

# Bridge Inspection Report

**B5039**  
**I-40-SEC 21-EB LNS**  
**over**  
**Middle Fk Horsehead Cr.**



**Inspection Date:**

**Inspected By:**

**Inspection Type(s):**

## TABLE OF CONTENTS

	PAGE NUMBER
LOCATION MAP	3
NATIONAL BRIDGE INVENTORY	7
ELEMENTS	8
PICTURES	10
SKETCHES	11

Inspector:

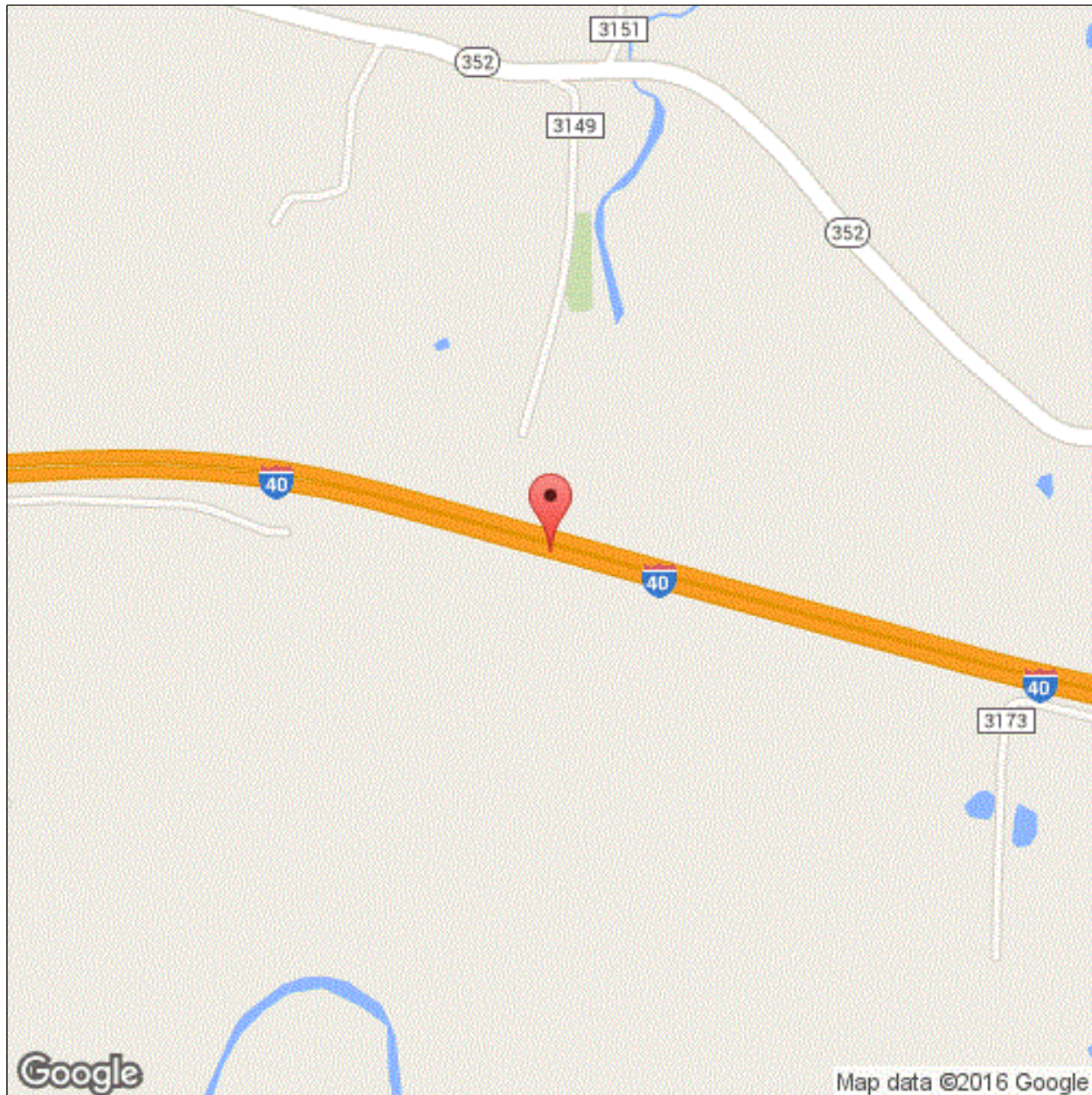
Inspection Date:

Structure Number: B5039

Facility Carried: I-40-SEC 21-EB LNS

## Bridge Inspection Report

### Location Map



Latitude: 35.496571

Longitude: -93.635170



Inspector:

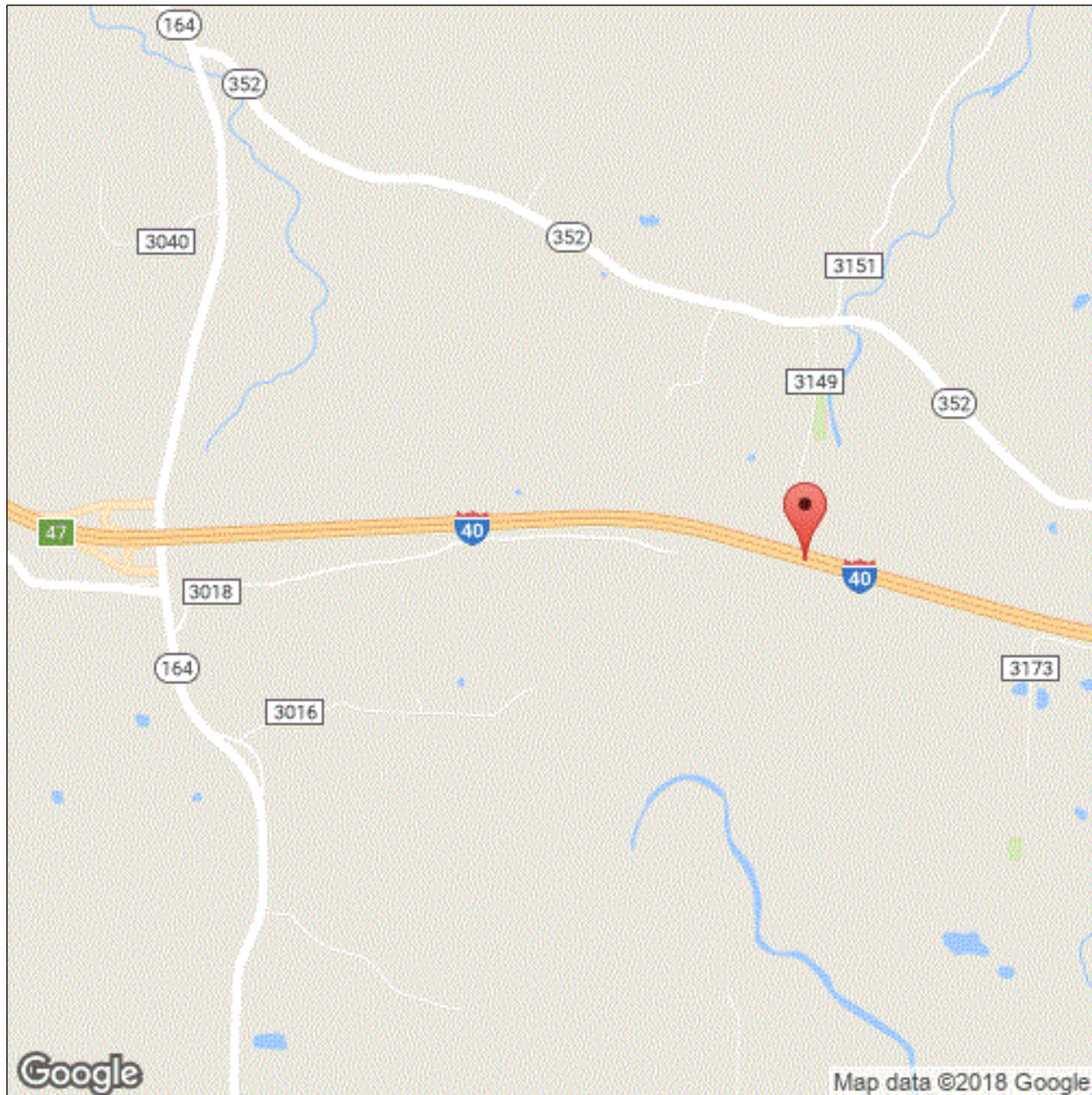
Structure Number: B5039

Inspection Date:

Facility Carried: I-40-SEC 21-EB LNS

## Bridge Inspection Report

### Location Map



Latitude: 35.496571

Longitude: -93.635170



Inspector:

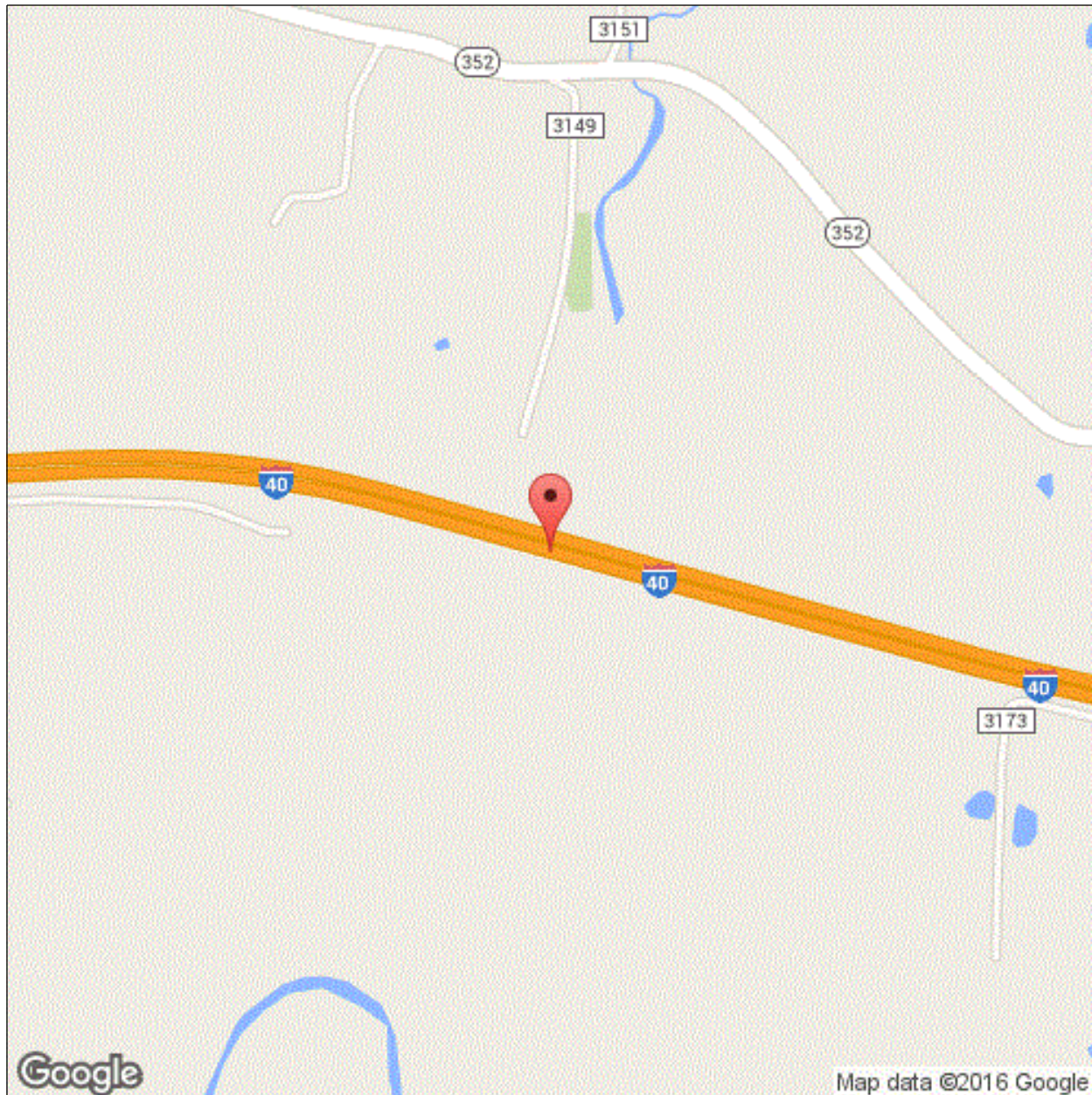
Inspection Date:

Structure Number: B5039

Facility Carried: I-40-SEC 21-EB LNS

## Bridge Inspection Report

### Location Map



Latitude: 35.496571

Longitude: -93.635170

**Inspector:**

**Inspection Date:**

**Structure Number:** B5039

**Facility Carried:** I-40-SEC 21-EB LNS

## **Bridge Inspection Report**

### **Executive Summary**

Inspector:

Structure Number: B5039

Inspection Date:

Facility Carried: I-40-SEC 21-EB LNS

## Bridge Inspection Report

## National Bridge Inventory

IDENTIFICATION		INSPECTIONS	
(1) STATE CODE	056 - Arkansas	(90) INSPECTION DATE	03/06/2018
(8) STRUCTURE NUMBER	B5039	(91) DESIGNATED INSPECTION FREQUENCY	24
(5) INV. ROUTE (ON/UNDER)	1 1 1 40 2	(92) CRITICAL FEATURE INSPECTION	(93) CFI DATE
(2) HIGHWAY AGENCY	08 (3) COUNTY CODE 071	A. FRACTURE CRITICAL DETAIL	N
(4) PLACE CODE	00000	B. UNDERWATER INSPECTION	N
(6) FEATURES INTERSECTED	Middle Fk Horsehead Cr.	C. OTHER SPECIAL	N
(7) FACILITY CARRIED	I-40-SEC 21-EB LNS		
(9) LOCATION	1.45 M E Of SH 164		
(11) MILEPOINT 47.960	(12) BASE HIGHWAY NETWORK 1		
(13A) LRS INVENTORY ROUTE	0000040210 (13B) SUBROUTE NUMBER 00		
(16) LATITUDE 35.496571	(17) LONGITUDE -93.635170		
(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 7	(60) SUBSTRUCTURE 7
B) TYPE OF DESIGN/CONSTR: 02 - Stringer/Multi-beam or Girder		(61) CHANNEL & CHANNEL PROTECTION 7	(62) CULVERT N
(44) STRUCTURE TYPE, APPROACH SPANS			
A) KIND OF MATERIAL/DESIGN: 0 - Other			
B) TYPE OF DESIGN/CONSTR: 00 - Other			
(45) NUMBER OF SPANS IN MAIN 3	(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	(106) YEAR RECONSTRUCTED 0000	(31) DESIGN LOAD	6
(42) TYPE OF SERVICE ON 1 UNDER 5		(63) METHOD USED TO DETERMINE OPERATING RATING	1
(28) LANES ON 02 UNDER 00		(64) OPERATING RATING	60.0
(29) AVERAGE DAILY TRAFFIC 22000	(19) BYPASS DETOUR LENGTH 10	(65) METHOD USED TO DETERMINE INVENTORY RATING	1
(30) YEAR OF AVERAGE DAILY TRAFFIC 2014		(66) INVENTORY RATING	36.0
(109) AVERAGE DAILY TRUCK TRAFFIC 1		(70) BRIDGE POSTING	5
		(41) STRUCTURE OPEN/POSTED/CLOSED	A
GEOMETRIC DATA		APPRAISAL	
(48) LENGTH OF MAX SPAN (ft.) 72	(49) STRUCTURE LENGTH (ft.) 203	(67) STRUCTURAL EVALUATION	7
(50) CURB/SIDEWALK WIDTHS (ft.) LEFT 0 RIGHT 0		(68) DECK GEOMETRY	6
(51) BRDG RDWY WIDTH CURB-TO-CURB (ft.) 39.0		(69) UNDERCLEARANCES, VERTICAL & HORIZONTAL	N
(52) DECK WIDTH, OUT-TO-OUT (ft.) 42.1		(71) WATERWAY ADEQUACY	8
(32) APPROACH ROADWAY WIDTH (ft.) 40.0		(72) APPROACH ROADWAY ALIGNMENT	8
(33) BRIDGE MEDIAN 0	(34) SKEW (DEG.) 20	(36) TRAFFIC SAFETY FEATURE	
(35) STRUCTURE FLARED 0	(10) INV RTE, MIN VERT CLEAR (ft.) 99.99	36A) BRIDGE RAILINGS:	1
(47) TOTAL HORIZONTAL CLEARANCE (ft.) 40.4		36B) TRANSITIONS:	1
(53) VERTICAL CLEARANCE OVER BRIDGE ROADWAY (ft.) 99.99		36C) APPROACH GUARDRAIL:	1
(54) VERTICAL UNDER CLEARANCE (ft.) N 0		36D) APPROACH GUARDRAIL ENDS:	1
(55) LATERAL UNDER CLEARANCE RIGHT (ft.) N 99.9		(113) SCOUR CRITICAL BRIDGES	8
(56) MIN LATERAL UNDER CLEARANCE (ft.) 0		SUFFICIENCY RATING 84.0	STATUS 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	1
(94) BRIDGE IMPROVEMENT COST (\$)	0	(26) FUNCTIONAL CLASSIFICATION OF INVENTORY ROUTE	01
(95) ROADWAY IMPROVEMENT COST (\$)	0	(100) STRAHNET HIGHWAY DESIGNATION	1
(96) TOTAL PROJECT COST	0	(101) PARALLEL STRUCTURE DESIGNATION	R
(97) YEAR OF IMPROVEMENT COST ESTIMATE		(102) DIRECTION OF TRAFFIC	1
(114) FUTURE ADT 14048	(115) YEAR OF FUTURE ADT 2028	(103) TEMP STRUCTURE	
		(105) FEDERAL LANDS HIGHWAYS	0
		(110) DESIGNATED NATIONAL NETWORK	1
		(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

