

## Structure Inventory and Appraisal Sheet (English Units)

Bridge Key:	3312	Agency ID:	3312	SR: 20.5	SD/FO: SD
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### IDENTIFICATION

State 1: 23 Maine      Struc Num 8: 3312

Facility Carried 7: VINE STREET      Location 9: 0.7 MI S JCT 236

Rte.(On/Under)5A: Route On Structure      Rte. Signing Prefix 5B: 5 City Street

Level of Service 5C: 0 None of the below      Rte. Number 5D: 00000

Directional Suffix 5E: 0 N/A (NBI)      % Responsibility : 0

SHD District 2: 01 Southern      County Code 3: 031 York

Place Code 4: 31250 South Berwick      Mile Post 11: 0.000 mi

Feature Intersected 6: GREAT WORKS RIVER

Latitude 16: 43d 13' 07"      Longitude 17: 070d 48' 39"

Border Bridge Code 98: Not Applicable (P)

Border Bridge Number 99: n/a

### INSPECTION

Frequency 91: 12 months      Inspection Date 90: 8/25/2010      Next Inspection: 08/25/2011

FC Frequency 92A: NA      FC Inspection Date 93A: NA      Next FC Inspection: NA

UW Frequency 92B: NA      UW Inspection Date 93B: NA      Next UW Inspection: NA

SI Frequency 92C: NA      SI Date 93C: NA      Next SI: NA

Element Frequency: 12 months      Element Inspection Date: 08/25/2010      Next Elem. Insp. Due: 08/25/2011

### STRUCTURE TYPE AND MATERIALS

Number of Approach Spans 46: 3      Number of Spans Main Unit 45: 6

Main Span Material/Design 43A/B:

3 Steel      02 Stringer/Girder

Approach Span Material/Design 44A/B:

1 Concrete      04 Tee Beam

Deck Type 107: 1 Concrete-Cast-in-Place

Wearing Surface 108A: 2 Integral Concrete

Membrane 108B: 0 None

Deck Protection 108C: None

### CLASSIFICATION

Defense Highway 100: 0 Not a STRAHNET hwy      Parallel Structure 101: No || bridge exists

Direction of Traffic 102: 2 2-way traffic      Temporary Structure 103: Not Applicable (P)

Highway System 104: 0 Not on NHS      NBIS Length 112: Long Enough

Toll Facility 20: 3 On free road      Functional Class 26: 19 Urban Local

Defense Hwy 110: 0 Not a STRAHNET hwy      Historical Significance 37: 5 Not eligible for NRHP

Owner 22: 01 State Highway Agency

Custodian 21: 01 State Highway Agency

### AGE AND SERVICE

Year Built 27: 1955      Year Reconstructed 106: -4

Type of Service on 42A: 1 Highway

Type of Service under 42B: 5 Waterway

Lanes on 28A: 2      Lanes Under 28B: 0      Detour Length 19: 1.0 mi

ADT 29: 485      Truck ADT 109: 5 %      Year of ADT 30: 2009

### CONDITION

Deck 58: 5 Fair      Super 59: 5 Fair      Sub 60: 1 Imminent Failure

Culvert 62: N N/A (NBI)      Channel/Channel Protection 61: 6 Bank Slumping

### GEOMETRIC DATA

Length Max Span 48: 28.0 ft      Structure Length 49: 240.0 ft

Curb/Sdwk Width L 50A: 0.4 ft      Curb/Sidewalk Width R 50B: 0.4 ft

Width Curb to Curb 51: 20.3 ft      Width Out to Out 52: 23.1 ft

Approach Roadway Width 32: 20.0 ft      Median 33: 0 No median (w/ shoulders)

Deck Area: 5,544. sq. ft

Skew 34: 0.00 °      Structure Flared 35: 0 No flare

Vertical Clearance 10: 99.99 ft      Horiz. Clearance 47: 19.00 ft

Minimum Vertical Clearance Over Bridge 53: 327.8 ft

Minimum Vertical Underclearance Reference 54A: N Feature not hwy or RR

Minimum Vertical Underclearance 54B: 0.0 ft

Minimum Lateral Underclearance Reference R 55A: N Feature not hwy or RR

Minimum Lateral Underclearance R 55: 327.8 ft

Minimum Lateral Underclearance L 56: 327.8 ft

### LOAD RATING AND POSTING

Inventory Rating Method 65: 2 AS Allowable Stress: Operating Rating Method 63: 2 AS Allowable Stress

