



STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
16 STATE HOUSE STATION
AUGUSTA, MAINE 04333-0016

Janet T. Mills
GOVERNOR

Bruce A. Van Note
COMMISSIONER

January 30, 2025
Subject: Bridge wearing surface
Replacement
State WIN: 030139.00
Location: Orono
Amendment No. 1

Dear Sir/Ms.:

Size of the plans on the webpage have been changed to a more downlable format. No information has changed.

Consider these changes and information prior to submitting your bid on **February 19, 2025**

Sincerely,

A handwritten signature in blue ink that reads 'George Macdougall'.

George M. A. Macdougall P.E.
Contracts & Specifications Engineer

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION



SPECIFICATIONS

Design: Load Factor Design per AASHTO Standard Specifications for Highway Bridge 1989 and Interim Specifications 1990 and 1991.

DESIGN LOADING

Live Load HS20

MATERIALS

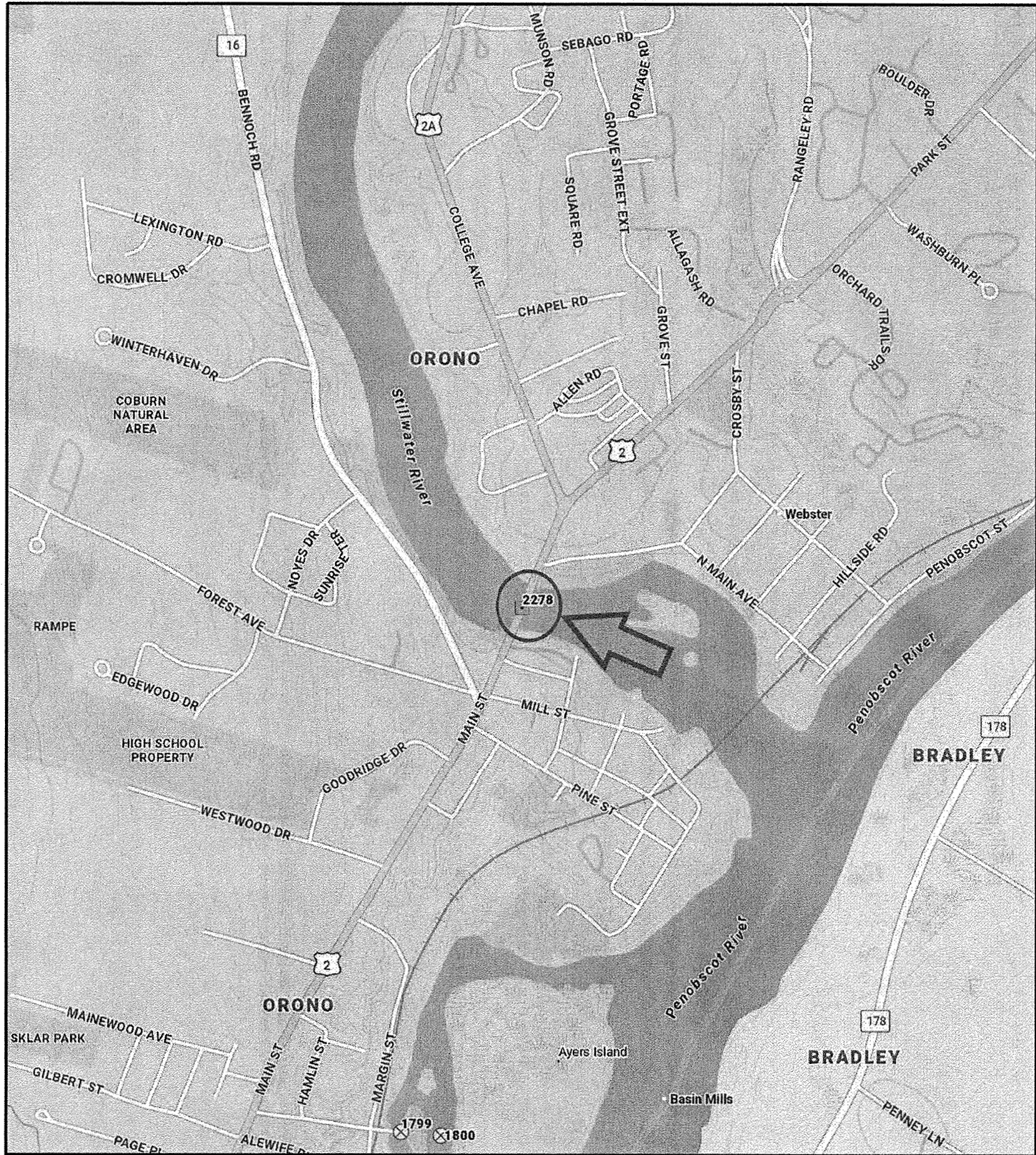
Concrete:
Patching Material Class A
for Deck Repairs or MaineDOT QPL

Reinforcing:
Plain Reinforcing Steel ASTM A615, Grade 60

Joint Headers:
Polyester Polymer Concrete See Special Provision 502

BASIC DESIGN STRESSES

Reinforcing:
Plain Reinforcing Steel f y = 60,000 psi



LOCATION MAP

ORONO
PENOBSCOT COUNTY
BRANDON M. SILK
MEMORIAL BRIDGE
OVER
STILLWATER RIVER
MAIN STREET (US Route 2)
PROJECT NO. 030139.00
PROJECT LENGTH 0.096 mi.
BRIDGE NO. 2278

LIST OF DRAWINGS

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UTILITIES

Bangor Natural Gas Company Charter Communications Inc. Consolidated Communications GoNetSpeed	Orono-Veazie Water District University of Maine System Versant Power Town of Orono - Bridge Lighting
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TRAFFIC DATA

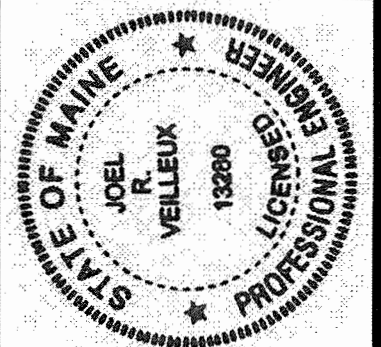
Current (2025) AADT	14,280
Future (2037) AADT	15,140
DHV - % of AADT	10%
Design Hour Volume	1,569
Heavy Trucks (% of AADT)	2%
Heavy Trucks (% of DHV)	1%
Directional Distribution (% of DHV)	53%
18 kip Equivalent P 2.0	165
18 kip Equivalent P 2.5	157
Design Speed (mph)	25 mph

MAINTENANCE OF TRAFFIC

Maintain one 12'-0" wide lane of one direction traffic over the bridge during construction using staged construction. Detour the southbound US RTE 2 traffic during construction in accordance with the Detour Plan shown on Plan Sheet 10 and in accordance with Special Provisions.

PROJECT LOCATION	Brandon M. Silk Memorial Bridge (#2278) over Stillwater River Lat./Long. 44°53'7.944" N 68°40'15.096" W
PROGRAM AREA	Maintenance & Operations
OUTLINE OF WORK	Bridge Wearing Surface Replacement

STATE OF MAINE DEPARTMENT OF TRANSPORTATION	APPROVED	DATE
	COMMISSIONER: <i>Joel R. Veilleux</i>	1-16-25
CHIEF ENGINEER: <i>Joel R. Veilleux</i>		1-14-2025



SIGNATURE	P.E. NUMBER	DATE
<i>Joel R. Veilleux</i>	13280	1/10/2025

PROJECT INFORMATION		MAINTENANCE & OPERATIONS	
PROGRAM	PROJECT MANAGER	M&O REGION 4	JOEL VELLEUX
DESIGNER	CONSULTANT		
PROJECT RESIDENT	CONTRACTOR		
PROJECT COMPLETION DATE			

ORONO BRANDON M. SILK MEMORIAL	TITLE SHEET
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SHEET NUMBER

1

WIN 030139.00

ESTIMATED QUANTITIES			
ITEM NO.	DESCRIPTION	QUANTITY	UNIT
202.127	REMOVE EXISTING BITUMINOUS PAVEMENT (1,600 SY)	1	LS
202.202	REMOVING PAVEMENT SURFACE	180	SY
403.2081	12.5 MM POLYMER MODIFIED HOT MIX ASPHALT	180	T
403.209	HOT MIX ASPHALT 9.5 MM (SIDEWALKS, DRIVES, ISLANDS, & INCIDENTALS)	5	T
403.2131	12.5 MM POLYMER MODIFIED HMA BASE	175	T
409.15	BITUMINOUS TACK COAT - APPLIED	176	G
508.14	HIGH PERFORMANCE WATERPROOFING MEMBRANE (1,600 SY)	1	LS
518.50	REPAIR OF UPWARD FACING SURFACES - TO REINFORCING STEEL < 8 IN.	250	SF
518.51	REPAIR OF UPWARD FACING SURFACES - BELOW REINFORCING STEEL < 8 IN.	100	SF
520.242	BRIDGE JOINT MODIFICATION TYPE 2	2	EA
608.46	REGRADING SIDEWALK	40	SY
609.380	RESET CURB TYPE 1	85	LF
627.733	4" WHITE OR YELLOW PAINTED PAVEMENT MARKING LINE	1,520	LF
652.39	WORK ZONE TRAFFIC CONTROL	1	LS
656.75	TEMPORARY SOIL EROSION AND WATER POLLUTION CONTROL	1	LS
659.10	MOBILIZATION	1	LS

GENERAL CONSTRUCTION NOTES

1. For easements, construction limits, and right of way lines, refer to the Right of Way Map.
2. All utility facilities shall be adjusted by the respective utilities unless otherwise noted.
3. Project information referred to below may be accessed at the following MaineDOT web address: <http://www.maine.gov/mdot/contractors/>
4. 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.
5. 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:

a. If a Lump Sum pay item is eliminated, the requirements of Standard Specifications Section 109.2, Elimination of Items, will take precedence.

b. If other Contract Documents specifically allow a change in payment for a Lump Sum pay item, those requirements will be followed.

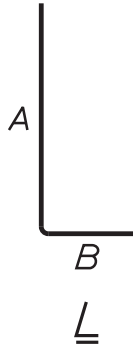
c. If a design change results in changes to estimated quantities for Lump Sum pay items, price adjustments will be made in accordance with Standard Specifications Section 109.7, Equitable Adjustments to Compensation and Time.

