

Highway Bridge Inspection Report

BR# 6339

BASS HARBOR FERRY SLIP

State Aid #6

Over

Blue Hill Bay

Town:

Tremont



Inspection Date: 06/27/2019

Inspected By: Edwards, Carl

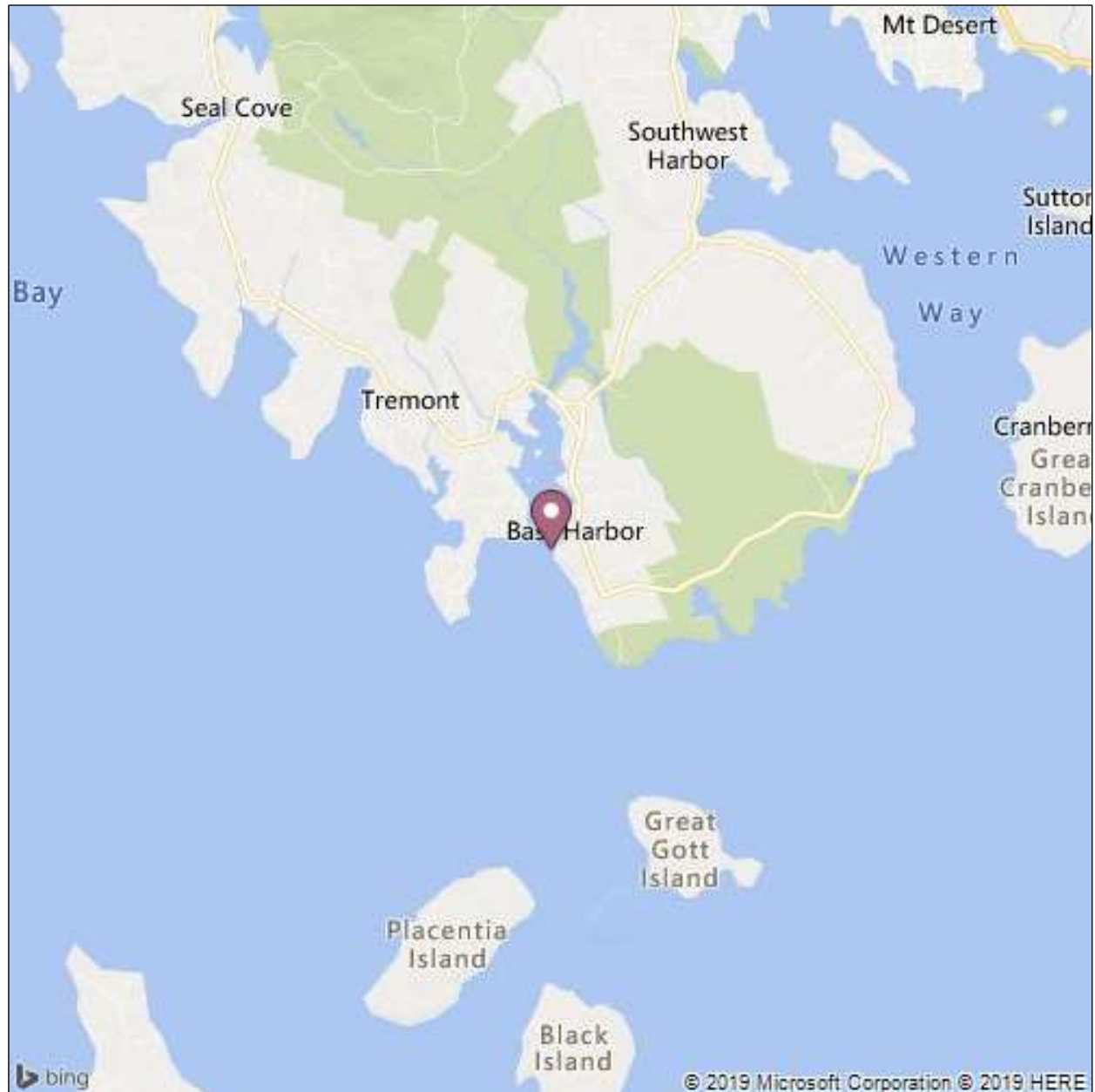
Inspection Type(s): Routine and Fracture Critical

