



Bridge #07038(Routine, Underwater type 2)

US 412-09-LM 4.96 over JOHNSON CREEK

Location: 3.29 M W OF MISSOURI LINE

Team Lead: James Adams **Inspection Date:** June 24, 2020



Latitude:36.05245, Longitude:-90.40032

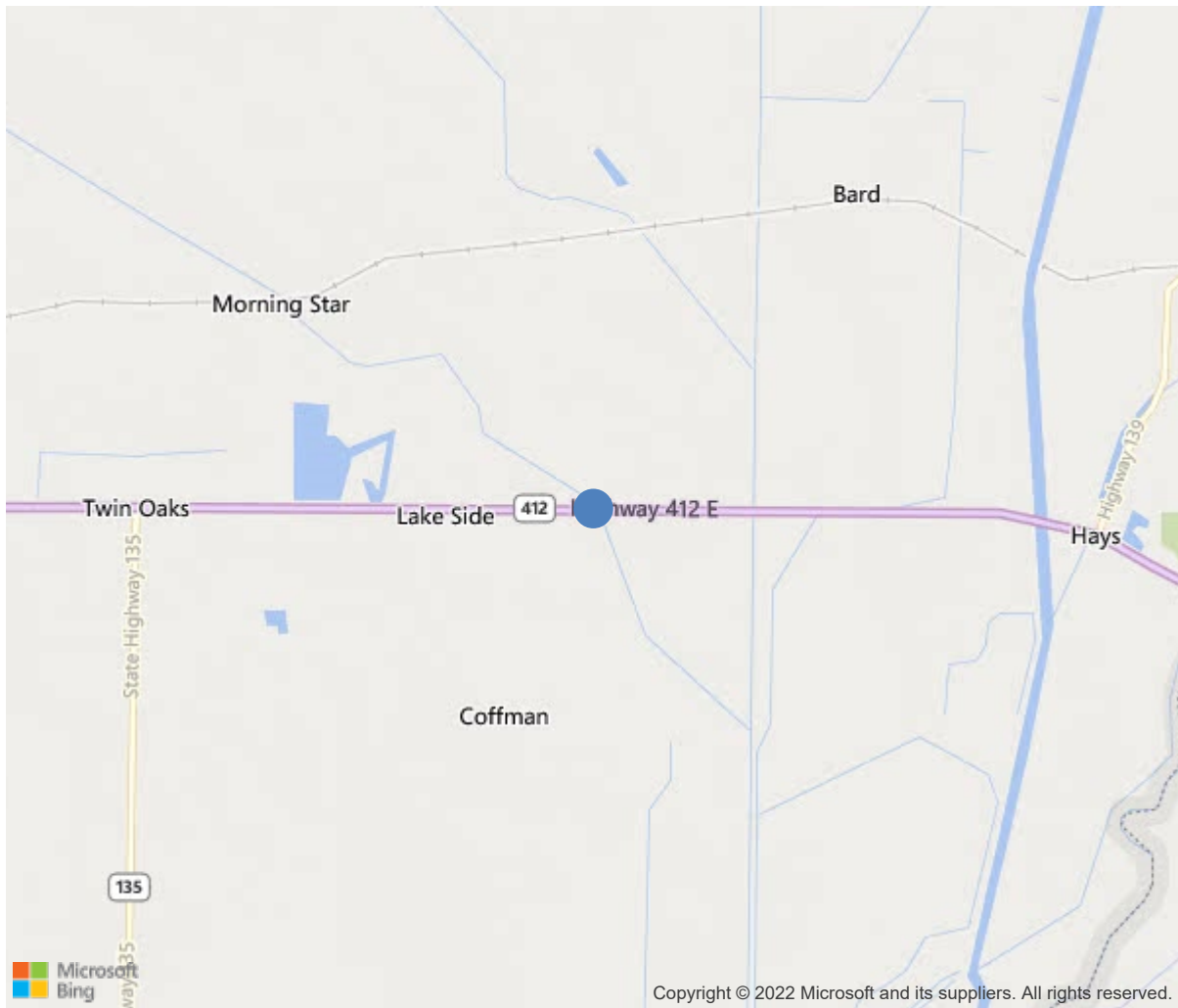
Route:412 Section:09 Log:4.96

Arnold Road ID:28x412x9xA, Arnold Log mile:4.949

District 10, Greene County

Owner: 1-State Highway Agency

3.29 M W OF MISSOURI LINE



36.05245, -90.40032



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IDENTIFICATION	
(1) State Names	Arkansas
(8) Structure Number	07038
(5) Inventory Route	412
(2) Highway Agency District	10
(3) County Code	55-Greene County, Arkansas
(4) Place Code	0
(6) Features Intersected	JOHNSON CREEK
(7) Facility Carried	US 412-09-LM 4.96
(9) Location	3.29 M W OF MISSOURI LINE
(11) Mile Point	4.96 mi
(12) Base Highway Network	Yes
(13) LRS Inventory Rte & Subrte	0000412090
(16) Latitude	36.0524486372037
(17) Longitude	-90.4003189697425
(98) Border Bridge State Code	
(99) Border Bridge Structure No.	
STRUCTURE TYPE AND MATERIAL	
(43) Main Structure Type	42
Material	4-Steel continuous
Type	2-Stringer/Multi-beam or girder
(44) Approach Structure Type	00
Material	0-Other
Type	0-Other
(45) No. of Spans in Main Unit	3
(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	1-Epoxy Coated Reinforcing
AGE AND SERVICE	
(27) Year Built	2008
(106) Year Reconstructed	0
(42) Type of Service	15
On	1-Highway
Under	5-Waterway
(28) Lane	
On	4
Under	0
(29) Average Daily Traffic	8600
(30) Year of ADT	2014
(109) Truck ADT	14 %
(19) Bypass, Detour Length	4 mi
GEOMETRIC DATA	
(48) Length of Maximum Span	34 ft
(49) Structure Length	91 ft
(50) Curb or Sidewalk Width	
Left	0 ft
Right	0 ft
(51) Bridge Roadway Width Curb to Curb	75.1 ft
(52) Deck Width Out to Out	78.2 ft
(32) Approach Roadway Width (W/Shoulders)	75.1 ft
(33) Bridge Median	0-No median
(34) Skew	12 Deg
(35) Structure Flared	No flare
(10) Inventory Route Min Vert Clear	99.99 ft
(47) Inventory Route Total Horiz Clear	76.1 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	14-Urban Other Principal Arterial
(100) Defense Highway	0-The inventory route is not a S
(101) Parallel Structure	N-No parallel structure exists.
(102) Direction of Traffic	2 - 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	4-Historical significance is not dete
CONDITION	
(58) Deck	7
(59) Superstructure	8
(60) Substructure	8
(61) Channel & Channel Protection	6
(62) Culverts	N
LOAD RATING AND POSTING	
(31) Design Load	5-MS 18 / HS 20
(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	3
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	8
(68) Deck Geometry	9
(69) Clearances, Vertical/Horizontal	N
(71) Waterway Adequacy	8
(72) Approach Roadway Alignment	7
(36A) Bridge Railings	1-Inspected feature meets currently a
(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	10307
(115) Year of Future ADT	2025

INSPECTIONS *			
(90) Inspection Date			06/2020
(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.			



