New York State
Department of Transportation
Bridge Inspection Report

Structure Information

BIN: 2223000  Region: 08  County: COLUMBIA  Locality: City of HUDSON
Feature Carried: FERRY STREET  Feature Crossed: CSX, LEASED AMTRA
Approximate Year Built: 1905  Orientation: 8 - NORTHWEST
Structure is not owned or maintained by New York State Department of Transportation
Number of Spans: 1  Typical or Main Span Type: 10 - Truss - Thru
This Structure is not a Ramp
Postings (As of Inspection Date):  Load Posting: 99
Posted Vertical Clearance On: Not Posted  Posted Vertical Clearance Under: Not Posted

Inspection Date
September 30, 2015

New York State Inspection Overview

Type of Inspection: General
General Recommendation: 3
Computed Condition Rating: 3.069

Action Items

No Flags have been issued during this inspection
There are no vulnerability reviews recommended
No Diving Inspection Requested
No Further Investigation Requested

Inspector & Reviewer Information

Structure Inspected By: Thomas Hill
Report Reviewed by: William Dritz

Signature Information

Inspection Signature: Thomas Hill, P.E. 080079-1  Date: 11/25/15 11:46 AM
Reviewer Signature: William Dritz, P.E. 066606-1  Date: November 29, 2015
Report Printed: January 29, 2016
## Structure Ratings

### Abutment Elements

<table>
<thead>
<tr>
<th>Element</th>
<th>Begin Abutment</th>
<th>End Abutment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Joint with Deck</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>Bearings, Bolts, Pads</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Seat and Pedestals</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Backwall</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>Stem (Breastwall)</td>
<td>5</td>
<td>4</td>
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<tr>
<td>Erosion or Scour</td>
<td>6</td>
<td>6</td>
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<tr>
<td>Footings</td>
<td>9</td>
<td>9</td>
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<tr>
<td>Piles</td>
<td>8</td>
<td>8</td>
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<tr>
<td>Recommendation</td>
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### Wingwall Elements

<table>
<thead>
<tr>
<th>Element</th>
<th>Begin Abutment</th>
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<tbody>
<tr>
<td>Walls</td>
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<td>Footings</td>
<td>9</td>
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<tr>
<td>Erosion or Scour</td>
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<tr>
<td>Piles</td>
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### Channel Elements

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>Stream Alignment</td>
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<tr>
<td>Erosion and Scour</td>
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<tr>
<td>Waterway Opening</td>
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<td>Bank Protection</td>
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### Approach Elements

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<td>Drainage</td>
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<td>Embankment</td>
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<td>Pavement</td>
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<td>Guide Railing</td>
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# Span Ratings

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<thead>
<tr>
<th>Element</th>
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<tr>
<td>Deck Elements</td>
<td>Wearing Surface</td>
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<td>Curbs</td>
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<td>Sidewalks &amp; Fascias</td>
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<td>Railings &amp; Parapets</td>
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<td>Scuppers &amp; Downspouts</td>
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<td>Gratings</td>
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<td>Secondary Members</td>
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<tr>
<td>Pier</td>
<td>Bearings, Bolts, Pads</td>
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<td>Pedestals</td>
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<td>Top of Cap or Beam</td>
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<tr>
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<td>Stem Solid Pier</td>
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<td>Cap Beam</td>
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<td>Pier Columns</td>
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<td>Footings</td>
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<td>Erosion or Scour</td>
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<td>Recommendation</td>
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<td>Utilities</td>
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<td>Sign Structures</td>
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<td>Utilities &amp; Supports</td>
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</tr>
</tbody>
</table>
Federal NBI Ratings

NBI Deck Condition: 4
NBI Superstruct Condition: 3
NBI Substruct Condition: 5
NBI Channel Condition: N
NBI Culvert Condition: N

