE: DEC 2019

SCHOODIC BRIDGE
SCHOODIC BROOK
CHERRYFIELD WASHINGTON COUNTY
CROSS SECTIONS

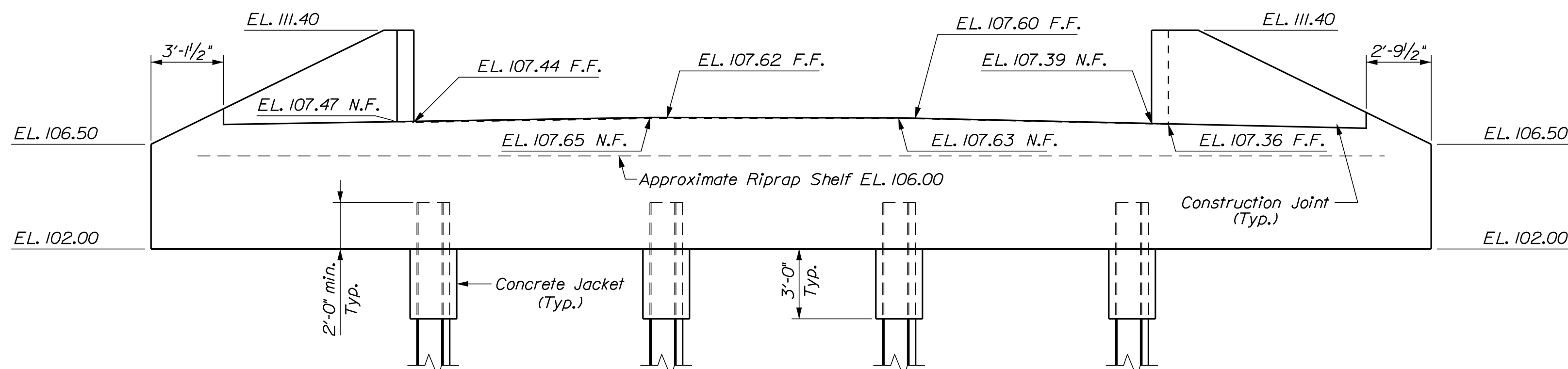
SHEET NUMBER
15
OF 24



PLAN ~ ABUTMENT NO. 1
Abutment No. 2 Opposite Hand



ELEVATION ~ ABUTMENT NO. 1



ELEVATION ~ ABUTMENT NO. 2

PILE NOTES

- The maximum factored pile load is 290 kips for the Strength I limit state.
- H-pile material shall be ASTM A 572, Grade 50.
- Estimate of piles required:
Abutment No. 1: 4 ~ HP 14x89 @ 44 feet
Abutment No. 2: 4 ~ HP 14x89 @ 43 feet
- The order lengths of the piles shall include an additional 5 feet of length for each test pile to accommodate dynamic pile testing equipment.
- All piles shall be equipped with a pile tip in accordance with Standard Specifications Subsection 501.048 - Prefabricated Pile Tips and 711.10 - H-Beam Piles, Splices and Tips.
- Piles shall be driven to the required resistance on or within bedrock in accordance with Standard Specification Section 501.
- The Contractor shall perform and submit a wave equation analysis for review and acceptance by the Resident. The maximum allowable driving stress is 0.90 times F_y. The submittal analyses shall include the proposed stopping criteria based on the wave equation analysis and the proposed driving system.
- The Contractor shall perform 2 dynamic load tests with 24-hour (minimum) restrike tests to confirm the nominal resistance of the piles. The required nominal resistance for the pile is the factored axial pile load divided by a resistance factor of 0.65 per LRFD Specifications. The dynamic test shall be performed on the first production pile driven at each substructure unit.
- H-piles to be oriented as shown, with the webs perpendicular to the centerline of construction.
- Piles shall not be out of position shown by more than 2 inches in any direction.

ABUTMENT NOTES

- Reinforcing steel shall have a minimum concrete cover of 3 inches at bottom of abutment and 2 inches everywhere else unless otherwise noted.
- Place drains with 4 inch diameter in the breastwall and wingwalls at 10 foot maximum spacing. The exact location will be determined by the Resident.
- Place the parapet portions of the wingwalls after erection of the precast units to ensure an accurate match with the superstructure.
- Cover joints where waterstops are not required in accordance with Standard Details Section 502.
- Install drainage geocomposite behind the abutments and wingwalls up to the approach slab seat elevation and in accordance with Special Provision Section 620, Drainage Geocomposite.
- Payment for the concrete jackets around the tops of the H-piles will not be paid for directly, but will be considered incidental to Pay Item 502.219, Structural Concrete Abutments and Retaining Walls. Fill Concrete may be used for the concrete jackets. Payment for excavation necessary to construct the concrete jackets will be considered incidental to Contract items.
- Adjust the abutment seat elevations in accordance with Special Provision 535 - Precast, Prestressed Concrete Superstructure (Camber).

Date: 8/10/2020

Username: David Shaw

Division: BRIDGE

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STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
2223000
WIN
022230.00
BRIDGE NO. 3649
BRIDGE PLANS

DESIGN-DETAILED	BY	DATE	SIGNATURE
CHECKED-REVIEWED	M. PARLIN	MAY 2020	
DESIGN-REVIEWED	B. BARTLETT	D. SHAW	
DESIGN-DETAILED	J. HASBROUCK		
DESIGN-REVIEWED	L. KRUSINSKI	DEC. 2019	
DESIGN-DETAILED	T. WHITE		
REVISIONS 1			P.E. NUMBER
REVISIONS 2			DATE
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SCHOODIC BRIDGE
SCHOODIC BROOK
CHERRYFIELD WASHINGTON COUNTY
ABUTMENTS NO. 1 AND 2

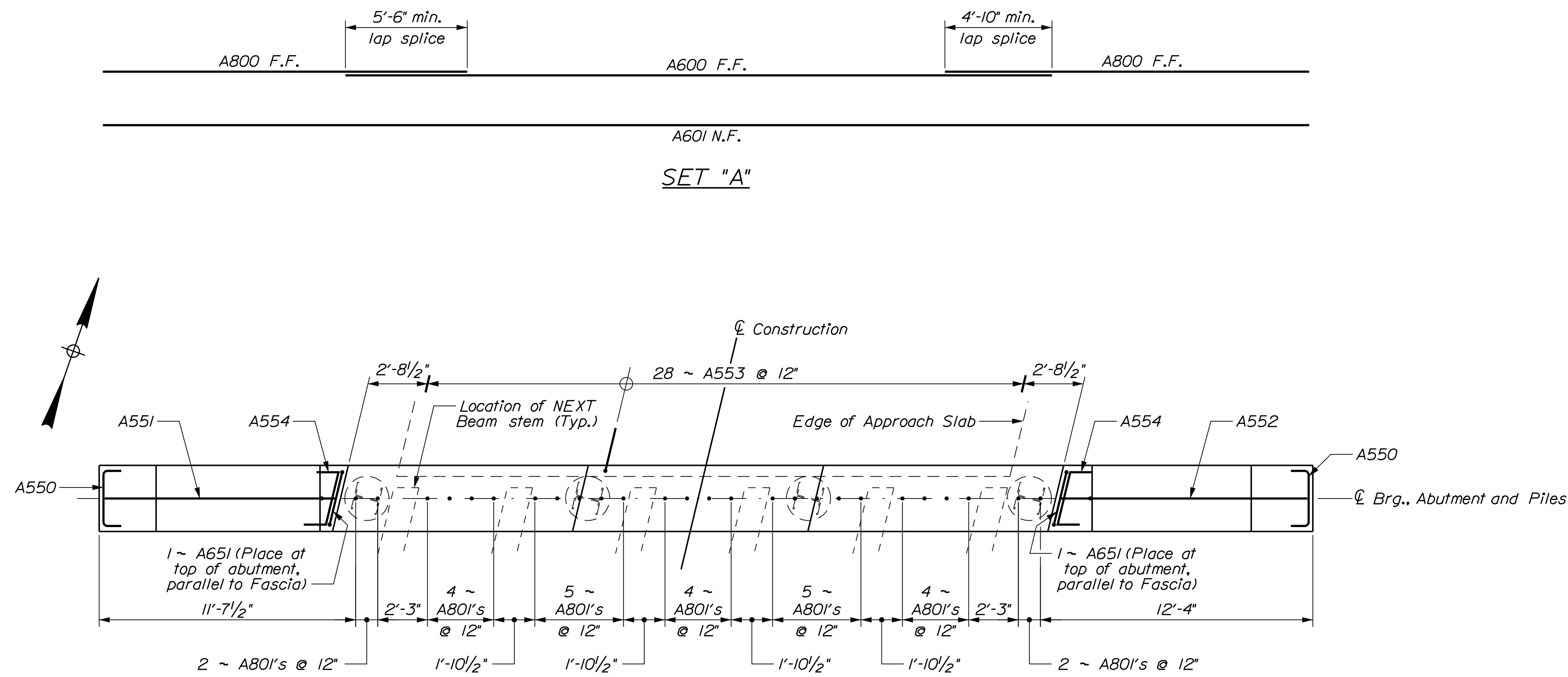
SHEET NUMBER
16
OF 24

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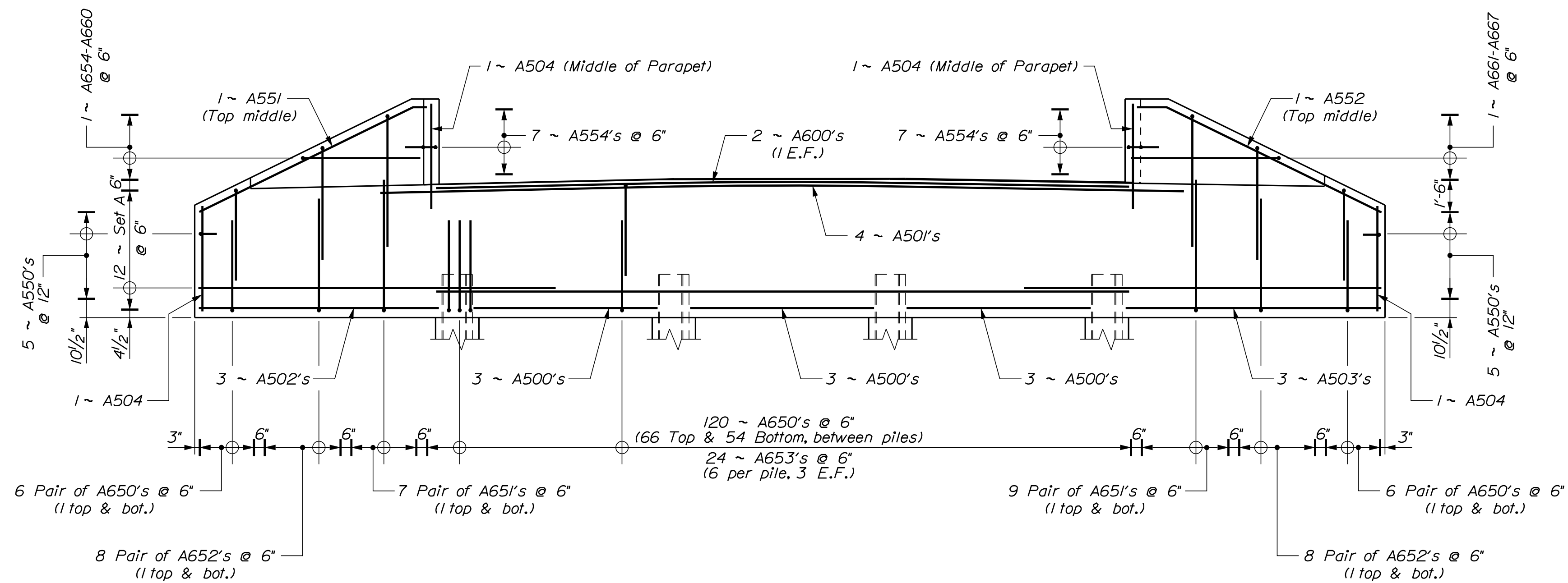
Division: BRIDGE

Username: David.Shaw

Date: 8/10/2020

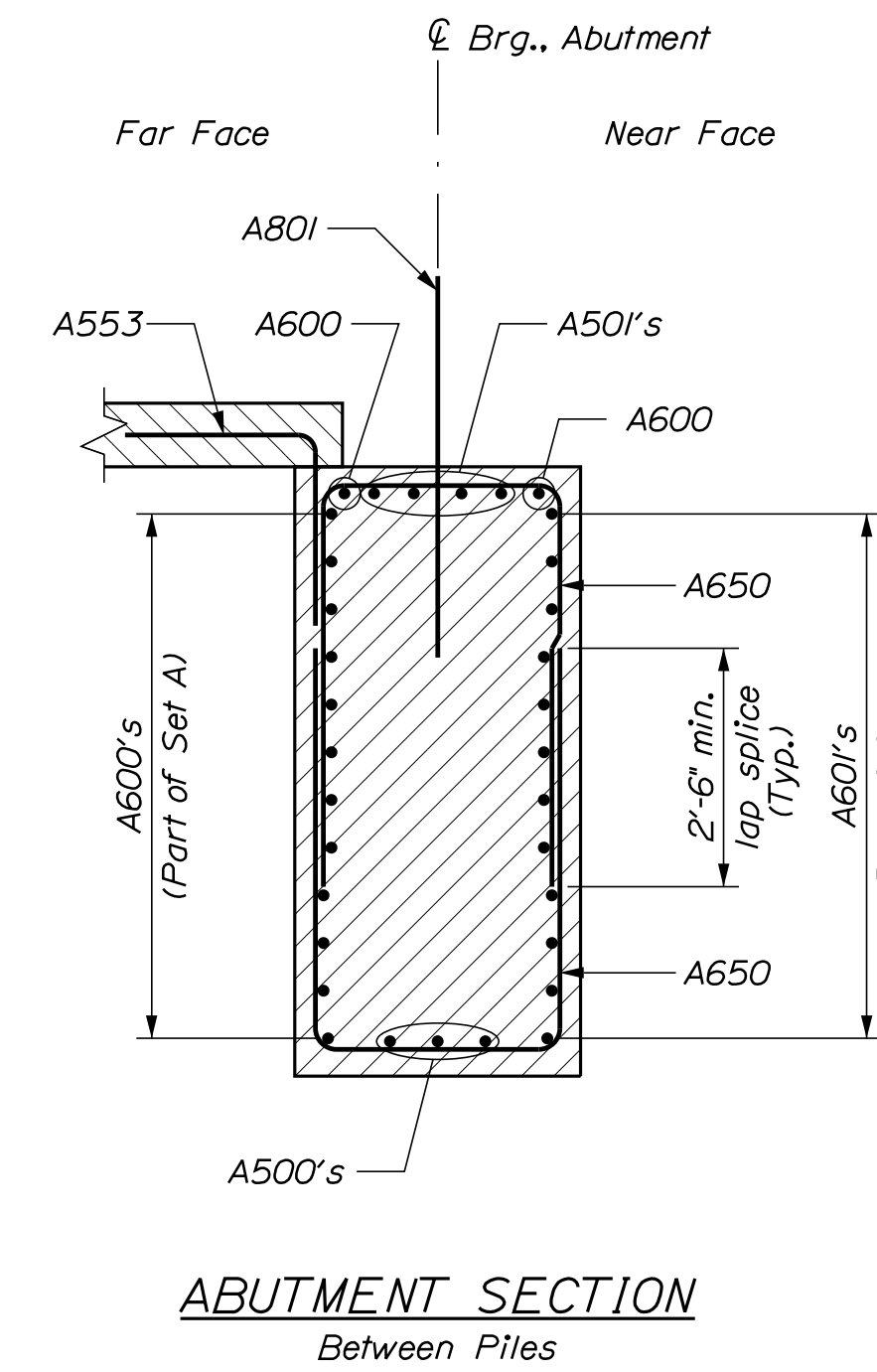


PLAN ~ ABUTMENT NO. 1

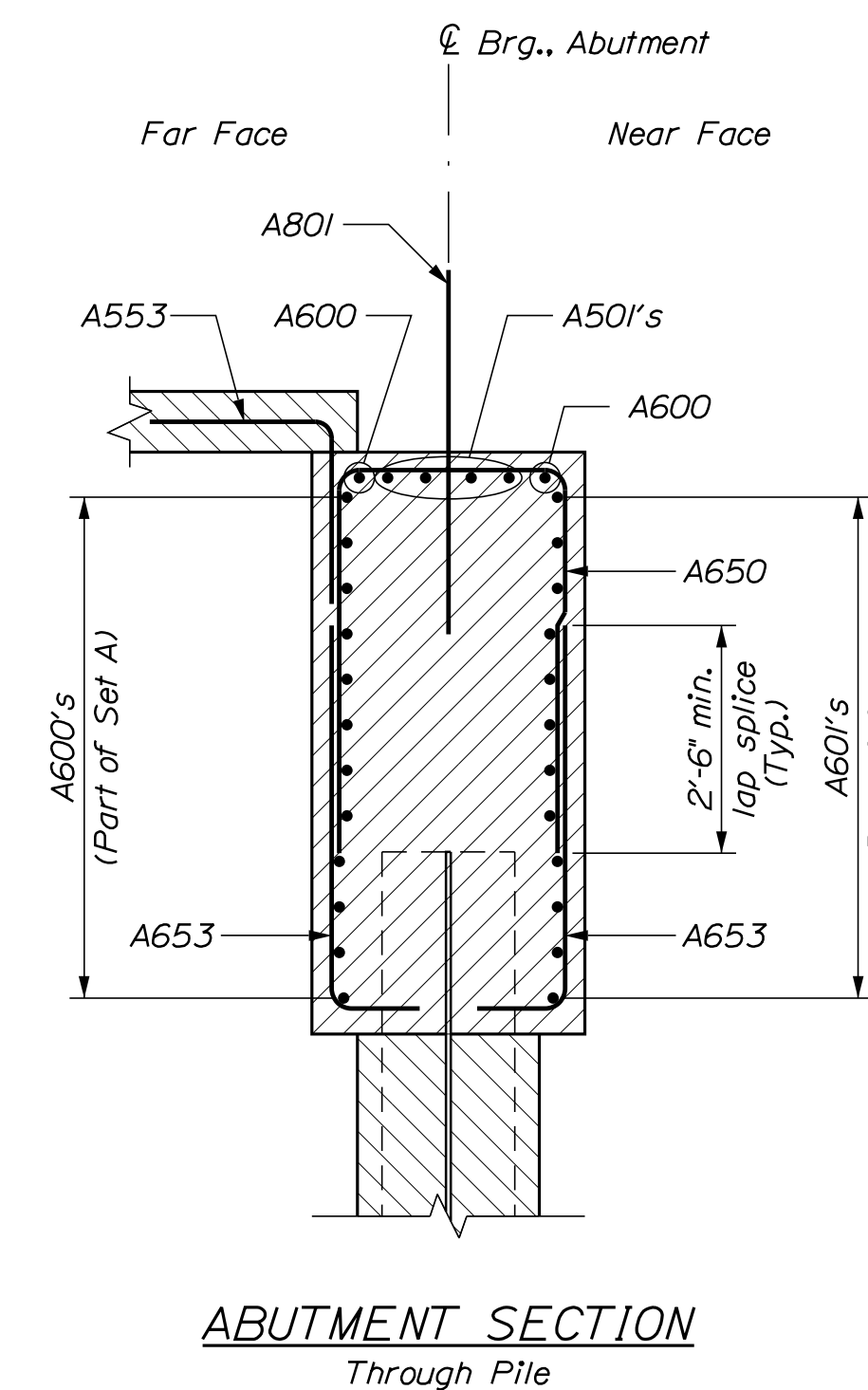
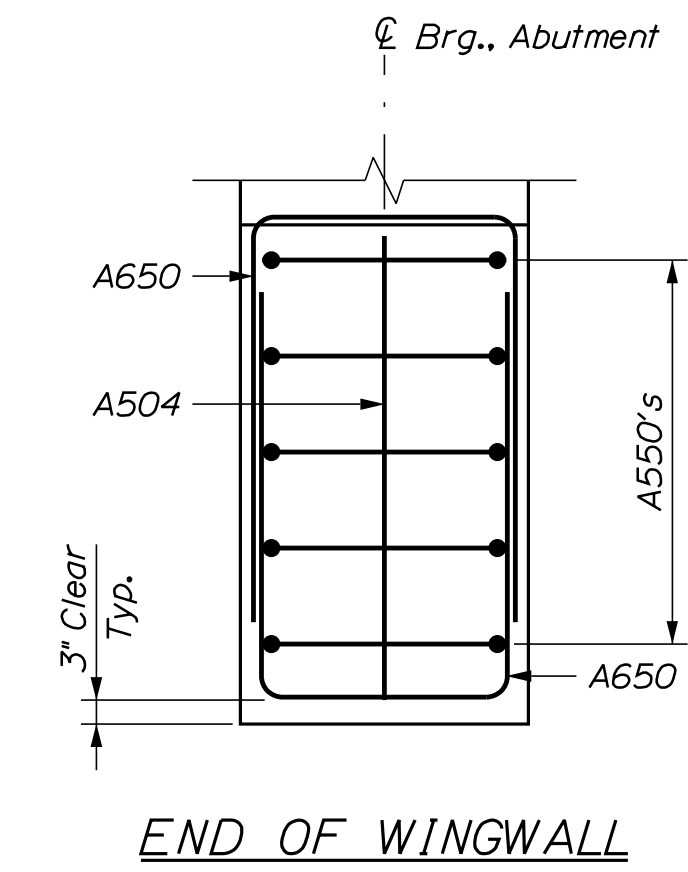


ELEVATION ~ ABUTMENT NO. 1

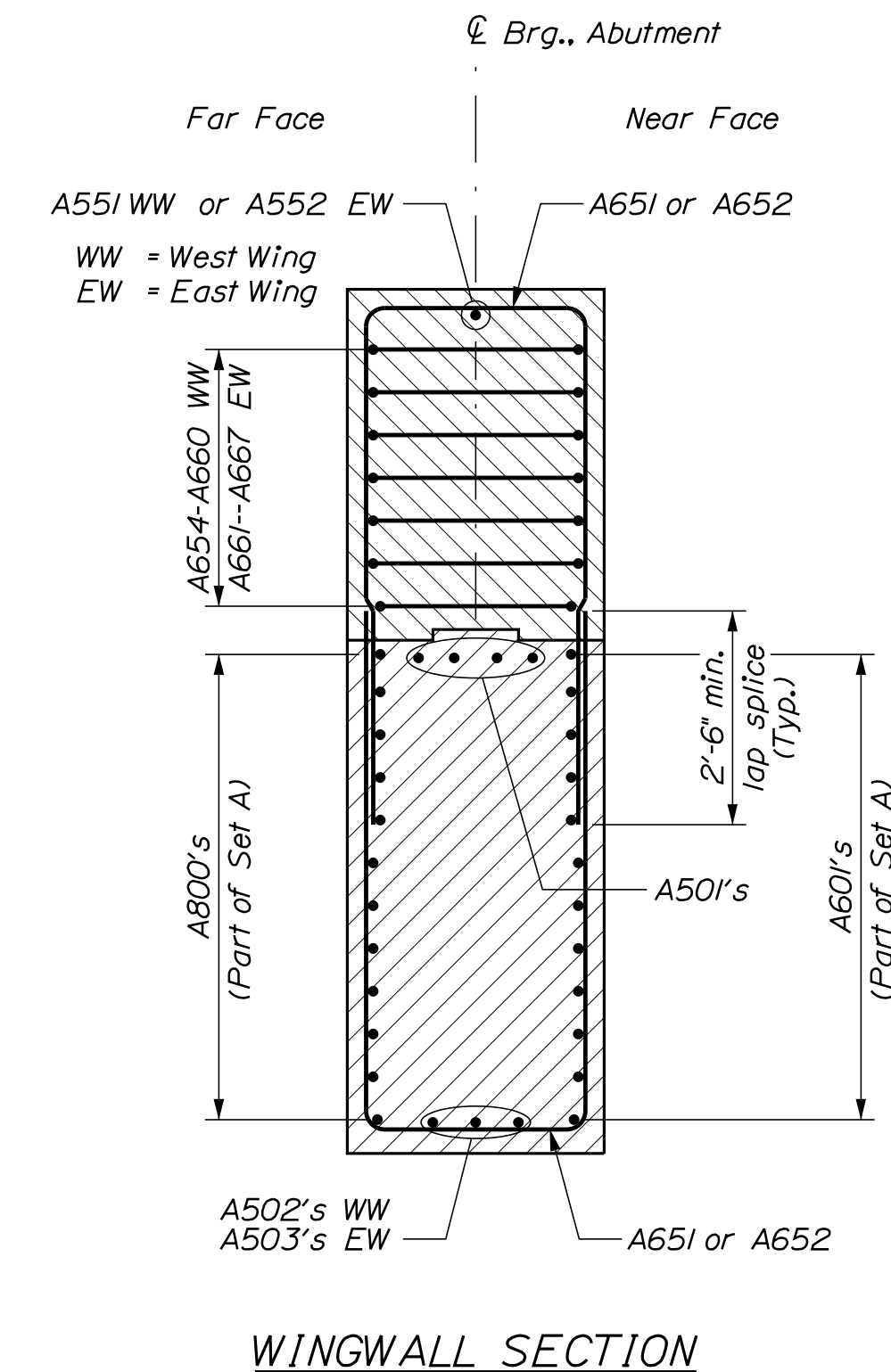
Set A: 2 ~ A800 (1 each wing) F.F., 1 ~ A600 (Middle) F.F., and 1 ~ A601 N.F. (See detail)



ABUTMENT SECTION Between Piles



ABUTMENT SECTION Through Pile



DESIGNED BY	DATE	SIGNATURE
CHECKED BY	DATE	P.E. NUMBER
DESIGNED BY	DATE	DATE
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

