



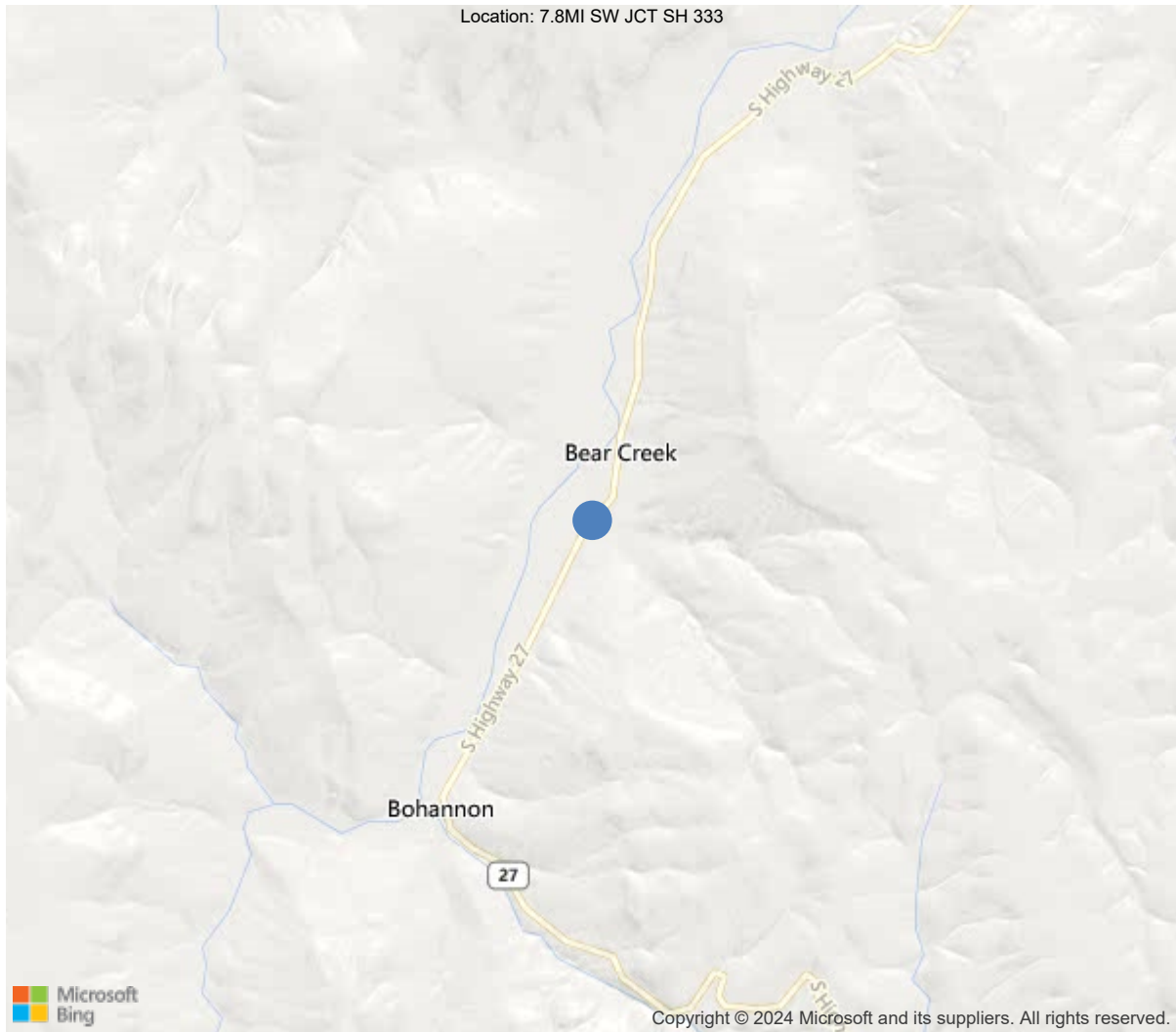
Latitude:35.82644, Longitude:-92.77073

Route:27 Section:16 Log:10.638

Arnold Road ID:64x27x16xA, Arnold Log mile:10.531

District 09, 129 - Searcy County

Owner: 1 - State Highway Agency



35.82644, -92.77073



Asset #05367 (Routine, Underwater type 2)

