

Bridge A3557 Inspection Report



Latitude:35.48984, Longitude:-93.82673

Route:219 Section:01 Log:0.21

Arnold Road ID:24x219x1xA, Arnold Log mile:0.204

District 04, 47 - Franklin County

Owner: 1 - State Highway Agency

Inspection Direction: 2 - S to N

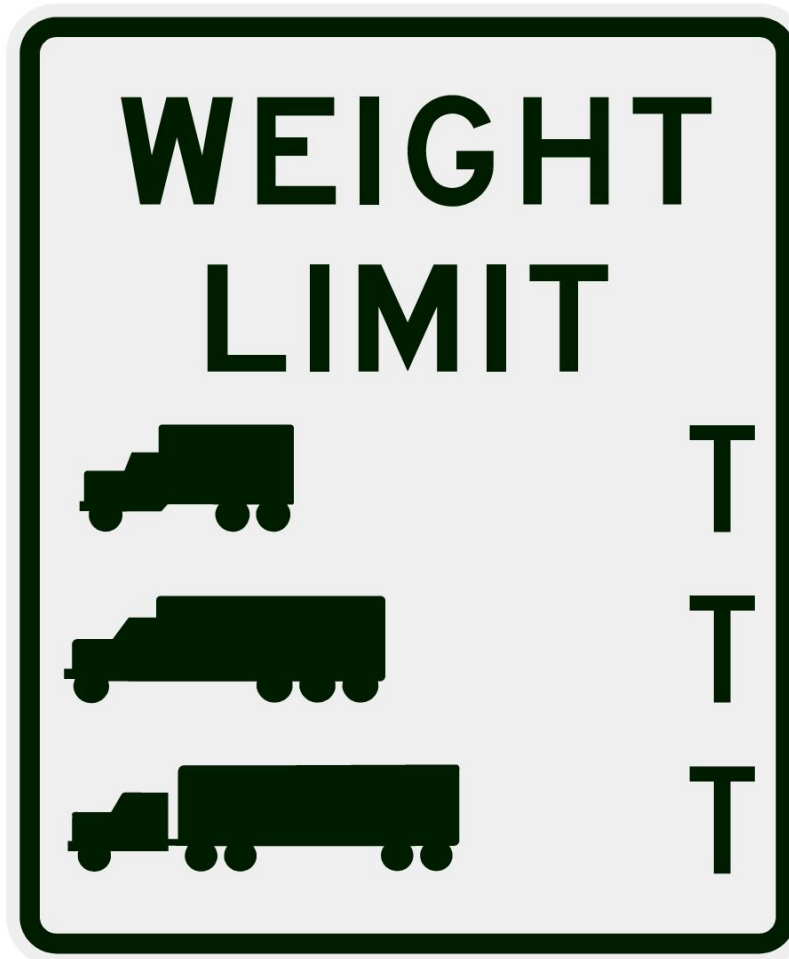
Bridge Posting Information

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

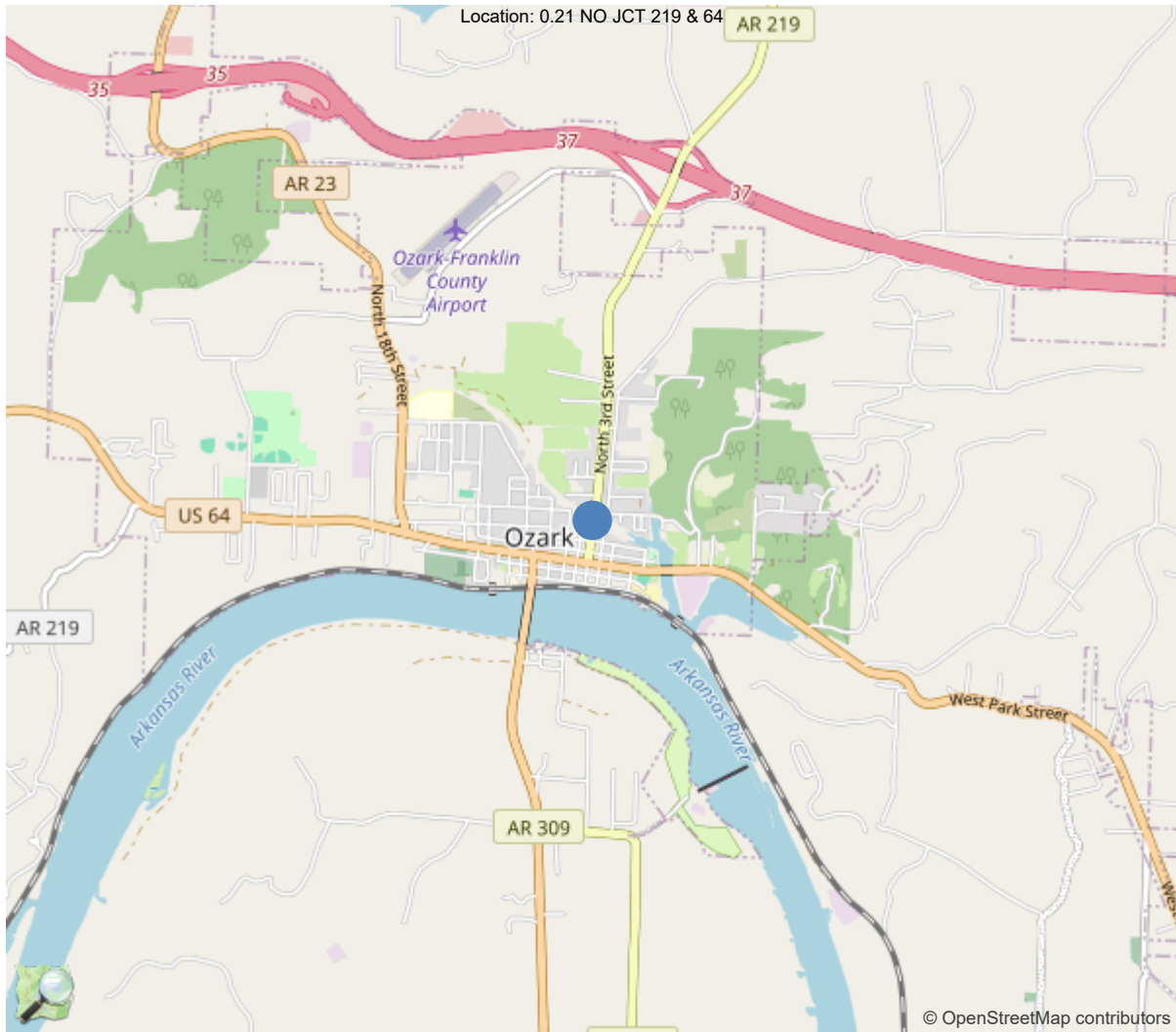
70 - Bridge Posting: 5 - Equal to or above legal loads

