



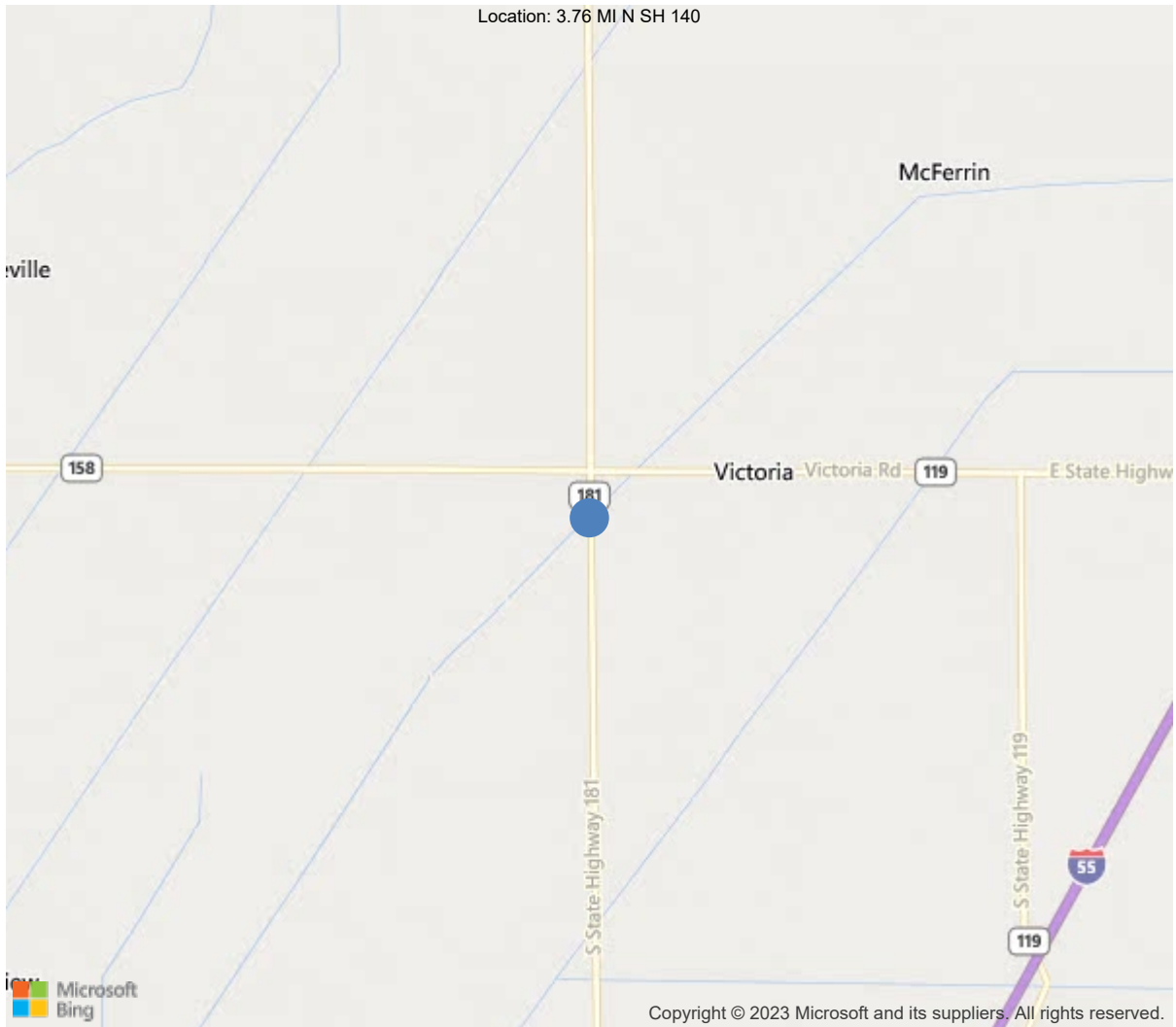
Latitude:35.75307, Longitude:-90.07358

Route:181 Section:02 Log:3.76

Arnold Road ID:47x181x2xA, Arnold Log mile:3.767

District 10, 93 - Mississippi County

Owner: 1 - State Highway Agency



35.75307, -90.07358



Asset #03825(Routine)

