

Bridge M3986 Inspection Report



Latitude:35.19757, Longitude:-91.04915

Route:49 Section:07 Log:1.1

Arnold Road ID:74x49x7xA, Arnold Log mile:1.105

District 01, 147 - Woodruff County

Owner: 1 - State Highway Agency

Inspection Direction: 1 - N to S

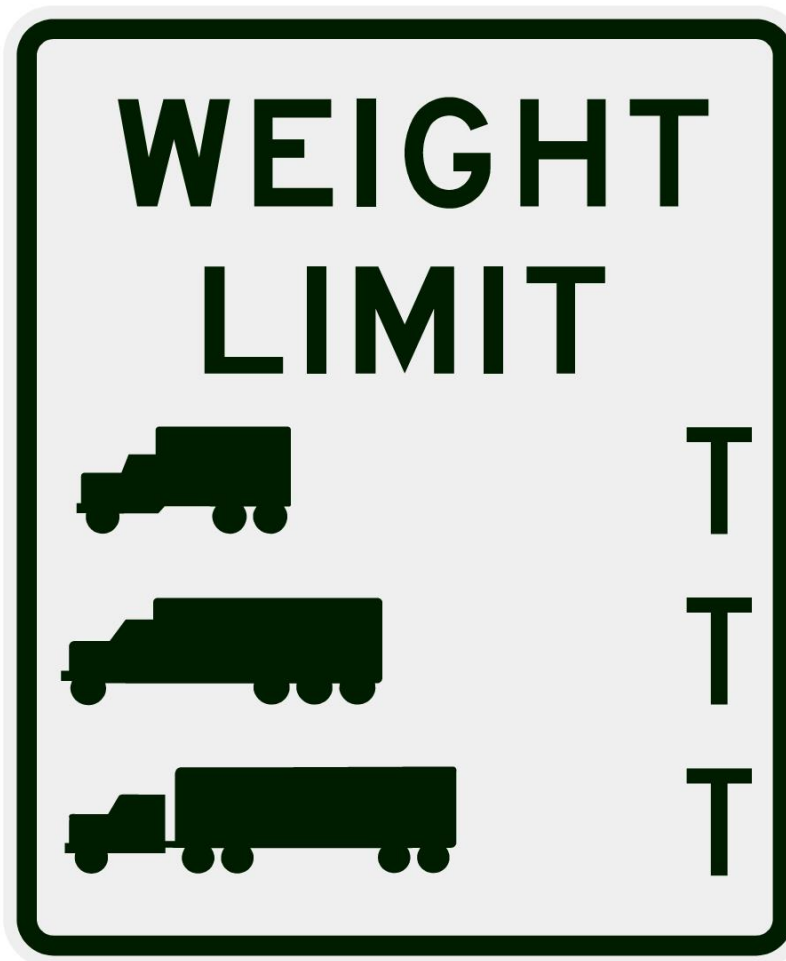
Bridge Posting Information

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

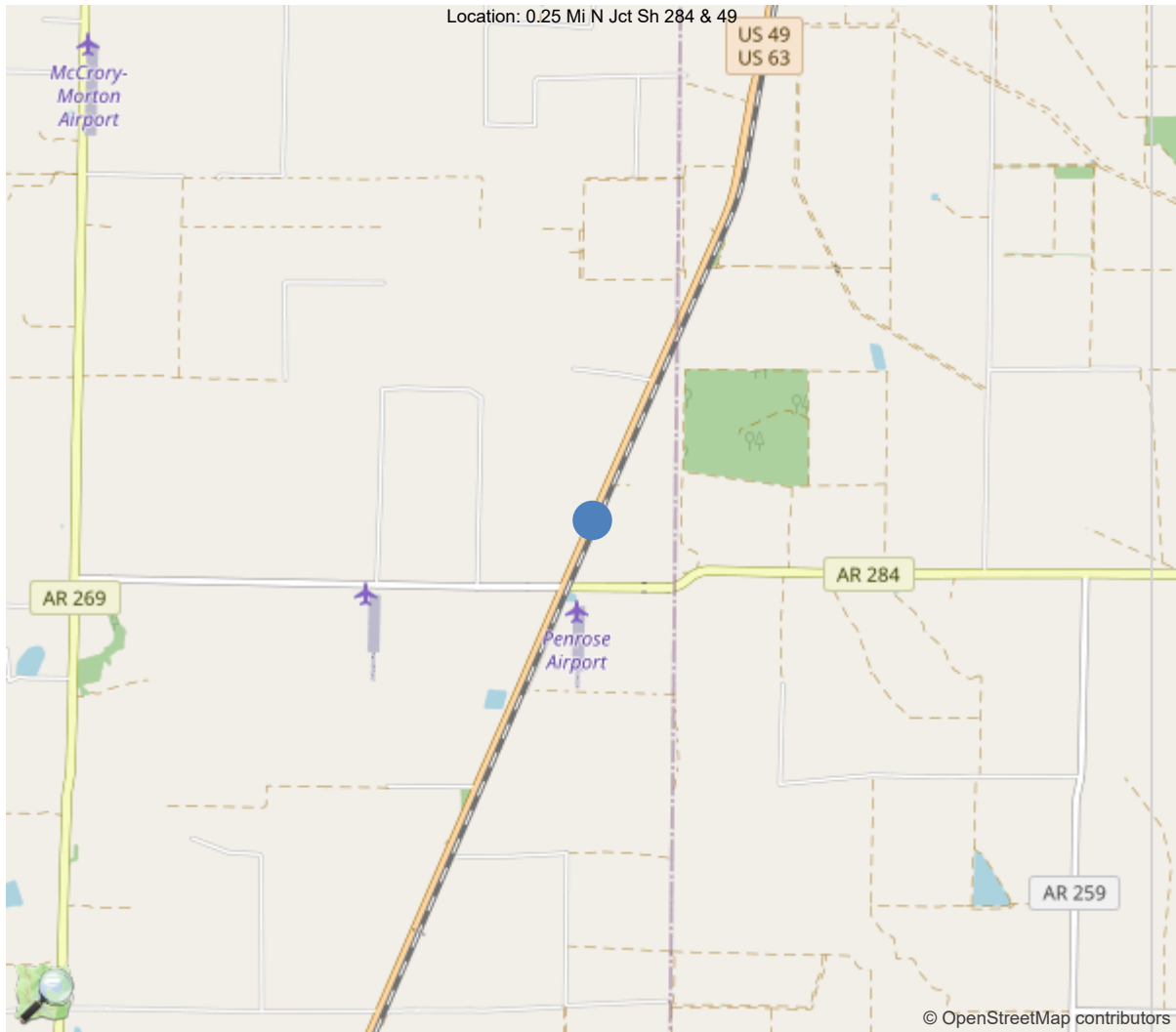
70 - Bridge Posting: 5 - Equal to or above legal loads

Legal Load	Calculated Capacity	Beginning of Bridge Sign Current Value	End of Bridge Sign Current Value
Code 4 (22 Tons)	41		
Code 9 (31 Tons)	44		
Code 5 (40 Tons)	55		

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



35.19757, -91.04915

National Bridge Inventory Data Sheet

IDENTIFICATION	
(1) State Names	5 - Arkansas
(8) Structure Number	M3986
(5) Inventory Route	1
(2) Highway Agency District	01 - District 01
(3) County Code	147 - Woodruff County
(4) Place Code	0
(6) Features Intersected	Creek
(7) Facility Carried	Us-49/Sec-7/L-1.10
(9) Location	0.25 Mi N Jct Sh 284 & 49
(11) Mile Point	1.1 mi
(12) Base Highway Network	Yes
(13) LRS Inventory Rte & Subrte	0000049070
(16) Latitude	35.19757
(17) Longitude	-91.04915
(98) Border Bridge State Code	
(99) Border Bridge Structure No.	
STRUCTURE TYPE AND MATERIAL	
(43) Main Structure Type	122
Material	1 - Concrete
Type	22 - Channel beam
(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	2 - Concrete Precast Panels
(108) Wearing Surface/Protective System	
Type of Wearing Surface	6 - Bituminous
Type of Membrane	0 - None
Type of Deck Protection	0 - None
AGE AND SERVICE	
(27) Year Built	1977
(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	1496
(30) Year of ADT	2018
(109) Truck ADT	1 %
(19) Bypass, Detour Length	11 mi
GEOMETRIC DATA	
(48) Length of Maximum Span	31 ft
(49) Structure Length	93 ft
(50) Curb or Sidewalk Width	
Left	1 ft
Right	1 ft
(51) Bridge Roadway Width Curb to Curb	26.2 ft
(52) Deck Width Out to Out	28.2 ft
(32) Approach Roadway Width (W/Shoulders)	29 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	26.2 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	6 - Rural Minor 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	7
(59) Superstructure	5
(60) Substructure	5
(61) Channel & Channel Protection	7
(62) Culverts	N
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	51
(65) Inventory Rating Method	1 - Load Factor(LF)
(66) Inventory Rating	
Type	
Rating	31
(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	7
(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	1596
(115) Year of Future ADT	2028

