



Latitude:34.90435, Longitude:-94.11906

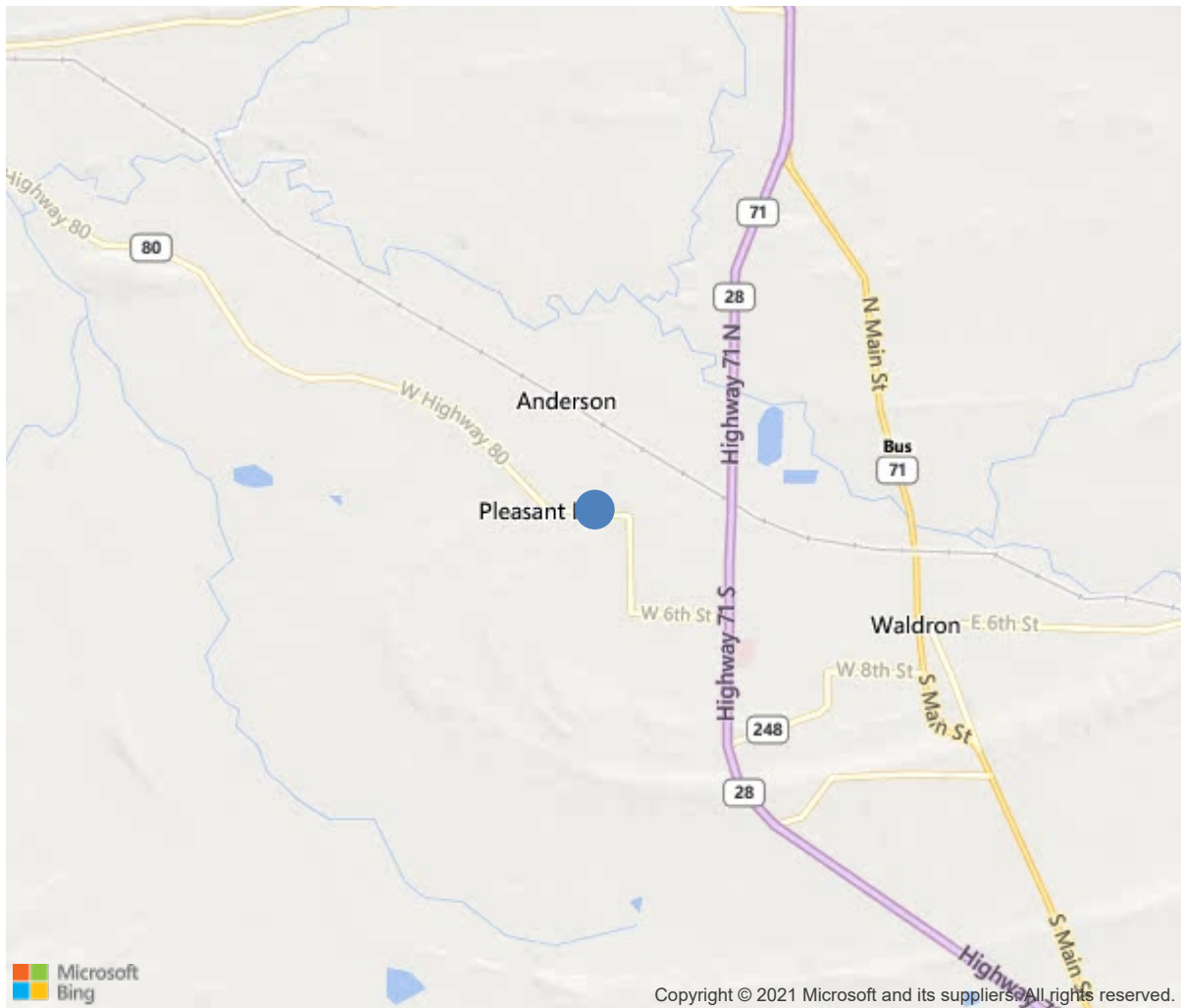
Route:80 Section:00 Log:4.47

Arnold Road ID:63x80x0xA, Arnold Log mile:4.436

District 04, Scott County

Owner: 1-State Highway Agency

0.9 MI NW US 71



34.90435, -94.11906



**Bridge #M1470(Routine)**  
**State Highway 80 over Creek-Scott Co.**  
**Location: 0.9 MI NW US 71**

**Team Lead: Jeff Jones Inspection Date: January 11, 2021**

IDENTIFICATION	
(1) State Names	Arkansas
(8) Structure Number	M1470
(5) Inventory Route	80
(2) Highway Agency District	04
(3) County Code	127-Scott County, Arkansas
(4) Place Code	0
(6) Features Intersected	Creek-Scott Co.
(7) Facility Carried	State Highway 80
(9) Location	0.9 MI NW US 71
(11) Mile Point	4.47 mi
(12) Base Highway Network	No
(13) LRS Inventory Rte & Subrte	0000000000
(16) Latitude	34.90435
(17) Longitude	-94.11906
(98) Border Bridge State Code	
(99) Border Bridge Structure No.	
STRUCTURE TYPE AND MATERIAL	
(43) Main Structure Type	42
Material	4-Steel continuous
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	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	1-Monolithic Concrete (concurrently placed
Type of Membrane	0-None
Type of Deck Protection	0-None
AGE AND SERVICE	
(27) Year Built	1966
(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	870
(30) Year of ADT	2018
(109) Truck ADT	1 %
(19) Bypass, Detour Length	3 mi
GEOMETRIC DATA	
(48) Length of Maximum Span	20 ft
(49) Structure Length	42 ft
(50) Curb or Sidewalk Width	
Left	1 ft
Right	1 ft
(51) Bridge Roadway Width Curb to Curb	24 ft
(52) Deck Width Out to Out	26 ft
(32) Approach Roadway Width (W/Shoulders)	23 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	25.9 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	0
(26) Functional Class	7-Rural Major Collector
(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	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	33
(65) Inventory Rating Method	1-Load Factor(LF)
(66) Inventory Rating	
Type	2
Rating	20
(70) Bridge Posting	3-10.0 - 19.9 % below
(41) Structure Open/Posted/Closed	P-Posted for load (may include o
APPRAISAL	
(67) Structural Evaluation	5
(68) Deck Geometry	4
(69) Clearances, Vertical/Horizontal	N
(71) Waterway Adequacy	6
(72) Approach Roadway Alignment	7
(36A) Bridge Railings	0-Inspected feature does not meet cur
(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	5-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	
(114) Future ADT	1135
