

STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION



MADISON - ANSON  
SOMERSET COUNTY  
BICENTENNIAL MEMORIAL BRIDGE  
OVER  
KENNEBEC RIVER  
ROUTES 8,43,148 & 201A  
FEDERAL AID PROJECT NO. 2611300  
PROJECT LENGTH 0.091 mi.  
BRIDGE NO. 2491

SPECIFICATIONS

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

MATERIALS

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

BASIC DESIGN STRESSES

Concrete..... f'c = 4000psi  
Reinforcing:  
Plain Reinforcing Steel..... f y = 60,000 psi

TRAFFIC DATA

Current (2023) AADT ..... 8160  
Future (2043) AADT ..... 8980  
DHV - % of AADT ..... 11  
Design Hour Volume ..... 988  
Heavy Trucks (% of AADT) ..... 7  
Heavy Trucks (% of DHV) ..... 5  
Directional Distribution (% of DHV) ..... 57  
18 kip Equivalent P 2.0 ..... 539  
18 kip Equivalent P 2.5 ..... 514  
Design Speed (mph) ..... 25

LIST OF DRAWINGS

Title Sheet.....	1
Estimated Quantities & General Construction Notes.....	2
General Plan.....	3
Bridge Typical Section & Wick Drain Details.....	4
Bridge Joint Details.....	5
Staged Construction Sections.....	6
Staged Construction Plan - Stage No. 1.....	7
Staged Construction Plan - Stage No. 2.....	8
Bridge Joint Details.....	9
Right of Way Map.....	10

UTILITIES

Anson-Madison Sanitary District  
Bee Line TV, Inc.  
Consolidated Communications Of Northern New England  
FirstLight  
Madison Electric Works  
Somerset Telephone Company (TDS Of Maine)

MAINTENANCE OF TRAFFIC

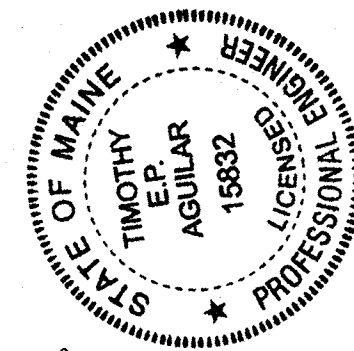
Maintain one lane of alternating traffic using temporary traffic signals.

PROJECT LOCATION	Bicentennial Memorial Bridge (#2491) over Kennebec River. Located on the Madison-Anson town line. Lat./Long. 44°47'56.1" N 69°53'17.8" W
PROGRAM AREA	Bridge Program
OUTLINE OF WORK	Bridge Deck Wearing Surface Replacement and General Repairs