Legal Load	Calculated Capacity	Beginning of Bridge Sign Current Value	End of Bridge Sign Current Value
Code 4 (22 Tons)	33		
Code 9 (31 Tons)	36		
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



35.48984, -93.82673

National Bridge Inventory Data Sheet

IDENTIFICATION	
(1) State Names	5 - Arkansas
(8) Structure Number	A3557
(5) Inventory Route	1
(2) Highway Agency District	04 - District 04
(3) County Code	47 - Franklin County
(4) Place Code	52970
(6) Features Intersected	Gar Branch-Franklin Co.
(7) Facility Carried	State Highway 219
(9) Location	0.21 NO JCT 219 & 64
(11) Mile Point	0.21 mi
(12) Base Highway Network	No
(13) LRS Inventory Rte & Subrte	0000000000
(16) Latitude	35.48984
(17) Longitude	-93.82673
(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	1
(46) No. of Approach Spans	0
(107) Deck Structure Type	1 - Concrete Cast-in-Place
(108) Wearing Surface/Protective System	
Type of Wearing Surface	0 - None (no additional concrete thickne
Type of Membrane	0 - None
Type of Deck Protection	0 - None
AGE AND SERVICE	
(27) Year Built	1962
(106) Year Reconstructed	1974
(42) Type of Service	55
On	5 - Highway-pedestrian
Under	5 - Waterway
(28) Lane	
On	2
Under	0
(29) Average Daily Traffic	5900
(30) Year of ADT	2018
(109) Truck ADT	4 %
(19) Bypass, Detour Length	3 mi
GEOMETRIC DATA	
(48) Length of Maximum Span	48 ft
(49) Structure Length	50 ft
(50) Curb or Sidewalk Width	
Left	4 ft
Right	4 ft
(51) Bridge Roadway Width Curb to Curb	44 ft
(52) Deck Width Out to Out	54 ft
(32) Approach Roadway Width (W/Shoulders)	47.9 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	44 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	7 - Rural Major Collector
(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	5 - Bridge is not eligible for
CONDITION	
(58) Deck	5
(59) Superstructure	5
(60) Substructure	6
(61) Channel & Channel Protection	7
(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	43
(65) Inventory Rating Method	1 - Load Factor(LF)
(66) Inventory Rating	
Type	
Rating	26
(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	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	0 - Inspected feature does not meet
(113) Scour Critical Bridges	8 - Bridge foundations determined t
PROPOSED IMPROVEMENTS	
(75) Type of Work	35 - Bridge rehabilitation bec
(76) Length of Structure Improvement	50 ft
(94) Bridge Improvement Cost	\$ 0
(95) Roadway Improvement Cost	\$ 0
(96) Total Project Cost	\$ 121
(97) Year of Improvement Cost Estimate	2000
(114) Future ADT	6500
(115) Year of Future ADT	2038

INSPECTIONS *			
(90) Inspection Date			07/08/2024
(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: Jeff Jones, Inspection Date: 07/08/2024

Specifications for National Bridge Inventory Sheets

IDENTIFICATION	
B.ID.01 Bridge Number	A3557
B.ID.02 Bridge Name	
B.ID.03 Previous Bridge No.	
B.W.01 Year Built	1962

LOCATION	
B.L.01 State Code	5 - Arkansas
B.L.02 County Code	47 - Franklin County
B.L.03 Place Code	52970 - Ozark
B.L.04 Highway Agency District	04 - District 04
B.L.05 Latitude	35.48984
B.L.06 Longitude	-93.82673
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	0.21 NO JCT 219 & 64
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	49.9
B.G.02 Total Bridge Length	49.9
B.G.03 Max Span Length	47.9
B.G.04 Min Span Length	47.9
B.G.05 Bridge Width Out-to-Out	54.1
B.G.06 Bridge Width Curb-to-Curb	44
B.G.07 Left Curb or Sidewalk Width	3.9
B.G.08 Right Curb or Sidewalk Width	3.9
B.G.09 Approach Roadway Width	47.9

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	17
B.G.14 Sidehill Bridge	N - Not a sidehill bridge
B.G.15 Irregular Deck Area	
B.G.16 Calculated Deck Area	2699.6

LOADS AND LOAD RATING	
B.LR.01 Design Load	HS20 - HS-20
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	0.72
B.LR.06 Operating Load Rating Factor	1.19
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	Y - E/E' details are present
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	5 - FAIR - Some moderate defec
B.C.02 Superstructure Condition	5 - FAIR - Some moderate defec
B.C.03 Substructure Condition	6 - SATISFACTORY - Widespread
B.C.04 Culvert Condition	N - NOT APPLICABLE - Component
B.C.05 Bridge Railing Condition	6 - SATISFACTORY - Widespread
B.C.06 Bridge Railing Transitions Condition	N - NOT APPLICABLE - Component
B.C.07 Bridge Bearings Cond.	5 - FAIR - Some moderate defec
B.C.08 Bridge Joints Condition	5 - FAIR - Some moderate defec
B.C.09 Channel Condition Rating	7 - GOOD - Some minor defects.
B.C.10 Channel Protection Condition	6 - SATISFACTORY - Widespread
B.C.11 Scour Condition Rating	8 - Insignificant scour.
B.C.12 Bridge Condition Classification	F - Fair
B.C.13 Lowest Condition Rating	5 - FAIR - Some moderate defec
B.C.14 NSTM Insp. Condition	
B.C.15 UW Inspection Condition	

