

Bridge 00827 Inspection Report



Latitude:33.41454, Longitude:-93.10861

Route:79 Section:03 Log:0.54

Arnold Road ID:52x79x3xA, Arnold Log mile:0.541

District 07, 103 - Ouachita County

Owner: 1 - State Highway Agency

Inspection Direction: 2 - S to N

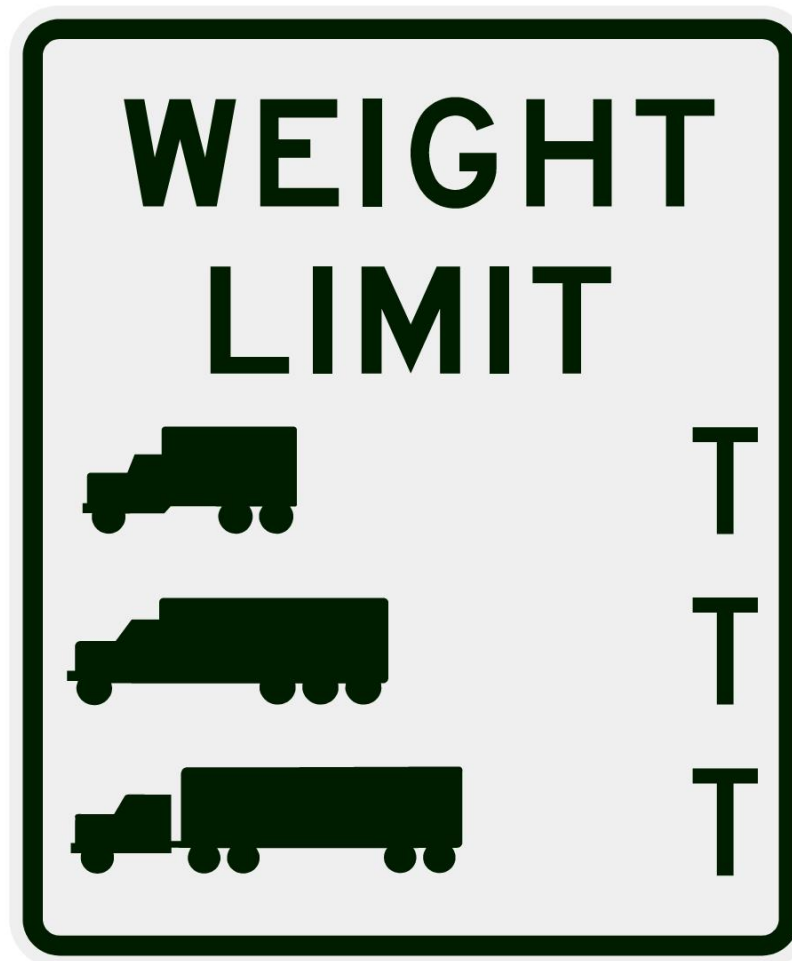
Bridge Posting Information

