



Latitude:36.13448, Longitude:-94.20241

Route:112 Section:01 Log:4.859

Arnold Road ID:72x112x1xA, Arnold Log mile:4.9

District 04, 143 - Washington County

Owner: 1 - State Highway Agency

Inspection Direction: 2 - S to N

Bridge Posting Information

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

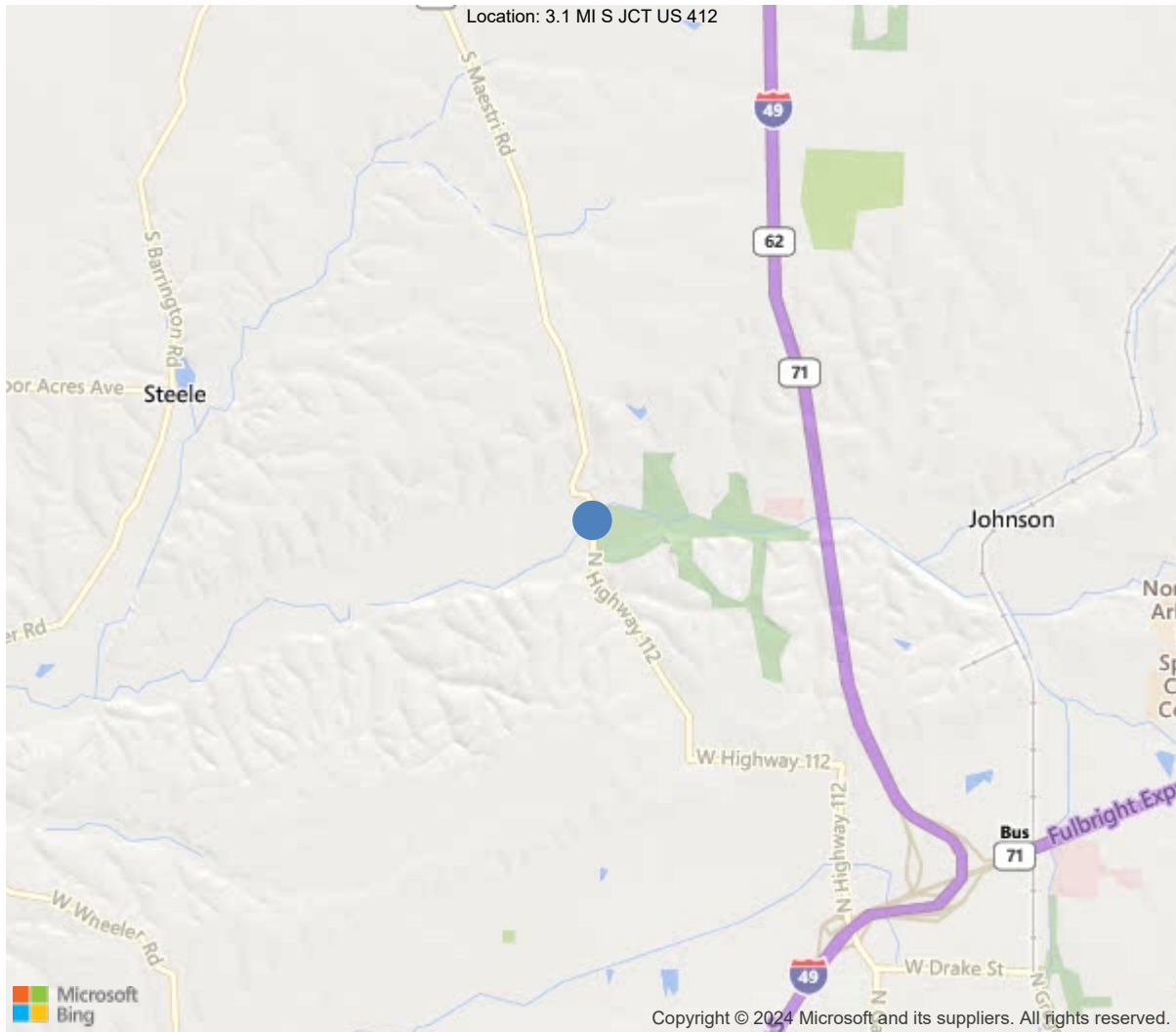
70 - Bridge Posting: 5 - Equal to or above legal loads

Legal Load	Calculated Capacity	Beginning of Bridge Sign Current Value	End of Bridge Sign Current Value
Code 4 (22 Tons)	40		
Code 9 (31 Tons)	50		
Code 5 (40 Tons)	56		

