

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

SPECIFICATIONS

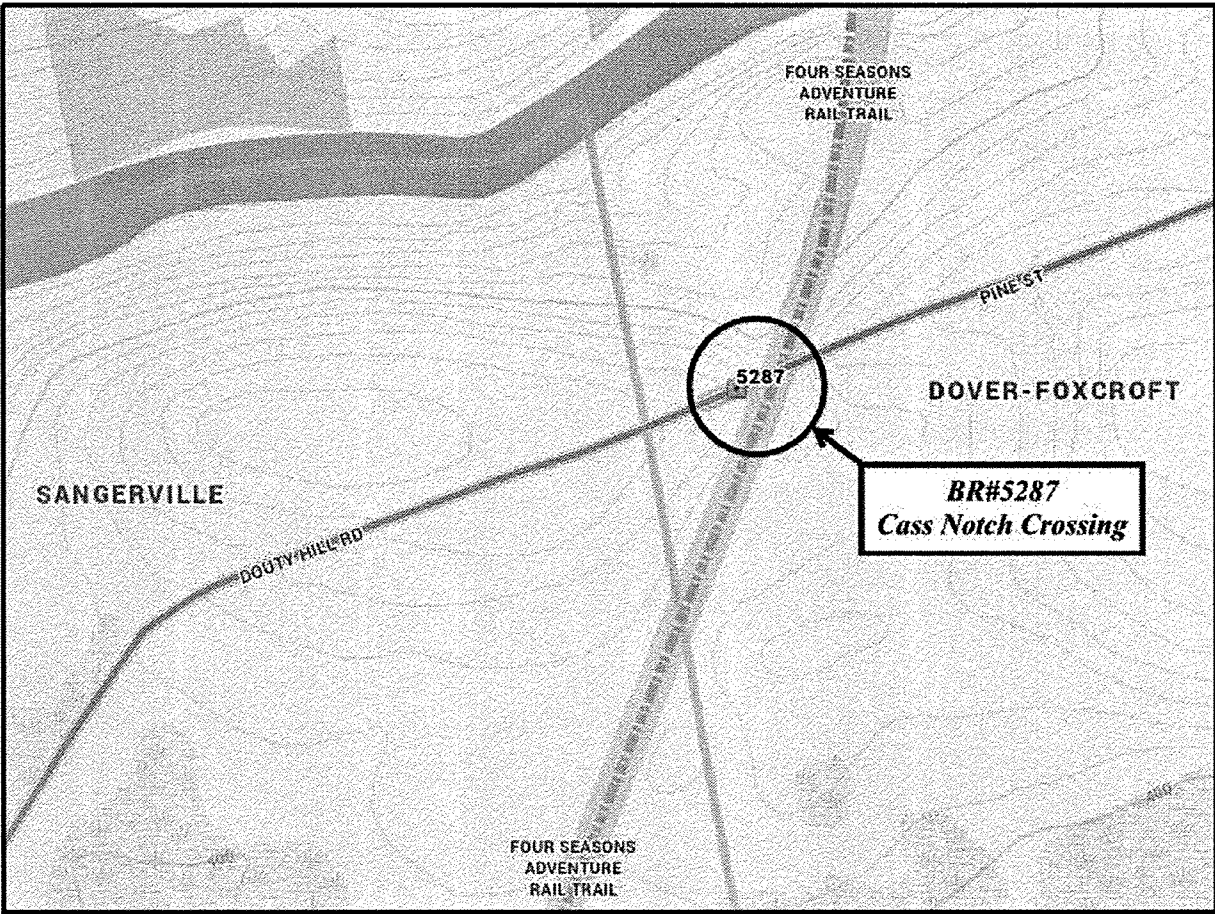
2014 MaineDOT Standard Specifications with updates and
the 2014 MaineDOT Standard Details with Updates.

TRAFFIC DATA

Current (2015) AADT..... 839



DOVER-FOXCROFT
PISCATAQUIS COUNTY
Cass Notch Crossing
OVER
MAINE CENTRAL RR TRACKS
BRIDGE NO. 5287
BRIDGE REHABILITATION
WR ~ 33915
WIN ~ 25402.00



LIST OF DRAWINGS

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MATERIALS

Concrete:..... Class "LP"
All concrete.....
Reinforcing Steel.....ASTM A 615/A 615M, Grade 60
Structural Steel:
All Material (except as noted).....AASHTO M 270M/M 270 Grade 36
High Strength Bolts.....ASTM F3125, Grade 325, Type 3

BASIC DESIGN STRESSES

Concrete..... f 'c = 5000 psi
Reinforcing Steel..... f y = 60,000 psi
Structural Steel:
ASTM A 709, Grade 36..... F y = 36,000 psi
ASTM F3125, Grade A325, Type 3..... F μ = 120,000 psi

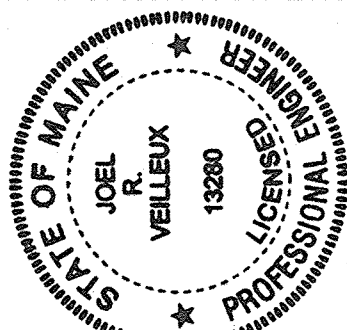
PROJECT LOCATION	Pine Street over Maine Central RR (Cass Notch Crossing) in Dover-Foxcroft Lat./Long. 45°10'38.75" N 69°15'15.8" W
PROGRAM AREA	Bridge and Structure Maintenance
OUTLINE OF WORK	Bridge Rehabilitation.

