



Latitude:34.17435, Longitude:-93.07462

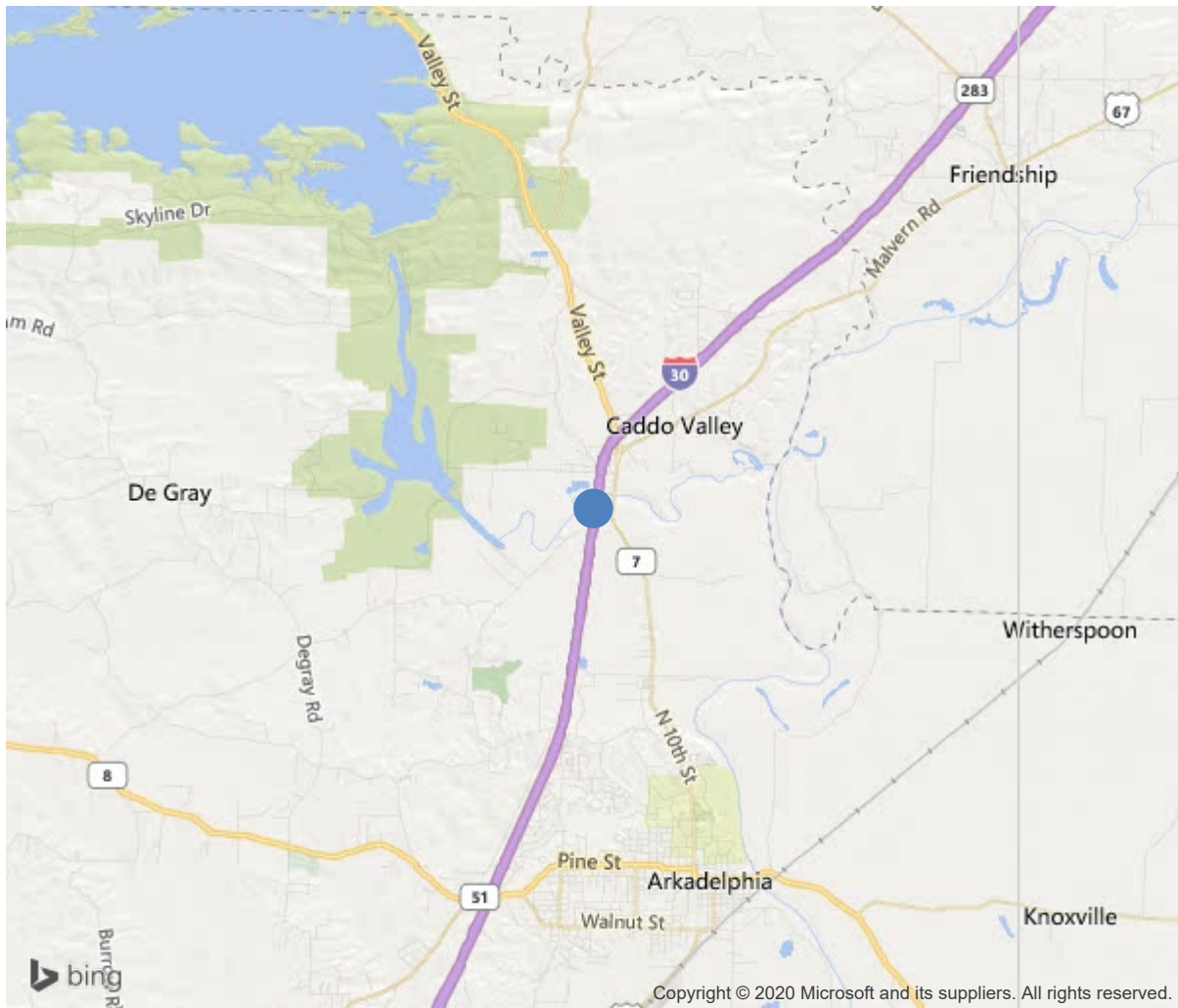
Route:30 Section:14 Log:76.81

Arnold Road ID:10x30x14xB, Arnold Log mile:66.151

District 07, Clark County

Owner: 1-State Highway Agency

.14 MI SW JCT SH 7



34.17435, -93.07462



Bridge #A3706(Routine)
I-30 S4 WB LM76.81 over CADDO RIVER

Location: .14 MI SW JCT SH 7

Team Lead: Rickie Bratton Inspection Date: July 29, 2019

IDENTIFICATION	
(1) State Names	Arkansas
(8) Structure Number	A3706
(5) Inventory Route	30
(2) Highway Agency District	07
(3) County Code	19-Clark County, Arkansas
(4) Place Code	0
(6) Features Intersected	CADDO RIVER
(7) Facility Carried	I-30 S4 WB LM76.81
(9) Location	.14 MI SW JCT SH 7
(11) Mile Point	76.81 mi
(12) Base Highway Network	Yes
(13) LRS Inventory Rte & Subrte	0000030140
(16) Latitude	34.17435
(17) Longitude	-93.07462
(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	20
(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	1965
(106) Year Reconstructed	1997
(42) Type of Service	15
On	1-Highway
Under	5-Waterway
(28) Lane	
On	2
Under	0
(29) Average Daily Traffic	16000
(30) Year of ADT	2018
(109) Truck ADT	50 %
(19) Bypass, Detour Length	1 mi
GEOMETRIC DATA	
(48) Length of Maximum Span	80 ft
(49) Structure Length	1142 ft
(50) Curb or Sidewalk Width	
Left	0 ft
Right	0 ft
(51) Bridge Roadway Width Curb to Curb	39.7 ft
(52) Deck Width Out to Out	42.7 ft
(32) Approach Roadway Width (W/Shoulders)	38.1 ft
(33) Bridge Median	0-No median
(34) Skew	0 Deg
