



BRIDGE NO. 03903

34250 - GROTON
MOSHER STREET
over
AMTRAK RAILROAD

Fracture Critical and Routine Inspection

2/01/2018

Inspected by: AI Engineers



Bridge No. 03903

Mosher Street
over
Amtrak Railroad
Groton

Inspected By:



Date: 02/01/2018



Personal Certification: I hereby certify that this report, including all of its contents, has been approved by me, and that I am a duly licensed professional engineer under the laws of the State of Connecticut.

Signature: 

License No.: 27653

Date: 3-12-2018

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Form: Location

Inspection type: Fracture Critical,Routine

Inspection Date: 2/01/2018

Inspected by: AI Engineers

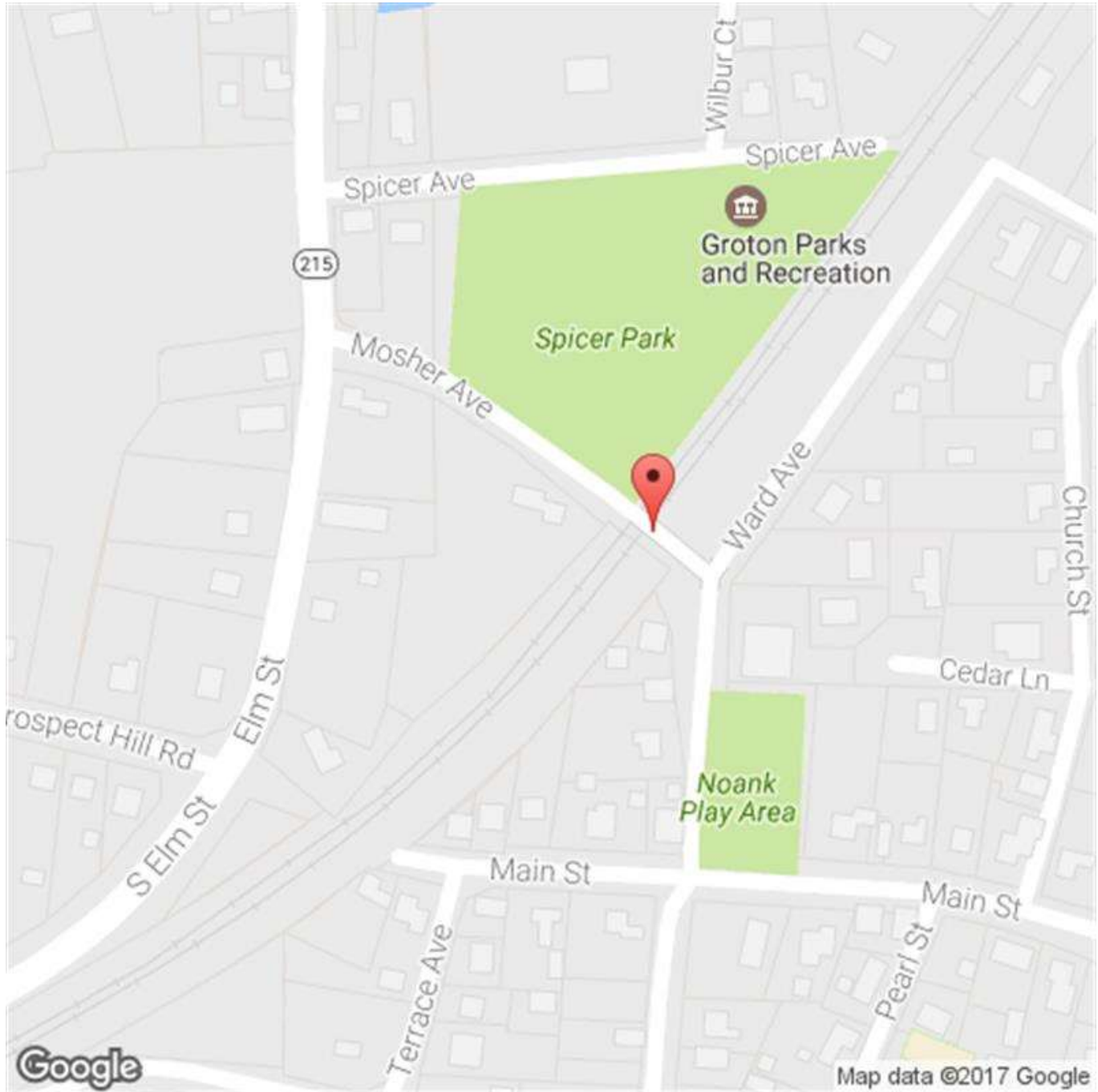
Bridge No: 03903

Town: GROTON

Carried: MOSHER STREET

Crossed: AMTRAK RAILROAD

Inventory Route: Non-NHS



Location Map # 1

STRUCTURE INVENTORY & APPRAISAL

INSPECTION

Structurally Deficient Functionally Obsolete

Sufficiency Rating

(90) Inspection Date (91) Frequency

Indepth Insp Proposed next Indepth Year

Deck Survey Date Class

Access Flagman

| | Frequency | Date | Type |
|------------|---------------------------------|---|--|
| Fracture | <input type="text" value="24"/> | <input type="text" value="02/01/2018"/> | <input type="text" value="D Two Girder System, riveted / bolted plate girders"/> |
| Underwater | <input type="text"/> | <input type="text"/> | <input type="text"/> |
| Special | <input type="text" value="12"/> | <input type="text"/> | <input type="text" value="J Corrosion / Section loss"/> |

IDENTIFICATION

Bridge Name

Town Code - Name

(5) Inventory Route

(A) Record Type

(B) Signing Prefix

(C) Level of Service

(D) Route Number.

(E) Dir Suffix

(6A) Featured Intersected

(6B) Critical Facility Indicator

(7) Facility Carried

(9) Location

(11) Mile Post Miles

(16) Latitude Deg. Min. Sec.

(17) Longitude Deg. Min. Sec.

(98) Border Bridge

(A) State Code (B) Percent Responsibility %

(C) Border Town Name

(99) Border Bridge Structure No.

STRUCTURE TYPE & MATERIALS

(43) Structure Type, Main

A) Material

B) Design Type

(44) Structure Type, Approach

A) Material

B) Design Type

(45) Number of Spans, Main Unit

(46) Number of Approach Spans

(107) Deck Structure Type

(108) Wearing Surface/Protection Systems

A) Type of Wearing Surface

B) Type of Membrane

C) Type of Deck Protection

Substructure

A) Material

B) Design Type

Paint

Type

Year

Comment

GEOMETRIC DATA

(48) Length of Maximum Span ft.

(49) Structure Length ft.

(50) Curb or Sidewalk Widths

A) Left ft. in. B) Right ft. in.

(51) Bridge Roadway Width Curb to Curb ft. in.

(52) Deck Width, Out to Out ft. in.

(32) Approach Roadway Width ft.

Form: BRI-19, Rev. 2/15

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(33) Bridge Median

Deck Area sq. ft.

(34) Skew Angle deg.

(35) Structure Flared

(10) Inv. Rte. Min. Vert. Clearance ft. in.

(47) Inv. Rte. Total Horiz. Clr. ft. in.

Log Inv. Rte. Total Horiz. Clr. ft. in.

RLog Inv. Rte. Total Horiz. Clr. ft. in.

(53) Min. Vert. Clearence Over Bridge ft. in.

(54) Log-Min. Vert. Underclearance ref. ft. in.

(55) Min. Lat Underclearance on Right ref. ft. in.

(56) Min. Lat Underclearance on Left ft. in.

CONDITION

(58) Deck

(59) Superstructure

(60) Substructure

(61) Channel & Channel Protections

(62) Culverts

(36) Traffic Safety Features

A) Bridge Railings

B) Transitions

C) Approach Guardrail

D) Approach Guardrail Ends

WATERWAY

Drainage Basin Waterway

(38) Navigation Control

(39) Navigation Vertical Clearance ft.

(40) Navigation Horiz. Clr. ft.

(111) Pier/Abutment Navigation

AGE AND SERVICE

Year Built (106) Year Reconstructed

(42) Type of Service

A) On

B) Under

(28) Number of Lanes

A) On B) Under

(29) Average Daily Traffic

Is Above Half ADT?

(109) Precent Truck %

(30) Years of ADT

(19) Bypass, Detour Length Miles

APPRAISALS

(67) Structural Evaluation

(68) Deck Geometry

(69) Underclearances, Vert. & Horiz.

(71) Waterway Adequacy

(72) Approach Roadway Alignment

(113) Scour Critical

COMMENTS

- Bridge is logged from west to east with girder G1 at the north face.

- ADT based on 1% increase per year for local roads.

- 55' high rail used for inspection.

- Re-evaluation is recommended due to section loss.

- A re-evaluation of LR analysis is recommended till the inspection of the rehab project # 058-0336 with an advertisement date 4/17/19.

CLASSIFICATION

(112) NBIS Bridge Length

(104) Highway System

(26) Functional Class

(100) Defense Highway

(101) Parallel Structure

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(116) Vert-Lift Brg Nav Min

ft.

In.

(102) Direction of Traffic

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(103) Temporary Structure

(110) Designated National Network

(20) Toll

(21) Maintain

(22) Owner

Report Class

(37) Historical Significance

POSTED SIGNS

Other Posted Sign 1

Other Posted Sign 2

| | Actual | Recomended | |
|----------------------------------|-----------------------------|--------------------------|------|
| Posted Load Single Unit Truck | <input type="text"/> | <input type="text"/> | tons |
| Posted Load Semi-Trailer Truck | <input type="text"/> | <input type="text"/> | tons |
| Posted Load 4 Axle Truck | <input type="text"/> | <input type="text"/> | tons |
| Posted Load 3S2 Truck | <input type="text"/> | <input type="text"/> | tons |
| All Vehicles | <input type="text"/> | <input type="text"/> | tons |
| Posted Vert. Clearance on Bridge | <input type="text"/> ft. | <input type="text"/> in. | |
| Posted Vert. Underclearance | <input type="text"/> ft. | <input type="text"/> in. | |
| Posted Speed Limit on Bridge | <input type="text"/> m.p.h. | | |

OTHER FEATURES

Fence Required

Fence Present

Fence Type

Fence Height

Fence Material

Fence Top Type

Barrel Ladders

Stand Pipes

Catwalks

Moveable Inspection System

Haunches Present over Roadway

Utilities

PROPOSED IMPROVEMENTS

(75A) Type of Work Proposed

(75B) Work Done By

(76) Length of Structure Improvement ft.

(94) Bridge Improvement Cost \$

(95) Roadway Improvement Cost \$

(96) Total Project Cost \$

(97) Year of Improvement Estimate

(114) Future ADT

(115) Year of Future ADT

DOT Bridge Program List No

Project No

Advertised Date

LOAD RATING & POSTING

(31) Design Load

(63) Operating Rating Type

(64) Operating Rating

(65) Inventory Rating Type

(66) Inventory Rating

Evaluation Code

Year of Evaluation

(70) Bridge Posting

(41) Structure Status

Form: BRI-19, Rev. 2/15

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INSPECTOR'S SIGNATURES:

1)  Date: 03/06/2018

2)  Date: 03/06/2018

3)  Date: 03/12/2018

4) _____ Date: _____

P.E. SIGNATURE:



Date: 03/12/2018

P.E. #

Reviewed By:


Gregory A. Funk

Date: 04/16/2018

Form: BRI-18, Rev. 1/14

Inspection type: Fracture Critical,Routine

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Inventory Route: Non-NHS

FIELD INSPECTION REPORT

Location: 0.4 MI E OF ROUTE 215
 Main Material: 3 - Steel
 Main Design: 03 - Girder and Floorbeam

Year Built: 1936
 Year Rebuilt: 1993

Snooper Required:
 Snooper Used:

Inspectors:

| | |
|--------------------|-----------------|
| Lead Inspector: | Hesham Elmakky |
| Inspector: | Task: |
| Afzal, Hassan | BSE - Inspector |
| Area, 15 | BSE - Inspector |
| Chuck, Christopher | BSE - Inspector |
| Elmakky, Hesham | BSE - Inspector |
| Ismail, Ziad | BSE - Inspector |
| Pruzinsky, Caleb | BSE - Inspector |

Visits:

| Visit Date: | Temp: | Start Time: | End Time: |
|-------------|-------|-------------|-----------|
| 02/01/2018 | 37 | 10:00 PM | 05:00 AM |
| 02/04/2018 | 45 | 10:00 PM | 05:00 AM |
| 02/19/2018 | 46 | 09:00 AM | 10:30 AM |

58. DECK:

Reinforced concrete deck with waterproofing membrane and bituminous concrete overlay.

