



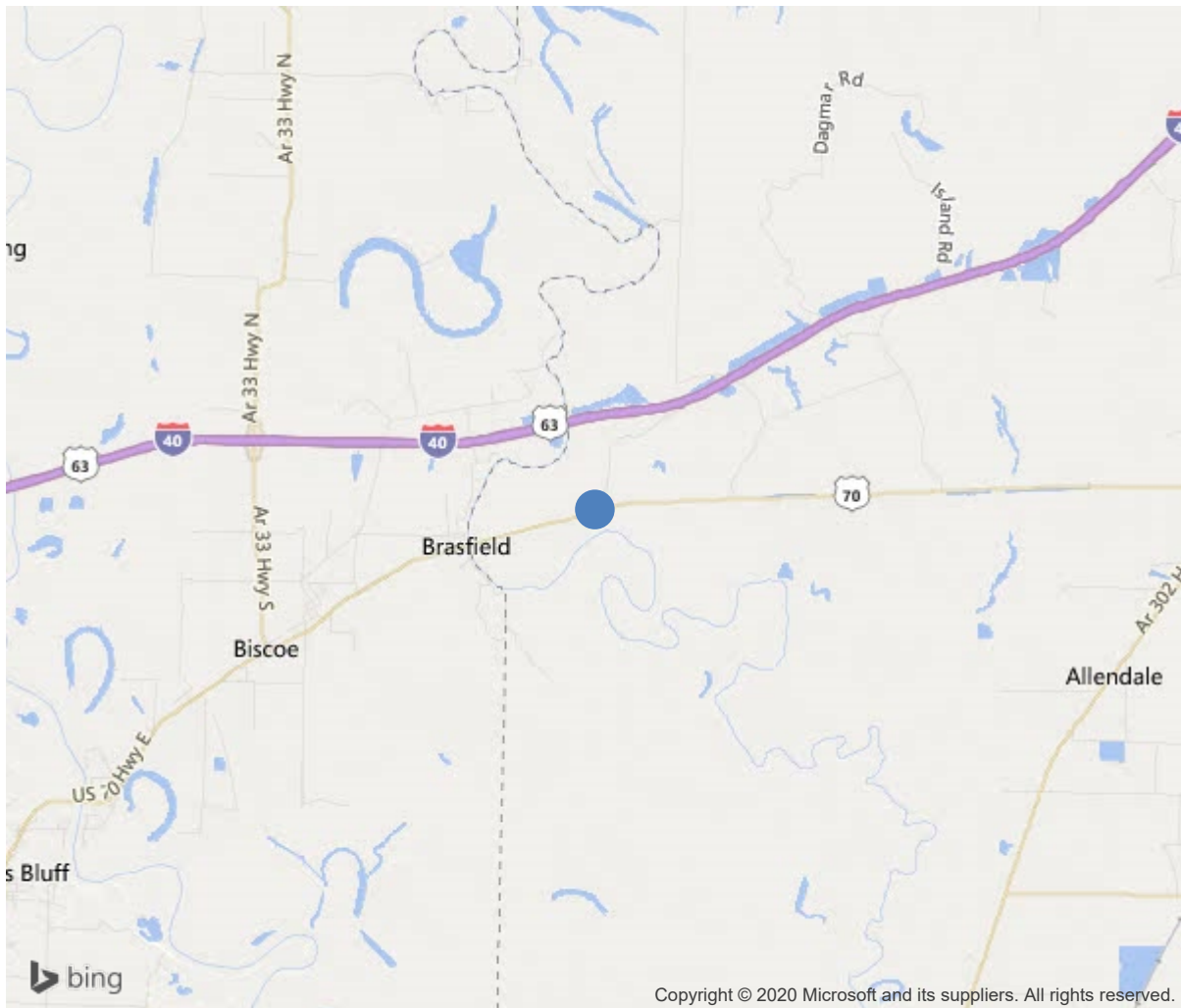
**Bridge #01104**(Routine)

**Us-70/Sec-17/L1.31 over Cache River Relief**

**Location: 1.31 Mi E Of Prairie Co**

**Team Lead:** Drew Melton **Inspection Date:** October 29, 2018

1.31 Mi E Of Prairie Co



34.83607, -91.35474



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**Team Lead: Drew Melton Inspection Date: October 29, 2018**

