



Latitude:35.54688, Longitude:-93.96561

Route:67 Section:00 Log:6.439

Arnold Road ID:24xWIRERDx1xA, Arnold Log mile:6.358

District 04, 47 - Franklin County

Owner: 2 - County Highway Agency

Inspection Direction: 3 - E to W

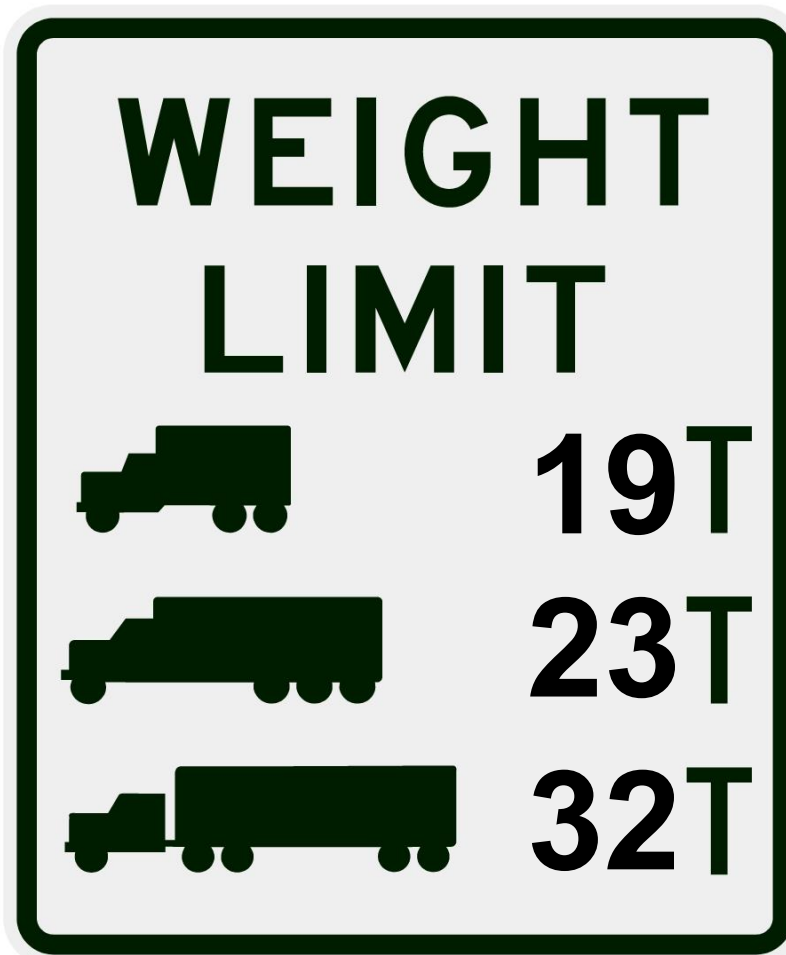
Bridge Posting Information

41 - Structure Open/Posted/Closed: P - Posted for load (may include other restrictions such a temporary bridges which are load posted)

