



Latitude:36.07827, Longitude:-94.20105

Route:16 Section:02 Log:13.35

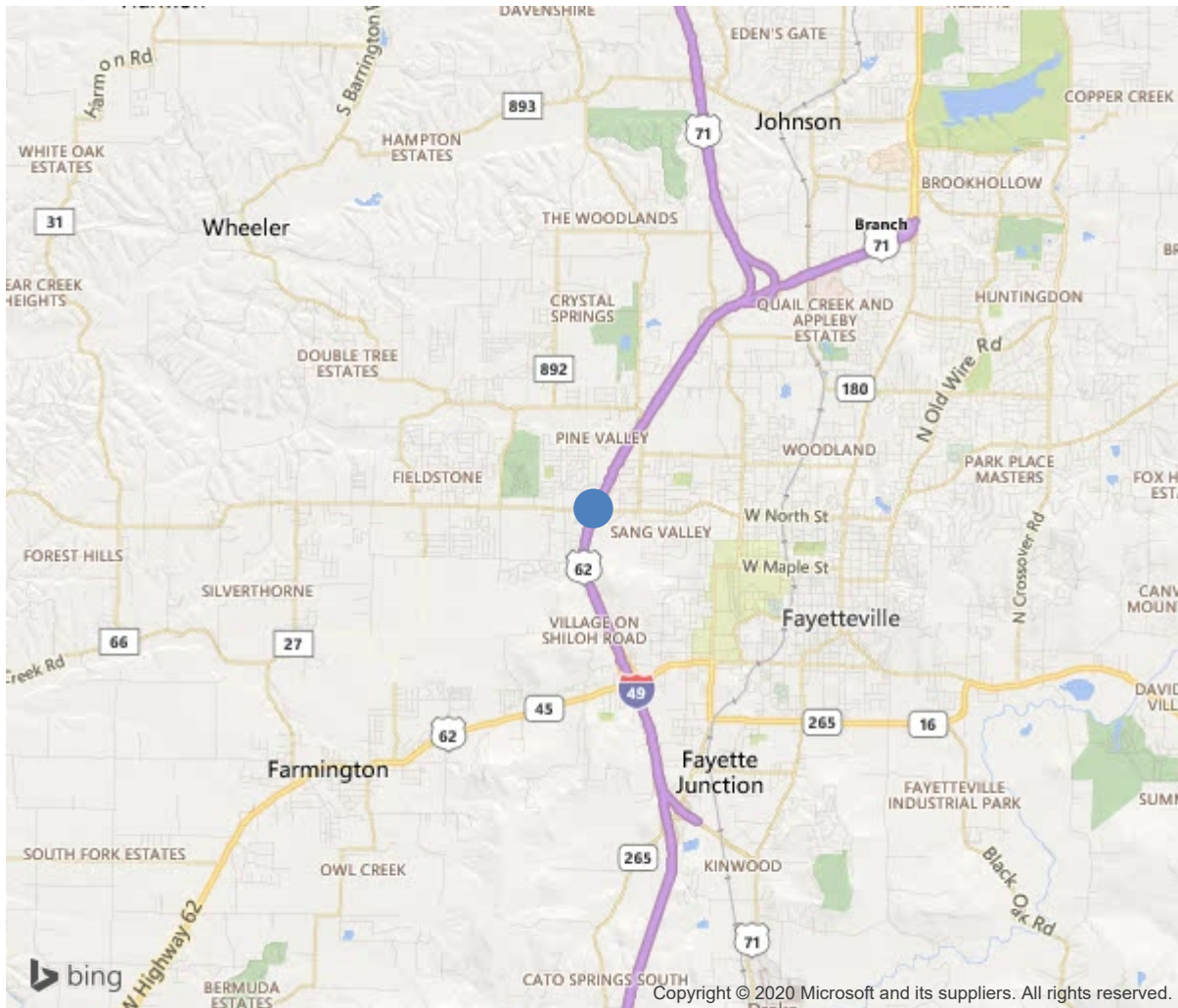
Arnold Road ID:72x16x2xA, Arnold Log mile:13.334

District 04, Washington County

Owner: 1-State Highway Agency

Place Code: 23000 - FAYETTEVILLE

JCT I-49 & SH 16 IN CITY



36.07827, -94.20105



Bridge #05628(Routine)