INSPECTIONS *			
(90) Inspection Date			06/12/2024
(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: Myron Futrell, Inspection Date: 06/12/2024

Specifications for National Bridge Inventory Sheets

IDENTIFICATION	
B.ID.01 Bridge Number	M3986
B.ID.02 Bridge Name	
B.ID.03 Previous Bridge No.	M0855
B.W.01 Year Built	1977

LOCATION	
B.L.01 State Code	5 - Arkansas
B.L.02 County Code	147 - Woodruff County
B.L.03 Place Code	00000 - N/A
B.L.04 Highway Agency District	01 - District 01
B.L.05 Latitude	35.19757
B.L.06 Longitude	-91.04915
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	0.25 Mi N Jct Sh 284 & 49
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	89.4
B.G.02 Total Bridge Length	92.8
B.G.03 Max Span Length	30.8
B.G.04 Min Span Length	28.2
B.G.05 Bridge Width Out-to-Out	28.2
B.G.06 Bridge Width Curb-to-Curb	26.2
B.G.07 Left Curb or Sidewalk Width	1
B.G.08 Right Curb or Sidewalk Width	1
B.G.09 Approach Roadway Width	27.2

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	10
B.G.14 Sidehill Bridge	N - Not a sidehill bridge
B.G.15 Irregular Deck Area	
B.G.16 Calculated Deck Area	2619.7

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	0.86
B.LR.06 Operating Load Rating Factor	1.42
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	7 - GOOD - Some minor defects.
B.C.02 Superstructure Condition	5 - FAIR - Some moderate defec
B.C.03 Substructure Condition	5 - FAIR - Some moderate defec
B.C.04 Culvert Condition	N - NOT APPLICABLE - Component
B.C.05 Bridge Railing Condition	7 - GOOD - Some minor defects.
B.C.06 Bridge Railing Transitions Condition	7 - GOOD - Some minor defects.
B.C.07 Bridge Bearings Cond.	N - NOT APPLICABLE - Component
B.C.08 Bridge Joints Condition	5 - FAIR - Some moderate defec
B.C.09 Channel Condition Rating	8 - VERY GOOD - Inherent defec
B.C.10 Channel Protection Condition	N - NOT APPLICABLE - Bridge do
B.C.11 Scour Condition Rating	8 - Insignificant 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	G - Good
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

SPAN SETS			
M1			
B.SP.02 # of Spans	3	B.SP.08 Deck Interaction	IM - Integral or monolithic
B.SP.03 # of Beam Lines	8	B.SP.09 Deck Material and Type	C02 - Reinforced concrete - pr
B.SP.04 Span Material	C02 - Reinforced concrete - pr	B.SP.10 Wearing Surface	B01 - Bituminous (asphalt)
B.SP.05 Span Continuity	1 - Simple or single span	B.SP.11 Deck Protective System	0 - None
B.SP.06 Span Type	G07 - Girder/beam - channel ad	B.SP.12 Deck Reinforcing Protective System	0 - None
B.SP.07 Span Protective System	0 - None	B.SP.13 Deck Stay-In-Place Forms	0 - None

SUBSTRUCTURE SETS			
A1			
B.SB.02 No. of Substructure Units	2	B.SB.05 Substructure Protective System	0 - None
B.SB.03 Substructure Material	C02 - Reinforced concrete - pr	B.SB.06 Foundation Type	P05 - Pile - timber
B.SB.04 Substructure Type	A08 - Abutment - pile bent wit	B.SB.07 Foundation Protective System	T01 - Treated - timber preserv
P1			
B.SB.02 No. of Substructure Units	2	B.SB.05 Substructure Protective System	0 - None
B.SB.03 Substructure Material	C02 - Reinforced concrete - pr	B.SB.06 Foundation Type	P05 - Pile - timber
B.SB.04 Substructure Type	B03 - Bent - pile	B.SB.07 Foundation Protective System	T01 - Treated - timber preserv

HIGHWAY FEATURES			
H1			
B.F.02 Feature Location	C - Carried on bridge	B.H.09 Annual ADT	1496
B.F.03 Feature Name	Us-49/Sec-7/L-1.10	B.H.10 Annual ADTT	14
B.H.01 Functional Classification	4 - Minor Arterial	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	49070	B.H.16 Highway Max Usable Surface Width	25.9
B.H.07 LRS Mile Point	1.1	B.H.17 Bypass Detour Length	11
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	49	2-T - TEMP - Two-way traffic - NS or EW	2 - U.S. route	1 - Mainline



Team Lead: Myron Futrell, Inspection Date: 06/12/2024

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
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Asset #M3986(Routine, Underwater type 2)

Us-49/Sec-7/L-1.10 over Creek

Location: 0.25 Mi N Jct Sh 284 & 49

Team Lead: Myron Futrell Inspection Date: 06/12/2024

Inspection Notes

General Observation

Team Lead - Myron Futrell
Bridge Inspector - Charley Smith
Accessed with waders.
No lane closure required for this inspection.

