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

STRUCTURES INSPECTION FIELD REPORT

SPECIAL MEMBER INSPECTION

BR. DEPT. NO. P-02-003

CITY	Y/TOWN		85	STRUCTURE NO.	1	1-Kilo. POINT	90-ROU	JTINE IN	SP. DATE	93*-SPEC	. MEMB.	INSP. DATE		
PA	KTON			P02003-6UX-	MUN-BRI	000.306	De	ec 3, 2	2021	·				
	ACILITY CARRIED VY BLACK HILL R		,	MEMORIAL NAMI	E/LOCAL NAME	27-YR	BUILT 850		REBUILT 929	*YR REH	(N 0000	ON 106)		
	EATURES INTERSECTED ATER TURKEY HILI	BRO)K	26-FUNCTIONAL OR Rural Local		DIST. BRIDGE II	NSPECTI	ION ENG	INEER	M. Azizi				
43-STRUCTURE TYPE 101 : Concrete Slab				22-OWNER Town Agency	21-MAINTAINER Town Agency	TEAM LEADER	R. Rogei	rs						
107-DECK TYPE 1 : Concrete Cast-in-Place				weather sunny	TEMP. (air) 17°C	D OANTELLEEMIO								
Ac Re	etual Posting stormended Posting nuived Date: 00/00/0000	3 N	olicable 3S2 Single N N N N 0	(Y=Yes,N: NR=Not R	Signs In Place (Y=Yes,N=No, NR=Not Required) Legibility Visibility PLANS (Y							//N): N //N): N		
	TING			Recomme	end for Rating o	r Rerating (Y/N	l):	N [If YES ple	ase give		OW ()		
Ra	Inspection data at tin	Date: ne of exist 62: _	0 0	REAS	SON:				, inc. (,	MEDION	() [
SP	ECIAL MEMBER(S):													
	MEMBER	CRACK (Y/N):	WELD'S CONDITION (0-9)	LOCATION OF CORE COLLISION DAMAG	ROSION, SECTION LO GE, STRESS CONCEN	SS (%), CRACKS, NTRATION, ETC.	PREVIOUS (0-9)	PRESENT (0-9)	INV. RATING FROM RAT	ING ANAL		eficiencies		
Α	ltem 60.1.d - Breastwalls	N		See remarks	in commen	ts section.	2	2	Not	Rated	I	S-A		
В	ltem 60.1.e - Wingwalls	N		See remarks	in commen	ts section.	2	2	Not	Rated	l	S-A		
С														
D														
E														
Lis	st of field tests performed:	•							I-58	I-59	I-60	I-62		
					(Overa	all Previous Co	onditio	n)	7	7	2	-		
					(Overa	all Current Cor	dition)		7	7	2			
CA M=	Severe/Major Deficiency - D	CIES: which are minor corrosion of steeliciencies which	or in nature, genera eel, Minor scouring h are more extens	ally do not impact the structural	anning and effort to repair. I	Examples include but are	e not limited	to: Moderate	e to major dete	ioration in co		I		
	S= Critical Structural Deficion H= Critical Hazard Deficieno	ortne CV - Adeficie	e bridge. ency in a compone	arral element of a bridge that pos ent or element of a bridge that p to: Loose concrete hanging do	ooses an extreme hazard or	unsafe condition to the	public, but d	loes not impa	air the structura	I integrity of t	ne bridge. E	xamples		
I =	ASAP- [Action/Repair should	ately contact Dis	District Maintenan	ction Engineer (DBIE) to report ce Engineer or the Responsible or the Responsible Party (if not	e Party (if not a State owner	d bridge) upon receipt of	the Inspect		/ailable].					
	X=IINKNOWN			PPLICABLE		IIDDEN/INAC				P:				

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

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PO2003-6UX-MUN-BRI JUN 21, 2023

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.

Sketch 1: Locus map

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Photo 1: South breastwall, West end.



Photo 2: South breastwall, West end showing cracks.



Photo 3: South breastwall, West end showing penetration.

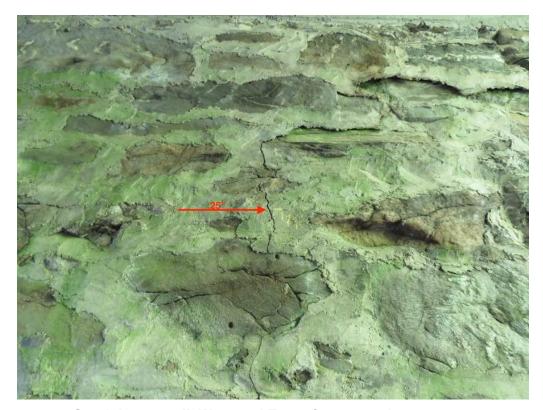


Photo 4: South breastwall, West end East of west crack.

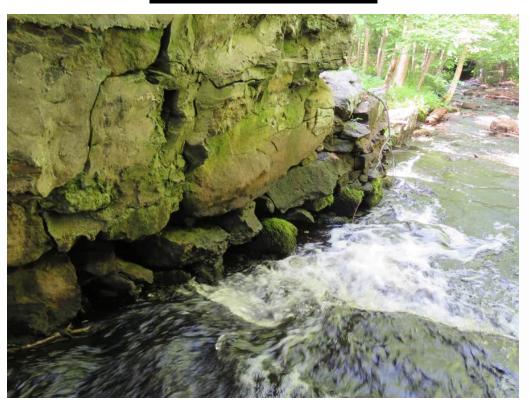


Photo 5: South breastwall, West end, voids to the bottom stones.



Photo 6: North breastwall, West end.

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Photo 7: North breastwall, East end.



Photo 8: Southwest wingwall.

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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. BR. DEPT. NO.

6UX P-02-003

B.STRUCTURE NO.

P02003-6UX-MUN-BRI

JUN 21, 2023

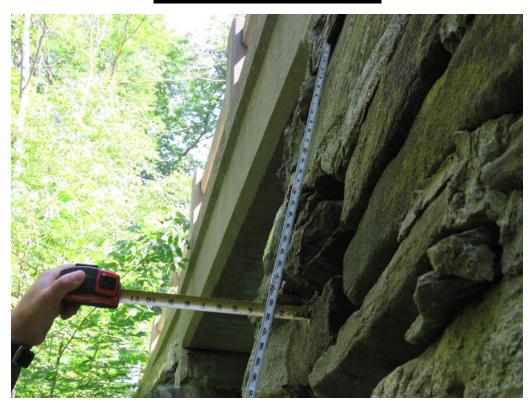


Photo 11: Outward displacement measurement to the Southwest wingwall.



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.

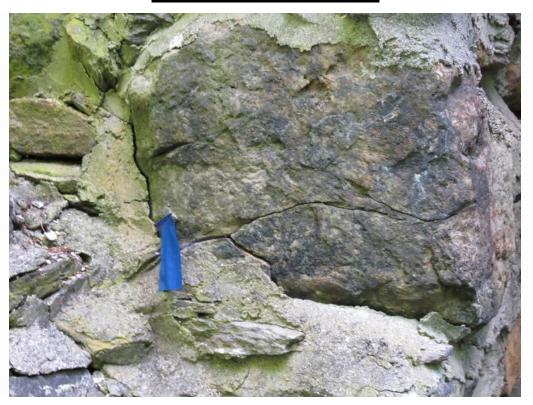


Photo 17: Northwest wingwall, breastwall interface.

Report Date: August 2, 2023 State Information Classification • ode BDFPT#= P02003 Agency Br.No. (112) NBIS Bridge Length Ν L.O. Town = Paxton Ν (104) Highway System B.I.N= 6UX AASHTO= 040.0 09 (26) Functional Class -Rural Local RANK= 0 H.I.= FHWA Select List= N (6/21/17) (100) Defense Highway n Identification N (101) Parallel Structure P020036UXMUNBRI (8) Structure Number 151000000 (102) Direction of Traffic -1-way traffic 1 (5) Inventory Route (103) Temporary Structure N (2) State Highway Department District 03 027 (4) Place code 52420 (105) Federal Lands Highways 0 (3) County Code WATER TURKEY HILL BROOK (110) Designated National Network N (6) Features Intersected (7) Facility Carried HWY BLACK HILL R (20) Toll -On free road 3 1000 FT NW OF RT 31 (21) Maintain -Town Agency 03 (9) Location (11) Kilometerpoint 0000.306 (22) Owner -Town Agency 03 (12) Base Highway Network (37) Historical Significance undetermined Condition _ Code (13) LRS Inventory Route & Subroute 00000000000 (58) Deck 7 42 DFG 18 MIN 42.54 SEC (16) Latitude (59) Superstructure 7 35.74 SEC (17) Longitude 57 MIN (60) Substructure 2 (98) Border Bridge State Code Share (61) Channel & Channel Protection 7 (99) Border Bridge Structure No. N (62) Culverts Structure Type and Material Load Rating and Posting Code (43) Structure Type Main: Code 101 Concrete (31) Design Load -Unknown 0 Jointless bridge type: Not applicable Slab (63) Operating Rating Method -Allowable Stress (AS) 2 (44) Structure Type Appr: (64) Operating Rating 00.0 000 Other Code (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 (41) Structure -(107) Deck Structure Type -Concrete Cast-in-Place Code 1 Open Α Appraisal Code (108) Wearing Surface / Protective System: (67) Structural Evaluation Code 6 A) Type of wearing surface -Bituminous (68) Deck Geometry 5 B) Type of membrane -Unknown Code 8 (69) Underclearances, vert. and horiz. N 0 C) Type of deck protection -None Code (71) Waterway adequacy 9 Age and Service (72) Approach Roadway Alignment 9 1850 (27) Year Built 0 0 0 0 (36) Traffic Safety Features (106) Year Reconstructed 1929 (113) Scour Critical Bridges 6 (42) Type of Service: On -Highway Inspections 15 (90) Inspection Date 12/03/21 (91) Frequency 03 MO Under -Waterway Code (92) Critical Feature Inspection: (93) CFI DATE 01 00 (28) Lanes: On Structure Under structure MO A) 00/00/00 (A) Fracture Critical Detail 00 Ν (29) Average Daily Traffic 000040 00/00/00 (B) Underwater Inspection 00 MO B) Ν (30) Year of ADT 2023 (109) Truck ADT 00 % (C) Other Special Inspection 03 MO C) 06/21/23 002 KM Υ (19) Bypass, detour length Geometric Data 00 MO *) 00/00/00 (*) Other Inspection () N (48) Length of maximum span 0003.9 M (*) Closed Bridge 00 MO *) 00/00/00 Ν 00005.3 M (49) Structure Length (*) UW Special Inspection N 00 MO *) 00/00/00 $00.1\,\mathrm{M}$ MO *) 00/00/00 (50) Curb or sidewalk: 00.1 M Right (*) Damage Inspection Rating Loads (51) Bridge Roadway Width Curb to Curb 007.2 M Report Date 00/00/00 Type 3 Type 3S2 Type HS H20 (52) Deck Width Out to Out 008.2 M 0.0 0.0 Operating 0.0 0.0 006.7 M (32) Approach Roadway Width (w/shoulders) 0.0 Inventory 0.0 0.0 0.0 (33) Bridge Median -No median Code n Field Posting (34) Skew 00 DEG (35) Structure Flared Ν 00/00/00 Status Posting Date (10) Inventory Route MIN Vert Clear 00.00 M Single 2 Axle 3 Axle 5 Axle Actual (47) Inventory Route Total Horiz Clear 07.2 M Recommended 99.99 M (53) Min Vert Clear Over Bridge Rdwy Missing Signs Ν (54) Min Vert Underclear ref M 00.00 Misc. N $00.0\,\mathrm{M}$ (55) Min Lat Underclear RT ref Bridge Name (56) Min Lat Underclear LT 00.0 MN Anti-missile fence N Acrow Panel N Jointless Bridge Navigation Data Freeze/Thaw N: Not Applicable (38) Navigation Control -Code No navigation control on waterway 0 # Stairs On/Adjacent Stair Owner(s) (111) Pier Protection Code Accessibility (Needed/Used) (39) Navigation Vertical Clearance 000.0 M N / N Liftbucket N/N Rigging N/N Other (116) Vert-lift Bridge Nav Min Vert Clear Μ N/NLadder N / N Staging 0000.0 M (40) Navigation Horizontal Clearance N/NBoat N/NTraffic Control Inspection Y/YWader N / N RR Flagperson 008 Hours: N/NInspector 50 N / N Police

MASSACHUSETTS DEPARTMENT OF TRANSPORTATION PAGE _ 1 OF _ 10

2-DI	ST B.I.N. S'	<u> TRUC</u>		ES INSPE			REI	POR	\mathbf{T} \lceil	BR.	DEPT.	NO.
0	3 6UX		SPE	CIAL MEM	BER INS	PECTION				P-	02-00	3
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PAX	TON		1	P02003-6UX-	MUN-BRI	000.306	De	c 3, 2	021	De	1, 20)22
100000000000000000000000000000000000000	CILITY CARRIED			MEMORIAL NAM	E/LOCAL NAME	27-YR			REBUILT	*YR REH		N 106)
HW	Y BLACK HILL R	2				100	850		929		0000	
	ATURES INTERSECTED			26-FUNCTIONAL	/	DIST. BRIDGE	SPECT.	ON ENGI	NEER	M. Azizi		¥.
•	TER TURKEY HILI	L BROO	K	Rural Loca		1/1/19	1	1				•
43-ST 101	: Concrete Slab			Town Agency	21-MAINTAINER Town Agenc	TEAM LEADER	J.Snyle	In				
	ECK TYPE			WEATHER	TEMP. (air)	те м мемве Т. Т. GUM	RS	W_	1			
1:	Concrete Cast-in-l	Place		Sunny	2°C	1. 1. GOW	77	11	6			
WE	IGHT POSTING	Not Appl		X	A	t bridge	Advar	ice	DI A	NC A	7/NIN.	N
Act	tual Posting	$\neg \vdash \vdash \vdash$	S2 Single	Signs In		- w	E	W	PLA	(Y	/N):	N
	commended Posting		N N	(Y=Yes,N NR=Not F					(V.C.	R.) (Y	/N): I	N
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				Recomm	end for Rating	or Rerating (Y/N	I):	N -	If YES ple	ase give p	200.00-010-00000	w ()
Rati	ng Report (Y/N):	Date:		REAS	SON:			-				
	Inspection data at tir						1	NA				
1 58:	- 159: - 160: - I	62: -	Date :00/	/00/0000			14		-		•	
SPI	ECIAL MEMBER(S):				III		1		INIV DATINI	OE MEME	DED	
	MEMBER	CRACK (Y/N):	WELD'S CONDITION (0-9)	LOCATION OF CORE	ROSION, SECTION I GE, STRESS CONC	LOSS (%), CRACKS, ENTRATION, ETC.	PREVIOUS	PRESENT (0-9)	INV. RATING FROM RAT	ING ANALY		liciencies
	tem 60.1.d - Breastwalls	N		See remarks	in comme	nts section.	2	2	Not	Rated		S-A
	tem 60.1.e - Wingwalls	N		See remarks	in comme	nts section.	2	2	Not	Rated	,	S-A
С												
							-					
D												
E												
Lis	t of field tests performed	:							I-58	I-59	I-60	I-62
<u>No</u>	ne				(Ove	erall Previous Co	onditio	7)	7	7	2	-
10					12			,				
				60 S	(Ove	rall Current Con	dition)		7		2	-
DEF	FICIENCY: A defect in a str	ructure that requ	uires correctiv	re action.								
CAT M=	TEGORIES OF DEFICIENCE Minor Deficiency - Deficiencies	s which are minor in	in nature, genera	ally do not impact the structural	l integrity of the bridge an	d could easily be repaired.	Examples in	nclude but are	e not limited to	: Spalled conc	ete, Minor po	ot
	Revere/Major Deficiency - D	r corrosion of steel Deficiencies which a	are more extensi	ive in nature and need more pl	lanning and effort to repa	ir. Examples include but are	not limited	to: Moderate	to major deter	ioration in con		
	= Critical Structural Defici	orroded rebars, Co	onsiderable settle	ement, Considerable scouring ural element of a bridge that po	or undermining, Moderat	e to extensive corrosion to	structural st	eel with meas	surable loss of	section, etc.		
	= Critical Structural Deficien	of the b	oridge. cy in a componer	nt or element of a bridge that p	ooses an extreme hazard	or unsafe condition to the	public, but d	oes not impa	ir the structura	I integrity of th	e bridge, Exa	imples
		, include bu etc.	it are not limited t	to: Loose concrete hanging do	own over traffic or pedesti	rians, A hole in a sidewalk t	hat may cau	se injuries to	pedestrians, N	Missing section	of bridge rail	ling,
1000	GENCY OF REPAIR: mmediate- [Inspector(s) immedia	ately contact Distri	ict Bridge Inspect	tion Engineer (DBIE) to report	the Deliciency and to so	eive futher instruction from	n him/harl					
1 - 1	eurare- [mspector(s) immedi	overa contact Distri	or minde inshed	AND LINGUICE (DDIE) IO IEPOR	THE DELIGIOUS SHOTO LO LEC	CITE INTRICT HISHOCHOR HOL	minimielj.					

[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].

[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].

A = ASAP

P = Prioritize-

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.

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 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 Soutt 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.



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 Soutt breastwall.

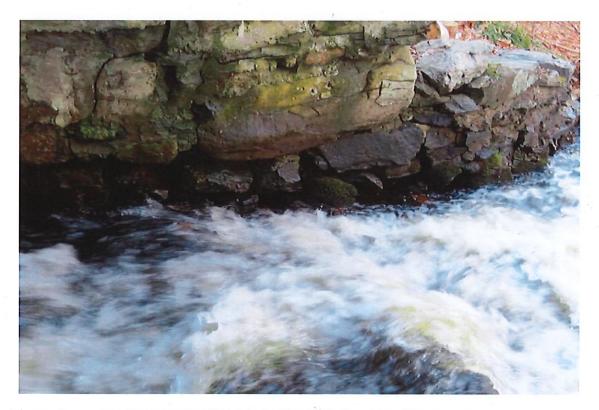


Photo 4: South breastwall voids to the bottom at the West end.