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



36.13448, -94.20241



Asset #05599(Routine, Underwater type 2)

SH 112-Wash Co. over Clear Creek

Location: 3.1 MI S JCT US 412

Team Lead: Anthony Caudel Inspection Date: 09/19/2023

IDENTIFICATION	
(1) State Names	5 - Arkansas
(8) Structure Number	05599
(5) Inventory Route	1
(2) Highway Agency District	04 - District 04
(3) County Code	143 - Washington County
(4) Place Code	0
(6) Features Intersected	Clear Creek
(7) Facility Carried	SH 112-Wash Co.
(9) Location	3.1 MI S JCT US 412
(11) Mile Point	4.859 mi
(12) Base Highway Network	No
(13) LRS Inventory Rte & Subrte	0000000000
(16) Latitude	36.13448
(17) Longitude	-94.20241
(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	5
(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	0 - None
AGE AND SERVICE	
(27) Year Built	1975
(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	9700
(30) Year of ADT	2018
(109) Truck ADT	1 %
(19) Bypass, Detour Length	12 mi
GEOMETRIC DATA	
(48) Length of Maximum Span	45 ft
(49) Structure Length	227 ft
(50) Curb or Sidewalk Width	
Left	0 ft
Right	0 ft
(51) Bridge Roadway Width Curb to Curb	32.2 ft
(52) Deck Width Out to Out	34.8 ft
(32) Approach Roadway Width (W/Shoulders)	40 ft
(33) Bridge Median	0 - No median
(34) Skew	35 Deg
(35) Structure Flared	0 - No flare
(10) Inventory Route Min Vert Clear	99.99 ft
(47) Inventory Route Total Horiz Clear	33.1 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	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	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	6
(60) Substructure	5
(61) Channel & Channel Protection	5
(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	4
(69) Clearances, Vertical/Horizontal	N
(71) Waterway Adequacy	8
(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	0 - Inspected feature does not meet
(113) Scour Critical Bridges	8 - 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	7173
(115) Year of Future ADT	2028

INSPECTIONS *			
(90) Inspection Date	09/19/2023		
(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		
<p>* 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.</p>			



Asset #05599(Routine, Underwater type 2)

SH 112-Wash Co. over Clear Creek

Location: 3.1 MI S JCT US 412

Team Lead: Anthony Caudel Inspection Date: 09/19/2023

General Observation

09/08/2021 - RSM & SPC: Routine inspection conducted this date. See notes tab for documentation.

09/19/2019 - TJL - Elements were plan verified on this date.

09/19/2019 - JCJ & TJL - Routine and Underwater Type 2 Inspections conducted on this date. Wading and probing indicate the top of the Left footing at Bent # 3 is exposed. Remaining footings have cover with no apparent scour problems during this inspection.

09/19/2019 - JCJ & TJL - ArDOT Drawing # 18868 General Notes State that the footings shall be set 2' - 6" minimum below channel bottom. Boring legend in the plans indicate that the channel is limestone.

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

09/21/2023 - ADC & AMJ

- Overall, the deck is in fair condition with spalling, abrasion and cracking in the driving surface along with cracking with efflorescence and spalling in the under surface of the deck.

A-59 - Joint Repair Needed (Yes)

Expansion Joint Seals - The compression deck joints seals have rips, tears, and leak water on the bent caps and bearings. There is transverse cracking, delaminated areas, and spalls adjacent to the expansion joint headers.

A-61 - Polymer Overlay Advised (Y)

Would recommend a polymer overlay after delaminated areas are repaired.