026113.00 WIN 26113.00

MADISON - ANSON  
BICENTEN. MEM. BRIDGE

SHEET NUMBER  
1  
OF 10

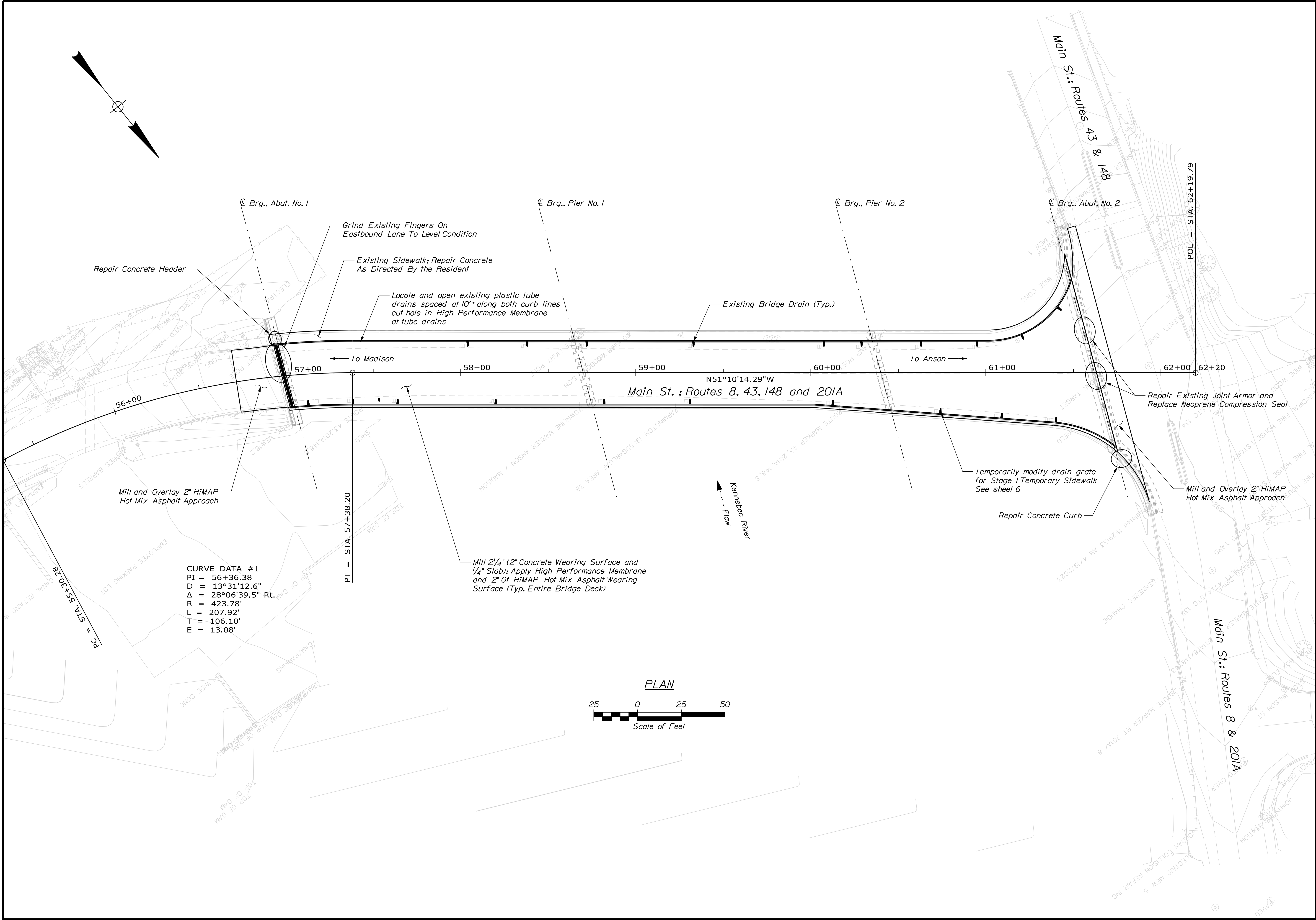


SIGNATURE  
15832  
P.E. NUMBER  
08/27/2024  
DATE

PROGRAM	PROJECT INFORMATION
PROJECT MANAGER	Bridge Program
DESIGNER	Mark Parlin
CONSULTANT	Mark Gray
PROJECT RESIDENT	N/A
CONTRACTOR	
PROJECT COMPLETION DATE	

STATE OF MAINE DEPARTMENT OF TRANSPORTATION	APPROVED	DATE
COMMISSIONER	DEPUTY CHIEF ENGINEER	8/27/24





STATE OF MAINE		DEPARTMENT OF TRANSPORTATION	
		026113.00	
		WIN	26113.00
		BRIDGE NO. 2491	BRIDGE PLANS
BICENTENNIAL MEMORIAL BRIDGE		PROJ. MANAGER	DATE
KENNEBEC RIVER		CHECKED-REVIEWED	BY
MADISON - ANSON		DESIGN-DETAILED	M. PARLIN
SOMERSET COUNTY		DESIGN-DETAILED	R. GRAY
GENERAL PLAN		REVISIONS 1	SIGNATURE
		REVISIONS 2	P.E. NUMBER
		REVISIONS 3	DATE
		REVISIONS 4	
		FIELD CHANGES	
SHEET NUMBER		3	
		OF 10	



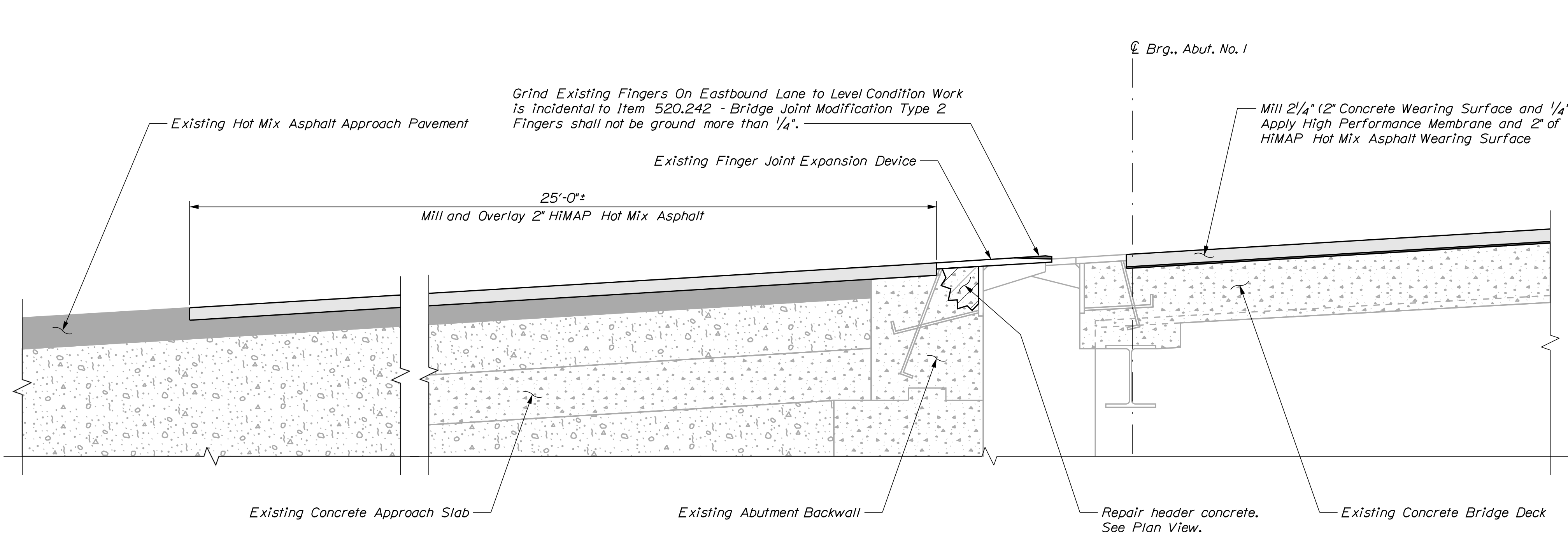
*Alternative methods of covering the drains with an ADA compliant cover may be approved at the discretion of the Resident.*

DESIGN-DETAILED	M. GRAY	R. WATKINS	SEP 2024	SIGNATURE
CHECKED-REVIEWED				
DESIGN2-DETAILED2				
DESIGN3-DETAILED3				P.E. NUMBER
REVISIONS 1				
REVISIONS 2				
REVISIONS 3				DATE
REVISIONS 4				
FIELD CHANGES				

