

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION



SPECIFICATIONS

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

DESIGN LOADING

Live Load HL - 93

TRAFFIC DATA

	I-295 NB	I-295 SB
Current (2019) AADT	30,470	29,990
Future (2039) AADT	31,990	31,490
DHV - % of AADT	13%	13%
Design Hour Volume	4,358	4,289
Heavy Trucks (% of AADT)	6%	6%
Heavy Trucks (% of DHV)	3%	3%
Directional Distribution (% of DHV)	100%	100%
18 kip Equivalent P 2.0	1,895	2,013
18 kip Equivalent P 2.5	1,806	1,918
Design Speed (mph)	50	50

MATERIALS

Concrete (Unless noted otherwise)	Class "A"
Concrete (Transition Barriers)	Class "LP" or Class "P"
Reinforcing Steel	ASTM A 615/A 615M, Grade 60
Steel Plating	ASTM A 572, Grade 50

BASIC DESIGN STRESSES

Concrete, Class "A"	f'c = 4,000 psi
Concrete, Class "LP"	f'c = 5,000 psi
Reinforcing Steel	f _y = 60,000 psi
Steel Plating	f _y = 50,000 psi

PORTLAND
CUMBERLAND COUNTY
CNRR CROSSING BRIDGE
OVER
CNRR

US 1 & I-295
FEDERAL AID PROJECT NO. 2354500
PROJECT LENGTH 0.031 mi.
BRIDGE NO. 5616

INTERSTATE 295 SOUTHBOUND
OVER
WASHINGTON AVENUE

US 1 & I-295
FEDERAL AID PROJECT NO. 2361503
PROJECT LENGTH 0.026 mi.
BRIDGE NO. 0816

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UTILITIES

Maine Department of Transportation
St. Lawrence and Atlantic Railroad

MAINTENANCE OF TRAFFIC

Night work using interstate closures, interstate lane closures and phased construction.

PROJECT LOCATION:	I-295 over CNRR, located 0.2 miles north of Washington Avenue, Latitude 43°40'53", Longitude 70°15'16" I-295 over Washington Avenue, located 0.1 miles north of Tukey's Bridge, Latitude 43°40'46", Longitude 70°15'22"
PROGRAM AREA:	Bridge
OUTLINE OF WORK:	Bridge Rehabilitation

WIN 023545.00 & 023615.03

2354500 & 2361503

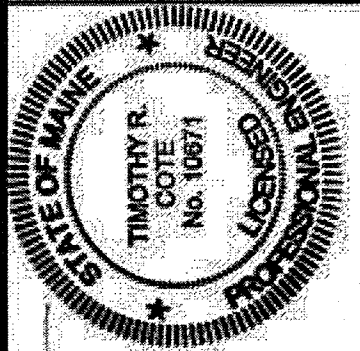
PORTLAND
CNRR & WASHINGTON AVENUE
BRIDGES

TITLE SHEET

SHEET NUMBER

1

OF 21



SIGNATURE
P.E. NUMBER
DATE

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

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
APPROVED
COMMISSIONER
CHIEF ENGINEER

DATE
4-18-2020
4-3-2020

ESTIMATED BRIDGE QUANTITIES					
ITEM NO.	DESCRIPTION	QUANTITY	QUANTITY	TOTAL	UNIT
		<i>SB Washington Ave. Br. No. *0816</i>	<i>CNRR Br. No. *5616</i>		
202.202	Removing Pavement Surface	530	670	1200	SY
203.20	Common Excavation*	2	140	142	CY
206.082	Structural Earth Excavation - Major Structures, Plan Quantity	0	15	15	CY
304.10	Aggregate Subbase Course - Gravel	0	15	15	CY
403.207	Hot Mix Asphalt, 19.0 mm Nominal Maximum Size	10	100	110	TON
403.2081	Hot Mix Asphalt, 12.5 mm Nominal Maximum Size (Polymer Modified)	45	110	155	TON
403.211	Hot Mix Asphalt, 9.5 mm Nominal Maximum Size (Shimming)	7	0	7	TON
403.213	Hot Mix Asphalt, 12.5 mm Nominal Maximum Size (Base and Intermediate Base course)	10	110	120	TON
403.2131	Hot Mix Asphalt, 12.5 mm Nominal Maximum Size (Base and Intermediate Base course, Polymer Modified)	15	100	115	TON
409.15	Bituminous Tack Coat, Applied	30	55	85	GAL
461.131	Temporary Pavement*	10	25	35	TON
508.13	Sheet Waterproofing Membrane (135 SY)	0	1	1	LS
518.51	Repair of Upward Facing Surfaces - below Reinforcing Steel < 8 inches*	20	0	20	SF
518.52	Repair of Upward Facing Surfaces > 8 inches*	1	0	1	CY
518.70	Repair of Overhead Surfaces < 8 inches*	0	125	125	SF
518.71	Repair of Overhead Surfaces > 8 inches*	0	3	3	CY
520.243	Bridge Joint Modification Type 3	2	0	2	EA
520.245	Bridge Joint Modification Type 5	0	4	4	EA
523.312	Clean and Seal Bearings	0	40	40	EA
524.50	Temporary Roadway Mat	1	1	2	EA
526.503	Precast Concrete Transition Barrier	0	1	1	LS
527.33	Truck Mounted Attenuator	0	2	2	EA
627.744	6" White or Yellow Painted Pavement Marking Line	700	2400	3100	LF
629.05	Hand Labor, Straight Time	10	10	20	HR
631.10	Air Compressor (including operator)	10	10	20	HR
631.11	Air Tool (including operator)	10	10	20	HR
631.12	All Purpose Excavator (including operator)	5	5	10	HR
631.172	Truck-Large (including operator)	5	5	10	HR
652.30	Flashing Arrow	0	2	2	EA
652.312	Type III Barricades	6	3	9	EA
652.33	Drum	9	92	101	EA
652.34	Cone	10	20	30	EA
652.35	Construction Signs	550	550	1100	SF
652.361	Maintenance of Traffic Control Devices: CNRR/Washington Avenue SB	0.5	0.5	1	LS
652.38	Flaggers	50	50	100	HR
652.381	Traffic Officers	55	0	55	HR
652.41	Portable-Changeable Message Sign	1	1	2	EA
652.46	Sequential Flashing Warning Lights	0	10	10	EA
656.75	Temporary Soil Erosion and Water Pollution Control	0.5	0.5	1	LS
659.10	Mobilization	0.5	0.5	1	LS

* Undetermined Location
Notes:
1. Estimated Quantities for each bridge are provided here for reference purposes only.



CNRR & WASHINGTON AVENUE
INTERSTATE 295
PORTLAND
CUMBERLAND

ESTIMATED QUANTITIES

SHEET NUMBER
3
OF 21

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

SIGNATURE

P.E. NUMBER

DATE

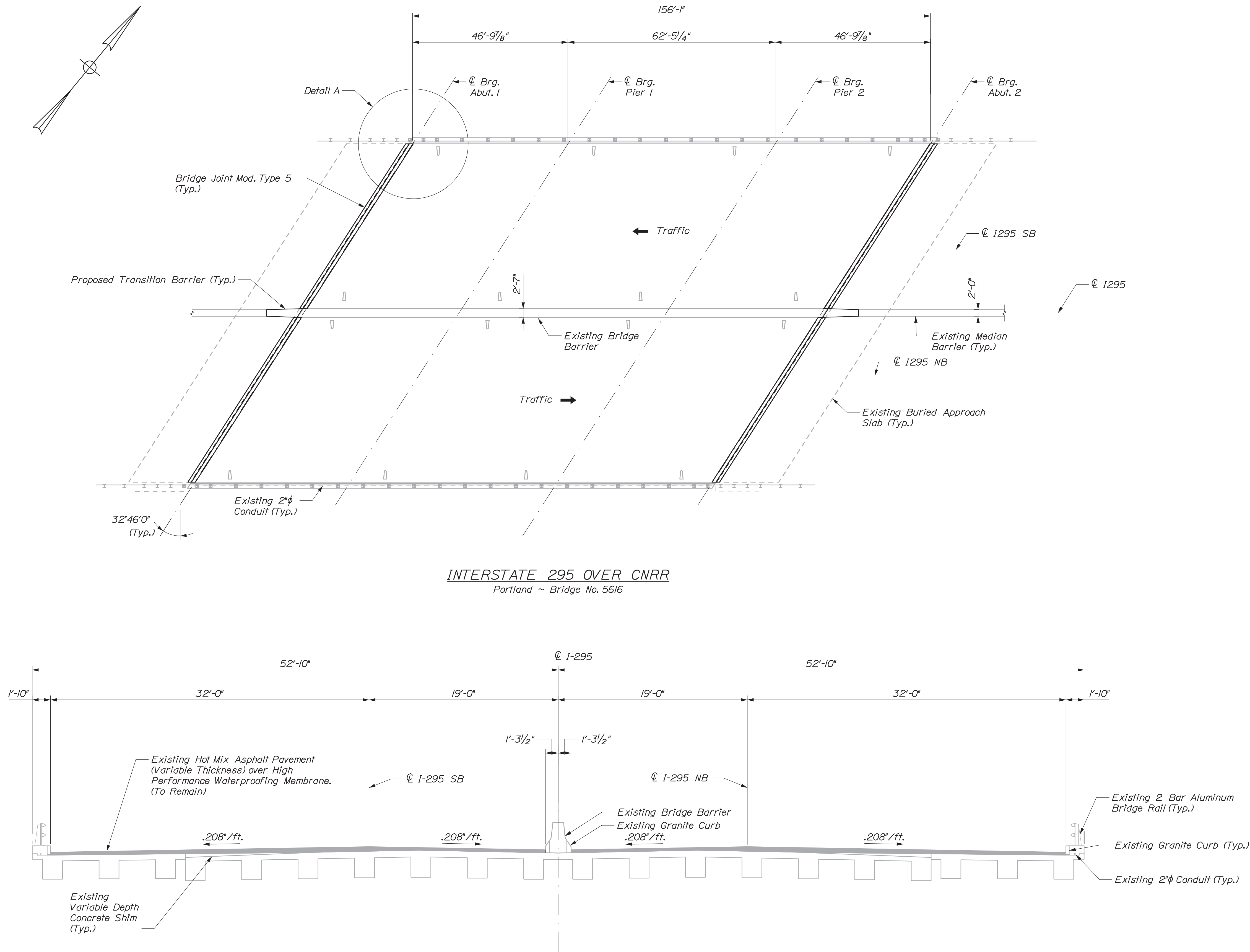
BRIDGE NO. 5616
WIN 23545.00
BRIDGE PLANS

Date:3/4/2020

Username:

Division:

Filename: 004_PlanSect - CNRR.dgn



INTERSTATE 295 OVER CNRR
Portland ~ Bridge No. 5616

TRANSVERSE SECTION

NOTES:

1. For Bridge Joint Modification, Type 5, see "CNRR Joint Modification Details".
2. For Detail A, see "CNRR Modification Details II".
3. For Transition Barrier Details, see "CNRR Median Transition Barrier".



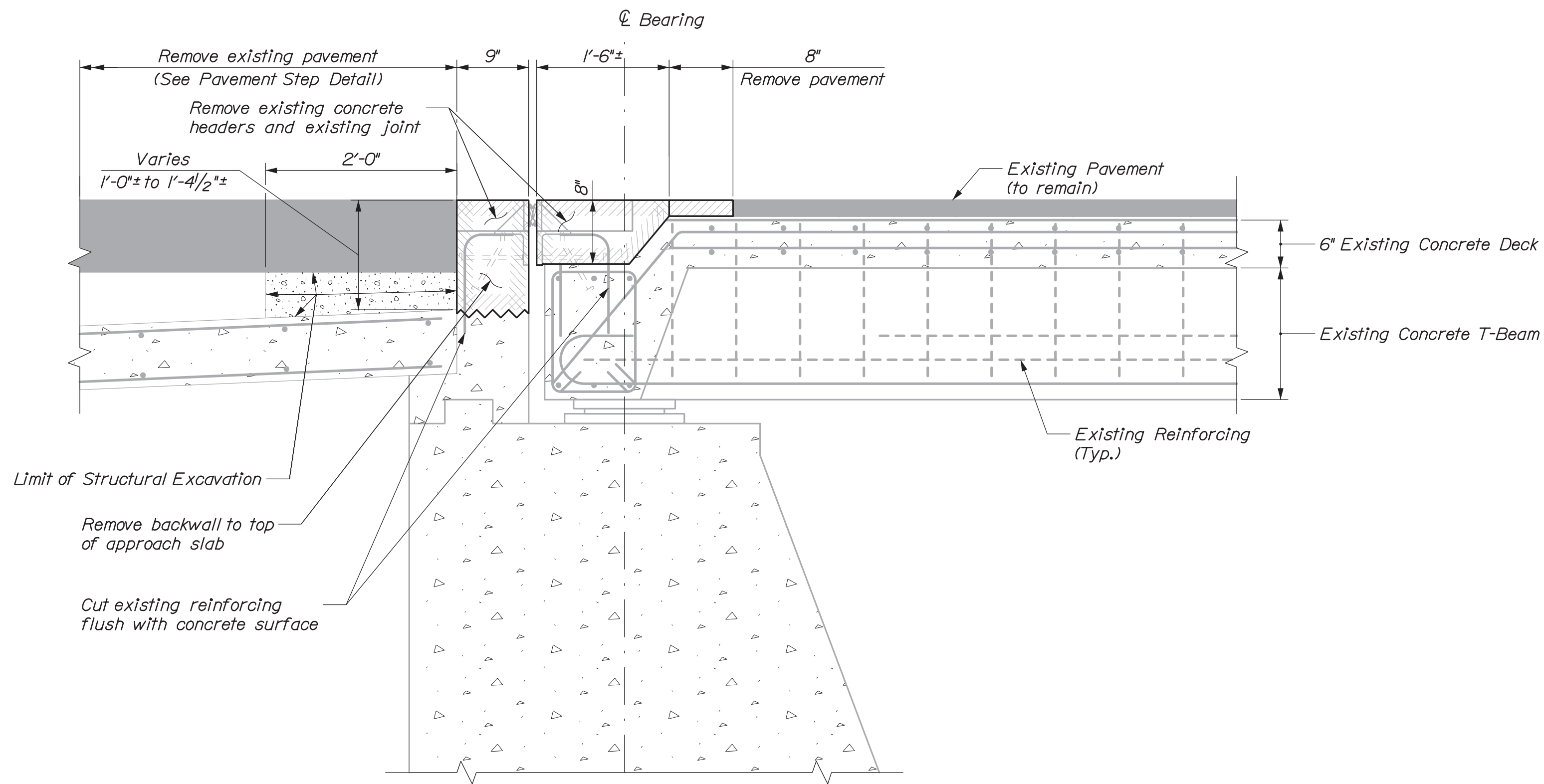
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PROJ. MANAGER	M. Kersbergen	BY	DATE					STATE OF MAINE			
DESIGN-DETAILED	T. Cole	E. Beausoleil	02/20					DEPARTMENT OF TRANSPORTATION			
CHECKED-REVIEWED	A. Stephens	K. Broisy	02/20								
DESIGN2-DETAILED2											
DESIGN3-DETAILED3											
REVISIONS 1								2354500 & 2361503			
REVISIONS 2											
REVISIONS 3											
REVISIONS 4											
FIELD CHANGES											
						DATE			WIN		
						5616 & 0816			023545.00 & 023615.03		
									BRIDGE PLANS		

