



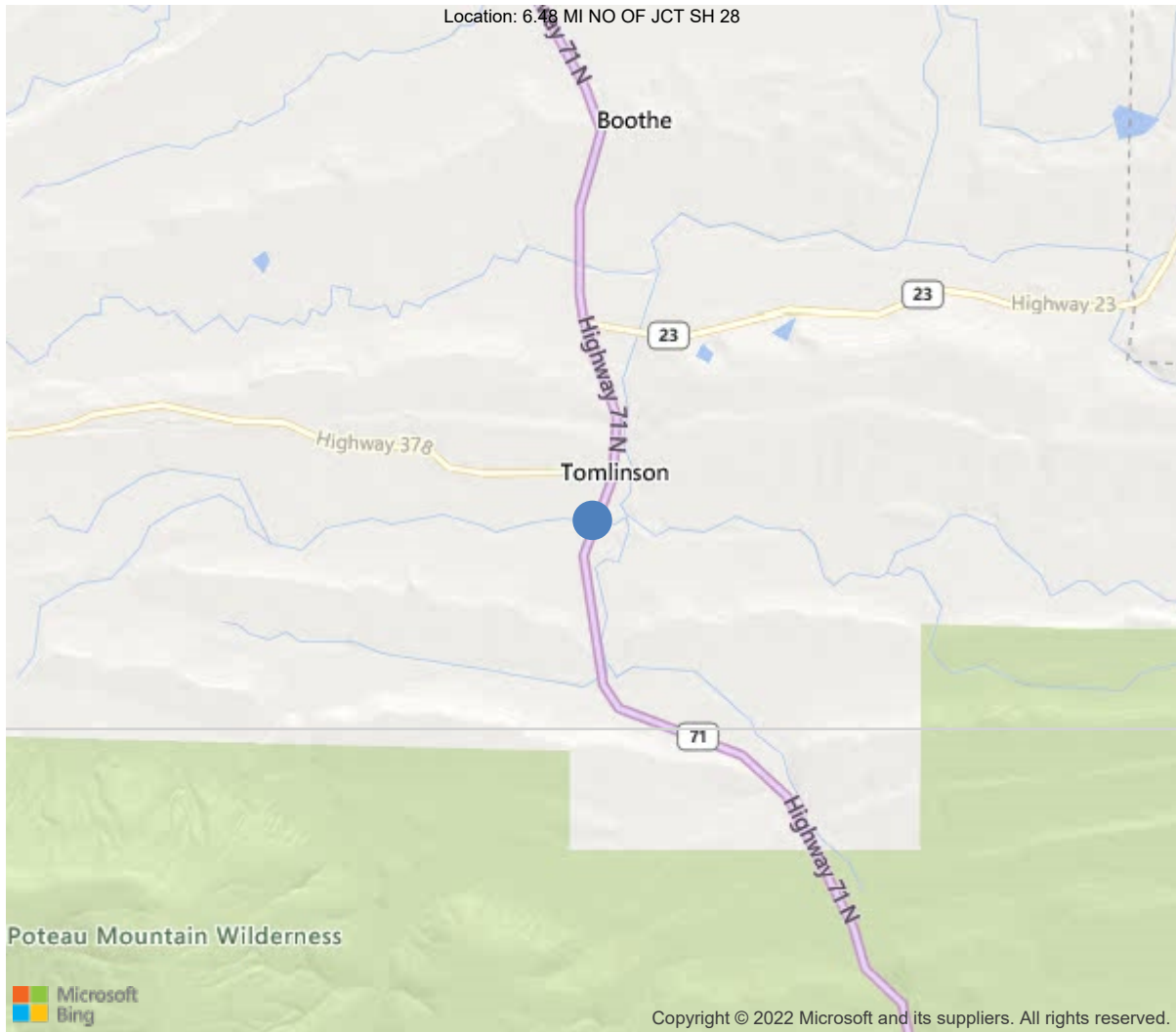
Latitude:35.01502, Longitude:-94.12109

Route:71 Section:10 Log:31.64

Arnold Road ID:63x71x10xA, Arnold Log mile:31.627

District 04, 127 - Scott County

Owner: 1 - State Highway Agency



35.01502, -94.12109



Asset #00319(Routine)

US Highway 71 over Brushy Creek - Scott Co.

