

## Bridge X1662 Inspection Report



Latitude:36.38047, Longitude:-91.09819

Route:00093 Section:01 Log:1.9

Arnold Road ID:61x93x1xA, Arnold Log mile:1.897

District 10, 121 - Randolph County

Owner: 1 - State Highway Agency

Inspection Direction: 2 - S to N

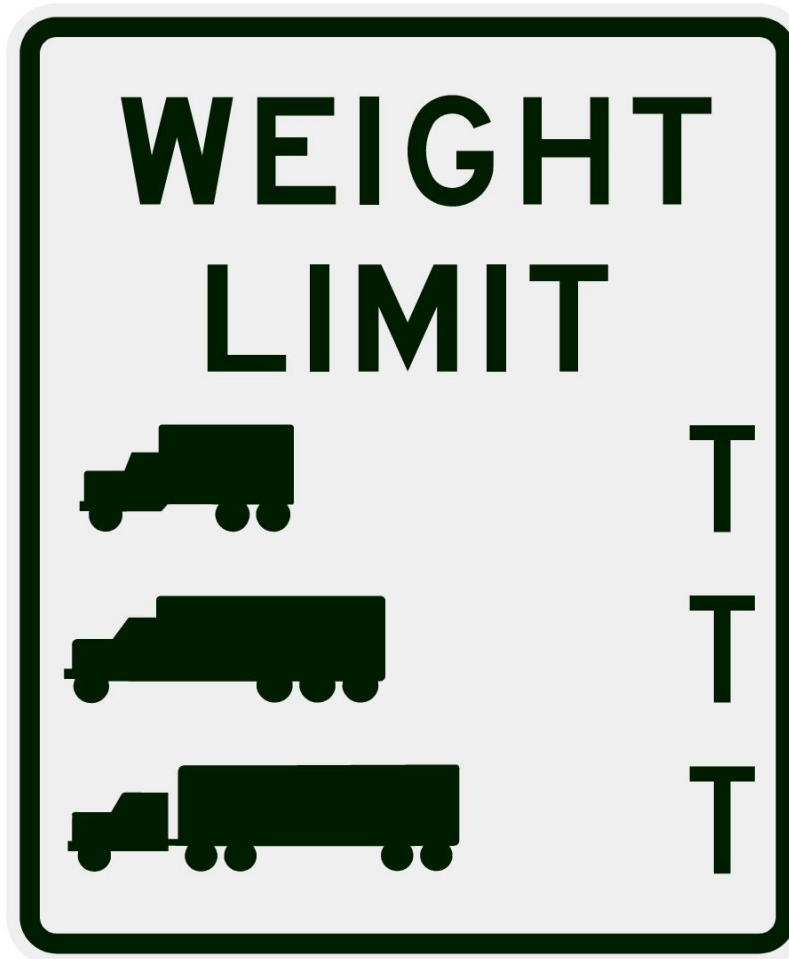
### Bridge Posting Information

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

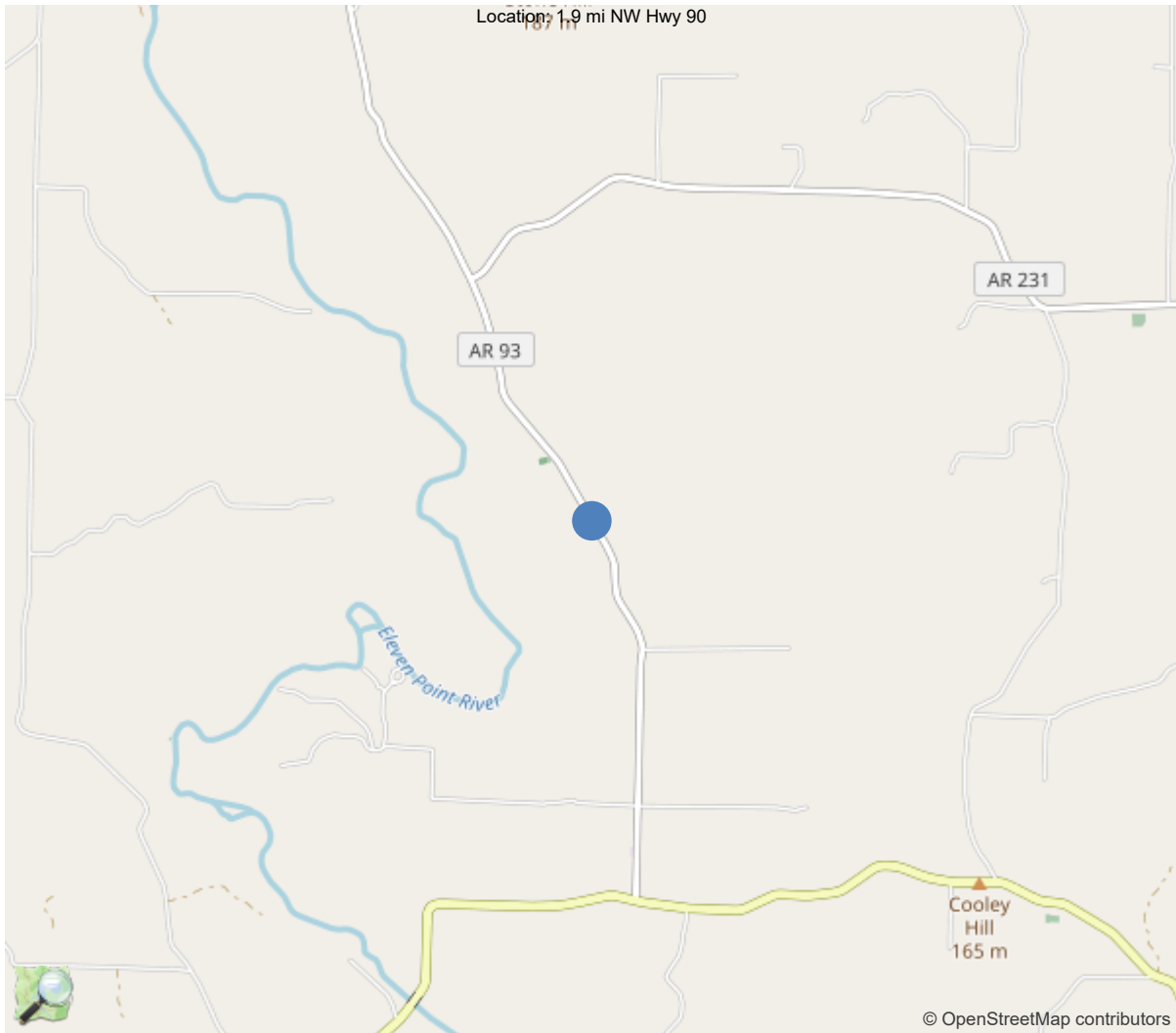
70 - Bridge Posting: 5 - Equal to or above legal loads