Overall Rating: 5

The deck is in fair condition.

Rating

Overlay: 6 Bituminous concrete overlay exhibits:

- Longitudinal and transverse cracks up to 1/4" wide. See photo 5.
- Near the abutments the overlay at the paved over deck joints is breaking up with "D" cracks and depressions up to 2' x 18" x 1" deep. See photo 6.
- There is separations up to 1" wide x full length along the edges of the patches near abutment 1.

Deck - Str. Condition: 5 Underside of the reinforced concrete deck exhibits:

- Hollow areas (intact) over the railroad tracks up to 8 SF between floorbeams FB3 and FB4 (intact). See photo 8.
- Random spalls up to 5' x 2' x 2" deep with exposed and rusted rebar. The epoxy coating is failing.
- 4' x 6" x 1" deep spall with exposed rebar and one (1) debonded rebar between FB3 and FB4. See photo 9.

See photo 7.

Curbs: N Sloped concrete curbs are monolithic with the parapets. See item 'Parapets' below.

Median: N

Sidewalks: 4 Top side of reinforced concrete sidewalks exhibit:

- Full width transverse hairline cracks throughout.
- Spalls up to 1' x 1' x 1" deep.
- There is limited access to south sidewalk due to utilities carried across the structure.

See photo 10.

Underside of sidewalks consist of reinforced concrete edge beams supported by steel double angle concrete encased cantilevers.

Concrete edge beams exhibit:

- Spalls up to 4' long x 6" wide x 4" deep with exposed and rusted rebar between FB1 and FB2 at the

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north side. See photo 11.

Concrete encasements exhibit:

- Severe scaling areas up to 4" deep with exposed and rusted rebar (primarily at the north sidewalk supports FB2, FB4, FB5 and FB6). See photo 12.

Steel exhibits:

- Double angles, web and stiffeners exhibit heavy rust and lamination with up to 1/8" deep section loss (1/8" remaining at bottom of angles).
- The bottom of the west vertical stiffener at the north sidewalk support at FB0 is rusted out up to 4" high with knife edge remaining.
- Perforations up to 3.5" x 3" in web and up to 80% section loss to rivet heads (north FB5).
- The top west leg of the bottom flange of floorbeam FB5 cantilever support is bent down for 4" long x 1" near its end.

See photo 13.

Parapet: 6 Concrete jersey shape parapets poured against the webs exhibit:

- Vertical hairline cracks with efflorescence throughout.
- Spalls up to 1 SF x 3" deep and a 1/4" wide diagonal crack at the west end of the south parapet.
- Average curb reveal is 3" at both sides.

See photo 14.

Railing: N

Paint: N

Fence: 5 Timber board fence with chain link nailed to the board faces. The chain link fence is supported by steel angles and timber planks from the back. The fence exhibits:

- Timber planks exhibit checks, splits, rot and decay.
- Steel angles exhibit random areas of moderate to heavy rust.
- Chain link fence is disconnected from the timber boards at the base of the northwest corner and there is a hole in the chain link fence at this location. See photo 16.
- Chain link fence at northeast corner is open up to 12" high x 6" wide at the bottom. Timber behind the fence has a 8" x 2" hole.

See photo 15.

Drains: 8 - PVC weep pipes at the underside of deck. No deficiencies noted. All extend below superstructure.

Lighting Standard: N

Overall Utility Condition Rating 6 - Fair

Utility Type/Size

| | |
|---------------|---|
| 2 Water | <p>South side has a 16" diameter insulated water main carried across the top of the sidewalk. The utility exhibits:</p> <ul style="list-style-type: none"> - Random areas of loose insulation and sagging aluminum casing. - 2" diameter rusted through hole in insulation at the west end. - There is a broken pipe strap at the west end. <p>See photo 17.</p> |
| 4 Telephone | <ul style="list-style-type: none"> - There is a 4" diameter steel communication conduit installed |

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through the concrete support blocks for the above mentioned water main. The communication conduit is in good condition.

- The first support block (at west end) has a potential spall on its corner.

See photo 17.

Construction Joints: N

Expansion Joint: 5 Saw cut joints over both abutments exhibit:

- Full length x up to 1" wide "D" cracks and breaking up bituminous.
- Previously rated 'N'.

Haunches Present over travelway? YES

APPROACH CONDITION:

Bituminous concrete pavement.

Overall Rating: 5

The approaches are in fair condition.

Rating

Approach Slab: N

Relief Joints: 5

- East approach relief joint exhibits full length x 1" wide "D" cracks and breaking up bituminous.
- West relief joint exhibits full width x 1.5' long depressed area and wheel rutting.
- Previously miscoded. Rating revised from 'N'.

Approach Guide Rail: 6 Approach metal beam rails at all four (4) corners exhibit:

- Minor collision damage.

Two (2) cable guide rails behind the metal beam rails at all for corners exhibit:

- Loose cables.
- Bent and rotted posts. See photo 18.
- (2) broken and (1) rotted posts at the southeast approach.

Approach Pavement: 5 Bituminous concrete pavement exhibits:

- West approach pavement with full width x 1.5' long patched area with depression.
- Longitudinal and transverse cracks open up to 1/4" wide. See photo 19.
- Potholes up to 8" diameter x 1-1/2" deep (east approach). See photo 19.
- Breaking up pavement up to 6" x 3" x 1.5" deep (west approach).

Approach Embankment: 6 - 10' wide x full length of slope x 5' deep erosion area at the southeast corner. See photo 20.

Because the erosion area does not affect the roadway or rails, the rating has been revised from a '5'.

Traffic Safety Features

Bridge Railings: 1

Transitions: 0 Not RB-350 type (No rub-rail).

Approach Guardrails: 0 Not RB-350 type (Steel blockouts).

Approach Guardrail Ends: 0 Not RB-350 type.

59. SUPERSTRUCTURE:

Steel (2) Girder/Floorbeam system.

Overall Rating: 4

The superstructure is in poor condition.

Rating

| | | |
|-------------------------|---|---|
| Bearing Devices: | 5 | Expansion bearings at abutment 1 are retrofitted steel bearings over elastomeric bearing pads. They exhibit: - Heavy rust with laminations up to 1/2" thick and up to 1/8" deep section loss. See photo 21. Fixed bearings at abutment 2 exhibit: - Laminated rust up to 1/4" thick and up to 1/16" deep section loss. See photo 22. - The anchor bolt nuts exhibit heavy rosebudding with up to 75% section loss. |
| Stringers: | N | |
| Girders: | 4 | Riveted (2) Steel Plate Girders encased in concrete. Underside exhibits: - There is up to 1/4" thick pack rust between the plates (G2 at floorbeam FB0). See photo 23. - Bottom flange cover plates have up to 2' long x 9" wide x 1/8" deep section loss (G1 at floorbeams FB4 and FB6). See photo 24. Concrete encasements exhibit: - Spalls along the bottom flanges up to 1" deep. See photo 7. Top side exhibits: - The web at the sidewalk interface has full length x up to 8" high (4" average) x 1/4" deep section loss (Average Thickness Loss - 57%; Average Shear Loss - 4.4%). See photo 25. - Web stiffener angle legs have up to 2" high x 100% section loss. See photo 26. See photo 10. See item "Rivets & Bolts" below. |
| Floor Beams: | 4 | Steel floorbeams encased in concrete. Floorbeams exhibit: - 10' long x full width x 3/16" deep section loss to the bottom flange and (25) rivet heads with up to 70% section loss (floorbeam FB0 near G2). See photo 27. Concrete encasement exhibits: - Spalls up to 1" deep along the bottom flange exposing the steel bottom flange and the rebar in the web. See photo 28. See photo 7. See item "Rivets & Bolts" below. |
| Trusses - General: | N | |
| Trusses - Portals: | N | |
| Trusses - Bracing: | N | |
| Paint: | 1 | 100% paint failure on exposed structural steel below the deck with light to heavy rust. |
| Rust: | 4 | See items above. |
| Machinery Movable Span: | N | |
| Rivets & Bolts: | 4 | The following locations exhibit sections losses to rivet heads: Girders: G1 - floorbeam FB8 - (30) rivet heads with up to 100% section loss. G2 - floorbeam FB0 - (4) rivet heads with up to 80% section loss. |

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| | |
|--|---|
| | Floorbeams: floorbeam FB0 - G2 - (25) rivet heads with up to 70% section loss. See photo 27. |
| | Sidewalk cantilever supports: North side - floorbeam FB4 - (2) rivet heads with up to 25% section loss. North side - floorbeam FB5 - (2) rivet heads with up to 80% section loss. |
| Welds - Cracks: | 8 |
| Timber Decay: | N |
| Concrete Cracking: | 5 See "Girders" above. |
| Collision Damage: | 8 |
| Member Alignment: | 8 |
| Deflection Under Load: | N (N) Normal; (E) Excessive |
| Vibration Under Load: | N (N) Normal; (E) Excessive |
| Stand Pipes: | N |
| Catwalks: | N |
| Movable Inspection System: | N |
| Barrel Ladders: | N |
| Are Barrel Ladders OSHA Compliant? <input type="text" value="NA"/> | |

60. SUBSTRUCTURE:

Reinforced concrete and masonry abutments.

Overall Rating:

The substructure is in satisfactory condition.

Rating

| | | |
|-------------------------|---|--|
| Abutments - Stem: | 6 | Combination of masonry and reinforced concrete abutment stems: Mortar: - Hairline cracks throughout. Concrete: - Vertical cracks up to 1/16" wide. Masonry: - 3' long vertical hairline crack in the south end of abutment 2. There is evidence of past leakage. See photo 29. |
| Abutments - Backwall: | 6 | Reinforced concrete abutment backwalls exhibit: - Vertical and diagonal cracks up to 1/8" wide. |
| Abutments - Footings: | 8 | Not visible. |
| Abutments - Settlement: | 8 | None noted. |
| Abutments - Wingwalls: | 6 | Combination of masonry and reinforced concrete wingwalls: Mortar: - Cracks in the mortar throughout. |

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Concrete:
- Hollow areas up to 2' x 2' (wingwall 2A).
- Spalls up to 2' x 3" x 3" deep (wingwall 1B).

Masonry:
- No deficiencies noted.

See photo 30.

| | | |
|---------------------------|---|---|
| Piers/Bents - Caps: | N | |
| Piers/Bents - Pile Bent: | N | |
| Piers/Bents - Columns: | N | |
| Piers/Bents - Footings: | N | |
| Piers/Bents - Settlement: | N | |
| Erosion - Scour: | 8 | Erosion: Rated - 8 Scour: Rated - N/A |
| Concrete Crack - Spall: | 6 | See above items |
| Steel Corrosion: | N | |
| Paint: | N | |
| Timber Decay: | N | |
| Collision Damage: | 8 | |
| Debris: | 6 | There are debris piles in front of the abutment 2 up to 3' high (one pile is masonry blocks and the other is stacked scrap wood). |

61. CHANNEL AND CHANNEL PROTECTION:

Overall Rating: N

Rating

| | | |
|-------------------------|---|--|
| Channel - Scour: | N | |
| Embankment - Erosion: | N | |
| Debris: | N | |
| Vegetation: | N | |
| Channel Change: | N | |
| Fender - System: | N | |
| Spur Dikes and Jetties: | N | |
| Rip Rap: | N | |

62. CULVERTS AND RETAINING WALLS:

Overall Rating: N

Rating

| | | |
|------------------------|---|--|
| Barrel: | N | |
| Concrete: | N | |
| Steel: | N | |
| Timber: | N | |
| Headwall: | N | |
| Cutoff Wall: | N | |
| Debris: | N | |
| Retaining Wall System: | N | |

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Footings: N

LOAD POSTING:

Rating

| | | |
|----------------------|--|--|
| Single Unit (Tons): | | |
| Semi Trailer (Tons): | | |
| 4 Axle (Tons): | | |
| 3S2 (Tons): | | |
| All Vehicles: | | |
| Advanced Warning: | | |
| Warning At Bridge: | | |
| Legibility: | | |
| Visibility: | | |

VERTICAL CLEARANCE POSTING

Min. Vert Under Clearance: 21 Ft 5 In

The minimum vertical underclearance is 21'-5" measured from girder G2 to the east rail of track 2.

