

# Bridge Inspection Report

NBI Structure Number: 011702150015100

## Haverhill 215/151

Date of Inspection: 08/24/2020

NHRR(ABD)

Date Report Sent: 10/19/2020

over

Owner: NHDOT

US302,NH 10

Bridge Inspection Group: A-Team

Bridge Maintenance Crew: 10

### Recommended Postings:

Weight: **No Posting Required**

Weight Sign OK

Width: **Not Required**

Width Sign OK

Primary Height Sign Recommendation: 13'-9"

Optional Centerline Height Sign Rec: None

Clearances: Over: 99.99

Height Sign OK

(Feet) Under: 14.14

Route:

SIGNS IN PLACE 8/24/2020.

### Condition:

Red List Status: Not on the Redlist

Deck: 5 Fair

Superstructure: 6 Satisfactory

Substructure: 5 Fair

Culvert: N N/A (NBI)

Sufficiency Rating: -2 %

### Structure Type and Materials:

Number of Main Spans: 1

Number of Approach Spans: 0

### Main Span Material and Design Type

Steel/Stringer/Girder

Bridge Rail: N/A or not required

Rail Transition: N/A or not required

Bridge Approach Rail: N/A or not required

Approach Rail Ends: N/A or not required

NH Bridge Type: DPG (Deck Plate Girder)

Deck Type: Wood or Timber

Wearing Surface: Gravel

Membrane: None

Deck Protection: None

Curb Reveal: Not Measured

Plan Location: unknown

Total Bridge Length: 93.0 ft

Right Curb/Sidewalk Width: 0.0 ft

Total Bridge Width: 14.0 ft

Median: No median

Bridge Skew: 62.00 °

Year Built/Rebuilt: 1937

### Bridge Dimensions:

Length Maximum Span: 88.0 ft

Left Curb/Sidewalk Width: 0.0 ft

Width Curb to Curb: ft

Approach Roadway Width: ft

(W/Shoulders)

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## Bridge Service:

Type of Service on Bridge: Pedestrian-bicycle

Type of Service Under: Highway, with or without ped

Lanes on Bridge:

Lanes Under: 2

AADT:

Percent Trucks: %

Year of AADT:

Future AADT:

Year of Future AADT:

Federal or State Definition Bridge: NH-Definition Bridge

National Highway System: Bridge does not carry NHS

Roadway Functional Class:

New Hampshire Bridge Tier: 6

Eligibility for the National Register of Historic Places: Possibly eligible for

Traffic Direction:

## National Bridge Inventory (NBI) Appraisal Ratings:

Deck Geometry: N Not applicable (NBI)

Underclearances: 2 Intolerable - Replace

Approach Alignment: 8 Equal Desirable Crit

Structural Evaluation:

Channel/Channel Protection: N N/A (NBI)

Waterway Adequacy: N Not applicable

Bridge Scour Critical Status: N Not Over Waterway

Riprap Condition: unknown

Debris Present: unknown

Channel Notes:

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**Element Details (see disclaimer below)**

