



Latitude:35.08225, Longitude:-90.61933

Route:75 Section:00 Log:4.66

Arnold Road ID:68x75x0xA, Arnold Log mile:4.657

District 01, 123 - St. Francis County

Owner: 1 - State Highway Agency

Inspection Direction: 2 - S to N

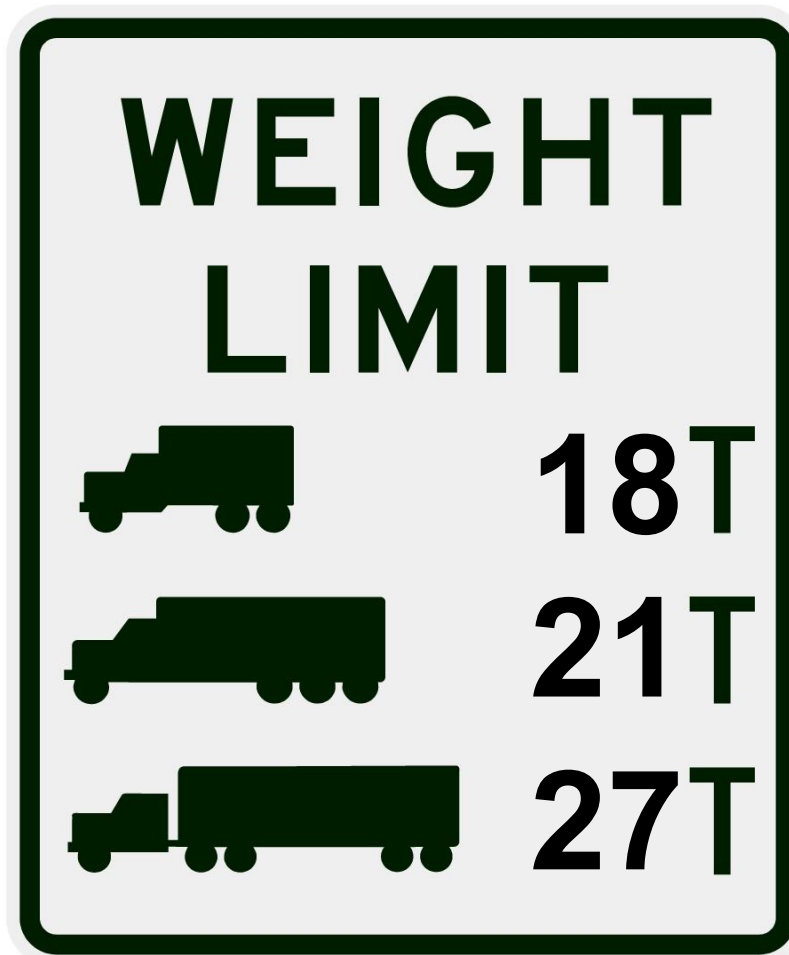
Bridge Posting Information

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

