



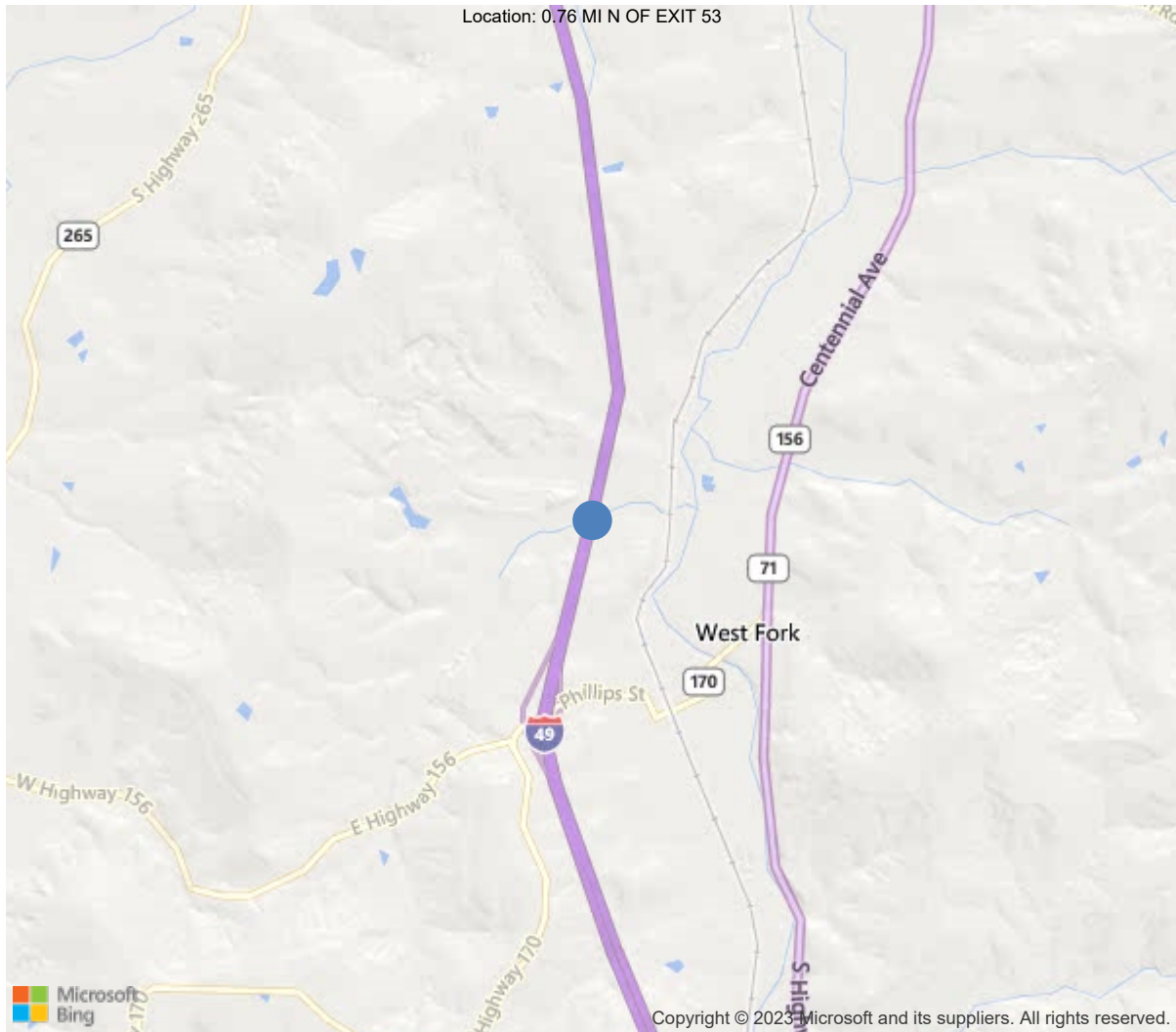
Latitude:35.93794, Longitude:-94.19538

Route:49 Section:28 Log:53.76

Arnold Road ID:72x49x28xA, Arnold Log mile:53.832

District 04, 143 - Washington County

Owner: 1 - State Highway Agency



35.93794, -94.19538



Asset #B6239(Routine, Underwater type 2)
I-49 Northbound over Farm Road - Wash. Co.

