

Bridge 05223 Inspection Report



Latitude:35.36064, Longitude:-90.65107

Route:42 Section:03 Log:8.25

Arnold Road ID:19x42x3xA, Arnold Log mile:8.25

District 01, 37 - Cross County

Owner: 1 - State Highway Agency

Inspection Direction: 4 - W to E

Bridge Posting Information

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

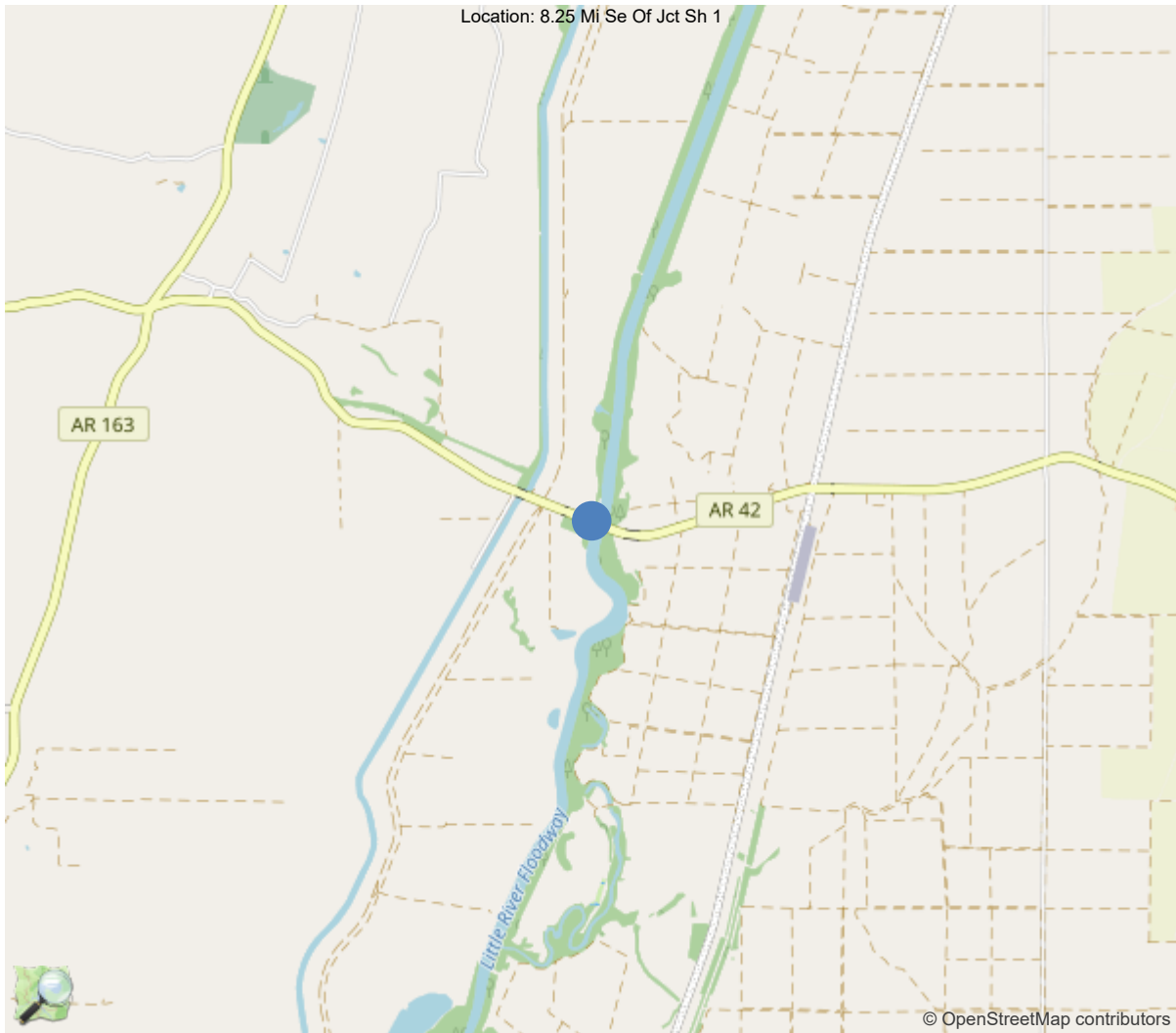
70 - Bridge Posting: 5 - Equal to or above legal loads

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)	59		
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



