

# Bridge Inspection Report

**05093**  
**SH 80-Scott Co.**  
**over**  
**Dutch Creek**



**Inspection Date:**

**Inspected By:**

**Inspection Type(s):**

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Inspector:

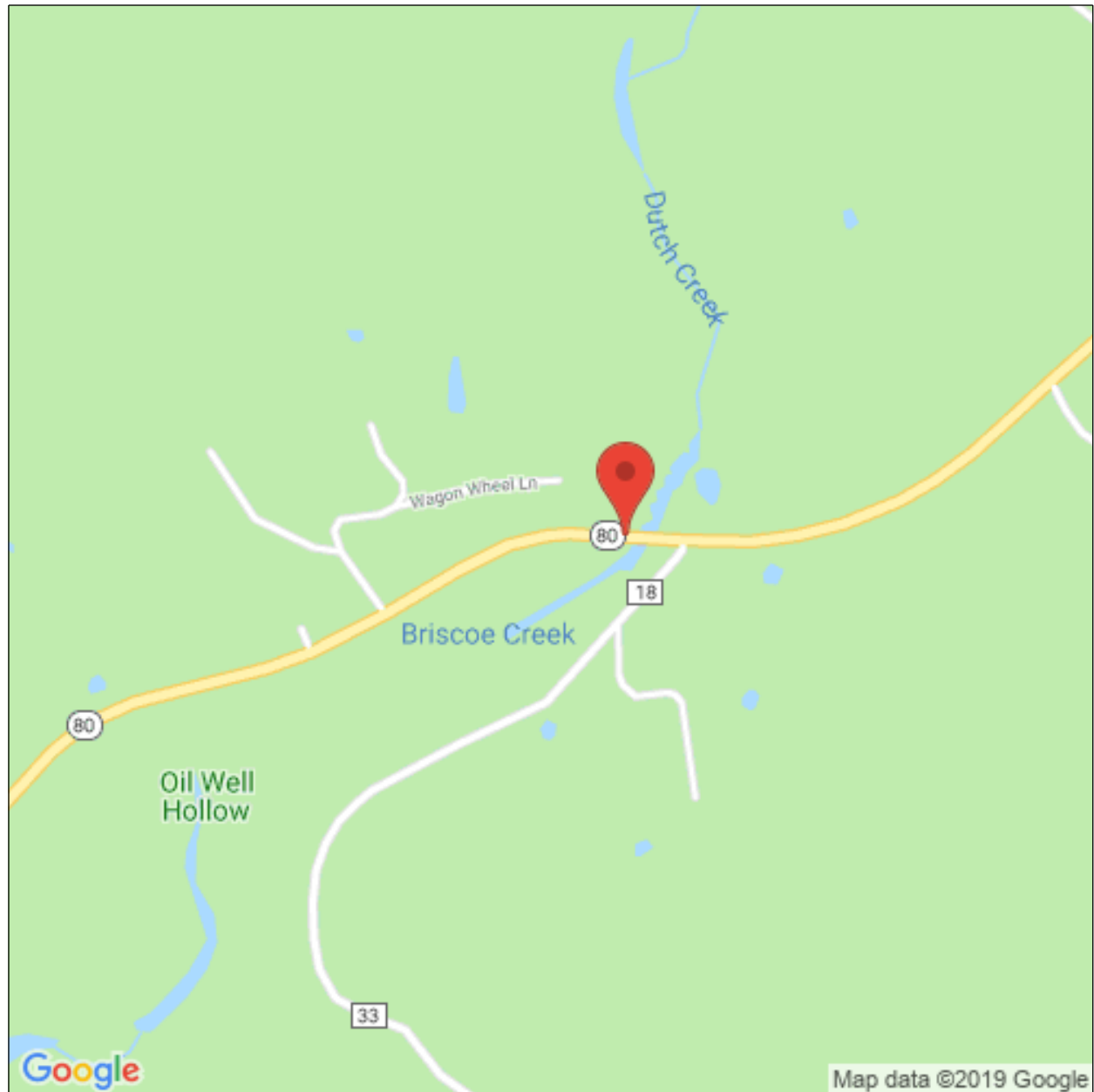
Structure Number: 05093

Inspection Date:

Facility Carried: SH 80-Scott Co.