Inventory Rating 66: HS19.5      Operating Rating 64: HS28.9

Design Load 31: 2 M 13.5 (H 15)      Posting 70: 5 At/Above Legal Loads

Posting status 41: K Closed to all traffic

### ELEMENT CONDITION STATE DATA

Str Unit	Elm/Env	Description	Units	Total Qty	% in 1	Qty. St. 1	% in 2	Qty. St. 2	% in 3	Qty. St. 3	% in 4	Qty. St. 4	% in 5	Qty. St. 5
UNIT 1	13/2	Unp Conc Deck/AC Ovl	(SF)	3,881	0 %	0	0 %	0	100 %	3,881	0 %	0	0 %	0
UNIT 1	107/2	Paint Stl Opn Girder	(LF)	672	18 %	121	16 %	108	36 %	242	20 %	134	10 %	67
UNIT 1	210/2	R/Conc Pier Wall	(LF)	180	0 %	0	75 %	135	20 %	36	5 %	9	0 %	0
UNIT 1	215/2	R/Conc Abutment	(LF)	46	0 %	0	100 %	46	0 %	0	0 %	0	0 %	0
UNIT 1	218/2	Undefined Wall Elem.	(LF)	80	0 %	0	50 %	40	50 %	40	0 %	0	0 %	0
UNIT 1	302/2	Compressn Joint Seal	(LF)	23	0 %	0	0 %	0	100 %	23	0 %	0	0 %	0

### APPRAISAL

Bridge Rail 36A: 0 Substandard      Approach Rail 36C: 1 Meets Standards

Transition 36B: 1 Meets Standards      Approach Rail Ends 36D: 0 Substandard

Str. Evaluation 67: 0      Deck Geometry 68: 3 Intolerable - Correct

Underclearance, Vertical and Horizontal 69: N Not applicable (NBI)

Waterway Adequacy 71: 8 Equal Desirable      Approach Alignment 72: 7 Above Min Criteria

Scour Critical 113: 8 Stable Above Footing

### PROPOSED IMPROVEMENTS

Bridge Cost 94: \$ 250,000      Type of Work 75: 34 Widen w/ Deck Reha

Roadway Cost 95: \$ 25,000      Length of Improvement 76: 240.2 ft

Total Cost 96: \$ 375,000      Future ADT 114: 728

Year of Cost Estimate 97: 2004      Year of Future ADT 115: 2029

### NAVIGATION DATA

Navigation Control 38: 0 Permit Not Required

Vertical Clearance 39: 0.0 ft      Horizontal Clearance 40: 0.0 ft

Pier Protection 111: Not Applicable (P)      Lift Bridge Vertical Clearance 116: 0.0 ft

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Str Unit	Elm/Env	Description	Units	Total Qty	% in 1	Qty. St. 1	% in 2	Qty. St. 2	% in 3	Qty. St. 3	% in 4	Qty. St. 4	% in 5	Qty. St. 5
UNIT 1	311/2	Moveable Bearing	(EA)	28	57 %	16	29 %	8	14 %	4	0 %	0	0 %	0
UNIT 1	331/2	Conc Bridge Railing	(LF)	344	0 %	0	100 %	344	0 %	0	0 %	0	0 %	0
UNIT 1	363/2	Section Loss SmFlag	(EA)	1	0 %	0	100 %	1	0 %	0	0 %	0	0 %	0
UNIT 1	382/2	Wear.Surf.- AC Only	(SF)	3,410	80 %	2,728	10 %	341	10 %	341	0 %	0	0 %	0
UNIT 1	388/2	Paint	(SF)	10,360	65 %	6,734	20 %	2,072	10 %	1,036	5 %	518	0 %	0
UNIT 1	389/2	Reinfor conc dk/slab	(SF)	3,881	33 %	1,281	33 %	1,281	34 %	1,320	0 %	0	0 %	0
UNIT 2	13/2	Unp Conc Deck/AC Ovl	(SF)	2,040	0 %	0	0 %	0	100 %	2,040	0 %	0	0 %	0
UNIT 2	110/2	R/Conc Open Girder	(LF)	960	0 %	0	30 %	288	60 %	576	10 %	96	0 %	0
UNIT 2	210/2	R/Conc Pier Wall	(LF)	60	0 %	0	0 %	0	40 %	24	60 %	36	0 %	0
UNIT 2	215/2	R/Conc Abutment	(LF)	30	0 %	0	70 %	21	30 %	9	0 %	0	0 %	0
UNIT 2	218/2	Undefined Wall Elem.	(LF)	92	0 %	0	50 %	46	30 %	28	20 %	18	0 %	0
UNIT 2	331/2	Conc Bridge Railing	(LF)	140	0 %	0	100 %	140	0 %	0	0 %	0	0 %	0