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

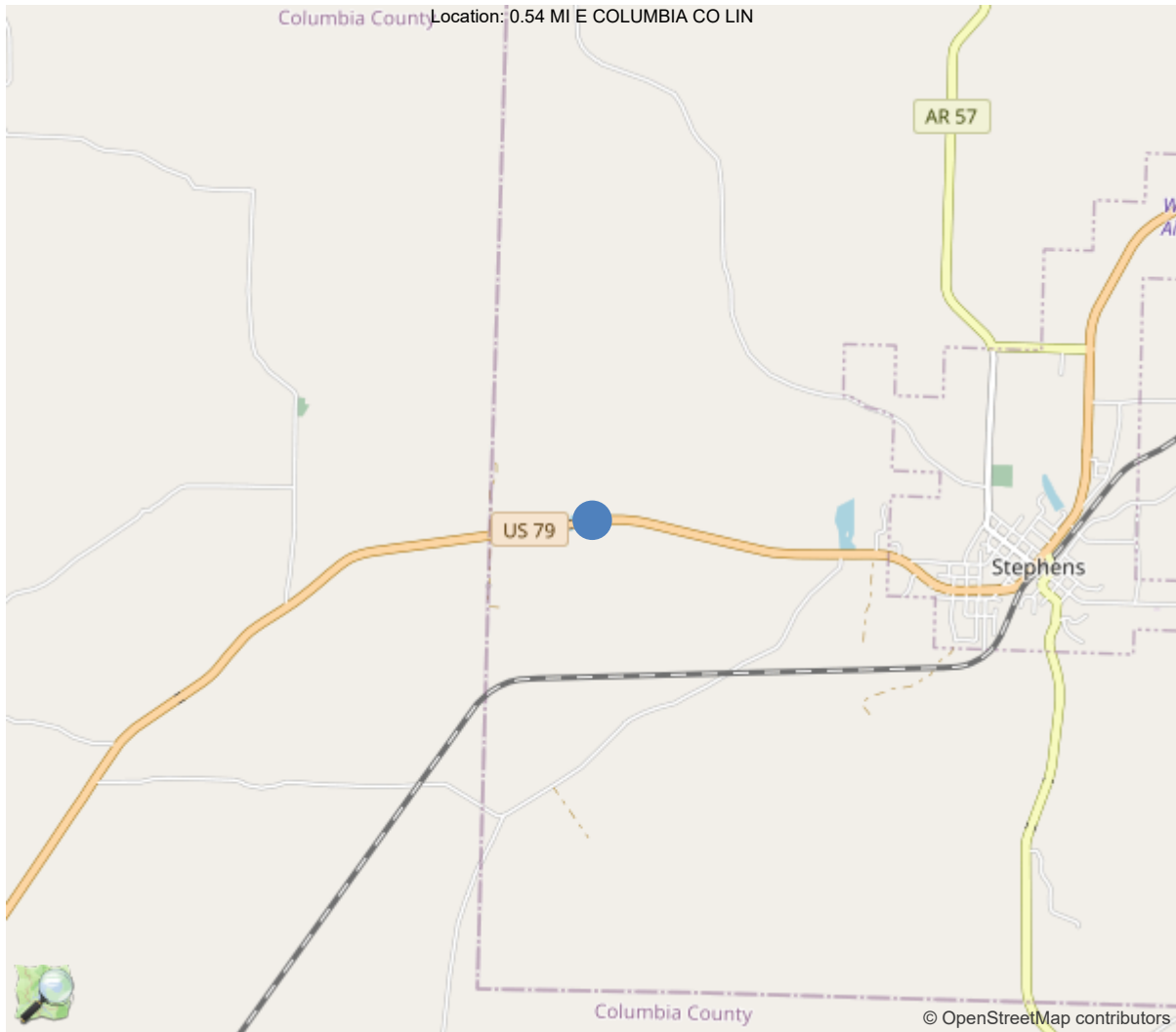
70 - Bridge Posting: 5 - Equal to or above legal loads

Legal Load	Calculated Capacity	Beginning of Bridge Sign Current Value	End of Bridge Sign Current Value
Code 4 (22 Tons)	31		
Code 9 (31 Tons)	39		
Code 5 (40 Tons)	54		

