

# STATE OF MAINE DEPARTMENT OF TRANSPORTATION



**SPECIFICATIONS**

Design: Load and Resistance Factor Design per AASHTO LRFD Bridge Design Specifications, Tenth Edition 2024.

**TRAFFIC DATA**

Current (2026) AADT.....	13,250
Future (2046) AADT.....	14,580
DHV - % of AADT.....	11%
Design Hour Volume.....	1,604
Heavy Trucks (% of AADT).....	3%
Heavy Trucks (% of DHV).....	1%
Directional Distribution (% of DHV).....	59%
18 kip Equivalent P 2.0.....	247
18 kip Equivalent P 2.5.....	236
Design Speed (mph).....	45

**MATERIALS**

Concrete:	
Deck and Abutments.....	Class "A1"
Reinforcing:	
Low-Carbon Chromium Steel.....	ASTM A1035, Type CS, Grade 100

**BASIC DESIGN STRESSES**

Concrete:	
Class "A1".....	f 'c = 4,000 psi
Reinforcing:	
Low-Carbon Chromium Steel.....	f y = 100,000 psi

## WATERVILLE-WINSLOW KENNEBEC COUNTY DONALD V. CARTER BRIDGE OVER KENNEBEC RIVER DONALD V. CARTER BRIDGE FEDERAL AID PROJECT NO. 2952800 PROJECT LENGTH 0.51 mi. BRIDGE NO. 1141

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**UTILITIES**

Charter Communications  
CSX Transportation  
City of Waterville  
Kennebec Sanitary Treatment Dist.

**MAINTENANCE OF TRAFFIC**

Staged Construction

Lat. 44.53072° N Long. 69.94658° W

<b>PROJECT LOCATION</b>	Donald V. Carter Bridge (#1141) over lower Kennebec River Located 0.30 of a mile northwest of Route 201
<b>OUTLINE OF WORK</b>	Bridge Wearing Surface and Joint Replacement



STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
APPROVED
DATE
COMMISSIONER: Ashley E. Stephens
3-17-24
CHIEF ENGINEER: [Signature]
3-19-26

STATE OF MAINE
ASHLEY E. STEPHENS
No. 13888
PROFESSIONAL ENGINEER
SIGNATURE
P.E. NUMBER
DATE

PROJECT INFORMATION
PROGRAM
BRIDGE
PROJECT MANAGER
DESIGNER
CONSULTANT
PROJECT RESIDENT
CONTRACTOR
PROJECT COMPLETION DATE

WATERVILLE-WINSLOW  
DONALD V. CARTER  
TITLE SHEET

SHEET NUMBER  
**1**  
OF 24

Username: ebeausotell Date: 3/6/2026

WTN 029528.00

ESTIMATED QUANTITIES			
ITEM NO.	DESCRIPTION	QUANTITY	UNIT
202.127	Removing of Existing Bituminous Pavement (10,800 SY)	1	LS
202.202	Removing Pavement Surface	280	SY
203.20	Common Excavation	320	CY
304.10	Aggregate Subbase Course - Gravel	280	CY
403.2081	Hot Mix Asphalt - 12.5 mm (Polymer Modified)	960	TON
403.209	Hot Mix Asphalt - 9.5 mm (sidewalks, drives, & incidentals)	70	TON
403.2131	Hot Mix Asphalt - 12.5 mm (base and intermediate course Polymer Modified)	1,010	TON
409.15	Bituminous Tack Coat, Applied	680	GAL
461.131	Temporary Pavement	100	TON
508.14	High Performance Waterproofing Membrane (10,800 SY)	1	LS
515.21	Protective Coating for Concrete Surfaces (2,300 SY)	1	LS
518.50	Repair of Upward Facing Surfaces - To Reinforcing Steel < 8 Inches	250	SF
518.51	Repair of Upward Facing Surfaces - Below Reinforcing Steel < 8 Inches	250	SF
521.234	Expansion Device Finger Joint System - State Supplied	3	EA
521.53	Downspout Modifications	3	EA
526.301	Portable Concrete Barrier, Type I (2,340 LF)	1	LS
527.34	Work Zone Crash Cushions	4	UNIT
607.181	Chain Link Fence 8 ft., High-Security	140	LF
609.40	Reset Curb Type 5	650	LF
610.08	Plain Riprap	20	CY
627.733	4" White or Yellow Painted Pavement Marking Line	8,700	LF
627.77	Removing Existing Pavement Marking	3,500	SF
627.78	Temporary 4" Painted Pavement Marking Line, White or Yellow	14,000	LF
629.05	Hand Labor, Straight Time	20	HR
631.10	Air Compressor (including operator)	20	HR
631.11	Air Tool (including operator)	20	HR
631.12	All Purpose Excavator (including operator)	21	HR
631.172	Truck-large (including operator)	20	HR
639.19	Field Office, Type B	1	EA
652.312	Type III Barricades	6	EA
652.33	Drum	50	EA
652.34	Cone	50	EA
652.35	Construction Signs	340	SF
652.361	Maintenance of Traffic Control Devices	1	LS
652.38	Flaggers	200	HR
652.41	Portable-Changeable Message Sign	2	EA
656.75	Temporary Soil Erosion and Water Pollution Control	1	LS
658.20	Acrylic Latex Color Finish	990	SY
659.10	Mobilization	1	LS

**GENERAL CONSTRUCTION NOTES**

- No utility adjustments are anticipated.
- Existing signs within the project limits shall remain in place unless otherwise noted. Any existing signs that conflict with Maintenance of Traffic requirements shall be covered as directed by the Resident, and any existing signs that conflict with construction operations shall be removed and reinstalled as directed by the Resident. All work associated with covering, uncovering, removing, and reinstalling existing signs shall be considered incidental to the Contract. No separate payment will be made.
- Do not excavate for Aggregate Subbase Course where existing material is suitable as determined by the Resident.
- Project information referred to below may be accessed at the following MaineDOT web address: <https://www.maine.gov/dot/doing-business/bid-opportunities>.
- 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.
- 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 and Time.
- All reinforcing steel that is exposed and remains in place shall be cleaned by a method approved by the Resident. Payment shall be incidental to related contract items.
- Install 1 inch diameter PVC drains in accordance with Standard Detail 502(04) as directed by the Resident. Payment for all work required to install PVC drains in existing deck will not be paid for directly, but shall be considered incidental to related Contract Items.
- Protective Coating for Concrete Surfaces shall be applied to the following areas:
 

All exposed surfaces of abutment backwalls and seats, Bridge barrier from base of curb on roadway face to 1-ft down outside face, Top of Pier Cap No. 6
- Contractor shall repair areas of concrete deck as directed by the Resident. Locations of deck repairs are undetermined for this Contract. The Resident will identify and mark areas for deck repair after removing the wearing surface. Payment for the deck repair work shall be under the appropriate 518 Pay Item.
- During deck repairs concrete shall not be removed from the existing precast concrete deck panels.
- Excavation below existing pavement required for abutment backwall work shall be paid for under Item No. 203.20 - Common Excavation.
- All dimensions, elevations and other information shown on the Contract plans to define the structure are based upon the original construction drawings and are not guaranteed to represent as-built conditions. The Contractor shall verify all conditions and dimensions as required for the completion of the work under the Contract. The Contractor shall be responsible for the accuracy and for the correct fit of all construction.
- The slopes at both abutments have areas of erosion. The Contractor shall repair areas of erosion with riprap placed to the lines, grades, and limits as directed by the Resident.

STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION  
Federal Project No. 2952800  
WIN 029528.00

PROJ. MANAGER	TRAVIS HAMEL, P.E.	BY	DATE
DESIGN-DETAILED	C. STANDLEY	E. BEAUSOLEIL	03/2026
CHECKED-REVIEWED	R. BRATLEY	A. STEPHENS	03/2026
DESIGN-DETAILED			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

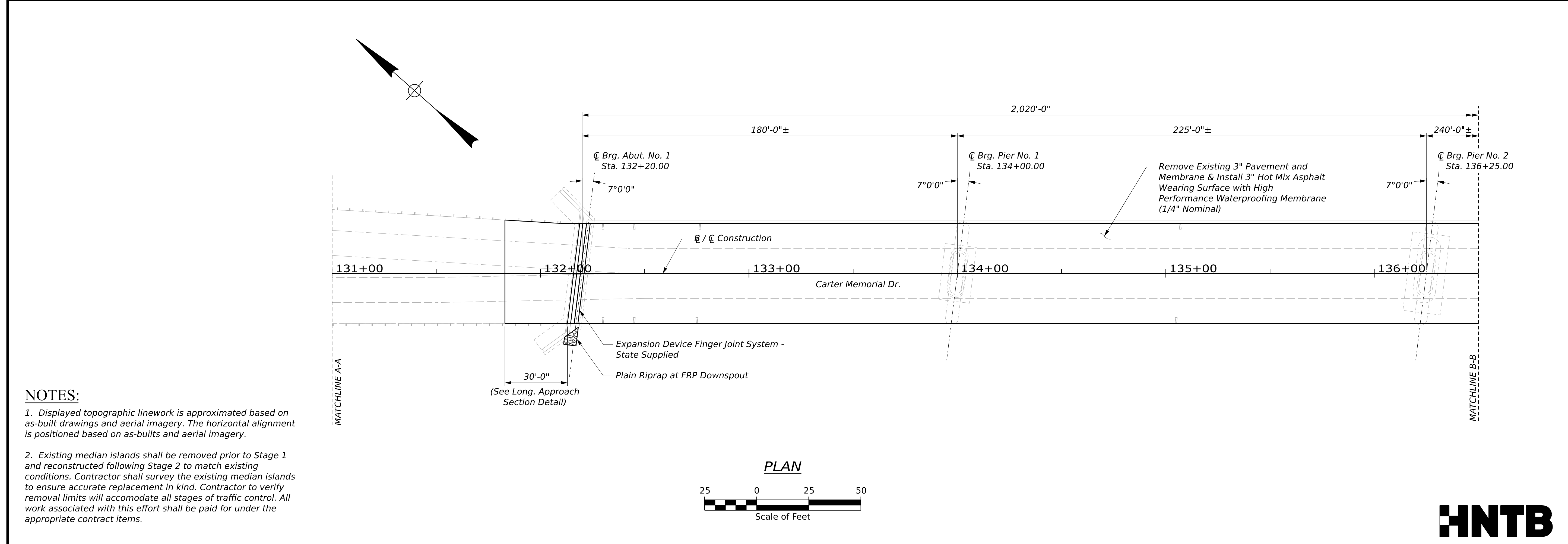
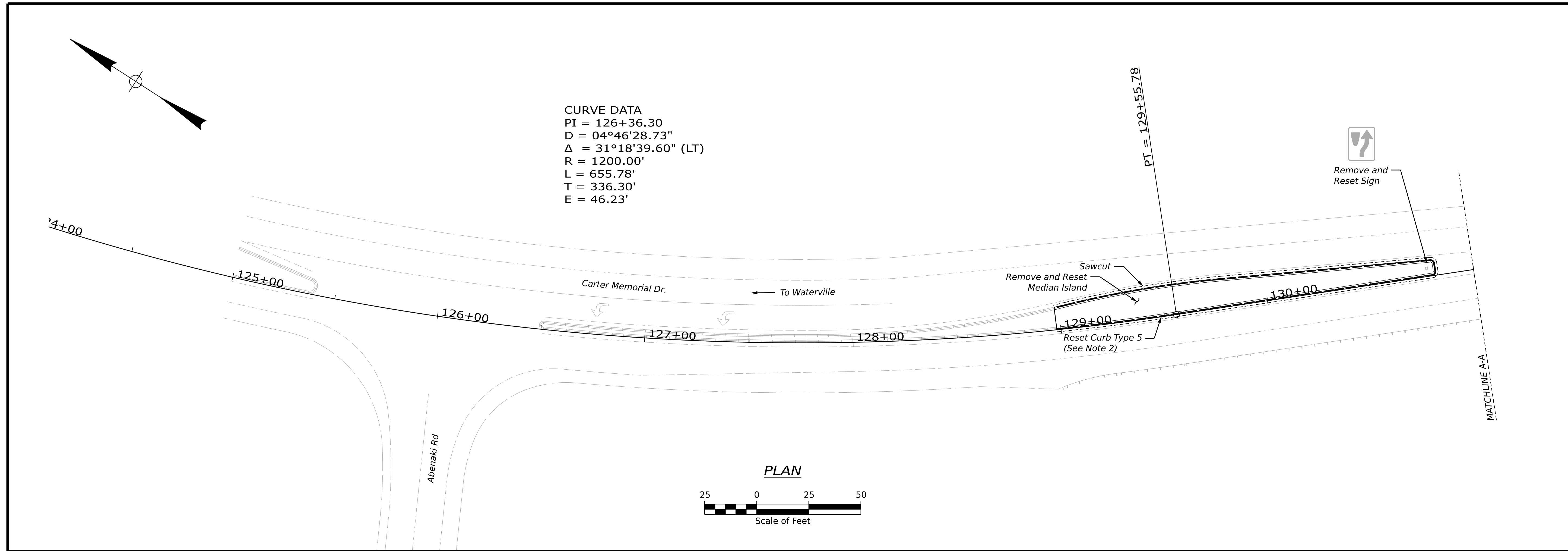
DONALD V. CARTER BRIDGE NO. 1141  
CROSSING KENNEBEC RIVER  
WATERVILLE-WINSLOW  
**ESTIMATED QUANTITIES  
AND GENERAL NOTES**

SHEET NUMBER  
**2**  
OF 24



Date: 3/10/2026

Username: ebeausoleil



**NOTES:**

1. Displayed topographic linework is approximated based on as-built drawings and aerial imagery. The horizontal alignment is positioned based on as-builts and aerial imagery.
2. Existing median islands shall be removed prior to Stage 1 and reconstructed following Stage 2 to match existing conditions. Contractor shall survey the existing median islands to ensure accurate replacement in kind. Contractor to verify removal limits will accommodate all stages of traffic control. All work associated with this effort shall be paid for under the appropriate contract items.

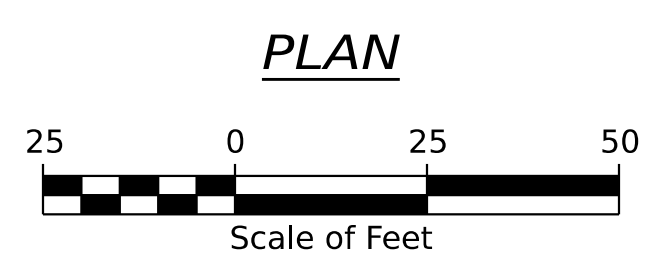
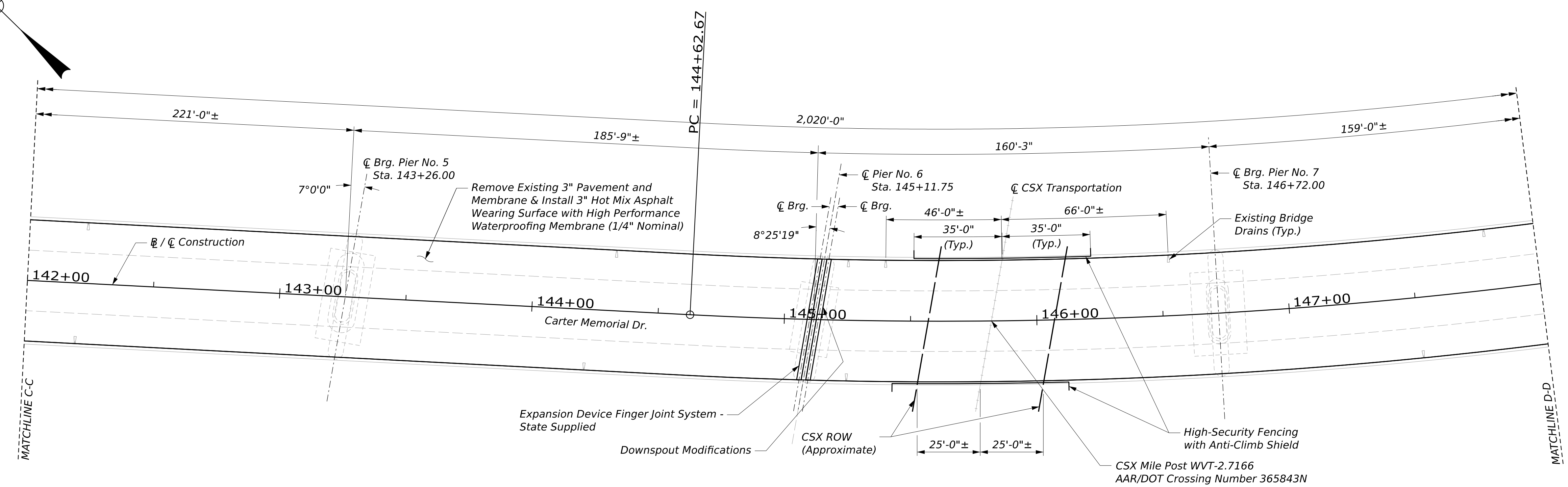
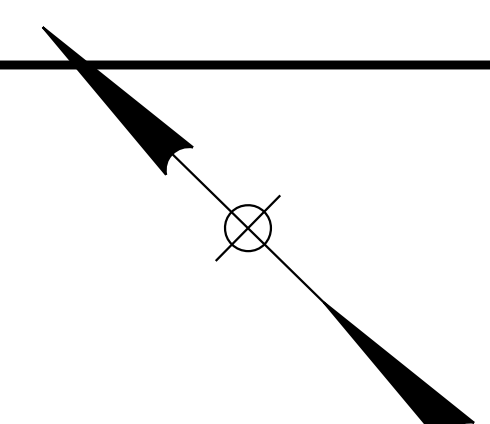
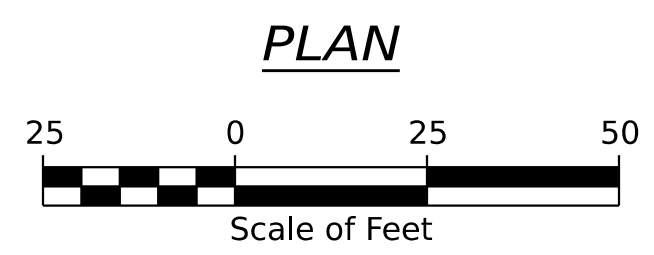
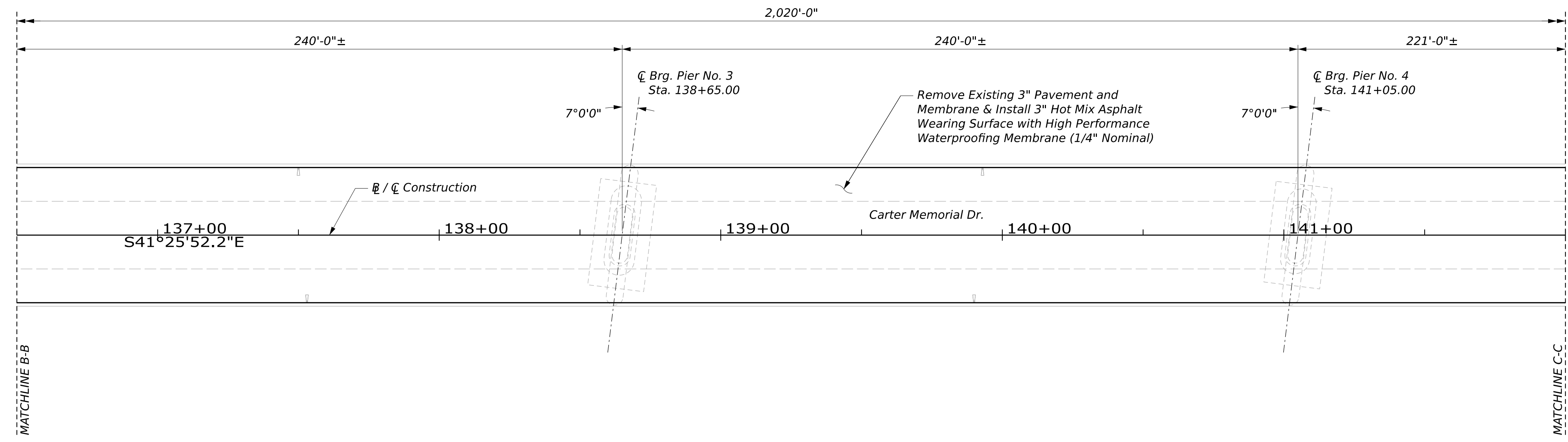
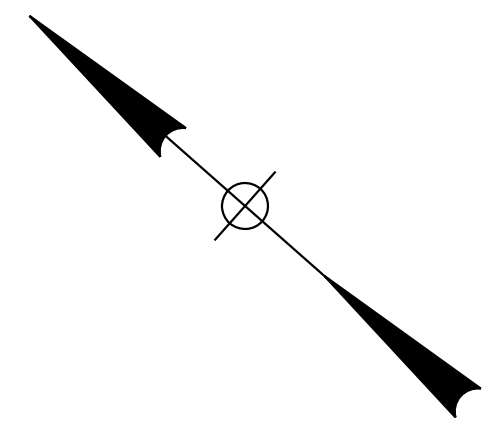
STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION  
Federal Project No. 2952800  
WIN 029528.00

PROJ. MANAGER	TRAVIS HAMEL, P.E.	DATE
DESIGNED/DRAWN	P. BROWN	03/2026
CHECKED/REVIEWED	L. ZACCINI	03/2026
DESIGNED/REVIEWED	A. STEPHENS	
DESIGNED/REVIEWED		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

