



Latitude:36.18988, Longitude:-94.49633

Route:59 Section:01 Log:24.55

Arnold Road ID:4x59x1xA, Arnold Log mile:24.49

District 09, 7 - Benton County

Owner: 1 - State Highway Agency

Inspection Direction: 1 - N to S

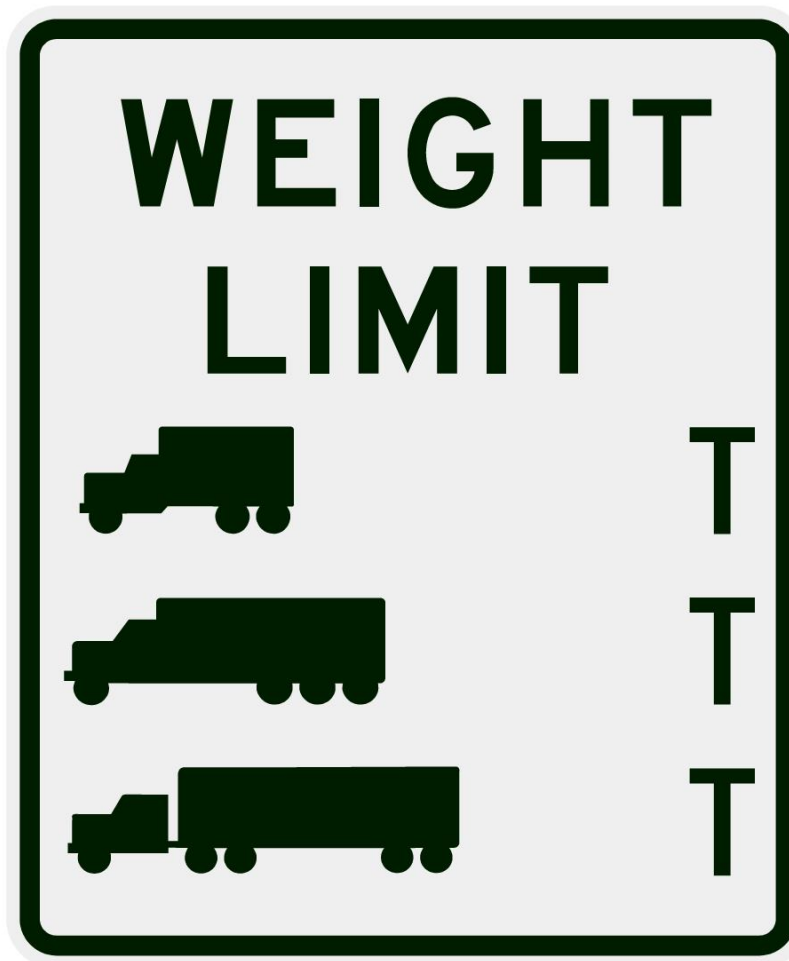
Bridge Posting Information