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DEC 1, 2022

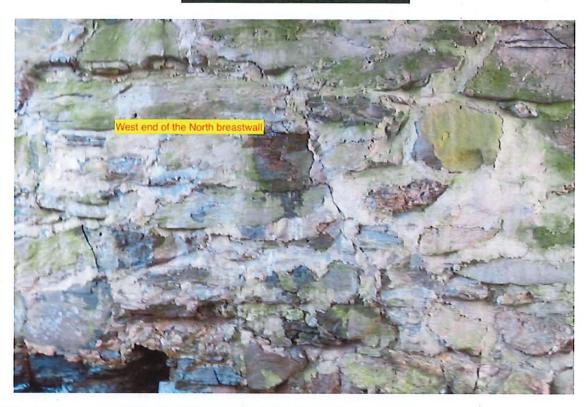


Photo 5: Crack to the West end of the North breastwall.



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

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Photo 7: Southwest wingwall deficiencies.

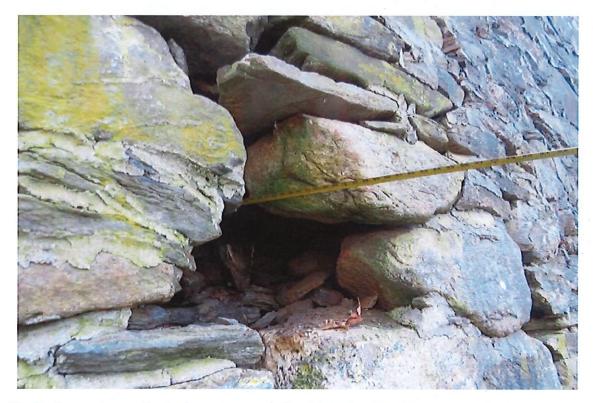


Photo 8: Area of missing stones and void to the Southwest wingwall.

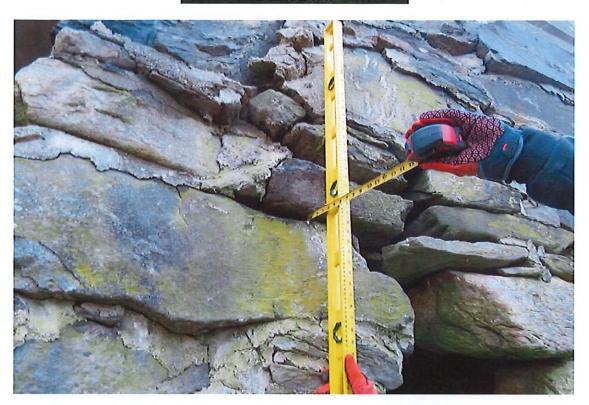


Photo 9: Outward displacement to the Southwest wingwall.



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

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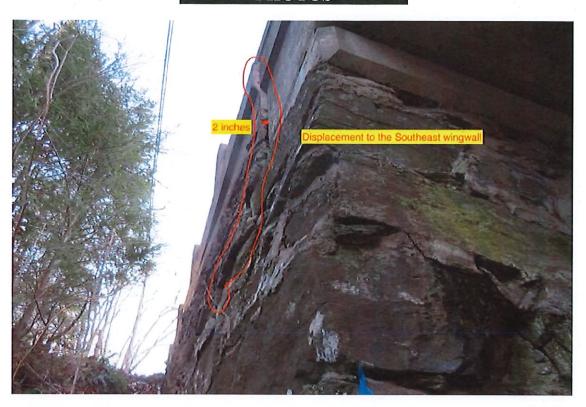


Photo 11: Displacement to the Southeast wingwall.



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

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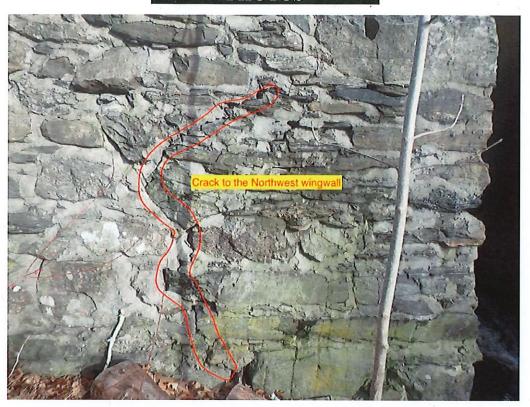


Photo 13: Northwest wingwall displacement and crack.



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

-	ber 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.	(100) 1 41101101101 01000	09
RANK= 0 H.I.=	NA FH	WA Select List= N (6/21/1)		0
(8) Structure Number		P020036UXMUNBF	(101) Parallel Structure	V
(5) Inventory Route		15100000	(102) Direction of Traffic - 1-way	traffic 1
(2) State Highway Department I	District	0	(103) Temporary Structure	N
(3) County Code 027	(4) Place code	5242	(105) Federal Lands Highways	0
(6) Features Intersected	WAT	ER TURKEY HILL BROO	(110) Designated National Network	N
(7) Facility Carried		HWY BLACK HILL	` '	3
(9) Location	•	1000 FT NW OF RT 3	(21) Maintain - Town Agency	03
(11) Kilometerpoint		0000.30	(22) Owner - Town Agency	03
(12) Base Highway Network			(37) Historical Significance undeterm	
(13) LRS Inventory Route & Sub		00000000	Condition	Code
(16) Latitude		DEG 18 MIN 42.54 SEC	(58) Deck	7
(17) Longitude	711	DEG 57 MIN 35.74 SEC	(59) Superstructure (60) Substructure	7 2
(98) Border Bridge State Code		Share %	(61) Channel & Channel Protection	7
(99) Border Bridge Structure No			(62) Culverts	, N
	ructure Type and Material		Load Rating and Po	
(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	0.00
Other		Code 000	(65) Inventory Rating Method - Allowable Stress	(AS) 2
(45) Number of spans in main u		001	(66) Inventory Rating	0.00
(46) Number of approach spans		0000	(70) Bridge Posting	0
(107) Deck Structure Type -	Concrete Cast-in-Place	Code 1	(41) Structure - Open Appraisal	Code
(108) Wearing Surface / Protect	•		(67) Structural Evaluation	code
A) Type of wearing surface		Code 6	(68) Deck Geometry	5
B) Type of membrane -	Unknown	Code 8	(69) Underclearances, vert. and horiz.	N
C) Type of deck protection -		Code ((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 (92) Critical Feature Inspection:	(91) Frequency 03 Mi
(28) Lanes: On Structure	01 UI	nder structure 00	7.1	(93) CFI DATE 00 MO A) 00/00/0
(29) Average Daily Traffic	2022 (400) Total ART	000040		00 MO B) 00/00/0
(30) Year of ADT	2022 (109) Truck ADT	00 %	4-1 - 11 - 1 - 1 - 1	03 MO C) 12/01/2
(19) Bypass, detour length	Geometric Data	002 KM		*
(48) Length of maximum span	ocometic bota	0003.9 M	(*) Other Inspection () N (*) Closed Bridge N	00 MO *) 00/00/0 00 MO *) 00/00/0
(49) Structure Length		0005.3 M	(*) Closed Bridge N (*) UW Special Inspection N	00 MO*) 00/00/0
(50) Curb or sidewalk:	Left 00.1 M	Right 00.1 M	(*) Damage Inspection	MO *) 00/00/0
(51) Bridge Roadway Width Curi		007.2 M	Rating Loads	
(52) Deck Width Out to Out		008.2M	Report Date 00/00/00 H20	Type 3 Type 3S2 Type HS
(32) Approach Roadway Width (w/shoulders)	006.7 M	Operating 0.0	0.0 0.0 0.0
(33) Bridge Median - No me	•	Code 0	Inventory 0.0 Field Posting	0.0 0.0 0.0
(34) Skew 00 DEG	(35) Structure Flared			Posting Date 00/00/00
(10) Inventory Route MIN Vert (00.00 M	2 Axle 3 Axle	5 Axle Single
(47) Inventory Route Total Horiz		07.2 M	Actual	57000 Shight
(53) Min Vert Clear Over Bridge		99.99 M	Recommended	
(54) Min Vert Underclear ref	N N	00.00 M	Missing Signs N	
(55) Min Lat Underclear RT ref	N.	00.0 M	Misc.	
(56) Min Lat Underclear LT	15	M 0.00	Bridge Name	
(20) - mr Eas Oridorologi Er	Navigation Data		N Anti-missile fence N Acrow Panel	N Jointless Bridge
	navigation control on water	rway Code 0	Freeze/Thaw N : Not Applicable	
(38) Navigation Control - No		Code	# Stairs On/Adjacent 0 Stair Owner(s) Accessibility (Needed/	Llead\
· •			Accessionity (Meeded)	useu)
(111) Pier Protection	е	000.0 M	NE (NE L'Ghundra)	N CH OT
(38) Navigation Control - No (111) Pier Protection (39) Navigation Vertical Clearanc (116) Vert-lift Bridge Nav Min Ver		000.0 M M	N / N Liftbucket N / N Rigging	N/N Other
(111) Pier Protection (39) Navigation Vertical Clearanc	rt Clear		N/N Ladder N/N Staging	·
111) Pier Protection 39) Navigation Vertical Clearanc 116) Vert-lift Bridge Nav Min Ver	rt Clear	М		rol Inspertion

Report Date: Novem	ber 28, 2022 State Information	n			ClassificationCod
BDEPT#= P02003		Agency Br.No.			(112) NBIS Bridge Length
Town= Paxton			L.	0.	(104) Highway System
B.I.N= 6UX			AASHT		(26) Functional Class - Rural Local 0
RANK= 0 H.I.=	NA Identification	FHWA Se	elect List=	N (6/21/17)	(100) Defense Highway
(8) Structure Number	Tachtineation		P02003	6UXMUNBRI	(101) Parallel Structure
(5) Inventory Route				151000000	(102) Direction of Traffic - 1-way traffic
(2) State Highway Department	District			03	(103) Temporary Structure
(3) County Code 027	(4) Place code			52420	(105) Federal Lands Highways
(6) Features Intersected		WATER TU	JRKEY H	ILL BROOK	(110) Designated National Network
(7) Facility Carried		н	WY BL	ACK HILL R	(20) Toll - On free road
(9) Location		1	1000 FT N	IW OF RT 31	(21) Maintain - Town Agency
(11) Kilometerpoint				0000.306	(22) Owner - Town Agency
(12) Base Highway Network				• N	(37) Historical Significance undetermined
(13) LRS Inventory Route & Sul	route	000000000	0000		Cod
(16) Latitude		42 DEG	18 MIN	42.54 SEC	(58) Deck
(17) Longitude		71 DEG	57 MIN	35.74 SEC	(59) Superstructure
(98) Border Bridge State Code			Share	e %	(60) Substructure
(99) Border Bridge Structure No	. #	*			(61) Channel & Channel Protection (62) Culverts
St	ructure Type and M	aterial			Load Rating and PostingCod
(43) Structure Type Main:	Concrete		Code	101	(31) Design Load - Unknown
Slab	Jointless	bridge type:	Not a	oplicable	(63) Operating Rating Method - Allowable Stress (AS)
(44) Structure Type Appr:					(64) Operating Rating 00
Other			Code	000	(65) Inventory Rating Method - Allowable Stress (AS)
(45) Number of spans in main u	nit			001	(66) Inventory Rating 00
(46) Number of approach spans				0000	(70) Bridge Posting
(107) Deck Structure Type -	Concrete Cast-i	n-Place		Code 1	(41) Structure - Open
(108) Wearing Surface / Protect	*				AppraisalCod
A) Type of wearing surface				Code 6	(67) Structural Evaluation (68) Deck Geometry
B) Type of membrane -	Unknown			Code 8	(69) Underclearances, vert. and horiz.
C) Type of deck protection -				Code 0	(71) Waterway adequacy
	Age and Service				(72) Approach Roadway Alignment
(27) Year Built				1850	(36) Traffic Safety Features 0 0 0
(106) Year Reconstructed				1929	(113) Scour Critical Bridges
(42) Type of Service: On -	Highway				Inspections
Under - Waterway	070000			Code 15	(90) Inspection Date 12/03/21 (91) Frequency 03
(28) Lanes: On Structure	01	Under s	tructure		(92) Critical Feature Inspection: (93) CFI DAT
(29) Average Daily Traffic	200			000040	(A) Fracture Critical Detail N 00 MO A) 00/00
(30) Year of ADT	1986 (109) Truck	ADT		00 %	(B) Underwater Inspection N 00 MO B) 00/00
(19) Bypass, detour length	Geometric Data			002 KM	(C) Other Special Inspection Y 03 MO C) 09/21
(48) Length of maximum span	- Geometric Data			0003.9M	(*) Other Inspection () N 00 MO *) 00/00
(49) Structure Length				0005.3M	(*) Closed Bridge N 00 MO *) 00/00 (*) UW Special Inspection N 00 MO *) 00/00
(50) Curb or sidewalk:	Left 00	1 M	Right		(*) UW Special Inspection N 00 MO *) 00/00 (*) Damage Inspection MO *) 00/00
(51) Bridge Roadway Width Cur		× 11	Right	007.2 M	Rating Loads
(52) Deck Width Out to Out	o to curb			008.2 M	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 me			Code		Inventory 0.0 0.0 0.0 0.0
(34) Skew 00 DEG	(35) Structu	re Flared	Couc	. 0 N	Field Posting
(10) Inventory Route MIN Vert (750 5	C Harca		M 00.00	Status Posting Date 00/00/00 2 Axle 3 Axle 5 Axle Single
(47) Inventory Route Total Horiz				07.2 M	2 Axle 3 Axle 5 Axle Single Actual
(53) Min Vert Clear Over Bridge				99.99 M	Recommended
(54) Min Vert Underclear ref	N			00.00 M	Missing Signs N
(55) Min Lat Underclear RT ref	· N			M 0.00	Misc.
(56) Min Lat Underclear LT	IN			00.0M	Bridge Name
(30) Pilli Lat Officercledi Li	 Navigation Data 			00.01	N Anti-missile fence N Acrow Panel N Jointless Bridge
38) Navigation Control - No	navigation control			Code 0	Freeze/Thaw N : Not Applicable
111) Pier Protection	30,000	,		Code	# Stairs On/Adjacent 0 Stair Owner(s)
39) Navigation Vertical Clearance	e .			000.0M	Accessibility (Needed/Used)
116) Vert-lift Bridge Nav Min Ve				М	N/N Liftbucket N/N Rigging N/N Other
40) Navigation Horizontal Cleara				0000.0 M	N/N Ladder N/N Staging
	VVVVII (1.00ED)				N / N Boat N / N Traffic Control N / N Boat Inspection
					Y / Y Wader N / N RR Flagperson

MASSACHUSETTS DEPARTMENT OF TRANSPORTATION PAGE 1 OF 8

STRUCTURES INSPECTION FIELD REPORT

2-DIST	B.I.N.
02	GUV

SPECIAL MEMBER INSPECTION

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

	.0.300							ı					
CITY/TOWN		8ST	TRUCTURE NO.		11-Kilo. POIN	TP	90-ROU	ITINE IN	ISP. DATI	E 93*-S	PEC. MI	EMB. IN	NSP. DAT
PAXTON		P	02003-6UX-MU	N-BRI	000.30)6	De	c 3, 2	2021	5	Sep 2	1, 20	022
07-FACILITY CARRIED			MEMORIAL NAME/LOC	CAL NAME	2	7-YR B		2000	REBUIL	*YR	REHAB		N 106)
HWY BLACK HILL R							350		929			000	
06-FEATURES INTERSECTED	DOOK		26-FUNCTIONAL CLAS	s (DIST. BŘII	OGEN	SPECTI	ON ENG	INEER	M. Az	izi		
WATER TURKEY HILL E	SKOOK		Rural Local		7//	00	r Poleon	lia			0		
43-STRUCTURE TYPE 101 : Concrete Slab			Town Agency Town	IAINTAINER Vn Agency	TEAM LEA	ADER	101002	KO		(A)			
107-DECK TYPE 1:Concrete Cast-in-Pla	ace		P Cloudy	P. (air) 20°C	R. RO	MBER: GER	S		1/2			_	
WEIGHT POSTING H	Vot Applicabl	e ngle	X Signs In Place	E	bridge W	7	Advan E	ce W	PL	ANS	(Y/N	l): N	1
Actual Posting N	N N	N	(Y=Yes,N=No, NR=Not Requir								0.70		
Recommended Posting N	N N	N	Legibility/	/) (V.	C.R.)	(Y/N	I):	4
Waived Date: 00/00/0000 EJI	DMT Date: 0	0/00/0	0000 Visibility						TA	PE#:	0-		-
RATING			Recommend t	for Pating	or Poratino	. /V/NI	· P	1	If YES p			77 000000	
Rating Report (Y/N): N Da	ate:		Recommend	To Rating C	or Relating) (17N)	,		HIGH () MED) MUIC) LOV	V ()
Inspection data at time of	of existing rati	ng	REASON:				11	*4					
158: - 159: - 160: - 162:	the state of the s		00/0000				Mg	P					
SPECIAL MEMBER(S):													
MEMBER CF	RACK WELD	'S	LOCATION OF CORROSIO COLLISION DAMAGE, ST	N, SECTION L	OSS (%), CRA	CKS,	COND	ITION PRESENT	INV. RAT	ING OF I ATING A	MEMBER NALYSIS		iciencies
IVIEIVIDER (Y/N): (0-9)				•	20.00	(0-9)	(0-9)	H-20	3	352		
A Item 60.1.d - Breastwalls	N	S	See remarks in o	commer	ıts secti	ion.	2	2	No	t Ra	ed	Ş	S-A
B Item 60.1.e - Wingwalls	N	S	See remarks in o	commer	ıts secti	ion.	2	2	No	t Ra	ed	5	S-A
С													
D													
Е													
List of field to ato nowformed									I-:	5Q T	-59	I-60	I-62
List of field tests performed:													1-02
				(Ove	rall Previo	us Co	nditio	1)			7	2	-
			2	(Over	all Curren	t Con	dition)		7	7 _	7	2	
DEFICIENCY: A defect in a structu	1/10/2014 (ACOUST 10/14/1	rrective	action.					e,					
CATEGORIES OF DEFICIENCIE M= Minor Deficiency - Deficiencies which	ch are minor in nature	generally	y do not impact the structural integrit	ty of the bridge and	could easily be r	epaired. E	Examples in	nclude but a	re not limite	d to: Spalle	d concrete	, Minor po	ət
S- Savera/Major Deficiency - Deficie	encies which are more	extensive		and effort to repair	. Examples includ	le but are	not limited	to: Moderal	te to major d	eterioration	in concret		
C-S= Critical Structural Deficiency	y - A deficiency in a of the bridge.	structura	el element of a bridge that poses an	extreme unsafe co	ndition due to the	failure or	imminent f	ailure of the	element wh	ich will affe	ect the stru	ctural integ	grity
C-H= Critical Hazard Deficiency -	. A deficiency in a co	emponent limited to	or element of a bridge that poses a c Loose concrete hanging down ove	n extreme hazard er traffic or pedestri	or unsafe conditio ans, A hole in a si	n to the p dewalk th	ublic, but d at may cau	oes not imp se injuries t	air the struct to pedestrian	tural integri is, Missing	ty of the br section of	idge. Exar bridge rail	mples ing,
URGENCY OF REPAIR:													
A = ASAP- [Action/Repair should be i	initiated by District Ma	ntenance	on Engineer (DBIE) to report the Del Engineer or the Responsible Party The Responsible Party (if not a State	(if not a State own	ed bridge) upon r	eceipt of t	he Inspecti		vailable].				
total be promized by bis	manionance En	OI U	tony (ii not a State	a cinago) aik	made Wi			,	1				

CITY/TOWN
PAXTON

B.I.N. BR. DEPT. NO.
BR. DEPT. NO.
P-02-003

P02003-6UX-MUN-BRI

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.