Location: 6.48 MI NO OF JCT SH 28

Team Lead: Jeff Jones, Inspection Date: 05/24/2021

IDENTIFICATION	
(1) State Names	5 - Arkansas
(8) Structure Number	00319
(5) Inventory Route	1
(2) Highway Agency District	04 - District 04
(3) County Code	127 - Scott County
(4) Place Code	0
(6) Features Intersected	Brushy Creek - Scott Co.
(7) Facility Carried	US Highway 71
(9) Location	6.48 MI NO OF JCT SH 28
(11) Mile Point	31.64 mi
(12) Base Highway Network	No
(13) LRS Inventory Rte & Subrte	0000000000
(16) Latitude	35.01502
(17) Longitude	-94.12109
(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	35 ft
(49) Structure Length	70 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)	33.1 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	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	48
(65) Inventory Rating Method	1 - Load Factor(LF)
(66) Inventory Rating	
Type	
Rating	29
(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	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	6954
(115) Year of Future ADT	2028

INSPECTIONS *			
(90) Inspection Date	05/24/2021		
(91) Frequency	24		
(92) Critical Feature Inspection	Done	Freq. (Mon)	Date
A: Fracture Critical Detail	No		
B: Underwater Inspection	No		
C: Other Special Inspection			
<p>* 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.</p>			



Asset #00319(Routine)

District: 04, County: 127

Team Lead: Jeff Jones, Inspection Date: 05/24/2021

A-46 - Asset Files

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General Observation (False)

05/24/2021 - JCJ & TJL- Routine Inspection conducted this date.

06/27/2019 - EJW & JPW - Underwater Inspection Wading and probing indicates the footings have cover with no apparent scour problems at this inspection.



Asset #00319(Routine)

US Highway 71 over Brushy Creek - Scott Co.

Location: 6.48 MI NO OF JCT SH 28

Team Lead: Jeff Jones, Inspection Date: 05/24/2021

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
16	Reinforced Concrete Top Flange	SF	1365	893	464	8	0
1090	Exposed Rebar	SF	8	0	0	8	0
1120	Efflorescence/Rust Staining	SF	464	0	464	0	0
510	Wearing Surfaces	SF	1365	1016	95	89	165
3210	Delam/Spall/Patched Area/Pothole	SF	192	0	0	27	165
3220	Crack (Wearing Surface)	SF	157	0	95	62	0
(16) Wearing Surface: -The concrete driving surface has lost bond with the deck and is audible when impacted by traffic. -The driving surface of the deck has been repaired by state maintenance forces in the past. Rigid concrete overlay repair was made in panel sections approximately half a travel lane wide to approximately mid-span of each span with offset construction joints along the length of the bridge. -Some repair panels have transverse cracks and are breaking apart in several areas. -Differential elevation in the wearing surface indicate possible reduction in section of the deck due to abrasion between the wearing surface and the original deck. Undersurface: -Both spans have map cracking with efflorescence and leaching visible from the undersurface of the deck. -Span # 1, Bay # 1 has shallow spalls with exposed reinforcing steel visible from the undersurface of the deck. -Span # 1 has some transverse and map cracks with efflorescence. -Span # 2 has map cracking with efflorescence visible from the undersurface of the deck under the driving lanes.							
38	RC Slab	SF	1914	1160	730	24	0
1080	Delamination/Spall/Patched Area	SF	47	0	47	0	0
1090	Exposed Rebar	SF	24	0	0	24	0
1120	Efflorescence/Rust Staining	SF	18	0	18	0	0
1130	Cracking (RC and Other)	SF	665	0	665	0	0
(38) -Structure has been widened at the inlet and outlet ends with a concrete slab span. -There are spalls with exposed reinforcing steel and delaminated areas along the exterior edges that are visible from the undersurface of the slab span portions of the deck. -The driving surface has map cracking typical in both spans.							
110	Reinforced Concrete Open Girder/Beam	LF	210	43	167	0	0
1080	Delamination/Spall/Patched Area	LF	2	0	2	0	0
1090	Exposed Rebar	LF	1	0	1	0	0
1120	Efflorescence/Rust Staining	LF	110	0	110	0	0
1130	Cracking (RC and Other)	LF	54	0	54	0	0



Asset #00319(Routine)

US Highway 71 over Brushy Creek - Scott Co.

