



Latitude:34.06384, Longitude:-92.97997

Route:7 Section:06 Log:6.53

Arnold Road ID:10x7x6xA, Arnold Log mile:6.545

District 07, 19 - Clark County

Owner: 1 - State Highway Agency

Bridge Posting Information

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

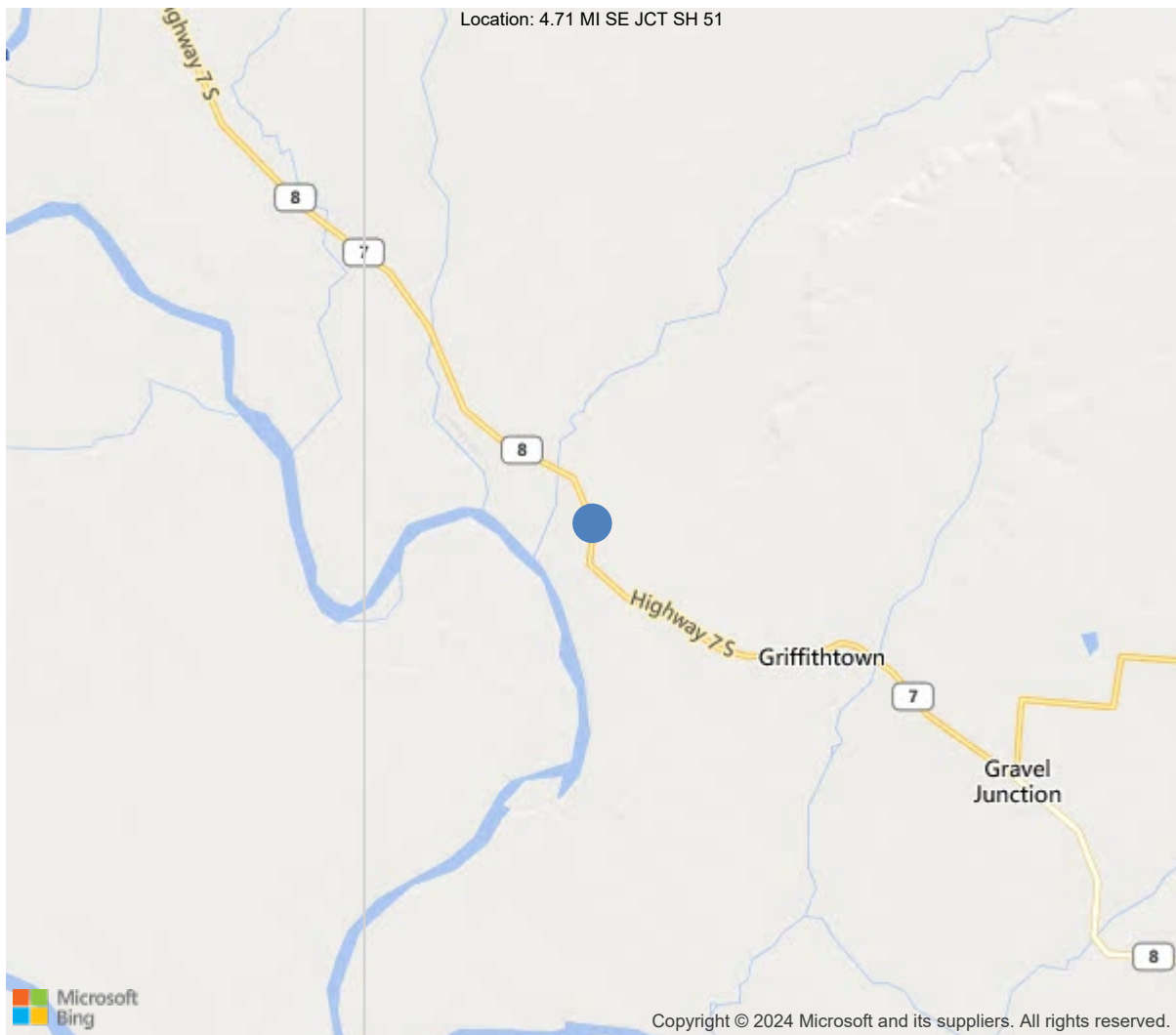
70 - Bridge Posting: 5 - Equal to or above legal loads

Legal Load	Calculated Capacity	Beginning of Bridge Sign Current Value	End of Bridge Sign Current Value
Code 4 (22 Tons)	29		
Code 9 (31 Tons)	32		
Code 5 (40 Tons)	44		

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



34.06384, -92.97997



Asset #M0178(Routine, Underwater type 2)

