



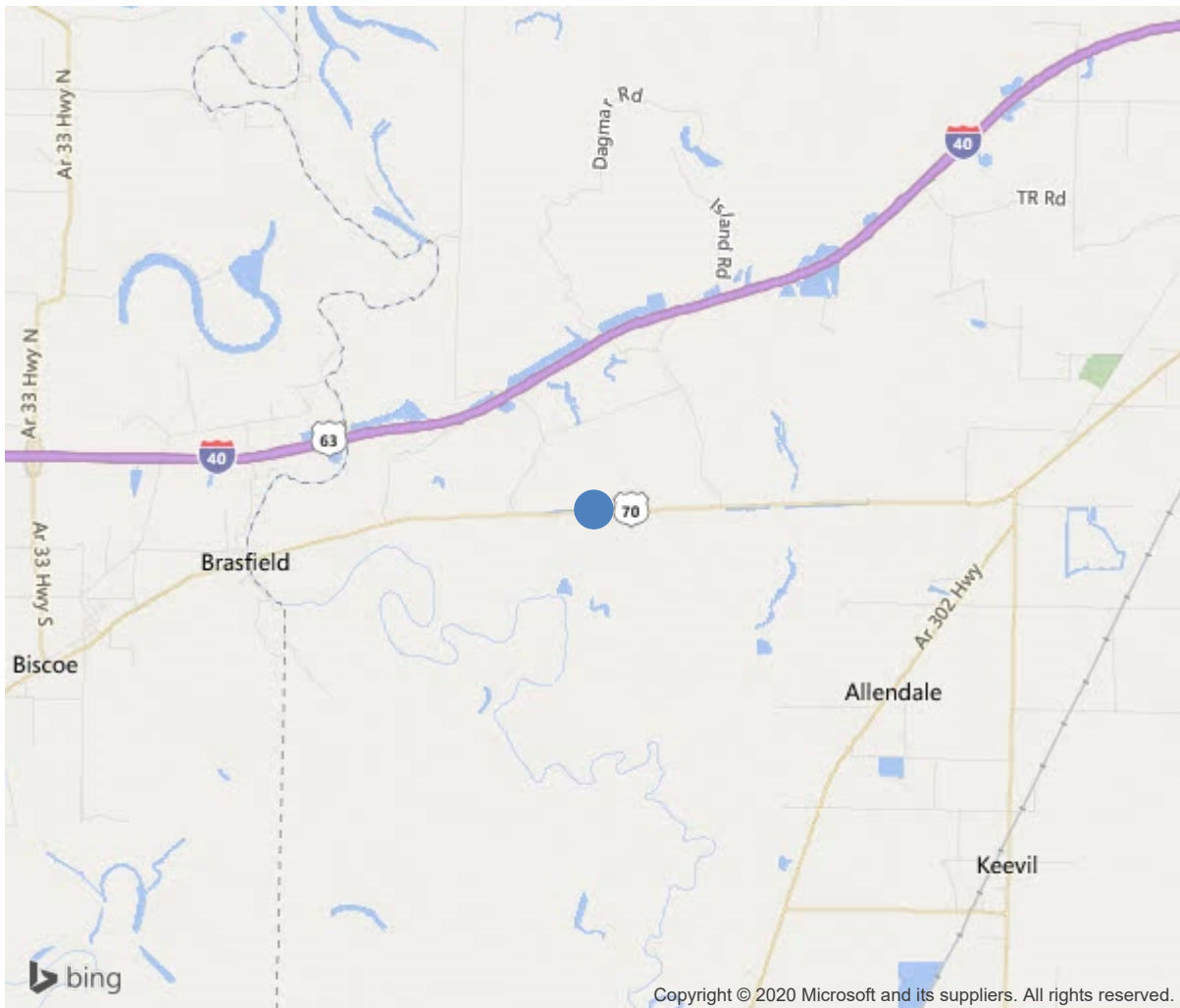
Bridge #01107 (Routine)

Us-70/Sec-17/L3.49 over Big Robe Bayou

Location: 3.49 Mi E Prairie Co Line

Team Lead: Joel Davis Inspection Date: May 20, 2019

3.49 Mi E Prairie Co Line



34.83822, -91.31651



Bridge #01107 (Routine)
Us-70/Sec-17/L3.49 over Big Robe Bayou
Location: 3.49 Mi E Prairie Co Line

