



Latitude:35.84285, Longitude:-90.75608

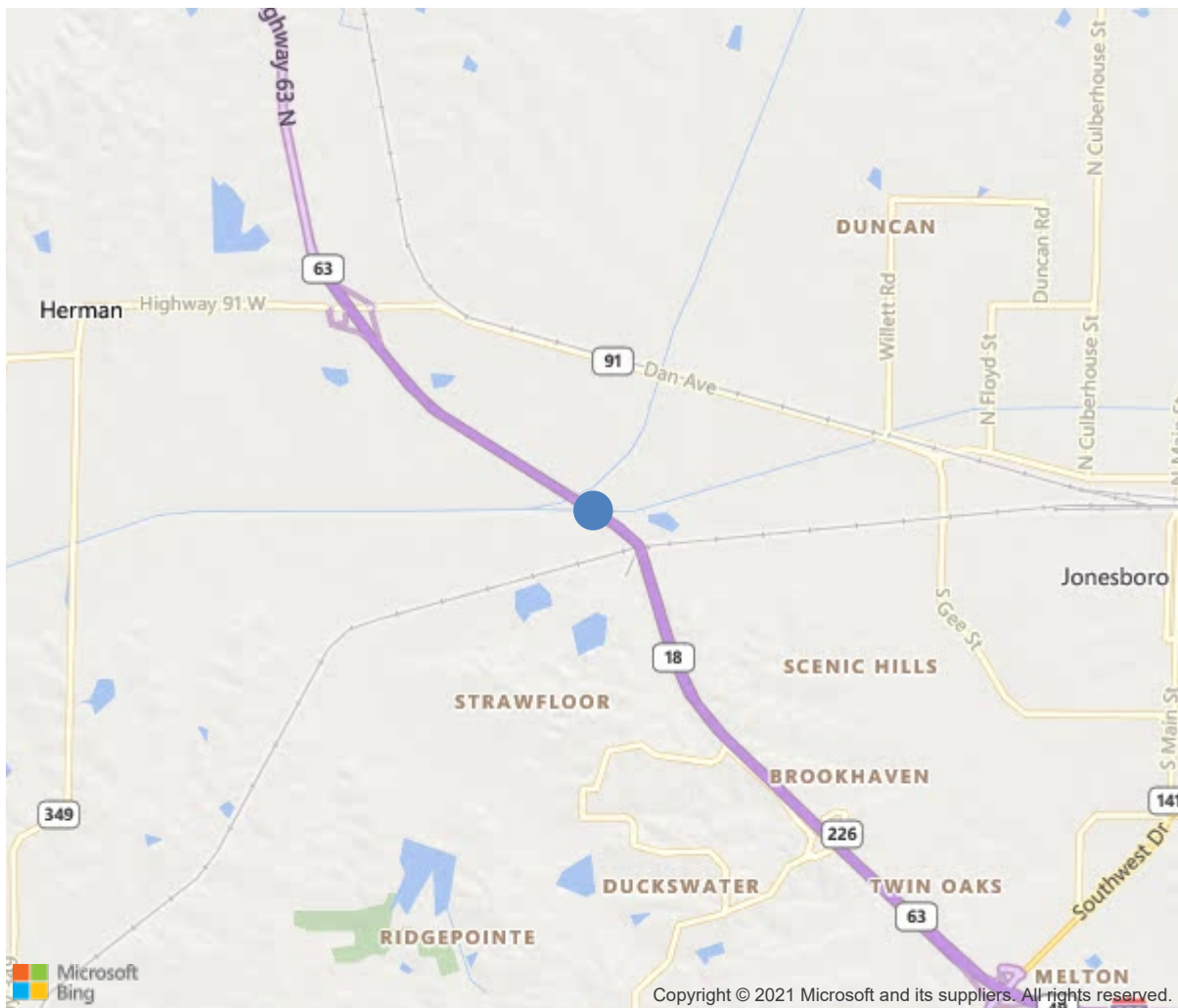
Route:555 Section:03 Log:1.665

Arnold Road ID:16x555x3xB, Arnold Log mile:1.665

District 10, Craighead County

Owner: 1-State Highway Agency

4.43 MI NW OF SH 1B



35.84285, -90.75608



Bridge #A5205(Routine)

