



Latitude:35.72989, Longitude:-90.36684

Route:872 Section:00 Log:4.51

Arnold Road ID:16xCRAIGHEAD872RDx1xA, Arnold Log mile:1.489

District 10, 31 - Craighead County

Owner: 2 - County Highway Agency

Inspection Direction: 3 - E to W

### Bridge Posting Information

41 - Structure Open/Posted/Closed: A - Open, no restriction

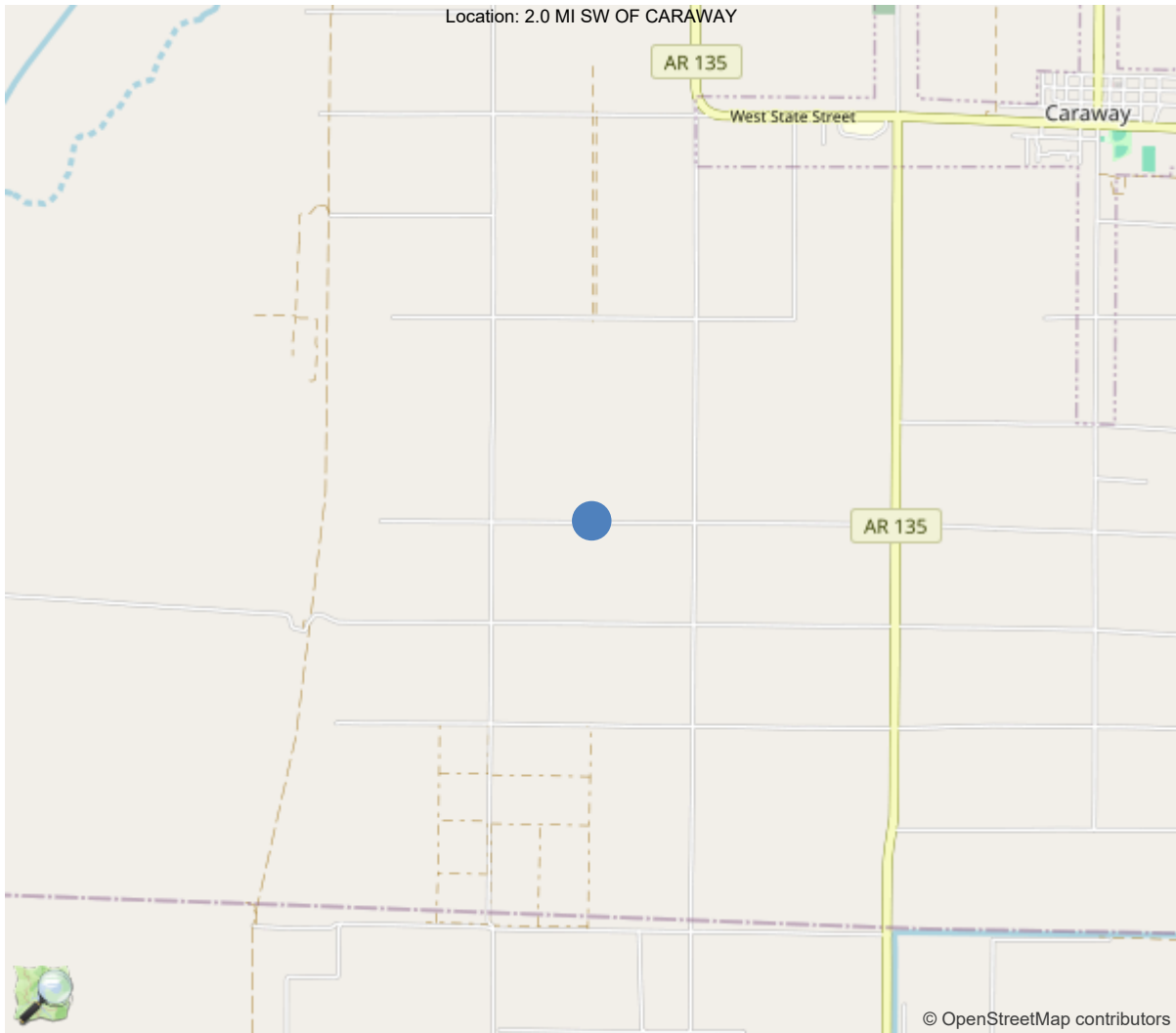
70 - Bridge Posting: 5 - Equal to or above legal loads

