



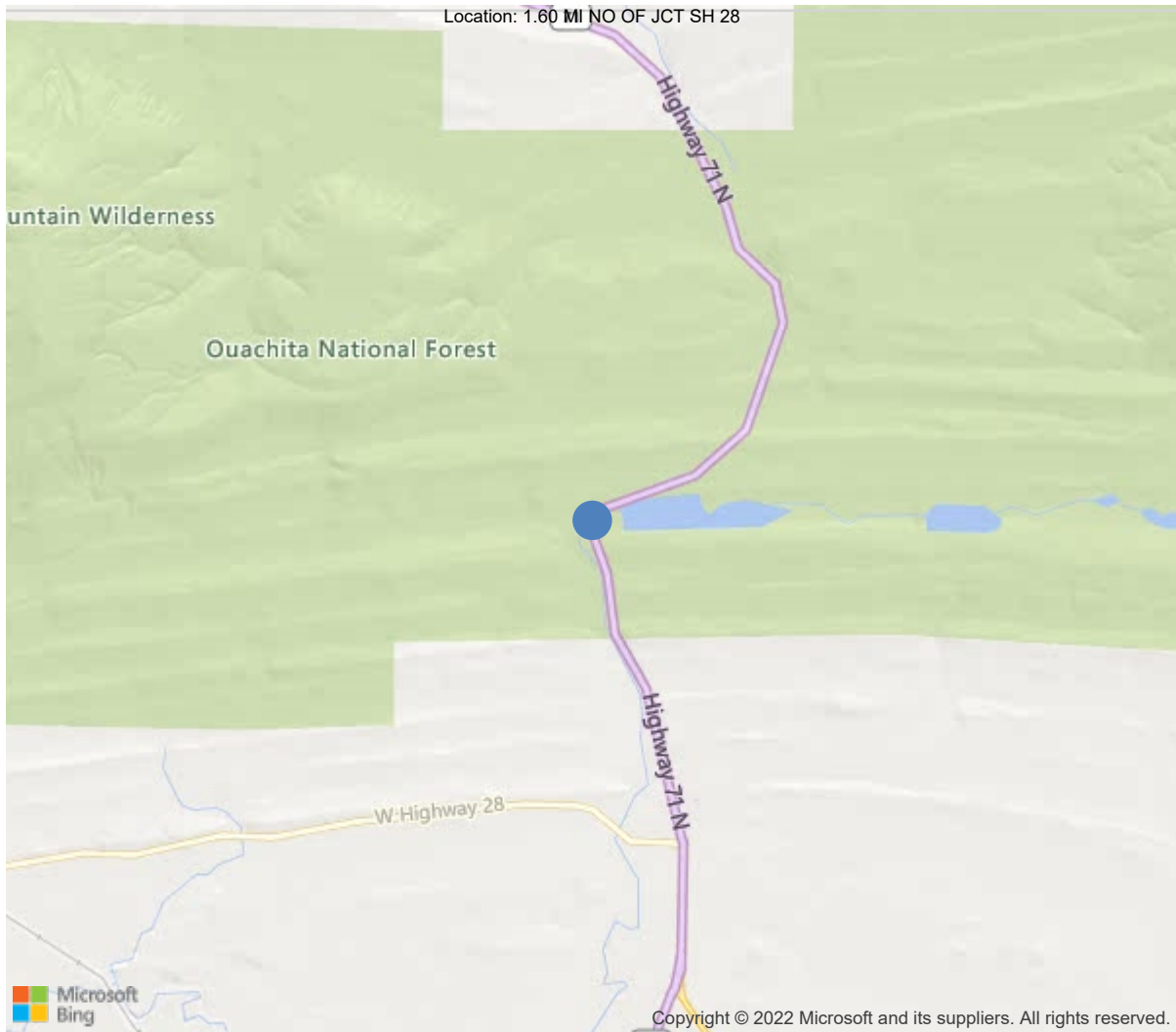
Latitude:34.96329, Longitude:-94.11000

Route:71 Section:10 Log:26.83

Arnold Road ID:63x71x10xA, Arnold Log mile:26.829

District 04, 127 - Scott County

Owner: 1 - State Highway Agency



34.96329, -94.11000



Asset #00322(Routine)

US Highway 71 over Sq. Rock Cr. - Scott Co.

