



Latitude:36.20246, Longitude:-94.49595

Route:59 Section:01 Log:23.7

Arnold Road ID:4x59x1xA, Arnold Log mile:23.623

District 09, 7 - Benton County

Owner: 1 - State Highway Agency

Inspection Direction: 1 - N to S

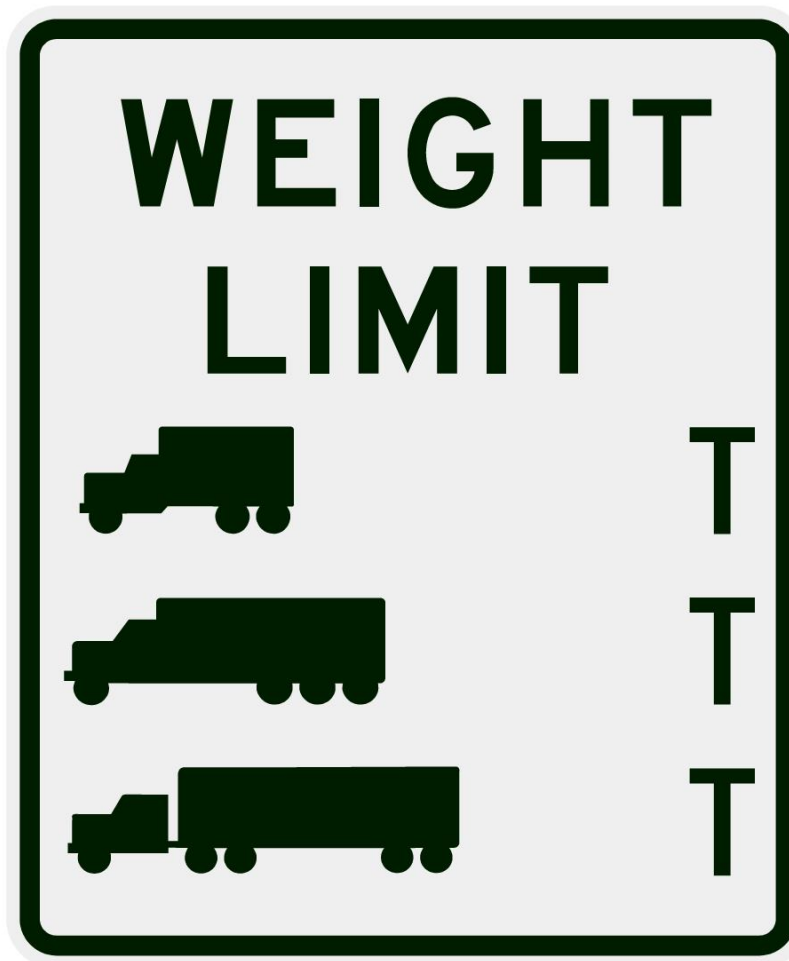
Bridge Posting Information

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

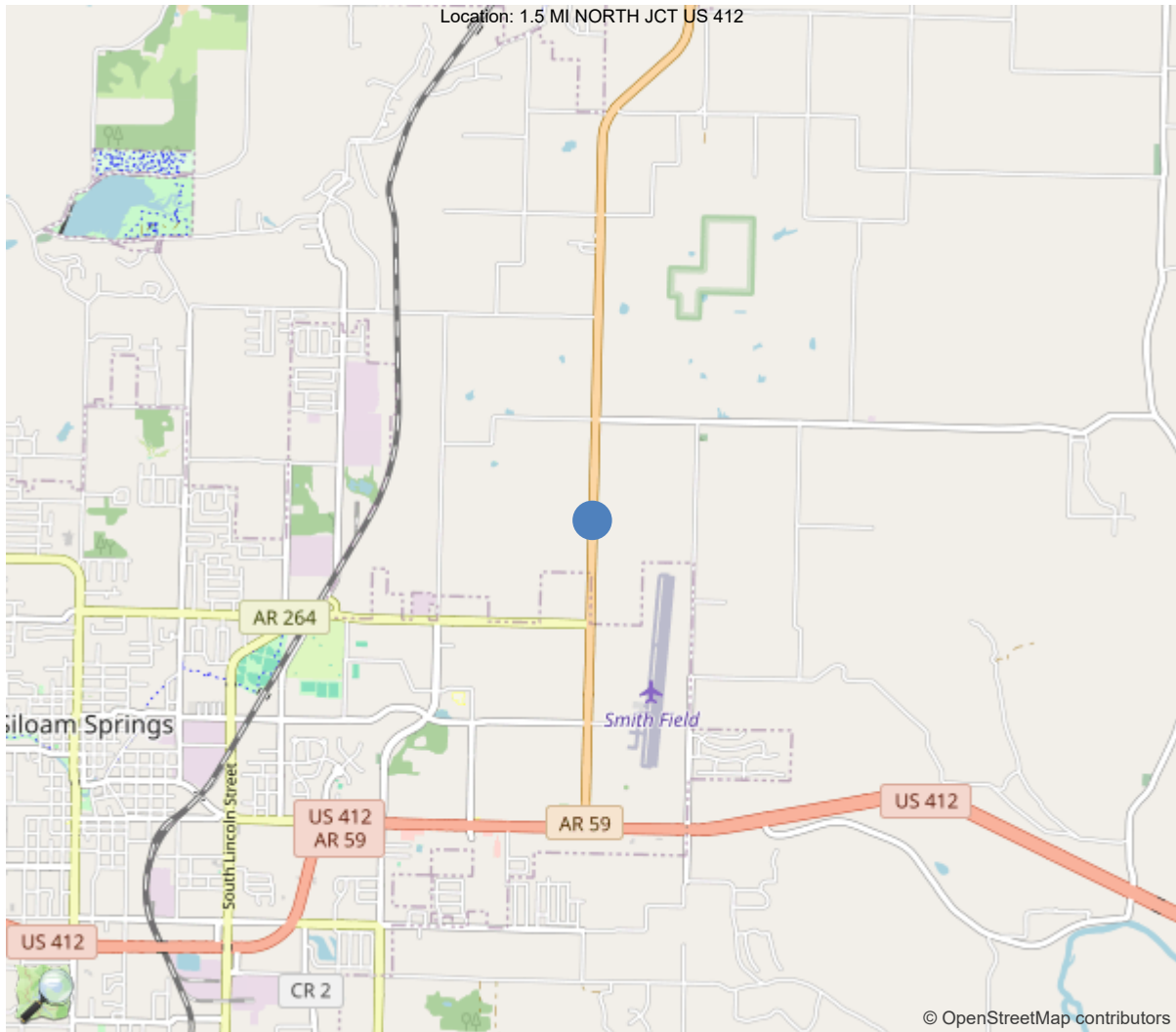
70 - Bridge Posting: 5 - Equal to or above legal loads

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



36.20246, -94.49595

IDENTIFICATION	
(1) State Names	5 - Arkansas
(8) Structure Number	X1316
(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	1.5 MI NORTH JCT US 412
(11) Mile Point	23.7 mi
(12) Base Highway Network	Yes
(13) LRS Inventory Rte & Subrte	0000059010
(16) Latitude	36.202457
(17) Longitude	-94.495949
(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	2008
(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	17000
(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	99.99 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	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	7
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		
<p>* 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.</p>			



Asset #X1316(Routine)

SH 59 Benton 2 over BRANCH

Location: 1.5 MI NORTH JCT US 412

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

