



Latitude:35.12945, Longitude:-90.48712

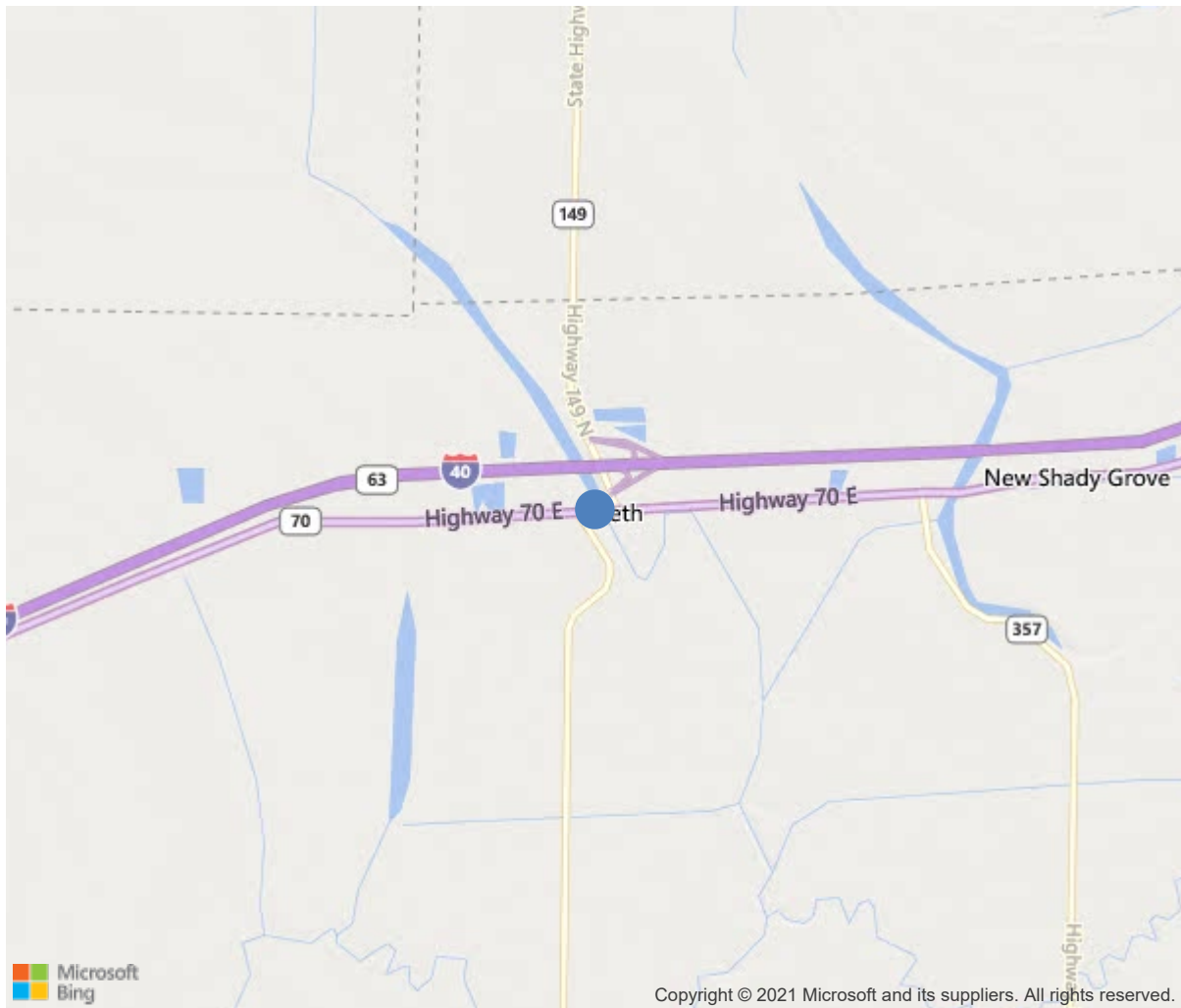
Route:70 Section:19 Log:19.83

Arnold Road ID:68x70x19xA, Arnold Log mile:19.833

District 01, St. Francis County

Owner: 1-State Highway Agency

.20 Mi Ne Jct Of Sh 149



35.12945, -90.48712



Bridge #01375(Routine)