Date:3/4/2020

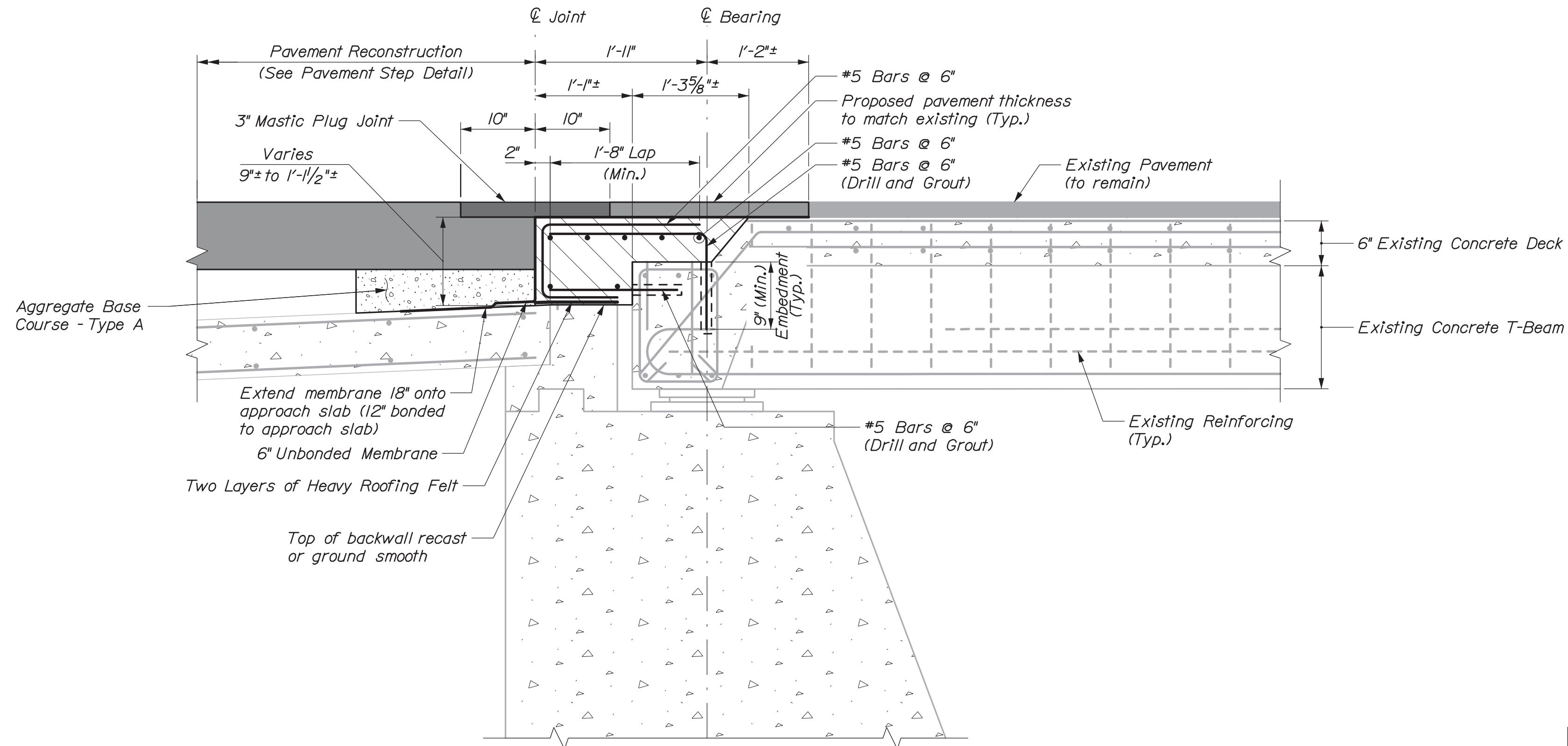
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Division:

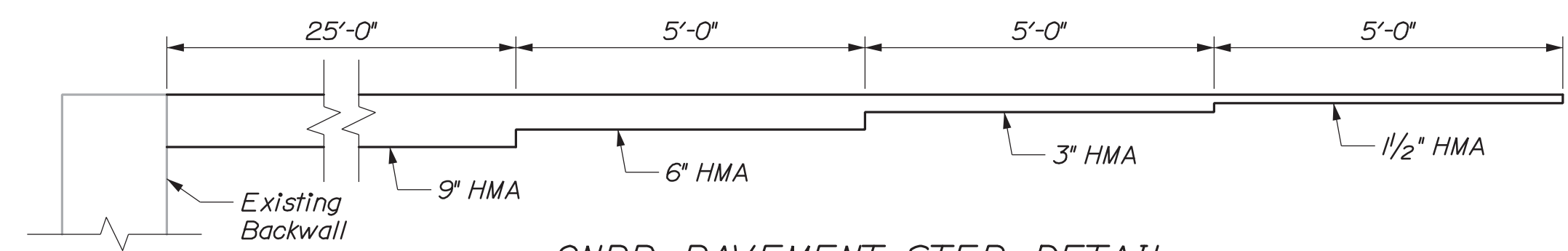
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DEMOLITION
(Abutment 1 shown, Abutment 2 similar)



CONSTRUCTION
(Abutment 1 shown, Abutment 2 similar)
BRIDGE JOINT MODIFICATION TYPE 5



CNRR PAVEMENT STEP DETAIL

Notes:
1. Membrane, where specified, shall be sheet membrane.

HNTB

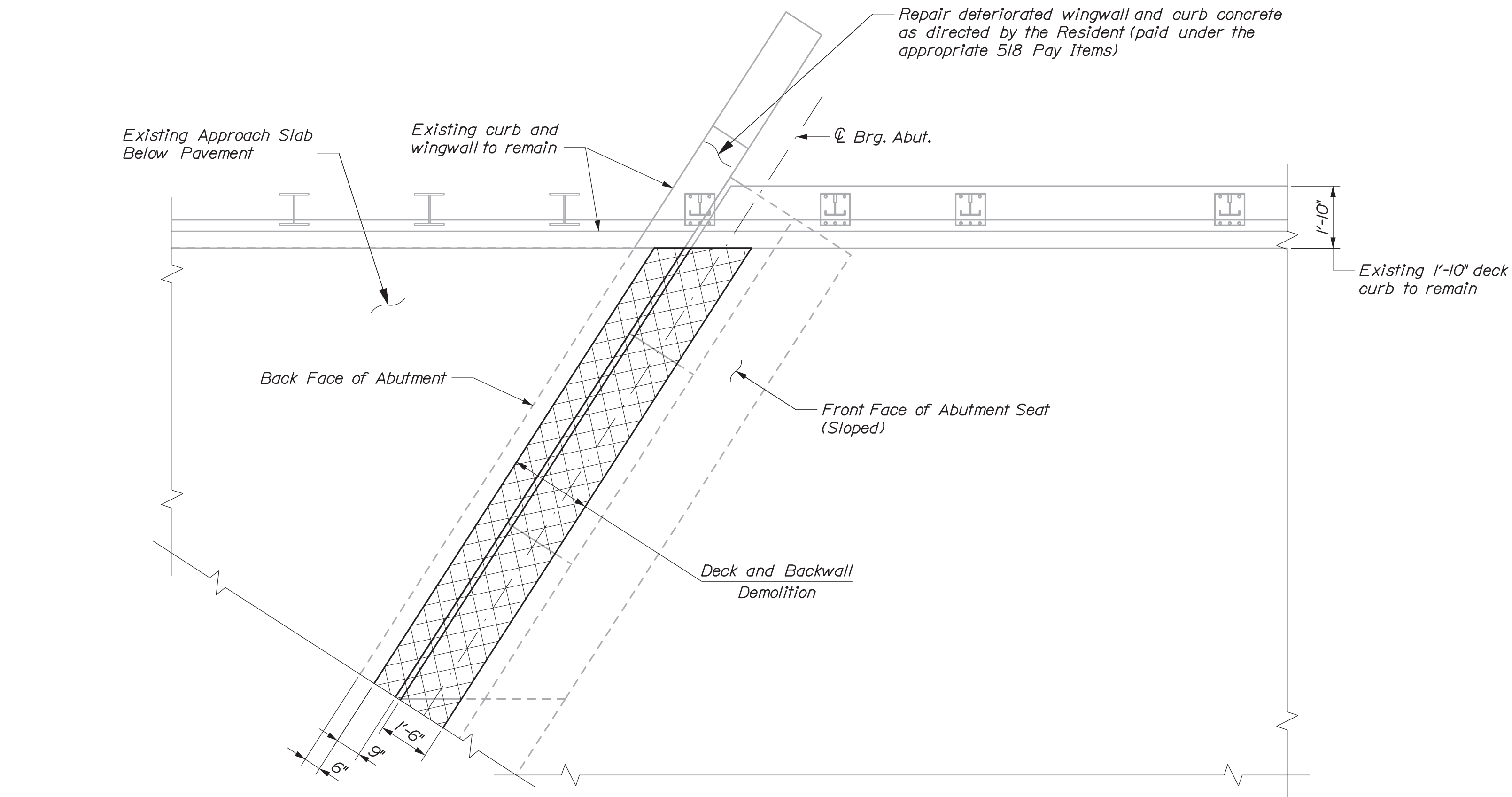
STATE OF MAINE		DEPARTMENT OF TRANSPORTATION		2354500 & 2361503		WIN		023545.00 & 023615.03		BRIDGE PLANS	
CNRR & WASHINGTON AVENUE		INTERSTATE 295		CUMBERLAND		PORTLAND		CNRR JOINT MODIFICATION		DETAILS I	
PROJECT MANAGER		BY		DATE		SIGNATURE		P.E. NUMBER		DATE	
DESIGNED-Detailed		E. Beausoleil		02/20							
CHECKED-Reviewed		K. Broyer		02/20							
DESIGN-Details											
REVISIONS 1											
REVISIONS 2											
REVISIONS 3											
REVISIONS 4											
FIELD CHANGES											
SHEET NUMBER		5		OF 21							

Date:3/4/2020

Username:

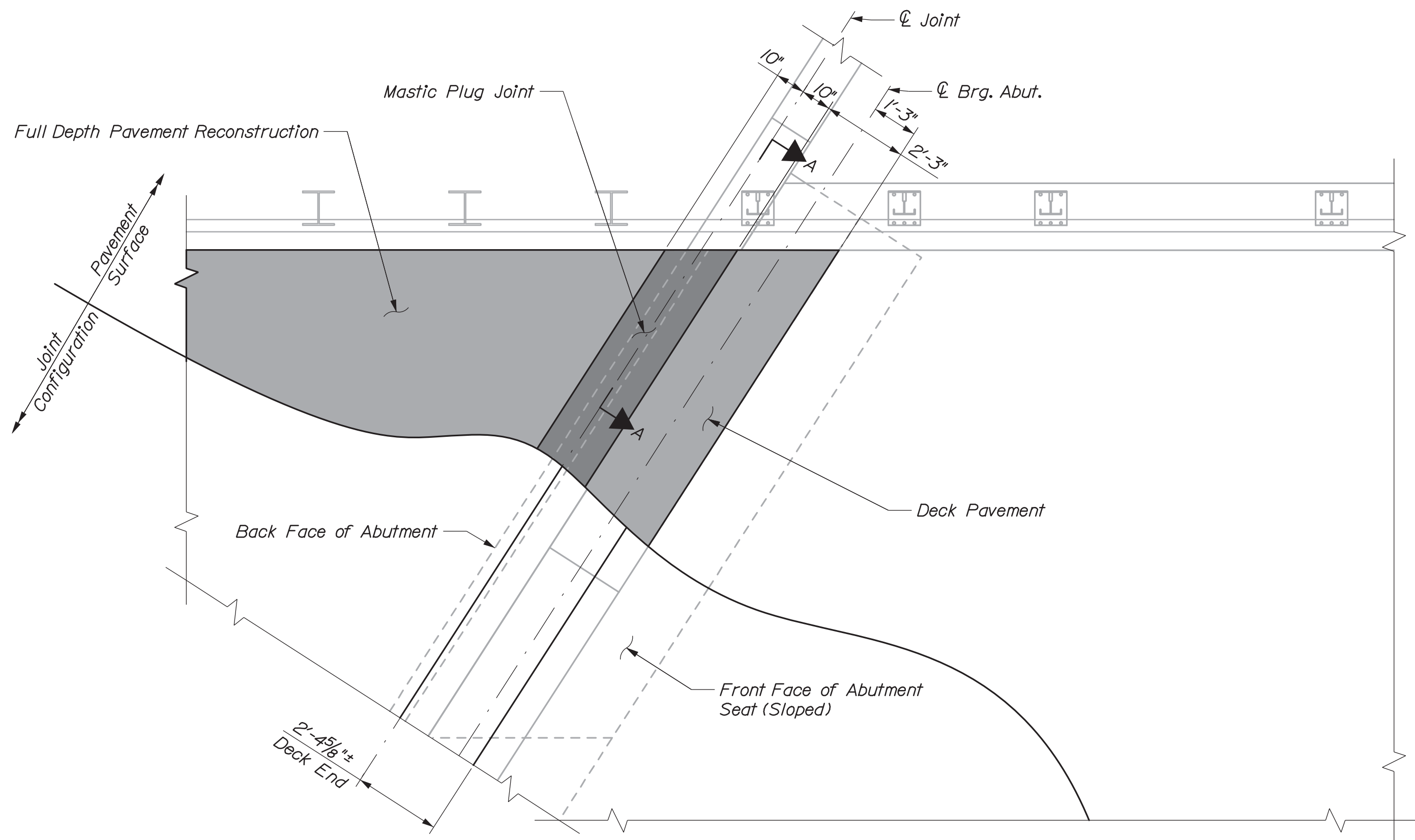
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DEMOLITION PLAN

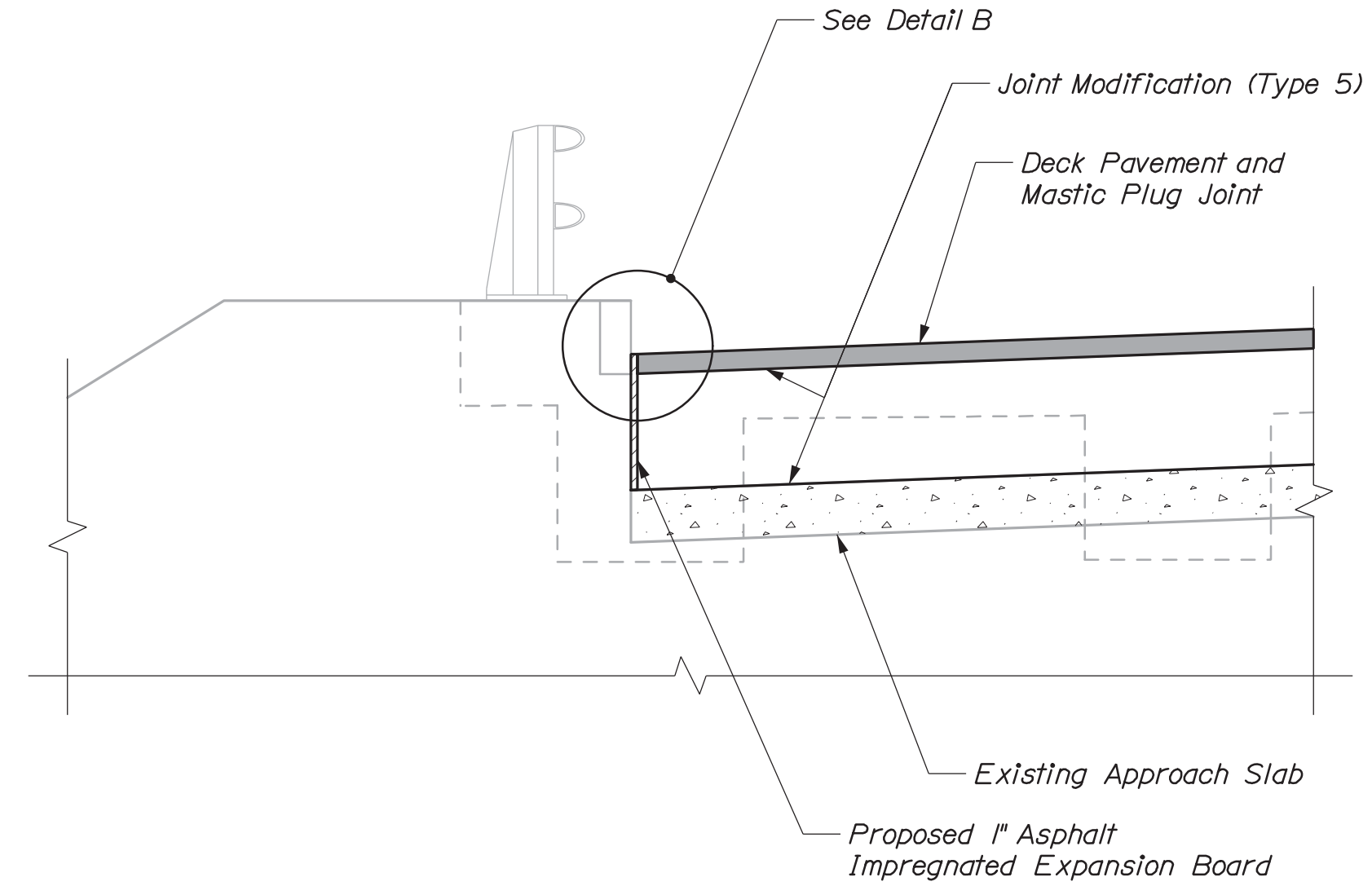
(SW & NE Corners Shown
SE & NW Corners Similar)