Location: 1.60 MI NO OF JCT SH 28

Team Lead: Jeff Jones, Inspection Date: 07/07/2021

IDENTIFICATION	
(1) State Names	5 - Arkansas
(8) Structure Number	00322
(5) Inventory Route	1
(2) Highway Agency District	04 - District 04
(3) County Code	127 - Scott County
(4) Place Code	0
(6) Features Intersected	Sq. Rock Cr. - Scott Co.
(7) Facility Carried	US Highway 71
(9) Location	1.60 MI NO OF JCT SH 28
(11) Mile Point	26.83 mi
(12) Base Highway Network	Yes
(13) LRS Inventory Rte & Subrte	0000071100
(16) Latitude	34.96329
(17) Longitude	-94.11
(98) Border Bridge State Code	
(99) Border Bridge Structure No.	
STRUCTURE TYPE AND MATERIAL	
(43) Main Structure Type	11
Material	1 - Concrete
Type	1 - Slab
(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	2 - Integral Concrete (separate non-mo
Type of Membrane	0 - None
Type of Deck Protection	0 - None
AGE AND SERVICE	
(27) Year Built	1928
(106) Year Reconstructed	1981
(42) Type of Service	15
On	1 - Highway
Under	5 - Waterway
(28) Lane	
On	2
Under	0
(29) Average Daily Traffic	5500
(30) Year of ADT	2014
(109) Truck ADT	1 %
(19) Bypass, Detour Length	15 mi
GEOMETRIC DATA	
(48) Length of Maximum Span	25 ft
(49) Structure Length	50 ft
(50) Curb or Sidewalk Width	
Left	0 ft
Right	0 ft
(51) Bridge Roadway Width Curb to Curb	44 ft
(52) Deck Width Out to Out	46.8 ft
(32) Approach Roadway Width (W/Shoulders)	35.1 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	45.3 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	1
(26) Functional Class	2 - Rural Principal Arterial -
(100) Defense Highway	2 - 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	5
(59) Superstructure	5
(60) Substructure	5
(61) Channel & Channel Protection	7
(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	53
(65) Inventory Rating Method	1 - Load Factor(LF)
(66) Inventory Rating	
Type	
Rating	32
(70) Bridge Posting	5 - Equal to or above legal loads
(41) Structure Open/Posted/Closed	A - Open, no restriction
APPRAISAL	
(67) Structural Evaluation	5
(68) Deck Geometry	6
(69) Clearances, Vertical/Horizontal	N
(71) Waterway Adequacy	8
(72) Approach Roadway Alignment	6
(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	6954
(115) Year of Future ADT	2028

INSPECTIONS *			
(90) Inspection Date	07/07/2021		
(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 #00322(Routine)

District: 04, County: 127

Team Lead: Jeff Jones, Inspection Date: 07/07/2021

A-46 - Asset Files

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General Observation (False)

07/07/2021 - JCJ & TJL - Routine Inspection conducted this date.

06/28/2019 - EJW & JPW - Underwater Type II Inspection conducted on this date. Wading and probing indicates the footings have cover. No apparent scour problems at this inspection.



Asset #00322(Routine)

US Highway 71 over Sq. Rock Cr. - Scott Co.

