

Bridge Inspection Report

02396

US 79/sec15/L6.77

over

LITTLE HOG TUSK CREEK



Inspection Date:

Inspected By:

Inspection Type(s):

Inspector:

Structure Number: 02396

Inspection Date:

Facility Carried: US 79/sec15/L6.77

Bridge Inspection Report

National Bridge Inventory

IDENTIFICATION		INSPECTIONS	
(1) STATE CODE	056 - Arkansas	(90) INSPECTION DATE	10/26/2016
(8) STRUCTURE NUMBER	02396	(91) DESIGNATED INSPECTION FREQUENCY	24
(5) INV. ROUTE (ON/UNDER)	1 2 1 79 0	(92) CRITICAL FEATURE INSPECTION	(93) CFI DATE
(2) HIGHWAY AGENCY	01 (3) COUNTY CODE 077	A. FRACTURE CRITICAL DETAIL	N
(4) PLACE CODE	00000	B. UNDERWATER INSPECTION	N
(6) FEATURES INTERSECTED	LITTLE HOG TUSK CREEK	C. OTHER SPECIAL	N
(7) FACILITY CARRIED	US 79/sec15/L6.77	CONDITION	
(9) LOCATION	1.0 MI W JCT SH 238	(58) DECK	8
(11) MILEPOINT 6.770	(12) BASE HIGHWAY NETWORK 1	(59) SUPERSTRUCTURE	5 (60) SUBSTRUCTURE 7
(13A) LRS INVENTORY ROUTE	0000079150 (13B) SUBROUTE NUMBER 00	(61) CHANNEL & CHANNEL PROTECTION	6 (62) CULVERT N
(16) LATITUDE 34.776482	(17) LONGITUDE -91.005013	LOAD RATING AND POSTING	
(98A) BORDER BRIDGE CODE		(31) DESIGN LOAD	4
PERCENT RESPONSIBILITY	(99) BORDER BRIDGE STRUCT	(63) METHOD USED TO DETERMINE OPERATING RATING	1
STRUCTURE TYPE AND MATERIAL		(64) OPERATING RATING	60.0
(43) STRUCTURE TYPE, MAIN		(65) METHOD USED TO DETERMINE INVENTORY RATING	1
A) KIND OF MATERIAL/DESIGN:	3 - Steel	(66) INVENTORY RATING	36.0
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	5
(45) NUMBER OF SPANS IN MAIN	3 (46) NUMBER OF APPROACH	(68) DECK GEOMETRY	5
(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	1952 (106) YEAR RECONSTRUCTED	36A) BRIDGE RAILINGS:	0
(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	820 (19) BYPASS DETOUR LENGTH	36D) APPROACH GUARDRAIL ENDS:	0
(30) YEAR OF AVERAGE DAILY TRAFFIC	2014	(113) SCOUR CRITICAL BRIDGES	5
(109) AVERAGE DAILY TRUCK TRAFFIC	14	SUFFICIENCY RATING	0 STATUS 68.1
GEOMETRIC DATA		CLASSIFICATION	
(48) LENGTH OF MAX SPAN (ft.)	30 (49) STRUCTURE LENGTH (ft.)	(112) NBIS BRIDGE LENGTH	Y
(50) CURB/SIDEWALK WIDTHS (ft.)	LEFT 1.5 RIGHT 1.5	(104) HIGHWAY SYSTEM OF THE INVENTORY ROUTE	1
(51) BRDG RDWY WIDTH CURB-TO-CURB (ft.)	25.9	(26) FUNCTIONAL CLASSIFICATION OF INVENTORY ROUTE	02
(52) DECK WIDTH, OUT-TO-OUT (ft.)	31.6	(100) STRAHNET HIGHWAY DESIGNATION	0
(32) APPROACH ROADWAY WIDTH (ft.)	35.1	(101) PARALLEL STRUCTURE DESIGNATION	N
(33) BRIDGE MEDIAN	0 (34) SKEW (DEG.)	(102) DIRECTION OF TRAFFIC	2
(35) STRUCTURE FLARED	0 (10) INV RTE, MIN VERT CLEAR (ft.)	(103) TEMP STRUCTURE	
(47) TOTAL HORIZONTAL CLEARANCE (ft.)	28.9	(105) FEDERAL LANDS HIGHWAYS	0
(53) VERTICAL CLEARANCE OVER BRIDGE ROADWAY (ft.)	99.99	(110) DESIGNATED NATIONAL NETWORK	1
(54) VERTICAL UNDER CLEARANCE (ft.)	N 0	(20) TOLL	3
(55) LATERAL UNDER CLEARANCE RIGHT (ft.)	N 99.9	(21) MAINTENANCE RESPONSIBILITY	01
(56) MIN LATERAL UNDER CLEARANCE (ft.)	0	(22) OWNER	01
PROPOSED IMPROVEMENTS		(37) HISTORICAL	5
(75A) TYPE OF WORK PROPOSED	31 (75B) WORK DONE BY	1	
(76) LENGTH OF STRUCTURE IMPROVEMENT (ft.)	119.0	NAVIGATION DATA	
(94) BRIDGE IMPROVEMENT COST (\$)	0	(38) NAVIGATION CONTROL	0
(95) ROADWAY IMPROVEMENT COST (\$)	235	(111) PIER OR ABUTMENT PROTECTION	1
(96) TOTAL PROJECT COST	541	(39) NAV VERT CLEARANCE (ft.)	0
(97) YEAR OF IMPROVEMENT COST ESTIMATE	2003	(116) MIN NAVIGATION VERT CLEARANCE, VERT LIFT BRIDGE (ft.)	0
(114) FUTURE ADT	934 (115) YEAR OF FUTURE ADT	(40) NAV HORIZONTAL CLEARANCE (ft.)	0
	2028		

