



Latitude:34.84241, Longitude:-90.64010

Route:79 Section:16 Log:9.3

Arnold Road ID:39x79x16xA, Arnold Log mile:9.3

District 01, 77 - Lee County

Owner: 1 - State Highway Agency

Inspection Direction: 4 - W to E

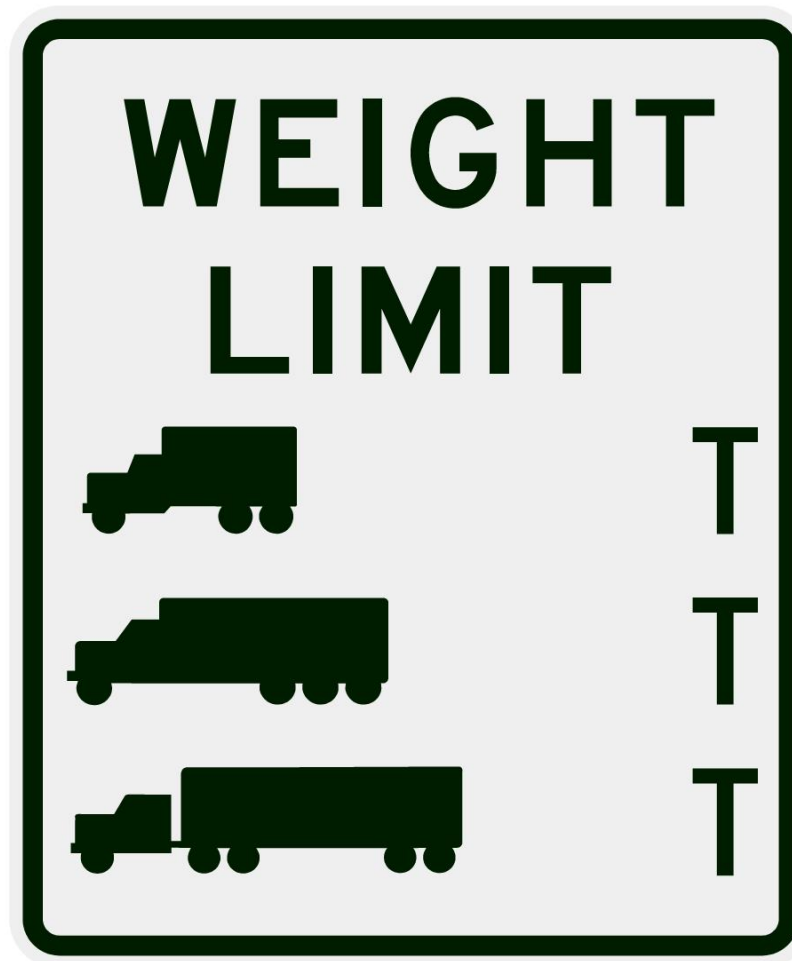
### Bridge Posting Information

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