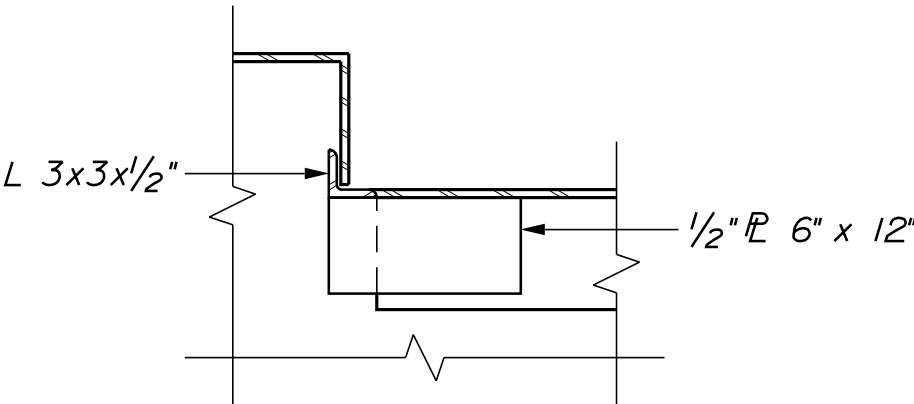
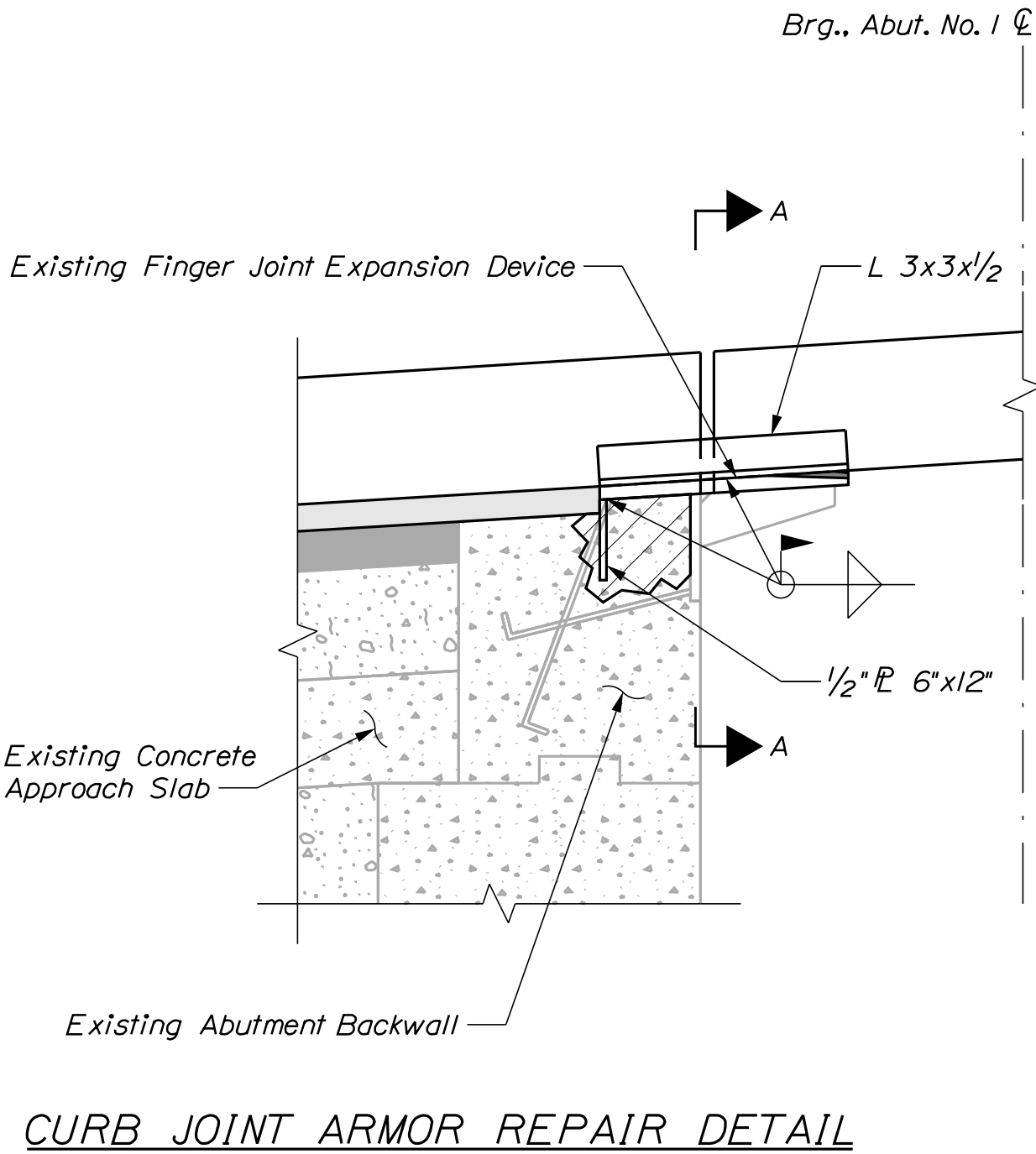
## BRIDGE TYPICAL SECTION AND WICK DRAIN DETAILS