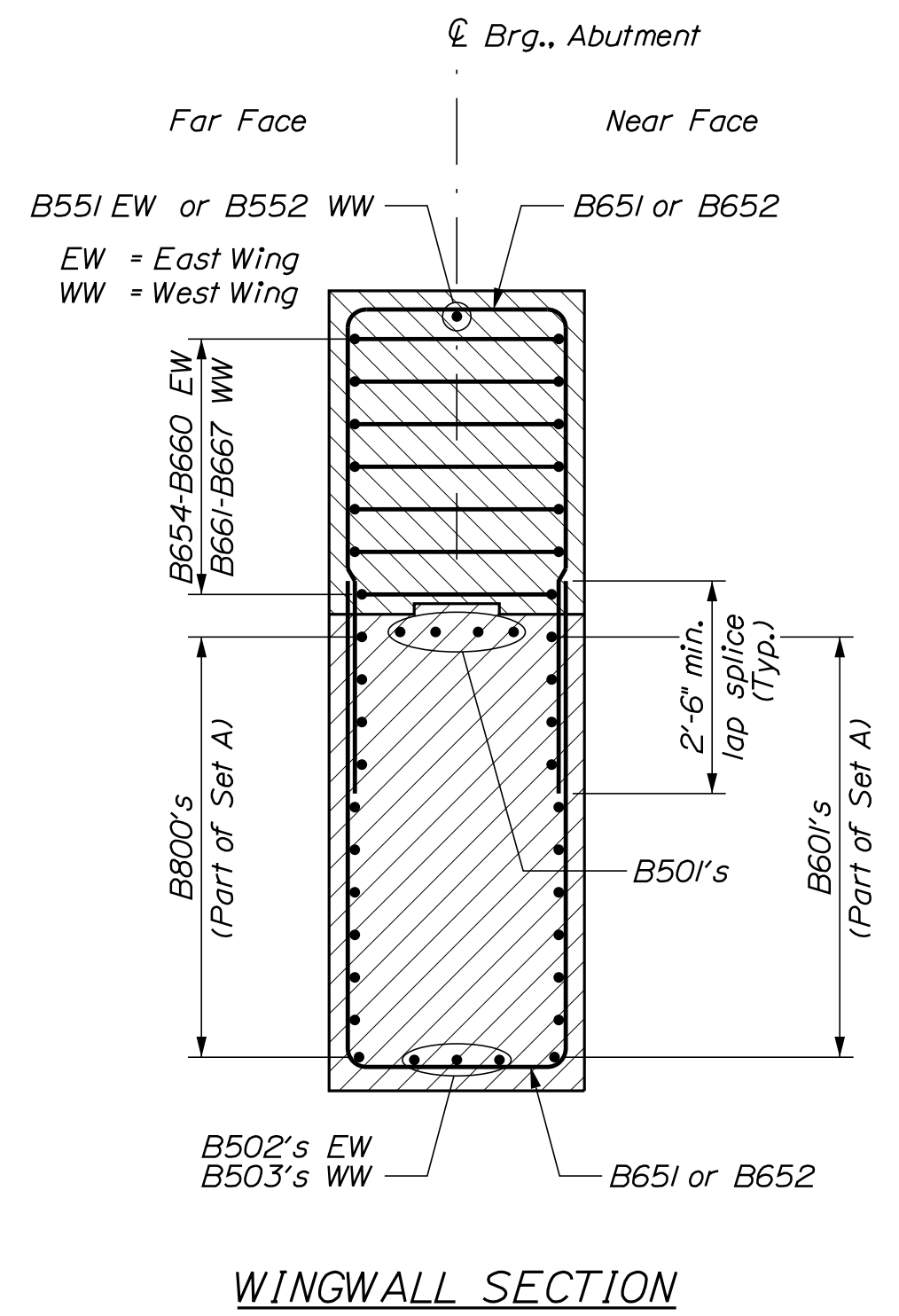
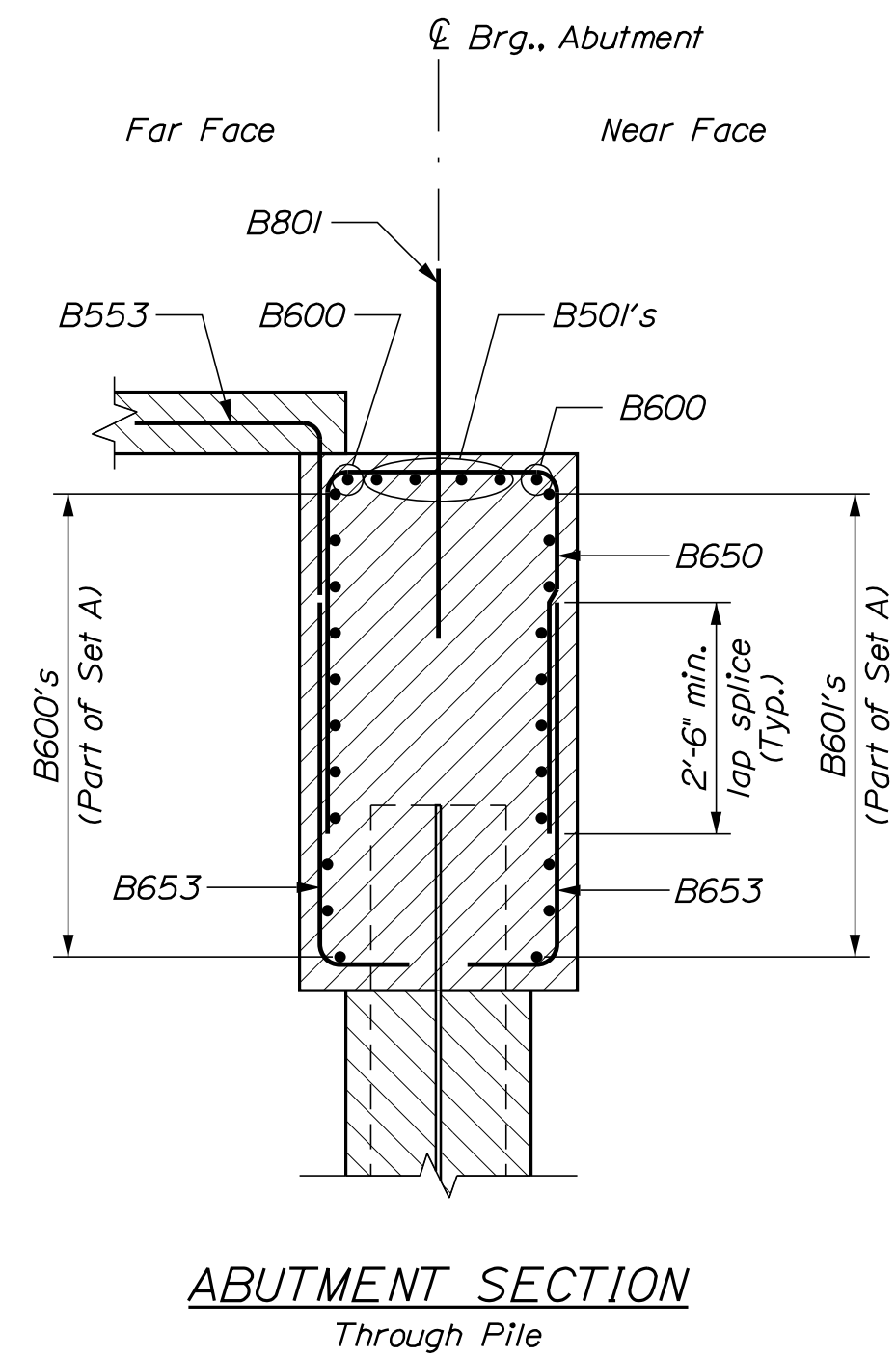
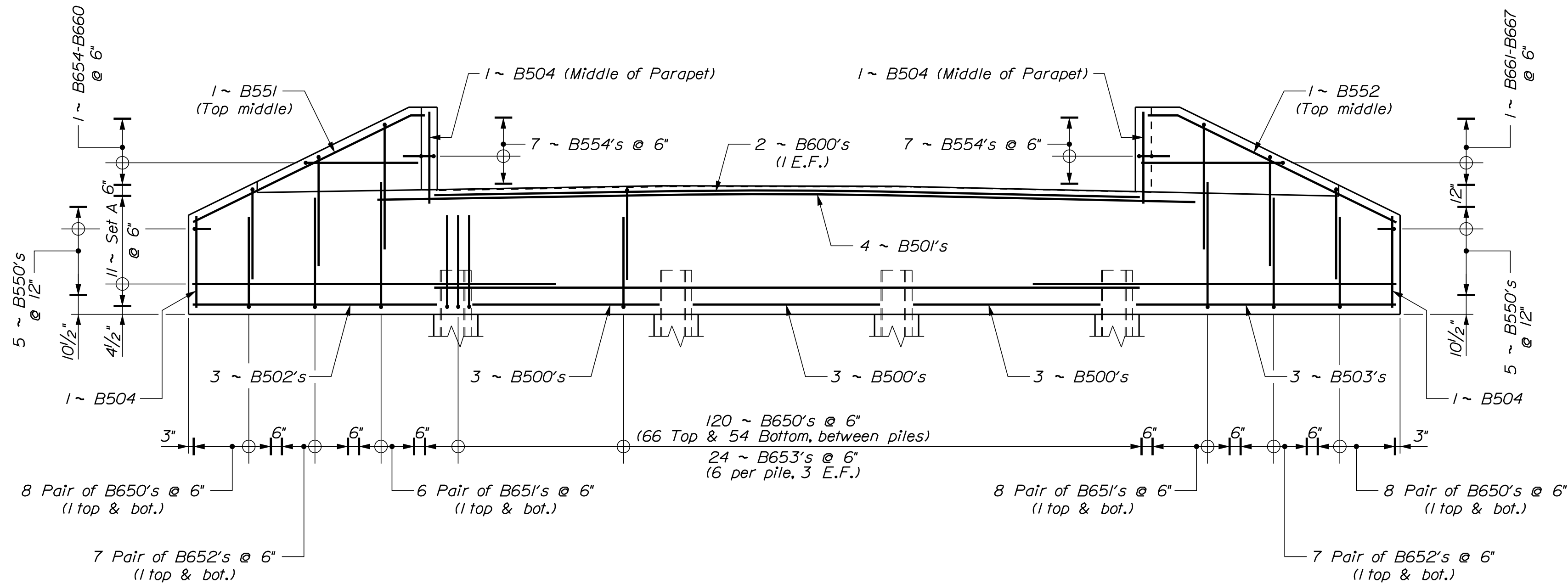
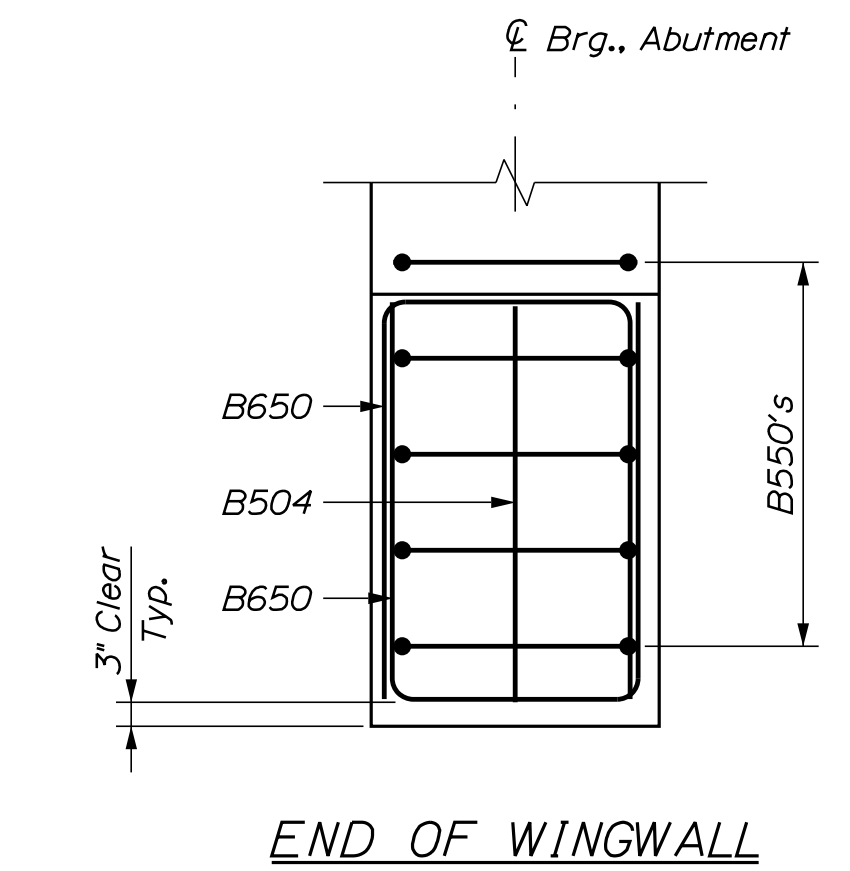
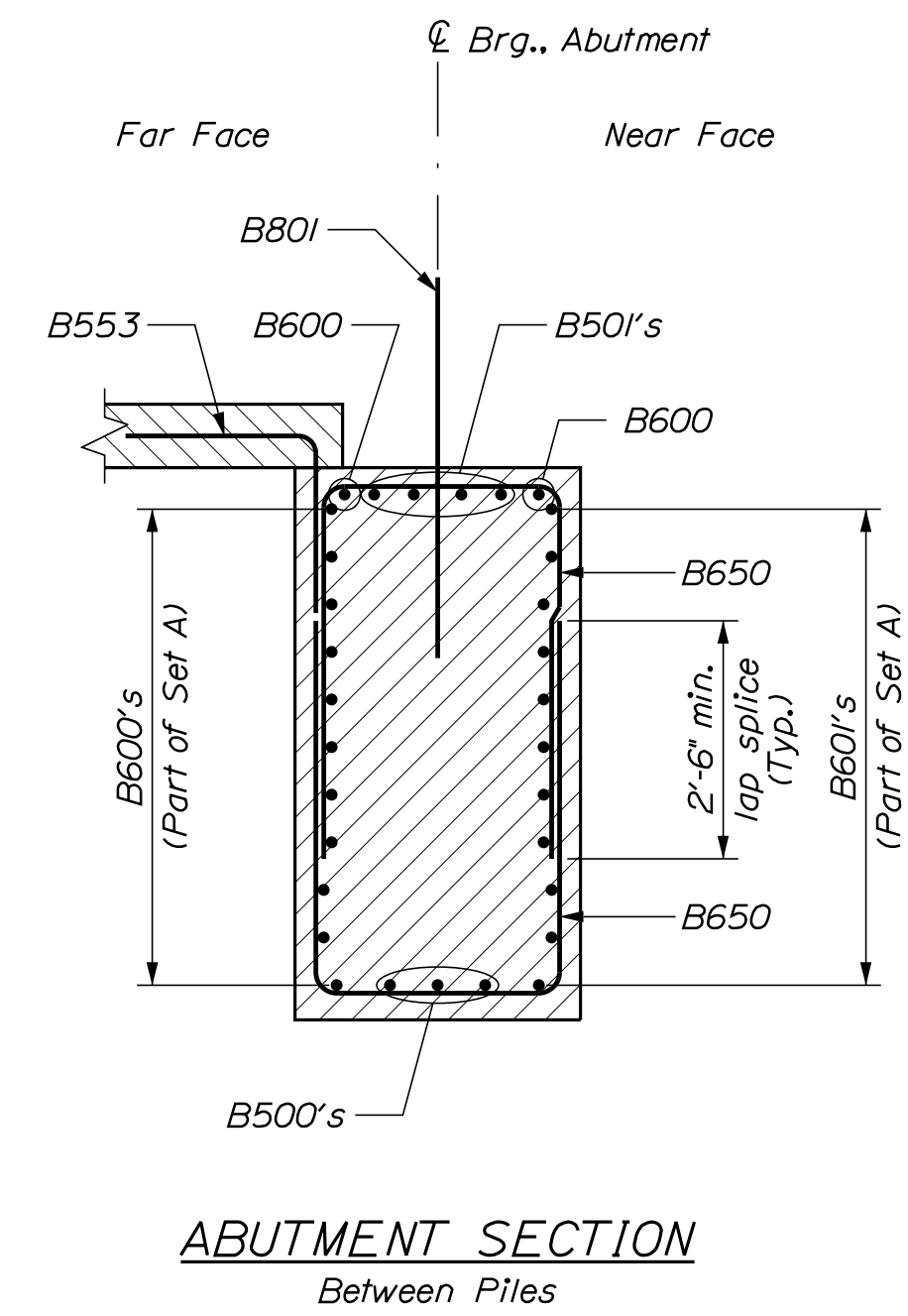
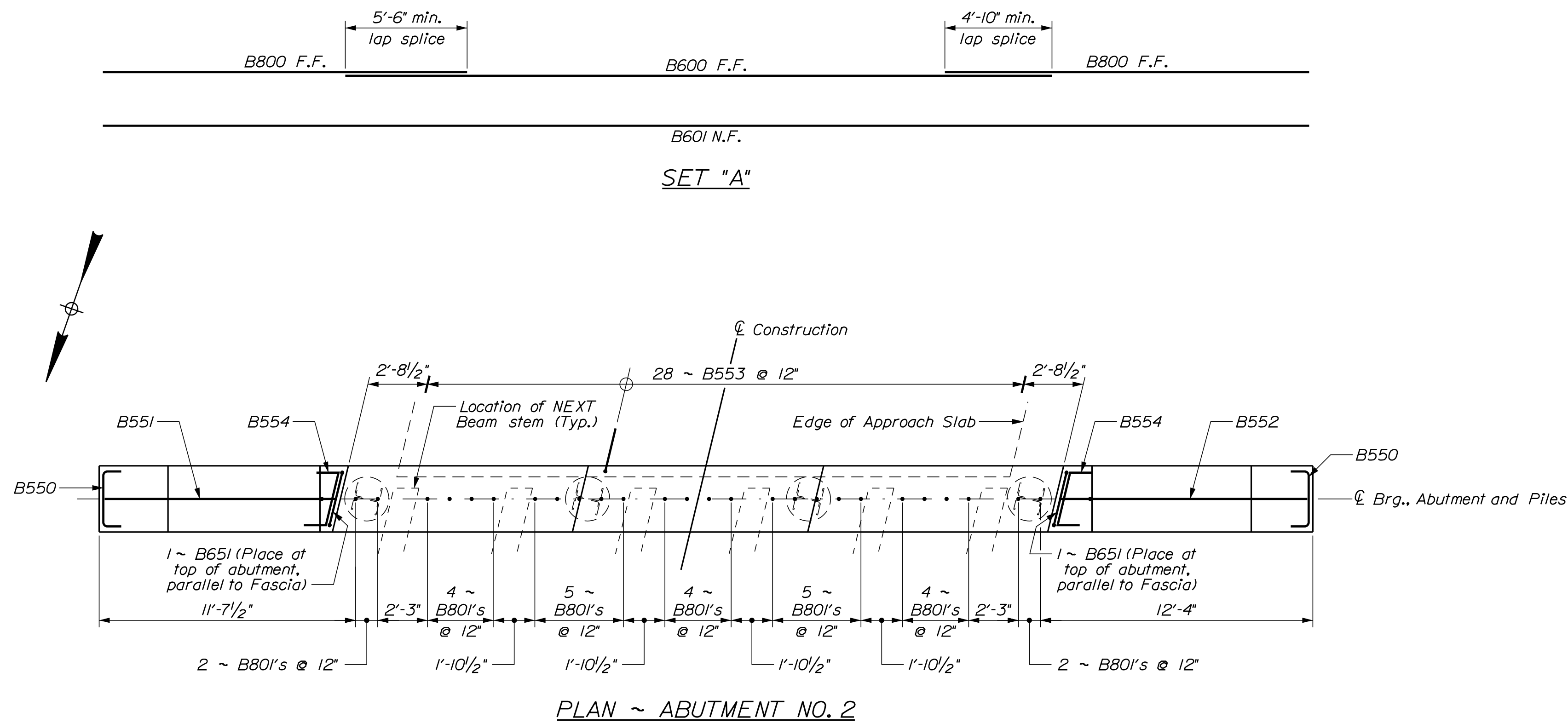
PROJ. MANAGER	BY	DATE
DESIGN-DETAILED	D. SHAW	MAY 2020
CHECKED-REVIEWED	J. HASBROUCK	MAY 2020
DESIGN-DETAILED	L. KRUSINSKI	DEC 2019
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

Date: 8/10/2020

Username: David Shaw

Division: BRIDGE

Filename: ... \018_Abument_No2_Rebar.dgn



Set A: 2 ~ B800 (1 each wing) F.F.,
 1 ~ B600 (Middle) F.F. and
 1 ~ B601 N.F. (See detail)

SIGNATURE

DATE

BY

M. PARLIN

DESIGN-DETAILED

CHECKED-REVIEWED

DESIGNS DETAILED

REVISIONS 1

REVISIONS 2

REVISIONS 3

REVISIONS 4

FIELD CHANGES

DATE

DATE

DATE

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DATE

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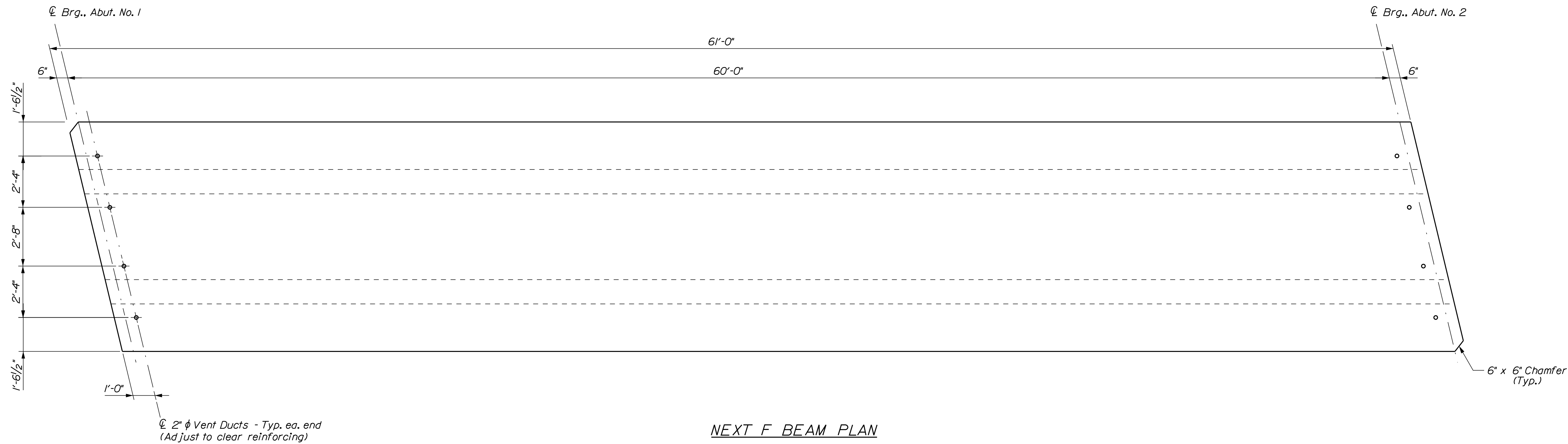
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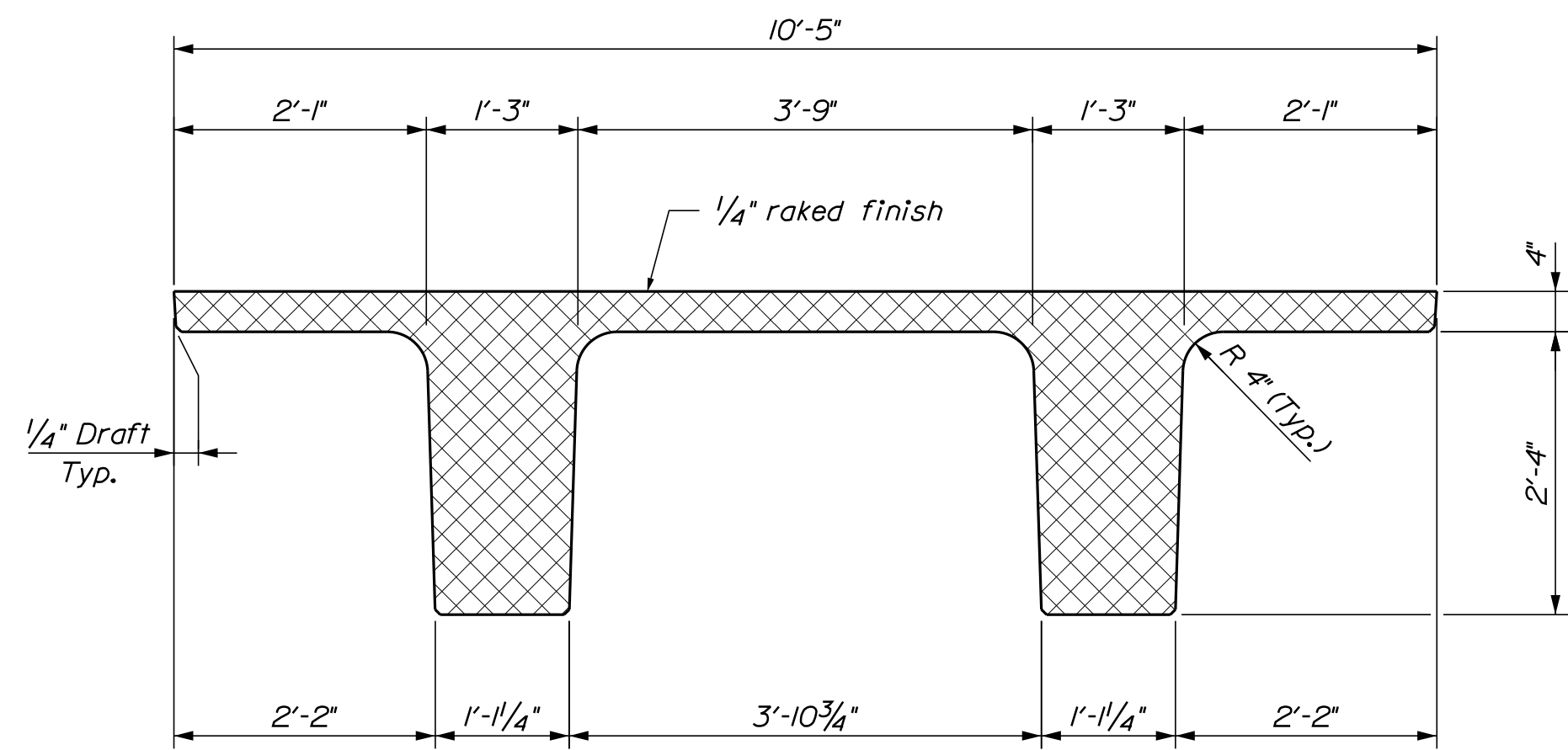
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Division: BRIDGE