(35) Structure Flared	No flare
(10) Inventory Route Min Vert Clear	99.99 ft
(47) Inventory Route Total Horiz Clear	41.3 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 water
(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	11-Urban Principal Arterial - Int		
(100) Defense Highway	1-The inventory route is on a In		
(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	1-The inventory route is part of the		
(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			7
(59) Superstructure			6
(60) Substructure			6
(61) Channel & Channel Protection			8
(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			20
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			6
(68) Deck Geometry			6
(69) Clearances, Vertical/Horizontal			N
(71) Waterway Adequacy			8
(72) Approach Roadway Alignment			7
(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	5-Bridge foundations determined to be		
PROPOSED IMPROVEMENTS			
(75) Type of Work	Replacement of bridge or other		
(76) Length of Structure Improvement	1150 ft		
(94) Bridge Improvement Cost	\$ 0		
(95) Roadway Improvement Cost	\$ 247		
(96) Total Project Cost	\$ 3184		
(97) Year of Improvement Cost Estimate	1996		
(114) Future ADT	16894		
(115) Year of Future ADT	2028		
INSPECTIONS			
(90) Inspection Date			201907
(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	

SUFFICIENCY RATING	94.7
STATUS (SD/FO/None)	Not Deficient



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Location: .14 MI SW JCT SH 7