SHEET NUMBER



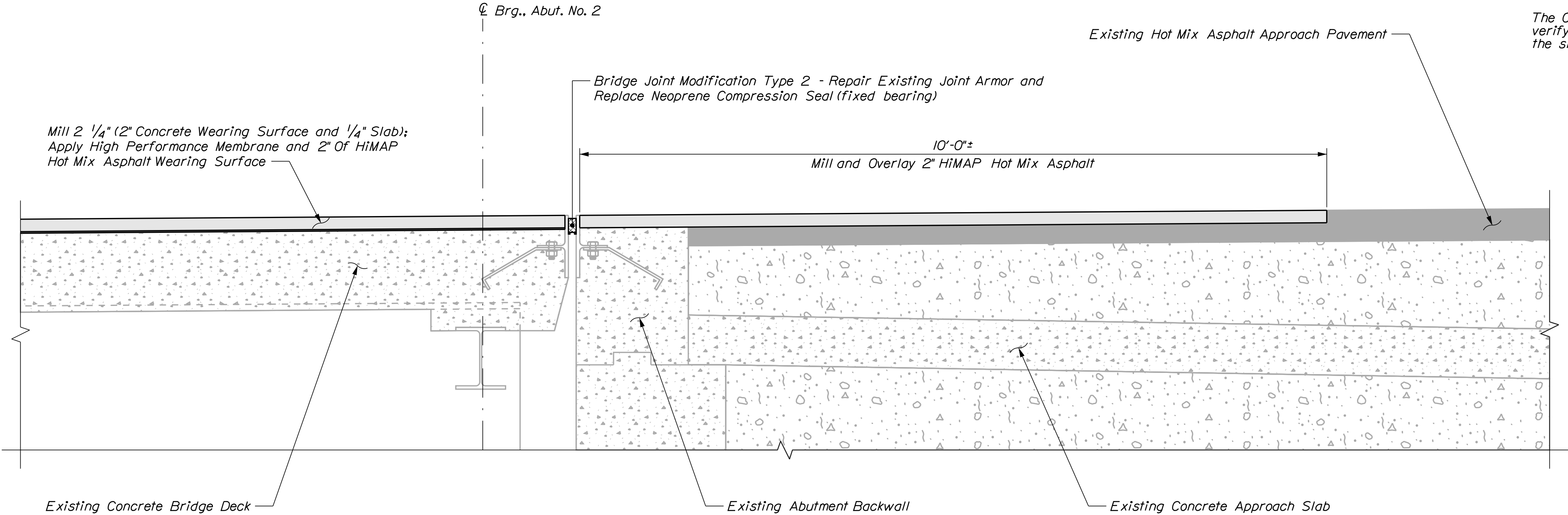


ABUTMENT NO. 1 SECTION



SECTION A-A

The Contractor shall field measure the joint to verify the size of the angle to ensure it clears the sidewalk joint armor.

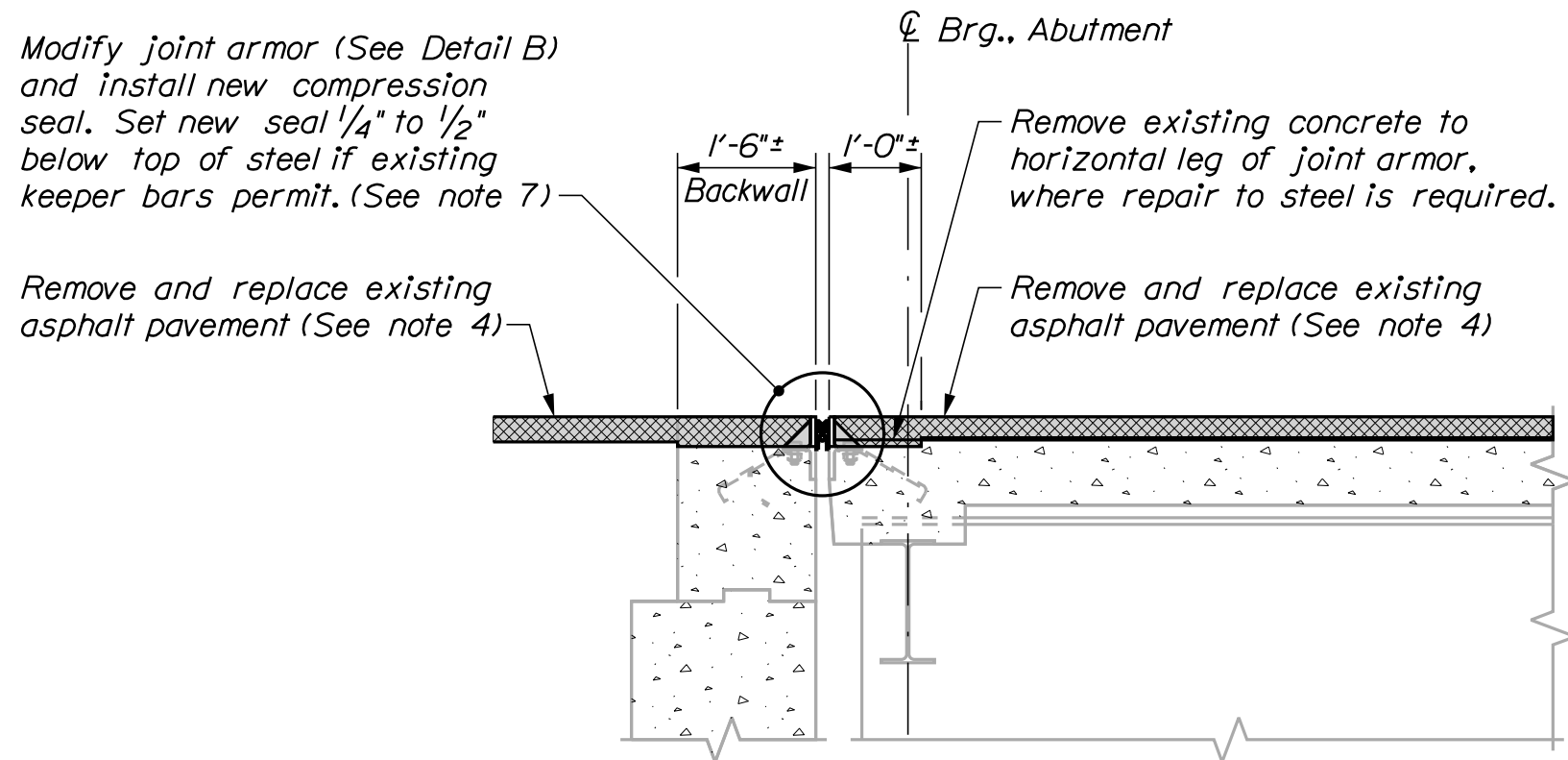


ABUTMENT NO. 2 SECTION

STATE OF MAINE DEPARTMENT OF TRANSPORTATION				SIGNATURE			
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WIN 26113.00							
BRIDGE NO. 2491				BRIDGE PLANS			

