



Latitude:33.94647, Longitude:-93.44400

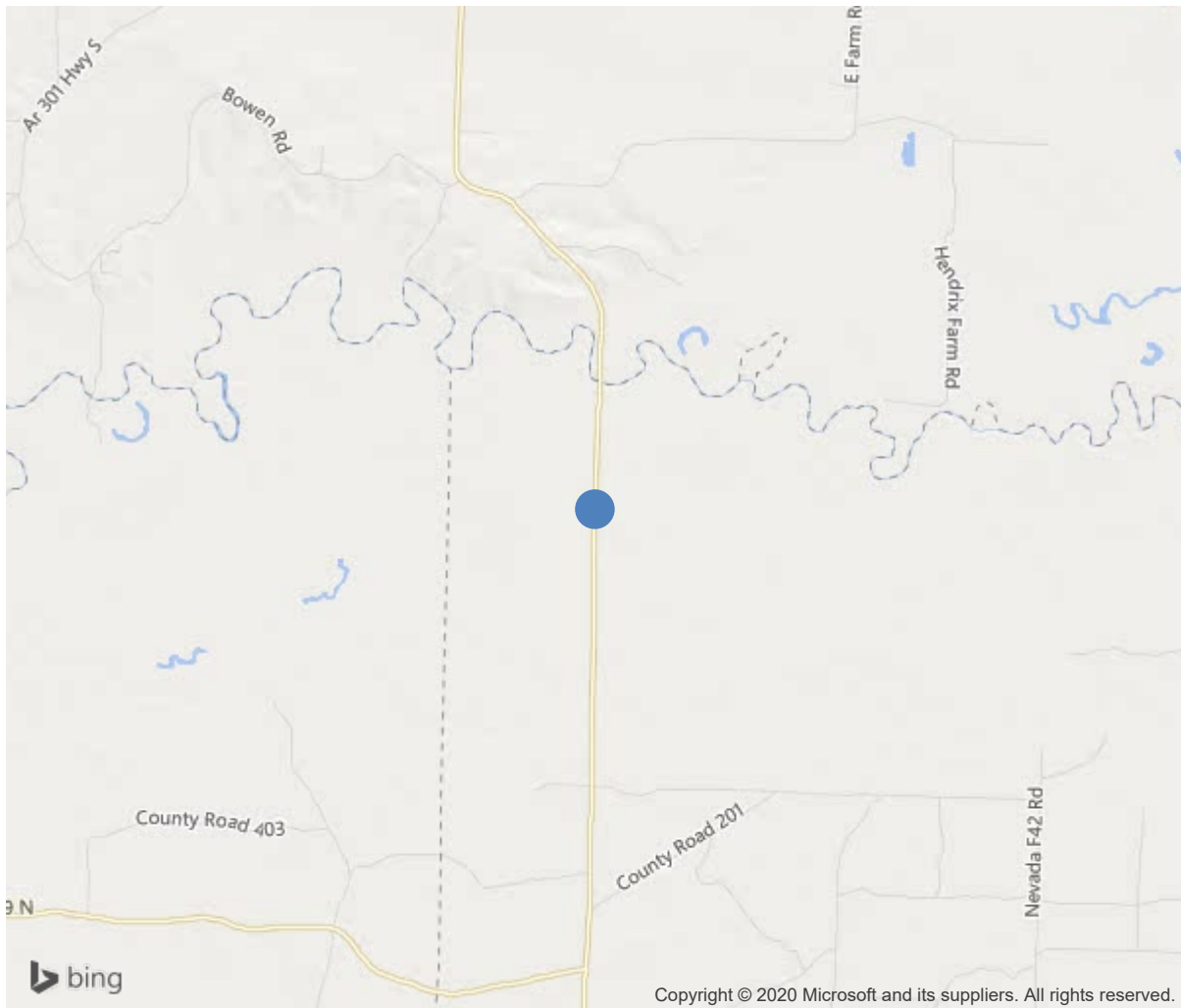
Route:19 Section:05 Log:10.86

Arnold Road ID:50x19x5xA, Arnold Log mile:10.864

District 03, Nevada County

Owner: 1-State Highway Agency

0.6 MS PIKE CO LINE



33.94647, -93.44400



Bridge #06347(Routine)

