



Latitude:36.49323, Longitude:-94.47024

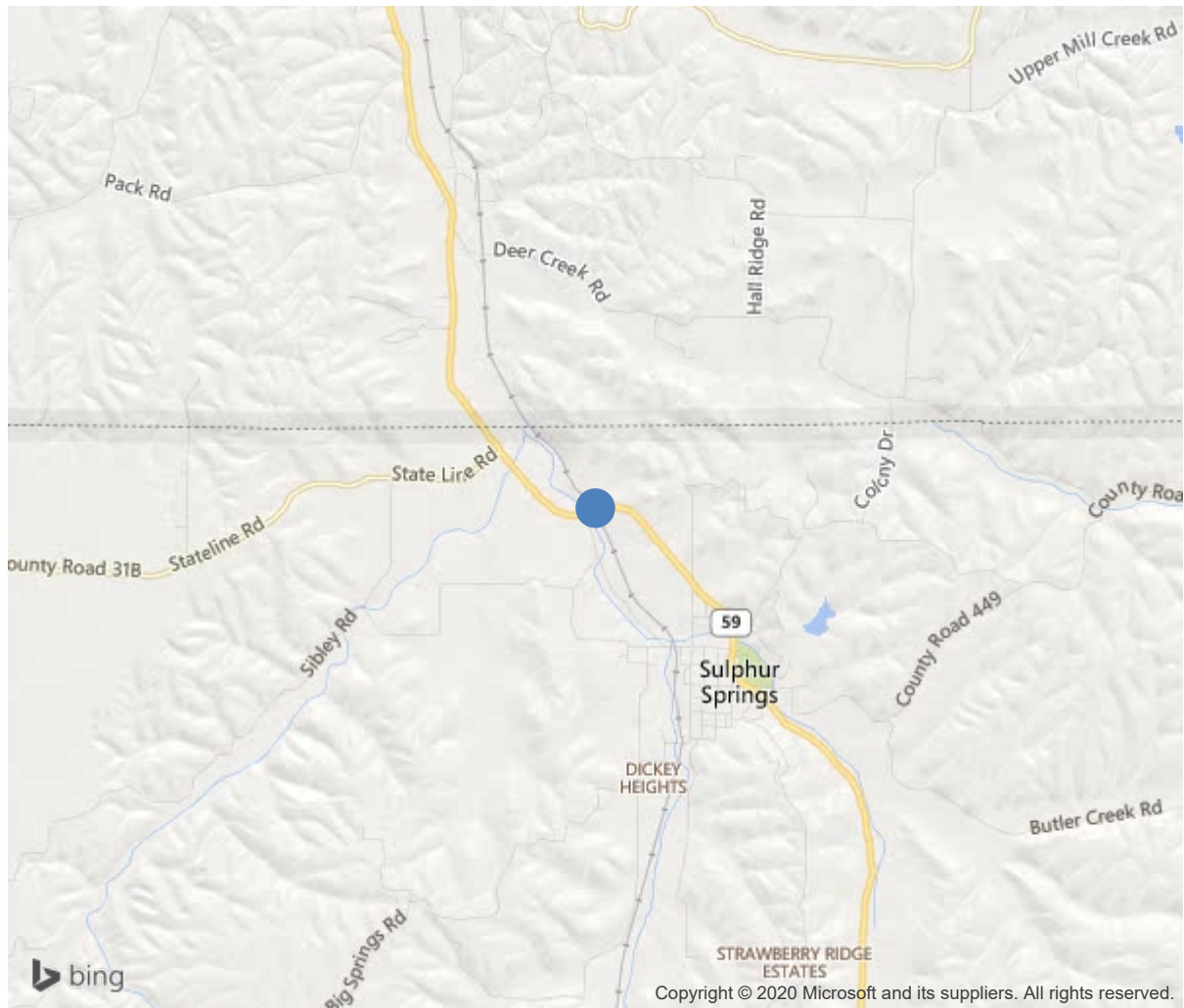
Route:59 Section:01 Log:0.7

Arnold Road ID:4x59x1xA, Arnold Log mile:0.753

District 09, Benton County

Owner: 1-State Highway Agency

5.9 MI N JCT SH 72 & 59



36.49323, -94.47024



Bridge #06996(Routine)
SH 59 Benton 2 over KCS RR and BUTLER CREEK

Location: 5.9 MI N JCT SH 72 & 59

Team Lead: Tommy Dohn Inspection Date: April 21, 2016

IDENTIFICATION	
(1) State Names	Arkansas
(8) Structure Number	06996
(5) Inventory Route	59
(2) Highway Agency District	09
(3) County Code	7-Benton County, Arkansas
(4) Place Code	0
(6) Features Intersected	KCS RR and BUTLER CREEK
(7) Facility Carried	SH 59 Benton 2
(9) Location	5.9 MI N JCT SH 72 & 59
(11) Mile Point	0.7 mi
(12) Base Highway Network	No
(13) LRS Inventory Rte & Subrte	0000000000
(16) Latitude	36.49323
(17) Longitude	-94.47024
(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	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 (concurrently placed
Type of Membrane	0-None
Type of Deck Protection	1-Epoxy Coated Reinforcing
AGE AND SERVICE	
(27) Year Built	2006
(106) Year Reconstructed	0
(42) Type of Service	17
On	1-Highway
Under	7-Railroad-waterway
(28) Lane	
On	2
Under	0
(29) Average Daily Traffic	3500
(30) Year of ADT	2018
(109) Truck ADT	15 %
(19) Bypass, Detour Length	5 mi
GEOMETRIC DATA	
(48) Length of Maximum Span	111 ft
(49) Structure Length	295 ft
(50) Curb or Sidewalk Width	
Left	0 ft
Right	0 ft
(51) Bridge Roadway Width Curb to Curb	40 ft
(52) Deck Width Out to Out	43.4 ft
(32) Approach Roadway Width (W/Shoulders)	40 ft
(33) Bridge Median	0-No median
(34) Skew	20 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	23.41 ft
Ref:	
(55) Min Lat Underclear RT	15.3 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	6-Rural 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	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	7
(59) Superstructure	7
(60) Substructure	8
(61) Channel & Channel Protection	8
(62) Culverts	N
LOAD RATING AND POSTING	
(31) Design Load	A-HL93
(63) Operating Rating Method	3
(64) Operating Rating	
Type	3-Load and Resistance Factor(LRFR)
Rating	40
(65) Inventory Rating Method	3-Load and Resistance Factor(LRF
(66) Inventory Rating	
Type	3
Rating	31
(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	6
(69) Clearances, Vertical/Horizontal	6
(71) Waterway Adequacy	9
(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	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	3385