Inspector: Carl Edwards
Inspection Date: 06/27/2019

Structure Number: 6339
Facility Carried: State Aid #6

Highway Bridge Inspection Report

Location Map



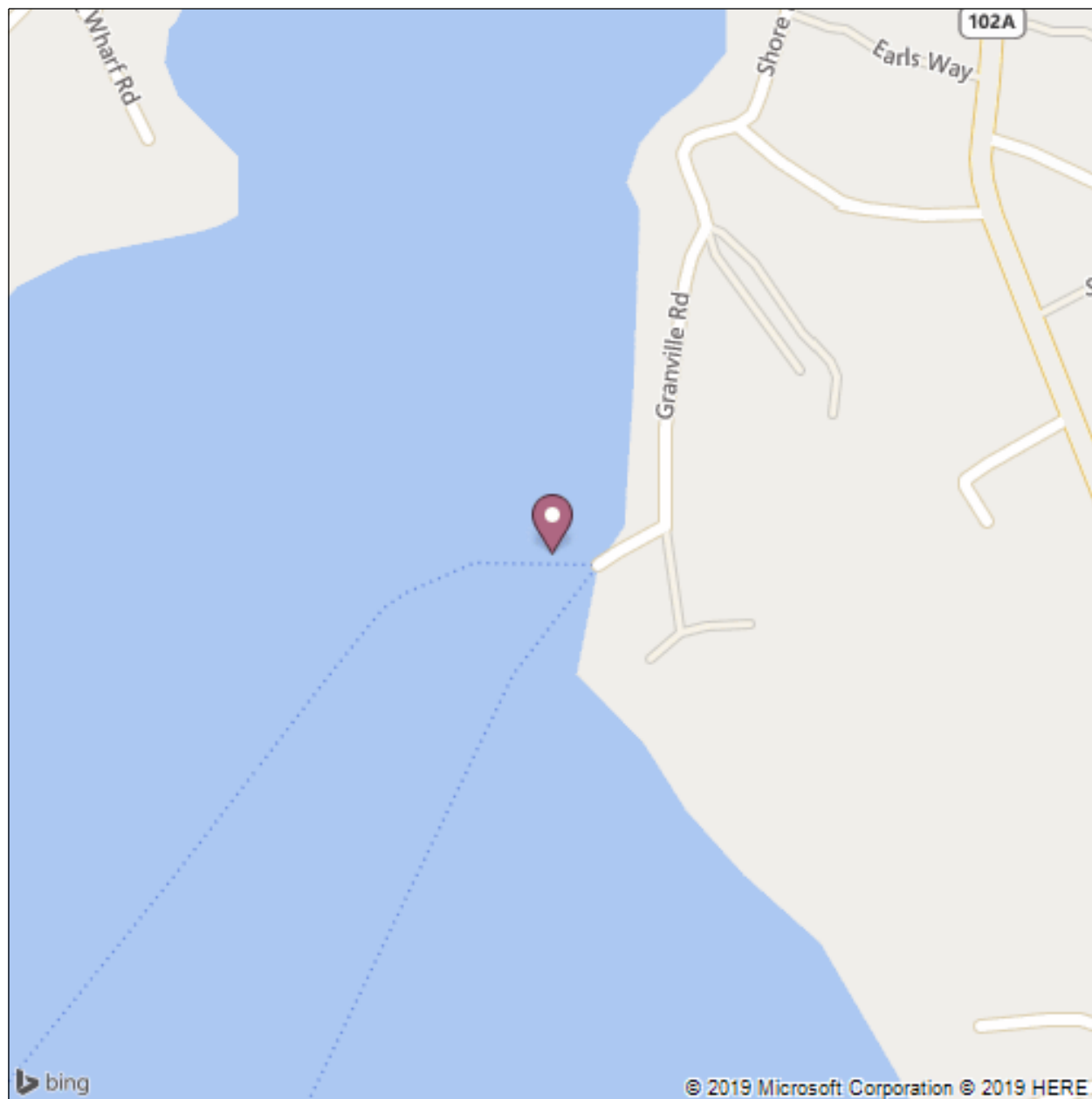
Latitude: 44.23488
Longitude: -68.34854

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Highway Bridge Inspection Report