PAGE 3 OF 8

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

REMARKS

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.

 CITY/TOWN
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 INSPECTION DATE

 PAXTON
 6UX
 P-02-003
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 SEP 21, 2022



Photo 3: North breastwall west end, looking northwest.



Photo 4: North breastwall east end, looking north.

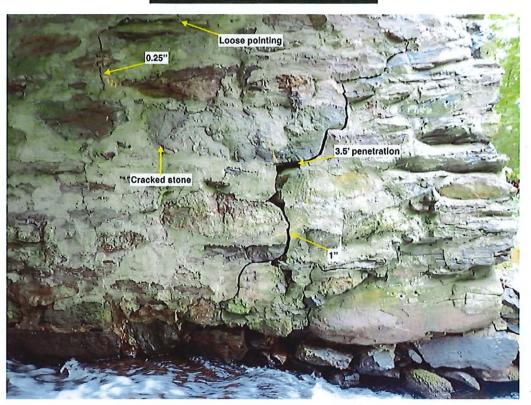


Photo 1: South breastwall west end, looking south.



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

 CITY/TOWN
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 6UX
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 SEP 21, 2022



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



Photo 6: Southwest wingwall, looking east.

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

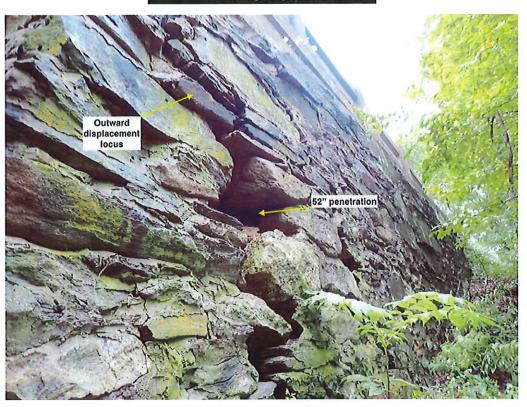


Photo 7: Southwest wingwall, looking southeast.



Photo 8: Southeast wingwall, looking southwest.

CITY/TOWN
PAXTON
B.I.N. BR. DEPT. NO.
BR. DEPT. NO.
BR. DEPT. NO.
P-02-003
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SEP 21, 2022



Photo 9: Northwest wingwall, looking northeast.



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

	30, 2022 State Information	i			_		Classification			Code
BDEPT#= P02003		Agency Br.N	0.			(112) NBIS Bridge Length				N
Town= Paxton			L.	.0.		(104) Highway System				N
B.I.N= 6UX			AASHT		140.0	(26) Functional Class -	Rural Local			09
RANK= 0 H.I.=	NA Identification .	FHWA S	Select List=	= N (6/2	1/17)	(100) Defense Highway				0
(8) Structure Number	Tacifcineación		P02003	36UXMUI	NBRI	(101) Parallel Structure				N
(5) Inventory Route				15100	0000	(102) Direction of Traffic -	1-w	ay traffic		1
(2) State Highway Department D	strict				03	(103) Temporary Structure				N
(3) County Code 027	(4) Place code			5.	2420	(105) Federal Lands Highways				0
(6) Features Intersected		WATER T	URKEY H	ILL BR	оок	(110) Designated National Ne	twork			N
(7) Facility Carried		0.	HWY BL	ACK HI	LL R	(20) Toll - On free	road			3
(9) Location			1000 FT N	NW OF R	T 31	(21) Maintain - Tov	n Agency			03
(11) Kilometerpoint				0000	.306	(22) Owner - Tov	n Agency			03
(12) Base Highway Network					Ν	(37) Historical Significance	undeter	mined		
(13) LRS Inventory Route & Subr	oute	00000000	00000				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			Shar	e	%	(60) Substructure (61) Channel & Channel Prote	tion			2 7
(99) Border Bridge Structure No.	#					(62) Culverts	don			N .
Stru	icture Type and Ma	aterial			_		Load Rating and P	osting _		Code
(43) Structure Type Main:	Concrete		Code		101		nknown			0
Slab	Jointless	bridge type	: Not a	pplicable	9	(63) Operating Rating Method	- Allowable Stres	s (AS)		2
(44) Structure Type Appr:						(64) Operating Rating				0.00
Other			Code		000	(65) Inventory Rating Method	- Allowable Stres	s (AS)	*	2
(45) Number of spans in main un	it				001	(66) Inventory Rating				0.00
(46) Number of approach spans					0000	(70) Bridge Posting				0
(107) Deck Structure Type -	Concrete Cast-i	n-Place		Code	1	(41) Structure - Ope				A Code
(108) Wearing Surface / Protective	5-465 P5-7					(67) Structural Evaluation	Appraisal _			Code
A) Type of wearing surface -	Bituminous	-		Code	6	(68) Deck Geometry				5
B) Type of membrane -	Unknown			Code	8	(69) Underclearances, vert. an	d horiz.			N
C) Type of deck protection -	None			Code	0	(71) Waterway adequacy				9
	Age and Service				_	(72) Approach Roadway Alignr	nent			9
(27) Year Built					1850	(36) Traffic Safety Features			(0 0 0 0
(106) Year Reconstructed	1000 2			1	1929	(113) Scour Critical Bridges	0.0			6
(42) Type of Service: On -	Highway				g=	(00) In an although Date (12)	Inspections	200000000000000000000000000000000000000		02 110
Under - Waterway				Code	15		/03/21	(91) F	requency	03 MO
(28) Lanes: On Structure	01	Under	structure		00	(92) Critical Feature Inspection		00		3) CFI DATE
(29) Average Daily Traffic					0040	(A) Fracture Critical Detail (B) Underwater Inspection	N	00 00	MO A) MO B)	00/00/00
	1986 (109) Truck	ADI			%	(C) Other Special Inspection	N			06/02/22
(19) Bypass, detour length	■ Geometric Data	22		002	KM		/ Y	03 00	MO C) MO *)	00/02/22
(48) Length of maximum span	- Geometrie Data			0003	9 M	(*) Other Inspection () (*) Closed Bridge	N	00	MO *)	00/00/00
(49) Structure Length				00005		(*) UW Special Inspection	N N	00	MO *)	00/00/00
(50) Curb or sidewalk:	Left 00	1 M	Right		.1M	(*) Damage Inspection	14	00	MO *)	00/00/00
(51) Bridge Roadway Width Curb				007			Rating Loads			
(52) Deck Width Out to Out				008		Report Date 00/00/00	H20	Type 3	Type 3S2	Type HS
(32) Approach Roadway Width (v	//shoulders)			006		Operating	0.0	0.0	0.0	0.0
(33) Bridge Median - No med			Code		0	Inventory	0.0 Field Posting	0.0	0.0	0.0
(34) Skew 00 DEG	(35) Structu	re Flared			N	Status	rield Fosting	Posting	Date 00/00	/00
(10) Inventory Route MIN Vert Cl				00.0		2 Axle	3 Axle	_	Axle	Single
(47) Inventory Route Total Horiz					.2M	Actual	o / bile	5.	buc	omgic
(53) Min Vert Clear Over Bridge R				99.9		Recommended				
(54) Min Vert Underclear ref	N			00.0		Missing Signs N				
(55) Min Lat Underclear RT ref	N				.0M	n.i. u	Misc			
(56) Min Lat Underclear LT					.0M	Bridge Name	1.00			
\/	Navigation Data					N Anti-missile fence	N Acrow Panel		N Jointless I	Bridge
(38) Navigation Control - No r	navigation control	on waterway		Code	0	Freeze/Thaw N : Not Application # Stairs On/Adjacent 0				
(111) Pier Protection				Code		# Stairs On/Adjacent 0	Stair Owner(s) ccessibility (Needed	1/11cod1		
(39) Navigation Vertical Clearance				000.	0 M		20.00	i, useu)	NI/NI C	hor
(116) Vert-lift Bridge Nav Min Vert	Clear				М	N / N Liftbucket N / N Ladder	N / N Rigging		N/N Ot	ner
(40) Navigation Horizontal Clearar	ice			0000.	0M	N / N Boat	N / N Staging N / N Traffic Cor	itrol		
						man and a second and	and a second second		Insp	ection
						Y / Y Wader	N / N RR Flagpe	rson		rs: 008

Report Date: September 22, 2022 State Information	ClassificationCoc
BDEPT#= P02003 Agency Br.No.	(112) NBIS Bridge Length
Town= Paxton L.O.	(104) Highway System
	.0 (26) Functional Class - Rural Local C
RANK= 0 H.I.= NA Identification FHWA Select List= N (6/21	7) (100) Defense Highway
8) Structure Number P020036UXMUN	(101) Parallel Structure
5) Inventory Route 151000	(102) Direction of Traffic - 1-way traffic
2) State Highway Department District	03 (103) Temporary Structure
3) County Code 027 (4) Place code 52	20 (105) Federal Lands Highways
6) Features Intersected WATER TURKEY HILL BRO	K (110) Designated National Network
7) Facility Carried HWY BLACK HIL	R (20) Toll - On free road
9) Location 1000 FT NW OF R	31 (21) Maintain - Town Agency
11) Kilometerpoint 0000.	06 (22) Owner - Town Agency
12) Base Highway Network	N (37) Historical Significance undetermined
13) LRS Inventory Route & Subroute 000000000000	ConditionCod
16) Latitude 42 DEG 18 MIN 42.54 S	
17) Longitude 71 DEG 57 MIN 35.74 S	
98) Border Bridge State Code Share	(60) Substructure (61) Channel & Channel Protection
99) Border Bridge Structure No. #	(62) Culverts
Structure Type and Material	Load Rating and PostingCod
	1 (31) Design Load - Unknown
Jointless bridge type: Not applicable	(63) Operating Rating Method - Allowable Stress (AS)
44) Structure Type Appr:	(64) Operating Rating
	0 (65) Inventory Rating Method - Allowable Stress (AS)
45) Number of spans in main unit	(co, and and a grant a
46) Number of approach spans 00	
107) Deck Structure Type - Concrete Cast-in-Place Code	1 (41) Structure - Open AppraisalCod
108) Wearing Surface / Protective System:	(67) Structural Evaluation
A) Type of wearing surface - Bituminous Code	(68) Dock Geometry
B) Type of membrane - Unknown Code	(69) Underclearances, vert, and horiz
C) Type of deck protection - None Code	(71) Waterway adequacy
Age and Service	(72) Approach Roadway Alignment
27) Year Built 1	(36) Iranic Salety Features 0 0 0
106) Year Reconstructed 1	(113) Scour Critical Bridges
42) Type of Service: On - Highway	Inspections (01) Francisco Data (22)231
Under - Waterway Code	(02) CFI DE
28) Lanes: On Structure 01 Under structure	(A) For how Cittled Beteff
29) Average Daily Traffic 000	
30) Year of ADT 1986 (109) Truck ADT 00	(C) Other Chesial Inspection (C) MO C) 00/21
(19) Bypass, detour length Geometric Data	
48) Length of maximum span 0003.	
49) Structure Length 00005.	() 5.5552 2.1255
50) Curb or sidewalk: Left 00.1 M Right 00.	()
51) Bridge Roadway Width Curb to Curb 007.	Rating Loads
52) Deck Width Out to Out 008.	Report Date 00/00/00 H20 Type 3 Type 3S2 Type H
32) Approach Roadway Width (w/shoulders) 006.	Operating 0.0 0.0 0.0 0.0
33) Bridge Median - No median Code	
34) Skew 00 DEG (35) Structure Flared	N Status Posting Date 00/00/00
10) Inventory Route MIN Vert Clear 00.0	status rosting bate copyon
47) Inventory Route Total Horiz Clear 07.	
53) Min Vert Clear Over Bridge Rdwy 99.9	
54) Min Vert Underclear ref N 00.0	Missing Signs N
55) Min Lat Underclear RT ref N 00.	MISC
56) Min Lat Underclear LT 00.	Bridge Name
Navigation Data	And-missile fence in Action Faller in Johndess bridge
88) Navigation Control - No navigation control on waterway Code	Freeze/Thaw N : Not Applicable # Stairs On/Adjacent 0 Stair Owner(s)
.11) Pier Protection Code	# Stairs Only Adjacent U Stair Owner(s) Accessibility (Needed/Used)
9) Navigation Vertical Clearance 000.0	
116) Vert-lift Bridge Nav Min Vert Clear	N/N Liftbucket N/N Rigging N/N Other N/N Ladder N/N Staging
10) Navigation Horizontal Clearance 0000.0	N / N Boat N / N Traffic Control
	IT IT DOUG IT IT HUMIC COMMON
	Y / Y Wader N / N RR Flagperson Inspection Hours: (

MASSACHUSETTS DEPARTMENT OF TRANSPORTATION PAGE _ 1 OF _ 6

STRUCTURES INSPECTION FIELD REPORT

BR. DEPT. NO.

03 6UX	SPI	ECIAL MEM	IBER INSP	ECTION				, k	P-0	2-003	3
CITY/TOWN	8.	-STRUCTURE NO.		11-Kilo. POINT	90-ROU	JTINE IN	NSP. DAT	E 93*-S	PEC. M	EMB. II	NSP. DAT
PAXTON	81	P02003-6UX-	MUN-BRI	000.306	De	c 19,	2019	5	Sep 1	17, 20	021
07-FACILITY CARRIED		MEMORIAL NAM	E/LOCAL NAME	27-YR I			REBUIL	T *YR		B'D (NOì	N 106)
HWY BLACK HILL R					850		929		7,7007	000	
06-FEATURES INTERSECTED	PPOOK	26-FUNCTIONAL		DIST. BRIDGE IN	ISPECTI	ON ENC	SINEER	M. Az	izi	/	
WATER TURKEY HILL	BROOK	Rural Loca		TEAM LEADER	I SAI		_/]	-			
43-STRUCTURE TYPE 101 : Concrete Slab		Town Agency	21-MAINTAINER Town Agency	TEAM LEADER	H	1	1	. ,	~		
107-DECK TYPE		WEATHER	TEMP. (air)	TEAM MEMBER	as VI	100	XN	1/			
1 : Concrete Cast-in-F	Place	Cloudy	17°C	O. BROCH	HU #	lind	Shell	~			
WEIGHT POSTING	Not Applicable	X	At	bridge	Advan	се)/ _N	ANIC	0//\	n. N	
Actual Posting N		Signs In (Y=Yes,N		_ w _	E	W	PL	ANS	(Y/N	ν): Ν	
Recommended Posting N		NR=Not I	Required)				(V.	C.R.)	(Y/N	V): N	1
		Legibility 0/0000					∐ _{TA}	PE#:			
RATING	EUDIN'I Date. 00/00	0,000		N- /			If YES	nlease (nive nri	ority:	
[1]	Date:	Recomm	end for Rating o	or Rerating (Y/N): [N	HIGH () MED	300) LOW	V ()
		REAS	SON:)			-		
Inspection data at tim		0/00/0000		(M	(A)		3 E	6			,
SPECIAL MEMBER(S):				1							
MEMBER	CRACK (Y/N): WELD'S CONDITION	LOCATION OF CORI COLLISION DAMA	ROSION, SECTION LO GE, STRESS CONCE	OSS (%), CRACKS, NTRATION, ETC.	PREVIOUS	PRESENT	FROM R	TING OF I	NALYSIS	0	ciencies
ltem 60.1.d -	(1714). (0-9)	See remarks	in common	te eaction	(0-9)	(0-9)	H-20	3	3S2	+-	
Breastwalls	N	occ remarks	iii commen	to occion.	2	2	No	t Rat	ed	5	S-A
Item 60.1.e - Wingwalls	N	See remarks	in commen	ts section.	2	2	No	t Rat	ted	5	S-A
	8 2									<u> </u>	
C											.1
D							*				
_											-
E											
List of field tests performed:			,				I-	58 I	-59	I-60	I-62
None			(Over	all Previous Co	nditio	7)		7	7	2	-
						•		7	7	2	
			(Overa	all Current Con	antion)						
	ucture that requires correcti	ive action.									
CATEGORIES OF DEFICIENCE M= Minor Deficiency - Deficiencies holes, Minor	which are minor in nature, gener	rally do not impact the structura	I integrity of the bridge and	could easily be repaired.	Examples in	nclude but a	are not limite	d to: Spalle	d concrete	e, Minor po	ıt
S= Severe/Major Deficiency - De	eficiencies which are more exten rroded rebars, Considerable sett	sive in nature and need more p	lanning and effort to repair.	Examples include but are	not limited	to: Modera	te to major d	leterioration	in concre	te, Expose	d and
C-S= Critical Structural Deficie	ency - A deficiency in a struct	tural element of a bridge that po	oses an extreme unsafe con	dition due to the failure or	r imminent f	ailure of the	e element wh	nich will affe	ect the stru	ıctural inteç	grity
C-H= Critical Hazard Deficienc	v _ A deficiency in a compon	ent or element of a bridge that d to: Loose concrete hanging do									
URGENCY OF REPAIR:		The Federal (PRIF)	the Defelorer	ha futbos loci ti t	him/r3						
I = Immediate- (Inspector(s) immedia	tely contact District Bridge Inspe	ection Engineer (DBIE) to report	the Deliciency and to recei	ive further instruction from	i nim/ner].						

