

# Bridge Inspection Report

Bedford 090/065

Date of Inspection: 03/09/2016

NH101

Date Report Sent: 4/6/2016

Over

Picture taken during inspection

PULPIT BROOK

Owner: NHDOT

### Recommended Postings:

Weight: No Posting Required

Weight Sign OK

Width: Not Required

Width Sign OK

Primary Height Sign Recommendation: *None*

Clearances: Over:

Height Signs OK

Optional Centerline Height Sign Rec: *None*

(Feet) Under: 0.00

Route:

### Condition: State Redlist

Deck: N N/A (NBI)

Superstructure: N N/A (NBI)

Substructure: N N/A (NBI)

Culvert: 4 Poor

### Structure Type and Materials:

Number of Spans Main Unit: 2

Number of Approach Spans: 0

### Main Span Material and Design Type

Concrete Culvert

Sufficiency Rating: 50.4%

NBI Status: Not Applicable

Bridge Rail: N/A or Not Required

Rail Transition: N/A or Not Required

Bridge Approach Rail: Meets Standards

Approach Rail Ends: Meets Standards

NH Bridge Type: Concrete Pipe

Deck Type: No Deck ( N/A - NBI)

Wearing Surface: No Deck ( N/A - NBI)

Membrane: No Deck ( N/A - NBI)

Deck Protection: No Deck ( N/A - NBI)

Pavement thickness: 2.0 in

Curb Reveal: Not Applicable

Plan Location: Unknown

### Bridge Dimensions:

Length Maximum Span: 5.0 ft

Left Curb/Sidewalk Width: 0.0 ft

Width Curb to Curb: 0.0 ft

Approach Roadway Width (W/ Shoulders): 40.0 ft

Total Bridge Length: 12.5 ft

Right Curb/Sidewalk Width: 0.0 ft

Total Bridge Width: 0.0 ft

Median: No median

Bridge Skew: 0.00 °

### Bridge Service:

Type of Service on Bridge: Highway

Year Built: 1936

Type of Service under: Waterway

Year Rebuilt: Not Rebuilt

Lanes on bridge: 2

Detour Length: 3.0 mi

Lanes Under: NA

AADT: 24000

Percent Trucks: 7%

Year of AADT: 2013

Future AADT: 35520

Year of Future AADT: 2035

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Federal or State Definition Bridge: NH Definition Bridge  
 Roadway Functional Class: Rural Princ. Arterial  
 New Hampshire Highway System and Class: Primary-DOT Maintained  
 Eligibility for the National Register of Historic Places: Possibly eligible  
 Traffic Direction: Two-way traffic

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

Deck Geometry: Not Applicable (NBI)  
 Underclearances: Not Applicable (NBI)  
 Approach Alignment: Equal Minimum Criteria  
 Structural Evaluation: Minimum Tolerable  
 Channel/Channel Protection: Bank Protection Eroded  
 Waterway Adequacy: Equal Minimum Criteria  
 Bridge Scour Critical Status: Stable, action needed  
 Riprap Condition: Good Condition  
 Debris Present: No Debris Present  
 Date of Underwater Inspection: Not Applicable

**AASHTO CoRe Element Condition State Data:**

No.	Description	Env.	Material Notes and Condition Notes
215	Reinforced Concrete Abutment	Severe	NEW C.I.P. HEADWALL BUILT BY BOBM 2011 AT NORTH (INLET). 32' LONG X 10' HIGH X 16" THICK.  CONCRETE HEADWALL- FINE CRACKS.
217	Other Material Abutment	Severe	MORTARED STONE HEADWALL AT SOUTH (OUTLET)  MINOR CRACKS IN MORTAR. HEADWALL TIPPING OVER SPAN #1. FEW STONES MISSING AT ENDS OF WINGS ON SOUTH.
241	Reinforced Concrete Culvert	Severe	CP- 3" SEPARATION IN JOINTS #1 AND 2#, SPAN 1. 3" SEPARATION IN JOINTS #3, #5, AND #6 IN SPAN 2. MINOR SETTLEMENT AND MISALIGNMENT IN SPAN 2.
360	Settlement Condition Warning Flag	Severe	CP- MINOR SETTLEMENT AND MODERATE MISALIGNMENT AT JOINTS.
361	Scour Condition Warning Flag	Severe	MINOR CHANNEL SCOUR.

