

Bridge 03931 Inspection Report



Latitude:33.41767, Longitude:-91.84973

Route:425 Section:03 Log:1.51

Arnold Road ID:22x425x3xA, Arnold Log mile:1.516

District 02, 43 - Drew County

Owner: 1 - State Highway Agency

Inspection Direction: 2 - S to N

Bridge Posting Information

41 - Structure Open/Posted/Closed: A - Open, no restriction

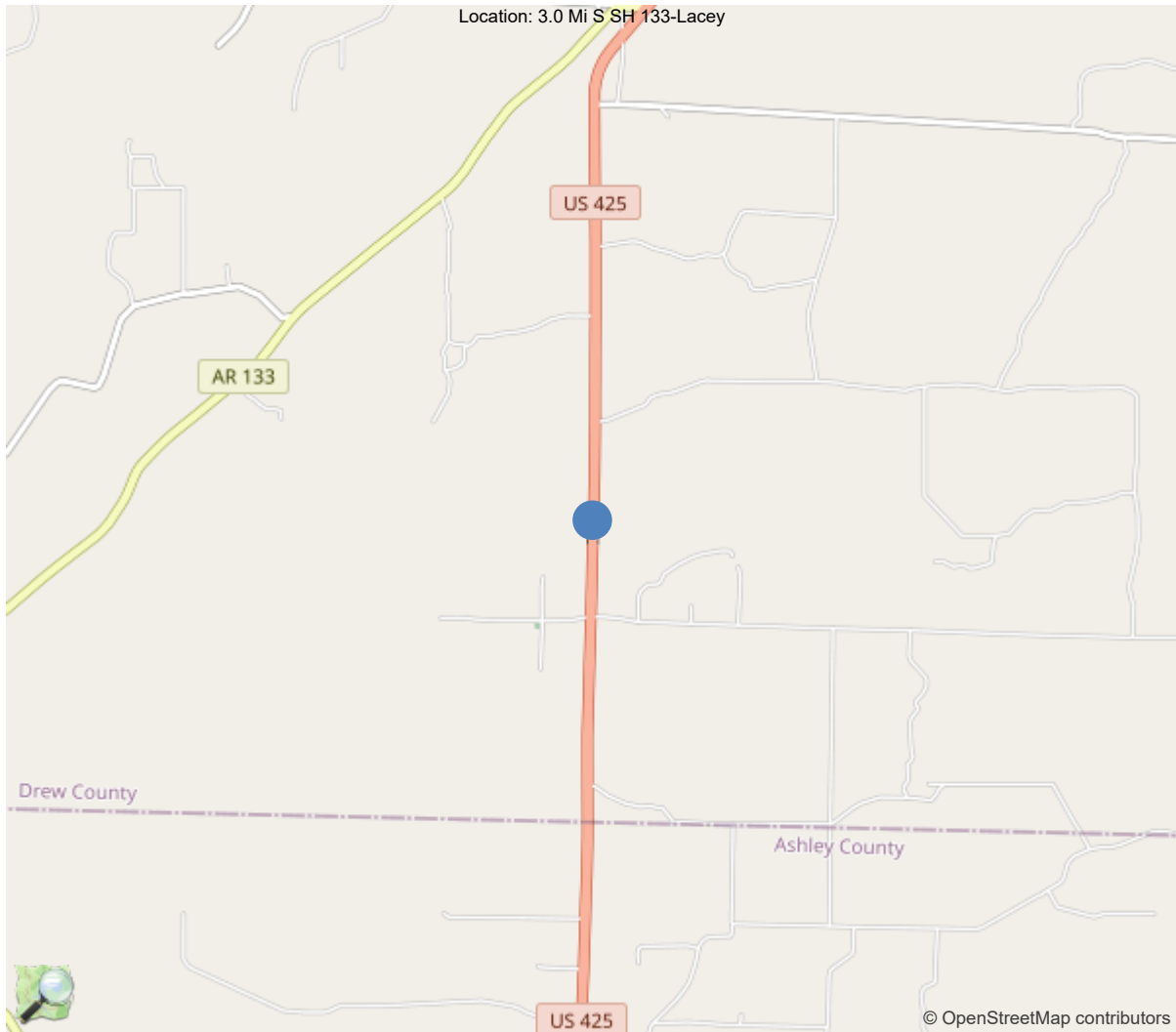
70 - Bridge Posting: 5 - Equal to or above legal loads

Legal Load	Calculated Capacity	Beginning of Bridge Sign Current Value	End of Bridge Sign Current Value
Code 4 (22 Tons)	40		
Code 9 (31 Tons)	47		
Code 5 (40 Tons)	60		

If calculated capacity is less than the Legal Load Listed, the Bridge Legally Requires Posting Signs to be installed by the Bridge Owner.



