

Bridge Inspection Report

US 80

over

SLOUGH LAUDERDALE County

- INSPECTION DATE 04/20/2023
- STRUCTURE NUMBER 210008003812350
- BRIDGE ID 12378



Suffiency Rating: 52.4

Health Index:

0

Status: OK Inspected By: Team Leader Jeff McGee

Taylor Coker, Jeff McGee, Bryan Nutt,

Inspection Type(s): Routine

Inspection Performed By: State

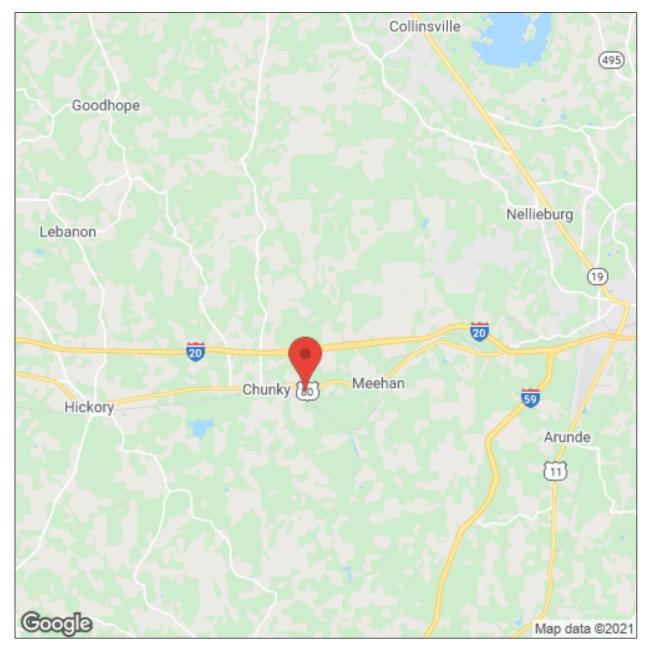
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Location Map



Latitude: 32.32469 Longitude: -88.906813

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Executive Summary

2023 ROUTINE INSPECTION

DECK IS FAIR CONDITION, RATED 5, WITH MOD. SCALING AND POP OUTS, WITH EXPOSED REBAR IN THE SOFFITS.

SUPERSTRUCTURE IS IN FAIR CONDITION, RATED 5, WITH VERTICAL CRACKS BEAM ENDS AND EXPOSED REBAR.

SUBSTRUCTURE IS IN FAIR CONDITION, RATED 6, WITH ISOLATED EXPOSED REBAR IN CAPS.

CHANNEL IS IN GOOD CONDITION, RATED 8, NO PROBLEMS NOTED.

Recommendations:

- 1. Repair Beam ends.
- 2. Clean and seal deck.

LAUDERDALE **Structure Number: 210008003812350** County: **Facility Carried:** US 80

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National Bridge Inventory

		,							
	IDENTIFICA	ATION					INSPECTION	IS	
(1) STATE CODE	284 - Miss	issippi				(90) INSPECTION DATE	04/20/2023		
(8) STRUCTURE NUMBER	210008003	3812350				(91) DESIGNATED INSPECTIO	N FREQUENCY	12	
(5) INV. ROUTE (ON/UNDER)	1	2	1	08000	0	(92) CRITICAL FEATURE INSF	PECTION		(93) CFI DATE
(2) HIGHWAY AGENCY 05	(3) COUN	NTY CODE	075			A. FRACTURE CRITICAL D	ETAIL N		
(4) PLACE CODE	92556					B. UNDERWATER INSPEC	TION N		
(6) FEATURES INTERSECTED	SLOUGH					C. OTHER SPECIAL	N		
(7) FACILITY CARRIED	US 80						CONDITION	I	
(9) LOCATION	0.5 MI E N	NEWTON	CL			(58) DECK	5		
(11) MILEPOINT 0.532 (1	2) BASE HIG	HWAY NE	TWORK	0		(59) SUPERSTRUCTURE 5	(60) SUB	STRUCTURE 6	
		(()							