35.36064, -90.65107

National Bridge Inventory Data Sheet

IDENTIFICATION	
(1) State Names	5 - Arkansas
(8) Structure Number	05223
(5) Inventory Route	1
(2) Highway Agency District	01 - District 01
(3) County Code	37 - Cross County
(4) Place Code	0
(6) Features Intersected	St.Francis Bay
(7) Facility Carried	Sh-42/Sec-3/L-8.25
(9) Location	8.25 Mi Se Of Jct Sh 1
(11) Mile Point	8.25 mi
(12) Base Highway Network	No
(13) LRS Inventory Rte & Subrte	0000000000
(16) Latitude	35.36064
(17) Longitude	-90.65107
(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	7
(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	1970
(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	420
(30) Year of ADT	2018
(109) Truck ADT	1 %
(19) Bypass, Detour Length	25 mi
GEOMETRIC DATA	
(48) Length of Maximum Span	80 ft
(49) Structure Length	398 ft
(50) Curb or Sidewalk Width	
Left	0.5 ft
Right	0.5 ft
(51) Bridge Roadway Width Curb to Curb	28 ft
(52) Deck Width Out to Out	30 ft
(32) Approach Roadway Width (W/Shoulders)	25 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	28 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	7
(60) Substructure	7
(61) Channel & Channel Protection	6
(62) Culverts	N
LOAD RATING AND POSTING	
(31) Design Load	5 - MS 18 / HS 20
(63) Operating Rating Method	1
(64) Operating Rating	
Type	1 - Load Factor(LF)
Rating	60
(65) Inventory Rating Method	1 - Load Factor(LF)
(66) Inventory Rating	
Type	
Rating	36
(70) Bridge Posting	5 - Equal to or above legal loads
(41) Structure Open/Posted/Closed	A - Open, no restriction
APPRAISAL	
(67) Structural Evaluation	
(68) Deck Geometry	5
(69) Clearances, Vertical/Horizontal	N
(71) Waterway Adequacy	8
(72) Approach Roadway Alignment	6
(36A) Bridge Railings	1 - Inspected feature meets current
(36B) Transitions	1 - Inspected feature meets current
(36C) Approach Guardrail	0 - Inspected feature does not meet
(36D) Approach Guardrail Ends	1 - Inspected feature meets current
(113) Scour Critical Bridges	5 - Bridge foundations determined t
PROPOSED IMPROVEMENTS	
(75) Type of Work	
(76) Length of Structure Improvement	0 ft
(94) Bridge Improvement Cost	\$ 0
(95) Roadway Improvement Cost	\$ 0
(96) Total Project Cost	\$ 0
(97) Year of Improvement Cost Estimate	
(114) Future ADT	479
(115) Year of Future ADT	2028

INSPECTIONS *			
(90) Inspection Date			10/07/2024
(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: Drew Melton, Inspection Date: 10/07/2024

Specifications for National Bridge Inventory Sheets

IDENTIFICATION	
B.ID.01 Bridge Number	05223
B.ID.02 Bridge Name	
B.ID.03 Previous Bridge No.	02011
B.W.01 Year Built	1970

LOCATION	
B.L.01 State Code	5 - Arkansas
B.L.02 County Code	37 - Cross County
B.L.03 Place Code	00000 - N/A
B.L.04 Highway Agency District	01 - District 01
B.L.05 Latitude	35.36064
B.L.06 Longitude	-90.65107
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	8.25 Mi Se Of Jct Sh 1
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	392
B.G.02 Total Bridge Length	398
B.G.03 Max Span Length	80.1
B.G.04 Min Span Length	37
B.G.05 Bridge Width Out-to-Out	29.9
B.G.06 Bridge Width Curb-to-Curb	27.9
B.G.07 Left Curb or Sidewalk Width	0.7
B.G.08 Right Curb or Sidewalk Width	0.7
B.G.09 Approach Roadway Width	24.9

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	34
B.G.14 Sidehill Bridge	N - Not a sidehill bridge
B.G.15 Irregular Deck Area	
B.G.16 Calculated Deck Area	11881.5

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	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	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	7 - GOOD - Some minor defects.
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	6 - SATISFACTORY - Widespread
B.C.06 Bridge Railing Transitions Condition	6 - SATISFACTORY - Widespread
B.C.07 Bridge Bearings Cond.	6 - SATISFACTORY - Widespread
B.C.08 Bridge Joints Condition	5 - FAIR - Some moderate defec
B.C.09 Channel Condition Rating	6 - SATISFACTORY - Widespread
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	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	F - Fair
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: Drew Melton, Inspection Date: 10/07/2024

