



Latitude:35.77783, Longitude:-90.17810

Route:77 Section:02 Log:6.76

Arnold Road ID:47x77x2xA, Arnold Log mile:6.213

District 10, Mississippi County

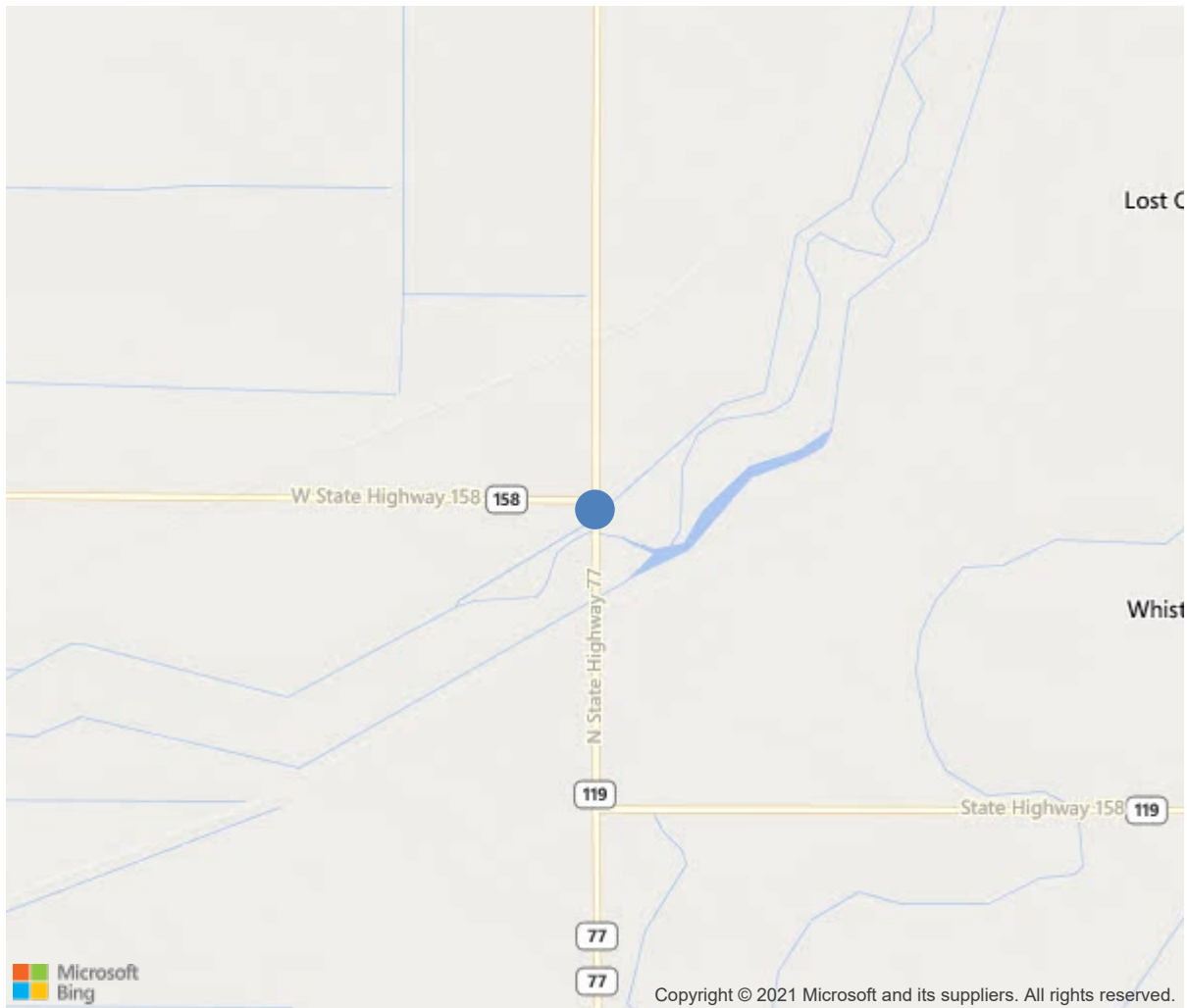
Owner: 1-State Highway Agency



Bridge #02872(Routine)
SH 77-02- LM 6.76 over LITTLE RIVER
Location: 0.05 MI S JCT OF SH 158