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

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



36.38047, -91.09819



## National Bridge Inventory Data Sheet

IDENTIFICATION	
(1) State Names	5 - Arkansas
(8) Structure Number	X1662
(5) Inventory Route	1
(2) Highway Agency District	10 - District 10
(3) County Code	121 - Randolph County
(4) Place Code	0
(6) Features Intersected	creek
(7) Facility Carried	AR Hwy 93
(9) Location	1.9 mi NW Hwy 90
(11) Mile Point	1.9 mi
(12) Base Highway Network	No
(13) LRS Inventory Rte & Subrte	
(16) Latitude	36.3804669
(17) Longitude	-91.0981859
(98) Border Bridge State Code	
(99) Border Bridge Structure No.	
STRUCTURE TYPE AND MATERIAL	
(43) Main Structure Type	319
Material	3 - Steel
Type	19 - Culvert
(44) Approach Structure Type	00
Material	0 - Other
Type	0 - Other
(45) No. of Spans in Main Unit	4
(46) No. of Approach Spans	0
(107) Deck Structure Type	N - Not applicable
(108) Wearing Surface/Protective System	
Type of Wearing Surface	N - Not applicable (applies only to stru
Type of Membrane	0 - None
Type of Deck Protection	0 - None
AGE AND SERVICE	
(27) Year Built	2022
(106) Year Reconstructed	
(42) Type of Service	15
On	1 - Highway
Under	5 - Waterway
(28) Lane	
On	2
Under	0
(29) Average Daily Traffic	560
(30) Year of ADT	2018
(109) Truck ADT	1 %
(19) Bypass, Detour Length	10 mi
GEOMETRIC DATA	
(48) Length of Maximum Span	5 ft
(49) Structure Length	23.2 ft
(50) Curb or Sidewalk Width	
Left	0 ft
Right	0 ft
(51) Bridge Roadway Width Curb to Curb	0 ft
(52) Deck Width Out to Out	0 ft
(32) Approach Roadway Width (W/Shoulders)	19.9 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	99.9 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	7 - Rural Major Collector
(100) Defense Highway	0 - The inventory route is not
(101) Parallel Structure	N - No parallel structure exists
(102) Direction of Traffic	2 - way traffic
(103) Temporary Structure	- Blank
(105) Federal Lands Highways	0 - N/A
(110) Designated National Network	0 - The inventory route is not
(20) Toll	3 - On free road. The structure
(21) Maintain	1 - State Highway Agency
(22) Owner	1 - State Highway Agency
(37) Historical Significance	5 - Bridge is not eligible for
CONDITION	
(58) Deck	N
(59) Superstructure	N
(60) Substructure	N
(61) Channel & Channel Protection	7
(62) Culverts	8
LOAD RATING AND POSTING	
(31) Design Load	0 - Other or Unknown
(63) Operating Rating Method	3
(64) Operating Rating	
Type	3 - Load and Resistance Factor(LRFR)
Rating	60
(65) Inventory Rating Method	3 - Load and Resistance Factor
(66) Inventory Rating	
Type	
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	
(68) Deck Geometry	
(69) Clearances, Vertical/Horizontal	N
(71) Waterway Adequacy	8
(72) Approach Roadway Alignment	8
(36A) Bridge Railings	N - Not applicable or a safety feat
(36B) Transitions	N - Not applicable or a safety feat
(36C) Approach Guardrail	N - Not applicable or a safety feat
(36D) Approach Guardrail Ends	N - Not applicable or a safety feat
(113) Scour Critical Bridges	8 - Bridge foundations determined t
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	645
(115) Year of Future ADT	2028

INSPECTIONS *			
(90) Inspection Date			01/22/2024
(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: 01/22/2024

### Specifications for National Bridge Inventory Sheets

IDENTIFICATION	
B.ID.01 Bridge Number	X1662
B.ID.02 Bridge Name	
B.ID.03 Previous Bridge No.	
B.W.01 Year Built	2022

LOCATION	
B.L.01 State Code	5 - Arkansas
B.L.02 County Code	121 - Randolph County
B.L.03 Place Code	00000 - N/A
B.L.04 Highway Agency District	10 - District 10
B.L.05 Latitude	36.3804669
B.L.06 Longitude	-91.0981859
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	1.9 mi NW Hwy 90
B.L.12 Metropolitan Planning Organization	

CLASSIFICATION	
B.CL.01 Owner	S01 - State transportation departme
B.CL.02 Maint. Responsibility	S01 - State transportation departme
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	23.2
B.G.02 Total Bridge Length	23.3
B.G.03 Max Span Length	4.9
B.G.04 Min Span Length	5
B.G.05 Bridge Width Out-to-Out	
B.G.06 Bridge Width Curb-to-Curb	0
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	
B.G.14 Sidehill Bridge	N - Not a sidehill bridge
B.G.15 Irregular Deck Area	
B.G.16 Calculated Deck Area	466.2

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	LRFR - Load and Resistance Factor R
B.LR.05 Inventory Load Rating Factor	1
B.LR.06 Operating Load Rating Factor	1.67
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	N - NOT APPLICABLE - Component
B.C.02 Superstructure Condition	N - NOT APPLICABLE - Component
B.C.03 Substructure Condition	N - NOT APPLICABLE - Component
B.C.04 Culvert Condition	9 - EXCELLENT - Isolated inher
B.C.05 Bridge Railing Condition	N - NOT APPLICABLE - Component
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	9 - EXCELLENT - Isolated inher
B.C.11 Scour Condition Rating	9 - No scour.
B.C.12 Bridge Condition Classification	G - Good
B.C.13 Lowest Condition Rating	9 - EXCELLENT - Isolated inher
B.C.14 NSTM Insp. Condition	
B.C.15 UW Inspection Condition	

APPRAISAL	
B.AP.01 Approach Roadway Alignment	G - Good
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

