

2-DIST  
**03**B.I.N.  
**6UX**

## STRUCTURES INSPECTION FIELD REPORT

BR. DEPT. NO.  
**P-02-003**

## SPECIAL MEMBER INSPECTION

CITY/TOWN <b>PAXTON</b>	8-STRUCTURE NO. <b>P02003-6UX-MUN-BRI</b>	11-Kilo. POINT <b>000.306</b>	90-ROUTINE INSP. DATE <b>Dec 3, 2021</b>	93*-SPEC. MEMB. INSP. DATE <b>Jun 21, 2023</b>
07-FACILITY CARRIED <b>HWY BLACK HILL R</b>	MEMORIAL NAME/LOCAL NAME	27-YR BUILT <b>1850</b>	106-YR REBUILT <b>1929</b>	*YR REHAB'D (NON 106) <b>0000</b>
06-FEATURES INTERSECTED <b>WATER TURKEY HILL BROOK</b>	26-FUNCTIONAL CLASS <b>Rural Local</b>	DIST. BRIDGE INSPECTION ENGINEER <b>M. Azizi</b>		
43-STRUCTURE TYPE <b>101 : Concrete Slab</b>	22-OWNER <b>Town Agency</b>	21-MAINTAINER <b>Town Agency</b>	TEAM LEADER <b>R. Rogers</b>	
107-DECK TYPE <b>1 : Concrete Cast-in-Place</b>	WEATHER <b>sunny</b>	TEMP. (air) <b>17°C</b>	TEAM MEMBERS <b>B. SANTEUFEMIO</b>	

<b>WEIGHT POSTING</b>		<b>Not Applicable</b> <input checked="" type="checkbox"/>	<b>At bridge</b>	<b>Advance</b>	<b>PLANS</b> (Y/N): <b>N</b>
Actual Posting	H <input type="checkbox"/> 3 <input type="checkbox"/> 3S2 <input type="checkbox"/> Single <input type="checkbox"/>	<b>Signs In Place</b> (Y=Yes, N=No, NR=Not Required)	E <input type="checkbox"/> W <input type="checkbox"/>	E <input type="checkbox"/> W <input type="checkbox"/>	<b>(V.C.R.)</b> (Y/N): <b>N</b>
Recommended Posting	H <input type="checkbox"/> 3 <input type="checkbox"/> 3S2 <input type="checkbox"/> Single <input type="checkbox"/>	<b>Legibility/Visibility</b>	E <input type="checkbox"/> W <input type="checkbox"/>	E <input type="checkbox"/> W <input type="checkbox"/>	
Waived Date: <b>00/00/0000</b> EJDMT Date: <b>00/00/0000</b>		<b>TAPE#:</b> _____			

<b>RATING</b>		<b>Recommend for Rating or Rerating (Y/N):</b> <b>N</b>	<b>If YES please give priority:</b> HIGH ( ) MEDIUM ( ) LOW ( )
Rating Report (Y/N): <b>N</b>	Date: <b>----</b>	<b>REASON:</b>	
Inspection data at time of existing rating I 58: - I 59: - I 60: - I 62: - Date :00/00/0000			

SPECIAL MEMBER(S):										
	MEMBER	CRACK (Y/N):	WELD'S CONDITION (0-9)	LOCATION OF CORROSION, SECTION LOSS (%), CRACKS, COLLISION DAMAGE, STRESS CONCENTRATION, ETC.	CONDITION		INV. RATING OF MEMBER FROM RATING ANALYSIS			Deficiencies
					PREVIOUS	PRESENT				
					(0-9)	(0-9)	H-20	3	3S2	
A	Item 60.1.d - Breastwalls	N		See remarks in comments section.	2	2	Not Rated			S-A
B	Item 60.1.e - Wingwalls	N		See remarks in comments section.	2	2	Not Rated			S-A
C										
D										
E										

<b>List of field tests performed:</b>	<b>(Overall Previous Condition)</b>	<b>I-58</b>	<b>I-59</b>	<b>I-60</b>	<b>I-62</b>
		<b>7</b>	<b>7</b>	<b>2</b>	<b>-</b>
	<b>(Overall Current Condition)</b>	<b>7</b>	<b>7</b>	<b>2</b>	<b>-</b>

<b>DEFICIENCY:</b>	A defect in a structure that requires corrective action.
<b>CATEGORIES OF DEFICIENCIES:</b>	
<b>M= Minor Deficiency</b> - Deficiencies which are minor in nature, generally do not impact the structural integrity of the bridge and could easily be repaired. Examples include but are not limited to: Spalled concrete, Minor pot holes, Minor corrosion of steel, Minor scouring, Clogged drainage, etc. <b>S= Severe/Major Deficiency</b> - Deficiencies which are more extensive in nature and need more planning and effort to repair. Examples include but are not limited to: Moderate to major deterioration in concrete, Exposed and corroded rebars, Considerable settlement, Considerable scouring or undermining, Moderate to extensive corrosion to structural steel with measurable loss of section, etc. <b>C-S= Critical Structural Deficiency</b> - A deficiency in a structural element of a bridge that poses an extreme unsafe condition due to the failure or imminent failure of the element which will affect the structural integrity of the bridge. <b>C-H= Critical Hazard Deficiency</b> - A deficiency in a component or element of a bridge that poses an extreme hazard or unsafe condition to the public, but does not impair the structural integrity of the bridge. Examples include but are not limited to: Loose concrete hanging down over traffic or pedestrians, A hole in a sidewalk that may cause injuries to pedestrians, Missing section of bridge railing, etc.	
<b>URGENCY OF REPAIR:</b>	
<b>I = Immediate-</b> [Inspector(s) immediately contact District Bridge Inspection Engineer (DBIE) to report the Deficiency and to receive further instruction from him/her]. <b>A = ASAP-</b> [Action/Repair should be initiated by District Maintenance Engineer or the Responsible Party (if not a State owned bridge) upon receipt of the Inspection Report]. <b>P = Prioritize-</b> [Shall be prioritized by District Maintenance Engineer or the Responsible Party (if not a State owned bridge) and repairs made when funds and/or manpower is available].	

X=UNKNOWN

N=NOT APPLICABLE

H=HIDDEN/INACCESSIBLE

R=REMOVED

CITY/TOWN PAXTON	B.I.N. 6UX	BR. DEPT. NO. P-02-003	8.-STRUCTURE NO. P02003-6UX-MUN-BRI	INSPECTION DATE JUN 21, 2023
---------------------	---------------	---------------------------	--	---------------------------------

## REMARKS

### **BRIDGE ORIENTATION**

According to the map the approaches are north and south and the elevations are east and west. This is a single span concrete deck slab with dry set masonry stone abutments. The brook flows east to west. **See sketch 1.**

### **GENERAL REMARKS**

There are changes to the breastwall and wingwalls since previous inspection. See items 60.1.d and 60.1.e for comments and pictures. The DBIE & ADBE were notified following this inspection.

### **ITEM 60 - SUBSTRUCTURE**

#### **Item 60.1.d - Breastwalls**

Both breastwalls have several cracked stones throughout, mostly at or near bottom.

#### **South breastwall:**

West end, 1" wide full height settlement crack with up to 4' penetration into the crack and up to 1" outward displacement. **See photos 1-2-3.**

At 5' east of aforementioned crack, 0.25" wide full height settlement crack extending diagonally to top west corner. **See photo 4.**

Between aforementioned cracks, cracked stone at mid-height and delaminated pointing near top.

West end waterline, 6' long area of missing or dislodged stones with up to 3.33' penetration and no evidence of loss of fill. **See photo 5.**

#### **North breastwall:**

West end, 0.18" wide full height settlement crack. **See photo 6.**

West end bottom, one dislodged stone with no evident settlement/displacement of the overlying stones.

West end last 3' bottom, up to 2' penetration.

East end, full height diagonal crack up to 0.25" wide. **See photo 7.**

East end near bottom, two cracked stones.

#### **Item 60.1.e - Wingwalls**

##### **Southwest wingwall:**

Adjacent to breastwall, there is significant settlement, measured at two areas of full height separation between the stones, i.e. 5" wide at the north separation and 3" wide at the south separation, with up to 56" of penetration. Since the previous inspection there has been a loss of backfill and rocks in that location.

Measurement location has been marked with yellow keel. **See photos 8-9-10.**

At mid-height; missing stones with a void up to 2' wide x 2' high x 3' deep.

Overall outward displacement, 3", taken on previous measurement locus. **See photo 11.**

There is a hole at the interface of the wearing surface and the wingwall at the joint. **See photos 12-13.**

##### **Southeast wingwall:**

Wingwall top has 2" of outward displacement (measured at the concrete rail base) and a full height crack along the pointing. **See photo 14.**

There is a 2" space at the top between the wearing surface and the wingwall. **See photo 15.**

##### **Northwest wingwall:**

Outward displacement, 1" with full height settlement crack (at pointing/stone interface). **See photo 16.**

At wingwall/breastwall interface, cracked stone. **See photo 17.**

### **Sketch / Photo Log**

Sketch 1 : Locus map



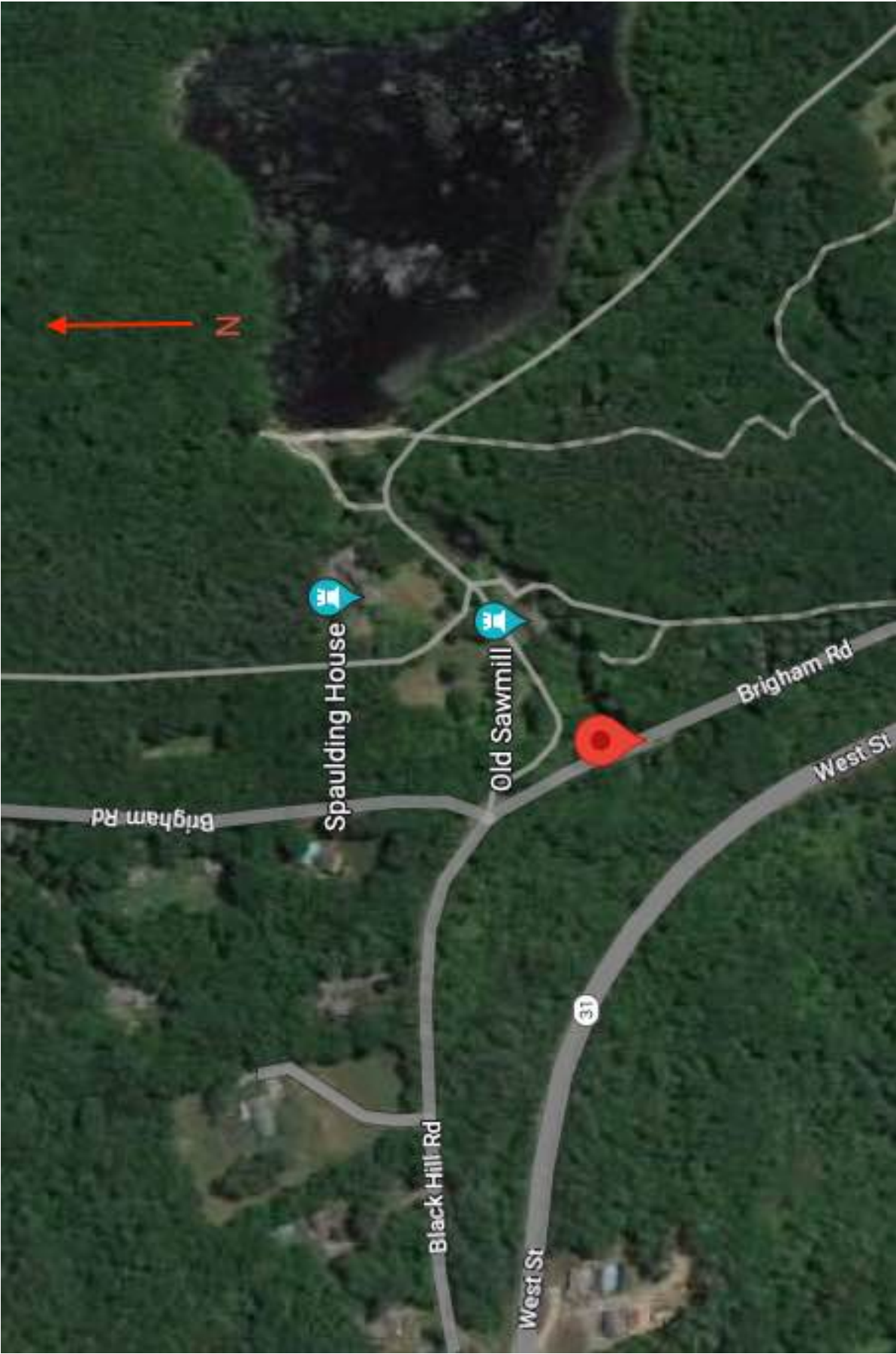
CITY/TOWN <b>PAXTON</b>	B.I.N. <b>6UX</b>	BR. DEPT. NO. <b>P-02-003</b>	8.-STRUCTURE NO. <b>P02003-6UX-MUN-BRI</b>	INSPECTION DATE <b>JUN 21, 2023</b>
----------------------------	----------------------	----------------------------------	---	--

### REMARKS

Photo 1 : South breastwall, West end.  
 Photo 2 : South breastwall, West end showing cracks.  
 Photo 3 : South breastwall, West end showing penetration.  
 Photo 4 : South breastwall, West end East of west crack.  
 Photo 5 : South breastwall, West end, voids to the bottom stones.  
 Photo 6 : North breastwall, West end.  
 Photo 7 : North breastwall, East end.  
 Photo 8 : Southwest wingwall.  
 Photo 9 : Penetration to the void on the Southwest wingwall.  
 Photo 10 : New loss of backfill and stones in the void.  
 Photo 11 : Outward displacement measurement to the Southwest wingwall.  
 Photo 12 : Hole at the interface joint.  
 Photo 13 : Hole at the joint interface.  
 Photo 14 : Southeast wingwall displacement.  
 Photo 15 : Southeast wingwall displacement to the top.  
 Photo 16 : Northwest wingwall cracks.  
 Photo 17 : Northwest wingwall, breastwall interface.

CITY/TOWN	B.I.N.	BR. DEPT. NO.	8-STRUCTURE NO.	INSPECTION DATE
PAXTON	6UX	P-02-003	P02003-6UX-MUN-BRI	JUN 21, 2023

SKETCHES



Sketch 1: Locus map



CITY/TOWN PAXTON	B.I.N. 6UX	BR. DEPT. NO. P-02-003	8-STRUCTURE NO. P02003-6UX-MUN-BRI	INSPECTION DATE JUN 21, 2023
---------------------	---------------	---------------------------	---------------------------------------	---------------------------------

**PHOTOS**

Photo 1: South breastwall, West end.



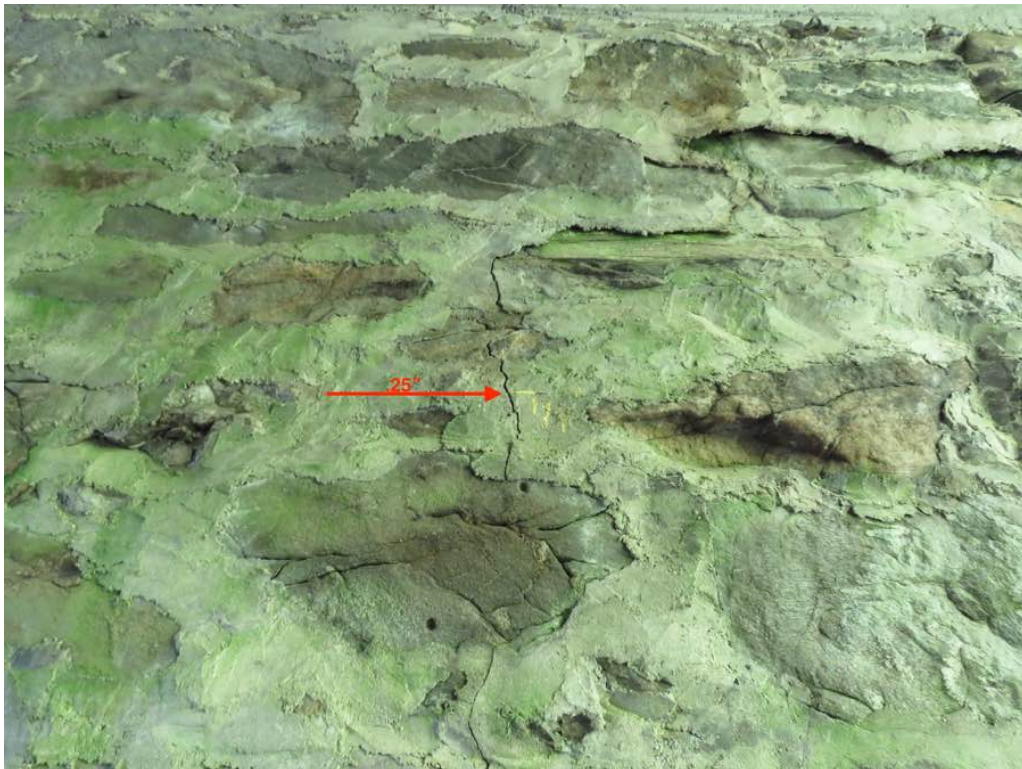
Photo 2: South breastwall, West end showing cracks.



CITY/TOWN PAXTON	B.I.N. 6UX	BR. DEPT. NO. P-02-003	8.-STRUCTURE NO. P02003-6UX-MUN-BRI	INSPECTION DATE JUN 21, 2023
---------------------	---------------	---------------------------	--	---------------------------------

**PHOTOS**

**Photo 3:** South breastwall, West end showing penetration.



**Photo 4:** South breastwall, West end East of west crack.



CITY/TOWN PAXTON	B.I.N. 6UX	BR. DEPT. NO. P-02-003	8-STRUCTURE NO. P02003-6UX-MUN-BRI	INSPECTION DATE JUN 21, 2023
---------------------	---------------	---------------------------	---------------------------------------	---------------------------------

**PHOTOS**

**Photo 5:** South breastwall, West end, voids to the bottom stones.



**Photo 6:** North breastwall, West end.



CITY/TOWN PAXTON	B.I.N. 6UX	BR. DEPT. NO. P-02-003	8-STRUCTURE NO. P02003-6UX-MUN-BRI	INSPECTION DATE JUN 21, 2023
---------------------	---------------	---------------------------	---------------------------------------	---------------------------------

## PHOTOS



Photo 7: North breastwall, East end.



Photo 8: Southwest wingwall.



CITY/TOWN PAXTON	B.I.N. 6UX	BR. DEPT. NO. P-02-003	8.-STRUCTURE NO. P02003-6UX-MUN-BRI	INSPECTION DATE JUN 21, 2023
---------------------	---------------	---------------------------	--	---------------------------------

**PHOTOS**

**Photo 9:** Penetration to the void on the Southwest wingwall.



**Photo 10:** New loss of backfill and stones in the void.



CITY/TOWN PAXTON	B.I.N. 6UX	BR. DEPT. NO. P-02-003	8-STRUCTURE NO. P02003-6UX-MUN-BRI	INSPECTION DATE JUN 21, 2023
---------------------	---------------	---------------------------	---------------------------------------	---------------------------------

**PHOTOS**

**Photo 11:** Outward displacement measurement to the Southwest wingwall.



**Photo 12:** Hole at the interface joint.



CITY/TOWN PAXTON	B.I.N. 6UX	BR. DEPT. NO. P-02-003	8-STRUCTURE NO. P02003-6UX-MUN-BRI	INSPECTION DATE JUN 21, 2023
---------------------	---------------	---------------------------	---------------------------------------	---------------------------------

**PHOTOS**

Photo 13: Hole at the joint interface.



Photo 14: Southeast wingwall displacement.



CITY/TOWN PAXTON	B.I.N. 6UX	BR. DEPT. NO. P-02-003	8.-STRUCTURE NO. P02003-6UX-MUN-BRI	INSPECTION DATE JUN 21, 2023
---------------------	---------------	---------------------------	--	---------------------------------

**PHOTOS**

Photo 15: Southeast wingwall displacement to the top.



Photo 16: Northwest wingwall cracks.

CITY/TOWN PAXTON	B.I.N. 6UX	BR. DEPT. NO. P-02-003	8.-STRUCTURE NO. P02003-6UX-MUN-BRI	INSPECTION DATE JUN 21, 2023
---------------------	---------------	---------------------------	--	---------------------------------

**PHOTOS**

**Photo 17:** Northwest wingwall, breastwall interface.



Report Date: August 2, 2023

State Information										Classification										Code																			
BDEPT#= P02003										Agency Br.No.										(112) NBIS Bridge Length										N									
Town= Paxton										L.O.										(104) Highway System										N									
B.I.N= 6UX										AASHTO= 040.0										(26) Functional Class - Rural Local										09									
RANK= 0 H.I.= NA										FHWA Select List= N (6/21/17)										(100) Defense Highway										0									
Identification										P020036UXMUNBRI										(101) Parallel Structure										N									
(8) Structure Number										151000000										(102) Direction of Traffic - 1-way traffic										1									
(5) Inventory Route										03										(103) Temporary Structure										N									
(2) State Highway Department District										52420										(105) Federal Lands Highways										0									
(3) County Code 027 (4) Place code										WATER TURKEY HILL BROOK										(110) Designated National Network										N									
(6) Features Intersected										HWY BLACK HILL R										(20) Toll - On free road										3									
(7) Facility Carried										1000 FT NW OF RT 31										(21) Maintain - Town Agency										03									
(9) Location										0000.306										(22) Owner - Town Agency										03									
(11) Kilometerpoint										N										(37) Historical Significance undetermined																			
(12) Base Highway Network										000000000000										Condition										Code									
(13) LRS Inventory Route & Subroute										42 DEG 18 MIN 42.54 SEC										(58) Deck										7									
(16) Latitude										71 DEG 57 MIN 35.74 SEC										(59) Superstructure										7									
(17) Longitude										Share %										(60) Substructure										2									
(98) Border Bridge State Code																				(61) Channel & Channel Protection										7									
(99) Border Bridge Structure No. #																				(62) Culverts										N									
Structure Type and Material																				Load Rating and Posting										Code									
(43) Structure Type Main: Concrete										Code 101										(31) Design Load - Unknown										0									
Slab										Jointless bridge type: Not applicable										(63) Operating Rating Method - Allowable Stress (AS)										2									
(44) Structure Type Appr:																				(64) Operating Rating										00.0									
Other										Code 000										(65) Inventory Rating Method - Allowable Stress (AS)										2									
(45) Number of spans in main unit										001										(66) Inventory Rating										00.0									
(46) Number of approach spans										0000										(70) Bridge Posting										0									
(107) Deck Structure Type - Concrete Cast-in-Place										Code 1										(41) Structure - Open										A									
(108) Wearing Surface / Protective System:																				Appraisal										Code									
A) Type of wearing surface - Bituminous										Code 6										(67) Structural Evaluation										2									
B) Type of membrane - Unknown										Code 8										(68) Deck Geometry										5									
C) Type of deck protection - None										Code 0										(69) Underclearances, vert. and horiz.										N									
(71) Waterway adequacy																														9									
(72) Approach Roadway Alignment																														9									
(36) Traffic Safety Features																				0 0 0 0																			
(113) Scour Critical Bridges																				6																			
Age and Service																				Inspections																			
(27) Year Built										1850										(90) Inspection Date 12/03/21										(91) Frequency 03 MO									
(106) Year Reconstructed										1929										(92) Critical Feature Inspection:										(93) CFI DATE									
(42) Type of Service: On - Highway																				(A) Fracture Critical Detail N 00 MO A) 00/00/00																			
Under - Waterway										Code 15										(B) Underwater Inspection N 00 MO B) 00/00/00																			
(28) Lanes: On Structure 01 Under structure 00																				(C) Other Special Inspection Y 03 MO C) 06/21/23																			
(29) Average Daily Traffic 000040																				(*) Other Inspection ( ) N 00 MO *) 00/00/00																			
(30) Year of ADT 2023 (109) Truck ADT 00 %																				(*) Closed Bridge N 00 MO *) 00/00/00																			
(19) Bypass, detour length 002 KM																				(*) UW Special Inspection N 00 MO *) 00/00/00																			
Geometric Data																				(*) Damage Inspection MO *) 00/00/00																			
(48) Length of maximum span 0003.9 M																				Rating Loads																			
(49) Structure Length 00005.3 M																				Report Date 00/00/00 H20 Type 3 Type 3S2 Type HS																			
(50) Curb or sidewalk: Left 00.1 M Right 00.1 M																				Operating 0.0 0.0 0.0 0.0																			
(51) Bridge Roadway Width Curb to Curb 007.2 M																				Inventory 0.0 0.0 0.0 0.0																			
(52) Deck Width Out to Out 008.2 M																				Field Posting																			
(32) Approach Roadway Width (w/shoulders) 006.7 M																				Status										Posting Date 00/00/00									
(33) Bridge Median - No median Code 0																				2 Axle 3 Axle 5 Axle Single																			
(34) Skew 00 DEG (35) Structure Flared N																				Actual																			
(10) Inventory Route MIN Vert Clear 00.00 M																				Recommended																			
(47) Inventory Route Total Horiz Clear 07.2 M																				Missing Signs N																			
(53) Min Vert Clear Over Bridge Rdwy 99.99 M																				Misc.																			
(54) Min Vert Underclear ref N 00.00 M																				Bridge Name																			
(55) Min Lat Underclear RT ref N 00.0 M																				N Anti-missile fence N Acrow Panel N Jointless Bridge																			
(56) Min Lat Underclear LT 00.0 M																				Freeze/Thaw N : Not Applicable																			
Navigation Data																				# Stairs On/Adjacent 0 Stair Owner(s)																			
(38) Navigation Control - No navigation control on waterway Code 0																				Accessibility (Needed/Used)																			
(111) Pier Protection Code																				N / N Liftbucket N / N Rigging N / N Other																			
(39) Navigation Vertical Clearance 000.0 M																				N / N Ladder N / N Staging																			
(116) Vert-lift Bridge Nav Min Vert Clear M																				N / N Boat N / N Traffic Control																			
(40) Navigation Horizontal Clearance 0000.0 M																				Y / Y Wader N / N RR Flagperson Inspection Hours: 008																			
																				N / N Inspector 50 N / N Police																			

2-DIST

B.I.N.

03

6UX

## STRUCTURES INSPECTION FIELD REPORT

BR. DEPT. NO.

P-02-003

## SPECIAL MEMBER INSPECTION

CITY/TOWN <b>PAXTON</b>	8-STRUCTURE NO. <b>P02003-6UX-MUN-BRI</b>	11-Kilo. POINT <b>000.306</b>	90-ROUTINE INSP. DATE <b>Dec 3, 2021</b>	93*-SPEC. MEMB. INSP. DATE <b>Dec 1, 2022</b>
07-FACILITY CARRIED <b>HWY BLACK HILL R</b>	MEMORIAL NAME/LOCAL NAME		27-YR BUILT <b>1850</b>	106-YR REBUILT <b>1929</b>
06-FEATURES INTERSECTED <b>WATER TURKEY HILL BROOK</b>	26-FUNCTIONAL CLASS <b>Rural Local</b>		DIST. BRIDGE INSPECTION ENGINEER <b>M. Azizi</b>	
43-STRUCTURE TYPE <b>101 : Concrete Slab</b>	22-OWNER <b>Town Agency</b>	21-MAINTAINER <b>Town Agency</b>	TEAM LEADER J. Snyder	
107-DECK TYPE <b>1 : Concrete Cast-in-Place</b>	WEATHER <b>Sunny</b>	TEMP. (air) <b>2°C</b>	TEAM MEMBERS <b>T. T. GUMULA</b>	

WEIGHT POSTING		Not Applicable <input checked="" type="checkbox"/> X		At bridge		Advance		PLANS (Y/N): <b>N</b>	
		H 3 3S2 Single		E W		E W			
Actual Posting		<b>N N N N</b>		<input type="checkbox"/> <input type="checkbox"/>		<input type="checkbox"/> <input type="checkbox"/>			
Recommended Posting		<b>N N N N</b>		<input type="checkbox"/> <input type="checkbox"/>		<input type="checkbox"/> <input type="checkbox"/>		(V.C.R.) (Y/N): <b>N</b>	
Waived Date: 00/00/0000		EJDMT Date: 00/00/0000		Legibility/Visibility				TAPE#:	

RATING		Rating Report (Y/N): <b>N</b>		Date: ----		Recommend for Rating or Rerating (Y/N): <b>N</b>		If YES please give priority: HIGH ( ) MEDIUM ( ) LOW ( )	
Inspection data at time of existing rating I 58: - I 59: - I 60: - I 62: - Date: 00/00/0000		REASON:							

## SPECIAL MEMBER(S):

	MEMBER	CRACK (Y/N):	WELD'S CONDITION (0-9)	LOCATION OF CORROSION, SECTION LOSS (%), CRACKS, COLLISION DAMAGE, STRESS CONCENTRATION, ETC.	CONDITION		INV. RATING OF MEMBER FROM RATING ANALYSIS			Deficiencies
					PREVIOUS (0-9)	PRESENT (0-9)	H-20	3	3S2	
A	Item 60.1.d - Breastwalls	N		See remarks in comments section.	2	2	Not Rated			S-A
B	Item 60.1.e - Wingwalls	N		See remarks in comments section.	2	2	Not Rated			S-A
C										
D										
E										

## List of field tests performed:

None

(Overall Previous Condition)

(Overall Current Condition)

I-58 I-59 I-60 I-62

7	7	2	-
7	7	2	-

DEFICIENCY: A defect in a structure that requires corrective action.

## CATEGORIES OF DEFICIENCIES:

M= Minor Deficiency - Deficiencies which are minor in nature, generally do not impact the structural integrity of the bridge and could easily be repaired. Examples include but are not limited to: Spalled concrete, Minor pot holes, Minor corrosion of steel, Minor scouring, Clogged drainage, etc.

