

Bridge Inspection Report

02140
SH 77-02- LM 3.71
over
DITCH NO 21



Inspection Date:

Inspected By:

Inspection Type(s):

Inspector:

Structure Number: 02140

Inspection Date:

Facility Carried: SH 77-02- LM 3.71

Bridge Inspection Report

Location Map



Latitude: 35.82208

Longitude: -90.17800

Inspector:

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Bridge Inspection Report

National Bridge Inventory

IDENTIFICATION		INSPECTIONS	
(1) STATE CODE	056 - Arkansas	(90) INSPECTION DATE	08/01/2016
(8) STRUCTURE NUMBER	02140	(91) DESIGNATED INSPECTION FREQUENCY	24
(5) INV. ROUTE (ON/UNDER)	1 3 1 77 0	(92) CRITICAL FEATURE INSPECTION	(93) CFI DATE
(2) HIGHWAY AGENCY	10 (3) COUNTY CODE 093	A. FRACTURE CRITICAL DETAIL	N
(4) PLACE CODE	00000	B. UNDERWATER INSPECTION	N
(6) FEATURES INTERSECTED	DITCH NO 21	C. OTHER SPECIAL	N
(7) FACILITY CARRIED	SH 77-02- LM 3.71		
(9) LOCATION	3.7 MI S JCT SH 18		
(11) MILEPOINT 3.710	(12) BASE HIGHWAY NETWORK 0		
(13A) LRS INVENTORY ROUTE	0000000000 (13B) SUBROUTE NUMBER 00		
(16) LATITUDE 35.82208	(17) LONGITUDE -90.17800		
(98A) BORDER BRIDGE CODE			
PERCENT RESPONSIBILITY	(99) BORDER BRIDGE STRUCT		
STRUCTURE TYPE AND MATERIAL		CONDITION	
(43) STRUCTURE TYPE, MAIN		(58) DECK	7
A) KIND OF MATERIAL/DESIGN: 1 - Concrete		(59) SUPERSTRUCTURE	7 (60) SUBSTRUCTURE 4
B) TYPE OF DESIGN/CONSTR: 01 - Slab		(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 3	(46) NUMBER OF APPROACH 0		
(107) DECK STRUCTURE TYPE 1	(108A) WEARING SURFACE 6		
(108B) DECK MEMBRANE 0	(108C) DECK PROTECTION 0		
AGE OF SERVICE		LOAD RATING AND POSTING	
(27) YEAR BUILT 1952	(106) YEAR RECONSTRUCTED 0000	(31) DESIGN LOAD	2
(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	37.0
(29) AVERAGE DAILY TRAFFIC 1500	(19) BYPASS DETOUR LENGTH 11	(65) METHOD USED TO DETERMINE INVENTORY RATING	1
(30) YEAR OF AVERAGE DAILY TRAFFIC 2014		(66) INVENTORY RATING	22.0
(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.) 18	(49) STRUCTURE LENGTH (ft.) 54	(67) STRUCTURAL EVALUATION	4
(50) CURB/SIDEWALK WIDTHS (ft.) LEFT 1 RIGHT 1		(68) DECK GEOMETRY	4
(51) BRDG RDWY WIDTH CURB-TO-CURB (ft.)	24.0	(69) UNDERCLEARANCES, VERTICAL & HORIZONTAL	N
(52) DECK WIDTH, OUT-TO-OUT (ft.)	26.5	(71) WATERWAY ADEQUACY	8
(32) APPROACH ROADWAY WIDTH (ft.)	27.9	(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:	0
(47) TOTAL HORIZONTAL CLEARANCE (ft.)	25.9	36B) TRANSITIONS:	0
(53) VERTICAL CLEARANCE OVER BRIDGE ROADWAY (ft.)	99.99	36C) APPROACH GUARDRAIL:	0
(54) VERTICAL UNDER CLEARANCE (ft.)	N 0	36D) APPROACH GUARDRAIL ENDS:	0
(55) LATERAL UNDER CLEARANCE RIGHT (ft.)	N 99.9	(113) SCOUR CRITICAL BRIDGES	5
(56) MIN LATERAL UNDER CLEARANCE (ft.)	0	SUFFICIENCY RATING	1 STATUS 37.8
PROPOSED IMPROVEMENTS		CLASSIFICATION	
(75A) TYPE OF WORK PROPOSED 31	(75B) WORK DONE BY 1	(112) NBIS BRIDGE LENGTH	Y
(76) LENGTH OF STRUCTURE IMPROVEMENT (ft.)	78.0	(104) HIGHWAY SYSTEM OF THE INVENTORY ROUTE	0
(94) BRIDGE IMPROVEMENT COST (\$)	0	(26) FUNCTIONAL CLASSIFICATION OF INVENTORY ROUTE	07
(95) ROADWAY IMPROVEMENT COST (\$)	117	(100) STRAHNET HIGHWAY DESIGNATION	0
(96) TOTAL PROJECT COST	269	(101) PARALLEL STRUCTURE DESIGNATION	N
(97) YEAR OF IMPROVEMENT COST ESTIMATE	2002	(102) DIRECTION OF TRAFFIC	2
(114) FUTURE ADT 1586	(115) YEAR OF FUTURE ADT 2028	(103) TEMP STRUCTURE	
		(105) FEDERAL LANDS HIGHWAYS	0
		(110) DESIGNATED NATIONAL NETWORK	0
		(20) TOLL	3
		(21) MAINTENANCE RESPONSIBILITY	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
38 - Reinforced Concrete Slab	1- Ben.	1431	sq. ft.	1377	54	0	0
	Deck with Asphalt Overlay has minor unsealed cracks thru asphalt, especially at joints and some spalls and repairs to asphalt. Soffit has a few minor longitudinal cracks with 2sqft. of light efflorescence.						
1120 - Efflorescence/Rust Staining		2			2		
1130 - Cracking (RC and Other)		52			52		
510 - Wearing Surfaces		1134	sq. ft.	870	0	264	0
3210 - Delamination/Spall/Patched Area/Pothole (Wearing Surfaces)		108				108	
3220 - Crack (Wearing Surface)		156				156	
215 - Reinforced Concrete Abutment	1- Ben.	78	ft.	78			
225 - Steel Pile	1- Ben.	3	each	3			
515 - Steel Protective Coating		51	sq. ft.	51			
228 - Timber Pile	1- Ben.	7	each	4	1	1	1
	Bent 2 Pile 1 is hollow with crushing, little to no support, see 2016 photo. Bent 2 Pile 5, below splice, has up to 1in. outside decay, see 2016 photo. Bent 3 Pile 3 has 4in. outside decay and section loss, see 2016 photo.						
1140 - Decay/Section Loss		3			1	1	1
234 - Reinforced Concrete Pier Cap	1- Ben.	55	ft.	50	0	5	0
	Cap Bent 2 has a 1.5ft. diameter spall face of cap over Pile 2 with rebar and a 8in. x 18in. spall over Pile 3 with rebar exposed. Cap Bent 3 has 2Lf of delaminated areas.						
1080 - Delamination/Spall/Patched Area		3				3	
1090 - Exposed Rebar		2				2	
333 - Other Bridge Railing	1- Ben.	108	ft.	0	106	2	0
	Metal Bridge Rail has 60% paint deterioration and minor rust with pitting. Right side of Span 2 Bridge Rail has 2 Concrete Post are cracked and broke with rebar exposed, see 2016 photo.						
1000 - Corrosion		106			106		
1130 - Cracking (RC and Other)		2				2	

