

Bridge 03627 Inspection Report



Latitude:35.97855, Longitude:-92.48158

Route:14 Section:04 Log:10.66

Arnold Road ID:64x14x4xA, Arnold Log mile:10.617

District 09, 129 - Searcy County

Owner: 1 - State Highway Agency

Inspection Direction: 4 - W to E

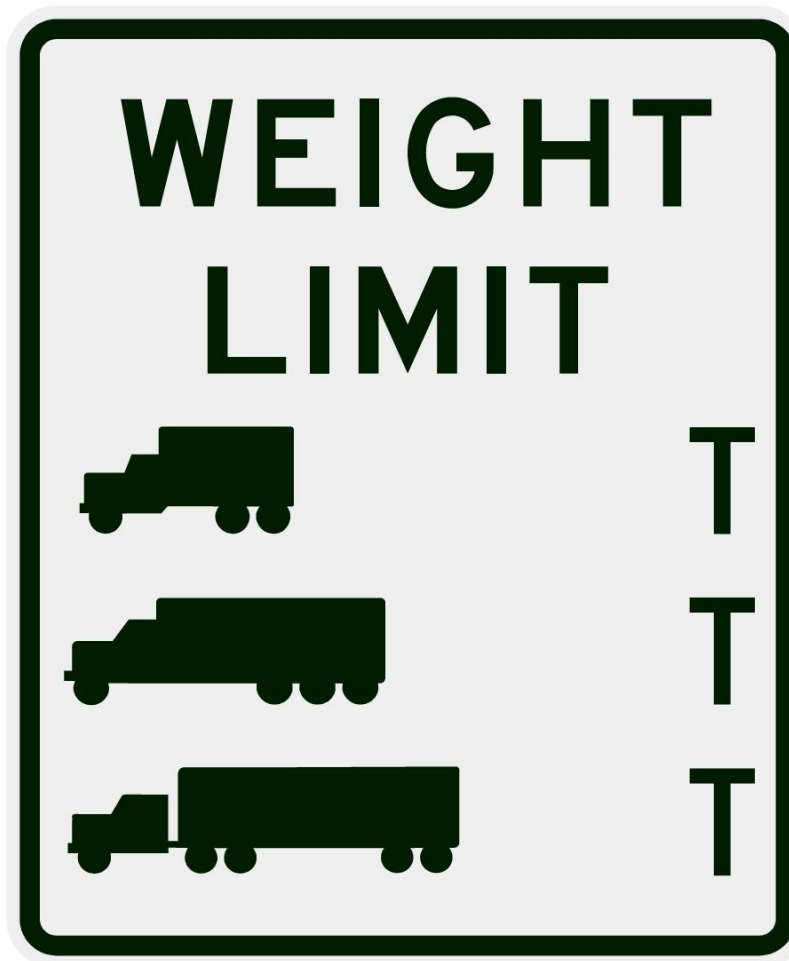
Bridge Posting Information

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

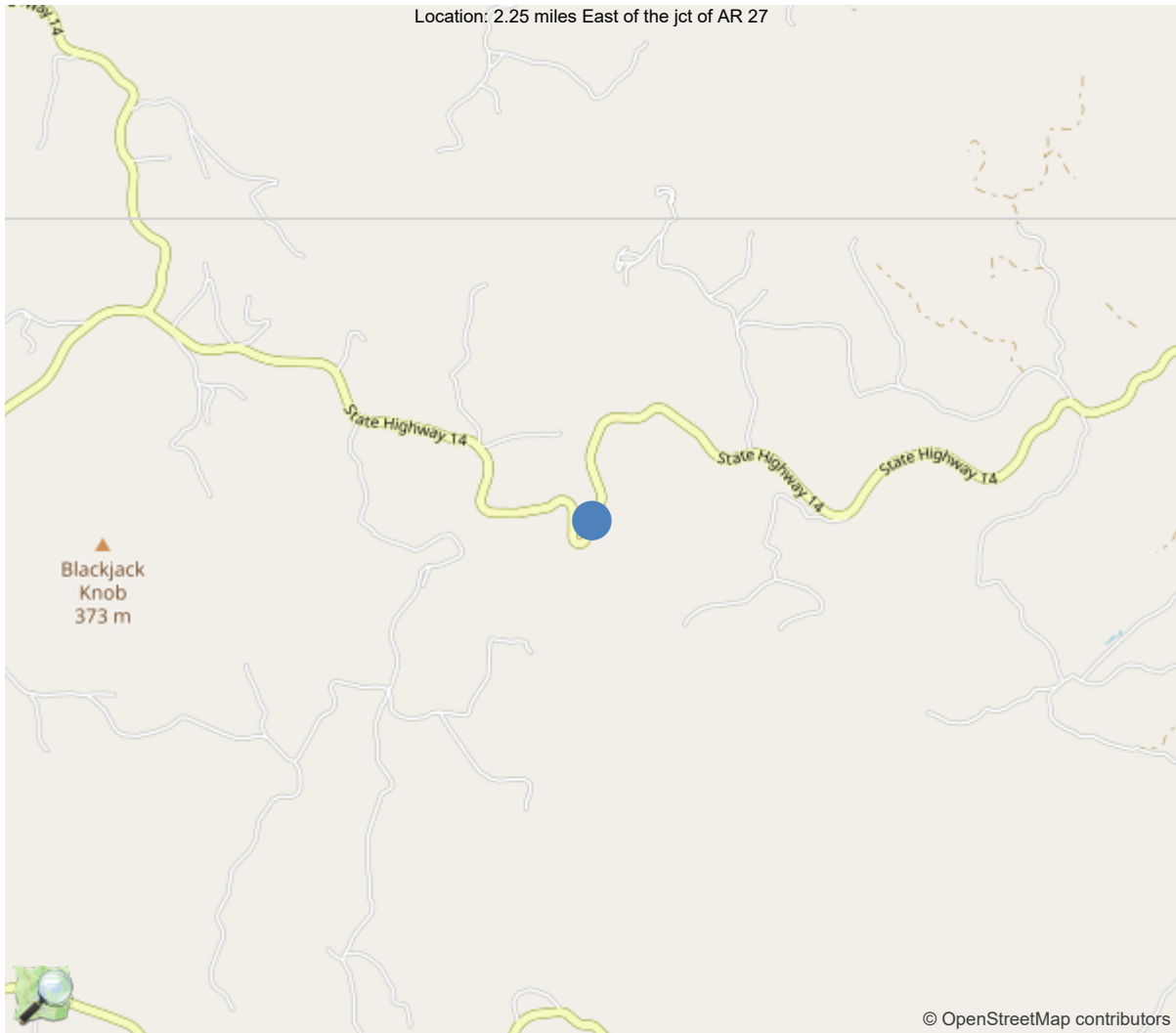
70 - Bridge Posting: 5 - Equal to or above legal loads