Location: 6.48 MI NO OF JCT SH 28

Team Lead: Jeff Jones, Inspection Date: 05/24/2021

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
(110) -Span # 1, Girder # 2 has a longitudinal hairline crack with light efflorescence at deck juncture. -Span # 1, Girder # 3 has a shallow softball sized spall with no exposed reinforcing steel at the base of girder located 6" from Bent # 1. -Span # 2, Girder # 2 has map and longitudinal cracking with efflorescence at the deck / girder juncture and along the bottom surface of the girder. -Span # 2, Girder # 1 has a spalled area with exposed reinforcing steel visible on the haunch. -Repair to the 10" spall with exposed reinforcing steel with initial section loss at Bent # 2, Girder # 3 is still holding during this inspection.							
205	Reinforced Concrete Column	EA	6	0	4	2	0
1130	Cracking (RC and Other)	EA	2	0	0	2	0
1190	Abrasion/Wear (PSC/RC)	EA	4	0	4	0	0
(205) -Columns # 3 & 4 have minor concrete deterioration at the construction joint. -There is light abrasion at the base of the columns.							
215	Reinforced Concrete Abutment	LF	101	16	82	3	0
1080	Delamination/Spall/Patched Area	LF	6	0	6	0	0
1090	Exposed Rebar	LF	1	0	0	1	0
1120	Efflorescence/Rust Staining	LF	27	0	25	2	0
1130	Cracking (RC and Other)	LF	11	0	11	0	0
1190	Abrasion/Wear (PSC/RC)	LF	40	0	40	0	0
(215) There is light abrasion at the base of the abutments. Most notable in Bent # 3. -Bent # 1 has a spalled area with a failed grouted patch adjacent to the construction joint on the Left side. -Bent # 1 has diagonal cracks under Girders # 1 and 3 in the original portions of the abutment. -Bent # 1 has a 12" spalled area with exposed reinforcing steel under Girder # 3. -Bent # 1 has one full height vertical crack under Girder # 2. -Bent # 3 has diagonal cracking at the exterior edges of Girders # 1 and 3. -Bent # 3 has one full height vertical crack under Girder # 2.							
220	Reinforced Concrete Pile Cap/Footing	LF	112	112	0	0	0
(220) -Footings have cover with no apparent scour problems.							
234	Reinforced Concrete Pier Cap	LF	47	40	2	5	0
1080	Delamination/Spall/Patched Area	LF	3	0	1	2	0
1090	Exposed Rebar	LF	3	0	0	3	0
1130	Cracking (RC and Other)	LF	1	0	1	0	0
(234) -Bent # 2, Span # 1 side has a spalled area adjacent to Beam # 1 at the construction joint. -Bent # 2, Span # 2 at Girder # 1 has a concrete spall in the haunch under the beam. -Bent # 2 Girder # 3 has a 10" spall with exposed reinforcing steel with initial section loss. Repair to the haunch has failed and has exposed the reinforcing steel.							
301	Pourable Joint Seal	LF	47	0	43	4	0
2310	Leakage	LF	23	0	23	0	0

US Highway 71 over Brushy Creek - Scott Co.

Location: 6.48 MI NO OF JCT SH 28

Team Lead: Jeff Jones, Inspection Date: 05/24/2021

Deck

[illegible]

US Highway 71 over Brushy Creek - Scott Co.

Location: 6.48 MI NO OF JCT SH 28

Team Lead: Jeff Jones, Inspection Date: 05/24/2021

Superstructure

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
110	Reinforced Concrete Open Girder/Beam	LF	210	43	167	0	0
1080	Delamination/Spall/Patched Area	LF	2	0	2	0	0
1090	Exposed Rebar	LF	1	0	1	0	0
1120	Efflorescence/Rust Staining	LF	110	0	110	0	0
1130	Cracking (RC and Other)	LF	54	0	54	0	0
<p>(110) -Span # 1, Girder # 2 has a longitudinal hairline crack with light efflorescence at deck juncture.</p> <p>-Span # 1, Girder # 3 has a shallow softball sized spall with no exposed reinforcing steel at the base of girder located 6" from Bent # 1.</p> <p>-Span # 2, Girder # 2 has map and longitudinal cracking with efflorescence at the deck / girder juncture and along the bottom surface of the girder.</p> <p>-Span # 2, Girder # 1 has a spalled area with exposed reinforcing steel visible on the haunch.</p> <p>-Repair to the 10" spall with exposed reinforcing steel with initial section loss at Bent # 2, Girder # 3 is still holding during this inspection.</p>							

US Highway 71 over Brushy Creek - Scott Co.