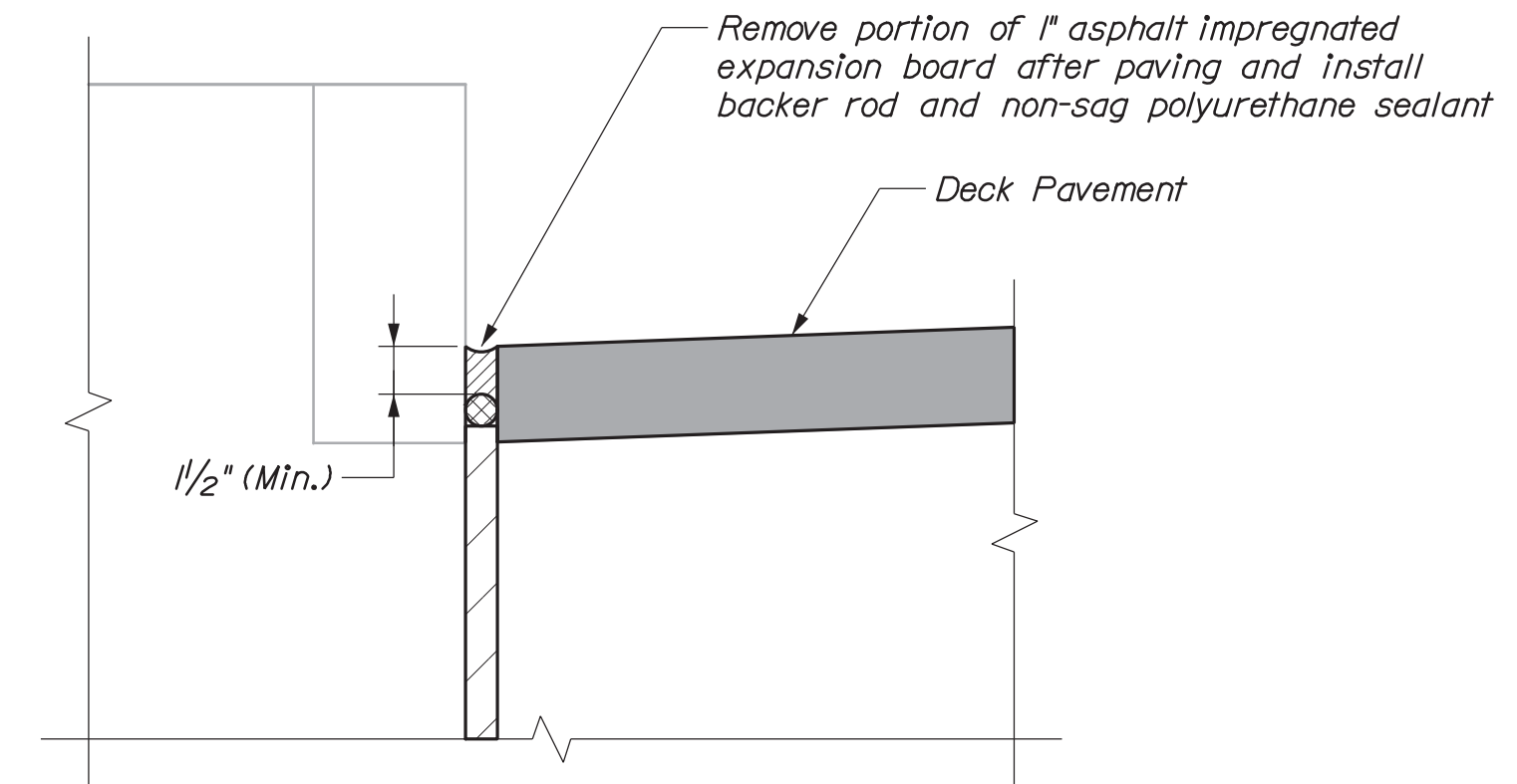
CONSTRUCTION PLAN

(SW & NE Corners Shown
SE & NW Corners Similar)

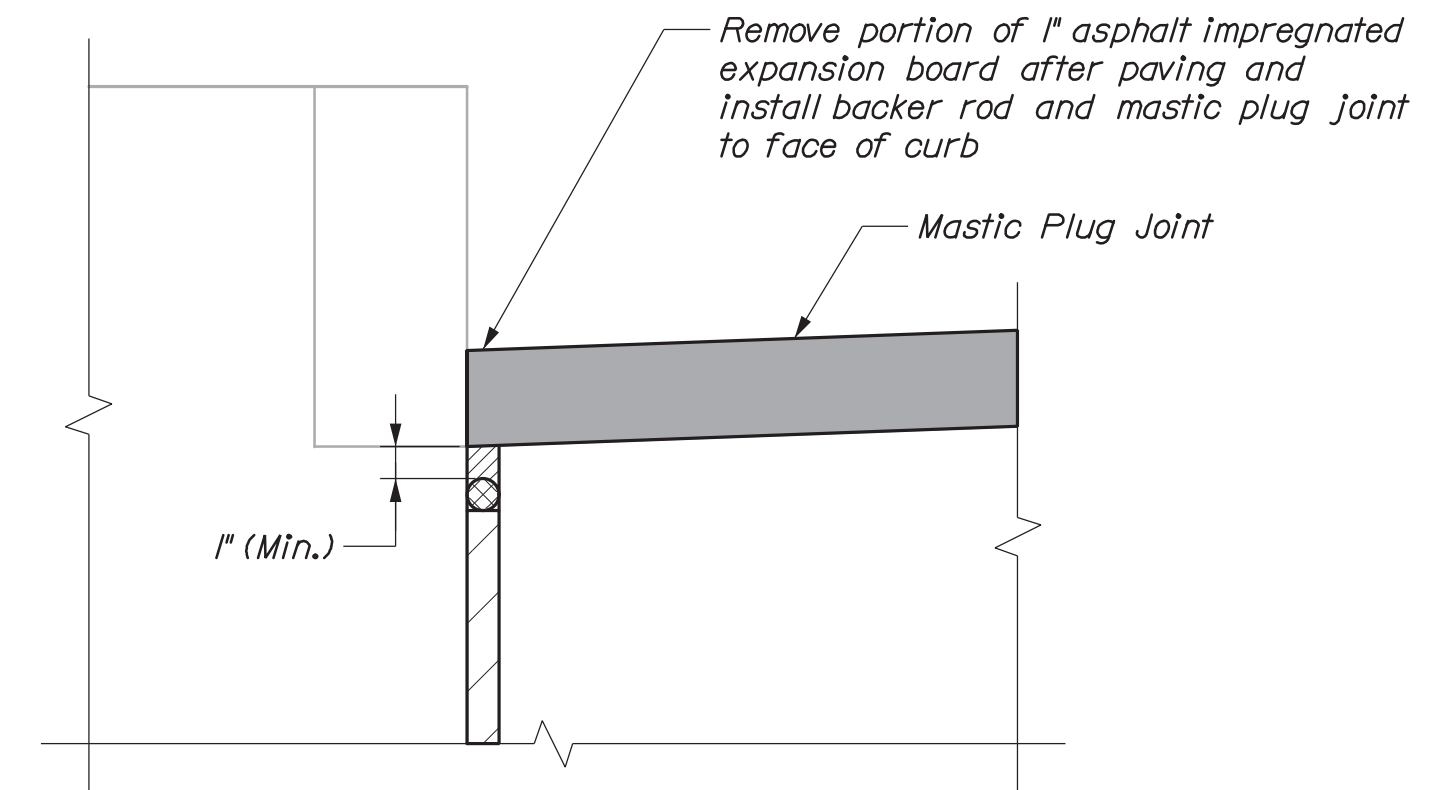
DETAIL A



SECTION A-A



AT DECK PAVEMENT



AT MASTIC PLUG JOINT

DETAIL B

PROJ. MANAGER	BY	DATE	SIGNATURE	P.E. NUMBER	DATE
M. Kersbergen	E. Beausoleil	02/20			
DESIGN-DETAILED	T. Cole	02/20			
CHECKED-REVIEWED	A. Stephens				
DESIGN-DETAILED	K. Broyer				
REVISIONS 1					
REVISIONS 2					
REVISIONS 3					
REVISIONS 4					
FIELD CHANGES					

1. Butt Joints, Temporary Earth Support System, and Temporary Pavement Ramps shall be incidental to Pay Item 524.50, "Temporary Roadway Mat".

3. Expansion Anchors shall be fully removable and shall be installed in accordance with the manufacturer's requirements. Expansion Anchors shall have minimum projection above Temporary Roadway Plate. Each Expansion Anchor shall be able to resist 5.0 kips of shear force and 2.0 kips of pullout force. Holes shall be filled with grout selected from the Qualified Products List after work is complete.



(Vertical Scale Exaggerated)

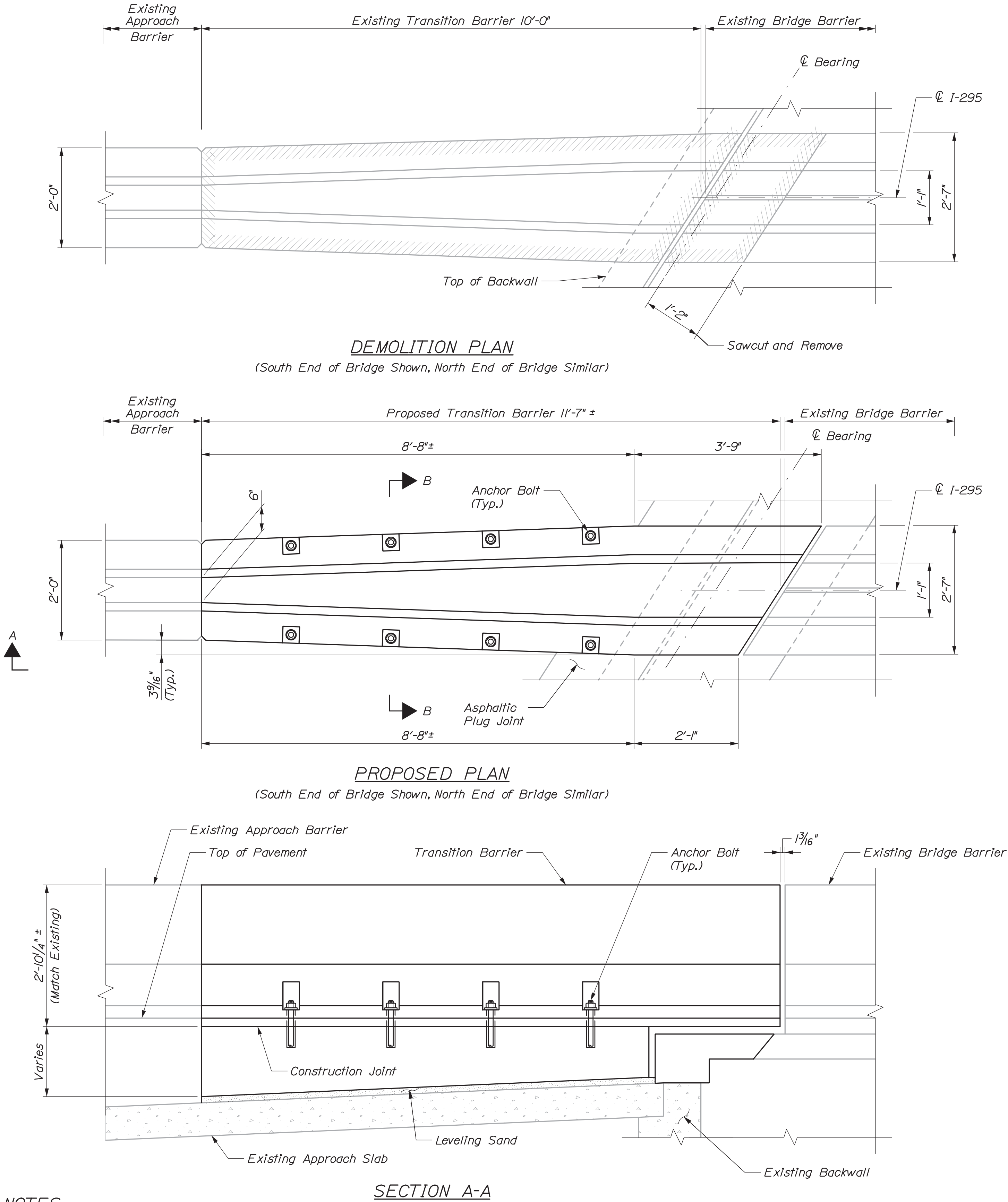
This diagram illustrates the cross-section of a temporary roadway structure and the process for joint modification. The top section shows a horizontal roadway plate, labeled "1/4\" x 8' x 12' Temporary Roadway Plate", supported by "Temporary Pavement (Typ.) (See Detail)". The plate is positioned over a "Bearing" area, which is indicated by a vertical dashed line. The distance from the left edge of the plate to the bearing is labeled "Varies (1'-0\" - 1'-6\" (1'-0\" Min.))". The distance from the bearing to the right edge of the plate is also labeled "Varies (1'-0\" - 1'-6\" (1'-0\" Min.))". The total length of the plate is labeled "5'-6\" (Max. Span)".

Below the plate, the diagram shows the "Existing Granular Fill" and a "Temporary Earth Support System (Designed by Contractor)". A "Proposed Joint work" area is shown, with a "2'-0\" (Max.)" dimension indicating the width of the excavation. The joint is supported by "3/4\" Temporary Shim Pavement or Steel Shims (Typ.)" and "3/4\" Expansion Anchor (see Note 3)". The diagram also shows "Excavation for joint modification" and "Proposed Joint work" areas.