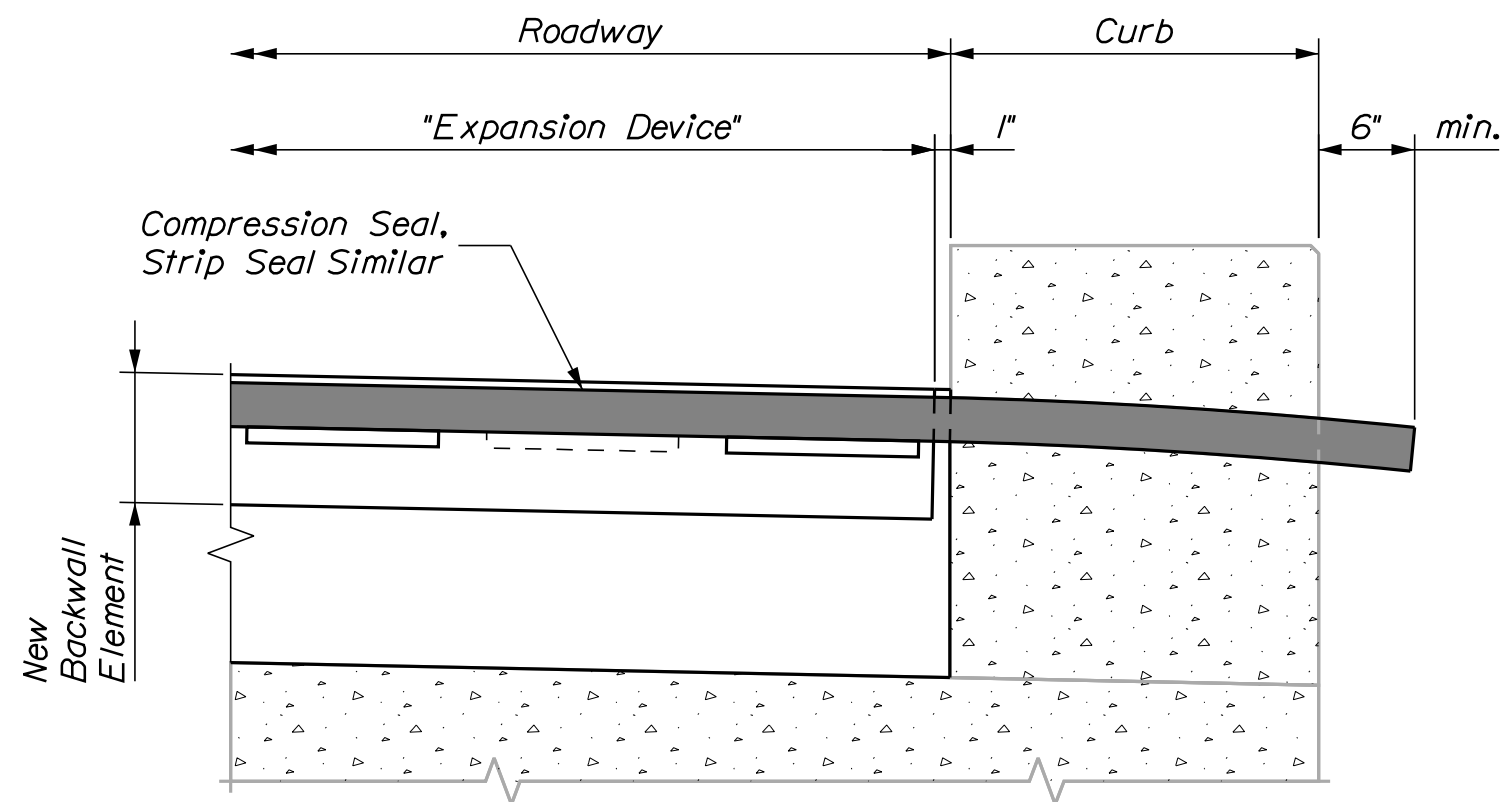
BICENTENNIAL MEMORIAL BRIDGE KENNEBEC RIVER				M. PARLIN				DATE			
MADISON - ANSON SOMERSET COUNTY				DESIGN-DETAILED		M. GRAY		R. MAYER		SEP 2024	
				CHECKED-REVISED							
				DESIGN2-DETAILED2							
				DESIGN3-DETAILED3							
				REVISIONS 1							
BRIDGE JOINT DETAILS				REVISIONS 2							
				REVISIONS 3							
				REVISIONS 4							
				FIELD CHANGES							

