Highway Bridge Inspection Report

BR# 5800

I-95 NB / STILLWATER AVE

I95 NORTHBOUND Over

STILLWATER AVENUE

Town: Bangor



Inspection Date: 09/07/2021

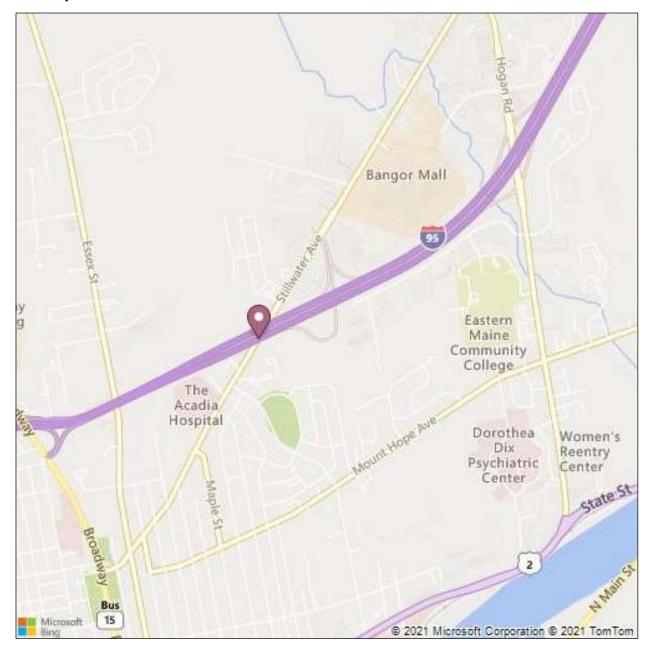
Inspected By: Harris, Scott

Inspection Type(s): Routine

Inspection Date: 09/07/2021 Facility Carried: 195 NORTHBOUND

Highway Bridge Inspection Report

Location Map



Latitude: 44.82352 Longitude: -68.75932

National Bridge Inventory

Status: 1 - SD Bridge Name: I-95 NB / STILLWATER AVE Sufficiency Rating: 60.3

Inspections

(90) INSPECTION DATE & (91) DESIGNATED INSPECTION FREQUENCY 24 09/07/2021

(92) CRITICAL FEATURE INSPECTION & (93) CFI DATE

 (92A) FRACTURE CRITICAL DETAIL
 N

 (92B) UNDERWATER INSPECTION
 N

 (92C) OTHER SPECIAL INSPECTION
 N

Identification

 (1) STATE CODE
 231 - Maine

 (8) STRUCTURE NUMBER
 5800

(5) INVENTORY ROUTE

(5A) RECORD TYPE 1: Route carried "on" the structure

(5B) ROUTE SIGNING PREFIX

3 - STATE HIGHWAY

(5C) DESIGNATED LEVEL OF SERVICE

1 - MAINLINE

(5) INVENTORY ROUTE 95
(5) INVENTORY ROUTE 1 - NORTH

 (2) HIGHWAY AGENCY DISTRICT
 04 - Eastern

 (3) COUNTY CODE
 019 Penobscot

 (4) PLACE CODE
 02795

(6) FEATURES INTERSECTED STILLWATER AVENUE
(7) FACILITY CARRIED 195 NORTHBOUND
(9) LOCATION 0.8 MI N JCT RTE 15

(11) MILEPOINT 184.620

(12) BASE HIGHWAY NETWORK Inventory Route is on the Base Network

(13) LRS INVENTORY ROUTE, SUBROUTE (13A) LRS INVENTORY ROUTE

 (13B) SUBROUTE NUMBER
 00

 (16) LATITUDE
 44.82352

 (17) LONGITUDE
 -68.75932

(98A) BORDER BRIDGE CODE
(98B) PERCENT RESPONSIBILITY
0

(98B) PERCENT RESPONSIBILITY
(99) BORDER BRIDGE STRUCT NO.