APPRAISAL	
B.AP.01 Approach Roadway Alignment	G - Good
B.AP.02 Overtopping Likelihood	3 - Low - once every 26 to 50 years
B.AP.03 Scour Vulnerability	AB-T - TEMP - Stable for scour, pos
B.AP.04 Scour Plan of Action	0 - A scour POA is not required.
B.AP.05 Seismic Vulnerability	0 - Seismic evaluation not complete

SPAN SETS			
M1			
B.SP.02 # of Spans	1	B.SP.08 Deck Interaction	CU - Composite - unshored cons
B.SP.03 # of Beam Lines	9	B.SP.09 Deck Material and Type	C01 - Reinforced concrete - ca
B.SP.04 Span Material	S01 - Steel - rolled	B.SP.10 Wearing Surface	0 - None
B.SP.05 Span Continuity	1 - Simple or single span	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	0 - None
B.SP.07 Span Protective System	0 - None	B.SP.13 Deck Stay-In-Place Forms	0 - None

SUBSTRUCTURE SETS			
A1			
B.SB.02 No. of Substructure Units	2	B.SB.05 Substructure Protective System	0 - None
B.SB.03 Substructure Material	M02 - Masonry - stone	B.SB.06 Foundation Type	F02 - Footing - on rock
B.SB.04 Substructure Type	A01 - Abutment - cantilever/wa	B.SB.07 Foundation Protective System	0 - None
W1			
B.SB.02 No. of Substructure Units	2	B.SB.05 Substructure Protective System	0 - None
B.SB.03 Substructure Material	C01 - Reinforced concrete - ca	B.SB.06 Foundation Type	F02 - Footing - on rock
B.SB.04 Substructure Type	A01 - Abutment - cantilever/wa	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	5900
B.F.03 Feature Name	State Highway 219	B.H.10 Annual ADTT	236
B.H.01 Functional Classification	5 - Major Collector	B.H.11 Year of Annual ADT	2018
B.H.02 Urban Code	99999	B.H.12 Highway Max Usable Vertical Clearance	99.9
B.H.03 NHS Designation	N - Non-NHS	B.H.13 Highway Min Vertical Clearance	99.9
B.H.04 National Highway Freight Network	N - Not on the NHFN	B.H.14 Highway Min Horizontal Clearance, Left	
B.H.05 STRAHNET Designation	N - Not a STRAHNET route	B.H.15 Highway Min Horizontal Clearance, Right	
B.H.06 LRS Route ID		B.H.16 Highway Max Usable Surface Width	51.5
B.H.07 LRS Mile Point	0.21	B.H.17 Bypass Detour Length	3
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	219	2-T - TEMP - Two-way traffic - NS or EW	3 - State route	1 - Mainline



Team Lead: Jeff Jones, Inspection Date: 07/08/2024

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	Gar Branch	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	

OTHER FEATURES

P1

B.F.02 Feature Location	C - Carried on bridge	B.F.01A Feature Type	P - Pathway
B.F.03 Feature Name	State Highway 219		

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
----------------------------------	----------------------------------	----------------------	-----------------------



Inspection Notes

General Observation

07/08/2024 - JCJ & TJL - Routine Inspection and Type 2 Underwater Inspection conducted this date.

Inspection Procedure:

Parking:

Vehicle can be parked in the parking lot at the Southeast end of the structure.

Access:

Structure inspected from the ground.

There is pedestrian access on the Northeast end of the structure without needing to go through locked gates.

Depth of Water:

Water was approximately 3' deep during the time of inspection.

Tools Needed:

Hip Waders & Range Pole – Substructure in the channel was visually inspected along with wading and probing using sections of range pole from under the structure.

GoPro Camera on a pole - Abutment caps and Superstructure was inspected using a go pro camera.

HILTI PD-E Laser distance meter on a pole – Cross sections of the channel were taken along both edges of the structure with a HILTI PD-E Laser distance meter on a pole.

61 - Channel/Channel Protection (7 - Bank protection is in need of minor repairs. River control devices and embankment protection have a little minor damage. Banks and/or channel have minor amounts of drift.)

07/08/2024 - JCJ & TJL - Type 2 Underwater Inspection conducted this date.

Design:

ArDOT Drawing Number 16949 General Notes state that spread footings shall be set a minimum of 1'-6" into rock.

Field observations at the structure:

Wading and probing during turbid water conditions indicate a portion of Abutment 1 footing is exposed with no apparent scour problems during this inspection.

Solid rock channel exposed adjacent to Abutment 1 footing.

Water was approximately 3' deep in the channel during the time of inspection.

Profile:

A cross section of the channel was taken along both sides of the structure this date.

See channel cross section documentation associated with this inspection for additional information.

Channel:

There is some rock accumulation in the channel.

Embankment is well vegetated with trees. some vegetation restrict the channel.

A-15 - Late Reason (N/A)

Heavy work load.

A-54 - Sealable Deck Cracks (Y)

The driving surface of the deck has numerous areas of sealable transverse and map cracking.

There are a few transverse cracks with light efflorescence visible from the undersurface of the deck.



Asset #A3557(Routine, Underwater type 2)
State Highway 219 over Gar Branch-Franklin Co.
Location: 0.21 NO JCT 219 & 64
Team Lead: Jeff Jones Inspection Date: 07/08/2024

A-57 - Girder End and Bearing Painting Needed (Y)

Superstructure -

The superstructure has active corrosion with thick flaking rust to the ends of the beams with up to 1/16" section loss to base of webs and 1/8" section loss to the bottom flanges.

Bearings -

The bearings have areas of heavy corrosion with thick flaking rust and section loss. The bearings in some locations have heavy pack rust between the bearing plates.