Location: 1.60 MI NO OF JCT SH 28

Team Lead: Jeff Jones, Inspection Date: 07/07/2021

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
16	Reinforced Concrete Top Flange	SF	975	919	52	4	0
1090	Exposed Rebar	SF	2	0	0	2	0
1120	Efflorescence/Rust Staining	SF	54	0	52	2	0
510	Wearing Surfaces	SF	975	293	612	33	37
3210	Delam/Spall/Patched Area/Pothole	SF	52	0	12	3	37
3220	Crack (Wearing Surface)	SF	630	0	600	30	0
(16) Wearing surface- -The concrete driving surface is breaking apart over both abutments and over Bent # 2 in the northbound lane. -The concrete wearing surface is audible and abrades on the bridge deck under traffic. -The driving surface of the deck has map cracking that has been sealed with epoxy in the past. -Construction joint sealant on the driving surface of the deck is deteriorated. Deck soffit -There are areas with map cracking with efflorescence adjacent to Bent # 3 that are visible from the undersurface of the deck. -There are isolated transverse cracks with rust stains and efflorescence at variable spacing that are visible from the undersurface of the deck. -There are spalls with exposed reinforcing steel in the expansion dam of Span # 1 over Bent # 2 that are visible from the undersurface of the deck. -Span # 2 Deck soffit. Spall with exposed reinforcing steel in Bay # 2 adjacent to Bent # 3. (510-16) Wearing surface- -The concrete driving surface is breaking apart over both abutments and over Bent # 2 in the northbound lane. -The concrete wearing surface is audible and abrades on the bridge deck under traffic. -The driving surface of the deck has map cracking that has been sealed with epoxy in the past. -Construction joint sealant on the driving surface of the deck is deteriorated.							
38	RC Slab	SF	1367	1211	154	2	0
1080	Delamination/Spall/Patched Area	SF	48	0	46	2	0
1120	Efflorescence/Rust Staining	SF	3	0	3	0	0
1130	Cracking (RC and Other)	SF	105	0	105	0	0
(38) -There are delaminated areas along the exterior edges of the slab span sections that are visible from the undersurface of the deck. -There are a few isolated transverse cracks at variable spacing. - There are 2 spalls with exposed reinforcing steel in the Span # 2 slab soffit adjacent to Bent # 2.							
110	Reinforced Concrete Open Girder/Beam	LF	150	139	11	0	0
1120	Efflorescence/Rust Staining	LF	6	0	6	0	0
1130	Cracking (RC and Other)	LF	5	0	5	0	0
(110) -Span # 2, Girder # 3 has hairline map cracking with efflorescence.							
205	Reinforced Concrete Column	EA	6	0	5	1	0
1090	Exposed Rebar	EA	1	0	0	1	0
1130	Cracking (RC and Other)	EA	1	0	1	0	0



Asset #00322(Routine)

US Highway 71 over Sq. Rock Cr. - Scott Co.