SPAN SETS			
M1			
B.SP.02 # of Spans	7	B.SP.08 Deck Interaction	NC - Non-composite
B.SP.03 # of Beam Lines	5	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	CX - Coating - other
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	C01 - Coating - paint	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	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	0 - None
B.SB.03 Substructure Material	C01 - Reinforced concrete - ca	B.SB.06 Foundation Type	PX - Pile - other
B.SB.04 Substructure Type	P04 - Pier - multiple column w	B.SB.07 Foundation Protective System	0 - None
P2			
B.SB.02 No. of Substructure Units	4	B.SB.05 Substructure Protective System	0 - None
B.SB.03 Substructure Material	C01 - Reinforced concrete - ca	B.SB.06 Foundation Type	PX - Pile - other
B.SB.04 Substructure Type	P03 - Pier - multiple column	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	420
B.F.03 Feature Name	Sh-42/Sec-3/L-8.25	B.H.10 Annual ADTT	4
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	27.8
B.H.07 LRS Mile Point	8.25	B.H.17 Bypass Detour Length	25
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	1	42	2-T - TEMP - Two-way traffic - NS or EW	3 - State route	1 - Mainline



Team Lead: Drew Melton, Inspection Date: 10/07/2024

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	St.Francis Bay	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 and 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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Inspection Notes

General Observation

Drawing numbers: 15821,15823, 15826-29.

Routine inspection performed by walking across deck and using a snooper to access under structure. Channel was observed at low water conditions and a lane closure was used and provided by Cross County yard in the form of flaggers. Snooped from right lane.

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

Deck is in fair condition with many cracks, several shallow spalls and light to moderate abrasion full length. Undersurface has delaminations, and cracks some with efflorescence.

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

Superstructure is in good condition. Surface rust full length with little to no section loss.

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

Substructure is in good condition with minor spalls and cracks, some exposed reinforcing steel.

61 - Channel/Channel Protection (6 - Bank is beginning to slump. River control devices and embankment protection have widespread minor damage. There is minor stream bed movement evident. Debris is restricting the channel slightly.) Channel has good alignment with structure. Channel banks have areas of erosion and slumping with channel having drift at bent 4. Little to no water restriction.

Channel, Bent 4, Left Side: Moderate drift.

A-54 - Sealable Deck Cracks (Y)

Deck Surface, Full Length: Transverse cracks some are sealed and spaced 2' apart.

A-55 - Deck Washing Needed (Y)

Deck Gutters: Dirt and debris.

A-59 - Joint Repair Needed (Yes)

All Joint Seals: Cracked, broken and deteriorated.

A-60 - Full Girder Painting Needed (Y)

Girders, All Spans, Full Length: Rusty with 25% bare steel 50% rust bleeding through paint. Rest of paint is chalky and has loss of color pigment.

A-62 - Hydro and LMC Advised (Y)

Deck Surface, Full Length: Transverse cracks some are sealed spaced 2' apart. Each span has shallow spalls and moderate abrasion.



Asset #05223(Routine)

Sh-42/Sec-3/L-8.25 over St.Francis Bay

Location: 8.25 Mi Se Of Jct Sh 1

Team Lead: Drew Melton Inspection Date: 10/07/2024

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

Log mile signs are laying down and are incorrect. They should read Sh-42, Section 3, Log Mile 8.25.

A-64 - Vegetation Removal Requested (Y)

Vegetation is growing beside and under bridge.

B.C.05 Bridge Railing Condition Rating (6 - SATISFACTORY - Widespread minor or isolated moderate defects.)

Bridge railing is in satisfactory condition with areas of collision damage and spacer blocks missing, turned, or broken.

B.C.06 Bridge Railing Transitions Condition Rating (6 - SATISFACTORY - Widespread minor or isolated moderate defects.)

Bridge railing transitions are in satisfactory condition with some minor collision damage.

B.C.07 Bridge Bearings Condition Rating (6 - SATISFACTORY - Widespread minor or isolated moderate defects.)

Bridge bearings are in satisfactory condition with surface rust some laminations and loose bolts.

B.C.08 Bridge Joints Condition Rating (5 - FAIR - Some moderate defects.)

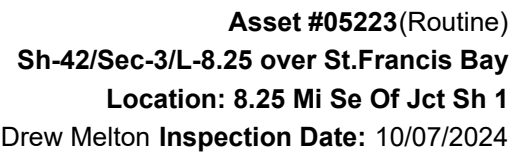
Bridge joints are in fair condition with material weathered and cracked and one joint seal missing.