25402.00 WIN 25402.00

DOVER-FOXCROFT
CASS NOTCH BRIDGE (OVER MAINE CENTRAL RR)

SHEET NUMBER
1

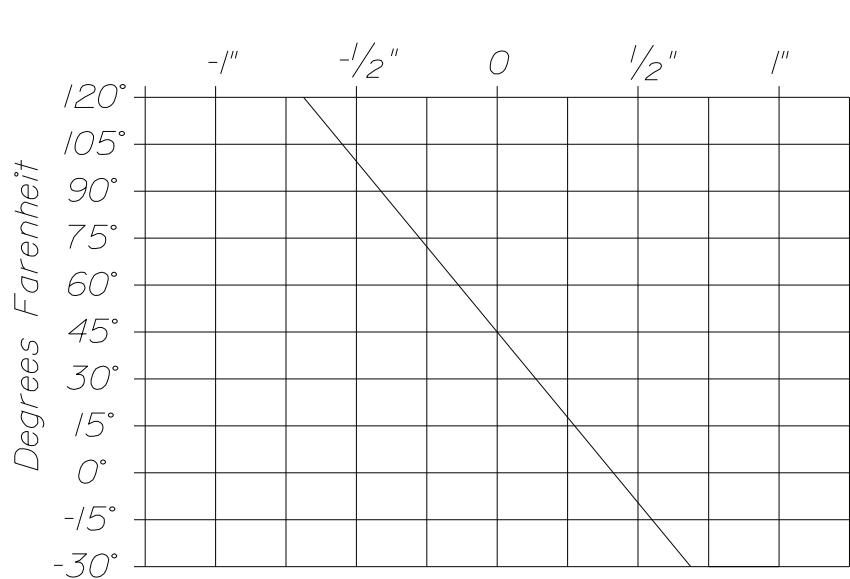
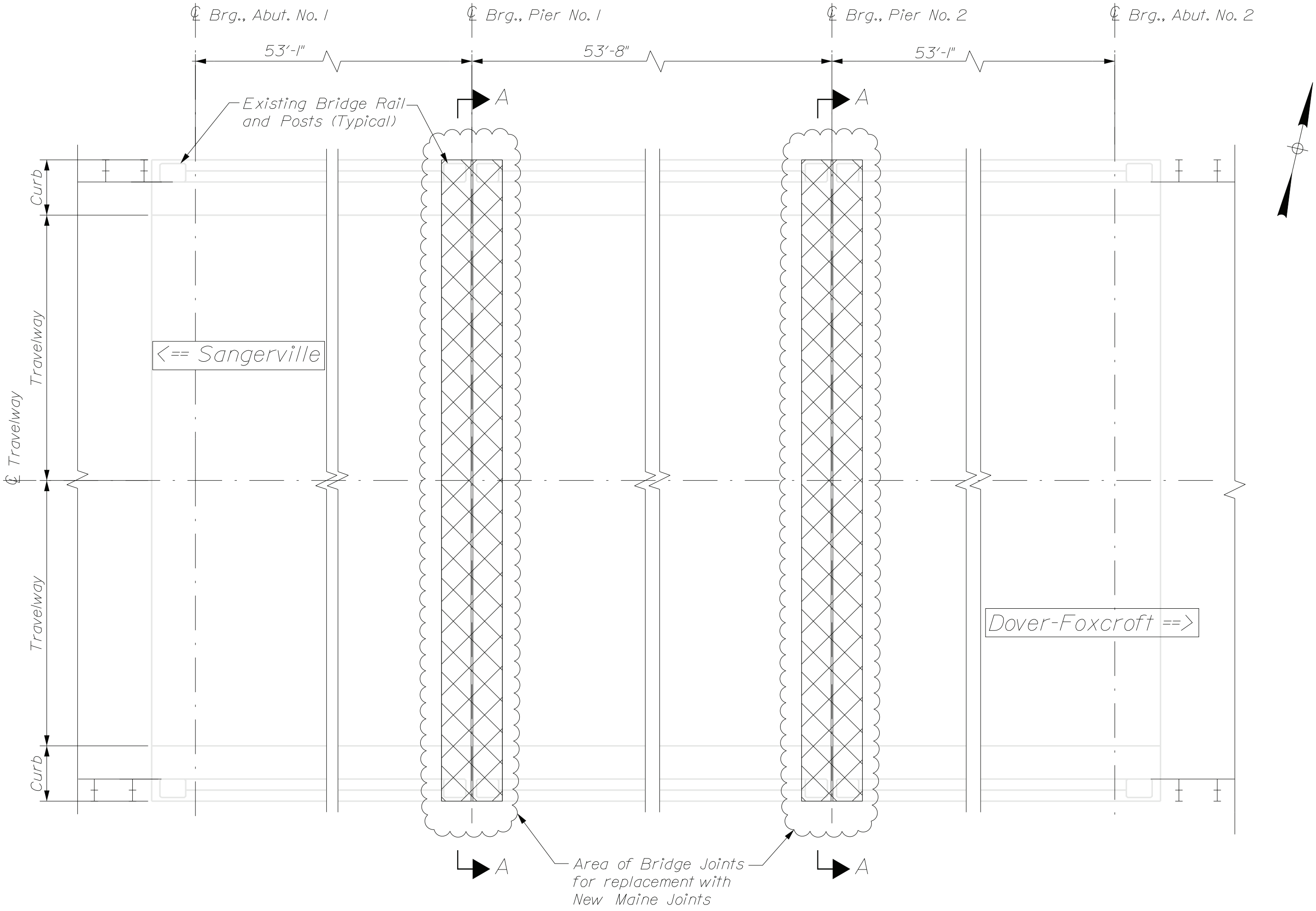
OF 5



SIGNATURE
13280
P.E. NUMBER
3-7-2019
DATE

PROJECT INFORMATION	
PROGRAM	Bridge & Structure Maintenance
PROJECT MANAGER	M. Thompson
DESIGNER	G. Libby
CONSULTANT	
PROJECT RESIDENT	
CONTRACTOR	
PROJECT COMPLETION DATE	

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
APPROVED
DATE
COMMISSIONER:
CHIEF ENGINEER:



SEAL ADJUSTMENT CHART
(Pier #1 & Pier #2)

Notes:
~ These joints were designed for a 1 7/8" opening at 45°

JOINT OPENING NOTES:

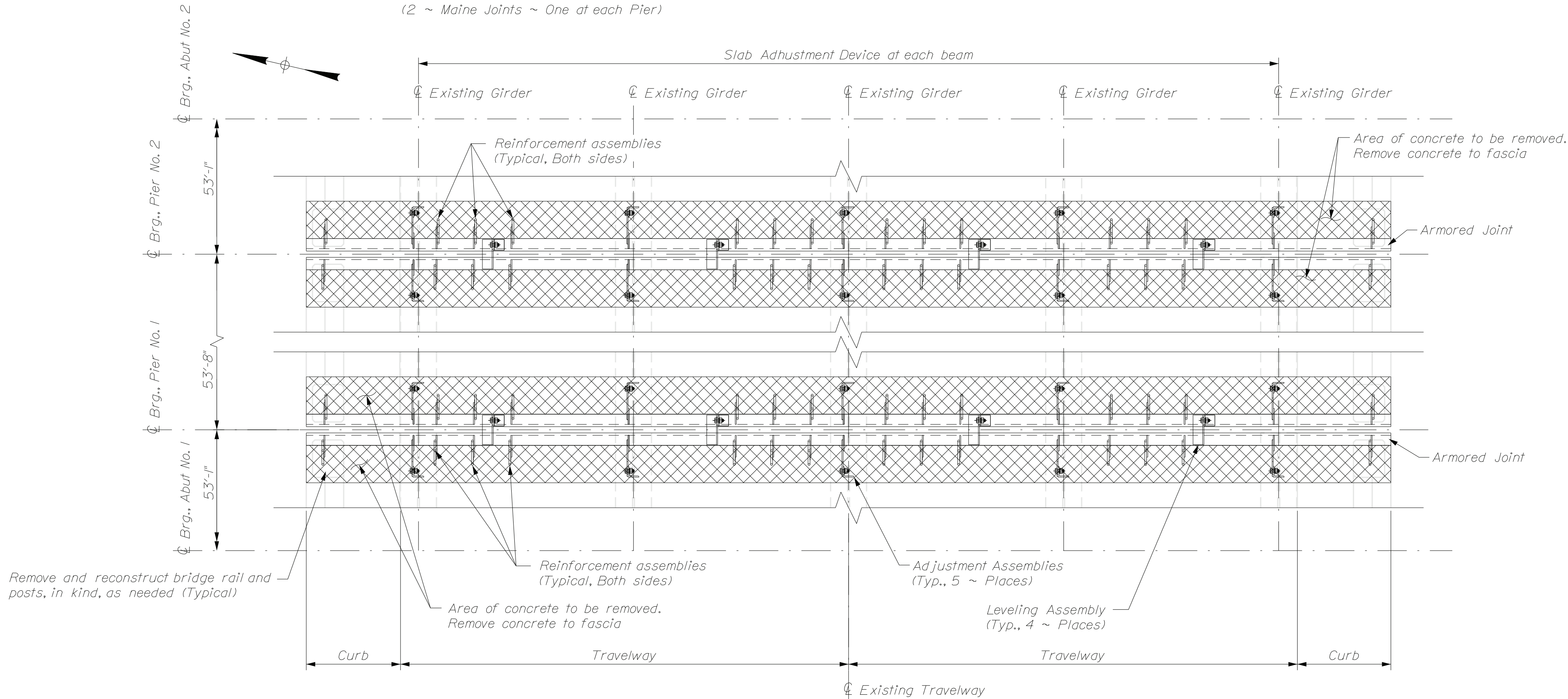
The Expansion Device shall be set to an opening of 1 7/8" inch in the Fabrication Shop. The joint opening shall be adjusted for temperature in the field at the time of installation using the following formula:

$$0.00008 \times "D" \times "\Delta T" = \text{Adjustment (in inches)}$$

"D" is the distance in feet between the backwall and the nearest fixed bearing (for joints at abutments) or between the fixed bearings at either side of the expansion joint (for joints or piers).

"ΔT" is the difference between the temperature of the bridge girders and 45°F.

A structure temperature above 45°F will result in a smaller joint opening.



ARMORED JOINT REPLACEMENT PLAN
(2 ~ Maine Joints - One at each Pier)

SCOPE OF WORK

Replace expansion joint armor, concrete headers and joint seals at Pier #1 and Pier #2. Coat deck with epoxy sealer. Joint armor to be fabricated and supplied by others. All other work shall be by the Department. New joint seals shall be Watson Bowman Acme WABO WA-300 or D.S. Brown Delastic CV-3000. Install seals in accordance with manufacturer's recommendations.

Project Manager - Region 4 Bridge Transportation Operations Manager (TOM): Mike Thompson.

GENERAL CONSTRUCTION NOTES:

- The existing bridge plans may be accessed at the following MaineDOT web address:
<http://www.maine.gov/mdot/contractors/>
The plans are reproductions of the original drawings as prepared for construction of the bridge. It is very unlikely that the plans will show any construction field change or any alterations which may have been made to the bridge during it's life span.
- Dimensions shown are from existing plans and may differ from actual field dimensions. Field verify all dimensions prior to installation.
- Any necessary reconstruction of the existing bridge rail and the removal and replacement of curb concrete shall be as approved by the Region Bridge TOM.
- Existing Concrete curb which requires removal in order to install the armored joints and seal shall be carefully and neatly cut off and removed to sound concrete as required. Concrete shall be placed to the limits shown on the plans.
- Fabricate and deliver the expansion joint to Region 4, Carmel Bridge Maintenance Lot at 991 Fuller Road in Carmel, Maine. Contact for delivery arrangements is Mike Thompson at 207-712-6604 or Michael.Thompson@maine.gov
- Seal existing and new concrete surfaces in accordance with the Bridge Maintenance Manual. The coating limits are to be at the discretion of the Region Bridge TOM.
- Seal top of the deck surface with epoxy sealer at the discretion of the Region Bridge TOM.