Team Lead: Brandon Sutton, Inspection Date: 01/22/2024

## SPAN SETS

## C1

B.SP.02 # of Spans	4	B.SP.08 Deck Interaction	
B.SP.03 # of Beam Lines	0	B.SP.09 Deck Material and Type	0 - None
B.SP.04 Span Material	S01 - Steel - rolled	B.SP.10 Wearing Surface	
B.SP.05 Span Continuity	7 - Buried	B.SP.11 Deck Protective System	
B.SP.06 Span Type	P01 - Pipe - Rigid	B.SP.12 Deck Reinforcing Protective System	
B.SP.07 Span Protective System	0 - None	B.SP.13 Deck Stay-In-Place Forms	

## HIGHWAY FEATURES

## H1

B.F.02 Feature Location	C - Carried on bridge	B.H.09 Annual ADT	560
B.F.03 Feature Name	AR Hwy 93	B.H.10 Annual ADTT	5
B.H.01 Functional Classification	5 - Major Collector	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	99.9
B.H.07 LRS Mile Point	1.9	B.H.17 Bypass Detour Length	10
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	93	2-T - TEMP - Two-way traffic - NS or EW	3 - State route	1 - Mainline

## 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	creek	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 #X1662(Routine)

AR Hwy 93 over creek

Location: 1.9 mi NW Hwy 90

Team Lead: Brandon Sutton Inspection Date: 01/22/2024

### Inspection Notes

**61 - Channel/Channel Protection** (7 - Bank protection is in need of minor repairs. River control devices and embankment protection have a little minor damage. Banks and/or channel have minor amounts of drift.)  
Pipes 1-3 have minor drift buildup.

**62 - Culverts** (8 - No noticeable or noteworthy deficiencies which affect the condition of the culvert. Insignificant scrape marks caused by drift.)

This is a quad 60" x 50' structure that replaces a non bridge length structure at the same location.

CMP pipes are in excellent condition. Pipes 2 and 3 have minor distortion.

**113 - Scour Critical Bridges** (8 - Bridge foundations determined to be stable for the assessed or calculated scour condition. Scour is determined to be above top of footing (Example A) by assessment (i.e., bridge foundations are on rock formations that have been determined to resist scour within the service life of the bridge4), by calculation or by installation of properly designed countermeasures (see HEC 23).)

Item 113 was changed to "8" per office policy regarding culvert structure - KJT 1/4/2023



Asset #X1662(Routine)

AR Hwy 93 over creek

Location: 1.9 mi NW Hwy 90

Team Lead: Brandon Sutton Inspection Date: 01/22/2024

### National Bridge Element Quantities and Notes

ELEMENTS	DESCRIPTION	UNITS	TOTAL				
				CS1	CS2	CS3	CS4
240	Steel Culvert	LF	200	200	0	0	0



## Inspection Photos and Notes



Elevation view



Roadway view



Upstream channel view



Downstream channel view

### Maintenance Needs

**Date Reported:** 01/22/2024

**Priority:** D- Routine

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

**Status:** Open

**Component:** Channel

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### Deficiency Description

Pipes 1-3 have minor drift buildup.

### Remarks

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Pipes 1-3 have minor drift buildup





Asset #X1662(Routine)  
AR Hwy 93 over creek  
Location: 1.9 mi NW Hwy 90

Team Lead: Brandon Sutton Inspection Date: 01/22/2024

## Routine Maintenance

### Check Box Maintenance Items

Type of Maintenance	Is Recommended?
A-54 - Sealable Deck Cracks	
A-55 - Deck Washing Needed	
A-56 - Joint Cleaning/Flushing Needed	
A-57 - Beam End and Bearing Paint Needed	
A-58 - Cap Cleaning/Flushing Needed	
A-59 - Joint Repair Needed	
A-60 - Full Beam Painting Needed	
A-61 - Polymer Overlay Advised	
A-62 - Hydro and LMC Advised	
A-63 - Missing/Incorrect Log Mile Signage	
A-64 - Vegetation Removal Requested	
A-65 - Clogged deck drains?	
A-66 - Approach minor pothole/leveling needed	

