



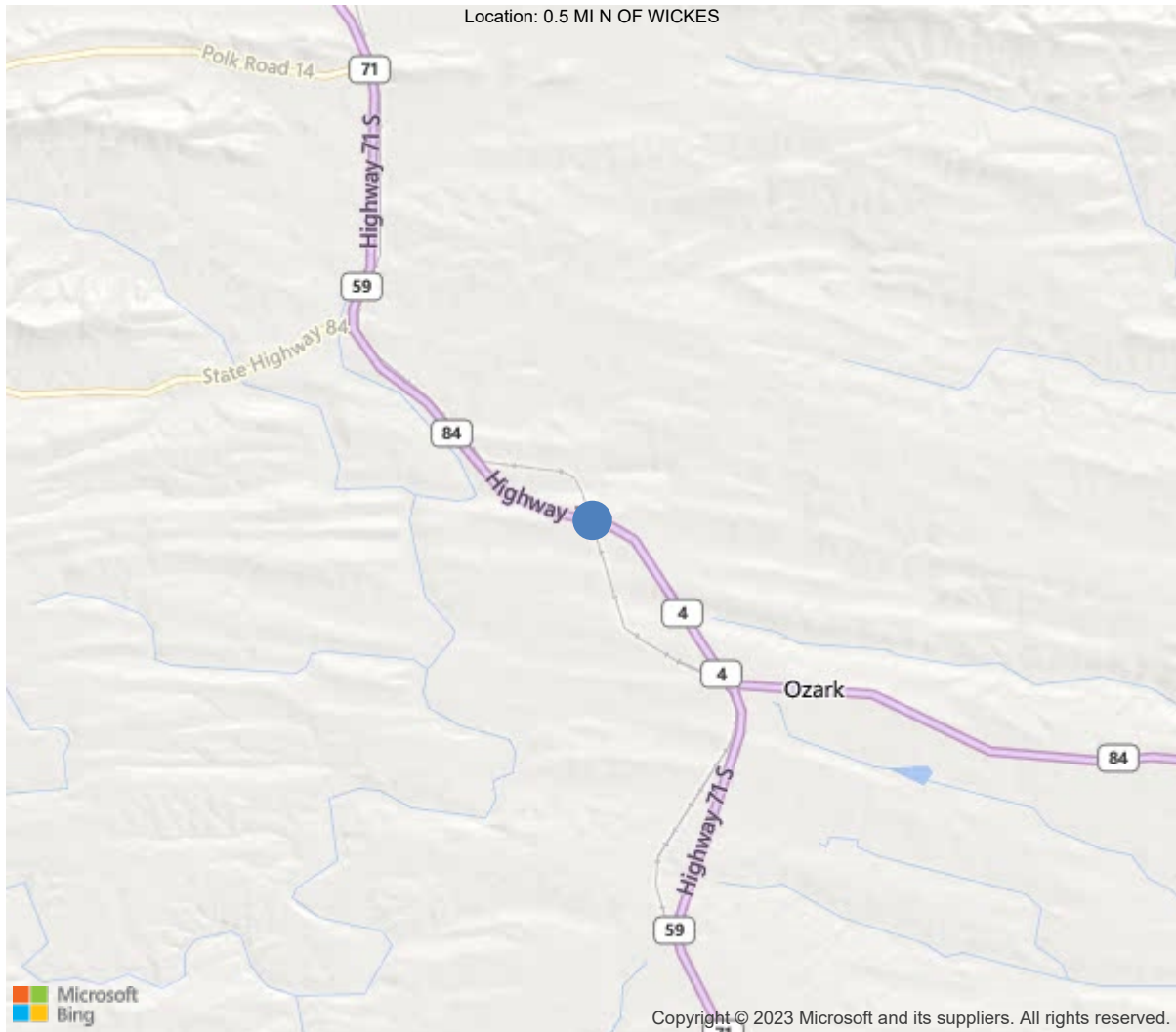
Latitude:34.31552, Longitude:-94.35118

Route:71 Section:08 Log:9.848

Arnold Road ID:57x71x8xA, Arnold Log mile:9.882

District 04, 113 - Polk County

Owner: 1 - State Highway Agency



34.31552, -94.35118





Asset #06766(Routine)