REINFORCING STEEL - BRIDGE JOINT MODIFICATON

BENT BARS						
MARK	QTY.	LENGTH	TYPE	A	B	LOCATION
L350	64	18"	L	11 1/2"	6 1/2"	Joint Modification - Abutment Side
L351	64	12 1/2"	L	6"	6 1/2"	Joint Modification - Slab Side

BENDING DIAGRAM

STRAIGHT BARS			
MARK	QTY.	LENGTH	LOCATION
S300	20	15'-8"	Bridge Joint Modification



NOTE: No separate payment for reinforcing steel will be made. All reinforcing steel shall be considered incidental to Pay Item 520.242 Bridge Joint Modification Type 2

BRIDGE JOINT MODIFICATON - SETTING JOINT OPENING

Joint Setting Chart	
Temp. (°F)	"X" (in.)
90	1 9/16
85	1 5/8
80	1 3/4
75	1 7/8
70	1 15/16
65	2 1/16
60	2 3/16
55	2 5/16
50	2 3/8
45	2 1/2
40	2 5/8

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
MAINTENANCE & OPERATIONS

BRIDGE NO. 2278
WIN 030139.00
BRIDGE PLANS

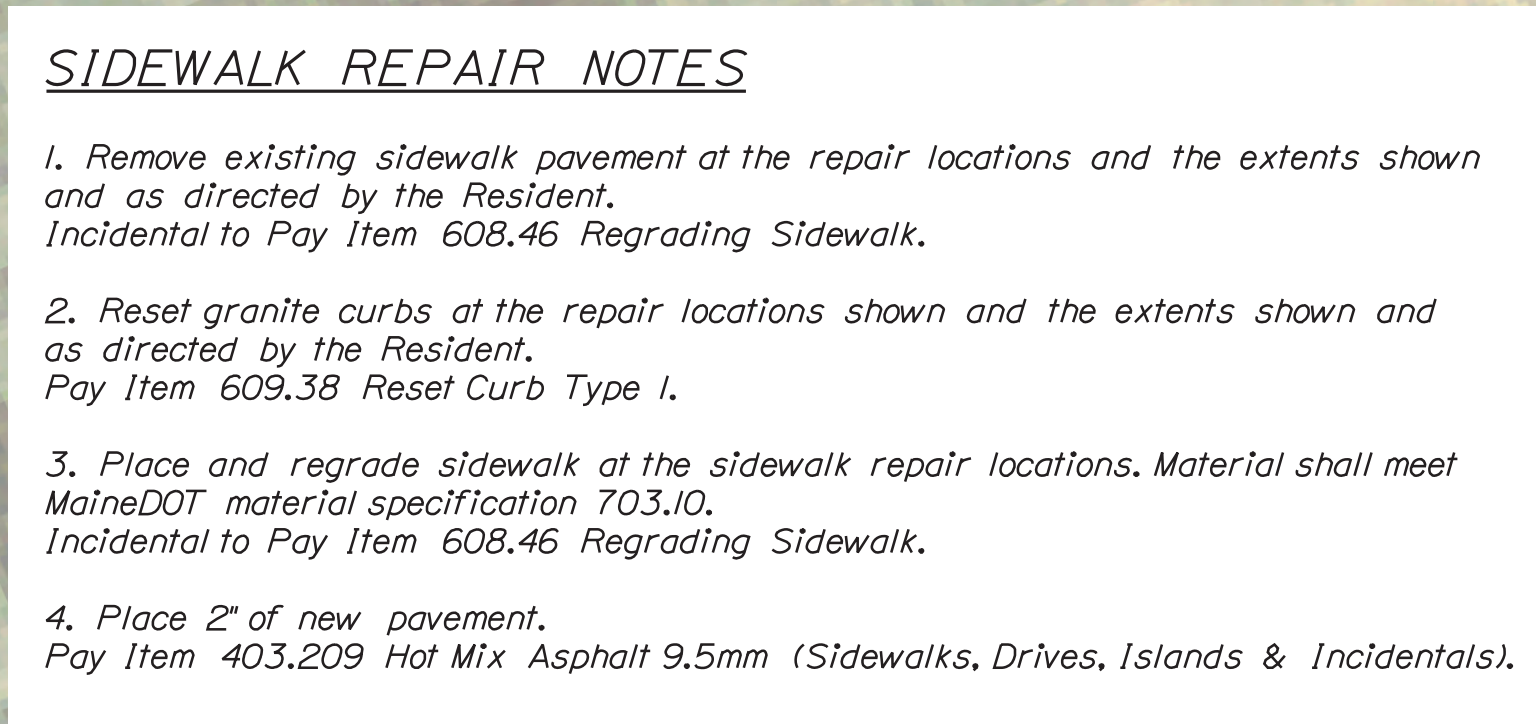
BRANDON M. SILK MEMORIAL
STILLWATER RIVER
ORONO
PENOBSCOT COUNTY

QUANTITIES, NOTES & MISC.

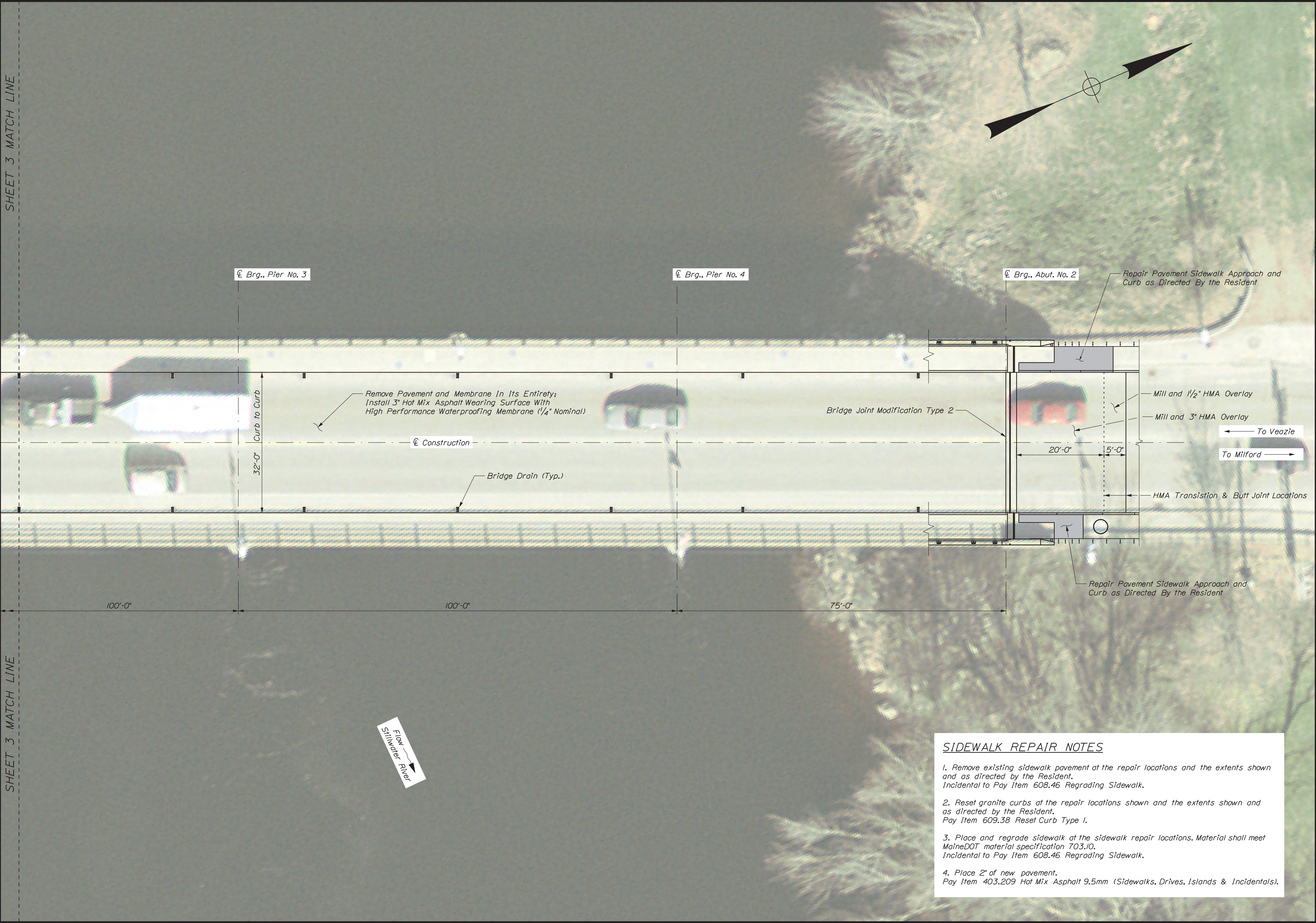
SHEET NUMBER
2
OF 12

PROJ. MANAGER: MBO REGION 4
DESIGN-DETAILED J. J. VAILLUX
CHECKED-REVIEWED
DESIGN-DETAILED
REVISIONS 1
REVISIONS 2
REVISIONS 3
REVISIONS 4
FIELD CHANGES

DATE 1/2025
BY J. VAILLUX
SIGNATURE
P.E. NUMBER
DATE



Filename: ... \JRV CAD\004 GeneralPlan.dgn Division: BRIDGE Username: Joel.R.Veillex Date:1/10/2025



SIDEWALK REPAIR NOTES

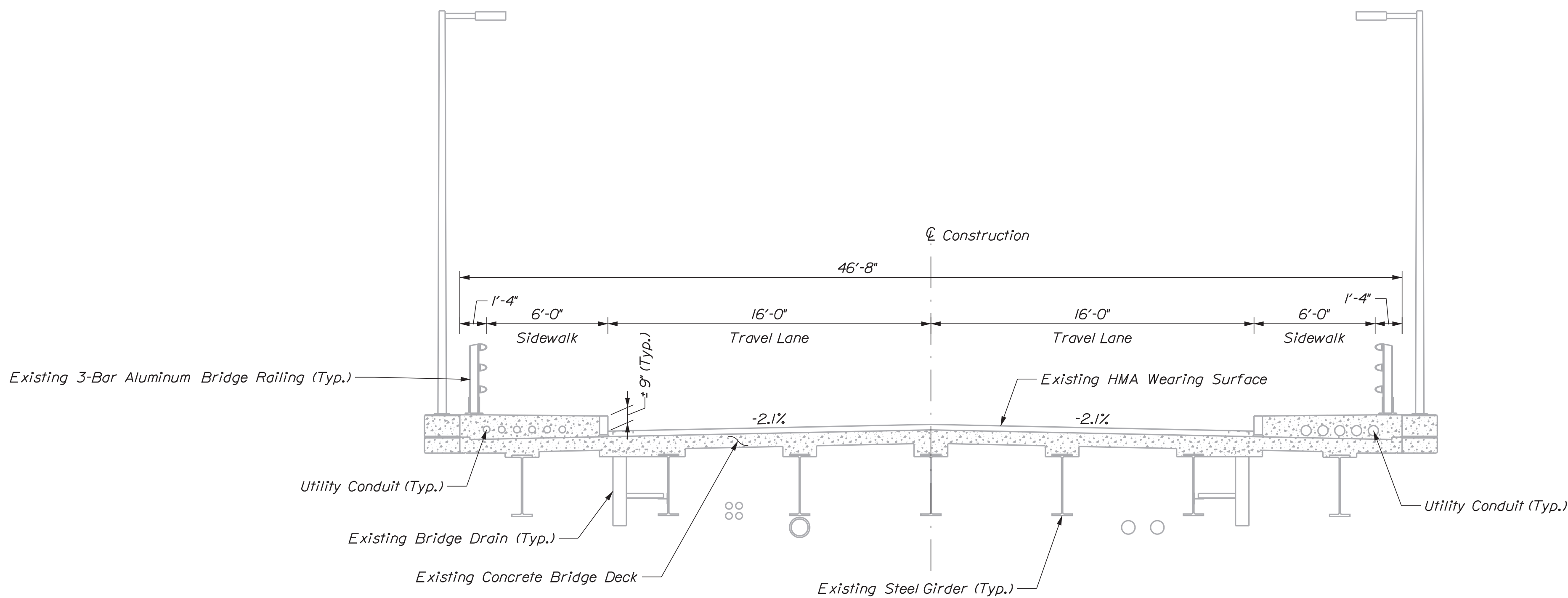
1. Remove existing sidewalk pavement at the repair locations and the extents shown and as directed by the Resident.
Incidental to Pay Item 608.46 Regrading Sidewalk.

2. Reset granite curbs at the repair locations shown and the extents shown and as directed by the Resident.
Pay Item 609.38 Reset Curb Type I.

