



Latitude:34.43887, Longitude:-92.87896

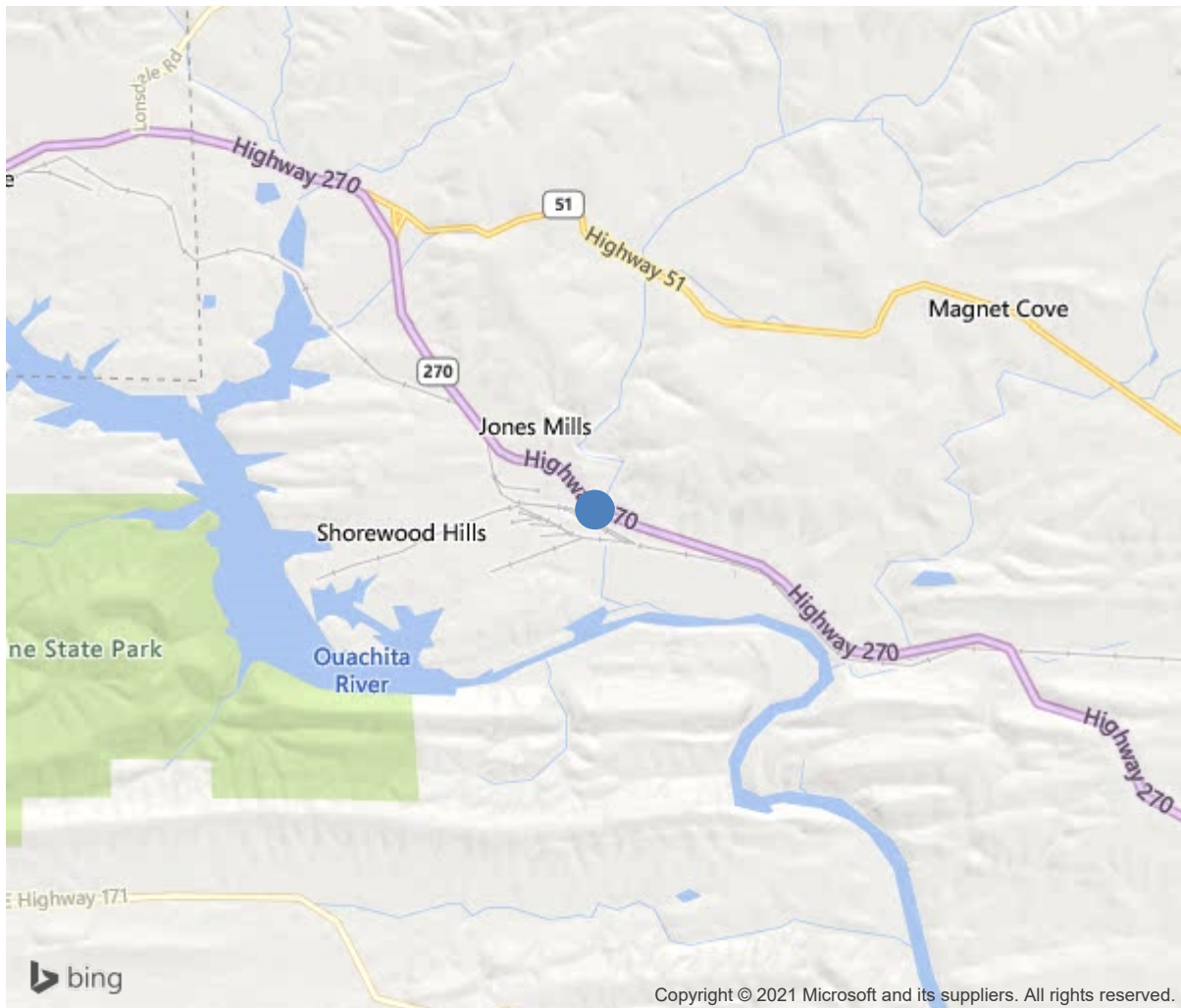
Route:270 Section:07 Log:2.85

Arnold Road ID:30x270x7xA, Arnold Log mile:3.015

District 06, Hot Spring County

Owner: 1-State Highway Agency

4.3 MI W JCT US 270&SH51



34.43887, -92.87896



Bridge #06024(Routine)

