

## Bridge 03930 Inspection Report



Latitude:33.41598, Longitude:-91.84979

Route:425 Section:03 Log:1.4

Arnold Road ID:22x425x3xA, Arnold Log mile:1.399

District 02, 43 - Drew County

Owner: 1 - State Highway Agency

Inspection Direction: 2 - S to N

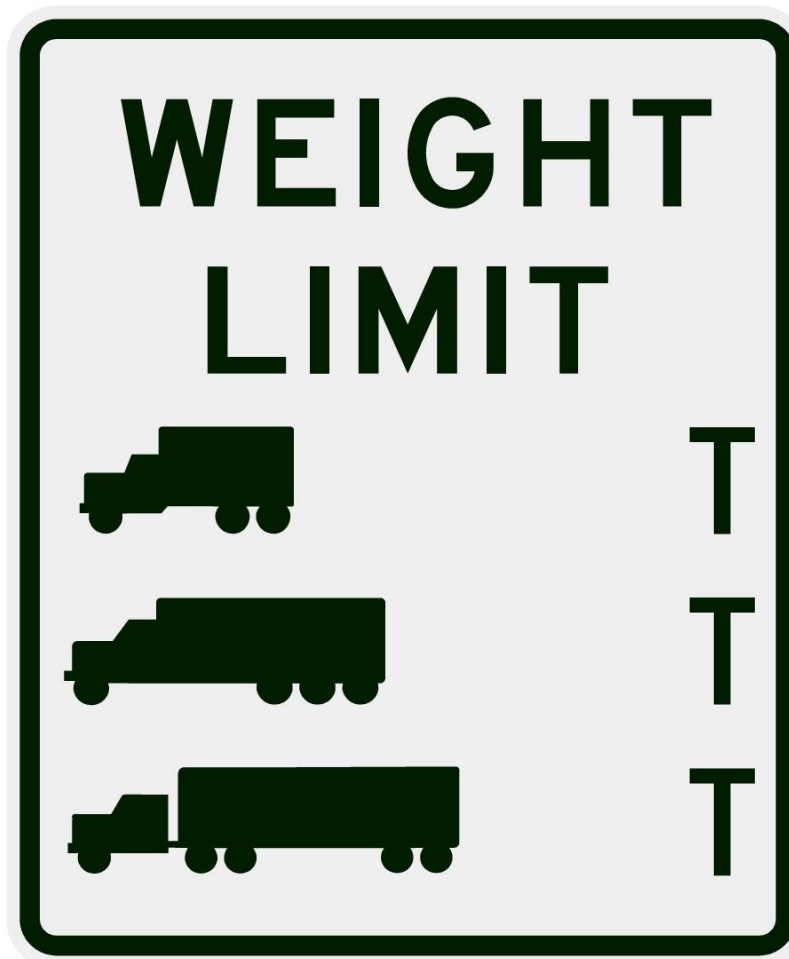
### Bridge Posting Information

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

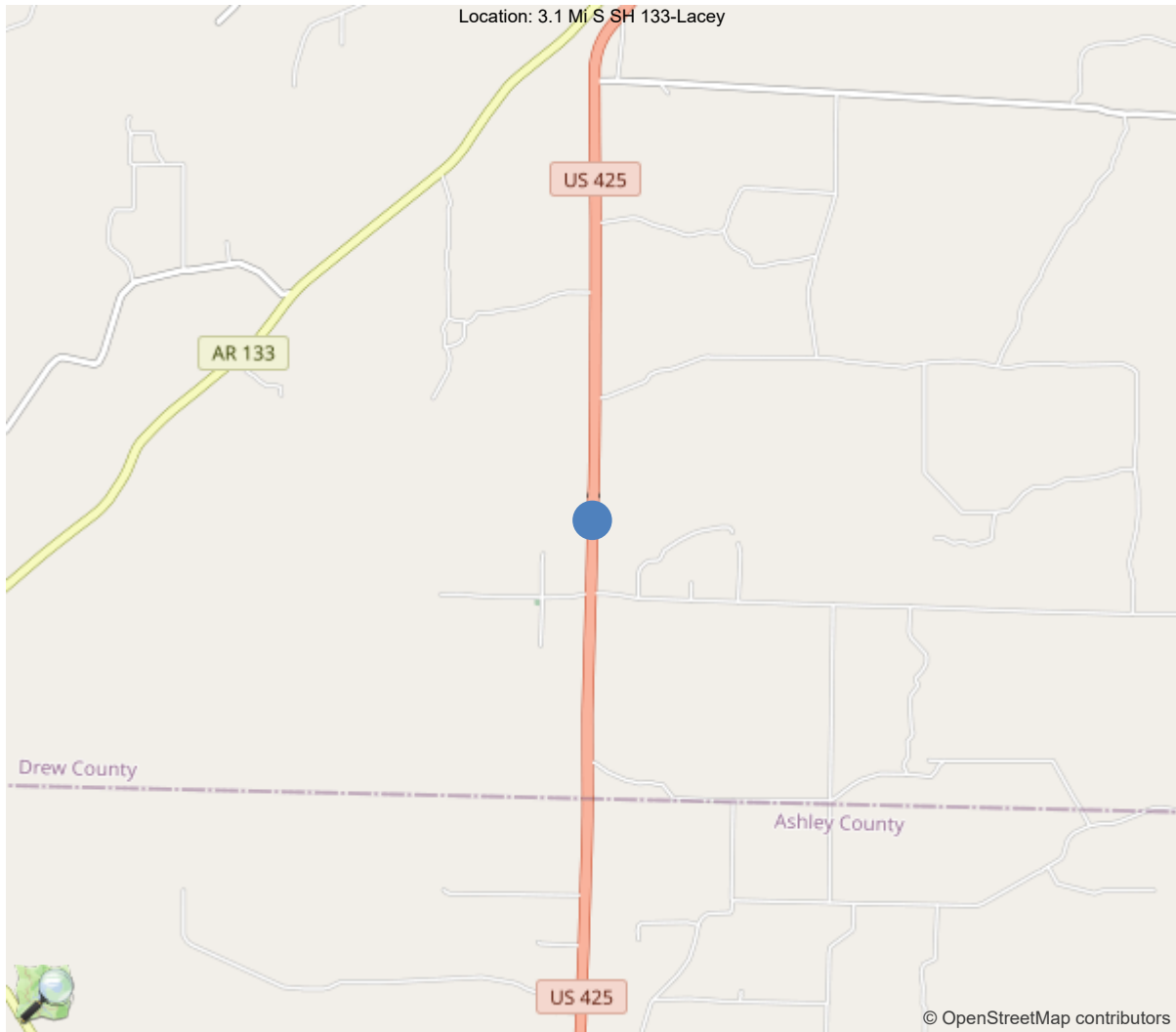
70 - Bridge Posting: 5 - Equal to or above legal loads

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



33.41598, -91.84979



## National Bridge Inventory Data Sheet

IDENTIFICATION	
(1) State Names	5 - Arkansas
(8) Structure Number	03930
(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 1.40
(9) Location	3.1 Mi S SH 133-Lacey
(11) Mile Point	1.4 mi
(12) Base Highway Network	Yes
(13) LRS Inventory Rte & Subrte	0000425030
(16) Latitude	33.41598
(17) Longitude	-91.84979
(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	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	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	2.9 ft
Right	2.9 ft
(51) Bridge Roadway Width Curb to Curb	27.9 ft
(52) Deck Width Out to Out	33.7 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	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	
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	03930
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	33.41598
B.L.06 Longitude	-91.84979
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 #03930(Routine)

US 425-03 LM 1.40 over South Fork Panther Creek

Location: 3.1 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.06-25-2007, Dropping UW inspection due to sub-str. elements are not continuously submerged. High water events occur.

No signs of channel scour up or down stream. NBI Items #60 and #61 will represent all elements that occasionally stand in water. RLW.

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### A-54 - Sealable Deck Cracks (Y)

Deck:

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

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

All joints filled with debris

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### A-59 - Joint Repair Needed (Y)

Joints: Bents 1-4: Pourable joint material has deteriorated and joint is mostly filled with dirt and debris.

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### A-61 - Polymer Overlay Advised (Y)

Deck:

All spans: Several unsealed, hairline- to moderate-sized 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.

Spans 1-2: A couple small spalls with exposed rebar.

Span 3: A couple small delaminations.