S= Severe/Major Deficiency - Deficiencies which are more extensive in nature and need more planning and effort to repair. Examples include but are not limited to: Moderate to major deterioration in concrete, Exposed and corroded rebars, Considerable settlement, Considerable scouring or undermining, Moderate to extensive corrosion to structural steel with measurable loss of section, etc.

C-S= Critical Structural Deficiency - A deficiency in a structural element of a bridge that poses an extreme unsafe condition due to the failure or imminent failure of the element which will affect the structural integrity of the bridge.

C-H= Critical Hazard Deficiency - A deficiency in a component or element of a bridge that poses an extreme hazard or unsafe condition to the public, but does not impair the structural integrity of the bridge. Examples include but are not limited to: Loose concrete hanging down over traffic or pedestrians, A hole in a sidewalk that may cause injuries to pedestrians, Missing section of bridge railing, etc.

## URGENCY OF REPAIR:

I = Immediate- [Inspector(s) immediately contact District Bridge Inspection Engineer (DBIE) to report the Deficiency and to receive further instruction from him/her].

A = ASAP- [Action/Repair should be initiated by District Maintenance Engineer or the Responsible Party (if not a State owned bridge) upon receipt of the Inspection Report].

P = Prioritize- [Shall be prioritized by District Maintenance Engineer or the Responsible Party (if not a State owned bridge) and repairs made when funds and/or manpower is available].

X=UNKNOWN

N=NOT APPLICABLE

H=HIDDEN/INACCESSIBLE

R=REMOVED

CITY/TOWN PAXTON	B.I.N. 6UX	BR. DEPT. NO. P-02-003	8.-STRUCTURE NO. P02003-6UX-MUN-BRI	INSPECTION DATE DEC 1, 2022
---------------------	---------------	---------------------------	--	--------------------------------

## REMARKS

### BRIDGE ORIENTATION

According to the map the approaches are North and South and the elevations are East and West. This is a single span concrete deck slab with dry set masonry stone abutments. The brook flows East to West.

### GENERAL REMARKS

Since the previous inspection:

- No change to the wingwalls.
- No change to the breastwalls.

### ITEM 60 - SUBSTRUCTURE

#### Item 60.1.d - Breastwalls

Both breastwalls have several cracked stones throughout, mostly at or near bottom.

##### South breastwall:

- West end; 1 inch wide full height settlement crack with up to 3.5 feet of penetration into the crack and up to 1 inch outward displacement. **See photos #1 and #2.**
- At 5 feet East of aforementioned crack; 0.25 inch wide full height settlement crack extending diagonally to the top West corner. **See photo #3.**
- Between aforementioned cracks; cracked stone at mid-height and delaminated pointing near top.
- West end waterline; 6 foot long area of missing or dislodged stones with up to 3.33 feet of penetration and no evidence of loss of fill. **See photo #4.**

##### North breastwall:

- West end; 0.18 inch wide full height settlement crack. **See photo #5.**
- West end bottom; one dislodged stone with no evident settlement/displacement of the overlying stones.
- West end last 3 foot bottom; up to 2 feet of penetration.
- East end; full height diagonal crack up to 0.25 inch wide. **See photo #6.**
- East end near bottom; two cracked stones.

#### Item 60.1.e - Wingwalls

##### Southwest wingwall:

- Adjacent to breastwall; there is significant settlement, measured at two areas of full height separation between the stones, i.e. 3.5 inch wide at the North separation and 3 inch wide at the South separation, with up to 52 inches of penetration. Measurement loci have been marked with yellow keel. **See photos #7 and #8.**
- At mid-height; missing stones with a void up to 1.83 foot wide x 2 foot high x 3 foot deep.
- Overall outward displacement; 3 inches, taken using a 4 foot level on previous measurement locus. **See photo #9.**

There is a hole at the interface of the wearing surface and the wingwall at the joint. **See photo #10.**

##### Southeast wingwall:

- Wingwall top has 2 inches of outward displacement (measured at the concrete rail base) and a full height crack along the pointing. **See photo #11.**

There is a 2 inch space at the top between the wearing surface and the wingwall. **See photo #12.**

##### Northwest wingwall:

- Outward displacement; 1 inch with full height settlement crack (at pointing/stone interface). **See photo #13.**
- At wingwall/breastwall interface; cracked stone. **See photo #14.**

CITY/TOWN PAXTON	B.I.N. 6UX	BR. DEPT. NO. P-02-003	8.-STRUCTURE NO. P02003-6UX-MUN-BRI	INSPECTION DATE DEC 1, 2022
---------------------	---------------	---------------------------	--	--------------------------------

## REMARKS

### Photo Log

- Photo 1 : Crack to the West end of the South breastwall.
- Photo 2 : Cracking at the top of the South breastwall at the West end.
- Photo 3 : Crack to the South breastwall.
- Photo 4 : South breastwall voids to the bottom at the West end.
- Photo 5 : Crack to the West end of the North breastwall.
- Photo 6 : Crack to the East end of the North breastwall.
- Photo 7 : Southwest wingwall deficiencies.
- Photo 8 : Area of missing stones and void to the Southwest wingwall.
- Photo 9 : Outward displacement to the Southwest wingwall.
- Photo 10 : Hole at the wearing surface and the Southwest wingwall.
- Photo 11 : Displacement to the Southeast wingwall.
- Photo 12 : Displacement to the Southeast wingwall at the top.
- Photo 13 : Northwest wingwall displacement and crack.
- Photo 14 : Cracked stone to the Northwest wingwall and breastwall interface.



CITY/TOWN PAXTON	B.I.N. 6UX	BR. DEPT. NO. P-02-003	8-STRUCTURE NO. P02003-6UX-MUN-BRI	INSPECTION DATE DEC 1, 2022
---------------------	---------------	---------------------------	---------------------------------------	--------------------------------

**PHOTOS**

**Photo 1:** Crack to the West end of the South breastwall.



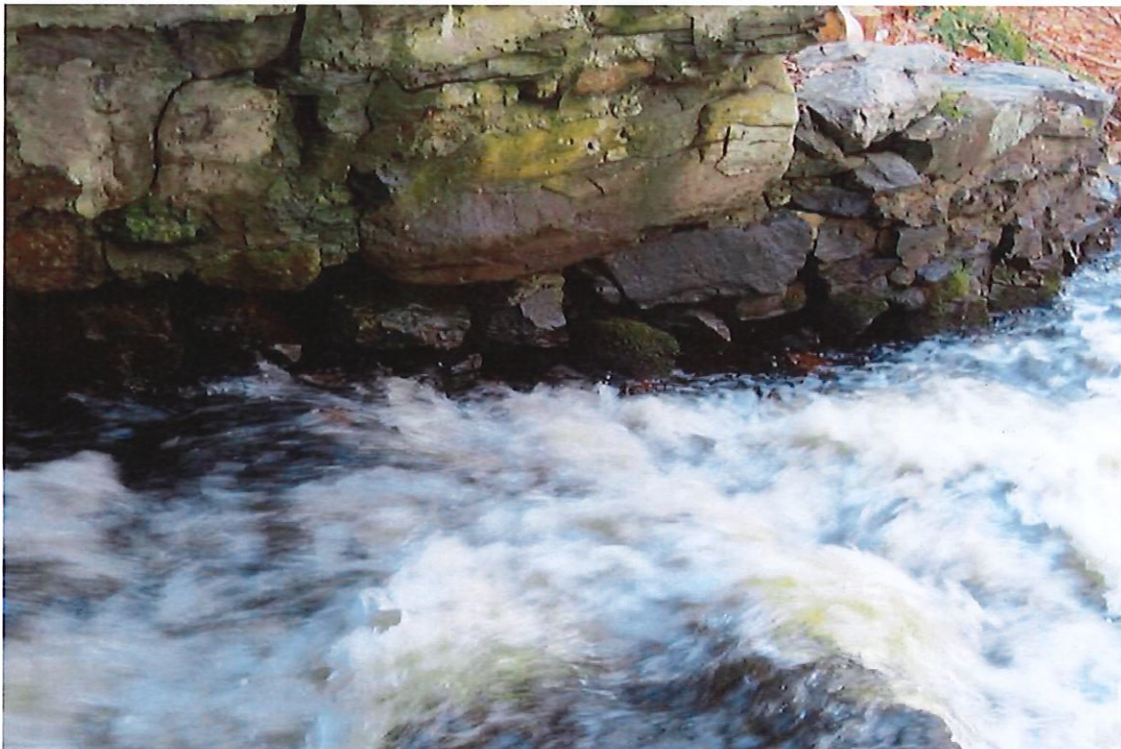
**Photo 2:** Cracking at the top of the South breastwall at the West end.



CITY/TOWN PAXTON	B.I.N. 6UX	BR. DEPT. NO. P-02-003	8.-STRUCTURE NO. P02003-6UX-MUN-BRI	INSPECTION DATE DEC 1, 2022
---------------------	---------------	---------------------------	--	--------------------------------

**PHOTOS**

**Photo 3: Crack to the South breastwall.**



**Photo 4: South breastwall voids to the bottom at the West end.**



CITY/TOWN PAXTON	B.I.N. 6UX	BR. DEPT. NO. P-02-003	8.-STRUCTURE NO. P02003-6UX-MUN-BRI	INSPECTION DATE DEC 1, 2022
---------------------	---------------	---------------------------	--	--------------------------------

**PHOTOS**

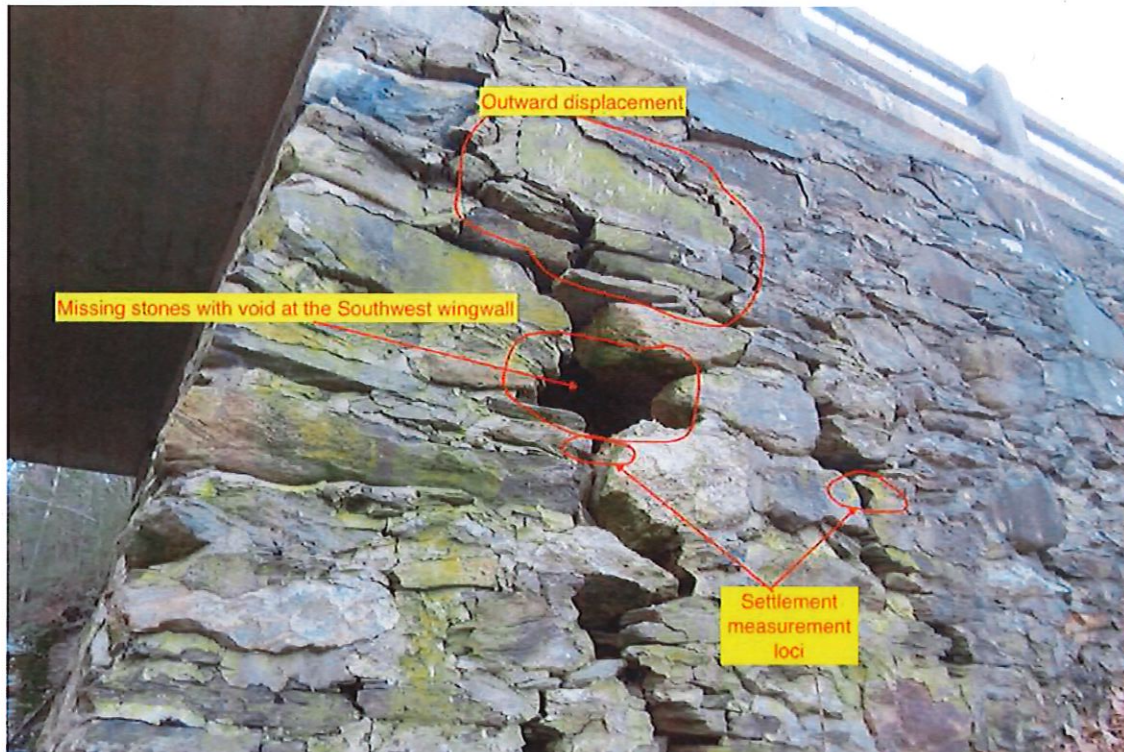
**Photo 5: Crack to the West end of the North breastwall.**



**Photo 6: Crack to the East end of the North breastwall.**



CITY/TOWN PAXTON	B.I.N. 6UX	BR. DEPT. NO. P-02-003	8.-STRUCTURE NO. P02003-6UX-MUN-BRI	INSPECTION DATE DEC 1, 2022
---------------------	---------------	---------------------------	--	--------------------------------

**PHOTOS**

**Photo 7: Southwest wingwall deficiencies.**



**Photo 8: Area of missing stones and void to the Southwest wingwall.**



CITY/TOWN PAXTON	B.I.N. 6UX	BR. DEPT. NO. P-02-003	8.-STRUCTURE NO. P02003-6UX-MUN-BRI	INSPECTION DATE DEC 1, 2022
---------------------	---------------	---------------------------	--	--------------------------------

**PHOTOS**

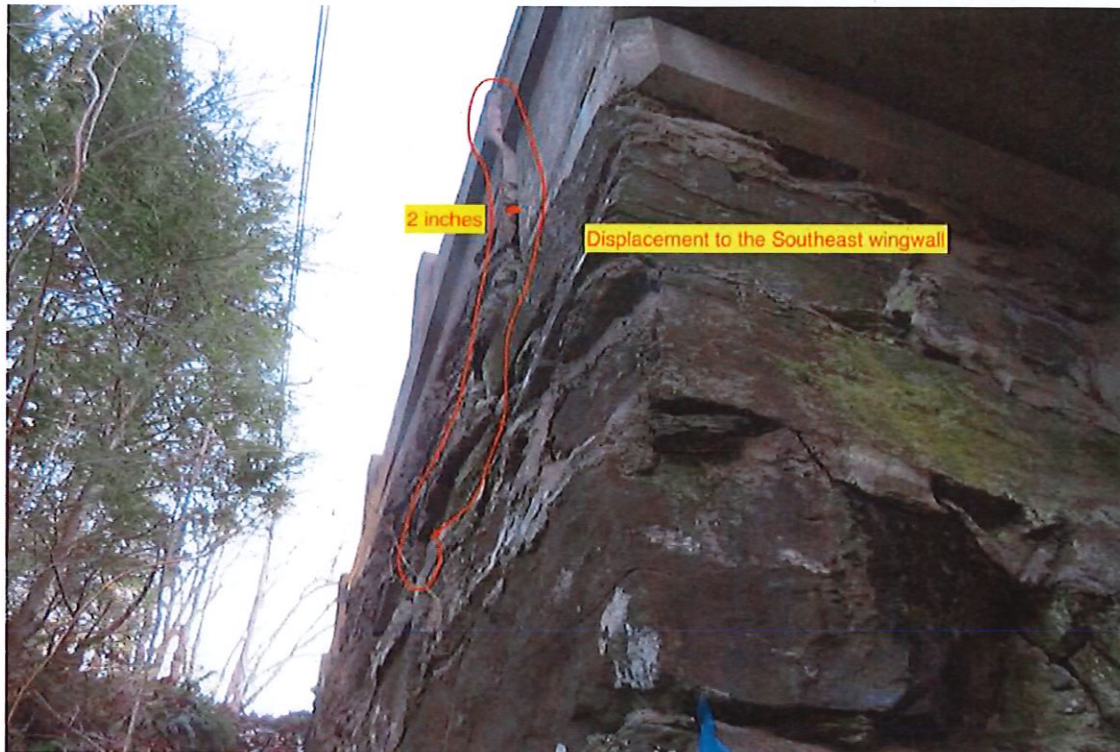
**Photo 9: Outward displacement to the Southwest wingwall.**



**Photo 10: Hole at the wearing surface and the Southwest wingwall.**



CITY/TOWN PAXTON	B.I.N. 6UX	BR. DEPT. NO. P-02-003	8.-STRUCTURE NO. P02003-6UX-MUN-BRI	INSPECTION DATE DEC 1, 2022
---------------------	---------------	---------------------------	--	--------------------------------

**PHOTOS**

**Photo 11: Displacement to the Southeast wingwall.**



**Photo 12: Displacement to the Southeast wingwall at the top.**



CITY/TOWN  
PAXTONB.I.N.  
6UXBR. DEPT. NO.  
P-02-0038.-STRUCTURE NO.  
P02003-6UX-MUN-BRIINSPECTION DATE  
DEC 1, 2022

## PHOTOS



Photo 13: Northwest wingwall displacement and crack.



Photo 14: Cracked stone to the Northwest wingwall and breastwall interface.

Report Date: December 7, 2022

State Information				Classification				Code				
BDEPT# = P02003				Agency Br.No.				(112) NBIS Bridge Length				N
Town = Paxton				L.O.				(104) Highway System				N
B.I.N = 6UX				AASHTO = 040.0				(26) Functional Class - Rural Local				09
RANK = 0 H.I. = NA				FHWA Select List = N (6/21/17)				(100) Defense Highway				0
(8) Structure Number				P020036UXMUNBRI				(101) Parallel Structure				N
(5) Inventory Route				151000000				(102) Direction of Traffic - 1-way traffic				1
(2) State Highway Department District				03				(103) Temporary Structure				N
(3) County Code 027 (4) Place code				52420				(105) Federal Lands Highways				0
(6) Features Intersected				WATER TURKEY HILL BROOK				(110) Designated National Network				N
(7) Facility Carried				HWY BLACK HILL R				(20) Toll - On free road				3
(9) Location				1000 FT NW OF RT 31				(21) Maintain - Town Agency				03
(11) Kilometerpoint				0000.306				(22) Owner - Town Agency				03
(12) Base Highway Network				N				(37) Historical Significance				undetermined
(13) LRS Inventory Route & Subroute				000000000000				Condition				Code
(16) Latitude				42 DEG 18 MIN 42.54 SEC				(58) Deck				7
(17) Longitude				71 DEG 57 MIN 35.74 SEC				(59) Superstructure				7
(98) Border Bridge State Code				Share %				(60) Substructure				2
(99) Border Bridge Structure No. #								(61) Channel & Channel Protection				7
(43) Structure Type Main: Concrete				Code 101				(62) Culverts				N
Slab				Jointless bridge type: Not applicable				Load Rating and Posting				Code
(44) Structure Type Appr: Other				Code 000				(31) Design Load - Unknown				0
(45) Number of spans in main unit				001				(63) Operating Rating Method - Allowable Stress (AS)				2
(46) Number of approach spans				0000				(64) Operating Rating				00.0
(107) Deck Structure Type - Concrete Cast-in-Place				Code 1				(65) Inventory Rating Method - Allowable Stress (AS)				2
(108) Wearing Surface / Protective System:								(66) Inventory Rating				00.0
A) Type of wearing surface - Bituminous				Code 6				(70) Bridge Posting				0
B) Type of membrane - Unknown				Code 8				(41) Structure - Open				A
C) Type of deck protection - None				Code 0				Appraisal				Code
(27) Year Built				1850				(67) Structural Evaluation				2
(106) Year Reconstructed				1929				(68) Deck Geometry				5
(42) Type of Service: On - Highway								(69) Underclearances, vert. and horiz.				N
Under - Waterway				Code 15				(71) Waterway adequacy				9
(28) Lanes: On Structure 01 Under structure				00				(72) Approach Roadway Alignment				9
(29) Average Daily Traffic				000040				(36) Traffic Safety Features				0 0 0 0
(30) Year of ADT 2022 (109) Truck ADT				00 %				(113) Scour Critical Bridges				6
(19) Bypass, detour length				002 KM				Inspections				
(48) Length of maximum span				0003.9M				(90) Inspection Date 12/03/21				(91) Frequency 03 MO
(49) Structure Length				00005.3M				(92) Critical Feature Inspection:				(93) CFI DATE
(50) Curb or sidewalk: Left 00.1 M Right 00.1 M								(A) Fracture Critical Detail				N 00 MO A) 00/00/00
(51) Bridge Roadway Width Curb to Curb				007.2M				(B) Underwater Inspection				N 00 MO B) 00/00/00
(52) Deck Width Out to Out				008.2M				(C) Other Special Inspection				Y 03 MO C) 12/01/22
(32) Approach Roadway Width (w/shoulders)				006.7M				(*) Other Inspection ( )				N 00 MO *) 00/00/00
(33) Bridge Median - No median				Code 0				(*) Closed Bridge				N 00 MO *) 00/00/00
(34) Skew 00 DEG (35) Structure Flared				N				(*) UW Special Inspection				N 00 MO *) 00/00/00
(10) Inventory Route MIN Vert Clear				00.00M				(*) Damage Inspection				MO *) 00/00/00
(47) Inventory Route Total Horiz Clear				07.2M				Rating Loads				
(53) Min Vert Clear Over Bridge Rdwy				99.99M				Report Date 00/00/00				H20 Type 3 Type 3S2 Type HS
(54) Min Vert Underclear ref N				00.00M				Operating				0.0 0.0 0.0 0.0
(55) Min Lat Underclear RT ref N				00.0M				Inventory				0.0 0.0 0.0 0.0
(56) Min Lat Underclear LT				00.0M				Field Posting				
Navigation Data								Status				Posting Date 00/00/00
(38) Navigation Control - No navigation control on waterway				Code 0				2 Axle 3 Axle 5 Axle Single				
(111) Pier Protection				Code				Actual				
(39) Navigation Vertical Clearance				000.0M				Recommended				
(116) Vert-lift Bridge Nav Min Vert Clear				M				Missing Signs N				
(40) Navigation Horizontal Clearance				0000.0M				Misc.				
								Bridge Name				
								N Anti-missile fence N Acrow Panel N Jointless Bridge				
								Freeze/Thaw N : Not Applicable				
								# Stairs On/Adjacent 0 Stair Owner(s)				
								Accessibility (Needed/Used)				
								N / N Liftbucket N / N Rigging N / N Other				
								N / N Ladder N / N Staging				
								N / N Boat N / N Traffic Control				
								Y / Y Wader N / N RR Flagperson				Inspection
								N / N Inspector 50 N / N Police				Hours: 008



Report Date: November 28, 2022

State Information				Classification				Code				
BDEPT# = P02003				Agency Br.No.				(112) NBIS Bridge Length				N
Town = Paxton				L.O.				(104) Highway System				N
B.I.N = 6UX				AASHTO = 040.0				(26) Functional Class - Rural Local				09
RANK = 0 H.I. = NA				FHWA Select List = N (6/21/17)				(100) Defense Highway				0
(8) Structure Number				P020036UXMUNBRI				(101) Parallel Structure				N
(5) Inventory Route				151000000				(102) Direction of Traffic - 1-way traffic				1
(2) State Highway Department District				03				(103) Temporary Structure				N
(3) County Code 027 (4) Place code				52420				(105) Federal Lands Highways				0
(6) Features Intersected				WATER TURKEY HILL BROOK				(110) Designated National Network				N
(7) Facility Carried				HWY BLACK HILL R				(20) Toll - On free road				3
(9) Location				1000 FT NW OF RT 31				(21) Maintain - Town Agency				03
(11) Kilometerpoint				0000.306				(22) Owner - Town Agency				03
(12) Base Highway Network				N				(37) Historical Significance				undetermined
(13) LRS Inventory Route & Subroute				000000000000				Condition				Code
(16) Latitude				42 DEG 18 MIN 42.54 SEC				(58) Deck				7
(17) Longitude				71 DEG 57 MIN 35.74 SEC				(59) Superstructure				7
(98) Border Bridge State Code				Share %				(60) Substructure				2
(99) Border Bridge Structure No. #								(61) Channel & Channel Protection				7
(43) Structure Type Main: Concrete				Code 101				(62) Culverts				N
Slab				Jointless bridge type: Not applicable				Load Rating and Posting				Code
(44) Structure Type Appr: Other				Code 000				(31) Design Load - Unknown				0
(45) Number of spans in main unit				001				(63) Operating Rating Method - Allowable Stress (AS)				2
(46) Number of approach spans				0000				(64) Operating Rating				00.0
(107) Deck Structure Type - Concrete Cast-in-Place				Code 1				(65) Inventory Rating Method - Allowable Stress (AS)				2
(108) Wearing Surface / Protective System:								(66) Inventory Rating				00.0
A) Type of wearing surface - Bituminous				Code 6				(70) Bridge Posting				0
B) Type of membrane - Unknown				Code 8				(41) Structure - Open				A
C) Type of deck protection - None				Code 0				Appraisal				Code
(27) Year Built				1850				(67) Structural Evaluation				2
(106) Year Reconstructed				1929				(68) Deck Geometry				5
(42) Type of Service: On - Highway								(69) Underclearances, vert. and horiz.				N
Under - Waterway				Code 15				(71) Waterway adequacy				9
(28) Lanes: On Structure 01 Under structure				00				(72) Approach Roadway Alignment				9
(29) Average Daily Traffic				000040				(36) Traffic Safety Features				0 0 0 0
(30) Year of ADT 1986 (109) Truck ADT				00 %				(113) Scour Critical Bridges				6
(19) Bypass, detour length				002 KM				Inspections				
(48) Length of maximum span				0003.9M				(90) Inspection Date 12/03/21				(91) Frequency 03 MO
(49) Structure Length				00005.3M				(92) Critical Feature Inspection:				(93) CFI DATE
(50) Curb or sidewalk: Left 00.1 M Right 00.1 M								(A) Fracture Critical Detail				N 00 MO A) 00/00/00
(51) Bridge Roadway Width Curb to Curb				007.2M				(B) Underwater Inspection				N 00 MO B) 00/00/00
(52) Deck Width Out to Out				008.2M				(C) Other Special Inspection				Y 03 MO C) 09/21/22
(32) Approach Roadway Width (w/shoulders)				006.7M				(*) Other Inspection ( )				N 00 MO *) 00/00/00
(33) Bridge Median - No median				Code 0				(*) Closed Bridge				N 00 MO *) 00/00/00
(34) Skew 00 DEG (35) Structure Flared				N				(*) UW Special Inspection				N 00 MO *) 00/00/00
(10) Inventory Route MIN Vert Clear				00.00M				(*) Damage Inspection				MO *) 00/00/00
(47) Inventory Route Total Horiz Clear				07.2M				Rating Loads				
(53) Min Vert Clear Over Bridge Rdwy				99.99M				Report Date 00/00/00				H20 Type 3 Type 3S2 Type HS
(54) Min Vert Underclear ref N				00.00M				Operating				0.0 0.0 0.0 0.0
(55) Min Lat Underclear RT ref N				00.0M				Inventory				0.0 0.0 0.0 0.0
(56) Min Lat Underclear LT				00.0M				Field Posting				
(38) Navigation Control - No navigation control on waterway				Code 0				Status				Posting Date 00/00/00
(111) Pier Protection				Code				2 Axle 3 Axle 5 Axle Single				
(39) Navigation Vertical Clearance				000.0M				Actual				
(116) Vert-lift Bridge Nav Min Vert Clear				M				Recommended				
(40) Navigation Horizontal Clearance				0000.0M				Missing Signs N				
								Misc.				
								Bridge Name				
								N Anti-missile fence N Acrow Panel N Jointless Bridge				
								Freeze/Thaw N : Not Applicable				
								# Stairs On/Adjacent 0 Stair Owner(s)				
								Accessibility (Needed/Used)				
								N / N Liftbucket N / N Rigging N / N Other				
								N / N Ladder N / N Staging				
								N / N Boat N / N Traffic Control				
								Y / Y Wader N / N RR Flagperson				Inspection Hours: 008
								N / N Inspector 50 N / N Police				



## STRUCTURES INSPECTION FIELD REPORT

## SPECIAL MEMBER INSPECTION

BR. DEPT. NO.

P-02-003

2-DIST

03

B.I.N.

6UX

CITY/TOWN <b>PAXTON</b>	8-STRUCTURE NO. <b>P02003-6UX-MUN-BRI</b>	11-Kilo. POINT <b>000.306</b>	90-ROUTINE INSP. DATE <b>Dec 3, 2021</b>	93*-SPEC. MEMB. INSP. DATE <b>Sep 21, 2022</b>
07-FACILITY CARRIED <b>HWY BLACK HILL R</b>	MEMORIAL NAME/LOCAL NAME	27-YR BUILT <b>1850</b>	106-YR REBUILT <b>1929</b>	*YR REHAB'D (NON 106) <b>0000</b>
06-FEATURES INTERSECTED <b>WATER TURKEY HILL BROOK</b>	26-FUNCTIONAL CLASS <b>Rural Local</b>	DIST. BRIDGE INSPECTION ENGINEER <b>M. Azizi</b>		
43-STRUCTURE TYPE <b>101 : Concrete Slab</b>	22-OWNER <b>Town Agency</b>	21-MAINTAINER <b>Town Agency</b>	TEAM LEADER <b>T. Toloczko</b>	
107-DECK TYPE <b>1 : Concrete Cast-in-Place</b>	WEATHER <b>P Cloudy</b>	TEMP. (air) <b>20°C</b>	TEAM MEMBERS <b>R. ROGERS</b>	

WEIGHT POSTING	Not Applicable <input checked="" type="checkbox"/>	At bridge	Advance	PLANS (Y/N): <b>N</b>
Actual Posting	H 3 3S2 Single <b>N N N N</b>	E W	E W	(V.C.R.) (Y/N): <b>N</b>
Recommended Posting	<b>N N N N</b>			TAPE#:
Waived Date: <b>00/00/0000</b>	EJDMT Date: <b>00/00/0000</b>			

RATING	Recommend for Rating or Rerating (Y/N): <b>N</b>	If YES please give priority: HIGH ( ) MEDIUM ( ) LOW ( )
Rating Report (Y/N): <b>N</b>	Date: <b>----</b>	
REASON: <b>W</b>		
Inspection data at time of existing rating I 58: - I 59: - I 60: - I 62: - Date: <b>00/00/0000</b>		

## SPECIAL MEMBER(S):

	MEMBER	CRACK (Y/N):	WELD'S CONDITION (0-9)	LOCATION OF CORROSION, SECTION LOSS (%), CRACKS, COLLISION DAMAGE, STRESS CONCENTRATION, ETC.	CONDITION		INV. RATING OF MEMBER FROM RATING ANALYSIS			Deficiencies
					PREVIOUS (0-9)	PRESENT (0-9)	H-20	3	3S2	
A	Item 60.1.d - Breastwalls	N		See remarks in comments section.	2	2	Not Rated			S-A
B	Item 60.1.e - Wingwalls	N		See remarks in comments section.	2	2	Not Rated			S-A
C										
D										
E										

List of field tests performed:

(Overall Previous Condition)

(Overall Current Condition)

I-58	I-59	I-60	I-62
7	7	2	-
7	7	2	-

DEFICIENCY: A defect in a structure that requires corrective action.

