



Latitude:35.00701, Longitude:-90.41404

Route:50 Section:1 Log:20.8

Arnold Road ID:68x50x1xA, Arnold Log mile:20.798

District 01, 123 - St. Francis County

Owner: 1 - State Highway Agency

Inspection Direction: 4 - W to E

Bridge Posting Information

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

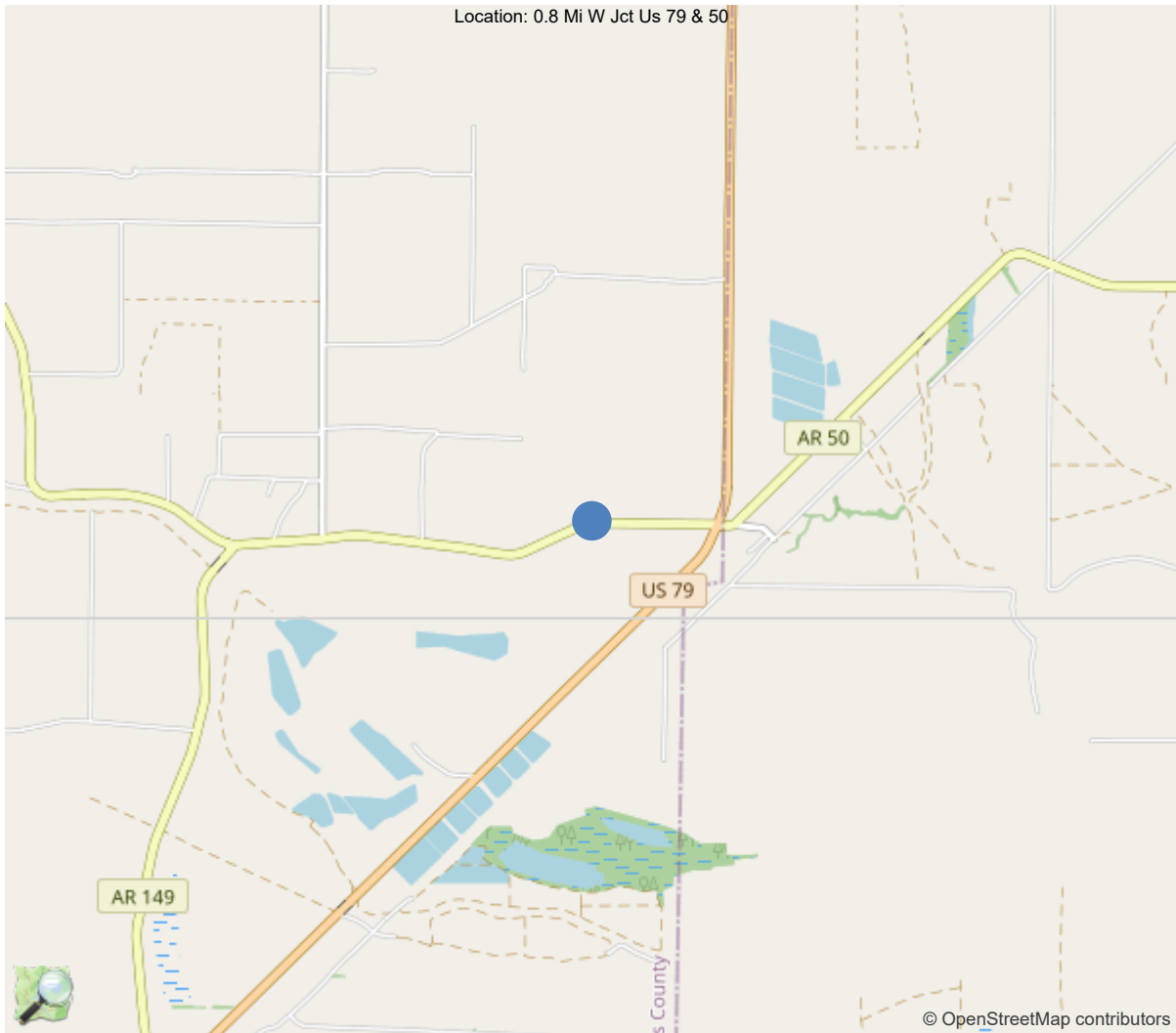
70 - Bridge Posting: 5 - Equal to or above legal loads

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



35.00701, -90.41404



Asset #07467(Routine)