Team Lead: Tim Myrick **Inspection Date:** November 24, 2020

0.05 MI S JCT OF SH 158



35.77783, -90.17810



Bridge #02872(Routine)

SH 77-02- LM 6.76 over LITTLE RIVER

Location: 0.05 MI S JCT OF SH 158

Team Lead: Tim Myrick Inspection Date: November 24, 2020

IDENTIFICATION	
(1) State Names	Arkansas
(8) Structure Number	02872
(5) Inventory Route	77
(2) Highway Agency District	10
(3) County Code	93-Mississippi County, Arkansa
(4) Place Code	0
(6) Features Intersected	LITTLE RIVER
(7) Facility Carried	SH 77-02- LM 6.76
(9) Location	0.05 MI S JCT OF SH 158
(11) Mile Point	6.76 mi
(12) Base Highway Network	No
(13) LRS Inventory Rte & Subrte	0000000000
(16) Latitude	35.77783
(17) Longitude	-90.1781
(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	5
(46) No. of Approach Spans	0
(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	1954
(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	2035
(30) Year of ADT	2018
(109) Truck ADT	1 %
(19) Bypass, Detour Length	13 mi
GEOMETRIC DATA	
(48) Length of Maximum Span	40 ft
(49) Structure Length	202 ft
(50) Curb or Sidewalk Width	
Left	0 ft
Right	0 ft
(51) Bridge Roadway Width Curb to Curb	24 ft
(52) Deck Width Out to Out	28.7 ft
(32) Approach Roadway Width (W/Shoulders)	27.9 ft
(33) Bridge Median	0-No median
(34) Skew	45 Deg
(35) Structure Flared	No flare
(10) Inventory Route Min Vert Clear	99.99 ft
(47) Inventory Route Total Horiz Clear	24.9 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	5-Bridge is not eligible for the NRHP
CONDITION	
(58) Deck	5
(59) Superstructure	3
(60) Substructure	5
(61) Channel & Channel Protection	5
(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	14
(65) Inventory Rating Method	1-Load Factor(LF)
(66) Inventory Rating	
Type	5
Rating	9
(70) Bridge Posting	0-> 39.9% below
(41) Structure Open/Posted/Closed	P-Posted for load (may include o
APPRAISAL	
(67) Structural Evaluation	3
(68) Deck Geometry	4
(69) Clearances, Vertical/Horizontal	N
(71) Waterway Adequacy	9
(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	
(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	2074
(115) Year of Future ADT	2028

INSPECTIONS *			
(90) Inspection Date			11/2020
(91) Frequency			24 Months
(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.			



Bridge #02872(Routine)
SH 77-02- LM 6.76 over LITTLE RIVER
Location: 0.05 MI S JCT OF SH 158

Team Lead: Tim Myrick, **Inspection Date:** November 24, 2020

ELEM	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
12	Reinforced Concrete Deck	SF	5068	3288	0	1780	0
1080	Delamination/Spall/Patched Area	SF	491	0	0	491	0
1090	Exposed Rebar	SF	61	0	0	61	0
1120	Efflorescence/Rust Staining	SF	1228	0	0	1228	0
510	Wearing Surfaces	SF	4800	4800	0	0	0
3210	Delam/Spall/Patched Area/Pothole	SF	0	0	0	0	0
3220	Crack (Wearing Surface)	SF	0	0	0	0	0
107	Steel Open Girder/Beam	LF	1000	625	125	230	20
1000	Corrosion	LF	375	0	125	230	20
515	Steel Protective Coating	SF	7525	0	0	5672	1853
3440	Effectiveness (Steel Protective Coatings)	SF	7525	0	0	5672	1853
215	Reinforced Concrete Abutment	LF	93	37	0	56	0
1090	Exposed Rebar	LF	2	0	0	2	0
6000	Scour	LF	54	0	0	54	0
227	Reinforced Concrete Pile	EA	21	19	0	2	0
1120	Efflorescence/Rust Staining	EA	1	0	0	1	0
1130	Cracking (RC and Other)	EA	1	0	0	1	0
234	Reinforced Concrete Pier Cap	LF	136	64	0	72	0
1080	Delamination/Spall/Patched Area	LF	4	0	0	4	0
1090	Exposed Rebar	LF	36	0	0	36	0
1120	Efflorescence/Rust Staining	LF	7	0	0	7	0
1130	Cracking (RC and Other)	LF	25	0	0	25	0
304	Open Expansion Joint	LF	243	243	0	0	0
311	Movable Bearing	EA	25	0	0	25	0
1000	Corrosion	EA	25	0	0	25	0
313	Fixed Bearing	EA	25	0	0	25	0
1000	Corrosion	EA	25	0	0	25	0
333	Other Bridge Railing	LF	406	337	0	69	0
1220	Deterioration (Other)	LF	69	0	0	69	0





