



Latitude:36.11145, Longitude:-94.16408

Route:71 Section:17 Log:0.54

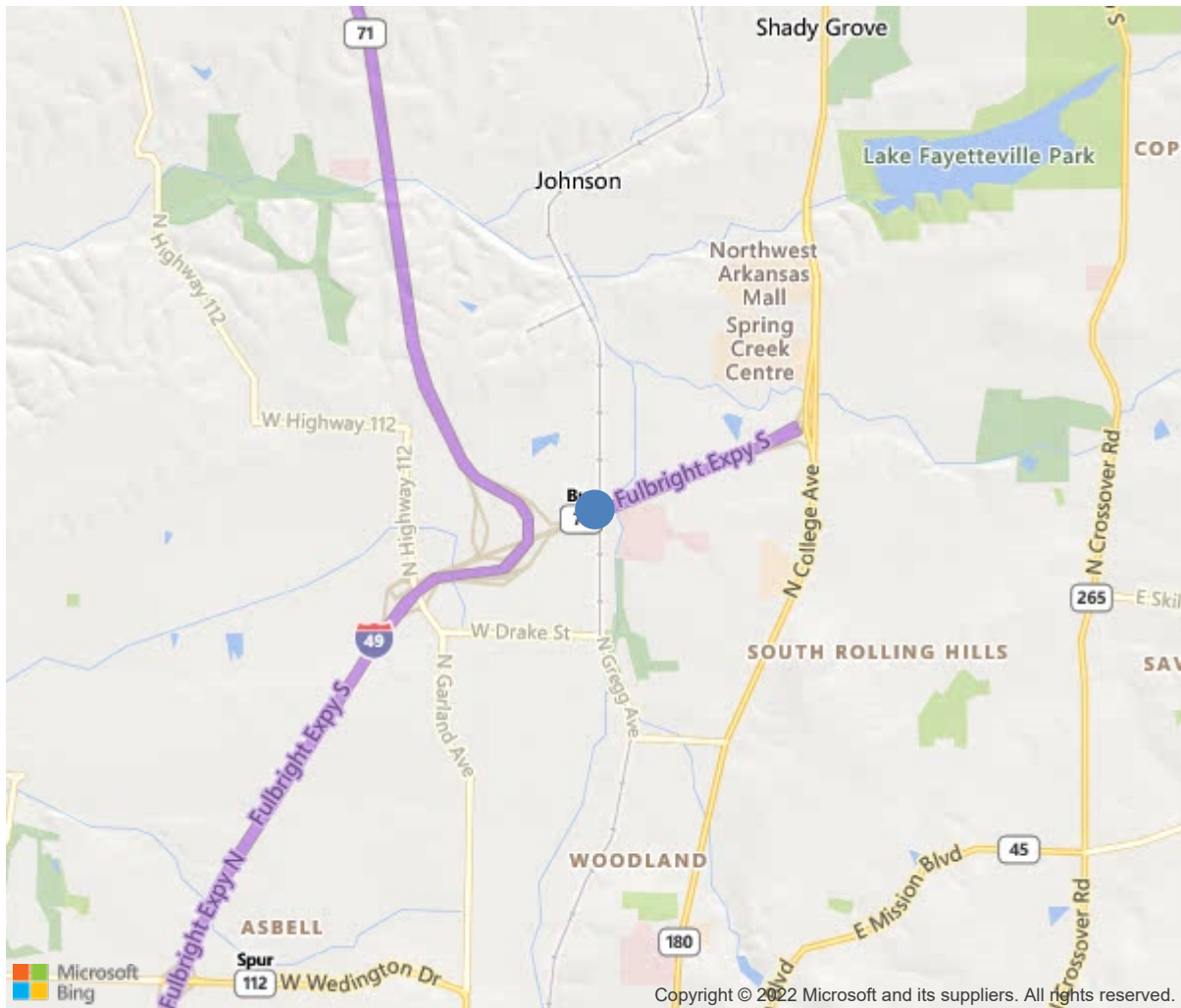
Arnold Road ID:72x71x17BxB, Arnold Log mile:7.233

District 04, Washington County

Owner: 1-State Highway Agency

Place Code: 23290 - Fayetteville

5.21 NO JCT US 62 & 71



36.11145, -94.16408

Inspection Direction : W to E



Bridge #A5802(Routine)