(13A) LRS INVENTORY ROUTE 000000080P (13B) SUBROUTE NUMBER 1

(16) LATITUDE 32.32469 (17) LONGITUDE -88.906813

(98A) BORDER BRIDGE CODE

PERCENT RESPONSIBILITY (99) BORDER BRIDGE STRUCT

STRUCTURE TYPE AND MATERIAL

(43) STRUCTURE TYPE, MAIN

A) KIND OF MATERIAL/DESIGN: 1 - Concrete B) TYPE OF DESIGN/CONSTR: 04 - Tee Beam

(44) STRUCTURE TYPE, APPROACH SPANS

A) KIND OF MATERIAL/DESIGN: B) TYPE OF DESIGN/CONSTR:

(45) NUMBER OF SPANS IN MAIN 3 (46) NUMBER OF APPROACH 0 (107) DECK STRUCTURE TYPE 1 (108A) WEARING SURFACE 0 (108B) DECK MEMBRANE (108C) DECK PROTECTION 0

AGE OF SERVICE

(27) YEAR BUILT 1928 (106) YEAR RECONSTRUCTED

(42) TYPE OF SERVICE ON 1 UNDER 9 (28) LANES ON 02 UNDER 00

(29) AVERAGE DAILY TRAFFIC 1200 (19) BYPASS DETOUR LENGTH 15

(30) YEAR OF AVERAGE DAILY TRAFFIC 2020 (109) AVERAGE DAILY TRUCK TRAFFIC 12

GEOMETRIC DATA

(48) LENGTH OF MAX SPAN (ft.) 24 (49) STRUCTURE LENGTH (ft.) 80.1 (50) CURB/SIDEWALK WIDTHS (ft.) RIGHT .7 (51) BRDG RDWY WIDTH CURB-TO-CURB (ft.) 20.7 (52) DECK WIDTH, OUT-TO-OUT (ft.) 22 6 (32) APPROACH ROADWAY WIDTH (ft.) 29 9 (33) BRIDGE MEDIAN 0 (34) SKEW (DEG.) 0 (35) STRUCTURE FLARED 0 (10) INV RTE, MIN VERT CLEAR (ft.) 99.99 (47) TOTAL HORIZONTAL CLEARANCE (ft.) (53) VERTICAL CLEARANCE OVER BRIDGE ROADWAY (ft.) 99.99 (54) VERTICAL UNDER CLEARANCE (ft.) 0 Ν (55) LATERAL UNDER CLEARANCE RIGHT (ft.) Ν 0 (56) MIN LATERAL UNDER CLEARANCE (ft.)

PROPOSED IMPROVEMENTS

(75A) TYPE OF WORK PROPOSED 31 (75B) WORK DONE BY 1

(76) LENGTH OF STRUCTURE IMPROVEMENT (ft.) 131.9 (94) BRIDGE IMPROVEMENT COST (\$) 313000 31000 (95) ROADWAY IMPROVEMENT COST (\$) (96) TOTAL PROJECT COST 932000 (97) YEAR OF IMPROVEMENT COST ESTIMATE

(115) YEAR OF FUTURE ADT 2041 (114) FUTURE ADT 1200

(61) CHANNEL & CHANNEL PROTECTION 8 (62) CULVERT N

(31) DESIGN LOAD

(63) METHOD USED TO DETERMINE OPERATING RATING 1

40.3 (64) OPERATING RATING

(65) METHOD USED TO DETERMINE INVENTORY RATING 1

(66) INVENTORY RATING (70) BRIDGE POSTING

(41) STRUCTURE OPEN/POSTED/CLOSED P

<u>APPRAISAL</u>

LOAD RATING AND POSTING

(67) STRUCTURAL EVALUATION 5

(68) DECK GEOMETRY

(69) UNDERCLEARANCES, VERTICAL & HORIZONTAL N

(71) WATERWAY ADEQUACY 8

(72) APPROACH ROADWAY ALIGNMENT 5

(36) TRAFFIC SAFETY FEATURE

36A) BRIDGE RAILINGS: 0 36B) TRANSITIONS: n 36C) APPROACH GUARDRAIL: 0 36D) APPROACH GUARDRAIL ENDS: 1 (113) SCOUR CRITICAL BRIDGES