Location: 1.60 MI NO OF JCT SH 28

Team Lead: Jeff Jones, Inspection Date: 07/07/2021

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
1190	Abrasion/Wear (PSC/RC)	EA	4	0	4	0	0
(205) -Bent # 2, Column # 4 has a 20" spall with exposed reinforcing steel with a 36" delaminated area above the spall. -Bent # 2, Column # 4 has vertical cracking with a delaminated area on the the Span # 1 side approximately half way up the column. -There is light to medium abrasion at the base of the original columns.							
215	Reinforced Concrete Abutment	LF	216	163	44	9	0
1080	Delamination/Spall/Patched Area	LF	4	0	3	1	0
1090	Exposed Rebar	LF	3	0	0	3	0
1120	Efflorescence/Rust Staining	LF	16	0	12	4	0
1130	Cracking (RC and Other)	LF	27	0	26	1	0
1190	Abrasion/Wear (PSC/RC)	LF	3	0	3	0	0
(215) -There are vertical cracks in the widened portions of the abutments. -Bent # 1 has map cracking with efflorescence under and adjacent to the exterior girders. -Bent # 3 has map cracking with efflorescence under and adjacent to the exterior girders. -Map cracking is most prominent under Bay # 2 of Bent # 3. -There is a vertical crack with two 2" X 10" areas of spalling with exposed reinforcing steel on the Right side of Bent # 3. -Bent # 3 abutment crack measured 0.040" during this inspection. -The wing walls have random vertical and diagonal hairline cracks.							
220	Reinforced Concrete Pile Cap/Footing	LF	250	250	0	0	0
(220) -Footings have cover with no apparent scour problems during this inspection.							
234	Reinforced Concrete Pier Cap	LF	47	29	7	11	0
1080	Delamination/Spall/Patched Area	LF	12	0	3	9	0
1090	Exposed Rebar	LF	2	0	0	2	0
1120	Efflorescence/Rust Staining	LF	1	0	1	0	0
1130	Cracking (RC and Other)	LF	3	0	3	0	0
(234) -The Span # 1 side of Bent # 2 there is a 3' delaminated area in the Right side of the cap adjacent to Girder # 3. -The Span # 1 side of Bent # 2 there is a 8" tall spall with exposed reinforcing steel on the Right side of the cap adjacent to the old section of the cap. -There is map cracking with efflorescence adjacent to the construction joints where the cap was widened.							
301	Pourable Joint Seal	LF	55	0	0	55	0
2310	Leakage	LF	29	0	0	29	0
2320	Seal Adhesion	LF	5	0	0	5	0
2350	Debris Impaction	LF	21	0	0	21	0
(301) -The joint seals are deteriorated and leak. -Debris accumulation in the joints typical in the gutters.							
331	Reinforced Concrete Bridge Railing	LF	100	53	27	20	0

US Highway 71 over Sq. Rock Cr. - Scott Co.

Location: 1.60 MI NO OF JCT SH 28

Team Lead: Jeff Jones, Inspection Date: 07/07/2021

Deck

[illegible]

Asset #00322(Routine)

Substructure

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
205	Reinforced Concrete Column	EA	6	0	5	1	0
1090	Exposed Rebar	EA	1	0	0	1	0
1130	Cracking (RC and Other)	EA	1	0	1	0	0
1190	Abrasion/Wear (PSC/RC)	EA	4	0	4	0	0
(205) -Bent # 2, Column # 4 has a 20" spall with exposed reinforcing steel with a 36" delaminated area above the spall. -Bent # 2, Column # 4 has vertical cracking with a delaminated area on the the Span # 1 side approximately half way up the column. -There is light to medium abrasion at the base of the original columns.							
215	Reinforced Concrete Abutment	LF	216	163	44	9	0
1080	Delamination/Spall/Patched Area	LF	4	0	3	1	0
1090	Exposed Rebar	LF	3	0	0	3	0
1120	Efflorescence/Rust Staining	LF	16	0	12	4	0
1130	Cracking (RC and Other)	LF	27	0	26	1	0
1190	Abrasion/Wear (PSC/RC)	LF	3	0	3	0	0
(215) -There are vertical cracks in the widened portions of the abutments. -Bent # 1 has map cracking with efflorescence under and adjacent to the exterior girders. -Bent # 3 has map cracking with efflorescence under and adjacent to the exterior girders. -Map cracking is most prominent under Bay # 2 of Bent # 3. -There is a vertical crack with two 2" X 10" areas of spalling with exposed reinforcing steel on the Right side of Bent # 3. -Bent # 3 abutment crack measured 0.040" during this inspection. -The wing walls have random vertical and diagonal hairline cracks.							
220	Reinforced Concrete Pile Cap/Footing	LF	250	250	0	0	0
(220) -Footings have cover with no apparent scour problems during this inspection.							
234	Reinforced Concrete Pier Cap	LF	47	29	7	11	0
1080	Delamination/Spall/Patched Area	LF	12	0	3	9	0
1090	Exposed Rebar	LF	2	0	0	2	0
1120	Efflorescence/Rust Staining	LF	1	0	1	0	0
1130	Cracking (RC and Other)	LF	3	0	3	0	0
(234) -The Span # 1 side of Bent # 2 there is a 3' delaminated area in the Right side of the cap adjacent to Girder # 3. -The Span # 1 side of Bent # 2 there is a 8" tall spall with exposed reinforcing steel on the Right side of the cap adjacent to the old section of the cap. -There is map cracking with efflorescence adjacent to the construction joints where the cap was widened.							