Federal Inspection Findings

Special Emphasis Requirements

Special Emphasis Inspection Requirements

Non-Redundant/Fracture Critical Members: Yes
Pin and Hangers: No
Fatigue-Prone Welds: Yes
Non-Categorized Fatigue-Prone Details: No
Other (Specified in Text): Yes

Special Emphasis Detail Notes

Thru-trusses
Welds at ends of partial length cover plates on floor beams.
Rivets in tension zones (Cat. D)

Special Emphasis Certification

Special Emphasis Certification: Yes
Hands-On Inspection Waived/Exception: No

Note:
GENERAL COMMENT
There are no photographs referenced for this comment

Due to RR scheduling issues in 2014, a Type 5 inspection was necessary on 2/5/15 to inspect remaining items that could not be accessed in 2014. As per DOT, the type 5 inspection was not entered in BDIS. Therefore, there were several items with a rating of 9 from the 2014 inspection, which are updated (in BDIS) this inspection.

The bridge was closed to all traffic prior to the 2014 inspection. There is an adjacent pedestrian bridge on the right of this bridge which is open.

Abutment - Bearings, Bolts, Pads - Begin - Rated 3

Referenced Photos: 1,2

This item was rated 9 during the 2014 inspection, and was revised to 3 during the 2015 type 5 inspection. See general note for bridge.

The truss bearings appear to be steel sliding on steel expansion bearings. No anchor bolts or other attachments were noted. All components are moderately corroded and bearings appear frozen. Maintain 3 rating.

There is a single row of steel diaphragms (S15x42.9#) between the floor beams, at the center of each truss bay (center of travel lanes) within panels 1 thru 8. These diaphragms have been historically rated as “stringers” under the primary member item. The sole plate of the steel “stringer” within the center of the bay between trusses 2&3 is partially lifted up, and consequently is not in full contact with the steel pedestal. Condition is long-standing with no significant detrimental affects noted. Resulting loss of bearing support is approximately 50%. The other steel “stringer” bearing at begin would rate 5.

The timber stringers bear directly on the steel beam bridge seat. Timber stringers #11 and #20 slightly overhang the ends of the steel beam bridge seat; these isolated conditions are rated under the seat item.
Abutment - Bearings, Bolts, Pads - End - Rated 4
Referenced Photos: 3,4

This item was rated 9 during the 2014 inspection, and was revised to 4 during the 2015 type 5 inspection. See general note for bridge.

All components of the end truss bearings are corroded with up to 15% section losses. The anchor bolts for the truss bearings appear to be missing; having been possibly removed during prior repair work. The bearing plates are welded or riveted to each other.

All stringer bearings are heavily corroded with delaminations and section losses up to 10% on the bearing plates. The historic noted deficiency of the short stringer seat below stringer 9 is rated under the end seat item. Maintain rating of 4.

Abutment - Seat and Pedestals - Begin - Rated 4
Referenced Photos: 5,6

This item was rated 9 during the 2014 inspection, and was revised to 4 during the 2015 type 5 inspection. See general note for bridge.

Timber stringers bear directly on top of the steel beam bridge seat which is discreet between trusses. Between the center truss and the right truss, timber stringer #11 overhangs the left end of the steel beam seat by 1.25". Stringer #20 overhangs the right end of the steel beam seat by 1.75", and the remaining left portion of stringer is not in full contact with the top flange of the steel beam seat. These are long-standing conditions presumed to be as-built. Maintain 4 rating. Otherwise, seats for stringers and trusses would rate '5'.

Abutment - Seat and Pedestals - End - Rated 3
Referenced Photos: 4

This item was rated 9 during the 2014 inspection, and was revised to 3 during the 2015 type 5 inspection. See general note for bridge.

