



Latitude:35.16454, Longitude:-90.17588

Route:191 Section:01 Log:1.24

Arnold Road ID:18x191x1xA, Arnold Log mile:1.245

District 01, 35 - Crittenden County

Owner: 1 - State Highway Agency

Inspection Direction: 2 - S to N

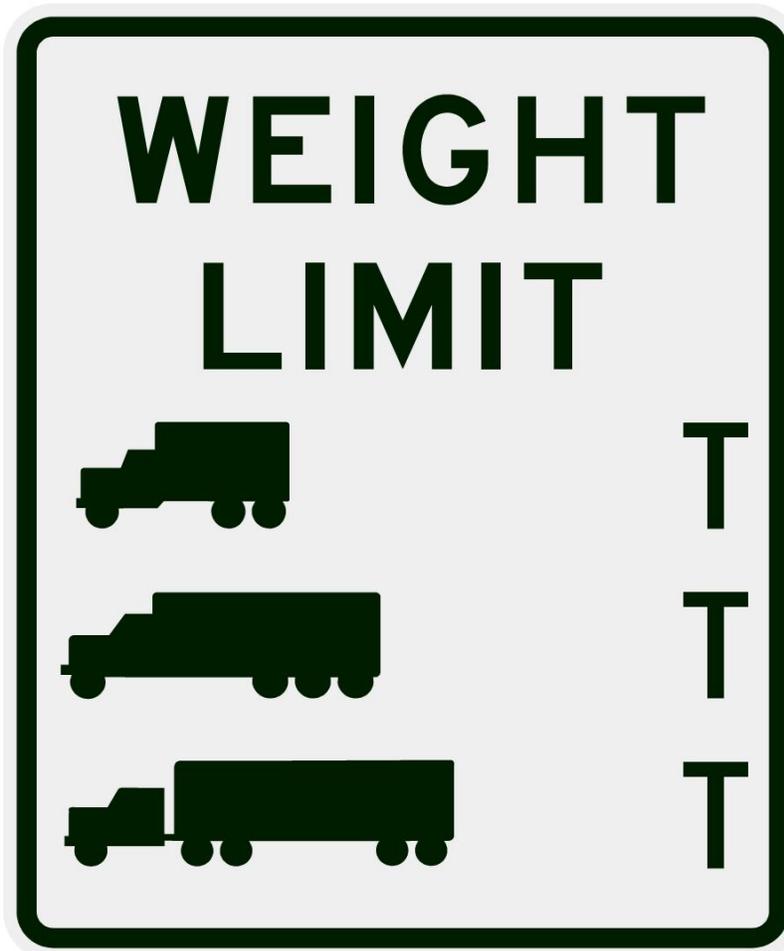
Bridge Posting Information

