



Latitude:33.13051, Longitude:-93.64653

Route:29 Section:01 Log:7.98

Arnold Road ID:37x29x1xA, Arnold Log mile:7.99

District 03, 73 - Lafayette County

Owner: 1 - State Highway Agency

Inspection Direction: 2 - S to N

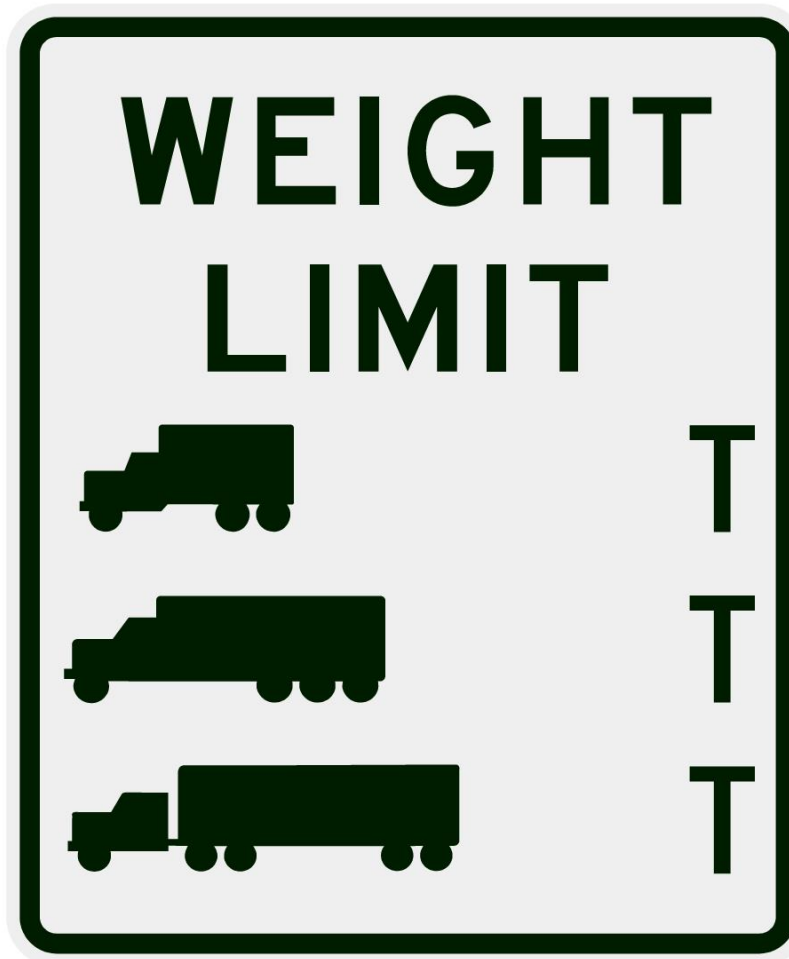
### Bridge Posting Information

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

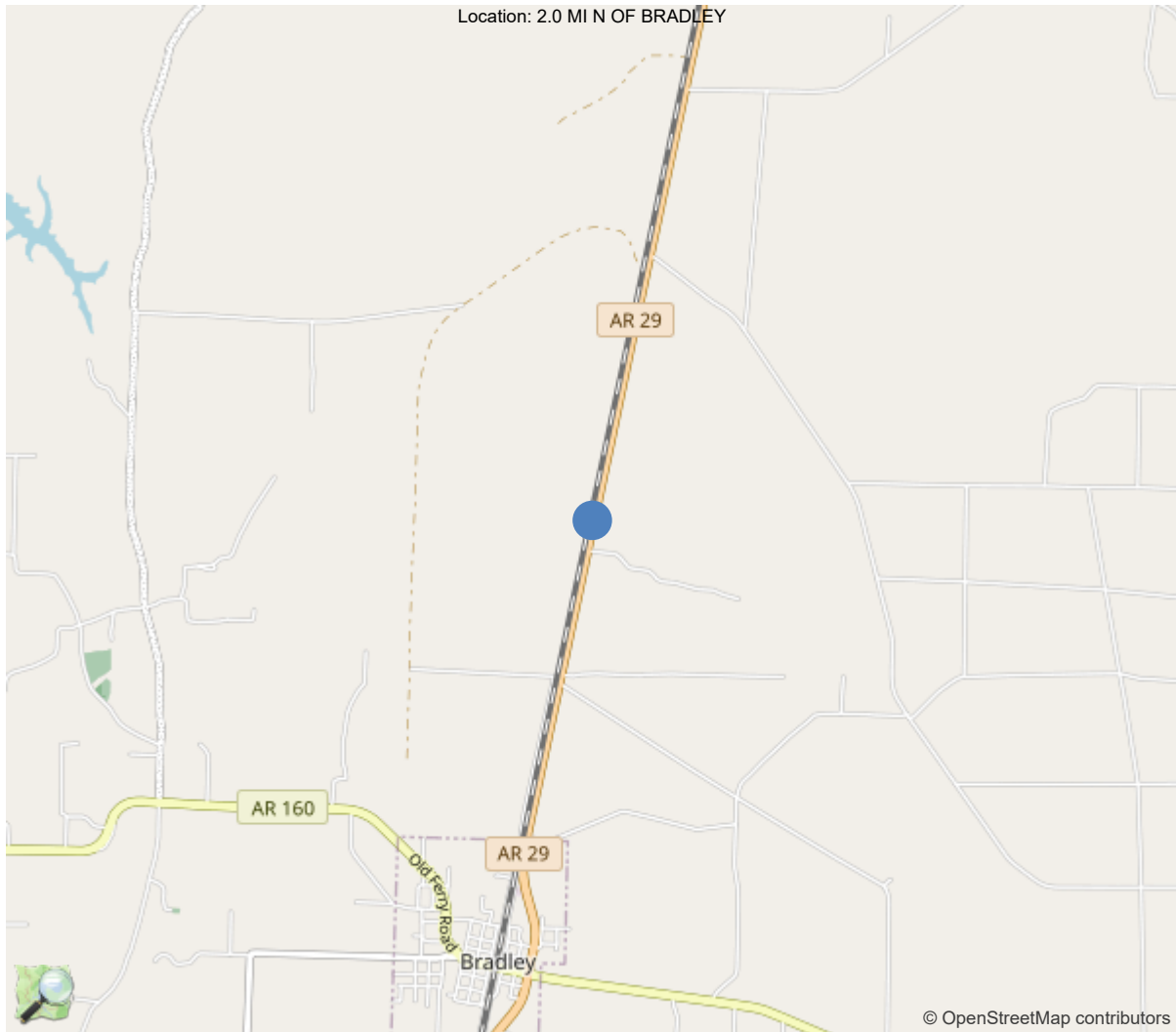
70 - Bridge Posting: 5 - Equal to or above legal loads

Legal Load	Calculated Capacity	Beginning of Bridge Sign Current Value	End of Bridge Sign Current Value
Code 4 (22 Tons)	30		
Code 9 (31 Tons)	35		
Code 5 (40 Tons)	43		

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



33.13051, -93.64653



Asset #02450(Routine, Underwater type 2)

