



Latitude:35.09637, Longitude:-90.29357

Route:147 Section:01 Log:11.84

Arnold Road ID:18x147x1xA, Arnold Log mile:11.84

District 01, 35 - Crittenden County

Owner: 1 - State Highway Agency

Inspection Direction: 2 - S to N

Bridge Posting Information

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

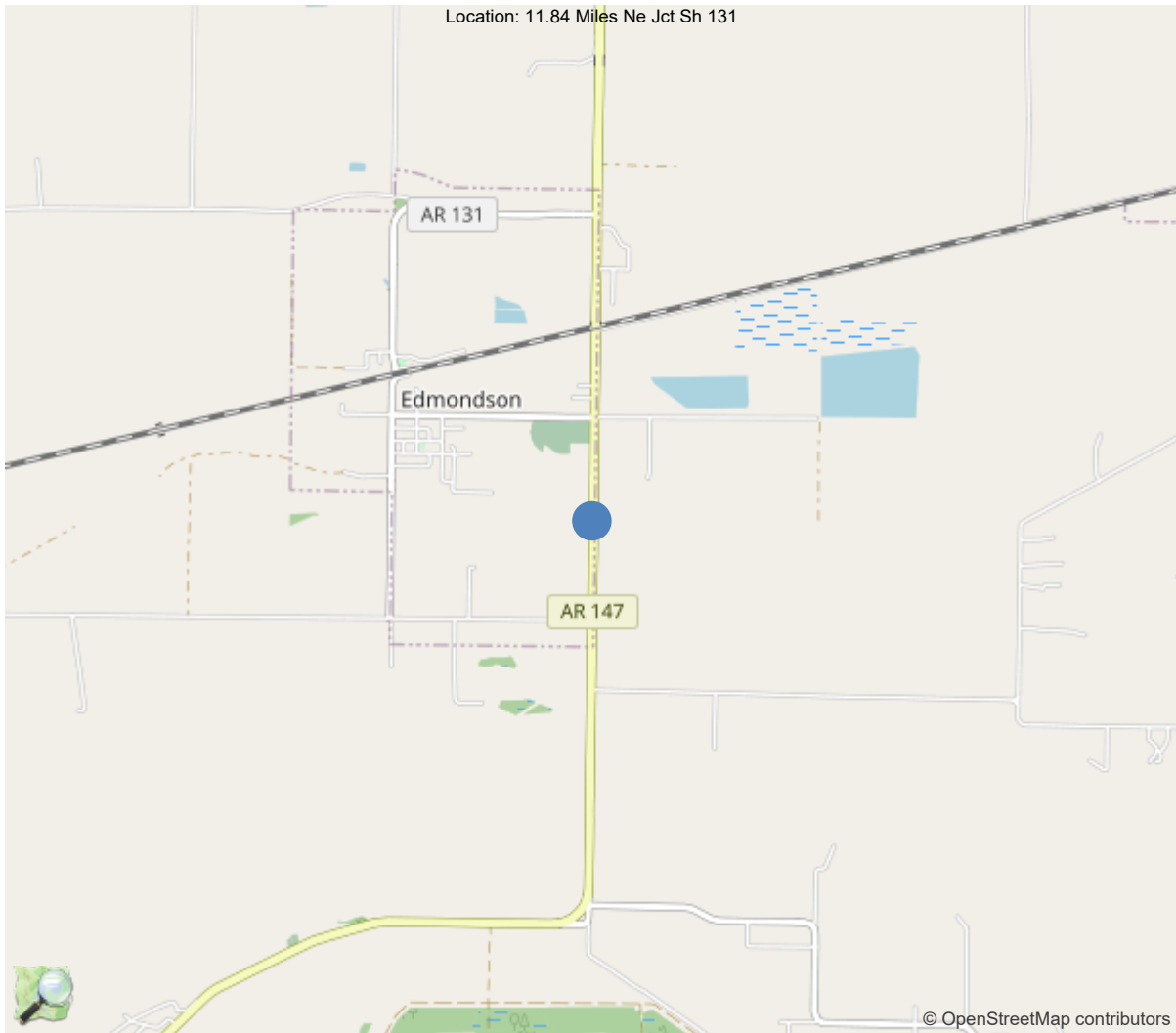
70 - Bridge Posting: 5 - Equal to or above legal loads