Legal Load	Calculated Capacity	Beginning of Bridge Sign Current Value	End of Bridge Sign Current Value
Code 4 (22 Tons)	40		
Code 9 (31 Tons)	43		
Code 5 (40 Tons)	47		

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



35.97855, -92.48158

National Bridge Inventory Data Sheet

IDENTIFICATION	
(1) State Names	5 - Arkansas
(8) Structure Number	03627
(5) Inventory Route	1
(2) Highway Agency District	09 - District 09
(3) County Code	129 - Searcy County
(4) Place Code	0
(6) Features Intersected	BIG CREEK
(7) Facility Carried	SH 14 Searcy
(9) Location	2.25 miles East of the jct of AR 27
(11) Mile Point	10.66 mi
(12) Base Highway Network	Yes
(13) LRS Inventory Rte & Subrte	0000024040
(16) Latitude	35.97855
(17) Longitude	-92.48158
(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	5
(46) No. of Approach Spans	0
(107) Deck Structure Type	1 - Concrete Cast-in-Place
(108) Wearing Surface/Protective System	
Type of Wearing Surface	0 - None (no additional concrete thickne
Type of Membrane	0 - None
Type of Deck Protection	0 - None
AGE AND SERVICE	
(27) Year Built	1963
(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	380
(30) Year of ADT	2018
(109) Truck ADT	1 %
GEOMETRIC DATA	
(48) Length of Maximum Span	75 ft
(49) Structure Length	311.5 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	28.7 ft
(32) Approach Roadway Width (W/Shoulders)	22 ft
(33) Bridge Median	0 - No median
(34) Skew	30 Deg
(35) Structure Flared	0 - No flare
(10) Inventory Route Min Vert Clear	99.99 ft
(47) Inventory Route Total Horiz Clear	25.9 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	0
(26) Functional Class	6 - Rural Minor 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	5
(59) Superstructure	5
(60) Substructure	6
(61) Channel & Channel Protection	7
(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	50
(65) Inventory Rating Method	1 - Load Factor(LF)
(66) Inventory Rating	
Type	
Rating	30
(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	5
(69) Clearances, Vertical/Horizontal	N
(71) Waterway Adequacy	9
(72) Approach Roadway Alignment	7
(36A) Bridge Railings	1 - Inspected feature meets current
(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	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	516
(115) Year of Future ADT	2028

INSPECTIONS *			
(90) Inspection Date			02/27/2025
(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.			

Team Lead: Benjamin Smith, Inspection Date: 02/27/2025

Specifications for National Bridge Inventory Sheets

IDENTIFICATION	
B.ID.01 Bridge Number	03627
B.ID.02 Bridge Name	
B.ID.03 Previous Bridge No.	
B.W.01 Year Built	1963

LOCATION	
B.L.01 State Code	5 - Arkansas
B.L.02 County Code	129 - Searcy County
B.L.03 Place Code	00000 - N/A
B.L.04 Highway Agency District	09 - District 09
B.L.05 Latitude	35.97855
B.L.06 Longitude	-92.48158
B.L.07 Border Bridge Number	
B.L.08 Border Bridge State or Country Code	
B.L.09 Border Bridge Insp. Resp.	
B.L.10 Border Bridge Designated Lead State	
B.L.11 Bridge Location	2.25MI E OF JCT SH 27
B.L.12 Metropolitan Planning Organization	

CLASSIFICATION	
B.CL.01 Owner	S01 - State transportation departme
B.CL.02 Maint. Responsibility	S01 - State transportation departme
B.CL.03 Federal or Tribal Land Access	N - Not Applicable
B.CL.04 Historic Significance	N - Bridge is not eligible for the
B.CL.05 Toll	N - Bridge does not carry a toll ro
B.CL.06 Emergency Evacuation Designation	

ROADSIDE HARDWARE	
B.RH.01A Bridge Railing Type	
B.RH.01B Bridge Railing Year (YY)	
B.RH.01C Bridge Railing Test Level	
B.RH.02A Transition Type	
B.RH.02B Transition Year (YY)	
B.RH.02C Transition Test Level	