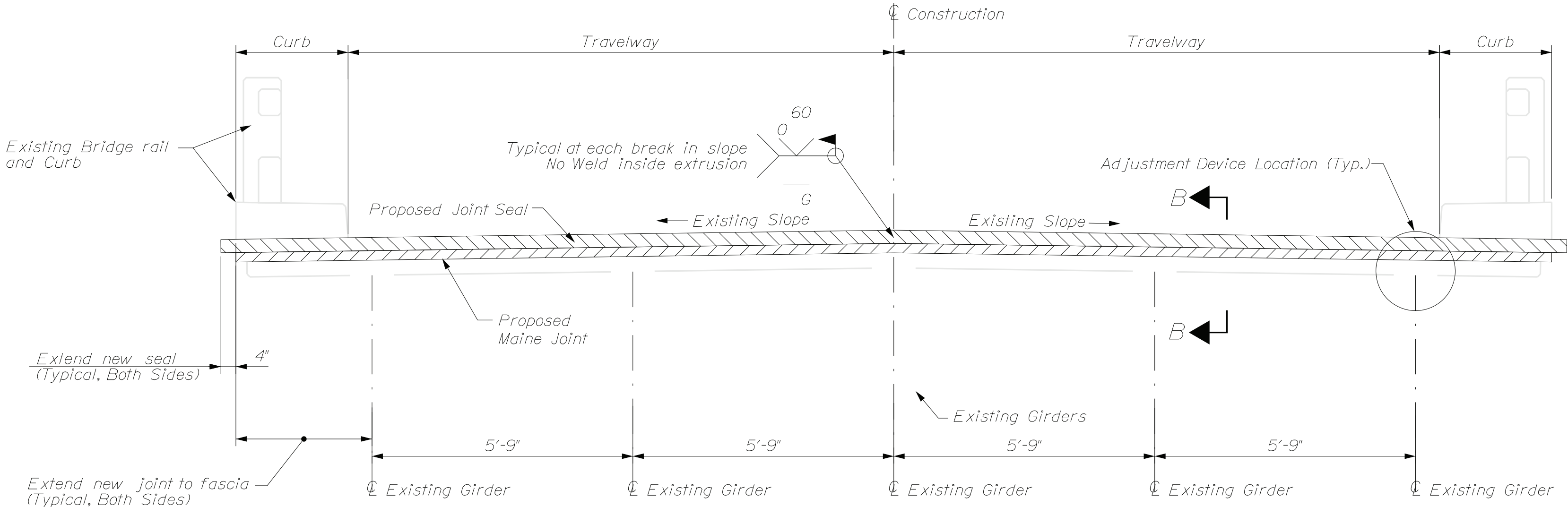
CONCRETE SLAB NOTES

- The existing concrete shall be removed so as not to damage existing vertical and horizontal steel in the parapets or the longitudinal and transverse reinforcing steel in the superstructure. Any damaged reinforcing steel shall be replaced at the Contractors expense.
- Existing reinforcing steel to remain shall be cleaned as directed by the Resident prior to placing new concrete.
- All rebar splices shall be 18" minimum.
- Reinforcing steel shall have a minimum 2" of cover unless otherwise noted.
- All adjustment angles shall be welded after final position adjustments are made.
- Concrete removal limits depend on the existing bridge and may not match what is shown here. Refer to existing bridge plans and field measurements. Limits may be reduced with the approval of the Resident.