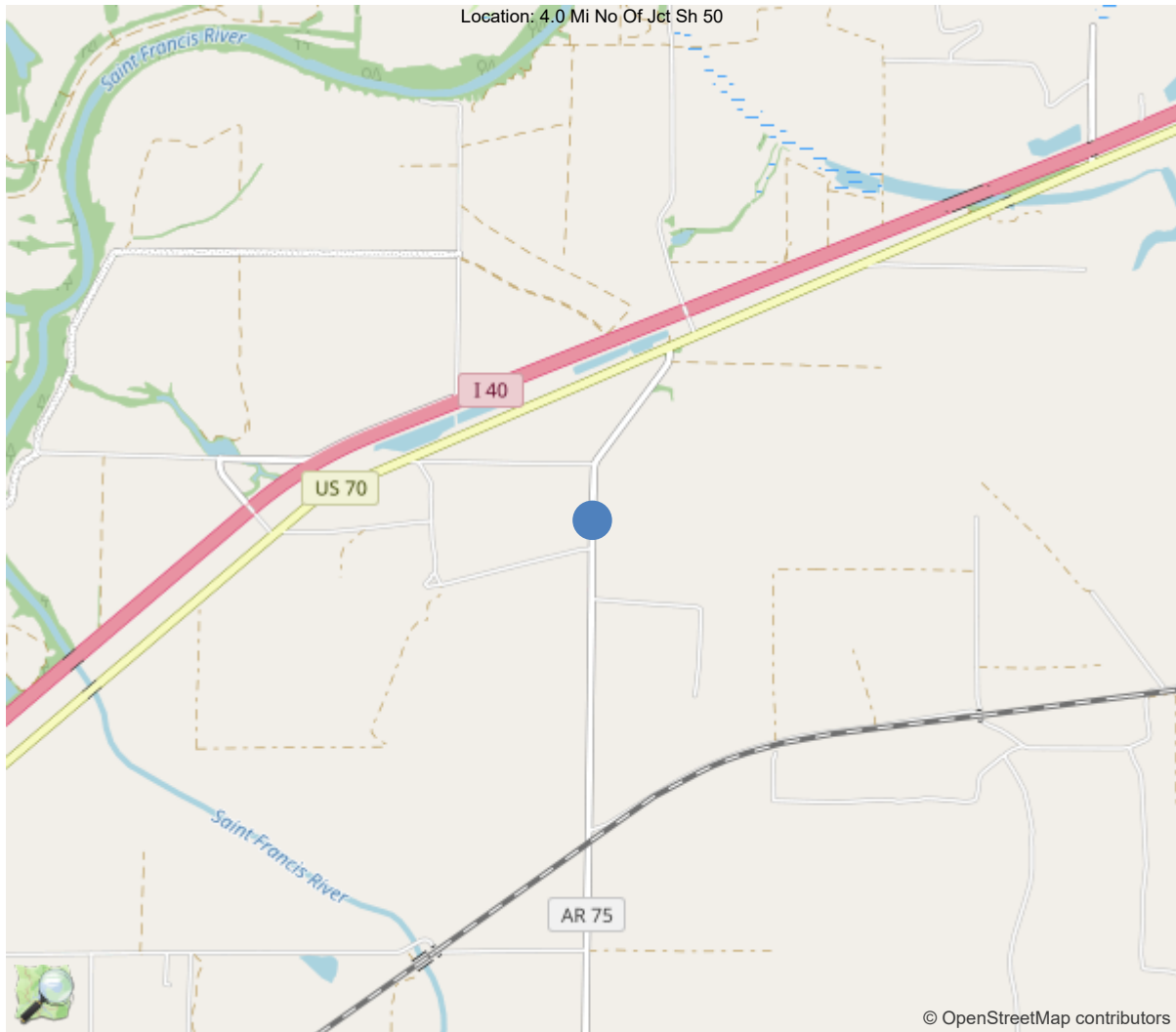
70 - Bridge Posting: 1 - 30.0 - 39.9 % below

Legal Load	Calculated Capacity	Beginning of Bridge Sign Current Value	End of Bridge Sign Current Value
Code 4 (22 Tons)	18	18	18
Code 9 (31 Tons)	21	21	21
Code 5 (40 Tons)	27	27	27

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



35.08225, -90.61933



Asset #m3912(Routine)