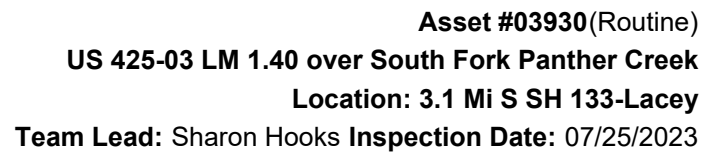
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### National Bridge Element Quantities and Notes

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
38	RC Slab	SF	2262	469	1532	261	0
1080	Delamination/Spall/Patched Area	SF	12	0	6	6	0
1090	Exposed Rebar	SF	15	0	0	15	0
1120	Efflorescence/Rust Staining	SF	120	0	0	120	0
1130	Cracking (RC and Other)	SF	370	0	250	120	0
1190	Abrasion/Wear (PSC/RC)	SF	1276	0	1276	0	0
(38) Deck (void-tube construction): 30.16' wide x 75' long = 2262 sqft.  Deck: All spans: Several unsealed, hairline- to moderate-sized longitudinal cracks / minor to significant abrasive wear in travel lanes. Span 3 left lane has patched with spalls recurring at original patch. Sides of slabs: Span 3 right @ Bent 3: Vertical crack.  Soffit: All spans: Cracking with efflorescence and rust staining, mostly reflective of cracking in deck surface / some scattered areas of patching/grouting/rubbing. Spans 1-2: A couple small spalls with exposed rebar. Span 3: A couple small delaminations.							
215	Reinforced Concrete Abutment	LF	78	78	0	0	0
(215) Abutment: 30.66' = 31' each (with 4' wingwalls each corner) / Bents 1 & 4.							
227	Reinforced Concrete Pile	EA	10	5	5	0	0
1190	Abrasion/Wear (PSC/RC)	EA	5	0	5	0	0
(227) Piling: 5 per bent / Bents 2-3. Bent 2: Light abrasive wear at water/groundline.							
234	Reinforced Concrete Pier Cap	LF	62	58	0	4	0
1090	Exposed Rebar	LF	4	0	0	4	0
(234) Caps: 30.66' = 31' each / Bents 2-3. Bents 2 : Spalling with exposed rebar (heavy corrosion) on bottom face of cap right of Pile 4. Bent 3: Spalling with exposed rebar on back face near pile 4.							
301	Pourable Joint Seal	LF	132	0	0	122	10
2320	Seal Adhesion	LF	66	0	0	66	0
2330	Seal Damage	LF	10	0	0	0	10
2350	Debris Impaction	LF	56	0	0	56	0
(301) Joints: 33' each / Bents 1-4. Bents 1-4: Pourable joint material has deteriorated and joints are mostly filled with dirt and debris.							
321	Reinforced Concrete Approach Slab	SF	1680	0	1680	0	0



## Inspection Photos and Notes



Elevation.



Deck span 3 left has spalling at previously patched area.



All end slopes have trees, vines and vegetation.



Span 2 Under view.





Span 1 left has trees, vines and vegetation impeding inspections.



Deck over view.



Approach.



Bent 3 cap has spalls with exposed rebar. near pile 4.





07/19/2021

Span 1 left lane on soffit has large cracks with staining and leakage.



07/19/2021

Span 1 right side at drain opening, spalling with exposed rebar.



07/19/2021

Bent 2 joint material has missing areas with loss of adhesion and debris impaction.



07/19/2021

Span 3 left lane patched area.



### Maintenance Needs

Date Reported: 07/10/2017

Priority: D- Routine

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

Status: Monitor

Component:

### Deficiency Description

Caps: Bents 2 & 3: Spalling with exposed rebar (heavy corrosion) on bottom face of cap right of Pile 4.

### Remarks

Repair as you can fit into your schedule



Bent 3 cap back between piles 4 & 5 has large spall with exposed rebar.



Bent 2 bottom of cap between piles 4 & 5 has spall with exposed rebar.



Bent 3 cap has spall with exposed rebar.



Bent 3 right of pile 4 spall with reposed rebar.







## 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- Large-sized longitudinal cracks / minor to significant abrasive wear in travel lanes.

