

Bridge B3727 Inspection Report



Latitude:34.88509, Longitude:-91.25949

Route:40 Section:43 Log:211.61

Arnold Road ID:48x40x43xA, Arnold Log mile:211.608

District 01, 95 - Monroe County

Owner: 1 - State Highway Agency

Inspection Direction: 4 - W to E

Bridge Posting Information

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

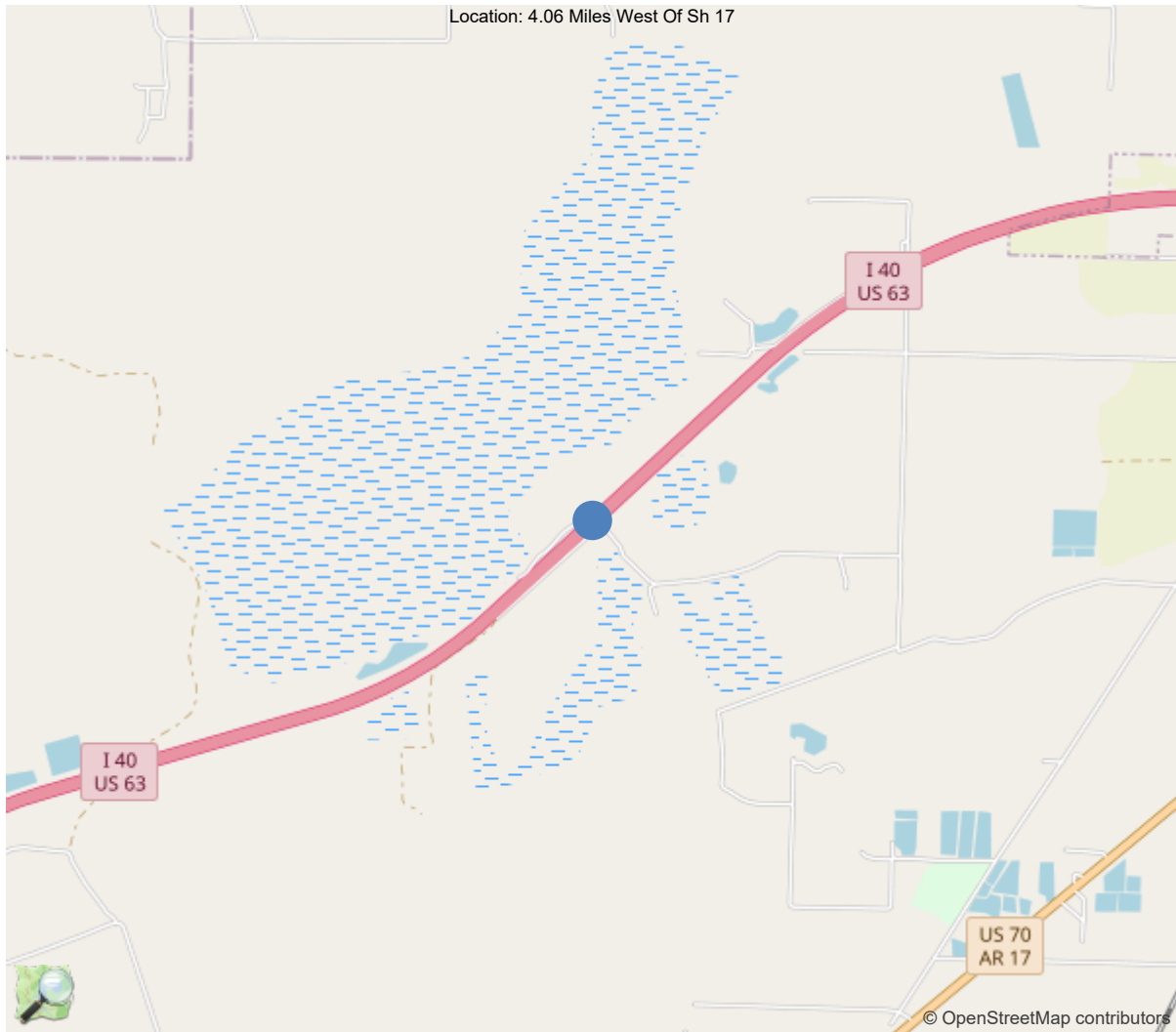
70 - Bridge Posting: 5 - Equal to or above legal loads