## CATEGORIES OF DEFICIENCIES:

M= Minor Deficiency - Deficiencies which are minor in nature, generally do not impact the structural integrity of the bridge and could easily be repaired. Examples include but are not limited to: Spalled concrete, Minor pot holes, Minor corrosion of steel, Minor scouring, Clogged drainage, etc.

S= Severe/Major Deficiency - Deficiencies which are more extensive in nature and need more planning and effort to repair. Examples include but are not limited to: Moderate to major deterioration in concrete, Exposed and corroded rebars, Considerable settlement, Considerable scouring or undermining, Moderate to extensive corrosion to structural steel with measurable loss of section, etc.

C-S= Critical Structural Deficiency - A deficiency in a structural element of a bridge that poses an extreme unsafe condition due to the failure or imminent failure of the element which will affect the structural integrity of the bridge.

C-H= Critical Hazard Deficiency - A deficiency in a component or element of a bridge that poses an extreme hazard or unsafe condition to the public, but does not impair the structural integrity of the bridge. Examples include but are not limited to: Loose concrete hanging down over traffic or pedestrians, A hole in a sidewalk that may cause injuries to pedestrians, Missing section of bridge railing, etc.

## URGENCY OF REPAIR:

I = Immediate - [Inspector(s) immediately contact District Bridge Inspection Engineer (DBIE) to report the Deficiency and to receive further instruction from him/her].

A = ASAP - [Action/Repair should be initiated by District Maintenance Engineer or the Responsible Party (if not a State owned bridge) upon receipt of the Inspection Report].

P = Prioritize - [Shall be prioritized by District Maintenance Engineer or the Responsible Party (if not a State owned bridge) and repairs made when funds and/or manpower is available].

X=UNKNOWN

N=NOT APPLICABLE

H=HIDDEN/INACCESSIBLE

R=REMOVED



CITY/TOWN PAXTON	B.I.N. 6UX	BR. DEPT. NO. P-02-003	8.-STRUCTURE NO. P02003-6UX-MUN-BRI	INSPECTION DATE SEP 21, 2022
---------------------	---------------	---------------------------	--	---------------------------------

## REMARKS

### BRIDGE ORIENTATION

According to the map the approaches are north and south and the elevations are east and west. This is a single span concrete deck slab with dry set masonry stone abutments. The brook flows east to west.

### GENERAL REMARKS

- No change at breastwalls or wingwalls since previous inspection.

### ITEM 60 - SUBSTRUCTURE

#### Item 60.1.d - Breastwalls

Both breastwalls have several cracked stones throughout, mostly at or near bottom.

##### South breastwall:

- West end; 1" wide full height settlement crack with up to 3.5' penetration into the crack and up to 1" outward displacement. **See Photo 1.**
- At 5' east of aforementioned crack; 0.25" wide full height settlement crack extending diagonally to top west corner. **See Photo 1.**
- Between aforementioned cracks; cracked stone at mid-height and delaminated pointing near top.
- West end waterline; 6' long area of missing or dislodged stones with up to 3.33' penetration and no evidence of loss of fill. **See Photo 2.**

##### North breastwall:

- West end; 0.18" wide full height settlement crack. **See Photo 3.**
- West end bottom; one dislodged stone with no evident settlement/displacement of the overlying stones.
- West end last 3' bottom; up to 2' penetration.
- East end; full height diagonal crack up to 0.25" wide. **See Photo 4.**
- East end near bottom; two cracked stones. **See Photo 5.**

#### Item 60.1.e - Wingwalls

##### Southwest wingwall:

- Adjacent to breastwall; significant settlement, measured at two areas of full height separation between the stones, i.e. 3.5" wide at north separation and 3" wide at south separation, with up to 52" penetration. Measurement loci have been marked with yellow keel. **See Photo 6.**
- At mid-height; missing stone with a void up to 1.58' wide x 1' high x 1.5' deep.
- Outward displacement; 2".
- Overall outward displacement; 3", taken using a 4' level on previous measurement locus. **See Photo 7.**

##### Southeast wingwall:

- Wingwall top has 2" outward displacement (measured at the concrete rail base) and a full height crack along the pointing. **See Photo 8.**

##### Northwest wingwall:

- Outward displacement; 1" with full height settlement crack (at pointing/stone interface). **See Photo 9.**
- At wingwall/breastwall interface; cracked stone. **See Photo 10.**

### Photo Log

- Photo 1 : South breastwall west end, looking south.
- Photo 2 : South breastwall west end bottom voids, looking southeast.
- Photo 3 : North breastwall west end, looking northwest.
- Photo 4 : North breastwall east end, looking north.
- Photo 5 : North breastwall east end bottom, looking north.

CITY/TOWN PAXTON	B.I.N. 6UX	BR. DEPT. NO. P-02-003	8.-STRUCTURE NO. P02003-6UX-MUN-BRI	INSPECTION DATE SEP 21, 2022
<div style="text-align: center;"><b>REMARKS</b></div> <p>Photo 6 : Southwest wingwall, looking east. Photo 7 : Southwest wingwall, looking southeast. Photo 8 : Southeast wingwall, looking southwest. Photo 9 : Northwest wingwall, looking northeast. Photo 10 : Northwest wingwall/north breastwall interface, looking east.</p>				



CITY/TOWN PAXTON	B.I.N. 6UX	BR. DEPT. NO. P-02-003	8.-STRUCTURE NO. P02003-6UX-MUN-BRI	INSPECTION DATE SEP 21, 2022
---------------------	---------------	---------------------------	--	---------------------------------

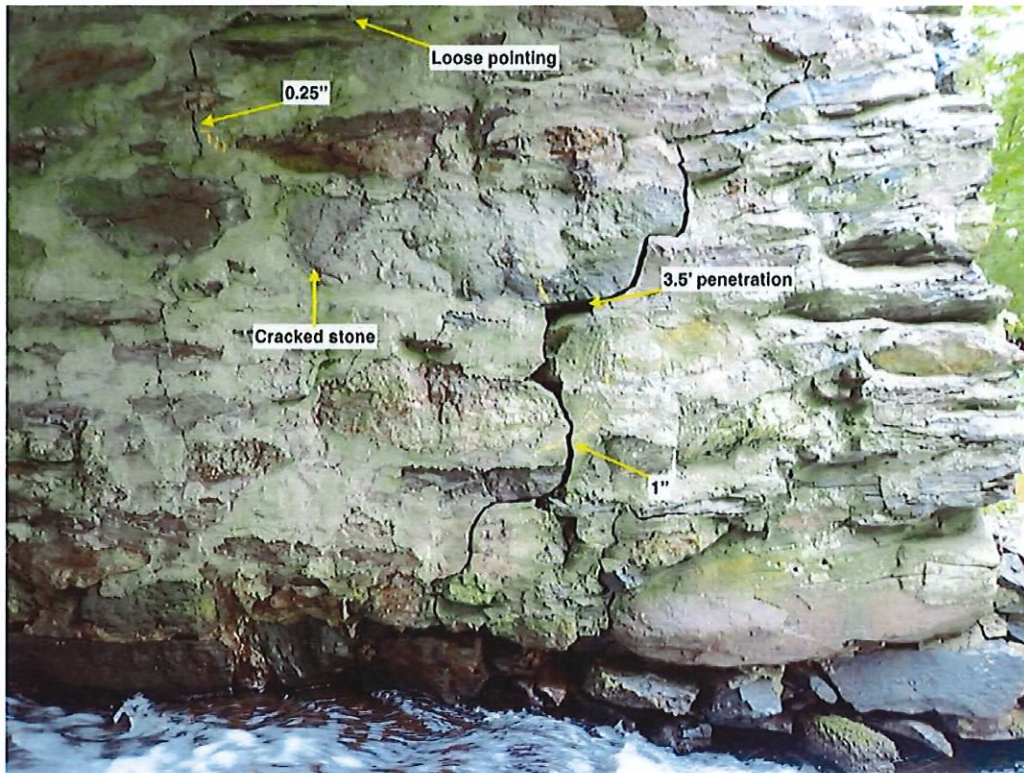
**PHOTOS**

**Photo 3:** North breastwall west end, looking northwest.

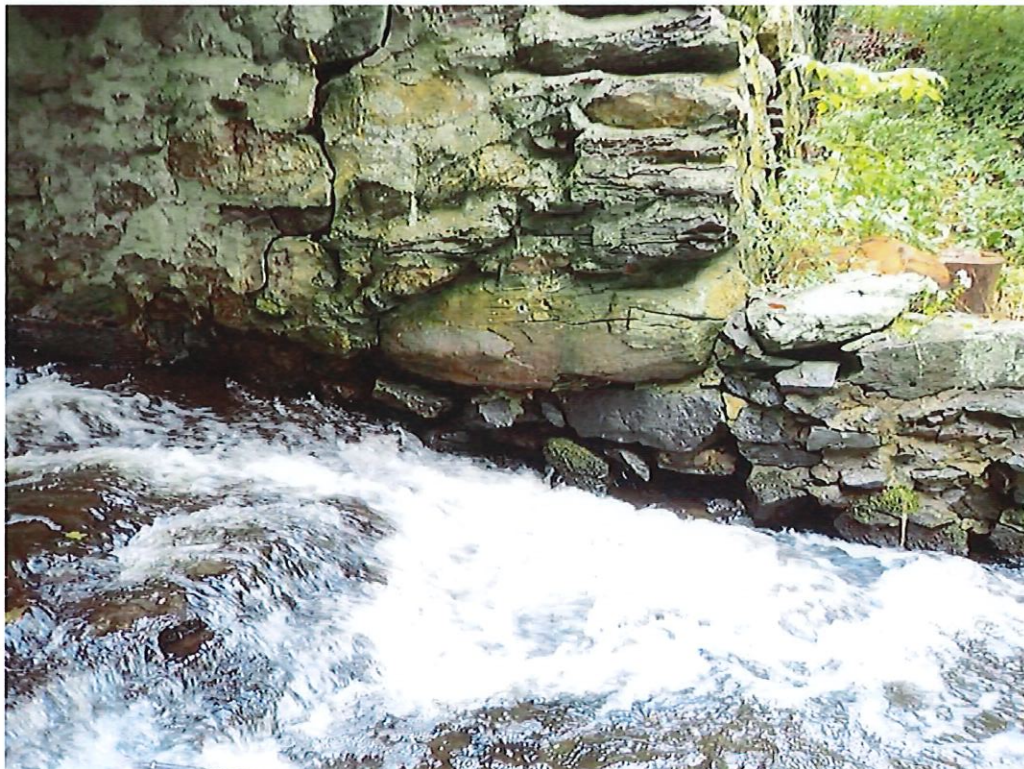


**Photo 4:** North breastwall east end, looking north.



CITY/TOWN  
PAXTONB.I.N.  
6UXBR. DEPT. NO.  
P-02-0038-STRUCTURE NO.  
P02003-6UX-MUN-BRIINSPECTION DATE  
SEP 21, 2022**PHOTOS**

**Photo 1: South breastwall west end, looking south.**



**Photo 2: South breastwall west end bottom voids, looking southeast.**



CITY/TOWN  
PAXTONB.I.N.  
6UXBR. DEPT. NO.  
P-02-0038-STRUCTURE NO.  
P02003-6UX-MUN-BRIINSPECTION DATE  
SEP 21, 2022**PHOTOS**

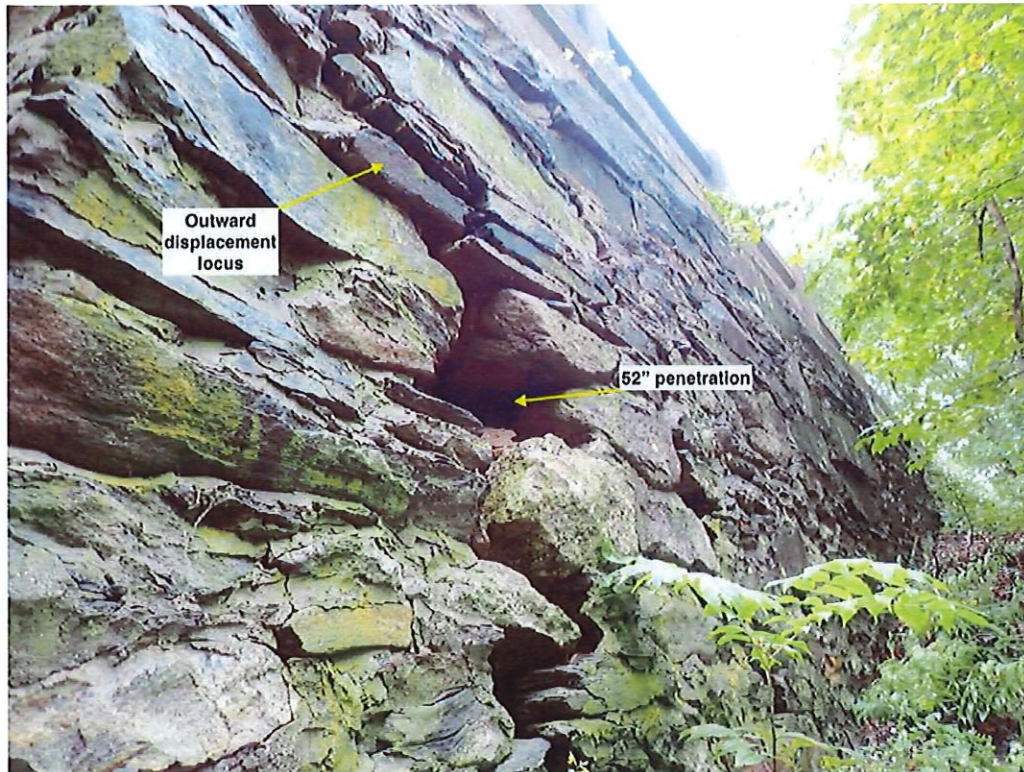
**Photo 5:** North breastwall east end bottom, looking north.



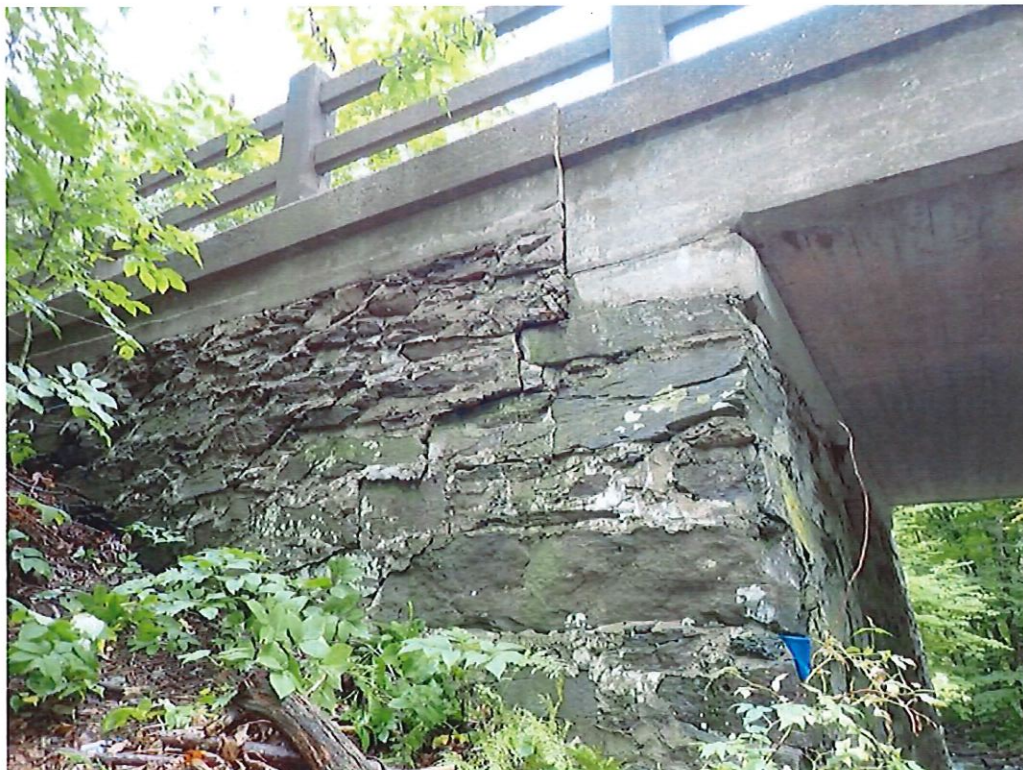
**Photo 6:** Southwest wingwall, looking east.



CITY/TOWN PAXTON	B.I.N. 6UX	BR. DEPT. NO. P-02-003	8.-STRUCTURE NO. P02003-6UX-MUN-BRI	INSPECTION DATE SEP 21, 2022
---------------------	---------------	---------------------------	--	---------------------------------

**PHOTOS**

**Photo 7:** Southwest wingwall, looking southeast.



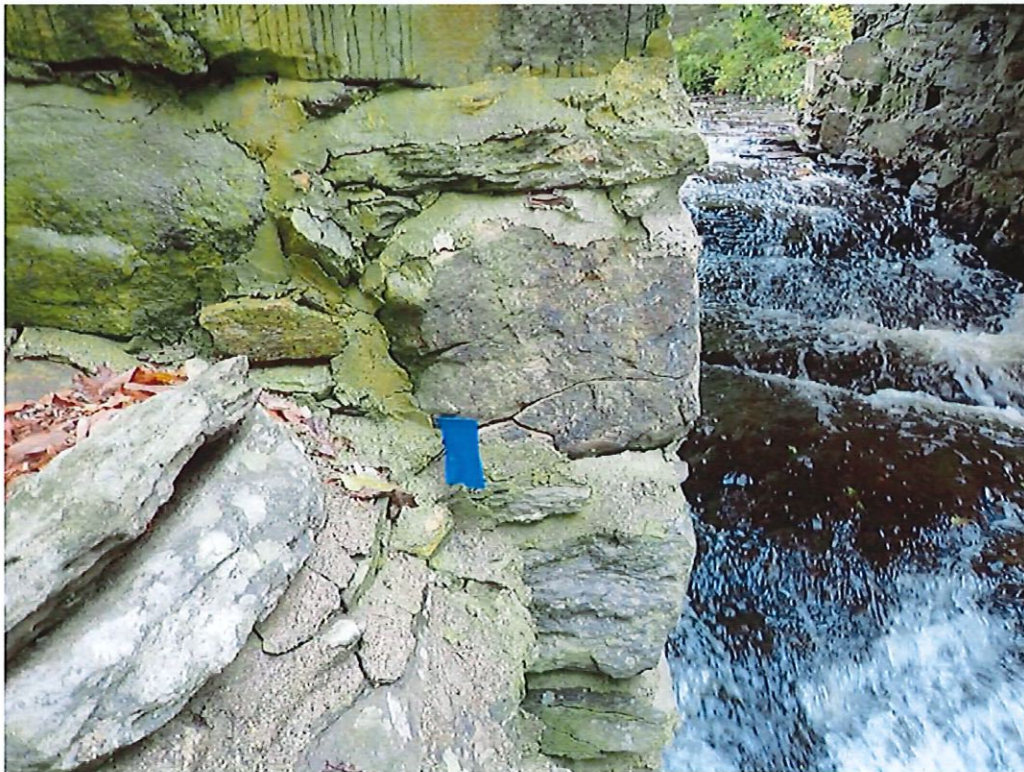
**Photo 8:** Southeast wingwall, looking southwest.



CITY/TOWN PAXTON	B.I.N. 6UX	BR. DEPT. NO. P-02-003	8.-STRUCTURE NO. P02003-6UX-MUN-BRI	INSPECTION DATE SEP 21, 2022
---------------------	---------------	---------------------------	--	---------------------------------

**PHOTOS**

**Photo 9: Northwest wingwall, looking northeast.**



**Photo 10: Northwest wingwall/north breastwall interface, looking east.**



Report Date: August 30, 2022

State Information				Classification				Code				
BDEPT#= P02003				Agency Br.No.				(112) NBIS Bridge Length				N
Town= Paxton				L.O.				(104) Highway System				N
B.I.N= 6UX				AASHTO= 040.0				(26) Functional Class - Rural Local				09
RANK= 0 H.I.= NA				FHWA Select List= N (6/21/17)				(100) Defense Highway				0
Identification				P020036UXMUNBRI				(101) Parallel Structure				N
(8) Structure Number				151000000				(102) Direction of Traffic - 1-way traffic				1
(5) Inventory Route				03				(103) Temporary Structure				N
(2) State Highway Department District				52420				(105) Federal Lands Highways				0
(3) County Code 027 (4) Place code				WATER TURKEY HILL BROOK				(110) Designated National Network				N
(6) Features Intersected				HWY BLACK HILL R				(20) Toll - On free road				3
(7) Facility Carried				1000 FT NW OF RT 31				(21) Maintain - Town Agency				03
(9) Location				0000.306				(22) Owner - Town Agency				03
(11) Kilometerpoint				N				(37) Historical Significance undetermined				
(12) Base Highway Network				000000000000				Condition				Code
(13) LRS Inventory Route & Subroute				42 DEG 18 MIN 42.54 SEC				(58) Deck				7
(16) Latitude				71 DEG 57 MIN 35.74 SEC				(59) Superstructure				7
(17) Longitude				Share %				(60) Substructure				2
(98) Border Bridge State Code								(61) Channel & Channel Protection				7
(99) Border Bridge Structure No. #								(62) Culverts				N
Structure Type and Material								Load Rating and Posting				Code
(43) Structure Type Main: Concrete				Code 101				(31) Design Load - Unknown				0
Slab				Jointless bridge type: Not applicable				(63) Operating Rating Method - Allowable Stress (AS)				2
(44) Structure Type Appr: Other				Code 000				(64) Operating Rating				00.0
(45) Number of spans in main unit				001				(65) Inventory Rating Method - Allowable Stress (AS)				2
(46) Number of approach spans				0000				(66) Inventory Rating				00.0
(107) Deck Structure Type - Concrete Cast-in-Place				Code 1				(70) Bridge Posting				0
(108) Wearing Surface / Protective System:								(41) Structure - Open				A
A) Type of wearing surface - Bituminous				Code 6				Appraisal				Code
B) Type of membrane - Unknown				Code 8				(67) Structural Evaluation				2
C) Type of deck protection - None				Code 0				(68) Deck Geometry				5
Age and Service								(69) Underclearances, vert. and horiz.				N
(27) Year Built				1850				(71) Waterway adequacy				9
(106) Year Reconstructed				1929				(72) Approach Roadway Alignment				9
(42) Type of Service: On - Highway								(36) Traffic Safety Features				0 0 0 0
Under - Waterway				Code 15				(113) Scour Critical Bridges				6
(28) Lanes: On Structure 01 Under structure				00				Inspections				
(29) Average Daily Traffic				000040				(90) Inspection Date 12/03/21				(91) Frequency 03 MO
(30) Year of ADT 1986 (109) Truck ADT				00 %				(92) Critical Feature Inspection:				(93) CFI DATE
(19) Bypass, detour length				002 KM				(A) Fracture Critical Detail				N 00 MO A) 00/00/00
Geometric Data								(B) Underwater Inspection				N 00 MO B) 00/00/00
(48) Length of maximum span				0003.9M				(C) Other Special Inspection				Y 03 MO C) 06/02/22 a/b/c/z
(49) Structure Length				00005.3M				(*) Other Inspection ( )				N 00 MO *) 00/00/00
(50) Curb or sidewalk: Left 00.1 M Right 00.1 M								(*) Closed Bridge				N 00 MO *) 00/00/00
(51) Bridge Roadway Width Curb to Curb				007.2M				(*) UW Special Inspection				N 00 MO *) 00/00/00
(52) Deck Width Out to Out				008.2M				(*) Damage Inspection				MO *) 00/00/00
(32) Approach Roadway Width (w/shoulders)				006.7M				Rating Loads				
(33) Bridge Median - No median				Code 0				Report Date 00/00/00				H20 Type 3 Type 3S2 Type HS
(34) Skew 00 DEG (35) Structure Flared				N				Operating				0.0 0.0 0.0 0.0
(10) Inventory Route MIN Vert Clear				00.00M				Inventory				0.0 0.0 0.0 0.0
(47) Inventory Route Total Horiz Clear				07.2M				Field Posting				
(53) Min Vert Clear Over Bridge Rdwy				99.99M				Status				Posting Date 00/00/00
(54) Min Vert Underclear ref N				00.00M				2 Axle 3 Axle 5 Axle Single				
(55) Min Lat Underclear RT ref N				00.0M				Actual				
(56) Min Lat Underclear LT				00.0M				Recommended				
Navigation Data								Missing Signs N				
(38) Navigation Control - No navigation control on waterway				Code 0				Bridge Name				N Anti-missile fence N Acrow Panel N Jointless Bridge
(111) Pier Protection				Code				Freeze/Thaw N : Not Applicable				
(39) Navigation Vertical Clearance				000.0M				# Stairs On/Adjacent 0 Stair Owner(s)				
(116) Vert-lift Bridge Nav Min Vert Clear				M				Accessibility (Needed/Used)				
(40) Navigation Horizontal Clearance				0000.0M				N / N Liftbucket N / N Rigging N / N Other				
								N / N Ladder N / N Staging				
								N / N Boat N / N Traffic Control				
								Y / Y Wader N / N RR Flagperson				Inspection Hours: 008
								N / N Inspector 50 N / N Police				

Report Date: September 22, 2022

State Information				Classification				Code				
BDEPT# = P02003				Agency Br.No.				(112) NBIS Bridge Length				N
Town = Paxton				L.O.				(104) Highway System				N
B.I.N = 6UX				AASHTO = 040.0				(26) Functional Class - Rural Local				09
RANK = 0 H.I. = NA				FHWA Select List = N (6/21/17)				(100) Defense Highway				0
(8) Structure Number				P020036UXMUNBRI				(101) Parallel Structure				N
(5) Inventory Route				151000000				(102) Direction of Traffic - 1-way traffic				1
(2) State Highway Department District				03				(103) Temporary Structure				N
(3) County Code 027 (4) Place code				52420				(105) Federal Lands Highways				0
(6) Features Intersected				WATER TURKEY HILL BROOK				(110) Designated National Network				N
(7) Facility Carried				HWY BLACK HILL R				(20) Toll - On free road				3
(9) Location				1000 FT NW OF RT 31				(21) Maintain - Town Agency				03
(11) Kilometerpoint				0000.306				(22) Owner - Town Agency				03
(12) Base Highway Network				N				(37) Historical Significance undetermined				
(13) LRS Inventory Route & Subroute				0000000000000				Condition				Code
(16) Latitude				42 DEG 18 MIN 42.54 SEC				(58) Deck				7
(17) Longitude				71 DEG 57 MIN 35.74 SEC				(59) Superstructure				7
(98) Border Bridge State Code				Share %				(60) Substructure				2
(99) Border Bridge Structure No. #								(61) Channel & Channel Protection				7
								(62) Culverts				N
Structure Type and Material								Load Rating and Posting				Code
(43) Structure Type Main: Concrete				Code 101				(31) Design Load - Unknown				0
Slab				Jointless bridge type: Not applicable				(63) Operating Rating Method - Allowable Stress (AS)				2
(44) Structure Type Appr: Other				Code 000				(64) Operating Rating				00.0
(45) Number of spans in main unit				001				(65) Inventory Rating Method - Allowable Stress (AS)				2
(46) Number of approach spans				0000				(66) Inventory Rating				00.0
(107) Deck Structure Type - Concrete Cast-in-Place				Code 1				(70) Bridge Posting				0
(108) Wearing Surface / Protective System:								(41) Structure - Open				A
A) Type of wearing surface - Bituminous				Code 6				Appraisal				Code
B) Type of membrane - Unknown				Code 8				(67) Structural Evaluation				2
C) Type of deck protection - None				Code 0				(68) Deck Geometry				5
								(69) Underclearances, vert. and horiz.				N
								(71) Waterway adequacy				9
Age and Service								(72) Approach Roadway Alignment				9
(27) Year Built				1850				(36) Traffic Safety Features				0 0 0 0
(106) Year Reconstructed				1929				(113) Scour Critical Bridges				6
(42) Type of Service: On - Highway								Inspections				
Under - Waterway				Code 15				(90) Inspection Date 12/03/21				(91) Frequency 03 MO
(28) Lanes: On Structure 01				Under structure 00				(92) Critical Feature Inspection:				(93) CFI DATE
(29) Average Daily Traffic				000040				(A) Fracture Critical Detail				N 00 MO A) 00/00/00
(30) Year of ADT 1986 (109) Truck ADT				00 %				(B) Underwater Inspection				N 00 MO B) 00/00/00
(19) Bypass, detour length				002 KM				(C) Other Special Inspection				Y 03 MO C) 09/21/22
								(*) Other Inspection ( )				N 00 MO *) 00/00/00
								(*) Closed Bridge				N 00 MO *) 00/00/00
								(*) UW Special Inspection				N 00 MO *) 00/00/00
								(*) Damage Inspection				MO *) 00/00/00
Geometric Data								Rating Loads				
(48) Length of maximum span				0003.9M				Report Date 00/00/00				H20 Type 3 Type 3S2 Type HS
(49) Structure Length				00005.3M				Operating				0.0 0.0 0.0 0.0
(50) Curb or sidewalk: Left 00.1 M Right 00.1 M								Inventory				0.0 0.0 0.0 0.0
(51) Bridge Roadway Width Curb to Curb				007.2M								
(52) Deck Width Out to Out				008.2M								
(32) Approach Roadway Width (w/shoulders)				006.7M								
(33) Bridge Median - No median				Code 0				Field Posting				
(34) Skew 00 DEG (35) Structure Flared				N				Status				Posting Date 00/00/00
(10) Inventory Route MIN Vert Clear				00.00M				2 Axle 3 Axle 5 Axle Single				
(47) Inventory Route Total Horiz Clear				07.2M				Actual				
(53) Min Vert Clear Over Bridge Rdwy				99.99M				Recommended				
(54) Min Vert Underclear ref N				00.00M				Missing Signs N				
(55) Min Lat Underclear RT ref N				00.0M				Misc.				
(56) Min Lat Underclear LT				00.0M								
Navigation Data								Bridge Name				
(38) Navigation Control - No navigation control on waterway				Code 0				N Anti-missile fence N Acrow Panel N Jointless Bridge				
(111) Pier Protection				Code				Freeze/Thaw N : Not Applicable				
(39) Navigation Vertical Clearance				000.0M				# Stairs On/Adjacent 0 Stair Owner(s)				
(116) Vert-lift Bridge Nav Min Vert Clear				M				Accessibility (Needed/Used)				
(40) Navigation Horizontal Clearance				0000.0M				N / N Liftbucket N / N Rigging N / N Other				
								N / N Ladder N / N Staging				
								N / N Boat N / N Traffic Control				
								Y / Y Wader N / N RR Flagperson				Inspection Hours: 008
								N / N Inspector 50 N / N Police				