(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	95.8
STATUS (SD/FO/None)	Not Deficient

ELEM	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
12 (12)	Reinforced Concrete Deck	SF	11760	11760	0	0	0
Random cracking throughout deck with some minor leakage. Size and spacing allows for CS1							
107 (107)	Steel Open Girder/Beam	LF	1475	1475	0	0	0
Weathering steel. Plate girder size is 44 3/4 tall x 14" flange width with 1 1/4" thickness.							
205	Reinforced Concrete Column	EA	6	6	0	0	0
215	Reinforced Concrete Abutment	LF	132	126	6	0	0
4000 (215)	Settlement	LF	6	0	6	0	0
6' wide x 7' back x 6" tall settlement at right corner of abutment #1 exposing 5" of steel pile beneath girder #5							
234	Reinforced Concrete Pier Cap	LF	90	90	0	0	0
302	Compression Joint Seal	LF	92	0	92	0	0
2350	Debris Impaction	LF	92	0	92	0	0
310	Elastomeric Bearing	EA	20	20	0	0	0
331 (331)	Reinforced Concrete Bridge Railing	LF	590	590	0	0	0
Vertical cracking at 6' average intervals along both sides of structure. Allows for CS1							



Approach view in direction of log mile.



Bridge #06996(Routine)

SH 59 Benton 2 over KCS RR and BUTLER CREEK

Location: 5.9 MI N JCT SH 72 & 59

Team Lead: Tommy Dohn **Inspection Date:** April 21, 2016

Maintenance Needs



Bridge #06996(Routine)

SH 59 Benton 2 over KCS RR and BUTLER CREEK

Location: 5.9 MI N JCT SH 72 & 59

Team Lead: Tommy Dohn Inspection Date: April 21, 2016

Inspection Comments

TAD/BDS. 4/21/16 Routine inspection only. Vertical cracking to concrete bridge rail, average spacing is 6'. Minor deck cracking all spans. Construction joints have loss of adhesion and leaking at various locations noticeable corrosion to SIP forms directly beneath joints. Expansion joints at abutment #1 and #2 have debris impaction and are beginning to leak onto abutment. Settlement at right corner goes back 7' under corner of abutment #1 exposing 5" of steel pile beneath girder #5, and causing approach roadway to be low.

Structure is in good condition, see channel soundings, inventory pictures & deficiency pictures dated 4/08/2014. Form IIIB dated 4/04/2012 is still valid. Approach driving surface @ Bent #1 is low, with potholes, see picture

Sufficiency Rating Calculation Accepted by tehe576 at 2013-02-06 08:45:16

See channel soundings, inventory photos and Form IIIB dated 04/05/2010.

Structure is in good condition, see Form IIIB & bridge pictures of deck cracking. Approach roadway driving surface at Bent # 1 had level up since last inspection.