SH 181-02- LM 3.76 over DRAINAGE DITCH NUMBER 31

Location: 3.76 MI N SH 140

Team Lead: Richard Jones, Inspection Date: 05/24/2022

IDENTIFICATION	
(1) State Names	5 - Arkansas
(8) Structure Number	03825
(5) Inventory Route	1
(2) Highway Agency District	10 - District 10
(3) County Code	93 - Mississippi County
(4) Place Code	0
(6) Features Intersected	DRAINAGE DITCH NUMBER 31
(7) Facility Carried	SH 181-02- LM 3.76
(9) Location	3.76 MI N SH 140
(11) Mile Point	3.76 mi
(12) Base Highway Network	No
(13) LRS Inventory Rte & Subrte	0000000000
(16) Latitude	35.75307
(17) Longitude	-90.07358
(98) Border Bridge State Code	
(99) Border Bridge Structure No.	
STRUCTURE TYPE AND MATERIAL	
(43) Main Structure Type	11
Material	1 - Concrete
Type	1 - Slab
(44) Approach Structure Type	00
Material	0 - Other
Type	0 - Other
(45) No. of Spans in Main Unit	8
(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	1964
(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	680
(30) Year of ADT	2018
(109) Truck ADT	1 %
(19) Bypass, Detour Length	5 mi
GEOMETRIC DATA	
(48) Length of Maximum Span	28 ft
(49) Structure Length	224 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	45 Deg
(35) Structure Flared	0 - No flare
(10) Inventory Route Min Vert Clear	99.99 ft
(47) Inventory Route Total Horiz Clear	24 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 w
(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	7 - Rural Major Collector
(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	6
(61) Channel & Channel Protection	6
(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	42
(65) Inventory Rating Method	1 - Load Factor(LF)
(66) Inventory Rating	
Type	
Rating	25
(70) Bridge Posting	5 - Equal to or above legal loads
(41) Structure Open/Posted/Closed	A - Open, no restriction
APPRAISAL	
(67) Structural Evaluation	6
(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
(36B) Transitions	0 - Inspected feature does not meet
(36C) Approach Guardrail	0 - Inspected feature does not meet
(36D) Approach Guardrail Ends	0 - Inspected feature does not meet
(113) Scour Critical Bridges	5 - Bridge foundations determined t
PROPOSED IMPROVEMENTS	
(75) Type of Work	
(76) Length of Structure Improvement	0 ft
(94) Bridge Improvement Cost	\$ 0
(95) Roadway Improvement Cost	\$ 0
(96) Total Project Cost	\$ 0
(97) Year of Improvement Cost Estimate	
(114) Future ADT	915
(115) Year of Future ADT	2028

INSPECTIONS *			
(90) Inspection Date	05/24/2022		
(91) Frequency	24		
(92) Critical Feature Inspection	Done	Freq. (Mon)	Date
A: Fracture Critical Detail	No		
B: Underwater Inspection	No		
C: Other Special Inspection			
<p>* 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.</p>			





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

Approach roadways have some settlement.

Bridge rails have surface rust throughout. Several posts have minor cracks or spalls with some rebar exposed.

Asphalt wearing surface has a few longitudinal cracks. Asphalt is cracked and delaminated over joints.

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**59 - Superstructure** (7 - GOOD CONDITION - some minor problems.)

Slab soffit has longitudinal cracks, some have efflorescence. Soffit has a few delaminated areas or spalls with exposed rebar along cracks.

Soffit has several cracked and delaminated areas or spalls with rebar exposed around drain openings.

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**60 - Substructure** (6 - SATISFACTORY CONDITION - structural elements show some minor deterioration.)

Concrete caps have several minor cracks, spalls, or delaminated areas near key ways.

Caps have a few minor cracks or spalls with exposed rebar on bottom.

Ends of caps have areas of concrete disintegration with some rebar exposed near Lt and Rt ends, especially at bents 7 and 8.

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**A-46 - Asset Files**

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Asset #03825(Routine)

SH 181-02- LM 3.76 over DRAINAGE DITCH NUMBER 31

Location: 3.76 MI N SH 140

Team Lead: Richard Jones, Inspection Date: 05/24/2022

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
38	RC Slab	SF	5824	5527	86	211	0
1080	Delamination/Spall/Patched Area	SF	5	0	5	0	0
1090	Exposed Rebar	SF	60	0	0	60	0
1120	Efflorescence/Rust Staining	SF	36	0	11	25	0
1130	Cracking (RC and Other)	SF	196	0	70	126	0
510	Wearing Surfaces	SF	5376	3727	0	1649	0
3210	Delam/Spall/Patched Area/Pothole	SF	27	0	0	27	0
3220	Crack (Wearing Surface)	SF	1622	0	0	1622	0
215	Reinforced Concrete Abutment	LF	95	95	0	0	0
227	Reinforced Concrete Pile	EA	35	19	16	0	0
1190	Abrasion/Wear (PSC/RC)	EA	15	0	15	0	0
6000	Scour	EA	1	0	1	0	0
234	Reinforced Concrete Pier Cap	LF	276	192	9	75	0
1080	Delamination/Spall/Patched Area	LF	18	0	7	11	0
1090	Exposed Rebar	LF	23	0	0	23	0
1120	Efflorescence/Rust Staining	LF	23	0	2	21	0
1130	Cracking (RC and Other)	LF	20	0	0	20	0
301	Pourable Joint Seal	LF	204	0	0	204	0
2350	Debris Impaction	LF	204	0	0	204	0
330	Metal Bridge Railing	LF	448	0	448	0	0
1000	Corrosion	LF	448	0	448	0	0
515	Steel Protective Coating	SF	1434	0	0	0	1434
3440	Effectiveness (Steel Protective Coatings)	LF	1434	0	0	0	1434

