

**January 23, 2023**  
**REPLACEMENT OF BRIDGE NO. 04409**  
**WOOLSON STREET OVER STEELE BROOK**  
**STATE PROJECT NO. 9153-4409**

**ADDENDUM NO. 3**

**PRE-BID MEETING**

A non-mandatory pre-bid meeting was held at Watertown Town Hall on January 10, 2023 at 10:00 a.m. The meeting minutes are included as a part of this addendum.

**QUESTIONS & ANSWERS**

- Q1. Item No. 0924002 Concrete Driveway Ramp is paid by the CY per the schedule of prices. Can you please verify that the quantity and/or unit is correct for this item?
- A1. *Item No. 0924002 Concrete Driveway Ramp is measured per cubic yard. The quantity has been updated.*
- Q2. Are there any existing plans for rating reports available for this bridge?
- A2. *The bridge is estimated to have been originally constructed in 1929. Plans of the existing bridge are not available. No load rating report was found to be on file with CTDOT. The 2021 Bridge Inspection Report has been provided for reference.*
- Q3. Please clarify how the bridge rail is going to be paid.
- A3. *The bridge rail is to be paid under the item "Metal Bridge Rail (Combination) in accordance with the plans and specifications. The Schedule of Values has been corrected.*
- Q4. CHRO set-aside goals are based on the state funded portion of the project, can that amount be provided so we can figure the correct amount of set-aside?
- A4. *The project is being funded under the Connecticut Department of Transportation State Local Bridge Program which will fund 50% of the construction costs.*
- Q5. Item #0975002A Mobilization and Project Closeout - Is a Field Office or Anti-tracking Pad required under this Item?
- A5. *A field office is to be provided under Item No. 0969060A Construction Field Office, Small. The project does not call for anti-tracking pads.*
- Q6. Where is the specification for the benches? How do they get paid?
- A6. *The benches are not included in the contract. The intent is for the benches to be donated through a Town program.*
- Q7. Plan sheet #18/General Sidewalk and Ramp Note #9 – The Detectable Warning Strip shall be paid under item "Detectable Warning Surface". No such item exists. How do these warning strips get paid?
- Q7. *Detectable Warning Surface is the correct item. The schedule of values has been revised.*

Q8. Plan Sheet #22 - Concrete Distribution Chart for Substructure and Footings doesn't seem to match up with the Item Quantities for that work. Can you check into that?

A8. *The bid is based on the quantities in the schedule of values. The quantities on the bid forms are correct. The table on sheet 22 has been updated, however, this is concrete distribution which will not directly correlate with the items or bid quantities.*

Q9. Is there a DBE, SBE, WBE or MBE set aside Goal for this Project?

*Yes. CHRO language was included in the first addendum.*

The Bid Proposal Form has been revised to reflect these changes.

There will be no change in the number of calendar days due to this Addendum.

The foregoing is hereby made a part of the contract.



**TOWN OF WATERTOWN  
REPLACEMENT OF BRIDGE NO. 04409  
WOOLSON STREET OVER STEELE BROOK  
PRE-BID MEETING  
Notes from Meeting held on: January 10, 2023  
SLR #141.11452.00013**

ATTENDEES	REPRESENTING
Jerry Lukowski	Town of Watertown (Town)
Paul Bunevich	Town of Watertown
Donna Ford	Town of Watertown
Tom Dering	Arborio Corp.
Matt Dayton	Dayton Construction
Ed Hellauer	Guerrera Construction
Luke St. Amour	Hemlock Construction
John McLaughlin	Xenelis Construction
Ryan Giguere	NJR Construction
Shelley Plude, PE	SLR International Corporation (SLR)

#### Pre-Bid Meeting Minutes

On January 10, 2023, a pre-bid meeting was held at the Watertown Town Hall in the Public Works Conference Room beginning at 10:00 a.m. with representatives from the Town of Watertown and SLR. A number of plan holders were also in attendance.

The purpose of this meeting was to give a general overview of the project and to allow contractors an opportunity to ask questions.

Final bids are due on February 1, 2023, at 11:00 a.m. and are to be submitted to the Office of the Town Purchasing Agent, Town Hall, 61 Echo Lake Road, Watertown, Connecticut.

The following is a summary of the meeting:

SLR provided an overview of the proposed project. The replacement of the Woolson Street bridge over Steele Brook will be funded under the Connecticut Department of Transportation (CTDOT) State Local Bridge Program (State Project Number 9153-4409). The existing bridge is to be replaced with a 33'-5.625" by 6'-0" precast concrete rigid frame on concrete pedestal abutments founded on bedrock. The proposed replacement structure will be extended downstream from the existing bridge to facilitate intersection sight lines and to provide space for future connection of a multiuse trail.

- Utility relocations are required for this project and are shown on the plans. A pole relocation plan has been coordinated with the owners of the aerial utilities. The lines over the top of the

bridge will be relocated. Based on the proposed relocations, the anticipated crane location is on the north side of the bridge.

Underground conduit is present south of the bridge. The utility companies have indicated that they may wait until the contractor is on site and has begun excavations to remove the underground lines. Pole CL&P C4894 located on the south side of Merriam Lane will be relocated, however, will still require temporary support when the contractor is excavating for the wingwall.

Eversource Gas has developed plans to temporarily remove the section of gas main over the bridge. Following installation of the precast concrete rigid frame, the gas main will be installed over the top of the new structure. The contractor will be required to coordinate the final installation of the gas main with Eversource.

Water and sewer are also present at the site and will not be relocated. A 36-inch-diameter concrete transmission water main runs through the site. On the Woolson Street approach, the water main is located generally in the eastern shoulder then crosses the roadway, traverses under Steele Brook, then travels north in the western shoulder of Northfield Road. The water main is highly sensitive. The proposed placement of the crane on the north side of the bridge is in part to prevent heavy loads from being stored on top of the main. The existing stone masonry wingwalls are proposed to be reconstructed to avoid potentially impacting the sewer main.

The 8-inch sewer main comes down along the centerline of Northfield Road, turns to the west around the existing bridge, crosses below the streambed, turning back towards the centerline of Woolson Street before existing the roadway to the southeast.

The 8-inch water main comes down Merriam Lane and Northfield Road, connecting at the intersection before turning and crossing Steele Brook below the channel. The water main is located along the western curb line on Woolson Street south of the bridge. Due to the proximity of the water and sewer mains to the northern abutment, temporary support of these utilities will be required.

- Continuous flow is present in the storm drainage system that runs along the eastern side of Northfield Road. The contractor shall expect to encounter flows throughout the project and will be required to handle stormwater while working on the storm drainage improvements in that area.
- Construction of the proposed culvert will require a full bypass of the channel and road closure. The road closure should be scheduled after July 4, 2023, with a limited closure window of 2 weeks. The intent is the perform the majority of the work during the closure and reopen the roadway to traffic, with additional work completed after the roadway is reopened. It is anticipated that the winter shutdown will be utilized to procure materials, submit shop drawings, and coordinate the utility relocations.

- Woolson Street, Northfield Road, and Merriam Lane will be closed to through traffic during construction; however, the contractor is expected to maintain a minimum of one lane through the construction site to accommodate emergency services as shown in the contract documents. On the Detour Plan, Hopkins Road is signed one way (westbound). The driveway at the southwestern corner of the existing bridge may be closed during construction. Pavement of the shared driveway to the southwest is shown to provide an alternative entrance/exit to the property.
- Due to scouring of the existing bridge, the majority of the channel within the bridge has been stabilized with concrete. Given that the underside of the bridge may not be visible upon inspection of the site, SLR wanted to ensure contractors are aware there will be demolition of concrete within the channel as well as removal of the abutments.

### Questions

1. *(Q): Do we know the elevation on the water main?*

**(A): The location is shown based on best available mapping. The elevation of either water main is unknown other than both utilities are below the channel bed where they cross upstream of the bridge.**

2. *(Q): Will the contractor be required to coordinate with the utilities?*

**(A): Yes. While the Town and SLR have coordinated extensively with the utilities and developed relocation plans, the exact timing of the relocation plans is yet to be determined. The contractor should expect to coordinate with the utilities. At a minimum, coordination will be required to complete the gas main relocation as well as temporary support of a utility pole and the water and sewer mains. The relocation of the underground conduit on the southern side of the bridge may also take place after construction has begun.**

Replacement of Bridge No. 04409  
Woolson Street over Steele Brook  
Watertown, Connecticut  
State Project No. 9153-4409  
SLR Project No. 141.11452.00013

Date of Bid Opening: \_\_\_\_\_ Time: \_\_\_\_\_

Note: The bidder shall fill in, under the column "Unit Prices Bid," the unit prices, written in words and in numbers, for which he proposes to perform the various items of work called for, and under the column headed "Amount," the amount of each of the items at the unit prices bid. After the proposal is opened and read, the quantities will be extended and totaled in accordance with the written bid prices and the bid will be verified or corrected.

Item No.	Item Description	Unit	Approximate Quantities	Unit Prices Bid		Amount (Figures)
				Figures	Writing	
0201001	Clearing and Grubbing	LS	1			
0202000	Earth Excavation	CY	1,840			
0202216A	Excavation and Reuse of Existing Channel Bottom Material	CY	50			
0202217A	Supplemental Streambed Material	EST	1	\$ 13,000.00	Thirteen thousand dollars and zero cents	
0202452A	Test Pits	EA	1			
0202529	Cut Bituminous Concrete Pavement	LF	83			
0202574	Reset Monument	EA	1			
0203000	Structure Excavation - Earth (Complete)	CY	1,300			
0203100	Structure Excavation - Rock (Complete)	CY	30			
0204151A	Handling Water	LS	1			
0209001	Formation of Subgrade	SY	1,566			
0212000	Subbase	CY	435			
0213100	Granular Fill	CY	20			
0216000	Pervious Structure Backfill	CY	1,230			
0219001	Sedimentation Control System	LF	930			
0219011A	Sediment Control System at Catch Basin	EA	11			
0286001.10	Rock in Drainage Trench Excavation 0'-10' Deep	CY	4			
0304002	Processed Aggregate Base	CY	286			
0406010-1	Bituminous Concrete, Class 1	TON	460			
0406010-2	Bituminous Concrete, Class 2	TON	460			
0406236	Material for Tack Coat	Gal.	174			
0406303A	Sawing and Sealing Joints	LF	85			
0406999A	Asphalt Adjustment Cost (Estimated Cost)	EST	1	\$ 5,000.00	Five thousand dollars and zero cents	
0503001	Removal of Superstructure	LS	1			
0586001.10	Type 'C' Catch Basin - 0'-10' Deep	EA	4			

Kindly insert here the total amount of your Bid.: \$ \_\_\_\_\_

It is understood that the unit prices shall govern in the case of a discrepancy between the unit prices and this amount.

This bid includes addenda no.:

Replacement of Bridge No. 04409  
Woolson Street over Steele Brook  
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Item No.	Item Description	Unit	Approximate Quantities	Unit Prices Bid		Amount (Figures)
				Figures	Writing	
0586002.10	Type 'C' Catch Basin (4' Sump) - 0'-10' Deep	EA	2			
0586500.10	Manhole - 0'-10' Deep	EA	2			
0586600	Reset Catch Basin	EA	1			
0586650	Reset Manhole	EA	3			
0586790.10	Remove Drainage Structure - 0'-10' Deep	EA	2			
0601062	Footing Concrete	CY	165			
0601064	Abutment and Wall Concrete	CY	188			
0601091A	Simulated Stone Masonry	SY	120			
0601121	Parapet Concrete	LF	73			
0601504	1" Preformed Expansion Joint Filler for Bridges	SF	47			
0601971A	Precast Concrete Three Sided Rigid Frame	LF	72			
0602030	Deformed Steel Bars - Galvanized	LB	35,800			
0606001A	Cement Rubble Masonry	CY	75			
0607001A	Dry Rubble Masonry	CY	25			
0686000.12	12" R.C. Pipe - 0'-10' Deep	LF	53			
0686000.18	18" R.C. Pipe - 0'-10' Deep	LF	12			
0686000.24	24" R.C. Pipe - 0'-10' Deep	LF	69			
0686000.30	30" R.C. Pipe - 0'-10' Deep	LF	55			
0686950.10	Remove Existing Pipe - 0'-10' Deep	LF	80			
0703014A	Rounded Riprap	CY	61			
0707001A	Membrane Waterproofing (Woven Glass Fabric)	SY	300			
0708001	Dampproofing	SY	326			
0716000	Temporary Earth Retaining System	SF	1,100			
0728032A	No. 6 Crushed Stone	CY	41			
0751821	6" Structure Underdrain	LF	146			

Kindly insert here the total amount of your Bid.: \$ \_\_\_\_\_

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Woolson Street over Steele Brook  
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State Project No. 9153-4409  
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Date of Bid Opening: \_\_\_\_\_ Time: \_\_\_\_\_

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Item No.	Item Description	Unit	Approximate Quantities	Unit Prices Bid		Amount (Figures)
				Figures	Writing	
0815001	Bituminous Concrete Lip Curbing	LF	493			
0819002A	Penetrating Sealer Protective Compound	SY	53			
0822100.01A	Temporary Traffic Barrier	LF	250			
0904041A	Metal Bridge Rail (Combination)	LF	74			
0910031	Thrie Beam Attachment	EA	2			
0910300	Metal Beam Rail (R-B MASH)	LF	135			
0911924	R-B End Anchorage - Type II	EA	1			
0912503	Remove Metal Beam Rail	LF	327			
0921001	Concrete Sidewalk	SF	800			
0921005	Concrete Sidewalk Ramp	SF	350			
0921009A	Concrete Sidewalk with Monolithic Curb	SF	1,415			
0921048	Detectable Warning Surface	SF	43			
0922501	Bituminous Concrete Driveway	SY	180			
0924002	Concrete Driveway Ramp	CY	6			
0944000	Furnishing and Placing Topsoil	SY	940			
0944010	Furnishing and Placing Topsoil - 12in Deep	SY	73			
0945301	Mulching	SY	73			
0949028	Echinacea purpurea "Magnus" 1 Gal. Container	EA	27			
0949060	Fothergilla Gardenii 3 Gal. Container	EA	11			
0949280	Anemone x "Curtain Call Deep Rose" 1 Gal. Container	EA	41			
0949281	Dennstaedtia punctilobula 1 Gal. Container	EA	24			
0949282	Schizachyrium scoparium 1 Gal. Container	EA	47			
0949770	Acer Rubrum "Autumn Glory" 3in - 3.5in Cal.	EA	2			
0950005	Turf Establishment	SY	600			
0950013	Erosion Control Matting	SY	160			

Kindly insert here the total amount of your Bid.: \$ \_\_\_\_\_

It is understood that the unit prices shall govern in the case of a discrepancy between the unit prices and this amount.

This bid includes addenda no.:

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Date of Bid Opening: \_\_\_\_\_ Time: \_\_\_\_\_