58 - Deck (7 - GOOD CONDITION - some minor problems.)

Precast reinforced concrete deck is top flange of channel beam unit with asphalt overlay. Deck appears to be in overall good condition. Top of deck is covered with asphalt and is not visible. Undersurface of deck has a small amount of exposed reinforcing steel and minor cracking with light efflorescence.

06/12/2018 lowered deck from 8 to 7 due to rebar exposed on soffit.

59 - Superstructure (5 - FAIR CONDITION - all primary structural elements are sound but may have minor section loss, cracking, spalling or scour.)

Reinforced concrete channel beam superstructure is in overall fair condition. Multiple units have spalling in legs, some with exposed reinforcing steel with moderate section loss and CS2 and CS3 cracking. Several units have loose or missing transverse connecting bolts. Several units are acting semi-independently which is reflected in wearing surface cracking and spalling.

06/12/2018 lowered superstructure from 7 to 6 due to spalling with rebar and cracking to legs of units.

06/11/2020-lowered superstructure from 6 to 5 due to spalling with rebar and cracking to legs of units, some with moderate efflorescence.

60 - Substructure (5 - FAIR CONDITION - all primary structural elements are sound but may have minor section loss, cracking, spalling or scour.)

Substructure is in overall fair condition. Precast concrete pile caps have several vertical hairline cracks each. Abutments have been sandbagged for erosion abatement. Timber piles are weathered with minor splits, a few piles have minor decay, and one pile has been spliced and encased in concrete. Concrete splice encasement is of unknown structural integrity,

06/12/2018 lowered substructure from 7 to 6 due to initial decay to a pile.

06/09/2022 lowered substructure from 6 to 5 due to some advanced deterioration in piles.

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.)

Channel is in overall good condition. Channel alignment is good, slopes are well vegetated and there is a minor amount of debris in channel.

7/18/2024- Lowered channel from 8 to 7 due to minor amount of debris in channel.

A-55 - Deck Washing Needed (Y)

Dirt and vegetation growing in gutters.



Asset #M3986(Routine, Underwater type 2)

Us-49/Sec-7/L-1.10 over Creek

Location: 0.25 Mi N Jct Sh 284 & 49

Team Lead: Myron Futrell Inspection Date: 06/12/2024

A-63 - Missing/Incorrect Log Mile Signage (Y)

Log mile should be 1.10

A-64 - Vegetation Removal Requested (Y)

Vegetation growing under, beside and onto bridge.

