

Bridge M1146 Inspection Report



Latitude:35.44627, Longitude:-93.75043

Route:64 Section:03 Log:18.52

Arnold Road ID:24x64x3xA, Arnold Log mile:18.539

District 04, 47 - Franklin County

Owner: 1 - State Highway Agency

Inspection Direction: 4 - W to E

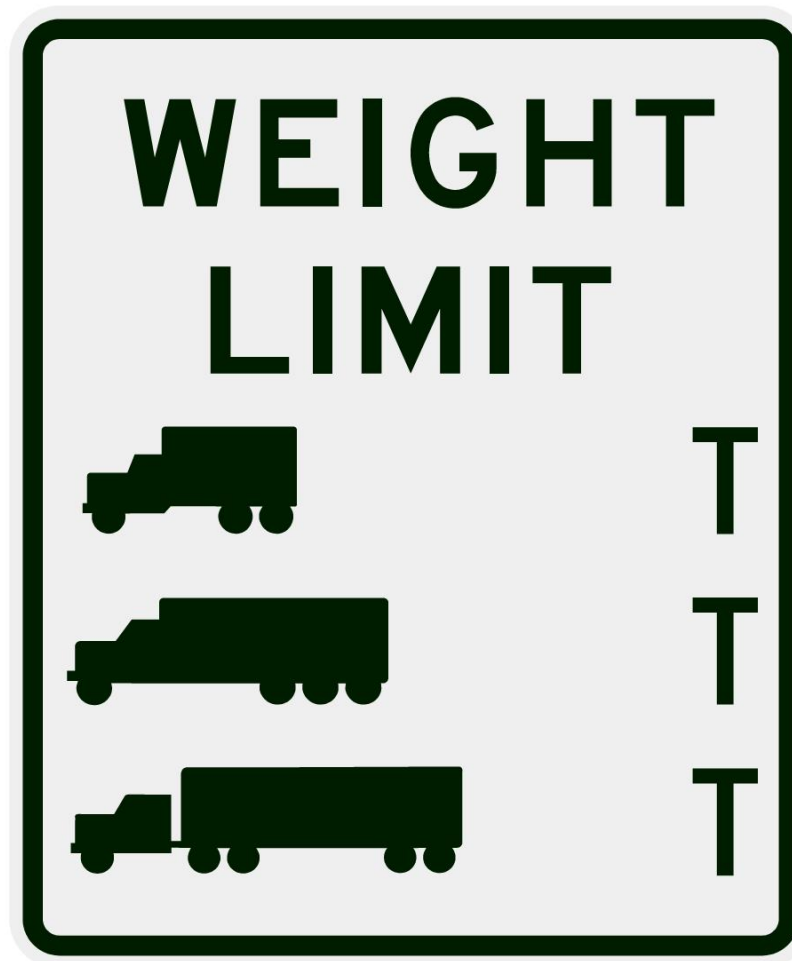
Bridge Posting Information

