

STATE OF MAINE DEPARTMENT OF TRANSPORTATION



SPECIFICATIONS

Design: Load and Resistance Factor Design per AASHTO LRFD Bridge Design Specifications, Ninth edition, 2019.

DESIGN LOADING

Live Load HL - 93 Modified for Strength I

TRAFFIC DATA

Current (2020) AADT 6890
 Future (2040) AADT 8270
 DHV - % of AADT 15
 Design Hour Volume 1241
 Heavy Trucks (% of AADT) 4
 Heavy Trucks (% of DHV) 4
 Directional Distribution (% of DHV) 100
 18 kip Equivalent P 2.0 258
 18 kip Equivalent P 2.5 246
 Design Speed (mph) 30

MATERIALS

Concrete:
 Structural Wearing Surface PPC

BASIC DESIGN STRESSES

Concrete f 'c = 5,000 psi

LIST OF DRAWINGS

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PORTLAND CUMBERLAND COUNTY WASHINGTON AVE. S.B. BRIDGE OVER I-295 FEDERAL PROJECT NO. 2366100 PROJECT LENGTH 0.0824 mi. BRIDGE NO. 0820

UTILITIES

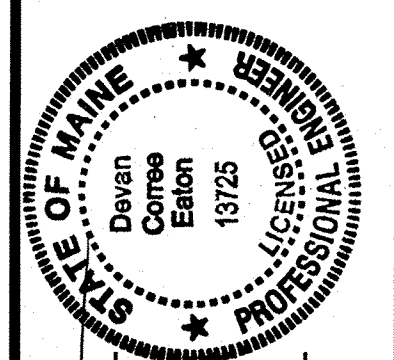
None

MAINTENANCE OF TRAFFIC

Staged Construction, Maintaining one 14'-0" wide lane during construction.

PROJECT LOCATION	Washington Avenue S.B. Bridge over I-295 NB & SB Located 0.15 Miles South of Jct. I-295 Exit 8, South Bound Lat./Long. 43°40'24" N 70°15'26" W
PROGRAM AREA	Highway Bridge Traditional
OUTLINE OF WORK	Bridge Wearing Surface and Joint Seal Replacement

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
APPROVED: *[Signature]*
COMMISSIONER: *[Signature]*
DATE: 10/16/2020
CHIEF ENGINEER: *[Signature]*
10-15-2020



SIGNATURE: *[Signature]*
P.E. NUMBER: 13725
DATE: 10/17/20

PROGRAM	BRIDGE
PROJECT MANAGER	DEVAN EATON
DESIGNER	SILAS FITZGERALD
CONSULTANT	
PROJECT RESIDENT	
CONTRACTOR	
PROJECT COMPLETION DATE	