SH 7 S-6 LM 6.53 over L'EAU FRAIS RELIEF

Location: 4.71 MI SE JCT SH 51

Team Lead: Rickie Bratton, Inspection Date: 03/06/2023

IDENTIFICATION	
(1) State Names	5 - Arkansas
(8) Structure Number	M0178
(5) Inventory Route	1
(2) Highway Agency District	07 - District 07
(3) County Code	19 - Clark County
(4) Place Code	0
(6) Features Intersected	L'EAU FRAIS RELIEF
(7) Facility Carried	SH 7 S-6 LM 6.53
(9) Location	4.71 MI SE JCT SH 51
(11) Mile Point	6.53 mi
(12) Base Highway Network	Yes
(13) LRS Inventory Rte & Subrte	0000007060
(16) Latitude	34.0638442347027
(17) Longitude	-92.9799739242955
(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	11
(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	1957
(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	1700
(30) Year of ADT	2018
(109) Truck ADT	1 %
(19) Bypass, Detour Length	5 mi
GEOMETRIC DATA	
(48) Length of Maximum Span	19 ft
(49) Structure Length	209 ft
(50) Curb or Sidewalk Width	
Left	0 ft
Right	0 ft
(51) Bridge Roadway Width Curb to Curb	24 ft
(52) Deck Width Out to Out	25 ft
(32) Approach Roadway Width (W/Shoulders)	30.8 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	25.6 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	6 - Rural Minor Arterial
(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	7
(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	38
(65) Inventory Rating Method	1 - Load Factor(LF)
(66) Inventory Rating	
Type	
Rating	23
(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	4
(69) Clearances, Vertical/Horizontal	N
(71) Waterway Adequacy	6
(72) Approach Roadway Alignment	6
(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	31 - Replacement of bridge or
(76) Length of Structure Improvement	242 ft
(94) Bridge Improvement Cost	\$ 0
(95) Roadway Improvement Cost	\$ 156
(96) Total Project Cost	\$ 689
(97) Year of Improvement Cost Estimate	2003
(114) Future ADT	1810
(115) Year of Future ADT	2028

INSPECTIONS *			
(90) Inspection Date	03/06/2023		
(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 #M0178(Routine, Underwater type 2)

District: 07, County: 19 - Clark County

Team Lead: Rickie Bratton, Inspection Date: 03/06/2023

General Observation

Logged south to north.

All bents on this structure have concrete footings with stub piles to supplement original pile. Original piles are very rotten with 32 in lower condition states.

52 - Deck Width (25)

Deck Width = (25.0') per plans.

58 - Deck (7 - GOOD CONDITION - some minor problems.)

Overview

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

BT#2-11 maintance forces added conc. ftgs & @ least 4 pile per bent(see drawings dated 1-31-01 &2-10-05 REV BT#8) =90 pile 03-23-2011 most original pile are rotten several are crushed. Maint has added helper piles as needed. Bt 8 pile 7 crushed. 3/30/2009 JPR Bent 3 pile 3 rotten, Bent 4 Piles 1 & 5 rotten, Bent 6 pile 1 rotten. 03/14/2013 JPR Bent 2 pile 6 rotten below splice. Bent 8 piles 5 & 7 are crushing. Bent 10 piles 4, 6, & 8 have no bearing with cap.

Bent 6 pile 8, no bearing. Bent 7 pile 1 no bearing also pile 6. Bent 7 pile 8 no bearing.

06/22/2021 JPR -- District Bridge Crew has been working replacing piles and columns on this structure recently but not sure if they are through yet.



Asset #M0178(Routine, Underwater type 2)

SH 7 S-6 LM 6.53 over L'EAU FRAIS RELIEF

Location: 4.71 MI SE JCT SH 51

Team Lead: Rickie Bratton, **Inspection Date:** 03/06/2023

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
16	Reinforced Concrete Top Flange	SF	5225	5225	0	0	0
510	Wearing Surfaces	SF	5016	4598	418	0	0
3220	Crack (Wearing Surface)	SF	418	0	418	0	0
(16) Reinforced Concrete Top Flange = (209' x 25.0') = 5225 sq.ft. per plans.							
(510-16) Wearing Surfaces = (209' x 24.0') = 5016 sq.ft. per plans.							
110	Reinforced Concrete Open Girder/Beam	LF	1463	1454	7	2	0
1090	Exposed Rebar	LF	2	0	0	2	0
1130	Cracking (RC and Other)	LF	7	0	7	0	0
(110) Reinforced Concrete Open Girder/Beam = (209' x 7 PC Units) = 1463 Lf. per plans.							
Span 9 units 4&5 cracks along bottom legs.							
Span 10 unit 5, crack in bottom leg.							
206	Timber Column	EA	40	40	0	0	0
215	Reinforced Concrete Abutment	LF	70	70	0	0	0
(215) Reinforced Concrete Abutment = (35' x 2) = 70' per plans.							
220	Reinforced Concrete Pile Cap/Footing	LF	250	250	0	0	0