Team Lead: Joel Davis Inspection Date: May 20, 2019

IDENTIFICATION	
(1) State Names	Arkansas
(8) Structure Number	01107
(5) Inventory Route	70
(2) Highway Agency District	01
(3) County Code	95-Monroe County, Arkansas
(4) Place Code	0
(6) Features Intersected	Big Robe Bayou
(7) Facility Carried	Us-70/Sec-17/L3.49
(9) Location	3.49 Mi E Prairie Co Line
(11) Mile Point	3.49 mi
(12) Base Highway Network	No
(13) LRS Inventory Rte & Subrte	0000000000
(16) Latitude	34.83822
(17) Longitude	-91.31651
(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	21
(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	1100
(30) Year of ADT	2014
(109) Truck ADT	19 %
(19) Bypass, Detour Length	4 mi
GEOMETRIC DATA	
(48) Length of Maximum Span	34 ft
(49) Structure Length	715 ft
(50) Curb or Sidewalk Width	
Left	0.5 ft
Right	0.5 ft
(51) Bridge Roadway Width Curb to Curb	26.9 ft
(52) Deck Width Out to Out	30 ft
(32) Approach Roadway Width (W/Shoulders)	35.1 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	27.9 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 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		2-Bridge is eligible for the NRHP.	
CONDITION			
(58) Deck			6
(59) Superstructure			6
(60) Substructure			6
(61) Channel & Channel Protection			6
(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			48
(65) Inventory Rating Method		1-Load Factor(LF)	
(66) Inventory Rating			
Type			21
Rating			29
(70) Bridge Posting		5-Equal to or above legal loads	
(41) Structure Open/Posted/Closed		A-Open, no restriction	
APPRAISAL			
(67) Structural Evaluation			6
(68) Deck Geometry			4
(69) Clearances, Vertical/Horizontal			N
(71) Waterway Adequacy			8
(72) Approach Roadway Alignment			8
(36) Traffic Safety Features			0000
A) Bridge Railings		0-Inspected feature does not meet cur	
B) Transitions		0-Inspected feature does not meet cur	
C) Approach Guardrail		0-Inspected feature does not meet cur	
D) Approach Guardrail Ends		0-Inspected feature does not meet cur	
(113) Scour Critical Bridges		5-Bridge foundations determined to be	
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			1167
(115) Year of Future ADT			2028
INSPECTIONS			
(90) Inspection Date			
(91) Frequency			24 Months
(92) Critical Feature Inspection	Done	Freq. (Mon)	Date
A: Fracture Critical Detail	No	24	
B: Underwater Inspection	No	0	
C: Other Special Inspection	No	0	



ELEM	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
16	Reinforced Concrete Top Flange	SF	21450	14181	6157	1112	0
1080	Delamination/Spall/Patched Area	SF	7	0	7	0	0
1090	Exposed Rebar	SF	112	0	0	112	0
1120	Efflorescence/Rust Staining	SF	2145	0	1145	1000	0
1130	Cracking (RC and Other)	SF	5005	0	5005	0	0
510	Wearing Surfaces	SF	19305	18179	800	326	0
3220	Crack (Wearing Surface)	SF	1120	0	800	320	0
3210	Delam/Spall/Patched Area/Pothole	SF	6	0	0	6	0
(16)							
Gutters are full of dirt and debris with vegetation growing in them. 80' of curb is scaling and breaking off. Wearing surface has transverse cracks at each joint and a few others sporadically spaced. Wearing surface has longitudinal crack near center full length. Bent #21 has two 3' areas of spalling in asphalt. Soffit has transverse cracks spaced 3' apart 1/3 with light and moderate efflorescence. Soffit overhangs at bent #3 are spalled 1' both side rebar exposed with 10% section loss. Soffit overhang span #5 left side has two 1' spalls with exposed rebar with 10% section loss near bent #5. Soffit overhang span #7 left side has 1' spall rebar exposed 10% section loss. Bent #8 soffit overhang right side joint is spalled with exposed rebar 10% section loss. Span #9 soffit between girders 1,2 has 3' spalls with exposed rebar no section loss. Span #9 soffit between girders 2,3 have two 1' spalls with exposed rebar no section loss near center span. Span #10 soffit between girders 4,5 has 2' area of spalling at 3/4 span with exposed rebar 5% section loss. Span #11 soffit between girders 1,2 has 1' spall with exposed rebar 5% section loss, and 4' of delamination. Span #11 soffit between girders 2,3 has 1' of delamination. Span #11 soffit between girders 4,5 has 15' area of spalling at 1/4 and 3/4 span with exposed rebar 5% section loss. Span #12 soffit between girders 1,2 girders 3,4 and 4,5 have 4' area of spalling with exposed rebar 5% section loss. Span #13 soffit between girders 1,2 has a 2' area delamination. Span #13 soffit between girders 2,3 has a 2' area of spalling with exposed rebar 5% section loss. Span #13 soffit between girders 4,5 has a 2' area of spalling at 3/4 span with exposed rebar 5% section loss. Span #14 soffit between girders 1,2 has 6' area of spalling at 3/4 span with exposed rebar 5% section loss. Span #14 soffit between girders 2,3 has 2' area of spalling with exposed rebar 5% section loss. Span #14 soffit between girders 3,4 has 2' area of spalling at 1/4 span with exposed rebar 5% section loss. Span #15 soffit between girders has 5' of spalling exposed rebar 5% section loss. Span #15 soffit overhang left side at 3/4 span has 1' spall exposed rebar 5% section loss. Span #15 soffit between girders 4,5 has 6' of spalling exposed rebar 5% section loss. Span #16 soffit between girders 4,5 has 6' of spalling exposed rebar 5% section loss. Span #16 soffit between girders 1,2 has 20' of spalling exposed rebar 5% section loss. Span #17 soffit between girders 4,5 has 3' of spalling exposed rebar 5% section loss. Span #18 soffit between girders 1,2 has 4' of spalling exposed rebar 5% section loss. Span #18 soffit between girders 4,5 has 2' of spalling exposed rebar 5% section loss. Span #19 soffit between girders 3,4 has 1' of spalling exposed rebar 5% section loss. Span #19 soffit between girders 4,5 has 25' of spalling exposed rebar 5% section loss. Span #20 soffit between girders 4,5 has 3' of spalling exposed rebar 5% section loss. Bent #21 soffit overhang at joint is spalled 2' exposed rebar with 10% section loss.							
110	Reinforced Concrete Open Girder/Beam	LF	3575	3547	16	12	0
1080	Delamination/Spall/Patched Area	LF	19	0	16	3	0