SH 27 Searcy over WATTS CREEK

Location: 7.8MI SW JCT SH 333

Team Lead: Benjamin Smith, Inspection Date: 11/15/2022

IDENTIFICATION	
(1) State Names	5 - Arkansas
(8) Structure Number	05367
(5) Inventory Route	1
(2) Highway Agency District	09 - District 09
(3) County Code	129 - Searcy County
(4) Place Code	0
(6) Features Intersected	WATTS CREEK
(7) Facility Carried	SH 27 Searcy
(9) Location	7.8MI SW JCT SH 333
(11) Mile Point	10.638 mi
(12) Base Highway Network	No
(13) LRS Inventory Rte & Subrte	0000000000
(16) Latitude	35.82644
(17) Longitude	-92.77073
(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	3
(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	0 - None
AGE AND SERVICE	
(27) Year Built	1971
(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	170
(30) Year of ADT	2018
(109) Truck ADT	1 %
(19) Bypass, Detour Length	3 mi
GEOMETRIC DATA	
(48) Length of Maximum Span	35 ft
(49) Structure Length	105 ft
(50) Curb or Sidewalk Width	
Left	0 ft
Right	0 ft
(51) Bridge Roadway Width Curb to Curb	27.9 ft
(52) Deck Width Out to Out	30.8 ft
(32) Approach Roadway Width (W/Shoulders)	24 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	28.9 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 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	0
(26) Functional Class	7 - Rural Major Collector
(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	7
(59) Superstructure	7
(60) Substructure	7
(61) Channel & Channel Protection	5
(62) Culverts	N
LOAD RATING AND POSTING	
(31) Design Load	4 - M 18 / H 20
(63) Operating Rating Method	1
(64) Operating Rating	
Type	1 - Load Factor(LF)
Rating	53
(65) Inventory Rating Method	1 - Load Factor(LF)
(66) Inventory Rating	
Type	
Rating	32
(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	6
(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	1 - Inspected feature meets current
(36D) Approach Guardrail Ends	1 - Inspected feature meets current
(113) Scour Critical Bridges	8 - 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	264
(115) Year of Future ADT	2028

INSPECTIONS *			
(90) Inspection Date	11/15/2022		
(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 **#05367** (Routine, Underwater type 2)

District: 09, **County:** 129 - Searcy County

Team Lead: Benjamin Smith, **Inspection Date:** 11/15/2022

General Observation

Structure is logged from SW to NE, and is accessible from the channel.
No bat activity was noted.



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Location: 7.8MI SW JCT SH 333

Team Lead: Benjamin Smith, Inspection Date: 11/15/2022

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
38	RC Slab	SF	2940	2701	148	91	0
1080	Delamination/Spall/Patched Area	SF	146	0	90	56	0
1090	Exposed Rebar	SF	35	0	0	35	0
1130	Cracking (RC and Other)	SF	31	0	31	0	0
1190	Abrasion/Wear (PSC/RC)	SF	27	0	27	0	0
(38) Driving surface- the bare concrete deck has wear for the full width and length of the driving lanes.							
Span #1- has wear for the full width and length of the driving lanes with random areas of hairline map cracking.							
Span #2- The left gutter line has heavy scaling for most of the length of the span. The driving lanes are showing wear for the full width and length. The end of the span has asphalt patched spalling at the center line and an unpatched spall in the right gutter line. The right gutter line has a 3' diagonal hairline crack at the end of the span.							
Span #3- has asphalt patched spalls at the center line at the beginning of the span, with a small delaminated area near the center line in the left lane at the beginning of the span.							
Undersurface- The ends of spans #1,2 and the beginning of span #3 have 22 small (1/2") drain pipes in each span that extend down from the slab, due to the hollow tubes inside the concrete in the bridge deck. Longitudinal hairline cracking was noted in the under surface of the slab at random locations.							
Span #1- the left drip edge has 8' of cs3 delamination and 2' of spalling with exposed rebar. The right drip edge has 12' of cs3 delamination and 1' of spalling with exposed rebar.							
Span #2- the left drip edge has 3' of cs3 delamination. The right drip edge has 5' of cs3 delamination and 19' of spalling with exposed cs3 rebar.							
Span #3-the left drip edge has 6' of delamination and 1' of spalling with exposed rebar. The right drip edge has 9' of cs3 delamination and 12' of spalling with exposed cs3 rebar.							
205	Reinforced Concrete Column	EA	4	4	0	0	0
(205) Bent #1 columns- Column #1- no deficiencies noted. The footing has cover. Column #2- no deficiencies noted. Column #2 has a small insignificant spall on the interior face that is not large enough to quantify. The footing has cover.							
Bent #2 columns- Column #1- no deficiencies noted. The footing has cover. Column #2- no deficiencies noted. The footing has cover.							
215	Reinforced Concrete Abutment	LF	70	53	15	2	0
1080	Delamination/Spall/Patched Area	LF	2	0	1	1	0
1090	Exposed Rebar	LF	1	0	0	1	0
1130	Cracking (RC and Other)	LF	14	0	14	0	0

