

Bridge Inspection Report

M0284
SH 9/Fulton County
over
HARKLE ROAD CREEK



Inspection Date:

Inspected By:

Inspection Type(s):

Structure Number: M0284

Facility Carried: SH 9/Fulton County

National Bridge Inventory

IDENTIFICATION					INSPECTIONS				
(1) STATE CODE 056 - Arkansas					(90) INSPECTION DATE 11/28/2017				
(8) STRUCTURE NUMBER M0284					(91) DESIGNATED INSPECTION FREQUENCY 24				
(5) INV. ROUTE (ON/UNDER) 1 3 1 9 0					(92) CRITICAL FEATURE INSPECTION (93) CFI DATE				
(2) HIGHWAY AGENCY 05 (3) COUNTY CODE 049					A. FRACTURE CRITICAL DETAIL N				
(4) PLACE CODE 00000					B. UNDERWATER INSPECTION N				
(6) FEATURES INTERSECTED HARKLE ROAD CREEK					C. OTHER SPECIAL N				
(7) FACILITY CARRIED SH 9/Fulton County									
(9) LOCATION 2.29 Mi NE of Izard Co Li									
(11) MILEPOINT 2.290 (12) BASE HIGHWAY NETWORK 1									
(13A) LRS INVENTORY ROUTE 0000009140 (13B) SUBROUTE NUMBER 00									
(16) LATITUDE 36.280281 (17) LONGITUDE -91.900391									
(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 5 (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					LOAD RATING AND POSTING				
A) KIND OF MATERIAL/DESIGN: 0 - Other					(31) DESIGN LOAD 2				
B) TYPE OF DESIGN/CONSTR: 00 - Other					(63) METHOD USED TO DETERMINE OPERATING RATING 2				
(45) NUMBER OF SPANS IN MAIN 2 (46) NUMBER OF APPROACH 0					(64) OPERATING RATING 45.0				
(107) DECK STRUCTURE TYPE 1 (108A) WEARING SURFACE 6					(65) METHOD USED TO DETERMINE INVENTORY RATING 2				
(108B) DECK MEMBRANE 0 (108C) DECK PROTECTION 0					(66) INVENTORY RATING 27.0				
AGE OF SERVICE					(70) BRIDGE POSTING 5				
(27) YEAR BUILT 1926 (106) YEAR RECONSTRUCTED 0000					(41) STRUCTURE OPEN/POSTED/CLOSED A				
(42) TYPE OF SERVICE ON 1 UNDER 5					APPRAISAL				
(28) LANES ON 02 UNDER 00					(67) STRUCTURAL EVALUATION 5				
(29) AVERAGE DAILY TRAFFIC 1200 (19) BYPASS DETOUR LENGTH 10					(68) DECK GEOMETRY 4				
(30) YEAR OF AVERAGE DAILY TRAFFIC 2014					(69) UNDERCLEARANCES, VERTICAL & HORIZONTAL N				
(109) AVERAGE DAILY TRUCK TRAFFIC 1					(71) WATERWAY ADEQUACY 7				
GEOMETRIC DATA					(72) APPROACH ROADWAY ALIGNMENT 7				
(48) LENGTH OF MAX SPAN (ft.) 24.2 (49) STRUCTURE LENGTH (ft.) 48.2					(36) TRAFFIC SAFETY FEATURE				
(50) CURB/SIDEWALK WIDTHS (ft.) LEFT 0.8 RIGHT 0.8					36A) BRIDGE RAILINGS: 0				
(51) BRDG RDWY WIDTH CURB-TO-CURB (ft.) 24.3					36B) TRANSITIONS: 0				
(52) DECK WIDTH, OUT-TO-OUT (ft.) 25.5					36C) APPROACH GUARDRAIL: 0				
(32) APPROACH ROADWAY WIDTH (ft.) 22.0					36D) APPROACH GUARDRAIL ENDS: 0				
(33) BRIDGE MEDIAN 0 (34) SKEW (DEG.) 0					(113) SCOUR CRITICAL BRIDGES 5				
(35) STRUCTURE FLARED 0 (10) INV RTE, MIN VERT CLEAR (ft.) 99.99					SUFFICIENCY RATING 0 STATUS 59.2				
(47) TOTAL HORIZONTAL CLEARANCE (ft.) 25.3					CLASSIFICATION				
(53) VERTICAL CLEARANCE OVER BRIDGE ROADWAY (ft.) 99.99					(112) NBIS BRIDGE LENGTH Y				
(54) VERTICAL UNDER CLEARANCE (ft.) N 0					(104) HIGHWAY SYSTEM OF THE INVENTORY ROUTE 0				
(55) LATERAL UNDER CLEARANCE RIGHT (ft.) N 99.9					(26) FUNCTIONAL CLASSIFICATION OF INVENTORY ROUTE 06				
(56) MIN LATERAL UNDER CLEARANCE (ft.) 0					(100) STRAHNET HIGHWAY DESIGNATION 0				
PROPOSED IMPROVEMENTS					(101) PARALLEL STRUCTURE DESIGNATION N				
(75A) TYPE OF WORK PROPOSED (75B) WORK DONE BY					(102) DIRECTION OF TRAFFIC 2				
(76) LENGTH OF STRUCTURE IMPROVEMENT (ft.) 0					(103) TEMP STRUCTURE				
(94) BRIDGE IMPROVEMENT COST (\$) 0					(105) FEDERAL LANDS HIGHWAYS 0				
(95) ROADWAY IMPROVEMENT COST (\$) 0					(110) DESIGNATED NATIONAL NETWORK 0				
(96) TOTAL PROJECT COST 0					(20) TOLL 3				
(97) YEAR OF IMPROVEMENT COST ESTIMATE					(21) MAINTENANCE RESPONSIBILITY 01				
(114) FUTURE ADT 1362 (115) YEAR OF FUTURE ADT 2028					(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				