Location: 0.76 MI N OF EXIT 53

Team Lead: Eric West, Inspection Date: 04/05/2023

IDENTIFICATION	
(1) State Names	5 - Arkansas
(8) Structure Number	B6239
(5) Inventory Route	1
(2) Highway Agency District	04 - District 04
(3) County Code	143 - Washington County
(4) Place Code	0
(6) Features Intersected	Farm Road - Wash. Co.
(7) Facility Carried	I-49 Northbound
(9) Location	0.76 MI N OF EXIT 53
(11) Mile Point	53.76 mi
(12) Base Highway Network	Yes
(13) LRS Inventory Rte & Subrte	0000049080
(16) Latitude	35.93794
(17) Longitude	-94.19538
(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	4
(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	1994
(106) Year Reconstructed	0
(42) Type of Service	16
On	1 - Highway
Under	6 - Highway-waterway
(28) Lane	
On	2
Under	4
(29) Average Daily Traffic	11500
(30) Year of ADT	2018
(109) Truck ADT	1 %
(19) Bypass, Detour Length	1 mi
GEOMETRIC DATA	
(48) Length of Maximum Span	82 ft
(49) Structure Length	276 ft
(50) Curb or Sidewalk Width	
Left	0 ft
Right	0 ft
(51) Bridge Roadway Width Curb to Curb	40 ft
(52) Deck Width Out to Out	43 ft
(32) Approach Roadway Width (W/Shoulders)	40 ft
(33) Bridge Median	0 - No median
(34) Skew	58 Deg
(35) Structure Flared	0 - No flare
(10) Inventory Route Min Vert Clear	99.99 ft
(47) Inventory Route Total Horiz Clear	41 ft
(53) Min Vert Clear Over Bridge Rdwy	99.99 ft
(54) Min Vert Underclear	20.67 ft
Ref:	
(55) Min Lat Underclear RT	7 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	1
(26) Functional Class	1 - Rural Principal Arterial -
(100) Defense Highway	1 - The inventory route is on
(101) Parallel Structure	R - The right structure of par
(102) Direction of Traffic	1 - 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	5
(59) Superstructure	7
(60) Substructure	5
(61) Channel & Channel Protection	6
(62) Culverts	N
LOAD RATING AND POSTING	
(31) Design Load	6 - MS 18+Mod / HS 20+Mod
(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	6
(68) Deck Geometry	7
(69) Clearances, Vertical/Horizontal	9
(71) Waterway Adequacy	9
(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	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	13361
(115) Year of Future ADT	2028

INSPECTIONS *			
(90) Inspection Date	04/05/2023		
(91) Frequency	24		
(92) Critical Feature Inspection	Done	Freq. (Mon)	Date
A: Fracture Critical Detail	No		
B: Underwater Inspection	No		
C: Other Special Inspection			
* 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 #B6239(Routine, Underwater type 2)

District: 04, County: 143 - Washington County

Team Lead: Eric West, Inspection Date: 04/05/2023

General Observation

04/05/2023 - EJW & NS - Routine and Underwater Type II Inspection conducted on this date. Under clearances verified on this date.

03/01/2021 - RSM & SPC: Routine inspection conducted this date. See element notes for documentation. Underclearance measurements were field measured and verified this date. See Microstation drawing linked in "Files" tab for clearance measurements.

03/18/2019 - TJL - Elements were plan verified on this date.

03/18/2019 - JCJ & TJL - Type 2 Underwater Inspection - Visual observation during low water conditions indicate that the substructure footings have cover with no apparent scour problems during this inspection. No substructure was in the water during this inspection. 03/18/2019 - JCJ & TJL - Vertical underclearance was actual field measured during this inspection. There is a farm road / driveway under Spans # 2 & 4.

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.)

04/05/2023 - EJW - Underwater Type II Inspection conducted on this date. Visual observation indicates:

-No substructure in the water.

-No apparent scour problems at this inspection.

A-15 - Late Reason (Optimize Schedule)

04/05/2023 - EJW - Structure inspected late due to heavy work load.

A-46 - Asset Files

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A-54 - Sealable Deck Cracks (Y)

04/05/2023 - EJW - The driving surface of the deck has sealable transverse and longitudinal cracking.

A-57 - Beam End and Bearing Painting Needed (Y)

04/05/2023 - EJW - Active corrosion, flaking rust and minor section loss to the end of Beam # 6 at abutment # 1, and the end of Beam # 3 at abutment # 2.

A-59 - Joint Repair Needed (Yes)

04/05/2023 - EJW - Saw joint sealant is deteriorating and missing in areas.