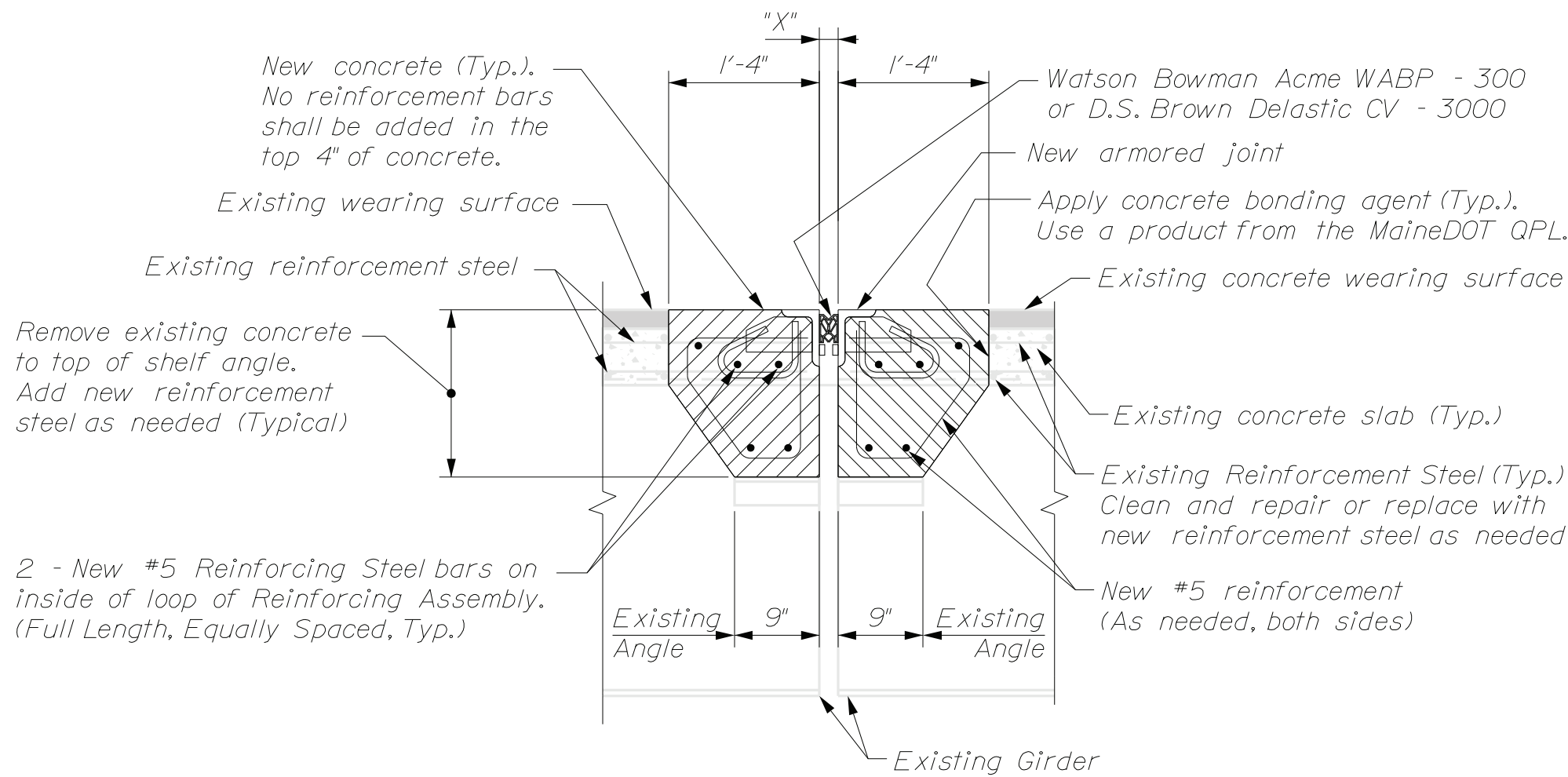
HEAVY DUTY JOINT NOTES

- The Expansion Devices shall be fabricated to be installed normal to grade.
- Prior to the installation of the seal the steel surfaces to receive the adhesive shall be blasted clean and solvent washed per the seal manufacturer's instructions.
- The diameter of the vent holes in top and vertical faces of Maine Joint may be slightly smaller or larger than the designated size on the drawings for ease of fabrication.
- The joint armor shall be furnished and installed ungalvanized.

CASS NOTCH CROSSING BRIDGE MAINE CENTRAL RR DOVER-FOXCROFT				PISCATAQUIS		PROJ. MANAGER Mike Thompson		BY C. Libby	DATE FEB 2019	STATE OF MAINE DEPARTMENT OF TRANSPORTATION	
						DESIGN-DETAILED CHECKED-REVIEWED		C. Libby J. Veilleux			
						DESIGN2-DETAILED2				SIGNATURE	
						DESIGN3-DETAILED3					
						REVISIONS 1				P.E. NUMBER	
						REVISIONS 2					
						REVISIONS 3					
						REVISIONS 4				DATE	
						FIELD CHANGES					
BRIDGE NO. 5287											
WIN 25402.00											
25402.00											
BRIDGE JOINT PLANS											

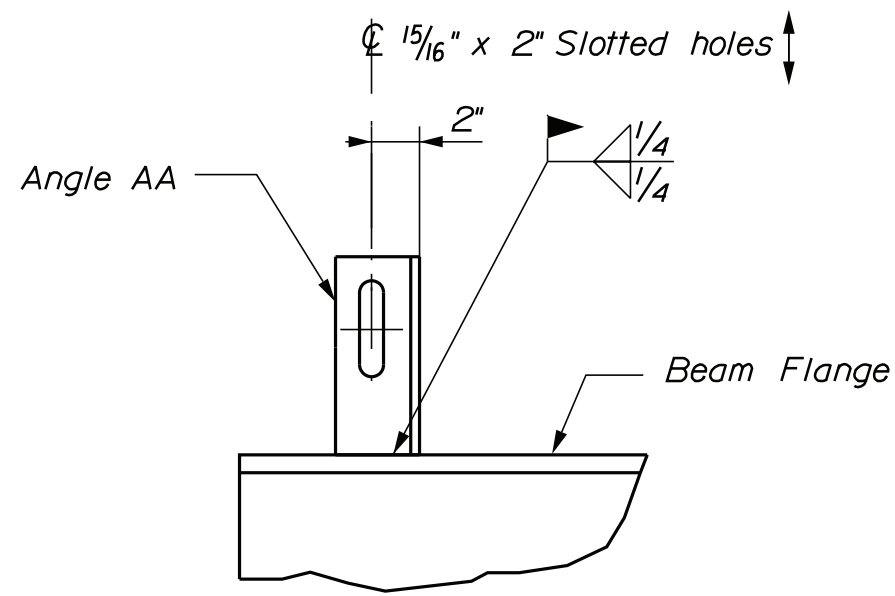


TRANSVERSE SECTION A - A
(Maine Joint at Pier #1 & Pier #2)



SECTION B - B

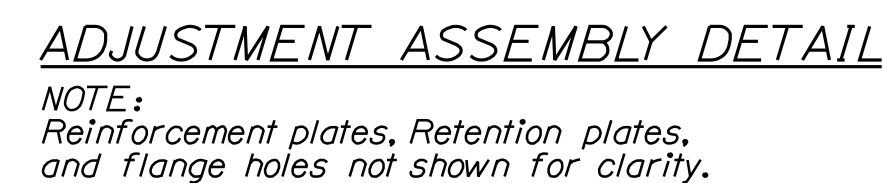
NOTE: Adjustment devices not shown for clarity



