

## SAFE SPAN, L.L.C.

BRIDGE INSPECTION SERVICES P.O. Box 95 SILVERHILL, ALABAMA 36576

TELEPHONE: (251) 945-6228 OR (850) 418-0457 SAFESPANLLC.COM Michael W. Sharp, C.B.I.

Pete Peterson, C.B.I.

April 19, 2024

Mayor Ross Houserr PO Box 890 Magnolia Springs, AL 36555

Re: Bridge 016355 CR 49 over Magnolia River

Enclosed please find the completed 2024 ALDOT inspection forms for the above referenced bridge(s). These forms have been completed and entered into the Alabama Bridge Management System (BrM) and are to be placed in the bridge files. In this package you will find in order:

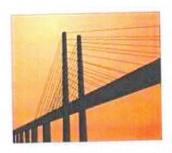
- 1. Executive Summary
- 2. Photographic file
- 3. Sketch of Deficiencies
- 4. Streambed Profile
- 5. BI-4 Form, Streambed Cross Sections
- 6. BI-5 Form, Bridge Inspection Condition Report
- 7. BI-6 Form, Structure Inventory and Appraisal
- 8. BI-9 Form, Bridge Maintenance Estimate
- 9. BI-13 Form, General Narrative
- 10. Dive Report

Please note that any maintenance that is needed will be found on the BI-9 Form. Please sign all forms under "Reviewer". This is defined as someone who is authorized to schedule maintenance. Safe Span, L.L.C. listed all Inspection notes on the BI-5 Form.

We here at Safe Span, L.L.C. appreciate this opportunity, and look forward to working with you in the future. If you or any City personnel wish to discuss these records please do not hesitate to contact us. Thank you again.

Sincerely,

Cc: file



## SAFE SPAN, L.L.C.

SAFETY INSPECTION OF IN-SERVICE BRIDGES P.O. Box 95

SILVERHILL, ALABAMA 36576

TELEPHONE: (251) 945-6228 CELL (850) 418-0457 SAFESPANLLC.COM

Michael W. Sharp, CBI Pete Peterson, CBI

April 19, 2024

Re: Bridge 016355 CR 49 over Magnolia River

### EXECUTIVE SUMMARY

The following information relates to the recent routine (24 month) safety inspection (hands-on) and underwater dive for the above referenced in-service bridge:

### **Findings**

- 1. The deck shows numerous hairline to 1/8" wide cracks located throughout with some map cracking.
- 2. Two longitudinal cracks that run parallel to the centerline may be full depth. The cracks show some efflorescence on underside of deck. Sounding does not indicate any problems at this time but should be monitored on a routine basis.
- 3. The remainder of the deck cracking appears to be shrinkage cracks from the concrete curing process. There is some map cracking in both lanes over Bents 2-8. Cracking at Spans 3 & 5 has increased to 1/8" wide.
- 4. The patch on the piling cap at Bent 5 over Pile C shows some failure of the patching material. Although the patch is crumbling there is no exposure of the reinforcing steel at this time.
- 5. Moderate drift has collected around most of the bent piles.
- 6. Underwater inspection was completed on this date. All piles appear to be in good shape and no major issues with scour.

### Conclusions

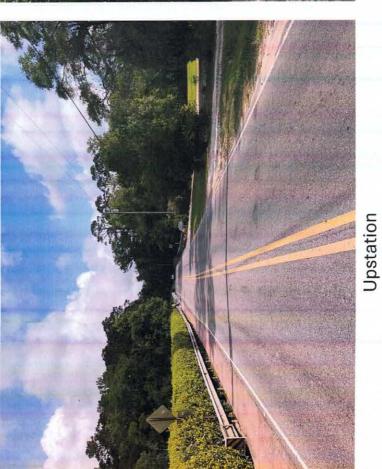
- 1. The deck and the superstructure are in a Satisfactory condition with widespread deck cracking noted.
- 2. The substructure is in a Good condition with light scaling at the waterline.
- 3. The channel is in a Good condition with an aggradation of the streambed since the las inspection.

### Recommendations

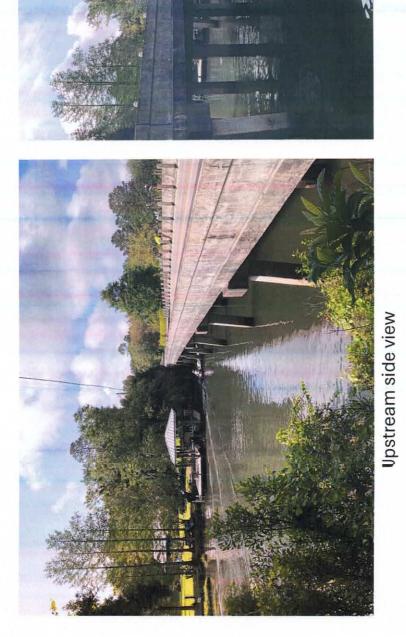
- 1. Continue to monitor all primary structural components on a routine (24 month) basis.
- 2. Remove drift around bent piles as needed.
- 3. Grade guardrail to meet ALDOT Standards.
- 4. Clean sand/debris from deck/drains as needed.



Downstation



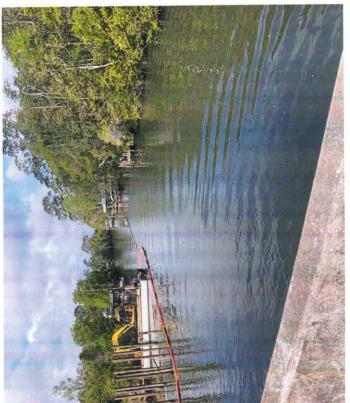
# Bridge 016355 CR 49 over Magnolia River



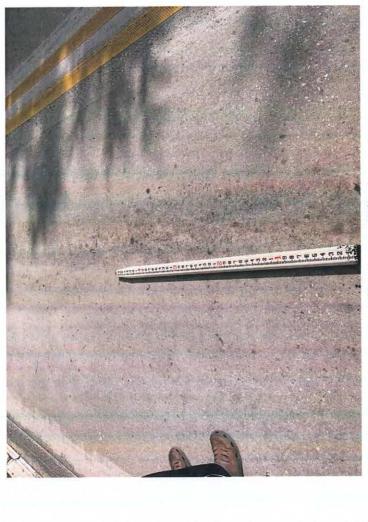
Downstream side view



Upstream



Downstream

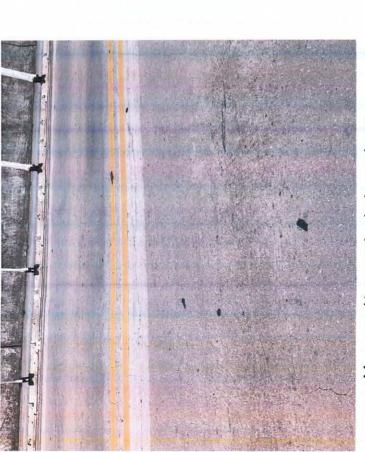


Deck cracking

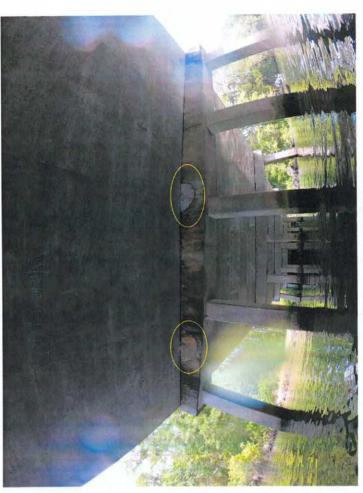
C\$3 crack on deck



# Bridge 016355 CR 49 over Magnolia River



Map cracking on deck throughout



Bent 5 patch and spall

# Bridge 016355 CR 49 over Magnolia River



Eff on ceiling

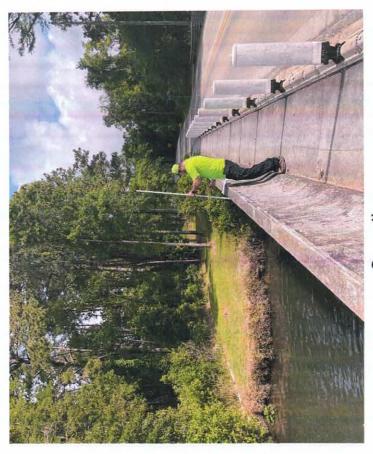


Eff on ceiling (2)