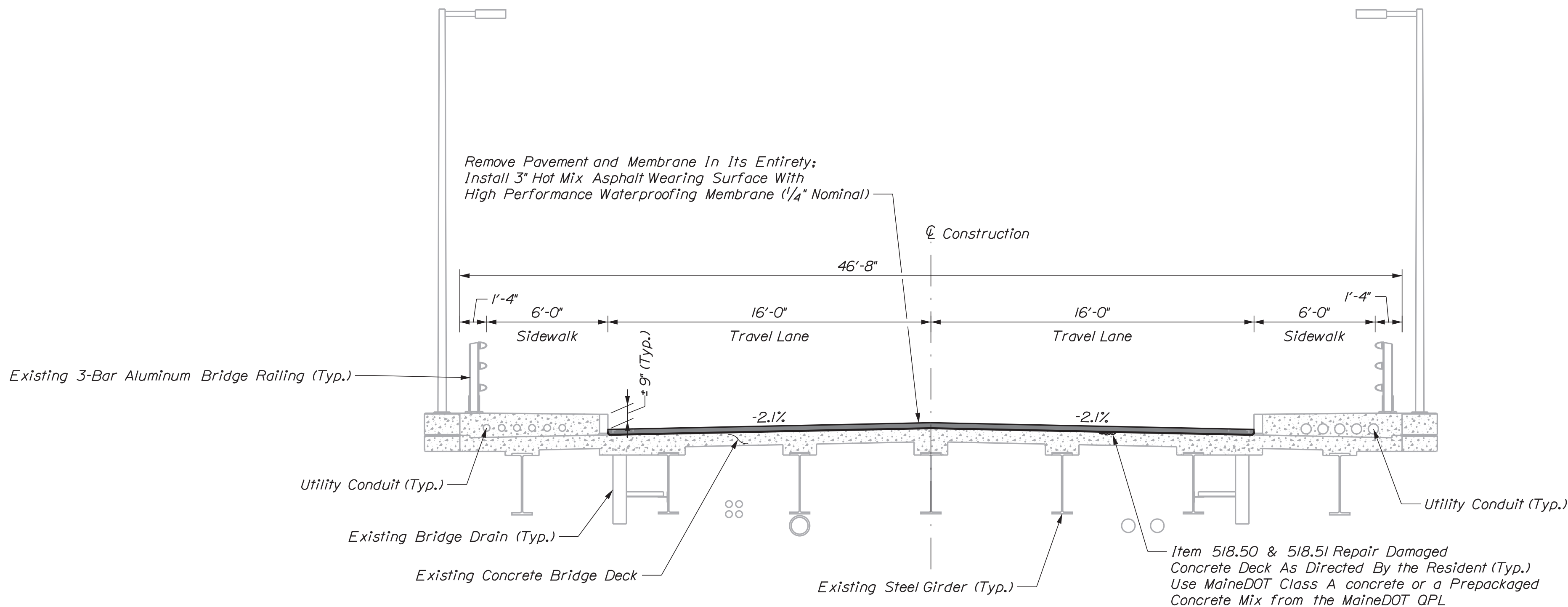
3. Place and regrade sidewalk at the sidewalk repair locations. Material shall meet MaineDOT material specification 703.10.
Incidental to Pay Item 608.46 Regrading Sidewalk.

4. Place 2" of new pavement.
Pay Item 403.209 Hot Mix Asphalt 9.5mm (Sidewalks, Drives, Islands & Incidentals).

STATE OF MAINE DEPARTMENT OF TRANSPORTATION		SIGNATURE				P.E. NUMBER				DATE				BRIDGE NO. 2278		WIN		0307139.00		BRIDGE PLANS	
BRANDON M. SILK MEMORIAL STILLWATER RIVER ORONO PENOBSCOT COUNTY GENERAL PLAN		PROJ. MANAGER: M40 REGION 4		BY: J. VAILLEUX		DATE: 1/2025															
		DESIGN-DETAILED		J. VAILLEUX																	
		CHECKED-REVIEWED																			
		DESIGN2-DETAILED2																			
		DESIGN3-DETAILED3																			
		REVISIONS 1																			
		REVISIONS 2																			
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		REVISIONS 4																			
		FIELD CHANGES																			
SHEET NUMBER																					
4																					
OF 12																					

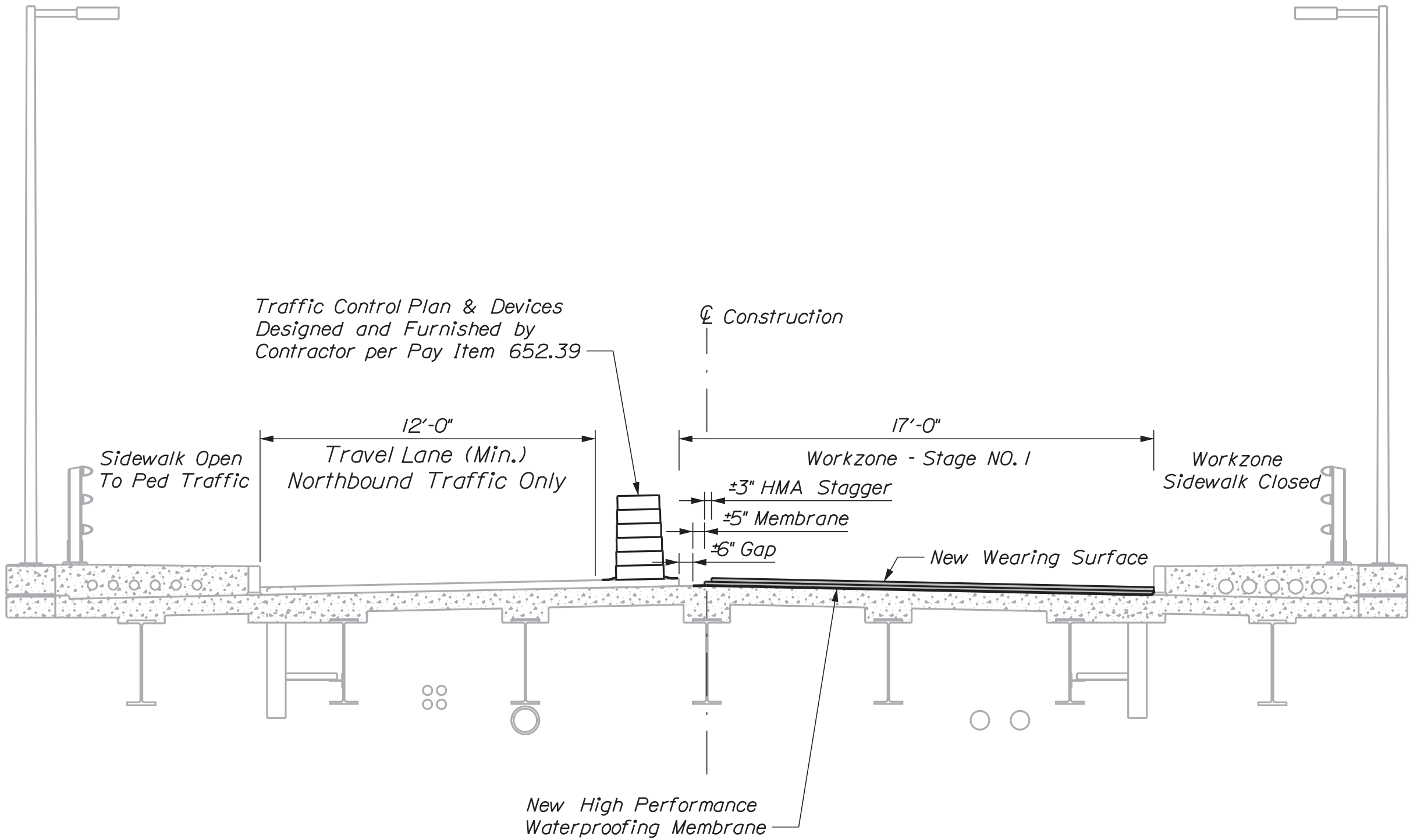


EXISTING BRIDGE TYPICAL SECTION

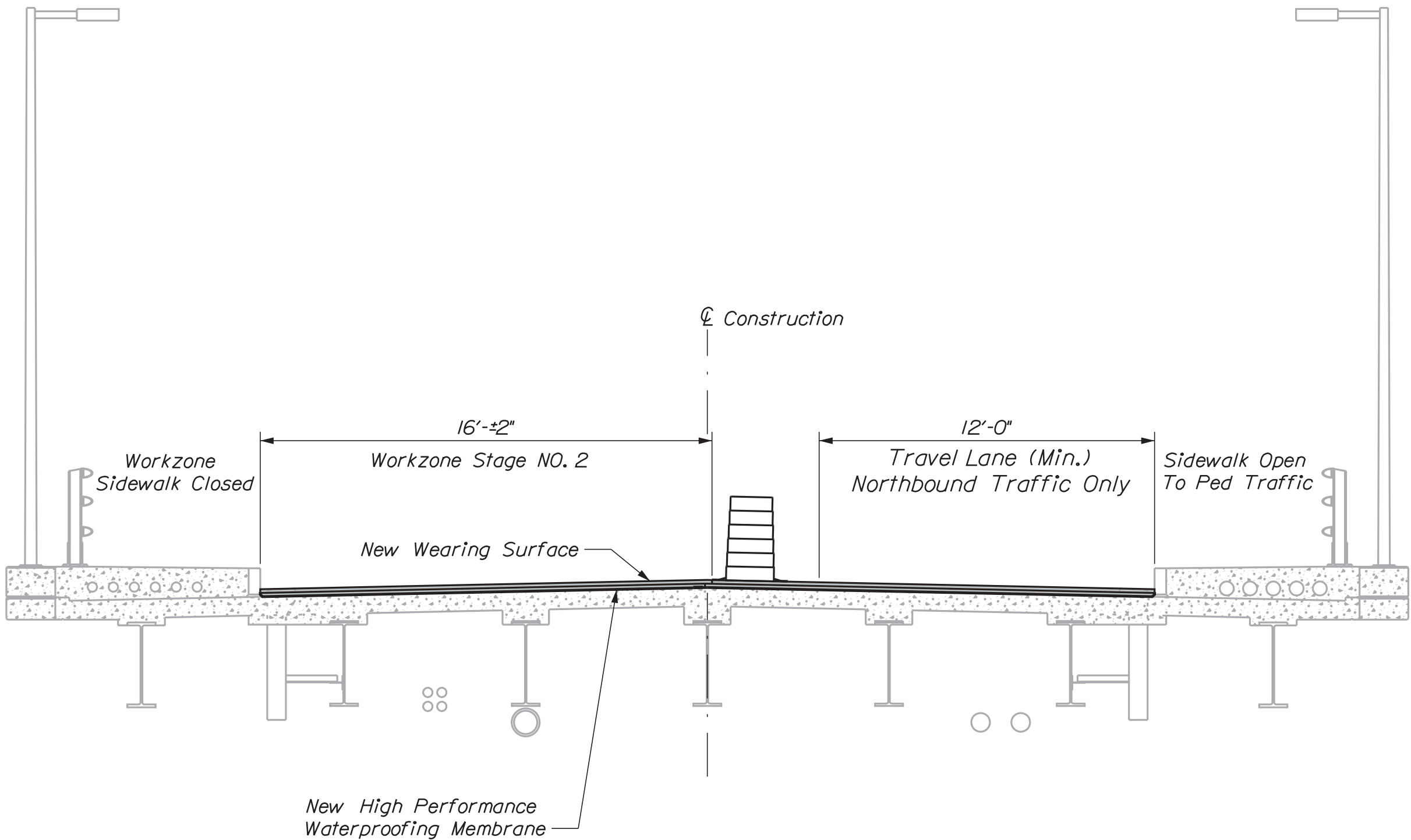


PROPOSED BRIDGE TYPICAL SECTION

STATE OF MAINE		DEPARTMENT OF TRANSPORTATION	
ORONO		PENOBSCOT COUNTY	
BRANDON M. SILK MEMORIAL		STILLWATER RIVER	
SHEET NUMBER		TYPICAL SECTIONS	
5		OF 12	
MAINTENANCE & OPERATIONS		BRIDGE NO. 2278	
WIN		030139.00	
BRIDGE PLANS			
DESIGN-DETAILED		DATE	
CHECKED-REVIEWED		BY	
DESIGN-DETAILED		J. VILLEUX	
REVISIONS 1		SIGNATURE	
REVISIONS 2		P.E. NUMBER	
REVISIONS 3		DATE	
REVISIONS 4			
FIELD CHANGES			