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
12	Reinforced Concrete Deck	SF	7800	1798	5938	64	0
1080	Delamination/Spall/Patched Area	SF	321	0	308	13	0
1090	Exposed Rebar	SF	27	0	0	27	0
1120	Efflorescence/Rust Staining	SF	19	0	13	6	0
1130	Cracking (RC and Other)	SF	5129	0	5129	0	0
1190	Abrasion/Wear (PSC/RC)	SF	506	0	488	18	0
<p>(12) - At this inspection defects still remain, driving surface has more spalling, delaminated areas, and large cracking adjacent to joints. Cracks have been sealed in the past and is starting to fail in many locations.</p> <p>- The under surface has spalling at joint, drains, and deck edges, span 4 bent 5 bays 2-4 has efflorescence map cracking that has deteriorated concrete.</p> <p>- Past defects still remain and are deteriorating.</p> <p>-Driving surface has several delaminated areas along the expansion joint assemblies.</p> <p>-Span # 1 left has a 6" spall with exposed reinforcing adjacent to deck drain hole.</p> <p>-Spans # 2 and 3 have small shallow spalls/delaminated areas on the driving surface of the deck.</p> <p>-Span # 3 has several delaminated areas in the wheel paths of the right lane and shoulder.</p> <p>-Span # 3 driving surface has a 12" spall in the left lane, and an 8" and 16" spall in the right lane.</p> <p>-Span # 4 has a 2'x3' spall with a temporary asphalt patch near bent # 5. The driving surface of span # 4 has cracking and delaminated areas along the expansion joints with a few delaminated areas in the wheel paths.</p> <p>-Span # 4 has several areas with concrete repairs in the driving. The right lane of span # 4 has an 8' long x 4' wide repair with wear/scaling adjacent to bent # 5. The repair sounds delaminated when sounded. The undersurface of the deck in this area has medium scale/leaching in an area that is approximately 10' X 8'. Bay # 3 adjacent to this area has map cracking with efflorescence.</p> <p>Deck Undersurface:</p> <p>-The undersurface of the deck overhang on the right side of span # 1 has and 3' x 3' spalled area with exposed reinforcing steel with initial section loss adjacent to abutment # 1.</p> <p>-The undersurface of the deck in span # 4 has medium scale/leaching on the right side adjacent to bent # 5 in an area that is approximately 10' X 8'. Bay # 3 adjacent to this area has map cracking with efflorescence.</p> <p>-The undersurface of the deck has spalls with exposed reinforcing steel adjacent to the deck drains. Exposed reinforcing steel has active corrosion with initial section loss.</p> <p>Approach Roadways:</p> <p>The South approach roadway has settlement in the right lane adjacent to the bridge end.b</p>							
107	Steel Open Girder/Beam	LF	1125	969	66	90	0
1000	Corrosion	LF	156	0	66	90	0
515	Steel Protective Coating	SF	7214	7164	0	0	50
3440	Effectiveness (Steel Protective Coatings)	LF	50	0	0	0	50
<p>(107) -There is active corrosion with flaking rust and measurable section loss to the ends of the beams where the expansion joints leak. Section loss ranges from initial up to 1/8". No visible cracks apparent in the beams at this inspecton.</p>							
205	Reinforced Concrete Column	EA	8	1	6	1	0
1080	Delamination/Spall/Patched Area	EA	2	0	2	0	0
1090	Exposed Rebar	EA	1	1	0	0	0

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
1130	Cracking (RC and Other)	EA	3	0	2	1	0
1190	Abrasion/Wear (PSC/RC)	EA	2	0	2	0	0
<p>(205) - At this inspection columns have moderate abrasion at water line bents 4 and 5 columns have vertical cracking, and moderate spalling.</p> <p>-The bases of the columns have light abrasion typical.</p> <p>-Bent # 2, left column has medium abrasion/honeycombing at base of column.</p> <p>-Bent # 3 right has medium abrasion.</p> <p>-Bent # 3 left column has exposed reinforcing steel at the base of the column located approximately 1' above the top of the footing. Exposed reinforcing steel (Hoop) has very little concrete cover from the construction process.</p> <p>-Bent # 4 column # 2, ahead face has a 2' wide x 3' high delaminated area with wide cracking in the upper portion of the column. The cracking propagates into the cap undersurface for approximately 14".</p> <p>-Bent # 5 left column has a shallow 5" spall in backface adjacent to the cap and hairline horizontal cracking in upper portion of column. Bent # 5, right column has hairline horizontal cracking in the upper portion of column.</p>							
215	Reinforced Concrete Abutment	LF	104	79	24	1	0
1080	Delamination/Spall/Patched Area	LF	17	0	17	0	0
1090	Exposed Rebar	LF	3	0	2	1	0
1120	Efflorescence/Rust Staining	LF	4	0	4	0	0
1130	Cracking (RC and Other)	LF	1	0	1	0	0
<p>(215) - Abutments have vertical efflorescent cracking and spalling , top of back walls have shallow spalling, and cracking.</p> <p>-The top of the abutments have shallow delaminated areas.</p> <p>-The left end of abutment # 1 has a vertical 4" spall with exposed reinforcing steel located approximately 1' from beam # 1 in the face of the backwall.</p> <p>-There is 1 vertical crack with light efflorescence in the backwall of abutment # 1 in bay # 3.</p> <p>-Abutment # 2 has 2 shallow 5" spalls with exposed reinforcing steel in the face of the backwall located in bay # 2.</p> <p>-The top of abutment # 2 backwall has a few random transverse cracks.</p>							
220	Reinforced Concrete Pile Cap/Footing	LF	5	5	0	0	0
<p>(220) -The top of the footing for the left column of bent # 3 is exposed at this inspection. No apparent undermining or scour problems at this inspection.</p>							
234	Reinforced Concrete Pier Cap	LF	148	78	20	30	20
1080	Delamination/Spall/Patched Area	LF	10	0	10	0	0
1090	Exposed Rebar	LF	43	0	0	23	20
1130	Cracking (RC and Other)	LF	17	0	10	7	0
<p>(234) - RC Caps are deteriorated with spalling, delam, and cracking in various locations throughout, (For locations and details see photos and maintenance needs).</p> <p>-All intermediate bents have numerous delaminated areas and spalls in the caps with exposed reinforcing steel with measurable section loss ranging from initial up to 1/8" during this inspection. Bent # 2 left and bent # 4 are the most extreme cases. The entire backface of bent # 4 cap is delaminated with large spalls that expose reinforcing steel with up to approximately 1-1/2" of concrete section loss in some locations. The ahead face of cap has delaminated areas in random locations. The top of the cap has delaminated areas along the edge in bays # 1 and 3. Sounding indicated that the delaminated areas in the top of the cap do not appear to extend under the bearing devices at this inspection. The entire undersurface of the cap is delaminated.</p> <p>-Stains on the substructure caps indicate that the deck joint seals leak.</p>							