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OF 10			

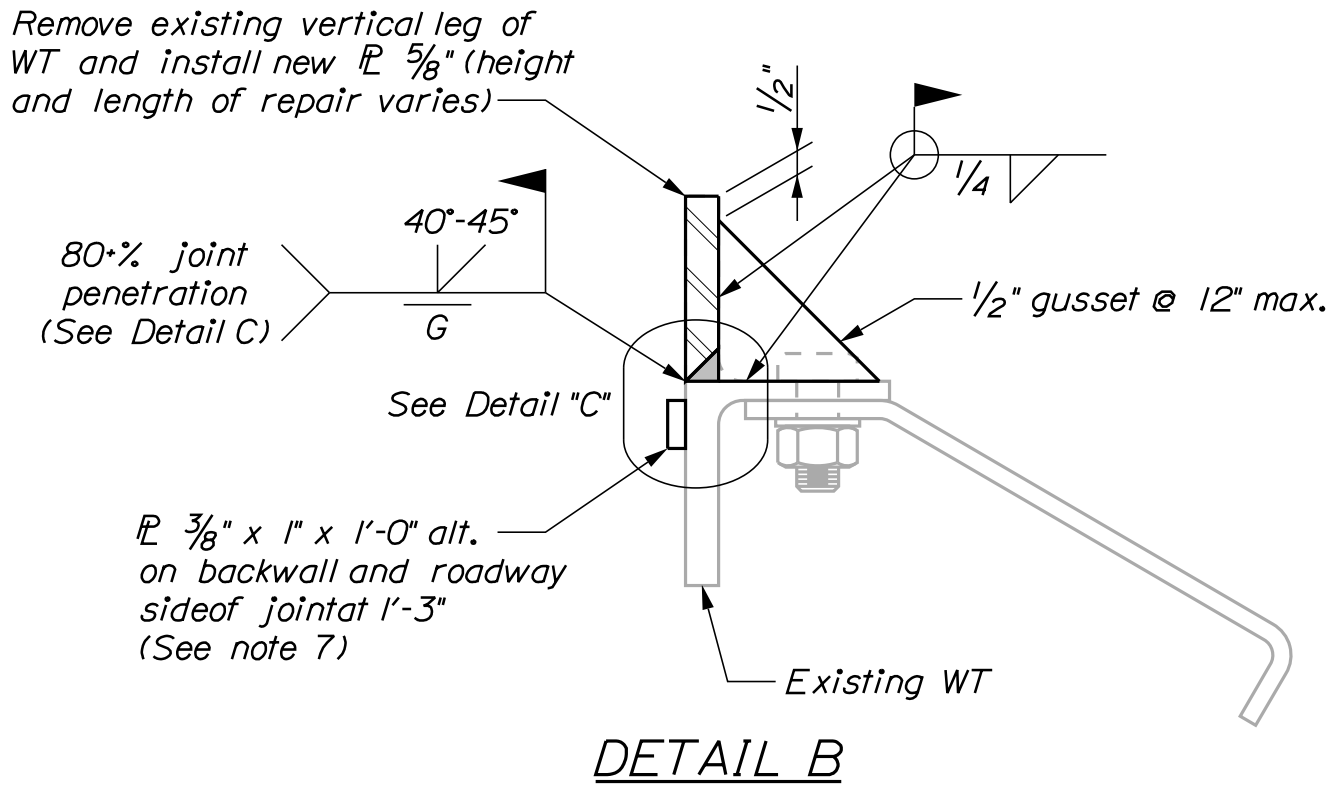


BRIDGE JOINT MODIFICATION TYPE 2  
(See also "Compression Seal at Curb")

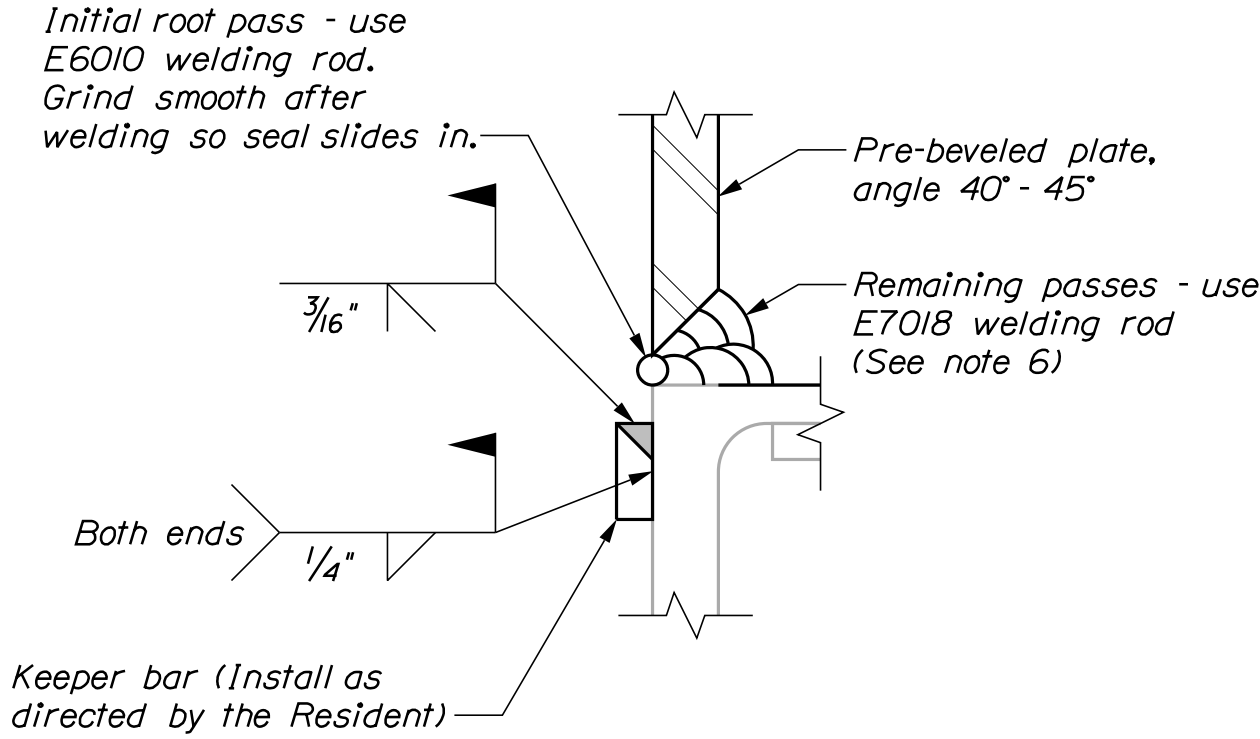
Limits of joint modification  
Compression seal - full deck width and completely through raised curbs plus six inch extensions per side; joint armor repair as directed by Resident.



BRIDGE JOINT DETAIL AT CURB  
Scale: 1" = 1'-0"



Note:  
One side of joint repair shown.  
Repair detail may be required at both sides of joint.

