

Bridge Inspection Report

03934
US 425-03 LM 5.52
over
Brown Creek



Inspection Date:

Inspected By:

Inspection Type(s):

Inspector:

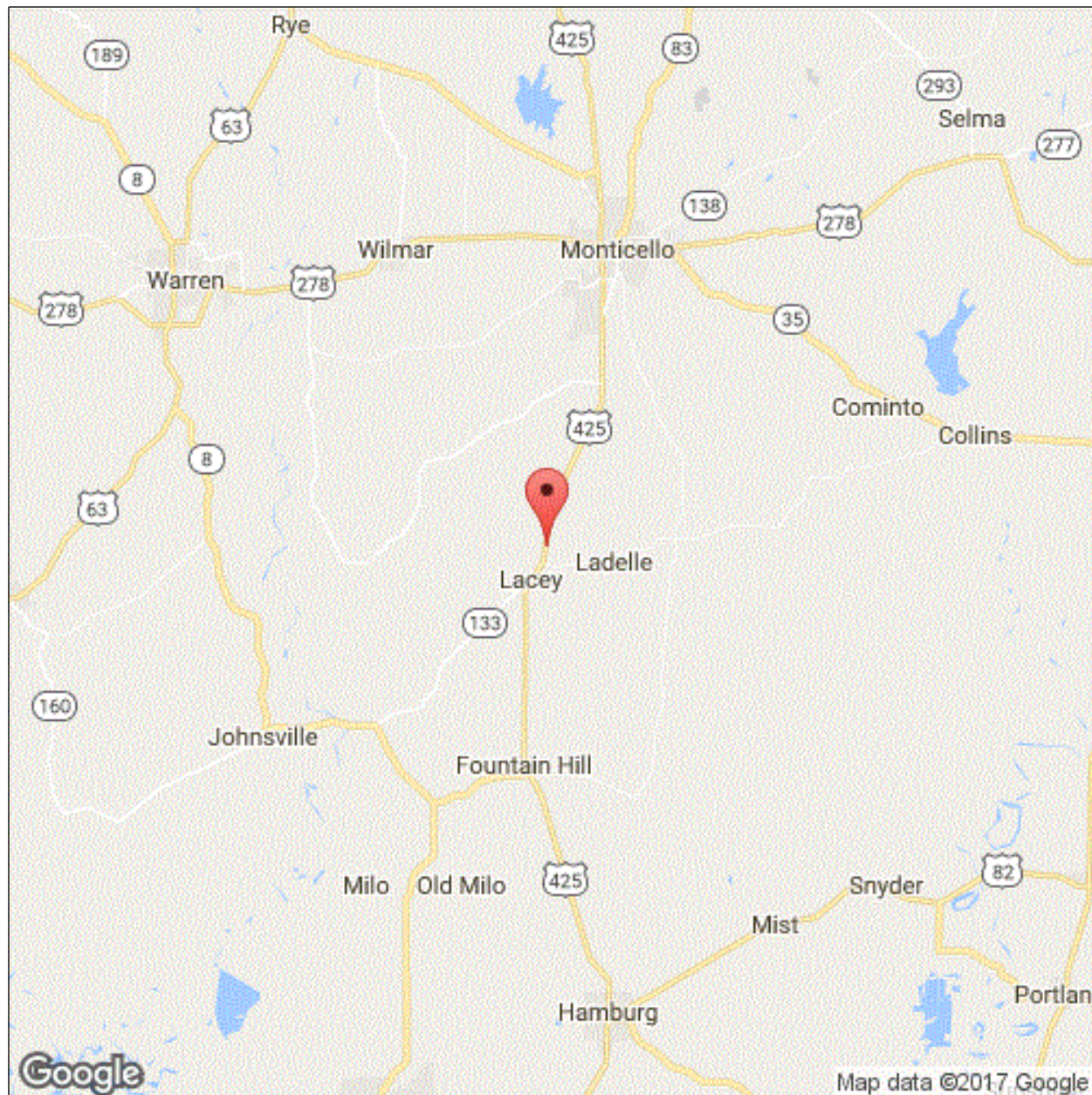
Structure Number: 03934

Inspection Date:

Facility Carried: US 425-03 LM 5.52

Bridge Inspection Report

Location Map



Latitude: 33.47261

Longitude: -91.83601

Inspector:

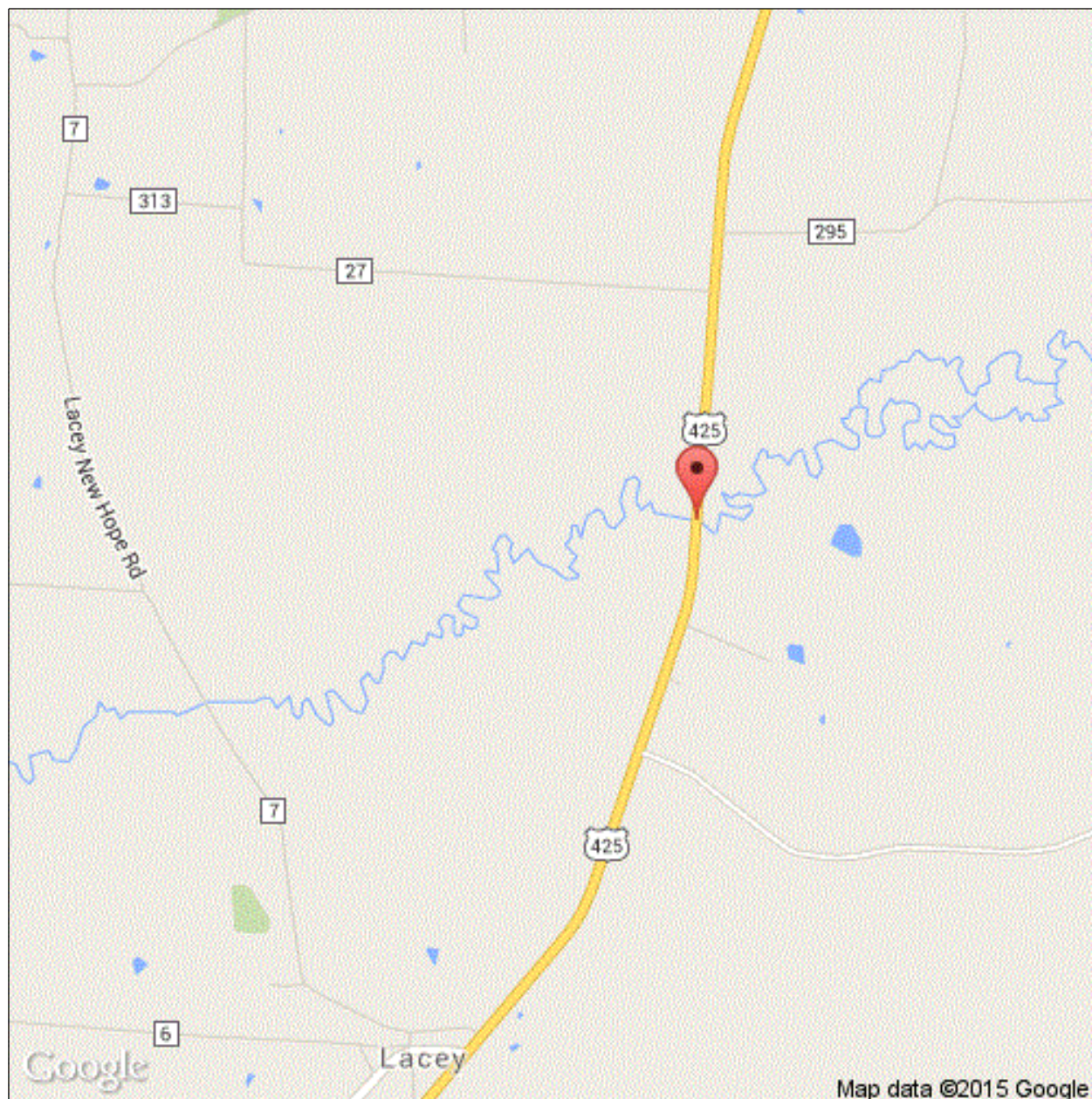
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Location Map



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Executive Summary

Beginning of structure toward SH 133, Lacey, South End.

