

# Bridge Inspection Report

**02953**

**US 278-16 LM 0.38**

**over**

**Bayou Bartholomew**



**Inspection Date:**

**Inspected By:**

**Inspection Type(s):**

Inspector:

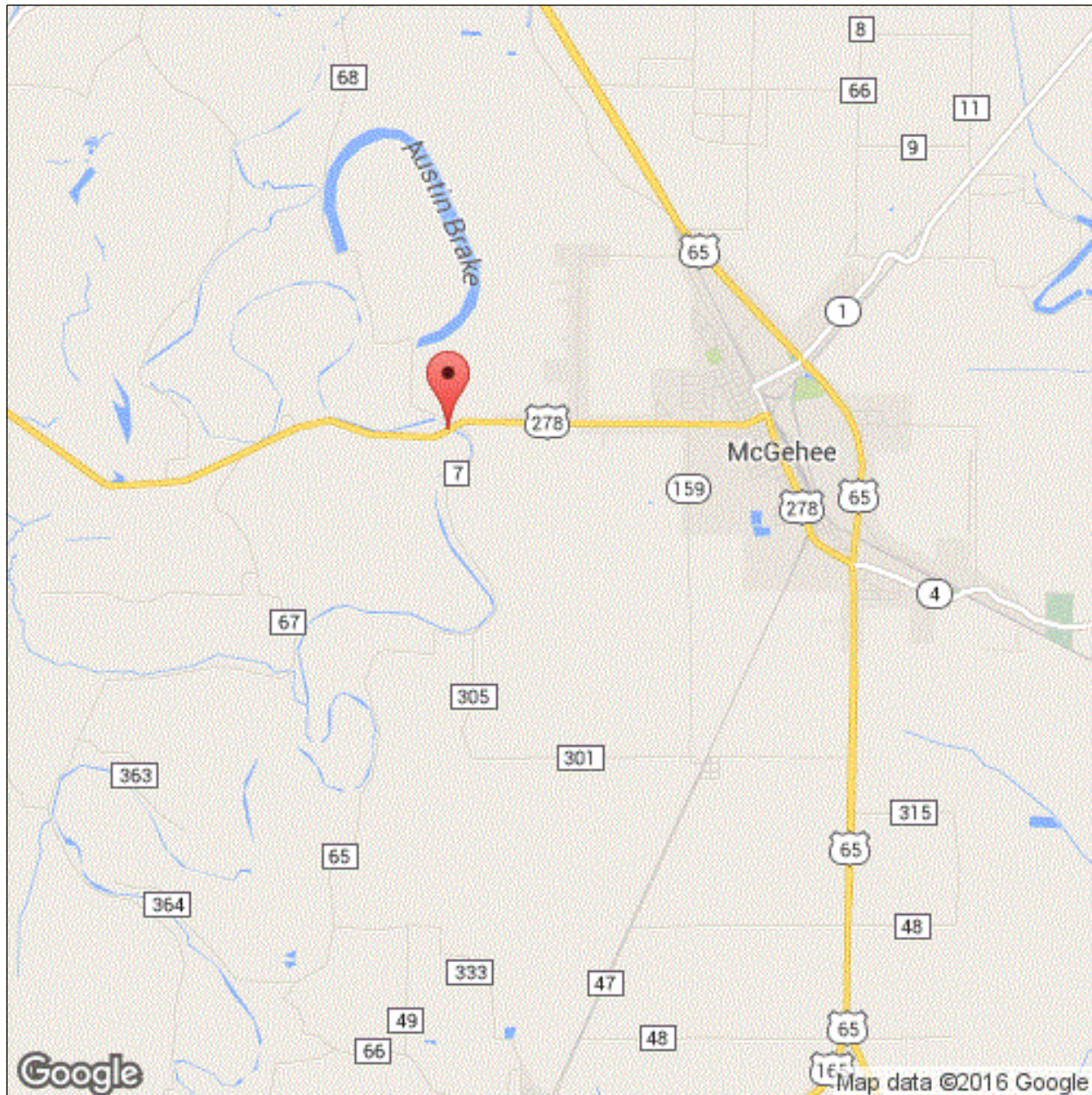
Structure Number: 02953

Inspection Date:

Facility Carried: US 278-16 LM 0.38

## Bridge Inspection Report

### Location Map



Latitude: 33.6283699114165

Longitude: -91.44702205936119



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### Location Map



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## National Bridge Inventory

