



Latitude:36.22681, Longitude:-94.23061

Route:112 Section:02 Log:1

Arnold Road ID:4x112x2xA, Arnold Log mile:0.992

District 09, 7 - Benton County

Owner: 1 - State Highway Agency

Inspection Direction: 2 - S to N

Bridge Posting Information

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

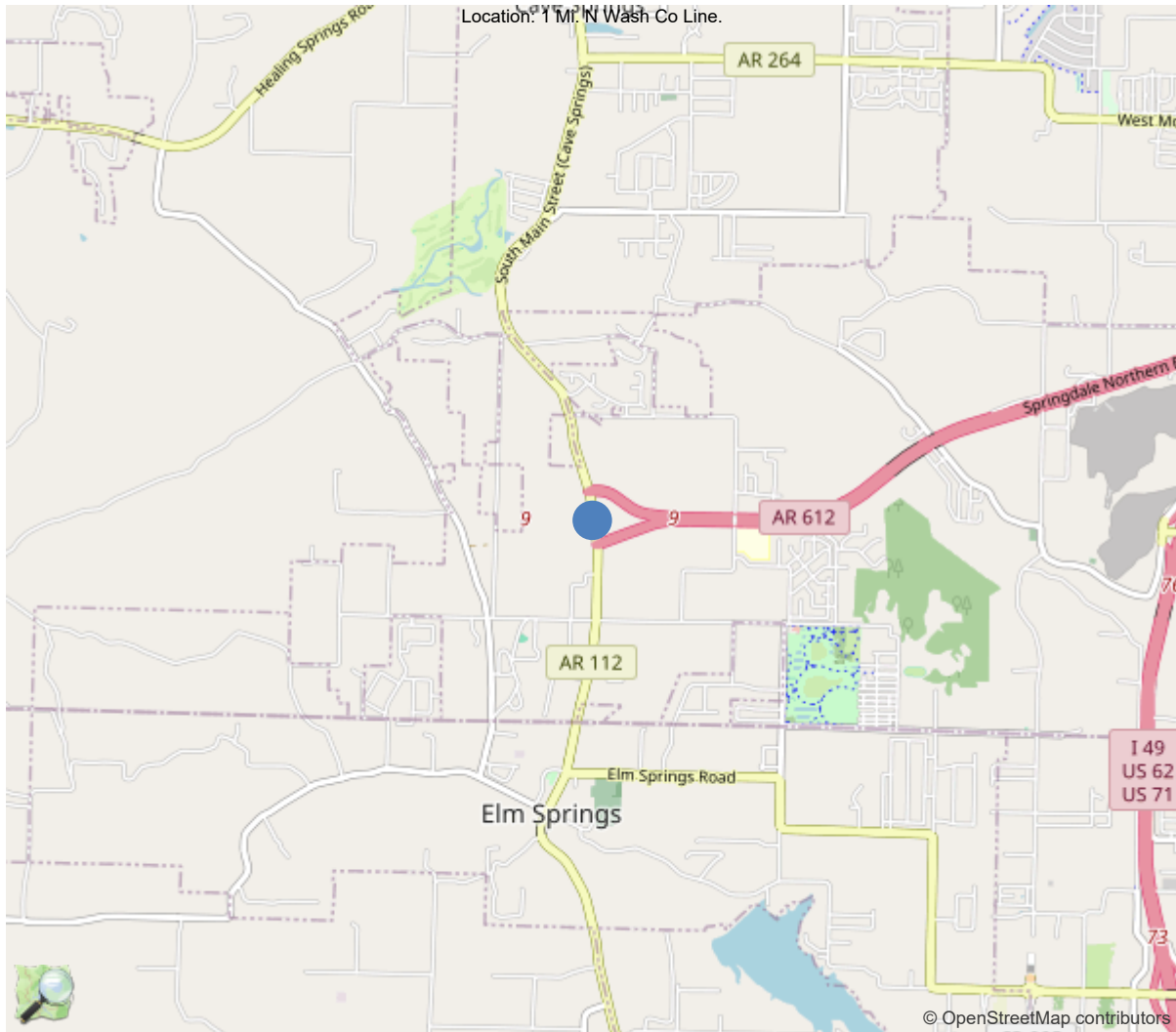
70 - Bridge Posting: 5 - Equal to or above legal loads

