



Latitude:35.84388, Longitude:-90.75773

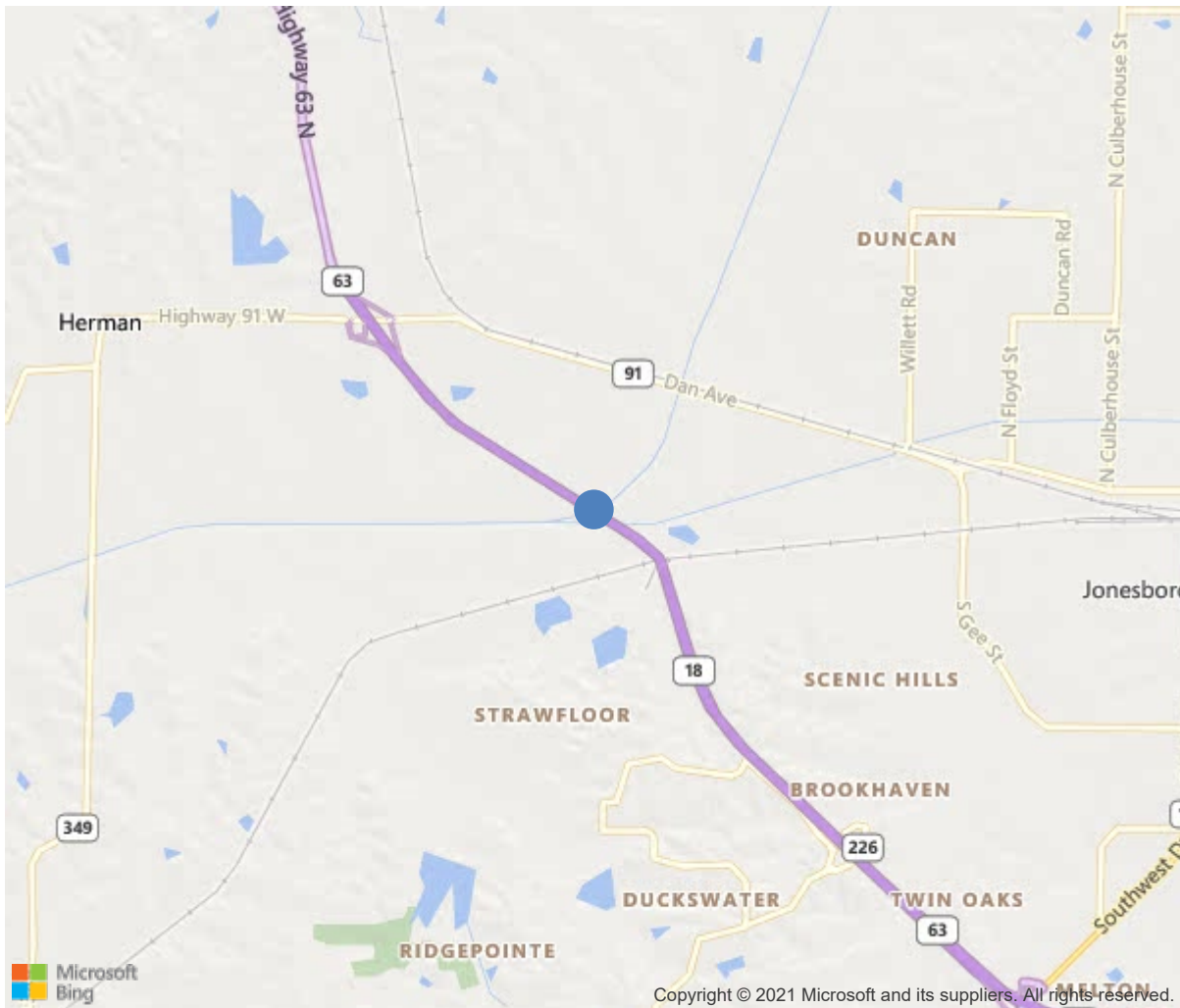
Route:555 Section:03 Log:48.3

Arnold Road ID:16x555x3xA, Arnold Log mile:48.3

District 10, Craighead County

Owner: 1-State Highway Agency

4.55 MI NW OF SH 1B



35.84388, -90.75773



Bridge #B5206(Routine)

