

STATE OF MAINE DEPARTMENT OF TRANSPORTATION

PLANS PREPARED BY:
 157 Capital Street
 Augusta, Maine 04333

SPECIFICATIONS

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

TRAFFIC DATA

Current (2020) AADT	3280
Future (2040) AADT	3610
DHV - % of AADT	12%
Design Hour Volume	433
Heavy Trucks (% of AADT)	8%
Heavy Trucks (% of DHV)	4%
Directional Distribution (% of DHV)	54%
18 kip Equivalent P 2.0	114
18 kip Equivalent P 2.5	109
Design Speed (mph)	35

MATERIALS

Concrete (Unless Noted Otherwise)	Class "A"
Reinforcing Steel	ASTM A 615/A 615M, Grade 60
Structural Steel:	
All Material (except as noted)	ASTM A709/A709M, Grade 36
High Strength Bolts (except as noted)	ASTM A325, Type I

BASIC DESIGN STRESSES

Concrete	f'c = 4,000 psi
Reinforcing Steel	f _y = 60,000 psi
Structural Steel:	
ASTM A 709/A 709M, Grade 36	F _y = 36,000 psi
ASTM A 325	F _u = 120,000 psi



ARROWSIC/WOOLWICH SAGADAHOC COUNTY MAX L. WILDER MEMORIAL BRIDGE ROUTE 127/ARROWSIC ROAD OVER SASANOA RIVER FEDERAL AID PROJECT NO. 2350700 PROJECT LENGTH 0.158 mi. BRIDGE NO. 2026

LIST OF SHEETS

Title Sheet	1
Estimated Quantities and General Construction Notes	2
Bridge Plan and Elevation (2 Sheets)	3-4
Phased Construction Sections	5
Approach Girder Span Typical Sections	6
Truss Typical Sections	7
Expansion Joint Modifications (2 Sheets)	8-9
Bearing Details	10
Pier Repairs	11

UTILITIES

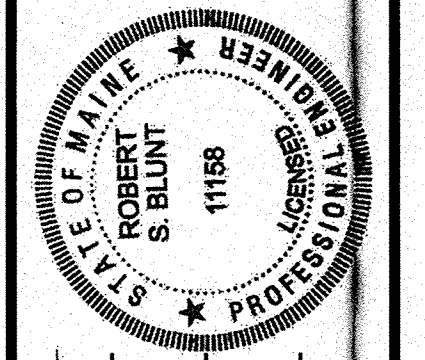
Consolidated Communications
 Central Maine Power Company
 Spectrum

MAINTENANCE OF TRAFFIC

Temporary signals to maintain one 11'-0" lane with alternating one-way traffic.

PROJECT LOCATION:	Bridge is located on Route 127 over the Sasanoa River. Bridge Coordinates of Latitude 43°54'34" N., Longitude 69°48'02" W.
PROGRAM AREA:	Bridge Program
OUTLINE OF WORK:	Wearing Surface Replacement and Joint Rehabilitation

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
APPROVED
DATE
3-27-2020
COMMISSIONER: <i>[Signature]</i>
CHIEF ENGINEER: <i>[Signature]</i>



<i>[Signature]</i>	SIGNATURE
ROBERT S. BLUNT	NAME
11168	P.E. NUMBER
March 13, 2020	DATE

PROGRAM	BRIDGE
PROJECT MANAGER	MACKENZIE KEISERBERGEN
DESIGNER	VHB
CONSULTANT	VHB
PROJECT RESIDENT	VHB
CONTRACTOR	
PROJECT COMPLETION DATE	

WIN 23507.00

2350700

MAX L. WILDER MEMORIAL BRIDGE
 OVER SASANOA RIVER
 ARROWSIC/WOOLWICH SAGADAHOC COUNTY
TITLE SHEET

SHEET NUMBER
1
OF 11

Date: 3/13/2020

Username: PDonovan

Division: BRIDGE

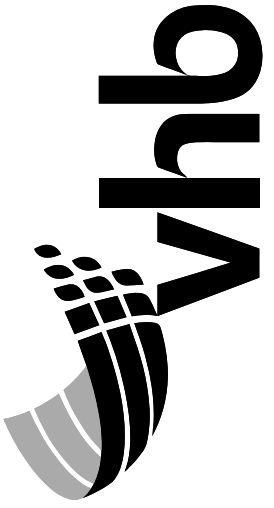
Filename: 001_Title.dgn

ESTIMATED QUANTITIES			
ITEM NO.	DESCRIPTION	QUANTITY	UNIT
202.127	Removing of Existing Bituminous Pavement (2,250 SY)	1	LS
403.2101	Hot Mix Asphalt - 9.5 mm (Polymer Modified)	189	TON
409.15	Bituminous Tack Coat, Applied	68	GAL
503.12	Reinforcing Steel, Fabricated and Delivered	100	LB
503.13	Reinforcing Steel, Placing	150	LB
508.14	High Performance Waterproofing Membrane (50 SY)	1	LS
514.06	Curing Box for Concrete Cylinders	1	EA
518.50	Repair of Upward Facing Surfaces- to Reinforcing Steel < 8 inches	9	SF
518.60	Repair of Vertical Surfaces < 8 inches	40	SF
520.245	Bridge Joint Modification Type 5	3	EA
523.5302	Steel Bearing, Expansion, Sliding Plate	1	EA
524.301	Temporary Structural Support	1	LS
627.733	4" White or Yellow Painted Pavement Marking Line	3,300	LF
627.77	Removing Pavement Marking	300	SF
627.78	Temporary 4" Painted Pavement Marking Line, White or Yellow	2,400	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	1	EA
643.72	Temporary Traffic Signal: Route 127 Max Wilder Bridge	1	LS
652.312	Type III Barricades	2	EA
652.33	Drum	20	EA
652.34	Cone	40	EA
652.341	Temporary Flexible Delineator	75	EA
652.35	Construction Signs	400	SF
652.361	Maintenance of Traffic Control Devices	1	LS
652.38	Flaggers	120	HR
652.41	Portable Changeable Message Sign	2	EA
656.75	Temporary Soil Erosion and Water Pollution Control	1	LS
659.10	Mobilization	1	LS

GENERAL CONSTRUCTION NOTES

- Dimensions and details shown in these plans have been obtained from limited field measurements and may not accurately reflect actual field conditions. Accordingly, the contractor shall take field measurements of all existing components impacted by the proposed work to ensure consistency with the proposed work. Any discrepancies in dimensions, character or extent of the existing features that affect the proposed work shall be brought to the attention of the Resident before advancing the work.
- All utility facilities shall be adjusted by the respective utilities unless otherwise noted.
- 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.
- 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.

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
2350700
WIN
23507.00
BRIDGE NO. 2026
BRIDGE PLANS



PROJ. MANAGER	MAKER/RE	REVISION	DATE
DESIGN-DETAILED	MEB	3/13/20	
CHECKED-REVIEWED	RSBLINT	3/13/20	
DESIGN-DETAILED			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

MAX L. WILDER MEMORIAL BRIDGE
OVER SASANOA RIVER
ARROWSIC/WOOLWICH SAGadahoc COUNTY
ESTIMATED QUANTITIES AND
GENERAL CONSTRUCTION NOTES

