



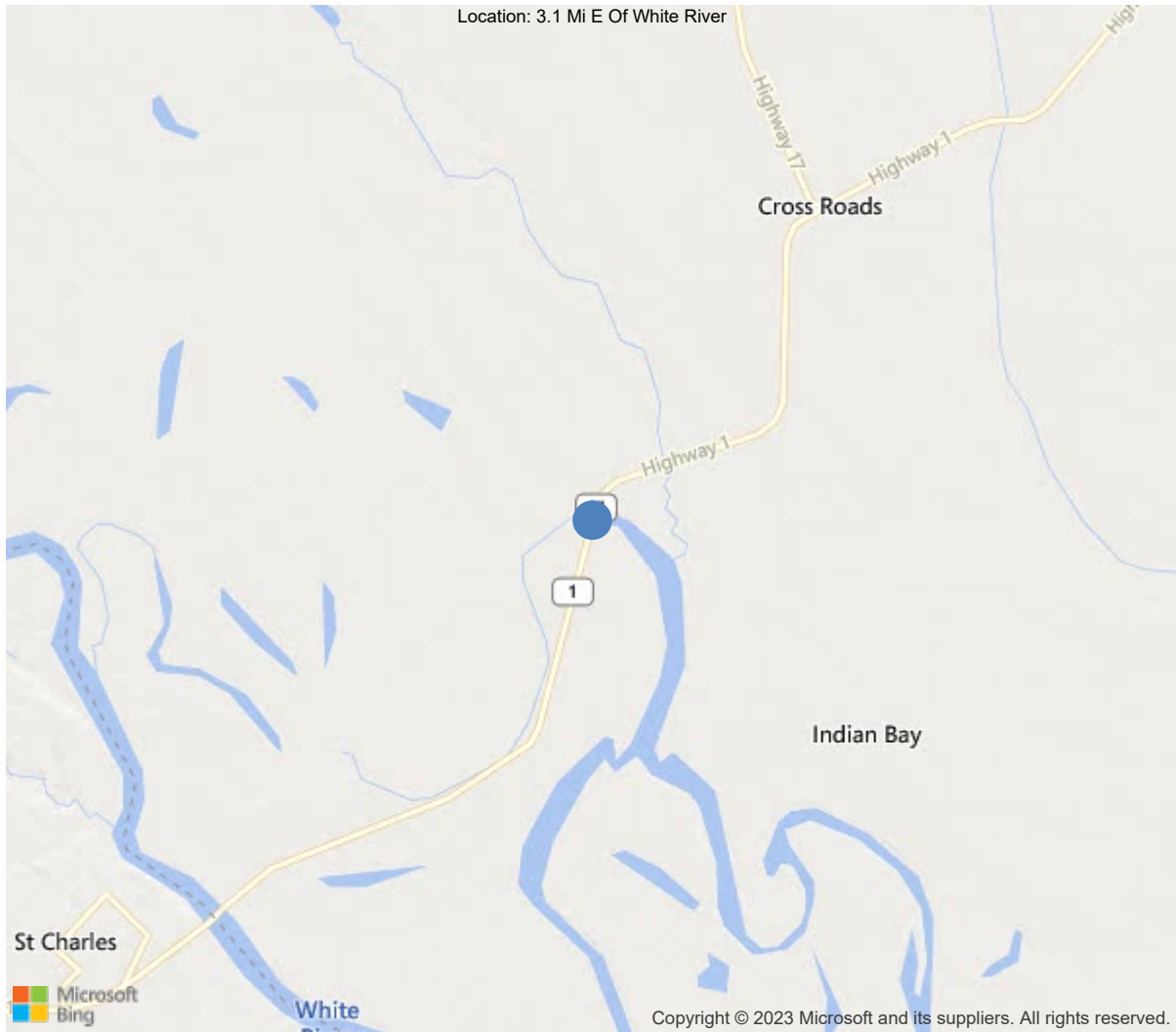
Latitude:34.40434, Longitude:-91.08946

Route:1 Section:06 Log:2.97

Arnold Road ID:48x1x6xA, Arnold Log mile:2.971

District 01, 95 - Monroe County

Owner: 1 - State Highway Agency



34.40434, -91.08946



Asset #05855(Routine)