ELEM	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
1090	Exposed Rebar	LF	9	0	0	9	0
(110)	All girders have vertical hairline cracks spaced 1' apart. Bent #3 span #2 girder #2 right side has 1' delamination. Bent #3 span #2 girder #4 left side has 1' delamination. Bent #3 span #3 girder #1 has 1' delamination on bottom. Bent #3 span #3 girder #3 has 1' spall with exposed rebar on bottom 5% section loss. Bent #3 span #3 girder #4 left side has 1' delamination. Bent #5 span #4 girder #3 left side has 1' delamination. Bent #5 span #4 girder #5 has 1' spall with exposed rebar no section loss. Bent #7 span #6 girder #1 left side has 1' spall with exposed rebar 10% section loss. Bent #7 span #6 girder #5 both sides are delaminated for 1'. Bent #9 span #8 girder #4 left side has 1' spall exposed rebar no section loss, and 1' delamination. Bent #9 span #9 girder #4 left side has 1' delamination. Bent #11 span #10 girder #1 has 1' delamination. Bent #13 span #12 girder #1 left side has 2' spall with exposed rebar 10% section loss. Bent #13 span #12 girder #2 both sides are spalled for 1' no rebar, right side also has 1' delamination. Bent #13 span #12 girders #4,5 right sides are delaminated for 1'. Bent #13 span #13 girder #5 is delaminated. Bent #15 span #14 girder #2 last 1' delaminated. Bent #15 span #14 girder #5 has 3' delamination. Bent #15 span #15 girder #1 has 1' crack, delamination on bottom. Bent #15 span #15 girder #3 left side has 1' delamination. Bent #17 span #16 girder #4 has 1' delamination. Bent #17 span #16 girder #5 has 3' spall over cap with exposed rebar 10% section loss. Bent #17 span #16 girder #3 is spalled with exposed rebar no section loss. Bent #21 span #20 girder #1 is spalled with exposed rebar no section loss. Bent #22 span #21 girder #5 has 2' spall on left side exposed rebar with 10% section loss.						
215	Reinforced Concrete Abutment	LF	64	0	64	0	0
6000	Scour	LF	64	0	64	0	0
(215)	Abutment #1,2 has erosion up to 2' under cap exposing all piles. Abutment #1 both sides monument wall cracked and broken at base. Abutment #1 cap left top corner has 6" spall and delamination with no rebar exposed.						
227	Reinforced Concrete Pile	EA	110	104	4	2	0
1090	Exposed Rebar	EA	2	0	0	2	0
1130	Cracking (RC and Other)	EA	4	0	4	0	0
(227)	Bent #3 pile #1 is cracked at top. Bent #5 pile #1 is spalled at top 1' with exposed rebar 10% section loss. Bent #7 pile #1,5 both have 4' long crack at top. Bent #14 pile #4 has small crack at top. Bent #17 pile #5 has 1' area of delamination with spall and exposed rebar with 10% section loss.						
234	Reinforced Concrete Pier Cap	LF	510	465	40	5	0
1080	Delamination/Spall/Patched Area	LF	4	0	2	2	0
1090	Exposed Rebar	LF	5	0	2	3	0