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



33.41454, -93.10861

National Bridge Inventory Data Sheet

IDENTIFICATION	
(1) State Names	5 - Arkansas
(8) Structure Number	00827
(5) Inventory Route	1
(2) Highway Agency District	07 - District 07
(3) County Code	103 - Ouachita County
(4) Place Code	0
(6) Features Intersected	CREEK
(7) Facility Carried	US 79 S-3 LM 0.54
(9) Location	0.54 MI E COLUMBIA CO LIN
(11) Mile Point	0.54 mi
(12) Base Highway Network	Yes
(13) LRS Inventory Rte & Subrte	0000079030
(16) Latitude	33.41454
(17) Longitude	-93.10861
(98) Border Bridge State Code	
(99) Border Bridge Structure No.	
STRUCTURE TYPE AND MATERIAL	
(43) Main Structure Type	119
Material	1 - Concrete
Type	19 - Culvert
(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	N - Not applicable
(108) Wearing Surface/Protective System	
Type of Wearing Surface	N - Not applicable (applies only to stru
Type of Membrane	N - Not applicable (applies only to stru
Type of Deck Protection	N - Not applicable (applies only to stru
AGE AND SERVICE	
(27) Year Built	1948
(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	2600
(30) Year of ADT	2018
(109) Truck ADT	12 %
(19) Bypass, Detour Length	25 mi
GEOMETRIC DATA	
(48) Length of Maximum Span	11 ft
(49) Structure Length	22 ft
(50) Curb or Sidewalk Width	
Left	0 ft
Right	0 ft
(51) Bridge Roadway Width Curb to Curb	0 ft
(52) Deck Width Out to Out	0 ft
(32) Approach Roadway Width (W/Shoulders)	36.1 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	28 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	1 - Navigation protection not
(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	N
(59) Superstructure	N
(60) Substructure	N
(61) Channel & Channel Protection	6
(62) Culverts	5
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	44
(65) Inventory Rating Method	1 - Load Factor(LF)
(66) Inventory Rating	
Type	
Rating	26
(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	9
(69) Clearances, Vertical/Horizontal	N
(71) Waterway Adequacy	6
(72) Approach Roadway Alignment	6
(36A) Bridge Railings	0 - Inspected feature does not meet
(36B) Transitions	0 - Inspected feature does not meet
(36C) Approach Guardrail	0 - Inspected feature does not meet
(36D) Approach Guardrail Ends	0 - Inspected feature does not meet
(113) Scour Critical Bridges	8 - 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	3438
(115) Year of Future ADT	2028

INSPECTIONS *			
(90) Inspection Date			08/05/2024
(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: Rickie Bratton, Inspection Date: 08/05/2024

Specifications for National Bridge Inventory Sheets

IDENTIFICATION	
B.ID.01 Bridge Number	00827
B.ID.02 Bridge Name	
B.ID.03 Previous Bridge No.	
B.W.01 Year Built	1948

LOCATION	
B.L.01 State Code	5 - Arkansas
B.L.02 County Code	103 - Ouachita County
B.L.03 Place Code	00000 - N/A
B.L.04 Highway Agency District	07 - District 07
B.L.05 Latitude	33.41454
B.L.06 Longitude	-93.10861
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	0.54 MI E COLUMBIA CO LIN
B.L.12 Metropolitan Planning Organization	

CLASSIFICATION	
B.CL.01 Owner	S01 - State transportation departme
B.CL.02 Maint. Responsibility	S01 - State transportation departme
B.CL.03 Federal or Tribal Land Access	N - Not Applicable
B.CL.04 Historic Significance	N - Bridge is not eligible for the
B.CL.05 Toll	N - Bridge does not carry a toll ro
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	22
B.G.03 Max Span Length	11.2
B.G.04 Min Span Length	11
B.G.05 Bridge Width Out-to-Out	
B.G.06 Bridge Width Curb-to-Curb	0
B.G.07 Left Curb or Sidewalk Width	0
B.G.08 Right Curb or Sidewalk Width	0
B.G.09 Approach Roadway Width	36.1

B.G.10 Bridge Median	0 - No median
B.G.11 Skew	0
B.G.12 Curved Bridge	N - Not curved
B.G.13 Max Bridge Height	
B.G.14 Sidehill Bridge	N - Not a sidehill bridge
B.G.15 Irregular Deck Area	
B.G.16 Calculated Deck Area	793.3

LOADS AND LOAD RATING	
B.LR.01 Design Load	H15 - H-15
B.LR.02 Design Method	
B.LR.03 Load Rating Date	
B.LR.04 Load Rating Method	LFR - Load Factor Rating
B.LR.05 Inventory Load Rating Factor	0.72
B.LR.06 Operating Load Rating Factor	1.22
B.LR.07 Controlling Legal Load Rating Factor	
B.LR.08 Routine Permit Loads	

INSPECTION REQUIREMENTS	
B.IR.01 NSTM Inspection Required	N - NSTM inspection not required.
B.IR.02 Fatigue Details	N - No E/E' details
B.IR.03 UW Inspection Required	N - Underwater inspection not requi
B.IR.04 Complex Feature	N - Bridge does not have complex fe