Legal Load	Calculated Capacity	Beginning of Bridge Sign Current Value	End of Bridge Sign Current Value
Code 4 (22 Tons)	36		
Code 9 (31 Tons)	41		
Code 5 (40 Tons)	51		

If calculated Capacity is less than the Legal Load Listed, the Bridge Legally Requires Posting Signs to be installed by the Bridge Owner



30"x36" AR



35.72989, -90.36684



Asset #22101(Routine, Underwater type 2)

CR 872 - A over DITCH NO 2

Location: 2.0 MI SW OF CARAWAY

Team Lead: Brandon Sutton Inspection Date: 05/01/2024

IDENTIFICATION	
(1) State Names	5 - Arkansas
(8) Structure Number	22101
(5) Inventory Route	1
(2) Highway Agency District	10 - District 10
(3) County Code	31 - Craighead County
(4) Place Code	0
(6) Features Intersected	DITCH NO 2
(7) Facility Carried	CR 872 - A
(9) Location	2.0 MI SW OF CARAWAY
(11) Mile Point	4.51 mi
(12) Base Highway Network	No
(13) LRS Inventory Rte & Subrte	0000000000
(16) Latitude	35.7298943980703
(17) Longitude	-90.3668425205018
(98) Border Bridge State Code	
(99) Border Bridge Structure No.	
STRUCTURE TYPE AND MATERIAL	
(43) Main Structure Type	122
Material	1 - Concrete
Type	22 - Channel beam
(44) Approach Structure Type	00
Material	0 - Other
Type	0 - Other
(45) No. of Spans in Main Unit	2
(46) No. of Approach Spans	0
(107) Deck Structure Type	2 - Concrete Precast Panels
(108) Wearing Surface/Protective System	
Type of Wearing Surface	0 - None (no additional concrete thickne
Type of Membrane	0 - None
Type of Deck Protection	0 - None
AGE AND SERVICE	
(27) Year Built	1999
(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	78
(30) Year of ADT	2018
(109) Truck ADT	1 %
(19) Bypass, Detour Length	2 mi
GEOMETRIC DATA	
(48) Length of Maximum Span	30 ft
(49) Structure Length	60 ft
(50) Curb or Sidewalk Width	
Left	0 ft
Right	0 ft
(51) Bridge Roadway Width Curb to Curb	29.6 ft
(52) Deck Width Out to Out	30.9 ft
(32) Approach Roadway Width (W/Shoulders)	20 ft
(33) Bridge Median	0 - No median
(34) Skew	0 Deg
(35) Structure Flared	0 - No flare
(10) Inventory Route Min Vert Clear	99.99 ft
(47) Inventory Route Total Horiz Clear	29.6 ft
(53) Min Vert Clear Over Bridge Rdwy	99.99 ft
(54) Min Vert Underclear	0 ft
Ref:	
(55) Min Lat Underclear RT	0 ft
Ref:	
(56) Min Lat Underclear LT	0 ft
NAVIGATION DATA	
(38) Navigation Control	0 - No navigation control on w
(111) Pier Protection	
(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	9 - Rural Local
(100) Defense Highway	0 - The inventory route is not
(101) Parallel Structure	N - No parallel structure exis
(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
(20) Toll	3 - On free road. The structu
(21) Maintain	2 - County Highway Agency
(22) Owner	2 - County Highway Agency
(37) Historical Significance	5 - Bridge is not eligible for
CONDITION	
(58) Deck	7
(59) Superstructure	7
(60) Substructure	7
(61) Channel & Channel Protection	6
(62) Culverts	N
LOAD RATING AND POSTING	
(31) Design Load	0 - Other or Unknown
(63) Operating Rating Method	1
(64) Operating Rating	
Type	1 - Load Factor(LF)
Rating	55
(65) Inventory Rating Method	1 - Load Factor(LF)
(66) Inventory Rating	
Type	
Rating	33
(70) Bridge Posting	5 - Equal to or above legal loads
(41) Structure Open/Posted/Closed	A - Open, no restriction
APPRAISAL	
(67) Structural Evaluation	
(68) Deck Geometry	6
(69) Clearances, Vertical/Horizontal	N
(71) Waterway Adequacy	8
(72) Approach Roadway Alignment	6
(36A) Bridge Railings	0 - Inspected feature does not meet
(36B) Transitions	0 - Inspected feature does not meet
(36C) Approach Guardrail	0 - Inspected feature does not meet
(36D) Approach Guardrail Ends	0 - Inspected feature does not meet
(113) Scour Critical Bridges	5 - Bridge foundations determined t
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	209
(115) Year of Future ADT	2007