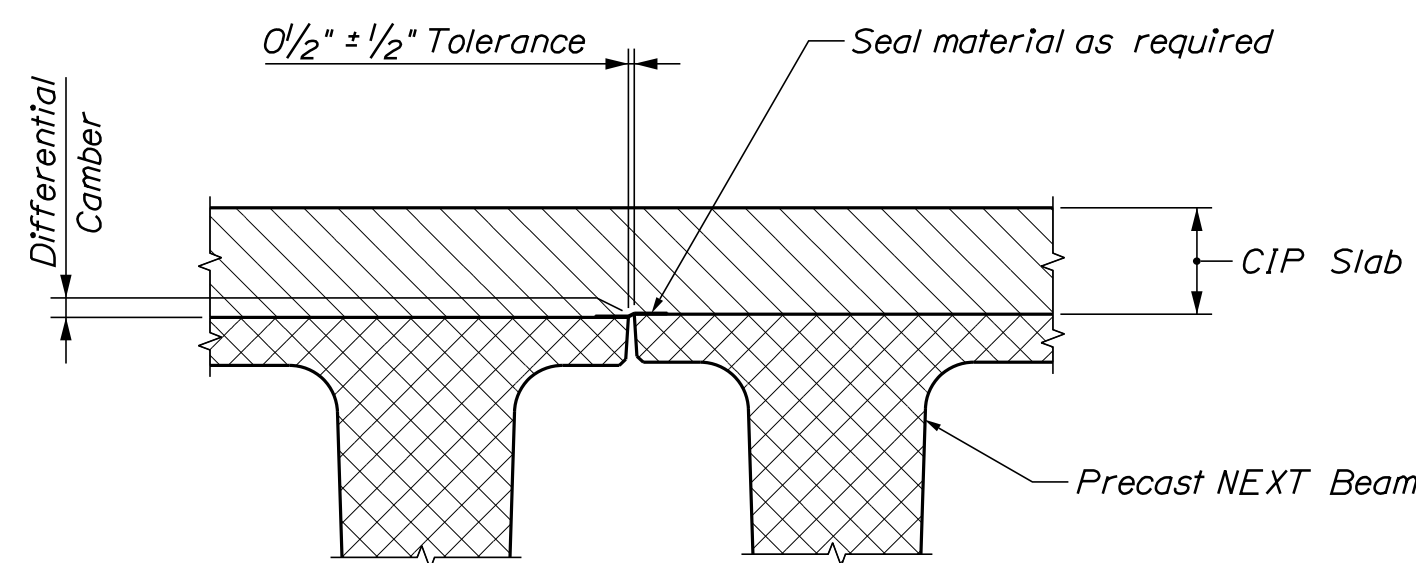
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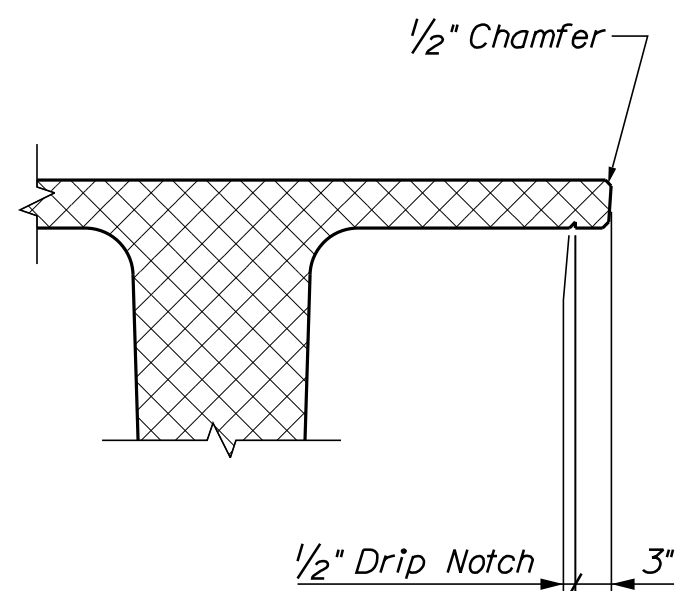
NEXT F BEAM PLAN



NEXT 32 F BEAM SECTION



NEXT BEAM GAP FORM DETAIL



FASCIA OVERHANG DETAIL

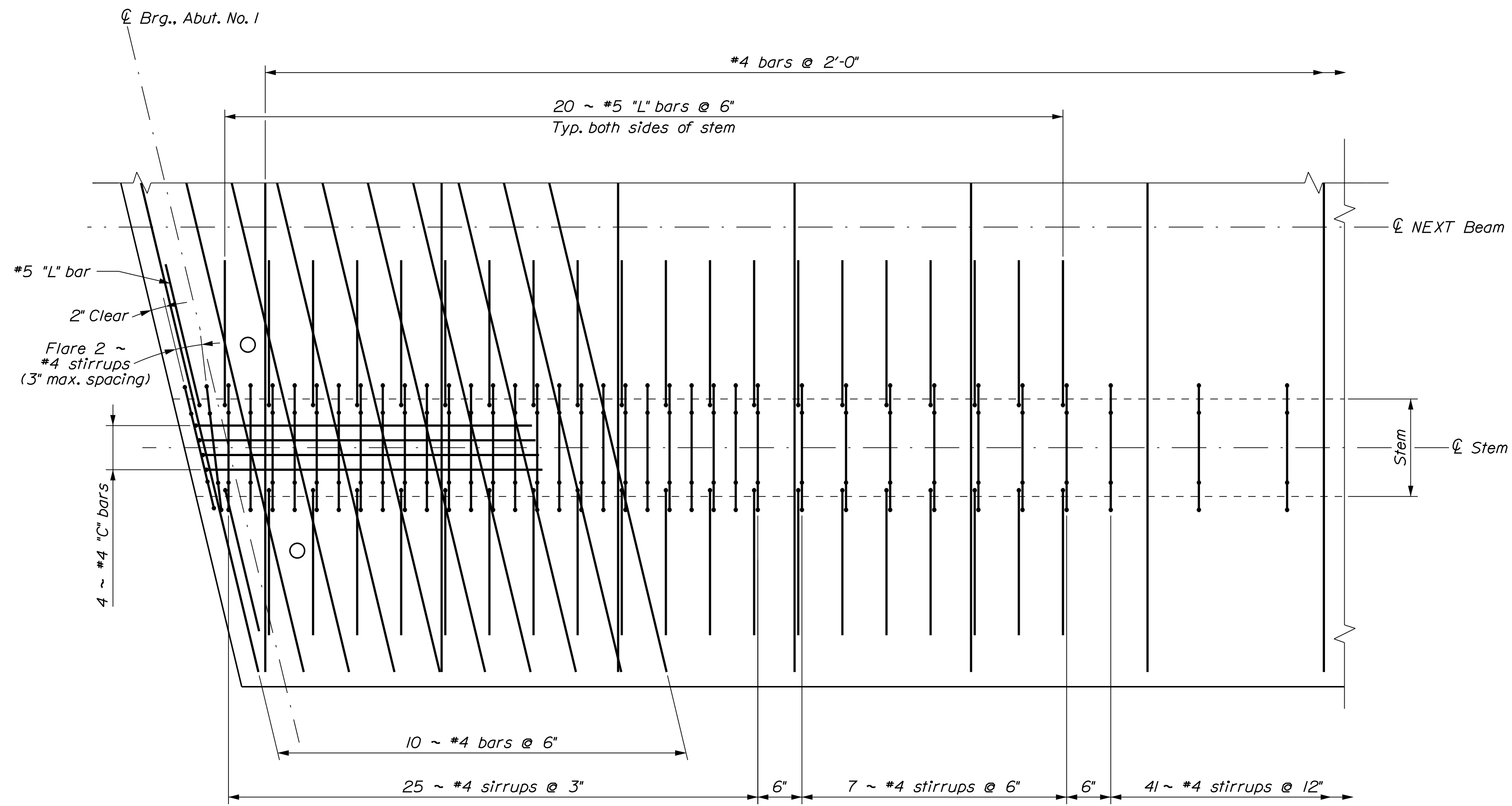
PRECAST CONCRETE SUPERSTRUCTURE NOTES

- NEXT F Beams are a non - proprietary shape developed by PCI NORTHEAST (PCINE). Standardized section properties and details may be found at <http://www.pcine.org>.
- The estimated camber at release is 1 5/8 inches and the estimated camber at erection is 2 7/8 inches. Refer to Special Provision Section 535, Precast, Prestressed Concrete Superstructure - Camber.
- Prestressing strands shall be 0.6 inch diameter. The tensioning force is 44 kips per prestressing strand, including the top strands.
- Reinforcing steel shall have a minimum concrete cover of 2 inches unless otherwise noted.
- Do not drill or use powder actuated tools on the prestressed beams without the approval of the Fabrication Engineer.
- The top surface of the upper flange of the prestressed beams shall be raked to a surface roughness of 1/4 inch, except at 10-ft. increments along the centerline of each beam. At these locations a flattened area of sufficient size shall be left to facilitate taking elevations for setting bottom of slab elevations.
- A maximum of 50 percent of the strands in the bottom 5 rows may be debonded 6 inches from the end of the beam. All 4 top row strands shall be fully bonded.
- Lifting loops and temporary/storage/shipping dunnage shall be a maximum of 2 feet from each beam end.

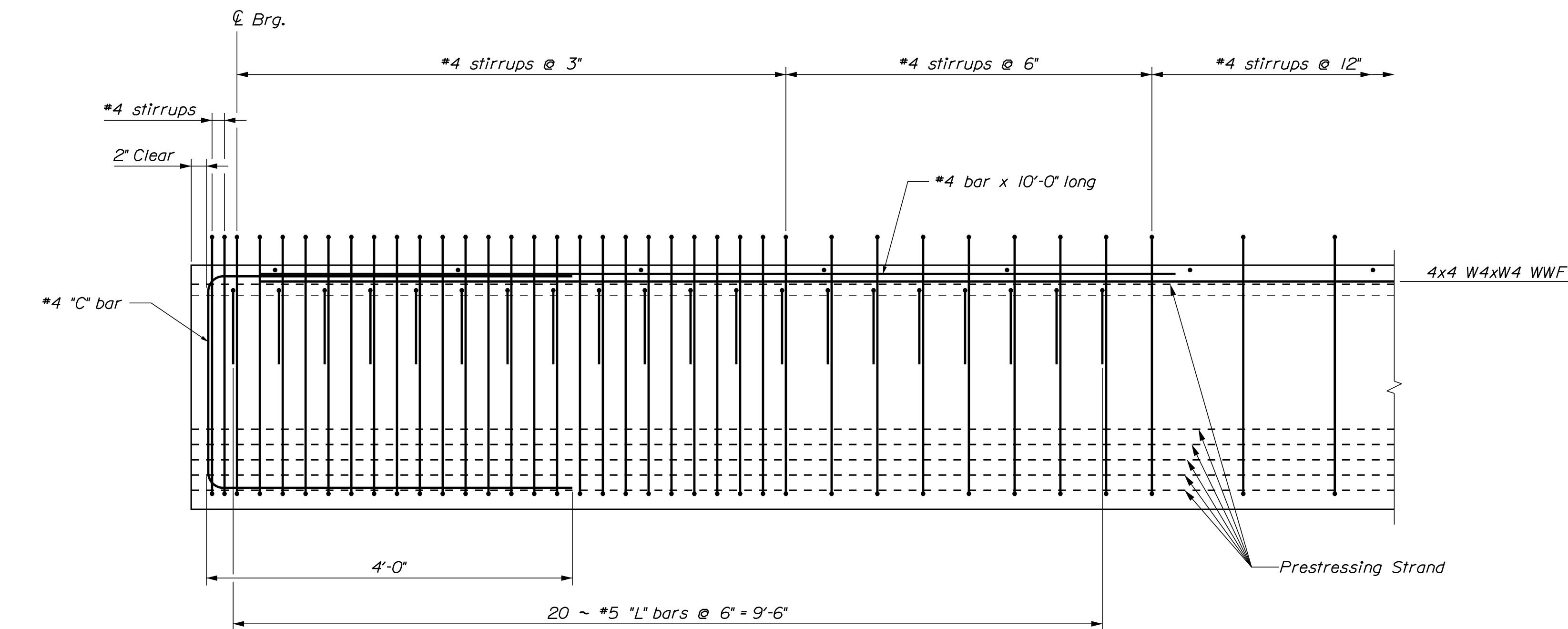
ELASTOMERIC BEARING PAD NOTES

- Elastomeric Bearing Pads shall be 1 1/8"x2'-6"x32'-5" per abutment.
- The elastomer shall have a shear modulus of 95 psi and a Shore A Durometer hardness of 50.
- Elastomeric Bearing Pads shall conform to the requirements of the latest edition of the AASHTO LRFD Bridge Construction Specifications, Section 18.2.
- Elastomeric Bearing Pads will not be paid for directly but will be considered incidental to related Contract items. No separate payment will be made.

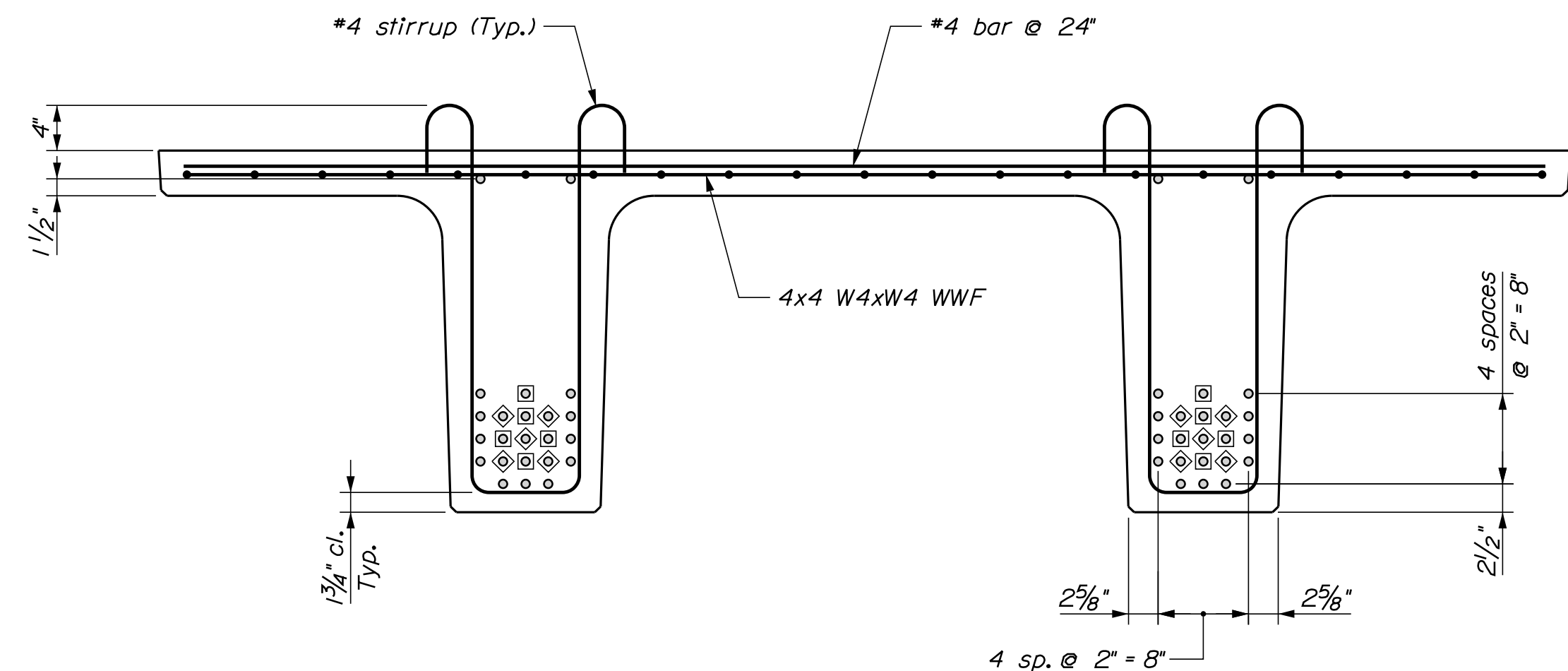
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SCHOODIC BRIDGE		SCHOODIC BROOK		WASHINGTON COUNTY		PRECAST NEXT BEAM		SHEET NUMBER		19		OF 24	
PROJ. MANAGER	M. PARLIN	BY	D. SHAW	DATE	FEB. 2017	SIGNATURE	P.E. NUMBER	DATE					
DESIGN-DETAILED	B. BARTLETT	CHECKED-REVIEWED	J. HASBROUCK										
DESIGN-DETAILED	L. KRUSINSKI	DESIGN-DETAILED	L. KRUSINSKI										
REVISIONS	1	REVISIONS	2										
REVISIONS	3	REVISIONS	4										
FIELD CHANGES													



PARTIAL TOP FLANGE REINFORCING PLAN
 Prestressing strands, welded wire and top longitudinal bars not shown for clarity
 Opposite end similar

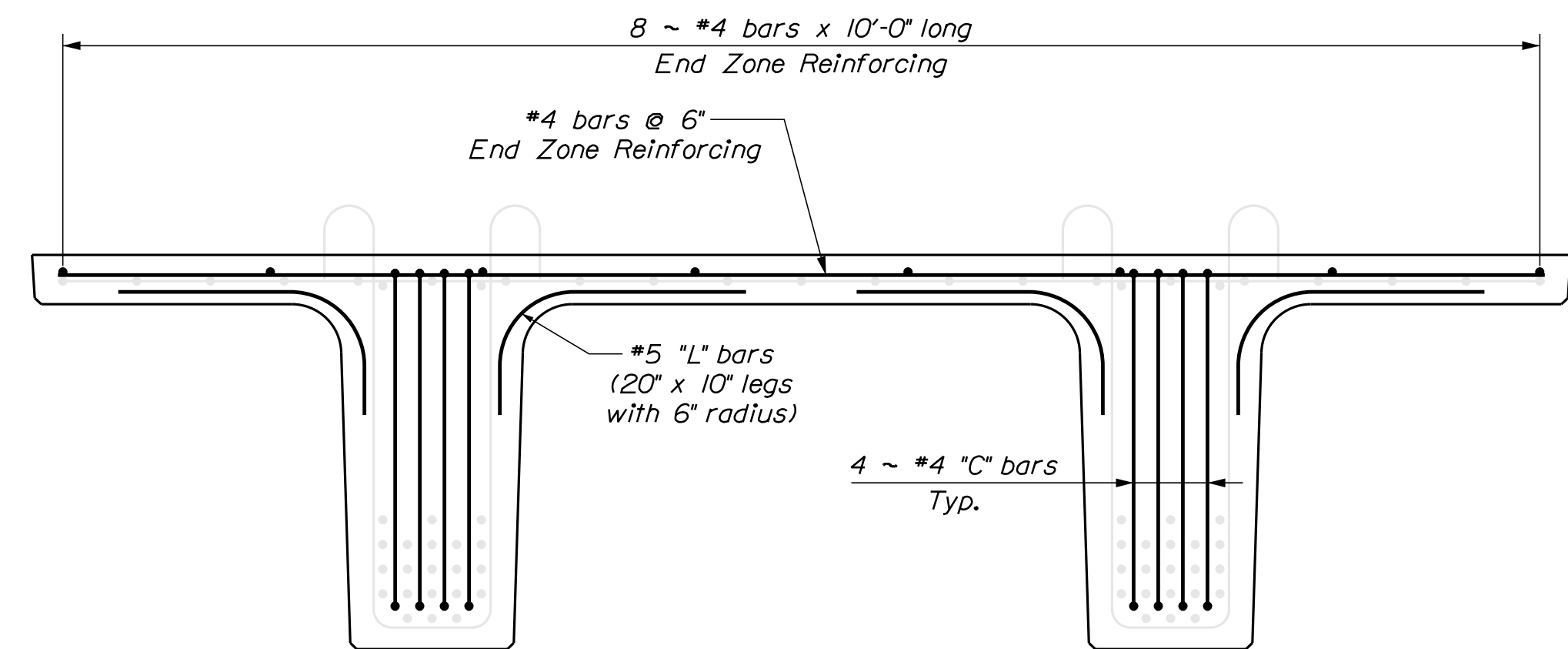


LONGITUDINAL SECTION THROUGH STEM



NEXT F BEAM TYPICAL REINFORCING SECTION

- ◻ Strands debonded 6 inches.
- ◊ Strands debonded 6 feet.
- Strands not debonded.



NEXT F BEAM END REINFORCING SECTION

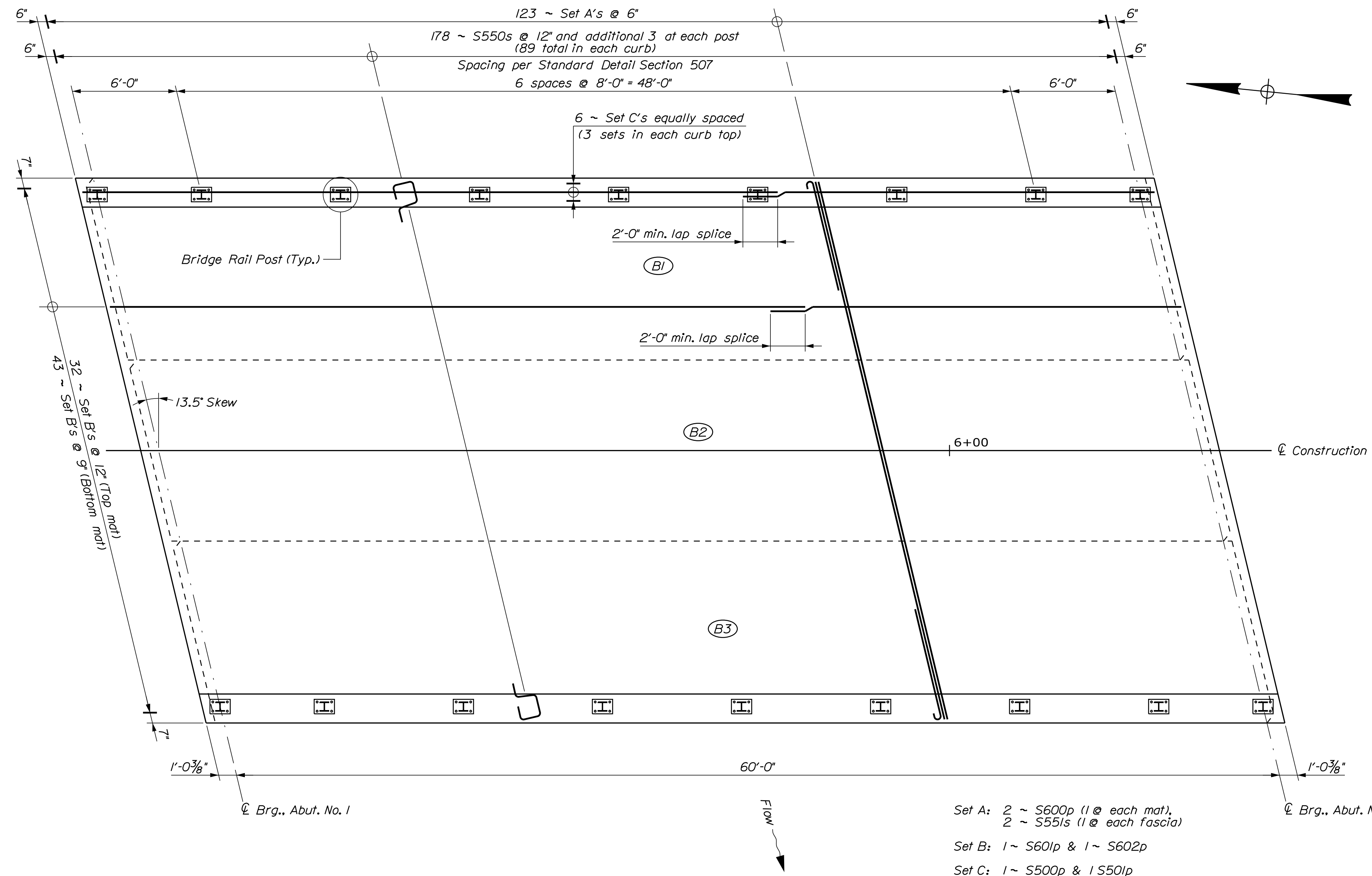
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M. PARLIN	D. SHAW	MAY 2020			
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CHECKED-REVIEWED	J. HASBROUCK				
DESIGN-DETAILED	L. KRUSINSKI	DEC 2019			
REVISIONS 1					
REVISIONS 2					
REVISIONS 3					
REVISIONS 4					
FIELD CHANGES					

SCHOODIC BRIDGE
 SCHOODIC BROOK
 CHERRYFIELD WASHINGTON COUNTY
PRECAST NEXT BEAM

SHEET NUMBER

20

OF 24



Set A: 2 ~ S600p (1 @ each mat),
2 ~ S551s (1 @ each fascia)