beginning end



Ending end



s5 b6 g4



s5 b6 g4





Elevation

Maintenance Needs

Date Reported: 10/18/2012
Priority: C - Important
Type of Work: Repair
Status: Monitor
Component: Superstructure

Deficiency Description

Span 1 bent 1 girder 2 has 7" x 1" hole in web at haunch.
Span 1 bent 1 Girder 3 has 5" x 1" hole in web at haunch.
Span 1 bent 1 girder 5 has 6" x 2" hole in web at haunch.
Span 1 bent 2 girder 3 has 1/2" x 1 1/2" hole in web at haunch.
Span 2 bent 3 girder 2 has 5" x 1" hole in web at haunch.
Span 2 bent 3 girder 5 has 2" diameter hole in web at haunch.
Span 3 bent 4 girder 5 has 2" hole in web with heavy section loss
Span 4 bent 4 girder 1 has 1" diameter hole in web at haunch.
Span 4 bent 4 girder 4 has a 7"x 1" hole in web at haunch, and heavy section loss at bearing.

Remarks



02872 10-01-2015 Span 2 Girder 2 over bent 2
bottom flange.



02872 10-01-2015 Span 5 Girder 5 over Bent 5.



02872 10-01-2015 Span 2 Girder 2 over bent 2.



02872 10-01-2015 Span 1 Girder 5 over Bent 1.



02872 10-01-2015 Span 2 Girder 2 over Bent 3.



02872 10-01-2015 Span 3 & 4 Girder 4 over Bent
4.







02872 10-01-2015 Span 5 Girder 3 over Bent 6.



02872 10-01-2015 Span 2 Girder 4 over Bent 2.



02872 10-01-2015 Span 5 Girder 4 over bent 6 left
bottom flange.





02872 10-01-2015 Span 1 Girder 3 over Bent 1.



02872 10-01-2015 Span 1 Girder 3 over Bent 2.



02872 10-01-2015 Span 3 Girder 3 over Bent 4





02872 10-01-2015 Span 3 Girder 2 over Bent 4.



Span 5 girder 5 bent 5



02872 10-01-2015 Span 3 Girder 3 over Bent 4
Bottom Flange.



S2 b3 g5



S3 b4 g1



S3 b4 g5

Date Reported: 10/18/2012
Priority: C - Important
Type of Work: Clean
Status: Monitor
Component: 311 - Movable Bearing

Deficiency Description

Majority of Bearings are rust covered with some section loss.
Majority of Anchor Bolts have heavy section loss with a few having complete section loss.

Remarks



02872 10-01-2015 Span 5 Girder 1 bearing @ bent 6.

Date Reported: 10/18/2012
Priority: C - Important
Type of Work: Clean
Status: Monitor
Component: Superstructure

Deficiency Description

All Steel Girders are rusted with pitting and 4' on ends of Girders have up to 1/4" section loss to web and bottom flange. Exterior Girders are rusted with pitting and up to 1/4" section loss to mostly top and bottom flanges.

Remarks



02872 10-01-2015 Span 3 Girder 5.



S4 b5 g4

Date Reported: 10/18/2012
Priority: D- Routine
Type of Work: Repair
Status: Monitor
Component: Substructure

Deficiency Description

Concrete Caps

Have several small shelled out areas with some expose rebar, inadequate coverage due to steel placement.

Remarks



B5 bay 2

Date Reported: 10/18/2012
Priority: D- Routine
Type of Work: Repair
Status: Monitor
Component: Substructure

Deficiency Description

Top 3' of Bent 3 Pile 4 has some cracking visible.
Top 10' of Bent 3 Pile 5 has moderate cracking with efflorescence visible.

Remarks



02872 10-01-2015 Bent 3 Pile 5.