30"x36" AR



33.41767, -91.84973

National Bridge Inventory Data Sheet

IDENTIFICATION	
(1) State Names	5 - Arkansas
(8) Structure Number	03931
(5) Inventory Route	1
(2) Highway Agency District	02 - District 02
(3) County Code	43 - Drew County
(4) Place Code	0
(6) Features Intersected	South Fork Panther Creek
(7) Facility Carried	US 425-03 LM 1.51
(9) Location	3.0 Mi S SH 133-Lacey
(11) Mile Point	1.51 mi
(12) Base Highway Network	Yes
(13) LRS Inventory Rte & Subrte	0000425030
(16) Latitude	33.41767
(17) Longitude	-91.84973
(98) Border Bridge State Code	
(99) Border Bridge Structure No.	
STRUCTURE TYPE AND MATERIAL	
(43) Main Structure Type	11
Material	1 - Concrete
Type	1 - Slab
(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 pl
Type of Membrane	0 - None
Type of Deck Protection	0 - None
AGE AND SERVICE	
(27) Year Built	1965
(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	3800
(30) Year of ADT	2018
(109) Truck ADT	21 %
(19) Bypass, Detour Length	45 mi
GEOMETRIC DATA	
(48) Length of Maximum Span	25 ft
(49) Structure Length	75 ft
(50) Curb or Sidewalk Width	
Left	1.5 ft
Right	1.5 ft
(51) Bridge Roadway Width Curb to Curb	27.9 ft
(52) Deck Width Out to Out	33.3 ft
(32) Approach Roadway Width (W/Shoulders)	34.1 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	30.8 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	5 - None present but re-evalua
(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	0 - The inventory route is not
(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	6
(60) Substructure	7
(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	
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	
(68) Deck Geometry	4
(69) Clearances, Vertical/Horizontal	N
(71) Waterway Adequacy	8
(72) Approach Roadway Alignment	8
(36A) Bridge Railings	1 - Inspected feature meets current
(36B) Transitions	0 - Inspected feature does not meet
(36C) Approach Guardrail	0 - Inspected feature does not meet
(36D) Approach Guardrail Ends	1 - Inspected feature meets current
(113) Scour Critical Bridges	5 - Bridge foundations determined t
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	4492
(115) Year of Future ADT	2028

INSPECTIONS *			
(90) Inspection Date			07/25/2023
(91) Frequency			24
(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.			

Team Lead: Sharon Hooks, **Inspection Date:** 07/25/2023

Specifications for National Bridge Inventory Sheets

IDENTIFICATION	
B.ID.01 Bridge Number	03931
B.ID.02 Bridge Name	
B.ID.03 Previous Bridge No.	
B.W.01 Year Built	

LOCATION	
B.L.01 State Code	5 - Arkansas
B.L.02 County Code	43 - Drew County
B.L.03 Place Code	00000 - N/A
B.L.04 Highway Agency District	02 - District 02
B.L.05 Latitude	33.41767
B.L.06 Longitude	-91.84973
B.L.07 Border Bridge Number	
B.L.08 Border Bridge State or Country Code	
B.L.09 Border Bridge Insp. Resp.	
B.L.10 Border Bridge Designated Lead State	
B.L.11 Bridge Location	
B.L.12 Metropolitan Planning Organization	

CLASSIFICATION	
B.CL.01 Owner	
B.CL.02 Maint. Responsibility	
B.CL.03 Federal or Tribal Land Access	
B.CL.04 Historic Significance	
B.CL.05 Toll	
B.CL.06 Emergency Evacuation Designation	

ROADSIDE HARDWARE	
B.RH.01A Bridge Railing Type	
B.RH.01B Bridge Railing Year (YY)	
B.RH.01C Bridge Railing Test Level	
B.RH.02A Transition Type	
B.RH.02B Transition Year (YY)	
B.RH.02C Transition Test Level	