Set B: 1 ~ S601p & 1 ~ S602p

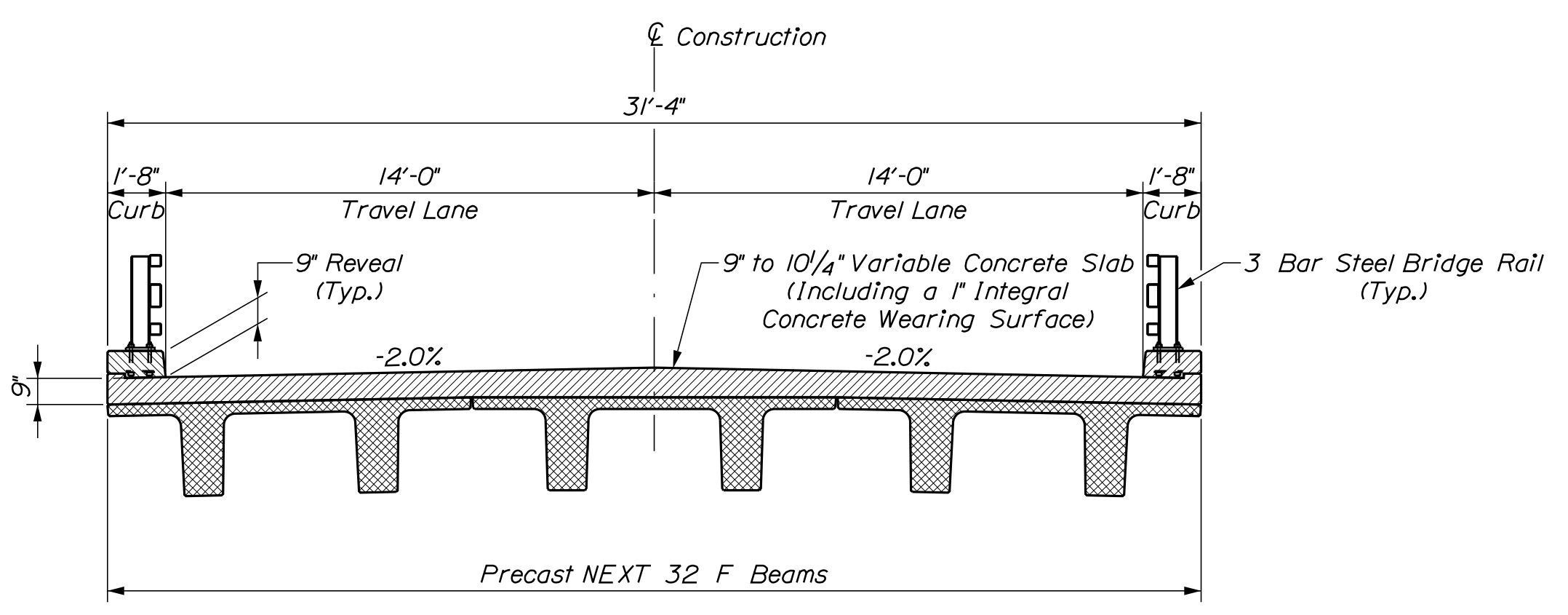
Set C: 1 ~ S500p & 1 S501p

SUPERSTRUCTURE NOTES

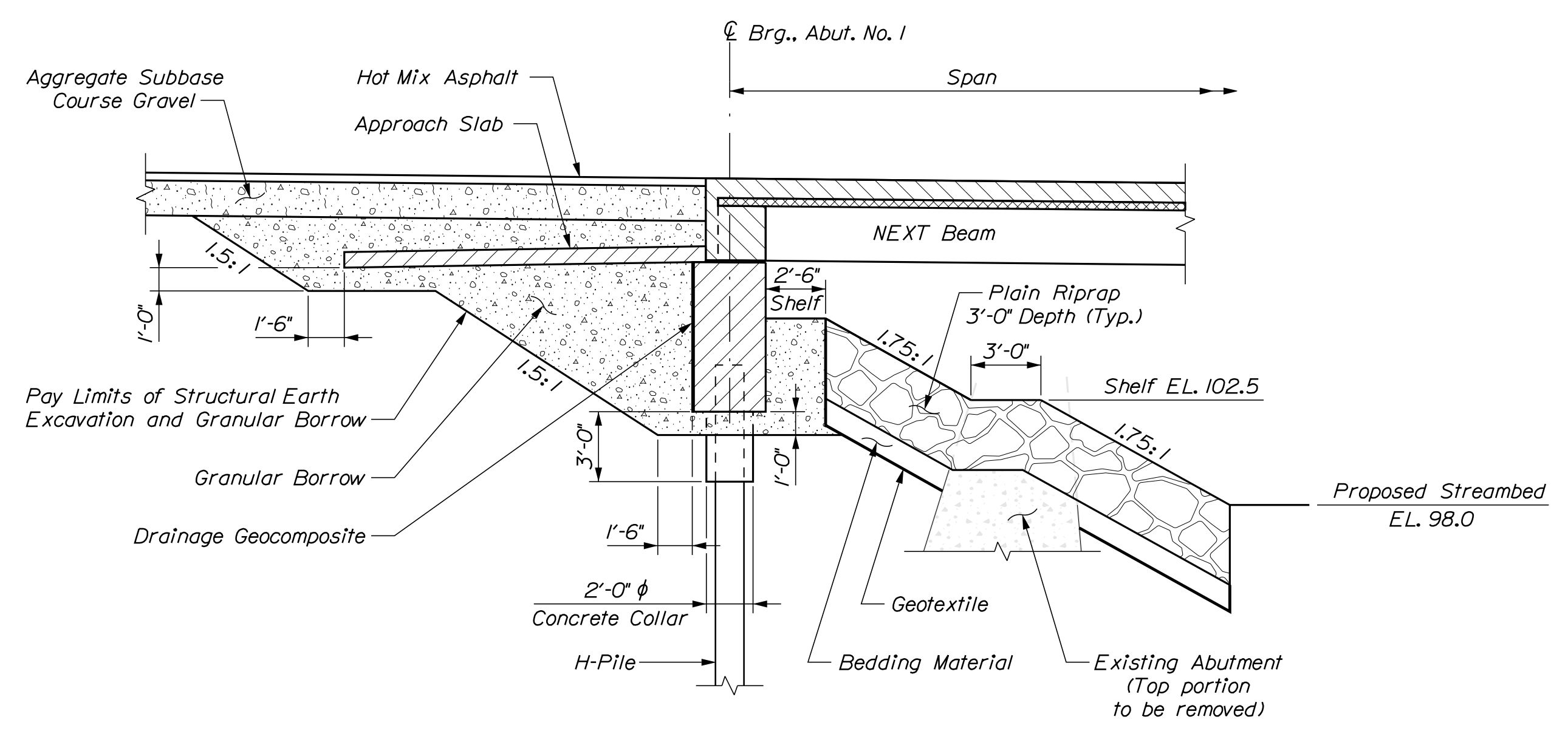
- The deck thickness shall be adjusted in accordance with Special Provision Section 535, Precast, Prestressed Concrete Superstructure - Camber.
- Form a one inch V-groove on the fascias at the horizontal joint between the curb and slab.
- Both top and bottom mats of reinforcing shall be placed parallel to the finished profile. Reinforcing shall have a constant concrete top cover of 3 inches. Bottom concrete cover may be variable with a minimum cover of 1 inch.
- End diaphragm concrete will be paid for under Item No. 502.261, Structural Concrete Roadway and Sidewalk Slabs on Concrete Bridges and shall be placed with the deck.
- The Contractor shall stagger splice locations of longitudinal bars.
- Anchor rods for the steel bridge rail posts shall be shortened by 1" to provide additional clearance between the top of deck and bottom of anchor rod.
- Saw Cut Grooving shall be in the longitudinal direction.

Filename: ... \MSTA\021_Superstructure.dgn
 Division: BRIDGE
 Username: David.Shaw
 Date: 8/10/2020

SUPERSTRUCTURE PLAN



TYPICAL BRIDGE SECTION



ABUTMENT SECTION

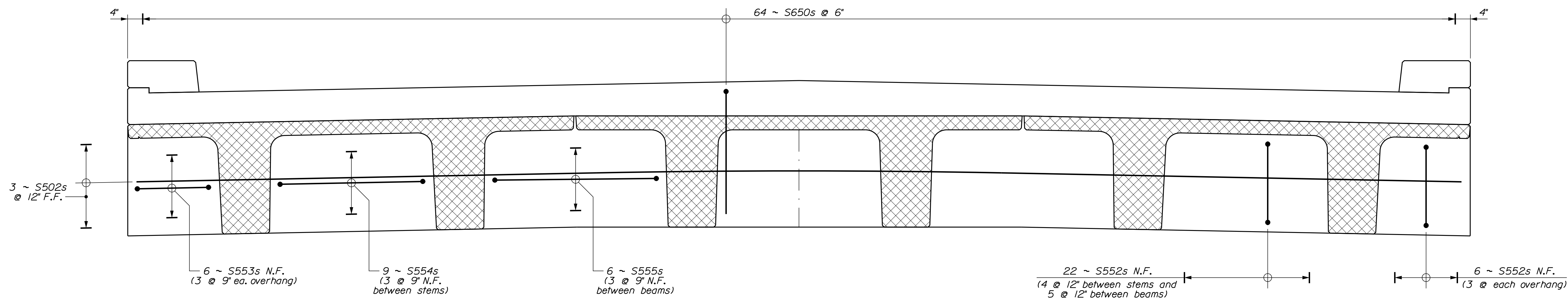
STATE OF MAINE DEPARTMENT OF TRANSPORTATION 2223000	BRIDGE NO. 3649 WIN 022230.00 BRIDGE PLANS	
PROJECT MANAGER M. PARLIN	BY D. SHAW	DATE MAY 2020
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DESIGNS-DETAILED L. KRUSINSKI	REVISIONS 1 REVISIONS 2 REVISIONS 3 REVISIONS 4	P.E. NUMBER DATE
SCHOODIC BRIDGE SCHOODIC BROOK WASHINGTON COUNTY CHERRYFIELD		SUPERSTRUCTURE PLAN
SHEET NUMBER 21 OF 24		

Date: 8/10/2020

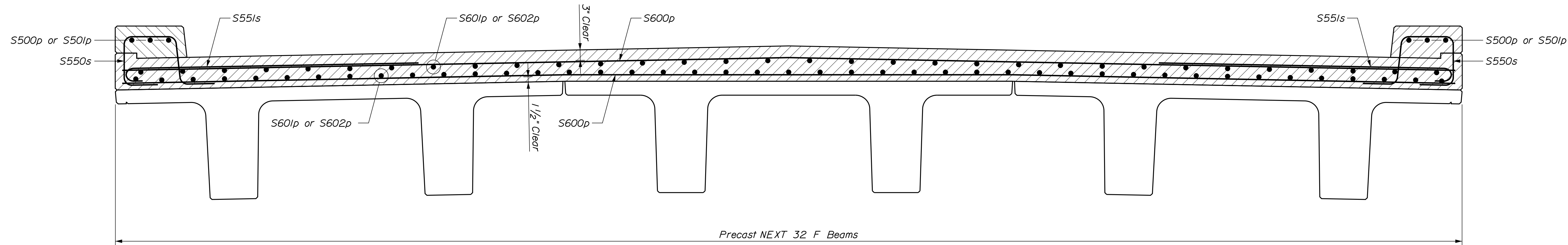
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Division: BRIDGE

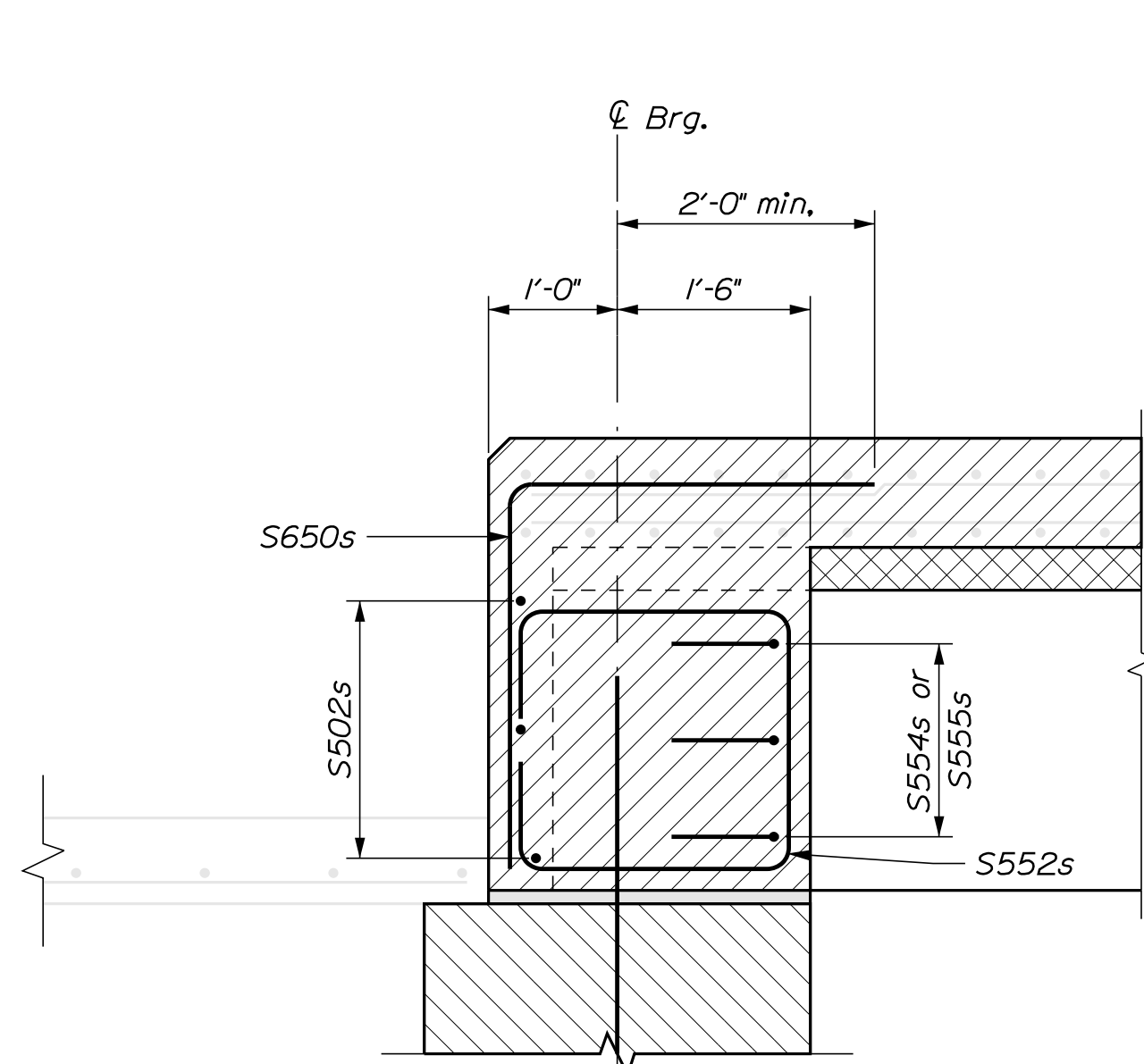
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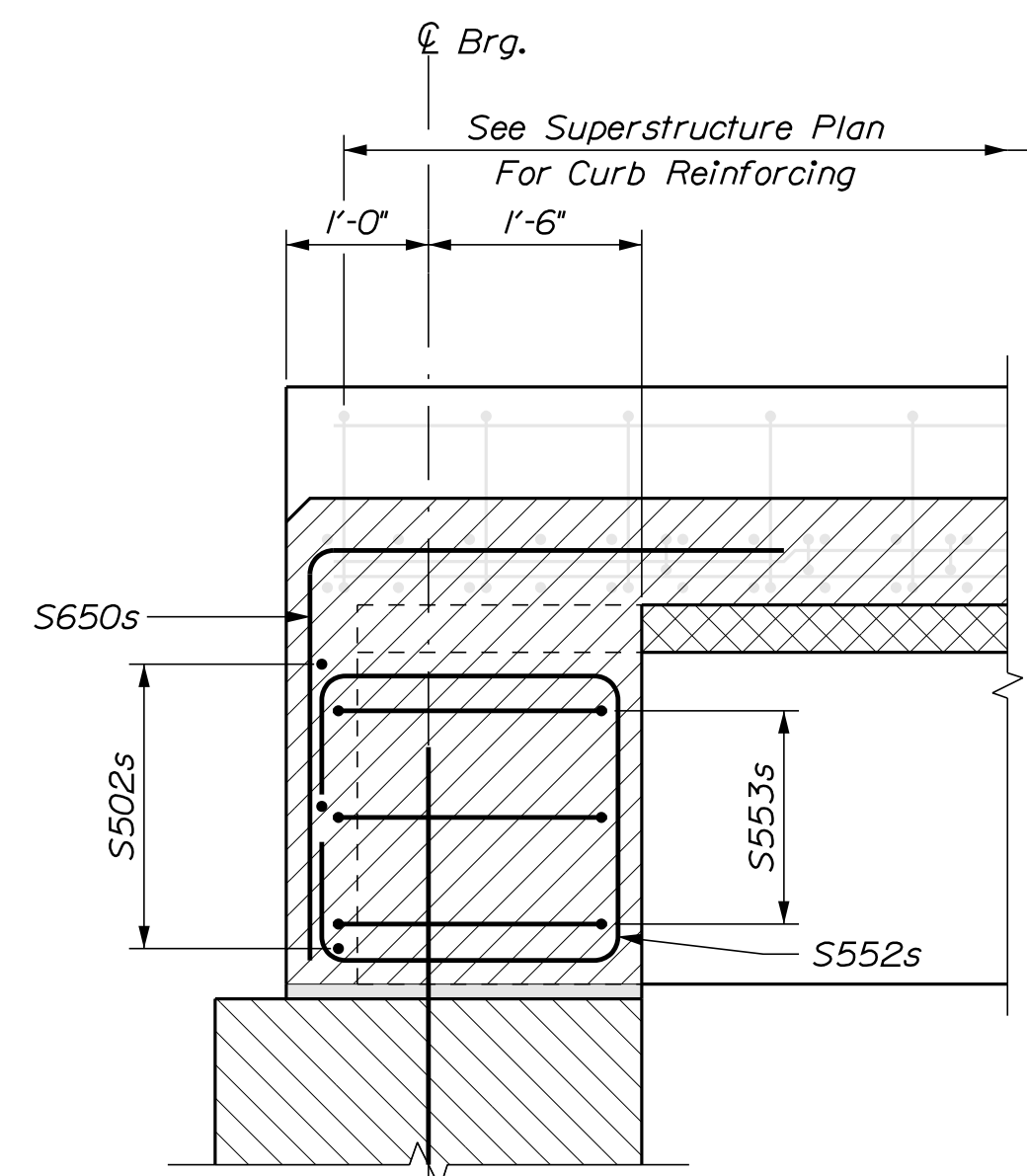
END DIAPHRAGM ELEVATION



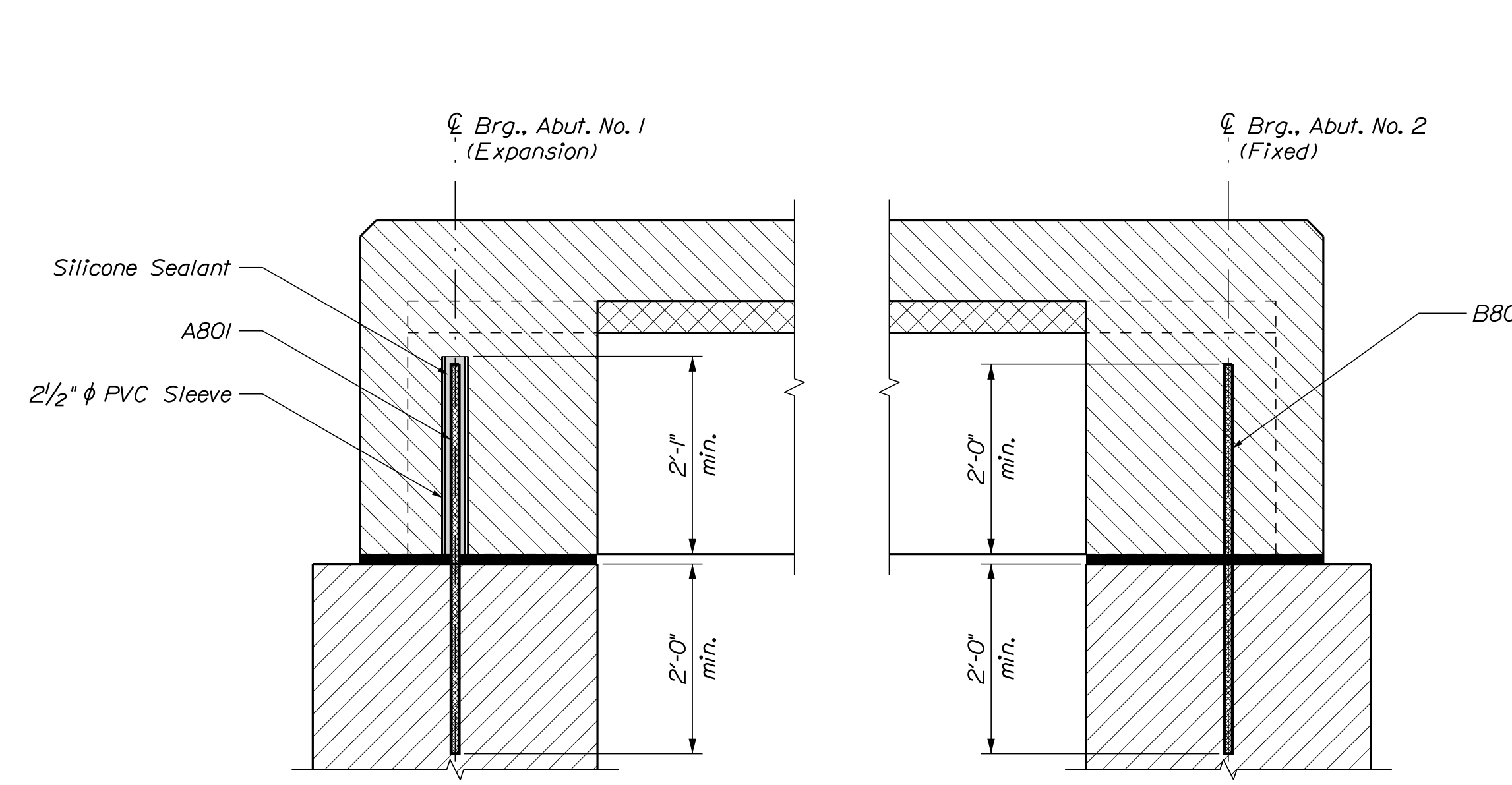
SUPERSTRUCTURE SLAB REINFORCEMENT
Section cut parallel to centerline of bearing



END DIAPHRAGM SECTION AT ROADWAY



END DIAPHRAGM SECTION AT CURB



SUPERSTRUCTURE ANCHORAGE DETAIL

STATE OF MAINE		DEPARTMENT OF TRANSPORTATION		2223000		WIN		022230.00		BRIDGE NO. 3649		BRIDGE PLANS	
SCHOOIDIC BRIDGE		SCHOOIDIC BROOK		WASHINGTON COUNTY		CHERRYFIELD		SUPERSTRUCTURE DETAILS		SHEET NUMBER		22	
PROJ. MANAGER	M. PARLIN	BY	D. SHAW	DATE	MAY 2020	DESIGN-DETAILED	B. BARTLETT	SIGNATURE		P.E. NUMBER		DATE	
CHECKED-REVIEWED	J. HASBROUCK	DESIGN-DETAILED	L. KRUSINSKI	DATE	DEC 2019	DESIGN-DETAILED	T. WHITE	SIGNATURE		P.E. NUMBER		DATE	
REVISIONS 1		REVISIONS 2		REVISIONS 3		REVISIONS 4		FIELD CHANGES					