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
302	Compression Joint Seal	LF	258	94	86	54	24
2310	Leakage	LF	60	0	14	40	6
2330	Seal Damage	LF	26	0	0	8	18
2360	Adjacent Deck or Header	LF	78	0	72	6	0
(302) -The compression joint seals are in place but have a few rips, tears and areas with adhesion failure. The seals leak water on the substructure. -The undersurface of the assemblies have active corrosion at the expansion dams. -The expansion joint assembly at bent # 4 has impact damage in the left lane that appears to be from ice and snow removal operations. The span # 3 side of the assembly is approximately 3/4" higher than the span # 4 side and appears to be elevated due to pack rust in the bearing devices. -There is spalling, delaminated areas, and sealable transverse cracks adjacent to the expansion expansion joint assemblies. -The leaking joints appear to be contributing to the delaminated areas and spalling in the caps and active corrosion on the beams and bearings.							
311	Movable Bearing	EA	25	0	2	6	17
1000	Corrosion	EA	9	0	2	6	1
2210	Movement	EA	16	0	0	0	16
515	Steel Protective Coating	SF	50	10	0	0	40
3440	Effectiveness (Steel Protective Coatings)	EA	40	0	0	0	40
(311) -Bearings have heavy/severe corrosion with thick pack rust between the bearing plates that restricts bearing movement. The pack rust in the bearings at bent # 4 appear to have elevated the end of span # 3 causing a height differential of the driving surface of approximately 3/4" between the spans. -Bearing # 2 of span # 3 over bent # 4 has a broken anchor bolt that appears to be from excessive pack rust in the bearing device.							
313	Fixed Bearing	EA	25	0	7	18	0
1000	Corrosion	EA	25	0	7	18	0
515	Steel Protective Coating	SF	50	30	0	0	20
3440	Effectiveness (Steel Protective Coatings)	EA	20	0	0	0	20
(313) -Bearings have heavy/severe corrosion with thick pack rust between the bearing plates.							
331	Reinforced Concrete Bridge Railing	LF	450	305	134	11	0
1080	Delamination/Spall/Patched Area	LF	9	0	9	0	0
1090	Exposed Rebar	LF	29	0	29	0	0
1130	Cracking (RC and Other)	LF	107	0	96	11	0
(331) -The base of the parapet walls have small shallow spalls that expose reinforcing steel with active corrosion and rust. -Parapets have vertical and a few horizontal cracks.							



Elevation



Typical under surface



Typical deck



Bent 4 right has debris against column 2.



Rip rap upstream north bank. This countermeasure is failing.



Downstream channel alignment is good



Upstream channel is migrating to the north, rip rap has been put in place for countermeasures.



Inspection direction



Deck has debris full length on both shoulders.



Joint 2



Joint 4



Joint 5



Compression joint 5 at centerline has tarring to joint. Cs3 joint is leaking in these areas.



Abutment # 1 expansion joint-Seal damage.



Expansion joint over Bent # 4.