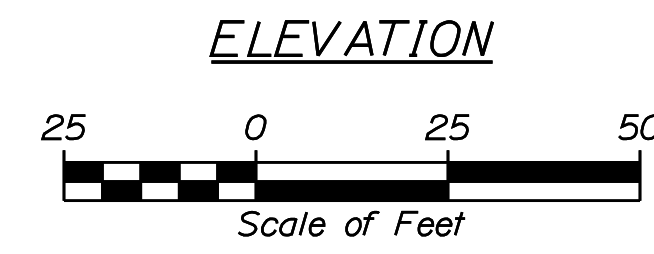
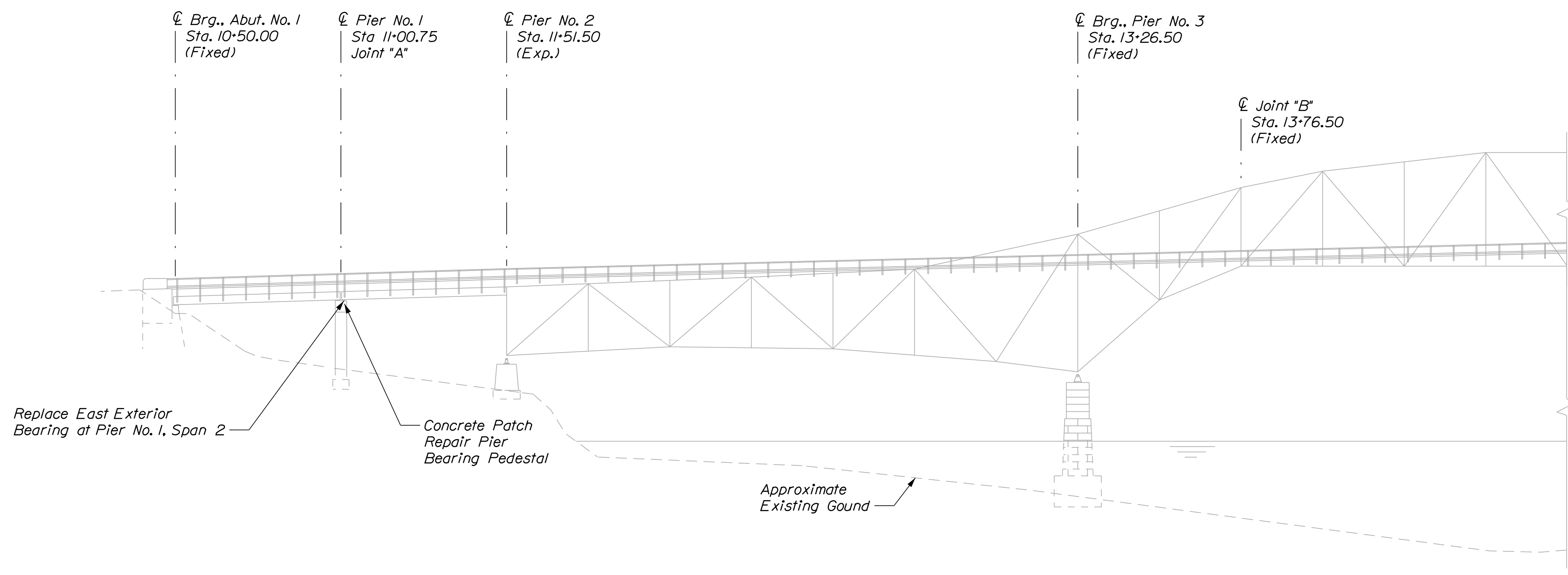
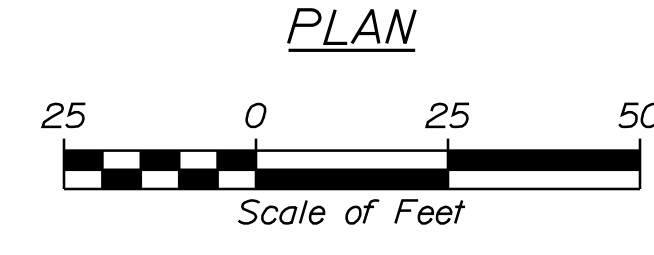
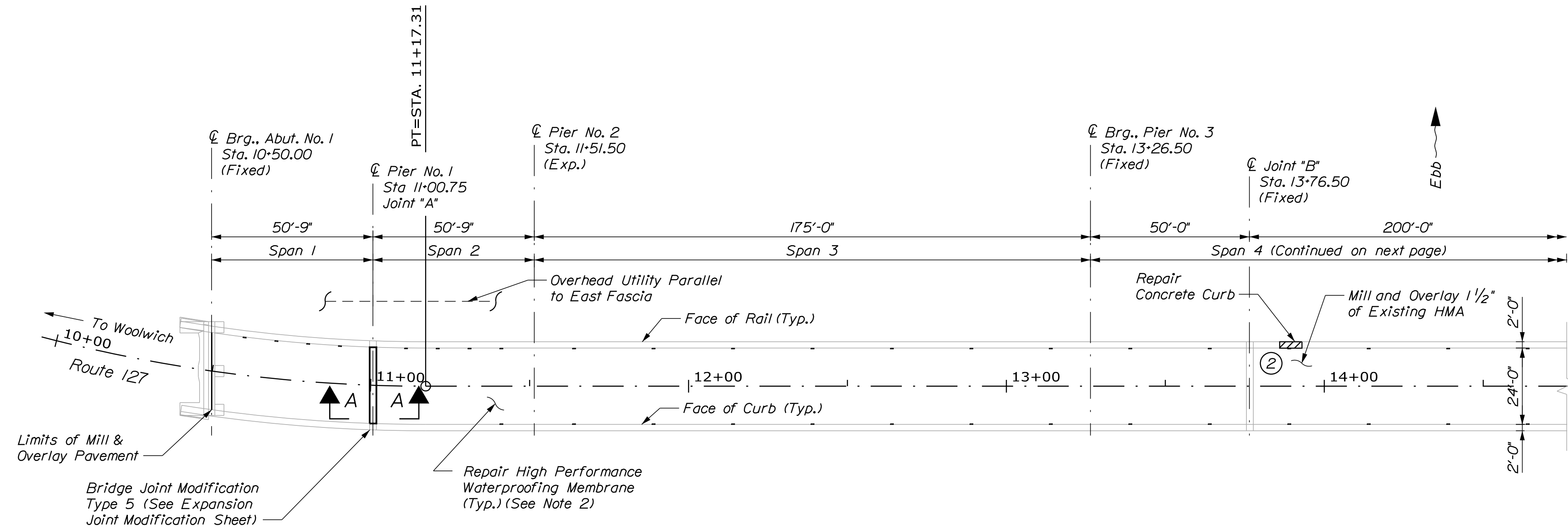
SHEET NUMBER
2
OF 11

Date: 3/13/2020

Username: PDonovan

Division: BRIDGE

Filename: 003_plan_el.dgn



- NOTES:**
- Overhead utilities run parallel to the east fascia.
 - Repair High Performance Waterproofing Membrane and Pavement as directed by the Resident.

- KEY**
- Limits of Surface Patch Repair
 - Square Foot of Repair



PROJ. MANAGER	MAKER/REK	REVISION	DATE
DESIGN-DETAILED	MEB		3/13/20
CHECKED-REVIEWED	RSE/LINT		3/13/20
DESIGN-DETAILED	RSE/LINT		
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

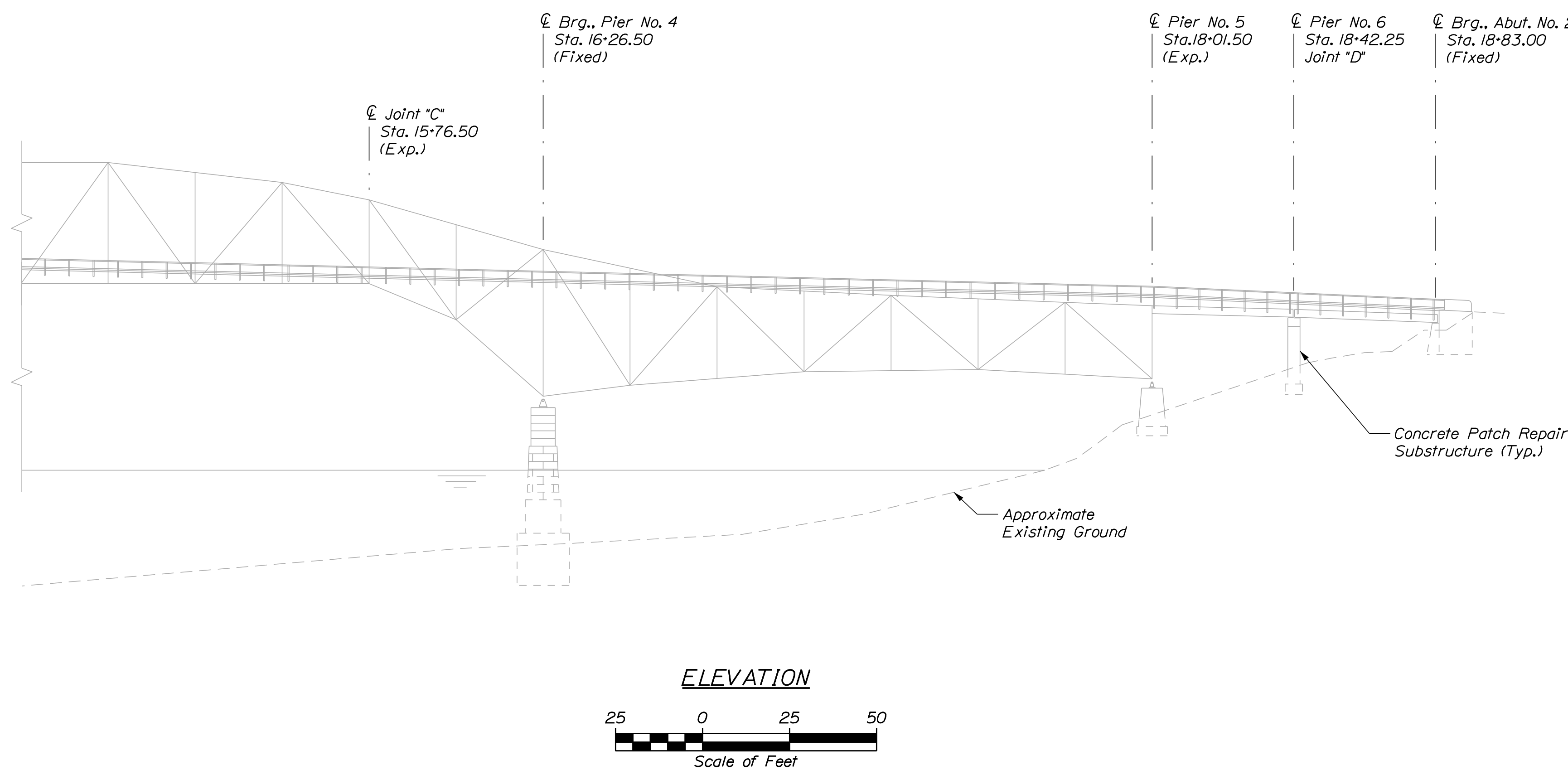
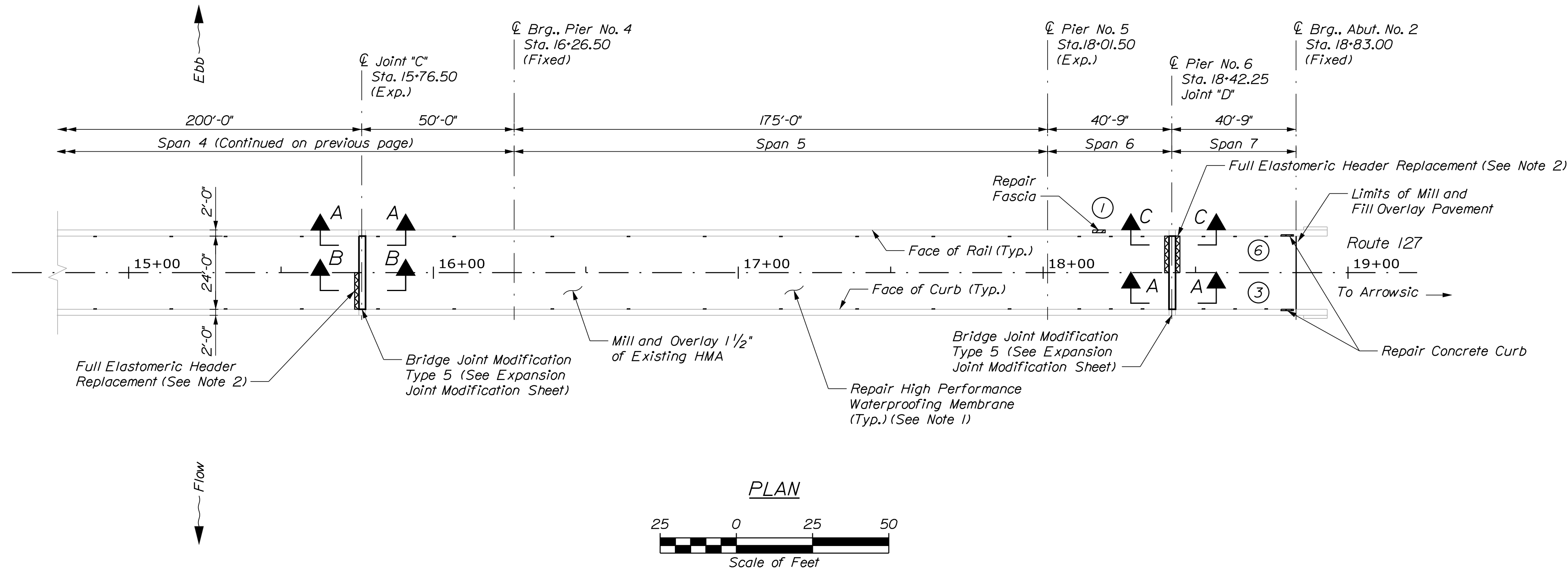
MAX L. WILDER MEMORIAL BRIDGE
OVER SASANOA RIVER
ARROWSIC/WOOLWICH SAGadahoc COUNTY
BRIDGE PLAN AND
ELEVATION (1 OF 2)