BRIDGE GEOMETRY	
B.G.01 NBIS Bridge Length	310
B.G.02 Total Bridge Length	312
B.G.03 Max Span Length	75.1
B.G.04 Min Span Length	53
B.G.05 Bridge Width Out-to-Out	28.5
B.G.06 Bridge Width Curb-to-Curb	24
B.G.07 Left Curb or Sidewalk Width	1
B.G.08 Right Curb or Sidewalk Width	1
B.G.09 Approach Roadway Width	22

B.G.10 Bridge Median	0 - No median
B.G.11 Skew	30
B.G.12 Curved Bridge	N - Not curved
B.G.13 Max Bridge Height	32
B.G.14 Sidehill Bridge	N - Not a sidehill bridge
B.G.15 Irregular Deck Area	
B.G.16 Calculated Deck Area	8905.7

LOADS AND LOAD RATING	
B.LR.01 Design Load	H15 - H-15
B.LR.02 Design Method	
B.LR.03 Load Rating Date	
B.LR.04 Load Rating Method	LFR - Load Factor Rating
B.LR.05 Inventory Load Rating Factor	0.83
B.LR.06 Operating Load Rating Factor	1.39
B.LR.07 Controlling Legal Load Rating Factor	
B.LR.08 Routine Permit Loads	

INSPECTION REQUIREMENTS	
B.IR.01 NSTM Inspection Required	N - NSTM inspection not required.
B.IR.02 Fatigue Details	Y - E/E' details are present
B.IR.03 UW Inspection Required	N - Underwater inspection not requi
B.IR.04 Complex Feature	N - Bridge does not have complex fe

COMPONENT CONDITION RATINGS	
B.C.01 Deck Condition Rating	6 - SATISFACTORY - Widespread
B.C.02 Superstructure Condition	5 - FAIR - Some moderate defec
B.C.03 Substructure Condition	6 - SATISFACTORY - Widespread
B.C.04 Culvert Condition	N - NOT APPLICABLE - Component
B.C.05 Bridge Railing Condition	7 - GOOD - Some minor defects.
B.C.06 Bridge Railing Transitions Condition	7 - GOOD - Some minor defects.
B.C.07 Bridge Bearings Cond.	6 - SATISFACTORY - Widespread
B.C.08 Bridge Joints Condition	8 - VERY GOOD - Some inherent
B.C.09 Channel Condition Rating	7 - GOOD - Some minor defects.
B.C.10 Channel Protection Condition	N - NOT APPLICABLE - Bridge do
B.C.11 Scour Condition Rating	7 - Some minor scour.
B.C.12 Bridge Condition Classification	F - Fair
B.C.13 Lowest Condition Rating	5 - FAIR - Some moderate defec
B.C.14 NSTM Insp. Condition	N - NOT APPLICABLE - Component
B.C.15 UW Inspection Condition	

APPRAISAL	
B.AP.01 Approach Roadway Alignment	G - Good
B.AP.02 Overtopping Likelihood	1 - Remote - once every 100 years o
B.AP.03 Scour Vulnerability	0 - Scour appraisal has not been co
B.AP.04 Scour Plan of Action	0 - A scour POA is not required.
B.AP.05 Seismic Vulnerability	0 - Seismic evaluation not complete

Team Lead: Benjamin Smith, Inspection Date: 02/27/2025

SPAN SETS			
M1			
B.SP.02 # of Spans	5	B.SP.08 Deck Interaction	CU - Composite - unshored cons
B.SP.03 # of Beam Lines	5	B.SP.09 Deck Material and Type	C01 - Reinforced concrete - ca
B.SP.04 Span Material	S01 - Steel - rolled	B.SP.10 Wearing Surface	0 - None
B.SP.05 Span Continuity	1 - Simple or single span	B.SP.11 Deck Protective System	0 - None
B.SP.06 Span Type	G02 - Girder/beam - I-shaped s	B.SP.12 Deck Reinforcing Protective System	0 - None
B.SP.07 Span Protective System	C01 - Coating - paint	B.SP.13 Deck Stay-In-Place Forms	0 - None

SUBSTRUCTURE SETS			
A1			
B.SB.02 No. of Substructure Units	2	B.SB.05 Substructure Protective System	0 - None
B.SB.03 Substructure Material	C01 - Reinforced concrete - ca	B.SB.06 Foundation Type	P01 - Pile - steel H-shape
B.SB.04 Substructure Type	A02 - Abutment - stub	B.SB.07 Foundation Protective System	0 - None
P1			
B.SB.02 No. of Substructure Units	2	B.SB.05 Substructure Protective System	0 - None
B.SB.03 Substructure Material	C01 - Reinforced concrete - ca	B.SB.06 Foundation Type	F02 - Footing - on rock
B.SB.04 Substructure Type	B02 - Bent - column with web w	B.SB.07 Foundation Protective System	0 - None
P2			
B.SB.02 No. of Substructure Units	2	B.SB.05 Substructure Protective System	0 - None
B.SB.03 Substructure Material	C01 - Reinforced concrete - ca	B.SB.06 Foundation Type	F02 - Footing - on rock
B.SB.04 Substructure Type	B01 - Bent - column or open	B.SB.07 Foundation Protective System	0 - None

HIGHWAY FEATURES			
H1			
B.F.02 Feature Location	C - Carried on bridge	B.H.09 Annual ADT	380
B.F.03 Feature Name	SH 14 Searcy	B.H.10 Annual ADTT	3
B.H.01 Functional Classification	4 - Minor Arterial	B.H.11 Year of Annual ADT	2018
B.H.02 Urban Code	99999	B.H.12 Highway Max Usable Vertical Clearance	99.9
B.H.03 NHS Designation	N - Non-NHS	B.H.13 Highway Min Vertical Clearance	99.9
B.H.04 National Highway Freight Network	N - Not on the NHFN	B.H.14 Highway Min Horizontal Clearance, Left	
B.H.05 STRAHNET Designation	N - Not a STRAHNET route	B.H.15 Highway Min Horizontal Clearance, Right	
B.H.06 LRS Route ID	24040	B.H.16 Highway Max Usable Surface Width	25.5
B.H.07 LRS Mile Point	10.66	B.H.17 Bypass Detour Length	37
B.H.08 Lanes On Highway	2	B.H.18 Crossing Bridge Number	