(115) Year of Future ADT	2028

INSPECTIONS *			
(90) Inspection Date			01/2021
(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		
* 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.			



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**State Highway 80 over Creek-Scott Co.**

**Location: 0.9 MI NW US 71**

**Team Lead: Jeff Jones, Inspection Date: January 11, 2021**

ELEM	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
12	Reinforced Concrete Deck	SF	1040	957	81	2	0
1090	Exposed Rebar	SF	2	0	0	2	0
1120	Efflorescence/Rust Staining	SF	6	0	6	0	0
1130	Cracking (RC and Other)	SF	75	0	75	0	0
510	Wearing Surfaces	SF	867	746	1	120	0
3220	Crack (Wearing Surface)	SF	120	0	0	120	0
3210	Delam/Spall/Patched Area/Pothole	SF	1	0	1	0	0
(12)							
-There is an asphalt wearing surface on the deck. -Light scale in the gutters adjacent to the asphalt overlay. -There is light scale / leaching with hairline map cracking in Bays # 1, 4, & 5 of both spans that is visible from the undersurface of the deck. -Spalling with exposed reinforcing steel on the undersurface adjacent to the deck drains in Span # 2. -Minor areas of cracking with light efflorescence in Span # 1.							
107	Steel Open Girder/Beam	LF	240	223	0	13	4
1000	Corrosion	LF	17	0	0	13	4
515	Steel Protective Coating	SF	920	0	454	454	12
3440	Effectiveness (Steel Protective Coatings)	SF	920	0	454	454	12
(107)							
-The majority of the superstructure has light freckled rust. -The ends of the beams at the abutments have active corrosion with flaking rust. -Maintenance forces have painted over the active corrosion in the past as a type of repair. -Active corrosion is flaking off the painted repairs in many areas. -Section loss to the ends of the beams at the abutments ranges from heavy pitting up to knife edge section loss to the bottom flanges. -The base of webs in the ends of the beams over the abutments ranges from heavy pitting up to 7/16" section loss at Beam # 5 over Bent # 3. -Beam # 1 over Bent # 2 has an old crack / torch cut that has a welded repair that is cracked. This appears to be in "as built" condition.							
210	Reinforced Concrete Pier Wall	LF	24	0	1	23	0
1130	Cracking (RC and Other)	LF	1	0	1	0	0
1190	Abrasion/Wear (PSC/RC)	LF	23	0	0	23	0
(210)							
-Medium abrasion at the base of wall.							
215	Reinforced Concrete Abutment	LF	108	94	11	3	0
1080	Delamination/Spall/Patched Area	LF	3	0	0	3	0
1130	Cracking (RC and Other)	LF	3	0	3	0	0



