



Latitude:35.81410, Longitude:-89.99004

Route:148 Section:02 Log:4.08

Arnold Road ID:47x148x2xA, Arnold Log mile:4.021

District 10, Mississippi County

Owner: 1-State Highway Agency

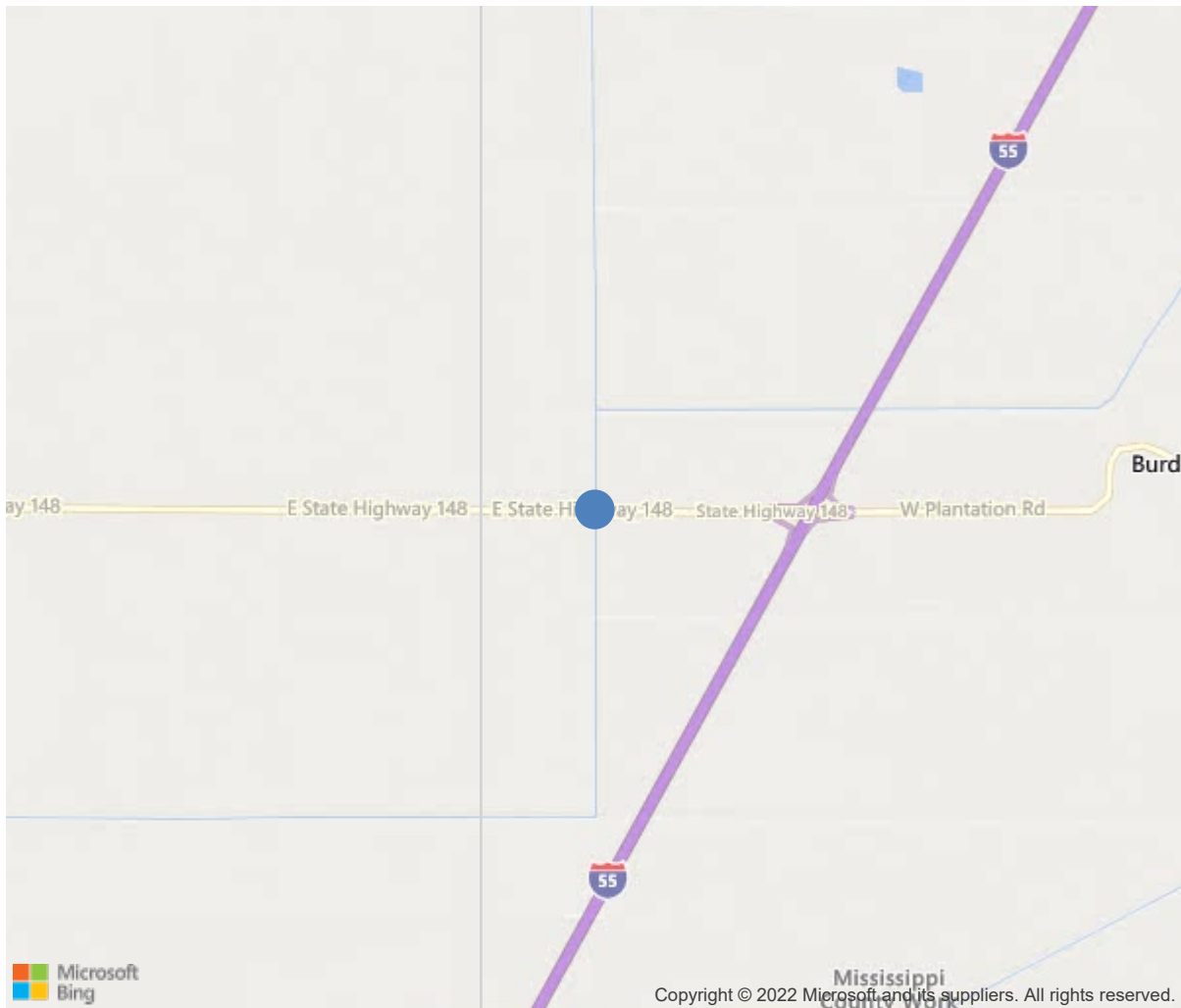


Bridge #M2052(Routine, Fracture Critical)
SH 148-SEC 02-4.08 over National or Ditch #6

