

Bridge Inspection Report

05716
SH 35-03 LM 1.79
over
Hurricane Creek



Inspection Date:

Inspected By:

Inspection Type(s):

Inspector:

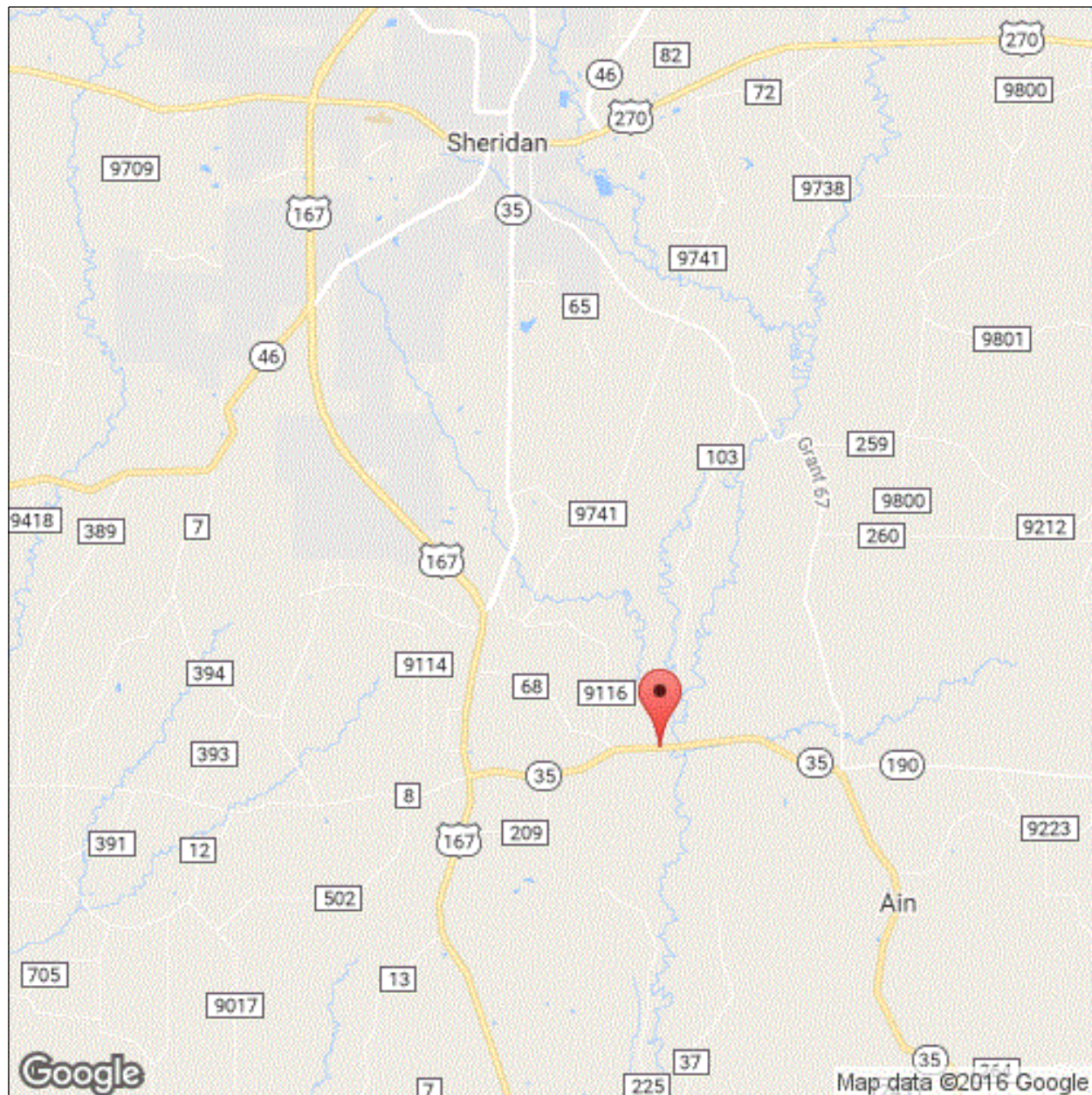
Structure Number: 05716

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Facility Carried: SH 35-03 LM 1.79

Bridge Inspection Report

Location Map



Latitude: 34.22853

Longitude: -92.37555



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Executive Summary

Bridge is logged from west to east.

