

# Bridge Inspection Report

NBI Structure Number: 007401810007200

Effingham 181/072

Date of Inspection: 08/16/2019

STEVENS ROAD

Date Report Sent: 01/17/2020

over

Owner: Municipality

BROOK

Bridge Inspection Group: C-Team

Bridge Maintenance Crew: OTHER

### Recommended Postings:

Weight: No Posting Required

Weight Sign OK

Width: Not Required

Width Sign OK

Primary Height Sign Recommendation: None

Clearances: Over: 99.99

Height Sign OK

Optional Centerline Height Sign Rec: None

(Feet) Under: 0.00

Route: 99.99

### Condition:

Red List Status: Not on the Redlist

Deck: N N/A (NBI)

Superstructure: N N/A (NBI)

Substructure: N N/A (NBI)

Culvert: 9 Excellent

Sufficiency Rating: 100 %

Bridge Rail: N/A or not required

Rail Transition: N/A or not required

Bridge Approach Rail: Meets Standards

Approach Rail Ends: Meets Standards

### Bridge Dimensions:

Length Maximum Span: 10.0 ft

Left Curb/Sidewalk Width: 0.0 ft

Width Curb to Curb: 0.0 ft

Approach Roadway Width: 18.0 ft  
(W/Shoulders)

### Structure Type and Materials:

Number of Main Spans: 1

Number of Approach Spans: 0

### Main Span Material and Design Type

Prestressed Concrete/Culvert

NH Bridge Type: CB-P (Concrete Box-Precast)

Deck Type: N/A (NBI)

Wearing Surface: N/A (no deck (NBI))

Membrane: N/A (no deck (NBI))

Deck Protection: N/A (no deck (NBI))

Curb Reveal: Not Measured

Plan Location: N-O-F

Total Bridge Length: 10.0 ft

Right Curb/Sidewalk Width: 0.0 ft

Total Bridge Width: 0.0 ft

Median: No median

Bridge Skew: 5.00°

Year Built/Rebuilt: 2018

FEB - 4 PFCN

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**Bridge Service:**

Type of Service on Bridge: Highway

Type of Service Under: Waterway

Lanes on Bridge: 2

Lanes Under: 0

AADT: 92

Percent Trucks: 10%

Year of AADT: 2017

Future AADT: 136

Year of Future AADT: 2040

Federal or State Definition Bridge: NH-Definition Bridge

National Highway System: Bridge does not carry NHS

Roadway Functional Class: Rural, Local

New Hampshire Bridge Tier: 5

Eligibility for the National Register of Historic Places: Not eligible for NRHP

Traffic Direction: 2-way traffic

**National Bridge Inventory (NBI) Appraisal Ratings:**

Deck Geometry: N Not applicable (NBI)

Underclearances: N Not applicable (NBI)

Approach Alignment: 8 Equal Desirable Crit

Structural Evaluation: 9 Above Desirable Crit

Channel/Channel Protection: 8 Protected

Waterway Adequacy: 6 Equal Minimum

Bridge Scour Critical Status: 8 Stable Above Footing

Riprap Condition: Good Condition

Debris Present: No Debris Present

Channel Notes:

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**Element Details (see disclaimer below)**

No.	Description	Material Notes and Condition Notes:
215	Reinforced Concrete Abutment	PRECAST CONCRETE WINGS.  LIKE NEW CONDITION. MINOR INSTALLATION DAMAGE.
245	Prestressed Concrete Culvert	NEW PRECAST CONCRETE BOX 10" THICK.  LIKE NEW CONDITION.

**Element States (see disclaimer below)**

No.	Description	Quantity	Units	State 1	State 2	State 3	State 4
215	Reinforced Concrete Abutment	40	ft	100%	0%	0%	0%
245	Prestressed Concrete Culvert	26	ft	100%	0%	0%	0%

Element Disclaimer: NHDOT is transitioning from CoRe elements to AASHTO elements. The AASHTO element data shown above is the product of the automated element migration routine from the AASHTOWare BrM software. This migrated data has undergone limited field verification. Adequate quality control of this element data is not expected to be achieved until the conclusion of the 2020 inspection season. Please utilize element data with caution.

**Bridge Notes:**

REMOVED FROM MUNICIPAL RED LIST 12/11/2018.  
NEW PRECAST CONCRETE CULVERT 12/11/2018.

**Inspection Notes: 08/16/2019**

MAS - Inspection comments -  
CULVERT: GRAVEL - GOOD CONDITION. CONCRETE BOX - LIKE NEW CONDITION. WINGS - LIKE NEW CONDITION, MINOR INSTALLATION SPALLS.

PICTURE: C599-  
58. TERMINAL END DAMAGED AT SOUTHWEST.