Inspector:

Structure Number: B5039

Inspection Date:

Facility Carried: I-40-SEC 21-EB LNS

## 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.	8120	sq. ft.	1500	5520	1100	0
	MINOR TO MODERATE CRACKING & MINOR SCALE & SPALLING THROUGHOUT. MINOR TO MODERATE SPALLING AT JOINT 3. MINOR CRACKING IN SOFFIT. MINOR HONEYCOMB IN SPAN 2. MINOR DELAM, CRACKING & SPALLING W REBAR EXPOSED AROUND SOME DECK DRAINS.						
1080 - Delamination/Spall/Patched Area		1020			1020		
1130 - Cracking (RC and Other)		4600			3500	1100	
1190 - Abrasion/Wear (PSC/RC)		1000			1000		
<b>107 - Steel Open Girder/Beam</b>	1- Ben.	1407	ft.	1377	30	0	0
	MINOR TO MODERATE RUST IN HAUNCHED AREAS OF SOME BEAMS. MINOR OLD SECTION LOSS IN HAUNCHED AREAS OF SOME BEAMS						
1000 - Corrosion		30			30		
515 - Steel Protective Coating		11900	sq. ft.	11870	0	30	0
3440 - Effectiveness (Steel Protective Coatings)		30				30	
<b>205 - Reinforced Concrete Column</b>	1- Ben.	6	each	6			
	MINOR CRACKING & SCALE.						
<b>215 - Reinforced Concrete Abutment</b>	1- Ben.	90	ft.	90			
	MINOR CRACKING.						
<b>234 - Reinforced Concrete Pier Cap</b>	1- Ben.	84	ft.	82	2	0	0
	MINOR CRACKING & SCALE. MINOR DELAM, CRACKING & SPALLING IN BK FACE OF CAP 3 UNDER BEAM 4.						
1080 - Delamination/Spall/Patched Area		2			2		
<b>302 - Compression Joint Seal</b>	1- Ben.	166	ft.	0	4	37	125
	MODERATE DELAM & CRACKING IN ALL SEALS. SEALS AT ABUTMENT 1 & PIER 2 HAVE SEVERAL FAILED AREAS. SEAL AT PIER 3 HAS FAILED & FALLEN OUT OF JOINT.						
2310 - Leakage		125					125
2330 - Seal Damage		37				37	
2360 - Adjacent Deck or Header		4			4		
<b>311 - Movable Bearing</b>	1- Ben.	21	each	21			0
	MINOR RUST ON ALL BEARINGS.						
515 - Steel Protective Coating		63	sq. ft.	0	28	35	0
3440 - Effectiveness (Steel Protective Coatings)		63			28	35	



Inspector:

Structure Number: B5039

Inspection Date:

Facility Carried: I-40-SEC 21-EB LNS

### Bridge Inspection Report

#### Element Inspection

<b>313 - Fixed Bearing</b>	1- Ben.	21	each	21			
MINOR RUST ON ALL BEARINGS.							
515 - Steel Protective Coating		63	sq. ft.	0	28	35	0
3440 - Effectiveness (Steel Protective Coatings)		63			28	35	
<b>321 - Reinforced Concrete Approach Slab</b>	1- Ben.	2847	sq. ft.	2557	250	40	0
MINOR TO MODERATE CRACKING.							
1130 - Cracking (RC and Other)		290			250	40	
<b>330 - Metal Bridge Railing</b>	1- Ben.	406	ft.	406			
Aluminum Rail							
<b>331 - Reinforced Concrete Bridge Railing</b>	1- Ben.	406	ft.	406			
MINOR SCALE IN CONCRETE.							