BRIDGE GEOMETRY	
B.G.01 NBIS Bridge Length	
B.G.02 Total Bridge Length	
B.G.03 Max Span Length	
B.G.04 Min Span Length	
B.G.05 Bridge Width Out-to-Out	
B.G.06 Bridge Width Curb-to-Curb	
B.G.07 Left Curb or Sidewalk Width	
B.G.08 Right Curb or Sidewalk Width	
B.G.09 Approach Roadway Width	

B.G.10 Bridge Median	
B.G.11 Skew	
B.G.12 Curved Bridge	
B.G.13 Max Bridge Height	
B.G.14 Sidehill Bridge	
B.G.15 Irregular Deck Area	
B.G.16 Calculated Deck Area	

LOADS AND LOAD RATING	
B.LR.01 Design Load	
B.LR.02 Design Method	
B.LR.03 Load Rating Date	
B.LR.04 Load Rating Method	
B.LR.05 Inventory Load Rating Factor	
B.LR.06 Operating Load Rating Factor	
B.LR.07 Controlling Legal Load Rating Factor	
B.LR.08 Routine Permit Loads	

INSPECTION REQUIREMENTS	
B.IR.01 NSTM Inspection Required	
B.IR.02 Fatigue Details	
B.IR.03 UW Inspection Required	
B.IR.04 Complex Feature	

COMPONENT CONDITION RATINGS	
B.C.01 Deck Condition Rating	
B.C.02 Superstructure Condition	
B.C.03 Substructure Condition	
B.C.04 Culvert Condition	
B.C.05 Bridge Railing Condition	
B.C.06 Bridge Railing Transitions Condition	
B.C.07 Bridge Bearings Cond.	
B.C.08 Bridge Joints Condition	
B.C.09 Channel Condition Rating	
B.C.10 Channel Protection Condition	
B.C.11 Scour Condition Rating	
B.C.12 Bridge Condition Classification	
B.C.13 Lowest Condition Rating	
B.C.14 NSTM Insp. Condition	
B.C.15 UW Inspection Condition	

APPRAISAL	
B.AP.01 Approach Roadway Alignment	
B.AP.02 Overtopping Likelihood	
B.AP.03 Scour Vulnerability	
B.AP.04 Scour Plan of Action	
B.AP.05 Seismic Vulnerability	



Team Lead: Sharon Hooks, Inspection Date: 07/25/2023

HIGHWAY ROUTES					
Highway Parent	B.RT.01 Route Designation	B.RT.02 Route Number	B.RT.03 Route Direction	B.RT.04 Route Type	B.RT.05 Service Type

POSTING STATUS DATA	
B.PS.01 Load Posting Status	B.PS.02 Posting Status Change Date

LOAD EVALUATION AND POSTING			
B.EP.01 Legal Load Configuration	B.EP.02 Legal Load Rating Factor	B.EP.03 Posting Type	B.EP.04 Posting Value



Asset #03931 (Routine)

US 425-03 LM 1.51 over South Fork Panther Creek

Location: 3.0 Mi S SH 133-Lacey

Team Lead: Sharon Hooks Inspection Date: 07/25/2023

Inspection Notes

General Observation

Beginning of structure toward SH 133, Ashley County Line, South End.

A-54 - Sealable Deck Cracks (Y)

Deck:

All spans: Several unsealed, hairline- to moderate-sized full-depth longitudinal cracks / minor to significant abrasive wear in travel lanes.

Span 1: Patched area in left lane.

A-56 - Joint Cleaning/Flushing Needed (Y)

All joints are filled with debris.

A-59 - Joint Repair Needed (Y)

Bents 1, 3, & 4: Pourable joint material has deteriorated and joint is mostly filled with dirt and debris.

Bent 2: Joint has been re-sealed, but is losing adhesion in most places.

A-61 - Polymer Overlay Advised (Y)

Deck:

All spans: Several unsealed, hairline- to moderate-sized full-depth longitudinal cracks / minor to significant abrasive wear in travel lanes.

