

# Bridge Inspection Report

**05278**  
**US 165-05 LM 2.45**  
**over**  
**Moore Bayou**



**Inspection Date:**

**Inspected By:**

**Inspection Type(s):**

Inspector:

Structure Number: 05278

Inspection Date:

Facility Carried: US 165-05 LM 2.45

Bridge Inspection Report

National Bridge Inventory

IDENTIFICATION		INSPECTIONS	
(1) STATE CODE	056 - Arkansas	(90) INSPECTION DATE	08/29/2017
(8) STRUCTURE NUMBER	05278	(91) DESIGNATED INSPECTION FREQUENCY	24
(5) INV. ROUTE (ON/UNDER)	1 2 1 165 0	(92) CRITICAL FEATURE INSPECTION	(93) CFI DATE
(2) HIGHWAY AGENCY	02 (3) COUNTY CODE 001	A. FRACTURE CRITICAL DETAIL	N
(4) PLACE CODE	00000	B. UNDERWATER INSPECTION	N
(6) FEATURES INTERSECTED	Moore Bayou	C. OTHER SPECIAL	N
(7) FACILITY CARRIED	US 165-05 LM 2.45	CONDITION	
(9) LOCATION	2.45 Mi N AR Rvr-Pndleton	(58) DECK	7
(11) MILEPOINT 2.450	(12) BASE HIGHWAY NETWORK 1	(59) SUPERSTRUCTURE	6 (60) SUBSTRUCTURE 8
(13A) LRS INVENTORY ROUTE	0000165050 (13B) SUBROUTE NUMBER 00	(61) CHANNEL & CHANNEL PROTECTION	8 (62) CULVERT N
(16) LATITUDE 34.01811	(17) LONGITUDE -91.38167	LOAD RATING AND POSTING	
(98A) BORDER BRIDGE CODE		(31) DESIGN LOAD	5
PERCENT RESPONSIBILITY	(99) BORDER BRIDGE STRUCT	(63) METHOD USED TO DETERMINE OPERATING RATING	1
STRUCTURE TYPE AND MATERIAL		(64) OPERATING RATING	45.0
(43) STRUCTURE TYPE, MAIN		(65) METHOD USED TO DETERMINE INVENTORY RATING	1
A) KIND OF MATERIAL/DESIGN:	4 - Steel continuous	(66) INVENTORY RATING	27.0
B) TYPE OF DESIGN/CONSTR:	02 - Stringer/Multi-beam or Girder	(70) BRIDGE POSTING	5
(44) STRUCTURE TYPE, APPROACH SPANS		(41) STRUCTURE OPEN/POSTED/CLOSED	A
A) KIND OF MATERIAL/DESIGN:	0 - Other	APPRAISAL	
B) TYPE OF DESIGN/CONSTR:	00 - Other	(67) STRUCTURAL EVALUATION	6
(45) NUMBER OF SPANS IN MAIN	16 (46) NUMBER OF APPROACH	(68) DECK GEOMETRY	7
(107) DECK STRUCTURE TYPE	1 (108A) WEARING SURFACE	(69) UNDERCLEARANCES, VERTICAL & HORIZONTAL	N
(108B) DECK MEMBRANE	0 (108C) DECK PROTECTION	(71) WATERWAY ADEQUACY	8
