

# Bridge Inspection Report

**A5446**  
**I-555NB-02-LM16.51**  
**over**  
**DRAINAGE DITCH NO. 61**



**Inspection Date:**

**Inspected By:**

**Inspection Type(s):**

Inspector:

Structure Number: A5446

Inspection Date:

Facility Carried: I-555NB-02-  
LM16.51

## Bridge Inspection Report

## National Bridge Inventory

IDENTIFICATION		INSPECTIONS	
(1) STATE CODE	056 - Arkansas	(90) INSPECTION DATE	11/19/2015
(8) STRUCTURE NUMBER	A5446	(91) DESIGNATED INSPECTION FREQUENCY	24
(5) INV. ROUTE (ON/UNDER)	1 1 1 555 1	(92) CRITICAL FEATURE INSPECTION	(93) CFI DATE
(2) HIGHWAY AGENCY	10 (3) COUNTY CODE 111	A. FRACTURE CRITICAL DETAIL	N
(4) PLACE CODE	00000	B. UNDERWATER INSPECTION	N
(6) FEATURES INTERSECTED	DRAINAGE DITCH NO. 61	C. OTHER SPECIAL	N
(7) FACILITY CARRIED	I-555NB-02-LM16.51		
(9) LOCATION	1.38 MI E OF PAYNEWAY ARK	CONDITION	
(11) MILEPOINT 16.51	(12) BASE HIGHWAY NETWORK 1	(58) DECK	5
(13A) LRS INVENTORY ROUTE	0000063080 (13B) SUBROUTE NUMBER 00	(59) SUPERSTRUCTURE 6	(60) SUBSTRUCTURE 6
(16) LATITUDE 35.53572	(17) LONGITUDE -90.47800	(61) CHANNEL & CHANNEL PROTECTION 7	(62) CULVERT N
(98A) BORDER BRIDGE CODE		LOAD RATING AND POSTING	
PERCENT RESPONSIBILITY	(99) BORDER BRIDGE STRUCT	(31) DESIGN LOAD	5
		(63) METHOD USED TO DETERMINE OPERATING RATING	1
		(64) OPERATING RATING	60
		(65) METHOD USED TO DETERMINE INVENTORY RATING	1
		(66) INVENTORY RATING	36
		(70) BRIDGE POSTING	5
		(41) STRUCTURE OPEN/POSTED/CLOSED	A
STRUCTURE TYPE AND MATERIAL		APPRAISAL	
(43) STRUCTURE TYPE, MAIN		(67) STRUCTURAL EVALUATION	6
A) KIND OF MATERIAL/DESIGN: 3 - Steel		(68) DECK GEOMETRY	5
B) TYPE OF DESIGN/CONSTR: 02 - Stringer/Multi-beam or Girder		(69) UNDERCLEARANCES, VERTICAL & HORIZONTAL	N
(44) STRUCTURE TYPE, APPROACH SPANS		(71) WATERWAY ADEQUACY	9
A) KIND OF MATERIAL/DESIGN: 0 - Other		(72) APPROACH ROADWAY ALIGNMENT	8
B) TYPE OF DESIGN/CONSTR: 00 - Other		(36) TRAFFIC SAFETY FEATURE	
(45) NUMBER OF SPANS IN MAIN 17	(46) NUMBER OF APPROACH 0	36A) BRIDGE RAILINGS:	1
(107) DECK STRUCTURE TYPE 1	(108A) WEARING SURFACE 1	36B) TRANSITIONS:	1
(108B) DECK MEMBRANE 0	(108C) DECK PROTECTION 0	36C) APPROACH GUARDRAIL:	1
		36D) APPROACH GUARDRAIL ENDS:	1
AGE OF SERVICE		(113) SCOUR CRITICAL BRIDGES	5
(27) YEAR BUILT 1973	(106) YEAR RECONSTRUCTED 0000	SUFFICIENCY RATING	0
(42) TYPE OF SERVICE ON 1	UNDER 5	STATUS 94.6	
(28) LANES ON 02	UNDER 00	CLASSIFICATION	
(29) AVERAGE DAILY TRAFFIC 15000	(19) BYPASS DETOUR LENGTH 1	(112) NBIS BRIDGE LENGTH	Y
(30) YEAR OF AVERAGE DAILY TRAFFIC 2014		(104) HIGHWAY SYSTEM OF THE INVENTORY ROUTE	1
(109) AVERAGE DAILY TRUCK TRAFFIC 1		(26) FUNCTIONAL CLASSIFICATION OF INVENTORY ROUTE	01
GEOMETRIC DATA		(100) STRAHNET HIGHWAY DESIGNATION	1
(48) LENGTH OF MAX SPAN (ft.) 80	(49) STRUCTURE LENGTH (ft.) 722	(101) PARALLEL STRUCTURE DESIGNATION	L
(50) CURB/SIDEWALK WIDTHS (ft.) LEFT 0	RIGHT 0	(102) DIRECTION OF TRAFFIC	1
(51) BRDG RDWY WIDTH CURB-TO-CURB (ft.)	37.1	(103) TEMP STRUCTURE	
(52) DECK WIDTH, OUT-TO-OUT (ft.)	39.7	(105) FEDERAL LANDS HIGHWAYS	0
(32) APPROACH ROADWAY WIDTH (ft.)	38.1	(110) DESIGNATED NATIONAL NETWORK	1
(33) BRIDGE MEDIAN 0	(34) SKEW (DEG.) 0	(20) TOLL	3
(35) STRUCTURE FLARED 0	(10) INV RTE, MIN VERT CLEAR (ft.) 99.99	(21) MAINTENANCE RESPONSIBILITY	01
(47) TOTAL HORIZONTAL CLEARANCE (ft.)	38.1	(22) OWNER	01
(53) VERTICAL CLEARANCE OVER BRIDGE ROADWAY (ft.)	99.99	(37) HISTORICAL	5
(54) VERTICAL UNDER CLEARANCE (ft.)	N 0	NAVIGATION DATA	
(55) LATERAL UNDER CLEARANCE RIGHT (ft.)	N 99.9	(38) NAVIGATION CONTROL	0
(56) MIN LATERAL UNDER CLEARANCE (ft.)	0	(111) PIER OR ABUTMENT PROTECTION	5
PROPOSED IMPROVEMENTS		(39) NAV VERT CLEARANCE (ft.)	0
(75A) TYPE OF WORK PROPOSED	(75B) WORK DONE BY	(116) MIN NAVIGATION VERT CLEARANCE, VERT LIFT BRIDGE (ft.)	0
(76) LENGTH OF STRUCTURE IMPROVEMENT (ft.)	0	(40) NAV HORIZONTAL CLEARANCE (ft.)	0
(94) BRIDGE IMPROVEMENT COST (\$)	0		
(95) ROADWAY IMPROVEMENT COST (\$)	0		
(96) TOTAL PROJECT COST	0		
(97) YEAR OF IMPROVEMENT COST ESTIMATE			
(114) FUTURE ADT 8692	(115) YEAR OF FUTURE ADT 2028		