A few of the bearings at both abutments have fretting visible with vertical movement under live load.

A-59 - Joint Repair Needed (Y)

Expansion joint seals -

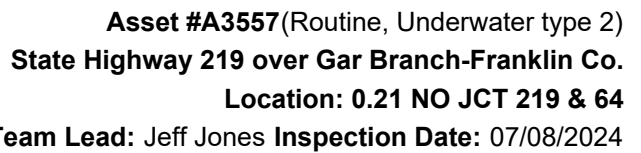
The pourable expansion joint sealant at abutment 2 (North abutment) has adhesion failure in the driving lane allowing water, dirt, and debris to leak onto the substructure. The pre-formed compression joint seal is falling out at the sidewalk.

The pre-formed compression joint seal at abutment 1 has dirt and debris causing adhesion failure.

The expansion joint seal has fallen out of the Right sidewalk.

National Bridge Element Quantities and Notes

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
12	Reinforced Concrete Deck	SF	2294	1736	350	208	0
1080	Delamination/Spall/Patched Area	SF	8	0	8	0	0
1090	Exposed Rebar	SF	2	0	2	0	0
1130	Cracking (RC and Other)	SF	517	0	309	208	0
1190	Abrasion/Wear (PSC/RC)	SF	31	0	31	0	0
(12) Driving surface: There are numerous areas of sealable transverse and map cracking visible on the driving surface of the deck. Two 8" spalls with exposed reinforcing steel in the Right half of the deck. Undersurface: There are a few transverse cracks with light efflorescence visible from the undersurface of the deck.							
107	Steel Open Girder/Beam	LF	449	267	115	67	0
1000	Corrosion	LF	182	0	115	67	0
515	Steel Protective Coating	SF	2972	2455	0	415	102
3440	Effectiveness (Steel Protective Coatings)	SF	517	0	0	415	102
(107) The superstructure has active corrosion with flaking rust and measurable section loss at the ends of beams. 115LF CS2 & 67LF CS3 There is up to 1/8" section loss in the bottom flanges at the ends of the girders during this inspection. The girders have areas of corrosion under the deck drains and in a few other random locations. Rust is beginning to show through the paint in areas throughout. No visible cracks apparent in the steel beams.							
215	Reinforced Concrete Abutment	LF	140	32	102	6	0
1080	Delamination/Spall/Patched Area	LF	1	0	1	0	0
1090	Exposed Rebar	LF	1	0	0	1	0
1120	Efflorescence/Rust Staining	LF	14	0	10	4	0
1130	Cracking (RC and Other)	LF	14	0	13	1	0
1190	Abrasion/Wear (PSC/RC)	LF	78	0	78	0	0
(215) Original abutments are constructed of rock masonry and have been widened with cast in place concrete at both ends. Transverse cracking visible in the top of both back walls. Abutment 1, left side has two 3" shallow spalls with exposed reinforcing steel. 2LF CS2 Abutment 1 right has a 10" horizontal crack. Abutment 1 Rt wing wall has vertical and diagonal cracking with efflorescence. Abutment 1, right construction joint has 3' of efflorescence. Abutment 2 right stem wall has 2 vertical hairline cracks. Abutment 2 Left wing wall has 3 diagonal cracks with efflorescence.							
217	Masonry Abutment	LF	52	47	3	2	0
1610	Mortar Breakdown (Masonry)	LF	1	0	1	0	0



ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
1620	Split/Spall (Masonry)	LF	4	0	2	2	0
(217) Abutment 2 rock masonry portion has a few stones with hairline cracks. 2LF CS2 and 2 LF CS3 Abutment 2 has one small area of mortar deterioration between the stones. 1 LF CS2							
220	Reinforced Concrete Pile Cap/Footing	LF	55	55	0	0	0
(220) Portions of the concrete footings are exposed where the structure has been widened In the past with cast in place concrete. No apparent noteworthy problems visible in the exposed portions of the footings.							
234	Reinforced Concrete Pier Cap	LF	52	40	12	0	0
1130	Cracking (RC and Other)	LF	12	0	12	0	0
(234) Reinforced concrete pier cap over the rock masonry abutments. Transverse hairline cracks in the abutment backwalls that are visible from the driving surface of the deck. 12 LF CS2							
301	Pourable Joint Seal	LF	28	2	0	0	26
2310	Leakage	LF	26	0	0	0	26
(301) The portion of the expansion joint seal in the driving lanes at the North bridge end has been replaced with pourable sealant. The pourable sealant has areas of adhesion failure and leaks water / debris on the superstructure and substructure. 26LF CS4							
302	Compression Joint Seal	LF	80	60	0	20	0
2310	Leakage	LF	20	0	0	20	0
(302) The joint seals are falling out of the sidewalk at both abutments with leakage. 20LF CS3							
311	Movable Bearing	EA	9	0	3	6	0
1000	Corrosion	EA	9	0	3	6	0
515	Steel Protective Coating	SF	27	3	0	8	16
3440	Effectiveness (Steel Protective Coatings)	SF	24	0	0	8	16
(311) The Expansion bearings are at abutment 2. Bearings over abutment 2 have active corrosion, flaking rust, and pack rust between the bearing plates in some locations. A few bearings have fretting with vertical movement under live load.							
313	Fixed Bearing	EA	9	1	1	7	0
1000	Corrosion	EA	8	0	1	7	0
515	Steel Protective Coating	SF	27	2	0	6	19
3440	Effectiveness (Steel Protective Coatings)	SF	25	0	0	6	19
(313) The Fixed bearings are at Abutment 1. Bearings have active corrosion, flaking rust, and pack rust between the bearing plates in some locations. A few bearings have minor movement with fretting.							
321	Reinforced Concrete Approach Slab	SF	1820	1785	31	4	0
1080	Delamination/Spall/Patched Area	SF	2	0	1	1	0
1130	Cracking (RC and Other)	SF	33	0	30	3	0
(321) R.C. Approach Slabs- Abutment 1 approach slab has approximately 1/2" of settlement at the abutment in the main travel lanes. Abutment 2 approach slab has approximately 1 1/4" settlement at the abutment in the main travel lanes. Abutment 2 road iron has several large and deep gouges from snow plow impacts.							