Structure Type and Material

n/a

000000095X

(43) STRUCTURE TYPE, MAIN

(43A) KIND OF MATERIAL/DESIGN 3 - Steel

(43B) TYPE OF DESIGN/CONSTR 02 - Stringer/Multi-beam or Girder

(44) STRUCTURE TYPE, APPROACH SPANS

 (44A) KIND OF MATERIAL/DESIGN
 0 - Other

 (44B) TYPE OF DESIGN/CONSTRUCTION
 00 - Other

 (45) NUMBER OF SPANS IN MAIN UNIT
 3

 (46) NUMBER OF APPROACH SPANS
 0

(107) DECK STRUCTURE TYPE 1 - Concrete Cast-in-Place

(108) WEARING SURFACE/PROTECTIVE SYSTEMS

 (108A) WEARING SURFACE
 6 - Bituminous

 (108B) DECK MEMBRANE
 2 - Preformed Fabric

 (108C) DECK PROTECTION
 0 - None

Age of Service

 (27) YEAR BUILT
 1960

 (106) YEAR RECONSTRUCTED
 2006

(42) TYPE OF SERVICE

(42A) TYPE OF SERVICE ON BRIDGE 1 - Highway

(42B) TYPE OF SERVICE UNDER BRIDGE 1 - Highway, with or w/out pedestrian

(28) LANES

 (28A) LANES ON THE STRUCTURE
 02

 (28B) LANES UNDER THE STRUCTURE
 02

 (29) AVERAGE DAILY TRAFFIC
 25120

 (30) YEAR OF AVERAGE DAILY TRAFFIC
 2016

 (109) AVERAGE DAILY TRUCK TRAFFIC
 5

 (19) BYPASS DETOUR LENGTH
 1

Geometric Data

(50) CURB/SIDEWALK WIDTHS (50A) LEFT CURB SIDEWALK (ft.) 0.5 (50B) RIGHT CURB SIDEWALK (ft.) 0.5 (51) BRDG RDWY WIDTH CURB-TO-CURB (ft.) 30.2 (52) DECK WIDTH, OUT-TO-OUT (ft.) 35 (32) APPROACH ROADWAY WIDTH (ft.) 40 (33) BRIDGE MEDIAN 0 - No median (34) SKEW (deg.) 56 (35) STRUCTURE FLARED 0 - No flare (10) INV RTE, MIN VERT CLEARANCE (ft.) 328.05 (47) TOTAL HORIZONTAL CLEARANCE (ft.) 30 (53) VERTICAL CLEARANCE OVER BRIDGE ROADWAY (ft.) 327.76 (54) MIN VERTICAL UNDERCLEARANCE (54A) REFERENCE FEATURE H - Highway beneath structure (54B) MIN VERTICAL UNDERCLEARENCE (ft.) 14.50 (55) MIN LATERAL UNDER CLEARANCE RIGHT (55A) REFERENCE FEATURE H - Highway beneath structure (55B) MIN LATERAL UNDER CLEARANCE RIGHT (ft.) 12.14 (56) MIN LATERAL UNDER CLEARANCE (ft.) 12.1 Classification (112) NBIS BRIDGE LENGTH Yes (104) HIGHWAY SYSTEM OF THE INVENTORY ROUTE 1 - Structure/Route is on NHS (26) FUNCTIONAL CLASSIFICATION OF INVENTORY ROUTE 11 - Urban - Principal Arterial - Interstate (100) STRAHNET HIGHWAY DESIGNATION Is on an Interstate STRAHNET route (101) PARALLEL STRUCTURE DESIGNATION R - Right structure (North or East) (102) DIRECTION OF TRAFFIC 1-way traffic (103) TEMP STRUCTURE (105) FEDERAL LANDS HIGHWAYS Not Applicable (110) DESIGNATED NATIONAL NETWORK Inventory route on National Truck Network (20) TOLL 3 - On Free Road (21) MAINTENANCE RESPONSIBILITY 01 - State Highway Agency (22) OWNER 01 - State Highway Agency (37) HISTORICAL SIGNIFICANCE 4 - Not determinable Condition (58) DECK 4 - Poor Condition (advanced deterioration) (59) SUPERSTRUCTURE 6 - Satisfactory Condition (minor deterioration) (60) SUBSTRUCTURE 5 - Fair Condition (minor section loss) (61) CHANNEL & CHANNEL PROTECTION 6 - Bank slump, widespread minor damage (62) CULVERT N - Not Applicable **Load Rating and Posting** (31) DESIGN LOAD 6 - HS 20+Mod (63) METHOD USED TO DETERMINE OPERATING RATING 8 - Load and Resistance Factor Rating (LRFR) rating report by rating factor (RF) method using HL-93 loadings. (64) OPERATING RATING 1.37 (65) METHOD USED TO DETERMINE INVENTORY RATING 8 - Load and Resistance Factor Rating (LRFR) rating report by rating factor (RF) method using HL-93 loadings. (66) INVENTORY RATING 1.06 (70) BRIDGE POSTING 5 - Equal to or above legal loads (41) STRUCTURE OPEN/POSTED/CLOSED A - Open **Appraisal** (67) STRUCTURAL EVALUATION 5 (68) DECK GEOMETRY 4 (69) UNDERCLEARANCES, VERTICAL & HORIZONTAL 6

N - Not Applicable

8 - Equal to present desirable criteria

0 - Does not meet acceptable standards/safety feature is required

0 - Does not meet acceptable standards/safety feature is required

0 - Does not meet acceptable standards/safety feature is required

0 - Does not meet acceptable standards/safety feature is required

91.0

220

(49) STRUCTURE LENGTH (ft.)