Legal Load	Calculated Capacity	Beginning of Bridge Sign Current Value	End of Bridge Sign Current Value
Code 4 (22 Tons)	36		
Code 9 (31 Tons)	37		
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



35.09637, -90.29357



Asset #07173(Routine, Underwater type 2)

Sh147/Sec-1/L11.84 over 10 Mile Bayou Cutoff Di

Location: 11.84 Miles Ne Jct Sh 131

Team Lead: Drew Melton Inspection Date: 06/15/2023

IDENTIFICATION	
(1) State Names	5 - Arkansas
(8) Structure Number	07173
(5) Inventory Route	1
(2) Highway Agency District	01 - District 01
(3) County Code	35 - Crittenden County
(4) Place Code	0
(6) Features Intersected	10 Mile Bayou Cutoff Di
(7) Facility Carried	Sh147/Sec-1/L11.84
(9) Location	11.84 Miles Ne Jct Sh 131
(11) Mile Point	11.84 mi
(12) Base Highway Network	No
(13) LRS Inventory Rte & Subrte	0000000000
(16) Latitude	35.096371
(17) Longitude	-90.293571
(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 pl
Type of Membrane	0 - None
Type of Deck Protection	1 - Epoxy Coated Reinforcing
AGE AND SERVICE	
(27) Year Built	2011
(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	2785
(30) Year of ADT	2018
(109) Truck ADT	5 %
(19) Bypass, Detour Length	10 mi
GEOMETRIC DATA	
(48) Length of Maximum Span	53.5 ft
(49) Structure Length	159 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	43.2 ft
(32) Approach Roadway Width (W/Shoulders)	40 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	40 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	1 - Navigation protection not
(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
(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
(20) Toll	3 - On free road. The structure
(21) Maintain	1 - State Highway Agency
(22) Owner	1 - State Highway Agency
(37) Historical Significance	4 - Historical significance is
CONDITION	
(58) Deck	7
(59) Superstructure	8
(60) Substructure	7
(61) Channel & Channel Protection	5
(62) Culverts	N
LOAD RATING AND POSTING	
(31) Design Load	A - HL93
(63) Operating Rating Method	1
(64) Operating Rating	
Type	1 - Load Factor(LF)
Rating	41
(65) Inventory Rating Method	1 - Load Factor(LF)
(66) Inventory Rating	
Type	
Rating	24
(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	9
(36A) Bridge Railings	1 - Inspected feature meets current
(36B) Transitions	1 - Inspected feature meets current
(36C) Approach Guardrail	1 - Inspected feature meets current
(36D) Approach Guardrail Ends	1 - Inspected feature meets current
(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	3300
(115) Year of Future ADT	2030

INSPECTIONS *			
(90) Inspection Date	06/15/2023		
(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.			



General Observation

06/15/2023 Under water type 2 inspection was performed. No substructure was in water at time of inspection. This was a visual around substructure at low water conditions. Little to no scour at this time. Channel profile was made on both sides of bridge measurements taken and recorded into MicroStation drawing at each bent and center point of span from top of rail down.

-Access for this structure is walking and wading.

-Trees and vegetation are growing beside and under bridge.

-Abutment #2 left approach rail cable broken.

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

Deck is in good condition with hairline to cs2 cracks in deck with hairline cracks in the soffit/undersurface as well.

59 - Superstructure (8 - VERY GOOD CONDITION - no problems noted.)

6/8/2021-Lowered superstructure from 9 to 8 due to steel protective coating having granular texture.

Superstructure is in very good condition with the steel girder surface having a grainy feel to the surface.

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

06/15/2023 lowered substructure from 8 to 7 due to some minor cracks in abutments and pier caps.

Substructure is in good condition with some minor cracks in abutments and pier caps, and steel pile CMPs have a rusted exterior.

