



Latitude:34.81873, Longitude:-91.54629

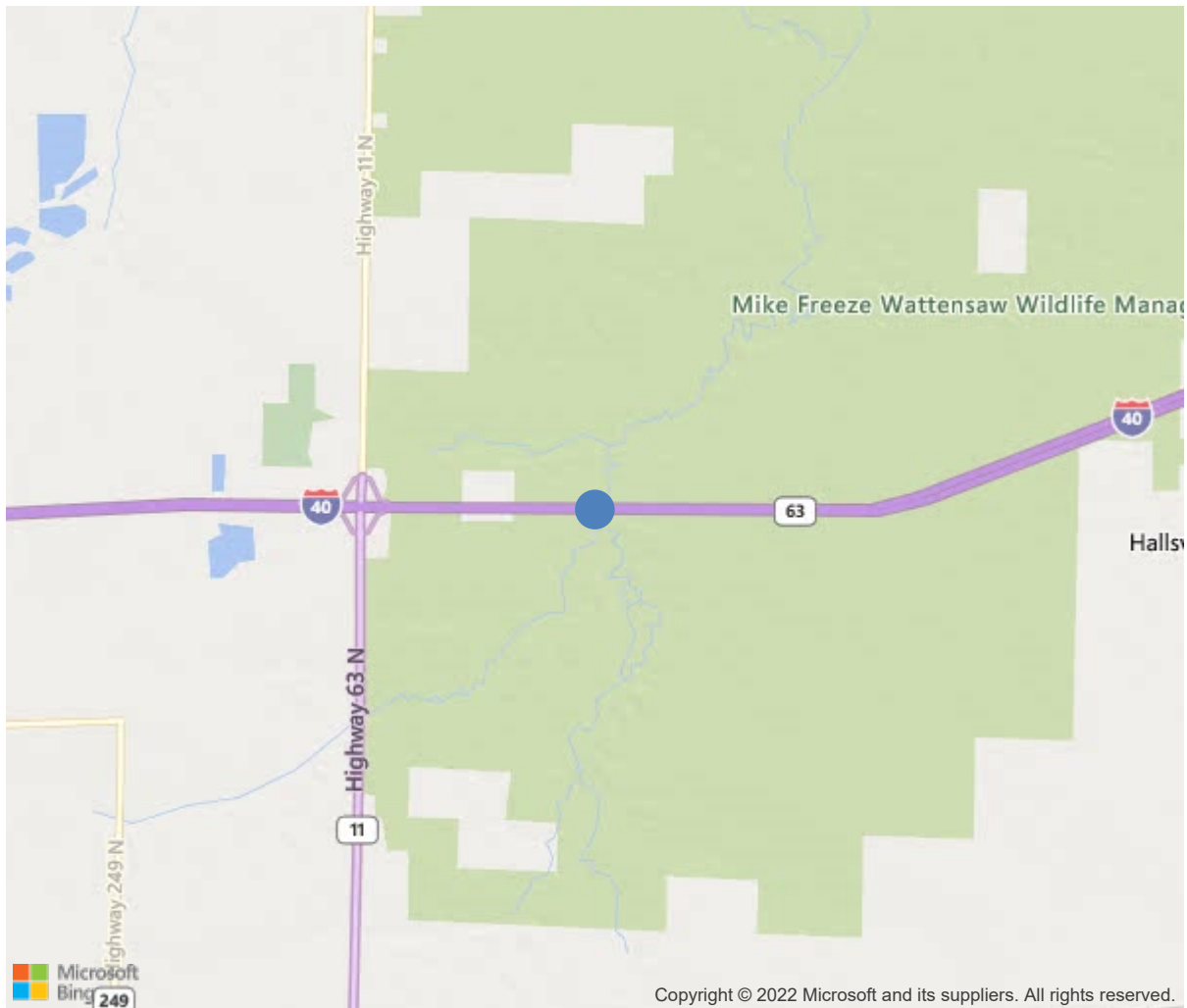
Route:40 Section:42 Log:194.39

Arnold Road ID:59x40x42xA, Arnold Log mile:194.299

District 06, Prairie County

Owner: 1-State Highway Agency

1.2 MI E OF JCT SH 11



34.81873, -91.54629

Inspection Direction :