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

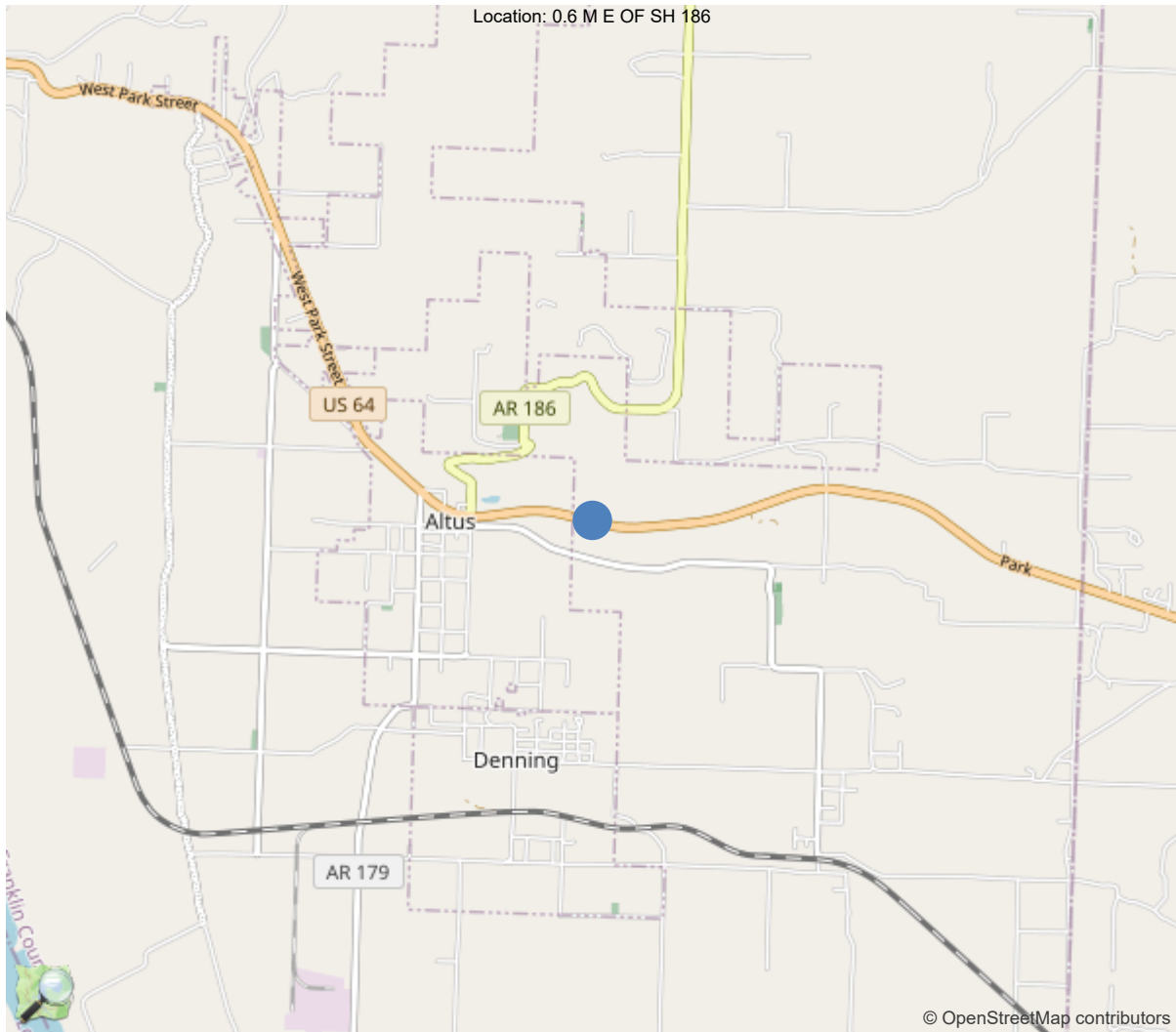
70 - Bridge Posting: 5 - Equal to or above legal loads

Legal Load	Calculated Capacity	Beginning of Bridge Sign Current Value	End of Bridge Sign Current Value
Code 4 (22 Tons)	28		
Code 9 (31 Tons)	33		
Code 5 (40 Tons)	48		

