

Bridge 04657 Inspection Report



Latitude:35.87760, Longitude:-90.48566

Route:928 Section:00 Log:1.78

Arnold Road ID:16xCRAIGHEAD928RDx1xA, Arnold Log mile:6.38

District 10, 31 - Craighead County

Owner: 2 - County Highway Agency

Inspection Direction: 3 - E to W

Bridge Posting Information

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

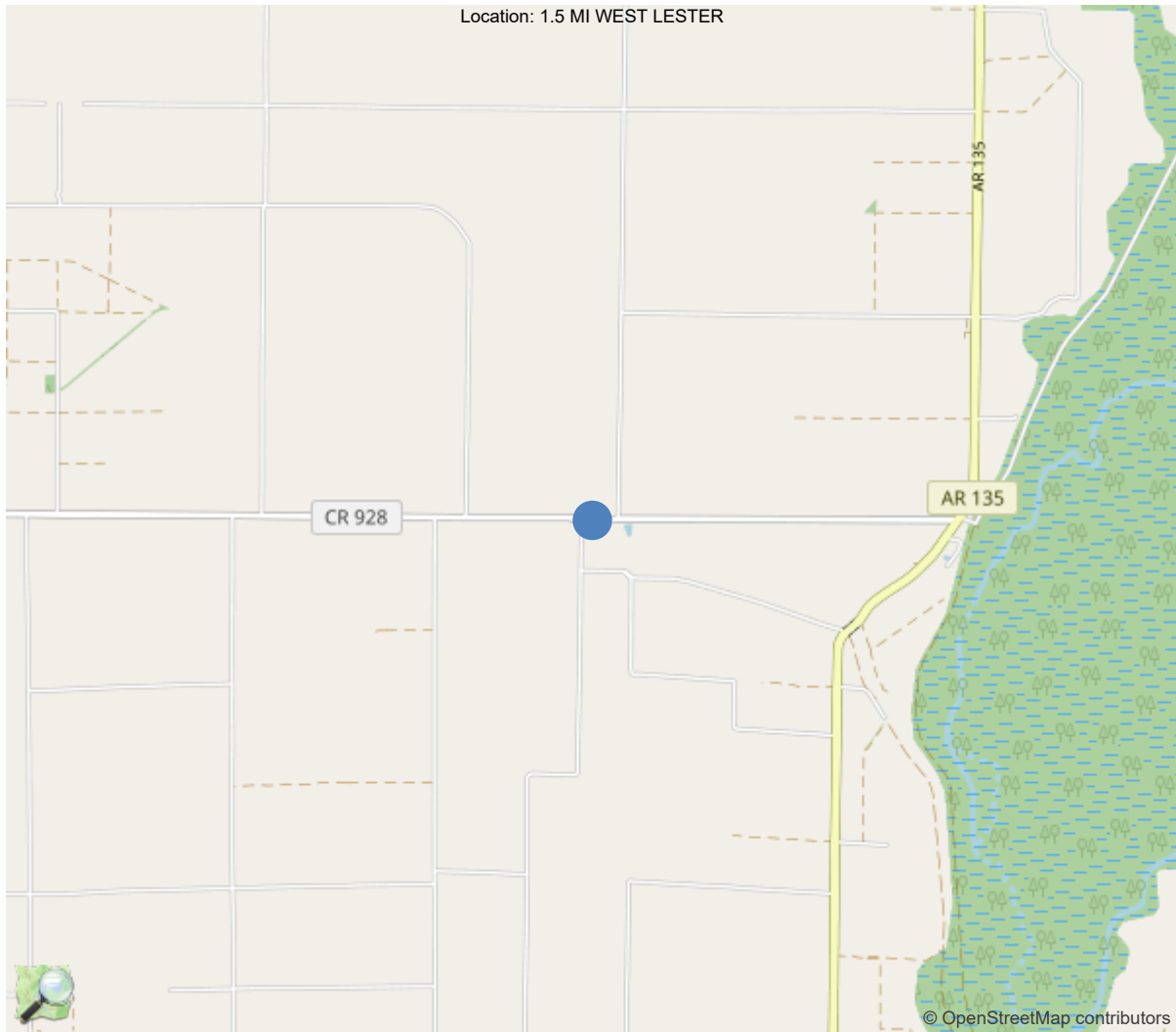
70 - Bridge Posting: 5 - Equal to or above legal loads

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)	50		
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



35.87760, -90.48566



Asset #04657(POA Scour Assessment Evaluation)