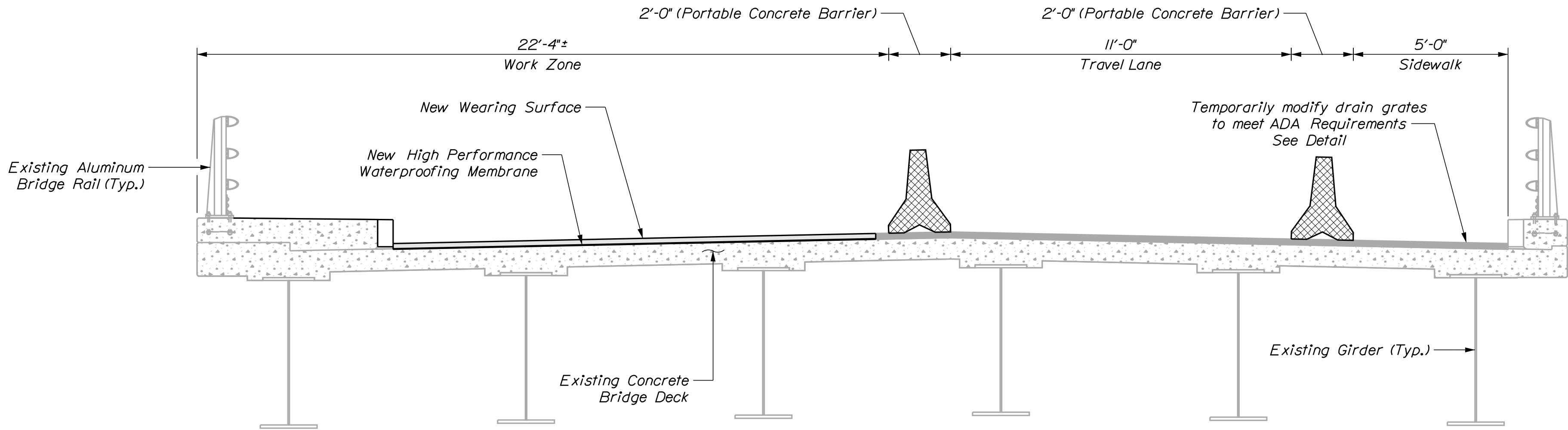


DETAIL C

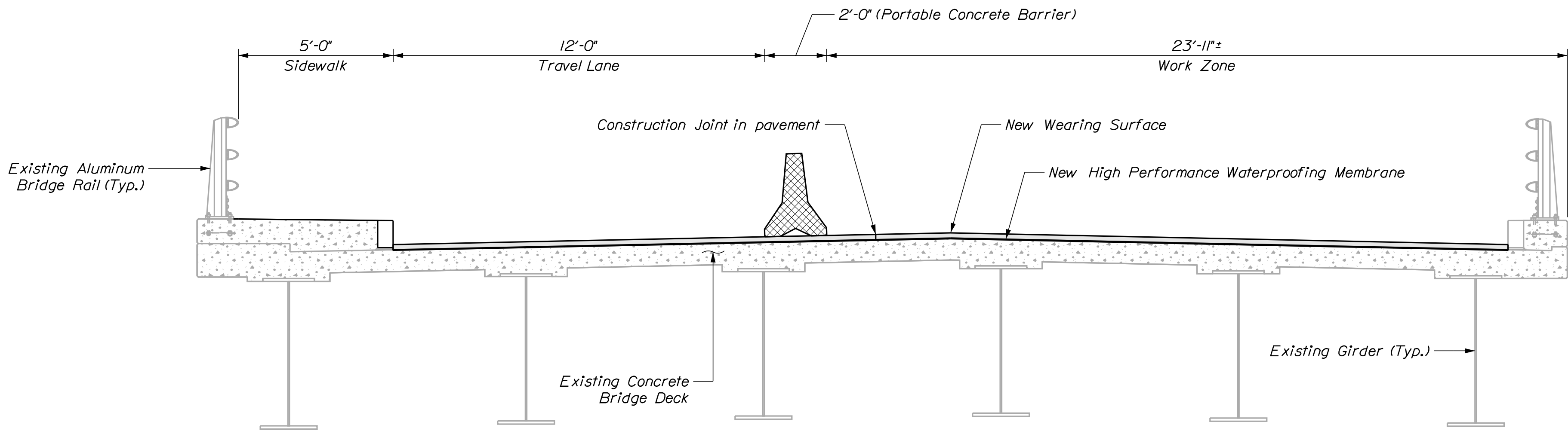
JOINT MODIFICATION TYPE 2 NOTES

1. Refer to Standard Details Section 520 for details and information not shown.
2. All new steel supplied for the bridge joint modification shall be uncoated.
3. The Contractor shall be fully responsible for selecting the appropriate seal based on the movement rating from the Qualified Products list.
4. The minimum movement rating for the compression seal shall be 1/2"
5. The Contractor shall field measure the existing deck and joint to verify the seal size.
6. Where applicable, removal and replacement of existing bituminous, elastomeric, or header concrete shall be completed along the full width of the roadway. Bridge joint armor and extrusion modifications shall extend to the limits described on the respective joint modification details.
7. Welding shall be completed as a series of skip welds to minimize welding distortion.
8. If the base metal temperature falls below 32 degrees Fahrenheit, the base metal shall be heated to a minimum of 80 degrees Fahrenheit before welding. If the base metal temperature falls below 50 degrees Fahrenheit, the base metal shall be heated to remove any moisture. A welding procedure and listing of proposed welding consumables shall be submitted to the Resident for approval.
9. Keeper bars shall be positioned to allow top of compression seal to sit 1/4" to 1/2" below top of armor. If existing keeper bar does not permit the seal to set at the specified depth, Contractor shall notify the Resident.

BICENTENNIAL MEMORIAL BRIDGE KENNEBEC RIVER MADISON - ANSON SOMERSET COUNTY  BRIDGE JOINT DETAILS	PROJ. MANAGER		M. PARLIN	BY	DATE
	DESIGN-DETAILED		M. GRAY	R. MAYER	SEP 2024
	CHECKED-REVIEWED				
	DESIGN2-DETAILED2				
	DESIGN3-DETAILED3				
	REVISIONS 1				
	REVISIONS 2				
	REVISIONS 3				
	REVISIONS 4				
	FIELD CHANGES				
SHEET NUMBER					
6					
OF 10					
STATE OF MAINE DEPARTMENT OF TRANSPORTATION					
026113.00					
BRIDGE NO. 2491					
WIN 26113.00					
BRIDGE PLANS					