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)	58		

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



36.22681, -94.23061

IDENTIFICATION	
(1) State Names	5 - Arkansas
(8) Structure Number	07307
(5) Inventory Route	1
(2) Highway Agency District	09 - District 09
(3) County Code	7 - Benton County
(4) Place Code	0
(6) Features Intersected	SH 612
(7) Facility Carried	SH 112
(9) Location	1 Mi. N Wash Co Line.
(11) Mile Point	1 mi
(12) Base Highway Network	No
(13) LRS Inventory Rte & Subrte	
(16) Latitude	36.22681
(17) Longitude	-94.23061
(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	2
(46) No. of Approach Spans	0
(107) Deck Structure Type	1 - Concrete Cast-in-Place
(108) Wearing Surface/Protective System	
Type of Wearing Surface	0 - None (no additional concrete thickne
Type of Membrane	0 - None
Type of Deck Protection	1 - Epoxy Coated Reinforcing
AGE AND SERVICE	
(27) Year Built	2017
(106) Year Reconstructed	0
(42) Type of Service	11
On	1 - Highway
Under	1 - Highway, with or without pedestrian
(28) Lane	
On	2
Under	4
(29) Average Daily Traffic	10000
(30) Year of ADT	2018
(109) Truck ADT	6 %
(19) Bypass, Detour Length	1 mi
GEOMETRIC DATA	
(48) Length of Maximum Span	98 ft
(49) Structure Length	200.2 ft
(50) Curb or Sidewalk Width	
Left	0 ft
Right	0 ft
(51) Bridge Roadway Width Curb to Curb	41.2 ft
(52) Deck Width Out to Out	43.1 ft
(32) Approach Roadway Width (W/Shoulders)	43 ft
(33) Bridge Median	0 - No median
(34) Skew	9 Deg
(35) Structure Flared	0 - No flare
(10) Inventory Route Min Vert Clear	99 ft
(47) Inventory Route Total Horiz Clear	40 ft
(53) Min Vert Clear Over Bridge Rdwy	99 ft
(54) Min Vert Underclear	17 ft
Ref:	
(55) Min Lat Underclear RT	0 ft
Ref:	
(56) Min Lat Underclear LT	0 ft
NAVIGATION DATA	
(38) Navigation Control	N - Not applicable, no waterwa
(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	16 - Urban Minor Arterial
(100) Defense Highway	0 - The inventory route is not
(101) Parallel Structure	N - No parallel structure exis
(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 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	8
(59) Superstructure	9
(60) Substructure	8
(61) Channel & Channel Protection	N
(62) Culverts	N
LOAD RATING AND POSTING	
(31) Design Load	A - HL93
(63) Operating Rating Method	1
(64) Operating Rating	
Type	1 - Load Factor(LF)
Rating	58
(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	5
(69) Clearances, Vertical/Horizontal	9
(71) Waterway Adequacy	N
(72) Approach Roadway Alignment	8
(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	N - Bridge not over waterway.
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	12000
(115) Year of Future ADT	2037

INSPECTIONS *			
(90) Inspection Date	07/27/2023		
(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 #07307(Routine)

SH 112 over SH 612

Location: 1 Mi. N Wash Co Line.

Team Lead: Nathan Rowland **Inspection Date:** 07/27/2023

General Observation

07-27-2023 WNR & DBM: Routine inspection conducted this date see element notes for documentation.

Structure is Logged South to North and is accessible with a large extension ladder.
No bat activity was noted.