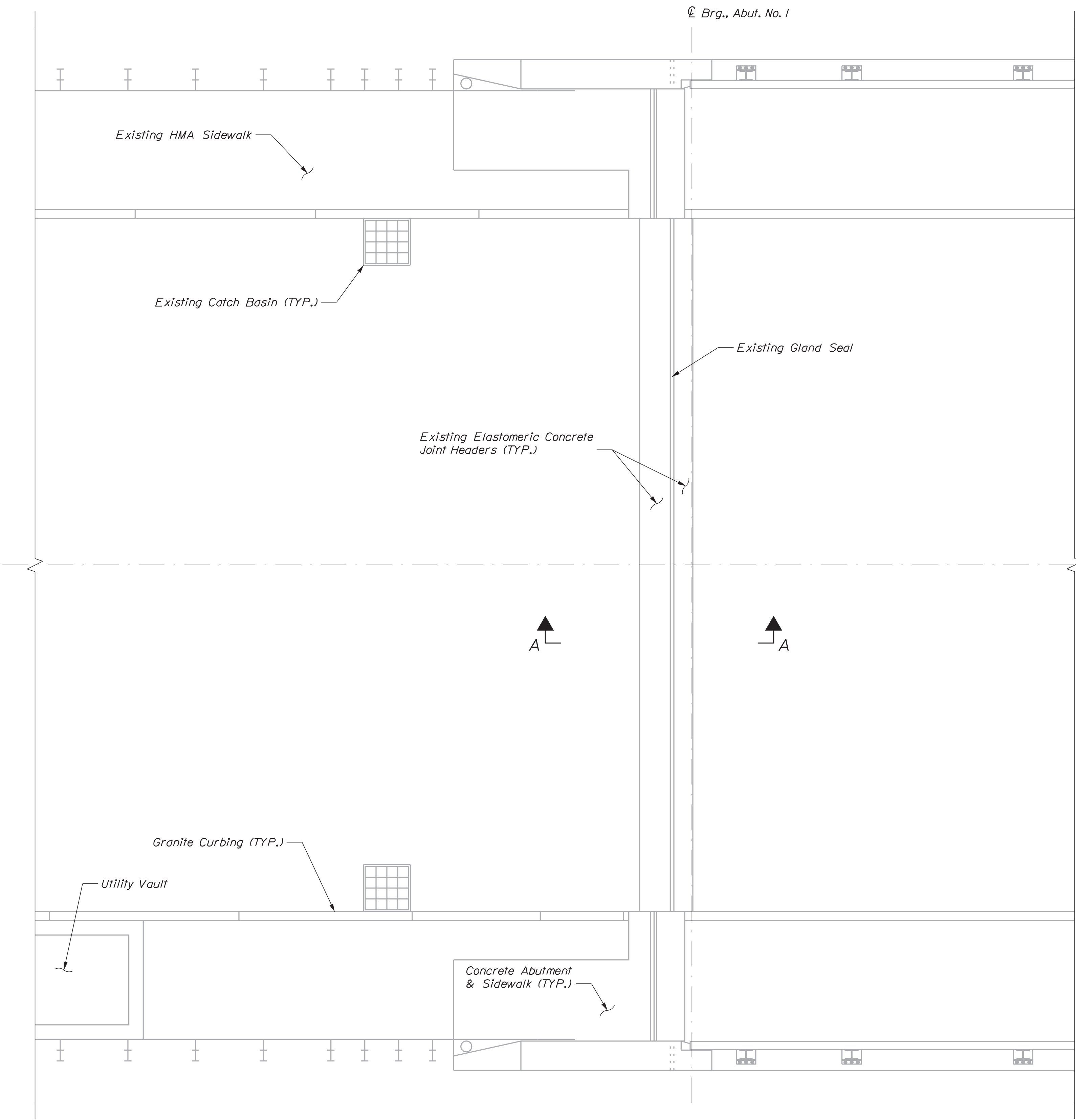


STAGE NO. 1
 (Shown for illustrative purposes, Contractor may stage either side of the bridge first, at their option)

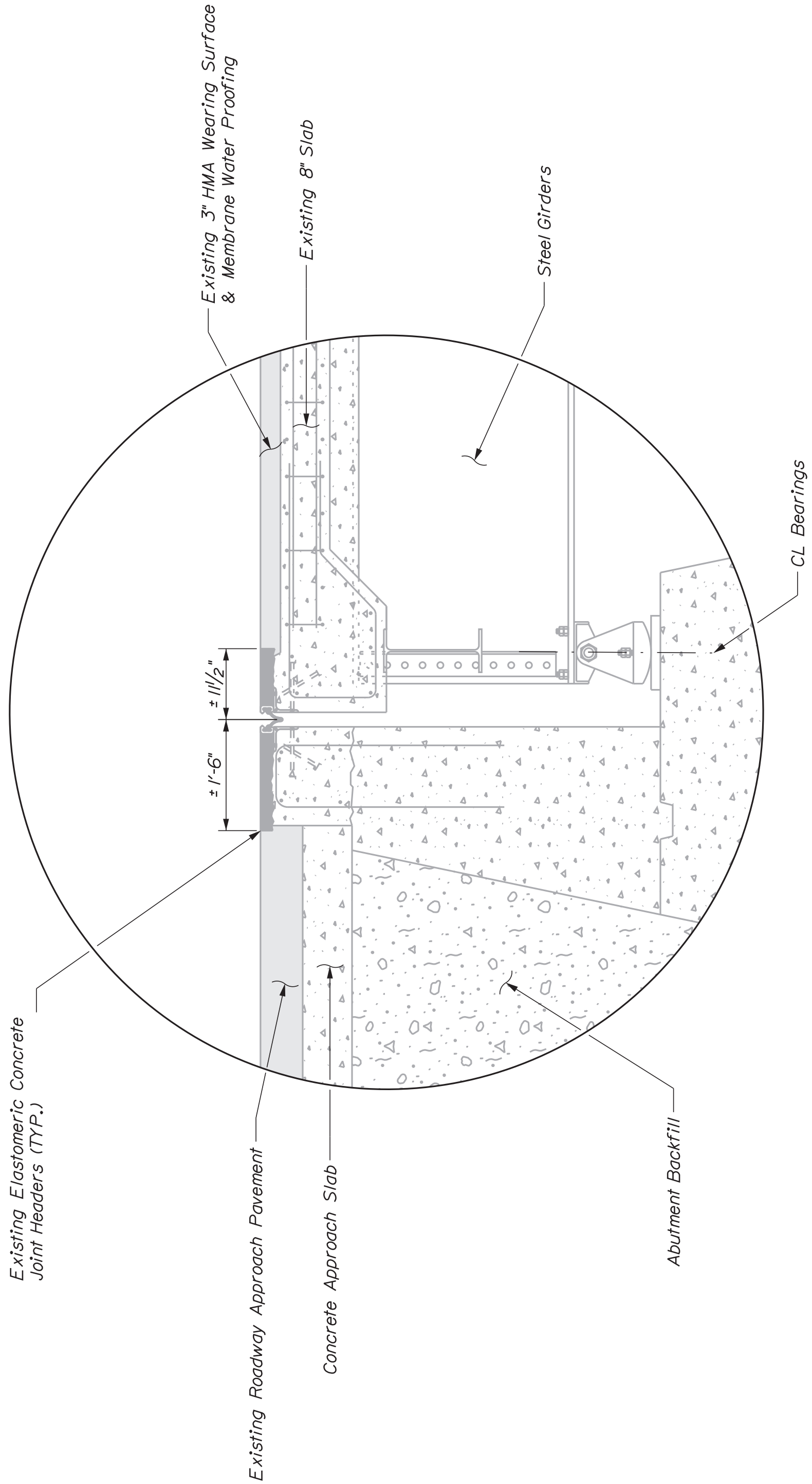


STAGE NO. 2

SHEET NUMBER		BRANDON M. SILK MEMORIAL STILLWATER RIVER ORONO		PROJ. MANAGER: M&O REGION 4 DESIGN-DETAILED J. VILLEUX CHECKED-REVIEWED J. VILLEUX DESIGN2-DETAILED2 DESIGN3-DETAILED3 REVISIONS 1 REVISIONS 2 REVISIONS 3 REVISIONS 4 FIELD CHANGES		STATE OF MAINE DEPARTMENT OF TRANSPORTATION		DATE 1/2025		SIGNATURE	
		PENOBSCOT COUNTY						P.E. NUMBER			
STAGED CONSTRUCTION SECTIONS								DATE			
								BRIDGE NO. 2278		WIN 030139.00	
										BRIDGE PLANS	

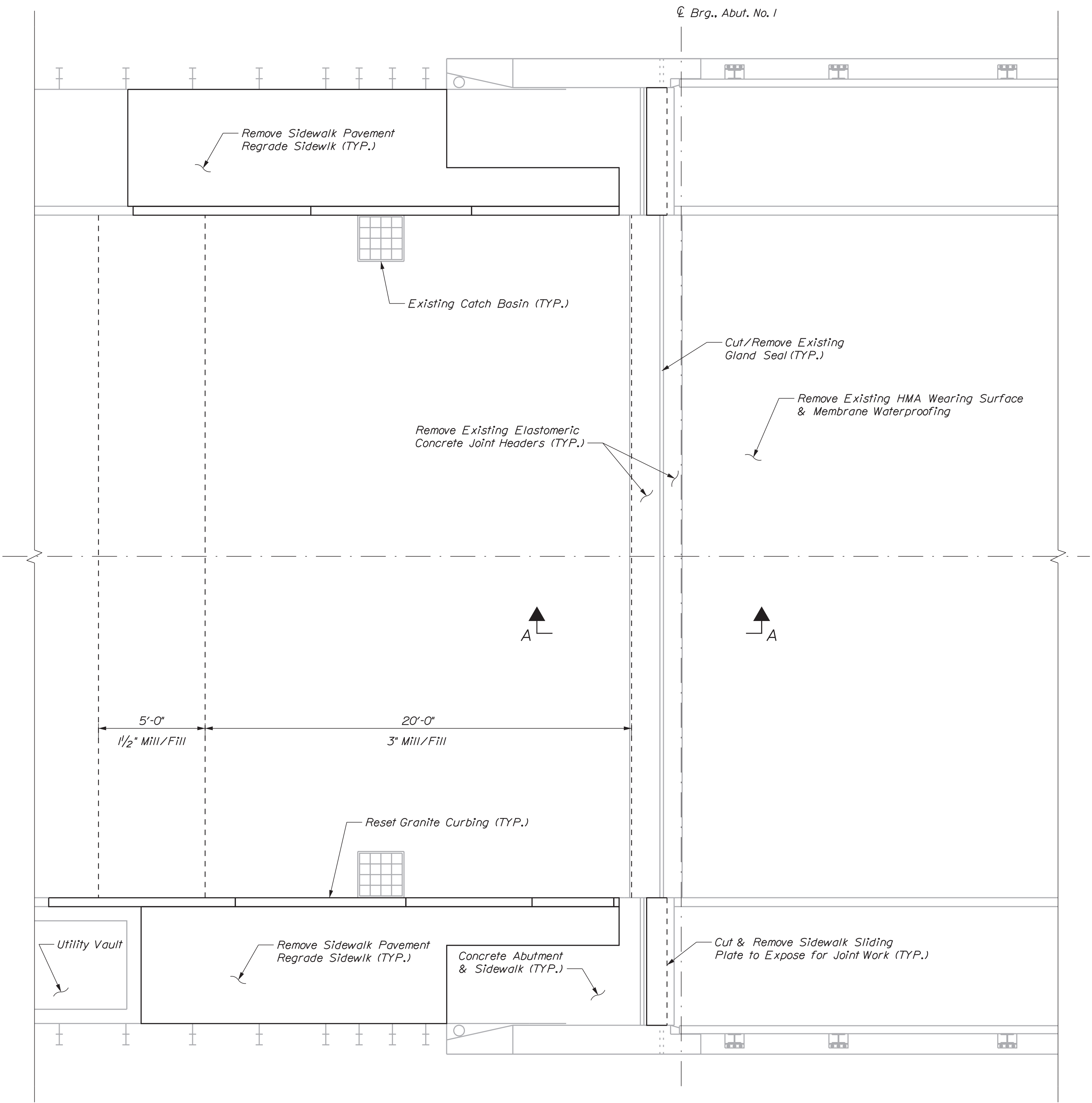


EXISTING PLAN VIEW
SOUTHWEST ABUTMENT #1
(Northeast Abutment #2 Similar)

