



Bridge Inspection Report

US 80

over

CHUNKY RIVER

LAUDERDALE County

- INSPECTION DATE
04/20/2023
- STRUCTURE NUMBER
210008003812330
- BRIDGE ID
12377



Sufficiency Rating:
51.8

Health Index:
100.00

Status:
OK

Inspected By: Team Leader Jeff McGee

Taylor Coker, Jeff McGee, Bryan Nutt,

Inspection Type(s): Routine

Inspection Performed By: State

TABLE OF CONTENTS

	PAGE NUMBER
LOCATION MAP BRIDGE	1
EXECUTIVE SUMMARY	2
NATIONAL BRIDGE INVENTORY	3
ELEMENTS	4
ADMINISTRATION	5
APPROACH	6
DECK	7
SUPERSTRUCTURE	8
SUBSTRUCTURE	9
HYDRAULICS	10
PICTURES	11

County:	LAUDERDALE	Structure Number:	210008003812330	Facility Carried:	US 80
Inspection Date:	04/20/2023	Bridge ID:	12377	Feature Intersected:	CHUNKY RIVER

Location Map



Latitude: 32.326436
Longitude: -88.909533

County:	LAUDERDALE	Structure Number:	210008003812330	Facility Carried:	US 80
Inspection Date:	04/20/2023	Bridge ID:	12377	Feature Intersected:	CHUNKY RIVER

Executive Summary

2023 ROUTINE INSPECTION

DECK IS IN FAIR CONDITION,RATED 5,WITH HEAVY DECK SCALING,SPALLS IN CURB,LIGHT COLL.DAMAGE TO BRIDGE RAIL AND JOINTS FAILED AT BENTS 6 AND 7.

SUPERSTRUCTURE IS IN FAIR CONDITION,RATED 5,WITH BEAM END CRACKS AT VARIOUS LOC.SEE NOTES

SUBSTRUCTURE IS IN FAIR CONDITION,RATED 5,WITH CRACKS,SPALLS AND EXPOSED REBAR IN CAPS.

CHANNEL IS IN GOOD CONDITION,RATED 7,WITH MINOR PROBLEMS.

RECOMMENDATIONS:

1. REPAIR BEAM ENDS
2. REPAIR JOINTS OVER BENTS 6 AND 7

County:	LAUDERDALE	Structure Number:	210008003812330	Facility Carried:	US 80
Inspection Date:	04/20/2023	Bridge ID:	12377	Feature Intersected:	CHUNKY RIVER

National Bridge Inventory

IDENTIFICATION						INSPECTIONS	
(1) STATE CODE	284 - Mississippi					(90) INSPECTION DATE	04/20/2023
(8) STRUCTURE NUMBER	210008003812330					(91) DESIGNATED INSPECTION FREQUENCY	24
(5) INV. ROUTE (ON/UNDER)	1	2	1	00080	0	(92) CRITICAL FEATURE INSPECTION	(93) CFI DATE
(2) HIGHWAY AGENCY 05	(3) COUNTY CODE 075					A. FRACTURE CRITICAL DETAIL	N
(4) PLACE CODE	92556					B. UNDERWATER INSPECTION	N
(6) FEATURES INTERSECTED	CHUNKY RIVER					C. OTHER SPECIAL	N
(7) FACILITY CARRIED	US 80					CONDITION	
(9) LOCATION	0.3 MI E NEWTON CL					(58) DECK	5
(11) MILEPOINT 0.326	(12) BASE HIGHWAY NETWORK 0					(59) SUPERSTRUCTURE 5	(60) SUBSTRUCTURE 5
(13A) LRS INVENTORY ROUTE 000000080P	(13B) SUBROUTE NUMBER 1					(61) CHANNEL & CHANNEL PROTECTION 7	(62) CULVERT N
(16) LATITUDE 32.326436	(17) LONGITUDE -88.909533					LOAD RATING AND POSTING	
(98A) BORDER BRIDGE CODE						(31) DESIGN LOAD	2
PERCENT RESPONSIBILITY	(99) BORDER BRIDGE STRUCT					(63) METHOD USED TO DETERMINE OPERATING RATING	1
STRUCTURE TYPE AND MATERIAL							
(43) STRUCTURE TYPE, MAIN							
A) KIND OF MATERIAL/DESIGN: 3 - Steel							
B) TYPE OF DESIGN/CONSTR: 02 - Stringer/Multi-beam or Girder							
(44) STRUCTURE TYPE, APPROACH SPANS							
A) KIND OF MATERIAL/DESIGN: 1 - Concrete							
B) TYPE OF DESIGN/CONSTR: 04 - Tee Beam							
(45) NUMBER OF SPANS IN MAIN 1	(46) NUMBER OF APPROACH 9					(65) METHOD USED TO DETERMINE INVENTORY RATING	1
(107) DECK STRUCTURE TYPE 1	(108A) WEARING SURFACE 0					(66) INVENTORY RATING	25.2
(108B) DECK MEMBRANE 0	(108C) DECK PROTECTION 0					(70) BRIDGE POSTING	5
(41) STRUCTURE OPEN/POSTED/CLOSED A							
APPRAISAL							
(67) STRUCTURAL EVALUATION 5							
(68) DECK GEOMETRY 2							
(69) UNDERCLEARANCES, VERTICAL & HORIZONTAL N							
(71) WATERWAY ADEQUACY 6							
(72) APPROACH ROADWAY ALIGNMENT 4							
(36) TRAFFIC SAFETY FEATURE							
36A) BRIDGE RAILINGS: 0							
36B) TRANSITIONS: 0							
36C) APPROACH GUARDRAIL: 0							
36D) APPROACH GUARDRAIL ENDS: 0							
(113) SCOUR CRITICAL BRIDGES 5							
SUFFICIENCY RATING 51.8 STATUS 2							
CLASSIFICATION							
(112) NBIS BRIDGE LENGTH Y							
(104) HIGHWAY SYSTEM OF THE INVENTORY ROUTE 0							
(26) FUNCTIONAL CLASSIFICATION OF INVENTORY ROUTE 07							
(100) STRAHNET HIGHWAY DESIGNATION 0							
(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 3							
(21) MAINTENANCE RESPONSIBILITY 01							
(22) OWNER 01							
(37) HISTORICAL 5							
NAVIGATION DATA							
(38) NAVIGATION CONTROL 0							
(111) PIER OR ABUTMENT PROTECTION							
(39) NAV VERT CLEARANCE (ft.) 0							
(116) MIN NAVIGATION VERT CLEARANCE, VERT LIFT BRIDGE (ft.)							
(40) NAV HORIZONTAL CLEARANCE (ft.) 0							