STAGE NO. 1



STAGE NO. 2

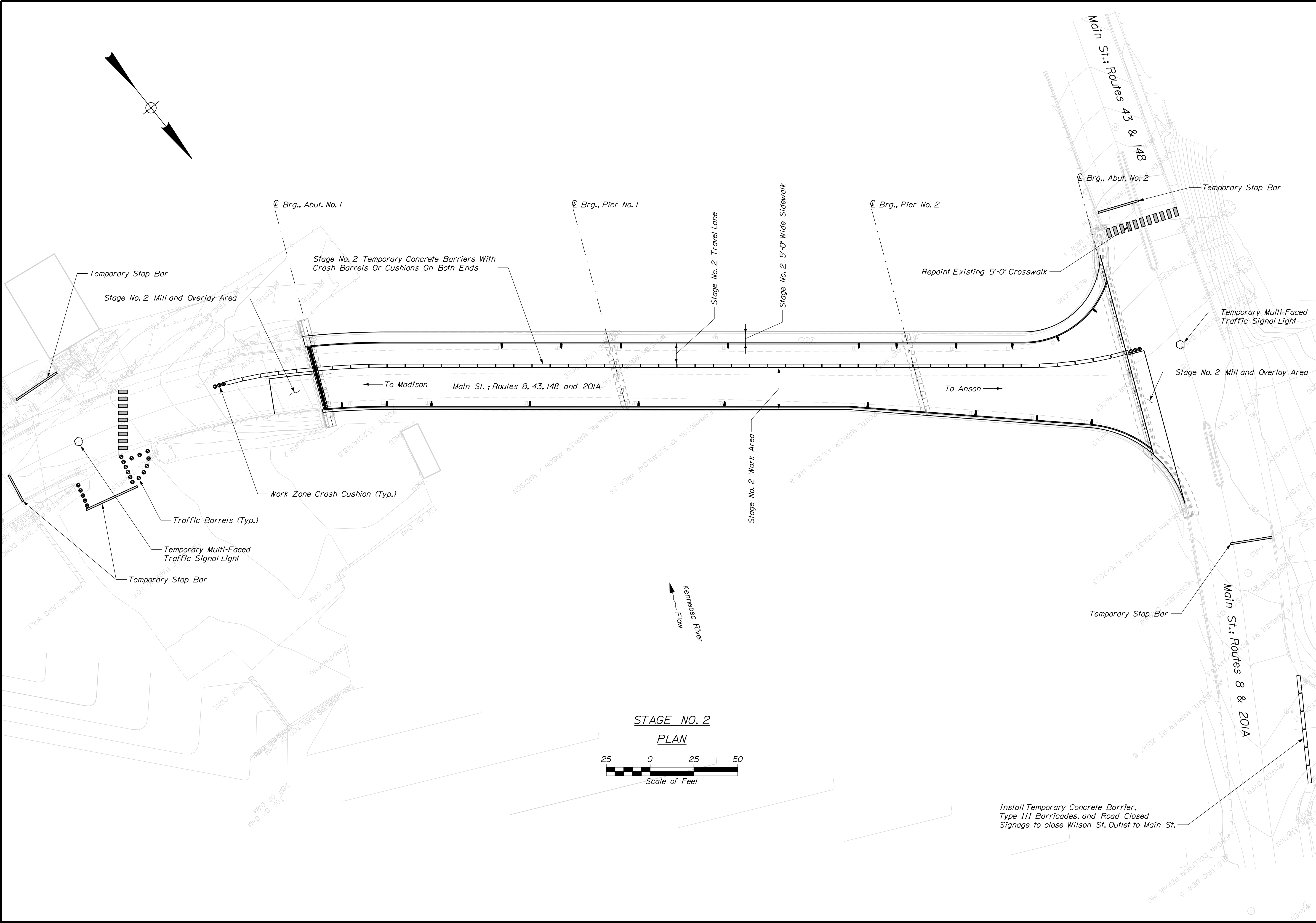
NOTES:

1. Portable concrete barrier is shown on these sections for conceptual purposes. The actual traffic control devices used for delineating the work areas shall be determined by the Contractor per Special Provision Section 910, Work Zone Safety System, except that portable concrete barrier shall be used to delineate the temporary sidewalk area in Stage No. 1.

BICENTENNIAL MEMORIAL BRIDGE		STATE OF MAINE	
KENNEBEC RIVER		DEPARTMENT OF TRANSPORTATION	
MADISON - ANSON SOMERSET COUNTY		026113.00	
STAGED CONSTRUCTION SECTIONS		WIN 26113.00	
		BRIDGE NO. 2491	
		BRIDGE PLANS	
<div> <div>PROJ. MANAGER</div> <div>CHECKED-REVIEWED</div> <div>DESIGN-DETAILED</div> <div>M. GRAY</div> </div>	<div> <div>BY</div> <div>R. MAYER</div> </div>	<div> <div>DATE</div> <div>SEP. 2024</div> </div>	<div> <div>SIGNATURE</div> </div>
<div> <div>SHEET NUMBER</div> <div>7</div> </div>	<div> <div>OF</div> <div>10</div> </div>		







STATE OF MAINE DEPARTMENT OF TRANSPORTATION		026113.00		WIN 26113.00		BRIDGE NO. 2491		BRIDGE PLANS	
BICENTENNIAL MEMORIAL BRIDGE KENNEBEC RIVER MADISON - ANSON SOMERSET COUNTY		STAGED CONSTRUCTION PLAN - STAGE NO. 2		SHEET NUMBER 9		OF 10			
PROJ. MANAGER	CHECKED-REVIEWED	DESIGN-DETAILED	DATE	BY	DATE	SIGNATURE	P.E. NUMBER	DATE	
M. PARLIN	M. GRAY	R. MAYER	SEP 2024						
DESIGN-DETAILED	DESIGN-DETAILED	DESIGN-DETAILED	DESIGN-DETAILED	DESIGN-DETAILED	DESIGN-DETAILED	DESIGN-DETAILED	DESIGN-DETAILED	DESIGN-DETAILED	DESIGN-DETAILED
REVISIONS 1	REVISIONS 2	REVISIONS 3	REVISIONS 4	REVISIONS 5	REVISIONS 6	REVISIONS 7	REVISIONS 8	REVISIONS 9	REVISIONS 10
FIELD CHANGES									

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