2-DIST  
03B.I.N.  
6UX

## STRUCTURES INSPECTION FIELD REPORT

## SPECIAL MEMBER INSPECTION

BR. DEPT. NO.  
P-02-003

CITY/TOWN <b>PAXTON</b>	8.-STRUCTURE NO. <b>P02003-6UX-MUN-BRI</b>	11-Kilo. POINT <b>000.306</b>	90-ROUTINE INSP. DATE <b>Dec 19, 2019</b>	93*-SPEC. MEMB. INSP. DATE <b>Sep 17, 2021</b>
07-FACILITY CARRIED <b>HWY BLACK HILL R</b>	MEMORIAL NAME/LOCAL NAME		27-YR BUILT <b>1850</b>	106-YR REBUILT <b>1929</b>
06-FEATURES INTERSECTED <b>WATER TURKEY HILL BROOK</b>		26-FUNCTIONAL CLASS <b>Rural Local</b>	DIST. BRIDGE INSPECTION ENGINEER <b>M. Azizi</b>	
43-STRUCTURE TYPE <b>101 : Concrete Slab</b>	22-OWNER <b>Town Agency</b>	21-MAINTAINER <b>Town Agency</b>	TEAM LEADER J. Snyder	
107-DECK TYPE <b>1 : Concrete Cast-in-Place</b>	WEATHER <b>Cloudy</b>	TEMP. (air) <b>17°C</b>	TEAM MEMBERS <b>O. BROCHU</b>	

<b>WEIGHT POSTING</b>		<b>Not Applicable</b> <input checked="" type="checkbox"/>		<b>At bridge</b>		<b>Advance</b>		<b>PLANS (Y/N):</b> <b>N</b>																	
		<table border="1"> <tr> <td>H</td> <td>3</td> <td>3S2</td> <td>Single</td> </tr> <tr> <td><b>N</b></td> <td><b>N</b></td> <td><b>N</b></td> <td><b>N</b></td> </tr> </table>		H	3	3S2	Single	<b>N</b>	<b>N</b>	<b>N</b>	<b>N</b>	<table border="1"> <tr> <td>E</td> <td>W</td> </tr> <tr> <td></td> <td></td> </tr> </table>		E	W			<table border="1"> <tr> <td>E</td> <td>W</td> </tr> <tr> <td></td> <td></td> </tr> </table>		E	W			<b>(V.C.R.) (Y/N):</b> <b>N</b>	
H	3	3S2	Single																						
<b>N</b>	<b>N</b>	<b>N</b>	<b>N</b>																						
E	W																								
E	W																								
Actual Posting				Signs In Place (Y=Yes, N=No, NR=Not Required)																					
Recommended Posting				Legibility/Visibility																					
Waived Date: 00/00/0000		EJDMT Date: 00/00/0000						TAP#: _____																	

<b>RATING</b>		Recommend for Rating or Rerating (Y/N): <b>N</b>		If YES please give priority:	
Rating Report (Y/N): <b>N</b>	Date: ----			HIGH ( ) MEDIUM ( ) LOW ( )	
Inspection data at time of existing rating		REASON:			
I 58: - I 59: - I 60: - I 62: -		Date: 00/00/0000			

SPECIAL MEMBER(S):										
	MEMBER	CRACK (Y/N):	WELD'S CONDITION (0-9)	LOCATION OF CORROSION, SECTION LOSS (%), CRACKS, COLLISION DAMAGE, STRESS CONCENTRATION, ETC.	CONDITION		INV. RATING OF MEMBER FROM RATING ANALYSIS			Deficiencies
					PREVIOUS (0-9)	PRESENT (0-9)	H-20	3	3S2	
A	Item 60.1.d - Breastwalls	N		See remarks in comments section.	2	2	Not Rated			S-A
B	Item 60.1.e - Wingwalls	N		See remarks in comments section.	2	2	Not Rated			S-A
C										
D										
E										

List of field tests performed: <b>None</b>	(Overall Previous Condition)	I-58	I-59	I-60	I-62
		7	7	2	-
	(Overall Current Condition)	7	7	2	-

**DEFICIENCY:** A defect in a structure that requires corrective action.

**CATEGORIES OF DEFICIENCIES:**

**M= Minor Deficiency** - Deficiencies which are minor in nature, generally do not impact the structural integrity of the bridge and could easily be repaired. Examples include but are not limited to: Spalled concrete, Minor pot holes, Minor corrosion of steel, Minor scouring, Clogged drainage, etc.

**S= Severe/Major Deficiency** - Deficiencies which are more extensive in nature and need more planning and effort to repair. Examples include but are not limited to: Moderate to major deterioration in concrete, Exposed and corroded rebars, Considerable settlement, Considerable scouring or undermining, Moderate to extensive corrosion to structural steel with measurable loss of section, etc.

**C-S= Critical Structural Deficiency** - A deficiency in a structural element of a bridge that poses an extreme unsafe condition due to the failure or imminent failure of the element which will affect the structural integrity of the bridge.

**C-H= Critical Hazard Deficiency** - A deficiency in a component or element of a bridge that poses an extreme hazard or unsafe condition to the public, but does not impair the structural integrity of the bridge. Examples include but are not limited to: Loose concrete hanging down over traffic or pedestrians, A hole in a sidewalk that may cause injuries to pedestrians, Missing section of bridge railing, etc.

**URGENCY OF REPAIR:**

**I = Immediate** - [Inspector(s) immediately contact District Bridge Inspection Engineer (DBIE) to report the Deficiency and to receive further instruction from him/her].

**A = ASAP** - [Action/Repair should be initiated by District Maintenance Engineer or the Responsible Party (if not a State owned bridge) upon receipt of the Inspection Report].

**P = Prioritize** - [Shall be prioritized by District Maintenance Engineer or the Responsible Party (if not a State owned bridge) and repairs made when funds and/or manpower is available].

X=UNKNOWN

N=NOT APPLICABLE

H=HIDDEN/INACCESSIBLE

R=REMOVED

CITY/TOWN PAXTON	B.I.N. 6UX	BR. DEPT. NO. P-02-003	8.-STRUCTURE NO. P02003-6UX-MUN-BRI	INSPECTION DATE SEP 17, 2021
---------------------	---------------	---------------------------	--	---------------------------------

## REMARKS

### BRIDGE ORIENTATION

According to the map the approaches are north and south and the elevations are east and west. This is a single span concrete deck slab with dry set masonry stone abutments. The brook flows east to west.

### GENERAL REMARKS

Since the previous inspection:

- No change to the wingwalls.
- No change to the breastwalls.

### ITEM 60 - SUBSTRUCTURE

#### Item 60.1 - Abutments

##### Item 60.1.d - Breastwalls

Both breastwalls have several cracked stones throughout mostly at or near the bottom.

##### **South breastwall:**

The west end has a 1" wide full height settlement crack with up to 3'-6" penetration into the crack and up to 1" outward displacement. **See Photo 1.** At 5' east of this crack there is an additional 0.25" wide full height settlement crack extending diagonally to the top west corner. **See Photo 2.**

The waterline west end has a 6' long area of missing or dislodged stones with up to 3'-4" penetration and no evidence of loss of fill. **See Photo 3.**

##### **North breastwall:**

The west end has a 0.18" wide full height settlement crack.

The west end bottom has one dislodged stone with no evident settlement/displacement of the overlying stones. The last 3' of the west end has up to 2' of penetration at the bottom. **See Photo 4.**

The east end has a diagonal crack up to 0.25" wide full height.

##### Item 60.1.e - Wingwalls

##### **Southwest wingwall:**

The wingwall has significant settlement, measured at two areas of full height separation between the stones, 3" wide and 3.5" wide, with up to 3'-8" penetration. These measurement loci have been marked with spray paint and yellow keel.

No additional separation has been found during this inspection. **See Photo 5.**

The outward displacement measurement (2") and the overall outward displacement measurement (3") have not changed since the previous inspection. The overall outward displacement was found by placing a 4' level on the previous measurement locus. **See Photo 6.**

##### **Southeast wingwall:**

The wingwall has 2" outward displacement at the top (measured at the concrete rail base).

### Photo Log

- Photo 1 : South breastwall, west end crack.
- Photo 2 : South breastwall, new settlement crack.
- Photo 3 : South breastwall, west end bottom.
- Photo 4 : North breastwall, west end bottom gap in masonry.
- Photo 5 : Southwest wingwall, settlement and measurement loci.
- Photo 6 : Southwest wingwall, outward displacement locus closeup.



CITY/TOWN PAXTON	B.I.N. 6UX	BR. DEPT. NO. P-02-003	8-STRUCTURE NO. P02003-6UX-MUN-BRI	INSPECTION DATE SEP 17, 2021
---------------------	---------------	---------------------------	---------------------------------------	---------------------------------

**PHOTOS**

Photo 1: South breastwall, west end crack.

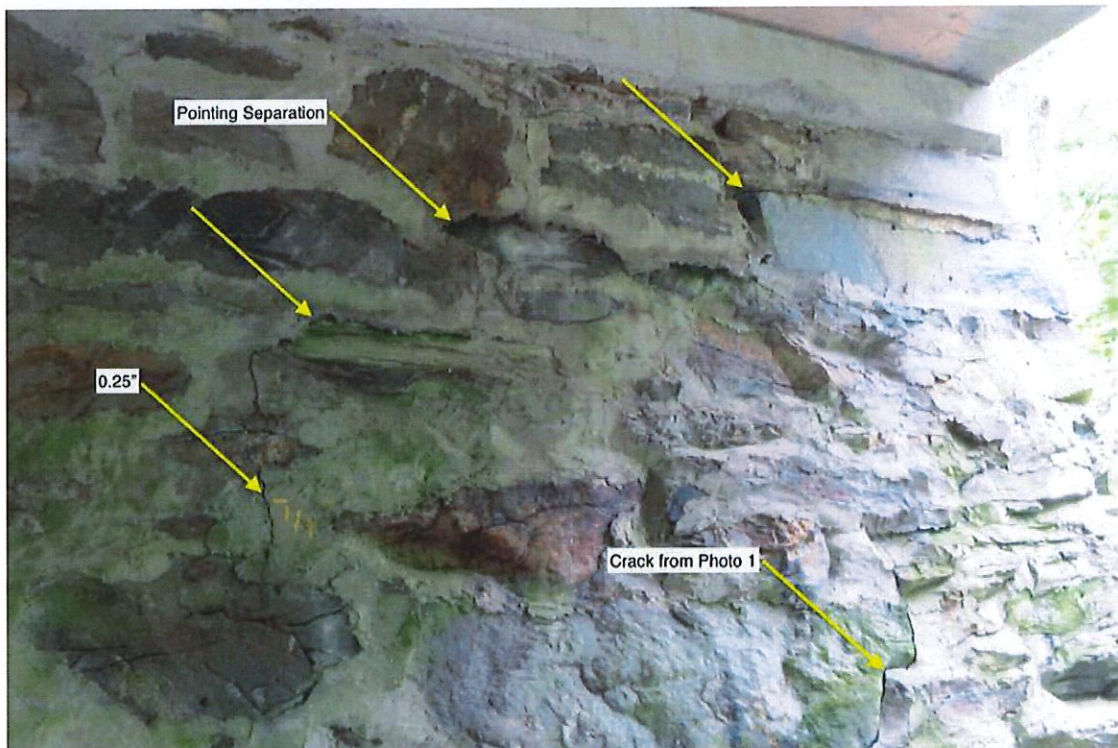


Photo 2: South breastwall, new settlement crack.



CITY/TOWN PAXTON	B.I.N. 6UX	BR. DEPT. NO. P-02-003	8.-STRUCTURE NO. P02003-6UX-MUN-BRI	INSPECTION DATE SEP 17, 2021
---------------------	---------------	---------------------------	--	---------------------------------

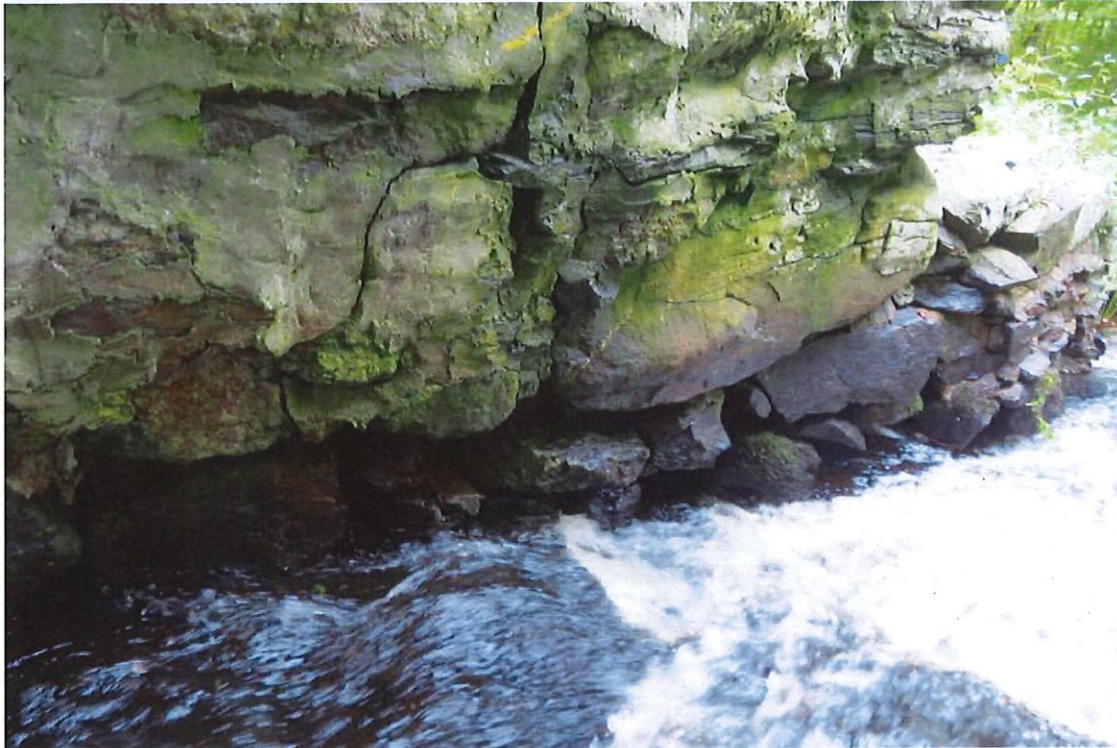
**PHOTOS**

Photo 3: South breastwall, west end bottom.



Photo 4: North breastwall, west end bottom gap in masonry.



CITY/TOWN PAXTON	B.I.N. 6UX	BR. DEPT. NO. P-02-003	8.-STRUCTURE NO. P02003-6UX-MUN-BRI	INSPECTION DATE SEP 17, 2021
---------------------	---------------	---------------------------	--	---------------------------------

**PHOTOS**

**Photo 5:** Southwest wingwall, settlement and measurement loci.

CITY/TOWN PAXTON	B.I.N. 6UX	BR. DEPT. NO. P-02-003	8.-STRUCTURE NO. P02003-6UX-MUN-BRI	INSPECTION DATE SEP 17, 2021
---------------------	---------------	---------------------------	--	---------------------------------

**PHOTOS**

**Photo 6:** Southwest wingwall, outward displacement locus closeup.



Report Date: August 26, 2021

State Information		Classification		Code
BDEPT# = P02003	Agency Br.No.	(112) NBIS Bridge Length		N
Town = Paxton	L.O.	(104) Highway System		N
B.I.N = 6UX	AASHTO = 040.0	(26) Functional Class -	Rural Local	09
RANK = 0 H.I. = NA	FHWA Select List = N (6/21/17)	(100) Defense Highway		0
(8) Structure Number	P020036UXMUNBRI	(101) Parallel Structure		N
(5) Inventory Route	151000000	(102) Direction of Traffic -	1-way traffic	1
(2) State Highway Department District	03	(103) Temporary Structure		N
(3) County Code 027 (4) Place code	52420	(105) Federal Lands Highways		0
(6) Features Intersected	<b>WATER TURKEY HILL BROOK</b>	(110) Designated National Network		N
(7) Facility Carried	<b>HWY BLACK HILL R</b>	(20) Toll -	On free road	3
(9) Location	1000 FT NW OF RT 31	(21) Maintain -	Town Agency	03
(11) Kilometerpoint	0000.306	(22) Owner -	Town Agency	03
(12) Base Highway Network	N	(37) Historical Significance	undetermined	
(13) LRS Inventory Route & Subroute	000000000000	Condition		Code
(16) Latitude	42 DEG 18 MIN 42.54 SEC	(58) Deck		7
(17) Longitude	71 DEG 57 MIN 35.74 SEC	(59) Superstructure		7
(98) Border Bridge State Code	Share %	(60) Substructure		2
(99) Border Bridge Structure No. #		(61) Channel & Channel Protection		5
Structure Type and Material		(62) Culverts		N
(43) Structure Type Main: Concrete	Code 101	Load Rating and Posting		Code
Slab	Jointless bridge type: Not applicable	(31) Design Load -	Unknown	0
(44) Structure Type Appr: Other	Code 000	(63) Operating Rating Method -	Allowable Stress (AS)	2
(45) Number of spans in main unit	001	(64) Operating Rating		00.0
(46) Number of approach spans	0000	(65) Inventory Rating Method -	Allowable Stress (AS)	2
(107) Deck Structure Type - Concrete Cast-in-Place	Code 1	(66) Inventory Rating		00.0
(108) Wearing Surface / Protective System:		(70) Bridge Posting		0
A) Type of wearing surface - Bituminous	Code 6	(41) Structure -	Open	A
B) Type of membrane - Unknown	Code 8	Appraisal		Code
C) Type of deck protection - None	Code 0	(67) Structural Evaluation		2
Age and Service		(68) Deck Geometry		5
(27) Year Built	1850	(69) Underclearances, vert. and horiz.		N
(106) Year Reconstructed	1929	(71) Waterway adequacy		9
(42) Type of Service: On - Highway		(72) Approach Roadway Alignment		9
Under - Waterway	Code 15	(36) Traffic Safety Features		0 0 0 0
(28) Lanes: On Structure 01 Under structure 00		(113) Scour Critical Bridges		6
(29) Average Daily Traffic	000040	Inspections		
(30) Year of ADT 1986 (109) Truck ADT	00 %	(90) Inspection Date 12/19/19	(91) Frequency 03 MO	
(19) Bypass, detour length	002 KM	(92) Critical Feature Inspection:	(93) CFI DATE	
Geometric Data		(A) Fracture Critical Detail	N 00 MO A)	00/00/00
(48) Length of maximum span	0003.9M	(B) Underwater Inspection	N 00 MO B)	00/00/00
(49) Structure Length	00005.3M	(C) Other Special Inspection	Y 03 MO C)	06/09/21
(50) Curb or sidewalk: Left 00.1 M Right 00.1 M		(*) Other Inspection ( )	N 00 MO *)	00/00/00
(51) Bridge Roadway Width Curb to Curb	007.2M	(*) Closed Bridge	N 00 MO *)	00/00/00
(52) Deck Width Out to Out	008.2M	(*) UW Special Inspection	N 00 MO *)	00/00/00
(32) Approach Roadway Width (w/shoulders)	006.7M	(*) Damage Inspection		MO *) 00/00/00
(33) Bridge Median - No median	Code 0	Rating Loads		
(34) Skew 00 DEG (35) Structure Flared	N	Report Date 00/00/00	H20	Type 3 Type 3S2 Type HS
(10) Inventory Route MIN Vert Clear	00.00M	Operating	0.0	0.0 0.0 0.0
(47) Inventory Route Total Horiz Clear	07.2M	Inventory	0.0	0.0 0.0 0.0
(53) Min Vert Clear Over Bridge Rdwy	99.99M	Field Posting		
(54) Min Vert Underclear ref	N 00.00M	Status		Posting Date 00/00/00
(55) Min Lat Underclear RT ref	N 00.0M	Actual	2 Axle	3 Axle 5 Axle Single
(56) Min Lat Underclear LT	00.0M	Recommended		
Navigation Data		Missing Signs	N	
(38) Navigation Control - No navigation control on waterway	Code 0	Misc.		
(111) Pier Protection	Code	Bridge Name		
(39) Navigation Vertical Clearance	000.0M	N Anti-missile fence	N Acrow Panel	N Jointless Bridge
(116) Vert-lift Bridge Nav Min Vert Clear	M	Freeze/Thaw	N : Not Applicable	
(40) Navigation Horizontal Clearance	0000.0M	Accessibility (Needed/Used)		
		N / N Liftbucket	N / N Rigging	N / N Other
		N / N Ladder	N / N Staging	
		N / N Boat	N / N Traffic Control	
		Y / Y Wader	N / N RR Flagperson	Inspection
		N / N Inspector 50	N / N Police	Hours: 008

Report Date: September 21, 2021

State Information				Classification				Code				
BDEPT# = P02003				Agency Br.No.				(112) NBIS Bridge Length				N
Town = Paxton				L.O.				(104) Highway System				N
B.I.N = 6UX				AASHTO = 040.0				(26) Functional Class - Rural Local				09
RANK = 0 H.I. = NA				FHWA Select List = N (6/21/17)				(100) Defense Highway				0
Identification				P020036UXMUNBRI				(101) Parallel Structure				N
(8) Structure Number				151000000				(102) Direction of Traffic - 1-way traffic				1
(5) Inventory Route				03				(103) Temporary Structure				N
(2) State Highway Department District				52420				(105) Federal Lands Highways				0
(3) County Code 027 (4) Place code				WATER TURKEY HILL BROOK				(110) Designated National Network				N
(6) Features Intersected				HWY BLACK HILL R				(20) Toll - On free road				3
(7) Facility Carried				1000 FT NW OF RT 31				(21) Maintain - Town Agency				03
(9) Location				0000.306				(22) Owner - Town Agency				03
(11) Kilometerpoint				N				(37) Historical Significance undetermined				
(12) Base Highway Network				000000000000				Condition				Code
(13) LRS Inventory Route & Subroute				42 DEG 18 MIN 42.54 SEC				(58) Deck				7
(16) Latitude				71 DEG 57 MIN 35.74 SEC				(59) Superstructure				7
(17) Longitude				Share %				(60) Substructure				2
(98) Border Bridge State Code								(61) Channel & Channel Protection				5
(99) Border Bridge Structure No. #								(62) Culverts				N
Structure Type and Material								Load Rating and Posting				Code
(43) Structure Type Main: Concrete				Code 101				(31) Design Load - Unknown				0
Slab				Jointless bridge type: Not applicable				(63) Operating Rating Method - Allowable Stress (AS)				2
(44) Structure Type Appr: Other				Code 000				(64) Operating Rating				00.0
(45) Number of spans in main unit				001				(65) Inventory Rating Method - Allowable Stress (AS)				2
(46) Number of approach spans				0000				(66) Inventory Rating				00.0
(107) Deck Structure Type - Concrete Cast-in-Place				Code 1				(70) Bridge Posting				0
(108) Wearing Surface / Protective System:								(41) Structure - Open				A
A) Type of wearing surface - Bituminous				Code 6				Appraisal				Code
B) Type of membrane - Unknown				Code 8				(67) Structural Evaluation				2
C) Type of deck protection - None				Code 0				(68) Deck Geometry				5
Age and Service								(69) Underclearances, vert. and horiz.				N
(27) Year Built				1850				(71) Waterway adequacy				9
(106) Year Reconstructed				1929				(72) Approach Roadway Alignment				9
(42) Type of Service: On - Highway								(36) Traffic Safety Features				0 0 0 0
Under - Waterway				Code 15				(113) Scour Critical Bridges				6
(28) Lanes: On Structure 01				Under structure 00				Inspections				
(29) Average Daily Traffic				000040				(90) Inspection Date 12/19/19				(91) Frequency 03 MO
(30) Year of ADT 1986 (109) Truck ADT				00 %				(92) Critical Feature Inspection:				(93) CFI DATE
(19) Bypass, detour length				002 KM				(A) Fracture Critical Detail				N 00 MO A) 00/00/00
Geometric Data								(B) Underwater Inspection				N 00 MO B) 00/00/00
(48) Length of maximum span				0003.9M				(C) Other Special Inspection				Y 03 MO C) 09/17/21
(49) Structure Length				00005.3M				(*) Other Inspection ( )				N 00 MO *) 00/00/00
(50) Curb or sidewalk: Left 00.1 M Right 00.1 M								(*) Closed Bridge				N 00 MO *) 00/00/00
(51) Bridge Roadway Width Curb to Curb				007.2M				(*) UW Special Inspection				N 00 MO *) 00/00/00
(52) Deck Width Out to Out				008.2M				(*) Damage Inspection				MO *) 00/00/00
(32) Approach Roadway Width (w/shoulders)				006.7M				Rating Loads				
(33) Bridge Median - No median				Code 0				Report Date 00/00/00				H20 Type 3 Type 352 Type HS
(34) Skew 00 DEG (35) Structure Flared				N				Operating				0.0 0.0 0.0 0.0
(10) Inventory Route MIN Vert Clear				00.00M				Inventory				0.0 0.0 0.0 0.0
(47) Inventory Route Total Horiz Clear				07.2M				Field Posting				
(53) Min Vert Clear Over Bridge Rdwy				99.99M				Status				Posting Date 00/00/00
(54) Min Vert Underclear ref N				00.00M				2 Axle 3 Axle 5 Axle Single				
(55) Min Lat Underclear RT ref N				00.0M				Actual				
(56) Min Lat Underclear LT				00.0M				Recommended				
Navigation Data								Missing Signs N				
(38) Navigation Control - No navigation control on waterway				Code 0				Misc.				
(111) Pier Protection				Code				Bridge Name				
(39) Navigation Vertical Clearance				000.0M				N Anti-missile fence N Acrow Panel N Jointless Bridge				
(116) Vert-lift Bridge Nav Min Vert Clear				M				Freeze/Thaw N : Not Applicable				
(40) Navigation Horizontal Clearance				0000.0M				Accessibility (Needed/Used)				
								N / N Liftbucket N / N Rigging N / N Other				
								N / N Ladder N / N Staging				
								N / N Boat N / N Traffic Control				
								Y / Y Wader N / N RR Flagperson				Inspection Hours: 008
								N / N Inspector 50 N / N Police				



2-DIST  
03B.I.N.  
6UX

## STRUCTURES INSPECTION FIELD REPORT

BR. DEPT. NO.  
P-02-003

## SPECIAL MEMBER INSPECTION

CITY/TOWN <b>PAXTON</b>	8-STRUCTURE NO. <b>P02003-6UX-MUN-BRI</b>	11-Kilo. POINT <b>000.306</b>	90-ROUTINE INSP. DATE <b>Dec 19, 2019</b>	93*-SPEC. MEMB. INSP. DATE <b>Dec 3, 2020</b>
07-FACILITY CARRIED <b>HWY BLACK HILL R</b>	MEMORIAL NAME/LOCAL NAME		27-YR BUILT <b>1850</b>	106-YR REBUILT <b>1929</b>
06-FEATURES INTERSECTED <b>WATER TURKEY HILL BROOK</b>	26-FUNCTIONAL CLASS <b>Rural Local</b>	DIST. BRIDGE INSPECTION ENGINEER <b>M. Azizi</b>		
43-STRUCTURE TYPE <b>101 : Concrete Slab</b>	22-OWNER <b>Town Agency</b>	21-MAINTAINER <b>Town Agency</b>	TEAM LEADER <b>T. Toloczko</b>	
107-DECK TYPE <b>1 : Concrete Cast-in-Place</b>	WEATHER <b>Clear</b>	TEMP. (air) <b>10°C</b>	TEAM MEMBERS <b>T. T. GUMULA</b>	

WEIGHT POSTING		Not Applicable <input checked="" type="checkbox"/>		At bridge		Advance		PLANS (Y/N): <b>N</b>	
		H 3 3S2 Single		E W		E W		(V.C.R.) (Y/N): <b>N</b>	
Actual Posting		<b>N N N N</b>		<input type="checkbox"/> <input type="checkbox"/>		<input type="checkbox"/> <input type="checkbox"/>			
Recommended Posting		<b>N N N N</b>		<input type="checkbox"/> <input type="checkbox"/>		<input type="checkbox"/> <input type="checkbox"/>			
Waived Date: <b>00/00/0000</b>		EJDMT Date: <b>00/00/0000</b>		Legibility/Visibility				TAPE#:	

RATING		Recommend for Rating or Rerating (Y/N): <b>N</b>		If YES please give priority:	
Rating Report (Y/N): <b>N</b>	Date: <b>----</b>			HIGH ( ) MEDIUM ( ) LOW ( )	
Inspection data at time of existing rating		REASON:			
158: - 159: - 160: - 162: -		Date: <b>00/00/0000</b>			

## SPECIAL MEMBER(S):

	MEMBER	CRACK (Y/N):	WELD'S CONDITION (0-9)	LOCATION OF CORROSION, SECTION LOSS (%), CRACKS, COLLISION DAMAGE, STRESS CONCENTRATION, ETC.	CONDITION		INV. RATING OF MEMBER FROM RATING ANALYSIS			Deficiencies
					PREVIOUS (0-9)	PRESENT (0-9)	H-20	3	3S2	
A	Item 60.1.d - Breastwalls	N		See remarks in comments section.	3	3	Not Rated			S-A
B	Item 60.1.e - Wingwalls	N		See remarks in comments section.	3	3	Not Rated			S-A
C										
D										
E										

## List of field tests performed:

**None**

(Overall Previous Condition)

(Overall Current Condition)

I-58	I-59	I-60	I-62
7	7	3	-
7	7	3	-

DEFICIENCY: A defect in a structure that requires corrective action.