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
12	Reinforced Concrete Deck	SF	8589	8173	416	0	0
1120	Efflorescence/Rust Staining	SF	47	0	47	0	0
1130	Cracking (RC and Other)	SF	369	0	369	0	0
(12) 07-27-2023 WNR & DBM: Driving surface--The driving surface of the deck has hairline sealable longitudinal and transverse cracking in both lanes. Maintenance Forces have placed a type of epoxy repair since the last inspection. Left lane- has 148' of sealable cracking. Right lane- has 221' of sealable cracking. Undersurface-The left and right overhang of bridge has cracking and efflorescence. The undersurface has sip forms. No corrosion was noted in the forms. Span #1- The beginning left deck edge of the exterior of span #1 has 1' of cs2 efflorescence. Left overhang has 11' of cs2 efflorescence. Right overhang- has 11' of cs2 efflorescence. Span #2- Left overhang- has 17' of cs2 efflorescence. Right overhang- has 7' of cs2 efflorescence.							
107	Steel Open Girder/Beam	LF	990	990	0	0	0
515	Steel Protective Coating	SF	10117	10117	0	0	0
(107) 07-27-2023 WNR & DBM: -No noteworthy deficiencies at this inspection. The paint system still has gloss.							
210	Reinforced Concrete Pier Wall	LF	14	14	0	0	0
(210) -Pier wall #1 has insignificant scrape marks on both sides approximately 4' up from the base of wall.							
215	Reinforced Concrete Abutment	LF	88	73	15	0	0
1120	Efflorescence/Rust Staining	LF	6	0	6	0	0
1130	Cracking (RC and Other)	LF	9	0	9	0	0
(215) 07-27-2023 WNR & DBM: - The tops of abutment backwalls have hairline longitudinal cracks at random spacing visible from the driving surface that have been sealed by contractor forces. -The cracks in some locations extend down the vertical face of backwall with efflorescence visible. Abutment #1- has 3' of cs2 efflorescence in the vertical face of the back wall. No cracking was noted in the bridge seat. No deficiencies noted on the MSE portion of the abutment. Abutment #2- has 3' of cs2 efflorescence in the back wall. The bridge seat has 1' of vertical cracking at a step down. No deficiencies noted on the MSE portion of the abutment.							
234	Reinforced Concrete Pier Cap	LF	43	43	0	0	0
(234) 07-27-2023 WNR & DBM: Pier #1 cap- No noteworthy deficiencies at this inspection.							

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
301	Pourable Joint Seal	LF	87	62	23	2	0
2310	Leakage	LF	2	0	0	2	0
2350	Debris Impaction	LF	23	0	23	0	0
(301) Abutment #1 seal- has 1' of cs3 leakage at the mid section with 11' of cs2 debris impaction in the gutter lines.							
Abutment #2 seal- has 1' of cs3 leakage in the left lane due to a small tear with 12' of cs2 debris impaction.							
310	Elastomeric Bearing	EA	15	15	0	0	0
(310) 07-27-2023 WNR & DBM: Abutment #1 bearings- No noteworthy deficiencies at this inspection.							
Pier #1- bearings- No noteworthy deficiencies at this inspection.							
Abutment #2 bearings- No noteworthy deficiencies at this inspection.							
331	Reinforced Concrete Bridge Railing	LF	398	284	114	0	0
1130	Cracking (RC and Other)	LF	114	0	114	0	0
(331) Right side parapet- has 46' of vertical cracking at the saw joints and random locations.							
Left side parapet- has 68' of vertical cracks at the saw joints and other random locations.							
No deficiencies noted in the metal approach railing.							



Elevation looking west



Inventory looking north



General view of superstructure.



Bent #1 behind side.



Typical cracking in parapet



View of joint at abutment #2



View of joint at abutment #1



General view of deck



Contractor has placed sealant for longitudinal cracking on top of abutment #2 backwall.



Abutment # 1 bay #2 efflorescence in abutment backwall



Typical cracking in parapet



Inventory looking North



General view of span #2 superstructure



General view of span #1 superstructure



Abutment #2 joint material



Elevation looking West



Abutment #1 joint material.



Contractor has made attempts to seal deck surface cracking.



Typical view of final protective system applied to superstructure.



General view of deck



View looking west.



View looking East.



Approach view in direction of log mile.



Typical view of driving surface.



07/27/2021

Elevation view. Log mile from left to right.



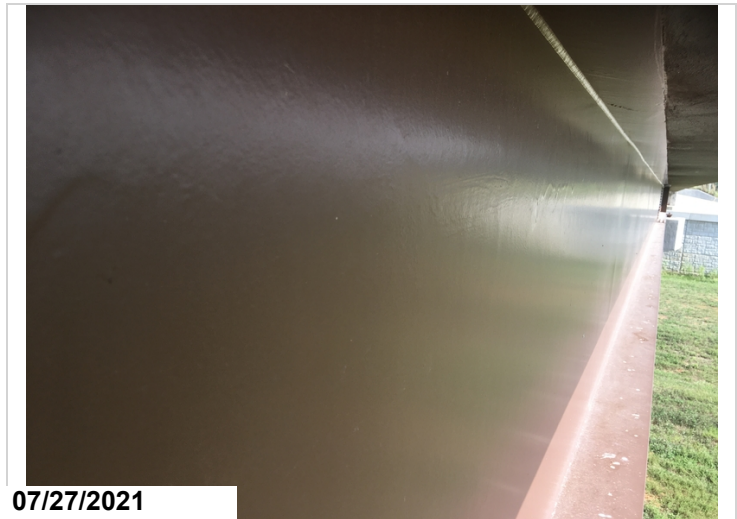
07/27/2021

The beginning left deck edge of the exterior of span #1 has 1' of cs2 efflorescence.