[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]. [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].

A = ASAP-

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

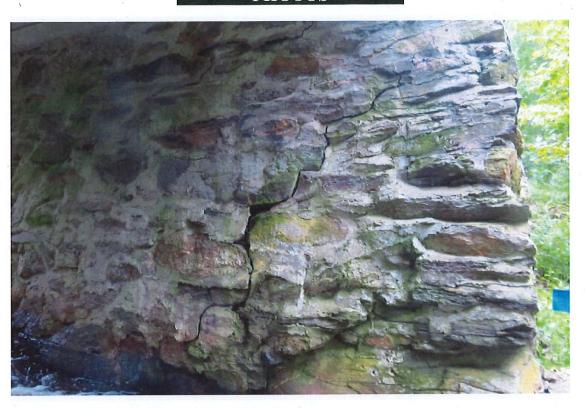


Photo 1: South breastwall, west end crack.

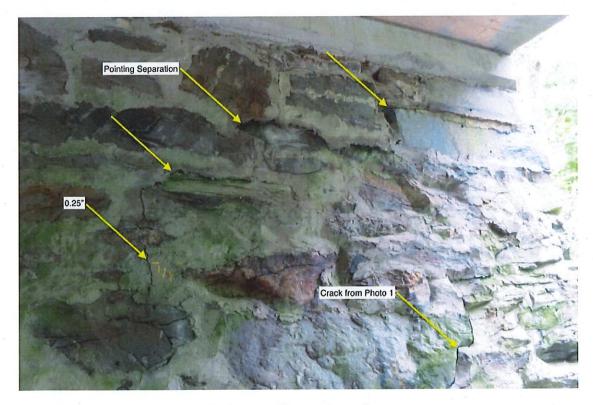


Photo 2: South breastwall, new settlement crack.

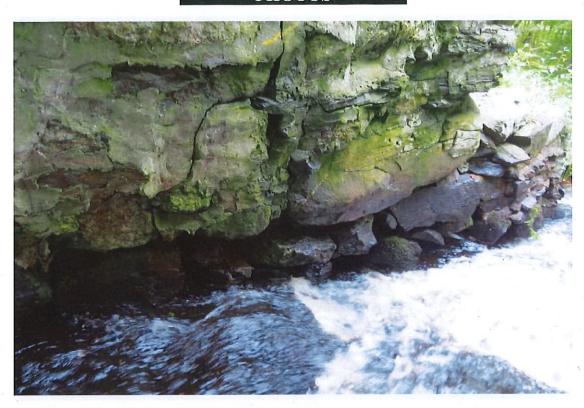


Photo 3: South breastwall, west end bottom.



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



Photo 5: Southwest wingwall, settlement and measurement loci.

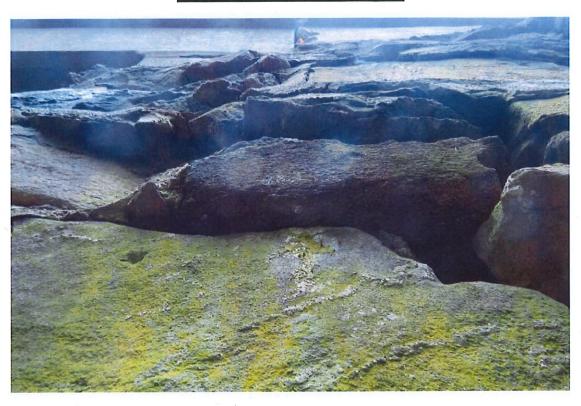


Photo 6: Southwest wingwall, outward displacement locus closeup.

Report Date: August 26, 2021 State Information	Classification	_ Code
BDEPT#= P02003 Agency Br.No.	(112) NBIS Bridge Length	Ν
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 Identification FHWA Select List= N (6/21/17)	(100) Defense Highway	0
DO20026LIVMI INIDIT	(101) Parallel Structure	Ν
(8) Structure Number P0200360XM0N0R1 (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	(37) Historical Significance undetermined	
(13) LRS Inventory Route & Subroute 00000000000	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 N
Structure Type and Material	(62) Culverts Load Rating and Posting	N _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	0.00
(46) Number of approach spans 0000	(70) Bridge Posting	0
(107) Deck Structure Type - Concrete Cast-in-Place Code 1	(41) Structure - Open	Α
(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
Age and Service	(71) Waterway adequacy	9
(27) Year Built 1850	(72) Approach Roadway Alignment (36) Traffic Safety Features 0 0	0 0
(106) Year Reconstructed 1929	(56) Hame Sarety Features	6
(42) Type of Service: On - Highway	(113) Scour Critical Bridges Inspections	0
Under - Waterway Code 15	(90) Inspection Date 12/19/19 (91) Frequency	03 MO
(28) Lanes: On Structure 01 Under structure 00	(92) Critical Feature Inspection: (93) CF	I DATE
(29) Average Daily Traffic 000040	(A) Fracture Critical Detail N 00 MO A) 0	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)	06/09/21
Geometric Data	(*) Other Inspection () N 00 MO *)	00/00/00
(48) Length of maximum span 0003.9 M	(*) Closed Bridge N 00 MO *)	00/00/00
(49) Structure Length 00005.3 M	(*) UW Special Inspection N 00 MO *)	00/00/00
(50) Curb or sidewalk: Left 00.1 M Right 00.1 M	()	00/00/00
(51) Bridge Roadway Width Curb to Curb 007.2 M	Report Date 00/00/00 H20 Type 3 Type 3S2 Type	pe HS
(52) Deck Width Out to Out 008.2 M	The state of the s	0.0
(32) Approach Roadway Width (w/shoulders) 006.7 M	operating	0.0
(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 00.00 M	2 Axle 3 Axle 5 Axle Sing	Jle
(47) Inventory Route Total Horiz Clear 07.2 M	Actual	
(53) Min Vert Clear Over Bridge Rdwy 99.99 M	Recommended	
(54) Min Vert Underclear ref N 00.00 M	Missing Signs N Misc.	
(55) Min Lat Underclear RT ref N 00.0 M	ACCOUNTS ON THE CONTRACT OF TH	
(56) Min Lat Underclear LT 00.0 M	Bridge Name N Anti-missile fence N Acrow Panel N Jointless Bridge	P
Navigation Data		
38) Navigation Control - No navigation control on waterway Code 0	Freeze/Thaw N : Not Applicable 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	N / N Boat N / N Traffic Control	
	Inspection	n
(40) Navigation Horizontal Clearance 0000.0 M	Y / Y Wader N / N RR Flagperson Hours:	008

September 21, 2021 Report Date: State Information Classification ... BDEPT#= P02003 Agency Br.No. (112) NBIS Bridge Length L.O. Ν Town= Paxton (104) Highway System AASHTO= 040.0 B.I.N= 6UX (26) Functional Class -Rural Local 09 0 FHWA Select List= N (6/21/17) H.I.= (100) Defense Highway 0 Identification (101) Parallel Structure N P020036UXMUNBRI (8) Structure Number (102) Direction of Traffic -1-way traffic 1 151000000 (5) Inventory Route 03 (103) Temporary Structure (2) State Highway Department District (4) Place code 52420 (105) Federal Lands Highways 0 027 (3) County Code N WATER TURKEY HILL BROOK (110) Designated National Network (6) Features Intersected HWY BLACK HILL R (20) Toll -On free road 3 (7) Facility Carried (9) Location 1000 FT NW OF RT 31 (21) Maintain -Town Agency 03 0000.306 (22) Owner -Town Agency 03 (11) Kilometerpoint (12) Base Highway Network N (37) Historical Significance undetermined Code Condition, (13) LRS Inventory Route & Subroute 000000000000 (58) Deck 42 DEG 18 MIN 42.54 SEC (16) Latitude (59) Superstructure 71 DEG 57 MIN 35.74 SEC (17) Longitude 2 (60) Substructure (98) Border Bridge State Code Share 5 (61) Channel & Channel Protection (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 O Slab Not applicable Jointless bridge type: (63) Operating Rating Method -Allowable Stress (AS) 2 (44) Structure Type Appr: 00.0 (64) Operating Rating Code (65) Inventory Rating Method -Allowable Stress (AS) 2 001 (45) Number of spans in main unit 00.0 (66) Inventory Rating (46) Number of approach spans 0000 (70) Bridge Posting 0 Α (41) Structure -Open (107) Deck Structure Type -Concrete Cast-in-Place Code 1 Appraisal (108) Wearing Surface / Protective System: (67) Structural Evaluation A) Type of wearing surface -Bituminous Code 6 (68) Deck Geometry Unknown Code 8 B) Type of membrane -(69) Underclearances, vert. and horiz. Ν C) Type of deck protection -Code 0 None (71) Waterway adequacy Age and Service (72) Approach Roadway Alignment 1850 (27) Year Built 0 0 0 (36) Traffic Safety Features (106) Year Reconstructed 1929 (113) Scour Critical Bridges 6 (42) Type of Service: On -Highway Inspections . (90) Inspection Date 12/19/19 (91) Frequency 03 MO Under -Waterway Code 15 (93) CFI DATE (92) Critical Feature Inspection: 01 ดถ (28) Lanes: On Structure Under structure 00 MO A) 00/00/00 (A) Fracture Critical Detail N (29) Average Dally Traffic 000040 00/00/00 00 MO B) (B) Underwater Inspection Ν (30) Year of ADT 1986 (109) Truck ADT 00 % 09/17/21 (C) Other Special Inspection 03 MO C) Υ 002 KM (19) Bypass, detour length 00/00/00 Geometric Data (*) Other Inspection () Ν 00 MO *) (48) Length of maximum span 0003.9M (*) Closed Bridge Ν 00 MO *) 00/00/00 00005.3 M (49) Structure Length (*) UW Special Inspection on MO *) 00/00/00 Ν (50) Curb or sidewalk: Left 00.1 M Right 00.1 M (*) Damage Inspection MO *) 00/00/00 Rating Loads (51) Bridge Roadway Width Curb to Curb 007.2 M Report Date Type 3S2 Type HS 00/00/00 H20 Type 3 008.2M (52) Deck Width Out to Out 0.0 0.0 Operating 0.0 0.0 006.7M (32) Approach Roadway Width (w/shoulders) Inventory 0.0 0.0 0.0 0.0 (33) Bridge Median -No median Code 0 Field Posting (34) Skew 00 DEG (35) Structure Flared Ν Posting Date 00/00/00 Status 00.00 M (10) Inventory Route MIN Vert Clear 2 Axle 5 Axle Single 3 Axle Actual 07.2 M (47) Inventory Route Total Horiz Clear Recommended 99.99 M (53) Min Vert Clear Over Bridge Rdwy Missina Sians 00.00 M (54) Min Vert Underclear ref Ν Misc. (55) Min Lat Underclear RT ref N 00.0 M Bridge Name 00.0M (56) Min Lat Underclear LT N Anti-missile fence N Acrow Panel N Jointless Bridge Navigation Data 🛥 N: Not Applicable Freeze/Thaw 0 (38) Navigation Control -No navigation control on waterway Code Accessibility (Needed/Used) (111) Pier Protection Code N / N Other N / N Liftbucket N/N Rigging 000.0M (39) Navigation Vertical Clearance N/NLadder N/N Staging (116) Vert-lift Bridge Nav Min Vert Clear М N/NBoat N / N Traffic Control Inspection (40) Navigation Horizontal Clearance M 0.0000 Y / Y Wader N / N RR Flagperson 008 Hours: N/N Police N / N Inspector 50

MASSACHUSETTS DEPARTMENT OF TRANSPORTATION PAGE _ 1 OF _ 6

STRUCTURES INSPECTION FIELD REPORT

B.I.N. SPECIAL MEMBER INSPECTION 6UX

BR. DEPT. NO. P-02-003

CITY	TOWN		8	STRUCTURE NO.		11-Kilo. PC	TMIC	90-RO	UTINE I	NSP. DATE	93*-SPEC, ME	MB. INSP. DATE
PAX	CTON		-3	P02003-6UX-	MUN-BRI	000.3	306	De	c 19,	2019	Dec 3	3, 2020
	CILITY CARRIED			MEMORIAL NAM	E/LOCAL NAME		27-YR	BUILT	106-YI	REBUILT	*YR REHAB	D (NON 106)
НΝ	Y BLACK HILL F	₹		74-5			1	850	1	929	00	00
06-FF	EATURES INTERSECTED		***************************************	26-FUNCTIONAL	CLASS [DIST. BE	RIDGE II	ISPECT	ION EN	GINEER	M. Azizi	<u>*</u>
	TER TURKEY HIL	L BRO	ok	Rural Loca		Y	11	:2			4	
461	: Concrete Slab			22-OWNER Town Agency	21-MAINTAINER Town Agency	TEAM	EADER	T. Toloc	zko			
	DECK TYPE			WEATHER	TEMP. (air)	TEAM N	EMBER	S			y	
1:	Concrete Cast-in-	Place		Clear	10°C	T. T. (GUMI	JLA	No	_		
WE	IGHT POSTING	Not Ap	plicable 382 Single	X		bridge W		Advar E	ice W	PLA	NS (Y/N)): N
Act	tual Posting	N N	N N	Signs In I (Y=Yes,N	=No.		$\neg \parallel \neg$		VV	1		
Red	commended Posting	N N	N N	NR=Not F		オーラ	ᅰ늗			(V.C.	R.) (Y/N)	: N
	ved Date: 00/00/0000	EJDMT D		Legibility 0/0000					_	TAPE	5#:	
RA'	ring									If YES ple	ase give prio	rity:
Rati	ng Report (Y/N): N	Date:			end for Rating	or Reratir	ng (Y/N):	N	,) LOW ()
	Inspection data at ti	me of avia	ting roting	REAS	ON:		/	01	\	X		
1 58:				0/00/0000				Ple	4			
SPI	ECIAL MEMBER(S):					,	\leftarrow					
		CRACK	WELD'S	LOCATION OF CORR	ROSION, SECTION L	OSS (%), CR	ACKS,	COND	NOITION	INV. RATING	OF MEMBER	
	MEMBER	(Y/N):	CONDITION (0-9)	COLLISION DAMAG	GE, STRESS CONCE	ENTRATION,	ETC.	PREVIOUS (0-9)	PRESENT (0-9)	H-20	3 382	Deficiencies
	tem 60.1.d - Breastwalls	N		See remarks in comments section. 3 3 Not Rated					Rated	S-A		
	tem 60.1.e - Vingwalls	N		See remarks	in commen	its sec	tion.	3	3	Not	Not Rated S-A	
С						William Town and Common of						
D					,		7					
				7-								
E												
List	of field tests performed	:	<u> </u>							I-58	I-59 I-	-60 I-62
No	Control of the Contro									700		
					(Over	rali Previo	ous Co	ndition	1)		<u> </u>	3 -
					(Over	all Currer	nt Cond	dition)		7	7	3 -
DEF	ICIENCY: A defect in a str	ucture that re	quires correcti	ve action.				***************************************		***************************************		
	EGORIES OF DEFICIENC	130 0000					TE TO T					
		corrosion of ste	el, Minor scouring	p. Clogged drainage, etc.							HARRY OF THE PROPERTY OF THE	· · · · · · · · · · · · · · · · · · ·
		orroded rebars, C	Considerable sett	ement, Considerable scouring or	r undermining, Moderate t	to extensive cor	rosion to st	ructural ste	el with me	asurable loss of s	ection, etc.	,
- W-15	- Critical Structural Deficie - Critical Hazard Deficienc	of the	bridge. ncy in a compone	ent or element of a bridge that po	ses an extreme hazard o	r unsafe conditi	on to the ou	blic but de	es not Imo	air the storctural	intendity of the hide	n Evernoles
		include t	out are not limited	to: Loose concrete hanging dow	vn over traffic or pedestria	ins, A hole in a s	idewalk the	t may caus	se injuries t	o pedestrians, M	issing section of brid	ige reiling.
	ENCY OF REPAIR:									***************************************		
				tion Engineer (DBIE) to report the ce Engineer or the Responsible					n Rannd			
				r the Responsible Party (if not a						vallable].		
Υ.	=UNKNOWN		I-NOT A	PPLICABLE		IIDDEN/I	NACC	FOOL		Para a same		MOVED

2-DIST

03

| B.I.N. | BR. DEPT. NO. | 8.-STRUCTURE NO. | INSPECTION DATE | PAXTON | P-02-003 | P02003-6UX-MUN-BRI | 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 B.I.N. BR. DEPT. NO. 8.-STRUCTURE NO. INSPECTION DATE PAXTON PO2003-6UX-MUN-BRI DEC 3, 2020

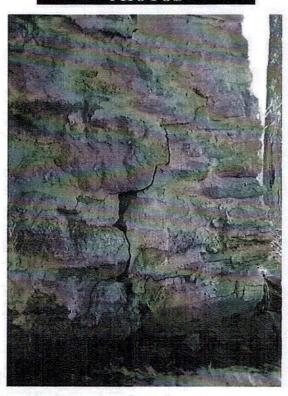


Photo 1: South breastwall, west end crack.

