



Latitude:35.78396, Longitude:-90.17815

Route:77 Section:02 Log:6.34

Arnold Road ID:47x77x2xA, Arnold Log mile:5.79

District 10, Mississippi County

Owner: 1-State Highway Agency

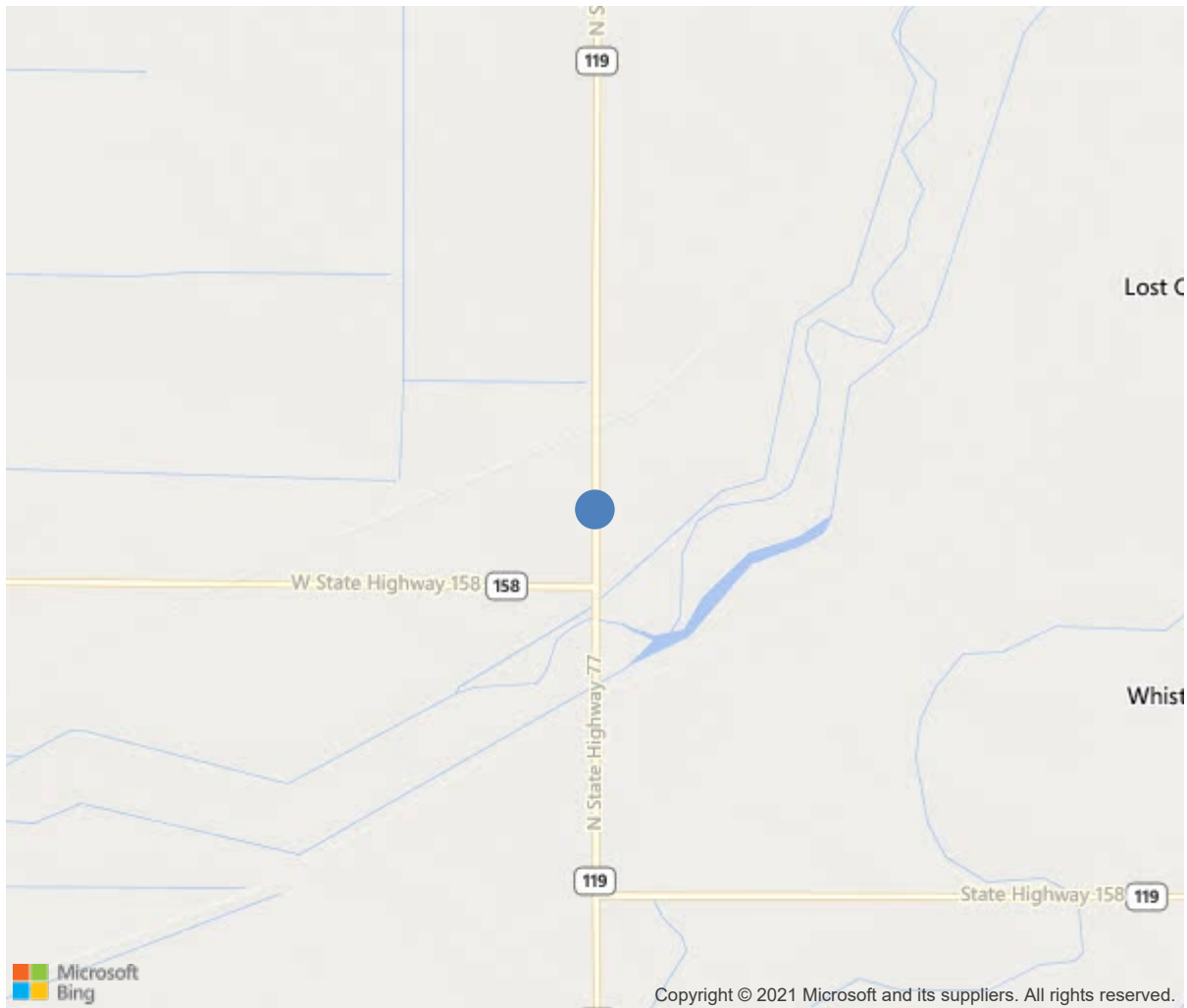


Bridge #02881 (Routine)
SH 77-02- LM 6.34 over LITTLE RIVER

Location: .5 MI N JCT OF SH 158

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

.5 MI N JCT OF SH 158



35.78396, -90.17815



Bridge #02881(Routine)