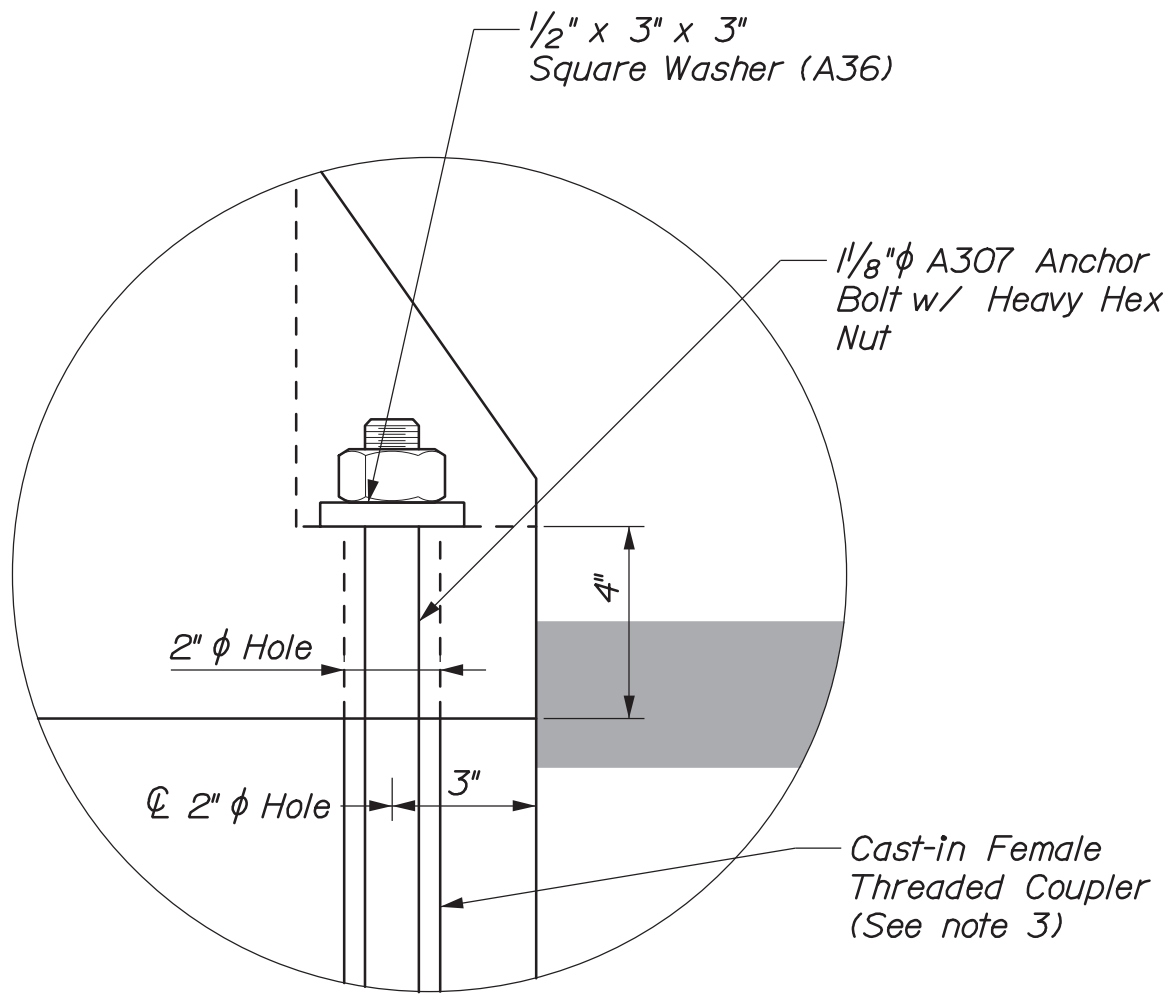
Figure 10.10: Typical Expansion Joint Detail. This technical drawing shows a cross-section of a concrete wall with a horizontal expansion joint. The wall is 12'-0" high and 8'-0" wide. The joint is located 4'-0" from the top. The joint is 6" wide. The joint is labeled "3/4"φ Expansion Anchor (TYP.)". The joint is labeled "Traffic" with an arrow pointing left. The joint is labeled "5 Spaces at 2'-0" = 10'-0"".

TEMPORARY ROADWAY PLATE PLAN

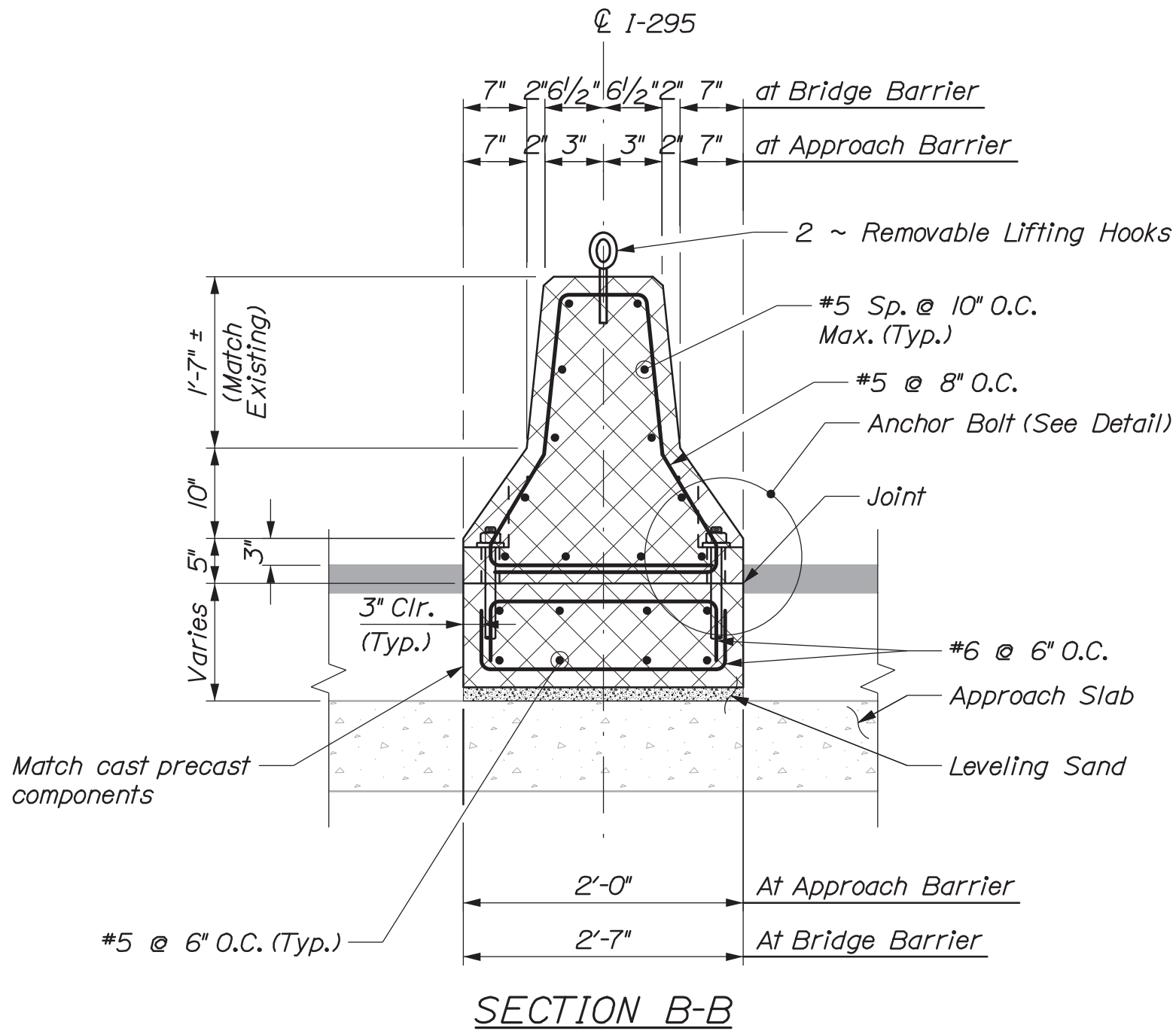
HNTB



- NOTES:**
- Contractor shall field verify barrier dimensions prior to fabrications.
 - The proposed concrete transition barrier shall have two removable lifting hooks. Each hook shall be rated to lift the barrier with a safety factor of 3.0.
 - Threaded female couplers shall be installed within the reinforcement of the lower concrete section. Coupler embedment depth shall be per manufacturer recommendations such that each coupler will be able to resist the full tension strength of the anchor bolt.



ANCHOR BOLT DETAIL



SECTION B-B

STATE OF MAINE DEPARTMENT OF TRANSPORTATION							
		WIN					
		5616 & 0816					
		023545.00 & 023615.03					
		BRIDGE PLANS					
CNRR & WASHINGTON AVENUE INTERSTATE 295 PORTLAND CUMBERLAND CNRR MEDIAN TRANSITION BARRIER		PROJ. MANAGER	M. Kersbergen	BY	DATE		
		DESIGN-DETAILED	T. Cole	E. Boussolet	02/20		
		CHECKED-REVIEWED	A. Stephens	K. Broyles	02/20		
		DESIGN2-DETAILED2					
		DESIGN3-DETAILED3					
		REVISIONS 1					
		REVISIONS 2					
		REVISIONS 3					
		REVISIONS 4					
		FIELD CHANGES					
		SHEET NUMBER					



LEGEND:

- NOTES:

4. The Contractor shall remove all debris and loosely adhered materials, rinse bearings and seats, and apply Fluid Film, or approved equal, to steel bearings in accordance with Special Provision 523 - Clean and Seal Bearing.

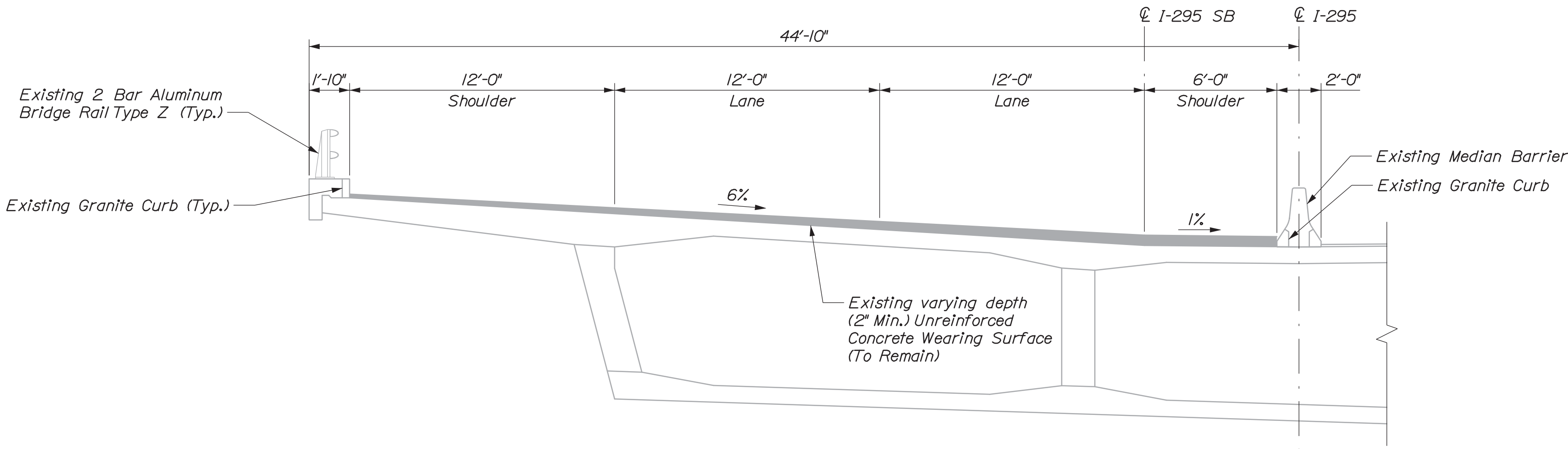
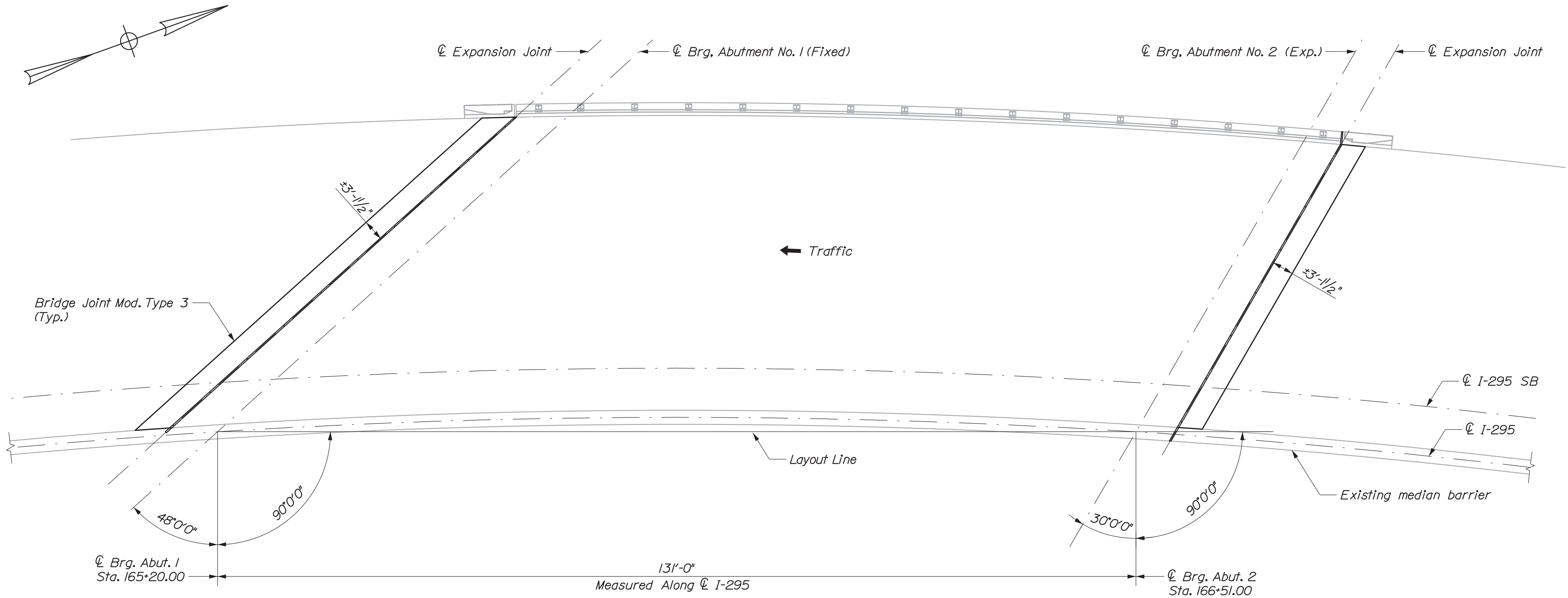
<div>OF 21</div> <div>SHEET NUMBER</div> <div>9</div>	CNRR & WASHINGTON AVENUE INTERSTATE 295 PORTLAND				PROJ. MANAGER	M. Kersbergen	BY	DATE
	CUMBERLAND CNRR SUPERSTRUCTURE REPAIRS				DESIGN-DETAILED	T. Cote	E. Beausoleil	02/V20
					CHECKED-REVIEWED	A. Stephens	K. Broyley	02/V20
					DESIGN2-DETAILED2			
					DESIGN3-DETAILED3			
					REVISIONS: 1			
					REVISIONS: 2			
					REVISIONS: 3			
					REVISIONS: 4			
					FIELD CHANGES			
<div>STATE OF MAINE</div> <div>DEPARTMENT OF TRANSPORTATION</div> <div>2354500 & 2361503</div> <div>WIN</div> <div>5616 & 0816</div> <div>023545.00 & 023615.03</div> <div>BRIDGE PLANS</div>								

Date:3/4/2020

Username:

Division:

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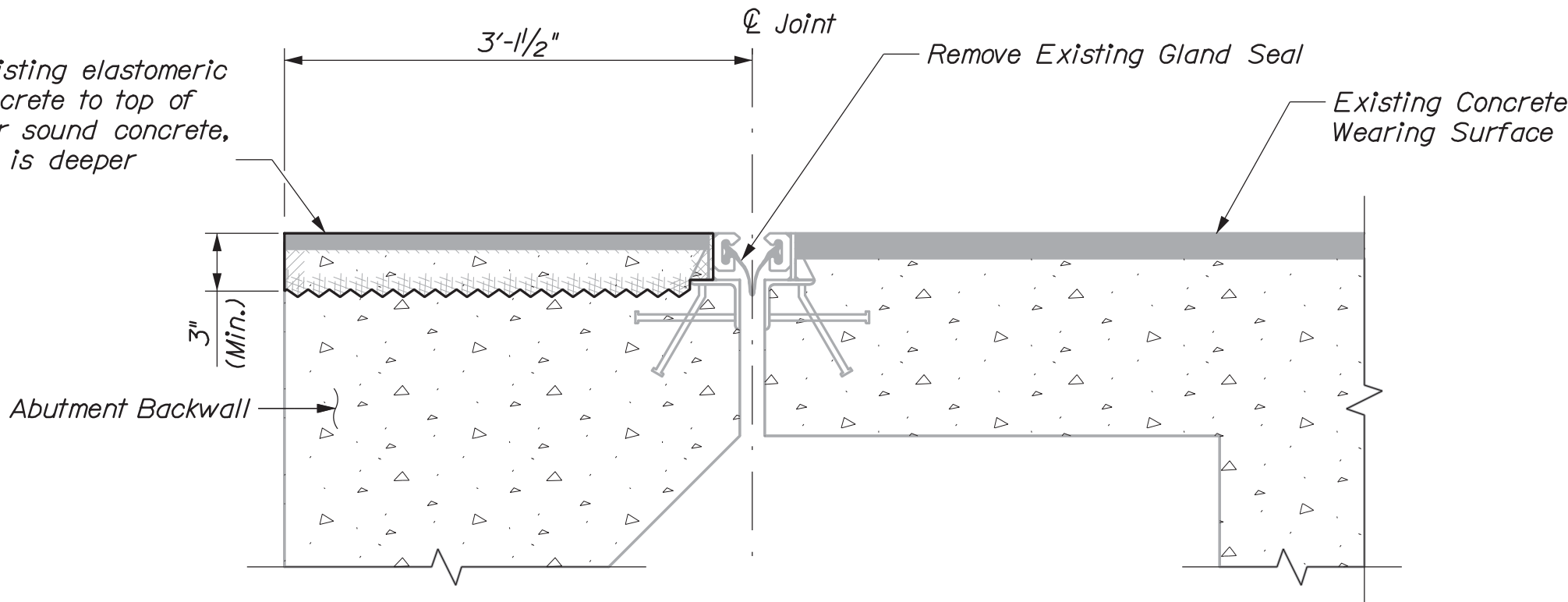


NOTES:
1. Contractor shall repair areas of backwall deterioration under and adjacent to the existing elastomeric header concrete as directed by the Resident. Locations of backwall repairs are undetermined for this bridge. Resident shall identify areas for backwall repair after removing the existing header concrete and shall progress the repair work to reopen the travel lanes daily with temporary pavement and/or plating as required. Coordinate work with Resident. Payment for concrete repair work shall be under the 518 pay items.

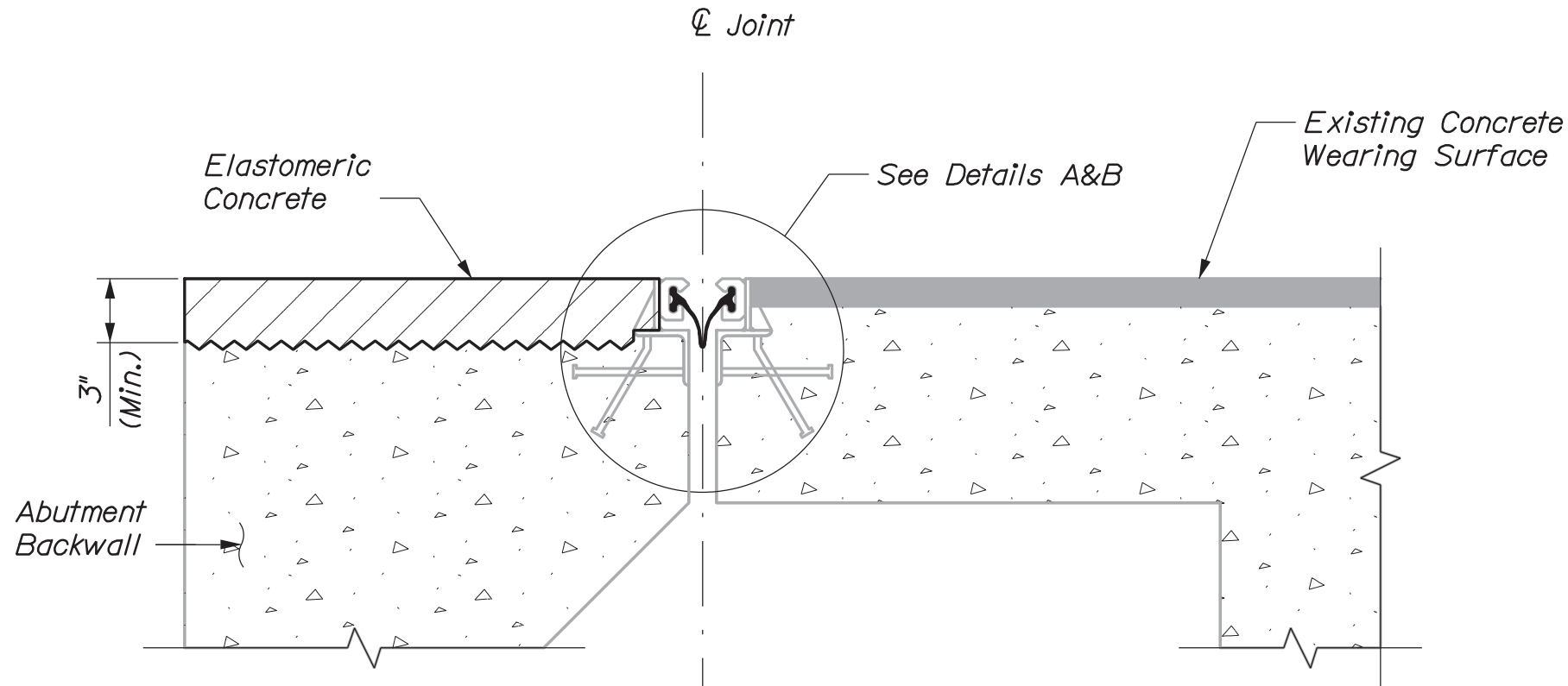
STATE OF MAINE		DEPARTMENT OF TRANSPORTATION	
2354500 & 2361503		WIN	
5616 & 0816		023545.00 & 023615.03	
BRIDGE PLANS			
CNRR & WASHINGTON AVENUE		PORTLAND	
INTERSTATE 295		CUMBERLAND	
WASHINGTON AVENUE		PLAN AND SECTION	
SHEET NUMBER		10	
OF 21			

NOTES:

1. All concrete surfaces where elastomeric concrete is to be applied shall have a 1/4-in. minimum anchor profile or roughened surface.
2. The Contractor shall be fully responsible for selecting the appropriate gland seal based on a ±1/2" movement rating from the Qualified Products List.
3. Removal and replacement of existing Elastomeric Header Concrete shall be completed along the full width of the roadway. Replacement seals shall be full width into curb and shall be installed in a single piece.
4. Elastomeric concrete headers shall be set to the proposed roadway profile grade and deck cross slope established through the Contractor's field survey. See Special Provision 403.
5. All elastomeric header concrete shall be formed. Elastomeric header concrete shall not be cast against existing pavement.
6. The existing elastomeric header concrete shall be removed full depth on the backwall. The As-Built Plans specified the elastomeric header concrete be installed to a minimum of 3 inches in depth. Actual conditions may vary.
7. After completing the elastomeric header concrete replacement, and associated backwall concrete repairs, remove the existing approach (departure) bituminous pavement to the bottom of the deepest repair of the backwall and place HMA to the roadway profile grade and deck cross slope. Install a pavement transition down to the existing approach pavement.
8. Upon completion of the permanent HMA repairs mill and fill the approaches per the details on Sheet 12.

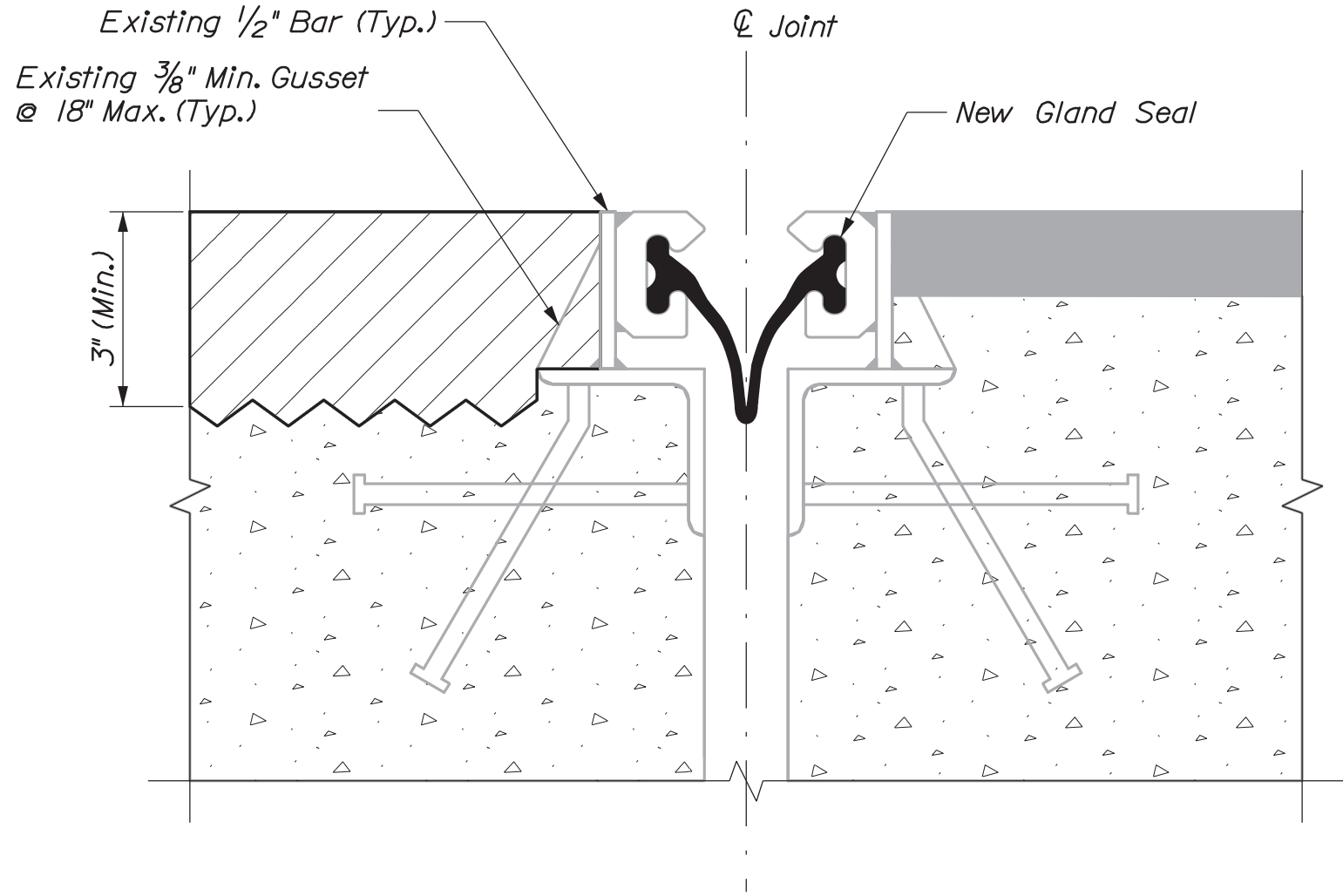


DEMOLITION
(South Abutment shown, North Abutment similar)



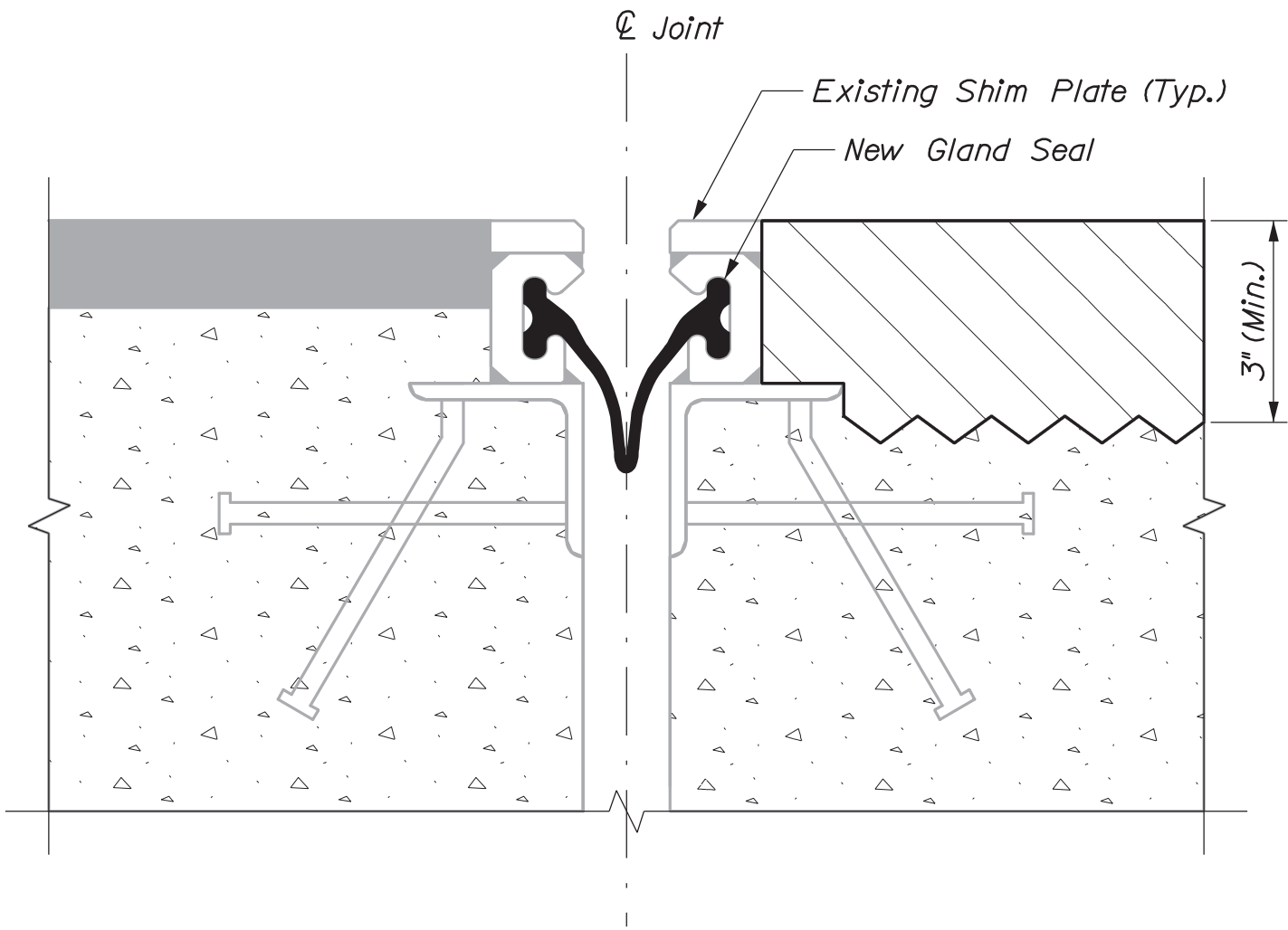
CONSTRUCTION
(South Abutment shown, North Abutment similar)

JOINT MODIFICATION TYPE 3



NOTE:
1. The height of the existing extrusion varies across the bridge width.