Team Lead: Rickie Bratton, Inspection Date: July 29, 2019

ELEM	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
12	Reinforced Concrete Deck	SF	48929	34779	14148	2	0
1080	Delamination/Spall/Patched Area	SF	2	0	0	2	0
1130	Cracking (RC and Other)	SF	6684	0	6684	0	0
(12)							
All spans have longitudinal cracks and numerous transverse cracks. Spans 19 & 20 @ Bent 19 joint there are 2 small spalls, these spalls have been patched with cold mix.							
107	Steel Open Girder/Beam	LF	6840	6840	0	0	0
515	Steel Protective Coating	SF	50760	50755	5	0	0
(107)							
Weathering steel.							
210	Reinforced Concrete Pier Wall	LF	33	32	0	1	0
1080	Delamination/Spall/Patched Area	LF	1	0	0	1	0
(210)							
Pier 3, ahead side has about 20' of spall with exposed steel.							
227	Reinforced Concrete Pile	EA	152	149	2	1	0
1080	Delamination/Spall/Patched Area	EA	1	0	0	1	0
1130	Cracking (RC and Other)	EA	2	0	2	0	0
(227)							
Some minor spalls and minor cracks. 0731/2017 JPR -- Bent 17 Pile 6 ahead side has a small crack @ bottom of the cap. Bent 3 pile 4 has a small spall at the bottom of the cap, with exposed steel.							
234	Reinforced Concrete Pier Cap	LF	943	918	5	20	0
1080	Delamination/Spall/Patched Area	LF	10	0	0	10	0
(234)							
Pier #3 has several spalls and delamination to the face of the Pier cap on ahead side, there is also some exposed steel.							
300	Strip Seal Expansion Joint	LF	42	0	42	0	0
2310	Leakage	LF	42	0	42	0	0
(300)							
Leaking at all joints, allowing water and roadway salts onto caps and girder ends.							
302	Compression Joint Seal	LF	943	0	86	857	0
2310	Leakage	LF	86	0	86	0	0
(302)							
Leaking at all joints, allowing water and roadway salts onto caps and girder ends.							
311	Movable Bearing	EA	37	9	23	0	5
1000	Corrosion	EA	9	0	9	0	0



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ELEM	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
1020	Connection	EA	5	0	0	0	5
2220	Alignment	EA	4	0	4	0	0
(311)							
Pier 1 back, bearings have rocked							
Bent 18 sp 17, bearings 1 and 4, missing top bolt at bearing and beam connection.							
Bent 19 sp 18 bearings 3-5 missing top bolt at beam connection.							
313	Fixed Bearing	EA	37	28	9	0	0
1000	Corrosion	EA	9	0	9	0	0
321	Reinforced Concrete Approach Slab	SF	2957	2757	100	100	0
1130	Cracking (RC and Other)	SF	200	0	100	100	0
(321)							
Both ends have numerous cracks							
331	Reinforced Concrete Bridge Railing	LF	1142	892	250	0	0
1130	Cracking (RC and Other)	LF	100	0	100	0	0



Crack in overhang span 18



Approach slab cracks



Bent 16 pile 3



Span 18 bent 19 bearing 3, 4 and 5 missing top bolts on left side



Bent 5 joint seal tore



Bents 1-5 typical of all with vegetation



Deck overview



Span 1 deck cracks



Bent 15 pile 3



Left end of cap at bent 20, spall with exposed rebar.



Bent 4



Bent 2 joint



Bent 15 bearing 1 flaking rust



Crack pile 3 bent 14



Bent 20, beam 1, light flaking rust on bearings.



Approach



Bent 5 bottom of cap between piles 3 and 4



Missing bolt span 17 bent 18 bearing 4 also not pictured also bearing 1



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Team Lead: Rickie Bratton **Inspection Date:** July 29, 2019

Maintenance Needs



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Location: .14 MI SW JCT SH 7

Team Lead: Rickie Bratton **Inspection Date:** July 29, 2019

Inspection Comments

Logged west to east. Inspection was late due to my confusion over WB or EB structure. East bound structure was originally inspected as A3706. For the record this is the WEST BOUND STRUCTURE. Concrete deck, rusting steel superstructure, concrete substructure. Approach slabs are cracked, joints are allowing water and wet debris onto caps. Bent 5 cap has several cracks and delaminations. Hammer pile # 3 has a large spalled area with exposed steel with moderate section loss. spalls Bent 2 joint armor is loose and "clangs" when under traffic load. Heavy vegetation on east end with some encroaching over the right hand parapet.

Superstructure Notes

07/31/2017 JPR -- Span 21, girder 1 Lt. Outside @ bottom of web has (10' x 0.5' = 5 sq. ft.) of excess flaking to the protective coating.

Substructure Notes

Several spalls, delams, etc. Bent #'s 4-5 are the worst. 07/31/2017 JPR -- Pier 1 looking back @ rocker bearing are rocked ahead.