Date Reported: 10/18/2012
Priority: G - General/ Preventive maintenance
Type of Work: Repair
Status: Monitor
Component: Deck

Deficiency Description

Top of Deck left & right Gutter lines have areas of scaling.
Top of Deck left Gutter line Span 3 has a 2.5' x 10" x 2" deep deterioration and spalled out area.
Top of Deck left Gutter line Span 4 has a 2.5' x 4' x 2" deep deterioration and spalled out area.
Top of Deck left Gutter line Span 5 has a 2.5' x 20' x 2" deep deterioration with spalled out area.

Remarks



02872 10-01-2015 Span 3 Left gutterline.



02872 10-01-2015 Span 5 Left gutterline & left lane.

Date Reported: 10/18/2012
Priority: C - Important
Type of Work: Repair
Status: Monitor
Component: Channel

Deficiency Description

Bent 1 abutment erosion heavy Slope erosion and undermining of bent 1 abutment, 3' deep x 3' back under cap has exposed piling.

Remarks



Bent 1 erosion, 2017



02872 10-01-2015 Bent 1 Abutment Right end

Team Lead: Tim Myrick **Inspection Date:** November 24, 2020

Date Reported: 10/18/2012
Priority: C - Important
Type of Work: Repair
Status: Monitor
Component: Miscellaneous

Deficiency Description

Bent 6 abutment erosion heavy slope erosion from roadway runoff has undermined left side of bent 6 abutment, 2' deep and 2' back under, exposing piling.

Remarks



02872 10-01-2015 Bent 6 Left end



Bridge #02872(Routine)
SH 77-02- LM 6.76 over LITTLE RIVER
Location: 0.05 MI S JCT OF SH 158

Team Lead: Tim Myrick **Inspection Date:** November 24, 2020

Date Reported: 10/08/2014
Priority: C - Important
Type of Work: Repair
Status: Monitor
Component: Bridge

Deficiency Description

Several Concrete Bridge Rail Posts
Are cracked with some of them spalled with rebar exposed.

Remarks

Date Reported: 10/08/2014
Priority: C - Important
Type of Work: Repair
Status: Monitor
Component: Bridge

Deficiency Description

Left and right Overhangs have some spalled areas with rebar exposed.
Bottom of Deck has some cracking with efflorescence.
All Open Joint angle iron is rusting with initial section loss, only 3 to 4 foot of joint visible due to asphalt overlay.

Remarks



02872 10-01-2015 Span 4 right side first drain.



02872 10-01-2015 Span 5 Bay 1 @ bent 6.

Date Reported: 10/08/2014
Priority: C - Important
Type of Work: Repair
Status: Monitor
Component: Substructure

Deficiency Description

Bent 2 cap left end of has a 2' x 6" spall with exposed rebar, 1' of exposed rebar on bottom near pile 2, a 2' x 4" spall with exposed rebar at pile 4, 2' of deterioration near girder 5.
Bent 3 cap has heavy deterioration and cracking with 10' total of exposed rebar due to lack of steel coverage. Span 3 side of cap has 15' of spall with some exposed rebar, right end of cap over pile 5 has 3' of cracking.
Bent 4 top of cap left end between girders 1 & 2 is spalled up to 2" deep.
Bent 4 left end of cap has 3' spalled with exposed rebar (with section loss) over pile 1.
Bent 5 cap has 6' of cracking & impending spalls.
Bent 6 abutment left end has a 2' x 4" deep spall with exposed rebar (with section loss to rebar) under bearing 1 with 1" of loss of bearing.

Remarks





02872 10-01-2015 Bent 3 Cap Span 3 Side.



02872 10-01-2015 Span 5 Girder 1 bearing @ bent 6.



02872 10-01-2015 Bent 2 Cap Left end



Bridge #02872(Routine)
SH 77-02- LM 6.76 over LITTLE RIVER
Location: 0.05 MI S JCT OF SH 158

Team Lead: Tim Myrick Inspection Date: November 24, 2020

Date Reported: 10/07/2015
Priority: D- Routine
Type of Work: Repair
Status: Monitor
Component: Bridge

Deficiency Description

Several areas of concrete curbs are deteriorated with section loss and some rebar exposed.

Remarks



02872 10-01-2015 Span 5 left curb.