JOINT DETAIL A
(South Abutment)



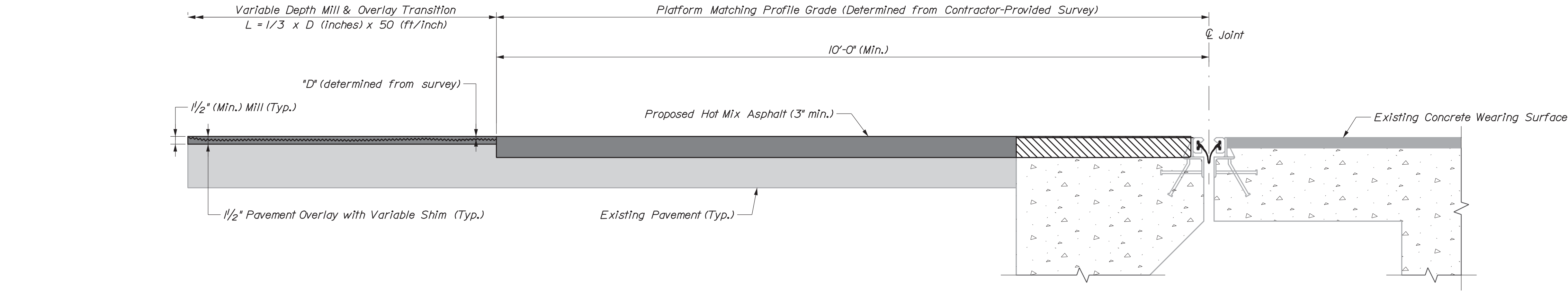
JOINT DETAIL B
(North Abutment)

STATE OF MAINE DEPARTMENT OF TRANSPORTATION 2354500 & 2361503 WIN 5616 & 0816 023545.00 & 023615.03 BRIDGE PLANS				
			SIGNATURE	
			P.E. NUMBER	
			DATE	
CNRR & WASHINGTON AVENUE INTERSTATE 295 PORTLAND CUMBERLAND WASHINGTON AVENUE JOINT MODIFICATION DETAILS	PROJ. MANAGER	M. Kersbergen	BY	
	DESIGN-DETAILED	T. Cole	E. Beausoleil	DATE
	CHECKED-REVIEWED	A. Stephens	K. Broyer	02/20
	DESIGN-DETAILED			02/20
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	REVISIONS 2			
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	REVISIONS 4			
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SHEET NUMBER		11		
		OF 21		

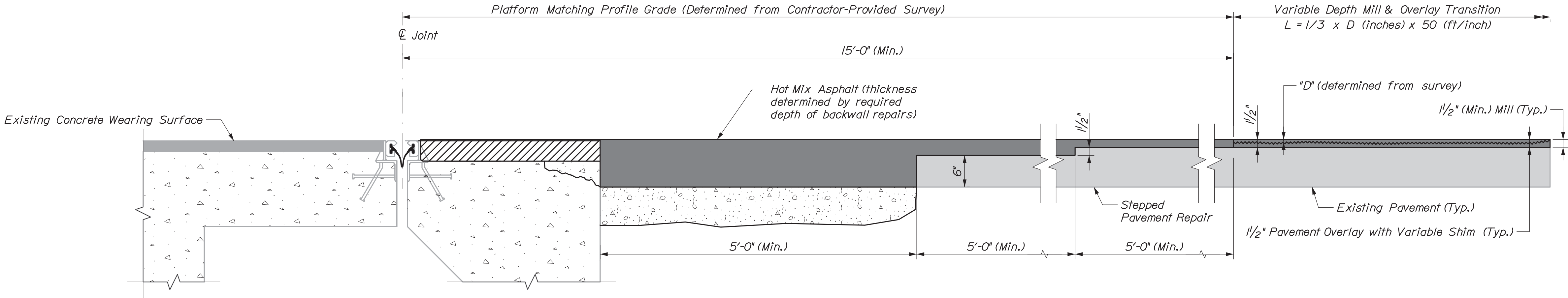
Date:3/4/2020

Username:

Filename: 012_Joint Modification Details Type 3.dgn Division:



PROFILE GRADE CORRECTION (WITH NO BACKWALL REPAIRS)



PROFILE GRADE CORRECTION (WITH BACKWALL REPAIRS)

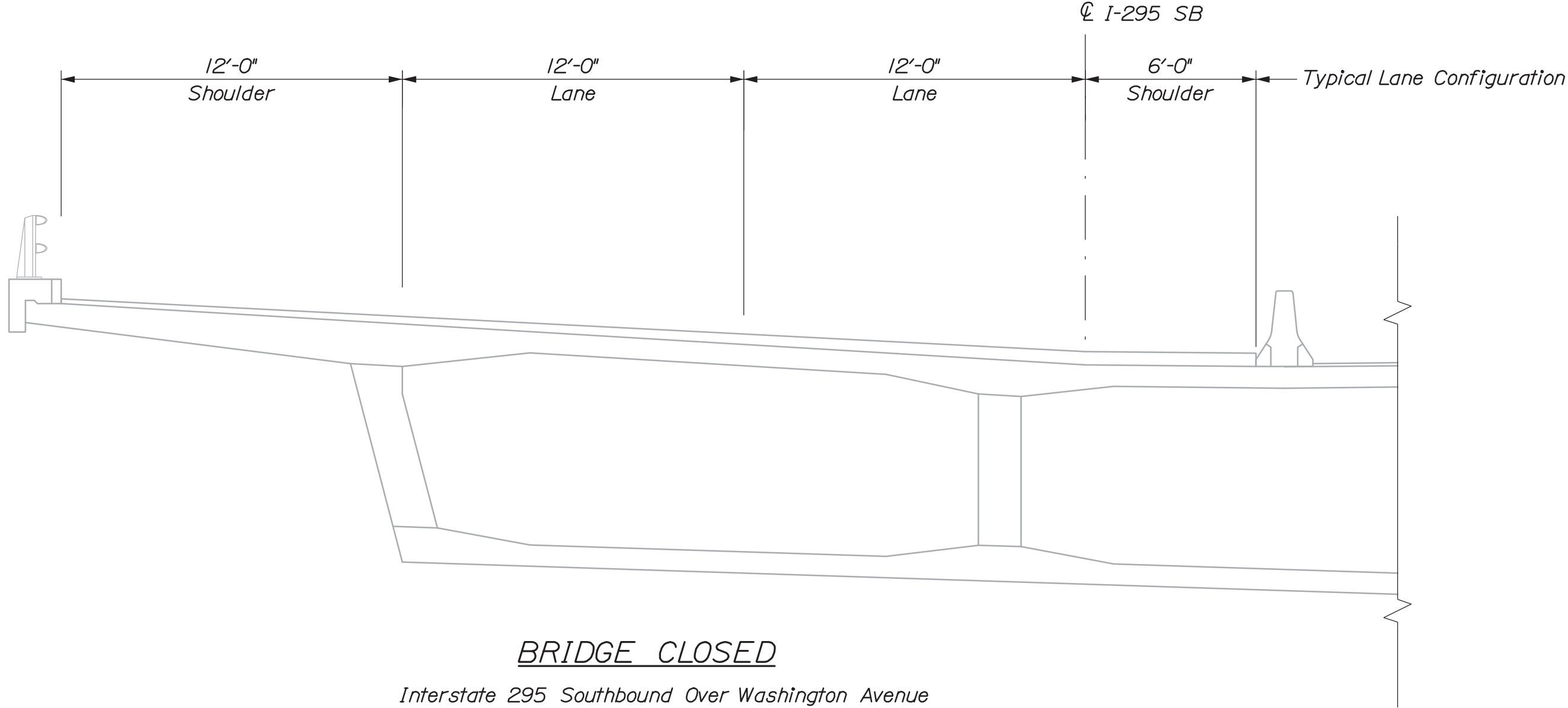
PAVEMENT MODIFICATION - BRIDGE JOINT MODIFICATION TYPE 3

(Backwall - Left, Deck - Right as shown)
 (Deck - Left, Backwall - Right similar)

SHEET NUMBER <div>12</div> OF 21	CNRR & WASHINGTON AVENUE INTERSTATE 295 PORTLAND CUMBERLAND				PROJ. MANAGER M. Kerstbergen	BY E. Beausoleil	DATE 02/20	STATE OF MAINE DEPARTMENT OF TRANSPORTATION
					CHECKED-REVIEWED A. Stephens	K. Broyley	02/20	
	WASHINGTON AVENUE PAVEMENT DETAILS				DESIGN2-DETAILED2			SIGNATURE
					DESIGN3-DETAILED3			
					REVISIONS 1			P.E. NUMBER 2354500 & 2361503
					REVISIONS 2			
					REVISIONS 3			
					REVISIONS 4			
					FIELD CHANGES			WIN 023545.00 & 023615.03
							5616 & 0816	BRIDGE PLANS

NOTES:

1. Sections are shown looking northbound.
2. Washington Avenue bridge work will be done at night under a closure of I-295 Southbound. Work may be completed during the Veranda Street closure following details and specifications of WIN 021745.00 I-295 over Veranda Street. Work completed outside of the Veranda Street closure shall follow the I-295 Southbound Detour Plan.
3. The Veranda Street southbound on ramp shall be closed during bridge work. See Veranda Street Southbound On Ramp Detour Plan.
4. Washington Avenue bridge work zone is detailed to occur in a single continuous work zone with the CNRR bridge work.



CNRR & WASHINGTON AVENUE INTERSTATE 295 PORTLAND CUMBERLAND BRIDGE PHASING WASHINGTON AVENUE	SHEET NUMBER		STATE OF MAINE DEPARTMENT OF TRANSPORTATION			
	13		2354500 & 2361503			
	OF 21		WIN			
			5616 & 0816 023545.00 & 023615.03 BRIDGE PLANS			

PROJ. MANAGER	M. Kersbergen	BY	DATE
DESIGN-DETAILED	AJS	AJS	12/19
CHECKED-REVIEWED	JRH	JRH	12/19
DESIGN-DETAILED			
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REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

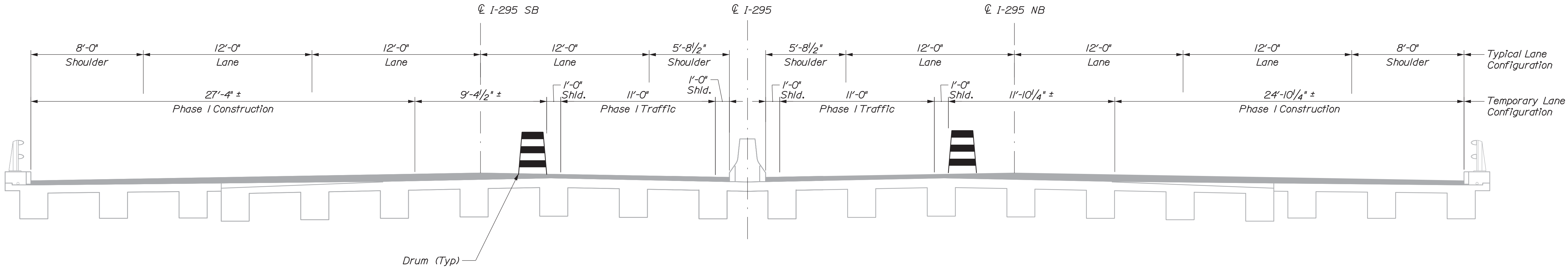
SIGNATURE
P.E. NUMBER
DATE

Date:3/4/2020

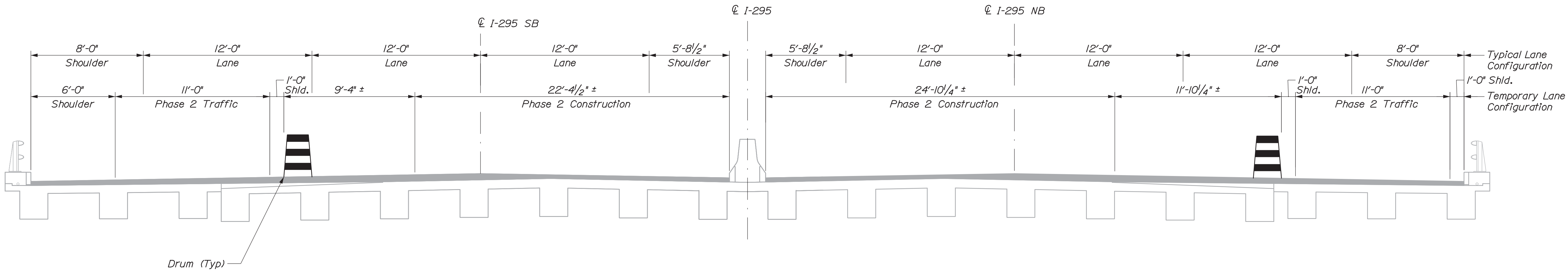
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Division:

Filename: 014_CNRR_SB.dgn



PHASE I
Interstate 295 Over CNRR



PHASE 2
Interstate 295 Over CNRR

NOTES:

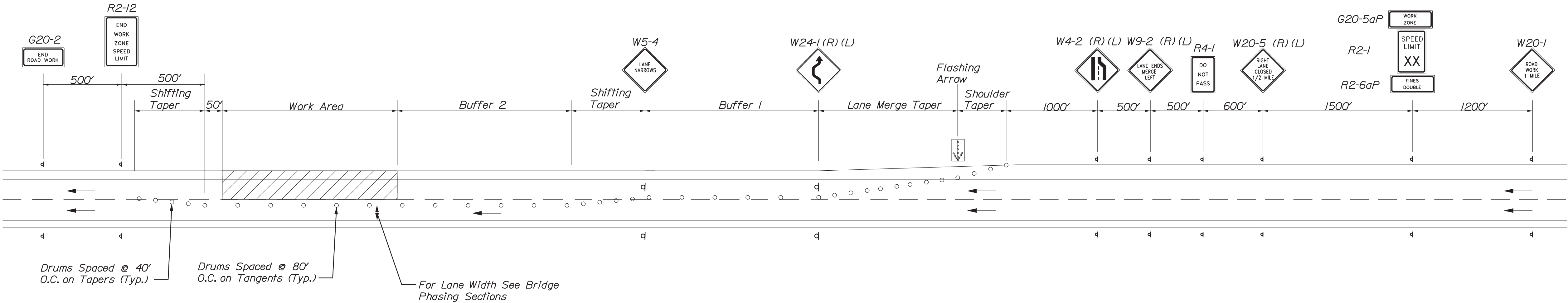
- Sections are shown looking northbound.
- The Veranda Street southbound on ramp shall be closed during bridge work. See Veranda Street Southbound On Ramp Detour Plan.
- CNRR southbound bridge work zone is detailed to occur in a single continuous work zone with the Washington Avenue southbound bridge work.