Location: 1.1 MI W JCT I 55

Team Lead: Richard Jones **Inspection Date:** November 10, 2021

1.1 MI W JCT I 55



35.81410, -89.99004

Inspection Direction : E to W



Bridge #M2052(Routine, Fracture Critical)
SH 148-SEC 02-4.08 over National or Ditch #6

Location: 1.1 MI W JCT I 55

Team Lead: Richard Jones Inspection Date: November 10, 2021

IDENTIFICATION	
(1) State Names	Arkansas
(8) Structure Number	M2052
(5) Inventory Route	148
(2) Highway Agency District	10
(3) County Code	93-Mississippi County, Arkansa
(4) Place Code	0
(6) Features Intersected	National or Ditch #6
(7) Facility Carried	SH 148-SEC 02-4.08
(9) Location	1.1 MI W JCT I 55
(11) Mile Point	4.08 mi
(12) Base Highway Network	No
(13) LRS Inventory Rte & Subrte	0000000000
(16) Latitude	35.8141
(17) Longitude	-89.99004
(98) Border Bridge State Code	
(99) Border Bridge Structure No.	
STRUCTURE TYPE AND MATERIAL	
(43) Main Structure Type	310
Material	3-Steel
Type	10-Truss - Thru
(44) Approach Structure Type	72
Material	7-Wood or timber
Type	2-Stringer/Multi-beam or girder
(45) No. of Spans in Main Unit	1
(46) No. of Approach Spans	4
(107) Deck Structure Type	1-Concrete Cast-in-Place
(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	1938
(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	200
(30) Year of ADT	2018
(109) Truck ADT	1 %
(19) Bypass, Detour Length	9 mi
GEOMETRIC DATA	
(48) Length of Maximum Span	76 ft
(49) Structure Length	148 ft
(50) Curb or Sidewalk Width	
Left	0.5 ft
Right	0.5 ft
(51) Bridge Roadway Width Curb to Curb	21.7 ft
(52) Deck Width Out to Out	22.8 ft
(32) Approach Roadway Width (W/Shoulders)	30.8 ft
(33) Bridge Median	0-No median
(34) Skew	0 Deg
(35) Structure Flared	No flare
(10) Inventory Route Min Vert Clear	99.99 ft
(47) Inventory Route Total Horiz Clear	22.3 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 water
(111) Pier Protection	5-None present but re-evaluation
(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 a S
(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 part of
(20) Toll	3-On free road. The structure is toll-
(21) Maintain	1-State Highway Agency
(22) Owner	1-State Highway Agency
(37) Historical Significance	2-Bridge is eligible for the NRHP.
CONDITION	
(58) Deck	3
(59) Superstructure	4
(60) Substructure	4
(61) Channel & Channel Protection	6
(62) Culverts	N
LOAD RATING AND POSTING	
(31) Design Load	0-Other or Unknown
(63) Operating Rating Method	1
(64) Operating Rating	
Type	1-Load Factor(LF)
Rating	12
(65) Inventory Rating Method	1-Load Factor(LF)
(66) Inventory Rating	
Type	1
Rating	7
(70) Bridge Posting	0-> 39.9% below
(41) Structure Open/Posted/Closed	P-Posted for load (may include o
APPRAISAL	
(67) Structural Evaluation	2
(68) Deck Geometry	4
(69) Clearances, Vertical/Horizontal	N
(71) Waterway Adequacy	8
(72) Approach Roadway Alignment	8
(36A) Bridge Railings	0-Inspected feature does not meet cur
(36B) Transitions	0-Inspected feature does not meet cur
(36C) Approach Guardrail	0-Inspected feature does not meet cur
(36D) Approach Guardrail Ends	0-Inspected feature does not meet cur
(113) Scour Critical Bridges	5-Bridge foundations determined to be
PROPOSED IMPROVEMENTS	
(75) Type of Work	Replacement of bridge or other
(76) Length of Structure Improvement	178 ft
(94) Bridge Improvement Cost	\$ 0
(95) Roadway Improvement Cost	\$ 109
(96) Total Project Cost	\$ 391
(97) Year of Improvement Cost Estimate	2003
(114) Future ADT	390
(115) Year of Future ADT	2028

INSPECTIONS *			
(90) Inspection Date			11/2021
(91) Frequency			24 Months
(92) Critical Feature Inspection	Done	Freq. (Mon)	Date
A: Fracture Critical Detail	Yes	24	11/2021
B: Underwater Inspection	No	0	
C: Other Special Inspection	No	0	
* 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.			