A-61 - Polymer Overlay Advised (Y)

04/05/2023 - EJW - Minor repairs on the driving surface with multiple sealable cracks.



Asset #B6239(Routine, Underwater type 2)

I-49 Northbound over Farm Road - Wash. Co.

Location: 0.76 MI N OF EXIT 53

Team Lead: Eric West, Inspection Date: 04/05/2023

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
12	Reinforced Concrete Deck	SF	11694	7304	4202	188	0
1080	Delamination/Spall/Patched Area	SF	8	0	4	4	0
1120	Efflorescence/Rust Staining	SF	72	0	72	0	0
1130	Cracking (RC and Other)	SF	2853	0	2669	184	0
1190	Abrasion/Wear (PSC/RC)	SF	1457	0	1457	0	0
<p>(12) -Light / medium abrasion on the driving surface of span # 3 along the white line. The deck gutters have areas of light scale forming.</p> <p>-The driving surface of the deck has longitudinal cracking that appears to correspond with the top flange of the superstructure beams</p> <p>-The driving surface of the deck has a few pop outs from shale inclusion from the construction process.</p> <p>-The saw / construction joint sealant is deteriorating with the sealant completely missing in a several areas.</p> <p>-The stay in place forms have efflorescence beginning to form on the undersurface of the deck under the saw / construction joints.</p> <p>-The expansion dam at abutment # 1 bay # 6 has active corrosion and section loss in the SIP forms.</p> <p>-There is a 13" x 34" X up to 2 5/8" deep area of concrete deterioration in the right gutter adjacent to abutment # 1 joint assembly, this area currently has a temporary asphalt patch.</p> <p>Undersurface:</p> <p>-The undersurface of the deck overhang on the right side of span # 3 has a 6" spalled area.</p>							
107	Steel Open Girder/Beam	LF	1638	1636	0	2	0
1000	Corrosion	LF	2	0	0	2	0
515	Steel Protective Coating	SF	16832	15410	1410	0	12
3410	Chalking (Steel Protective Coatings)	LF	1402	0	1402	0	0
3440	Effectiveness (Steel Protective Coatings)	LF	20	0	8	0	12
<p>(107) -Abutment # 1 beam # 6, and abutment # 2 beam # 3 have active corrosion with flaking rust at the beam ends. There is up to initial section loss during this inspection. Corrosion appears to be due to drainage troughs discharging water on the beam ends.</p> <p>-The majority of the paint system excluding the areas mentioned above appears to be sound and functioning as intended. The exterior beams are beginning to oxidize.</p> <p>-No visible cracks in the beams.</p>							
205	Reinforced Concrete Column	EA	9	0	4	5	0
1080	Delamination/Spall/Patched Area	EA	1	0	1	0	0
1130	Cracking (RC and Other)	EA	8	0	3	5	0
<p>(205) -Bent # 2, columns # 1, 2 and # 3 have vertical cracks that measure up to 0.060" in width during this inspection.</p> <p>-Bents # 3 & 4 columns have up to 0.040" wide vertical cracks at the ground elevation.</p> <p>-Bent # 4 column # 3 has a 5" spall in the corner of the column with no exposed reinforcing steel.</p>							
215	Reinforced Concrete Abutment	LF	142	40	97	5	0
1080	Delamination/Spall/Patched Area	LF	32	0	32	0	0
1090	Exposed Rebar	LF	1	0	0	1	0



Asset #B6239(Routine, Underwater type 2)

I-49 Northbound over Farm Road - Wash. Co.

