



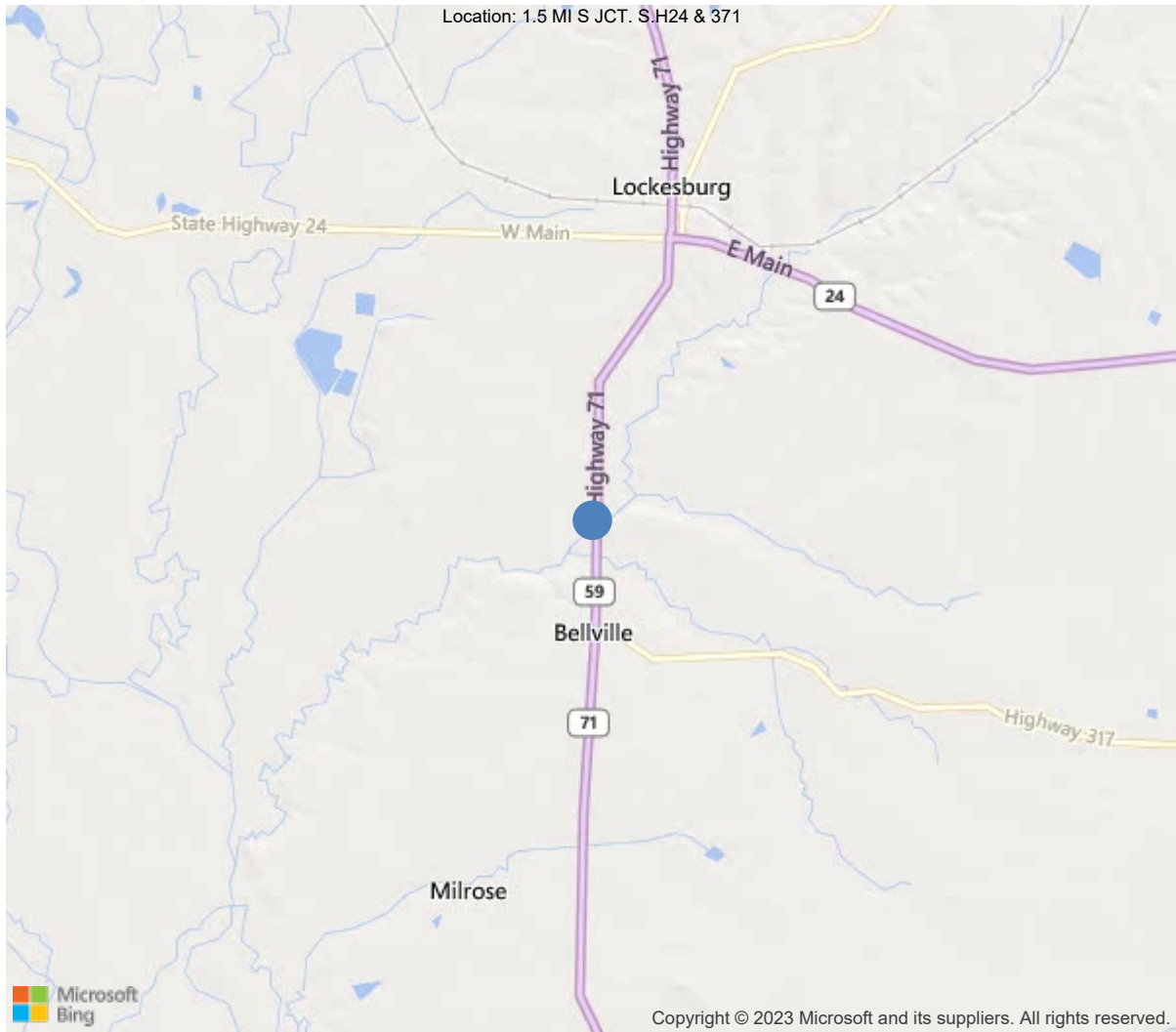
Latitude:33.94677, Longitude:-94.17514

Route:71 Section:05 Log:11.46

Arnold Road ID:66x71x5xA, Arnold Log mile:11.402

District 03, 133 - Sevier County

Owner: 1 - State Highway Agency



33.94677, -94.17514



Asset #01321 (Routine, Underwater type 2)
US 71-SEC.05-11.46 over BIG BELLVILLE CREEK

