BRIDGE NO. 153011

80490 - WATERTOWN
Falls Avenue #1
over
Stream

Screening Inspection
8/16/2016
Inspected by: WSP
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Form: Location
Inspection type: Screening
Inspection Date: 8/16/2016
Inspected by: WSP

Town: WATERTOWN
Carried: Falls Avenue #1
Crossed: Stream
Inventory Route: 8

Location Map # 1
# SCREENING - INVENTORY DATA

<table>
<thead>
<tr>
<th>Bridge: 153011</th>
<th>Town: 80490 - WATERTOWN</th>
<th>Carried: Falls Avenue #1</th>
<th>Crossed: Stream</th>
</tr>
</thead>
</table>

## IDENTIFICATION

<table>
<thead>
<tr>
<th>(4) Town</th>
<th>80490 - WATERTOWN</th>
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<tbody>
<tr>
<td>(6A) Feature Intersected</td>
<td>Stream</td>
</tr>
<tr>
<td>(7) Facility Carried</td>
<td>Falls Avenue #1</td>
</tr>
<tr>
<td>(9) Location</td>
<td>0.1 mi N of Falls Terrace</td>
</tr>
<tr>
<td>(16) Latitude</td>
<td>41° 35′ 31.3″</td>
</tr>
<tr>
<td>(17) Longitude</td>
<td>-73° 4 39.9″</td>
</tr>
</tbody>
</table>

## STRUCTURE TYPE AND MATERIAL

<table>
<thead>
<tr>
<th>(43) Structure Type, Main</th>
</tr>
</thead>
<tbody>
<tr>
<td>A) Material</td>
</tr>
<tr>
<td>B) Design Type</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>(44) Structure Type, Approach</th>
</tr>
</thead>
<tbody>
<tr>
<td>A) Material</td>
</tr>
<tr>
<td>B) Design Type</td>
</tr>
</tbody>
</table>

| (45) Number of Spans, Main Unit | 1 |
| (46) Number of Approach Spans | 0 |
| (107) Deck Structure Type | N - Not Applicable |

<table>
<thead>
<tr>
<th>(108) Wearing Surface Protective Systems</th>
</tr>
</thead>
<tbody>
<tr>
<td>A) Type of Wearing Surface</td>
</tr>
</tbody>
</table>

## AGE AND SERVICE

<table>
<thead>
<tr>
<th>(27) Year Built</th>
<th>1940</th>
</tr>
</thead>
<tbody>
<tr>
<td>(29) Average Daily Traffic</td>
<td>1200</td>
</tr>
<tr>
<td>(28) Number Of Lanes</td>
<td>(A) On 02</td>
</tr>
<tr>
<td>(30) Year Of ADT</td>
<td>1991</td>
</tr>
</tbody>
</table>
GEOMETRIC DATA

(48) Length of Maximum Span  7 ft  9 in
(49) Structure Length  7 ft  9 in
(51) Bridge Roadway Width
   Curb to Curb  33 ft  9 in
(52) Deck Width, Out to Out* **  59 ft  9 in
Deck Area* **  460 sq ft
(34) Skew Angle  27
(35) Structure Flared  0 - No flare

* Record measurements to the nearest whole number.

** Under the screening phase of the program, Bridge Width (Out-Out) and Deck Area are not applicable to culverts that are significantly wider than the roadway (i.e. inlet-to-Outlet measurement is significantly greater than the curb-to-curb measurement.)
<table>
<thead>
<tr>
<th>OVERLAY</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>Depression/Settlement</td>
<td>Sat/Better</td>
</tr>
<tr>
<td>Sidewalk</td>
<td>Fair/Worse</td>
</tr>
<tr>
<td>Bridge Rail/Fence</td>
<td>Fair/Worse</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>STRUCTURE</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Deck</td>
<td>N/A</td>
</tr>
<tr>
<td>Superstructure</td>
<td>N/A</td>
</tr>
<tr>
<td>Substructure</td>
<td>N/A</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CULVERT</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Cell</td>
<td>Fair/Worse</td>
</tr>
<tr>
<td>Headwall/Wingwalls</td>
<td>Sat/Better</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>WATERWAY</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Debris</td>
<td>Sat/Better</td>
</tr>
<tr>
<td>Stream Alignment</td>
<td>Fair/Worse</td>
</tr>
<tr>
<td>Embankment/Erosion</td>
<td>Sat/Better</td>
</tr>
</tbody>
</table>