Team Lead: Rickie Bratton, **Inspection Date:** 03/06/2023

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
(220) Reinforced Concrete Pile Cap/Footing = (25' x 10) = 250 LF per drawings. The Reinforced Concrete Pile Cap/Footings are (24" x 24" x 25' long) and there is an added Reinforced Concrete Pile Cap/Footing @ each Intermediate bent.							
footing							
228	Timber Pile	EA	50	18	0	32	0
1140	Decay/Section Loss	EA	32	0	0	32	0
(228) See notes in Substructure for details on piling.							
234	Reinforced Concrete Pier Cap	LF	270	265	4	1	0
1090	Exposed Rebar	LF	5	0	4	1	0
(234) Reinforced Concrete Pier Cap = (27.0' x 10 bents) = 270 Lf.							
301	Pourable Joint Seal	LF	250	250	0	0	0
(301) Pourable Joint Seal = (25.0' x 10 bents) = 250 Lf. per plans.							
330	Metal Bridge Railing	LF	418	104	314	0	0
1000	Corrosion	LF	314	0	314	0	0
(330) Span 5, rail damage and middle post, left side. 03/15/2021 JPR -- rail damage has been repaired, there is no maintenance need for this item now.							



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Team Lead: Rickie Bratton, Inspection Date: 03/06/2023

Deck

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
16	Reinforced Concrete Top Flange	SF	5225	5225	0	0	0
510	Wearing Surfaces	SF	5016	4598	418	0	0
3220	Crack (Wearing Surface)	SF	418	0	418	0	0
(16) Reinforced Concrete Top Flange = (209' x 25.0') = 5225 sq.ft. per plans.							
(510-16) Wearing Surfaces = (209' x 24.0') = 5016 sq.ft. per plans.							

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Comment: Overview

Location: 4.71 MI SE JCT SH 51

Team Lead: Rickie Bratton, **Inspection Date:** 03/06/2023

Superstructure

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
110	Reinforced Concrete Open Girder/Beam	LF	1463	1454	7	2	0
1090	Exposed Rebar	LF	2	0	0	2	0
1130	Cracking (RC and Other)	LF	7	0	7	0	0
(110) Reinforced Concrete Open Girder/Beam = (209' x 7 PC Units) = 1463 Lf. per plans. Span 9 units 4&5 cracks along bottom legs. Span 10 unit 5, crack in bottom leg.							



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SH 7 S-6 LM 6.53 over L'EAU FRAIS RELIEF

Location: 4.71 MI SE JCT SH 51

Team Lead: Rickie Bratton, Inspection Date: 03/06/2023

Substructure

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
206	Timber Column	EA	40	40	0	0	0
215	Reinforced Concrete Abutment	LF	70	70	0	0	0
(215) Reinforced Concrete Abutment = (35' x 2) = 70' per plans.							
220	Reinforced Concrete Pile Cap/Footing	LF	250	250	0	0	0
(220) Reinforced Concrete Pile Cap/Footing = (25' x 10) = 250 LF per drawings. The Reinforced Concrete Pile Cap/Footings are (24" x 24" x 25' long) and there is an added Reinforced Concrete Pile Cap/Footing @ each Intermediate bent.							
footing							
228	Timber Pile	EA	50	18	0	32	0
1140	Decay/Section Loss	EA	32	0	0	32	0
(228) See notes in Substructure for details on piling.							
234	Reinforced Concrete Pier Cap	LF	270	265	4	1	0
1090	Exposed Rebar	LF	5	0	4	1	0
(234) Reinforced Concrete Pier Cap = (27.0' x 10 bents) = 270 Lf.							

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Comment: BT#2-11 maintance forces added conc. ftgs & @ least 4 pile per bent(see drawings dated 1-31-01 &2-10-05 REV BT#8)=90 pile 03-23-2011 most original pile are rotten several are crushed. Maint has added helper piles as needed. Bt 8 pile 7 crushed. 3/30/2009 JPR Bent 3 pile 3 rotten, Bent 4 Piles 1 & 5 rotten, Bent 6 pile 1 rotten. 03/14/2013 JPR Bent 2 pile 6 rotten below splice. Bent 8 piles 5 & 7 are crushing. Bent 10 piles 4, 6, & 8 have no bearing with cap.

Bent 6 pile 8, no bearing. Bent 7 pile 1 no bearing also pile 6. Bent 7 pile 8 no bearing. 06/22/2021 JPR -- District Bridge Crew has been working replacing piles and columns on this structure recently but not sure if they are through yet.



Elevation



Span 11 unit 1, left leg, exposed rebar at bent 11 bearing area.



Span 8 unit 5 left leg 5' from bent 8 has exposed rebar.



Span 2 soffit overview.