Asset #00322(Routine)

US Highway 71 over Sq. Rock Cr. - Scott Co.

Location: 1.60 MI NO OF JCT SH 28

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Culvert

ELEMENTS	DESCRIPTION	UNITS	TOTAL				
				CS1	CS2	CS3	CS4



Elevation.



Approach roadway facing South.



Deck. Typical.



Span # 1 deck soffit. Typical.



South abutment driving surface.



Bent 2 Column 4 spalling with exposed reinforcing steel.



Bent 3 Rt spalling with exposed reinforcing steel.



North bridge end.



Bent # 3 Lt cracking with efflorescence.



Bent 3 vertical crack.



Span 2 Bay 2 spalling with exposed reinforcing steel.



Bent 1 Lt cracking with efflorescence.



Span 2 Rt concrete delamination along the edge of the slab span.



Bent 2 over Col 4 concrete delamination and exposed reinforcing steel.



Failing joint sealant.



Roadway



Span 2 cracking with efflorescence buildup.



North approach asphalt repair.



Seal adhesion failure.



Elevation



Bent 2 deck haunch spalling with exposed reinforcing steel.



Span 1 Lt concrete delamination.



Span # 2 wearing surface. Typical.



Span # 1 wearing surface.



Span # 1 wearing surface.



Span # 2 deck soffit adjacent to Bent # 3.



Span # 1 deck soffit. Typical.



Span # 1 Deck soffit. Spall with exposed reinforcing steel in Bay # 2 adjacent to Bent # 3.



Wearing surface. North bridge end.



Span # 1 deck wearing surface. Typical.



Slab. Typical.



Slab soffit. Right side of Span # 2. Delaminated areas.



Span # 2 slab soffit adjacent to Bent # 2. Spall with exposed reinforcing steel and delaminated areas.



Span # 1 superstructure. Typical.



Span # 2 superstructure. Typical.



Span # 1 superstructure. Typical.



Bent # 2 columns. Typical.



Bent # 2. Column # 4. Spall with exposed reinforcing steel.



Left side of Bent # 1. Typical.



Right side of Bent # 1. Typical.



Right side of Bent # 3. Typical.



Left side of Bent # 3. Typical.



There is a vertical crack with two 2" X 10" areas of spalling with exposed reinforcing steel on the Right side of Bent # 3.



Right construction joint adjacent to Girder # 3.



Left side of Bent # 2.



Right side of Bent # 2. Typical.



Expansion joint sealant over Bent # 2.



Left parapet. Typical.



Diagonal cracking in the Left parapet of Span # 1.



Left bridge railing in Span # 1 over Bent # 2 has collision damage. Base of wall is fractured at the deck juncture and the top is leaning out of alignment 1 1/2".

Maintenance Needs

Date Reported: 10/04/2011
Priority: B - Pressing
Type of Work: Repair (General)
Status: Open
Component: Element

Deficiency Description

Bridge Deck

Driving surface of the deck is breaking apart.
Deck joint sealant is deteriorated.
The deck haunches over Bent # 2 have spalling with exposed reinforcing steel.
The concrete wearing surface is audible and abrades on the bridge deck under traffic.

Remarks



Bent # 2 deck haunch spalling with exposed reinforcing steel.



Failing joint sealant.



Asset #00322(Routine)

US Highway 71 over Sq. Rock Cr. - Scott Co.

Location: 1.60 MI NO OF JCT SH 28

Team Lead: Jeff Jones, Inspection Date: 07/07/2021



North bridge end.



North end of Bridge deck wearing surface.



South end of bridge deck wearing surface.