Soffit:

All spans: Cracking with efflorescence and rust staining, mostly reflective of cracking in deck surface / delaminations/spalling/exposed rebar around drain holes, especially Span 2 left and Span 3 right.

A-64 - Vegetation Removal Requested (Y)

Tree's ,vines on all end slopes and under bridge.

Inspection Photos and Notes



07/25/2023

Elevation.



07/25/2023

Span 3 left side has trees and vegetation growing under bridge.



07/25/2023

Span 2 under view of soffit.



07/25/2023

Trees, vines and vegetation impeding inspection process.



Span 3 deck right lane has large unsealed longitudinal cracks.



Trees, vines and vegetation impeding inspection process.



Deck over view.



Approach.



07/21/2021

Span1 left side of soffit has cracking with efflorescence.



07/21/2021

Under view of span 2.



07/21/2021

Bent 1 Joint seals have debris impaction.

Maintenance Needs

Date Reported: 07/20/2015

Priority: D- Routine

Type of Work: (Inactive) (Inactive) 0 - N/A

Status: Monitor

Component:

Deficiency Description

COMBINED - Span 2 left side and span 3 right side drain hole bottom of slab.
Spalling and exposed rebar.

Remarks

07-02-2019 GGL-KLR: Combined similar MN.



Span 2 left side of soffit area has spall with exposed rebar and common on bent 3 soffit drain on right side .



Span 2 delam under drain opening right side.



01/01/2020

Bent 3 right side drain at soffit area has spall with exposed rebar.



01/01/2020



07/21/2021

Bent 2 left near Bent 3 has spall with exposed rebar.



07/21/2021

Bent 3 right at drain opening has spall with exposed rebar.

Maintenance Needs

Date Reported: 07/25/2023

Priority: D- Routine

Type of Work: Channel Work/Drift Removal

Status: Open

Component: Miscellaneous

Deficiency Description

Channel right side (East) upstream has a beaver dam restricting water flow.

Remarks



Beaver dam on right side (East) is restricting water flow.



Right side of channel (east) has beaver dam restricting water flow.



Beaver dam.



Asset #03931(Routine)
US 425-03 LM 1.51 over South Fork Panther Creek
Location: 3.0 Mi S SH 133-Lacey
Team Lead: Sharon Hooks Inspection Date: 07/25/2023

Routine Maintenance

Check Box Maintenance Items

Type of Maintenance	Is Recommended?
A-54 - Sealable Deck Cracks	Yes
A-55 - Deck Washing Needed	
A-56 - Joint Cleaning/Flushing Needed	Yes
A-57 - Beam End and Bearing Paint Needed	
A-58 - Cap Cleaning/Flushing Needed	
A-59 - Joint Repair Needed	Yes
A-60 - Full Beam Painting Needed	
A-61 - Polymer Overlay Advised	Yes
A-62 - Hydro and LMC Advised	
A-63 - Missing/Incorrect Log Mile Signage	
A-64 - Vegetation Removal Requested	Yes
A-65 - Clogged deck drains?	
A-66 - Approach minor pothole/leveling needed	

A-54 - Sealable Deck Cracks (Yes)

Deck:

All spans: Several unsealed, hairline- to moderate-sized full-depth longitudinal cracks / minor to significant abrasive wear in travel lanes.

Span 1: Patched area in left lane.



Span 3 deck right lane has large unsealed longitudinal cracks.

A-55 - Deck Washing Needed

A-56 - Joint Cleaning/Flushing Needed (Yes)

All joints are filled with debris.

A-57 - Girder End and Bearing Painting Needed

A-58 - Cap Cleaning/Flushing Needed

A-59 - Joint Repair Needed (Yes)

Bents 1, 3, & 4: Pourable joint material has deteriorated and joint is mostly filled with dirt and debris.
Bent 2: Joint has been re-sealed, but is losing adhesion in most places.



Bent 1 Joint seals have debris impaction.

A-60 - Full Girder Painting Needed

A-61 - Polymer Overlay Advised (Yes)

Deck:

All spans: Several unsealed, hairline- to moderate-sized full-depth longitudinal cracks / minor to significant abrasive wear in travel lanes.

Soffit:

All spans: Cracking with efflorescence and rust staining, mostly reflective of cracking in deck surface / delaminations/spalling/exposed rebar around drain holes, especially Span 2 left and Span 3 right.