## Bridge Inspection Report

### Location Map



Latitude: 34.95668

Longitude: -93.72110

Inspector:

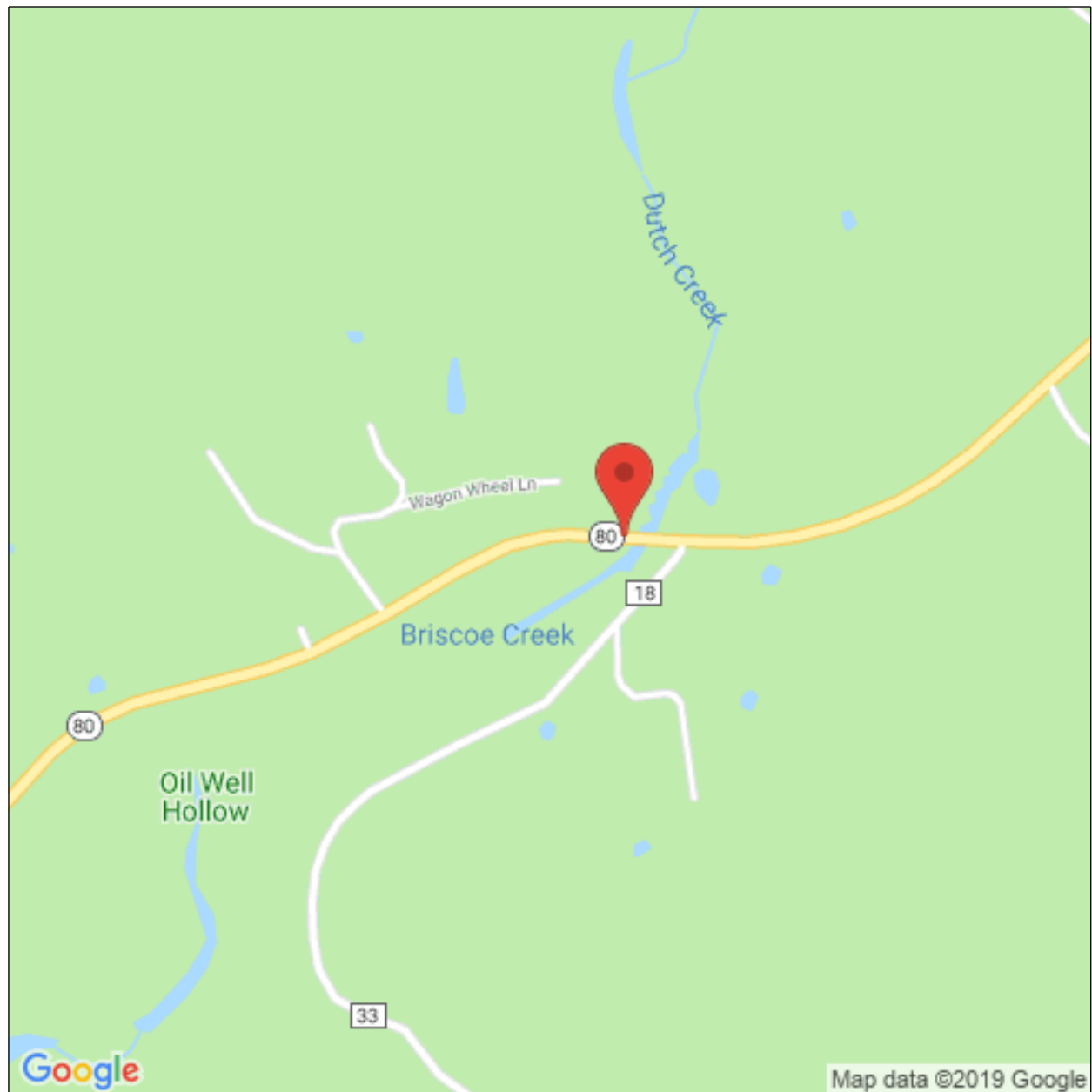
