

Bridge Inspection Report

A5447
I-555NB-02-LM15.93
over
SAND SLOUGH



Inspection Date:

Inspected By:

Inspection Type(s):

Inspector:

Structure Number: A5447

Inspection Date:

Facility Carried: I-555NB-02-
LM15.93

Bridge Inspection Report

National Bridge Inventory

IDENTIFICATION		INSPECTIONS	
(1) STATE CODE	056 - Arkansas	(90) INSPECTION DATE	11/19/2015
(8) STRUCTURE NUMBER	A5447	(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	SAND SLOUGH	C. OTHER SPECIAL	N
(7) FACILITY CARRIED	I-555NB-02-LM15.93		
(9) LOCATION	1.90 MI E OF PAYNEWAY ARK		
(11) MILEPOINT 15.93	(12) BASE HIGHWAY NETWORK 1		
(13A) LRS INVENTORY ROUTE	0000063080 (13B) SUBROUTE NUMBER 00		
(16) LATITUDE 35.53278	(17) LONGITUDE -90.46847		
(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 6	(60) SUBSTRUCTURE 6
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 25	(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 1973	(106) YEAR RECONSTRUCTED 0000	(31) DESIGN LOAD	5
(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 15000	(19) BYPASS DETOUR LENGTH 1	(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.) 40	(49) STRUCTURE LENGTH (ft.) 1002	(67) STRUCTURAL EVALUATION	6
(50) CURB/SIDEWALK WIDTHS (ft.) LEFT 0 RIGHT 0		(68) DECK GEOMETRY	5
(51) BRDG RDWY WIDTH CURB-TO-CURB (ft.) 37.1		(69) UNDERCLEARANCES, VERTICAL & HORIZONTAL	N
(52) DECK WIDTH, OUT-TO-OUT (ft.) 39.7		(71) WATERWAY ADEQUACY	9
(32) APPROACH ROADWAY WIDTH (ft.) 38.1		(72) APPROACH ROADWAY ALIGNMENT	8
(33) BRIDGE MEDIAN 0	(34) SKEW (DEG.) 0	(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.) 38.4		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	5
(56) MIN LATERAL UNDER CLEARANCE (ft.) 0		SUFFICIENCY RATING	0 STATUS 94.6
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	L
(97) YEAR OF IMPROVEMENT COST ESTIMATE		(102) DIRECTION OF TRAFFIC	1
(114) FUTURE ADT 8692	(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	5
		(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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Element Inspection

	Environment	Total Quantity	Units	Condition State 1	Condition State 2	Condition State 3	Condition State 4
12 - Reinforced Concrete Deck	1- Ben.	41879	sq. ft.	33843	2112	5924	0
1080 - Delamination/Spall/Patched Area		2772				2772	
1090 - Exposed Rebar		18			18		
1120 - Efflorescence/Rust Staining		2094			2094		
1130 - Cracking (RC and Other)		3152				3152	
107 - Steel Open Girder/Beam	1- Ben.	5000	ft.	4250		750	0
1000 - Corrosion		750				750	
515 - Steel Protective Coating		12175	sq. ft.	8110			4065
3440 - Effectiveness (Steel Protective Coatings)		4065					4065
215 - Reinforced Concrete Abutment	1- Ben.	84	ft.	84			
227 - Reinforced Concrete Pile	1- Ben.	96	each	94	2		0
1130 - Cracking (RC and Other)		2			2		
234 - Reinforced Concrete Pier Cap	1- Ben.	816	ft.	788	28		0
1090 - Exposed Rebar		12			12		
1130 - Cracking (RC and Other)		16			16		
302 - Compression Joint Seal	1- Ben.	962	ft.	876		86	0
2330 - Seal Damage		86				86	
311 - Movable Bearing	1- Ben.	125	each	0		125	0
1000 - Corrosion		125				125	
313 - Fixed Bearing	1- Ben.	125	each	0		125	0
1000 - Corrosion		125				125	
331 - Reinforced Concrete Bridge Railing	1- Ben.	2004	ft.	2004			

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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 5, Girder 3, Bay 2, Diaphragm 2 connection has all bolts loose.

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:

Road irons

Several small spalled areas at majority of road irons (6 in. diam. typ).

