



Latitude:36.02127, Longitude:-90.94054

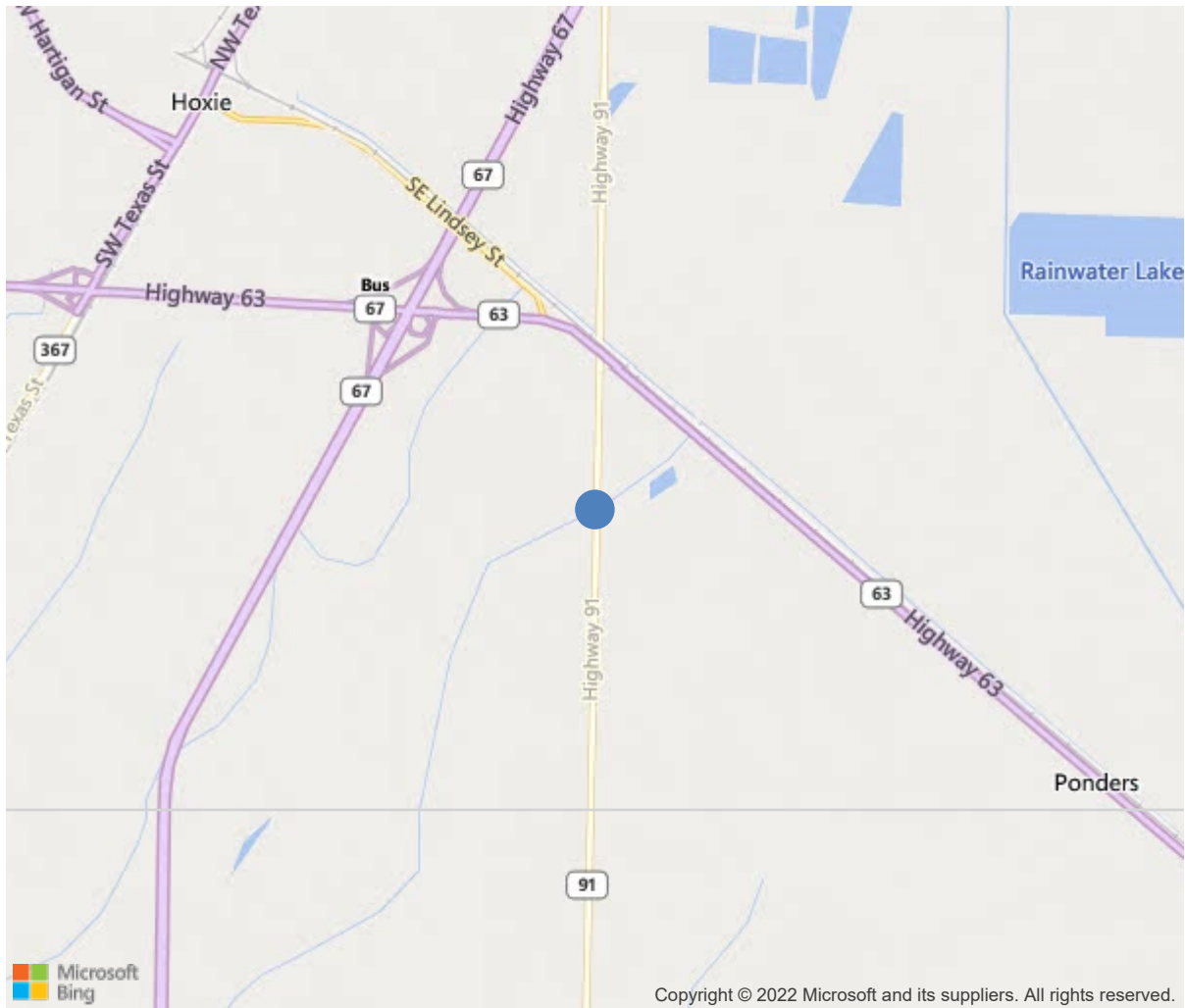
Route:91 Section:01 Log:3.55

Arnold Road ID:38x91x1xA, Arnold Log mile:3.414

District 10, Lawrence County

Owner: 1-State Highway Agency

3.55 MI S JCT US412/91



36.02127, -90.94054



**Bridge #M1653(Routine)**  
**SH 91-01- LM 3.55 over LINDSEYS CREEK**

**Location: 3.55 MI S JCT US412/91**

**Team Lead: Tim Myrick Inspection Date: November 03, 2021**

IDENTIFICATION	
(1) State Names	Arkansas
(8) Structure Number	M1653
(5) Inventory Route	91
(2) Highway Agency District	10
(3) County Code	75-Lawrence County, Arkansas
(4) Place Code	0
(6) Features Intersected	LINDSEYS CREEK
(7) Facility Carried	SH 91-01- LM 3.55
(9) Location	3.55 MI S JCT US412/91
(11) Mile Point	3.55 mi
(12) Base Highway Network	No
(13) LRS Inventory Rte & Subrte	0000000000
(16) Latitude	36.02127
(17) Longitude	-90.94054
(98) Border Bridge State Code	
(99) Border Bridge Structure No.	
STRUCTURE TYPE AND MATERIAL	
(43) Main Structure Type	122
Material	1-Concrete
Type	22-Channel beam
(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	2-Concrete Precast Panels
(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	1931
(106) Year Reconstructed	1956
(42) Type of Service	15
On	1-Highway
Under	5-Waterway
(28) Lane	
On	2
Under	0
(29) Average Daily Traffic	580
(30) Year of ADT	2018
(109) Truck ADT	1 %
(19) Bypass, Detour Length	7 mi
GEOMETRIC DATA	
(48) Length of Maximum Span	15 ft
(49) Structure Length	45 ft
(50) Curb or Sidewalk Width	
Left	0.5 ft
Right	0.5 ft
(51) Bridge Roadway Width Curb to Curb	24 ft
(52) Deck Width Out to Out	25.2 ft
(32) Approach Roadway Width (W/Shoulders)	25.9 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	25.6 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 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	0
(26) Functional Class	17-Urban 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	5