Sh-1/Sec-6/L-2.97 over Waters Bayou

Location: 3.1 Mi E Of White River

Team Lead: Drew Melton, Inspection Date: 10/19/2022

IDENTIFICATION	
(1) State Names	5 - Arkansas
(8) Structure Number	05855
(5) Inventory Route	1
(2) Highway Agency District	01 - District 01
(3) County Code	95 - Monroe County
(4) Place Code	0
(6) Features Intersected	Waters Bayou
(7) Facility Carried	Sh-1/Sec-6/L-2.97
(9) Location	3.1 Mi E Of White River
(11) Mile Point	2.97 mi
(12) Base Highway Network	Yes
(13) LRS Inventory Rte & Subrte	0000001060
(16) Latitude	34.404339
(17) Longitude	-91.089462
(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	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	5 - Epoxy Overlay
Type of Membrane	0 - None
Type of Deck Protection	0 - None
AGE AND SERVICE	
(27) Year Built	1981
(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	940
(30) Year of ADT	2019
(109) Truck ADT	27 %
(19) Bypass, Detour Length	72 mi
GEOMETRIC DATA	
(48) Length of Maximum Span	58 ft
(49) Structure Length	332.2 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	42.9 ft
(32) Approach Roadway Width (W/Shoulders)	40 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	0 - The inventory route is not
(20) Toll	3 - On free road. The structure
(21) Maintain	1 - State Highway Agency
(22) Owner	1 - State Highway Agency
(37) Historical Significance	5 - Bridge is not eligible for
CONDITION	
(58) Deck	8
(59) Superstructure	7
(60) Substructure	6
(61) Channel & Channel Protection	5
(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	6
(68) Deck Geometry	7
(69) Clearances, Vertical/Horizontal	N
(71) Waterway Adequacy	9
(72) Approach Roadway Alignment	6
(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	7 - Countermeasures have been installed
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	1200
(115) Year of Future ADT	2038

INSPECTIONS *			
(90) Inspection Date	10/19/2022		
(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>			





### General Observation

Abutment 1 right side bank is eroding within 50' of bridge.  
Abutment 1 left side approach gutter at bridge end has void 2' x 2'.  
Abutment 2 right bank 60' from abutment 2 is eroding.  
Small trees and vegetation are growing under and beside bridge.  
Approach rail abutment #1 right side and abutment #2 left side has minor collision damage.

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### 58 - Deck (8 - VERY GOOD CONDITION - no problems noted.)

10/12/2020-raised deck from 7 to 8 due to epoxy overlay sealing open deck cracks.

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

10/12/2020-Lowered superstructure from 8 to 7 due to scaly rust on girder ends at abutment #1.

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

---

### 61 - Channel/Channel Protection (5 - Bank protection is being eroded. River control devices and/or embankment have major damage. Trees and brush restrict the channel.)

10-3-2016 lowered channel from 8 to 6 due to Abutment 2 right bank 60' from abutment 2 is eroding.  
10/19/2022 lowered channel from 6 to 5 due to erosion on each end of bridge beside structure.

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### A-46 - Asset Files

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Asset #05855(Routine)