Location: 6.48 MI NO OF JCT SH 28

Team Lead: Jeff Jones, Inspection Date: 05/24/2021

Substructure

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
205	Reinforced Concrete Column	EA	6	0	4	2	0
1130	Cracking (RC and Other)	EA	2	0	0	2	0
1190	Abrasion/Wear (PSC/RC)	EA	4	0	4	0	0
(205) -Columns # 3 & 4 have minor concrete deterioration at the construction joint. -There is light abrasion at the base of the columns.							
215	Reinforced Concrete Abutment	LF	101	16	82	3	0
1080	Delamination/Spall/Patched Area	LF	6	0	6	0	0
1090	Exposed Rebar	LF	1	0	0	1	0
1120	Efflorescence/Rust Staining	LF	27	0	25	2	0
1130	Cracking (RC and Other)	LF	11	0	11	0	0
1190	Abrasion/Wear (PSC/RC)	LF	40	0	40	0	0
(215) There is light abrasion at the base of the abutments. Most notable in Bent # 3. -Bent # 1 has a spalled area with a failed grouted patch adjacent to the construction joint on the Left side. -Bent # 1 has diagonal cracks under Girders # 1 and 3 in the original portions of the abutment. -Bent # 1 has a 12" spalled area with exposed reinforcing steel under Girder # 3. -Bent # 1 has one full height vertical crack under Girder # 2. -Bent # 3 has diagonal cracking at the exterior edges of Girders # 1 and 3. -Bent # 3 has one full height vertical crack under Girder # 2.							
220	Reinforced Concrete Pile Cap/Footing	LF	112	112	0	0	0
(220) -Footings have cover with no apparent scour problems.							
234	Reinforced Concrete Pier Cap	LF	47	40	2	5	0
1080	Delamination/Spall/Patched Area	LF	3	0	1	2	0
1090	Exposed Rebar	LF	3	0	0	3	0
1130	Cracking (RC and Other)	LF	1	0	1	0	0
(234) -Bent # 2, Span # 1 side has a spalled area adjacent to Beam # 1 at the construction joint. -Bent # 2, Span # 2 at Girder # 1 has a concrete spall in the haunch under the beam. -Bent # 2 Girder # 3 has a 10" spall with exposed reinforcing steel with initial section loss. Repair to the haunch has failed and has exposed the reinforcing steel.							



Asset #00319(Routine)

US Highway 71 over Brushy Creek - Scott Co.

Location: 6.48 MI NO OF JCT SH 28

Team Lead: Jeff Jones, Inspection Date: 05/24/2021

Culvert

ELEMENTS	DESCRIPTION	UNITS	TOTAL				
				CS1	CS2	CS3	CS4



Elevation.



Approach roadway facing North.



Deck. Typical.



Span # 1 deck soffit.



Span # 1 Right. Slab soffit.



Span 1 Bent 2 concrete delamination and spalling with exposed reinforcing steel.



Span 2 Bay 1 cracks with efflorescence.



Span # 1 Bay # 1 cracking with efflorescence buildup.



Map cracking on the slabs.



Span 1 Bay 1 spalling with exposed reinforcing steel adjacent to Bent 1.



Typical driving surface of the deck.



Span 1 spalling with exposed reinforcing steel in the deck expansion dam.



Span # 1 spalling with exposed reinforcing steel in the deck expansion dam.



Span 2 Bay 2 cracking with efflorescence on the undersurface.



Span 2 Bent 2 Girder 1 spalling with exposed reinforcing steel.



Roadway



Bent 1 Lt spalling with exposed reinforcing steel adjacent to Girder 1.



Span # 1 wearing surface breaking apart.



Bent 2 columns 3 & 4 abrasion and concrete deterioration.



Span 2 Rt spalling with exposed reinforcing steel.



Elevation



Typical joint seal deterioration.



Span 2 Girder 2 cracking with efflorescence.



Deck. Left lane. Typical of driving surface.



Deck. Right lane. Typical of driving surface.



Deck soffit. Span # 1, Bay # 1.



Deck soffit. Span # 1. Bay # 2.



Span # 1, Bay # 1. Spalls with exposed reinforcing steel in proximity to Bent # 1.



Span # 2 deck soffit. Map cracking and transverse cracking with efflorescence.



Span # 1 deck wearing surface.