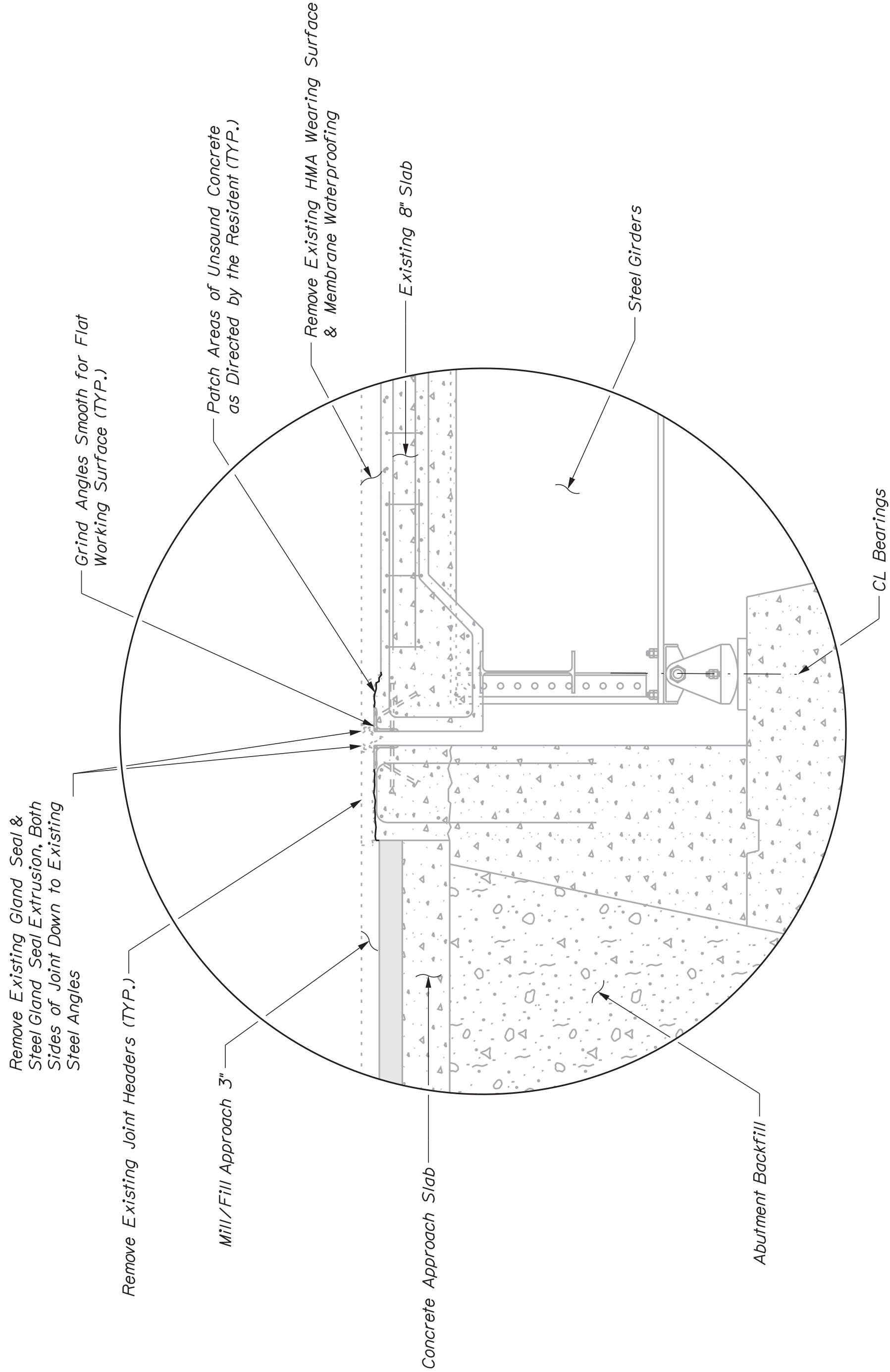


EXISTING SECTION A-A

<div>OF 12</div>	<div>SHEET NUMBER</div> <div>7</div>	BRANDON M. SILK MEMORIAL STILLWATER RIVER PENOBSCOT COUNTY ORONO				PROJ. MANAGER: M&O REGION 4	BY	DATE	STATE OF MAINE DEPARTMENT OF TRANSPORTATION			
		JOINT MODIFICATION EXISTING				DESIGN-DETAILED	J. VELLEUX	1/2025				
						CHECKED-REVIEWED	J. VELLEUX					
						DESIGN2-DETAILED2						
						DESIGN3-DETAILED3						
				REVISIONS 1				SIGNATURE				
				REVISIONS 2					P.E. NUMBER			
				REVISIONS 3								
				REVISIONS 4								
				FIELD CHANGES				DATE				
									BRIDGE NO. 2278	WIN	030139.00	BRIDGE PLANS



DEMOLITION PLAN VIEW
SOUTHWEST ABUTMENT #1
(Northeast Abutment #2 Similar)