INSPECTIONS *			
(90) Inspection Date	05/01/2024		
(91) Frequency	24		
(92) Critical Feature Inspection	Done	Freq. (Mon)	Date
A: Fracture Critical Detail	No		
B: Underwater Inspection	No		
C: Other Special Inspection	No		
* The inspection date and frequency information in this box contains the current NBI date and frequency information. Please refer to the report header for the date this inspection was conducted.			





Team Lead: Brandon Sutton, Inspection Date: 05/01/2024

IDENTIFICATION	
B.ID.01 Bridge Number	22101
B.ID.02 Bridge Name	
B.ID.03 Previous Bridge No.	11902
B.W.01 Year Built	1999

LOCATION	
B.L.01 State Code	5 - Arkansas
B.L.02 County Code	31 - Craighead County
B.L.03 Place Code	00000 - N/A
B.L.04 Highway Agency District	10 - District 10
B.L.05 Latitude	35.7298943980703
B.L.06 Longitude	-90.3668425205018
B.L.07 Border Bridge Number	
B.L.08 Border Bridge State or Country Code	
B.L.09 Border Bridge Insp. Resp.	
B.L.10 Border Bridge Designated Lead State	
B.L.11 Bridge Location	2.0 MI SW OF CARAWAY
B.L.12 Metropolitan Planning Organization	

CLASSIFICATION	
B.CL.01 Owner	L01 - County highway agency
B.CL.02 Maint. Responsibility	L01 - County highway agency
B.CL.03 Federal or Tribal Land Access	N - Not Applicable
B.CL.04 Historic Significance	N - Bridge is not eligible for the
B.CL.05 Toll	N - Bridge does not carry a toll ro
B.CL.06 Emergency Evacuation Designation	

ROADSIDE HARDWARE	
B.RH.01A Bridge Railing Type	
B.RH.01B Bridge Railing Year (YY)	
B.RH.01C Bridge Railing Test Level	
B.RH.02A Transition Type	
B.RH.02B Transition Year (YY)	
B.RH.02C Transition Test Level	

BRIDGE GEOMETRY	
B.G.01 NBIS Bridge Length	57.6
B.G.02 Total Bridge Length	60
B.G.03 Max Span Length	29.9
B.G.04 Min Span Length	30
B.G.05 Bridge Width Out-to-Out	30.8
B.G.06 Bridge Width Curb-to-Curb	29.5
B.G.07 Left Curb or Sidewalk Width	0
B.G.08 Right Curb or Sidewalk Width	0
B.G.09 Approach Roadway Width	20

B.G.10 Bridge Median	0 - No median
B.G.11 Skew	0
B.G.12 Curved Bridge	N - Not curved
B.G.13 Max Bridge Height	10
B.G.14 Sidehill Bridge	N - Not a sidehill bridge
B.G.15 Irregular Deck Area	
B.G.16 Calculated Deck Area	1851.6

LOADS AND LOAD RATING	
B.LR.01 Design Load	U - Unknown
B.LR.02 Design Method	
B.LR.03 Load Rating Date	
B.LR.04 Load Rating Method	LFR - Load Factor Rating
B.LR.05 Inventory Load Rating Factor	0.92
B.LR.06 Operating Load Rating Factor	1.53
B.LR.07 Controlling Legal Load Rating Factor	
B.LR.08 Routine Permit Loads	

INSPECTION REQUIREMENTS	
B.IR.01 NSTM Inspection Required	N - NSTM inspection not required.
B.IR.02 Fatigue Details	
B.IR.03 UW Inspection Required	N - Underwater inspection not requi
B.IR.04 Complex Feature	