WIN 023661.00

2366100

WASHINGTON AVE S.B. BRIDGE
I-295
PORTLAND CUMBERLAND COUNTY
TITLE SHEET

SHEET NUMBER
1
OF 5

ESTIMATED QUANTITIES			
ITEM NO.	DESCRIPTION	QUANTITY	UNIT
202.1235	DIAMOND GRINDING CONCRETE PAVEMENT	1500	SY
202.202	REMOVING PAVEMENT SURFACE	233	SY
202.30	REMOVING EXISTING CONCRETE WEARING SURFACE (1500 SY)	1	LS
403.2081	HOT MIX ASPHALT 12.5mm (POLYMER MODIFIED)	31	T
403.211	HOT MIX ASPHALT - SHIM	6	T
409.15	BITUMINOUS TACK COAT APPLIED	16	G
502.442	POLYESTER POLYMER CONCRETE WEARING SURFACE (13,500 SF)	1	LS
515.21	PROTECTIVE COATING FOR CONCRETE SURFACES (2400 SY)	1	LS
518.391	REPAIRING GRANITE CURB JOINT AND BEDDING MORTAR	112	LF
518.50	REPAIR OF UPWARD FACING SURFACE TO REINFORCING STEEL <8 INCHES	675	SF
518.51	REPAIR OF UPWARD FACING SURFACE BELOW REINFORCING STEEL <8 INCHES	270	SF
520.241	BRIDGE JOINT MODIFICATION TYPE I GLAND SEAL	2	EA
526.301	TEMPORARY CONCRETE BARRIER TYPE I (560 LF)	1	LS
527.34	WORK ZONE CRASH CUSHIONS	1	UN
627.744	6" WHITE OR YELLOW PAVEMENT MARKING LINE	1400	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
631.172	TRUCK - LARGE (INCLUDING OPERATOR)	20	HR
631.21	ROAD BROOM (INCLUDING OPERATORS AND HAULER)	20	HR
639.19	FIELD OFFICE TYPE B	1	EA
652.30	FLASHING ARROW	1	EA
652.312	TYPE III BARRICADE	2	EA
652.33	DRUM	25	EA
652.34	CONE	50	EA
652.35	CONSTRUCTION SIGNS	200	SF
652.361	MAINTENANCE OF TRAFFIC CONTROL DEVICES (60 CD)	1	LS
652.41	PORTABLE CHANGABLE MESSAGE SIGN	1	EA
656.75	TEMPORARY SOIL EROSION AND WATER POLLUTION CONTROL	1	LS
659.10	MOBILIZATION	1	LS

GENERAL CONSTRUCTION NOTES

1. Project information referred to below may be accessed at the following MaineDOT web address: <http://www.maine.gov/mdot/contractors/>

2. 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.

3. The bridge deck evaluation report of the existing bridge may be accessed at the MaineDOT web address. The report contains visual inspection information and deck core data of the bridge. There is no assurance that the information or data is a true representation of the conditions of the entire deck.

4. 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:

a. If a Lump Sum pay item is eliminated, the requirements of Standard Specifications Section 109.2, Elimination of Items, will take precedence.

b. If other Contract Documents specifically allow a change in payment for a Lump Sum pay item, those requirements will be followed.

c. 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.

5. Traffic shall not be permitted on exposed structural deck.

6. Protective Coating for Concrete Surfaces shall be applied to the following areas:
 Polyester Polymer Concrete Wearing Surface
 Concrete Sidewalk
 Exposed concrete headers at bridge joints
 Exposed concrete surfaces of permanent concrete transition barriers
 Exposed concrete surfaces of pedestrian barrier to the extent of expansion dams
 Exposed concrete surfaces of the top of curb
 Exposed concrete surfaces of the back of the curb as directed by the Resident

