



Latitude:36.11115, Longitude:-94.16407

Route:71 Section:17 Log:0.54

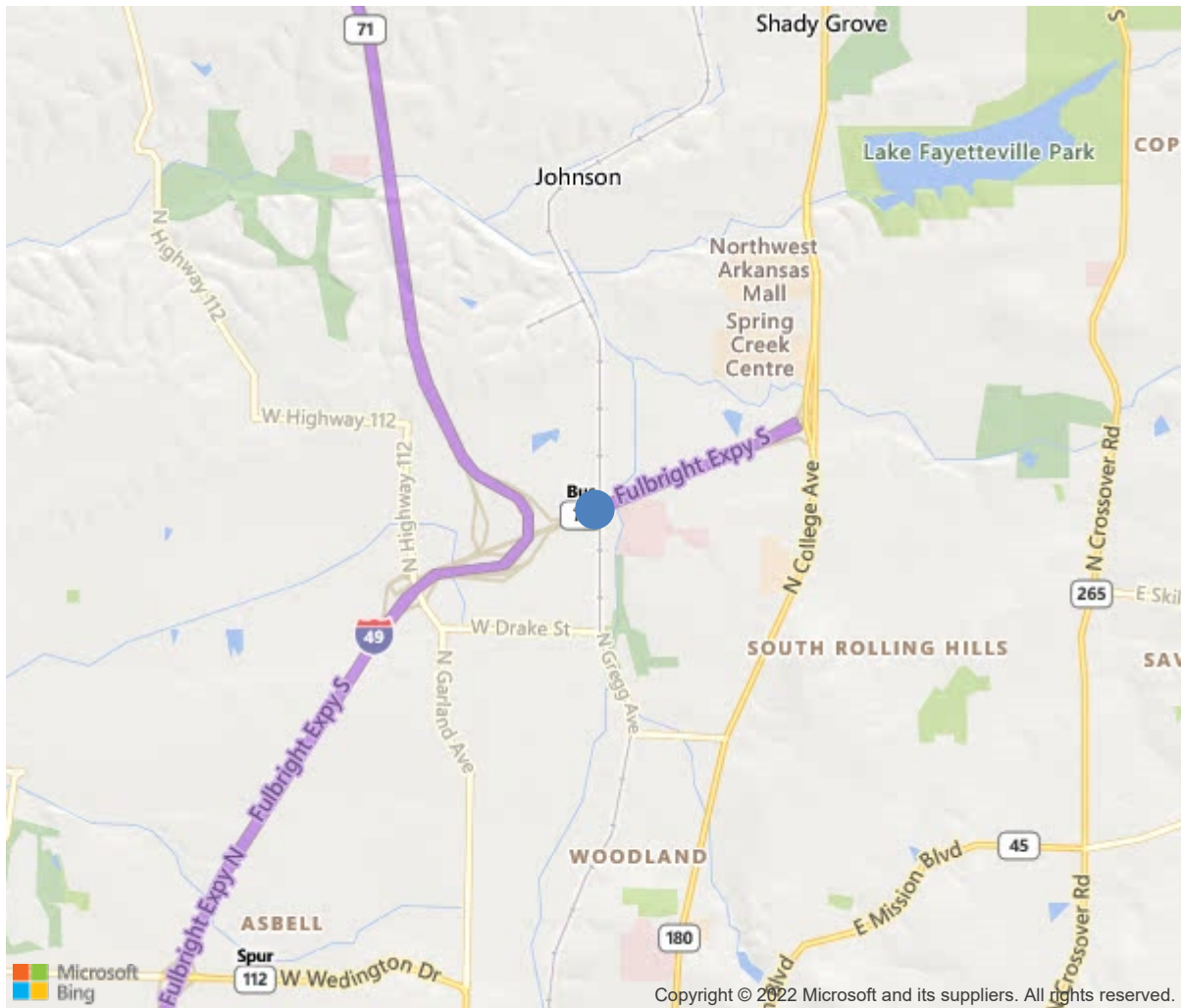
Arnold Road ID:72x71x17BxA, Arnold Log mile:0.811

District 04, Washington County

Owner: 1-State Highway Agency

Place Code: 23290 - Fayetteville

5.21 NO JCT US 62 & 71



36.11115, -94.16407

Inspection Direction : W to E



Bridge #B5802(Routine)
US 71-SEC 17B, NB over Gregg Ave., A&M RR.