COMPONENT CONDITION RATINGS	
B.C.01 Deck Condition Rating	N - NOT APPLICABLE - Component
B.C.02 Superstructure Condition	N - NOT APPLICABLE - Component
B.C.03 Substructure Condition	N - NOT APPLICABLE - Component
B.C.04 Culvert Condition	5 - FAIR - Some moderate defec
B.C.05 Bridge Railing Condition	N - NOT APPLICABLE - Component
B.C.06 Bridge Railing Transitions Condition	N - NOT APPLICABLE - Component
B.C.07 Bridge Bearings Cond.	N - NOT APPLICABLE - Component
B.C.08 Bridge Joints Condition	N - NOT APPLICABLE - Bridge do
B.C.09 Channel Condition Rating	6 - SATISFACTORY - Widespread
B.C.10 Channel Protection Condition	7 - GOOD - Some minor defects.
B.C.11 Scour Condition Rating	7 - Some minor scour.
B.C.12 Bridge Condition Classification	F - Fair
B.C.13 Lowest Condition Rating	5 - FAIR - Some moderate defec
B.C.14 NSTM Insp. Condition	
B.C.15 UW Inspection Condition	

APPRAISAL	
B.AP.01 Approach Roadway Alignment	F - Fair
B.AP.02 Overtopping Likelihood	2 - Very low - once every 51 to 99
B.AP.03 Scour Vulnerability	AB-T - TEMP - Stable for scour, pos
B.AP.04 Scour Plan of Action	0 - A scour POA is not required.
B.AP.05 Seismic Vulnerability	0 - Seismic evaluation not complete

Team Lead: Rickie Bratton, Inspection Date: 08/05/2024

SPAN SETS			
C1			
B.SP.02 # of Spans	2	B.SP.08 Deck Interaction	
B.SP.03 # of Beam Lines	1	B.SP.09 Deck Material and Type	0 - None
B.SP.04 Span Material	C01 - Reinforced concrete - ca	B.SP.10 Wearing Surface	
B.SP.05 Span Continuity	7 - Buried	B.SP.11 Deck Protective System	
B.SP.06 Span Type	F02 - Frame - four-sided	B.SP.12 Deck Reinforcing Protective System	
B.SP.07 Span Protective System		B.SP.13 Deck Stay-In-Place Forms	

SUBSTRUCTURE SETS			
A1			
B.SB.02 No. of Substructure Units	2	B.SB.05 Substructure Protective System	0 - None
B.SB.03 Substructure Material	C01 - Reinforced concrete - ca	B.SB.06 Foundation Type	F01 - Footing - not on rock
B.SB.04 Substructure Type	A01 - Abutment - cantilever/wa	B.SB.07 Foundation Protective System	0 - None
P1			
B.SB.02 No. of Substructure Units	1	B.SB.05 Substructure Protective System	0 - None
B.SB.03 Substructure Material	C01 - Reinforced concrete - ca	B.SB.06 Foundation Type	F01 - Footing - not on rock
B.SB.04 Substructure Type	P01 - Pier - wall	B.SB.07 Foundation Protective System	0 - None

HIGHWAY FEATURES			
H1			
B.F.02 Feature Location	C - Carried on bridge	B.H.09 Annual ADT	2600
B.F.03 Feature Name	US 79 S-3 LM 0.54	B.H.10 Annual ADTT	312
B.H.01 Functional Classification	3 - Principal Arterial - Other	B.H.11 Year of Annual ADT	2018
B.H.02 Urban Code	99999	B.H.12 Highway Max Usable Vertical Clearance	99.9
B.H.03 NHS Designation	Y - NHS	B.H.13 Highway Min Vertical Clearance	99.9
B.H.04 National Highway Freight Network	1-T - TEMP - NHFN - 1 or 2 or	B.H.14 Highway Min Horizontal Clearance, Left	
B.H.05 STRAHNET Designation	N - Not a STRAHNET route	B.H.15 Highway Min Horizontal Clearance, Right	
B.H.06 LRS Route ID	79030	B.H.16 Highway Max Usable Surface Width	27.8
B.H.07 LRS Mile Point	0.54	B.H.17 Bypass Detour Length	25
B.H.08 Lanes On Highway	2	B.H.18 Crossing Bridge Number	

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
H1	R01	79	2-T - TEMP - Two-way traffic - NS or EW	2 - U.S. route	1 - Mainline