Location: 1.5 MI S JCT. S.H24 & 371

Team Lead: Charlie Rogers, Inspection Date: 02/16/2022

IDENTIFICATION	
(1) State Names	5 - Arkansas
(8) Structure Number	01321
(5) Inventory Route	1
(2) Highway Agency District	03 - District 03
(3) County Code	133 - Sevier County
(4) Place Code	0
(6) Features Intersected	BIG BELLVILLE CREEK
(7) Facility Carried	US 71-SEC.05-11.46
(9) Location	1.5 MI S JCT. S.H24 & 371
(11) Mile Point	11.46 mi
(12) Base Highway Network	Yes
(13) LRS Inventory Rte & Subrte	0000071050
(16) Latitude	33.94677
(17) Longitude	-94.17514
(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	3
(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	1934
(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	4600
(30) Year of ADT	2018
(109) Truck ADT	17 %
(19) Bypass, Detour Length	17 mi
GEOMETRIC DATA	
(48) Length of Maximum Span	32 ft
(49) Structure Length	94 ft
(50) Curb or Sidewalk Width	
Left	0.5 ft
Right	0.5 ft
(51) Bridge Roadway Width Curb to Curb	24.3 ft
(52) Deck Width Out to Out	25.6 ft
(32) Approach Roadway Width (W/Shoulders)	36.1 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	24.6 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 exists
(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	6
(59) Superstructure	5
(60) Substructure	6
(61) Channel & Channel Protection	6
(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	44
(65) Inventory Rating Method	1 - Load Factor(LF)
(66) Inventory Rating	
Type	
Rating	26
(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	2
(69) Clearances, Vertical/Horizontal	N
(71) Waterway Adequacy	7
(72) Approach Roadway Alignment	7
(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	5 - Bridge foundations determined t
PROPOSED IMPROVEMENTS	
(75) Type of Work	31 - Replacement of bridge or
(76) Length of Structure Improvement	121 ft
(94) Bridge Improvement Cost	\$ 0
(95) Roadway Improvement Cost	\$ 400
(96) Total Project Cost	\$ 919
(97) Year of Improvement Cost Estimate	2003
(114) Future ADT	5226
(115) Year of Future ADT	2028

INSPECTIONS *			
(90) Inspection Date	02/16/2022		
(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 #01321 (Routine, Underwater type 2)

District: 03, County: 133 - Sevier County

Team Lead: Charlie Rogers, Inspection Date: 02/16/2022

General Observation

02/20/2018...AL, SS, DECK PHOTOS TAKEN. LITTLE OR NO CHANGE IN CONDITION.....2-10-2020 AL,SS,DECK AND UNDER DECK PHOTOS TAKEN PER THIS INSPECTION...2/16/2022...AL, Elevation, Deck, Def photos taken...

Add pier walls and column.. rebar exposed in

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

02/20/2018...AL, SS, DECK PHOTOS TAKEN. LITTLE OR NO CHANGE IN CONDITION...2/16/2022...Cracking in bottom of deck in various locations leaking water down onto beams causing corrosion. Spalls and rebar exposed on bottom side of deck, efflorescence with rust staining and regular cracking in various locations...

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

Raised super to a 5 fair due to Repairs made to beams, see photos and drawings. Still some initial section loss in critical areas -----2/16/2022...Steel diaphragm's at bents #1 and #2 are rusted with holes in diaphragm's. Corrosion with some section loss in various locations of beams and beam ends...

60 - Substructure (6 - SATISFACTORY CONDITION - structural elements show some minor deterioration.)

2/17/2022...Large amounts of debris sitting on top of caps, beam ends, and bearings causing corrosion...

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.)

2/16/2022...Soundings taken this inspection and linked to report files...

A-46 - Asset Files

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Asset #01321 (Routine, Underwater type 2)