SUFFICIENCY RATING 52.4 STATUS 2

CLASSIFICATION

(112) NBIS BRIDGE LENGTH

(104) HIGHWAY SYSTEM OF THE INVENTORY ROUTE 0

(26) FUNCTIONAL CLASSIFICATION OF INVENTORY ROUTE 07

(100) STRAHNET HIGHWAY DESIGNATION

(101) PARALLEL STRUCTURE DESIGNATION N

(102) DIRECTION OF TRAFFIC 2

(103) TEMP STRUCTURE

(105) FEDERAL LANDS HIGHWAYS 0 (110) DESIGNATED NATIONAL NETWORK 0

(20) TOLL

(21) MAINTENANCE RESPONSIBILITY 01 (22) OWNER

(37) HISTORICAL 5

NAVIGATION DATA

(38) NAVIGATION CONTROL (111) PIER OR ABUTMENT PROTECTION

(39) NAV VERT CLEARANCE (ft.) 0

(116) MIN NAVIGATION VERT CLEARANCE, VERT LIFT BRIDGE (ft.)

01

(40) NAV HORIZONTAL CLEARANCE (ft.) 0

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Element Inspection

	Environment	Total Quantity	Units	Condition State 1	Condition State 2	Condition State 3	Condition State 4
16 - Reinforced Concrete Top Flange	Ben.	1647	sq. ft.	0	1647	0	0
1080 - Delamination/Spall/Patched Area		2		0	2	0	0
1090 - Exposed Rebar		1		0	1	0	0
1190 - Abrasion/Wear (PSC/RC)		1644		0	1644	0	0
110 - Reinforced Concrete Open Girder/Beam		243	ft.	242	1	0	0
1090 - Exposed Rebar		1		0	1	0	0
205 - Reinforced Concrete Column	Ben.	4	each	4	0	0	0
215 - Reinforced Concrete Abutment	Ben.	50	ft.	50	0	0	0
234 - Reinforced Concrete Pier Cap	Ben.	50	ft.	37	13	0	0
1090 - Exposed Rebar		13		0	13	0	0
304 - Open Expansion Joint	Ben.	42	ft.	42	0	0	0
331 - Reinforced Concrete Bridge Railing	Ben.	161	ft.	161	0	0	0

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ADMINISTRATION

Structure Assessment								
Structural/Functional Classificat	ion: OK		Health Index	:	0			
Suffiency Rating:	52.4		Replacemen	t Index:	52.5			
	Propose	d Improv	/ements					
75A Type of Work Proposed: 3	1 - Replacement -		94 Bridge Imp	rovement C	ost:	313000	\$	
75B Work Done By: 1	- Work to be done by cor	ntract	95 Roadway I	mprovement	t Cost:	31000	\$	
76 Length Of Structure Improve	ment: 131.9	Ft.	96 Total Proje	ct Cost:		932000		
Project Notes: 932014.648565	78049		97 Year Of Im	provement (Cost Es	stimate: 201	1	
	Origina	al Constr	uction					
Project Number: FAP-185(B)	Plans Available: Unknown							
Station: 524+70								
	Site	Condition	ons					
Snooper Required: No		Sit	e Vegetation:	None				
Traffic control required: None								
Utility Attachments:								
□Water	Sewer		Telecom					
□Gas	Electric		Other					
Overhead Appurtenances:								
☐Sign Truss	□Signal		Lighting					
☐Utility Line			Other					

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Approach Report

NBI Info						
(36B) TRANSITIONS	0 - Does not meet acceptable standards/safety feature is required					
(36C) APPROACH GUARDRAIL	0 - Does not meet acceptable standards/safety feature is required					
(36D) APPROACH GUARDRAIL ENDS	1 - Meets acceptable standards					
(72) APPROACH ROADWAY ALIGNMENT	5 - Somewhat better than minimum adequacy to tolerate being left in place as is					

	Approac	h
Appr Guardrail-rear Left Position	Good	S
Appr Guardrail-rear Right Position	Good	S
Appr Guardrail-forward Left Position	Good	S
Appr Guardrail-forward Right Position	Good	S
Appr Roadway Condition	Good	
Appr Roadway Transitions	Good	
	Signag	е
End Of Bridge Markers	Good	
Vertical Clearance Signing	NA	

	5 5
End Of Bridge Markers	Good
Vertical Clearance Signing	NA
Posting Sign - Rear	NA
Posting Sign - Forward	NA
Posting Values Correct	NA
Valid Posting Limits	

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DECK

NBI Info

(58) DECK 5 - Fair Condition (minor section loss)

(036A) BRIDGE RAIL 0 - Does not meet acceptable standards/safety feature is required

(108A) WEARING SURFACE 0 - None

LEFT SHOULDER WIDTH 1.5 FT.
RIGHT SHOULDER WIDTH 1.5 FT.