06-25-2007, Dropping UW inspection due to sub-str. elements are not continuously submerged. High water events occur. No signs of channel scour up or down stream. NBI Items #60 and #61 will represent all elements that occasionally stand in water. RLW.

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National Bridge Inventory

IDENTIFICATION		INSPECTIONS	
(1) STATE CODE	056 - Arkansas	(90) INSPECTION DATE	07/17/2019
(8) STRUCTURE NUMBER	03934	(91) DESIGNATED INSPECTION FREQUENCY	24
(5) INV. ROUTE (ON/UNDER)	1 2 1 425 0	(92) CRITICAL FEATURE INSPECTION	(93) CFI DATE
(2) HIGHWAY AGENCY	02 (3) COUNTY CODE 043	A. FRACTURE CRITICAL DETAIL	N
(4) PLACE CODE	00000	B. UNDERWATER INSPECTION	N
(6) FEATURES INTERSECTED	Brown Creek	C. OTHER SPECIAL	N
(7) FACILITY CARRIED	US 425-03 LM 5.52		
(9) LOCATION	1.0 Mi N SH 133-Lacey	CONDITION	
(11) MILEPOINT 5.520	(12) BASE HIGHWAY NETWORK 1	(58) DECK	6
(13A) LRS INVENTORY ROUTE 0000425030	(13B) SUBROUTE NUMBER 00	(59) SUPERSTRUCTURE 6	(60) SUBSTRUCTURE 6
(16) LATITUDE 33.47261	(17) LONGITUDE -91.83601	(61) CHANNEL & CHANNEL PROTECTION 7	(62) CULVERT N
(98A) BORDER BRIDGE CODE		LOAD RATING AND POSTING	
PERCENT RESPONSIBILITY	(99) BORDER BRIDGE STRUCT	(31) DESIGN LOAD	5
		(63) METHOD USED TO DETERMINE OPERATING RATING	1
		(64) OPERATING RATING	60.0
		(65) METHOD USED TO DETERMINE INVENTORY RATING	1
		(66) INVENTORY RATING	36.0
		(70) BRIDGE POSTING	5
		(41) STRUCTURE OPEN/POSTED/CLOSED	A
STRUCTURE TYPE AND MATERIAL		APPRAISAL	
(43) STRUCTURE TYPE, MAIN		(67) STRUCTURAL EVALUATION	6
A) KIND OF MATERIAL/DESIGN: 1 - Concrete		(68) DECK GEOMETRY	4
B) TYPE OF DESIGN/CONSTR: 01 - Slab		(69) UNDERCLEARANCES, VERTICAL & HORIZONTAL	N
(44) STRUCTURE TYPE, APPROACH SPANS		(71) WATERWAY ADEQUACY	8
A) KIND OF MATERIAL/DESIGN: 0 - Other		(72) APPROACH ROADWAY ALIGNMENT	8
B) TYPE OF DESIGN/CONSTR: 00 - Other		(36) TRAFFIC SAFETY FEATURE	
(45) NUMBER OF SPANS IN MAIN 4	(46) NUMBER OF APPROACH 0	36A) BRIDGE RAILINGS:	1
(107) DECK STRUCTURE TYPE 1	(108A) WEARING SURFACE 1	36B) TRANSITIONS:	0
(108B) DECK MEMBRANE 0	(108C) DECK PROTECTION 0	36C) APPROACH GUARDRAIL:	0
		36D) APPROACH GUARDRAIL ENDS:	0
AGE OF SERVICE		(113) SCOUR CRITICAL BRIDGES	5
(27) YEAR BUILT 1965	(106) YEAR RECONSTRUCTED 0000	SUFFICIENCY RATING	65.8 STATUS 0
(42) TYPE OF SERVICE ON 1 UNDER 5		CLASSIFICATION	
(28) LANES ON 02 UNDER 00		(112) NBIS BRIDGE LENGTH	Y
(29) AVERAGE DAILY TRAFFIC 3900	(19) BYPASS DETOUR LENGTH 45	(104) HIGHWAY SYSTEM OF THE INVENTORY ROUTE	1
(30) YEAR OF AVERAGE DAILY TRAFFIC 2014		(26) FUNCTIONAL CLASSIFICATION OF INVENTORY ROUTE	02
(109) AVERAGE DAILY TRUCK TRAFFIC 1		(100) STRAHNET HIGHWAY DESIGNATION	0
		(101) PARALLEL STRUCTURE DESIGNATION	N
		(102) DIRECTION OF TRAFFIC	2
		(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
GEOMETRIC DATA		NAVIGATION DATA	
(48) LENGTH OF MAX SPAN (ft.) 30	(49) STRUCTURE LENGTH (ft.) 120	(38) NAVIGATION CONTROL	0
(50) CURB/SIDEWALK WIDTHS (ft.) LEFT 1.5 RIGHT 1.5		(111) PIER OR ABUTMENT PROTECTION	5
(51) BRDG RDWY WIDTH CURB-TO-CURB (ft.)	27.9	(39) NAV VERT CLEARANCE (ft.)	0
(52) DECK WIDTH, OUT-TO-OUT (ft.)	33.3	(116) MIN NAVIGATION VERT CLEARANCE, VERT LIFT BRIDGE (ft.)	0
(32) APPROACH ROADWAY WIDTH (ft.)	34.1	(40) NAV HORIZONTAL CLEARANCE (ft.)	0
(33) BRIDGE MEDIAN 0	(34) SKEW (DEG.) 0		
(35) STRUCTURE FLARED 0	(10) INV RTE, MIN VERT CLEAR (ft.) 99.99		
(47) TOTAL HORIZONTAL CLEARANCE (ft.)	30.8		
(53) VERTICAL CLEARANCE OVER BRIDGE ROADWAY (ft.)	99.99		
(54) VERTICAL UNDER CLEARANCE (ft.)	N 0		
(55) LATERAL UNDER CLEARANCE RIGHT (ft.)	N 99.9		
(56) MIN LATERAL UNDER CLEARANCE (ft.)	0		
PROPOSED IMPROVEMENTS			
(75A) TYPE OF WORK PROPOSED	(75B) WORK DONE BY		
(76) LENGTH OF STRUCTURE IMPROVEMENT (ft.)	0		
(94) BRIDGE IMPROVEMENT COST (\$)	0		
(95) ROADWAY IMPROVEMENT COST (\$)	0		
(96) TOTAL PROJECT COST	0		
(97) YEAR OF IMPROVEMENT COST ESTIMATE			
(114) FUTURE ADT 4991	(115) YEAR OF FUTURE ADT 2028		