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

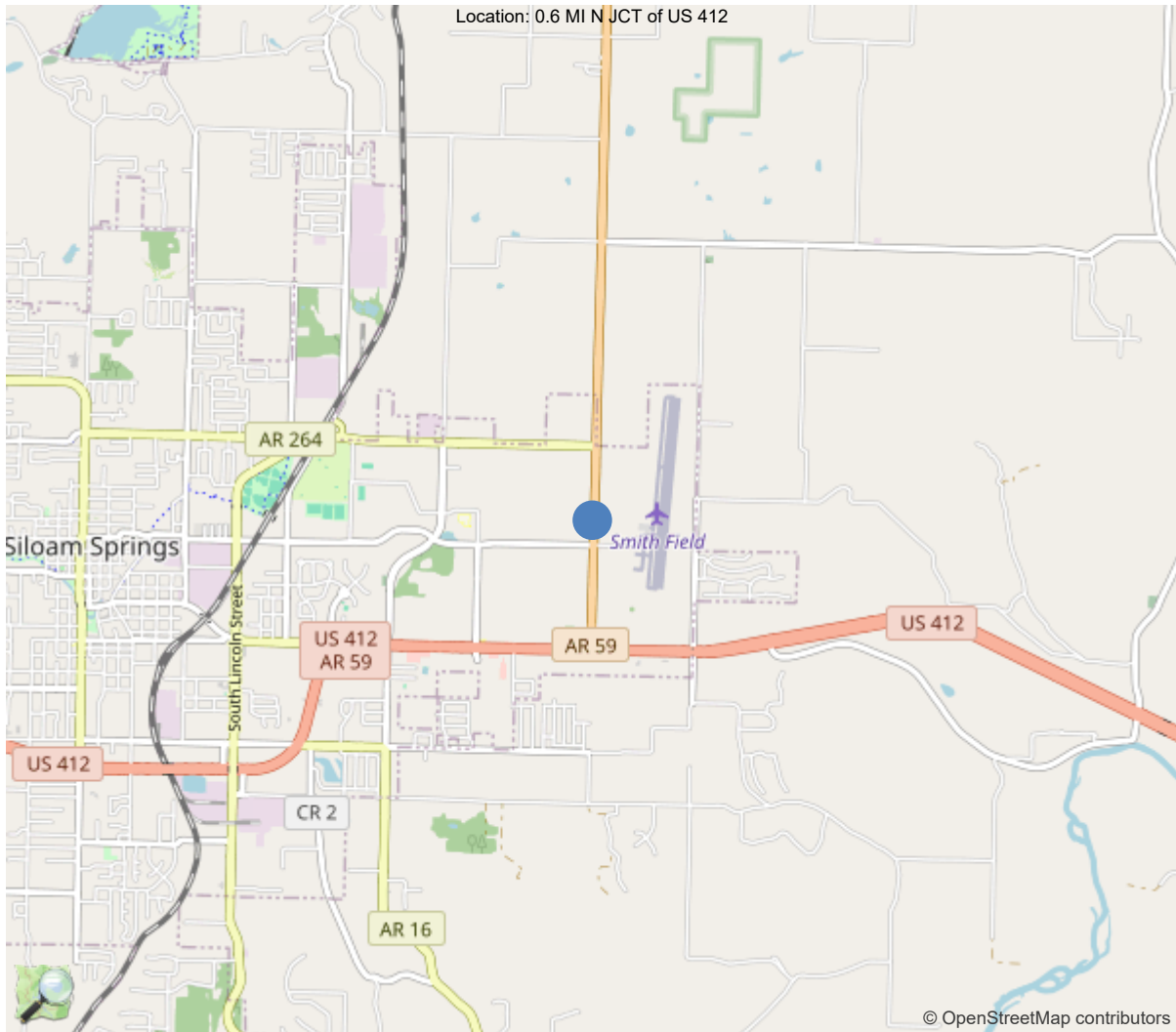
70 - Bridge Posting: 5 - Equal to or above legal loads

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



36.18988, -94.49633



Asset #X1307(Routine)
SH 59 Benton 2 over BRANCH
Location: 0.6 MI N JCT of US 412

