



Latitude:36.25065, Longitude:-94.48537

Route:59 Section:01 Log:20.23

Arnold Road ID:4x59x1xA, Arnold Log mile:20.122

District 09, 7 - Benton County

Owner: 1 - State Highway Agency

Inspection Direction: 1 - N to S

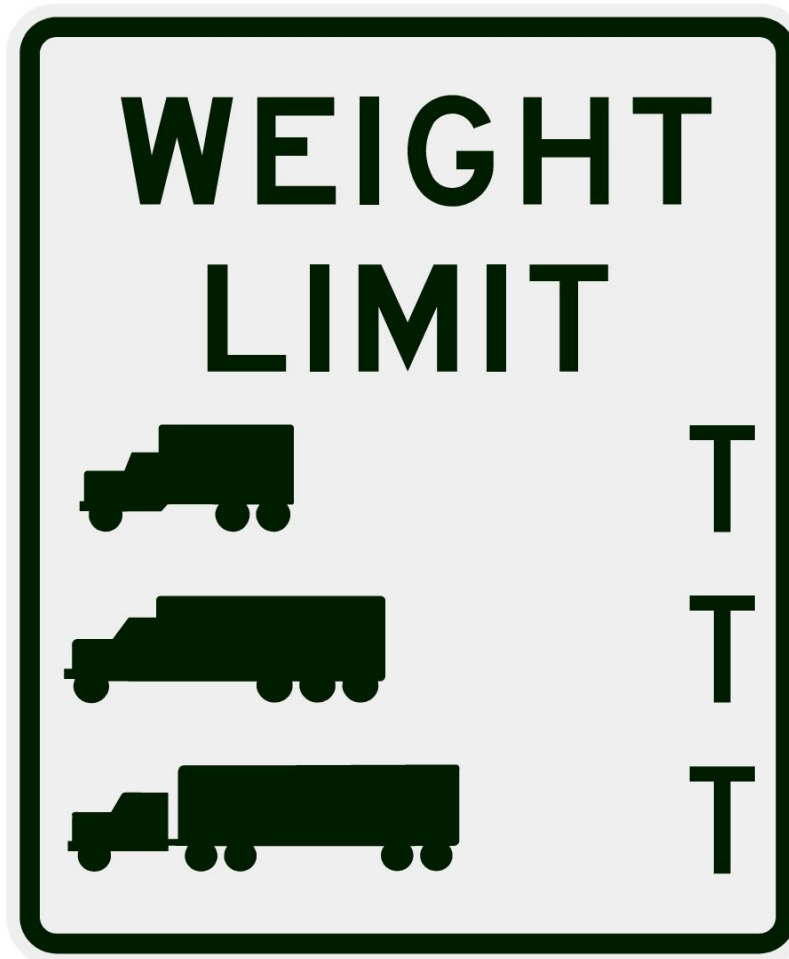
Bridge Posting Information

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

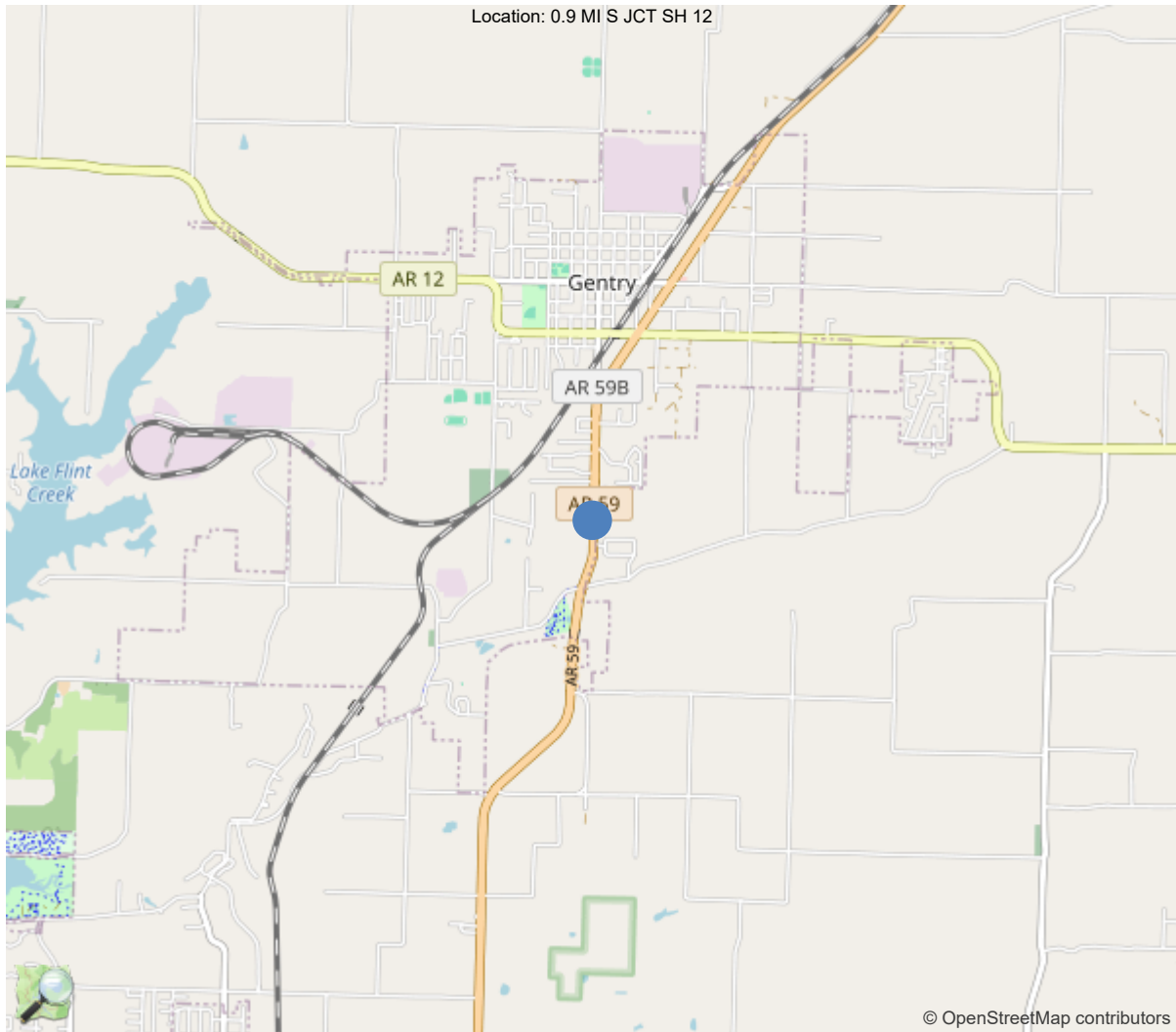
70 - Bridge Posting: 5 - Equal to or above legal loads

