

Bridge 06578 Inspection Report



Latitude:36.15643, Longitude:-93.48489

Route:412 Section:05 Log:4.35

Arnold Road ID:8x412x5xA, Arnold Log mile:4.348

District 09, 15 - Carroll County

Owner: 1 - State Highway Agency

Inspection Direction: 4 - W to E

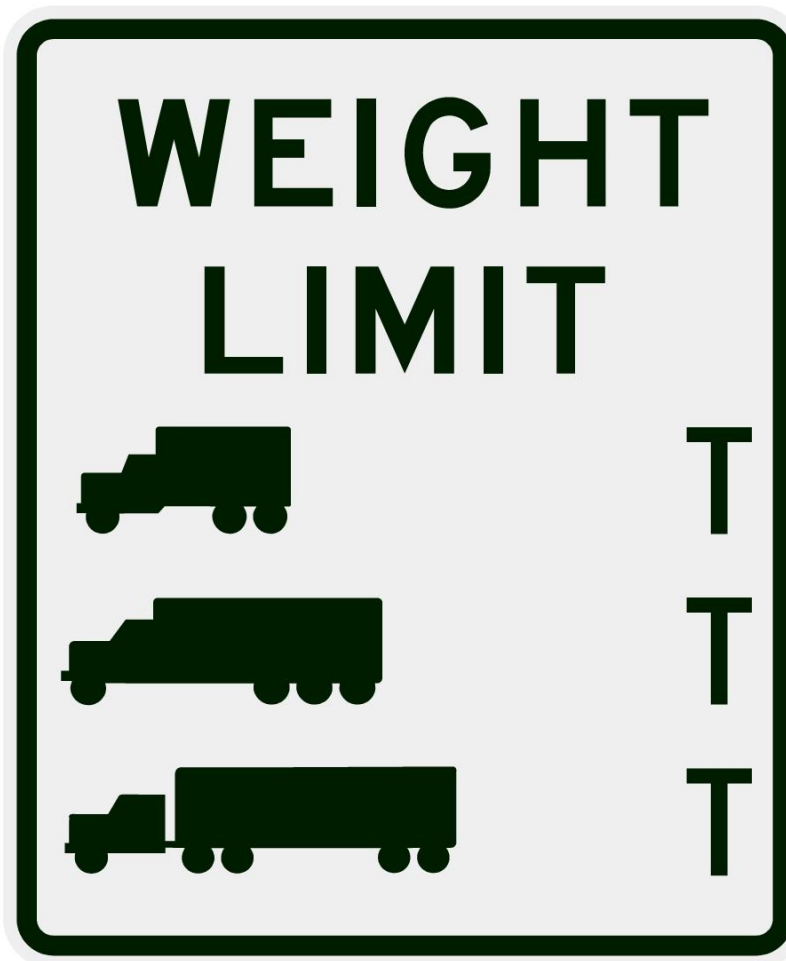
Bridge Posting Information

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

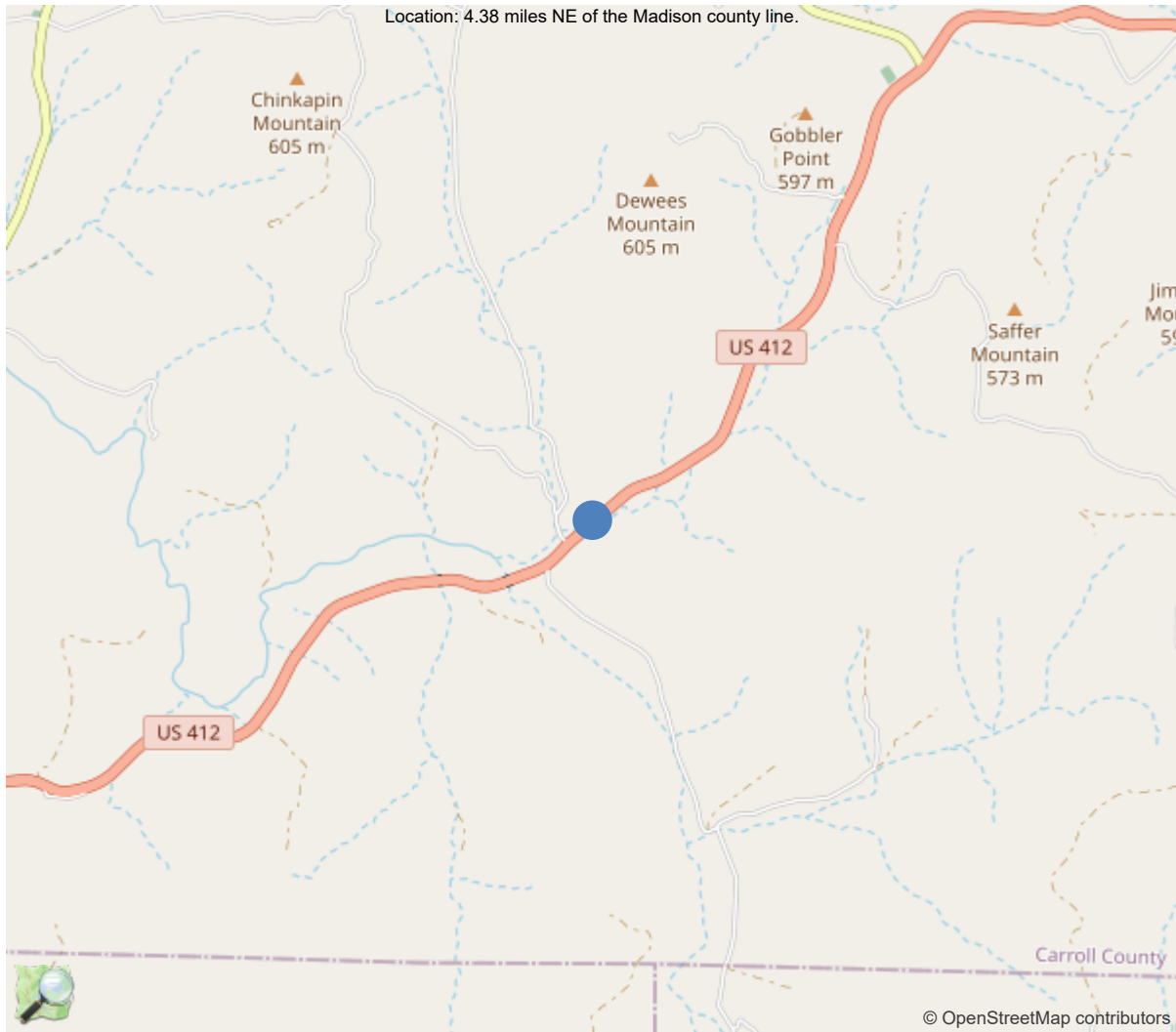
70 - Bridge Posting: 5 - Equal to or above legal loads

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



36.15643, -93.48489

National Bridge Inventory Data Sheet

IDENTIFICATION	
(1) State Names	5 - Arkansas
(8) Structure Number	06578
(5) Inventory Route	1
(2) Highway Agency District	09 - District 09
(3) County Code	15 - Carroll County
(4) Place Code	0
(6) Features Intersected	DRY FORK BR
(7) Facility Carried	US 412 S-5 Carroll
(9) Location	4.38 miles NE of the Madison county line.
(11) Mile Point	4.35 mi
(12) Base Highway Network	Yes
(13) LRS Inventory Rte & Subrte	0000412050
(16) Latitude	36.15643
(17) Longitude	-93.48489
(98) Border Bridge State Code	
(99) Border Bridge Structure No.	
STRUCTURE TYPE AND MATERIAL	
(43) Main Structure Type	12
Material	1 - Concrete
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	5 - Epoxy Overlay
Type of Membrane	0 - None
