



Latitude:36.10015, Longitude:-90.45924

Route:49 Section:02 Log:12.73

Arnold Road ID:28x49x2xA, Arnold Log mile:12.71

District 10, 55 - Greene County

Owner: 1 - State Highway Agency

Inspection Direction: 1 - N to S

Bridge Posting Information

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

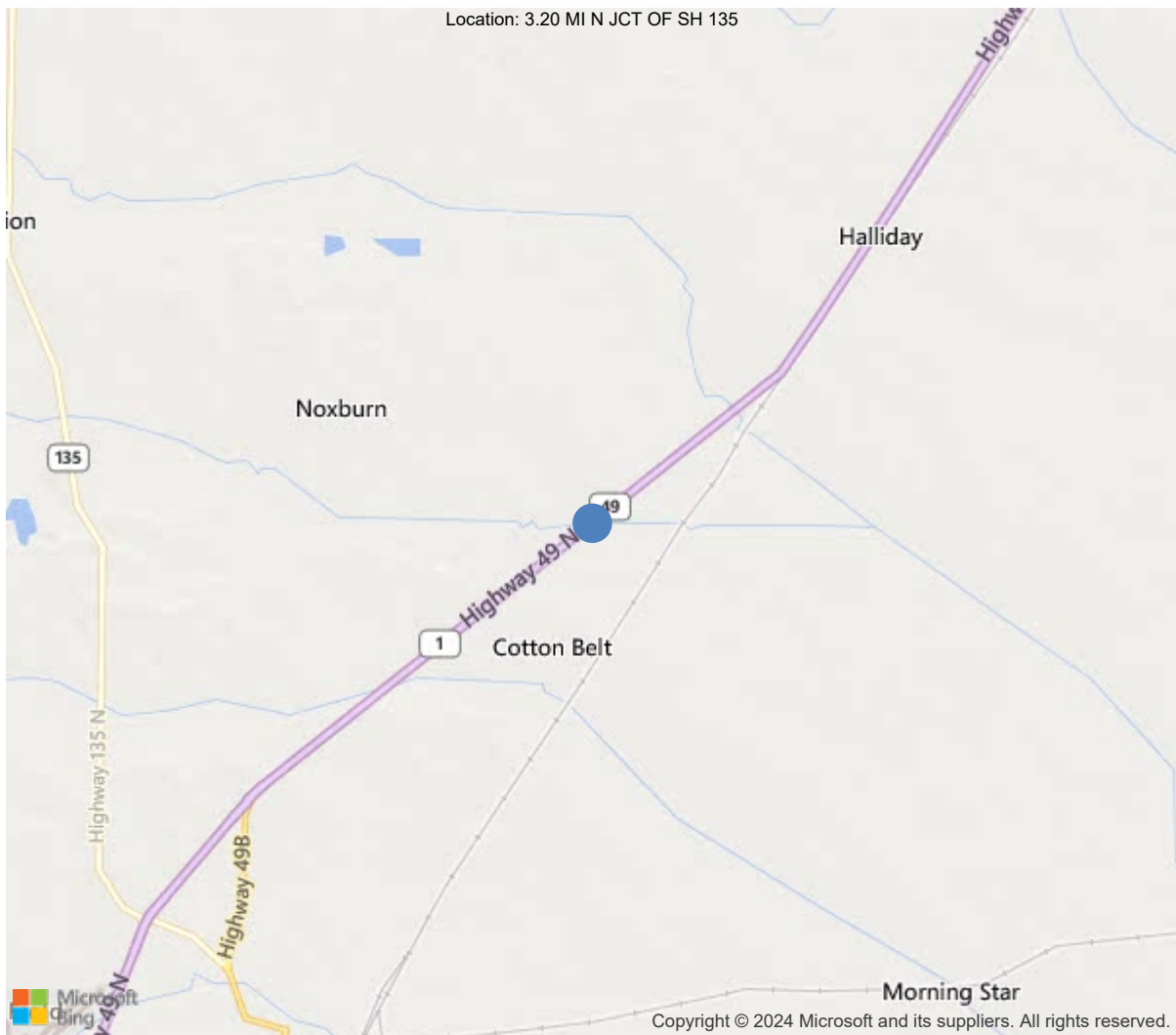
70 - Bridge Posting: 5 - Equal to or above legal loads

Legal Load	Calculated Capacity	Beginning of Bridge Sign Current Value	End of Bridge Sign Current Value
Code 4 (22 Tons)	35	Null	Null
Code 9 (31 Tons)	39	Null	Null
Code 5 (40 Tons)	48	Null	Null