DONALD V. CARTER BRIDGE NO. 1141  
CROSSING KENNEBEC RIVER  
WATERVILLE-WINSLOW  
**GENERAL PLAN 1**

SHEET NUMBER  
**3**  
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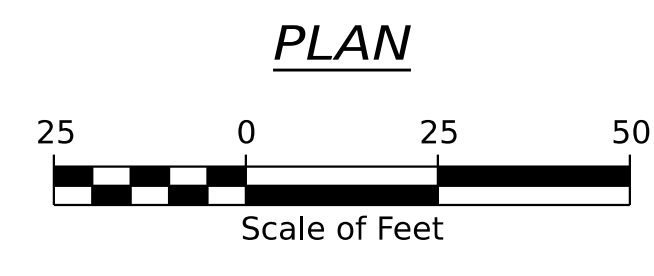
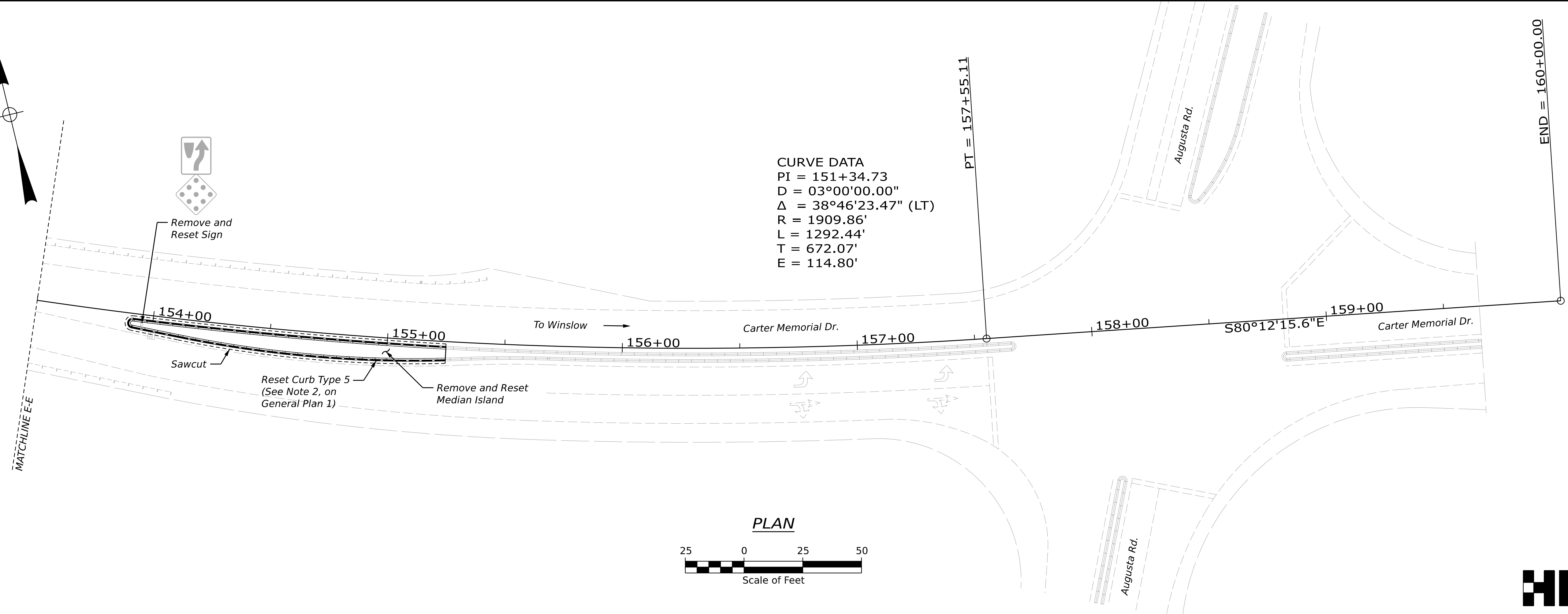
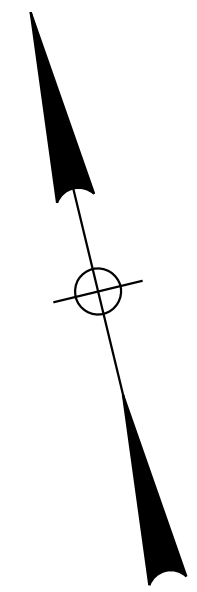
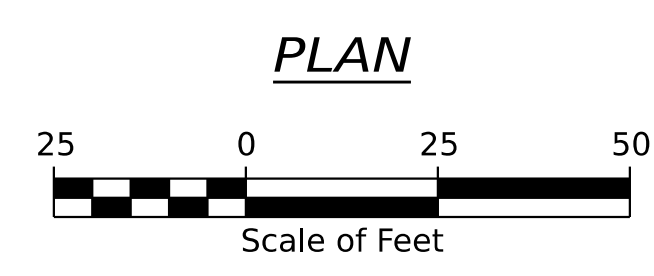
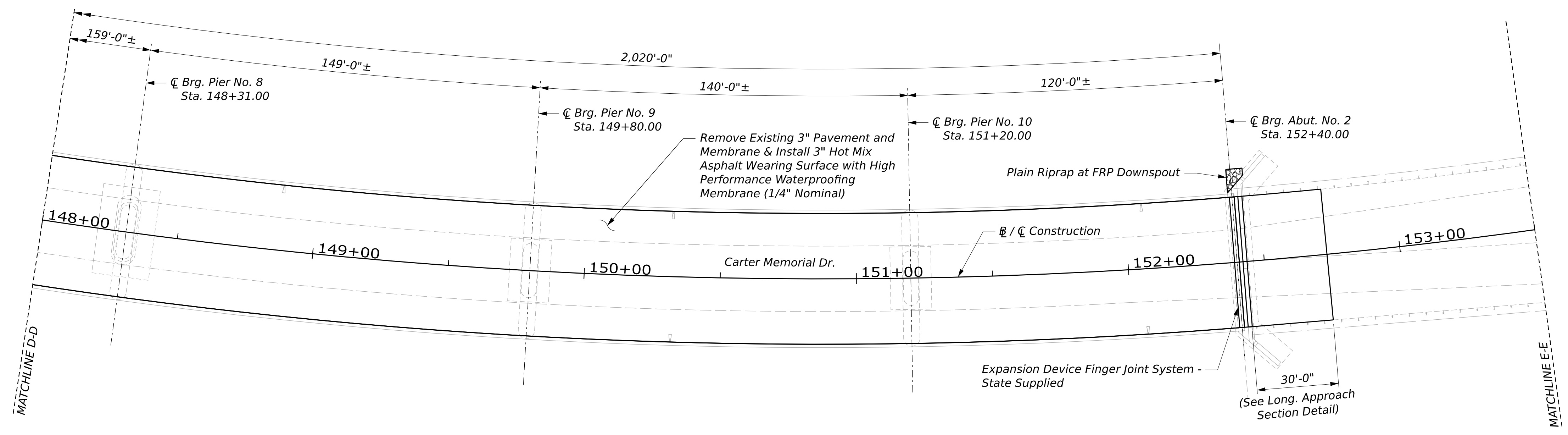
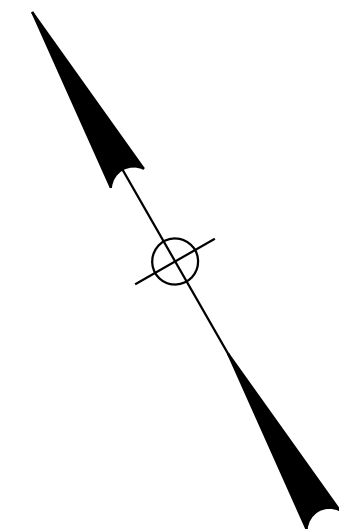
PROJ. MANAGER	TRAVIS HAMEL, P.E.	DATE
DESIGNED	P. BROWN	03/2026
CHECKED	L. ZACCINI	03/2026
DESIGNED-DETAILED		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

DONALD V. CARTER BRIDGE NO. 1141  
CROSSING KENNEBEC RIVER  
WATERVILLE-WINSLOW  
**GENERAL PLAN 2**

SHEET NUMBER  
**4**  
OF 24



Date: 3/10/2026  
Username: ebeausoleil



STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION  
Federal Project No. 2952800  
WIN 029528.00

SIGNATURE	P.E. NUMBER	DATE

PROJ. MANAGER	TRAVIS HAMEL, P.E.
DESIGNER	P. BROWN
CHECKED	L. ZACCINI
DESIGNED	A. STEPHENS
REVISIONS 1	
REVISIONS 2	
REVISIONS 3	
REVISIONS 4	
FIELD CHANGES	

DONALD V. CARTER BRIDGE NO. 1141  
CROSSING KENNEBEC RIVER  
WATERVILLE-WINSLOW  
**GENERAL PLAN 3**

SHEET NUMBER  
**5**  
OF 24



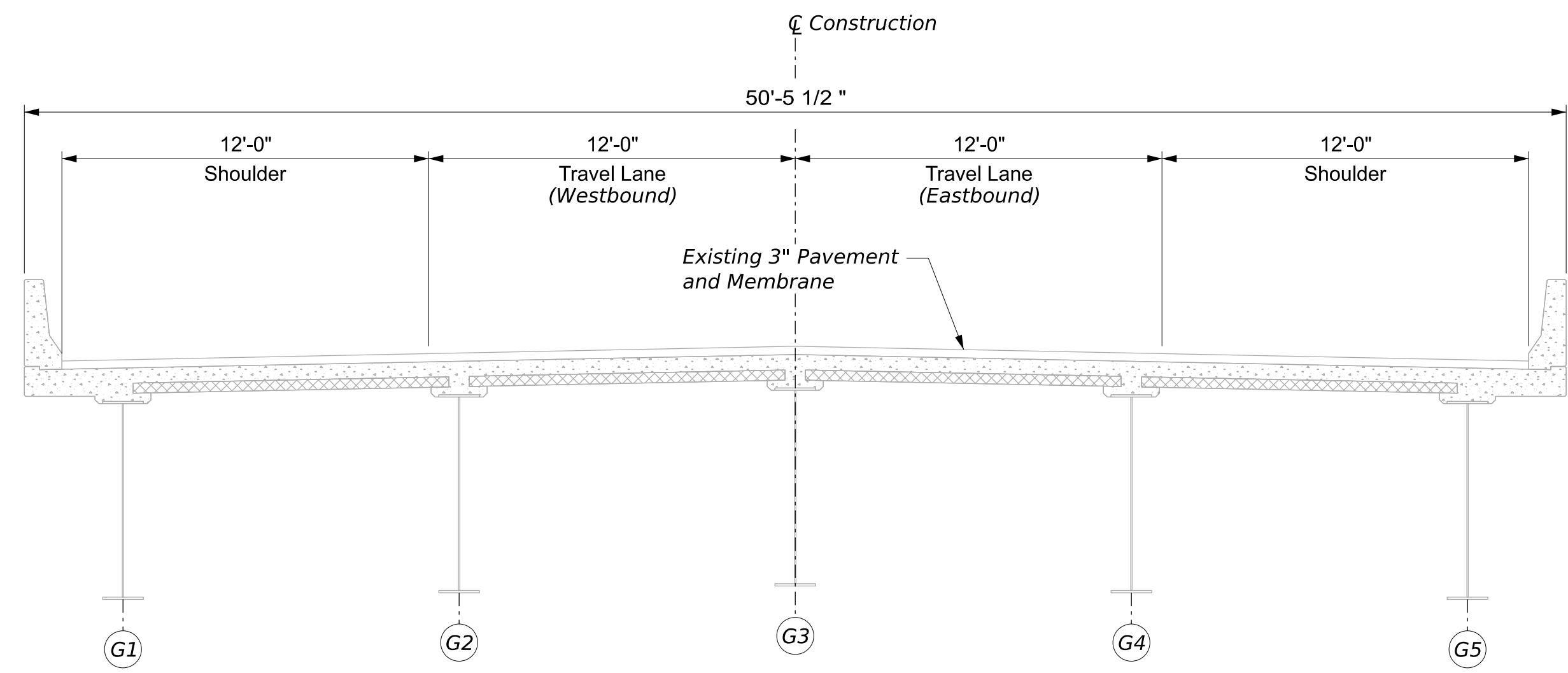
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Date: 3/10/2026



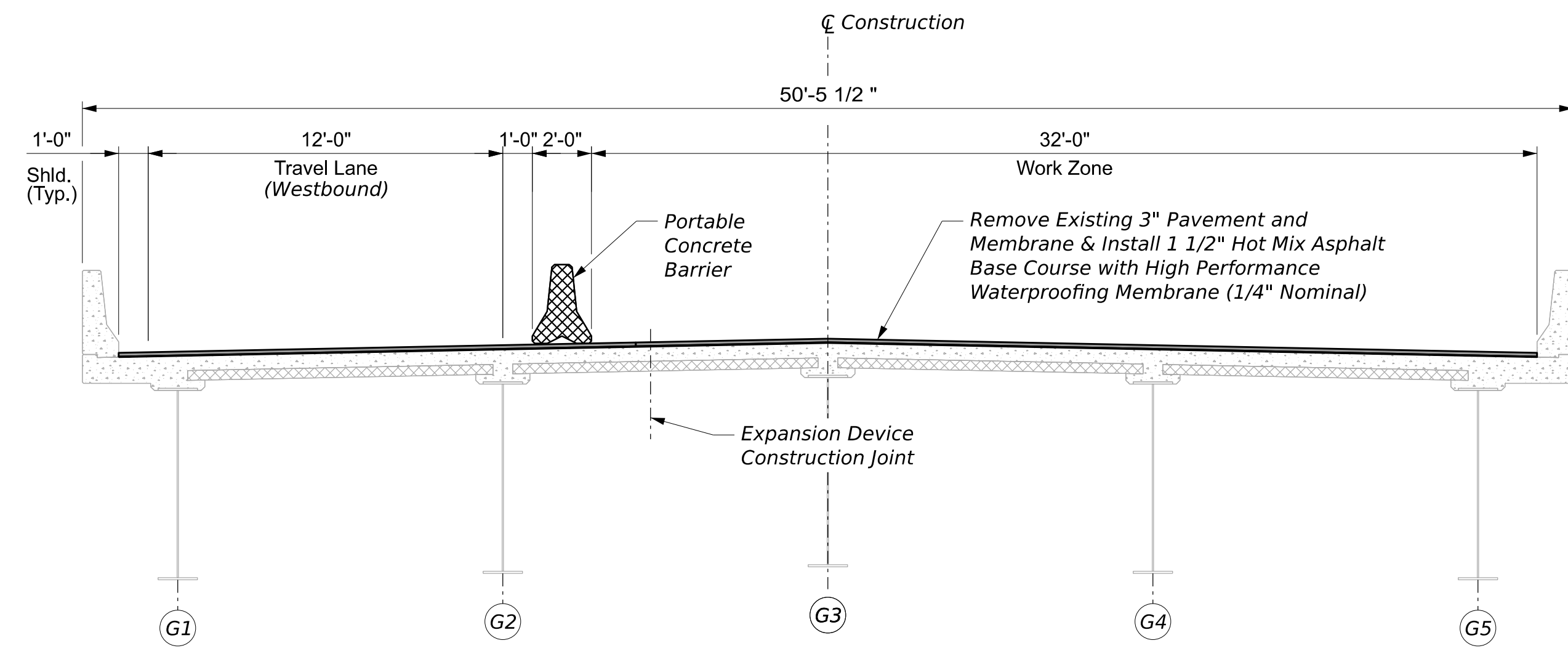
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Username: ebeausoleil

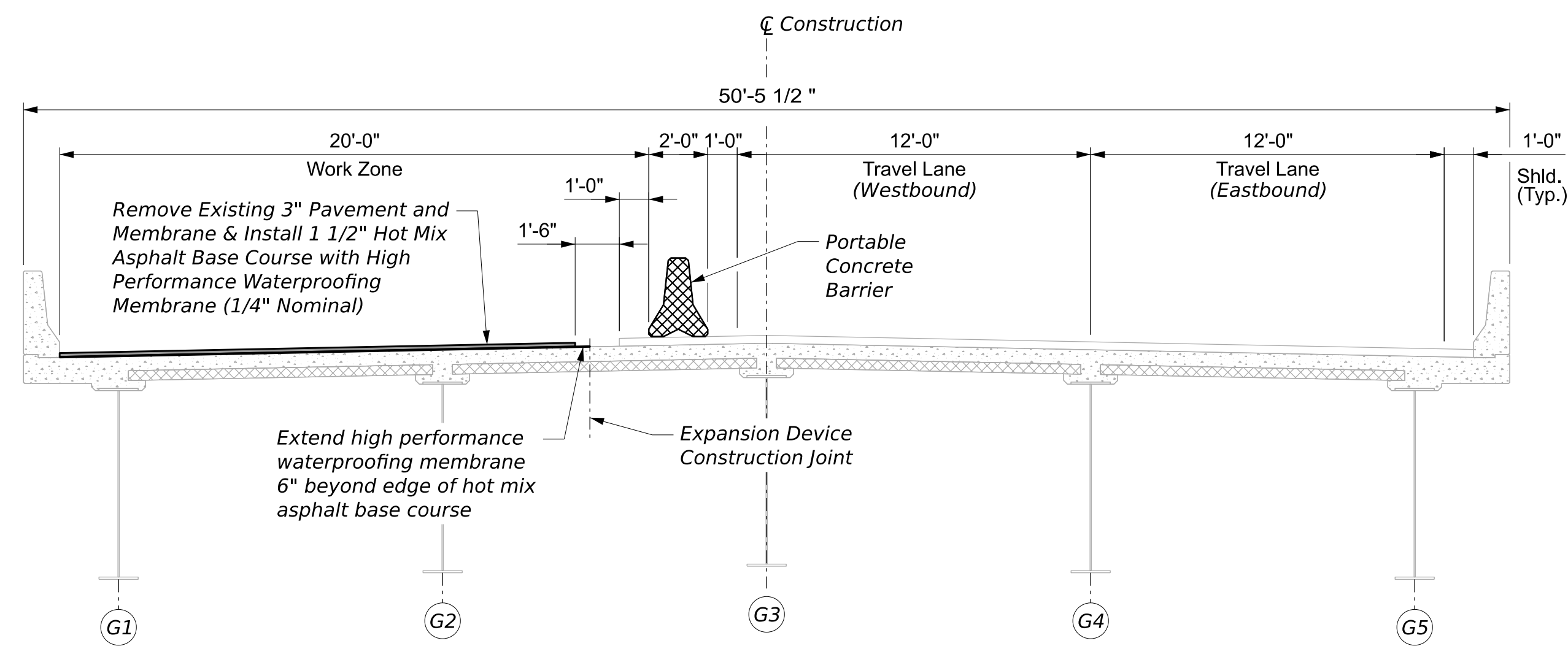
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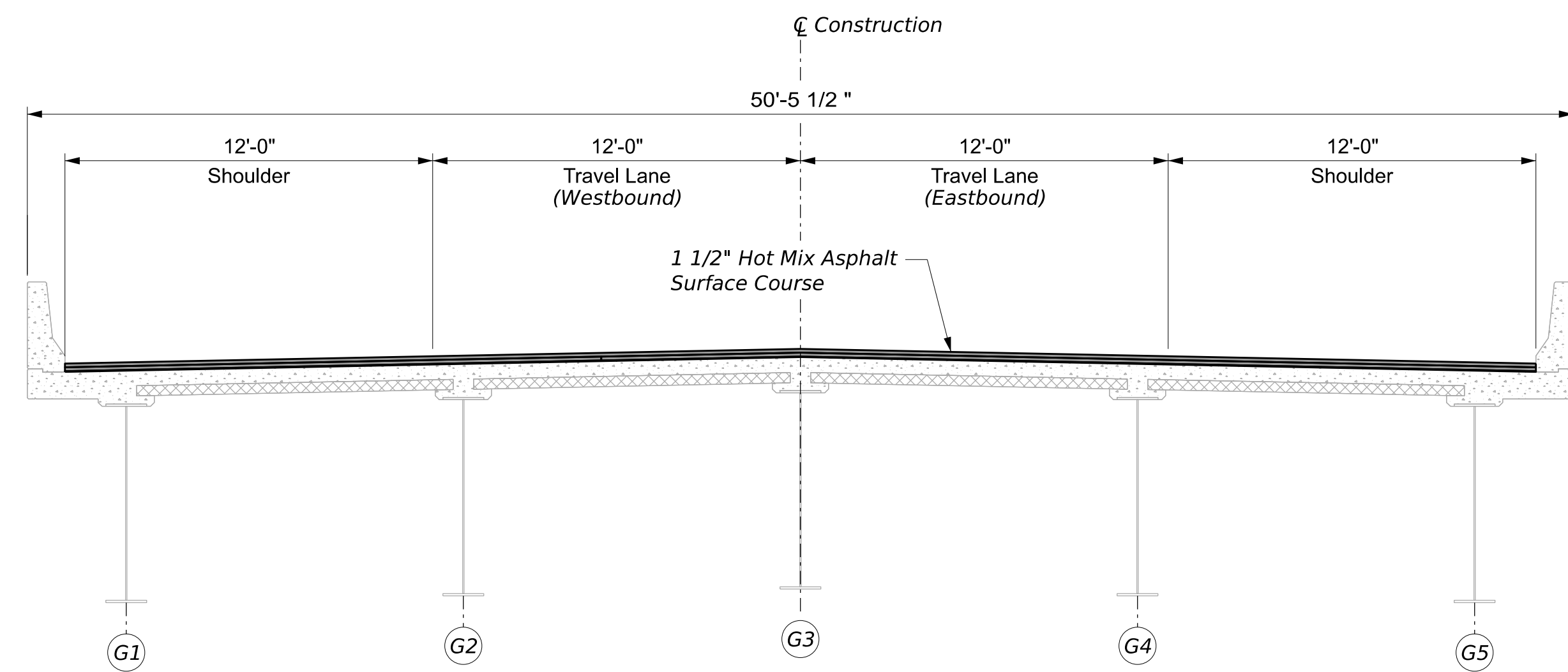
**EXISTING TRANSVERSE SECTION**



**STAGE 2**  
(Eastbound Traffic Off-Site Detour)



**STAGE 1**



**PROPOSED TRANSVERSE SECTION**  
(Surface Course Using Temporary Lane Shifts with Flaggers)

**NOTES:**

1. All surface course paving shall be completed in a single operation. The Contractor shall place temporary wedges/tapers at the bridge drains and expansion device locations as directed by the Resident before allowing traffic on the base pavement. Taper length shall be 4 feet per inch of transition depth. Payment for temporary wedges/tapers shall be incidental to related Contract items.

STATE OF MAINE  
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PROJ. MANAGER	TRAVIS HAMEL, P.E.	DATE
DESIGN-DETAILED	C. STANLEY	03/2026
CHECKED/REVIEWED	E. BEAUSOLEIL	03/2026
DESIGN-DETAILED	R. BRATLEY	
DESIGN-DETAILED	A. STEPHENS	
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

DONALD V. CARTER BRIDGE NO. 1141  
CROSSING KENNEBEC RIVER  
WATERVILLE-WINSLOW  
**STAGED CONSTRUCTION**

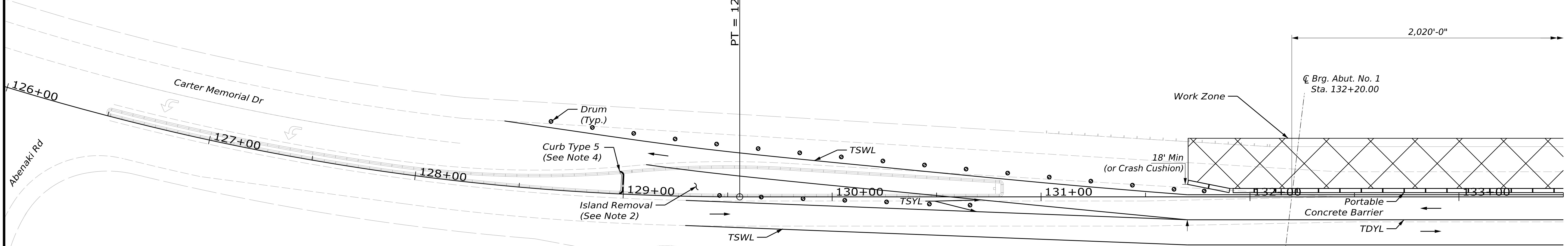
SHEET NUMBER

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CURVE DATA  
 PI = 126+36.30  
 D = 04°46'28.73"  
 Δ = 31°18'39.60" (LT)  
 R = 1200.00'  
 L = 655.78'  
 T = 336.30'  
 E = 46.23'



**NOTES:**

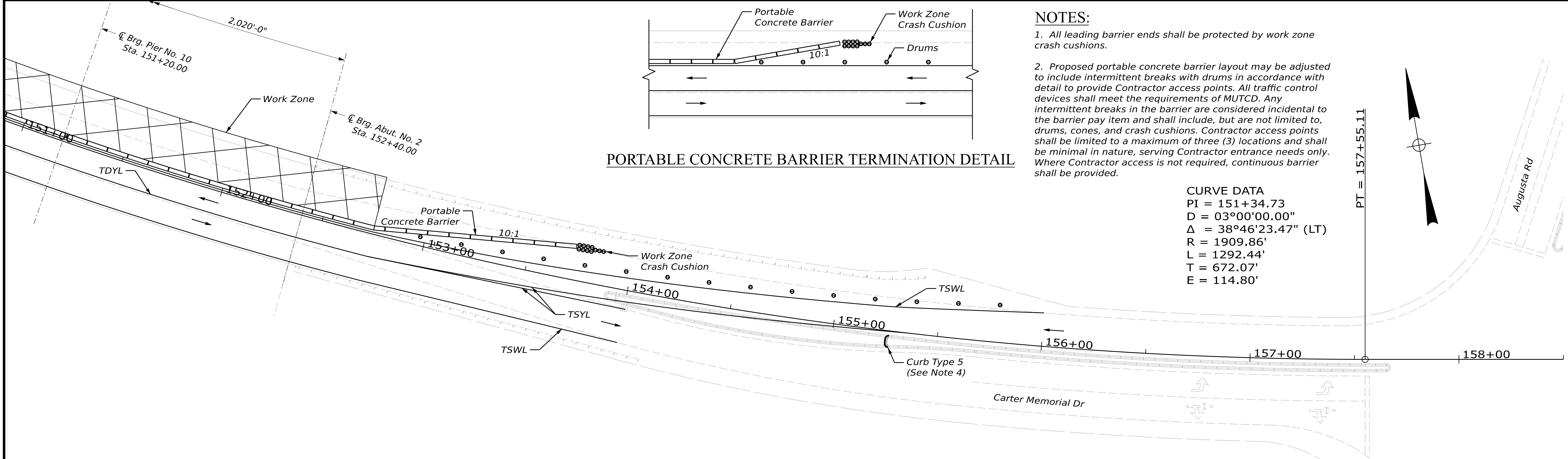
1. Workzone speed shall be reduced from 45 mph to 35 mph for all stages.
2. See general plans for island removal limits and details.
3. Remove any existing pavement markings that conflict with the temporary traffic control layout. No temporary striping shall be allowed on final surface pavement.
4. Contractor shall temporarily place Curb Type 5 for Stage 1 as shown to avoid a blunt end of curb. Reconstruction of median island shall take place during Stage 2.