SH 77-02- LM 6.34 over LITTLE RIVER

Location: .5 MI N JCT OF SH 158

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

IDENTIFICATION	
(1) State Names	Arkansas
(8) Structure Number	02881
(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 6.34
(9) Location	.5 MI N JCT OF SH 158
(11) Mile Point	6.34 mi
(12) Base Highway Network	No
(13) LRS Inventory Rte & Subrte	0000000000
(16) Latitude	35.78396
(17) Longitude	-90.17815
(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	9
(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	19
On	1-Highway
Under	9-Relief for waterway
(28) Lane	
On	2
Under	0
(29) Average Daily Traffic	1700
(30) Year of ADT	2018
(109) Truck ADT	1 %
(19) Bypass, Detour Length	24 mi
GEOMETRIC DATA	
(48) Length of Maximum Span	40 ft
(49) Structure Length	362 ft
(50) Curb or Sidewalk Width	
Left	1 ft
Right	1 ft
(51) Bridge Roadway Width Curb to Curb	24 ft
(52) Deck Width Out to Out	28.5 ft
(32) Approach Roadway Width (W/Shoulders)	27.9 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	25.9 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	5
(60) Substructure	4
(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	26
(65) Inventory Rating Method	1-Load Factor(LF)
(66) Inventory Rating	
Type	9
Rating	16
(70) Bridge Posting	1-30.0 - 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	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	Replacement of bridge or other
(76) Length of Structure Improvement	399 ft
(94) Bridge Improvement Cost	\$ 0
(95) Roadway Improvement Cost	\$ 117
(96) Total Project Cost	\$ 760
(97) Year of Improvement Cost Estimate	2003
(114) Future ADT	1586
(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 #02881 (Routine)

SH 77-02- LM 6.34 over LITTLE RIVER

Location: .5 MI N 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	9122	7188	240	1694	0
1080	Delamination/Spall/Patched Area	SF	1243	0	0	1243	0
1090	Exposed Rebar	SF	41	0	0	41	0
1120	Efflorescence/Rust Staining	SF	250	0	0	250	0
1130	Cracking (RC and Other)	SF	160	0	0	160	0
1190	Abrasion/Wear (PSC/RC)	SF	240	0	240	0	0
510	Wearing Surfaces	SF	7604	7364	0	240	0
3220	Crack (Wearing Surface)	SF	240	0	0	240	0
3210	Delam/Spall/Patched Area/Pothole	SF	0	0	0	0	0
107	Steel Open Girder/Beam	LF	1800	249	1036	490	25
1000	Corrosion	LF	1551	0	1036	490	25
515	Steel Protective Coating	SF	13421	0	2338	7638	3445
3440	Effectiveness (Steel Protective Coatings)	SF	13421	0	2338	7638	3445
215	Reinforced Concrete Abutment	LF	66	0	46	20	0
6000	Scour	LF	66	0	46	20	0
227	Reinforced Concrete Pile	EA	42	42	0	0	0
234	Reinforced Concrete Pier Cap	LF	197	37	36	124	0
1080	Delamination/Spall/Patched Area	LF	41	0	0	41	0
1090	Exposed Rebar	LF	43	0	0	43	0
1120	Efflorescence/Rust Staining	LF	40	0	0	40	0
1130	Cracking (RC and Other)	LF	36	0	36	0	0
304	Open Expansion Joint	LF	253	253	0	0	0
311	Movable Bearing	EA	45	0	0	45	0
1000	Corrosion	EA	45	0	0	45	0
313	Fixed Bearing	EA	45	0	0	45	0
1000	Corrosion	EA	45	0	0	45	0
330	Metal Bridge Railing	LF	736	11	649	76	0
1000	Corrosion	LF	649	0	649	0	0
1010	Cracking	LF	51	0	0	51	0
7000	Damage	LF	25	0	0	25	0