No.	Description	Env.	Quantity	Units	State 1	State 2	State 3	State 4	State 5
215	Reinforced Concrete Abutment	Severe	32	(LF)	100 %	0 %	0 %	0 %	
217	Other Material Abutment	Severe	50	(LF)	50 %	25 %	25 %	0 %	
241	Reinforced Concrete Culvert	Severe	85	(LF)	40 %	10 %	50 %	0 %	
360	Settlement Condition Warning Flag	Severe	1	(EA)	0 %	100 %	0 %		
361	Scour Condition Warning Flag	Severe	1	(EA)	100 %	0 %	0 %		

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**Bridge Notes:**

RECORDED AS A BRIDGE AND ADDED TO STATE RED LIST 7/14/2008. NEW CONCRETE ABUTMENT AT NORTH BUILT BY BOBM 2011.

**Approach and Roadway Notes:** ASPHALT- SETTLED, PATCHED AND CRACKED. W-BEAM RAIL- NO DAMAGE.

**Inspection History:**

<b>Inspection Date:</b> 03/09/2016	<b>Inspector:</b> NJL	<b>Deck:</b> N N/A (NBI)
<b>Notes:</b>		<b>Super:</b> N N/A (NBI)
NJL inspection comments- ASPHALT- LIGHT DEPRESSIONS AND CRACKS ON TRAVELWAY ASPHALT. REPAIRED ASPHALT PATCH ON NORTH HAS SOME LIGHT SETTLEMENT OVER CP; ASPHALT CRACKED ON SOUTH. CULVERT: CP- MINOR SETTLEMENT AND MISALIGNMENT. AREAS OF SEPARATION IN BOTH SPANS. SUBSTRUCTURE: ABUTMENT- CONCRETE HEADWALL ON NORTH, FINE CRACKS. OTHER ABUTMENT- HEADWALL TIPPING ON SOUTH. FEW STONES MISSING AT ENDS OF WINGS ON SOUTH.		<b>Substr:</b> N N/A (NBI)
PICTURE: D178- 17. WEST APPROACH. 18. SOUTH ELEVATION.		<b>Culvert:</b> 4 Poor

<b>Inspection Date:</b> 11/13/2015	<b>Inspector:</b> KLM	<b>Deck:</b> N N/A (NBI)
<b>Notes:</b>		<b>Super:</b> N N/A (NBI)
KLM inspection comments- ASPHALT- LIGHT DEPRESSIONS AND CRACKS ON TRAVELWAY ASPHALT. REPAIRED ASPHALT PATCH ON NORTH HAS SOME LIGHT SETTLEMENT OVER CP; ASPHALT CRACKED ON SOUTH. CULVERT: CP- MINOR SETTLEMENT AND MISALIGNMENT. AREAS OF SEPARATION IN BOTH SPANS. SUBSTRUCTURE: ABUTMENT- CONCRETE HEADWALL ON NORTH, FINE CRACKS. OTHER ABUTMENT- HEADWALL TIPPING ON SOUTH.		<b>Substr:</b> N N/A (NBI)
		<b>Culvert:</b> 4 Poor

<b>Inspection Date:</b> 03/16/2015	<b>Inspector:</b> NJL	<b>Deck:</b> N N/A (NBI)
<b>Notes:</b>		<b>Super:</b> N N/A (NBI)
NJL inspection comments- ASPHALT- LIGHT DEPRESSIONS AND CRACKS ON TRAVELWAY ASPHALT. REPAIRED ASPHALT PATCH ON NORTH HAS SOME LIGHT SETTLEMENT OVER CP; ASPHALT CRACKED ON SOUTH. CULVERT: CP- MINOR SETTLEMENT AND MISALIGNMENT. AREAS OF SEPARATION IN BOTH SPANS. SUBSTRUCTURE: ABUTMENT- CONCRETE HEADWALL ON NORTH, FINE CRACKS. OTHER ABUTMENT- HEADWALL TIPPING ON SOUTH.		<b>Substr:</b> N N/A (NBI)
		<b>Culvert:</b> 4 Poor