Posted Clearance Under Bridge: Ft In

Posted Clearance On Bridge: Ft In

Advanced Warning: True

Warning At Bridge:

Legibility:

Visibility:

NOTES / COMMENTS:

Character of Traffic: Moderate volume, mixed weights.

Additional Notes:

- Bridge ID is clear and legible. See photo 1.
- Bridge is logged from west to east with girder G1 at the north fascia which is consistent with the previous report and bridge plans.
- A 55' high rail, Amtrak flagman and groundmen were used to inspect the structure.
- A re-evaluation of LR analysis is recommended till the inspection of the rehab project # 058-0336 with a scheduled advertisement date of 4/17/19.

Additional Comments:

See report table of contents.

National Bridge Elements**Inspection type:** Fracture Critical,Routine**Inspection Date:** 2/01/2018**Inspected by:** AI Engineers**Bridge No:** 03903**Town:** GROTON**Carried:** MOSHER STREET**Crossed:** AMTRAK RAILROAD**Inventory Route:** Non-NHS

| | Environment | Total Quantity | Units | Condition State 1 | Condition State 2 | Condition State 3 | Condition State 4 |
|---|-------------|----------------|---------|-------------------|-------------------|-------------------|-------------------|
| 12 - Reinforced Concrete Deck | Mod. | 4887 | sq. ft. | 4734 | 153 | 0 | 0 |
| 1080 - Delamination/Spall/Patched Area | | 27 | | 0 | 27 | 0 | 0 |
| 1090 - Exposed Rebar | | 61 | | 0 | 61 | 0 | 0 |
| 1120 - Efflorescence/Rust Staining | | 46 | | 0 | 46 | 0 | 0 |
| 1130 - Cracking (RC and Other) | | 19 | | 0 | 19 | 0 | 0 |
| 107 - Steel Open Girder/Beam | Mod. | 203 | ft. | 0 | 190 | 13 | 0 |
| 1000 - Corrosion | | 203 | | 0 | 190 | 13 | 0 |
| 152 - Steel Floor Beam | Mod. | 341 | ft. | 0 | 331 | 10 | 0 |
| 1000 - Corrosion | | 341 | | 0 | 331 | 10 | 0 |
| 217 - Masonry Abutment | Mod. | 62 | ft. | 47 | 15 | 0 | 0 |
| 1610 - Mortar Breakdown (Masonry) | | 5 | | 0 | 5 | 0 | 0 |
| 1630 - Patched Area (Masonry) | | 10 | | 0 | 10 | 0 | 0 |
| 310 - Elastomeric Bearing | Mod. | 2 | each | 0 | 2 | 0 | 0 |
| 1000 - Corrosion | | 1 | | 0 | 1 | 0 | 0 |
| 2230 - Bulging, Splitting, or Tearing | | 1 | | 0 | 1 | 0 | 0 |
| 313 - Fixed Bearing | Mod. | 2 | each | 0 | 2 | 0 | 0 |
| 1000 - Corrosion | | 2 | | 0 | 2 | 0 | 0 |
| 331 - Reinforced Concrete Bridge Railing | Mod. | 212 | ft. | 185 | 27 | 0 | 0 |
| 1130 - Cracking (RC and Other) | | 27 | | 0 | 27 | 0 | 0 |

Sketches

Inspection type: Fracture Critical,Routine

Inspection Date: 2/01/2018

Inspected by: AI Engineers

Bridge No: 03903

Town: GROTON

Carried: MOSHER STREET

Crossed: AMTRAK RAILROAD

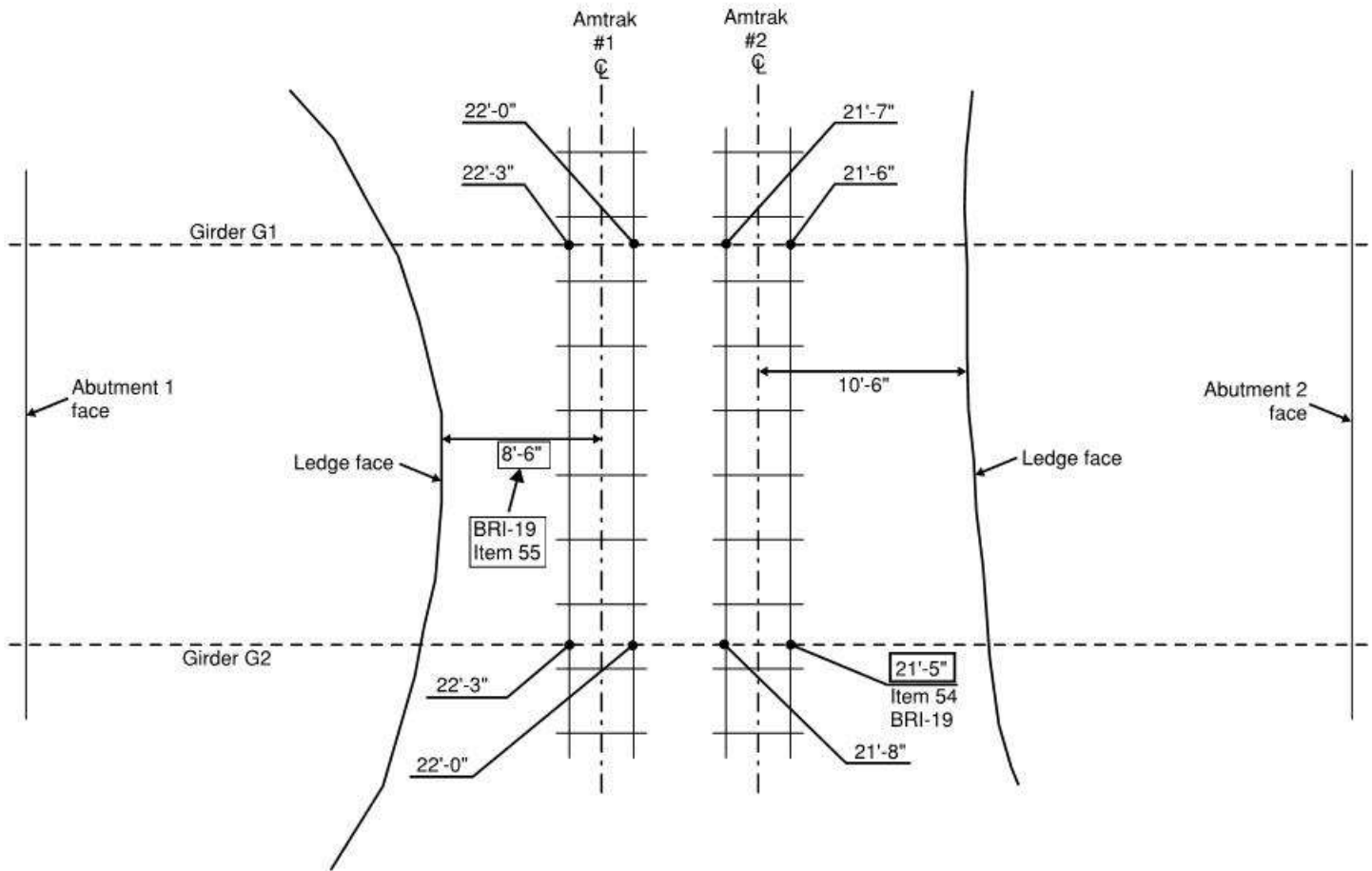
Inventory Route: Non-NHS

CREW: HE, ZRI (AI)

DATE: 2/4/2018

BRIDGE NO.: 03903

MOSHER ST. LOG EAST



CLEARANCE DIAGRAM

| | | | | | |
|----------|-------|-------|----------|-------|-------|
| REVISION | DATE: | CREW: | REVISION | DATE: | CREW: |
| REVISION | DATE: | CREW: | REVISION | DATE: | CREW: |

Sketches

Inspection type: Fracture Critical,Routine

Inspection Date: 2/01/2018

Inspected by: AI Engineers

Bridge No: 03903

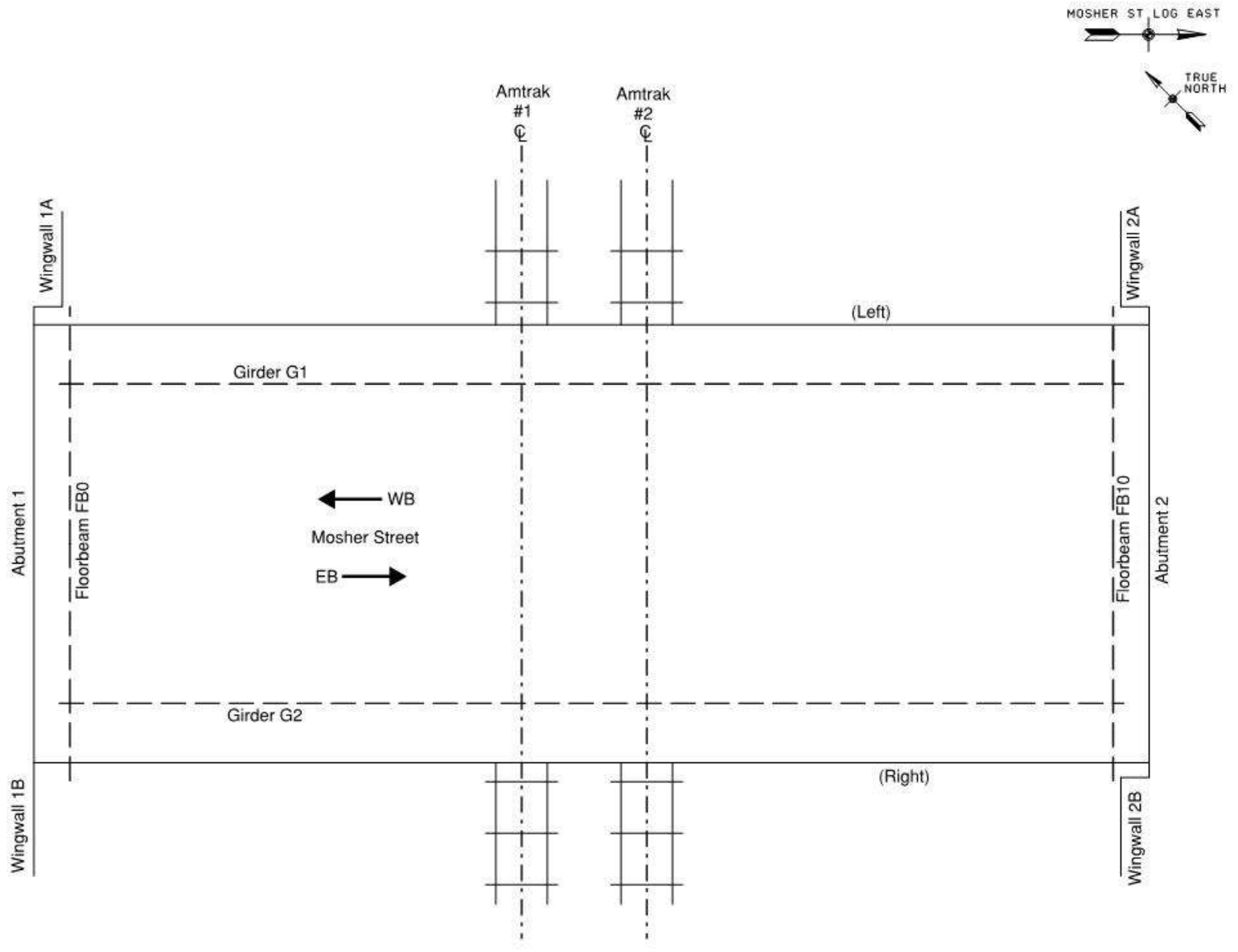
Town: GROTON

Carried: MOSHER STREET

Crossed: AMTRAK RAILROAD

Inventory Route: Non-NHS

| | | |
|--------------------|----------------|-------------------|
| CREW: HE, ZRI (AI) | DATE: 2/4/2018 | BRIDGE NO.: 03903 |
|--------------------|----------------|-------------------|