Changed UW Insp. type to "3" since soundings/profile were made. DRB, 11/18/11

09-04-2009 GGL-GLM: Added Underwater Inspection due to depth of water at Bent 3 - sounding performed this date.

09-05-2007, Dropping UW inspection due to sub-str. elements are not continuously submerged. High water events occur. NBI Items #60 and #61 will represent all elements that occasionally stand in water. RLW. Underwater inspection performed by probing piling at Bent 3 - no indication of additional erosion or scouring.

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Bridge Inspection Report

National Bridge Inventory

IDENTIFICATION		INSPECTIONS	
(1) STATE CODE	056 - Arkansas	(90) INSPECTION DATE	08/01/2017
(8) STRUCTURE NUMBER	05716	(91) DESIGNATED INSPECTION FREQUENCY	24
(5) INV. ROUTE (ON/UNDER)	1 3 1 35 0	(92) CRITICAL FEATURE INSPECTION	(93) CFI DATE
(2) HIGHWAY AGENCY	02 (3) COUNTY CODE 053	A. FRACTURE CRITICAL DETAIL	N
(4) PLACE CODE	00000	B. UNDERWATER INSPECTION	N
(6) FEATURES INTERSECTED	Hurricane Creek	C. OTHER SPECIAL	N
(7) FACILITY CARRIED	SH 35-03 LM 1.79		
(9) LOCATION	1.79 Mi E US 167-Crossrds		
(11) MILEPOINT 1.790	(12) BASE HIGHWAY NETWORK 0		
(13A) LRS INVENTORY ROUTE	0000000000 (13B) SUBROUTE NUMBER 00		
(16) LATITUDE 34.22853	(17) LONGITUDE -92.37555		
(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: 1 - Concrete		(59) SUPERSTRUCTURE	6 (60) SUBSTRUCTURE 7
B) TYPE OF DESIGN/CONSTR: 01 - Slab		(61) CHANNEL & CHANNEL PROTECTION	8 (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 37	(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 1977	(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 1200	(19) BYPASS DETOUR LENGTH 10	(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.) 35	(49) STRUCTURE LENGTH (ft.) 1295	(67) STRUCTURAL EVALUATION	6
(50) CURB/SIDEWALK WIDTHS (ft.) LEFT 0 RIGHT 0		(68) DECK GEOMETRY	6
(51) BRDG RDWY WIDTH CURB-TO-CURB (ft.) 34.4		(69) UNDERCLEARANCES, VERTICAL & HORIZONTAL	N
(52) DECK WIDTH, OUT-TO-OUT (ft.) 37		(71) WATERWAY ADEQUACY	8
(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.) 35.8		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 94.0
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	0
(94) BRIDGE IMPROVEMENT COST (\$)	0	(26) FUNCTIONAL CLASSIFICATION OF INVENTORY ROUTE	07
(95) ROADWAY IMPROVEMENT COST (\$)	0	(100) STRAHNET HIGHWAY DESIGNATION	0
(96) TOTAL PROJECT COST	0	(101) PARALLEL STRUCTURE DESIGNATION	N
(97) YEAR OF IMPROVEMENT COST ESTIMATE		(102) DIRECTION OF TRAFFIC	2
(114) FUTURE ADT 1398	(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
		(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
38 - Reinforced Concrete Slab	1- Ben.	47915	sq. ft.	3593	5466	38856	0
<p>Deck: 37' wide x 1295' long. Span 12 left: A couple small areas of exposed rebar. Moderate- to large-sized unsealed longitudinal cracks spaced approximately every 12-18", mostly from Spans 16-37. Some moderate-sized unsealed map cracking in numerous locations.</p> <p>NOTE: State forces have made repairs/patched several areas on deck including: approx 251 SF Bent 6 left and right Bent 7 left and right (ahead) Bent 21 right (back) Span 21 right Bent 23 right Span 23 right Bent 24 left Span 24 right Bent 25 left (back) Bent 27 left (back) Bent 28 left Bent 30 left and right Bent 31 left (back) and right Bent 32 at centerline Bent 33 on left shoulder Bent 35 left, right (ahead), and on left shoulder Span 35 near centerline Bent 36 right (back) Bent 37 on right shoulder Span 37 left near Bent 38 Bent 38 right. State forces have also grouted over the largest cracks on the sides of slabs.</p> <p>NOTE: Deck has been milled in the past to improve ride (High at joints).</p>							
1080 - Delamination/Spall/Patched Area		251			251		
1090 - Exposed Rebar		6				6	
1130 - Cracking (RC and Other)		44030			5180	38850	
7000 - Damage		35			35		
215 - Reinforced Concrete Abutment	1- Ben.	84	ft.	84			
<p>Abutments: 42' each / Bents 1 & 38. End slope - Bent 38: Minor erosion along bottom of cap. (4" tall x 1-1.5' deep - piling slightly exposed.)</p>							
227 - Reinforced Concrete Pile	1- Ben.	252	each	250	2	0	0
Piling: 7 per bent / Bents 2-37.							
1080 - Delamination/Spall/Patched Area		2			2		