Us70/Sec-19/L19.83 over Shell Lake

Location: .20 Mi Ne Jct Of Sh 149

Team Lead: Drew Melton Inspection Date: April 26, 2021

IDENTIFICATION	
(1) State Names	Arkansas
(8) Structure Number	01375
(5) Inventory Route	70
(2) Highway Agency District	01
(3) County Code	123-St. Francis County, Arkansa
(4) Place Code	0
(6) Features Intersected	Shell Lake
(7) Facility Carried	Us70/Sec-19/L19.83
(9) Location	.20 Mi Ne Jct Of Sh 149
(11) Mile Point	19.83 mi
(12) Base Highway Network	No
(13) LRS Inventory Rte & Subrte	0000000000
(16) Latitude	35.12945
(17) Longitude	-90.48712
(98) Border Bridge State Code	
(99) Border Bridge Structure No.	
STRUCTURE TYPE AND MATERIAL	
(43) Main Structure Type	14
Material	1-Concrete
Type	4-Tee beam
(44) Approach Structure Type	00
Material	0-Other
Type	0-Other
(45) No. of Spans in Main Unit	10
(46) No. of Approach Spans	0
(107) Deck Structure Type	1-Concrete Cast-in-Place
(108) Wearing Surface/Protective System	
Type of Wearing Surface	6-Bituminous
Type of Membrane	0-None
Type of Deck Protection	0-None
AGE AND SERVICE	
(27) Year Built	1930
(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	1500
(30) Year of ADT	2019
(109) Truck ADT	18 %
(19) Bypass, Detour Length	1 mi
GEOMETRIC DATA	
(48) Length of Maximum Span	34.5 ft
(49) Structure Length	341 ft
(50) Curb or Sidewalk Width	
Left	0.5 ft
Right	0.5 ft
(51) Bridge Roadway Width Curb to Curb	27 ft
(52) Deck Width Out to Out	30 ft
(32) Approach Roadway Width (W/Shoulders)	27 ft
(33) Bridge Median	0-No median
(34) Skew	0 Deg
(35) Structure Flared	No flare
(10) Inventory Route Min Vert Clear	99.99 ft
(47) Inventory Route Total Horiz Clear	27 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 water
(111) Pier Protection	1-Navigation protection not requ
(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 a S
(101) Parallel Structure	N-No parallel structure exists.
(102) Direction of Traffic	2 - way traffic
(103) Temporary Structure	
(105) Federal Lands Highways	0-N/A
(110) Designated National Network	1-The inventory route is part of the
(20) Toll	3-On free road. The structure is toll-
(21) Maintain	1-State Highway Agency
(22) Owner	1-State Highway Agency
(37) Historical Significance	5-Bridge is not eligible for the NRHP
CONDITION	
(58) Deck	5
(59) Superstructure	5
(60) Substructure	5
(61) Channel & Channel Protection	8
(62) Culverts	N
LOAD RATING AND POSTING	
(31) Design Load	2-M 13.5 / H 15
(63) Operating Rating Method	1
(64) Operating Rating	
Type	1-Load Factor(LF)
Rating	46
(65) Inventory Rating Method	1-Load Factor(LF)
(66) Inventory Rating	
Type	10
Rating	28
(70) Bridge Posting	5-Equal to or above legal loads
(41) Structure Open/Posted/Closed	A-Open, no restriction
APPRAISAL	
(67) Structural Evaluation	5
(68) Deck Geometry	4
(69) Clearances, Vertical/Horizontal	N
(71) Waterway Adequacy	8
(72) Approach Roadway Alignment	8
(36A) Bridge Railings	0-Inspected feature does not meet cur
(36B) Transitions	1-Inspected feature meets currently a
(36C) Approach Guardrail	0-Inspected feature does not meet cur
(36D) Approach Guardrail Ends	1-Inspected feature meets currently a
(113) Scour Critical Bridges	5-Bridge foundations determined to be
PROPOSED IMPROVEMENTS	
(75) Type of Work	Replacement of bridge or other
(76) Length of Structure Improvement	379 ft
(94) Bridge Improvement Cost	\$ 0
(95) Roadway Improvement Cost	\$ 126
(96) Total Project Cost	\$ 801
(97) Year of Improvement Cost Estimate	2003
(114) Future ADT	2057
(115) Year of Future ADT	2028

INSPECTIONS *			
(90) Inspection Date			04/2021
(91) Frequency			24 Months
(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.			





Bridge #01375(Routine)

Us70/Sec-19/L19.83 over Shell Lake

Location: .20 Mi Ne Jct Of Sh 149

Team Lead: Drew Melton, Inspection Date: April 26, 2021

ELEM	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
16	Reinforced Concrete Top Flange	SF	10230	9998	70	159	3
1080	Delamination/Spall/Patched Area	SF	88	0	61	24	3
1090	Exposed Rebar	SF	61	0	9	52	0
1120	Efflorescence/Rust Staining	SF	83	0	0	83	0
510	Wearing Surfaces	SF	9318	0	8690	620	8
3210	Delam/Spall/Patched Area/Pothole	SF	21	0	20	1	0
3220	Crack (Wearing Surface)	SF	8998	0	8670	320	8
3230	Effectiveness (Wearing Surface)	SF	299	0	0	299	0

(16)

Wearing surface is cracked transverse and longitudinal with all different size cracks all of surface has cracks and multiple areas of achm patches.

Deck at bent #7 right side and deck at bent #9 both sides in gutter each location has a hole through the deck.

Span #1 soffit-under surface left overhang has 1' delamination near bent #2.

Span #1 soffit-under surface right overhang has 1' spall with exposed rebar with 5% section loss.

Span #2 soffit-under surface right overhang has 3' of cracks with moderate efflorescence.

Span #2 soffit-under surface between girders #4,5 has a 1' spall in center with exposed rebar with no section loss.

Span #2 soffit-under surface between girders # 4,5 has two 4' delamination's from 1/4 span to mid-span.

Span #2 soffit-under surface left overhang has three 1' spalls with exposed rebar with no section loss.

Span #3 soffit -under surface left overhang has two 1' spalls with exposed rebar with 5% section loss.

Span #3 soffit-under surface left overhang has a 2' delamination near second drain.

Span #3 soffit-under surface between girders #1,2 has a 1' spall with exposed rebar with 5% section loss in center.

Span #3 soffit-under surface between girders #1,2 has 10' of delamination's.

Span #3 soffit-under surface between girders #4,5 has a 2' spall near bent #3 with exposed rebar with no section loss.

Span #4 soffit-under surface right overhang has 3' spall with 2' exposed rebar with 10% section loss near bent #4.

Span #4 soffit-under surface right overhang has 1' spall with exposed rebar with no section loss near bent #5.

Span #4 soffit-under surface left overhang has four 1' spalls with exposed rebar with 5% section loss two at each bent.

Span #4 soffit-under surface between girders #4,5 has 5' of delamination's, and a 1' spall with exposed rebar with no section loss.

Span #5 soffit-under surface left overhang has 9' total of spalls with exposed rebar with 5% section loss.

Span #5 soffit-under surface left overhang has 4' total of delamination's.

Span #5 soffit-under surface between girders #1,2 has 2' spall with exposed rebar with 10% section loss near bent #6.

Span #5 soffit-under surface between girders #1,2 has 4' total areas of delamination's.

Span #5 soffit-under surface between girders #4,5 has a 1' spall with exposed rebar with no section loss near bent #6.

Span #6 soffit-under surface right overhang has 3' of spalls with exposed rebar with 10% section loss.

Span #6 soffit-under surface left overhang has a 2' spall with exposed rebar with 5% section loss near second drain.

Span #6 soffit-under surface left overhang has 3' of delamination's.

Span #6 soffit-under surface between girders #1,2 has 1' spall with exposed rebar with no section loss near bent #5.

Span #6 soffit-under surface has transverse crack with rust stain near bent #6 full width of bridge.

Span #6 soffit-under surface between girders #4,5 has 2' delamination at mid-span.

Span #7 soffit-under surface right overhang has 3' spall from span to span thru to deck.

Span #7 soffit-under surface left overhang at bent #7 has 3' spall thru to deck with exposed rebar with no section loss.

Span #7 soffit-under surface between girders #1,2 has three 3' delaminations and 4' spall with exposed rebar, rebar has 5% section loss.

Span #7 soffit-under surface between girders #4,5 has 2' delamination at mid-span.

