



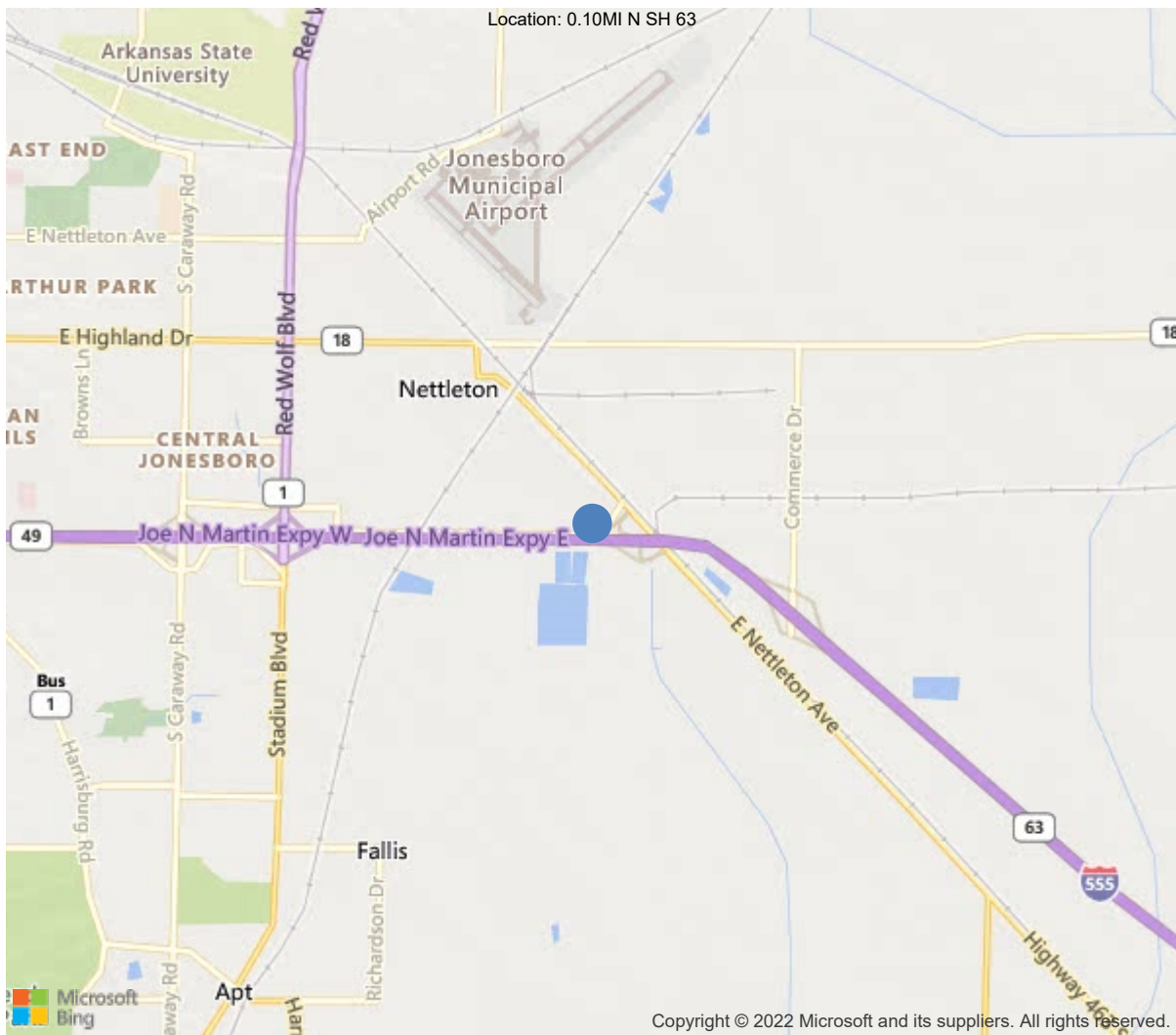
Latitude:35.80805, Longitude:-90.64214

Route:351 Section:00 Log:0.05

Arnold Road ID:16x351x0xA, Arnold Log mile:0.05

District 10, 31 - Craighead County

Owner: 1 - State Highway Agency



35.80805, -90.64214



Asset #05201 (Routine, Underwater type 2)