<b>Inspection Date:</b> 11/05/2014	<b>Inspector:</b> NJL	<b>Deck:</b> N N/A (NBI)
<b>Notes:</b>		<b>Super:</b> N N/A (NBI)
NJL inspection comments- ASPHALT- LIGHT DEPRESSIONS AND CRACKS ON TRAVELWAY ASPHALT. REPAIRED ASPHALT PATCH ON NORTH HAS SOME LIGHT SETTLEMENT OVER CP; ASPHALT CRACKED ON SOUTH. CULVERT: CP- MINOR SETTLEMENT AND MISALIGNMENT. AREAS OF SEPARATION IN BOTH SPANS. SUBSTRUCTURE: ABUTMENT- CONCRETE HEADWALL ON NORTH, FINE CRACKS. OTHER ABUTMENT- HEADWALL TIPPING ON SOUTH.		<b>Substr:</b> N N/A (NBI)
		<b>Culvert:</b> 4 Poor

# Bridge Inspection Report

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## Inspection History:

<b>Inspection Date:</b> 03/17/2014	<b>Inspector:</b> NJL	<b>Deck:</b> N N/A (NBI)
<b>Notes:</b> NJL inspection comments- ASPHALT- MINOR DEPRESSIONS AND CRACKS ON TRAVELWAY ASPHALT. REPAIRED ASPHALT PATCH ON NORTH HAS SOME MINOR SETTLEMENT OVER CP; ASPHALT CRACKED ON SOUTH. CULVERT: CP- MINOR SETTLEMENT AND MISALIGNMENT. AREAS OF SEPARATION IN BOTH SPANS. SUBSTRUCTURE: ABUTMENT- CONCRETE HEADWALL ON NORTH, FINE CRACKS. OTHER ABUTMENT- HEADWALL TIPPING ON SOUTH.		<b>Super:</b> N N/A (NBI) <b>Substr:</b> N N/A (NBI) <b>Culvert:</b> 4 Poor
PICTURE: D134- 35. ASPHALT CRACKED ON EAST APPROACH AND NEAR WHITE LINE ON SOUTH.		
<b>Inspection Date:</b> 11/13/2013	<b>Inspector:</b> KLM	<b>Deck:</b> N N/A (NBI)
<b>Notes:</b> KLM inspection comments- ASPHALT- MINOR DEPRESSIONS AND CRACKS ON TRAVELWAY ASPHALT. REPAIRED ASPHALT PATCH ON NORTH HAS SOME MINOR SETTLEMENT OVER CP. CULVERT: CP- MINOR SETTLEMENT AND MISALIGNMENT. AREAS OF SEPARATION ON BOTH SPANS. SUBSTRUCTURE: ABUTMENT- NEW CONCRETE AT NORTH. HEADWALL TIPPING ON SOUTH.		<b>Super:</b> N N/A (NBI) <b>Substr:</b> N N/A (NBI) <b>Culvert:</b> 4 Poor
<b>Inspection Date:</b> 03/14/2013	<b>Inspector:</b> KLM	<b>Deck:</b> N N/A (NBI)
<b>Notes:</b> KLM inspection comments- ASPHALT- MINOR DEPRESSIONS AND CRACKS ON TRAVELWAY ASPHALT. REPAIRED ASPHALT PATCH ON NORTH HAS SOME MINOR SETTLEMENT OVER CP. CULVERT: CP- MINOR SETTLEMENT AND MISALIGNMENT. AREAS OF SEPARATION ON BOTH SPANS. SUBSTRUCTURE: ABUTMENT- NEW CONCRETE AT NORTH. HEADWALL TIPPING ON SOUTH.		<b>Super:</b> N N/A (NBI) <b>Substr:</b> N N/A (NBI) <b>Culvert:</b> 4 Poor
<b>Inspection Date:</b> 11/15/2012	<b>Inspector:</b> KLM	<b>Deck:</b> N N/A (NBI)
<b>Notes:</b> KLM inspection comments- ASPHALT- SMALL DEPRESSION ON WEST BOUND TRAVELWAY. PATCHED AT NORTH. CULVERT: CP- MINOR SETTLEMENT AND MISALIGNMENT. AREAS OF SEPERATION BOTH SPANS. SUBSTRUCTURE: ABUTMENT- NEW CONCRETE AT NORTH. HEADWALL TIPPING ON SOUTH.		<b>Super:</b> N N/A (NBI) <b>Substr:</b> N N/A (NBI) <b>Culvert:</b> 4 Poor
<b>Inspection Date:</b> 03/14/2012	<b>Inspector:</b> MHC	<b>Deck:</b> N N/A (NBI)
<b>Notes:</b> MHC inspection comments- ASPHALT- SMALL DEPRESSION ON WEST BOUND TRAVELWAY. PATCHED AT NORTH. CULVERT: CP- MINOR SETTLEMENT AND MISALIGNMENT. AREAS OF SEPERATION BOTH SPANS. SUBSTRUCTURE: ABUTMENT- NEW CONCRETE AT NORTH. HEADWALL PUSHING AT SOUTH.		<b>Super:</b> N N/A (NBI) <b>Substr:</b> N N/A (NBI) <b>Culvert:</b> 4 Poor
PICTURES: D085 3. RAIL DAMAGE AT SOUTHWEST.		