**Deck**

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				CS1	CS2	CS3	CS4
38	RC Slab	SF	5824	5527	86	211	0
1080	Delamination/Spall/Patched Area	SF	5	0	5	0	0
1090	Exposed Rebar	SF	60	0	0	60	0
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1130	Cracking (RC and Other)	SF	196	0	70	126	0
510	Wearing Surfaces	SF	5376	3727	0	1649	0
3210	Delam/Spall/Patched Area/Pothole	SF	27	0	0	27	0
3220	Crack (Wearing Surface)	SF	1622	0	0	1622	0

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

Comment: Approach roadways have some settlement.

Bridge rails have surface rust throughout. Several posts have minor cracks or spalls with some rebar exposed.

Asphalt wearing surface has a few longitudinal cracks. Asphalt is cracked and delaminated over joints.



## Superstructure

ELEMENTS	DESCRIPTION	UNITS	TOTAL				
				CS1	CS2	CS3	CS4

### 59 - Superstructure (7 - GOOD CONDITION - some minor problems.)

Comment: Slab soffit has longitudinal cracks, some have efflorescence. Soffit has a few delaminated areas or spalls with exposed rebar along cracks.

Soffit has several cracked and delaminated areas or spalls with rebar exposed around drain openings.



## Substructure

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
215	Reinforced Concrete Abutment	LF	95	95	0	0	0
227	Reinforced Concrete Pile	EA	35	19	16	0	0
1190	Abrasion/Wear (PSC/RC)	EA	15	0	15	0	0
6000	Scour	EA	1	0	1	0	0
234	Reinforced Concrete Pier Cap	LF	276	192	9	75	0
1080	Delamination/Spall/Patched Area	LF	18	0	7	11	0
1090	Exposed Rebar	LF	23	0	0	23	0
1120	Efflorescence/Rust Staining	LF	23	0	2	21	0
1130	Cracking (RC and Other)	LF	20	0	0	20	0

### 60 - Substructure (6 - SATISFACTORY CONDITION - structural elements show some minor deterioration.)

Comment: Concrete caps have several minor cracks, spalls, or delaminated areas near key ways.

Caps have a few minor cracks or spalls with exposed rebar on bottom.

Ends of caps have areas of concrete disintegration with some rebar exposed near Lt and Rt ends, especially at bents 7 and 8.





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### Culvert

ELEMENTS	DESCRIPTION	UNITS	TOTAL				
				CS1	CS2	CS3	CS4



Wearing surface





### Maintenance Needs

**Date Reported:** 07/23/2012  
**Priority:** C - Important  
**Type of Work:** (Inactive) (Inactive) 1 - Clean  
**Status:** Repair Documented  
**Component:** Channel

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### Deficiency Description

Channel

Moderate drift lodged against Bents 3, 4, 5, & 7 to 8 piles and under Span 7 is diverting majority of water flow under Spans 5&6, see 2016 photo of elevation photo for typical.

Scour has reduced Pile penetration at Bent 7, especially at Pile 1, Bent 7 = 7.2ft. since 1990 soundings, see sounding sheet 2016.

Moderate drift across span 3 & 7, see 2018 photo of span 3.

### Remarks

Majority of drift has been removed. Observed during routine inspection. RRJ

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span 3

**Date Reported:** 07/23/2012  
**Priority:** (Inactive) (Inactive) G - General/ Preventive maintenance  
**Type of Work:** (Inactive) (Inactive) 9 - None  
**Status:** Monitor  
**Component:** Element

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**Deficiency Description**

Asphalt wearing surface has a few longitudinal cracks. Asphalt is cracked and delaminated over joints.

**Remarks**

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**Date Reported:** 07/23/2012  
**Priority:** C - Important  
**Type of Work:** Repair (General)  
**Status:** Monitor  
**Component:** Substructure

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### Deficiency Description

Concrete caps have several minor cracks, spalls, or delaminated areas near key ways.

Caps have a few minor cracks or spalls with exposed rebar on bottom.