ASBESTOS DRAINS U

DECK AREA 1810 SQ FT.

Condition

Full Bridge

Structure: Fair MOD. DECK SCALING, SEVERAL POP OUTS, REBAR EXP. AT BAY 1 AT SPAN 3,

SOFFIT, EXP. REBAR AT SOFFIT AREA ALL 3 SPANS, SEVERAL LOCATIONS.

Notes

Wearing Surface: Fair

Curbs: NA

Median: NA

Sidewalk: NA

Joints: Poor

Railing: Good

Drainage: Good

Lighting: NA

Utilities: NA

Overlay Thickness: in

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SUPERSTRUCTURE

NBI Info

(59) SUPERSTRUCTURE

5 - Fair Condition (minor section loss)

NUMBER OF BRIDGE PINS

FRACTURE CRITICAL DETAILS

Full Bridge

CONDITION

Girders: Fair VERT. CRACKS AT CONC. BEAM ENDS OF SPAN 2, B-3, BEAM 3. VC'S

AT R/C BEAMS, EXP. REBAR AT SPAN 2, BEAM 3, 1', 2'X1' REBAR AT SPAN 1, SPALL AND DELAM BEAM 3 SPAN 2 BOTTOM OF BEAM 4'X1'.

Notes

Floor Beams: NA

Stringers: NA

Steel Risers: NA

Bearings: NA

Hinge Pins/Hangers: NA

Diaphragms/Cross Frames: Fair CONC. DIA CRACKED AT B-4 AT ENDWALL.

Condition

Paint: NA

Collision Damage: Good

Deflection/Vibration: Good

Cap/Girder Debris: Fair

Navigation Lighting: NA

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SUBSTRUCTURE

NBI Info

(60) SUBSTRUCTURE 6 - Satisfactory Condition (minor deterioration)

(111) PIER PROTECTION

Abutments

<u>Condition</u> <u>Notes</u>

Backwall: Good

Bulkhead: NA

Wing Walls: Good

Cap: Fair B-2, SPAN 1, SPALL WITH EXP. REBAR 1'X1' FACE OF CAP. B-3 SPAN 2

SPALLS WITH EXP REBAR AT WEST SIDE OF CAP, 3'.

Footings: NA

Piles: NA

Embankment: Good

Slope Paving: NA

Full Bridge

<u>Condition</u> <u>Notes</u>

Cap: Fair

Risers: NA

Columns/Piles: Good

Footings: NA

Web Walls: NA

Bracing: NA

Pier Protection-Navigation: NA

Pier Protection Lighting: NA

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Hydraulics Report

NBI Info

(61) CHANNEL & CHANNEL PROTECTION 8 - Banks are protected

(113) SCOUR CRITICAL BRIDGES 5 - Scour within limits of footing or piles

(110) 000011 011110/12 2		0 0 00a	and mines of rooting or photo				
(71) WATERWAY ADEQU	ACY	8 - Bridge Al	8 - Bridge Above Approaches				
		Нус	draulics				
DESIGN MAIN CHANNEL	SPAN	CU	RRENT MAIN CHANNEL S	SPAN			
BANK CONDITION-UPSTR	REAM	Good					
BANK CONDITION-SITE		Good					
BANK CONDITION-DOWN	ISTREAM	Good					
SCOUR COUNTERMEAS	URES	Good					
SPURS	BEND	WAY WEIRS	DROP STRUCTURES	HARDPOINTS			
JACKS	LONG	ITUDINAL DIKES	GUIDE BANKS	✓ RIPRAP			
☐GABIONS ☐CRUTC		CH S/UNDERPINNING	CROSS BRACING	SHEET PILE/COFFERDAM			
DEBRIS DEFLECTORS	□VISUA	L SCOUR MONITORING	FIXED SCOUR MONITOR	ING INSTRUMENTATION			
STREAMBED MATERIAL							
COBBLE/BOULDER	GRAVEL	SAND	SILT	✓ SILT-CLAY			
UNKNOWN FOUNDATION	1						
SCOUR EVALUATION DO	NE		S				
USGS GAGING STATION			None				
OBSERVED STREAM VEL	OCITY		Low				
STREAMBED AGGRADAT	TION EVIDE	NT	None				
STREAMBED DEGRADAT	TON EVIDE	NT	None				
ABUTMENTS ENCROACH	HINTO CHA	No	No				
INDICATIONS OF SCOUR		No	No				
EVIDENCE OF ABUTMEN	T UNDERM	No					
EVIDENCE OF PIER UND	ERMINING	NA					
INDICATIONS THAT FLOO	DDWATERS	E No					
INDICATIONS THAT FLOO	DDWATERS	ACHES No					
SCOUR NOTES							