Team Lead: Tim Myrick Inspection Date: November 24, 2020

Date Reported: 10/13/2017
Priority: B - Pressing; 6 month completion goal
Type of Work: Repair
Status: Assigned
Component: Superstructure

Deficiency Description

Span 1 bent 1 girder 4 has (2) 1" x 2" diameter holes in bottom flange.
Span 1 bent 2 girder 2 has a 1" diameter hole at haunch, and bottom flange only 1/2" remains due to section loss.
Span 1 bent 2 girder 5 has 3/16" section loss to bottom flange remains.
Span 2 bent 2 girder 2 has 7" x 2" hole in web at haunch and a 5" x 3" hole in left flange at bearing complete section loss.
Span 2 bent 2 girder 4 has 3 1/2" x 1" hole in web at haunch, heavy section loss bottom flange left side at bearing, only 1/8" of flange remains. Girder is also bowed with pinholes to web only 1/8" of web remains over bent 2.
Span 2 Girder 5 has 20' of rust with up to 1/8" section loss.
Span 3 girder 1 mid span heavy section loss bottom flange 5/16" flange remains.
Span 3 girder 5 has 5/8" section loss bottom flange for 2', and a 10' section with up to 1/8" section loss, and 10' from back of bent 3 cap has 3' long area heavy section loss with knife edge to flange.
Span 3 bent 4 girder 2 has 5" x 1/2" hole in web at haunch.
Span 3 bent 4 girder 3 has 7" x 1" hole in web at haunch and 3" x 1" hole near the bearing, (both sides) on right flange, and the left bottom flange has heavy section loss.
Span 3 bent 4 girder 4 has 6" x 3/4" hole in web at haunch, and a 1" diameter hole in web 2' from end.
Bottom flange has a 1" x 1 1/2" hole 2' from bent 4.
Span 4 bent 4 girder 2 has 5"x 1/2"hole in web at haunch, and left side of girder has 1" x 1/2" hole in bottom flange.
Span 4 bent 4 girder 3 has 5" x 1" hole in web at Haunch, and 10' area with heavy section loss, plus bottom flange left side at bearing 3" x 1" hole.
Span 4 bent 5 girder 3 bottom flange, right side near bearing has a 3" diameter hole.
Span 5 bent 5 girder 2 heavy section loss to bottom flange at bearing on left side and a 1" x 1/2"hole in web at haunch and 3" x 2" hole at bottom flange.
Span 5 bent 5 girder 3 has three 1" diameter holes in web.
Span 5 bent 5 girder 4 has 2" x 1/2"hole in web at haunch, and 1/4" of flange remains at bearing.
Span 5 bent 5 girder 5 has a 2 1/2" diameter hole in web at haunch.
Span 5 bent 6 girder 1 has a 4" x 1" hole in web at haunch.
Span 5 bent 6 girder 2 has 3" x 2" hole in web at haunch.
Span 5 bent 6 girder 3 has a 3" x 3/4" hole in web at haunch.

Remarks

District Bridge Crew making repairs in the area, but will have to make repairs at other location before completing these items. KAW 10/17/13



Span 3 girder 3 near bent 4



S3 b4 g3



S3 b3 g5



Span 4 girder 4 at bent 4





S3 b4 g3



s5 b6 g4



s5 b6 g4



S3 10' from b3 g5





S4 b4 g3



S2 g5



S2 b2 g4



S3 b4 g3



S3 b4 g3



S5 b5 g2



S4 b5 g3



S5 b5 g3



S5 b6 g1

Date Reported: 10/05/2018
Priority: C - Important
Type of Work: Repair
Status: Monitor
Component: Superstructure

Deficiency Description

Span 4 bent 4 girder 3 has 5" x 1" hole in web at Haunch, and 10' area with heavy section loss, plus bottom flange left side at bearing 3" x 1" hole.

Span 4 bent 4 girder 4 has a 7"x 1" hole in web at haunch, and heavy section loss at bearing.

Remarks



Span 4 girder 4 at bent 4



Span 3 girder 3 near bent 4



Span4 girder 3 bent 4



S4 b4 g3

Date Reported: 12/03/2020
Priority: CF - Critical Finding
Type of Work: Repair
Status: Open
Component: Superstructure

Deficiency Description

Span 2 bent 2 girder 5 has 9" x 1" hole in web at haunch, 3/8" section loss bottom flange 5" x 3' area and crushing.
Span 2 bent 3 girder 1 has a 18" crack with holes in web crushing over cap.
Span 5 bent 6 girder 4 has a 1" diameter hole everywhere in web at Haunch and end of web, and the left flange (near bearing) has a 4" x 8 1/2" hole and the right flange has heavy section loss with a 1" hole, plus web has 3 1/2" x 1" hole.