COMPONENT CONDITION RATINGS	
B.C.01 Deck Condition Rating	7 - GOOD - Some minor defects.
B.C.02 Superstructure Condition	7 - GOOD - Some minor defects.
B.C.03 Substructure Condition	7 - GOOD - Some minor defects.
B.C.04 Culvert Condition	N - NOT APPLICABLE - Component
B.C.05 Bridge Railing Condition	7 - GOOD - Some minor defects.
B.C.06 Bridge Railing Transitions Condition	N - NOT APPLICABLE - Component
B.C.07 Bridge Bearings Cond.	N - NOT APPLICABLE - Component
B.C.08 Bridge Joints Condition	N - NOT APPLICABLE - Bridge do
B.C.09 Channel Condition Rating	7 - GOOD - Some minor defects.
B.C.10 Channel Protection Condition	6 - SATISFACTORY - Widespread
B.C.11 Scour Condition Rating	6 - Widespread minor or isolat
B.C.12 Bridge Condition Classification	G - Good
B.C.13 Lowest Condition Rating	7 - GOOD - Some minor defects.
B.C.14 NSTM Insp. Condition	
B.C.15 UW Inspection Condition	

APPRAISAL	
B.AP.01 Approach Roadway Alignment	F - Fair
B.AP.02 Overtopping Likelihood	1 - Remote - once every 100 years o
B.AP.03 Scour Vulnerability	AB-T - TEMP - Stable for scour, pos
B.AP.04 Scour Plan of Action	0 - A scour POA is not required.
B.AP.05 Seismic Vulnerability	0 - Seismic evaluation not complete

SPAN SETS			
<b>M1</b>			
B.SP.02 # of Spans	2	B.SP.08 Deck Interaction	IM - Integral or monolithic
B.SP.03 # of Beam Lines	8	B.SP.09 Deck Material and Type	C02 - Reinforced concrete - pr
B.SP.04 Span Material	C02 - Reinforced concrete - pr	B.SP.10 Wearing Surface	0 - None
B.SP.05 Span Continuity	1 - Simple or single span	B.SP.11 Deck Protective System	0 - None
B.SP.06 Span Type	G07 - Girder/beam - channel ad	B.SP.12 Deck Reinforcing Protective System	0 - None
B.SP.07 Span Protective System	0 - None	B.SP.13 Deck Stay-In-Place Forms	0 - None

SUBSTRUCTURE SETS			
<b>A1</b>			
B.SB.02 No. of Substructure Units	2	B.SB.05 Substructure Protective System	0 - None
B.SB.03 Substructure Material	C01 - Reinforced concrete - ca	B.SB.06 Foundation Type	PX - Pile - other
B.SB.04 Substructure Type	A02 - Abutment - stub	B.SB.07 Foundation Protective System	0 - None
<b>P1</b>			
B.SB.02 No. of Substructure Units	1	B.SB.05 Substructure Protective System	0 - None
B.SB.03 Substructure Material	C01 - Reinforced concrete - ca	B.SB.06 Foundation Type	PX - Pile - other
B.SB.04 Substructure Type	B03 - Bent - pile	B.SB.07 Foundation Protective System	0 - None

HIGHWAY FEATURES			
<b>H1</b>			
B.F.02 Feature Location	C - Carried on bridge	B.H.09 Annual ADT	78
B.F.03 Feature Name	CR 80-A (911=872)	B.H.10 Annual ADTT	0
B.H.01 Functional Classification	7 - Local	B.H.11 Year of Annual ADT	2018
B.H.02 Urban Code	99999	B.H.12 Highway Max Usable Vertical Clearance	99.9
B.H.03 NHS Designation	N - Non-NHS	B.H.13 Highway Min Vertical Clearance	99.9
B.H.04 National Highway Freight Network	N - Not on the NHFN	B.H.14 Highway Min Horizontal Clearance, Left	
B.H.05 STRAHNET Designation	N - Not a STRAHNET route	B.H.15 Highway Min Horizontal Clearance, Right	
B.H.06 LRS Route ID		B.H.16 Highway Max Usable Surface Width	29.5
B.H.07 LRS Mile Point	4.51	B.H.17 Bypass Detour Length	2
B.H.08 Lanes On Highway	2	B.H.18 Crossing Bridge Number	