A-62 - Hydro and LMC Advised

A-63 - Missing/Incorrect Log Mile Signage

A-64 - Vegetation Removal Requested (Yes)

Tree's ,vines on all end slopes and under bridge.



Span 3 left side has trees and vegetation growing under bridge.



Trees, vines and vegetation impeding inspection process.



Trees, vines and vegetation impeding inspection process.

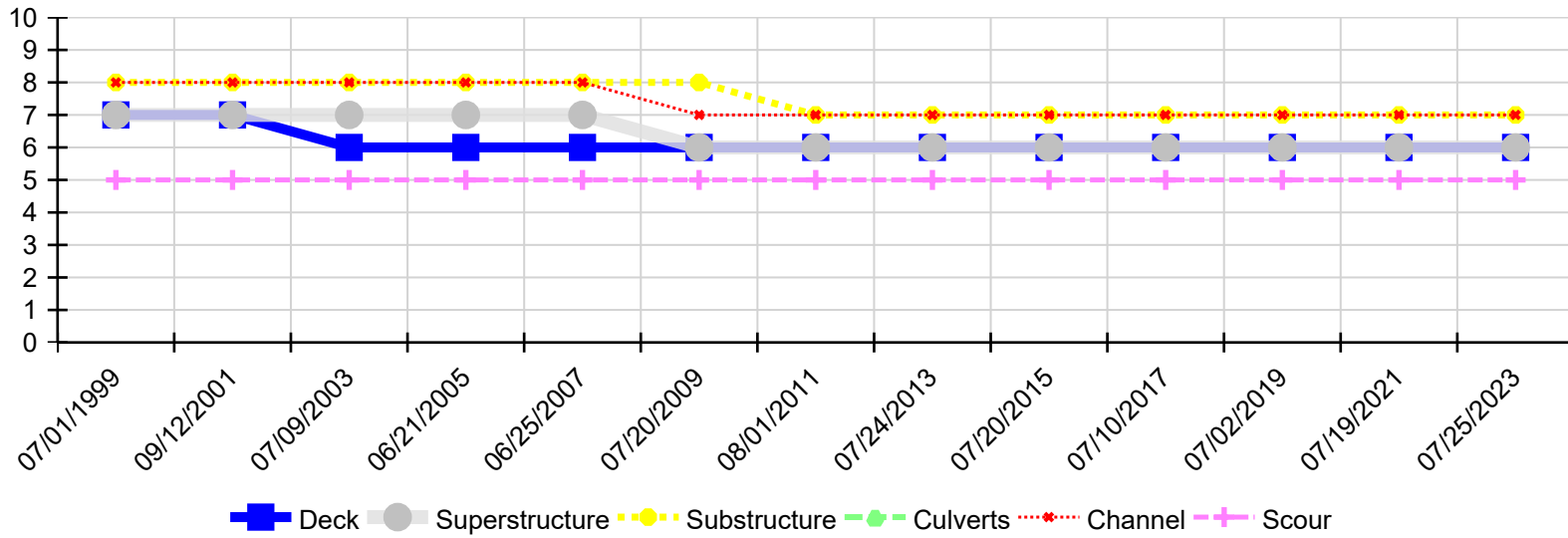
A-65 - Clogged deck drains?

A-66 - Approach minor pothole/leveling needed



Asset #03931(Routine)
US 425-03 LM 1.51 over South Fork Panther Creek
Location: 3.0 Mi S SH 133-Lacey
Team Lead: Sharon Hooks Inspection Date: 07/25/2023

Condition History



Inspection Date	Deck	Superstructure	Substructure	Culverts	Channel	Scour
07/25/2023	6	6	7	N	7	5
07/19/2021	6	6	7	N	7	5
07/02/2019	6	6	7	N	7	5
07/10/2017	6	6	7	N	7	5
07/20/2015	6	6	7	N	7	5
07/24/2013	6	6	7	N	7	5
08/01/2011	6	6	7	N	7	5
07/20/2009	6	6	8	N	7	5
06/25/2007	6	7	8	N	8	5
06/21/2005	6	7	8	N	8	5
07/09/2003	6	7	8	N	8	5
09/12/2001	7	7	8	N	8	5
07/01/1999	7	7	8	N	8	5