Inspector:

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## 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.	28663	sq. ft.	22871	1433	4359	0
1080 - Delamination/Spall/Patched Area		2100				2100	
1120 - Efflorescence/Rust Staining		1433			1433		
1130 - Cracking (RC and Other)		2259				2259	
<b>107 - Steel Open Girder/Beam</b>	1- Ben.	3600	ft.	3090		507	3
1000 - Corrosion		510				507	3
515 - Steel Protective Coating		12882	sq. ft.	10118		0	2764
3440 - Effectiveness (Steel Protective Coatings)		2764					2764
<b>205 - Reinforced Concrete Column</b>	1- Ben.	8	each	8			
<b>215 - Reinforced Concrete Abutment</b>	1- Ben.	84	ft.	84			
<b>220 - Reinforced Concrete Pile Cap/Footing</b>	1- Ben.	70	ft.	70			
<b>227 - Reinforced Concrete Pile</b>	1- Ben.	76	each	76			
<b>234 - Reinforced Concrete Pier Cap</b>	1- Ben.	544	ft.	544			
<b>302 - Compression Joint Seal</b>	1- Ben.	666	ft.	666			
<b>311 - Movable Bearing</b>	1- Ben.	85	each	0		85	0
1000 - Corrosion		85				85	
<b>313 - Fixed Bearing</b>	1- Ben.	85	each	0		85	0
1000 - Corrosion		85				85	
<b>331 - Reinforced Concrete Bridge Railing</b>	1- Ben.	1444	ft.	1444			