Inspection Photos and Notes



Elevation. Right side of structure.



Undersurface of the deck. Typical.



Deck. Typical.



Channel left side of structure.



Channel. Right side of structure.



Approach roadway facing North.



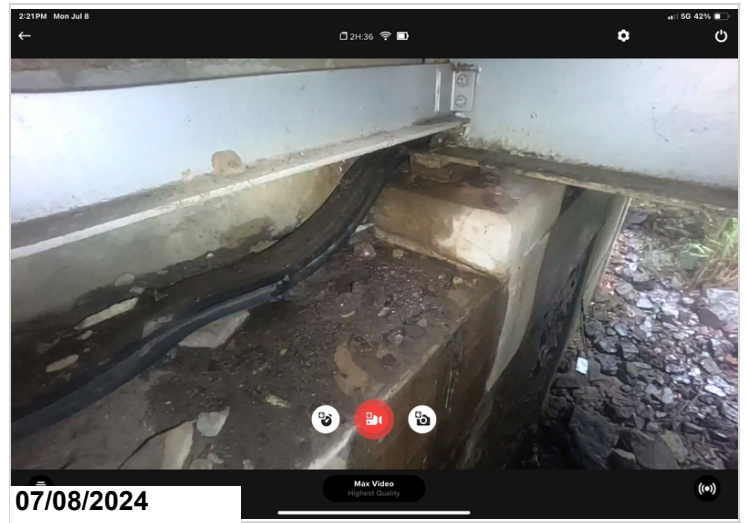
Sealable map cracking in the deck.



Right lane at abutment 2-Mapcracking.



Mapcracking.



Abutment 2, Debris on cap.



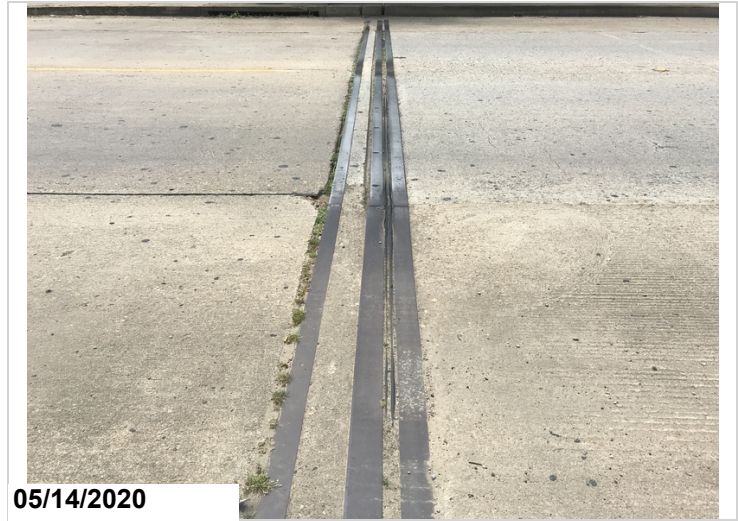
Abutment 2. Expansion joint seal leaking.



The pourable type expansion joint sealant at abutment # 2 (North abutment) has adhesion failure in the driving lane allowing water, dirt and debris to leak onto the substructure.



The pre-formed compression joint seal at abutment # 1 has dirt and debris causing adhesion failure.



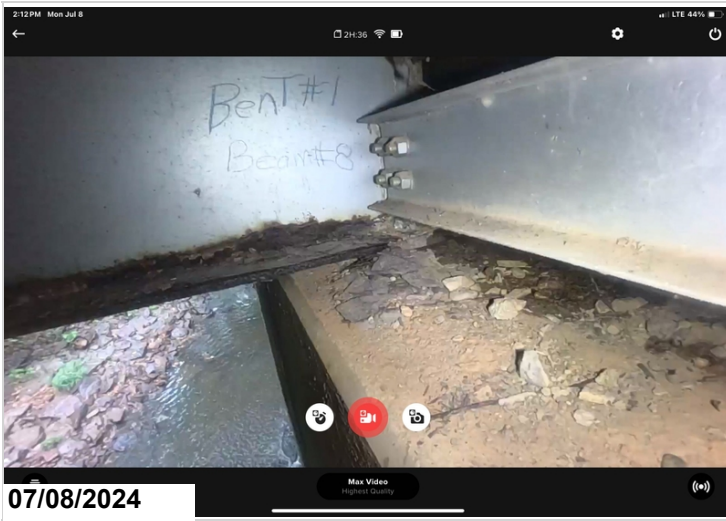
The pre-formed compression joint seal at abutment # 1 has dirt and debris causing adhesion failure.



Deck. Typical.



Undersurface of the deck. Typical.



Abutment 1, Girder 8, Corrosion.



Superstructure. Typical.



Superstructure. Typical.



Superstructure. Typical.



Abutment 1. Typical.



Abutment 1. Typical.



Abutment 2. Typical.



Abutment 2 has one small area of mortar deterioration between the stone. 1 LF CS2



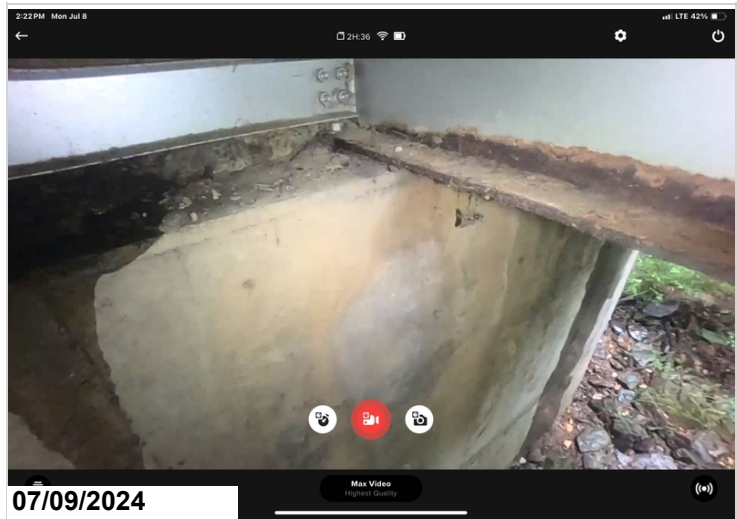
Abutment 2. Vertical crack in a stone.