US 270-7 Log 2.85 over COVE CREEK

Location: 4.3 MI W JCT US 270&SH51

Team Lead: Shane Byrd Inspection Date: December 09, 2020

IDENTIFICATION	
(1) State Names	Arkansas
(8) Structure Number	06024
(5) Inventory Route	270
(2) Highway Agency District	06
(3) County Code	59-Hot Spring County, Arkansas
(4) Place Code	0
(6) Features Intersected	COVE CREEK
(7) Facility Carried	US 270-7 Log 2.85
(9) Location	4.3 MI W JCT US 270&SH51
(11) Mile Point	2.85 mi
(12) Base Highway Network	Yes
(13) LRS Inventory Rte & Subrte	0000270070
(16) Latitude	34.43887
(17) Longitude	-92.87896
(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	4
(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 placed
Type of Membrane	0-None
Type of Deck Protection	0-None
AGE AND SERVICE	
(27) Year Built	1984
(106) Year Reconstructed	0
(42) Type of Service	15
On	1-Highway
Under	5-Waterway
(28) Lane	
On	4
Under	0
(29) Average Daily Traffic	13000
(30) Year of ADT	2014
(109) Truck ADT	1 %
(19) Bypass, Detour Length	2 mi
GEOMETRIC DATA	
(48) Length of Maximum Span	45 ft
(49) Structure Length	182 ft
(50) Curb or Sidewalk Width	
Left	0 ft
Right	0 ft
(51) Bridge Roadway Width Curb to Curb	67.9 ft
(52) Deck Width Out to Out	71 ft
(32) Approach Roadway Width (W/Shoulders)	67.9 ft
(33) Bridge Median	0-No median
(34) Skew	0 Deg
(35) Structure Flared	No flare
(10) Inventory Route Min Vert Clear	99.99 ft
(47) Inventory Route Total Horiz Clear	68.9 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 water
(111) Pier Protection	1-Navigation protection not requ
(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 - Oth
(100) Defense Highway	0-The inventory route is not a S
(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 part of
(20) Toll	3-On free road. The structure is toll-
(21) Maintain	1-State Highway Agency
(22) Owner	1-State Highway Agency
(37) Historical Significance	5-Bridge is not eligible for the NRHP
CONDITION	
(58) Deck	7
(59) Superstructure	6
(60) Substructure	6
(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	60
(65) Inventory Rating Method	1-Load Factor(LF)
(66) Inventory Rating	
Type	4
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	6
(68) Deck Geometry	9
(69) Clearances, Vertical/Horizontal	N
(71) Waterway Adequacy	8
(72) Approach Roadway Alignment	8
(36A) Bridge Railings	1-Inspected feature meets currently a
(36B) Transitions	0-Inspected feature does not meet cur
(36C) Approach Guardrail	0-Inspected feature does not meet cur
(36D) Approach Guardrail Ends	0-Inspected feature does not meet cur
(113) Scour Critical Bridges	8-Bridge foundations determined to be
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	0
(114) Future ADT	15525
(115) Year of Future ADT	2028
INSPECTIONS	
(90) Inspection Date	12/2020
(91) Frequency	24 Months
(92) Critical Feature Inspection	Done Freq. (Mon) Date
A: Fracture Critical Detail	No
B: Underwater Inspection	No
C: Other Special Inspection	No