IDENTIFICATION		INSPECTIONS	
(1) STATE CODE	056 - Arkansas	(90) INSPECTION DATE	04/20/2017
(8) STRUCTURE NUMBER	02953	(91) DESIGNATED INSPECTION FREQUENCY	24
(5) INV. ROUTE (ON/UNDER)	1 2 1 278 0	(92) CRITICAL FEATURE INSPECTION	(93) CFI DATE
(2) HIGHWAY AGENCY	02 (3) COUNTY CODE 041	A. FRACTURE CRITICAL DETAIL	N
(4) PLACE CODE	00000	B. UNDERWATER INSPECTION	N
(6) FEATURES INTERSECTED	Bayou Bartholomew	C. OTHER SPECIAL	Y 24 04/11/2016
(7) FACILITY CARRIED	US 278-16 LM 0.38		
(9) LOCATION	4.5 Mi W US 65, McGehee		
(11) MILEPOINT 0.380	(12) BASE HIGHWAY NETWORK 0		
(13A) LRS INVENTORY ROUTE	0000000000 (13B) SUBROUTE NUMBER 00		
(16) LATITUDE 33.6283699114165	(17) LONGITUDE -91.44702205936119		
(98A) BORDER BRIDGE CODE			
PERCENT RESPONSIBILITY	(99) BORDER BRIDGE STRUCT		
STRUCTURE TYPE AND MATERIAL		CONDITION	
(43) STRUCTURE TYPE, MAIN		(58) DECK	4
A) KIND OF MATERIAL/DESIGN: 3 - Steel		(59) SUPERSTRUCTURE	5
B) TYPE OF DESIGN/CONSTR: 02 - Stringer/Multi-beam or Girder		(60) SUBSTRUCTURE	5
(44) STRUCTURE TYPE, APPROACH SPANS		(61) CHANNEL & CHANNEL PROTECTION	7
A) KIND OF MATERIAL/DESIGN: 0 - Other		(62) CULVERT	N
B) TYPE OF DESIGN/CONSTR: 00 - Other			
(45) NUMBER OF SPANS IN MAIN 9	(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 1956	(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	49.1
(29) AVERAGE DAILY TRAFFIC 2400	(19) BYPASS DETOUR LENGTH 14	(65) METHOD USED TO DETERMINE INVENTORY RATING	1
(30) YEAR OF AVERAGE DAILY TRAFFIC 2014		(66) INVENTORY RATING	29.0
(109) AVERAGE DAILY TRUCK TRAFFIC 1		(70) BRIDGE POSTING	5
GEOMETRIC DATA		(41) STRUCTURE OPEN/POSTED/CLOSED	A
(48) LENGTH OF MAX SPAN (ft.) 40	(49) STRUCTURE LENGTH (ft.) 362		
(50) CURB/SIDEWALK WIDTHS (ft.) LEFT 1 RIGHT 1			
(51) BRDG RDWY WIDTH CURB-TO-CURB (ft.)	24.0		
(52) DECK WIDTH, OUT-TO-OUT (ft.)	26.2		
(32) APPROACH ROADWAY WIDTH (ft.)	25.9		
(33) BRIDGE MEDIAN 0	(34) SKEW (DEG.) 40		
(35) STRUCTURE FLARED 0	(10) INV RTE, MIN VERT CLEAR (ft.) 99.99		
(47) TOTAL HORIZONTAL CLEARANCE (ft.)	25.9		
(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		APPRAISAL	
(75A) TYPE OF WORK PROPOSED 31	(75B) WORK DONE BY 1	(67) STRUCTURAL EVALUATION	5
(76) LENGTH OF STRUCTURE IMPROVEMENT (ft.) 399.0		(68) DECK GEOMETRY	2
(94) BRIDGE IMPROVEMENT COST (\$)	0	(69) UNDERCLEARANCES, VERTICAL & HORIZONTAL	N
(95) ROADWAY IMPROVEMENT COST (\$)	117	(71) WATERWAY ADEQUACY	8
(96) TOTAL PROJECT COST	757	(72) APPROACH ROADWAY ALIGNMENT	6
(97) YEAR OF IMPROVEMENT COST ESTIMATE 2003		(36) TRAFFIC SAFETY FEATURE	
(114) FUTURE ADT 1962	(115) YEAR OF FUTURE ADT 2028	36A) BRIDGE RAILINGS:	0
		36B) TRANSITIONS:	1
		36C) APPROACH GUARDRAIL:	1
		36D) APPROACH GUARDRAIL ENDS:	1
		(113) SCOUR CRITICAL BRIDGES	5
		SUFFICIENCY RATING	1
		STATUS	57.4
		CLASSIFICATION	
		(112) NBIS BRIDGE LENGTH	Y
		(104) HIGHWAY SYSTEM OF THE INVENTORY ROUTE	0
		(26) FUNCTIONAL CLASSIFICATION OF INVENTORY ROUTE	07
		(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	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
12 - Reinforced Concrete Deck	1- Ben.	9485	sq. ft.	7227	1864	394	0
	Deck : 362' by 26.2' Deck all spans have concrete patched areas with spalls and spalls with exposed rebar. Soffit has spalls with exposed rebar and delaminations . Heavy abrasion and spalls filled with asphalt all spans with small pop out spall entire deck. Soffit all spans have delams ,cracks and efflorescence.						
1080 - Delamination/Spall/Patched Area		938			848	90	
1090 - Exposed Rebar		55			16	39	
1120 - Efflorescence/Rust Staining		65			50	15	
1190 - Abrasion/Wear (PSC/RC)		1200			950	250	
107 - Steel Open Girder/Beam	1- Ben.	1800	ft.	890	800	110	0
	Girders: 5 each at 360' Girders all spans have areas of surface rust with some minor pitting. Girder ends have rust with pitting near open joints. ( girder ends repainted by state forces.)						
1000 - Corrosion		910			800	110	
515 - Steel Protective Coating		12150	sq. ft.	0	9843	1092	1215
3440 - Effectiveness (Steel Protective Coatings)		12150			9843	1092	1215
215 - Reinforced Concrete Abutment	1- Ben.	72	ft.	72			
	Abutment: 36' each Bents 1 & 10						
227 - Reinforced Concrete Pile	1- Ben.	40	each	33	7	0	0
	Pile : 5 each at bents 2-9 Bent 6 pile 2, Bent 7 pile 3 & 4, Bent 8 pile 2,3 & 4 have small spalls. Bent 9 pile 3 & 4 have vertical cracks from the cap down.						
1080 - Delamination/Spall/Patched Area		6			6		
1130 - Cracking (RC and Other)		1			1		
234 - Reinforced Concrete Pier Cap	1- Ben.	208	ft.	200	8	0	0
	Cap: 26 ' each bents 2-9 Bent 4 and 6 have horizontal cracks.						
1130 - Cracking (RC and Other)		8			8		
304 - Open Expansion Joint	1- Ben.	260	ft.	0	257	3	0
	Open joints: 26' each bents 1-10 All joints have pitting rust with some flaking and spalls at joint armor.						
2360 - Adjacent Deck or Header		260			257	3	
311 - Movable Bearing	1- Ben.	45	each	0	35	10	0
	Movable bearings: 5 each spans 1-9 All bearings have pitting rust with some flaking.						
1000 - Corrosion		45			35	10	
515 - Steel Protective Coating		90	sq. ft.	0	15	75	