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



34.88509, -91.25949

National Bridge Inventory Data Sheet

IDENTIFICATION	
(1) State Names	5 - Arkansas
(8) Structure Number	B3727
(5) Inventory Route	1
(2) Highway Agency District	01 - District 01
(3) County Code	95 - Monroe County
(4) Place Code	0
(6) Features Intersected	Creek
(7) Facility Carried	I-40EB/Se43/211.61
(9) Location	4.06 Miles West Of Sh 17
(11) Mile Point	211.61 mi
(12) Base Highway Network	Yes
(13) LRS Inventory Rte & Subrte	0000040430
(16) Latitude	34.88509
(17) Longitude	-91.259491
(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	5 - Epoxy Overlay
Type of Membrane	0 - None
Type of Deck Protection	1 - Epoxy Coated Reinforcing
AGE AND SERVICE	
(27) Year Built	1966
(106) Year Reconstructed	2000
(42) Type of Service	15
On	1 - Highway
Under	5 - Waterway
(28) Lane	
On	2
Under	0
(29) Average Daily Traffic	29000
(30) Year of ADT	2019
(109) Truck ADT	61 %
(19) Bypass, Detour Length	5 mi
GEOMETRIC DATA	
(48) Length of Maximum Span	44 ft
(49) Structure Length	134 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	42.8 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	1
(26) Functional Class	1 - Rural Principal Arterial -
(100) Defense Highway	1 - The inventory route is on
(101) Parallel Structure	R - The right structure of par
(102) Direction of Traffic	1 - 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	8
(59) Superstructure	8
(60) Substructure	7
(61) Channel & Channel Protection	5
(62) Culverts	N
LOAD RATING AND POSTING	
(31) Design Load	6 - MS 18+Mod / HS 20+Mod
(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	7
(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	18277
(115) Year of Future ADT	2028

INSPECTIONS *			
(90) Inspection Date			01/13/2025
(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: Myron Futrell, Inspection Date: 01/13/2025

Specifications for National Bridge Inventory Sheets

IDENTIFICATION	
B.ID.01 Bridge Number	B3727
B.ID.02 Bridge Name	
B.ID.03 Previous Bridge No.	
B.W.01 Year Built	1966

LOCATION	
B.L.01 State Code	5 - Arkansas
B.L.02 County Code	95 - Monroe County
B.L.03 Place Code	00000 - N/A
B.L.04 Highway Agency District	01 - District 01
B.L.05 Latitude	34.88509
B.L.06 Longitude	-91.259491
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	4.06 Miles West Of Sh 17
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	129.7
B.G.02 Total Bridge Length	133.9
B.G.03 Max Span Length	44
B.G.04 Min Span Length	41.7
B.G.05 Bridge Width Out-to-Out	42.7
B.G.06 Bridge Width Curb-to-Curb	40
B.G.07 Left Curb or Sidewalk Width	0
B.G.08 Right Curb or Sidewalk Width	0
B.G.09 Approach Roadway Width	40

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	21
B.G.14 Sidehill Bridge	N - Not a sidehill bridge
B.G.15 Irregular Deck Area	
B.G.16 Calculated Deck Area	5709.2

LOADS AND LOAD RATING	
B.LR.01 Design Load	HS20M - HS-20 and Military
B.LR.02 Design Method	
B.LR.03 Load Rating Date	
B.LR.04 Load Rating Method	LFR - Load Factor Rating
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	N - No E/E' details
B.IR.03 UW Inspection Required	N - Underwater inspection not requi
B.IR.04 Complex Feature	N - Bridge does not have complex fe

COMPONENT CONDITION RATINGS	
B.C.01 Deck Condition Rating	8 - VERY GOOD - Some inherent
B.C.02 Superstructure Condition	8 - VERY GOOD - Some inherent
B.C.03 Substructure Condition	7 - GOOD - Some minor defects.
B.C.04 Culvert Condition	N - NOT APPLICABLE - Component
B.C.05 Bridge Railing Condition	7 - GOOD - Some minor defects.
B.C.06 Bridge Railing Transitions Condition	9 - EXCELLENT - Isolated inher
B.C.07 Bridge Bearings Cond.	7 - GOOD - Some minor defects.
B.C.08 Bridge Joints Condition	8 - VERY GOOD - Some inherent
B.C.09 Channel Condition Rating	5 - FAIR - Moderate defects; b
B.C.10 Channel Protection Condition	7 - GOOD - Some minor defects.
B.C.11 Scour Condition Rating	7 - Some minor scour.
B.C.12 Bridge Condition Classification	G - Good
B.C.13 Lowest Condition Rating	7 - GOOD - Some minor defects.
B.C.14 NSTM Insp. Condition	N - NOT APPLICABLE - Component
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	0 - Scour appraisal has not been co
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: Myron Futrell, Inspection Date: 01/13/2025