Date: 8/10/2020

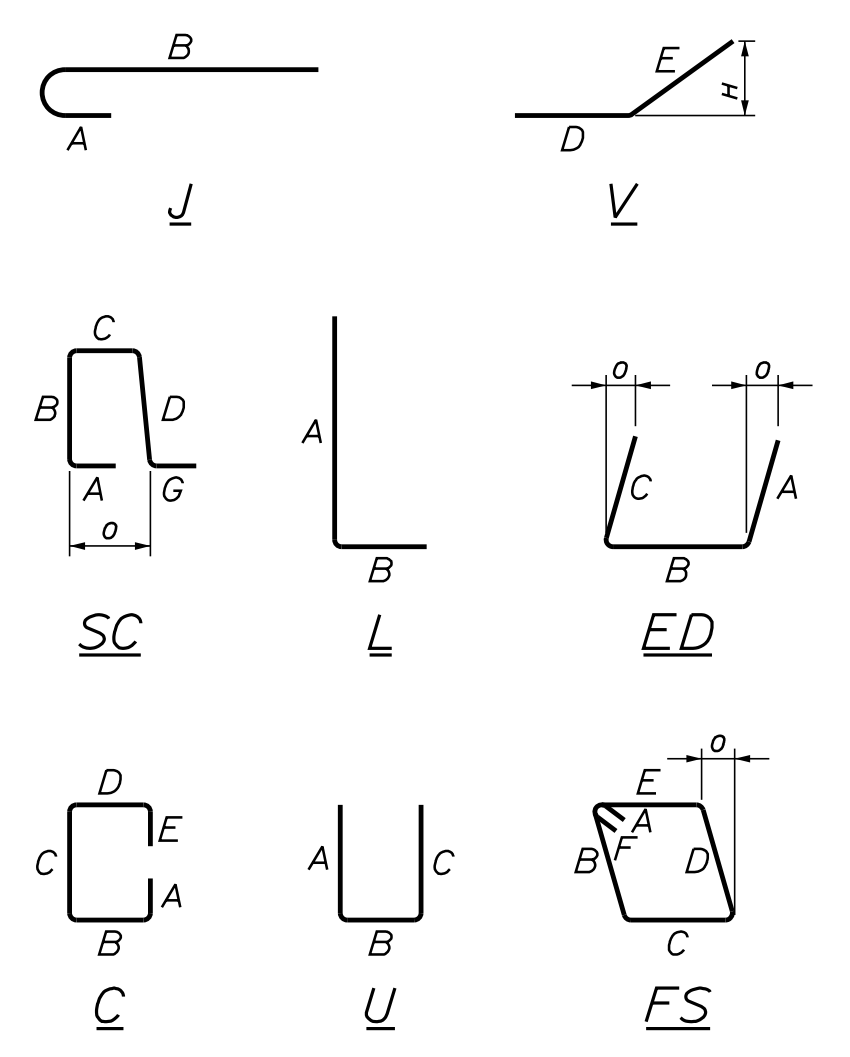
Username: David.Shaw

Division: BRIDGE

Filename: ... \00\BRIDGE\MSTA\023_Rebar.dgn

STRAIGHT BARS				STRAIGHT BARS				BENT BARS																
MARK	QTY.	LENGTH	LOCATION	MARK	QTY.	LENGTH	LOCATION	MARK	QTY.	LENGTH	TYPE	A	B	C	D	E	F	G	H	O	R	LOCATION		
<i>Abutment No. 1</i>				<i>Abutment No. 2</i>				<i>Abutment No. 1</i>																
A500	9	8'-6"	Bottom Abutment, between piles	B500	9	8'-6"	Bottom Abutment, between piles	A550	10	4'-2"	U	10"	2'-6"	10"									End Abutment Wingwall	
A501	4	37'-2"	Top Abutment	B501	4	37'-2"	Top Abutment	A551	1	11'-7"	V				10'-11"	8"					3/2"	Top West Abutment Wingwall		
A502	3	11'-1"	Bottom Abutment, West Wingwall	B502	3	11'-1"	Bottom Abutment, East Wingwall	A552	1	12'-4 1/2"	V				11'-0"	1'-4 1/2"					7 1/2"	Top East Abutment Wingwall		
A503	3	11'-9 1/2"	Bottom Abutment, East Wingwall	B503	3	11'-9 1/2"	Bottom Abutment, West Wingwall	A553	28	4'-0"	L	2'-0"	2'-0"										Hooks for Approach Slab	
A504	4	4'-10"	End Wingwall or Parapet	B504	4	4'-1 1/2"	End Wingwall or Parapet	A554	14	4'-6"	ED	12"	2'-6"	12"								2 3/4"	Abutment Parapet	
A600	14	32'-0"	Abutment Backwall	B600	13	32'-0"	Abutment Backwall	A650	144	11'-1 1/2"	U	4'-3"	2'-7 1/2"	4'-3"									Abut. Breastwall/End Wingwall	
A601	12	54'-6"	Abutment Breastwall	B601	11	54'-6"	Abutment Breastwall	A651	34	14'-9 1/2"	U	6'-1"	2'-7 1/2"	6'-1"									Abutment Wingwall	
								A652	32	13'-1 1/2"	U	5'-3"	2'-7 1/2"	5'-3"									Abutment Wingwall	
A800	24	16'-6"	Abutment Backwall	B800	22	16'-6"	Abutment Backwall	A653	24	5'-3"	L	4'-3"	12"										Bottom Abutment at piles	
A801	26	4'-2"	Abutment/End Diaphragm	B801	26	4'-2"	Abutment/End Diaphragm	A654	1	18'-2"	U	7'-6 1/2"	2'-6"	8'-1 1/2"									Top West Abutment Wingwall	
								A655	1	16'-2"	U	6'-6 1/2"	2'-6"	7'-1 1/2"									Top West Abutment Wingwall	
								A656	1	14'-1"	U	5'-6"	2'-6"	6'-1"									Top West Abutment Wingwall	
								A657	1	12'-1"	U	4'-6"	2'-6"	5'-1"									Top West Abutment Wingwall	
								A658	1	10'-0"	U	3'-5 1/2"	2'-6"	4'-0 1/2"									Top West Abutment Wingwall	
								A659	1	8'-0"	U	2'-5 1/2"	2'-6"	3'-0 1/2"									Top West Abutment Wingwall	
								A660	1	5'-11"	U	1'-5"	2'-6"	2'-0"									Top West Abutment Wingwall	
								A661	1	19'-5"	U	8'-2"	2'-6"	8'-9"									Top East Abutment Wingwall	
								A662	1	17'-7"	U	7'-3"	2'-6"	7'-10"									Top East Abutment Wingwall	
								A663	1	15'-6 1/2"	U	6'-3"	2'-6"	6'-9 1/2"									Top East Abutment Wingwall	
								A664	1	13'-6"	U	5'-2 1/2"	2'-6"	5'-9 1/2"									Top East Abutment Wingwall	
								A665	1	11'-5 1/2"	U	4'-2 1/2"	2'-6"	4'-9"									Top East Abutment Wingwall	
								A666	1	9'-5"	U	3'-2"	2'-6"	3'-9"									Top East Abutment Wingwall	
								A667	1	7'-4 1/2"	U	2'-2"	2'-6"	2'-8 1/2"									Top East Abutment Wingwall	
								<i>Abutment No. 2</i>																
								B550	10	4'-2"	U	10"	2'-6"	10"									End Abutment Wingwall	
								B551	1	11'-7"	V				10'-11"	8"					3/2"	Top East Abutment Wingwall		
								B552	1	12'-4 1/2"	V				11'-0"	1'-4 1/2"					7 1/2"	Top West Abutment Wingwall		
								B553	28	4'-0"	L	2'-0"	2'-0"										Hooks for Approach Slab	
								B554	14	4'-6"	ED	12"	2'-6"	12"								2 3/4"	Abutment Parapet	
								B650	152	10'-11 1/2"	U	4'-2"	2'-7 1/2"	4'-2"									Abut. Breastwall/End Wingwall	
								B651	30	14'-1 1/2"	U	5'-9"	2'-7 1/2"	5'-9"									Abutment Wingwall	
								B652	28	12'-8 1/2"	U	5'-0 1/2"	2'-7 1/2"	5'-0 1/2"									Abutment Wingwall	
								B653	24	5'-2"	L	4'-2"	12"										Bottom Abutment at piles	
								B654	1	17'-4"	U	7'-1 1/2"	2'-6"	7'-8 1/2"									Top East Abutment Wingwall	
								B655	1	15'-4"	U	6'-1 1/2"	2'-6"	6'-8 1/2"									Top East Abutment Wingwall	
								B656	1	13'-3 1/2"	U	5'-1 1/2"	2'-6"	5'-8"									Top East Abutment Wingwall	
								B657	1	11'-3"	U	4'-1"	2'-6"	4'-8"									Top East Abutment Wingwall	
								B658	1	9'-2 1/2"	U	3'-1"	2'-6"	3'-7 1/2"									Top East Abutment Wingwall	
								B659	1	7'-2"	U	2'-0 1/2"	2'-6"	2'-7 1/2"									Top East Abutment Wingwall	
								B660	1	5'-1 1/2"	U	1'-0 1/2"	2'-6"	1'-7"									Top East Abutment Wingwall	
								B661	1	18'-10"	U	7'-10 1/2"	2'-6"	8'-5 1/2"									Top West Abutment Wingwall	
								B662	1	16'-9"	U	6'-10"	2'-6"	7'-5"									Top West Abutment Wingwall	
								B663	1	14'-9"	U	5'-10"	2'-6"	6'-5"									Top West Abutment Wingwall	
								B664	1	12'-8"	U	4'-9 1/2"	2'-6"	5'-4 1/2"									Top West Abutment Wingwall	
								B665	1	10'-8"	U	3'-9 1/2"	2'-6"	4'-4 1/2"									Top West Abutment Wingwall	
								B666	1	8'-7"	U	2'-9"	2'-6"	3'-4"									Top West Abutment Wingwall	
								B667	1	6'-7"	U	1'-9"	2'-6"	2'-4"									Top West Abutment Wingwall	
								<i>Superstructure</i>																
								S550s	178	5'-4 1/8"	SC	10"	1'-2 5/8"	1'-3 1/4"	1'-2 1/4"							10"	1'-4 1/4"	Superstructure Curb
								S551s	246	7'-7"	J	7"	7'-0"											Superstructure Fascia
								S552s	56	8'-0"	C	10"	2'-2"	2'-0"	2'-2"	10"								End Diaphragm
								S553s	12	8'-9"	FS	5 1/2"	1'-9"	2'-2"	1'-9"	2'-2"	5 1/2"					5"	End Diaphragm-Fascia	
								S554s	18	5'-2"	ED	10"	3'-6"	10"									2 1/4"	End Diaphragm
								S555s	12	5'-8"	ED	10"	4'-0"	10"									2 1/4"	End Diaphragm
								S650s	128	6'-0"	L	3'-0"	3'-0"											End Diaphragm/Backwall

TYPE - BENDING DIAGRAMS



S500p: p = Glass Fiber Reinforced Polymer
 S550s: s = Stainless Steel

All dimensions are out-to-out of bar.

Bending details and hooks shall conform to the recommendations of the current revision of ACI Standard 315 and ACI Standard 318.

Reinforcing:
 Plain Steel..... ASTM A 615, Grade 60
 Stainless Steel..... ASTM A955 Grade 75 (S.S.)
 Glass Fiber Reinforced Polymer..... ASTM D7957

GENERAL NOTES

1. The first two digits following the letter(s) of the mark indicate the size of the bar:

Mark "A502" = bar size #5
 Mark "B805" = bar size #8
 Mark "S650" = bar size #6

STATE OF MAINE
 DEPARTMENT OF TRANSPORTATION
 2223000
 WIN 022230.00
 BRIDGE NO. 3649
 BRIDGE PLANS

SCHOODIC BRIDGE
 WASHINGTON COUNTY
 REINFORCING STEEL SCHEDULE

PROJ. MANAGER: M. PARLIN
 CHECKED-REVIEWED: B. BARTLETT, J. HASBROUCK, L. KRUSINSKI
 DESIGNED-Detailed: I. WHITE
 DATE: MAY 2020, DEC 2019

BY: D. SHAW, I. WHITE
 SIGNATURE: _____
 P.E. NUMBER: _____
 DATE: _____

REVISIONS:
 REVISIONS 1: _____
 REVISIONS 2: _____
 REVISIONS 3: _____
 REVISIONS 4: _____
 FIELD CHANGES: _____

SHEET NUMBER
 23
 OF 24

Town, County, State _____
 Approx. Property Lines _____
 Existing Right of Way _____
 Limits of Wrought Portion _____
 Control Of Access _____
 New Right of Way _____
 New Easement _____
 New Temporary Rights _____
 New R/W Within Existing R/W _____

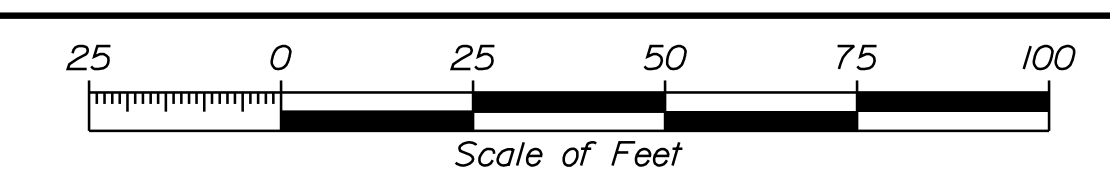
New R/W Along Existing R/W _____
 Building _____
 Trees Conifer _____
 Tree Line _____
 Water Edge _____
 Ledge _____
 Fence _____
 Sign _____

PLAN LEGEND
 Existing _____ Proposed _____
 Sanitary Sewer _____
 Telephone Line _____
 Electric Line _____
 Water Line _____
 Underdrain Line _____
 Gas Line _____
 Guardrail _____
 Culvert _____

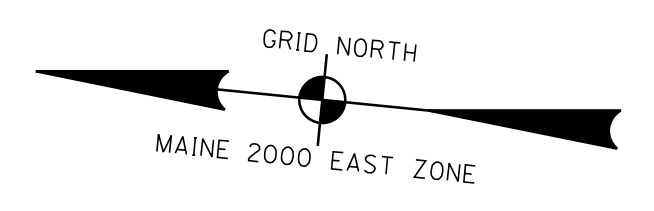
Traveled Way _____
 Ditch _____
 Catch Basin _____
 Manhole _____
 Sewer Manhole _____
 Utility Pole _____
 Fire Hydrant _____
 Curbing _____

Cut Line _____
 Stonewall _____
 Baseline _____
 Monument _____
 Iron Rod Found _____
 Replacement Pin Set _____
 Fill Line _____
 Retaining Wall _____
 Traverse Point _____
 Pipe Found _____

THIS PLAN WAS PREPARED IN CONNECTION WITH THE DEPARTMENT'S ACQUISITION OF REAL PROPERTY FOR TRANSPORTATION PURPOSES. IT CANNOT BE USED TO ESTABLISH LEGAL BOUNDARIES BETWEEN ABUTTING PROPERTY OWNERS.

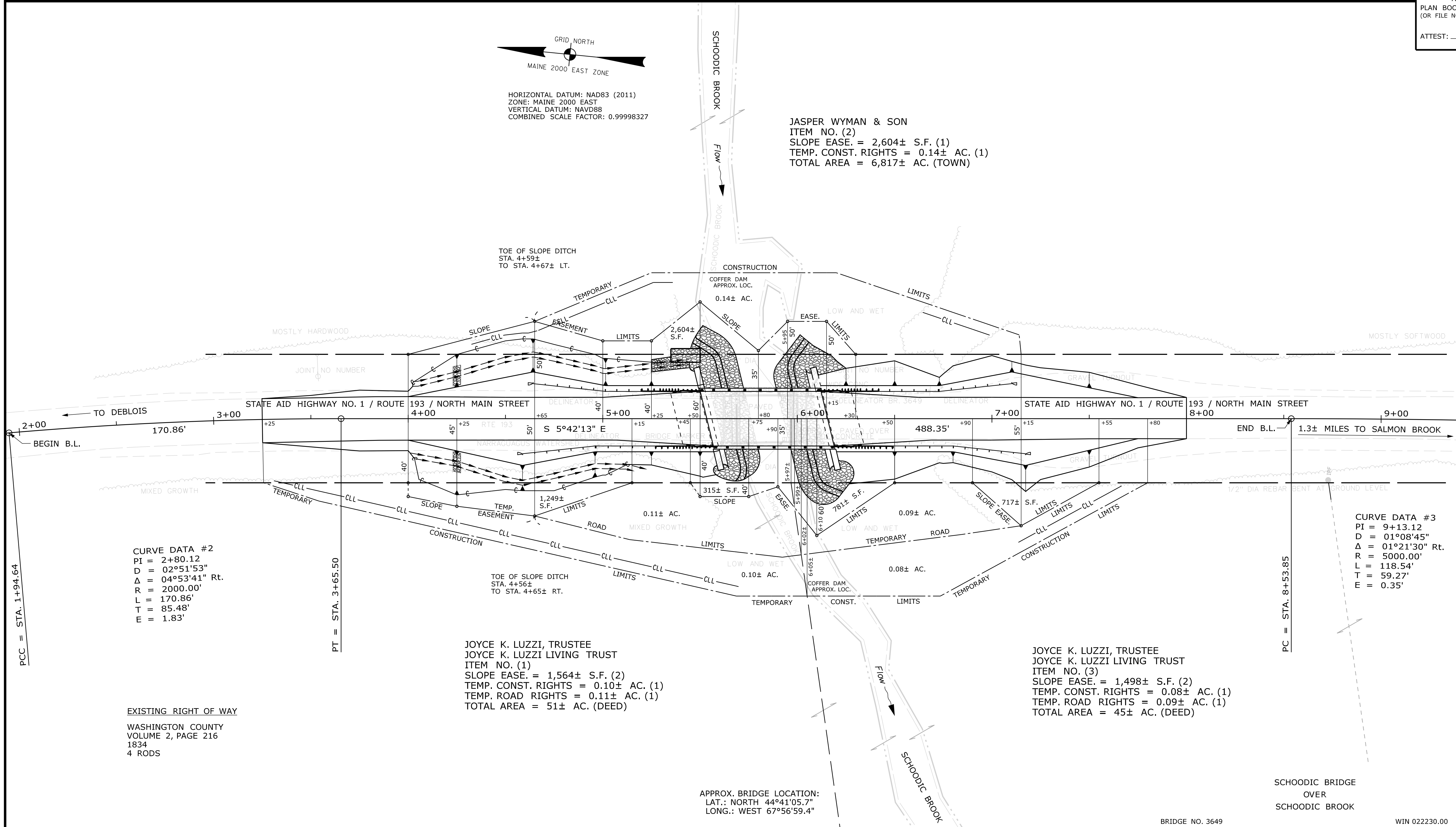


STATE OF MAINE
 REGISTRY OF DEEDS
 COUNTY OF _____
 RECEIVED _____, 20____
 AT _____ HRS. _____ MINS. _____ M.
 AND RECORDED IN
 PLAN BOOK _____, PAGE _____
 ATTEST: _____ REGISTRAR



HORIZONTAL DATUM: NAD83 (2011)
 ZONE: MAINE 2000 EAST
 VERTICAL DATUM: NAVD88
 COMBINED SCALE FACTOR: 0.99998327

JASPER WYMAN & SON
 ITEM NO. (2)
 SLOPE EASE. = 2,604± S.F. (1)
 TEMP. CONST. RIGHTS = 0.14± AC. (1)
 TOTAL AREA = 6,817± AC. (TOWN)



CURVE DATA #2
 PI = 2+80.12
 D = 02°51'53"
 Δ = 04°53'41" Rt.
 R = 2000.00'
 L = 170.86'
 T = 85.48'
 E = 1.83'

EXISTING RIGHT OF WAY
 WASHINGTON COUNTY
 VOLUME 2, PAGE 216
 1834
 4 RODS

JOYCE K. LUZZI, TRUSTEE
 JOYCE K. LUZZI LIVING TRUST
 ITEM NO. (1)
 SLOPE EASE. = 1,564± S.F. (2)
 TEMP. CONST. RIGHTS = 0.10± AC. (1)
 TEMP. ROAD RIGHTS = 0.11± AC. (1)
 TOTAL AREA = 51± AC. (DEED)

JOYCE K. LUZZI, TRUSTEE
 JOYCE K. LUZZI LIVING TRUST
 ITEM NO. (3)
 SLOPE EASE. = 1,498± S.F. (2)
 TEMP. CONST. RIGHTS = 0.08± AC. (1)
 TEMP. ROAD RIGHTS = 0.09± AC. (1)
 TOTAL AREA = 45± AC. (DEED)

CURVE DATA #3
 PI = 9+13.12
 D = 01°08'45"
 Δ = 01°21'30" Rt.
 R = 5000.00'
 L = 118.54'
 T = 59.27'
 E = 0.35'

APPROX. BRIDGE LOCATION:
 LAT.: NORTH 44°41'05.7"
 LONG.: WEST 67°56'59.4"

Date: 8/10/2020
 Username: David Shaw
 Division: BRIDGE
 Filename: ... \000\ROW\MSTA001_RWP\PLAN1.dgn

ITEM	TECH	CHECKED
EXISTING CONDITION PLAN	BS	G.L.L.
FINAL RIGHT OF WAY	B.S.	G.L.L.
AREAS	B.S.	G.L.L.

STATE OF MAINE
 DEPARTMENT OF TRANSPORTATION
 16 STATE HOUSE STATION - AUGUSTA, ME 04333-0016 - 207-624-3460
 CHERRYFIELD
 RIGHT OF WAY MAP

REVISIONS			PLAN FILED IN PLAN BOOK				PAGE COUNTY RECORD				BRUCE A. VAN NOTE	
NO.	DATE	DESCRIPTION	NO.	GRANTOR	INSTRUMENT	DATE	BOOK	PAGE	COND.	DATE		BOOK
						7/20/2020	4680	111				

BRUCE A. VAN NOTE
 COMMISSIONER
 JOYCE NOEL TAYLOR
 CHIEF ENGINEER
 DATE



To the best of my knowledge and belief the Highway Right of Way lines depicted herein are based upon a survey conforming to the Standards of Practice promulgated by the Maine Board of Licensure for Professional Land Surveyors 02-360 CMR, Chapter 90; Exceptions: (1) No separate survey report, (2) Monumentation only as shown on plan. See sheet 2 of this plan set for coordinates. (3) Other boundary lines, including lines between abutters are approximate and for general reference purposes only.

STATE AID HIGHWAY NO. 1
 ROUTE 193 / NORTH MAIN STREET
 CHERRYFIELD WASHINGTON COUNTY
 FEDERAL AID PROJECT NO. 2223000
 DECEMBER 2019
 SCALE 1" = 25'
 RIGHT-OF-WAY MAP
 SHEET 1 OF 2
 D.O.T. FILE NO. 15-337

SHEET NUMBER
 24
 OF 24

STATE OF MAINE DEPARTMENT OF TRANSPORTATION



SPECIFICATIONS

Design: Load and Resistance Factor Design per AASHTO LRFD Bridge Design Specifications, Ninth Edition 2020.

DESIGN LOADING

Live Load HL - 93 Modified for Strength I

TRAFFIC DATA

Current (2019) AADT	2620
Future (2039) AADT	2880
DHV - % of AADT	12
Design Hour Volume	346
Heavy Trucks (% of AADT)	7
Heavy Trucks (% of DHV)	7
Directional Distribution (% of DHV)	55
18 kip Equivalent P 2.0	118
18 kip Equivalent P 2.5	112
Design Speed (mph)	25

MATERIALS

Concrete: Unless Noted Otherwise Class "A"
Reinforcing Steel ASTM A 615/A 615M, Grade 60

BASIC DESIGN STRESSES

Concrete $f'c = 4000$ psi
Reinforcing Steel $f_y = 60,000$ psi

LIST OF DRAWINGS

Title Sheet	1
Est. Quantities, Gen. Const. Notes & Rebar Schedule	2
General Plan	3
Profile	4
Superstructure Repair Plan	5
Superstructure Details	6
Approach Railing Repair; Sheet 1 of 2	7
Approach Railing Repair; Sheet 2 of 2	8
Staged Construction Section	9
Staged Construction Plan; Stage 1	10
Staged Construction Plan; Stage 2	11
Right of Way Map	12

CHERRYFIELD WASHINGTON COUNTY COVERED BRIDGE OVER NARRAGUAGUS RIVER U.S. ROUTE 1 FEDERAL PROJECT 2229400 PROJECT LENGTH 0.049 mi. BRIDGE NO. 2192

UTILITIES

Charter Communications
Emera Maine

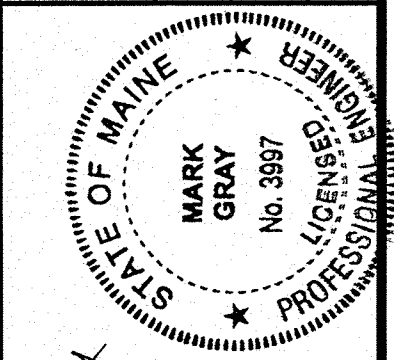
Fairpoint Communications - Northern
New England Telephone Operations LLC

MAINTENANCE OF TRAFFIC

Maintain one lane of alternating one - way traffic using traffic signals.

<u>PROJECT LOCATION</u>	Covered Bridge over the Narraguagus River. Located 0.03 of a mile west of Main Street. Lat./Long. 44°35'52.2" N 67°55'30.4" W
<u>PROGRAM AREA</u>	Highway Bridges-Traditional
<u>OUTLINE OF WORK</u>	Deck Seal Installation Concrete Repair and Crack Sealing

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
APPROVED
DATE
COMMISSIONER: <i>[Signature]</i> 8-31-2020
CHIEF ENGINEER: <i>[Signature]</i> 8-31-2020



[Signature]
SIGNATURE
3997
P.E. NUMBER
8.12.2020
DATE

PROJECT INFORMATION
PROGRAM
BRIDGE
PROJECT MANAGER
MARK PARLIN
DESIGNER
MARK GRAY
CONSULTANT
N/A
PROJECT RESIDENT
CONTRACTOR
PROJECT COMPLETION DATE

CHERRYFIELD
COVERED BRIDGE
TITLE SHEET

SHEET NUMBER
1
OF 12

WIN 022294.00

2229400

Date: 8/12/2020

Username: Richard.Moyer

Division: BRIDGE

Filename: \\00\BRIDGE\MSTA\001_Title.dgn

ESTIMATED QUANTITIES			
ITEM NO.	DESCRIPTION	QUANTITY	UNIT
202.202	REMOVING PAVEMENT SURFACE	40	SY
203.20	COMMON EXCAVATION	83	CY
304.10	AGGREGATE SUBBASE COURSE - GRAVEL	61	CY
403.208	HOT MIX ASPHALT 12.5 MM HMA SURFACE	16	T
403.213	HOT MIX ASPHALT 12.5 MM BASE	20	T
409.15	BITUMINOUS TACK COAT - APPLIED	6	G
424.304	HIGH MOL WGT METHACRYLATE CRACK SEAL	73	G
502.45	STRUCTURAL CONCRETE APPROACH SLABS	5	CY
502.701	BRIDGE DRAIN GRATE MODIFICATION	1	EA
503.12	REINFORCING STEEL, FABRICATED AND DELIVERED	1210	LB
503.13	REINFORCING STEEL, PLACING	1815	LB
515.21	PROTECTIVE COATING FOR CONCRETE SURFACES (461 SY)	1	LS
518.50	REPAIR OF UPWARD FACING SURFACES - TO REINFORCING STEEL < 8 IN.	10	SF
518.52	REPAIR OF UPWARD FACING SURFACES >= 8 IN	29	CY
518.60	REPAIR OF VERTICAL SURFACES < 8 IN.	119	SF
518.61	REPAIR OF VERTICAL SURFACES >= 8 IN.	2	CY
520.233	EXPANSION DEVICE - SILICONE COATED PRECOMPRESSED FOAM	152	LF
526.301	TEMPORARY CONCRETE BARRIER TYPE I (190 LF)	1	LS
527.34	WORK ZONE CRASH CUSHIONS	2	UN
627.77	REMOVING PAVEMENT MARKINGS	70	SF
627.78	TEMPORARY 4 INCH PAINTED PAVEMENT MARKING LINE, WHITE OR YELLOW	210	LF
629.05	HAND LABOR, STRAIGHT TIME	10	HR
631.10	AIR COMPRESSOR (INCLUDING OPERATOR)	10	HR
631.11	AIR TOOL (INCLUDING OPERATOR)	10	HR
631.12	ALL PURPOSE EXCAVATOR (INCLUDING OPERATOR)	10	HR
631.172	TRUCK - LARGE (INCLUDING OPERATOR)	10	HR
631.21	ROAD BROOM (INCLUDING OPERATORS AND HAULER)	10	HR
639.19	FIELD OFFICE TYPE B	0.5	EA
643.72	TEMPORARY TRAFFIC SIGNAL	1	LS
652.312	TYPE III BARRICADE	4	EA
652.33	DRUM	50	EA
652.34	CONE	100	EA
652.35	CONSTRUCTION SIGNS	400	SF
652.361	MAINTENANCE OF TRAFFIC CONTROL DEVICES	1	LS
652.38	FLAGGER	450	HR
652.41	PORTABLE CHANGEABLE MESSAGE SIGN	3	EA
656.75	TEMPORARY SOIL EROSION AND WATER POLLUTION CONTROL	1	LS
659.10	MOBILIZATION	1	LS

GENERAL CONSTRUCTION NOTES

- For easements, construction limits and right of way lines, refer to Right of Way Map.
- All utility facilities shall be adjusted by the respective utilities unless otherwise noted.
- Protective Coating for Concrete Surfaces (Item 515.21) shall be applied to the following areas:
Concrete bridge railing,
Concrete sidewalk railing.
- Project information referred to below may be accessed at the following MaineDOT web address: <http://www.maine.gov/mdot/contractors/>.
- The existing bridge plans may be accessed at the MaineDOT web address. The plans are reproductions of the original drawings as prepared for the construction of the bridge. It is very unlikely that the plans will show any construction field changes or any alterations which may have been made to the bridge during its life span.
- The bridge deck evaluation report of the existing bridge may be accessed at the MaineDOT web address. The report contains visual inspection information and deck core data of the bridge. There is no assurance that the information or data is a true representation of the conditions of the entire deck.
- Quantities included for pay items measured and paid for by Lump Sum are estimated quantities and are provided by MaineDOT for informational purposes only. Lump Sum pay items will be paid for at the Contract Bid amount, with no addition or reduction in payment to the Contractor if the actual final quantities are different from the MaineDOT provided estimated quantities, except as follows:
 - If a Lump Sum pay item is eliminated, the requirements of Standard Specifications Section 109.2, Elimination of Items, will take precedence.
 - If other Contract Documents specifically allow a change in payment for a Lump Sum pay item, those requirements will be followed.
 - If a design change results in changes to estimated quantities for Lump Sum pay items, price adjustments will be made in accordance with Standard Specifications Section 109.7, Equitable Adjustments to Compensation.