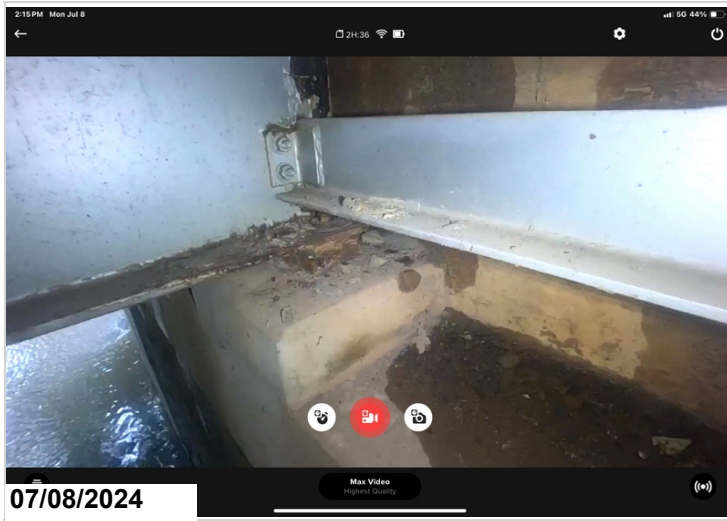
Abutment 2. Vertical crack in a stone.



Abutment 2, Joint leakage.



Abutment 2, Girder 8 Bearing corrosion.



Abutment 1, Girder 5, Bearing Corrosion.

Maintenance Needs

Date Reported: 05/24/2018

Priority: C - Important

Type of Work: Bearing Repair/Replacement

Status: Monitor

Component: Superstructure

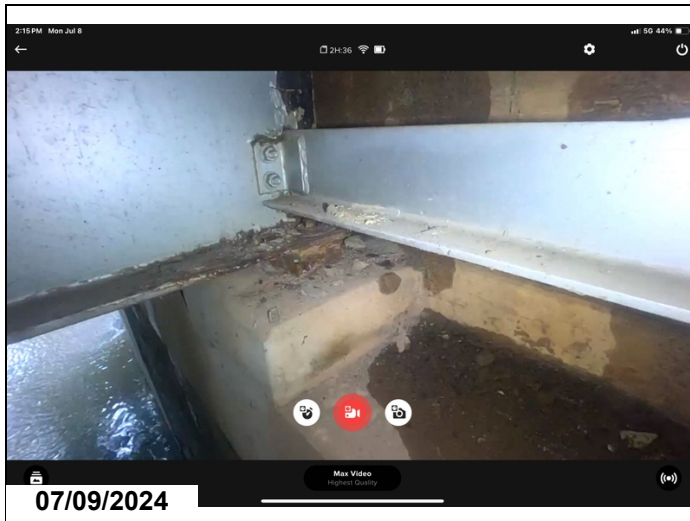
Deficiency Description

Bearings -

The bearings have areas of heavy corrosion with thick flaking rust and section loss. The bearings in some locations have heavy pack rust between the bearing plates.

A few of the bearings at both abutments have fretting visible with vertical movement under live load.

Remarks



Abutment 1, Girder 5, Bearing Corrosion.



The bearings have areas of heavy corrosion with thick flaking rust and section loss. The bearings in some locations have heavy pack rust between the bearing plates.

A few of the bearings at both abutments have fretting visible with vertical movement under live load.



05/14/2020

The bearings have areas of heavy corrosion with thick flaking rust and section loss. The bearings in some locations have heavy pack rust between the bearing plates.

A few of the bearings at both abutments have fretting visible with vertical movement under live load.

Maintenance Needs

Date Reported: 04/29/2014

Priority: C - Important

Type of Work: Superstructure Repair

Status: Monitor

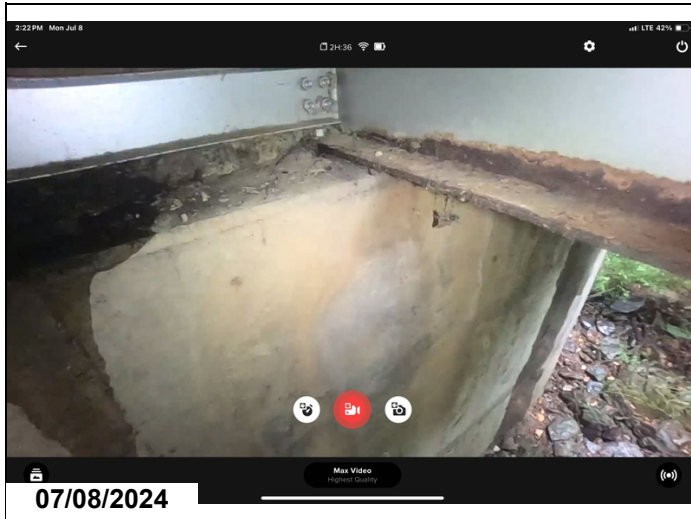
Component: Element

Deficiency Description

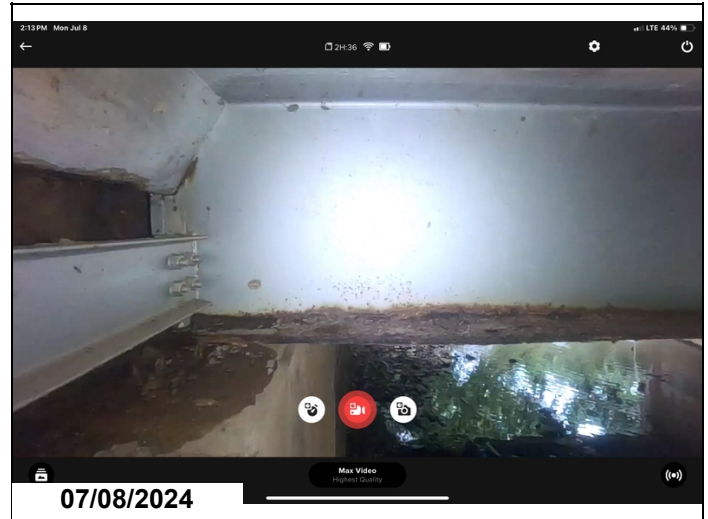
Superstructure -

The superstructure has active corrosion with thick flaking rust to the ends of the beams with up to 1/16" section loss to base of webs and 1/8" section loss to the bottom flanges.