SPAN SETS			
M1			
B.SP.02 # of Spans	3	B.SP.08 Deck Interaction	CU - Composite - unshored cons
B.SP.03 # of Beam Lines	6	B.SP.09 Deck Material and Type	C01 - Reinforced concrete - ca
B.SP.04 Span Material	S01 - Steel - rolled	B.SP.10 Wearing Surface	P01 - Polymer - epoxy
B.SP.05 Span Continuity	2 - Continuous	B.SP.11 Deck Protective System	0 - None
B.SP.06 Span Type	G02 - Girder/beam - I-shaped s	B.SP.12 Deck Reinforcing Protective System	C01 - Coating - epoxy coated
B.SP.07 Span Protective System	P01 - Patina - uncoated weathe	B.SP.13 Deck Stay-In-Place Forms	M01 - Metal

SUBSTRUCTURE SETS			
A1			
B.SB.02 No. of Substructure Units	2	B.SB.05 Substructure Protective System	C01 - Coating - paint
B.SB.03 Substructure Material	C01 - Reinforced concrete - ca	B.SB.06 Foundation Type	PX - Pile - other
B.SB.04 Substructure Type	A02 - Abutment - stub	B.SB.07 Foundation Protective System	0 - None
P1			
B.SB.02 No. of Substructure Units	2	B.SB.05 Substructure Protective System	C01 - Coating - paint
B.SB.03 Substructure Material	C01 - Reinforced concrete - ca	B.SB.06 Foundation Type	PX - Pile - other
B.SB.04 Substructure Type	B01 - Bent - column or open	B.SB.07 Foundation Protective System	0 - None

HIGHWAY FEATURES			
H1			
B.F.02 Feature Location	C - Carried on bridge	B.H.09 Annual ADT	29000
B.F.03 Feature Name	I-40EB/Se43/211.61	B.H.10 Annual ADTT	17690
B.H.01 Functional Classification	1 - Interstate	B.H.11 Year of Annual ADT	2019
B.H.02 Urban Code	99999	B.H.12 Highway Max Usable Vertical Clearance	99.9
B.H.03 NHS Designation	Y - NHS	B.H.13 Highway Min Vertical Clearance	99.9
B.H.04 National Highway Freight Network	1-T - TEMP - NHFN - 1 or 2 or	B.H.14 Highway Min Horizontal Clearance, Left	
B.H.05 STRAHNET Designation	1 - STRAHNET route	B.H.15 Highway Min Horizontal Clearance, Right	
B.H.06 LRS Route ID	40430	B.H.16 Highway Max Usable Surface Width	39.6
B.H.07 LRS Mile Point	211.61	B.H.17 Bypass Detour Length	5
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	40E	1-T - TEMP - One-way traffic - NB or EB or SB or WB	1 - Interstate route	1 - Mainline



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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 #B3727(Routine, Underwater type 2)

I-40EB/Se43/211.61 over Creek

Location: 4.06 Miles West Of Sh 17

Team Lead: Myron Futrell Inspection Date: 01/13/2025

Inspection Notes

General Observation

Team Lead-Myron Futrell
Bridge Inspectors-Charley Smith, Austin Crain.
Accessed by foot, weighted line used for channel profile.
No lane closure required for inspection.

Drawing numbers: 37969,37980.

58 - Deck (8 - VERY GOOD CONDITION - no problems noted.)

Reinforced concrete deck appears to be in overall very good condition. Top of deck has epoxy overlay; underside of deck has metal stay in place forms. No visible deficiencies.

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

Steel superstructure is in overall very good condition. Girders are A-588 steel girders and elastomeric bearings. Patina protective coating has slightly granular texture.

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

Reinforced concrete substructure is in overall good condition. Pier caps and columns have no noted deficiencies, abutment backwalls have a few vertical cracks with light efflorescence.

Lowered Substructure from 8 to 7 due to cracks with efflorescence in back walls.

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.)

Channel is in overall fair condition. Slopes have minor erosion, trees and brush growing in channel restrict channel slightly.

12/12/2022 lowered channel from 8 to 5 due to large amounts of debris restrictions.

A-55 - Deck Washing Needed (Y)

Deck has dirt and debris in gutters.

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

No log mile signs in place

A-64 - Vegetation Removal Requested (Y)

Trees and vegetation growing beside and onto bridge.

B.C.05 Bridge Railing Condition Rating (7 - GOOD - Some minor defects.)