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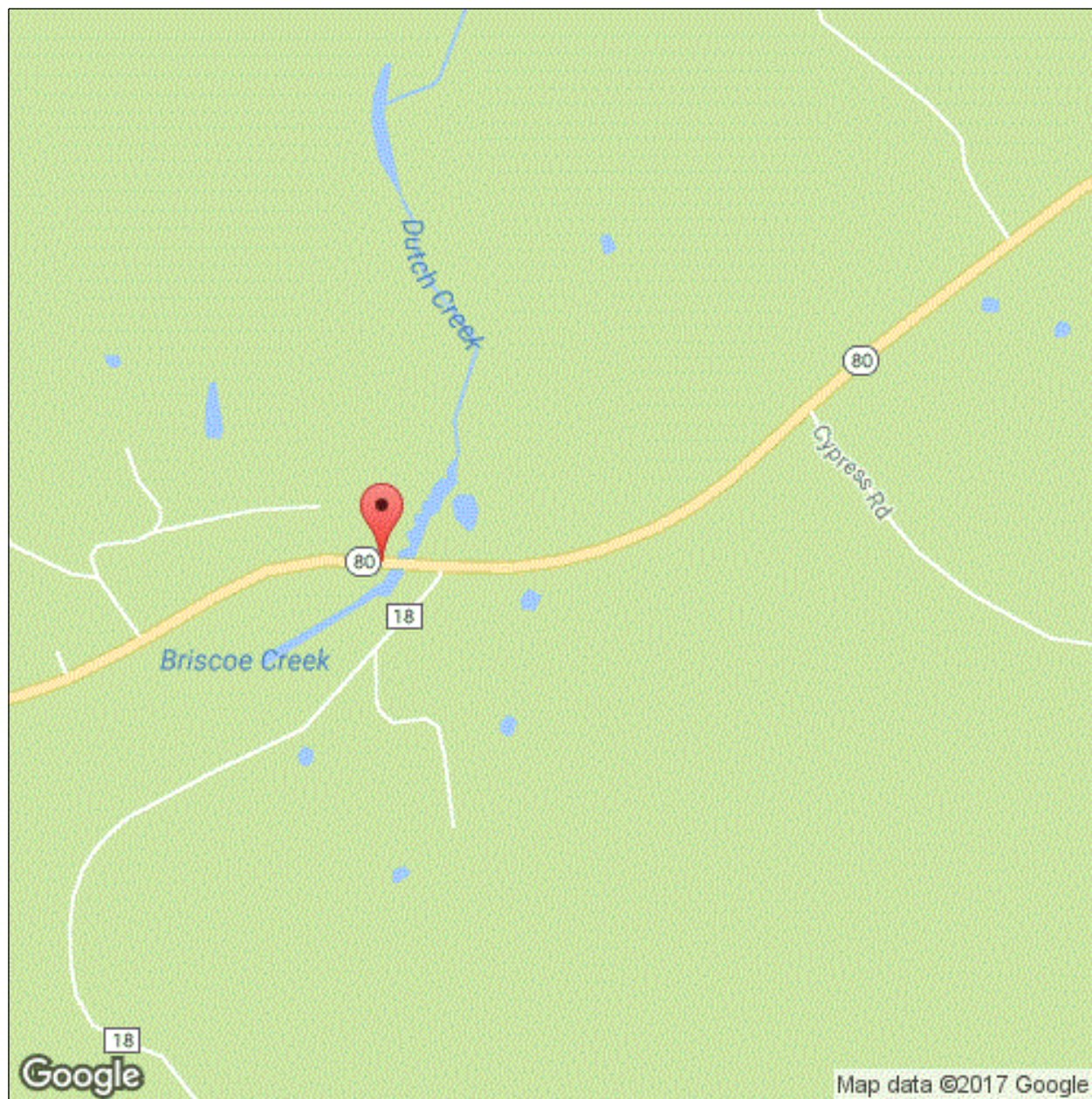
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### Location Map