**A-54 - Sealable Deck Cracks**

**A-55 - Deck Washing Needed**

**A-56 - Joint Cleaning/Flushing Needed**



**Asset #X1662(Routine)**  
**AR Hwy 93 over creek**  
**Location: 1.9 mi NW Hwy 90**

**Team Lead: Brandon Sutton Inspection Date: 01/22/2024**

**A-57 - Girder End and Bearing Painting Needed**

**A-58 - Cap Cleaning/Flushing Needed**

**A-59 - Joint Repair Needed**

**A-60 - Full Girder Painting Needed**

**A-61 - Polymer Overlay Advised**

**A-62 - Hydro and LMC Advised**

**A-63 - Missing/Incorrect Log Mile Signage**

**A-64 - Vegetation Removal Requested**

**A-65 - Clogged deck drains?**



**Asset #X1662(Routine)**

**AR Hwy 93 over creek**

**Location: 1.9 mi NW Hwy 90**

**Team Lead: Brandon Sutton Inspection Date: 01/22/2024**

**A-66 - Approach minor pothole/leveling needed**

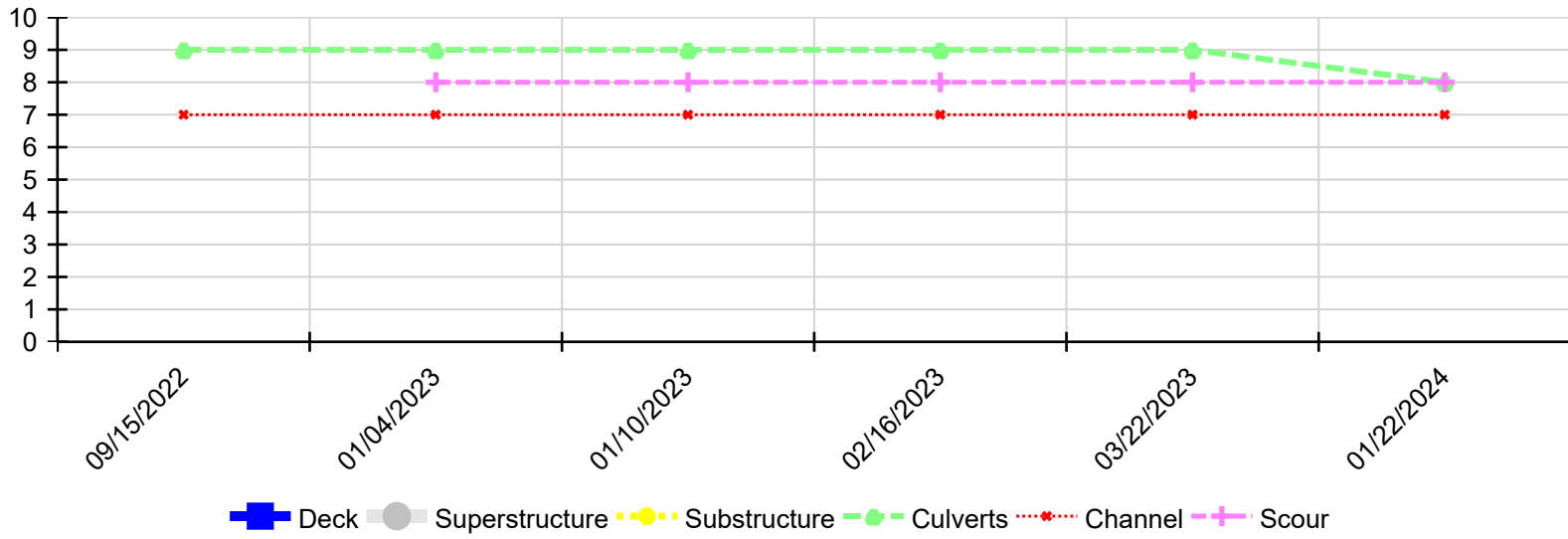




Asset #X1662(Routine)  
AR Hwy 93 over creek  
Location: 1.9 mi NW Hwy 90

Team Lead: Brandon Sutton Inspection Date: 01/22/2024

Condition History



Inspection Date	Deck	Superstructure	Substructure	Culverts	Channel	Scour
01/22/2024	N	N	N	8	7	8
03/22/2023	N	N	N	9	7	8
02/16/2023	N	N	N	9	7	8
02/16/2023	N	N	N	9	7	8
01/10/2023	N	N	N	9	7	8
01/04/2023	N	N	N	9	7	8
09/15/2022	N	N	N	9	7	N