Beginning end



ending end sign crew fixed this by end of day



Bridge #02881 (Routine)
SH 77-02- LM 6.34 over LITTLE RIVER
Location: .5 MI N JCT OF SH 158

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

Maintenance Needs

Date Reported: 10/26/2011
Priority: C - Important
Type of Work: Clean
Status: Monitor
Component: Superstructure

Deficiency Description

Steel Girders

60% paint deterioration and rust with pitting.

3 ft. on ends of Majority of Girders have rust with 1/8 in. sect. loss on bottom flange and web at concrete haunch.

Remarks



Bridge #02881 (Routine)
SH 77-02- LM 6.34 over LITTLE RIVER
Location: .5 MI N JCT OF SH 158

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

Date Reported: 10/26/2011
Priority: C - Important
Type of Work: Repair
Status: Monitor
Component: Deck

Deficiency Description

Span 8 has a 12ft. X 1ft. X 4in. deep spall with exposed rebar on right Overhang, see 2016 deficiency Photo.

Remarks





Bridge #02881 (Routine)
SH 77-02- LM 6.34 over LITTLE RIVER
Location: .5 MI N JCT OF SH 158

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

Date Reported: 10/26/2011
Priority: C - Important
Type of Work: Repair
Status: Monitor
Component: Superstructure

Deficiency Description

Span 6 Girder 2 over Bent 6
Span 4 Girder 3 over Bent 4
are floating with a 1/8in. gap.

Remarks

Date Reported: 10/26/2011
Priority: G - General/ Preventive maintenance
Type of Work: Repair
Status: Monitor
Component: Superstructure

Deficiency Description

Span 7 Girder 1

Is rusted with 1/8in. loss of section on web and bottom flange, mainly near drains, see 2016 deficiency photo.

Span 9 Girder 4 over Bent 10 has a knife edge in bottom flange near bearing, see 2016 photo.

Remarks





Bridge #02881 (Routine)
SH 77-02- LM 6.34 over LITTLE RIVER
Location: .5 MI N JCT OF SH 158

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

Date Reported: 10/24/2012
Priority: C - Important
Type of Work: Repair
Status: Monitor
Component: 311 - Movable Bearing

Deficiency Description

Span 3 Girder 2 Bent 4
Has 2 anchor bolts rusted off.

Remarks





Bridge #02881 (Routine)
SH 77-02- LM 6.34 over LITTLE RIVER
Location: .5 MI N JCT OF SH 158

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

Date Reported: 10/24/2012
Priority: G - General/ Preventive maintenance
Type of Work: Repair
Status: Monitor
Component: Deck

Deficiency Description

Concrete Deck Gutter lines
Exposed concrete in Gutter Lines has several small spalls and impending spalls with delamination

Remarks



Bridge #02881 (Routine)
SH 77-02- LM 6.34 over LITTLE RIVER
Location: .5 MI N JCT OF SH 158

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

Date Reported: 10/24/2012
Priority: C - Important
Type of Work: Clean
Status: Monitor
Component: Superstructure

Deficiency Description

Bearings
Are rusted with pitting, some section loss and pack rust between masonry plate and bearing.

Remarks

Date Reported: 10/24/2012
Priority: C - Important

Type of Work: Repair
Status: Monitor
Component: Channel

Deficiency Description

Bent 1 & Bent 10 Abutments have moderate slope erosion from roadway runoff causing undermining of abutments:
Bent 1 Abutment has some embankment erosion near center line
Bent 10 has up to 20ft. length of concrete x 2ft. high and up to 6ft. back under abutment, see 2016 photos.