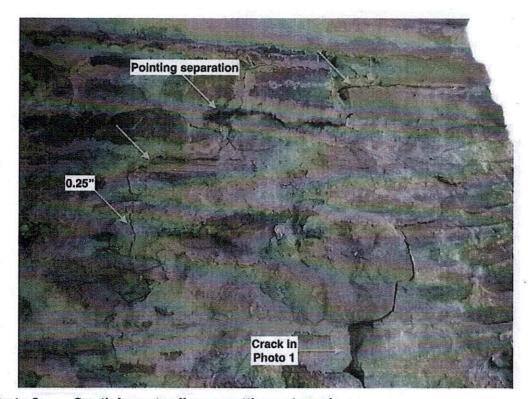


Photo 2: South breastwall, new settlement crack.

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



Photo 3: South breastwall, west end bottom.



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

CITY/TOWN B.I.N. BR. DEPT. NO. 8.-STRUCTURE NO. INSPECTION DATE PAXTON PO2003-6UX-MUN-BRI DEC 3, 2020

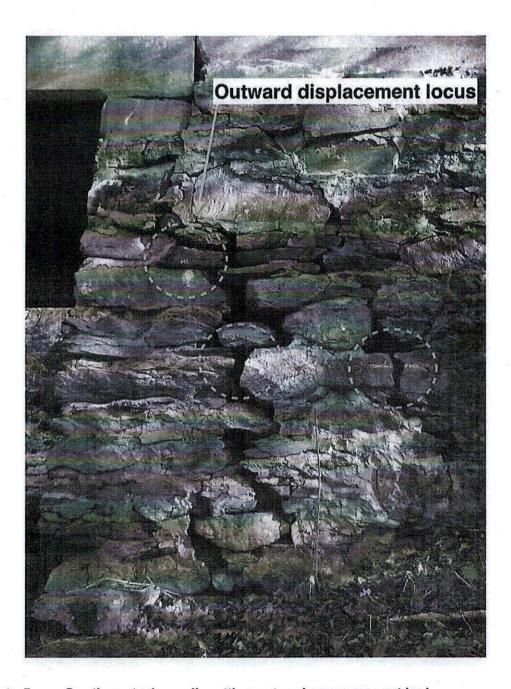


Photo 5: Southwest wingwall, settlement and measurement loci.

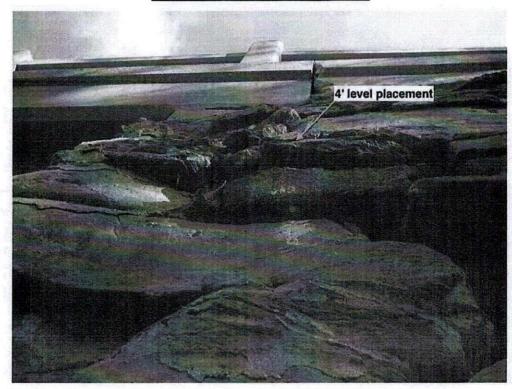


Photo 6: Southwest wingwall, outward displacement locus closeup.

Report Date: November 25, 2020 State Information		ClassificationCode
BDEPT#= P02003 Agency Br.No.		(112) NBIS Bridge Length N
Town= Paxton L.C) .	(104) Highway System N
B.I.N= 6UX AASHTO	= 040.0	(26) Functional Class - Rural Local 09
RANK= 0 H.I.= NA Identification FHWA Select List=	N (6/21/17)	(100) Defense Highway 0
	UXMUNBRI	(101) Parallel Structure N
	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 HI		(110) Designated National Network
The state of the s	CK HILL R	424
And the control of th	W 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 Condition Code
(13) LRS Inventory Route & Subroute 000000000000 (16) Latitude 42 DEG 18 MIN	42.54 SEC	(58) Deck 7
(16) Latitude 42 DEG 18 MIN (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. #	70	(61) Channel & Channel Protection 5
Structure Type and Material	1 8 1	(62) Culverts N
(43) Structure Type Main: Concrete Code	101	Load Rating and PostingCode
The state of the s	plicable	(31) Design Load - Unknown 0 (63) Operating Rating Method - Allowable Stress (AS) 2
(44) Structure Type Appr:		(63) Operating Rating Method - Allowable Stress (AS) 2 (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:		AppraisalCode
A) Type of wearing surface - Bituminous	Code 6	(67) Structural Evaluation 3
B) Type of membrane - Unknown	Code 8	(68) Deck Geometry 5 (69) Underclearances, vert. and horiz. N
The state of the s	Code 0	(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	V VII	(90) Inspection Date 12/19/19 (01) Frequency 06 MO
	ode 15	(02) Citizal Feature Inspection
(28) Lanes: On Structure 01 Under structure	00	(A) Fracture Critical Detail N 00 MO A) 00/00/00
(29) Average Daily Traffic	000040	(B) Underwater Inspection N 00 MO B) 00/00/00
(30) Year of ADT 1986 (109) Truck ADT	00 %	(C) Other Special Inspection Y 06 MO C) 06/29/20 12/3
(19) Bypass, detour length Geometric Data	002 KM	(*) Other Inspection () N 00 MO *) 00/00/00
(48) Length of maximum span	0003.9M	(*) Closed Bridge N 00 MO *) 00/00/00
(49) Structure Length	00005.3M	(*) UW Special Inspection N 00 MO *) 00/00/00
(50) Curb or sidewalk: Left 00.1 M Right	00.1M	(*) Damage Inspection MO *) 00/00/00
(51) Bridge Roadway Width Curb to Curb	007.2M	Report Date 00/00/00 H20 Type 3 Type 3S2 Type HS
(52) Deck Width Out to Out	008.2M	Operating 0.0 0.0 0.0 0.0
(32) Approach Roadway Width (w/shoulders)	006.7M	Inventory 0.0 0.0 0.0 0.0
(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	M00.00	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 Missing Signs N
(54) Min Vert Underclear ref N	M 00.00	Misc.
(55) Min Lat Underclear RT ref N	M0.00	Bridge Name
(56) Min Lat Underclear LT Navigation Data	00.0M	N Anti-missile fence N Acrow Panel N Jointless Bridge
The state of the s	ode 0	Freeze/Thaw N : Not Applicable Accessibility (Needed/Used)
	ode	- 1
(39) Navigation Vertical Clearance	000.0M	N/N Liftbucket N/N Rigging N/N Other N/N Ladder N/N Staging
(116) Vert-lift Bridge Nav Min Vert Clear	М	N / N Boat N / N Traffic Control
(40) Navigation Horizontal Clearance	M0.0000	Y / Y Wader N / N RR Flagnerson Inspection
		N/N Inspector 50 N/N Police Hours: 008

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= FHWA Select List= N (6/21/17) (100) Defense Highway H.I.= n Identification (101) Parallel Structure P020036UXMUNBRI (8) Structure Number (102) Direction of Traffic -1-way traffic 151000000 (5) Inventory Route 03 (103) Temporary Structure (2) State Highway Department District 027 (4) Place code 52420 (105) Federal Lands Highways (3) County Code n (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 U3 (12) Base Highway Network N (37) Historical Significance undetermined (13) LRS Inventory Route & Subroute 000000000000 Condition . Code (16) Latitude (58) Deck 42 DEG 18 MIN 42.54 SEC 7 (59) Superstructure (17) Longitude 7 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, (43) Structure Type Main: Concrete 101 (31) Design Load -Unknown 0 Slab Not applicable Jointless bridge type: (63) Operating Rating Method -Allowable Stress (AS) 2 (44) Structure Type Appr: (64) Operating Rating 0.00 Code 000 (65) Inventory Rating Method -Allowable Stress (AS) 2 (45) Number of spans in main unit 001 (66) Inventory Rating 0.00 (46) Number of approach spans 0000 (70) Bridge Posting 0 (107) Deck Structure Type -(41) Structure -Concrete Cast-in-Place Open Code 1 A (108) Wearing Surface / Protective System: Appraisal Code (67) Structural Evaluation A) Type of wearing surface -3 **Bltuminous** Code 6 (68) Deck Geometry 5 B) Type of membrane -Unknown 8 Code (69) Underclearances, vert. and horiz. N C) Type of deck protection -None Code 0 (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 (90) Inspection Date 12/19/19 Code 15 (91) Frequency 06 MO (92) Critical Feature Inspection: (28) Lanes: On Structure 01 (93) CFI DATE Under structure 00 (A) Fracture Critical Detail (29) Average Dally Traffic 00 MO A) 00/00/00 000040 N (30) Year of ADT 1986 (109) Truck ADT (B) Underwater Inspection 00 MO B) 00/00/00 00 % N (C) Other Special Inspection 06 (19) Bypass, detour length MO C) 12/03/20 002 KM Y Geometric Data (*) Other Inspection () N 00 MO *) 00/00/00 (48) Length of maximum span 0003.9M (*) Closed Bridge 00 MO *) 00/00/00 N (49) Structure Length 00005.3 M (*) UW Special Inspection 00 MO *) 00/00/00 N (50) Curb or sidewalk: Left 00.1 M 00.1 M Right (*) Damage Inspection MO *) 00/00/00 (51) Bridge Roadway Width Curb to Curb Rating Loads 007.2 M Report Date 00/00/00 Type 3S2 Type HS H20 Type 3 (52) Deck Width Out to Out 008.2M Operating 0.0 0.0 0.0 0.0 (32) Approach Roadway Width (w/shoulders) 006.7M Inventory 0.0 0.0 0.0 0.0 (33) Bridge Median -No median Code n Field Posting (34) Skew 00 DEG (35) Structure Flared 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 Actual 07.2 M (53) Min Vert Clear Over Bridge Rdwy Recommended 99.99 M Missing Signs N (54) Min Vert Underclear ref N 00.00 M Misc. (55) Min Lat Underclear RT ref N 00.0M Bridge Name (56) Min Lat Underclear LT 00.0M N Anti-missile fence N Acrow Panel N Jointless Bridge Navigation Data ... Freeze/Thaw N : Not Applicable (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 M0.000 N/N Ladder N/N Staging (116) Vert-lift Bridge Nav Min Vert Clear N/N Boat N / N Traffic Control (40) Navigation Horizontal Clearance 0000.0M Inspection Y/Y Wader N / N RR Flagperson 008 Hours: N/N Inspector 50 N/N Police





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

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MASSACHUSETTS DEPARTMENT OF TRANSPORTATION PAGE _ 1 OF _ 5

STRUCTURES INSPECTION FIELD REPORT

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

SPECIAL MEMBER INSPECTION

BR. DEPT. NO. P-02-003

CITY/TOWN		8.	-STRUCTURE NO.		11-Kilo. POINT	90-RO	UTINE I	NSP. DATE	93*-SPEC	MEMB.	INSP. DAT	
PAXTON			P02003-6UX-	MUN-BRI	000.306	De	c 16,	2017	Jun 11,		2019	
07-FACILITY CARRIED HWY BLACK HILL F	₹ ,	V W JS	MEMORIAL NAM	MEMORIAL NAME/LOCAL NAME				*YR REHAB'I 929 00		AB'D (N		
06-FEATURES INTERSECTED WATER TURKEY HIL	L BRO	ЭК	26-FUNCTIONAL Rural Loca		DIST. BRIDGE II	18PECT	ION EN	GINEER	M. Azir			
43-STRUCTURE TYPE 101 : Concrete Slab			22-OWNER Town Agency	21-MAINTAINER Town Agency	TEAM LEADER	M. McG	10	9 th				
107-DECK TYPE 1 : Concrete Cast-in-	Place		WEATHER Drizzle	TEMP. (air) L	TEAM MEMBER D. SIMKH		H	5/	18385 1			
WEIGHT POSTING		plicable	X		bridge	Advar		PLA	NC A	//N):	N	
Actual Posting	N N EJDMT Da	3S2 Single	Signs In (Y=Yes,N NR=Not F Legibility Visibility	Required)		E	W	(V.C	C.R.) (\		N	
RATING		N. Carlot	Manager Manager	uest for Rating	997 (1) 1 - 1		N	If YES pl	ease give	priority:		
Rating Report (Y/N): N Inspection data at ti I 58: - I 59: - I 60: -			- A Maria			W		HIGH () MEDIUM	() LC	JW ()	
SPECIAL MEMBER(S):						,						
MEMBER	CRACK (Y/N):	WELD'S CONDITION (0-9)	LOCATION OF CORE COLLISION DAMA	ROSION, SECTION LO GE, STRESS CONCE	OSS (%), CRACKS, NTRATION, ETC.	PREVIOUS (0-9)	PRESENT (0-9)	FROM RA	IG OF MEMITING ANALY		eficiencies	
A Item 60.1.d - Breastwalls	N		See remarks	in commen	ts section.	3	3	Not	Rated		S-A	
B Item 60.1.e - Wingwalls	N	i	See remarks	in commen	ts section.	3	3	Not	Rated		S-A	
С			▼) per of p				e k					
D					8				E_	1		
E								8			-	
List of field tests performed	<u>:</u>	•						I-58	8 I-59	1-60	I-62	
			46 0 . S	(Over	all Previous Co	nditio	n)	7	7	3	_	
				(Overa	all Current Con	dition)		7		3		
DEFICIENCY: A defect in a st		quires correcti	ve action.									
S= Severe/Major Deficiency - [s which are mind or corrosion of ste Deficiencies whice corroded rebars, ency - Adef of the cy - Adeficie include	h are more extensionsiderable sett considerable sett iciency in a struct bridge. ency in a componi	g, Clogged drainage, etc. sive in nature and need more pl tlement, Considerable scouring	lanning and effort to repair. or undermining, Moderate to uses an extreme unsafe con poses an extreme hazard o	Examples include but are to extensive corrosion to dition due to the failure or unsafe condition to the part of th	e not limited structural st r imminent public, but o	to: Modera eel with me failure of th	ate to major dete easurable loss of e element which pair the structur	erioration in cor of section, etc. th will affect the ral integrity of the	structural in	osed and otegrity xamples	
A = ASAP- [Action/Repair should	d be initiated by	District Maintenar	ection Engineer (DBIE) to report nce Engineer or the Responsibl or the Responsible Party (if not	e Party (if not a State owne	d bridge) upon receipt of	the Inspect						

CITY/TOWN
PAXTON

B.I.N. BR. DEPT. NO.
BR. DEPT. NO.
P-02-003

B.I.N. BR. DEPT. 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 B.I.N. BR. DEPT. NO. 8.-STRUCTURE NO. INSPECTION DATE PAXTON PO2003-6UX-MUN-BRI JUN 11, 2019

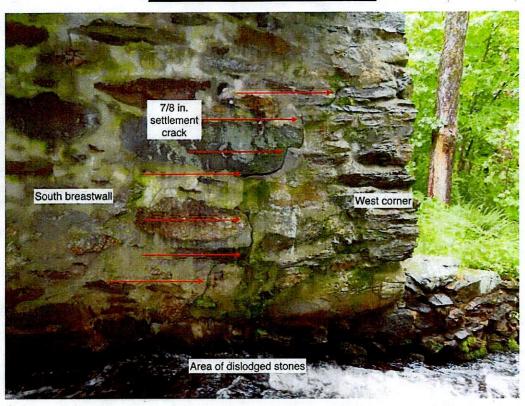


Photo 1: South breastwall.

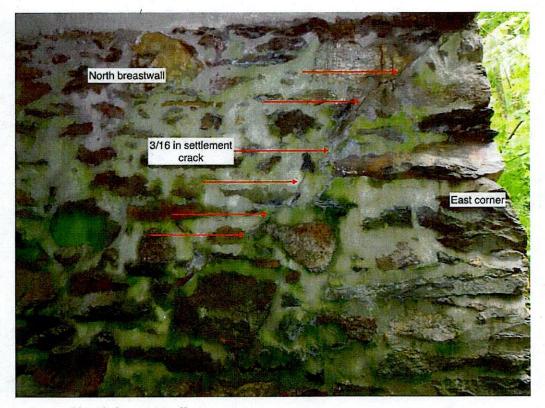


Photo 2: North breastwall.

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

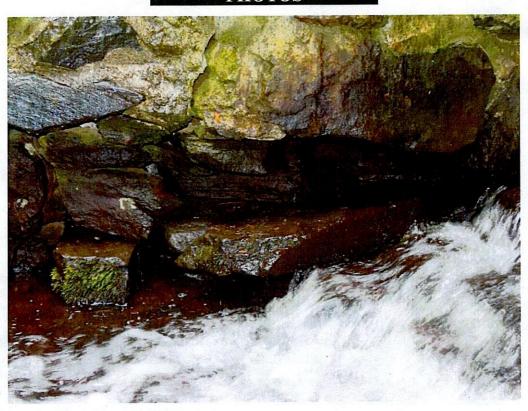


Photo 3: Northwest corner.

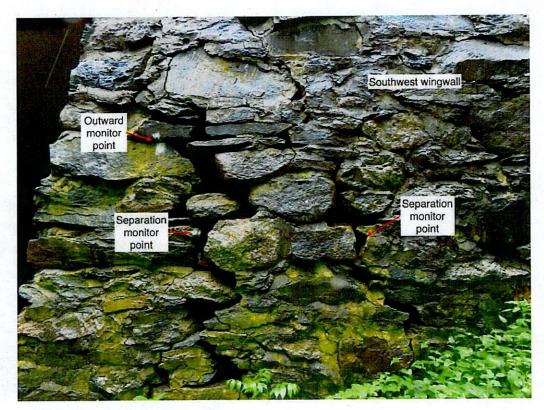


Photo 4: Southwest wingwall.