Team Lead: Nathan Rowland Inspection Date: 07/10/2023

IDENTIFICATION	
(1) State Names	5 - Arkansas
(8) Structure Number	X1307
(5) Inventory Route	1
(2) Highway Agency District	09 - District 09
(3) County Code	7 - Benton County
(4) Place Code	0
(6) Features Intersected	BRANCH
(7) Facility Carried	SH 59 Benton 2
(9) Location	0.6 MI N JCT of US 412
(11) Mile Point	24.55 mi
(12) Base Highway Network	Yes
(13) LRS Inventory Rte & Subrte	0000059010
(16) Latitude	36.189877
(17) Longitude	-94.49633
(98) Border Bridge State Code	
(99) Border Bridge Structure No.	
STRUCTURE TYPE AND MATERIAL	
(43) Main Structure Type	119
Material	1 - Concrete
Type	19 - Culvert
(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	N - Not applicable
(108) Wearing Surface/Protective System	
Type of Wearing Surface	N - Not applicable (applies only to stru
Type of Membrane	N - Not applicable (applies only to stru
Type of Deck Protection	N - Not applicable (applies only to stru
AGE AND SERVICE	
(27) Year Built	2007
(106) Year Reconstructed	0
(42) Type of Service	15
On	1 - Highway
Under	5 - Waterway
(28) Lane	
On	5
Under	0
(29) Average Daily Traffic	15150
(30) Year of ADT	2018
(109) Truck ADT	10 %
(19) Bypass, Detour Length	9 mi
GEOMETRIC DATA	
(48) Length of Maximum Span	8 ft
(49) Structure Length	21 ft
(50) Curb or Sidewalk Width	
Left	0 ft
Right	0 ft
(51) Bridge Roadway Width Curb to Curb	0 ft
(52) Deck Width Out to Out	0 ft
(32) Approach Roadway Width (W/Shoulders)	76.1 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	99.9 ft
(53) Min Vert Clear Over Bridge Rdwy	99.9 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	16 - Urban 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	1 - The inventory route is par
(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	N
(59) Superstructure	N
(60) Substructure	N
(61) Channel & Channel Protection	8
(62) Culverts	6
LOAD RATING AND POSTING	
(31) Design Load	4 - M 18 / H 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	
(68) Deck Geometry	N
(69) Clearances, Vertical/Horizontal	N
(71) Waterway Adequacy	8
(72) Approach Roadway Alignment	9
(36A) Bridge Railings	N - Not applicable or a safety feat
(36B) Transitions	N - Not applicable or a safety feat
(36C) Approach Guardrail	N - Not applicable or a safety feat
(36D) Approach Guardrail Ends	N - Not applicable or a safety feat
(113) Scour Critical Bridges	8 - 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	
(114) Future ADT	16641
(115) Year of Future ADT	2027

INSPECTIONS *			
(90) Inspection Date	07/10/2023		
(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 #X1307(Routine)

SH 59 Benton 2 over BRANCH

Location: 0.6 MI N JCT of US 412

Team Lead: Nathan Rowland **Inspection Date:** 07/10/2023

General Observation

7/10/2023 WNR & DBM: Routine inspection conducted this date. See element notes for documentation.

Structure is logged from North to South.No bat activity was noted.

A-15 - Late Reason

Heavy Work load



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Team Lead: Nathan Rowland Inspection Date: 07/10/2023



07/10/2023

Elevation looking west



07/10/2023

Inventory looking South



07/10/2023

Downstream view



07/10/2023

Upstream view



07/10/2023

Barrel #1



07/10/2023

Barrel #2



07/10/2023

Barrel #3



06/17/2021

Elevation view. Log mile from left to right.



Approach view in direction of log mile.



Upstream channel view.



Downstream channel view.



Typical view of driving surface.



Approach view in direction of log mile.



Elevation view. Log mile from left to right.



Typical cracking at the head walls.



Typical view of interior of barrels.



View of abrasion in barrel floor.



Upstream channel view.



Downstream channel view.



Barrel #2, top slab-Exposed reinforcing steel at construction joint where culvert was widened approximately 40' from inlet end.



Typical view of driving surface.

Maintenance Needs

Date Reported: 06/19/2017

Priority: D- Routine

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

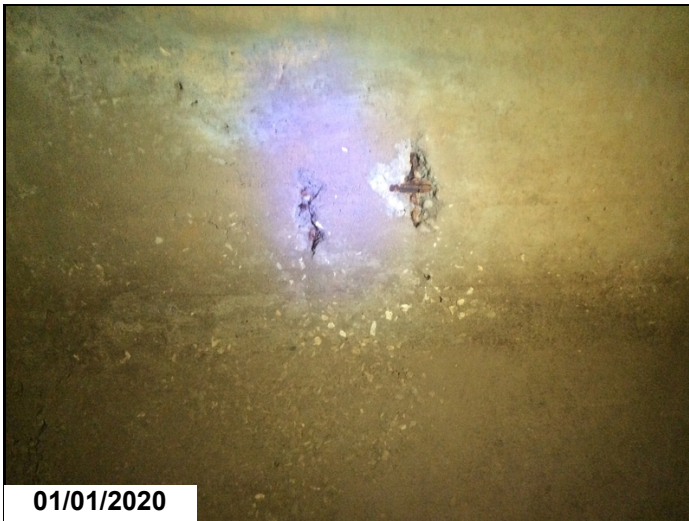
Status: Monitor

Component:

Deficiency Description

Culvert - Barrel #1, wall #1, 5th unit from right side has an area of shallow spalling with exposed reinforcing steel. The top slab of barrel #2 has exposed reinforcing steel at construction joint where culvert was widened in the past located approximately 40' from left end. The exposed reinforcing steel in both locations have active corrosion with measurable section loss.