Remarks



Bent 10 abutment embankment erosion.



Bent 1 erosion.





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SH 77-02- LM 6.34 over LITTLE RIVER
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Team Lead: Tim Myrick Inspection Date: November 24, 2020

Date Reported: 10/24/2012
Priority: G - General/ Preventive maintenance
Type of Work: Repair
Status: Monitor
Component: Deck

Deficiency Description

Bottom of Deck, left and right Overhangs
Has several small shell areas with some exposed rebar.

Bottom of Deck
Has several cracks with efflorescence, especially Spans 1, 5 & 7.

Remarks



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SH 77-02- LM 6.34 over LITTLE RIVER
Location: .5 MI N JCT OF SH 158

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

Date Reported: 10/24/2012
Priority: C - Important
Type of Work: Repair
Status: Monitor
Component: Miscellaneous

Deficiency Description

Majority of anchor bolts and nuts
have up to 50 % section loss.

Remarks



Bridge #02881 (Routine)
SH 77-02- LM 6.34 over LITTLE RIVER
Location: .5 MI N JCT OF SH 158

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

Date Reported: 11/05/2013
Priority: D- Routine
Type of Work: Repair
Status: Monitor
Component: Substructure

Deficiency Description

Bent 6
Moderate deterioration to top of cap 1 1/2 in. deep with section loss, see photo 2013.

Remarks

Date Reported: 10/09/2014
Priority: B - Pressing; 6 month completion goal
Type of Work: Repair
Status: Repair Documented
Component: 107 - Steel Open Girder/Beam

Deficiency Description

Span 9 Girder 2 over Bent 10 has 12in. X 1in. hole rusted thru web near bottom flange and a 2in. x 2in. hole in bottom left flange & a 3 ½ in. diameter hole in right flange near bearing, see 2016 photo.

Remarks

Girder 9 has been repaired by District 10 Bridge crew 3/19/2020 see photo 2020

Span 9 Girder 2 over Bent 10 has 12in. X 1in. hole rusted thru web near bottom flange and a 2in. x 2in. hole in bottom left flange & a 3 ½ in. diameter hole in right flange near bearing, see 2016 photo.





Bridge #02881 (Routine)
SH 77-02- LM 6.34 over LITTLE RIVER
Location: .5 MI N JCT OF SH 158

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

Date Reported: 10/09/2014
Priority: G - General/ Preventive maintenance
Type of Work: Clean
Status: Monitor
Component: Deck

Deficiency Description

Dirt and Debris in Gutterlines.

Remarks

Deck has been overlayed job #100838 observed at inspection JFA 10-04-2018



Deck



Bridge #02881 (Routine)
SH 77-02- LM 6.34 over LITTLE RIVER
Location: .5 MI N JCT OF SH 158

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

Date Reported: 10/09/2014
Priority: D- Routine
Type of Work: Repair
Status: Monitor
Component: Deck

Deficiency Description

Concrete Deck with asphalt overlay
Has open cracks thru asphalt, especially at joints and with some impending spalls.

Remarks

Deck has been overlayed job #100838 observed at inspection JFA 10-04-2018



Bridge #02881 (Routine)
SH 77-02- LM 6.34 over LITTLE RIVER
Location: .5 MI N JCT OF SH 158

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

Date Reported: 10/09/2014
Priority: G - General/ Preventive maintenance
Type of Work: Repair
Status: Monitor
Component: Substructure

Deficiency Description

All Concrete Caps
Have heavy deterioration, some cracking and with some efflorescence.