HIGHWAY ROUTES					
Highway Parent	B.RT.01 Route Designation	B.RT.02 Route Number	B.RT.03 Route Direction	B.RT.04 Route Type	B.RT.05 Service Type
H1	1	14	2-T - TEMP - Two-way traffic - NS or EW	3 - State route	1 - Mainline



Team Lead: Benjamin Smith, Inspection Date: 02/27/2025

WATERWAY FEATURES

W1

B.F.02 Feature Location	B - Below bridge	B.N.03 Movable Bridge Max Navigation Vertical Clearance	
B.F.03 Feature Name	BIG CREEK	B.N.04 Navigation Channel Width	
B.N.01 Navigable Waterway	N - Not navigable waters	B.N.05 Navigation Channel Min Horizontal Clearance	
B.N.02 Navigation Min Vertical Clearance		B.N.06 Substructure Navigation Protection	

POSTING STATUS DATA

B.PS.01 Load Posting Status	B.PS.02 Posting Status Change Date
PO - Permanent and Open	

LOAD EVALUATION AND POSTING

B.EP.01 Legal Load Configuration	B.EP.02 Legal Load Rating Factor	B.EP.03 Posting Type	B.EP.04 Posting Value
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Inspection Notes

General Observation

The structure is logged from West to East and is accessible with a UBIU or a large extension ladder.
No bat activity was noted.

58 - Deck (5 - FAIR CONDITION - all primary structural elements are sound but may have minor section loss, cracking, spalling or scour.)

Overall the deck is in fair condition with large areas of spalling and delamination in the driving surface, the worst cases are in spans #2,3. The undersurface has some discoloration in the bays in span #3.

59 - Superstructure (5 - FAIR CONDITION - all primary structural elements are sound but may have minor section loss, cracking, spalling or scour.)

Overall the superstructure is in fair condition with some rust holes in the some of the beam webs in span #3. The bearings have corrosion cs3.

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

Overall the substructure is in satisfactory condition with areas of delamination and cracking cs2. A few areas of exposed rebar were noted.

61 - Channel/Channel Protection (7 - Bank protection is in need of minor repairs. River control devices and embankment protection have a little minor damage. Banks and/or channel have minor amounts of drift.)

The upstream channel is mostly vegetated with areas of embankment erosion.

The channel beneath the structure flows mainly in spans #2,3. The columns near the channel have minor local scour with no footings exposed.

The downstream channel is vegetated.

A-60 - Full Girder Painting Needed (Y)

Full beam painting is recommended after beam end repairs are made.

A-62 - Hydro and LMC Advised (Y)

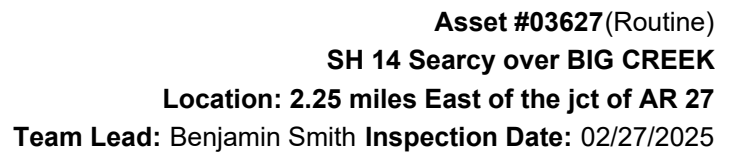
All spans have areas of delamination or spalling. Spans #2,3 have large areas of delamination and spalling with some discoloration noted on the undersurface.

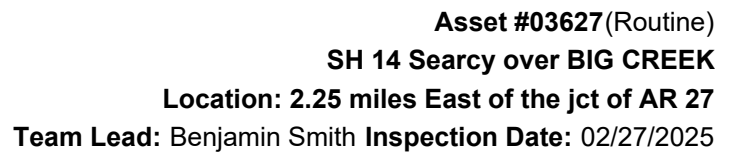
B.IR.02 - Fatigue Prone Details (Y)

The bottom flanges of all beams have cover plates that are tapered and welded at the ends.

A-B.C.11 - B.C.11 Scour Condition Rating (New NBIS) (7 - Some minor scour.)

The pier columns near the channel have minor local scour with no footings exposed.





Left overhang- No deficiencies noted.

Span #3- The undersurface has large areas of darker discoloration visible in the bays.

Bay #1- transverse hairline cracking is visible from the undersurface with no efflorescence, the bay has a 1' area of spalling with exposed rebar.

Bay #2- transverse hairline cracking is visible from the undersurface with 1' of efflorescence cs2.

Bay #3- transverse hairline cracking is visible from the undersurface with no efflorescence, the bay is mostly discolored from deck leaching with 9' of efflorescence cs3.

Bay #4- transverse hairline cracking is visible from the undersurface with no efflorescence. The bay is mostly discolored from deck leaching and has 1' of spalling with exposed rebar near the beginning of the span.

Overhangs-

Left overhang- has 1' of efflorescence cs2 and 1' of spalling cs3, The 2nd and 3rd drains each 1' of have cs3 spalling.

Right overhang- The 1st, 2nd drain areas have 1' of spalling. The 3rd drain has 1' of exposed rebar cs3

Span #4- The undersurface of the deck has visible hairline cracks.

Bay #1- has 1' of spalling cs3 that is 10' from bent #3.

Bay #2- has 2' of delamination cs3 towards the end of the span.

Bay #3- has hairline cracking.