Sh-50/Sec-1/L20.80 over cutoff bayou

Location: 0.8 Mi W Jct Us 79 & 50

Team Lead: Myron Futrell Inspection Date: 04/12/2023

IDENTIFICATION	
(1) State Names	5 - Arkansas
(8) Structure Number	07467
(5) Inventory Route	1
(2) Highway Agency District	01 - District 01
(3) County Code	123 - St. Francis County
(4) Place Code	0
(6) Features Intersected	cutoff bayou
(7) Facility Carried	Sh-50/Sec-1/L20.80
(9) Location	0.8 Mi W Jct Us 79 & 50
(11) Mile Point	20.8 mi
(12) Base Highway Network	No
(13) LRS Inventory Rte & Subrte	0000000000
(16) Latitude	35.007012
(17) Longitude	-90.414035
(98) Border Bridge State Code	
(99) Border Bridge Structure No.	
STRUCTURE TYPE AND MATERIAL	
(43) Main Structure Type	42
Material	4 - Steel continuous
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	6
(46) No. of Approach Spans	0
(107) Deck Structure Type	1 - Concrete Cast-in-Place
(108) Wearing Surface/Protective System	
Type of Wearing Surface	1 - Monolithic Concrete (concurrently pl
Type of Membrane	0 - None
Type of Deck Protection	1 - Epoxy Coated Reinforcing
AGE AND SERVICE	
(27) Year Built	2020
(106) Year Reconstructed	
(42) Type of Service	15
On	1 - Highway
Under	5 - Waterway
(28) Lane	
On	2
Under	0
(29) Average Daily Traffic	65
(30) Year of ADT	2019
(109) Truck ADT	15 %
(19) Bypass, Detour Length	3 mi
GEOMETRIC DATA	
(48) Length of Maximum Span	68 ft
(49) Structure Length	411 ft
(50) Curb or Sidewalk Width	
Left	0 ft
Right	0 ft
(51) Bridge Roadway Width Curb to Curb	30 ft
(52) Deck Width Out to Out	33.1 ft
(32) Approach Roadway Width (W/Shoulders)	30.6 ft
(33) Bridge Median	0 - No median
(34) Skew	45 Deg
(35) Structure Flared	0 - No flare
(10) Inventory Route Min Vert Clear	99.9 ft
(47) Inventory Route Total Horiz Clear	30 ft
(53) Min Vert Clear Over Bridge Rdwy	99.9 ft
(54) Min Vert Underclear	0 ft
Ref:	
(55) Min Lat Underclear RT	0 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	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	8
(59) Superstructure	8
(60) Substructure	8
(61) Channel & Channel Protection	7
(62) Culverts	N
LOAD RATING AND POSTING	
(31) Design Load	A - HL93
(63) Operating Rating Method	3
(64) Operating Rating	
Type	3 - Load and Resistance Factor(LRFR)
Rating	60
(65) Inventory Rating Method	3 - Load and Resistance Factor
(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	
(69) Clearances, Vertical/Horizontal	
(71) Waterway Adequacy	9
(72) Approach Roadway Alignment	7
(36A) Bridge Railings	1 - Inspected feature meets current
(36B) Transitions	1 - Inspected feature meets current
(36C) Approach Guardrail	1 - Inspected feature meets current
(36D) Approach Guardrail Ends	1 - Inspected feature meets current
(113) Scour Critical Bridges	5 - Bridge foundations determined t
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	0
(114) Future ADT	70
(115) Year of Future ADT	2039

INSPECTIONS *			
(90) Inspection Date	04/12/2023		
(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.			

**General Observation**

8-10-2021 one time special inspection to update that bridge has been opened.

31 - Design Load (A)

Item 31 was updated using the value shown on the design plans. TEH 6-21-2021

36C - Approach Guardrail (1 - Inspected feature meets currently acceptable standards.*)

04/27/2021 Bridge not yet open missing approach rail at time of inspection.

36D - Approach Guardrail Ends (1 - Inspected feature meets currently acceptable standards.*)

04/27/2021 Bridge not yet open missing approach rail at time of inspection.

58 - Deck (8 - VERY GOOD CONDITION - no problems noted.)

Deck is in very good condition with only a few hairline cracks, primarily over intermediate bents, a few have been sealed and several hairline cracks in soffit overhang with some having light efflorescence.

59 - Superstructure (8 - VERY GOOD CONDITION - no problems noted.)

Superstructure is in very good condition only one missing washer at a splice plate being noted.

60 - Substructure (8 - VERY GOOD CONDITION - no problems noted.)

Substructure is in very good condition with some piles having freckled rust showing through the painted area and a few hairline cracks in ends of caps..

61 - Channel/Channel Protection (7 - Bank protection is in need of minor repairs. River control devices and embankment protection have a little minor damage. Banks and/or channel have minor amounts of drift.)