Bridge #M2052(Routine, Fracture Critical)

SH 148-SEC 02-4.08 over National or Ditch #6

Location: 1.1 MI W JCT I 55

Team Lead: Richard Jones, Inspection Date: November 10, 2021

ELEM	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
12	Reinforced Concrete Deck	SF	3375	1124	1200	1051	0
1080	Delamination/Spall/Patched Area	SF	1117	0	246	871	0
1120	Efflorescence/Rust Staining	SF	432	0	432	0	0
1130	Cracking (RC and Other)	SF	702	0	522	180	0
510	Wearing Surfaces	SF	3212	1113	191	1908	0
3210	Delam/Spall/Patched Area/Pothole	SF	1072	0	191	881	0
3220	Crack (Wearing Surface)	SF	246	0	0	246	0
3230	Effectiveness (Wearing Surface)	SF	781	0	0	781	0
111	Timber Open Girder/Beam	LF	1008	910	87	7	4
1140	Decay/Section Loss	LF	28	0	20	4	4
1150	Check/Shake	LF	67	0	67	0	0
1170	Split/Delamination (Timber)	LF	3	0	0	3	0
117	Timber Stringer	LF	1064	880	176	0	8
1140	Decay/Section Loss	LF	28	0	20	0	8
1150	Check/Shake	LF	152	0	152	0	0
1170	Split/Delamination (Timber)	LF	4	0	4	0	0
120	Steel Truss	LF	152	0	101	49	2
1000	Corrosion	LF	111	0	97	14	0
1010	Cracking	LF	2	0	0	0	2
7000	Damage	LF	39	0	4	35	0
515	Steel Protective Coating	SF	6453	0	0	5808	645
3440	Effectiveness (Steel Protective Coatings)	SF	6453	0	0	5808	645
152	Steel Floor Beam	LF	69	0	57	12	0
1000	Corrosion	LF	69	0	57	12	0
162	Steel Gusset Plate	EA	24	0	19	5	0
1000	Corrosion	EA	23	0	19	4	0
7000	Damage	EA	1	0	0	1	0
216	Timber Abutment	LF	66	18	0	48	0
1140	Decay/Section Loss	LF	48	0	0	48	0
228	Timber Pile	EA	46	9	33	4	0



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Location: 1.1 MI W JCT I 55

Team Lead: Richard Jones, **Inspection Date:** November 10, 2021

ELEM	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
1140	Decay/Section Loss	EA	12	0	8	4	0
1150	Check/Shake	EA	22	0	22	0	0
1170	Split/Delamination (Timber)	EA	3	0	3	0	0
235	Timber Pier Cap	LF	154	129	15	7	3
1140	Decay/Section Loss	LF	12	0	2	7	3
1150	Check/Shake	LF	10	0	10	0	0
1170	Split/Delamination (Timber)	LF	3	0	3	0	0
304	Open Expansion Joint	LF	46	0	46	0	0
2360	Adjacent Deck or Header	LF	46	0	46	0	0
313	Fixed Bearing	EA	4	0	0	4	0
1000	Corrosion	EA	4	0	0	4	0
330	Metal Bridge Railing	LF	296	273	16	7	0
1020	Connection	LF	7	0	0	7	0
7000	Damage	LF	16	0	16	0	0
515	Steel Protective Coating	SF	948	948	0	0	0



Load posting at beginning



Load posting at end



wearing surface



L2 Lt



Span 1 bays 1 and 2



Span 3



Span 3 Lt



Span 3 bays 4 and 5



Span 4 and 5 Lt



approach



main





Bridge #M2052(Routine, Fracture Critical)
SH 148-SEC 02-4.08 over National or Ditch #6

Location: 1.1 MI W JCT I 55

Team Lead: Richard Jones **Inspection Date:** November 10, 2021

Maintenance Needs

Date Reported: 11/19/2010
Priority: C - Important
Type of Work: Repair
Status: Monitor
Inspection Direction E to W
Component: Superstructure

Deficiency Description

Majority of truss verticals and diagonals have collision damage.

Remarks

Date Reported: 11/23/2011
Priority: C - Important

Type of Work: Repair
Status: Monitor
Inspection Direction E to W
Component: Superstructure

Deficiency Description

Span 3 bent 3 timber stringers 3, 13, and 14 have 2' on end that is decayed with up to 50% loss of section.
Span 3 bent 4 stringer 8 is decayed and hollow on end.