Bridge #B3709(Routine, Underwater type 2)

I 40 EB Log 194.39 over HURRICANE CREEK

Location: 1.2 MI E OF JCT SH 11

Team Lead: Keith Harris Inspection Date: August 25, 2021

IDENTIFICATION	
(1) State Names	Arkansas
(8) Structure Number	B3709
(5) Inventory Route	40
(2) Highway Agency District	06
(3) County Code	117-Prairie County, Arkansas
(4) Place Code	0
(6) Features Intersected	HURRICANE CREEK
(7) Facility Carried	I 40 EB Log 194.39
(9) Location	1.2 MI E OF JCT SH 11
(11) Mile Point	194.39 mi
(12) Base Highway Network	Yes
(13) LRS Inventory Rte & Subrte	0000040420
(16) Latitude	34.81873
(17) Longitude	-91.54629
(98) Border Bridge State Code	
(99) Border Bridge Structure No.	
STRUCTURE TYPE AND MATERIAL	
(43) Main Structure Type	11
Material	1-Concrete
Type	1-Slab
(44) Approach Structure Type	00
Material	0-Other
Type	0-Other
(45) No. of Spans in Main Unit	5
(46) No. of Approach Spans	0
(107) Deck Structure Type	1-Concrete Cast-in-Place
(108) Wearing Surface/Protective System	
Type of Wearing Surface	1-Monolithic Concrete (concurrently placed
Type of Membrane	0-None
Type of Deck Protection	0-None
AGE AND SERVICE	
(27) Year Built	1965
(106) Year Reconstructed	0
(42) Type of Service	15
On	1-Highway
Under	5-Waterway
(28) Lane	
On	2
Under	0
(29) Average Daily Traffic	30000
(30) Year of ADT	2013
(109) Truck ADT	1 %
(19) Bypass, Detour Length	1 mi
GEOMETRIC DATA	
(48) Length of Maximum Span	29 ft
(49) Structure Length	145 ft
(50) Curb or Sidewalk Width	
Left	1 ft
Right	1 ft
(51) Bridge Roadway Width Curb to Curb	40 ft
(52) Deck Width Out to Out	44.4 ft
(32) Approach Roadway Width (W/Shoulders)	42 ft
(33) Bridge Median	0-No median
(34) Skew	30 Deg
(35) Structure Flared	No flare
(10) Inventory Route Min Vert Clear	99.99 ft
(47) Inventory Route Total Horiz Clear	42.3 ft
(53) Min Vert Clear Over Bridge Rdwy	99.99 ft
(54) Min Vert Underclear	0 ft
Ref:	
(55) Min Lat Underclear RT	99.9 ft
Ref:	
(56) Min Lat Underclear LT	0 ft
NAVIGATION DATA	
(38) Navigation Control	0-No navigation control on water
(111) Pier Protection	1-Navigation protection not requ
(39) Navigation Vertical Clearance	0 ft
(116) Vert-Lift Bridge Nav Min Vert Clear	0 ft
(40) Navigation Horizontal Clearance	0 ft