IDENTIFICATION	
(1) State Names	Arkansas
(8) Structure Number	01104
(5) Inventory Route	70
(2) Highway Agency District	01
(3) County Code	95-Monroe County, Arkansas
(4) Place Code	0
(6) Features Intersected	Cache River Relief
(7) Facility Carried	Us-70/Sec-17/L1.31
(9) Location	1.31 Mi E Of Prairie Co
(11) Mile Point	1.31 mi
(12) Base Highway Network	No
(13) LRS Inventory Rte & Subrte	0000000000
(16) Latitude	34.836071
(17) Longitude	-91.354736
(98) Border Bridge State Code	
(99) Border Bridge Structure No.	
STRUCTURE TYPE AND MATERIAL	
(43) Main Structure Type	14
Material	1-Concrete
Type	4-Tee beam
(44) Approach Structure Type	00
Material	0-Other
Type	0-Other
(45) No. of Spans in Main Unit	12
(46) No. of Approach Spans	0
(107) Deck Structure Type	1-Concrete Cast-in-Place
(108) Wearing Surface/Protective System	
Type of Wearing Surface	6-Bituminous
Type of Membrane	0-None
Type of Deck Protection	0-None
AGE AND SERVICE	
(27) Year Built	1930
(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	1100
(30) Year of ADT	2014
(109) Truck ADT	19 %
(19) Bypass, Detour Length	4 mi
GEOMETRIC DATA	
(48) Length of Maximum Span	34 ft
(49) Structure Length	409 ft
(50) Curb or Sidewalk Width	
Left	0.5 ft
Right	0.5 ft
(51) Bridge Roadway Width Curb to Curb	26.9 ft
(52) Deck Width Out to Out	30 ft
(32) Approach Roadway Width (W/Shoulders)	36.1 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	27.9 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	0
(26) Functional Class	7-Rural Major Collector
(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
(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	6
(62) Culverts	N
LOAD RATING AND POSTING	
(31) Design Load	2-M 13.5 / H 15
(63) Operating Rating Method	1
(64) Operating Rating	
Type	1-Load Factor(LF)
Rating	48
(65) Inventory Rating Method	1-Load Factor(LF)
(66) Inventory Rating	
Type	12
Rating	29
(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	4
(69) Clearances, Vertical/Horizontal	N
(71) Waterway Adequacy	8
(72) Approach Roadway Alignment	8
(36) Traffic Safety Features	0000
A) Bridge Railings	0-Inspected feature does not meet cur
B) Transitions	0-Inspected feature does not meet cur
C) Approach Guardrail	0-Inspected feature does not meet cur
D) Approach Guardrail Ends	0-Inspected feature does not meet cur
(113) Scour Critical Bridges	5-Bridge foundations determined to be
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	1167
(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

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ELEM	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
16	Reinforced Concrete Top Flange	SF	12270	12070	40	160	0
1090	Exposed Rebar	SF	10	0	0	10	0
1120	Efflorescence/Rust Staining	SF	190	0	40	150	0
510	Wearing Surfaces	SF	11043	9893	1150	0	0
3220	Crack (Wearing Surface)	SF	1150	0	1150	0	0
(16)							
Soffit has transverse cracks spaced six to eight inches from bents with light to moderate efflorescence and some light rust staining. Soffit overhangs are spalled around drains and joints. Span #12 bay #1 has a three foot area with spalling and delamination. Curbs have areas of detonation thirty four square feet total. Wearing surface has cracks in each span.							
110	Reinforced Concrete Open Girder/Beam	LF	2045	2042	0	3	0
1080	Delamination/Spall/Patched Area	LF	1	0	0	1	0
1090	Exposed Rebar	LF	2	0	0	2	0
(110)							
All girders have hairline vertical flexure cracks. Span #5 girder #5 at bent #5 spalled on end Span #7 bent #7 girder #1 has one foot spall on bottom at bent no rebar exposed. Span #7 bent #7 girder #5 left side at bent has one foot spall exposed rebar with 10% section loss.							
215	Reinforced Concrete Abutment	LF	72	0	72	0	0
6000	Scour	LF	72	0	72	0	0
(215)							
Abutment #1,2 cap is undermined four inches exposing all piles. Abutment back walls are cracked full length.							
227	Reinforced Concrete Pile	EA	55	45	8	2	0
1080	Delamination/Spall/Patched Area	EA	3	0	3	0	0
1090	Exposed Rebar	EA	1	0	0	1	0
1130	Cracking (RC and Other)	EA	6	0	5	1	0
(227)							
Bent #3 piles #3,5 are cracked at top. Bent #5 piles #1,2 are cracked and delaminated at top. Bent #6 pile #1 has a small delamination at top. Bent #7 pile #3 is delaminated at top. Bent #7 pile #5 is cracked at top. Bent #9 pile #1 has a one foot spall at top with exposed rebar. Bent #9 pile #3 is cracked at top. Bent #10 pile #4 is delaminated at top. Bent #11 pile #5 is cracked at top.							



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ELEM	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
234	Reinforced Concrete Pier Cap	LF	280	277	3	0	0
1080	Delamination/Spall/Patched Area	LF	3	0	3	0	0
(234)							
Bent #3 cap ahead face has a one foot delamination over pile #2.							
Bent #5 cap ahead face left side has a one foot delamination.							
Bent #9 cap has one foot delamination by pile #5.							
300	Strip Seal Expansion Joint	LF	135	0	0	135	0
2350	Debris Impaction	LF	135	0	0	135	0
(300)							
Joints have been overlaid limiting function.							
311	Movable Bearing	EA	25	25	0	0	0
331	Reinforced Concrete Bridge Railing	LF	818	816	2	0	0
7000	Damage	LF	2	0	2	0	0



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## **Maintenance Needs**



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### Inspection Comments

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