Remarks



Span 3 stringer 13 over bent 3.





Span 3 stringer over bent 3



Span 3 bent 3 stringer 3



Span 3 bent 3 stringers 13 and 14



Span 3 bent 4 stringer 8



Bridge #M2052(Routine, Fracture Critical)
SH 148-SEC 02-4.08 over National or Ditch #6

Location: 1.1 MI W JCT I 55

Team Lead: Richard Jones **Inspection Date:** November 10, 2021

Date Reported: 11/23/2011
Priority: D- Routine
Type of Work: Clean
Status: Monitor
Inspection Direction E to W
Component: Superstructure

Deficiency Description

Truss members have faded paint with areas of scattered freckled surface rust.

Remarks

Date Reported: 11/20/2012
Priority: B - Pressing; 6 month completion goal
Type of Work: Repair
Status: Open

Inspection Direction E to W

Component: Deck

Deficiency Description

Lt and Rt edges of deck have advanced concrete disintegration. Rt curb is missing for most of spans 1, 2, 4, and 5. Lt and Rt gutters/edge of travel lanes have several full depth patches. Most patches are in fair to poor condition.

Remarks



Span 1 and 2 Rt



Span 1 and 2 Rt



Span 3 Rt



Span 4 and 5 Rt



Span 4 Rt



Bridge #M2052(Routine, Fracture Critical)
SH 148-SEC 02-4.08 over National or Ditch #6

Location: 1.1 MI W JCT I 55

Team Lead: Richard Jones **Inspection Date:** November 10, 2021

Date Reported: 11/20/2012

Priority: D- Routine

Type of Work: None

Status: Monitor

Inspection Direction E to W

Component: Deck

Deficiency Description

Asphalt wearing surface is raveling out along outside wheel path. Wearing surface has several potholes or depressions with map cracking.

Remarks

Date Reported: 11/20/2012

Priority: C - Important

Type of Work: Repair

Status: Monitor

Inspection Direction E to W

Component: Superstructure

Deficiency Description

Bottoms of truss verticals have pack rust buildup between angles with up to 1" of distortion to angles.
Truss verticals have a line of section loss along connection to lower chord.

Remarks



Left truss unit L3 connection pack rust.



LT Side vertical L3



L1 Lt section loss to 1 angle of vertical



Typical of verticals



L3 Lt



Typ verticals at LC connection

Date Reported: 11/20/2012
Priority: C - Important
Type of Work: Repair
Status: Monitor
Inspection Direction E to W
Component: Superstructure

Deficiency Description

Lt Truss - Top chord between L0 and U1 has collision damage 7' ahead of L0. Interior channel of top chord is bowed.

Remarks



M2052 Lt end post at beginning 05212014



L0 - U1 Lt



L2 - U3 diagonal Lt

Date Reported: 11/20/2012
Priority: C - Important
Type of Work: Repair
Status: Monitor
Inspection Direction E to W
Component: Superstructure

Deficiency Description

Truss struts and lower laterals have areas of pack rust and some section loss.

Remarks



Left end of lower lateral brace bent 3.



Lower laterals



Bridge #M2052(Routine, Fracture Critical)
SH 148-SEC 02-4.08 over National or Ditch #6

Location: 1.1 MI W JCT I 55

Team Lead: Richard Jones **Inspection Date:** November 10, 2021

Date Reported: 11/20/2012
Priority: C - Important
Type of Work: Repair
Status: Monitor
Inspection Direction E to W
Component: Bridge

Deficiency Description

Span 3 Rt rail has 10' of collision damage. Rt curb has 10' missing.
Lt rail at span 3 has approximately 6' of collision damage.

Remarks



M2052 Rt L4 - L5 05212014



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Location: 1.1 MI W JCT I 55

Team Lead: Richard Jones **Inspection Date:** November 10, 2021





Bridge #M2052(Routine, Fracture Critical)
SH 148-SEC 02-4.08 over National or Ditch #6

Location: 1.1 MI W JCT I 55

Team Lead: Richard Jones **Inspection Date:** November 10, 2021



Date Reported: 11/20/2012
Priority: C - Important
Type of Work: Repair
Status: Monitor
Inspection Direction E to W
Component: Superstructure

Deficiency Description

Floor beams have flaking rust with some section loss near Lt and Rt ends. A few rivet heads have heavy section loss. Floor beams have some minor section loss at lower lateral connections.