(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	23
(65) Inventory Rating Method	1-Load Factor(LF)
(66) Inventory Rating	
Type	3
Rating	14
(70) Bridge Posting	2-20.0 - 29.9 % 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	8
(72) Approach Roadway Alignment	8
(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	812
(115) Year of Future ADT	2028

INSPECTIONS *			
(90) Inspection Date			11/2021
(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.			



**Bridge #M1653(Routine)**  
**SH 91-01- LM 3.55 over LINDSEYS CREEK**

**Location: 3.55 MI S JCT US412/91**

**Team Lead: Tim Myrick, Inspection Date: November 03, 2021**

ELEM	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
16	Reinforced Concrete Top Flange	SF	1134	1134	0	0	0
510	Wearing Surfaces	SF	1080	0	0	1080	0
3220	Crack (Wearing Surface)	SF	366	0	0	366	0
3230	Effectiveness (Wearing Surface)	SF	714	0	0	714	0
110	Reinforced Concrete Open Girder/Beam	LF	315	51	0	264	0
1080	Delamination/Spall/Patched Area	LF	4	0	0	4	0
1090	Exposed Rebar	LF	235	0	0	235	0
1120	Efflorescence/Rust Staining	LF	3	0	0	3	0
1130	Cracking (RC and Other)	LF	22	0	0	22	0
215	Reinforced Concrete Abutment	LF	52	52	0	0	0
228	Timber Pile	EA	10	0	7	3	0
1140	Decay/Section Loss	EA	6	0	3	3	0
1150	Check/Shake	EA	4	0	4	0	0
234	Reinforced Concrete Pier Cap	LF	52	51	0	1	0
1090	Exposed Rebar	LF	1	0	0	1	0
330	Metal Bridge Railing	LF	90	0	90	0	0
1000	Corrosion	LF	90	0	90	0	0
515	Steel Protective Coating	SF	306	214	92	0	0
3440	Effectiveness (Steel Protective Coatings)	SF	92	0	92	0	0





beginning end



ending end



## Maintenance Needs

**Date Reported:** 07/12/2011  
**Priority:** D- Routine  
**Type of Work:** Repair  
**Status:** Monitor  
**Component:** Deck

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## Deficiency Description

Top of Deck Asphalt Overlay has several open cracks especially over joints and between units, remainder of wearing surface has moderate abrasion.