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



35.44627, -93.75043

National Bridge Inventory Data Sheet

IDENTIFICATION	
(1) State Names	5 - Arkansas
(8) Structure Number	M1146
(5) Inventory Route	1
(2) Highway Agency District	04 - District 04
(3) County Code	47 - Franklin County
(4) Place Code	0
(6) Features Intersected	Ditch - Franklin Co.
(7) Facility Carried	US Highway 64
(9) Location	0.6 M E OF SH 186
(11) Mile Point	18.52 mi
(12) Base Highway Network	No
(13) LRS Inventory Rte & Subrte	0000000000
(16) Latitude	35.44627
(17) Longitude	-93.750427
(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	1931
(106) Year Reconstructed	1961
(42) Type of Service	15
On	1 - Highway
Under	5 - Waterway
(28) Lane	
On	2
Under	0
(29) Average Daily Traffic	2300
(30) Year of ADT	2018
(109) Truck ADT	1 %
(19) Bypass, Detour Length	12 mi
GEOMETRIC DATA	
(48) Length of Maximum Span	11 ft
(49) Structure Length	21 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	99.9 ft
(53) Min Vert Clear Over Bridge Rdwy	99.99 ft
(54) Min Vert Underclear	0 ft
Ref:	
(55) Min Lat Underclear RT	0 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	0
(26) Functional Class	7 - Rural Major Collector
(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 stru
(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	6
LOAD RATING AND POSTING	
(31) Design Load	4 - M 18 / H 20
(63) Operating Rating Method	1
(64) Operating Rating	
Type	1 - Load Factor(LF)
Rating	39
(65) Inventory Rating Method	1 - Load Factor(LF)
(66) Inventory Rating	
Type	
Rating	24
(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	N
(69) Clearances, Vertical/Horizontal	N
(71) Waterway Adequacy	6
(72) Approach Roadway Alignment	8
(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	4682
(115) Year of Future ADT	2028

INSPECTIONS *			
(90) Inspection Date			04/09/2024
(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		
<p>* 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.</p>			

Team Lead: Jeff Jones, Inspection Date: 04/09/2024

Specifications for National Bridge Inventory Sheets

IDENTIFICATION	
B.ID.01 Bridge Number	M1146
B.ID.02 Bridge Name	
B.ID.03 Previous Bridge No.	
B.W.01 Year Built	1931

LOCATION	
B.L.01 State Code	5 - Arkansas
B.L.02 County Code	47 - Franklin County
B.L.03 Place Code	00000 - N/A
B.L.04 Highway Agency District	04 - District 04
B.L.05 Latitude	35.44627
B.L.06 Longitude	-93.750427
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	0.6 M E OF SH 186
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	21
B.G.02 Total Bridge Length	21
B.G.03 Max Span Length	11.2
B.G.04 Min Span Length	10
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	757.8

LOADS AND LOAD RATING	
B.LR.01 Design Load	H20 - H-20
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	0.67
B.LR.06 Operating Load Rating Factor	1.08
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	
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	6 - SATISFACTORY - Widespread
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	8 - Insignificant scour.
B.C.12 Bridge Condition Classification	F - Fair
B.C.13 Lowest Condition Rating	6 - SATISFACTORY - Widespread
B.C.14 NSTM Insp. Condition	
B.C.15 UW Inspection Condition	

APPRAISAL	
B.AP.01 Approach Roadway Alignment	G - Good
B.AP.02 Overtopping Likelihood	3 - Low - once every 26 to 50 years
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: Jeff Jones, Inspection Date: 04/09/2024

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	0 - None	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	2300
B.F.03 Feature Name	US Highway 64	B.H.10 Annual ADTT	23
B.H.01 Functional Classification	5 - Major Collector	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	N - Non-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		B.H.16 Highway Max Usable Surface Width	99.9
B.H.07 LRS Mile Point	18.52	B.H.17 Bypass Detour Length	12
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	64	2-T - TEMP - Two-way traffic - NS or EW	2 - U.S. route	1 - Mainline



Team Lead: Jeff Jones, Inspection Date: 04/09/2024

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	Ditch	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
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Inspection Notes

General Observation

04/09/2024 - JCJ & TJL - Routine Inspection conducted this date.

Inspection Procedure:

Parking:

Vehicle can be parked on the shoulder at the Southwest bridge end.

Access:

Structure inspected from the ground.

There is pedestrian access on both sides of the structure without needing to go through locked gates.

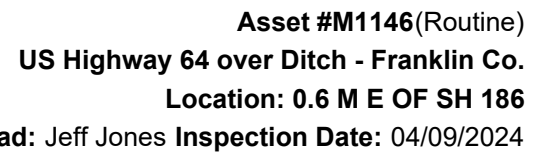
Depth of Water:

Water was approximately 6" deep during the time of inspection.