**LEGEND:**

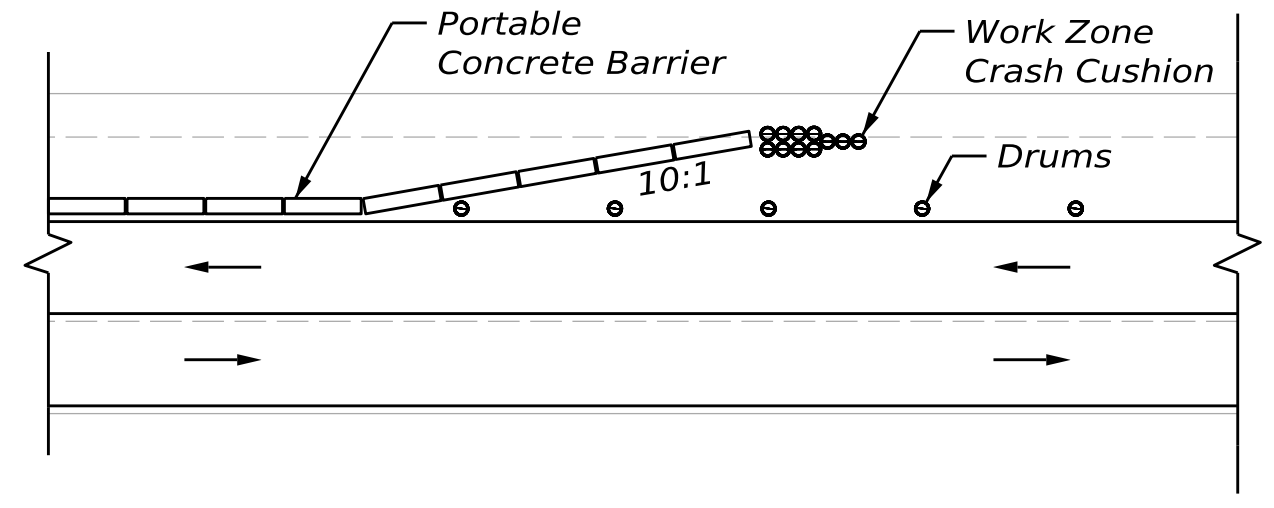
TSWL - Temporary Solid White Line  
 TSYL - Temporary Solid Yellow Line  
 TDYL - Temporary Double Yellow Line

STATE OF MAINE  
 DEPARTMENT OF TRANSPORTATION  
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 WIN 029528.00

DATE	BY	SIGNATURE	P.E. NUMBER	DATE
03/2026	P. BROWN			
03/2026	A. STEPHENS			



**PORTABLE CONCRETE BARRIER TERMINATION DETAIL**

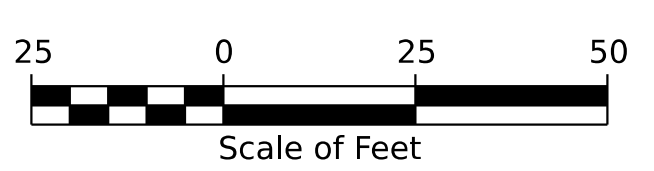


**NOTES:**

1. All leading barrier ends shall be protected by work zone crash cushions.
2. Proposed portable concrete barrier layout may be adjusted to include intermittent breaks with drums in accordance with detail to provide Contractor access points. All traffic control devices shall meet the requirements of MUTCD. Any intermittent breaks in the barrier are considered incidental to the barrier pay item and shall include, but are not limited to, drums, cones, and crash cushions. Contractor access points shall be limited to a maximum of three (3) locations and shall be minimal in nature, serving Contractor entrance needs only. Where Contractor access is not required, continuous barrier shall be provided.

CURVE DATA  
 PI = 151+34.73  
 D = 03°00'00.00"  
 Δ = 38°46'23.47" (LT)  
 R = 1909.86'  
 L = 1292.44'  
 T = 672.07'  
 E = 114.80'

**PLAN**



DONALD V. CARTER BRIDGE NO. 1141  
 CROSSING KENNEBEC RIVER  
 WATERVILLE-WINSLOW  
 TRAFFIC CONTROL PLAN  
 STAGE 1

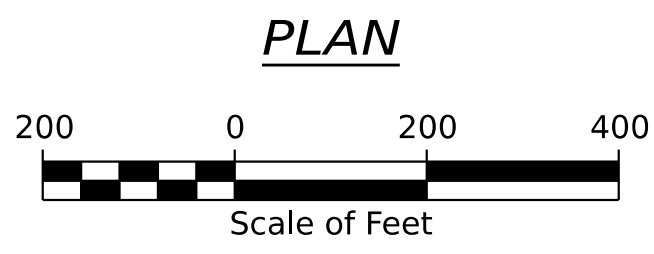
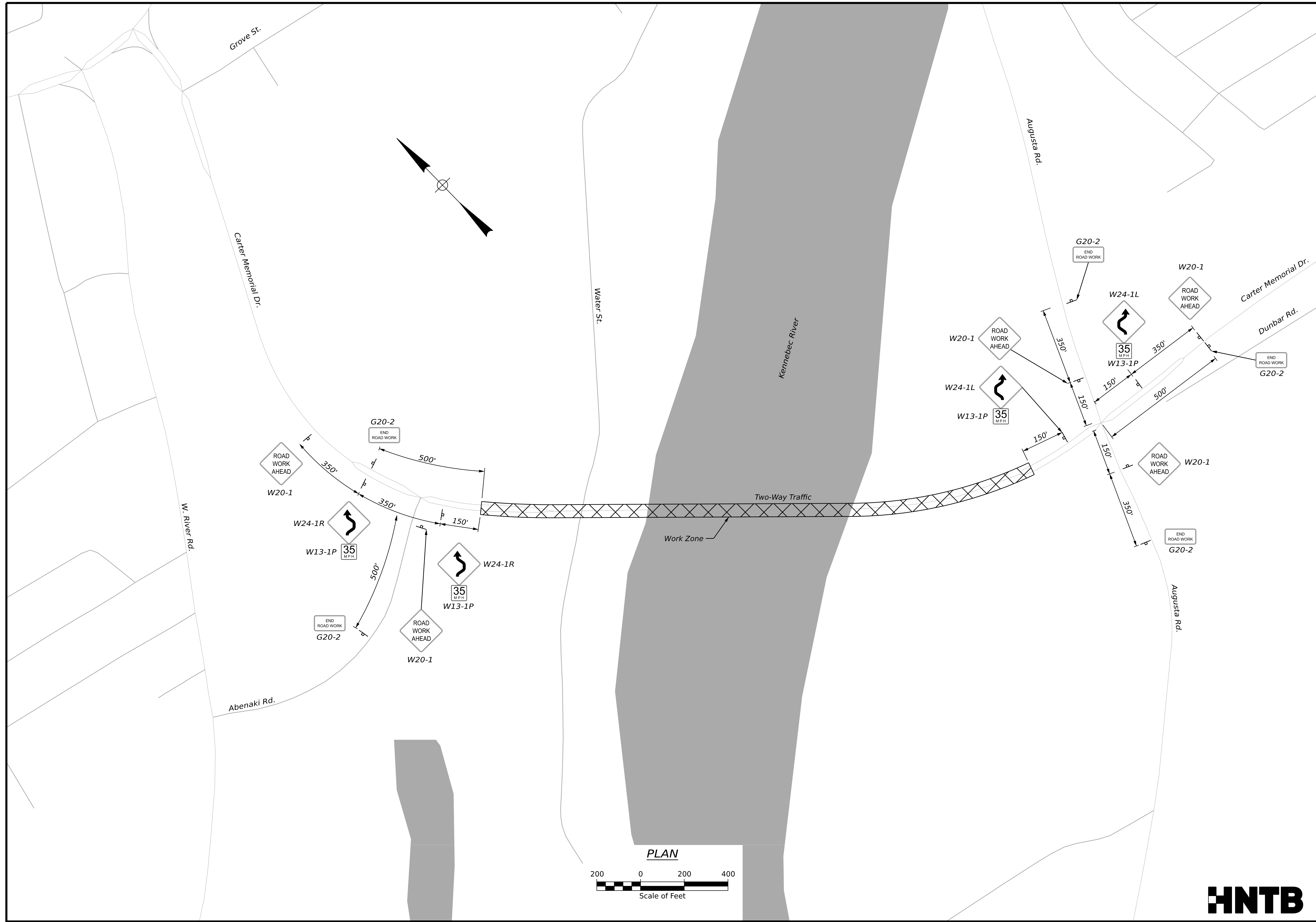
SHEET NUMBER

8

OF 24

Date: 3/10/2026  
 Username: ebeausoleil





STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION  
Federal Project No. 2952800  
WIN 029528.00

PROJ. MANAGER	TRAVIS HAMEL, P.E.	BY	DATE
DESIGN-DETAILED	P. BROWN	P. BROWN	03/2026
CHECKED-REVIEWED	L. ZACCHINI	A. STEPHENS	03/2026
DESIGN-DETAILED			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

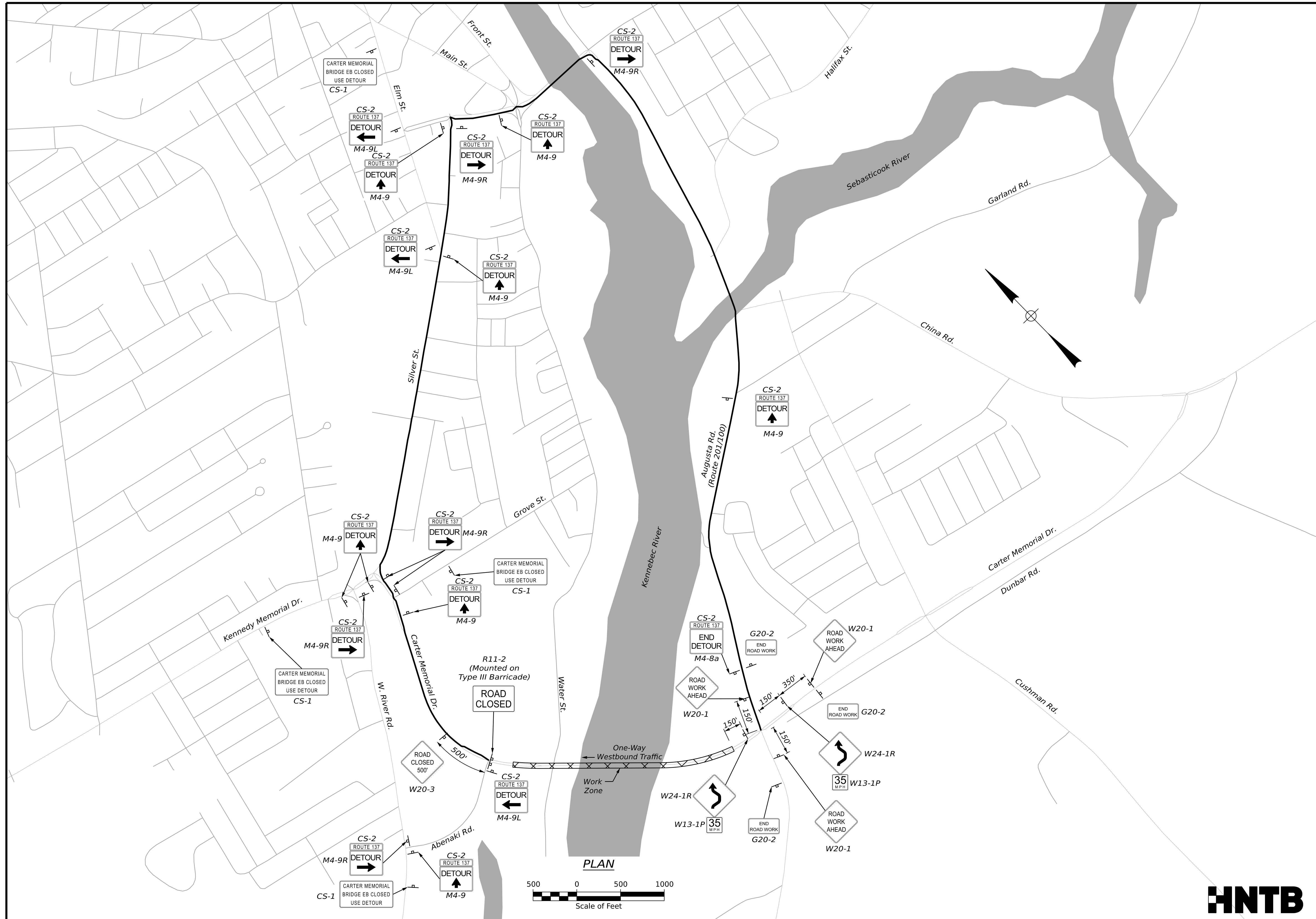
DONALD V. CARTER BRIDGE NO. 1141  
CROSSING KENNEBEC RIVER  
WATERVILLE-WINSLOW  
**TRAFFIC CONTROL PLAN  
STAGE 1 SIGNING**

SHEET NUMBER  
**10**  
OF 24

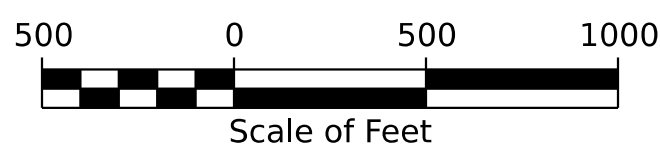


Date: 3/10/2026

Username: ebeausoleil



PLAN



STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION  
Federal Project No. 2952800  
WIN 029528.00

PROJ. MANAGER	TRAVIS HAMEL, P.E.	BY	DATE
DESIGN-DETAILED	P. BROWN	P. BROWN	03/2026
CHECKED/REVIEWED	L. ZACCINI	A. STEPHENS	03/2026
DESIGN-DETAILED			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

DONALD V. CARTER BRIDGE NO. 1141  
CROSSING KENNEBEC RIVER  
WATERVILLE-WINSLOW  
TRAFFIC CONTROL PLAN  
STAGE 2 SIGNING

SHEET NUMBER  
**11**  
OF 24



CONSTRUCTION SIGN SUMMARY

IDENTIFICATION NUMBER	SIZE OF SIGN		TEXT	TEXT DIMENSIONS (INCHES)			NUMBER OF SIGNS REQUIRED	COLOR		TOTAL AREA IN SQUARE FEET
	WIDTH	HEIGHT		LETTER HEIGHT	VERTICAL SPACING	ARROW RTE. MKR		BACK-GROUND	LEGEND BORDER	
CS-1	54"	30"	CARTER MEMORIAL BRIDGE EB CLOSED USE DETOUR	4"C 4"C 4"C	3" 3"		4	Orange	Black	11.25 (45.00)
CS-2	30"	18"	ROUTE 137	4"C			18	Orange	Black	3.75 (67.50)
G20-2	36"	18"	END ROAD WORK	Text dimensions shall conform to "standard highway signs"			5	Orange	Black	4.50 (22.50)
M4-8a	24"	18"	END DETOUR				1	Orange	Black	3.00 (3.00)
M4-9	30"	24"	DETOUR ↑				8	Orange	Black	5.00 (40.00)
M4-9L	30"	24"	DETOUR ←				3	Orange	Black	5.00 (15.00)
M4-9R	30"	24"	DETOUR →				6	Orange	Black	5.00 (30.00)
R11-2	48"	30"	ROAD CLOSED				1	White	Black	10.00 (10.00)
W13-1P	24"	24"	35 MPH				4	Orange	Black	4.00 (16.00)
W20-1	36"	36"	ROAD WORK AHEAD				5	Orange	Black	9.00 (45.00)
W20-3	36"	36"	ROAD CLOSED 500'				1	Orange	Black	9.00 (9.00)
W24-1L	36"	36"	↻				2	Orange	Black	9.00 (18.00)
W24-1R	36"	36"	↻				2	Orange	Black	9.00 (18.00)

NOTES:

1. Sign locations are approximate and to be verified in the field by the Contractor and approved by the Resident.
2. Information shown reflects signage for the Traffic Control Plans. Additional Signage may be necessary for other maintenance of traffic activities.

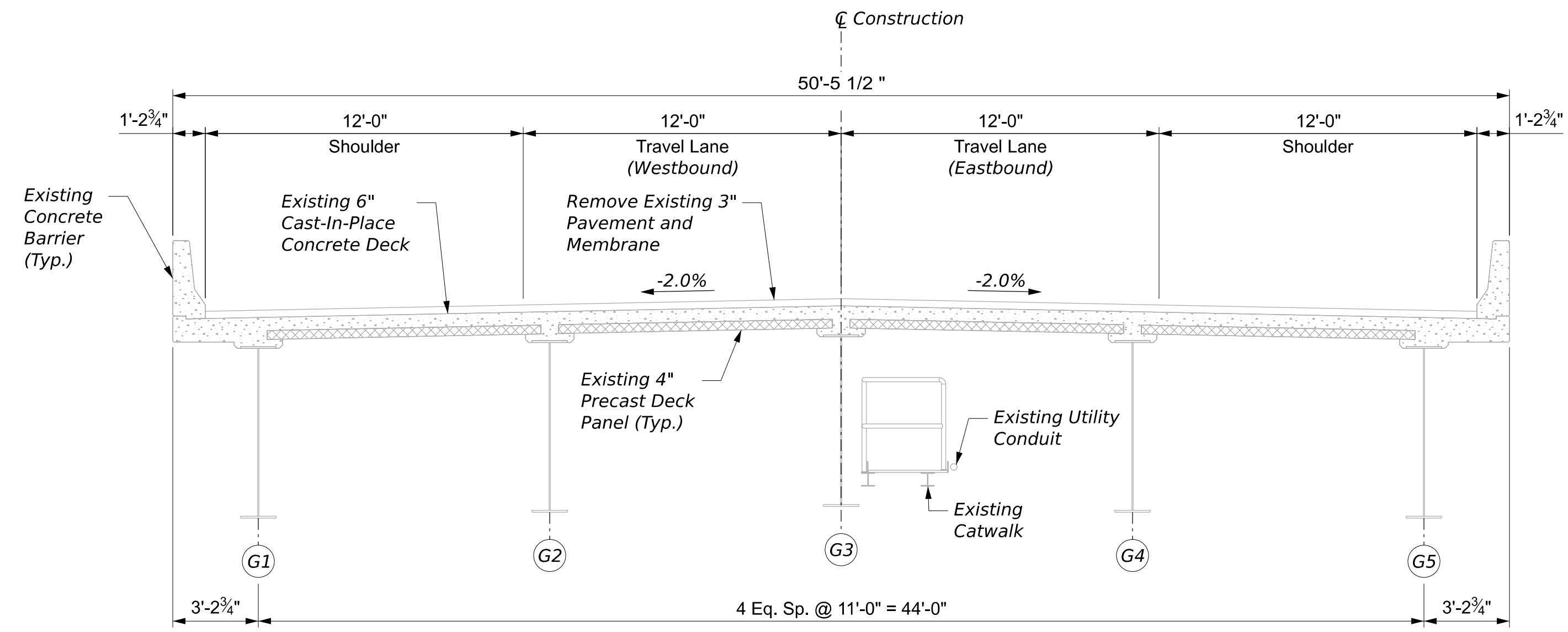
STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION  
Federal Project No. 2952800  
WIN 029528.00

PROJ. MANAGER	TRAVIS HAMEL, P.E.	DATE	
DESIGNER	P. BROWN	BY	P. BROWN
CHECKED	J. ZACCINI	DATE	03/2026
DESIGNED	J. STEPHENS		
REVISIONS 1		SIGNATURE	
REVISIONS 2		P.E. NUMBER	
REVISIONS 3		DATE	
REVISIONS 4			
FIELD CHANGES			

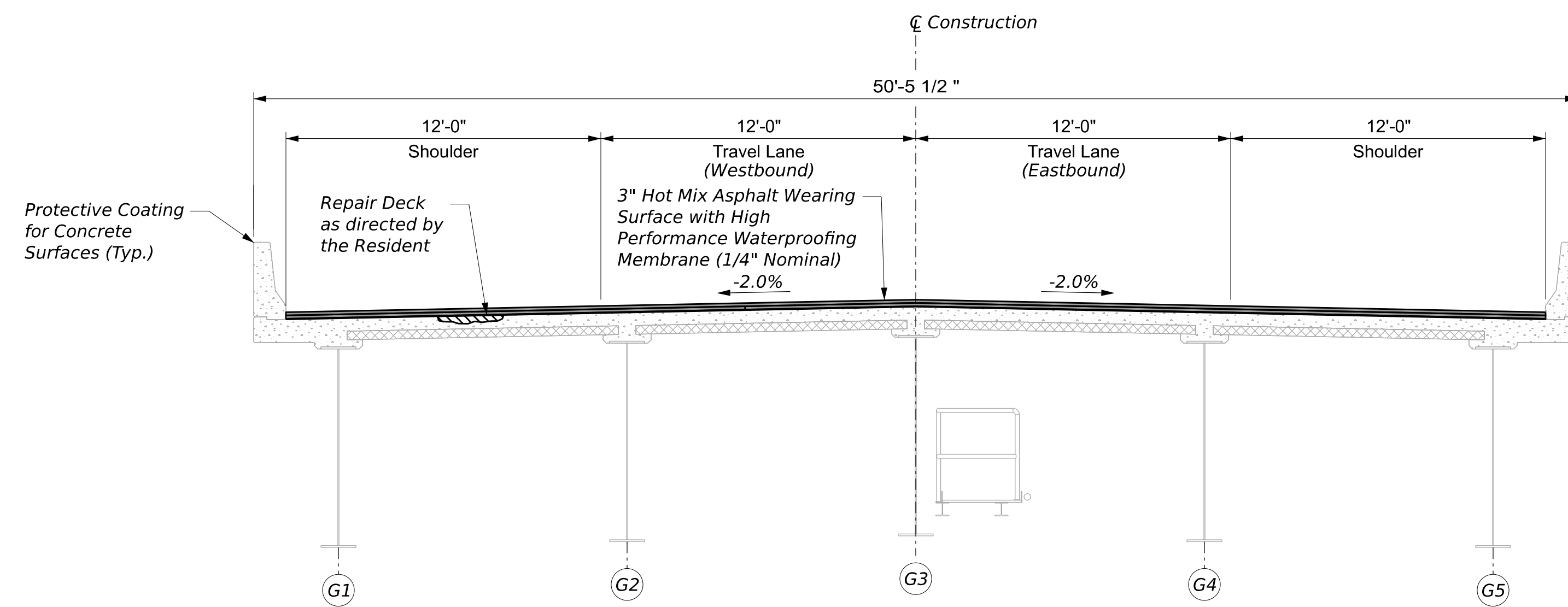
DONALD V. CARTER BRIDGE NO. 1141  
CROSSING KENNEBEC RIVER  
WATERVILLE-WINSLOW  
TRAFFIC CONTROL PLAN  
SIGN SUMMARY

SHEET NUMBER  
12  
OF 24





**EXISTING TRANSVERSE SECTION**  
(Crowned Roadway Shown, Superelevation Section Similar)



**PROPOSED TRANSVERSE SECTION**  
(Crowned Roadway Shown, Superelevation Section Similar)

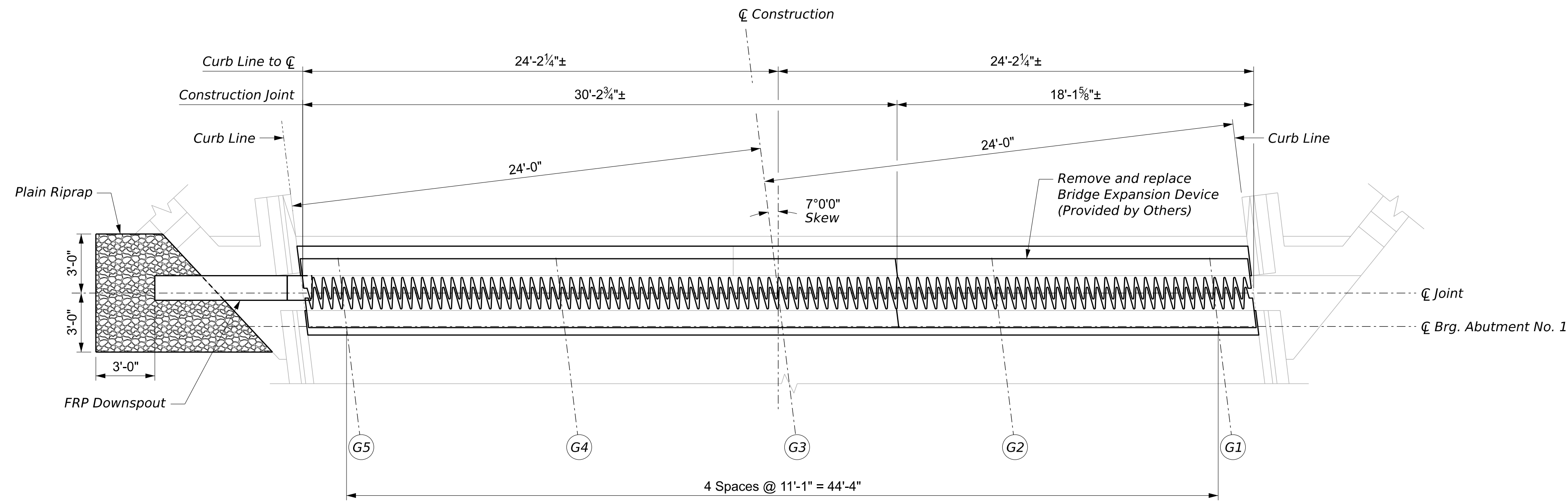
STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION  
Federal Project No. 2952800  
WIN 029528.00

PROJ. MANAGER	TRAVIS HAMEL, P.E.	BY	DATE
DESIGN-DETAILED	C. STANLEY	E. BEAUSOLEIL	03/2026
CHECKED/REVIEWED	R. BRATLEY	A. STEPHENS	03/2026
DESIGN-DETAILED			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