Remarks



Bridge #02881 (Routine)
SH 77-02- LM 6.34 over LITTLE RIVER
Location: .5 MI N JCT OF SH 158

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

Date Reported: 10/09/2014
Priority: D- Routine
Type of Work: Repair
Status: Monitor
Component: Substructure

Deficiency Description

Span 8 side of Bent 9 Cap and Bottom of Cap Bent 9
Has rebar exposed due to lack of steel coverage.

Remarks

Date Reported: 10/12/2016
Priority: C - Important

Type of Work: Repair
Status: Monitor
Component: Superstructure

Deficiency Description

Span 1 bent 1 girder 2 has 3' of bottom flange & web rusted with up to 1/8" section loss.
Span 1 bent 1 girder 3 has a 2" x 1/2" hole in web at concrete haunch.
Span 3 Bent 4 girder 1 has 4 1/2" x 1" hole in web at concrete haunch.
Span 3 bent 3 girder 3 has a 4" x 1" hole in web at concrete haunch.
Span 3 bent 4 girder 3 has a 1 1/2" x 1" hole at haunch.
Span 4 bent 4 girder 3 has 4" long x 1.2" hole in web at haunch.
Span 5 bent 5 girder 1 has a 8" x 6" holes in web at concrete haunch.
Span 5 bent 6 girder 2 has a 1/2" x 2" hole in web at haunch.
Span 6 bent 6 girder 3 has a 1/2" diameter hole in web near haunch.
Span 6 bent 6 girder 4 has up to a 1/4" section loss to bottom flange near anchor bolt.
Span 7 girder 1 is rusted with 1/8" loss of section on web and bottom flange, mainly near drains plus 2" x 1" hole top of web at haunch.
(20')Span 7 bent 7 girders 2, 3, & 4 have up to a 1/4" section loss to bottom flange near anchor bolts.
Span 7 Bent 8 girder 3 has 2" x 1" hole in web at haunch.
Span 7 Bent 8 girder 5 has 3" x 2" hole in web at haunch.
Span 8 bent 8 girder 1 has a 7" x 4" hole rusted thru web at concrete haunch.
Span 8 bent 8 girder 3 has a 2" x 1" hole rusted thru web at concrete haunch.
Span 8 bent 8 girder 5 of 6" x 1" hole rusted thru web at concrete haunch.
Span 8 bent 9 girder 2 has a 3/4" diameter hole rusted thru web at concrete haunch.
Span 8 bent 9 girder 3 has a 5" X 2" hole rusted thru web at concrete haunch.
Span 8 bent 9 girder 5 has a 5" long x 1" hole in web near haunch.
Span 9 Bent 10 Girder 3 has 4 holes ranging from 8" X 1 1/4" hole rusted thru web at concrete haunch.
Span 9 Bent 10 Girder 4 has heavy section loss to bottom flange near bearing.

Remarks



Span 5 girder 2 at bent 6



Span 6 girder 3 over bent 6







Span5 girder 1 at bent 5



Span 8 girder 5 at bent 9



Sp 3&4 girder 3 at bent 4



Span 3 girder 3 bent 3



B10 G4



S3 b4 g1



S4 b4 g3



S5 b5 g1



S7 b7 g1



S8 b8 g1



S7&8 b8 g5



S8 b9 g3

Date Reported: 10/12/2016
Priority: C - Important
Type of Work: Repair
Status: Assigned
Component: Substructure

Deficiency Description

Span 1 side of Bent 2 Concrete Cap over Pile 3 has a 1.5ft. X 2ft. X 1 1/2in. deep spall with exposed rebar, reinforcement has 40% loss of section, see 2015 deficiency photo.

Left end of Bent 2 Concrete Cap has a spall near Girder 1, 14in. x 8in. x 2 1/2in. deep and a spall near Pile 1, 18in. x 6in. x 3in. deep with exposed rebar, see 2018 photo.

Top of Cap Bent 2 Between girders 1&2 is spalled with deterioration and retaining water, up to a 1 1/2in. deep, spall is at the edge of bearing.