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

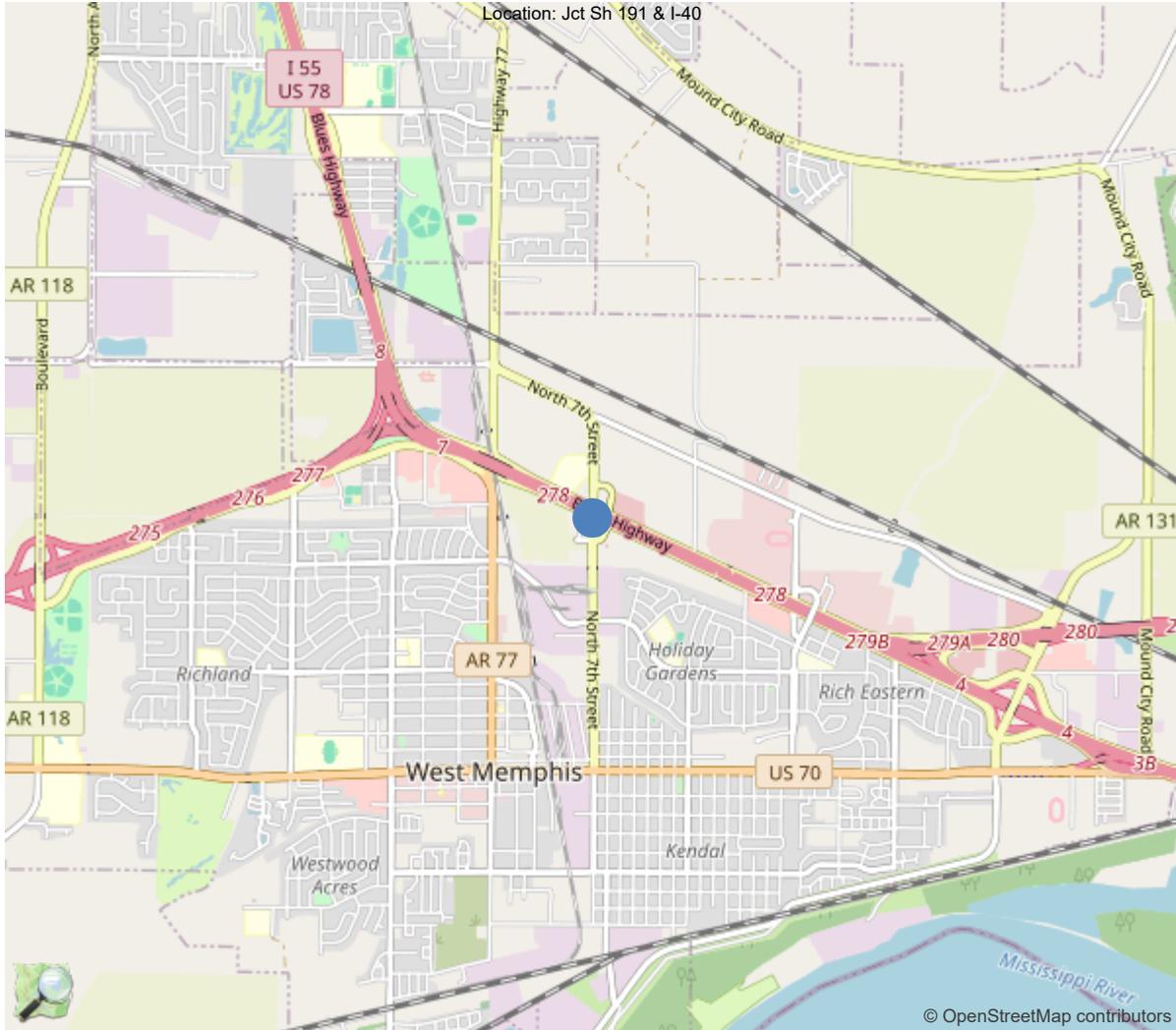
70 - Bridge Posting: 5 - Equal to or above legal loads

Legal Load	Calculated Capacity	Beginning of Bridge Sign Current Value	End of Bridge Sign Current Value
Code 4 (22 Tons)	40		
Code 9 (31 Tons)	50		
Code 5 (40 Tons)	58		