Channel is in overall good condition rip rap is in place, channel is fairly open with only small amounts of debris at bents #4 and 5. There is minor erosion under spans #2 and 3 with several erosion veins up to two feet deep.

4/17/2023-Lowered channel from 8 to 7 due to minor slope erosion under spans #2 and 3.

Spans #2 and 3 slope has several erosion veins running down slope up to two feet deep, spans #2 and 3.

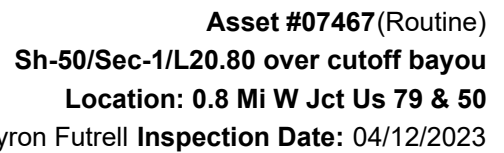
113 - Scour Critical Bridges (5 - Bridge foundations determined to be stable for assessed or calculated scour condition.

Scour is determined to be within the limits of footing or piles (Example B) by assessment (i.e., bridge foundations are on rock formations that have been determined to resist scour within the service life of the bridge), by calculations or by installation of properly designed countermeasures (see HEC 23).)

Item 113 was updated to "5" based on Form 113 received from the design engineer. TEH 6-21-2021

A-54 - Sealable Deck Cracks (Y)

Deck has a few unsealed hairline cracks, primarily over interior bents.



ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
12	Reinforced Concrete Deck	SF	13396	13296	100	0	0
1130	Cracking (RC and Other)	SF	250	150	100	0	0
(12) Soffit-under surface overhangs have a few hairline transverse cracks. Deck has several sealed and unsealed hairline cracks primarily over bents.							
107	Steel Open Girder/Beam	LF	1632	1631	1	0	0
1020	Connection	LF	1	0	1	0	0
515	Steel Protective Coating	SF	14290	14290	0	0	0
(107) Span #3 girder #2 field splice lower right bottom flange first bolt is missing a washer.							
215	Reinforced Concrete Abutment	LF	162	162	0	0	0
225	Steel Pile	EA	20	7	13	0	0
1000	Corrosion	EA	13	0	13	0	0
515	Steel Protective Coating	SF	253	88	165	0	0
3440	Effectiveness (Steel Protective Coatings)	EA	165	0	165	0	0
(225) Bent #4 pile #4 concrete encasement on back side at top has a little bit of honey combing. Several piles have areas of freckled rust.							
(515-225) Freckled to light rust showing through paint.							
234	Reinforced Concrete Pier Cap	LF	235	230	5	0	0
1010	Cracking	LF	5	0	5	0	0
(234) Caps have a few hairline cracks on ends. Spalled corner on bent #3 cap left end bottom back face has been repaired.							
300	Strip Seal Expansion Joint	LF	93	93	0	0	0
310	Elastomeric Bearing	EA	28	28	0	0	0
321	Reinforced Concrete Approach Slab	SF	2700	2616	84	0	0
1130	Cracking (RC and Other)	SF	84	0	84	0	0
(321) Abutment #1 approach slab has four hairline cracks that have been sealed. Abutment #2 approach slab has two hairline cracks that have been sealed and one transverse unsealed hairline crack.							
331	Reinforced Concrete Bridge Railing	LF	816	811	5	0	0
1120	Efflorescence/Rust Staining	LF	5	0	5	0	0
1130	Cracking (RC and Other)	LF	68	68	0	0	0
(331) Right rail has vertical hairline cracks spaced 4' to 6' a few have light efflorescence. Span #4 right rail has three feet of longitudinal hairline cracking with light efflorescence near top at mid span.							



Abutment #1 right approach rail



Abutment #1 left approach rail



Abutment #2 right approach rail



Abutment #2 left approach rail



Left bridge rail



Right bridge rail



Typical hairline vertical crack in concrete bridge rail



Side View / elevation

Maintenance Needs

Date Reported: 04/17/2023

Priority: D- Routine

Type of Work: Channel Work/Drift Removal

Status: Open

Component: Channel

Deficiency Description

Spans #2 and 3 have small trees growing underneath bridge.

Remarks



04/17/2023

Small trees and vegetation growing under spans #2 and 3.



04/17/2023

Erosion veins up to three feet deep under spans #2 and 3 in slope.



Asset #07467(Routine)

Sh-50/Sec-1/L20.80 over cutoff bayou

Location: 0.8 Mi W Jct Us 79 & 50

Team Lead: Myron Futrell Inspection Date: 04/12/2023

Maintenance Needs

Date Reported: 04/17/2023

Priority: D- Routine

Type of Work: Channel Work/Drift Removal

Status: Open

Component: Channel

Deficiency Description

Spans #2 and 3 slope has several erosion veins running down slope up to two feet deep, spans #2 and 3.