US 71-SEC.05-11.46 over BIG BELLVILLE CREEK

Location: 1.5 MI S JCT. S.H24 & 371

Team Lead: Charlie Rogers, Inspection Date: 02/16/2022

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
12	Reinforced Concrete Deck	SF	2406	1396	652	358	0
1080	Delamination/Spall/Patched Area	SF	8	0	0	8	0
1090	Exposed Rebar	SF	2	0	2	0	0
1120	Efflorescence/Rust Staining	SF	450	0	100	350	0
1130	Cracking (RC and Other)	SF	550	0	550	0	0
510	Wearing Surfaces	SF	2406	2210	0	196	0
3210	Delam/Spall/Patched Area/Pothole	SF	96	0	0	96	0
3220	Crack (Wearing Surface)	SF	100	0	0	100	0
(12) 510- AC Overlay 1130- cracking bottom of deck all spans Delam end of bridge above beam #5 right side rebar exposed (1080-12) Delam end of bridge right side soffit next to abutment with rebar exposed spalls under deck with rebar exposed Between Bents 1 & 2 Bay #3							
107	Steel Open Girder/Beam	LF	473	443	0	30	0
1000	Corrosion	LF	30	0	0	30	0
515	Steel Protective Coating	SF	3216	2716	0	0	500
3440	Effectiveness (Steel Protective Coatings)	LF	500	0	0	0	500
205	Reinforced Concrete Column	EA	4	2	1	1	0
1080	Delamination/Spall/Patched Area	EA	1	0	1	0	0
1090	Exposed Rebar	EA	1	0	0	1	0
210	Reinforced Concrete Pier Wall	LF	258	256	2	0	0
1090	Exposed Rebar	LF	2	0	2	0	0
215	Reinforced Concrete Abutment	LF	104	103	1	0	0
1090	Exposed Rebar	LF	1	0	1	0	0
234	Reinforced Concrete Pier Cap	LF	56	52	4	0	0
1090	Exposed Rebar	LF	4	0	4	0	0
301	Pourable Joint Seal	LF	96	0	0	96	0
2350	Debris Impaction	LF	96	0	0	96	0
311	Movable Bearing	EA	15	0	0	15	0
1000	Corrosion	EA	15	0	0	15	0
313	Fixed Bearing	EA	15	0	0	15	0



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Team Lead: Charlie Rogers, **Inspection Date:** 02/16/2022

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
1000	Corrosion	EA	15	0	0	15	0
(313) 1000- corrosion to bearings							
331	Reinforced Concrete Bridge Railing	LF	189	189	0	0	0



Deck

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
12	Reinforced Concrete Deck	SF	2406	1396	652	358	0
1080	Delamination/Spall/Patched Area	SF	8	0	0	8	0
1090	Exposed Rebar	SF	2	0	2	0	0
1120	Efflorescence/Rust Staining	SF	450	0	100	350	0
1130	Cracking (RC and Other)	SF	550	0	550	0	0
510	Wearing Surfaces	SF	2406	2210	0	196	0
3210	Delam/Spall/Patched Area/Pothole	SF	96	0	0	96	0
3220	Crack (Wearing Surface)	SF	100	0	0	100	0
(12) 510- AC Overlay							
1130- cracking bottom of deck all spans							
Delam end of bridge above beam #5 right side rebar exposed							
(1080-12) Delam end of bridge right side soffit next to abutment with rebar exposed spalls under deck with rebar exposed Between Bents 1 & 2 Bay #3							

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Comment: 02/20/2018...AL, SS, DECK PHOTOS TAKEN. LITTLE OR NO CHANGE IN CONDITION...2/16/2022...Cracking in bottom of deck in various locations leaking water down onto beams causing corrosion. Spalls and rebar exposed on bottom side of deck, efflorescence with rust staining and regular cracking in various locations...



Superstructure

ELEMENTS	DESCRIPTION	UNITS	TOTAL				
				CS1	CS2	CS3	CS4
107	Steel Open Girder/Beam	LF	473	443	0	30	0
1000	Corrosion	LF	30	0	0	30	0
515	Steel Protective Coating	SF	3216	2716	0	0	500
3440	Effectiveness (Steel Protective Coatings)	LF	500	0	0	0	500

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

Comment: Raised super to a 5 fair due to Repairs made to beams, see photos and drawings. Still some initial section loss in critical areas -----2/16/2022...Steel diaphragm's at bents #1 and #2 are rusted with holes in diaphragm's. Corrosion with some section loss in various locations of beams and beam ends...



Substructure

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
205	Reinforced Concrete Column	EA	4	2	1	1	0
1080	Delamination/Spall/Patched Area	EA	1	0	1	0	0
1090	Exposed Rebar	EA	1	0	0	1	0
210	Reinforced Concrete Pier Wall	LF	258	256	2	0	0
1090	Exposed Rebar	LF	2	0	2	0	0
215	Reinforced Concrete Abutment	LF	104	103	1	0	0
1090	Exposed Rebar	LF	1	0	1	0	0
234	Reinforced Concrete Pier Cap	LF	56	52	4	0	0
1090	Exposed Rebar	LF	4	0	4	0	0

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Comment: 2/17/2022...Large amounts of debris sitting on top of caps, beam ends, and bearings causing corrosion...

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Location: 1.5 MI S JCT. S.H24 & 371

Team Lead: Charlie Rogers, **Inspection Date:** 02/16/2022

Culvert

ELEMENTS	DESCRIPTION	UNITS	TOTAL				
				CS1	CS2	CS3	CS4



Bent 2 column 2



All joints covered with asphalt



End joint



Elevation 2/2022



Bent 1 abutment



Painted steel I beams



Underside of deck typical all spans 2/2022



Deck 2/2022



Alignment 2/2022



SS



AI



Bent 2 pier wall



Span 1



Rust staining



Span 1



Span 1



Span 2 beam 2



Various beam ends have section loss



Beam ends



Fixed bearings have heavy pack rust



Heavy pack rust



Bent 2

Maintenance Needs

Date Reported: 02/17/2022

Priority: C - Important

Type of Work: (Inactive) (Inactive) 1 - Clean

Status: Open

Component: Element

Deficiency Description

Large amounts of debris sitting on top of caps, beam ends, and bearings causing corrosion.