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



35.16454, -90.17588



IDENTIFICATION	
(1) State Names	5 - Arkansas
(8) Structure Number	03130
(5) Inventory Route	1
(2) Highway Agency District	01 - District 01
(3) County Code	35 - Crittenden County
(4) Place Code	74540
(6) Features Intersected	I-40/Sec-52/L-278.20
(7) Facility Carried	Sh-191/Sec-1/L1.24
(9) Location	Jct Sh 191 & I-40
(11) Mile Point	1.24 mi
(12) Base Highway Network	No
(13) LRS Inventory Rte & Subrte	0000000000
(16) Latitude	35.16454
(17) Longitude	-90.17588
(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	6
(46) No. of Approach Spans	0
(107) Deck Structure Type	1 - Concrete Cast-in-Place
(108) Wearing Surface/Protective System	
Type of Wearing Surface	1 - Monolithic Concrete (concurrently pl
Type of Membrane	0 - None
Type of Deck Protection	1 - Epoxy Coated Reinforcing
AGE AND SERVICE	
(27) Year Built	1957
(106) Year Reconstructed	1992
(42) Type of Service	61
On	6 - Overpass structure at an interchange or s
Under	1 - Highway, with or without pedestrian
(28) Lane	
On	4
Under	10
(29) Average Daily Traffic	7500
(30) Year of ADT	2019
(109) Truck ADT	1 %
(19) Bypass, Detour Length	0 mi
GEOMETRIC DATA	
(48) Length of Maximum Span	70 ft
(49) Structure Length	382.6 ft
(50) Curb or Sidewalk Width	
Left	0 ft
Right	0 ft
(51) Bridge Roadway Width Curb to Curb	64.3 ft
(52) Deck Width Out to Out	67.1 ft
(32) Approach Roadway Width (W/Shoulders)	64 ft
(33) Bridge Median	0 - No median
(34) Skew	20 Deg
(35) Structure Flared	0 - No flare
(10) Inventory Route Min Vert Clear	99.99 ft
(47) Inventory Route Total Horiz Clear	64.3 ft
(53) Min Vert Clear Over Bridge Rdwy	99.99 ft
(54) Min Vert Underclear	16.41 ft
Ref:	
(55) Min Lat Underclear RT	7.1 ft
Ref:	
(56) Min Lat Underclear LT	5 ft
NAVIGATION DATA	
(38) Navigation Control	N - Not applicable, no waterwa
(111) Pier Protection	5 - None present but re-evalua
(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	16 - Urban Minor Arterial
(100) Defense Highway	0 - The inventory route is not
(101) Parallel Structure	N - No parallel structure exis
(102) Direction of Traffic	2 - way traffic
(103) Temporary Structure	
(105) Federal Lands Highways	0 - N/A
(110) Designated National Network	0 - The inventory route is not
(20) Toll	3 - On free road. The 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	7
(60) Substructure	7
(61) Channel & Channel Protection	N
(62) Culverts	N
LOAD RATING AND POSTING	
(31) Design Load	5 - MS 18 / HS 20
(63) Operating Rating Method	1
(64) Operating Rating	
Type	1 - Load Factor(LF)
Rating	60
(65) Inventory Rating Method	1 - Load Factor(LF)
(66) Inventory Rating	
Type	
Rating	36
(70) Bridge Posting	5 - Equal to or above legal loads
(41) Structure Open/Posted/Closed	A - Open, no restriction
APPRAISAL	
(67) Structural Evaluation	
(68) Deck Geometry	7
(69) Clearances, Vertical/Horizontal	3
(71) Waterway Adequacy	N
(72) Approach Roadway Alignment	7
(36A) Bridge Railings	1 - Inspected feature meets current
(36B) Transitions	1 - Inspected feature meets current
(36C) Approach Guardrail	1 - Inspected feature meets current
(36D) Approach Guardrail Ends	1 - Inspected feature meets current
(113) Scour Critical Bridges	N - Bridge not over waterway.
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	9517
(115) Year of Future ADT	2028

INSPECTIONS *			
(90) Inspection Date			09/27/2022
(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.			



Asset #03130(Routine)

Sh-191/Sec-1/L1.24 over I-40/Sec-52/L-278.20

Location: Jct Sh 191 & I-40

Team Lead: Myron Futrell Inspection Date: 09/27/2022

General Observation

Drawing numbers: 9619-23

Abutment #2 right approach rail attachment to bridge has several loose bolts.

Abutment 2 left and right approach shoulder has settled 2 " at bridge end.

Gutters have dirt and debris in them.

Span #1 just right of bridge ground drain under bridge grate has rusted out and is failing.



ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
12	Reinforced Concrete Deck	SF	25397	19935	5461	1	0
1080	Delamination/Spall/Patched Area	SF	1	0	0	1	0
1120	Efflorescence/Rust Staining	SF	382	0	382	0	0
1130	Cracking (RC and Other)	SF	5079	0	5079	0	0
<p>(12) Deck has transverse and longitudinal open cs2 cracks each span five to six feet apart. Soffit/Under surface overhangs have hairline transverse cracks with light efflorescence spaced four feet apart. Span #3 left lane has three inch hole bored through deck</p>							
107	Steel Open Girder/Beam	LF	3800	0	3800	0	0
1000	Corrosion	LF	3799	0	3799	0	0
1900	Distortion	LF	1	0	1	0	0
515	Steel Protective Coating	SF	36500	0	0	32850	3650
3410	Chalking (Steel Protective Coatings)	LF	32850	0	0	32850	0
3440	Effectiveness (Steel Protective Coatings)	LF	3650	0	0	0	3650
<p>(107) All girders, paint is chalky loss of pigment with spotted rust 10% being bare steel. Span #3 girder #2 over right lane has one foot long spot of collision damage lower flange is bent upward one inch.</p>							
205	Reinforced Concrete Column	EA	20	16	2	2	0
1080	Delamination/Spall/Patched Area	EA	1	0	0	1	0
1090	Exposed Rebar	EA	1	0	1	0	0
1130	Cracking (RC and Other)	EA	2	0	1	1	0
<p>(205) Paint is peeling on columns. Bent #3 column #3 left back corner cracked and delaminated for five feet. Cs3 Bent #3 column #4 has one foot long crack on ahead face. Bent #4 column #3 is cracked on back face left corner above parapet wall. Bent #5 column #1 has six inch spall with exposed rebar on ahead face six feet up from ground no section loss.</p>							
215	Reinforced Concrete Abutment	LF	182	152	30	0	0
1120	Efflorescence/Rust Staining	LF	15	0	15	0	0
1130	Cracking (RC and Other)	LF	15	0	15	0	0
<p>(215) Back wall's have vertical cracks spaced six feet half with light efflorescence.</p>							
234	Reinforced Concrete Pier Cap	LF	330	312	16	2	0
1080	Delamination/Spall/Patched Area	LF	2	0	2	0	0
1130	Cracking (RC and Other)	LF	16	0	14	2	0
<p>(234) Paint on caps is peeling. Bent #2 riser under girders #7, 8, 10 are cracked. Bent #3 riser under girder #6 is cracked. Bent #3 cap lt. end and back face of cap are cracked. Bent #3 cap back face bearing risers at girders #9,10 on right sides are cracked and delaminated.</p>							



ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
<p>Bent #5 risers on ahead face under girder #7 and #10 have vertical cracks. Bent #5 back face has vertical crack under girder #1. Bent #6 risers under girders #6, 7, #9 and #10 are cracked on back face verticals. Bent #6 girder 8 riser on back face has two foot delamination.</p>							
302	Compression Joint Seal	LF	468	0	440	20	8
2320	Seal Adhesion	LF	53	0	25	20	8
2340	Seal Cracking	LF	415	0	415	0	0
<p>(302) Joint steel on deck has no paint surface rust only. Joint under bridge and in between spans have surface rust and staining. Underneath joints have surface rust little paint left some localized areas of minor section loss. All seals torn and weathered. Bent #2 joint seal has lost adhesion for eight feet and is sagging. Bent #4 joint seal has eight feet of seal with no adhesion and twenty five feet of partial adhesion. Bent #5 joint has twenty feet in left lane seal has partial adhesion.</p>							
311	Movable Bearing	EA	60	0	60	0	0
1000	Corrosion	EA	59	0	59	0	0
1020	Connection	EA	1	0	1	0	0
515	Steel Protective Coating	SF	180	0	0	90	90
3410	Chalking (Steel Protective Coatings)	EA	90	0	0	90	0
3440	Effectiveness (Steel Protective Coatings)	EA	90	0	0	0	90
<p>(311) All moveable bearings have surface rust with minor pack rust. 50% paint left rest of paint chalky and loss of pigment. Movable bearing at bent #5 girder #1 span #5 left side has loose bolt, backed out quarter of an inch.</p>							
313	Fixed Bearing	EA	60	0	60	0	0
1000	Corrosion	EA	59	0	59	0	0
1020	Connection	EA	1	0	1	0	0
515	Steel Protective Coating	SF	180	0	0	90	90
3410	Chalking (Steel Protective Coatings)	EA	90	0	0	90	0
3440	Effectiveness (Steel Protective Coatings)	EA	90	0	0	0	90
<p>(313) Fixed bearing at bent #5 girder #1 span #4 right side anchor nut loose. All fixed bearings have surface rust with minor pack rust little to no section loss. 50% paint loss rest of paint chalky and loss of pigment.</p>							
331	Reinforced Concrete Bridge Railing	LF	765	380	385	0	0
1090	Exposed Rebar	LF	3	0	3	0	0
1130	Cracking (RC and Other)	LF	382	0	382	0	0
<p>(331) Bridge rails have cs2 vertical cracks spaced every two feet. Span #2 left rail has three pieces of exposed rebar due to poor concrete coverage.</p>							



Side view / elevation

Maintenance Needs

Date Reported: 09/30/2020

Priority: C - Important

Type of Work: Repair (General)

Status: Forward State

Component: Miscellaneous

Deficiency Description

Span #1 just right of bridge, ground drain under bridge grate has rusted out and is failing.