Bent 3 cap span 2 side has a 6 in. W x 12 in. H spall with exposed rebar with a 6 ft. long horizontal crack 5 in. from top.

Left End of Bent 3 Concrete Cap has a 2ft. X 1ft. X 2in. deep spall with exposed rebar, see 2017 photo.

Bent 4 cap span 3 side has a 6 ft. long area of cracking with efflorescence between girders 4 & 5.

Span 4 Between Girders 4&5 Bent 4 Concrete Cap has a 3ft. X 2ft. X 3in. deep spall with exposed rebar, see 2017 deficiency photo.

Bottom of Concrete Cap Bent 4 between Piles 4&5 has a 4ft. X 1ft. X 3in. deep spall with exposed rebar, see 2015 photo.

Left side of Span 6 side of Bent 6 Cap is spalled near bearing with rebar exposed, see 2017 photo.

Span 7 side at Bearing 2 of Concrete Cap Bent 7 has a 4.5ft X 1ft X 3inch deep spall with exposed rebar near bearing 2; see 2017 photo – Also, Top of Cap has deterioration between Girders 1&2, up to 2in. deep.

Top & Bottom of Concrete Cap Bent 8 has heavy deterioration especially at bearings 2&3, see 2015 photo.

Bent 9 cap has 2.0 ft. of spalling at top & bottom of cap with no exposed rebar.

Remarks

bridge crew is evaluating caps and beams to schedule repairs





Span 2 bent 2 lt side





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Bent 2 cap RT end





B10 G2



S1 b2



B2 left



S4 b4



B6 left



B7 bay1

Date Reported: 10/12/2016
Priority: B - Pressing; 6 month completion goal
Type of Work: Repair
Status: Assigned
Component: Substructure

Deficiency Description

Spans 2&3 side of Bent 3 Concrete Cap under the right side of Bearing 3 has a 3in. deep void on top of cap & under bearing, see 2017 photo.

Bent 3 cap span 2 side has a 6 in. W x 12 in. H spall with exposed rebar with a 6 ft. long horizontal crack 5 in. from top, see photo.

Bent 4 Concrete Cap Span 3 side under Bearing 3 has a 2.5ft. X 1ft. X 6in. deep spall with 40% loss of bearing area, see 2017 photo

Right End of Bottom of Concrete Cap Bent 6 at Pile 5 has a 4ft. X 1ft. X 3in. deep spall with exposed rebar, see photo.

Top of Concrete Cap Bent 6 & between Girders 3&5 has moderate deterioration of up to 3 inches deep with section loss & rebar exposed with 30% of loss of bearing Spans 5&6 Girder 5, (water retention on top of Cap), See 2017 photo.

Bent 6 cap right end has heavy deterioration & section loss with 60 % loss of bearing area under span 6 girder 5 bearing, see 2018 photo.

Remarks

bridge crew is review caps and beams to schedule repairs







Span 6 girder 5 bearing at bent 6







Bent 4 cap top at girder 3



S3 B4



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

Date Reported: 10/12/2016
Priority: G - General/ Preventive maintenance
Type of Work: Repair
Status: Monitor
Component: Deck

Deficiency Description

Concrete Curbs have some abrasive wear, deterioration in some areas with section loss and some cracking.

Remarks



Bridge #02881 (Routine)

SH 77-02- LM 6.34 over LITTLE RIVER

Location: .5 MI N JCT OF SH 158

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

Inspection Comments

SNOOPER BRIDGE

Record change 2020 to fix, fix of item 41

3/19/2020 Special inspection of sub due to item 60 rated a 4. District bridge crew has repaired the critical finding at bent 6 right end and sub will be moved to a 5.

Deck Notes

No changes to following notes in the deck and super left from previous routine.

Steel Bridge Rails have 70% paint deterioration.

Right side of Bridge has 24 Bridge Post cracked and 15 Post with exposed rebar.

Left side of Bridge has 27 Bridge Post cracked and 10 Post with exposed rebar.