Remarks



Floor beam 1 Rt



Floor beam 2 Rt



Floor beam 2 Rt

Date Reported: 11/21/2012
Priority: C - Important
Type of Work: Repair
Status: Monitor
Inspection Direction E to W
Component: Superstructure

Deficiency Description

Timber girders at spans 1, 2, 4 and 5 have a few minor checks and corner splits. Girders have areas of decay on ends over bents 1 and 6.

Span 1 bent 1 girder 4 has a 2" deep area of decay on bottom over cap.

Span 1 bent 1 girder 11 has core decay on end. Bottom of girder has section loss over cap.

Span 2 bent 3 girders 11, 12, and 14 are decayed with up to 60% loss of section on end.

Span 4 bent 4 girder 1 is split over cap and for 3' into span.

Span 4 bent 4 girders 11 and 12 have some core decay and are partially hollow on end.

Span 4 girder 14 has a full length check on outside face of girder.

Span 5 bent 6 girder 14 is decayed and hollow on end. Bottom of girder is crushed over cap. Girder is separated from deck approximately 6' back.

Remarks



Span 2 girders 11 & 12.



Bent 1 girder 11



Span 2 bent 3 girders 11 and 12



Span 4 girder 1

Date Reported: 05/22/2014
Priority: C - Important
Type of Work: Repair
Status: Monitor
Inspection Direction E to W
Component: Superstructure

Deficiency Description

LT TRUSS

L0 exterior gusset plate has minor section loss along connection to lower chord.
L2 vertical has minor collision damage.
L4 vertical has collision damage and is bowed and twisted up to $\frac{3}{4}$ " out of alignment.
L5 vertical has minor distortion from collision damage.
Top chord from U7 – L8 has minor collision damage.

RT TRUSS

L0 top plate has a 1" diameter hole rusted through. Interior gusset plate has a 4" area of $\frac{1}{8}$ " section loss.
L2 vertical has minor collision damage.
L5 vertical has minor collision damage.
L6 lower chord has $\frac{1}{4}$ " of pack rust between chord and interior gusset.
L8 exterior gusset plate has up to $\frac{1}{8}$ " section loss along connection to lower chord. Top plate has a 1" diameter hole rusted through.

Remarks



M2052 Lt L4 - U5 diagonal 05212014



Floor beam 1 Rt



L0 Lt



L0 Lt interior gusset plate



L0 Rt



L0 Rt



L6 Rt



L8 Rt



L8 Rt

Date Reported: 05/22/2014
Priority: B - Pressing; 6 month completion goal
Type of Work: Repair
Status: Assigned
Inspection Direction E to W
Component: Superstructure

Deficiency Description

LT TRUSS

L2 – U3 diagonal has impact damage. Diagonal is bowed and is 4" out of alignment. Interior angle of diagonal is bowed under U3 gusset.

L3 vertical has collision damage. Interior angles of vertical are bowed and twisted up to 2.75" out of alignment.

U3 interior gusset is bent 4" out at corner.

U3 - L4 diagonal has collision damage and bent and twisted up to 9" out of alignment.

L6 vertical has collision damage. Interior angles are bowed and twisted up to 6.5" out of alignment. Angle on back side has a ¾" tear.

RT TRUSS

L3 vertical has collision damage and is bowed and twisted up to 3" out of alignment.

Remarks



M2052 Gusset Plate U3 Lt. side 05-21-2014 - old damage



M2052 Lt L2 - U3 Diagonal 05212014



M2052 Gusset Plate U3 Lt.side 11-19-2010



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Team Lead: Richard Jones **Inspection Date:** November 10, 2021



M2052 Lt L5 vertical 05212014



Bridge #M2052(Routine, Fracture Critical)
SH 148-SEC 02-4.08 over National or Ditch #6

Location: 1.1 MI W JCT I 55

Team Lead: Richard Jones **Inspection Date:** November 10, 2021





M2052 U5 - L6 diagonal Lt 05212014





M2052 Lt L4 - U5 diagonal 05212014



M2052 Rt L5 - U5 Vertical 5 Rt.side 11-19-2010



M2052 Lt L6 vertical 05212014



M2052 Lt L3 vertical 05212014



U3 - L4 Lt



L5 Lt



L6 Lt

Date Reported: 11/18/2014
Priority: C - Important
Type of Work: Repair
Status: Monitor
Inspection Direction E to W
Component: Substructure

Deficiency Description

Bent 2 cap has 1.5' on Lt end that is decayed and hollow with approximately 30% section loss.
Bent 4 cap has 1' on Rt end and 4' on Lt end that is decayed and partially hollow on top.
Bent 4 Rt sub cap over piles 9a and 9b has some core decay.