**Team Lead:** Jeff Jones, **Inspection Date:** January 11, 2021

ELEM	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
1190 (215)	Abrasion/Wear (PSC/RC)	LF	8	0	8	0	0
-There is one 6" spall and two 10" shallow spalls with no exposed reinforcing steel in the bearing areas of Bent # 3 under Beams # 1, 5, and 6. -Random areas of light abrasion on the base of the abutments. -Abutments have isolated vertical cracks.							
301	Pourable Joint Seal	LF	52	52	0	0	0
305 (305)	Assembly Joint without Seal	LF	48	48	0	0	0
The majority of the expansion joints are covered with asphalt. There is active corrosion in the expansion joint that is visible in the gutters.							
330	Metal Bridge Railing	LF	80	78	1	0	1
7000	Damage	LF	2	0	1	0	1
515	Steel Protective Coating	SF	350	349	1	0	0
3440 (330)	Effectiveness (Steel Protective Coatings)	SF	1	0	1	0	0
01/23/2020 - JCJ & TJL - -The metal portions of the bridge railing have a new paint system with isolated areas of minor out of plane bending due to apparent traffic impacts. -The Northeast concrete end post has broken off and has exposed reinforcing steel.							



Elevation.



Elevation. Inlet end of structure.





Elevation. Inlet end of structure.



Approach roadway facing East.





Approach roadway facing West.



Deck. Typical.





Span # 2 deck soffit. Typical.



Approach roadway facing East.





Approach roadway facing West.



Load Limit sign at the East bridge end.





Load Limit Sign at the West bridge end.



Bent # 3 Lt missing end post.





Typical undersurface



Bent # 3 spalling in the bearing area of beams # 1, 5, & 6.





Typical driving surface of the deck.



Roadway





Roadway 2



Inventory 2 looking South.





Bent # 1 Beam # 3 active corrosion with layers of flaking rust at the ends of the beams.



Typical undersurface of the deck.





Failing paint system on the bridge rails.



Old section loss scars.





Deck. Typical.



Deck soffit. Span # 1. Bays # 1 & 2.





Spall with exposed reinforcing steel adjacent to the deck drains in Span # 2.



Undersurface of Span # 2. Typical.





Spall with exposed reinforcing steel adjacent to the Right deck drain in Span # 2.



Span # 2 superstructure. Typical.



Bent # 1 Beam # 5. Paint system at the end of the beam.



Beam # 3 at Bent # 1 has 5/16" section loss to the base of the web.





Bent # 1. Beam # 3. There is 1/4" section loss in the vertical face of the web adjacent to the expansion dam.



Beam # 1 over Bent # 2.





Span # 2 superstructure. Typical.



Bent # 3. Beam # 5. Base of web has 7/16" section loss.





Bent # 1. Beam # 3. Corrosion with section loss.



Beam # 1 over Bent # 2.





Beam # 5 at Bent # 3. Section loss.



Superstructure. Typical.





Bent # 2. Back face. Typical.  
Wading and probing substructure.



Bent # 2. Typical.





Bent # 3. Typical.



Bent # 1. Typical.





Bent # 3. Typical.

## Maintenance Needs

**Date Reported:** 02/29/2016  
**Priority:** D- Routine  
**Type of Work:** Repair  
**Status:** Open  
**Component:** 330 - Metal Bridge Railing

## Deficiency Description

Guard Rail

The Northeast concrete end post has broken off and has exposed reinforcing steel.

## Remarks



Bent # 3 Lt missing end post.



Northeast end post.





Northeast end post.

**Date Reported:** 02/15/2017  
**Priority:** C - Important  
**Type of Work:** Clean  
**Status:** Open  
**Component:** 107 - Steel Open Girder/Beam

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### Deficiency Description

#### Superstructure

There is active corrosion with flaking rust showing through the paint system at the ends of the beams. Section loss on the ends of the beams to the webs and flanges.

#### Remarks

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Bent # 1 Beam # 3 active corrosion with layers of flaking rust at the ends of the beams.



Old section loss scars.





Bent # 1, Beam # 3 has 5/16" section loss to the base of the web.



Active corrosion under the paint system has 7/16" section loss to the base of web. The bottom flange is reduced to 3/16".





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**Team Lead:** Jeff Jones **Inspection Date:** January 11, 2021

### **Inspection Comments**

01/11/2021 - JCJ & TJL - Routine Inspection conducted this date.

01/23/2020 - JCJ & TJL - Routine and Type 2 Underwater Inspection Inspection conducted this date.

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### **Substructure Notes**

01/23/2020 - JCJ & TJL - Type 2 Underwater Inspection - Wading and probing during moderate and turbid water conditions indicate that the footings have cover with no apparent scour problems during this inspection. Soundings were conducted during this inspection, see attached microstation drawing.