Sh-75/Sec-00/L4.66 over Creek

Location: 4.0 Mi No Of Jct Sh 50

Team Lead: Myron Futrell Inspection Date: 08/22/2024

IDENTIFICATION	
(1) State Names	5 - Arkansas
(8) Structure Number	M3912
(5) Inventory Route	1
(2) Highway Agency District	01 - District 01
(3) County Code	123 - St. Francis County
(4) Place Code	0
(6) Features Intersected	Creek
(7) Facility Carried	Sh-75/Sec-00/L4.66
(9) Location	4.0 Mi No Of Jct Sh 50
(11) Mile Point	4.66 mi
(12) Base Highway Network	No
(13) LRS Inventory Rte & Subrte	0000000000
(16) Latitude	35.082245
(17) Longitude	-90.619331
(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	1
(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	1975
(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	100
(30) Year of ADT	2019
(109) Truck ADT	1 %
(19) Bypass, Detour Length	16 mi
GEOMETRIC DATA	
(48) Length of Maximum Span	24.5 ft
(49) Structure Length	26.5 ft
(50) Curb or Sidewalk Width	
Left	0.5 ft
Right	0.5 ft
(51) Bridge Roadway Width Curb to Curb	27.2 ft
(52) Deck Width Out to Out	28.2 ft
(32) Approach Roadway Width (W/Shoulders)	20.4 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	27.2 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	7 - Rural Major Collector
(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	5
(61) Channel & Channel Protection	5
(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	26
(65) Inventory Rating Method	1 - Load Factor(LF)
(66) Inventory Rating	
Type	
Rating	15
(70) Bridge Posting	1 - 30.0 - 39.9 % below
(41) Structure Open/Posted/Closed	P - Posted for load (may include
APPRAISAL	
(67) Structural Evaluation	
(68) Deck Geometry	5
(69) Clearances, Vertical/Horizontal	N
(71) Waterway Adequacy	7
(72) Approach Roadway Alignment	8
(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	5 - Bridge foundations determined to
PROPOSED IMPROVEMENTS	
(75) Type of Work	35 - Bridge rehabilitation becomes
(76) Length of Structure Improvement	26 ft
(94) Bridge Improvement Cost	\$ 0
(95) Roadway Improvement Cost	\$ 0
(96) Total Project Cost	\$ 35
(97) Year of Improvement Cost Estimate	2003
(114) Future ADT	169
(115) Year of Future ADT	2028

INSPECTIONS *			
(90) Inspection Date	08/22/2024		
(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

Team Lead-Myron Futrell
Bridge Inspector-Charley Smith
Accessed with waders.
No lane closure required for inspection.

36C - Approach Guardrail (0 - Inspected feature does not meet currently acceptable stds. or a safety feature is required and none is provided.*)

Abutment #2 left side has no approach rail.

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

Deck appears to be in overall satisfactory condition, top of deck has achm overlay, underside of deck is mostly covered with timber and is only visible in areas where timber has completely decayed. Overlay has transverse and longitudinal cracking and curbs are heavily scaled and spalled on ends with some exposed rebar. Gutters have dirt, debris and vegetation in them. Timber sub deck / stay in place forms have areas over exterior girders and at bridge ends with 100% section loss due to decay.

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

Superstructure is in overall satisfactory condition; exterior girders have areas of corrosion with laminations to top and bottom flanges with moderate section loss. Paint is chalky with areas of surface rust throughout.

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

Substructure is in poor overall condition; abutment backwalls are decayed allowing material to leach through. Multiple piles have been spliced some not encased in concrete some have been encased in concrete. Concrete encasements are of unknown structural integrity and pile depth penetration is unknown. Several piles have minor to moderate decay.

9/18/2024-Raised substructure from 4 to 5 due to bent 1 pile 4 having been spliced and encased in concrete.

61 - Channel/Channel Protection (5 - Bank protection is being eroded. River control devices and/or embankment have major damage. Trees and brush restrict the channel.)

Channel is in fair condition with vegetation growing in channel and a small beaver dam in channel left side of bridge. Channel alignment is good at structure.

7/11/2023-Lowered channel from 6 to 5 due to small beaver dam left side of bridge and vegetation growing in channel.

A-15 - Late Reason (Optimize Schedule)

Schedule too heavy during implementation of new note taking convention, drawing updates and SNBI data collection.



Asset #m3912(Routine)

Sh-75/Sec-00/L4.66 over Creek

Location: 4.0 Mi No Of Jct Sh 50

Team Lead: Myron Futrell Inspection Date: 08/22/2024

A-55 - Deck Washing Needed (Y)

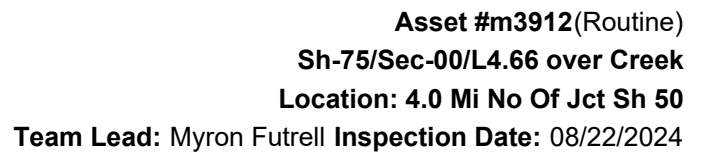
Dirt, debris and vegetation in gutters.