Remarks



Bent 3



Bent 2

Maintenance Needs

Date Reported: 01/15/2003

Priority: D- Routine

Type of Work: Repair (General)

Status: Monitor

Component:

Deficiency Description

Steel diaphragm's at bents #1 and #2 are rusted with holes in diaphragm's.

Remarks



Bent 2 bay 4 diaphragm



Bent 1 bay 4 diaphragm



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Routine Maintenance

Check Box Maintenance Items

Type of Maintenance	Is recommended?
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	
A-63 Missing/Incorrect Log Mile Signage	
A-64 - Vegetation Removal Requested	

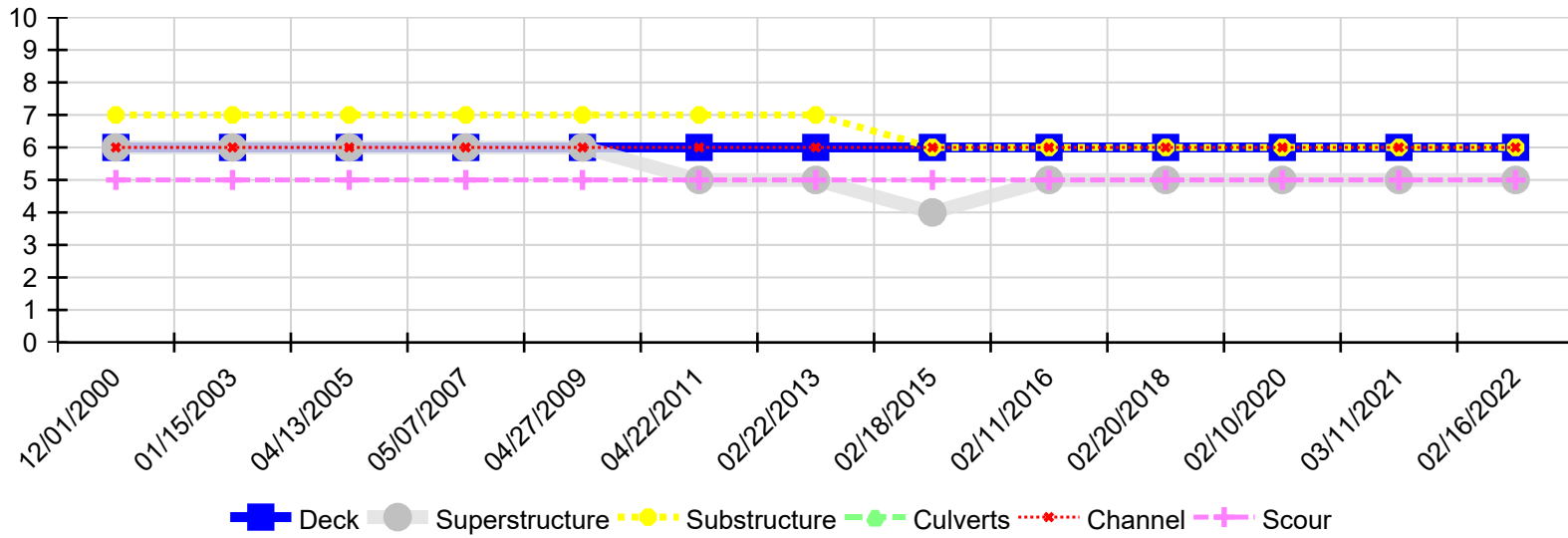


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Condition History



Inspection Date	Deck	Superstructure	Substructure	Culverts	Channel	Scour
02/16/2022	6	5	6	N	6	5
03/11/2021	6	5	6	N	6	5
02/10/2020	6	5	6	N	6	5
02/20/2018	6	5	6	N	6	5
02/11/2016	6	5	6	N	6	5
02/18/2015	6	5	6	N	6	5
02/18/2015	6	4	6	N	6	5
02/22/2013	6	5	7	N	6	5
04/22/2011	6	5	7	N	6	5
04/27/2009	6	6	7	N	6	5
05/07/2007	6	6	7	N	6	5
04/13/2005	6	6	7	N	6	5
01/15/2003	6	6	7	N	6	5
12/01/2000	6	6	7	N	6	5