National Bridge Element Quantities and Notes

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
16	Reinforced Concrete Top Flange	SF	2608	2605	1	2	0
1090	Exposed Rebar	SF	2	0	0	2	0
1120	Efflorescence/Rust Staining	SF	1	0	1	0	0
510	Wearing Surfaces	SF	2428	1772	612	44	0
3210	Delam/Spall/Patched Area/Pothole	SF	12	0	12	0	0
3220	Crack (Wearing Surface)	SF	644	0	600	44	0
<p>(16) Span 1, left curb, at bent 2: spalled for 5' with 3' exposed reinforcing steel with minor section loss. Each joint wearing surface is cracked and several longitudinal cracks.</p> <p>Span 1, deck, at centerline: 6" wide by 12' long patched area that is failing.</p> <p>Span 1, unit 1, undersurface of deck near bent 2, at drain: 2 square feet of reinforcing steel exposed with moderate section loss near drain. 2SF CS3</p> <p>Span 2, unit 4, undersurface of deck: one longitudinal crack between undersurface of deck and unit leg with light efflorescence for one foot. 1SF CS2</p>							
110	Reinforced Concrete Open Girder/Beam	LF	739	654	24	61	0
1080	Delamination/Spall/Patched Area	LF	3	0	1	2	0
1090	Exposed Rebar	LF	30	0	0	30	0
1120	Efflorescence/Rust Staining	LF	37	0	8	29	0
1130	Cracking (RC and Other)	LF	15	0	15	0	0
<p>(110) All spans all units have several 6" spalls with exposed rebar with moderate section loss. Units are moving independently in all spans under vehicular loads.</p> <p>Span 3 girders have small areas of rebar on surface with moderate section loss various locations.</p> <p>Span 1, mid span, connecting bolts between units 1 and 2: both bolts loose.</p> <p>Span 1, mid span, connecting bolts between units 3 and 4: both bolts loose.</p> <p>Span 1, unit 2, right leg, mid span: 8" spall with exposed rebar with moderate section loss. 1LF CS3</p> <p>Span 1, unit 3, left leg, mid span at diaphragm: 18" spall with exposed reinforcing steel with moderate section loss at center diaphragm. Center diaphragm has cracks and spalls with exposed rebar moderate section loss. 2LF CS3</p> <p>Span 1, unit 3, left leg: a few pieces of exposed reinforcing steel on surface with moderate section loss, 3 small pieces. 1LF CS3</p> <p>Span 1, has a loose connection bolt between unit #3,4 at mid span.</p> <p>Span 1, unit 4, left leg, 1/4 span: 1' spall with exposed reinforcing steel with moderate section loss. 1LF CS3</p> <p>Span 1, unit 4, right leg: has a few pieces of surface steel exposed with moderate section loss. 3LF CS3</p> <p>Span 1, unit 4, center diaphragm: cracked and delaminated and spalled with exposed reinforcing steel with moderate section loss.</p> <p>Span 1, unit 5, mid span, diaphragm and right leg: spalled 1' and into right leg of unit with exposed rebar with moderate section loss. 1LF CS3</p> <p>Span 2, unit 5, left leg, 3/4 span, bottom face: 2' cracking. 2LF CS2</p> <p>Span 1, unit 5, right leg, ahead of center: 2' long crack. 2LF CS2</p> <p>Span 1, unit 6, right leg, 3/4 span: 1' spall with exposed reinforcing steel with minor section loss. 1LF CS3</p> <p>Span 1, unit 6, mid span, diaphragm: 1' spall with exposed reinforcing steel with moderate section loss. 1LF CS3</p> <p>Span 1, unit 7, mid span, diaphragm: cracked and delaminated into left leg. 1LF CS2</p> <p>Span 1, unit 7, left leg, 2' ahead of mid span, side face: 8' cracking. 8LF CS2</p> <p>Span 1, unit 8, left leg: some reinforcing steel on surface with moderate section loss. 6 small pieces. 6LF CS3</p>							

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
Span 2, unit 1, right leg, bottom face: several small pieces of exposed secondary reinforcing steel with moderate section loss due to poor concrete coverage. 5LF CS3 Span 2, unit 3, right leg: 1' spall with exposed reinforcing steel mid span, 1' spall with exposed reinforcing steel 3/4 span and 1' spall with exposed reinforcing steel at bent 3, reinforcing steel has minor section loss. 3LF CS3 Span 2, unit 3, right leg, 1/4 span: 1' cracking. 1LF CS2 Span 2, unit 4, mid span: diaphragm is cracked. Span 2, unit 7, left leg, mid span, bottom face: 4' cracking. 4LF CS2 Span 2, unit 7, right leg: two one foot shallow spalls no rebar 2' after mid span and a 1' shallow spall 2' before mid span. 3LF CS2 Span 2, unit 8, right leg, bent 2: 1' delaminated area on bottom face. 1LF CS2 Span 2, unit 8, right outside, at bent 2: 2' spalled area steel plate exposed. 2LF S3							
Span 3, connection bolts, between units 1 and 2: all bolts are missing. Span 3, unit 2, right leg, starting 4' back from mid span: 8' cracking with light efflorescence. 8LF CS2 Span 3, unit 4, right leg, full length: cracked with moderate efflorescence and 2' spalling mid span with exposed reinforcing steel with moderate section loss. Efflorescence 29LF CS3, Rebar 2LF CS3 Span 3, unit 4, left leg, near mid span:has 6' cracking: 6LF CS2 Span 3, unit 5, right leg, mid span: 1' spall with exposed reinforcing steel with moderate section loss. 1LF CS3 Span 3, connection bolt, between unit 2 and 3: missing bolt. Span 3, unit 7, right leg, near abutment 2, 2' spall with exposed reinforcing steel with moderate section loss on bottom of leg. 2LF CS3							
215	Reinforced Concrete Abutment	LF	63	32	31	0	0
6000	Scour	LF	31	0	31	0	0
(215) Abutment 1, cap: a few inches of exposure above settled sandbags from previous repair exposing pile 1. 31LF CS2							
216	Timber Abutment	LF	24	0	18	0	6
1140	Decay/Section Loss	LF	6	0	0	0	6
1160	Crack (Timber)	LF	18	0	18	0	0
(216) Timber abutments: weathered with minor cracks. 18LF CS2 Abutment 1, timber back wall, left side: has areas of 100% decay. 6LF CS4							
228	Timber Pile	EA	13	0	12	1	0
1140	Decay/Section Loss	EA	5	0	4	1	0
1160	Crack (Timber)	EA	7	0	7	0	0
1170	Split/Delamination (Timber)	EA	1	0	1	0	0
(228) All piles: weathered and have minor surface cracks. 7EA CS2 Abutment 1, piles 1,2,5: exposed. Bent 2, pile 1: split at top. 1EA CS2 Bent 2, pile 2: spliced and encased in concrete. Structural integrity of concrete encasement unknown. 1EA CS3 Bent 2, pile 3: minor outer shell decay at ground line. 1EA CS2 Bent 2, pile 4: minor outer shell decay at ground line. 1EA CS2 Bent 3, pile 2: outer shell decay with a small amount of section loss. 1EA CS2 Bent 3, pile 5, back left side: 1' area that sounds slightly hollow with vegetation growing in cracks. 1EA CS2							
234	Reinforced Concrete Pier Cap	LF	57	57	0	0	0
(234) All pile caps: hairline vertical cracks spaced two feet apart. Bent 2 and 3, pile caps, bottom face: ends of form wires exposed flush with bottom.							