61 - Channel/Channel Protection (5 - Bank protection is being eroded. River control devices and/or embankment have major damage. Trees and brush restrict the channel.)

06/15/2023 lowered channel from 9 to 5 due to debris restrictions in channel.

06/15/2023 Under water type 2 inspection was performed. No substructure was in water at time of inspection. This was a visual around substructure at low water conditions. Little to no scour at this time. Channel profile was made on both sides of bridge measurements taken and recorded into MicroStation drawing at each bent and center point of span from top of rail down.

Channel has good alignment with bridge. Channel banks are well vegetated with little erosion and slumping. Banks under bridge have rip rap placed and seems to be functioning as intended. Channel has large amounts of vegetation growing in it causing restrictions to water flow.

A-54 - Sealable Deck Cracks (Y)

Deck has unsealed transverse and longitudinal cracks each span.

A-55 - Deck Washing Needed (Y)

Gutters have dirt and debris.

A-63 - Missing/Incorrect Log Mile Signage (Y)

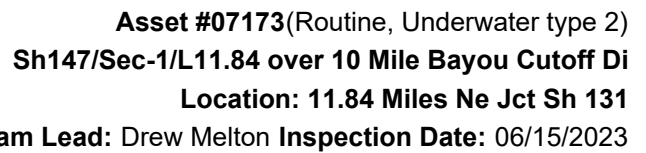
No log mile signs in place should read 11.84.



Asset #07173(Routine, Underwater type 2)
Sh147/Sec-1/L11.84 over 10 Mile Bayou Cutoff Di
Location: 11.84 Miles Ne Jct Sh 131
Team Lead: Drew Melton **Inspection Date:** 06/15/2023

A-64 - Vegetation Removal Requested (Y)

Trees and vegetation are growing beside and under bridge.



ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
12	Reinforced Concrete Deck	SF	6809	6169	640	0	0
1130	Cracking (RC and Other)	SF	640	0	640	0	0
(12) -Deck has transverse and longitudinal hairlines cracks all spans. -Deck has two open longitudinal cracks each lane full length of bridge. -Soffit/under surface overhang has transverse hairline cracks each span spaced at 10' +-. -Gutters have dirt and debris.							
107	Steel Open Girder/Beam	LF	790	790	0	0	0
515	Steel Protective Coating	SF	5807	0	5807	0	0
3430	Oxide Film Degradation Color/Texture Adherence(Steel Protective Coatings)	LF	5807	0	5807	0	0
(107) -Steel protective coating has granular texture.							
215	Reinforced Concrete Abutment	LF	90	90	0	0	0
(215) -Both abutment backwalls have vertical hairline cracks.							
225	Steel Pile	EA	12	12	0	0	0
515	Steel Protective Coating	SF	258	223	35	0	0
3430	Oxide Film Degradation Color/Texture Adherence(Steel Protective Coatings)	EA	35	0	35	0	0
(225) -CMP encasements have light rust forming on bents #2 and 3 near waterline.							
234	Reinforced Concrete Pier Cap	LF	86	78	8	0	0
1120	Efflorescence/Rust Staining	LF	8	0	8	0	0
(234) -Concrete above caps at bents have a few vertical cracks with light efflorescence.							
321	Reinforced Concrete Approach Slab	SF	1752	1402	350	0	0
1130	Cracking (RC and Other)	SF	350	0	350	0	0
(321) -All approach slabs and gutters have hairline and cs2 cracks.							
331	Reinforced Concrete Bridge Railing	LF	318	238	80	0	0
1120	Efflorescence/Rust Staining	LF	40	0	40	0	0
1130	Cracking (RC and Other)	LF	40	0	40	0	0
(331) -Bridge rails have vertical cracks spaced every 4' some with light efflorescence.							