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### Bridge Inspection Report

#### Maintenance Needs

Date Reported: 10/11/2011 12:00:00 AM

Priority: G - General/ Preventive maintenance

Work Code:

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#### Deficiency Description:

Span 11 Bay 1 Diaphragm 3 at girder 1  
Has 1 loose bolt

Work Description:

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Date Repairs Completed:

Maintenance Comments:

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Date Reported: 10/11/2011 12:00:00 AM

Priority: C - Important

Work Code:

---

#### Deficiency Description:

Bent 16 Piles 1A, 2A, 3A & 4A  
have 1 ft. areas shelled out up to 3 in. deep with exposed rebar at pile buildup.

Work Description:

---

Date Repairs Completed:

Maintenance Comments:

---

Inspector:

Structure Number: A5446

Inspection Date:

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### Bridge Inspection Report

#### Maintenance Needs

Date Reported: 10/11/2011 12:00:00 AM

Priority: C - Important

Work Code:

---

#### Deficiency Description:

Bent 16 Piles 1A, 2A, 3A & 4A have 1 ft. areas shelled out up to 3 in. deep with exposed rebar at pile buildup.

Bent 16 Pile 1B has a 2.5 ft. x 1.5 ft. x 4 in. deep shelled out area with exposed rebar at pile buildup location, see photo 2007 inspection.

Bent 16 Pile 2B & 4B has a 1.5 ft. x 1 ft. x 3 in. deep shelled out area with exposed rebar at pile buildup location, see photo 2007 inspection.

Work Description:

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Date Repairs Completed:

Maintenance Comments:

---

Date Reported: 10/11/2011 12:00:00 AM

Priority: C - Important

Work Code:

---

#### Deficiency Description:

Lt end of Bent 11 cap.  
has a 8 in. x 2.5 ft. x 1 1/2 in deep shelled out areal with exposed rebar.

Work Description:

---

Date Repairs Completed:

Maintenance Comments:

---

Inspector:

Inspection Date:

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### Bridge Inspection Report

#### Maintenance Needs

**Date Reported:** 10/11/2011 12:00:00 AM

**Priority:** C - Important

**Work Code:**

---

**Deficiency Description:**

Left & Right end of Bent 13 Cap is shelled out with rebar exposed.

**Work Description:**

---

**Date Repairs Completed:**

**Maintenance Comments:**

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**Date Reported:** 10/11/2011 12:00:00 AM

**Priority:** C - Important

**Work Code:**

---

**Deficiency Description:**

Deck

Majority of deck has minor size cracks top of deck.

Several spalls in Spans 1, 2, 3 & 16

**Work Description:**

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**Date Repairs Completed:**

**Maintenance Comments:**

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**Date Reported:** 10/11/2011 12:00:00 AM

**Priority:** C - Important

**Work Code:**

---

**Deficiency Description:**

Top of Bent 12 cap.

has 12 ft. deteriorated with section loss, up to 3 in. deep with no exposed rebar.

**Work Description:**

---

**Date Repairs Completed:**

**Maintenance Comments:**

---

Inspector:

Inspection Date:

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### Bridge Inspection Report

#### Maintenance Needs

Date Reported: 10/11/2011 12:00:00 AM

Priority: C - Important

Work Code:

---

#### Deficiency Description:

Some cracking to majority of Caps and Piles.

Work Description:

---

Date Repairs Completed:

Maintenance Comments:

---

Date Reported: 10/11/2011 12:00:00 AM

Priority: G - General/ Preventive maintenance

Work Code:

---

#### Deficiency Description:

Span 4 Girder 5 Bent 5 has one anchor bolt nut missing.

Span 8 Girder 3 Bent 9 has one anchor bolt sheered off.

Span 14 Girder 4 Bent 15 has wrong size anchor bolt nut, (Nut too Large for Bolt).