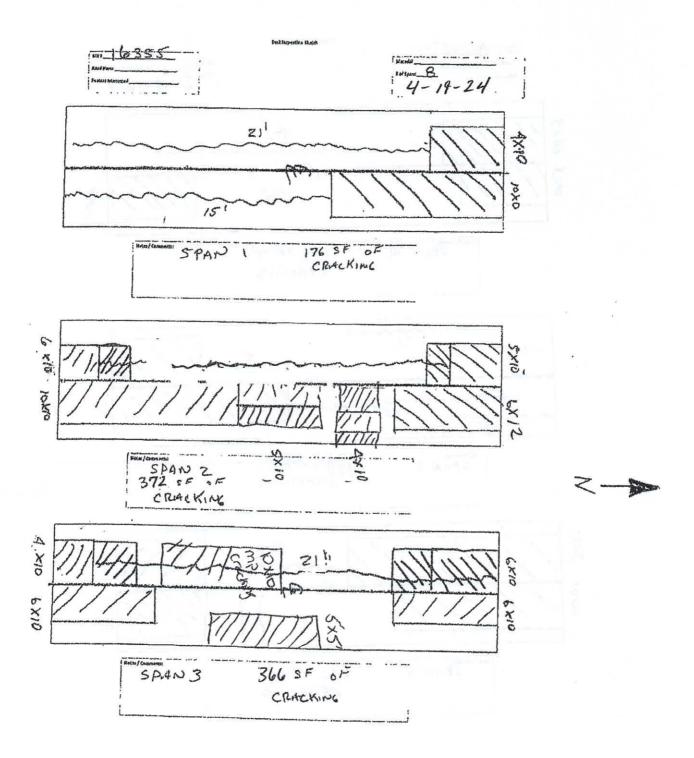
Hairline cracking on concrete railing

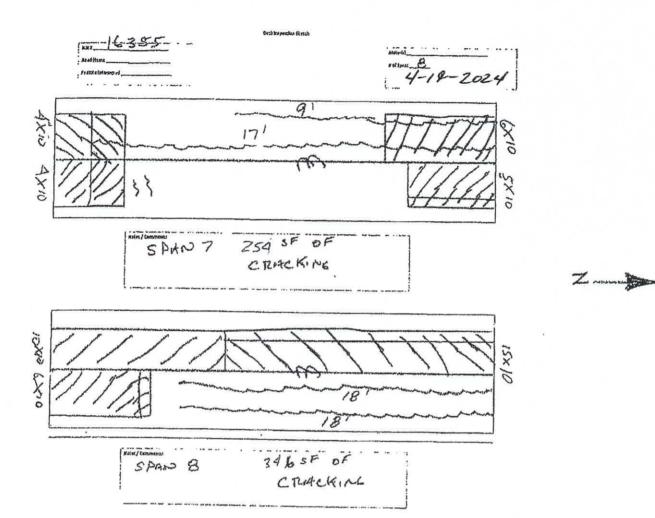


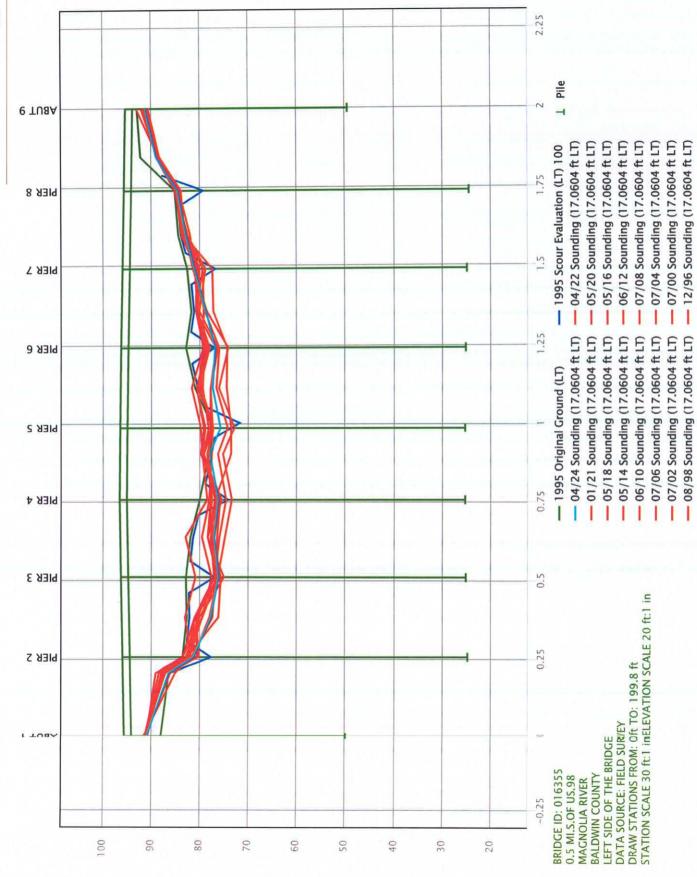


Soundings

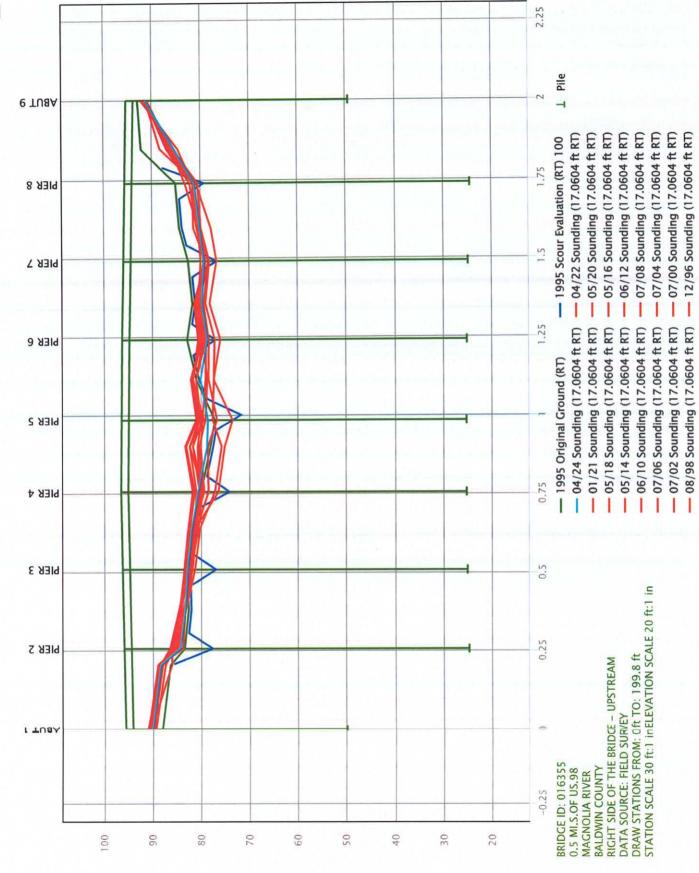
4/19/2024







ESTIMATED SCOUR							100
PIER NUMBER	2	8	4	5	9	7	8
CONTRACTUAL SCOUR (FT)	9.0	9.0	9.0	9.0	9.0	9.0	9.0
PIER SCOUR (FT)	5.3	5.3 5.3 5.3 5.3 5.3 5.3	5.3	5.3	5.3	5.3	5.3
TOTAL SCOUR (FT)	5.9	5.9 5.9 5.9 5.9 5.9 5.9 5.9	5.9	5.9	5.9	5.9	5.9



