

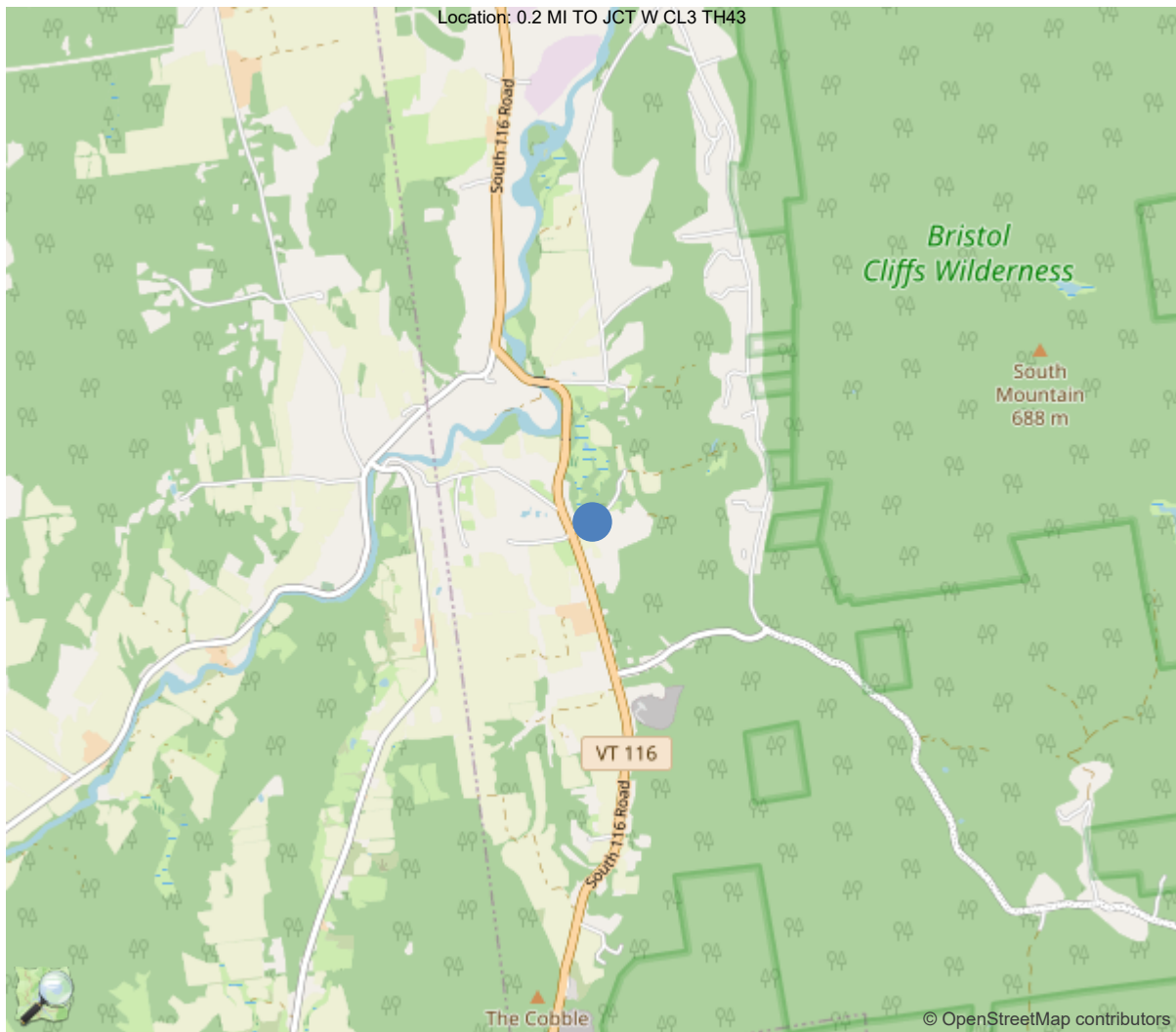


Town: 30 - BRISTOL

District 5, 1 - ADDISON County

Owner: 3 - Town or Township Highway Agency

Maintenance Responsibility: 3 - Town or Township Highway Agency



44.08863, -73.08852

IDENTIFICATION	
(1) State Names	50 - Vermont
(8) Structure Number	100103002001031
(5) Inventory Route	1
(2) Highway Agency District	5 - District 5
(3) County Code	1 - ADDISON
(4) Place Code	9025
(6) Features Intersected	LITTLE NOTCH BROOK
(7) Facility Carried	C4027
(9) Location	0.2 MI TO JCT W CL3 TH43
(11) Mile Point	0 mi
(12) Base Highway Network	No
(13) LRS Inventory Rte & Subrte	
(16) Latitude	44.088625
(17) Longitude	-73.0885166666667
(98) Border Bridge State Code	
(99) Border Bridge Structure No.	
STRUCTURE TYPE AND MATERIAL	
(43) Main Structure Type	32
Material	3 - Steel
Type	2 - Stringer/Multi-beam or girder
(44) Approach Structure Type	00
Material	0 - Other
Type	0 - Other
(45) No. of Spans in Main Unit	1
(46) No. of Approach Spans	0
(107) Deck Structure Type	8 - Wood or Timber
(108) Wearing Surface/Protective System	
Type of Wearing Surface	7 - Wood or Timber