Work Description:

Date Repairs Completed:

Maintenance Comments:

Inspector:

Structure Number: A5447

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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:

Several girders are floating, from 1/8 in. up to 3/4 in and shims shifted and / or missing:

Span 1 Girder 2 Bent 2

Span 2 Girder 3 Bent 2

Span 3 Girder 2 Bent 4

Span 4 Girder 2 Bent 5

Span 5 Girder 4 Bent 5

Span 5 & 6 Girders 2 & 4 Bent 6

Span 6 Girder 2 Bent 7

Span 7 Girder 2 Bent 8

Span 8 Girder 2 Bent 9

Span 9 Girder 3 Bent 10

Span 10 Girder 3 Bent 11, shim is missing (1/2in. gap), see 2011 photo.

Span 11 Girder 3 Bent 12

Span 12 Girder 2 Bent 13, shim is missing (3/4in. gap), see 2011 photo.

Span 14 Girder 2 Bent 15

Span 16 Girder 3 Bent 16

Span 17 Girder 3 Bent 18

Span 19 Girder 2 Bent 19

Span 19 Girder 2 Bent 20

Span 20 Girder 3 Bent 20

Span 20 Girder 2 Bent 21

Span 21 Girder 3 Bent 21

Span 22 Girder 2 Bent 22

Span 23 Girder 2 Bent 23

Span 24 Girder 2 Bent 24

Span 24 Girder 2 Bent 25, (5/8in. gap) see 2011 photo.

Span 25 Girder 2 Bent 25, (3/4in. gap) see 2011 photo.

Work Description:

Date Repairs Completed:

Maintenance Comments:

Inspector:

Inspection Date:

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Maintenance Needs

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

Priority: C - Important

Work Code:

Deficiency Description:

Majority of compression seals are torn, split and losing adhesion.

2 Compression Seals are missing:

Bent 9 = 28 ft.

Bent 14 = 24 ft.

Work Description:

Date Repairs Completed:

Maintenance Comments:

Inspector:

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Maintenance Needs

Date Reported: 11/19/2015

Priority: D - Routine

Work Code:

Deficiency Description:

Bent 2, 4, 5, 6, 10, 12, 13, 14, 15, 19, 20, 21, 22 Caps have shelled out areas with rebar exposed mainly due to concrete coverage.

Left end of Caps Bents 5, 7, 9, 13, 14 & 19 have shelled out areas, with exposed rebar.

Right end of Caps Bents 2, 6, 10, 19, 21 & 24 have shelled out areas, with exposed rebar.

Work Description:

Date Repairs Completed:

Maintenance Comments:

Stage: Monitor



PHOTO 1 Description

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Maintenance Needs

Date Reported: 11/19/2015

Priority: C - Important

Work Code:

Deficiency Description:

Moderate size and density cracks top of deck, with several small spalled areas, some have rebar exposed, Spans 1 thru 25.

Work Description:

Date Repairs Completed:

Maintenance Comments:

Stage: Monitor



PHOTO 1 Description

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Maintenance Needs

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

Priority: C - Important

Work Code:

Deficiency Description:

Deck Span 9

2 pot holes in top of deck with exposed rebar, (1 ft. diam. x 3 in. deep typ.)

Work Description:

Date Repairs Completed:

Maintenance Comments:

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

Priority: C - Important

Work Code:

Deficiency Description:

Steel Girders

Steel girders have some minor rust forming with 3 ft. on ends of girders rusted with pitting, typical

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:

Majority of bearings are rusted with initial section loss and pack rust.

Work Description:

Date Repairs Completed:

Maintenance Comments:

Inspector:

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Maintenance Needs

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

Priority: G - General/ Preventive maintenance

Work Code:

Deficiency Description:

Several anchor bolt nuts are missing.

Bent 5, girder 5 Span 4 has 1 missing.

Bent 18, girder 2 Span 17 side has 1 missing.

Bent 18, girder 3 Span 17 side has 2 missing,

Bent 20 girders 4 & 5 Span 20 side each have one missing.

Work Description:

Date Repairs Completed:

Maintenance Comments:

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

Priority: C - Important

Work Code:

Deficiency Description:

Several anchor bolt nuts are missing:

Span 4 Girder 5 Bent 5, has 1 missing.

Span 5 Girder 4 Bent 5, has one anchor bolt rusted off.

Span 17 Girder 2 Bent 18, has 1 missing.

Span 17 Girder 3 Bent 18, has 2 missing,

Span 20 Girder 4&5 Bent 20, each has one missing.

Span 20 Girder 3 Bent 21 has one anchor bolt sheered off.

Work Description:

Date Repairs Completed:

Maintenance Comments:
