



Latitude:34.72904, Longitude:-91.80820

Route:381 Section:01 Log:3.479

Arnold Road ID:43x381x1xA, Arnold Log mile:3.474

District 06, 85 - Lonoke County

Owner: 1 - State Highway Agency

Bridge Posting Information

41 - Structure Open/Posted/Closed: A - Open, no restriction

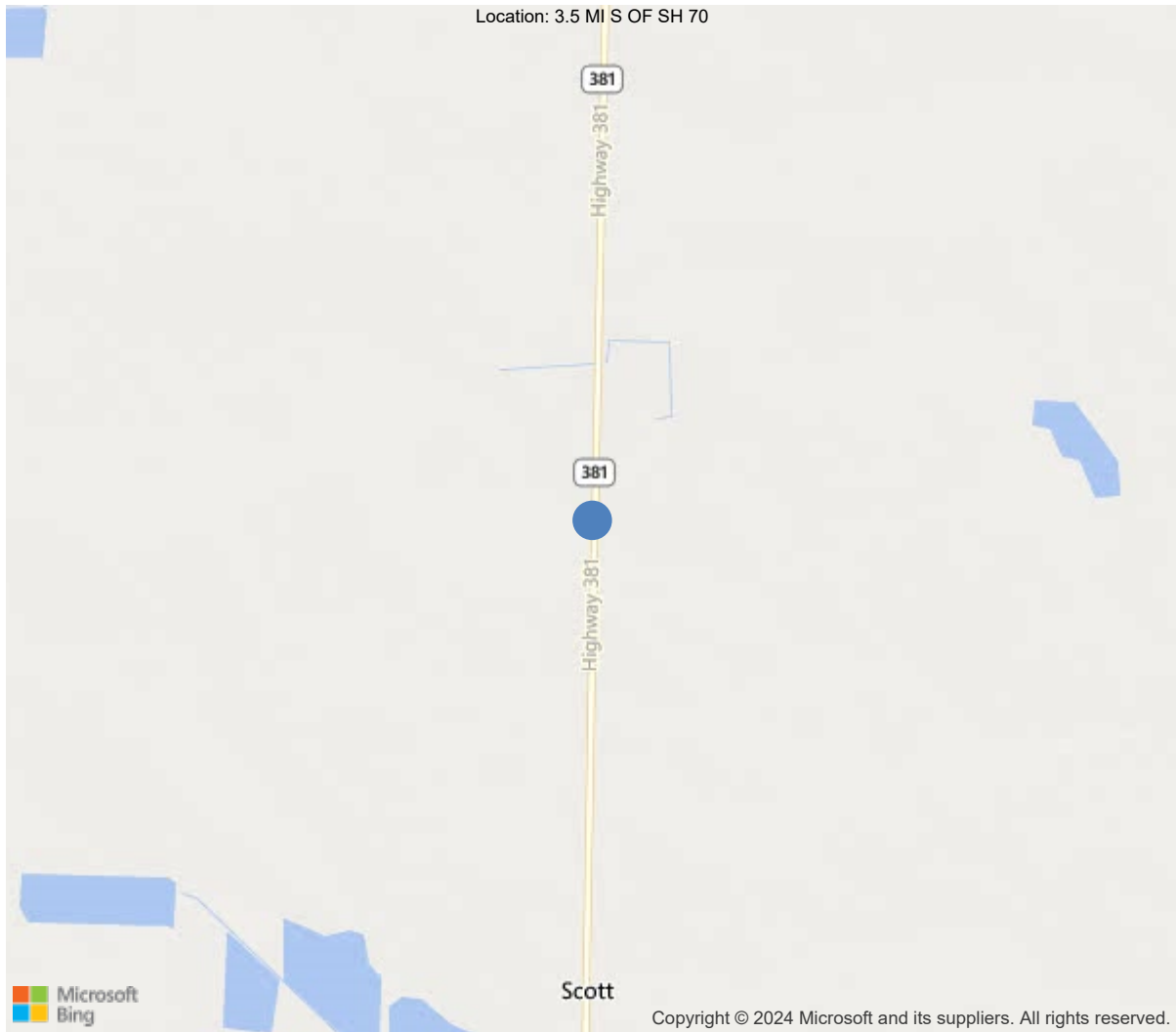
70 - Bridge Posting: 5 - Equal to or above legal loads

Legal Load	Calculated Capacity	Beginning of Bridge Sign Current Value	End of Bridge Sign Current Value
Code 4 (22 Tons)	40		
Code 9 (31 Tons)	50		
Code 5 (40 Tons)	60		

If calculated Capacity is less than the Legal Load Listed, the Bridge Legally Requires Posting Signs to be installed by the Bridge Owner



30"x36" AR



34.72904, -91.80820



Asset #M3143(Routine, Underwater type 2)

SH 381 log 3.48 over SKINNERS BRANCH

Location: 3.5 MI S OF SH 70

Team Lead: Bryan Saunders, Inspection Date: 05/15/2023

IDENTIFICATION	
(1) State Names	5 - Arkansas
(8) Structure Number	M3143
(5) Inventory Route	1
(2) Highway Agency District	06 - District 06
(3) County Code	85 - Lonoke County
(4) Place Code	0
(6) Features Intersected	SKINNERS BRANCH
(7) Facility Carried	SH 381 log 3.48
(9) Location	3.5 MI S OF SH 70
(11) Mile Point	3.479 mi
(12) Base Highway Network	No
(13) LRS Inventory Rte & Subrte	0000000000
(16) Latitude	34.72904
(17) Longitude	-91.8082
(98) Border Bridge State Code	
(99) Border Bridge Structure No.	
STRUCTURE TYPE AND MATERIAL	
(43) Main Structure Type	122
Material	1 - Concrete
Type	22 - Channel beam
(44) Approach Structure Type	00
Material	0 - Other
Type	0 - Other
(45) No. of Spans in Main Unit	2
(46) No. of Approach Spans	0
(107) Deck Structure Type	2 - Concrete Precast Panels
(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	1968
(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	530
(30) Year of ADT	2018
(109) Truck ADT	1 %
(19) Bypass, Detour Length	3 mi
GEOMETRIC DATA	
(48) Length of Maximum Span	19 ft
(49) Structure Length	38 ft
(50) Curb or Sidewalk Width	
Left	0.4 ft
Right	0.4 ft
(51) Bridge Roadway Width Curb to Curb	25.9 ft
(52) Deck Width Out to Out	28.2 ft
(32) Approach Roadway Width (W/Shoulders)	24.9 ft
(33) Bridge Median	0 - No median
(34) Skew	0 Deg
(35) Structure Flared	0 - No flare
(10) Inventory Route Min Vert Clear	99.99 ft
(47) Inventory Route Total Horiz Clear	26.9 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	1 - Navigation protection not
(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	7 - Rural Major Collector
(100) Defense Highway	0 - The inventory route is not
(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	0 - The inventory route is not
(20) Toll	3 - On free road. The structure
(21) Maintain	1 - State Highway Agency
(22) Owner	1 - State Highway Agency
(37) Historical Significance	5 - Bridge is not eligible for
CONDITION	
(58) Deck	7
(59) Superstructure	7
(60) Substructure	5
(61) Channel & Channel Protection	5
(62) Culverts	N
LOAD RATING AND POSTING	
(31) Design Load	2 - M 13.5 / H 15
(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	
(68) Deck Geometry	5
(69) Clearances, Vertical/Horizontal	N
(71) Waterway Adequacy	6
(72) Approach Roadway Alignment	8
(36A) Bridge Railings	0 - Inspected feature does not meet
(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	5 - Bridge foundations determined to
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	691
(115) Year of Future ADT	2028

INSPECTIONS *			
(90) Inspection Date	05/15/2023		
(91) Frequency	24		
(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.			



Asset #M3143(Routine, Underwater type 2)

District: 06, County: 85 - Lonoke County

Team Lead: Bryan Saunders, Inspection Date: 05/15/2023

General Observation

Revised MS sketch 5/23/17

Logged South bound.

Channel profile added 5/17/21

60 - Substructure (5 - FAIR CONDITION - all primary structural elements are sound but may have minor section loss, cracking, spalling or scour.)
pile probed with range pole 2023

61 - Channel/Channel Protection (5 - Bank protection is being eroded. River control devices and/or embankment have major damage. Trees and brush restrict the channel.)
pile probed with range pole 2023

Team Lead: Bryan Saunders, **Inspection Date:** 05/15/2023

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
16	Reinforced Concrete Top Flange	SF	1064	1053	8	3	0
1080	Delamination/Spall/Patched Area	SF	11	0	8	3	0
510	Wearing Surfaces	SF	988	988	0	0	0
(16) Approximately 8 feet of grout between the units is missing. Bent 2: spall on unit 1 in spans 1 & 2. Similar condition to unit 8							
110	Reinforced Concrete Open Girder/Beam	LF	608	604	4	0	0
1090	Exposed Rebar	LF	4	0	4	0	0
(110) Span 1, unit 1 has a spall with exposed rebar at the base of the third rail post. Scattered very small cracks in the legs of the channel beams.							
216	Timber Abutment	LF	110	78	20	12	0
1140	Decay/Section Loss	LF	12	0	0	12	0
1160	Crack (Timber)	LF	20	0	20	0	0
(216) Cracks and splits on the ends of the crabbing. Bent 3 12' of cribbing is missing							
228	Timber Pile	EA	15	9	5	1	0
1140	Decay/Section Loss	EA	1	0	0	1	0
1160	Crack (Timber)	EA	5	0	5	0	0
(228) State forces have repaired pile at bent 1 pile 3 & 4, bent 2 pile 1, bent 3 pile 4. Bent 1 pile 5 has a 2'x6"deep decay area at the top Bent 2 pile 2 and 3 cracks splits Bent 3 pile 2 is hollow. Concrete collar bent 2 pile 1 and 5 vertical cracks							
234	Reinforced Concrete Pier Cap	LF	91	81	4	6	0
1080	Delamination/Spall/Patched Area	LF	6	0	0	6	0
1130	Cracking (RC and Other)	LF	4	0	4	0	0
(234) Spalls on the right end of bent 1 and on the ahead face of bent 2.							
330	Metal Bridge Railing	LF	74	74	0	0	0
515	Steel Protective Coating	SF	74	74	0	0	0
(330) galvanized steel							

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SH 381 log 3.48 over SKINNERS BRANCH

Location: 3.5 MI S OF SH 70

Team Lead: Bryan Saunders, Inspection Date: 05/15/2023

Substructure

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
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Comment: pile probed with range pole 2023

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Comment: pile probed with range pole 2023



Elevation



Approach looking south



Deck view



soffit view



Upstream



Downstream



Bent 1



Bent 1 pile 5 2' tall 6" deep decayed section



Bent 2 pile 2 and 3



Bent 1 pile 5

Maintenance Needs

Date Reported: 05/22/2023

Priority: B - Pressing

Type of Work: Repair (General)

Status: Open

Component:

Deficiency Description

Bent 1 pile 5, has large decayed area 2' x 6" deep

Remarks



Bent 1 pile 5 2' tall 6" deep decayed section



Bent 1 pile 5 2' tall 6" deep decayed section

Maintenance Needs

Date Reported: 05/25/2011

Priority: D- Routine

Type of Work: (Inactive) (Inactive) 9 - None

Status: Monitor

Component:

Deficiency Description

Deck has small spalls in grouted keyways between channel units.

Remarks



Grout missing from between channel units



Grout missing from between channel units



Deck has small spalls in grouted keyways between channel units.

Maintenance Needs

Date Reported: 05/28/2019

Priority: D- Routine

Type of Work: (Inactive) (Inactive) 1 - Clean

Status: Assigned

Component:

Deficiency Description

Bent 2: large amount of drift and sediment against pile.

Remarks

Assigned Lonoke 06431 6/20/19

Most of the drift has been removed

Sediment mound is still in place.



Bent 2: large amount of drift and sediment against pile.



Asset #M3143(Routine, Underwater type 2)

SH 381 log 3.48 over SKINNERS BRANCH

Location: 3.5 MI S OF SH 70

Team Lead: Bryan Saunders, **Inspection Date:** 05/15/2023

Routine Maintenance

Check Box Maintenance Items

Type of Maintenance	Is recommended?
A-54 - Sealable Deck Cracks	No
A-55 - Deck Washing Needed	No
A-56 - Joint Cleaning/Flushing Needed	No
A-57 - Beam End and Bearing Paint Needed	No
A-58 - Cap Cleaning/Flushing Needed	No
A-59 - Joint Repair Needed	Yes
A-60 - Full Beam Painting Needed	No
A-61 - Polymer Overlay Advised	No
A-62 - Hydro and LMC Advised	No
A-63 Missing/Incorrect Log Mile Signage	Yes
A-64 - Vegetation Removal Requested	

A-54 - Sealable Deck Cracks (No)

A-55 - Deck Washing Needed (No)

A-56 - Joint Cleaning/Flushing Needed (No)



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A-57 - Beam End and Bearing Painting Needed (No)

A-58 - Cap Cleaning/Flushing Needed (No)

A-59 - Joint Repair Needed (Yes)

A-60 - Full Beam Painting Needed (No)

A-61 - Polymer Overlay Advised (No)

A-62 - Hydro and LMC Advised (No)

A-63 - Missing/Incorrect Log Mile Signage (Yes)

A-64 - Vegetation Removal Requested



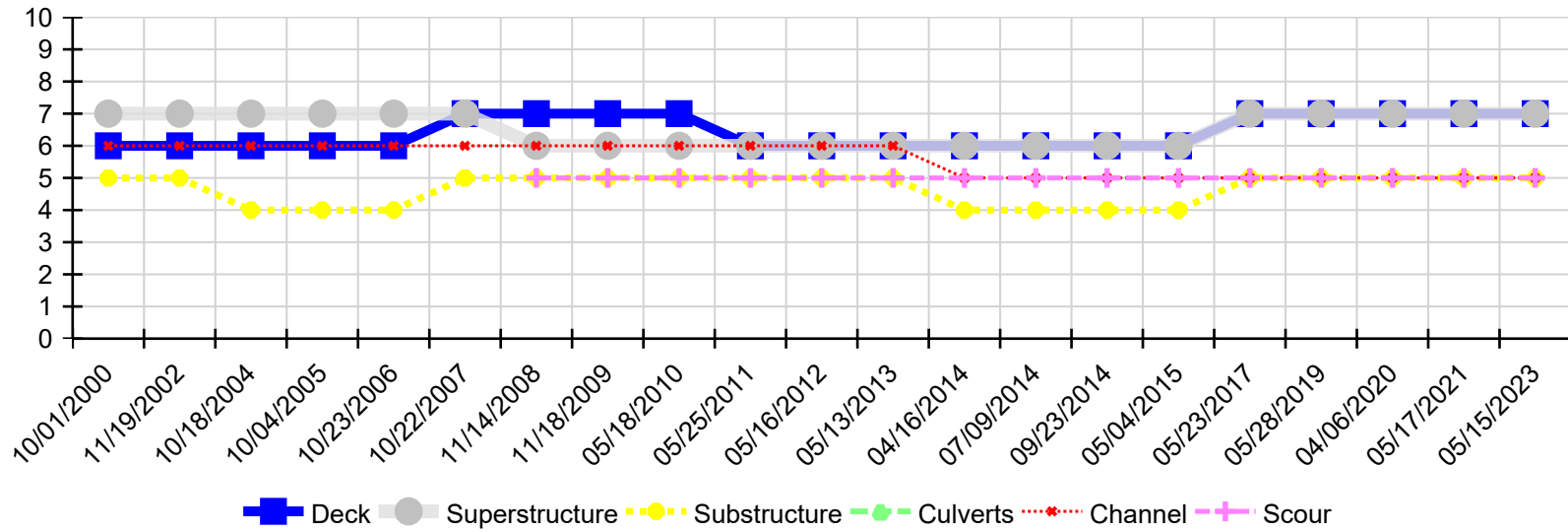
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Location: 3.5 MI S OF SH 70

Team Lead: Bryan Saunders, Inspection Date: 05/15/2023

Condition History



Inspection Date	Deck	Superstructure	Substructure	Culverts	Channel	Scour
05/15/2023	7	7	5	N	5	5
05/17/2021	7	7	5	N	5	5
04/06/2020	7	7	5	N	5	5
05/28/2019	7	7	5	N	5	5
05/23/2017	7	7	5	N	5	5
05/04/2015	6	6	4	N	5	5
09/23/2014	6	6	4	N	5	5
07/09/2014	6	6	4	N	5	5
04/16/2014	6	6	4	N	5	5
05/13/2013	6	6	5	N	6	5
05/16/2012	6	6	5	N	6	5
05/25/2011	6	6	5	N	6	5
05/18/2010	7	6	5	N	6	5
11/18/2009	7	6	5	N	6	5
11/14/2008	7	6	5	N	6	5
10/22/2007	7	7	5	N	6	N
10/23/2006	6	7	4	N	6	N
10/04/2005	6	7	4	N	6	N
10/18/2004	6	7	4	N	6	N
11/19/2002	6	7	5	N	6	N
10/01/2000	6	7	5	N	6	N