CLASSIFICATION	
(112) NBIS Bridge Length	Y
(104) Highway System	1
(26) Functional Class	1-Rural Principal Arterial - Int
(100) Defense Highway	1-The inventory route is on a In
(101) Parallel Structure	R-The right structure of paralle
(102) Direction of Traffic	1 - way traffic
(103) Temporary Structure	
(105) Federal Lands Highways	0-N/A
(110) Designated National Network	1-The inventory route is part of the
(20) Toll	3-On free road. The structure is toll-
(21) Maintain	1-State Highway Agency
(22) Owner	1-State Highway Agency
(37) Historical Significance	5-Bridge is not eligible for the NRHP
CONDITION	
(58) Deck	5
(59) Superstructure	5
(60) Substructure	5
(61) Channel & Channel Protection	7
(62) Culverts	N
LOAD RATING AND POSTING	
(31) Design Load	6-MS 18+Mod / HS 20+Mod
(63) Operating Rating Method	1
(64) Operating Rating	
Type	1-Load Factor(LF)
Rating	60
(65) Inventory Rating Method	1-Load Factor(LF)
(66) Inventory Rating	
Type	5
Rating	36
(70) Bridge Posting	5-Equal to or above legal loads
(41) Structure Open/Posted/Closed	A-Open, no restriction
APPRAISAL	
(67) Structural Evaluation	5
(68) Deck Geometry	7
(69) Clearances, Vertical/Horizontal	N
(71) Waterway Adequacy	8
(72) Approach Roadway Alignment	8
(36A) Bridge Railings	0-Inspected feature does not meet cur
(36B) Transitions	1-Inspected feature meets currently a
(36C) Approach Guardrail	1-Inspected feature meets currently a
(36D) Approach Guardrail Ends	1-Inspected feature meets currently a
(113) Scour Critical Bridges	5-Bridge foundations determined to be
PROPOSED IMPROVEMENTS	
(75) Type of Work	
(76) Length of Structure Improvement	0 ft
(94) Bridge Improvement Cost	\$ 0
(95) Roadway Improvement Cost	\$ 0
(96) Total Project Cost	\$ 0
(97) Year of Improvement Cost Estimate	
(114) Future ADT	17450
(115) Year of Future ADT	2028

INSPECTIONS *			
(90) Inspection Date	08/2021		
(91) Frequency	24 Months		
(92) Critical Feature Inspection	Done	Freq. (Mon)	Date
A: Fracture Critical Detail	No		
B: Underwater Inspection	No		
C: Other Special Inspection	No		
* The inspection date and frequency information in this box contains the current NBI date and frequency information. Please refer to the report header for the date this inspection was conducted.			

ELEM	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
38	RC Slab	SF	6126	2308	2728	1090	0
1080	Delamination/Spall/Patched Area	SF	245	0	130	115	0
1090	Exposed Rebar	SF	5	0	0	5	0
1120	Efflorescence/Rust Staining	SF	225	0	0	225	0
1130	Cracking (RC and Other)	SF	1045	0	660	385	0
1190	Abrasion/Wear (PSC/RC)	SF	2298	0	1938	360	0
(38)							
Span 2 on the bottom has Spalls with exposed rebar. The right end of the span at bent 2 is spalled with exposed rebar. Span 2: right lane has large spall almost the entire length of span. Also spall with asphalt patch Span 4 is similar on both ends of the right side and the ahead end of the left side.							
All spans have Spalls filled with asphalt and span 2 & 3 have some concrete patches.							
All spans have cracking in the deck surface and cracking with efflorescence and rust stains on the bottom.							
The right gutter line of all spans have severe abrasion.							
215	Reinforced Concrete Abutment	LF	115	105	10	0	0
1080	Delamination/Spall/Patched Area	LF	2	0	2	0	0
1090	Exposed Rebar	LF	8	0	8	0	0
(215)							
Bent 6 has Spalls with exposed rebar on the face.							
Bent 6: pile exposed at the abutment due to erosion. Bent 1 also with erosion action exposing pile.							
227	Reinforced Concrete Pile	EA	35	14	21	0	0
1190	Abrasion/Wear (PSC/RC)	EA	21	0	21	0	0
(227)							
Pile at bents 3,4 and 5 have surface abrasion near the bottom.							
Bent 6: erosion action exposed 6 pile at this abutment							
Bent 1: erosion action has exposed 1 pile at the abutment							
234	Reinforced Concrete Pier Cap	LF	202	164	19	19	0
1080	Delamination/Spall/Patched Area	LF	13	0	5	8	0
1090	Exposed Rebar	LF	19	0	8	11	0
1130	Cracking (RC and Other)	LF	6	0	6	0	0
(234)							
Bent 2 has small Spalls with exposed rebar on both sides.							
Bent 3 has a delamination on the back side at pile 2 and cracking with efflorescence between piles 5 and 6, Spalls with exposed rebar on the bottom of the cap at pile 4.							
Bent 4 back side, has a spall at pile 1 and a large delam. Cracking on the ahead side at pile 4.							
Bent 5 cap back spall with exposed rebar above pile 1.							