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Longitude: -93.72110



Inspector:

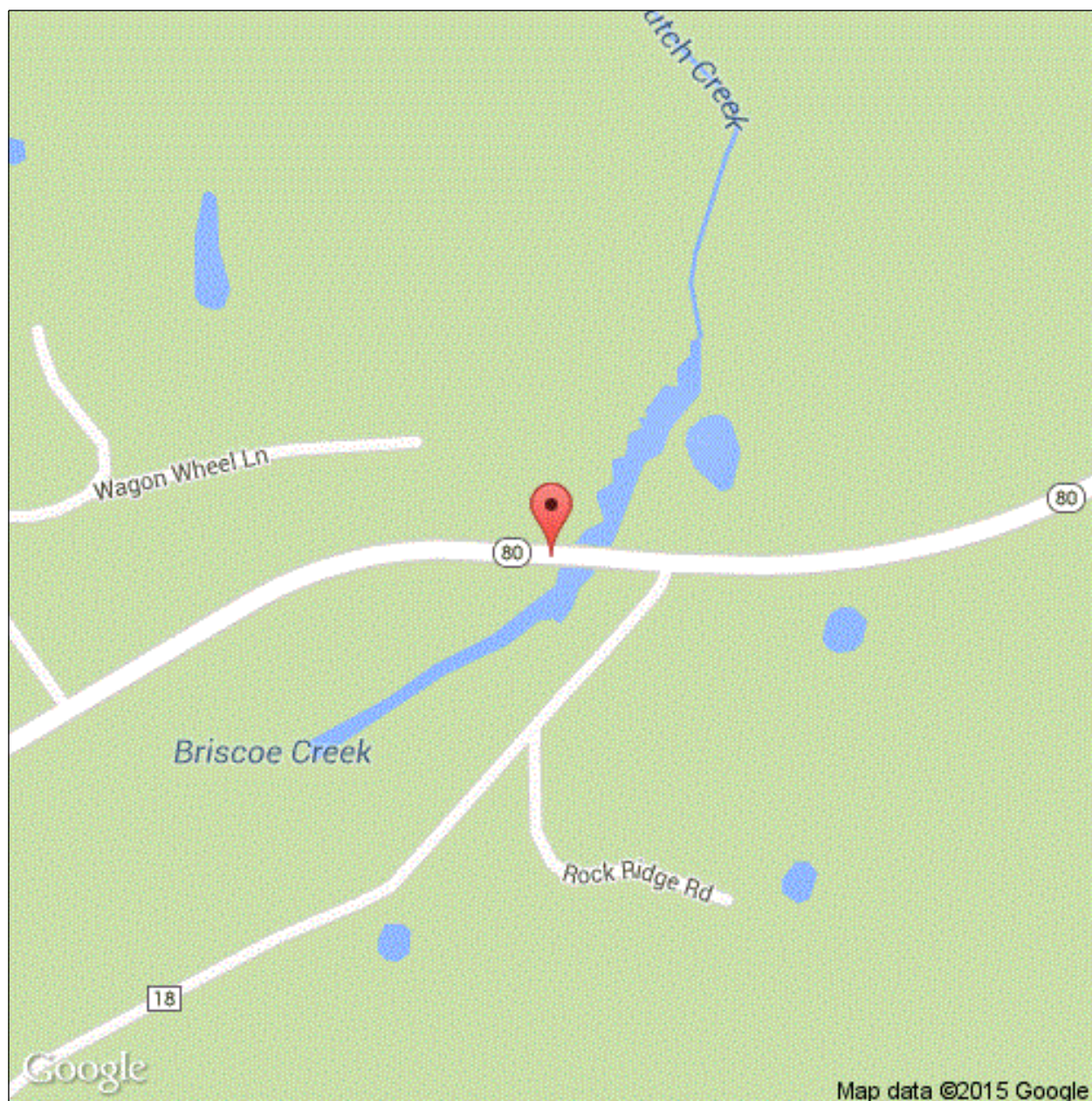
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### Location Map



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## **Bridge Inspection Report**

### **Executive Summary**

02/22/2017 JPB & SPC-Routine and Underwater Type 2 Inspections conducted on this date.