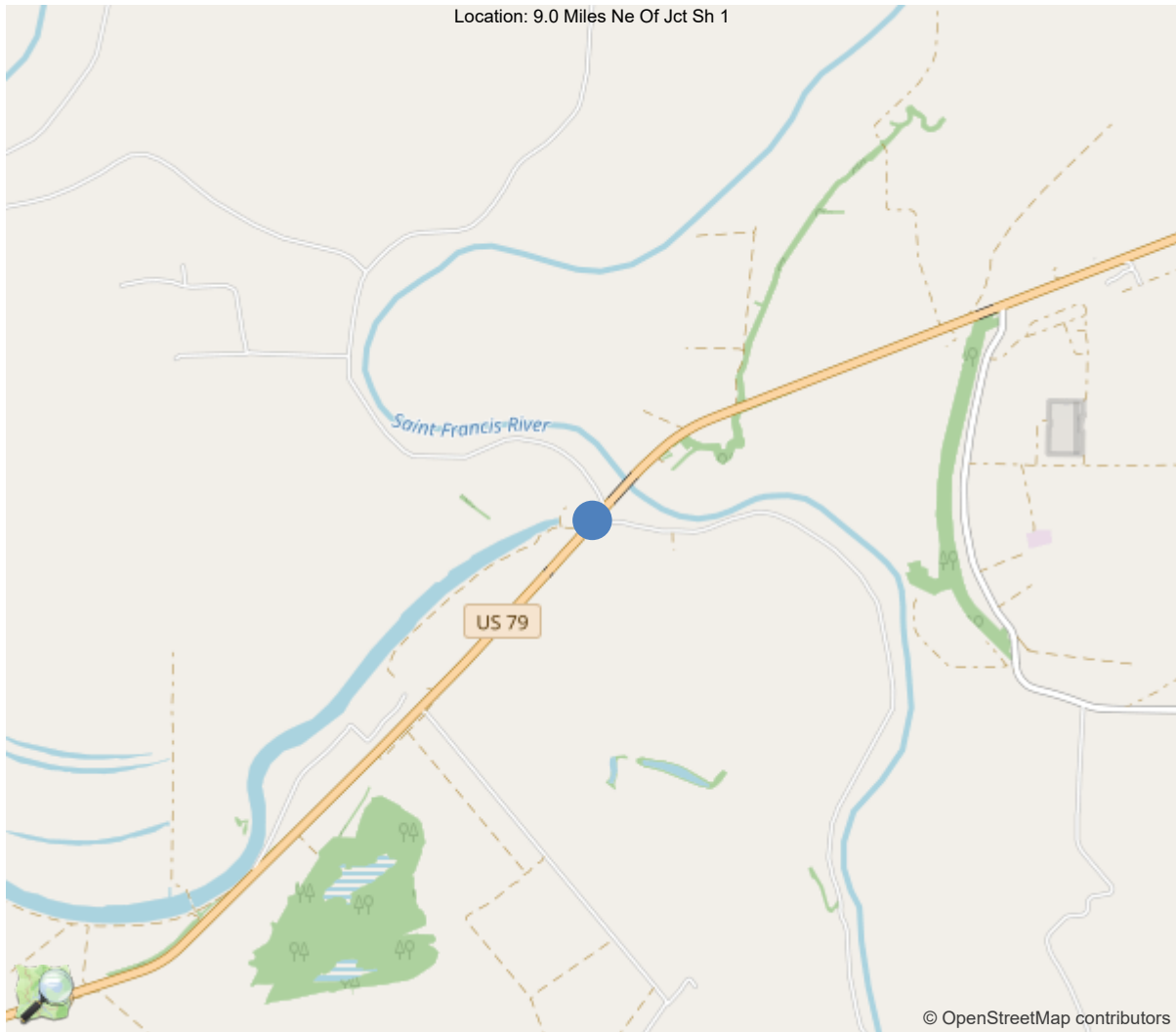
70 - Bridge Posting: 5 - Equal to or above legal loads

Legal Load	Calculated Capacity	Beginning of Bridge Sign Current Value	End of Bridge Sign Current Value
Code 4 (22 Tons)	38		
Code 9 (31 Tons)	41		
Code 5 (40 Tons)	45		

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



34.84241, -90.64010





Asset #05951(Routine)