Remarks



Span #1 just right of bridge, ground drain under bridge grate has rusted out and is failing.



Span #1 just right of bridge ground drain under bridge grate has rusted out and is failing.

Maintenance Needs

Date Reported: 10/03/2022

Priority: C - Important

Type of Work: Repair (General)

Status: Open

Component: Approach

Deficiency Description

West bound service road right guard rail has collision damage.

Remarks



West bound service road right approach rail has collision damage

Maintenance Needs

Date Reported: 10/30/2014

Priority: D- Routine

Type of Work: Repair (General)

Status: Monitor

Component: Element

Deficiency Description

Deck has transverse and longitudinal open cs2 cracks each span five to six feet apart.

Remarks



Typical deck crack

Maintenance Needs

Date Reported: 10/30/2014

Priority: D- Routine

Type of Work: Repair (General)

Status: Monitor

Component: Approach

Deficiency Description

Abutment #2 right approach rail attachment to bridge has several loose bolts.

Remarks



Loose bolts at abutment #2 right approach rail connection



Abutment #2 rt. approach rail attachment to bridge has several loose bolts.

Maintenance Needs

Date Reported: 09/29/2016

Priority: D- Routine

Type of Work: Repair (General)

Status: Monitor

Component: Approach

Deficiency Description

Abutment #2 left and right approach shoulder has settled two inches at bridge end.

Remarks



Abutment #2 left approach shoulder settlement



Abutment #2 right approach shoulder settlement



Abutment 2 right approach shoulder has settled 2 " at bridge end.



Abutment 2 left approach shoulder has settled 2 " at bridge end.

Maintenance Needs

Date Reported: 09/30/2020

Priority: D- Routine

Type of Work: (Inactive) (Inactive) 1 - Clean

Status: Forward State

Component: Deck

Deficiency Description

Gutters have dirt and debris in them.

Remarks



Dirt and debris in gutters



Gutters have dirt and debris in them.

Maintenance Needs

Date Reported: 09/30/2020

Priority: D- Routine

Type of Work: (Inactive) (Inactive) 1 - Clean

Status: Forward State

Component: Element

Deficiency Description

All girders, paint is chalky loss of pigment with spotted rust 10% being bare steel.

Remarks



Typical outside girder paint condition.



Typical interior girder paint condition

Maintenance Needs

Date Reported: 09/30/2020

Priority: D- Routine

Type of Work: Repair (General)

Status: Forward State

Component: Element

Deficiency Description

Bent #3 column #3 left back corner cracked and delaminated for five feet.

Bent #3 column #4 has one foot long crack on ahead face.

Bent #4 column #3 is cracked on back face left corner above parapet wall.

Bent #5 column #1 has six inch spall with exposed rebar on ahead face six feet up from ground no section loss.

Remarks



09/28/2022

Bent #3 column #3 left back corner cracked and delaminated for five feet. Cs3



09/28/2022

Bent #5 column #1 has six inch spall with exposed rebar on ahead face six feet up from ground no section loss.



09/29/2020

Bent #5 column 1 has 6" spall exposed rebar on front face 6' up from ground no section loss.

Maintenance Needs

Date Reported: 09/30/2020

Priority: D- Routine

Type of Work: Repair (General)

Status: Forward State

Component: Element

Deficiency Description

Bent #2 riser under girders #7, 8, 10 are cracked.

Bent #3 riser under girder #6 is cracked.

Bent #3 cap lt. end and back face of cap are cracked.

Bent #3 cap back face bearing risers at girders #9,10 on right sides are cracked and delaminated.

Bent #5 risers on ahead face under girder #7 and #10 have vertical cracks.

Bent #5 back face has vertical crack under girder #1.

Bent #6 risers under girders #6, 7, #9 and #10 are cracked on back face verticals.

Bent #6 girder 8 riser on back face has two foot delamination.

Remarks



Bent #6 girder 8 riser on back face has two foot delamination.