Type of Deck Protection	1 - Epoxy Coated Reinforcing
AGE AND SERVICE	
(27) Year Built	1996
(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	5400
(30) Year of ADT	2025
(109) Truck ADT	14 %
GEOMETRIC DATA	
(48) Length of Maximum Span	35 ft
(49) Structure Length	105 ft
(50) Curb or Sidewalk Width	
Left	0 ft
Right	0 ft
(51) Bridge Roadway Width Curb to Curb	40.4 ft
(52) Deck Width Out to Out	43.2 ft
(32) Approach Roadway Width (W/Shoulders)	41 ft
(33) Bridge Median	0 - No median
(34) Skew	50 Deg
(35) Structure Flared	0 - No flare
(10) Inventory Route Min Vert Clear	99.99 ft
(47) Inventory Route Total Horiz Clear	41.3 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	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	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	4 - Historical significance is
CONDITION	
(58) Deck	7
(59) Superstructure	7
(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	6
(69) Clearances, Vertical/Horizontal	N
(71) Waterway Adequacy	9
(72) Approach Roadway Alignment	8
(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	6500
(115) Year of Future ADT	2038

INSPECTIONS *			
(90) Inspection Date			05/27/2026
(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 #06578(Routine, Underwater type 2)

US 412 S-5 Carroll over DRY FORK BR

Location: 4.38 miles NE of the Madison county line.