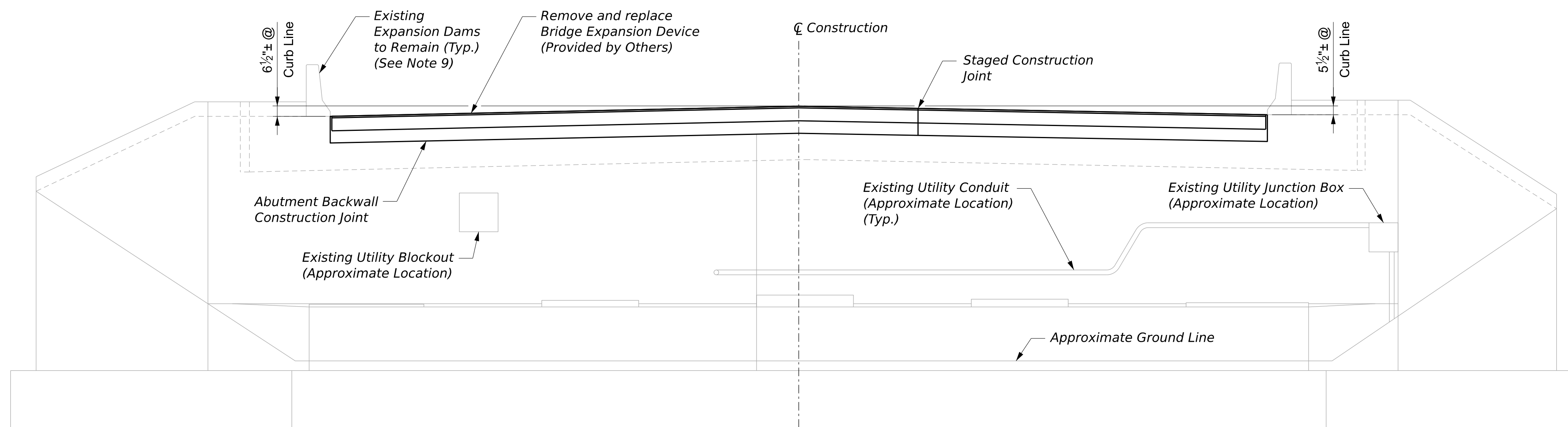
DONALD V. CARTER BRIDGE NO. 1141  
CROSSING KENNEBEC RIVER  
WATERVILLE-WINSLOW  
**TRANSVERSE SECTIONS**

SHEET NUMBER  
**13**  
OF 24





ABUTMENT NO. 1 PLAN



ABUTMENT NO. 1 FINGER JOINT ELEVATION

(Fabric Curtain Trough and FRP Downspout not shown for clarity, see next sheet)

**NOTES:**

- Expansion Device Finger Joint System - State Supplied will be fabricated and delivered to the site under WIN 029528.10. The work under WIN 029528.10 included fabricating finger joint expansion devices and fabric curtain troughs, including the anchorage system, support components for fabric curtain troughs and all necessary materials and equipment required to complete the fabrication and delivery work.
- Removal of the existing finger joints, troughs, downspouts, attachments and hardware, installation of Expansion Device Finger Joint System - State Supplied, and fabrication and installation of FRP downspouts is included as part of this contract. Work shall be completed in accordance with these plans and 521 Special Provisions.
- Existing deck longitudinal reinforcing to remain within the joint replacement limits shall be cut such that 2" of concrete cover is maintained in the proposed condition. Existing deck and abutment backwall transverse reinforcing shall be removed and replaced with new as shown in these details, except as noted. Existing transverse reinforcing that extends into the parapets at each abutment backwall and deck shall be cut to provide lap with new transverse reinforcing bars as shown in the plan details. The existing parapet reinforcing shall remain in place and shall not be damaged during removal and replacement of the finger joint.
- Expansion Device Finger Joint System - State Supplied shall be fabricated and installed in accordance with Standard Details 521(01) thru 521(12). Expansion device opening shall be adjusted for temperature in the field at the time of installation in accordance with MaineDOT Standard Detail 521(11). The joint geometry shall conform to the following:  
 \* Abutment No. 1 - Type E Set to 6 1/8 inch(es) at 45 degrees (Dimension "I")  
 \* Abutment No. 2 - Type C Set to 4 1/8 inch(es) at 45 degrees (Dimension "J")  
 \* Pier No. 6 - Type D Set to 5 1/8 inch(es) at 45 degrees (Dimension "J")
- The finger joints for both abutments shall be installed in two stages to accommodate traffic based on the bridge deck and abutment construction joint locations. Connection between the two stages shall be achieved using a prequalified V-groove field weld.
- Finger joint embedded anchor studs specified in Standard Details 521 shall be replaced with loop anchor as detailed in this plan set and spaced at 1'-0".
- FRP downspouts shall be field located by the Contactor and Resident. FRP downspout dimensions shall be field verified such that the outlets clear the abutment seats prior to fabrication.
- Silicone sealant shall be selected from The MaineDOT Qualified Products List for Bridge Seals and Joints.
- Existing barrier expansion dams have removable slider plates. The Contractor may remove these plates, at their option, to facilitate the finger joint work. Payment shall be incidental to Expansion Device - Finger Joint Modifications pay item. All removed components shall be carefully handled, protected, and reinstalled in their original positions unless otherwise directed by the Resident. Any damage resulting from removal or reinstallation shall be repaired at no additional cost to the Department.
- Where drilling and anchoring is specified, the Contractor shall use a material listed on the MaineDOT Qualified Products List of Epoxy and Resin Bonding Agents. The depth of embedment shall be sufficient to develop 125% of the yield strength of the threaded rod. The proposed anchoring material and embedment shall be submitted for approval.

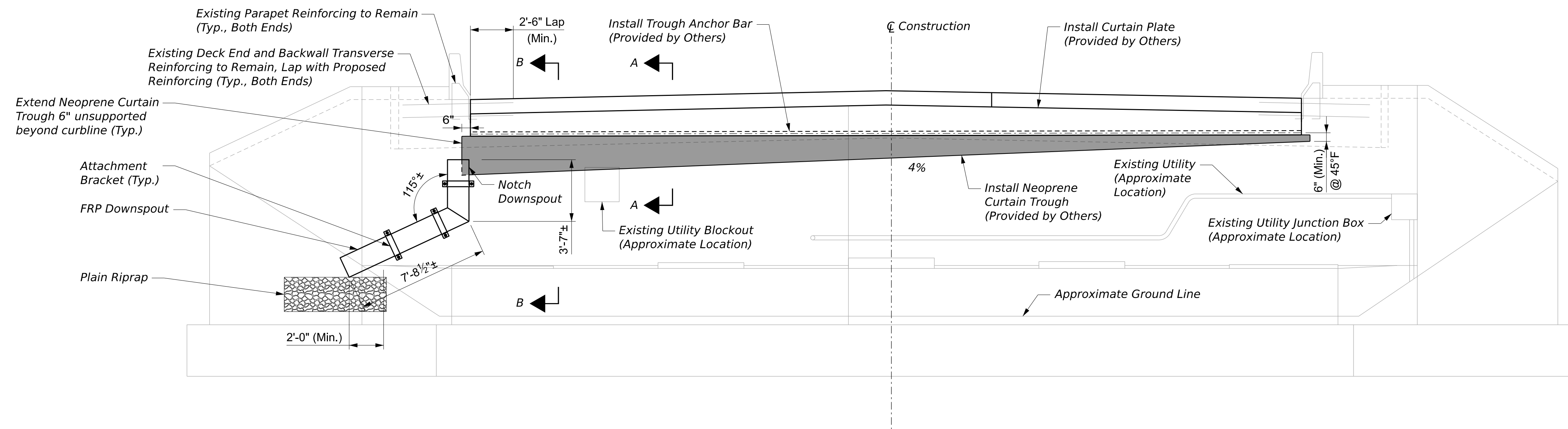
STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION  
Federal Project No. 2952800  
WIN 029528.00

PROJ. MANAGER	TRAVIS HAMEL, P.E.	DATE
DESIGN-DETAILED	C. STANDLEY	E. BEAUSOLEIL 03/2026
CHECKED-REVIEWED	R. BRATLEY	A. STEPHENS 03/2026
DESIGN-DETAILED		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

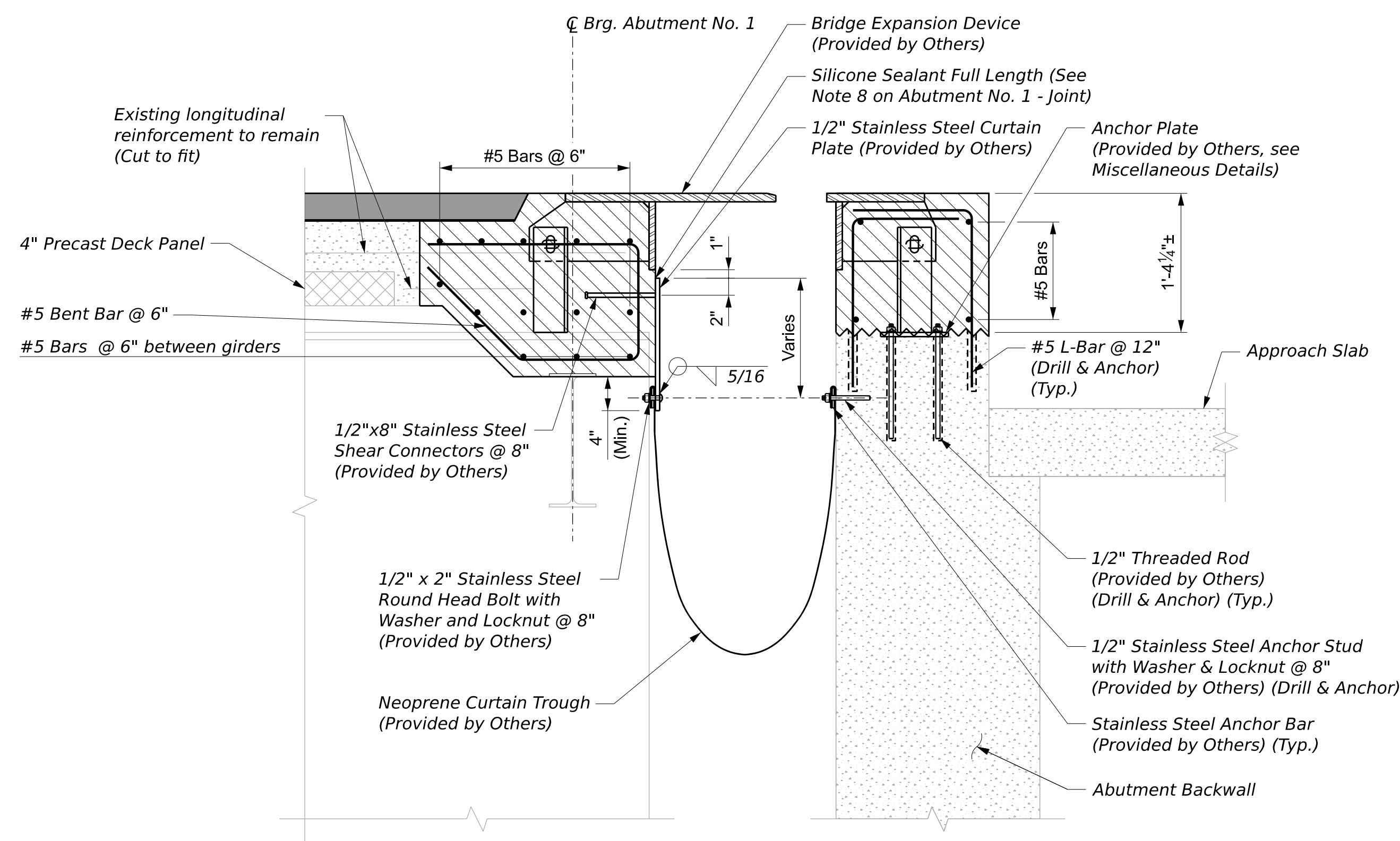
DONALD V. CARTER BRIDGE NO. 1141  
CROSSING KENNEBEC RIVER  
WATERVILLE-WINSLOW  
ABUTMENT NO. 1 - JOINT

SHEET NUMBER  
**14**  
OF 24

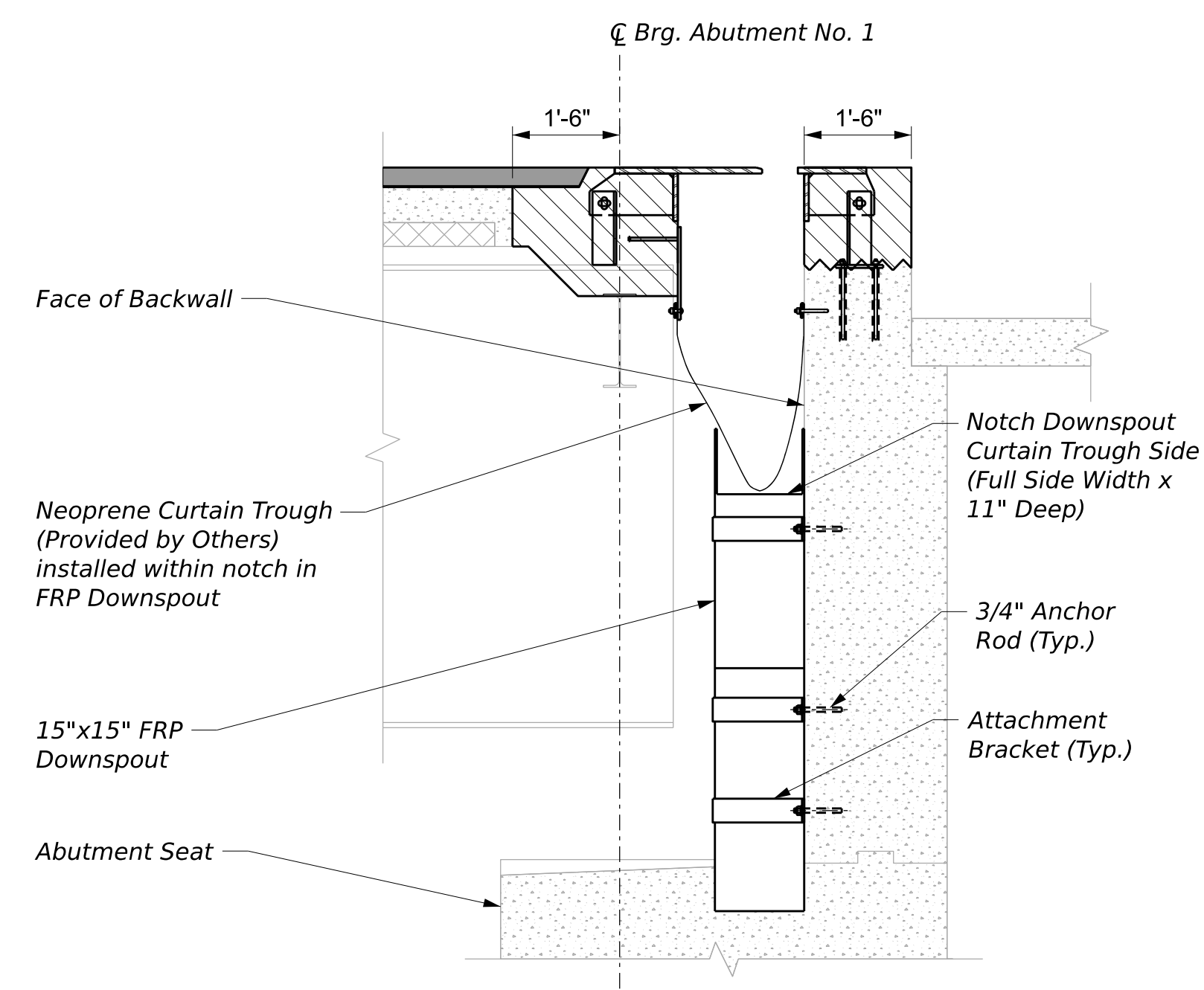




ABUTMENT NO. 1 CURTAIN TROUGH ELEVATION



SECTION A-A



SECTION B-B

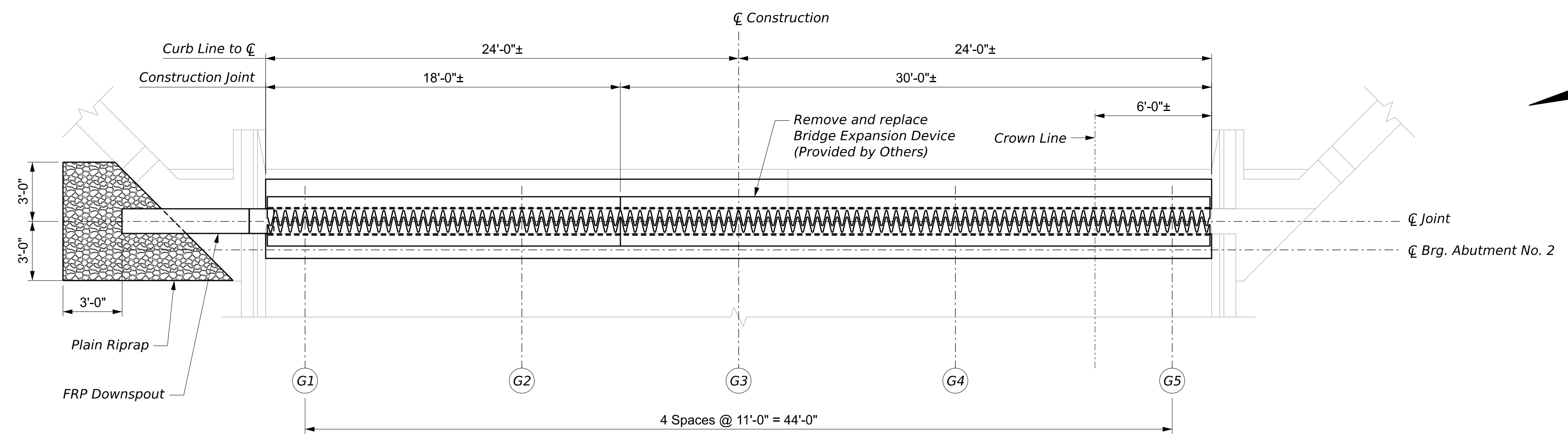
STATE OF MAINE		DATE	
DEPARTMENT OF TRANSPORTATION		BY	
Federal Project No. 2952800		E. BEAUSOLEIL 03/2026	
WIN 029528.00		A. BRATLEY 03/2026	
SIGNATURE		P.E. NUMBER	
DATE		DATE	

PROJ. MANAGER	TRAVIS HAMEL, P.E.
DESIGNER	C. STANLEY
CHECKED	E. BEAUSOLEIL
DESIGNED	R. BRATLEY
REVISIONS	
REVISIONS 1	
REVISIONS 2	
REVISIONS 3	
REVISIONS 4	
FIELD CHANGES	

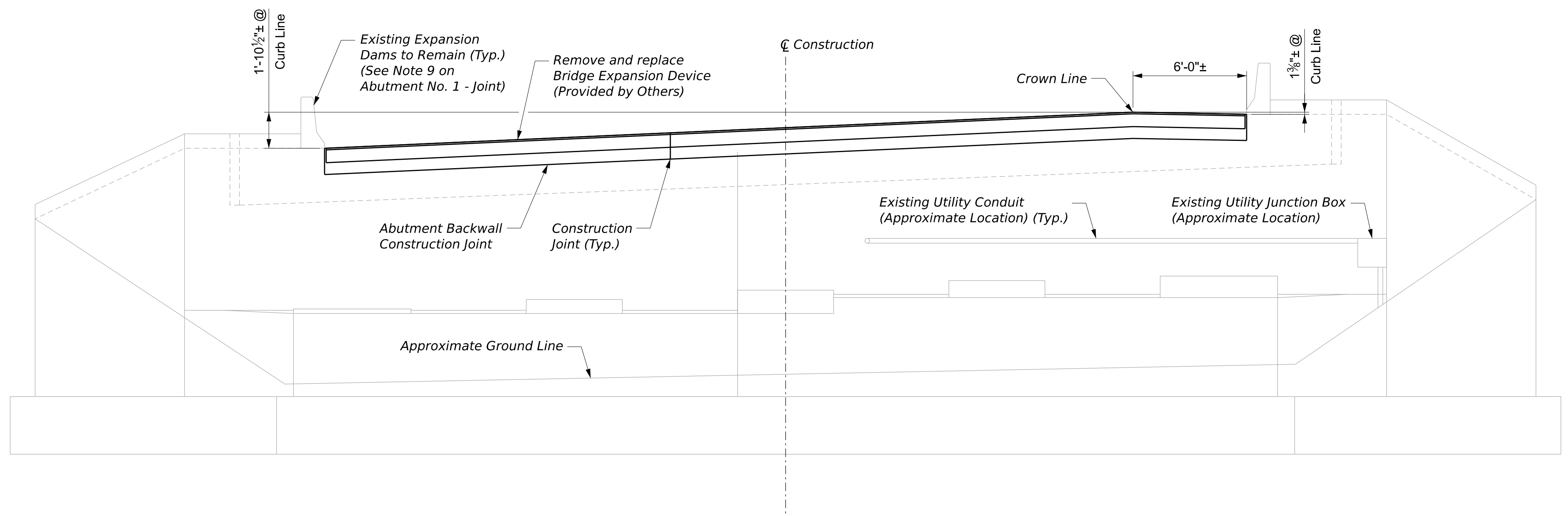
DONALD V. CARTER BRIDGE NO. 1141 CROSSING KENNEBEC RIVER WATERVILLE-WINSLOW
ABUTMENT NO. 1 - TROUGH
SHEET NUMBER <b>15</b> OF 24



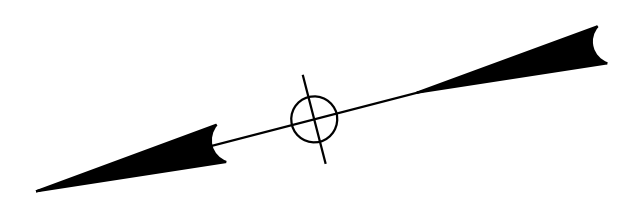
Date: 3/10/2026  
Username: ebeausoleil



**ABUTMENT NO. 2 PLAN**



**ABUTMENT NO. 2 FINGER JOINT ELEVATION**  
 (Fabric Curtain Trough and FRP Downspout not shown for clarity, see next sheet)



STATE OF MAINE  
 DEPARTMENT OF TRANSPORTATION  
 Federal Project No. 2952800  
 WIN 029528.00

PROJ. MANAGER	TRAVIS HAMEL, P.E.	BY	DATE
DESIGN-DETAILED	J. STANDLEY	E. BEAUSOLEIL	03/2026
CHECKED-REVIEWED	R. BRATLEY	A. STEPHENS	03/2026
DESIGN-DETAILED			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

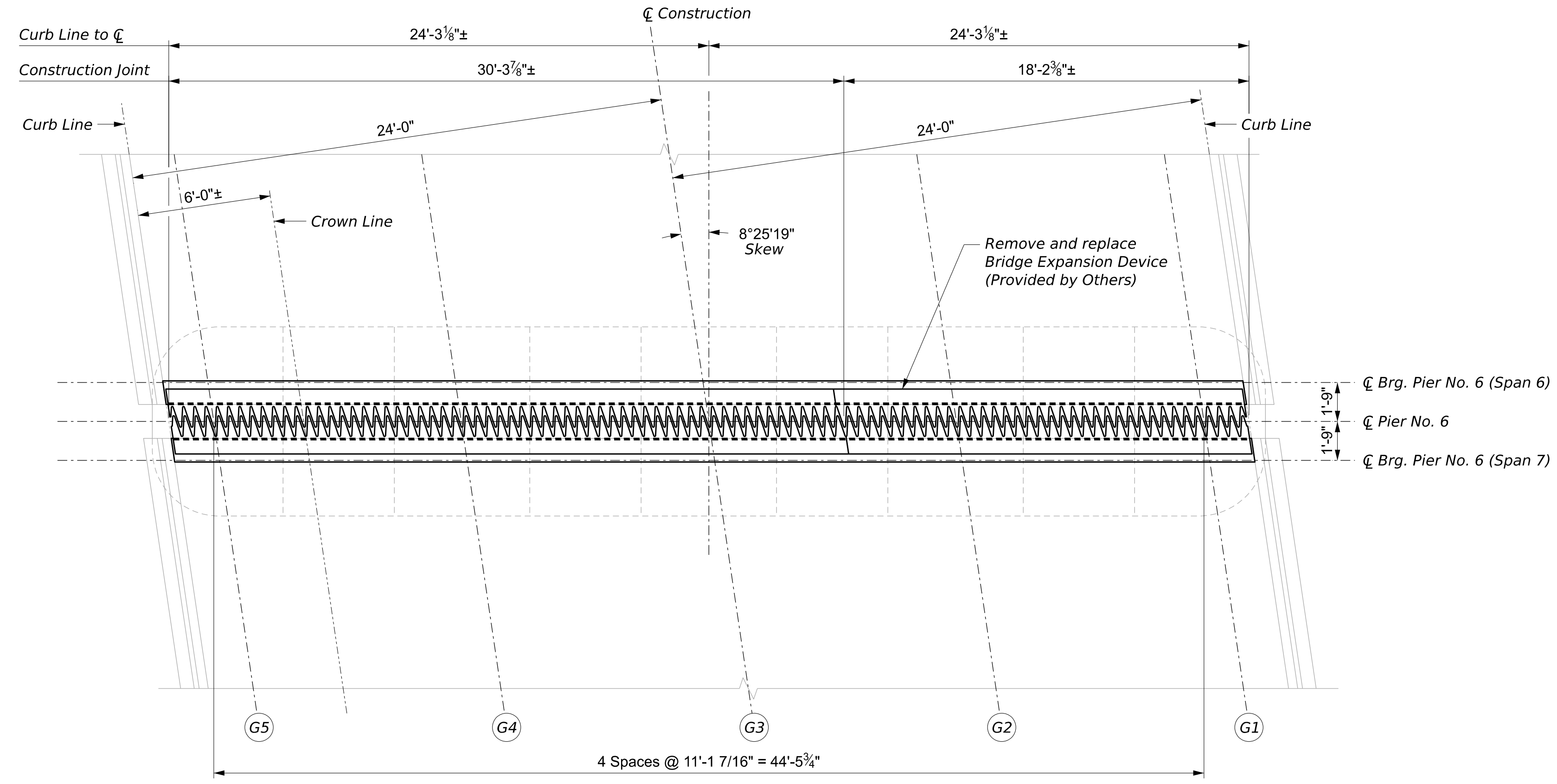
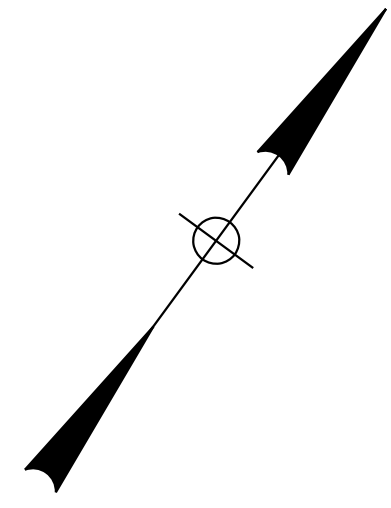
DONALD V. CARTER BRIDGE NO. 1141  
 CROSSING KENNEBEC RIVER  
 WATERVILLE-WINSLOW  
**ABUTMENT NO. 2 - JOINT**

