



Latitude:34.01961, Longitude:-91.81462

Route:425 Section:06 Log:5.83

Arnold Road ID:40x425x6xA, Arnold Log mile:5.838

District 02, 79 - Lincoln County

Owner: 1 - State Highway Agency

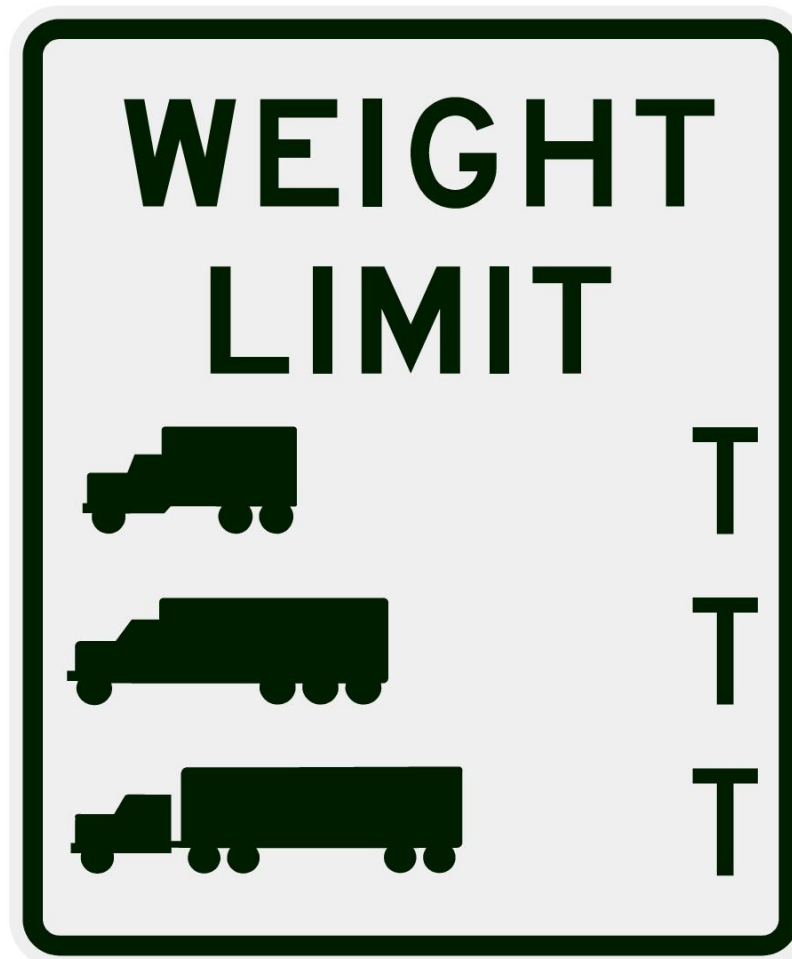
Bridge Posting Information

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

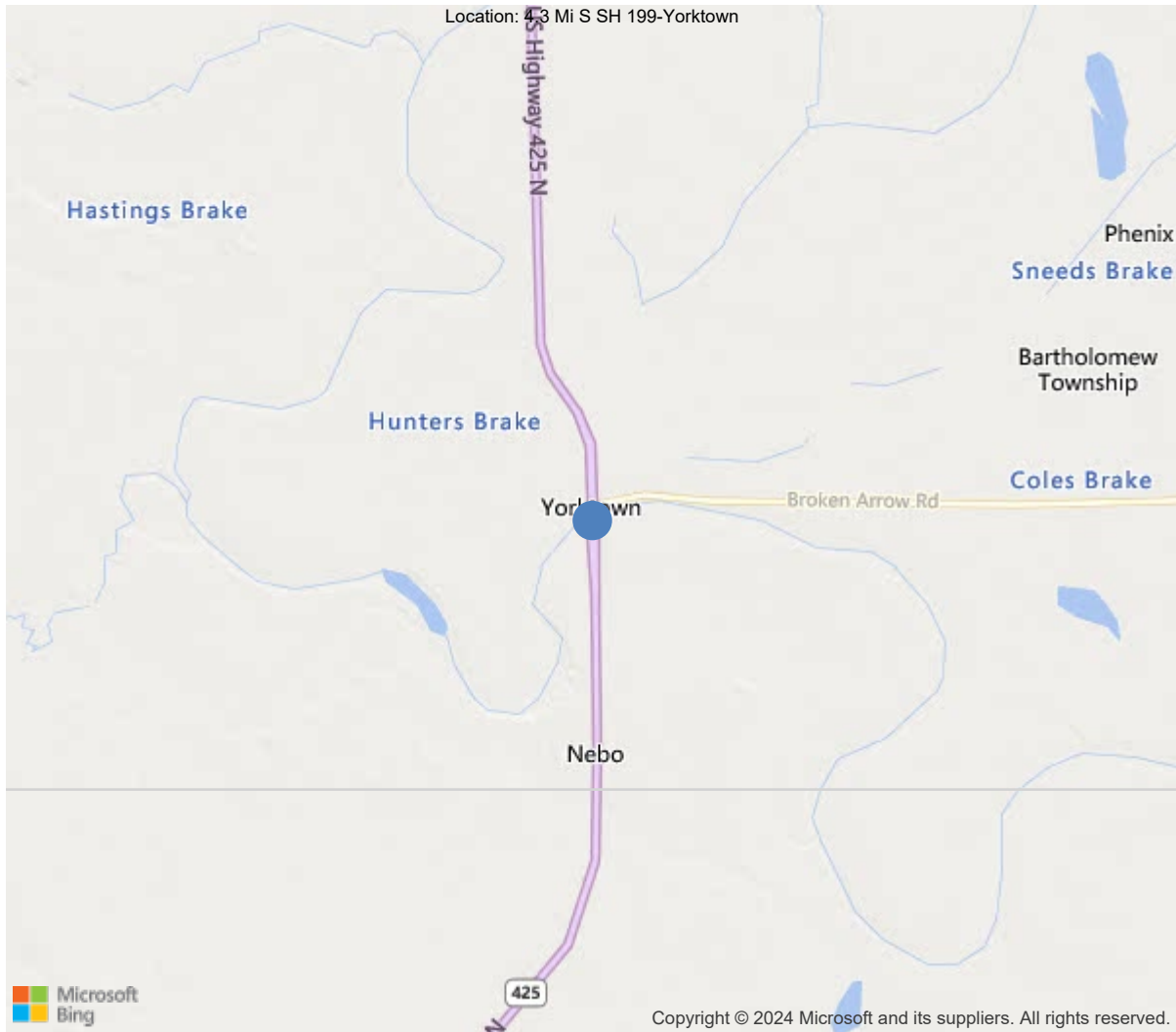
70 - Bridge Posting: 5 - Equal to or above legal loads

Legal Load	Calculated Capacity	Beginning of Bridge Sign Current Value	End of Bridge Sign Current Value
Code 4 (22 Tons)	40		
Code 9 (31 Tons)	50		
Code 5 (40 Tons)	60		

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



34.01961, -91.81462



Asset #B6681 (Routine)

US 425 NB LM 5.83 over Bayou Bartholomew

Location: 4.3 Mi S SH 199-Yorktown

Team Lead: Greg Loomis, Inspection Date: 10/27/2022

IDENTIFICATION	
(1) State Names	5 - Arkansas
(8) Structure Number	B6681
(5) Inventory Route	1
(2) Highway Agency District	02 - District 02
(3) County Code	79 - Lincoln County
(4) Place Code	0
(6) Features Intersected	Bayou Bartholomew
(7) Facility Carried	US 425 NB LM 5.83
(9) Location	4.3 Mi S SH 199-Yorktown
(11) Mile Point	5.83 mi
(12) Base Highway Network	Yes
(13) LRS Inventory Rte & Subrte	0000425060
(16) Latitude	34.01961
(17) Longitude	-91.81462
(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	6
(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	1998
(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	15000
(30) Year of ADT	2018