Bent #6 risers under girders #6, #9 and #10 are cracked on back face verticals.



Bent #3 cap back face bearing risers girders #9,10 right sides are cracked and delaminated.



Bent #3 cap lt. end and back face of cap are cracked.



Typical vertical crack on bearing risers.



Bent #6 girder 8 riser on back face has 2' delamination.

Maintenance Needs

Date Reported: 09/30/2020

Priority: D- Routine

Type of Work: Replace (General)

Status: Forward State

Component: Element

Deficiency Description

All seals torn and weathered.

Bent #2 joint seal has lost adhesion for eight feet and is sagging.

Bent #4 joint seal has eight feet of seal with no adhesion and twenty five feet of partial adhesion.

Bent #5 joint has twenty feet in left lane seal has partial adhesion.

Remarks



Bent #3 joint seal sagging



Abutment #2 joint



Bent #6 joint



Bent #5 joint



Bent #4 joint



Bent #3 joint



Bent #2 joint



Abutment #1 joint

Maintenance Needs

Date Reported: 09/30/2020

Priority: D- Routine

Type of Work: Repair (General)

Status: Forward State

Component: Element

Deficiency Description

Movable bearing at bent #5 girder #1 span #5 left side has loose bolt, backed out a quarter of an inch.
Fixed bearing at bent #5 girder #1 span #4 right side has a loose anchor nut.

Remarks



09/28/2022

Movable bearing at bent #5 girder #1 span #5 left side has loose bolt, backed out quarter of an inch.



09/29/2020

Bent #5, girder #1 span 5 left side loose bolt backed out 1/4", and in span 4 anchor nut loose.

Maintenance Needs

Date Reported: 09/29/2016

Priority: D- Routine

Type of Work: (Inactive) (Inactive) 0 - N/A

Status: Monitor

Component:

Deficiency Description

Abutment 2 left side at bridge end and parapet wall has 2' hole.

10/3/2022-Hole has filled in small void left under approach gutter.

Remarks



Abutment #2 left side slope



Hole at abutment #2 left side

Maintenance Needs

Date Reported: 10/03/2022

Priority: D- Routine

Type of Work: Repair (General)

Status: Open

Component: Element

Deficiency Description

Span #3 left lane has open 3" hole bored through deck.

Remarks



Span #3 left lane has three inch hole bored through deck



Routine Maintenance

Check Box Maintenance Items

Type of Maintenance	Is recommended?
A-54 - Sealable Deck Cracks	
A-55 - Deck Washing Needed	
A-56 - Joint Cleaning/Flushing Needed	
A-57 - Beam End and Bearing Paint Needed	
A-58 - Cap Cleaning/Flushing Needed	
A-59 - Joint Repair Needed	
A-60 - Full Beam Painting Needed	
A-61 - Polymer Overlay Advised	
A-62 - Hydro and LMC Advised	
A-63 - Missing/Incorrect Log Mile Signage	
A-64 - Vegetation Removal Requested	

A-54 - Sealable Deck Cracks

A-55 - Deck Washing Needed

A-56 - Joint Cleaning/Flushing Needed



Asset #03130(Routine)