**Previous Inspection Notes: 12/11/2018**

MAS - inspection comments -  
CULVERT: GRAVEL - GOOD CONDITION, ICE AND SNOW COVERED. CONCRETE BOX - NEW CONDITION. WINGS - NEW CONDITION, MINOR INSTALLATION SPALLS.

PICTURES: C591-  
07. WEST APPROACH.  
08. SOUTH ELEVATION.

**Approach and Roadway Notes:**

GRAVEL - (7) GOOD CONDITION.  
W- BEAM RAIL - DAMAGED AT SOUTHWEST TERMINAL END..

**Unusual or experimental features:**

# Bridge Inspection Report

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Effingham 181/072

## Inspection History

Inspection Date	Inspector Initials	Inspection Type(s) Performed				Major Element Ratings				Red list	Posting
		NBI	Elem	FCM	U/W	Deck	Super	Sub	Culvert		
08/16/2019	MAS	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N	N	N	9	<input type="checkbox"/>	No Posting Req'd
12/11/2018	MAS	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	N	N	N	9	<input type="checkbox"/>	No Posting Req'd
08/31/2017	KJT	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	5	5	3	N	<input checked="" type="checkbox"/>	6 Tons
12/01/2016	KJT	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	5	5	3	N	<input checked="" type="checkbox"/>	6 Tons
08/24/2015	KJT	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	5	5	3	N	<input checked="" type="checkbox"/>	6 Tons
12/08/2014	MAS	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	5	5	3	N	<input checked="" type="checkbox"/>	6 Tons
08/23/2013	MAS	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	5	5	3	N	<input checked="" type="checkbox"/>	6 Tons
10/12/2012	MAS	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	5	5	3	N	<input checked="" type="checkbox"/>	6 Tons
12/08/2011	MAS	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	5	5	3	N	<input checked="" type="checkbox"/>	6 Tons
10/26/2010	DPC	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	5	5	3	N	<input checked="" type="checkbox"/>	6 Tons
12/11/2009	KJT	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	5	5	3	N	<input checked="" type="checkbox"/>	6 Tons
08/26/2008	DPC	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	5	5	3	N	<input checked="" type="checkbox"/>	6 Tons
12/13/2007	KJT	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	5	5	5	N	<input checked="" type="checkbox"/>	6 Tons
09/19/2006	RLM	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	5	5	5	N	<input checked="" type="checkbox"/>	6 Tons
12/15/2005	RLM	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	5	5	5	N	<input checked="" type="checkbox"/>	6 Tons
08/25/2004	DPC	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	5	5	5	N	<input checked="" type="checkbox"/>	6 Tons
02/04/2004	RLM	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	5	5	5	N	<input checked="" type="checkbox"/>	6 Tons
04/17/2003	DPC	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	5	5	5	N	<input checked="" type="checkbox"/>	6 Tons
10/03/2002	DPC	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	5	5	5	N	<input checked="" type="checkbox"/>	6 Tons
11/29/2001	DPC	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	5	5	5	N	<input checked="" type="checkbox"/>	6 Tons
10/19/2000	RLM	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	6	6	5	N	<input checked="" type="checkbox"/>	6 Tons
12/09/1999	DPC	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	6	6	5	N	<input checked="" type="checkbox"/>	6 Tons
10/02/1998	FNM	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	6	6	6	N	<input checked="" type="checkbox"/>	6 Tons
10/01/1997		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	6	6	6	N	<input checked="" type="checkbox"/>	6 Tons
02/01/1996		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	6	6	6	N	<input checked="" type="checkbox"/>	6 Tons
02/01/1994		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	6	6	6	N	<input checked="" type="checkbox"/>	6 Tons
09/01/1992		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	6	6	6	N	<input checked="" type="checkbox"/>	6 Tons

Inspection Frequency (mo.)			
NBI	Elem	FCM	U/W
24	24	N/A	N/A

TOWN: EFFINGHAM  
BRIDGE NUMBER: 181072

**BRIDGE CAPACITY SUMMARY**

DESIGN LOAD: HL-93 (ASSUMED) DESIGN METHOD: LRFD (ASSUMED)