Team Lead: Benjamin Smith Inspection Date: 05/28/2026

Inspection Notes

General Observation

The structure is logged from West to East and is accessible with a small ladder. Parking is available on the shoulder.

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

Overall the deck is in good condition with a polymer overlay, one of the overhangs has exposed rebar CS3.

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

Overall the superstructure is in good condition with hairline flexure cracking and small areas of efflorescence CS2.

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

Overall the substructure is in good condition with shrinkage cracking and minor efflorescence and delamination.

62 - Culverts (N - Not applicable. Used if structure is not a culvert.)

61 - Channel/Channel Protection (8 - Banks are protected or well vegetated. River control devices such as spur dikes and embankment protection are not required or are in a stable condition.)

The upstream channel is well vegetated. The alignment is satisfactory.

The channel beneath the structure flows mainly in span #2. No scour noted.

The downstream channel is well vegetated. The alignment is satisfactory.

71 - Waterway Adequacy (9 - Bridge deck and roadway approaches above flood water elevations (high water.) Chance of overtopping is remote.)

72 - Approach Roadway Alignment (8 - Equal to present desirable criteria)

113 - Scour Critical Bridges (5 - Bridge foundations determined to be stable for assessed or calculated scour condition. Scour is determined to be within the limits of footing or piles (Example B) by assessment (i.e., bridge foundations are on rock formations that have been determined to resist scour within the service life of the bridge), by calculations or by installation of properly designed countermeasures (see HEC 23).)

A-51 - Inspection Direction (4 - W to E)



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A-15 - Late Reason

A-45 - Bats Present (0 - No)

A-108 - Load Rating Requested (No - Load rating not requested at this time.)

A-119 - Scour Assessment Request (No - Scour Assessment not requested at this time.)

A-B.C.11 - B.C.11 Scour Condition Rating (New NBIS) (9 - No Scour.)

No scour noted.

National Bridge Element Quantities and Notes

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
12	Reinforced Concrete Deck	SF	4494	2582	1910	2	0
1080	Delamination/Spall/Patched Area	SF	2	0	0	2	0
1130	Cracking (RC and Other)	SF	230	0	230	0	0
1190	Abrasion/Wear (PSC/RC)	SF	1680	0	1680	0	0
510	Wearing Surfaces	SF	4200	4197	0	3	0
3210	Delam/Spall/Patched Area/Pothole	SF	3	0	0	3	0
(12) Driving surface- has a polymer overlay. The left lane of span #2 has 3' of spalling CS3 in the polymer.							
Construction joint seals- The first pourable construction joint seal has 24' of adhesion loss with leakage CS2. The second pourable construction joint seal has 25' of adhesion loss with leakage CS2.							
Under surface- the under surface has metal sip forms in all bays.							
Span #1- No deficiencies noted in the bays. Left overhang- no deficiencies noted. Right overhang- no deficiencies noted.							
Span #2- No deficiencies noted in the bays. Right deck overhang- no deficiencies noted. Left deck overhang- has 1' of exposed rebar CS3.							
Span #3- Minor corrosion was noted in the sip forms at bays #1,4 at abutment #2. Left overhang- no deficiencies noted. Right overhang- no deficiencies noted.							
(510-12) The left lane of span #2 has 3' of spalling CS3 in the polymer overlay.							
110	Reinforced Concrete Open Girder/Beam	LF	525	522	3	0	0
1120	Efflorescence/Rust Staining	LF	3	0	3	0	0
(110) 5 reinforced concrete Tee beam system.							
Span #1- Tee beam #1- has very minor vertical hairline flexure cracking. Tee beam #2- has 1' of vertical efflorescence CS2. Tee beam #3- has very minor vertical hairline flexure cracking. Tee beam #4- has very minor vertical hairline flexure cracking. Tee beam #5- has very minor vertical hairline flexure cracking.							
Span #2- Tee beam #1- has very minor vertical hairline flexure cracking. Tee beam #2- has 1' of vertical efflorescence CS2. Tee beam #3- has very minor vertical hairline flexure cracking and 1' of vertical efflorescence CS2 at the beginning of the span..							