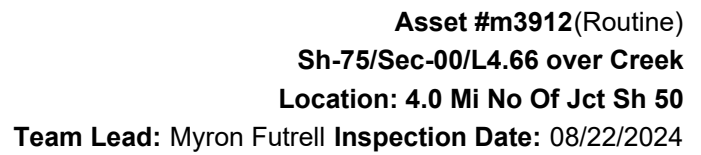
A-63 - Missing/Incorrect Log Mile Signage (Y)

Missing log mile signs, should read 4.66.

A-64 - Vegetation Removal Requested (Y)

Vegetation growing onto bridge.

[illegible]



ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
Bent 2, piles 3,5:	spliced below ground line. Splice and encasements have unknown structural integrity.						
Bent 2, pile 4:	1' split at top.	1EA	CS3				
Bent 2, pile 5:	minor shake.	1EA	CS2				
235	Timber Pier Cap	LF	56	41	15	0	0
1160	Crack (Timber)	LF	15	0	15	0	0
(235)	Timber caps: minor horizontal cracks.	15LF	CS2				
330	Metal Bridge Railing	LF	52	0	46	5	1
1000	Corrosion	LF	46	0	46	0	0
1020	Connection	LF	6	0	0	5	1
515	Steel Protective Coating	SF	156	0	0	0	156
3440	Effectiveness (Steel Protective Coatings)	LF	156	0	0	0	156
(330)	Bridge rails, full length: surface rust very limited paint left with little to no section loss.	Corrosion 46LF	CS3				
Bridge rail, left side:	not connected to last rail post.	Connection 1LF	CS4				
Left rail rocked back and rail post spacers and split and decayed.	Connection 5LF	CS3					
Steel protective coating, full length:	paint system failing.	Effectiveness 165SF	CS4				



Side view / elevation



Top view / inventory



Aerial View



Typical, decayed rail post spacers, left side.



Bridge rail, left side



Bridge rail, right side



Abutment 2, approach rail, left side: missing.



Abutment 2, approach rail, right side



Abutment 1, approach rail, left side



Abutment 1, approach rail, right side



Abutment 2, posting sign



Abutment 1, posting sign



Typical missing timber slab deck over exterior girders



Undersurface of deck



Typical missing timber sub deck at abutment 2



Abutment 2, right curb



Abutment 2, left curb



Typical deck



Typical girder paint



Abutment 1, timber back wall, left side decayed with broken and missing boards.



Abutment 1, timber back wall, right side decayed with broken and missing boards.



Abutment 2, timber back wall, left side: decayed with missing and broken boards , timber pile is leaning in.



Abutment 2, timber back wall, right side: decayed with missing and broken boards.



Abutment 2



Abutment 1, pile 3: moderate decay at ground line. 1EA CS3



Abutment 1, pile 4: minor outer shell decay on upper section of spliced pile. 1EA CS3



Abutment 1



Channel, right side



Channel, left side



Dirt and vegetation in gutters



Abutment 2, log mile sign missing



Abutment 1, right flair board and log mile sign missing



07/12/2023

Abutment #2 left flair board



08/22/2024

Vegetation growing beside, under and onto bridge



08/22/2024

Bridge rail, left side: not connected to last rail post.
Connection 1LF CS3

Maintenance Needs

Date Reported: 07/12/2017

Priority: A - Safety deficiency; requires prompt action

Status: Assigned

Type of Work: Approach Leveling/Maintenance

Component: Approach

Deficiency Description

Abutment 2, right shoulder, at bridge end: eroded due to roadway run off.

Abutment 2, approach roadway, at centerline: hole at bridge end with two-foot-deep void underneath, due to erosion caused by missing back wall above cap.

Remarks

7/11/2023-Reopened maintenance need as an A priority, due to increased size of hole in shoulder in abutment #2 left approach roadway and added hole in roadway at centerline with void underneath.

8/22/2024-Abutment 2 left approach shoulder erosion has been repaired at time of inspection.