Location Map



Latitude: 44.23488
Longitude: -68.34854

National Bridge Inventory

Status: 2 - FO

Bridge Name: BASS HARBOR FERRY SLIP

Sufficiency Rating: 59.5

Inspections

(90) INSPECTION DATE	& (91) DESIGNATED INSPECTION FREQUENCY	24	06/27/2019
(92) CRITICAL FEATURE INSPECTION	& (93) CFI DATE		
(92A) FRACTURE CRITICAL DETAIL		Y 24	06/27/2019
(92B) UNDERWATER INSPECTION		Y 60	06/27/2019
(92C) OTHER SPECIAL INSPECTION		Y 96	09/25/2015

Identification

(1) STATE CODE	231 - Maine
(8) STRUCTURE NUMBER	6339
(5) INVENTORY ROUTE	
(5A) RECORD TYPE	1: Route carried "on" the structure
(5B) ROUTE SIGNING PREFIX	4 - COUNTY HIGHWAY
(5C) DESIGNATED LEVEL OF SERVICE	0 - None
(5) INVENTORY ROUTE	0
(5) INVENTORY ROUTE	0 - NOT APPLICABLE
(2) HIGHWAY AGENCY DISTRICT	04 - Eastern
(3) COUNTY CODE	009 Hancock
(4) PLACE CODE	77345
(6) FEATURES INTERSECTED	Blue Hill Bay
(7) FACILITY CARRIED	State Aid #6
(9) LOCATION	Bass Harbor
(11) MILEPOINT	0
(12) BASE HIGHWAY NETWORK	Inventory Route is not on the Base Network
(13) LRS INVENTORY ROUTE, SUBROUTE	
(13A) LRS INVENTORY ROUTE	00000F0005
(13B) SUBROUTE NUMBER	00
(16) LATITUDE	44.23488
(17) LONGITUDE	-68.34854
(98A) BORDER BRIDGE CODE	
(98B) PERCENT RESPONSIBILITY	
(99) BORDER BRIDGE STRUCT NO.	

Structure Type and Material

(43) STRUCTURE TYPE, MAIN	
(43A) KIND OF MATERIAL/DESIGN	3 - Steel
(43B) TYPE OF DESIGN/CONSTR	15 - Movable - Lift
(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	1
(46) NUMBER OF APPROACH SPANS	0
(107) DECK STRUCTURE TYPE	3 - Open Grating
(108) WEARING SURFACE/PROTECTIVE SYSTEMS	
(108A) WEARING SURFACE	0 - None
(108B) DECK MEMBRANE	0 - None
(108C) DECK PROTECTION	0 - None

Age of Service

(27) YEAR BUILT	1997
(106) YEAR RECONSTRUCTED	2013
(42) TYPE OF SERVICE	
(42A) TYPE OF SERVICE ON BRIDGE	1 - Highway
(42B) TYPE OF SERVICE UNDER BRIDGE	5 - Waterway
(28) LANES	
(28A) LANES ON THE STRUCTURE	02
(28B) LANES UNDER THE STRUCTURE	00
(29) AVERAGE DAILY TRAFFIC	874
(30) YEAR OF AVERAGE DAILY TRAFFIC	2016
(109) AVERAGE DAILY TRUCK TRAFFIC	5
(19) BYPASS DETOUR LENGTH	100

