



Latitude:35.32013, Longitude:-94.28976

Route:22 Section:01 Log:8.89

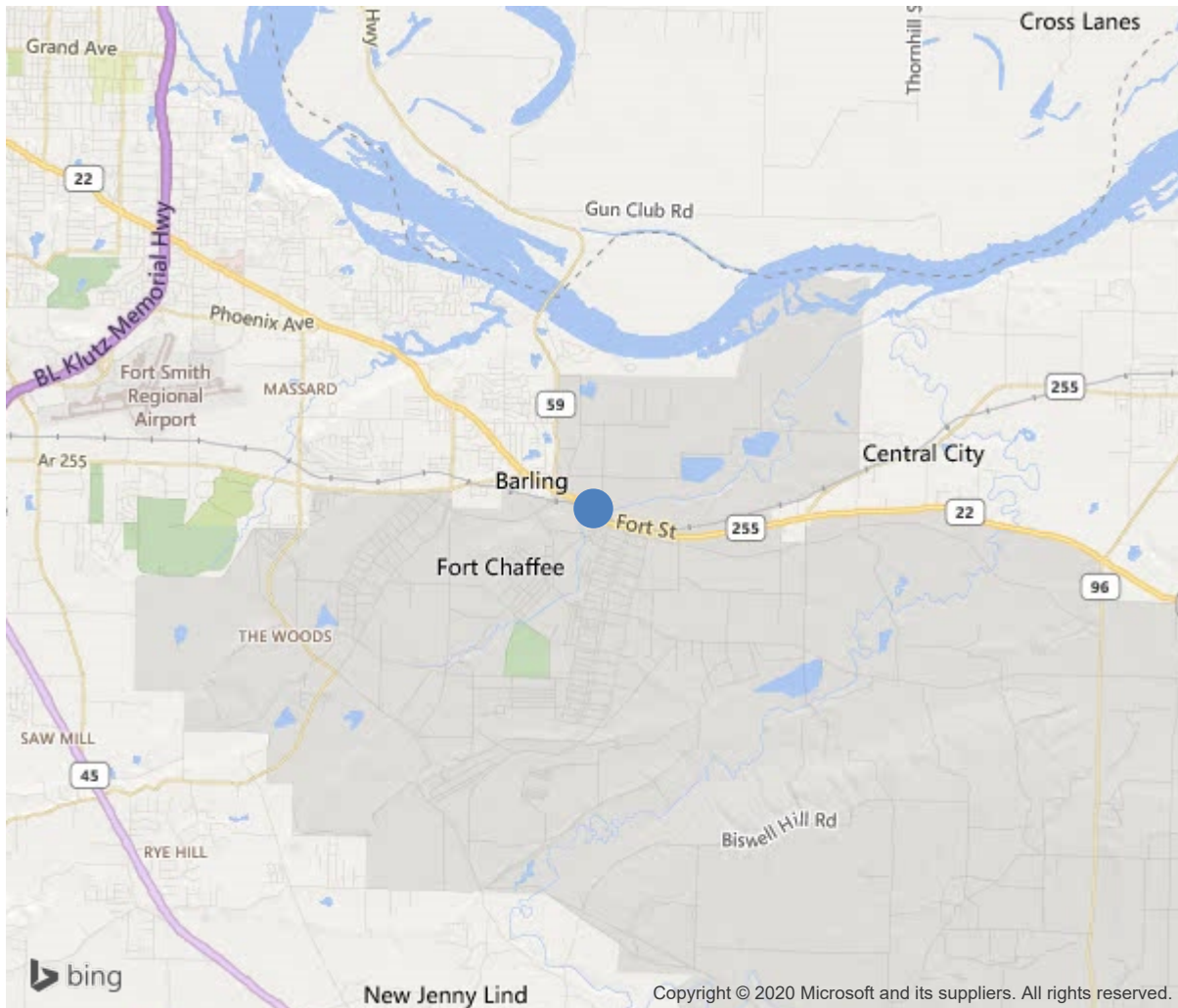
Arnold Road ID:65x22x1xA, Arnold Log mile:8.832

District 04, Sebastian County

Owner: 1-State Highway Agency

Place Code: 03360 - BARLING

NW EDGE OF FT. CHAFFEE



35.32013, -94.28976



Bridge #07048(Routine, Underwater type 2)

State Highway 22-1 over Little Vache Cr Seb. Co.