HIGHWAY ROUTES					
Highway Parent	B.RT.01 Route Designation	B.RT.02 Route Number	B.RT.03 Route Direction	B.RT.04 Route Type	B.RT.05 Service Type
H1	R01	80	2-T - TEMP - Two-way traffic - NS or EW	4 - County route	1 - Mainline



Team Lead: Brandon Sutton, Inspection Date: 05/01/2024

## WATERWAY FEATURES

W1

B.F.02 Feature Location	B - Below bridge	B.N.03 Movable Bridge Max Navigation Vertical Clearance	
B.F.03 Feature Name	DITCH NO 2	B.N.04 Navigation Channel Width	
B.N.01 Navigable Waterway	N - Not navigable waters	B.N.05 Navigation Channel Min Horizontal Clearance	
B.N.02 Navigation Min Vertical Clearance		B.N.06 Substructure Navigation Protection	

## POSTING STATUS DATA

B.PS.01 Load Posting Status	B.PS.02 Posting Status Change Date
PO - Permanent - Open	

## LOAD EVALUATION AND POSTING

B.EP.01 Legal Load Configuration	B.EP.02 Legal Load Rating Factor	B.EP.03 Posting Type	B.EP.04 Posting Value
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Asset #22101(Routine, Underwater type 2)

CR 872 - A over DITCH NO 2

Location: 2.0 MI SW OF CARAWAY

Team Lead: Brandon Sutton Inspection Date: 05/01/2024

### General Observation

05/01/2024 - BDS / DJW: Performed a routine and underwater 2 inspection by walking the channel using waders and UAS.

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#### 58 - Deck (7 - GOOD CONDITION - some minor problems.)

Top flange of precast units have areas of minor abrasion.

Concrete rails have a few cracks with efflorescence and a few delaminated/spalled areas.

Span 1 unit 6 has a 6' delaminated area along shear key at bent 1, area has been patched.

Span 2 unit 3 has a 2.5' delaminated area along shear key near bent 2.

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#### 59 - Superstructure (7 - GOOD CONDITION - some minor problems.)

Left and right legs of precast units has several minor flexure cracks, some have light efflorescence. Legs have minor spalls, especially at transverse bolt connections.

Diaphragms over bents 2 and 3 have a few cracks and spalls.

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#### 60 - Substructure (7 - GOOD CONDITION - some minor problems.)

Caps have a few small spalls under units and minor honeycombed areas.

Bent 2 cap ahead has a few patched areas.

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#### 61 - Channel/Channel Protection (6 - Bank is beginning to slump. River control devices and embankment protection have widespread minor damage. There is minor stream bed movement evident. Debris is restricting the channel slightly.)

Channel has a beaver dam spanning across the entire channel.

Span 1 has old timber piling left in place, debris buildup catches on piles.

Span 2 has sediment and debris buildup.

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Elevation view



Roadway view



Span 2 unit 6 spall at transverse bolt connection (typical).



Upstream channel view



Downstream channel view



Span 2 right side has some embankment erosion and rip rap displacement



**Maintenance Needs**

**Date Reported:** 05/01/2024

**Priority:** C - Important

**Type of Work:** Channel Work/Drift Removal

**Status:** Open

**Component:** Channel

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**Deficiency Description**

Channel has a beaver dam spanning across the entire channel.

**Remarks**



Beaver dam upstream from bridge



**Asset #22101**(Routine, Underwater type 2)

**CR 872 - A over DITCH NO 2**

**Location: 2.0 MI SW OF CARAWAY**

**Team Lead:** Brandon Sutton **Inspection Date:** 05/01/2024

## **Routine Maintenance**

Check Box Maintenance Items

<b>Type of Maintenance</b>	<b>Is recommended?</b>
A-54 - Sealable Deck Cracks	No
A-55 - Deck Washing Needed	No
A-56 - Joint Cleaning/Flushing Needed	No
A-57 - Beam End and Bearing Paint Needed	No
A-58 - Cap Cleaning/Flushing Needed	No
A-59 - Joint Repair Needed	No
A-60 - Full Beam Painting Needed	No
A-61 - Polymer Overlay Advised	No
A-62 - Hydro and LMC Advised	No
A-63 - Missing/Incorrect Log Mile Signage	No
A-64 - Vegetation Removal Requested	No