Team Lead: Joel Davis, **Inspection Date:** May 20, 2019

ELEM	DESCRIPTION	UNITS	TOTAL	CS1	CS2	CS3	CS4
1130 (234)	Cracking (RC and Other)	LF	36	0	36	0	0
Bent #3 cap ahead face above pile #1 has 6" delamination. Bent #7 cap right bottom end is spalled with exposed rebar with 5% section loss. Bent #7 cap ahead face has longitudinal crack 6" below top of cap full length. Bents #9,11 cap ahead face are cracked between piles #3,4 for 3' long 3" down from top of cap. Bent #12 cap back face has 1' spall above pile #1 with exposed rebar no section loss. Bent #15 cap right end is spalled with 1' with exposed rebar no section loss. Bent #17 cap ahead face has 1' spall at top under girder #4 no rebar exposed. Bent #19 cap ahead face is cracked, delaminated and has 2' spall with exposed rebar 10% section loss, 1' delamination is on bottom chord between piles #3,4. Bottom face has 1' spall between piles 2,3 with exposed rebar with 10% section loss.							
305	Assembly Joint without Seal	LF	330	0	0	330	0
2350 (305)	Debris Impaction	LF	330	0	0	330	0
Asphalt overlay has made Joint have little movement.							
311	Movable Bearing	EA	50	50	0	0	0
331	Reinforced Concrete Bridge Railing	LF	1430	1420	0	10	0
1090 (331)	Exposed Rebar	LF	10	0	0	10	0
Span #2 right rail has minor collision damage 2' in length. Span #17 right rail has minor collision damage 8' in length 3 post are broken.							



Bridge #01107 (Routine)

Us-70/Sec-17/L3.49 over Big Robe Bayou

Location: 3.49 Mi E Prairie Co Line

Team Lead: Joel Davis Inspection Date: May 20, 2019



Bridge #01107 (Routine)

Us-70/Sec-17/L3.49 over Big Robe Bayou

Location: 3.49 Mi E Prairie Co Line

Team Lead: Joel Davis Inspection Date: May 20, 2019

Maintenance Needs



Inspection Comments

-

Deck Notes

Deck: Gutters are full of dirt and debris with vegetation growing in them. 80' of curb is scaling and breaking off. Wearing surface has transverse cracks at each joint and a few others sporadically spaced. Wearing surface has longitudinal crack near center full length. Bent #21 has two 3' areas of spalling in asphalt. Soffit has transverse cracks spaced 3' apart 1/3 with light and moderate efflorescence. Soffit overhangs at bent #3 are spalled 1' both side rebar exposed with 10% section loss. Soffit overhang span #5 left side has two 1' spalls with exposed rebar with 10% section loss near bent #5. Soffit overhang span #7 left side has 1' spall rebar exposed 10% section loss. Bent #8 soffit overhang right side joint is spalled with exposed rebar 10% section loss. Span #9 soffit between girders 1,2 has 3' spalls with exposed rebar no section loss. Span #9 soffit between girders 2,3 have two 1' spalls with exposed rebar no section loss near center span. Span #10 soffit between girders 4,5 has 2' area of spalling at 3/4 span with exposed rebar 5% section loss. Span #11 soffit between girders 1,2 has 1' spall with exposed rebar 5% section loss, and 4' of delamination. Span #11 soffit between girders 2,3 has 1' of delamination. Span #11 soffit between girders 4,5 has 15' area of spalling at 1/4 and 3/4 span with exposed rebar 5% section loss. Span #12 soffit between girders 1,2 girders 3,4 and 4,5 have 4' area of spalling with exposed rebar 5% section loss. Span #13 soffit between girders 1,2 has a 2' area delamination. Span #13 soffit between girders 2,3 has a 2' area of spalling with exposed rebar 5% section loss. Span #13 soffit between girders 4,5 has a 2' area of spalling at 3/4 span with exposed rebar 5% section loss. Span #14 soffit between girders 1,2 has 6' area of spalling at 3/4 span with exposed rebar 5% section loss. Span #14 soffit between girders 2,3 has 2' area of spalling with exposed rebar 5% section loss. Span #14 soffit between girders 3,4 has 2' area of spalling at 1/4 span with exposed rebar 5% section loss. Span #15 soffit between girders has 5' of spalling exposed rebar 5% section loss. Span #15 soffit overhang left side at 3/4 span has 1' spall exposed rebar 5% section loss. Span #15 soffit between girders 4,5 has 6' of spalling exposed rebar 5% section loss. Span #16 soffit between girders 4,5 has 6' of spalling exposed rebar 5% section loss. Span #16 soffit between girders 1,2 has 20' of spalling exposed rebar 5% section loss. Span #17 soffit between girders 4,5 has 3' of spalling exposed rebar 5% section loss. Span #18 soffit between girders 1,2 has 4' of spalling exposed rebar 5% section loss. Span #18 soffit between girders 4,5 has 2' of spalling exposed rebar 5% section loss. Span #19 soffit between girders 3,4 has 1' of spalling exposed rebar 5% section loss. Span #19 soffit between girders 4,5 has 25' of spalling exposed rebar 5% section loss. Span #20 soffit between girders 4,5 has 3' of spalling exposed rebar 5% section loss. Bent #21 soffit overhang at joint is spalled 2' exposed rebar with 10% section loss. Assembly joints:

Asphalt overlay has made Joint have little movement.

Bridge railings:

Span #2 right rail has minor collision damage 2' in length.

Span #17 right rail has minor collision damage 8' in length 3 post are broken.

Superstructure Notes

Girders: All girders have vertical hairline cracks spaced 1' apart. Bent #3 span #2 girder #2 right side has 1' delamination. Bent #3 span #2 girder #4 left side has 1' delamination. Bent #3 span #3 girder #1 has 1' delamination on bottom. Bent #3 span #3 girder #3 has 1' spall with exposed rebar on bottom 5% section loss. Bent #3 span #3 girder #4 left side has 1' delamination. Bent #5 span #4 girder #3 left side has 1' delamination. Bent #5 span #4 girder #5 has 1' spall with exposed rebar no section loss. Bent #7 span #6 girder #1 left side has 1' spall with exposed rebar 10% section loss. Bent #7 span #6 girder #5 both sides are delaminated for 1'. Bent #9 span #8 girder #4 left side has 1' spall exposed rebar no section loss, and 1' delamination. Bent #9 span #9 girder #4 left side has 1' delamination. Bent #11 span #10 girder #1 has 1' delamination. Bent #13 span #12 girder #1 left side has 2' spall with exposed rebar 10% section loss. Bent #13 span #12 girder #2 both sides are spalled for 1' no rebar, right side also has 1' delamination. Bent #13 span #12 girders #4,5 right sides are delaminated for 1'. Bent #13 span #13 girder #5 is delaminated. Bent #15 span #14 girder #2 last 1' delaminated. Bent #15 span #14 girder #5 has 3' delamination. Bent #15 span #15 girder #1 has 1' crack, delamination on bottom. Bent #15 span #15 girder #3 left side has 1' delamination. Bent #17 span #16 girder #4 has 1' delamination. Bent #17 span #16 girder #5 has 3' spall over cap with exposed rebar 10% section loss. Bent #17 span #16 girder #3 is spalled with exposed rebar no section loss. Bent #21 span #20 girder #1 is spalled with exposed rebar no section loss. Bent #22 span #21 girder #5 has 2' spall on left side exposed rebar with 10% section loss.

Substructure Notes



Abutments:

Abutment #1,2 has erosion up to 2' under cap exposing all piles.
Abutment #1 both sides monument wall cracked and broken at base.
Abutment #1 cap left top corner has 6" spall and delamination with no rebar exposed.

RC piles:

Bent #3 pile #1 is cracked at top.
Bent #5 pile #1 is spalled at top 1' with exposed rebar 10% section loss.
Bent #7 pile #1,5 both have 4' long crack at top.
Bent #14 pile #4 has small crack at top.
Bent #17 pile #5 has 1' area of delamination with spall and exposed rebar with 10% section loss.

RC caps: Bent #3 cap ahead face above pile #1 has 6" delamination. Bent #7 cap right bottom end is spalled with exposed rebar with 5% section loss. Bent #7 cap ahead face has longitudinal crack 6" below top of cap full length. Bents #9,11 cap ahead face are cracked between piles #3,4 for 3' long 3" down from top of cap. Bent #12 cap back face has 1' spall above pile #1 with exposed rebar no section loss. Bent #15 cap right end is spalled with 1' with exposed rebar no section loss. Bent #17 cap ahead face has 1' spall at top under girder #4 no rebar exposed. Bent #19 cap ahead face is cracked, delaminated and has 2' spall with exposed rebar 10% section loss, 1' delamination is on bottom chord between piles #3,4. Bottom face has 1' spall between piles 2,3 with exposed rebar with 10% section loss.