(109) Truck ADT	18 %
(19) Bypass, Detour Length	29 mi
GEOMETRIC DATA	
(48) Length of Maximum Span	55 ft
(49) Structure Length	332 ft
(50) Curb or Sidewalk Width	
Left	0 ft
Right	0 ft
(51) Bridge Roadway Width Curb to Curb	48 ft
(52) Deck Width Out to Out	50.8 ft
(32) Approach Roadway Width (W/Shoulders)	36.1 ft
(33) Bridge Median	0 - No median
(34) Skew	0 Deg
(35) Structure Flared	1 - Yes, flared
(10) Inventory Route Min Vert Clear	99.99 ft
(47) Inventory Route Total Horiz Clear	38.7 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 w
(111) Pier Protection	5 - None present but re-evalua
(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	1
(26) Functional Class	2 - Rural Principal Arterial -
(100) Defense Highway	0 - The inventory route is not
(101) Parallel Structure	R - The right structure of par
(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	7
(59) Superstructure	8
(60) Substructure	7
(61) Channel & Channel Protection	8
(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	60
(65) Inventory Rating Method	1 - Load Factor(LF)
(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	5
(69) Clearances, Vertical/Horizontal	N
(71) Waterway Adequacy	8
(72) Approach Roadway Alignment	8
(36A) Bridge Railings	1 - Inspected feature meets current
(36B) Transitions	0 - Inspected feature does not meet
(36C) Approach Guardrail	0 - Inspected feature does not meet
(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	2733
(115) Year of Future ADT	2028