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Bridge Inspection Report

Element Inspection

	Environment	Total Quantity	Units	Condition State 1	Condition State 2	Condition State 3	Condition State 4
12 - Reinforced Concrete Deck	1- Ben.	1229	sq. ft.	1066	150	1	12
	Deck at Abutment 2: Spalled with 1.5' x 4' hole in Deck at right edge with bridge rail post broken loose. Deck at Abutment 1: Right edge spalled with bridge rail post broken loose. Deck between Girders 2 & 3 at Span 1 has deep spall with exposed rebar with 100% section loss. Heavy deterioration and spalls with rebar exposed to Left & Right side of deck of Spans 1 & 2. Minor cracking to overlay.						
1080 - Delamination/Spall/Patched Area		65			65		
1090 - Exposed Rebar		98			85	1	12
510 - Wearing Surfaces		1174	sq. ft.	1114	60	0	0
3220 - Crack (Wearing Surface)		60			60		
107 - Steel Open Girder/Beam	1- Ben.	516	ft.	288	200	28	0
	Rust & Section loss to bottom flange of Girder 7 @ beginning of Span 2. Flaking rust and some areas of severe section loss with knife edge areas to Girders 1 - 3 & 9 -12 @ Spans 1 & 2. Girders have been cleaned & painted in the past, but have areas of active corrosion and flaking rust.						
1000 - Corrosion		228			200	28	
515 - Steel Protective Coating		1682	sq. ft.	0	757	500	425
3440 - Effectiveness (Steel Protective Coatings)		1682			757	500	425
210 - Reinforced Concrete Pier Wall	1- Ben.	26	ft.	18	8	0	0
	Moderate vertical cracks to Bent 1.						
1130 - Cracking (RC and Other)		8			8		
215 - Reinforced Concrete Abutment	1- Ben.	74	ft.	63	11	0	0
	4 minor vertical cracks at Abutment 1. 7 minor vertical cracks at Abutment 2.						
1130 - Cracking (RC and Other)		11			11		
220 - Reinforced Concrete Pile Cap/Footing	1- Ben.	62	ft.	32	30	0	0
	Scoured to bottom of Footing on ahead side of Bent 1.						
6000 - Scour		30			30		
330 - Metal Bridge Railing	1- Ben.	90	ft.	87	0	3	0
	Right end posts @ Abutments 1 @ 2 Right side are broken loose. Bolts missing @ connection plate near mid span on Right side						
1020 - Connection		3				3	
515 - Steel Protective Coating		270	sq. ft.	270			0

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Pictures



2 1/2 inches of asphalt wearing surface



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Bridge Inspection Report

Maintenance Needs

Date Reported: 11/28/2017

Priority: B - Pressing; 6 month completion goal

Work Code: Repair

Deficiency Description:

Deck at Abutment 2 Spalled with 1.5' x 4' hole in Deck at right edge with bridge rail post broken loose.
Deck at Abutment 1 right edge spalled with bridge rail post broken loose.