Tools Needed:

Hip Waders & Range Pole - Structure was visually inspected and by wading and probing with sections of range pole from under the structure.

61 - Channel/Channel Protection (6 - Bank is beginning to slump. River control devices and embankment protection have widespread minor damage. There is minor stream bed movement evident. Debris is restricting the channel slightly.) Maintenance forces have placed rip rap in the eroded area behind the Northwest wing wall in the past, repair is still holding during this inspection.
Channel on the right side of structure has embankment erosion.
There is gravel accumulation in the channel that restricts the opening of Barrel # 1.
There is approximately 20" of rock accumulation in Barrel # 1.



ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
241	Reinforced Concrete Culvert	LF	100	29	56	15	0
1080	Delamination/Spall/Patched Area	LF	2	0	0	2	0
1120	Efflorescence/Rust Staining	LF	7	0	7	0	0
1130	Cracking (RC and Other)	LF	7	0	7	0	0
1190	Abrasion/Wear (PSC/RC)	LF	55	0	42	13	0
(241) This structure is a Double R. C. Box culvert that has been widened at both ends.							
There is approximately 20 inches of rock accumulation in Barrel # 1.							
Areas of light honeycomb from the construction process.							
There are a few isolated areas with minor efflorescence visible in the top slab. 2LF CS2							
Base of the original walls have concrete deterioration with some areas that have medium abrasion. 42LF CS2 & 13LF CS3							
Cracking with light efflorescence at the Left construction joint in the top slab where the box has been widened. 1LF CS2							
Barrel # 1 Right & Barrel # 2 Left has diagonal cracks with efflorescence at the wing wall juncture. 4LF CS2							
Wall # 2 Right has concrete deterioration with minor section loss at the base. 1LF CS3							
There are a few isolated vertical hairline cracks in the wall. 7 LF CS2							
Barrel # 2, Right side, base of Wall # 2 Ahead face has minor concrete deterioration up to 2" deep. 1' long x 3 1/2" tall x 3" deep concrete section loss. 1LF CS3							

Inspection Photos and Notes



Elevation. Left side of structure.



Elevation. Right side of structure.



Maintenance forces have placed rip rap in the eroded area behind the Northwest wing wall in the past, repair is still holding.



Channel. Left side of structure.



RC Box Culvert -
There is approximately 20" of rock accumulation in Barrel # 1.



Channel. Right side of structure.



Approach roadway facing East.



Approach roadway facing West.



Barrel # 2. Typical.



Barrel # 2 Exterior wall, left end has a diagonal crack with efflorescence adjacent to the wing wall juncture. 3LF CS2



The base of Wall # 2 Ahead face, Right side has minor concrete deterioration up to 2" deep. 1' long x 3 1/2" tall x 3" deep concrete section loss. 1LF CS3



Wall # 2. Abrasion. 7LF CS3



04/09/2024

The base of Wall # 2 Right has minor concrete deterioration
1LF CS3



04/09/2024

Barrel # 1. Typical.

Maintenance Needs

Date Reported: 06/20/2012

Priority: D- Routine

Type of Work: Miscellaneous

Status: Monitor

Component: Element

Deficiency Description

RC Box Culvert -

There is approximately 20" of rock accumulation in Barrel # 1.

Remarks



RC Box Culvert -
There is approximately 20" of rock accumulation in Barrel # 1.



Barrel # 1-Streambed material accumulation.



Routine Maintenance

Check Box Maintenance Items

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

A-54 - Sealable Deck Cracks

A-55 - Deck Washing Needed

A-56 - Joint Cleaning/Flushing Needed



Asset #M1146(Routine)
US Highway 64 over Ditch - Franklin Co.

Location: 0.6 M E OF SH 186

Team Lead: Jeff Jones Inspection Date: 04/09/2024

A-57 - Girder End and Bearing Painting Needed

A-58 - Cap Cleaning/Flushing Needed

A-59 - Joint Repair Needed

A-60 - Full Girder Painting Needed

A-61 - Polymer Overlay Advised

A-62 - Hydro and LMC Advised

A-63 - Missing/Incorrect Log Mile Signage

A-64 - Vegetation Removal Requested

A-65 - Clogged deck drains?