Location: 5.21 NO JCT US 62 & 71

Team Lead: Lee Swan Inspection Date: December 01, 2021

IDENTIFICATION	
(1) State Names	Arkansas
(8) Structure Number	B5802
(5) Inventory Route	71
(2) Highway Agency District	04
(3) County Code	143-Washington County, Arkansas
(4) Place Code	23290
(6) Features Intersected	Gregg Ave., A&M RR.
(7) Facility Carried	US 71-SEC 17B, NB
(9) Location	5.21 NO JCT US 62 & 71
(11) Mile Point	0.54 mi
(12) Base Highway Network	Yes
(13) LRS Inventory Rte & Subrte	000007117B
(16) Latitude	36.11115
(17) Longitude	-94.16407
(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	4
(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 placed
Type of Membrane	0-None
Type of Deck Protection	0-None
AGE AND SERVICE	
(27) Year Built	1979
(106) Year Reconstructed	0
(42) Type of Service	14
On	1-Highway
Under	4-Highway-railroad
(28) Lane	
On	2
Under	5
(29) Average Daily Traffic	49000
(30) Year of ADT	2014
(109) Truck ADT	1 %
GEOMETRIC DATA	
(48) Length of Maximum Span	94 ft
(49) Structure Length	323 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)	40 ft
(33) Bridge Median	0-No median
(34) Skew	22 Deg
(35) Structure Flared	No flare
(10) Inventory Route Min Vert Clear	99.99 ft
(47) Inventory Route Total Horiz Clear	40.7 ft
(53) Min Vert Clear Over Bridge Rdwy	99.99 ft
(54) Min Vert Underclear	23.58 ft
Ref:	
(55) Min Lat Underclear RT	12.1 ft
Ref:	
(56) Min Lat Underclear LT	0 ft
NAVIGATION DATA	
(38) Navigation Control	N-Not applicable, no waterway.
(111) Pier Protection	1-Navigation protection not requ
(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	14-Urban Other Principal Arterial
(100) Defense Highway	0-The inventory route is not a S
(101) Parallel Structure	R-The right structure of paralle
(102) Direction of Traffic	1 - way traffic
(103) Temporary Structure	
(105) Federal Lands Highways	0-N/A
(110) Designated National Network	0-The inventory route is not part of
(20) Toll	3-On free road. The structure is toll-
(21) Maintain	1-State Highway Agency
(22) Owner	1-State Highway Agency
(37) Historical Significance	5-Bridge is not eligible for the NRHP
CONDITION	
(58) Deck	6
(59) Superstructure	6
(60) Substructure	7
(61) Channel & Channel Protection	N
(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	4
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	7
(68) Deck Geometry	7
(69) Clearances, Vertical/Horizontal	6
(71) Waterway Adequacy	N
(72) Approach Roadway Alignment	8
(36A) Bridge Railings	1-Inspected feature meets currently a
(36B) Transitions	1-Inspected feature meets currently a
(36C) Approach Guardrail	1-Inspected feature meets currently a
(36D) Approach Guardrail Ends	1-Inspected feature meets currently a
(113) Scour Critical Bridges	N-Bridge not over waterway.
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	29536
(115) Year of Future ADT	2028

INSPECTIONS *			
(90) Inspection Date			12/2021
(91) Frequency			24 Months
(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.			



Bridge #B5802(Routine)
US 71-SEC 17B, NB over Gregg Ave., A&M RR.