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Report Date: June 11, 2019 Classification State Information Code BDEPT#= P02003 Agency Br.No. (112) NBIS Bridge Length N Town= Paxton L.O. N (104) Highway System AASHTO= 040.0 B.I.N= 6UX (26) Functional Class -Rural Local 09 RANK= 0 FHWA Select List= N (6/21/17) 0 H.I.= (100) Defense Highway NA Identification N (101) Parallel Structure P020036UXMUNBRI (8) Structure Number (102) Direction of Traffic -1-way traffic 1 151000000 (5) Inventory Route N (103) Temporary Structure 03 (2) State Highway Department District 0 (4) Place code 52420 (105) Federal Lands Highways (3) County Code N WATER TURKEY HILL BROOK (110) Designated National Network (6) Features Intersected 3 (7) Facility Carried HWY BLACK HILL R (20) Toll -On free road 1000 FT NW OF RT 31 03 (21) Maintain -Town Agency (9) Location 03 0000.306 (22) Owner -Town Agency (11) Kilometerpoint (12) Base Highway Network (37) Historical Significance undetermined Condition, Code (13) LRS Inventory Route & Subroute 00000000000 7 (58) Deck 42 DEG 18 MIN 42.54 SEC (16) Latitude 7 (59) Superstructure 71 DEG 57 MIN 35.74 SEC (17) Longitude 3 (60) Substructure Share (98) Border Bridge State Code 5 (61) Channel & Channel Protection (99) Border Bridge Structure No. N (62) Culverts Structure Type and Material Load Rating and Posting Code Concrete Code 101 (43) Structure Type Main: 0 (31) Design Load -Unknown Slab Jointless bridge type: Not applicable 2 (63) Operating Rating Method -Allowable Stress (AS) (44) Structure Type Appr: 00 0 (64) Operating Rating 000 Other Code (65) Inventory Rating Method -Allowable Stress (AS) 2 (45) Number of spans in main unit 001 (66) Inventory Rating 0.00 0000 (70) Bridge Posting 0 (46) Number of approach spans A 1 (41) Structure -Open Concrete Cast-in-Place Code (107) Deck Structure Type -Appraisal (108) Wearing Surface / Protective System: 3 (67) Structural Evaluation 6 A) Type of wearing surface -Bituminous Code 5 (68) Deck Geometry 8 B) Type of membrane -Unknown Code N (69) Underclearances, vert. and horiz. Code 0 C) Type of deck protection -None 9 (71) Waterway adequacy Age and Service 9 (72) Approach Roadway Alignment 1850 (27) Year Built 0 0 (36) Traffic Safety Features 0 0 (106) Year Reconstructed 1929 (113) Scour Critical Bridges 6 (42) Type of Service: On -Inspections Highway 06 MO (91) Frequency (90) Inspection Date 12/16/17 Code 15 Waterway Under -(93) CFI DATE (92) Critical Feature Inspection: 00 (28) Lanes: On Structure 01 Under structure 00 MO A) 00/00/00 (A) Fracture Critical Detail N 000040 (29) Average Daily Traffic 00 MOB) 00/00/00 (B) Underwater Inspection N (30) Year of ADT 1986 (109) Truck ADT 00 % 06 MO C) 06/11/19 (C) Other Special Inspection Y 002 KM (19) Bypass, detour length 00/00/00 Geometric Data 00 MO *) (*) Other Inspection () N 0003.9 M (48) Length of maximum span (*) Closed Bridge 00 MO *) 00/00/00 N (49) Structure Length 00005.3 M (*) UW Special Inspection 00 MO *) 00/00/00 N Right 00.1 M (*) Damage Inspection MO *) 00/00/00 Left 00.1 M (50) Curb or sidewalk: Rating Loads (51) Bridge Roadway Width Curb to Curb 007.2 M Type 3S2 Type HS Report Date 00/00/00 H₂0 Type 3 008.2 M (52) Deck Width Out to Out 0.0 Operating 0.0 0.0 0.0 006.7 M (32) Approach Roadway Width (w/shoulders) Inventory 0.0 0.0 0.0 0.0 (33) Bridge Median -No median Code 0 Field Posting 00 DEG N (34) Skew (35) Structure Flared Status Posting Date 00/00/00 (10) Inventory Route MIN Vert Clear 00.00 M 2 Axle 3 Axle 5 Axle Single Actual 07.2 M (47) Inventory Route Total Horiz Clear Recommended 99.99 M (53) Min Vert Clear Over Bridge Rdwy Missing Signs (54) Min Vert Underclear ref N 00.00 M Misc. (55) Min Lat Underclear RT ref N 00.0M Bridge Name (56) Min Lat Underclear LT 00.0M N Anti-missile fence N Acrow Panel N Jointless Bridge Navigation Data N: Not Applicable Freeze/Thaw Code 0 (38) Navigation Control -No navigation control on waterway Accessibility (Needed/Used) (111) Pier Protection N/N Rigging N/N Liftbucket N/N Other (39) Navigation Vertical Clearance 000.0M N/N Ladder N/N Staging (116) Vert-lift Bridge Nav Min Vert Clear M Boat Traffic Control N/N N/N Inspection M 0.0000 (40) Navigation Horizontal Clearance N / N RR Flagperson Wader Y/Y 008 Hours: N / N Inspector 50 N/N Police

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	ASHTO= 040.0	(26) Functional Class -	Rural Local		09
RANK= 0 H.I.= NA FHWA Select	t List= N (6/21/17)	(100) Defense Highway			0
	020036UXMUNBRI	(101) Parallel Structure			N
(5) Inventory Route	151000000	(102) Direction of Traffic -	1-way traff	ic	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 TURK	EY 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 Age	ency		03
(11) Kilometerpoint	0000.306	(22) Owner - Town Age	ency		03
(12) Base Highway Network	N	(37) Historical Significance	undetermined		
13) LRS Inventory Route & Subroute 00000000000	0		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
Structure Type and Material		(62) Culverts	Pating and Pacting		N
43) Structure Type Main: Concrete C	Code 101	(31) Design Load - Unknow	Rating and Posting	31-15	Code
	Not applicable		llowable Stress (AS)	1	0 2
44) Structure Type Appr:		(64) Operating Rating			00.0
Other	code 000		llowable 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			Α
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	Z.		N
Age and Service		(71) Waterway adequacy			9
27) Year Built	1850	(72) Approach Roadway Alignment(36) Traffic Safety Features			9
106) Year Reconstructed	1929	(113) Scour Critical Bridges			0 0 0 0
42) Type of Service: On - Highway		(113) Scoul Critical Bridges	Inspections		6
Under - Waterway	Code 15	(90) Inspection Date 12/16/17	(91)	Frequency	06 MO
28) Lanes: On Structure 01 Under struct	ture 00	(92) Critical Feature Inspection:			3) 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 4/1/
(9) Bypass, detour length	002 KM	(C) Other Special Inspection	Y 06	MO C)	12/13/18
Geometric Data		(*) Other Inspection ()	N 00	MO *)	00/00/00
18) Length of maximum span	0003.9 M	(*) Closed Bridge	N 00	MO *)	00/00/00
19) Structure Length	00005.3 M	(*) UW Special Inspection	N 00	MO *)	00/00/00
50) Curb or sidewalk: Left 00.1 M	Right 00.1 M	(*) Damage Inspection		MO *)	00/00/00
51) Bridge Roadway Width Curb to Curb	007.2 M	Report Date 00/00/00	Rating Loads	2 7 7 202	Time UC
52) Deck Width Out to Out	008.2 M	Operating	H20 Type 0.0	3 Type 3S2 0.0	Type HS 0.0
2) Approach Roadway Width (w/shoulders)	006.7M	Inventory	0.0 0.0	0.0	0.0
3) Bridge Median - No median	Code 0		Field Posting	0.0	0.0
4) Skew 00 DEG (35) Structure Flared	N	Status		Date 00/00/	/00
0) Inventory Route MIN Vert Clear	M 00.00	2 Axle		Axle	Single
7) Inventory Route Total Horiz Clear	07.2 M	Actual			
3) Min Vert Clear Over Bridge Rdwy	99.99 M	Recommended			
4) Min Vert Underclear ref N	00.00 M	Missing Signs N	Misc		
	00.0M	Bridge Name	Misc.		
5) Min Lat Underclear RT ref		Bridge Name N Anti-missile fence N A	crow Panel	N Jointless 5	Bridge
6) Min Lat Underclear LT	00.0M	A AILI-IIIISSIIC ICIICE IN A	COW Pariel	N Jointless E	nuge
6) Min Lat Underclear LT Navigation Data					
Navigation Control - No navigation control on waterway	Code 0	Freeze/Thaw N: Not Applicable	bility (Needed/Used)		
8) Navigation Control - No navigation control on waterway 11) Pier Protection	Code 0	Freeze/Thaw N : Not Applicable Accessit		N/N Ot	her
8) Navigation Control - No navigation control on waterway 11) Pier Protection 9) Navigation Vertical Clearance	Code 0 Code 000.0 M	Freeze/Thaw N : Not Applicable Accessit	l Rigging	N/N Ot	her
Navigation Data No navigation control on waterway Navigation Pata No navigation control on waterway Navigation Control on waterway	Code 0	Freeze/Thaw N : Not Applicable Accessit N / N Liftbucket N / N	Rigging Staging		her



Photo 5: Southeast wingwall.



Photo 6: Another view of the Southeast wingwall.





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

MASSACHUSETTS DEPARTMENT OF TRANSPORTATION PAGE _ 1 OF _ 5

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

STRUCTURES INSPECTION FIELD REPORT SPECIAL MEMBER INSPECTION

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

CIT	TY/TOWN			8STRUCTURE NO.		11-Kilo. POINT	90-RC	UTINE	INSP. DATE	93*-SP	EC. MEM	B. INSP. DAT
_	AXTON	a f		P02003-6UX-	-MUN-BRI	000.306	00000		, 2017		lun 1,	
	FACILITY CARRIED WY BLACK HILL F	3	ı	MEMORIAL NAM	E/LOCAL NAME		1850		R REBUILT 1929	*YRR	EHAB'D (- 35000
W.	FEATURES INTERSECTED ATER TURKEY HIL	L BRO	ОК	26-FUNCTIONAL (Rural Loca		DIST. BRIDGE	NSPECT	TON EN	GINEER	M. Aziz	<u>.</u>	
43 o	STRUCTURE TYPE 11 : Concrete Slab			22-OWNER Town Agency	21-MAINTAINER Town Agency	TEAM LEADER	D. Simi	hoyich	Die	ud		
	-DECK TYPE : Concrete Cast-in-l	Place		WEATHER Cloudy	TEMP. (air)	TEAM MEMBE D. SMITH						
W	EIGHT POSTING		plicable	X	Af	t bridge	Advar	nce				
Re	ecommended Posting N	N N	N N N ate: 00/0	Signs In I (Y=Yes,N= NR=Not R	I=No, Required)	W	E	W	(V.C	C.R.)	(Y/N):	N N
	ATING	LUDIII. D.	ite. 00,0	7,70000							lawitu	
Ra	Inspection data at tim	Date:	ting rating	REAS		or Rerating (Y/	N): []	N) MEDIU	e priority JM () L	: .ow ()
1 58	3: - 159: - 160: - 1			0/00/0000	- C	ey	A		-		,	
SP	ECIAL MEMBER(S):								e l	2 8 . 4		12.140
	MEMBER	CRACK (Y/N):	WELD'S CONDITION (0-9)	LOCATION OF CORRECT COLLISION DAMAGE	OSION, SECTION LO	OSS (%), CRACKS, ENTRATION, ETC.	PREVIOUS (0-9)	PRESENT (0-9)	INV. RATIN FROM RAT	IG OF ME TING ANA	13/010	eficiencies
A	ltem 60.1.d - Breastwalls	N		See remarks i	in commen	ts section.	3	3	Not	Rate	d	S-A
	l <mark>tem 60.1</mark> .e - <mark>Wingwalls</mark>	N		See remarks i	in commen	ts section.	3	3	Not	Rate	d	S-A
С	Y Y	y			x 2 5 5	*		-	8			
D				,				•				
E				Fr. L	,		(10)					
Lis	t of field tests performed:	-							I-58	I-59	9 I-60	I-62
	T.				(Over	all Previous Co	ndition	1)	7	7	3][-
2.5	9		*	S111.150	(Overa	all Current Cond	dition)		7.	7	3	-
	FICIENCY: A defect in a struc	omers 200 (200 (200 (00 (00 (00 (00 (00 (00 (uires correctiv	ve action.								
	TEGORIES OF DEFICIENCE Minor Deficiency - Deficiencies w	which are minor l	In nature, gener	rally do not impact the structural ir	ntegrity of the bridge and	could easily be repaired. F	Examples in	clude but a	re not limited to	· Snalled co	ncrete. Minor	not
	holes, Minor of the Property - Deficiency - Deficiency	corrosion of steel ficiencies which a	el, Minor scouring are more extensi	g, Clogged drainage, etc.	nning and effort to renair E	Examples include but are r	not limited t	lo: Moderati	a to major dator	riamtian in o	oncrete Even	
	= Critical Structural Deficien (= Critical Hazard Deficiency	ncy - A deficiency - A deficiency	ciency in a structu bridge, ncy in a componer		es an extreme unsafe cond	dition due to the failure or i	imminent fa	ailure of the	element which	will affect the	e structural int	ramnles
I = Ir				ction Engineer (DBIE) to report the				on Report].			(
P = P				or the Responsible Party (if not a S					railable].	**		

CITY/TOWN B.I.N. BR. DEPT. NO. 8.-STRUCTURE NO. INSPECTION DATE PAXTON FO2003-6UX-MUN-BRI 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 measurments taken during the previous inspection were confirmed and the locations were marked with spray paint for future refrence. 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. BR. DEPT. NO. 8.-STRUCTURE NO. INSPECTION DATE
PO2003-6UX-MUN-BRI JUN 1, 2018



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



Photo 2: Top of the breastwall, Southwest corner.

CITY/TOWN
PAXTON
B.I.N. BR. DEPT. NO. 8.-STRUCTURE NO. INSPECTION DATE
PO2003-6UX-MUN-BRI JUN 1, 2018

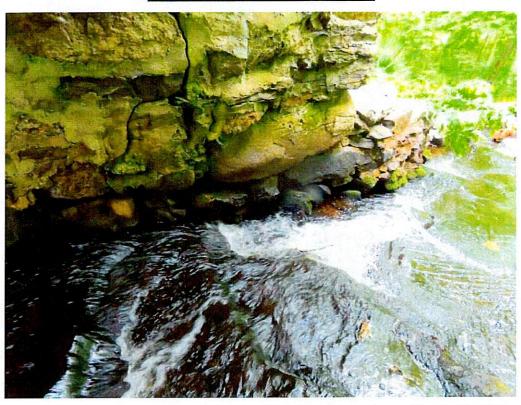


Photo 3: Void due to missing/dislodged stones. Note the settlement of the corner above the void.



Photo 4: Dislodged stone at the Northwest corner.

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



Photo 5: Southwest wingwall.

	2018 State Information				 Classification 			Code
BDEPT#= P02003		y Br.No.		(112) NBIS Bridge Length	- Classification		-20	N N
Town= Paxton		L	0.	(104) Highway System				N
B.I.N= 6UX		AASH	TO= 040.0	(26) Functional Class -	Rural Local			09
RANK= 0 H.I.=	NA Flantification	HWA Select List:	= N (6/21/17)	(100) Defense Highway				. 0
(O) Characture Number	Identification	P0200	36UXMUNBRI	(101) Parallel Structure				N
(8) Structure Number (5) Inventory Route		1 0200	151000000	(102) Direction of Traffic -	1-wa	ay traffi	С	1
(2) State Highway Department Di	strict		03	(103) Temporary Structure				N
(3) County Code 027	(4) Place code		52420	(105) Federal Lands Highways				0
(6) Features Intersected		TER TURKEY H	IILL BROOK	(110) Designated National Networ	·k			N
(7) Facility Carried			ACK HILL R					3
(9) Location				(21) Maintain - Town A				03
(11) Kilometerpoint				(22) Owner - Town Ag				03
(12) Base Highway Network				(37) Historical Significance	undeterr	mined		03
(13) LRS Inventory Route & Subro	oute 000	000000000		(57) Thistorical Digitalicance	Condition _	imica		Code
(16) Latitude		DEG 18 MIN	42.54 SEC	(58) Deck				7
(17) Longitude		DEG 57 MIN	35.74 SEC	(59) Superstructure				7
(98) Border Bridge State Code		Shar	V 2	(60) Substructure				3
(99) Border Bridge Structure No.	#	Silai	e 70	(61) Channel & Channel Protection				5
	ture Type and Material			(62) Culverts				N
	Concrete	Code	101	Loa	d Rating and Po	sting .		Code
Slab	Jointless bridge		pplicable	(31) Design Load - Unkno				0
(44) Structure Type Appr:	Joilluess bridge	ctype. Not a	Philicaple		Allowable Stres	s (AS)		2
Other		Code	000	(64) Operating Rating		1		0.00
		Code	000		Allowable Stres	s (AS)		2
45) Number of spans in main unit			001	(66) Inventory Rating				0.00
46) Number of approach spans	C C		0000	(70) Bridge Posting				0
107) Deck Structure Type -	Concrete Cast-in-Place		Code 1	(41) Structure - Open	Appraisal			A Code
108) Wearing Surface / Protective	12 12 14 14 14 14 14 14 14 14 14 14 14 14 14			(67) Structural Evaluation	Appraisar _			3
A) Type of wearing surface -	Bituminous		Code 6	(68) Deck Geometry				5
B) Type of membrane -	Unknown		Code 8	(69) Underclearances, vert. and ho	riz.			N
C) Type of deck protection -	None		Code 0	(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 12/16/1	.7	(91)	Frequency	06 MC
28) Lanes: On Structure	01 U	Inder 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	986 (109) Truck ADT		00 %	(B) Underwater Inspection	N	00	MO B)	00/00/00
19) Bypass, detour length			002 KM	(C) Other Special Inspection	Υ	06	MO C)	12/16/17
	Geometric Data		North Assessment North	(*) Other Inspection ()	N	00	MO *)	00/00/00
48) Length of maximum span			0003.9 M	(*) Closed Bridge	Ν	00	MO *)	00/00/00
49) Structure Length			00005.3 M	(*) UW Special Inspection	N	00	MO *)	00/00/00
50) Curb or sidewalk:	Left 00.1 M	Right		(*) Damage Inspection	Rating Loads		MO *)	00/00/00
51) Bridge Roadway Width Curb t	o Curb		007.2 M	Report Date 00/00/00	H20	Type 3	3 Type 35	S2 Type HS
52) Deck Width Out to Out			008.2 M	Operating	0.0	0.0	0.0	0.0
32) Approach Roadway Width (w/	shoulders)		006.7 M	Inventory	0.0	0.0	0.0	0.0
33) Bridge Median - No media	n	Code	0	Bertania and a series of the s	Field Posting			
34) Skew 00 DEG	(35) Structure Flare	d	N	Status		Posting	Date . 00/	00/00
10) Inventory Route MIN Vert Clea	ar		00.00 M	2 Axle	3 A	de		5 Axle
17) Inventory Route Total Horiz Cl	ear		07.2 M	Actual				
53) Min Vert Clear Over Bridge Rd	wy		99.99 M	Recommended				
54) Min Vert Underclear ref	N		00.00 M	Missing Signs N	Misc.			
55) Min Lat Underclear RT ref	N		00.0 M	Bridge Name	I'llaCi			*
66) Min Lat Underclear LT			00.0 M	NAME OF THE PROPERTY OF THE PR	Acrow Panel		N Jointles	ss Bridae
	Navigation Data			Freeze/Thaw N : Not Applicable			Jonides	Dilage
.d	vigation control on wate	10.000	Code 0	50 NT 14 NT 15	sibility (Needed,	/Used)		
11) Pier Protection			Code	N / N Liftbucket N /	N Rigging		N/N	Other
9) Navigation Vertical Clearance	71		000.0M		N Staging		45	
16) Vert-lift Bridge Nav Min Vert (М		N Traffic Cont	rol	18 1 2	cnoct'
	e		0000.0 M	Y/Y Wader N/	N RR Flagper	con	In	nspection
0) Navigation Horizontal Clearanc				1/1 Wadel N/	iv ick i lagper.	3011	LI.	ours: 008