Side view-elevation



Top view-Inventory



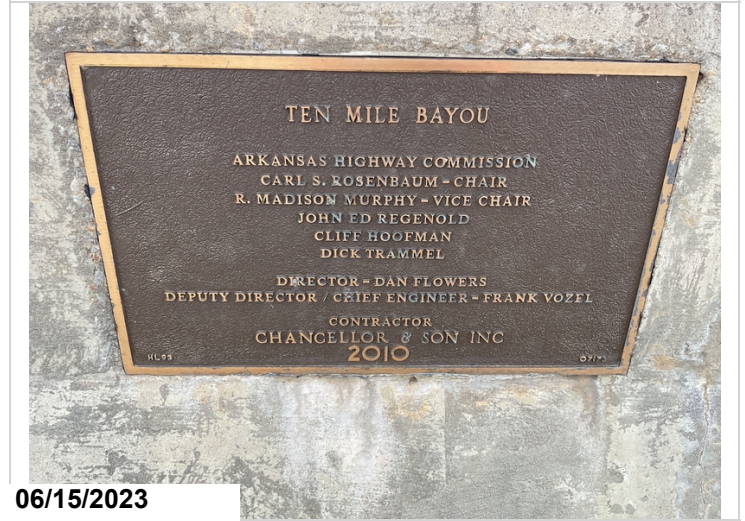
Channel left side



Channel right side



Channel under bridge



Bridge identification plate



Typical vegetation



Abutment #2 left approach rail cable broken.



All approach slabs and gutters have hairline and cs2 cracks.



Left bridge rail



Right bridge rail



Bridge rails have vertical cracks spaced every 4' some with light efflorescence.



Typical deck



Typical soffit/under surface



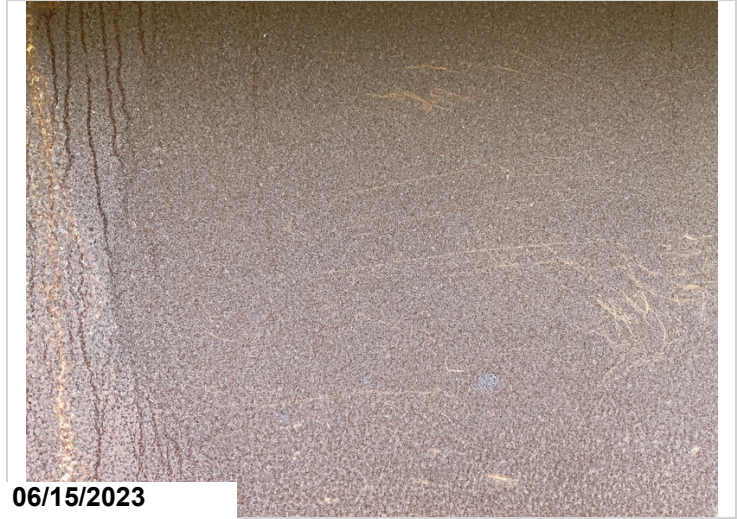
Typical soffit/under surface overhang



Typical deck crack.



Typical debris in gutters



Typical girder condition



Typical rust on cmp around steel piles



concrete above caps at bents have a few vertical cracks with light efflorescence.



Typical abutment crack



Abutment #1



Abutment #2



Typical debris in gutters



Typical deck crack.



Bridge has no log mile signs.



Typical vegetation

Maintenance Needs

Date Reported: 06/09/2021

Priority: C - Important

Type of Work: Repair (General)

Status: Assigned

Component: Approach

Deficiency Description

Abutment #2 left approach rail cable broken.

Remarks



Abutment #2 left approach rail.

Maintenance Needs

Date Reported: 06/08/2021

Priority: D- Routine

Type of Work: Repair (General)

Status: Monitor

Component: Element

Deficiency Description

Abutments #1,2 approach slabs have unsealed cracks.

Remarks



Abutment #1 approach slab.



Typical longitudinal crack in approach slab.



Abutment #2 approach slab.

Routine Maintenance

Check Box Maintenance Items

Type of Maintenance	Is recommended?
A-54 - Sealable Deck Cracks	Yes
A-55 - Deck Washing Needed	Yes
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	Yes
A-64 - Vegetation Removal Requested	Yes

A-54 - Sealable Deck Cracks (Yes)

Deck has unsealed transverse and longitudinal cracks each span.



Typical deck crack.