SH 19 - 05 -10.86 over LITTLE MISSOURI RV RLF

Location: 0.6 MS PIKE CO LINE

Team Lead: John King Inspection Date: October 14, 2019

| IDENTIFICATION | |
|---|----------------------------------|
| (1) State Names | Arkansas |
| (8) Structure Number | 06347 |
| (5) Inventory Route | 19 |
| (2) Highway Agency District | 03 |
| (3) County Code | 99-Nevada County, Arkansas |
| (4) Place Code | 0 |
| (6) Features Intersected | LITTLE MISSOURI RV RLF |
| (7) Facility Carried | SH 19 - 05 -10.86 |
| (9) Location | 0.6 MS PIKE CO LINE |
| (11) Mile Point | 10.86 mi |
| (12) Base Highway Network | No |
| (13) LRS Inventory Rte & Subrte | 0000000000 |
| (16) Latitude | 33.94647 |
| (17) Longitude | -93.44400 |
| (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 | 17 |
| (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 | 0-None |
| AGE AND SERVICE | |
| (27) Year Built | 1991 |
| (106) Year Reconstructed | 0 |
| (42) Type of Service | 19 |
| On | 1-Highway |
| Under | 9-Relief for waterway |
| (28) Lane | |
| On | 2 |
| Under | 0 |
| (29) Average Daily Traffic | 840 |
| (30) Year of ADT | 2018 |
| (109) Truck ADT | 31 % |
| (19) Bypass, Detour Length | 26 mi |
| GEOMETRIC DATA | |
| (48) Length of Maximum Span | 25 ft |
| (49) Structure Length | 425 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 ft |
| (32) Approach Roadway Width (W/Shoulders) | 40 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 | 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 th |
| (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 | 4 |
| (59) Superstructure | 4 |
| (60) Substructure | 4 |
| (61) Channel & Channel Protection | 7 |
| (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 | 37 |
| (65) Inventory Rating Method | 1-Load Factor(LF) |
| (66) Inventory Rating | |
| Type | 17 |
| Rating | 22 |
| (70) Bridge Posting | 3-10.0 - 19.9 % below |
| (41) Structure Open/Posted/Closed | P-Posted for load (may include o |
| APPRAISAL | |
| (67) Structural Evaluation | 4 |
| (68) Deck Geometry | 8 |
| (69) Clearances, Vertical/Horizontal | N |
| (71) Waterway Adequacy | 7 |
| (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 | 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 | 0 |
| (114) Future ADT | 1061 |
| (115) Year of Future ADT | 2028 |
| INSPECTIONS | |
| (90) Inspection Date | 201910 |
| (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 | Yes 0 201911 |

| | |
|---------------------|------------------------|
| SUFFICIENCY RATING | 52.8 |
| STATUS (SD/FO/None) | Structurally Deficient |