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
301	Pourable Joint Seal	LF	56	0	0	56	0
2350	Debris Impaction	LF	56	0	0	56	0
(301) Pourable joint sealer: joints have been overlaid limiting movement. 56LF CS3							
330	Metal Bridge Railing	LF	184	183	1	0	0
1020	Connection	LF	1	0	1	0	0
515	Steel Protective Coating	SF	368	0	368	0	0
3430	Oxide Film Degradation Color/Texture Adherence(Steel Protective Coatings)	SF	368	0	368	0	0
(330) Abutment 2, monument post, left side: spalled one top corner with no exposed reinforcing steel. Steel protective coating is oxidized. 368SF CS2 Span 2, rail post, left side, last post, bottom rail bolt: missing nut. 1LF CS2							

Inspection Photos and Notes



Side view / elevation



Top view / inventory



Span 2, rail post, left side, last post, bottom rail bolt: missing nut.



Bridge rail, left side



Bridge rail, right side



Abutment 1, approach rail, right side



Abutment 1, approach rail, left side



Abutment 2, approach rail, left side



Abutment 2, approach rail, right side



Span 3, undersurface of deck



Bent 3, joint between spans 2 and 3, right side: cracked and spalled.



Span 3, undersurface of deck



06/12/2024

Span 2, undersurface of deck



06/12/2024

Span 1, undersurface of deck.



06/12/2024

Span 1, unit 1, undersurface of deck near bent 2, at drain: 2 square feet of reinforcing steel exposed with moderate section loss near drain. 2SF CS3



06/12/2024

Span 3, deck



Span 2, deck



Cracking and spalling in overlay along centerline.



Typical longitudinal cracking in overlay along grout joints.



Span 1, deck, at centerline: 6" wide by 12' long patched area that is failing.



Span 1, left curb, at bent 2: spalled for 5' with 3' exposed reinforcing steel with minor section loss.



Span 3, connection bolts, between units 1 and 2: all bolts are missing.



Span 3, connection bolt, between unit 2 and 3: missing bolt.



Typical loose bolt between units



Bent 2, ahead face



Bent 2, ahead face



Bent 3, pile 2: outer shell decay with a small amount of section loss. 1EA CS2



Abutment 2



Bent 2, pile 4: minor outer shell decay at ground line. 1EA
CS2



Bent 2, pile 3: minor outer shell decay at ground line. 1EA
CS2



Bent 3, back face



Bent 2, pile 2: spliced and encased in concrete. Structural
integrity of concrete encasement unknown.



Abutment 1



Bent 2, back face



Channel, right side



Channel, left side



Abutment 1, approach roadway



Abutment 2, approach roadway



Vegetation growing in gutters



Abutment 1, log mile sign



06/12/2024

Abutment 2, log mile sign



06/12/2024

Vines and vegetation growing beside, under and onto bridge.