Sld	te Information		ClassificationCo
BDEPT#= P02003	Agency Br.No.		(112) NBIS Bridge Length
Town= Paxton		L.O.	(104) Highway System
B.I.N= 6UX		AASHTO= 040.0	(26) Functional Class - Rural Local
RANK= 0 H.I.= NA	dentificationFHWA Se	lect List= N (6/21/17	(100) Defense Highway
(8) Structure Number	dentineation	P020036UXMUNBR	(101) Parallel Structure
(5) Inventory Route		15100000	(402) Direction of Toffe
(2) State Highway Department District	:	03	(103) Temporary Structure
	Place code	52420	(105) Federal Lands Highways
(6) Features Intersected	WATER TU	RKEY HILL BROOK	(110) Designated National Network
(7) Facility Carried	H	WY BLACK HILL F	(20) Toll - On free road
(9) Location	1	000 FT NW OF RT 3:	(21) Maintain - Town Agency
(11) Kilometerpoint		0000.306	(22) Owner - Town Agency
(12) Base Highway Network		N	(37) Historical Significance undetermined
(13) LRS Inventory Route & Subroute	000000000	0000	ConditionCo
(16) Latitude	42 DEG	18 MIN 42.54 SEC	(58) Deck
(17) Longitude	71 DEG	57 MIN 35.74 SEC	(59) Superstructure
(98) Border Bridge State Code		Share %	(60) Substructure
(99) Border Bridge Structure No. #			(61) Channel & Channel Protection
Structure	Type and Material		(62) Culverts
(43) Structure Type Main: Conc		Code 101	Load Rating and PostingCoc.
Slab	Jointless bridge type:	Not applicable	(31) Design Load - Unknown (63) Operating Rating Method - Allowable Stress (AS)
(44) Structure Type Appr:			(63) Operating Rating Method - Allowable Stress (AS) (64) Operating Rating 00
Other		Code 000	(65) Inventory Rating Method - Allowable Stress (AS)
(45) Number of spans in main unit		001	(66) Inventory Rating (166) Inventory Rating (166)
(46) Number of approach spans		0000	(70) Bridge Posting
(107) Deck Structure Type - Co	ncrete Cast-in-Place	Code 1	(41) Structure - Open
(108) Wearing Surface / Protective Sys	tem:		AppraisalCoo
A) Type of wearing surface - E	Bituminous	Code 6	(67) Structural Evaluation
B) Type of membrane - L	Jnknown	Code 8	(68) Deck Geometry
20 24	None	Code 0	(69) Underclearances, vert. and horiz.
	and Service		(71) Waterway adequacy
(27) Year Built		1850	(72) Approach Roadway Alignment
(106) Year Reconstructed		1929	(36) Traffic Safety Features 0 0 0
(42) Type of Service: On -	Highway		(113) Scour Critical Bridges Inspections
Under - Waterway	,	Code 15	(90) Inspection Date 12/16/17 (91) Frequency 06
(28) Lanes: On Structure	01 Under str		(92) Critical Feature Inspection: (93) CFI DA
(29) Average Daily Traffic		000040	(A) Fracture Critical Detail N 00 MO A) 00/00
(30) Year of ADT 1986	(109) Truck ADT	00 %	(B) Underwater Inspection N 00 MO B) 00/00
(19) Bypass, detour length	(105) 11 0011 151	002 KM	(C) Other Special Inspection Y 06 MO C) 06/0:
	ometric Data	002 KM	(*) Other Inspection () N 00 MO *) 00/00
(48) Length of maximum span		0003.9 M	(*) Closed Bridge N 00 MO *) 00/00
(49) Structure Length		00005.3 M	(*) UW Special Inspection N 00 MO *) 00/00
(50) Curb or sidewalk: Le	eft 00.1 M	Right 00.1 M	(*) Damage Inspection MO *) 00/00
(51) Bridge Roadway Width Curb to Cu	rb	007.2 M	Rating Loads
(52) Deck Width Out to Out		008.2 M	Report Date 00/00/00 H20 Type 3 Type 3S2 Type H:
(32) Approach Roadway Width (w/shou	lders)	006.7 M	Operating 0.0 0.0 0.0 0.0 0.0 Inventory 0.0 0.0 0.0 0.0 0.0
(33) Bridge Median - No median		Code 0	Inventory 0.0 0.0 0.0 0.0 0.0 0.0 Field Posting
(34) Skew 00 DEG	(35) Structure Flared	N	Status Posting Date 00/00/00
(10) Inventory Route MIN Vert Clear		00.00 M	2 Axle 3 Axle 5 Ax
(47) Inventory Route Total Horiz Clear		07.2 M	Actual
(53) Min Vert Clear Over Bridge Rdwy		99.99 M	Recommended
(54) Min Vert Underclear ref	N	00.00 M	Missing Signs N
(55) Min Lat Underclear RT ref	N ·	00.0 M	Misc
(56) Min Lat Underclear LT		00.0 M	Bridge Name N Anti-missile fence N Acrow Panel N Jointless Bridge
Nav	igation Data		N Anti-missile fence N Acrow Panel N Jointless Bridge Freeze/Thaw N: Not Applicable
	tion 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		М	N / N Boat N / N Traffic Control
40) Navigation Horizontal Clearance		0000.0 M	Y/Y Wader N/N RR Flagperson Inspection Hours: 0

			• • • •
			* **
	response to the second		
•			





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

9			

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

STRUCTURES INSPECTION FIELD REPORT

BR. DEPT. NO.

ROUTINE & SPECIAL MEMBER INSPECTION

P-02-003

CITY/TOWN PAXTON	8ST						110. POINT A: OPEN 90-ROUTINE INSP. DAT DEC 16, 2013						
07-FACILITY CARRIED HWY BLACK HILL	MEMORIAL NAME/LOCAL NAME 27-					106-YR REBUILT 1929	YR REHAB'D (NON 106) 0000						
06-FEATURES INTERSECTED	26-FUNCTIONAL	CLASS		DIST. BR	DGE INSPECT	ION ENGINEER	M. Az	izi	1	9			
WATER TURKEY H	Rural Loca	al	C		40	1/	10	y	2_				
43-STRUCTURE TYPE 101 : Concrete Slal		22-OWNER Town Agency	21-MAINTA Town Ag	The M	1/2/	/							
107-DECK TYPE 1 : Concrete Cast-i	n-Pla	ace		WEATHER Sunny	TEMP. (air) -5°(:	TEAM M		2	.6.			
ITEM 58	7	1	ITE	M 59	Manes	7		ITEM	60		3		3.3
DECK L		DEF	SUP	ERSTRUCTU	RE		DEF	SUBST	RUCTURE	_			DEF
1.Wearing surface	7	-	1.Stri	ngers		N	-	1. Abu	tments	Dive	Cur	3	
2.Deck Condition	7	-	2.Flo	orbeams		N	-		a. Pedestals N N				-
3.Stay in place forms	N	-	3.Flo	or System Braci	ing	N	_		b. Bridge Seats N 7				
4.Curbs	н	-	4.Gird	ders or Beams		N	-	d. Breas		3		S-A	
5.Median	N		5.Tru	sses - General		N	-	e. Wingv		N	3		S-A
6.Sidewalks	N		a. l	Upper Chords	N		-	f. Slope g. Pointi	Paving/Rip-Rap	N	N 6		M-P
			b. 1	Lower Chords	N		-	h. Footin		N	Н		-
7.Parapets	N	-	c. 1	Web Members	N		-	i. Piles		N	N		-
8.Railing	6	M-P	d. I	Lateral Bracing	N		_	j. Scour		N	5	-	S-A S-A
9.Anti Missile Fence	N	-	e. 3	Sway Bracings	N		-	k. Settle	nkment erosion	N	6		M-P
10.Drainage System	N	-		Portals	N	+	-	m.		N	N		
11.Lighting Standards	N	-		End Posts	N	+	-	2. Pier	2. Piers or Bents			N	
12.Utilities	N	- 3		& Hangers		N	1	a. Pedes	tals	N	N		
13.Deck Joints	N	_		n Plt's, Gussets	s & Angles		-	b. Caps c. Colun	nns	N	N		- 2
14.	-			er Plates		N			:/Webs/Pierwalls	N	N		-
	N	-	10-11-01-01	ring Devices		N	-	e. Pointi		N	N		-
15.	N	-		aphragms/Cros	- Frames	N	-	f. Footing	ng .	N	N	-	
16.	N	-			5 Frames	N	-	h. Scour		N.	N		-
N	1	s		vets & Bolts				i. Settle	ment	N	N		-
CURB REVEAL 16		187	12.W	9. W. N. S.		N	-	<i>j.</i>		N	N		
(In millimeters)		107	13. Me	ember Alignmer	nt	7	-	3. Pile	Ponts	N	N		
APPROACHES		DEF	14.Pa	int/Coating		N	-	a. Pile C		N	N	N	
a. Appr. pavement condition	6	M-P	15.Cc	ncrete Deck Sla	ab	7	-	b. Piles	400	N	N		_
b. Appr. Roadway Settlement	6	M-P	Vear	Painted	N				nal Bracing	N	N		
	+						J	e. Faster	ontal Bracing	N	N		-
c. Appr. Sidewalk Settlement	N	-		SION DAMAGE: (X) Minor ()			vere ()						
d.	IA .			annual process of a	Please expl			UNDERN	IINING (Y/N) If Y	ES ple	ase ex	xplain	Y
OVERHEAD SIGNS (Y/N) N (Attached to bridge)			None	(X) Minor() VIBRATION:		COLLISION DAMAGE: None (X) Minor () Moderate () Severe ()							
DEF				(X) Minor ()	SCOUR:	SCOUR: Please explain							
a. Condition of Welds	N	-	9 3	7 72 75 75				None () Minor () M	oderat	te (X) Sev	rere ()
b. Condition of Bolts	Fracture Critical Member: (Y/N)				I-60 (Div	e Report): N	<i>I</i> -6	0 (This	Repor	t): 3			
c. Condition of Signs N - A				Any Cracks: (Y/N) N					93B-U/W (DIVE) Insp 00/00/0000				

CITY/ PAXT		N			B.I. 6L		BR. DEPT. NO. 8STRUCTURE NO. P-02-003 P02003-6UX-MUN-BRI				INSPECTION DATE DEC 16, 2017						
N L N	EM 6	78					TEM 36 7	127		of Assistantian Age				ACCESSI	- St. 1486	(Y/I	
	INNE				5					36	CON		DEF			Needed	
		L & L PROTECTIO	N				Bridge Railin	ıg		0	6		M-P	Lift Bucket		N	N
CIII	11 11 12	LINOILCIIO					Transitions			0	N	_ _	-	Ladder		N	N
Г			T	Cur	DEF		Approach Gu		endon.	0	N	-		Boat		N	N
1.Ch	annel	Scour	N	5	S-A	D.	Approach Gu	uardrail Er	nds	0	N		-	Waders		Y	Υ
2.Em	nbank	ment Erosion	N	7	-	WI	EIGHT POS	TING		Not A			X	Inspector 5	0	N	N
3.De	bris		N	7	-				H		3S2	Single		Rigging		N	N
4.Ve	getati	on	N	7	2 - 8 a 12	Ac	ctual Posting	1	N	N	N	N		Staging		N	N
5.Uti	lities		N	N	-	Re	ecommended	d Posting	N	N	N	N		Traffic Con		N	N
6.Rip	o-Rap	Slope Protection	N	7		Wa	aived Date:	00/00/00	00 E.	JDMT D	ate:	00/00	0000	RR Flagger Police		N	N
	grada		N	7	-				t bridge		L	ner Advar	nce	Other:		+	
-		System	N	N		Sig	gns In Place	E		W	E		W	Other.	<u> </u>	N	N
0.1 0.	iluci c	- Jystem	1.	1			=Yes,N=No, R=NotRequired)		<u> </u>			_					
14(0)							gibility/ sibility							TOTALH	OURS		8
		11 0y252 15 15 15 15 15 15 15 15 15 15 15 15 15	-			CL	EARANCE P	OSTING		N		S		PLANS	(Y	(N):	N
	•		_			N	ot	X	ft	in	ft		meter		A	,.	
STRE	EAM FL	OW VELOCITY:		504		32160	tual Field Meas			0		0	-	(V.C.R.)	(Y/N):	N	
Tidal () Hig	gh () Moderate (X) I	Low () Nor	ne ()	Po	sted Clearance		A buidaa	0		0			, , [
						Sig	gns In Place	N	t bridge	S		V	S	TAPE#: _			
ITEM 61	1 (Dive I	Report): N ITEM 6	1 (This	s Repo	t): 5	(Y:	=Yes,N=No, R=Not Required	0						List of field te	sts performe	d:	
93b-l	U/W IN	ISP. DATE: 00	0/00	/0000)	Le	egibility/ sibility										
RATI	ING					_	be filled out by	DBIE)					If YE	S please give p	riority:		
		ort (Y/N): N					uest for Rati		rating	(Y/N):	N			GH () MEDIUM)	
Date:		00/00/0000													1		
		ion data at time of	evisti	na rat	ina	REA	ASON:		-				-	MA)	/		
		9: - 160: - Da			838	8.2	-										NAME OF TAXABLE PARTY.
							CON	DITIO	V D A	PINC	CI	HINE	- T	U 50 50 00	104)		
	cons	CONDITION	_				CON	DEFE		1011216		שעווע	(For	Items 58, 59, 60	and 61)		
	CODE	NOT APPLICABLE						DEFE	:013	200		-					
G	9	EXCELLENT	-	vcellen	t condition.												
G	8	VERY GOOD			em noted.	-											
G	7	GOOD			inor probler	ms.											
F	6	SATISFACTORY	_		•	100.00	some minor deteri	ioration.			E.	•					
F	5	FAIR	A	All prima	ry structura	al eleme	ents are sound bu	it may have n	ninor sect	ion loss,	crackin	ng, spalling	or scour.				700
P	4	POOR	A	Advance	d section lo	oss, de	terioration, spallin	g or scour.				,			V 200 7		800
Р	3	SERIOUS					ion, spalling or sco		ously affe	cted prim	ary stru	uctural cor	nponents.	Local failures are p	ossible. Fatigue	cracks	
			A	Advance	d deteriora	tion of	primary structural	elements. Fa						e may be present of		re .	
С	2	CRITICAL	N.						Employed Service	11-11-5	2		100	rrective action is ta tal movement affect	the state of the s	ablility.	
С	1	"IMMINENT" FAILURE	B	Bridge is	closed to t	traffic b	out corrective action	n may put it l	back in lig	ht service	9.						
	0	FAILED	C	Out of se	ervice - bey	ond co	rrective action.										
		Law I					DEFICI	ENCY	REP	ORTI	NG	GUII	E	- 29	1,96		
DEFI	CIEN	CY: A defect in a str	ucture	that re	quires corre	ective a	7/3	2		1-25				3			
		IES OF DEFICIENC			18,11.1	134 5		Top 30		1 100					*- Version and	C) C	\$
5-75555		Deficiency - Deficiencies holes, Minor	corros	ion of ste	el, Minor scol	uning, Cir	logged drainage, etc.										
S= Se	evere/N	Major Deficiency - D	eficienc	cies which	are more ex	tensive i	in nature and need m	ore planning an	d effort to r	epair. Examerate to extend	nples inc	clude but are	not limited to	Moderate to major de with measurable loss	terioration in concre of section, etc.	te, Expose	d and
C-S=	Critic	al Structural Defici														ctural integ	rity
		cal Hazard Deficience	cv -	A deficie	ncy in a com	ponent o	or element of a bridge	that poses an e	extreme has	ard or unsa	afe cond	lition to the p	ublic, but doe	s not impair the structu	ral integrity of the bi	ridge. Exan	nples
- 11	J. 161		0	include t etc.	out are not lim	nited to: I	Loose concrete hangi	ing down over tr	raffic or peo	lestrians, A	hole in a	a sidewalk th	at may cause	injuries to pedestrians	, Missing section of	bridge raili	ng,
		OF REPAIR:					744		175			nere f				8	
I = Im	mediat		-				n Engineer (DBIE) to r Engineer or the Respo							Report			
	ioritize						e Responsible Party (

MASSACHUSETTS DEPARTMENT OF TRANSPORTATION PAGE 3 OF 12

2-DIST B.I.N.