Span #7 soffit-under surface right overhang has 4' spalls with exposed rebar with 5% section loss.

Span #8 soffit-under surface left overhang has two 1' spalls with exposed rebar with 5% section loss.

Span #8 soffit-under surface between girders #4,5 has 4' of delamination's.

Span #8 soffit-under surface right overhang has 6' of spalls with exposed rebar with 10% section loss.

Span #8 soffit-under surface has transverse crack with rust stains near bent 8.



ELEM	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
Span #9 soffit-under surface right overhang has 3' of spalls with exposed rebar with 5% section loss. Span #9 soffit-under surface right overhang has 3' of delamination's. Span #9 soffit-under surface left overhang has 2' of spalls with exposed rebar with 5% section loss. Span #9 soffit-under surface between girders #4,5 has 3' delamination at mid-span. Span #10 soffit-under surface left overhang has 1' delamination at abutment #2. Span #10 soffit -under surface right overhang has 6' of spalls from mid-point to end of bridge with exposed rebar with 5% section loss. Span #10 soffit-under surface between girders 4 and 5 has 20' delaminations. Span #10 soffit-under surface has transverse crack with rust stains near bent #10							
110	Reinforced Concrete Open Girder/Beam	LF	1705	1563	87	55	0
1080	Delamination/Spall/Patched Area	LF	65	0	62	3	0
1090	Exposed Rebar	LF	47	0	6	41	0
1130	Cracking (RC and Other)	LF	30	0	19	11	0
(110)							
Span #1 girder #1 center span left side has 6' long crack with delamination at bottom. Span #1 girder #1 left side at bent #2 has 2' spall with exposed rebar with 5% section loss. Span #1 girder #5 bottom at bent #1 has 4' long crack with heavy efflorescence. Span #1 girder #5 bottom at bent #2 has 1' long crack. Span #2 girder #1 at bent #2 left side has 2' spall with exposed rebar with 5% section loss. Span #2 girder #2 at bent #3 left side has 1' delamination. Span #2 girder #3 at bent #3 bottom and sides have 1' spall with exposed rebar with 5% section loss. Span #2 girder #5 left side has 3' of delamination's near bent #3. Span #2 girder #5 bottom at bent #3 has 4' crack with light efflorescence. Span #3 girder #1 at bent #3 has 2' delamination on left side. Span #3 girder #1 at bent #4 has 1' delamination on left side. Span #3 girder #2 left side at bent #3 has 1' delamination. Span #3 girder #3 at bent #3 left side has 1' delamination. Span #3 girder #4 at bent #3 bottom has 1' delamination and 1' spall with exposed rebar with no section loss. Span #3 girder #5 bottom at bent #3 has 2' spall with exposed rebar with 10% section loss. Span #3 girder #5 right side and bottom at bent #4 has 2' delamination. Span #4 girder #1 left side at bent #4 has 2' spall with exposed rebar with 5% section loss. Span #4 girder #1 left side at bent #5 has 1' delamination and cracks. Span #4 girder #2 left side at bent #5 has 1' delamination. Span #4 girder #3 bottom at bent #5 has 1' spall with no rebar exposed. Span #4 girder #5 left side at bent #5 has 2' delamination. Span #4 girder #5 right side has 2' delamination with 1' spall with exposed rebar with no section loss at bent #5. Span #5 girder #1 left outside at bent #5 has 2' delamination with 1' spall with exposed rebar with 10% section loss. Span #5 girder #1 left outside at bent #6 has 3' delamination. Span #5 girder #1 right side at bent #6 has 2' delamination. Span #5 girder #5 at bent #5 has 2' spall with exposed rebar with 5% section loss. Span #5 girder #5 at bent #6 bottom and right side has 2' spall with exposed rebar with 5% section loss. Span #6 girder #1 left side at bent #6 has 3' crack on bottom and sides. Span #6 girder #1 right side at bent #7 has 1' delamination and 1' spall with exposed rebar with no section loss. Span #6 girder #5 near bent #5 has 2' delamination on bottom stating up sides with 1' spall with exposed rebar with 10% section loss. Span #6 girder #5 at bent #7 right side has 2' spall with exposed rebar with 10% section loss. Span #7 girder #1 left side at bent #7 has 3' delamination with 1' spall with exposed rebar with 10% section loss. Span #7 girder #1 left side at bent #8 has 2' of cracks and delamination. Span #7 girder #1 right side at bent #7 has 2' delamination. Span #7 girder #2 left side at bent #8 has 1' delamination. Span #7 girder #5 left side and bottom at bent #7 has 3' delamination, right side spalled with exposed rebar with 10 % section loss. Span #7 girder #5 right side at bent #8 has 2' spall with exposed rebar with 5% section loss. Span #8 girder #1 left side at bent #8 has 3' spall with exposed rebar with 10% section loss. Span #8 girder #1 left side at bent #9 has 2' delamination and a 2' spall with exposed rebar with 5% section loss. Span #8 girder #1 right side at bent #9 has 1' spall with exposed rebar with 10% section loss.							



Bridge #01375(Routine)