Underwater Type 2 Inspection: Wading and probing indicate footing exposed at Bt 3 but are well keyed into the rock streambed with no apparent undermining. No scour issues at this inspection.

The deck condition appears to be deteriorating since last inspection. The bearings and structural steel has active corrosion adjacent to the abutments. Leaking deck joints appear to be contributing to the deficiencies. See maintenance needs for additional information.

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## Bridge Inspection Report

## National Bridge Inventory

IDENTIFICATION		INSPECTIONS	
(1) STATE CODE	056 - Arkansas	(90) INSPECTION DATE	03/25/2019
(8) STRUCTURE NUMBER	05093	(91) DESIGNATED INSPECTION FREQUENCY	24
(5) INV. ROUTE (ON/UNDER)	1 3 1 80 0	(92) CRITICAL FEATURE INSPECTION	(93) CFI DATE
(2) HIGHWAY AGENCY	04 (3) COUNTY CODE 127	A. FRACTURE CRITICAL DETAIL	N
(4) PLACE CODE	00000	B. UNDERWATER INSPECTION	N
(6) FEATURES INTERSECTED	Dutch Creek	C. OTHER SPECIAL	N
(7) FACILITY CARRIED	SH 80-Scott Co.		
(9) LOCATION	1.0 MI W YELL CO LINE		
(11) MILEPOINT 22.475	(12) BASE HIGHWAY NETWORK 0		
(13A) LRS INVENTORY ROUTE	0000000000 (13B) SUBROUTE NUMBER 00		
(16) LATITUDE 34.95668	(17) LONGITUDE -93.72110		
(98A) BORDER BRIDGE CODE			
PERCENT RESPONSIBILITY	(99) BORDER BRIDGE STRUCT		
STRUCTURE TYPE AND MATERIAL		CONDITION	
(43) STRUCTURE TYPE, MAIN		(58) DECK	5
A) KIND OF MATERIAL/DESIGN: 3 - Steel		(59) SUPERSTRUCTURE	5
B) TYPE OF DESIGN/CONSTR: 02 - Stringer/Multi-beam or Girder		(60) SUBSTRUCTURE	6
(44) STRUCTURE TYPE, APPROACH SPANS		(61) CHANNEL & CHANNEL PROTECTION	8
A) KIND OF MATERIAL/DESIGN: 0 - Other		(62) CULVERT	N
B) TYPE OF DESIGN/CONSTR: 00 - Other			
(45) NUMBER OF SPANS IN MAIN	4		
(46) NUMBER OF APPROACH	0		
(107) DECK STRUCTURE TYPE	1		
(108A) WEARING SURFACE	1		
(108B) DECK MEMBRANE	0		
(108C) DECK PROTECTION	0		
AGE OF SERVICE		LOAD RATING AND POSTING	
(27) YEAR BUILT	1968	(31) DESIGN LOAD	2
(106) YEAR RECONSTRUCTED	0000	(63) METHOD USED TO DETERMINE OPERATING RATING	1
(42) TYPE OF SERVICE	ON 1 UNDER 5	(64) OPERATING RATING	52.0
(28) LANES	ON 02 UNDER 00	(65) METHOD USED TO DETERMINE INVENTORY RATING	1