Remarks



Routine Maintenance

Check Box Maintenance Items

Type of Maintenance	Is recommended?
A-54 - Sealable Deck Cracks	Yes
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 (Yes)

Deck has a few unsealed hairline cracks, primarily over interior bents.

A-55 - Deck Washing Needed

A-56 - Joint Cleaning/Flushing Needed



Asset #07467(Routine)

Sh-50/Sec-1/L20.80 over cutoff bayou

Location: 0.8 Mi W Jct Us 79 & 50

Team Lead: Myron Futrell Inspection Date: 04/12/2023

A-57 - Girder End and Bearing Painting Needed

A-58 - Cap Cleaning/Flushing Needed

A-59 - Joint Repair Needed

A-60 - Full Girder Painting Needed

A-61 - Polymer Overlay Advised

A-62 - Hydro and LMC Advised

A-63 - Missing/Incorrect Log Mile Signage

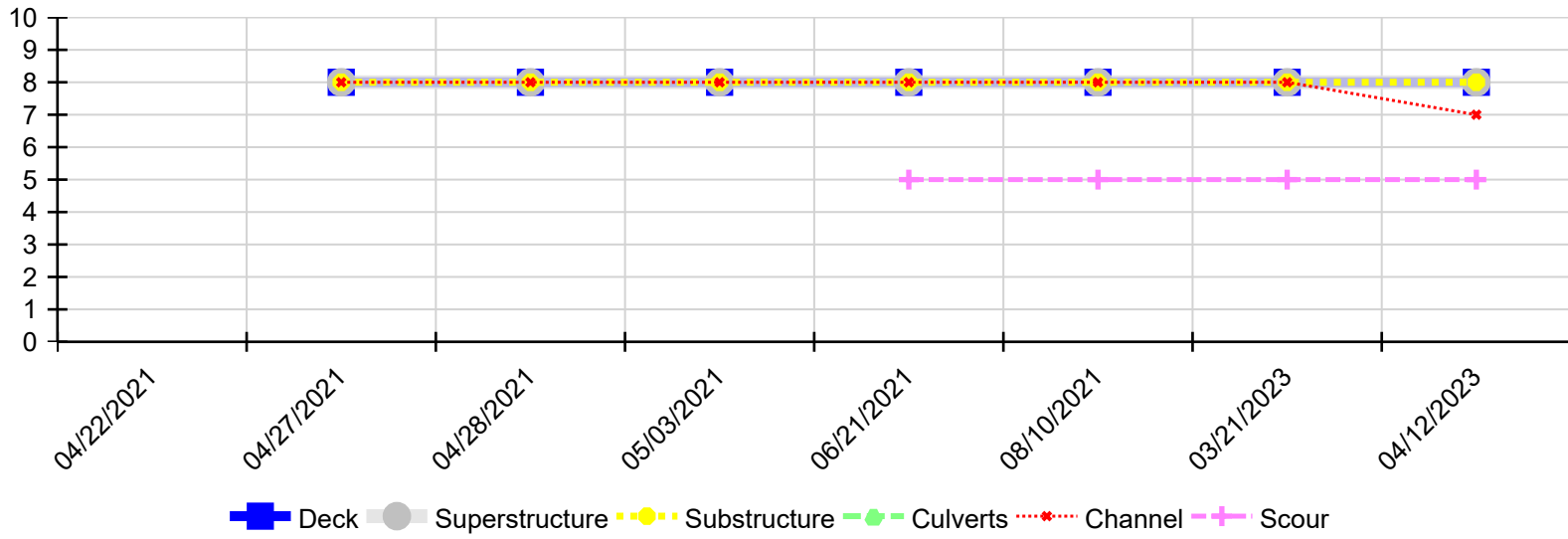
A-64 - Vegetation Removal Requested



Asset #07467(Routine)
Sh-50/Sec-1/L20.80 over cutoff bayou
Location: 0.8 Mi W Jct Us 79 & 50

Team Lead: Myron Futrell **Inspection Date:** 04/12/2023

Condition History



Inspection Date	Deck	Superstructure	Substructure	Culverts	Channel	Scour
04/12/2023	8	8	8	N	7	5
03/21/2023	8	8	8	N	8	5
08/10/2021	8	8	8	N	8	5
06/21/2021	8	8	8	N	8	5
05/03/2021	8	8	8	N	8	N
04/28/2021	8	8	8	N	8	N
04/27/2021	8	8	8	N	8	N
04/22/2021	N	N	N	N	N	N