Sh-1/Sec-6/L-2.97 over Waters Bayou

Location: 3.1 Mi E Of White River

Team Lead: Drew Melton, Inspection Date: 10/19/2022

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
12	Reinforced Concrete Deck	SF	14134	14073	0	61	0
1120	Efflorescence/Rust Staining	SF	61	0	0	61	0
510	Wearing Surfaces	SF	13200	13200	0	0	0
(12) 10/12/2020-Deck has had epoxy overlay since last inspection. Soffit over hangs have transverse cracks spaced three to four feet with light efflorescence and rust stains spaced at twenty feet apart.							
107	Steel Open Girder/Beam	LF	1980	1964	0	16	0
1000	Corrosion	LF	16	0	0	16	0
515	Steel Protective Coating	SF	13424	13314	0	0	110
3430	Oxide Film Degradation Color/Texture Adherence(Steel Protective Coatings)	LF	110	0	0	0	110
(107) Girders have areas of concrete spills from construction. Abutment #1 span #1 girders #2,3,4,5 have scaley rust on bottom flanges and lower web first 4'+-. Span #2 girder #3 has small thin delamination on bottom of bottom flange. Span #2 girder #6 bottom flange has 1' long x 1/ 2" wide thin delamination 6' from bent #3. Span #4 girder #2 center span bottom flange is slightly bent up. Span #4 girder #3 has a small thin delamination on bottom of bottom flange. Span #5 girder #3 has a small thin delamination on bottom of bottom flange. Span #5 girder #4 has 1' long thin lamination on bottom flange 4' from bent #6. Span #5 girder #5 lower flange right back field splice bolt loose.							
205	Reinforced Concrete Column	EA	16	15	1	0	0
1080	Delamination/Spall/Patched Area	EA	1	0	1	0	0
(205) Bent #4 column #2 has 2 small spalls and area of honeycombing.							
215	Reinforced Concrete Abutment	LF	96	91	5	0	0
1120	Efflorescence/Rust Staining	LF	5	0	5	0	0
(215) Abutment #2 back wall has several vertical hairline cracks with light efflorescence.							
225	Steel Pile	EA	24	19	0	5	0
1000	Corrosion	EA	5	0	0	5	0
515	Steel Protective Coating	SF	1728	0	1603	0	125
3440	Effectiveness (Steel Protective Coatings)	EA	1728	0	1603	0	125
(225) Steel case around concrete is rusted with areas of 100% section loss concrete fill material can be seen. Steel h piles that are exposed have surface rust little to no section loss at this time. Bent #3 pile #11 has areas of 100% section loss to steel encasement with a two to three foot void in concrete encasement at water line exposing steel H beam. Bent #5 pile #8 has areas of 100% section loss in steel encasement with a two foot void in concrete encasement at water line. Bent #5 pile #7,10,12 all have areas of 100% section loss in steel encasement with a three to four foot void in concrete encasement at water line exposing steel H beam.							
227	Reinforced Concrete Pile	EA	10	10	0	0	0
234	Reinforced Concrete Pier Cap	LF	195	186	9	0	0

**Team Lead:** Drew Melton, **Inspection Date:** 10/19/2022

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
1090	Exposed Rebar	LF	1	0	1	0	0
1130	Cracking (RC and Other)	LF	8	0	8	0	0
(234) Bent #2 cap back face has two six inch pieces of exposed rebar above right column no section loss, and several vertical cracks spaced at 3'+-. Bent #4 cap has vertical hairline cracks in faces spaced two to three feet apart. Bent #4 cap ahead face left end at top corner has spalled off. Bent #4 cap back face, left side bottom corner has 6" spall with no exposed rebar.							
301	Pourable Joint Seal	LF	86	84	0	2	0
2310	Leakage	LF	2	0	0	2	0
(301) 10/12/2020- compression joint seals have been replaced with pourable joint seal. Abutment #2 joint has a 6" hole near center.							
310	Elastomeric Bearing	EA	42	37	4	1	0
1000	Corrosion	EA	4	0	4	0	0
2230	Bulging, Splitting or Tearing	EA	1	0	0	1	0
(310) Girders #2,3,4,5 at abutment #1 bearing sole plates have corrosion with laminations. Bent #3 girder #1 bearing is bulging or smashing out from under girder.							
331	Reinforced Concrete Bridge Railing	LF	660	528	132	0	0
1130	Cracking (RC and Other)	LF	132	0	132	0	0
(331) Bridge rail has vertical cracks spaced 10' apart.							



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Location: 3.1 Mi E Of White River

Team Lead: Drew Melton, Inspection Date: 10/19/2022

## Deck

ELEMENTS	DESCRIPTION	UNITS	TOTAL				
				CS1	CS2	CS3	CS4
12	Reinforced Concrete Deck	SF	14134	14073	0	61	0
1120	Efflorescence/Rust Staining	SF	61	0	0	61	0
510	Wearing Surfaces	SF	13200	13200	0	0	0
(12) 10/12/2020-Deck has had epoxy overlay since last inspection. Soffit over hangs have transverse cracks spaced three to four feet with light efflorescence and rust stains spaced at twenty feet apart.							

**58 - Deck** (8 - VERY GOOD CONDITION - no problems noted.)

Comment: 10/12/2020-raised deck from 7 to 8 due to epoxy overlay sealing open deck cracks.