SLAB ELEMENT ADJUSTMENT ANGLE

NOTE:
Installation Details for MaineDOT
Crew Personnel

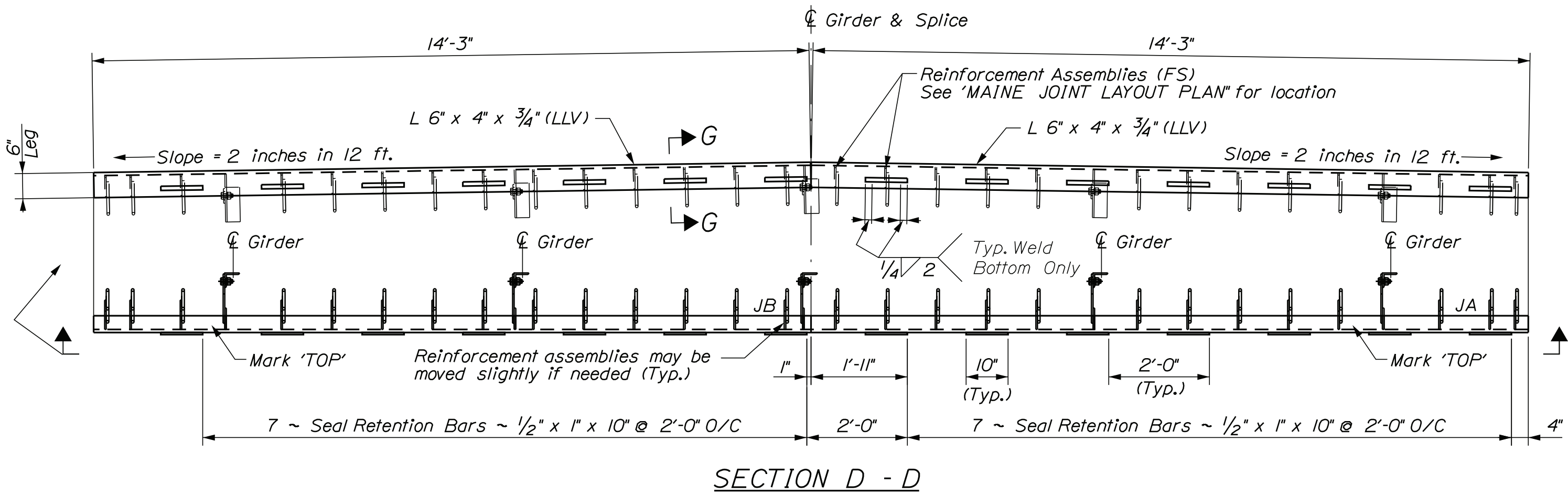
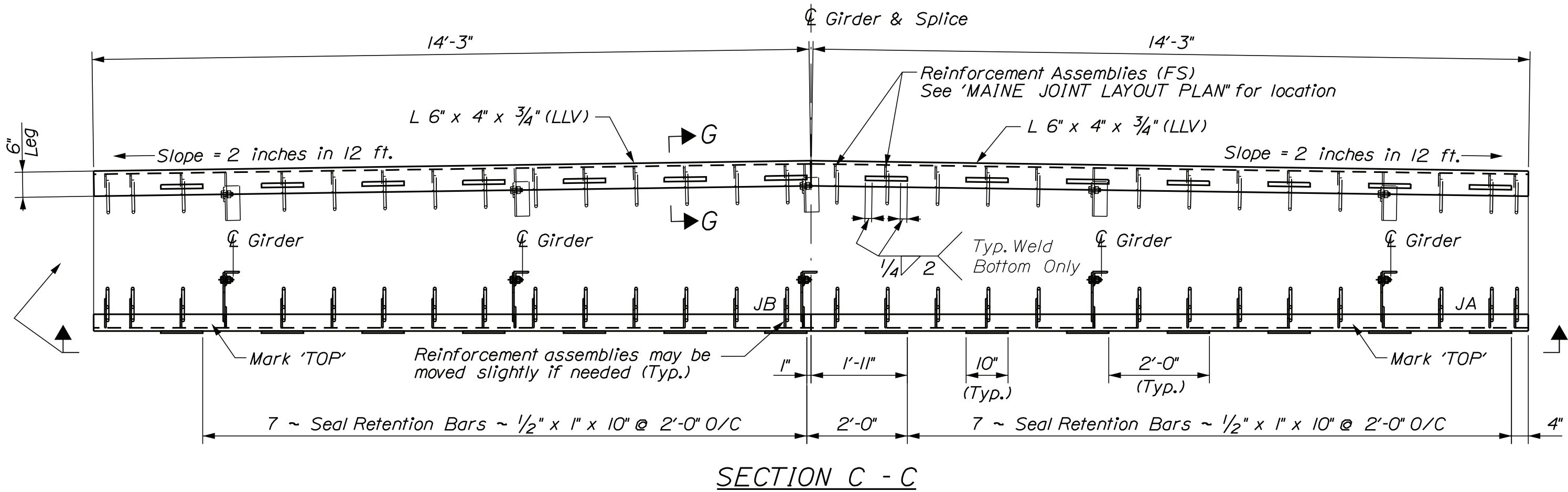
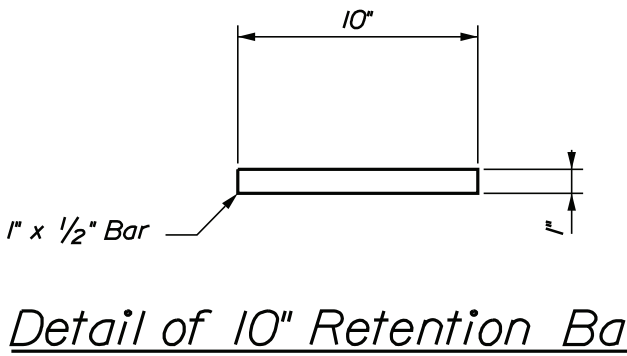
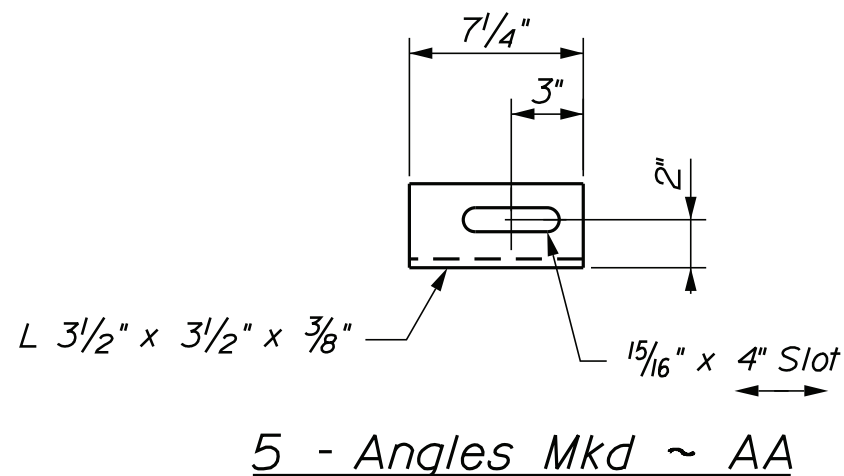
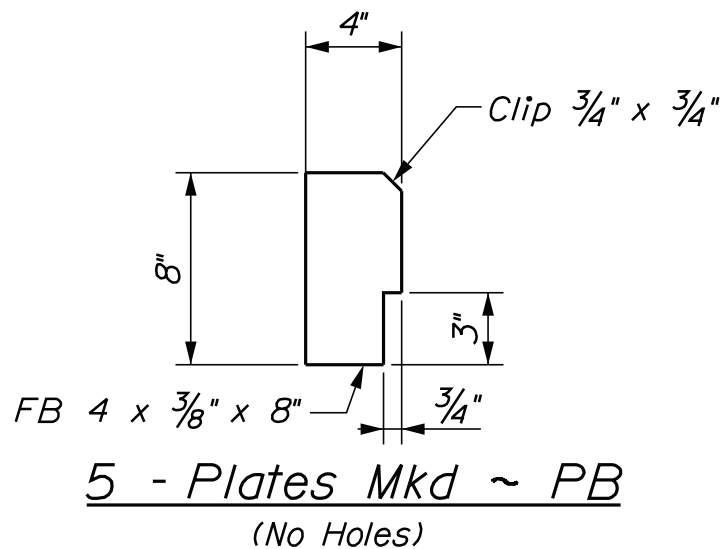
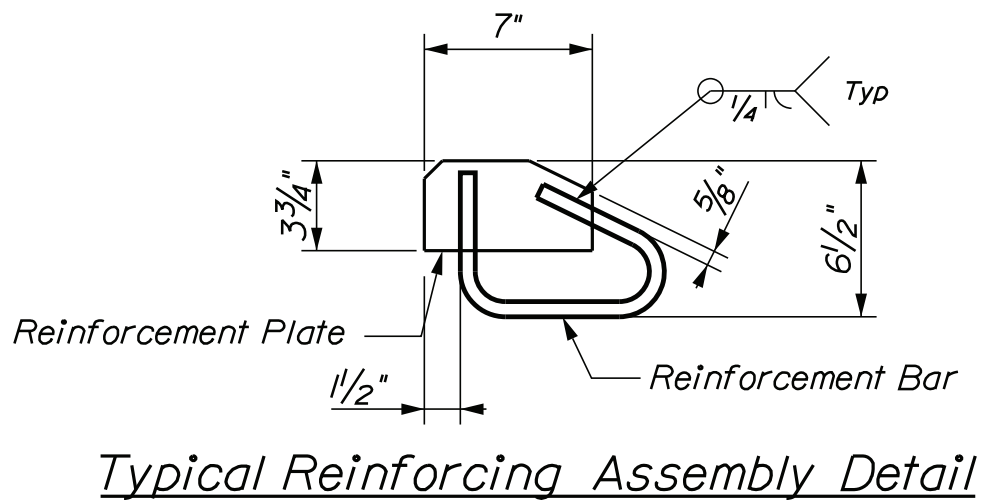
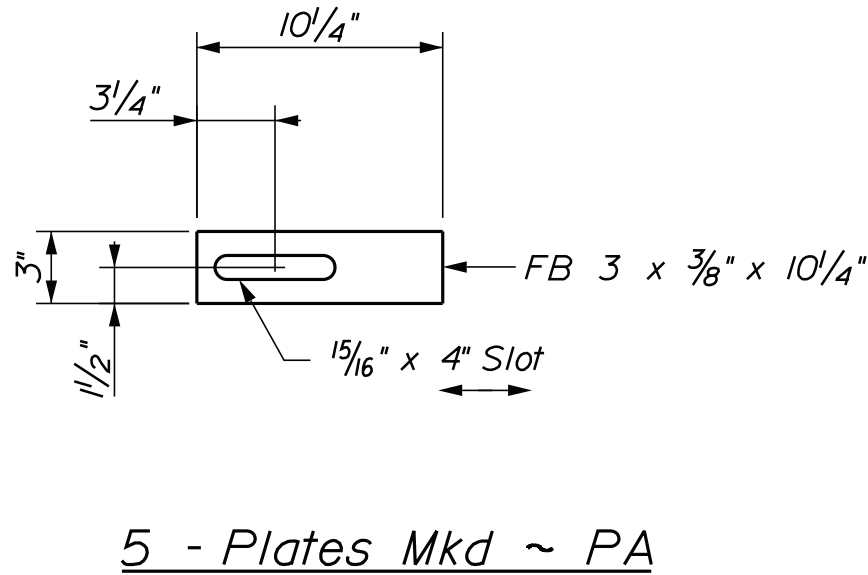
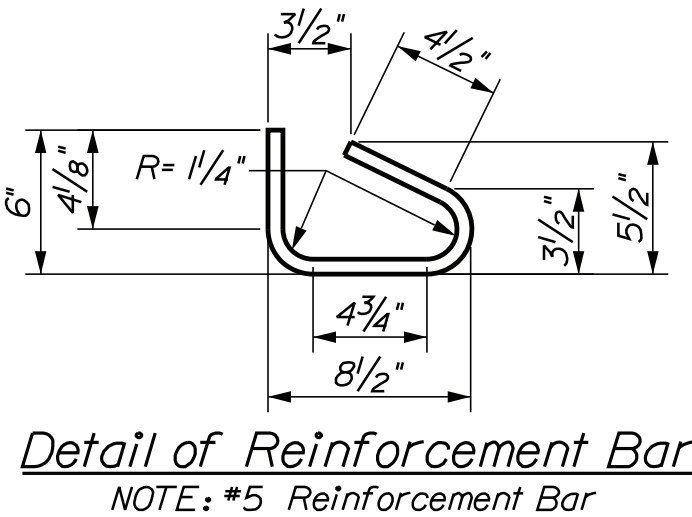
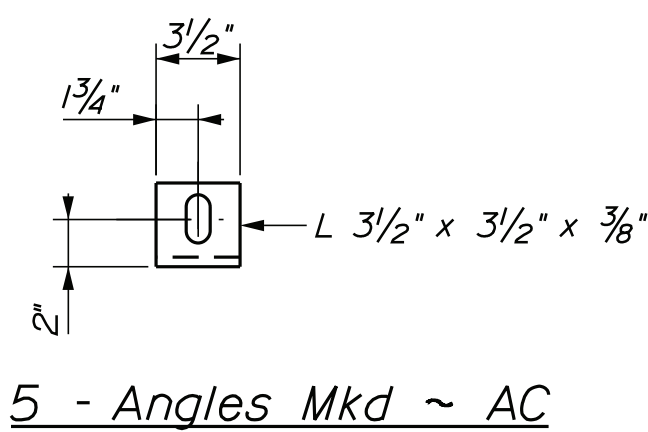
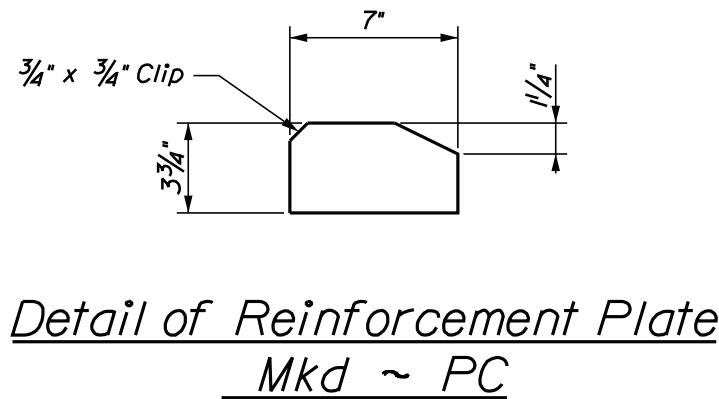