ESTIMATED SCOUR							100
PIER NUMBER	7	m	4	2	9	7	8
CONTRACTUAL SCOUR (FT)	9.0	0.6 0.6 0.6 0.6 0.6 0.6 0.6	9.0	9.0	9.0	9.0	9.0
PIER SCOUR (FT)	5.3	5.3 5.3 5.3 5.3 5.3 5.3	5.3	5.3	5.3	5.3	5.3
TOTAL SCOUR (FT)	5.9	5.9 5.9 5.9 5.9 5.9 5.9 5.9	5.9	5.9	5.9	5.9	5.9

### Streambed Cross Sections

STR. NUM.: OCO0049 020000010700

Insp. Date: \$-19-24

Sheet: 1 of 2 Printed: 4/24/2024

FORM: BI-4 BIN: 016355

1 REC

IDENTIFICATION

DISTRICT: 02 AREA: Mobile

COUNTY: Baldwin

PREVIOUS VALUES: U.S. CUSTOMARY

SNDING DATE: 04 2024 VIEW: L

OFST RMRK: FROM CENTERLINE

LOCATION OF BM: TOP LT. RAIL 0+00=30.48 ELEV BASIS: A

STATION EQ: 0 + 0.0000 = 0 + 0.0000

ELEV EQ: 0.00 = 0.00 SND/ELEV IND: S

OFFSET: 17.06

	CURRENT		NEW	
STATIONS	SND/ELEV	REMARKS	SND/ELEV	REMARKS
0 + 0.0000	7.2000	ABUT 1		
0 + 20.3400	12.1000	EDGE OF WATER MIDSPAN		
0 + 25.5900	17.3000	BENT 2		
0 + 38.0600	21.1000	MIDSPAN		
0 + 50.8500	22.8000	BENT 3		
0 + 63.6500	22.0000	MIDSPAN		
0 + 75.4600	22.9000	BENT 4		
0 + 89.9000	21.2000	12.6=TOP OF WATER; MS		
0 + 98.4300	23.4000	BENT 5		
1 + 11.2200	21.7000	MIDSPAN		
1 + 24.0200	22.1000	BENT 6		
1 + 35.5000	20.1000	MIDSPAN		
1 + 48.9500	17.6000	BENT 7		
1 + 59.4500	15.7000	MIDSPAN		
1 + 73.8800	13.7000	BENT 8 EDGE OF WATER		
1 + 84.7100	9.1000	MIDSPAN		
1 + 99.8000	6.6000	ABUT 9		

Streambed Cross Sections

Insp. Date: 4-29-24

FORM: BI-4 BIN: 016355

1 REC

STR. NUM.: OCO0049 020000010700

Sheet: 2 of 2 Printed: 4/24/2024

IDENTIFICATION

AREA: Mobile

DISTRICT: 02

COUNTY: Baldwin

PREVIOUS VALUES: U.S. CUSTOMARY

OFFSET: 17.06

SNDING DATE 04 2024) VIEW: R)

OFST RMRK: FROM CENTERLINE

ELEV BASIS: A ELEV EQ: 0.00 = 0.00

LOCATION OF BM: TOP LT. RAIL 0+00=30.48

STATION EQ: 0 + 0.0000 = 0 + 0.0000

SND/ELEV IND: S

	CURRENT		NEW	
STATIONS	SND/ELEV	REMARKS	SND/ELEV	REMARKS
0 + 0.0000	8.2000	ABUT 1		
0 + 20.3400	10.2000	MIDSPAN		
0 + 25.5900	14.2000	BENT 2 EDGE OF WATER		
0 + 38.0600	15.4000	MIDSPAN		
0 + 50.8500	16.1000	BENT 3		
0 + 63.6500	17.0000	MIDSPAN		
0 + 75.4600	18.4000	BENT 4		
0 + 89.9000	20.3000	MIDSPAN		
0 + 98.4300	20.5000	BENT 5		
1 + 11.2200	18.9000	MIDSPAN		
1 + 24.0200	20.3000	BENT 6 TOP OF WATER =12.	4	
1 + 35.5000	19.1000	MIDSPAN		
1 + 48.9500	19.4000	BENT 7		
1 + 59.4500	18.3000	MIDSPAN		
1 + 73.8800	17.0000	BENT 8		
1 + 84.7100	12.7000	MIDSPAN EDGE OF WATER		
1 + 99.8000	6.5000	ABUT 9		

### Inspection Report

FORM: BI-5

STR. NUM.: OCO0049 020000010700

BIN: 016355

1 REC

Area: Mobile

Sheet: 1 of 3

Printed: 4/24/2024

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PREVIOUS INSP.: Phillip Pete Peterson

PREVIOUS DATE: 04/19/2024

PREVIOUS INSP. TYPE: Regular NBI

NEW DATE:

NEW INSP. TYPE:

### **RATING**

58) DECK RATING

59) SUPERSTRUCTURE RATING

60) SUBSTRUCTURE RATING

61) CHANNEL & CHANNEL PROTECTION

62) CULVERT RATING

CURRENT

NEW

REMARKS

See BI-13

### **MISCELLANEOUS**

- 71) WATERWAY ADEQUACY
- 72) APPROACH ROADWAY ADEQ APPRAISAL 36) TRAFFIC SAFETY FEATURES
  - A) BRIDGE RAIL
  - B) TRANSITION
  - C) APPROACH RAIL
  - D) END TREATMENT

CURRENT

NEW

- 1

### LOAD POSTING SIGNS:

- A) REQUIRED
- B) PRESENT
- C) VISIBLE
- D) LEGIBLE

### Inspection Report

FORM: BI-5 BIN: 016355 STR. NUM.: OCO0049 020000010700

1 REC

Area: Mobile

Sheet: 2 of 3

Printed: 4/24/2024

PREVIOUS DATE: 04/19/2024

NEW DATE: 4-19, 24

STRUCTURE UNIT: 1

	ELEM#	ELEMENT NAME	ENV	QUANTITY	UNITS	QTY CS 1	QTY CS 2	QTY CS 3	QTY CS 4
CURRENT: NEW:	12	Re Concrete Deck	2	6,623	sq.ft	4,266.00	109.00	2,248.00	0.00
NOTES:	=				-				
CURRENT: NEW:	1120	Efflorescence/Rust Staining	2	96	each	0.00	96.00	0.00	0.00
NOTES:	_Crack	s with Efflorescence underside	of deck	(see BI-13)					
CURRENT: NEW:	1130	Cracking (RC and Other)	2	2,248	each	0.00	0.00	2,248.00	0.00
NOTES:	Map cra	acking located throughout on de	eck (see	sketch). Crack	ting with ef	f on ceiling.			
CURRENT: NEW: NOTES:	215	Re Conc Abutment	2	66	ft 	66.00	0.00	0.00	0.00
CURRENT: NEW: NOTES:	226	Pre Conc Pile	2	45	2	45.00	0.00	0.00	0.00
CURRENT: NEW: NOTES:	1190	Abrasion(PSC/RC)	2	35	each	35.00	0.00	0.00	0.00
CURRENT: NEW:	234	Re Conc Pier Cap	2	307	ft _	302.00	5.00	0.00	0.00
NOTES:	_								
CURRENT: NEW: NOTES:	1000	Delamination/Spall/Patched F	Z	5	each	0.00	5.00	0.00	0.00
	-								
CURRENT: NEW:	306	Other Joint	2	34	ft 	34.00	0.00	0.00	0.00