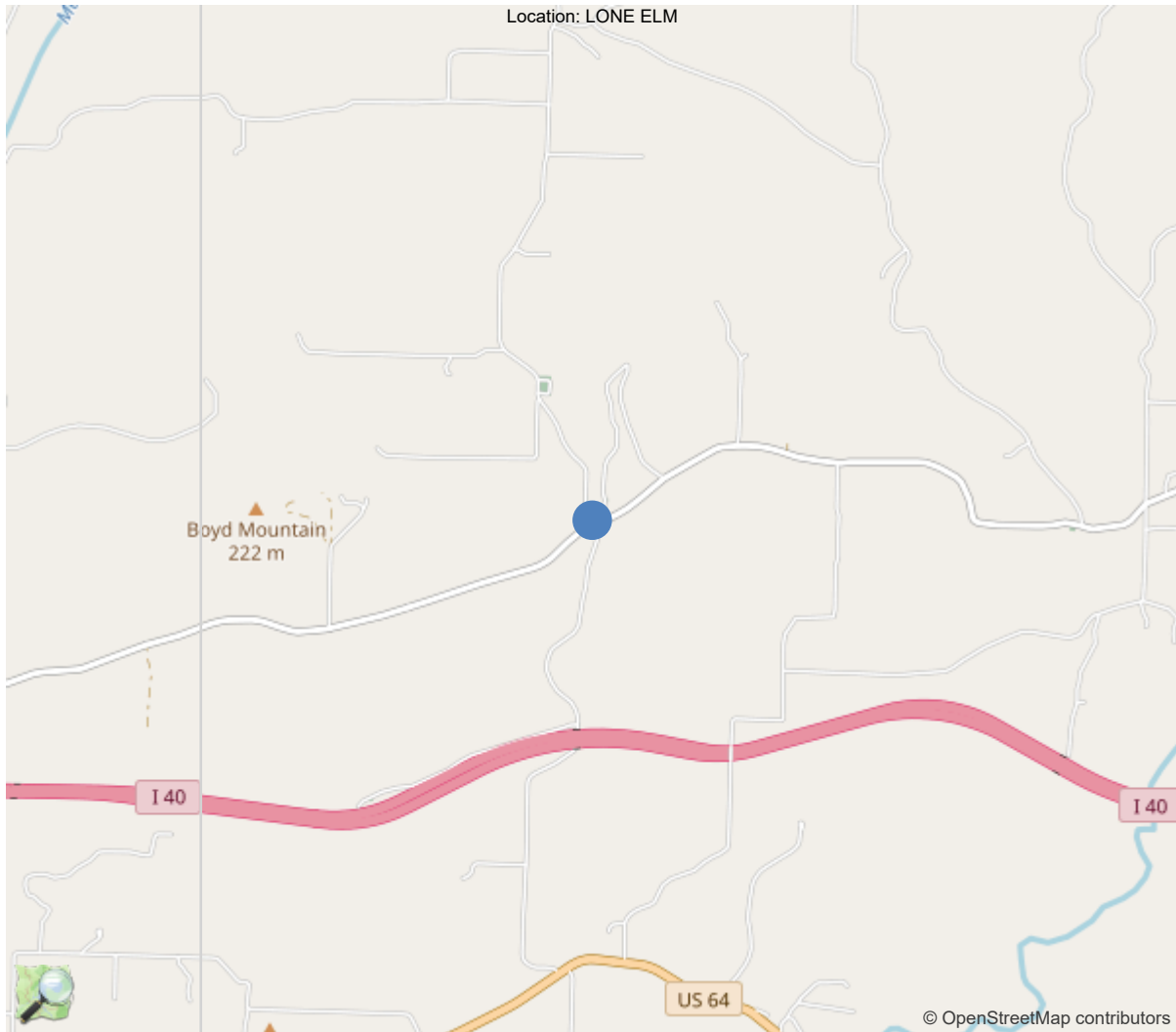
70 - Bridge Posting: 2 - 20.0 - 29.9 % below

Legal Load	Calculated Capacity	Beginning of Bridge Sign Current Value	End of Bridge Sign Current Value
Code 4 (22 Tons)	19	19	19
Code 9 (31 Tons)	23	23	23
Code 5 (40 Tons)	32	32	32

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



35.54688, -93.96561



Asset #13089(Routine, Underwater type 2)