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ELEM	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
12	Reinforced Concrete Deck	SF	7113	5898	121	1094	0
1120	Efflorescence/Rust Staining	SF	121	0	121	0	0
1130	Cracking (RC and Other)	SF	1094	0	0	1094	0
107	Steel Open Girder/Beam	LF	810	810	0	0	0
515	Steel Protective Coating	SF	6953	6953	0	0	0
215	Reinforced Concrete Abutment	LF	160	153	0	7	0
1120	Efflorescence/Rust Staining	LF	7	0	0	7	0
225	Steel Pile	EA	18	18	0	0	0
515	Steel Protective Coating	SF	1593	1593	0	0	0
234	Reinforced Concrete Pier Cap	LF	158	150	8	0	0
1010	Cracking	LF	6	0	6	0	0
1120	Efflorescence/Rust Staining	LF	2	0	2	0	0
310	Elastomeric Bearing	EA	18	18	0	0	0
321	Reinforced Concrete Approach Slab	SF	4307	3824	0	483	0
1130	Cracking (RC and Other)	SF	483	0	0	483	0
331	Reinforced Concrete Bridge Railing	LF	182	177	5	0	0
1120	Efflorescence/Rust Staining	LF	1	0	1	0	0
1130	Cracking (RC and Other)	LF	4	0	4	0	0



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Location: 3.29 M W OF MISSOURI LINE

Team Lead: James Adams **Inspection Date:** June 24, 2020

Maintenance Needs

Date Reported: 07/02/2018
Priority: C - Important
Type of Work: None
Status: Monitor
Component:

Deficiency Description

Deck has numerous unsealed transverse and longitudinal cracks, and has areas of map cracking in wheel paths, especially at span 2.

Remarks





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Date Reported: 07/02/2018

Priority: G - General/ Preventive maintenance

Type of Work: None

Status: Monitor

Component:

Deficiency Description

Span 2 Bent 2 earthquake restraints are resting against the cap.

Remarks



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Team Lead: James Adams **Inspection Date:** June 24, 2020

Date Reported: 06/24/2020

Priority: D- Routine

Type of Work: Repair

Status: Open

Component: Channel

Deficiency Description

Several small trees growing under bridge.

Remarks



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Inspection Comments

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Deck Notes

Approach Slabs have several unsealed transverse and longitudinal cracks.

Bridge rails have a few minor cracks with some efflorescence.

Deck has numerous unsealed transverse and longitudinal cracks, and has areas of map cracking in wheel paths, especially at span 2. Spans 1 & 3 have diagonal cracks at corners of deck over bents 1 & 4.

Soffit at bay 4 does not have SIP forms. Soffit has several transverse cracks with efflorescence.

Superstructure Notes

Weathering steel superstructure is light brown in color with a lightly granular texture.

Substructure Notes

Bent 1 abutment has a few vertical cracks with efflorescence.

Span 2 Bent 2 earthquake restraints are resting against the cap.

Bents 2 and 3 caps have minor cracks with some efflorescence at construction joint.

Several small trees growing under bridge.

Underwater type 2 inspection performed this report.