Asset #M1146(Routine)
US Highway 64 over Ditch - Franklin Co.

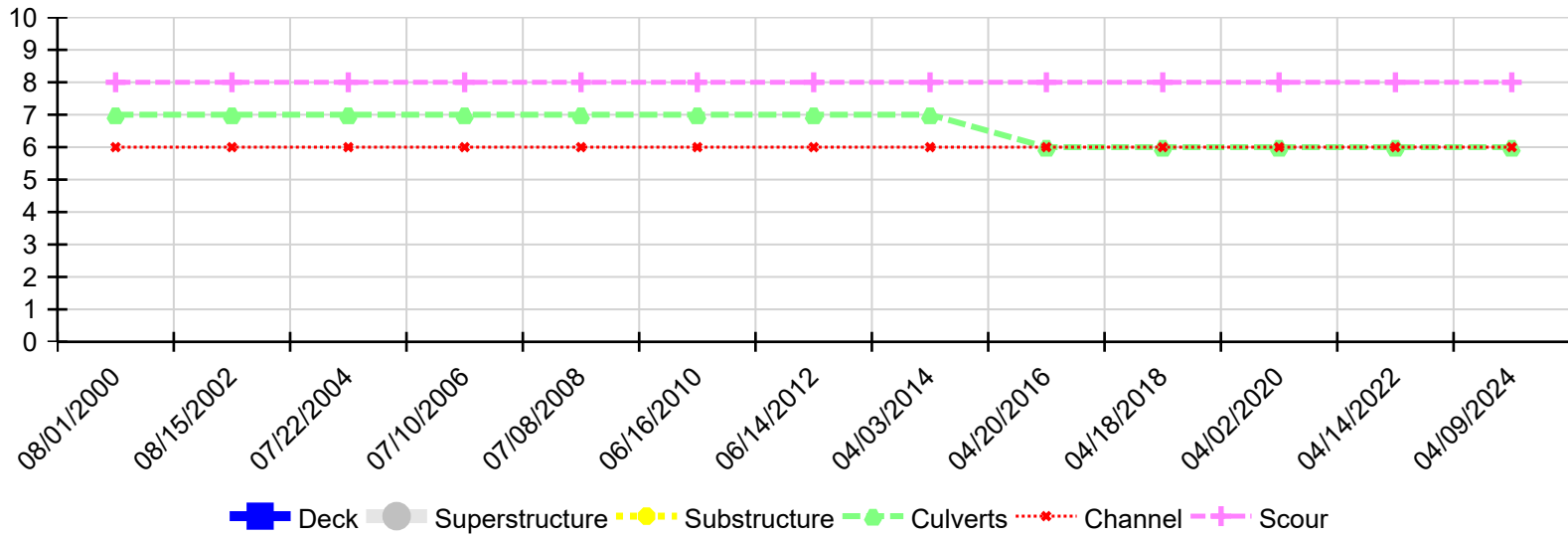
Location: 0.6 M E OF SH 186

Team Lead: Jeff Jones Inspection Date: 04/09/2024

A-66 - Approach minor pothole/leveling needed



Condition History



Inspection Date	Deck	Superstructure	Substructure	Culverts	Channel	Scour
04/09/2024	N	N	N	6	6	8
04/14/2022	N	N	N	6	6	8
04/02/2020	N	N	N	6	6	8
04/18/2018	N	N	N	6	6	8
04/20/2016	N	N	N	6	6	8
04/03/2014	N	N	N	7	6	8
06/14/2012	N	N	N	7	6	8
06/16/2010	N	N	N	7	6	8
07/08/2008	N	N	N	7	6	8
07/10/2006	N	N	N	7	6	8
07/22/2004	N	N	N	7	6	8
08/15/2002	N	N	N	7	6	8
08/01/2000	N	N	N	7	6	8