## CATEGORIES OF DEFICIENCIES:

M= Minor Deficiency - Deficiencies which are minor in nature, generally do not impact the structural integrity of the bridge and could easily be repaired. Examples include but are not limited to: Spalled concrete, Minor pot holes, Minor corrosion of steel, Minor scouring, Clogged drainage, etc.

S= Severe/Major Deficiency - Deficiencies which are more extensive in nature and need more planning and effort to repair. Examples include but are not limited to: Moderate to major deterioration in concrete, Exposed and corroded rebars, Considerable settlement, Considerable scouring or undermining, Moderate to extensive corrosion to structural steel with measurable loss of section, etc.

C-S= Critical Structural Deficiency - A deficiency in a structural element of a bridge that poses an extreme unsafe condition due to the failure or imminent failure of the element which will affect the structural integrity of the bridge.

C-H= Critical Hazard Deficiency - A deficiency in a component or element of a bridge that poses an extreme hazard or unsafe condition to the public, but does not impair the structural integrity of the bridge. Examples include but are not limited to: Loose concrete hanging down over traffic or pedestrians, A hole in a sidewalk that may cause injuries to pedestrians, Missing section of bridge railing, etc.

## URGENCY OF REPAIR:

I = Immediate- [Inspector(s) immediately contact District Bridge Inspection Engineer (DBIE) to report the Deficiency and to receive further instruction from him/her].

A = ASAP- [Action/Repair should be initiated by District Maintenance Engineer or the Responsible Party (if not a State owned bridge) upon receipt of the Inspection Report].

P = Prioritize- [Shall be prioritized by District Maintenance Engineer or the Responsible Party (if not a State owned bridge) and repairs made when funds and/or manpower is available].

X=UNKNOWN

N=NOT APPLICABLE

H=HIDDEN/INACCESSIBLE

R=REMOVED



CITY/TOWN PAXTON	B.I.N. 6UX	BR. DEPT. NO. P-02-003	8.-STRUCTURE NO. P02003-6UX-MUN-BRI	INSPECTION DATE DEC 3, 2020
---------------------	---------------	---------------------------	--	--------------------------------

## REMARKS

### **BRIDGE ORIENTATION**

According to the map the approaches are north and south and the elevations are east and west. This is a single span concrete deck slab with dry set masonry stone abutments. The brook flows east to west.

### **GENERAL REMARKS**

Since the previous inspection:

- No change to the wingwalls.
- An additional full height settlement crack in south breastwall, east of the west end crack. See Item 60.1.d.

### **ITEM 60 - SUBSTRUCTURE**

#### **Item 60.1 - Abutments**

##### **Item 60.1.d - Breastwalls**

Both breastwalls have several cracked stones throughout, mostly at or near the bottom.

##### **South breastwall:**

The west end has a 0.875" wide full height settlement crack with up to 2'-9" penetration into the crack. **See Photo 1.**

New condition: At 5' east of this crack there is an additional 0.25" wide full height settlement crack extending diagonally to the top west corner. **See Photo 2.**

The waterline west end has a 6' long area of missing or dislodged stones with up to 3'-4" penetration and no evidence of loss of fill. **See Photo 3.**

##### **North breastwall:**

The west end has a 0.18" wide full height settlement crack.

The west end bottom has one dislodged stone with no evident settlement/displacement of the overlying stones. **See Photo 4.**

#### **Item 60.1.e - Wingwalls**

##### **Southwest wingwall:**

The wingwall has significant settlement, measured at two areas of full height separation between the stones, 3" wide and 3.5" wide, with up to 3'-8" penetration. These measurement loci have been marked with spray paint and yellow keel.

No additional separation has been found during this inspection. **See Photo 5.**

The outward displacement measurement (2") and the overall outward displacement measurement (3") have not changed since the previous inspection. The overall outward displacement was found by placing a 4' level on the previous measurement locus. **See Photo 6.**

##### **Southeast wingwall:**

The wingwall has 2" outward displacement at the top (measured at the concrete rail base).

### **Photo Log**

- Photo 1 : South breastwall, west end crack.
- Photo 2 : South breastwall, new settlement crack.
- Photo 3 : South breastwall, west end bottom.
- Photo 4 : North breastwall, west end bottom gap in masonry.
- Photo 5 : Southwest wingwall, settlement and measurement loci.
- Photo 6 : Southwest wingwall, outward displacement locus closeup.



CITY/TOWN PAXTON	B.I.N. 6UX	BR. DEPT. NO. P-02-003	8.-STRUCTURE NO. P02003-6UX-MUN-BRI	INSPECTION DATE DEC 3, 2020
---------------------	---------------	---------------------------	--	--------------------------------

## PHOTOS



Photo 1: South breastwall, west end crack.

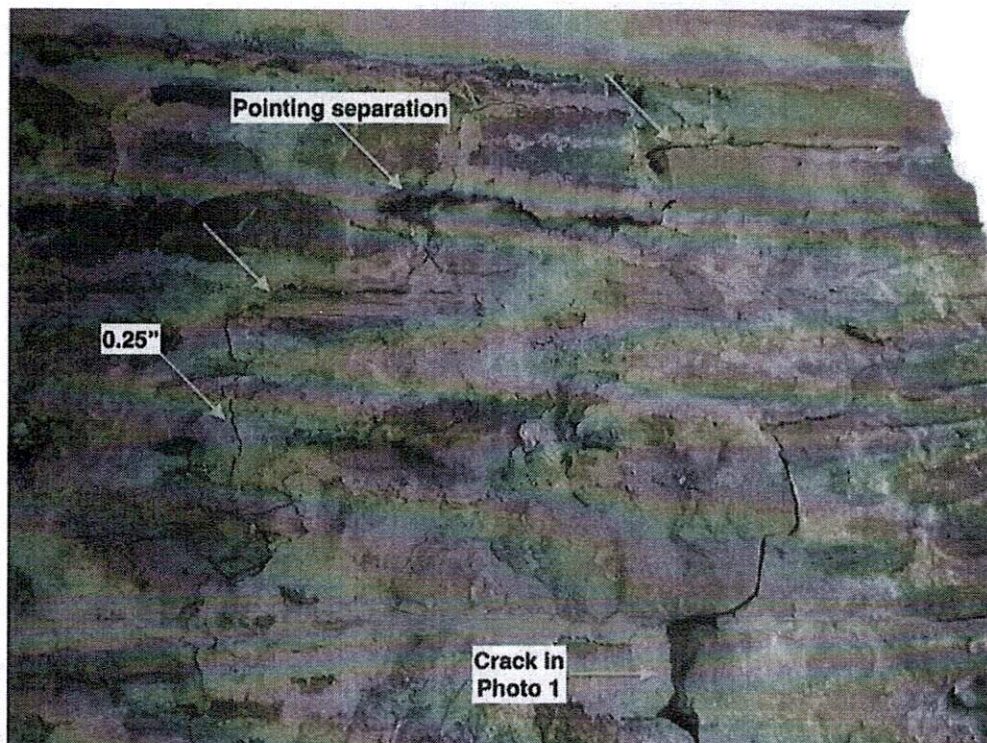


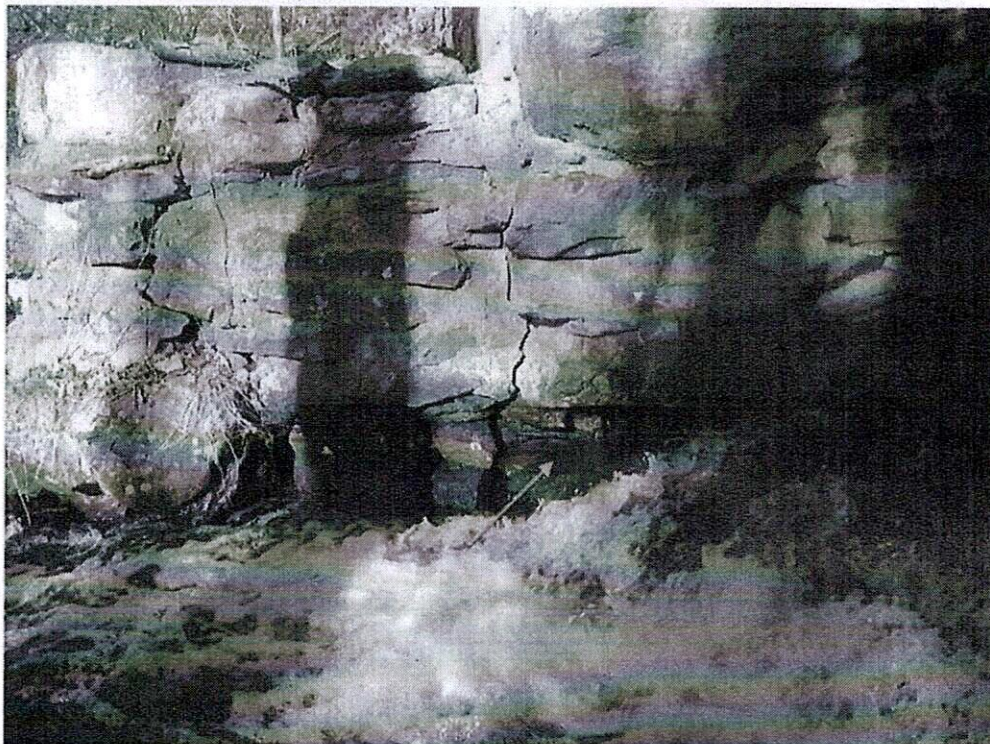
Photo 2: South breastwall, new settlement crack.



CITY/TOWN PAXTON	B.I.N. 6UX	BR. DEPT. NO. P-02-003	8.-STRUCTURE NO. P02003-6UX-MUN-BRI	INSPECTION DATE DEC 3, 2020
---------------------	---------------	---------------------------	--	--------------------------------

**PHOTOS**

**Photo 3:** South breastwall, west end bottom.

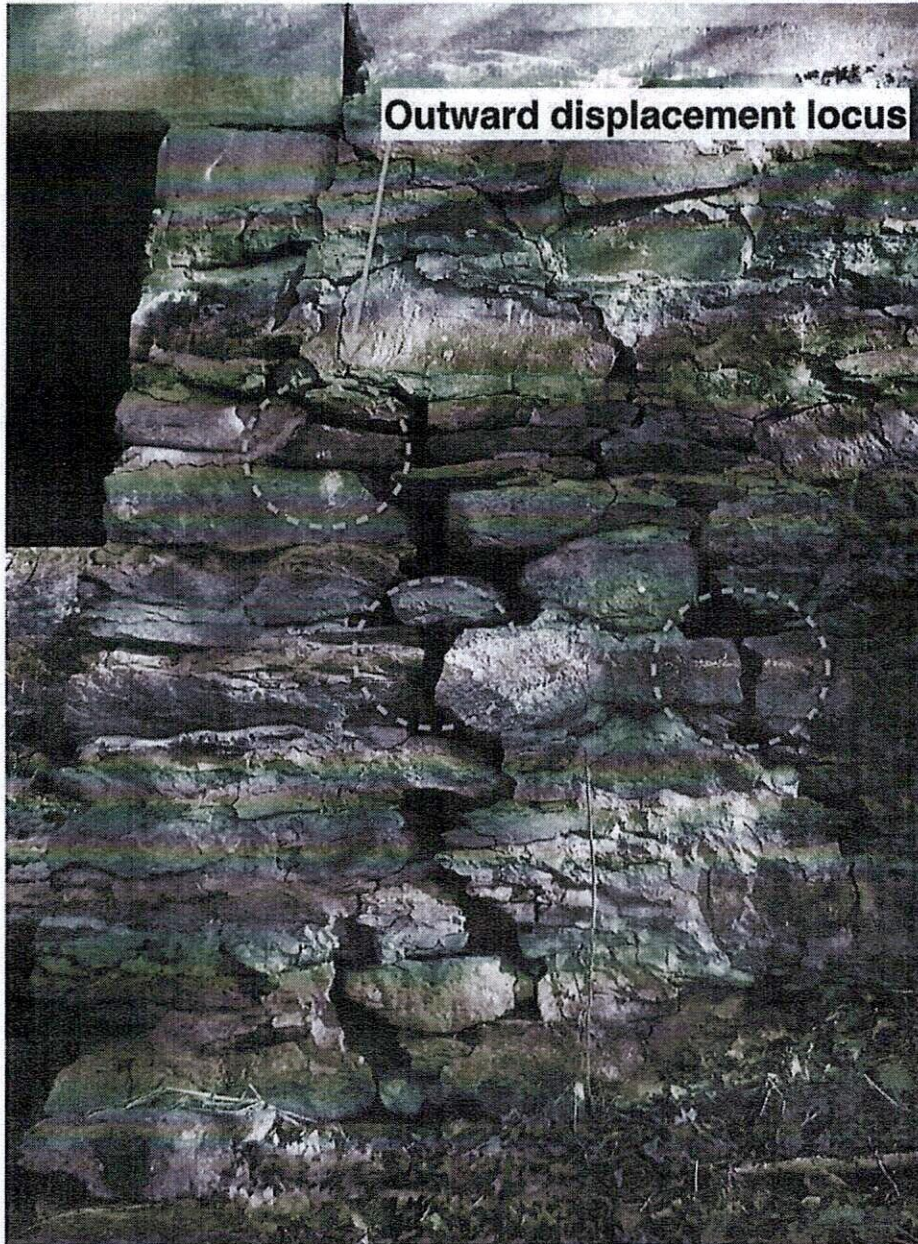


**Photo 4:** North breastwall, west end bottom gap in masonry.



CITY/TOWN  
PAXTONB.I.N.  
6UXBR. DEPT. NO.  
P-02-0038.-STRUCTURE NO.  
P02003-6UX-MUN-BRIINSPECTION DATE  
DEC 3, 2020

## PHOTOS



**Photo 5:** Southwest wingwall, settlement and measurement loci.



CITY/TOWN PAXTON	B.I.N. 6UX	BR. DEPT. NO. P-02-003	8.-STRUCTURE NO. P02003-6UX-MUN-BRI	INSPECTION DATE DEC 3, 2020
---------------------	---------------	---------------------------	--	--------------------------------

**PHOTOS**

**Photo 6:** Southwest wingwall, outward displacement locus closeup.



Report Date: November 25, 2020

State Information		Classification		Code
BDEPT# = P02003	Agency Br.No.	(112) NBIS Bridge Length		N
Town = Paxton	L.O.	(104) Highway System		N
B.I.N = 6UX	AASHTO = 040.0	(26) Functional Class - Rural Local		09
RANK = 0 H.I. = NA	FHWA Select List = N (6/21/17)	(100) Defense Highway		0
Identification		(101) Parallel Structure		N
(8) Structure Number	P020036UXMUNBRI	(102) Direction of Traffic - 1-way traffic		1
(5) Inventory Route	151000000	(103) Temporary Structure		N
(2) State Highway Department District	03	(105) Federal Lands Highways		0
(3) County Code 027 (4) Place code	52420	(110) Designated National Network		N
(6) Features Intersected	WATER TURKEY HILL BROOK	(20) Toll - On free road		3
(7) Facility Carried	HWY BLACK HILL R	(21) Maintain - Town Agency		03
(9) Location	1000 FT NW OF RT 31	(22) Owner - Town Agency		03
(11) Kilometerpoint	0000.306	(37) Historical Significance	undetermined	
(12) Base Highway Network	N	Condition		Code
(13) LRS Inventory Route & Subroute	000000000000	(58) Deck		7
(16) Latitude	42 DEG 18 MIN 42.54 SEC	(59) Superstructure		7
(17) Longitude	71 DEG 57 MIN 35.74 SEC	(60) Substructure		3
(98) Border Bridge State Code	Share %	(61) Channel & Channel Protection		5
(99) Border Bridge Structure No. #		(62) Culverts		N
Structure Type and Material		Load Rating and Posting		Code
(43) Structure Type Main: Concrete	Code 101	(31) Design Load - Unknown		0
Slab	Jointless bridge type: Not applicable	(63) Operating Rating Method - Allowable Stress (AS)		2
(44) Structure Type Appr: Other	Code 000	(64) Operating Rating		00.0
(45) Number of spans in main unit	001	(65) Inventory Rating Method - Allowable Stress (AS)		2
(46) Number of approach spans	0000	(66) Inventory Rating		00.0
(107) Deck Structure Type - Concrete Cast-in-Place	Code 1	(70) Bridge Posting		0
(108) Wearing Surface / Protective System:		(41) Structure - Open		A
A) Type of wearing surface - Bituminous	Code 6	Appraisal		Code
B) Type of membrane - Unknown	Code 8	(67) Structural Evaluation		3
C) Type of deck protection - None	Code 0	(68) Deck Geometry		5
Age and Service		(69) Underclearances, vert. and horiz.		N
(27) Year Built	1850	(71) Waterway adequacy		9
(106) Year Reconstructed	1929	(72) Approach Roadway Alignment		9
(42) Type of Service: On - Highway		(36) Traffic Safety Features		0 0 0 0
Under - Waterway	Code 15	(113) Scour Critical Bridges		6
(28) Lanes: On Structure 01 Under structure	00	Inspections		
(29) Average Daily Traffic	000040	(90) Inspection Date 12/19/19 12/3/20	(91) Frequency	06 MO
(30) Year of ADT 1986 (109) Truck ADT	00 %	(92) Critical Feature Inspection: OK	(93) CFI DATE	
(19) Bypass, detour length	002 KM	(A) Fracture Critical Detail	N 00 MO A)	00/00/00
Geometric Data		(B) Underwater Inspection	N 00 MO B)	00/00/00
(48) Length of maximum span	0003.9M	(C) Other Special Inspection	Y 06 MO C)	06/29/20 12/3/20
(49) Structure Length	00005.3M	(*) Other Inspection ()	N 00 MO *)	00/00/00
(50) Curb or sidewalk: Left 00.1 M Right 00.1 M		(*) Closed Bridge	N 00 MO *)	00/00/00
(51) Bridge Roadway Width Curb to Curb	007.2M	(*) UW Special Inspection	N 00 MO *)	00/00/00
(52) Deck Width Out to Out	008.2M	(*) Damage Inspection	N 00 MO *)	00/00/00
(32) Approach Roadway Width (w/shoulders)	006.7M	Rating Loads		
(33) Bridge Median - No median	Code 0	Report Date 00/00/00	H20	Type 3 Type 3S2 Type HS
(34) Skew 00 DEG (35) Structure Flared	N	Operating	0.0	0.0 0.0 0.0
(10) Inventory Route MIN Vert Clear	00.00M	Inventory	0.0	0.0 0.0 0.0
(47) Inventory Route Total Horiz Clear	07.2M	Field Posting		
(53) Min Vert Clear Over Bridge Rdwy	99.99M	Status	Posting Date 00/00/00	
(54) Min Vert Underclear ref N	00.00M	Actual	2 Axle 3 Axle 5 Axle Single	
(55) Min Lat Underclear RT ref N	00.0M	Recommended		
(56) Min Lat Underclear LT	00.0M	Missing Signs N		
Navigation Data		Misc.		
(38) Navigation Control - No navigation control on waterway	Code 0	Bridge Name	N Anti-missile fence N Acrow Panel N Jointless Bridge	
(111) Pier Protection	Code	Freeze/Thaw N : Not Applicable		
(39) Navigation Vertical Clearance	000.0M	Accessibility (Needed/Used)		
(116) Vert-lift Bridge Nav Min Vert Clear	M	N / N Liftbucket	N / N Rigging	N / N Other
(40) Navigation Horizontal Clearance	0000.0M	N / N Ladder	N / N Staging	
		N / N Boat	N / N Traffic Control	
		Y / Y Wader	N / N RR Flagperson	Inspection Hours: 008
		N / N Inspector 50	N / N Police	



Report Date: December 3, 2020

State Information				Classification		Code
BDEPT# = P02003		Agency Br.No.		(112) NBIS Bridge Length		N
Town = Paxton		L.O.		(104) Highway System		N
B.I.N = 6UX		AASHTO = 040.0		(26) Functional Class -	Rural Local	09
RANK = 0 H.I. = NA		FHWA Select List = N (6/21/17)		(100) Defense Highway		0
Identification				(101) Parallel Structure		N
(8) Structure Number		P020036UXMUNBRI		(102) Direction of Traffic -	1-way traffic	1
(5) Inventory Route		151000000		(103) Temporary Structure		N
(2) State Highway Department District		03		(105) Federal Lands Highways		0
(3) County Code 027 (4) Place code		52420		(110) Designated National Network		N
(6) Features Intersected		WATER TURKEY HILL BROOK		(20) Toll -	On free road	3
(7) Facility Carried		HWY BLACK HILL R		(21) Maintain -	Town Agency	03
(9) Location		1000 FT NW OF RT 31		(22) Owner -	Town Agency	03
(11) Kilometerpoint		0000.306		(37) Historical Significance	undetermined	
(12) Base Highway Network		N		Condition		Code
(13) LRS Inventory Route & Subroute		000000000000		(58) Deck		7
(16) Latitude		42 DEG 18 MIN 42.54 SEC		(59) Superstructure		7
(17) Longitude		71 DEG 57 MIN 35.74 SEC		(60) Substructure		3
(98) Border Bridge State Code		Share %		(61) Channel & Channel Protection		5
(99) Border Bridge Structure No. #				(62) Culverts		N
Structure Type and Material				Load Rating and Posting		Code
(43) Structure Type Main:		Concrete	Code 101	(31) Design Load -	Unknown	0
Slab		Jointless bridge type:	Not applicable	(63) Operating Rating Method -	Allowable Stress (AS)	2
(44) Structure Type Appr:				(64) Operating Rating		00.0
Other		Code	000	(65) Inventory Rating Method -	Allowable Stress (AS)	2
(45) Number of spans in main unit			001	(66) Inventory Rating		00.0
(46) Number of approach spans			0000	(70) Bridge Posting		0
(107) Deck Structure Type -		Concrete Cast-in-Place	Code 1	(41) Structure -	Open	A
(108) Wearing Surface / Protective System:				Appraisal		Code
A) Type of wearing surface -		Bituminous	Code 6	(67) Structural Evaluation		3
B) Type of membrane -		Unknown	Code 8	(68) Deck Geometry		5
C) Type of deck protection -		None	Code 0	(69) Underclearances, vert. and horiz.		N
Age and Service				(71) Waterway adequacy		9
(27) Year Built			1850	(72) Approach Roadway Alignment		9
(106) Year Reconstructed			1929	(36) Traffic Safety Features		0 0 0 0
(42) Type of Service: On -		Highway		(113) Scour Critical Bridges		6
Under -		Waterway	Code 15	Inspections		
(28) Lanes: On Structure		01	Under structure 00	(90) Inspection Date	12/19/19	(91) Frequency 06 MO
(29) Average Daily Traffic			000040	(92) Critical Feature Inspection:		(93) CFI DATE
(30) Year of ADT		1986 (109) Truck ADT	00 %	(A) Fracture Critical Detail	N 00 MO A)	00/00/00
(19) Bypass, detour length			002 KM	(B) Underwater Inspection	N 00 MO B)	00/00/00
Geometric Data				(C) Other Special Inspection	Y 06 MO C)	12/03/20
(48) Length of maximum span			0003.9M	(*) Other Inspection ( )	N 00 MO *)	00/00/00
(49) Structure Length			00005.3M	(*) Closed Bridge	N 00 MO *)	00/00/00
(50) Curb or sidewalk:		Left 00.1 M Right 00.1 M		(*) UW Special Inspection	N 00 MO *)	00/00/00
(51) Bridge Roadway Width Curb to Curb			007.2M	(*) Damage Inspection		MO *) 00/00/00
(52) Deck Width Out to Out			008.2M	Rating Loads		
(32) Approach Roadway Width (w/shoulders)			006.7M	Report Date	00/00/00	H20 Type 3 Type 3S2 Type HS
(33) Bridge Median -		No median	Code 0	Operating	0.0	0.0 0.0 0.0
(34) Skew 00 DEG (35) Structure Flared			N	Inventory	0.0	0.0 0.0 0.0
(10) Inventory Route MIN Vert Clear			00.00M	Field Posting		
(47) Inventory Route Total Horiz Clear			07.2M	Status		Posting Date 00/00/00
(53) Min Vert Clear Over Bridge Rdwy			99.99M	2 Axle 3 Axle 5 Axle Single		
(54) Min Vert Underclear ref		N	00.00M	Actual		
(55) Min Lat Underclear RT ref		N	00.0M	Recommended		
(56) Min Lat Underclear LT			00.0M	Missing Signs	N	
Navigation Data				Misc.		
(38) Navigation Control -		No navigation control on waterway	Code 0	Bridge Name		
(111) Pier Protection			Code	N Anti-missile fence	N Acrow Panel	N Jointless Bridge
(39) Navigation Vertical Clearance			000.0M	Freeze/Thaw	N : Not Applicable	
(116) Vert-lift Bridge Nav Min Vert Clear			M	Accessibility (Needed/Used)		
(40) Navigation Horizontal Clearance			0000.0M	N / N Liftbucket	N / N Rigging	N / N Other
				N / N Ladder	N / N Staging	
				N / N Boat	N / N Traffic Control	
				Y / Y Wader	N / N RR Flagperson	Inspection
				N / N Inspector 50	N / N Police	Hours: 008





Charles D. Baker, Governor  
Karyn E. Polito, Lieutenant Governor  
Stephanie Pollack, Secretary & CEO  
Jonathan L. Gulliver, Highway Administrator



August 29, 2019

Town of Paxton  
Board of Selectmen  
697 Pleasant St.  
Paxton, MA 01612

Attn: Mike Putnam, Highway Supt.

SUBJECT: SMALL BRIDGE INSPECTION REPORT

P-02-003 (6UX) BLACK HILL R / TURKEY HILL BROOK Dated: 06/11/19

Dear Mr. Putnam:

As part of the Massachusetts Bridge Inspection Program, MassDOT – Highway Division now also performs inspections of municipally owned bridges whose spans are between 10 feet and 20 feet.

**In review of attached report please note the deficiencies highlighted for your immediate attention.**

For your records is a copy of recent bridge inspection field report for the referenced municipally owned bridge. Repair, rehabilitation or reconstruction of any bridges to address the deficiencies reported is the owner/custodian's responsibility. Chapter 90 funds may be used for these purposes.

Questions regarding the content of the report may be directed to the District Bridge Inspection Engineer, Mahmood Azizi, P.E., at 508-929-3822.

Sincerely,

Barry Lorion  
District 3 Highway Director

MA/ma  
cc: BIE (2), DHD D-3, DBIE D-3  
Enclosure







2-DIST

B.I.N.

03

6UX

## STRUCTURES INSPECTION FIELD REPORT

BR. DEPT. NO.

P-02-003

## SPECIAL MEMBER INSPECTION

CITY/TOWN <b>PAXTON</b>	8-STRUCTURE NO. <b>P02003-6UX-MUN-BRI</b>	11-Kilo. POINT <b>000.306</b>	90-ROUTINE INSP. DATE <b>Dec 16, 2017</b>	93*-SPEC. MEMB. INSP. DATE <b>Jun 11, 2019</b>
07-FACILITY CARRIED <b>HWY BLACK HILL R</b>	MEMORIAL NAME/LOCAL NAME	27-YR BUILT <b>1850</b>	106-YR REBUILT <b>1929</b>	*YR REHAB'D (NON 106) <b>0000</b>
06-FEATURES INTERSECTED <b>WATER TURKEY HILL BROOK</b>	26-FUNCTIONAL CLASS <b>Rural Local</b>	DIST. BRIDGE INSPECTION ENGINEER <i>M. Aziz</i>		
43-STRUCTURE TYPE <b>101 : Concrete Slab</b>	22-OWNER Town Agency	21-MAINTAINER Town Agency	TEAM LEADER <i>M. McGinty</i>	
107-DECK TYPE <b>1 : Concrete Cast-in-Place</b>	WEATHER <b>Drizzle</b>	TEMP. (air) <b>18°C</b>	TEAM MEMBERS <b>D. SIMKHOVICH</b>	

<b>WEIGHT POSTING</b>		Not Applicable <input checked="" type="checkbox"/>		At bridge		Advance		PLANS (Y/N): <b>N</b>	
	H	3	3S2	Single	E	W	E	W	
Actual Posting	<b>N</b>	<b>N</b>	<b>N</b>	<b>N</b>					
Recommended Posting	<b>N</b>	<b>N</b>	<b>N</b>	<b>N</b>					(V.C.R.) (Y/N): <b>N</b>
Waived Date: 00/00/0000	EJDMT Date: 00/00/0000								TAPE#:

<b>RATING</b>		Request for Rating or Rerating (Y/N): <b>N</b>		If YES please give priority:	
Rating Report (Y/N): <b>N</b>	Date: ----			HIGH ( )	MEDIUM ( )
Inspection data at time of existing rating		REASON: <i>MCA</i>		LOW ( )	
I 58: - I 59: - I 60: - I 62: - Date: 00/00/0000					

## SPECIAL MEMBER(S):

	MEMBER	CRACK (Y/N):	WELD'S CONDITION (0-9)	LOCATION OF CORROSION, SECTION LOSS (%), CRACKS, COLLISION DAMAGE, STRESS CONCENTRATION, ETC.	CONDITION		INV. RATING OF MEMBER FROM RATING ANALYSIS			Deficiencies
					PREVIOUS (0-9)	PRESENT (0-9)	H-20	3	3S2	
A	Item 60.1.d - Breastwalls	N		See remarks in comments section.	3	3	Not Rated			S-A
B	Item 60.1.e - Wingwalls	N		See remarks in comments section.	3	3	Not Rated			S-A
C										
D										
E										

List of field tests performed:	(Overall Previous Condition)	I-58	I-59	I-60	I-62
		7	7	3	-
	(Overall Current Condition)	7	7	3	-

DEFICIENCY: A defect in a structure that requires corrective action.