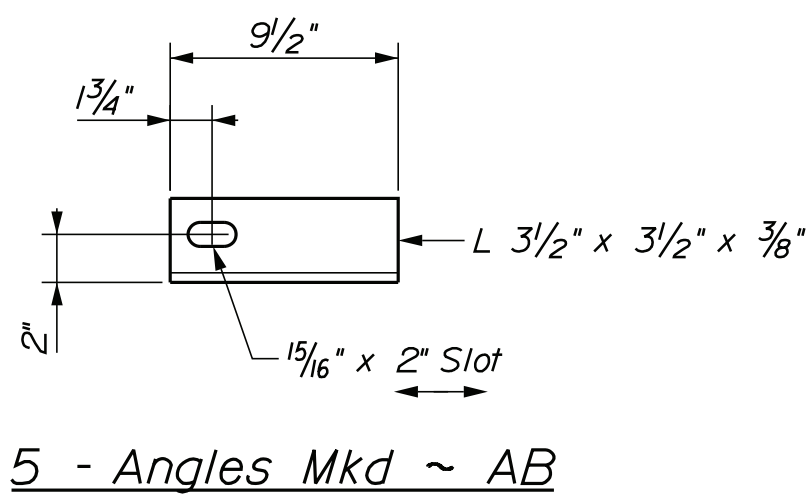
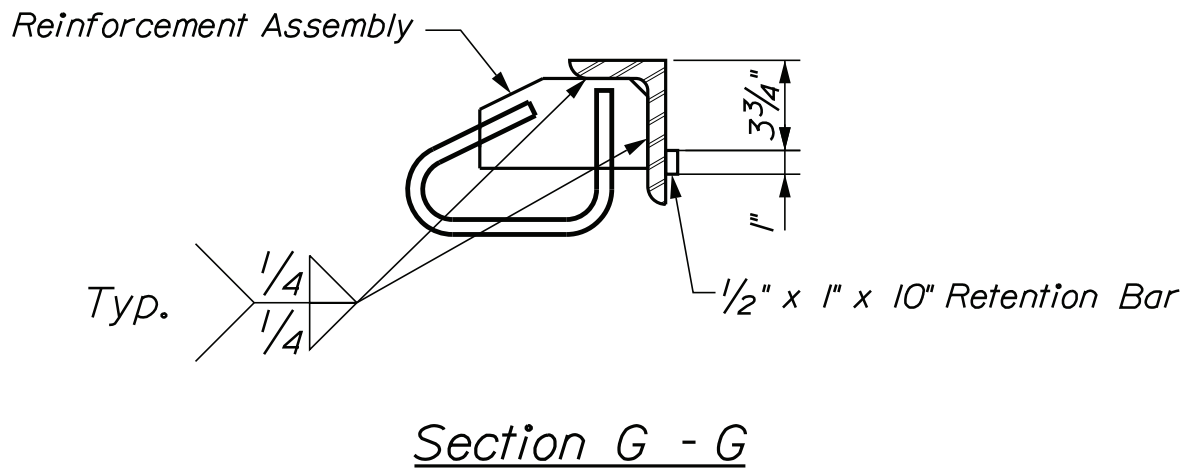
CASS NOTCH CROSSING BRIDGE MAINE CENTRAL RR DOVER-FOXCROFT	STATE OF MAINE DEPARTMENT OF TRANSPORTATION		25402.00 WIN 25402.00 BRIDGE NO. 5287 BRIDGE JOINT PLANS	
	DESIGN-DETAILED CHECKED-REVIEWED DESIGN-DETAILED DESIGN-DETAILED REVISIONS 1 REVISIONS 2 REVISIONS 3 REVISIONS 4 FIELD CHANGES		DATE FEB 2019 BY Mike Thompson DATE FEB 2019 BY G. Libby DATE BY J. Valenz DATE BY DATE BY DATE	
	PISCATAQUIS JOINT SECTIONS		SHEET NUMBER 3 OF 5	