SHEET NUMBER  
**16**  
 OF 24

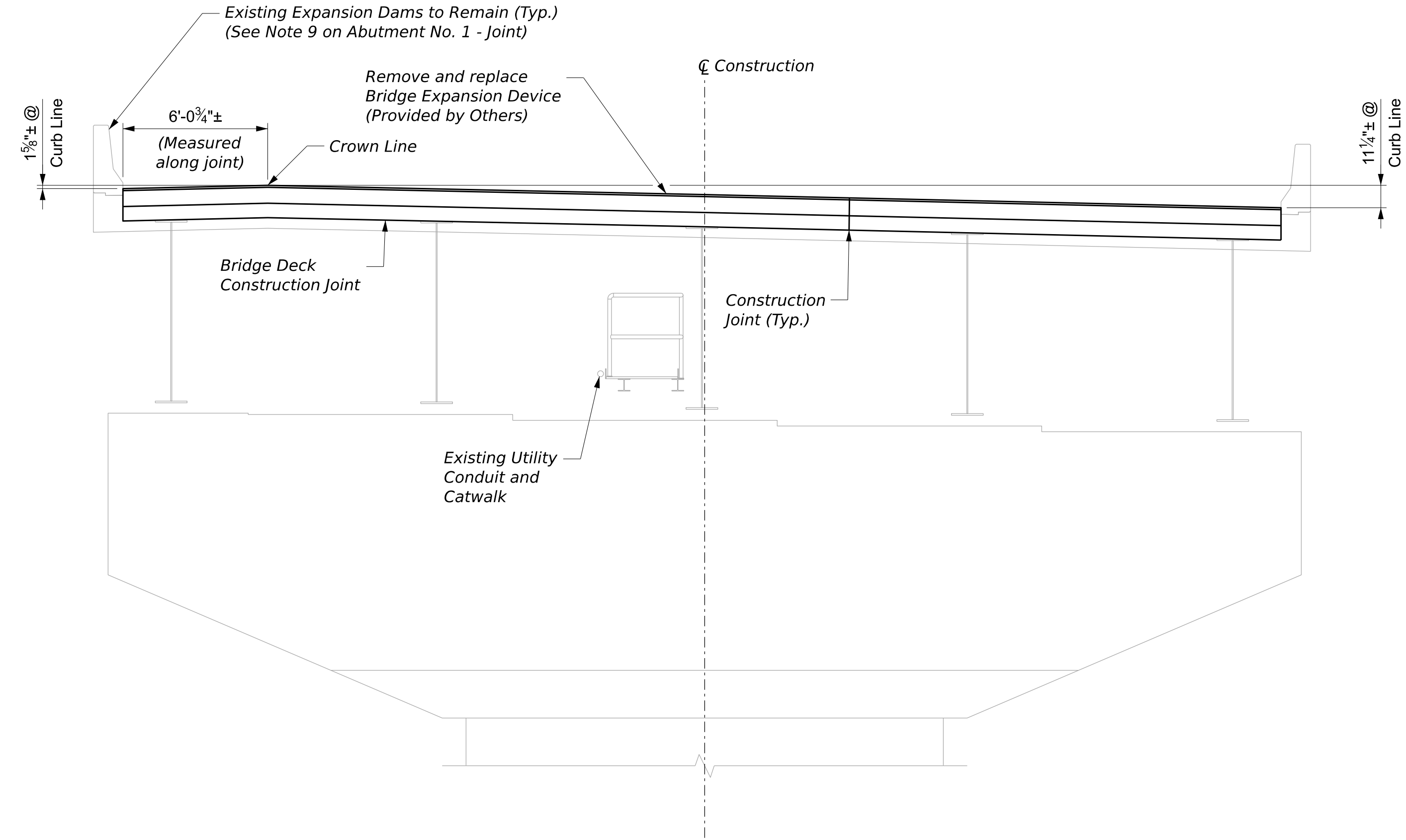


Username: ebeausoleil Date: 3/10/2026





PIER NO. 6 PLAN



PIER NO. 6 FINGER JOINT ELEVATION  
(Looking Downstation)

STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION  
Federal Project No. 2952800  
WIN 029528.00

PROJ. MANAGER	TRAVIS HAMEL, P.E.	DATE
DESIGN-DETAILED	N. BARET	03/2026
CHECKED/REVIEWED	R. BRATLEY	03/2026
DESIGN-DETAILED		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

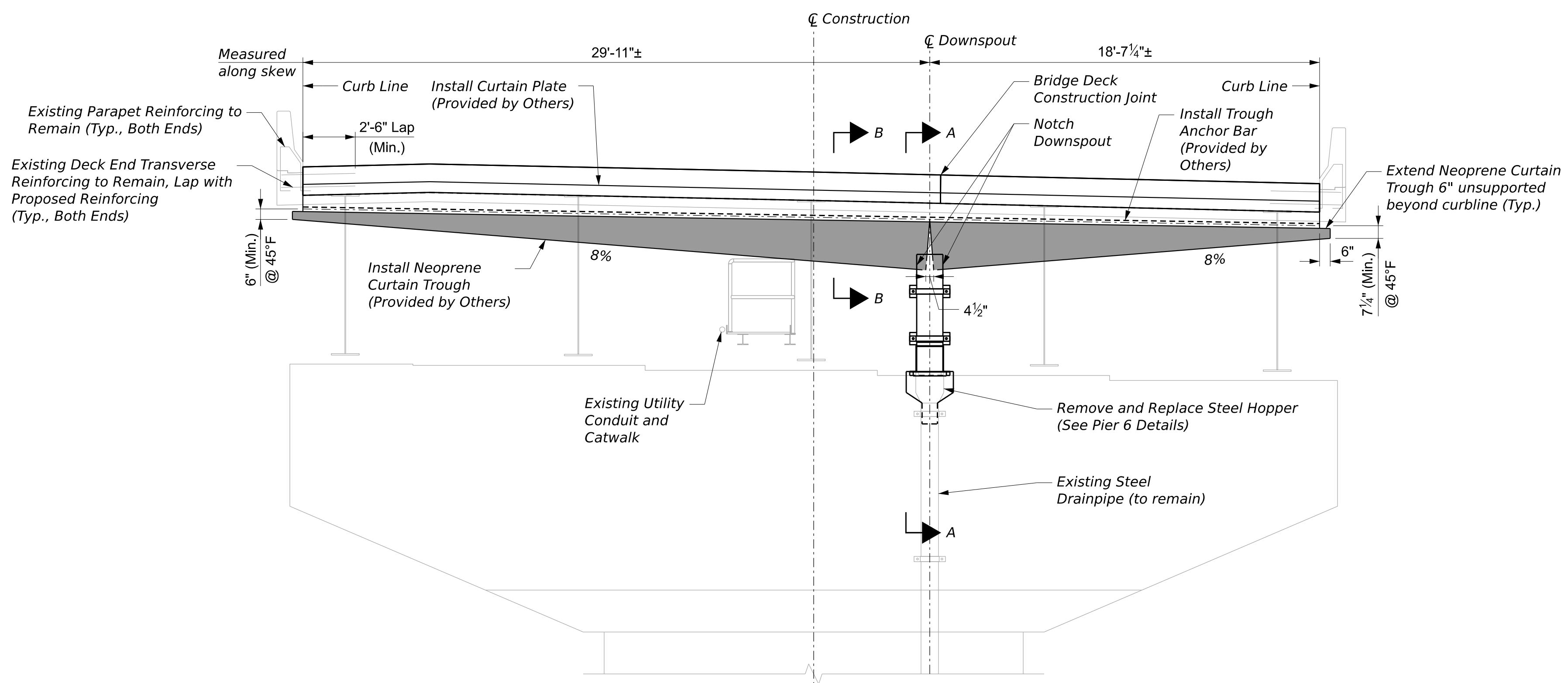
DONALD V. CARTER BRIDGE NO. 1141  
CROSSING KENNEBEC RIVER  
WATERVILLE-WINSLOW  
PIER NO. 6 - JOINT

SHEET NUMBER

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OF 24

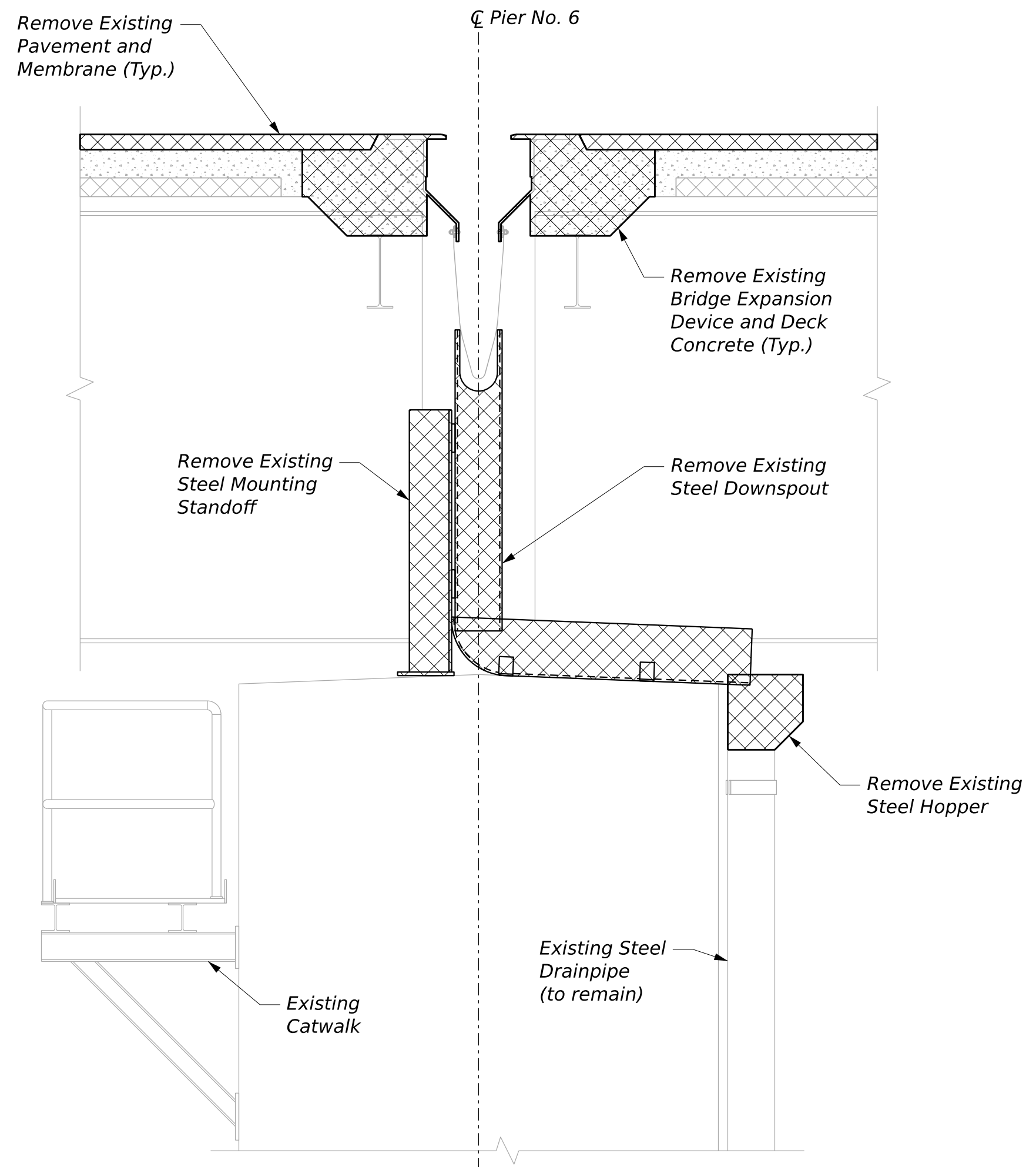




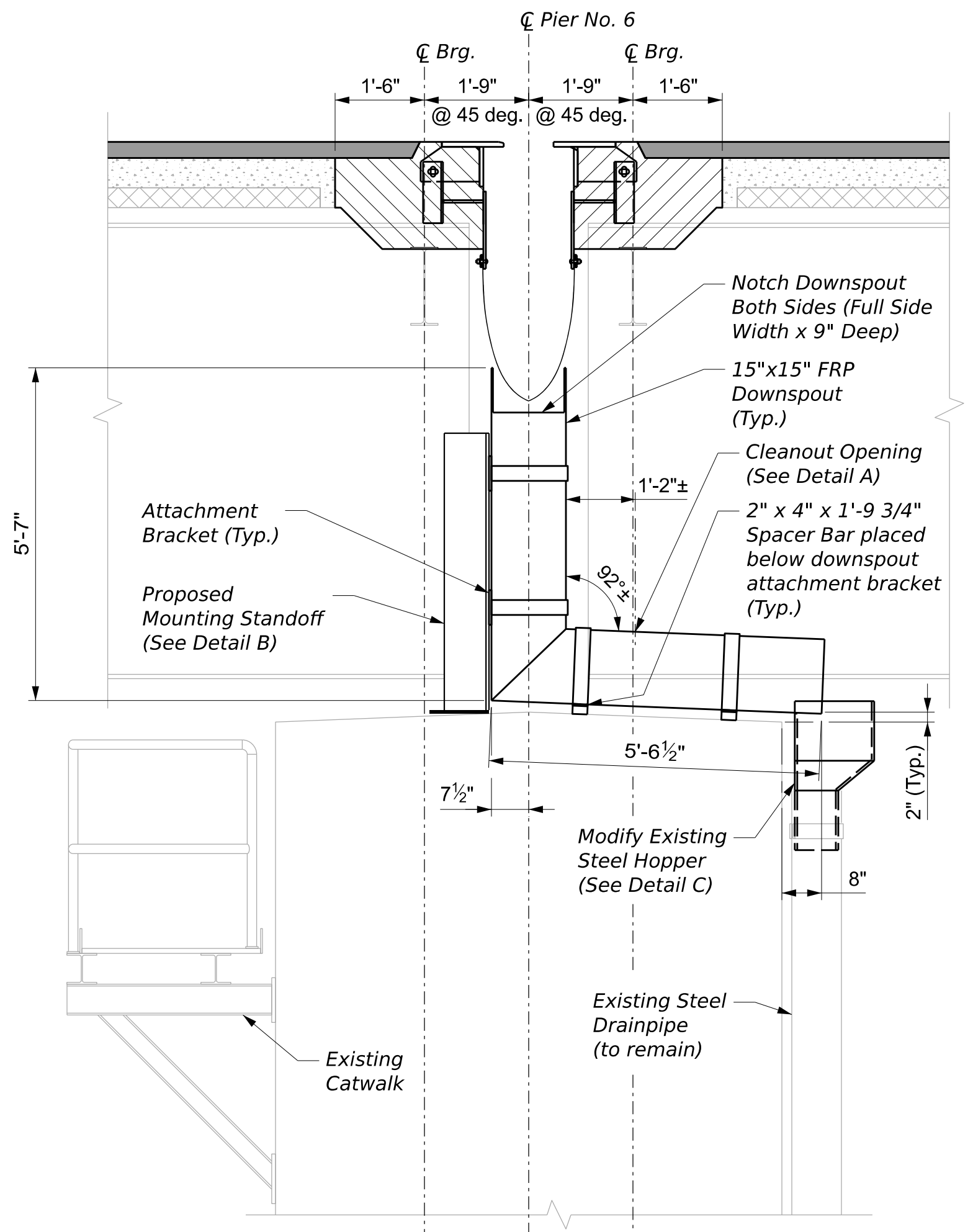
**PIER ACCESS NOTES:**  
 1. Pier 6 work shall be completed using access from the topside of the bridge. Ground level access is prohibited in CSX Right of Way.

**PIER NO. 6 CURTAIN TROUGH ELEVATION**

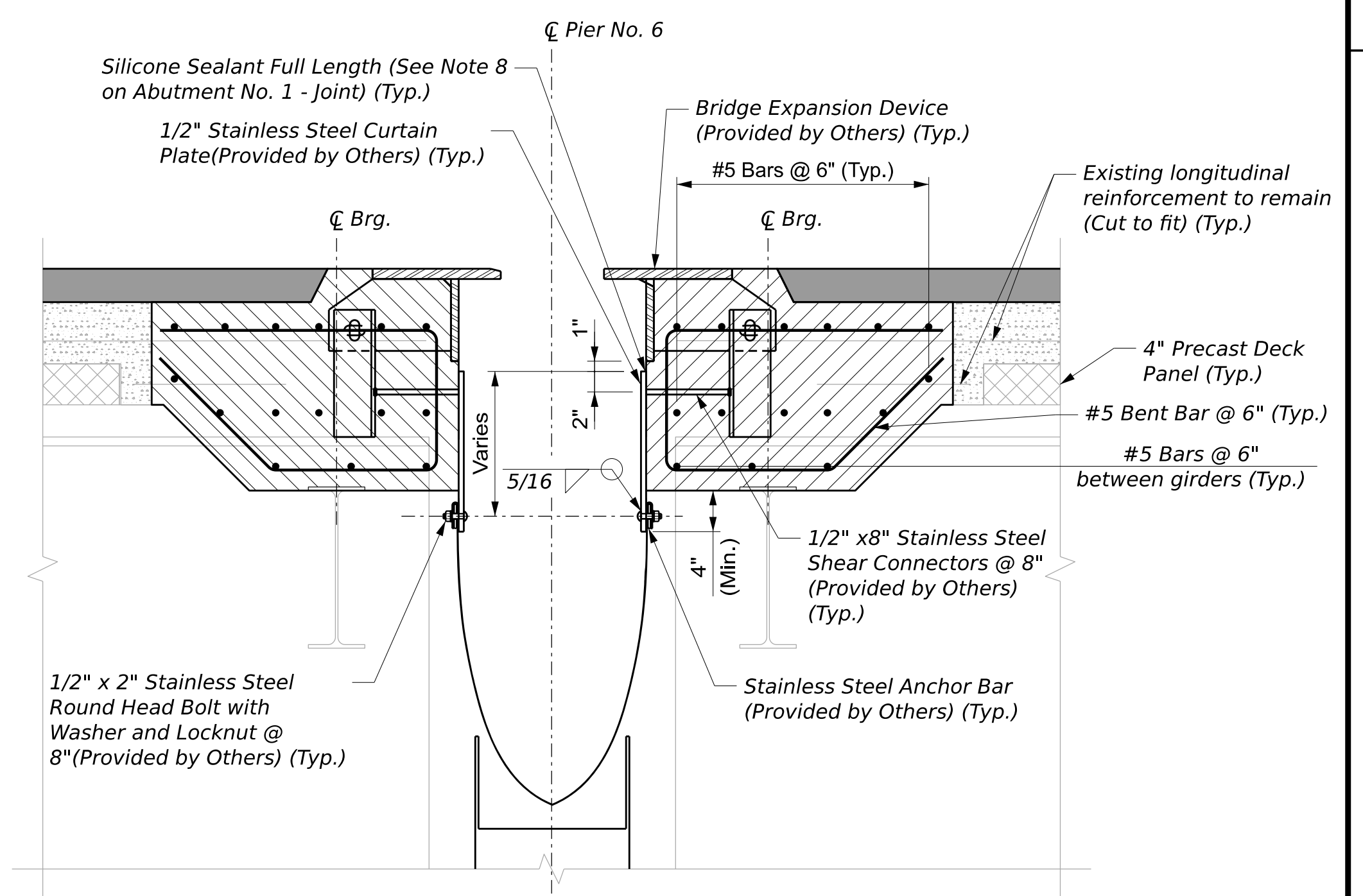
(Looking Downstation)  
 (Pier cap catwalk not shown for clarity)



EXISTING DOWNSPOUT REMOVAL DETAIL



SECTION A-A



SECTION B-B

STATE OF MAINE  
 DEPARTMENT OF TRANSPORTATION  
 Federal Project No. 2952800  
 WIN 029528.00

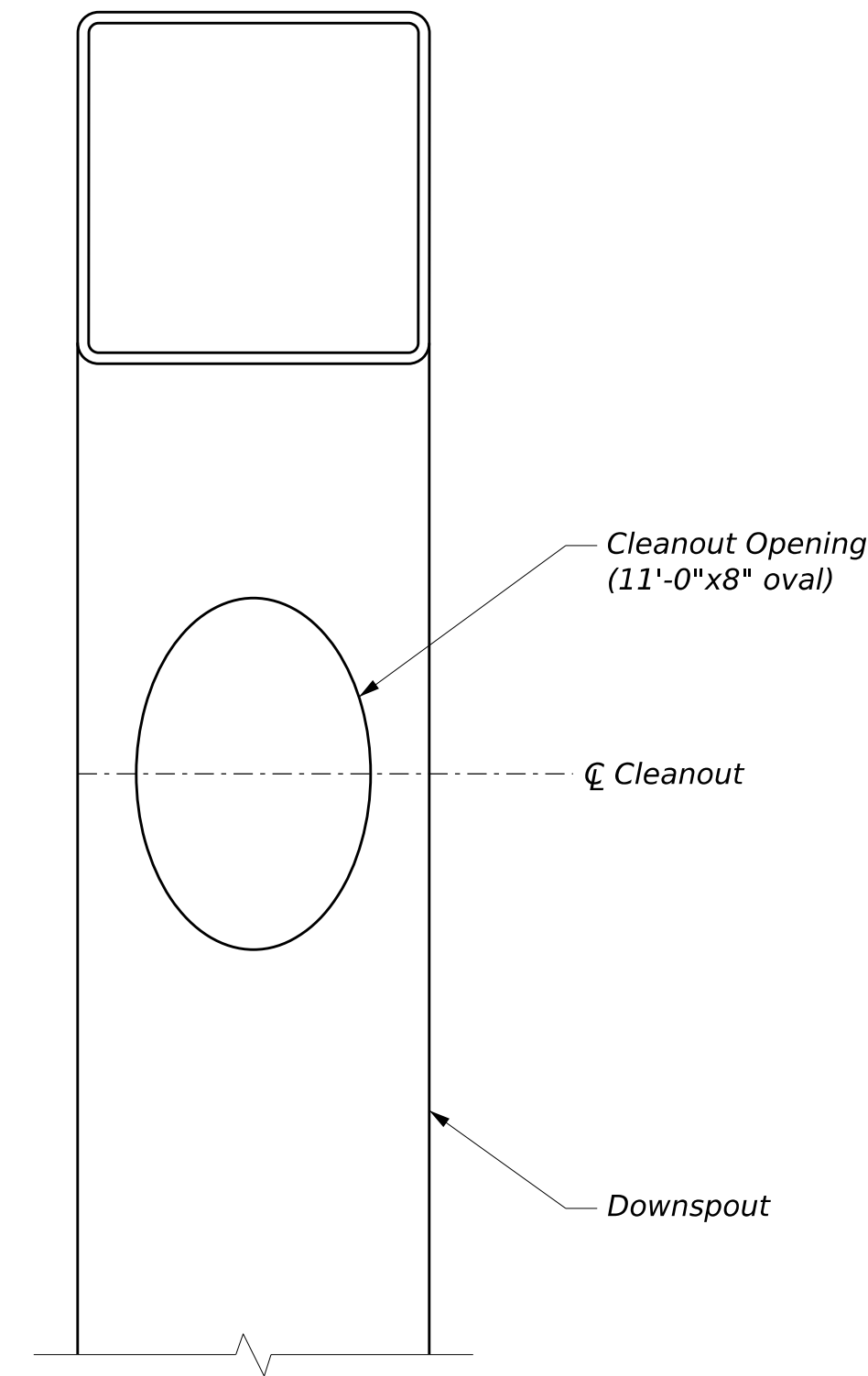
DATE	BY	REVISIONS
03/2026	E. BEAUSOLEIL	DESIGN-DETAILED
03/2026	A. STEPHENS	CHECKED/REVIEWED
		DESIGN-DETAILED
		DESIGN-DETAILED
		REVISIONS 1
		REVISIONS 2
		REVISIONS 3
		REVISIONS 4
		FIELD CHANGES