Sh-191/Sec-1/L1.24 over I-40/Sec-52/L-278.20

Location: Jct Sh 191 & I-40

Team Lead: Myron Futrell Inspection Date: 09/27/2022

A-57 - Girder End and Bearing Painting Needed

A-58 - Cap Cleaning/Flushing Needed

A-59 - Joint Repair Needed

A-60 - Full Girder Painting Needed

A-61 - Polymer Overlay Advised

A-62 - Hydro and LMC Advised

A-63 - Missing/Incorrect Log Mile Signage

A-64 - Vegetation Removal Requested



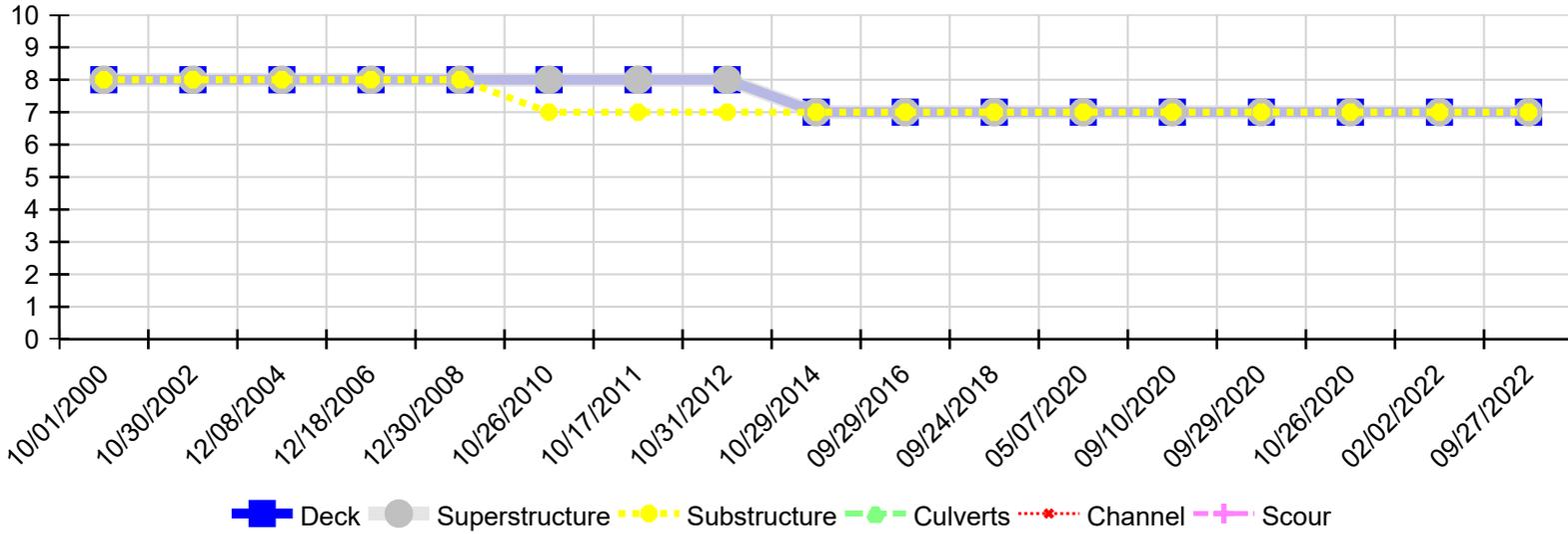
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Sh-191/Sec-1/L1.24 over I-40/Sec-52/L-278.20

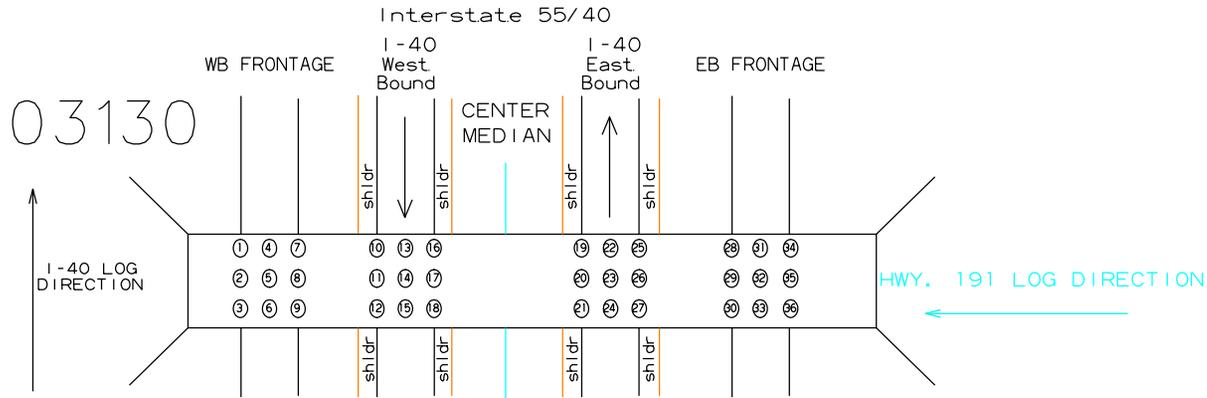
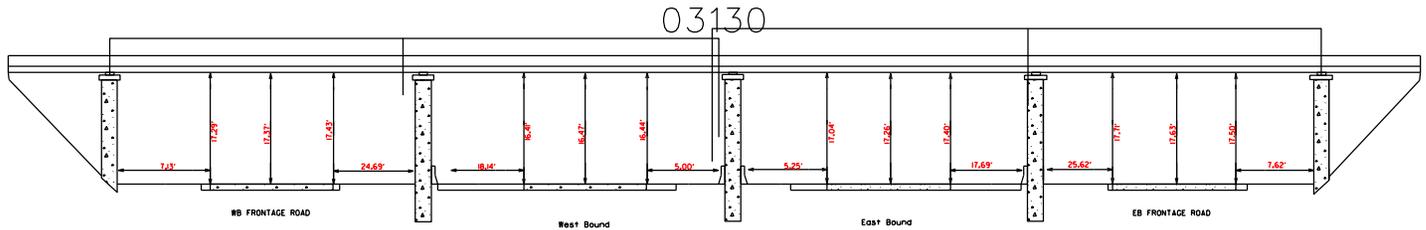
Location: Jct Sh 191 & I-40