The steel beam bridge seat is not long enough to accommodate the width of steel stringer #9 bearing. Consequently, the S9 bearing overhangs the right end of the seat, resulting in approx 75% loss of bearing area. This presumably as-built condition is long-standing, having been noted and yellow flagged as early as 2001. As per historic notes, in 2003 NYS DOT Region 8 provided a calculation supporting the removal of the flag for this condition, and the flag was subsequently removed by the Region. Stringer 9 is below the median area and does not directly support live load. In addition, the bridge was load posted for 3 tons for other deficient conditions prior to being closed to all traffic in 2014. In addition, the top of the steel beam bridge seat is covered with wet dirt and debris due to deficient backwall conditions, which is causing a corrosive environment. Maintain rating of 3.
Abutment - Backwall - Begin - Rated 5
There are no photographs referenced for this comment
This item was rated 9 during the 2014 inspection. The backwall is in fair condition and the rating was revised to 5 during the 2015 type 5 inspection. See general note for bridge.

Abutment - Backwall - End - Rated 4
Referenced Photos: 7
This item was rated 9 during the 2014 inspection, and was revised to 4 during the 2015 type 5 inspection. See general note for bridge.

The end backwall is comprised of timber planks stacked on edge. In most bays the upper plank has begun to twist/rotate and is misaligned with the lower plank creating up to a 2” w gap. Consequently approach fill is spilling through onto the bridge seat. Maintain rating of 4.

Abutment - Stem (Breastwall) - Begin - Rated 5
Referenced Photos: 9
This item was rated 9 during the 2014 inspection. The stem is in good condition and the rating was revised to 5 during the 2015 type 5 inspection. See general note for bridge.

Abutment - Stem (Breastwall) - End - Rated 4
Referenced Photos: 8,10
This item was rated 9 during the 2014 inspection, and was revised to 4 during the 2015 type 5 inspection. See general note for bridge.

The stone masonry stem of the end abutment has numerous, random, vertical and diagonal cracks up to ¼” W within the outer wythes of stones. Cracks are long-standing, and there were no unusual displacement of any stones noted. Stem is functioning. Maintain rating of 4.

Abutment - Erosion or Scour - Begin - Rated 6
Referenced Photos: 9
During the 2015 type 5 inspection, the ground was covered with 2’ of snow. Therefore, erosion conditions along the stem were unknown and rated 9. However, there are no erosion problems, and this item is revised to 6 this inspection.

Abutment - Erosion or Scour - End - Rated 6
Referenced Photos: 10
During the 2015 type 5 inspection, the ground was covered with 2’ of snow. Therefore, erosion conditions along the stem were unknown and rated 9. However, there are no erosion problems, and this item is revised to 6 this inspection.

Abutment - Footings - Begin - Rated 9
There are no photographs referenced for this comment
Footing is not exposed and has historically been rated 9.
Wingwall - Walls - Begin - Rated 5
There are no photographs referenced for this comment
This item was rated 9 during the 2014 inspection. The wingwalls are in good condition, and the rating was revised to 5 during the 2015 type 5 inspection. See general note for bridge.

Wingwall - Walls - End - Rated 5
There are no photographs referenced for this comment
This item was rated 9 during the 2014 inspection. The wingwalls are in good condition, and the rating was revised to 5 during the 2015 type 5 inspection. See general note for bridge.

Wingwall - Footings - Begin - Rated 9
There are no photographs referenced for this comment
Footing is not exposed and has historically been rated 9.

Wingwall - Footings - End - Rated 9
There are no photographs referenced for this comment
Footing is not exposed and has historically been rated 9.

Wingwall - Erosion or Scour - Begin - Rated 6
Referenced Photos: 9
During the 2015 type 5 inspection, the ground was covered with 2' of snow. Therefore, erosion conditions along the wingwalls were unknown and rated 9. However, there are no erosion problems, and this item is upgraded to 6 this inspection. See general note for bridge.

Wingwall - Erosion or Scour - End - Rated 6
Referenced Photos: 10
During the 2015 type 5 inspection, the ground was covered with 2' of snow. Therefore, erosion conditions along the wingwalls were unknown and rated 9. However, there are no erosion problems, and this item is upgraded to 6 this inspection. See general note for bridge.