DONALD V. CARTER BRIDGE NO. 1141  
 CROSSING KENNEBEC RIVER  
 WATERVILLE-WINSLOW  
 PIER NO. 6 - TROUGH

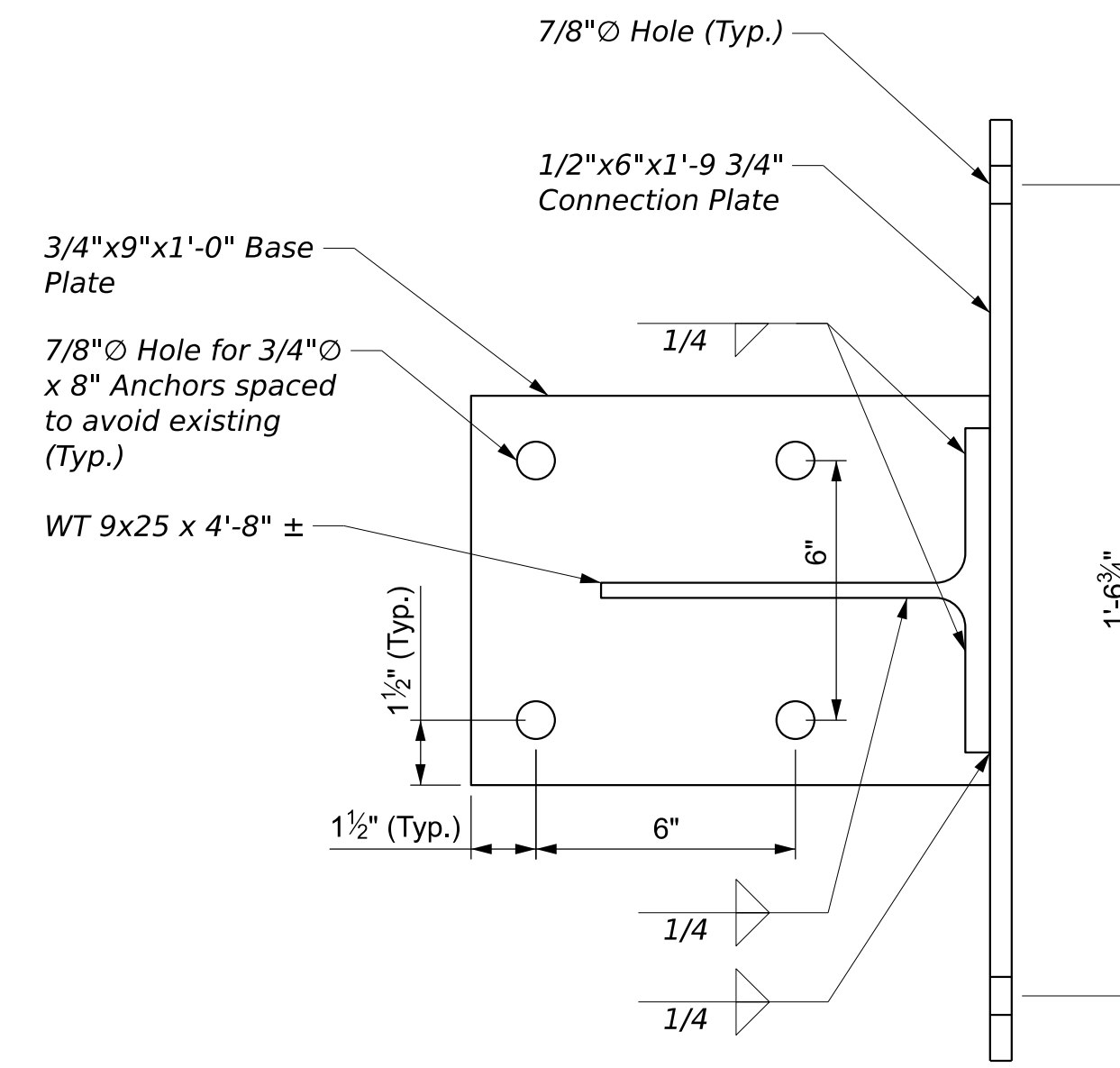
SHEET NUMBER

19  
 OF 24

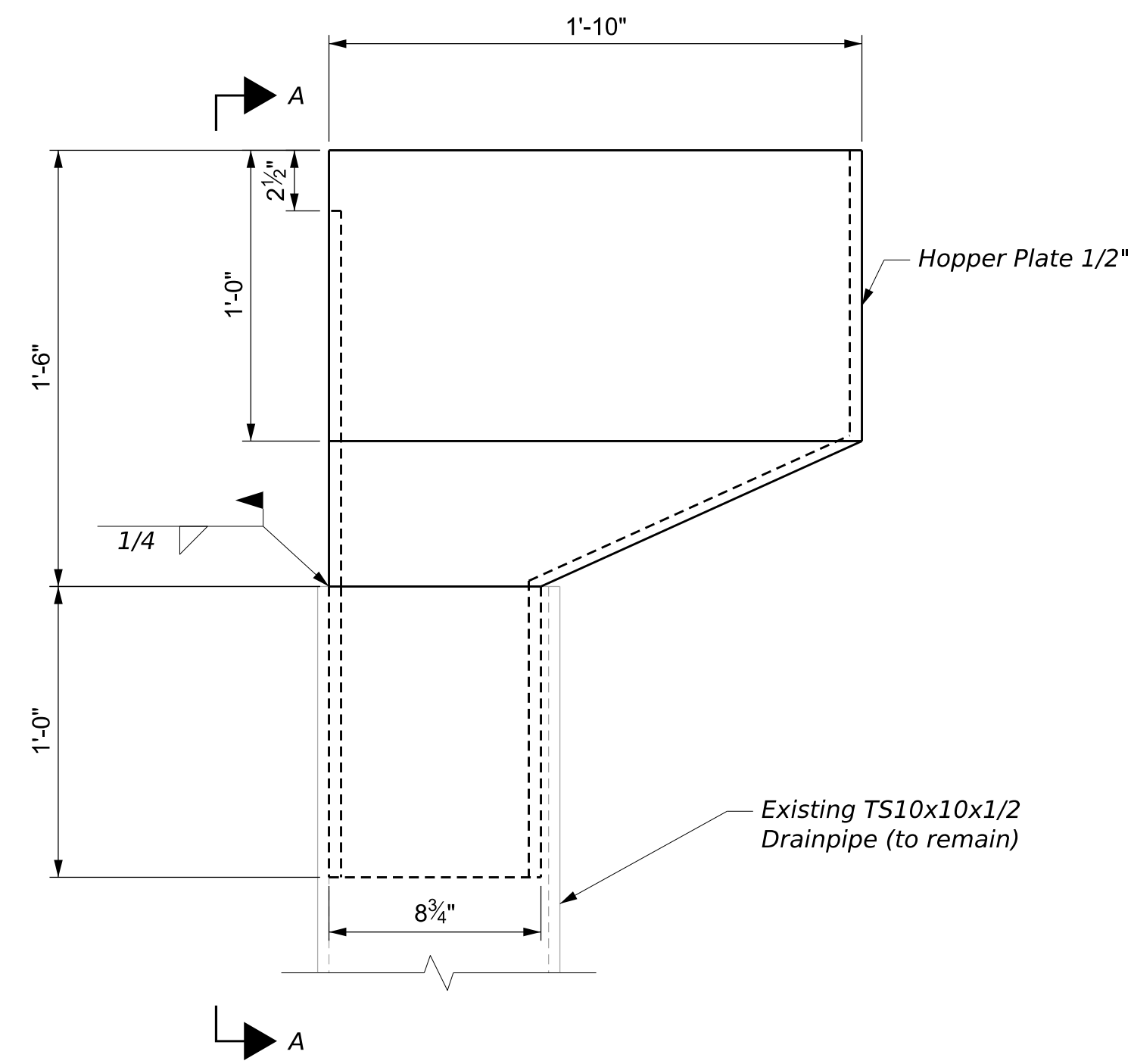




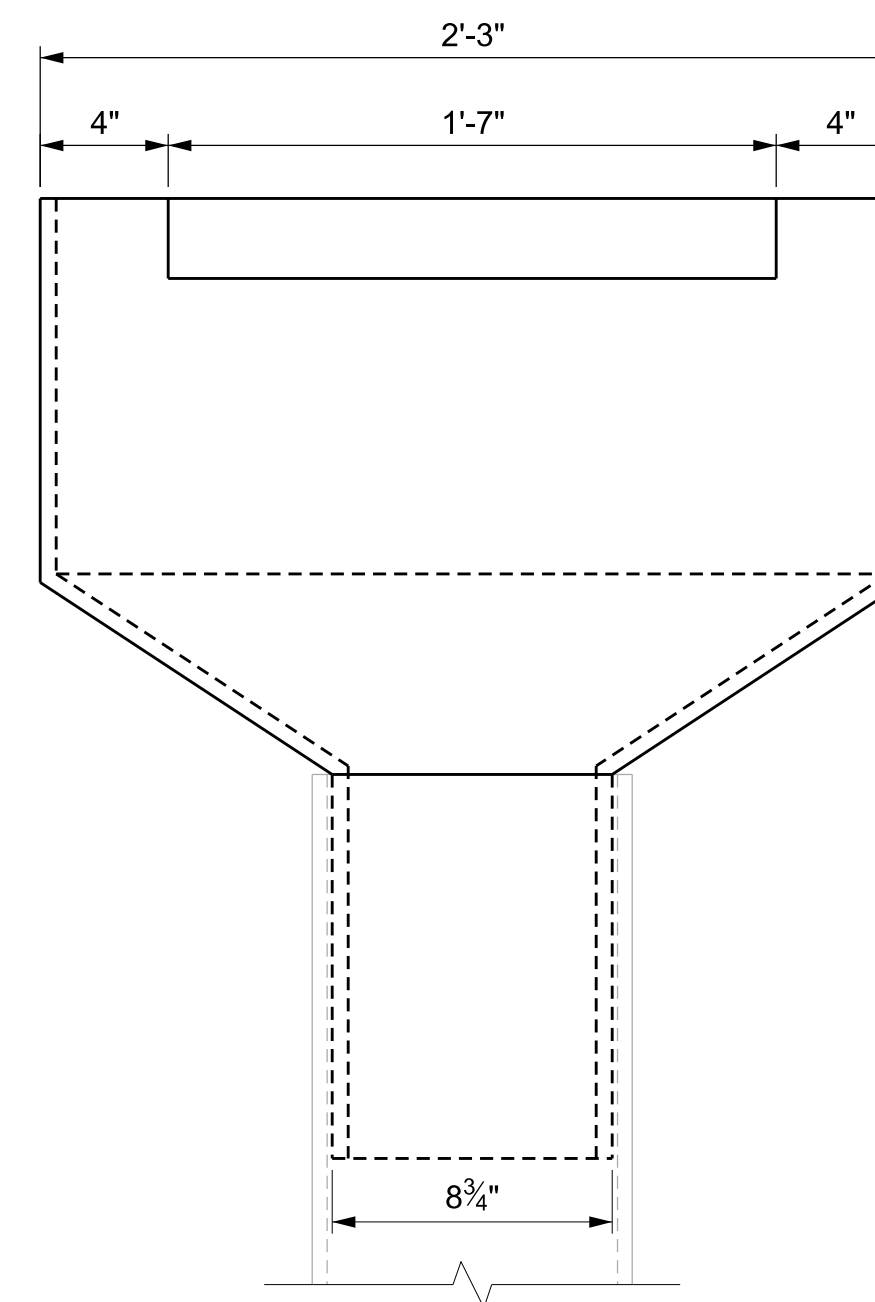
**DETAIL A**



**DETAIL B**  
(Proposed Mounting Standoff)



**DETAIL C**  
(Proposed Hopper)



**Section A-A**

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
Federal Project No. 2952800
WIN 029528.00

PROJ. MANAGER	TRAVIS HAMEL, P.E.	BY	DATE
DESIGN-DETAILED	N. BARET	E. BEAUSOLEIL	03/2026
CHECKED-REVIEWED	R. BRATLEY	A. STEPHENS	03/2026
DESIGN-DETAILED			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

DONALD V. CARTER BRIDGE NO. 1141
CROSSING KENNEBEC RIVER
WATERVILLE-WINSLOW
PIER NO. 6 - DETAILS

SHEET NUMBER
20
OF 24

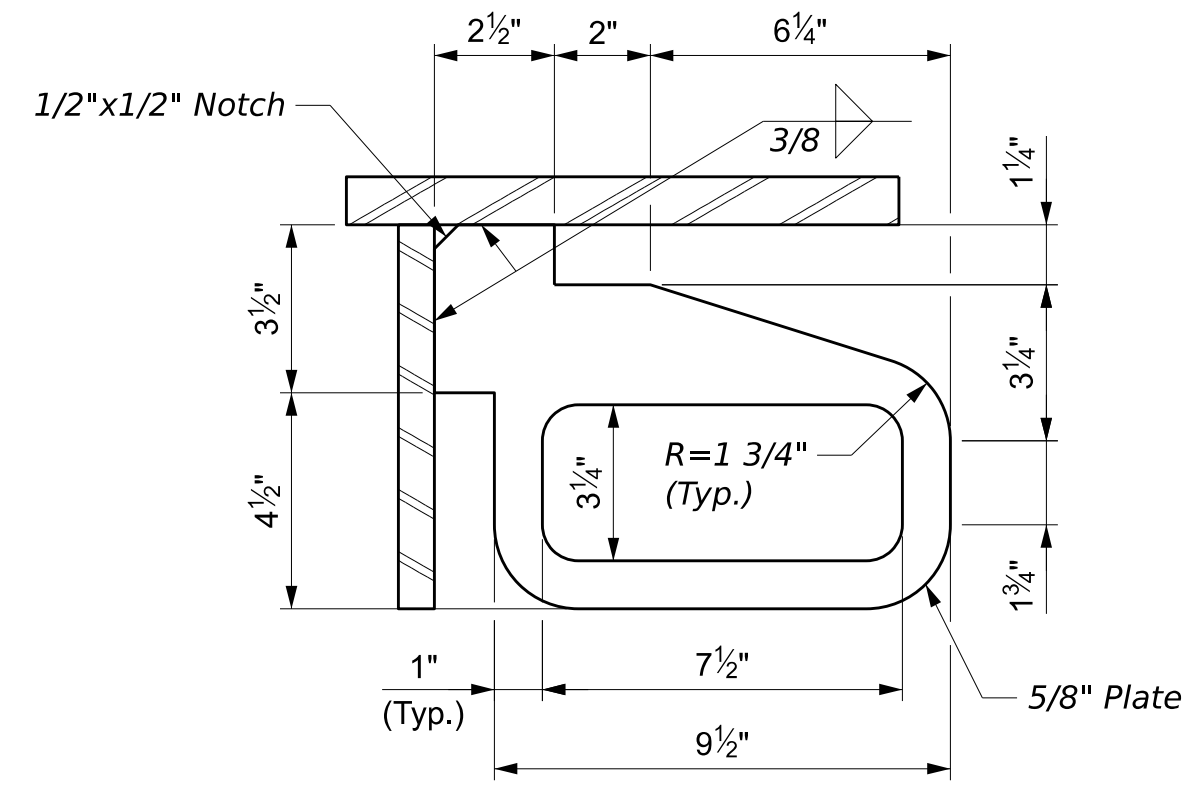


**DOWNSPOUT NOTES:**

- FRP Downspouts shall be designed and detailed based on the dimensions for the downspouts shown, and in accordance with Special Provisions Section 521, Downspout Modifications.
- The exact position of the downspouts shall be determined in the field and shall be coordinated with geometry of trough.
- All plates and bars shall conform to AASHTO M270 Grade 36.
- Brackets shall be galvanized in accordance with AASHTO M111 (ASTM 123) after fabrication.
- All rods and related hardware shall be ASTM A307 and shall be galvanized in accordance with ASTM (AASHTO M232).

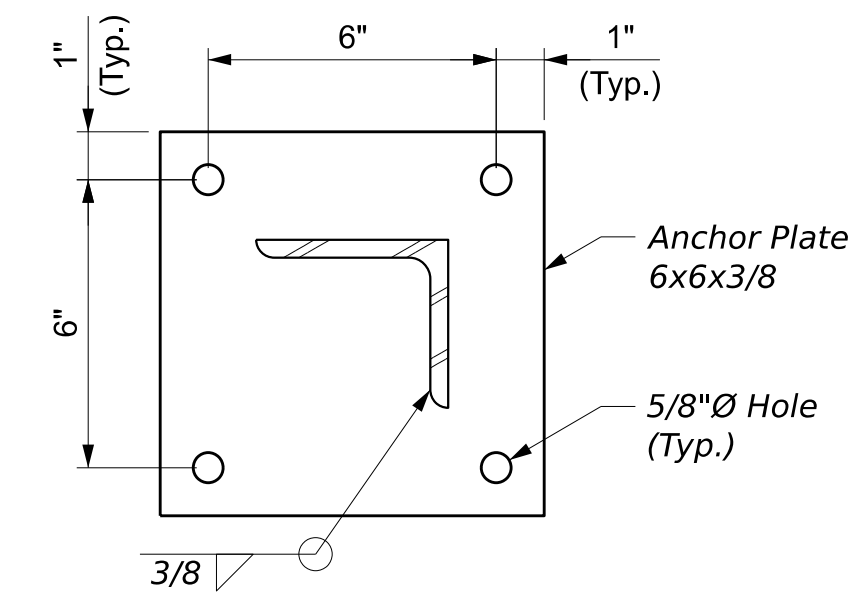
**CURTAIN TROUGH NOTE:**

- Trough shall maintain a minimum clearance of 3" from utility conduits and sheathing when the bridge is in its fully expanded (maximum temperature) condition.

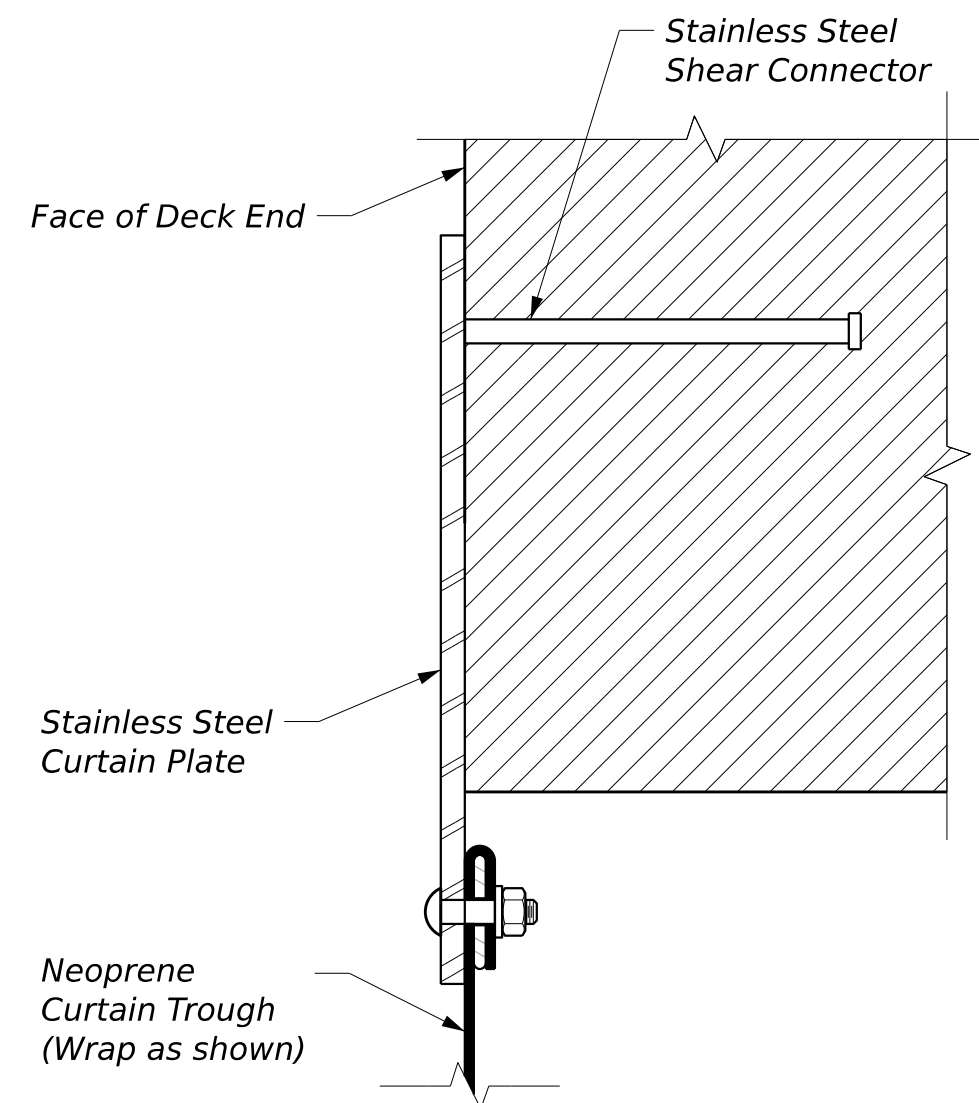


**LOOP ANCHOR DETAIL**

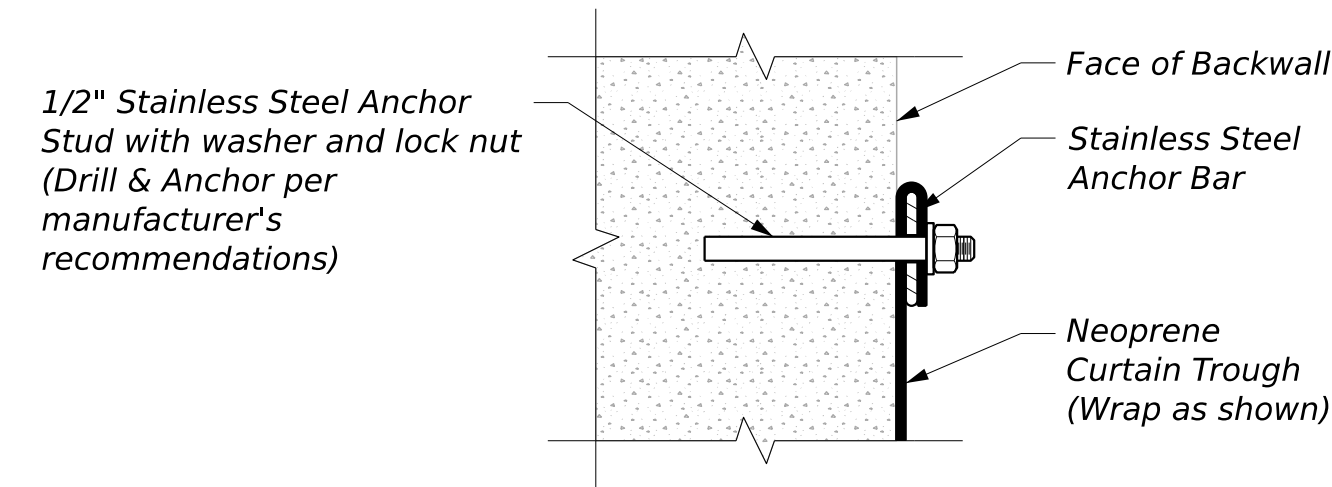
NOTE: Interior Radius = 3/4" (Typ.)