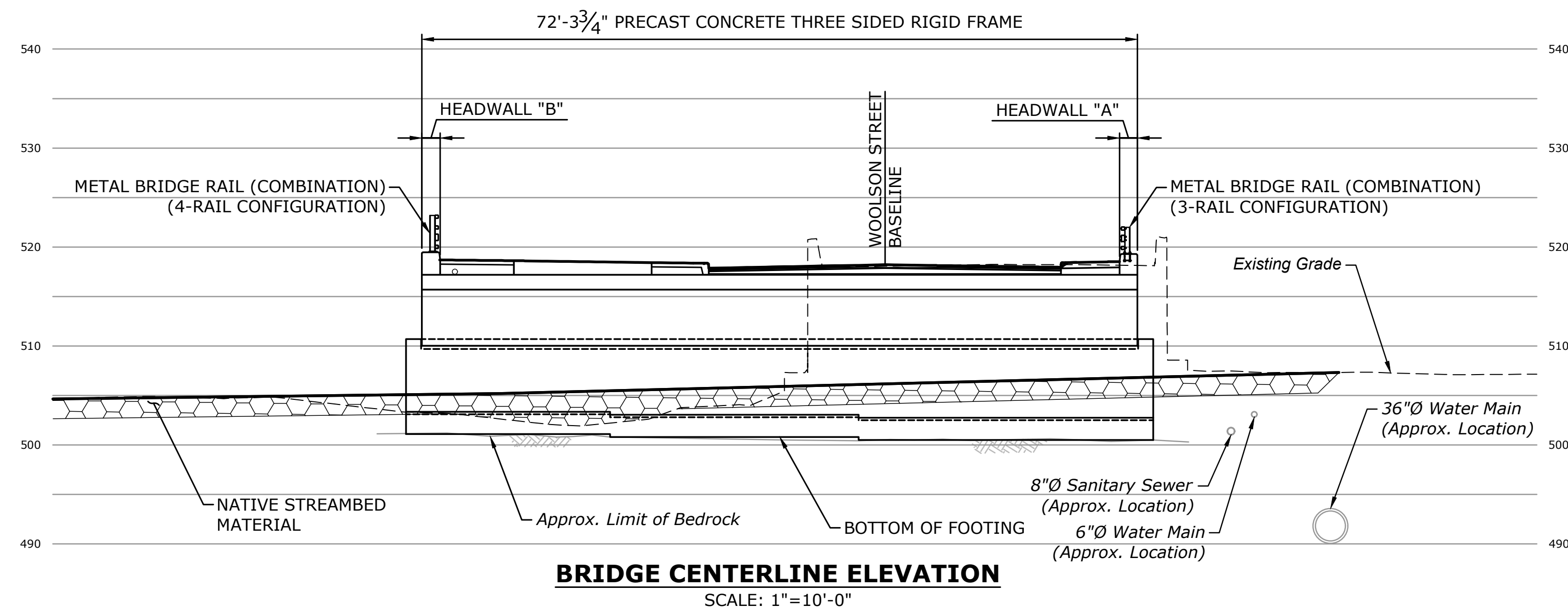
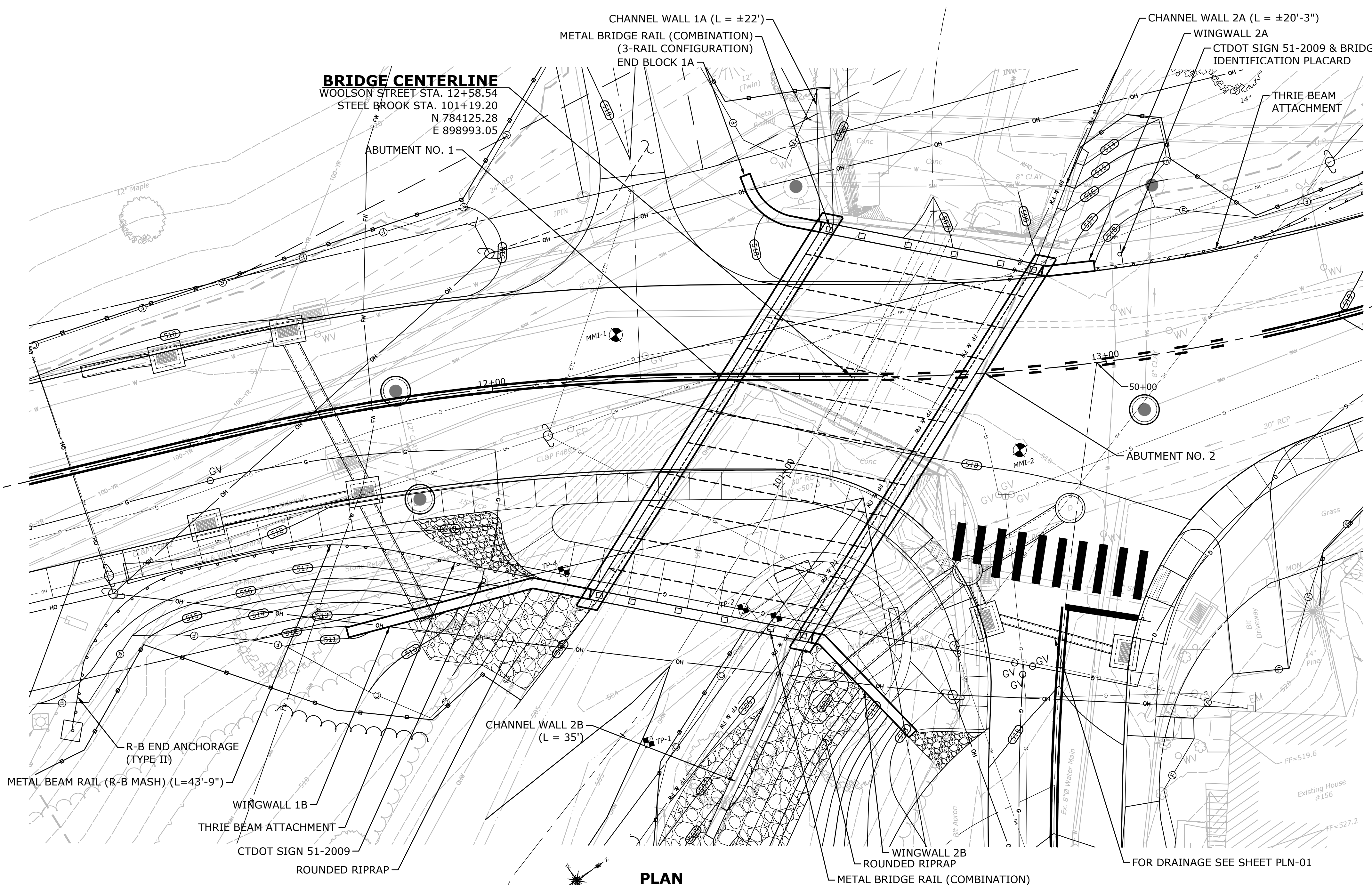
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Item No.	Item Description	Unit	Approximate Quantities	Unit Prices Bid		Amount (Figures)
				Figures	Writing	
0950040A	Conservation Seeding for Slopes	SY	340			
0969060A	Construction Field Office, Small	MO	10			
0971001A	Maintenance and Protection of Traffic	LS	1			
0974001	Removal of Existing Masonry	CY	660			
0975004	Mobilization and Project Closeout	LS	1			
0976002	Barricade Warning Lights - High Intensity	DAYS	5,273			
0979003	Construction Barricade Type III	EA	11			
0980020	Construction Surveying	LS	1			
1208931	Sign Face - Sheet Aluminum (Type IX Retroreflective Sheeting)	SF	10			
1210102	4" Yellow Epoxy Resin Pavement Markings	LF	785			
1210105	Epoxy Resin Pavement Markings, Symbols and Legends	SF	215			
1210106	12" White Epoxy Resin Pavement Markings	LF	15			
1220027	Construction Signs	SF	504			

Kindly insert here the total amount of your Bid.: \$ \_\_\_\_\_

It is understood that the unit prices shall govern in the case of a discrepancy between the unit prices and this amount.

This bid includes addenda no.:



THE INFORMATION, INCLUDING ESTIMATED QUANTITIES OF WORK, SHOWN ON THESE SHEETS IS BASED ON LIMITED INVESTIGATION BY THE STATE AND IS IN NO WAY WARRANTED TO INDICATE THE TRUE CONDITION OF ACTUAL QUANTITIES OR DISTRIBUTION OF QUANTITIES OF WORK WHICH WILL BE REQUIRED.

<div style="text-align: center;"><b><u>NOTICE TO BRIDGE INSPECTORS</u></b></div>	
<p>The ConnDOT Bridge Safety procedures require this bridge to be inspected for, but not limited to, all appropriate components indicated in the governing manual for bridge inspection. Attention must be given to the following special components and details (the listing for components for specific attention shall not be construed to reduce the importance of inspection of any other component of the structure). The frequency of inspection of this structure shall be in accordance with the governing manuals for bridge inspection, unless otherwise directed by ConnDOT's Manager or Bridge Safety and Evaluation.</p>	
<b><u>COMPONENT OR DETAIL</u></b>	<b><u>BRIDGE SKEET REFERENCE</u></b>
NONE	

## GENERAL NOTES

1. SPECIFICATIONS: CONNECTICUT DEPARTMENT OF TRANSPORTATION FORM 818 (2020), SUPPLEMENTAL SPECIFICATIONS DATED JULY 2021, AND SPECIAL PROVISIONS.
2. DESIGN SPECIFICATIONS: AASHTO LRFD DESIGN SPECIFICATIONS, 8<sup>TH</sup> EDITION, 2017, AS SUPPLEMENTED BY THE CONNECTICUT DEPARTMENT OF TRANSPORTATION BRIDGE DESIGN MANUAL (2003) WITH INTERIM REVISIONS UP TO AND INCLUDING 2011.

CONCRETE:

CLASS PCC 03340	f'c = 3,000 PSI
CLASS PCC 04462	f'c = 4,000 PSI
PRECAST CONCRETE PCC 08061	f'c = 8,000 PSI

THE CONCRETE STRENGTH USED IN DESIGN ( $f'_c$ ) OF THE CONCRETE COMPONENTS IS NOTED ABOVE. THE COMPRESSIVE STRENGTH OF THE CONCRETE IN THE CONSTRUCTED COMPONENTS SHALL CONFORM TO THE REQUIREMENTS OF SECTION 6.01 - CONCRETE FOR STRUCTURES AND M.03 - PORTLAND CEMENT CONCRETE.

REINFORCEMENT:  
ASTM A615 GRADE 60  $f_y = 60,000$  PSI

4. LIVE LOAD: HL-93, LEGAL AND PERMIT VEHICLES
5. FUTURE PAVING ALLOWANCE: NONE
6. EXISTING DIMENSIONS: DIMENSIONS AND ELEVATIONS OF THE EXISTING STRUCTURE SHOWN ON THESE PLANS ARE FOR GENERAL REFERENCE ONLY AND ARE NOT GUARANTEED. THE CONTRACTOR SHALL TAKE ALL FIELD MEASUREMENTS NECESSARY TO ASSURE PROPER FIT OF THE FINISH WORK AND SHALL ASSUME FULL RESPONSIBILITY FOR THEIR ACCURACY. WHEN SHOP DRAWINGS BASED ON FIELD MEASUREMENTS ARE SUBMITTED FOR APPROVAL, THE FIELD MEASUREMENTS SHALL ALSO BE SUBMITTED FOR REFERENCE BY THE REVIEWER.
7. SUPERSTRUCTURE REMOVAL: BEFORE INITIATING CONSTRUCTION, CONTRACTOR SHALL SUBMIT A PLAN FOR APPROVAL DEFINING METHOD FOR CONSTRUCTION AND PROTECTION OF DEBRIS FROM FALLING INTO THE STREAMBED DURING REMOVAL OF THE EXISTING BRIDGE SUPERSTRUCTURE. COST TO BE INCLUDED IN THE COST OF "REMOVAL OF SUPERSTRUCTURE".
8. SUBSTRUCTURE REMOVAL: EXISTING SUBSTRUCTURE WITHIN RIVERBED SHALL BE REMOVED TO ONE FOOT BELOW RIVER BED AND/OR TOP OF BEDROCK, WHICHEVER OCCURS FIRST. ALSO BEFORE INITIATING CONSTRUCTION, CONTRACTOR SHALL SUBMIT A PLAN FOR APPROVAL DEFINING METHOD FOR CONSTRUCTION AND PROTECTION OF DEBRIS FROM FALLING INTO THE STREAMBED DURING REMOVAL OF THE EXISTING BRIDGE SUBSTRUCTURE. ALL OF WHICH IS TO BE INCLUDED IN THE COST OF "REMOVAL OF EXISTING MASONRY".

## CONCRETE NOTES

1. REMAIN-IN-PLACE FORMS: THE USE OF REMAIN-IN-PLACE FORMS ON THIS STRUCTURE IS NOT ALLOWED.
2. THE FOLLOWING PAY ITEMS AND CONCRETE CLASSES ARE REQUIRED FOR CAST-IN-PLACE BRIDGE COMPONENTS:

ITEM	BRIDGE COMPONENTS	PCC CLASS
FOOTING CONCRETE	ABUTMENT, WINGWALL, AND END BLOCK FOOTINGS	PCC03340
ABUTMENT AND WALL CONCRETE	ABUTMENT, WINGWALL, AND END BLOCK STEMS	PCC04462
PARAPET CONCRETE	HEADWALLS	PCC04462

3. **EXPOSED EDGES:** EXPOSED EDGES OF CONCRETE SHALL BE BEVELED 1"x1" UNLESS DIMENSIONED OTHERWISE.
4. **CONCRETE COVER:** ALL REINFORCEMENT SHALL HAVE TWO INCHES COVER UNLESS DIMENSIONED OTHERWISE.
5. **REINFORCEMENT:** ALL REINFORCEMENT SHALL BE GALVANIZED AFTER FABRICATION UNLESS NOTED OTHERWISE. ALL REINFORCEMENT SHALL CONFORM TO THE REQUIREMENTS OF ASTM A767, CLASS 1, INCLUDING SUPPLEMENTAL REQUIREMENTS. THE COST OF FURNISHING AND PLACING THIS REINFORCEMENT SHALL BE INCLUDED IN THE ITEM "DEFORMED STEEL BARS - GALVANIZED."
6. **PREFORMED EXPANSION JOINT FILLER:** THE COST OF FURNISHING AND INSTALLING PREFORMED EXPANSION JOINT FILLER IS PAID FOR AS "½" PREFORMED EXPANSION JOINT FILLER FOR BRIDGES."
7. **CONSTRUCTION JOINTS:** CONSTRUCTION JOINTS, OTHER THAN THOSE SHOWN ON THE PLANS, WILL NOT BE PERMITTED WITHOUT THE PRIOR APPROVAL OF THE ENGINEER.
8. **PRECAST CONCRETE THREE SIDED RIGID FRAME:** SEE SPECIAL PROVISION.

<b>CONCRETE DISTRIBUTION</b>		
<b><u>DESCRIPTION</u></b>	<b><u>UNIT</u></b>	<b><u>QTY</u></b>
SUPERSTRUCTURE	CY	75
SUBSTRUCTURE	CY	122
FOOTINGS	CY	165
<b><u>TOTAL</u></b>	<b><u>CY</u></b>	<b><u>362</u></b>

HYDRAULIC DATA	
DRAINAGE AREA	4.5 SQ. MI.
DESIGN FREQUENCY	100 YR
DESIGN DISCHARGE	2,060 CFS
UPSTREAM DESIGN WATER SURFACE EL.	515.58 FT
DOWNSTREAM DESIGN WATER SURFACE EL.	510.44 FT
OVERTOPPING FREQUENCY	> 500 YR
OVERTOPPING DISCHARGE	3,600 CFS
WORST CASE SCOUR SUB-STRUCTURE	WEST ABUTMENT
MAXIMUM SCOUR ELEVATION	502.6 FT*
AVERAGE DAILY FLOW	8.0 CFS
AVERAGE SPRING FLOW	16.0 CFS

\* APPROXIMATE ELEVATION OF TOP OF BEDROCK

[illegible]

SEP	SEP	AAC
DESIGNED	DRAWN	CHECKED
AS SHOWN		
SCALE		
DECEMBER 20, 2022		
DATE		
141.11452.00013		
PROJECT NO.		
STR-01		
DRAWING NO.		
22		
SHEET NO		

## BRIDGE NO.04409

80490 - WATERTOWN  
WOOLSON STREET  
over  
STEELE BROOK

Routine Inspection

8/09/2021

Inspected by: Team 1



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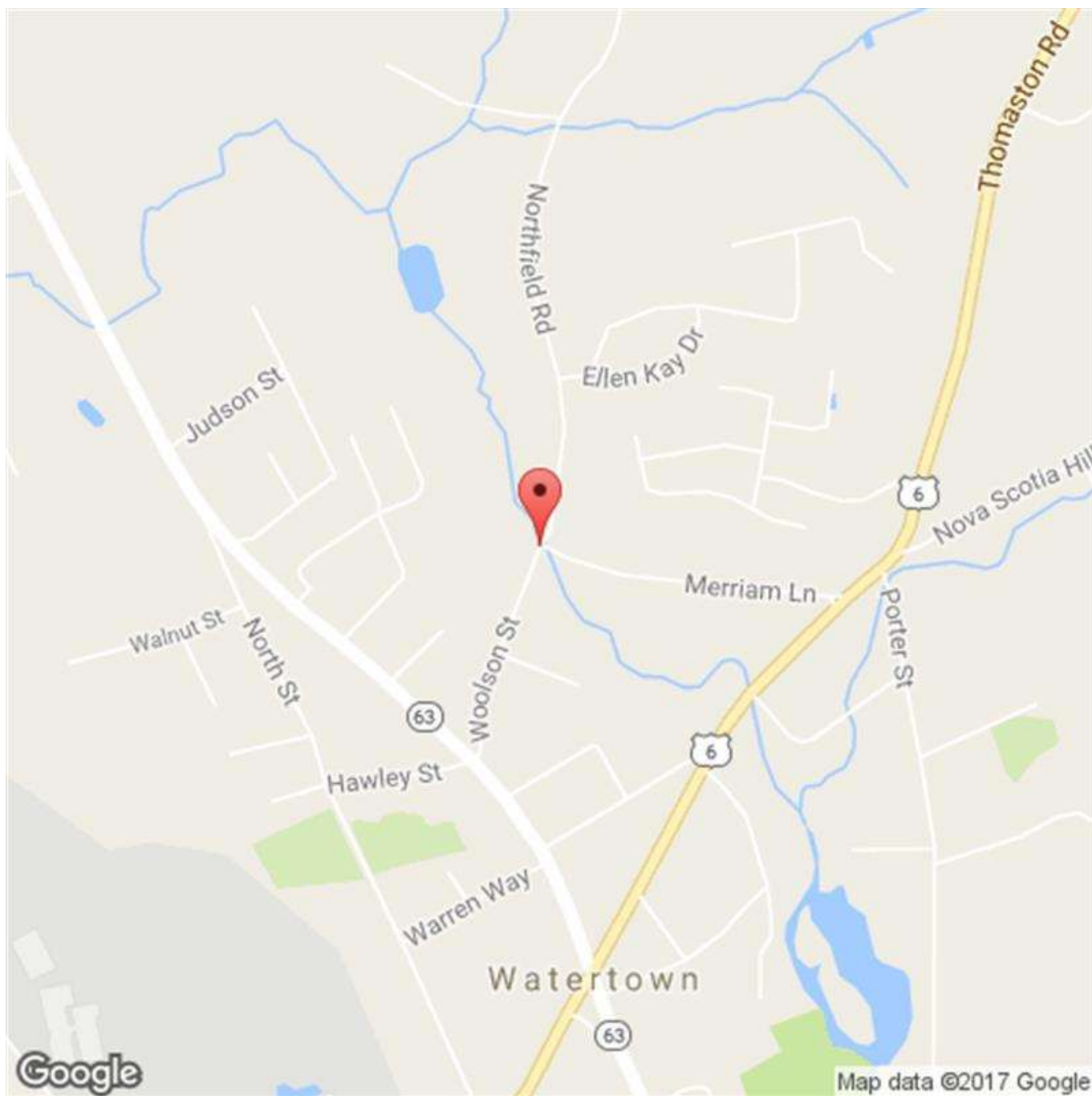
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Form: Location  
Inspection type: Routine  
Inspection Date: 8/09/2021  
Inspected by: Team 1

:Bridge No 04409

Town: WATERTOWN  
Carried: WOOLSON STREET  
Crossed: STEELE BROOK  
Inventory Route: Non-NHS



Location Map # 1

Form: BRI-19, Rev. 2/15  
Inspection type: Routine  
Inspection Date: 8/09/2021  
Inspected by: Team 1

:Bridge No 04409

Town: WATERTOWN  
Carried: WOOLSON STREET  
Crossed: STEELE BROOK  
Inventory Route: Non-NHS

## 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"/>	<input type="text"/>	<input type="text"/>
Underwater	<input type="text"/>	<input type="text"/>	<input type="text"/>
Special	<input type="text"/>	<input type="text"/>	<input type="text"/>

### 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  
Inspection type: Routine  
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Inspected by: Team 1

:Bridge No 04409

Town: WATERTOWN  
Carried: WOOLSON STREET  
Crossed: STEELE BROOK  
Inventory Route: Non-NHS

(33) Bridge Median 0 - No median

Deck Area 1272 sq. ft.

(34) Skew Angle 09 deg.

(35) Structure Flared 1 - Yes, flared

(10) Inv. Rte. Min. Vert. Clearance 99 ft. 99 in.

(47) Inv. Rte. Total Horiz. Clr. 29 ft. 0 in.