Span # 4 Right adjacent to Bent # 5.



Expansion joint over Bent # 5.



Expansion joint over abutment # 1.



Ends of cover plate.



Typical cracks in bridge rails.



Typical joint armor at joints



Bent 1 right deck edge has spalling with reinforcing steel exposed with section loss to the soffit of deck.



Bent 2 left drain area, spalling with reinforcing steel exposed with section loss to soffit of deck.



Bent 5 right deck edge has deteriorated concrete to drain soffit area. Cs3



At bent 5 joint area, there is large deep spalling with exposed rebar with section loss. Cs3 There are large transverse cracks that are adjacent to joint. Cs3



Span 4 left lane large spall with reinforcing steel exposed with section loss. Cs3



Span 3 right lane has spalling. Cs3



Span 3 centerline has spalling. Cs3



Span 2 has minor abrasion and minor map cracks that have been sealed.



Bent 5 right lane has large spalling adjacent to joint. Cs3



Span 5 left lane has sealed and unsealed map cracks. Cs3
There is also delam areas in this span. Cs2



Bent 5 left deck edge has spall with reinforcing steel exposed with section loss. Cs3



09/21/2023

Span 4 bent 5 bays 2-4 has efflorescence map cracking that has deteriorated concrete. Cs3



09/21/2023

Span 2 bay 1 center span has delam area and small efflorescence crack. Cs2



09/21/2023

Bent 4 girders 5 has section loss to and of girders. Cs3Span 4, bent 5, girder 5 & span 5, bent 5, girder 1, active corrosion with flaking rust and section loss up to 1/8" X 3 1/2 - 4'



09/21/2023

Bent 4 girder 5 back has up to 1/8 x 4" section loss to the bottom flange web juncture. Cs3Ahead girder has up to 1/16x 3' sections loss. Cs3



Bent 3 girder 2 this is typical at this Benton all girders up to 1/16" x 1' section loss. Cs3



Bent 2 span 1 girder 4 bottom web flange juncture has up to approximately 1/8" section loss for 2'. Cs3



Bent 2 span 1 girder 1 bottom web flange juncture has up to approximately 1/8" section loss for 2'. Cs3
Girder 2-5 this is typical. Girders ahead side is typical section loss.



Bent 5 column 1, back has spalling. Cs3



Bent 4 column 2 ahead side has large vertical cracking. Cs3



Bent 6 left wing spalling. Cs3



Minor spalling and vertical cracking to bent 1 back wall .



Bent 6 top of back wall has minor spalling and minor vertical cracks. Cs2



Bent 1 abutment has vertical efflorescence cracks. Cs2



Bent 3 column 1 footing exposed no undermining.
Cs2 Column 2 is typical. Cs2



Bent 2 cap left side back and bottom face has large spall
with reinforcing steel exposed with rebar detached and up to
75% section loss.



Bent 5 cap, left bottom and back face has spalls with
reinforcing steel exposed with section loss. Cs3



Bent 5 cap, right bottom face has large spall with reinforcing steel exposed with section loss. Cs3



Bent 4 back face



Bent 4 back face, bottom face and top has spalling scattered throughout cap. section loss is heavy to rebar throughout, in some areas rebar is rusted completely into. Cs3



Bent 4 ahead above column 2 has longitudinal cracking. Cs3 all cracking was sound and not delaminated at this inspection.



Bent 5 left, ahead, has delam, and longitudinal cracks. Cs3



Bent 3 bottom face center has spalls with reinforcing steel exposed. Cs3 also delam areas cs2



Bent 2 back, left top face has longitudinal crack. Cs3 sounded and not delaminated in this area. Cs3



Compression joint 5 at centerline has tarring to joint. Cs3 joint is leaking in these areas.



09/26/2023

Bent 2 bearings this is typical corrosion from leakage from joint.



09/21/2023

Bent 4 girder 1 corrosion with section loss up to 1/16"x3'.
Cs3Typical at girders 2,3,4, ahead and back. Cs3



09/21/2023

Bent 4 girder 2 back, corrosion has broke left anchor bolt.
Cs3



09/21/2023

Typical cracks in bridge rails.

Maintenance Needs

Date Reported: 08/28/2013

Priority: B - Pressing

Type of Work: Repair (General)

Status: Assigned

Component: Element

Deficiency Description

Bearings -

Bearings have heavy/severe corrosion with thick pack rust between the bearing plates that restricts bearing movement. The pack rust in the bearings at bent # 4 appear to have elevated the end of span # 3 causing a height differential of the driving surface of approximately 3/4" between the spans.