		(72) APPROACH ROADWAY ALIGNMENT	8
AGE OF SERVICE		(36) TRAFFIC SAFETY FEATURE	
(27) YEAR BUILT	1983 (106) YEAR RECONSTRUCTED	36A) BRIDGE RAILINGS:	1
(42) TYPE OF SERVICE	ON 1 UNDER 5	36B) TRANSITIONS:	0
(28) LANES	ON 02 UNDER 00	36C) APPROACH GUARDRAIL:	0
(29) AVERAGE DAILY TRAFFIC	1600 (19) BYPASS DETOUR LENGTH	36D) APPROACH GUARDRAIL ENDS:	1
(30) YEAR OF AVERAGE DAILY TRAFFIC	2014	(113) SCOUR CRITICAL BRIDGES	5
(109) AVERAGE DAILY TRUCK TRAFFIC	1	SUFFICIENCY RATING	0 STATUS 71.8
		CLASSIFICATION	
GEOMETRIC DATA		(112) NBIS BRIDGE LENGTH	Y
(48) LENGTH OF MAX SPAN (ft.)	65 (49) STRUCTURE LENGTH (ft.)	(104) HIGHWAY SYSTEM OF THE INVENTORY ROUTE	1
(50) CURB/SIDEWALK WIDTHS (ft.)	LEFT 0 RIGHT 0	(26) FUNCTIONAL CLASSIFICATION OF INVENTORY ROUTE	02
(51) BRDG RDWY WIDTH CURB-TO-CURB (ft.)	40.0	(100) STRAHNET HIGHWAY DESIGNATION	0
(52) DECK WIDTH, OUT-TO-OUT (ft.)	43	(101) PARALLEL STRUCTURE DESIGNATION	N
(32) APPROACH ROADWAY WIDTH (ft.)	40.0	(102) DIRECTION OF TRAFFIC	2
(33) BRIDGE MEDIAN	0 (34) SKEW (DEG.)	(103) TEMP STRUCTURE	
(35) STRUCTURE FLARED	0 (10) INV RTE, MIN VERT CLEAR (ft.)	(105) FEDERAL LANDS HIGHWAYS	0
(47) TOTAL HORIZONTAL CLEARANCE (ft.)	41.3	(110) DESIGNATED NATIONAL NETWORK	1
(53) VERTICAL CLEARANCE OVER BRIDGE ROADWAY (ft.)	99.99	(20) TOLL	3
(54) VERTICAL UNDER CLEARANCE (ft.)	N 0	(21) MAINTENANCE RESPONSIBILITY	01
(55) LATERAL UNDER CLEARANCE RIGHT (ft.)	N 99.9	(37) HISTORICAL	5
(56) MIN LATERAL UNDER CLEARANCE (ft.)	0	NAVIGATION DATA	
PROPOSED IMPROVEMENTS		(38) NAVIGATION CONTROL	0
(75A) TYPE OF WORK PROPOSED	(75B) WORK DONE BY	(111) PIER OR ABUTMENT PROTECTION	5
(76) LENGTH OF STRUCTURE IMPROVEMENT (ft.)	0	(39) NAV VERT CLEARANCE (ft.)	0
(94) BRIDGE IMPROVEMENT COST (\$)	0	(116) MIN NAVIGATION VERT CLEARANCE, VERT LIFT BRIDGE (ft.)	0
(95) ROADWAY IMPROVEMENT COST (\$)	0	(40) NAV HORIZONTAL CLEARANCE (ft.)	0
(96) TOTAL PROJECT COST	0		
(97) YEAR OF IMPROVEMENT COST ESTIMATE			
(114) FUTURE ADT	1703 (115) YEAR OF FUTURE ADT		
	2028		