Abutment 2, right shoulder: eroded at bridge end.



Abutment 2, left shoulder: erosion has been repaired at time of inspection.



Small hole in abutment 2, approach roadway with 2' deep void underneath.



Abutment #2 left approach shoulder has two foot by two foot by one foot deep hole at bridge end



3' deep hole in abutment #2 approach roadway at centerline



Abutment #2 right approach shoulder has two foot deep void



Void behind girder #4 at abutment #2

Maintenance Needs

Date Reported: 07/11/2023

Priority: A - Safety deficiency; requires prompt action

Type of Work: Substructure Repair

Status: Repair Documented

Component: Substructure

Deficiency Description

Bent 1, Pile 5, upper portion of spliced pile: severely decayed.

Remarks

8/22/2024-Pile has been spliced and encased in concrete at time of inspection.



08/22/2024

Bent 1, pile 5: spliced and encased in concrete.
Encasement is of unknown structural integrity. Decay
1EA CS3



07/12/2023

Bent #1 pile #5 upper portion of spliced pile decayed with
up to 70% section loss.

Maintenance Needs

Date Reported: 07/12/2017

Priority: C - Important

Type of Work: Deck Repair

Status: Monitor

Component: Deck

Deficiency Description

Timber sub deck at bridge ends and over exterior girders and at bridge ends are decayed with up to 100% section loss.

Remarks



Typical missing timber sub deck at abutment 2



Typical missing timber slab deck over exterior girders

Maintenance Needs

Date Reported: 07/12/2017

Priority: C - Important

Type of Work: Substructure Repair

Status: Monitor

Component: Substructure

Deficiency Description

Both abutments, timber back walls: areas of decay with up to 100% section loss causing roadway to settle.

Remarks



Abutment 2, timber back wall, right side: decayed with missing and broken boards



Abutment 2, timber back wall, left, side: decayed with missing and broken boards , timber pile is leaning in



Abutment 1, timber back wall, right side decayed with broken and missing boards.



Abutment 1, timber back wall, left side decayed with broken and missing boards.



Abutment 2, void at centerline above cap where timber
back wall is missing

Maintenance Needs

Date Reported: 07/12/2017

Priority: C - Important

Type of Work: Repair (General)

Status: Monitor

Component: Element

Deficiency Description

Bent 1, pile 3: outer shell decay with moderate section loss.

Remarks



Abutment 1, pile 3: moderate decay at ground line. 1EA
CS3

Maintenance Needs

Date Reported: 07/07/2020

Priority: C - Important

Type of Work: Repair (General)

Status: Monitor

Component: Element

Deficiency Description

Left rail: not connected to last rail post.

Left rail: rocked back and rail post spacers and split and decayed.

Remarks



Bridge rail, left side



Typical, decayed rail post spacers, left side.



Asset #m3912(Routine)

Sh-75/Sec-00/L4.66 over Creek

Location: 4.0 Mi No Of Jct Sh 50

Team Lead: Myron Futrell Inspection Date: 08/22/2024

Routine Maintenance

Check Box Maintenance Items

Type of Maintenance	Is recommended?
A-54 - Sealable Deck Cracks	No
A-55 - Deck Washing Needed	Yes
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	Yes
A-64 - Vegetation Removal Requested	Yes

A-54 - Sealable Deck Cracks (No)

A-55 - Deck Washing Needed (Yes)

Dirt, debris and vegetation in gutters.



Dirt and vegetation in gutters

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 (No)

A-61 - Polymer Overlay Advised (No)

A-62 - Hydro and LMC Advised (No)

A-63 - Missing/Incorrect Log Mile Signage (Yes)

Missing log mile signs, should read 4.66.



Abutment 2, log mile sign missing



Abutment 1, right flair board and log mile sign missing



Abutment #2 left flair board

A-64 - Vegetation Removal Requested (Yes)

Vegetation growing onto bridge.