Asset #05855(Routine)

Sh-1/Sec-6/L-2.97 over Waters Bayou

Location: 3.1 Mi E Of White River

Team Lead: Drew Melton, Inspection Date: 10/19/2022

**Superstructure**

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
107	Steel Open Girder/Beam	LF	1980	1964	0	16	0
1000	Corrosion	LF	16	0	0	16	0
515	Steel Protective Coating	SF	13424	13314	0	0	110
3430	Oxide Film Degradation Color/Texture Adherence(Steel Protective Coatings)	LF	110	0	0	0	110
(107) Girders have areas of concrete spills from construction. Abutment #1 span #1 girders #2,3,4,5 have scaley rust on bottom flanges and lower web first 4'+-. Span #2 girder #3 has small thin delamination on bottom of bottom flange. Span #2 girder #6 bottom flange has 1' long x 1/ 2" wide thin delamination 6' from bent #3. Span #4 girder #2 center span bottom flange is slightly bent up. Span #4 girder #3 has a small thin delamination on bottom of bottom flange. Span #5 girder #3 has a small thin delamination on bottom of bottom flange. Span #5 girder #4 has 1' long thin lamination on bottom flange 4' from bent #6. Span #5 girder #5 lower flange right back field splice bolt loose.							

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

Comment: 10/12/2020-Lowered superstructure from 8 to 7 due to scaly rust on girder ends at abutment #1.



## Substructure

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
205	Reinforced Concrete Column	EA	16	15	1	0	0
1080	Delamination/Spall/Patched Area	EA	1	0	1	0	0
(205) Bent #4 column #2 has 2 small spalls and area of honeycombing.							
215	Reinforced Concrete Abutment	LF	96	91	5	0	0
1120	Efflorescence/Rust Staining	LF	5	0	5	0	0
(215) Abutment #2 back wall has several vertical hairline cracks with light efflorescence.							
225	Steel Pile	EA	24	19	0	5	0
1000	Corrosion	EA	5	0	0	5	0
515	Steel Protective Coating	SF	1728	0	1603	0	125
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(225) Steel case around concrete is rusted with areas of 100% section loss concrete fill material can be seen. Steel h piles that are exposed have surface rust little to no section loss at this time. Bent #3 pile #11 has areas of 100% section loss to steel encasement with a two to three foot void in concrete encasement at water line exposing steel H beam. Bent #5 pile #8 has areas of 100% section loss in steel encasement with a two foot void in concrete encasement at water line. Bent #5 pile #7,10,12 all have areas of 100% section loss in steel encasement with a three to four foot void in concrete encasement at water line exposing steel H beam.							
227	Reinforced Concrete Pile	EA	10	10	0	0	0
234	Reinforced Concrete Pier Cap	LF	195	186	9	0	0
1090	Exposed Rebar	LF	1	0	1	0	0
1130	Cracking (RC and Other)	LF	8	0	8	0	0
(234) Bent #2 cap back face has two six inch pieces of exposed rebar above right column no section loss, and several vertical cracks spaced at 3'+-. Bent #4 cap has vertical hairline cracks in faces spaced two to three feet apart. Bent #4 cap ahead face left end at top corner has spalled off. Bent #4 cap back face, left side bottom corner has 6" spall with no exposed rebar.							

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

Comment:

**61 - Channel/Channel Protection** (5 - Bank protection is being eroded. River control devices and/or embankment have major damage. Trees and brush restrict the channel.)

Comment: 10-3-2016 lowered channel from 8 to 6 due to Abutment 2 right bank 60' from abutment 2 is eroding.  
10/19/2022 lowered channel from 6 to 5 due to erosion on each end of bridge beside structure.



Asset #05855(Routine)

Sh-1/Sec-6/L-2.97 over Waters Bayou

Location: 3.1 Mi E Of White River

Team Lead: Drew Melton, Inspection Date: 10/19/2022

## Culvert

ELEMENTS	DESCRIPTION	UNITS	TOTAL				
				CS1	CS2	CS3	CS4





Side view-elevation



**Asset #05855(Routine)**

**Sh-1/Sec-6/L-2.97 over Waters Bayou**

**Location: 3.1 Mi E Of White River**

**Team Lead: Drew Melton, Inspection Date: 10/19/2022**

**Maintenance Needs**

**Date Reported:** 09/24/2012  
**Priority:** D- Routine  
**Type of Work:** Repair (General)  
**Status:** Monitor  
**Component:** Approach

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**Deficiency Description**

Approach rail abutment #1 right side and abutment #2 left side has minor collision damage.