- Winter sand and grass/weeds up against the concrete sidewalk, including in the approaches to the bridge, shall be removed and disposed of as directed by the Resident. This work will be paid for using equipment and labor bid items.
- Installation of Item 520.233 Expansion Device - Silicone Coated Precompressed Foam, shall occur after placement of Item 424.304 High Molecular Weight Methacrylate Crack Sealer.
- Temporary pavement ramps shall be constructed at a length of four feet per inch of transition depth. Materials, placement, maintenance and removal shall be incidental to other contract items.

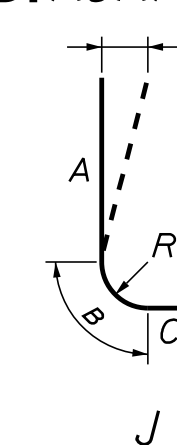
REINFORCEMENT BAR SCHEDULE

STRAIGHT BARS				BENT BARS										
MARK	QTY.	LENGTH	LOCATION	MARK	QTY.	LENGTH	TYPE	A	B	C	H	R	LOCATION	
Abutment No. 1				Abutment No. 1										
A500	3	13'-3"	Abut. No. 1	A550	24	2'-3"	J	1'-6"	3/4"	5/2"	4"	1/4"	Abut. No. 1	
A501	3	11'-9"	Abut. No. 1											
Abutment No. 2				Abutment No. 2										
B500	3	13'-3"	Abut. No. 2	B550	24	2'-3"	J	1'-6"	3/4"	5/2"	4"	1/4"	Abut. No. 2	
B501	3	11'-9"	Abut. No. 2											
Approach Slab				Piers 1 & 2										
AS500	10	13'-3"	Approach Slab	P550	96	1'-11"	J	1'-6"	3/4"	2"	4"	1/4"	Piers 1 & 2	
AS501	10	11'-9"	Approach Slab											
AS502	48	3'-6"	Approach Slab											
Piers 1 & 2														
P500	12	13'-3"	Piers 1 & 2											
P501	12	11'-9"	Piers 1 & 2											
MARK	QTY.	LENGTH	LOCATION	MARK	QTY.	LENGTH	TYPE	A	B	C	H	R	LOCATION	

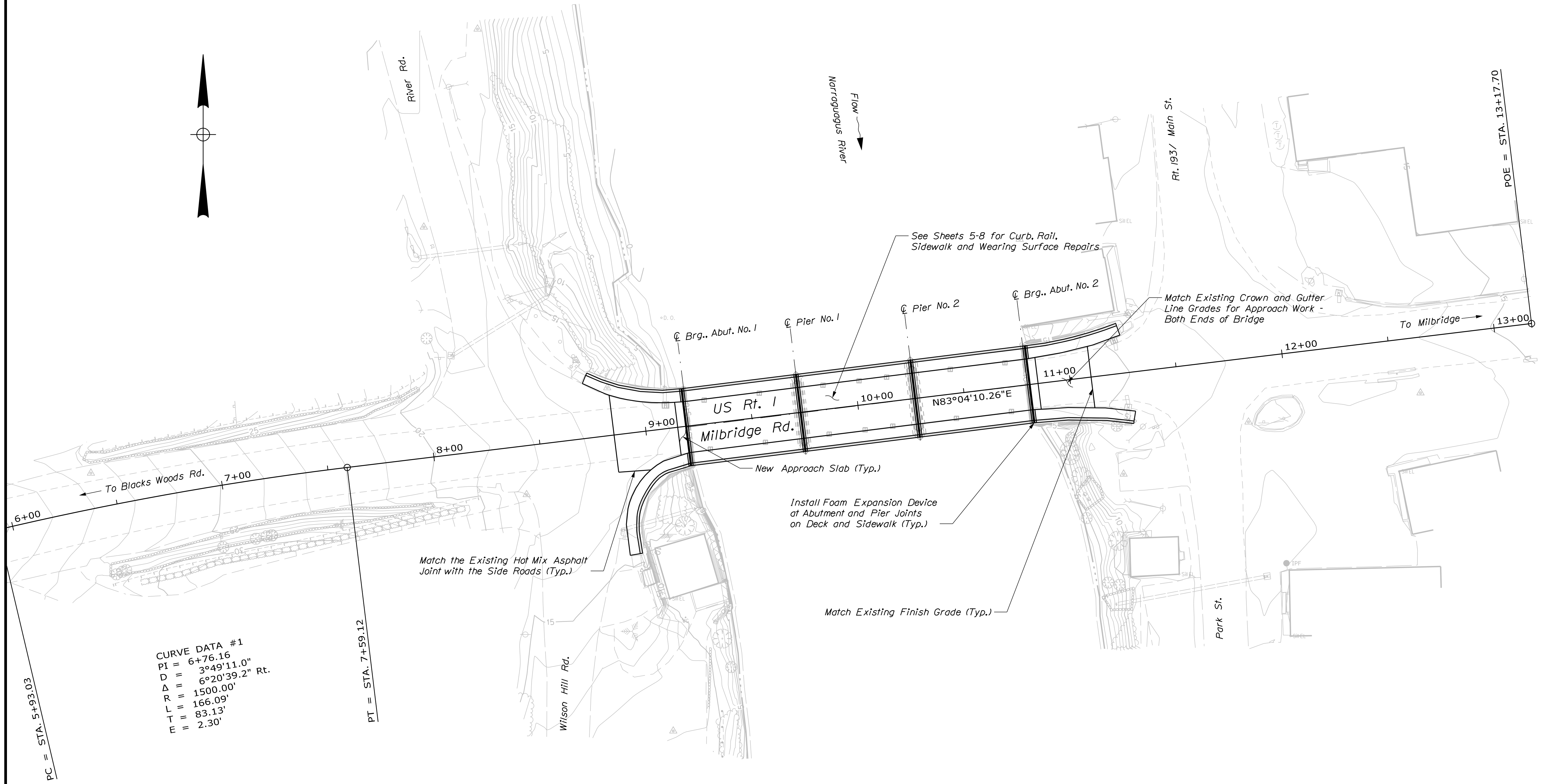
GENERAL NOTES

- The first two digits following the letter(s) of the mark indicate the size of the bar:
Mark "A502" = bar size #5
Mark "P805" = bar size #8
Mark "S650" = bar size #6
- All dimensions are out-to-out of bar.
- Bending details and hooks shall conform to the recommendations of the current revision of ACI Standard 315 and ACI Standard 318.
- Reinforcing Bar: ASTM A 615/A 615M, Grade 60

TYPE - BENDING DIAGRAMS

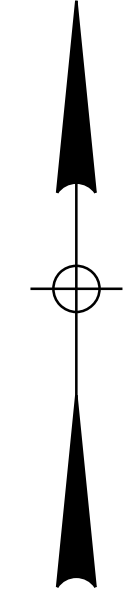
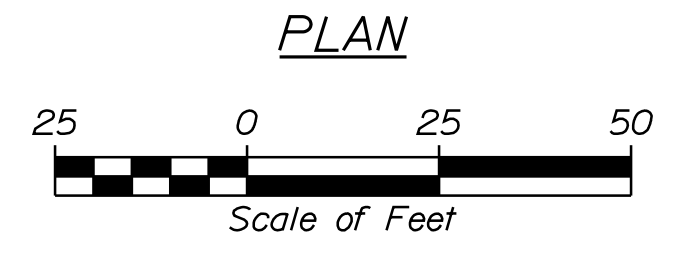


STATE OF MAINE DEPARTMENT OF TRANSPORTATION 2229400	WIN 022294.00	BRIDGE NO. 2192	BRIDGE PLANS
PROJ. MANAGER M. PARIN	BY R. MAYER	DATE JULY 2020	SIGNATURE
CHECKED-DETAILED M. GRAY			P.E. NUMBER
DESIGN-DETAILED			DATE
DESIGNS-DETAILED			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			
COVERED BRIDGE NARRAGUAGUS RIVER CHERRYFIELD WASHINGTON COUNTY EST. QUANTITIES, GEN. CONST. NOTES & REBAR SCHEDULE			
SHEET NUMBER 2 OF 12			

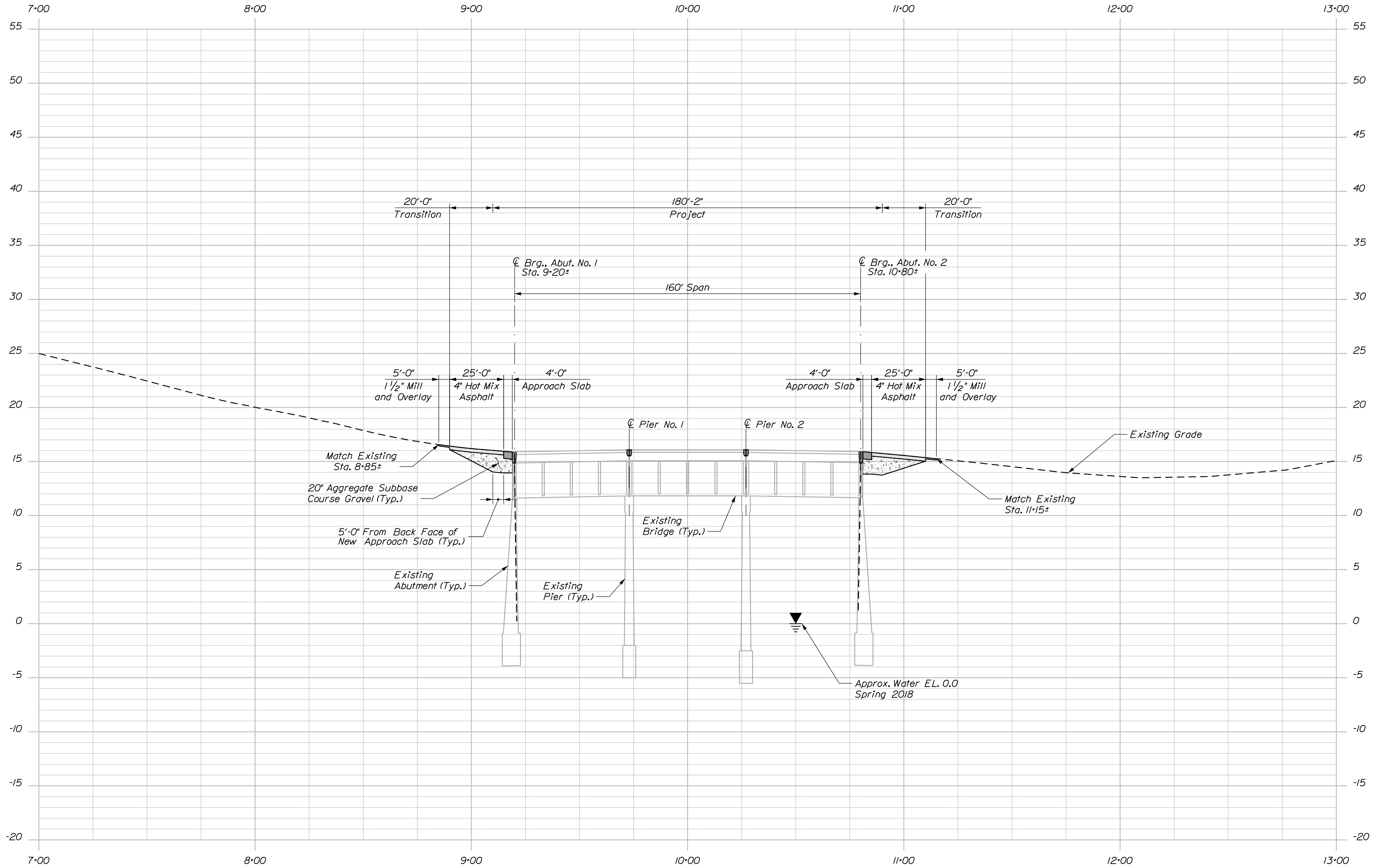


CURVE DATA #1
 PI = 6+76.16
 D = 3°49'11.0"
 Δ = 6°20'39.2" Rt.
 R = 1500.00'
 L = 166.09'
 T = 83.13'
 E = 2.30'

PT = STA. 7+59.12



STATE OF MAINE DEPARTMENT OF TRANSPORTATION		2229400	
CHERRYFIELD WASHINGTON COUNTY		WIN 022294.00	
COVERED BRIDGE NARRAGAGUS RIVER		BRIDGE NO. 2192	
GENERAL PLAN		BRIDGE PLANS	
SHEET NUMBER		3	
OF 12			
PROJ. MANAGER	M. PARLIN	BY	R. MAYER
CHECKED/REVIEWED	M. GRAY	DATE	JULY 2020
DESIGN/DETAILED		SIGNATURE	
DESIGN/DETAILED		P.E. NUMBER	
REVISIONS 1		DATE	
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

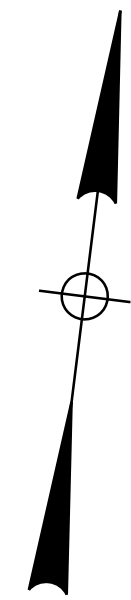


PROFILE

DESIGN-REVIEWED	M. GRAY	DATE	JULY 2020
CHECKED-REVIEWED	R. MAYER	BY	
DESIGN-DETAILED		DATE	
REVISIONS 1		SIGNATURE	
REVISIONS 2		P.E. NUMBER	
REVISIONS 3		DATE	
REVISIONS 4			
FIELD CHANGES			

PROJ. MANAGER	M. PARLIN
DESIGN-REVIEWED	M. GRAY
CHECKED-REVIEWED	R. MAYER
DESIGN-DETAILED	
REVISIONS 1	
REVISIONS 2	
REVISIONS 3	
REVISIONS 4	
FIELD CHANGES	

COVERED BRIDGE
NARRAGUAGUS RIVER
CHERRYFIELD WASHINGTON COUNTY
PROFILE



NOTES

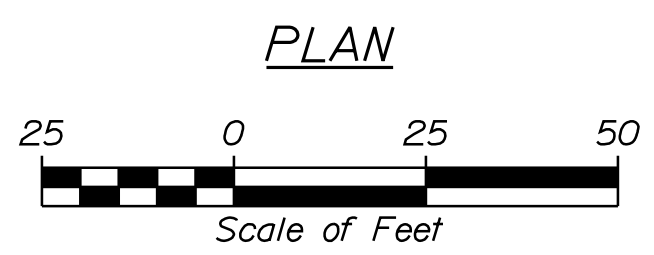
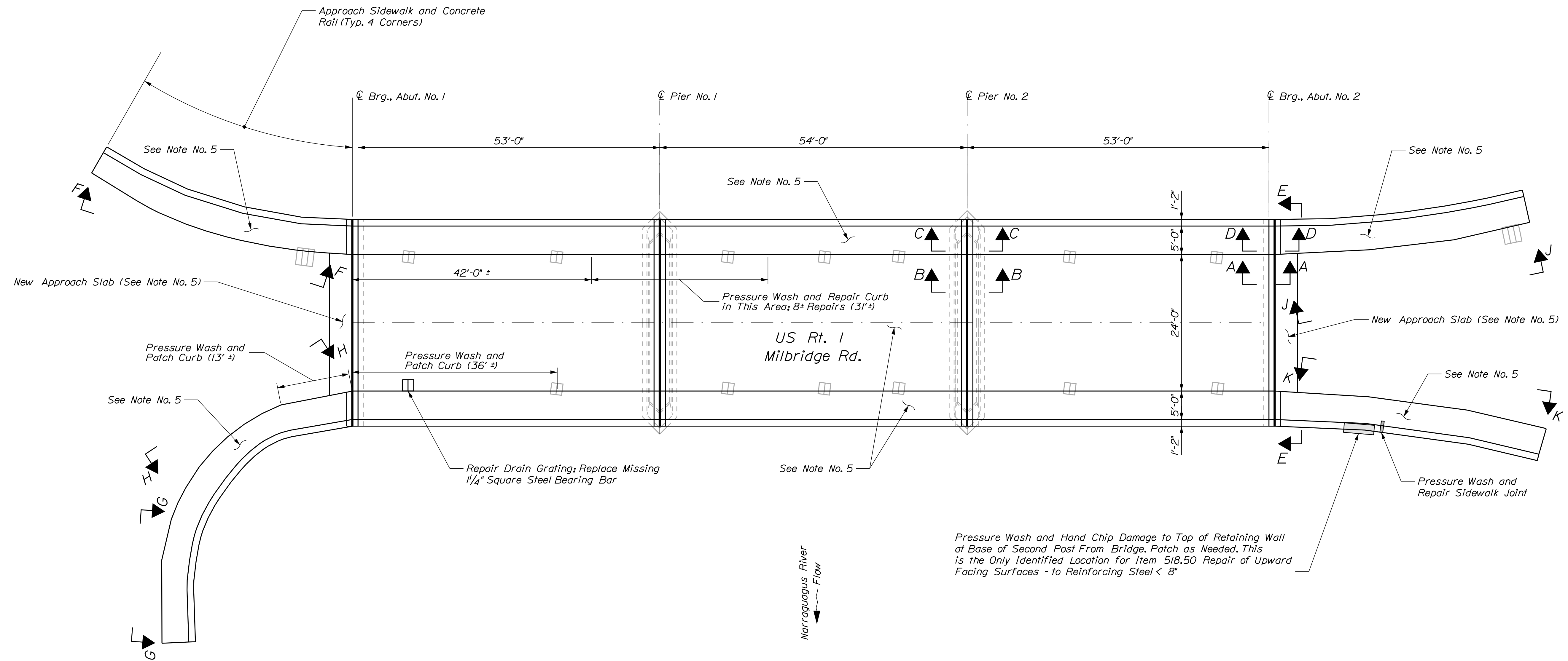
1. Pressure wash and apply Silicone Joint Sealant equivalent to Sika-Flex 1A to joint between back of sidewalk and approach rail all 4 corners of bridge. This work shall be incidental to other contract items.

2. Refer to sheet 6 for Sections AA through EE

3. Refer to sheet 7 for Elevations FF, GG and HH. Refer to sheet 8 for Elevations JJ and KK.

4. Locations and types of repair were determined from a site visit in July 2020. Final repair locations and types of repair shall be determined and agreed upon in the field by the Contractor and the Resident.

5. Apply Item 424.304 High Molecular Weight Methacrylate Crack Sealer to sidewalks and concrete curb (both bridge and approach sections), concrete wearing surface and new approach slabs. Apply to curb faces with a brush.



STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
2229400
WIN
022294.00
BRIDGE NO. 2192
BRIDGE PLANS

	SIGNATURE	DATE
	P.E. NUMBER	DATE

PROJ. MANAGER	M. PARLIN	BY	R. MAYER	DATE	JULY 2020
CHECKED-REVIEWED	M. GRAY				
DESIGN-DETAILED					
DESIGN-DETAILED					
REVISIONS 1					
REVISIONS 2					
REVISIONS 3					
REVISIONS 4					
FIELD CHANGES					