Date Reported: 10/04/2011
Priority: D- Routine
Type of Work: Repair (General)
Status: Open
Component: Element

Deficiency Description

Bridge Deck. Soffit.

The exterior edges of the deck undersurface have large delaminated areas.

There are a few isolated areas with shallow spalling with exposed reinforcing steel on the undersurface between the girders over Bent # 2 and in Span # 2, Bay # 2.

Remarks



Span # 2 Right concrete delamination along the edge of the slab span.



Span # 2 Bay # 2 spalling with exposed reinforcing steel.



Span # 1 Left concrete delamination.



Span # 2 Bay # 2 deck soffit.



Span # 1 over Bent # 2 soffit of expansion dam.



Asset #00322(Routine)

US Highway 71 over Sq. Rock Cr. - Scott Co.

Location: 1.60 MI NO OF JCT SH 28

Team Lead: Jeff Jones, **Inspection Date:** 07/07/2021

Date Reported: 10/04/2011
Priority: D- Routine
Type of Work: Repair (General)
Status: Open
Component: Substructure

Deficiency Description

Substructure

Bent # 2, Column # 4 has a 12" spall with exposed reinforcing steel.
Bent # 2 Cap has a 24" delaminated area adjacent to Girder # 3.

Remarks



Bent # 2 over Column # 4 concrete delamination and exposed reinforcing steel.



Bent # 2 Column # 4 spalling with exposed reinforcing steel.



Bent # 2 column # 4. Spall with exposed reinforcing steel.



Span # 1 side of Bent # 2 cap. Spall with exposed reinforcing steel and delaminated areas.



Asset #00322(Routine)

US Highway 71 over Sq. Rock Cr. - Scott Co.

Location: 1.60 MI NO OF JCT SH 28

Team Lead: Jeff Jones, **Inspection Date:** 07/07/2021

Date Reported: 06/27/2019
Priority: D- Routine
Type of Work: Repair (General)
Status: Open
Component: Element

Deficiency Description

Substructure

The abutments have wide vertical cracks and spalling with exposed reinforcing steel.

Remarks



Bent # 3 Rt spalling with exposed reinforcing steel.



Bent # 3 vertical crack.



Bent # 3 abutment crack measured 0.040" during this inspection.



Asset #00322(Routine)

US Highway 71 over Sq. Rock Cr. - Scott Co.

Location: 1.60 MI NO OF JCT SH 28

Team Lead: Jeff Jones, Inspection Date: 07/07/2021

Date Reported: 07/08/2021
Priority: C - Important
Type of Work: Repair (General)
Status: Open
Component: Approach

Deficiency Description

South approach roadway.

The asphalt is breaking apart at the South bridge end.

Remarks



South approach roadway.

The asphalt is breaking apart at the South bridge end.

Date Reported: 07/08/2021
Priority: D- Routine
Type of Work: Repair (General)
Status: Open
Component: Element

Deficiency Description

Joint sealant is deteriorated with debris accumulation in the joints.

Remarks



Joint sealant is deteriorated with debris accumulation in the joints.

Date Reported: 07/08/2021
Priority: C - Important
Type of Work: Repair (General)
Status: Open
Component: Element

Deficiency Description

Left bridge railing in Span # 1 over Bent # 2 has collision damage. Base of wall is fractured at the deck juncture and the top is leaning out of alignment 1 1/2".

Remarks



Left bridge railing in Span # 1 over Bent # 2 has collision damage. Base of wall is fractured at the deck juncture and the top is leaning out of alignment 1 1/2".

Date Reported: 07/08/2021
Priority: C - Important
Type of Work: Repair (General)
Status: Open
Component: Approach

Deficiency Description

The Northwest approach guardrail is not attached to the Bridge parapet wall.

Remarks



The Northwest approach guardrail is not attached to the Bridge parapet wall.



Asset #00322(Routine)

US Highway 71 over Sq. Rock Cr. - Scott Co.