SH 16-Washington over I-49 MN LNS

Location: JCT I-49 & SH 16 IN CITY

Team Lead: Eric West Inspection Date: November 02, 2017

IDENTIFICATION	
(1) State Names	Arkansas
(8) Structure Number	05628
(5) Inventory Route	16
(2) Highway Agency District	04
(3) County Code	143-Washington County, Arkansas
(4) Place Code	23000
(6) Features Intersected	I-49 MN LNS
(7) Facility Carried	SH 16-Washington
(9) Location	JCT I-49 & SH 16 IN CITY
(11) Mile Point	13.35 mi
(12) Base Highway Network	Yes
(13) LRS Inventory Rte & Subrte	0000016040
(16) Latitude	36.07827
(17) Longitude	-94.20105
(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	1976
(106) Year Reconstructed	0
(42) Type of Service	11
On	1-Highway
Under	1-Highway, with or without pedestrian
(28) Lane	
On	2
Under	6
(29) Average Daily Traffic	34000
(30) Year of ADT	2014
(109) Truck ADT	1 %
GEOMETRIC DATA	
(48) Length of Maximum Span	81 ft
(49) Structure Length	262 ft
(50) Curb or Sidewalk Width	
Left	3 ft
Right	3 ft
(51) Bridge Roadway Width Curb to Curb	49.9 ft
(52) Deck Width Out to Out	58 ft
(32) Approach Roadway Width (W/Shoulders)	62 ft
(33) Bridge Median	0-No median
(34) Skew	30 Deg
(35) Structure Flared	No flare
(10) Inventory Route Min Vert Clear	99.99 ft
(47) Inventory Route Total Horiz Clear	56.1 ft
(53) Min Vert Clear Over Bridge Rdwy	99.99 ft
(54) Min Vert Underclear	16.5 ft
Ref:	
(55) Min Lat Underclear RT	30 ft
Ref:	
(56) Min Lat Underclear LT	6.2 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	0
(26) Functional Class	14-Urban Other Principal Arterial
(100) Defense Highway	0-The inventory route is not a S
(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 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	9
(69) Clearances, Vertical/Horizontal	6
(71) Waterway Adequacy	N
(72) Approach Roadway Alignment	8
(36) Traffic Safety Features	1111
A) Bridge Railings	1-Inspected feature meets currently a
B) Transitions	1-Inspected feature meets currently a
C) Approach Guardrail	1-Inspected feature meets currently a
D) 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	42194
(115) Year of Future ADT	2028
INSPECTIONS	
(90) Inspection Date	
(91) Frequency	24 Months
(92) Critical Feature Inspection	Done Freq. (Mon) Date
A: Fracture Critical Detail	No 24
B: Underwater Inspection	No 0
C: Other Special Inspection	No 0

Team Lead: Eric West, **Inspection Date:** November 02, 2017

ELEM	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
12	Reinforced Concrete Deck	SF	13000	362	11753	885	0
1080	Delamination/Spall/Patched Area	SF	34	0	0	34	0
1090	Exposed Rebar	SF	3	0	2	1	0
1120	Efflorescence/Rust Staining	SF	513	0	513	0	0
1130	Cracking (RC and Other)	SF	6848	0	5998	850	0
1190	Abrasion/Wear (PSC/RC)	SF	5240	0	5240	0	0
(12)							
The driving surface of the deck has sealable transverse cracks that range in spacing from 1' to 4' centers with numerous areas that have diagonal and map cracks. The driving surface of the deck has several delaminated areas and spalls with no exposed reinforcing steel at this inspection. The undersurface of the deck has cracks with light efflorescence. There are a few softball size delaminated areas and spalls with exposed reinforcing steel visible in the overhang of the deck soffit.							
107	Steel Open Girder/Beam	LF	1834	1834	0	0	0
515	Steel Protective Coating	SF	17370	17322	0	0	48
3440	Effectiveness (Steel Protective Coatings)	SF	48	0	0	0	48
(107)							
Span 3, Beam 1 has a longitudinal imperfection in the undersurface of the bottom flange located approx. 1" from the exterior edge for the entire length of beam. The ends of the beams over the abutments have areas of paint failure with small areas that have active corrosion.							
205	Reinforced Concrete Column	EA	9	9	0	0	0
(205)							
Substructure columns have no apparent noteworthy deficiencies at this inspection.							
215	Reinforced Concrete Abutment	LF	140	94	45	1	0
1080	Delamination/Spall/Patched Area	LF	18	0	18	0	0
1090	Exposed Rebar	LF	1	0	0	1	0
1130	Cracking (RC and Other)	LF	7	0	7	0	0
1190	Abrasion/Wear (PSC/RC)	LF	20	0	20	0	0
(215)							
Bent 5 has one 24" vertical spall with exposed reinforcing steel located in the backwall adjacent to Beam 7. Exposed reinforcing steel has active corrosion with initial section loss at this inspection. The driving surface on top of the back walls have a few isolated areas with light abrasion and a few isolated shallow baseball size spalls with no exposed reinforcing steel. Bent 1 backwall has 3 hairline vertical cracks.							
234	Reinforced Concrete Pier Cap	LF	194	193	1	0	0
1130	Cracking (RC and Other)	LF	1	0	1	0	0
(234)							