No.	Description	Material Notes and Condition Notes:
31	Timber Deck	8" X 8" CREOSOTE TIMBERS WITH STONE BALLAST.  MODERATE TO HEAVY DECAY EVIDENT IN TIMBERS AT ENDS; MOSS AND VEGETATION GROWING IN AREAS.
L 1140	Decay/Section Loss	MODERATE TO HEAVY DECAY EVIDENT IN TIMBERS AT ENDS.
107	Steel Open Girder/Beam	RIVETED GIRDERS WITH I-BEAM EXTENSIONS AT SW AND NE.  HEAVY RUST. BOTTOM FLANGE GOUGED AND BENT UP ON NORTH SIDE, FEW NICKS IN AREAS ON BOTTOM FLANGES.
L 515	Steel Protective Coating	
L 1000	Corrosion	LIGHT RUST THROUGHOUT, MODERATE TO HEAVY AT ENDS.
L 7000	Damage	BOTTOM FLANGE GOUGED ON NORTH SIDE FROM ACCIDENT IMPACT. FEW NICKS IN AREAS ON BOTTOM FLANGES.
215	Reinforced Concrete Abutment	LIGHT CRACKS AND SPALLS AND SCRAPES, MODERATE SPALLS AND EFFLORESCENCE IN ABUTMENTS AND WINGS. LIGHT SCRAPES AND GOUGES IN CONCRETE AT WEST ABUTMENT AND WING FROM TRAFFIC IMPACT DAMAGE. LARGE VERTICAL CRACK NEAR CENTER OF EACH ABUTMENT. WOOD AND RR RAIL SPLICE PLATE DEBRIS BUILD UP ON TOPS OF ABUTMENTS.
L 1080	Delamination/Spall/Patched Area	MODERATE SPALLS IN ABUTMENTS AND WINGS. LIGHT SCRAPES AND GOUGES IN CONCRETE FROM ACCIDENT IMPACT DAMAGE.
L 1120	Efflorescence/Rust Staining	LIGHT TO MODERATE EFFLORESCENCE IN ABUTMENTS AND WINGS.
L 1130	Cracking (RC and Other)	LARGE VERTICAL CRACK NEAR CENTER OF EACH ABUTMENT. MAP CRACKING IN WINGS AND ABUTMENTS.
311	Movable Bearing	WOOD CHIP DEBRIS AT EAST.
L 515	Steel Protective Coating	
313	Fixed Bearing	WOOD DEBRIS AT WEST.
L 515	Steel Protective Coating	
332	Timber Bridge Railing	TIMBER PLANK  ATV TRAIL USE ONLY. TIPPED OUTWARD ALONG TIMBER RETAINERS AT BASE. AREAS OF MODERATE TO HEAVY DECAY IN THE TIMBER RETAINERS.
L 1140	Decay/Section Loss	AREAS OF MODERATE TO HEAVY DECAY IN THE TIMBER RETAINERS.

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Haverhill 215/151

**Element States (see disclaimer below)**

No.	Description	Quantity	Units	State 1	State 2	State 3	State 4
31	Timber Deck	1,259	sq.ft	0%	84%	16%	0%
└ 1140	Decay/Section Loss	630	sq.ft	0%	68%	32%	0%
107	Steel Open Girder/Beam	180	ft	0%	80%	20%	0%
└ 515	Steel Protective Coating	---	---	0%	100%	0%	0%
└ 1000	Corrosion	172	ft	0%	79%	21%	0%
└ 7000	Damage	8	ft	0%	100%	0%	0%
215	Reinforced Concrete Abutment	253	ft	9%	61%	30%	0%
└ 1080	Delamination/Spall/Patched Area	50	ft	0%	0%	100%	0%
└ 1120	Efflorescence/Rust Staining	30	ft	0%	100%	0%	0%
└ 1130	Cracking (RC and Other)	150	ft	0%	83%	17%	0%
311	Movable Bearing	3	each	100%	0%	0%	0%
└ 515	Steel Protective Coating	---	---	100%	0%	0%	0%
313	Fixed Bearing	3	each	100%	0%	0%	0%
└ 515	Steel Protective Coating	---	---	100%	0%	0%	0%
332	Timber Bridge Railing	197	ft	50%	50%	0%	0%
└ 1140	Decay/Section Loss	98	ft	0%	100%	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:**

PHONE CABLE ALONG EAST FACE OF BACKWALL.

TRACKS REMOVED, STRUCTURE USED FOR RECREATION TRAIL.

7/18/2013- US302,NH 10 RESURFACED; MIN VERT UNDERCLEARANCE UNCHANGED.

8/19/2014- OVER HEIGHT DAMAGE INSPECTION FROM ACCIDENT ON 8/15/2014, NOTIFIED BY TMC.

**Inspection Notes: 08/24/2020**

TDC inspection comments -

TIMBER PLANK RAIL: FOR ATV USE ONLY. TIPPED OUTWARD; SOME STONE BALLAST PUSHED UP ALONG LOWER PLANKS. AREAS OF MODERATE TO HEAVY DECAY IN THE TIMBER RETAINERS.