Bay #4- has hairline cracking.

Left overhang- The 2nd and 3rd drain each have a spall with exposed rebar cs3.

Right overhang- the 1st drain has 2' of exposed rebar cs3. The 3rd drain has 1' of exposed rebar cs3.

Span #5-

The undersurface of the deck has visible hairline cracks.

Bay #1- has 1' of delamination cs3 near mid span.

Bay #2- has 2' of efflorescence cs2 at the 2nd construction joint.

Bay #3- has 2' of delamination cs3 at the first construction joint.

Bay #4- has 3' of delamination cs3 at the first construction joint and 1' of delamination cs3 at the second joint.

Overhangs-

Left overhang- The beginning left corner of the deck has 1' of shallow exposed rebar cs3.

Right overhang- has 1' of delamination cs3 at drain #1 and 1' of delamination cs3 at drain #2, and 1' of exposed rebar cs3 at the 3rd drain.

07	Steel Open Girder/Beam	LF	1550	1002	350	198	0
1000	Corrosion	LF	548	0	350	198	0
515	Steel Protective Coating	SF	14264	8234	0	1590	444
3440	Effectiveness (Steel Protective Coatings)	SF	6030	0	0	1590	444

(107) 5 painted steel beam system. The protective coating total includes the diaphragms. The cover plates on the bottom flange are tapered and welded all the way around, this is an E detail.

Span #1-The bottom flange and the bottom of the top flange has flaking paint with little to no corrosion underneath in random locations in the span, except at the beam ends. The corrosion at the beam ends has been painted with lubra-seal rust inhibitor, the corrosion is showing back through in some locations. The fascia beams have 3-5' areas of corrosion on the top and bottom flange beneath the drain holes along both sides of the structure, these areas have up to 1/4" section loss.

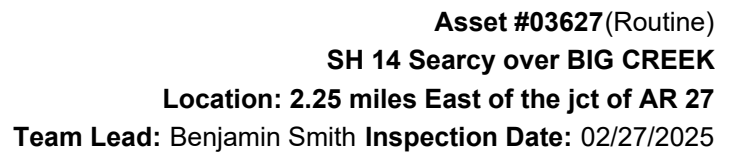
Beam #1- has 12' of cs3 corrosion on the exterior top flange beneath the drain areas with up to 1/4" section loss at the first drain area. The bottom flange has 4' of cs2 corrosion near abutment #1. The beginning of the beam has 1' of cs2 corrosion. The beam end has 5' of cs2 corrosion on the web and bottom flange.

Beam #2- has 1' of cs2 corrosion at the beginning of the span and 4' of cs2 corrosion at the end of the span.

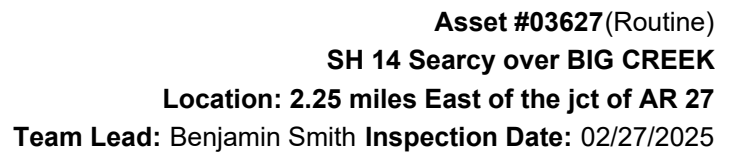
Beam #3- has 2' of corrosion cs2 at the beginning of the span and 2' of cs2 corrosion at the end of the span.

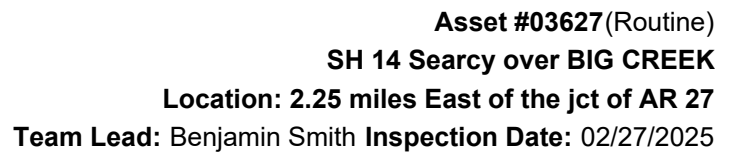
Beam #4- has 3' of corrosion cs3 on the bottom flange with 1/8" section loss and 4' of cs2 corrosion at the end of the span.

Beam #5- has 9' of corrosion cs3 on the exterior top flange beneath the drain areas with up to 1/4" section loss. Beam #5 has 4' of cs2 corrosion on the bottom flange at the beginning of the span and 3' of cs3 corrosion on the lower web and upper web with 1/4" section loss at the end of the span.