Date: 3/13/2020

Username: PDonovan

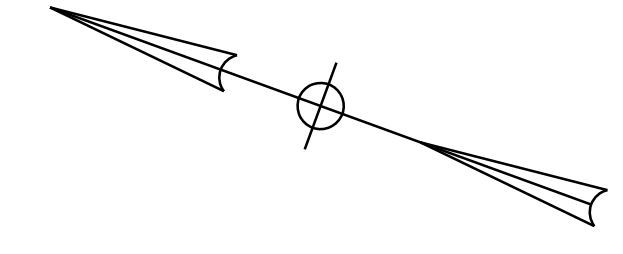
Division: BRIDGE

Filename: 004_plon_el.dgn



- NOTES:**
1. Repair High Performance Waterproofing Membrane and Pavement as directed by the Resident.
 2. Full Elastomeric Header Replacement shall be paid under item 520.245 Bridge Joint Modification Type 5.

- KEY**
- [Hatched Box] Limits of Surface Patch Repair
 - [Cross-hatched Box] Limits of Full Elastomeric Header Replacement
 - [Circle with Number] Square Foot of Repair



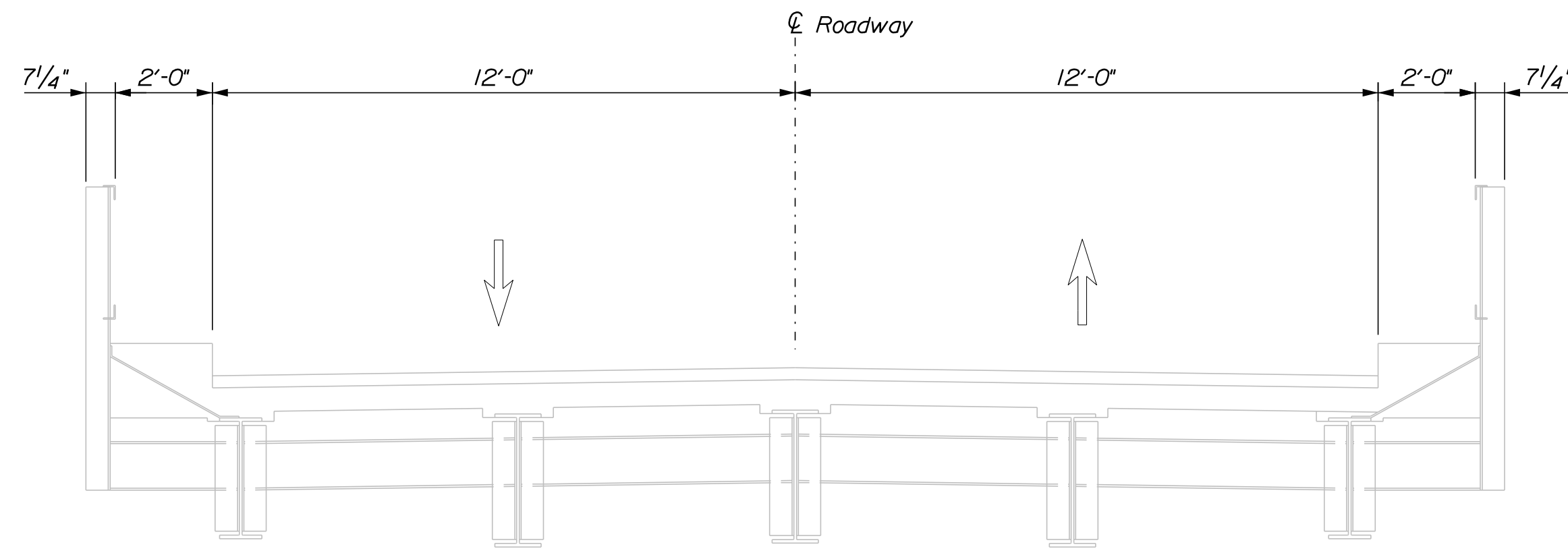
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
2350700
WIN
23507.00
BRIDGE NO. 2026
BRIDGE PLANS



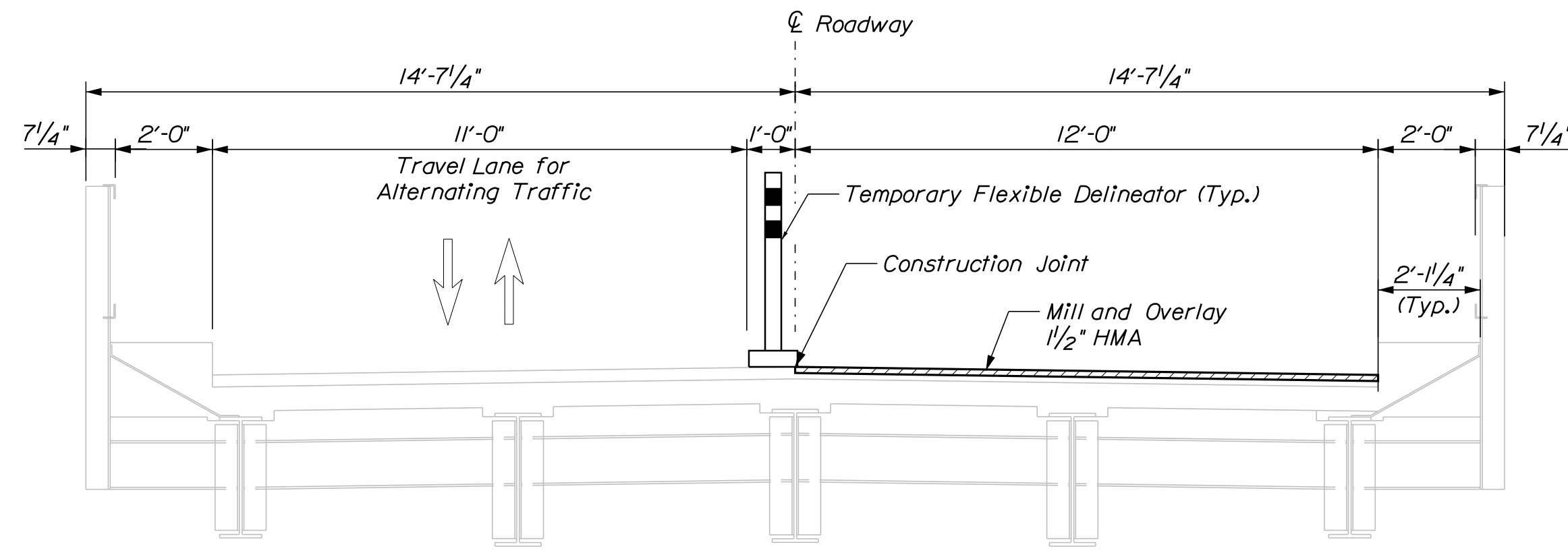
PROJ. MANAGER	DATE	BY
MAKERKE KERBERGEN	3/13/20	DPD
DESIGN-DETAILED		RSBLINT
CHECKED-REVIEWED		RSBLINT
DESIGN-DETAILED		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

MAX L. WILDER MEMORIAL BRIDGE
OVER SASANOA RIVER
ARROWSIC/WOOLWICH SAGadahoc COUNTY
BRIDGE PLAN AND
ELEVATION (2 OF 2)

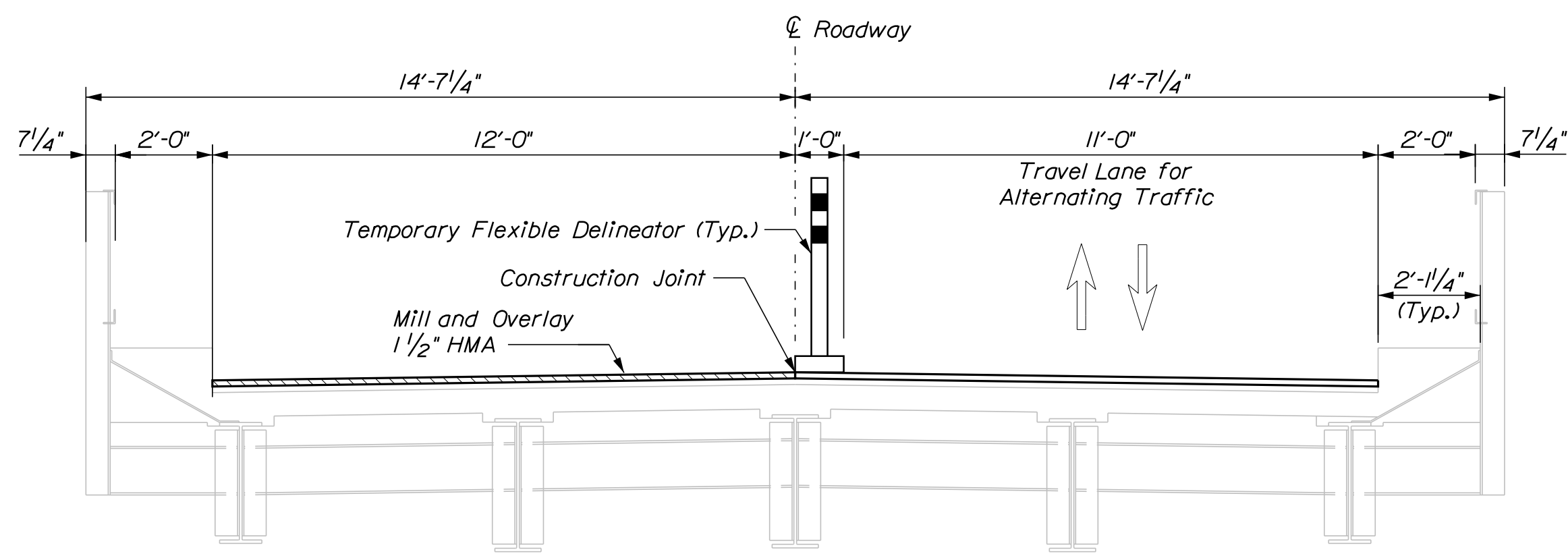
SHEET NUMBER
4
OF 11



EXISTING



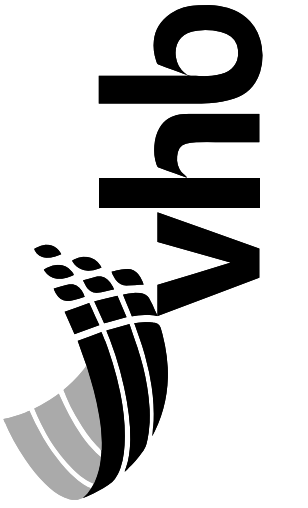
PHASE 1



PHASE 2

TEMPORARY TRAFFIC CONTROL NOTES

1. The bases for Temporary Flexible Delineators shall not exceed 12 inches wide. Spacing of delineators shall be 25-foot on-center for tangents and 12-foot on-center for tapers. The Contractor may substitute drums or cones for use in tapers.
2. Temporary Flexible Delineators shall conform to the Manual on Uniform Traffic Control Devices (MUTCD). Additionally any method used to stabilize these devices shall also conform to the MUTCD.



STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
2350700
WIN
23507.00
BRIDGE NO. 2026
BRIDGE PLANS

PROJ. MGR.	MANAGER	DATE	BY	DATE
DESIGN-DETAILED	MEB	3/13/20	DPD	3/13/20
CHECKED-REVIEWED	RSEBLINT	3/13/20	RSEBLINT	3/13/20
DESIGN-DETAILED				
REVISIONS 1				
REVISIONS 2				
REVISIONS 3				
REVISIONS 4				
FIELD CHANGES				

MAX L. WILDER MEMORIAL BRIDGE
OVER SASANOA RIVER
ARROWSIC/WOOLWICH SAGadahoc COUNTY
PHASED CONSTRUCTION
SECTIONS

SHEET NUMBER

5

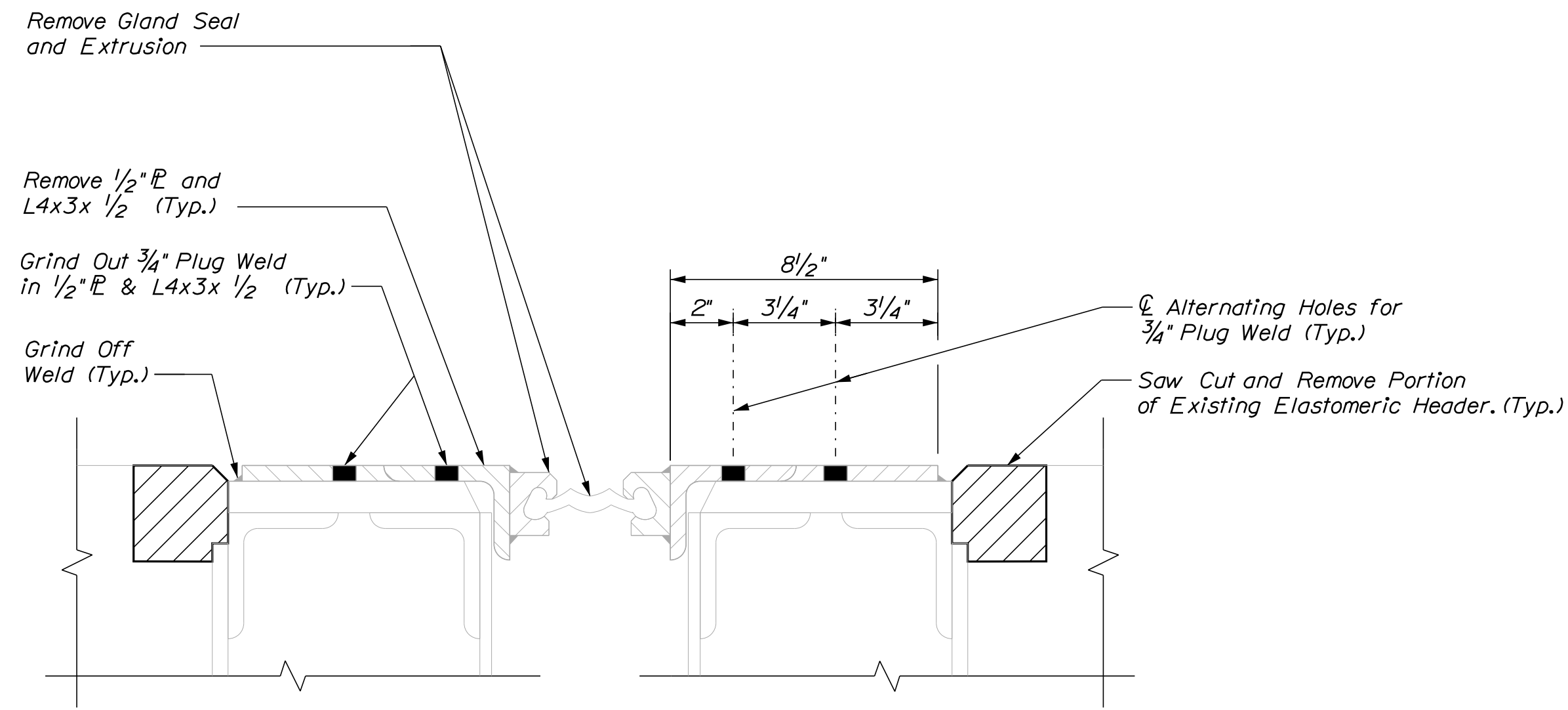
OF 11

Date: 3/13/2020

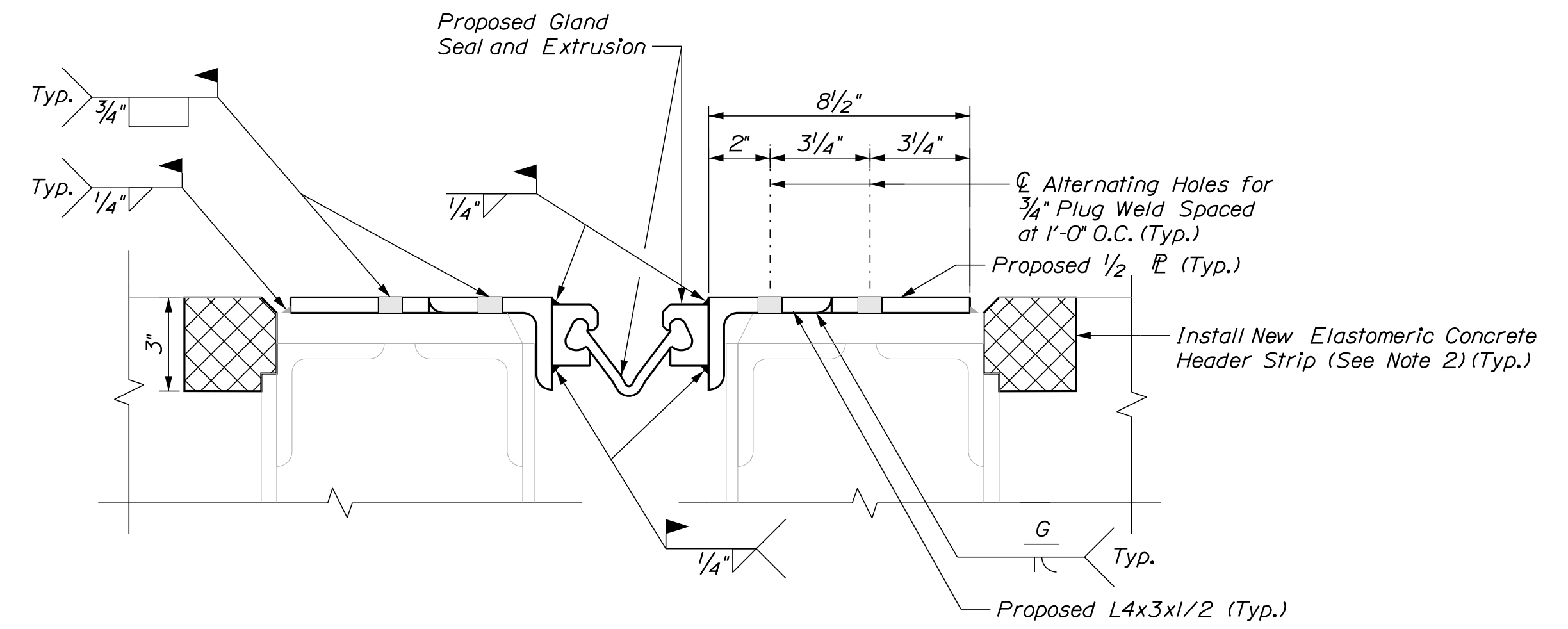
Username: PDonovan

Division: BRIDGE

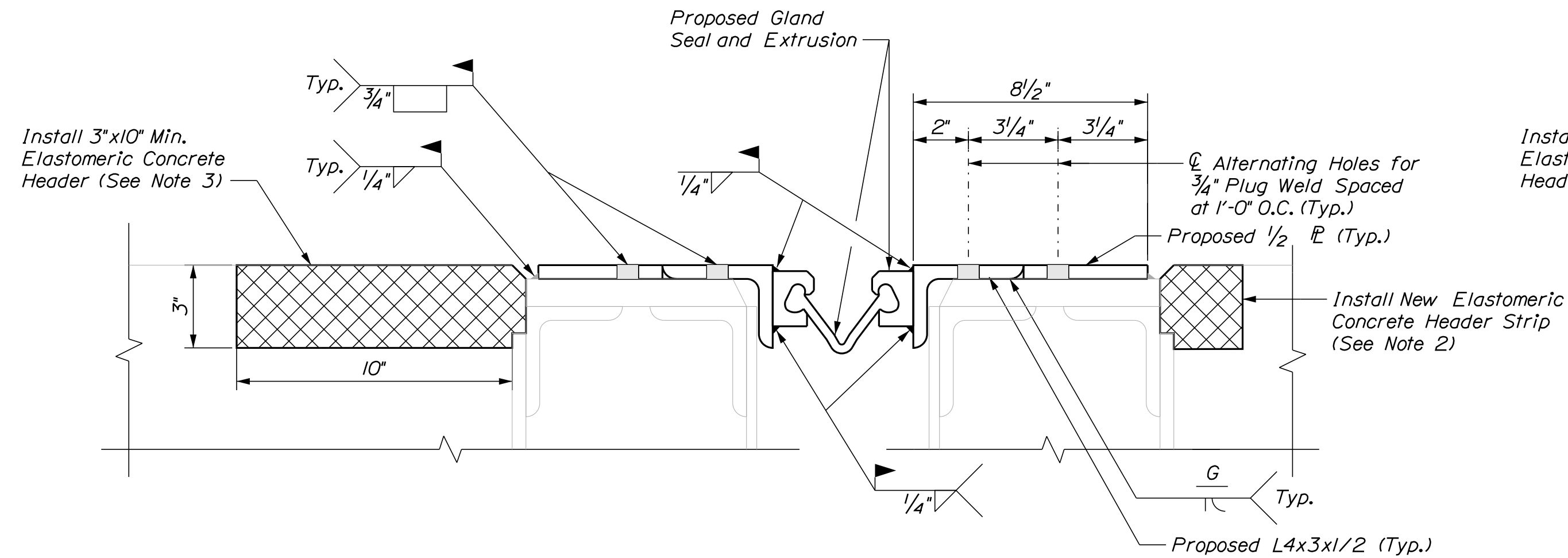
Filename: 008_Joints_01.dgn



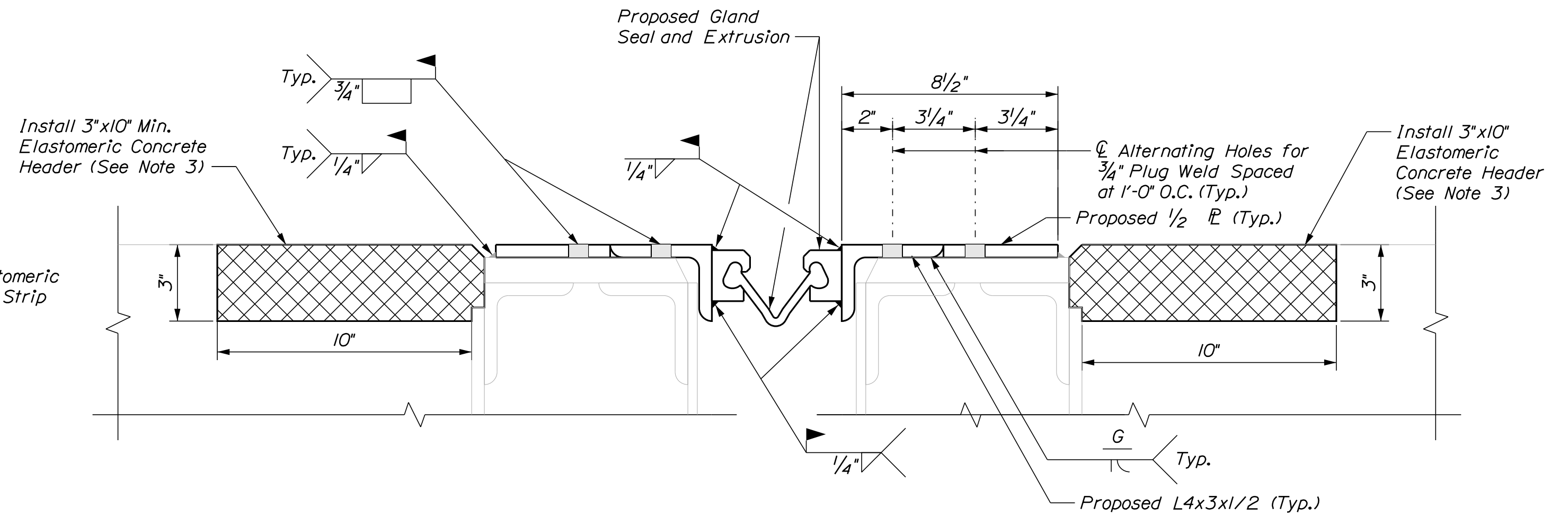
EXISTING EXPANSION JOINT SECTION
(Joint "A" Shown, Joint "C" and "D" Similar)



SECTION A-A
(Joint "A")



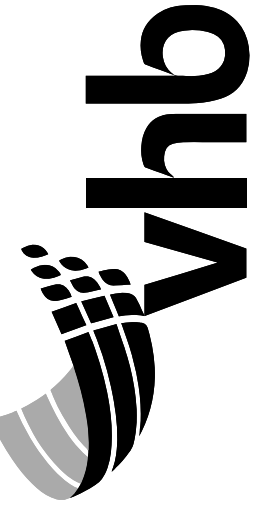
SECTION B-B
(Joint "C")



SECTION C-C
(Joint "D")

NOTES:

1. All concrete surfaces where elastomeric concrete is to be applied shall have a 1/2" inch minimum anchor profile or roughened surface as directed by the Resident.
2. Partial Removal of the elastomeric headers shall be limited to the minimum width required to install the joint steel. Removal limits shall be determined by the Resident.
3. Limits of Full Elastomeric Concrete Header replacement are shown on the Bridge Plan and Elevation (2 of 2) Sheet and paid under item 520.245 Bridge Joint Modification Type 5. See Special Provision 520.
4. Proposed Joint Steel and Gland Seal shall extend through the curb. Joint Steel shall be welded onto existing curb plates or replaced.
5. The seals to be furnished shall be:
 Joint A @ Sta. 11+00.75 = 4" Gland Seal
 Joint C @ Sta. 15+76.50 = 4" Gland Seal
 Joint D @ Sta. 18+42.25 = 4" Gland Seal
6. The seal shall be approved by the Resident prior to ordering and installation. The Contractor shall verify the dimensions necessary to assure that the new joint seals will fit.



PROJ. MGR.	DATE	BY
DESIGN DETAIL	3/13/20	MEB
CHECKED/REVIEWED	3/13/20	RSLINT
DESIGN DETAIL		RSLINT
DESIGN DETAIL		
REVISIONS		
REVISIONS		
REVISIONS		
REVISIONS		
FIELD CHANGES		

MAX L. WILDER MEMORIAL BRIDGE
OVER SASANOA RIVER
ARROWSIC/WOOLWICH SAGadahoc COUNTY
**EXPANSION JOINT
MODIFICATIONS (1 of 2)**