Location: NW EDGE OF FT. CHAFFEE

Team Lead: Eric West Inspection Date: April 02, 2020

IDENTIFICATION	
(1) State Names	Arkansas
(8) Structure Number	07048
(5) Inventory Route	22
(2) Highway Agency District	04
(3) County Code	131-Sebastian County, Arkansas
(4) Place Code	3360
(6) Features Intersected	Little Vache Cr Seb. Co.
(7) Facility Carried	State Highway 22-1
(9) Location	NW EDGE OF FT. CHAFFEE
(11) Mile Point	8.89 mi
(12) Base Highway Network	Yes
(13) LRS Inventory Rte & Subrte	0000022010
(16) Latitude	35.32013
(17) Longitude	-94.28976
(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	3
(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 (concur
Type of Membrane	0-None
Type of Deck Protection	1-Epoxy Coated Reinforcing
AGE AND SERVICE	
(27) Year Built	2008
(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	16000
(30) Year of ADT	2018
(109) Truck ADT	4 %
(19) Bypass, Detour Length	2 mi
GEOMETRIC DATA	
(48) Length of Maximum Span	37 ft
(49) Structure Length	111 ft
(50) Curb or Sidewalk Width	
Left	0 ft
Right	0 ft
(51) Bridge Roadway Width Curb to Curb	75.1 ft
(52) Deck Width Out to Out	78.2 ft
(32) Approach Roadway Width (W/Shoulders)	75.1 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	76.1 ft
(53) Min Vert Clear Over Bridge Rdwy	99.9 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			0
(26) Functional Class		16-Urban Minor 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	1-The inventory route is part of the na		
(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			7
(60) Substructure			8
(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			3
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			N
(71) Waterway Adequacy			8
(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		8-Bridge foundations determined to be	
PROPOSED IMPROVEMENTS			
(75) Type of Work			
(76) Length of Structure Improvement			ft
(94) Bridge Improvement Cost			\$
(95) Roadway Improvement Cost			\$
(96) Total Project Cost			\$
(97) Year of Improvement Cost Estimate			
(114) Future ADT			21086
(115) Year of Future ADT			2028
INSPECTIONS			
(90) Inspection Date			201805
(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	97.6
STATUS (SD/FO/None)	Not Deficient

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Team Lead: John Wilson, **Inspection Date:** April 02, 2020

ELEM	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
12	Reinforced Concrete Deck	SF	8168	7951	217	0	0
1120	Efflorescence/Rust Staining	SF	22	0	22	0	0
1130	Cracking (RC and Other)	SF	195	0	195	0	0
(12)							
-The gutters have hairline transverse cracks on spacing that ranges from 2' to 4'.							
-Span 2 has isolated areas with hairline map cracking and a full length longitudinal crack in the left inside lane near centerline.							
-Random transverse cracks in the overhangs with light efflorescence.							
107	Steel Open Girder/Beam	LF	1221	1209	12	0	0
1000	Corrosion	LF	12	0	12	0	0
515	Steel Protective Coating	SF	7427	7409	6	12	0
3440	Effectiveness (Steel Protective Coatings)	SF	18	0	6	12	0
(107)							
-Beam #1 at abutment #1 has corrosion with flaking rust to the bottom flange and base of web on the interior and exterior sides in an area approximately 12' long.							
205	Reinforced Concrete Column	EA	8	7	1	0	0
1080	Delamination/Spall/Patched Area	EA	1	0	1	0	0
(205)							
-There is one 6" shallow spall with no exposed reinforcing steel at the base of Column 1, Bent 3.							
215	Reinforced Concrete Abutment	LF	221	175	46	0	0
1080	Delamination/Spall/Patched Area	LF	9	0	9	0	0
1120	Efflorescence/Rust Staining	LF	3	0	3	0	0
1130	Cracking (RC and Other)	LF	34	0	34	0	0
(215)							
-Both abutments have transverse cracking on approximately 2' spacing visible in the top of backwalls. The cracking in locations is full height with efflorescence and is visible from the undersurface.							
-The stem wall of abutment #2 has a few shallow spalls on the right side that appear to be from impact damage during the construction process.							
234	Reinforced Concrete Pier Cap	LF	157	155	2	0	0
1080	Delamination/Spall/Patched Area	LF	2	0	2	0	0
(234)							
-Bent 2 has 2 shallow spalls with no exposed reinforcing steel in the Span 1 side of cap located between Columns 1 & 2.							
302	Compression Joint Seal	LF	181	178	3	0	0
2310	Leakage	LF	3	0	3	0	0
2350	Debris Impaction	LF	159	159	0	0	0
(302)							

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[illegible]



Southwest bridge end with approximately 7' of head cut scour.



Elevation



Roadway



Typical driving surface of the deck.



Deteriorating poured joint sealant.



Typical undersurface of the deck



Bent # 1 Beam # 1 exterior base of web and bottom flange with flaking rust



East abutment mention loss to the back wall.



Bent # 4 vertical cracks with efflorescence buildup.



Span # 3 Lt concrete spalling/ delamination.

Maintenance Needs

Date Reported: 04/19/2016
Priority: D- Routine
Type of Work: Repair
Status: Monitor
Component: Superstructure

Deficiency Description

Superstructure-

Span 1, Beam 1 has active corrosion with flaking rust to the bottom flange and base of web on the interior and exterior sides of beam adjacent to Bent 1.

Remarks



Span #1, beam #1-Corrosion with flaking rust on bottom flange and base of web at abutment #1.



Beam 1 at Bent 1.

Date Reported: 04/19/2016
Priority: G - General/ Preventive maintenance
Type of Work: Clean
Status: Monitor
Component: Substructure

Deficiency Description

Substructure-
Stains and debris on the abutment caps indicate that the deck joint seals leak in areas.

Remarks



General view of abutment #1 expansion joint.



Debris on bent 1 seat.



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Substructure Notes

04/02/2020 - EJW & JPW - Type 2 Underwater Inspection - Visual observation during low water conditions indicate that there is no apparent scour problems at this inspection.