Remarks



S2 g5



B2 right g5



S2 b2 g5



S2 b3 g1



S5 b6 g4



S5 b6 g4



S5 b6 g4



Bridge #02872(Routine)
SH 77-02- LM 6.76 over LITTLE RIVER
Location: 0.05 MI S JCT OF SH 158

Team Lead: Tim Myrick Inspection Date: November 24, 2020

Inspection Comments

SNOOPER or ladder BRIDGE

9/20 Record change to update item 41

Deck Notes

Inspected with Snooper.

No repairs made to deck.

Wearing surface has been rotor milled off and replaced under job # 100838.

Several Concrete Bridge Rail Posts are cracked and spalled, a few have exposed rebar.

Several areas of concrete curbs are deteriorated with section loss and some exposed rebar, rebar has been covered with asphalt.

Top of Deck Span 3 left lane has a 2' x 3' broken patch/impending spall.

Top of Deck has some concrete and asphalt patches.

Top of Deck left & right Gutter lines have areas of scaling.

Top of Deck left Gutter line Span 3 has a 2.5' x 10' x 2" deep area of deterioration and spalled area.

Top of Deck left Gutter line Span 4 has a 2.5' x 4' x 2" deep area of deterioration and spalled area.

Top of Deck left Gutter line Span 5 has a 2.5' x 20' x 2" deep area of deterioration with spalled area.

Left and right Overhangs have some spalled areas with exposed rebar.

Bottom of Deck has some cracking with efflorescence and minor abrasion.

All Open Joint angle iron is rusting with initial section loss, joint not visible due to asphalt overlay.

Span 2, left overhang has 1' of exposed rebar at both joints & 1' of exposed rebar at drain opening.

Span 2 right overhang has 1' of exposed rebar at both joints.