### Inspection Report

FORM: BI-5 BIN: 016355

STR. NUM.: OCO0049 020000010700 1 REC

Area: Mobile

Sheet: 3 of 3

Printed: 4/24/2024

PREVIOUS DATE: 04/19/2024 NEW DATE: 0.00 0.00 0.00 2 34 each 34.00 2350 Debris Impaction CURRENT: NEW: NOTES: 10.00 0.00 0.00 ft 390.00 400 331 Re Conc Bridge Railing CURRENT: NEW: NOTES: 0.00 10.00 0.00 0.00 Delamination/Spall/Patched # 2 each 10 1080 CURRENT: NEW: NOTES: REASON FOR INSP. Rowfine 701 4-29-24 INSP. NBIS CERT NO. ALA. PROF. ENGR. NO. INSPECTOR'S

Date: 4-19-24 Sheet: 1 of 9

Printed: 4/24/2024

FORM: BI-6 BIN: 016355

1 REC

AGENCY BRIDGE ID

8) NBI STRUCTURE NO

99) BORDER STRUCT NO

NAME

Inventory - Admin Subtask

STRUCTURAL IDE	ENTIFICATION	
	CURRENT	NEW
	016355	
	016355	

???????????????????????

LOCATION CURRENT NEW 01 Alabama 1A) FIPS STATE Region 4-Atlanta 1B) FHWA REGION Mobile 2) AREA Baldwin 3) COUNTY MAGNOLIA SPRINGS 4) CITY/TOWN/PLACECODE MAGNOLIA RIVER 6A) FEATURE INTERSECTED Mag. Springs Hwy. 7) FACILITY CARRIED 0.5 MI.S.OF US.98 9) LOCATION S 30D 23M 58.900S D M 16) LATITUDE S 87D 46M 11.450S D M 17) LONGITUDE Not Applicable (P) 98AA) BORDER STATE % 98B) SHARE(%) Not Applicable 98AB) BORDER FHWA REGION

	AGE AND SERVICE	
	CURRENT	NEW
27) YEAR BUILT	1996	
106) YEAR RECONSTRUCT	0	
42A) TYPE OF SERVICE ON	1 Highway	
42B) UNDER	5 Waterway	
28B) LANES UNDER	0	

**OPERATION** CURRENT NEW City/Municipal Hwy Agenc 21) MAINT. RESP. City/Municipal Hwy Agenc 22) OWNER District 2 ALDOT DISTRICT

CLAS	SIFICATION INFORMATION	
	CURRENT	NEW
112) NBIS BRIDGE LENGTH 101) PARALLEL STRUCTURE	Long Enough No    bridge exists	
103) TEMPORARY STRUCTURE	Not Applicable (P)	
37) HISTORIC SIGNIFICANCE	5 Not eligible for NRHP	

Date: 4-19-24 Sheet: 2 of 9

FORM: BI-6

35) STRUCTURE FLARED

Printed: 4/24/2024

OKIVI. E			
BIN: 016	355 1 REC	Inventory Design Subtock	
		Inventory - Design Subtask	
		DECK	
		CURRENT	NEW
107)	DECK STRUCTURE TYPE	1 Concrete-Cast-in-Place	
	DECK SURFACE TYPE	0 None	
	DECK MEMBRANE TYPE	0 None	
	DECK PROTECTION	None	
	CURB SIDEWALK WIDTH/LEFT	0.00 ft	f
	CURB SIDEWALK WIDTH/RIGHT	0.00 ft	f
	DECK WIDTH	33.10 ft	f
	BRIDGE MEDIAN	0 No median	Toward 19
	DECK AREA	6,623.00	(SF
		STRUCTURE STATUS	
		CURRENT	NEW
	BRIDGE STATUS	3 Active	
		SPANS	
		CURRENT	NEW
45)	NUMBER OF MAIN SPANS	8	
	MAIN SPANS MATERIAL	2 Concrete Continuous	
	MAIN SPANS DESIGN	01 Slab	
	NUMBER OF APPROACH SPANS	0	
44A)	APPROACH SPAN MATERIAL	Not Applicable (P)	
44B)	APPROACH SPAN DESIGN	Not Applicable (P)	
34)	SKEW	0 D	

	LENGTH	
	CURRENT	NEW
48) MAXIMUM SPAN LENGTH	24.90 ft	ft
49) STRUCTURE LENGTH	200.10 ft	ft
TOTAL LENGTH	200.10 ft	ft

0 No flare

Date: 4-19-24 Sheet: 3 of 9

FORM: BI-6 BIN: 016355

1 REC

Printed: 4/24/2024

### Inventory - Roads Subtask

	IDENTIFICATION	
	CURRENT	NEW
ROAD/ROUTE NAME  5A) POSITION/PREFIX  5B) KIND HWY. (RT. PREFIX)  5C) DESIG. LEVEL SERVICE  5D) RTE#  5E) SUFFIX  6B) CRITICAL FACILITY	CO. RD. 49 Route On Structure 4 County Hwy 1 Mainline 00049 0 N/A (NBI) Not Applicable	

HIGHWAY NETW	ORKS & SERVICE CLASSIFICATION	
	CURRENT	NEW
11) KILOMETER/MILE POINT	0.006 mi	mi
12) NATIONAL BASE NET	Not on Base Network	
13A) LRS INVENTORY RTE.	000CO00490	-
13B) SUB#	00	
20) TOTAL FACILITY	3 On free road	-
26) FUNCTIONAL CLASS	09 Rural Local	
102) TRAFFIC DIRECTION	2 2-way traffic	·

	TRAFFIC	
	CURRENT	NEW
28A) LANES SPEED	2 3 <u>5 m</u> ph	mph
29) RECENTADT 30) YEAR	35 mph 2,535 2022	
109) TRUCK % 114) FUTURE ADT	1%	%
115) FUT. YEAR	2042	-

ALTE	RNATE CLASSIFICATIONS	
	CURRENT	NEW
100) DEFENSE HIGHWAY	0 Not a STRAHNET hwy	
104) NAT. HWY. SYSTEM	0 Not on NHS	
105) FED. LANDS HWY.	0 N/A (NBI)	
110) NAT. TRUCK NETWORK	0 Not part of natl netwo	
SCHOOL BUS RTE.	No	[ ]
TRANSIT RTE.	No	į į
EMERGENCY RTE.	No	į į
NBI RTE.	Ves	1 1

Sheet: 4 of 9

FORM: BI-6

BIN: 016355

1 REC

Inventory - Roads Subtask

Printed: 4/24/2024

	minerial interest and the second	
	CLEARANCES	
	CURRENT	NEW
10) VERTICAL	99.99 ft	
47) HORIZONTAL	30.20 ft	
	WIDTHS	
	CURRENT	NEW
32) APPROACH ROAD	34.10 ft	
51) ROADWAY	30.20 ft	
	DETOURS	
	CURRENT	NEW
19) LENGTH	8.00 mi	