INSPECTIONS *			
(90) Inspection Date	10/27/2022		
(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 #B6681(Routine)

District: 02, County: 79 - Lincoln County

Team Lead: Greg Loomis, Inspection Date: 10/27/2022

General Observation

Bridge is logged from south to north.
Beginning of structure toward Star City.

Updated LM from 5.84 to 5.83 per Str Ln from TS dated 12/09. DRB, 12/11/09



Asset #B6681 (Routine)

US 425 NB LM 5.83 over Bayou Bartholomew

Location: 4.3 Mi S SH 199-Yorktown

Team Lead: Greg Loomis, Inspection Date: 10/27/2022

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
12	Reinforced Concrete Deck	SF	14575	14243	332	0	0
1130	Cracking (RC and Other)	SF	332	0	332	0	0
(12) Deck: 40'-10" wide x 110' long (Spans 1-2) + average 45'-10" x 220' long (Spans 3-6) = 14,575 square feet total. Very light abrasive wear with very light map cracking in scattered areas, especially in wheel ruts. A few small longitudinal and transverse cracks per span.							
107	Steel Open Girder/Beam	LF	1870	1870	0	0	0
515	Steel Protective Coating	SF	13913	13913	0	0	0
(107) Girders: 5 per span / Spans 1-2 (55' each = 110'); 6 per span / Spans 3-6 (55' each = 220') = 330' total span. Coating/weathering steel (W30x116): 7.44 square feet per linear foot. Uniformed color, brown, on all steel members with granular texture.							
215	Reinforced Concrete Abutment	LF	130	40	35	55	0
1130	Cracking (RC and Other)	LF	85	0	30	55	0
6000	Scour	LF	5	0	5	0	0
(215) Abutments: 40' each (with 10' wings each corner) / Bent 1; 50' each (with 10' wings each corner) / Bent 7. Bents 1 & 7: Horizontal cracking with scattered map cracking - 55' CS3 cracking; 30' CS2 cracking. Scour - Bent 7 left: Minor erosion/settlement (currently filled with rock rip-rap) of end slope material exposing 6" of Pile 1 - 5' CS2 scour.							
227	Reinforced Concrete Pile	EA	29	29	0	0	0
(227) Piling: 5 per bent / Bents 2 & 3; 6 per bent / Bents 4-6; 1 per bent / Bent 7 (exposed due to erosion).							
234	Reinforced Concrete Pier Cap	LF	216	0	108	108	0
1130	Cracking (RC and Other)	LF	216	0	108	108	0
(234) Caps: 40' each / Bents 2-3; 42'-6" = 43' each / Bent 4; 45' each / Bent 5; 47'-6" = 48' each / Bent 6. Bents 2-6: Map-cracking across front, back, and end faces of caps.							
302	Compression Joint Seal	LF	292	174	118	0	0
2330	Seal Damage	LF	24	0	24	0	0
2340	Seal Cracking	LF	94	0	94	0	0
(302) Joints: 38' each / Bents 1-3; 40'-6" = 41' each / Bent 4; 43' each / Bent 5; 45'-6" = 46' each / Bent 6; 48' each / Bent 7. Bents 2-6: Various locations have adhesive failing and cracking on one side or the other with some damage/leakage. Bent 5: Transverse cracking across deck adjacent to joint.							
311	Movable Bearing	EA	34	24	10	0	0

US 425 NB LM 5.83 over Bayou Bartholomew

Location: 4.3 Mi S SH 199-Yorktown

Team Lead: Greg Loomis, **Inspection Date:** 10/27/2022

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
1000	Corrosion	EA	10	0	10	0	0
515	Steel Protective Coating	SF	34	24	10	0	0
3430	Oxide Film Degradation Color/Texture Adherence(Steel Protective Coatings)	EA	10	0	10	0	0
(311) Movable bearings: 5 each / Bents 2b & 3b; 6 each / Bents 4b, 5b, 6a, & 6b Coating/weathering steel: 1 square feet each. Some dark brown color to bearings due to leaking joint seals.							
313	Fixed Bearing	EA	34	24	10	0	0
1000	Corrosion	EA	10	0	10	0	0
515	Steel Protective Coating	SF	34	24	10	0	0
3430	Oxide Film Degradation Color/Texture Adherence(Steel Protective Coatings)	EA	10	0	10	0	0
(313) Fixed bearings: 5 each / Bents 1 & 2a; 6 each / Bents 3a, 4a, 5a, & 7. Coating/weathering steel: 1 square feet each. Some dark brown color to bearings due to leaking joint seals.							
331	Reinforced Concrete Bridge Railing	LF	664	0	0	664	0
1130	Cracking (RC and Other)	LF	664	0	0	664	0
(331) Railing 332' each side. Heavy map-cracking throughout on inside and outside of walls.							