US 71-Polk Co. over Kansas City Southern RR

Location: 0.5 MI N OF WICKES

Team Lead: Jeff Jones, Inspection Date: 01/12/2022

IDENTIFICATION	
(1) State Names	5 - Arkansas
(8) Structure Number	06766
(5) Inventory Route	1
(2) Highway Agency District	04 - District 04
(3) County Code	113 - Polk County
(4) Place Code	0
(6) Features Intersected	Kansas City Southern RR
(7) Facility Carried	US 71-Polk Co.
(9) Location	0.5 MI N OF WICKES
(11) Mile Point	9.848 mi
(12) Base Highway Network	Yes
(13) LRS Inventory Rte & Subrte	0000071080
(16) Latitude	34.315517
(17) Longitude	-94.351181
(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	1 - Monolithic Concrete (concurrently pl
Type of Membrane	0 - None
Type of Deck Protection	1 - Epoxy Coated Reinforcing
AGE AND SERVICE	
(27) Year Built	2000
(106) Year Reconstructed	0
(42) Type of Service	12
On	1 - Highway
Under	2 - Railroad
(28) Lane	
On	2
Under	0
(29) Average Daily Traffic	4200
(30) Year of ADT	2014
(109) Truck ADT	20 %
(19) Bypass, Detour Length	5 mi
GEOMETRIC DATA	
(48) Length of Maximum Span	107 ft
(49) Structure Length	109 ft
(50) Curb or Sidewalk Width	
Left	0 ft
Right	0 ft
(51) Bridge Roadway Width Curb to Curb	39.4 ft
(52) Deck Width Out to Out	42.8 ft
(32) Approach Roadway Width (W/Shoulders)	39 ft
(33) Bridge Median	0 - No median
(34) Skew	30 Deg
(35) Structure Flared	0 - No flare
(10) Inventory Route Min Vert Clear	99.99 ft
(47) Inventory Route Total Horiz Clear	40.4 ft
(53) Min Vert Clear Over Bridge Rdwy	99.99 ft
(54) Min Vert Underclear	22.92 ft
Ref:	
(55) Min Lat Underclear RT	37.9 ft
Ref:	
(56) Min Lat Underclear LT	62.7 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	0 ft
(40) Navigation Horizontal Clearance	0 ft

CLASSIFICATION	
(112) NBIS Bridge Length	Y
(104) Highway System	1
(26) Functional Class	2 - Rural Principal Arterial -
(100) Defense Highway	1 - The inventory route is on
(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	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	7
(59) Superstructure	7
(60) Substructure	7
(61) Channel & Channel Protection	N
(62) Culverts	N
LOAD RATING AND POSTING	
(31) Design Load	5 - MS 18 / HS 20
(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	8
(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	
(114) Future ADT	5108
(115) Year of Future ADT	2028

INSPECTIONS *			
(90) Inspection Date	01/12/2022		
(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 #06766(Routine)

District: 04, County: 113 - Polk County

Team Lead: Jeff Jones, Inspection Date: 01/12/2022

**General Observation (False)**

01/12/2022 - JCJ & TJL - Routine Inspection conducted this date.

01/12/2022 - JCJ & TJL - Vertical Underclearance was actual field measured during this inspection.