Superstructure Notes



Team Lead: Tim Myrick Inspection Date: November 24, 2020

All Steel Girders are rusted with pitting and 4' on ends of Girders have up to 1/4" section loss to web and bottom flange.
Exterior Girders are rusted with pitting and up to 1/4" section loss to mostly top and bottom flanges.
Place three girders in CF due to heavy section loss and crushing of girders. See photos 11-18-2020
Span 1 bent 1 Girder 3 has 5" x 1" hole in web at haunch.
Span 1 bent 1 girder 4 has (2) 1" x 2" diameter holes in bottom flange.
Span 1 bent 1 girder 5 has 6" x 2" hole in web at haunch.
Span 1 bent 2 girder 2 has a 1" diameter hole at haunch, and bottom flange only 1/2" remains due to section loss.
Span 1 bent 2 girder 3 has 1/2" x 1 1/2" hole in web at haunch.
Span 1 bent 2 girder 5 has 3/16" section loss to bottom flange remains.
Span 2 bent 2 girder 2 has 7" x 2" hole in web at haunch and a 5" x 3" hole in left flange at bearing complete section loss.
Span 2 bent 2 girder 4 has 3 1/2" x 1" hole in web at haunch, heavy section loss bottom flange left side at bearing, only 1/8" of flange remains. Girder is also bowed with pinholes to web only 1/8" of web remains over bent 2.
Span 2 bent 2 girder 5 has 9" x 1" hole in web at haunch, 3/8" section loss bottom flange 5" x 3' area and crushing over cap.
Critical finding
Span 2 Girder 5 has 20' of rust with up to 1/8" section loss.
Span 2 bent 3 girder 1 has a 18" crack with holes in web crushing over cap. Critical finding
Span 2 bent 3 girder 2 has 5" x 1" hole in web at haunch.
Span 2 bent 3 girder 5 has 2" diameter hole in web at haunch.
Span 3 girder 1 mid span heavy section loss bottom flange 5/16" flange remains.
Span 3 girder 5 has 5/8" section loss bottom flange for 2', and a 10' section with up to 1/8" section loss, and 10' from back of bent 3 cap has 3' long area heavy section loss with knife edge to flange.
Span 3 bent 4 girder 2 has 5" x 1/2" hole in web at haunch.
Span 3 bent 4 girder 3 has 7" x 1" hole in web at haunch and 3" x 1" hole near the bearing, (both sides) on right flange, and the left bottom flange has heavy section loss.
Span 3 bent 4 girder 4 has 6" x 3/4" hole in web at haunch, and a 1" diameter hole in web 2' from end.
Bottom flange has a 1" x 1 1/2" hole 2' from bent 4.
Span 3 bent 4 girder 5 has 2" hole in web with heavy section loss
Span 4 bent 4 girder 1 has 1" diameter hole in web at haunch.
Span 4 bent 4 girder 2 has 5" x 1/2" hole in web at haunch, and left side of girder has 1" x 1/2" hole in bottom flange.
Span 4 bent 4 girder 3 has 5" x 1" hole in web at Haunch, and 10' area with heavy section loss, plus bottom flange left side at bearing 3" x 1" hole.
Span 4 bent 4 girder 4 has a 7"x 1" hole in web at haunch, and heavy section loss at bearing.
Span 4 bent 5 girder 3 bottom flange, right side near bearing has a 3" diameter hole.
Span 4 bent 5 girder 4 haunch repair broke loose Lt. side.
Span 5 bent 5 girder 2 heavy section loss to bottom flange at bearing on left side and a 1" x 1/2" hole in web at haunch and 3" x 2" hole at bottom flange.
Span 5 bent 5 girder 3 has three 1" diameter holes in web.
Span 5 bent 5 girder 4 has 2" x 1/2" hole in web at haunch, and 1/4" of flange remains at bearing.
Span 5 bent 5 girder 5 has a 2 1/2" diameter hole in web at haunch.
Span 5 bent 6 girder 1 has a 4" x 1" hole in web at haunch.
Span 5 bent 6 girder 2 has 3" x 2" hole in web at haunch.
Span 5 bent 6 girder 3 has a 3" x 3/4" hole in web at haunch.
Span 5 bent 6 girder 4 has a 1" diameter hole everywhere in web at Haunch and end of web, and the left flange (near bearing) has a 4" x 8 1/2" hole and the right flange has heavy section loss with a 1" hole, plus web has 3 1/2" x 1" hole. Critical finding
Majority of Bearings are rust covered with some section loss.
Majority of Anchor Bolts have heavy section loss with a few having complete section loss.

Substructure Notes



Bridge #02872(Routine)
SH 77-02- LM 6.76 over LITTLE RIVER
Location: 0.05 MI S JCT OF SH 158

Team Lead: Tim Myrick **Inspection Date:** November 24, 2020

Caps have several small shelled out areas with some exposed rebar, inadequate coverage due to steel placement.
Heavy Slope Erosion and undermining of bent 1 abutment, up to 3' deep x up to 2' back under cap, has exposed piling.
Bent 2 cap left end of has a 2' x 6" spall with exposed rebar, 1' of exposed rebar on bottom near pile 2, a 2' x 4" spall with exposed rebar at pile 4, 2' of deterioration near girder 5. Cap has a 10' horizontal crack near top of cap, 4' of cracking with efflorescence near pile 3, right end of cap has 2' of map cracking & efflorescence.
Bent 3 cap has heavy deterioration and cracking with 10' total of exposed rebar due to lack of steel coverage.
Span 3 side of cap has 15' of spall with some exposed rebar, right end of cap over pile 5 has 3' of cracking. Bent 3 pile 4 Top 3' of pile has some cracking visible.
Bent 3 pile 5 top 10' of pile has moderate cracking with efflorescence visible.
Bent 4 top of cap left end between girders 1 & 2 is spalled up to 2" deep.
Bent 4 left end of cap has 3' spalled with exposed rebar (with section loss) over pile 1.
Bent 4 right end of cap is spalled at the top and bottom with some exposed rebar on bottom of cap.
Bent 5 cap has 6' of cracking & impending spalls. Bent 6 abutment left end has a 2' x 4" deep spall with exposed rebar (with section loss to rebar) under bearing 1 with 1" of loss of bearing.
Heavy slope erosion from roadway runoff has undermined left side of bent 6 abutment, 2' deep and 2' back under, exposing piling.
Brush in channel & under bridge.