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ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
Tee beam #4- has very minor vertical hairline flexure cracking. Tee beam #5- has very minor vertical hairline flexure cracking. Span #3- Tee beam #1- has very minor vertical hairline flexure cracking. Tee beam #2- has 1' of vertical efflorescence CS2 at the beginning of the span.. Tee beam #3- has very minor vertical hairline flexure cracking. Tee beam #4- has very minor vertical hairline flexure cracking. Tee beam #5- has very minor vertical hairline flexure cracking. Bearings- the bearings are concealed at all locations.							
205	Reinforced Concrete Column	EA	6	4	1	1	0
1080	Delamination/Spall/Patched Area	EA	1	0	0	1	0
1190	Abrasion/Wear (PSC/RC)	EA	1	0	1	0	0
(205) Bent #1 columns- Column #1- no deficiencies noted. Column #2- has abrasion CS2 on the lower portion. Column #3- no deficiencies noted. The footings have cover. Bent #2 columns- Column #1- no deficiencies noted Column #2- has a vertical delamination CS3 on the span #2 side. Column #3- no deficiencies noted. The footings have cover.							
215	Reinforced Concrete Abutment	LF	141	140	0	1	0
1080	Delamination/Spall/Patched Area	LF	1	0	0	1	0
(215) Abutment #1- has 13' of vertical and horizontal hairline shrinkage cracks with 1' of spalling CS3 with no rebar exposed at the right end of the abutment. The right side of the abutment is cast on solid rock. The rip rap is in place and functioning as intended. The base of the abutment has a concrete embankment settlement repair along the right side. Abutment #2- has 7' of vertical and horizontal hairline shrinkage cracks. The rip rap is in place and functioning as intended.							
234	Reinforced Concrete Pier Cap	LF	141	118	9	14	0
1080	Delamination/Spall/Patched Area	LF	6	0	0	6	0
1090	Exposed Rebar	LF	8	0	0	8	0
1120	Efflorescence/Rust Staining	LF	9	0	9	0	0
(234) Pier cap #1- has 7' of vertical hairline shrinkage cracks. The left end of the cap on the span #1 side has 2' of delamination CS3 and 1' of spalling with exposed rebar CS3. The span #2 side of the cap has 2' of spalling with shallow exposed rebar CS3 at the midsection. The vertical face of the cap has 3' of efflorescence CS2 with efflorescence CS3 leaching build up due to construction joint seal leakage. Pier cap #2- has 6' of efflorescence CS2. The underside of the cap has 1' of delamination CS3 between columns #1,2. The underside of the right cantilever has 5' of spalling with rebar CS3 exposed, 3' of delamination CS3. The vertical face of the cap has efflorescence CS2 and CS3 leaching build up due to construction joint seal leakage.							
331	Reinforced Concrete Bridge Railing	LF	230	206	23	1	0
1080	Delamination/Spall/Patched Area	LF	1	0	0	1	0

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
1130	Cracking (RC and Other)	LF	23	0	23	0	0
(331) Left side parapet wall- has 23' of horizontal and vertical cracking CS2 at random locations. Right side parapet wall- has 41' of vertical, and map cracking. Sections #5,6,7 have map cracking CS3 for their full length. The beginning right parapet section has 1' of spalling CS3 with no rebar exposed on the top edge. Approach railing- The upper connection is loose on the left beginning approach railing. Transitions- are gradually stiffened.							

Inspection Photos and Notes



Elevation view.



Approach rail termination.



Undersurface view.



Driving surface view.



Left and right parapet condition.



General superstructure view.



Typical tee beam condition.



General view of abutment #1.



Typical bent view.



General view of abutment #2.



Downstream channel view.



Upstream channel view.



Channel beneath the structure.



Approach view in direction of log mile.



Illegible log mile signs.



Transition area.



Bent #1 construction joint condition.



Rip rap and exposed rock at the abutment #1 embankment.



Abutment #2 rip rap.



Sip corrosion in bay #4 at abutment #2.



Typical diagonal cracking in span #2.



Spalling CS3 in the left lane polymer overlay.



Delamination CS3 on column #2 of bent #2.



Abrasion CS2 on column #2 of bent #1.



Embankment settlement repair along the right side of abutment #1.



Efflorescence leaching on the bent #2 cap.



Efflorescence cracking CS2 with efflorescence CS3 leaching build up.



Bent #1 cap ahead side has minor spalls with rebar exposed.