(29) AVERAGE DAILY TRAFFIC	540	(66) INVENTORY RATING	31.0
(19) BYPASS DETOUR LENGTH	10	(70) BRIDGE POSTING	5
(30) YEAR OF AVERAGE DAILY TRAFFIC	2014	(41) STRUCTURE OPEN/POSTED/CLOSED	A
(109) AVERAGE DAILY TRUCK TRAFFIC	1		
GEOMETRIC DATA		APPRAISAL	
(48) LENGTH OF MAX SPAN (ft.)	57	(67) STRUCTURAL EVALUATION	5
(49) STRUCTURE LENGTH (ft.)	230	(68) DECK GEOMETRY	4
(50) CURB/SIDEWALK WIDTHS (ft.)	LEFT 1.4 RIGHT 1.4	(69) UNDERCLEARANCES, VERTICAL & HORIZONTAL	N
(51) BRDG RDWY WIDTH CURB-TO-CURB (ft.)	24.0	(71) WATERWAY ADEQUACY	8
(52) DECK WIDTH, OUT-TO-OUT (ft.)	30	(72) APPROACH ROADWAY ALIGNMENT	8
(32) APPROACH ROADWAY WIDTH (ft.)	21.0	(36) TRAFFIC SAFETY FEATURE	
(33) BRIDGE MEDIAN	0	36A) BRIDGE RAILINGS:	1
(34) SKEW (DEG.)	30	36B) TRANSITIONS:	1
(35) STRUCTURE FLARED	0	36C) APPROACH GUARDRAIL:	1
(10) INV RTE, MIN VERT CLEAR (ft.)	99.99	36D) APPROACH GUARDRAIL ENDS:	1
(47) TOTAL HORIZONTAL CLEARANCE (ft.)	26.9	(113) SCOUR CRITICAL BRIDGES	8
(53) VERTICAL CLEARANCE OVER BRIDGE ROADWAY (ft.)	99.99	SUFFICIENCY RATING	73.5
(54) VERTICAL UNDER CLEARANCE (ft.)	N 0	STATUS	0
(55) LATERAL UNDER CLEARANCE RIGHT (ft.)	N 99.9		
(56) MIN LATERAL UNDER CLEARANCE (ft.)	0		
PROPOSED IMPROVEMENTS		CLASSIFICATION	
(75A) TYPE OF WORK PROPOSED	(75B) WORK DONE BY	(112) NBIS BRIDGE LENGTH	Y
(76) LENGTH OF STRUCTURE IMPROVEMENT (ft.)	0	(104) HIGHWAY SYSTEM OF THE INVENTORY ROUTE	0
(94) BRIDGE IMPROVEMENT COST (\$)	0	(26) FUNCTIONAL CLASSIFICATION OF INVENTORY ROUTE	07
(95) ROADWAY IMPROVEMENT COST (\$)	0	(100) STRAHNET HIGHWAY DESIGNATION	0
(96) TOTAL PROJECT COST	0	(101) PARALLEL STRUCTURE DESIGNATION	N
(97) YEAR OF IMPROVEMENT COST ESTIMATE		(102) DIRECTION OF TRAFFIC	2
(114) FUTURE ADT	671	(103) TEMP STRUCTURE	
(115) YEAR OF FUTURE ADT	2028	(105) FEDERAL LANDS HIGHWAYS	0
		(110) DESIGNATED NATIONAL NETWORK	0
		(20) TOLL	3
		(21) MAINTENANCE RESPONSIBILITY	01
		(22) OWNER	01
		(37) HISTORICAL	5
		NAVIGATION DATA	
		(38) NAVIGATION CONTROL	0
		(111) PIER OR ABUTMENT PROTECTION	1
		(39) NAV VERT CLEARANCE (ft.)	0
		(116) MIN NAVIGATION VERT CLEARANCE, VERT LIFT BRIDGE (ft.)	0
		(40) NAV HORIZONTAL CLEARANCE (ft.)	0