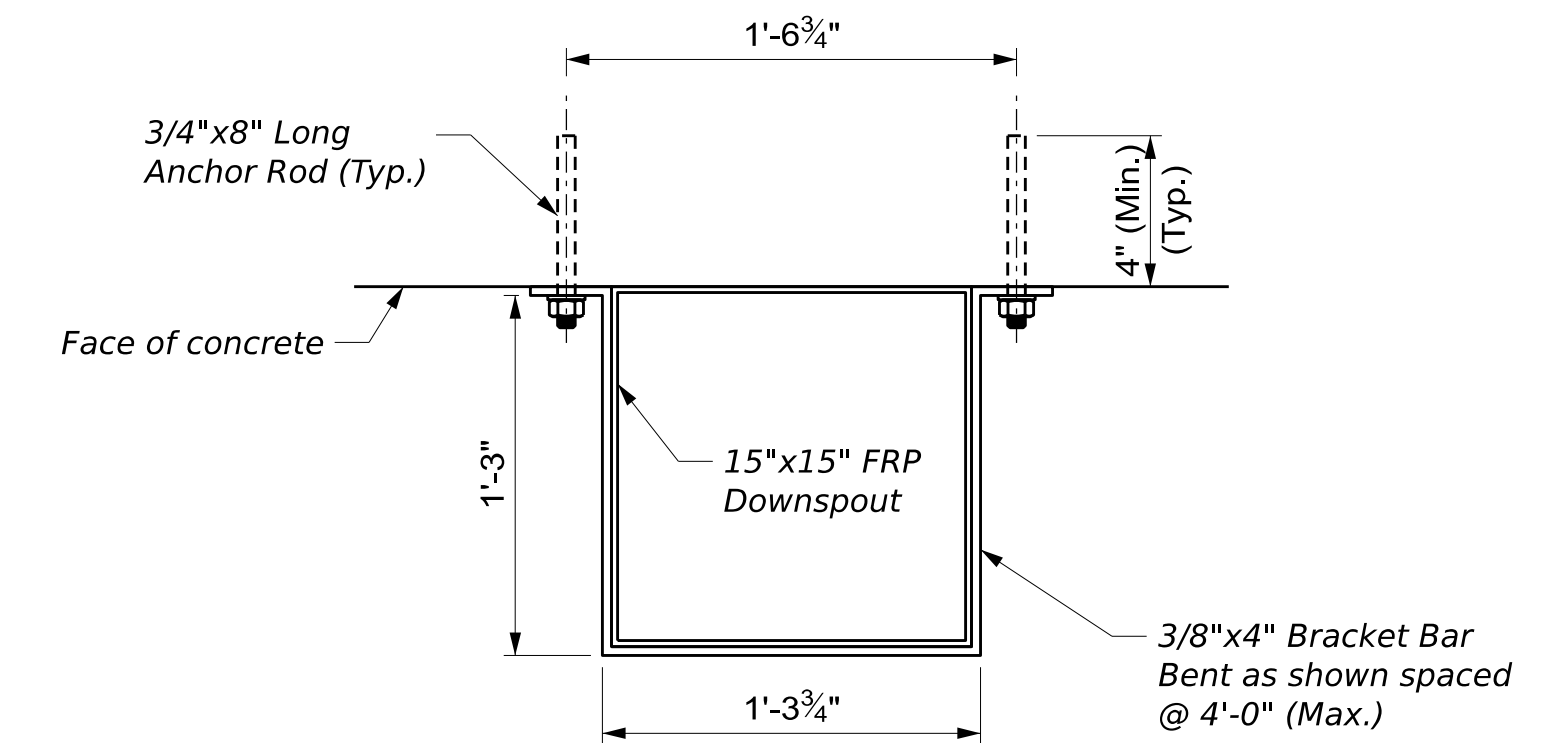
**ANCHOR PLATE DETAIL**



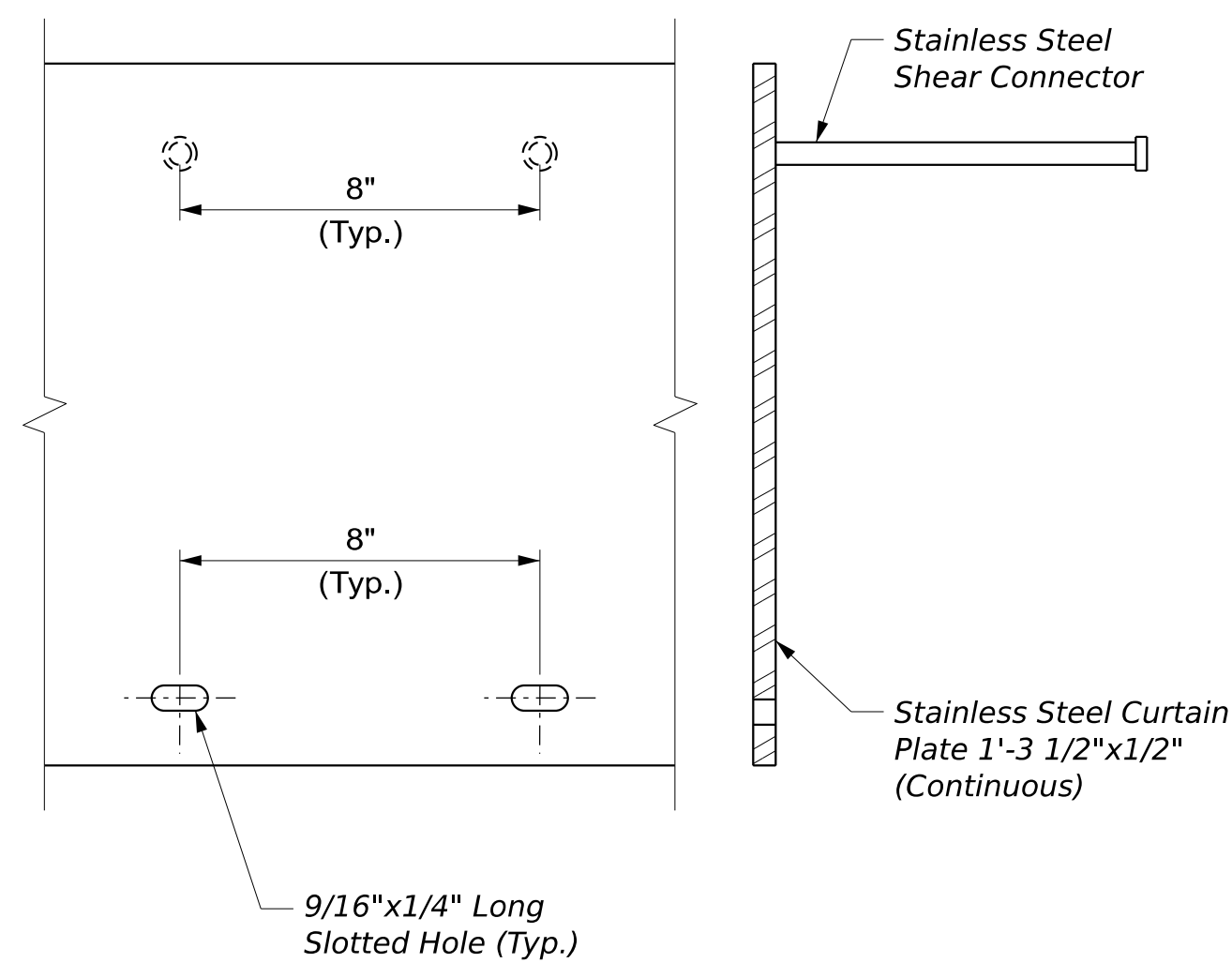
**TROUGH ANCHOR DETAIL - DECK END**



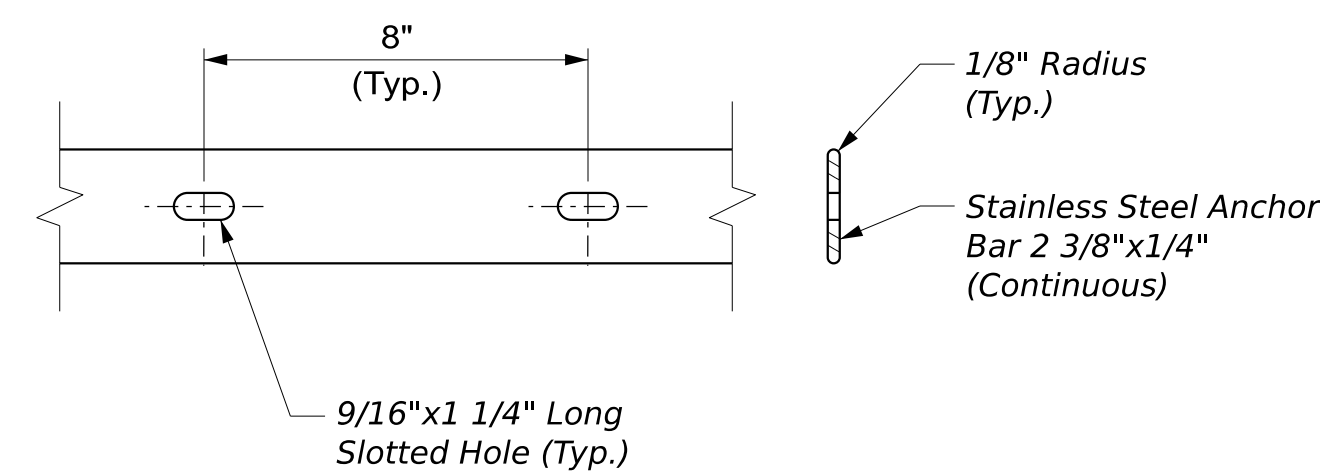
**TROUGH ANCHOR DETAIL - BACKWALL**



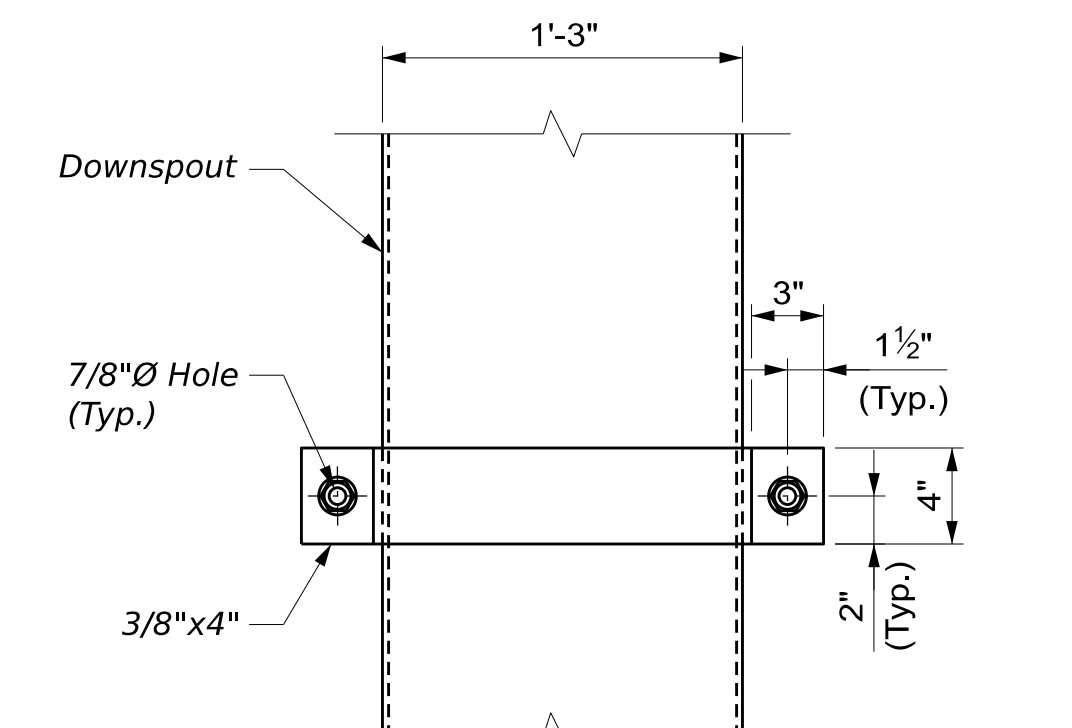
**DOWNSPOUT ATTACHMENT BRACKET DETAIL**



**CURTAIN PLATE**



**ANCHOR BAR**



**ELEVATION VIEW OF ATTACHMENT BRACKET**

STATE OF MAINE		DEPARTMENT OF TRANSPORTATION		Federal Project No. 2952800		WIN 029528.00	
PROJ. MANAGER	TRAVIS HAMEL, P.E.	BY	E. BEAUSOLEIL	DATE	03/2026	SIGNATURE	
DESIGNER/DETAILER	J. STANDLEY	CHECKED/REVIEWED	R. BRATLEY	DATE	03/2026	P.E. NUMBER	
DESIGN/DETAILS		DESIGN/DETAILS		DATE		DATE	
REVISIONS 1		REVISIONS 2		DATE		DATE	
REVISIONS 3		REVISIONS 4		DATE		DATE	
FIELD CHANGES							

DONALD V. CARTER BRIDGE NO. 1141  
CROSSING KENNEBEC RIVER  
WATERVILLE-WINSLOW

**MISCELLANEOUS DETAILS**

SHEET NUMBER  
**21**  
OF 24

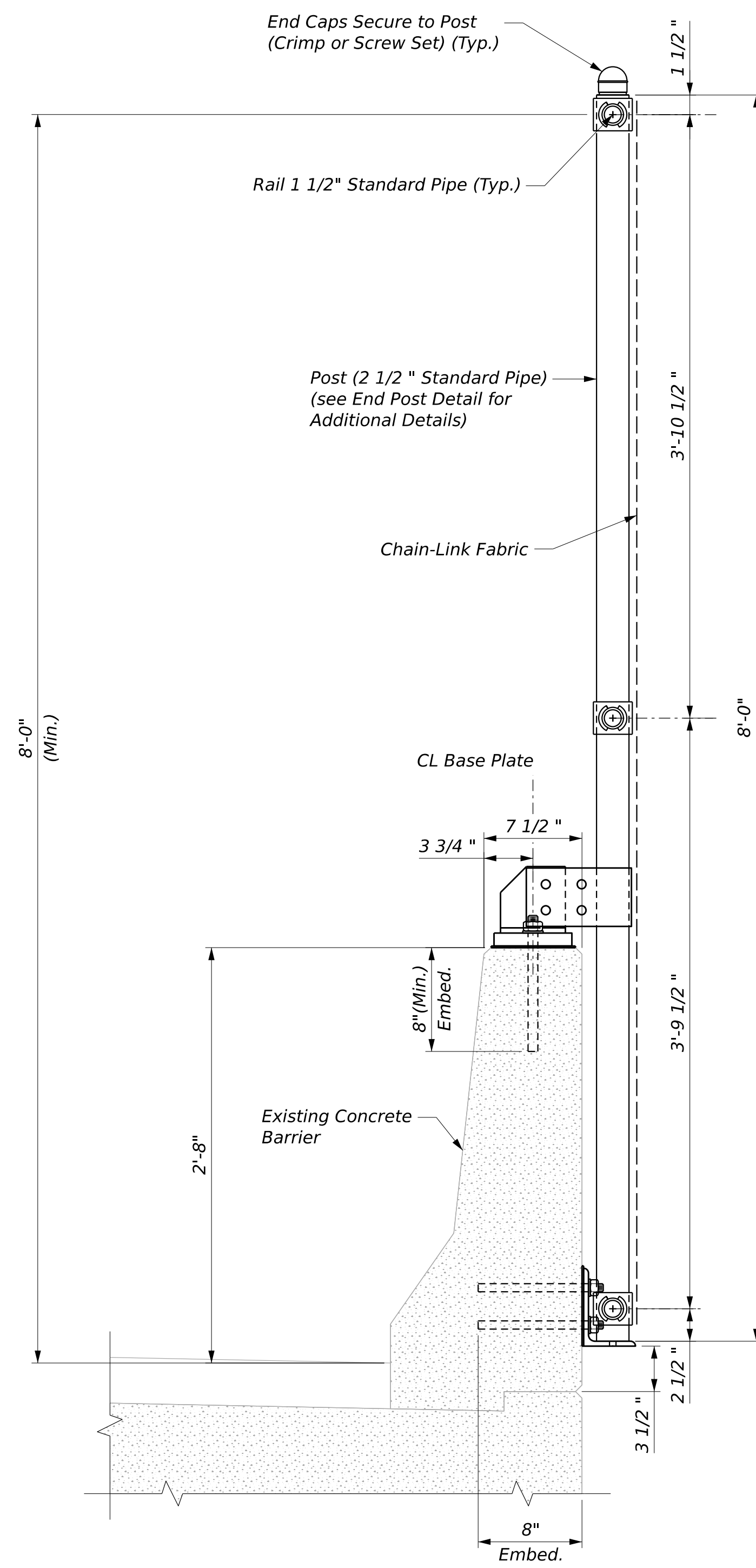


Username: ebeausoleil Date: 3/10/2026

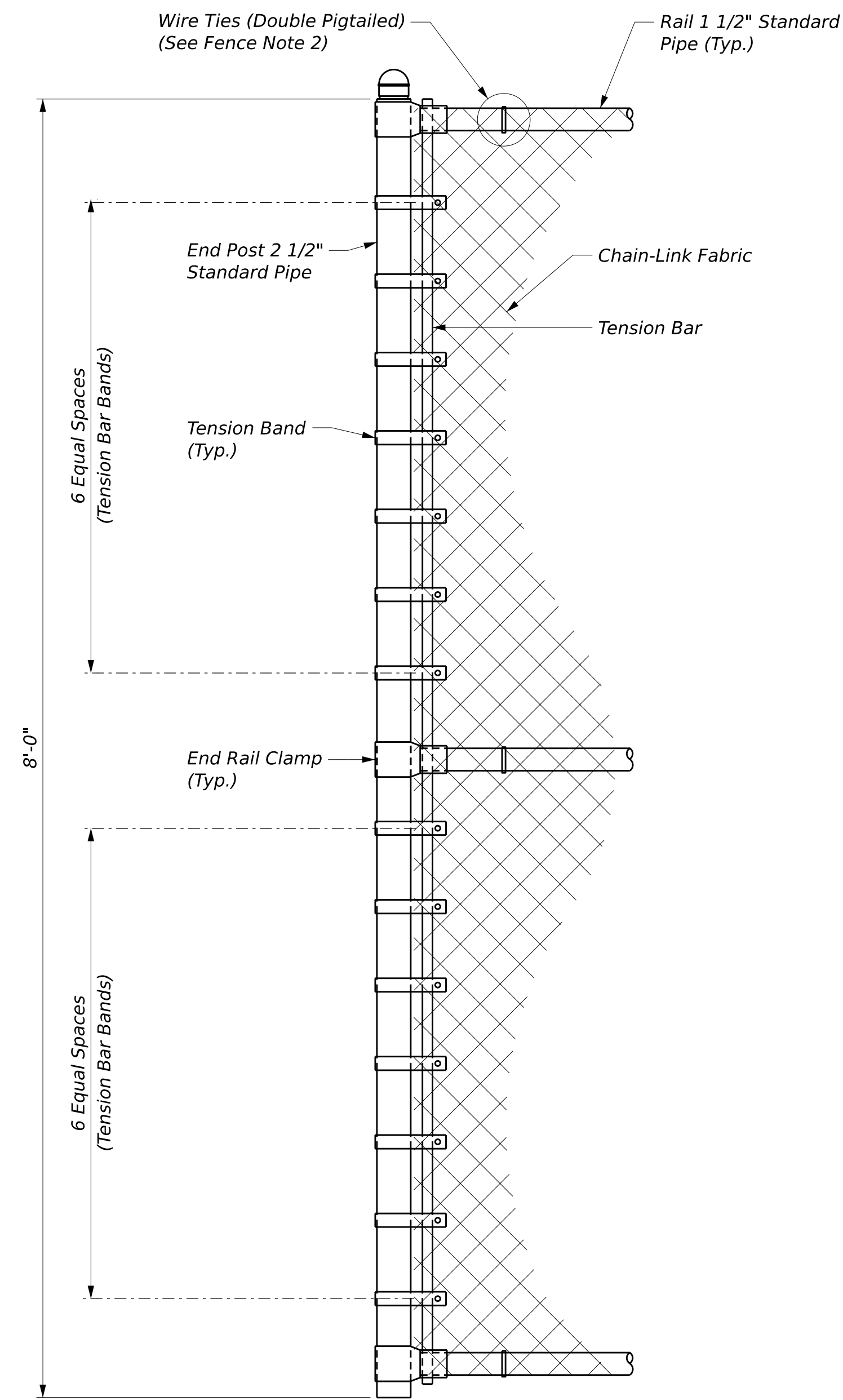
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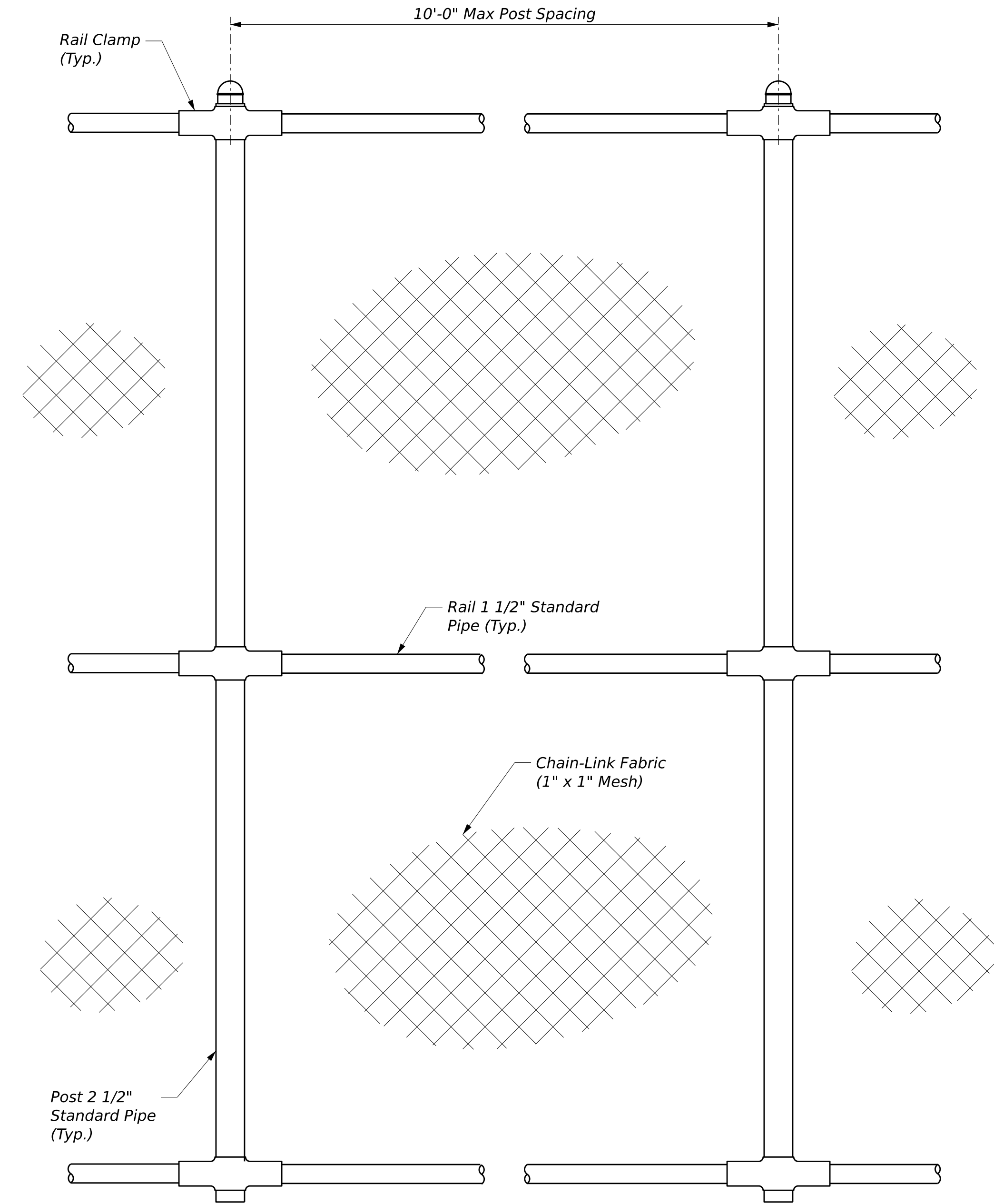
**FENCE NOTES:**  
1. Refer to sheet Fence Details 2 for notes and standard details.