Remarks



Bent 2 Lt



Bridge #M2052(Routine, Fracture Critical)
SH 148-SEC 02-4.08 over National or Ditch #6

Location: 1.1 MI W JCT I 55

Team Lead: Richard Jones **Inspection Date:** November 10, 2021

Date Reported: 11/10/2015

Priority: D- Routine

Type of Work: None

Status: Monitor

Inspection Direction E to W

Component: Substructure

Deficiency Description

Bent 1 timber back wall has decay with section loss, beginning to lose roadway embankment.

Remarks

Date Reported: 11/27/2017

Priority: C - Important

Type of Work: Repair

Status: Monitor

Inspection Direction E to W

Component: Substructure

Deficiency Description

Bent 1 pile 3 has some minor core decay or a possible delaminated area.

Bent 2 pile 1 has a ½" wide check on ahead side.

Bent 3 pile 4 has a delaminated area on 1 side.

Bent 4 piles 3 - 6 have some core decay or internal shakes/delaminated areas.

Bent 4 pile 9a and 9b have ½" outside decay at ground level.

Remarks





Bent 3 pile 4



Date Reported: 11/27/2017
Priority: B - Pressing; 6 month completion goal
Type of Work: Repair
Status: Monitor
Inspection Direction E to W
Component: Substructure

Deficiency Description

Bent 3 pile 7 top 3' is decayed and hollow.
Bent 5 pile 1 is decayed & hollow.
Bent 5 pile 5 is decayed and partially hollow.
Bent 6 pile 3 is decayed and partially hollow.

Remarks





Date Reported: 11/21/2018
Priority: A - Safety deficiency; requires prompt action
Type of Work: Repair
Status: Open
Inspection Direction E to W
Component: Superstructure

Deficiency Description

Lt truss - U5 – L6 diagonal has collision damage and is bowed and twisted up to 11" out of alignment. Interior angle of diagonal has a crack at top and bottom connections. Angle is cracked in the vertical plane through 1 bolt hole at top and bottom connections. Cracks appear to have arrested at 2nd bolt hole.

Remarks

to District bridge crew for repair. Several angles and plates make up this member; crack is one of the steel angles. KAW 11/27/18



U5 connection to diagonal to L6



L6 crack pic 1



L6 crack



2021 - Interior angle of U5 - L6 diagonal Lt top



2021 - Interior angle of U5 - L6 diagonal Lt bottom



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Location: 1.1 MI W JCT I 55

Team Lead: Richard Jones **Inspection Date:** November 10, 2021

Deck Notes

Asphalt wearing surface is raveling out along outside wheel path. Wearing surface has several potholes or depressions with map cracking.

Lt and Rt edges of deck have advanced concrete disintegration. Rt curb is missing for most of spans 1, 2, 4, and 5. Lt and Rt gutters/edge of travel lanes have several full depth patches. Most patches are in fair to poor condition.

Span 3 Rt rail has 10' of collision damage. Rt curb has 10' missing.

Lt rail at span 3 has approximately 6' of collision damage.

Span 1 has a full depth patch approximately 5' x 9' in bays 1 and 2.

Span 3 has a full depth patch approximately 4' x 8' in bays 3 and 4.

Spans 4 and 5 have a full depth patch approximately 5' x 20' in bays 11 - 13.

Superstructure Notes



Bridge #M2052(Routine, Fracture Critical)

SH 148-SEC 02-4.08 over National or Ditch #6

Location: 1.1 MI W JCT I 55

Team Lead: Richard Jones **Inspection Date:** November 10, 2021

Timber girders at spans 1, 2, 4 and 5 have a few minor checks and corner splits. Girders have areas of decay on ends over bents 1 and 6.

Span 1 bent 1 girder 4 has a 2" deep area of decay on bottom over cap.

Span 1 bent 1 girder 11 has core decay on end. Bottom of girder has section loss over cap.

Span 2 bent 3 girders 11, 12, and 14 are decayed with up to 60% loss of section on end.