(71) WATERWAY ADEQUACY

(36) TRAFFIC SAFETY FEATURE 36A) BRIDGE RAILINGS:

36B) TRANSITIONS:

(72) APPROACH ROADWAY ALIGNMENT

36C) APPROACH GUARDRAIL

36D) APPROACH GUARDRAIL ENDS

Proposed Improvements

(75) TYPE OF WORK

(75A) TYPE OF WORK PROPOSED

(75B) WORK DONE BY

(76) LENGTH OF STRUCTURE IMPROVEMENT (ft.)

(94) BRIDGE IMPROVEMENT COST (SK)

(95) ROADWAY IMPROVEMENT COST (SK)

(96) TOTAL PROJECT COST

(97) YEAR OF IMPROVEMENT COST ESTIMATE

(114) FUTURE ADT

35168 2036

(115) YEAR OF FUTURE ADT

Navigation Data

(38) NAVIGATION CONTROL	N - Not applicable, no waterway
(111) PIER OR ABUTMENT PROTECTION	
(39) NAV VERT CLEARANCE	0
(116) MIN NAVIGATION VERT CLEARANCE, VERT LIFT BRIDGE	0
(40) NAV HORIZONTAL CLEARANCE	0

Inspection Notes

Structure Number: 5800	Town: Bangor	
Structure Name: I-95 NB / STILLWATER AVE		
Structure Notes 1960 Three simple span, steel rolled beams with compo	site, concrete deck all on concrete substructure. Bituminous w	rearing surface.
Wearing Surface New bituminous overlay		
	NBI Item 58: 4 racking & efflo areas (dry conditions at this time No major spans one missing splice. The east pier joint has loose joint armo	
Superstructure Girders have isolated paint failures with scattered freckl failures with minor to moderate rusting. Girders have minor to moderate rusting.	NBI Item 59: 6 ing. Exterior girder ends, bearings and girder ends over piers hor scrapes over roadway.	nave isolated paint
Substructure Abutments have extensive map cracking up to 1/8" wide west abutment. East abutment wings have extensive da cap has scattered minor to moderate cracking with isola	NBI Item 60: 5 with dark staining. Isolated areas of spalling with exposed relative map cracking. Westerly pier columns have scattered map cotted areas of heavy cracking and spalling at south end.	oar at SW corner of racking. Westerly pier
Culvert	NBI Item 62: N	

Channel NBI Item 61: 6

Other		
O control to control to		
Special Inspection		
Monitoring		
Pontis Notes		

Inspection Date: 09/07/2021 Facility Carried: 195 NORTHBOUND

Highway Bridge Inspection Report

Element Inspection

	Environment	Total Quantity	Units	Condition State 1	Condition State 2	Condition State 3	Condition State 4
12 - Reinforced Concrete Deck	4 - Sev.	7700	sq. ft.	0	7400	300	0
107 - Steel Open Girder/Beam	3 - Mod.	1100	ft.	900	200	0	0
515 - Steel Protective Coating		1100	sq. ft.	500	475	75	50
205 - Reinforced Concrete Column	3 - Mod.	6	each	0	6	0	0
215 - Reinforced Concrete Abutment	2 - Low	210	ft.	0	180	30	0
234 - Reinforced Concrete Pier Cap	3 - Mod.	122	ft.	0	92	30	0
300 - Strip Seal Expansion Joint	4 - Sev.	61	ft.	0	0	51	10
302 - Compression Joint Seal	4 - Sev.	61	ft.	54	7	0	0
311 - Movable Bearing	3 - Mod.	15	each	10	5	0	0
515 - Steel Protective Coating		15	sq. ft.	0	10	0	5
313 - Fixed Bearing	3 - Mod.	15	each	10	5	0	0
515 - Steel Protective Coating		15	sq. ft.	0	10	0	5
801 - Beam End	3 - Mod.	30	each	15	15	0	0
515 - Steel Protective Coating		30	sq. ft.	0	20	5	5
841 - Asphalt Wearing Surface with Membrane	/1 - 501/	6644	sq. ft.	6644	0	0	0
855 - Slope Protection - Concrete	2 - Low	4200	sq. ft.	3200	1000	0	0
871 - Aluminum Bridge Railing	4 - Sev.	440	ft	384	40	16	0