Wire Road over Maxey Creek

Location: LONE ELM

Team Lead: Eric West Inspection Date: 06/06/2024

IDENTIFICATION	
(1) State Names	5 - Arkansas
(8) Structure Number	13089
(5) Inventory Route	1
(2) Highway Agency District	04 - District 04
(3) County Code	47 - Franklin County
(4) Place Code	0
(6) Features Intersected	Maxey Creek
(7) Facility Carried	Wire Road
(9) Location	LONE ELM
(11) Mile Point	6.439 mi
(12) Base Highway Network	No
(13) LRS Inventory Rte & Subrte	0000000000
(16) Latitude	35.546875
(17) Longitude	-93.965607
(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	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	0 - None
AGE AND SERVICE	
(27) Year Built	1960
(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	410
(30) Year of ADT	2018
(109) Truck ADT	1 %
(19) Bypass, Detour Length	3 mi
GEOMETRIC DATA	
(48) Length of Maximum Span	22 ft
(49) Structure Length	44.5 ft
(50) Curb or Sidewalk Width	
Left	0 ft
Right	0 ft
(51) Bridge Roadway Width Curb to Curb	35.4 ft
(52) Deck Width Out to Out	36 ft
(32) Approach Roadway Width (W/Shoulders)	20 ft
(33) Bridge Median	0 - No median
(34) Skew	22 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	0 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	8 - Rural Minor Collector
(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	2 - County Highway Agency
(22) Owner	2 - County Highway Agency
(37) Historical Significance	5 - Bridge is not eligible for
CONDITION	
(58) Deck	5
(59) Superstructure	6
(60) Substructure	4
(61) Channel & Channel Protection	6
(62) Culverts	N
LOAD RATING AND POSTING	
(31) Design Load	0 - Other or Unknown
(63) Operating Rating Method	1
(64) Operating Rating	
Type	1 - Load Factor(LF)
Rating	31
(65) Inventory Rating Method	1 - Load Factor(LF)
(66) Inventory Rating	
Type	
Rating	19
(70) Bridge Posting	2 - 20.0 - 29.9 % below
(41) Structure Open/Posted/Closed	P - Posted for load (may inclu
APPRAISAL	
(67) Structural Evaluation	
(68) Deck Geometry	2
(69) Clearances, Vertical/Horizontal	N
(71) Waterway Adequacy	5
(72) Approach Roadway Alignment	3
(36A) Bridge Railings	0 - Inspected feature does not meet
(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	U - Bridge with "unknown" foundatio
PROPOSED IMPROVEMENTS	
(75) Type of Work	31 - Replacement of bridge or
(76) Length of Structure Improvement	68 ft
(94) Bridge Improvement Cost	\$ 0
(95) Roadway Improvement Cost	\$ 109
(96) Total Project Cost	\$ 235
(97) Year of Improvement Cost Estimate	2002
(114) Future ADT	450
(115) Year of Future ADT	2038

INSPECTIONS *			
(90) Inspection Date	06/06/2024		
(91) Frequency	12		
(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.			



General Observation

06/06/2024 - EJW & JPW - Routine and Underwater Type II Inspection conducted on this date. Structure accessed from the ground with the use of waders.

58 - Deck (5 - FAIR CONDITION - all primary structural elements are sound but may have minor section loss, cracking, spalling or scour.)

Wearing Surface:

Full depth transverse and longitudinal cracks in the original portion of the deck (right side). CS2

Medium wear in isolated areas of the original deck. CS2

Span # 2, right: the edge of the deck in span # 2 has several spalls that are partially concealed by a steel channel where the bridge rail posts are attached to the deck. The spalled areas appear to be from past collision damage to the railing. The spalled areas in some locations expose steel cable used as reinforcing steel during the construction process. CS3

The new portion of the deck has sealable transverse cracks. CS2

Deck undersurface:

The undersurface of the original portion of deck has spalling between beams # 8 and # 9 with exposed cable used as reinforcing steel during the construction process. CS3

Span # 1: The original portion of span # 1 is partially covered with felt paper used during the construction process.

Old form work still in place over the majority of the original deck in span # 2.

The new portion of the deck has hairline transverse cracks with light efflorescence visible from the undersurface of the deck adjacent to bent # 2.

Railing:

Bridge rail has been replaced in the past and has no apparent problems at this inspection.

Approach roadways:

The asphalt driving surface of the East approach roadway has approximately 1" of settlement at the bridge end.

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

Superstructure:

Beams have no paint system.

The beams are rusty and have minor surface pitting on the original portion of the structure.

There are a few isolated areas with minor flaking rust in the top of the web at the deck juncture near bent # 2. The ends of original beams have flaking rust in the bearing areas in a few random locations.

Diaphragm in span # 1 between beams # 6 and # 7 has a loose bolted connection where it attaches to beam # 6.

The beams on the widened portion have mill scale with a light rust coat forming.

There are no apparent problems during this inspection.

60 - Substructure (4 - POOR CONDITION - advanced section loss, deterioration, spalling or scour.)

R.C. Abutment-

Abutment # 1 Rt has vertical and map cracking at the wing wall juncture. The majority of the Rt wing wall has mapcracking with efflorescence and areas of concrete deterioration.

Abutment # 1 Rt stem wall has a wide full height vertical crack under the outside edge of the right exterior beam outside the bearing area. The crack is 1/4" wide measured 4" below the bridge seat. There is a 3/16" offset at the crack location.