Ends of caps have areas of concrete disintegration with some rebar exposed near Lt and Rt ends, especially at bents 7 and 8.

### Remarks

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2022 - Bent 7 Lt



2022 - Bent 8 Rt





Bent 7 Lt







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SH 181-02- LM 3.76 over DRAINAGE DITCH NUMBER 31

Location: 3.76 MI N SH 140

Team Lead: Richard Jones, Inspection Date: 05/24/2022

Date Reported: 07/23/2012

Priority: (Inactive) (Inactive) G - General/ Preventive maintenance

Type of Work: (Inactive) (Inactive) 9 - None

Status: Monitor

Component: Element

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#### Deficiency Description

Bridge rails have surface rust throughout. Several posts have minor cracks or spalls with some rebar exposed.

#### Remarks

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**Asset #03825(Routine)**

**SH 181-02- LM 3.76 over DRAINAGE DITCH NUMBER 31**

**Location: 3.76 MI N SH 140**

**Team Lead:** Richard Jones, **Inspection Date:** 05/24/2022

## **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	



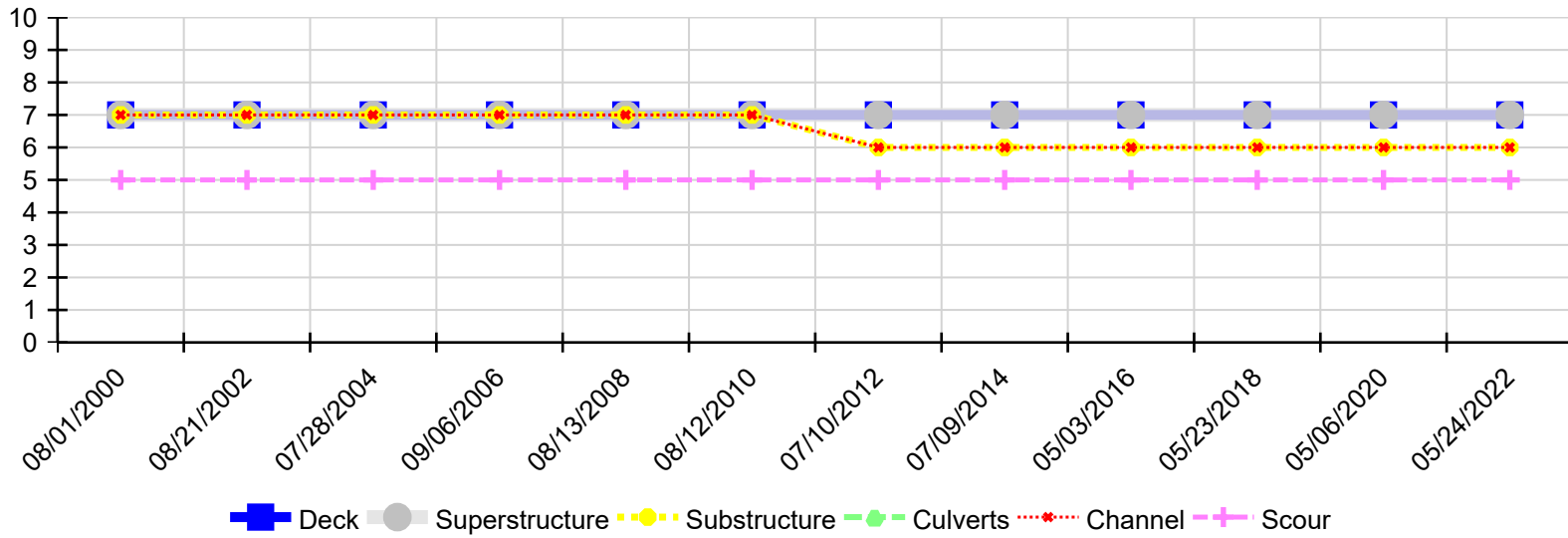
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Team Lead: Richard Jones, Inspection Date: 05/24/2022

### Condition History



Inspection Date	Deck	Superstructure	Substructure	Culverts	Channel	Scour
05/24/2022	7	7	6	N	6	5
05/06/2020	7	7	6	N	6	5
05/23/2018	7	7	6	N	6	5
05/03/2016	7	7	6	N	6	5
07/09/2014	7	7	6	N	6	5
07/10/2012	7	7	6	N	6	5
08/12/2010	7	7	7	N	7	5
08/13/2008	7	7	7	N	7	5
09/06/2006	7	7	7	N	7	5
07/28/2004	7	7	7	N	7	5
08/21/2002	7	7	7	N	7	5
08/01/2000	7	7	7	N	7	5