**COMMENTS**

Revisit inspection on 7/13/2016 by Matt LaPlante (Team Leader) and Brandon Gale (Assistant Team Leader).
- Culvert is 7.8 FT elliptical CMP. - Both headwalls are concrete. - Roadway is oriented South to North and the stream flows from West to East. - Approximately 3.5 FT of fill above pipe culvert at roadway centerline. - Culvert is skewed 27 degrees from road.

To be followed by full inspection  Yes
Town Bridges (Span of 20 FT & under) – Inventory and Screening - Field Notes

Town: Watertown  Bridge No.: 153011  Date of Inspection: 4/21/2016

Consultant Co Name: WSP & ASE

Inspector: Akram Ahmad. PE  See General Notes
(Print)  (Signature)

Inspector: Matthew Greer
(Print)  (Signature)

Reviewed by: Matthew Bacon. PE  Date: 9/15/16

Inventory Data

Road: Falls Avenue  Crossing: Stream

Location to nearest intersection: 0.1 Miles N (N/ S/ E/ W) from Junction with Falls Terrace

Is this a border bridge? Yes/No  Border Town (and state): 

Functional Classification of Roadway: Rural principal arterial (interstate)/ Rural principal arterial (other)/ Rural minor arterial/ Rural major collector/ Rural minor collector/ Rural local/ Urban principal arterial (interstate)/ Urban principal arterial (other freeway)/ Urban other principal arterial/ Urban minor arterial/ Urban collector/ Urban local

ADT: 3800  Date of ADT: 2011

Source: CDOT Town ADT map  Town source, Project source, other

(Do not use the ADT from previous 1991 report and do not estimate ADT – if no source, leave blank)

Main Span:
-Bridge Material: Concrete/ Continuous Conc/ [Steel] Continuous Steel/ Pre-stressed Conc/ Continuous Pre-Stressed Conc/ Timber/ Masonry/ Aluminum or Iron/ Other

-Type of Bridge: Slab/ Multi-Beam/ Girder & Floorbeam/ Tee Beam/ Multiple Box Beam/ Spread box Beam/ Frame/ Deck Arch/ Pipe culvert/ or Box Culvert/ Channel Beam/ Other

Approach Span:
-Bridge Material: Concrete/ Continuous Conc/ [Steel] Continuous Steel/ Pre-stressed Conc/ Continuous Pre-Stressed Conc/ Timber/ Masonry/ Aluminum or Iron/ Other N/A

-Type of Bridge: Slab/ Multi-Beam/ Girder & Floorbeam/ Tee Beam/ Multiple Box Beam/ Spread box Beam/ Frame/ Deck Arch/ Pipe culvert or Box Culvert/ Channel Beam/ Other N/A

NBIS Bridge Length: 7.8'  Structure Length: 7.8'

Number of Spans: 1  Span Lengths: Span1- 7.8'  Span2-  Span3-  Span4-

Bridge Width (out-to-out)**: 59.0'  (curb-to-curb): 33.0'

Deck Area**: 460 SF  Number of Lanes on Structure: 2

** Under the screening phase of the program, Bridge Width (out to out) and Deck Area are not applicable to culverts that are significantly wider than the roadway (i.e. inlet-to-outlet measurement is significantly greater than the roadway curb-to-curb measurement)
Mandatory / Standard Photos

1. Top View [Photo1 - Looking north/ east/ south/ west across bridge in log/ reverse log direction of road.] Bridge from South approach, looking North.

2. Elevation View [Photo2 - North/ east/ south/ west elevation (inlet/ outlet)] Outlet (East) elevation.

3. Under View [Photo3 – Describe elements viewed, e.g. West abutment and typical superstructure; East barrel looking upstream, etc.] Typical interior of pipe from outlet note perforations on invert, looking West.