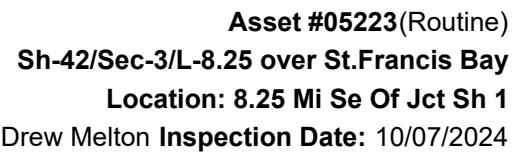
B.C.10 Channel Protection Condition Rating (7 - GOOD - Some minor defects.)

Channel protection is in good condition consisting of rip rap. Most rip is in place and working as intended.

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

Minor scour is present at bank lines and water.

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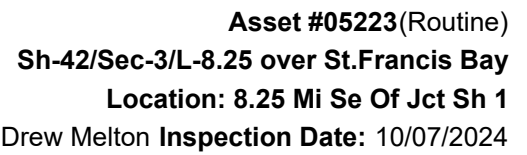


ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
205	Reinforced Concrete Column	EA	8	1	6	1	0
1080	Delamination/Spall/Patched Area	EA	1	0	0	1	0
1090	Exposed Rebar	EA	2	0	2	0	0
1190	Abrasion/Wear (PSC/RC)	EA	4	0	4	0	0
(205) Bent 3, Column 1, Ahead; Several pieces of exposed reinforcing steel due to poor concrete coverage. Reinforcing steel has no section loss. 1Each CS2 (Exposed Rebar) Bent 4, Column 2: 2' spall with no exposed reinforcing steel, and a 1' spall with exposed reinforcing steel. Reinforcing steel has no section loss. 1Each CS2 (Exposed Rebar) Bent 6, Column 2, Back: 3' honeycomb. 1Each CS3 (Delamination/Spall/Patched Area) Bents 3, 4, 5 & 6, Both Columns: Light abrasion with no loose aggregate near water line. 4Each CS2 (Abrasion/Wear)							
210	Reinforced Concrete Pier Wall	LF	38	11	27	0	0
1190	Abrasion/Wear (PSC/RC)	LF	27	0	27	0	0
(210) Bents 4, 5 & 6, Web Walls: Light abrasion with no loose aggregate near waterline. 27LF CS2. (Abrasion/Wear)							
215	Reinforced Concrete Abutment	LF	80	72	4	4	0
1080	Delamination/Spall/Patched Area	LF	4	0	4	0	0
1090	Exposed Rebar	LF	4	0	0	4	0
(215) Abutment 1, Cap: Four small pieces of exposed reinforcing steel due to poor concrete. Reinforcing steel has moderate section loss. Cap also has several small 6" or less delaminations 4' total. 4LF CS3 (Exposed Rebar), 4LF CS2 (Delamination/Spall/Patched Area)							
226	Prestressed concrete piles	EA	10	8	2	0	0
1080	Delamination/Spall/Patched Area	EA	2	0	2	0	0
(226) Bent 7 pile 1 at ground line has been broken off in construction and small amount of concrete poured around it. Pile in ground is drove at an angle into bank and pile is delaminated top two feet and top part of pile is sitting only on a few inches of bottom part of pile almost behind the pile part drove into ground and has vertical crack at bottom and is leaning slightly forward. This pile is a prestressed pile with 3/8 cable for reinforcing steel pile at break steel cable has large section loss. 08/13/2020 this location has had a large concrete reinforced collar 5' x 5' with an rebar mat and poured with 5 yards of concrete. completed pour on 9-12-18. The concrete area has undermined several feet.							
234	Reinforced Concrete Pier Cap	LF	171	138	16	17	0
1080	Delamination/Spall/Patched Area	LF	1	0	1	0	0
1090	Exposed Rebar	LF	24	0	7	17	0
1130	Cracking (RC and Other)	LF	8	0	8	0	0
(234) All, Caps: Hairline vertical cracks spaced 1' to 2' apart. Bent 2, Cap, Ahead, Above Pile 4: 6" spall no exposed reinforcing steel. 1LF CS2 (Delamination/Spall/Patched Area) Bent 3, Cap, Back: Six 1' spills with reinforcing steel exposed above left column and a 1' spall with exposed reinforcing steel on right side. Reinforcing steel has no section loss. 7LF CS2 (Exposed Rebar) Bent 3, Cap, Ahead: 3' exposed reinforcing steel due to poor concrete coverage. Reinforcing steel has minor section loss. 3LF CS3 (Exposed Rebar) Bent 3, Cap, Ahead: 8' of longitudinal cracking. 8LF CS2 (Cracking) Bent 4, Cap, Back, Under Girder 4: 1' spall with reinforcing steel exposed. Reinforcing steel has minor section loss. 1LF CS3 (Exposed Rebar) Bent 4, Cap, Ahead: 3' of exposed reinforcing steel due to poor concrete coverage. Reinforcing steel has moderate section loss. 3LF CS3 (Exposed Rebar)							