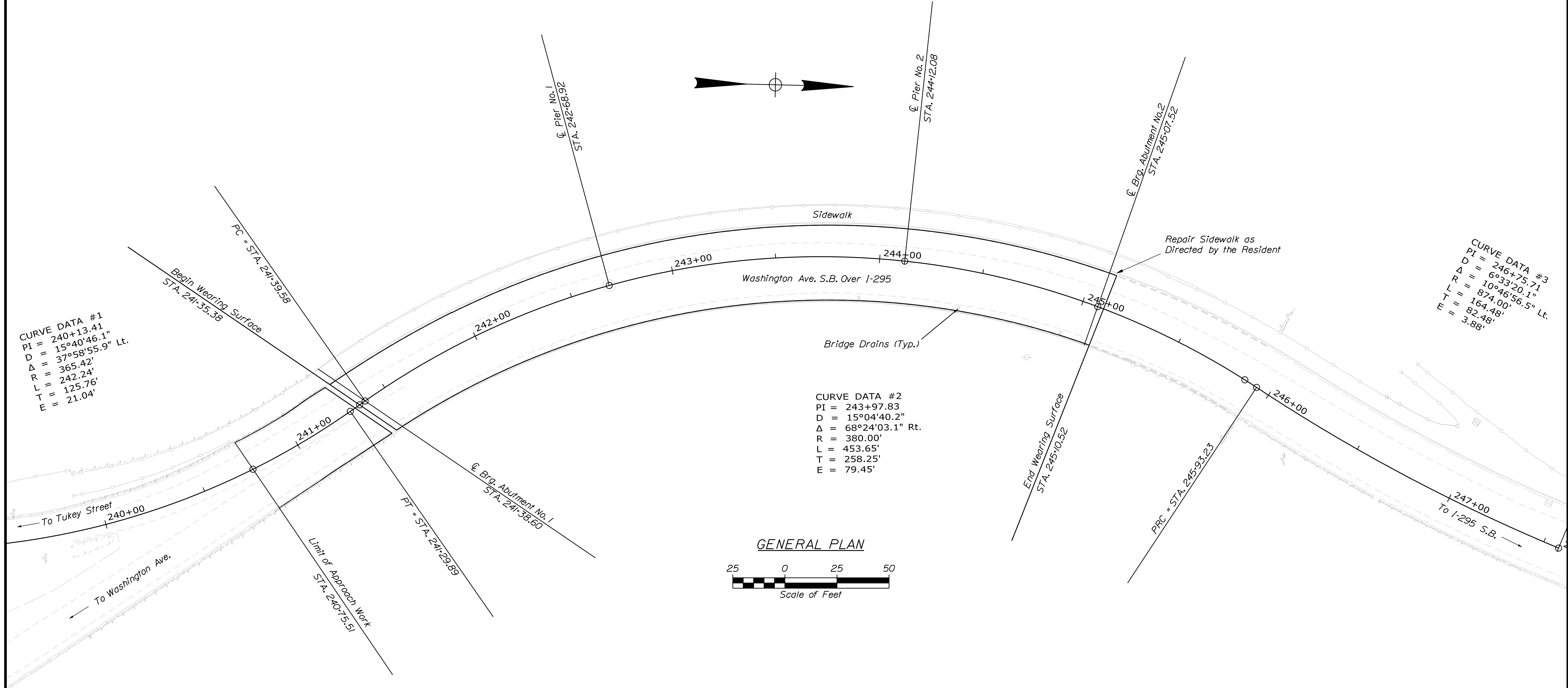
7. Item 520.241 Bridge Joint Modification Type I Gland Seal consists of removing and replacing the existing gland seals. No steel repair is anticipated during construction. Gland seals shall have a minimum movement rating of 3". The Contractor shall submit the selected gland seal to the Department for approval prior to fabrication of the expansion devices.

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
2366100
WIN
023661.00
BRIDGE NO. 0820
BRIDGE PLANS

PROJ. MANAGER	D. EATON	BY	J. LEAVITT	DATE	9/15/2020
CHECKED-REVIEWED	S. FITZGERALD	BY	M. POLIUN	DATE	9/25/2020
DESIGNS DETAILED	D. EATON	SIGNATURE			
REVISIONS 1		P.E. NUMBER			
REVISIONS 2		DATE			
REVISIONS 3					
REVISIONS 4					
FIELD CHANGES					