KEY PLAN

| | | | | | |
|----------|-------|-------|----------|-------|-------|
| REVISION | DATE: | CREW: | REVISION | DATE: | CREW: |
| REVISION | DATE: | CREW: | REVISION | DATE: | CREW: |

Sketches

Inspection type: Fracture Critical, Routine

Inspection Date: 2/01/2018

Inspected by: AI Engineers

Bridge No: 03903

Town: GROTON

Carried: MOSHER STREET

Crossed: AMTRAK RAILROAD

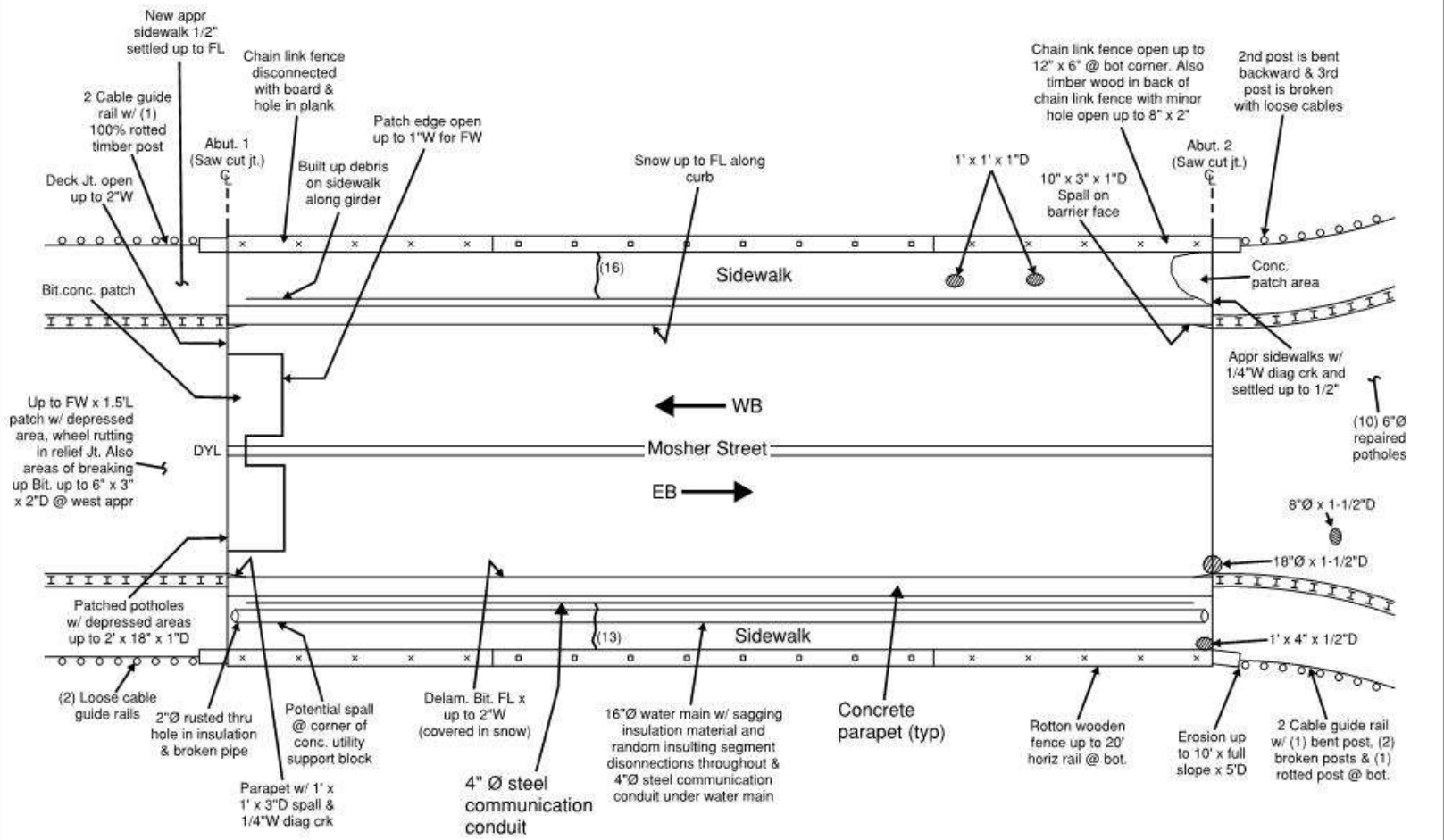
Inventory Route: Non-NHS

CREW: HE, ZRI (AI)

DATE: 2/19/2018

BRIDGE NO.: 03903

MOSHER ST, LOG EAST



General notes:

- Overlay and approach pavement exhibits longitudinal and transverse cracks up to 1/4" wide (1" wide at west approach).
- Both Abutments and east approach saw cut joints exhibit full length by up to 1" wide "D" cracks and breaking up bituminous.
- Average curb reveal is 3" at both sides.
- Sidewalks exhibit light scale throughout.
- Parapets exhibit vertical hairline cracks with efflorescence throughout.
- Timber board fence with chain link nailed to the board faces. The chain link fence is supported by steel angles and timber planks from the back and has random areas of moderate to heavy rust on the angles. Timber planks exhibit rot and decay.
- Approach metal beam rails have minor collision damage.

LEGEND:

| | |
|--|-------------------------------|
| | HOLLOW AREA |
| | SHALL REBAR |
| | SPALL AREA / POT HOLE |
| | SPALL AREA WITH EXPOSED REBAR |
| | MAPCRACKS |
| | HAIRLINE CRACKS |
| | HONEYCOMB AREA |
| | SCALE AREA |
| | EFFLORESCENCE PRESENT |
| | DYL SOLID YELLOW LINE |
| | METAL BEAM RAIL (MBR) |
| | 2 CABLE GUIDE RAIL |

TOP OF DECK

| | | | | | |
|----------|-------|-------|----------|-------|-------|
| REVISION | DATE: | CREW: | REVISION | DATE: | CREW: |
| REVISION | DATE: | CREW: | REVISION | DATE: | CREW: |

Sketches

Inspection type: Fracture Critical,Routine

Inspection Date: 2/01/2018

Inspected by: AI Engineers

Bridge No: 03903

Town: GROTON

Carried: MOSHER STREET

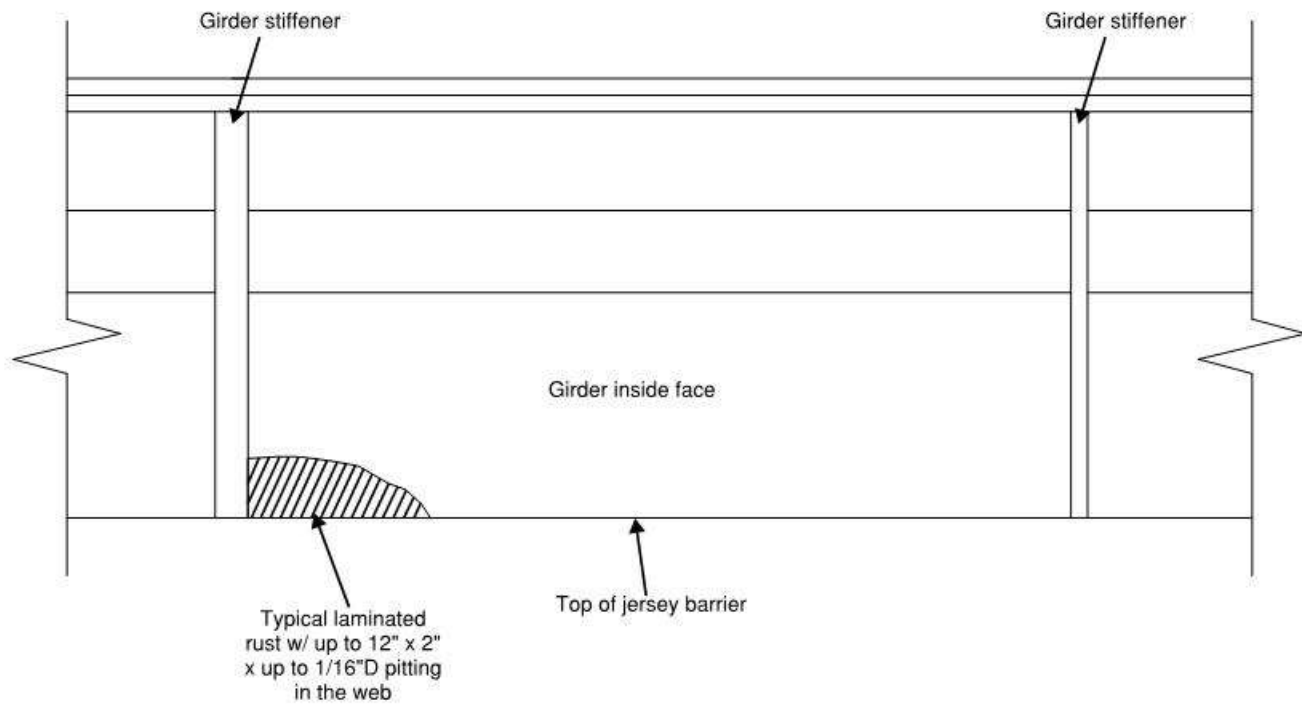
Crossed: AMTRAK RAILROAD

Inventory Route: Non-NHS

CREW: HE, ZRI (AI)

DATE: 2/4/2018

BRIDGE NO.: 03903



INSIDE FACE (TYPICAL)

GIRDER ELEVATION ABOVE DECK

LEGEND:
SECTION LOSS AREA

| | | | | | |
|-------------------|-------|-------|-------------------|-------|-------|
| REVISION Δ | DATE: | CREW: | REVISION Δ | DATE: | CREW: |
| REVISION Δ | DATE: | CREW: | REVISION Δ | DATE: | CREW: |

Sketches

Inspection type: Fracture Critical, Routine

Inspection Date: 2/01/2018

Inspected by: AI Engineers

Bridge No: 03903

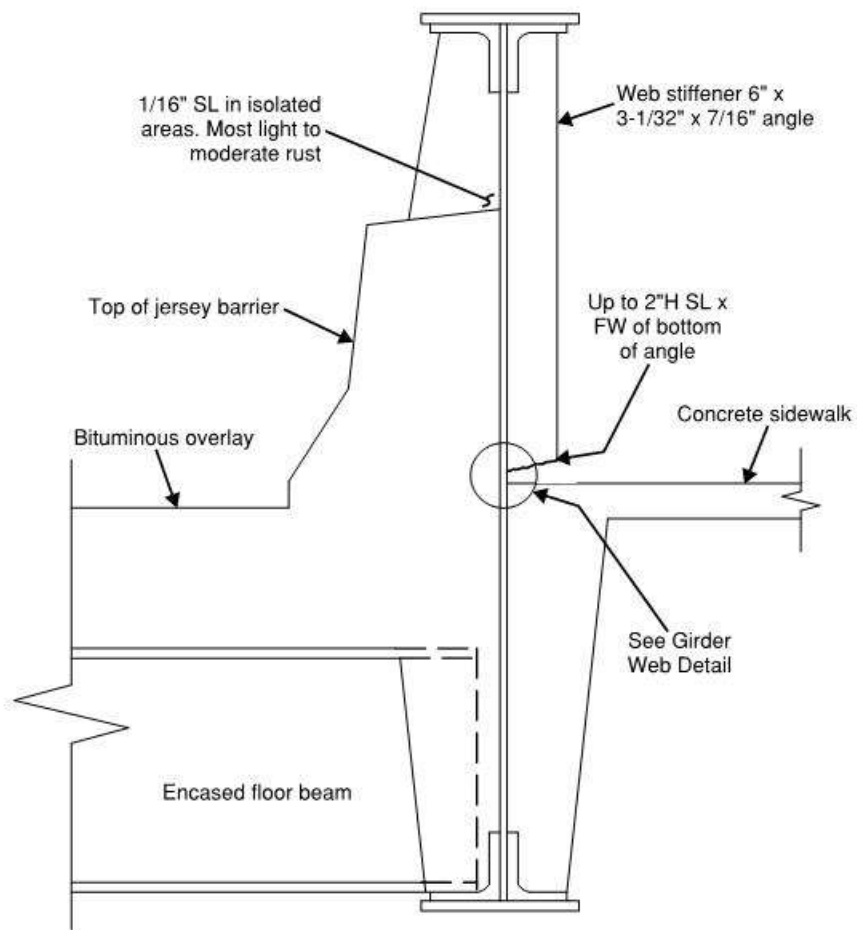
Town: GROTON

Carried: MOSHER STREET

Crossed: AMTRAK RAILROAD

Inventory Route: Non-NHS

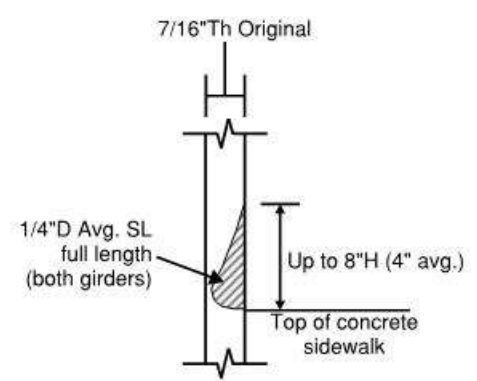
| | | |
|--------------------|----------------|-------------------|
| CREW: HE, ZRI (AI) | DATE: 2/4/2018 | BRIDGE NO.: 03903 |
|--------------------|----------------|-------------------|