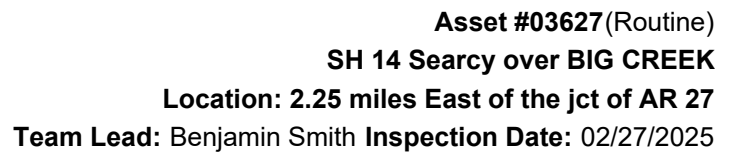


ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
Span #2-	The bottom flange and the bottom of the top flange has flaking paint with little to no corrosion underneath at random locations on all 5 beams in the span.						
Beam #1-	has 14' of cs3 corrosion on the top exterior flange beneath the drains, the exterior bottom flange has 19' of cs2 corrosion. The bottom flange and lower web has 4' of cs3 corrosion with 1/4" section loss at the beginning of the span. The beam end has 5' of cs2 corrosion on the web and bottom flange.						
Beam #2-	has 5' of corrosion cs3 on the bottom flange and upper web at the beginning of the span and 4' of cs2 corrosion at the end of the span.						
Beam #3-	has 3' of cs3 corrosion on the web and bottom flange and upper web with 3/16" deep pitting at the beginning of the span and 4' of cs2 corrosion at the end of the span.						
Beam #4-	has 5' of cs3 corrosion with 1/8" deep pitting on the web at the beginning of the span the upper web has a 3" area of 1/4" deep section loss. and 3' of cs2 corrosion at the end of the span.						
Beam #5-	has 15' of cs3 corrosion on the exterior top flange beneath the drain areas with up to 1/4" section loss. The exterior bottom flange has 18' of cs2 corrosion. Beam #5 has 6' of cs3 corrosion with 1/4" section loss on the lower web. The upper web has a 4" area of 1/4" section loss at the beginning of the span. The beam end has up to 7/16" section loss in the lower web for 5', the original thickness of the web at this location is 5/8". The upper web section beneath the deck haunch has cs3 corrosion with 3/16" section loss. The diaphragm at the end of the span has corrosion that has partially corroded away the flange.						
Span #3-	The bottom flange and the bottom of the top flange has flaking paint with little to no corrosion underneath at random locations on all 5 beams. The corrosion has been painted with lubra-seal rust inhibitor, this repair has corrosion showing back through at the end of the span.						
Beam #1-	has 14' of cs3 corrosion on the top exterior flange, the exterior bottom flange has 17' of cs2 corrosion. The bottom flange and lower web has 4' of cs3 corrosion with 1/4" section loss at the beginning of the span. The beam end has 7' of cs2 corrosion on the web and bottom flange. Beam #1 has a 5' long by 1/2" thick cover plate on the bottom flange at the end of span #3, beginning 18" back from the bearing.						
Beam #2-	has 5' of corrosion cs3 on the bottom flange and upper web at the beginning of the span with a 3/4" by 2.5" rust hole in the upper web and 4' of cs2 corrosion at the end of the span.						
Beam #3-	has 3' of cs2 corrosion on the web and bottom flange and upper web at the beginning of the span. The top flange has a 3' area of cs3 corrosion near mid span with 1/8" section loss. the lower web and bottom flange has 3' of cs3 corrosion with 1/8" at the end of the span. Beam #3 has grinder marks on the web past mid span.						
Beam #4-	has 6' of cs2 corrosion on the web and bottom flange at the beginning of the span, the upper web has a 4" rust hole. The lower web and bottom flange has 5' of cs2 corrosion at the end of the span. The edge of the cover plate of beam #4 has a small area of poor quality porous weld. No cracking was noted at this location.						
Beam #5-	has 12' of cs3 corrosion on the exterior top flange beneath the drain areas with up to 1/4" section loss. The exterior bottom flange has 18' of cs2 corrosion. Beam #5 has 7' of cs3 corrosion with a 12" long by 1.5" tall rust hole in the lower web beginning 3' into the span after the plated repair. The beginning beam end has been plated with a 1/2" plate for the first 3' of the span on the interior and exterior web. The lower web and bottom flange has 4' of cs3 corrosion with 3/16" section loss.						
Span #4-	was not entered with the snoopers at the 2/27/25 inspection due to mechanical failure. The span was looked at from the side at eye level.						
The bottom flange and the bottom of the top flange	has flaking paint with little to no corrosion underneath on all 5 beams at random locations. Most locations of the corrosion have been painted with lubra-seal rust inhibitor, the corrosion is showing back through in most locations.						
Beam #1-	has 13' of cs3 corrosion on the top exterior flange beneath the drain areas, the exterior bottom flange has 24' of cs2 corrosion. The bottom flange and lower web has 4' of cs2 corrosion at the beginning of the span. The beam end has 7' of cs2 corrosion on the web and bottom flange.						
Beam #2-	has 3' of corrosion cs2 on the bottom flange and upper web at the beginning of the span. The end of the span has 6' of cs2 corrosion.						
Beam #3-	has 4' of cs2 corrosion on the web and bottom flange and upper web at the beginning of the span. The lower web and bottom flange has 6' of cs3 corrosion with 1/8" section loss at the end of the span.						
Beam #4-	has 3' of cs2 corrosion on the web and bottom flange at the beginning of the span. The lower web and bottom flange has 4' of cs3 corrosion with 1/8" section loss at the end of the span.						

[illegible]



ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
<p>Pier wall #3- consists of a 16' long horizontal concrete strut between the columns. The member has 2' of delamination cs3 and 1' of cracking cs2.</p> <p>Pier wall #4- consists of a 16' long horizontal concrete strut between the columns. The top edge on the span #5 side has insignificant spalling.</p>							
215	Reinforced Concrete Abutment	LF	70	53	3	14	0
1080	Delamination/Spall/Patched Area	LF	14	0	0	14	0
1130	Cracking (RC and Other)	LF	3	0	3	0	0
<p>(215) Abutment #1- has 2' of vertical cracking cs2 in the back wall and 1' of vertical cracking cs2 in the bridge seat. The footing has cover. The hand placed rip rap is in place and functioning as intended.</p> <p>Abutment #2- has large areas of honeycombing along the vertical face of the lower portion of the abutment. The right end of the bridge seat has a shallow delamination cs3 under bearing #5. The bridge seat has minor debris accumulation. The dumped rip rap is in place and functioning as intended.</p>							
234	Reinforced Concrete Pier Cap	LF	120	96	16	8	0
1080	Delamination/Spall/Patched Area	LF	8	0	0	8	0
1130	Cracking (RC and Other)	LF	16	0	16	0	0
<p>(234) Pier #1 cap -The extreme left end of the pier cap has minor delamination on the vertical face for 1' with 4' of vertical cracks cs2.</p> <p>Pier #2 cap- The extreme left end of the pier cap has 1' of delamination cs3 on the vertical face with 4' of vertical cracking cs2 and 3' of horizontal delamination cs3 under bay #1.</p> <p>Pier #3 cap- has 5' of vertical cracks cs2 with 1' of delamination cs3 on the vertical face under bay #1 in span #3.</p> <p>Pier #4 cap- has 3' of vertical cracks cs2 and 2' of delamination cs3 on the span #5 side under bay #1.</p>							
305	Assembly Joint without Seal	LF	174	174	0	0	0
<p>(305) The assembly joints with out seals are allowing water and deicer to corrode the beam ends and bearings.</p>							
311	Movable Bearing	EA	25	0	0	25	0
1000	Corrosion	EA	25	0	0	25	0
<p>(311) All movable bearings over piers 1,2,3,4 have minor section loss and have been painted with lubra -seal rust inhibitor. Most anchor bolts and anchor bolt nuts have heavy cs3 corrosion with some section loss, some section loss is severe.</p> <p>Pier #1 moveable bearings- all 5 have cs3 corrosion. The anchor bolts under beams #1,2,3,4 in span #1 have heavy section loss.</p> <p>Pier #2 Moveable bearings- All 5 have cs3 corrosion with heavy section loss on the anchor bolts.</p> <p>Pier #3 moveable bearings- (all 10 are moveable)- the left anchor bolt nuts are corroded away at bearings #1,3,4,5.</p> <p>Pier #4 moveable bearings- all 5 have cs3 corrosion. All 5 bearings are tilted toward span #4. Pack rust under the rocker of bearing #3 has lifted the bearing and is not fully in contact with the masonry plate.</p>							
313	Fixed Bearing	EA	25	0	0	25	0
1000	Corrosion	EA	25	0	0	25	0
<p>(313) All fixed bearings over piers #1,2,3 have corrosion with minor section loss and have been painted with lubra-seal rust inhibitor.</p>							



ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
<p>The anchor bolts and nuts at many locations have cs3 corrosion with section loss, some section loss is severe.</p> <p>Abutment #1 fixed bearings- All 5 have cs3 corrosion, bearings #1,2 have pack rust.</p> <p>Pier #1 fixed bearings- All 5 have cs3 corrosion with heavy section loss on the anchor bolts.</p> <p>Pier #2 fixed bearings- all 5 have cs3 corrosion with heavy section loss on the anchor bolts.</p> <p>(no fixed bearings at pier #3)</p> <p>Pier #4 bearings- all 5 have cs3 corrosion.</p> <p>Abutment #2 fixed bearings- all 5 have cs3 corrosion with pack rust due to debris accumulation on the bridge seat. Bearings #1,4,5 are the worst condition.</p>							
330	Metal Bridge Railing	LF	624	0	624	0	0
1000	Corrosion	LF	624	0	624	0	0
515	Steel Protective Coating	SF	1872	1248	0	624	0
3440	Effectiveness (Steel Protective Coatings)	SF	624	0	0	624	0
<p>(330) Right side metal railing- The metal w-section has a light rust coating cs2 on the front and back along both sides of the structure with no section loss. The paint system is failing along the entire length of rail on both sides.</p> <p>Left side metal railing- The metal w-section has a light rust coating cs2 on the front and back along both sides of the structure with no section loss. The paint system is failing along the entire length of rail on both sides.</p> <p>Approach railing- The approach railing at the left beginning of the structure has vehicle damage. The ending approach railing has minor vehicle damage.</p> <p>Transition- is not gradually stiffened.</p>							

Inspection Photos and Notes



Elevation view.



Bridge plate.



Transition area.



Driving surface view.



Area of cs3 corrosion on the exterior beams beneath the drain areas. Typically 3' long with up to 1/4" deep section loss.



Undersurface view.



General view of the open bents.



Typical view of the bents with web wall.



Channel beneath the structure.



Upstream channel view.



Downstream channel view.



Approach view in direction of log mile.



Cover plate welding detail. This is an E detail.



The moveable bearings at pier #4 span #5 are all tilted toward span #4.



Typical bearing area.

Maintenance Needs

Date Reported: 02/27/2025

Priority: B - Pressing

Type of Work: Superstructure Repair

Status: Open

Component: Superstructure

Deficiency Description

Beam #5 at the beginning of span #3 has a 12" by 1.5" rust hole in the lower web.

Beam #2 and beam #4 have a 3/4" tall by 4" long rust hole in the upper web at the beginning of span #3.

Beam #5 at the end of span #2 has up to 7/16" section loss on the lower web for 5' at the end of the span.

Remarks



02/27/2025
3/4" tall by 4" long rust hole in the upper web of beam #2 at the beginning of span #3.



02/27/2025
3/4" tall by 4" long rust hole in the upper web of beam #4 at the beginning of span #3.



02/27/2025
12" by 1.5" tall rust hole in the lower web of the beginning of beam #5. 3' from the end of the beam.



02/27/2025
Up to 7/16" section loss on the lower web for 5' at the end of beam #5 span #2.

Maintenance Needs

Date Reported: 04/05/2012

Priority: C - Important

Status: Assigned

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

Component:

Deficiency Description

The web has pitting with 3/16 deep section loss on beam #1 of span #2. Typical also of beams 1,2,3 at the beginning of span #2.

The lower portion of the web of beam #5 in span #2 has 5/16" deep section loss at the end the span for a length of 6'.

Beam #5 has 5/16" of section loss for 6' at the end of span #3.

(The original thickness of the web is 5/8").

The fascia beams have 3' areas of corrosion on the top and bottom flange beneath the drain holes along both sides of the structure.

Remarks



02/27/2019

5/16" deep section loss on the lower web of beam #5 at the end of span #2 for a length of 6'.



02/27/2019

Pitting with 3/16 deep section loss on beam #1 of span #2. Typical of beams 1,2,3 at the beginning of span #2. The original thickness of the web is 5/8".



Corrosion beneath drains along the left and right sides of structure.