Remarks

09/09/2021 - RSM - Priority changed from "D" to "B" due to excessive corrosion with pack rust restricting movement and lifting the end of the span causing height differential of the spans.



Bent 4 girder 2 back, corrosion has broke left anchor bolt.
Cs3



Bent 4 girder 1 corrosion with section loss up to 1/16"x3'.
Cs3Typical at girders 2,3,4, ahead and back. Cs3



Bent 2 bearings this is typical corrosion from leakage from joint.



Bearings have heavy/severe corrosion with thick pack rust between the bearing plates that restricts bearing movement. The pack rust in the bearings at bent # 4 appear to have elevated the end of span # 3 causing a height differential of the driving surface of approximately 3/4" between the spans.



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Maintenance Needs

Date Reported: 09/09/2021

Priority: B - Pressing

Type of Work: Repair (General)

Status: Assigned

Component: Element

Deficiency Description

Substructure -

The entire backface of Bent # 4 cap is delaminated with large spalls that expose reinforcing steel with up to approximately 1-1/2" of concrete section loss in some locations. The entire undersurface of the cap is delaminated. The ahead face of cap has delaminated areas in random locations. The top of the cap has delaminated areas along the edge in bays # 1 and 3.

Remarks



09/21/2023

Bent 5 cap, right bottom face has large spall with reinforcing steel exposed with section loss. Cs3



09/21/2023

Bent 5 cap, left bottom and back face has spalls with reinforcing steel exposed with section loss. Cs3



09/21/2023

Bent 4 back face, bottom face and top has spalling scattered throughout cap. section loss is heavy to rebar throughout, in some areas rebar is rusted completely into. Cs3



09/21/2023

Bent 4 back face, bottom face and top has spalling scattered throughout cap. section loss is heavy to rebar throughout, in some areas rebar is rusted completely into. Cs3



09/21/2023

Bent 2 cap left side back and bottom face has large spall with reinforcing steel exposed with rebar detached and up to 75% section loss.



09/08/2021

The entire backface of Bent # 4 cap is delaminated with large spalls that expose reinforcing steel with up to approximately 1-1/2" of concrete section loss in some locations. The entire undersurface of the cap is delaminated. The ahead face of cap has delaminated areas in random locations. The top of the cap has delaminated areas along the edge in bays # 1 and 3.



The entire backface of Bent # 4 cap is delaminated with large spalls that expose reinforcing steel with up to approximately 1-1/2" of concrete section loss in some locations. The entire undersurface of the cap is delaminated. The ahead face of cap has delaminated areas in random locations. The top of the cap has delaminated areas along the edge in bays # 1 and 3.



The entire backface of Bent # 4 cap is delaminated with large spalls that expose reinforcing steel with up to approximately 1-1/2" of concrete section loss in some locations. The entire undersurface of the cap is delaminated. The ahead face of cap has delaminated areas in random locations. The top of the cap has delaminated areas along the edge in bays # 1 and 3.



The entire backface of Bent # 4 cap is delaminated with large spalls that expose reinforcing steel with up to approximately 1-1/2" of concrete section loss in some locations. The entire undersurface of the cap is delaminated. The ahead face of cap has delaminated areas in random locations. The top of the cap has delaminated areas along the edge in bays # 1 and 3.

Maintenance Needs

Date Reported: 12/28/2019

Priority: C - Important

Type of Work: Repair (General)

Status: Monitor

Component: Element

Deficiency Description

Deck -

The driving surface has several delaminated areas along the expansion joint assemblies.

The right side of span # 4 adjacent to Bent # 5 has soft a deteriorated concrete repair that sounds delaminated when sounded. There is map cracking with leaching visible from the undersurface of the deck in this area.

Span # 3 driving surface has a 12" spall in the left lane, and an 8" and 16" spall in the right lane along with delaminated areas in the wheel paths and right shoulder.

Remarks



Span 3 centerline has spalling. Cs3



Span 3 right lane has spalling. Cs3



Bent 4 adjacent to joint is delam with spalls. Cs3



Span 4 left lane large spall with reinforcing steel exposed with section loss. Cs3



At bent 5 joint area, there is large deep spalling with exposed rebar with section loss. Cs3 There are large transverse cracks that are adjacent to joint. Cs3



Span 4-Scaling with mapcracking and efflorescence.



Deck soffit. Span # 4 Right. Adjacent to Bent # 5.



Span # 4 adjacent to Bent # 5. Right side of deck.