## CATEGORIES OF DEFICIENCIES:

- M= Minor Deficiency** - Deficiencies which are minor in nature, generally do not impact the structural integrity of the bridge and could easily be repaired. Examples include but are not limited to: Spalled concrete, Minor pot holes, Minor corrosion of steel, Minor scouring, Clogged drainage, etc.
- S= Severe/Major Deficiency** - Deficiencies which are more extensive in nature and need more planning and effort to repair. Examples include but are not limited to: Moderate to major deterioration in concrete, Exposed and corroded rebars, Considerable settlement, Considerable scouring or undermining, Moderate to extensive corrosion to structural steel with measurable loss of section, etc.
- C-S= Critical Structural Deficiency** - A deficiency in a structural element of a bridge that poses an extreme unsafe condition due to the failure or imminent failure of the element which will affect the structural integrity of the bridge.
- C-H= Critical Hazard Deficiency** - A deficiency in a component or element of a bridge that poses an extreme hazard or unsafe condition to the public, but does not impair the structural integrity of the bridge. Examples include but are not limited to: Loose concrete hanging down over traffic or pedestrians, A hole in a sidewalk that may cause injuries to pedestrians, Missing section of bridge railing, etc.

## URGENCY OF REPAIR:

- I= Immediate** - [Inspector(s) immediately contact District Bridge Inspection Engineer (DBIE) to report the Deficiency and to receive further instruction from him/her].
- A= ASAP** - [Action/Repair should be initiated by District Maintenance Engineer or the Responsible Party (if not a State owned bridge) upon receipt of the Inspection Report].
- P= Prioritize** - [Shall be prioritized by District Maintenance Engineer or the Responsible Party (if not a State owned bridge) and repairs made when funds and/or manpower is available].

X=UNKNOWN

N=NOT APPLICABLE

H=HIDDEN/INACCESSIBLE

R=REMOVED



CITY/TOWN PAXTON	B.I.N. 6UX	BR. DEPT. NO. P-02-003	8.-STRUCTURE NO. P02003-6UX-MUN-BRI	INSPECTION DATE JUN 11, 2019
---------------------	---------------	---------------------------	--	---------------------------------

## REMARKS

### BRIDGE ORIENTATION

According to the map the approaches are North and South and the elevations are East and West. This is a single span concrete deck slab with dry set masonry stone abutments. The brook flows East to West.

### GENERAL REMARKS

There are no changes to the wingwalls and breastwalls since the previous inspection.

### ITEM 60 - SUBSTRUCTURE

#### Item 60.1 - Abutments

##### Item 60.1.d - Breastwalls

Both breastwalls have several cracked stones throughout mostly at or near the bottom.

The South breastwall at the West end has a 7/8 in. wide full height settlement crack with up to 33 in. of penetration into the crack.

There is also a 6 ft. long area of missing or dislodged stones at the waterline, with up to 40 in. of penetration. There is no evidence of loss of fill in this area. **See Photo 1.**

The North breastwall at the East end has a 3/16 in. wide full height settlement crack. **See Photo 2.**

The North breastwall has one dislodged stone at the West end with no evident settlement/displacement of the overlying stones. **See Photo 3.**

##### Item 60.1.e - Wingwalls

There are two areas of full height separation, 3 in. wide and 3-1/2 in. wide; to the Southwest wingwall with up to 44 in. of penetration. These two measurements are marked with spray paint and yellow "Keel" crayon to monitor any additional separation and an additional measuring point to monitor the 2 in. outward displacement. **See Photos 4.**

The Southeast wingwall has a 2 in. outward displacement at the top of the rail base. **See Photos 5 and 6.**

### Photo Log

- Photo 1 : South breastwall.
- Photo 2 : North breastwall.
- Photo 3 : Northwest corner.
- Photo 4 : Southwest wingwall.
- Photo 5 : Southeast wingwall.
- Photo 6 : Another view of the Southeast wingwall.



CITY/TOWN  
PAXTONB.I.N.  
6UXBR. DEPT. NO.  
P-02-0038.-STRUCTURE NO.  
P02003-6UX-MUN-BRIINSPECTION DATE  
JUN 11, 2019

## PHOTOS



Photo 1: South breastwall.

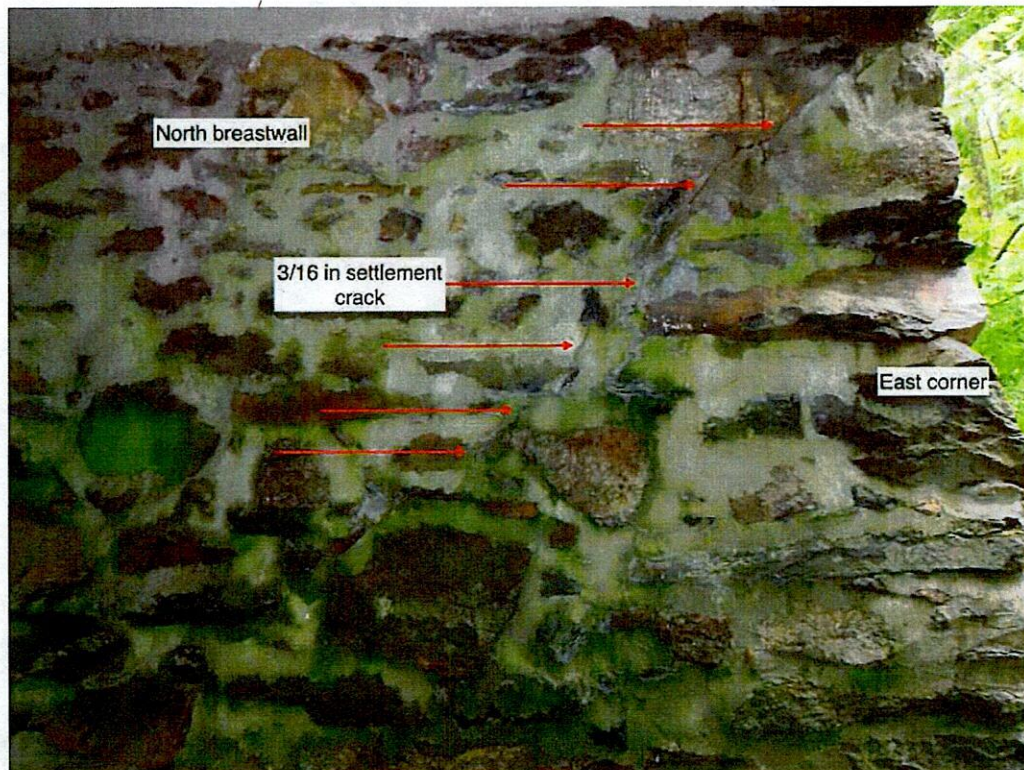


Photo 2: North breastwall.



CITY/TOWN PAXTON	B.I.N. 6UX	BR. DEPT. NO. P-02-003	8.-STRUCTURE NO. P02003-6UX-MUN-BRI	INSPECTION DATE JUN 11, 2019
---------------------	---------------	---------------------------	--	---------------------------------

**PHOTOS**

Photo 3: Northwest corner.

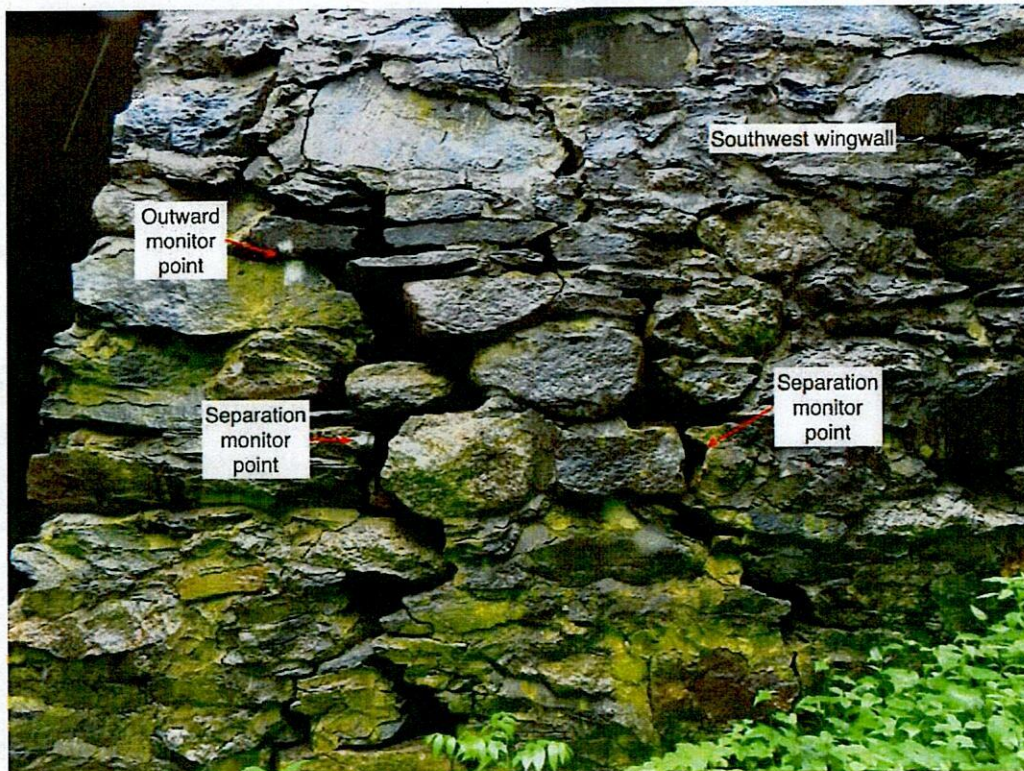


Photo 4: Southwest wingwall.







Report Date: June 11, 2019

State Information				Classification				Code				
BDEPT# = P02003				Agency Br.No.				(112) NBIS Bridge Length				N
Town = Paxton				L.O.				(104) Highway System				N
B.I.N = 6UX				AASHTO = 040.0				(26) Functional Class - Rural Local				09
RANK = 0 H.I. = NA				FHWA Select List = N (6/21/17)				(100) Defense Highway				0
(8) Structure Number				P020036UXMUNBRI				(101) Parallel Structure				N
(5) Inventory Route				151000000				(102) Direction of Traffic - 1-way traffic				1
(2) State Highway Department District				03				(103) Temporary Structure				N
(3) County Code 027 (4) Place code				52420				(105) Federal Lands Highways				0
(6) Features Intersected				WATER TURKEY HILL BROOK				(110) Designated National Network				N
(7) Facility Carried				HWY BLACK HILL R				(20) Toll - On free road				3
(9) Location				1000 FT NW OF RT 31				(21) Maintain - Town Agency				03
(11) Kilometerpoint				0000.306				(22) Owner - Town Agency				03
(12) Base Highway Network				N				(37) Historical Significance				undetermined
(13) LRS Inventory Route & Subroute				000000000000				Condition				Code
(16) Latitude				42 DEG 18 MIN 42.54 SEC				(58) Deck				7
(17) Longitude				71 DEG 57 MIN 35.74 SEC				(59) Superstructure				7
(98) Border Bridge State Code				Share %				(60) Substructure				3
(99) Border Bridge Structure No. #								(61) Channel & Channel Protection				5
								(62) Culverts				N
Structure Type and Material								Load Rating and Posting				Code
(43) Structure Type Main: Concrete				Code 101				(31) Design Load - Unknown				0
Slab				Jointless bridge type: Not applicable				(63) Operating Rating Method - Allowable Stress (AS)				2
(44) Structure Type Appr: Other				Code 000				(64) Operating Rating				00.0
(45) Number of spans in main unit				001				(65) Inventory Rating Method - Allowable Stress (AS)				2
(46) Number of approach spans				0000				(66) Inventory Rating				00.0
(107) Deck Structure Type - Concrete Cast-In-Place				Code 1				(70) Bridge Posting				0
(108) Wearing Surface / Protective System:								(41) Structure - Open				A
A) Type of wearing surface - Bituminous				Code 6				Appraisal				Code
B) Type of membrane - Unknown				Code 8				(67) Structural Evaluation				3
C) Type of deck protection - None				Code 0				(68) Deck Geometry				5
Age and Service								(69) Underclearances, vert. and horiz.				N
(27) Year Built				1850				(71) Waterway adequacy				9
(106) Year Reconstructed				1929				(72) Approach Roadway Alignment				9
(42) Type of Service: On - Highway								(36) Traffic Safety Features				0 0 0 0
Under - Waterway				Code 15				(113) Scour Critical Bridges				6
(28) Lanes: On Structure 01				Under structure 00				Inspections				
(29) Average Daily Traffic				000040				(90) Inspection Date 12/16/17				(91) Frequency 06 MO
(30) Year of ADT 1986 (109) Truck ADT				00 %				(92) Critical Feature Inspection:				(93) CFI DATE
(19) Bypass, detour length				002 KM				(A) Fracture Critical Detail				N 00 MO A) 00/00/00
Geometric Data								(B) Underwater Inspection				N 00 MO B) 00/00/00
(48) Length of maximum span				0003.9 M				(C) Other Special Inspection				Y 06 MO C) 06/11/19
(49) Structure Length				00005.3 M				(*) Other Inspection ( )				N 00 MO *) 00/00/00
(50) Curb or sidewalk: Left 00.1 M Right 00.1 M								(*) Closed Bridge				N 00 MO *) 00/00/00
(51) Bridge Roadway Width Curb to Curb				007.2 M				(*) UW Special Inspection				N 00 MO *) 00/00/00
(52) Deck Width Out to Out				008.2 M				(*) Damage Inspection				MO *) 00/00/00
(32) Approach Roadway Width (w/shoulders)				006.7 M				Rating Loads				
(33) Bridge Median - No median				Code 0				Report Date 00/00/00				H20 Type 3 Type 3S2 Type HS
(34) Skew 00 DEG (35) Structure Flared				N				Operating				0.0 0.0 0.0 0.0
(10) Inventory Route MIN Vert Clear				00.00 M				Inventory				0.0 0.0 0.0 0.0
(47) Inventory Route Total Horiz Clear				07.2 M				Field Posting				
(53) Min Vert Clear Over Bridge Rdwy				99.99 M				Status				Posting Date 00/00/00
(54) Min Vert Underclear ref N				00.00 M				2 Axle 3 Axle 5 Axle Single				
(55) Min Lat Underclear RT ref N				00.0 M				Actual				
(56) Min Lat Underclear LT				00.0 M				Recommended				
Navigation Data								Missing Signs N				Misc.
(38) Navigation Control - No navigation control on waterway				Code 0				Bridge Name				
(111) Pier Protection				Code 000.0 M				N Anti-missile fence N Acrow Panel N Jointless Bridge				
(39) Navigation Vertical Clearance				M				Freeze/Thaw N : Not Applicable				
(116) Vert-lift Bridge Nav Min Vert Clear				0000.0 M				Accessibility (Needed/Used)				
(40) Navigation Horizontal Clearance				0000.0 M				N / N Liftbucket N / N Rigging N / N Other				
								N / N Ladder N / N Staging				
								N / N Boat N / N Traffic Control				
								Y / Y Wader N / N RR Flagperson				Inspection
								N / N Inspector 50 N / N Police				Hours: 008



Report Date: May 29, 2019

State Information				Classification				Code				
BDEPT# = P02003				Agency Br.No.				(112) NBIS Bridge Length				N
Town = Paxton				L.O.				(104) Highway System				N
B.I.N = 6UX				AASHTO = 040.0				(26) Functional Class - Rural Local				09
RANK = 0 H.I. = NA				FHWA Select List = N (6/21/17)				(100) Defense Highway				0
(8) Structure Number				P020036UXMUNBRI				(101) Parallel Structure				N
(5) Inventory Route				151000000				(102) Direction of Traffic - 1-way traffic				1
(2) State Highway Department District				03				(103) Temporary Structure				N
(3) County Code 027 (4) Place code				52420				(105) Federal Lands Highways				0
(6) Features Intersected				WATER TURKEY HILL BROOK				(110) Designated National Network				N
(7) Facility Carried				HWY BLACK HILL R				(20) Toll - On free road				3
(9) Location				1000 FT NW OF RT 31				(21) Maintain - Town Agency				03
(11) Kilometerpoint				0000.306				(22) Owner - Town Agency				03
(12) Base Highway Network				N				(37) Historical Significance				undetermined
(13) LRS Inventory Route & Subroute				000000000000				Condition				Code
(16) Latitude				42 DEG 18 MIN 42.54 SEC				(58) Deck				7
(17) Longitude				71 DEG 57 MIN 35.74 SEC				(59) Superstructure				7
(98) Border Bridge State Code				Share %				(60) Substructure				3
(99) Border Bridge Structure No. #								(61) Channel & Channel Protection				5
								(62) Culverts				N
Structure Type and Material								Load Rating and Posting				Code
(43) Structure Type Main: Concrete				Code 101				(31) Design Load - Unknown				0
Slab				Jointless bridge type: Not applicable				(63) Operating Rating Method - Allowable Stress (AS)				2
(44) Structure Type Appr:								(64) Operating Rating				00.0
Other				Code 000				(65) Inventory Rating Method - Allowable Stress (AS)				2
(45) Number of spans in main unit				001				(66) Inventory Rating				00.0
(46) Number of approach spans				0000				(70) Bridge Posting				0
(107) Deck Structure Type - Concrete Cast-in-Place				Code 1				(41) Structure - Open				A
(108) Wearing Surface / Protective System:								Appraisal				Code
A) Type of wearing surface - Bituminous				Code 6				(67) Structural Evaluation				3
B) Type of membrane - Unknown				Code 8				(68) Deck Geometry				5
C) Type of deck protection - None				Code 0				(69) Underclearances, vert. and horiz.				N
Age and Service								(71) Waterway adequacy				9
(27) Year Built				1850				(72) Approach Roadway Alignment				9
(106) Year Reconstructed				1929				(36) Traffic Safety Features				0 0 0 0
(42) Type of Service: On - Highway								(113) Scour Critical Bridges				6
Under - Waterway				Code 15				Inspections				
(28) Lanes: On Structure 01 Under structure				00				(90) Inspection Date 12/16/17				(91) Frequency 06 MO
(29) Average Daily Traffic				000040				(92) Critical Feature Inspection:				(93) CFI DATE
(30) Year of ADT 1986 (109) Truck ADT				00 %				(A) Fracture Critical Detail				N 00 MO A) 00/00/00
(19) Bypass, detour length				002 KM				(B) Underwater Inspection				N 00 MO B) 00/00/00
Geometric Data								(C) Other Special Inspection				Y 06 MO C) 12/13/18
(48) Length of maximum span				0003.9 M				(*) Other Inspection ()				N 00 MO *) 00/00/00
(49) Structure Length				00005.3 M				(*) Closed Bridge				N 00 MO *) 00/00/00
(50) Curb or sidewalk: Left 00.1 M Right 00.1 M								(*) UW Special Inspection				N 00 MO *) 00/00/00
(51) Bridge Roadway Width Curb to Curb				007.2 M				(*) Damage Inspection				MO *) 00/00/00
(52) Deck Width Out to Out				008.2 M				Rating Loads				
(32) Approach Roadway Width (w/shoulders)				006.7 M				Report Date 00/00/00				H20 Type 3 Type 3S2 Type HS
(33) Bridge Median - No median				Code 0				Operating				0.0 0.0 0.0 0.0
(34) Skew 00 DEG (35) Structure Flared				N				Inventory				0.0 0.0 0.0 0.0
(10) Inventory Route MIN Vert Clear				00.00 M				Field Posting				
(47) Inventory Route Total Horiz Clear				07.2 M				Status				Posting Date 00/00/00
(53) Min Vert Clear Over Bridge Rdwy				99.99 M				2 Axle 3 Axle 5 Axle Single				
(54) Min Vert Underclear ref N				00.00 M				Actual				
(55) Min Lat Underclear RT ref N				00.0 M				Recommended				
(56) Min Lat Underclear LT				00.0 M				Missing Signs N				
Navigation Data								Misc.				
(38) Navigation Control - No navigation control on waterway				Code 0				Bridge Name				
(111) Pier Protection				Code				N Anti-missile fence N Acrow Panel N Jointless Bridge				
(39) Navigation Vertical Clearance				000.0 M				Freeze/Thaw N : Not Applicable				
(116) Vert-lift Bridge Nav Min Vert Clear				M				Accessibility (Needed/Used)				
(40) Navigation Horizontal Clearance				0000.0 M				N / N Liftbucket N / N Rigging N / N Other				
								N / N Ladder. N / N Staging				
								N / N Boat N / N Traffic Control				
								Y / Y Wader N / N RR Flagperson				Inspection
								N / N Inspector 50 N / N Police				Hours: 008



CITY/TOWN PAXTON	B.I.N. 6UX	BR. DEPT. NO. P-02-003	8-STRUCTURE NO. P02003-6UX-MUN-BRI	INSPECTION DATE JUN 11, 2019
---------------------	---------------	---------------------------	---------------------------------------	---------------------------------

## PHOTOS



Photo 5: Southeast wingwall.



Photo 6: Another view of the Southeast wingwall.





Charles D. Baker, Governor  
Karyn E. Polito, Lieutenant Governor  
Stephanie Pollack, Secretary & CEO  
Jonathan L. Gulliver, Highway Administrator



October 13, 2018

Town of Paxton  
Board of Selectmen  
697 Pleasant St.  
Paxton, MA 01612

Attn: Mike Putnam, Highway Supt.

SUBJECT: SMALL BRIDGE INSPECTION REPORT

P-02-003 (6UX) BLACK HILL R / TURKEY HILL BROOK Dated: 06/01/18

Dear Mr. Putnam:

As part of the Massachusetts Bridge Inspection Program, MassDOT – Highway Division now also performs inspections of municipally owned bridges whose spans are between 10 feet and 20 feet.

**In review of attached report please note the deficiencies highlighted for your immediate attention.**

For your records is a copy of recent bridge inspection field report for the referenced municipally owned bridge. Repair, rehabilitation or reconstruction of any bridges to address the deficiencies reported is the owner/custodian's responsibility. Chapter 90 funds may be used for these purposes.

Questions regarding the content of the report may be directed to the District Bridge Inspection Engineer, Mahmood Azizi, at 508-929-3822.

Sincerely,

Barry Lorion  
District 3 Highway Director

MA/ma  
cc: BIE (2), DHD D-3, DBIE D-3  
Enclosure







2-DIST  
03B.I.N.  
6UX

## STRUCTURES INSPECTION FIELD REPORT

## SPECIAL MEMBER INSPECTION

BR. DEPT. NO.  
P-02-003

CITY/TOWN PAXTON	8-STRUCTURE NO. P02003-6UX-MUN-BRI	11-Kilo. POINT 000.306	90-ROUTINE INSP. DATE Dec 16, 2017	93*-SPEC. MEMB. INSP. DATE Jun 1, 2018
07-FACILITY CARRIED HWY BLACK HILL R	MEMORIAL NAME/LOCAL NAME		27-YR BUILT 1850	106-YR REBUILT 1929
06-FEATURES INTERSECTED WATER TURKEY HILL BROOK	26-FUNCTIONAL CLASS Rural Local	DIST. BRIDGE INSPECTION ENGINEER M. Azizi		
43-STRUCTURE TYPE 101 : Concrete Slab	22-OWNER Town Agency	21-MAINTAINER Town Agency	TEAM LEADER D. Simkhovich	
107-DECK TYPE 1 : Concrete Cast-in-Place	WEATHER Cloudy	TEMP. (air) 20°C	TEAM MEMBERS D. SMITH	

WEIGHT POSTING		Not Applicable <input checked="" type="checkbox"/>		At bridge		Advance		PLANS (Y/N): <input type="checkbox"/>	
		H 3 3S2 Single		E W		E W		(V.C.R.) (Y/N): <input type="checkbox"/>	
Actual Posting		<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		<input type="checkbox"/> <input type="checkbox"/>		<input type="checkbox"/> <input type="checkbox"/>		Tape#:	
Recommended Posting		<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>		<input type="checkbox"/> <input type="checkbox"/>		<input type="checkbox"/> <input type="checkbox"/>			
Waived Date: 00/00/0000		EJDMT Date: 00/00/0000							

RATING		Request for Rating or Rerating (Y/N): <input type="checkbox"/>		If YES please give priority:	
Rating Report (Y/N): <input type="checkbox"/>		Date: ----		HIGH ( ) MEDIUM ( ) LOW ( )	
Inspection data at time of existing rating		REASON:			
I 58: - I 59: - I 60: - I 62: - Date: 00/00/0000					

## SPECIAL MEMBER(S):

	MEMBER	CRACK (Y/N):	WELD'S CONDITION (0-9)	LOCATION OF CORROSION, SECTION LOSS (%), CRACKS, COLLISION DAMAGE, STRESS CONCENTRATION, ETC.	CONDITION		INV. RATING OF MEMBER FROM RATING ANALYSIS			Deficiencies
					PREVIOUS	PRESENT				
					(0-9)	(0-9)	H-20	3	3S2	
A	Item 60.1.d - Breastwalls	N		See remarks in comments section.	3	3	Not Rated			S-A
B	Item 60.1.e - Wingwalls	N		See remarks in comments section.	3	3	Not Rated			S-A
C										
D										
E										

List of field tests performed:

(Overall Previous Condition)

(Overall Current Condition)

I-58	I-59	I-60	I-62
7	7	3	-
7	7	3	-

DEFICIENCY: A defect in a structure that requires corrective action.

## CATEGORIES OF DEFICIENCIES:

M= Minor Deficiency - Deficiencies which are minor in nature, generally do not impact the structural integrity of the bridge and could easily be repaired. Examples include but are not limited to: Spalled concrete, Minor pot holes, Minor corrosion of steel, Minor scouring, Clogged drainage, etc.

S= Severe/Major Deficiency - Deficiencies which are more extensive in nature and need more planning and effort to repair. Examples include but are not limited to: Moderate to major deterioration in concrete, Exposed and corroded rebars, Considerable settlement, Considerable scouring or undermining, Moderate to extensive corrosion to structural steel with measurable loss of section, etc.

C-S= Critical Structural Deficiency - A deficiency in a structural element of a bridge that poses an extreme unsafe condition due to the failure or imminent failure of the element which will affect the structural integrity of the bridge.

C-H= Critical Hazard Deficiency - A deficiency in a component or element of a bridge that poses an extreme hazard or unsafe condition to the public, but does not impair the structural integrity of the bridge. Examples include but are not limited to: Loose concrete hanging down over traffic or pedestrians, A hole in a sidewalk that may cause injuries to pedestrians, Missing section of bridge railing, etc.

## URGENCY OF REPAIR:

I = Immediate- (Inspector(s) immediately contact District Bridge Inspection Engineer (DBIE) to report the Deficiency and to receive further instruction from him/her).

A = ASAP- (Action/Repair should be initiated by District Maintenance Engineer or the Responsible Party (if not a State owned bridge) upon receipt of the Inspection Report).

P = Prioritize- (Shall be prioritized by District Maintenance Engineer or the Responsible Party (if not a State owned bridge) and repairs made when funds and/or manpower is available).

X=UNKNOWN

N=NOT APPLICABLE

H=HIDDEN/INACCESSIBLE

R=REMOVED



CITY/TOWN PAXTON	B.I.N. 6UX	BR. DEPT. NO. P-02-003	8.-STRUCTURE NO. P02003-6UX-MUN-BRI	INSPECTION DATE JUN 1, 2018
---------------------	---------------	---------------------------	--	--------------------------------

## REMARKS

### BRIDGE ORIENTATION

According to the map the approaches are North and South and the elevations are East and West. This is a single span concrete deck slab with dry set masonry stone abutments. The brook flows East to West.

### ITEM 60 - SUBSTRUCTURE

#### Item 60.1 - Abutments

##### Item 60.1.d - Breastwalls

The Southeast, Northwest and Northeast corners of the breastwalls have almost full height settlement cracks to the pointing along horizontal and vertical masonry joints. **See photos 1 and 2.** Both breastwalls have several cracked stones throughout mostly at or near the bottom.

The South breastwall at the South end has a 6 foot long area of missing or dislodged stones at the waterline. **See photo 3.** The depth of the void varies from 1 foot to as much as 40 inches (penetration between inner stones). As a result the West corner of the South breastwall has separated from the rest of the breastwall up to 1 inch on the South face. There is no evidence of loss of fill in this area.

The North breastwall has one dislodged stone at the West end with no evident settlement/displacement of the overlying stones. **See photo 4.**

##### Item 60.1.e - Wingwalls

There are two areas of full height separation to the Southwest wingwall at the breastwall interface. Benchmarks were established to monitor any additional separation during this inspection. **See photo 5.** The two measurements taken during the previous inspection were confirmed and the locations were marked with spray paint for future reference. An additional measuring point was established to monitor outward displacement.

#### Photo Log

- Photo 1 : Cracking to the pointing at the Northeast corner.
- Photo 2 : Top of the breastwall, Southwest corner.
- Photo 3 : Void due to missing/dislodged stones at the Southwest corner. Note the settlement of the corner above the void.
- Photo 4 : Dislodged stone at the Northwest corner.
- Photo 5 : Southwest wingwall.



CITY/TOWN PAXTON	B.I.N. 6UX	BR. DEPT. NO. P-02-003	8.-STRUCTURE NO. P02003-6UX-MUN-BRI	INSPECTION DATE JUN 1, 2018
---------------------	---------------	---------------------------	--	--------------------------------

**PHOTOS**

Photo 1: Cracking to the pointing at the Northeast corner.