I-555 over Big Creek

Location: 4.55 MI NW OF SH 1B

Team Lead: Richard Jones Inspection Date: April 14, 2020

IDENTIFICATION	
(1) State Names	Arkansas
(8) Structure Number	B5206
(5) Inventory Route	63
(2) Highway Agency District	10
(3) County Code	31-Craighead County, Arkansas
(4) Place Code	0
(6) Features Intersected	Big Creek
(7) Facility Carried	US 63-06NB-LM10.52
(9) Location	4.55 MI NW OF SH 1B
(11) Mile Point	10.52 mi
(12) Base Highway Network	No
(13) LRS Inventory Rte & Subrte	0000000000
(16) Latitude	35.84388
(17) Longitude	-90.75773
(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	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	6-Bituminous
Type of Membrane	0-None
Type of Deck Protection	0-None
AGE AND SERVICE	
(27) Year Built	1970
(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	10500
(30) Year of ADT	2018
(109) Truck ADT	1 %
(19) Bypass, Detour Length	1 mi
GEOMETRIC DATA	
(48) Length of Maximum Span	53 ft
(49) Structure Length	161.5 ft
(50) Curb or Sidewalk Width	
Left	0.4 ft
Right	0.4 ft
(51) Bridge Roadway Width Curb to Curb	39 ft
(52) Deck Width Out to Out	42.3 ft
(32) Approach Roadway Width (W/Shoulders)	44 ft
(33) Bridge Median	0-No median
(34) Skew	35 Deg
(35) Structure Flared	No flare
(10) Inventory Route Min Vert Clear	99.99 ft
(47) Inventory Route Total Horiz Clear	39.7 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	N-Not applicable, no waterway.
(111) Pier Protection	5-None present but re-evaluation
(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	12-Urban Principal Arterial - Oth
(100) Defense Highway	2-The inventory route is on a No
(101) Parallel Structure	L-The left structure of parallel
(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	6
(59) Superstructure	6
(60) Substructure	5
(61) Channel & Channel Protection	4
(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	5
(68) Deck Geometry	6
(69) Clearances, Vertical/Horizontal	N
(71) Waterway Adequacy	8
(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	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	11407
(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	Yes		03/2021
* 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.			



Bridge #B5206(Routine)

I-555 over Big Creek

Location: 4.55 MI NW OF SH 1B

Team Lead: Richard Jones, Inspection Date: April 14, 2020

ELEM	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
12	Reinforced Concrete Deck	SF	6519	4865	1130	524	0
1080	Delamination/Spall/Patched Area	SF	523	0	0	523	0
1090	Exposed Rebar	SF	1	0	0	1	0
1130	Cracking (RC and Other)	SF	1130	0	1130	0	0
510	Wearing Surfaces	SF	6201	6105	0	96	0
3220	Crack (Wearing Surface)	SF	96	0	0	96	0
107	Steel Open Girder/Beam	LF	1113	1029	84	0	0
1000	Corrosion	LF	84	0	84	0	0
515	Steel Protective Coating	SF	8691	0	4773	3918	0
3440	Effectiveness (Steel Protective Coatings)	SF	8691	0	4773	3918	0
215	Reinforced Concrete Abutment	LF	122	110	12	0	0
1120	Efflorescence/Rust Staining	LF	6	0	6	0	0
6000	Scour	LF	6	0	6	0	0
227	Reinforced Concrete Pile	EA	14	6	8	0	0
1080	Delamination/Spall/Patched Area	EA	1	0	1	0	0
1190	Abrasion/Wear (PSC/RC)	EA	7	0	7	0	0
234	Reinforced Concrete Pier Cap	LF	98	95	3	0	0
1080	Delamination/Spall/Patched Area	LF	1	0	1	0	0
1090	Exposed Rebar	LF	2	0	2	0	0
302	Compression Joint Seal	LF	192	0	0	141	51
2320	Seal Adhesion	LF	51	0	0	0	51
2330	Seal Damage	LF	7	0	0	7	0
2350	Debris Impaction	LF	134	0	0	134	0
311	Movable Bearing	EA	21	0	0	21	0
1020	Connection	EA	1	0	0	1	0
2220	Alignment	EA	20	0	0	20	0
313	Fixed Bearing	EA	21	0	21	0	0
1000	Corrosion	EA	21	0	21	0	0
321	Reinforced Concrete Approach Slab	SF	1752	1728	24	0	0
1130	Cracking (RC and Other)	SF	24	0	24	0	0



Bridge #B5206(Routine)

I-555 over Big Creek

Location: 4.55 MI NW OF SH 1B

Team Lead: Richard Jones, **Inspection Date:** April 14, 2020

ELEM	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
510	Wearing Surfaces	SF	1752	1752	0	0	0
330	Metal Bridge Railing	LF	318	318	0	0	0
331	Reinforced Concrete Bridge Railing	LF	318	210	108	0	0
1130	Cracking (RC and Other)	LF	108	0	108	0	0