Approach - Pavement - Rated 4
Referenced Photos: 31,32
This item was rated 5 during the 2014 inspection. Both approach pavements have several longitudinal cracks and random horizontal cracks approx 1/2"W. Ride quality would not be greatly affected. Lower rating to 4.

Approach - Guide Railing - Rated 4
Referenced Photos: 11
This item was rated 4 during the 2014 inspection. The begin right guide rail has minor impact damage, and the leading end “boxing glove” end section is flattened. Similar conditions exist at the beginning of the end right guide railing. Maintain 4 rating. The begin left and end left guide railings would rate '5'.
Span 1-Deck Elements - Wearing Surface - Rated 2
Referenced Photos: 12,13,14
This item was rated 3 during the 2014 inspection. The top surface of the 3" x 9" timber deck planking is rated as a wearing surface. The top surfaces of the timber planks have several areas with minor rot, checking/splitting, and isolated areas of small through-holes that have been covered with ½" thick plywood. Wearing surface is also worn in wheel paths. Deficiencies affect on ride quality. Lower rating to 2.

Span 1-Deck Elements - Curbs - Rated 3
Referenced Photos: 15,16
This item was rated 3 during the 2014 inspection. Small sections of the right timber curb are missing, which may be as- built. There are also two sections of the curb which are partially loose near mid-span. The curb has random splitting and minor rot. Maintain 3 rating. The left curb is in similar condition.

Span 1-Deck Elements - Railings & Parapets - Rated 4
Referenced Photos: 15,16
This item was rated 4 during the 2014 inspection. There are no railings or parapets on this bridge. There is pedestrian wire mesh fencing along both the left and right trusses. The mesh connections to the trusses are broken at random locations, which leaves the fencing somewhat loose. Otherwise, the fencing is in fair condition. No significant changes noted since the 2014 inspection. Maintain 4 rating.

Span 1-Deck Elements - Median - Rated 3
Referenced Photos: 17
This item was rated 4 during the 2014 inspection. The raised wooden median safety walk has random loose/ missing, and rotted boards throughout. The missing boards create an uneven surface on the safety walk, but no gaps are wide enough for a pedestrian fall-through hazard. No safety flag issued because; the median has been roped off to delineate the hazard, the bridge is closed to all traffic including pedestrians, there is a pedestrian bridge immediately adjacent to this bridge on the right side, any pedestrian (illegally) using the bridge would presumably utilize the traffic lane areas of the top of deck instead of the median area. Lower rating to 3.

Span 1-Superstructure - Deck Structural - Rated 3
Referenced Photos: 18,19,20
This item was rated 3 during the 2014 inspection, as well as during the 2015 type 5 inspection. The underside of the timber deck is typically heavily water stained with remnants of light mold growth. However, probe depths of the underside were typically limited to approx 1/2” using a carpenter’s awl with moderate force. 2013 inspection noted some of timber decking deflected under live load. Rating of 3 maintained.

Span 1-Superstructure - Primary Members - Rated 2
Referenced Photos: 15,17,18,19,20,21,22,23,24,25,26,27
Primary member comment does not fit due to 4000 character limit. See attached document for primary member note.
This item was rated 9 during the 2014 inspection, and was revised to 2 during the 2015 type 5 inspection. See general note for bridge.

There is a single row of short diaphragms transverse to the stringers within the last panel (panel 9) of the bridge. All these diaphragms are heavily corroded and typically have 50 to 100% section losses to the flanges and webs.

The knee braces that connect the truss top chord to the floor beams are rated as secondary members. The T1 knee brace at L01 is heavily corroded with up to 60% section losses to components. The outboard knee brace of T1 at L09, and both knee braces of T2 at L09 are missing; apparently having been removed long ago.