Over Limit Report

5800 Town1: Bridge #: Bangor Bridge Name: I-95 NB / STILLWATER AVE Town2: Owner: 01 - State Highway Agency Maintainer: 01 - State Highway Agency N Not applicable Co-Owner: N Not applicable Co-Maintainer: Region: 04 - Eastern Vertical Clearance - Under Left, Center, and Right is based on the direction of travel Roadway - Heading North or East Actual Heights in Feet-Inches Date Measured: 08/05/2013 Center Deficient Sign Left Right **Posted** Main: STILLWATER AVENUE 14 - 6 14-5 14 - 9 Main 14-4 Other: Other Ramp Ramps: Roadway - Heading South or West Actual Heights in Feet-Inches Date Measured: 08/05/2013 Deficient Sign <u>Left</u> Center Posted Main: STILLWATER AVENUE 14 - 5 14-4 14 - 6 ✓ Main 14 - 4 Other: Other Ramp Ramps: **Vertical Clearance - Portal** Roadway: 195 NORTHBOUND Heading North or East Actual Heights in Feet-Inches Date Measured: <u>Left</u> Center Right **Deficient Sign Posted** Portal **Heading South or West** Actual Heights in Feet-Inches Date Measured: Left Center Right **Posted Deficient Sign** Portal Permitting ☐ Red Flag Comments **Pointer** Heading North Height: 14 - 4 2037279-BRPT Heading South Height: 14 - 4 2037279-BRPT Left Ramp Height: Right Ramp Height: Portal North Height: Portal South Height: Other Road Height: Bridge Width: 30.2 ft Roadway Width: 40 ft Underclearance heights are signed if less than 14 ft 6 in Check with Maine Turnpike Authority for load heights over 13 ft 6 in Always check 511 **Load Restrictions** Posted tons Date posted: Posted One Truck at aTime Posted for 4 axle only Operating Load Rating 1.37

> axles axles axles

Permit Load Ratings

Underwater Dive Inspection Report

Structure Number: 5800		Bridge Name:	I-95 NB/STILLWATER AVE		
Town 1 : 19020 - Bangor		Town 2:			
Division: Bangor		DiveID:	4092		Tidal:
Location: .8 MI N 15					
Tide Information:				Ph	notos:
Dive Entry Location:					
Scour:					
Comments/Hazards:					
Streambed Description:					
Streambed Description.					
Channel Description:					
Substructure Description:					
Inspection Team:	Role:		Dive Conditions:		
			Time: Entry:	AM/PM	
			Time: Exit:	AM/PM	
			Water Temp:		
			Visibility (ft):		
			Max Depth (ft):		
			Current:		
			Weather:		
			Underwater Inspection Date:		
			Channel Condition:		
			Substr/Culvert Condition:		
			Inspection Cycle:		
Ratings Comments:					

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Highway Bridge Inspection Report

Pictures



PHOTO 1

Description Roadway condition



PHOTO 2

Description east joint

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Highway Bridge Inspection Report

Pictures



РНОТО 3

Description east joint



PHOTO 4

Description new wearing surface

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Highway Bridge Inspection Report

Pictures

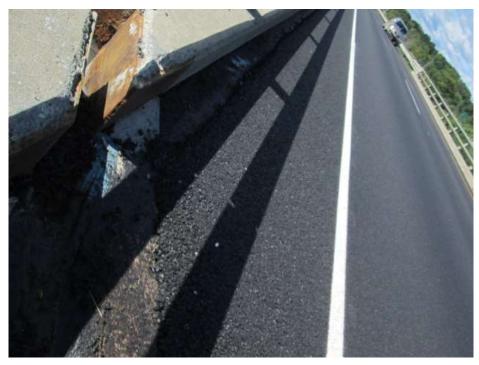


PHOTO 5

Description wearing surface



РНОТО 6

Description east pier joint

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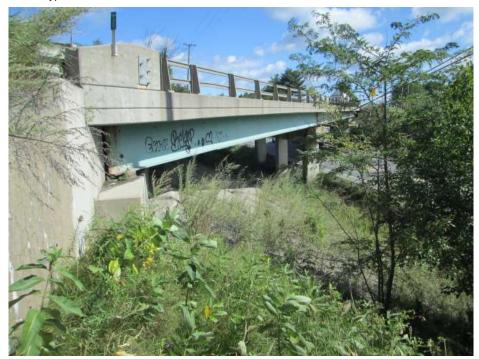
Highway Bridge Inspection Report