Team Lead: Myron Futrell Inspection Date: 09/27/2022

Condition History



Inspection Date	Deck	Superstructure	Substructure	Culverts	Channel	Scour
09/27/2022	7	7	7	N	N	N
02/02/2022	7	7	7	N	N	N
10/26/2020	7	7	7	N	N	N
09/29/2020	7	7	7	N	N	N
09/10/2020	7	7	7	N	N	N
05/07/2020	7	7	7	N	N	N
09/24/2018	7	7	7	N	N	N
09/29/2016	7	7	7	N	N	N
10/29/2014	7	7	7	N	N	N
10/31/2012	8	8	7	N	N	N
10/17/2011	8	8	7	N	N	N
10/26/2010	8	8	7	N	N	N
12/30/2008	8	8	8	N	N	N
12/18/2006	8	8	8	N	N	N
12/08/2004	8	8	8	N	N	N
10/30/2002	8	8	8	N	N	N
10/01/2000	8	8	8	N	N	N



ROADWAY VERTICAL CLEARANCES

1	4	7	10	13	16	19	22	25	28	31	34
17.98'	17.96'	17.98'	16.87'	16.82'	16.57'	17.20'	17.43'	17.40'	17.71'	17.63'	17.50'
2	5	8	11	14	17	20	23	26	29	32	35
17.79'	17.87'	17.85'	17.33'	17.13'	16.45'	17.64'	17.26'	18.08'	18.43'	17.81'	17.73'
3	6	9	12	15	18	21	24	27	30	33	36
17.29'	17.37'	17.43'	16.41'	16.47'	16.44'	17.04'	17.43'	17.46'	17.87'	17.89'	17.80'
WEST BOUND FRONTAGE ROAD			West Bound			East Bound			EAST BOUND FRONTAGE ROAD		

ROADWAY HORIZONTAL CLEARANCES

1	7	10	16	19	25	27	34
7.34'	25.06'	18.37'	5.08'	5.41'	17.69'	25.93'	8.25'
2	8	11	17	20	26	28	35
7.13'	24.95'	18.28'	5.00'	5.29'	17.99'	25.85'	7.89'
3	9	12	18	21	27	29	36
7.16'	24.69'	18.14'	5.00'	5.25'	18.00'	25.62'	7.62'
Total Horizontal Clearance		Total Horizontal Clearance		Total Horizontal Clearance		Total Horizontal Clearance	
55.82'		47.14'		46.94'		57.24'	
WEST BOUND FRONTAGE ROAD		West Bound		East Bound		EAST BOUND FRONTAGE ROAD	

Red Readings are Minimum Clearance Per Roadway (Item #54, 55, 56)

ROUTE UNDER STRUCTURE

DIST.	CO.	RT.	SEC.	LOG MILE	BRIDGE NUMBER	INVENTORY DIRECTION
1	18	55/40	1	278.23	03130	W To E

ROUTE ON STRUCTURE

*Not to Scale		
Bridge No.	Dist.	Co.
03130	1	CRITTENDEN - 18
Logmile	Rt.	Sect/Zone
1.23	191	01/0
Date Drawn	Date Updated	
09/29/2016	09/28/2022	