**Remarks**

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Abutment #2 left side approach rail has minor collision damage 70' from bridge end.



Abutment #1 right approach rail has several areas of minor collision damage.





Abutment 1 right approach rail damage.

**Date Reported:** 09/24/2012  
**Priority:** C - Important  
**Type of Work:** Repair (General)  
**Status:** Monitor  
**Component:** Element

---

#### Deficiency Description

Bent #3 column #11 has areas of 100% section loss to steel encasement with a two to three foot void in concrete encasement at water line exposing steel H beam.

Bent #5 column #8 has areas of 100% section loss in steel encasement with a two foot void in concrete encasement at water line.

Bent #5 column #7,10,12 all have areas of 100% section loss in steel encasement with a three to four foot void in concrete encasement at water line exposing steel H beam.

#### Remarks

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Typical voids in concrete surrounding piles.



Void in concrete bent 6 pile encasement.

**Date Reported:** 10/02/2014  
**Priority:** C - Important  
**Type of Work:** (Inactive) (Inactive) 1 - Clean  
**Status:** Monitor  
**Component:** Channel

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**Deficiency Description**

Small trees and vegetation are growing under and beside bridge.

**Remarks**

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Typical vegetation.



Typical vegetation.





Trees and vegetation growing beside and under bridge abutment #1 right side.



Trees and vegetation growing beside and under bridge abutment #2 left side.



Trees and vegetation growing beside, under and onto bridge abutment #2 right side.



Trees and vegetation growing beside and under bridge abutment #1 left side.



**Date Reported:** 10/03/2016  
**Priority:** C - Important  
**Type of Work:** Repair (General)  
**Status:** Assigned  
**Component:** Approach

---

**Deficiency Description**

Abutment 1 left side approach gutter at bridge end has void 2' x 2'.

**Remarks**

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Abutment 1 left side approach gutter at bridge end  
has void 2' x 2'.



**Asset #05855(Routine)**

**Sh-1/Sec-6/L-2.97 over Waters Bayou**

**Location: 3.1 Mi E Of White River**

**Team Lead: Drew Melton, Inspection Date: 10/19/2022**

**Date Reported:** 10/03/2016  
**Priority:** C - Important  
**Type of Work:** Repair (General)  
**Status:** Monitor  
**Component:** Channel

---

**Deficiency Description**

Abutment 1 right side bank is eroding within 30' of bridge.  
Abutment 2 right bank 60' from abutment 2 is eroding.

10/12/2020-Changed abutment #1 right side erosion from 50' to 30'.

**Remarks**

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Slope erosion at abutment #1 right side.



Abutment 2 right bank 60' from abutment 2 is eroding.



Abutment 1 right side bank is eroding within 50' of bridge.



**Date Reported:** 10/13/2020  
**Priority:** D- Routine  
**Type of Work:** (Inactive) (Inactive) 1 - Clean  
**Status:** Forward State  
**Component:** Deck

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**Deficiency Description**

Gutters have debris in them.

**Remarks**

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Debris in gutters.

**Date Reported:** 10/13/2020  
**Priority:** D- Routine  
**Type of Work:** (Inactive) (Inactive) 1 - Clean  
**Status:** Forward State  
**Component:** Element

---

**Deficiency Description**

Abutment caps have dirt and debris on them.

**Remarks**

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Dirt and debris on abutment #2 cap, typical of abutment #1.



**Date Reported:** 10/13/2020  
**Priority:** D- Routine  
**Type of Work:** (Inactive) (Inactive) 1 - Clean  
**Status:** Forward State  
**Component:** Element

---

**Deficiency Description**

Abutment #1 bearings #2, 3, 4 and 5 have corrosion with laminations.

**Remarks**

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Abutment #1 bearings have corrosion with laminations.