CR 928 - C over THOMPSON CREEK DITCH

Location: 1.5 MI WEST LESTER

Team Lead: Victoria Elliott Inspection Date: 07/01/2024

National Bridge Inventory Data Sheet

IDENTIFICATION	
(1) State Names	5 - Arkansas
(8) Structure Number	04657
(5) Inventory Route	1
(2) Highway Agency District	10 - District 10
(3) County Code	31 - Craighead County
(4) Place Code	0
(6) Features Intersected	THOMPSON CREEK DITCH
(7) Facility Carried	CR 928 - C
(9) Location	1.5 MI WEST LESTER
(11) Mile Point	1.78 mi
(12) Base Highway Network	No
(13) LRS Inventory Rte & Subrte	0000000000
(16) Latitude	35.8775995660895
(17) Longitude	-90.4856584823131
(98) Border Bridge State Code	
(99) Border Bridge Structure No.	
STRUCTURE TYPE AND MATERIAL	
(43) Main Structure Type	32
Material	3 - Steel
Type	2 - Stringer/Multi-beam or girder
(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	0 - None (no additional concrete thickne
Type of Membrane	0 - None
Type of Deck Protection	0 - None
AGE AND SERVICE	
(27) Year Built	1991
(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	419
(30) Year of ADT	2018
(109) Truck ADT	1 %
(19) Bypass, Detour Length	4 mi
GEOMETRIC DATA	
(48) Length of Maximum Span	53 ft
(49) Structure Length	161.6 ft
(50) Curb or Sidewalk Width	
Left	0 ft
Right	0 ft
(51) Bridge Roadway Width Curb to Curb	28 ft
(52) Deck Width Out to Out	30.8 ft
(32) Approach Roadway Width (W/Shoulders)	32.2 ft
(33) Bridge Median	0 - No median
(34) Skew	35 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	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	0 - The inventory route is not
(20) Toll	3 - On free road. The structure
(21) Maintain	2 - County Highway Agency
(22) Owner	2 - County Highway Agency
(37) Historical Significance	4 - Historical significance is
CONDITION	
(58) Deck	8
(59) Superstructure	8
(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	6
(69) Clearances, Vertical/Horizontal	N
(71) Waterway Adequacy	9
(72) Approach Roadway Alignment	7
(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	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	0
(114) Future ADT	215
(115) Year of Future ADT	2007

INSPECTIONS *			
(90) Inspection Date			10/17/2023
(91) Frequency			48
(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: Victoria Elliott, Inspection Date: 07/01/2024

Specifications for National Bridge Inventory Sheets

IDENTIFICATION	
B.ID.01 Bridge Number	04657
B.ID.02 Bridge Name	
B.ID.03 Previous Bridge No.	11830
B.W.01 Year Built	1991

LOCATION	
B.L.01 State Code	5 - Arkansas
B.L.02 County Code	31 - Craighead County
B.L.03 Place Code	00000 - N/A
B.L.04 Highway Agency District	10 - District 10
B.L.05 Latitude	35.8775995660895
B.L.06 Longitude	-90.4856584823131
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	1.5 MI WEST LESTER
B.L.12 Metropolitan Planning Organization	

CLASSIFICATION	
B.CL.01 Owner	L01 - County highway agency
B.CL.02 Maint. Responsibility	L01 - County highway agency
B.CL.03 Federal or Tribal Land Access	N - Not Applicable
B.CL.04 Historic Significance	7 - Historic significance of the br
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	161.7
B.G.02 Total Bridge Length	161.7
B.G.03 Max Span Length	53.1
B.G.04 Min Span Length	53
B.G.05 Bridge Width Out-to-Out	30.8
B.G.06 Bridge Width Curb-to-Curb	27.9
B.G.07 Left Curb or Sidewalk Width	0
B.G.08 Right Curb or Sidewalk Width	0
B.G.09 Approach Roadway Width	32.2

B.G.10 Bridge Median	0 - No median
B.G.11 Skew	35
B.G.12 Curved Bridge	N - Not curved
B.G.13 Max Bridge Height	25
B.G.14 Sidehill Bridge	N - Not a sidehill bridge
B.G.15 Irregular Deck Area	
B.G.16 Calculated Deck Area	4988.2

LOADS AND LOAD RATING	
B.LR.01 Design Load	HS20 - HS-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	1
B.LR.06 Operating Load Rating Factor	1.67
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	8 - VERY GOOD - Some inherent
B.C.02 Superstructure Condition	8 - VERY GOOD - Some inherent
B.C.03 Substructure Condition	7 - GOOD - Some minor defects.
B.C.04 Culvert Condition	N - NOT APPLICABLE - Component
B.C.05 Bridge Railing Condition	8 - VERY GOOD - Some inherent
B.C.06 Bridge Railing Transitions Condition	8 - VERY GOOD - Some inherent
B.C.07 Bridge Bearings Cond.	8 - VERY GOOD - Some inherent
B.C.08 Bridge Joints Condition	8 - VERY GOOD - Some inherent
B.C.09 Channel Condition Rating	7 - GOOD - Some minor defects.
B.C.10 Channel Protection Condition	
B.C.11 Scour Condition Rating	7 - Some minor scour.
B.C.12 Bridge Condition Classification	G - Good
B.C.13 Lowest Condition Rating	7 - GOOD - Some minor defects.
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	1 - Remote - once every 100 years o
B.AP.03 Scour Vulnerability	A - Scour appraisal completed. Brid
B.AP.04 Scour Plan of Action	0 - A scour POA is not required.
B.AP.05 Seismic Vulnerability	0 - Seismic evaluation not complete