SHEET NUMBER

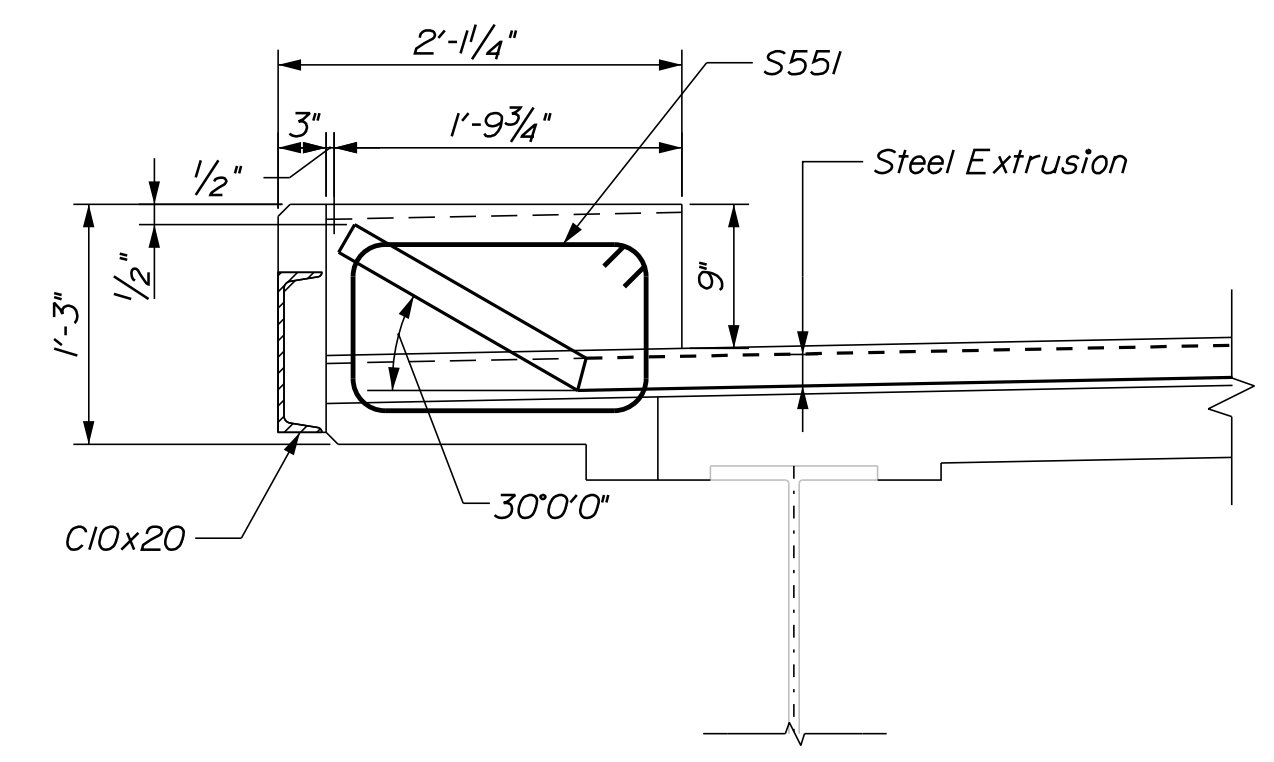
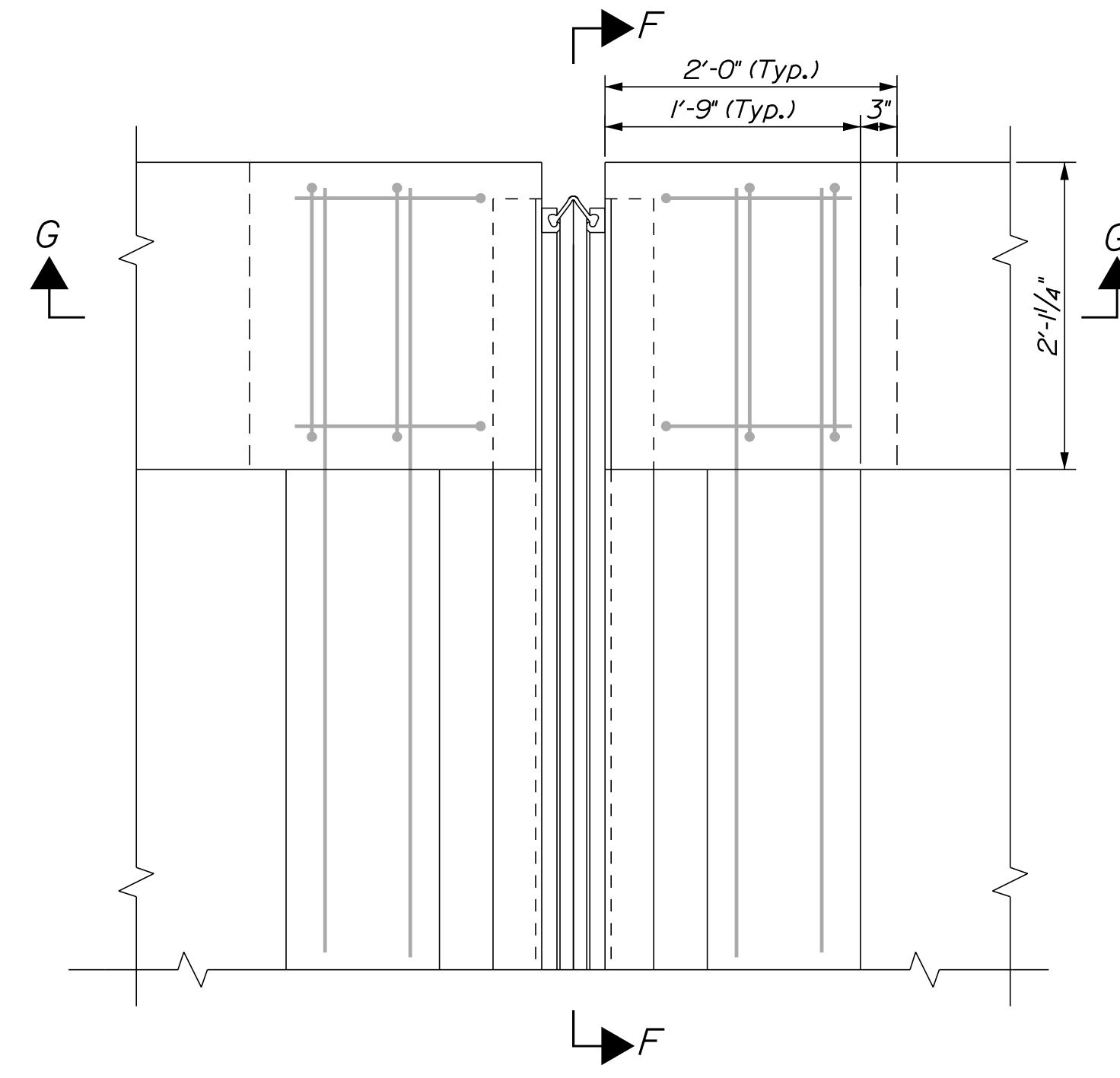
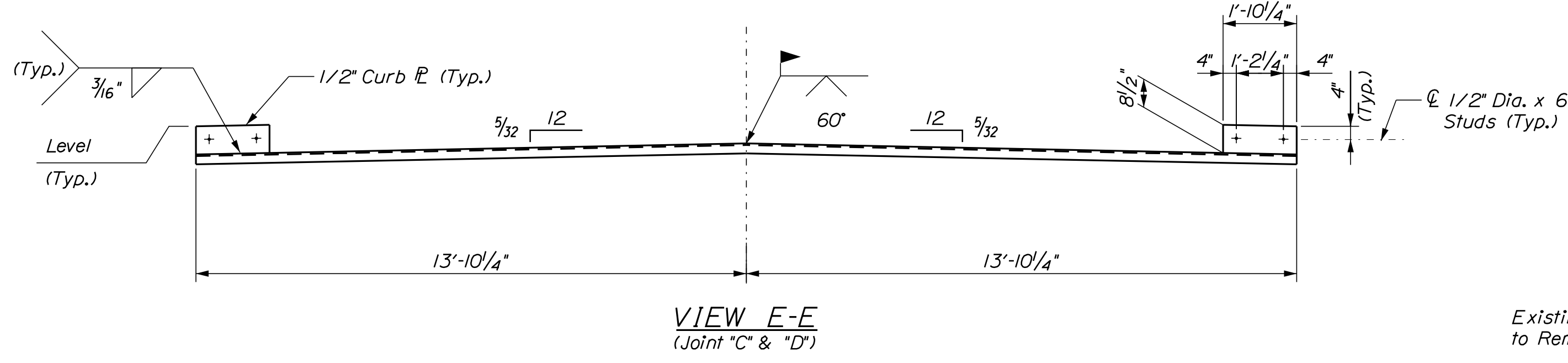