WASHINGTON AVE. S.B. BRIDGE
1-295
PORTLAND CUMBERLAND COUNTY
ESTIMATED QUANTITIES &
GENERAL CONSTRUCTION NOTES

SHEET NUMBER
2
OF 5

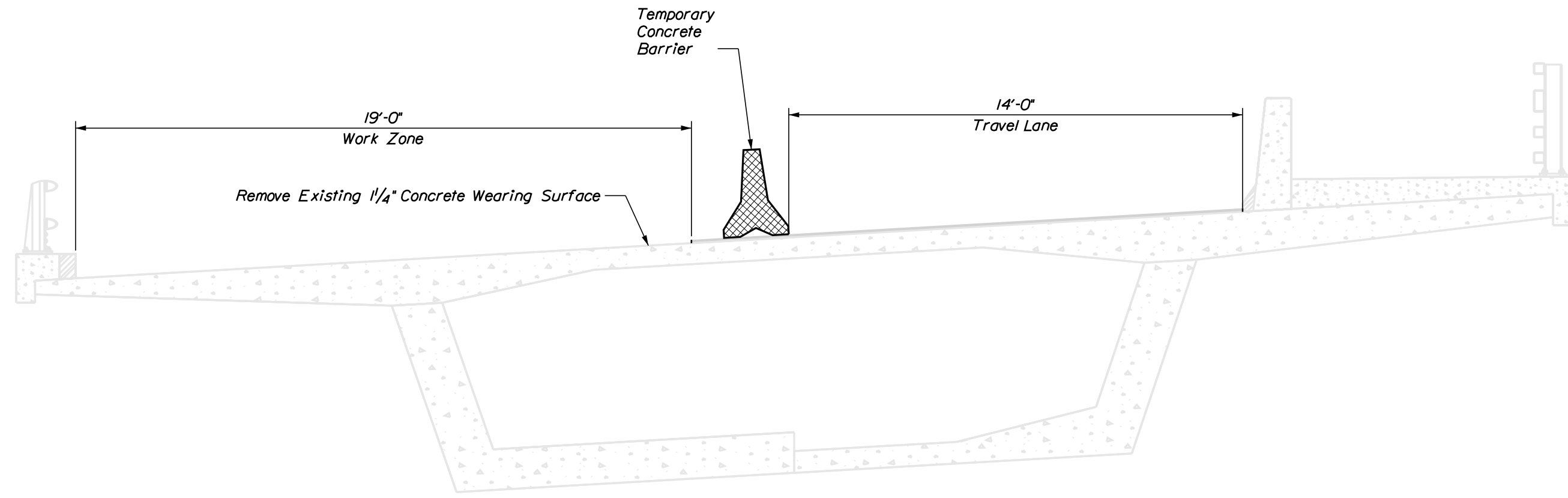


CURVE DATA #1
 PI = 240+13.41
 D = 15°40'46.1"
 Δ = 37°58'55.9" Lt.
 R = 365.42'
 L = 242.24'
 T = 125.76'
 E = 21.04'

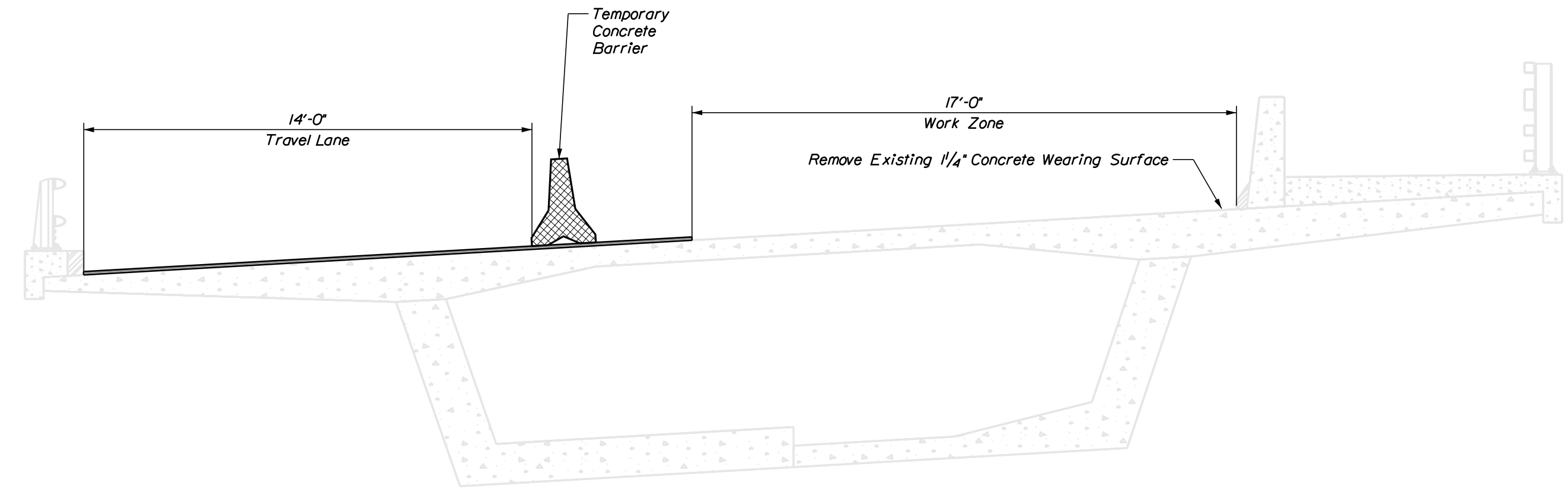
CURVE DATA #2
 PI = 243+97.83
 D = 15°04'40.2"
 Δ = 68°24'03.1" Rt.
 R = 380.00'
 L = 453.65'
 T = 258.25'
 E = 79.45'