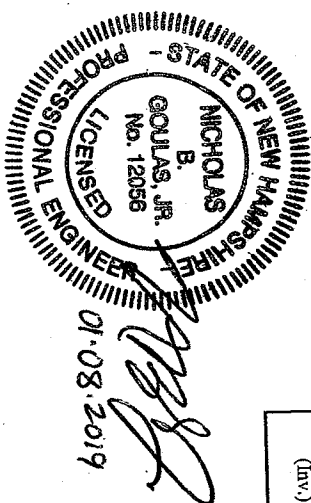
RATING METHOD: FIELD EVAL. & ENG. JUDGMENT PLAN FILE: SCANNED PLANS

RATED BY: JTP DATE: 1/8/2019  
CHECK BY: LOG DATE: 1/8/2019

ROUTE: STEVENS ROAD

OVER: STREAM

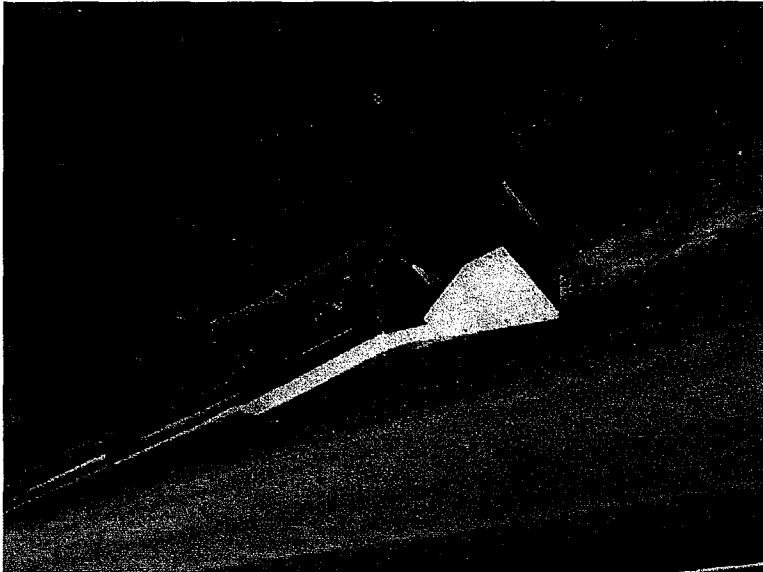
RATED MEMBER	LONGITUD. EFFECTIVE SPAN LENGTH	REQUIRED CAPACITY (HS Tons)			AVAILABLE CAPACITY (HS Tons)						
		CURRENT LEGAL LOADS	CERTIFIED VEHICLES SINGLE UNIT	MULTIPLE VEHICLES MULTIPLE UNIT	MULTIPLE LANES LOADED		SINGLE LANES LOADED				
					INVENTORY	OPERATING	POSTING	INVENTORY	OPERATING	POSTING	
Precast Concrete Box Culvert* Flexure Shear	10'-0" 10'-0"	HS 17.9 HS 22.4	HS 19.7 HS 24.8	HS 17.2 HS 22.3	HS 22.0 HS 27.2	HS 28.5 HS 35.3		HS 22.0 HS 27.2	HS 28.5 HS 35.3		
<p>*Load ratings are assigned per engineering judgment utilizing inventory rating factors of 1.0 and operating rating factors of 1.296 (=1.75/1.35), corresponding to HL-93 design assumed per the date of construction.</p>											
RECOMMENDED POSTING:					Rating Method (Op.) 63. By Insp.		English Tons 64. (Op.) 51.3		Metric Tons 46.5		
NO POSTING REQUIRED					(Inv.) 65. By Insp.		66. (Inv.) 39.6		35.9		



C599 58

TERMINAL END DAMAGED  
AT SOUTHWEST.

Friday, August 16, 2019



**EFFINGHAM 181/072**  
**STEVENS ROAD over BROOK**

Owner: Municipality  
Inspection Team: C

EFFINGHAM MUNICIPAL BRIDGES

BRIDGE NUMBER	TYPE	NO. SPANS	ROAD INV.NO.	ROAD NAME	OVER	LENGTH (O-T-O)	RECOMMENDED POSTING
080/113	IB-C	1	82	ELM STREET	PINE RIVER	62'-0"	E-2
097/088	JACK	1	83	DRAKE ROAD	WILKINSON BROOK	22'-0"	WEIGHT LIMIT 6 TONS; ONE LANE BRIDGE
165/112	MP	4	68	SNOW ROAD	SOUTH RIVER	32'-0"	E-2
166/082	IB-C	2	65	GRANITE ROAD	SOUTH RIVER	36'-0"	BRIDGE CLOSED
176/185	HT	1	53	HUNTRESS BRIDGE ROAD	OSSIPEE RIVER	139'-0"	NO POSTING REQ'D; MIN. VERT. CLR. 12'-03"
181/072	CB-P	1	63	STEVENS ROAD	BROOK	10'-0"	NO POSTING REQ'D;

REMARKS: 166/082 SENT AS A CRITICAL DEFICIENCY ON 8/25/2015.  
 165/112 SENT AS A DEFICIENCY ON 8/26/2015.  
 166/100 REMOVED FROM THE INVENTORY (PRIVATE BRIDGE PER TOWN DOCUMENTS).

REVISED/REVIEWED: 1/19