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ELEM	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
Substructure caps have no apparent noteworthy problems at this inspection.							
302	Compression Joint Seal	LF	116	27	47	0	42
2310	Leakage	LF	42	0	0	0	42
2320	Seal Adhesion	LF	47	0	47	0	0
(302)							
-The deck joint seal at Bent 1 has adhesion failure and portions of the joint seal have fallen out of place. -The expansion joint seal at Bent 5 has adhesion failure with minor settlement at this inspection. -The expansion joint anchorage visible from the undersurface of the exterior edges of the deck have active corrosion with flaking rust.							
311	Movable Bearing	EA	28	18	9	1	0
1000	Corrosion	EA	9	0	9	0	0
2240	Loss of Bearing Area	EA	1	0	0	1	0
515	Steel Protective Coating	SF	28	28	0	0	0
(311)							
-Bearings at the abutments have active corrosion with layers of rust between the masonry plates and the sole plates. 11/0/2017 - Painted at the east and west abutments with corrosion beginning to show through the new paint. -The bearings have minor debris accumulation where the missing portions of the deck joint seal leaks debris on the substructure cap and bearings. -The expansion bearing at Bent 5, Beam 5, the rocker makes contact with the Rt side of the masonry plate only. The Lt side has approx. 1/8" air space between the rocker and the masonry plate.							
313	Fixed Bearing	EA	7	7	0	0	0
515	Steel Protective Coating	SF	7	7	0	0	0
(313)							
The fixed bearings at Bent 3 have no apparent noteworthy deficiencies at this inspection.							
321	Reinforced Concrete Approach Slab	SF	3430	2727	703	0	0
1130	Cracking (RC and Other)	SF	143	0	143	0	0
1190	Abrasion/Wear (PSC/RC)	SF	560	0	560	0	0
(321)							
The West approach slab has several diagonal and transverse cracks at this inspection. There light abrasion in the wheel path on the West approach slab.							
330	Metal Bridge Railing	LF	524	524	0	0	0
(330)							
The metal bridge railing has no noteworthy problems at this inspection.							
331	Reinforced Concrete Bridge Railing	LF	524	509	15	0	0
1130	Cracking (RC and Other)	LF	15	0	15	0	0
(331)							
Parapets have a few random vertical cracks.							



Sealable deck cracking.



Paint pack rust on the exterior expansion joint assemblies.



Sealable deck cracking.



Span # 2 right overhang spalling with exposed reinforcing steel.



Typical driving surface of the deck.



Bent # 5 joint seal.



Northwest approach railing.



Bent # 1 beam # 5 active corrosion on the beam end.



Bent # 5 Beam # 1 active corrosion forming.



Bent # 5 right spalling with exposed reinforcing steel.



Bent # 1 failed joint seal.



Deteriorating saw joint sealant.



Southeast approach rail.



Typical undersurface of the deck.



Bent # 5 Beam # 5 bearing out of adjustment.



Bearings painted at the east abutment.



Dirt and gravel accumulation on the abutments.



Bent # 1 right pack rust.



Bent # 1 bearings painted.



Span # 2 cracking with efflorescence on the undersurface of the deck.



Bridge #05628(Routine)

SH 16-Washington over I-49 MN LNS

Location: JCT I-49 & SH 16 IN CITY

Team Lead: Eric West **Inspection Date:** November 02, 2017

Maintenance Needs



Bridge #05628(Routine)

SH 16-Washington over I-49 MN LNS

Location: JCT I-49 & SH 16 IN CITY

Team Lead: Eric West **Inspection Date:** November 02, 2017

Inspection Comments

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Deck Notes

Utilities: There is a 2" ridged steel conduit for an unknown utility attached to the Lt exterior side of the deck.