



THE STATE OF NEW HAMPSHIRE
DEPARTMENT OF TRANSPORTATION



Victoria F. Sheehan
Commissioner

February 12, 2018

William Cass, P.E.
Assistant Commissioner

RECEIVED

FEB 14 2018

SELECTMEN'S OFFICE
TOWN OF SANDOWN NH

Lynne Blaisdell
Sandown Town Administrator
PO Box 1756
Sandown, NH 03873

RE: INTERIM INSPECTION OF MUNICIPALLY OWNED BRIDGE
TOWN OF SANDOWN

Dear Ms. Blaisdell:

Enclosed is a copy of an interim bridge inspection report for one municipally owned bridge in the Town of Sandown, which has been made to update our annual submission to the Federal Government. Please note that Red List bridges are in bold type.

<u>Bridge #</u>	<u>Location</u>	<u>Recommended Posting</u>
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In order to be legal and enforceable, weight signs (black letters on a white background) need to be located at each end of the bridge. Advisory width signs (black letters on yellow background) should also be located at each end of the bridge. At the Town's discretion, you may post a structure at a lower weight limit than the Department's recommended posting.

098/117	Fremont Road over Exeter River	No Posting Required
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Please note if there are any changes in the recommended weight posting or lack of postings for your bridge. Even though a bridge may be recommended for a weight posting or closure by the State, the decision to properly post or close the structure is the responsibility of the municipal officials. It is the best interest of the municipality to post or sign your bridges in accordance with these recommendations. A failure to warn motorists of potential bridge hazards could result in tort liability claims. Also, if your bridges are not posted properly, it will result in forfeiture of any possible federal highway funds for projects in your municipality.

Our bridge inspectors have indicated that the bridge listed above is in compliance with DOT's recommendations; therefore no action needs to be taken by the Town. Please call if there are any questions.

Sincerely,

William E. Watson Jr., P.E., Administrator
Bureau of Planning and Community Assistance
Tel: (603) 271-3344

WEW/sa
Enclosures

cc: Sandown Public Works Director
Commissioner, Department of Education

S:\Planning\Community Assistance\1-Municipalities\Sandown\Bridge Insp\Interim 098-117 2-12-18.DOC

SANDOWN MUNICIPAL BRIDGES

BRIDGE NUMBER	TYPE	NO. SPANS	ROAD INV.NO.	ROAD NAME	OVER	LENGTH (O-T-O)	RECOMMENDED POSTING
093/109	MP-A	1	63	PHILLIPS ROAD	EXETER RIVER	16'-0"	E2
098/117	CS	1	53	FREMONT ROAD	EXETER RIVER	16'-6"	NO POSTING REQ'D
110/120	MP	1	61	ODELL ROAD	EXETER RIVER	16'-0"	NO POSTING REQ'D

REMARKS: 093/109 SENT AS A CRITICAL DEFICIENCY ON 7/30/2015, REHAB 2016

REVIEWED/REVISED: 1/17

Bridge Inspection Report

Structure Number: 023200980011700

Sandown 098/117

Date of Inspection: 12/07/2017

Date Report Sent: 01/29/2018

Owner: Municipality

Bridge Inspection Group: D-Team

Bridge Maintenance Crew: OTHER

FREMONT ROAD

over

EXETER RIVER

RECEIVED

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SELECTMEN'S OFFICE
TOWN OF SANDOWN NH

Recommended Postings:

Weight: No Posting Required

☒ Weight Sign OK

Width: Not Required

☒ Width Sign OK

Primary Height Sign Recommendation: None

Optional Centerline Height Sign Rec: None

Clearances: Over: 99.99
(Feet) Under: 0.00
Route: 99.99

☒ Height Sign OK

Condition:

Red List Status: Not on the Redlist

Deck: 8 Very Good

Superstructure: 8 Very Good

Substructure: 6 Satisfactory

Culvert: N N/A (NBI)

Sufficiency Rating: 91 %

Bridge Rail: Meets Standards

Rail Transition: Meets Standards

Bridge Approach Rail: Meets Standards

Approach Rail Ends: Meets Standards

Structure Type and Materials:

Number of Main Spans: 1

Number of Approach Spans: 0

Main Span Material and Design Type

Concrete Slab

NH Bridge Type: CS (Concrete Slab)