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Bridge Inspection Report

Maintenance Needs

Date Reported: 07/28/2016

Priority: D - Routine

Work Code:

Deficiency Description:

Metal Bridge Rail has 60% paint deterioration and minor rust with pitting.

Right side of Span 2 Bridge Rail has 2 Concrete Post are cracked and broke with rebar exposed, see 2016 photo.

Work Description:

Date Repairs Completed:

Maintenance Comments:

Stage: Open



PHOTO 1 Description

Stage: Open



PHOTO 2 Description

Inspector:

Structure Number: 02140

Inspection Date:

Facility Carried: SH 77-02- LM 3.71

Bridge Inspection Report

Maintenance Needs

Date Reported: 07/28/2016

Priority: C - Important

Work Code:

Deficiency Description:

Bent 2 Pile 5, below splice, has up to 1in. outside decay, see 2016 photo.

Bent 3 Pile 3 has 4in. outside decay and section loss, see 2016 photo.

Work Description:

Date Repairs Completed:

Maintenance Comments:

Stage: Open



PHOTO 1 Description

Stage: Open



PHOTO 2 Description

Inspector:

Structure Number: 02140

Inspection Date:

Facility Carried: SH 77-02- LM 3.71

Bridge Inspection Report

Maintenance Needs

Date Reported: 9/12/2012 12:00:00 AM

Priority: D - Routine

Work Code:

Deficiency Description:

Approach roadway at North bridge end has 1 1/2 in. settlement.

Work Description:

Date Repairs Completed: 07/28/2016

Maintenance Comments:

Approach Roadway has been repaired with asphalt, see 2016 photo of roadway view for typical. Observed during Inspection RES

Date Reported: 08/01/2016

Priority: G - General/ Preventive maintenance

Work Code:

Deficiency Description:

Cap Bent 2 has a 1.5ft. diameter spall face of cap over Pile 2 with rebar and a 8in. x 18in. spall over Pile 3 with rebar exposed.

Cap Bent 3 has 2Lf of delaminated areas.

Work Description:

Date Repairs Completed:

Maintenance Comments:

Inspector:

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Bridge Inspection Report

Maintenance Needs

Date Reported: 08/01/2016

Priority: B - Pressing; 6 month completion goal

Work Code:

Deficiency Description:

Bent 2 Pile 1 is hollow with crushing, little to no support, see 2016 photo.

Work Description:

Date Repairs Completed:

Maintenance Comments:

Stage: Open



PHOTO 1 Description

Stage: Open



PHOTO 2 Description