Asset #B6681 (Routine)

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US 425 NB LM 5.83 over Bayou Bartholomew

Location: 4.3 Mi S SH 199-Yorktown

Team Lead: Greg Loomis, **Inspection Date:** 10/27/2022

Substructure

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
215	Reinforced Concrete Abutment	LF	130	40	35	55	0
1130	Cracking (RC and Other)	LF	85	0	30	55	0
6000	Scour	LF	5	0	5	0	0
(215) Abutments: 40' each (with 10' wings each corner) / Bent 1; 50' each (with 10' wings each corner) / Bent 7. Bents 1 & 7: Horizontal cracking with scattered map cracking - 55' CS3 cracking; 30' CS2 cracking. Scour - Bent 7 left: Minor erosion/settlement (currently filled with rock rip-rap) of end slope material exposing 6" of Pile 1 - 5' CS2 scour.							
227	Reinforced Concrete Pile	EA	29	29	0	0	0
(227) Piling: 5 per bent / Bents 2 & 3; 6 per bent / Bents 4-6; 1 per bent / Bent 7 (exposed due to erosion).							
234	Reinforced Concrete Pier Cap	LF	216	0	108	108	0
1130	Cracking (RC and Other)	LF	216	0	108	108	0
(234) Caps: 40' each / Bents 2-3; 42'-6" = 43' each / Bent 4; 45' each / Bent 5; 47'-6" = 48' each / Bent 6. Bents 2-6: Map-cracking across front, back, and end faces of caps.							



Left side view



Roadway view



Deck - Spans 1-3: Typical



Soffit - Spans 3-4: Typical

Maintenance Needs

Date Reported: 10/23/2018

Priority: C - Important

Type of Work: Repair (General)

Status: Open

Component: Approach

Deficiency Description

Approach railing - Bent 7 left: Several posts have been damaged (bent) by traffic impact - sliding railing also appears to be out of place.

10-27-2022 GGL-PRD: Changed priority from "G" to "C".

Remarks



Bent 7 bridge railing and post damage.



Bent 7 bridge guard rail damage.



Approach railing - Bent 7 left (damage)

Maintenance Needs

Date Reported: 10/28/2020

Priority: C - Important

Type of Work: Repair (General)

Status: Open

Component: Approach

Deficiency Description

Approach roadway - Bents 1 & 7: Deterioration/cracking of asphalt wearing surface at bridge ends

Bent 1 (south end) has a 1' x 2' pothole in inside wheel rut of right lane with settlement causing a bump going onto bridge.

Bent 7 (north end) has settlement (approximate 1/2-1") causing a drop leaving bridge.

Remarks



North approach has 1/2" to 1" drop leaving bridge.



Approach roadway - Bent 1 right: Deterioration/pothole

Maintenance Needs

Date Reported: 10/23/2018

Priority: D- Routine

Type of Work: (Inactive) (Inactive) 1 - Clean

Status: Repair Documented

Component: Deck

Deficiency Description

CORRECTED -

Gutter lines and drains both sides of deck have sediment and debris impeding drainage off of deck.

Remarks

10-27-2022 GGL-PRD: No debris build-up in gutter-line needing removal this inspection.



CORRECTED - Gutter-line - left side: No debris needing removal



Gutter lines and drains full sediment and debris impeding drainage.

Maintenance Needs

Date Reported: 10/23/2018

Priority: D- Routine

Type of Work: (Inactive) (Inactive) 1 - Clean

Status: Monitor

Component: Channel

Deficiency Description

Channel - Spans 1-3 & Span 5: Numerous small trees, bushes, and other vegetation growing up under bridge.

Remarks



Vegetation on both ends of bridge.



Small trees and vegetation growing under bridge.



Channel - Span 2 (vegetation)



Spans 5&6 have trees and vegetation growing under bridge.



Trees growing under bridge.