Location: 5.21 NO JCT US 62 & 71

Team Lead: Lee Swan, Inspection Date: December 01, 2021

ELEM	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
12	Reinforced Concrete Deck	SF	12420	6988	5229	203	0
1080	Delamination/Spall/Patched Area	SF	201	0	5	196	0
1090	Exposed Rebar	SF	7	0	0	7	0
1120	Efflorescence/Rust Staining	SF	56	0	56	0	0
1130	Cracking (RC and Other)	SF	3876	0	3876	0	0
1190	Abrasion/Wear (PSC/RC)	SF	1292	0	1292	0	0
(12)							
Numerous spalls with exposed reinforcing steel are visible from the driving surface of the deck. There are sealable transverse, diagonal, and map cracks visible from the driving surface of the deck. The metal SIP forms have areas with active corrosion. Light tire wear in the wheel paths. Transverse cracks with light efflorescence and staining on the overhangs of the deck. 12-03-2019 - Maintenance forces have placed asphalt on the spalls as type of repair. 12-01-2021 - Many of the asphalt patches are failing.							
107	Steel Open Girder/Beam	LF	1938	1882	56	0	0
1000	Corrosion	LF	56	0	56	0	0
515	Steel Protective Coating	SF	19010	17562	1252	0	196
3440	Effectiveness (Steel Protective Coatings)	SF	196	0	0	0	196
3410	Chalking (Steel Protective Coatings)	SF	1252	0	1252	0	0
(107)							
Active corrosion on beam ends flanges and webs due to compression seal failure and build up of dirt and debris falling through joint. Superstructure has areas with freckled rust. 12-03-2019 - Girder ends now have flaking rust beginning to form.							
(107-515)							
The paint system has failed on the girder ends where the girders are corroded. Outside girders are chalking.							
205	Reinforced Concrete Column	EA	6	5	1	0	0
1130	Cracking (RC and Other)	EA	1	0	1	0	0
(205)							
Bent 4 column 1, small cracks at the ground line.							
215	Reinforced Concrete Abutment	LF	97	49	48	0	0
1080	Delamination/Spall/Patched Area	LF	23	0	23	0	0
1090	Exposed Rebar	LF	1	0	1	0	0
1130	Cracking (RC and Other)	LF	14	0	14	0	0
1190	Abrasion/Wear (PSC/RC)	LF	10	0	10	0	0

Location: 5.21 NO JCT US 62 & 71

Team Lead: Lee Swan, **Inspection Date:** December 01, 2021

ELEM	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
(215)							
Bent 1, top of back wall has a repaired area approx. 20' long in the Rt lane. Bent 5 has hairline map cracking adjacent to the exterior beams. Bent 5 has scaling and cracking on the face of the abutment cap.							
234	Reinforced Concrete Pier Cap	LF	130	121	9	0	0
1130	Cracking (RC and Other)	LF	9	0	9	0	0
(234)							
Bents 2, 3 & 4 have vertical hairline cracks on both Lt and Rt side adjacent to columns.							
302	Compression Joint Seal	LF	90	0	0	21	69
2310	Leakage	LF	69	0	0	0	69
2320	Seal Adhesion	LF	11	0	0	11	0
2350	Debris Impaction	LF	10	0	0	10	0
(302)							
Compression joint seal at Bent 1 has fallen out and allowing free flow of water and debris. Compression seal at Bent 5 has partially fallen out with debris impaction. There is a 2' section of steel road iron that has been removed in the Bent 5 Rt lane. Additionally bent # 5 has an area of impact damage from a snow plow that has bent the road iron out of plane.							
310	Elastomeric Bearing	EA	30	0	30	0	0
1000	Corrosion	EA	30	0	30	0	0
515	Steel Protective Coating	SF	30	18	0	6	6
3440	Effectiveness (Steel Protective Coatings)	SF	12	0	0	6	6
(310)							
Elastomeric bearing pads at the abutments have minor rust on the sole plates where the deck joints leak water and debris on the bearings.							
321	Reinforced Concrete Approach Slab	SF	1776	1628	82	66	0
1080	Delamination/Spall/Patched Area	SF	4	0	4	0	0
1130	Cracking (RC and Other)	SF	144	0	78	66	0
(321)							
The approach slabs have large transverse cracks.							
331	Reinforced Concrete Bridge Railing	LF	646	492	154	0	0
1080	Delamination/Spall/Patched Area	LF	4	0	4	0	0
1090	Exposed Rebar	LF	12	0	12	0	0
1130	Cracking (RC and Other)	LF	138	0	138	0	0
(331)							
The right parapet has map cracking typical with small areas of shallow spalling with exposed reinforcing steel at the base of the							

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ELEM	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
	parapet wall.						