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



36.10015, -90.45924



Asset #02459(Routine, Underwater type 2)

US 49-02- LM 12.73 over JACKS CREEK

Location: 3.20 MI N JCT OF SH 135

Team Lead: Richard Jones Inspection Date: 05/08/2023

IDENTIFICATION	
(1) State Names	5 - Arkansas
(8) Structure Number	02459
(5) Inventory Route	1
(2) Highway Agency District	10 - District 10
(3) County Code	55 - Greene County
(4) Place Code	0
(6) Features Intersected	JACKS CREEK
(7) Facility Carried	US 49-02- LM 12.73
(9) Location	3.20 MI N JCT OF SH 135
(11) Mile Point	12.73 mi
(12) Base Highway Network	Yes
(13) LRS Inventory Rte & Subrte	0000049020
(16) Latitude	36.1001542478457
(17) Longitude	-90.4592404274146
(98) Border Bridge State Code	
(99) Border Bridge Structure No.	
STRUCTURE TYPE AND MATERIAL	
(43) Main Structure Type	32
Material	3 - Steel
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	6 - Bituminous
Type of Membrane	0 - None
Type of Deck Protection	0 - None
AGE AND SERVICE	
(27) Year Built	1947
(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	6400
(30) Year of ADT	2018
(109) Truck ADT	6 %
(19) Bypass, Detour Length	1 mi
GEOMETRIC DATA	
(48) Length of Maximum Span	30 ft
(49) Structure Length	92.3 ft
(50) Curb or Sidewalk Width	
Left	1.7 ft
Right	1.7 ft
(51) Bridge Roadway Width Curb to Curb	26 ft
(52) Deck Width Out to Out	31.5 ft
(32) Approach Roadway Width (W/Shoulders)	36.1 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	26 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	16 - Urban 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	1 - The inventory route is par
(20) Toll	3 - On free road. The structu
(21) Maintain	1 - State Highway Agency
(22) Owner	1 - State Highway Agency
(37) Historical Significance	5 - Bridge is not eligible for
CONDITION	
(58) Deck	6
(59) Superstructure	6
(60) Substructure	5
(61) Channel & Channel Protection	5
(62) Culverts	N
LOAD RATING AND POSTING	
(31) Design Load	4 - M 18 / H 20
(63) Operating Rating Method	1
(64) Operating Rating	
Type	1 - Load Factor(LF)
Rating	53
(65) Inventory Rating Method	1 - Load Factor(LF)
(66) Inventory Rating	
Type	
Rating	32
(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	2
(69) Clearances, Vertical/Horizontal	N
(71) Waterway Adequacy	9
(72) Approach Roadway Alignment	8
(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	31 - Replacement of bridge or
(76) Length of Structure Improvement	119 ft
(94) Bridge Improvement Cost	\$ 0
(95) Roadway Improvement Cost	\$ 265
(96) Total Project Cost	\$ 739
(97) Year of Improvement Cost Estimate	2003
(114) Future ADT	14000
(115) Year of Future ADT	2033

INSPECTIONS *			
(90) Inspection Date	05/08/2023		
(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.			



Asset #02459(Routine, Underwater type 2)

US 49-02- LM 12.73 over JACKS CREEK

Location: 3.20 MI N JCT OF SH 135

Team Lead: Richard Jones Inspection Date: 05/08/2023

58 - Deck (6 - SATISFACTORY CONDITION - structural elements show some minor deterioration.)

Soffit is in overall good condition, but has several cracks with efflorescence along exterior girders and overhangs. Overhangs have some initial concrete disintegration.

59 - Superstructure (6 - SATISFACTORY CONDITION - structural elements show some minor deterioration.)

Several beam ends were repaired by HBM in 2020.

60 - Substructure (5 - FAIR CONDITION - all primary structural elements are sound but may have minor section loss, cracking, spalling or scour.)

Substructure elements are in good to fair condition, but has a history of moderate scour.

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.)

Embankment has some erosion at Lt and Rt ends of bent 4.

Small trees growing under bridge.