Span 3 bent 3 timber stringers 3, 13, and 14 have 2' on end that is decayed with up to 50% loss of section.

Span 3 bent 4 stringer 8 is decayed and hollow on end.

Span 4 bent 4 girder 1 is split over cap and for 3' into span.

Span 4 bent 4 girders 11 and 12 have some core decay and are partially hollow on end.

Span 4 girder 14 has a full length check on outside face of girder.

Span 5 bent 6 girder 14 is decayed and hollow on end. Bottom of girder is crushed over cap. Girder is separated from deck approximately 6' back.

Truss members have faded paint with areas of scattered freckled surface rust.

Majority of truss verticals and diagonals have collision damage.

Bottoms of truss verticals have pack rust buildup between angles with up to 1" of distortion to angles.

Truss verticals have a line of section loss along connection to lower chord.

Floor beams have flaking rust with some section loss near Lt and Rt ends. A few rivet heads have heavy section loss. Floor beams have some minor section loss at lower lateral connections. Gussets have some section loss along the bottom connection to lower chord.

LT TRUSS

L0 exterior gusset plate has minor section loss along connection to lower chord.

Top chord between L0 and U1 has collision damage 7' ahead of L0. Interior channel of top chord is bowed.

L2 vertical has minor collision damage.

L2 – U3 diagonal has impact damage. Diagonal is bowed and is 4" out of alignment. Interior angle of diagonal is bowed under U3 gusset.

L3 vertical has collision damage. Interior angles of vertical are bowed and twisted up to 2.75" out of alignment.

U3 interior gusset is bent 4" out at corner.

U3 - L4 diagonal has collision damage and bent and twisted up to 9" out of alignment.

L4 vertical has collision damage and is bowed and twisted up to ¾" out of alignment.

L5 vertical has minor distortion from collision damage.

U5 – L6 diagonal has collision damage and is bowed and twisted up to 11" out of alignment. Interior angle of diagonal has a crack at top and bottom connections. Angle is cracked in the vertical plane through 1 bolt hole at top and bottom connections. Cracks appear to have arrested at 2nd bolt hole.

L6 vertical has collision damage. Interior angles are bowed and twisted up to 6.5" out of alignment. Angle on back side has a ¾" tear.

Top chord from U7 – L8 has minor collision damage.

RT TRUSS

L0 top plate has a 1" diameter hole rusted through. Interior gusset plate has a 4" area of 1/8" section loss.

L2 vertical has minor collision damage.

L3 vertical has collision damage and is bowed and twisted up to 3" out of alignment.

L5 vertical has minor collision damage.

L6 lower chord has ¼" of pack rust between chord and interior gusset.

L8 exterior gusset plate has up to 1/8" section loss along connection to lower chord. Top plate has a 1" diameter hole rusted through.

Substructure Notes



Bridge #M2052(Routine, Fracture Critical)
SH 148-SEC 02-4.08 over National or Ditch #6

Location: 1.1 MI W JCT I 55

Team Lead: Richard Jones **Inspection Date:** November 10, 2021

Bent 1 timber back wall has decay with section loss, beginning to lose roadway embankment.
Bent 1 pile 3 has some minor core decay or a possible delaminated area.
Bent 2 cap has 1.5' on Lt end that is decayed and hollow with approximately 30% section loss.
Bent 2 pile 1 has a 1/2" wide check on ahead side.
Bent 3 cap and sub caps were replaced sometime in the past. Caps have several checks and a few corner splits.
Bent 3 pile 1b was spliced sometime in the past.
Bent 3 pile 4 has a delaminated area on 1 side.
Bent 3 pile 7 top 3' is decayed and hollow.
Bent 4 cap has 1' on Rt end and 4' on Lt end that is decayed and partially hollow on top. Cap is spliced over pile 3
Bent 4 Rt sub cap over piles 9a and 9b has some core decay.
Bent 4 piles 3 - 6 have some core decay or internal shakes/delaminated areas.
Bent 4 pile 9a and 9b have 1/2" outside decay at ground level.
Bent 5 pile 1 is decayed & hollow.
Bent 5 pile 5 is decayed and partially hollow.
Bent 6 timber cap was replaced some in the past.
Bent 6 pile 3 is decayed and partially hollow.
Bent 6 pile 4 was spliced sometime in the past.
Channel has some minor embankment erosion under spans 4 and 5. (Minor embankment erosion near bent 4 piling).