CURVE DATA #3
 PI = 246+75.71
 D = 6°33'20.1"
 Δ = 10°46'56.5" Lt.
 R = 874.00'
 L = 164.48'
 T = 82.48'
 E = 3.88'

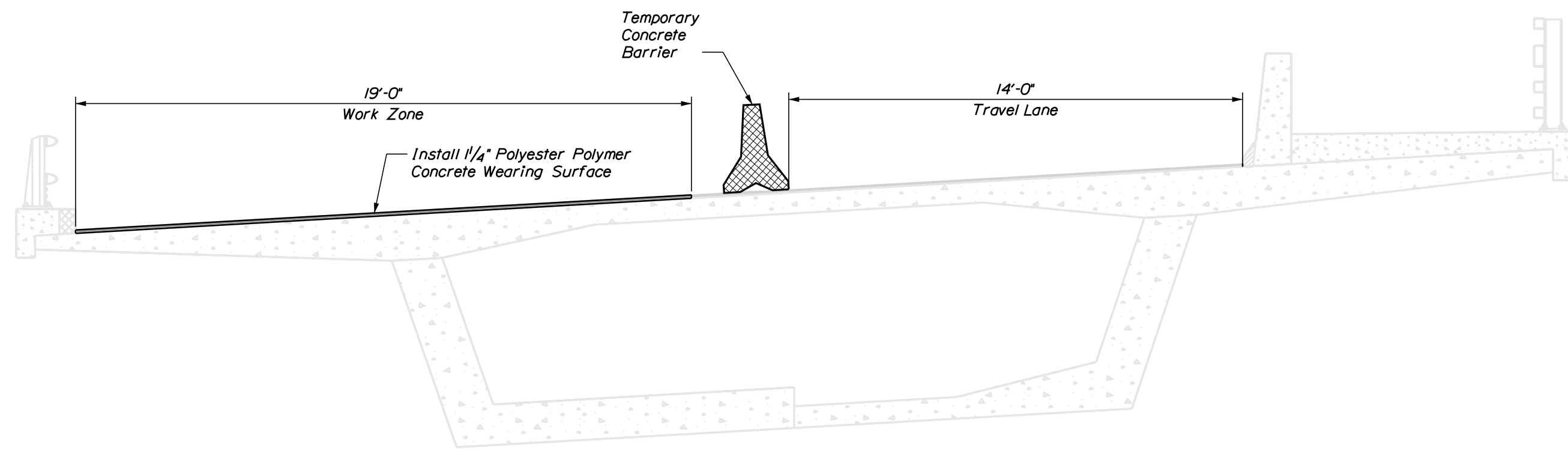
STATE OF MAINE DEPARTMENT OF TRANSPORTATION		2366100	
WASHINGTON AVE. S.B. BRIDGE 1-295		WIN 023661.00	
PORTLAND CUMBERLAND COUNTY		BRIDGE NO. 0820	
GENERAL PLAN		BRIDGE PLANS	
SHEET NUMBER		3	
OF 5		DATE	
PROJ. MANAGER	D. EATON	BY	J. LEAVITT
DESIGN DETAILED	S. FITZGERALD	DATE	9/18/2020
CHECKED/REVIEWED	D. EATON	DATE	9/25/2020
DESIGNS DETAILED		SIGNATURE	
REVISIONS 1		P.E. NUMBER	
REVISIONS 2		DATE	
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			