| ELEM | DESCRIPTION | UNITS | TOTAL | CS1 | CS2 | CS3 | CS4 |
|---|--------------------------------------|--------|---------------|--------|-----------------|------|-----|
| 12 | Reinforced Concrete Deck | SF | 18275 | 11713 | 0 | 6562 | 0 |
| 1080 | Delamination/Spall/Patched Area | SF | 647 | 0 | 0 | 647 | 0 |
| 1090 | Exposed Rebar | SF | 1200 | 0 | 0 | 1200 | 0 |
| 1120 | Efflorescence/Rust Staining | SF | 50 | 0 | 0 | 50 | 0 |
| 1130 | Cracking (RC and Other) | SF | 4665 | 0 | 0 | 4665 | 0 |
| (12) | | | | | | | |
| SPALLS AND REBAR EXPOSED DUE TO FIRE DAMAGE BENTS 9- 15 (9-7-16) | | | | | | | |
| DECK | SQFT | SPALLS | REBAR EXPOSED | CRACKS | | | |
| | | 647 | 1200 | 4665 | 10-14-2019..... | | |
| 1120 EFFLORESCENCE SERFACE WHITE NO RUST STAINING AT THIS TIME. | | | | | | | |
| 10/02/2017 Epoxy coated rebar has lost coating and now has surface rust forming | | | | | | | |
| 110 | Reinforced Concrete Open Girder/Beam | LF | 2125 | 1338 | 540 | 247 | 0 |
| 1080 | Delamination/Spall/Patched Area | LF | 90 | 0 | 0 | 90 | 0 |
| 1090 | Exposed Rebar | LF | 157 | 0 | 0 | 157 | 0 |
| 1130 | Cracking (RC and Other) | LF | 540 | 0 | 540 | 0 | 0 |
| (110) | | | | | | | |
| 11/07/2016____ JCO/JBK____ SS/DEF. PHOTO TAKEN 2016 | | | | | | | |
| SPALLS AND REBAR EXPOSED DUE TO FIRE DAMAGE BENTS 9- 15 (9-7-16) | | | | | | | |
| BEAMS | LF | SPALLS | REBAR EXPOSED | CRACKS | | | |
| | | 90 | 157 | 540 | 10-14-2019..... | | |
| rebar has lost coating and now has surface rust forming | | | | | | | |
| 215 | Reinforced Concrete Abutment | LF | 87 | 87 | 0 | 0 | 0 |
| 225 | Steel Pile | EA | 88 | 88 | 0 | 0 | 0 |
| (225) | | | | | | | |
| 11/07/2016____ JCO/JBK | | | | | | | |
| SS/DEF. PHOTO TAKEN | | | | | | | |
| SPALLS AND REBAR EXPOSED DUE TO FIRE DAMAGE BENTS 9- 15 (9-7-16) | | | | | | | |
| COLUMNS EACH | | SPALLS | REBAR EXPOSED | CRACKS | | | |
| | | 16 | 18 | 1 | | | |
| 9/5/2017...CLR, JK | | | | | | | |
| BENTS 10 - 15 ALL PILES HAVE BEEN REPAIRED BY LITTLE ROCK... | | | | | | | |
| 234 | Reinforced Concrete Pier Cap | LF | 774 | 316 | 0 | 458 | 0 |
| 1080 | Delamination/Spall/Patched Area | LF | 221 | 0 | 0 | 221 | 0 |
| 1090 | Exposed Rebar | LF | 155 | 0 | 0 | 155 | 0 |
| 1130 | Cracking (RC and Other) | LF | 82 | 0 | 0 | 82 | 0 |
| (234) | | | | | | | |



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Team Lead: John King, Inspection Date: October 14, 2019

| ELEM | DESCRIPTION | UNITS | TOTAL | CS1 | CS2 | CS3 | CS4 |
|---|------------------------------------|-------|-------|-----|-----|-----|-----|
| 11/07/2016 JCO/JBK SS/DEF. PHOTO TAKEN SPALLS AND REBAR EXPOSED DUE TO FIRE DAMAGE BENTS 9- 15 (9-7-16) CAPS SPALLS REBAR EXPOSED CRACKS 221 155 82 Updated 10-14-2019..... | | | | | | | |
| 331 | Reinforced Concrete Bridge Railing | LF | 850 | 800 | 50 | 0 | 0 |
| 1080 | Delamination/Spall/Patched Area | LF | 50 | 0 | 50 | 0 | 0 |