Maintenance Needs

Date Reported: 02/06/2023

Priority: D- Routine

Type of Work: Superstructure Repair

Status: Monitor

Component: Superstructure

Deficiency Description

The bearings and anchor bolts have cs3 corrosion. Many of the anchor bolt studs have corrosion with loss of section.

Remarks

Bridge Crew



Anchor bolt section loss and bearing corrosion over pier #1.

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	No
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	Yes
A-63 - Missing/Incorrect Log Mile Signage	No
A-64 - Vegetation Removal Requested	No
A-65 - Clogged deck drains?	
A-66 - Approach minor pothole/leveling needed	

A-54 - Sealable Deck Cracks (No)

A-55 - Deck Washing Needed (No)

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



Asset #03627(Routine)

SH 14 Searcy over BIG CREEK

Location: 2.25 miles East of the jct of AR 27

Team Lead: Benjamin Smith Inspection Date: 02/27/2025

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

A-58 - Cap Cleaning/Flushing Needed (No)

A-59 - Joint Repair Needed (No)

A-60 - Full Girder Painting Needed (Yes)

Full beam painting is recommended after beam end repairs are made.

A-61 - Polymer Overlay Advised (No)

A-62 - Hydro and LMC Advised (Yes)

All spans have areas of delamination or spalling. Spans #2,3 have large areas of delamination and spalling with some discoloration noted on the undersurface.

A-63 - Missing/Incorrect Log Mile Signage (No)

A-64 - Vegetation Removal Requested (No)

A-65 - Clogged deck drains?



Asset #03627(Routine)

SH 14 Searcy over BIG CREEK

Location: 2.25 miles East of the jct of AR 27

Team Lead: Benjamin Smith Inspection Date: 02/27/2025

A-66 - Approach minor pothole/leveling needed



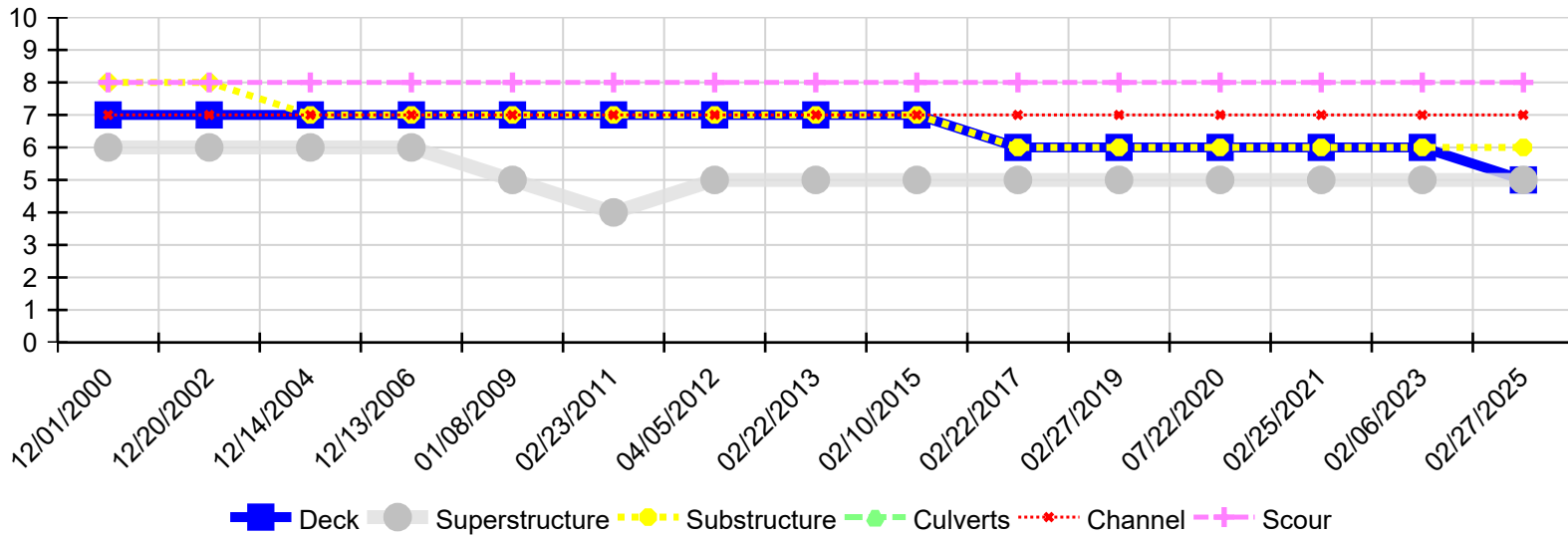
Asset #03627(Routine)

SH 14 Searcy over BIG CREEK

Location: 2.25 miles East of the jct of AR 27

Team Lead: Benjamin Smith Inspection Date: 02/27/2025

Condition History



Inspection Date	Deck	Superstructure	Substructure	Culverts	Channel	Scour
02/27/2025	5	5	6	N	7	8
02/06/2023	6	5	6	N	7	8
02/25/2021	6	5	6	N	7	8
07/22/2020	6	5	6	N	7	8
02/27/2019	6	5	6	N	7	8
02/22/2017	6	5	6	N	7	8
02/10/2015	7	5	7	N	7	8
02/22/2013	7	5	7	N	7	8
04/05/2012	7	5	7	N	7	8
02/23/2011	7	4	7	N	7	8
01/08/2009	7	5	7	N	7	8
12/13/2006	7	6	7	N	7	8
12/14/2004	7	6	7	N	7	8
12/20/2002	7	6	8	N	7	8
12/01/2000	7	6	8	N	7	8