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313 - Fixed Bearing	1- Ben.	45	each	0	35	10	0
	Fixed bearings :5 each spans 1-9. All bearing have pitting rust and some flaking.						
1000 - Corrosion		45			35	10	
515 - Steel Protective Coating		90	sq. ft.	0	10	80	
330 - Metal Bridge Railing	1- Ben.	726	ft.	376	350		
	Railing: 363, each side. Bridge railing has areas of rust and some small areas of damage. Bridge post in various locations have been repaired by state forces.						



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### Pictures



No overlay on the bridge deck.



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## Bridge Inspection Report

### Maintenance Needs

Date Reported: 04/02/2015

Priority: G - General/ Preventive maintenance

Work Code:

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Deficiency Description:

All spans girder are rusty with some pitting most common at ends and drain openings.

Work Description:

---

Date Repairs Completed:

Maintenance Comments:

---

Stage: Open



PHOTO 1 Description



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## Bridge Inspection Report

### Maintenance Needs

Date Reported: 04/20/2017

Priority: D - Routine

Work Code:

---

#### Deficiency Description:

Joint armor all spans has rust with some pitting and are open allowing water on to girder ends causing section loss to girders.

Work Description:

---

Date Repairs Completed:

Maintenance Comments:

---

Stage: Open



PHOTO 1      Description      Open joint seals at span1 bent 1

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### Maintenance Needs

Date Reported: 4/3/2013 12:00:00 AM

Priority: C - Important

Work Code:

---

Deficiency Description:

Deck spans 1,2,3,4 & 5 have spalls, spalls with exposed rebar.

Work Description:

---

Date Repairs Completed: 04/01/2015

Maintenance Comments:

---

Inspector:

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## Bridge Inspection Report

### Maintenance Needs

Date Reported: 04/20/2017

Priority: C - Important

Work Code:

Deficiency Description:

Deck all spans have spalls with exposed rebar. Deck all spans have small spalls and spalls filled with asphalt.

Work Description:

Date Repairs Completed:

Maintenance Comments:

Stage: Open



PHOTO 1 Description

Stage: Monitor



PHOTO 2 Description Span 3 left lane near bent 3 spall with exposed rebar in previously patched area.



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### Maintenance Needs

Stage: Assigned



PHOTO 3      Description      Spall with exposed rebar span 3 near bent 3

Stage: Assigned



PHOTO 5      Description      Span 1 near bent 1 spall with exposed rebar

Stage: Assigned



PHOTO 4      Description      Deck over view of span 3