Bent #13 end of bridge side



Span #13 deck photo



Under photo Span #4



Bent #6



Under photo Span #17



Bent #12 right side



Under photo Span #15



Bent #14 beginning of bridge side



Span #1



Span #7 deck photo



Under photo Span #11



Under photo Span #13



Bent #14 right side





Under photo Span #14



Bent #15 beginning of bridge side



Span #11 deck photo



Span #15 photo deck



Bent #9 left side



Bent #16 beginning of bridge side



Bent #13 beginning of bridge side



Deck photo Span #17



Bent #10 end of bridge side



Under photo Span #12



Under photo span #9



Span #8 deck photo



Under photo Span #12



Span #12 deck photo



Under photo Span #16



Under photo Span #17



Posting photo beginning of bridge



Bent #13 right side



Under photo Span #7



Under photo Span #6



Under photo Span #10



Bent #17 beginning of bridge side



Under photo Span #16



Bent #17 end of bridge side



Under photo Span #9



Bent #4



Bent #16 end of bridge side



Bent #13 left side



Bent #9 end of bridge side



Span #6 deck photo



Bent #18 end of bridge



Under photo Span #10



Bent #11 left side



Under photo Span #15



Under photo Span #2



Span #9 deck photo



Bent #11 end of bridge side



Bent #15 end of bridge side



Bent #5



Bent #11 right right side



Under photo Span #11



Span photo #16



Bent #12 beginning of bridge side



Bent #2



Under photo Span #14



Span #1 deck photo



Bent #1



Bent #14 end of bridge side



Span #3 deck photo



Bent #14 left side



Under photo Span #8



Name plate



Under photo Span #5



Bent #12 left side



Bent #10 beginning of bridge side



Span #5 deck photo



Bent #11 beginning of bridge side



Bent #3



Span #4 deck photo



Bent #16 right side



Posting end of bridge



Bent #15 left side



AI



Bent #15 left side



Span #14 deck photo



Access road



Span #10 deck photo



Bent #16 left side



Under photo Span #3



Span #2 deck photo



Bent #8



Under photo Span #13



Bent #10 left side



Bent #9 right side



Bent #12 end of bridge side



Bent #9 beginning of bridge side



Bent #10 right side



Bridge #06347 (Routine)

SH 19 - 05 -10.86 over LITTLE MISSOURI RV RLF

Location: 0.6 MS PIKE CO LINE

Team Lead: John King **Inspection Date:** October 14, 2019

Maintenance Needs



Bridge #06347(Routine)

SH 19 - 05 -10.86 over LITTLE MISSOURI RV RLF

Location: 0.6 MS PIKE CO LINE

Team Lead: John King Inspection Date: October 14, 2019

Inspection Comments

Deck Notes

4 POOR - SPALLS AND REBAR EXPOSED DUE TO FIRE DAMAGE (9-7-16)
Joints: ALL JOINTS ARE LEAKING AND MISSING PIECES OR HAVE TORN JOINT MATERIAL.
9/9/2016 BRIDGE HAS BEEN POSTED FOR LOAD AS PER KENNY BENNETT
09/12/2016 photo's of posted signs taken..bridge was looked at by DE & Assistant inspector...
09/16/2016 CONCRETE IS STILL SPALLING OFF WITH TRUCK TRAFFIC CROSSING BRIDGE, BRIDGE IS STILL STABLE
AS PER 09/16/2016 AT 11:05 AM (JCO)
09/23/2016 CHECK BRIDGE ---WILL AND JOHNNY
09/30/2016 CHECK BRIDGE ---JIM AND JOHNNY,,, STILL STABLE AT 1:30 PM
10/13/2016 CHECK BRIDGE --- CLR /JBK,,, STILL STABLE AT THIS TIME. NOTE SMALL PC OF CONCRETE ARE STILL
SPALLING OFF
11/07/2016___ JCO/JBK
CHANGE ITEM 58 TO A 4-POOR DUE TO SPALLS AND REBAR EXPOSED....
SS/DEF. PHOTO TAKEN
SPALLS AND REBAR EXPOSED DUE TO FIRE DAMAGE BENTS 9- 15 (9-7-16)

| | | SPALLS | REBAR EXPOSED | CRACKS |
|------|------|--------|---------------|--------|
| DECK | SQFT | 495 | 925 | 3400. |

THIS IS ON THE BOTTOM OF THE DECK.....MOST DECK CRACKS HAVE WATER LEAKING TO BOTTOM SIDE, PHOTO
TAKEN AFTER LIGHT RAIN IN INSPECTION DATED 11/07/2016
EXPOSED STEEL BARS ARE NOT RUSTING AT THIS TIME. BUT FIRE WAS HOT ENOUGH TO TAKE PROTECTIVE
COATING OFF BARS.....
12/14/2016 CONCRETE IS STILL SPALLING OFF WITH TRUCK TRAFFIC CROSSING BRIDGE, BRIDGE IS STILL STABLE
AS PER THIS INSPECTION. POSTING PHOTO'S TAKEN AND SIDE SHOT, SIGNS ARE UP (CLR/JBK). NO MAINTENANCE
NEED PRINTED ON THIS INSPECTION.. .