There is a single row of steel diaphragms (S15x42.9#) between the floor beams, at the center of each truss bay (center of travel lanes) within panels 1 thru 8. These diaphragms have been historically rated as “stringers” under the primary member item, and are heavily corroded in all panels with overall web section losses to 90% and overall flange losses to 75%. Deterioration is most significant at both rows of diaphragms within panels 3 thru 5. The presence of these diaphragms appears to have been excluded in the most recent Virtis load rating, presumably due to the severe section losses. The timber stringers adjacent to the diaphragms are in fair to good condition.

The diaphragms have tie plates on the bottom flanges, which extend below the bottom flanges of the floor beams, and connect diaphragms of adjacent panels together. The tie plates were presumably intended to help keep the floor beams in-plane. The tie plate of the diaphragm row between T1 and T2 has 100% section loss at floor beam 1. The tie plates are also heavily corroded and separated at floor beams 1 and 2 of the diaphragm row between T2 and T3. However, both rows of diaphragms remain connected to the floor beam webs with vertical angles. Therefore, the connections are not compromised for vertical load due to the section losses of the tie plates, and FB lateral loads are resisted by the timber deck/ stringers.

Maintain 2 rating.

The majority of the paint system on all steel members below deck has completely failed, resulting in significant deterioration and section losses to diaphragms, stringers, floor beams and some elements of lower chord truss members. The paint system on all steel members above deck is only slightly better. Maintain 1 rating.
Span 1-Utilities - Sign Structures - Rated 3
Referenced Photos: 31,32
This item was rated 1 during the 2014 inspection due to improper bridge closed signage on the approaches. The signage was the same during the 2015 type 5 inspection. Since the 2015 type 5 inspection the bridge closures at both approaches have been upgraded with permanent concrete barriers with reflective striping, and orange barrels/drums to help delineate the barriers. The load posting signs have been removed from both approaches as well. However, the bridge closed signage remains sub-standard on both approaches. On the begin approach there is only a “Road Closed” sign attached to a wooden saw-horse. On the end approach there is only a “Closed” sign attached to a wooden saw-horse. Upgrade rating to (only) 3 due to sub-standard signage. However, no safety flag is warranted. Otherwise, closures would rate 5.

Span 1-Utilities - Utilities & Supports - Rated 5
There are no photographs referenced for this comment
This item was rated 9 during the 2014 inspection. The utility conduit on the left truss is in fair condition and the rating was revised to 5 during the 2015 type 5 inspection. See general note for bridge.

Additional Inspection Notes

Diving Reference
There was no dive referenced for this inspection.

Overloads Observed
No overload vehicles were noted during this inspection.

Notes to Next Inspector
BIN plate is on the begin stem.

Improvements Observed
Bridge closure: Permanent concrete barriers have been installed at both approaches.
Load Posting Signs have been removed.

BIN Plate and Fencing information
The BIN Plate is in OK condition.
A Pedestrian Fence is present.
No Snow Fence.

Field Notes

Staff Present During Inspection
Inspection Date: September 30, 2015

TL: Tom Hill, P.E.
ATL: Daniel Schneider
ATLT: Travia Bailey

Amtrak Railroad Flagger.

**Inspection Time & Permit Requirements**

*Time Required to Inspect Bridge:* 9 Hours

*Lane Closure Usage:*

*Railroad Flagging Time:* 3 Hours

**Detailed Time & Weather**

<table>
<thead>
<tr>
<th>Field Date</th>
<th>Arrival</th>
<th>Departure</th>
<th>Temp (F)</th>
<th>Weather Conditions</th>
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<td>05:00 PM</td>
<td>68</td>
<td>Cloudy</td>
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Inspection Photographs

truss 1 bearing at begin, looking back

Photo Number: 1  Photo Filename: truss 1 bearing at begin, looking back.jpg

truss 1 bearing at begin

Photo Number: 2  Photo Filename: truss 1 bearing at begin.jpg
T3 bearing at end

Photo Number: 3  Photo Filename: T3 bearing at end.jpg

end seat and bearings looking right

Photo Number: 4  Photo Filename: end seat and bearings looking right.jpg
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<thead>
<tr>
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<tr>
<td>6</td>
<td>begin seat below stringer 20.jpg</td>
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BIN: 2223000 Bridge Inspection Report
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end timber backwall