Wearing surface



Soffit



Bridge #B5206(Routine)

I-555 over Big Creek

Location: 4.55 MI NW OF SH 1B

Team Lead: Richard Jones **Inspection Date:** April 14, 2020

Maintenance Needs

Date Reported: 04/28/2011
Priority: C - Important
Type of Work: None
Status: Monitor
Component:

Deficiency Description

Channel
Sounding taken, 9.1 ft. scour has occurred on Bent 3 as per layout sheet, see soundings 2013.

Remarks

Date Reported: 04/19/2012
Priority: C - Important
Type of Work: None
Status: Monitor
Component:

Deficiency Description

Deck has been reported as having several cracks; spalls, delaminated areas, and patches in the wheel path; and some spalls with rebar exposed.

Remarks

Deck and approach slabs received an asphalt overlay in 2018.





Bridge #B5206(Routine)

I-555 over Big Creek

Location: 4.55 MI NW OF SH 1B

Team Lead: Richard Jones **Inspection Date:** April 14, 2020

Date Reported: 04/19/2012
Priority: C - Important
Type of Work: Clean
Status: Monitor
Component: Superstructure

Deficiency Description

Steel girders have scattered freckled rust throughout. Protective coating has limited effectiveness. Ends of girders have areas of flaking rust with some minor section loss, especially at web below haunch and at diaphragm connections.

Remarks



Bridge #B5206(Routine)

I-555 over Big Creek

Location: 4.55 MI NW OF SH 1B

Team Lead: Richard Jones **Inspection Date:** April 14, 2020

Date Reported: 04/19/2012
Priority: C - Important
Type of Work: Repair
Status: Monitor
Component: Superstructure

Deficiency Description

Bearings have pack rust with some section loss. Moveable bearings are tilted up to 15 degrees. Some are at maximum rotation.

Span 2 bent 2 bearing 5 rocker pin is missing both cotter keys.

Remarks

Date Reported: 04/09/2013
Priority: C - Important
Type of Work: None
Status: Monitor
Component:

Deficiency Description

Bent 1 abutment is undermined for 6' near centerline up to 1' below cap and 2' back under.

Remarks



Bent 1 is undermined near center line.

Date Reported: 04/20/2018
Priority: C - Important
Type of Work: None
Status: Repair Documented
Component:

Deficiency Description

Large Void Right side of bent 4 undermining back under approach slab, See photo 2018.

Remarks

to Craighead Co for repair. KAW 5/15/18

Embankment under span 3 was lined with rip rap in 2017. Undermined cap and approach slab at bent 4 was repaired with flowable fill and hand placed rip rap.



Bent 4 Embankment



Bridge #B5206(Routine)

I-555 over Big Creek

Location: 4.55 MI NW OF SH 1B

Team Lead: Richard Jones **Inspection Date:** April 14, 2020

Inspection Comments

Deck Notes

Deck and approach slabs received an asphalt overlay in 2018.
Most deck and approach slab notes are from previous inspections.
Concrete approach slabs have moderate width cracking.
Concrete bridge rail has several vertical cracks
Compression seals are cracked and torn.
Bent 1 compression seal has been noted as having 3' dropped out of joint.
Bent 3 compression seal has been noted as completely dropped out of joint.
Deck has been reported as having several cracks; spalls, delaminated areas, and patches in the wheel path; and some spalls with rebar exposed.

Superstructure Notes

Steel girders have scattered freckled rust throughout. Protective coating has limited effectiveness.
Ends of girders have areas of flaking rust with some minor section loss, especially at web below haunch and at diaphragm connections.
Bearings have pack rust with some section loss. Moveable bearings are tilted up to 15 degrees. Some are at maximum rotation.
Span 2 bent 2 bearing 5 rocker pin is missing both cotter keys.

Substructure Notes

Embankment erosion is continuing under and adjacent to span 1 with some slides/loss of fill.
Bent 1 abutment is undermined for 6' near centerline up to 1' below cap and 2' back under.
Caps have a few delaminated areas and spalls with rebar exposed.
Piles have minor abrasion near water level.
Embankment under span 3 was lined with rip rap in 2017. Undermined cap and approach slab at bent 4 was repaired with flowable fill and hand placed rip rap.
Bent 4 concrete abutment has 6 ft. of cracks with efflorescence.