Team Lead: Rickie Bratton, Inspection Date: 08/05/2024

WATERWAY FEATURES

W1

B.F.02 Feature Location	B - Below bridge	B.N.03 Movable Bridge Max Navigation Vertical Clearance	
B.F.03 Feature Name	CREEK	B.N.04 Navigation Channel Width	
B.N.01 Navigable Waterway	N - Not navigable waters	B.N.05 Navigation Channel Min Horizontal Clearance	
B.N.02 Navigation Min Vertical Clearance		B.N.06 Substructure Navigation Protection	

POSTING STATUS DATA

B.PS.01 Load Posting Status	B.PS.02 Posting Status Change Date
PO - Permanent - Open	

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 #00827 (Routine)

US 79 S-3 LM 0.54 over CREEK

Location: 0.54 MI E COLUMBIA CO LIN

Team Lead: Rickie Bratton Inspection Date: 08/05/2024

Inspection Notes

General Observation

Hip wader used for inspection.

62 - Culverts (5 - Moderate to major deterioration or disintegration, extensive cracking and leaching or spalls on concrete or masonry walls and slabs. Minor settlement or misalignment. Noticeable scouring or erosion at curtain walls, wingwalls or pipes. Metal culverts have significant distortion and deflection in one section, significant corrosion or deep pitting.) Fair condition - Culvert has large scaled and pitted areas due to an oil fire inside the structure. Soffit of both spans have spalls/delams and exposed rebar. Divider wall has map cracking and abrasion.

Inspection Photos and Notes



Barrel 2 soffit has exposed rebar.



Divider wall outlet end 6" section of severe abrasion.



Barrel 1 exposed rebar in soffit



Barrel 1 soffit exposed rebar.



Elevation



Channel upstream overview left side



Channel downstream overview right side



Approach roadway Northbound



Elevation



Elevation



Right end of the center wall, large spall.



Downstream



Upstream



Approach

Maintenance Needs

Date Reported: 07/24/2018

Priority: C - Important

Type of Work: Repair (General)

Status: Monitor

Component: Culverts

Deficiency Description

Barrels 1 and 2 have spalls in soffit due to fire damage.

Remarks



Box Culvert barrel 1 spalls in the Soffit of the top.



Box Culvert barrel 2, looking from Rt. @ Soffit of box Culvert top has spalls over most of the top. P



Spalling on the top of the box in barrel 2.

Maintenance Needs

Date Reported: 07/24/2018

Priority: D- Routine

Type of Work: Repair (General)

Status: Monitor

Component: Culverts

Deficiency Description

Box Culvert barrel 1 looking ahead at center wall has map cracking for entire length of the wall, with some minor spalls

Remarks



01/01/2020

Box Culvert barrel 1 looking ahead at center wall has map cracking for entire length of the wall, with some minor spalls



08/08/2022

Barrel 1, spalls on the top & map cracking on the center wall.

Routine Maintenance

Check Box Maintenance Items

Type of Maintenance	Is Recommended?
A-54 - Sealable Deck Cracks	No
A-55 - Deck Washing Needed	No
A-56 - Joint Cleaning/Flushing Needed	No
A-57 - Beam End and Bearing Paint Needed	No
A-58 - Cap Cleaning/Flushing Needed	No
A-59 - Joint Repair Needed	No
A-60 - Full Beam Painting Needed	No
A-61 - Polymer Overlay Advised	No
A-62 - Hydro and LMC Advised	No
A-63 - Missing/Incorrect Log Mile Signage	No
A-64 - Vegetation Removal Requested	No
A-65 - Clogged deck drains?	
A-66 - Approach minor pothole/leveling needed	

A-54 - Sealable Deck Cracks (No)

A-55 - Deck Washing Needed (No)

A-56 - Joint Cleaning/Flushing Needed (No)



Asset #00827(Routine)

US 79 S-3 LM 0.54 over CREEK

Location: 0.54 MI E COLUMBIA CO LIN

Team Lead: Rickie Bratton Inspection Date: 08/05/2024

A-57 - Girder End and Bearing Painting Needed (No)

A-58 - Cap Cleaning/Flushing Needed (No)

A-59 - Joint Repair Needed (No)

A-60 - Full Girder Painting Needed (No)

A-61 - Polymer Overlay Advised (No)

A-62 - Hydro and LMC Advised (No)

A-63 - Missing/Incorrect Log Mile Signage (No)

A-64 - Vegetation Removal Requested (No)

A-65 - Clogged deck drains?