Section View G1
(Similar to G2)

Shear Loss Calc:

Original Web Area: $102" \times 7/16" = 44.625 \text{ in}^2$
 Area Loss: $8" \times 1/4" (\text{avg.}) = 2.0 \text{ in}^2$
 $\% \text{Loss} = \frac{2.0}{44.625} = 4.4\%$



GIRDER WEB DETAIL

Average Section Loss (Thickness): $\frac{(0.44 - 0.19)}{0.44} \times 100 = 57\%$

General notes:

- Heavy laminated rust section loss in full length along sidewalks.
- Most web stiffeners have 100% section loss in protruding leg at sidewalk with connecting rivets up to 90% section loss in that location.
- Heavy accumulation of debris along inside sidewalks.

GIRDER WEB STIFFENER DETAIL

| | | | | | |
|-------------------|-------|-------|-------------------|-------|-------|
| REVISION Δ | DATE: | CREW: | REVISION Δ | DATE: | CREW: |
| REVISION Δ | DATE: | CREW: | REVISION Δ | DATE: | CREW: |

Sketches

Inspection type: Fracture Critical, Routine

Inspection Date: 2/01/2018

Inspected by: AI Engineers

Bridge No: 03903

Town: GROTON

Carried: MOSHER STREET

Crossed: AMTRAK RAILROAD

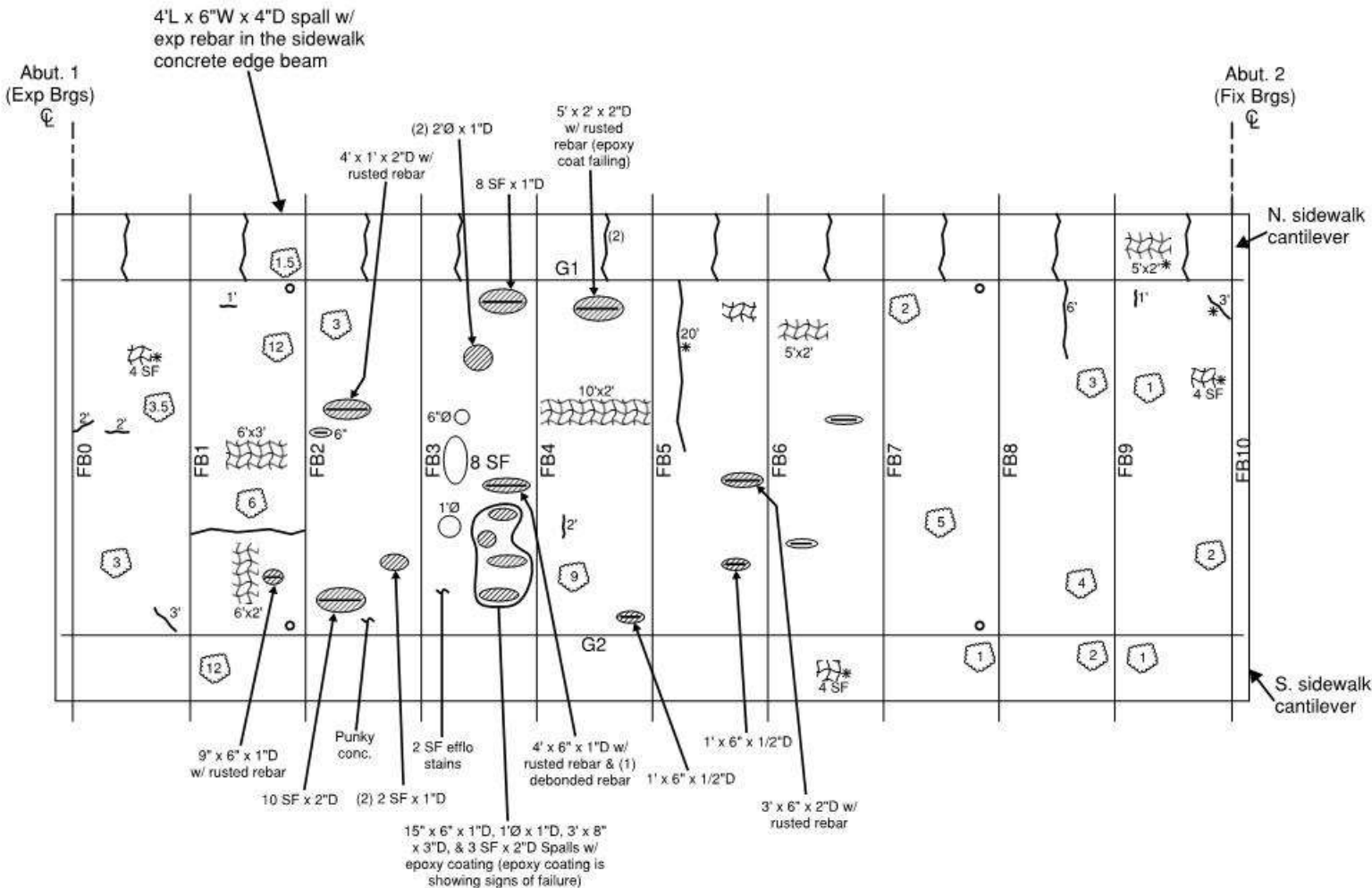
Inventory Route: Non-NHS

CREW: HE, ZRI (AI)

DATE: 2/4/2018

BRIDGE NO.: 03903

MOSHER ST. LOG EAST



General notes:

- Random epoxy coated spalls showing signs of distress with cracked/chipped/coating and spotty light rust to rebar.

- LEGEND:
- HOLLOW AREA
 - SHALLOW REBAR
 - SPALL AREA
 - SPALL AREA WITH EXPOSED REBAR
 - MAPCRACKS
 - HAIRLINE CRACKS
 - HONEYCOMB AREA
 - SCALE AREA
 - EFFLORESCENCE PRESENT
 - (X) SQUARE FOOTAGE OF PATCHES
 - WEEP PIPE

UNDERSIDE OF DECK & FRAMING - CONCRETE DETERIORATION

| | | | | | |
|----------|-------|-------|----------|-------|-------|
| REVISION | DATE: | CREW: | REVISION | DATE: | CREW: |
| REVISION | DATE: | CREW: | REVISION | DATE: | CREW: |

Sketches

Inspection type: Fracture Critical, Routine

Inspection Date: 2/01/2018

Inspected by: AI Engineers

Bridge No: 03903

Town: GROTON

Carried: MOSHER STREET

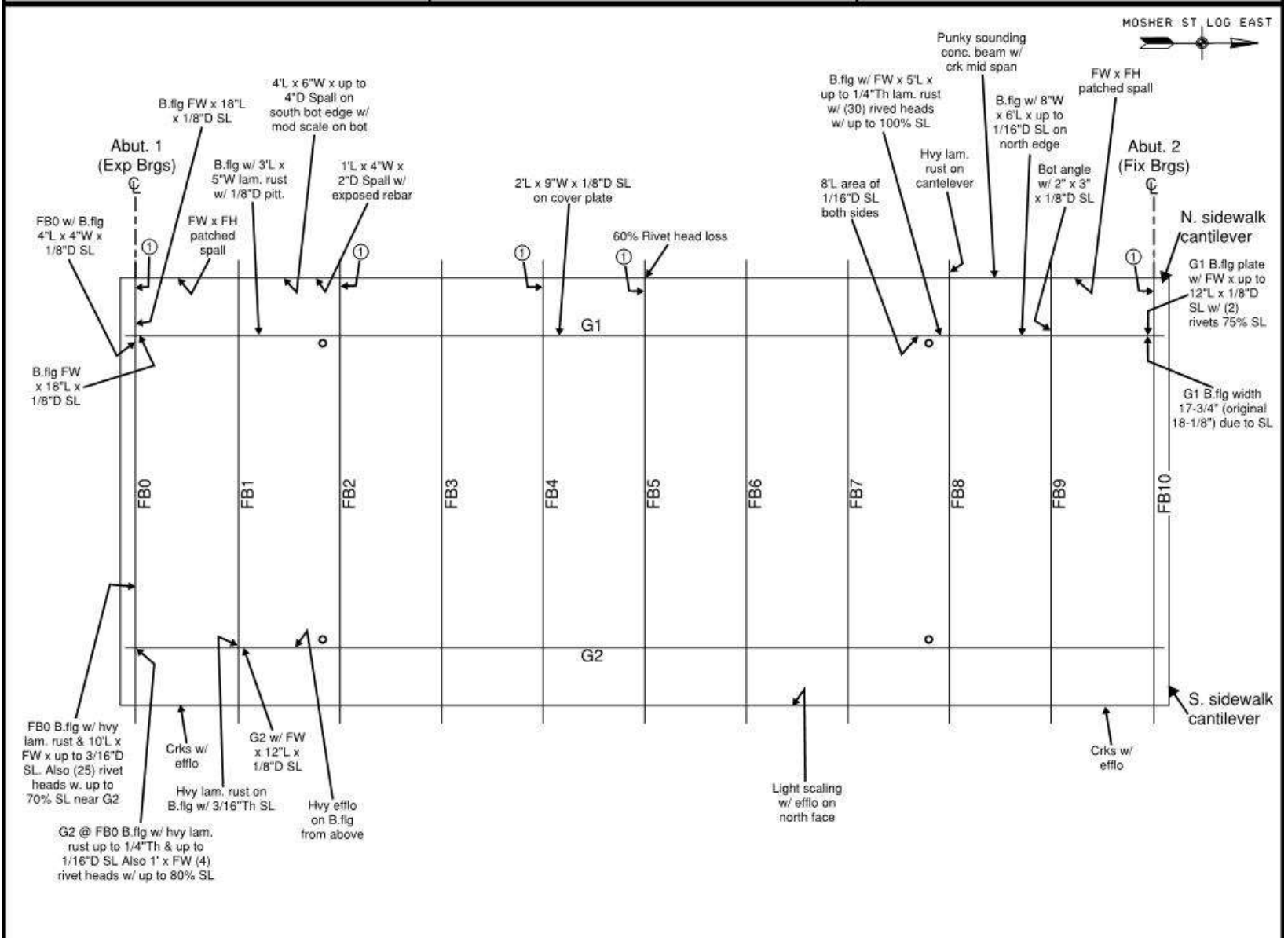
Crossed: AMTRAK RAILROAD

Inventory Route: Non-NHS

CREW: HE, ZRI (AI)

DATE: 2/4/2018

BRIDGE NO.: 03903



Deterioration Legend:

- ① - See Underside of Deck - Sidewalk Support Cantilever sheets

General notes:

- Expansion bearings at abutment 1 exhibit heavy laminated rust up to 1/2" thick and up to 1/8" deep section loss.
- Elastomeric pads have minor bulging.
- Fixed bearings at abutment 2 exhibit heavy laminated rust up to 1/4" thick and up to 1/16" deep section loss.
- Heavy rosebudding with up to 75% section loss on anchor bolt nuts on fixed bearings with no rotation apparent.
- Spalls along the bottom flanges of the girders and floorbeams up to 1" deep exposing the bottom flanges throughout.