SH 29 - 01- 7.98 over DOOLEY CREEK

Location: 2.0 MI N OF BRADLEY

Team Lead: Jared Kegley Inspection Date: 09/09/2024

IDENTIFICATION	
(1) State Names	5 - Arkansas
(8) Structure Number	02450
(5) Inventory Route	1
(2) Highway Agency District	03 - District 03
(3) County Code	73 - Lafayette County
(4) Place Code	0
(6) Features Intersected	DOOLEY CREEK
(7) Facility Carried	SH 29 - 01- 7.98
(9) Location	2.0 MI N OF BRADLEY
(11) Mile Point	7.98 mi
(12) Base Highway Network	No
(13) LRS Inventory Rte & Subrte	0000000000
(16) Latitude	33.1305091321932
(17) Longitude	-93.6465256815487
(98) Border Bridge State Code	
(99) Border Bridge Structure No.	
STRUCTURE TYPE AND MATERIAL	
(43) Main Structure Type	32
Material	3 - Steel
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	3
(46) No. of Approach Spans	0
(107) Deck Structure Type	1 - Concrete Cast-in-Place
(108) Wearing Surface/Protective System	
Type of Wearing Surface	6 - Bituminous
Type of Membrane	0 - None
Type of Deck Protection	0 - None
AGE AND SERVICE	
(27) Year Built	1952
(106) Year Reconstructed	0
(42) Type of Service	15
On	1 - Highway
Under	5 - Waterway
(28) Lane	
On	2
Under	0
(29) Average Daily Traffic	1300
(30) Year of ADT	2018
(109) Truck ADT	1 %
(19) Bypass, Detour Length	18 mi
GEOMETRIC DATA	
(48) Length of Maximum Span	30 ft
(49) Structure Length	92 ft
(50) Curb or Sidewalk Width	
Left	1 ft
Right	1 ft
(51) Bridge Roadway Width Curb to Curb	24 ft
(52) Deck Width Out to Out	26 ft
(32) Approach Roadway Width (W/Shoulders)	34.1 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	24 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	6 - Rural 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	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	6
(59) Superstructure	6
(60) Substructure	7
(61) Channel & Channel Protection	7
(62) Culverts	N
LOAD RATING AND POSTING	
(31) Design Load	2 - M 13.5 / H 15
(63) Operating Rating Method	1
(64) Operating Rating	
Type	1 - Load Factor(LF)
Rating	47
(65) Inventory Rating Method	1 - Load Factor(LF)
(66) Inventory Rating	
Type	
Rating	28
(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	4
(69) Clearances, Vertical/Horizontal	N
(71) Waterway Adequacy	7
(72) Approach Roadway Alignment	8
(36A) Bridge Railings	1 - Inspected feature meets current
(36B) Transitions	0 - Inspected feature does not meet
(36C) Approach Guardrail	0 - Inspected feature does not meet
(36D) Approach Guardrail Ends	0 - Inspected feature does not meet
(113) Scour Critical Bridges	5 - Bridge foundations determined to
PROPOSED IMPROVEMENTS	
(75) Type of Work	31 - Replacement of bridge or
(76) Length of Structure Improvement	119 ft
(94) Bridge Improvement Cost	\$ 0
(95) Roadway Improvement Cost	\$ 265
(96) Total Project Cost	\$ 737
(97) Year of Improvement Cost Estimate	2003
(114) Future ADT	3743
(115) Year of Future ADT	2028

INSPECTIONS *			
(90) Inspection Date	09/09/2024		
(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 #02450(Routine, Underwater type 2)

SH 29 - 01- 7.98 over DOOLEY CREEK

Location: 2.0 MI N OF BRADLEY

Team Lead: Jared Kegley Inspection Date: 09/09/2024

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**58 - Deck** (6 - SATISFACTORY CONDITION - structural elements show some minor deterioration.)