01/23/2017 SPECIAL INSPECTION __DECK, POSTING , SS, PHOTO TAKEN. LITTLE TO NO CHANGE. CONCRETE STILL
SPALLING OFF VARIOUS LOCATIONS. JBK.....

02/21/2017 AL,SS,POSTING PHOTOS TAKEN. LITTLE TO NO CHANGE 03/15/2017 SS,posting photo
taken signs are up and correct. Conditions still same . JBK/CWP
04/05/2017 Special inspection.ss,posting. Little change concrete is still spalling off and exposing a little more rebar bottom of
deck and caps & piles. JBK.....JBK/CWP ..
5/02/2017 SS,Posting photo taken,little to no change Heavy Bridge has started construction per this inspection on bent 15..
6/27/2017...SS, Posting, Repair and measurement photos for 20 columns included in this inspection..
7/06/2017 SS,POSTING PHOTO TAKEN,NO CHANGE AT THIS TIME...
8/21/2017...SS, POSTING PHOTOS TAKEN. NO CHANGE AT THIS TIME.... 9/5/2017...SS,
POSTING, REPAIR PHOTOS TAKEN. NO CHANGE AT THIS TIME...

10/02/2017 AL,SS,CH,DECK OTHER PHOTO TAKEN ..,Epoxy coated rebar has lost coating and now has surface rust
forming little to no change in condition....
11/27/2017...AL, SS, POSTING PHOTOS TAKEN...

04/02/2018 SS,POSTING PHOTO TAKEN. LITTLE TO NO CHANGE FROM LAST INSPECTION

8/8/2018...AL, SS, Posting photos taken. Little or no change in condition...

12/03/18 Posting Photo taken. Special little to no changes.....4/11/2019...Special inspection. AL, SS, Posting, Def. Photos
taken. See substructure notes..

.08/2019 special only. Posting photos taken.....10/14/19 AL,SS,DECK AND UNDER DECK PHOTOS TAKEN ALSO
POSTING PHOTOS TAKEN PER THIS ROUTINE INSPECTION updated Elements after this inspection see elements.....



Bridge #06347 (Routine)

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Superstructure Notes

4 POOR

CHANGE ITEM 59 TO A 4-POOR DUE TO SPALLS AND REBAR EXPOSED....
SPALLS AND REBAR EXPOSED DUE TO FIRE DAMAGE BENTS 9- 15 (9-7-16)

| | | SPALLS | REBAR EXPOSED | CRACKS |
|-------|----|--------|---------------|--------|
| BEAMS | LF | 84 | 67 | 599 |

EXPOSED STEEL BARS ARE NOT RUSTING AT THIS TIME. BUT FIRE WAS HOT ENOUGH TO TAKE PROTECTIVE COATING OFF BARS.. 10/09/2017 rebar has lost coating and now has surface rust forming ...10-14-19.... updated Elements after this inspection see elements

Substructure Notes

PLANS SHOW STEEL PILING AT BENTS 2 THRU 17 HAVE CONCRETE ENCASEMENT SEE LAYOUT SHEET DRAWING # 30720 JOB # 03979..

4 POOR

CHANGE ITEM 60 TO A 4-POOR DUE TO SPALLS AND REBAR EXPOSED....
SPALLS AND REBAR EXPOSED DUE TO FIRE DAMAGE BENTS 9- 15 (9-7-16)

| | | SPALLS | REBAR EXPOSED | CRACKS |
|------|----|--------|---------------|--------|
| CAPS | LF | 141 | 83 | 11 |

PILES EACH 16 18 1
SLOPE PROTECTION END BRIDGE SOME RIPRAP MISSING AND FILTER BLANKET EXPOSED
ON LEFT SIDE OF BRIDGE...

EXPOSED STEEL BARS ARE NOT RUSTING AT THIS TIME. BUT FIRE WAS HOT ENOUGH TO TAKE PROTECTIVE COATING OFF BARS..5/02/2017 Heavy Bridge has started construction per this inspection on bent 15...9/5/2017 heavy bridge has completed the repairs to the columns from bts.10-15....4/11/2019...Bents 10, 11, 12, and 15 cracks in columns, typical all columns, going to monitor to see if they are caused by vibration in the bridge or just shrinkage cracks...10-14-19.... updated Elements after this inspection see elements