Us-79/Sec-16/L9.30 over Cow Bayou

Location: 9.0 Miles Ne Of Jct Sh 1

Team Lead: Drew Melton Inspection Date: 09/09/2024

IDENTIFICATION	
(1) State Names	5 - Arkansas
(8) Structure Number	05951
(5) Inventory Route	1
(2) Highway Agency District	01 - District 01
(3) County Code	77 - Lee County
(4) Place Code	0
(6) Features Intersected	Cow Bayou
(7) Facility Carried	Us-79/Sec-16/L9.30
(9) Location	9.0 Miles Ne Of Jct Sh 1
(11) Mile Point	9.3 mi
(12) Base Highway Network	Yes
(13) LRS Inventory Rte & Subrte	0000079160
(16) Latitude	34.84241
(17) Longitude	-90.6401
(98) Border Bridge State Code	
(99) Border Bridge Structure No.	
STRUCTURE TYPE AND MATERIAL	
(43) Main Structure Type	42
Material	4 - Steel continuous
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	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	5 - Epoxy Overlay
Type of Membrane	0 - None
Type of Deck Protection	0 - None
AGE AND SERVICE	
(27) Year Built	1983
(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	1900
(30) Year of ADT	2019
(109) Truck ADT	1 %
(19) Bypass, Detour Length	33 mi
GEOMETRIC DATA	
(48) Length of Maximum Span	55 ft
(49) Structure Length	420 ft
(50) Curb or Sidewalk Width	
Left	0 ft
Right	0 ft
(51) Bridge Roadway Width Curb to Curb	40 ft
(52) Deck Width Out to Out	42.8 ft
(32) Approach Roadway Width (W/Shoulders)	41.3 ft
(33) Bridge Median	0 - No median
(34) Skew	0 Deg
(35) Structure Flared	0 - No flare
(10) Inventory Route Min Vert Clear	99.99 ft
(47) Inventory Route Total Horiz Clear	40 ft
(53) Min Vert Clear Over Bridge Rdwy	99.99 ft
(54) Min Vert Underclear	0 ft
Ref:	
(55) Min Lat Underclear RT	0 ft
Ref:	
(56) Min Lat Underclear LT	0 ft
NAVIGATION DATA	
(38) Navigation Control	0 - No navigation control on w
(111) Pier Protection	1 - Navigation protection not
(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	1
(26) Functional Class	2 - Rural Principal Arterial -
(100) Defense Highway	0 - The inventory route is not
(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	1 - The inventory route is par
(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	5 - MS 18 / HS 20
(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	
(68) Deck Geometry	7
(69) Clearances, Vertical/Horizontal	N
(71) Waterway Adequacy	8
(72) Approach Roadway Alignment	8
(36A) Bridge Railings	1 - Inspected feature meets current
(36B) Transitions	1 - Inspected feature meets current
(36C) Approach Guardrail	0 - Inspected feature does not meet
(36D) Approach Guardrail Ends	1 - Inspected feature meets current
(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	1936
(115) Year of Future ADT	2028

INSPECTIONS *			
(90) Inspection Date	09/09/2024		
(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.			





### General Observation

Drawing numbers: 25098, 25100-111, 25099, 15101-102, 25127-36.

Routine inspection performed by walking across deck and accessing under structure with an A-40 snooper in right lane. Lane closure was used and put in by a contractor that was doing repairs at time of inspection.

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

Deck is in good condition with an epoxy overlay. Deck undersurface overhangs have cracks some with light efflorescence.

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

Superstructure is in good condition with a few girder ends having some active corrosion with minor section loss.

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

Substructure is in satisfactory condition with local erosion and scour making footings exposed.

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**61 - Channel/Channel Protection** (6 - Bank is beginning to slump. River control devices and embankment protection have widespread minor damage. There is minor stream bed movement evident. Debris is restricting the channel slightly.) Channel has good alignment with structure. Channel banks have areas of erosion with channel having minor amounts of debris.

Slopes, Span 1, 2 & 8: Eroded with depths up to 4' extending down slopes.

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#### A-58 - Cap Cleaning/Flushing Needed (Y)

Bent caps have some debris.

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#### A-60 - Full Girder Painting Needed (Y)

All Spans, All Girders, Full Length: Surface rust.

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#### A-63 - Missing/Incorrect Log Mile Signage (Y)

Log mile signs are incorrect should be US-79, Section-16, Log Mile 9.3.

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#### B.C.05 Bridge Railing Condition Rating (7 - GOOD - Some minor defects.)

Bridge railing is in good condition with vertical cracks and few pieces of exposed reinforcing steel. Reinforcing steel has no section loss.

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#### B.C.06 Bridge Railing Transitions Condition Rating (8 - VERY GOOD - Some inherent defects.)

Bridge railing transitions are in very good condition with no note worthy defects.

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#### B.C.07 Bridge Bearings Condition Rating (8 - VERY GOOD - Some inherent defects.)

Bridge bearings are in very good condition with no note worthy defects.

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**Asset #05951** (Routine)

**Us-79/Sec-16/L9.30 over Cow Bayou**

**Location: 9.0 Miles Ne Of Jct Sh 1**

**Team Lead:** Drew Melton **Inspection Date:** 09/09/2024

**B.C.08 Bridge Joints Condition Rating (7 - GOOD - Some minor defects.)**

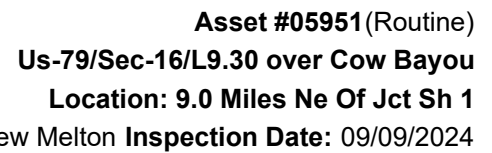
Bridge joints are in good condition with a few minor defects.