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## Bridge Inspection Report

## Element Inspection

	Environment	Total Quantity	Units	Condition State 1	Condition State 2	Condition State 3	Condition State 4
<b>12 - Reinforced Concrete Deck</b>	1- Ben.	5928	sq. ft.	4729	813	386	0
	-Hairline map cracking with leaching and light scale is visible from underside of deck on all spans. -Transverse cracks at approximately 12" centers with delaminated areas and spalling with sections of exposed reinforcing steel with initial section loss that have very little concrete cover. -Soft deteriorated concrete with severe scale in the Lt gutter of Span 1. -Spalling with exposed reinforcing steel visible on the undersurface of the deck at the deck drains. The exposed reinforcing steel has initial section loss. -Numerous areas of delaminated concrete and failing previous repairs.						
1080 - Delamination/Spall/Patched Area		474		0	350	124	0
1090 - Exposed Rebar		62		0	0	62	0
1120 - Efflorescence/Rust Staining		9		0	9	0	0
1130 - Cracking (RC and Other)		654		0	454	200	0
<b>107 - Steel Open Girder/Beam</b>	1- Ben.	1140	ft.	0	1101	39	0
	-Paint system has freckled rust throughout. -Rust appears to be heaviest on the bottom flanges at the abutments where there is active corrosion with slabs of rust and up to 1/8" section loss to the bottom flanges at the ends of the beams. -There is active corrosion in the ends of the beams where the deck joint seals leak water and debris. -Active corrosion with flaking rust on the top flanges where the deck drains spill water on the superstructure.						
1000 - Corrosion		1140		0	1101	39	0
515 - Steel Protective Coating		7410	sq. ft.	0	3578	3578	254
<b>205 - Reinforced Concrete Column</b>	1- Ben.	6	each	0	6	0	0
	-Bent 4 columns have vertical cracks on inside face of Column 1 and back face of Column 2. -There is Light abrasion at the base of the columns.						
1130 - Cracking (RC and Other)		2		0	2	0	0
1190 - Abrasion/Wear (PSC/RC)		4		0	4	0	0
<b>215 - Reinforced Concrete Abutment</b>	1- Ben.	58	ft.	56	1	1	0
	-Bent # 1 has a shallow spall with exposed reinforcing steel in Bay # 2 adjacent to Beam # 3. -Several pieces of form work tie wire exposed in the back wall of bent # 1.						
1090 - Exposed Rebar		1		0	0	1	0
1130 - Cracking (RC and Other)		1		0	1	0	0
<b>220 - Reinforced Concrete Pile Cap/Footing</b>	1- Ben.	36	ft.	36	0	0	0

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## Element Inspection

<b>234 - Reinforced Concrete Pier Cap</b>	1- Ben.	90	ft.	87	1	2	0
	-Shallow spalling with the legs of slab bolsters exposed at the undersurface of the caps. -A few isolated areas of shallow spalling with exposed reinforcing steel visible at the undersurface of the Rt side of Bent 2 where reinforcing steel appears to have been placed against the forms during the construction process. (Stirrups). There is no apparent section loss to the exposed steel.						
1080 - Delamination/Spall/Patched Area		1		0	1	0	0
1090 - Exposed Rebar		2		0	0	2	0
<b>302 - Compression Joint Seal</b>	1- Ben.	156	ft.	0	12	119	25
	-Compression seal at Bent 2 is deteriorated and fallen out and is resting on the bent cap. -Bents 3 & 4 joint seals have adhesion failure in areas with sections sagging and section that are bulging into traffic.						
2310 - Leakage		73		0	0	73	0
2320 - Seal Adhesion		17		0	7	10	0
2330 - Seal Damage		32		0	0	14	18
2340 - Seal Cracking		18		0	5	6	7
2350 - Debris Impaction		16		0	0	16	0
<b>311 - Movable Bearing</b>	1- Ben.	20	each	0	10	10	0
	-Expansion bearings have a rust coating with areas of active corrosion. -Leaking deck joints contribute to corrosion of the bearings.						
1000 - Corrosion		20		0	10	10	0
515 - Steel Protective Coating		20	sq. ft.	0	0	10	10
3440 - Effectiveness (Steel Protective Coatings)		20		0	0	10	10
<b>313 - Fixed Bearing</b>	1- Ben.	20	each	0	12	8	0
	-Fixed bearings at the abutments have active corrosion with pack rust.						
515 - Steel Protective Coating		20	sq. ft.	0	0	12	8
3440 - Effectiveness (Steel Protective Coatings)		20		0	0	12	8
<b>330 - Metal Bridge Railing</b>	1- Ben.	456	ft.	383	0	73	0
	-The Rt top bridge rail on Span 1 is missing two anchor bolts at posts 2 & 3. -Span 1 Rt, Post 1 has concrete cracking at the base of the post. -Damage defect is used for transverse cracks in the curb the rail posts are attached to.						
1020 - Connection		2		0	0	2	0
7000 - Damage		71		0	0	71	0

