

# Highway Bridge Inspection Report

BR# 6340

## FRENCHBORO ISLAND FERRY SLIP

Ferry Slip  
Over  
Lunt Harbor

Town:  
Frenchboro



Inspection Date: 07/29/2020  
12:00:00 AM

Inspected By: Edwards, Carl

Inspection Type(s): Routine and Fracture Critical

**Inspector:** Carl Edwards  
**Inspection Date:** 07/29/2020

**Structure Number:** 6340  
**Facility Carried:** Ferry Slip

### Highway Bridge Inspection Report

#### Location Map



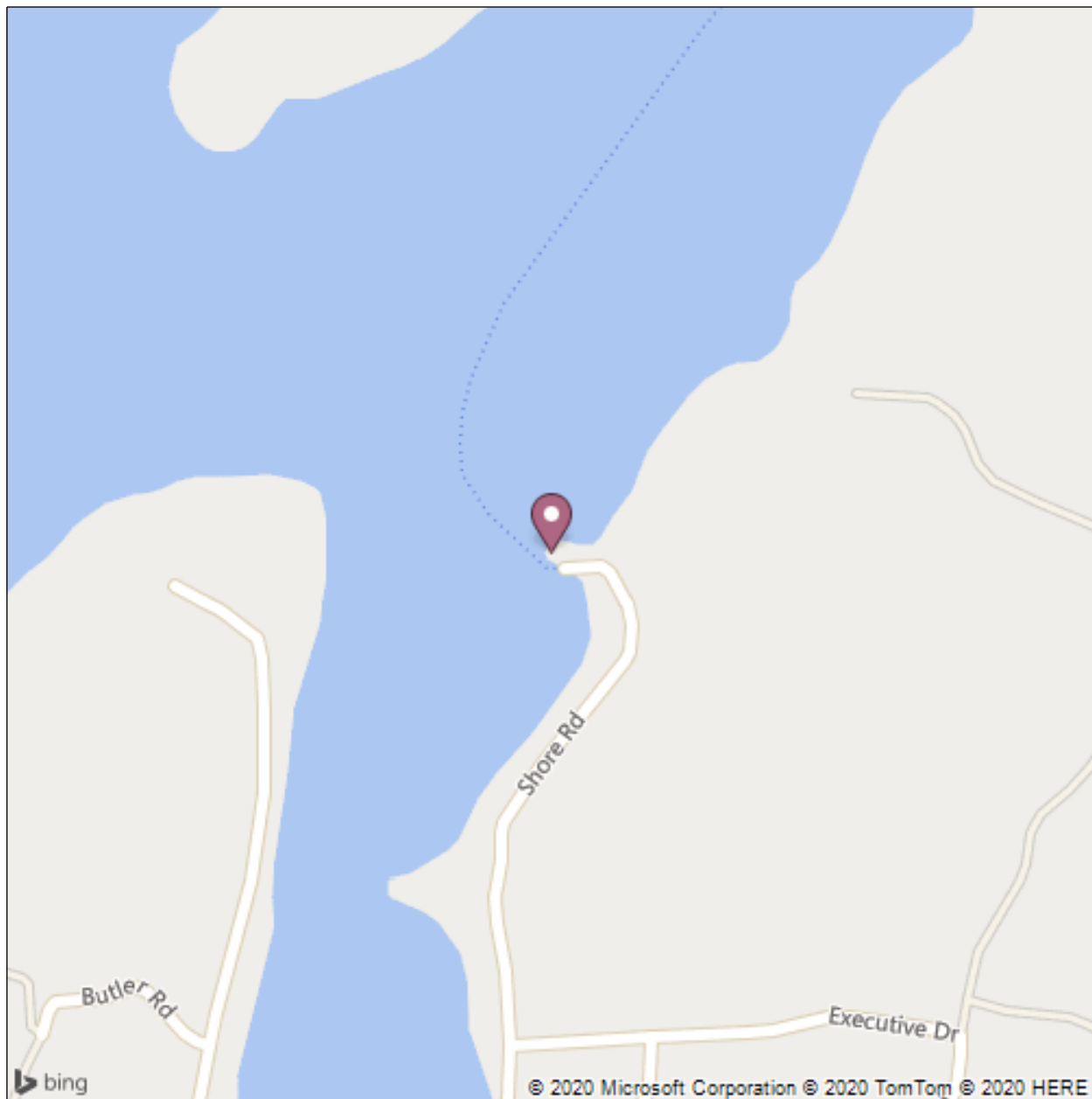
**Latitude:** 44.12142  
**Longitude:** -68.36225