Geometric Data

(48) LENGTH OF MAXIMUM SPAN (ft.)	80
(49) STRUCTURE LENGTH (ft.)	80
(50) CURB/SIDEWALK WIDTHS	
(50A) LEFT CURB SIDEWALK (ft.)	0
(50B) RIGHT CURB SIDEWALK (ft.)	3.0
(51) BRDG RDWY WIDTH CURB-TO-CURB (ft.)	11.0
(52) DECK WIDTH, OUT-TO-OUT (ft.)	14.7
(32) APPROACH ROADWAY WIDTH (ft.)	15
(33) BRIDGE MEDIAN	0 - No median
(34) SKEW (deg.)	0
(35) STRUCTURE FLARED	0 - No flare
(10) INV RTE, MIN VERT CLEARANCE (ft.)	16.00
(47) TOTAL HORIZONTAL CLEARANCE (ft.)	11.0
(53) VERTICAL CLEARANCE OVER BRIDGE ROADWAY (ft.)	16.00
(54) MIN VERTICAL UNDERCLEARANCE	
(54A) REFERENCE FEATURE	N - Feature not a highway or railroad
(54B) MIN VERTICAL UNDERCARENCE (ft.)	0
(55) MIN LATERAL UNDER CLEARANCE RIGHT	
(55A) REFERENCE FEATURE	N - Feature not a highway or railroad
(55B) MIN LATERAL UNDER CLEARANCE RIGHT (ft.)	0
(56) MIN LATERAL UNDER CLEARANCE (ft.)	0

Classification

(112) NBIS BRIDGE LENGTH	Yes
(104) HIGHWAY SYSTEM OF THE INVENTORY ROUTE	0 - Structure/Route is NOT on NHS
(26) FUNCTIONAL CLASSIFICATION OF INVENTORY ROUTE	08 - Rural - Minor Collector
(100) STRAHNET HIGHWAY DESIGNATION	Not a STRAHNET route
(101) PARALLEL STRUCTURE DESIGNATION	N - No parallel structure
(102) DIRECTION OF TRAFFIC	One lane bridge for 2-way traffic
(103) TEMP STRUCTURE	
(105) FEDERAL LANDS HIGHWAYS	Not Applicable
(110) DESIGNATED NATIONAL NETWORK	Inventory route not on network
(20) TOLL	3 - On Free Road
(21) MAINTENANCE RESPONSIBILITY	01 - State Highway Agency
(22) OWNER	01 - State Highway Agency
(37) HISTORICAL SIGNIFICANCE	5 - Not eligible

Condition

(58) DECK	7 - Good Condition (some minor problems)
(59) SUPERSTRUCTURE	6 - Satisfactory Condition (minor deterioration)
(60) SUBSTRUCTURE	6 - Satisfactory Condition (minor deterioration)
(61) CHANNEL & CHANNEL PROTECTION	6 - Bank slump. widespread minor damage
(62) CULVERT	N - Not Applicable

Load Rating and Posting

(31) DESIGN LOAD	5 - HS 20
(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	1.54
(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	1.19
(70) BRIDGE POSTING	5 - Equal to or above legal loads
(41) STRUCTURE OPEN/POSTED/CLOSED	A - Open

Appraisal

(67) STRUCTURAL EVALUATION	6
(68) DECK GEOMETRY	2
(69) UNDERCLEARANCES, VERTICAL & HORIZONTAL	N
(71) WATERWAY ADEQUACY	8 - Bridge Above Approaches
(72) APPROACH ROADWAY ALIGNMENT	8 - Equal to present desirable criteria
(36) TRAFFIC SAFETY FEATURE	
36A) BRIDGE RAILINGS:	0 - Does not meet acceptable standards/safety feature is required
36B) TRANSITIONS:	0 - Does not meet acceptable standards/safety feature is required
36C) APPROACH GUARDRAIL	0 - Does not meet acceptable standards/safety feature is required

36D) APPROACH GUARDRAIL ENDS
(113) SCOUR CRITICAL BRIDGES

0 - Does not meet acceptable standards/safety feature is required
5 - Scour within limits of footing or piles

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 (\$K)	
(95) ROADWAY IMPROVEMENT COST (\$K)	
(96) TOTAL PROJECT COST	
(97) YEAR OF IMPROVEMENT COST ESTIMATE	
(114) FUTURE ADT	1398
(115) YEAR OF FUTURE ADT	2036

Navigation Data

(38) NAVIGATION CONTROL	0 - No navigation control on waterway (bridge permit not required)
(111) PIER OR ABUTMENT PROTECTION	2 - In place and functioning
(39) NAV VERT CLEARANCE	0
(116) MIN NAVIGATION VERT CLEARANCE, VERT LIFT BRIDGE	1.5
(40) NAV HORIZONTAL CLEARANCE	0

Inspection Notes

Structure Number: 6339

Town: Tremont

Structure Name: BASS HARBOR FERRY SLIP

Structure Notes

80' Single Span Bascule through girder Transfer Bridge

Wearing Surface

Deck

NBI Item 58: 7

The grid deck and concrete filled sidewalk is in good condition.