**Date Reported:** 10/13/2020  
**Priority:** D- Routine  
**Type of Work:** (Inactive) (Inactive) 1 - Clean  
**Status:** Forward State  
**Component:** Element

---

**Deficiency Description**

Abutment #1 girders Nos. 2, 3, 4 and 5 have scaly rust last 4' on bottom flanges and lower web.

**Remarks**

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Span #1 abutment #1 girders have scaly rust first 4'+- on bottom flanges and lower web.



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**Location: 3.1 Mi E Of White River**

**Team Lead: Drew Melton, Inspection Date: 10/19/2022**

## **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	



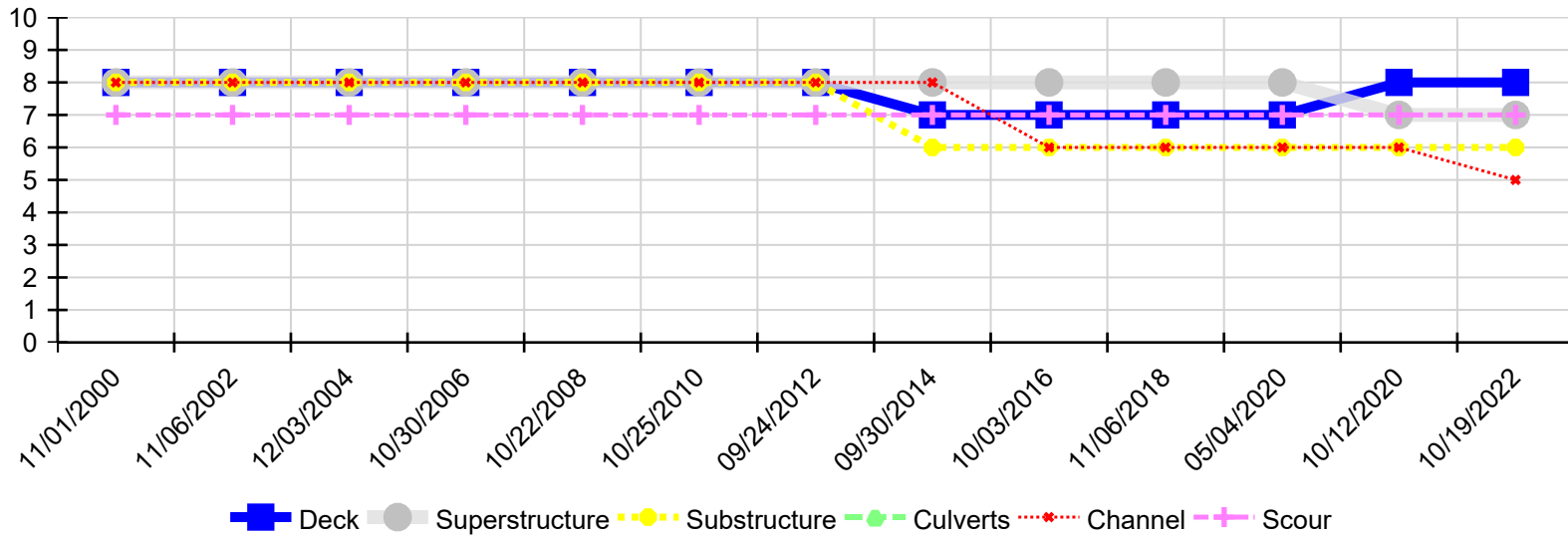
Asset #05855(Routine)

Sh-1/Sec-6/L-2.97 over Waters Bayou

Location: 3.1 Mi E Of White River

Team Lead: Drew Melton, Inspection Date: 10/19/2022

Condition History



Inspection Date	Deck	Superstructure	Substructure	Culverts	Channel	Scour
10/19/2022	8	7	6	N	5	7
10/12/2020	8	7	6	N	6	7
05/04/2020	7	8	6	N	6	7
11/06/2018	7	8	6	N	6	7
10/03/2016	7	8	6	N	6	7
09/30/2014	7	8	6	N	8	7
09/24/2012	8	8	8	N	8	7
10/25/2010	8	8	8	N	8	7
10/22/2008	8	8	8	N	8	7
10/30/2006	8	8	8	N	8	7
12/03/2004	8	8	8	N	8	7
11/06/2002	8	8	8	N	8	7
11/01/2000	8	8	8	N	8	7