I-555 over LOST CREEK

Location: 4.43 MI NW OF SH 1B

Team Lead: Richard Jones Inspection Date: April 14, 2020

IDENTIFICATION	
(1) State Names	Arkansas
(8) Structure Number	A5205
(5) Inventory Route	63
(2) Highway Agency District	10
(3) County Code	31-Craighead County, Arkansas
(4) Place Code	0
(6) Features Intersected	LOST CREEK
(7) Facility Carried	US 63-06SB-LM10.62
(9) Location	4.43 MI NW OF SH 1B
(11) Mile Point	10.62 mi
(12) Base Highway Network	Yes
(13) LRS Inventory Rte & Subrte	0000063060
(16) Latitude	35.84285
(17) Longitude	-90.75608
(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	1-Monolithic Concrete (concurrently placed
Type of Membrane	0-None
Type of Deck Protection	0-None
AGE AND SERVICE	
(27) Year Built	1978
(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	10500
(30) Year of ADT	2018
(109) Truck ADT	16 %
(19) Bypass, Detour Length	1 mi
GEOMETRIC DATA	
(48) Length of Maximum Span	68 ft
(49) Structure Length	207.6 ft
(50) Curb or Sidewalk Width	
Left	0.4 ft
Right	0.4 ft
(51) Bridge Roadway Width Curb to Curb	39 ft
(52) Deck Width Out to Out	42.3 ft
(32) Approach Roadway Width (W/Shoulders)	44 ft
(33) Bridge Median	0-No median
(34) Skew	55 Deg
(35) Structure Flared	No flare
(10) Inventory Route Min Vert Clear	99.99 ft
(47) Inventory Route Total Horiz Clear	39.7 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	5-None present but re-evaluation
(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	12-Urban Principal Arterial - Oth
(100) Defense Highway	2-The inventory route is on a No
(101) Parallel Structure	R-The right structure of paralle
(102) Direction of Traffic	1 - way traffic
(103) Temporary Structure	
(105) Federal Lands Highways	0-N/A
(110) Designated National Network	1-The inventory route is part of the
(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	4
(59) Superstructure	6
(60) Substructure	5
(61) Channel & Channel Protection	4
(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	3
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	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 currently a
(36B) Transitions	1-Inspected feature meets currently a
(36C) Approach Guardrail	1-Inspected feature meets currently a
(36D) Approach Guardrail Ends	1-Inspected feature meets currently a
(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	0
(114) Future ADT	11407
(115) Year of Future ADT	2028

INSPECTIONS *			
(90) Inspection Date			04/2020
(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	Yes		03/2021
* 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.			





Bridge #A5205(Routine)

I-555 over LOST CREEK

Location: 4.43 MI NW OF SH 1B

Team Lead: Richard Jones, Inspection Date: April 14, 2020

ELEM	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
12	Reinforced Concrete Deck	SF	8364	5826	1586	952	0
1080	Delamination/Spall/Patched Area	SF	2278	0	1326	952	0
1090	Exposed Rebar	SF	116	0	116	0	0
1130	Cracking (RC and Other)	SF	144	0	144	0	0
107	Steel Open Girder/Beam	LF	1428	1362	24	42	0
1000	Corrosion	LF	66	0	24	42	0
515	Steel Protective Coating	SF	13145	11686	658	263	538
3440	Effectiveness (Steel Protective Coatings)	SF	1459	0	658	263	538
215	Reinforced Concrete Abutment	LF	168	168	0	0	0
227	Reinforced Concrete Pile	EA	16	16	0	0	0
234	Reinforced Concrete Pier Cap	LF	137	131	5	1	0
1080	Delamination/Spall/Patched Area	LF	5	0	5	0	0
1090	Exposed Rebar	LF	1	0	0	1	0
302	Compression Joint Seal	LF	285	61	0	209	15
2320	Seal Adhesion	LF	99	0	0	84	15
2340	Seal Cracking	LF	125	0	0	125	0
311	Movable Bearing	EA	21	0	0	21	0
2220	Alignment	EA	21	0	0	21	0
313	Fixed Bearing	EA	21	19	1	1	0
2220	Alignment	EA	2	0	1	1	0
321	Reinforced Concrete Approach Slab	SF	1752	1521	231	0	0
1130	Cracking (RC and Other)	SF	12	0	12	0	0
1190	Abrasion/Wear (PSC/RC)	SF	219	0	219	0	0
330	Metal Bridge Railing	LF	408	408	0	0	0
331	Reinforced Concrete Bridge Railing	LF	408	372	36	0	0
1130	Cracking (RC and Other)	LF	36	0	36	0	0