Superstructure

NBI Item 59: 6

Steel girders are in satisfactory condition with moderate paint failure and rusting mostly bottom flanges.
Bearings have paint failure and corrosion.
Towers are in Good Condition.
All fender skins appear to be in good condition and secure.

Substructure

NBI Item 60: 6

The abutment is in Satisfactory condition with patched area.
Pipe pile supported dolphins in satisfactory condition - anode protection (see latest U/W report for details of anodes)

Culvert

NBI Item 62: N

Channel

NBI Item 61: 6

Please see most recent dive report for channel details

Other

Special Inspection

See previous VHB Inspection Report for electrical/mechanical inspection details

Monitoring

Pontis Notes

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Element Inspection

	Environment	Total Quantity	Units	Condition State 1	Condition State 2	Condition State 3	Condition State 4
28 - Steel Deck with Open Grid	4 - Sev.	770	sq. ft.	770	0	0	0
107 - Steel Open Girder/Beam	4 - Sev.	140	ft.	132	8	0	0
515 - Steel Protective Coating		140	sq. ft.	120	20	0	0
152 - Steel Floor Beam	4 - Sev.	150	ft.	150	0	0	0
515 - Steel Protective Coating		150	sq. ft.	130	20	0	0
215 - Reinforced Concrete Abutment	4 - Sev.	18	ft.	16	2	0	0
313 - Fixed Bearing	4 - Sev.	2	each	2	0	0	0
515 - Steel Protective Coating		2	sq. ft.	0	2	0	0
330 - Metal Bridge Railing	4 - Sev.	140	ft.	140	0	0	0
515 - Steel Protective Coating		140	sq. ft.	140	0	0	0
801 - Beam End	4 - Sev.	2	each	2	0	0	0
515 - Steel Protective Coating		2	sq. ft.	0	2	0	0
803 - Moveable Bridge Components - Medium	4 - Sev.	1	each	1	0	0	0
820 - Reinforced Concrete Wall	4 - Sev.	10	ft.	10	0	0	0
826 - Fender	4 - Sev.	8	ft.	8	0	0	0
827 - Dolphin	4 - Sev.	6	each	6	0	0	0

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Highway Bridge Inspection Report

Pictures



PHOTO 1

Description floor beams.open grate deck



PHOTO 2

Description Nly bearing/beam end

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Highway Bridge Inspection Report

Pictures



PHOTO 3

Description general view



PHOTO 4

Description vertical timber fender on stone-filled crib on north side

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Highway Bridge Inspection Report

Pictures



PHOTO 5

Description under apron/ramp end



PHOTO 6

Description floor beams,main carrying girders, counter weight hoist beams

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Pictures



PHOTO 7

Description



PHOTO 8

Description ramp/towers

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Highway Bridge Inspection Report

Pictures



PHOTO 9

Description Nly lower sheave case



PHOTO 10

Description link bar

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Highway Bridge Inspection Report

Pictures



PHOTO 11

Description pin in link bar of counter weight hoist



PHOTO 12

Description Sly lower sheave case

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Highway Bridge Inspection Report

Pictures



PHOTO 13

Description Pin & link bar



PHOTO 14

Description Link bar

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Highway Bridge Inspection Report

Pictures



PHOTO 15

Description apron



PHOTO 16

Description cable clevis (typ)

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Pictures



PHOTO 17

Description apron bearing



PHOTO 18

Description newer timber wave fence pieces

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Pictures



PHOTO 19

Description damaged cat walk on Sly side



PHOTO 20

Description

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Highway Bridge Inspection Report

Pictures



PHOTO 21

Description Nly cat walk



PHOTO 22

Description Sly bearing/beam end

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Highway Bridge Inspection Report

Pictures



PHOTO 23

Description abutment bridge seat



PHOTO 24

Description floor beam/girder connection - Nly side

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Highway Bridge Inspection Report

Pictures



PHOTO 25

Description floor beam/girder connection - Sly side