Str Unit	Elm/Env	Description	Element Notes
UNIT 1	13/2	Concrete Deck - Unprotected w/ AC	Approximately 15% cracking of bituminous wearing surface with heavier cracking at joint areas. Bottom of slab has approximately 50% map cracking with scattered spalling - exposed re-steel areas. Moderate scaling at fascia areas.
UNIT 1	107/2	Painted Steel Open Girder/Bear	Approximately 20% paint system distress with moderate rusting/ flaking at bearing areas. Girder web & bottom flange at drain areas have moderate/ heavy rusting & flaking.
UNIT 1	210/2	Reinforced Conc Pier Wall	Piers have past rehab, but have several areas of moderate scaling breastwalls & nose. Bridge seats have minor scaling.
UNIT 1	215/2	Reinforced Conc Abutment	Approximately 20% cracking with light staining breastwall & bridge seat areas.
UNIT 1	218/2	Undefined Wall Elem (Incl. Wing-, H	Minor to Moderate deterioration.
UNIT 1	302/2	Compression Joint Seal	Joints have been paved over.
UNIT 1	311/2	Moveable Bearing (roller, sliding, e	Steel bearing support at 2nd southerly pier area have extensive scaling of pier concrete. Bearings at exposed joint areas have heavy paint system distress & rusting. Remaining bearings have light paint failure & rusting areas.
UNIT 1	331/2	Reinforced Conc Bridge Railing	Minor to Moderate deterioration of concrete rail and posts.
UNIT 1	363/2	Section Loss	Section loss to concrete pier and to outside steel girder flanges
UNIT 1	382/2	Wearing Surface - AC Only (Dumm	<none>
UNIT 1	388/2	Paint (Dummy Element)	<none>
UNIT 1	389/2	Reinforced Concrete Deck/Slab	<none>
UNIT 2	13/2	Concrete Deck - Unprotected w/ AC	Concrete portion of wearing surface has been recently rehabbed. Minor cracking & delam only.
UNIT 2	110/2	Reinforced Conc Open Girder/Bear	Approximatley 30% heavy cracking, staining, spalling with exposed steel t-beams mostly at exterior girders (see photos).
UNIT 2	210/2	Reinforced Conc Pier Wall	Second southerly pier at north face has advanced scaing of over 11" beyond the reinforcing steel mat. Bridge seat areas also have advanced scaling. East side (dam side) pier nose has large shear crack & seperation area. Apparent settlement at west end bearing support area. (see lots of photos).
UNIT 2	215/2	Reinforced Conc Abutment	Moderate to Heavy deterioration
UNIT 2	218/2	Undefined Wall Elem (Incl. Wing-, H	North East wing wall has vertical crack.
UNIT 2	331/2	Reinforced Conc Bridge Railing	Conc. rail in Satisfactory condition.

## BRIDGE NOTES

Total of 9 spans. Six spans are steel painted girders, concrete deck, piers, abutments and wings with a bituminous wearing surface. Three spans are concrete girders, deck, piers, abutment & wing walls. Complete upstream of structure is a dam. Southerly span superstructure is uninspectable due to utility housing area.

2007 - PIERS WERE INSPECTED WITH UNDERBRIDGE CRANE AND FOUND TO HAVE SEVERE SECTION LOSS IN

**Structure Inventory and Appraisal Sheet (English Units)**

## PAST INSPECTION

Inspection Date: 08/25/2010

Type: 1 Regular NBI

Inspector: DTJHARR

Pontis User Key: DTJHARR - STEV

## Scope:

NBI: ☒Other: ☐Element: ☒Underwater: ☐Fracture Critical: ☐

## INSPECTION NOTES

STRUCTURE CLOSED TO ALL TRAFFIC

## PAST INSPECTION

Inspection Date: 05/04/2009

Type: 1 Regular NBI

Inspector: DTJHARR

Pontis User Key: DTJHARR - STEV

## Scope:

NBI: ☒Other: ☐Element: ☒Underwater: ☐Fracture Critical: ☐

## INSPECTION NOTES

STRUCTURE CLOSED TO ALL TRAFFIC

**Structure Inventory and Appraisal Sheet (English Units)**

## PAST INSPECTION

Inspection Date: 12/10/2008

Type: 1 Regular NBI

Inspector: DTJHARR

Pontis User Key: DTJHARR - STEV

## Scope:

NBI: ☒ Other: ☐ Element: ☒  
Underwater: ☐ Fracture Critical: ☐

## INSPECTION NOTES

This is an additional NBI, Element, and special inspection as a result of recently detected settlement at joint between main & approach spans. All bridge elements were inspected utilizing the under bridge crane. Substructure is in overall poor/ serious condition with advanced deterioration of concrete at pier connecting approach/ main spans. remaining piers have moderate scaling, cracking, and delaminating areas. See individual elements for addition description. (see photos). Engineering review of substructure required. 12 month cycle inspection.

