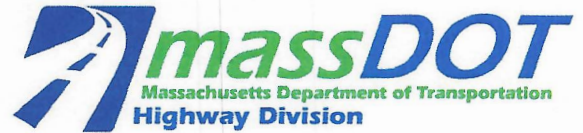




Charles D. Baker, Governor
Karyn E. Polito, Lieutenant Governor
Jamey Tesler, Acting Secretary & CEO
Jonathan L. Gulliver, Highway Administrator



The Honorable Donna D. Holaday
Mayor of Newburyport
City of Newburyport
City Hall
60 Pleasant Street
Newburyport, MA 01950

February 22, 2021

Attention: Jon-Eric White, P.E., City Engineer

SUBJECT: BRIDGE INSPECTION REPORT (NON-NBIS)

N-11-007=W-20-001 (8BC) Plummer Spring Road / Artichoke River C/RI Dated: 6/27/19

Dear Mayor Holaday:

An inspection was performed on the referenced City/Town owned bridge. For your records, forwarded herewith is a copy of the bridge inspection report. A copy of this town line bridge report has also been sent to the Town of West Newbury.

Repair, rehabilitation or reconstruction of any bridge to address the deficiencies reported is the owner/custodian's responsibility. Future inspections are not the responsibility of Massachusetts Department of Transportation – Highway Division.

Questions regarding the content of the report may be directed to the District Bridge Inspection Engineer, Joseph Dideo, at (781) 674-2172 or at joseph.dideo@dot.state.ma.us.

Sincerely,

Paul D. Stedman

Digitally signed by Paul D.
Stedman
Date: 2021.02.19 16:27:09 -05'00'

Paul D. Stedman
District Highway Director

JD / tl
cc: Brian Clang-BIE, D-4 DHD, D-4 DBIE
Enclosures

2-DIST
04

B.I.N.
8BC

STRUCTURES INSPECTION FIELD REPORT
CLOSED/REHABILITATION INSPECTION

BR. DEPT. NO.
N-11-007=W-20-001

CITY/TOWN NEWBURYPORT=WEST NEWBURY	8.-STRUCTURE NO. N11007-8BC-MUN-BRI	11-Kilo. POINT 000.000	90-ROUTINE INSP. DATE JUN 11, 2018	93*- INSPECTION DATE JUN 27, 2019
07-FACILITY CARRIED HWY PLMMR SPRNG	MEMORIAL NAME/LOCAL NAME	27-YR BUILT 1900	106-YR REBUILT 0000	YR REHAB'D (NON 106) 0000
06-FEATURES INTERSECTED WATER ARTICHOKE RIVER	26-FUNCTIONAL CLASS Rural Local	DIST. BRIDGE INSPECTION ENGINEER J. Dideo <i>[Signature]</i>		
43-STRUCTURE TYPE 811 : Masonry Arch - Deck	22-OWNER Town Agency	21-MAINTAINER Town Agency	TEAM LEADER A. Power <i>[Signature]</i>	
107-DECK TYPE N : Not applicable	WEATHER CLEAR	TEMP. (air) 30°C	TEAM MEMBERS Patrick Burke <i>[Signature]</i>	

ITEM 58 DECK	N	ITEM 41 STRUCTURE OPEN, POSTED OR CLOSED	K:CLOSED Date: 06/11/2018																					
ITEM 59 SUPERSTRUCTURE	5	ITEM 36 TRAFFIC SAFETY	TOTAL HOURS 8																					
ITEM 60 SUBSTRUCTURE	6		PLANS (Y/N) N																					
ITEM 60 - (From U/W Report)	N	<table border="1"> <thead> <tr> <th></th> <th>36</th> <th>COND</th> <th>DEF</th> </tr> </thead> <tbody> <tr> <td>A. Bridge Railing</td> <td>0</td> <td>0</td> <td>S-A</td> </tr> <tr> <td>B. Transitions</td> <td>0</td> <td>2</td> <td>S-A</td> </tr> <tr> <td>C. Approach Guardrail</td> <td>1</td> <td>6</td> <td>-</td> </tr> <tr> <td>D. Approach Guardrail Ends</td> <td>0</td> <td>2</td> <td>S-A</td> </tr> </tbody> </table>			36	COND	DEF	A. Bridge Railing	0	0	S-A	B. Transitions	0	2	S-A	C. Approach Guardrail	1	6	-	D. Approach Guardrail Ends	0	2	S-A	(V.C.R.) (Y/N) N
	36	COND	DEF																					
A. Bridge Railing	0	0	S-A																					
B. Transitions	0	2	S-A																					
C. Approach Guardrail	1	6	-																					
D. Approach Guardrail Ends	0	2	S-A																					
ITEM 61 CHANNEL	5	Pedestrian Access (Y/N) Y		Barricades In Place (Y/N) Y																				
ITEM 61 - (From U/W Report)	N	Roadway Abandoned (Y/N) N		TYPE: JERSEY BARRIER, CHAIN LINK FEN																				
ITEM 62 CULVERT	N	TAPES#:																						
ITEM 62 - (From U/W Report)	N																							

