

Bridge Inspection Report

B5445
I-555SB-02-LM16.92
over
DITCH 60



Inspection Date:

Inspected By:

Inspection Type(s):

Inspector:

Structure Number: B5445

Inspection Date:

Facility Carried: I-555SB-02-
LM16.92

Bridge Inspection Report

National Bridge Inventory

IDENTIFICATION		INSPECTIONS	
(1) STATE CODE	056 - Arkansas	(90) INSPECTION DATE	11/17/2015
(8) STRUCTURE NUMBER	B5445	(91) DESIGNATED INSPECTION FREQUENCY	24
(5) INV. ROUTE (ON/UNDER)	1 1 1 555 3	(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	DITCH 60	C. OTHER SPECIAL	N
(7) FACILITY CARRIED	I-555SB-02-LM16.92		
(9) LOCATION	.6MI E JCTS 14-63		
(11) MILEPOINT 16.92	(12) BASE HIGHWAY NETWORK 1		
(13A) LRS INVENTORY ROUTE	0000063080 (13B) SUBROUTE NUMBER 00		
(16) LATITUDE 35.53775	(17) LONGITUDE -90.48493		
(98A) BORDER BRIDGE CODE			
PERCENT RESPONSIBILITY	(99) BORDER BRIDGE STRUCT		
STRUCTURE TYPE AND MATERIAL		CONDITION	
(43) STRUCTURE TYPE, MAIN		(58) DECK	6
A) KIND OF MATERIAL/DESIGN: 3 - Steel		(59) SUPERSTRUCTURE	6 (60) SUBSTRUCTURE 7
B) TYPE OF DESIGN/CONSTR: 02 - Stringer/Multi-beam or Girder		(61) CHANNEL & CHANNEL PROTECTION	6 (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	30 (46) NUMBER OF APPROACH		
(107) DECK STRUCTURE TYPE	1 (108A) WEARING SURFACE		
(108B) DECK MEMBRANE	0 (108C) DECK PROTECTION		
	0		
AGE OF SERVICE		LOAD RATING AND POSTING	
(27) YEAR BUILT	1973 (106) YEAR RECONSTRUCTED	(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	(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.)	80 (49) STRUCTURE LENGTH (ft.)	(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.)	(36) TRAFFIC SAFETY FEATURE	
(35) STRUCTURE FLARED	0 (10) INV RTE, MIN VERT CLEAR (ft.)	36A) BRIDGE RAILINGS:	1
(47) TOTAL HORIZONTAL CLEARANCE (ft.)	38.1	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 95.6
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	R
(97) YEAR OF IMPROVEMENT COST ESTIMATE		(102) DIRECTION OF TRAFFIC	1
(114) FUTURE ADT	8692 (115) YEAR OF FUTURE ADT	(103) TEMP STRUCTURE	
	2028	(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.	50895	sq. ft.	46940	2632	1323	0
1080 - Delamination/Spall/Patched Area		606				606	
1090 - Exposed Rebar		88			88		
1120 - Efflorescence/Rust Staining		2544			2544		
1130 - Cracking (RC and Other)		717				717	
107 - Steel Open Girder/Beam	1- Ben.	6400	ft.	5500		882	18
1000 - Corrosion		900				882	18
515 - Steel Protective Coating		47457	sq. ft.	45946			1511
3440 - Effectiveness (Steel Protective Coatings)		1511					1511
205 - Reinforced Concrete Column	1- Ben.	12	each	8		4	0
1090 - Exposed Rebar		4				4	
215 - Reinforced Concrete Abutment	1- Ben.	84	ft.	84			
220 - Reinforced Concrete Pile Cap/Footing	1- Ben.	93	ft.	93			
227 - Reinforced Concrete Pile	1- Ben.	136	each	129		7	0
1090 - Exposed Rebar		7				7	
234 - Reinforced Concrete Pier Cap	1- Ben.	986	ft.	961		25	0
1090 - Exposed Rebar		25				25	
302 - Compression Joint Seal	1- Ben.	1147	ft.	860		287	0
2330 - Seal Damage		287				287	
311 - Movable Bearing	1- Ben.	150	each	0		150	0
1000 - Corrosion		150				150	
313 - Fixed Bearing	1- Ben.	150	each	0		150	0
1000 - Corrosion		150				150	
331 - Reinforced Concrete Bridge Railing	1- Ben.	2564	ft.	2564			

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Bridge Inspection Report

Maintenance Needs

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

Priority: C - Important

Work Code:

Deficiency Description:

Several Girders are floating:

Span 1 Girder 2 Bent 2 (1/8 in.).

Span 6 Girder 3 Bent 7 (1/8 in.).

Span 9 Girder 4 Bent 10 (1/16 in.).

Span 14 Girder 4 Bent 14 (1/16 in.).

Span 18 Girder 4 Bent 19 (1/16 in.).

Span 20 Girder 4 Bent 21 (1/16 in.).

Span 22 Girder 4 over Bt. 23 (1/16 in.).

Span 23 Girder 4 Bent 23 (1/16 in.).

Span 23 Girder 4 Bent 24 (1/16 in.).

Span 24 Girder 3 Bent 24 (1/16 in.).

Span 24 Girder 3 Bent 25 (1/16 in.).

Span 25 Girder 4 Bent 25 (1/16 in.).

Span 25 Girder 4 Bent 26 (1/16 in.).

Span 26 Girder 3 Bent 27 (1/16 in.).