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#### Location Map



**Latitude:** 44.12142  
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## National Bridge Inventory

Status: 2 - FO

Bridge Name: FRENCHBORO ISLAND FERRY SLIP

Sufficiency Rating: 43.8

### Inspections

(90) INSPECTION DATE	& (91) DESIGNATED INSPECTION FREQUENCY	24	07/29/2020
(92) CRITICAL FEATURE INSPECTION	& (93) CFI DATE		
(92A) FRACTURE CRITICAL DETAIL		Y 24	07/29/2020
(92B) UNDERWATER INSPECTION		Y 60	12/13/2018
(92C) OTHER SPECIAL INSPECTION		Y 96	09/16/2015

### Identification

(1) STATE CODE	231 - Maine
(8) STRUCTURE NUMBER	6340
(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	41085
(6) FEATURES INTERSECTED	Lunt Harbor
(7) FACILITY CARRIED	Ferry Slip
(9) LOCATION	-
(11) MILEPOINT	2.960
(12) BASE HIGHWAY NETWORK	Inventory Route is not on the Base Network
(13) LRS INVENTORY ROUTE, SUBROUTE	
(13A) LRS INVENTORY ROUTE	00000F0006
(13B) SUBROUTE NUMBER	00
(16) LATITUDE	44.12142
(17) LONGITUDE	-68.36225
(98A) BORDER BRIDGE CODE	
(98B) PERCENT RESPONSIBILITY	0
(99) BORDER BRIDGE STRUCT NO.	n/a

### 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	9 - Other
(108B) DECK MEMBRANE	0 - None
(108C) DECK PROTECTION	0 - None

### Age of Service

(27) YEAR BUILT	1988
(106) YEAR RECONSTRUCTED	
(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	01
(28B) LANES UNDER THE STRUCTURE	00
(29) AVERAGE DAILY TRAFFIC	528
(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.)	38
(49) STRUCTURE LENGTH (ft.)	47.7
(50) CURB/SIDEWALK WIDTHS	
(50A) LEFT CURB SIDEWALK (ft.)	0.3
(50B) RIGHT CURB SIDEWALK (ft.)	0.3
(51) BRDG RDWY WIDTH CURB-TO-CURB (ft.)	9.5
(52) DECK WIDTH, OUT-TO-OUT (ft.)	10.5
(32) APPROACH ROADWAY WIDTH (ft.)	19.0
(33) BRIDGE MEDIAN	0 - No median
(34) SKEW (deg.)	0
(35) STRUCTURE FLARED	0 - No flare
(10) INV RTE, MIN VERT CLEARANCE (ft.)	19.75
(47) TOTAL HORIZONTAL CLEARANCE (ft.)	9.5
(53) VERTICAL CLEARANCE OVER BRIDGE ROADWAY (ft.)	19.75
(54) MIN VERTICAL UNDERCLEARANCE	
(54A) REFERENCE FEATURE	N - Feature not a highway or railroad
(54B) MIN VERTICAL UNDERCLEASENCE (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	1-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	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	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	0.96
(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	0.74
(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	2
(69) UNDERCLEARANCES, VERTICAL & HORIZONTAL	N
(71) WATERWAY ADEQUACY	7 - Slight Chance of Overtopping Bridge
(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	N - NA/Safety feature not required

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

N - NA/Safety feature not required  
5 - Scour within limits of footing or piles

<b>Proposed Improvements</b>
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(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	845
(115) YEAR OF FUTURE ADT	2036

<b>Navigation Data</b>
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(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: 6340

Town: Frenchboro

Structure Name: FRENCHBORO ISLAND FERRY SLIP

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### Structure Notes

Frenchboro Ferry Terminal, Frenchboro Island

Rehabbed in 2014 including the approach pavement, substructure rehab and fender systems.

### Wearing Surface

#### Deck

NBI Item 58: 7

The grid deck and concrete filled deck sidewalk are in good condition.  
Nearby parking area continues to be plagued with isolated sink holes.

#### Superstructure

NBI Item 59: 6

Steel galvanized steel girders, diaphragms, and needle beams are in good condition with freckle rust, except end 4' of girders have moderate corrosion with scaled rust near bearings.  
Bearings have moderate corrosion.

#### Substructure

NBI Item 60: 5

Concrete abutment is in good condition.

Wharf is in satisfactory condition but has frequent voids which results in erosion and settlement of the approach fill.

Tower paint coating is failing at isolated locations with moderate corrosion. Steel pitting is evident.

Dolphins 1-3 and fenders are in good condition. Timber turning Dolphin #4 has moderate decay in the piles and several cracked, split or missing lacing beams.

#### Culvert

NBI Item 62: N

#### Channel

NBI Item 61: 6

Please see most recent dive report for underwater details.

#### **Other**

See attached email regarding captain-imposed 20,000lb load restriction.

#### **Special Inspection**

Please See VHB Inspection Report for electrical/mechanical inspection.

#### **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
<b>28 - Steel Deck with Open Grid</b>	4 - Sev.	284	sq. ft.	284	0	0	0
<b>107 - Steel Open Girder/Beam</b>	4 - Sev.	163	ft.	147	16	0	0
515 - Steel Protective Coating		163	sq. ft.	74	73	16	0
<b>152 - Steel Floor Beam</b>	4 - Sev.	12	ft.	12	0	0	0
515 - Steel Protective Coating		12	sq. ft.	8	4	0	0
<b>215 - Reinforced Concrete Abutment</b>	4 - Sev.	14	ft.	0	14	0	0
<b>313 - Fixed Bearing</b>	4 - Sev.	4	each	0	4	0	0
515 - Steel Protective Coating		4	sq. ft.	0	0	4	0
<b>330 - Metal Bridge Railing</b>	2 - Low	81	ft.	81	0	0	0
515 - Steel Protective Coating		81	sq. ft.	81	0	0	0
<b>801 - Beam End</b>	4 - Sev.	4	each	0	4	0	0
515 - Steel Protective Coating		4	sq. ft.	0	0	4	0
<b>803 - Moveable Bridge Components - Medium</b>	4 - Sev.	1	each	0	1	0	0
<b>826 - Fender</b>	4 - Sev.	3	ft.	2	1	0	0
<b>827 - Dolphin</b>	4 - Sev.	6	each	5	0	1	0



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## Highway Bridge Inspection Report

### Pictures



PHOTO 1

Description electrical panel



PHOTO 2

Description Ratchet Bar conn.



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## Pictures



PHOTO 3

Description Nly bearing



PHOTO 4

Description Sly bearing



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### Highway Bridge Inspection Report

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PHOTO 5

Description Sly side of ramp



PHOTO 6

Description looking out toward pen



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PHOTO 7

Description sink hole on Nly parking area



PHOTO 8

Description Nly side



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## Highway Bridge Inspection Report

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PHOTO 9

Description divers on outer pen area on Eel Grass dive



PHOTO 10

Description transfer under carriage



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### Highway Bridge Inspection Report

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PHOTO 11

Description Sly carrying beam



PHOTO 12

Description Nly carrying beam

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### Highway Bridge Inspection Report

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PHOTO 13

Description Sly dolphins



PHOTO 14

Description basin



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### Highway Bridge Inspection Report

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PHOTO 15

Description Nly dolphin



PHOTO 16

Description ramp/apron

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### Highway Bridge Inspection Report

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PHOTO 17

Description Nly Ratchet Bar connection



PHOTO 18

Description pen area



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PHOTO 19

Description bearing area/conn plates