A-55 - Deck Washing Needed (Yes)
Gutters have dirt and debris.



Typical debris in gutters

A-56 - Joint Cleaning/Flushing Needed

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 (Yes)
No log mile signs in place should read 11.84.

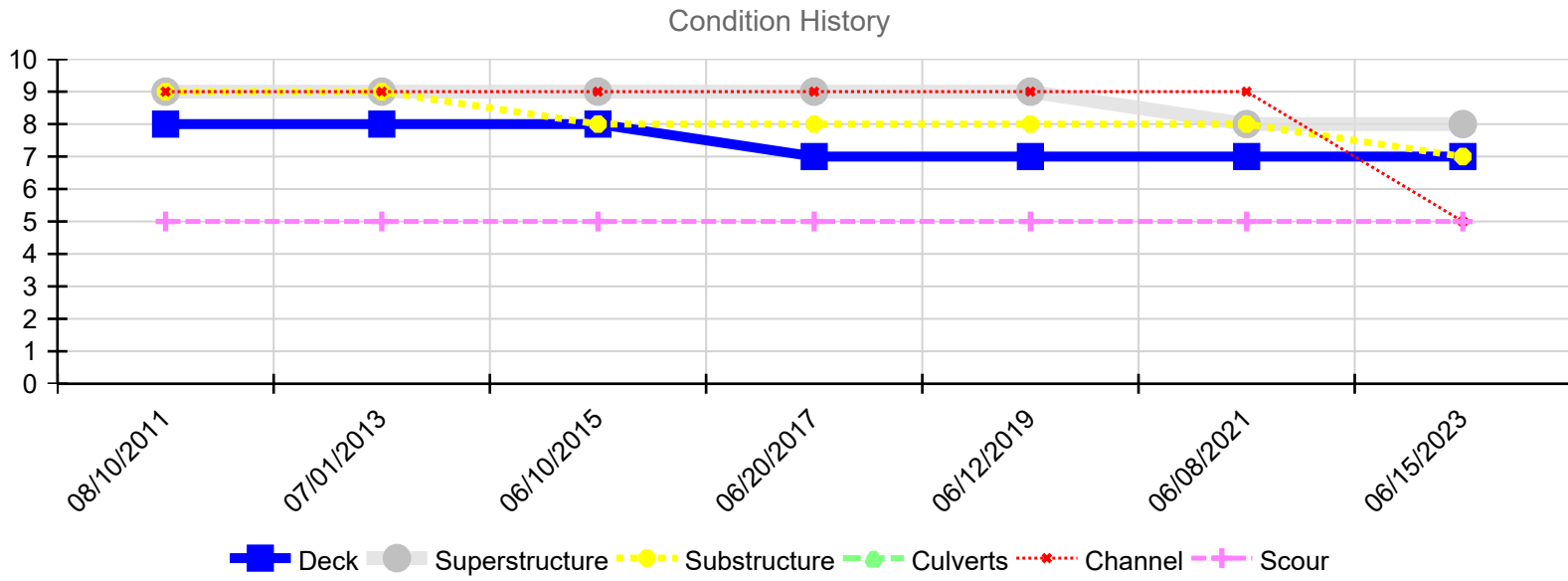


Bridge has no log mile signs.

A-64 - Vegetation Removal Requested (Yes)
Trees and vegetation are growing beside and under bridge.