SIGNS Not Applicable

Legend: Road Closed Signs, Detour Signs, Local Traffic/ Abutters Only Signs

Signs In Place (Y=Yes, N=No, NR=Not Required)
Legibility/Visibility

At bridge		Advance	
E	W	E	W
Y	Y	Y	Y
1/1	1/1	1/1	1/1

To be filled out by District Bridge Inspection Engineer

1) This bridge is scheduled for:
 Replacement () Rehabilitation () Repair () Removal () Unknown (✓)

2) If under construction please answer the following:

Contract Number:	Amount:	Completion Date:
Contractor:		Resident Engineer:
Scope of Work:		
Remarks:		

	ACCESSIBILITY (Y/N)	
	Needed	Used
Lift Bucket	N	N
Ladder	N	N
Boat	Y	Y
Wader	N	N
Inspector 50	N	N
Rigging	N	N
Staging	N	N
Traffic Control	N	N
RR Flagger	N	N
Police	N	N
Other:	N	N

CITY/TOWN NEWBURYPORT=WEST NEWBURY	B.I.N. 8BC	BR. DEPT. NO. N-11-007=W-20-001	8.-STRUCTURE NO. N11007-8BC-MUN-BRI	INSPECTION DATE JUN 27, 2019
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REMARKS

BRIDGE ORIENTATION

The approaches are east and west. The elevations are north and south. The Artichoke River flows from south to north.

GENERAL REMARKS

The bridge has been closed to vehicle traffic however pedestrian traffic is still being allowed at this time.

The bridge has been closed to vehicle traffic due to a failure in the spandrel wall at the southeast corner of the bridge. Jersey barriers with 6' high chain link fencing have been placed at the south side of the bridge preventing pedestrians from accessing the collapsed area (see **Photos 1-4**). Road closed and detour signs have been placed at intersections on both sides of the bridge about half a mile away in either direction (see **Photo 5**). Jersey barriers, traffic barrels, and signs are installed between cross streets and bridge warning of closed bridge ahead, but not preventing traffic (see **Photo 6**). Jersey barriers, traffic barrels and road closed signs have been installed at both ends of the bridge preventing vehicle access (see **Photo 7**).

There are signs of additional displacement of material in the collapsed area such as shifting stones, displaced fill material, and displaced and cracked asphalt (see **Photos 2-4**).

There are signs of additional deterioration on the north side of the bridge (currently open to pedestrian traffic). There are areas of settlement adjacent to the north bridge railing (see **Photo 8**), and bulging of the north spandrel wall (see **Photo 9**).

Photo Log

- Photo 1 : Jersey barriers and chain link fencing is in place to prevent pedestrian access to the failed portion of the bridge.
- Photo 2 : Inside the restricted area; spandrel wall has failed and material continues to fall into channel.
- Photo 3 : Heavy cracking in the asphalt adjacent to the collapsed area.
- Photo 4 : View of the collapsed area from the southwest wingwall. Note the severe displacement of stones on the southeast wingwall area.
- Photo 5 : Typical signage at cross streets. Intersection of Turkey Hill Road east of bridge shown.
- Photo 6 : Typical barrier and signage approaching the bridge. East approach shown.
- Photo 7 : Typical barrier and signage at bridge preventing vehicular traffic. East approach shown.
- Photo 8 : Settlement areas adjacent to the north bridge railing.
- Photo 9 : Bulging of the north spandrel wall both east and west of the arch.

CITY/TOWN NEWBURYPORT=WEST NEWBURY	B.I.N. 8BC	BR. DEPT. NO. N-11-007=W-20-001	8.-STRUCTURE NO. N11007-8BC-MUN-BRI	INSPECTION DATE JUN 27, 2019
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PHOTOS



Photo 1: Jersey barriers and chain link fencing is in place to prevent pedestrian access to the failed portion of the bridge.



Photo 2: Inside the restricted area; spandrel wall has failed and material continues to fall into channel.

CITY/TOWN NEWBURYPORT=WEST NEWBURY	B.I.N. 8BC	BR. DEPT. NO. N-11-007=W-20-001	8.-STRUCTURE NO. N11007-8BC-MUN-BRI	INSPECTION DATE JUN 27, 2019
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PHOTOS

Photo 3: Heavy cracking in the asphalt adjacent to the collapsed area.



Photo 4: View of the collapsed area from the southwest wingwall. Note the severe displacement of stones on the southeast wingwall area.

CITY/TOWN NEWBURYPORT=WEST NEWBURY	B.I.N. 8BC	BR. DEPT. NO. N-11-007=W-20-001	8.-STRUCTURE NO. N11007-8BC-MUN-BR1	INSPECTION DATE JUN 27, 2019
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PHOTOS



Photo 5: Typical signage at cross streets. Intersection of Turkey Hill Road east of bridge shown.



Photo 6: Typical barrier and signage approaching the bridge. East approach shown.

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PHOTOS



Photo 7: Typical barrier and signage at bridge preventing vehicular traffic. East approach shown.



Photo 8: Settlement areas adjacent to the north bridge railing.

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PHOTOS

Photo 9: Bulging of the north spandrel wall both east and west of the arch.