end stem cracks

Photo Number: 7  Photo Filename: end timber backwall.jpg

Photo Number: 8  Photo Filename: end stem cracks.jpg
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<th>Photo Filename</th>
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<td>10</td>
<td>end abutment.jpg</td>
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<td>Photo Number</td>
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<tr>
<td>13</td>
<td>wearing surface from begin right.jpg</td>
</tr>
<tr>
<td>14</td>
<td>wearing surface, looking back.jpg</td>
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</table>
BIN: 2223000 Bridge Inspection Report
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left truss, pedestrian fence and curb

right truss, pedestrian fence and curb
center truss and left side of median

underside from begin

Photo Number: 17  Photo Filename:  center truss and left side of median.jpg

Photo Number: 18  Photo Filename:  underside from begin.jpg
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<tr>
<th>Photo Number</th>
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<td>underside from end.jpg</td>
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<tr>
<td>20</td>
<td>underside from begin right, looking left</td>
<td>underside from begin, looking left.jpg</td>
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<td>Photo Number</td>
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<tr>
<td>21</td>
<td>lower chord of truss 1 from begin.jpg</td>
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<td>22</td>
<td>lower chord of t2 looking ahead from begin.jpg</td>
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</table>
lower chord of t3 looking back toward begin

floor beam 6, stringer bay 2, between T1 and T2
<table>
<thead>
<tr>
<th>Photo Number</th>
<th>Photo Filename</th>
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<tr>
<td>25</td>
<td>stringers in end panel, between T1 and T2, looking back</td>
</tr>
<tr>
<td>26</td>
<td>stringers, panel 1 from begin</td>
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</table>

**Inspection Date:** September 30, 2015
bottom flange of floor beam 1 near midspan between T1 and T2, looking ahead

secondary; knee brace 2 at left truss
secondary; diaphragm between stringers within end panel, between T1 and T2, looking back (all diaphragms similar)

Photo Number: 29  Photo Filename:  secondary; diaphragm between stringers

secondary; diaphragm within panel 3, between T2 and T3 (all longitudinal diaphragms similar)

Photo Number: 30  Photo Filename:  secondary; diaphragm within panel 3,
**Inspection Sketches**

**NYS DEPT. OF TRANSPORTATION**

**FEATURE CARRIED:** Ferry Street

**FEATURE CROSSED:** CSX Trans/Amtrak

**Railroad Clearances**

Vertical clearance readings taken from top of RR rail to bottom of truss

<table>
<thead>
<tr>
<th>STATION</th>
<th>READINGS</th>
<th>Round down to nearest whole inch Ref.: Inv. TA 86-901</th>
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Due to character limit in BDIS, the Primary Member Note is here.

This item was rated 2 during the 2014 inspection, as well as during the 2015 type 5 inspection. The bridge was down posted from 5 tons in 2012, to 3 Tons in 2013 (after level two load rating was updated by region 8), prior to being closed by the City of Hudson in 2014. No apparent significant changes noted in primary member conditions in several inspections. Maintain 2 rating.

Trusses: There are three parallel thru-trusses, and the travel lanes are divided by the center truss. The truss members above the deck are generally in good condition except for loss of paint and light rust throughout with no apparent significant section losses. The top chord plate of the left truss has pack rust with popped rivets near panel point 2. There are random missing rivets from the diagonal member U02L05 of the right truss. There are also random missing rivets from both sides of the top chords of the center and right trusses, between panel points 1-4. Portions of trusses above deck would rate 4.

Bottom chord of Truss 1 (left truss): The bottom batten plates near the bearings have localized section losses to 50%, and the bottom batten plate of the bottom chord between panel points 3 and 7 has up to 30% loss. Corrosion to these plates has been exacerbated by the accumulation of wet dirt and debris. Also, near the end of floor beam 6, the batten plate has random missing rivets due to pack rust (condition previously reported in 2012 as FB2).