Us70/Sec-19/L19.83 over Shell Lake

Location: .20 Mi Ne Jct Of Sh 149

Team Lead: Drew Melton, Inspection Date: April 26, 2021

ELEM	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
<p>Span #8 girder #2 has two 6' long cracks in bottom one at each bent.  Span #8 girder #2 at bent #9 right side has 1' spall with exposed rebar with 5% section loss.  Span #8 girder #3 at bent #9 last 2' on bottom and both sides cracked with 1' spall with exposed rebar with 5% section loss on bottom.  Span #8 girder #4 at bent #9 last 2' bottom and left side is cracked.  Span #8 girder #5 at bent #9 is cracked and delaminated last 3' on bottom and spalled on outside with exposed rebar with 5% section loss.  Span #9 girder #1 left side and bottom at bent #9 has 3' of cracks and delamination's.  Span #9 girder #1 left side at bent #10 has 2' delamination.  Span #9 girder #2 at bent #9 left side and bottom has 2' spall with exposed rebar with 5% section loss.  Span #9 girder #3 at bent #9 has 1' delamination on left and right sides.  Span #9 girder #4 at bent #9 left side has 1' spall with exposed rebar with 5% section loss.  Span #9 girder #4 at bent #9 right side has 2' delamination.  Span #9 girder #5 at bent #9 right side has 2' spall with exposed rebar with 10% section loss with cracking on bottom.  Span #9 girder #5 right side has 2' delamination and spall with exposed rebar with 10% section loss.  Span #10 girder #1 left outside at bent #10 has 2' delamination.  Span #10 girder #1 left outside at bent #11 is cracked for 1' and has 6" of rebar exposed with no section loss.  Span #10 girder #2 right side at bent #11 has 1' spall with exposed rebar with 10% section loss.  Span #10 girder #2 right side has 3' of small delamination's from mid-span on.  Span #10 girder #3 right side at bent #11 has 1' delamination.  Span #10 girder #4 left side at bent #11 has 1' delamination and 1' spall with exposed rebar with no section loss.  Span #10 girder #5 left side at bent #11 has 1' spall with exposed rebar with 10% exposed rebar.  Span #10 girder #5 at bent #10 has 1' spall with exposed rebar with 10% section loss.  Span #1 diaphragm between girders #1,2 at bent #2 has 3' delamination and 1' spall with exposed rebar with no section loss.  Span #2 bent #3 diaphragms between girders #1,2 and 3,4 both have 3' spalls with exposed rebar with 5% section loss.  Span #3 bent #3 diaphragms between girders #2,3 and 3,4 are destroyed.  Span #3 bent #3 diaphragm between girders #4,5 has multiple cracks.  Span #4 bent #4 diaphragm between girders #1,2 has 1' delamination.  Span #4 bent #5 diaphragm between girders #2,3 has 3' spall with exposed unbounded rebar with 5% section loss.  Span #4 bent #5 diaphragms between girders #3,4 and 4,5 both have 2' spalls with no rebar and cracking.  Span #5 bent #5 diaphragms between girders # (1,2), (3,4), and (4,5) each have 1' spall with exposed rebar with 10% section loss.  Span #6 bent #7 diaphragm between girders #1,2 is cracked all up with 3' spall with exposed rebar with 10% section loss.  Span #6 bent #7 diaphragm between girders #2,3 is cracked all up.  Span #6 bent #7 diaphragm between girders #4,5 is spalled on bottom full length with unbounded exposed rebar with no section loss.  Span #7 bent #7 diaphragm between girders #1,2 and 4,5 are cracked full width.  Span #7 bent #7 diaphragm between girders #3,4 is cracked full width, and has 1' spall with exposed rebar with 10% section loss.  Span #8 bent #8 diaphragm between girders #1,2 has cracked full width with 2' spall with exposed rebar with no section loss.  Span #8 bent #8 diaphragm between girders #2,3 has cracked full width with 1' spall with exposed rebar with no section loss.  Span #8 bent #8 diaphragm between girders #3,4 and 4,5 are cracked full width.  Span #8 bent #9 diaphragm between girders #1,2 has a 3' spall with exposed rebar with 5% section loss.  Span #8 bent #9 diaphragm between girders #2,3 has 2' spall with exposed rebar with 5% section loss.  Span #8 bent #8 diaphragm between girders #4,5 has 1' spall with exposed rebar with 5% section loss.  Span #9 bent #9 diaphragm between girders # (1,2), (3,4), and (4,5) are cracked full width.  Span #9 bent #9 diaphragm between girders #2,3 has 1' spall with exposed rebar with 5% section loss.  Span #9 bent #10 diaphragm between girders #4,5 has a 4' delamination.  Span #10 bent #11 all 4 diaphragms are cracked and delaminated.</p>							
215	Reinforced Concrete Abutment	LF	64	0	0	64	0
6000	Scour	LF	64	0	0	64	0
(215)	<p>Abutment #1 cap is undermined 2' with voids behind cap.  Abutment #2 is undermined 2'.  Abutment #2 cap is cracked full width.</p>						
227	Reinforced Concrete Pile	EA	45	0	40	5	0
1080	Delamination/Spall/Patched Area	EA	2	0	2	0	0

**Team Lead:** Drew Melton, **Inspection Date:** April 26, 2021

ELEM	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
1090	Exposed Rebar	EA	3	0	1	2	0
1130	Cracking (RC and Other)	EA	9	0	6	3	0
1190	Abrasion/Wear (PSC/RC)	EA	31	0	31	0	0
(227)							
<p>All piles from 8' below cap down are scaled with coarse aggregate exposed none loose.</p> <p>Bent #3 piles #1,2,5 all have vertical crack from top down for 3'</p> <p>Bent #5 pile #1 back face has 1' spall at top with exposed rebar with 10% section loss.</p> <p>Bent #5 pile #5 has vertical cracks from top down 6' long.</p> <p>Bent #7 pile #1 has 2' delamination at top.</p> <p>Bent #7 pile #2 has 4' delamination at top.</p> <p>Bent #7 pile #4 has 5' long crack from top down.</p> <p>Bent #8 pile#1 has 1' crack at top.</p> <p>Bent #8 pile #5 cracked at top 2'.</p> <p>Bent #9 pile #2 has 1' spall with exposed rebar with no section loss.</p> <p>Bent #9 pile #3 has a 1' spall with exposed rebar with 5% section loss.</p>							
234	Reinforced Concrete Pier Cap	LF	230	158	37	35	0
1080	Delamination/Spall/Patched Area	LF	27	0	27	0	0
1090	Exposed Rebar	LF	37	0	9	28	0
1130	Cracking (RC and Other)	LF	8	0	1	7	0
(234)							
<p>Bent #2 cap right end back face is cracked and delaminated for 2'.</p> <p>Bent #2 cap right end ahead face has 2' spall with exposed rebar with 5% section loss.</p> <p>Bent #2 cap left end has 1' spall with exposed rebar no section loss.</p> <p>Bent #3 cap left end has 2' spall with exposed rebar with no section loss.</p> <p>Bent #3 cap back face has 6' spall between piles #1,3 with exposed rebar with 10% section loss.</p> <p>Bent #3 cap bottom has 2' spall with exposed rebar between piles #1,2 with 10% section loss.</p> <p>Bent #3 cap has 2' spall between piles #2,3 with exposed rebar with 10% section loss.</p> <p>Bent #3 cap ahead face between piles #1,2 has 3' spall with exposed rebar with 5% section loss.</p> <p>Bent #3 cap ahead face between piles #2,3 has a 2' spall with exposed rebar with no section loss.</p> <p>Bent #3 cap ahead face above pile #3 has 2' delamination.</p> <p>Bent #3 cap ahead face right end has vertical crack.</p> <p>Bent #5 cap back face has 2' spall above pile #2 with exposed rebar with 10% section loss.</p> <p>Bent #5 cap back face has 1' spall above pile #3 with exposed rebar with 5% section loss.</p> <p>Bent #5 cap bottom by pile #3 has 1' spall with exposed rebar with 5% section loss and a 1' delamination.</p> <p>Bent #5 cap back face has 2' delamination with 1' spall with exposed rebar with 10% section loss.</p> <p>Bent #5 cap bottom has two 1' spalls with exposed rebar with 10% section loss one on each side of pile #4.</p> <p>Bent #5 cap ahead face has 1' delamination above pile #3.</p> <p>Bent #6 cap right back face end has 2' delamination.</p> <p>Bent #6 cap left back face has 2' delamination.</p> <p>Bent #7 cap back face has 6" spall with rebar exposed with 5% section loss above pile #2.</p> <p>Bent #7 cap back face has 1' spall exposed rebar with 10% section loss above pile #3.</p> <p>Bent #7 cap left end has 1' spall with exposed rebar with no section loss.</p> <p>Bent #7 cap ahead face above pile#2 has a 3' spall with exposed rebar with 10% section loss.</p> <p>Bent #7 cap ahead face above pile #3 has 2' delamination with 1' spall with exposed rebar with no section loss.</p> <p>Bent #7 cap ahead face above pile #4 has 2' delamination with 1' spall on bottom with exposed rebar with 5% section loss.</p> <p>Bent #8 cap right end ahead face spalled 2' with exposed rebar with 5% section loss.</p> <p>Bent #8 cap right end back face last 2' is cracked and delaminated.</p> <p>Bent #8 cap left end back face last 1' is cracked.</p> <p>Bent #9 cap right back face has 2' crack with delamination.</p> <p>Bent #9 cap above pile #4 back face has 2' delamination, 1' spall with exposed rebar with 5% section loss.</p> <p>Bent #10 cap right end has 1' spall with exposed rebar with 5% section loss.</p>							