Pictures



PHOTO 7

Description rail type



РНОТО 8

Description South side view

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Highway Bridge Inspection Report

Pictures



РНОТО 9

Description SW beam end



PHOTO 10

Description west abutment

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Highway Bridge Inspection Report

Pictures



PHOTO 11

Description Backwall cracking west abutment



PHOTO 12

Description Typical west abutment interior beam end

Inspection Date: 09/07/2021 Facility Carried: 195 NORTHBOUND

Highway Bridge Inspection Report

Pictures



PHOTO 13

Description Area of heavy staining west span deck



PHOTO 14

Description west span/ abutment

Inspection Date: 09/07/2021 Facility Carried: 195 NORTHBOUND

Highway Bridge Inspection Report

Pictures



PHOTO 15

Description west pier west face



PHOTO 16

Description rusting drain outlet at west pier

Inspection Date: 09/07/2021 Facility Carried: 195 NORTHBOUND

Highway Bridge Inspection Report

Pictures



PHOTO 17

Description center span view



PHOTO 18

Description wet stained area center span interior bay

Inspection Date: 09/07/2021 Facility Carried: 195 NORTHBOUND

Highway Bridge Inspection Report

Pictures



PHOTO 19

Description east pier west face



PHOTO 20

Description east abutment

Inspection Date: 09/07/2021 Facility Carried: 195 NORTHBOUND

Highway Bridge Inspection Report

Pictures



PHOTO 21

Description Heavy cracking east abutment



PHOTO 22

Description e3ast abutment

Inspection Date: 09/07/2021 Facility Carried: 195 NORTHBOUND

Highway Bridge Inspection Report

Pictures



PHOTO 23

Description north side view

Maintenance Work Items

Structure Number: 5800 Structure Name: I-95 NB / STILLWATER AVE

Town: 19020 Owner: Harris, Scott

Туре	Work Item	Priority	Notes
Maintenance	Rehab Substructure		Repair abutment and pier heavy spalling.
Preservation	Coat Beam Ends		
Preservation	Seal Joint		
Preservation	Other		Apply Silane
Maintenance	Repair Joint		Repair loose joint armor at east pier, install header
Safety	Repair Bridge Rail		

MaineDOT NBIS Bridge Safety Inspection JSA

Structure Number: 5800

inspector: Harris, Scott	Structure Name: I-95 NB / STILLWATER AVE
Team Lead: Scott Harris	Town: Bangor
Additional Team Members/Visitors:	
1.)	6.)
2.)	7.)
3.)	8.)
4.)	9.)
5.)	
Job being performed:	
Routine bridge inspection.	
Detential Herords	Controls
Potential Hazard:	Controls:
✓ Exposure to traffic	✓ Parked off road with strobe
	✓ Less than 1 hour on bridge
	✓ Wear standard reflective clothing and hard hat
	☐ Spotter ☐ Traffic Control Crew
Potential Hazard:	<u>Controls:</u>
✓ Steep slopes and uneven working areas	✓ Wear appropriate, prudent footwear
(rip rap, mud, loose fill, etc)	Rope or fall protection
	7
Potential Hazard:	Controls:
	
✓ Chipped Concrete or Steel (hand tools only)	✓ Wear appropriate, prudent eye/hand protection
Potential Hazard:	Controls:
Potential Hazard:	Controls.
✓ 6' Vertical drops	✓ Stay away from areas
- Tollinour stropp	
Potential Hazard:	Controls:
Water Hazards	Evaluate Water Hazard conditions
☐ Water depth under 1 foot ☐ Water depth 1 to 4 feet	☐ Use/Wear appropriate PPE ☐ Buddy System
Water depth over 4 feet	Buddy System
☐ Water flow calm/slow moving	
Water flow visible/not rapid	
☐ Water flow rapid with some short falls	
☐ Tidal Water	_
	_
Potential Hazard:	Controls:
☐ Insects, Poision Ivy, or other environmental hazards	Apply insect repellant and/or sunscreen
	コ