Overall





Soffit



Span 1





Span 2



Span 3



**Bridge #A5205**(Routine)

**I-555 over LOST CREEK**

**Location: 4.43 MI NW OF SH 1B**

**Team Lead:** Richard Jones **Inspection Date:** April 14, 2020

## **Maintenance Needs**

**Date Reported:** 04/28/2011  
**Priority:** C - Important  
**Type of Work:** None  
**Status:** Monitor  
**Component:**

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## **Deficiency Description**

Channel  
Scour and loss of pile penetration at  
Bent 2 = 5.4' and at  
Bent 3 = 1.7'

## **Remarks**

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**Date Reported:** 04/18/2012  
**Priority:** C - Important  
**Type of Work:** Repair  
**Status:** Monitor  
**Component:** Deck

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**Deficiency Description**

Concrete deck has several transverse cracks. Deck has several spalled and delaminated areas along transverse cracks and along joints at ends of spans. Several spalls have rebar exposed.

**Remarks**

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Span 2



Span 3

**Date Reported:** 04/18/2012  
**Priority:** C - Important  
**Type of Work:** Repair  
**Status:** Monitor  
**Component:** 302 - Compression Joint Seal

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**Deficiency Description**

Compression seals have several tears and several areas losing adhesion. Bent 3 joint seal has 15' near Lt gutter that has dropped out of joint armor.

**Remarks**

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Bent 2 joint



**Date Reported:** 04/18/2012  
**Priority:** C - Important  
**Type of Work:** Repair  
**Status:** Monitor  
**Component:** Superstructure

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**Deficiency Description**

Steel bearings have surface rust throughout. Rocker bearings have some pack rust.  
Expansion bearings at bents 2 and 3 are tilted up to 15 degrees. A few bearings are at or near max rotation.  
Span 2 bent 3 fixed bearing 7 has one anchor bolt sheared off.

**Remarks**

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Bent 2 bearing 7



**Bridge #A5205**(Routine)

**I-555 over LOST CREEK**

**Location: 4.43 MI NW OF SH 1B**

**Team Lead:** Richard Jones **Inspection Date:** April 14, 2020

**Date Reported:** 04/18/2012  
**Priority:** C - Important  
**Type of Work:** Clean  
**Status:** Monitor  
**Component:** Superstructure

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#### **Deficiency Description**

Steel girders have areas of scattered freckled rust. Ends of girders over bents have a few areas of rust and section loss, especially at web below haunch and along bottom flange.

#### **Remarks**

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**Date Reported:** 04/09/2013  
**Priority:** C - Important  
**Type of Work:** None  
**Status:** Monitor  
**Component:**

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**Deficiency Description**

Embankment erosion is progressing under and adjacent to span 3.

**Remarks**

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Slope under span 3



Span 3

**Date Reported:** 03/30/2015  
**Priority:** C - Important  
**Type of Work:** None  
**Status:** Repair Documented  
**Component:**

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**Deficiency Description**

Rt end of bent 1 abutment is undermined for 12 feet with 1 pile exposed.

**Remarks**

Slopes have been lined with stone rip rap.

observed during inspection

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Bent 1 Rt



Bent 1 Embankment





Bent 1 Rt



**Bridge #A5205**(Routine)

**I-555 over LOST CREEK**

**Location: 4.43 MI NW OF SH 1B**

**Team Lead:** Richard Jones **Inspection Date:** April 14, 2020

## Inspection Comments

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### Deck Notes

Metal bridge rail is in overall good condition. Concrete portion of rail has a few vertical cracks, and several areas of abrasion. Concrete approach slabs have wide diagonal cracks. Some have been sealed in the past.

Compression seals have several tears and several areas losing adhesion. Bent 3 joint seal has 15' near Lt gutter that has dropped out of joint armor.

Concrete deck has several transverse cracks. Deck has several spalled and delaminated areas along transverse cracks and along joints at ends of spans. Several spalls have rebar exposed.

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### Superstructure Notes

Steel girders have areas of scattered freckled rust. Ends of girders over bents have a few areas of rust and section loss, especially at web below haunch and along bottom flange.

Steel bearings have surface rust throughout. Rocker bearings have some pack rust.

Expansion bearings at bents 2 and 3 are tilted up to 15 degrees. A few bearings are at or near max rotation.

Span 2 bent 3 fixed bearing 7 has one anchor bolt sheared off.

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### Substructure Notes

Embankment under span 1 was lined with rip rap in 2017. Undermined cap at bent 1 was repaired with hand placed rip rap.

Embankment erosion is continuing under and adjacent to span 3.

Caps have a few cracked/delaminated areas, and spalls with rebar exposed.