Cracks and efflorescence in bridge rails.



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B.C.07 Bridge Bearings Condition Rating (7 - GOOD - Some minor defects.)

Bent 1 bearing 2, crack in weld to bottom flange
All bearings in good condition, minor surface rust.

B.C.08 Bridge Joints Condition Rating (8 - VERY GOOD - Some inherent defects.)

Minor debris impaction.

B.C.10 Channel Protection Condition Rating (7 - GOOD - Some minor defects.)

Riprap in place at abutments, vegetation growing in riprap.

A-B.C.11 - B.C.11 Scour Condition Rating (New NBIS) (7 - Some minor scour.)

Minor erosion of slopes.

National Bridge Element Quantities and Notes

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
12	Reinforced Concrete Deck	SF	5650	5650	0	0	0
510	Wearing Surfaces	SF	5280	5280	0	0	0
(12) No noted deficiencies. Deck has been covered with epoxy overlay. Deck has dirt and debris in gutters.							
107	Steel Open Girder/Beam	LF	792	792	0	0	0
515	Steel Protective Coating	SF	5340	0	5340	0	0
3430	Oxide Film Degradation Color/Texture Adherence(Steel Protective Coatings)	SF	5340	0	5340	0	0
(107) Steel protective coating: granular texture. Degradation 5340SF CS2 (515-107) Steel protective coating has granular texture. Degradation 5340SF CS2							
205	Reinforced Concrete Column	EA	4	4	0	0	0
(205) No noted deficiencies.							
215	Reinforced Concrete Abutment	LF	120	112	8	0	0
1120	Efflorescence/Rust Staining	LF	8	0	8	0	0
(215) Reinforced concrete abutments, backwalls: several vertical hairline cracks with light efflorescence. Efflorescence 85LF CS2							
234	Reinforced Concrete Pier Cap	LF	82	82	0	0	0
(234) No noted deficiencies.							
302	Compression Joint Seal	LF	86	86	0	0	0
(302) No noted deficiencies.							
310	Elastomeric Bearing	EA	24	23	1	0	0
1020	Connection	EA	1	0	1	0	0
(310) Bent 1 bearing 2: crack in weld to bottom flange Bent 3, girder 5, right anchor bolt: nut backed off. Connection 1EA CS2							
321	Reinforced Concrete Approach Slab	SF	1757	1757	0	0	0
521	Concrete Protective Coating	SF	1757	1757	0	0	0
(321) Approach slabs have been covered with epoxy overlay. Bent 1 bearing 2, crack in weld to bottom flange							
331	Reinforced Concrete Bridge Railing	LF	268	188	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) Reinforced concrete bridge rails, scattered throughout: longitudinal and vertical cracking, some with light efflorescence. Cracking 40LF CS2, Efflorescence 40LF CS2							



Asset #B3727(Routine, Underwater type 2)

I-40EB/Se43/211.61 over Creek

Location: 4.06 Miles West Of Sh 17

Team Lead: Myron Futrell Inspection Date: 01/13/2025

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
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Inspection Photos and Notes



Side view / elevation



Top view / inventory



Abutment 1, approach roadway



Name plate



Side view / elevation



Typical vertical cracking in bridge rail



Reinforced concrete bridge rail: typical longitudinal cracking with light efflorescence.



Bridge rail, right side



Bridge rail, left side



Abutment 1, transition, left side



Abutment 2, transition, right side



Abutment 1, approach rail, left side



Abutment 1, approach rail, right side



Abutment 2, transition, left side



Abutment 2, approach rail, right side.



Abutment 2, approach rail, left side



Typical deck



Span 1, underside of deck, typical of other spans.



Bent 3, girder 5, right anchor bolt: nut backed off.



Abutment 1



Bent 2, back



Bent 2, ahead



Bent 3, back



Abutment 2



Typical vertical hairline crack in abutment back wall with light efflorescence



Span 2, undersurface of deck



Channel, left side



Channel, right side



Dirt and debris in gutters



No log mile sign in place



Trees and vegetation growing beside and onto bridge.



Bent 1 bearing 2, crack in weld to bottom flange.



Abutment 1, joint



Abutment 2, joint



Abutment 1, approach slab



Abutment 2, approach slab



Asset #B3727(Routine, Underwater type 2)

I-40EB/Se43/211.61 over Creek

Location: 4.06 Miles West Of Sh 17

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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	Yes
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	Yes
A-65 - Clogged deck drains?	
A-66 - Approach minor pothole/leveling needed	

A-54 - Sealable Deck Cracks (No)

A-55 - Deck Washing Needed (Yes)

Deck has dirt and debris in gutters.