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**A-B.C.11 - B.C.11 Scour Condition Rating (New NBIS) (6 - Widespread minor or isolated moderate scour.)**

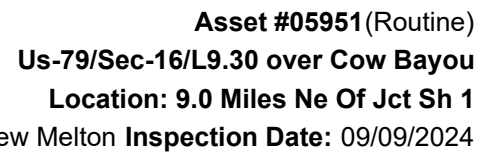
Scour exists under the structure on slopes and in channel. Some footings have been exposed.

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ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
12	Reinforced Concrete Deck	SF	17990	17567	422	1	0
1090	Exposed Rebar	SF	1	0	0	1	0
1120	Efflorescence/Rust Staining	SF	422	0	422	0	0
(12) All Spans, Deck Surface, Full Length: Transverse cracks spaced 3' apart. This is under the epoxy overlaid deck.							
All Spans, Deck Undersurface Overhangs: Hairline transverse cracks some with light efflorescence spaced 6' apart. 422SF CS2 (Efflorescence/Rust Staining)							
Span 5, Deck Undersurface Overhang, Right Side, 20' Ahead Of Bent 5: 6" spall exposed reinforcing steel. Reinforcing steel has minor section loss. 1SF CS3 (Exposed Rebar)							
107	Steel Open Girder/Beam	LF	2520	0	2500	20	0
1000	Corrosion	LF	2520	0	2500	20	0
515	Steel Protective Coating	SF	17086	1	0	16179	906
3410	Chalking (Steel Protective Coatings)	LF	16179	0	0	16179	0
3440	Effectiveness (Steel Protective Coatings)	LF	906	0	0	0	906
(107) All Spans, All Girders, Paint, Full Length: Surface rust with 5% bare steel rest of paint is dull, chalky. and has lost its color pigment. 16179SF CS3 (Chalking), 906SF CS4 (Effectiveness)							
All Spans, All Girders, Full Length: Surface rust. 2500LF CS2 (Corrosion)							
Span 1, Girders 1 & 3, At Bent 1: First 4' of bottom flange and lower web has active corrosion with laminations with minor section loss. 8LF CS3 (Corrosion)							
Span 4, Girders 1, 3 & 5, Bent 5: First 2' has active corrosion on bottom flange at bearing connection with minor section loss. 8LF CS3 (Corrosion)							
Span 5, Girder 5, 20' Ahead Of Bent 5, Right Side: Lower flange has 1" delamination.							
Span 8, Girder 4, Bent 9: Last 4' active corrosion with scaly rust on bottom flange and lower web. 4LF CS3 (Corrosion)							
205	Reinforced Concrete Column	EA	30	30	0	0	0
(205) No note worthy defects.							
215	Reinforced Concrete Abutment	LF	122	114	8	0	0
1120	Efflorescence/Rust Staining	LF	6	0	6	0	0
6000	Scour	LF	2	0	2	0	0
(215) Abutment Backwalls: Hairline vertical cracks spaced 6' apart some with light efflorescence. 6LF CS2 (Efflorescence/Rust Staining)							
Abutment 1, Cap, Left Side: Undermined for 2' (Length) up to 6" (Depth). 2LF CS2 (Scour)							
220	Reinforced Concrete Pile Cap/Footing	LF	240	0	225	15	0
6000	Scour	LF	240	0	225	15	0
(220) Bent 3, Footing: Exposed full length. 40LF CS2 (Scour)							
Bent 4, Footing: Exposed full length with undermining at left end up to 2'. 38LF CS2, 2LF CS3 (Scour)							
Bent 5, Footing: Exposed and undermined 2' on right end to 4' on left end. 34LF CS2, 6LF CS3 (Scour)							
Bent 6, Footing: Exposed and undermined 3' on left end to 4' on right end. 33LF CS2, 7LF CS3 (Scour)							
Bent 7, Footing: Exposed on right end. 40LF CS2 (Scour)							
Bent 8, Footing is exposed full length. 40LF CS2 (Scour)							





ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
227	Reinforced Concrete Pile	EA	31	11	20	0	0
1190	Abrasion/Wear (PSC/RC)	EA	20	0	20	0	0
(227) Bent 4 & 5, Piles: Light abrasion with no loose aggregate. 20Each CS2 (Abrasion/Wear) Bent 8, Pile 9: Exposed.							
234	Reinforced Concrete Pier Cap	LF	280	280	0	0	0
(234) No note worthy defects.							
301	Pourable Joint Seal	LF	86	86	0	0	0
(301) No note worthy defects.							
310	Elastomeric Bearing	EA	60	60	0	0	0
(310) No note worthy defects.							
331	Reinforced Concrete Bridge Railing	LF	844	694	140	10	0
1090	Exposed Rebar	LF	10	0	0	10	0
1130	Cracking (RC and Other)	LF	140	0	140	0	0
(331) Bridge Rails, Both Sides, Full Length: Vertical cracks spaced 6' apart. 140LF CS2 (Cracking) Bridge Rails, Both Sides: 10 pieces total of reinforcing steel exposed due to poor concrete coverage. Reinforcing steel has minor section loss. 10LF CS3 (Exposed Rebar)							