Remarks



01/01/2020
Barrel #1, wall #1, 5th unit from left side.



01/01/2020
Barrel #2, top slab-Exposed reinforcing steel at construction joint where culvert was widened.



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SH 59 Benton 2 over BRANCH

Location: 0.6 MI N JCT of US 412

Team Lead: Nathan Rowland Inspection Date: 07/10/2023

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



Asset #X1307(Routine)

SH 59 Benton 2 over BRANCH

Location: 0.6 MI N JCT of US 412

Team Lead: Nathan Rowland Inspection Date: 07/10/2023

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



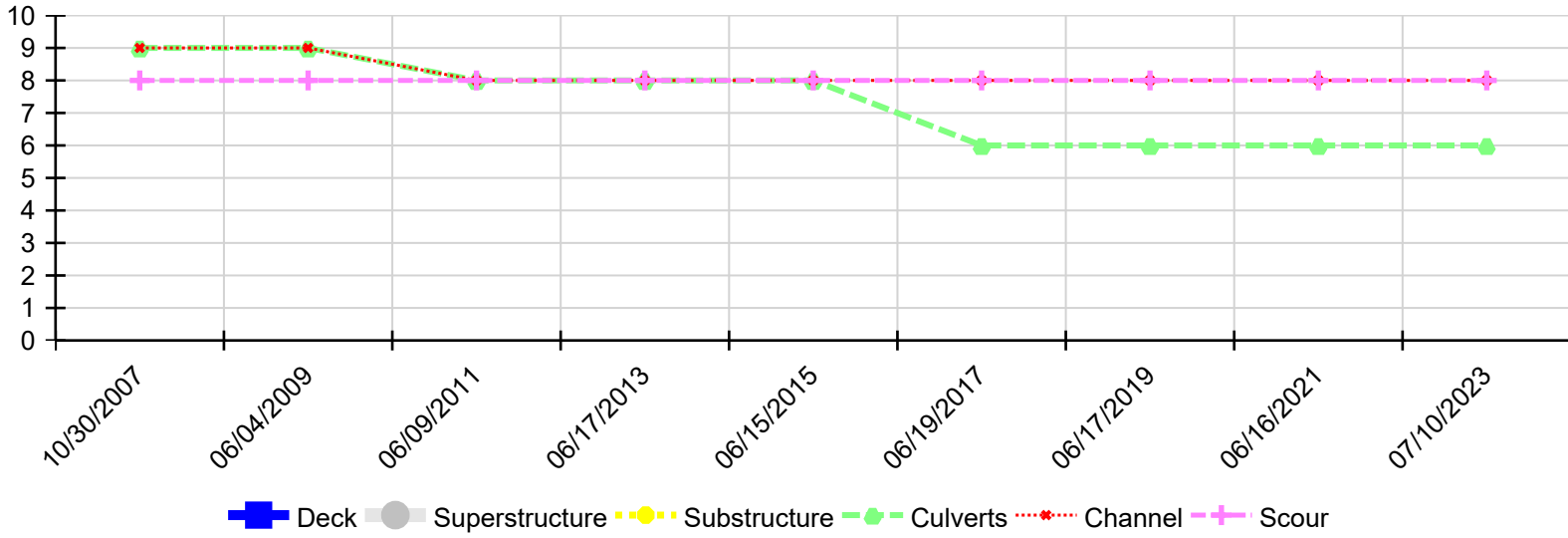
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SH 59 Benton 2 over BRANCH

Location: 0.6 MI N JCT of US 412

Team Lead: Nathan Rowland Inspection Date: 07/10/2023

Condition History



Inspection Date	Deck	Superstructure	Substructure	Culverts	Channel	Scour
07/10/2023	N	N	N	6	8	8
06/16/2021	N	N	N	6	8	8
06/17/2019	N	N	N	6	8	8
06/19/2017	N	N	N	6	8	8
06/15/2015	N	N	N	8	8	8
06/17/2013	N	N	N	8	8	8
06/09/2011	N	N	N	8	8	8
06/04/2009	N	N	N	9	9	8
10/30/2007	N	N	N	9	9	8