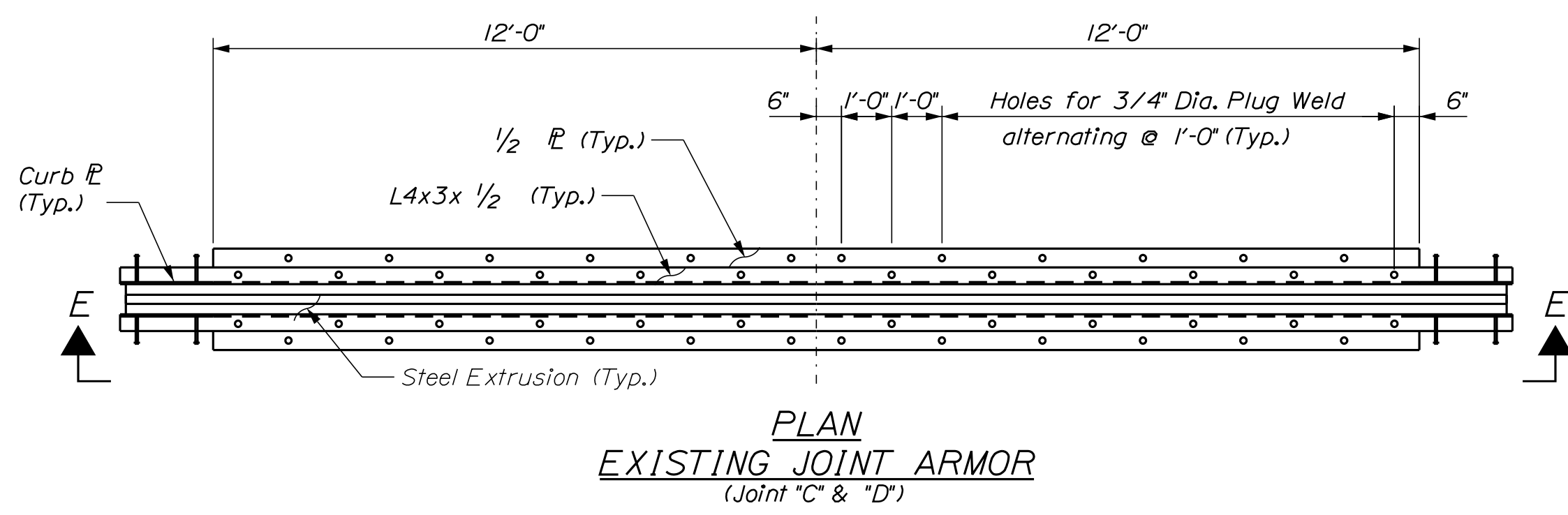
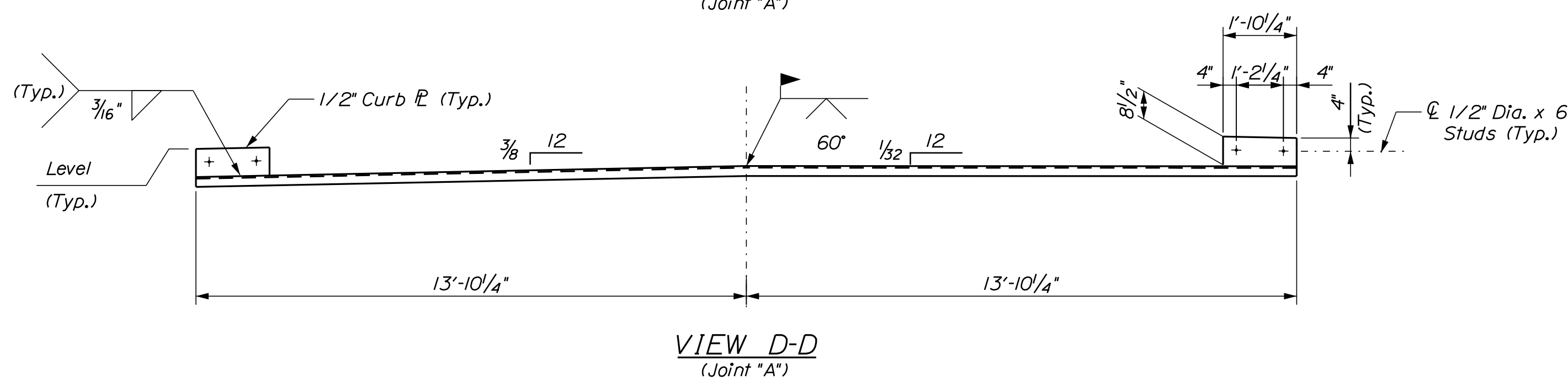
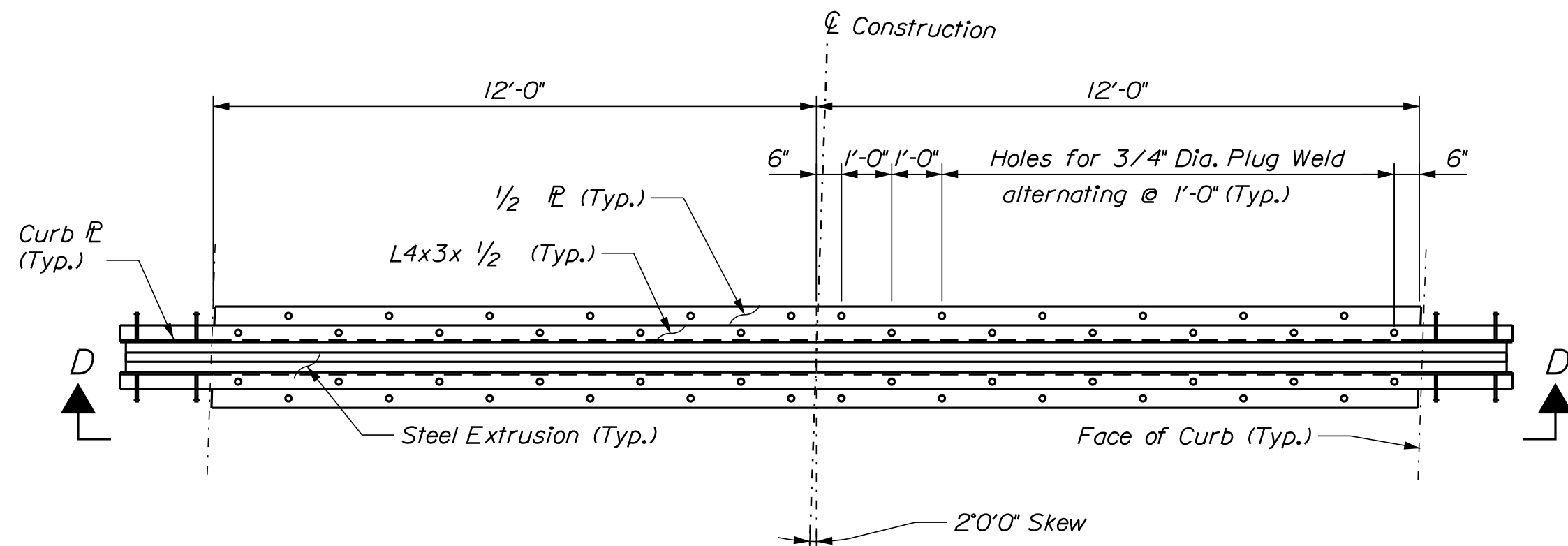
8