Deck is rated a 6 this inspection due to cracking with efflorescence on bottom side of deck in various locations. Note: Top side of deck has an asphalt overlay.

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**59 - Superstructure** (6 - SATISFACTORY CONDITION - structural elements show some minor deterioration.)

The superstructure is rated a 6 this inspection due to minor and moderate corrosion with minor section loss in various locations of the beam ends.

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**60 - Substructure** (7 - GOOD CONDITION - some minor problems.)

The substructure is rated a 7 this inspection due to there being a minor delam and exposed rebar on concrete pier cap.

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**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 rated a 7 this inspection due to banks being well vegetated with minor streambank damage. Soundings were taken this inspection and linked to the report and asset files.

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**A-2 - Wearing Surface Thickness** (6)

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**A-64 - Vegetation Removal Requested** (Y)

Vegetation growing along both sides of bridge.

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**A-B.C.11 - B.C.11 Scour Condition Rating (New NBIS)** (6 - Widespread minor or isolated moderate scour.)

The scour is rated a 6 this inspection due to isolated moderate scour under bent 4 abutment.

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Location: 2.0 MI N OF BRADLEY

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ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
12	Reinforced Concrete Deck	SF	2396	2394	2	0	0
1120	Efflorescence/Rust Staining	SF	2	0	2	0	0
510	Wearing Surfaces	SF	2214	1806	408	0	0
3210	Delam/Spall/Patched Area/Pothole	SF	8	0	8	0	0
3220	Crack (Wearing Surface)	SF	400	0	400	0	0
(12) Span 1, between beams 1 & 2, 2' of cracking with efflorescence, CS2.							
(510-12) Cracking in all spans of the wearing surface, CS2.							
8' total of spalling in the wearing surface in various locations, CS2.							
107	Steel Open Girder/Beam	LF	461	456	3	2	0
1000	Corrosion	LF	5	0	3	2	0
515	Steel Protective Coating	SF	2061	2036	0	0	25
3440	Effectiveness (Steel Protective Coatings)	LF	25	0	0	0	25
(107) Bent 1, beam 1, left side, 1' of section loss, CS3.							
Bent 4, beam 5, right side, 1' of section loss, CS3.							
(1000-107) Section loss beam 1 span 1							
215	Reinforced Concrete Abutment	LF	67	67	0	0	0
226	Prestressed concrete piles	EA	8	8	0	0	0
234	Reinforced Concrete Pier Cap	LF	49	47	2	0	0
1080	Delamination/Spall/Patched Area	LF	1	0	1	0	0
1090	Exposed Rebar	LF	1	0	1	0	0
(234) Bent 3, span 2 side, 1' of Delam, CS2.							
Bent 3, span 2 side, right side, 1' of exposed rebar, CS2.							
303	Assembly Joint with Seal	LF	96	0	0	0	96
2350	Debris Impaction	LF	96	0	0	0	96
(303) Joints are covered by an asphalt overlay, CS4.							
311	Movable Bearing	EA	15	0	0	15	0
1000	Corrosion	EA	15	0	0	15	0
(311) All movable bearings have minor to moderate corrosion, CS3.							
313	Fixed Bearing	EA	15	0	0	15	0
1000	Corrosion	EA	15	0	0	15	0
(313) All fixed bearings have minor to moderate corrosion, CS3.							
330	Metal Bridge Railing	LF	185	135	50	0	0

