



Latitude:35.21145, Longitude:-90.20661

Route:55 Section:11 Log:10.16

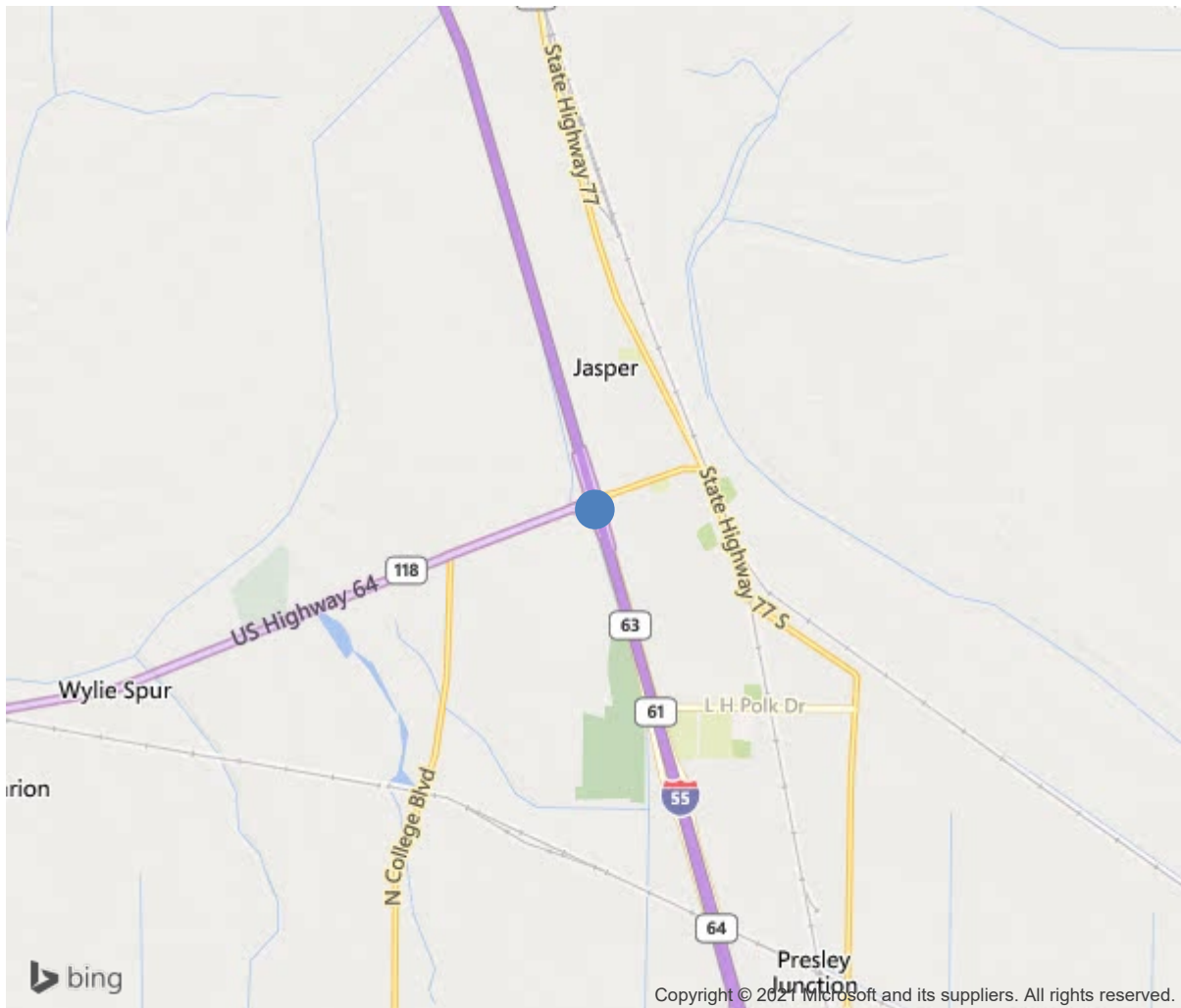
Arnold Road ID:18x55x11xB, Arnold Log mile:62.169

District 01, Crittenden County

Owner: 1-State Highway Agency

Place Code: 41380 - MARION

Jct Us 64 & I-55



35.21145, -90.20661



Bridge #A3131(Record Change)