US 71-SEC 17B, SB 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	A5802
(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, SB
(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	36.11145
(17) Longitude	-94.16408
(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	3
Under	5
(29) Average Daily Traffic	13000
(30) Year of ADT	2018
(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	47.9 ft
(52) Deck Width Out to Out	50.8 ft
(32) Approach Roadway Width (W/Shoulders)	47.9 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	48.9 ft
(53) Min Vert Clear Over Bridge Rdwy	99.99 ft
(54) Min Vert Underclear	23.67 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	12-Urban Principal Arterial - Oth
(100) Defense Highway	0-The inventory route is not a S
(101) Parallel Structure	L-The left structure of parallel
(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	5
(59) Superstructure	6
(60) Substructure	8
(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	5
(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 #A5802(Routine)

US 71-SEC 17B, SB 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	16357	4475	11373	187	322
1080	Delamination/Spall/Patched Area	SF	822	0	332	168	322
1090	Exposed Rebar	SF	19	0	0	19	0
1120	Efflorescence/Rust Staining	SF	80	0	80	0	0
1130	Cracking (RC and Other)	SF	10961	0	10961	0	0
(12)	<p>The driving surface has transverse and longitudinal cracking at various spacing throughout the driving surface. The overhangs of the structure has transverse cracking with efflorescence leaching through. Throughout the driving surface there are numerous failed asphalt patch repaired areas along with exposed reinforcing steel (Span 3 being the worst case) Along each of the wheel paths there is light tire wear with some minor scaling that is exposing the coarse aggregates.</p> <p>The Rt half of Span 3 has numerous shallow basketball size spalls with exposed reinforcing steel on the driving surface of the deck. Sealable transverse and longitudinal deck cracking typical. Light tire wear in the wheel paths. Spalling is beginning to develop in Span # 4 at this inspection.</p>						
107	Steel Open Girder/Beam	LF	2261	2219	0	42	0
1000	Corrosion	LF	42	0	0	42	0
515	Steel Protective Coating	SF	22179	21626	511	42	0
3440	Effectiveness (Steel Protective Coatings)	SF	553	0	511	42	0
(107)	<p>At Bent 1 (West Abutment) and Bent 5 (East Abutment) there is active corrosion along the bottom web juncture and the bottom flanges with flaking rust and pitting due to the compression joint missing and causing water and road debris to accumulate on top of the bridge seat and bottom flanges.</p>						
205	Reinforced Concrete Column	EA	9	6	3	0	0
1130	Cracking (RC and Other)	EA	3	0	3	0	0
(205)	<p>Bent 2 column 3 and bent 4 columns 1 and 2 have vertical cracks.</p>						
215	Reinforced Concrete Abutment	LF	110	100	7	0	3
1130	Cracking (RC and Other)	LF	10	0	7	0	3
(215)	<p>Both abutments have hairline vertical cracks along the back-walls and the face of both bridge seats. Dirt and gravel have accumulated along both of the bridge seats due to the compression joints missing allowing road debris to dump on to the abutments.</p>						
234	Reinforced Concrete Pier Cap	LF	155	148	7	0	0

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

ELEM	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
1080	Delamination/Spall/Patched Area	LF	1	0	1	0	0
1130	Cracking (RC and Other)	LF	6	0	6	0	0
(234)							
Small delam ahead side of bent 4 on the left end. Cracks bents 2 and 3 Vertical cracks in the cap over Columns 1 & 3 at Bent # 4.							
302	Compression Joint Seal	LF	102	0	0	0	102
2310	Leakage	LF	102	0	0	0	102
(302)							
Both joint seals are missing.							
310	Elastomeric Bearing	EA	35	21	0	14	0
1000	Corrosion	EA	14	0	0	14	0
515	Steel Protective Coating	SF	35	21	0	7	7
3440	Effectiveness (Steel Protective Coatings)	SF	14	0	0	7	7
(310)							
Each of the bearings at both abutments (Bent 1 and 5) have active corrosion with flaking rust and pitting along the sole plates.							
321	Reinforced Concrete Approach Slab	SF	2520	1386	920	98	116
1130	Cracking (RC and Other)	SF	294	0	80	98	116
1190	Abrasion/Wear (PSC/RC)	SF	840	0	840	0	0
(321)							
The approach slabs have sealable transverse cracks.							
331	Reinforced Concrete Bridge Railing	LF	646	539	107	0	0
1080	Delamination/Spall/Patched Area	LF	20	0	20	0	0
1090	Exposed Rebar	LF	37	0	37	0	0
1130	Cracking (RC and Other)	LF	50	0	50	0	0
(331)							
Parapet walls on the Rt side of The structure have shallow spalls with exposed reinforcing steel. Exposed reinforcing steel has no apparent section loss with very little concrete cover from the construction process. The left parapet walls has a few shallow spells with exposed reinforcing steel and a few vertical cracks.							