Minor map cracks. Span # 2. Left side of slab.



Span # 1. Left slab soffit. Spalling with exposed reinforcing steel.



Transverse hairline cracks in the Left side of Span # 1.



Span # 1. Girder # 2. Horizontal crack with efflorescence.



Girder # 3 at Bent # 1. No change.



Repair still holding. Span # 2 Bent # 2 Girder # 3.



Span # 2, Girder # 1 at Bent # 2. Spalling with exposed reinforcing steel at the cap haunch.



Cracking in Span # 2, Girder # 2. Typical.



Span # 2, Girder # 2. Cracks with efflorescence.



Bent # 2 columns. Typical.



Bent # 2, Column # 3 construction joint.



Bent # 1. Typical.



Bent # 1. Typical.



Bent # 3. Typical.



Bent # 3. Typical.



Bent # 1 has a 12" spalled area with exposed reinforcing steel under Girder # 3.



Light abrasion at the base of Bent # 3.



Bent # 2. Right side. Back face.



Bent # 2 Left side. Back face.



Expansion joint sealant over Bent # 2. Left side of structure.



Right parapet. Typical.

Maintenance Needs

Date Reported: 07/27/2015
Priority: C - Important
Type of Work: Repair (General)
Status: Open
Component: Element

Deficiency Description

Deck

The undersurface of the deck has map cracking with efflorescence in both spans of the original portion of the structure. There is concrete deterioration with spalling that exposes reinforcing steel in the expansion dams over Bent # 2. The concrete slab span portions of the deck have longitudinal cracking, delaminated areas, and concrete spalling with exposed reinforcing steel visible from the undersurface of the deck along the edges.

Remarks

Span 2 deck soffit. .



Span # 1 Bay # 1 spalling with exposed reinforcing steel adjacent to Bent # 1.



Span # 1 Bay # 1 cracking with efflorescence buildup.



Span # 2 Bay # 2 cracking with efflorescence on the undersurface.



Span # 1 Bent # 2 concrete delamination and spalling with exposed reinforcing steel.



Span # 1 deck soffit.



Span # 1 spalls with exposed reinforcing steel.



Span # 1 Left overhang. Slab span.



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US Highway 71 over Brushy Creek - Scott Co.

Location: 6.48 MI NO OF JCT SH 28

Team Lead: Jeff Jones, **Inspection Date:** 05/24/2021

Date Reported: 07/27/2015
Priority: D- Routine
Type of Work: Repair (General)
Status: Open
Component: Element

Deficiency Description

Concrete Tee Beams

The concrete haunch for Girder # 1 Span # 2 at Bent # 2 has spalling with exposed reinforcing steel.

Span # 2 Girder # 2 has map cracking with efflorescence.

Remarks



Span # 2 Bent # 2 Girder # 1 spalling with exposed reinforcing steel.



Span # 2 Girder # 2 cracking with efflorescence.



Span # 2 Bent # 2 Girder # 1 spalling with exposed reinforcing steel.



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Team Lead: Jeff Jones, **Inspection Date:** 05/24/2021

Date Reported: 07/27/2015
Priority: D- Routine
Type of Work: Repair (General)
Status: Open
Component: Element

Deficiency Description

South abutment

The south abutment has spalling in the top of the stem wall.

Remarks



Bent # 1 Lt spalling with exposed reinforcing steel adjacent to Girder # 1.



Bent # 1 Left. Spall with exposed reinforcing steel.



Bent # 1 Right. Spall with exposed reinforcing steel.



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US Highway 71 over Brushy Creek - Scott Co.

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Team Lead: Jeff Jones, **Inspection Date:** 05/24/2021

Date Reported: 07/27/2015
Priority: A - Safety deficiency; requires prompt action
Type of Work: Repair (General)
Status: Open
Component: Element

Deficiency Description

Deck

The rigid overlay driving surface of the deck has de-bonded and broken apart in areas and is audible when impacted by traffic.

-Differential elevation in the wearing surface indicate possible reduction in section of the deck due to abrasion between the wearing surface and the original deck.

Undersurface:

-Both spans have map cracking with efflorescence and leaching visible from the undersurface of the deck.

Remarks



Deck soffit. Span # 1, Bay # 1.



Span # 1 wearing surface breaking apart.



South Bridge End.



Span # 1 wearing surface is breaking apart.



Asset #00319(Routine)

US Highway 71 over Brushy Creek - Scott Co.