I-55SO/Sec11/10.16 over Us-64/Sec-17/L-19.12

Location: Jct Us 64 & I-55

Team Lead: Drew Melton Inspection Date: September 14, 2020

IDENTIFICATION	
(1) State Names	Arkansas
(8) Structure Number	A3131
(5) Inventory Route	55
(2) Highway Agency District	01
(3) County Code	35-Crittenden County, Arkansas
(4) Place Code	41380
(6) Features Intersected	Us-64/Sec-17/L-19.12
(7) Facility Carried	I-55SO/Sec11/10.16
(9) Location	Jct Us 64 & I-55
(11) Mile Point	10.16 mi
(12) Base Highway Network	Yes
(13) LRS Inventory Rte & Subrte	0000055110
(16) Latitude	35.211452
(17) Longitude	-90.206612
(98) Border Bridge State Code	
(99) Border Bridge Structure No.	
STRUCTURE TYPE AND MATERIAL	
(43) Main Structure Type	32
Material	3-Steel
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	7
(46) No. of Approach Spans	0
(107) Deck Structure Type	1-Concrete Cast-in-Place
(108) Wearing Surface/Protective System	
Type of Wearing Surface	3-Latex Concrete or similar additive
Type of Membrane	0-None
Type of Deck Protection	0-None
AGE AND SERVICE	
(27) Year Built	1960
(106) Year Reconstructed	2014
(42) Type of Service	11
On	1-Highway
Under	1-Highway, with or without pedestrian
(28) Lane	
On	2
Under	4
(29) Average Daily Traffic	14938
(30) Year of ADT	2018
(109) Truck ADT	34 %
(19) Bypass, Detour Length	5 mi
GEOMETRIC DATA	
(48) Length of Maximum Span	70 ft
(49) Structure Length	492.2 ft
(50) Curb or Sidewalk Width	
Left	1.5 ft
Right	1.5 ft
(51) Bridge Roadway Width Curb to Curb	39 ft
(52) Deck Width Out to Out	42 ft
(32) Approach Roadway Width (W/Shoulders)	38.1 ft
(33) Bridge Median	0-No median
(34) Skew	0 Deg
(35) Structure Flared	No flare
(10) Inventory Route Min Vert Clear	99.99 ft
(47) Inventory Route Total Horiz Clear	39 ft
(53) Min Vert Clear Over Bridge Rdwy	99.99 ft
(54) Min Vert Underclear	15.19 ft
Ref:	
(55) Min Lat Underclear RT	13 ft
Ref:	
(56) Min Lat Underclear LT	7.4 ft
NAVIGATION DATA	
(38) Navigation Control	N-Not applicable, no waterway.
(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	11-Urban 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	7
(59) Superstructure	6
(60) Substructure	7
(61) Channel & Channel Protection	N
(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	7
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	6
(68) Deck Geometry	6
(69) Clearances, Vertical/Horizontal	6
(71) Waterway Adequacy	N
(72) Approach Roadway Alignment	8
(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	N-Bridge not over waterway.
PROPOSED IMPROVEMENTS	
(75) Type of Work	Bridge rehabilitation because
(76) Length of Structure Improvement	492 ft
(94) Bridge Improvement Cost	\$ 0
(95) Roadway Improvement Cost	\$ 0
(96) Total Project Cost	\$ 927
(97) Year of Improvement Cost Estimate	2000
(114) Future ADT	17922
(115) Year of Future ADT	2028
INSPECTIONS	
(90) Inspection Date	04/2020
(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