Date: 7-79-Sheet: 5 of 9

Sheet: 5 of 9 Printed: 4/24/2024

FORM: BI-6 BIN: 016355

1 REC

Inventory - Identification Subtask

		AGENCY IDENTIFICATION	
		CURRENT	NEW
215) 298) 214) 205) 203) 206) 207)	LOCAL IDENTIFIER PREVIOUS STRUCTURE BIN(s) REPLACEMENT BIN ADJACENT MAINLINE BIN RELATIVE POSITION INDICATOR MPO CODE CONGRESSIONAL DISTRICT SENATE DISTRICT HOUSE DISTRICT LOCAL COMMISSION DISTRICT BRIDGE NAME / DESIGNATOR CPMS REFERENCE NUMBER PROJECT NUMBER ALABAMA ID	0107 5567 0 0 0 Not in an MPO 01 32 095 04?? ? NNNNNNNNNNNNNNNNNNNNNNNNNNNNNNNN	NEW
	ALDOT REGION	Southwest Region	

		INSPECTION	
		CURRENT	NEW
293)	INSPECTION AGENCY	City or Municipal Agency	
/	SPECIAL INSPECTION COUNT	0	
92D)	SPECIAL INSPECTION TYPE	N/A	
	SPECIAL INSPECTION TYPE	N/A	
	SPECIAL INSPECTION TYPE	N/A	
	SPECIAL INSPECTION TYPE	N/A	
	SPECIAL EQUIPMENT COUNT	1	
222)	SPECIAL EQUIPMENT USED	Boat	
222)	SPECIAL EQUIPMENT USED	N/A	
222)	SPECIAL EQUIPMENT USED	N/A	
222)	SPECIAL EQUIPMENT USED	N/A	
222)	SPECIAL EQUIPMENT USED	N/A	
222)	SPECIAL EQUIPMENT USED	N/A	
222)	SPECIAL EQUIPMENT USED	N/A	
218)	TOTAL EMP-HRS FOR UNDERWATER INSP.	6	
219A)	SNOOPER INSP. REQUIRED	Snooper Insp. Not Req'd	
219B)	SNOOPER INSP. FREQUENCY	0	
220)	LAST SNOOPER INSPECTION DATE	01/01/1900	
224A)	SCOUR INSPECTION REQUIRED	Scour Monit. Req'd	
224B)	SCOUR INSPECTION FREQUENCY	24 mo	mo
224C)	SPECIAL INSPECTION DETAIL INDICATOR	No Special Details	
	SCOUR COUNTERMEASURES REQUIRED	Scour Counterm Not Req'd	
,	SCOUR COUNTERMEASURES PLANNED	01/01/1900	
	SCOUR COUNTERMEASURES COMPLETED	01/01/1900	
,	SCOUR CRITICAL	8 Stable Above Footing	
113B)	SCOUR CRITICAL BRIDGE DESCRIPTION	Eval Based on Scour Cal	
	FOUNDATION TYPE	Pile	
	FOUNDATION ELEVATION	Known	
	STREAMBED MATERIAL	Clay/Loam	

Date: 4-19-24

Sheet: 6 of 9 Printed: 4/24/2024

FORM: BI-6 BIN: 016355

1 REC

Inventory - Identification Subtask

### AGENCY LOAD RATING

	AGENCT	LOAD RATING	
		CURRENT	NEW
41)	STRUCTURE TRAFFIC STATUS	A Open, no restriction	
70)	POSTING	5 At/Above Legal Loads	
	OPERATING RATING TYPE	1 LF Load Factor	
64)	OPERATING RATING	94.90	ton
65)	INVENTORY RATING TYPE	1 LF Load Factor	
66)	INVENTORY RATING	56.90	ton
	RATING SPECIFICATION USED	LFD	
	RATING ANALYSIS PERFORMED MAJOR	AASHTO BARS	
200,1,		Not Rated / Analyzed	
251)	RATING AGENCY	ALDOT (Maint. Bureau)	
252)	DATE RATED	01/01/1996	xxxxxxx
	RATING STATUS	Rating Published	
		No Action	
		No Action	
254A)	LOAD TYPE H	48.7	ton
	LOAD TYPE TWO-AXLE	75.4	ton
	LOAD TYPE TRI-AXLE DUMP	66.8	ton
	LOAD TYPE CONCRETE TRUCK	65.3	ton
	LOAD TYPE 18 WHEELER	98.0	ton
	LOAD TYPE SIX-AXLE	98.0	ton
	LOAD TYPE SCHOOL BUS	61.8	ton
	LOAD TYPE EV2	0.0	ton
,	LOAD TYPE EV3	0.0	ton
257)	REASON POSTED	Superstructure	
		None / Condition Noted	
258A	LAST POST CHANGE REASON	Never Posted	
	LAST POST CHANGE DATE	01/01/1900	
	POSTING CHART INDICATOR	Include on Posting Chart	
261)	DATE OF TEMPORARY STRENGTHENING	01/01/1900	1 1
262)	TYPE OF TEMPORARY STRENGTHENING	None	
		None	
265)	STANDARD DRAWINGS MAIN SPAN		
266)	STANDARD DRAWING APPROACH SPAN	???????????????	
31)	LIVE LOAD	5 MS 18 (HS 20)	

Date: 7 / 9
Sheet: 7 of 9

Sheet: 7 of 9 Printed: 4/24/2024

FORM: BI-6 BIN: 016355

1 REC

Inventor	y - State Items Subtask	
	CULVERT	
	CURRENT	NEW
237) CULVERT TYPE	Not Applicable	
233A) NUMBER OF BARRELS OR PIPES	0	l l
233B) BARREL LENGTH	0.00 ft	ft
233C) BARREL SPAN	0.00 ft	ft
233D) BARREL HEIGHT	0.00 ft	ft
233E) DEPTH OF FILL	0.00 ft	ft
	TYPE	
		N 15747

	TYPE		
		CURRENT	NEW
232)	HORIZONTAL AND/OR VERTICAL CURVE	Not - Horz or Vert Curve	
240A)	FRACTURE CRITICAL STRUCTURE GROUP TYPE	Not Applicable	
	BEGIN ABUTMENT TYPE	Pile Bent	
	BEGIN ABUTMENT CAP MATERIAL	Reinforced Concrete	
	BEGIN ABUTMENT CAP TYPE	Cast in Place	
	BEGIN ABUTMENT FOUNDATION	Prestress Concrete Piles	
	ENDING ABUTMENT TYPE	Pile Bent	·
245B)	ENDING ABUTMENT CAP MATERIAL	Reinforced Concrete	
245C)	ENDING ABUTMENT CAP TYPE	Cast in Place	
245D)	ENDING ABUTMENT FOUNDATION	Prestress Concrete Piles	
246A)	MAIN SPAN PIER MATERIAL PRIMARY	Prestressed Concrete	
	MAIN SPAN PIER MATERIAL SECONDARY	Not Applicable	
246B)	MAIN SPAN PIER TYPE PRIMARY	5 or + Column Pier Bent	
7	MAIN SPAN PIER TYPE SECONDARY	Not Applicable	
246C)	MAIN SPAN PIER CAP MATERIAL PRIMARY	Reinforced Concrete	****
~	MAIN SPAN PIER CAP MATERIAL SECONDARY	Not Applicable	
246D)	MAIN SPAN PIER CAP STRUCTURE PRIMARY	Cast-in-Place	
**	MAIN SPAN PIER CAP STRUCTURE SECONDARY	Not Applicable	
246E)	MAIN SPAN PIER FOUNDATION TYPE PRIMARY	Prestressed Conc. Piles	
	MAIN SPAN PIER FOUNDATION TYPE SECONDARY	Not Applicable	
247A)	APPROACH SPAN PIER MATERIAL PRIMARY	Not Applicable	
	APPROACH SPAN PIER MATERIAL SECONDARY	Not Applicable	
247B)	APPROACH SPAN PIER TYPE PRIMARY	Not Applicable	
100	APPROACH SPAN PIER TYPE SECONDARY	Not Applicable	
247C)	APPROACH SPAN PIER CAP MATERIAL PRIMARY	Not Applicable	
· ·	APPROACH SPAN PIER CAP MATERIAL SEC.	Not Applicable	
247D)	APPROACH SPAN PIER CAP STRUCTURE PRIM.	Not Applicable	
	APPROACH SPAN PIER CAP STRUCTURE SEC.	Not Applicable	
247E)	APPROACH SPAN PIER FOUNDATION TYPE PRIM.	Not Applicable	
	APPROACH SPAN PIER FOUNDATION TYPE SEC.	Not Applicable	