Work Description:

Date Repairs Completed:

Maintenance Comments:

Inspector:

Inspection Date:

Structure Number: B5445

Facility Carried: I-555SB-02-
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Bridge Inspection Report

Maintenance Needs

Date Reported: 11/17/2015

Priority: C - Important

Work Code:

Deficiency Description:

Bt 28 cap

Rt. end top of cap at bearing has chemical deterioration with exposed rebar, no loss of bearing support at this time, see 2015 photo.

Work Description:

Date Repairs Completed:

Maintenance Comments:

Stage: Monitor



PHOTO 1 Description

Inspector:

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Bridge Inspection Report

Maintenance Needs

Date Reported: 11/17/2015

Priority: C - Important

Work Code:

Deficiency Description:

Several caps have small shelled out areas with rebar exposed, some are mainly due to concrete coverage, Bents 2, 5, 6, 7, 9, 10, 11, 12, 14, 15, 16, 17, 18, 20, 22, 23, 24, 25, 26, 27, 28 and 29, 30 1 ft. typical.

Work Description:

Date Repairs Completed:

Maintenance Comments:

Stage: Monitor



PHOTO 1 Description

Inspector:

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Bridge Inspection Report

Maintenance Needs

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

Priority: C - Important

Work Code:

Deficiency Description:

Bearings are rusted with pitting and pack rust is forming between plates.

Work Description:

Date Repairs Completed:

Maintenance Comments:

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

Priority: G - General/ Preventive maintenance

Work Code:

Deficiency Description:

Anchor Bolts

Several anchor bolts are short, unable to have full threads thru anchor bolt nuts.

Work Description:

Date Repairs Completed:

Maintenance Comments:

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

Priority: C - Important

Work Code:

Deficiency Description:

Bent 4 Pile 1B has a 1 ft. x 3 in. deep shelled out area at pile splice, rebar exposed and some cracking near ground line.

Work Description:

Date Repairs Completed:

Maintenance Comments:

Inspector:

Structure Number: B5445

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Maintenance Needs

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

Priority: C - Important

Work Code:

Deficiency Description:

Deck has minor size and density cracks, mostly transverse, up to 1/8 in. wide
Some spalling to Deck especially Spans 9, 12, 19 and 24 with some rebar exposed.
Right gutterline has a few shelled out areas with no rebar exposed, especially Spans 2 & 5.

Work Description:

Date Repairs Completed:

Maintenance Comments:

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

Priority: C - Important

Work Code:

Deficiency Description:

Bent 26 Pile 1B has an 8 in. diameter x 3 in. deep shelled out area at pile splice, rebar exposed.
Bent 26 Pile 2B has a 12 in. wide x 18 in. long x 3 in.- 4 in. deep shelled out area with rebar exposed at pile splice, some loss of section to rebar, see 2009 photo.

Work Description:

Date Repairs Completed:

Maintenance Comments:

Inspector:

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Maintenance Needs

Date Reported: 11/17/2015

Priority: C - Important

Work Code:

Deficiency Description:

Majority of compression seals are deteriorated and split.

Some compression seals have fallen out:

Bent 1 = 18 ft

Bent 2 = 25 ft

Bent 7 = 26 ft

Bent 11 = 33ft

Bent 12 = 22 ft

Bent 17 = 22 ft

Bent 25 = 12 ft

Bent 26 = 31 ft

Bent 27 = 30 ft

Bent 28 = 12 ft

Bent 29 = 18 ft

Work Description:

Date Repairs Completed:

Maintenance Comments:

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

Priority: D - Routine

Work Code:

Deficiency Description:

Some embankment erosion at Bent 1 from roadway runoff

Work Description:

Date Repairs Completed:

Maintenance Comments:

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Maintenance Needs

Date Reported: 11/17/2015

Priority: C - Important

Work Code:

Deficiency Description:

Majority of Steel Girders have rust with light pitting.

Ends of Majority of Girders (3 ft. typical) are rusted with pitting and/or initial section loss, especially bottom flanges of Girders 1&5. (up to 1/8in section loss.)

Work Description:

Date Repairs Completed:

Maintenance Comments:

Stage: Monitor



PHOTO 1 Description

Inspector:

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Maintenance Needs

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

Priority: C - Important

Work Code:

Deficiency Description:

Parapet wall

Left side of Span 16 Parapet Wall is broken from collision damage with exposed rebar.

Work Description:

Date Repairs Completed:

Maintenance Comments:

Date Reported: 11/5/2013 12:00:00 AM

Priority: C - Important

Work Code:

Deficiency Description:

Bent 9 Pile 4 has a shelled out area with rebar exposed 4ft from cap, see 2013 photo.

Work Description:

Date Repairs Completed:

Maintenance Comments:

Inspector:

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Maintenance Needs

Date Reported: 11/17/2015

Priority: B - Pressing; 6 month completion goal

Work Code:

Deficiency Description:

Bent 25 left End of Cap has a shelled out area under Girder 1 of Bent 25 (2ft X18in X 8in deep), 50% of bearing floating. Bearing bolts are exposed, no support at this time see 2015 photo

Work Description:

Date Repairs Completed:

Maintenance Comments:

Bridge Crew making other repairs at this time - will schedule repairs later - KAW

Stage: Assigned



PHOTO 1 Description

Stage: Repair Complete



PHOTO 2 Description

Inspector:

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Maintenance Needs

Stage: Repair Complete



PHOTO 3 Description