Type of Membrane	0 - None
Type of Deck Protection	7 - Internally Sealed
AGE AND SERVICE	
(27) Year Built	1919
(106) Year Reconstructed	2002
(42) Type of Service	15
On	1 - Highway
Under	5 - Waterway
(28) Lane	
On	1
Under	0
(29) Average Daily Traffic	20
(30) Year of ADT	2019
(109) Truck ADT	2 %
(19) Bypass, Detour Length	99 mi
GEOMETRIC DATA	
(48) Length of Maximum Span	44 ft
(49) Structure Length	49 ft
(50) Curb or Sidewalk Width	
Left	0 ft
Right	0 ft
(51) Bridge Roadway Width Curb to Curb	15.4 ft
(52) Deck Width Out to Out	16 ft
(32) Approach Roadway Width (W/Shoulders)	12 ft
(33) Bridge Median	0 - No median
(34) Skew	0 Deg
(35) Structure Flared	0 - No flare
(10) Inventory Route Min Vert Clear	99.99 ft
(47) Inventory Route Total Horiz Clear	15.4 ft
(53) Min Vert Clear Over Bridge Rdwy	99.99 ft
(54) Min Vert Underclear	0 ft
Ref:	
(55) Min Lat Underclear RT	0 ft
Ref:	
(56) Min Lat Underclear LT	0 ft
NAVIGATION DATA	
(38) Navigation Control	0 - No navigation control on w
(111) Pier Protection	
(39) Navigation Vertical Clearance	0 ft
(116) Vert-Lift Bridge Nav Min Vert Clear	0 ft
(40) Navigation Horizontal Clearance	0 ft