Team Lead: Drew Melton, **Inspection Date:** September 14, 2020

ELEM	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
12	Reinforced Concrete Deck	SF	20580	15414	5166	0	0
1120	Efflorescence/Rust Staining	SF	5166	0	5166	0	0
(12)							
Deck wearing surface has been hydro blasted and wearing surface replaced. Soffit in all spans has open transverse cracks spaced differently each span with light efflorescence.							
107	Steel Open Girder/Beam	LF	3430	0	3427	3	0
1000	Corrosion	LF	3427	0	3427	0	0
1020	Connection	LF	2	0	0	2	0
1900	Distortion	LF	1	0	0	1	0
515	Steel Protective Coating	SF	30091	0	14645	14646	800
3440	Effectiveness (Steel Protective Coatings)	SF	30091	0	14645	14646	800
(107)							
Girders have areas of surface rust on web and bottom chord for full length rest of paint has limited effectiveness. Span #1 girder #4 first diaphragm connection has lower 2 bolts missing. Span #3 girder #5 last diaphragm connection has lower bolt missing. Span #4 girder #1 has collision damage from traffic. Span #6 between girder #2 & 3 top bolt is broken in next to last diaphragm. Span #7 between girder #1 & 2 middle diaphragm connection top bolt broken & second bolt missing. All girders have been scraped over roadway with minor damage.							
205	Reinforced Concrete Column	EA	24	21	3	0	0
1090	Exposed Rebar	EA	3	0	3	0	0
(205)							
Bent #2 column #1 ahead face has one foot of exposed steel. Bent #3 column #1 right side has two one foot pop offs with exposed rebar. Bent #3 column #3 left side has one foot spall at bottom with exposed rebar.							
215	Reinforced Concrete Abutment	LF	98	82	16	0	0
1120	Efflorescence/Rust Staining	LF	16	0	16	0	0
(215)							
Abutment back walls have vertical cracks spaced six feet apart some with light efflorescence.							
234	Reinforced Concrete Pier Cap	LF	236	229	0	7	0
1090	Exposed Rebar	LF	7	0	0	7	0
(234)							
All caps have vertical cracks beneath bearings. Bent #2 back face towards right end has two two foot pieces of rebar exposed. Bent #3 cap back face has 3 1' pop offs with rebar exposed & vertical cracks under bearing #3. Bent #5 rt. side ahead face 2' spall at joint w/ column #4 with rebar exposed.							



Bridge #A3131 (Record Change)
I-55SO/Sec11/10.16 over Us-64/Sec-17/L-19.12

Location: Jct Us 64 & I-55

Team Lead: Drew Melton, Inspection Date: September 14, 2020

ELEM	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
301	Pourable Joint Seal	LF	336	336	0	0	0
(301)	Joint steel is corroded underneath with laminations at joints.						
311	Movable Bearing	EA	49	0	47	2	0
1000	Corrosion	EA	46	0	46	0	0
1020	Connection	EA	3	0	1	2	0
515	Steel Protective Coating	SF	98	0	0	49	49
3440	Effectiveness (Steel Protective Coatings)	SF	98	0	0	49	49
(311)	Span #4 girder #1 at bent #4 girder to bearing bolt is missing on right side Span #7 girder #7 at bent #6 girder to bearing bolt is broken on right side Span #7 girder #1 at bent #6 girder to bearing bolt is backed out on right side. Bearings have surface rust with little to no section loss.						
313	Fixed Bearing	EA	49	0	41	8	0
1000	Corrosion	EA	41	0	41	0	0
1020	Connection	EA	8	0	0	8	0
515	Steel Protective Coating	SF	98	0	0	49	49
3440	Effectiveness (Steel Protective Coatings)	SF	98	0	0	49	49
(313)	Bearings have surface rust with little to no section loss Bent #1 girder #1, 2 & 6 have nuts missing from anchor bolts. Bent #8 girder #2, 3, 4, 5 & 6 have nuts missing from anchor bolts.						
321	Reinforced Concrete Approach Slab	SF	960	599	310	51	0
1080	Delamination/Spall/Patched Area	SF	1	0	0	1	0
1130	Cracking (RC and Other)	SF	110	0	60	50	0
1190	Abrasion/Wear (PSC/RC)	SF	250	0	250	0	0
(321)	Approach slabs have cs2 and cs3 longitudinal and transverse cracks. Abutment #2 left lane approach slab has one foot spall at bridge end. Wheel paths have moderate abrasion.						
330	Metal Bridge Railing	LF	980	980	0	0	0
515	Steel Protective Coating	SF	3938	3938	0	0	0
331	Reinforced Concrete Bridge Railing	LF	980	980	0	0	0



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I-55SO/Sec11/10.16 over Us-64/Sec-17/L-19.12

Location: Jct Us 64 & I-55

Team Lead: Drew Melton **Inspection Date:** September 14, 2020

Maintenance Needs

Date Reported: 04/09/2012
Priority: D- Routine
Type of Work: Repair
Status: Monitor
Component: Superstructure

Deficiency Description

Span #1 girder #4 first diaphragm connection has lower 2 bolts missing.
Span #3 girder #5 last diaphragm connection has lower bolt missing.
Span #4 girder #1 has collision damage from traffic.
Span #6 between girder #2 & 3 top bolt is broken in next to last diaphragm.
Span #7 between girder #1 & 2 middle diaphragm connection top bolt broken & second bolt missing.

Remarks



Typical diaphragm bolts missing.

Date Reported: 04/09/2012

Priority: D- Routine

Type of Work: N/A

Status: Monitor

Component:

Deficiency Description

BENT #1 GRD #1, 2 & 6

BENT #8 GRD #2, 3, 4, 5 & 6

GIRDERS HAVE NUTS MISSING FROM ANCHOR BOLTS AT BENT #1 & 8.