Log Inv. Rte. Total Horiz. Clr. 29 ft. 0 in.

RLog Inv. Rte. Total Horiz. Clr. 0 ft. 0 in.

(53) Min. Vert. Clearance Over Bridge 99 ft. 99 in.

(54) Log-Min. Vert. Underclearance N ref. 0 ft. 0 in.

(55) Min. Lat Underclearance on Right N ref. 0 ft. 0 in.

(56) Min. Lat Underclearance on Left 0 ft. 0 in.

#### CONDITION

(58) Deck 5

(59) Superstructure 4

(60) Substructure 4

(61) Channel & Channel Protections 5

(62) Culverts N

(36) Traffic Safety Features

A) Bridge Railings 0

B) Transitions 0

C) Approach Guardrail 0

D) Approach Guardrail Ends 0

#### WATERWAY

Drainage Basin Waterway 6912 - Steele Brook

(38) Navigation Control 0 - No navigation control on waterway (bridge permit not required)

(39) Navigation Vertical Clearance 0 ft.

(40) Navigation Horiz. Clr. 0 ft.

(111) Pier/Abutment Navigation

(116) Vert-Lift Brg Nav Min 0 ft. 0 in.

#### AGE AND SERVICE

Year Built 1929 (106) Year Reconstructed

(42) Type of Service

A) On 5 - Highway-pedestrian

B) Under 5 - Waterway

(28) Number of Lanes

A) On 02 B) Under 00

(29) Average Daily Traffic 1000

Is Above Half ADT? No

(109) Percent Truck 2 %

(30) Years of ADT 2019

(19) Bypass, Detour Length 1 Miles

#### APPRAISALS

(67) Structural Evaluation 4

(68) Deck Geometry 5

(69) Underclearances, Vert. & Horiz. N

(71) Waterway Adequacy 6

(72) Approach Roadway Alignment 4

(113) Scour Critical 5

#### COMMENTS

(29) ADT from DOT Traffic Monitoring Station WATT-187

#### CLASSIFICATION

(112) NBIS Bridge Length Yes

(104) Highway System 0 - Structure/Route is NOT on NHS

(26) Functional Class 17 - Urban - Collector

(100) Defense Highway 0 - Not a STRAHNET route

(101) Parallel Structure N - No parallel structure

(102) Direction of Traffic 2 - 2-way traffic

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Inventory Route: Non-NHS

(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  ft.  in.  
Posted Vert. Underclearance  ft.  in.  
Posted Speed Limit on Bridge  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

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Inspected by: Team 1

:Bridge No 04409

Town: WATERTOWN  
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Crossed: STEELE BROOK  
Inventory Route: Non-NHS

---

INSPECTOR'S SIGNATURES:

1) \_\_\_\_\_ Date: 08/16/2021

*Andrew R. Ferrara*

P.E. SIGNATURE:

Date:

2) \_\_\_\_\_ Date: 08/16/2021

*Phil A. White*

P.E. #

Reviewed By:

Date: 09/28/2021

3) \_\_\_\_\_ Date:

*Ned T. Statchen*  
Ned T. Statchen

4) \_\_\_\_\_ Date:

Form: BRI-18, Rev. 1/14  
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Inspection Date: 8/09/2021  
Inspected by: Team 1

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Town: WATERTOWN  
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Crossed: STEELE BROOK  
Inventory Route: Non-NHS

## FIELD INSPECTION REPORT

Location: 0.2 MILE EAST OF ROUTE 63  
Main Material: 3 - Steel  
Main Design: 02 - Stringer/Multi-beam or

Year Built: 1929  
Year Rebuilt:

Snooper Required: ☐  
Snooper Used: ☐

### Inspectors:

Lead Inspector:	Andrew Ferrara
Inspector:	Task:
Area,01	BSE - Inspector
Ferrara,Andrew	BSE - Inspector
Weir,Kirk	BSE - Inspector

### Visits:

Visit Date:	Temp:	Start Time:	End Time:
08/09/2021	68	07:20 AM	08:55 AM

### 58. DECK:

Inspected west to east, north is the inlet.

Overall Rating: 5

### Rating

Overlay: 3 Bituminous concrete wearing surface has no known membrane and exhibits:  
Numerous bituminous patches, longitudinal and transverse cracks up to 1-1/2" wide at random locations.

Random potholes up to 1 sf x 1" deep.

The bituminous is delaminated throughout.

Deck - Str. Condition: 5 Deck Underside exhibits:  
Transverse hairline cracks with and without efflorescence, light moss growth and light to heavy scaling up to full bay width x full bay length at random locations.

Hollow areas with potential spalls up to 6' long x 2' wide and spalls up to 40" long x 36" wide x up to 3" deep with exposed rusted wire mesh at random locations.

Several areas of active leakage noted during this inspection in both spans.

Curbs: N

Median: N

Sidewalks: 5 Sidewalk at south side only, covered mostly with bituminous.

The sidewalk is partially exposed at the southeast end and at short section along the parapet base line.

Parapet: 5 Parapets exhibit:  
Random full height isolated vertical cracks with and without efflorescence and random small surface spalls up to 6" diameter x 1" deep.

North fascia parapet inside face has moderate scaling up to 8' long x full height and hollow areas up to 5' long x full width near pier in Span 2.

South fascia parapet at the east end is missing concrete cap for 3' long.

Railing: N

Paint: N

Form: BRI-18, Rev. 1/14  
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Inspection Date: 8/09/2021  
Inspected by: Team 1

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Town: WATERTOWN  
Carried: WOOLSON STREET  
Crossed: STEELE BROOK  
Inventory Route: Non-NHS

Fence: N

Drains: N

Lighting Standard: N

Overall Utility Condition Rating 7 - Good

Utility Type/Size

1 | Gas

4" gas line located in Span 1, Bay 7 and continues into Span 2, Bay 8.

Construction Joints: N

Expansion Joint: N Paved over joints.

Haunches Present over travelway? NO

#### APPROACH CONDITION:

Overall Rating: 4

##### Rating

Approach Slab: N

Relief Joints: N

Approach Guide Rail: 5

MBR exhibits:

Random minor scrapes, dents, few tipped posts and minor rust at all corners.

Northwest and southeast have newer sections of metal beam rails.

Southwest has 2 cable guide rail beyond metal beam rail with loose cables and one broken post. .

Approach Pavement: 4

Approach bituminous exhibits:

East approach pavement has numerous cracks up to 1-1/4" wide, bituminous patches and random small pothole up to 1/2" deep.

West approach has "D" cracking adjacent to the deck end with minor spalling.

There is a 48" long x 15" wide x 28" deep void at the northeast corner adjacent to A-2 and WW 2A. The void has encroached into the roadway 10" in front of the MBR and has undermined the bituminous 6" creating a hazard, a traffic cone was left in the void.

Approach Embankment: 4

On 09/02/2021 Senior Engineer N. Statchen did a field check, he states the town made adequate repairs to the condition mentioned below. See photos 13 and 14. {09/13/21 A Ferrara}

The Northeast embankment behind wingwall 2A has a 6' long x 2' wide x 2' deep area of heavy erosion {covered by heavy vegetation growth} causing erosion along the edge of bituminous up to 48" long x 15" wide x 28" deep. Additionally, this condition is affecting the top and vertical face of the wingwall adjacent to the structure. There is a 4' long x up to 28" high x 20" deep area of missing wing cap and loose and shifting stones on the vertical face with voids.

##### Traffic Safety Features

Bridge Railings: 0

Transitions: 0

Approach Guardrails: 0

Approach Guardrail Ends: 0

#### 59. SUPERSTRUCTURE:

Overall Rating: 4

##### Rating

Bearing Devices: N

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Inventory Route: Non-NHS

Stringers: N

Girders: 5

There are 10 {span # 1} and 11 {span # 2} concrete encased I-beams which exhibit:  
Concrete encasements are missing at numerous locations exposing the bottom flanges and isolated webs of the girders.

Exposed bottom flanges of the I-beams have laminar rust (negligible section loss) at random locations.

Concrete encasements have light moss growth, numerous longitudinal cracks, horizontal cracks open up to 1/2" wide, some with efflorescence at random locations.

Moderate to heavy scaling up to full height and full length (span 2, beam 3 south face) at random locations.

Hollow areas up to full length x full width (span 1, beam 4 bottom flange).

There are encasement spalls up to full-length x full width x 2" deep (span 2, beam 8 bottom flange).

Floor Beams: N

Trusses - General: N

Trusses - Portals: N

Trusses - Bracing: N

Paint: N

Rust: 4

See Above.

Machinery Movable Span: N

Rivets & Bolts: N

Welds - Cracks: N

Timber Decay: N

Concrete Cracking: 4

See Above.

Collision Damage: 8

Member Alignment: N

Deflection Under Load: N

Vibration Under Load: N

Stand Pipes: N

Catwalks: N

Movable Inspection System: N

Barrel Ladders: N

Are Barrel Ladders OSHA Compliant? NA

## 60. SUBSTRUCTURE:

Overall Rating: 4

### Rating

Abutments - Stem: 4

The stone masonry abutments exhibits:  
Abutments have moderate moss growth and light efflorescence.

Stone masonry has missing joint mortar and cracks in the mortar at random locations.

Abutment # 1 has deteriorated/missing cement bags along the base of the stem causing a void up to 18' long x 28" high x up to 2' deep. There is a 10' long x 2' high section of missing concrete filled bags at the

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 Inventory Route: Non-NHS

		inlet end exposing the base stone, base stones exhibit random voids and shifting stones.
		Abutment # 2 on the north end has an area at the base of displaced stones 6' long x 21" high x up to 44" deep with and adjacent 30 sf area of loose and shifting stones with voids up to 21" deep.
Abutments - Backwall:	6	Concrete end diaphragms exhibit: Moderate to heavy scaling with light efflorescence and random horizontal cracks with and without efflorescence.  There are edge spalls around the utility in bay 7 of span 1.
Abutments - Footings:	4	See "Abutment-Stem" item above.
Abutments - Settlement:	4	See "Abutments-Wingwalls" item below.
Abutments - Wingwalls:	3	Masonry wingwalls exhibit: Wingwalls have light moss growth and loose/missing joint mortars.  There are voids in the masonry up to 2' long x 8" high x 28" deep.  Wingwall 1B is missing stones with voids up to 13" high x 15" wide x 20" deep.  Wingwalls 1B & 2A has heavy vegetation and vine growth.  Wingwall 2B has a section of cap missing 48" long x 15" wide x 28" deep, below this area the vertical face has ± 100 sf of loose and shifting stones.
Piers/Bents - Caps:	5	Concrete pier exhibits: The pier has moderate moss growth and heavy efflorescence with rust stains from previous leakages. There is moderate graffiti on west face of pier.  Areas of medium to heavy scale up to 26" high along base.  The base step out portions have up to 36" long x 9" high x up to 7" deep severe scaling and voids up to 10" long x 8" high x 7" deep.  Pier Nose has heavy scaling up to 36" long x 16" high x 3" deep and up to 60" long x 9" high x up to 9" deep at the step out base.  Random diaphragms have horizontal cracks with efflorescence and a 10" long x 3" high x 1.5" deep spall in bay 7, span 2.
Piers/Bents - Pile Bent:	N	
Piers/Bents - Columns:	N	
Piers/Bents - Footings:	6	Pier Scour walls/footings: Footing shows light to medium scale thru-out with pockets of heavy scale.  Isolated vertical crack in vertical face of footing extending into top of footing open up to 3/4" +/- under bay 5 in span 2, no change.
Piers/Bents - Settlement:	7	See above.
Erosion - Scour:	4	Span 2 concrete invert has collapsed at the inlet end causing abutment 2 stones to displace creating a void up to 44" deep.  See "Abutment Stem" item above. See "Channel Scour" item below.
Concrete Crack - Spall:	5	See above items.
Steel Corrosion:	5	Steel angle at inlet of pier nose shows pitting up to 8" high with section loss.
Paint:	N	
Timber Decay:	N	

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Crossed: STEELE BROOK  
Inventory Route: Non-NHS

Collision Damage: 8

Debris: 8

#### 61. CHANNEL AND CHANNEL PROTECTION:

Overall Rating: 5

##### Rating

Channel - Scour: 5 Scour hole at the inlet end of Span 2, up to 10' long x 15' wide x 24" deep and undermining the invert up to 30" deep at inlet end, note there is ledge at this location.

Span 1 downstream channel has a scour hole 10' long x 8' wide x up to 42" deep. Random areas around the scour hole at Span 1 outlet appears to have partially filled with silt and sand.

Span 1 has a concrete invert and Span 2 a partial concrete floor and ledge along abutment 2.

Span 2 invert at the outlet has undermining up to 12" deep.

Embankment - Erosion: 6 Some erosion with roots exposed, mostly downstream and southeast embankment has undermining up to 2' deep near outlet.

Debris: 6 There is a concrete apron at the Northwest corner with a 10" steel pipe in the apron.

Light encroachment at the inlet end.

Vegetation: 6 Channel is well vegetated with tree overhanging the channel both upstream and downstream.

Channel Change: 5 Channel flow enters along northwest due to heavy encroachment at northeast and the stream flow is divided at the pier.

Span 1 has a concrete invert that extends upstream and Span 2 has a partial concrete invert and ledge outcroppings.

Confirmed by adjacent land owner; the structure was overtopped in August of 1994.

See "Substructure Erosion /Scour".

Fender - System: N

Spur Dikes and Jetties: N

Rip Rap: 7 Large stones and boulders along the downstream embankments.

#### 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

Footings: N

LOAD POSTING:

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Inventory Route: Non-NHS

#### 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:

Ft

In

Structure spans over the water.

Posted Clearance Under Bridge:

Ft

In

Posted Clearance On Bridge:

Ft

In

Advanced Warning:

Warning At Bridge:

Legibility:

Visibility:

#### NOTES / COMMENTS:

Character of Traffic: Moderate volume with mixed vehicle weights.

#### Additional Notes:

Bridge ID was stenciled at the west end of the left fascia parapet during inspection, faded.

Bridge is logged from west to east with beam 1 on north side and flow from north to south.

Field Senior Ned Statchen inspected bridge on 9/2/2021 and found repair by Town was done at the NE corner.

#### Additional Comments:

Bridge is in Local Bridge Program - SLBP #9153 - 4409; ADV = 2/1/2020 [ There is no update available on the CPD tab although there are notes that say otherwise - NTS 9/27/2021 ]

There are no components that require an In-depth inspection. - NTS

National Bridge Elements  
 Inspection type: Routine  
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 Inspected by: Team 1

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 Crossed: STEELE BROOK  
 Inventory Route: Non-NHS

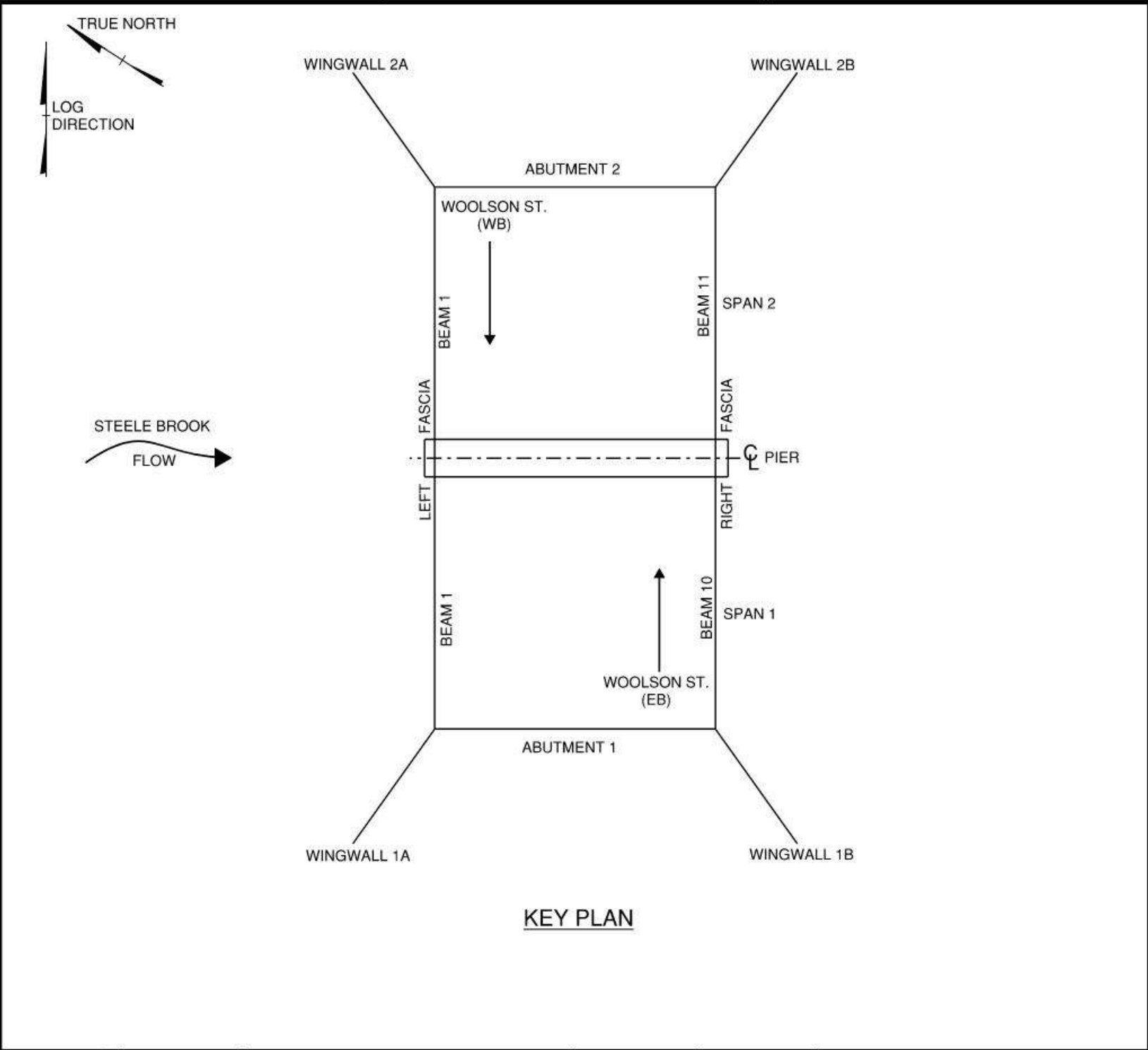
	Environment	Total Quantity	Units	Condition State 1	Condition State 2	Condition State 3	Condition State 4
12 - Reinforced Concrete Deck	Mod.	1272	sq. ft.	1148	41	83	0
1080 - Delamination/Spall/Patched Area		57		0	3	54	0
1090 - Exposed Rebar		13		0	3	10	0
1120 - Efflorescence/Rust Staining		5		0	5	0	0
1190 - Abrasion/Wear (PSC/RC)		49		0	30	19	0
510 - Wearing Surfaces		1272	sq. ft.	0	0	0	1272
3230 - Effectiveness (Wearing Surface)		1272		0	0	0	1272
107 - Steel Open Girder/Beam	Mod.	295	ft.	230	47	18	0
1000 - Corrosion		65		0	47	18	0
210 - Reinforced Concrete Pier Wall	Mod.	33	ft.	0	0	33	0
1190 - Abrasion/Wear (PSC/RC)		33		0	0	33	0
217 - Masonry Abutment	Mod.	63	ft.	4	0	59	0
1610 - Mortar Breakdown (Masonry)		15		0	0	15	0
1640 - Masonry Displacement		42		0	0	42	0
6000 - Scour		2		0	0	2	0
331 - Reinforced Concrete Bridge Railing	Mod.	66	ft.	28	0	38	0
1080 - Delamination/Spall/Patched Area		12		0	0	12	0
1120 - Efflorescence/Rust Staining		9		0	0	9	0
1130 - Cracking (RC and Other)		17		0	0	17	0