COVERED BRIDGE
NARRAGAGUS RIVER
CHERRYFIELD WASHINGTON COUNTY
**SUPERSTRUCTURE
REPAIR PLAN**

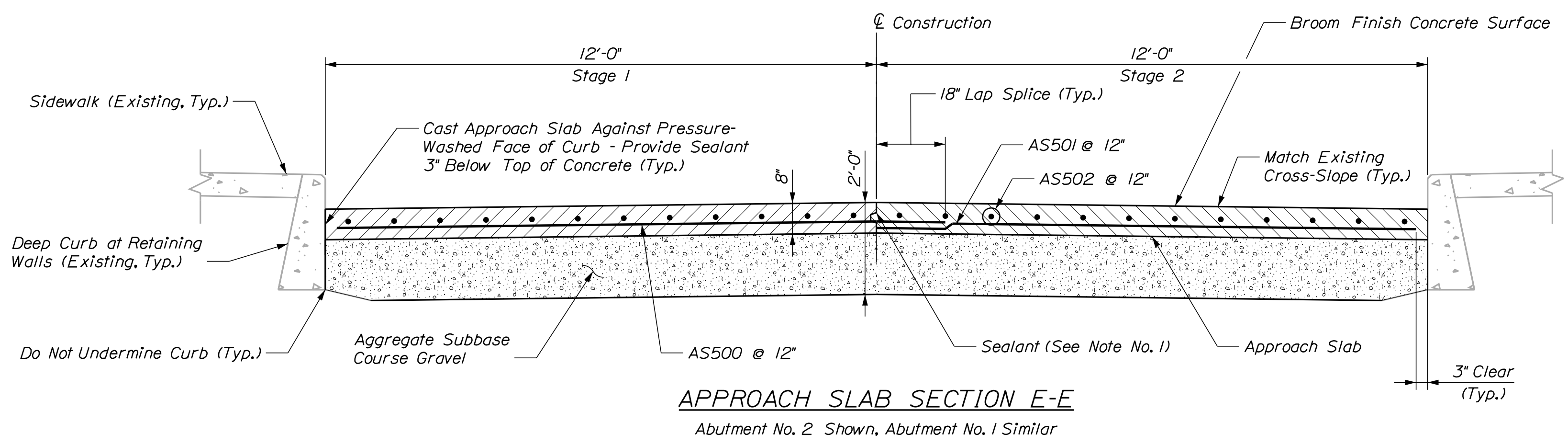
SHEET NUMBER
5
OF 12

Date: 8/11/2020

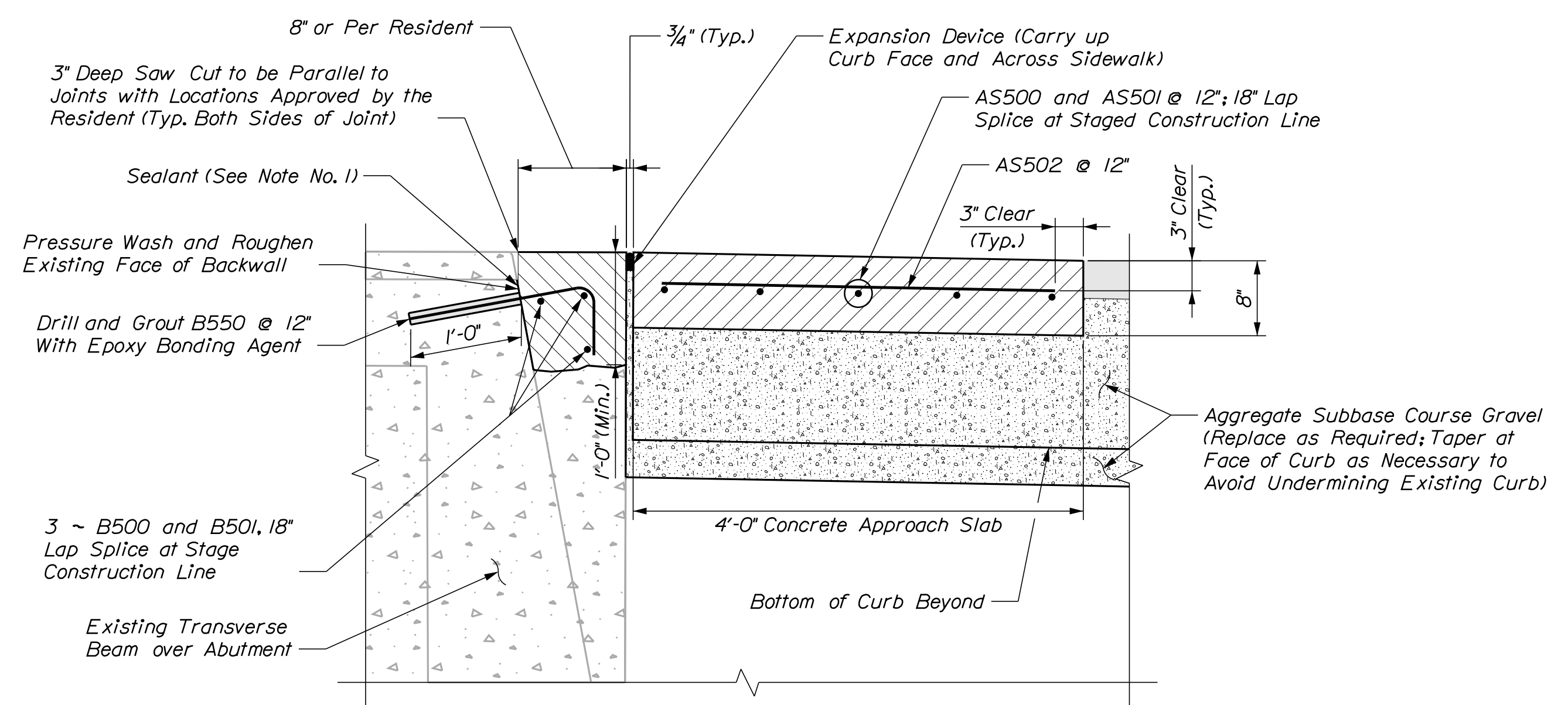
Username: Richard.Mayer

Division: BRIDGE

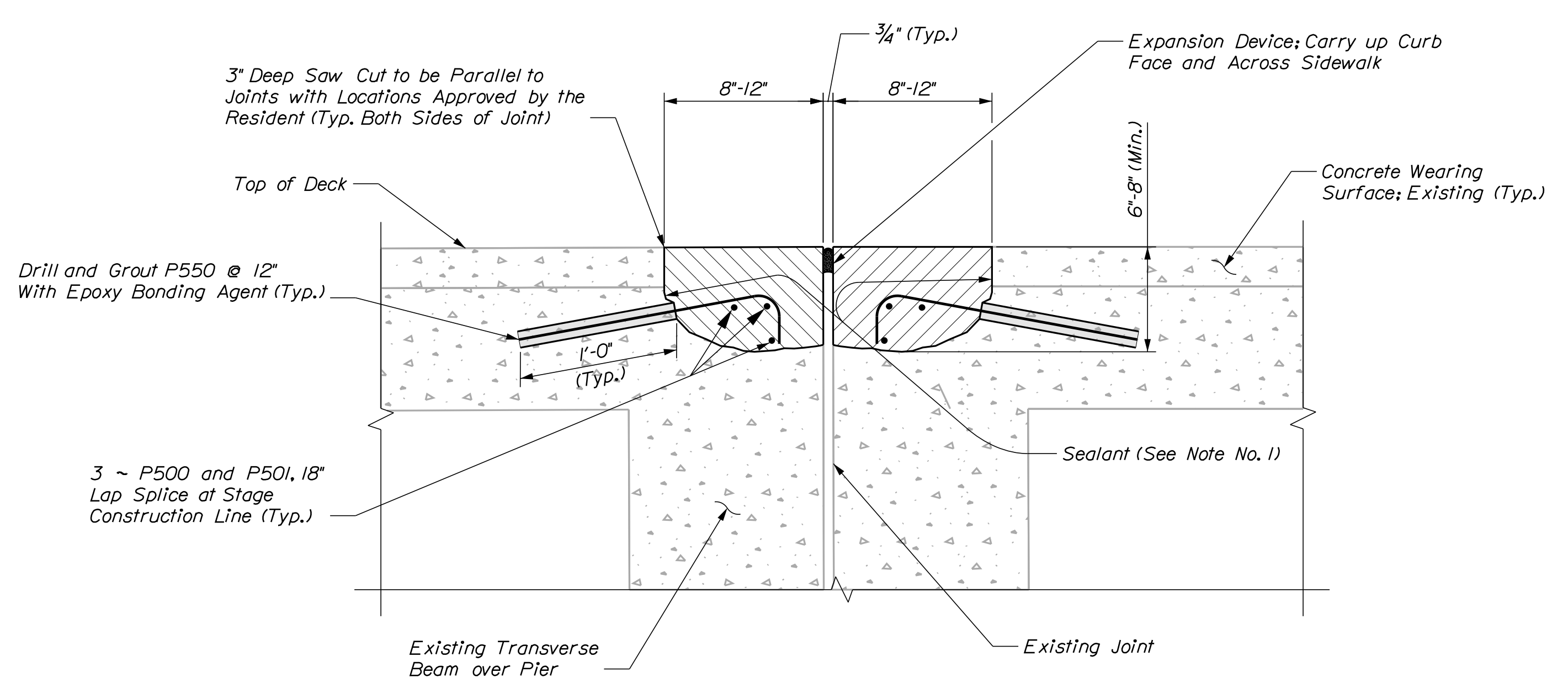
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APPROACH SLAB SECTION E-E
Abutment No. 2 Shown, Abutment No. 1 Similar



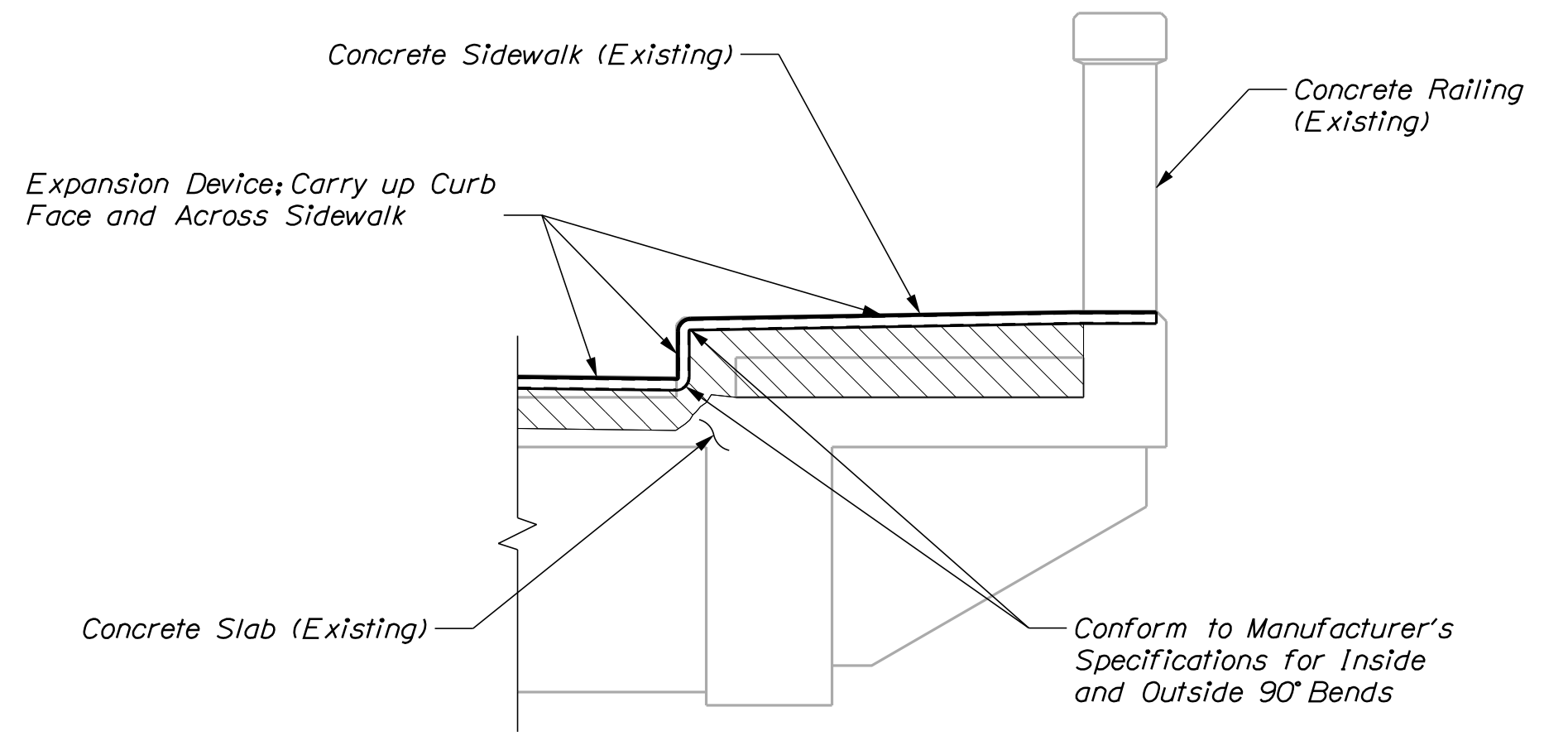
ABUTMENT DECK SEAL SECTION A-A
Abutment No. 2 Shown, Abutment No. 1 Similar



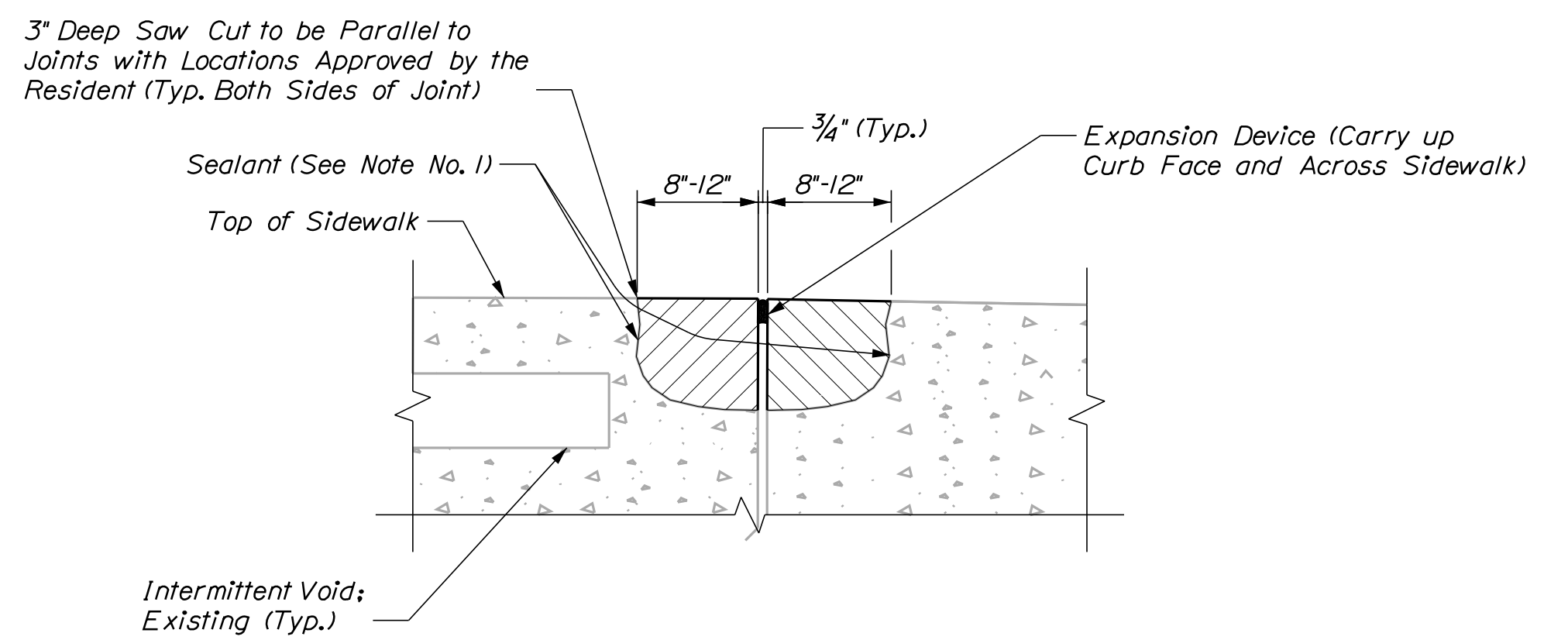
PIER DECK SEAL SECTION B-B
Pier No. 2 Shown, Pier No. 1 Similar

NOTES:

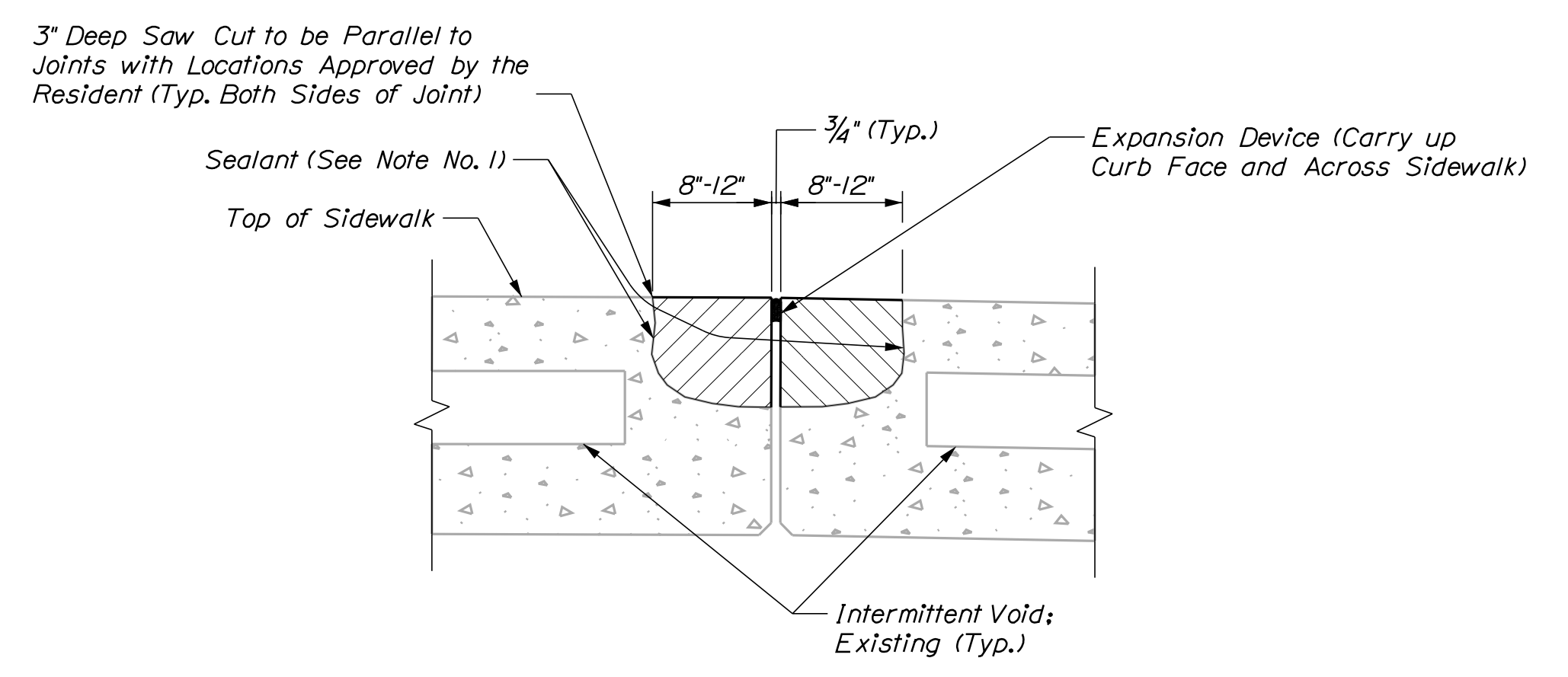
1. Sealant to be applied immediately before concrete placement 3" from top of finished concrete surface in continuous bead. Sealant to be Sika Leakmaster LV-Z or equivalent. Install per manufacturer's instructions. Bead to be 5x20mm (3/16" x 3/4"). This work is incidental to other contract items.
2. Payment for Item 502.45 Structural Concrete Approach Slabs shall include the concrete on the roadway approach side of both expansion devices at both abutments and between the existing curb faces at these locations.
3. Payment for all concrete removal and repair associated with installation of expansion devices at both piers and both abutments shall be paid for under Item 518.52 Repair of Upward Facing Surfaces >= 8 inches, per cubic yard, regardless of the depth of repair.



EXPANSION DEVICE AT CURB



ABUTMENT SIDEWALK SEAL SECTION D-D
Abutment No. 2 Shown, Abutment No. 1 Similar



PIER SIDEWALK SEAL SECTION C-C
Pier No. 2 Shown, Pier No. 1 Similar

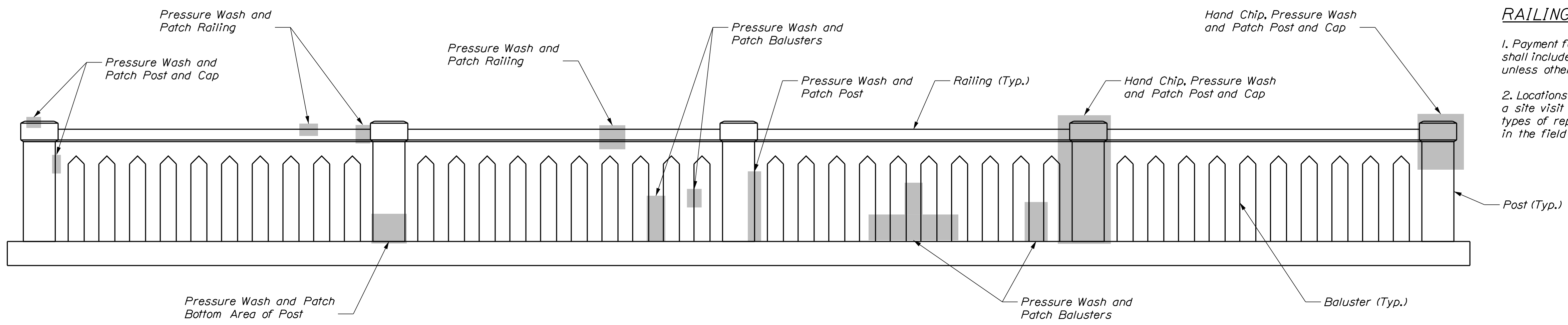
STATE OF MAINE		DEPARTMENT OF TRANSPORTATION		BRIDGE PLANS	
		2229400		WIN 022294.00	
		BRIDGE NO. 2192			
PROJ. MANAGER	M. PARLIN	BY	R. MAYER	DATE	JULY 2020
CHECKED-REVIEWED	M. GRAY			SIGNATURE	
DESIGN-DETAILED				P.E. NUMBER	
DESIGN-DETAILED				DATE	
REVISIONS 1					
REVISIONS 2					
REVISIONS 3					
REVISIONS 4					
FIELD CHANGES					
COVERED BRIDGE		NARRAGANUS RIVER		WASHINGTON COUNTY	
CHERRYFIELD		SUPERSTRUCTURE DETAILS			
SHEET NUMBER		6		OF 12	

Date: 8/11/2020

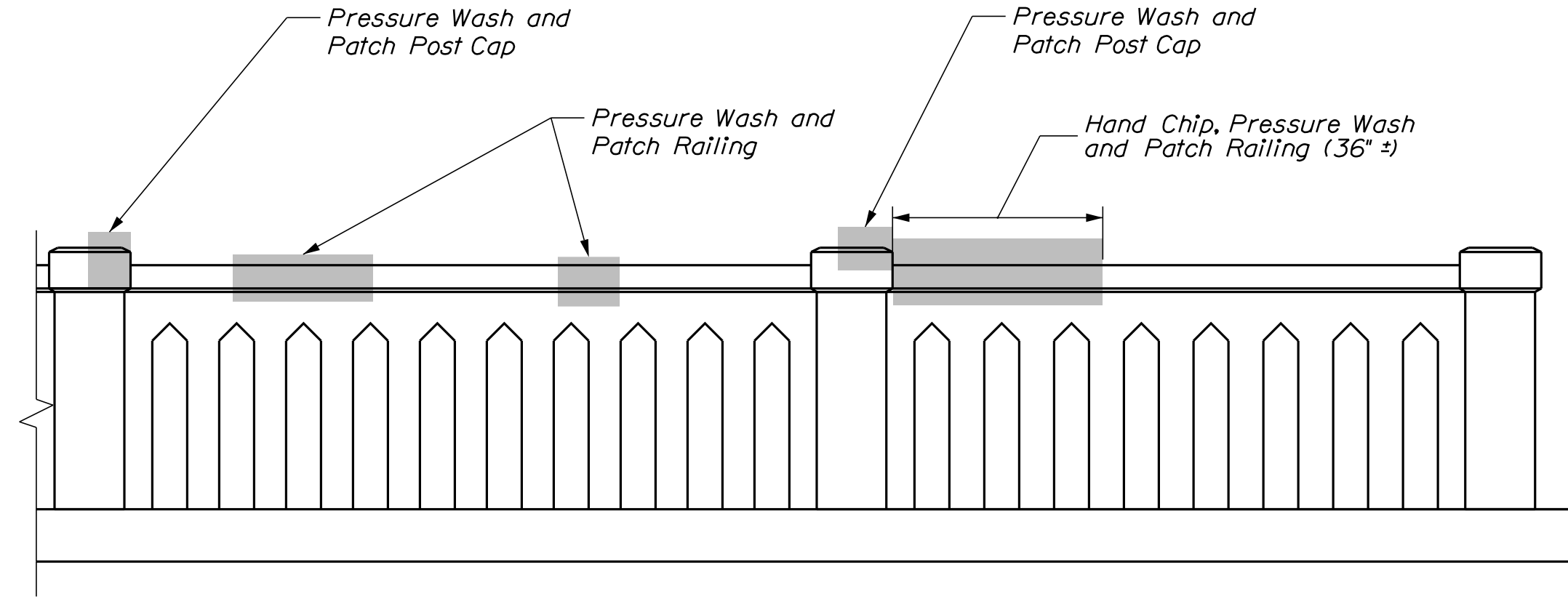
Username: Richard.Mayer

Division: BRIDGE

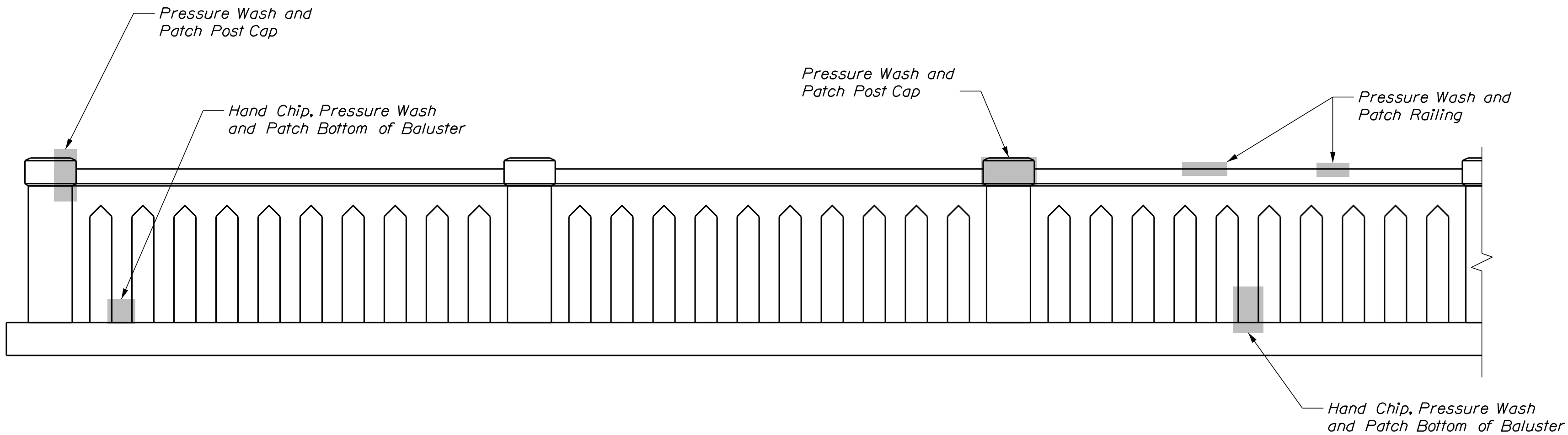
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APPROACH RAILING ELEVATION F-F NORTHWEST



APPROACH RAILING ELEVATION G-G SOUTHWEST



APPROACH RAILING ELEVATION H-H SOUTHWEST

RAILING NOTES

- 1. Payment for Item 518.60 Repair of Vertical Surfaces < 8' shall include all concrete rail repairs including the top rail, unless otherwise noted.
- 2. Locations and types of repair were determined from a site visit in July 2020. Final repair locations and types of repair shall be determined and agreed upon in the field by the Contractor and the Resident.

STATE OF MAINE		DEPARTMENT OF TRANSPORTATION		2229400		BRIDGE PLANS	
COVERED BRIDGE		NARRAGUAGUS RIVER		WASHINGTON COUNTY		CHERRYFIELD	
APPROACH RAILING REPAIR;		SHEET 1 OF 2		SHEET NUMBER		2	
PROJ. MANAGER		M. PARLIN		BY		DATE	
DESIGN-DETAILED		M. GRAY		R. MAYER		JULY 2020	
CHECKED-REVIEWED						SIGNATURE	
DESIGNS-DETAILED						P.E. NUMBER	
REVISIONS 1						DATE	
REVISIONS 2							
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FIELD CHANGES							
BRIDGE NO. 2192		WIN		022294.00			
OF 12							

Date: 8/11/2020

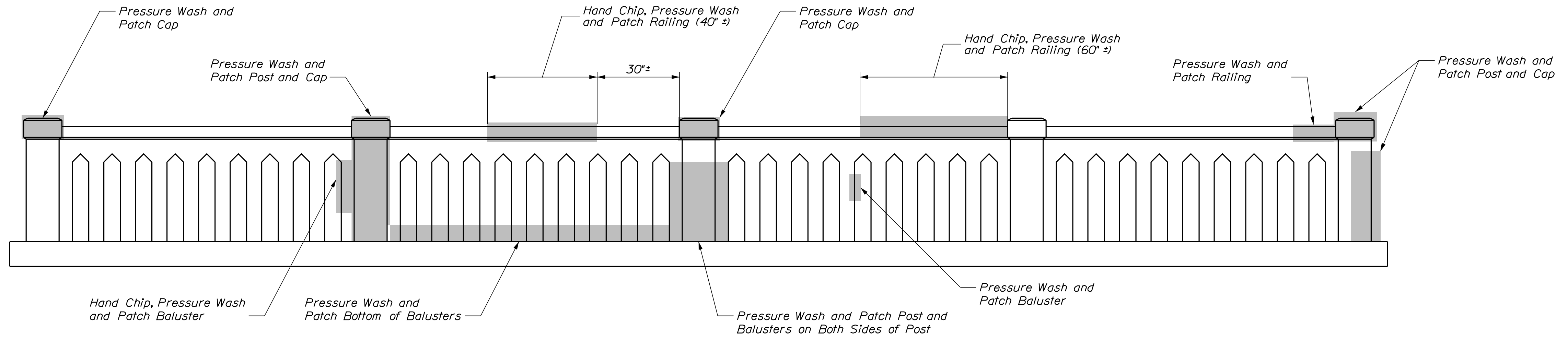
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Division: BRIDGE

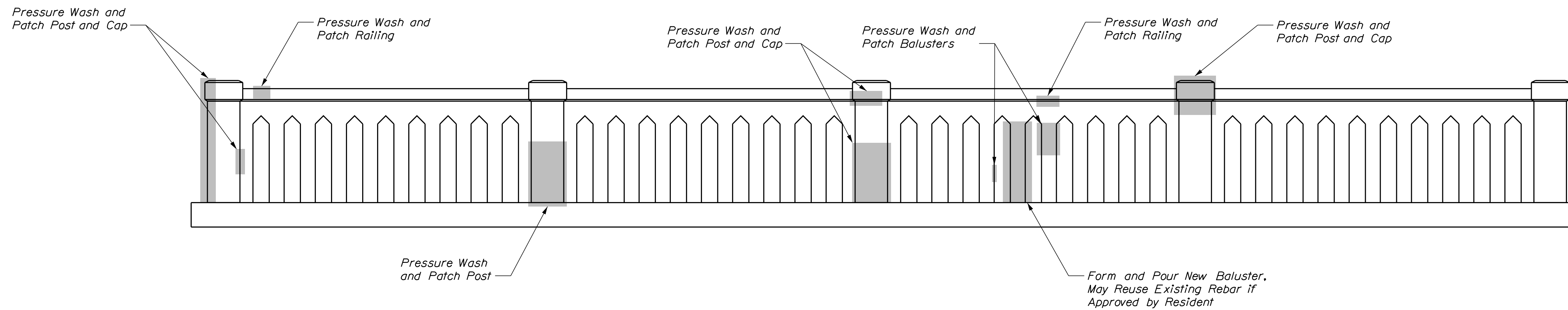
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RAILING NOTES

- 1. Payment for Item 518.60 Repair of Vertical Surfaces < 8" shall include all concrete rail repairs including the top rail, unless otherwise noted.
- 2. The baluster replacement in the southeast railing shall be paid under Item 518.61 Repair of Vertical Surfaces >= 8".
- 3. Locations and types of repair were determined from a site visit in July 2020. Final repair locations and types of repair shall be determined and agreed upon in the field by the Contractor and the Resident.