Date: 3/13/2020

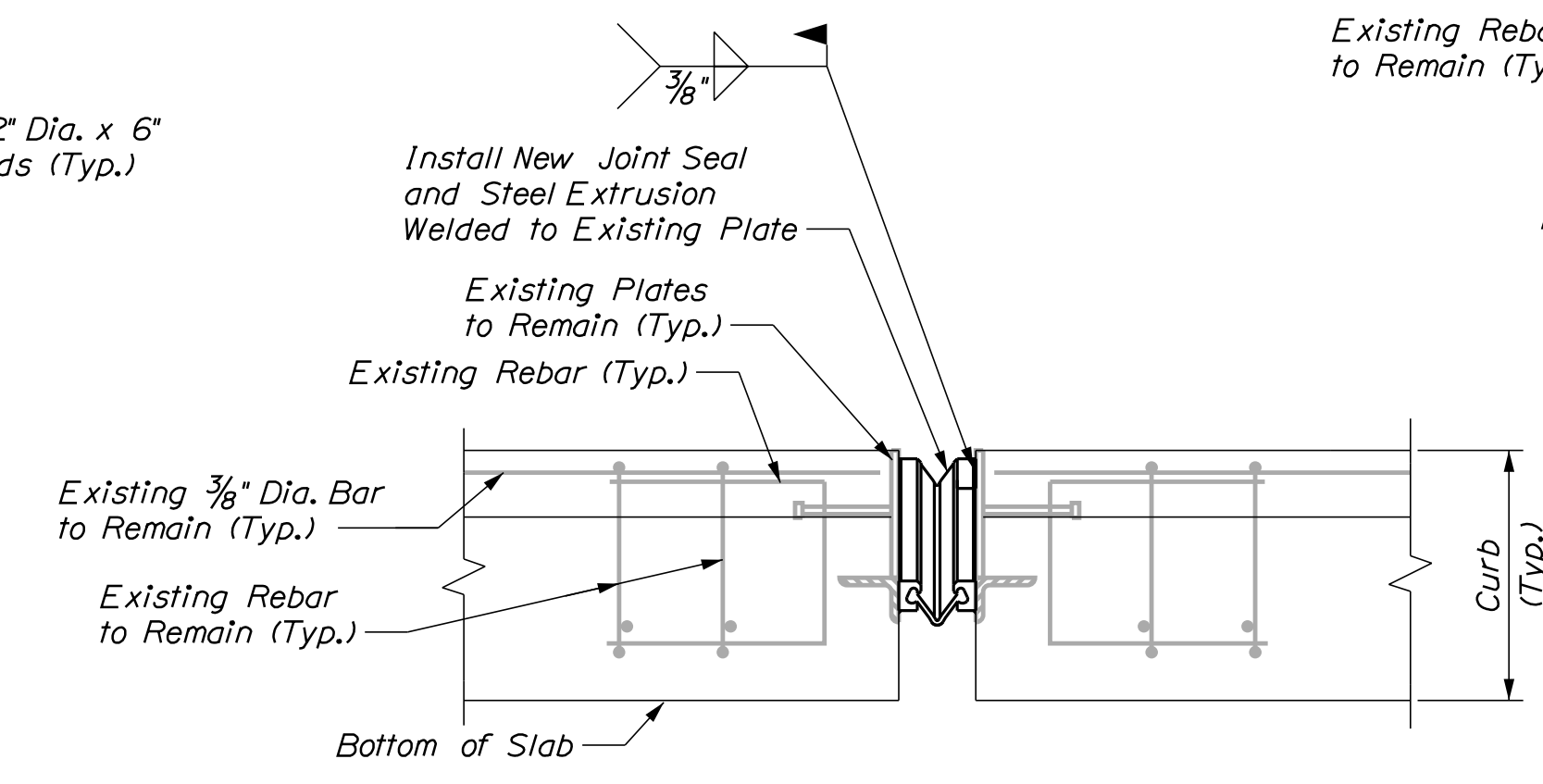
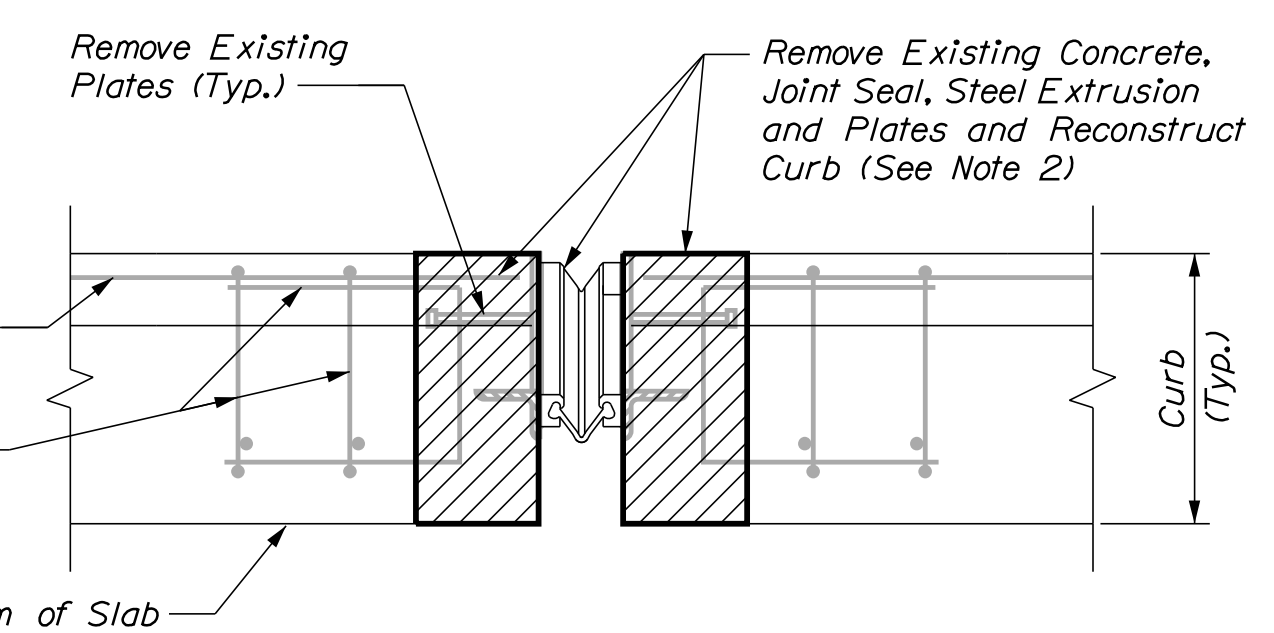
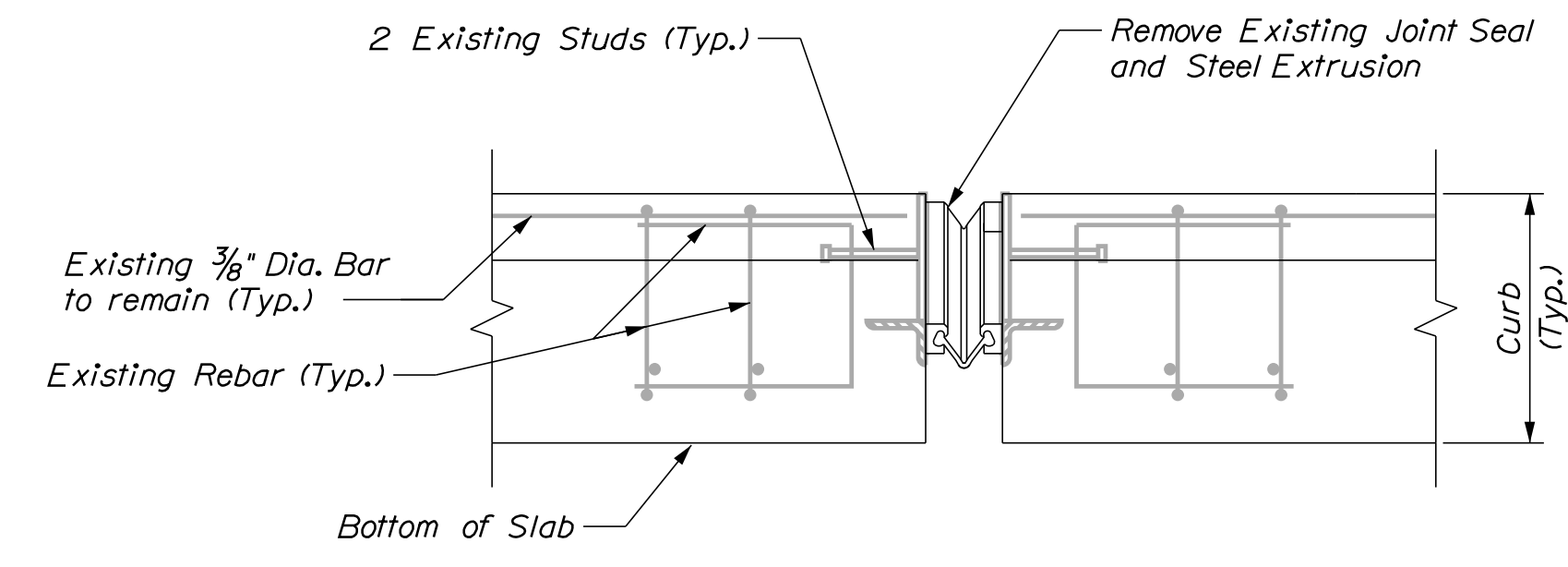
Username: PDonovan