STRUCTURES INSPECTION FIELD REPORT

ROUTINE & SPECIAL MEMBER INSPECTION

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

03 00X	110		a of Edial Membe		9 11 9					
CITY/TOWN		8.	-STRUCTURE NO.	11-Kilo. POINT	90-RO	UTINE INSP. I)ATE 93*-	SPEC. ME	EMB. II	NSP. DAT
PAXTON			P02003-6UX-MUN-BRI	000.306	De	c 16, 201	17	Dec 1	6, 2	017
07-FACILITY CARRIED HWY BLACK HILL R			MEMORIAL NAME/LOCAL NAME		1850	106-YR REB		R REHAB'	'D (NO	N 106)
06-FEATURES INTERSECTED			26-FUNCTIONAL CLASS	DIST. BRIDGE	DISPECT	ION ENGINEE	R M.A	zizi	7	
WATER TURKEY HILL	BRO	OK	Rural Local	VIII	(2-1-6	H,	(
43-STRUCTURE TYPE 101 : Concrete Slab			22-OWNER Town Agency Town Agenc		Tall	w W. sh	To the			
107-DECK TYPE 1 : Concrete Cast-in-F	Place		WEATHER Sunny -5°C	D. SMITH	ERS		200			
WEIGHT POSTING		plicable 3S2 Single		t bridge W	Advar	nce W	PLANS	(Y/N): 1	v
Actual Posting N	N	N N	(Y=Yes,N=No,							
Recommended Posting N	N	N N	NR=Not Required) Legibility/				(V.C.R.)	(Y/N):	N
Waived Date: 00/00/0000	EJDMT Da	ate: 00/00	0/0000 Visibility				TAPE#:			
RATING						. If YE	S please	give pric	ority:	
Rating Report (Y/N): N	Date:		Request for Rating	or Rerating (//N):	HIGH	() ME	DIUM () LOV	W ()
Inspection data at tim	an of oviet	ting rating	REASON:	7				137		
158: - 159: - 160: - 1			0/00/0000							
SPECIAL MEMBER(S):										
	CRACK	WELD'S	LOCATION OF CORROSION, SECTION I	OSS (%), CRACKS	, CONI		RATING OF			-11
MEMBER	(Y/N):	CONDITION (0-9)	COLLISION DAMAGE, STRESS CONC	ENTRATION, ETC.	PREVIOUS (0-9)	(0-9) H-2		3S2	- Deti	ciencies
A Item 60.1.d - Breastwalls	N		See remarks in comme	nts section	-	()	Not Ra	ted	5	S-A
Item 60.1.e - Wingwalls	N		See remarks in comme	nts section	N	3 1	Not Ra	ted	5	S-A
С			,							
D			Section 1							
Е		4								
List of field tests performed:							I-58	I-59 1	I-60	I-62
			(Ovo	rall Previous (Conditio	n) [_	-	_	_
			(Ove	iali Flevious C	onunio	'' '	_	\dashv	7007.5	
			(Ove	rall Current Co	ndition)		7	7	3	-
DEFICIENCY: A defect in a stru	cture that re	quires correcti	ve action.							
CATEGORIES OF DEFICIENC	IES:	r in nature, gener	ally do not impact the structural integrity of the bridge an	d could easily be renaire	d. Examples i	nclude but are not li	mited to: Snall	ed concrete.	Minor po	ıt
S= Severe/Major Deficiency - De	corrosion of ste ficiencies which	ei, Minor scourin h are more exten	g, Clogged drainage, etc. sive in nature and need more planning and effort to repai	ir. Examples include but	are not limited	to: Moderate to ma	jor deterioratio	n in concrete		
COI	rroded rebars,	Considerable sett	lement, Considerable scouring or undermining, Moderate ural element of a bridge that poses an extreme unsafe co	e to extensive corrosion	o structural si	eei with measurable	e loss of section	n, etc.		
C-H= Critical Hazard Deficienc	v - A deficie	ency in a compon	ent or element of a bridge that poses an extreme hazard to: Loose concrete hanging down over traffic or pedestr	or unsafe condition to th	e public, but o	loes not impair the	structural integ	rity of the brid	dge. Exar	mples
URGENCY OF REPAIR:				-					15	- 0
	No. of the Party of the Control of t	CONTRACTOR OF PROPERTY.	ction Engineer (DBIE) to report the Deficiency and to rec nce Engineer or the Responsible Party (if not a State own			ion Reportl.				
			or the Responsible Party (if not a State owned bridge) an				i-			

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

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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 bridege 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.I - 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.

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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.

Undermining and scour to the South end of the East breastwall.

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.

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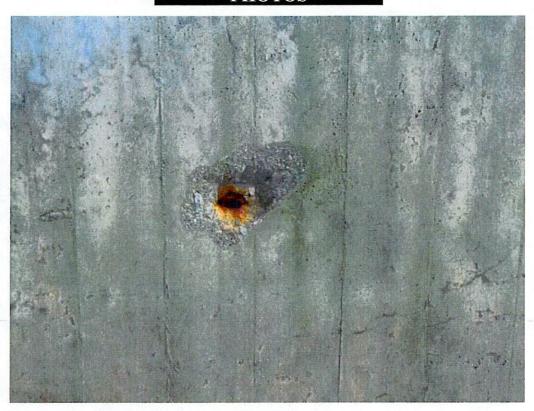


Photo 1: Spall to the North end of the deck slab.

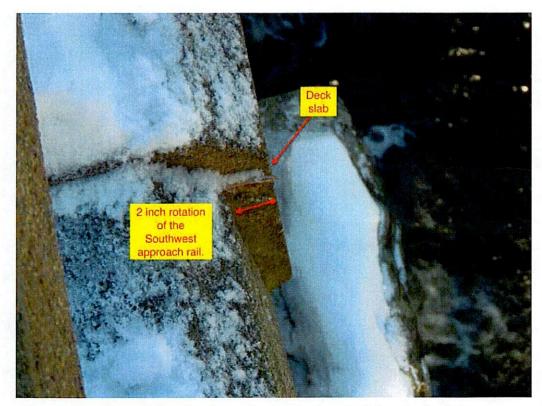


Photo 2: Rotation of the Southwest approach rail at the deck slab.

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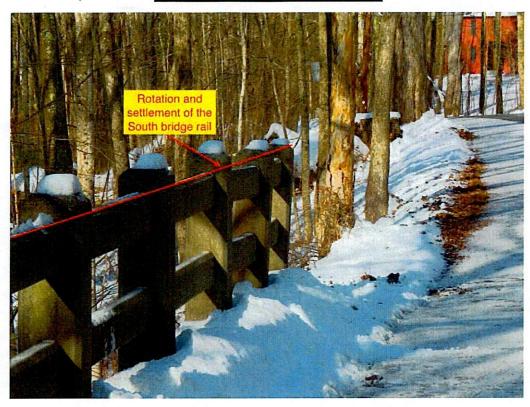


Photo 3: Rotation and settlement of the Southwest approach rail.



Photo 4: Cracks to the West approach pavement.

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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.

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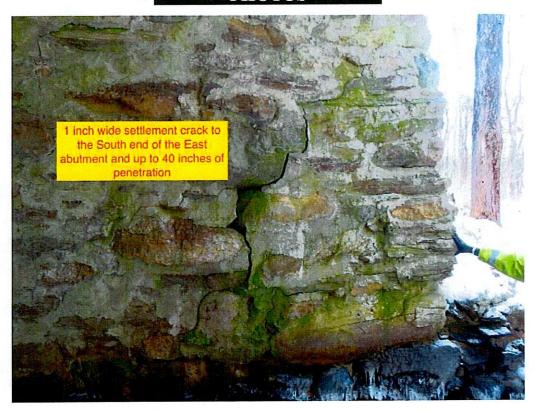


Photo 7: Settlement crack to the East breastwall at the South end.



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

CITY/TOWN
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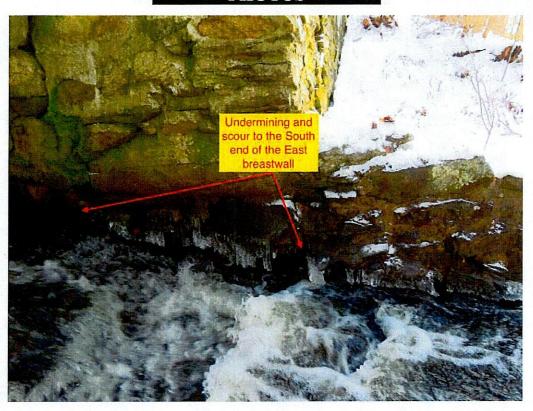


Photo 9: Undermining and scour to the South end of the East breastwall.



Photo 10: Large settlement cracks to the Southeast wingwall.

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Photo 11: Area of erosion to the Northwest embankment.



Photo 12: Area of erosion to the Southeast embankment.

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BLIN. BR. DEPT. NO. PO2003-6UX-MUN-BRI DEC 2017

7.- FACILITY CARRIED

HWY BLACKHILL RD

6A.- FACILITY UNDER

WATER TURKEY HILL BROOK



EAST APPROACH

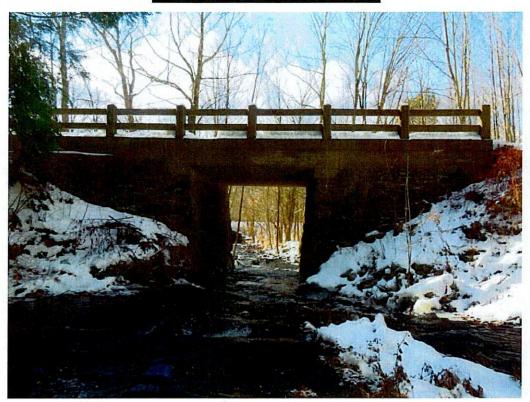


WEST APPROACH

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7.- FACILITY CARRIED
HWY BLACKHILL RD

6A.- FACILITY UNDER
WATER TURKEY HILL BROOK



NORTH ELEVATION



SOUTH ELEVATION

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7.- FACILITY CARRIED 6A.- FACILITY UNDER

HWY BLACKHILL RD WATER TURKEY HILL BROOK



TYPICAL UNDERSIDE



LOOKING DOWNSTREAM

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PAXTON

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B.I.N. BR. DEPT. NO.
P-02-003

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DEC 2017

7.- FACILITY CARRIED
HWY BLACKHILL RD

6A.- FACILITY UNDER
WATER TURKEY HILL BROOK



LOOKING UPSTREAM

Report Date: December 21, 2017 State Information Classification Code BDEPT#= P02003 Agency Br.No. (112) NBIS Bridge Length 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.= FHWA Select List= N Identification (100) Defense Highway n (8) Structure Number (101) Parallel Structure P020036UXMUNBRI N (5) Inventory Route (102) Direction of Traffic -151000000 1-way traffic (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 On free road (20) Toll -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 (37) Historical Significance undetermined (13) LRS Inventory Route & Subroute 00000000000 Condition -Code (16) Latitude 42 DEG 18 MIN (58) Deck 42.54 SEC 7 (17) Longitude (59) Superstructure 71 DEG 57 MIN 35.74 SEC 7 (98) Border Bridge State Code (60) Substructure Share 3 (61) Channel & Channel Protection (99) Border Bridge Structure No. # 5 (62) Culverts Structure Type and Material N Load Rating and Posting (43) Structure Type Main: Code Concrete Code 101 (31) Design Load -Unknown Slab Jointless bridge type: 0 Not applicable (63) Operating Rating Method -Allowable Stress (AS) (44) Structure Type Appr: 2 (64) Operating Rating Other 0.00 Code 000 (65) Inventory Rating Method -Allowable Stress (AS) (45) Number of spans in main unit 2 001 (66) Inventory Rating 0.00 (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 A) Type of wearing surface -Bituminous (67) Structural Evaluation Code 3 B) Type of membrane -(68) Deck Geometry Unknown Code 8 5 (69) Underclearances, vert. and horiz. C) Type of deck protection -None Code 0 N (71) Waterway adequacy Age and Service 9 (72) Approach Roadway Alignment (27) Year Built 9 1850 (36) Traffic Safety Features (106) Year Reconstructed 0 0 0 0 1929 (113) Scour Critical Bridges (42) Type of Service: On -6 Highway Inspections Under -Waterway Code 15 (90) Inspection Date 12/16/17 (91) Frequency 06 MO (28) Lanes: On Structure 01 (92) Critical Feature Inspection: Under structure nn (93) CFI DATE (29) Average Daily Traffic 000040 (A) Fracture Critical Detail 00 N MO A) 00/00/00 (30) Year of ADT 1986 (109) Truck ADT (B) Underwater Inspection 00 % N 00 MO B) 00/00/00 (19) Bypass, detour length (C) Other Special Inspection 002 KM Y 06 MO C) 12/16/17 Geometric Data (*) Other Inspection () 00 MO *) N 00/00/00 (48) Length of maximum span 0003.9M (*) Closed Bridge N 00 MO *) 00/00/00 (49) Structure Length 00005.3 M (*) UW Special Inspection N 00 MO *) 00/00/00 (50) Curb or sidewalk: Left 00 1 M Right 00.1 M (*) Damage Inspection MO *) 00/00/00 (51) Bridge Roadway Width Curb to Curb Rating Loads 007.2 M Report Date (52) Deck Width Out to Out 00/00/00 H20 Type 3 Type 3S2 Type HS 008.2 M Operating 0.0 (32) Approach Roadway Width (w/shoulders) 0.0 0.0 0.0 006.7M Inventory 0.0 0.0 0.0 0.0 (33) Bridge Median -No median Code n Field Posting (34) Skew 00 DEG (35) Structure Flared N Status Posting Date 00/00/00 10) Inventory Route MIN Vert Clear 00.00 M 2 Axle 3 Axle 5 Axle 47) Inventory Route Total Horiz Clear Actual 07.2 M 53) Min Vert Clear Over Bridge Rdwy Recommended 99.99 M 54) Min Vert Underclear ref Missing Signs N N 00.00 M 55) Min Lat Underclear RT ref Misc. N 00.0M Bridge Name 56) Min Lat Underclear LT 00.0M N Anti-missile fence N Acrow Panel Navigation Data N Jointless Bridge Freeze/Thaw N: Not Applicable 18) Navigation Control -No navigation control on waterway Code 0 Accessibility (Needed/Used) .11) Pier Protection Code N/N Liftbucket 19) Navigation Vertical Clearance N/N Rigging N/N Other 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 0000.0 M Inspection Y/Y Wader N/N RR Flagperson Hours: 008 N/N Inspector 50 N/N Police

Report Date: December 13, 2017		
BDEPT#= P02003 State Information Agency Br.No.	Classification	Code
Town= Paxton L.O.	(112) NBIS Bridge Length	N .
B.I.N= 6UX AASHTO= 032.0	(104) Highway System	N
RANK= 0 H.I.= NA FHWA Select List- N	(20) Functional class Rulai Local	09
(8) Structure Number P020036UXMUNBR	(404) = 11.15	0
(5) Inventory Route · 151000000	(100) 5: 11 1-1	RI 2
(2) State Highway Department District 03	, ,,,,,	Į.
(3) County Code 027 (4) Place code 52420		
(6) Features Intersected WATER TURKEY HILL BROOK		Ň
(7) Facility Carried HWY BLACKHILL RD		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	1 200 1714 117
(13) LRS Inventory Route & Subroute 000000000000	Condition	Code
(16) Latitude 42 DEG 18 MIN 42.54 SEC	(58) Deck	1
(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	Y
Structure Type and Material	(62) Culverts Load Rating and Posting	- KI
(43) Structure Type Main: Concrete Code 101	(31) Design Load - Unknown	code
Slab Jointless bridge type: Not applicable	(63) Operating Rating Method - Allowable Stress (AS)	. 0
(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	(66) Inventory Rating	0.00
(46) Number of approach spans 0000	(70) Bridge Posting	0
(107) Deck Structure Type - Code ?	(41) Structure - Open	Α
(108) Wearing Surface / Protective System:	(67) Structural Evaluation	Code 2
A) Type of wearing surface - Bituminous Code 6	(68) Deck Geometry	05
B) Type of membrane - None Code 0	(69) Underclearances, vert. and horiz.	N 6
C) Type of deck protection - None Code 0 Age and Service	(71) Waterway adequacy	g
(27) Very Built	(72) Approach Roadway Alignment	9
(106) Veer Bereat and all	(36) Traffic Safety Features	.0000
(100) fear Reconstructed 1929 (42) Type of Service: On - Highway .	(113) Scour Critical Bridges	6
Under - Waterway Code 15	(90) Inspection Date 00/80/90 (91) Frequency	24 140
(28) Lanes: On Structure 00 Under structure 00	(90) Inspection Date 00/60/00 (91) Frequency (92) Critical Feature Inspection:	24 MO (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		00/00/00 12/16/17
Geometric Data	(C) Other Special Inspection (*) Other Inspection () N MO C) N MO C)	00/00/00
(48) Length of maximum span 0004.0 M	(*) Closed Bridge N 00 MO *)	00/00/00
(49) Structure Length 711 00004.9 M	(*) UW Special Inspection N 00 MO *)	00/00/00
(50) Curb or sidewalk: Left 00.3 M Right 00.3 M	(*) Damage Inspection MO *)	00/00/00
(51) Bridge Roadway Width Curb to Curb 23–9 009.1M	Report Date 00/00/00 Rating Loads	202 Time UC
(52) Deck Width Out to Out	Report Date 00/00/00 H20 Type 3 Type 3 Operating 0.0 0.0 0.0	
(32) Approach Roadway Width (Wyshoulders) 22 009.1M	Inventory 0.0 0.0 0.0	
(33) Bridge Median - No median Code 0	Field Posting	0.0
(34) Skew 00 DEG (35) Structure Flared N	Status Posting Date 00	0/00/00
(10) Inventory Route MIN Vert Clear 99.99 M (47) Inventory Route Total Horiz Clear 29.99 M	2 Axle 3 Axle	5 Axle
(53)	Actual Recommended	
(54) 14-14-14-14-14-14-14-14-14-14-14-14-14-1	Missing Signs N	
(55) Min Lat Underclear RT ref N 00.00 M	Misc.	
	Bridge Name	
Navigation Data		ess Bridge
38) Navigation Control - No navigation control on waterway Code 0	Freeze/Thaw N : Not Applicable	
111) Pier Protection Code	Accessibility (Needed/Used)	01
39) Navigation Vertical Clearance 000.0 M		Other
116) Vert-lift Bridge Nav Min Vert Clear	N/N Ladder N/N Staging N/N Boat N/N Traffic Control	
10) Navigation Horizontal Clearance 0000.0 M	Wader N/N RR Flagperson	inspection
	N/N Inspector 50 N/N Police	Hours: 006
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