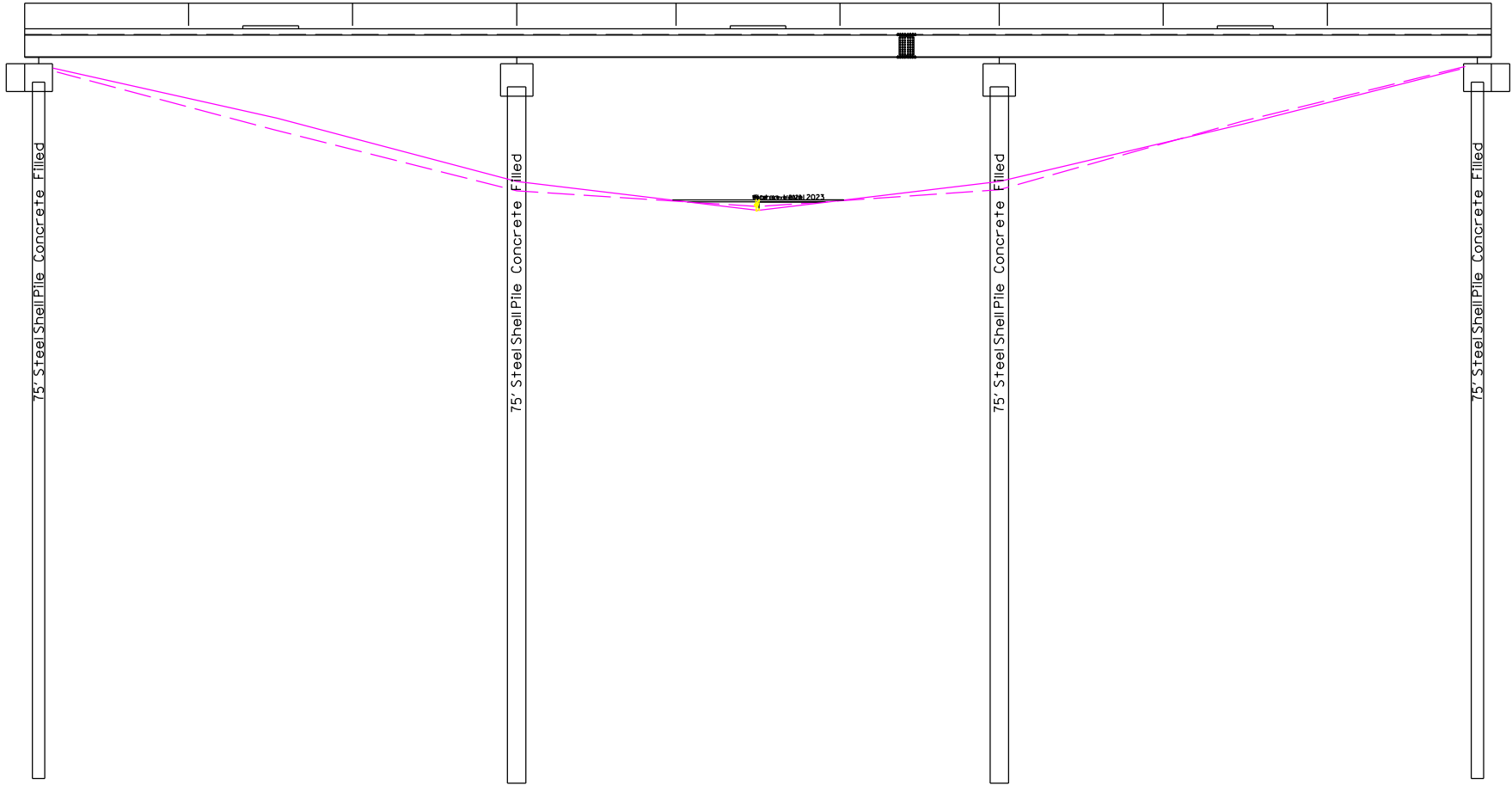
Typical vegetation



Inspection Date	Deck	Superstructure	Substructure	Culverts	Channel	Scour
06/15/2023	7	8	7	N	5	5
06/08/2021	7	8	8	N	9	5
06/12/2019	7	9	8	N	9	5
06/20/2017	7	9	8	N	9	5
06/10/2015	8	9	8	N	9	5
07/01/2013	8	9	9	N	9	5
08/10/2011	8	9	9	N	9	5

Measurments Taken Top Of Rail

Abutment #1



Bent #1

1/2

Bent #2

1/2

Bent #3

1/2

Bent #4

06/20/2023 Left Side 7.4'	13.6'	20.2'	21.9'	20.1'	12.7'	6.8'
06/20/2023 Right Side 7.0'	12.4'	19.2'	22.3'	19.2'	13.0'	7.1'