		PAINT	
		CURRENT	NEW
267)	DATE LAST PAINTED	01/01/1900	
271A)	PRIMER PAINT TYPE	Not Applicable	
271B)	INTERMEDIATE PAINT TYPE	Not Applicable	
271C)	FINISH PAINT TYPE	Not Applicable	
271D)	UNDERCOAT PAINT TYPE	Not Applicable	
273)	PAINT EXTENT	Not Applicable	
274)	PAINT COST	0.00	

Date: 4-19.24 Sheet: 8 of 9

Sheet: 8 of 9 Printed: 4/24/2024

FORM: BI-6 BIN: 016355

1 REC

Appraisal Task

	Appraisar rask	
STRU	CTURAL APPRAISAL	
	CURRENT	NEW
41) OPEN/POSTED/CLOSED	A Open, no restriction	xxxxx
72) APPROACH ALIGNMENT	6 Equal Min Criteria	
36A) BRIDGE RAILINGS	1 Meets Standards	
36B) TRANSITIONS	1 Meets Standards	
36C) APPROACH GUARDRAIL	1 Meets Standards	
36D) APPROACH GUARDRAIL ENDS	1 Meets Standards	
111) PIER PROTECTION	Not Applicable (P)	
113) SCOUR CRITICAL	8 Stable Above Footing	
FRACTURE CRITICAL DETAILS	No FC Details	

CALCULATE	ED APPRAISAL RATINGS	
	CURRENT	NEW
S7) STRUCTURAL EVALUATION	7 Above Min Criteria	XXXXX
88) DECK GEOMETRY	4 Tolerable	XXXXX
9) UNDERCLEARANCES	N Not applicable (NBI)	XXXXX
SD/FO STATUS	Not Deficient	xxxx
SUFFICIENCY RATING	86.50	XXXX.X
SUFFICIENCY RATING CALCULATE STATUS	1	xxxxx
HEALTH INDEX	96.55	xxxxx%

	CLEA	RANCES		
		CURRENT	NEW	
MI	NIMUM VERTICAL CLEARANCES			
53)	OVER STRUCTURE	99.99 ft		
54A)	UNDER (REFERENCE)	N Feature not hwy or RR		
54B)	UNDER CLEARANCE	0.00 ft		
MI	NIMUM LATERAL CLEARANCES			
55A)	REFERENCE FEATURE	N Feature not hwy or RR		
55B)	RIGHT SIDE	99.90 ft		
56)	LEFT SIDE	0.00 ft		
NA	AVIGATION DATA			
38)	NAVIGATION CONTROL EXISTS	Permit Not Required		
39)	NAVIGATION VERTICAL CLEARANCES	0.00 ft		
40)	NAVIGATION HORIZONTAL CLEARANCES	0.00 ft		
116)	MINIMUM VERTICAL LIFT CLEARANCES	0.00 ft		

	AD RATINGS	NBI LO	
NEW	CURRENT		
	No	LOAD RATING REVIEW RECOMMENDED	
xxxxx	01/01/1996	RATING DATE	
xxxxxxx	5 MS 18 (HS 20)	DESIGN LOAD	31)
	5 At/Above Legal Loads	POSTING	70)
	1 LF Load Factor	OPERATING TYPE	63)
ton	94.90	OPERATING RATING	64)
	1 LF Load Factor	INVENTORY TYPE	65)
ton	56.90	INVENTORY RATING	66)

Sheet: 9 of 9

FORM: BI-6 BIN: 016355

1 REC

Printed: 4/24/2024

	INSPECTION
	CURRENT
90) INSPECTION DATE	4/19/2024
91) FREQUENCY	24 mo
93A) FC INSPECTION DATE	N/A
92A) FC FREQUENCY	
93B) UW INSPECTION DATE	4/19/2024
92B) UW FREQUENCY	48 mo
93C) SPECIAL INSPECTION DATE	N/A
92C) SPECIAL FREQUENCY	

	CONDITION
	CURRENT
58) DECK 59) SUPER 60) SUB 61) CHANNEL/CHANNEL PROTECTION 62) CULVERT	5 Fair 7 Good 7 Good 8 Protected N N/A (NBI)

BF	RIDGE REPLACEMENT	
	CURRENT	
PROGRAM YEAR	0	
PRIORITY	X	
LOAD DEFICIENCY POINTS	0.0000	
WIDTH DEFICIENCY POINTS	7.8000	
VERT, CIR. DEFICIENCY POINTS	0.0000	
CONDITION DEFICIENCY POINTS	0.0000	
TOTAL DEFICIENCY POINTS	7.8000	
LOCAL RANK	1 of 252	
STATEWIDE RANK	754 of 1,676	

lete Peterson	4-29-24	701		
INSPECTOR'S SIGNATURE	DATE	INSP. NBIS CERT. NO.	or	ALA. PROF. ENGR. NO.
IRA-	5-8-24	Mayor		
REVIEWER'S SIGNATURE	DATE	REVIEWER'S TITLE		

### Bridge Maintenance Needed

FORM: BI-9 BIN: 016355 INSPECTED BY:	The Pole	ysar	0049 020000010700 DATE:	4-29-	Sheet: 1 Printed: 4	of 1 -/24/2024
REVIEWED BY:	184		DATE:	5-8-2	24	
C:	DESCRIPTION B29 DRIFT REMOVA RK: Remove drift from	n Substructure as nee	-	16.00	High	STAT
NC: REMA	B06 MINOR DECK R RK: CLEAN/EPOXY / NEW QTY:	ALL CRACKS ON TOP	POFAND UNDERSI -	DE OF BR	IDGE DECK AS	NEEDED.
	B:					
NEW ACTIVITY: UNIT: NEW REMARK:	B:	QTY:				
UNIT:	B:	QTY:		PRIOR	RITY:	
NEW ACTIVITY: UNIT:	B:	QTY:	ACTIVITY DESCRI	PTION: PRIOF	RITY:	