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Location: 1.2 MI E OF JCT SH 11

Team Lead: Keith Harris, **Inspection Date:** August 25, 2021

ELEM	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
301	Pourable Joint Seal	LF	254	0	0	127	127
2350	Debris Impaction	LF	127	0	0	0	127
2360	Adjacent Deck or Header	LF	127	0	0	127	0
(301)	All of the seal is missing, all joints has debris (non compressible material). Small Spalls are present along all of the joints.						
321	Reinforced Concrete Approach Slab	SF	1752	1676	72	4	0
1080	Delamination/Spall/Patched Area	SF	4	0	0	4	0
1130	Cracking (RC and Other)	SF	72	0	72	0	0
(321)	The approach slab at bent 1 has some large cracks.						
330	Metal Bridge Railing	LF	290	288	2	0	0
7000	Damage	LF	2	0	2	0	0
(330)	Aluminum bridge railing. The left side of span 1 has minor damage.						
331	Reinforced Concrete Bridge Railing	LF	290	272	18	0	0
1080	Delamination/Spall/Patched Area	LF	18	0	18	0	0



Elevation



Deck overview



Span 2 spalls with exposed rebar on soffit



Bent 3 exposed rebar around pile 4



Bent 4 cap large spalls



Approach

Maintenance Needs

Date Reported: 08/17/2015
Priority: B - Pressing; 6 month completion goal
Type of Work: Repair
Status: Open
Inspection Direction
Component:

Deficiency Description

Added 8/21

Span 2 large open spall in wheel path

large spall at bent 6 in approach slab

There are spalls filled with asphalt material in spans 2,3 and 4 of the deck surface.

Added 8/14/2019: Most asphalt patches have deteriorated or have been reopened. Large open spall with exposed rebar at bent 2, span 3

Span 2: right lane has large spall almost the entire length of span. Also spall with asphalt patch

Added 8/21 large spall at bent 6 in approach slab

Span 2 large open spall in wheel path

Remarks



Span 2: right lane has large spall almost the entire length of span. Also spall with asphalt patch



Large open spall with exposed rebar at bent 2, span 3



large spall at bent 6 in approach slab



Span 2 large open spall in wheel path

Date Reported: 08/09/2017

Priority: C - Important

Type of Work: Repair

Status: Monitor

Inspection Direction

Component:

Deficiency Description

Deck all spans have large unsealed cracks.

Added 8/14/19:

Span 2: spalls with exposed rebar in the soffit. Also multiple cracks with efflorescence staining

Remarks



Span 3: large crack at the center line with an open spall.



Span 3 large unsealed cracks. Common in all spans.



Span 2: spalls with exposed rebar in the soffit. Also multiple cracks with efflorescence staining



Span 4



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Location: 1.2 MI E OF JCT SH 11

Team Lead: Keith Harris **Inspection Date:** August 25, 2021

Date Reported: 08/09/2017
Priority: C - Important
Type of Work: None
Status: Monitor

Inspection Direction

Component:

Deficiency Description

Right shoulder of all spans severe abrasion.

Remarks



Spans 1,2,&3 right gutter line has severe abrasion.



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Location: 1.2 MI E OF JCT SH 11

Team Lead: Keith Harris **Inspection Date:** August 25, 2021

Date Reported: 08/25/2021

Priority: C - Important

Type of Work: Clean

Status: Open

Inspection Direction

Component:

Deficiency Description

Right gutter line is full of debris and gravel

Remarks



Right gutter line is full of debris and gravel



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Location: 1.2 MI E OF JCT SH 11

Team Lead: Keith Harris **Inspection Date:** August 25, 2021

Inspection Comments

AHTD Job 6717, 12737

Underwater soundings 08/09/17, 08/25/2021

Boat may be needed.

Logged east bound.