Bridge identification plate



Side view-elevation



Typical deck undersurface



Typical deck undersurface overhang





Typical deck surface



Abutment 2 slope



Span 7 & 8 slope



Channel under bridge





Span 1 & 2 slope erosion



Channel left side



Channel right side



Top view-inventory





Bent 5 cap has fertilizer, dirt and debris on it.



Typical girder condition



Log mile sign abutment 2.



Log mile sign abutment 1.





All Spans, Deck Undersurface Overhangs: Hairline transverse cracks some with light efflorescence spaced 6' apart.



Span 5, Deck Undersurface Overhang, Right Side, 20' Ahead Of Bent 5: 6" spall exposed reinforcing steel. Reinforcing steel has minor section loss.



Span 5, Girder 5, 20' Ahead Of Bent 5, Right Side: Lower flange has 1" delamination.

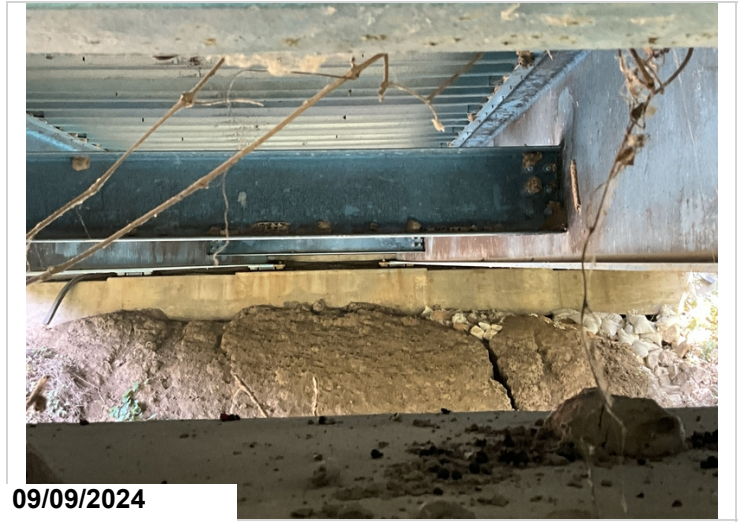


Span 4, Girders 1, 3 & 5, Bent 5: Active corrosion on bottom flange at bearing connection with minor section loss.





Typical girder condition



Abutment 2



Abutment 1



Bent 8 pile cap footing





Bent 7 pile cap footing



Bent 6 pile cap footing



Bent 5 pile footing



Bent 4 pile footing





Bent 3 pile footing



Bent 4 & 5, Piles: Light abrasion with no loose aggregate



Abutment 1 joint



Bridge Rails, Both Sides, Full Length: Vertical cracks spaced 6' apart.



### Maintenance Needs

Date Reported: 08/04/2014

Priority: C - Important

Type of Work: Repair (General)

Status: Monitor

Component: Channel

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### Deficiency Description

Slopes, Span 1, 2 & 8: Eroded with depths up to 4' extending down slopes.

### Remarks

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Abutment 2 slope



Span 7 & 8 slope



Span 1 & 2 slope erosion



Abutment 1 slope





Abutment 1 cap left side undermined for 2' up to 6"

### Maintenance Needs

Date Reported: 08/06/2012

Priority: C - Important

Type of Work: Miscellaneous

Status: Monitor

Component: Channel

### Deficiency Description

Vines and vegetation are growing under and beside bridge with vines growing up columns and onto caps. Vegetation is impeding the use of snooper in several locations.

### Remarks



Typical vegetation growing on bents



Span 1 and vegetation will not let snooper access



Typical vegetation



## Maintenance Needs

**Date Reported:** 08/26/2020

**Priority:** D- Routine

**Type of Work:** Repair (General)

**Status:** Repair Documented

**Component:** Deck

---

## Deficiency Description

Span #2 left lane has one foot spall with exposed rebar with 10% section loss.