Inspector:

Inspection Date:

Structure Number: B5039

Facility Carried: I-40-SEC 21-EB LNS

## Bridge Inspection Report

### Pictures

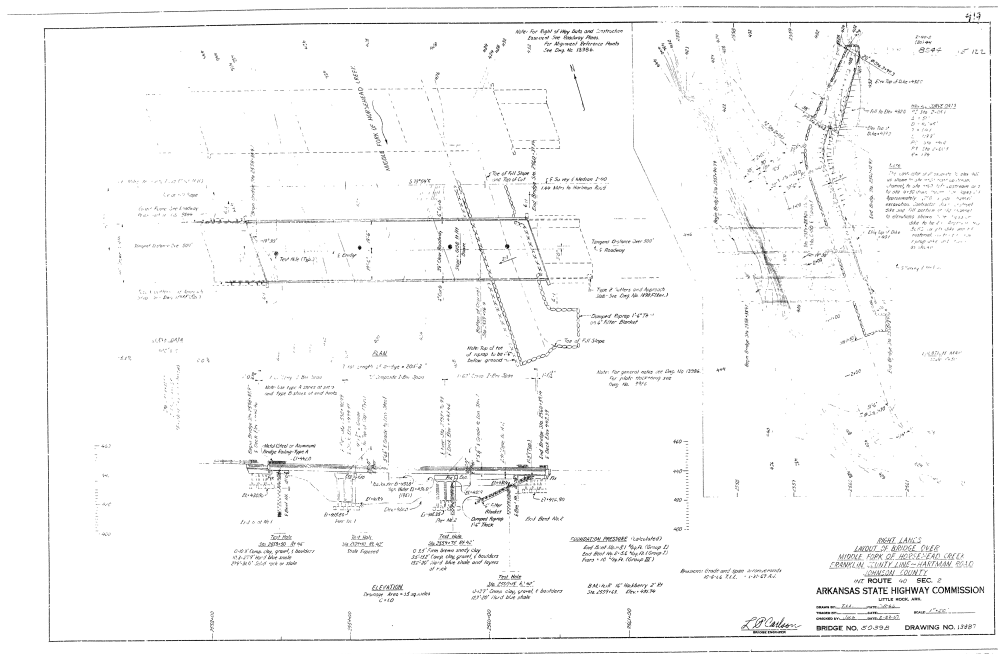


PHOTO 1

Description

PHOTO 2

Description

**Inspector:**

**Inspection Date:**

**Structure Number:** B5039

**Facility Carried:** I-40-SEC 21-EB LNS

**Bridge Inspection Report**

**Sketches**



Inspector:

Structure Number: B5039

Inspection Date:

Facility Carried: I-40-SEC 21-EB LNS

## Bridge Inspection Report

### Maintenance Needs

Date Reported: 2/21/2012 12:00:00 AM

Priority: D - Routine

Work Code:

---

#### Deficiency Description:

Deck joint #s 1 & 2 & 3

Joint # 1 approx. 90% of joint material is missing.

Joint # 2 all of joint material is missing.

Joint # 3 all of joint material is missing.

#### Work Description:

---

Date Repairs Completed:

Maintenance Comments:

---

Stage: Monitor



PHOTO 1      Description      Seals Failed at Joints.

Inspector:

Structure Number: B5039

Inspection Date:

Facility Carried: I-40-SEC 21-EB LNS

### Bridge Inspection Report

## Maintenance Needs

Date Reported: 2/21/2012 12:00:00 AM

Priority: D - Routine

Work Code:

---

### Deficiency Description:

Deck

Moderate unsealed cracks. Most of cracks are transverse. Minor Spalling at Joints.

### Work Description:

---

Date Repairs Completed:

Maintenance Comments:

---

Stage: Monitor



PHOTO 1      Description      Typ. Cracking in Deck.

Stage: Monitor



PHOTO 2      Description      Typ. Cracking in Deck.



Inspector:

Inspection Date:

Structure Number: B5039

Facility Carried: I-40-SEC 21-EB LNS

## Bridge Inspection Report

### Maintenance Needs

Stage: Monitor



PHOTO 3      Description      Typ. Cracking in Deck.

Stage: Monitor



PHOTO 4      Description      Patched & Spalled Areas at Joints.



Inspector:

Structure Number: B5039

Inspection Date:

Facility Carried: I-40-SEC 21-EB LNS

### Bridge Inspection Report

## Maintenance Needs

Date Reported: 03/06/2018

Priority: D - Routine

Work Code:

---

### Deficiency Description:

MINOR DRIFT IN CHANNEL BLOCKING FLOW AT PIER 3 ON LT. (UP) SIDE.

### Work Description:

---

Date Repairs Completed:

Maintenance Comments:

---

Stage: Open



PHOTO 1    Description    Drift at Pier 3.