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
1000	Corrosion	LF	50	0	50	0	0
(330) The left and right side of the metal bridge railing has corrosion, CS2.							



Elevation.



Typical photo of the under surface.



Typical photo of the topside of the deck.



Typical photo of the superstructure.



Typical photo of the substructure.



Upstream channel



Downstream channel



Inventory.



Vegetation growth on the left side at the end of the bridge.



Vegetation growth on the right side at the end of the bridge.



Vegetation on the right side at the beginning of the bridge.



Vegetation on the right side at the beginning of the bridge.



Bridge railing.



Bridge bearings.



Joints are covered by an asphalt overlay.





Span 1, between beams 1 & 2, 2' of cracking with efflorescence, CS2.



8' total of spalling in the wearing surface in various locations, CS2.



Cracking in all spans of the wearing surface, CS2.



Bent 1, beam 1, left side, 1' of section loss, CS3.



Bent 3, span 2 side, right side, 1' of exposed rebar, CS2.



Bent 3, span 2 side, 1' of Delam, CS2.



Joints are covered by an asphalt overlay, CS4.



All movable bearings have minor to moderate corrosion, CS3.



All fixed bearings have minor to moderate corrosion, CS3.



The left and right side of the metal bridge railing has corrosion, CS2.

## Maintenance Needs

Date Reported: 09/12/2022

Priority: B - Pressing

Type of Work: Repair (General)

Status: Open

Component:

## Deficiency Description

Moderate erosion under abutment 4 exposing various concrete pile.

## Remarks

9/12/2024 - Reopened MN and moved to a "B" priority due to worsening condition, see photos.



Scour hole leading under abutment 4 9/24



Scour hole leading under abutment 4 9/24



Scour hole leading under abutment 4



Scour hole leading under abutment 4

**Maintenance Needs**

**Date Reported:** 09/12/2022

**Priority:** D- Routine

**Type of Work:** Replace (General)

**Status:** Repair Documented

**Component:**

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**Deficiency Description**

Log mile sign and flare board needs replaced Rt side beginning of bridge. 29-1 7.98

**Remarks**

9/12/2024 - The log mile sign and flare board has been replaced per 9/24 inspection.

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Repaired





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Location: 2.0 MI N OF BRADLEY

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## Routine Maintenance

Check Box Maintenance Items

Type of Maintenance	Is recommended?
A-54 - Sealable Deck Cracks	No
A-55 - Deck Washing Needed	No
A-56 - Joint Cleaning/Flushing Needed	No
A-57 - Beam End and Bearing Paint Needed	No
A-58 - Cap Cleaning/Flushing Needed	No
A-59 - Joint Repair Needed	No
A-60 - Full Beam Painting Needed	No
A-61 - Polymer Overlay Advised	No
A-62 - Hydro and LMC Advised	No
A-63 - Missing/Incorrect Log Mile Signage	No
A-64 - Vegetation Removal Requested	Yes

**A-54 - Sealable Deck Cracks (No)**

**A-55 - Deck Washing Needed (No)**

**A-56 - Joint Cleaning/Flushing Needed (No)**



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**SH 29 - 01- 7.98 over DOOLEY CREEK**

**Location: 2.0 MI N OF BRADLEY**

**Team Lead: Jared Kegley Inspection Date: 09/09/2024**

**A-57 - Girder End and Bearing Painting Needed (No)**

**A-58 - Cap Cleaning/Flushing Needed (No)**

**A-59 - Joint Repair Needed (No)**

**A-60 - Full Girder Painting Needed (No)**

**A-61 - Polymer Overlay Advised (No)**

**A-62 - Hydro and LMC Advised (No)**

**A-63 - Missing/Incorrect Log Mile Signage (No)**

**A-64 - Vegetation Removal Requested (Yes)**

Vegetation growing along both sides of bridge.