Photo 2: Top of the breastwall, Southwest corner.



CITY/TOWN PAXTON	B.I.N. 6UX	BR. DEPT. NO. P-02-003	8.-STRUCTURE NO. P02003-6UX-MUN-BRI	INSPECTION DATE JUN 1, 2018
---------------------	---------------	---------------------------	--	--------------------------------

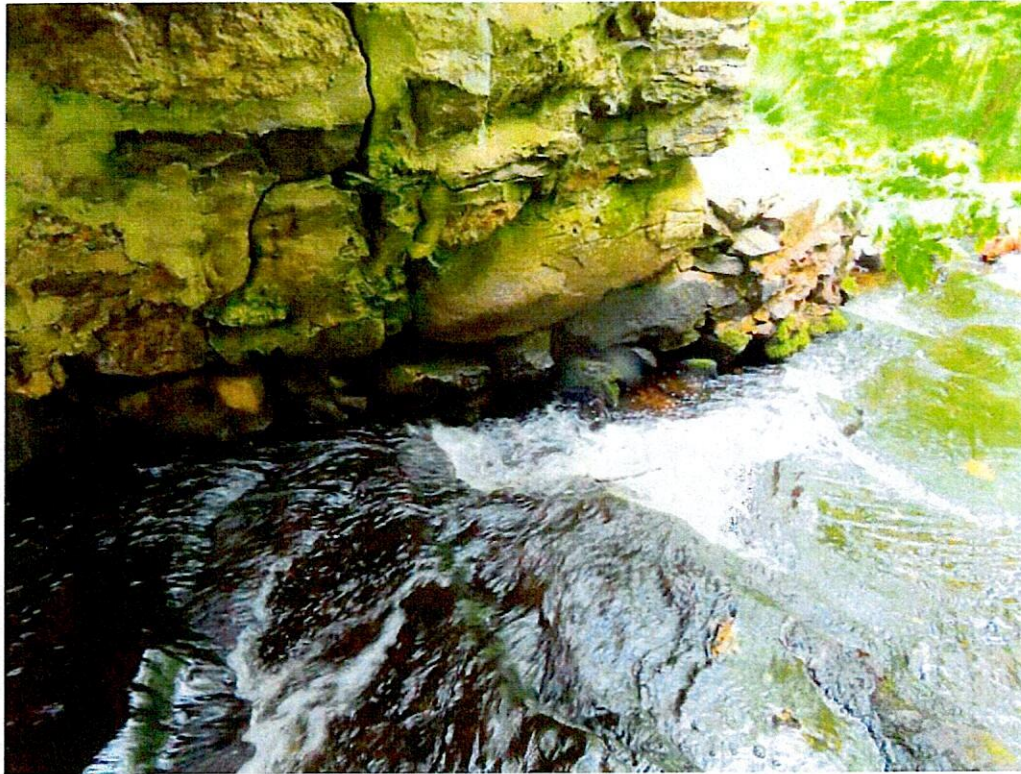
**PHOTOS**

Photo 3: Void due to missing/dislodged stones. Note the settlement of the corner above the void.



Photo 4: Dislodged stone at the Northwest corner.



CITY/TOWN PAXTON	B.I.N. 6UX	BR. DEPT. NO. P-02-003	8.-STRUCTURE NO. P02003-6UX-MUN-BRI	INSPECTION DATE JUN 1, 2018
---------------------	---------------	---------------------------	--	--------------------------------

**PHOTOS**

Photo 5: Southwest wingwall.



Report Date: May 29, 2018

State Information				Classification	Code
BDEPT#= P02003				(112) NBIS Bridge Length	N
Town= Paxton				(104) Highway System	N
B.I.N= 6UX				(26) Functional Class - Rural Local	09
RANK= 0	H.I.= NA	Agency Br.No.	AASHTO= 040.0	(100) Defense Highway	0
FHWA Select List= N (6/21/17)				(101) Parallel Structure	N
(8) Structure Number P020036UXMUNBRI				(102) Direction of Traffic - 1-way traffic	1
(5) Inventory Route 151000000				(103) Temporary Structure	N
(2) State Highway Department District 03				(105) Federal Lands Highways	0
(3) County Code 027 (4) Place code 52420				(110) Designated National Network	N
(6) Features Intersected WATER TURKEY HILL BROOK				(20) Toll - On free road	3
(7) Facility Carried HWY BLACK HILL R				(21) Maintain - Town Agency	03
(9) Location 1000 FT NW OF RT 31				(22) Owner - Town Agency	03
(11) Kilometerpoint 0000.306				(37) Historical Significance undetermined	
(12) Base Highway Network N				Condition	Code
(13) LRS Inventory Route & Subroute 000000000000				(58) Deck	7
(16) Latitude 42 DEG 18 MIN 42.54 SEC				(59) Superstructure	7
(17) Longitude 71 DEG 57 MIN 35.74 SEC				(60) Substructure	3
(98) Border Bridge State Code Share %				(61) Channel & Channel Protection	5
(99) Border Bridge Structure No. #				(62) Culverts	N
Structure Type and Material				Load Rating and Posting	Code
(43) Structure Type Main: Concrete Code 101				(31) Design Load - Unknown	0
Slab Jointless bridge type: Not applicable				(63) Operating Rating Method - Allowable Stress (AS)	2
(44) Structure Type Appr: Other Code 000				(64) Operating Rating	00.0
(45) Number of spans in main unit 001				(65) Inventory Rating Method - Allowable Stress (AS)	2
(46) Number of approach spans 0000				(66) Inventory Rating	00.0
(107) Deck Structure Type - Concrete Cast-in-Place Code 1				(70) Bridge Posting	0
(108) Wearing Surface / Protective System:				(41) Structure - Open	A
A) Type of wearing surface - Bituminous Code 6				Appraisal	Code
B) Type of membrane - Unknown Code 8				(67) Structural Evaluation	3
C) Type of deck protection - None Code 0				(68) Deck Geometry	5
Age and Service				(69) Underclearances, vert. and horiz.	N
(27) Year Built 1850				(71) Waterway adequacy	9
(106) Year Reconstructed 1929				(72) Approach Roadway Alignment	9
(42) Type of Service: On - Highway				(36) Traffic Safety Features	0 0 0 0
Under - Waterway Code 15				(113) Scour Critical Bridges	6
(28) Lanes: On Structure 01 Under structure 00				Inspections	
(29) Average Daily Traffic 000040				(90) Inspection Date 12/16/17	(91) Frequency 06 MO
(30) Year of ADT 1986 (109) Truck ADT 00 %				(92) Critical Feature Inspection:	(93) CFI DATE
(19) Bypass, detour length 002 KM				(A) Fracture Critical Detail N 00 MO A)	00/00/00
Geometric Data				(B) Underwater Inspection N 00 MO B)	00/00/00
(48) Length of maximum span 0003.9 M				(C) Other Special Inspection Y 06 MO C)	12/16/17
(49) Structure Length 00005.3 M				(*) Other Inspection ( ) N 00 MO *)	00/00/00
(50) Curb or sidewalk: Left 00.1 M Right 00.1 M				(*) Closed Bridge N 00 MO *)	00/00/00
(51) Bridge Roadway Width Curb to Curb 007.2 M				(*) UW Special Inspection N 00 MO *)	00/00/00
(52) Deck Width Out to Out 008.2 M				(*) Damage Inspection N 00 MO *)	00/00/00
(32) Approach Roadway Width (w/shoulders) 006.7 M				Rating Loads	
(33) Bridge Median - No median Code 0				Report Date 00/00/00	H20 Type 3 Type 3S2 Type HS
(34) Skew 00 DEG (35) Structure Flared N				Operating 0.0 0.0 0.0 0.0	
(10) Inventory Route MIN Vert Clear 00.00 M				Inventory 0.0 0.0 0.0 0.0	
(47) Inventory Route Total Horiz Clear 07.2 M				Field Posting	
(53) Min Vert Clear Over Bridge Rdwy 99.99 M				Status	Posting Date 00/00/00
(54) Min Vert Underclear ref N 00.00 M				Actual 2 Axle 3 Axle 5 Axle	
(55) Min Lat Underclear RT ref N 00.0 M				Recommended	
(56) Min Lat Underclear LT 00.0 M				Missing Signs N	
Navigation Data				Misc.	
(38) Navigation Control - No navigation control on waterway Code 0				Bridge Name	
(111) Pier Protection Code				N Anti-missile fence N Acrow Panel N Jointless Bridge	
(39) Navigation Vertical Clearance 000.0 M				Freeze/Thaw N : Not Applicable	
(116) Vert-lift Bridge Nav Min Vert Clear M				Accessibility (Needed/Used)	
(40) Navigation Horizontal Clearance 0000.0 M				N / N Liftbucket N / N Rigging N / N Other	
				N / N Ladder N / N Staging	
				N / N Boat N / N Traffic Control	
				Y / Y Wader N / N RR Flagperson	Inspection
				N / N Inspector 50 N / N Police	Hours: 008



Report Date: June 1, 2018

State Information				Classification				Code				
BDEPT#= P02003				Agency Br.No.				(112) NBIS Bridge Length				N
Town= Paxton				L.O.				(104) Highway System				N
B.I.N= 6UX				AASHTO= 040.0				(26) Functional Class - Rural Local				09
RANK= 0 H.I.= NA				FHWA Select List= N (6/21/17)				(100) Defense Highway				0
(8) Structure Number				P020036UXMUNBRI				(101) Parallel Structure				N
(5) Inventory Route				151000000				(102) Direction of Traffic - 1-way traffic				1
(2) State Highway Department District				03				(103) Temporary Structure				N
(3) County Code 027 (4) Place code				52420				(105) Federal Lands Highways				0
(6) Features Intersected				WATER TURKEY HILL BROOK				(110) Designated National Network				N
(7) Facility Carried				HWY BLACK HILL R				(20) Toll - On free road				3
(9) Location				1000 FT NW OF RT 31				(21) Maintain - Town Agency				03
(11) Kilometerpoint				0000.306				(22) Owner - Town Agency				03
(12) Base Highway Network				N				(37) Historical Significance				undetermined
(13) LRS Inventory Route & Subroute				000000000000				Condition				Code
(16) Latitude				42 DEG 18 MIN 42.54 SEC				(58) Deck				7
(17) Longitude				71 DEG 57 MIN 35.74 SEC				(59) Superstructure				7
(98) Border Bridge State Code				Share %				(60) Substructure				3
(99) Border Bridge Structure No. #								(61) Channel & Channel Protection				5
								(62) Culverts				N
Structure Type and Material								Load Rating and Posting				Code
(43) Structure Type Main: Concrete				Code 101				(31) Design Load - Unknown				0
Slab				Jointless bridge type: Not applicable				(63) Operating Rating Method - Allowable Stress (AS)				2
(44) Structure Type Appr: Other				Code 000				(64) Operating Rating				00.0
(45) Number of spans in main unit				001				(65) Inventory Rating Method - Allowable Stress (AS)				2
(46) Number of approach spans				0000				(66) Inventory Rating				00.0
(107) Deck Structure Type - Concrete Cast-in-Place				Code 1				(70) Bridge Posting				0
(108) Wearing Surface / Protective System:								(41) Structure - Open				A
A) Type of wearing surface - Bituminous				Code 6				Appraisal				Code
B) Type of membrane - Unknown				Code 8				(67) Structural Evaluation				3
C) Type of deck protection - None				Code 0				(68) Deck Geometry				5
Age and Service								(69) Underclearances, vert. and horiz.				N
(27) Year Built				1850				(71) Waterway adequacy				9
(106) Year Reconstructed				1929				(72) Approach Roadway Alignment				9
(42) Type of Service: On - Highway								(36) Traffic Safety Features				0 0 0 0
Under - Waterway				Code 15				(113) Scour Critical Bridges				6
(28) Lanes: On Structure 01 Under structure				00				Inspections				
(29) Average Daily Traffic				000040				(90) Inspection Date 12/16/17				(91) Frequency 06 MO
(30) Year of ADT 1986 (109) Truck ADT				00 %				(92) Critical Feature Inspection:				(93) CFI DATE
(19) Bypass, detour length				002 KM				(A) Fracture Critical Detail				N 00 MO A) 00/00/00
Geometric Data								(B) Underwater Inspection				N 00 MO B) 00/00/00
(48) Length of maximum span				0003.9M				(C) Other Special Inspection				Y 06 MO C) 06/01/18
(49) Structure Length				00005.3M				(*) Other Inspection ()				N 00 MO *) 00/00/00
(50) Curb or sidewalk: Left 00.1 M Right 00.1 M								(*) Closed Bridge				N 00 MO *) 00/00/00
(51) Bridge Roadway Width Curb to Curb				007.2M				(*) UW Special Inspection				N 00 MO *) 00/00/00
(52) Deck Width Out to Out				008.2M				(*) Damage Inspection				MO *) 00/00/00
(32) Approach Roadway Width (w/shoulders)				006.7M				Rating Loads				
(33) Bridge Median - No median				Code 0				Report Date 00/00/00				H20 Type 3 Type 3S2 Type HS
(34) Skew 00 DEG (35) Structure Flared				N				Operating				0.0 0.0 0.0 0.0
(10) Inventory Route MIN Vert Clear				00.00M				Inventory				0.0 0.0 0.0 0.0
(47) Inventory Route Total Horiz Clear				07.2M				Field Posting				
(53) Min Vert Clear Over Bridge Rdwy				99.99M				Status				Posting Date 00/00/00
(54) Min Vert Underclear ref N				00.00M				2 Axle 3 Axle 5 Axle				
(55) Min Lat Underclear RT ref N				00.0M				Actual				
(56) Min Lat Underclear LT				00.0M				Recommended				
Navigation Data								Missing Signs N				
(38) Navigation Control - No navigation control on waterway				Code 0				Misc.				
(111) Pier Protection				Code				Bridge Name				
(39) Navigation Vertical Clearance				000.0M				N Anti-missile fence N Acrow Panel N Jointless Bridge				
(116) Vert-lift Bridge Nav Min Vert Clear				M				Freeze/Thaw N : Not Applicable				
(40) Navigation Horizontal Clearance				0000.0M				Accessibility (Needed/Used)				
								N / N Liftbucket N / N Rigging N / N Other				
								N / N Ladder N / N Staging				
								N / N Boat N / N Traffic Control				
								Y / Y Wader N / N RR Flagperson				Inspection
								N / N Inspector 50 N / N Police				Hours: 008









Charles D. Baker, Governor  
Karyn E. Polito, Lieutenant Governor  
Stephanie Pollack, Secretary & CEO  
Jonathan L. Gulliver, Highway Administrator



April 3, 2018

Town of Paxton  
Board of Selectmen  
697 Pleasant St.  
Paxton, MA 01612

Attn: Mike Putnam, Highway Supt.

SUBJECT: NATIONAL BRIDGE INSPECTION STANDARDS (NBIS)  
BRIDGE INSPECTION REPORTS

P-02-003 (6UX) BLACK HILL R / TURKEY HILL BROOK Dated: 12/16/17

Dear Mr. Putnam:

As a courtesy, MassDOT has performed the inspection of the above referenced "BRI" structure, owned by your municipality. A "BRI" is a structure with clear span of less than 20 feet. These structures do not have a set inspection frequency and any future inspections are the responsibility of the municipality.

**In review of attached report please note the deficiencies highlighted.**

For your records are copies of recent bridge inspection field reports for the referenced structures. Repair, rehabilitation or reconstruction of any bridges to address the deficiencies reported is the owner/custodian's responsibility. Chapter 90 funds may be used for these purposes.

Questions regarding the content of the reports may be directed to the District Bridge Inspection Engineer, Mahmood Azizi, at 508-929-3822.

Sincerely,

Barry Lorion  
Acting District 3 Highway Director

MA/ma  
cc: BIE (2), DHD D-3, DBIE D-3  
Enclosure







2-DIST  
03B.I.N.  
6UX

## STRUCTURES INSPECTION FIELD REPORT

## ROUTINE &amp; SPECIAL MEMBER INSPECTION

BR. DEPT. NO.

P-02-003

CITY/TOWN <b>PAXTON</b>	8-STRUCTURE NO. <b>P02003-6UX-MUN-BRI</b>	11-Kilo. POINT <b>000.306</b>	41-STATUS <b>A:OPEN</b>	90-ROUTINE INSP. DATE <b>DEC 16, 2017</b>
07-FACILITY CARRIED <b>HWY BLACK HILL R</b>	MEMORIAL NAME/LOCAL NAME	27-YR BUILT <b>1850</b>	106-YR REBUILT <b>1929</b>	YR REHAB'D (NON 106) <b>0000</b>
06-FEATURES INTERSECTED <b>WATER TURKEY HILL BROOK</b>	26-FUNCTIONAL CLASS <b>Rural Local</b>	DIST. BRIDGE INSPECTION ENGINEER <i>M. Azizi</i>		
43-STRUCTURE TYPE <b>101 : Concrete Slab</b>	22-OWNER Town Agency	21-MAINTAINER Town Agency	TEAM LEADER <i>J. Snyder</i>	
107-DECK TYPE <b>1 : Concrete Cast-in-Place</b>	WEATHER <b>Sunny</b>	TEMP. (air) <b>-5°C</b>	TEAM MEMBERS <b>D. SMITH</b>	

<b>ITEM 58</b>	<b>7</b>	DEF
<b>DECK</b>		
1.Wearing surface	7	-
2.Deck Condition	7	-
3.Stay in place forms	N	-
4.Curbs	H	-
5.Median	N	-
6.Sidewalks	N	-
7.Parapets	N	-
8.Railing	6	M-P
9.Anti Missile Fence	N	-
10.Drainage System	N	-
11.Lighting Standards	N	-
12.Utilities	N	-
13.Deck Joints	N	-
14.	N	-
15.	N	-
16.	N	-
CURB REVEAL (In millimeters)	N 169	S 187

<b>APPROACHES</b>	DEF
a. Appr. pavement condition	6 M-P
b. Appr. Roadway Settlement	6 M-P
c. Appr. Sidewalk Settlement	N -
d.	N -

<b>OVERHEAD SIGNS</b> (Attached to bridge)	(Y/N)	N
DEF		
a. Condition of Welds	N	-
b. Condition of Bolts	N	-
c. Condition of Signs	N	-

<b>ITEM 59</b>	<b>7</b>	DEF
<b>SUPERSTRUCTURE</b>		
1.Stringers	N	-
2.Floorbeams	N	-
3.Floor System Bracing	N	-
4.Girders or Beams	N	-
5.Trusses - General	N	-
a. Upper Chords	N	-
b. Lower Chords	N	-
c. Web Members	N	-
d. Lateral Bracing	N	-
e. Sway Bracings	N	-
f. Portals	N	-
g. End Posts	N	-
6.Pin & Hangers	N	-
7.Conn Plt's, Gussets & Angles	N	-
8.Cover Plates	N	-
9.Bearing Devices	N	-
10.Diaphragms/Cross Frames	N	-
11.Rivets & Bolts	N	-
12.Welds	N	-
13.Member Alignment	7	-
14.Paint/Coating	N	-
15.Concrete Deck Slab	7	-

Year Painted	N
COLLISION DAMAGE: Please explain None (X) Minor ( ) Moderate ( ) Severe ( )	
LOAD DEFLECTION: Please explain None (X) Minor ( ) Moderate ( ) Severe ( )	
LOAD VIBRATION: Please explain None (X) Minor ( ) Moderate ( ) Severe ( )	

Any Fracture Critical Member: (Y/N)	N
Any Cracks: (Y/N)	N

<b>ITEM 60</b>	<b>3</b>	DEF
<b>SUBSTRUCTURE</b>		
1. Abutments	Dive	Cur
a. Pedestals	N	N
b. Bridge Seats	N	7
c. Backwalls	N	N
d. Breastwalls	N	3
e. Wingwalls	N	3
f. Slope Paving/Rip-Rap	N	N
g. Pointing	N	6
h. Footings	N	H
i. Piles	N	N
j. Scour	N	5
k. Settlement	N	4
l. Embankment erosion	N	6
m.	N	N
2. Piers or Bents	N	
a. Pedestals	N	N
b. Caps	N	N
c. Columns	N	N
d. Stems/Webs/Pierwalls	N	N
e. Pointing	N	N
f. Footing	N	N
g. Piles	N	N
h. Scour	N	N
i. Settlement	N	N
j.	N	N
k.	N	N
3. Pile Bents	N	
a. Pile Caps	N	N
b. Piles	N	N
c. Diagonal Bracing	N	N
d. Horizontal Bracing	N	N
e. Fasteners	N	N

UNDERMINING (Y/N)	If YES please explain	Y
COLLISION DAMAGE: None (X) Minor ( ) Moderate ( ) Severe ( )		
SCOUR: Please explain None ( ) Minor ( ) Moderate (X) Severe ( )		
I-60 (Dive Report):	N	I-60 (This Report): 3
93B-U/W (DIVE) Insp		00/00/0000

X=UNKNOWN

N=NOT APPLICABLE H=HIDDEN/INACCESSIBLE

R=REMOVED



CITY/TOWN <b>PAXTON</b>	B.I.N. <b>6UX</b>	BR. DEPT. NO. <b>P-02-003</b>	8.-STRUCTURE NO. <b>P02003-6UX-MUN-BRI</b>	INSPECTION DATE <b>DEC 16, 2017</b>
----------------------------	----------------------	----------------------------------	---	--

<b>ITEM 61</b>			
<b>CHANNEL &amp; CHANNEL PROTECTION</b>			
	Dive	Cur	DEF
1.Channel Scour	N	5	S-A
2.Embankment Erosion	N	7	-
3.Debris	N	7	-
4.Vegetation	N	7	-
5.Utilities	N	N	-
6.Rip-Rap/Slope Protection	N	7	-
7.Aggradation	N	7	-
8.Fender System	N	N	-

**STREAM FLOW VELOCITY:**  
Tidal ( ) High ( ) Moderate (X) Low ( ) None ( )

ITEM 61 (Dive Report): ☐ N ITEM 61 (This Report): ☐ 5

93b-U/W INSP. DATE: 00/00/0000

<b>ITEM 36 TRAFFIC SAFETY</b>			
	36	COND	DEF
A. Bridge Railing	0	6	M-P
B. Transitions	0	N	-
C. Approach Guardrail	0	N	-
D. Approach Guardrail Ends	0	N	-

**WEIGHT POSTING** Not Applicable ☒ X

	H	3	3S2	Single
Actual Posting	N	N	N	N
Recommended Posting	N	N	N	N

Waived Date: 00/00/0000 EJDMT Date: 00/00/0000

At bridge		Other Advance	
E	W	E	W
<div style="border: 1px solid black; width: 40px; height: 40px; margin: 0 auto;"></div>	<div style="border: 1px solid black; width: 40px; height: 40px; margin: 0 auto;"></div>	<div style="border: 1px solid black; width: 40px; height: 40px; margin: 0 auto;"></div>	<div style="border: 1px solid black; width: 40px; height: 40px; margin: 0 auto;"></div>

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

**CLEARANCE POSTING**

	N	S	meter
Actual Field Measurement	ft in	ft in	
Posted Clearance	0 0	0 0	

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

At bridge		Advance	
N	S	N	S
<div style="border: 1px solid black; width: 40px; height: 40px; margin: 0 auto;"></div>	<div style="border: 1px solid black; width: 40px; height: 40px; margin: 0 auto;"></div>	<div style="border: 1px solid black; width: 40px; height: 40px; margin: 0 auto;"></div>	<div style="border: 1px solid black; width: 40px; height: 40px; margin: 0 auto;"></div>

<b>ACCESSIBILITY (Y/N/P)</b>		
	Needed	Used
Lift Bucket	N	N
Ladder	N	N
Boat	N	N
Waders	Y	Y
Inspector 50	N	N
Rigging	N	N
Staging	N	N
Traffic Control	N	N
RR Flagger	N	N
Police	N	N
Other:		
	N	N

**TOTAL HOURS** 8

**PLANS (Y/N):** ☐ N

**(V.C.R.) (Y/N):** ☐ N

**TAPE#:** \_\_\_\_\_

**List of field tests performed:**

**RATING**  
Rating Report (Y/N): ☐ N  
Date: 00/00/0000  
Inspection data at time of existing rating  
158: - 159: - 160: - Date: 00/00/0000

(To be filled out by DBIE)  
Request for Rating or Rerating (Y/N): ☐ N  
**REASON:** \_\_\_\_\_  
If YES please give priority:  
HIGH ( ) MEDIUM ( ) LOW ( )  

N/A

### CONDITION RATING GUIDE

(For Items 58, 59, 60 and 61)

	CODE	CONDITION	DEFECTS
	N	NOT APPLICABLE	
G	9	EXCELLENT	Excellent condition.
G	8	VERY GOOD	No problem noted.
G	7	GOOD	Some minor problems.
F	6	SATISFACTORY	Structural elements show some minor deterioration.
F	5	FAIR	All primary structural elements are sound but may have minor section loss, cracking, spalling or scour.
P	4	POOR	Advanced section loss, deterioration, spalling or scour.
P	3	SERIOUS	Loss of section, deterioration, spalling or scour have seriously affected primary structural components. Local failures are possible. Fatigue cracks in steel or shear cracks in concrete may be present.
C	2	CRITICAL	Advanced deterioration of primary structural elements. Fatigue cracks in steel or shear cracks in concrete may be present or scour may have removed substructure support. Unless closely monitored it may be necessary to close the bridge until corrective action is taken.
C	1	"IMMINENT" FAILURE	Major deterioration or section loss present in critical structural components or obvious vertical or horizontal movement affecting structure stability. Bridge is closed to traffic but corrective action may put it back in light service.
	0	FAILED	Out of service - beyond corrective action.

### DEFICIENCY REPORTING GUIDE

**DEFICIENCY:** A defect in a structure that requires corrective action.

#### CATEGORIES OF DEFICIENCIES:

**M= Minor Deficiency** - Deficiencies which are minor in nature, generally do not impact the structural integrity of the bridge and could easily be repaired. Examples include but are not limited to: Spalled concrete, Minor pot holes, Minor corrosion of steel, Minor scouring, Clogged drainage, etc.

**S= Severe/Major Deficiency** - Deficiencies which are more extensive in nature and need more planning and effort to repair. Examples include but are not limited to: Moderate to major deterioration in concrete, Exposed and corroded rebars, Considerable settlement, Considerable scouring or undermining, Moderate to extensive corrosion to structural steel with measurable loss of section, etc.

**C-S= Critical Structural Deficiency** - A deficiency in a structural element of a bridge that poses an extreme unsafe condition due to the failure or imminent failure of the element which will affect the structural integrity of the bridge.

**C-H= Critical Hazard Deficiency** - A deficiency in a component or element of a bridge that poses an extreme hazard or unsafe condition to the public, but does not impair the structural integrity of the bridge. Examples include but are not limited to: Loose concrete hanging down over traffic or pedestrians, A hole in a sidewalk that may cause injuries to pedestrians, Missing section of bridge railing, etc.

#### URGENCY OF REPAIR:

**I = Immediate-** [Inspector(s) immediately contact District Bridge Inspection Engineer (DBIE) to report the Deficiency and to receive further instruction from him/her].

**A = ASAP-** [Action/Repair should be initiated by District Maintenance Engineer or the Responsible Party (if not a State owned bridge) upon receipt of the Inspection Report].

**P = Prioritize-** [Shall be prioritized by District Maintenance Engineer or the Responsible Party (if not a State owned bridge) and repairs made when funds and/or manpower is available].



## STRUCTURES INSPECTION FIELD REPORT

## ROUTINE &amp; SPECIAL MEMBER INSPECTION

BR. DEPT. NO.

P-02-003

2-DIST

03

B.I.N.

6UX

CITY/TOWN

PAXTON

8-STRUCTURE NO.

P02003-6UX-MUN-BRI

11-Kilo. POINT

000.306

90-ROUTINE INSP. DATE

Dec 16, 2017

93\*-SPEC. MEMB. INSP. DATE

Dec 16, 2017

07-FACILITY CARRIED

HWY BLACK HILL R

MEMORIAL NAME/LOCAL NAME

27-YR BUILT

1850

106-YR REBUILT

1929

\*YR REHAB'D (NON 106)

0000

06-FEATURES INTERSECTED

WATER TURKEY HILL BROOK

26-FUNCTIONAL CLASS

Rural Local

DIST. BRIDGE INSPECTION ENGINEER

M. Azizi

43-STRUCTURE TYPE

101 : Concrete Slab

22-OWNER

Town Agency

21-MAINTAINER

Town Agency

TEAM LEADER J. Snyder

107-DECK TYPE

1 : Concrete Cast-in-Place

WEATHER

Sunny

TEMP. (air)

-5°C

TEAM MEMBERS

D. SMITH

## WEIGHT POSTING

Not Applicable

X

H 3 3S2 Single

Actual Posting

N

N

N

N

Recommended Posting

N

N

N

N

Waived Date: 00/00/0000

EJDMT Date: 00/00/0000

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

At bridge

E

W

Advance

E

W

PLANS (Y/N): N

(V.C.R.) (Y/N): N

TAPE#:

## RATING

Rating Report (Y/N):

N

Date:

----

Request for Rating or Rerating (Y/N):

N

If YES please give priority:

HIGH ( ) MEDIUM ( ) LOW ( )

Inspection data at time of existing rating

I 58: - I 59: - I 60: - I 62: - Date: 00/00/0000

REASON:

## SPECIAL MEMBER(S):

	MEMBER	CRACK (Y/N):	WELD'S CONDITION (0-9)	LOCATION OF CORROSION, SECTION LOSS (%), CRACKS, COLLISION DAMAGE, STRESS CONCENTRATION, ETC.	CONDITION		INV. RATING OF MEMBER FROM RATING ANALYSIS			Deficiencies
					PREVIOUS (0-9)	PRESENT (0-9)	H-20	3	3S2	
A	Item 60.1.d - Breastwalls	N		See remarks in comments section.	N	3			Not Rated	S-A
B	Item 60.1.e - Wingwalls	N		See remarks in comments section.	N	3			Not Rated	S-A
C										
D										
E										

List of field tests performed:

(Overall Previous Condition)

(Overall Current Condition)

I-58	I-59	I-60	I-62
-	-	-	-
7	7	3	-

DEFICIENCY: A defect in a structure that requires corrective action.