4
OF 5

SHEET NUMBER		4		OF 5		CASS NOTCH CROSSING BRIDGE MAINE, CENTRAL RR DOVER-FOXCROFT				PISCATAQUIS		PROJ. MANAGER Mike Thompson		BY C. Libby		DATE FEB. 2009		STATE OF MAINE DEPARTMENT OF TRANSPORTATION	
								CHECKED-REVIEWED J. Yellow		CHECKED-DETAILED C. Libby		SIGNATURE							

Filename: ... \CADD\005_Steel_Details.dgn Division: BRIDGE Username: gerold.libby Date: 2/8/2019



NOTE:
All Steel shall be Finished SSPC-SP6, Blast Clean and ungalvanized.

CASS NOTCH CROSSING BRIDGE MAINE CENTRAL RR DOVER-FOXCROFT	STATE OF MAINE DEPARTMENT OF TRANSPORTATION			
	25402.00			
	BRIDGE NO. 5287			
	WIN 25402.00 BRIDGE JOINT PLANS			
PISCATAQUIS STEEL DETAILS	PROJ. MANAGER	Mike Thompson	BY	DATE
	CHECKED-REVIEWED	G. Libby	G. Libby	FEB 2019
	DESIGNED-DETAILED	J. Valerius	J. Valerius	
	REVISIONS	1		
SHEET NUMBER	5			
	OF 5			