SH 351-00 LM 0.05 over WHITEMAN DITCH

Location: 0.10MI N SH 63

Team Lead: James Adams, Inspection Date: 12/13/2022

IDENTIFICATION	
(1) State Names	5 - Arkansas
(8) Structure Number	05201
(5) Inventory Route	1
(2) Highway Agency District	10 - District 10
(3) County Code	31 - Craighead County
(4) Place Code	35710
(6) Features Intersected	WHITEMAN DITCH
(7) Facility Carried	SH 351-00 LM 0.05
(9) Location	0.10MI N SH 63
(11) Mile Point	0.05 mi
(12) Base Highway Network	No
(13) LRS Inventory Rte & Subrte	0000000000
(16) Latitude	35.8080468546668
(17) Longitude	-90.6421375634935
(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	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	5 - Epoxy Overlay
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	2500
(30) Year of ADT	2018
(109) Truck ADT	5 %
(19) Bypass, Detour Length	1 mi
GEOMETRIC DATA	
(48) Length of Maximum Span	35 ft
(49) Structure Length	105 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)	36.1 ft
(33) Bridge Median	0 - No median
(34) Skew	40 Deg
(35) Structure Flared	0 - 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	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 w
(111) Pier Protection	5 - None present but re-evalua
(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	0
(26) Functional Class	17 - Urban Collector
(100) Defense Highway	0 - The inventory route is not
(101) Parallel Structure	N - No parallel structure exis
(102) Direction of Traffic	2 - way traffic
(103) Temporary Structure	
(105) Federal Lands Highways	0 - N/A
(110) Designated National Network	0 - The inventory route is not
(20) Toll	3 - On free road. The structu
(21) Maintain	1 - State Highway Agency
(22) Owner	1 - State Highway Agency
(37) Historical Significance	5 - Bridge is not eligible for
CONDITION	
(58) Deck	6
(59) Superstructure	6
(60) Substructure	6
(61) Channel & Channel Protection	7
(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	
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	N
(71) Waterway Adequacy	8
(72) Approach Roadway Alignment	8
(36A) Bridge Railings	1 - Inspected feature meets current
(36B) Transitions	0 - Inspected feature does not meet
(36C) Approach Guardrail	0 - Inspected feature does not meet
(36D) Approach Guardrail Ends	0 - Inspected feature does not meet
(113) Scour Critical Bridges	7 - Countermeasures have been insta
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	2700
(115) Year of Future ADT	2038

INSPECTIONS *			
(90) Inspection Date	12/13/2022		
(91) Frequency	24		
(92) Critical Feature Inspection	Done	Freq. (Mon)	Date
A: Fracture Critical Detail	No		
B: Underwater Inspection	No		
C: Other Special Inspection			
* 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.			

**58 - Deck (6)**

Underwater type 2 inspection performed this report. Minor scour at bent 2. Approach roadways have gaps between roadway and approach slabs. Some have been filled with asphalt. Approach gutters have a few areas beginning to undermine. Concrete rails have a few vertical cracks. Concrete approach slabs have open unsealed cracks. Top of slab was reported as having map cracking, areas of abrasion, and a few spalls at joints in the past. Slabs have received a polymer overlay since 2018 inspection. Poured joint seals are missing, or have debris impaction. Slab soffit has a few longitudinal cracks. Soffit has a few small delaminated areas and a few small spalls with exposed rebar.

59 - Superstructure (6)

Span 1 left drain opening has a 2.0 ft. x 8.0 ft. delamination with rust stains.

60 - Substructure (6)

Underwater type 2 inspection performed this report. Minor scour at bent 2. Caps and abutments have cracks, spalls, or delaminated areas at key ways. Bent 1 abutment has 3ft. of map cracking & delamination near center keyway. Bent 2 cap has a 2ft. x 1ft. x 8in. deep spall with exposed rebar on span 2 side at center key way. Bent 3 cap has a 4ft. x 1.5ft. x 6in. deep spall with exposed rebar on span 2 side at left key way. Channel was excavated in 2018 and rip rap was placed on slopes. Minor drift under span 1.

61 - Channel/Channel Protection (7)

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A-46 - Asset Files

-

General Observation (False)

-



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Location: 0.10MI N SH 63

Team Lead: James Adams, Inspection Date: 12/13/2022

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
38	RC Slab	SF	4436	3800	636	0	0
1080	Delamination/Spall/Patched Area	SF	3	0	3	0	0
1090	Exposed Rebar	SF	3	0	3	0	0
1120	Efflorescence/Rust Staining	SF	16	0	16	0	0
1130	Cracking (RC and Other)	SF	4274	3800	474	0	0
1190	Abrasion/Wear (PSC/RC)	SF	140	0	140	0	0
521	Concrete Protective Coating	SF	4095	4095	0	0	0
215	Reinforced Concrete Abutment	LF	127	119	8	0	0
1080	Delamination/Spall/Patched Area	LF	4	0	4	0	0
1120	Efflorescence/Rust Staining	LF	4	0	4	0	0
227	Reinforced Concrete Pile	EA	14	0	14	0	0
1190	Abrasion/Wear (PSC/RC)	EA	14	0	14	0	0
234	Reinforced Concrete Pier Cap	LF	115	101	2	12	0
1080	Delamination/Spall/Patched Area	LF	5	0	1	4	0
1090	Exposed Rebar	LF	8	0	0	8	0
1130	Cracking (RC and Other)	LF	1	0	1	0	0
301	Pourable Joint Seal	LF	204	0	0	102	102
2320	Seal Adhesion	LF	102	0	0	0	102
2350	Debris Impaction	LF	102	0	0	102	0
321	Reinforced Concrete Approach Slab	SF	1752	1584	39	129	0
1130	Cracking (RC and Other)	SF	168	0	39	129	0
330	Metal Bridge Railing	LF	210	210	0	0	0
331	Reinforced Concrete Bridge Railing	LF	210	152	58	0	0
1130	Cracking (RC and Other)	LF	58	0	58	0	0