Location: 1.60 MI NO OF JCT SH 28

Team Lead: Jeff Jones, **Inspection Date:** 07/07/2021

Routine Maintenance

Check Box Maintenance Items

Data Field	Value
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 - Hydo and LMC Advised	



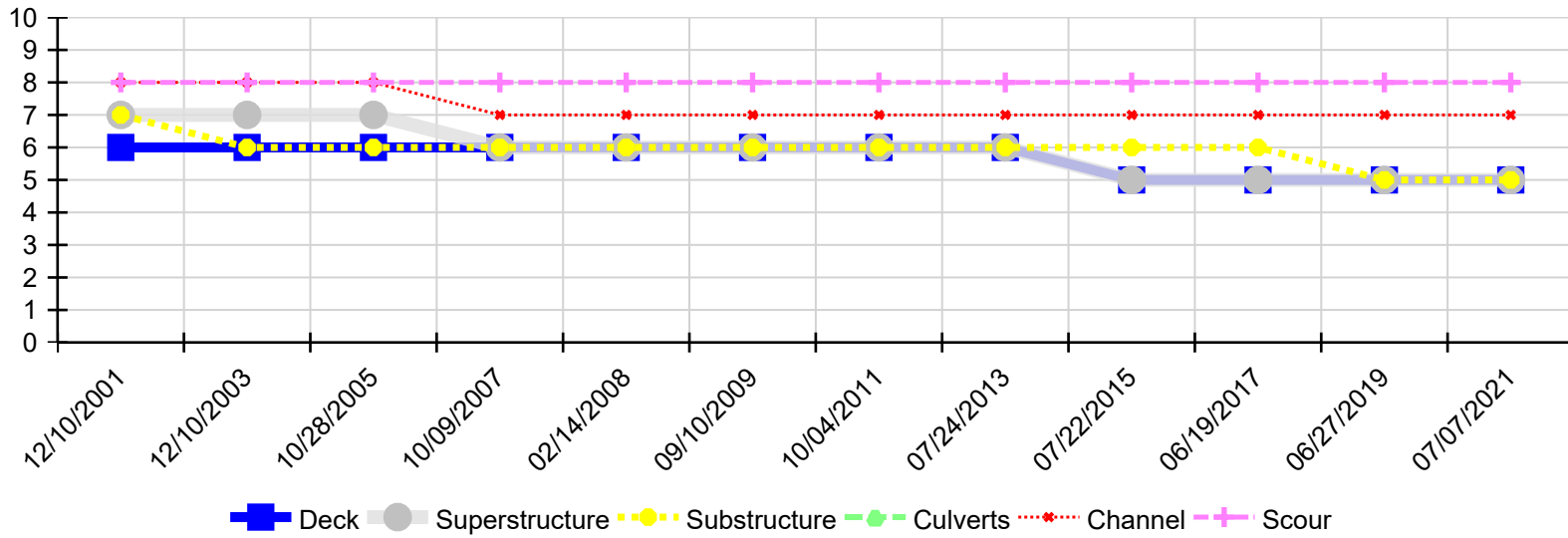
Asset #00322(Routine)

US Highway 71 over Sq. Rock Cr. - Scott Co.

Location: 1.60 MI NO OF JCT SH 28

Team Lead: Jeff Jones, Inspection Date: 07/07/2021

Condition History



Inspection Date	Deck	Superstructure	Substructure	Culverts	Channel	Scour
07/07/2021	5	5	5	N	7	8
06/27/2019	5	5	5	N	7	8
06/19/2017	5	5	6	N	7	8
07/22/2015	5	5	6	N	7	8
07/24/2013	6	6	6	N	7	8
10/04/2011	6	6	6	N	7	8
09/10/2009	6	6	6	N	7	8
02/14/2008	6	6	6	N	7	8
10/09/2007	6	6	6	N	7	8
10/28/2005	6	7	6	N	8	8
12/10/2003	6	7	6	N	8	8
12/10/2001	6	7	7	N	8	8