Deck soffit. Span # 4 Right side. Adjacent to Bent # 5.



Span # 4 Right adjacent to Bent # 5.

Maintenance Needs

Date Reported: 09/14/2011

Priority: C - Important

Type of Work: Repair (General)

Status: Monitor

Component: Element

Deficiency Description

Substructure -

The intermediate bent caps have areas of spalling with exposed reinforcing steel. The exposed reinforcing steel has active corrosion and measurable section loss where the expansion joints leak on the substructure.

Remarks



Bent # 3 cap, right end-Spall with exposed reinforcing steel.



Bent # 3 cap-Delaminated areas in undersurface.



Bent # 2 cap, left side-Spalling with exposed reinforcing steel.



Left end of Bent # 2.



Bent # 2. Left end of the cap.

Maintenance Needs

Date Reported: 09/14/2011

Priority: C - Important

Type of Work: Repair (General)

Status: Monitor

Component: Element

Deficiency Description

Superstructure -

The ends of the beams have active corrosion with flaking rust and section loss that ranges from initial up to approximately 1/8" at this inspection.

Remarks



Beam # 2 at abutment # 2-1/8" section loss to bottom flange.



Span # 1, beam # 1 at bent # 2-Corrosion with flaking rust/section loss.



Bent # 5. Beam # 2 with active corrosion and flaking rust.

Maintenance Needs

Date Reported: 08/28/2013

Priority: D- Routine

Type of Work: Repair (General)

Status: Monitor

Component: Element

Deficiency Description

Bridge Railing -

The base of the bridge railing has numerous small shallow spalls with exposed reinforcing steel.

Remarks



Shallow spalling with exposed reinforcing steel at base of parapet.



The base of the bridge railing has numerous small shallow spalls with exposed reinforcing steel.



The base of the bridge railing has numerous small shallow spalls with exposed reinforcing steel.

Maintenance Needs

Date Reported: 09/21/2015

Priority: D- Routine

Type of Work: Repair (General)

Status: Monitor

Component: Element

Deficiency Description

Deck -

The overhang portion of the deck has areas of spalling that expose reinforcing steel adjacent to the deck drains.

The undersurface of the deck overhang on the right side of Span # 1 has and 3' x 3' spalled area with exposed reinforcing steel with initial section loss adjacent to abutment # 1.

Remarks



09/21/2023

Bent 5 right deck edge has deteriorated concrete to drain soffit area. Cs3



09/21/2023

Bent 2 left drain area, spalling with reinforcing steel exposed with section loss to soffit of deck.



09/21/2023

Bent 1 right deck edge has spalling with reinforcing steel exposed with section loss to the soffit of deck.



09/08/2021

Span # 1 overhang on left side at abutment 1-Spalling with exposed reinforcing steel.



Span 2, left at bent 2-Spall with exposed reinforcing steel adjacent t to deck drain.



Spall with exposed reinforcing steel with initial section loss. Span # 1. Right. Adjacent to Bent # 1.



Bent # 3. Right end of cap.



Deck soffit overhang. Left side of Span # 1.

Maintenance Needs

Date Reported: 09/09/2021

Priority: D- Routine

Type of Work: Repair (General)

Status: Monitor

Component: Approach

Deficiency Description

South approach Roadway -

The South approach roadway has settlement in the right lane adjacent to the bridge end.

Remarks



09/08/2021

The South approach roadway has settlement in the right lane adjacent to the bridge end.



Asset #05599(Routine, Underwater type 2)

SH 112-Wash Co. over Clear Creek

Location: 3.1 MI S JCT US 412

Team Lead: Anthony Caudel **Inspection Date:** 09/19/2023

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	Yes
A-58 - Cap Cleaning/Flushing Needed	Yes
A-59 - Joint Repair Needed	Yes
A-60 - Full Beam Painting Needed	
A-61 - Polymer Overlay Advised	Yes
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)



Deck has debris full length on both shoulders.

A-56 - Joint Cleaning/Flushing Needed

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

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

A-59 - Joint Repair Needed (Yes)

Expansion Joint Seals - The compression deck joints seals have rips, tears, and leak water on the bent caps and bearings. There is transverse cracking, delaminated areas, and spalls adjacent to the expansion joint headers.



Joint 2



Joint 4



Joint 5



Compression joint 5 at centerline has tarring to joint. Cs3 joint is leaking in these areas.



Abutment # 1 expansion joint-Seal damage.



Expansion joint over Bent # 4.