Inspector:

Structure Number: 02396

Inspection Date:

Facility Carried: US 79/sec15/L6.77

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.	2915	sq. ft.	2895	20	0	0
	BOTH GUTTERS FULL LENGTH OF BRIDGE ARE FULL OF DIRT AND DEBRIS WITH VEGETATION GROWING IN THEM. SOFFIT OVERHANGS HAVE SMALL SPALLS 20 TOTAL WITH EXPOSED REBAR DUE TO POOR COVERAGE. WEARING SURFACE HAS CRACKS AT JOINTS.						
1090 - Exposed Rebar		20			20		
510 - Wearing Surfaces		2399	sq. ft.	2321	78	0	0
3220 - Crack (Wearing Surface)		78			78		
107 - Steel Open Girder/Beam	1- Ben.	369	ft.	0	333	36	0
	<p>Outside girders webs are bowed out about 1/2" due to corrosion with laminations at bents.</p> <p>ALL GIRDERS HAVE AREAS OF SURFACE RUST FOR FULL LENGTH. GIRDER ENDS HAVE AREAS OF CORROSION IN WEB NEAR EXPANSION DAM HAUNCH AND DIAPHRAGM CONNECTION WITH UP TO 50% SECTION LOSS.</p> <p>Paint has 20% bare steel 20% little effectiveness, and 60% moderate effectiveness.</p> <p>Span 1 abutment 1 girder 1,4 has section loss on lower flange and migrating into web first 2' 50% section loss. Girder 1 also has 4" hole in web at bottom flange.</p> <p>SPAN #1 , GIRDER #1 AT BENT #2 BOTTOM FLANGE HAS 35% SECTION LOSS FOR 2'.</p> <p>SPAN #1, GIRDER #1 AT BENT #1 BOTTOM FLANGE HAS 35% SECTION LOSS FOR 1'.</p> <p>SPAN #2 BENT #2 GIRDER #2 HAS A SMALL HOLE IN WEB AT EXPANSION DAM HAUNCH, AND A SMALL HOLE AT HAUNCH.</p> <p>SPAN #2 BENT #2 GIRDER #3 HAS A SMALL HOLE IN WEB AT DIAPHRAGM CONNECTION.</p> <p>SPAN #3 BENT #3 GIRDER #2 HAS A SMALL HOLE IN WEB AT EXPANSION DAM HAUNCH.</p> <p>SPAN #3 BENT #3 GIRDER #3 HAS A SMALL HOLE IN WEB AT DIAPHRAGM CONNECTION.</p> <p>SPAN #3, GIRDER 1,3,4 AT BENT #3 FIRST FOOT BOTTOM FLANGE HAS 50% SECTION LOSS.</p> <p>Span 3 abutment 2 girder 1,4 has section loss on lower flange and migrating into web first 1' 35% section loss.</p>						
1000 - Corrosion		357			321	36	
1900 - Distortion		12			12		
515 - Steel Protective Coating		2517	sq. ft.	0	1511	503	503
3440 - Effectiveness (Steel Protective Coatings)		2517			1511	503	503
215 - Reinforced Concrete Abutment	1- Ben.	72	ft.	72			
227 - Reinforced Concrete Pile	1- Ben.	8	each	8			
234 - Reinforced Concrete Pier Cap	1- Ben.	50	ft.	50			
	FACES OF CAPS HAVE FORM WIRES EXPOSED.						