Location: 0.76 MI N OF EXIT 53

Team Lead: Eric West, Inspection Date: 04/05/2023

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
1120	Efflorescence/Rust Staining	LF	7	0	7	0	0
1130	Cracking (RC and Other)	LF	62	0	58	4	0
(215) -Transverse cracks typical in the tops of both back walls that are visible from the driving surface of the deck. -There are minor shallow spalls in the top of the back walls visible from the driving surface of the deck. -The abutments have vertical and transverse cracks in the bearing area and at the steps. -Abutments # 1 & 2 back walls have minor vertical cracking with a few areas of random short duration diagonal cracks and map cracking at the ends of the backwalls at the wingwall juncture. -Abutment # 2 Rt has a 6" spall with exposed reinforcing steel located 1' right of beam # 6. -Abutment # 2 Lt has light map cracking with efflorescence buildup at Beam # 1. (1120-215) Abutment # 2 Lt bridge seat map cracking with efflorescence buildup.							
234	Reinforced Concrete Pier Cap	LF	153	128	13	12	0
1080	Delamination/Spall/Patched Area	LF	1	0	1	0	0
1130	Cracking (RC and Other)	LF	24	0	12	12	0
(234) -Bent # 2 Rt end of cap has map cracking, backface of cap has a couple hairline vertical cracks in bay # 1. Left end of cap has vertical cracking. -Bent # 3 Lt end of the cap has 1/4" wide map cracking and a hairline diagonal shear type crack visible on both sides of cap that propagates from the area of mapcracking. Right side of cap has hairline horizontal vertical and horizontal cracks in bay # 5 and under beam # 6. -Bent # 4 Rt has horizontal cracking in the end of the cap. -Bent # 4 Lt has map cracking in the end of the cap.							
305	Assembly Joint without Seal	LF	96	96	0	0	0
(305) -The sliding plates are in place and the anchorage appears to be sound at this inspection. -The rubber trough discharges on the substructure. -The metal stay in place forms at the abutment expansion dams have areas with active corrosion.							
311	Movable Bearing	EA	18	11	4	3	0
1000	Corrosion	EA	7	0	4	3	0
515	Steel Protective Coating	SF	36	9	4	9	14
3440	Effectiveness (Steel Protective Coatings)	EA	27	0	4	9	14
(311) -Abutment # 1 Bearings # 1, 3, 4, & 6 have minor corrosion forming. -Abutment # 2 Bearings # 1, 3, 4, & 6 have minor corrosion forming. -Abutment # 2, Beam # 1 & 3 has active corrosion and pack rust at the bottom of the rocker.							
313	Fixed Bearing	EA	12	11	1	0	0
1020	Connection	EA	1	0	1	0	0
515	Steel Protective Coating	SF	12	12	0	0	0
(313) Bents # 3 & 4 have Fixed Bearings. -The paint system appears to be sound with no significant changes since the last inspection. -The exterior anchor bolt for beam # 1 at bent # 3 appears to be working its way out of the cap.							
321	Reinforced Concrete Approach Slab	SF	1680	167	862	651	0
1080	Delamination/Spall/Patched Area	SF	113	52	57	4	0
1090	Exposed Rebar	SF	1	0	1	0	0

Asset #B6239(Routine, Underwater type 2)
I-49 Northbound over Farm Road - Wash. Co.

Asset #B6239(Routine, Underwater type 2)
I-49 Northbound over Farm Road - Wash. Co.



Substructure

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
205	Reinforced Concrete Column	EA	9	0	4	5	0
1080	Delamination/Spall/Patched Area	EA	1	0	1	0	0
1130	Cracking (RC and Other)	EA	8	0	3	5	0
(205) -Bent # 2, columns # 1, 2 and # 3 have vertical cracks that measure up to 0.060" in width during this inspection. -Bents # 3 & 4 columns have up to 0.040" wide vertical cracks at the ground elevation. -Bent # 4 column # 3 has a 5" spall in the corner of the column with no exposed reinforcing steel.							
215	Reinforced Concrete Abutment	LF	142	40	97	5	0
1080	Delamination/Spall/Patched Area	LF	32	0	32	0	0
1090	Exposed Rebar	LF	1	0	0	1	0
1120	Efflorescence/Rust Staining	LF	7	0	7	0	0
1130	Cracking (RC and Other)	LF	62	0	58	4	0
(215) -Transverse cracks typical in the tops of both back walls that are visible from the driving surface of the deck. -There are minor shallow spalls in the top of the back walls visible from the driving surface of the deck. -The abutments have vertical and transverse cracks in the bearing area and at the steps. -Abutments # 1 & 2 back walls have minor vertical cracking with a few areas of random short duration diagonal cracks and map cracking at the ends of the backwalls at the wingwall juncture. -Abutment # 2 Rt has a 6" spall with exposed reinforcing steel located 1' right of beam # 6. -Abutment # 2 Lt has light map cracking with efflorescence buildup at Beam # 1. (1120-215) Abutment # 2 Lt bridge seat map cracking with efflorescence buildup.							
234	Reinforced Concrete Pier Cap	LF	153	128	13	12	0
1080	Delamination/Spall/Patched Area	LF	1	0	1	0	0
1130	Cracking (RC and Other)	LF	24	0	12	12	0
(234) -Bent # 2 Rt end of cap has map cracking, backface of cap has a couple hairline vertical cracks in bay # 1. Left end of cap has vertical cracking. -Bent # 3 Lt end of the cap has 1/4" wide map cracking and a hairline diagonal shear type crack visible on both sides of cap that propagates from the area of mapcracking. Right side of cap has hairline horizontal vertical and horizontal cracks in bay # 5 and under beam # 6. -Bent # 4 Rt has horizontal cracking in the end of the cap. -Bent # 4 Lt has map cracking in the end of the cap.							