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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.	3384	sq. ft.	444	2885	55	0
Deck: 28.2' wide x 120' long. Span 1: Unsealed, moderate-sized longitudinal crack just left of centerline with reflective crack on soffit with rust-staining and light efflorescence. Span 3: Unsealed, minor- to moderate-sized longitudinal crack just right of centerline with reflective crack on soffit with rust-staining and light efflorescence. Span 4: Unsealed, moderate-sized longitudinal crack just left of centerline with reflective crack on soffit with rust-staining and light efflorescence. Some scattered unsealed minor- to moderate-sized cracking - diagonal and longitudinal - with some moderate-sized vertical cracking on sides of slabs at caps. Travel lanes have some minor abrasive wear with loss of mortar but no loss of aggregates.							
1080 - Delamination/Spall/Patched Area		5		0	5	0	0
1120 - Efflorescence/Rust Staining		75		0	75	0	0
1130 - Cracking (RC and Other)		255		0	200	55	0
1190 - Abrasion/Wear (PSC/RC)		2605		0	2605	0	0
215 - Reinforced Concrete Abutment	1- Ben.	74	ft.	74	0	0	0
Abutments: 37' each / Bents 1 and 5.							
227 - Reinforced Concrete Pile	1- Ben.	15	each	5	10	0	0
Pile: 5 per bent / Bents 2-4. Minor abrasion on lower 3 feet of piles at Bents 2 and 3.							
1190 - Abrasion/Wear (PSC/RC)		10		0	10	0	0
234 - Reinforced Concrete Pier Cap	1- Ben.	84	ft.	81	0	3	0
Caps: 28' each / Bents 2-4. Bent 3 back: Spalling on top edge with some rebar exposed (initial section loss).							
1090 - Exposed Rebar		3		0	0	3	0
301 - Pourable Joint Seal	1- Ben.	84	ft.	0	65	14	5
Joints: 28' each / Bents 2-4. Bents 2-4: Poured joint material has deteriorated and has come out in many place, allowing stormwater to leak through onto end of deck slab and onto cap - debris (dirt/sand) has filled in joint and is preventing joint from working properly.							
2330 - Seal Damage		47		0	28	14	5
2350 - Debris Impaction		37		0	37	0	0