Maintenance Needs

Date Reported: 05/15/2014

Priority: D- Routine

Type of Work: Repair (General)

Status: Assigned

Component:

Deficiency Description

The left end of the bent #1 cap has a 2' delamination and small spalls with exposed rebar at the left and at the mid section of the span #2 side. The bent #2 cap has a large spall with rebar exposed under the right cantilever.

Remarks



05/16/2022

Spalling with rebar exposed on the under surface of the right cantilever of bent #2.



05/29/2020

Delamination at the left cap end of bent #1.



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Routine Maintenance

Check Box Maintenance Items

Type of Maintenance	Is Recommended?
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	Yes
A-64 - Vegetation Removal Requested	No
A-65 - Clogged deck drains?	No
A-66 - Approach minor pothole/leveling needed	No

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 Painting 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 (Yes)



Illegible log mile signs.



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A-64 - Vegetation Removal Requested (No)

A-65 - Clogged deck drains? (No)

A-66 - Approach minor pothole/leveling needed (No)



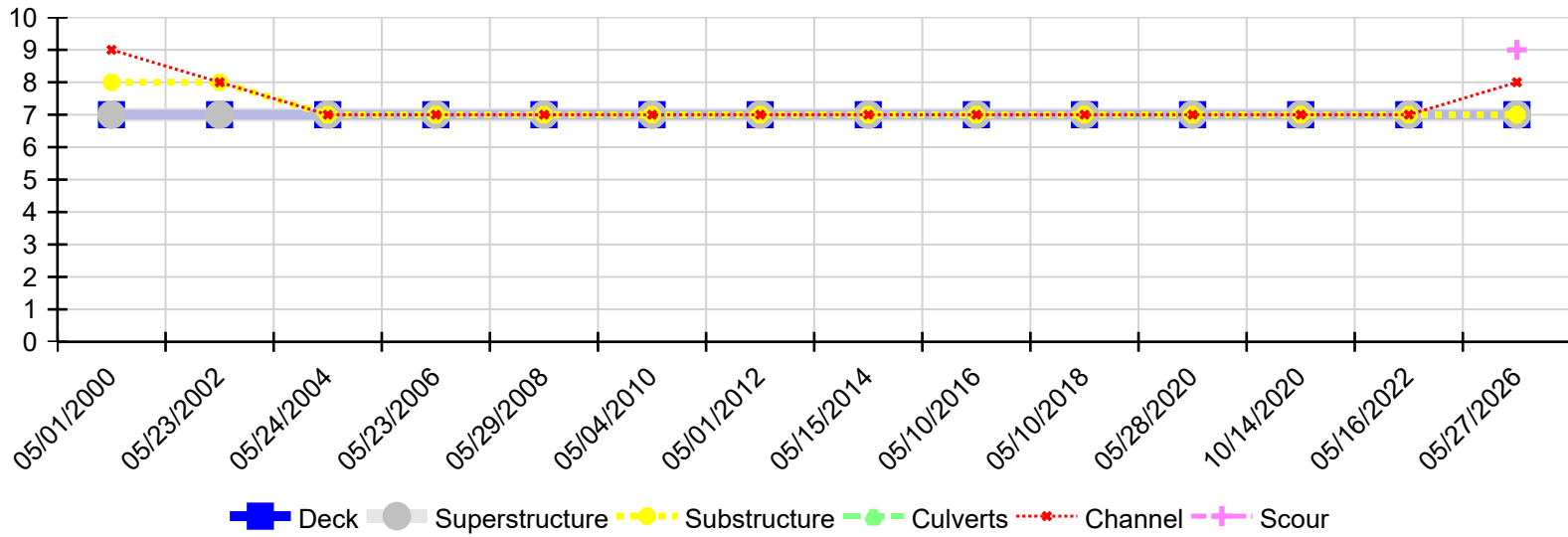
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Condition History



Inspection Date	Deck	Superstructure	Substructure	Culverts	Channel	Scour
05/27/2026	7	7	7	N	8	9
05/16/2022	7	7	7	N	7	N
10/14/2020	7	7	7	N	7	N
05/28/2020	7	7	7	N	7	N
05/10/2018	7	7	7	N	7	N
05/10/2016	7	7	7	N	7	N
05/15/2014	7	7	7	N	7	N
05/01/2012	7	7	7	N	7	N
05/04/2010	7	7	7	N	7	N
05/29/2008	7	7	7	N	7	N
05/23/2006	7	7	7	N	7	N
05/24/2004	7	7	7	N	7	N
05/23/2002	7	7	8	N	8	N
05/01/2000	7	7	8	N	9	N