	Protect skin with appropriate, prudent clothing
Potential Hazard:	<u>Controls:</u>
Lead paint and Avian excrement	☐ Wear gloves, do not scrape
Potential Hazard:	Controls:
Heavy Manual Lifting	Ask for assistance in donning dive gear, lifting equipment
Potential Hazard:	<u>Controls:</u>
DCS, Lung Expansion	Ascend slowly, user computers, Safety Stops (15' mark for 3 min.)
Potential Hazard:	<u>Controls:</u>
☐ Entanglement U/W	Use knife, Comm gear
Potential Hazard:	<u>Controls:</u>
☐ Boat Traffic	Fly Dive Flag, user spotter, contact bridge on Chan. 13
Potential Hazard:	<u>Controls:</u>
Cold Water	Use adequate dry suit underwear for water temperature
Potential Hazard:	<u>Controls:</u>
Live Boating	Keep track of divers, avoid powering during drop-off/pick-up
Other Potential Hazards:	Other Controls:
Safety Equipment Required: ☑ Hard hat ☐ Sunscreen ☑ Vest ☐ First Aid	Emergency Action Plan: ☐ Throw Ring ☐ Throw Rope ☐ First Aid Kit

✓ Glasses	O2	Positioning Device	☐ Fall Rescue Plan
✓ Gloves	☐ AED		
□PFD	Comm Gear		☐ Dan 1-919-684-9111
Rain Gear	✓ Cell Phone		☐ USCG 741-5465
☐ Bug Spray	□ Boat		
Other Safety Equipment:		Other Emergency Ac	tion Plan:

I certify that the MaineDOT NBIS Bridge Safety Inspection JSA has been completed according to all proper procedures required by the Maine Department of Transportation.

© Complete Scott B Harris

Bridge Components

Bridge #: Bridge Name: Owner: Co-Owner: Region:	5800 I-95 NB / STILLW 01 - State Highwa N Not applicable 04 - Eastern		Town1: Town2: Maintainer: Co-Maintainer:	Bangor 01 - State Highway Agency N Not applicable
Deck Joint Seal Type/ Emseal V Seal Watson Be Hot Rubbe Pour-in-Pl DS Brown	owman Company	ypes: Sliding Transflex Compression Modular Gland Vaybo Crete	Joint HDR Ma Concrete Delcrete Elastomeri LP Concre Phoscrete Plycrete	Curtain Troughs ic Armor
Material Shape Attached To Number of Bars Extra Height Bearing Type Qu Disk Pot Roller Roller Other: Pin Quant	Left Side Aluminum Semi-Elliptical Curb 2 N uantity: Elastomeric Rocker O Sliding Plate	Rail: Retrofit Safety Walk Pales Snow Fence Fatigue Prone Detail: Narrow Cover Plate - Sq End v Mide Cover Plate - Sq End w Mide Cover Plate - Sq End w Lateral Connection Plate - Wel	v/o Weld elded o Weld	Right Side Rail: Aluminum
Substructure Pier Collars Abutment Col Wood Piles Steel Piles Blocked Bridg	ge	tetaining Wall Type:		Other Confined Space Bridge Lighting Cat Walk Navigational Lighting Signs Attached

Bridge Preservation

Bridge #: 5800 Town1: Bangor

Bridge Name: I-95 NB / STILLWATER AVE Town2:

Owner: 01 - State Highway Agency Maintainer: 01 - State Highway Agency
Co-Owner: N Not applicable Co-Maintainer: N Not applicable

Co-Owner: N Not applicable Region: 04 - Eastern

Deck							Common Preservation	n
NBI Deck Information: Wearing Surface:			Paint Information:	Anodes:				
Deck Type	1 - Concr	ete Cast-in-Place		Туре	6 - Bi	ituminous	Туре	☐ Installed
Deck Protection	0 - None			Last Date		2006	Last Date	Detached
Membrane Type	2 - Prefor	med Fabric			Lifespan (Yrs) Next Date Est. 2006		Lifespan (Yrs) Next Date Est. 1997	Replace
				Mill & Fill D	Date			
Superstructure								
Beam Ends Paint: Last Date		Bearings Paint: Last Date	2018	Bearings L Last Date		ation: 2028	Concrete-Silane: Last Date	Washing: ✓ Required
Next Date Est.		Next Date Est.		Next Date	Est.	2028	Next Date Est.	UBIT
Beam Ends Fluid Filn Last Date	<u>n:</u>	Bearings Fluid F Last Date	-ilm: 10	Treatment Core 10			Concrete-Linseed Last Date	
Next Date Est. 201	18	Next Date Est.	10	Galvani	ized		Next Date Est.	
				Metalize	ed		Alkali-Silica reactivity	
Substructure								
General Notes								