## PAST INSPECTION

Inspection Date: 10/02/2007

Type: 1 Regular NBI

Inspector: DT2HARR

Pontis User Key: DT2HARR - SCOT

## Scope:

NBI: ☒ Other: ☒ Element: ☒  
Underwater: ☐ Fracture Critical: ☐

## INSPECTION NOTES

This is an additional NBI, Element, and special inspection as a result of recently detected settlement at joint between main & approach spans. All bridge elements were inspected utilizing the under bridge crane. Substructure is in overall poor/ serious condition with advanced deterioration of concrete at pier connecting approach/ main spans. remaining piers have moderate scaling, cracking, and delaminating areas. See individual elements for addition description. (see photos). Engineering review of substructure required. 12 month cycle inspection.

**Structure Inventory and Appraisal Sheet (English Units)**

## PAST INSPECTION

Inspection Date: 11/22/2006

Type: 1 Regular NBI

Inspector: DTPVERR

Pontis User Key: DTPVERR - PAUL

## Scope:

NBI: ☒Other: ☐Element: ☒Underwater: ☐Fracture Critical: ☐

## INSPECTION NOTES

Moderate to Heavy deterioration of all main structure elements.  
Severe deterioration of one pier has over 50% spall of one side with fully exposed rebar grid.  
Steel girders on outside have Severe deterioration under deck drains, bottom flange appears to be rusted thru.

## Channel:

Alignment - Satisfactory

Gradient - Severe - dam controlled

Opening - Satisfactory

Composition - Ledge outcrops on down stream side.

## PAST INSPECTION

Inspection Date: 01/18/2006

Type: 1 Regular NBI

Inspector: DTJHANN

Pontis User Key: DTJHANN - JAMIE

## Scope:

NBI: ☒Other: ☐Element: ☒Underwater: ☐Fracture Critical: ☐

## INSPECTION NOTES

Moderate to Heavy deterioration of all main structure elements.  
Severe deterioration of one pier has over 50% spall of one side with fully exposed rebar grid.  
Steel girders on outside have Severe deterioration under deck drains, bottom flange appears to be rusted thru.

## Channel:

Alignment - Satisfactory

Gradient - Severe - dam controlled

Opening - Satisfactory

Composition - Ledge outcrops on down stream side.

**Structure Inventory and Appraisal Sheet (English Units)**

## PAST INSPECTION

Inspection Date: 02/09/2005

Type: 1 Regular NBI

Inspector: -1

Pontis User Key: DEB

## Scope:

NBI: ☒ Other: ☐ Element: ☒  
Underwater: ☐ Fracture Critical: ☐

## INSPECTION NOTES

## INSPECTOR WORK CANDIDATES

Work Candidate ID	Action	Object	Agency Status	Agency Priority	Assigned to a Project	Rec. Date
A-DOT001-0CF6E449-0000009E	Replace	Bridge	Approved	High	No	10/2/2007
A-DOT001-0B60C05F-00000047	Replace	Bridge	Approved	High	No	10/2/2007
A-DOT001-0CF6E449-000000A0	Scour	Bridge	Approved	Medium	No	10/2/2007
A-DOT001-0CF6E449-000000A8	Repl Elem	Conc Bridge Railing	Approved	low	No	11/22/2006
A-DOT001-0CF6E449-000000A4	Rehab/Ovly	Unp Conc Deck/AC Ovl	Approved	High	No	10/2/2007
A-DOT001-0B60C05F-00000045	Rehab Elem	R/Conc Open Girder	Approved	High	No	10/2/2007
A-DOT001-0B60C05F-00000043	Rehab Elem	R/Conc Pier Wall	Approved	High	No	10/2/2007
A-DOT001-0B60C05F-00000041	Rehab Elem	Paint Stl Opn Girder	Approved	High	No	10/2/2007
A-DOT001-0CF6E449-000000A6	Part Paint	Paint Stl Opn Girder	Approved	High	No	10/2/2007
A-DOT001-0CF6E449-000000A2	Other	Bridge	Approved	low	No	11/22/2006