Sketches  
Inspection type: Routine  
Inspection Date: 8/09/2021  
Inspected by: Team 1

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Town: WATERTOWN  
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Crossed: STEELE BROOK  
Inventory Route: Non-NHS

CREW: PAJ, PKU	DATE: 06/02/2017	BRIDGE NO.: 04409
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KEY PLAN

REVISION	DATE:	CREW:	REVISION	DATE:	CREW:
REVISION	DATE:	CREW:	REVISION	DATE:	CREW:

# Sketches

Inspection type: Routine

Inspection Date: 8/09/2021

Inspected by: Team 1

:Bridge No 04409

Town: WATERTOWN

Carried: WOOLSON STREET

Crossed: STEELE BROOK

Inventory Route: Non-NHS

CREW: PAJ, PKU	DATE: 06/02/2017	BRIDGE NO.: 04409
----------------	------------------	-------------------

TOP OF DECK

**GENERAL NOTES:**

- OVERLAY HAS NUMEROUS BITUMINOUS PATCHES, LONGITUDINAL AND TRANSVERSE CRACKS UP TO 1-1/2" WIDE.
- PARAPETS HAVE RANDOM VERTICAL CRACKS UP TO FULL HEIGHT, SOME WITH EFFLORESCENCE AND SMALL SURFACE SPALLS.
- APPROACHMENT METAL BEAM GUIDE RAIL AT ALL CORNERS HAVE MINOR SCRAPES, DENTS, TIPPED POSTS AND MINOR RUST.
- EAST APPROACH PAVEMENT IS CRACKED UP TO 1-1/4" WIDE, BITUMINOUS PATCHES AND RANDOM POTHOLES UP TO 1" DEEP.

REVISION	DATE: 06/26/2019	CREW: Team 1	REVISION	DATE:	CREW:
REVISION	DATE: 08/09/21	CREW: Team 1	REVISION	DATE:	CREW:

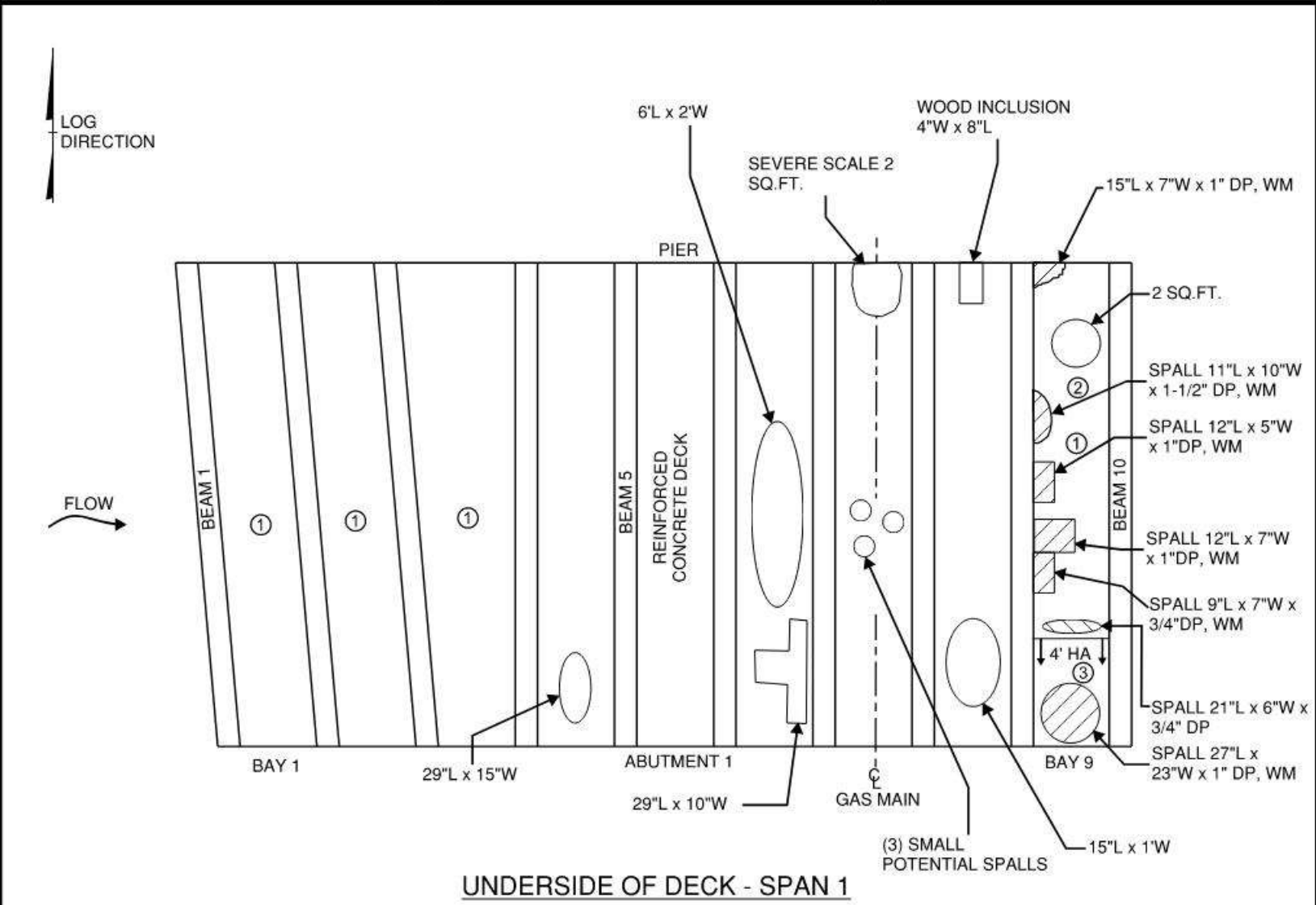
Sketches

Inspection type: Routine  
Inspection Date: 8/09/2021  
Inspected by: Team 1

:Bridge No 04409

Town: WATERTOWN  
Carried: WOOLSON STREET  
Crossed: STEELE BROOK  
Inventory Route: Non-NHS

CREW: PAJ, PKU	DATE: 06/02/2017	BRIDGE NO.: 04409
----------------	------------------	-------------------



**GENERAL NOTES:**  
- UNDERSIDE OF DECK HAS HAIRLINE CRACKS SOME WITH EFFLO, RUST STAINS AND MOD TO HVY SCALING  
- SEVERAL HOLLOW AREAS AND SPALLS EXPOSING THE WIRE MESH AT RANDOM LOCATIONS

- LEGEND:
- HOLLOW AREA
  - SHALLOW REBAR
  - SPALL AREA
  - SPALL AREA WITH EXPOSED REBAR
  - MAPCRACKS
  - HAIRLINE CRACKS
  - HONEYCOMB AREA
  - SCALE AREA
  - EFFLORESCENCE PRESENT
  - ① LIGHT SCALE THRU-OUT WITH SMALL POPOUTS
  - ② SAME AS ① BUT HAS POCKETS OF HVY SCALE TOTAL 2 SQ.FT.
  - ③ HA, TOTAL 12 SQ.FT. - SPALL 11' SQ.FT. = 8 SQ.FT. HA
  - WM WITH WIRE MESH

REVISION	DATE: 06/26/2019	CREW: Team 1	REVISION	DATE:	CREW:
REVISION	DATE: 08/09/21	CREW: Team 1	REVISION	DATE:	CREW:

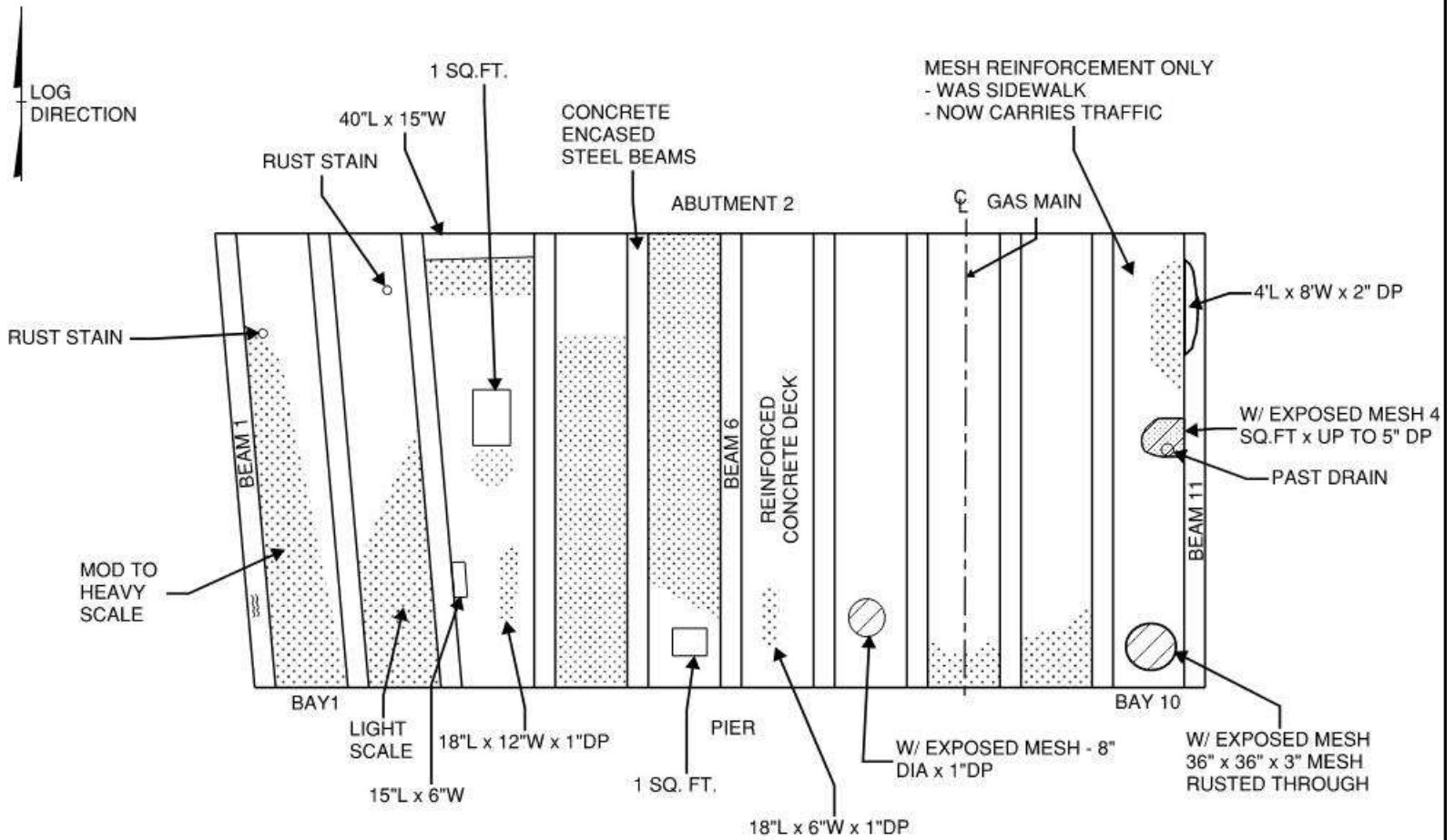
# Sketches

Inspection type: Routine  
Inspection Date: 8/09/2021  
Inspected by: Team 1

:Bridge No 04409

Town: WATERTOWN  
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Inventory Route: Non-NHS

CREW: PAJ, PKU	DATE: 06/02/2017	BRIDGE NO.: 04409
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## UNDERSIDE OF DECK - SPAN 2

### GENERAL NOTES:

- SEE UNDERSIDE OF DECK SPAN 1 GENERAL NOTES.

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

REVISION	DATE: 06/26/2019	CREW: Team 1	REVISION	DATE:	CREW:
REVISION	DATE: 08/09/21	CREW: Team 1	REVISION	DATE:	CREW:

## Sketches

Inspection type: Routine  
Inspection Date: 8/09/2021  
Inspected by: Team 1

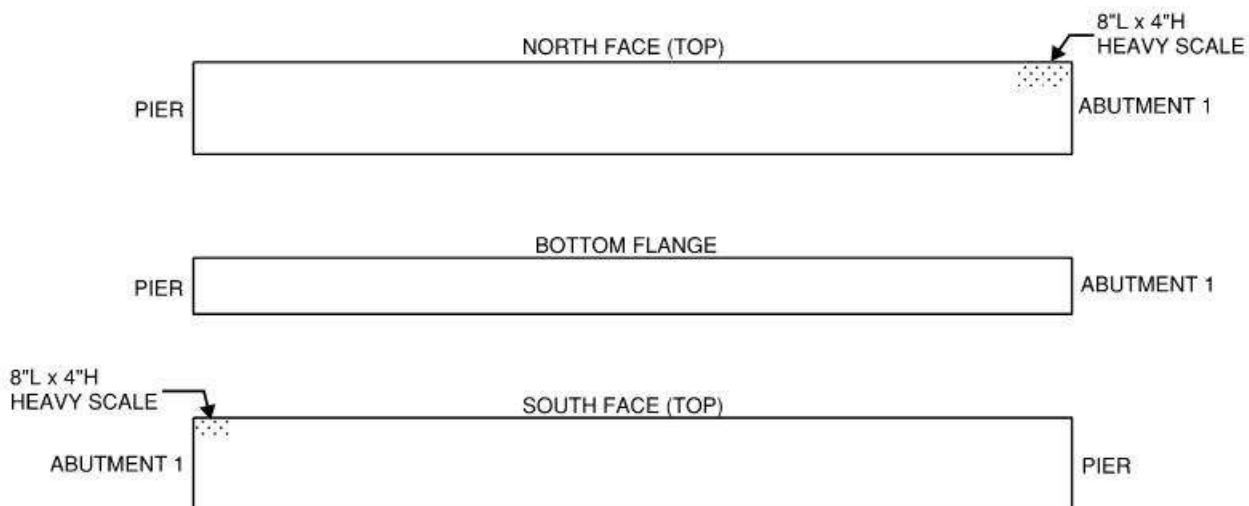
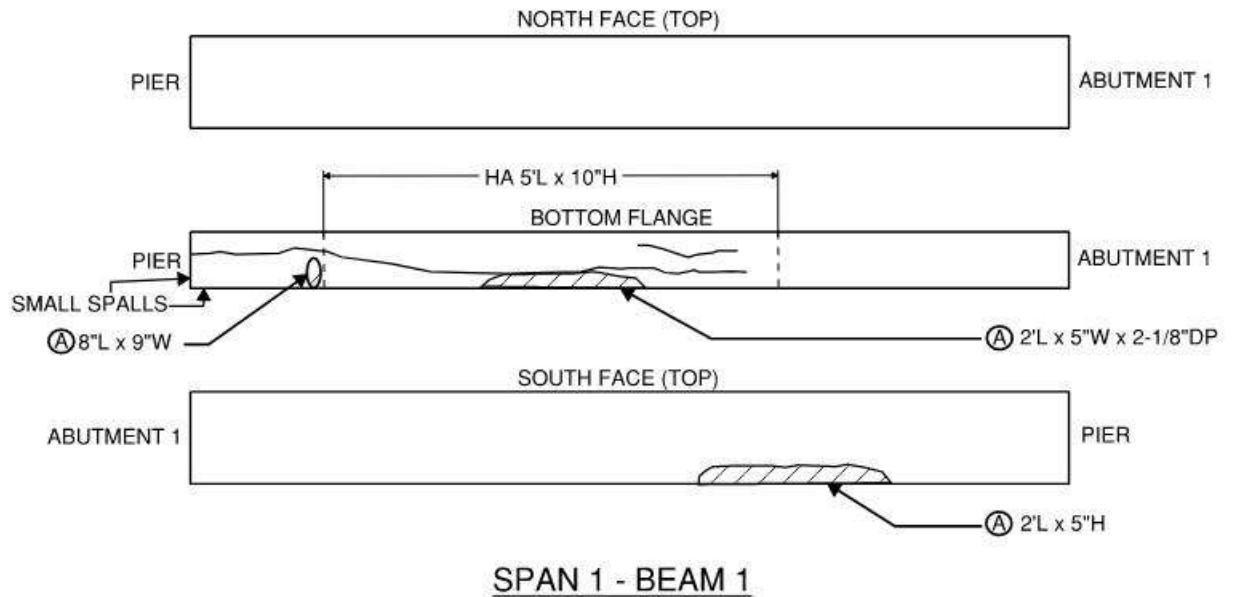
:Bridge No 04409

Town: WATERTOWN  
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Crossed: STEELE BROOK  
Inventory Route: Non-NHS

CREW: PAJ, PKU

DATE: 06/02/2017

BRIDGE NO.: 04409



LEGEND:

- HOLLOW AREA
- SHALLOW REBAR
- SPALL AREA
- SPALL AREA WITH EXPOSED REBAR
- MAPCRACKS
- HAIRLINE CRACKS
- HONEYCOMB AREA
- SCALE AREA
- EFFLORESCENCE PRESENT
- WITH EXPOSED RUSTED BOTTOM FLANGE

**GENERAL NOTES:**

- THE CONCRETE ENCASEMENT HAS SPALLS, HOLLOW AREAS, HEAVY SCALING AND CRACKS THROUGHOUT. SIZES ARE NOT RECORDED AT ALL LOCATIONS.