Legal Load	Calculated Capacity	Beginning of Bridge Sign Current Value	End of Bridge Sign Current Value
Code 4 (22 Tons)	28		
Code 9 (31 Tons)	33		
Code 5 (40 Tons)	48		

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



36.25065, -94.48537



Asset #X1317(Routine)
SH 59 Benton 2 over BRANCH
Location: 0.9 MI S JCT SH 12

Team Lead: Nathan Rowland Inspection Date: 04/24/2023

IDENTIFICATION	
(1) State Names	5 - Arkansas
(8) Structure Number	X1317
(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	0.9 MI S JCT SH 12
(11) Mile Point	20.23 mi
(12) Base Highway Network	No
(13) LRS Inventory Rte & Subrte	0000000000
(16) Latitude	36.2506545867816
(17) Longitude	-94.4853650147152
(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	15813
(30) Year of ADT	2018
(109) Truck ADT	10 %
(19) Bypass, Detour Length	9 mi
GEOMETRIC DATA	
(48) Length of Maximum Span	16 ft
(49) Structure Length	45 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)	56.1 ft
(33) Bridge Median	0 - No median
(34) Skew	45 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	4 - Historical significance is
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	39
(65) Inventory Rating Method	1 - Load Factor(LF)
(66) Inventory Rating	
Type	
Rating	24
(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	9
(72) Approach Roadway Alignment	9
(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	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	22900
(115) Year of Future ADT	2038

INSPECTIONS *			
(90) Inspection Date	04/24/2023		
(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.			



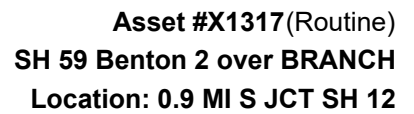
Asset #X1317(Routine)
SH 59 Benton 2 over BRANCH
Location: 0.9 MI S JCT SH 12

Team Lead: Nathan Rowland **Inspection Date:** 04/24/2023

General Observation

4/24/2023- WNR & DBM: Routine inspection conducted this date. See element notes for documentation.

Logged North to South.



ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
241	Reinforced Concrete Culvert	LF	420	323	42	55	0
1080	Delamination/Spall/Patched Area	LF	1	0	1	0	0
1120	Efflorescence/Rust Staining	LF	58	0	3	55	0
1130	Cracking (RC and Other)	LF	38	0	38	0	0
(241) 4/24/2023- WNR & DBM:							
-The East side of Barrels #1 and #2 have streambed material accumulation that restricts channel flow approximately 90%. -Channel at the outlet end has trees and vegetation growing restricting flow and promoting drift accumulation. -Barrel #1, wall #1 at the Northeast wingwall juncture has full-height vertical crack and basketball-sized spall with steel exposed. -Barrel #3, top slab has softball-sized spall with no exposed reinforcing steel adjacent to southeast wingwall. -The top slab in all barrels have numerous transverse and diagonal cracks with rust staining and efflorescence. -The walls in all barrels have hairline vertical cracks at random spacing. -Barrel #3 wall #3 right has a short duration hairline horizontal crack.							