# Bridge Inspection Report

Bedford 090/065

## Inspection History:

<b>Inspection Date:</b> 11/21/2011	<b>Inspector:</b> MHC	<b>Deck:</b> N N/A (NBI)
<b>Notes:</b> MHC inspection comments- ASPHALT- SMALL DEPRESSION ON WEST BOUND TRAVELWAY. PATCHED AT NORTH. CULVERT: CP- MINOR SETTLEMENT AND MISALIGNMENT. AREAS OF SEPERATION BOTH SPANS. SUBSTRUCTURE: ABUTMENT- NEW CONCRETE AT NORTH. HEADWALL PUSHING AT SOUTH.		<b>Super:</b> N N/A (NBI)
		<b>Substr:</b> N N/A (NBI)
		<b>Culvert:</b> 4 Poor

- PICTURES: D079  
 12. NEW CONCRETE ABUTMENT.  
 13. PIPE SEPERATION SPAN #2.  
 14. HEADWALL PUSHING OVER SPAN #1.  
 15. PIPE SEPERATION SPAN #1.  
 16. ASPHALT PATCH AND NEW RAIL AT NORTH.

<b>Inspection Date:</b> 03/03/2011	<b>Inspector:</b> NJL	<b>Deck:</b> N N/A (NBI)
<b>Notes:</b> NJL inspection comments- ASPHALT- 3" PLUS DEPRESSION AND 5" CRACK ON NORTH SHOULDER. SMALL DEPRESSION ON WEST BOUND TRAVELWAY. CULVERT: CP- SETTLEMENT AND MISALIGNMENT. WATER PIPING THOUGH SEVERAL SECTION UPSTREAM. VOIDS ABOVE AND SIDES OF PIPES. 9" TO 12" OF SEPERATION AT CP IN AREAS AND VOIDS WITH 3' TO 4' OF PENETRATION. 3" SEPARATION BETWEEN SECTIONS #1 AND #2, #14 AND #15, SPAN #1. 12" SEPARATION BETWEEN SECTION #16 AND #17, SPAN #1. 4" SEPARATION BETWEEN SECTION #15 AND #16, SPAN #2. 2" SEPARATION BETWEEN SECTION #5 AND #6, SPAN #2. SUBSTRUCTURE: ABUTMENT- STONE MASONRY- VOIDS WITH 5'TO 6' OF PENETRATION ON NORTH HEADWALL AND SCOUR.		<b>Super:</b> N N/A (NBI)
		<b>Substr:</b> N N/A (NBI)
		<b>Culvert:</b> 4 Poor

- PICTURES: D061-  
 14. NORTH SHOULDER SETTLED, SEVERAL CRACKS WITH UP TO 5" IN WIDTH.  
 15. CONTINUATION OF SETTLEMENT ON NORTH SHOULDER.

<b>Inspection Date:</b> 08/04/2010	<b>Inspector:</b> KLM	<b>Deck:</b> N N/A (NBI)
<b>Notes:</b> KLM inspection comments- ASPHALT- 3" DEPRESSION AND 4" CRACK ON NORTH SHOULDER. SMALL DEPRESSION ON WEST BOUND TRAVELWAY. CULVERT: CP- SETTLEMENT AND MISALIGNMENT. WATER PIPING THOUGH SEVERAL SECTION UPSTREAM. VOIDS ABOVE AND SIDES OF PIPES. 9" TO 12" OF SEPERATION AT CP IN AREAS AND VOIDS WITH 3' TO 4' OF PENETRATION. 3" SEPARATION BETWEEN SECTIONS #1 AND #2, #14 AND #15, SPAN #1. 12" SEPARATION BETWEEN SECTION #16 AND #17, SPAN #1. 4" SEPARATION BETWEEN SECTION #15 AND #16, SPAN #2. 2" SEPARATION BETWEEN SECTION #5 AND #6, SPAN #2. SUBSTRUCTURE: ABUTMENT- STONE MASONRY- VOIDS WITH 5'TO 6' OF PENETRATION ON NORTH HEADWALL AND SCOUR.		<b>Super:</b> N N/A (NBI)
		<b>Substr:</b> N N/A (NBI)
		<b>Culvert:</b> 4 Poor