**Team Lead:** Drew Melton, **Inspection Date:** April 26, 2021

[illegible]



**Bridge #01375(Routine)**

**Us70/Sec-19/L19.83 over Shell Lake**

**Location: .20 Mi Ne Jct Of Sh 149**

**Team Lead:** Drew Melton **Inspection Date:** April 26, 2021

## Maintenance Needs

**Date Reported:** 05/04/2011  
**Priority:** D- Routine  
**Type of Work:** Repair  
**Status:** Monitor  
**Component:** 227 - Reinforced Concrete Pile

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## Deficiency Description

Bent #3 piles #1,2,5 all have vertical crack from top down for 3'  
Bent #5 pile #1 back face has 1' spall at top with exposed rebar with 10% section loss.  
Bent #5 pile #5 has vertical cracks from top down 6' long.  
Bent #7 pile #1 has 2' delamination at top.  
Bent #7 pile #2 has 4' delamination at top.  
Bent #7 pile #4 has 5' long crack from top down.  
Bent #8 pile #1 has 1' crack at top.  
Bent #8 pile #5 cracked at top 2'.  
Bent #9 pile #2 has 1' spall with exposed rebar with no section loss.  
Bent #9 pile #3 has a 1' spall with exposed rebar with 5% section loss.

## Remarks

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Bent #9 pile #3



Bent #5 pile #1





Typical cracks in piles.



**Date Reported:** 05/04/2011  
**Priority:** C - Important  
**Type of Work:** Repair  
**Status:** Monitor  
**Component:** 110 - Reinforced Concrete Open Girder/Beam

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### Deficiency Description

Span #1 girder #1 center span left side has 6' long crack with delamination at bottom.  
Span #1 girder #1 left side at bent #2 has 2' spall with exposed rebar with 5% section loss.  
Span #1 girder #5 bottom at bent #1 has 4' long crack with heavy efflorescence.  
Span #1 girder #5 bottom at bent #2 has 1' long crack.  
Span #2 girder #1 at bent #2 left side has 2' spall with exposed rebar with 5% section loss.  
Span #2 girder #2 at bent #3 left side has 1' delamination.  
Span #2 girder #3 at bent #3 bottom and sides have 1' spall with exposed rebar with 5% section loss.  
Span #2 girder #5 left side has 3' of delamination's near bent #3.  
Span #2 girder #5 bottom at bent #3 has 4' crack with light efflorescence.  
Span #3 girder #1 at bent #3 has 2' delamination on left side.  
Span #3 girder #1 at bent #4 has 1' delamination on left side.  
Span #3 girder #2 left side at bent #3 has 1' delamination.  
Span #3 girder #3 at bent #3 left side has 1' delamination.  
Span #3 girder #4 at bent #3 bottom has 1' delamination and 1' spall with exposed rebar with no section loss.  
Span #3 girder #5 bottom at bent #3 has 2' spall with exposed rebar with 10% section loss.  
Span #3 girder #5 right side and bottom at bent #4 has 2' delamination.  
Span #4 girder #1 left side at bent #4 has 2' spall with exposed rebar with 5% section loss.  
Span #4 girder #1 left side at bent #5 has 1' delamination and cracks.  
Span #4 girder #2 left side at bent #5 has 1' delamination.  
Span #4 girder #3 bottom at bent #5 has 1' spall with no rebar exposed.  
Span #4 girder #5 left side at bent #5 has 2' delamination.  
Span #4 girder #5 right side has 2' delamination with 1' spall with exposed rebar with no section loss at bent #5.  
Span #5 girder #1 left outside at bent #5 has 2' delamination with 1' spall with exposed rebar with 10% section loss.  
Span #5 girder #1 left outside at bent #6 has 3' delamination.  
Span #5 girder #1 right side at bent #6 has 2' delamination.  
Span #5 girder #5 at bent #5 has 2' spall with exposed rebar with 5% section loss.  
Span #5 girder #5 at bent #6 bottom and right side has 2' spall with exposed rebar with 5% section loss.  
Span #6 girder #1 left side at bent #6 has 3' crack on bottom and sides.  
Span #6 girder #1 right side at bent #7 has 1' delamination and 1' spall with exposed rebar with no section loss.  
Span #6 girder #5 near bent #5 has 2' delamination on bottom stating up sides with 1' spall with exposed rebar with 10% section loss.  
Span #6 girder #5 at bent #7 right side has 2' spall with exposed rebar with 10% section loss.  
Span #7 girder #1 left side at bent #7 has 3' delamination with 1' spall with exposed rebar with 10% section loss.  
Span #7 girder #1 left side at bent #8 has 2' of cracks and delamination.  
Span #7 girder #1 right side at bent #7 has 2' delamination.  
Span #7 girder #2 left side at bent #8 has 1' delamination.  
Span #7 girder #5 left side and bottom at bent #7 has 3' delamination, right side spalled with exposed rebar with 10 % section loss.  
Span #7 girder #5 right side at bent #8 has 2' spall with exposed rebar with 5% section loss.  
Span #8 girder #1 left side at bent #8 has 3' spall with exposed rebar with 10% section loss.  
Span #8 girder #1 left side at bent #9 has 2' delamination and a 2' spall with exposed rebar with 5% section loss.  
Span #8 girder #1 right side at bent #9 has 1' spall with exposed rebar with 10% section loss.  
Span #8 girder #2 has two 6' long cracks in bottom one at each bent.  
Span #8 girder #2 at bent #9 right side has 1' spall with exposed rebar with 5% section loss.  
Span #8 girder #3 at bent #9 last 2' on bottom and both sides cracked with 1' spall with exposed rebar with 5% section loss on bottom.  
Span #8 girder #4 at bent #9 last 2' bottom and left side is cracked.  
Span #8 girder #5 at bent #9 is cracked and delaminated last 3' on bottom and spalled on outside with exposed rebar with 5% section loss.  
Span #9 girder #1 left side and bottom at bent #9 has 3' of cracks and delamination's.  
Span #9 girder #1 left side at bent #10 has 2' delamination.