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Element Inspection

234 - Reinforced Concrete Pier Cap	1- Ben.	1332	ft.	1229	28	75	0
Caps: 37' each / Bents 2-37. NOTE: State forces have grouted over most all spalls and cracks. A few small areas of delaminations remain.							
1080 - Delamination/Spall/Patched Area		56				56	
1090 - Exposed Rebar		14			3	11	
1130 - Cracking (RC and Other)		33			25	8	
301 - Pourable Joint Seal	1- Ben.	1292	ft.	988	0	304	0
Joint: 34" each / Bents 1-38. All bents: Outer 4' filled and impacted with gravel, dirt, and other debris. NOTE: State forces have resealed most (except gutterlines) with an asphalt sealant.							
2350 - Debris Impaction		304				304	
321 - Reinforced Concrete Approach Slab	1- Ben.	1225	sq. ft.	1213	0	12	0
Approach slabs: 1 each end / Bent 1. Bent 1 left: Moderate-sized transverse crack. NOTE: Bent 38: State forces have covered approach slab with asphalt wearing surface - removed from quantities.							
1130 - Cracking (RC and Other)		12				12	
331 - Reinforced Concrete Bridge Railing	1- Ben.	2590	ft.	1296	647	647	0
Railing: 1295' each side. Some scattered light map cracking with some minor vertical spalls with very small areas of exposed reinforcing steel - appears steel was too close to surface. (25% total length CS3 Cracking / 25% total length CS2 Rebar exposed)							
1090 - Exposed Rebar		647			647		
1130 - Cracking (RC and Other)		647				647	

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Maintenance Needs

Date Reported: 08/01/2017

Priority: B - Pressing; 6 month completion goal

Work Code: N/A

Deficiency Description:

Deck - various locations: Several concrete patches are deteriorating with pieces of concrete coming loose - these loose pieces could pose a hazard to traffic. Several areas have a 2-3" bump- up or drop-off in the wheel ruts at edges of the patches.

Work Description:

David: Lets jackhammer out below the reinforcing and pour these back, advise when complete

Date Repairs Completed:

Maintenance Comments:

Repairs will be done when warm weather returns so that concrete repairs set up properly. 01/30/18.

Stage: Open



PHOTO 1 Description Deck - Bent 7: Patch deterioration

Stage: Open



PHOTO 2 Description Deck - Bent 21 right: Patch deterioration

Inspector:

Inspection Date:

Structure Number: 05716

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Bridge Inspection Report

Maintenance Needs

Stage: Open



PHOTO 3 Description Deck - Bent 24 left: Patch deterioration

Stage: Open

Stage: Open



PHOTO 5 Description Deck - Bent 35 left: Patch deterioration



PHOTO 4 Description Deck - Bent 25 left: Patch deterioration

Inspector:

Structure Number: 05716

Inspection Date:

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Bridge Inspection Report

Maintenance Needs

Date Reported: 08/01/2017

Priority: G - General/ Preventive maintenance

Work Code: N/A

Deficiency Description:

Joints - all bents: Outer 4' filled with gravel, dirt, and other debris - grass is growing up in most of these areas just inside railing.

NOTE State forces have sealed interior of joints with an asphalt sealant.