Remarks



Abutment 2, Girder 8 corrosion.



Abutment 1, Girder 8, Corrosion.



The superstructure has active corrosion with thick flaking rust to the ends of the beams with up to 1/16" section loss to base of webs and 1/8" section loss to the bottom flanges.



The superstructure has active corrosion with thick flaking rust to the ends of the beams with up to 1/16" section loss to base of webs and 1/8" section loss to the bottom flanges.

Maintenance Needs

Date Reported: 06/10/2022

Priority: C - Important

Type of Work: Approach Leveling/Maintenance

Status: Assigned

Component: Approach

Deficiency Description

Approach Roadway-
The asphalt at the South approach has potholes adjacent to the approach slab.

Remarks

07/08/2024 - JCJ & TJL - Maintenance Forces have filled the pot hole with an asphalt patch. Priority Code reduced to a "C" Priority during this inspection.



South approach Pot hole. Maintenance Forces have filled the pot hole with an asphalt patch.



South approach roadway potholes at the end of the approach slab.

Maintenance Needs

Date Reported: 06/10/2022

Priority: C - Important

Type of Work: Approach Leveling/Maintenance

Status: Monitor

Component: Element

Deficiency Description

R.C. Approach Slabs-

Abutment 1 approach slab has approximately 1/2" of settlement at the abutment in the main travel lanes.

Abutment 2 approach slab has approximately 1 1/4" settlement at the abutment in the main travel lanes.

Abutment 2 road iron has several large and deep gouges from snow plow impacts.

Remarks



South approach Slab.



North approach slab settlement.



South approach slab settlement.



Asset #A3557(Routine, Underwater type 2)
State Highway 219 over Gar Branch-Franklin Co.
Location: 0.21 NO JCT 219 & 64
Team Lead: Jeff Jones Inspection Date: 07/08/2024

Routine Maintenance

Check Box Maintenance Items

Type of Maintenance	Is Recommended?
A-54 - Sealable Deck Cracks	Yes
A-55 - Deck Washing Needed	No
A-56 - Joint Cleaning/Flushing Needed	Yes
A-57 - Beam End and Bearing Paint Needed	Yes
A-58 - Cap Cleaning/Flushing Needed	Yes
A-59 - Joint Repair Needed	Yes
A-60 - Full Beam Painting Needed	No
A-61 - Polymer Overlay Advised	Yes
A-62 - Hydro and LMC Advised	No
A-63 - Missing/Incorrect Log Mile Signage	No
A-64 - Vegetation Removal Requested	No
A-65 - Clogged deck drains?	
A-66 - Approach minor pothole/leveling needed	

A-54 - Sealable Deck Cracks (Yes)

The driving surface of the deck has numerous areas of sealable transverse and map cracking. There are a few transverse cracks with light efflorescence visible from the undersurface of the deck.



Sealable map cracking in the deck.



Right lane at abutment 2-Mapcracking.



Mapcracking.

A-55 - Deck Washing Needed (No)

A-56 - Joint Cleaning/Flushing Needed (Yes)



A-57 - Girder End and Bearing Painting Needed (Yes)

Superstructure -

The superstructure has active corrosion with thick flaking rust to the ends of the beams with up to 1/16" section loss to base of webs and 1/8" section loss to the bottom flanges.

Bearings -

The bearings have areas of heavy corrosion with thick flaking rust and section loss. The bearings in some locations have heavy pack rust between the bearing plates.

A few of the bearings at both abutments have fretting visible with vertical movement under live load.

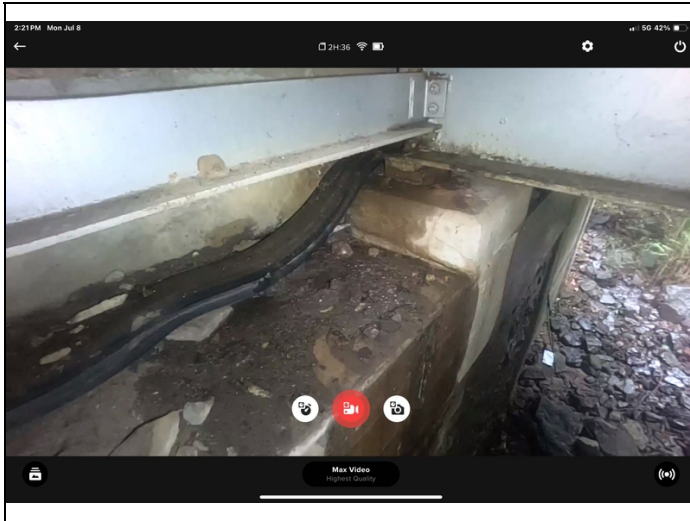
A-58 - Cap Cleaning/Flushing Needed (Yes)

A-59 - Joint Repair Needed (Yes)

Expansion joint seals -

The pourable expansion joint sealant at abutment 2 (North abutment) has adhesion failure in the driving lane allowing water, dirt, and debris to leak onto the substructure. The pre-formed compression joint seal is falling out at the sidewalk.

The pre-formed compression joint seal at abutment 1 has dirt and debris causing adhesion failure. The expansion joint seal has fallen out of the Right sidewalk.



Abutment 2, Debris on cap.