CNRR & WASHINGTON AVENUE INTERSTATE 295 PORTLAND					STATE OF MAINE DEPARTMENT OF TRANSPORTATION				
CUMBERLAND BRIDGE PHASING CNRR					2354500 & 2361503				
					WIN				
					023545.00 & 023615.03				
					BRIDGE PLANS				
SHEET NUMBER 14 OF 21					PROJ. MANAGER	M. Kersbergen	BY	DATE	
					DESIGN-DETAILED	AJS	AJS	12/19	
					CHECKED-REVIEWED	JRH	TRC	12/19	
					DESIGN2-DETAILED2				
					DESIGN3-DETAILED3				
					REVISIONS 1				
					REVISIONS 2				
					REVISIONS 3				
					REVISIONS 4				
					FIELD CHANGES				

Taper Table

Work Zone	Bridge	Work Zone Speed (mph)	Buffer 2 (ft)	Phase 1 Shifting Taper (ft)	Phase 2 Shifting Taper (ft)	Buffer 1 (ft)	Lane Merge Taper (ft)	Shoulder Taper (ft)
I	CNRR - Southbound	40	150	200	200	150	320	110
I	CNRR - Northbound	40	150	270	270	585	320	110



STANDARD LANE CLOSURE DETAIL
Detail Shown Is For Travel Lane Closure.
Passing Lane Closure Similar, But Opposite Hand.

- NOTES:
- Construction sign placement shall be adjusted by the Resident to avoid conflicts with existing signing.
 - This detail shall be modified as shown in the "Traffic Control Plans".

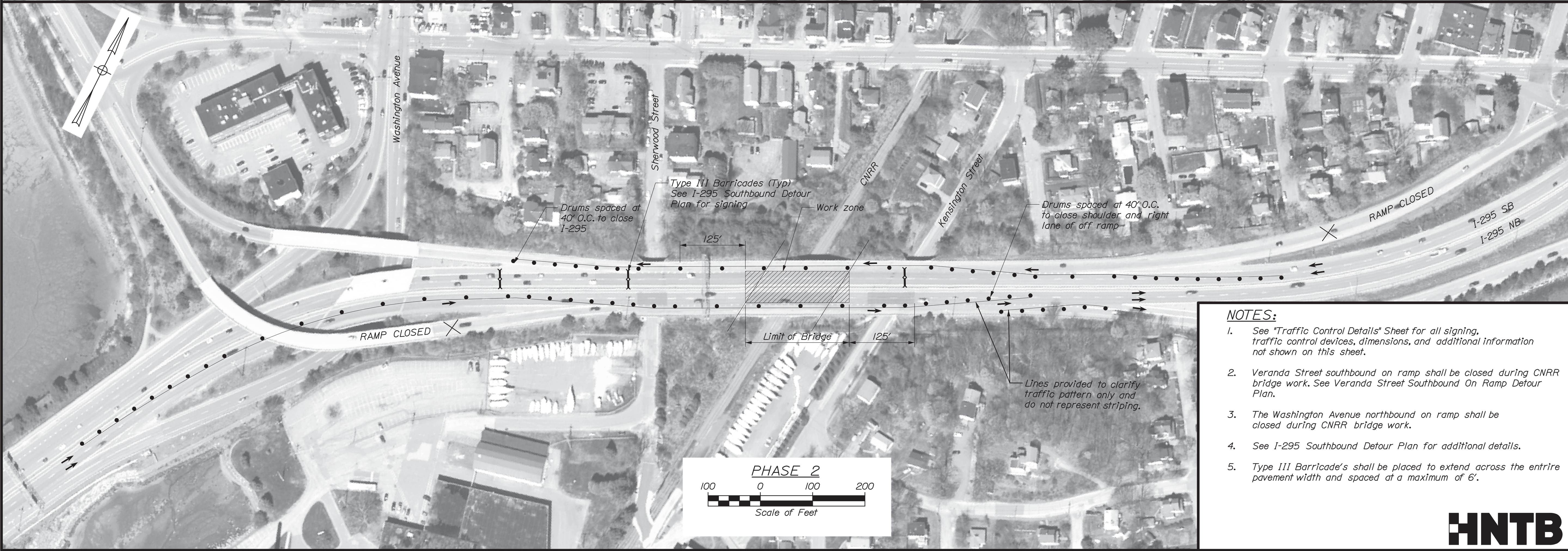
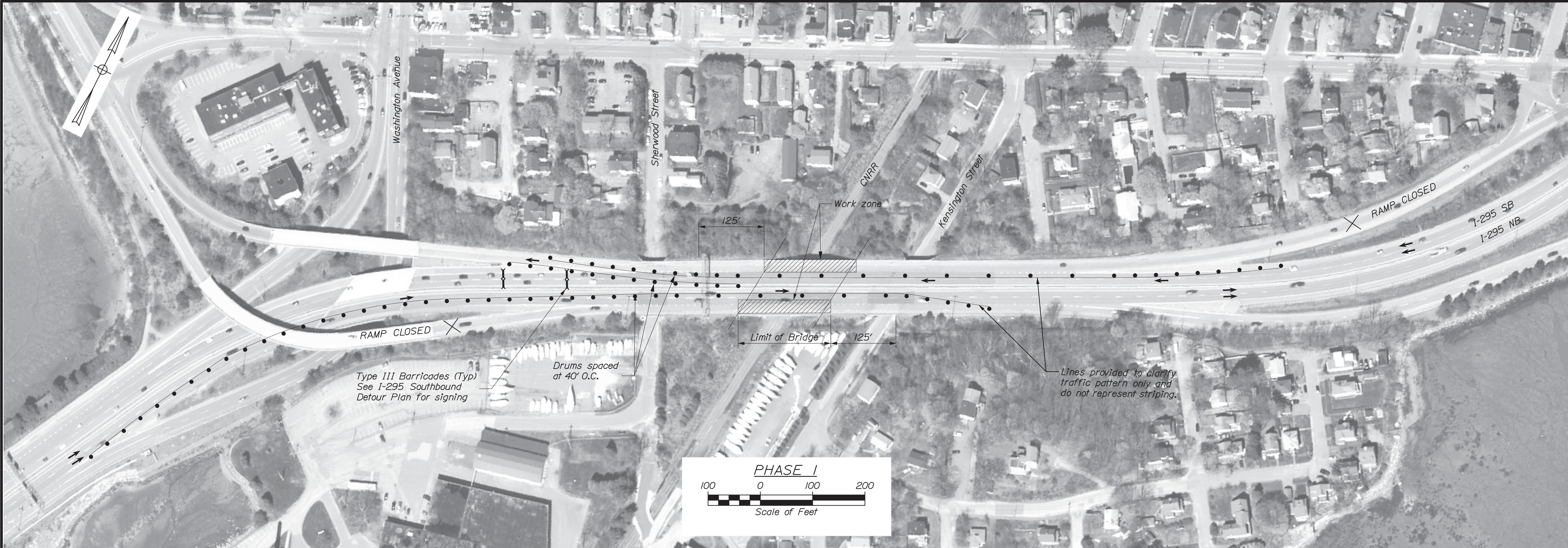
STATE OF MAINE DEPARTMENT OF TRANSPORTATION			DATE	BY	PROJ. MANAGER	M. Kersbergen	DESIGN-DETAILED	J.A.S.	12/19
			SIGNATURE		CHECKED-REVIEWED	JRH	12/19		
	2354500 & 2361503		P.E. NUMBER		DESIGN-DETAILED				
WIN	023545.00 & 023615.03	5616 & 0816	DATE		REVISIONS 1				
BRIDGE PLANS					REVISIONS 2				
					REVISIONS 3				
					REVISIONS 4				
FIELD CHANGES									
CUMBERLAND									
PORTLAND									
TRAFFIC CONTROL DETAILS									
SHEET NUMBER									
15									
OF 21									

Date:3/4/2020

Username:

Division:

Filename: 016_CNRR MOT Detail.dgn

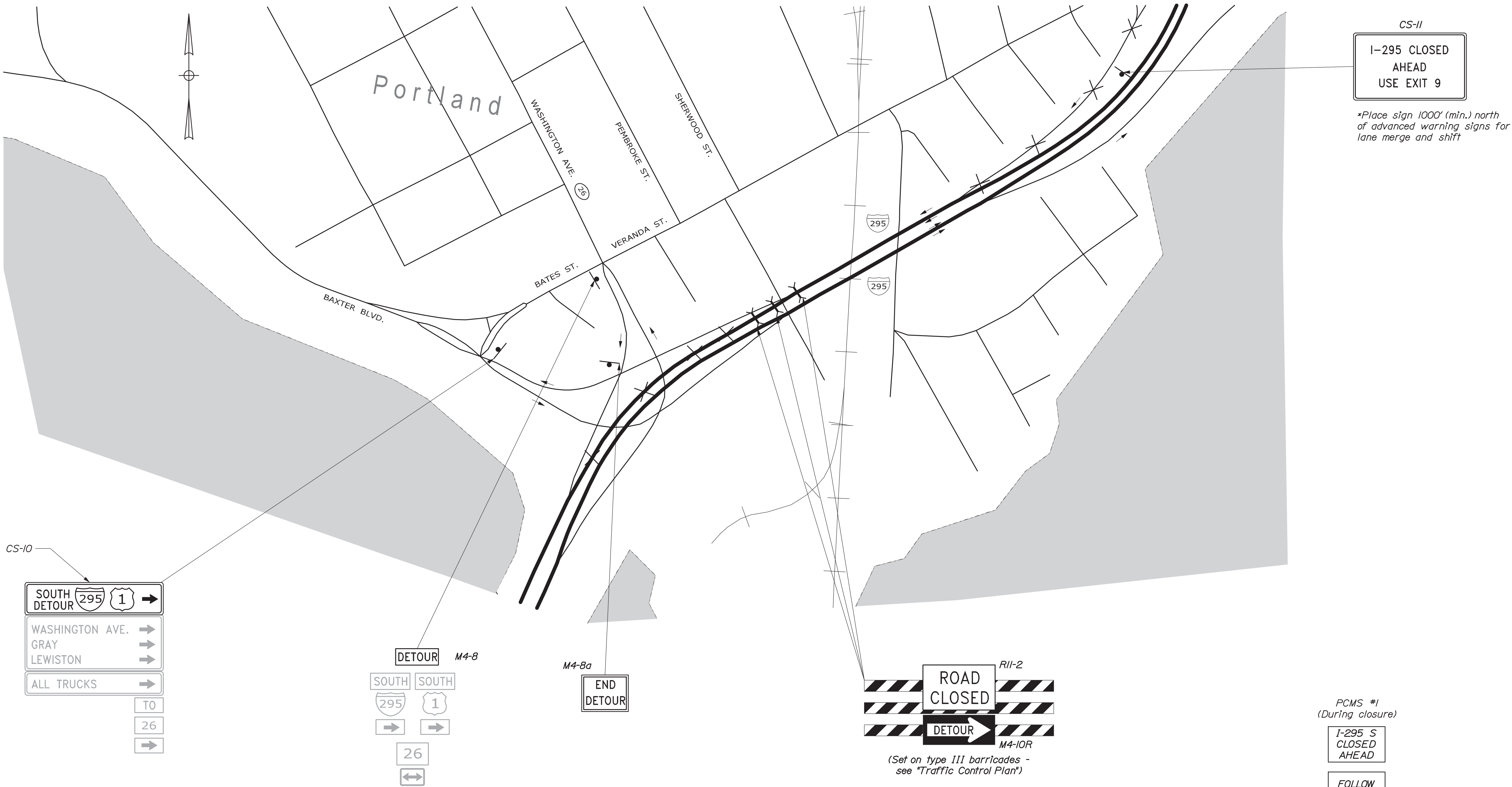


NOTES:

1. See "Traffic Control Details" Sheet for all signing, traffic control devices, dimensions, and additional information not shown on this sheet.
2. Veranda Street southbound on ramp shall be closed during CNRR bridge work. See Veranda Street Southbound On Ramp Detour Plan.
3. The Washington Avenue northbound on ramp shall be closed during CNRR bridge work.
4. See I-295 Southbound Detour Plan for additional details.
5. Type III Barricade's shall be placed to extend across the entire pavement width and spaced at a maximum of 6'.

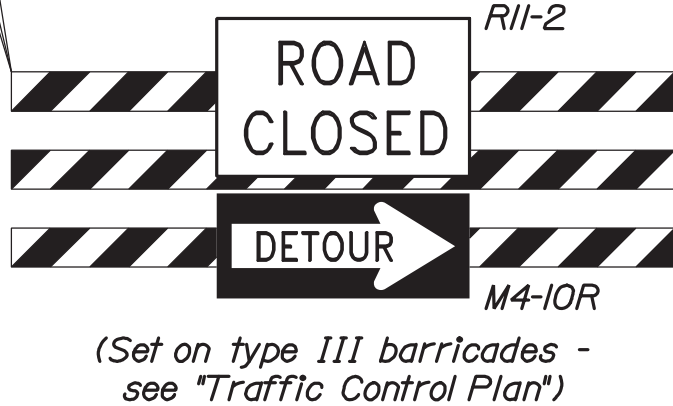
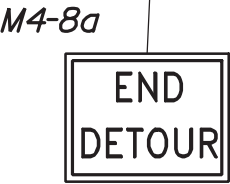
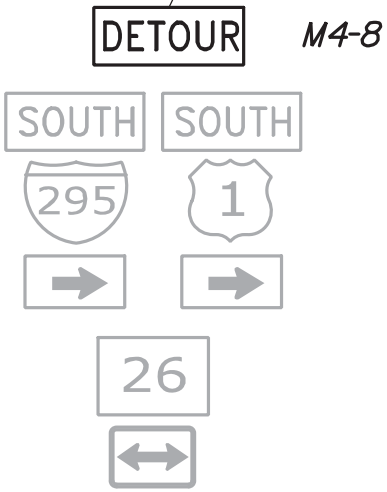
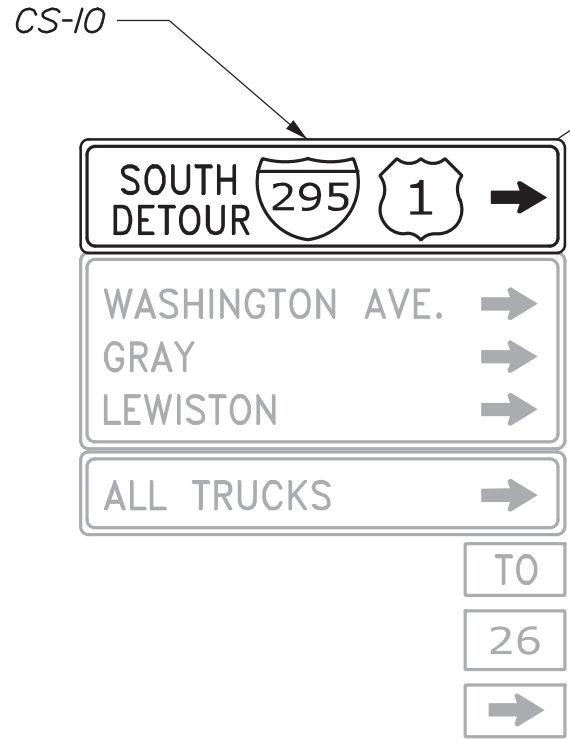


STATE OF MAINE		DEPARTMENT OF TRANSPORTATION		2354500 & 2361503		WIN		023545.00 & 023615.03		BRIDGE PLANS	
CNRR & WASHINGTON AVENUE		INTERSTATE 295		CUMBERLAND		PORTLAND		TRAFFIC CONTROL PLAN		WASHINGTON AVENUE & CNRR	
PROJ. MANAGER		M. Kerstberg		DATE		SIGNATURE		P.E. NUMBER		DATE	
DESIGN-DETAILED		J. A. S.		12/19		EPR		TFC		12/19	
CHECKED-REVIEWED		J. H.									
DESIGN-DETAILED											
REVISIONS 1											
REVISIONS 2											
REVISIONS 3											
REVISIONS 4											
FIELD CHANGES											
SHEET NUMBER		16		OF 21							