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Span #9 girder #2 at bent #9 left side and bottom has 2' spall with exposed rebar with 5% section loss.  
Span #9 girder #3 at bent #9 has 1' delamination on left and right sides.  
Span #9 girder #4 at bent #9 left side has 1' spall with exposed rebar with 5% section loss.  
Span #9 girder #4 at bent #9 right side has 2' delamination.  
Span #9 girder #5 at bent #9 right side has 2' spall with exposed rebar with 10% section loss with cracking on bottom.  
Span #9 girder #5 right side has 2' delamination and spall with exposed rebar with 10% section loss.  
Span #10 girder #1 left outside at bent #10 has 2' delamination.  
Span #10 girder #1 left outside at bent #11 is cracked for 1' and has 6" of rebar exposed with no section loss.  
Span #10 girder #2 right side at bent #11 has 1' spall with exposed rebar with 10% section loss.  
Span #10 girder #2 right side has 3' of small delamination's from mid-span on.  
Span #10 girder #3 right side at bent #11 has 1' delamination.  
Span #10 girder #4 left side at bent #11 has 1' delamination and 1' spall with exposed rebar with no section loss.  
Span #10 girder #5 left side at bent #11 has 1' spall with exposed rebar with 10% exposed rebar.  
Span #10 girder #5 at bent #10 has 1' spall with exposed rebar with 10% section loss.

**Remarks**

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Span #9 bent #9 girder.



Span #9 bent #9 girders.





Bent #9 left side girders.



Span #8 bent #9 girders



Bent #8 left side girder



Span #7 bent #7 ahead face girders



Span #6 bent #7 girders.



Span #6 bent #6 girders





Span #5 girders at bent #5



Girders span #4 bent #5



Girders span #3 bent #3



Girders span #2 bent #3



Bridge #01375(Routine)

Us70/Sec-19/L19.83 over Shell Lake

Location: .20 Mi Ne Jct Of Sh 149

Team Lead: Drew Melton Inspection Date: April 26, 2021

**Date Reported:** 05/04/2011  
**Priority:** C - Important  
**Type of Work:** Repair  
**Status:** Monitor  
**Component:** 234 - Reinforced Concrete Pier Cap

---

### Deficiency Description

Bent #2 cap right end back face is cracked and delaminated for 2'.  
Bent #2 cap right end ahead face has 2' spall with exposed rebar with 5% section loss.  
Bent #2 cap left end has 1' spall with exposed rebar no section loss.  
Bent #3 cap left end has 2' spall with exposed rebar with no section loss.  
Bent #3 cap back face has 6' spall between piles #1,3 with exposed rebar with 10% section loss.  
Bent #3 cap bottom has 2' spall with exposed rebar between piles #1,2 with 10% section loss.  
Bent #3 cap has 2' spall between piles #2,3 with exposed rebar with 10% section loss.  
Bent #3 cap ahead face between piles #1,2 has 3' spall with exposed rebar with 5% section loss.  
Bent #3 cap ahead face between piles #2,3 has a 2' spall with exposed rebar with no section loss.  
Bent #3 cap ahead face above pile #3 has 2' delamination.  
Bent #3 cap ahead face right end has vertical crack.  
Bent #5 cap back face has 2' spall above pile #2 with exposed rebar with 10% section loss.  
Bent #5 cap back face has 1' spall above pile #3 with exposed rebar with 5% section loss.  
Bent #5 cap bottom by pile #3 has 1' spall with exposed rebar with 5% section loss and a 1' delamination.  
Bent #5 cap back face has 2' delamination with 1' spall with exposed rebar with 10% section loss.  
Bent #5 cap bottom has two 1' spalls with exposed rebar with 10% section loss one on each side of pile #4.  
Bent #5 cap ahead face has 1' delamination above pile #3.  
Bent #6 cap right back face end has 2' delamination.  
Bent #6 cap left back face has 2' delamination.  
Bent #7 cap back face has 6" spall with rebar exposed with 5% section loss above pile #2.  
Bent #7 cap back face has 1' spall exposed rebar with 10% section loss above pile #3.  
Bent #7 cap left end has 1' spall with exposed rebar with no section loss.  
Bent #7 cap ahead face above pile#2 has a 3' spall with exposed rebar with 10% section loss.  
Bent #7 cap ahead face above pile #3 has 2' delamination with 1' spall with exposed rebar with no section loss.  
Bent #7 cap ahead face above pile #4 has 2' delamination with 1' spall on bottom with exposed rebar with 5% section loss.  
Bent #8 cap right end ahead face spalled 2' with exposed rebar with 5% section loss.  
Bent #8 cap right end back face last 2' is cracked and delaminated.  
Bent #8 cap left end back face last 1' is cracked.  
Bent #9 cap right back face has 2' crack with delamination.  
Bent #9 cap above pile #4 back face has 2' delamination, 1' spall with exposed rebar with 5% section loss.  
Bent #10 cap right end has 1' spall with exposed rebar with 5% section loss.