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
12	Reinforced Concrete Deck	SF	2475	2320	0	155	0
1080	Delamination/Spall/Patched Area	SF	8	0	0	8	0
1120	Efflorescence/Rust Staining	SF	91	0	0	91	0
1130	Cracking (RC and Other)	SF	56	0	0	56	0
510	Wearing Surfaces	SF	2340	1455	24	861	0
3210	Delam/Spall/Patched Area/Pothole	SF	27	0	24	3	0
3220	Crack (Wearing Surface)	SF	858	0	0	858	0
(12) Left concrete curb has some deterioration. Debris is built up along gutters. Soffit is in overall good condition, but has several cracks with efflorescence along exterior girders and overhangs. Overhangs have some initial concrete disintegration.							
(510-12) Wearing surface has several longitudinal, map, and transverse cracks. Asphalt is raveling out over joints.							
107	Steel Open Girder/Beam	LF	360	204	156	0	0
1000	Corrosion	LF	156	0	156	0	0
515	Steel Protective Coating	SF	2982	491	2000	491	0
3440	Effectiveness (Steel Protective Coatings)	LF	2982	491	2000	491	0
(107) Exterior beams have areas of corrosion along top flange. Several repairs were made to beam ends in 2020 by HBM crew.							
Span 1 bent 1 girder 1 was t spliced in 2020. Span 1 bent 1 girder 4 was t spliced in 2020.							
Span 1 bent 2 girders 1, 2, and 4 were t spliced in 2020. Span 2 bent 2 girders 1 and 4 were t spliced in 2020.							
Span 2 bent 3 girder 1 was t spliced in 2020. Span 3 bent 3 girders 1 and 4 were t spliced in 2020.							
Span 3 bent 4 girder 1 was t spliced in 2020.							
215	Reinforced Concrete Abutment	LF	72	20	0	52	0
1130	Cracking (RC and Other)	LF	4	0	0	4	0
6000	Scour	LF	48	0	0	48	0
(215) Bent 1 abutment had a concrete scour repair poured under abutment sometime in the past. Left wing/end post at bent 4 abutment is cracked from past collision damage.							
227	Reinforced Concrete Pile	EA	8	4	4	0	0
1080	Delamination/Spall/Patched Area	EA	1	0	1	0	0
1190	Abrasion/Wear (PSC/RC)	EA	3	0	3	0	0
(227) Bent 2 piles have minor abrasion near water level.							

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
Bent 2 pile 3 was patched by HBM crew in 2020. Bent 3 piles 1 - 3 were driven out of plumb, as built.							
234	Reinforced Concrete Pier Cap	LF	50	42	5	3	0
1080	Delamination/Spall/Patched Area	LF	8	0	5	3	0
(234) Interior bent caps have a few minor cracks and patched areas.							
305	Assembly Joint without Seal	LF	123	0	0	123	0
2350	Debris Impaction	LF	123	0	0	123	0
(305) covered with asphalt.							
311	Movable Bearing	EA	12	0	12	0	0
1000	Corrosion	EA	12	0	12	0	0
(311) Bearings were cleaned and painted in 2020, but have some section loss and active corrosion.							
313	Fixed Bearing	EA	12	0	12	0	0
1000	Corrosion	EA	12	0	12	0	0
(313) Bearings were cleaned and painted in 2020, but have some section loss and active corrosion.							
331	Reinforced Concrete Bridge Railing	LF	180	179	0	1	0
7000	Damage	LF	1	0	0	1	0
(331) Left wing/end post at bent 4 abutment is cracked from past collision damage.							



side



Roadway



Wearing surface



Span 2



Span 1 bent 1 girder 4 - typ girder repair



Asset #02459(Routine, Underwater type 2)

US 49-02- LM 12.73 over JACKS CREEK

Location: 3.20 MI N JCT OF SH 135

Team Lead: Richard Jones **Inspection Date:** 05/08/2023

Maintenance Needs

Date Reported: 04/05/2011

Priority: C - Important

Type of Work: Channel Work/Drift Removal

Status: Monitor

Component: Channel

Deficiency Description

5 ft. – 6 ft. of channel scour has occurred at Bents 2 & 3 since bridge was built as per layout sheet.
Lt and Rt ends of bent 4 abutment have embankment erosion. Abutment has some undermining.

Remarks

Maintenance Needs

Date Reported: 04/05/2011

Priority: C - Important

Type of Work: Miscellaneous

Status: Monitor

Component: Deck

Deficiency Description

Wearing surface has several longitudinal, map, and transverse cracks. Asphalt is raveling out over joints.

Remarks



Bent 3 joint

Maintenance Needs

Date Reported: 04/04/2013

Priority: D- Routine

Type of Work: Deck Repair

Status: Monitor

Component: Deck

Deficiency Description

Soffit is in overall good condition, but has several cracks with efflorescence along exterior girders and overhangs. Overhangs have some initial concrete disintegration.