07/27/2021

torn area in the abutment #1 pourable seal. right lane.



07/27/2021

General paint condition. Still showing gloss.

Maintenance Needs

Date Reported: 07/28/2021

Priority: D- Routine

Type of Work: Repair (General)

Status: Repair Documented

Component:

Deficiency Description

The driving surface of the deck has sealable cracking in both lanes.

Remarks

Benton II

07-27-2023 WNR & DBM: maintenance forces have placed an epoxy type of repair since the last inspection.



01/01/2020

Contractor has placed a type of sealant as a repair for deck cracking.



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SH 112 over SH 612

Location: 1 Mi. N Wash Co Line.

Team Lead: Nathan Rowland Inspection Date: 07/27/2023

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 #07307(Routine)

SH 112 over SH 612

Location: 1 Mi. N Wash Co Line.

Team Lead: Nathan Rowland Inspection Date: 07/27/2023

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

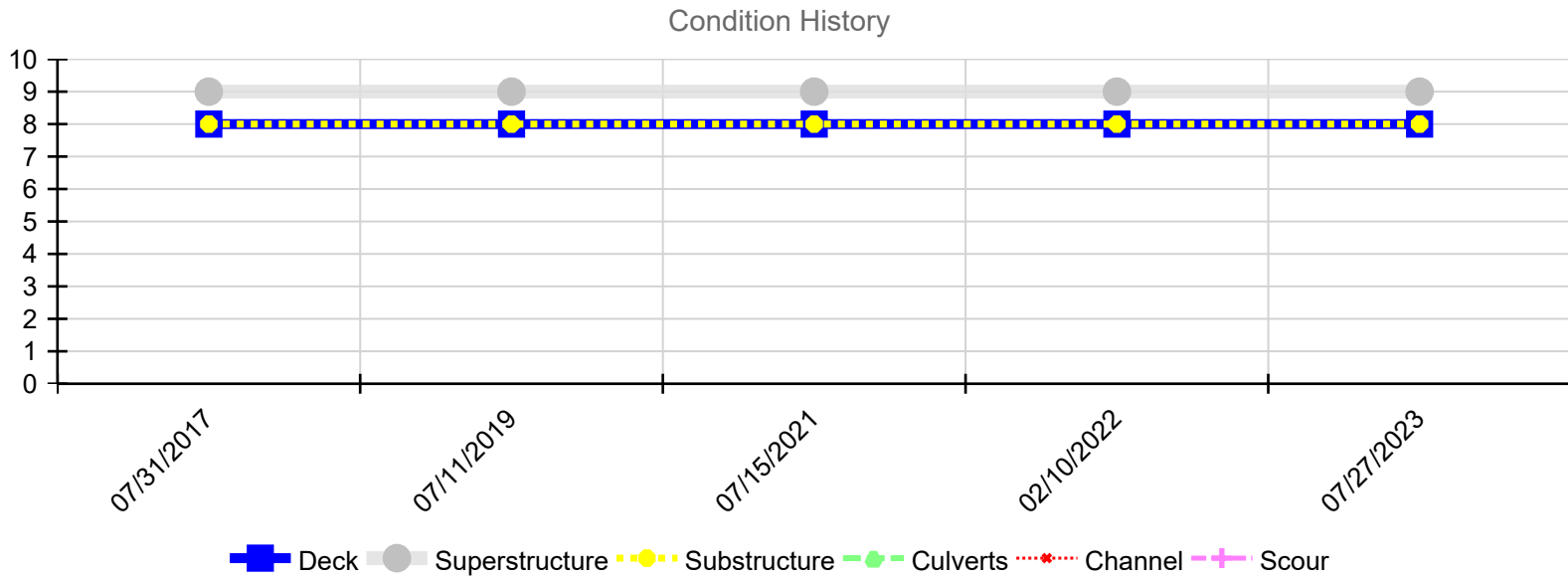


Asset #07307(Routine)

SH 112 over SH 612

Location: 1 Mi. N Wash Co Line.

Team Lead: Nathan Rowland Inspection Date: 07/27/2023



Inspection Date	Deck	Superstructure	Substructure	Culverts	Channel	Scour
07/27/2023	8	9	8	N	N	N
02/10/2022	8	9	8	N	N	N
07/15/2021	8	9	8	N	N	N
07/11/2019	8	9	8	N	N	N
07/31/2017	8	9	8	N	N	N