Deck

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
38	RC Slab	SF	2940	2701	148	91	0
1080	Delamination/Spall/Patched Area	SF	146	0	90	56	0
1090	Exposed Rebar	SF	35	0	0	35	0
1130	Cracking (RC and Other)	SF	31	0	31	0	0
1190	Abrasion/Wear (PSC/RC)	SF	27	0	27	0	0
(38) Driving surface- the bare concrete deck has wear for the full width and length of the driving lanes.							
Span #1- has wear for the full width and length of the driving lanes with random areas of hairline map cracking.							
Span #2- The left gutter line has heavy scaling for most of the length of the span. The driving lanes are showing wear for the full width and length. The end of the span has asphalt patched spalling at the center line and an unpatched spall in the right gutter line. The right gutter line has a 3' diagonal hairline crack at the end of the span.							
Span #3- has asphalt patched spalls at the center line at the beginning of the span, with a small delaminated area near the center line in the left lane at the beginning of the span.							
Undersurface-							
The ends of spans #1,2 and the beginning of span #3 have 22 small (1/2") drain pipes in each span that extend down from the slab, due to the hollow tubes inside the concrete in the bridge deck. Longitudinal hairline cracking was noted in the under surface of the slab at random locations.							
Span #1- the left drip edge has 8' of cs3 delamination and 2' of spalling with exposed rebar. The right drip edge has 12' of cs3 delamination and 1' of spalling with exposed rebar.							
Span #2- the left drip edge has 3' of cs3 delamination. The right drip edge has 5' of cs3 delamination and 19' of spalling with exposed cs3 rebar.							
Span #3-the left drip edge has 6' of delamination and 1' of spalling with exposed rebar. The right drip edge has 9' of cs3 delamination and 12' of spalling with exposed cs3 rebar.							



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Superstructure

ELEMENTS	DESCRIPTION	UNITS	TOTAL				
				CS1	CS2	CS3	CS4

Substructure

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
205	Reinforced Concrete Column	EA	4	4	0	0	0
<p>(205) Bent #1 columns- Column #1- no deficiencies noted. The footing has cover. Column #2- no deficiencies noted. Column #2 has a small insignificant spall on the interior face that is not large enough to quantify. The footing has cover.</p> <p>Bent #2 columns- Column #1- no deficiencies noted. The footing has cover. Column #2- no deficiencies noted. The footing has cover.</p>							
215	Reinforced Concrete Abutment	LF	70	53	15	2	0
1080	Delamination/Spall/Patched Area	LF	2	0	1	1	0
1090	Exposed Rebar	LF	1	0	0	1	0
1130	Cracking (RC and Other)	LF	14	0	14	0	0
<p>(215) Abutment #1- has 8' of vertical hairline cracks. The vertical face has 1' of spalling with 1' of shallow rebar exposed beneath the left keyway. The rip rap is in place and functioning as intended.</p> <p>Abutment #2- has 6' of vertical hairline cracks with 1' of cs3 delamination next to the left keyway. The rip rap is in place and functioning as intended.</p>							
234	Reinforced Concrete Pier Cap	LF	64	50	11	3	0
1080	Delamination/Spall/Patched Area	LF	2	0	0	2	0
1090	Exposed Rebar	LF	1	0	0	1	0
1130	Cracking (RC and Other)	LF	11	0	11	0	0
<p>(234) Bent cap #1- has 5' of vertical hairline cracks. The underside of the right cantilever has a small spall with rebar exposed. Water staining was noted around the keyways.</p> <p>Bent cap #2- has 6' of vertical hairline cracks. The tops of the left and right extreme cap ends have spalling/deterioration on the top edges for 1' each. Water staining was noted around the keyways.</p>							



Approach view in direction of log mile.



Typical view of the driving surface.



Typical view of driving surface.



Repaired pot holes at the beginning of span 3.



Downstream channel view.



Upstream channel view.



Approach view in direction of log mile.



Typical view of driving surface.



General view of the undersurface.



Downstream channel view.



Elevation view. Log mile from left to right.



Bridge plate.



Left beginning approach railing termination has mower damage.



Spalling with rebar exposed at the right drip edge of span #3.



Upstream channel view.



Areas of shallow exposed rebar along the bottom of the parapet walls.



General view of the bents.