CS-II
I-295 CLOSED
AHEAD
USE EXIT 9

*Place sign 1000' (min.) north
of advanced warning signs for
lane merge and shift



PCMS #/
(During closure)

I-295 S
CLOSED
AHEAD

FOLLOW
DETOUR

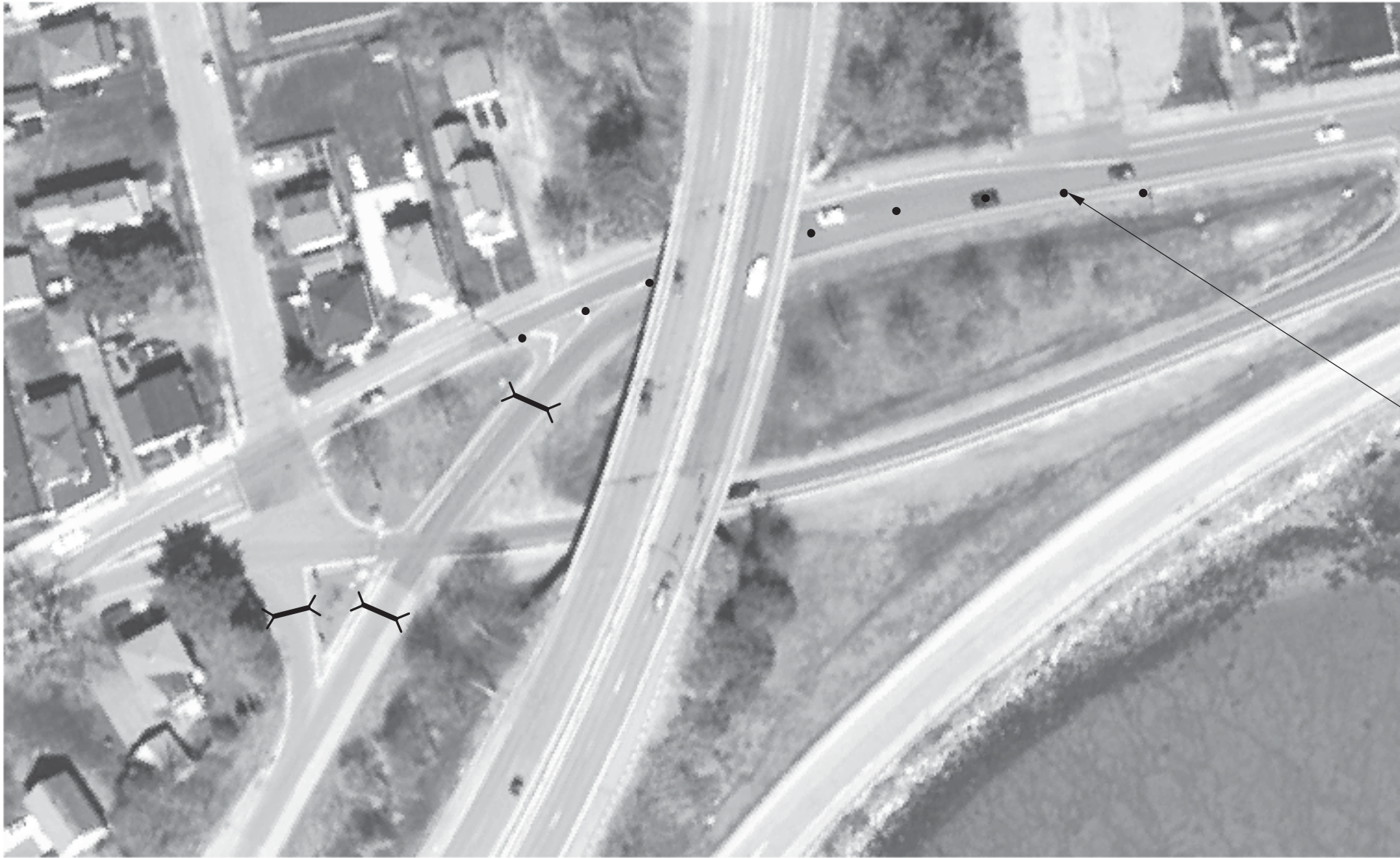
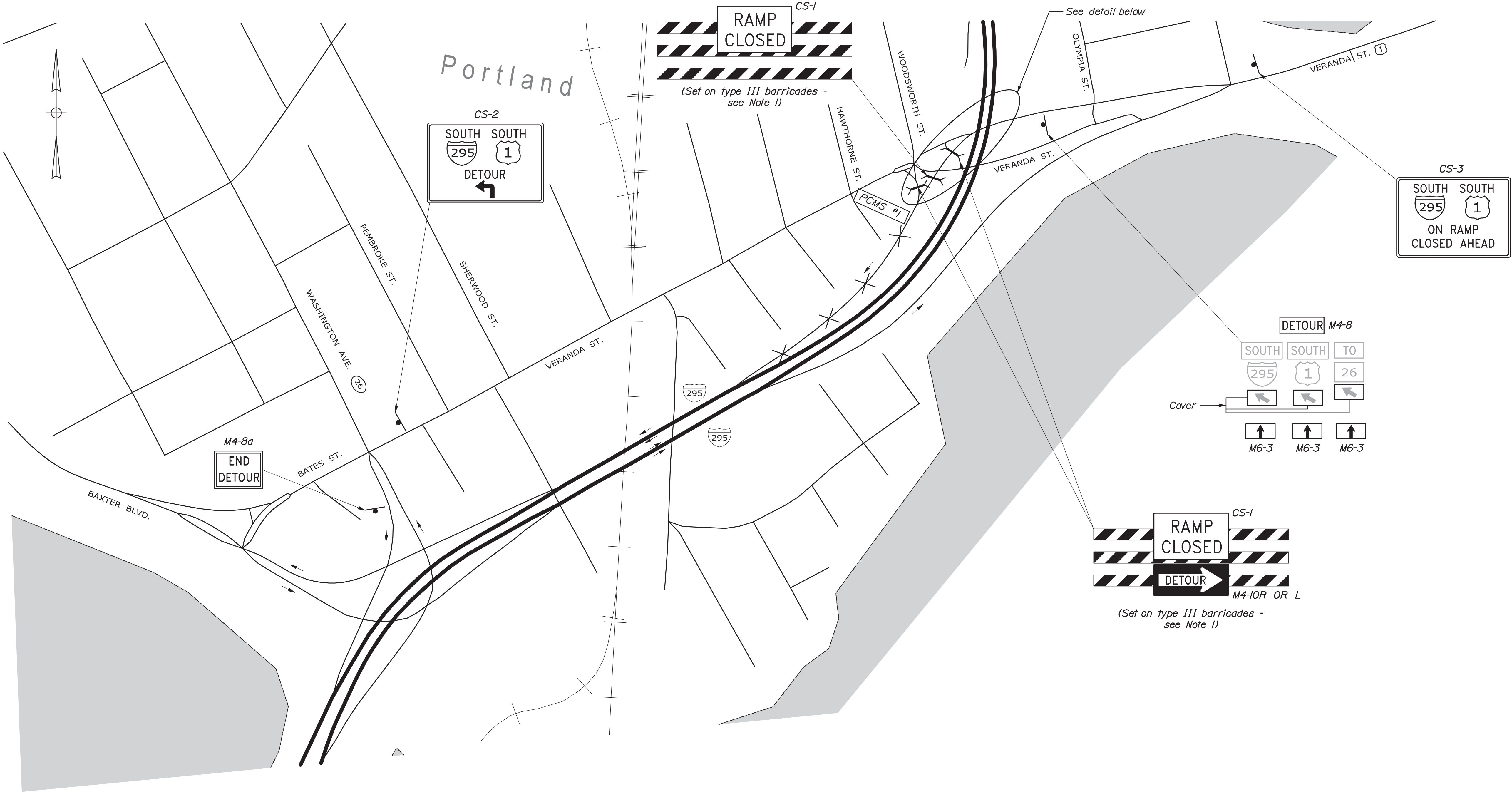
NOTES:

1. The Veranda Street southbound on ramp detour must be used in conjunction with this I-295 detour.
2. For additional detail see the Washington Ave and CNRR "Traffic Control Plan".
3. PCMS #1 shall utilize existing PCMS south of Exit 10.

STATE OF MAINE DEPARTMENT OF TRANSPORTATION		DATE		BY		M. Kersbergen		DATE	
2354500 & 2361503		12/19		EPR		JAS		12/19	
WIN		SIGNATURE		TRC		JRH		SIGNATURE	
023545.00 & 023615.03		P.E. NUMBER		DESIGN DETAIL		DESIGN DETAIL		P.E. NUMBER	
BRIDGE PLANS		DATE		REVISIONS 1		REVISIONS 1		DATE	
5616 & 0816		REVISIONS 2		REVISIONS 2		REVISIONS 2		DATE	
		REVISIONS 3		REVISIONS 3		REVISIONS 3		DATE	
		REVISIONS 4		REVISIONS 4		REVISIONS 4		DATE	
		FIELD CHANGES		FIELD CHANGES		FIELD CHANGES		DATE	

CNRR & WASHINGTON AVENUE INTERSTATE 295 PORTLAND	CUMBERLAND I-295 SOUTHBOUND DETOUR PLAN-WASHINGTON AVENUE
--	---

SHEET NUMBER	17
OF 21	



Drums spaced 80' o.c. to close left lane

PCMS #/ (1 Week prior to closure)

RAMP
CLOSED
NIGHTS

XX/XX
TO
XX/XX

NOTES:

- 1. Type III barricades shall be placed to extend across the entire pavement width and spaced at a maximum of 6'.
- 2. PCMS #/ shall utilize existing PCMS south of Exit 10.










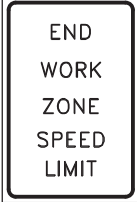


CNRR & WASHINGTON AVE. INTERSTATE 295 PORTLAND			CUMBERLAND			PROJ. MANAGER M. Kersbergen			BY			DATE			STATE OF MAINE DEPARTMENT OF TRANSPORTATION								
VERANDA STREET SOUTHBOUND ON RAMP DETOUR PLAN						DESIGN-DETAILED			AJS			12/19			SIGNATURE								
						CHECKED-REVIEWED			JRH			TRC						12/19					
						DESIGN2-DETAILED2			-			-						-					
						DESIGN3-DETAILED3			-			-						-					
						REVISIONS 1			-			-						-					
						REVISIONS 2			-			-			P.E. NUMBER								
						REVISIONS 3			-			-											
						REVISIONS 4			-			-											
						FIELD CHANGES			-			-											
DATE			-			-			-			DATE			BRIDGE NO. Varies			WIN 23615.00			BRIDGE PLANS		

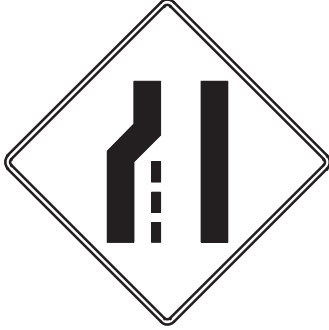




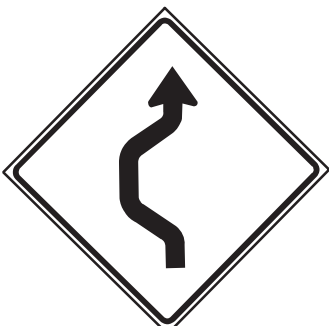


NOTE:
1. All signs on this sheet shall be placed to not conflict with signing shown on Detour Plans.
2. VMS #1 shall utilize existing VMS at mile 11.8.

STATE OF MAINE DEPARTMENT OF TRANSPORTATION		2354500 & 2361503		BRIDGE NO. Varies WIN 23615.00 BRIDGE PLANS	
CNRR & WASHINGTON AVENUE INTERSTATE 295 PORTLAND		CUMBERLAND		LOCAL SIGNING PLAN	
SHEET NUMBER		19		OF 21	
PROJ. MANAGER M. Kersbergen		BY		DATE	
DESIGN-DETAILED J.A.S.		J.A.S.		12/19	
CHECKED-REVIEWED J.R.H.		J.R.H.		12/19	
DESIGN-DETAILED					
REVISIONS 1					
REVISIONS 2					
REVISIONS 3					
REVISIONS 4					
FIELD CHANGES					
SIGNATURE		P.E. NUMBER		DATE	

CONSTRUCTION SIGN SUMMARY

IDENTIFI- CATION NUMBER	SIZE OF SIGN		TEXT	TEXT DIMENSIONS (INCHES)			NUMBER OF SIGNS REQUIRED	COLOR		BORDER RADIUS	AREA IN SQUARE FEET
	WIDTH	HEIGHT		LETTER HEIGHT	VERTICAL SPACING	ARROW RTE. MKR.		BACK- GROUND	LEGEND BORDER		
G20-2	48"	24"		TEXT DIMENSIONS SHALL CONFORM TO "STANDARD HIGHWAY SIGNS"			4	COLORS SHALL CONFORM TO STANDARD HIGHWAY SIGN DETAILS			8.00 (32)
G20-5aP	36"	24"					4				6.00 (24)
M4-8	24"	12"					2				2.00 (4)
M4-8a	24"	18"					2				3.00 (6)
M4-10R	48"	18"					6				6.00 (36)
M4-10L	48"	18"					1				6.00 (6)
M6-3	21"	15"					3				2.20 (6.6)
R2-1 (40)	48"	60"					4				20.00 (80)
R2-6aP	48"	36"					4				12.00 (48)
R2-12	36"	54"					4				13.50 (54)
R4-1	48"	60"					4				20.00 (80)
R11-2	48"	30"					4				8.00 (32)

IDENTIFI- CATION NUMBER	SIZE OF SIGN		TEXT	TEXT DIMENSIONS (INCHES)			NUMBER OF SIGNS REQUIRED	COLOR		BORDER RADIUS	AREA IN SQUARE FEET
	WIDTH	HEIGHT		LETTER HEIGHT	VERTICAL SPACING	ARROW RTE. MKR.		BACK- GROUND	LEGEND BORDER		
W4-2L W4-2R	48"	48"		TEXT DIMENSIONS SHALL CONFORM TO "STANDARD HIGHWAY SIGNS"			2 2	COLORS SHALL CONFORM TO STANDARD HIGHWAY SIGN DETAILS			16.00 (32) 16.00 (32)
W5-4 (MODIFIED)	48"	48"					4				16.00 (64)
W9-2L W9-2R	48"	48"					2 2				16.00 (32) 16.00 (32)
W20-1 (1 Mile)	48"	48"					4				16.00 (64)
W20-5R (1/2 Mile) W20-5L (1/2 Mile)	48"	48"					2 2				16.00 (32) 16.00 (32)
W24-1L W24-1R	48"	48"					2 2				16.00 (32) 16.00 (32)

CNRR & WASHINGTON AVENUE
INTERSTATE 295
PORTLAND
CUMBERLAND

SIGN SUMMARY

SHEET NUMBER
20
OF 21

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2354500 & 2361503

BRIDGE NO. VARIOUS
WIN
023545.00 & 023615.03
BRIDGE PLANS

PROJ. MANAGER
DESIGN-DETAILED
CHECKED-REVIEWED
DESIGN-DETAILED
REVISIONS 1
REVISIONS 2
REVISIONS 3
REVISIONS 4
FIELD CHANGES

BY
ALS
TRC

DATE
12/19
12/19

SIGNATURE
P.E. NUMBER
DATE