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1190	Abrasion/Wear (PSC/RC)	SF	140	0	140	0	0
521	Concrete Protective Coating	SF	4095	4095	0	0	0

58 - Deck (6)

Comment: Underwater type 2 inspection performed this report. Minor scour at bent 2. Approach roadways have gaps between roadway and approach slabs. Some have been filled with asphalt. Approach gutters have a few areas beginning to undermine. Concrete rails have a few vertical cracks. Concrete approach slabs have open unsealed cracks. Top of slab was reported as having map cracking, areas of abrasion, and a few spalls at joints in the past. Slabs have received a polymer overlay since 2018 inspection. Poured joint seals are missing, or have debris impaction. Slab soffit has a few longitudinal cracks. Soffit has a few small delaminated areas and a few small spalls with exposed rebar.



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Superstructure

ELEMENTS	DESCRIPTION	UNITS	TOTAL				
				CS1	CS2	CS3	CS4

59 - Superstructure (6)

Comment: Span 1 left drain opening has a 2.0 ft. x 8.0 ft. delamination with rust stains.



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Substructure

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
215	Reinforced Concrete Abutment	LF	127	119	8	0	0
1080	Delamination/Spall/Patched Area	LF	4	0	4	0	0
1120	Efflorescence/Rust Staining	LF	4	0	4	0	0
227	Reinforced Concrete Pile	EA	14	0	14	0	0
1190	Abrasion/Wear (PSC/RC)	EA	14	0	14	0	0
234	Reinforced Concrete Pier Cap	LF	115	101	2	12	0
1080	Delamination/Spall/Patched Area	LF	5	0	1	4	0
1090	Exposed Rebar	LF	8	0	0	8	0
1130	Cracking (RC and Other)	LF	1	0	1	0	0

60 - Substructure (6)

Comment: Underwater type 2 inspection performed this report. Minor scour at bent 2. Caps and abutments have cracks, spalls, or delaminated areas at key ways. Bent 1 abutment has 3ft. of map cracking & delamination near center keyway. Bent 2 cap has a 2ft. x 1ft. x 8in. deep spall with exposed rebar on span 2 side at center key way. Bent 3 cap has a 4ft. x 1.5ft. x 6in. deep spall with exposed rebar on span 2 side at left key way. Channel was excavated in 2018 and rip rap was placed on slopes. Minor drift under span 1.

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Culvert

ELEMENTS	DESCRIPTION	UNITS	TOTAL				
				CS1	CS2	CS3	CS4



Soffit



Bent 1 abutment



Elevation



Deck



North



Asset #05201(Routine, Underwater type 2)

SH 351-00 LM 0.05 over WHITEMAN DITCH

Location: 0.10MI N SH 63

Team Lead: James Adams, **Inspection Date:** 12/13/2022

Maintenance Needs

Date Reported: 12/13/2016
Priority: C - Important
Type of Work: (Inactive) (Inactive) 9 - None
Status: Monitor
Component: Substructure

Deficiency Description

Bent 3 cap has a 4ft. x 1.5ft. x 6in. deep spall with exposed rebar on span 2 side at left key way.

Remarks



Span 2 bent 3 cap



bent 3



Span 2 bent 3 cap keyway



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Date Reported: 12/13/2016
Priority: C - Important
Type of Work: (Inactive) (Inactive) 9 - None
Status: Monitor
Component: Substructure

Deficiency Description

Bent 2 cap has a 2ft. x 1ft. x 8in. deep spall with exposed rebar on bent 2 side at center key way.

Remarks



Span 2 bent 2 cap





Span 2 bent 2 cap keyway



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Location: 0.10MI N SH 63

Team Lead: James Adams, **Inspection Date:** 12/13/2022

Date Reported: 01/22/2013
Priority: D- Routine
Type of Work: (Inactive) (Inactive) 9 - None
Status: Monitor
Component: Deck

Deficiency Description

Slab soffit has a few longitudinal cracks. Soffit has a few small delaminated areas and a few small spalls with exposed rebar.