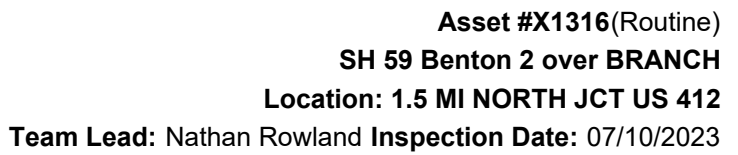
General Observation

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

Logged North to South.
No bat activity was noted.

A-15 - Late Reason

Heavy Work load



ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
241	Reinforced Concrete Culvert	LF	369	365	3	1	0
1080	Delamination/Spall/Patched Area	LF	1	0	1	0	0
1090	Exposed Rebar	LF	2	0	2	0	0
1120	Efflorescence/Rust Staining	LF	1	0	0	1	0
(241) 7/10/2023 WNR & DBM:							
-Top portion of pre-cast units have areas of exposed reinforcing wire/steel visible in lifting lug holes in locations.							
-The top slab portion of unit in barrel #2 near inlet end has a shallow spall with no exposed reinforcing steel.							
-The channel has stream bed material build up that restricts flow approximately 50% to barrels #2 and #3.							
Barrel #1 has 1' of stream bed material build up at the outlet end due to utility installation.							
Barrel #2 has 14" of stream bed material build up at the outlet end due to utility installation.							
Barrel #3 has 2' of stream bed material build up at the outlet end due to utility installation.							
- Barrel #2 has 1' of scour at the inlet end.							
-The left headwall has areas of map cracking with efflorescence over all 3 barrels and a shallow spall at each end of the headwall.							
The right headwall has no deficiencies.							