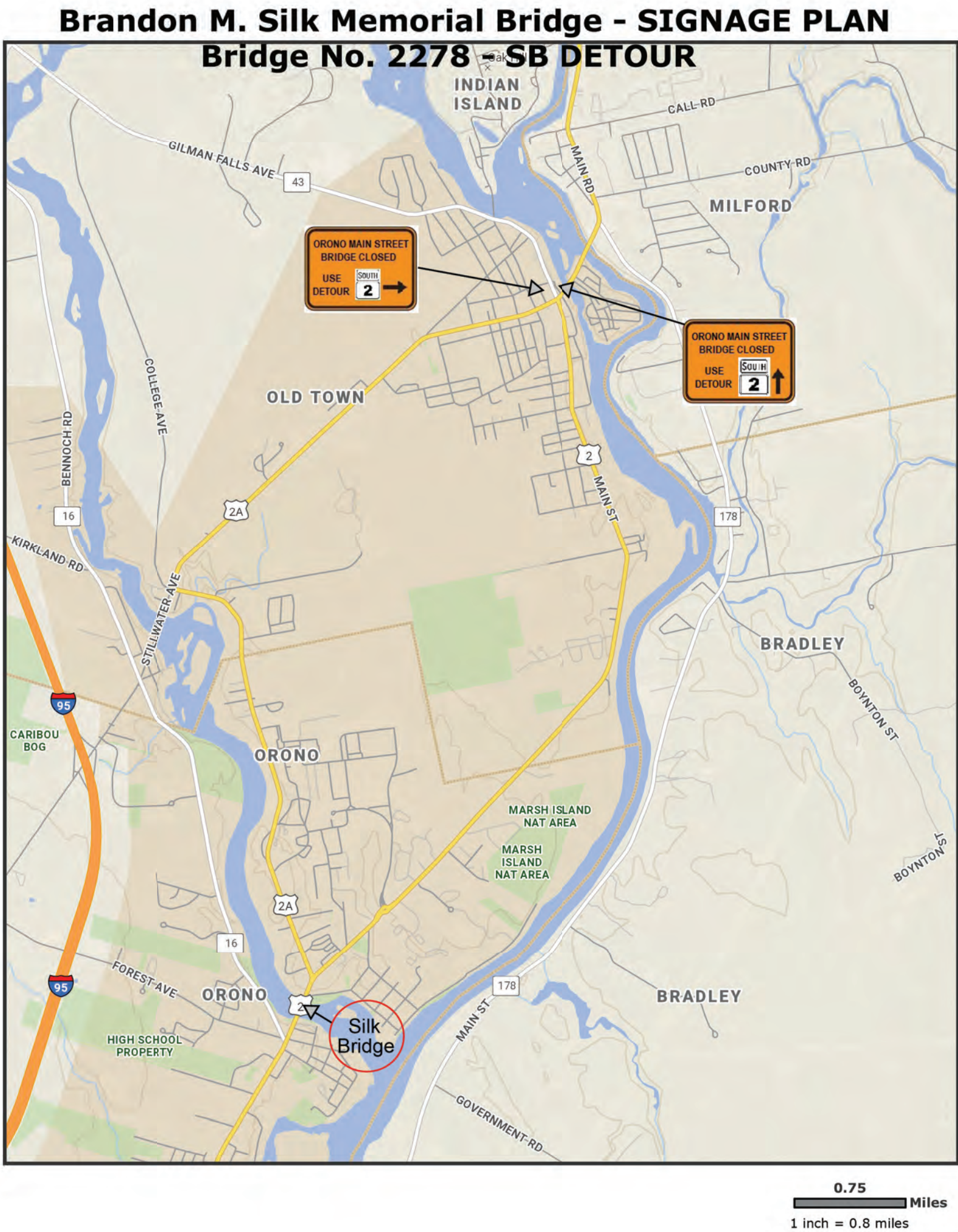
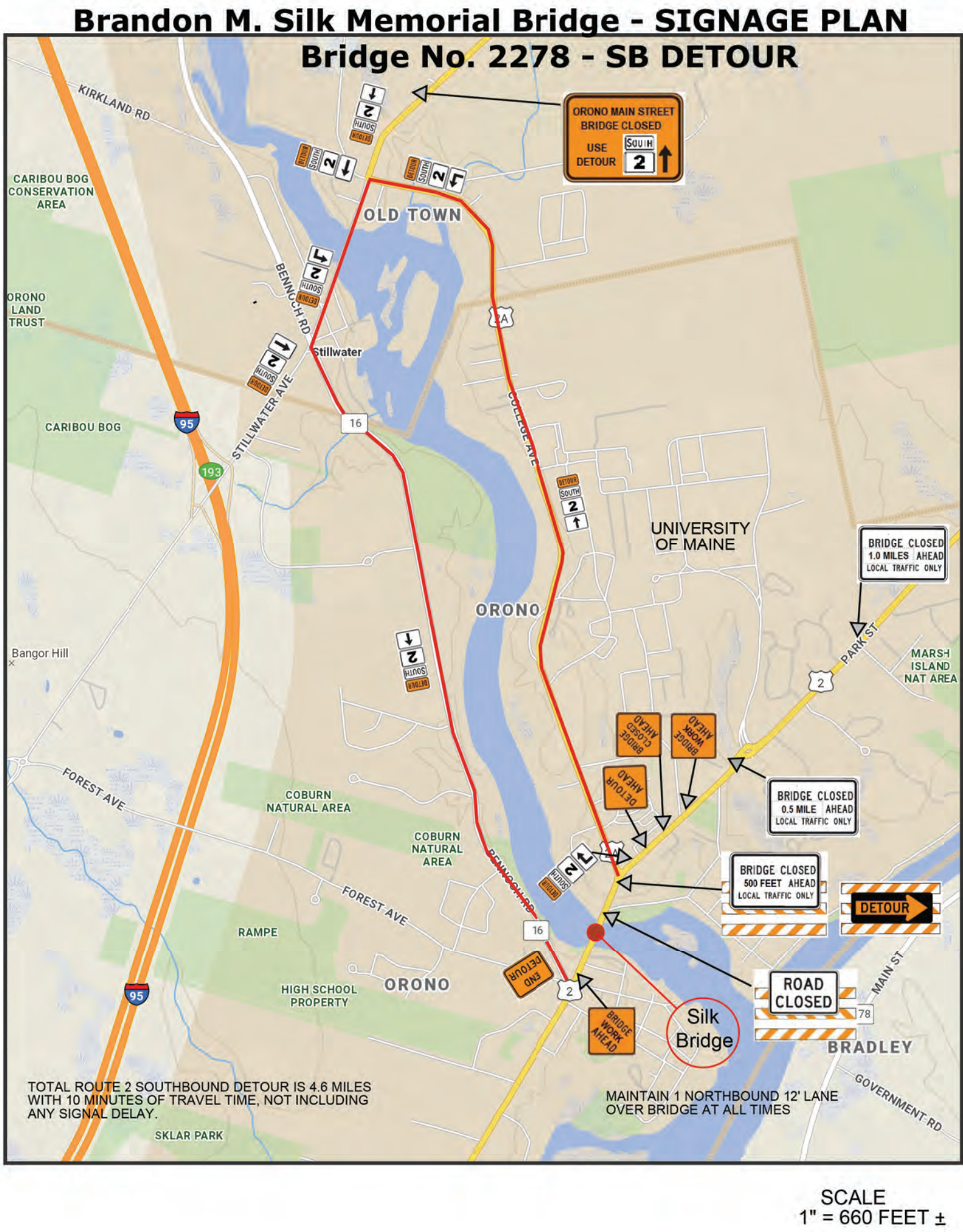
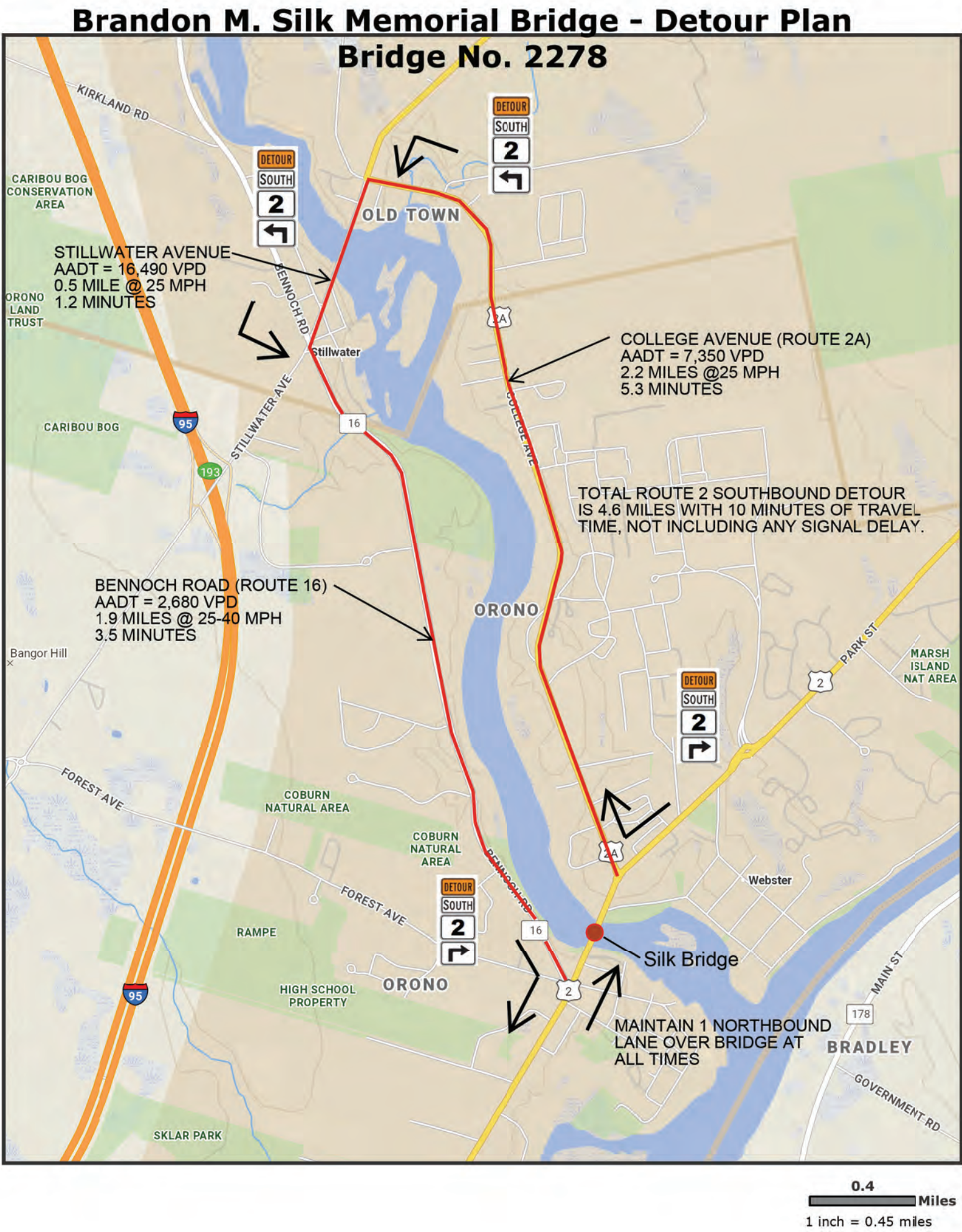


EXISTING SECTION A-A

BRANDON M. SILK MEMORIAL STILLWATER RIVER PENOBSCOT COUNTY ORONO		PROJ. MANAGER: M&O REGION 4		BY	DATE
		DESIGN-DETAILED	J. VELLEUX	J. VELLEUX	1/2025
JOINT MODIFICATION DEMOLITION		CHECKED-REVIEWED			SIGNATURE
		DESIGN2-DETAILED2			
		DESIGN3-DETAILED3			
		REVISIONS 1			
		REVISIONS 2			
		REVISIONS 3			DATE
		REVISIONS 4			
		FIELD CHANGES			
SHEET NUMBER					
8					
OF 12					
		STATE OF MAINE DEPARTMENT OF TRANSPORTATION MAINTENANCE & OPERATIONS			
		BRIDGE NO. 2278WIN0307139.00BRIDGE PLANS			



<div>9</div> <div>OF 12</div>	SHEET NUMBER				BRANDON M. SILK MEMORIAL STILLWATER RIVER PENOBSCOT COUNTY				PROJ. MANAGER: M&O		REGION 4	BY	DATE	STATE OF MAINE DEPARTMENT OF TRANSPORTATION MAINTENANCE & OPERATIONS	
									DESIGN-DETAILED		J. VELLEUX	1/2025			
									CHECKED-REVIEWED				SIGNATURE		
									DESIGN2-DETAILED2				P.E. NUMBER		
									DESIGN3-DETAILED3						
									REVISIONS 1						
									REVISIONS 2						
									REVISIONS 3						
									REVISIONS 4						
									FIELD CHANGES						
													DATE		
											</				



DETOUR PLAN NOTES

- The signage and sign placements for the Detour Plan shall be as shown and shall be included in the Contractor's Traffic Control Plan for the project. Exact sign dimensions and spacing between signs shall be provided in the Traffic Control Plan and shall be in accordance with the MUTCD and MaineDOT Standard Specifications.
- The signage shown is the minimum necessary for the Detour Plan portion of the Traffic Control Plan. Additional signage and traffic control devices will be required.
- The sidewalk nearest the workzone shall be closed to pedestrian traffic, as indicated on Plan Sheet 6 - Staged Construction Sections. Signage for sidewalk closure and control devices shall be addressed in the Contractor's Traffic Control Plan.