Asset #05223(Routine)
Sh-42/Sec-3/L-8.25 over St.Francis Bay
Location: 8.25 Mi Se Of Jct Sh 1
Team Lead: Drew Melton Inspection Date: 10/07/2024

ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
Bent 5, Cap, Ahead: 2' of exposed reinforcing steel due to poor concrete coverage. Reinforcing steel has moderate section loss. 2LF CS3 (Exposed Rebar) Bent 5, Cap, Back: 2' of exposed reinforcing steel due to poor concrete coverage. Reinforcing steel has moderate section loss. 2LF CS3 (Exposed Rebar) Bent 6, Cap, Back: 2' of exposed reinforcing steel due to poor concrete coverage. Reinforcing steel has moderate section loss. 2LF CS3 (Exposed Rebar) Bent 6, Cap, Ahead: 3' of exposed reinforcing steel due to poor concrete coverage. Reinforcing steel has moderate section loss. 3LF CS3 (Exposed Rebar) Bent 7, Cap, Back: 1' of exposed reinforcing steel due to poor concrete coverage. Reinforcing steel has moderate section loss. 1LF CS3 (Exposed Rebar)							
302	Compression Joint Seal	LF	240	0	0	208	32
2320	Seal Adhesion	LF	32	0	0	0	32
2340	Seal Cracking	LF	208	0	0	208	0
(302) Joint Steel: No paint left. All Joint Seals: Cracked, broken and deteriorated. 208LF CS3 (Seal Cracking) Bent 3, Joint seal: Missing. 32LF CS4 (Seal Adhesion)							
311	Movable Bearing	EA	35	0	34	1	0
1000	Corrosion	EA	34	0	34	0	0
2220	Alignment	EA	1	0	0	1	0
515	Steel Protective Coating	SF	70	0	18	17	35
3410	Chalking (Steel Protective Coatings)	SF	35	0	18	17	0
3440	Effectiveness (Steel Protective Coatings)	SF	35	0	0	0	35
(311) All Movable Bearings: Paint has 50% loss with rest of paint chalky and has loss of color pigment. 18SF CS2, 17SF CS3 (Chalking), 35SF CS4 (Effectiveness) All Movable Bearings: Corroded with small laminations with minor section loss. 34Each CS2 (Corrosion) Bent 4, Span 4, Bearing 1: Rocked back 15 degrees. 1Each CS3 (Alignment)							
313	Fixed Bearing	EA	35	0	35	0	0
1000	Corrosion	EA	33	0	33	0	0
1020	Connection	EA	2	0	2	0	0
515	Steel Protective Coating	SF	70	0	18	17	35
3410	Chalking (Steel Protective Coatings)	SF	35	0	18	17	0
3440	Effectiveness (Steel Protective Coatings)	SF	35	0	0	0	35
(313) All Fixed Bearings: Paint has 50% loss with rest of paint chalky and has loss of color pigment. 18SF CS2, 17SF CS3 (Chalking), 35SF CS4 (Effectiveness) All Fixed Bearings: Corroded with small laminations with minor section loss. 33Each CS2 (Corrosion) Bent 4, Span 3, Bearing 5: Bolts between girder and bearing are loose. 1Each CS2 (Connection) Bent 6, Span 5, Bearing 2: Bolt between girder and bearing is loose. 1Each CS2 (Connection)							
330	Metal Bridge Railing	LF	796	753	40	3	0
1020	Connection	LF	3	0	0	3	0
1900	Distortion	LF	40	0	40	0	0



ELEMENTS	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
515	Steel Protective Coating	SF	2388	0	2388	0	0
3410	Chalking (Steel Protective Coatings)	SF	2388	0	2388	0	0
(330) Bridge Rails, Full Length: Rails have a chalky appearance. 2388SF CS2 (Chalking)							
Bridge Rails: Spacers on each side are turned and not square with bridge.							
Bridge Rail, Spans 1, 2 & 3, Left Side: Damaged 25 feet by collision. 25LF CS2 (Distortion)							
Bridge Rail, Spans 1 & 2, Right Side: 20' of collision damage. 20LF CS2 (Distortion)							
Span 1, Bridge Rail, Right: 2nd post missing spacer and posts 3 & 5 have broken spacers. 3LF CS3 (Connection)							
Abutment 2, End Post: Spalled with no exposed reinforcing steel.							