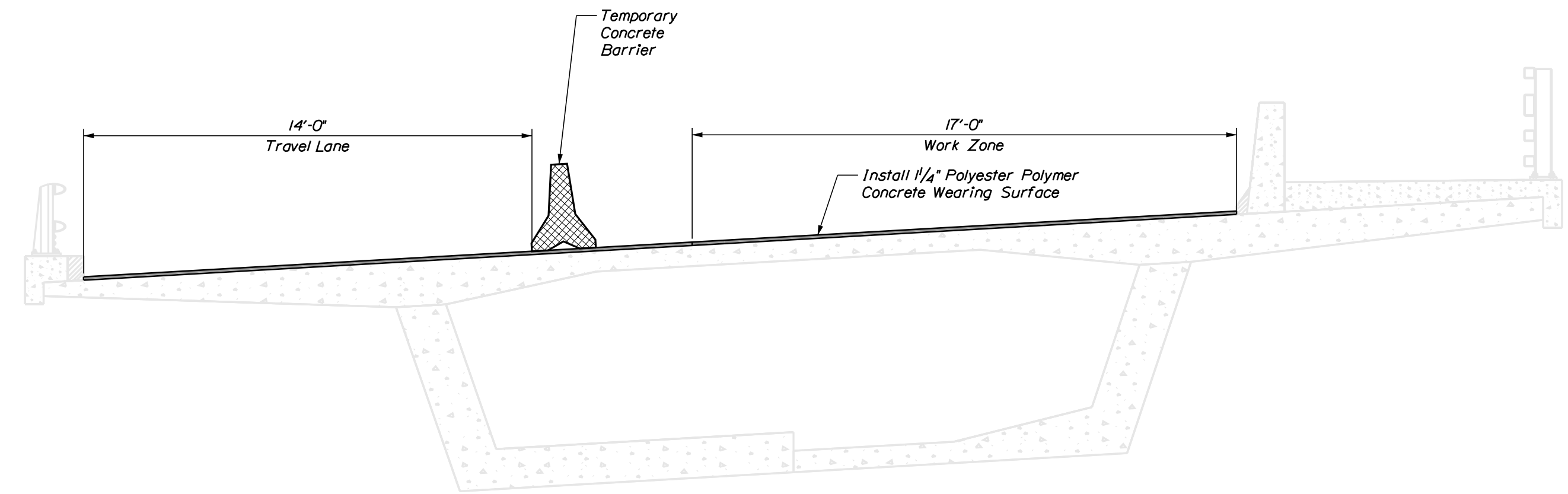
STAGE 1



STAGE 3



STAGE 2



STAGE 4

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2366100

WIN

BRIDGE NO. 0820 023661.00 BRIDGE PLANS

SIGNATURE

P.E. NUMBER

DATE

PROJ. MANAGER	D. EATON	BY	DATE
CHECKED-REVIEWED	S. FITZGERALD	J. LEAVITT	9/18/2020
DESIGNS DETAILED	D. EATON	M. POLLIN	9/25/2020
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

WASHINGTON AVE. S.B. BRIDGE
1-295
PORTLAND CUMBERLAND COUNTY

STAGED CONSTRUCTION

SHEET NUMBER

5

OF 5