Span 2, transverse cracks and patches.



Right bridge rail, small spalls in the top of the rail.



Span 3, several spalls and failing patches.



Span 3, spalls and failing patches.



Typical deck



Bent 1 girder 5, corrosion



Bent 1 girder 4, corrosion to the bottom flange.



Bent 1, joint seal has fallen out.



Span 1, transverse cracks.



Span 2, longitudinal cracks



Right bridge rail has exposed rebar.



Span 3, large spall with exposed rebar.



Span 3, several spalls and failing patches.



The joint seal at bent 5 has fallen out.



East approach slab, large transverse cracks.



Inventory



Girder 5 at bent 5



Typical soffit

Maintenance Needs

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

Deficiency Description

Expansion Joint Seals

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

The expansion joint seals at the north and south abutments have failed and are resting on the bridge seat below.

Remarks



Bent # 5 open expansion joint.



Image is not transferred
to inspectX yet.

Thanks for your patience.

Bent # 5 open expansion joint.



Bent # 1 open expansion joint.



Bent 1 (West Abutment) and Bent 5 (East Abutment) compression joints are both missing and are leaking water along with dumping road debris on top of the bridge set and causing the active corrosion to the girder ends and bearings.



Bent 1 debris on cap



Bent 1, joint seal has fallen out.



The joint seal at bent 5 has fallen out.



Bridge #A5802(Routine)
US 71-SEC 17B, SB 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: 12/14/2011
Priority: D- Routine
Type of Work: Repair
Status: Assigned
Component: 310 - Elastomeric Bearing

Deficiency Description

Bearings

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

The bearings have a failing paint system with areas of active corrosion.

Remarks



Image is not transferred
to inspectX yet.

Thanks for your patience.

Corrosion forming on the bearings.



Corrosion forming on the bearings.



Bent 1 (West Abutment) and Bent 5 (East Abutment) girders 1 - 7 have active corrosion with flaking rust and pitting.

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 the spalls as type of repair.

The Right half of Span's # 3 & 4 have numerous delaminated areas and spalls with exposed reinforcing steel on the driving surface.

Remarks



Span # 3 Right lane delamination's and spalling with exposed reinforcing steel.



Image is not transferred
to inspectX yet.

Thanks for your patience.

Span # 4 near centerline concrete delamination's and spalls with exposed reinforcing steel.



Span 3 has numerous failed asphalt patched areas along with exposed reinforcing steel that has initial section loss.



Span # 4 near centerline concrete delamination's and spalls with exposed reinforcing steel.



Span 3, several spalls and failing patches.



Span 3, several spalls and failing patches.

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.

The deck has sealable transverse and longitudinal cracks on the driving surface.

Remarks



Typical seal-able cracking throughout the driving surface.



Typical driving surface of the deck.



Image is not transferred
to inspectX yet.

Thanks for your patience.

Typical driving surface of the deck.



The deck has sealable Transverse and longitudinal
cracks on the driving surface of the deck.



Bridge #A5802(Routine)
US 71-SEC 17B, SB 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: 11/30/2017
Priority: G - General/ Preventive maintenance
Type of Work: Repair
Status: Monitor
Component: 107 - Steel Open Girder/Beam

Deficiency Description

Superstructure

12-03-2019 - maintenance items still exist flaking rust is now beginning to form.

The ends of the beams are developing active corrosion from joint seal leakage at the abutments.

Remarks



Image is not transferred
to inspectX yet.

Thanks for your patience.





Bent 1 (West Abutment) and Bent 5 (East Abutment) girders 1 - 7 have active corrosion with flaking rust and pitting.



Bent 1 girder 5, corrosion



Bent 1 girder 4, corrosion to the bottom flange.

Date Reported: 12/01/2021
Priority: D- Routine
Type of Work: Repair
Status: Open
Component: Approach

Deficiency Description

There is a pothole in the approach roadway on the East side of the bridge.

Remarks



Pothole in approach roadway, East side of bridge.



Pothole in approach roadway



Bridge #A5802(Routine)

US 71-SEC 17B, SB over Gregg Ave, A&M RR

Location: 5.21 NO JCT US 62 & 71

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

Inspection Comments

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