Span #2 deck right lane has one foot long by two inch wide shallow spall with no exposed rebar

Span #4 deck right lane has one foot spall with exposed rebar with 10% section loss

Span #8 left lane has one foot shallow spall with no exposed rebar.

08/30/2022-added deck spalls in spans 2, 4, 8.

## Remarks

Deck has been repaired and epoxy overlaid since last inspection.

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Typical deck repair



Span 8 left lane has 1' shallow spall with no exposed rebar





Span 4 deck right lane has 1' spall with exposed rebar with 10% section loss



Span 2 deck right lane has 1' long by 2" wide shallow spall with no exposed rebar



Span 2 deck left lane has 1' spall with exposed rebar



Span 2 left lane has a 1' spall with exposed rebar.



### Maintenance Needs

Date Reported: 10/06/2016

Priority: D- Routine

Type of Work: Deck Repair

Status: Repair Documented

Component: Deck

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### Deficiency Description

Deck has open transverse cracks spaced three feet apart.

### Remarks

Deck as had an epoxy overlay since last inspection.

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Typical deck surface repair



Typical transverse deck crack



Typical deck crack



### Maintenance Needs

Date Reported: 08/16/2018

Priority: D- Routine

Type of Work: Joint Repair

Status: Repair Documented

Component: Element

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### Deficiency Description

Abutment #1 joint seal has lost adhesion for five feet and has one inch hole.

Bent #5 seal has lost adhesion for twenty two feet.

Abutment #2 seal has two one inch holes in the right lane and shoulder.

8/30/2022-Added abutment #1 joint seal lost adhesion and hole.

### Remarks

Joints have been rehabbed since last inspection.

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Bent 5 joint



Typical hole in joint seal



Typical joint seal lost adhesion



Abutment 2 seal has two 1" holes in the right lane and shoulder.



### Maintenance Needs

Date Reported: 08/04/2014

Priority: D- Routine

Type of Work: Channel Work/Drift Removal

Status: Monitor

Component: Channel

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### Deficiency Description

Bent 3, Footing: Exposed full length.

Bent 4, Footing: Exposed full length with undermining at left end up to 2'.

Bent 5, Footing: Exposed and undermined 2' on right end to 4' on left end.

Bent 6, Footing: Exposed and undermined 3' on left end to 4' on right end.

Bent 7, Footing: Exposed on right end.

Bent 8, Footing is exposed full length.

### Remarks

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10/16/2024

Bent 3 pile footing



10/16/2024

Bent 4 pile footing





Bent 6 pile cap footing



Bent 7 pile cap footing



Bent 8 pile cap footing



**Maintenance Needs**

**Date Reported:** 08/04/2014

**Priority:** D- Routine

**Type of Work:** Repair (General)

**Status:** Monitor

**Component:** Approach

---

**Deficiency Description**

Abutment 2, Approach Rail, Right: minor collision damage.

**Remarks**

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Abutment 2, Approach Rail, Right: minor collision damage.



Asset #05951(Routine)

Us-79/Sec-16/L9.30 over Cow Bayou

Location: 9.0 Miles Ne Of Jct Sh 1

Team Lead: Drew Melton Inspection Date: 09/09/2024

## Routine Maintenance

Check Box Maintenance Items

Type of Maintenance	Is recommended?
A-54 - Sealable Deck Cracks	No
A-55 - Deck Washing Needed	No
A-56 - Joint Cleaning/Flushing Needed	No
A-57 - Beam End and Bearing Paint Needed	No
A-58 - Cap Cleaning/Flushing Needed	Yes
A-59 - Joint Repair Needed	No
A-60 - Full Beam Painting Needed	Yes
A-61 - Polymer Overlay Advised	No
A-62 - Hydro and LMC Advised	No
A-63 - Missing/Incorrect Log Mile Signage	Yes
A-64 - Vegetation Removal Requested	No

**A-54 - Sealable Deck Cracks (No)**

**A-55 - Deck Washing Needed (No)**

**A-56 - Joint Cleaning/Flushing Needed (No)**



**A-57 - Girder End and Bearing Painting Needed (No)**

**A-58 - Cap Cleaning/Flushing Needed (Yes)**

Bent caps have some debris.



Bent 5 cap has fertilizer, dirt and debris on it.