Inspection Photos and Notes



Side view-elevation aerial



Side view-elevation



Typical deck undersurface over water



Typical deck undersurface over water



Typical deck undersurface overhang



Typical deck undersurface



Typical deck surface



Abutment 2 slope right side



Abutment 2 slope left side



Bent 4 drift



Channel left



Channel right



Top view-Inventory



Typical deck crack



Deck Gutters: Dirt and debris.



Typical joint



Typical girder condition



Typical deck spalls



Typical deck abrasion



Abutment 2 log mile sign laying down



Abutment 1 log mile sign laying down



Typical vegetation



Deck view aerial



Span 5, Deck Undersurface, Bay 3, 1/4 Span: 1' delamination.



Span 5, Deck Undersurface, Bay 4, 1/4 Span: 1' delamination.



Typical crack with efflorescence span 5



Typical deck undersurface crack



Span 7 deck



Span 6 deck



Span 5 deck



Span 4 deck



Span 3 deck center



Typical deck abrasion



Typical deck crack



Span 1 deck



Span 2, Girder 3, Bent 3: Web is bent on end.



Typical girders over water



Typical outside girder over water



Typical girder condition



Abutment 1



Abutment 2



Bent 7



Bent 7, Cap, Back: 1' of exposed reinforcing steel due to poor concrete coverage. Reinforcing steel has moderate section loss.



Bent 6, Cap, Ahead: 3' of exposed reinforcing steel due to poor concrete coverage. Reinforcing steel has moderate section loss.



10/07/2024

Bent 6, Cap, Back: 2' of exposed reinforcing steel due to poor concrete coverage. Reinforcing steel has moderate section loss.



10/07/2024

Bent 5, Cap, Ahead: 2' of exposed reinforcing steel due to poor concrete coverage. Reinforcing steel has moderate section loss.



10/07/2024

Bent 5, Cap, Back: 2' of exposed reinforcing steel due to poor concrete coverage. Reinforcing steel has moderate section loss.



10/07/2024

Bent 4, Cap, Ahead: 3' of exposed reinforcing steel due to poor concrete coverage. Reinforcing steel has moderate section loss.



Bent 3, Cap, Ahead: 3' exposed reinforcing steel due to poor concrete coverage. Reinforcing steel has minor section loss.
Bent 3, Cap, Ahead: 8' of longitudinal cracking.



Bent 4, Cap, Back, Under Girder 4: 1' spall with reinforcing steel exposed. Reinforcing steel has minor section loss.



Bent 3, Cap, Ahead: 3' exposed reinforcing steel due to poor concrete coverage. Reinforcing steel has minor section loss.
Bent 3, Cap, Ahead: 8' of longitudinal cracking.



Bent 3, Cap, Back: Six 1' spalls with reinforcing steel exposed above left column and a 1' spall with exposed reinforcing steel on right side. Reinforcing steel has no section loss.



Abutment 1 joint



Abutment 2 joint



Bent 7 joint



Bent 6 joint



Bent 3 joint



Bent 2 joint



Bent 4, Span 4, Bearing 1: Rocked back 15 degrees.



Typical movable bearing



Typical fixed bearing



Typical abutment bearing



Abutment 2 left monument post



Typical bridge rail block broken missing

Maintenance Needs

Date Reported: 08/29/2012

Priority: C - Important

Type of Work: Repair (General)

Status: Monitor

Component: Deck

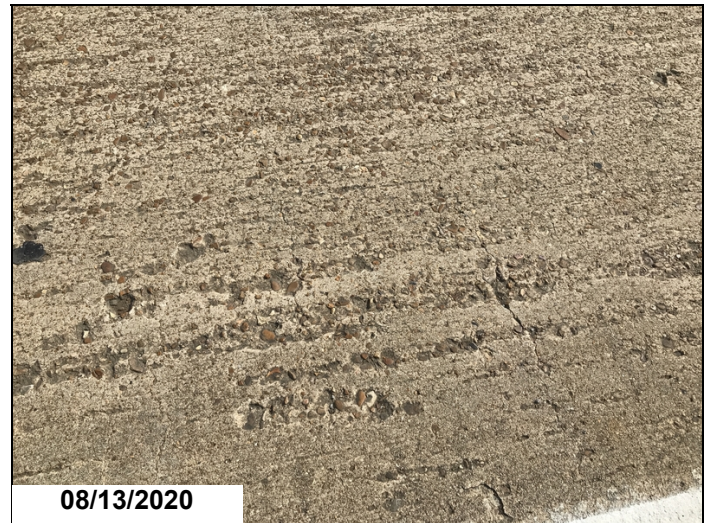
Deficiency Description

Deck spans #3,4 have moderate areas of scaling with depths up to ½" deep.