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**A-46 - Asset Files**

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Asset #06766(Routine)

US 71-Polk Co. over Kansas City Southern RR

Location: 0.5 MI N OF WICKES

Team Lead: Jeff Jones, Inspection Date: 01/12/2022

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
12	Reinforced Concrete Deck	SF	4633	3887	733	13	0
1120	Efflorescence/Rust Staining	SF	12	0	12	0	0
1130	Cracking (RC and Other)	SF	334	0	321	13	0
1190	Abrasion/Wear (PSC/RC)	SF	400	0	400	0	0
(12) -There are a few isolated sealable longitudinal cracks in the driving surface of the deck. -There is light abrasion in the wheel paths. -There are transverse cracks with light efflorescence visible from the undersurface of the overhangs of the deck that appear to correspond with the joints in the parapet walls.							
107	Steel Open Girder/Beam	LF	545	486	36	23	0
1000	Corrosion	LF	59	0	36	23	0
515	Steel Protective Coating	SF	6955	6896	0	36	23
3430	Oxide Film Degradation Color/Texture Adherence(Steel Protective Coatings)	LF	59	0	0	36	23
(107) -A588 weathering steel with abnormal weathering and flaking rust on Beams # 1, 2, 3, 4, and 5 at Bent # 2 due to leaking joint seal at Bent # 2.  The superstructure has active corrosion with large slabs of flaking rust on the bottom flange and base of web adjacent to the North abutment where the leaking expansion joint seal discharges onto the girders.  There is heavy pitting to the bottom flange and base of web during this inspection.							
215	Reinforced Concrete Abutment	LF	229	211	18	0	0
1120	Efflorescence/Rust Staining	LF	11	0	11	0	0
1130	Cracking (RC and Other)	LF	7	0	7	0	0
(215) -There are a few vertical hairline cracks in the stem walls and back walls of both abutments. -There are a few vertical cracks with efflorescence.							
302	Compression Joint Seal	LF	100	4	0	96	0
2310	Leakage	LF	96	0	0	96	0
(302) -The deck joint seal at Bent # 2 has adhesion failure in areas and has dropped down approximately 1/2" in the Northbound lane during this inspection. -Stains and debris on the North abutment indicates that the deck joint seal leaks.							
310	Elastomeric Bearing	EA	10	7	3	0	0
1000	Corrosion	EA	3	0	3	0	0
515	Steel Protective Coating	SF	20	14	0	0	6
3430	Oxide Film Degradation Color/Texture Adherence(Steel Protective Coatings)	EA	6	0	0	0	6
(310) -The external loading plates at Bent # 2, Beams # 2, 3, & 4 have abnormal weathering with flaking rust.							
331	Reinforced Concrete Bridge Railing	LF	218	216	2	0	0
1130	Cracking (RC and Other)	LF	2	0	2	0	0

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
(331) -There are a few insignificant scrape marks with no apparent noteworthy deficiencies during this inspection.							

**Asset #06766(Routine)**



## US 71-Polk Co. over Kansas City Southern RR

**Location: 0.5 MI N OF WICKES**

**Team Lead: Jeff Jones, Inspection Date: 01/12/2022**

## Superstructure

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
107	Steel Open Girder/Beam	LF	545	486	36	23	0
1000	Corrosion	LF	59	0	36	23	0
515	Steel Protective Coating	SF	6955	6896	0	36	23
3430	Oxide Film Degradation Color/Texture Adherence(Steel Protective Coatings)	LF	59	0	0	36	23
<p>(107) -A588 weathering steel with abnormal weathering and flaking rust on Beams # 1, 2, 3, 4, and 5 at Bent # 2 due to leaking joint seal at Bent # 2.</p> <p>The superstructure has active corrosion with large slabs of flaking rust on the bottom flange and base of web adjacent to the North abutment where the leaking expansion joint seal discharges onto the girders.</p> <p>There is heavy pitting to the bottom flange and base of web during this inspection.</p>							

**Asset #06766(Routine)**



Asset #06766(Routine)

US 71-Polk Co. over Kansas City Southern RR

Location: 0.5 MI N OF WICKES

Team Lead: Jeff Jones, Inspection Date: 01/12/2022

## Culvert

ELEMENTS	DESCRIPTION	UNITS	TOTAL				
				CS1	CS2	CS3	CS4





Elevation.