Bottom chord of Truss 2 (center truss): The outstanding legs of both lower angles of the bottom chord have corroded areas with up to 80% section loss, within the first two panels. Within this same area, the vertical legs of these angles have approx 10% section loss, and several rivets have 50% section loss. The outstanding leg of the lower left angle of the bottom chord also has a 3'L segment with approx 30% section loss, starting approx 8 feet from the end side of FB 8. The bottom batten plates near the begin and end abutment bearings and along the bottom chord between panel points 3 and 7 have up to 50% section loss. Corrosion to these plates has been exacerbated by the accumulation of wet dirt and debris. Also, near mid-span between FB’s 5 & 6, several rivet heads have 100% section loss along the bottom chord batten plate. However, the batten plate at this location remains connected with no signs of imminent separation. There are other missing rivets from the bottom chord at isolated and random locations.

Bottom chord of Truss 3 (right truss): The outstanding leg of the lower left angle of the bottom chord has approx 80% section loss, starting near the begin bearing and extending approx 2‘ beyond FB1. The vertical leg of this angle has approx 10% section loss, and several rivets in this area have 50% section
loss. The bottom batten plates near the begin and end abutment bearings and along the bottom chord between panel points 3 and 7 have up to 50% section loss. Corrosion to these plates has been exacerbated by the accumulation of wet dirt and debris.

Floor beams: There are a total of eight floor beams (FB’s); all of which are discreet between the three trusses. FB1 thru FB7 are $15 \times 50\#$ with 1/2”T x 7”W partial length bottom flange (only) cover plates. FB8 is a $20 \times 66\#$ with no cover plates.

There is significant deterioration to the webs and flanges of the interior portions of all FB’s that typically begins 2’ to 3’ away from the FB connections at the trusses. FB webs have heavy delaminations with areas of section loss up to 75%, as well as random 2-3” diameter perforations adjacent to stringer connections. Top and bottom flanges (including bottom cover plates) of FB’s have up to 55% section loss.

Within the last panel of the bridge the framing plan changes, and consequently FB8 supports multiple longer-span steel stringers, resulting in a larger contributory area than other floor beams.

Deficient conditions are generally uniform throughout the interior portions of all FB’s. However, the connection areas of all FB’s to the trusses have (only) minor section losses of 10% to 15%.

Stringers: The timber stringers are in fair to good condition with isolated areas of beginning stages of rot and mostly minor checking/splitting. All timber stringers are supported vertically by seat angles. Lateral supports brackets are present at approx 50% of stringer to floor beam connections. The remainder of the stringers appear to be supported laterally by the (nailed) connections to the timber deck.

The back to back channel stringers (C12x30\#) in the end panel (panel 9) have heavy corrosion with up to 50% section loss to the flanges and webs. The back to back channel stringers have a 3”x12” timber sandwiched between two channels, which is used as a nailing to attach the timber deck to the superstructure. The lower sections of several of these timber nailers are damp and in the beginning stages of rot. Deck timbers in panel 9 were noted to be somewhat loose during previous inspections, presumably due to the deficient nailers.
BIN: 2223000 Bridge Inspection Report
Inspection Date: September 30, 2015

NYS DEPT. OF TRANSPORTATION
BIN: 2223000
DATE: 9/30/2015

FEATURE CARRIED: Ferry Street
FEATURE CROSSED: CSX Trans/Amtrak

Sketch Filename: Photo loc plan.jpg
BIN: 2223000 Bridge Inspection Report
Inspection Date: September 30, 2015

Standard Photographs

2223000_LOCATION_MAP.JPG

BIN: 2223000
Carried: FERRY STREET
Crossed: CSX TRANSPORT
BIN: 2223000 Bridge Inspection Report
Inspection Date: September 30, 2015

2223000_QUAD_MAP.JPG

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