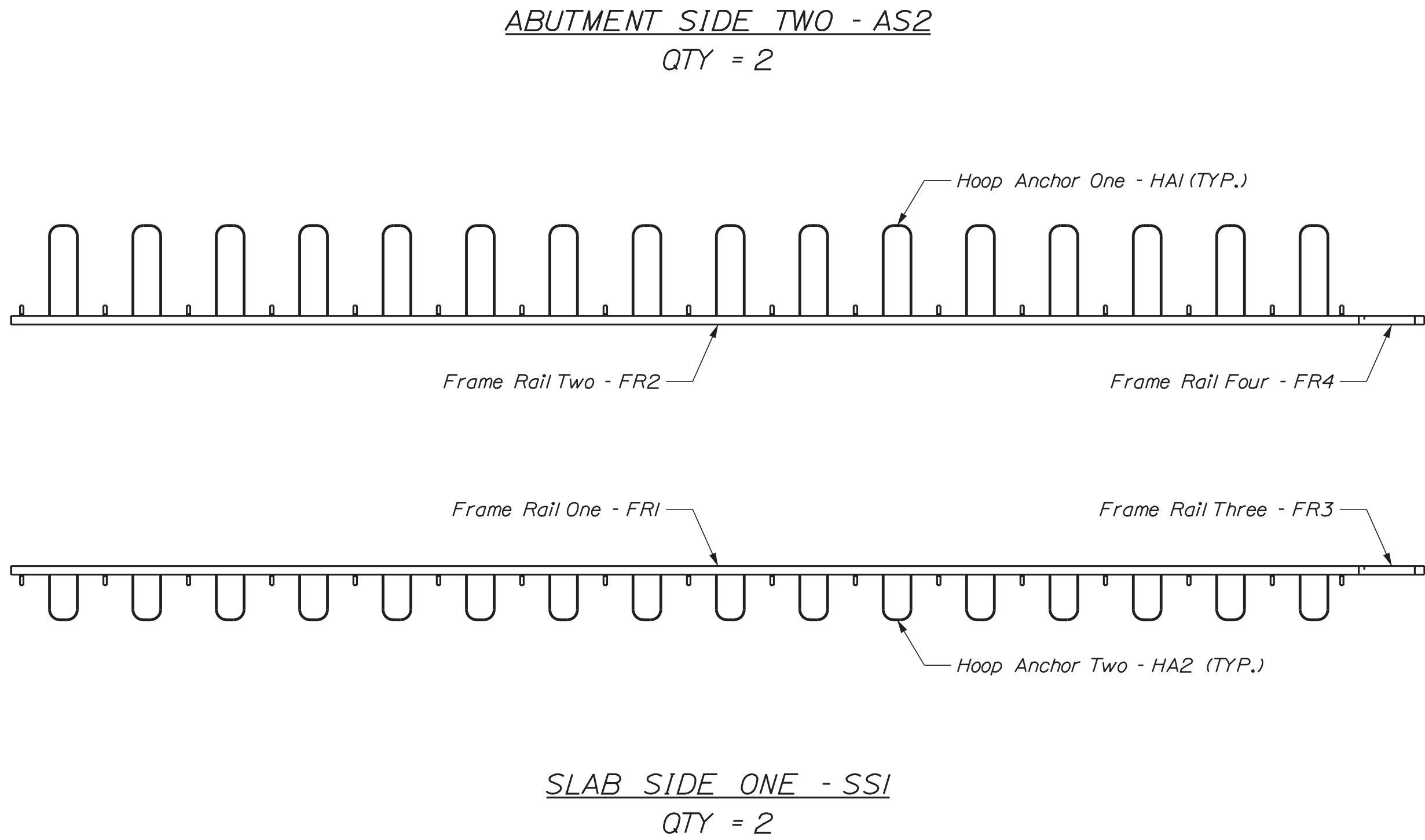
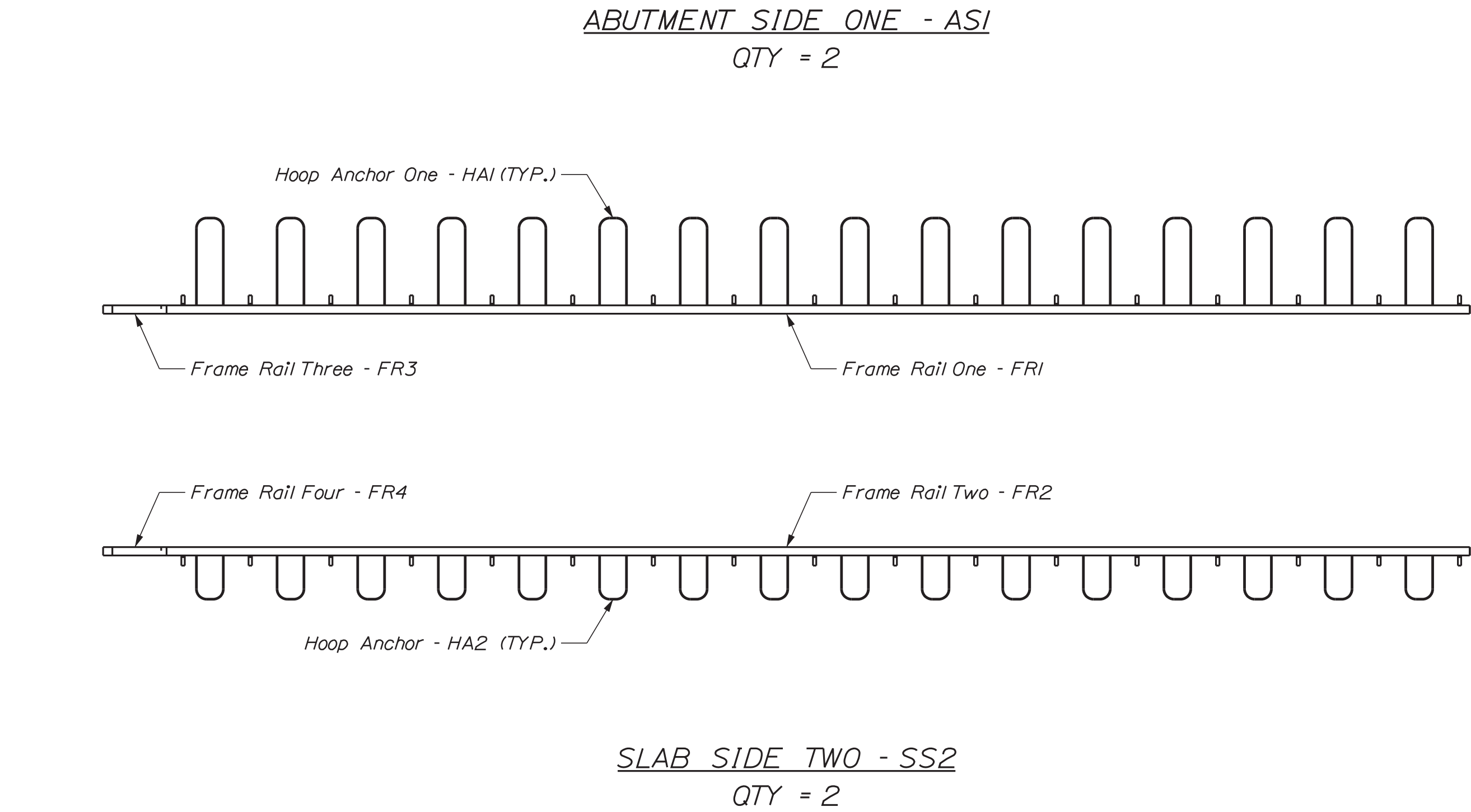
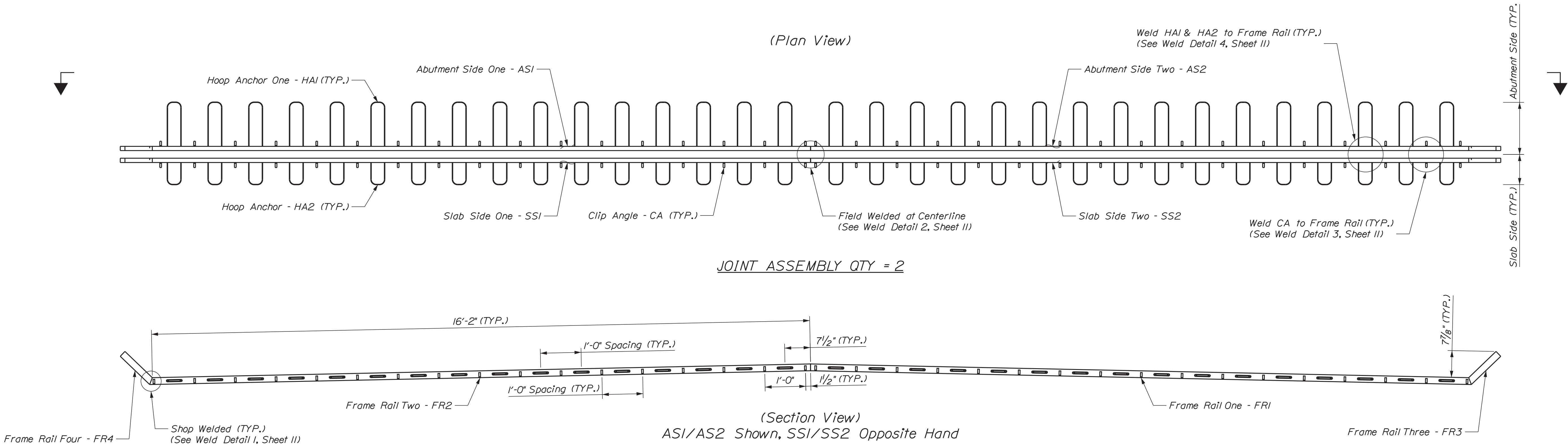
STATE OF MAINE DEPARTMENT OF TRANSPORTATION							
MAINTENANCE & OPERATIONS							
BRIDGE NO. 2278				WIN 030139.00			
BRIDGE PLANS							

BRANDON M. SILK MEMORIAL STILLWATER RIVER ORONO PENOBSCOT COUNTY				PROJ. MANAGER: M&O REGION 4 J. VAILLEUX BY: J. VAILLEUX DATE: 1/20/25			
DETOUR PLAN				DESIGN-DETAILED CHECKED-REVIEWED SIGNATURE			
				DESIGN2-DETAILED2			
				DESIGN3-DETAILED3			
				REVISIONS 1			
				REVISIONS 2			
REVISIONS 3							
REVISIONS 4				DATE			
FIELD CHANGES							