Abutment # 1 Rt footing has voids/concrete deterioration along the original portion of structure (right side). Worst case is adjacent to the North wing wall with one void that penetrates up to 3' under stem wall in one isolated location.

County maintenance forces have placed oversized rock at the bases of the bents in an attempt to control scour in the past. The majority of the oversized rock has been displaced by high water events.

Abutment # 2 Lt stem has no apparent problems.

Abutment # 2 Rt end of the stem and wing wall has light map cracking.

Abutment # 2 Rt footing has minor concrete deterioration with approximately 3" of section loss in areas along the base.

Bent # 2 -

Bent # 2 backface has a 24" area concrete deterioration with approximately 4" of concrete section loss located approximately 8' Rt of centerline.

Bent # 2 Rt (original portion) has concrete deterioration at the base of bent along the top of the footing. No exposed reinforcing steel at this inspection.

Bent # 2 Rt has shallow 8" spalls in the bearing area under the bottom flanges of several beams.

61 - Channel/Channel Protection (6 - Bank is beginning to slump. River control devices and embankment protection have widespread minor damage. There is minor stream bed movement evident. Debris is restricting the channel slightly.)

Channel-

The channel is generally in satisfactory condition, the banks have areas of erosion with trees and streambed material accumulation partially restricting the channel flow.

06/06/2024 - EJW & JPW - Underwater Type II Inspection conducted on this date. Wading and probing indicates:

Abutment # 1 Lt footing is exposed with voids along and under the edge of the irregular footing. The Rt footing is exposed with concrete deterioration and voids under the footing. The Rt footing has concrete deterioration with a 6" void adjacent to the centerline construction joint. The right wing wall has a 3' deep void at the wing wall juncture.

Bent # 2 has an area of full depth undermining to the new portion of pier wall left of centerline that extends approximately 6' in length at this inspection. The original portion of bent # 2 footing has voids along the footing that penetrate up to 2" under the pier wall in some locations. The inlet end of bent # 2 has voids that penetrate up to 12" under the pier wall.

Abutment # 2 Rt has minor voids along the edges of the non-uniform concrete footing. Previously documented voids that extend under the stem wall up to 4" appear to have silted in since last inspection and could not be found at this inspection.

Abutment # 2 Lt irregular concrete footing has voids along and under the edge of the footing, voids do not reach the face of the abutment stem.

No apparent significant changes or repairs since the last inspection.

A-54 - Sealable Deck Cracks (Y)

-The driving surface of the deck has sealable cracking.

A-60 - Full Girder Painting Needed (Y)

Superstructure -

Beams have no paint system. The original beams have areas of corrosion with flaking rust in the bearing areas in a few locations. The new beams under the widened portion of the structure have mill scale and light rust forming.



Roadway



West approach load posting sign.



East approach load posting sign.



Undersurface, Span # 2: typical.



Undersurface, Span # 1: typical.



Bridge rail: typical.



Span # 2, right: the edge of the deck in span # 2 has several spalls that are partially concealed by a steel channel where the bridge rail posts are attached to the deck.



Full depth transverse and longitudinal cracks in the original portion of the deck (right side). CS2



06/06/2024

Driving surface: typical.



06/06/2024

Abutment # 1 Rt stem wall has a wide full height vertical crack under the outside edge of the right exterior beam outside the bearing area. The crack is 1/4" wide measured 4" below the bridge seat. There is a 3/16" offset at the crack location.



06/06/2024

Bent # 2 backface has a 24" area concrete deterioration with approximately 4" of concrete section loss located approximately 8' Rt of centerline.



06/06/2024

Abutment # 1 Rt footing has voids/concrete deterioration along the original portion of structure (right side). Worst case is adjacent to the North wing wall with one void that penetrates up to 3' under stem wall in one isolated location.



Bent # 2, back: the footing has an area of full depth undermining to the new portion of pier wall left of centerline that extends approximately 6' in length at this inspection.



Bent # 2, back: the footing has an area of full depth undermining to the new portion of pier wall left of centerline that extends approximately 6' in length at this inspection.



Abutment # 1, right: The Rt footing has concrete deterioration with a 3' deep void adjacent to the right wing wall.



Abutment # 1, right: The Rt footing has concrete deterioration with a 3' void adjacent to the right wing wall.



Abutment # 1, right: The Rt footing has concrete deterioration with a 6" void adjacent to the centerline construction joint.



Abutment # 1, right: The Rt footing has concrete deterioration with a 6" void adjacent to the centerline construction joint.



Downstream



Upstream



Undersurface, Span # 1: typical.

Maintenance Needs

Date Reported: 01/11/2018

Priority: B - Pressing

Type of Work: Repair (General)

Status: Monitor

Component: Substructure

Deficiency Description

Substructure -

-Bent # 2 has an area of full depth undermining to the new portion of pier wall left of centerline that extends 6' - 8' in length measured along the length of pier wall. The inlet end of bent # 2 pier wall has voids that penetrate up to 12" under the pier wall.

-Abutment # 2, (West abutment) has voids along the right side that penetrate under the abutment stem wall up to approximately 4 inches in a few locations.

-Abutment # 1 (East Abutment) has voids that penetrate up to 3' past the face of abutment # 1 stem wall on the right end adjacent to the wing wall juncture.

Remarks

06/08/2022 - EJW - Deficiency description updated on this date to reflect current conditions.

05/27/2021 - RSM - Priority Code changed from "C" to "B" due to progression of scour with full depth undermining to bent # 2 pier wall.



Bent # 2 aheadface undermine scale.



Bent # 2 aheadface undermine.



Bent # 2 backface undermine scale.



Bent # 2 backface undermine.



Abutment # 1 Rt undermine scale.



Abutment # 1 Rt wing wall undermining.



Bent 2 footing, span 1-Void under footing.

Maintenance Needs

Date Reported: 03/07/2013

Priority: C - Important

Type of Work: Repair (General)

Status: Monitor

Component: Substructure

Deficiency Description

Substructure -

The bases of the bent walls and the footings in the original portion of structure (Right side) have soft deteriorated concrete with concrete section loss.

The substructure appears to be founded on creek gravel and soil with voids that penetrate under the footings.

Rip Rap placed adjacent to the footings in the past as a scour countermeasure has been displaced.

Remarks



Bent # 2 backface has a 24" area concrete deterioration with approximately 4" of concrete section loss located approximately 8' Rt of centerline.



The bases of the bent walls and the footings in the original portion of structure (Right side) have soft deteriorated concrete with concrete section loss. The substructure appears to be founded on creek gravel and soil with voids that penetrate under the footings.

Maintenance Needs

Date Reported: 01/08/2016

Priority: D- Routine

Type of Work: Repair (General)

Status: Monitor

Component: Deck

Deficiency Description

Deck -

The original portion of the deck (Right side) has areas of spalling along the right edge in span # 2. The most extreme area is adjacent to bent # 2 which has a spall approximately 16" long X 5" wide with exposed wire rope that was apparently cast into the deck for reinforcement at the time of construction. There is an area of spalling in the undersurface between beams # 8 and # 9 with exposed cable used as reinforcing steel during the construction process.

Remarks



05/27/2021

Span # 2, bay # 8-Exposed cable in deck undersurface.



05/27/2020

Right side of deck-Spalling.

Maintenance Needs

Date Reported: 06/02/2021

Priority: D- Routine

Type of Work: Repair (General)

Status: Monitor

Component: Superstructure

Deficiency Description

Superstructure -

Diaphragm in span # 1 between beams # 6 and # 7 has a loose bolted connection where it attaches to beam # 6.

Remarks



Diaphragm in span # 1 between beams # 6 and # 7 has a loose bolted connection where it attaches to beam # 6.

Routine Maintenance

Check Box Maintenance Items

Type of Maintenance	Is recommended?
A-54 - Sealable Deck Cracks	Yes
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	Yes
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	No

A-54 - Sealable Deck Cracks (Yes)

-The driving surface of the deck has sealable cracking.

A-55 - Deck Washing Needed (No)

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

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 (Yes)

Superstructure -

Beams have no paint system. The original beams have areas of corrosion with flaking rust in the bearing areas in a few locations. The new beams under the widened portion of the structure have mill scale and light rust forming.



Undersurface, Span # 1: typical.