Work Description:

Date Repairs Completed:

Maintenance Comments:

Stage: Open



PHOTO 1 Description

Stage: Open



PHOTO 2 Description

Inspector:

Inspection Date:

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Bridge Inspection Report

Maintenance Needs

Stage: Open



PHOTO 3 Description

Inspector:

Structure Number: 05716

Inspection Date:

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Bridge Inspection Report

Maintenance Needs

Date Reported: 9/2/2011 12:00:00 AM

Priority: G - General/ Preventive maintenance

Work Code: N/A

Deficiency Description:

Span 31 soffit:

Fire damage on left side near midspan with some minor delaminations and shallow spalls. (6' x 6' area)

Work Description:

No action at this time, but continue to monitor.

Date Repairs Completed:

Maintenance Comments:

Stage: Monitor



PHOTO 1 Description Soffit - Span 31 left: Fire damage

Inspector:

Structure Number: 05716

Inspection Date:

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Bridge Inspection Report

Maintenance Needs

Date Reported: 9/2/2011 12:00:00 AM

Priority: G - General/ Preventive maintenance

Work Code: N/A

Deficiency Description:

End slope – Bent 38:

Minor settlement/erosion along bottom of cap. (4" tall x 1-1.5' deep – piling slightly exposed.)

Work Description:

No action at this time. Continue to monitor and advise if condition worsens.

Date Repairs Completed:

Maintenance Comments:

Stage: Monitor



PHOTO 1 Description Endslope - Bent 38: Erosion

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Maintenance Needs

Date Reported: 08/25/2015

Priority: C - Important

Work Code: N/A

Deficiency Description:

Deck – Spans 16- 37 : Numerous moderate- to large-sized unsealed cracks with small areas of spalling at joints.

Work Description:

Date Repairs Completed:

Maintenance Comments:

This joint needs to be re-done. Cleanout old material, clean joint, repair spalls, and re-apply joint material. Seal cracks as necessary.

Stage: Monitor



PHOTO 1 Description Span 16 large unsealed longitudinal crack.

Stage: Monitor



PHOTO 2 Description Span 29 at bent 29 left lane small spall forming at joint.

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Maintenance Needs

Stage: Assigned



PHOTO 3 Description Deck - Span 22 left @ Bent 22:
Cracking

Stage: Assigned



PHOTO 4 Description Deck - Span 16: Cracking

Stage: Assigned



PHOTO 5 Description Deck - Span 12 left: Rebar exposed

Stage: Assigned



PHOTO 6 Description Deck - Span 26 left: Cracking

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Maintenance Needs

Stage: Assigned



PHOTO 7 Description Deck - Span 29 left @ Bent 29: Spalling

Stage: Assigned



PHOTO 8 Description Deck - Span 35 left: Cracking

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Bridge Inspection Report

Maintenance Needs

Date Reported: 08/01/2017

Priority: G - General/ Preventive maintenance

Work Code: N/A

Deficiency Description:

Gutterlines – both sides: Minor build-up of dirt and other debris (tree bark), somewhat restricting stormwater from flowing off bridge – grass is growing up in most of these areas just inside railing.

Work Description:

Date Repairs Completed:

Maintenance Comments:

Grant: clean gutters, advise when complete

Stage: Monitor



PHOTO 1 Description Right gutter line debris.

Stage: Assigned



PHOTO 2 Description Gutterline - Spans 28-38 right: Minor debris build-up

Inspector:

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Maintenance Needs

Stage: Assigned



PHOTO 3 Description Gutterline/joint - Bent 16 left:
Vegetation/debris build-up

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Maintenance Needs

Date Reported: 08/25/2015

Priority: D - Routine

Work Code: N/A

Deficiency Description:

Caps - Bents 4, 6, 7, 8, 11, 12, 14, 17, 18, 19, 20, 34, 35, & 37: Various spalls, delaminations, and/or cracks on faces of caps.

Bent 5, 7, & 13 have very small spalls with exposed rebar on bottom of caps.

Work Description:

Date Repairs Completed:

Maintenance Comments:

Stage: Open



PHOTO 1 Description Bent 6 ahead cap over pile 5 cracked and Delams.

Stage: Open



PHOTO 2 Description Bent 11 cap back spalls and Delams.

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Maintenance Needs

Stage: Open



PHOTO 3 Description Bent 13 bottom of cap at pile 3 spalls with exposed rebar.

Stage: Monitor



PHOTO 4 Description Cap - Bent 37 right: Spalling

Stage: Monitor



PHOTO 5 Description Cap - Bent 11 left back: Spalling

Stage: Monitor



PHOTO 6 Description Cap - Bent 2 left ahead: Rebar exposed