Elevation.



Roadway.



Approach roadway facing North.





Deck. Typical.



Typical undersurface of the deck.



Typical driving surface of the deck.



Sealable deck cracking.





Deck. Typical.



Sealable Longitudinal cracking in the deck.



Deck soffit. Typical.



Deck soffit. Typical.





Deck soffit. Right overhang. Typical.



Sealable deck cracking.



Photo of Girder # 1. Active corrosion.



Superstructure. Typical.





Superstructure. Typical.



Bent # 1 photo. Typical.



Bent # 2. Typical.



Bent # 2. Typical.





Bent # 1 typical.



Bent # 1 backwall vertical cracking with efflorescence buildup.



Bent # 2 typical.



Bent 1 top of the backwall cracks.





Bent # 2 compression joint seal.



Expansion joint seal over Bent # 2.



Expansion joint seal over Bent # 1.



Bent # 1 compression joint seal.





Active corrosion with flaking rust. External loading plate of Bent # 2. Girder # 4 bearing.



Bent # 2 bearings. Typical.



Bent # 1 bearings typical.



Bent 2 Bearing 4 active corrosion with layers of flaking rust.



Right parapet wall. Typical.



Insignificant scrape marks.



**Maintenance Needs**

**Date Reported:** 06/06/2012  
**Priority:** D- Routine  
**Type of Work:** Repair (General)  
**Status:** Monitor  
**Component:** Element

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**Deficiency Description**

Driving Surface

The driving surface of the deck has a few random short duration sealable cracks.

**Remarks**

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Sealable Longitudinal cracks in the wheel paths.



The driving surface of the deck has a few random short duration sealable cracks.

**Date Reported:** 01/27/2014  
**Priority:** D- Routine  
**Type of Work:** Repair (General)  
**Status:** Monitor  
**Component:** Element

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**Deficiency Description**

Expansion joint seals:

- The expansion joint seals leak.
- Compression joint seal at the North bridge end is losing its adhesion.

**Remarks**

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Expansion joint seal over Bent # 2.



Compression joint seal at the North bridge end is losing its adhesion and is leaking through to the substructure.





Asset #06766(Routine)

US 71-Polk Co. over Kansas City Southern RR

Location: 0.5 MI N OF WICKES

Team Lead: Jeff Jones, Inspection Date: 01/12/2022

**Date Reported:** 01/13/2022  
**Priority:** D- Routine  
**Type of Work:** (Inactive) (Inactive) 1 - Clean  
**Status:** Open  
**Component:** Element

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#### Deficiency Description

There is debris accumulation in the gutters.

#### Remarks

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Debris accumulation in the gutters.



**Date Reported:** 01/13/2022  
**Priority:** D- Routine  
**Type of Work:** (Inactive) (Inactive) 1 - Clean  
**Status:** Open  
**Component:** Element

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**Deficiency Description**

External loading plate of Bent # 2 bearings have active corrosion with flaking rust.

**Remarks**

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Active corrosion with flaking rust. External loading plate of Bent # 2. Girder # 4 bearing.

**Date Reported:** 01/13/2022  
**Priority:** D- Routine  
**Type of Work:** (Inactive) (Inactive) 1 - Clean  
**Status:** Open  
**Component:** Element

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#### Deficiency Description

The superstructure has active corrosion with large slabs of flaking rust on the bottom flange and base of web adjacent to the North abutment where the leaking expansion joint seal discharges onto the girders.

#### Remarks

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The superstructure has active corrosion with large slabs of flaking rust on the bottom flange and base of web adjacent to the North abutment where the leaking expansion joint seal discharge onto the girders. Photo of Girder # 1.



Active corrosion. Bent # 2, Girder # 4.