Deck Type: Concrete Precast Panel

Wearing Surface: Bituminous

Membrane: Preformed Fabric

Deck Protection: Epoxy Coated Reinforcing

Curb Reveal: 6 in

Plan Location: M1-11-2-2

Total Bridge Length: 16.5 ft

Right Curb/Sidewalk Width: 0.0 ft

Total Bridge Width: 27.0 ft

Median: No median

Bridge Skew: 0.00 °

Year Built/Rebuilt: 1980/2006

Bridge Dimensions:

Length Maximum Span: 13.9 ft

Left Curb/Sidewalk Width: 0.0 ft

Width Curb to Curb: 22.7 ft

Approach Roadway Width: 24.0 ft
(W/Shoulders)

Bridge Inspection Report

Structure Number: 023200980011700

Sandown 098/117

Bridge Service:

Type of Service on Bridge: Highway

Type of Service Under: Waterway

Lanes on Bridge: 2

Lanes Under: Not Applicable

AADT: 230

Percent Trucks: 4 %

Year of AADT: 2013

Future AADT: 340

Year of Future AADT: 2038

Federal or State Definition Bridge: NH-Definition Bridge

National Highway System: Bridge does not carry NHS

Roadway Functional Class: Rural Local

New Hampshire Highway System and Class: Municipal Highway

Eligibility for the National Register of Historic Places: Not Eligible

Traffic Direction: Two-way traffic

Bridge Inspection Report

Sandown 098/117

Structure Number: 023200980011700

Element Details (see disclaimer below)

No.	Description	Material Notes and Condition Notes:
38	Reinforced Concrete Slab	3 PRECAST CONCRETE SLABS. 9' W x 16.5' L x 12 in.D. TORCH APPLIED MEMBRANE W/ 3 in. PAVEMENT.
L 510	Wearing Surfaces	CURBS - FINE CRACKS, MINOR SPALL AND FEW SCRAPES DUE TO PLOW. UNDERSIDE OF DECK- NO SYMPTOMS OF DISTRESS.
		ASPHALT- NO DAMAGE.
215	Reinforced Concrete Abutment	SEVERAL REPAIRED AREAS, FEW FINE CRACKS AND MINOR ABRASION AT WATERLINE.
330	Metal Bridge Railing	**T-101** RAIL- FEW SCRAPES.

Element States (see disclaimer below)

No.	Description	Quantity	Units	State 1	State 2	State 3	State 4
38	Reinforced Concrete Slab	446	sq.ft	100%	0%	0%	0%
L 510	Wearing Surfaces	---	---	100%	0%	0%	0%
215	Reinforced Concrete Abutment	121	ft	100%	0%	0%	0%
330	Metal Bridge Railing	43	ft	100%	0%	0%	0%

Element Disclaimer: NHDOT is transitioning from CoRe elements to AASHTO elements. The AASHTO element data shown above is the product of the automated element migration routine from the AASHTOWare BrM software. This migrated data has undergone limited field verification. Adequate quality control of this element data is not expected to be achieved until the conclusion of the 2020 inspection season. Please utilize element data with caution.

Bridge Notes:

7/13/2011- ADDED TO MRL DUE TO SCOUR.

12/21/2016- NEW ASPHALT.

12/7/2017- REMOVED FROM MRL. GRAVEL AND RIP RAP PLACED IN CHANNEL BETWEEN TOE WALLS, RIP RAP AND LOAM PLACED AT WINGS.

Inspection Notes: 12/07/2017

BTB - inspection comments -

DECK / SUPERSTRUCTURE: ASPHALT - NO DAMAGE, CRACKED AT DECK END. CURBS - FINE CRACKS, MINOR SPALL AND FEW SCRAPES DUE TO PLOW. UNDERSIDE OF DECK- NO SYMPTOMS OF DISTRESS. RAIL- FEW SCRAPES.

SUBSTRUCTURE: SEVERAL REPAIRED AREAS, FEW FINE CRACKS AND MINOR ABRASION AT WATERLINE.

PICTURES: D210- 92 thru 94.