#### A-55 - Deck Washing Needed

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

All joints filled with debris

**A-57 - Girder End and Bearing Painting Needed**

**A-58 - Cap Cleaning/Flushing Needed**

**A-59 - Joint Repair Needed (Yes)**

Joints: Bents 1-4: Pourable joint material has deteriorated and joint is mostly filled with dirt and debris.



Bent 2 joint material has missing areas with loss of adhesion and debris impaction.

**A-60 - Full Girder Painting Needed**

**A-61 - Polymer Overlay Advised (Yes)**

Deck:

All spans: Several unsealed, hairline- to moderate-sized 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.

Spans 1-2: A couple small spalls with exposed rebar.

Span 3: A couple small delaminations.

**A-62 - Hydro and LMC Advised**



**A-63 - Missing/Incorrect Log Mile Signage**

**A-64 - Vegetation Removal Requested (Yes)**



All end slopes have trees, vines and vegetation.



Span 1 left has trees, vines and vegetation impeding inspections.

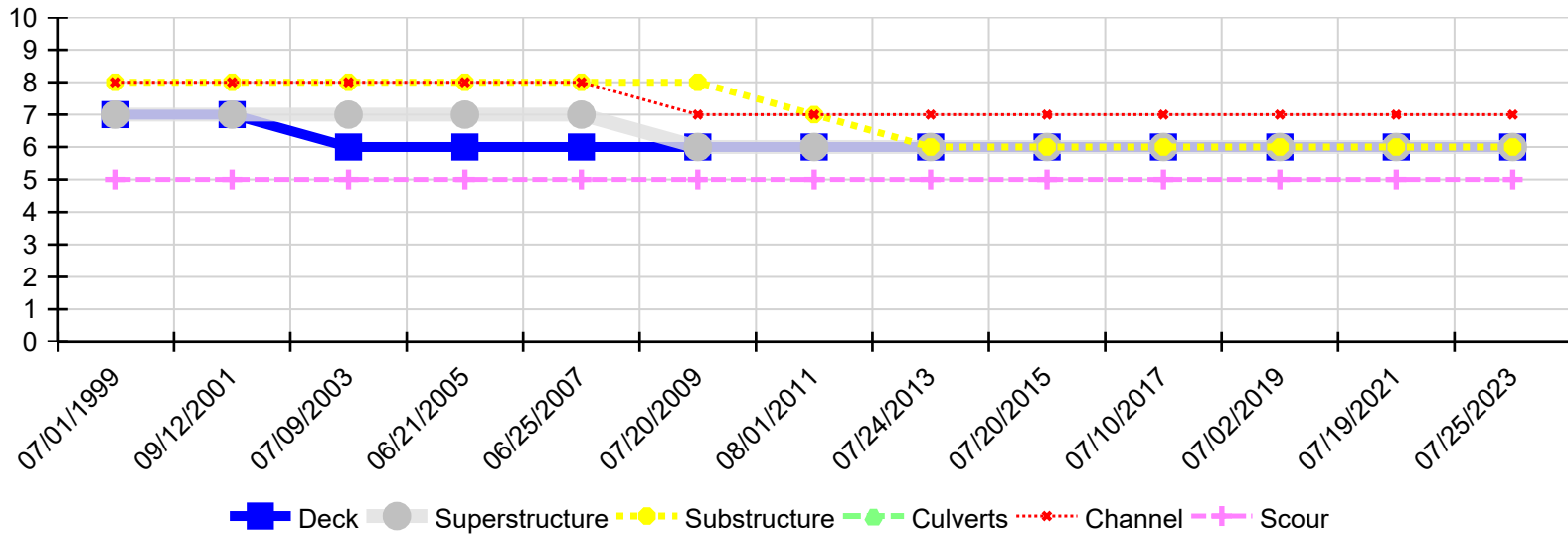
**A-65 - Clogged deck drains?**

**A-66 - Approach minor pothole/leveling needed**



**Asset #03930**(Routine)  
**US 425-03 LM 1.40 over South Fork Panther Creek**  
**Location: 3.1 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	6	N	7	5
07/19/2021	6	6	6	N	7	5
07/02/2019	6	6	6	N	7	5
07/10/2017	6	6	6	N	7	5
07/20/2015	6	6	6	N	7	5
07/24/2013	6	6	6	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