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Pictures



PHOTO 1 General, Superstructure

Description ELEVN

Pictures



PHOTO 2 General

Description CLE

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Pictures



PHOTO 3 General, Substructure, Channel

Description

DS

Pictures



PHOTO 4 General

Description ELEVS

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Pictures



PHOTO 5 Substructure

Description B-2 SPAN 1, SPALL WITH EXP. REBAR 1' X1' FACE OF CAP

Pictures



PHOTO 6 Substructure

Description B-3 SPAN 2, SPALLS IN CAP.

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Pictures



PHOTO 7 Superstructure

Description SPALL AND DELAM BEAM 3 SPAN 2 BOTTOM OF BEAM 4'X1'. VC'S AT R/C BEAMS

Pictures



PHOTO 8 General, Substructure, Channel

Description US

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Pictures



PHOTO 9 General

Description CLW

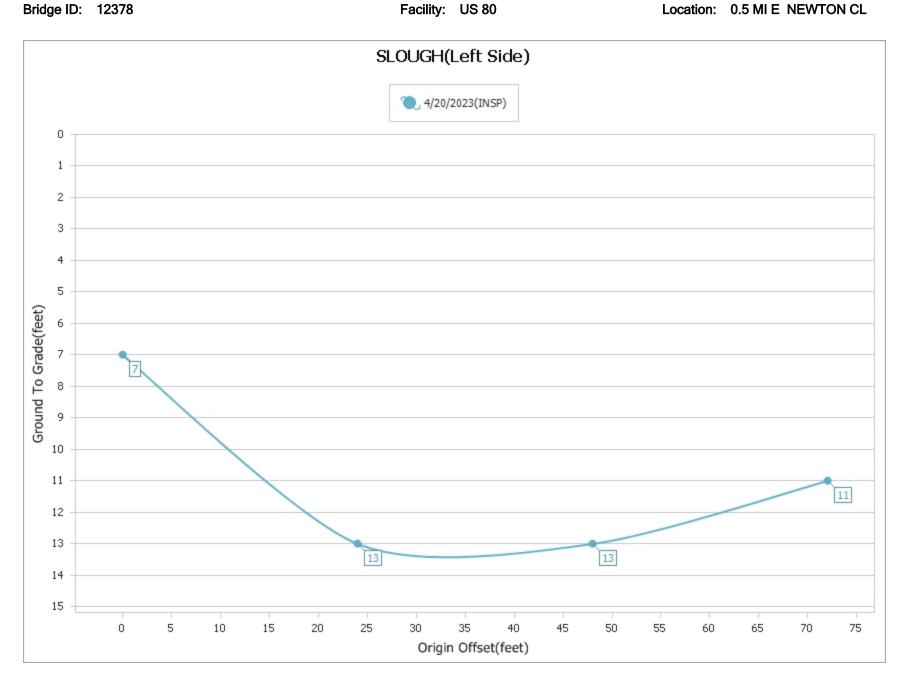
Pictures



PHOTO 10 Deck

Description MOD. DECK SCALING. SEVERAL POP OUTS

Structure#: 210008003812350 County: Lauderdale
Bridge ID: 12378 Facility: US 80



Feature Intersected: SLOUGH

Structure#: 210008003812350 County: Lauderdale Feature Intersected: SLOUGH Bridge ID: 12378 Facility: US 80 Location: 0.5 MI E NEWTON CL