UNDERSIDE OF DECK & FRAMING - GIRDER & BEAM DETERIORATION

| | | | | | |
|----------|-------|-------|----------|-------|-------|
| REVISION | DATE: | CREW: | REVISION | DATE: | CREW: |
| REVISION | DATE: | CREW: | REVISION | DATE: | CREW: |

Sketches

Inspection type: Fracture Critical, Routine

Inspection Date: 2/01/2018

Inspected by: AI Engineers

Bridge No: 03903

Town: GROTON

Carried: MOSHER STREET

Crossed: AMTRAK RAILROAD

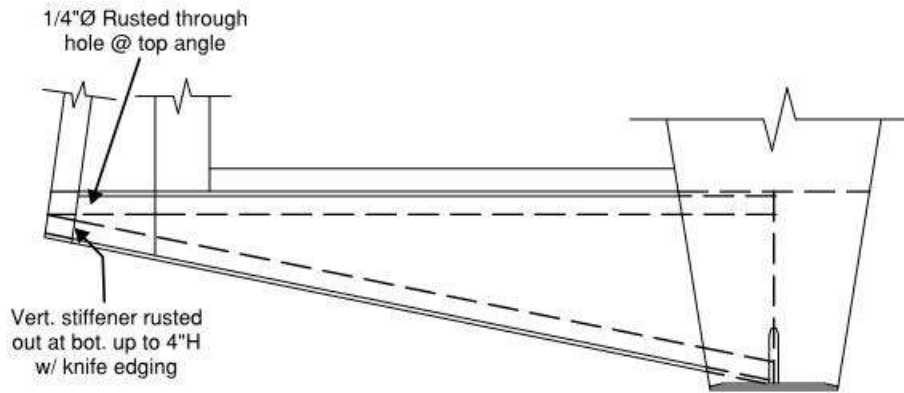
Inventory Route: Non-NHS

CREW: HE, ZRI (AI)

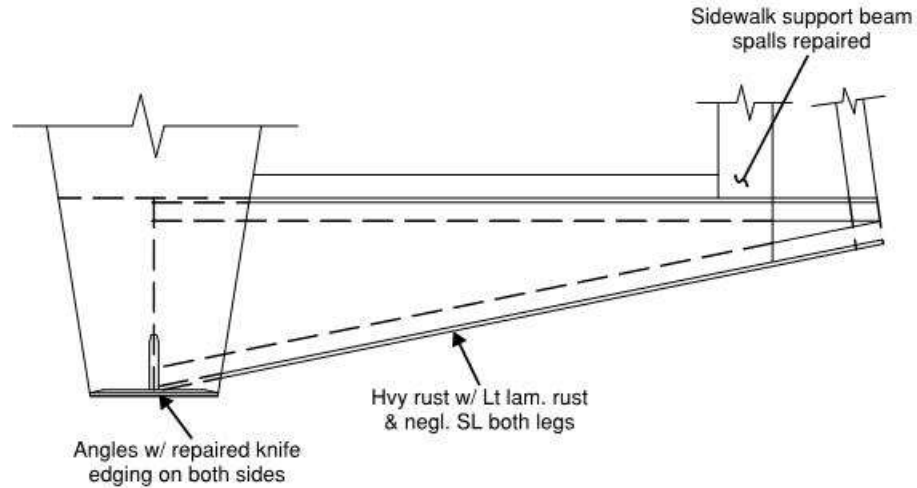
DATE: 2/4/2018

BRIDGE NO.: 03903

MOSHER ST. LOG EAST



FLOORBEAM FB0 - NORTH SIDE, WEST ELEVATION



FLOORBEAM FB0 - NORTH SIDE, EAST ELEVATION

UNDERSIDE OF DECK - SIDEWALK SUPPORT CANTILEVER

- LEGEND:**
- HOLLOW AREA
 - SHALLOW REBAR
 - SPALL AREA
 - SPALL AREA WITH EXPOSED REBAR
 - MAPCRACKS
 - HAIRLINE CRACKS
 - HONEYCOMB AREA
 - SCALE AREA
 - EFFLORESCENCE PRESENT

| | | | | | |
|----------|-------|-------|----------|-------|-------|
| REVISION | DATE: | CREW: | REVISION | DATE: | CREW: |
| REVISION | DATE: | CREW: | REVISION | DATE: | CREW: |

Sketches

Inspection type: Fracture Critical, Routine

Inspection Date: 2/01/2018

Inspected by: AI Engineers

Bridge No: 03903

Town: GROTON

Carried: MOSHER STREET

Crossed: AMTRAK RAILROAD

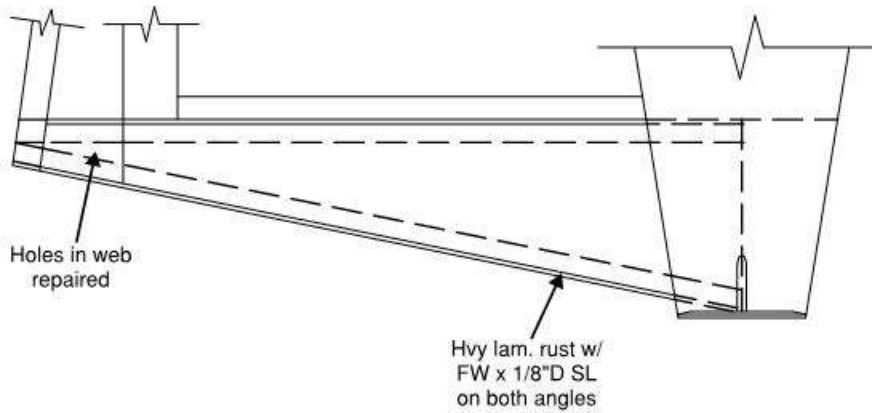
Inventory Route: Non-NHS

CREW: HE, ZRI (AI)

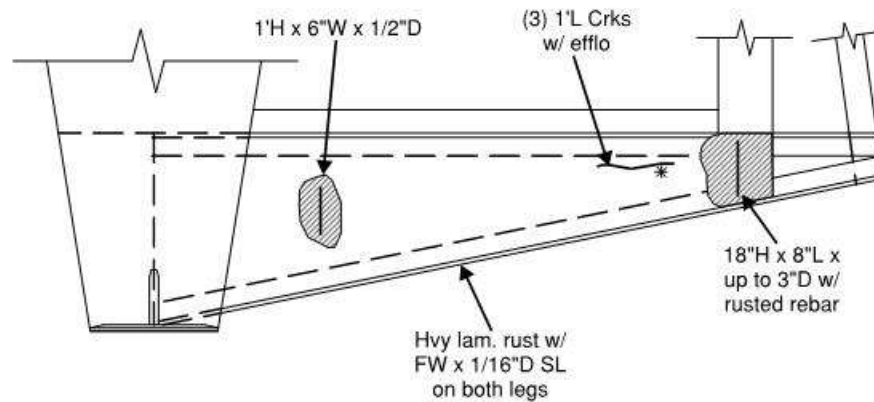
DATE: 2/4/2018

BRIDGE NO.: 03903

MOSHER ST. LOG EAST



FLOORBEAM FB10 - NORTH SIDE, WEST ELEVATION



FLOORBEAM FB2 - NORTH SIDE, EAST ELEVATION

UNDERSIDE OF DECK - SIDEWALK SUPPORT CANTILEVER

- LEGEND:**
- HOLLOW AREA
 - SHALLOW REBAR
 - SPALL AREA
 - SPALL AREA WITH EXPOSED REBAR
 - MAPCRACKS
 - HAIRLINE CRACKS
 - HONEYCOMB AREA
 - SCALE AREA
 - EFFLORESCENCE PRESENT

| | | | | | |
|----------|-------|-------|----------|-------|-------|
| REVISION | DATE: | CREW: | REVISION | DATE: | CREW: |
| REVISION | DATE: | CREW: | REVISION | DATE: | CREW: |

Sketches

Inspection type: Fracture Critical, Routine

Inspection Date: 2/01/2018

Inspected by: AI Engineers

Bridge No: 03903

Town: GROTON

Carried: MOSHER STREET

Crossed: AMTRAK RAILROAD

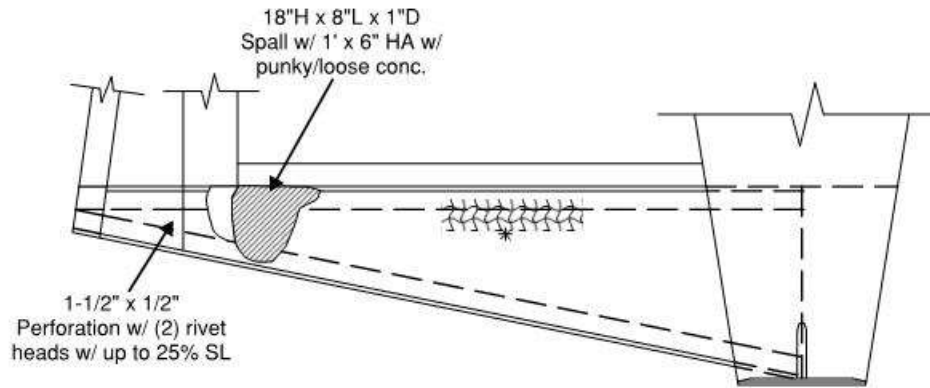
Inventory Route: Non-NHS

CREW: HE, ZRI (AI)

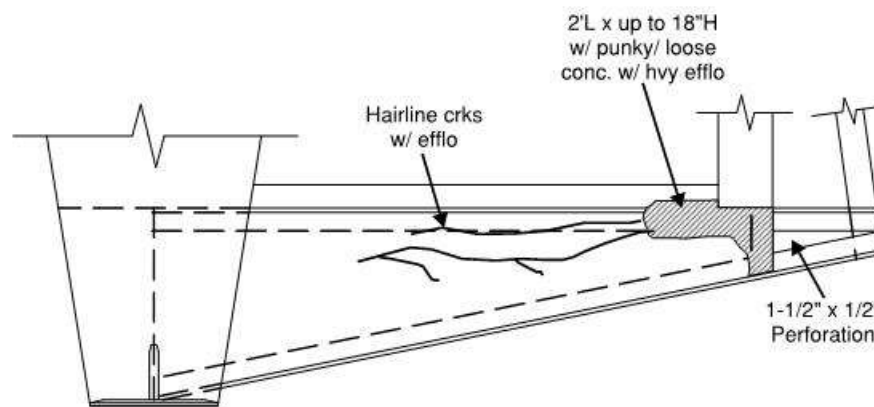
DATE: 2/4/2018

BRIDGE NO.: 03903

MOSHER ST. LOG EAST



FLOORBEAM FB4 - NORTH SIDE, WEST ELEVATION



FLOORBEAM FB4 - NORTH SIDE, EAST ELEVATION

UNDERSIDE OF DECK - SIDEWALK SUPPORT CANTILEVER

- LEGEND:**
- HOLLOW AREA
 - SHALLOW REBAR
 - SPALL AREA
 - SPALL AREA WITH EXPOSED REBAR
 - MAPCRACKS
 - HAIRLINE CRACKS
 - HONEYCOMB AREA
 - SCALE AREA
 - EFFLORESCE PRESENT

| | | | | | |
|----------|-------|-------|----------|-------|-------|
| REVISION | DATE: | CREW: | REVISION | DATE: | CREW: |
| REVISION | DATE: | CREW: | REVISION | DATE: | CREW: |