REVISION	DATE: 06/26/2019	CREW: Team 1	REVISION	DATE:	CREW:
REVISION	DATE: 08/09/21	CREW: Team 1	REVISION	DATE:	CREW:

# Sketches

Inspection type: Routine  
Inspection Date: 8/09/2021  
Inspected by: Team 1

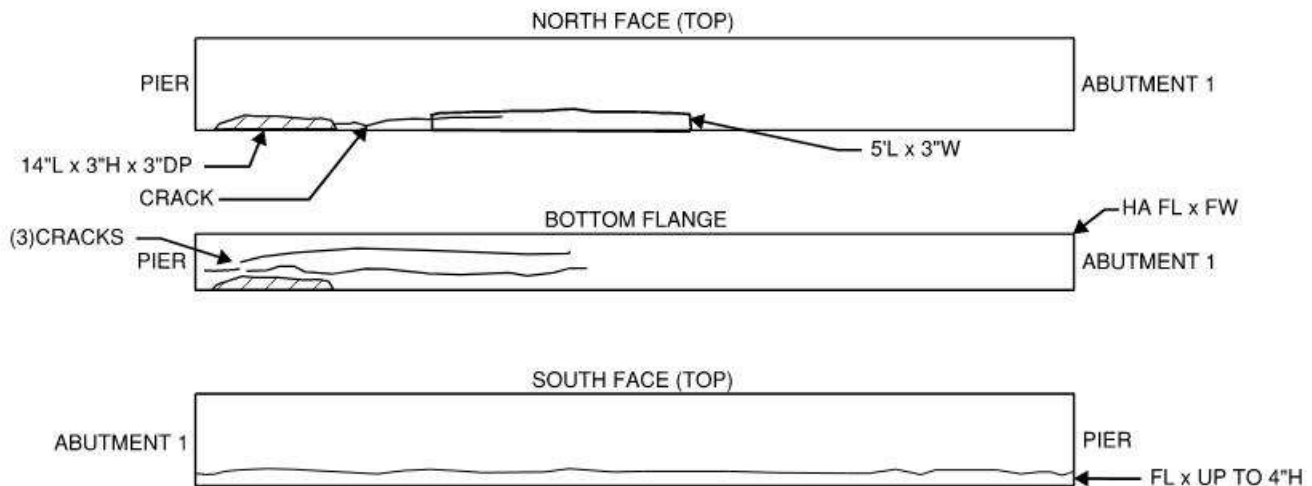
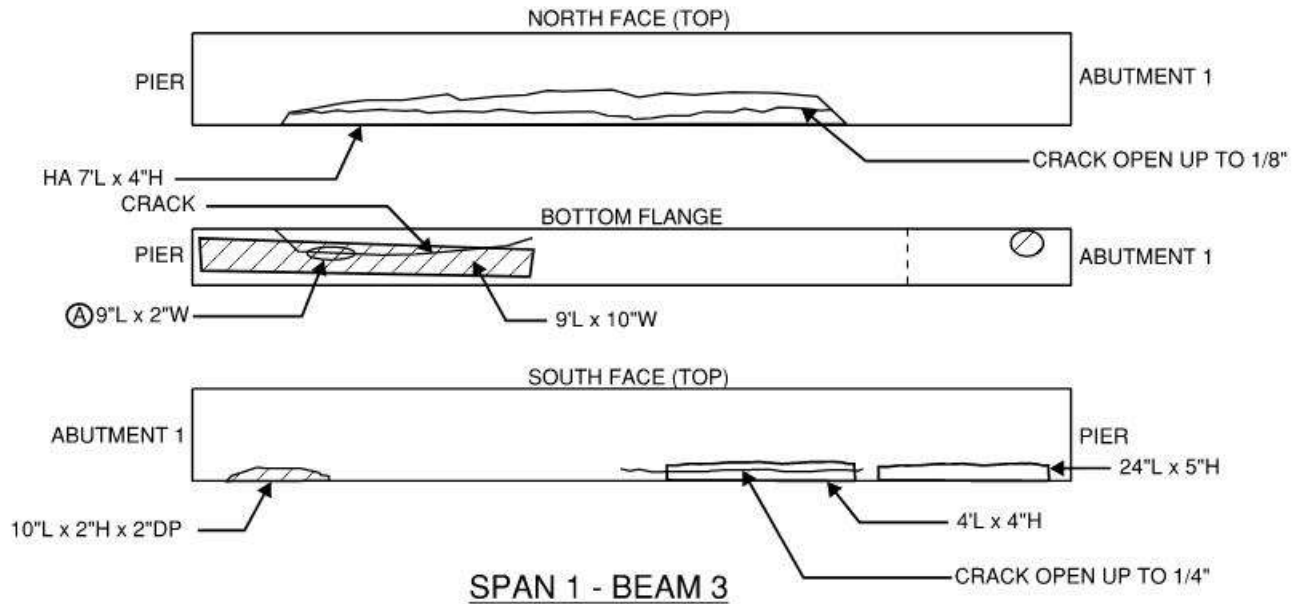
:Bridge No 04409

Town: WATERTOWN  
Carried: WOOLSON STREET  
Crossed: STEELE BROOK  
Inventory Route: Non-NHS

CREW: PAJ, PKU

DATE: 06/02/2017

BRIDGE NO.: 04409



LEGEND:

- HOLLOW AREA
- SHALLOW REBAR
- SPALL AREA
- SPALL AREA WITH EXPOSED REBAR
- MAPCRACKS
- HAIRLINE CRACKS
- HONEYCOMB AREA
- SCALE AREA
- EFFLORESCENCE PRESENT
- WITH EXPOSED RUSTED BOTTOM FLANGE

## GENERAL NOTES:

- SEE SPAN 1 BEAMS 1 AND 2 GENERAL NOTES.

REVISION	DATE: 06/26/2019	CREW: Team 1	REVISION	DATE:	CREW:
REVISION	DATE: 08/09/21	CREW: Team 1	REVISION	DATE:	CREW:

# Sketches

Inspection type: Routine  
 Inspection Date: 8/09/2021  
 Inspected by: Team 1

:Bridge No 04409

Town: WATERTOWN  
 Carried: WOOLSON STREET  
 Crossed: STEELE BROOK  
 Inventory Route: Non-NHS

CREW: PAJ, PKU	DATE: 06/02/2017	BRIDGE NO.: 04409
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**SPAN 1 - BEAM 5**

**SPAN 1 - BEAM 6**

**LEGEND:**

- HOLLOW AREA
- SHALLOW REBAR
- SPALL AREA
- SPALL AREA WITH EXPOSED REBAR
- MAP CRACKS
- HAIRLINE CRACKS
- HONEYCOMB AREA
- SCALE AREA
- EFFLORESCE PRESENT
- WITH EXPOSED RUSTED BEAM

**GENERAL NOTES:**

- SEE SPAN 1 BEAMS 1 AND 2 GENERAL NOTES.

REVISION	DATE: 06/26/2019	CREW: Team 1	REVISION	DATE:	CREW:
REVISION	DATE: 08/09/21	CREW: Team 1	REVISION	DATE:	CREW:

Sketches

Inspection type: Routine  
 Inspection Date: 8/09/2021  
 Inspected by: Team 1

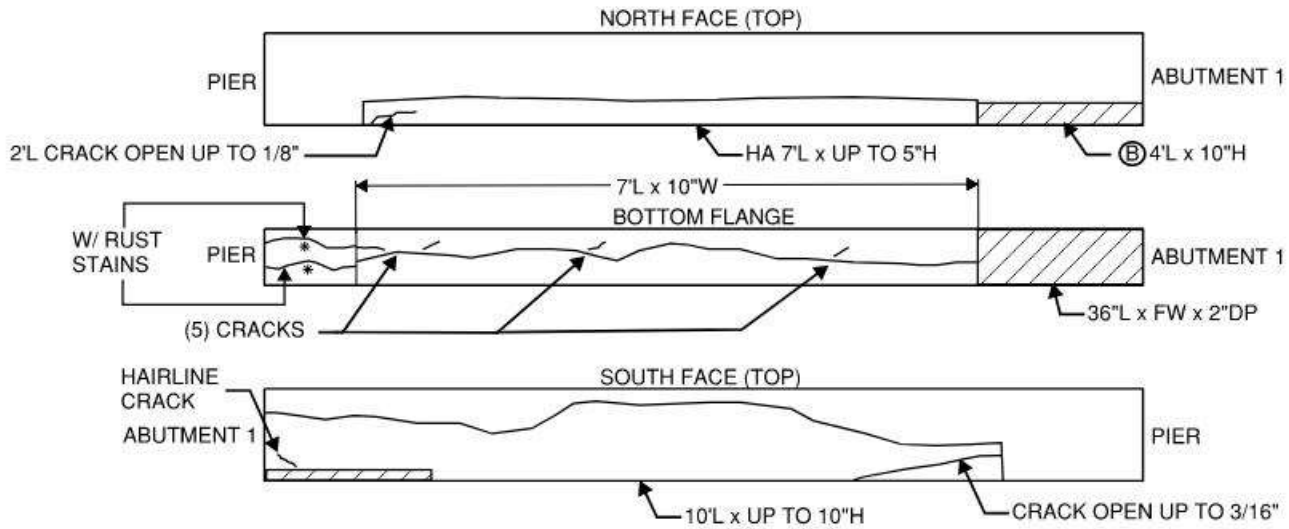
:Bridge No 04409

Town: WATERTOWN  
 Carried: WOOLSON STREET  
 Crossed: STEELE BROOK  
 Inventory Route: Non-NHS

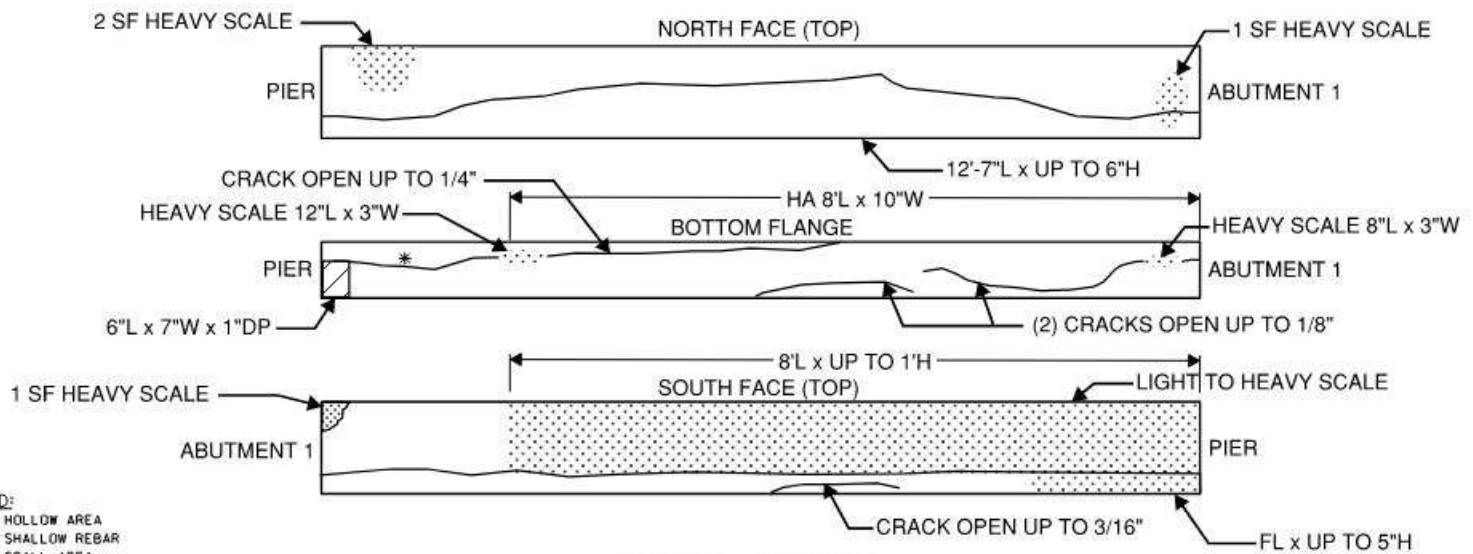
CREW: PAJ, PKU

DATE: 06/02/2017

BRIDGE NO.: 04409



SPAN 1 - BEAM 7



SPAN 1 - BEAM 8

GENERAL NOTES:

- SEE SPAN 1 - BEAM 1 AND 2 GENERAL NOTES SHEET.

- LEGEND:
- HOLLOW AREA
  - SHALLOW REBAR
  - SPALL AREA
  - SPALL AREA WITH EXPOSED REBAR
  - MAP CRACKS
  - HAIRLINE CRACKS
  - HONEYCOMB AREA
  - SCALE AREA
  - EFFLORESCE PRESENT
  - WITH EXPOSED RUSTED BEAM

REVISION	DATE: 06/26/2019	CREW: Team 1	REVISION	DATE:	CREW:
REVISION	DATE: 08/09/21	CREW: Team 1	REVISION	DATE:	CREW:

## Sketches

Inspection type: Routine

Inspection Date: 8/09/2021

Inspected by: Team 1

:Bridge No 04409

Town: WATERTOWN

Carried: WOOLSON STREET

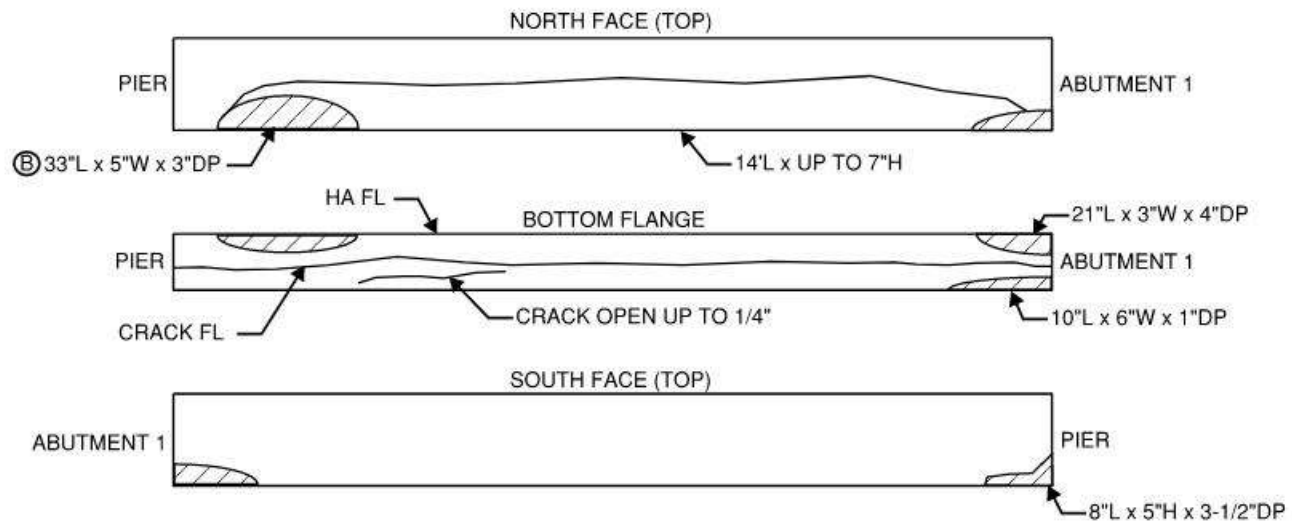
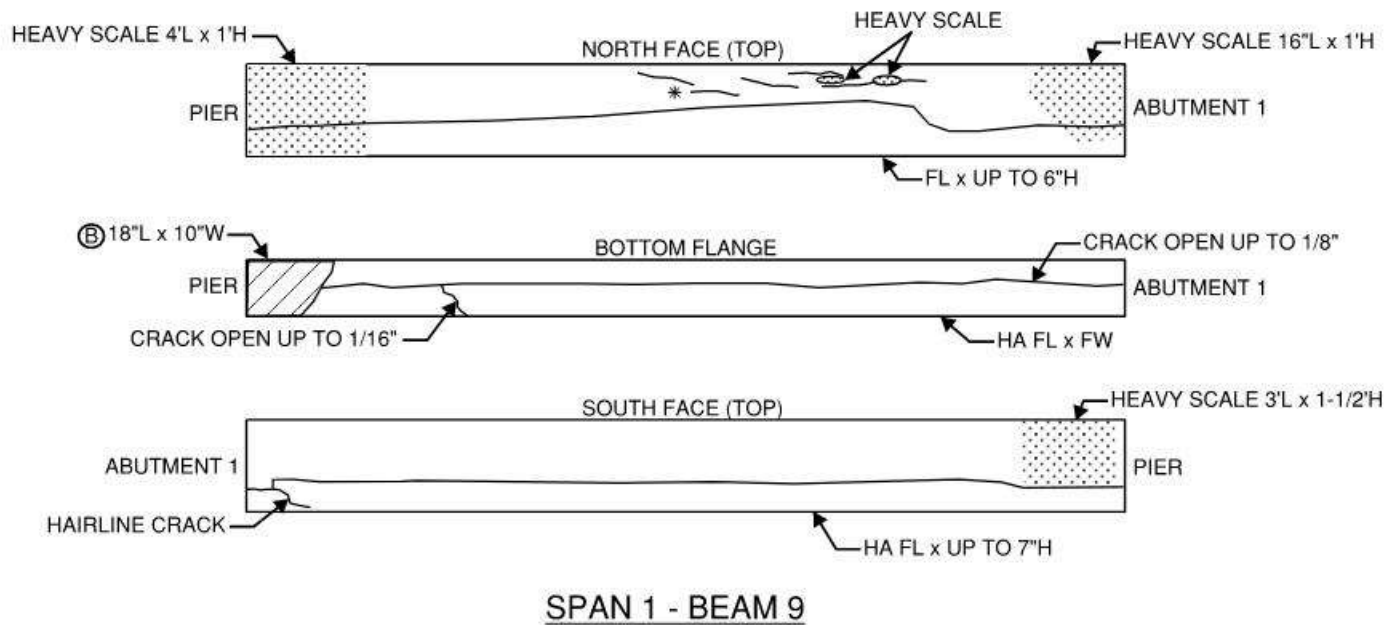
Crossed: STEELE BROOK

Inventory Route: Non-NHS

CREW: PAJ, PKU

DATE: 06/02/2017

BRIDGE NO.: 04409



LEGEND:

- HOLLOW AREA
- SHALLOW REBAR
- SPALL AREA
- SPALL AREA WITH EXPOSED REBAR
- MAPCRACKS
- HAIRLINE CRACKS
- HONEYCOMB AREA
- SCALE AREA
- EFFLORESCENCE PRESENT
- WITH EXPOSED RUSTED BEAM

**GENERAL NOTES:**

- SEE SPAN 1 - BEAM 1 AND 2 GENERAL NOTES SHEET.