Inspector:

Structure Number: 02396

Inspection Date:

Facility Carried: US 79/sec15/L6.77

Bridge Inspection Report

Element Inspection

305 - Assembly Joint without Seal	1- Ben.	126	ft.	0	63	63	0
JOINT ARMOR IS CORRODED WITH LAMINATIONS AND SECTION LOSS UP TO 5%. No paint left on joint steel.							
2370 - Metal Deterioration or Damage		126			63	63	
515 - Steel Protective Coating		379	sq. ft.	0	0	0	379
3440 - Effectiveness (Steel Protective Coatings)		379					379
311 - Movable Bearing	1- Ben.	12	each	0	0	12	0
ALL BEARINGS ARE CORRODED WITH LAMINATIONS WITH SECTION LOSS UP TO 15% No paint on bearings. All bearing nuts rusted off.							
1000 - Corrosion		12				12	
515 - Steel Protective Coating		36	sq. ft.	0	0	0	36
3440 - Effectiveness (Steel Protective Coatings)		36					36
313 - Fixed Bearing	1- Ben.	12	each	0	0	12	0
ALL BEARINGS ARE CORRODED WITH LAMINATIONS WITH SECTION LOSS UP TO 15% Girder 4 span 3 at abutment 2 right bearing nut rusted off. No paint on bearings.							
1000 - Corrosion		12				12	
515 - Steel Protective Coating		36	sq. ft.	0	0	0	36
3440 - Effectiveness (Steel Protective Coatings)		36					36
330 - Metal Bridge Railing	1- Ben.	185	ft.	185			
ABUTMENT #2 MONUMENT WALL HAS COLLISION DAMAGE ON LEFT SIDE. BRIDGE RAILS HAVE SURFACE RUST FULL LENGTH. 10% paint left on roadside of rails no paint on back side. Paint that is left has little effectiveness. Right side abutment 1 monument post has been broken and posts 1,2,3,5 have spalls.							
515 - Steel Protective Coating		369	sq. ft.	0	0	333	36
3440 - Effectiveness (Steel Protective Coatings)		369				333	36

Inspector:

Structure Number: 02396

Inspection Date:

Facility Carried: US 79/sec15/L6.77

Bridge Inspection Report

Pictures



Inspector:

Structure Number: 02396

Inspection Date:

Facility Carried: US 79/sec15/L6.77

Bridge Inspection Report

Maintenance Needs

Date Reported: 10/26/2016

Priority: C - Important

Work Code: N/A

Deficiency Description:

SPAN #2 BENT #2 GIRDER #2 HAS A SMALL HOLE IN WEB AT EXPANSION DAM HAUNCH, AND A SMALL HOLE AT HAUNCH.

SPAN #2 BENT #2 GIRDER #3 HAS A SMALL HOLE IN WEB AT DIAPHRAGM CONNECTION.