Inspector:  
 Inspection Date:

Structure Number: 05278  
 Facility Carried: US 165-05 LM 2.45

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.	41365	sq. ft.	41365			
	<p>Deck: 43' wide x 962' long.            Some scattered areas of minor- to moderate sized cracking in asphalt wearing surface, with moderate-sized transverse cracks at bents (20%)            Some very small areas of potholing (asphalt wearing surface peeling up) at various bents along centerline (2%).            A few scattered asphalt patches filling potholes in wheel ruts in various locations.</p>						
	<div style="border: 1px solid red; padding: 5px; display: inline-block; color: red;"> <p>Note: 2" of ACHM overlay on deck</p> </div>						
510 - Wearing Surfaces		38480	sq. ft.	30014	8466	0	0
3210 - Delamination/Spall/Patched Area/Pothole (Wearing Surfaces)		770			770		
3220 - Crack (Wearing Surface)		7696			7696		
107 - Steel Open Girder/Beam	1- Ben.	5760	ft.	5280	96	384	0
	<p>Girders: 6 per span / 960' total span.            Coating: 7.3 square feet/linear feet of girder.</p> <p>Girders 1-6 @ Bents 1, 5, 9, 13, &amp; 17: Ends of girders at open joints are corroding with initial section loss (flaking and pitting) of top and bottom and bottom flange and web at bottom flange and haunch - 6-10' from the joint at each location (6 girders x 8' x 8 locations = 384' CS3 / 6 girders x 2' x 8 locations = 96' CS2).</p>						
1000 - Corrosion		480			96	384	
515 - Steel Protective Coating		42048	sq. ft.	26398	15000	130	520
3430 - Oxide Film Degradation Color/Texture Adherence(Steel Protective Coatings)		15650			15000	130	520
205 - Reinforced Concrete Column	1- Ben.	10	each	10			
	<p>Columns: 5 per bent / Bents 9 &amp; 10.</p>						
215 - Reinforced Concrete Abutment	1- Ben.	106	ft.	106			
	<p>Abutments: 53' each / Bents 1 &amp; 17.</p>						
220 - Reinforced Concrete Pile Cap/Footing	1- Ben.	80	ft.	80			
	<p>Bents 9&amp;10 are 40' each for 80' total .</p>						
227 - Reinforced Concrete Pile	1- Ben.	100	each	99	1	0	0
	<p>Piling: 8 per bent / Bents 2-4, 6-8, 11-12, 14-16; 6 per bent / Bents 5 &amp; 13.            Bent 7 Pile 5: Small spall on back right side.</p>						
1080 - Delamination/Spall/Patched Area		1			1		
234 - Reinforced Concrete Pier Cap	1- Ben.	600	ft.	600			
	<p>Caps: 40' each / Bents 2-16.            Bents 1, 5, 9, 13, &amp; 17: Build-up of dirt and debris on top of caps and around bearings, holding moisture on top of caps and around bearings.</p>						

Inspector:

Structure Number: 05278

Inspection Date:

Facility Carried: US 165-05 LM 2.45

Bridge Inspection Report

Element Inspection

300 - Strip Seal Expansion Joint	1- Ben.	200	ft.	0	0	0	200
Joints: 40' each / Bents 1, 5, 9, 13, & 17. No joint material in place, allowing dirt and debris to build up on top of caps and around bearings and allowing stormwater through on top of caps, around bearings, and on ends of girders.							
2330 - Seal Damage		200					200
310 - Elastomeric Bearing	1- Ben.	120	each	120			
Bearings: 6 per bent / Bents 1-4, 5 back, 5 ahead, 6-8, 9 back, 9 ahead, 10-12, 13 back, 13 ahead, 14-17.							
331 - Reinforced Concrete Bridge Railing	1- Ben.	1924	ft.	1924			
Railing: 962' each side.							

Inspector:  
Inspection Date:

Structure Number: 05278  
Facility Carried: US 165-05 LM 2.45

Bridge Inspection Report

Maintenance Needs

Date Reported: 08/26/2015  
Priority: D - Routine  
Work Code: N/A

Deficiency Description:

Caps – Bents 1, 5, 9, 13, & 17:  
Build-up (4-8" deep) of dirt and debris on top of caps and around bearings, holding moisture on top of caps and around bearings.

Work Description:

Date Repairs Completed:

Maintenance Comments:

Stage: Monitor



PHOTO 1 Description Cap - Bent 13 (debris)

Stage: Monitor



PHOTO 2 Description Cap - Bent 1 (debris)

Inspector:

Structure Number: 05278

Inspection Date:

Facility Carried: US 165-05 LM 2.45

Bridge Inspection Report

Maintenance Needs

Date Reported: 08/26/2015

Priority: D - Routine

Work Code: N/A

Deficiency Description:

Joints – Bents 1, 5, 9, 13, & 17:

No joint material in place, allowing dirt and debris to build up on top of caps and around bearings and allowing stormwater through on top of caps, around bearings, and on ends of girders.

Work Description:

Date Repairs Completed:

Maintenance Comments:

Remove old material, clean joint, and re-apply new joint material.