Maintenance Needs

Date Reported: 10/23/2018

Priority: (Inactive) (Inactive) G - General/
Preventive maintenance

Type of Work: Repair (General)

Status: Monitor

Component: Element

Deficiency Description

Railing - all spans: Numerous map cracks.

Remarks



Railing - Span 7 left (typical map cracking)



Span 6 map cracking (common on all concrete bridge railing).

Maintenance Needs

Date Reported: 12/29/2019

Priority: (Inactive) (Inactive) G - General/
Preventive maintenance

Status: Monitor

Type of Work: Repair (General)

Component: Element

Deficiency Description

Joints - all bents: Preformed joint material is beginning to deteriorate and crack with a few areas of wear/tattering.

Remarks



Joint - Bent 4 (damaged)



Bent 4 joint seals are torn and leaking.



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-54 - Sealable Deck Cracks

A-55 - Deck Washing Needed

A-56 - Joint Cleaning/Flushing Needed



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Location: 4.3 Mi S SH 199-Yorktown

Team Lead: Greg Loomis, Inspection Date: 10/27/2022

A-57 - Beam End and Bearing Painting 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



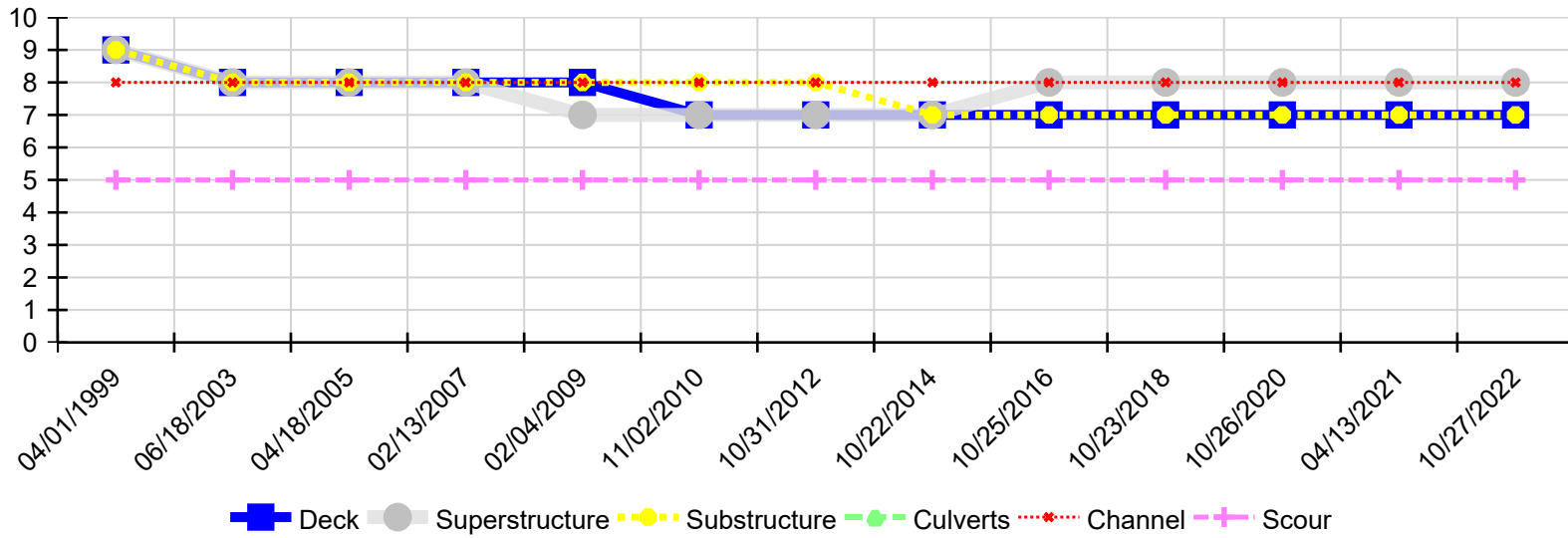
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Condition History



Inspection Date	Deck	Superstructure	Substructure	Culverts	Channel	Scour
10/27/2022	7	8	7	N	8	5
04/13/2021	7	8	7	N	8	5
10/26/2020	7	8	7	N	8	5
10/23/2018	7	8	7	N	8	5
10/25/2016	7	8	7	N	8	5
10/22/2014	7	7	7	N	8	5
10/31/2012	7	7	8	N	8	5
11/02/2010	7	7	8	N	8	5
02/04/2009	8	7	8	N	8	5
02/13/2007	8	8	8	N	8	5
04/18/2005	8	8	8	N	8	5
06/18/2003	8	8	8	N	8	5
04/01/1999	9	9	9	N	8	5