GIRDERS SPAN #3, BENT #3, GIRDER #2 HAS HOLE AT EXPANSION DAM HAUNCH

GIRDER #3 HAS HOLE AT DIAPHRAGM CONNECTION.

Span 1 Abutment 1 girder 1 has 4" hole at diaphragm and lower flange.

Work Description:

Date Repairs Completed:

Maintenance Comments:

Stage: Monitor



PHOTO 1 Description Span 3 bent 3 girder 2

Stage: Monitor



PHOTO 2 Description Bent 3 span 3 girder 3

Inspector:

Structure Number: 02396

Inspection Date:

Facility Carried: US 79/sec15/L6.77

Bridge Inspection Report

Maintenance Needs

Stage: Monitor



PHOTO 3 Description Span 2 girder 3 bent 2

Stage: Monitor



PHOTO 4 Description Bent 2 span 2 girder 2

Stage: Monitor



PHOTO 5 Description Span 1 Abutment 1 girder 1 has 4" hole at diaphragm and lower flange.

Inspector:

Structure Number: 02396

Inspection Date:

Facility Carried: US 79/sec15/L6.77

Bridge Inspection Report

Maintenance Needs

Date Reported: 11/8/2012 12:00:00 AM

Priority: C - Important

Work Code: N/A

Deficiency Description:

APPROACH RAIL ABUTMENT #1,#2, LEFT SIDE RAIL HAS COLLISION DAMAGE.

Work Description:

Date Repairs Completed:

Maintenance Comments:

Stage: Monitor



PHOTO 1 Description Abutment 1 left approach rail

Stage: Monitor



PHOTO 2 Description Abutment 2 left approach rail.

Inspector:

Structure Number: 02396

Inspection Date:

Facility Carried: US 79/sec15/L6.77

Bridge Inspection Report

Maintenance Needs

Date Reported: 10/26/2016

Priority: D - Routine

Work Code: N/A

Deficiency Description:

MONUMENT POST ABUTMENT #2 LEFT MINOR COLLISION DAMAGE.
Right side abutment 1 monument post has been broken and posts 1,2,3,5 have spalls.

Work Description:

Date Repairs Completed:

Maintenance Comments:

Stage: Monitor



PHOTO 1 Description Right side abutment 1 monument post has been broken and posts 1,2,3,5 have spalls.

Stage: Monitor



PHOTO 2 Description Abutment 2 left monument post.

Inspector:

Structure Number: 02396

Inspection Date:

Facility Carried: US 79/sec15/L6.77

Bridge Inspection Report

Maintenance Needs

Date Reported: 11/10/2014 12:00:00 AM

Priority: C - Important

Work Code: N/A

Deficiency Description:

BENT #2, #3 LEFT AND RIGHT SIDES EROSION UP TO 2' DEEP BY PILES EXPOSING PILES 2' MORE THAN GROUND LEVEL.

Work Description:

Date Repairs Completed:

Maintenance Comments:

Stage: Monitor



PHOTO 1 Description Erosion bent 3.

Inspector:

Structure Number: 02396

Inspection Date:

Facility Carried: US 79/sec15/L6.77

Bridge Inspection Report

Maintenance Needs

Date Reported: 11/10/2014 12:00:00 AM

Priority: D - Routine

Work Code: N/A

Deficiency Description:

FIRST FOOT OF ALL GIRDER ENDS ARE CORRODED WITH LAMINATIONS.

Work Description:

Date Repairs Completed:

Maintenance Comments:

Stage: Monitor



PHOTO 1 Description Typical girder end.

Inspector:

Structure Number: 02396

Inspection Date:

Facility Carried: US 79/sec15/L6.77

Bridge Inspection Report

Maintenance Needs

Date Reported: 11/10/2014 12:00:00 AM

Priority: D - Routine

Work Code: N/A

Deficiency Description:

GUTTERS HAVE VEGETATION GROWING IN THEM.

Work Description:

Date Repairs Completed:

Maintenance Comments:

Stage: Monitor



PHOTO 1 Description Typical gutters.