**APPROACH RAILING ELEVATION J-J
NORTHEAST**



**APPROACH RAILING ELEVATION K-K
SOUTHEAST**

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2229400

WIN

BRIDGE NO. 2192

BRIDGE PLANS

SIGNATURE

DATE

BY

M. PARLIN

PROJ. MANAGER

CHECKED-REVIEWED

DESIGNS-DETAILED

DESIGNS-DETAILED

REVISIONS 1

REVISIONS 2

REVISIONS 3

REVISIONS 4

FIELD CHANGES

DATE

BY

R. MAYER

DATE

DATE

DATE

DATE

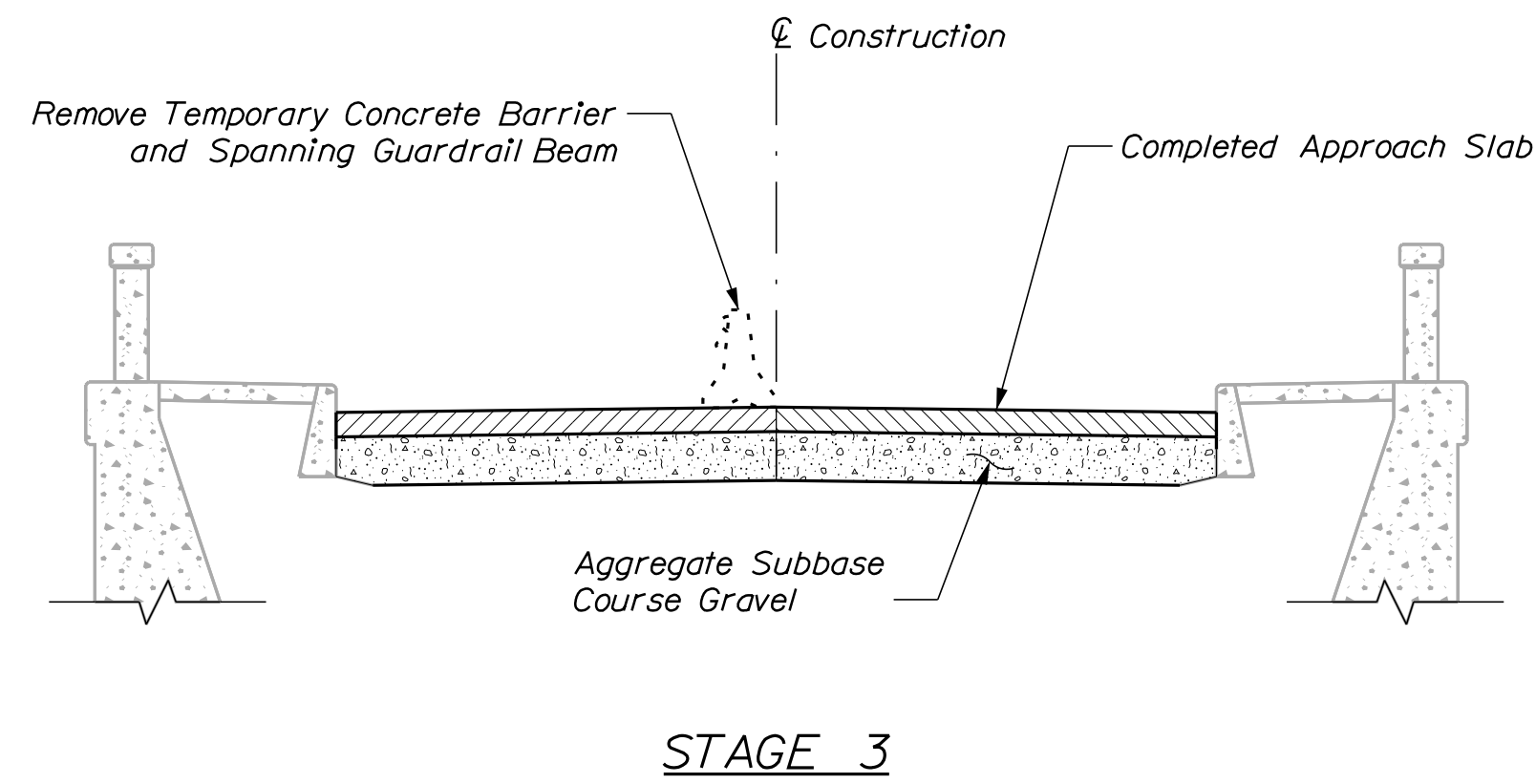
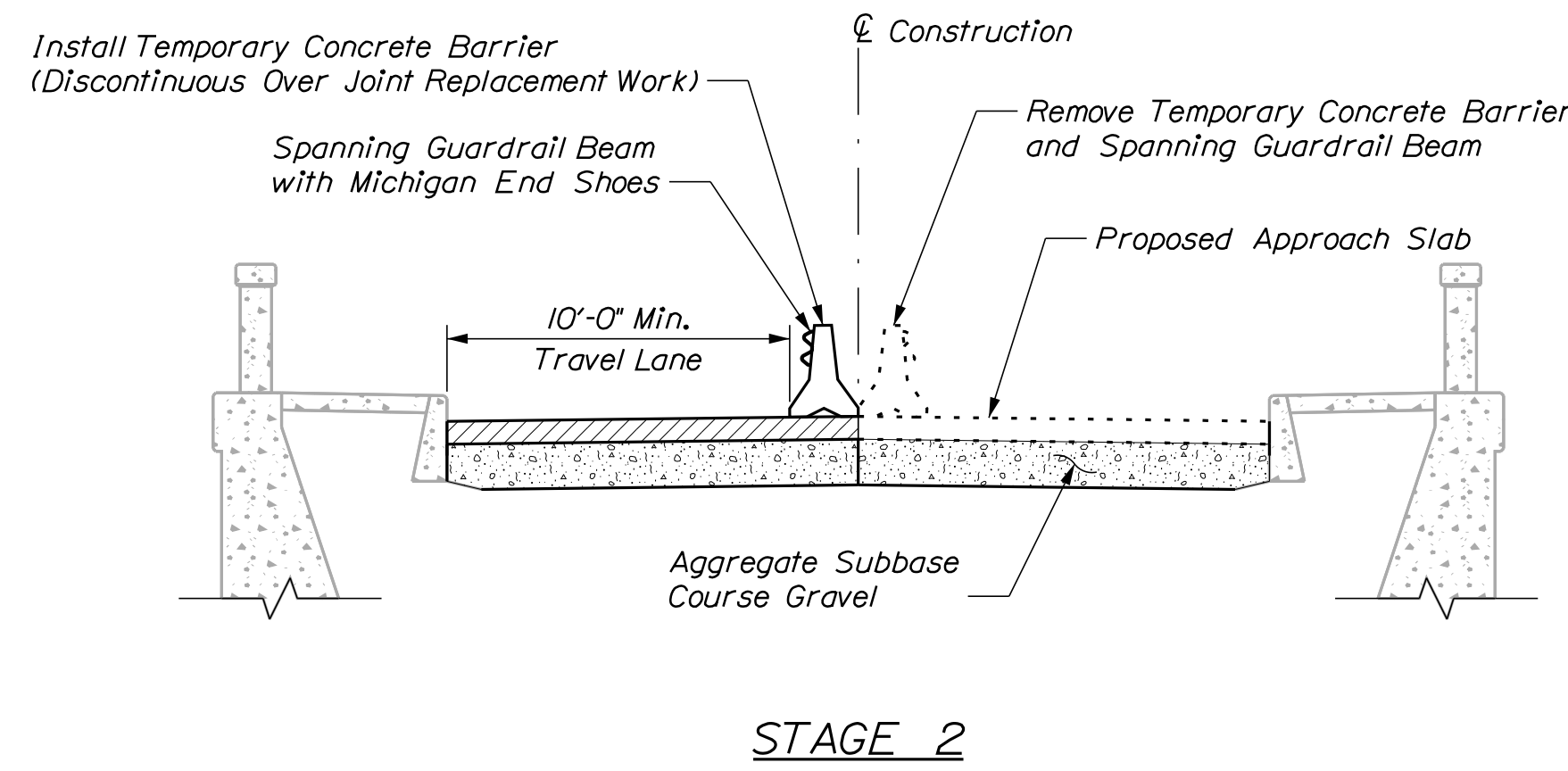
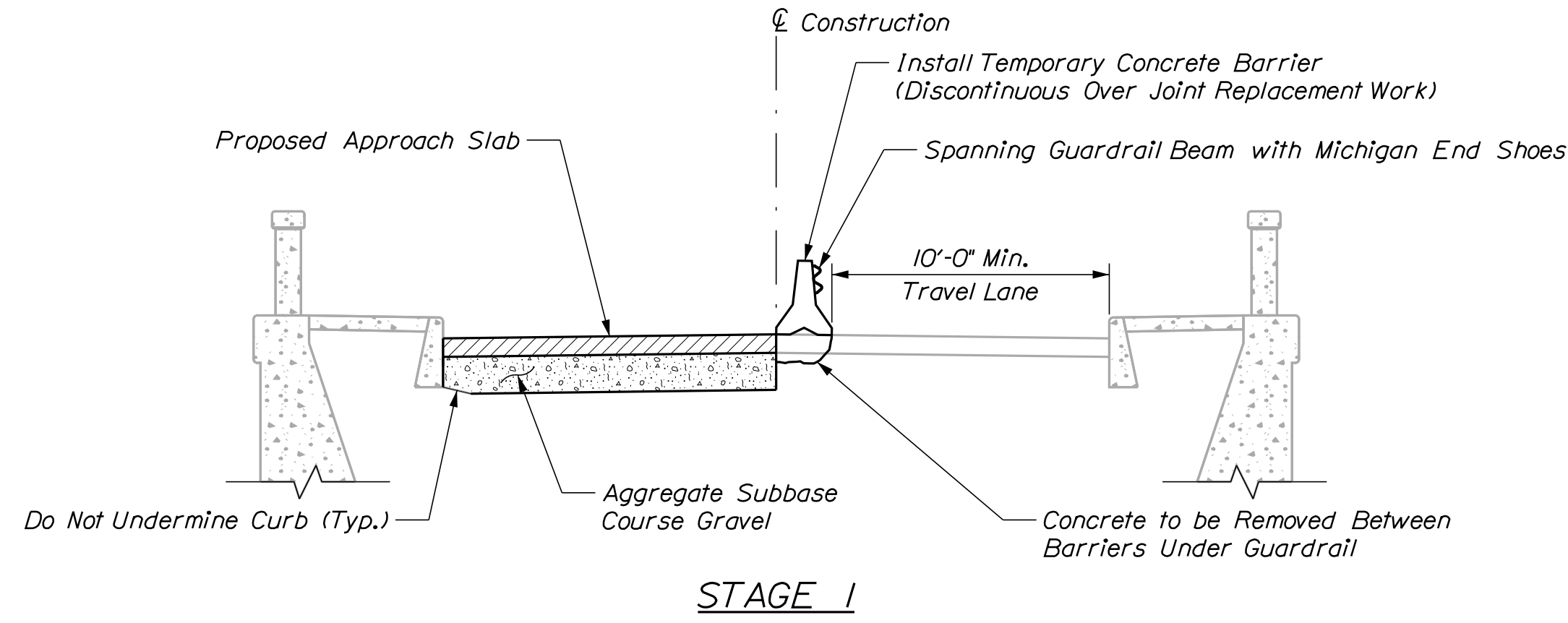
COVERED BRIDGE
NARRAGUAGUS RIVER
CHERRYFIELD WASHINGTON COUNTY

**APPROACH RAILING REPAIR;
SHEET 2 OF 2**

SHEET NUMBER

8

OF 12



STAGED CONSTRUCTION NOTES

1. Sequencing:

Stage 1. Install Temporary Concrete Barrier with guardrail beam spanning joint replacement work area. Repair abutment and pier joints, sidewalks and railings. Apply Silane to Railings. Install new approach slab with aggregate subbase course gravel. Apply High Molecular Weight Methacrylate Crack Sealer. Install base course of pavement and pavement transitions.

Stage 2. Remove Temporary Concrete Barrier from completed lane and install Temporary Concrete Barrier with guardrail beam spanning joint replacement work area. Repair abutment and pier joints, sidewalks and railings. Apply Silane to Railings. Install new approach slab with aggregate subbase course gravel. Apply High Molecular Weight Methacrylate Crack Sealer. Install base course of pavement and pavement transitions.

Stage 3. Install final pavement course. Remove Temporary Concrete Barrier from completed lane and re-open both lanes to traffic.

2. Spaces between Temporary Concrete Barrier spanned with guardrail beam will be paid under Item 526.301 Temporary Concrete Barrier Type 1

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2229400

WIN

BRIDGE NO. 2192

BRIDGE PLANS

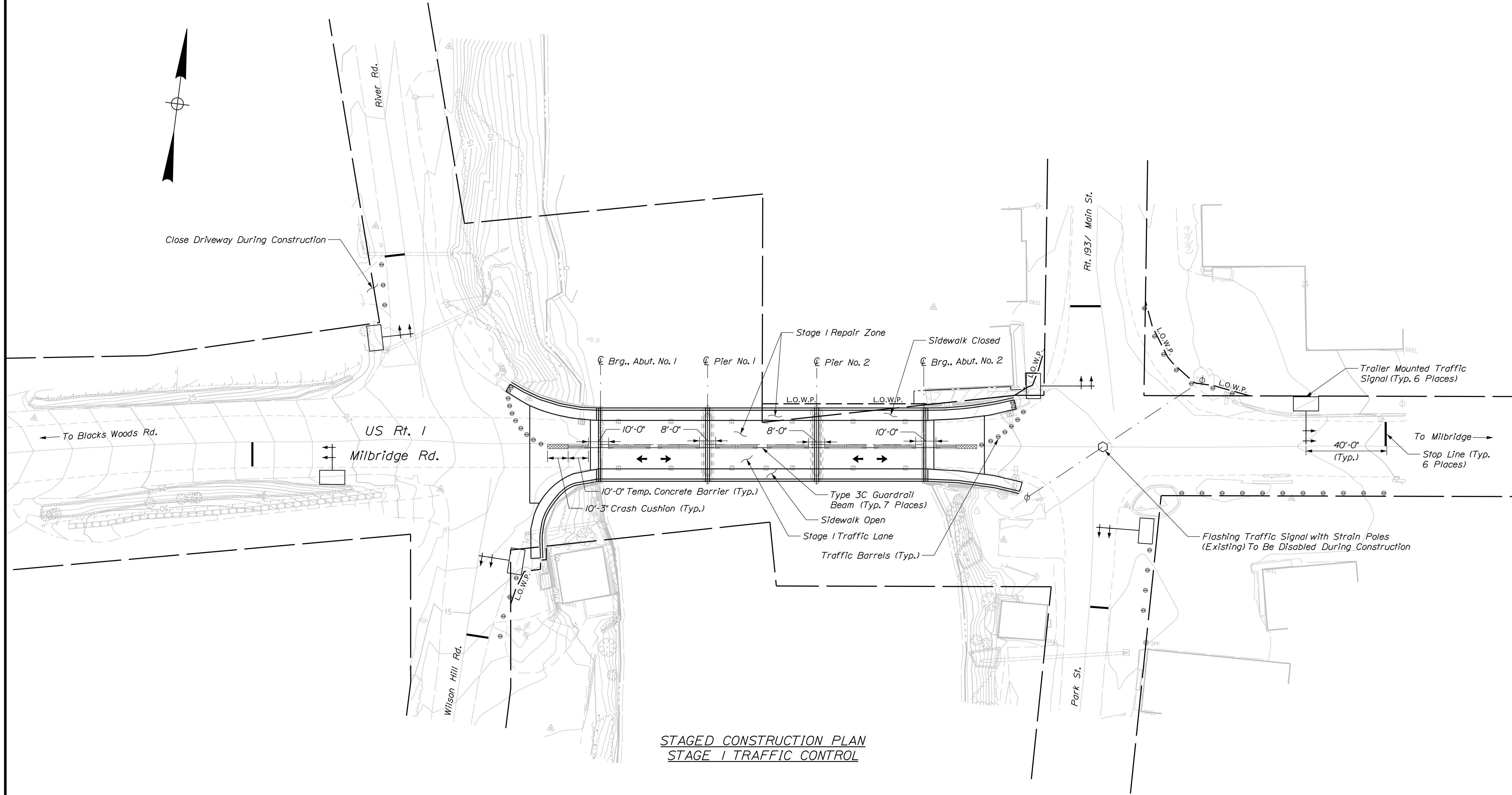
PROJ. MANAGER	M. PARLIN	DATE	
CHECKED-REVIEWED	M. GRAY	BY	R. MAYER
DESIGN-REVIEWED		DATE	JULY 2020
DESIGN-REVIEWED		SIGNATURE	
REVISIONS 1		P.E. NUMBER	
REVISIONS 2		DATE	
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

COVERED BRIDGE
NARRAGUAGUS RIVER
CHERRYFIELD WASHINGTON COUNTY
STAGED CONSTRUCTION SECTION

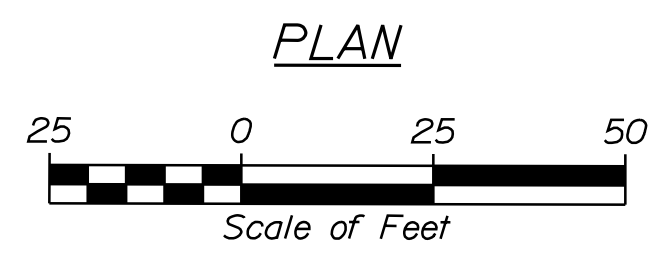
SHEET NUMBER

9

OF 12



STAGED CONSTRUCTION PLAN
STAGE I TRAFFIC CONTROL



PROJ. MANAGER	M. PARLIN	BY	R. MAYER	DATE	JULY 2020
DESIGN DETAILED	M. GRAY	CHECKED/REVIEWED		SIGNATURE	
DESIGNS DETAILED		DESIGNS DETAILED		P.E. NUMBER	
REVISIONS 1		REVISIONS 1		DATE	
REVISIONS 2		REVISIONS 2			
REVISIONS 3		REVISIONS 3			
REVISIONS 4		REVISIONS 4			
FIELD CHANGES		FIELD CHANGES			

PROJ. MANAGER	M. PARLIN	BY	R. MAYER	DATE	JULY 2020
DESIGN DETAILED	M. GRAY	CHECKED/REVIEWED		SIGNATURE	
DESIGNS DETAILED		DESIGNS DETAILED		P.E. NUMBER	
REVISIONS 1		REVISIONS 1		DATE	
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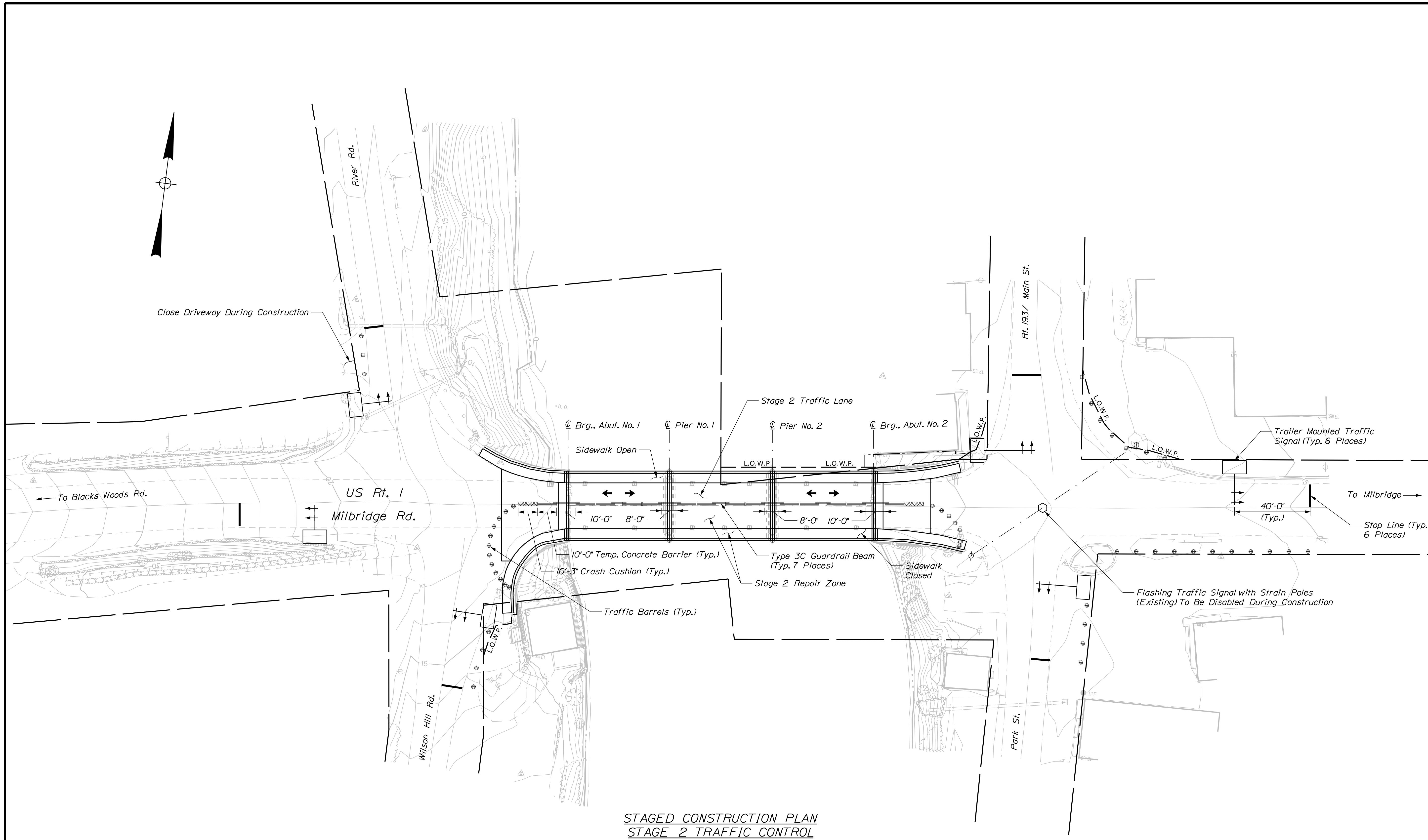
COVERED BRIDGE
NARRAGUAGUS RIVER
CHERRYFIELD WASHINGTON COUNTY
STAGED CONSTRUCTION
PLAN; STAGE 1

Username: Richard.Mayer

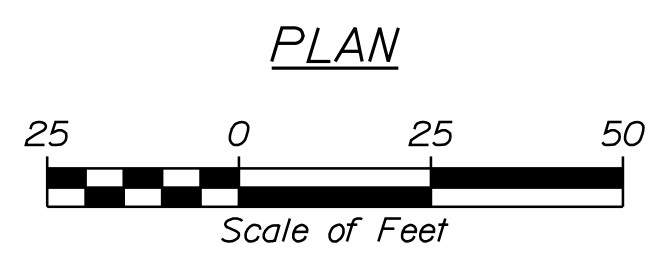
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Division: BRIDGE

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**STAGED CONSTRUCTION PLAN
STAGE 2 TRAFFIC CONTROL**



STATE OF MAINE DEPARTMENT OF TRANSPORTATION 2229400		BRIDGE NO. 2192 WIN 022294.00		BRIDGE PLANS	
COVERED BRIDGE NARRAGUAGUS RIVER CHERRYFIELD WASHINGTON COUNTY		STAGED CONSTRUCTION PLAN; STAGE 2		SHEET NUMBER 11 OF 12	
PROJ. MANAGER	M. PARLIN	BY	R. MAYER	DATE	JULY 2020
DESIGN DETAILED	M. GRAY	CHECKED/REVIEWED		SIGNATURE	
DESIGNS DETAILED		DESIGNS DETAILED		P.E. NUMBER	
REVISIONS 1		REVISIONS 1		DATE	
REVISIONS 2		REVISIONS 2			
REVISIONS 3		REVISIONS 3			
REVISIONS 4		REVISIONS 4			
FIELD CHANGES					