Team Lead: Shane Byrd, **Inspection Date:** December 09, 2020

ELEM	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
12	Reinforced Concrete Deck	SF	12922	12892	30	0	0
1120	Efflorescence/Rust Staining	SF	30	0	30	0	0
1130	Cracking (RC and Other)	SF	1805	1805	0	0	0
510	Wearing Surfaces	SF	12358	12358	0	0	0
(12)							
Deck has new polymer overlay under job #. 012350 12/9/2020 All spans have cracks with efflorescence in the overhang soffits.							
107	Steel Open Girder/Beam	LF	1620	1543	0	77	0
1000	Corrosion	LF	76	0	0	76	0
1020	Connection	LF	1	0	0	1	0
515	Steel Protective Coating	SF	11070	10942	0	0	128
3440	Effectiveness (Steel Protective Coatings)	SF	128	0	0	0	128
(107)							
Most ends of the girders have active corrosion with section loss in the haunch, lower web and bottom flange due to leaking joints. 1/8" section loss is typical. Bent 2, span 2, right side of beam 6, diaphragm bolts are missing. The protective system is effective with the exception of the girder ends.							
205	Reinforced Concrete Column	EA	12	8	4	0	0
1090	Exposed Rebar	EA	4	0	4	0	0
(205)							
Bent 2 columns 3 and 4 have spalls with exposed rebar. Bent 3 columns 1 and 2 have exposed rebar.							
215	Reinforced Concrete Abutment	LF	166	149	17	0	0
1120	Efflorescence/Rust Staining	LF	17	0	17	0	0
(215)							
Bents 1 and 5 have vertical cracks with efflorescence in the back wall.							
234	Reinforced Concrete Pier Cap	LF	212	208	4	0	0
1090	Exposed Rebar	LF	1	0	1	0	0
1130	Cracking (RC and Other)	LF	3	0	3	0	0
(234)							
Bent 2, exposed rebar on the back side. Bent 3 ahead side has small cracks. Bent 4 has crack on the backside.							

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ELEM	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
301 (301)	Pourable Joint Seal	LF	170	170	0	0	0
Under job # 012350 compression joints were removed and pourable joint seals were installed.							
310	Elastomeric Bearing	EA	72	0	72	0	0
1000 (310)	Corrosion	EA	72	0	72	0	0
The sole plates of all bearings have active corrosion.							
331	Reinforced Concrete Bridge Railing	LF	360	354	6	0	0
1080 (331)	Delamination/Spall/Patched Area	LF	6	0	6	0	0
12/17/2018-KRM & RLS- Both rails have small spalls.							



Deck overview.



Approach Eastbound.



Girder 3 bent 1 has pitting up to 1/16" to bottom flange.



Bent 1 abutment has cracks with efflorescence in the back wall.



Span 2 soffit overview.



Span 3 left side soffit overhang has cracks with efflorescence.



Bent 1 girder 4 right side has pitting up to 1/8" in the haunch area of the upper web.



Bent 2 beam 3 has corrosion lower flange and upper web haunch area.



Bent 2 column 4 has spall with exposed rebar.



Bent 2 column 3 left side has spall with exposed rebar.



Bent 3 column 2 has spall with exposed rebar.



Bent 2 cap back has spall with exposed rebar.



Bent 5 beam 5 sole plate has active corrosion.



Joint seal at bent 4 has been repaired.

Maintenance Needs

Date Reported: 12/05/2017
Priority: C - Important
Type of Work: Repair
Status: Monitor
Component: 302 - Compression Joint Seal

Deficiency Description

All joint seal is leaking causing active corrosion on beam ends.

Remarks

Joint seals have been repaired under job 012350



Bt. 4, Bm. 7, corrosion & minor pitting on the bottom flange & sole plate of bearing.



Bent 1 joint has lost adhesion and is leaking.



Bent 5 right side, joint has lost adhesion and is leaking.



Joint seal at bent 4 has been repaired.

Date Reported: 12/09/2020
Priority: C - Important
Type of Work: Repair
Status: Open
Component:

Deficiency Description

Asphalt approach at both ends of bridge have potholes.

Remarks



Pothole in asphalt approach at West end of bridge.



Pothole in asphalt approach at East end of bridge.

Date Reported: 12/09/2020
Priority: C - Important
Type of Work: Repair
Status: Open
Component: Superstructure

Deficiency Description

All Beam ends have active rust with moderate pitting to bottom flange and upper web.

Remarks



Girder 3 bent 1 has pitting up to 1/16" to bottom flange.



Bent 1 girder 4 right side has pitting up to 1/8" in the haunch area of the upper web.



Bent 2 beam 3 has corrosion lower flange and upper web haunch area.



Bridge #06024(Routine)
US 270-7 Log 2.85 over COVE CREEK
Location: 4.3 MI W JCT US 270&SH51

Team Lead: Shane Byrd **Inspection Date:** December 09, 2020

Inspection Comments

job 60117 dwg 26160
Approach going east

Deck Notes

Deck has new polymer overlay under job #. 012350

Substructure Notes

12/17/2018-KRM & RLS- Underwater Type 2 inspection performed this date. Channel profile and sounding sheet attached to the Sketch tab.