Sketches

Inspection type: Fracture Critical, Routine

Inspection Date: 2/01/2018

Inspected by: AI Engineers

Bridge No: 03903

Town: GROTON

Carried: MOSHER STREET

Crossed: AMTRAK RAILROAD

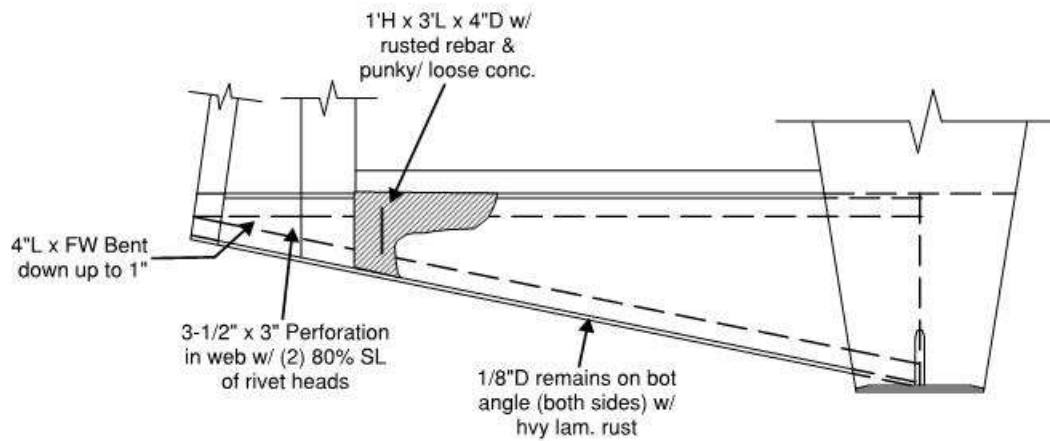
Inventory Route: Non-NHS

CREW: HE, ZRI (AI)

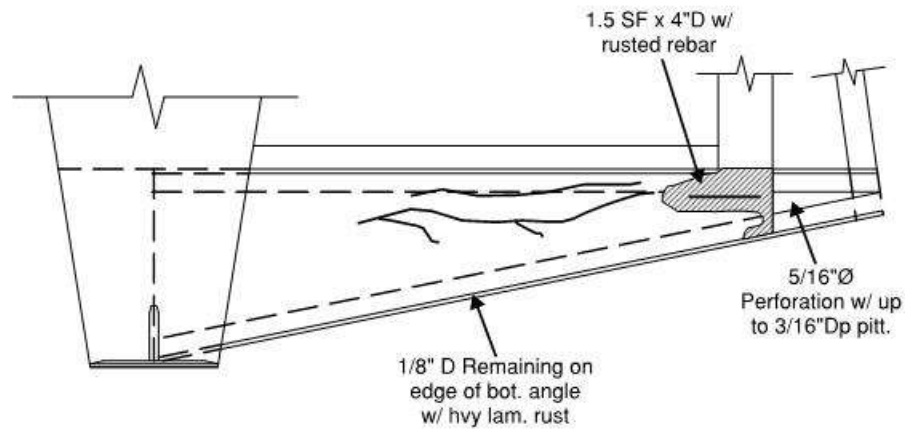
DATE: 2/4/2018

BRIDGE NO.: 03903

MOSHER ST. LOG EAST



FLOORBEAM FB5 - NORTH SIDE, WEST ELEVATION



FLOORBEAM FB5 - NORTH SIDE, EAST ELEVATION

UNDERSIDE OF DECK - SIDEWALK SUPPORT CANTILEVER

- LEGEND:**
- HOLLOW AREA
 - SHALLOW REBAR
 - SPALL AREA
 - SPALL AREA WITH EXPOSED REBAR
 - MAPCRACKS
 - HAIRLINE CRACKS
 - HONEYCOMB AREA
 - SCALE AREA
 - EFFLORESCENCE PRESENT

| | | | | | |
|----------|-------|-------|----------|-------|-------|
| REVISION | DATE: | CREW: | REVISION | DATE: | CREW: |
| REVISION | DATE: | CREW: | REVISION | DATE: | CREW: |

Sketches

Inspection type: Fracture Critical,Routine

Inspection Date: 2/01/2018

Inspected by: AI Engineers

Bridge No: 03903

Town: GROTON

Carried: MOSHER STREET

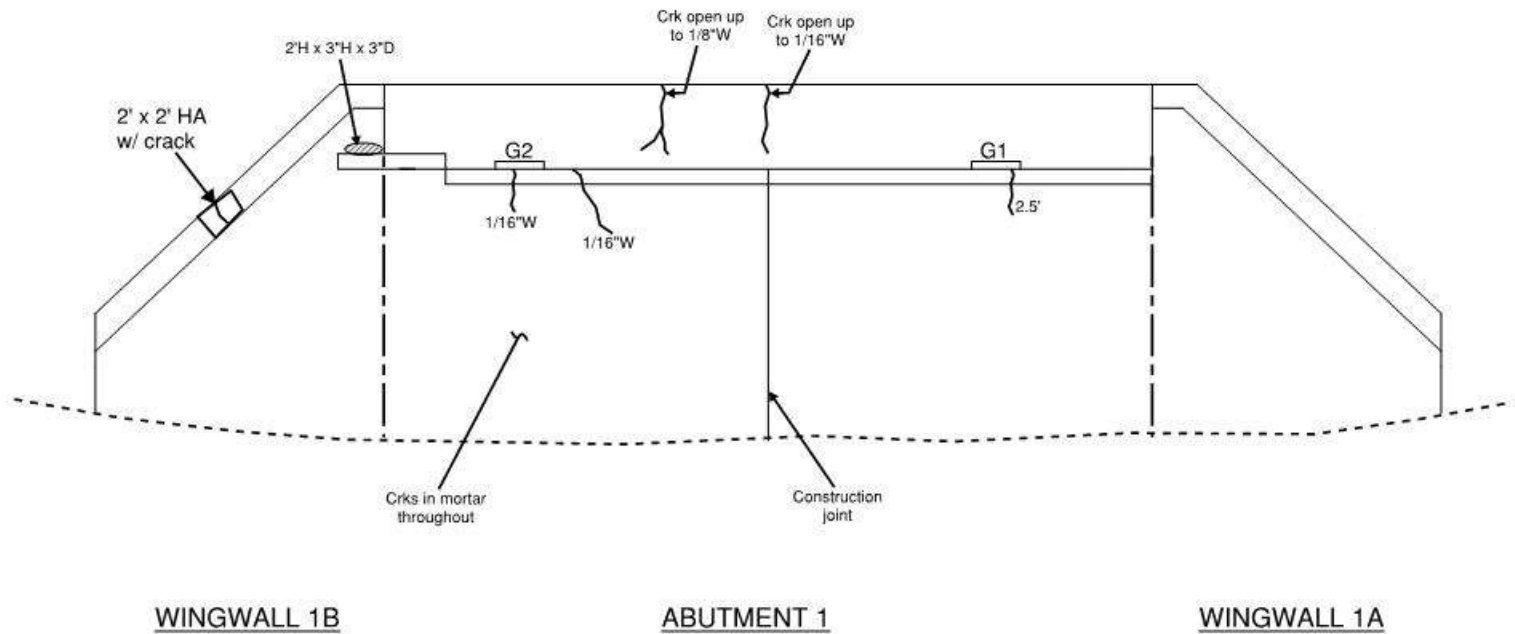
Crossed: AMTRAK RAILROAD

Inventory Route: Non-NHS

| | | |
|--------------------|----------------|-------------------|
| CREW: HE, ZRI (AI) | DATE: 2/4/2018 | BRIDGE NO.: 03903 |
|--------------------|----------------|-------------------|



PLAN VIEW



General notes:

- Limited plans available for sketch, footing level is unknown.
- Abutment stem is a combination of masonry and reinforced concrete.
- Heavy graffiti on abutment stem.

- LEGEND:**
- HOLLOW AREA
 - SHALLOW REBAR
 - SPALL AREA
 - SPALL AREA WITH EXPOSED REBAR
 - MAPCRACKS
 - HAIRLINE CRACKS
 - HONEYCOMB AREA
 - SCALE AREA
 - EFFLORESCENCE PRESENT

ABUTMENT 1 & WINGWALL 1A & 1B

| | | | | | |
|----------|-------|-------|----------|-------|-------|
| REVISION | DATE: | CREW: | REVISION | DATE: | CREW: |
| REVISION | DATE: | CREW: | REVISION | DATE: | CREW: |

Sketches

Inspection type: Fracture Critical, Routine

Inspection Date: 2/01/2018

Inspected by: AI Engineers

Bridge No: 03903

Town: GROTON

Carried: MOSHER STREET

Crossed: AMTRAK RAILROAD

Inventory Route: Non-NHS

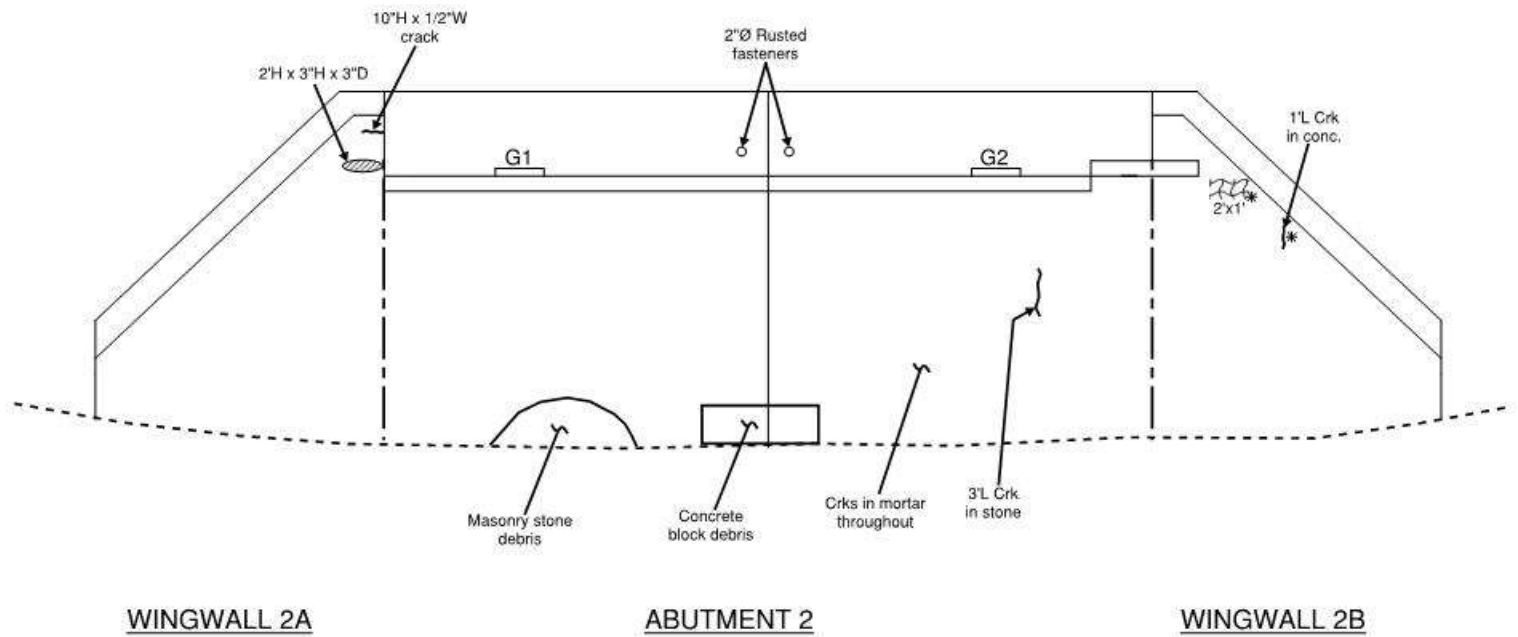
CREW: HE, ZRI (AI)

DATE: 2/4/2018

BRIDGE NO.: 03903



PLAN VIEW



General notes:

- Limited plans available for sketch, footing level is unknown.
- Abutment stem is a combination of masonry and reinforced concrete.
- Moderate to Heavy graffiti on abutment stem.
- Moderate concrete debris on abutment slope protection and up to 3' high on the stem.