Remarks



Typical bearing nut missing.

Date Reported: 04/14/2014
Priority: D- Routine
Type of Work: Repair
Status: Monitor
Component: Channel

Deficiency Description

Span #2 left side slope is eroded 1' deep extending down slope.

Remarks



Span #2 left side slope erosion.

Date Reported: 04/14/2014
Priority: D- Routine
Type of Work: Repair
Status: Monitor
Component: 311 - Movable Bearing

Deficiency Description

Bent #1 girder #1, 2 & 6 have nuts missing from anchor bolts.
Span #4 girder #1 at bent #4 girder to bearing bolt is missing on right side
Span #7 girder #7 at bent #6 girder to bearing bolt is broken on right side
Span #7 girder #1 at bent #6 girder to bearing bolt is backed out on right side.
Bent #8 girder #2, 3, 4, 5 & 6 have nuts missing from anchor bolts.

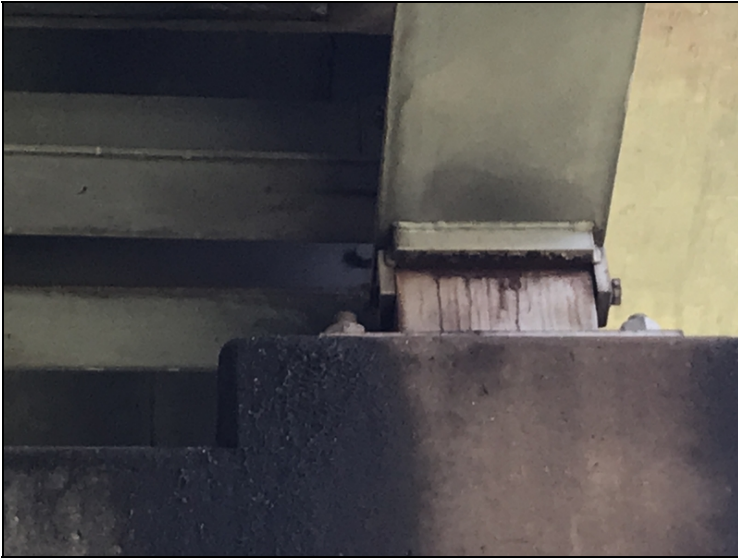
Remarks



Typical girder to bearing bolt missing.



Typical abutment bearing nut missing.



Typical backed out girder to bearing bolt.

Date Reported: 04/21/2020
Priority: C - Important
Type of Work: Repair
Status: Monitor
Component: Approach

Deficiency Description

Abutment #1 left approach at bridge end has erosion with small void under approach slab.

Remarks



Abutment #1 left approach at bridge end has erosion with small void under approach slab.

Date Reported: 04/21/2020
Priority: C - Important
Type of Work: Repair
Status: Forward State
Component: Approach

Deficiency Description

Abutment #1 both approach rails have collision damage.
Abutment #2 right approach rail has collision damage.

Remarks



Abutment #1 both approach rails have collision damage.



Abutment #2 right approach rail has collision damage.

Date Reported: 04/21/2020
Priority: D- Routine
Type of Work: Clean
Status: Monitor
Component: 107 - Steel Open Girder/Beam

Deficiency Description

Girders have areas of surface rust on web and bottom chord for full length. The rest of paint has limited effectiveness.

Remarks



Typical girder ends.

Date Reported: 04/21/2020
Priority: D- Routine
Type of Work: Repair
Status: Monitor
Component: 321 - Reinforced Concrete Approach Slab

Deficiency Description

Abutment #2 left lane approach slab has one-foot spall at bridge end.

Remarks



Abutment 2 left lane has 1' spall at bridge end.



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Location: Jct Us 64 & I-55

Team Lead: Drew Melton **Inspection Date:** September 14, 2020

Inspection Comments

Drawing numbers: 18748, 18752.

Span #2 left side slope is eroded 1' deep extending down slope.

Abutment #1 left approach at bridge end has erosion with small void under approach slab.

Abutment #1 both approach rails have collision damage.

Abutment #2 right approach rail has collision damage.

Deck Notes

04/20/2020 lowered deck from 8 to 7 due to soffit cracks with efflorescence.

Superstructure Notes

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Substructure Notes

04/20/2020 lowered substructure from 8 to 7 due to minor spalls and cracks.