Stage: Monitor

Stage: Monitor



PHOTO 1 Description Joint - Bent 1

PHOTO 2 Description Joint - Bent 17 right side

Inspector:  
Inspection Date:

Structure Number: 05278  
Facility Carried: US 165-05 LM 2.45

Bridge Inspection Report

Maintenance Needs

Date Reported: 08/26/2015  
Priority: G - General/ Preventive maintenance  
Work Code: N/A

Deficiency Description:

Deck – all spans: Some scattered areas of minor- to moderate sized cracking in asphalt wearing surface, with moderate-sized transverse cracks at bents.  
Some very small areas of potholing (asphalt wearing surface peeling up) at various bents along centerline.  
A few scattered asphalt patches filling potholes in wheel ruts in various locations.

Work Description:

Date Repairs Completed:  
Maintenance Comments:

Stage: Monitor



PHOTO 1 Description Wearing surface - Span 13

Stage: Monitor



PHOTO 2 Description Joint - Bent 17 right side

Inspector:

Structure Number: 05278

Inspection Date:

Facility Carried: US 165-05 LM 2.45

Bridge Inspection Report

Maintenance Needs

Stage: Monitor



PHOTO 3 Description Wearing surface - Span 7

Inspector:

Structure Number: 05278

Inspection Date:

Facility Carried: US 165-05 LM 2.45

Bridge Inspection Report

Maintenance Needs

Date Reported: 08/29/2017

Priority: C - Important

Work Code: N/A

Deficiency Description:

Girders 1-6 @ Bents 1, 5, 9, 13, & 17: Ends of girders at open joints are corroding with initial section loss (flaking and pitting) of top and bottom and bottom flange and web at bottom flange and haunch - 6-10' from the joint at each location.

Work Description:

Date Repairs Completed:

Maintenance Comments:

Stage: Open

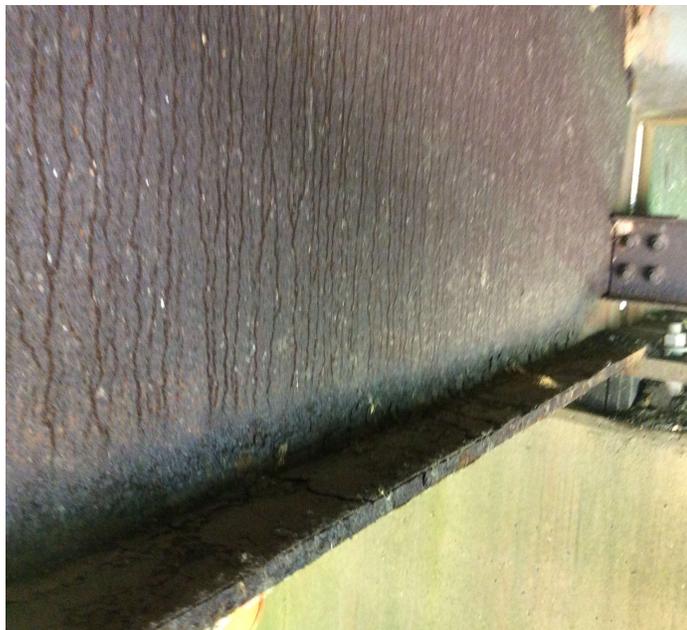


PHOTO 1 Description

Stage: Open



PHOTO 2 Description

Inspector:

Structure Number: 05278

Inspection Date:

Facility Carried: US 165-05 LM 2.45

Bridge Inspection Report

Maintenance Needs

Stage: Open



PHOTO 3 Description

Stage: Monitor

Stage: Monitor



PHOTO 5 Description Bent 13 expansion joint is missing .

Stage: Monitor



PHOTO 4 Description Bent 5 expansion joint is missing .



PHOTO 6 Description Bent 9 expansion joint is missing .

Inspector:

Structure Number: 05278

Inspection Date:

Facility Carried: US 165-05 LM 2.45

Bridge Inspection Report

Maintenance Needs

Stage: Monitor



PHOTO 7 Description Bent 17 expansion joint is missing .