Pipes through the slab at the end of span #1.



Approach view in direction of log mile.



Spalling in the driving surface of the deck at the end of span #2, beginning of span #3.



Spalling with exposed rebar at the right drip edge of span #2.



General view of abutment #2.



General view of abutment #1.



Elevation view. Log mile from left to right.



Delamination next to the left keyway at abutment 2.



Joint seal condition over bent 1.



Joint seal condition over bent 2.

Maintenance Needs

Date Reported: 11/08/2018

Priority: D- Routine

Type of Work: Repair (General)

Status: Monitor

Component:

Deficiency Description

The left drip edge on the underside of the slab in span #1 has spalls and delamination.
The right drip edge on the underside of the slab in spans #2,3 has large spalls with rebar exposed.
The tops of the left and right cap ends have spalling with no exposed rebar for 1' each.

Remarks



Spalling with rebar exposed at the right drip edge of span #3.



Spalling with exposed rebar at the right drip edge of span #2.



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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	



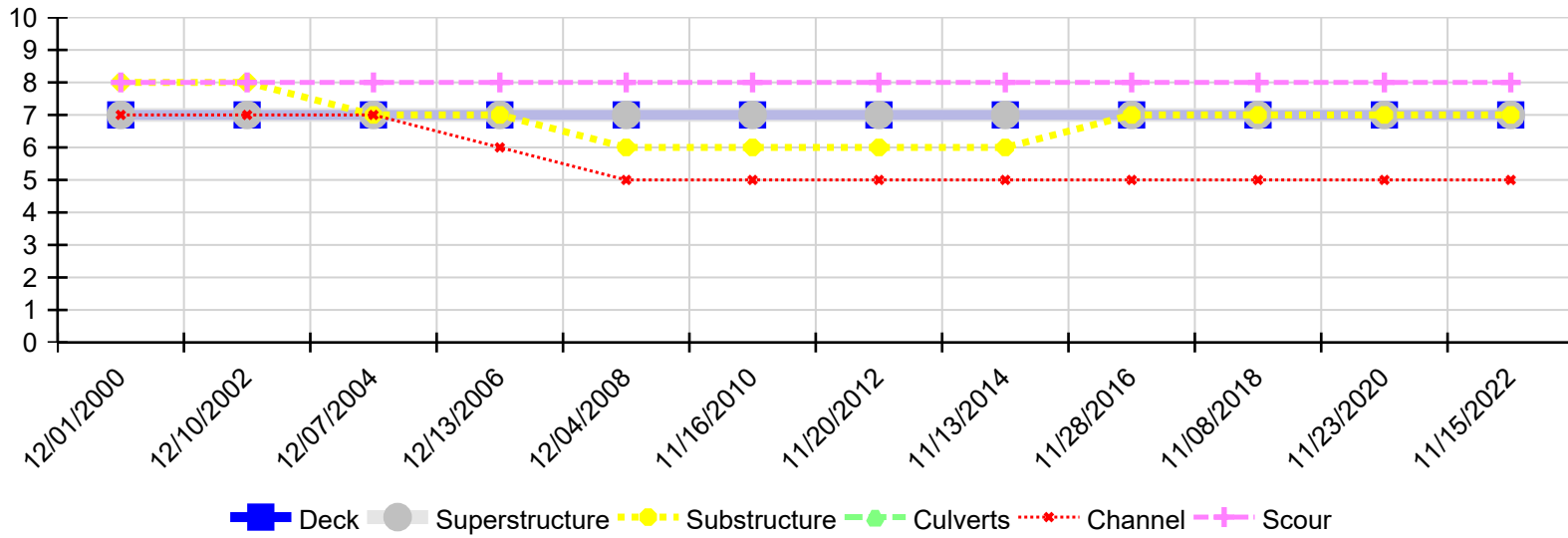
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Team Lead: Benjamin Smith, Inspection Date: 11/15/2022

Condition History



Inspection Date	Deck	Superstructure	Substructure	Culverts	Channel	Scour
11/15/2022	7	7	7	N	5	8
11/23/2020	7	7	7	N	5	8
11/08/2018	7	7	7	N	5	8
11/28/2016	7	7	7	N	5	8
11/13/2014	7	7	6	N	5	8
11/20/2012	7	7	6	N	5	8
11/16/2010	7	7	6	N	5	8
12/04/2008	7	7	6	N	5	8
12/13/2006	7	7	7	N	6	8
12/07/2004	7	7	7	N	7	8
12/10/2002	7	7	8	N	7	8
12/01/2000	7	7	8	N	7	8