ABUTMENT 2 & WINGWALL 2A & 2B

- LEGEND:**
- HOLLOW AREA
 - SHALLOW REBAR
 - SPALL AREA
 - SPALL AREA WITH EXPOSED REBAR
 - MAPCRACKS
 - HAIRLINE CRACKS
 - HONEYCOMB AREA
 - SCALE AREA
 - EFFLORESCENCE PRESENT

| | | | | | |
|----------|-------|-------|----------|-------|-------|
| REVISION | DATE: | CREW: | REVISION | DATE: | CREW: |
| REVISION | DATE: | CREW: | REVISION | DATE: | CREW: |

Form: Asset Photos

Inspection type: Fracture Critical,Routine

Inspection Date: 2/01/2018

Inspected by: AI Engineers

Bridge No: 03903

Town: GROTON

Carried: MOSHER STREET

Crossed: AMTRAK RAILROAD

Inventory Route: Non-NHS



Photo Number: 1

Bridge ID.

Photo Taken: 02/01/2018



Photo Number: 2

North elevation of the bridge.

Photo Taken: 02/01/2018

Form: Asset Photos

Inspection type: Fracture Critical,Routine

Inspection Date: 2/01/2018

Inspected by: AI Engineers

Bridge No: 03903

Town: GROTON

Carried: MOSHER STREET

Crossed: AMTRAK RAILROAD

Inventory Route: Non-NHS



Photo Number: 3

Photo Taken: 02/01/2018

Bridge from east approach.



Photo Number: 4

Photo Taken: 02/01/2018

East approach from bridge.

Form: Asset Photos

Inspection type: Fracture Critical,Routine

Inspection Date: 2/01/2018

Inspected by: AI Engineers

Bridge No: 03903

Town: GROTON

Carried: MOSHER STREET

Crossed: AMTRAK RAILROAD

Inventory Route: Non-NHS



Photo Number: 5

Photo Taken: 02/01/2018

General view of the overlay. Note the cracks.



Photo Number: 6

Photo Taken: 02/01/2018

Abutment 1 saw cut joint. Note the breaking up of the overlay and depressed area.

Form: Asset Photos

Inspection type: Fracture Critical,Routine

Inspection Date: 2/01/2018

Inspected by: AI Engineers

Bridge No: 03903

Town: GROTON

Carried: MOSHER STREET

Crossed: AMTRAK RAILROAD

Inventory Route: Non-NHS



Photo Number: 7

Photo Taken: 02/01/2018

General view of the underside of deck and framing.



Photo Number: 8

Photo Taken: 02/01/2018

Underside of deck between floorbeams 3 and 4. Note the hollow area.

Form: Asset Photos

Inspection type: Fracture Critical,Routine

Inspection Date: 2/01/2018

Inspected by: AI Engineers

Bridge No: 03903

Town: GROTON

Carried: MOSHER STREET

Crossed: AMTRAK RAILROAD

Inventory Route: Non-NHS



Photo Number: 9

Photo Taken: 02/01/2018

Underside of deck between floorbeams 3 and 4. Note the spall with exposed rebar and one (1) debonded rebar.



Photo Number: 10

Photo Taken: 02/01/2018

General view of north sidewalk (top side). Note steel girder G1 on top.

Form: Asset Photos

Inspection type: Fracture Critical,Routine

Inspection Date: 2/01/2018

Inspected by: AI Engineers

Bridge No: 03903

Town: GROTON

Carried: MOSHER STREET

Crossed: AMTRAK RAILROAD

Inventory Route: Non-NHS



Photo Number: 11

Photo Taken: 02/01/2018

Underside of sidewalk concrete edge beams between floorbeams 1 and 2 north side. Note the spall with exposed rusted rebar.



Photo Number: 12

Photo Taken: 02/01/2018

North floorbeam 5 sidewalk support east elevation. Note the heavy scaling with exposed and rusted rebar in the concrete encasement.

Form: Asset Photos

Inspection type: Fracture Critical,Routine

Inspection Date: 2/01/2018

Inspected by: AI Engineers

Bridge No: 03903

Town: GROTON

Carried: MOSHER STREET

Crossed: AMTRAK RAILROAD

Inventory Route: Non-NHS



Photo Number: 13

Photo Taken: 02/01/2018

Underside of north floorbeam FB8 sidewalk support. Note the exposed and rusted steel bottom flange angles.



Photo Number: 14

Photo Taken: 02/01/2018

General view of the north parapet and top of girder G1.

Form: Asset Photos

Inspection type: Fracture Critical,Routine

Inspection Date: 2/01/2018

Inspected by: AI Engineers

Bridge No: 03903

Town: GROTON

Carried: MOSHER STREET

Crossed: AMTRAK RAILROAD

Inventory Route: Non-NHS



Photo Number: 15

Photo Taken: 02/01/2018

General view of the north fence and sidewalk.



Photo Number: 16

Photo Taken: 02/01/2018

Northwest end of the fence. Note the hole and disconnected fence.

Form: Asset Photos

Inspection type: Fracture Critical,Routine

Inspection Date: 2/01/2018

Inspected by: AI Engineers

Bridge No: 03903

Town: GROTON

Carried: MOSHER STREET

Crossed: AMTRAK RAILROAD

Inventory Route: Non-NHS



Photo Number: 17

Photo Taken: 02/01/2018

General view of the water main and communication conduit carried across the south sidewalk.



Photo Number: 18

Photo Taken: 02/01/2018

Northeast approach 2-cable guide rail. Note the posts are broken/bent.

Form: Asset Photos

Inspection type: Fracture Critical,Routine

Inspection Date: 2/01/2018

Inspected by: AI Engineers

Bridge No: 03903

Town: GROTON

Carried: MOSHER STREET

Crossed: AMTRAK RAILROAD

Inventory Route: Non-NHS



Photo Number: 19

Photo Taken: 02/01/2018

General view of the east approach pavement. Note the cracks and potholes with and without patches.



Photo Number: 20

Photo Taken: 02/01/2018

Erosion at the southeast embankment.

Form: Asset Photos

Inspection type: Fracture Critical,Routine

Inspection Date: 2/01/2018

Inspected by: AI Engineers

Bridge No: 03903

Town: GROTON

Carried: MOSHER STREET

Crossed: AMTRAK RAILROAD

Inventory Route: Non-NHS



Photo Number: 21

Photo Taken: 02/01/2018

Girder G1 expansion bearing at abutment 1. Note the heavy rust and section loss at bearing components.



Photo Number: 22

Photo Taken: 02/01/2018

Girder G1 fixed bearing at abutment 2. Note the laminated rust and section loss at the bearing components. Also, note debris on the abutment seat.

Form: Asset Photos

Inspection type: Fracture Critical,Routine

Inspection Date: 2/01/2018

Inspected by: AI Engineers

Bridge No: 03903

Town: GROTON

Carried: MOSHER STREET

Crossed: AMTRAK RAILROAD

Inventory Route: Non-NHS



Photo Number: 23

Photo Taken: 02/01/2018

Girder G2 bottom flange near abutment 1. Note the efflorescence and the pack rust between plates.



Photo Number: 24

Photo Taken: 02/01/2018

Girder G1 bottom flange at floorbeam 4. Note the heavy laminated rust and section loss.

Form: Asset Photos

Inspection type: Fracture Critical,Routine

Inspection Date: 2/01/2018

Inspected by: AI Engineers

Bridge No: 03903

Town: GROTON

Carried: MOSHER STREET

Crossed: AMTRAK RAILROAD

Inventory Route: Non-NHS



Photo Number: 25

Photo Taken: 02/01/2018

Girder G1 web south elevation, west end, at interface with the parapet (above the deck). Note the section loss.



Photo Number: 26

Photo Taken: 02/01/2018

Girder G1 web north elevation, at interface with the parapet (above the deck). Note the section loss to the stiffeners up to 100%..

Form: Asset Photos

Inspection type: Fracture Critical,Routine

Inspection Date: 2/01/2018

Inspected by: AI Engineers

Bridge No: 03903

Town: GROTON

Carried: MOSHER STREET

Crossed: AMTRAK RAILROAD

Inventory Route: Non-NHS



Photo Number: 27

Photo Taken: 02/01/2018

Underside of floorbeam 0. Note the section loss to the bottom flange and the rivets.



Photo Number: 28

Photo Taken: 02/01/2018

Floorbeam 2 east elevation. Note the spalls exposing the steel bottom flange and the rebar in the web.

Form: Asset Photos

Inspection type: Fracture Critical,Routine

Inspection Date: 2/01/2018

Inspected by: AI Engineers

Bridge No: 03903

Town: GROTON

Carried: MOSHER STREET

Crossed: AMTRAK RAILROAD

Inventory Route: Non-NHS



Photo Number: 29

Photo Taken: 02/01/2018

General view of abutment 1. Note the graffiti.



Photo Number: 30

Photo Taken: 02/01/2018

General view of wingwall 2A.

Form: Maintenance

Carried: MOSHER STREET

Crossed: AMTRAK RAILROAD

Bridge No: 03903

Town: GROTON

Inventory Route: Non-NHS

Status: Open

Assigned To: ATB ATB

Work Item ID: 03903-2018-0005

Date Issued: 03/09/2018

Priority: Routine Repair

Deficiency: Steel Corrosion

Structural Component: Superstructure

Comments: Will be addressed in superstructure replacement project 0058-0336.

Steel floorbeams encased in concrete exhibit section loss up to 10' long x full width x 3/16" deep to the bottom flange and (25) rivet heads with up to 70% section loss (FB0 near G2).

Date Completed:

Actual Quantity:



Underside of floorbeam 0. Note the section loss to the bottom flange and the rivets.

Form: Maintenance

Carried: MOSHER STREET

Crossed: AMTRAK RAILROAD

Bridge No: 03903

Town: GROTON

Inventory Route: Non-NHS

Status: Open

Assigned To: ATB ATB

Work Item ID: 03903-2018-0004

Date Issued: 03/09/2018

Priority: Routine Repair

Deficiency: Steel Corrosion

Structural Component: Superstructure

Comments: Will be addressed in superstructure replacement project 0058-0336.

Riveted (2) steel plate girders encased in concrete exhibit:

- Exposed and rusted bottom flange cover plates with up to 2' long x 9" wide x 1/8" deep section loss (G1 at FB4 and FB6).
- The web at the sidewalk interface has laminated rust with full length x 8" high x 1/4"D section loss.

Date Completed:

Actual Quantity:



Girder G2 bottom flange near abutment 1. Note the efflorescence and the pack rust between plates.

Form: Maintenance

Carried: MOSHER STREET

Crossed: AMTRAK RAILROAD

Bridge No: 03903

Town: GROTON

Inventory Route: Non-NHS

Status: Open

Assigned To: ATB ATB

Work Item ID: 03903-2018-0003

Date Issued: 03/09/2018

Priority: Routine Repair

Deficiency: Steel Corrosion

Structural Component: Deck

Comments: Will be addressed in superstructure replacement project 0058-0336.

Fixed bearings at abutment 2 exhibit laminated rust up to 1/4" thick and up to 1/16" deep section loss.

Date Completed:

Actual Quantity:



Girder G1 fixed bearing at abutment 2. Note the laminated rust and section loss at the bearing components. Also, note debris on the abutment seat.

Form: Maintenance

Carried: MOSHER STREET

Crossed: AMTRAK RAILROAD

Bridge No: 03903

Town: GROTON

Inventory Route: Non-NHS

Status: Open

Assigned To: ATB ATB

Work Item ID: 03903-2018-0002

Date Issued: 03/09/2018

Priority: Routine Repair

Deficiency: Steel Corrosion

Structural Component: Superstructure

Comments: Will be addressed in superstructure replacement project 0058-0336.

Expansion bearings at abutment 1 exhibit laminated rust up to 1/2" thick and up to 1/8" deep section loss.

Date Completed:

Actual Quantity:



Girder G1 expansion bearing at abutment 1. Note the heavy rust and section loss at bearing components.

Form: Maintenance

Carried: MOSHER STREET

Crossed: AMTRAK RAILROAD

Bridge No: 03903

Town: GROTON

Inventory Route: Non-NHS

Status: Open

Assigned To: ATB ATB

Work Item ID: 03903-2018-0001

Date Issued: 03/08/2018

Priority: Priority Repair

Deficiency: Hollow Concrete

Structural Component: Deck

Comments: Will be addressed in superstructure replacement project 0058-0336. Report indicates hollow areas are intact and not in danger of falling at this time.

Hollow areas (intact) over the railroad tracks up to 8SF between floorbeams FB3 and FB4.

Date Completed:

Actual Quantity:



Underside of deck between floorbeams 3 and 4. Note the hollow area.