## Remarks

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Deck



**Bridge #M1653(Routine)**  
**SH 91-01- LM 3.55 over LINDSEYS CREEK**

**Location: 3.55 MI S JCT US412/91**

**Team Lead: Tim Myrick Inspection Date: November 03, 2021**



Deck 2020

**Date Reported:** 07/12/2011  
**Priority:** C - Important  
**Type of Work:** Repair  
**Status:** Monitor  
**Component:** Substructure

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#### Deficiency Description

Majority of Piles have some decay with checks and shakes. Some Piles have 1 to 2in. outside decay with some section loss.

Bent 3 piles 3,4 & 5 have up to 2 in. outside decay.

#### Remarks

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Bent 2 pile 5





Bent 2 pile 1 2020



Bent 2 pile 2 2020



Bent 2 pile 3 2020



Bent 3 pile 3 2020



Bent 3 pile 5 2020



Team Lead: Tim Myrick Inspection Date: November 03, 2021

Date Reported: 07/12/2011  
Priority: C - Important  
Type of Work: Repair  
Status: Monitor  
Component: Superstructure

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### Deficiency Description

Girder portion of Deck Units have a few small shelled out areas with exposed rebar due to inadequate coverage from steel replacement.

Span 1 Unit 1 has 8LF exposed rebar.  
Span 1 Unit 2 has 7LF of cracks and 1LF exposed rebar.  
Span 1 Unit 3 has 3LF of cracks, 10LF exposed rebar and 2LF delaminated area.  
Span 1 Unit 4 has 5LF of cracks and 6LF exposed rebar.  
Span 1 Unit 5 has 1LF of cracks and 10LF exposed rebar.  
Span 1 Unit 6 has 1LF of cracks, 13LF exposed rebar.  
Span 1 Unit 7 has 1LF of cracks and 5LF exposed rebar.

Span 2 Unit 1 has 15LF exposed rebar.  
Span 2 Unit 2 has 15LF exposed rebar.  
Span 2 Unit 3 has 15LF exposed rebar.  
Span 2 Unit 4 has 15LF exposed rebar.  
Span 2 Unit 5 has 13LF exposed rebar.  
Span 2 Unit 6 has 12LF exposed rebar.  
Span 2 Unit 7 has 15LF exposed rebar.

Span 3 Unit 1 has 10LF exposed rebar and 2LF of delamination.  
Span 3 Unit 2 has 4LF of cracks and 10LF exposed rebar.  
Span 3 Unit 3 has 3LF of cracks and 10LF exposed rebar.  
Span 3 Unit 4 has 12LF exposed rebar, and 2ft of efflorescence.  
Span 3 Unit 5 has 14LF exposed rebar.  
Span 3 Unit 6 has 14LF exposed rebar.  
Span 3 Unit 7 has 14LF exposed rebar.

### Remarks

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Span 2 soffit





Span 2 soffit 2020



Span 3 soffit 2020



Bridge #M1653(Routine)  
SH 91-01- LM 3.55 over LINDSEYS CREEK  
Location: 3.55 MI S JCT US412/91

Team Lead: Tim Myrick Inspection Date: November 03, 2021

Date Reported: 07/02/2014  
Priority: G - General/ Preventive maintenance  
Type of Work: Repair  
Status: Monitor  
Component: 515 - 330 - Metal Bridge Railing

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#### Deficiency Description

Metal Bridge Rail Has 30% paint deterioration with some pitting.