SPAN SETS			
M1			
B.SP.02 # of Spans	3	B.SP.08 Deck Interaction	CS - Composite - shored constr
B.SP.03 # of Beam Lines	4	B.SP.09 Deck Material and Type	C01 - Reinforced concrete - ca
B.SP.04 Span Material	C01 - Reinforced concrete - ca	B.SP.10 Wearing Surface	0 - None
B.SP.05 Span Continuity	1 - Simple or single span	B.SP.11 Deck Protective System	CX - Coating - other
B.SP.06 Span Type	G02 - Girder/beam - I-shaped s	B.SP.12 Deck Reinforcing Protective System	0 - None
B.SP.07 Span Protective System	P01 - Patina - uncoated weathe	B.SP.13 Deck Stay-In-Place Forms	M01 - Metal

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	P04 - Pile - prestressed concr
B.SB.04 Substructure Type	A02 - Abutment - stub	B.SB.07 Foundation Protective System	0 - None
P1			
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	P04 - Pile - prestressed concr
B.SB.04 Substructure Type	B03 - Bent - pile	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	419
B.F.03 Feature Name	CR 928 - C	B.H.10 Annual ADTT	4
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	N - Not on the NHFN	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	27.8
B.H.07 LRS Mile Point	1.78	B.H.17 Bypass Detour Length	4
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	1	928	2-T - TEMP - Two-way traffic - NS or EW	4 - County route	1 - Mainline



Team Lead: Victoria Elliott, Inspection Date: 07/01/2024

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	Thompson Creek 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 and 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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Asset #04657(POA Scour Assessment Evaluation)

CR 928 - C over THOMPSON CREEK DITCH

Location: 1.5 MI WEST LESTER

Team Lead: Victoria Elliott **Inspection Date:** 07/01/2024

Inspection Notes

58 - Deck (8 - VERY GOOD CONDITION - no problems noted.)

Deck has a few minor unsealed transverse and longitudinal cracks, especially in wheel paths.

59 - Superstructure (8 - VERY GOOD CONDITION - no problems noted.)

Weathering steel is in good condition.

60 - Substructure (7 - GOOD CONDITION - some minor problems.)

Caps have few minor cracks.

Bents 2 and 3 have minor abrasion at bottom 4'

61 - Channel/Channel Protection (7 - Bank protection is in need of minor repairs. River control devices and embankment protection have a little minor damage. Banks and/or channel have minor amounts of drift.)

Dense vegetation and small trees growing on slopes adjacent to bridge on left and right sides at spans 1 and 3.

Inspection Photos and Notes



Elevation view



Roadway view



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CR 928 - C over THOMPSON CREEK DITCH

Location: 1.5 MI WEST LESTER

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Routine Maintenance

Check Box Maintenance Items

Type of Maintenance	Is Recommended?
A-54 - Sealable Deck Cracks	Yes
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	Yes
A-65 - Clogged deck drains?	
A-66 - Approach minor pothole/leveling needed	

A-54 - Sealable Deck Cracks (Yes)

A-55 - Deck Washing Needed (No)

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



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CR 928 - C over THOMPSON CREEK DITCH

Location: 1.5 MI WEST LESTER

Team Lead: Victoria Elliott **Inspection Date:** 07/01/2024

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 (Yes)

A-65 - Clogged deck drains?