Maintenance Needs

Date Reported: 06/12/2018

Priority: C - Important

Type of Work: Superstructure Repair

Status: Monitor

Component: Element

Deficiency Description

Span 1, mid span, connecting bolts between units 1 and 2: both bolts loose.

Span 1, mid span, connecting bolts between units 3 and 4: both bolts loose.

Span 3, connection bolts, between units 1 and 2: all bolts are missing.

Span 3, connection bolt, between unit 2 and 3: missing bolt.

Remarks



Typical loose bolt between units



Span 3, connection bolts, between units 1 and 2: all bolts are missing.



Span #1 has a loose connection bolt between unit #3,4 at mid span.



Span #3 all bolts are missing between units #1,2.

Maintenance Needs

Date Reported: 06/12/2018

Priority: C - Important

Status: Monitor

Type of Work: Superstructure Repair

Component: Element

Deficiency Description

Span 1, unit 3, left leg, mid span, at diaphragm: 18" spall with exposed reinforcing steel with moderate section loss at center diaphragm. Center diaphragm has cracks and spalls with exposed rebar moderate section loss. 2LF CS3
Span 1, unit 4, left leg, 1/4 span: 1' spall with exposed reinforcing steel with moderate section loss. 1LF CS3
Span 1, unit 5, mid span, diaphragm and right leg: spalled 1' and into right leg of unit with exposed rebar with moderate section loss. 1LF CS3
Span 1, unit 6, right leg, 3/4 span: 1' spall with exposed reinforcing steel with minor section loss. 1LF CS3
Span 1, unit 6, mid span, diaphragm: 1' spall with exposed reinforcing steel with moderate section loss. 1LF CS3
Span 2, unit 3, right leg: 1' spall with exposed reinforcing steel mid span, 1' spall with exposed reinforcing steel 3/4 span and 1' spall with exposed reinforcing steel at bent 3, reinforcing steel has minor section loss. 3LF CS3
Span 3, unit 4, right leg, full length: cracked with moderate efflorescence and 2' spalling mid span with exposed reinforcing steel with moderate section loss. Efflorescence 29LF CS3, Rebar 2LF CS3
Span 3, unit 5, right leg, mid span: 1' spall with exposed reinforcing steel with moderate section loss. 1LF CS3
Span 3, unit 7, right leg, near abutment 2, 2' spall with exposed reinforcing steel with moderate section loss on bottom of leg. 2LF CS3

Remarks



Span 2, undersurface of deck



Span 1, undersurface of deck.

Maintenance Needs

Date Reported: 06/16/2020

Priority: C - Important

Type of Work: Substructure Repair

Status: Monitor

Component: Substructure

Deficiency Description

Abutment #1 left side timber back wall has areas of 100% decay.

Remarks



Abutment #1 left side timber back wall has areas of 100% decay.

Maintenance Needs

Date Reported: 06/09/2022

Priority: C - Important

Type of Work: Approach Leveling/Maintenance

Status: Monitor

Component: Approach

Deficiency Description

Abutment 1, approach roadway: settled up to 1 1/2"causing impact loading on bridge.

Abutment 2, approach roadway: settled up to 2 3/4"causing impact loading on bridge.

Remarks



Abutment 2, approach roadway



Abutment 1, approach roadway



Asset #M3986(Routine, Underwater type 2)

Us-49/Sec-7/L-1.10 over Creek

Location: 0.25 Mi N Jct Sh 284 & 49

Team Lead: Myron Futrell Inspection Date: 06/12/2024

Maintenance Needs

Date Reported: 06/09/2022

Priority: C - Important

Type of Work: Superstructure Repair

Status: Monitor

Component: Element

Deficiency Description

Units are moving independently in all spans under vehicular loads.

Remarks

Maintenance Needs

Date Reported: 06/09/2022

Priority: D- Routine

Type of Work: Deck Repair

Status: Monitor

Component: Element

Deficiency Description

Span 2, rail post, left side, last post, bottom rail bolt: missing nut.

Remarks



Span 2, rail post, left side, last post, bottom rail bolt:
missing nut.

Routine Maintenance

Check Box Maintenance Items

Type of Maintenance	Is Recommended?
A-54 - Sealable Deck Cracks	No
A-55 - Deck Washing Needed	Yes
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	Yes
A-64 - Vegetation Removal Requested	Yes
A-65 - Clogged deck drains?	
A-66 - Approach minor pothole/leveling needed	

A-54 - Sealable Deck Cracks (No)

A-55 - Deck Washing Needed (Yes)

Dirt and vegetation growing in gutters.