**A-54 - Sealable Deck Cracks (No)**

**A-55 - Deck Washing Needed (No)**

**A-56 - Joint Cleaning/Flushing Needed (No)**



**Asset #22101**(Routine, Underwater type 2)

**CR 872 - A over DITCH NO 2**

**Location: 2.0 MI SW OF CARAWAY**

**Team Lead: Brandon Sutton Inspection Date: 05/01/2024**

**A-57 - Girder End and Bearing Painting Needed (No)**

**A-58 - Cap Cleaning/Flushing Needed (No)**

**A-59 - Joint Repair Needed (No)**

**A-60 - Full Girder Painting Needed (No)**

**A-61 - Polymer Overlay Advised (No)**

**A-62 - Hydro and LMC Advised (No)**

**A-63 - Missing/Incorrect Log Mile Signage (No)**

**A-64 - Vegetation Removal Requested (No)**





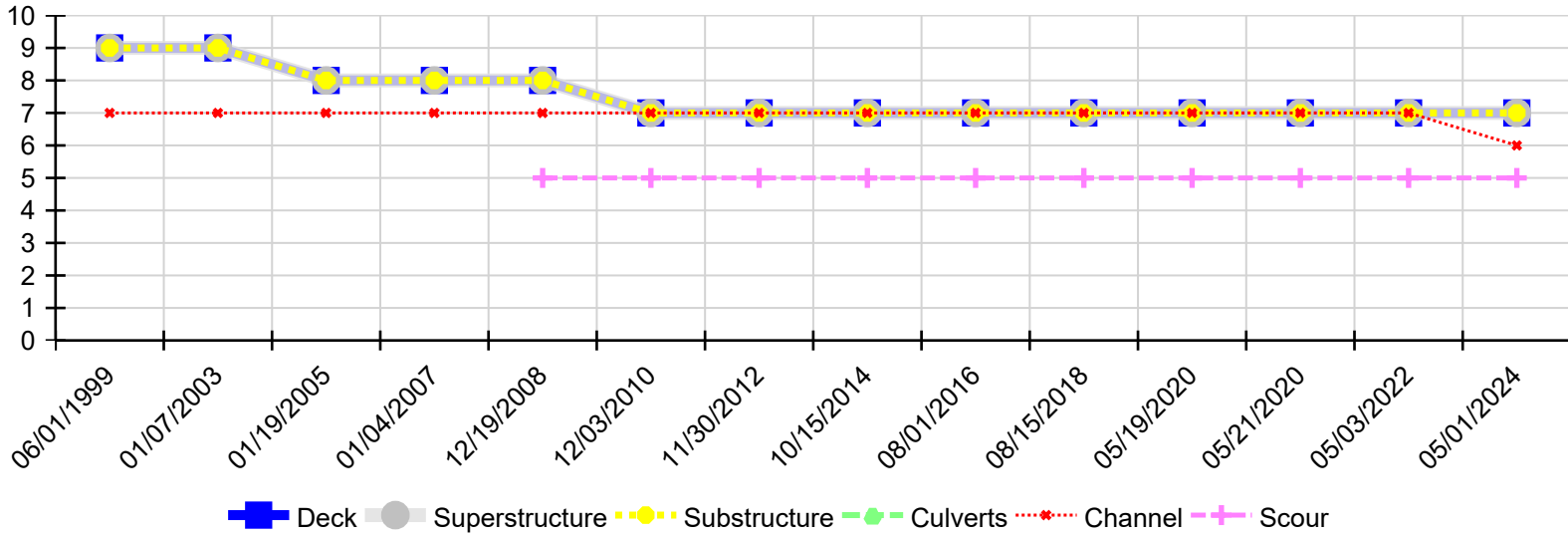
Asset #22101(Routine, Underwater type 2)