Vegetation growth on the left side at the end of the bridge.



Vegetation growth on the right side at the end of the bridge.



Vegetation on the right side at the beginning of the bridge.



Vegetation on the right side at the beginning of the bridge.



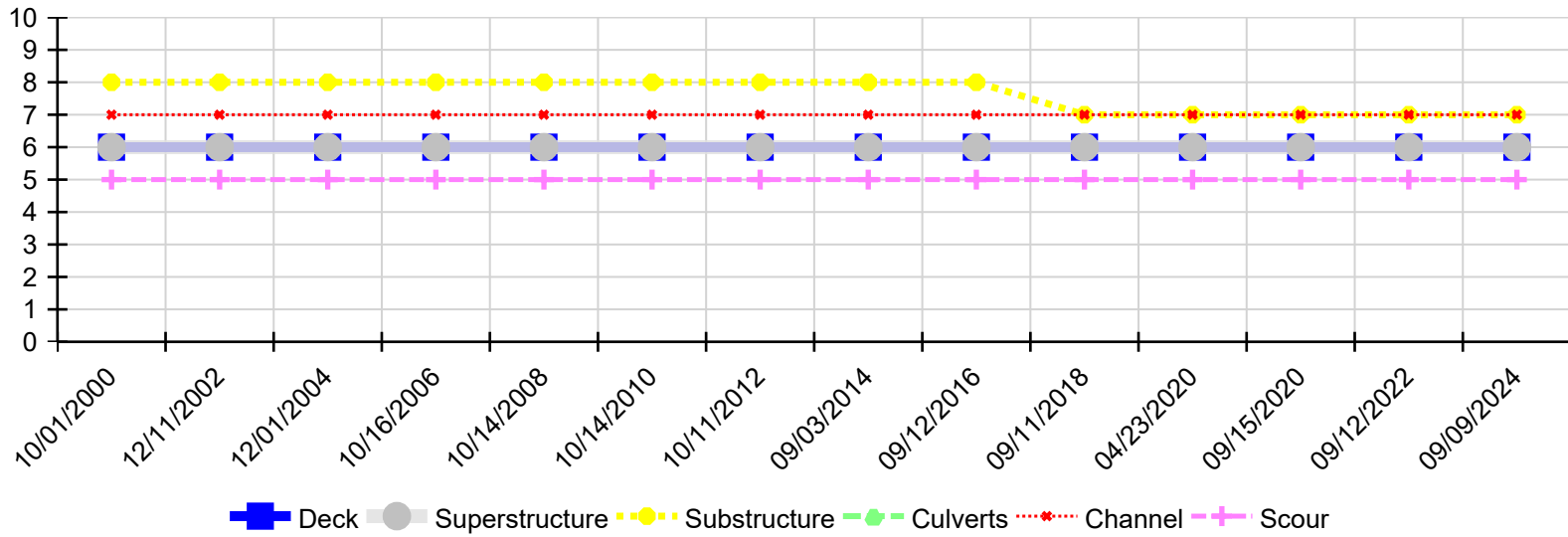
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SH 29 - 01- 7.98 over DOOLEY CREEK

Location: 2.0 MI N OF BRADLEY

Team Lead: Jared Kegley Inspection Date: 09/09/2024

Condition History



Inspection Date	Deck	Superstructure	Substructure	Culverts	Channel	Scour
09/09/2024	6	6	7	N	7	5
09/12/2022	6	6	7	N	7	5
09/15/2020	6	6	7	N	7	5
04/23/2020	6	6	7	N	7	5
09/11/2018	6	6	7	N	7	5
09/12/2016	6	6	8	N	7	5
09/03/2014	6	6	8	N	7	5
10/11/2012	6	6	8	N	7	5
10/14/2010	6	6	8	N	7	5
10/14/2008	6	6	8	N	7	5
10/16/2006	6	6	8	N	7	5
12/01/2004	6	6	8	N	7	5
12/11/2002	6	6	8	N	7	5
10/01/2000	6	6	8	N	7	5