- PICTURES: D053-  
 03-25.

<b>Inspection Date:</b> 03/10/2010	<b>Inspector:</b> KLM	<b>Deck:</b> N N/A (NBI)
<b>Notes:</b> KLM- INSPECTION COMMENTS- CULVERT: CP- SETTLEMENT AND MISALIGNMENT. WATER PIPING THOUGH SEVERAL SECTIONS UPSTREAM. VOIDS ABOVE AND ON SIDES OF PIPES. SUBSTRUCTURE: ABUTMENT- STONE MASONRY- VOIDS AND SCOUR.		<b>Super:</b> N N/A (NBI)
		<b>Substr:</b> N N/A (NBI)
		<b>Culvert:</b> 4 Poor

# Bridge Inspection Report

Bedford 090/065

## Inspection History:

<b>Inspection Date:</b> 11/10/2009	<b>Inspector:</b> KLM	<b>Deck:</b> N N/A (NBI)
<b>Notes:</b>		<b>Super:</b> N N/A (NBI)
KLM- INSPECTION COMMENTS-		<b>Substr:</b> N N/A (NBI)
CULVERT: CP- SETTLEMENT AND MISALIGNMENT. WATER PIPING THOUGH SEVERAL		<b>Culvert:</b> 4 Poor
SECTIONS UPSTREAM. VOIDS ABOVE AND ON SIDES OF PIPES.		
SUBSTRUCTURE: ABUTMENT- STONE MASONRY- VOIDS AND SCOUR.		

<b>Inspection Date:</b> 03/17/2009	<b>Inspector:</b> KLM	<b>Deck:</b> N N/A (NBI)
<b>Notes:</b>		<b>Super:</b> N N/A (NBI)
KLM- INSPECTION COMMENTS-		<b>Substr:</b> N N/A (NBI)
CULVERT: CP- SETTLEMENT AND MISALIGNMENT. WATER PIPING THOUGH SEVERAL		<b>Culvert:</b> 4 Poor
SECTIONS UPSTREAM. VOIDS ABOVE AND ON SIDES OF PIPES.		
ABUTMENT: STONE MASONRY- VOIDS AND SCOUR.		

PICTURES: D027- 46- 57.

<b>Inspection Date:</b> 08/15/2008	<b>Inspector:</b> RLM	<b>Deck:</b> N N/A (NBI)
<b>Notes:</b>		<b>Super:</b> N N/A (NBI)
RLM- INSPECTION COMMENTS-		<b>Substr:</b> N N/A (NBI)
CULVERT: CP- SETTLEMENT AND MISALIGNMENT. WATER PIPING THOUGH SEVERAL		<b>Culvert:</b> 4 Poor
SECTIONS UPSTREAM. VOIDS ABOVE PIPES.		
ABUTMENT: STONE MASONRY- VOIDS AND SCOUR.		

PICTURES: D011-

- 28. VOIDS AT NORTH END OF WEST BARREL.
- 29. VOIDS AT NORTH END OF WEST BARREL.
- 30. VOIDS AT NORTH END OF WEST BARREL.
- 31. VOIDS AT NORTH END OF WEST BARREL LOOKING BETWEEN BARRELS.
- 32. NORTH ELEVATION VOID.
- 33. NORTH ELEVATION VOID.
- 34. EAST BARREL SETTLEMENT AT NORTH.
- 35. SOUTHWEST VOIDS AND SETTLEMENT.
- 36. SOUTHWEST VOIDS AND SETTLEMENT.
- 37. WEST APPROACH.
- 38. ASPHALT CRACKS AND SETTLEMENT AT NORTH.

## Copy Distribution:

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