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**Bridge Inspection Report**

**Pictures**

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**Bridge Inspection Report**

**Sketches**



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### Bridge Inspection Report

## Maintenance Needs

**Date Reported:** 8/4/2011 12:00:00 AM

**Priority:** D - Routine

**Work Code:** Replace

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### Deficiency Description:

Expansion joint compression seals

Expansion joint compression seals are deteriorated in all expansion joints. The compression joint seals are sagging in many locations and has dropped down in numerous locations.

### Work Description:

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**Date Repairs Completed:**

**Maintenance Comments:**

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**Stage: Monitor**



PHOTO 1      Description      Bent # 4 joint seal failure.

**Stage: Monitor**



PHOTO 2      Description      Bent # 3 joint seal deterioration.

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## Bridge Inspection Report

### Maintenance Needs

**Date Reported:** 8/4/2011 12:00:00 AM

**Priority:** D - Routine

**Work Code:** Repair

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### Deficiency Description:

Superstructure

Superstructure has a failing paint system with areas of active corrosion. There is up to 1/8" section loss to the bottom flanges at this inspection. The ends of beams and bearing devices have flaking rust to the bottom flanges of beams and between the sole plates and masonry plates of bearing devices.

### Work Description:

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**Date Repairs Completed:**

**Maintenance Comments:**

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**Stage: Monitor**



PHOTO 1      Description      Active corrosion at the Beam ends typical.

**Stage: Monitor**



PHOTO 2      Description      Bent # 5 Beam # 4 active corrosion with layers of flaking rust.



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### Maintenance Needs

Stage: Monitor



PHOTO 3	Description	Bent # 5 Beam # 5 layers of flaking rust.
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## Bridge Inspection Report

### Maintenance Needs

Date Reported: 4/16/2013 12:00:00 AM

Priority: D - Routine

Work Code: Repair

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### Deficiency Description:

Deck

There are sealable deck cracks in all spans. The driving surface of the deck has shallow spalling with exposed reinforcing steel. The gutter on the left side of span # 1 has an area of soft and deteriorated concrete with delaminated areas. The overhang portion of the deck has areas of spalling with exposed reinforcing steel around the deck drains.

### Work Description:

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Date Repairs Completed:

Maintenance Comments:

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Stage: Monitor



PHOTO 1      Description      Span # 4 Rt spalling, delamination and temporary asphalt patches.

Stage: Monitor



PHOTO 2      Description      Span # 3 Rt spalling with exposed reinforcing steel.



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### Maintenance Needs

Stage: Monitor



PHOTO 3 Description Bent 2 deck joint seal missing

Stage: Monitor



PHOTO 5 Description Sealable deck cracking.

Stage: Monitor



PHOTO 4 Description Span # 2 adjacent to Bent # 2 spalling with exposed reinforcing steel and numerous deteriorating repairs.



PHOTO 6 Description Span # 1 Rt temporary asphalt patches.



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### Maintenance Needs

Stage: Monitor



PHOTO 7      Description      Span # 1 Lt spalling in the gutter.

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### Bridge Inspection Report

## Maintenance Needs

**Date Reported:** 4/16/2013 12:00:00 AM

**Priority:** D - Routine

**Work Code:** Repair

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### Deficiency Description:

Substructure

Bent # 2 has shallow spalling with exposed reinforcing steel in the undersurface of the bent cap on the right side.

### Work Description:

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**Date Repairs Completed:**

**Maintenance Comments:**

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**Stage:** Monitor



PHOTO 1      Description      Bent # 2 Rt undersurface of the cap.