DECK: TIMBERS SPLIT WITH MODERATE AND HEAVY DECAY EVIDENT AT ENDS; CREOSOTE DETERIORATED. STONE BALLAST WEARING SURFACE LIGHTLY RUTTED; TIMBER RETAINERS DECAYED, SPLIT AND TIPPED OUTWARD AT EDGES. SOME VEGETATION AT EDGES.

SUPER: SEVERAL RIVETS MISSING ON BOTTOM FLANGES. BOTTOM FLANGES OF GIRDERS GOUGED. BRACING FRAMES DAMAGED. PAINT POOR WITH HEAVY RUST.

SUB: LIGHT SCRAPES AND GOUGES FROM ACCIDENT IMPACT AT FACE OF WEST ABUTMENT AND NW WING. CRACKS AND LIGHT TO MODERATE SPALLS WITH MODERATE SPALLS IN WINGS; SOME VEGETATION AT JOINTS. LARGE VERTICAL CRACK NEAR CENTER OF EACH ABUTMENT. WOOD DEBRIS AND RR RAIL SPLICE PLATES ON TOPS OF ABUTMENTS. HEAVY POISON IVY VEGETATION.

PICTURES: A507-52 THRU 53.

**Previous Inspection Notes: 08/16/2018**

TDC inspection comments -

TIMBER PLANK RAIL: FOR ATV USE ONLY. TIPPED OUTWARD; STONE BALLAST PUSHED UP ALONG LOWER PLANKS. AREAS OF MODERATE TO HEAVY DECAY IN THE TIMBER RETAINERS.

DECK: TIMBERS SPLIT WITH MODERATE AND HEAVY DECAY EVIDENT AT ENDS; CREOSOTE DETERIORATED. STONE BALLAST WEARING SURFACE RUTTED; TIMBER RETAINERS DECAYED, SPLIT AND TIPPED OUTWARD AT EDGES. SOME VEGETATION AT EDGES.

SUPER: SEVERAL RIVETS MISSING ON BOTTOM FLANGES. BOTTOM FLANGES OF GIRDERS GOUGED. BRACING FRAMES DAMAGED. PAINT POOR WITH HEAVY RUST.

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PICTURES: A476-63 THRU 64.

**Approach and Roadway Notes:**

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Haverhill 215/151

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Inspection Date	Inspector Initials	Inspection Type(s) Performed				Major Element Ratings				Red list	Posting
		NBI	Elem	FCM	U/W	Deck	Super	Sub	Culvert		
08/24/2020	TDC	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	5	6	5	N	<input type="checkbox"/>	No Posting Req'd
08/16/2018	TDC	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	5	6	5	N	<input type="checkbox"/>	No Posting Req'd
08/15/2016	MAH	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	5	6	6	N	<input type="checkbox"/>	No Posting Req'd
08/19/2014	TDC	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	5	6	6	N	<input type="checkbox"/>	No Posting Req'd
07/18/2013	MAH	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	5	6	6	N	<input type="checkbox"/>	No Posting Req'd
07/29/2011	TDC	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	5	6	6	N	<input type="checkbox"/>	No Posting Req'd
07/30/2009	WBL	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	5	6	6	N	<input type="checkbox"/>	No Posting Req'd
09/05/2007	WBL	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	5	6	6	N	<input type="checkbox"/>	No Posting Req'd
07/28/2005	WBL	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	5	6	6	N	<input type="checkbox"/>	No Posting Req'd
07/25/2003	WBL	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	5	6	6	N	<input type="checkbox"/>	No Posting Req'd
05/18/2001	WBL	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	5	6	6	N	<input type="checkbox"/>	No Posting Req'd
06/17/1999	WBL	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	5	6	6	N	<input type="checkbox"/>	No Posting Req'd
08/01/1997		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	5	6	6	N	<input type="checkbox"/>	No Posting Req'd
07/01/1995		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	5	6	6	N	<input type="checkbox"/>	No Posting Req'd
07/01/1993		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	5	6	6	N	<input type="checkbox"/>	No Posting Req'd

Inspection Frequency (mo.)			
NBI	Elem	FCM	U/W
24	24	N/A	N/A