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Element Inspection

321 - Reinforced Concrete Approach Slab	1- Ben.	1820	sq. ft.	0	1820	0	0
	Approach slabs: 26' wide x 35' long. Travel lanes have some minor abrasive wear with loss of mortar but no loss of aggregates.						
1190 - Abrasion/Wear (PSC/RC)		1820		0	1820	0	0
330 - Metal Bridge Railing	1- Ben.	240	ft.	240	0	0	0
	Metal railing: 120' each side. Coating: 2.0 square feet per linear feet of railing. Metal railing is dull and has no luster.						
515 - Steel Protective Coating		480	sq. ft.	0	480	0	0
3410 - Chalking (Steel Protective Coatings)		480		0	480	0	0
331 - Reinforced Concrete Bridge Railing	1- Ben.	240	ft.	240	0	0	0
	RC railing: 120" each side.						

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Pictures

PHOTO 1

Description

PHOTO 1

Description

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Bridge Inspection Report

Pictures

PHOTO 2

Description

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Bridge Inspection Report

Sketches

Inspector:

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Bridge Inspection Report

Maintenance Needs

Date Reported: 07/17/2019

Priority: G - General/ Preventive maintenance

Work Code:

Deficiency Description:

Southeast approach rail has damage due to traffic impact.

Work Description:

Date Repairs Completed:

Maintenance Comments:

Stage: Open



PHOTO 1 Description Southeast approach rail has damage from traffic impact.

Inspector:

Structure Number: 03934

Inspection Date:

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Bridge Inspection Report

Maintenance Needs

Date Reported: 07/17/2019

Priority: C - Important

Work Code: N/A

Deficiency Description:

Deck -

Span 1: Unsealed, moderate-sized longitudinal crack just left of centerline with reflective crack on soffit with rust-staining and light efflorescence.

Span 3: Unsealed, minor- to moderate-sized longitudinal crack just right of centerline with reflective crack on soffit with rust-staining.

Span 4: Unsealed, moderate-sized longitudinal crack just left of centerline with reflective crack on soffit with rust-staining. Some scattered unsealed minor- to moderate-sized cracking - diagonal and longitudinal - with some moderate-sized vertical cracking on sides of slabs at caps.

Changed priority from "G" to "C" SDH 2019.

Work Description:

Date Repairs Completed:

Maintenance Comments:

Stage: Open



PHOTO 1 Description Span 1 at center line longitudinal crack full length.

Stage: Monitor



PHOTO 2 Description

Inspector:

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Maintenance Needs

Stage: Monitor



PHOTO 3	Description	Span 1 deck has large unsealed longitudinal cracks near center line that reflect thru to soffit with efflorescence.
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Maintenance Needs

Date Reported: 07/17/2019

Priority: C - Important

Work Code: N/A

Deficiency Description:

Joints - Bents 2-4: Poured joint material has deteriorated and has come out in many place, allowing stormwater to leak through onto end of deck slab and onto cap - debris (dirt/sand) has filled in joint and is preventing joint from working properly.

Changed priority from "G" to "C" SDH 2019.

Work Description:

Date Repairs Completed:

Maintenance Comments:

Stage: Monitor



PHOTO 1 Description Spans 1& 2 at bent 2 joint seal have lost bond and have areas missing.

Stage: Open



PHOTO 2 Description Joint - Bent 2: Missing material

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Maintenance Needs

Stage: Open



PHOTO 3 Description Joint - Bent 3: Missing material

Stage: Open



PHOTO 5 Description Joint - Bent 4: Deterioration

Stage: Monitor



PHOTO 4 Description Span 1 at bent 2 right side of slab has cracks with small spall over cap.

Affected Area : Create Report Section.
Section Name : Table of Contents
Section Type : TOC
Detailed Message : Object reference not set to an instance of an
object.