Concrete Curbs have some abrasive wear, deterioration in some areas with section loss and some cracking.

Concrete Deck with asphalt overlay has had wearing surface roto-milled off and replaced under job # 100838.

Asphalt has moderate width cracks at joints.

Previous concrete deck notes left in place.

Left side of Span 5 has a 15' x 5' full depth concrete patch.

Concrete in Gutter Lines have several small spalls and impending spalls with delamination.

Span 8 has a 12' X 1' X 4" deep spall with exposed rebar on right Overhang.

Bottom of Deck, left and right Overhangs, has several small spalled areas with some exposed rebar.

Bottom of Deck has several cracks with efflorescence, especially Spans 1, 5 & 7.

Bottom of Deck Concrete Haunches have several haunches cracked with efflorescence.

Superstructure Notes

Steel girders are rusted with pitting. 3' on end of majority of girders are rusted with up to 1/8" loss of section on bottom flange and web at concrete haunch.

Outside girders have rust forming on girders over drain areas, especially Span 3 Girder 5.

Span 1 bent 1 girder 2 has 3' of bottom flange & web rusted with up to 1/8" section loss.

Span 1 bent 1 girder 3 has a 2" x 1/2" hole in web at concrete haunch.

Span 3 Bent 4 girder 1 has 4 1/2" x 1" hole in web at concrete haunch.

Span 3 bent 3 girder 3 has a 4" x 1" hole in web at concrete haunch.

Span 3 bent 4 girder 3 has a 1 1/2" x 1" hole at haunch.

Span 4 bent 4 girder 3 has 4" long x 1.2" hole in web at haunch.

Span 5 bent 5 girder 1 has a 8" x 6" holes in web at concrete haunch.

Span 5 bent 6 girder 2 has a 1/2" x 2" hole in web at haunch.

Span 6 bent 6 girder 3 has a 1/2" diameter hole in web near haunch.

Span 6 bent 6 girder 4 has up to a 1/4" section loss to bottom flange near anchor bolt.

Span 7 girder 1 is rusted with 1/8" loss of section on web and bottom flange, mainly near drains plus 2" x 1" hole top of web at haunch.

(20') Span 7 bent 7 girders 2, 3, & 4 have up to a 1/4" section loss to bottom flange near anchor bolts.

Span 7 Bent 8 girder 3 has 2" x 1" hole in web at haunch.

Span 7 Bent 8 girder 5 has 3" x 2" hole in web at haunch.

Span 8 bent 8 girder 1 has a 7" x 4" hole rusted thru web at concrete haunch.

Span 8 bent 8 girder 3 has a 2" x 1" hole rusted thru web at concrete haunch.

Span 8 bent 8 girder 5 of 6" x 1" hole rusted thru web at concrete haunch.

Span 8 bent 9 girder 2 has a 3/4" diameter hole rusted thru web at concrete haunch.

Span 8 bent 9 girder 3 has a 5" X 2" hole rusted thru web at concrete haunch.

Span 8 bent 9 girder 5 has a 5" long x 1" hole in web near haunch.

Span 9 Bent 10 Girder 3 has 4 holes ranging from 8" X 1 1/4" hole rusted thru web at concrete haunch.

Span 9 Bent 10 Girder 4 has heavy section loss to bottom flange near bearing.

Few girders are floating with gap between bearing plates.

Span 6 Bent 7 girder 2 has 1/8" gap.

Span 4 Bent 4 girder 3 has 1/8" gap.

Bearings are rusted with pitting, some section loss and pack rust between masonry plate and bearing. Majority of Anchor Bolts and Nuts have up to 50 % section loss.

Span 3 Girder 2 Bent 4 has 2 anchor bolts rusted off.

Substructure Notes



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

Lowered condition rating from 5 to 4 due to several caps have large shelled out areas under bearing plates reducing percentage of bearing area. See photos.