## CATEGORIES OF DEFICIENCIES:

M= Minor Deficiency - Deficiencies which are minor in nature, generally do not impact the structural integrity of the bridge and could easily be repaired. Examples include but are not limited to: Spalled concrete, Minor pot holes, Minor corrosion of steel, Minor scouring, Clogged drainage, etc.

S= Severe/Major Deficiency - Deficiencies which are more extensive in nature and need more planning and effort to repair. Examples include but are not limited to: Moderate to major deterioration in concrete, Exposed and corroded rebars, Considerable settlement, Considerable scouring or undermining, Moderate to extensive corrosion to structural steel with measurable loss of section, etc.

C-S= Critical Structural Deficiency - A deficiency in a structural element of a bridge that poses an extreme unsafe condition due to the failure or imminent failure of the element which will affect the structural integrity of the bridge.

C-H= Critical Hazard Deficiency - A deficiency in a component or element of a bridge that poses an extreme hazard or unsafe condition to the public, but does not impair the structural integrity of the bridge. Examples include but are not limited to: Loose concrete hanging down over traffic or pedestrians, A hole in a sidewalk that may cause injuries to pedestrians, Missing section of bridge railing, etc.

## URGENCY OF REPAIR:

I = Immediate- [Inspector(s) immediately contact District Bridge Inspection Engineer (DBIE) to report the Deficiency and to receive further instruction from him/her].

A = ASAP- [Action/Repair should be initiated by District Maintenance Engineer or the Responsible Party (if not a State owned bridge) upon receipt of the Inspection Report].

P = Prioritize- [Shall be prioritized by District Maintenance Engineer or the Responsible Party (if not a State owned bridge) and repairs made when funds and/or manpower is available].

X=UNKNOWN

N=NOT APPLICABLE

H=HIDDEN/INACCESSIBLE

R=REMOVED



CITY/TOWN PAXTON	B.I.N. 6UX	BR. DEPT. NO. P-02-003	8.-STRUCTURE NO. P02003-6UX-MUN-BRI	INSPECTION DATE DEC 16, 2017
---------------------	---------------	---------------------------	--	---------------------------------

## REMARKS

### BRIDGE ORIENTATION

According to the compass the approaches are East and West and the elevations are North and South. This is a single span concrete deck slab with masonry stone abutments. The brook flows North to South.

### GENERAL REMARKS

The DBIE and ABE were notified of the serious condition of the Southeast corner of the East breastwall and possible localized failure if not rectified.

### ITEM 58 - DECK

#### Item 58.2 - Deck Condition

There is a 6 inch diameter x 1.5 inch deep spall at the North end. **See photo #1.**  
The North six feet has minor map cracking throughout.

#### Item 58.4 - Curbs

The curblines were snow covered at the time of this inspection.

#### Item 58.8 - Railing

The Southwest approach rail is rotated to the North approximately 2 inches and slightly settled. **See photos #2 and #3.**

There are isolated areas of minor spalling throughout.

### APPROACHES

#### Approaches a - Appr. pavement condition

The West approach has a 23 foot long x 1 inch wide crack with some short transverse cracks. **See photo #4.**  
The East approach has minor longitudinal cracking along the West curbline and minor transverse cracking at the rail end.

#### Approaches b - Appr. Roadway Settlement

There is minor settlement, up to 1 inch, at the East approach to deck transition.

### ITEM 59 - SUPERSTRUCTURE

#### Item 59.15 - Concrete Deck Slab

See Item 58.2.

### ITEM 60 - SUBSTRUCTURE

#### Item 60.1 - Abutments

##### Item 60.1.b - Bridge Seats

There is a 1 foot high concrete bridge seat above the masonry stone abutments.



CITY/TOWN PAXTON	B.I.N. 6UX	BR. DEPT. NO. P-02-003	8.-STRUCTURE NO. P02003-6UX-MUN-BRI	INSPECTION DATE DEC 16, 2017
---------------------	---------------	---------------------------	--	---------------------------------

## REMARKS

### Item 60.1.d - Breastwalls

The Southwest, Northwest and Northeast corners of the breastwalls have almost full height diagonal cracking that starts at the bridge seat outside edge. **See photo #5.**

Both breastwalls have several crack stones throughout mostly at or near the bottom. **See photo #6.**

The South end of the East breastwall has a 1 inch wide diagonal crack that extends from the bottom, approximately 6 foot in from the edge and goes to the bridge seat edge. The crack has up to 40 inches of penetration. **See photo #7.**

The breastwall appears to be settling to the South, most likely due to the scour/undermining of the bottom below the cracked area.

The scour hole is 6 foot long x 1 foot high x up to 40 inches deep. **See photos #8 and #9.**

### Item 60.1.e - Wingwalls

There are 2 large full height diagonal settlement cracks to the Southeast wingwall. The cracks start at the corner of the slab at the bridge seat. The wall is bulging between the cracks and has up to 36 inches of penetration.

At approximately 4 feet off the ground, the West crack measures 3.25 inches wide and the East crack measures 3 inches wide. **See photo #10.**

### Item 60.1.g - Pointing

There are several cracks to the pointing and areas of delaminations, heaviest at the Southeast end.

### Item 60.1.j - Scour

The South corner of the West breastwall is undermined or scoured up to 4 feet long x 1 foot high x 30 inches deep. **See photos #8 and #9.** See Item 60.1.d.

### Item 60.1.k - Settlement

See Items 60.1.d and 60.1.e.

### Item 60.1.l - Embankment erosion

There is minor to moderate erosion to the Southeast and Northwest approach embankments. **See photos #11 and #12.** The full extent of the erosion was hidden by the snow.

### SubStructure Undermining Notes

The Southeast and Southwest corners of the abutments are undermined by up to 40 inches.

### SubStructure Scour Notes

There is moderate scour to the Southeast corner of the East breastwall and minor scour to the Southwest corner of the West breastwall.

## TRAFFIC SAFETY

### Item 36a - Bridge Railing

The bridge railing consists of posts and 2 rails. There are no other traffic safety features.



CITY/TOWN PAXTON	B.I.N. 6UX	BR. DEPT. NO. P-02-003	8.-STRUCTURE NO. P02003-6UX-MUN-BRI	INSPECTION DATE DEC 16, 2017
---------------------	---------------	---------------------------	--	---------------------------------

### REMARKS

#### Photo Log

- Photo 1 : Spall to the North end of the deck slab.
- Photo 2 : Rotation of the Southwest approach rail at the deck slab.
- Photo 3 : Rotation and settlement of the Southwest approach rail.
- Photo 4 : Cracks to the West approach pavement.
- Photo 5 : Cracked stone and pointing at the East breastwall near South end.
- Photo 6 : Diagonal crack to the West breastwall at the North end.
- Photo 7 : Settlement crack to the East breastwall at the South end.
- Photo 8 : Undermining and scour to the South end of the East breastwall.
- Photo 9 : Undermining and scour to the South end of the East breastwall.
- Photo 10 : Large settlement cracks to the Southeast wingwall.
- Photo 11 : Area of erosion to the Northwest embankment.
- Photo 12 : Area of erosion to the Southeast embankment.



CITY/TOWN PAXTON	B.I.N. 6UX	BR. DEPT. NO. P-02-003	8-STRUCTURE NO. P02003-6UX-MUN-BRI	INSPECTION DATE DEC 16, 2017
---------------------	---------------	---------------------------	---------------------------------------	---------------------------------

## PHOTOS



Photo 1: Spall to the North end of the deck slab.

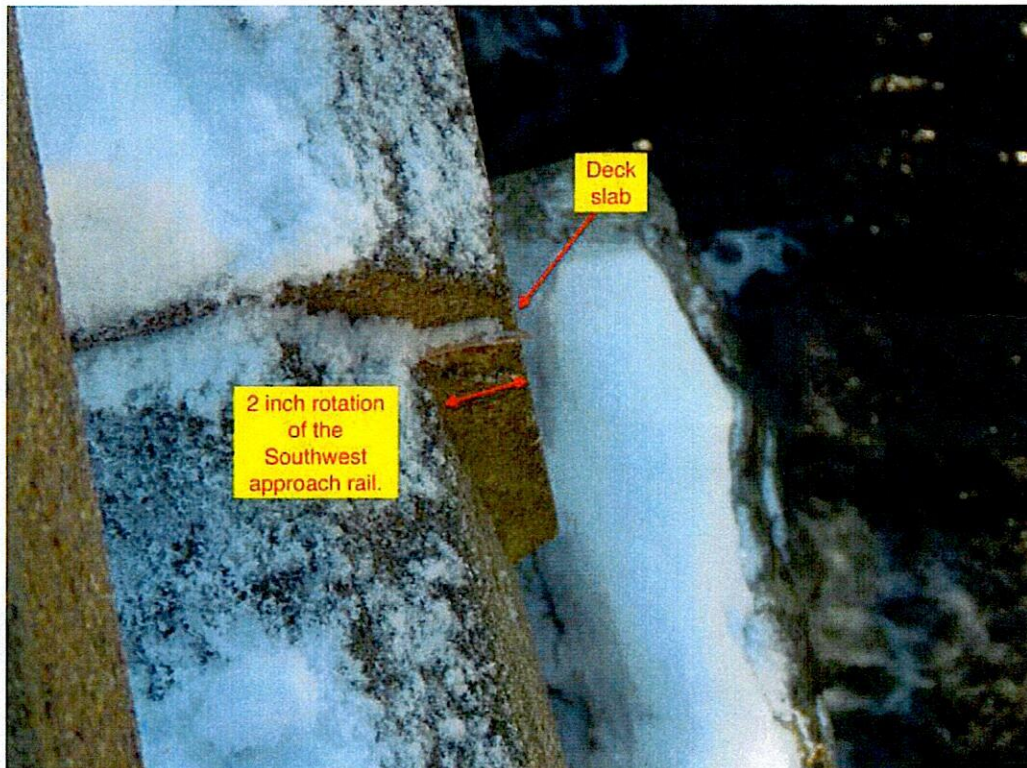


Photo 2: Rotation of the Southwest approach rail at the deck slab.



CITY/TOWN PAXTON	B.I.N. 6UX	BR. DEPT. NO. P-02-003	8.-STRUCTURE NO. P02003-6UX-MUN-BRI	INSPECTION DATE DEC 16, 2017
---------------------	---------------	---------------------------	--	---------------------------------

**PHOTOS**

Photo 3: Rotation and settlement of the Southwest approach rail.



Photo 4: Cracks to the West approach pavement.



CITY/TOWN PAXTON	B.I.N. 6UX	BR. DEPT. NO. P-02-003	8.-STRUCTURE NO. P02003-6UX-MUN-BRI	INSPECTION DATE DEC 16, 2017
---------------------	---------------	---------------------------	--	---------------------------------

**PHOTOS**

Photo 5: Cracked stone and pointing at the East breastwall near South end.

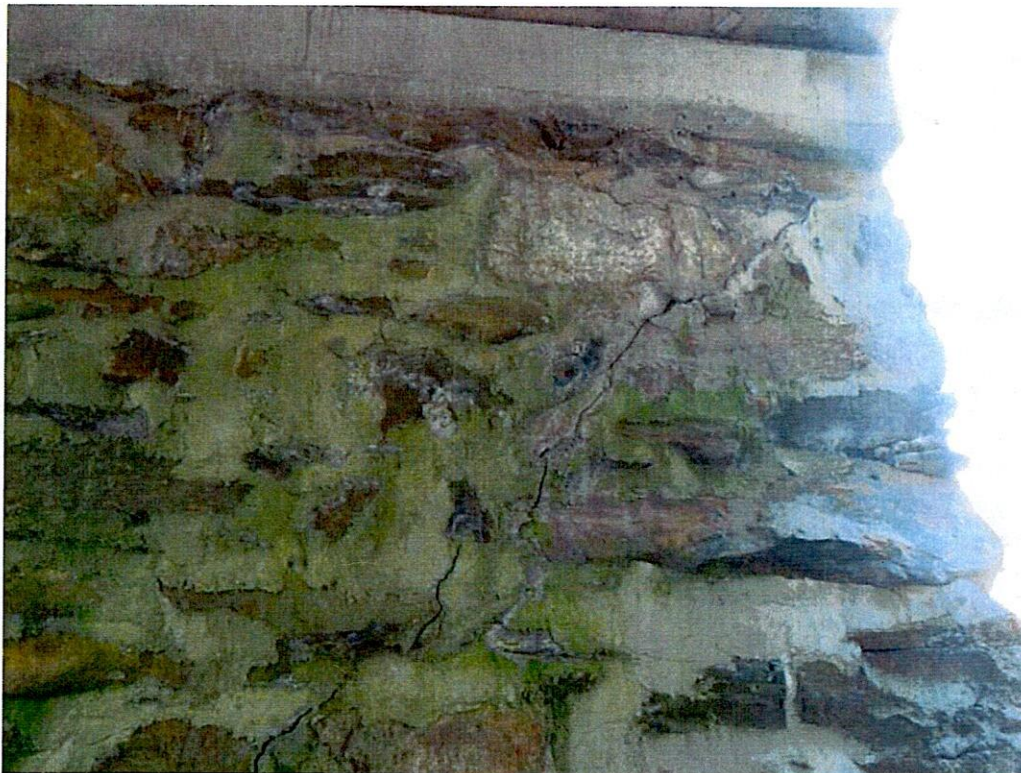


Photo 6: Diagonal crack to the West breastwall at the North end.



CITY/TOWN PAXTON	B.I.N. 6UX	BR. DEPT. NO. P-02-003	8.-STRUCTURE NO. P02003-6UX-MUN-BRI	INSPECTION DATE DEC 16, 2017
---------------------	---------------	---------------------------	--	---------------------------------

**PHOTOS**

Photo 7: Settlement crack to the East breastwall at the South end.



Photo 8: Undermining and scour to the South end of the East breastwall.



CITY/TOWN PAXTON	B.I.N. 6UX	BR. DEPT. NO. P-02-003	8.-STRUCTURE NO. P02003-6UX-MUN-BRI	INSPECTION DATE DEC 16, 2017
---------------------	---------------	---------------------------	--	---------------------------------

**PHOTOS**

Photo 9: Undermining and scour to the South end of the East breastwall.



Photo 10: Large settlement cracks to the Southeast wingwall.



CITY/TOWN PAXTON	B.I.N. 6UX	BR. DEPT. NO. P-02-003	8.-STRUCTURE NO. P02003-6UX-MUN-BRI	INSPECTION DATE DEC 16, 2017
---------------------	---------------	---------------------------	--	---------------------------------

**PHOTOS**

Photo 11: Area of erosion to the Northwest embankment.



Photo 12: Area of erosion to the Southeast embankment.



CITY/TOWN PAXTON	B.I.N. 6UX	BR. DEPT. NO. P-02-003	8.-STRUCTURE NO. P02003-6UX-MUN-BRI	PHOTO DATE DEC 2017
7.- FACILITY CARRIED HWY BLACKHILL RD			6A.- FACILITY UNDER WATER TURKEY HILL BROOK	

**INVENTORY PHOTOS****EAST APPROACH****WEST APPROACH**



CITY/TOWN PAXTON	B.I.N. 6UX	BR. DEPT. NO. P-02-003	8.-STRUCTURE NO. P02003-6UX-MUN-BRI	PHOTO DATE DEC 2017
7.- FACILITY CARRIED HWY BLACKHILL RD			6A.- FACILITY UNDER WATER TURKEY HILL BROOK	

**INVENTORY PHOTOS**

NORTH ELEVATION



SOUTH ELEVATION



CITY/TOWN PAXTON	B.I.N. 6UX	BR. DEPT. NO. P-02-003	8.-STRUCTURE NO. P02003-6UX-MUN-BRI	PHOTO DATE DEC 2017
7.- FACILITY CARRIED HWY BLACKHILL RD			6A.- FACILITY UNDER WATER TURKEY HILL BROOK	

**INVENTORY PHOTOS**

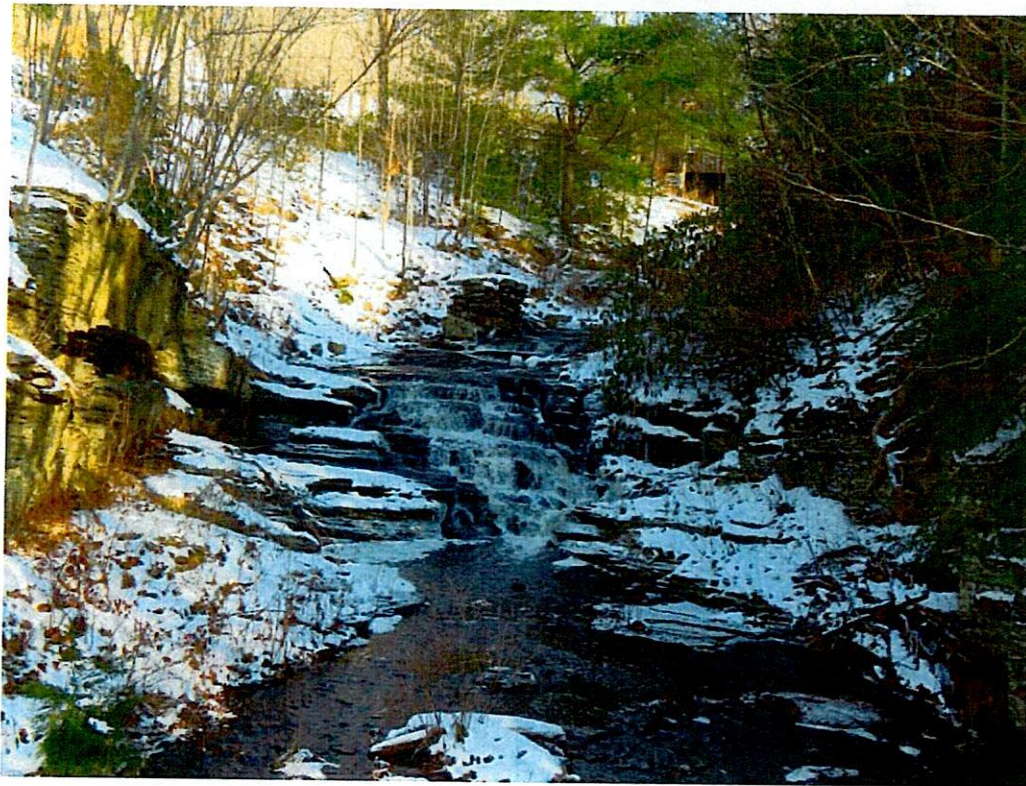
TYPICAL UNDERSIDE



LOOKING DOWNSTREAM



CITY/TOWN PAXTON	B.I.N. 6UX	BR. DEPT. NO. P-02-003	8.-STRUCTURE NO. P02003-6UX-MUN-BRI	PHOTO DATE DEC 2017
7.- FACILITY CARRIED HWY BLACKHILL RD			6A.- FACILITY UNDER WATER TURKEY HILL BROOK	

**INVENTORY PHOTOS**

LOOKING UPSTREAM



Report Date: December 21, 2017

State Information

BDEPT#= P02003

Agency Br.No.

Classification

Code

Town= Paxton

L.O.

(112) NBIS Bridge Length

N

B.I.N= 6UX

AASHTO= 040.0

(104) Highway System

N

RANK= 0 H.I.= NA

FHWA Select List= N

(26) Functional Class -

Rural Local

09

Identification

(100) Defense Highway

0

(8) Structure Number

P020036UXMUNBRI

(101) Parallel Structure

N

(5) Inventory Route

151000000

(102) Direction of Traffic -

1-way traffic

1

(2) State Highway Department District

03

(103) Temporary Structure

N

(3) County Code 027 (4) Place code

52420

(105) Federal Lands Highways

0

(6) Features Intersected

WATER TURKEY HILL BROOK

(110) Designated National Network

N

(7) Facility Carried

HWY BLACK HILL R

(20) Toll - On free road

3

(9) Location

1000 FT NW OF RT 31

(21) Maintain - Town Agency

03

(11) Kilometerpoint

0000.306

(22) Owner - Town Agency

03

(12) Base Highway Network

N

(37) Historical Significance undetermined

(13) LRS Inventory Route &amp; Subroute

000000000000

Condition

Code

(16) Latitude

42 DEG 18 MIN 42.54 SEC

(58) Deck

7

(17) Longitude

71 DEG 57 MIN 35.74 SEC

(59) Superstructure

7

(98) Border Bridge State Code

Share %

(60) Substructure

3

(99) Border Bridge Structure No. #

(61) Channel &amp; Channel Protection

5

Structure Type and Material

(62) Culverts

N

(43) Structure Type Main:

Concrete

Code 101

Load Rating and Posting

Code

Slab

Jointless bridge type: Not applicable

(31) Design Load - Unknown

0

(44) Structure Type Appr:

Other

Code 000

(63) Operating Rating Method - Allowable Stress (AS)

2

(45) Number of spans in main unit

001

(64) Operating Rating

00.0

(46) Number of approach spans

0000

(65) Inventory Rating Method - Allowable Stress (AS)

2

(107) Deck Structure Type -

Concrete Cast-in-Place

Code 1

(66) Inventory Rating

00.0

(108) Wearing Surface / Protective System:

(70) Bridge Posting

0

A) Type of wearing surface -

Bituminous

Code 6

(41) Structure - Open

A

B) Type of membrane -

Unknown

Code 8

(67) Structural Evaluation

3

C) Type of deck protection -

None

Code 0

(68) Deck Geometry

5

Age and Service

(69) Underclearances, vert. and horiz.

N

(27) Year Built

1850

(71) Waterway adequacy

9

(106) Year Reconstructed

1929

(72) Approach Roadway Alignment

9

(42) Type of Service: On -

Highway

(36) Traffic Safety Features

0 0 0 0

Under - Waterway

Code 15

(113) Scour Critical Bridges

6

(28) Lanes: On Structure

01

Under structure 00

(90) Inspection Date 12/16/17

(91) Frequency

06 MO

(29) Average Daily Traffic

000040

(92) Critical Feature Inspection:

(93) CFI DATE

(30) Year of ADT 1986 (109) Truck ADT

00 %

(A) Fracture Critical Detail

N

00

MO A)

00/00/00

(19) Bypass, detour length

002 KM

(B) Underwater Inspection

N

00

MO B)

00/00/00

Geometric Data

(C) Other Special Inspection

Y

06

MO C)

12/16/17

(48) Length of maximum span

0003.9M

(\*) Other Inspection ()

N

00

MO \*)

00/00/00

(49) Structure Length

00005.3M

(\*) Closed Bridge

N

00

MO \*)

00/00/00

(50) Curb or sidewalk:

Left

00.1 M

Right 00.1M

(\*) UW Special Inspection

N

00

MO \*)

00/00/00

(51) Bridge Roadway Width Curb to Curb

007.2M

(\*) Damage Inspection

MO \*)

00/00/00

(52) Deck Width Out to Out

008.2M

Rating Loads:

Report Date 00/00/00

H20

Type 3

Type 3S2

Type HS

(32) Approach Roadway Width (w/shoulders)

006.7M

Operating

0.0

0.0

0.0

0.0

(33) Bridge Median - No median

Code 0

Inventory

0.0

0.0

0.0

0.0

(34) Skew 00 DEG (35) Structure Flared

N

Field Posting

Status

Posting Date 00/00/00

(10) Inventory Route MIN Vert Clear

00.00M

Actual

2 Axle

3 Axle

5 Axle

(47) Inventory Route Total Horiz Clear

07.2M

Recommended

(53) Min Vert Clear Over Bridge Rdwy

99.99M

Missing Signs

N

(54) Min Vert Underclear ref

N

00.00M

Misc.

(55) Min Lat Underclear RT ref

N

00.0M

Bridge Name

N Anti-missile fence

N Acrow Panel

N Jointless Bridge

(56) Min Lat Underclear LT

00.0M

Freeze/Thaw N : Not Applicable

(8) Navigation Control - No navigation control on waterway

Code 0

Accessibility (Needed/Used)

(11) Pier Protection

Code

N / N Liftbucket

N / N Rigging

N / N Other

(9) Navigation Vertical Clearance

000.0M

N / N Ladder

N / N Staging

(16) Vert-lift Bridge Nav Min Vert Clear

M

N / N Boat

N / N Traffic Control

(0) Navigation Horizontal Clearance

0000.0M

Y / Y Wader

N / N RR Flagperson

Inspection

N / N Inspector 50

N / N Police

Hours: 008



Report Date: December 13, 2017

State Information		Agency Br.No.		Classification		Code	
BDEPT#= P02003				(112) NBIS Bridge Length			N
Town= Paxton		L.O.		(104) Highway System			N
B.I.N= 6UX		AASHTO= 032.0		(26) Functional Class -	Rural Local		09
RANK= 0 H.I.= NA	Identification	FHWA Select List= N		(100) Defense Highway			0
(8) Structure Number		P020036UXMUNBRI		(101) Parallel Structure			N
(5) Inventory Route		151000000		(102) Direction of Traffic -	1-WM		1
(2) State Highway Department District		03		(103) Temporary Structure			N
(3) County Code 027	(4) Place code	52420		(105) Federal Lands Highways			Q
(6) Features Intersected				(110) Designated National Network			N
(7) Facility Carried				(20) Toll -	On free road		3
(9) Location				(21) Maintain -	Town Agency		03-
(11) Kilometerpoint		0000.306		(22) Owner -	Town Agency		03,
(12) Base Highway Network				(37) Historical Significance	undetermined		
(13) LRS Inventory Route & Subroute		0000000000000			Condition		Code
(16) Latitude		42 DEG 18 MIN 42.54 SEC		(58) Deck			7
(17) Longitude		71 DEG 57 MIN 35.74 SEC		(59) Superstructure			7
(98) Border Bridge State Code		Share %		(60) Substructure			3
(99) Border Bridge Structure No. #				(61) Channel & Channel Protection			3
	Structure Type and Material			(62) Culverts			N
(43) Structure Type Main:	Concrete	Code 101			Load Rating and Posting		Code
Slab	Jointless bridge type:	Not applicable		(31) Design Load -	Unknown		0
(44) Structure Type Appr:				(63) Operating Rating Method -	Allowable Stress (AS)		2
Other		Code 000		(64) Operating Rating			00.0
(45) Number of spans in main unit		001		(65) Inventory Rating Method -	Allowable Stress (AS)		2
(46) Number of approach spans		0000		(66) Inventory Rating			00.0
(107) Deck Structure Type -		Code ?		(70) Bridge Posting			0
(108) Wearing Surface / Protective System:				(41) Structure -	Open		A
A) Type of wearing surface -	Bituminous	Code 6			Appraisal		Code
B) Type of membrane -	None	Code 0		(67) Structural Evaluation			0
C) Type of deck protection -	None	Code 0		(68) Deck Geometry			N
	Age and Service			(69) Underclearances, vert. and horiz.			N
(27) Year Built		1850		(71) Waterway adequacy			9
(106) Year Reconstructed		1929		(72) Approach Roadway Alignment			9
(42) Type of Service: On -	Highway			(36) Traffic Safety Features			0 0 0 0
Under -	Waterway	Code 15		(113) Scour Critical Bridges			6
(28) Lanes: On Structure	00	Under structure	00		Inspections		
(29) Average Daily Traffic		000040		(90) Inspection Date	00/00/00	(91) Frequency	24 MO
(30) Year of ADT	1986	(109) Truck ADT	00 %	(92) Critical Feature Inspection:	12/16/17	(93) CFI DATE	
(19) Bypass, detour length		002 KM		(A) Fracture Critical Detail	N 00	MO A)	00/00/00
	Geometric Data			(B) Underwater Inspection	N 00	MO B)	00/00/00
(48) Length of maximum span		0004.0M		(C) Other Special Inspection	N 00	MO C)	00/00/00 12/16/17
(49) Structure Length	7'11"	00004.9M		(*) Other Inspection ()	N 00	MO *)	00/00/00
(50) Curb or sidewalk:	Left 00.3 M	Right 00.3 M		(*) Closed Bridge	N 00	MO *)	00/00/00
(51) Bridge Roadway Width Curb to Curb		009.1M		(*) UW Special Inspection	N 00	MO *)	00/00/00
(52) Deck Width Out to Out		010.2M		(*) Damage Inspection		MO *)	00/00/00
(32) Approach Roadway Width (w/shoulders)		009.1M			Rating Loads		
(33) Bridge Median -	No median	Code 0		Report Date	00/00/00	H20	Type 3 Type 3S2 Type HS
(34) Skew	00 DEG	(35) Structure Flared	N	Operating	0.0	0.0	0.0 0.0
(10) Inventory Route MIN Vert Clear		99.99M		Inventory	0.0	0.0	0.0 0.0
(47) Inventory Route Total Horiz Clear		09.1M			Field Posting		
(53) Min Vert Clear Over Bridge Rdwy		99.99M		Status		Posting Date	00/00/00
(54) Min Vert Underclear ref	N	00.00M		Actual	2 Axle	3 Axle	5 Axle
(55) Min Lat Underclear RT ref	N	00.0M		Recommended			
(56) Min Lat Underclear LT		00.0M		Missing Signs	N		
	Navigation Data				Misc.		
38) Navigation Control -	No navigation control on waterway	Code 0		Bridge Name			
111) Pier Protection		Code		N Anti-missile fence	N Acrow Panel	N Jointless Bridge	
39) Navigation Vertical Clearance		000.0M		Freeze/Thaw	N : Not Applicable		
116) Vert-lift Bridge Nav Min Vert Clear		M			Accessibility (Needed/Used)		
40) Navigation Horizontal Clearance		0000.0M		N / N Liftbucket	N / N Rigging	N / N Other	
				N / N Ladder	N / N Staging		
				N / N Boat	N / N Traffic Control		
				N / N Wader	N / N RR Flagperson	Inspection	
				N / N Inspector 50	N / N Police	Hours:	008