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.)

Comment: 04/05/2023 - EJW - Underwater Type II Inspection conducted on this date. Visual observation indicates:

-No substructure in the water.

-No apparent scour problems at this inspection.



Asset #B6239(Routine, Underwater type 2)
I-49 Northbound over Farm Road - Wash. Co.

Location: 0.76 MI N OF EXIT 53

Team Lead: Eric West, Inspection Date: 04/05/2023

Culvert

ELEMENTS	DESCRIPTION	UNITS	TOTAL				
				CS1	CS2	CS3	CS4



Elevation



Roadway



Typical driving surface of the deck.



Typical undersurface of the deck.



Span #1 Rt concrete deterioration with a failing temporary asphalt patch.



Span #1 sealable deck cracking.



Span #3 Rt concrete deterioration and section loss.



Abutment # 1 Beam # 6 active corrosion with up to 1/8" section loss at the base of the expansion dam.



Abutment # 2 beam # 3 active corrosion with initial section loss at the expansion dam.



Bent # 2 column # 1 vertical cracking.



Bent # 2 Column #3 vertical cracks.



Bent # 4 column # 3 has a 5" spall in the corner of the column with no exposed reinforcing steel.



Abutment #1 Lt wing wall juncture map cracking.



Abutment # 2 Lt map cracking at beam # 1.



Abutment # 2 Rt concrete spalling with exposed reinforcing steel.



Abutment #2 top of the backwall transverse cracking with light wear.



Bent # 2 Column #3 with 0.060" vertical cracks.



Bent #4 Lt map cracking.



Abutment # 1 bearing #4 active corrosion with pack rust.



Abutment # 2 bearing # 3 active corrosion with pack rust.



South approach slab joint seal missing.



South approach slab concrete spalling and wide transverse cracking.



North approach slab cracking.



North approach slab.



Typical bridge rail cracking.



Span #1 sealable deck cracking.



Abutment # 2 beam # 3 active corrosion with initial section loss at the expansion dam.



Failing saw joint sealant.



Typical driving surface of the deck.

Maintenance Needs

Date Reported: 02/28/2013

Priority: C - Important

Type of Work: Repair (General)

Status: Monitor

Component: Element

Deficiency Description

Substructure -

The right side of Bent # 2 cap and the left side of Bent # 3 cap has map cracking with a hairline diagonal shear type crack visible on both sides of cap that propagates from the area of mapcracking.

Remarks



Bent 3 cap, left side-Wide cracking.



Left end of Bent # 3 cap.

Maintenance Needs

Date Reported: 03/18/2019

Priority: D- Routine

Type of Work: Repair (General)

Status: Monitor

Component: Element

Deficiency Description

Deck -
The Southeast corner of Span # 1 has a 2' area with soft deteriorated concrete.

Remarks



Span #1 Rt concrete deterioration with a failing temporary asphalt patch.



Span # 1. Right gutter.

Maintenance Needs

Date Reported: 02/28/2013

Priority: D- Routine

Type of Work: Repair (General)

Status: Monitor

Component: Element

Deficiency Description

Bent # 3 -

The exterior anchor bolt at Bent # 3 Beam # 1 is working out of the bent cap.

Remarks



The exterior anchor bolt at Bent # 3 Beam # 1 is working out of the bent cap.



The exterior anchor bolt at Bent # 3 Beam # 1 is working out of the bent cap.

Maintenance Needs

Date Reported: 03/18/2019

Priority: D- Routine

Type of Work: Repair (General)

Status: Monitor

Component: Element

Deficiency Description

Substructure -

There is vertical cracking at the base of the columns at Bents # 2 & 3.

Cracking at Bent # 2 measures up to 0.060" in width.

Remarks

04/05/2023 - EJW - Updated deficiency description to reflect current conditions.



Bent # 2, column # 2 vertical cracks measure up to 0.060" in width during this inspection.



Asset #B6239(Routine, Underwater type 2)
I-49 Northbound over Farm Road - Wash. Co.