Span # 4 Right adjacent to Bent # 5.



Expansion joint over Bent # 5.



Expansion joint over abutment # 1.

A-60 - Full Beam Painting Needed

A-61 - Polymer Overlay Advised (Yes)

Would recommend a polymer overlay after delaminated areas are repaired.

A-62 - Hydro and LMC Advised



Asset #05599(Routine, Underwater type 2)

SH 112-Wash Co. over Clear Creek

Location: 3.1 MI S JCT US 412

Team Lead: Anthony Caudel **Inspection Date:** 09/19/2023

A-63 - Missing/Incorrect Log Mile Signage

A-64 - Vegetation Removal Requested



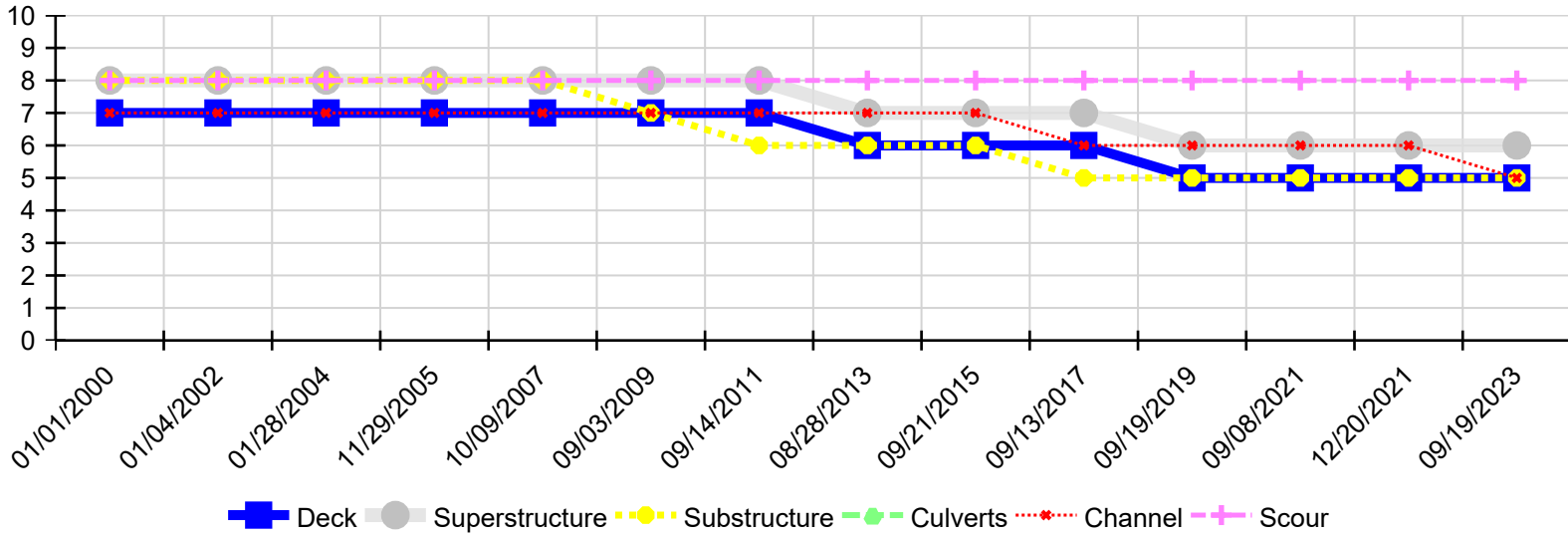
Asset #05599(Routine, Underwater type 2)

SH 112-Wash Co. over Clear Creek

Location: 3.1 MI S JCT US 412

Team Lead: Anthony Caudel Inspection Date: 09/19/2023

Condition History



Inspection Date	Deck	Superstructure	Substructure	Culverts	Channel	Scour
09/19/2023	5	6	5	N	5	8
12/20/2021	5	6	5	N	6	8
09/08/2021	5	6	5	N	6	8
09/19/2019	5	6	5	N	6	8
09/13/2017	6	7	5	N	6	8
09/21/2015	6	7	6	N	7	8
08/28/2013	6	7	6	N	7	8
09/14/2011	7	8	6	N	7	8
09/03/2009	7	8	7	N	7	8
10/09/2007	7	8	8	N	7	8
11/29/2005	7	8	8	N	7	8
01/28/2004	7	8	8	N	7	8
01/28/2004	7	8	8	N	7	8
01/04/2002	7	8	8	N	7	8
01/01/2000	7	8	8	N	7	8