**Asset #06766(Routine)**

**US 71-Polk Co. over Kansas City Southern RR**

**Location: 0.5 MI N OF WICKES**

**Team Lead: Jeff Jones, Inspection Date: 01/12/2022**

## **Routine Maintenance**

Check Box Maintenance Items

<b>Type of Maintenance</b>	<b>Is recommended?</b>
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	





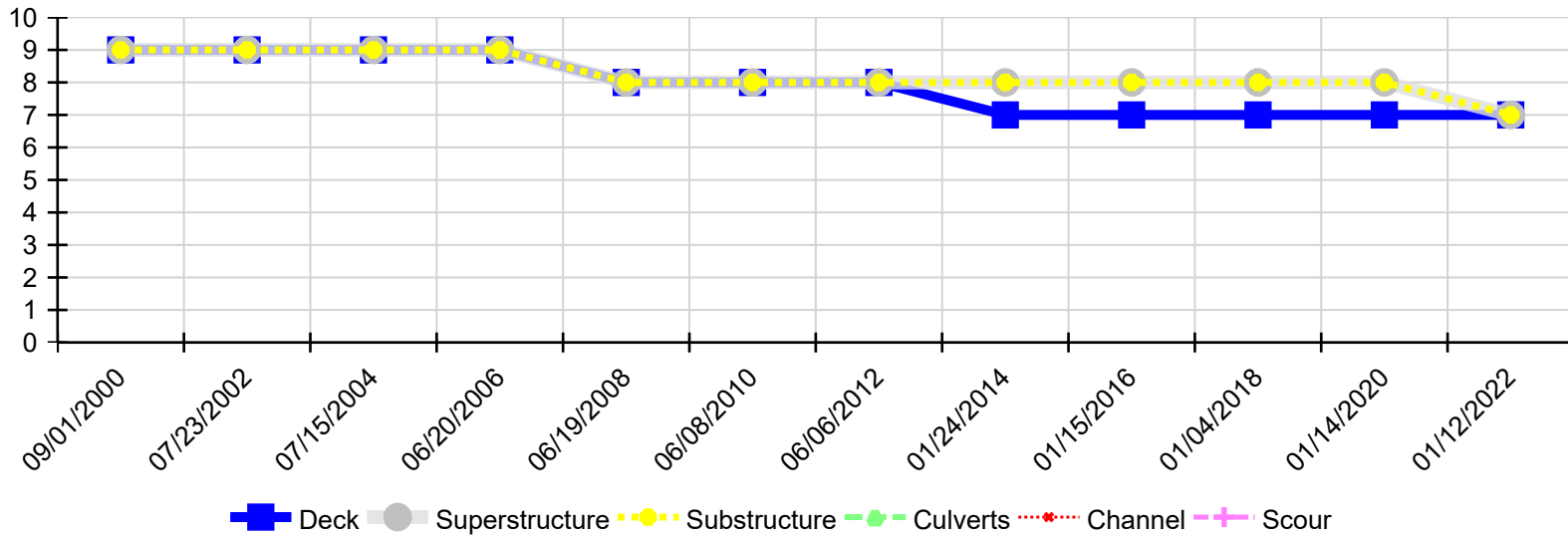
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US 71-Polk Co. over Kansas City Southern RR

Location: 0.5 MI N OF WICKES

Team Lead: Jeff Jones, Inspection Date: 01/12/2022

Condition History



Inspection Date	Deck	Superstructure	Substructure	Culverts	Channel	Scour
01/12/2022	7	7	7	N	N	N
01/14/2020	7	8	8	N	N	N
01/04/2018	7	8	8	N	N	N
01/15/2016	7	8	8	N	N	N
01/24/2014	7	8	8	N	N	N
06/06/2012	8	8	8	N	N	N
06/08/2010	8	8	8	N	N	N
06/19/2008	8	8	8	N	N	N
06/20/2006	9	9	9	N	N	N
07/15/2004	9	9	9	N	N	N
07/23/2002	9	9	9	N	N	N
09/01/2000	9	9	9	N	N	N