CONNECTION DETAIL - SECURITY FENCE



END POST DETAIL - SECURITY FENCE



ELEVATION - SECURITY FENCE

STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION  
Federal Project No. 2952800  
WIN 029528.00

DATE	BY	SIGNATURE	P.E. NUMBER	DATE
03/2026	E. BEAUSOLEIL			
03/2026	J.A. STEPHENS			

PROJ. MANAGER: TRAVIS HAMEL, P.E.  
DESIGNER: N. BARET  
CHECKED: R. BRATLEY  
DESIGN: R. BRATLEY  
REVISIONS 1  
REVISIONS 2  
REVISIONS 3  
REVISIONS 4  
FIELD CHANGES

DONALD V. CARTER BRIDGE NO. 1141  
CROSSING KENNEBEC RIVER  
WATERVILLE-WINSLOW

**FENCE DETAILS 1**

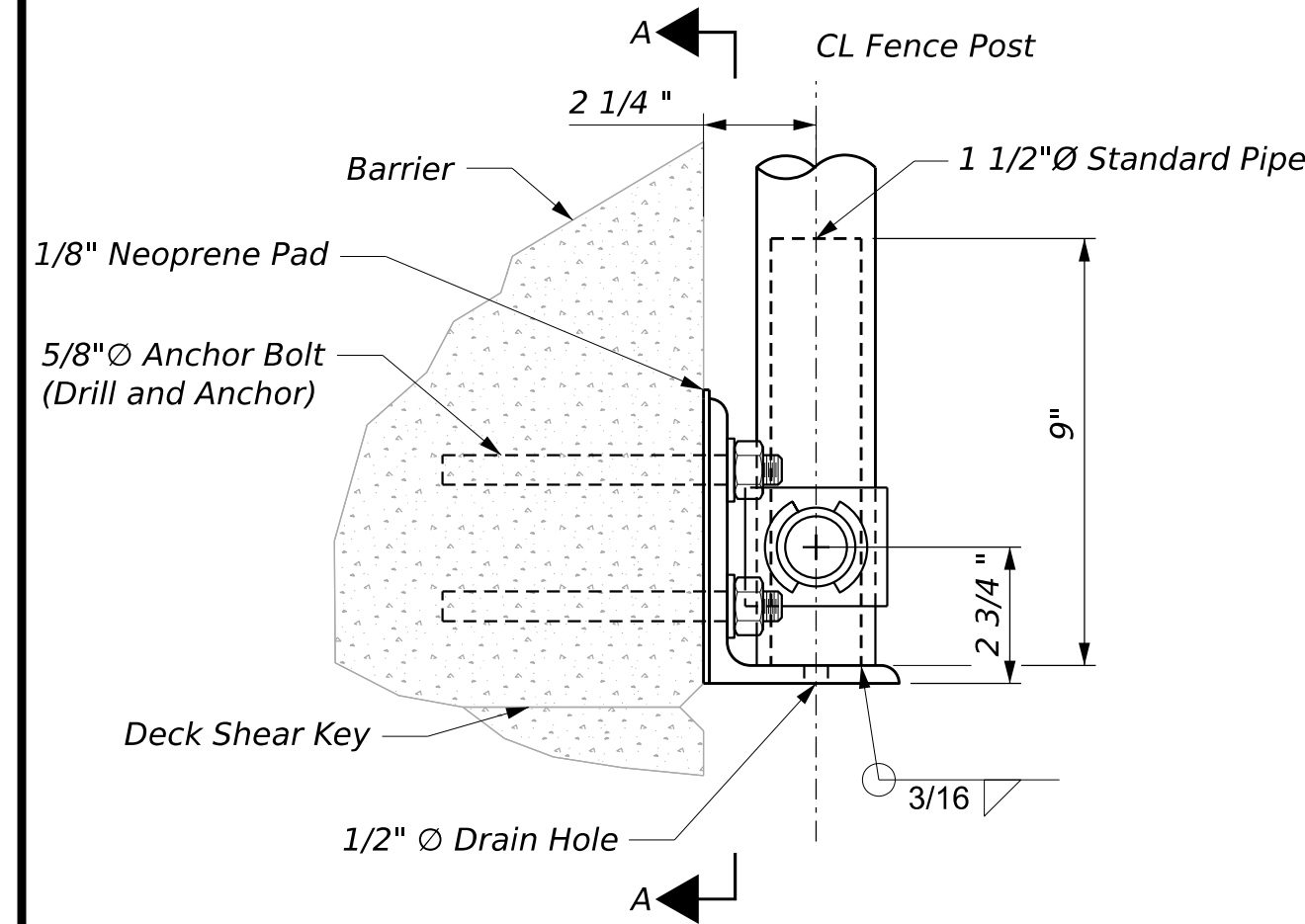
SHEET NUMBER  
**22**  
OF 24



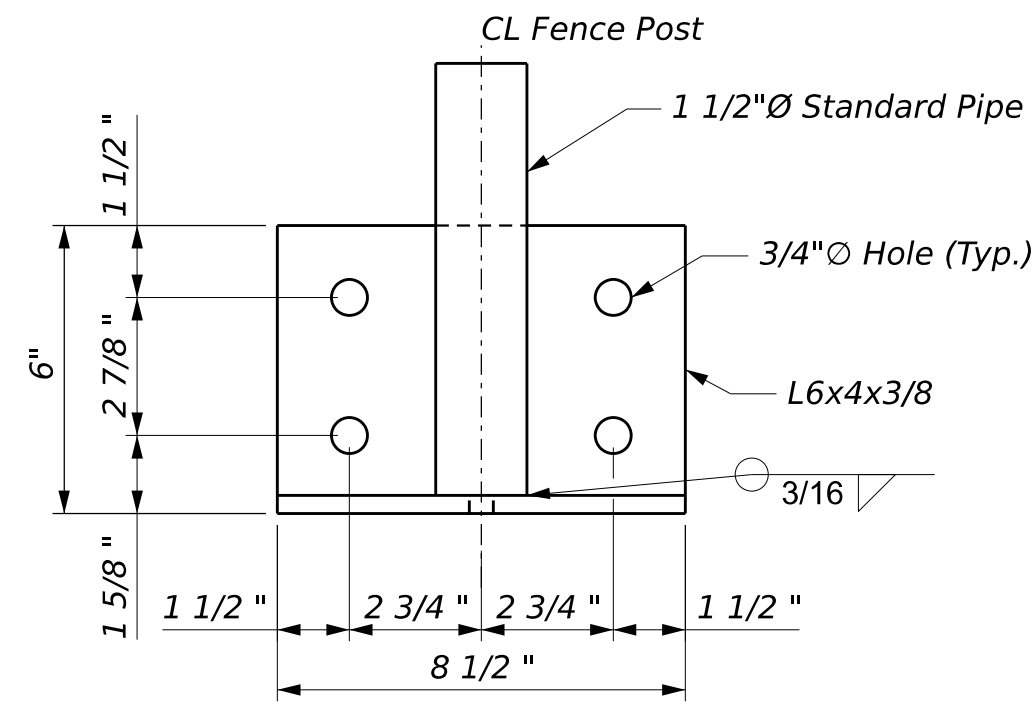
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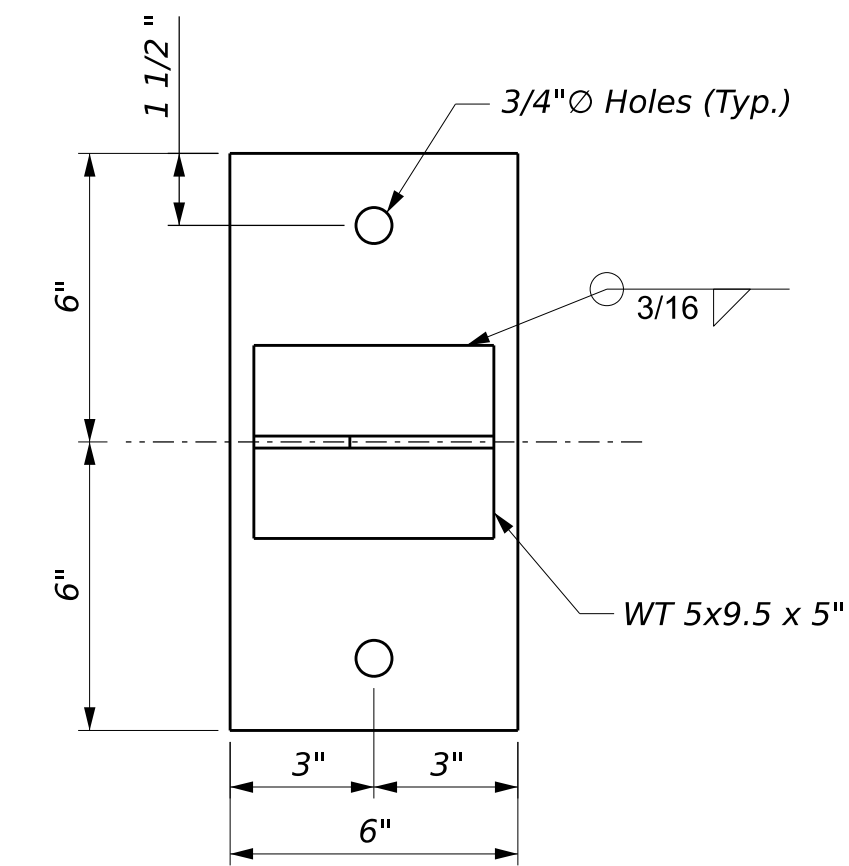
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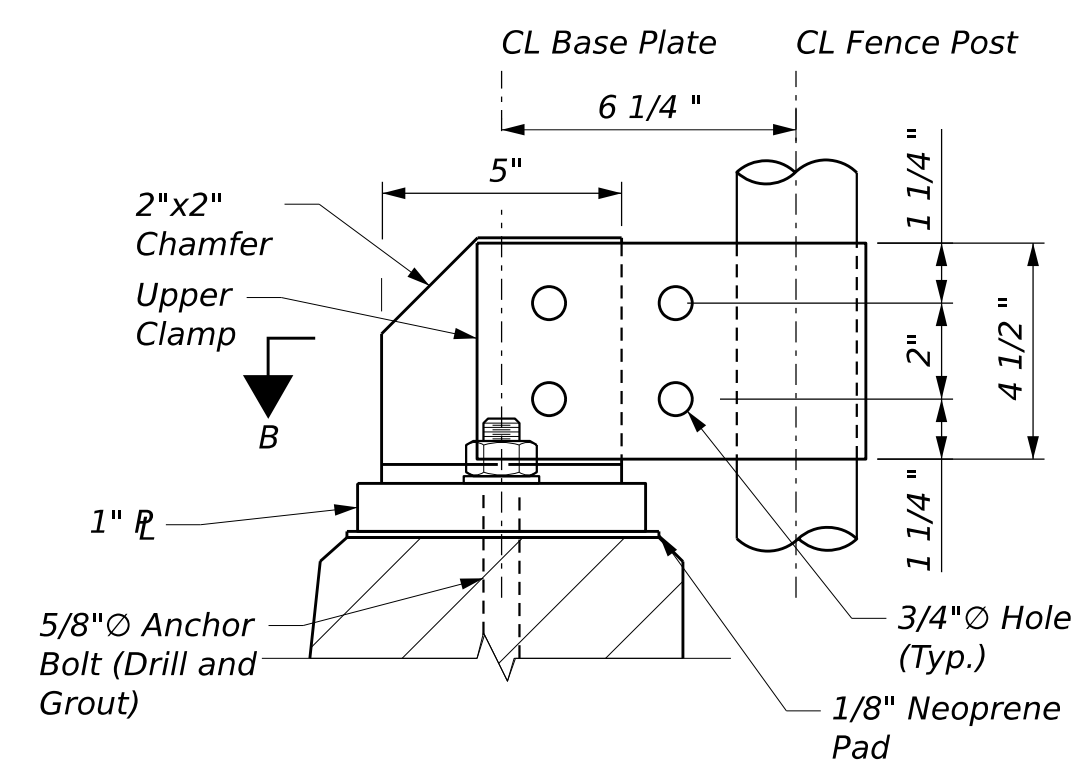
ELEVATION - LOWER SUPPORT



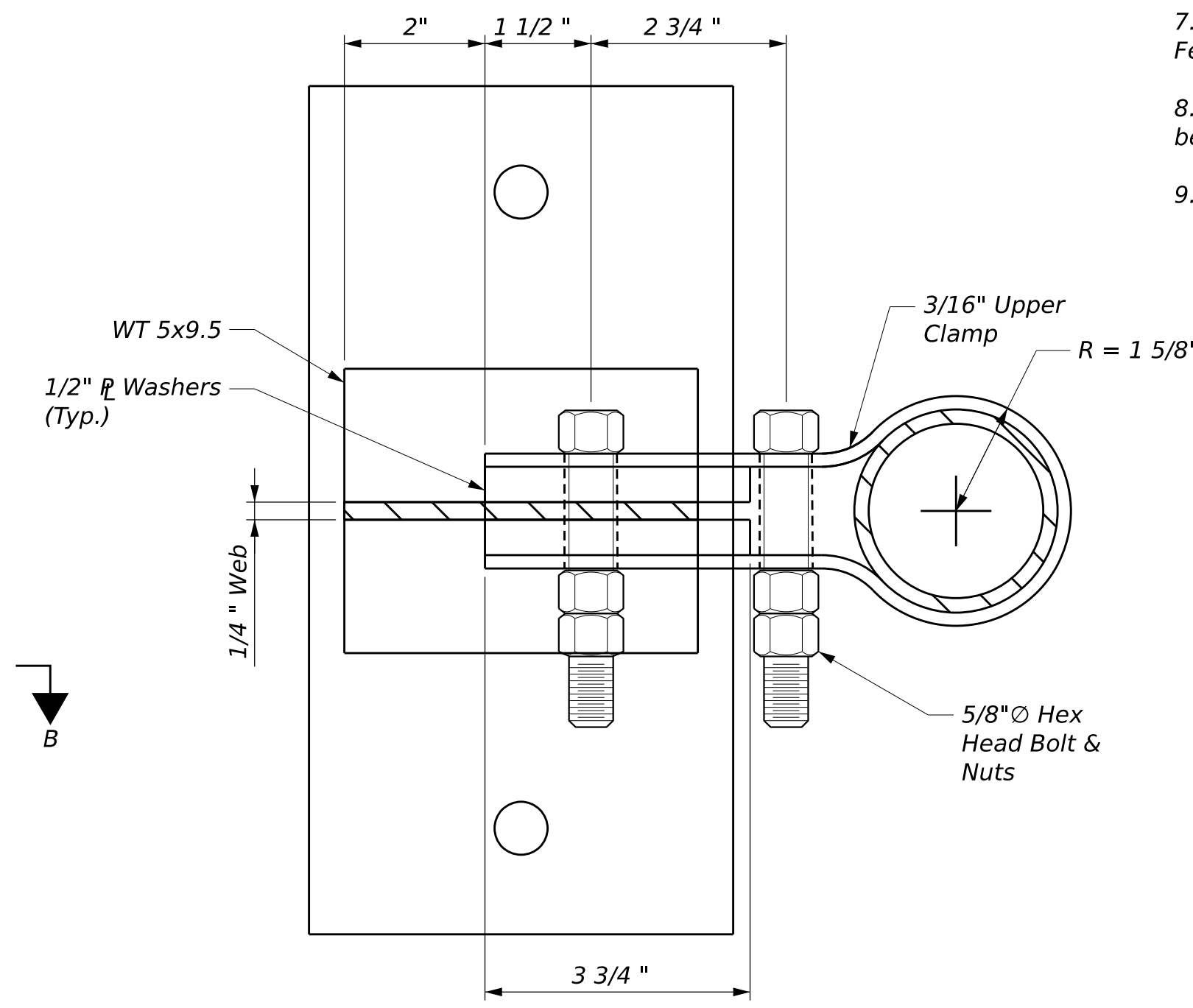
SECTION A-A



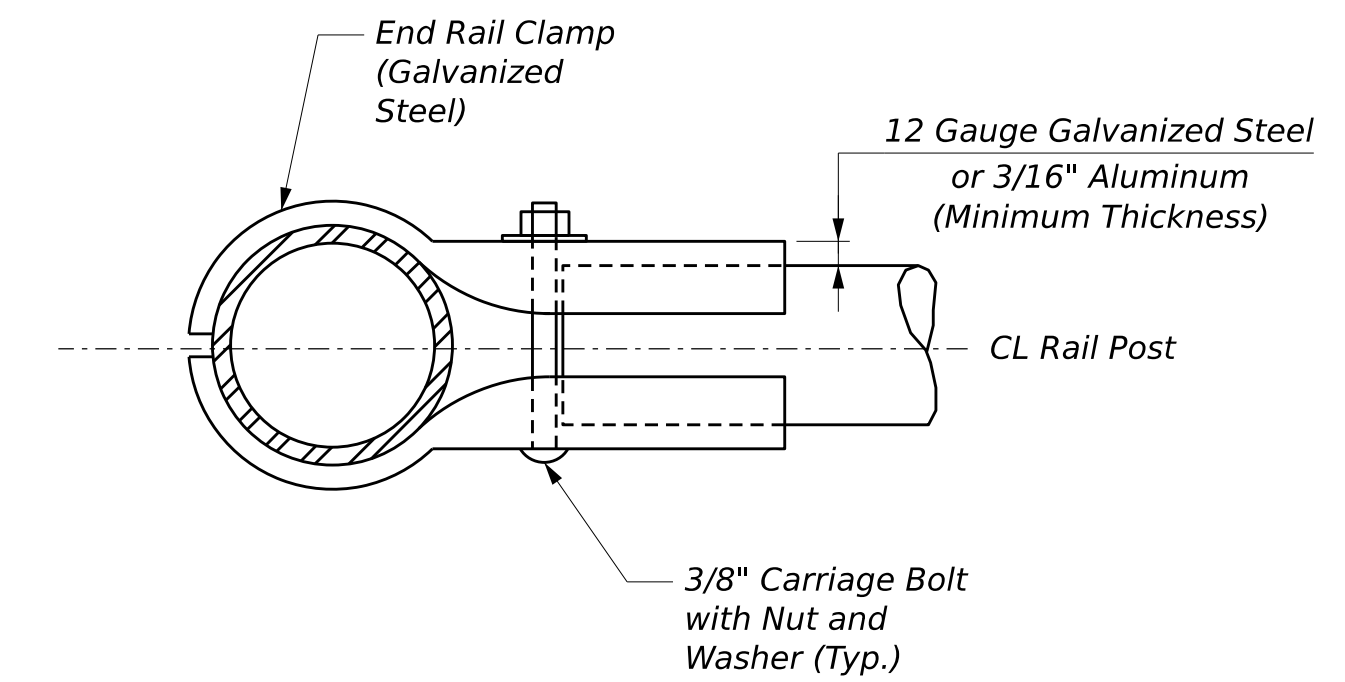
MODIFIED BASE PLATE DETAIL  
(For Snow and Security Fence)



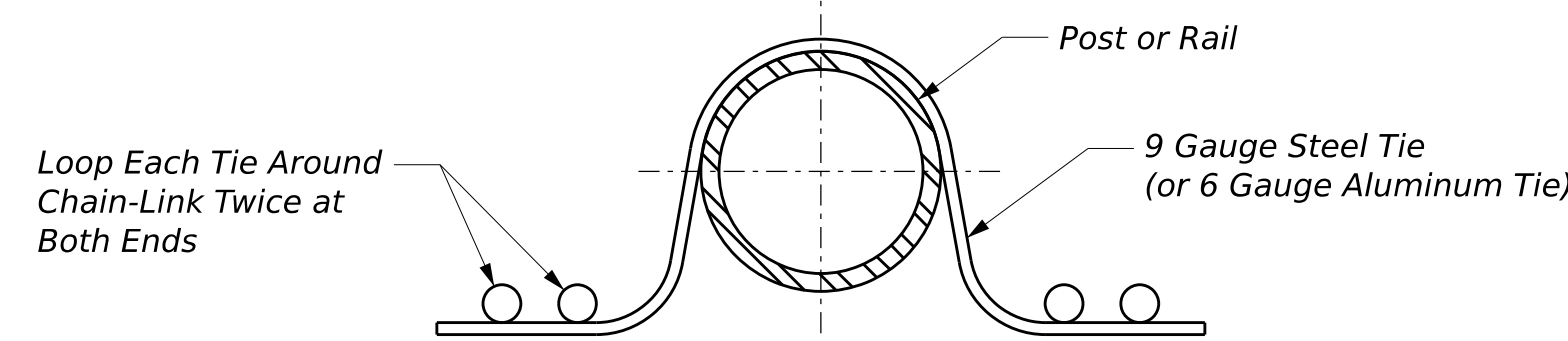
ELEVATION - MODIFIED BASE PLATE  
(For Snow and Security Fence)



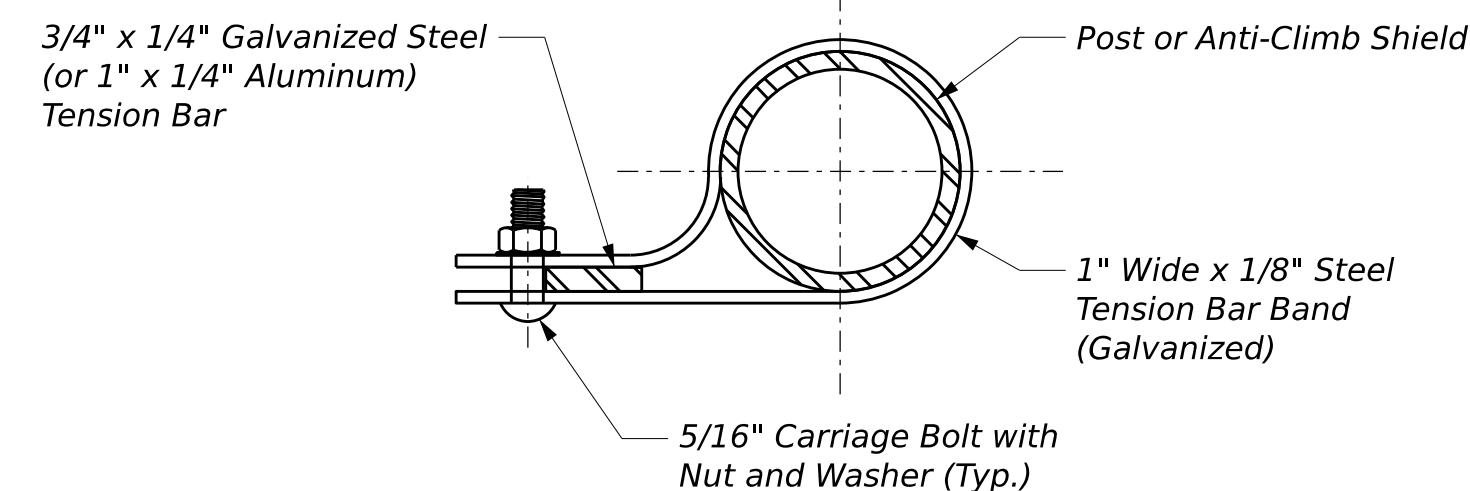
SECTION B-B  
(Concrete Parapet not shown for clarity)



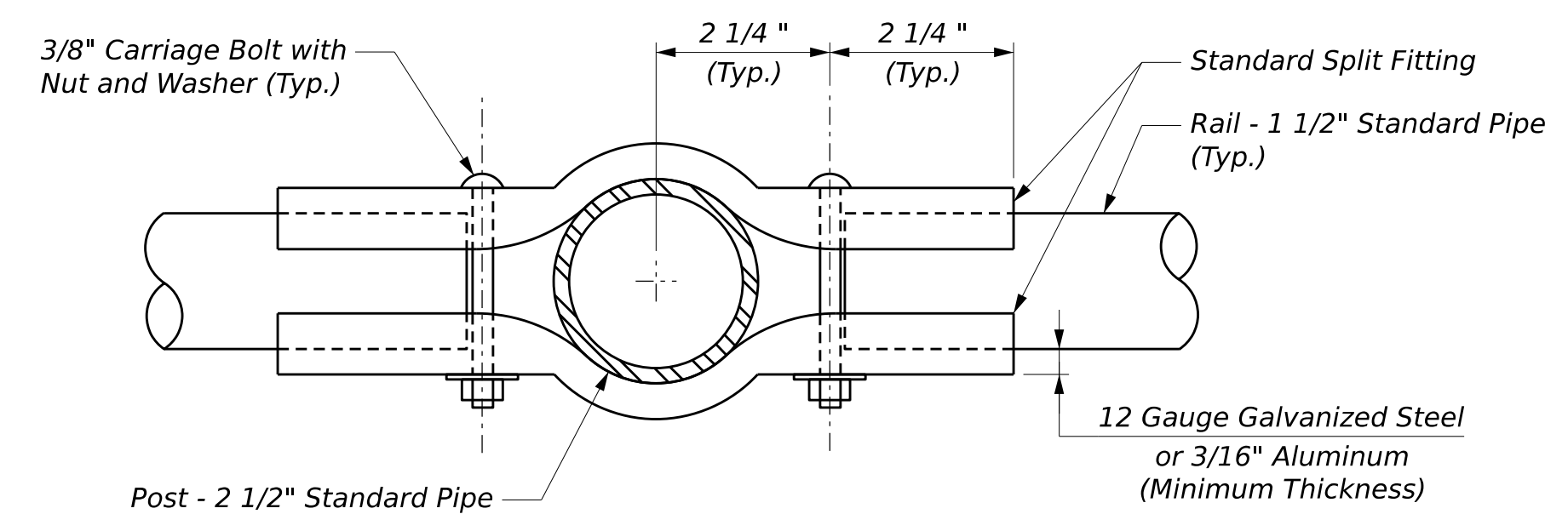
END POST DETAIL



DOUBLE PIGTAILED TIE



TENSION BAND DETAIL



RAIL CLAMP DETAIL

**FENCE NOTES:**

- Chain-Link fence shall conform to Standard Specification Section 710.03 and Special Provision Section 607. The size of wire mesh (fabric) shall be 1 inch.
- Wire ties shall be standard round 9 gauge zinc- or aluminum-coated steel or 6 gauge aluminum alloy conforming to ASTM F626. All ties shall be wrapped around chain-link fabric twice (double pigtailed) at both ends. Space ties @ 6 inches o.c. to bottom rail and @ 12 inches o.c. to all posts and other rails. Mechanical/Power fastened fence ties are acceptable.
- Post, rail, and anti-climb shield pipe shall be hot-dip galvanized. All pipe shall be schedule 40, standard weight. Nominal pipe sizes are shown.
- Tension bars, bar bands, upper clamp, boulevard and end rail clamps shall be steel or aluminum alloy conforming to AASHTO M181 (ASTM F626). Steel components shall be hot-dip galvanized in accordance with AASHTO M111 (ASTM A123) or AASHTO M232 (ASTM A153) as applicable.
- All bolts and nuts shall be steel conforming to ASTM A307 and ASTM A563 grade A respectively. Washers shall be hardened steel commercial type A plain and shall meet the dimensional requirements of ANSI B18.22. All bolts, nuts and washers shall be hot-dip galvanized in accordance with AASHTO M111 (ASTM A123) or AASHTO M232 (ASTM A153) as applicable.
- Rail may be field cut (sawn) to fit post spacing. Repair galvanizing on cut edges in accordance with ASTM A780.
- Anti-Climb Shield shall be considered incidental to Pay Item No. 607.181, Chain Link Fence - 8 ft, High-Security.
- Payment for modified base plate, lower support angle and all connecting components will be incidental to Pay Item No. 607.181, Chain Link Fence - 8 ft, High-Security.
- All bolts and connections shall be tightened to a snug-tight condition.

STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION  
Federal Project No. 2952800  
WIN 029528.00

PROJ. MANAGER	TRAVIS HAMEL, P.E.	DATE
DESIGN-DETAILED	N. BART	03/2026
CHECKED-REVIEWED	E. BEAUSOLEIL	03/2026
DESIGN-DETAILED	R. BRATLEY	
DESIGN-DETAILED	A. STEPHENS	
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

DONALD V. CARTER BRIDGE NO. 1141  
CROSSING KENNEBEC RIVER  
WATERVILLE-WINSLOW  
FENCE DETAILS 2

SHEET NUMBER

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OF 24