Previous Inspection Notes: 07/18/2017

NJL inspection comments -

DECK / SUPERSTRUCTURE: ASPHALT- LIGHT CRACKS AT DECK ENDS. CURBS- FINE CRACKS, MINOR SCALE. UNDERSIDE OF DECK SURFACE - NO SYMPTOMS OF DISTRESS. RAIL- FEW SCRAPES.

SUBSTRUCTURE: FINE CRACKS, MINOR SPALLS. TOEWALL AT EAST ABUTMENT. EROSION AT SOUTHEAST WING. SCOUR- WEST ABUTMENT UNDERMINED 20' IN LENGTH WITH 1' TO 2' OF PENETRATION AND UP TO 1' IN HEIGHT.

Approach and Roadway Notes:

APPROACH ASPHALT - NO DAMAGE, CRACKED AT DECK ENDS.

APPROACH W- BEAM RAIL - FEW SCRAPES, DAMAGE ON NORTHWEST.

Unusual or experimental features:

Issues finishing the abutment stabilization work.

Bridge Inspection Report

Structure Number: 023200980011700

Sandown 098/117

Inspection History

Inspection Date	Inspector Initials	Inspection Type(s) Performed				Major Element Ratings				Red list	Posting
		NBI	Elem	FCM	U/W	Deck	Super	Sub	Culvert		
12/07/2017	NJL	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	8	8	6	N	<input type="checkbox"/>	No Posting Req'd
07/18/2017	NJL	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	8	8	4	N	<input checked="" type="checkbox"/>	No Posting Req'd
12/21/2016	MAS	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	8	8	4	N	<input checked="" type="checkbox"/>	No Posting Req'd
07/30/2015	KJT	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	8	8	4	N	<input checked="" type="checkbox"/>	No Posting Req'd
12/16/2014	KJT	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	8	8	4	N	<input checked="" type="checkbox"/>	No Posting Req'd
07/17/2013	MAS	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	8	8	4	N	<input checked="" type="checkbox"/>	No Posting Req'd
12/13/2012	MAS	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	8	8	4	N	<input checked="" type="checkbox"/>	No Posting Req'd
07/13/2011	KJT	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	8	8	4	N	<input checked="" type="checkbox"/>	No Posting Req'd
07/21/2009	KJT	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	8	8	5	N	<input type="checkbox"/>	No Posting Req'd
06/27/2007	DPC	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	9	9	5	N	<input type="checkbox"/>	No Posting Req'd
01/25/2007	DPC	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	9	9	8	N	<input type="checkbox"/>	No Posting Req'd
08/23/2006	RLM	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	9	9	4	N	<input checked="" type="checkbox"/>	No Posting Req'd
08/22/2005	RLM	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0	0	0	N	<input checked="" type="checkbox"/>	Bridge Closed
10/04/2004	DPC	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	4	2	4	N	<input checked="" type="checkbox"/>	Bridge Closed
11/24/2003	DPC	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	4	2	4	N	<input checked="" type="checkbox"/>	Bridge Closed
08/28/2003	RLM	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	4	2	4	N	<input checked="" type="checkbox"/>	Bridge Closed
11/27/2002	RLM	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	4	3	4	N	<input checked="" type="checkbox"/>	3 Tons PCO
02/07/2002	RLM	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	4	3	5	N	<input checked="" type="checkbox"/>	3 Tons PCO
08/29/2001	RLM	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3	3	5	N	<input checked="" type="checkbox"/>	3 Tons PCO
12/11/2000	RLM	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	4	4	5	N	<input checked="" type="checkbox"/>	6 Tons
11/20/2000	RLM	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	4	4	6	N	<input checked="" type="checkbox"/>	6 Tons
03/01/1999	DPC	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	4	4	6	N	<input checked="" type="checkbox"/>	6 Tons
03/01/1998		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	4	4	6	N	<input checked="" type="checkbox"/>	6 Tons
01/01/1997		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	4	4	6	N	<input checked="" type="checkbox"/>	6 Tons
03/01/1996		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	5	4	6	N	<input checked="" type="checkbox"/>	6 Tons
02/01/1994		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	6	4	5	N	<input checked="" type="checkbox"/>	6 Tons
08/01/1991		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	4	4	5	N	<input checked="" type="checkbox"/>	6 Tons

Inspection Frequency (mo.)

NBI	Elem	FCM	U/W
24	24	N/A	N/A