Additional Photos:
(include any safety concerns of an urgent nature)

4. Upstream channel, looking West.

5. Downstream channel, looking East.

6.

7.

8.

9.

10.

11.

12.

13.

14.
Town Bridges (Span of 20 FT & under) - Inventory and Screening - Field Notes

Town: Watertown  Bridge No.: 153011  Date of Inspection: 4/21/2016

Basic Orientation Sketch:
(Add north arrow, stream flow arrow, number traffic lanes, and abutment & wing wall labels)

Screening Data (Limited Inspection)

Was structure inspected under the previous CDOT project (#170-936)?

Is structure new or significantly modified since last CDOT inspection?

Has the structure been inspected by others since the last CDOT inspection?

Date of last inspection by others: July 2012

Inspection Access

- Is there ready access to both sides of bridge (up & downstream)?
- Can stream be walked with waders?
- Items for full inspection - Boat or raft/ Divers/ Ladder/ Tidal/ Low FB/ Confined space/ Other

Topside (Bridge and Culvert)

- Condition of Topside (overlay, top of deck).
- Safety concerns of urgent nature on topside? (include parapets, railing, etc)

Underside (Bridge)

- Condition of underside of deck
- Condition of superstructure
- Condition of abutments
- Condition of wingwalls
- Safety concerns of urgent nature on underside?

Underside (Culvert)

- Condition of roof
- Condition of sidewalls
- Condition of invert
- Condition of wingwalls
- Safety concerns of urgent nature on underside?
Town Bridges (Span of 20 FT & under) – Inventory and Screening - Field Notes

Town: Watertown   Bridge No.: 153011   Date of Inspection: 4/21/2016

Channel
- Condition of scour . . . . . . . . . N/A Sat. Or Better ✔ Fair or worse __
- Condition of channel . . . . . . . . . N/A Sat. Or Better ✔ Fair or worse __
- Alignment of channel . . . . . . . . . N/A Sat. Or Better ✔ Fair or worse ✔
- Adequacy of channel to carry high flow . . . . . N/A Sat. Or Better ✔ Fair or worse __

General Assessment Based on Above:
- 58. Deck . . N/A ✔ Sat. Or Better ____ Fair or worse __
- 59. Superstructure . . N/A ✔ Sat. Or Better ____ Fair or worse __
- 60. Substructure . . N/A ✔ Sat. Or Better ____ Fair or worse __
- 61. Channel . . N/A ✔ Sat. Or Better ✔ Fair or worse __
- 62. Culvert . . N/A ✔ Sat. Or Better ____ Fair or worse ✔
- 67. Structural Evaluation . . N/A ✔ Sat. Or Better ____ Fair or worse ✔
- 71. Waterway adequacy . . N/A ✔ Sat. Or Better ✔ Fair or worse __

Safety Items:
Was town notified of any urgent safety concerns by e-mail (with photos) . . . Yes ___ No ✔ N/A __
Date the town was notified: _______________

Comments and Observations:

Topside - The wearing surface has several sealed cracks. The East bridge rail is damaged and disconnected at one of the posts. The West sidewalk is cracked and uneven.

Underside - The pipe invert has several perforations for the majority of the length. The water is flowing below the pipe at the perforations. The pipe shape is good. The Northeast wingwall has a small shallow spall.

Channel - The upstream channel is aligned with the inlet of the pipe at approximately 45 degrees. The channel has minor debris.

General - Revisit inspection on 7/13/2016 by Matt LaPlante (Lead Inspector) and Brandon Gale (Inspector)

Recommend full inspection.
Form: Asset Photos
Inspection type: Screening
Inspection Date: 8/16/2016
Inspected by: WSP

Town: WATERTOWN
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photo 1: Bridge from South approach, looking North.

photo 2: Outlet (East) elevation.

Photo Number: 1  Photo Taken: 04/21/2016

Photo Number: 2  Photo Taken: 04/21/2016
Typical interior of pipe from outlet note perforations on invert, looking West.

Upstream channel, looking West.
Downstream channel, looking East.