A-61 - Polymer Overlay Advised (No)

A-62 - Hydro and LMC Advised (No)



Asset #13089(Routine, Underwater type 2)

Wire Road over Maxey Creek

Location: LONE ELM

Team Lead: Eric West **Inspection Date:** 06/06/2024

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

A-64 - Vegetation Removal Requested (No)



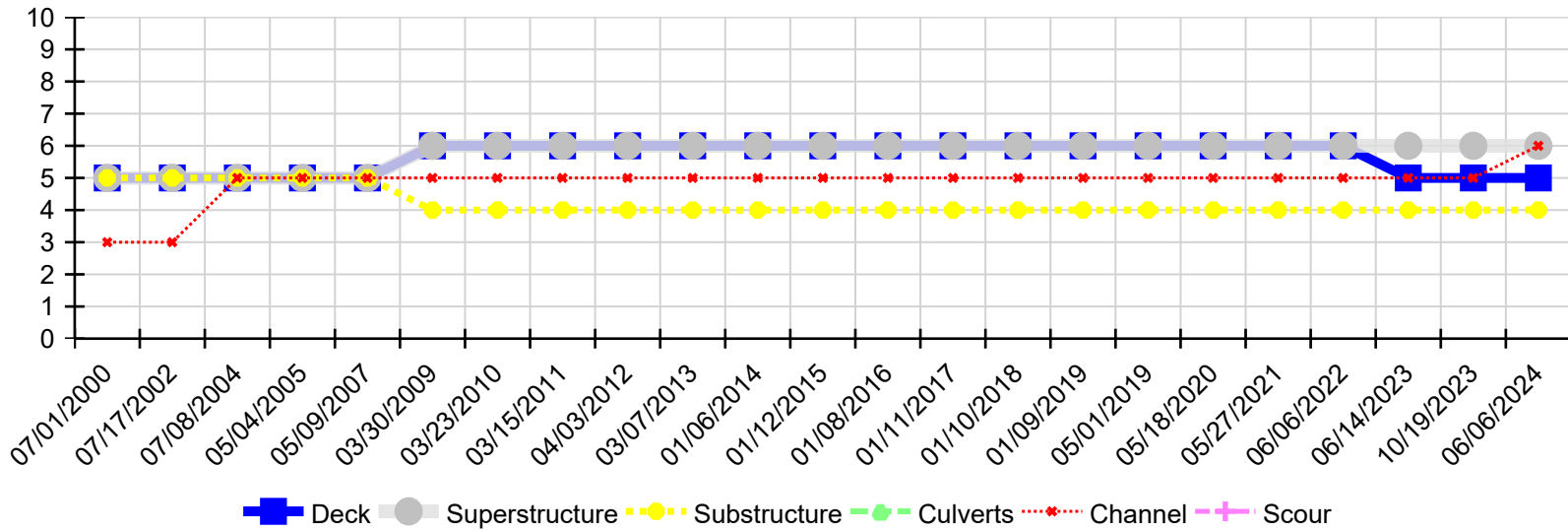
Asset #13089(Routine, Underwater type 2)

Wire Road over Maxey Creek

Location: LONE ELM

Team Lead: Eric West Inspection Date: 06/06/2024

Condition History



Inspection Date	Deck	Superstructure	Substructure	Culverts	Channel	Scour
06/06/2024	5	6	4	N	6	N
10/19/2023	5	6	4	N	5	N
06/14/2023	5	6	4	N	5	N
06/06/2022	6	6	4	N	5	N
05/27/2021	6	6	4	N	5	N
05/18/2020	6	6	4	N	5	N
05/01/2019	6	6	4	N	5	N
01/09/2019	6	6	4	N	5	N
01/10/2018	6	6	4	N	5	N
01/11/2017	6	6	4	N	5	N
01/08/2016	6	6	4	N	5	N
01/12/2015	6	6	4	N	5	N
01/06/2014	6	6	4	N	5	N
03/07/2013	6	6	4	N	5	N
04/03/2012	6	6	4	N	5	N
03/15/2011	6	6	4	N	5	N
03/23/2010	6	6	4	N	5	N
03/30/2009	6	6	4	N	5	N
05/09/2007	5	5	5	N	5	N
05/04/2005	5	5	5	N	5	N
07/08/2004	5	5	5	N	5	N
07/17/2002	5	5	5	N	3	N
07/01/2000	5	5	5	N	3	N