Location: 0.76 MI N OF EXIT 53

Team Lead: Eric West, **Inspection Date:** 04/05/2023

Routine Maintenance

Check Box Maintenance Items

Type of Maintenance	Is recommended?
A-54 - Sealable Deck Cracks	Yes
A-55 - Deck Washing Needed	
A-56 - Joint Cleaning/Flushing Needed	
A-57 - Beam End and Bearing Paint Needed	Yes
A-58 - Cap Cleaning/Flushing Needed	
A-59 - Joint Repair Needed	Yes
A-60 - Full Beam Painting Needed	
A-61 - Polymer Overlay Advised	Yes
A-62 - Hydro and LMC Advised	
A-63 Missing/Incorrect Log Mile Signage	
A-64 - Vegetation Removal Requested	



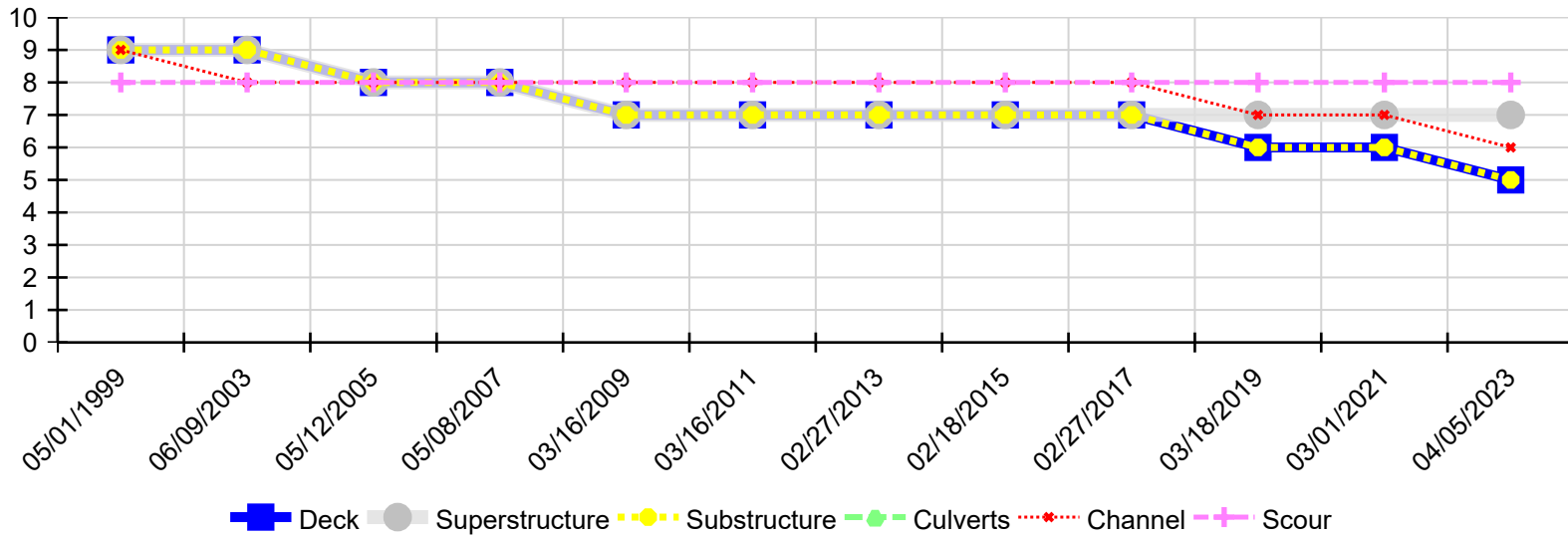
Asset #B6239(Routine, Underwater type 2)

I-49 Northbound over Farm Road - Wash. Co.

Location: 0.76 MI N OF EXIT 53

Team Lead: Eric West, Inspection Date: 04/05/2023

Condition History



Inspection Date	Deck	Superstructure	Substructure	Culverts	Channel	Scour
04/05/2023	5	7	5	N	6	8
03/01/2021	6	7	6	N	7	8
03/18/2019	6	7	6	N	7	8
02/27/2017	7	7	7	N	8	8
02/18/2015	7	7	7	N	8	8
02/27/2013	7	7	7	N	8	8
03/16/2011	7	7	7	N	8	8
03/16/2009	7	7	7	N	8	8
05/08/2007	8	8	8	N	8	8
05/12/2005	8	8	8	N	8	8
06/09/2003	9	9	9	N	8	8
05/01/1999	9	9	9	N	9	8