Division: BRIDGE

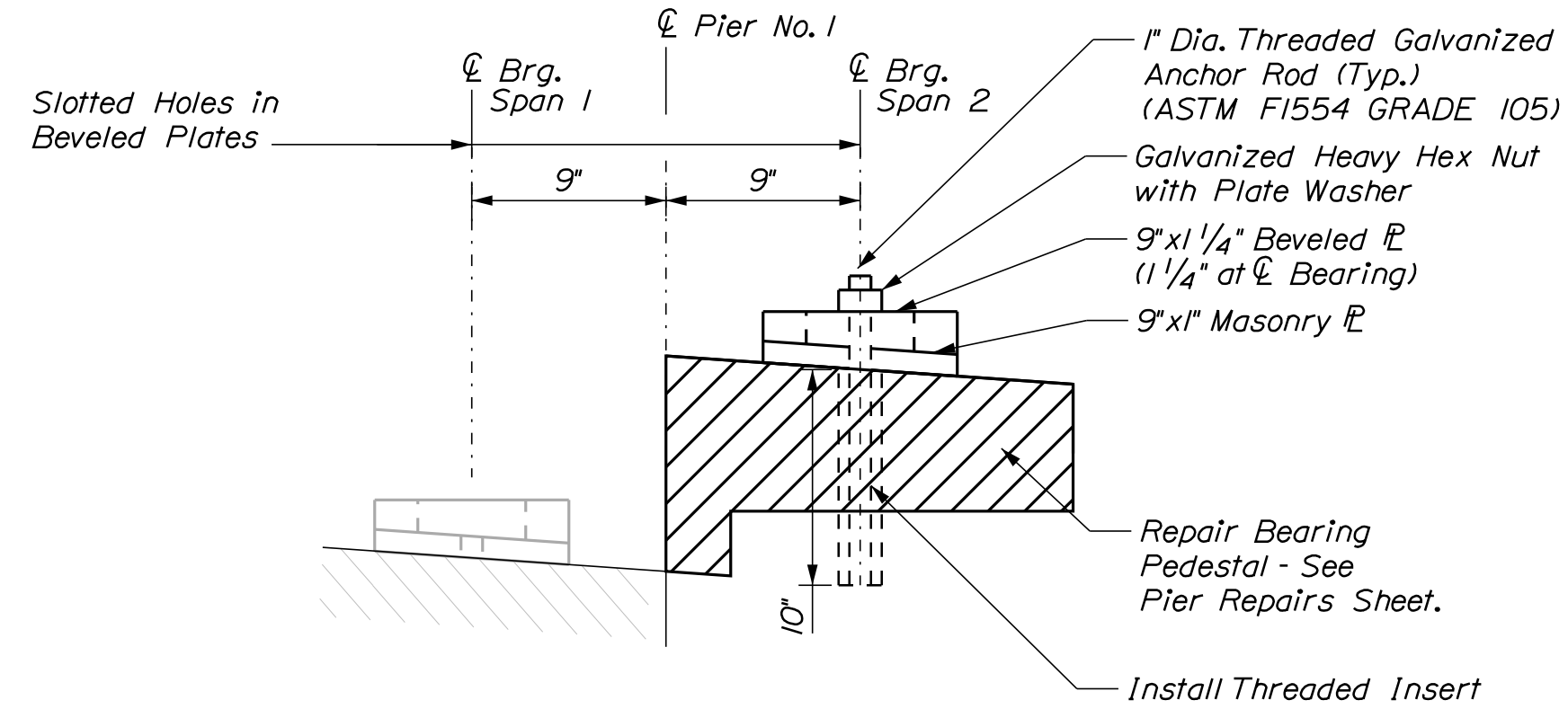
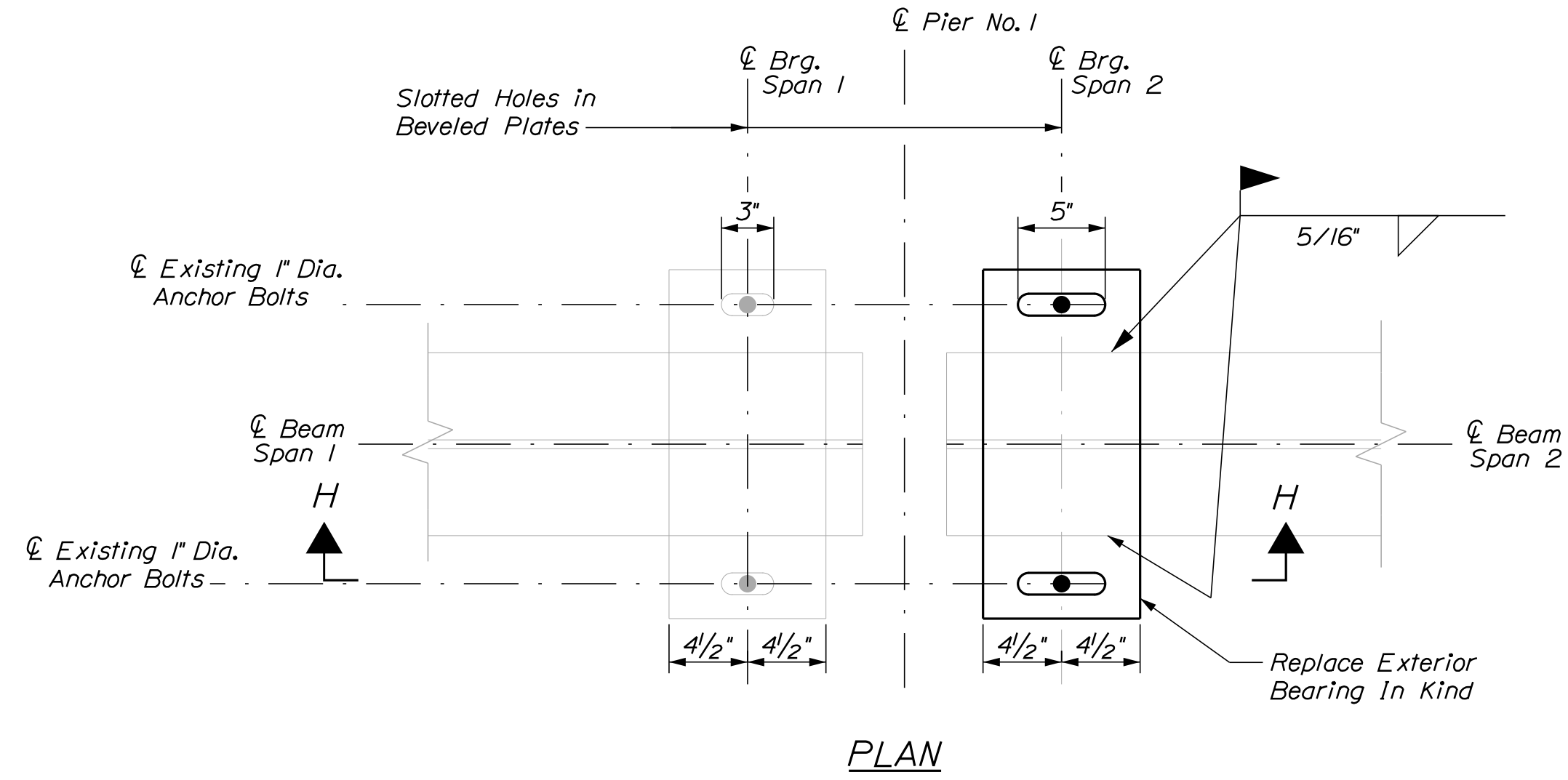
Filename: 009_Curb_01.dgn



- NOTES:
- Contractor shall field measure existing curb plate and joint dimensions prior to development of the shop drawings.
 - At the Contractor's option, they may remove and reconstruct a portion of the curb with Class A concrete. Curb reconstruction limits shall be the minimum required to remove existing plates, as directed by the Resident. The Contractor shall maintain the existing curb reinforcement. All work related to the curb joint modification shall be incidental to item 520.245 Bridge Joint Modification Type 5. See Alternate Section G-G below.



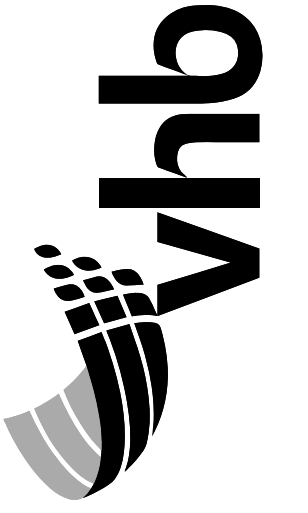
PROJ. MGR.	DATE	BY	DATE
DESIGN-DETAILED	3/13/20	DPD	3/13/20
CHECKED-REVIEWED		RSEBLINT	
DESIGN-DETAILED		RSEBLINT	
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			



SECTION H-H
EXPANSION BEARING DETAIL

NOTES:

1. The exterior beam end shall be jacked and stabilized to replace the existing bearing in kind. Payment for this work shall be included in Item 524.301 Temporary Structural Support.
2. Contractor to field measure existing bearing plate width and replace in kind.
3. Bearing plates shall be ASTM A36 steel.



STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2350700

WIN

BRIDGE NO. 2026

23507.00

BRIDGE PLANS

PROJ. MGR.	MANAGER	DATE	BY	DATE
DESIGN-DETAILED	MEB	3/13/20	DPD	3/13/20
CHECKED-REVIEWED	RSBLINT		RSBLINT	
DESIGN-DETAILED				
REVISIONS 1				
REVISIONS 2				
REVISIONS 3				
REVISIONS 4				
FIELD CHANGES				

MAX L. WILDER MEMORIAL BRIDGE
OVER SASANOA RIVER
ARROWSIC/WOOLWICH SAGADAHOE COUNTY

BEARING DETAILS

SHEET NUMBER

10

OF 11