Barrel #3 wall #3 right has a short duration hairline horizontal crack.



Northeast wingwall vertical cracking with basketball sized spall with steel exposed.



Elevation looking West.



Barrel #3 general view



Barrel #1 has gravel accumulation restricting barrel by 60%.



Barrel #2 has gravel accumulation restricting barrel by 60%.



Barrels #1 & #2 left approximately 60% of gravel accumulation.



Inventory looking south.



Elevation looking west



Inventory looking south



Downstream view



Upstream view



Barrel #3



Upstream view



Downstream view



Inventory looking South



Elevation looking west

Maintenance Needs

Date Reported: 04/04/2013

Priority: B - Pressing

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

Status: Assigned

Component:

Deficiency Description

Channel - The interiors of barrels #1 and #2 have streambed material accumulation that restricts flow approximately 60%. Channel at the outlet end has trees and vegetation growing that restricts flow and promotes drift accumulation.

Remarks



Barrel #1 gravel build



Barrel #2 gravel build



Barrels #1 & #2 have heavy gravel accumulation outlet end.



West channel has vegetation restricting water flow.



Elevation looking West.



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 #X1317(Routine)
SH 59 Benton 2 over BRANCH
Location: 0.9 MI S JCT SH 12

Team Lead: Nathan Rowland Inspection Date: 04/24/2023

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

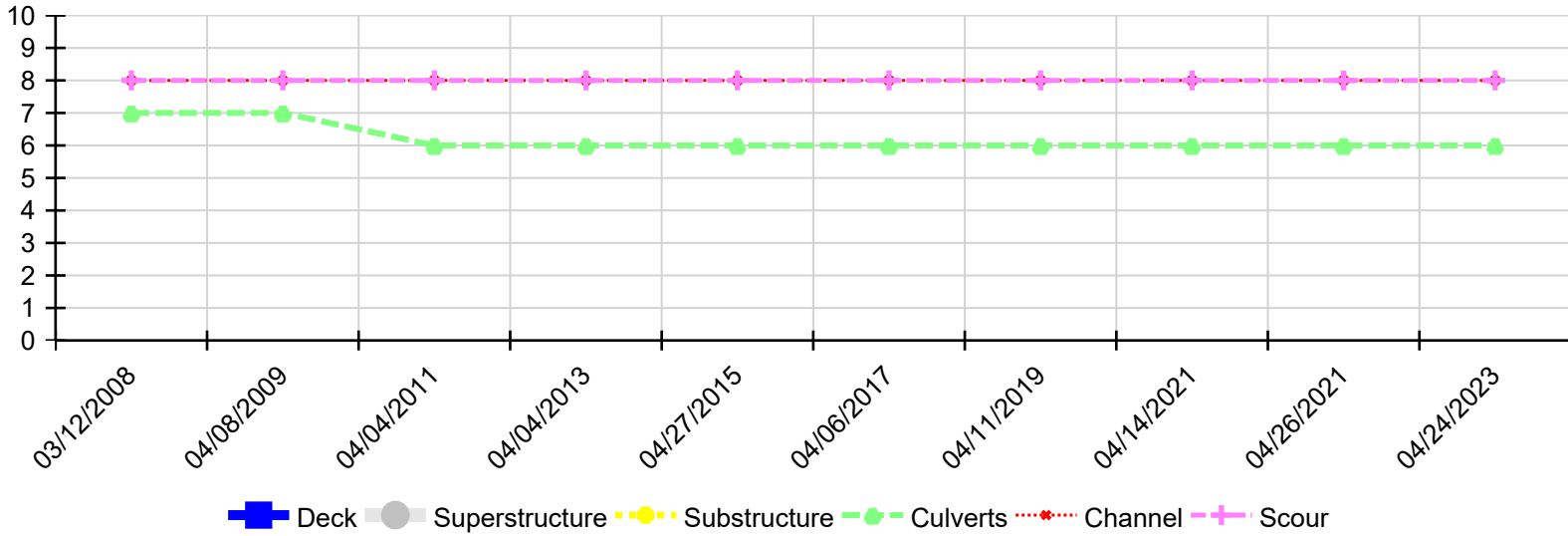
A-64 - Vegetation Removal Requested



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Condition History



Inspection Date	Deck	Superstructure	Substructure	Culverts	Channel	Scour
04/24/2023	N	N	N	6		8
04/26/2021	N	N	N	6		8
04/14/2021	N	N	N	6		8
04/11/2019	N	N	N	6		8
04/06/2017	N	N	N	6		8
04/27/2015	N	N	N	6		8
04/04/2013	N	N	N	6		8
04/04/2011	N	N	N	6		8
04/08/2009	N	N	N	7		8
03/12/2008	N	N	N	7		8