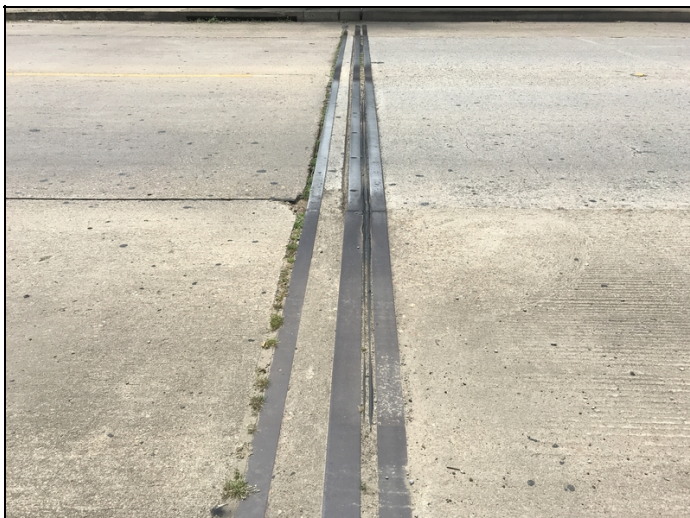
Abutment 2. Expansion joint seal leaking.



The pourable type expansion joint sealant at abutment # 2 (North abutment) has adhesion failure in the driving lane allowing water, dirt and debris to leak onto the substructure.



The pre-formed compression joint seal at abutment # 1 has dirt and debris causing adhesion failure.



The pre-formed compression joint seal at abutment # 1 has dirt and debris causing adhesion failure.



Asset #A3557(Routine, Underwater type 2)
State Highway 219 over Gar Branch-Franklin Co.
Location: 0.21 NO JCT 219 & 64
Team Lead: Jeff Jones Inspection Date: 07/08/2024

A-60 - Full Girder Painting Needed (No)

A-61 - Polymer Overlay Advised (Yes)

A-62 - Hydro and LMC Advised (No)

A-63 - Missing/Incorrect Log Mile Signage (No)

A-64 - Vegetation Removal Requested (No)

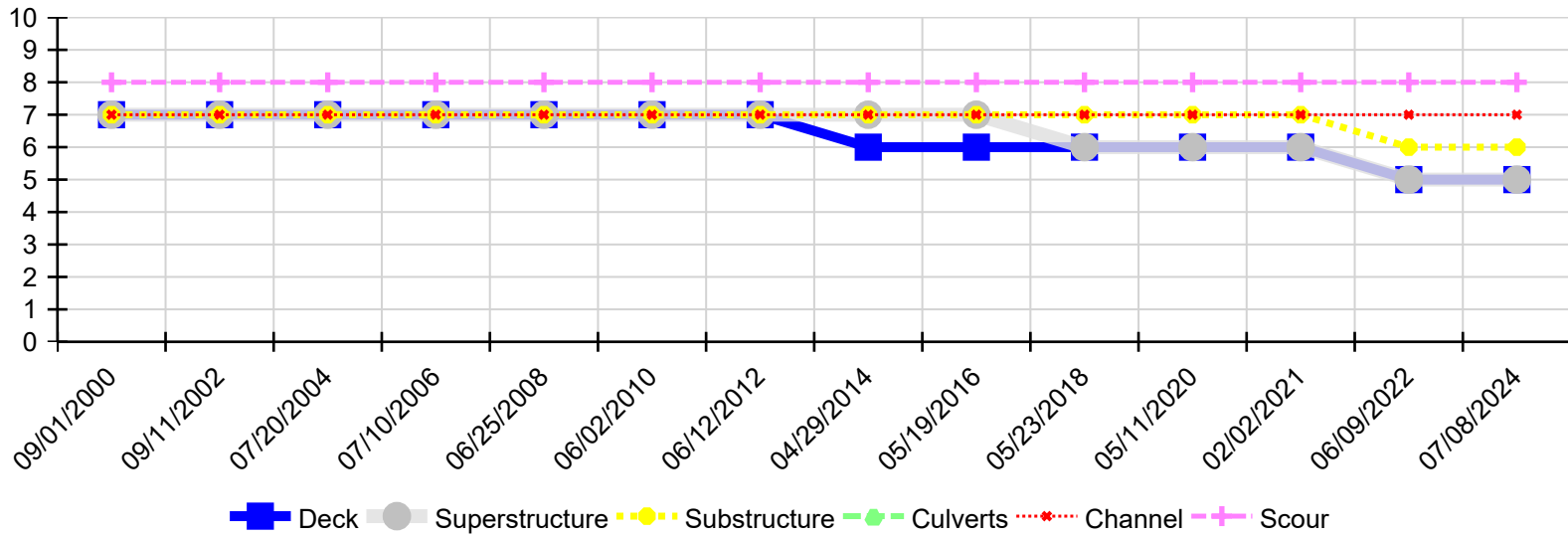
A-65 - Clogged deck drains?

A-66 - Approach minor pothole/leveling needed



Asset #A3557(Routine, Underwater type 2)
State Highway 219 over Gar Branch-Franklin Co.
Location: 0.21 NO JCT 219 & 64
Team Lead: Jeff Jones Inspection Date: 07/08/2024

Condition History



Inspection Date	Deck	Superstructure	Substructure	Culverts	Channel	Scour
07/08/2024	5	5	6	N	7	8
06/09/2022	5	5	6	N	7	8
02/02/2021	6	6	7	N	7	8
05/11/2020	6	6	7	N	7	8
05/23/2018	6	6	7	N	7	8
05/19/2016	6	7	7	N	7	8
04/29/2014	6	7	7	N	7	8
06/12/2012	7	7	7	N	7	8
06/02/2010	7	7	7	N	7	8
06/25/2008	7	7	7	N	7	8
07/10/2006	7	7	7	N	7	8
07/20/2004	7	7	7	N	7	8
09/11/2002	7	7	7	N	7	8
09/01/2000	7	7	7	N	7	8

10' Scale

Measurements taken under exterior girders