Span 3 Bent 4 girder 3

Span 4 Bent 4 girder 3

Span 7 Bent 7 Girders 2 & 4

All Concrete Caps have heavy deterioration, some cracking and some with efflorescence.

Span 1 bent 2 cap over Pile 3 has a 1.5' X 2' X 1.5" deep spall with exposed rebar, reinforcement has 40% loss of section of visible portion.

Span 1 Bent 2 cap face of cap has 2' x 1' spall area with rebar exposed.

Bent 2 cap left end has a spall near girder 1, 14" x 8" x 2.5" deep and a spall near pile 1, 12" x 6" x 3" deep with exposed rebar.

Bent 2 top of cap between girders 1 & 2 is spalled with deterioration and exposed rebar, retaining water, up to a 1.5" deep; spall is at the edge of bearing over pile 2.

Bent 2 cap right end has 1' on end spalled 1.5' H x 3" deep with exposed rebar.

Bent 3 cap left end has a 2' X 1' X 3" deep spall with exposed rebar near girder 1 bearing. Right end has a 1' x 2' area of exposed rebar.

Span 2 bent 3 cap over pile 4 has a 6" diameter spall with exposed rebar.

Span 2 bent 3 cap at pile 3 has a 6" x 12" spall with rebar exposed, with a 6' long horizontal crack 5" from top with efflorescence on span 2 side.

Spans 2 & 3 side of Bent 3 cap under the right side of bearing 3 has a 3" deep void on top of cap with 1/2" loss under bearing.

Span 3 bent 4 cap between girders 4 & 5 has a 6' long area of cracks with efflorescence.

Span 4 bent 4 cap under girder 3 has a 4' long x 6" high x 6" deep spall. Bottom of cap also has a 15" long crack with efflorescence & rust staining between piles 2 & 4.

Span 3 bent 4 cap under bearing 3 has a 2.5' X 1' X 6" deep spall with 40% loss of bearing area, anchor bolt in cap is visible, masonry plate is settling away from girder and is movable by hand.

Span 4 bent 4 cap between girders 4 & 5 has a 3' X 2' X 3" deep spall with exposed rebar.

Bent 4 bottom of cap between Piles 4 & 5 has a 4' X 1' X 3" deep spall with exposed rebar.

Bent 5 cap has a 1' diameter spall with exposed rebar on bottom of cap near pile 3.

Span 5 bent 6 cap, under girder 3 has an 8" wide 3' long x 2" deep spall with no exposed rebar.

Span 6 bent 6 cap left end, is spalled near bearing, 2' x 1' x 2" deep with exposed rebar.

Cap has a vertical crack under girder 2.

Bent 7 cap span 7 side face of cap over pile 4 & near girder 4 bearing has a 3' long x 6" wide x 6" deep spall with exposed rebar.

Span 7 bent 7 cap near bearing 2 has a 4.5' X 1' X 3" deep spall with exposed rebar near bearing 2.

Top of cap has deterioration between girders 1 & 2, up to 2" deep.

Span 7 bent 7 girder 4 bearing has a 2' x 6" wide x 1" deep impending spall.

Bent 7 left end 1' area spalled with rebar.

Bent 7 has heavy deterioration to the top of cap between girders 1-2.

Bent 8 cap top & bottom, has heavy deterioration especially at bearings 2 & 3.

Bent 9 cap Span 8 side over pile 4 and bottom of cap bent 9 has 1' of exposed rebar due to lack of steel coverage.

Bent 9 cap left end has 2' of spalls with no rebar exposed, top & bottom of cap.

Bent 1 & bent 10 abutments have moderate slope erosion from roadway runoff causing undermining of abutments:

Bent 1 abutment has some embankment erosion near center line and some repairs have been made since last inspection.

Bent 10 has up to 20' length of concrete x 2' high and up to 6' back under abutment, and 6' of spalls with exposed rebar.