Deck overview



Approach roadway



Profile



Roadway



Elevation



Span 6



Bent 8 piles 7 and 9 typical of old rotten piles.



Bent 6 crack in cap over pile 5



Deck overview



Approach



Span 10, unit 5, crack in bottom left leg.



Span 5 left side post and rail damage



Deck overview

Maintenance Needs

Date Reported: 03/14/2013

Priority: D- Routine

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

Status: Monitor

Component:

Deficiency Description

Local scour below bottom of cap @ Abutment 1 with minor roadway settlement.

Remarks



Minor scour abutment 1



Repair to abutment 1 erosion



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Team Lead: Rickie Bratton, **Inspection Date:** 03/06/2023

Routine Maintenance

Check Box Maintenance Items

Type of Maintenance	Is recommended?
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 - Hydro and LMC Advised	
A-63 Missing/Incorrect Log Mile Signage	
A-64 - Vegetation Removal Requested	

A-54 - Sealable Deck Cracks

A-55 - Deck Washing Needed

A-56 - Joint Cleaning/Flushing Needed



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Location: 4.71 MI SE JCT SH 51

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A-57 - Beam End and Bearing Painting 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 - Hydro and LMC Advised

A-63 - Missing/Incorrect Log Mile Signage

A-64 - Vegetation Removal Requested



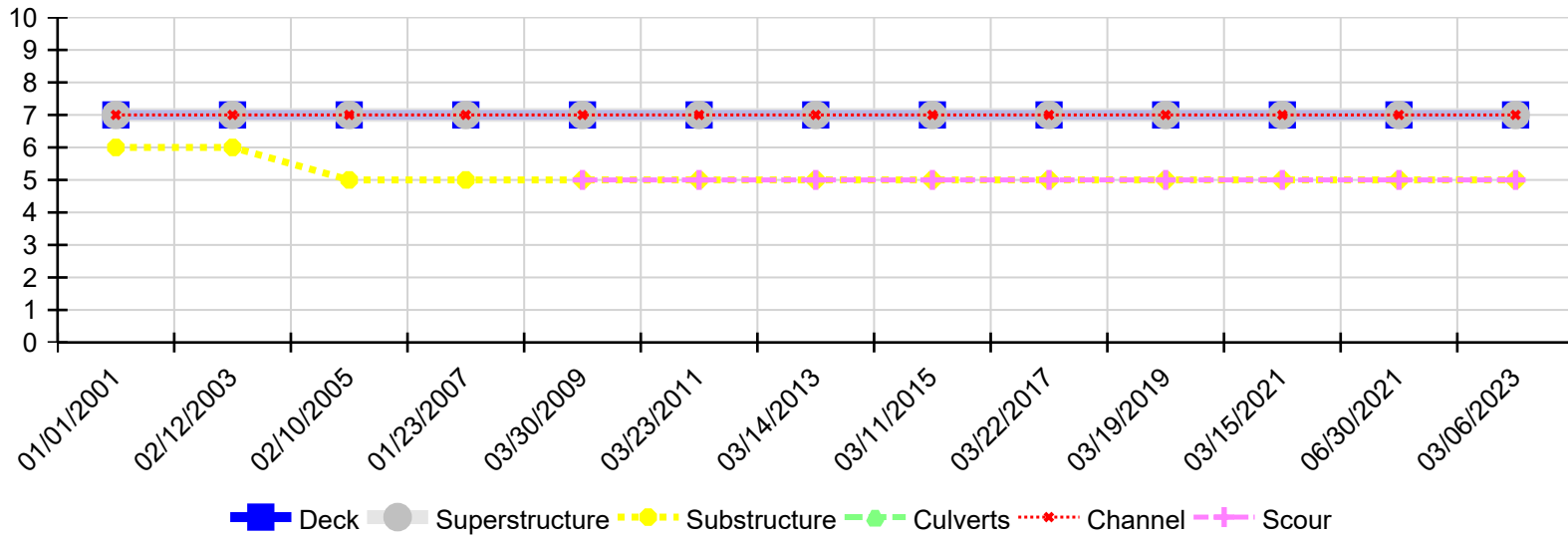
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Condition History



Inspection Date	Deck	Superstructure	Substructure	Culverts	Channel	Scour
03/06/2023	7	7	5	N	7	5
06/30/2021	7	7	5	N	7	5
03/15/2021	7	7	5	N	7	5
03/19/2019	7	7	5	N	7	5
03/22/2017	7	7	5	N	7	5
03/11/2015	7	7	5	N	7	5
03/14/2013	7	7	5	N	7	5
03/23/2011	7	7	5	N	7	5
03/30/2009	7	7	5	N	7	5
01/23/2007	7	7	5	N	7	N
02/10/2005	7	7	5	N	7	N
02/12/2003	7	7	6	N	7	N
01/01/2001	7	7	6	N	7	N