Remarks



05/08/2023

Lt overhang at bent 3

Maintenance Needs

Date Reported: 05/06/2020

Priority: D- Routine

Type of Work: Repair (General)

Status: Monitor

Component: Miscellaneous

Deficiency Description

Left wing/end post at bent 4 abutment is cracked from past collision damage.

Remarks



Bent 4 Lt



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US 49-02- LM 12.73 over JACKS CREEK

Location: 3.20 MI N JCT OF SH 135

Team Lead: Richard Jones Inspection Date: 05/08/2023

Routine Maintenance

Check Box Maintenance Items

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

A-54 - Sealable Deck Cracks

A-55 - Deck Washing Needed (Yes)

A-56 - Joint Cleaning/Flushing Needed



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US 49-02- LM 12.73 over JACKS CREEK

Location: 3.20 MI N JCT OF SH 135

Team Lead: Richard Jones Inspection Date: 05/08/2023

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



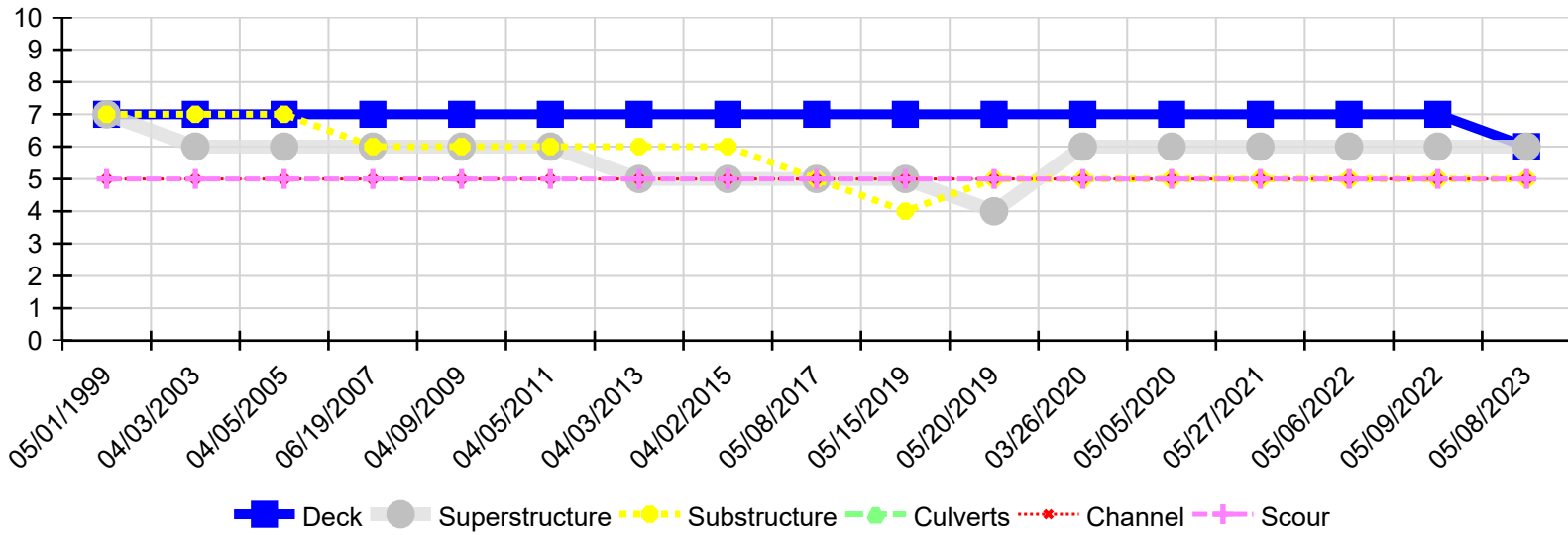
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Location: 3.20 MI N JCT OF SH 135