Vegetation growing in gutters

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

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 (Yes)

Log mile should be 1.10



Abutment 1, log mile sign



Abutment 2, log mile sign

A-64 - Vegetation Removal Requested (Yes)

Vegetation growing under, beside and onto bridge.



Vines and vegetation growing beside, under and onto bridge.

A-65 - Clogged deck drains?



Asset #M3986(Routine, Underwater type 2)

Us-49/Sec-7/L-1.10 over Creek

Location: 0.25 Mi N Jct Sh 284 & 49

Team Lead: Myron Futrell Inspection Date: 06/12/2024

A-66 - Approach minor pothole/leveling needed



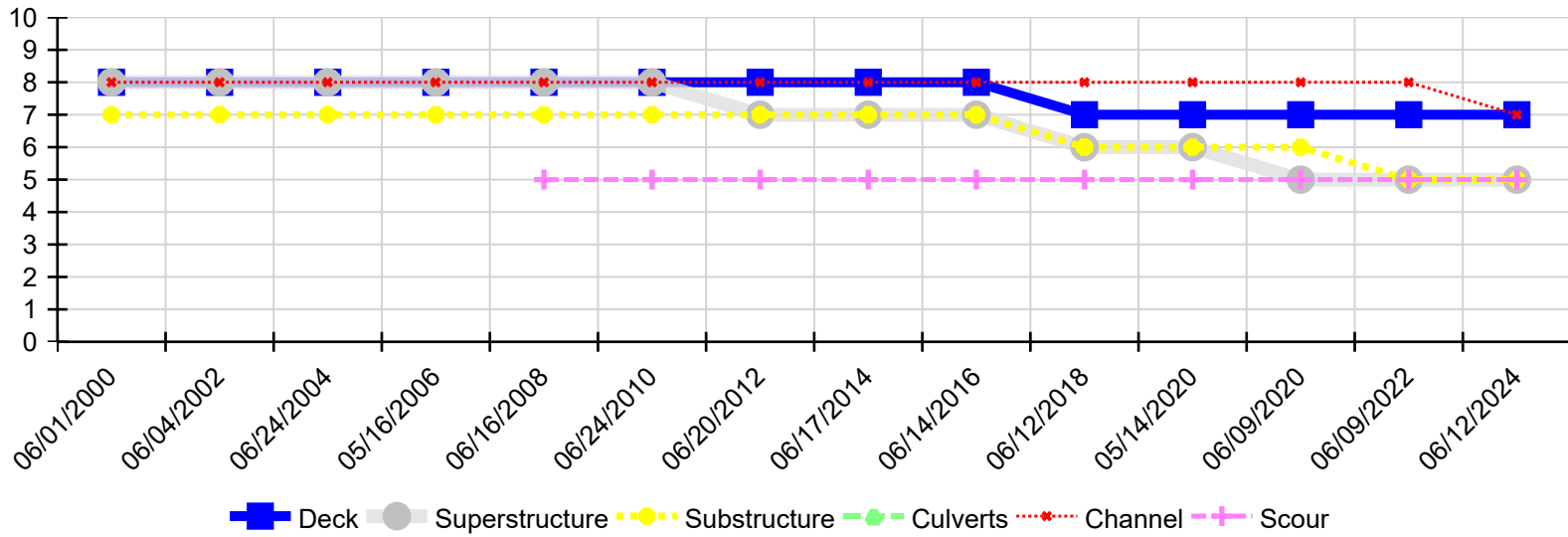
Asset #M3986(Routine, Underwater type 2)

Us-49/Sec-7/L-1.10 over Creek

Location: 0.25 Mi N Jct Sh 284 & 49

Team Lead: Myron Futrell Inspection Date: 06/12/2024

Condition History



Inspection Date	Deck	Superstructure	Substructure	Culverts	Channel	Scour
06/12/2024	7	5	5	N	7	5
06/09/2022	7	5	5	N	8	5
06/09/2020	7	5	6	N	8	5
05/14/2020	7	6	6	N	8	5
06/12/2018	7	6	6	N	8	5
06/14/2016	8	7	7	N	8	5
06/17/2014	8	7	7	N	8	5
06/20/2012	8	7	7	N	8	5
06/24/2010	8	8	7	N	8	5
06/16/2008	8	8	7	N	8	5
05/16/2006	8	8	7	N	8	N
06/24/2004	8	8	7	N	8	N
06/04/2002	8	8	7	N	8	N
06/01/2000	8	8	7	N	8	N