Dirt and debris in gutters

A-56 - Joint Cleaning/Flushing Needed (No)

A-57 - Girder End and Bearing Painting Needed (No)

A-58 - Cap Cleaning/Flushing Needed (No)

A-59 - Joint Repair Needed (No)

A-60 - Full Girder Painting Needed (No)

A-61 - Polymer Overlay Advised (No)

A-62 - Hydro and LMC Advised (No)

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

No log mile signs in place



No log mile sign in place

A-64 - Vegetation Removal Requested (Yes)

Trees and vegetation growing beside and onto bridge.



Trees and vegetation growing beside and onto bridge.

A-65 - Clogged deck drains?



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Location: 4.06 Miles West Of Sh 17

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A-66 - Approach minor pothole/leveling needed



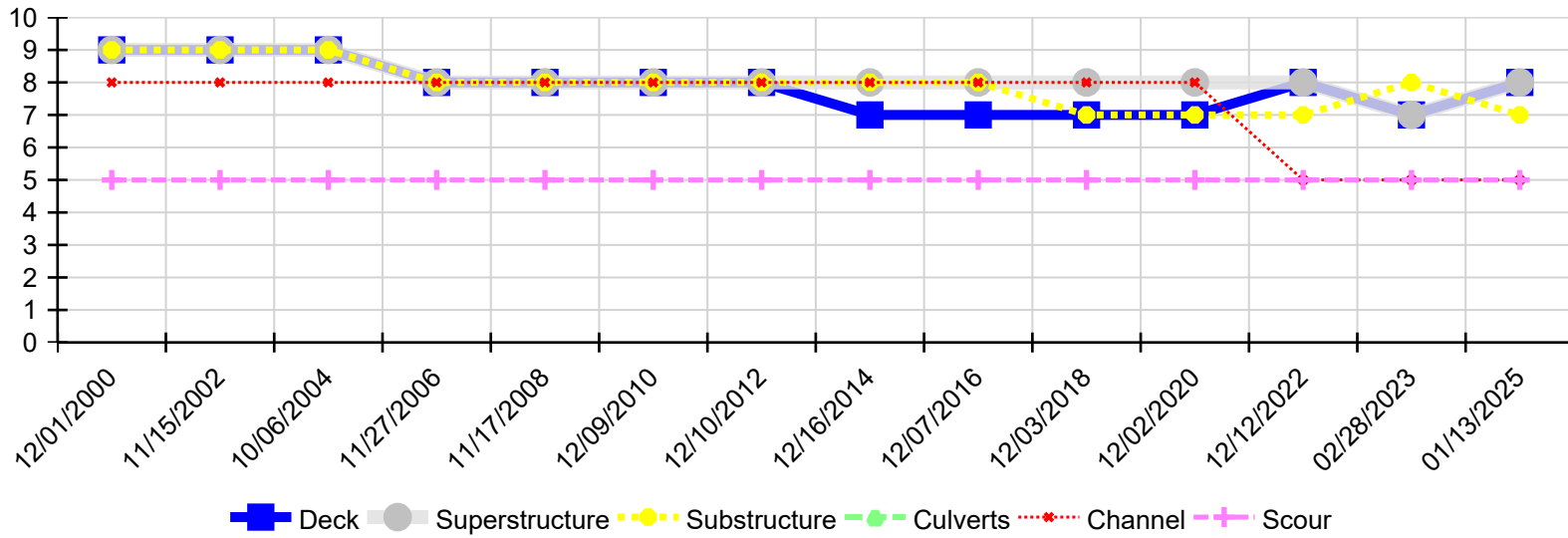
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Condition History



Inspection Date	Deck	Superstructure	Substructure	Culverts	Channel	Scour
01/13/2025	8	8	7	N	5	5
02/28/2023	8	8	7	N	5	5
02/28/2023	7	7	8	N	5	5
12/12/2022	8	8	7	N	5	5
12/02/2020	7	8	7	N	8	5
12/03/2018	7	8	7	N	8	5
12/07/2016	7	8	8	N	8	5
12/16/2014	7	8	8	N	8	5
12/10/2012	8	8	8	N	8	5
12/09/2010	8	8	8	N	8	5
11/17/2008	8	8	8	N	8	5
11/27/2006	8	8	8	N	8	5
10/06/2004	9	9	9	N	8	5
11/15/2002	9	9	9	N	8	5
12/01/2000	9	9	9	N	8	5