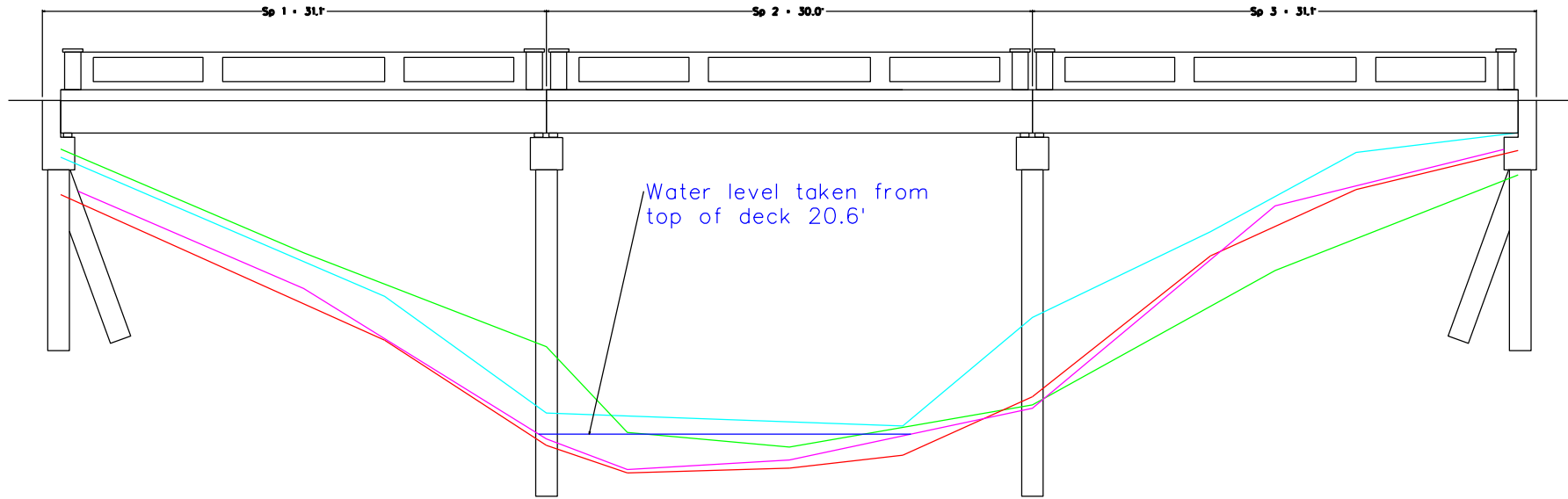
Team Lead: Richard Jones Inspection Date: 05/08/2023

Condition History

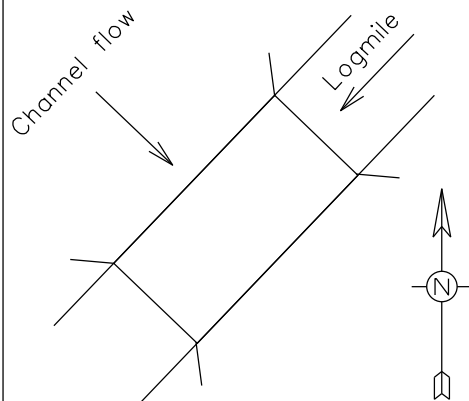


Inspection Date	Deck	Superstructure	Substructure	Culverts	Channel	Scour
05/08/2023	6	6	5	N	5	5
05/09/2022	7	6	5	N	5	5
05/06/2022	7	6	5	N	5	5
05/27/2021	7	6	5	N	5	5
05/05/2020	7	6	5	N	5	5
03/26/2020	7	6	5	N	5	5
05/20/2019	7	4	5	N	5	5
05/15/2019	7	5	4	N	5	5
05/08/2017	7	5	5	N	5	5
04/02/2015	7	5	6	N	5	5
04/03/2013	7	5	6	N	5	5
04/05/2011	7	6	6	N	5	5
04/09/2009	7	6	6	N	5	5
06/19/2007	7	6	6	N	5	5
04/05/2005	7	6	7	N	5	5
04/03/2003	7	6	7	N	5	5
05/01/1999	7	7	7	N	5	5

Overall Length = 92.25'



Bent 1	Mid	+20'	Bent 2	+5'	Mid	+22'	Bent 3	+11'	Mid	+20'	Bent 4
3.0'	9.4'		15.2'	20.5'	21.4'		18.8'		10.5'		4.6'
3.5'		12.1'	19.3'		20.1'		13.4'	8.1'		3.2'	2.0'
5.8'		14.8'	21.3'	23.0'	22.7'	21.9'	18.3'	9.6'		5.5'	3.1'
5.6'	11.6'	--	20.9'	22.8'	22.2'	--	19.0'	--	6.5'	--	3.0'



Channel profiled from top of deck on Rt side (upstream side)

Green soundings taken on 5/4/1990

Teal soundings taken on 6/4/1992

Red soundings taken on 5/15/2019

Pink soundings taken on 5/8/2023

*Not to Scale

Bridge No. 02459	Dist. 10	Co. Greene
Logmile 12.73	Rt. US 49	Sect/Zone - 02
Date Drawn 5/8/23	Insp. / Assist. RRJ/BDS/CCP	