CLASSIFICATION	
(112) NBIS Bridge Length	Y
(104) Highway System	0
(26) Functional Class	9 - Rural Local
(100) Defense Highway	0 - The inventory route is not
(101) Parallel Structure	N - No parallel structure exists
(102) Direction of Traffic	3 - One lane bridge for 2 - way traffic
(103) Temporary Structure	
(105) Federal Lands Highways	0 - N/A
(110) Designated National Network	0 - The inventory route is not
(20) Toll	3 - On free road. The structure
(21) Maintain	3 - Town or Township Highway A
(22) Owner	3 - Town or Township Highway A
(37) Historical Significance	5 - Bridge is not eligible for
CONDITION	
(58) Deck	6
(59) Superstructure	6
(60) Substructure	6
(61) Channel & Channel Protection	5
(62) Culverts	N
LOAD RATING AND POSTING	
(31) Design Load	0 - Other or Unknown
(63) Operating Rating Method	2
(64) Operating Rating	
Type	2 - Allowable Stress(AS)
Rating	72
(65) Inventory Rating Method	2 - Allowable Stress(AS)
(66) Inventory Rating	
Type	
Rating	54
(70) Bridge Posting	5 - Equal to or above legal loads
(41) Structure Open/Posted/Closed	A - Open, no restriction
APPRAISAL	
(67) Structural Evaluation	6
(68) Deck Geometry	7
(69) Clearances, Vertical/Horizontal	N
(71) Waterway Adequacy	6
(72) Approach Roadway Alignment	7
(36A) Bridge Railings	0 - Inspected feature does not meet
(36B) Transitions	0 - Inspected feature does not meet
(36C) Approach Guardrail	0 - Inspected feature does not meet
(36D) Approach Guardrail Ends	0 - Inspected feature does not meet
(113) Scour Critical Bridges	3 - Bridge is scour critical; bridge
PROPOSED IMPROVEMENTS	
(75) Type of Work	
(76) Length of Structure Improvement	ft
(94) Bridge Improvement Cost (Multiply value by 1000)	\$
(95) Roadway Improvement Cost (Multiply value by 1000)	\$
(96) Total Project Cost (Multiply value by 1000)	\$
(97) Year of Improvement Cost Estimate	
(114) Future ADT	21
(115) Year of Future ADT	2029

INSPECTIONS *			
(90) Inspection Date	08/01/2024		
(91) Frequency	24		
(92) Critical Feature Inspection	Done	Freq. (Mon)	Date
A: Fracture Critical Detail	No		
B: Underwater Inspection	No		
C: Other Special Inspection			
* The inspection date and frequency information in this box contains the current NBI date and frequency information. Please refer to the report header for the date this inspection was conducted.			

Maintenance Needs

Date Reported: 07/13/2022

Priority: 4 - Maintenance Finding - Next Inspection Cycle

Status: Open

Type of Work: 37 - Channel - Debris/Aggradation removal

Component: Channel

Deficiency Description

Heavy aggradation along upstream stream bed over the years has forced the channel along the upstream abutment 2 embankment and runs into/along abutment 1. This has caused localized scour exposing the abutment 1 footing and small voids were found below the base of footing in the downstream end. Heavy erosion along same side and protection has washed away over years.

Remarks

A channel realignment project with anti scour protection installed along abutment 1 should be considered.



Channel



Abutment 1

Maintenance Needs

Date Reported: 08/01/2024

Priority: 4 - Maintenance Finding - Next
Inspection Cycle

Status: Open

Type of Work: 17 - Deck - Rail system
repair/replacement

Component: Deck

Deficiency Description

The abutment 2 downstream end post has moderate displacement due to a past impact causing failed bolt connections in the stub beam bracket.

Remarks

Repairs should be considered.



Downstream abutment 2 guardrail end post

Deck

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
31	Timber Deck	SF	660	460	200	0	0
1140	Decay/Section Loss	SF	200	0	200	0	0
510	Wearing Surfaces	SF	660	600	60	0	0
1180	Abrasion/Wear (Timber)	SF	60	0	60	0	0
330	Metal Bridge Railing	LF	88	77	8	3	0
1000	Corrosion	LF	8	0	8	0	0
1020	Connection	LF	3	0	0	3	0

58 - Deck (6 - SATISFACTORY CONDITION - structural elements show some minor deterioration.)

Minor staining and saturation along timber soffit. The areas surrounding the beam flanges have heavy saturation with some small areas of rot initiating.

200 - Existing Wearing Surface Depth (2")

A21 - Deck Wearing Surface Condition (Good)

Minor checks and splits throughout and minor abrasion along the wheel paths at the abutment 2 end.

A39 - Deck Fascia Condition (Good)

B.C.05 Bridge Railing Condition Rating (SATISFACTORY - Widespread minor or isolated moderate defects.)

Scrape marks with minor rust staining throughout. The connecting stub beams along the fascias have heavy rust scale with moderate section loss throughout. The abutment 2 downstream end post has moderate displacement due to a past impact causing failed bolt connections in the stub beam bracket.

B.C.08 Bridge Joints Condition Rating (NOT APPLICABLE - Bridge does not have deck joints.)

APPROACH

72 - Approach Roadway Alignment (7 - Better than present minimum criteria)

A13 - Approach Rail Condition (Good)

Scattered scrape marks with some small areas of minor rust staining initiated.

A16 - Approach Post Condition (Good)

Scattered areas of minor freckled rust.

B.C.06 Bridge Railing Transitions Condition Rating (GOOD - Some minor defects.)

Scrape marks with some small areas of minor rust staining initiated. The downstream abutment 2 end has some flattening of the rail as well.

Superstructure

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
107	Steel Open Girder/Beam	LF	245	0	0	245	0
1000	Corrosion	LF	245	0	0	245	0
515	Steel Protective Coating	SF	1531	0	0	1021	510
3440	Effectiveness (Steel Protective Coatings)	LF	1531	0	0	1021	510
310	Elastomeric Bearing	EA	5	0	0	5	0
1000	Corrosion	EA	5	0	0	5	0
313	Fixed Bearing	EA	5	0	0	5	0
1000	Corrosion	EA	5	0	0	5	0

59 - Superstructure (6 - SATISFACTORY CONDITION - structural elements show some minor deterioration.)

Heavy rust scale build up along the flanges and lower area of the webs with minor to moderate section loss.

A55 - Lateral Bracing Condition (Satisfactory)

Heavy rust scale build up along the flanges and lower area of the webs with minor to moderate section loss.

B.C.07 Bridge Bearings Condition Rating (SATISFACTORY - Widespread minor or isolated moderate defects.)

Rust scale throughout with minor section loss.

B.C.14 NSTM Inspection Condition (NOT APPLICABLE - Component does not exist.)

Substructure

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
215	Reinforced Concrete Abutment	LF	32	0	32	0	0
1130	Cracking (RC and Other)	LF	32	0	32	0	0
800	Reinforced Concrete Wing/Retaining Wall	EA	4	2	0	2	0
1080	Delamination/Spall/Patched Area	EA	2	0	0	2	0

60 - Substructure (6 - SATISFACTORY CONDITION - structural elements show some minor deterioration.)

Scattered fine map cracks with light staining and lineal cracking along pour joints with minor separation throughout.

A71 - Abutment End Walls Condition (Satisfactory)

Precast segmented blocks are generally in good condition along abutment 2. The abutment 1 members have areas of minor scaling in scattered locations, the upstream exposed end has minor spalling with heavy scaling.

A77 - Retaining/Wingwall Condition (Satisfactory)

Scattered fine map cracks with light staining and lineal cracking along pour joints with minor separation throughout.

A78 - Abutment Footings Condition (Satisfactory)

The exposed abutment 1 footing has minor abrasion throughout.

CHANNEL

61 - Channel Condition (5 - Bank protection is being eroded. River control devices and/or embankment have major damage. Trees and brush restrict the channel.)

Heavy aggradation along upstream stream bed over the years has forced the channel along the upstream abutment 2 embankment and runs into/along abutment 1. This has caused localized scour exposing the abutment 1 footing and small voids were found below the base of footing in the downstream end. Heavy erosion along same side and protection has washed away over years.

B.C.10 Channel Protection Condition Rating (SATISFACTORY - Widespread minor or isolated moderate defects.)

B.C.11 Scour Condition Rating (Widespread minor or isolated moderate scour.)

GENERAL OBSERVATION

The structure remains in satisfactory condition with developing saturation in the deck and section loss in the beams. The channel should be considered for a realignment project; see maintenance report.

Channel Profile

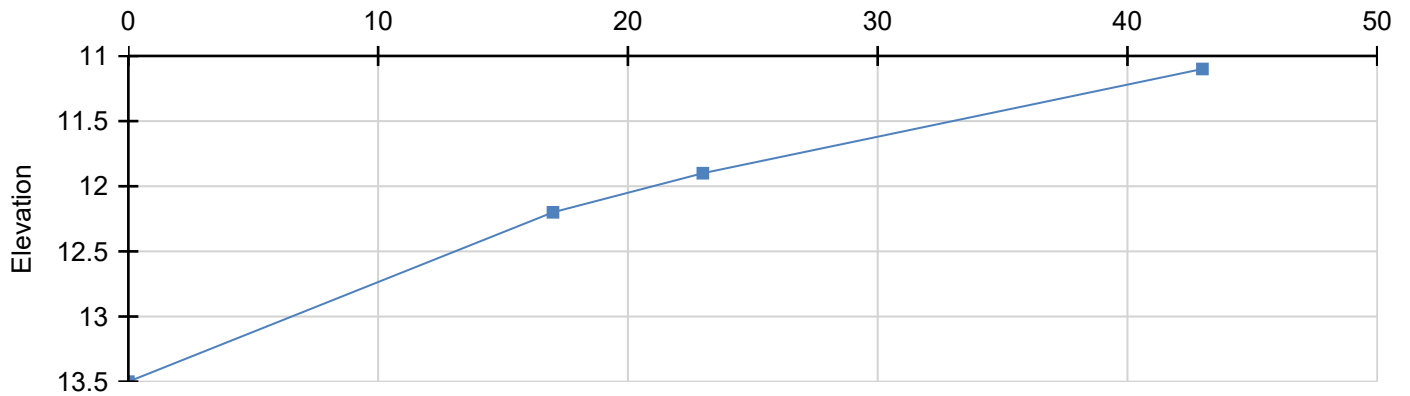
 Waterway Flow: Left to right
 Origin: Fascia soffit

 Top of Water:
 Bottom of Beam:

Station	Distance	Downstream	Upstream
Abutment 1/FOF	0	13.5	13
	17	12.2	12.1
EOW	23	11.9	
EOW	36		11.8
Abutment 2	43	11.1	11.6

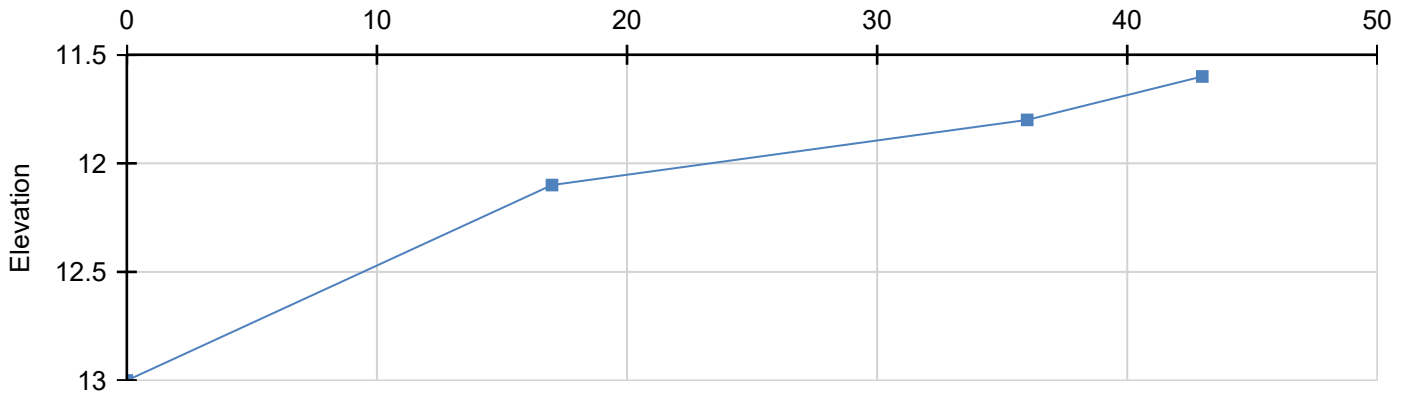
Downstream Elevation

Distance



Upstream Elevation

Distance





Abutment 1 approach



Abutment 2 approach



Downstream abutment 2 guardrail end post



Downstream elevation



Upstream elevation



Span



Abutment 2



Abutment 1



Upstream



Downstream