REVISION	DATE: 06/26/2019	CREW: Team 1	REVISION	DATE:	CREW:
REVISION	DATE: 08/09/21	CREW: Team 1	REVISION	DATE:	CREW:

## Sketches

Inspection type: Routine  
 Inspection Date: 8/09/2021  
 Inspected by: Team 1

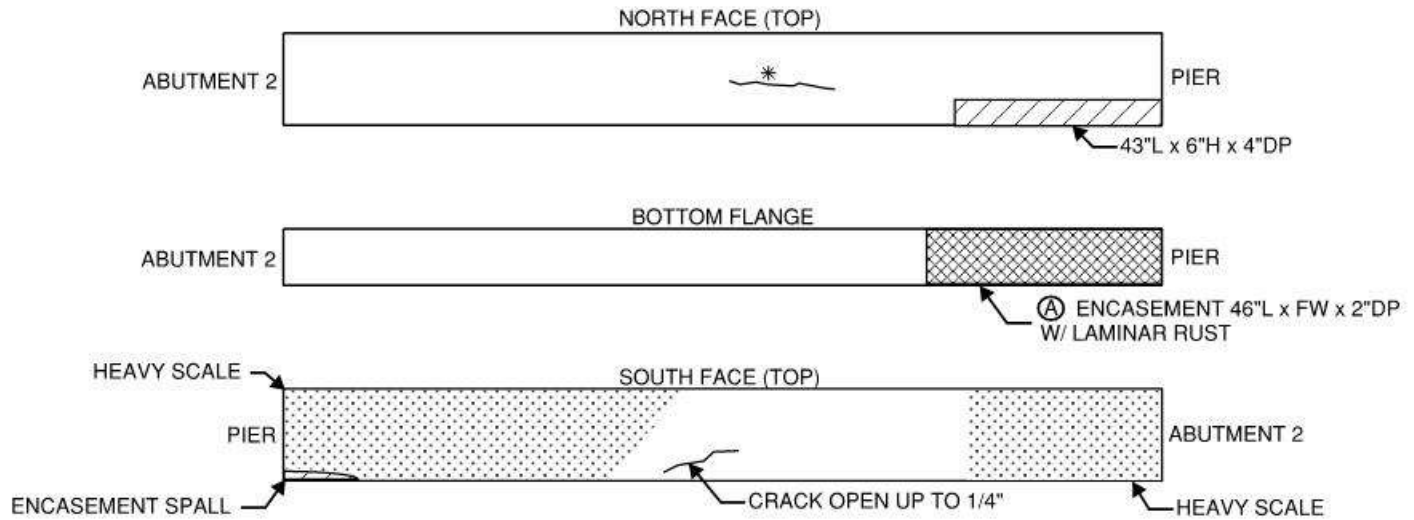
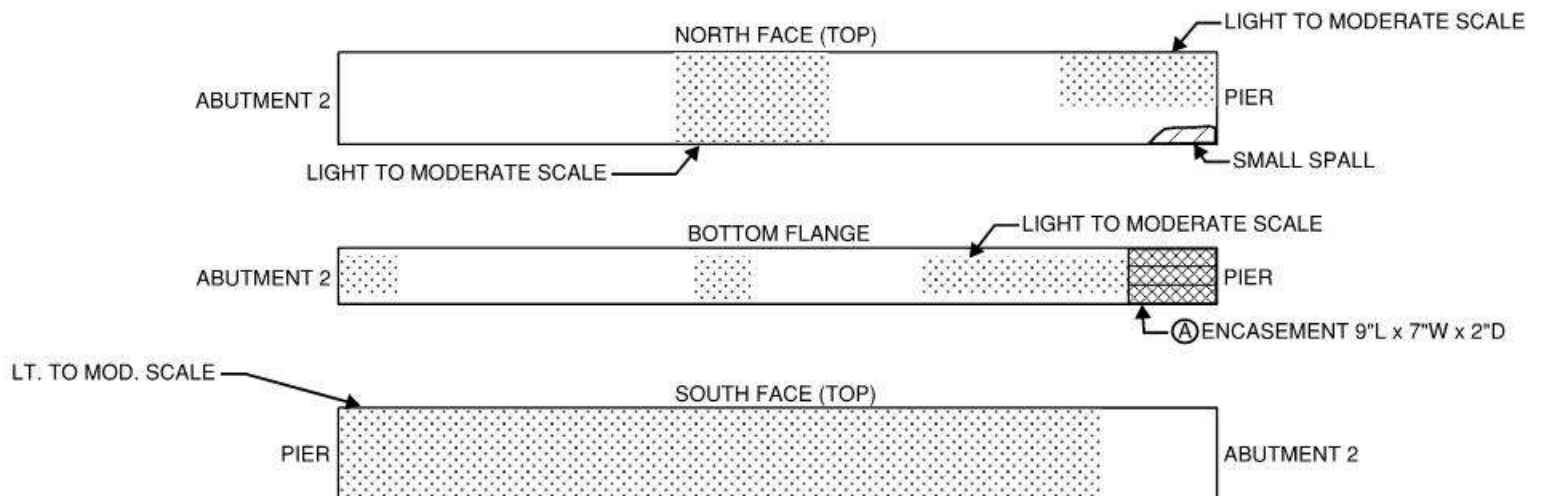
:Bridge No 04409

Town: WATERTOWN  
 Carried: WOOLSON STREET  
 Crossed: STEELE BROOK  
 Inventory Route: Non-NHS

CREW: PAJ, PKU

DATE: 06/02/2017

BRIDGE NO.: 04409

SPAN 2 - BEAM 1SPAN 2 - BEAM 2GENERAL NOTES:

- SEE SPAN 1 - BEAM 1 AND 2 GENERAL NOTES SHEET.

LEGEND:

- HOLLOW AREA
- SHALLOW REBAR
- SPALL AREA
- SPALL AREA WITH EXPOSED REBAR
- MAP CRACKS
- HAIRLINE CRACKS
- HONEYCOMB AREA
- SCALE AREA
- EFFLORESCENCE PRESENT
- WITH EXPOSED RUSTED BOTTOM FLANGE

REVISION	DATE: 06/26/2019	CREW: Team 1	REVISION	DATE:	CREW:
REVISION	DATE: 08/09/21	CREW: Team 1	REVISION	DATE:	CREW:

## Sketches

Inspection type: Routine  
 Inspection Date: 8/09/2021  
 Inspected by: Team 1

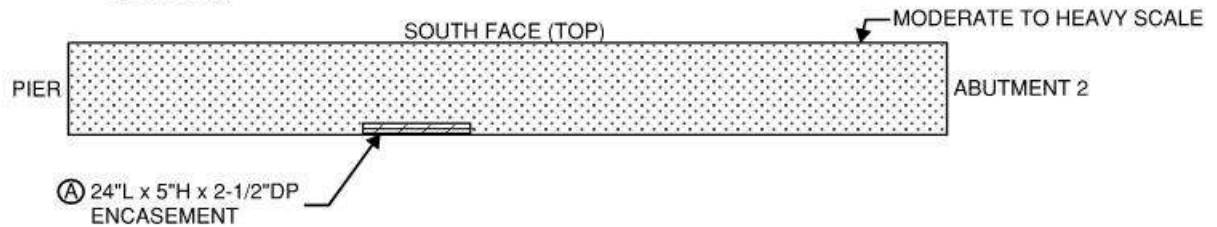
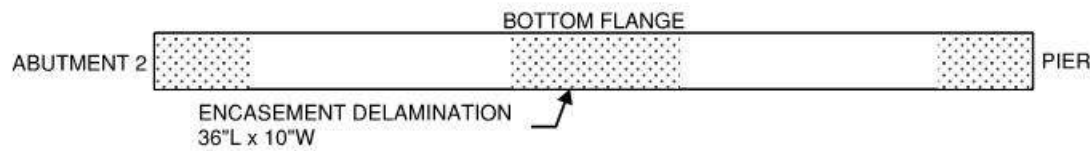
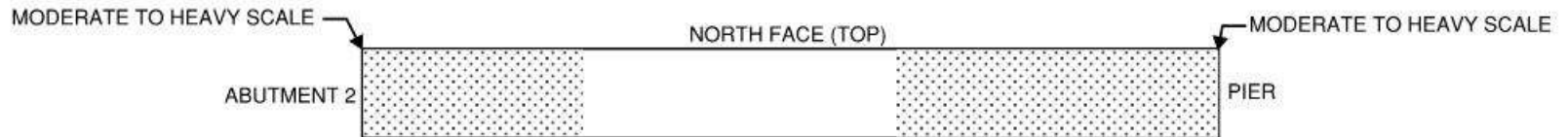
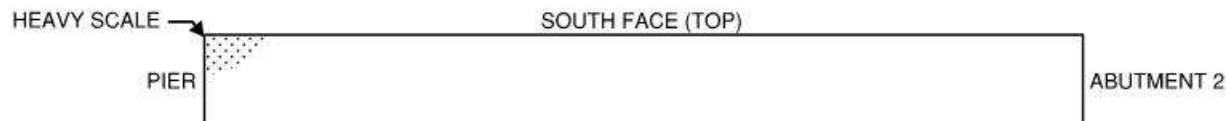
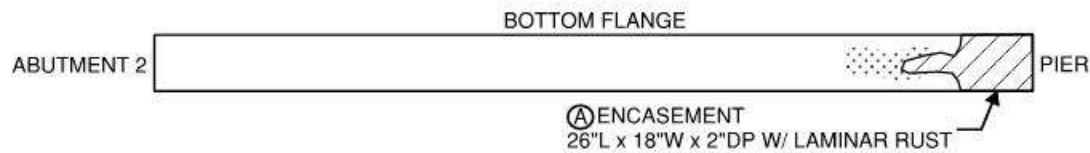
:Bridge No 04409

Town: WATERTOWN  
 Carried: WOOLSON STREET  
 Crossed: STEELE BROOK  
 Inventory Route: Non-NHS

CREW: PAJ, PKU

DATE: 06/02/2017

BRIDGE NO.: 04409

SPAN 2 - BEAM 3

LEGEND:

- HOLLOW AREA
- SHALLOW REBAR
- SPALL AREA
- SPALL AREA WITH EXPOSED REBAR
- MAPCRACKS
- HAIRLINE CRACKS
- HONEYCOMB AREA
- SCALE AREA
- EFFLORESCENCE PRESENT
- WITH EXPOSED RUSTED BOTTOM FLANGE

SPAN 2 - BEAM 4GENERAL NOTES:

- SEE SPAN 1 - BEAM 1 AND 2 GENERAL NOTES SHEET.

REVISION	DATE: 06/26/2019	CREW: Team 1	REVISION	DATE:	CREW:
REVISION	DATE: 08/09/21	CREW: Team 1	REVISION	DATE:	CREW:

# Sketches

Inspection type: Routine  
Inspection Date: 8/09/2021  
Inspected by: Team 1

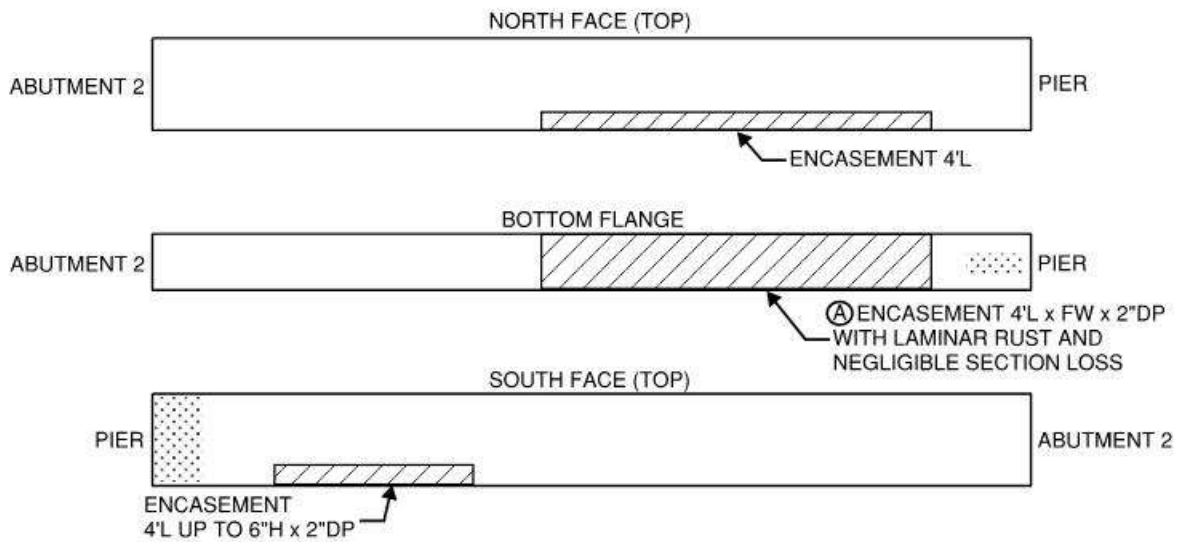
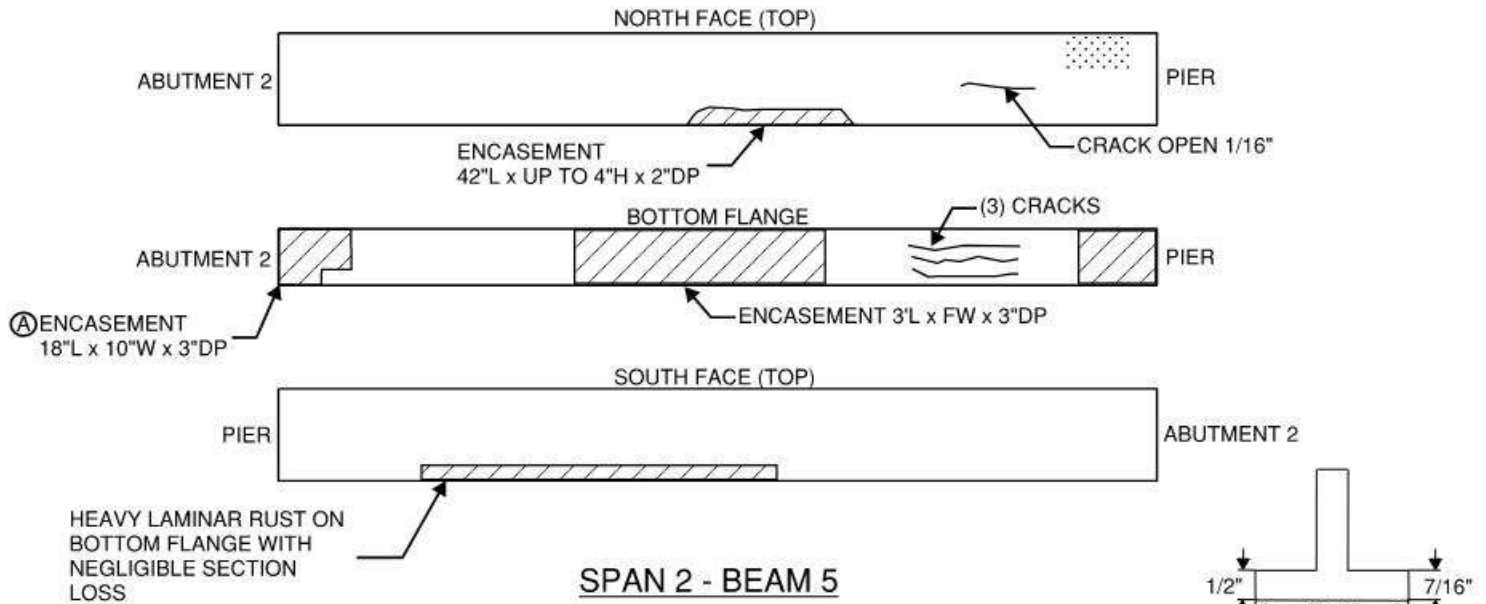
:Bridge No 04409

Town: WATERTOWN  
Carried: WOOLSON STREET  
Crossed: STEELE BROOK  
Inventory Route: Non-NHS

CREW: PAJ, PKU

DATE: 06/02/2017

BRIDGE NO.:04409



LEGEND:

- HOLLOW AREA
- SHALLOW REBAR
- SPALL AREA
- SPALL AREA WITH EXPOSED REBAR
- MAPCRACKS
- HAIRLINE CRACKS
- HONEYCOMB AREA
- SCALE AREA
- EFFLORESCENCE PRESENT
- WITH EXPOSED RUSTED BOTTOM FLANGE

## GENERAL NOTES:

- SEE SPAN 1 - BEAM 1 AND 2 GENERAL NOTES SHEET.