Work Description:

Date Repairs Completed:

Maintenance Comments:

Stage: Open



PHOTO 1 Description Deck at Abutment 2 Spalled with 1.5' x 3.5' hole in Deck at Right edge.

Stage: Open



PHOTO 2 Description Deck at Abutment 2 Spalled with 1.5' x 3.5' hole in Deck at Right edge.

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Maintenance Needs

Stage: Open



PHOTO 3 Description Deck at Abutment 2 Spalled with 1.5' x 3.5' hole in Deck at Right edge.

Stage: Open



PHOTO 5 Description Deck at Abutment 1 Right.

Stage: Open



PHOTO 4 Description Deck at Abutment 1 Right.

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Bridge Inspection Report

Maintenance Needs

Date Reported: 11/28/2017

Priority: D - Routine

Work Code:

Deficiency Description:

Erosion to slope behind Left Wing at Abutment 2 beginning to undermine roadway.

Work Description:

Date Repairs Completed:

Maintenance Comments:

Stage: Open



PHOTO 1 Description Erosion to slope behind Left Wing at Abutment 2 beginning to undermine roadway.

Inspector:

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Bridge Inspection Report

Maintenance Needs

Date Reported: 11/09/2015

Priority: C - Important

Work Code: Repair

Deficiency Description:

Heavy deterioration and spalls with rebar exposed to Left & Right side of deck of Spans 1 & 2.

Work Description:

Date Repairs Completed:

Maintenance Comments:

Stage: Assigned



PHOTO 1 Description Left side of Deck over Bent 1.

Stage: Assigned



PHOTO 2 Description Right edge of Deck at Span 1.

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Bridge Inspection Report

Maintenance Needs

Date Reported: 11/09/2015

Priority: D - Routine

Work Code: Repair

Deficiency Description:

Moderate vertical cracks to Bent 1.

Work Description:

Date Repairs Completed:

Maintenance Comments:

Stage: Assigned



PHOTO 1 Description Moderate vertical cracks to Bent 1.

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Maintenance Needs

Date Reported: 11/28/2017

Priority: C - Important

Work Code: Repair

Deficiency Description:

Rust and some areas of severe section loss with knife edge areas to Girders 1 - 12 @ Spans 1 & 2.

Work Description:

Date Repairs Completed:

Maintenance Comments:

Stage: Assigned



PHOTO 1 Description Girder 1.

Stage: Assigned



PHOTO 2 Description Bottom flange of Girder 1 at Span 1.

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Bridge Inspection Report

Maintenance Needs

Stage: Assigned



PHOTO 3 Description Bottom flange of Girder 1 at Span 1.

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Maintenance Needs

Date Reported: 11/28/2017

Priority: B - Pressing; 6 month completion goal

Work Code: Repair

Deficiency Description:

Severe section loss to bottom flange of Girder 7 at over Bent 1.

Work Description:

Date Repairs Completed:

Maintenance Comments:

Stage: Assigned



PHOTO 1 Description Girder 7 at beginning of Span 2.

Stage: Assigned



PHOTO 2 Description Girder 7 at beginning of Span 2.

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Maintenance Needs

Date Reported: 11/09/2015

Priority: C - Important

Work Code: Repair

Deficiency Description:

All masonry plates are rusted and corroded over Bent 1.

Work Description:

Date Repairs Completed:

Maintenance Comments:

Stage: Assigned



PHOTO 1 Description Bearings at Girder 10 (typical).

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Maintenance Needs

Date Reported: 11/09/2015

Priority: D - Routine

Work Code: Repair

Deficiency Description:

Scour @ Left end of Bent 1.

Work Description:

Date Repairs Completed:

Maintenance Comments:

Stage: Assigned



PHOTO 1 Description Scour @ Left end of Bent 1.

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Bridge Inspection Report

Maintenance Needs

Date Reported: 11/09/2015

Priority: C - Important

Work Code: Repair

Deficiency Description:

Heavy scaling & spalling with rebar exposed to soffit @ Spans 1 & 2.

Work Description:

Date Repairs Completed:

Maintenance Comments:

Stage: Assigned



PHOTO 1 Description Span 1 between Girders 9 & 10 (typical).

Stage: Assigned



PHOTO 2 Description Deck between Girders 2 & 3 at Span 1 has deep spall with exposed rebar with 100% section loss.