### Remarks

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Bent #9 cap back face



Bent #8 cap ahead face





Bent #8 cap back face



Span #7 cap ahead face



Bent #7 back face



Bent #5 cap ahead face





Bent #6 cap back face



Bent #5 cap back face



Bent #3 cap ahead face



Bent #3 cap left end





Bent #3 cap back face



Bent #2 cap ahead face



Bent #2 right end

**Date Reported:** 04/18/2013  
**Priority:** C - Important  
**Type of Work:** Repair  
**Status:** Monitor  
**Component:** 215 - Reinforced Concrete Abutment

---

**Deficiency Description**

Abutment #2 is undermined 2'.

**Remarks**

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Abutment #2 is undermined 2'.



**Date Reported:** 04/18/2013  
**Priority:** C - Important  
**Type of Work:** Repair  
**Status:** Monitor  
**Component:** 331 - Reinforced Concrete Bridge Railing

---

#### Deficiency Description

Right bridge rail at first joint broken each direction 6'.

The following locations of bridge rail have collision damage with cracking, spalling, and broken rail posts. Span #1 bent #1 right side, Span #2 right side, Bent #6 right side, Span #7 right and left side.

Two rail posts are broken on right side at abutment #2.

#### Remarks

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Span #7 left bridge rail



Span #4,5 right bridge rail





Span #2 right bridge rail



Span #1 right side bridge rail



**Bridge #01375(Routine)**  
**Us70/Sec-19/L19.83 over Shell Lake**  
**Location: .20 Mi Ne Jct Of Sh 149**

**Team Lead:** Drew Melton **Inspection Date:** April 26, 2021

**Date Reported:** 04/24/2017  
**Priority:** D- Routine  
**Type of Work:** Clean  
**Status:** Monitor  
**Component:** Channel

---

#### **Deficiency Description**

Trees and vegetation are growing beside and under bridge.

#### **Remarks**

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Trees and vegetation are growing beside and under bridge.



**Bridge #01375**(Routine)  
**Us70/Sec-19/L19.83 over Shell Lake**  
**Location: .20 Mi Ne Jct Of Sh 149**

**Team Lead:** Drew Melton **Inspection Date:** April 26, 2021

**Date Reported:** 04/24/2017  
**Priority:** C - Important  
**Type of Work:** Clean  
**Status:** Monitor  
**Component:** Deck

---

#### Deficiency Description

Gutters are full of dirt and debris with vegetation growing in them.

#### Remarks

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Debris in gutters



**Date Reported:** 04/24/2017  
**Priority:** C - Important  
**Type of Work:** Repair  
**Status:** Assigned  
**Component:** Approach

---

**Deficiency Description**

Abutment #1 left, right approach roadway has hole in it 3' deep with large void under roadway.

**Remarks**

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Abutment #1 left, right approach roadway has hole in it 3' deep with large void under roadway.



**Date Reported:** 04/24/2017  
**Priority:** C - Important  
**Type of Work:** Repair  
**Status:** Assigned  
**Component:** 215 - Reinforced Concrete Abutment

---

**Deficiency Description**

Abutment #1 cap is undermined 2' with voids behind cap.

**Remarks**

---



Abutment #1 cap is undermined 2' with voids  
behind cap.

**Date Reported:** 04/24/2017  
**Priority:** C - Important  
**Type of Work:** Repair  
**Status:** Monitor  
**Component:** Approach

---

**Deficiency Description**

Abutment #2 right side erosion has caused monument post on approach rail to slide down 2'.

**Remarks**

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Abutment #2 right side erosion has caused monument post on approach rail to slide down 2'.



**Date Reported:** 04/30/2019  
**Priority:** C - Important  
**Type of Work:** Repair  
**Status:** Assigned  
**Component:** 16 - Reinforced Concrete Top Flange