CR 872 - A over DITCH NO 2

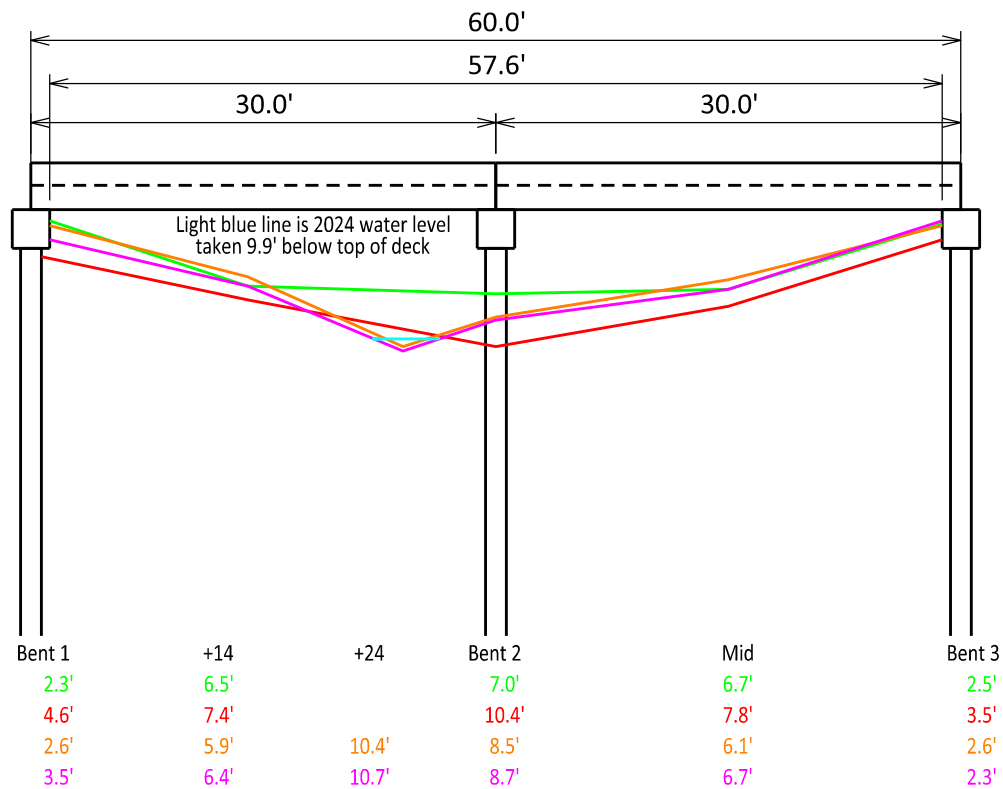
Location: 2.0 MI SW OF CARAWAY

Team Lead: Brandon Sutton Inspection Date: 05/01/2024

Condition History



Inspection Date	Deck	Superstructure	Substructure	Culverts	Channel	Scour
05/01/2024	7	7	7	N	6	5
05/03/2022	7	7	7	N	7	5
05/21/2020	7	7	7	N	7	5
05/19/2020	7	7	7	N	7	5
08/15/2018	7	7	7	N	7	5
08/01/2016	7	7	7	N	7	5
10/15/2014	7	7	7	N	7	5
11/30/2012	7	7	7	N	7	5
12/03/2010	7	7	7	N	7	5
12/19/2008	8	8	8	N	7	5
01/04/2007	8	8	8	N	7	N
01/19/2005	8	8	8	N	7	N
01/07/2003	9	9	9	N	7	N
06/01/1999	9	9	9	N	7	N



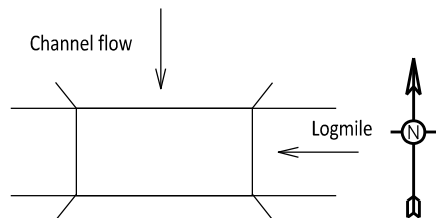
Channel profiled from top of deck on Lt side (downstream side)

Green line and soundings taken on 6/15/1999

Red line and soundings taken on 8/1/2016

Orange line and soundings taken on 5/19/2020

Pink soundings taken on 05/01/2024



Scale: 1"=8'

Inspection Dir: E to W

Channel Flow: N to S

BRIDGE NO.

22101

Logmile: 4.51

Route: CR 872

Date Drawn: 05/06/24

Insp. / Assist.: BDS / DJW

District: 10

County: Craighead - 16

Sect/Zone: 00/A



ARKANSAS STATE HIGHWAY COMMISSION  
Little Rock, ARK.