Span 3, spalls and failing patches.



Inventory



West approach slab, large transverse cracks.



Bent 1 joint has fallen out.



Span 2, spalls and failing patches.



Span 3, spall and abrasion.



Span 3, spall with exposed rebar



Span 4, large areas of failing patches and spall.



Span 4, transverse cracks and spalls/patches.



Bent 5 girder and bearing 5



Abrasion and cracks in bent 5.



Bent 5 girder 4, corrosion



Large crack and delaminating concrete in the beam seat between girders 3 and 4.



Bent 5 bearing 2, flaking rust,



Bent 5 behind girder 1, rebar and crack in back wall.



Bent 5, joint laying on cap.



Bent 1 girder 3, corrosion on the bottom flange.



Bent 1, crack in the beam seat.



Bent 1 girder 4, corrosion bottom flange.



Bent 1 girder 5 and bearing 5.



Span 2 bay 5, also span 1 bay 4, span 4 bay 1.



Typical soffit



Elevation

Maintenance Needs

Date Reported: 12/14/2011
Priority: C - Important
Type of Work: Repair
Status: Open
Component: 302 - Compression Joint Seal

Deficiency Description

Expansion Joint Seals

12-01-2021- Changed priority to "C"

12-03-2019 - maintenance items still exist no apparent noteworthy change since last inspection.

The expansion joint seals have failed and are allowing water to leak on the abutments.

Remarks



Both bent 1 (West Abutment) and bent 5 (East Abutment) compression joints are missing and are leaking water, plus dumping road debris on top of the bridge seat and the girder ends causing the active corrosion.



Bent # 5 joint seal.



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Thanks for your patience.

Bent # 1 joint seal missing.



Bent # 1 joint seal missing.



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Bent # 5 joint seal.



Bent 1 joint has fallen out.



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Location: 5.21 NO JCT US 62 & 71

Team Lead: Lee Swan Inspection Date: December 01, 2021

Date Reported: 12/14/2011
Priority: B - Pressing; 6 month completion goal
Type of Work: Repair
Status: Assigned
Component: Deck

Deficiency Description

Deck

12-03-2019 - maintenance items still exist no apparent noteworthy change since last inspection. Maintenance forces has place asphalt in the spalls as a type of repair.

There are numerous spalls with exposed reinforcing steel that are visible on the driving surface of the deck.

Remarks



Image is not transferred
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Thanks for your patience.



Typical spalling with exposed reinforcing steel in spans 3 and 4 (Span 3 being the worst case).

Spans 3 and 4 spalling with exposed reinforcing steel.



Span 3 spalling with exposed reinforcing steel.



Span 4, several spalls and failing patches.



Span 3, spalls and failing patches.



Bridge #B5802(Routine)
US 71-SEC 17B, NB over Gregg Ave., A&M RR.

Location: 5.21 NO JCT US 62 & 71

Team Lead: Lee Swan Inspection Date: December 01, 2021

Date Reported: 11/07/2013
Priority: D- Routine
Type of Work: Repair
Status: Assigned
Component: Deck

Deficiency Description

Deck

12-03-2019 - maintenance items still exist no apparent noteworthy change since last inspection.

There are sealable transverse, diagonal, and map cracks visible on the driving surface of the deck. The metal SIP forms have areas with active corrosion that is visible from the undersurface of the deck..

Remarks



Image is not transferred
to inspectX yet.

Thanks for your patience.

The metal SIP forms have areas with active corrosion at Span 2, Bay 5.



There are sealable transverse, diagonal, and map cracks visible from the driving surface of the deck.



Typical seal-able deck cracking throughout the structure.



The metal SIP forms have areas with active corrosion at Span 2, Bay 5.



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West approach slab, large transverse cracks.



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Inspection Comments

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