Work Description:

---

Date Repairs Completed:

Maintenance Comments:

---

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### Bridge Inspection Report

#### Maintenance Needs

Date Reported: 11/19/2015

Priority: C - Important

Work Code:

---

#### Deficiency Description:

Deck Spans 7,8,9,12,13,14,15,16,17

have map cracking and delamination areas/spalls patched areas with conc. and asphalt in poor condition and several shelled out areas, especially in wheel paths

#### Work Description:

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Date Repairs Completed:

Maintenance Comments:

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Stage: Monitor



PHOTO 1 Description



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**Bridge Inspection Report**

**Maintenance Needs**

**Date Reported:** 10/11/2011 12:00:00 AM

**Priority:** G - General/ Preventive maintenance

**Work Code:**

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**Deficiency Description:**

Majority of bearings are rusted with pitting & and some pack rust forming between sole & masonry plate.

**Work Description:**

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**Date Repairs Completed:**

**Maintenance Comments:**

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**Date Reported:** 10/11/2011 12:00:00 AM

**Priority:** C - Important

**Work Code:**

---

**Deficiency Description:**

Road Iron at Bent 18  
is loose and moving under traffic.

**Work Description:**

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**Date Repairs Completed:**

**Maintenance Comments:**

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### Bridge Inspection Report

#### Maintenance Needs

Date Reported: 10/11/2011 12:00:00 AM

Priority: G - General/ Preventive maintenance

Work Code:

---

#### Deficiency Description:

A few girders are floating, 1/16 in.-1/8 in. typical.

Span 2 Girders 2&4 Bent 3

Span 4 Girder 3 Bent 4

Span 4 Girder 3 Bent 5

Span 8 Girder 2 Bent 9

Span 11 Girder 2 Bent 12

Span 12 Girder 2 Bent 13

Span 17 Girders 2&3 Bent 17

Work Description:

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Date Repairs Completed:

Maintenance Comments:

---

Date Reported: 10/11/2011 12:00:00 AM

Priority: G - General/ Preventive maintenance

Work Code:

---

#### Deficiency Description:

Majority of compression seals are deteriorated and split.

Bent 7 compression seal has 15 feet missing

Work Description:

---

Date Repairs Completed:

Maintenance Comments:

---

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### Bridge Inspection Report

#### Maintenance Needs

Date Reported: 10/11/2011 12:00:00 AM

Priority: G - General/ Preventive maintenance

Work Code:

---

#### Deficiency Description:

Span 11 Girder 1 Bay 1 Diaphragm 3 at girder 1 has 1 loose bolt.  
Span 12 Girder 2 Bay 2 Diaphragm 1 over Bent 12 has 4 bolts missing

Work Description:

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Date Repairs Completed:

Maintenance Comments:

---

Date Reported: 10/11/2011 12:00:00 AM

Priority: C - Important

Work Code:

---

#### Deficiency Description:

Majority of Steel Girders have rust forming with light pitting.  
Majority of Ends of Girders have 2 ft.- 3 ft. typical rusted with pitting and/or initial section loss.

Work Description:

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Date Repairs Completed:

Maintenance Comments:

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Date Reported: 11/6/2013 12:00:00 AM

Priority: C - Important

Work Code:

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#### Deficiency Description:

Caps Bents 2 thru 14 has rebar exposed, mainly due to concrete coverage as built condition.

Work Description:

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Date Repairs Completed:

Maintenance Comments:

---

Inspector:

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### Bridge Inspection Report

#### Maintenance Needs

Date Reported: 11/6/2013 12:00:00 AM

Priority: C - Important

Work Code:

---

#### Deficiency Description:

Right end of Bent 5 Cap has a spalled area with rebar exposed.

Work Description:

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Date Repairs Completed:

Maintenance Comments:

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Date Reported: 11/6/2013 12:00:00 AM

Priority: C - Important

Work Code:

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#### Deficiency Description:

Right end of Bent 8 Cap has a spalled area with rebar exposed.

Work Description:

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Date Repairs Completed:

Maintenance Comments:

---

Date Reported: 11/6/2013 12:00:00 AM

Priority: C - Important

Work Code:

---

#### Deficiency Description:

Moderate size and density cracks top of deck span 16 with heavy scaling.

Work Description:

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Date Repairs Completed:

Maintenance Comments:

---

Inspector:

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#### Maintenance Needs

Date Reported: 11/19/2015

Priority: C - Important

Work Code:

---

#### Deficiency Description:

Girder 3 Span 9 Bent 10  
Hole rusted thru web at haunch

#### Work Description:

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Date Repairs Completed:

Maintenance Comments:

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Stage: Open



PHOTO 1 Description