---

### Deficiency Description

Span #1 soffit-under surface left overhang has 1' delamination near bent #2.  
Span #1 soffit-under surface right overhang has 1' spall with exposed rebar with 5% section loss.  
Span #2 soffit-under surface right overhang has 3' of cracks with moderate efflorescence.  
Span #2 soffit-under surface between girders #4,5 has a 1' spall in center with exposed rebar with no section loss.  
Span #2 soffit-under surface between girders # 4,5 has two 4' delamination's from 1/4 span to mid-span.  
Span #2 soffit-under surface left overhang has three 1' spalls with exposed rebar with no section loss.  
Span #3 soffit -under surface left overhang has two 1' spalls with exposed rebar with 5% section loss.  
Span #3 soffit-under surface left overhang has a 2' delamination near second drain.  
Span #3 soffit-under surface between girders #1,2 has a 1' spall with exposed rebar with 5% section loss in center.  
Span #3 soffit-under surface between girders #1,2 has 10' of delamination's.  
Span #3 soffit-under surface between girders #4,5 has a 2' spall near bent #3 with exposed rebar with no section loss.  
Span #4 soffit-under surface right overhang has 3' spall with 2' exposed rebar with 10% section loss near bent #4.  
Span #4 soffit-under surface right overhang has 1' spall with exposed rebar with no section loss near bent #5.  
Span #4 soffit-under surface left overhang has four 1' spalls with exposed rebar with 5% section loss two at each bent.  
Span #4 soffit-under surface between girders #4,5 has 5' of delamination's, and a 1' spall with exposed rebar with no section loss.  
Span #5 soffit-under surface left overhang has 9' total of spalls with exposed rebar with 5% section loss.  
Span #5 soffit-under surface left overhang has 4' total of delamination's.  
Span #5 soffit-under surface between girders #1,2 has 2' spall with exposed rebar with 10% section loss near bent #6.  
Span #5 soffit-under surface between girders #1,2 has 4' total areas of delamination's.  
Span #5 soffit-under surface between girders #4,5 has a 1' spall with exposed rebar with no section loss near bent #6.  
Span #6 soffit-under surface right overhang has 3' of spalls with exposed rebar with 10% section loss.  
Span #6 soffit-under surface left overhang has a 2' spall with exposed rebar with 5% section loss near second drain.  
Span #6 soffit-under surface left overhang has 3' of delamination's.  
Span #6 soffit-under surface between girders #1,2 has 1' spall with exposed rebar with no section loss near bent #5.  
Span #6 soffit-under surface has transverse crack with rust stain near bent #6 full width of bridge.  
Span #6 soffit-under surface between girders #4,5 has 2' delamination at mid-span.  
Span #7 soffit-under surface right overhang has 3' spall from span to span thru to deck.  
Span #7 soffit-under surface left overhang at bent #7 has 3' spall thru to deck with exposed rebar with no section loss.  
Span #7 soffit-under surface between girders #1,2 has three 3' delaminations and 4' spall with exposed rebar, rebar has 5% section loss.  
Span #7 soffit-under surface between girders #4,5 has 2' delamination at mid-span.  
Span #7 soffit-under surface right overhang has 4' spalls with exposed rebar with 5% section loss.  
Span #8 soffit-under surface left overhang has two 1' spalls with exposed rebar with 5% section loss.  
Span #8 soffit-under surface between girders #4,5 has 4' of delamination's.  
Span #8 soffit-under surface right overhang has 6' of spalls with exposed rebar with 10% section loss.  
Span #8 soffit-under surface has transverse crack with rust stains near bent 8.  
Span #9 soffit-under surface right overhang has 3' of spalls with exposed rebar with 5% section loss.  
Span #9 soffit-under surface right overhang has 3' of delamination's.  
Span #9 soffit-under surface left overhang has 2' of spalls with exposed rebar with 5% section loss.  
Span #9 soffit-under surface between girders #4,5 has 3' delamination at mid-span.  
Span #10 soffit-under surface left overhang has 1' delamination at abutment #2.  
Span #10 soffit -under surface right overhang has 6' of spalls from mid-point to end of bridge with exposed rebar with 5% section loss.  
Span #10 soffit-under surface between girders 4 and 5 has 20' delaminations.  
Span #10 soffit-under surface has transverse crack with rust stains near bent #10

### Remarks

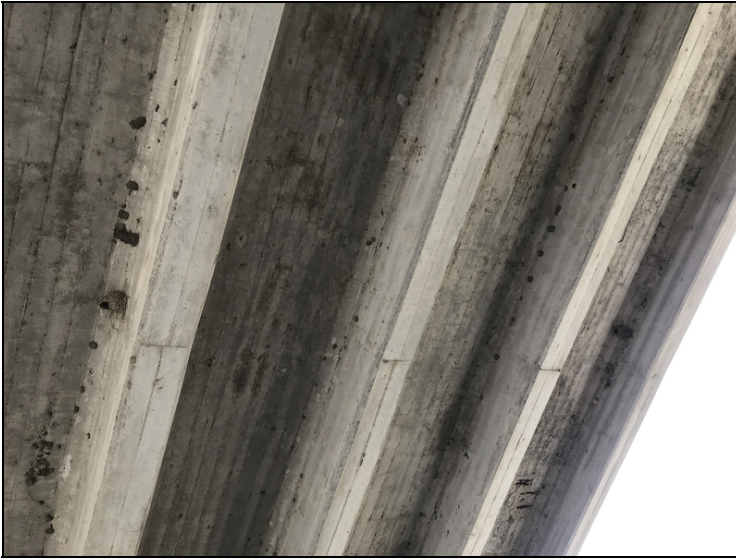




Span #2 soffit-under surface



Typical spalls on soffit-under surface overhang.



Span #4 soffit-Under surface



Span #5 soffit-under surface



Span #6 soffit-under surface



Span #9 soffit-under surface





Span #10 soffit-under surface

**Date Reported:** 04/26/2021  
**Priority:** B - Pressing; 6 month completion goal  
**Type of Work:** Repair  
**Status:** Open  
**Component:** 16 - Reinforced Concrete Top Flange

---

**Deficiency Description**

Deck at bent #7 right side and deck at bent #9 both sides in gutter each location has a hole through the deck.

**Remarks**

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Bent #9 deck right side



Bent #9 deck left side



Bent #7deck right side



**Date Reported:** 04/26/2021  
**Priority:** D- Routine  
**Type of Work:** Repair  
**Status:** Open  
**Component:** 16 - Reinforced Concrete Top Flange

---

**Deficiency Description**

Wearing surface is cracked transverse and longitudinal with all different size cracks all of surface has cracks and multiple areas of achm patches.

**Remarks**

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Span #10 deck



Span #9 deck



**Bridge #01375(Routine)**  
**Us70/Sec-19/L19.83 over Shell Lake**  
**Location: .20 Mi Ne Jct Of Sh 149**

**Team Lead:** Drew Melton **Inspection Date:** April 26, 2021



Span #8 deck



Span #7 deck





**Bridge #01375(Routine)**  
**Us70/Sec-19/L19.83 over Shell Lake**  
**Location: .20 Mi Ne Jct Of Sh 149**

**Team Lead:** Drew Melton **Inspection Date:** April 26, 2021



Span #6 deck



Span #5 deck





Span #4 deck



Span #3 deck



Span #2 deck



Span #1 deck



**Bridge #01375**(Routine)  
**Us70/Sec-19/L19.83 over Shell Lake**  
**Location: .20 Mi Ne Jct Of Sh 149**

**Team Lead:** Drew Melton **Inspection Date:** April 26, 2021

### **Inspection Comments**

Drawing Nos. 1036, 1957, 1963.  
Trees and vegetation are growing beside and under bridge.  
Gutters are full of dirt and debris with vegetation growing in them.

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### **Deck Notes**

04/24/2017 Lowered deck from 6 to 5 due to full depth failures at some joints.

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### **Superstructure Notes**

04/24/2017 Lowered superstructure from 6 to 5 due to large number of cracks, delamination's, and spalls at shear zones at end of girders.

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### **Substructure Notes**

04/24/2017 Lowered substructure from 6 to 5 due to large amounts of rebar exposed with up to 10% section loss.

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### **Load Rating**

INSPECTOR: Please note and document the condition of the ends of the girders along with the caps at each inspection. TEH  
6-8-2017