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A-66 - Approach minor pothole/leveling needed



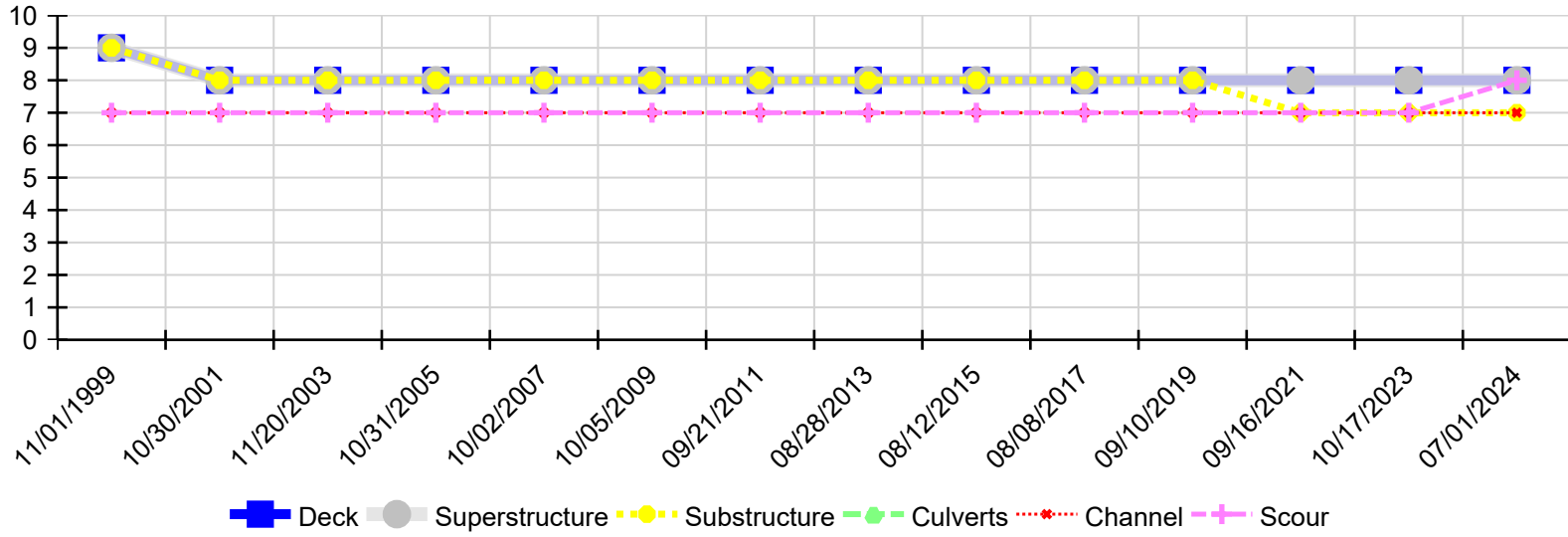
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Condition History



Inspection Date	Deck	Superstructure	Substructure	Culverts	Channel	Scour
07/01/2024	8	8	7	N	7	8
10/17/2023	8	8	7	N	7	7
09/16/2021	8	8	7	N	7	7
09/10/2019	8	8	8	N	7	7
08/08/2017	8	8	8	N	7	7
08/12/2015	8	8	8	N	7	7
08/28/2013	8	8	8	N	7	7
09/21/2011	8	8	8	N	7	7
10/05/2009	8	8	8	N	7	7
10/02/2007	8	8	8	N	7	7
10/31/2005	8	8	8	N	7	7
11/20/2003	8	8	8	N	7	7
10/30/2001	8	8	8	N	7	7
11/01/1999	9	9	9	N	7	7

Appendices

Appendix A

Bridge Number: 04657 B.AP.03: A Item 113: 8

Assessed By: Victoria Elliott Checked By: Nate Brown

Scour Assessment Level A– Stability Screening

The stability screening must be performed by an evaluating engineer working under direct supervision of a professional engineer familiar with Scour Assessments. If any of the following Level A questions are answered “yes”, then continue to the Level B Assessment.

If all Level A answers are “no”, the Scour Assessment is complete, and the bridge is deemed “stable” unless conditions change. Code (B.AP.03) Scour Vulnerability A or B. The difference between A and B is the Countermeasure Type identified previously.

1. Unknown Foundations	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
2. Visibly Scoured? <ul style="list-style-type: none"> ○ If rock (Figure 5) (Must check with Geotechnical for rock properties.) ○ Scour Resistant Rock = No. ○ Ex. Layers of scoured interbedded shale code “Yes” (Figure 5) 	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
3. Shallow Foundations (Must check with Geotechnical for rock properties.) <ul style="list-style-type: none"> ○ Spread footing on soil code or scourable rock “Yes.” ○ Spread footing keyed into non-scourable rock code “No” 	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
4. Evidence or history of overtopping <ul style="list-style-type: none"> ○ When B.AP.02 “Overtopping Likelihood” is coded 1-6 then code “Yes” ○ When debris is stuck in cross frames or on an abutment or pier seats then code “Yes” ○ When historical photos or witness-accounts indicate high-water touching the underside of the superstructure then code “Yes.” 	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
5. Are any of the Scour, Underwater, or Channel component ratings rated 5 or worse? <ul style="list-style-type: none"> ○ Underwater Inspection Condition, Channel Condition, Channel Protection Condition, Scour Condition Rating 	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No