Remarks



Typical scaling in span #3 deck



Deck spans #3,4 have moderate areas of scaling with depths up to ½".

Maintenance Needs

Date Reported: 08/22/2018

Priority: C - Important

Type of Work: Joint Repair

Status: Monitor

Component: Element

Deficiency Description

Bent 3, Joint seal: Missing.

Remarks



Bent 3, Joint seal: Missing.

Maintenance Needs

Date Reported: 08/19/2022

Priority: C - Important

Type of Work: Repair (General)

Status: Open

Component: Approach

Deficiency Description

Abutment 1 & 2, Approach Roadways: Settled.

Remarks



Abutment 2 approach roadway.



Abutment 1 approach roadway.

Maintenance Needs

Date Reported: 08/22/2022

Priority: C - Important

Type of Work: Deck Repair

Status: Monitor

Component: Element

Deficiency Description

Span 3, Deck Surface, Right Lane: 6" spall, and 1' spall.

Span 4, Deck Surface, Right Lane, 15' From Bent 5: 1' spall with no exposed reinforcing steel.

Span 4, Deck Surface, Right Lane: 1' spall no exposed reinforcing steel.

Span 5, Deck Surface, Left Lane: Two 1' shallow spalls and one 2' by 1' spall no exposed reinforcing steel.

Span 6, Deck Surface, Right Lane: Three shallow spalls with no exposed reinforcing steel.

Remarks



Span 3 deck center



Span 4 deck



Span 5 deck



Span 6 deck

Maintenance Needs

Date Reported: 08/05/2014

Priority: D- Routine

Type of Work: Repair (General)

Status: Monitor

Component: Approach

Deficiency Description

Abutment 2, Approach Rail, Right Side: Low and leaning away from roadway.

Remarks



08/13/2020

Abutment 2, Approach Rail, Right Side: Low and leaning away from roadway.

Maintenance Needs

Date Reported: 08/22/2018

Priority: D- Routine

Type of Work: Miscellaneous

Status: Monitor

Component: Element

Deficiency Description

Bridge Rails: Spacers on each side are turned and not square with bridge.
Span 1, Bridge Rail, Right: 2nd post missing spacer and posts 3 & 5 have broken spacers.

Remarks



Span 1 right side bridge rail

Maintenance Needs

Date Reported: 08/14/2020

Priority: D- Routine

Type of Work: Deck Repair

Status: Monitor

Component: Element

Deficiency Description

Wearing Surface, Span 7, Near Bent 7: 40 square feet of rough area.

Remarks



Wearing Surface, Span 7, Near Bent 7: 40 square feet of rough area.

Maintenance Needs

Date Reported: 08/19/2022

Priority: D- Routine

Status: Monitor

Type of Work: Channel Work/Drift Removal

Component: Channel

Deficiency Description

Channel, Left Side: Moderate drift.

Remarks



Channel, Left Side: Moderate drift.

Maintenance Needs

Date Reported: 08/22/2022

Priority: D- Routine

Type of Work: Repair (General)

Status: Repair Documented

Component: Channel

Deficiency Description

Bent #7 pile #1 repair is undermined up to four feet due to erosion.

Remarks

Undermining has been repaired since last inspection.



Bent 7



Bent #7 back face



Bent #7 pile #1 repair undermined

Routine Maintenance

Check Box Maintenance Items

Type of Maintenance	Is Recommended?
A-54 - Sealable Deck Cracks	Yes
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	Yes
A-60 - Full Beam Painting Needed	Yes
A-61 - Polymer Overlay Advised	No
A-62 - Hydro and LMC Advised	Yes
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 (Yes)

Deck Surface, Full Length: Transverse cracks some are sealed and spaced 2' apart.



Typical deck crack

A-55 - Deck Washing Needed (Yes)

Deck Gutters: Dirt and debris.



Deck Gutters: Dirt and debris.

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 (Yes)

All Joint Seals: Cracked, broken and deteriorated.



Typical joint

A-60 - Full Girder Painting Needed (Yes)

Girders, All Spans, Full Length: Rustied with 25% bare steel 50% rust bleeding through paint. Rest of paint is chalky and has loss of color pigment.



Typical girder condition

A-61 - Polymer Overlay Advised (No)

A-62 - Hydro and LMC Advised (Yes)

Deck Surface, Full Length: Transverse cracks some are sealed spaced 2' apart.
Each span has shallow spalls and moderate abrasion.



Typical deck spalls



Typical deck abrasion

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

Log mile signs are laying down and are incorrect. They should read Sh-42, Section 3, Log Mile 8.25.



Abutment 2 log mile sign laying down



Abutment 1 log mile sign laying down

A-64 - Vegetation Removal Requested (Yes)

Vegetation is growing beside and under bridge.



Typical vegetation

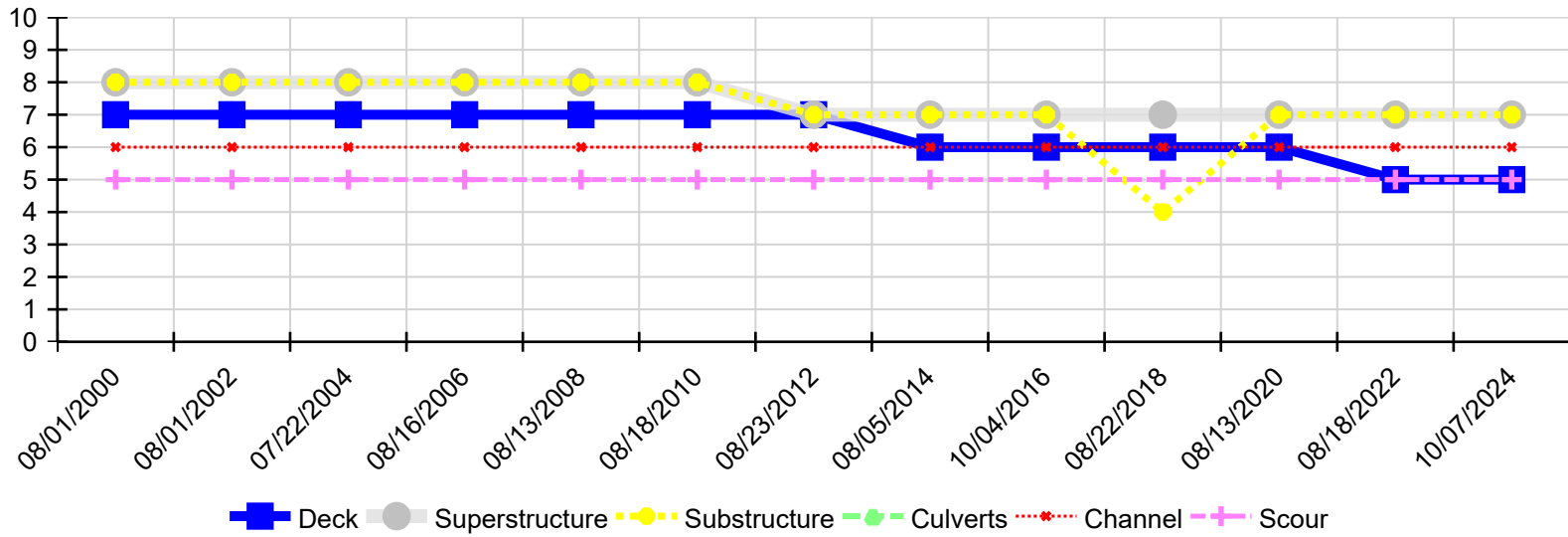
A-65 - Clogged deck drains?

A-66 - Approach minor pothole/leveling needed



Asset #05223(Routine)
Sh-42/Sec-3/L-8.25 over St.Francis Bay
Location: 8.25 Mi Se Of Jct Sh 1
Team Lead: Drew Melton Inspection Date: 10/07/2024

Condition History



Inspection Date	Deck	Superstructure	Substructure	Culverts	Channel	Scour
10/07/2024	5	7	7	N	6	5
08/18/2022	5	7	7	N	6	5
08/13/2020	6	7	7	N	6	5
08/22/2018	6	7	4	N	6	5
10/04/2016	6	7	7	N	6	5
08/05/2014	6	7	7	N	6	5
08/23/2012	7	7	7	N	6	5
08/18/2010	7	8	8	N	6	5
08/13/2008	7	8	8	N	6	5
08/16/2006	7	8	8	N	6	5
07/22/2004	7	8	8	N	6	5
08/01/2002	7	8	8	N	6	5
08/01/2000	7	8	8	N	6	5