REVISION	DATE: 06/26/2019	CREW: Team 1	REVISION	DATE:	CREW:
REVISION	DATE: 08/09/21	CREW: Team 1	REVISION	DATE:	CREW:

# Sketches

Inspection type: Routine  
 Inspection Date: 8/09/2021  
 Inspected by: Team 1

:Bridge No 04409

Town: WATERTOWN  
 Carried: WOOLSON STREET  
 Crossed: STEELE BROOK  
 Inventory Route: Non-NHS

CREW: PAJ, PKU	DATE: 06/02/2017	BRIDGE NO.: 04409
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NORTH FACE (TOP)

ENCASEMENT 54"L

ABUTMENT 2

PIER

BOTTOM FLANGE

ENCASEMENT 54"L x FW x 2"DP WITH LAMINAR RUST AND NEGLIGIBLE SECTION LOSS

ABUTMENT 2

PIER

SOUTH FACE (TOP)

ENCASEMENT 36"L x UP TO 5"H x 2"DP

PIER

ABUTMENT 2

**SPAN 2 - BEAM 7**

NORTH FACE (TOP)

ENCASEMENT FL x FW x 2"DP WITH LAMINAR RUST

ABUTMENT 2

PIER

BOTTOM FLANGE

ENCASEMENT FL x FW x 2"DP WITH LAMINAR RUST

ABUTMENT 2

PIER

SOUTH FACE (TOP)

LIGHT TO MODERATE SCALE

PIER

ABUTMENT 2

**SPAN 2 - BEAM 8**

**LEGEND:**

- HOLLOW AREA
- SHALLOW REBAR
- SPALL AREA
- SPALL AREA WITH EXPOSED REBAR
- MAPCRACKS
- HAIRLINE CRACKS
- HONEYCOMB AREA
- SCALE AREA
- EFFLORESCENCE PRESENT
- ENCASEMENT WITH EXPOSED RUSTED BOTTOM FLANGE

**GENERAL NOTES:**

- SEE SPAN 1 - BEAM 1 AND 2 GENERAL NOTES SHEET.

REVISION	DATE: 06/26/2019	CREW: Team 1	REVISION	DATE:	CREW:
REVISION	DATE: 08/09/21	CREW: Team 1	REVISION	DATE:	CREW:

Inspection type: Routine  
Inspection Date: 8/09/2021  
Inspected by: Team 1

Town: WATERTOWN  
Carried: WOOLSON STREET  
Crossed: STEELE BROOK  
Inventory Route: Non-NHS

CREW: PAJ, PKU		DATE: 06/02/2017		BRIDGE NO.: 04409	
<p><b>SPAN 2 - BEAM 9</b></p> <p><b>SPAN 2 - BEAM 10</b></p> <p><b>LEGEND:</b></p> <ul style="list-style-type: none"> <li>HOLLOW AREA</li> <li>SHALLOW REBAR</li> <li>SPALL AREA</li> <li>SPALL AREA WITH EXPOSED REBAR</li> <li>MAP CRACKS</li> <li>HAIRLINE CRACKS</li> <li>HONEYCOMB AREA</li> <li>SCALE AREA</li> <li>EFFLORESCENCE PRESENT</li> <li>WITH EXPOSED RUSTED BOTTOM FLANGE</li> </ul> <p><b>GENERAL NOTES:</b></p> <p>- SEE SPAN 1 - BEAM 1 AND 2 GENERAL NOTES SHEET.</p>					
REVISION <b>A</b>	DATE: 06/26/2019	CREW: Team 1	REVISION <b>B</b>	DATE:	CREW:
REVISION <b>A</b>	DATE: 08/09/21	CREW: Team 1	REVISION <b>A</b>	DATE:	CREW:

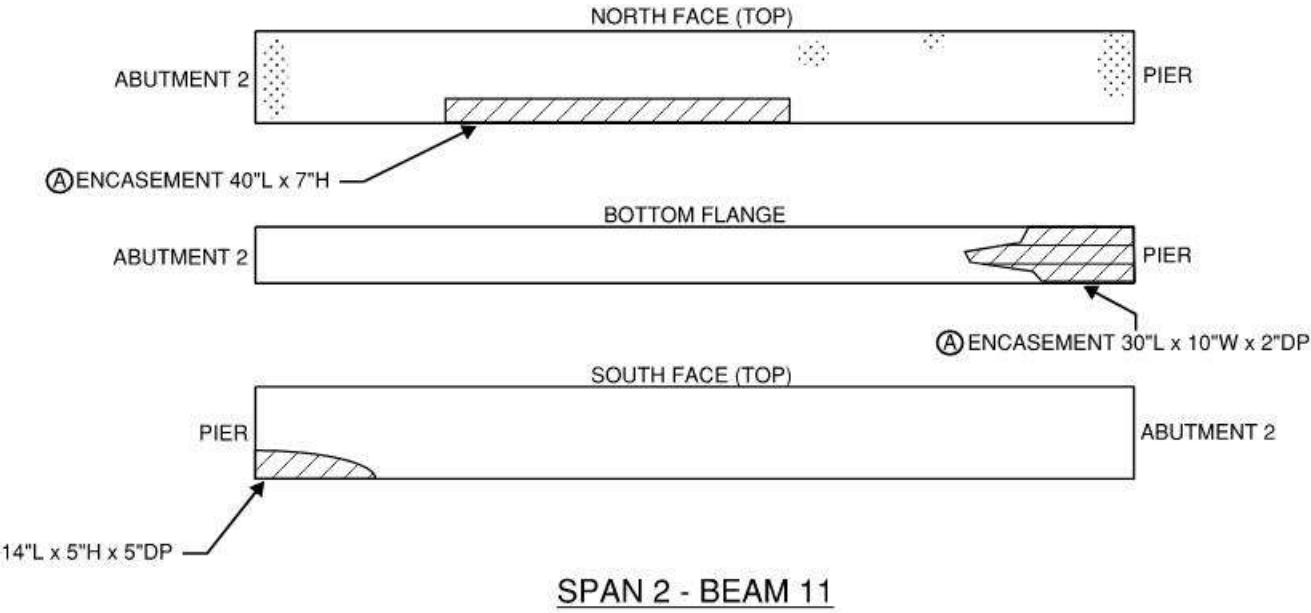
Sketches

Inspection type: Routine  
Inspection Date: 8/09/2021  
Inspected by: Team 1

:Bridge No 04409

Town: WATERTOWN  
Carried: WOOLSON STREET  
Crossed: STEELE BROOK  
Inventory Route: Non-NHS

CREW: PAJ, PKU	DATE: 06/02/2017	BRIDGE NO.: 04409
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GENERAL NOTES:  
- SEE SPAN 1 - BEAM 1 AND 2 GENERAL NOTES SHEET.

REVISION	DATE: 06/26/2019	CREW: Team 1	REVISION	DATE:	CREW:
REVISION	DATE: 08/09/21	CREW: Team 1	REVISION	DATE:	CREW:

# Sketches

Inspection type: Routine  
 Inspection Date: 8/09/2021  
 Inspected by: Team 1

:Bridge No 04409

Town: WATERTOWN  
 Carried: WOOLSON STREET  
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 Inventory Route: Non-NHS

CREW: PAJ, PKU	DATE: 06/02/2017	BRIDGE NO.: 04409
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CRACKS, LOOSE AND MISSING MORTAR WITH VOIDS UP TO 15" DEEP

HEAVY VEGETATION IN FRONT OF WINGWALL

WINGWALL 1B

MISSING STONE WITH VOID 13"H x 15"L x 20" DP

DETERIORATED AND MISSING BAGS 8'L x 24"H UP TO 24" DP

HEAVY SCALE

UTILITY; SPALL EDGE AT UTILITY

MODERATED SCALE

CRACKS, LOOSE AND MISSING MORTAR WITH VOIDS UP TO 16" DEEP

1'H x 4"W x 3" DP

DRAIN

WINGWALL (RETAINING WALL) 1A

DETERIORATED AND MISSING BAGS 14'L x 2'H UP TO 24" DP 2019 measurements; 18'L x 28" H x 24" D

10' L x 2' H area of missing CC filled bags exposing base stones with voids and displaced stones.

ABUTMENT 1

**GENERAL NOTES:**

- ABUTMENTS AND WINGWALLS HAVE HAVE LIGHT TO MODERATE VEGETATION GROWTH AND MODERATE MOSS GROWTH AT RANDOM LOCATIONS.
- ABUTMENTS AND WINGWALLS HAVE MISSING MORTAR, CRACKS, VOID IN MORTAR, AND MISSING STONES AT RANDOM LOCATIONS.
- DIAPHRAGMS/BACKWALL HAVE MODERATE TO HEAVY SCALE.

**LEGEND:**

- HOLLOW AREA
- SHALLOW REBAR
- SPALL AREA
- SPALL AREA WITH EXPOSED REBAR
- MAP CRACKS
- HAIRLINE CRACKS
- HONEYCOMB AREA
- SCALE AREA
- EFFLORESCENCE PRESENT

REVISION	DATE: 06/26/2019	CREW: Team 1	REVISION	DATE:	CREW:
REVISION	DATE: 08/09/21	CREW: Team 1	REVISION	DATE:	CREW:

# Sketches

Inspection type: Routine  
 Inspection Date: 8/09/2021  
 Inspected by: Team 1

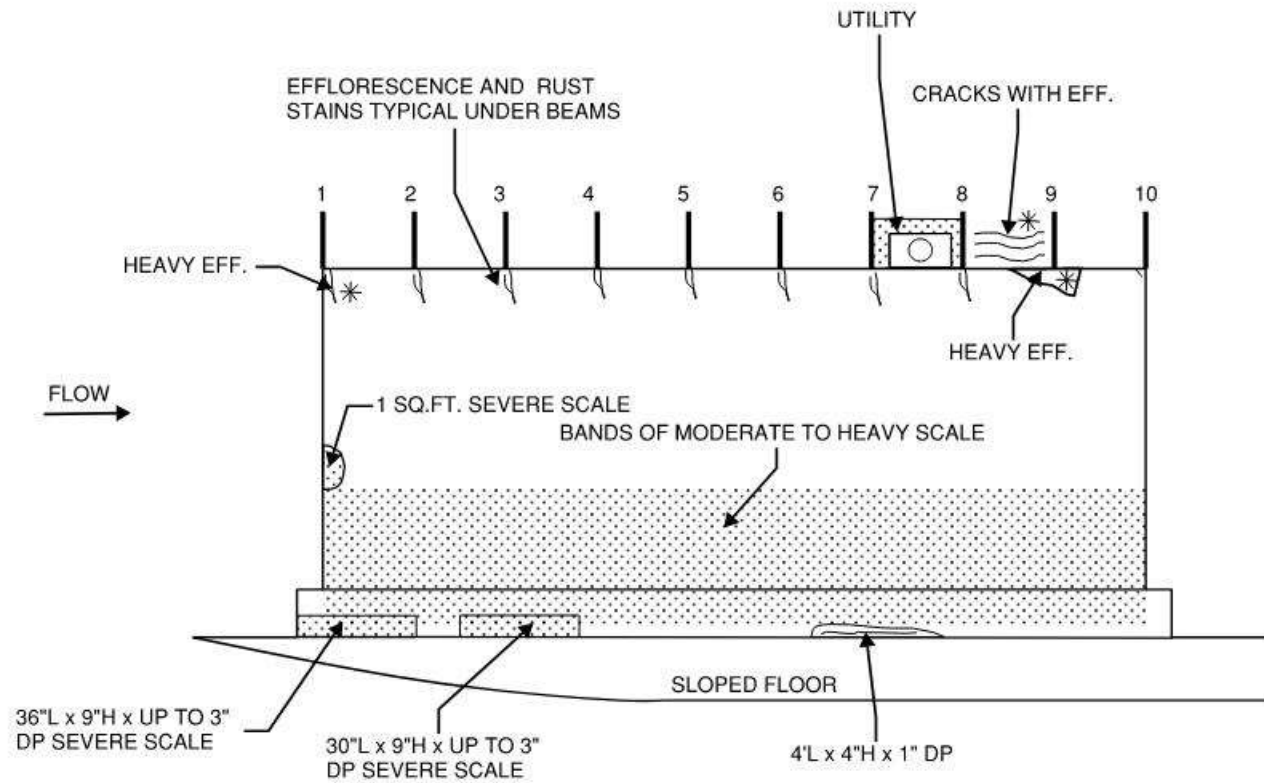
:Bridge No 04409

Town: WATERTOWN  
 Carried: WOOLSON STREET  
 Crossed: STEELE BROOK  
 Inventory Route: Non-NHS

CREW: PAJ, PKU

DATE: 06/02/2017

BRIDGE NO.: 04409



PIER (WEST-ELEVATION)

## GENERAL NOTES:

- PIER HAS MODERATE MOSS GROWTH, HEAVY EFFLO. WITH RUST STAINS FROM PREVIOUS LEAKAGE AND MODERATE GRAFFITI.
- AREAS OF MODERATE TO HEAVY SCALING ALONG THE BASE AND VOIDS AT STEP OUT BASE.

LEGEND:

	HOLLOW AREA
	SHALLOW REBAR
	SPALL AREA
	SPALL AREA WITH EXPOSED REBAR
	MAPCRACKS
	HAIRLINE CRACKS
	HONEYCOMB AREA
	SCALE AREA
	EFFLORESCENCE PRESENT

REVISION	DATE: 06/26/2019	CREW: Team 1	REVISION	DATE:	CREW:
REVISION	DATE: 08/09/21	CREW: Team 1	REVISION	DATE:	CREW:

Sketches

Inspection type: Routine  
Inspection Date: 8/09/2021  
Inspected by: Team 1

:Bridge No 04409

Town: WATERTOWN  
Carried: WOOLSON STREET  
Crossed: STEELE BROOK  
Inventory Route: Non-NHS

CREW: PAJ, PKU	DATE: 06/02/2017	BRIDGE NO.: 04409
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STEEL NOSE GUARD  
RUSTED WITH  
LARGE PERFS

36"L x 16"H UP TO 2.5" DP  
SEVERE SCALE

60"L x 9"H UP TO 9" DP  
SEVERE SCALE

NORTH PIER NOSE

33"L x 9"H x UPTO 2"  
DP SEVERE SCALE

54"L x 13"H x 2" DP  
SEVERE SCALE

SOUTH PIER NOSE

PIER NOSE

GENERAL NOTES:  
- SEE PIER (WEST ELEVATION) GENERAL NOTES.

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

REVISION	DATE: 06/26/2019	CREW: Team 1	REVISION	DATE:	CREW:
REVISION	DATE: 08/09/21	CREW: Team 1	REVISION	DATE:	CREW:

Sketches

Inspection type: Routine  
 Inspection Date: 8/09/2021  
 Inspected by: Team 1

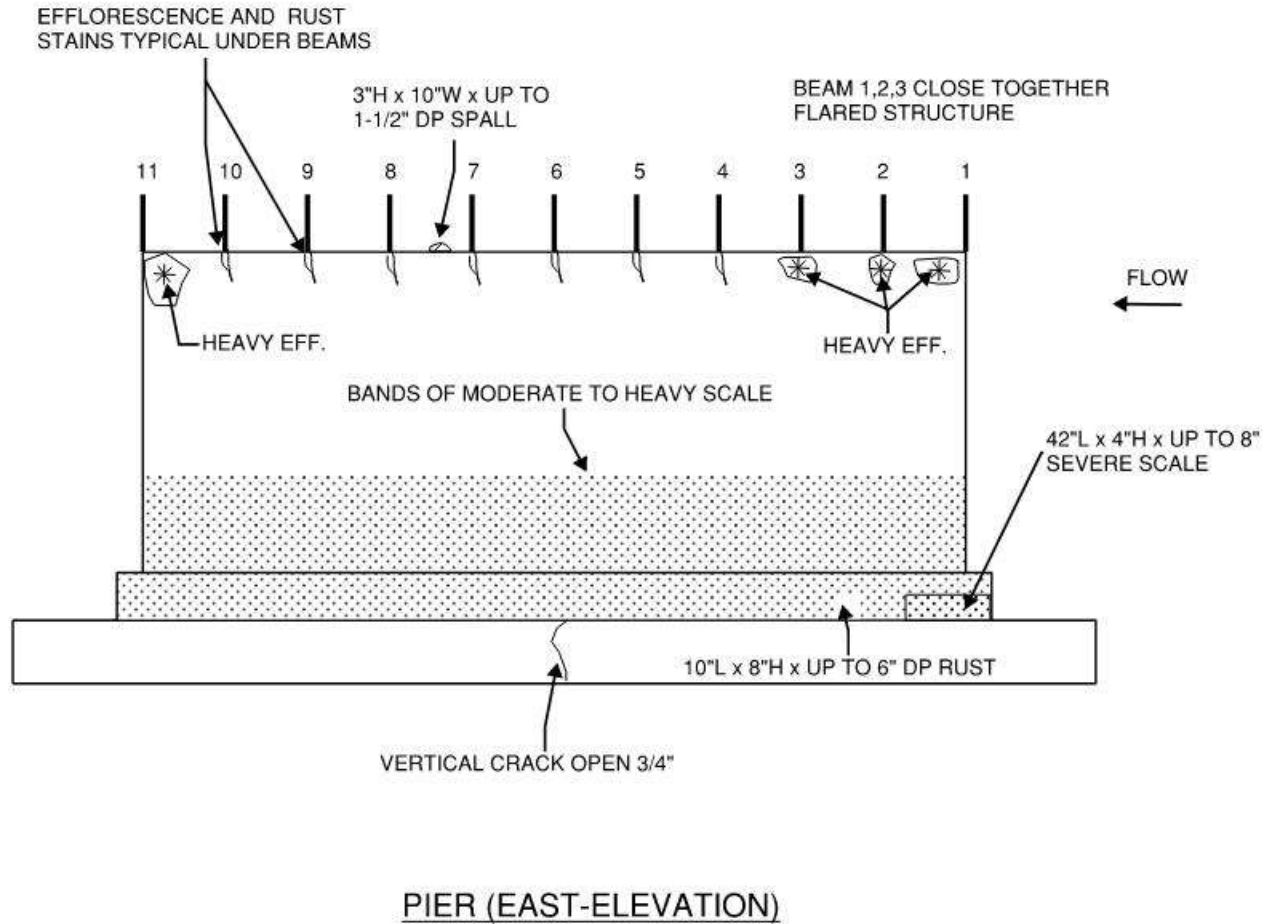
:Bridge No 04409

Town: WATERTOWN  
 Carried: WOOLSON STREET  
 Crossed: STEELE BROOK  
 Inventory Route: Non-NHS

CREW: PAJ, PKU

DATE: 06/02/2017

BRIDGE NO.: 04409



GENERAL NOTES:

- SEE PIER (WEST-ELEVATION) GENERAL NOTES

LEGEND:

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

REVISION	DATE: 06/26/2019	CREW: Team 1	REVISION	DATE:	CREW:
REVISION	DATE: 08/09/21	CREW: Team 1	REVISION	DATE:	CREW:

# Sketches

Inspection type: Routine

Inspection Date: 8/09/2021

Inspected by: Team 1

:Bridge No 04409

Town: WATERTOWN

Carried: WOOLSON STREET

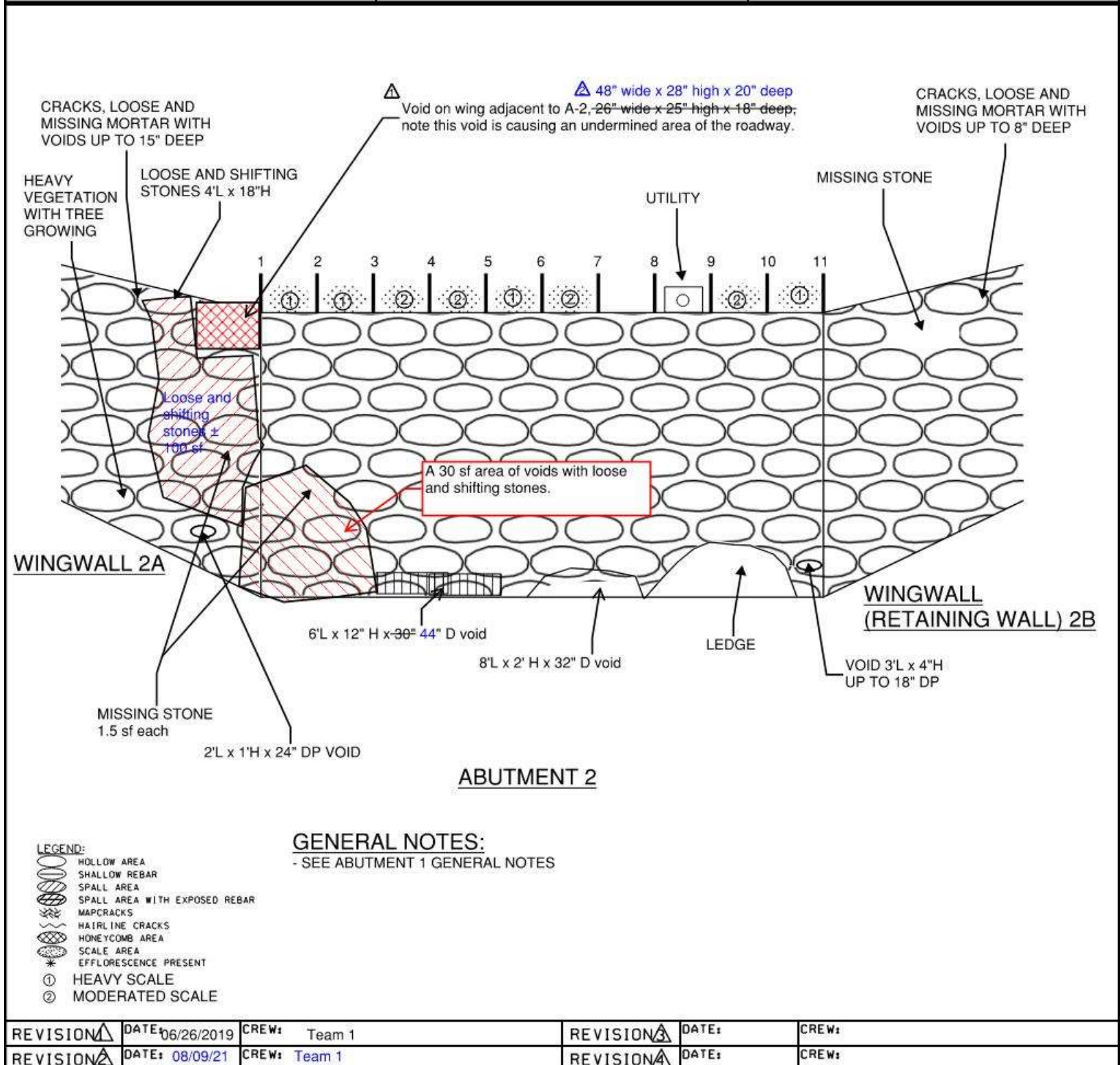
Crossed: STEELE BROOK

Inventory Route: Non-NHS

CREW: PAJ, PKU

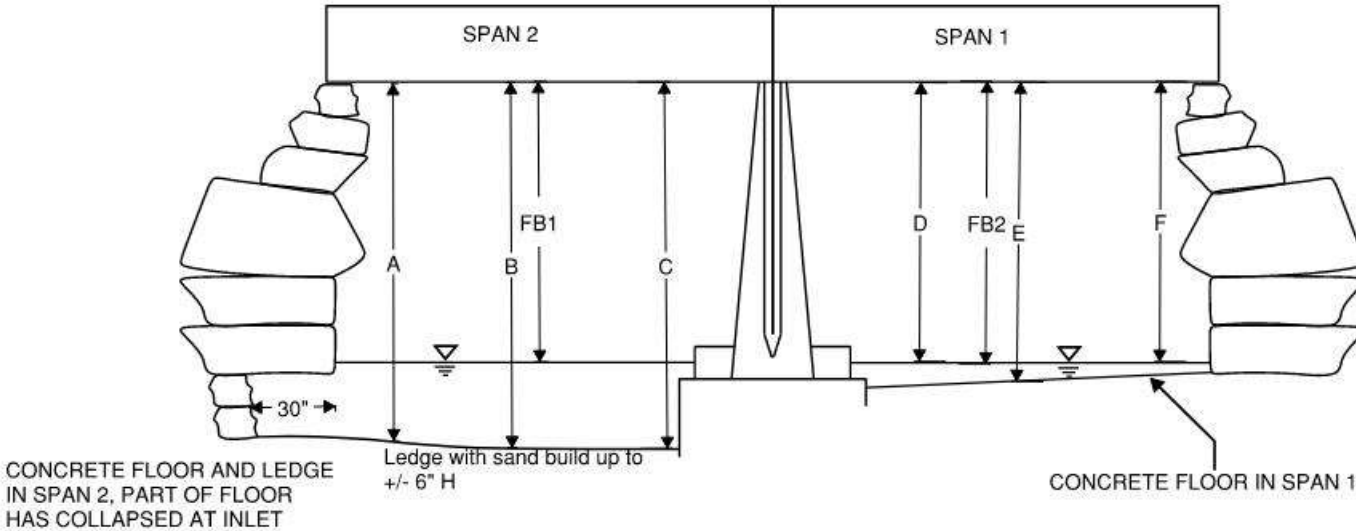
DATE: 06/02/2017

BRIDGE NO.: 04409



REVISION	DATE: 06/26/2019	CREW: Team 1	REVISION	DATE:	CREW:
REVISION	DATE: 08/09/21	CREW: Team 1	REVISION	DATE:	CREW:

CREW: PAJ, PKU	DATE: 06/02/2017	BRIDGE NO.: 04409
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DATE:	FB1	A	B	C	FB2	D	E	F
6/18/13	8'-7"	10'-0"	10'-0"	10'-6"	8'-5"	8'-9"	8'-8"	8'-6"
6/4/15	8'-8"	9'-6"	10'-5"	10'-0"	8'-6"	8'-9"	8'-8"	8'-7"
6/2/17	8'-6"	10'-0"	10'-8"	10'-2"	8'-7"	8'-8"	8'-8"	8'-10"
06/26/2019	9'-02"	10'-02"	10'-09"	10'-06"	8'-07"	8" -08"	8'-07"	8'-10"
08/09/21	9'-01"	10'-03"	10'-08"	10'-05"	8'-07"	8'-08"	8'-07"	8'-10"

-WATER DEPTHS IN SPAN 1 DUE TO FLOOR AND IN SPAN 2 MEASUREMENT WERE TAKEN FROM BOTTOM SIDE OF BEAM TO STREAMBED.

-FREE BOARD MEASUREMENTS WERE TAKEN FROM BOTTOM SIDE OF BEAM TO WATER LINE.

CHANNEL CROSS-SECTION

REVISION	DATE: 06/26/2019	CREW: Team 1	REVISION	DATE:	CREW:
REVISION	DATE: 08/09/21	CREW: Team 1	REVISION	DATE:	CREW:

# Sketches

Inspection type: Routine  
 Inspection Date: 8/09/2021  
 Inspected by: Team 1

:Bridge No 04409

Town: WATERTOWN  
 Carried: WOOLSON STREET  
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 Inventory Route: Non-NHS

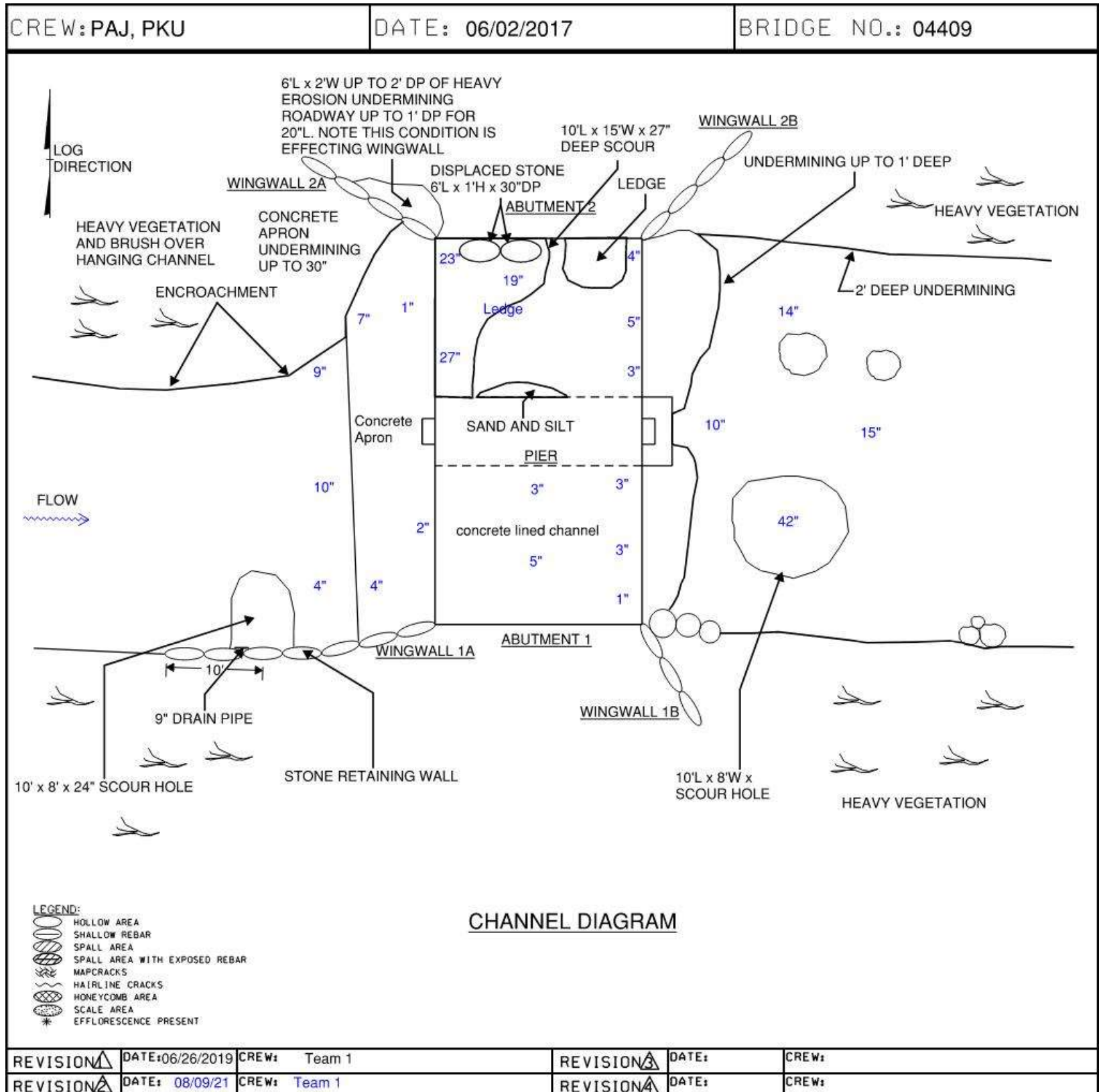




Photo Number: 1

Photo Taken: 08/09/2021

Top view of structure from the Northwest.



Photo Number: 2

Photo Taken: 08/09/2021

General bituminous concrete wearing surface with numerous patches and cracks.



Photo Number: 3

Photo Taken: 08/09/2021

A closer view of the bituminous concrete wearing surface.



Photo Number: 4

Photo Taken: 08/09/2021

Looking Westbound over the structure from the East approach.



Photo Number: 5

Photo Taken: 08/09/2021

Looking Eastbound over the structure from the West approach.



Photo Number: 6

Photo Taken: 08/09/2021

Lead inspector investigating undermining of Bituminous concrete at the Northwest corner of structure.



Photo Number: 7

Photo Taken: 08/09/2021

View of the undermining of roadway at the Northwest corner.



Photo Number: 8

Photo Taken: 08/09/2021

A closer view of the undermining of roadway at the Northwest corner.

Form: Asset Photos  
Inspection type: Routine  
Inspection Date: 8/09/2021  
Inspected by: Team 1

:Bridge No 04409

Town: WATERTOWN  
Carried: WOOLSON STREET  
Crossed: STEELE BROOK  
Inventory Route: Non-NHS



Photo Number: 9

Photo Taken: 08/09/2021

Wooden stick ruler measuring the length of undermining of the bituminous at the Northwest corner  
{48 inches.}



Photo Number: 10

Photo Taken: 08/09/2021

Lead inspector measuring the width of undermining of roadway at the Northwest corner. {15 inches.}



Photo Number: 11

Photo Taken: 08/09/2021

Lead inspector measuring depth of the undermining of roadway at the Northwest corner of structure. {28 inches.}



Photo Number: 12

Photo Taken: 09/02/2021

Repairs made to the Northeast roadway embankment 09/02/2021.

Form: Asset Photos  
Inspection type: Routine  
Inspection Date: 8/09/2021  
Inspected by: Team 1

:Bridge No 04409

Town: WATERTOWN  
Carried: WOOLSON STREET  
Crossed: STEELE BROOK  
Inventory Route: Non-NHS



Photo Number: 13

Photo Taken: 09/02/2021

Repairs made to the Northeast roadway embankment 09/02/2021.



Photo Number: 14

Photo Taken: 08/09/2021

Loose and missing stones at the top Northeast wing-wall {2-A} adjacent to undermining of roadway at the Northwest corner.

Form: Asset Photos  
Inspection type: Routine  
Inspection Date: 8/09/2021  
Inspected by: Team 1

:Bridge No 04409

Town: WATERTOWN  
Carried: WOOLSON STREET  
Crossed: STEELE BROOK  
Inventory Route: Non-NHS



Photo Number: 15

Photo Taken: 08/09/2021

Inlet elevation. {North}



Photo Number: 16

Photo Taken: 08/09/2021

Looking up stream from the pier at inlet.

Form: Asset Photos  
Inspection type: Routine  
Inspection Date: 8/09/2021  
Inspected by: Team 1

:Bridge No 04409

Town: WATERTOWN  
Carried: WOOLSON STREET  
Crossed: STEELE BROOK  
Inventory Route: Non-NHS



Photo Number: 17

Photo Taken: 08/09/2021

Looking downstream from the pier at the outlet.



Photo Number: 18

Photo Taken: 08/09/2021

Looking through span # 1 from the outlet end.

Form: Asset Photos  
Inspection type: Routine  
Inspection Date: 8/09/2021  
Inspected by: Team 1

:Bridge No 04409

Town: WATERTOWN  
Carried: WOOLSON STREET  
Crossed: STEELE BROOK  
Inventory Route: Non-NHS



Photo Number: 19

Photo Taken: 08/09/2021

Typical missing concrete at the bottom flange of beam in span # 1.



Photo Number: 20

Photo Taken: 08/09/2021

Abutment # 1. {West}



Photo Number: 21

Photo Taken: 08/09/2021

Void at the base of abutment # 1 near the inlet end.



Photo Number: 22

Photo Taken: 08/09/2021

West side of the pier.

Form: Asset Photos  
Inspection type: Routine  
Inspection Date: 8/09/2021  
Inspected by: Team 1

:Bridge No 04409

Town: WATERTOWN  
Carried: WOOLSON STREET  
Crossed: STEELE BROOK  
Inventory Route: Non-NHS



Photo Number: 23

Photo Taken: 08/09/2021

The East side of pier.



Photo Number: 24

Photo Taken: 08/09/2021

Looking through span # 2 from the inlet end.

Form: Asset Photos  
Inspection type: Routine  
Inspection Date: 8/09/2021  
Inspected by: Team 1

:Bridge No 04409

Town: WATERTOWN  
Carried: WOOLSON STREET  
Crossed: STEELE BROOK  
Inventory Route: Non-NHS



Photo Number: 25

Photo Taken: 08/09/2021

Looking through span # 2 from the outlet end.



Photo Number: 26

Photo Taken: 08/09/2021

Typical missing concrete at the bottom flange's of beams in span # 2.

Form: Asset Photos  
Inspection type: Routine  
Inspection Date: 8/09/2021  
Inspected by: Team 1

:Bridge No 04409

Town: WATERTOWN  
Carried: WOOLSON STREET  
Crossed: STEELE BROOK  
Inventory Route: Non-NHS



Photo Number: 27

Photo Taken: 08/09/2021

Rust stains and discoloration in the underside of the last bay in span # 2. {Underside of the sidewalk at South side.}



Photo Number: 28

Photo Taken: 08/09/2021

Abutment # 2. {East} Looking from the inlet end.



Photo Number: 29

Photo Taken: 08/09/2021

Six foot the length of large void at the base of abutment # 2 near the inlet end.



Photo Number: 30

Photo Taken: 08/09/2021

Stick ruler measuring the depth of void near the inlet end of abutment # 2.

Form: Asset Photos  
Inspection type: Routine  
Inspection Date: 8/09/2021  
Inspected by: Team 1

:Bridge No 04409

Town: WATERTOWN  
Carried: WOOLSON STREET  
Crossed: STEELE BROOK  
Inventory Route: Non-NHS



Photo Number: 31

Photo Taken: 08/09/2021

Northwest wing-wall. 1-A



Photo Number: 32

Photo Taken: 08/09/2021

Southwest wing-wall. 1-B



Photo Number: 33

Photo Taken: 08/09/2021

Northwest wing-wall. 2-A



Photo Number: 34

Photo Taken: 08/09/2021

The Southeast wing-wall. 2-B