Elevation looking east



Inventory looking south



Barrel #1



Barrel #2



Barrel #3



Downstream view



Upstream view



Elevation view. Log mile from left to right.



Approach view in direction of log mile.



Shallow spill at the end of the left headwall.



Upstream channel view.



Downstream channel view.



Typical view of driving surface.



Downstream channel view.



Typical view of driving surface.



Upstream channel view.



Drift accumulation at the inlet end of barrels #1,2.



Elevation view. Log mile from right to left.



Typical view of interior of barrels.



Approach view in direction of log mile.

Maintenance Needs

Date Reported: 06/19/2017

Priority: B - Pressing

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

Status: Repair Documented

Component:

Deficiency Description

Channel - The channel and the barrel outlets have stream bed material build up due to erosion from a nearby utility being installed. the barrels gave from 12" to 24" of build up in a 36" culvert.

Remarks

Benton II

7/10/2023 WNR: Drift and debris has been remove since the last inspection



Streambed accumulation removed



Standing water.



Standing water.



Barrel #3 has 2' of stream bed material build up at the outlet end.



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SH 59 Benton 2 over BRANCH

Location: 1.5 MI NORTH JCT 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 #X1316(Routine)

SH 59 Benton 2 over BRANCH

Location: 1.5 MI NORTH JCT 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



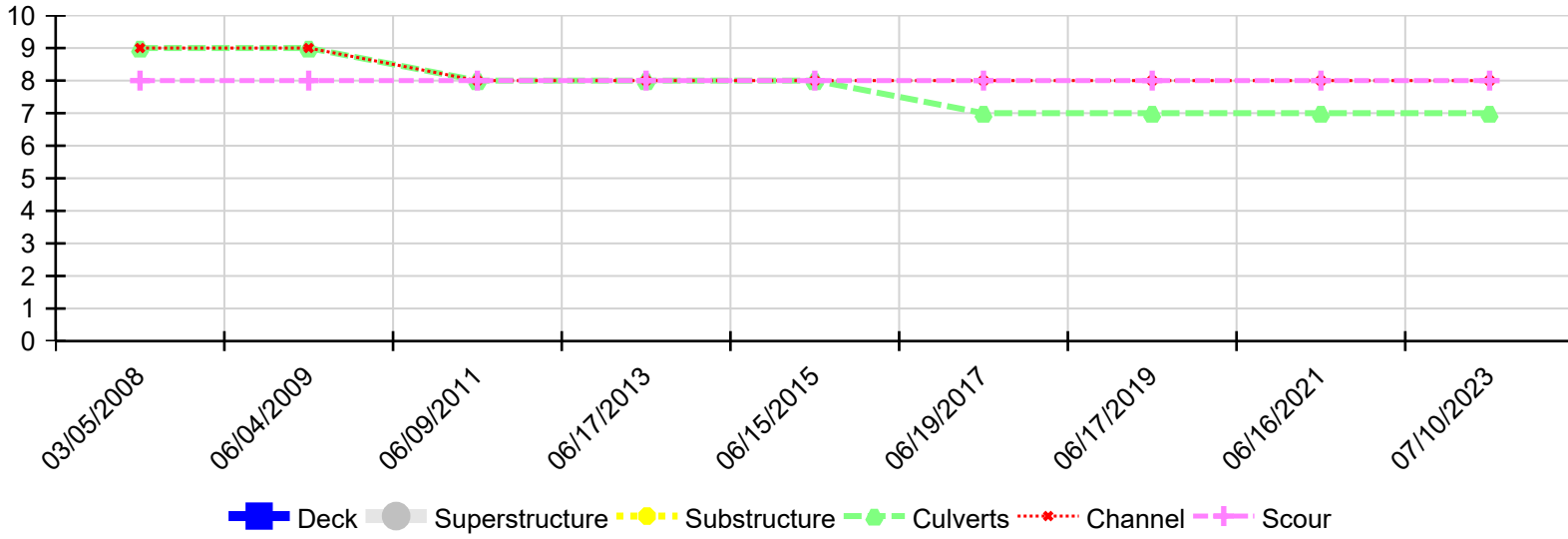
Asset #X1316(Routine)

SH 59 Benton 2 over BRANCH

Location: 1.5 MI NORTH JCT 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	7	8	8
06/16/2021	N	N	N	7	8	8
06/17/2019	N	N	N	7	8	8
06/19/2017	N	N	N	7	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
03/05/2008	N	N	N	9	9	8