### General Narrative Form

FORM: BI-13 BIN: 016355

0111

1 REC

STR. NUM.: OCO0049 020000010700

Sheet: 1 of 4

Printed: 4/24/2024

USER ID	DATE	TYPE	COMMENTS
Pontis	01/01/1995	R	RYF PROPOSED STRUCTURE: 2- 4 SPAN CONTINUOUS RC SLABS W/ 25' SPANS TO BE CONSTRUCTED UNDER PROJ 406300.10 SET 4.
Pontis	01/16/1996	R	RYF RATED PROPOSED STR. USING LF. MF BARS R5.5M2.0. INV = 258 OPER = 297 : POST = LEGAL ALL VEHICLES.
Pontis	08/17/1998	G	WHM 58-DECK 58.6-RAILING: CONCRETE BARRIER RAILS SHOW HAIRLINE SHRINKAGE CRACKS LOCATED THROUGHOUT. 58.8-DRAINS: ACCUMULATION OF SAND/DEBRIS IN GUTTER- LINES. 60-SUBSTRUCTURE 60.1.F-ABUT./EROSION: POTHOLES HAVE APPEARED AT EDGE OF PAVEMENT AT JUNCTION OF WING AND BACKWALL-NEAR RIGHT AND FAR LEFT CORNERS.
Pontis	07/24/2000	G	MWS * SAME AS PREVIOUS INSPECTION W/FOLLOWING ADDITIONS 58-DECK 58.6-RAILING: MINOR SPALL ON BARRIER RAIL AT END TREATMENT FAR LEFT. 58.8-DRAINS: GUTTERLINES AND DRAINS ARE CLEAR OF SAND AND DEBRIS. 60-SUBSTRUCTURE 60.1.F-ABUT/EROSION: POTHOLES AT EDGE OF PAVEMENT AT WINGS AND BACKWALLS HAVE BEEN REPAIRED.
Pontis	02/11/2001	G	WHM * UNDERWATER INSPECTION BY LLOYD PITTS, P.E.; C.B.I. DEFICIENCIES: LIGHT SCALING IN THE WET/DRY ZONE, POSSIBLY DUE TO SALINITY OF THE WATER. CORRECTIVE ACTION: MONITOR SCALING OF CONCRETE PILES. NO CORRECTIVE ACTION NECESSARY AT THIS TIME
Pontis	07/08/2002	G	MWS * SAME AS PREVIOUS INSPECTION W/FOLLOWING ADDITIONS: 58-DECK 58.2-STRUCTURAL: SPAN 5 RIGHT LANE SHOWS HAIR LINE CRACKS. CONSTRUCTION JOINTS SHOW MINOR HAIR LINE CRACKS. 58.12-EXPANSION JOINTS: COUNTY CREW PLACED JOINT FILLER MAT.
Pontis	07/13/2004	G	MWS * SAME AS PREVIOUS INSPECTION W/FOLLOWING ADDITIONS: 58-DECK 58.2-STRUCTURAL: DECK SHOWS HAIRLINE SHRINKAGE CRACKS @ SPAN 6 RIGHT AND LEFT LANE. SPAN 8 RIGHT AND LEFT LANE. SPAN 9 LEFT LANE. ** MISCELLANEOUS ** 275.APPROACH ROADWAY: BOTH APPROACHES NEED TO BE LEVELED W/POTHOLE @ ABUT.1.
Pontis	04/10/2005	R	WHM ***UNDERWATER UNSPECETION BY LLOYD PITTS,P.E., CBI THERE IS MINOR SCALING AND LOSS OF THE CONCRETE MATRIX IN THE WET/DRY ZONE. NO CORRECTIVE ACTION NECESSARY AT THIS TIME.
Pontis	07/20/2006	R	WHM *NO ADDITIONAL DEFICIENCIES NOTED AT THIS INSPECTION*
Pontis	02/26/2008	Α	JDH ITEM 21 BEFORE = 02 ITEM 21 AFTER = 04 ITEM 293 BEFORE = 02 ITEM 293 AFTER = 04

Pontis	07/12/2008	R	WHM 58-DECK 58.2-STRUCTURAL: DECK SHOWS HAIRLINE TO 1/8" WIDE CRACK ENTIRE LENGTH OF STRUCTURE 2' FROM CENTERLINE IN NORTHBOUND LANE. DECK SHOWS HAIRLINE TO 1/8" WIDE CRACK ENTIRE LENGTH IN CENTER OF SOUTHBOUND LANE. DECK SHOWS MINOR POPOUTS AND MINOR MAP CRACKING LOCATED THROUGHOUT. UNDERSIDE OF DECK SHOWS THAT CRACK IN SOUTH-BOUND LANE APPEARS TO BE FULL DEPTH AND SHOWS AREAS OF EFFLOR- ESCENCE. ALL CRACKS APPEAR TO BE SHRINKAGE CRACKS FROM THE CURING PROCESS DURING CONSTRUCTION. 58.6-RAILING: BARRIER RAIL SHOWS A SPALL ON OUTSIDE FACE AT BENT 8/RIGHT SIDE THAT IS 18"L X 9"W X 1"D. RAIL SHOWS A MINOR SPALL AT FAR RIGHT END ON TOP FACE THAT IS 3" ROUND AND 1"D. 58.12-EXP. JOINTS/DEVICES: EXPANSION JOINT AT CENTER OF DECK IS FILLED WITH SAND/DEBRIS. 59-SUPERSTRUCTURE 59.1.A-BEARING DEVICES: ASPHALT FELT/TAR PAPER BOND BREAKER BETWEEN DECK SLAB AND PILING CAPS APPEARS TO BE BRITTLE AND SHOWING SIGNS OF AGE. 60-SUBSTRUCTURE 60.2.A-BENTS/CAPS: PILING CAP AT BENT 5 OVER PILE C/NEAR FACE SHOWS A SPALL 36"L X 21"W X 3"D. 61-CHANNEL 61.3-DRIFT: LARGE TREE IN CHANNEL ON UPSTREAM SIDE AT BENT 6. 275-APPROACH ROADWAY CONDTION: MINOR SETTLEMENT HAS OCCURRED AT BOTH APPROACHES AND ASPHALT IS BREAKING APART. 36-TRAFFIC SAFETY FEATURES 36.D-END TREATMENT: THERE IS MINOR EROSION BEHIND END TREATMENT AT SOUTHWEST CORNER. BRUSH OBSCURES HAZARD STICKERS ON END TREAT-MENTS/EAST SIDE. ***UNDERWATER INSPECTION BY LLOY PITTS, P.E., C.B.I.*** THERE IS MINOR SCALING AND LOSS OF THE CONCRETE MATRIX IN THE WET/DRY ZONE. THERE IS SOME LOSS OF THE LARGER AGGREGATE UP TO 3/8" DEEP. NO CORRECTIVE ACTION NECESSARY AT THIS TIME BUT CONDITIONS SHOULD BE MONITORED AND POSSIBLE APPLICATION OF ACID RESISTANT SEALER IN THE FUTURE TO STOP LOSS OF CONCRETE MATRIX.
Pontis	06/26/2010	R	WHM 58-DECK 58.8-DRAINS: ACCUMULATION OF SAND/DEBRIS IN GUTTERLINES HAS BLOCKED SOME DRAINHOLES. 60-SUBSTRUCTURE 60.2.A-BENTS/CAPS: THE SPALL AT BENT 5 OVER PILE C NOW SHOWS EXPOSED REINFORCING STEEL. 61-CHANNEL 61.3-DRIFT: MINOR AMOUNT OF DRIFT ON UPSTREAM SIDE AT BENT 4.
Pontis	08/12/2010	R	WHM THE FOLLOWING ITEMS OF WORK WERE COMPLETED BY SHANE PARKER OF OF PARKER CONSTRUCTION FOR THE PRICE OF \$2,000.00: 1.  CLEANED/PATCHED SPALL W/EXPOSED REBAR AT BENT 5/CAP OVER PILE C 2.  REMOVAL OF LARGE AMOUNT OF DEBRIS UNDER SPAN 4 3. CLEANED SAND/DEBRIS FROM DECK/DRAINS 4. CLEANED/PATCHED SPALLS ON BARRIER RAIL AT FAR RIGHT CORNER
Pontis	06/16/2012	R	WHM 58-DECK 58.2-STRUCTURAL: 1. DECK SHOWS HAIRLINE MAP CRACKING IN BOTH LA OVER BENTS 2-8. 2. BOTTOM FACE OF DECK SHOWS 5' LONG HAIRLINE CRACKS WITH EFFLORESCENCE OVER PILE C SPANS 1-3. 3. SPANS 1 AND 2 SHOW HAIRLINE CRACKS W/EFFLORESCENCE ALONG CENTER LINE ENTIRE LENGTH. 4. SPAN 5 SHOWS 4' LONG HAIRLINE CRACKS W/EFFLORESCENCE OVER PILE B-D. 60-SUBSTRUCTURE 60.2.A-BENTS/CAPS: PATCH AT BENT 5/CAP APPEARS TO BE FAILING AROUND THE EDGES OF THE PATCH AND HAS CRUMBLED BUT REAMINS INTACT. 275-APPROACH ROADWAY CONDITION: BOTH APPROACHES HAVE BEEN LEVELED

WHM \*\*\*UNDERWATER INSPECTION BY SHANE PARKER, CBI\*\*\* PILES SHOW

SEALER AND CONTINUE TO MONITOR.