Location: 6.48 MI NO OF JCT SH 28

Team Lead: Jeff Jones, Inspection Date: 05/24/2021

Date Reported: 05/25/2021
Priority: D- Routine
Type of Work: Repair (General)
Status: Open
Component: Approach

Deficiency Description

Asphalt approach roadway -
The asphalt at both approaches is breaking apart with several patches.

Remarks



South approach.



Asset #00319(Routine)

US Highway 71 over Brushy Creek - Scott Co.

Location: 6.48 MI NO OF JCT SH 28

Team Lead: Jeff Jones, **Inspection Date:** 05/24/2021

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	



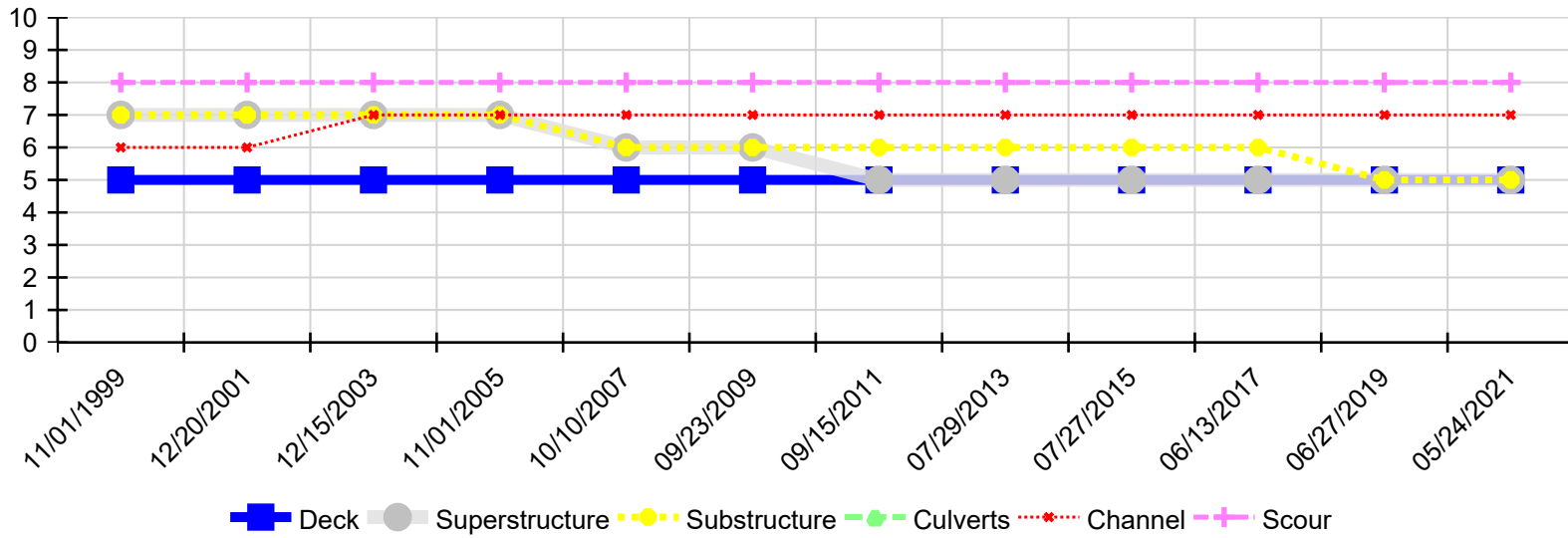
Asset #00319(Routine)

US Highway 71 over Brushy Creek - Scott Co.

Location: 6.48 MI NO OF JCT SH 28

Team Lead: Jeff Jones, Inspection Date: 05/24/2021

Condition History



Inspection Date	Deck	Superstructure	Substructure	Culverts	Channel	Scour
05/24/2021	5	5	5	N	7	8
06/27/2019	5	5	5	N	7	8
06/13/2017	5	5	6	N	7	8
07/27/2015	5	5	6	N	7	8
07/29/2013	5	5	6	N	7	8
09/15/2011	5	5	6	N	7	8
09/23/2009	5	6	6	N	7	8
10/10/2007	5	6	6	N	7	8
11/01/2005	5	7	7	N	7	8
12/15/2003	5	7	7	N	7	8
12/20/2001	5	7	7	N	6	8
11/01/1999	5	7	7	N	6	8