Date:1/7/2025

Username: Joel R. Veilleux

Filename: ... \011 Shop Details - Bridge Joints.dgn Division: BRIDGE



BRIDGE JOINT SUB-ASSEMBLIES

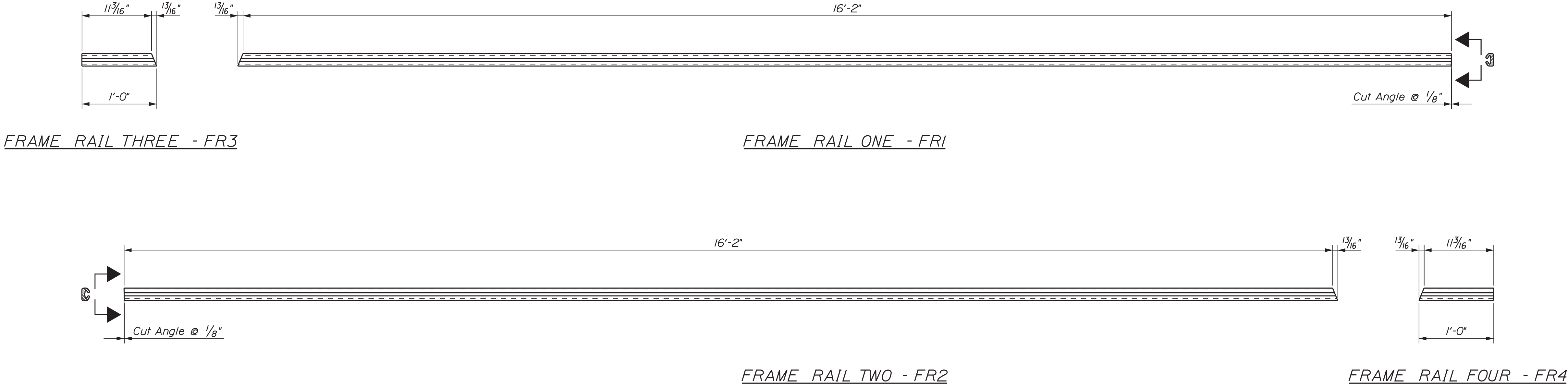
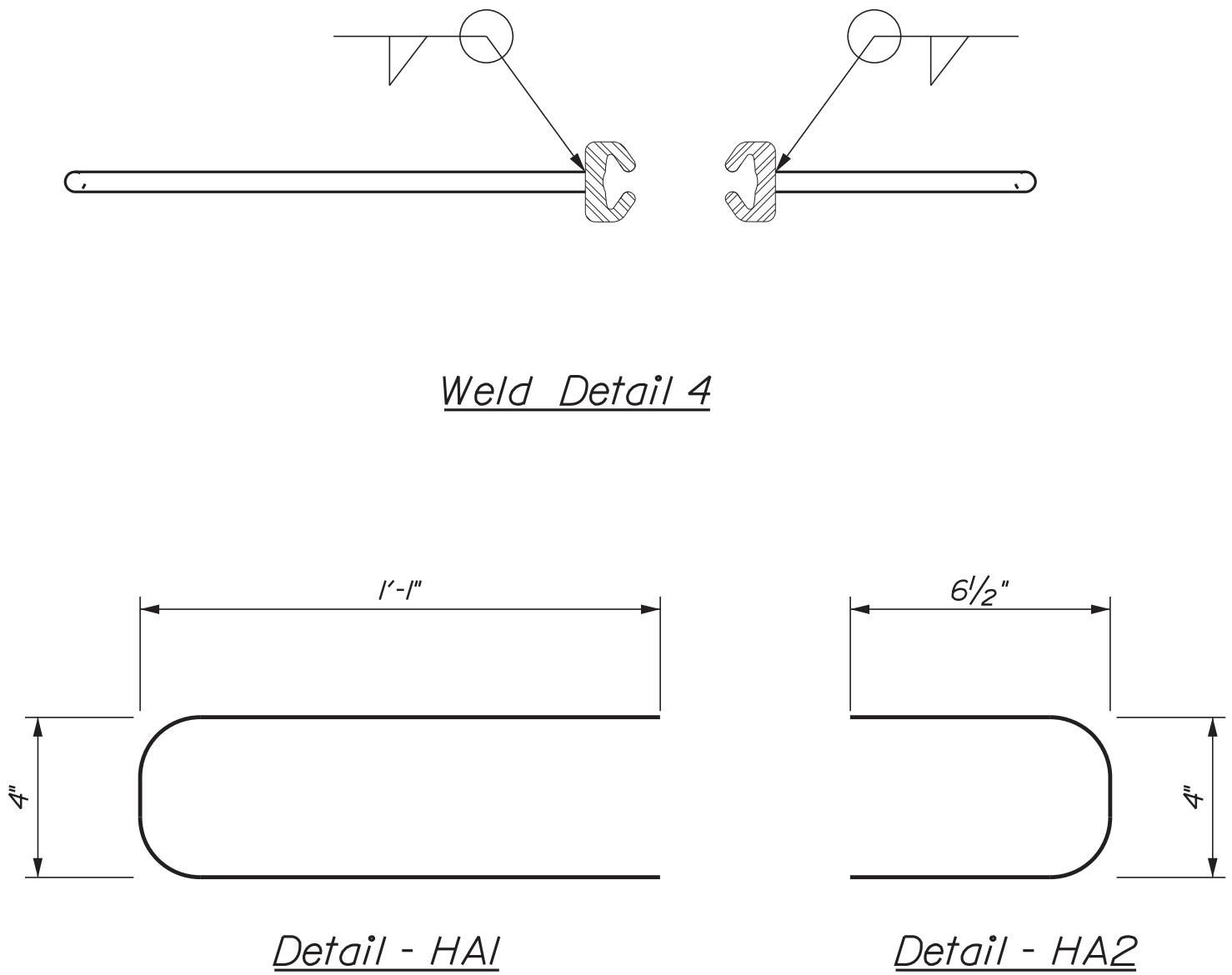
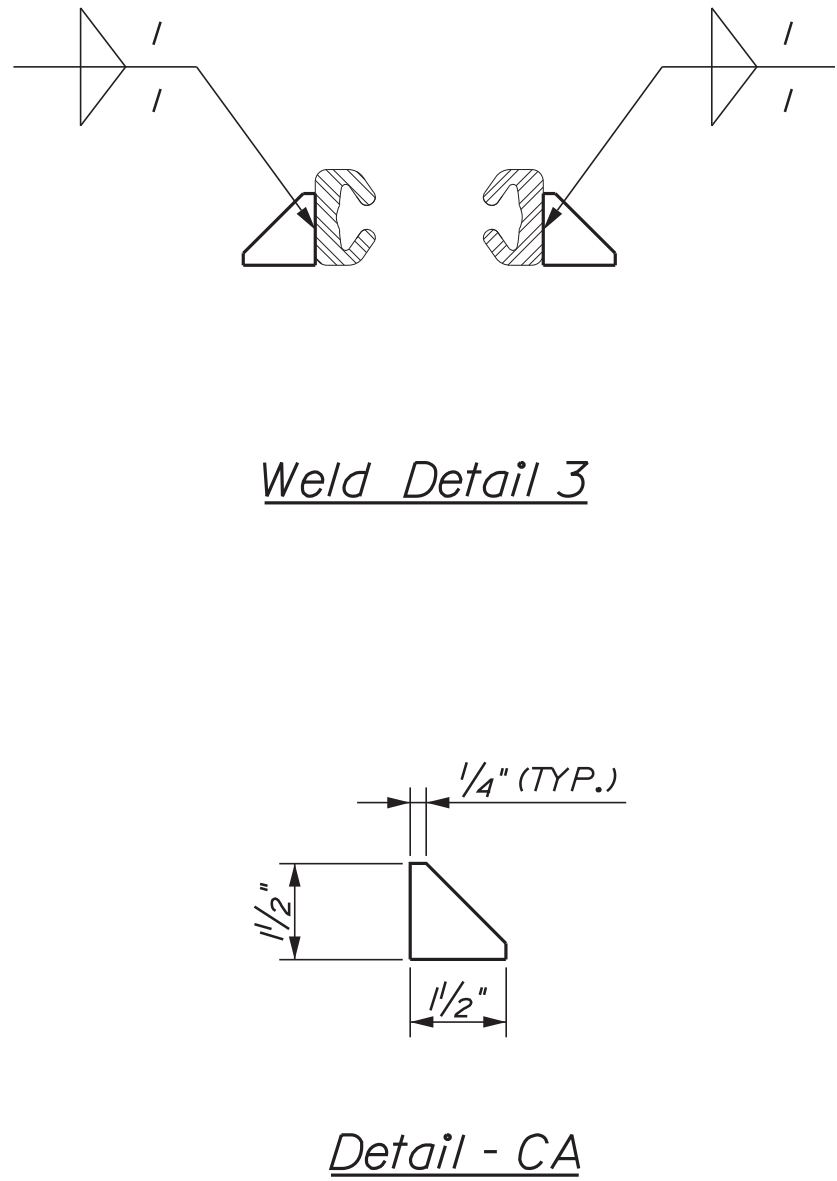
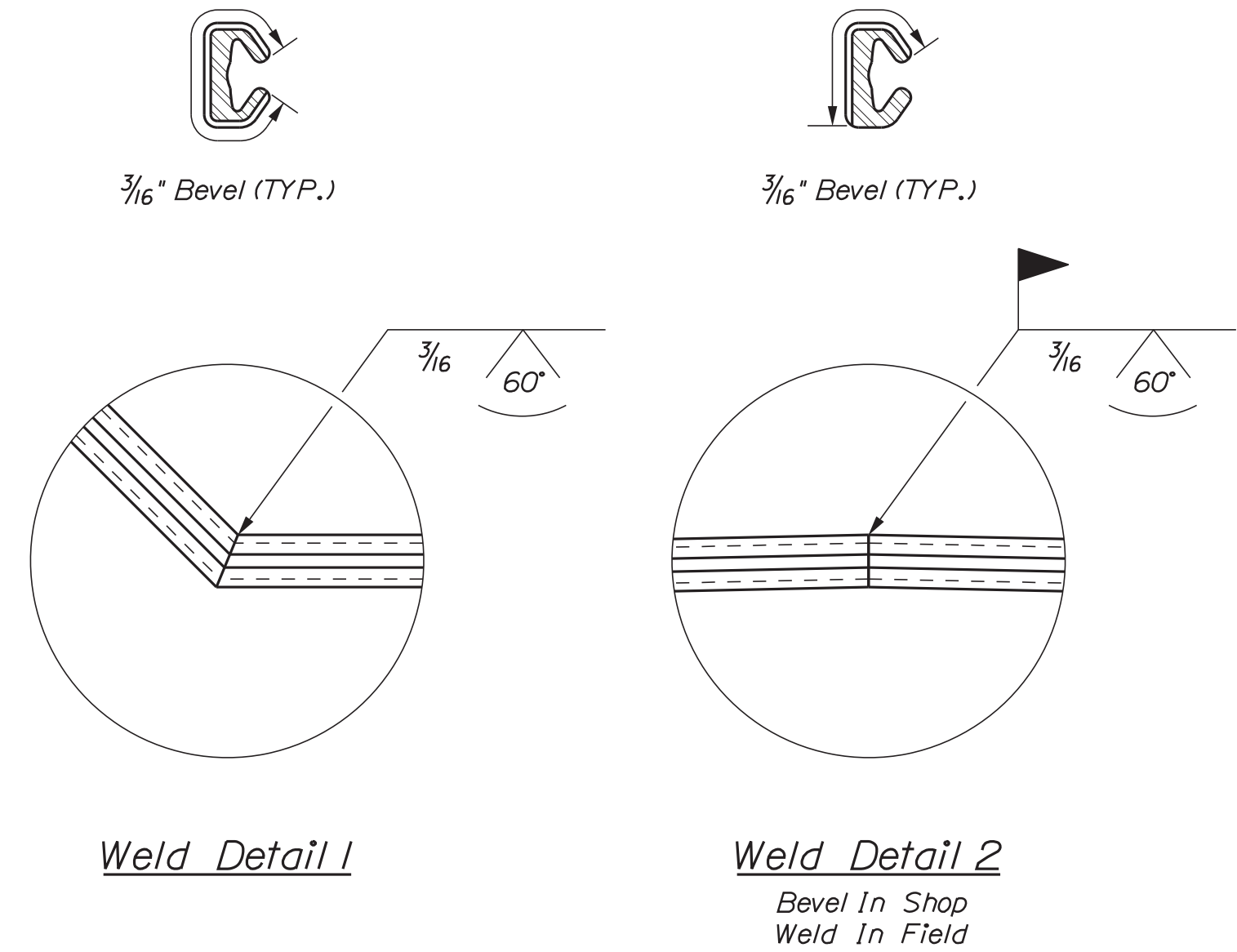
REFERENCE DRAWINGS
STATE SUPPLIED MATERIALS

STATE OF MAINE DEPARTMENT OF TRANSPORTATION	MAINTENANCE & OPERATIONS		BRIDGE NO. 2278		WIN 030139.00		BRIDGE PLANS	
	SIGNATURE		P.E. NUMBER		DATE			
BRANDON M. SILK MEMORIAL STILLWATER RIVER ORONO		PENOBSCOT COUNTY		SHEET NUMBER		11		
SHOP DETAILS - BRIDGE JOINTS				OF 12				

PARTS & MATERIALS SCHEDULE - STATE SUPPLIED			
QUANTITY	MARK	LENGTH	REMARKS
4	Frame Rail One - FRI	16'-2 ³ / ₁₆ "	Gland Seal Frame Rail, GR A36
4	Frame Rail Two - FR2	16'-2 ³ / ₁₆ "	Gland Seal Frame Rail, GR A36
4	Frame Rail Three - FR3	1'-0"	Gland Seal Frame Rail, GR A36
4	Frame Rail Four - FR4	1'-0"	Gland Seal Frame Rail, GR A36
64	Hoop Anchor - HA1	2'-4 ³ / ₄ "	*4 Bar, ASTM A615, Gr 60 - Plain
64	Hoop Anchor - HA2	1'-3 ³ / ₄ "	*4 Bar, ASTM A615, Gr 60 - Plain
136	Clip Angle - CA	1 ¹ / ₂ "x1 ¹ / ₂ "	1 ¹ / ₂ " Thickness, ASTM A36, Gr 36
2	A2R Seal	35'-0"	Gland Seal
1	DSB 1520	EA	Lubricant Adhesive
Fabricated Assemblies Shall Be Hot-Dipped Galvanized per ASTM A123			

- FABRICATION NOTES
- 1) All fabricated parts shall be hot-dipped galvanized in accordance with ASTM A123.
- 2) Blast clean prior to galvanizing.
- 3) Stripe coat the bevel surfaces at the field weld locations prior to galvanizing. Use one coat of epoxy paint, any color.
- 4) Stripe coat the clip angles at the field weld locations prior to galvanizing. 1/2" up both sides and bottom surfaces. Use one coat of epoxy paint, any color.

REFERENCE DRAWINGS
STATE SUPPLIED MATERIALS



STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
MAINTENANCE & OPERATIONS

BRIDGE NO. 2278
WIN
0307139.00
BRIDGE PLANS

BRANDON M. SILK MEMORIAL
STILLWATER RIVER
ORONO
PENOBSCOT COUNTY

SHOP DETAILS - BRIDGE JOINTS

SHEET NUMBER

12
OF 12

PROJ. MANAGER	MBO REGION 4	BY	DATE	SIGNATURE
DESIGNED-DETAILED	J. J. VILLEUX	J. VILLEUX	1/2025	
CHECKED-REVIEWED				
DESIGNS-DETAILED				
DESIGNS 1				
REVISIONS 2				P.E. NUMBER
REVISIONS 3				DATE
REVISIONS 4				
FIELD CHANGES				