MINOR SCALING AND LOSS OF THE CONCRETE MATRIX W/LOSS OF SOME OF THE LARGER AGGREGATE IN THE WET/DRY ZONE. PILES ARE COVERED WITH ALGAE FROM THE MUDLINE UPWARDS. SCALING MAY BE DUE TO FERTILIZER RUNOFF INTO MAGNOLIA RIVER. MAY CONSIDER COATING WITH ACID RESISTANT

06/30/2012

**Pontis** 

R

Pontis 05/10/2014 R

WHM 58-DECK 58.2-STRUCTURAL: HAIRLINE MAP CRACKING AT SPAN 5/NORTHBOUND LN HAS INCREASED FROM HAIRLINE TO 1/8"WIDE. ALSO MAP CRACKING AT SPAN 3/BOTH LINES HAS INCREASED TO 1/8" WIDE. 58.11-JOINT LEAKAGE: THE SILICONE JOINT FILLER MATERIAL IS COMING OUT OF THE EXPANSION JOINT AT THE MIDDLE OF THE BRIDGE. 60-SUBSTRUCTURE 60.2.E-BENTS/SCOUR: SEE BI-4 REPORT. DUE TO THE RECENT HIGH- FLOW EVENT, LOCAL SCOUR HAS OCCURED FROM BENTS 3-7/BOTH SIDES. SCOUR RANGES FROM 1'-7'. SAFE SPAN PRINTED ONLY THE LAST (2) PROFILES TO SHOW THE COMPARISON FROM THE LAST INSPECTION. 61-CHANNEL 61.1-CHANNEL SHOWS SCOUR FROM BENTS 3-7/BOTH SIDES UP TO 7'. 61.2-EMBANKMENT EROSION: HAS OCCURRED AROUND GUARDRAIL PLATFORMS AT ALL (4) CORNERS. DO NOT MEET ALDOT STANDARD OF 28". 61.3-DRIFT: HAS ACCUMULATED ON UPSTREAM SIDE AT BENTS 4 & 5. 275-APPROACH ROADWAY CONDITION-THERE IS AN AREA OF EROSION UNDER THE EDGE OF PAVEMENT AT THE SOUTHEAST CORNER AT THE GUARDRAIL.

MackeyW 05/16/2016

58-Deck

G

58.2-Structural: The following quantities were derived for the Element Level inspection and refer to minor map cracking; Bent 2=160 SF, Bent 3=180 SF, Bent 4=240 SF, Bent 6=300 SF, Bent 7=200 SF and Bent 8=200 SF. Crack along the centerline=200 SF.

MackeyW 05/07/2018 G

58-Deck

rather than "bents".

58.6-railing: Several additional hairline vertical cracks are visible on barrier rails.

58.8- Drains: The gutterlines are filled with sand/debris.

58.11-The expansion joint at Bent 5 is packed with sand/debris.

275-Approach roadway Condition: There is some minor settlement at the bridge ends.

\*\*\*The thermoplastic center/edgeline striping has begun to fail in several locations.

\*\*\*The notes regarding the map cracking on the deck from 5/16/16 should read "spans"

SharpM 04/28/2020 G

Same as previous inspection w/following additions:

See file for Deck Sketch of Deficiencies.

Underside of Deck notes as follows:

Span 1 shows 2 cracks 4'L X at bent 2 over piles 2-3.

Span 2 shows a crack at centerline 23' L w/Efflorescence.

Span 3 shows a crack 12'L from Bent 3 with Efflorescence and 2 cracks at Bent 4 over piles 2-3.

Span 5 shows a crack at centerline 8'L with Efflorescence and (2) 5'L cracks at Bent 6 over 2-3 with Efflorescence.

Span 6 shows a 10'L crack from Bent 6 over pile 3 with Efflorescence and a 10'L crack at Bent 7 over pile 3 with Efflorescence.

Span 7 shows a crack at Centerline 23'L with Efflorescence.

Span 8 shows (2) cracks 23'L each with Efflorescence between piles 2-3 and 3-4.

Patch on Bent 5 cap is no longer sound 32"X 18".

\*\*\* See 2020 Dive Report\*\*\*

Debris at Bent Piles 3-8.

PetersonP 01/19/2021 G

Post Hurricane Sally inspection. Recorded cross sections and performed an underwater inspection on 1-18-21. Up to 6 ft of local scour noted. Some piles could not be fully inspected due to large amounts of debris. Moderate and heavy debris located throughout.

PetersonP 04/15/2022

Exposed aggregate on piles in the wet/dry zone.

Numerous hairline cracks on the ceiling located throughout with eff evident. Moderate debris evident in the channel. Light marine growth on piles (typ).

## ALDOT UNDERWATER PILE INSPECTION FORM

1. BIN 016355	Diver Official Use Only
2. DATE 4-19-2024	
3. DIVISION	Boat Wakin Wakin
4. COUNTY Baldwin	Special Equipment Needs
5. STRUCTURE#	MaxiDepith 13
6. WATERWAY Magnolia River	
7. ELEVATION (TOP OF RAIL TO WATER SURFACE)	
8. LEVEL OF INSPECTION: 1 2 3 9. INSPECTION TYPE: ROUTINE CONSTRUCTION INTERIM	
TYPE OF PILES: STEEL H PILE ENCASED CONCRETE PILE  10. PILES PER BENT: # 5 TOWER BENT: YES NO	
11. CONFIGURATION OF PILES PILE SIZE: 18" DIAG. BRACING: YES	Now Horz. Bracing: Yes Now
12. BOTTOM TYPE: MUD SILT SAND CLAY CLAY	GRAVEL ROCK RIP RAP
13. MARINE GROWTH: NONE LIGHT MODERATE	HEAVY
14. ABRASION/SCALING: NONE LIGHT MODERATE	HEAVY
15. HONEYCOMB: NONE LIGHT MODERATE	HEAVY
16. SPALLS: NONE LIGHT MODERATE	HEAVY
17. COLLISION DAMAGE: NONE LIGHT MODERATE	HEAVY
18. CRACKING: NONE LIGHT MODERATE	HEAVY
19. DRIFT: NONE LIGHT MODERATE	HEAVY
20. CONST. DEBRIS: NONE V LIGHT MODERATE	HEAVY
21. EXPOSED STEEL: YES NO PILE RE	INFORCEMENT
22. OVERALL UW. PILE SCORE: 7	
23. OVERALL SCORE OF UW. BRACING: NA	
24. OVERALL SCORE OF UW. CONNECTORS:/#	
25. FLOW DIRECTION: SOUTH NORTH WEST	EAST TIDAL T
26. SCOUR COUNTERMEASURES OBSERVED: YES NO	
27. SCOUR EVALUATION RECOMMENDED @ SITE: YES NO NO	
28. DIVER RECOMMENDATIONS: None at this time.	
29. TOPSIDE INSPECTOR:	ACBI# 373 DATE 4-19.24
30. DIVER INSPECTOR: Lite fileser	ACBI# 70/ DATE 4-19-24
31	A support and a second contract of the second

Best 12,3, 9, 1, 7, 8,9 24" punt 18" X 32"