Remarks

Date Reported: 01/24/2011
Priority: C - Important
Type of Work: (Inactive) (Inactive) 9 - None
Status: Assigned
Component: Approach

Deficiency Description

Concrete approach slabs have open unsealed cracks.

Remarks

HBM to apply polymer overlay



Approach slab cracks



Approach slab at end

Date Reported: 01/24/2011
Priority: C - Important
Type of Work: (Inactive) (Inactive) 9 - None
Status: Monitor
Component: Approach

Deficiency Description

Approach roadways have gaps between roadway and approach slabs. Approach gutters have a few areas beginning to undermine.

Remarks



Typ gap at approach slabs



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Routine Maintenance

Check Box Maintenance Items

Data Field	Value
A-54 - Sealable Deck Cracks	
A-55 - Deck Washing Needed	
A-56 - Joint Cleaning/Flushing Needed	
A-57-Beam End and Bearing Paint Needed	
A-58 - Cap Cleaning/Flushing Needed	
A-59 - Joint Repair Needed	
A-60 - Full Beam Painting Needed	
A-61 - Polymer Overlay Advised	
A-62 - Hydo and LMC Advised	



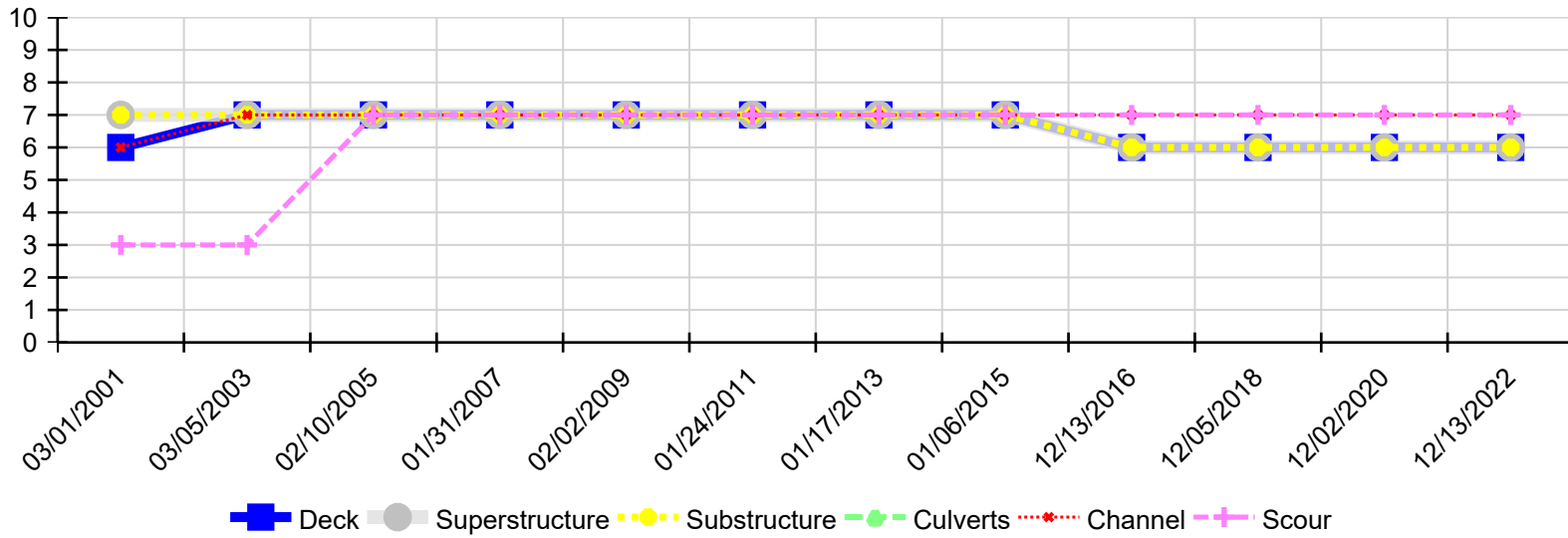
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Condition History



Inspection Date	Deck	Superstructure	Substructure	Culverts	Channel	Scour
12/13/2022	6	6	6	N	7	7
12/02/2020	6	6	6	N	7	7
12/05/2018	6	6	6	N	7	7
12/13/2016	6	6	6	N	7	7
01/06/2015	7	7	7	N	7	7
01/17/2013	7	7	7	N	7	7
01/24/2011	7	7	7	N	7	7
02/02/2009	7	7	7	N	7	7
01/31/2007	7	7	7	N	7	7
02/10/2005	7	7	7	N	7	7
03/05/2003	7	7	7	N	7	3
03/01/2001	6	7	7	N	6	3