Vegetation growing beside, under and onto bridge



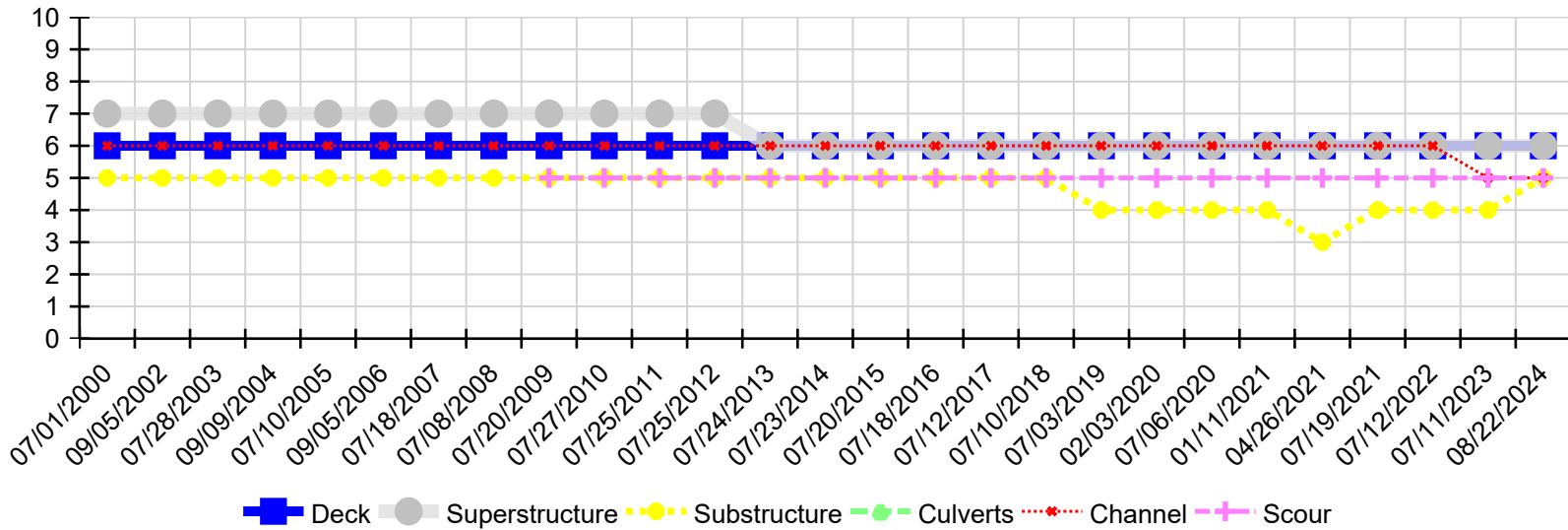
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Location: 4.0 Mi No Of Jct Sh 50

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Condition History



Inspection Date	Deck	Superstructure	Substructure	Culverts	Channel	Scour
08/22/2024	6	6	5	N	5	5
07/11/2023	6	6	4	N	5	5
07/12/2022	6	6	4	N	6	5
07/19/2021	6	6	4	N	6	5
04/26/2021	6	6	3	N	6	5
01/11/2021	6	6	4	N	6	5
07/06/2020	6	6	4	N	6	5
02/03/2020	6	6	4	N	6	5
07/03/2019	6	6	4	N	6	5
07/10/2018	6	6	5	N	6	5
07/12/2017	6	6	5	N	6	5
07/18/2016	6	6	5	N	6	5
07/20/2015	6	6	5	N	6	5
07/23/2014	6	6	5	N	6	5
07/24/2013	6	6	5	N	6	5
07/25/2012	6	7	5	N	6	5
07/25/2011	6	7	5	N	6	5
07/27/2010	6	7	5	N	6	5
07/20/2009	6	7	5	N	6	5
07/08/2008	6	7	5	N	6	N
07/18/2007	6	7	5	N	6	N
09/05/2006	6	7	5	N	6	N
07/10/2005	6	7	5	N	6	N
09/09/2004	6	7	5	N	6	N
07/28/2003	6	7	5	N	6	N
09/05/2002	6	7	5	N	6	N
07/01/2000	6	7	5	N	6	N