**A-59 - Joint Repair Needed (No)**

**A-60 - Full Girder Painting Needed (Yes)**

All Spans, All Girders, Full Length: Surface rust.



Typical girder condition

**A-61 - Polymer Overlay Advised (No)**

**A-62 - Hydro and LMC Advised (No)**

**A-63 - Missing/Incorrect Log Mile Signage (Yes)**

Log mile signs are incorrect should be US-79, Section-16, Log Mile 9.3.



Log mile sign abutment 2.



Log mile sign abutment 1.

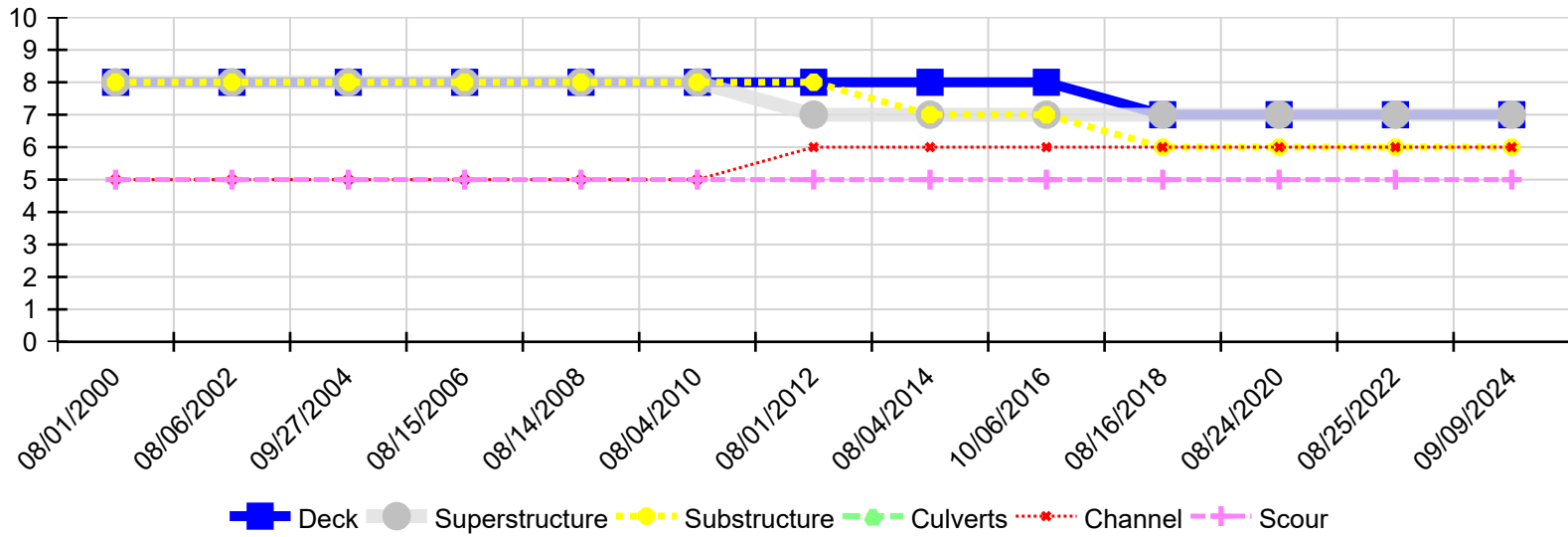
**A-64 - Vegetation Removal Requested (No)**





Asset #05951 (Routine)  
Us-79/Sec-16/L9.30 over Cow Bayou  
Location: 9.0 Miles Ne Of Jct Sh 1  
Team Lead: Drew Melton Inspection Date: 09/09/2024

Condition History



Inspection Date	Deck	Superstructure	Substructure	Culverts	Channel	Scour
09/09/2024	7	7	6	N	6	5
08/25/2022	7	7	6	N	6	5
08/24/2020	7	7	6	N	6	5
08/16/2018	7	7	6	N	6	5
10/06/2016	8	7	7	N	6	5
08/04/2014	8	7	7	N	6	5
08/01/2012	8	7	8	N	6	5
08/04/2010	8	8	8	N	5	5
08/14/2008	8	8	8	N	5	5
08/15/2006	8	8	8	N	5	5
09/27/2004	8	8	8	N	5	5
08/06/2002	8	8	8	N	5	5
08/01/2000	8	8	8	N	5	5