#### Remarks

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Bridge #M1653(Routine)  
SH 91-01- LM 3.55 over LINDSEYS CREEK  
Location: 3.55 MI S JCT US412/91

Team Lead: Tim Myrick Inspection Date: November 03, 2021

Date Reported: 07/02/2014  
Priority: D- Routine  
Type of Work: Repair  
Status: Monitor  
Component: Substructure

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#### Deficiency Description

Bent 2 Concrete Cap  
Span 1 side face of cap above pile 3 has a 2 in. x 12 in. spall with exposed rebar due to inadequate coverage.

#### Remarks

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### Inspection Comments

Bridge Number M1653  
County Lawrence County  
Route SH 91, Sec 1, LM 3.414  
Feature Intersected LINDSEYS CREEK

The referenced bridge has been load rated and a change in load posting is recommended.

Posting Vehicle	Current Bridge Load Posting	Current Field Load Posting	New Recommended Load Posting
Code 4 (3 axles)	Legal18 Tons	18 Tons	
Code 9 (4 axles)	Legal22 Tons	22 Tons	
Code 5 (5 axles)	Legal31 Tons	31 Tons	

The reason for the posting change is:

Recent field inspections and a re-evaluation of the bridge model have resulted in a lower rating.

Sincerely,  
Michael

Michael C. Busick, P.E.  
Senior Engineer – Bridge Division

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### Deck Notes

Bridge is posted correctly.  
Northeast & southwest flareboards are missing.  
Steel Bridge Rail has rust with some pitting.  
Top of Deck Asphalt Overlay has several open cracks especially over joints and between units, remainder of wearing surface has moderate abrasion.

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### Superstructure Notes

Girder portion of Deck Units have a few small shelled out areas with exposed rebar due to inadequate coverage from steel replacement.  
No reinforcement has debonded from concrete at this time.  
Span 1 Unit 1 has 8LF exposed rebar.  
Span 1 Unit 2 has 7LF of cracks and 1LF exposed rebar.  
Span 1 Unit 3 has 3LF of cracks, 9LF exposed rebar and 2LF delaminated area.  
Span 1 Unit 4 has 5LF of cracks and 6LF exposed rebar.  
Span 1 Unit 5 has 1LF of cracks and 10LF exposed rebar.  
Span 1 Unit 6 has 1LF of cracks, 13LF exposed rebar.  
Span 1 Unit 7 has 1LF of cracks and 5LF exposed rebar.  
Span 2 Unit 1 has 15LF exposed rebar.  
Span 2 Unit 2 has 15LF exposed rebar.  
Span 2 Unit 3 has 15LF exposed rebar.  
Span 2 Unit 4 has 15LF exposed rebar.  
Span 2 Unit 5 has 13LF exposed rebar.  
Span 2 Unit 6 has 12LF exposed rebar.  
Span 2 Unit 7 has 15LF exposed rebar.  
Span 3 Unit 1 has 10LF exposed rebar and 2LF of delamination.  
Span 3 Unit 2 has 4LF of cracks and 10LF exposed rebar.  
Span 3 Unit 3 has 3LF of cracks and 10LF exposed rebar.  
Span 3 Unit 4 has 12LF exposed rebar, and 2ft of efflorescence.  
Span 3 Unit 5 has 14LF exposed rebar.  
Span 3 Unit 6 has 14LF exposed rebar.  
Span 3 Unit 7 has 14LF exposed rebar.

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### Substructure Notes



**Bridge #M1653**(Routine)

**SH 91-01- LM 3.55 over LINDSEYS CREEK**

**Location: 3.55 MI S JCT US412/91**

**Team Lead:** Tim Myrick **Inspection Date:** November 03, 2021

Span 1 side of Bent 2 Cap has a spalled out area with exposed rebar due to lack of steel coverage.

Majority of Piles have some decay with checks and shakes. Some Piles have 1 to 2 in. outside decay with some section loss.

Bent 3 piles 3,4 & 5 have up to 2 in. outside decay.

Heavy vegetation in channel.