Asset #00827(Routine)

US 79 S-3 LM 0.54 over CREEK

Location: 0.54 MI E COLUMBIA CO LIN

Team Lead: Rickie Bratton Inspection Date: 08/05/2024

A-66 - Approach minor pothole/leveling needed



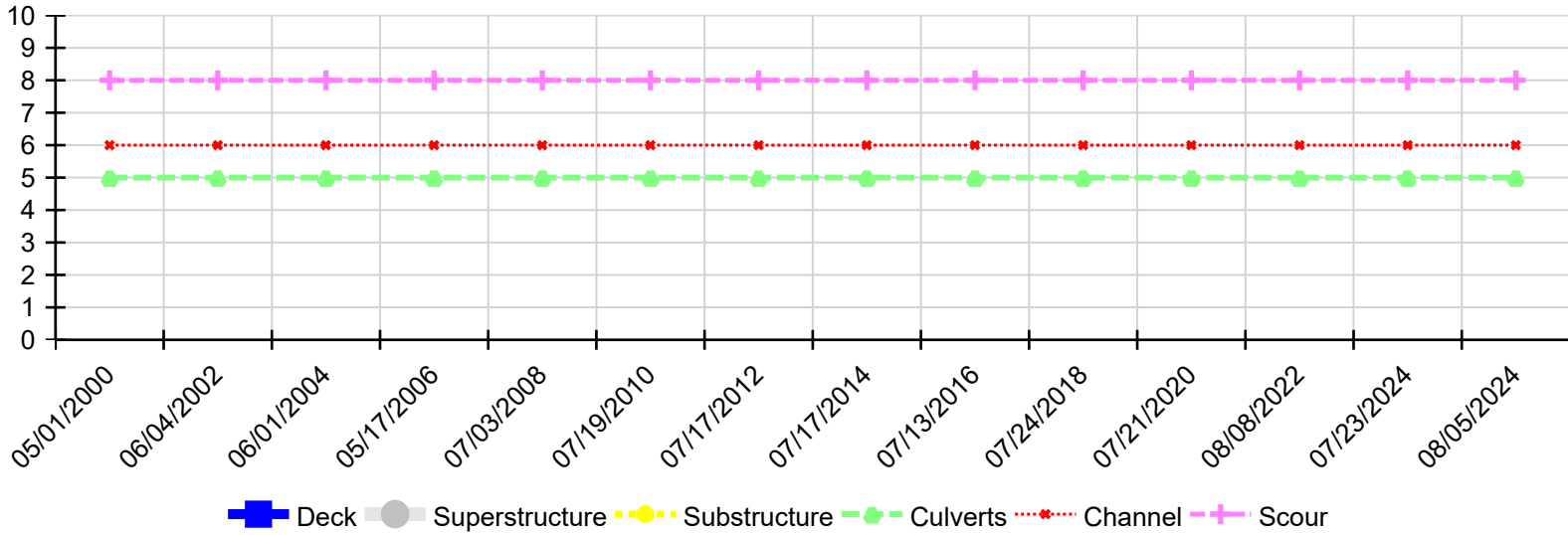
Asset #00827(Routine)

US 79 S-3 LM 0.54 over CREEK

Location: 0.54 MI E COLUMBIA CO LIN

Team Lead: Rickie Bratton Inspection Date: 08/05/2024

Condition History



Inspection Date	Deck	Superstructure	Substructure	Culverts	Channel	Scour
08/05/2024	N	N	N	5	6	8
07/23/2024	N	N	N	5	6	8
08/08/2022	N	N	N	5	6	8
07/21/2020	N	N	N	5	6	8
07/24/2018	N	N	N	5	6	8
07/13/2016	N	N	N	5	6	8
07/17/2014	N	N	N	5	6	8
07/17/2012	N	N	N	5	6	8
07/19/2010	N	N	N	5	6	8
07/03/2008	N	N	N	5	6	8
05/17/2006	N	N	N	5	6	8
06/01/2004	N	N	N	5	6	8
06/04/2002	N	N	N	5	6	8
05/01/2000	N	N	N	5	6	8