County:	LAUDERDALE	Structure Number:	210008003812330	Facility Carried:	US 80
Inspection Date:	04/20/2023	Bridge ID:	12377	Feature Intersected:	CHUNKY RIVER

Element Inspection

	Environment	Total Quantity	Units	Condition State 1	Condition State 2	Condition State 3	Condition State 4
12 - Reinforced Concrete Deck	Ben.	2662	sq. ft.	2662	0	0	0
16 - Reinforced Concrete Top Flange	Ben.	5544	sq. ft.	0	0	5544	0
1190 - Abrasion/Wear (PSC/RC)		5544		0	0	5544	0
107 - Steel Open Girder/Beam	Ben.	489	ft.	489	0	0	0
110 - Reinforced Concrete Open Girder/Beam	Ben.	755	ft.	735	0	20	0
1130 - Cracking (RC and Other)		20		0	0	20	0
205 - Reinforced Concrete Column	Ben.	18	each	18	0	0	0
215 - Reinforced Concrete Abutment	Ben.	50	ft.	50	0	0	0
234 - Reinforced Concrete Pier Cap	Ben.	450	ft.	432	18	0	0
1080 - Delamination/Spall/Patched Area		4		0	4	0	0
7000 - Damage		14		0	14	0	0
301 - Pourable Joint Seal	Ben.	130	ft.	0	0	0	130
2330 - Seal Damage		130		0	0	0	130
302 - Compression Joint Seal	Ben.	37	ft.	0	0	0	37
2330 - Seal Damage		37		0	0	0	37
310 - Elastomeric Bearing	Ben.	4	each	4	0	0	0
311 - Movable Bearing	Ben.	8	each	8	0	0	0
331 - Reinforced Concrete Bridge Railing	Ben.	738	ft.	738	0	0	0

County:	LAUDERDALE	Structure Number:	210008003812330	Facility Carried:	US 80
Inspection Date:	04/20/2023	Bridge ID:	12377	Feature Intersected:	CHUNKY RIVER

ADMINISTRATION

Structure Assessment

Structural/Functional Classification:	OK	Health Index:	100.00
Sufficiency Rating:	51.8	Replacement Index:	52.5

Proposed Improvements

75A Type of Work Proposed:	31 - Replacement -	94 Bridge Improvement Cost:	1334000	\$
75B Work Done By:	1 - Work to be done by contract	95 Roadway Improvement Cost:	133000	\$
76 Length Of Structure Improvement:	465.6	Ft.	96 Total Project Cost:	3761000
Project Notes:	3760519.2685232256	97 Year Of Improvement Cost Estimate:	2011	

Original Construction

Project Number:	FAP-185(B) / MP-5080(1)	Plans Available:	Yes
Station:	530+55.83		

Site Conditions

Snooper Required:	Yes	Site Vegetation:	None
-------------------	-----	------------------	------

Traffic control required: Lane Closure

Utility Attachments:

<input type="checkbox"/> Water	<input type="checkbox"/> Sewer	<input type="checkbox"/> Telecom
<input type="checkbox"/> Gas	<input type="checkbox"/> Electric	<input type="checkbox"/> Other

Overhead Appurtenances:

<input type="checkbox"/> Sign Truss	<input type="checkbox"/> Signal	<input type="checkbox"/> Lighting
<input type="checkbox"/> Utility Line		<input type="checkbox"/> Other

County:	LAUDERDALE	Structure Number:	210008003812330	Facility Carried:	US 80
Inspection Date:	04/20/2023	Bridge ID:	12377	Feature Intersected:	CHUNKY RIVER

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	0 - Does not meet acceptable standards/safety feature is required
(72) APPROACH ROADWAY ALIGNMENT	4 - Meets minimum tolerable limits to be left in place as is

Approach

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	

Signage

End Of Bridge Markers	Good
Vertical Clearance Signing	NA
Posting Sign - Rear	NA
Posting Sign - Forward	NA
Posting Values Correct	NA
Valid Posting Limits	H TRUCK LIMIT - 29 TONS HS SHORT LIMIT - 40 TONS

County:	LAUDERDALE	Structure Number:	210008003812330	Facility Carried:	US 80
Inspection Date:	04/20/2023	Bridge ID:	12377	Feature Intersected:	CHUNKY RIVER

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	1.2	FT.
RIGHT SHOULDER WIDTH	1.2	FT.
ASBESTOS DRAINS	U	
DECK AREA	8209	SQ FT.

Full Bridge

	<u>Condition</u>	<u>Notes</u>
Structure:	Fair	curb below bridgerail spalled at b-5 north side,spalled at b-3 north side,top of bridgerail post coll. damage at bent 2,b-e north side,heavy deck scaling ,
Wearing Surface:	Poor	
Curbs:	NA	
Median:	NA	
Sidewalk:	NA	
Joints:	Poor	joints failed at b-6 and b-7
Railing:	Good	
Drainage:	Good	
Lighting:	NA	
Utilities:	NA	
Overlay Thickness:	in	

County:	LAUDERDALE	Structure Number:	210008003812330	Facility Carried:	US 80
Inspection Date:	04/20/2023	Bridge ID:	12377	Feature Intersected:	CHUNKY RIVER

SUPERSTRUCTURE

NBI Info

(59) SUPERSTRUCTURE 5 - Fair Condition (minor section loss)

NUMBER OF BRIDGE PINS

FRACTURE CRITICAL DETAILS

Full Bridge

CONDITION

	<u>Condition</u>	<u>Notes</u>
Girders:	Fair	beam 1 at span 3,3 delams and 1 spall exposed rebar,beam end spalled b-2 span 2 beams 1 and 2,b-3 span 3 beams 1 and 3,b-4 span 4 beams 1and 3, b-8 span 8 beam 1,b-9 span 8 beam 1,b-10 span 10 beams 1 and 3,4' horizontal crack in beam 3 span 5, span 9 beam 3 12' horizontal crack
Floor Beams:	NA	
Stringers:	NA	
Steel Risers:	NA	
Bearings:	Good	MAIN SPAN
Hinge Pins/Hangers:	NA	
Diaphragms/Cross Frames:	Good	
Paint:	Good	
Collision Damage:	NA	
Deflection/Vibration:	Good	
Cap/Girder Debris:	Poor	
Navigation Lighting:	NA	

County:	LAUDERDALE	Structure Number:	210008003812330	Facility Carried:	US 80
Inspection Date:	04/20/2023	Bridge ID:	12377	Feature Intersected:	CHUNKY RIVER

SUBSTRUCTURE

NBI Info

(60) SUBSTRUCTURE 5 - Fair Condition (minor section loss)

(111) PIER PROTECTION

Abutments

	<u>Condition</u>	<u>Notes</u>
Backwall:	Good	spall sw corner 3'x1'
Bulkhead:	NA	
Wing Walls:	Good	
Cap:	Good	cracking bottom of cap at b-10 ,6',spall face of cap b-7 span 6 between beams 3 and 4 2'x1', exposed rebar in face of cap b-4 span 4
Footings:	NA	
Piles:	NA	
Embankment:	Good	
Slope Paving:	NA	

Full Bridge

	<u>Condition</u>	<u>Notes</u>
Cap:	Good	
Risers:	Good	
Columns/Piles:	Good	
Footings:	NA	
Web Walls:	Good	
Bracing:	NA	
Pier Protection-Navigation:	NA	
Pier Protection Lighting:	NA	

County:	LAUDERDALE	Structure Number:	210008003812330	Facility Carried:	US 80
Inspection Date:	04/20/2023	Bridge ID:	12377	Feature Intersected:	CHUNKY RIVER

Hydraulics Report

NBI Info

(61) CHANNEL & CHANNEL PROTECTION 7 - Bank protection needs minor repairs
 (113) SCOUR CRITICAL BRIDGES 5 - Scour within limits of footing or piles
 (71) WATERWAY ADEQUACY 6 - Occasional Overtopping of Approaches - Insignificant Delays

Hydraulics

DESIGN MAIN CHANNEL SPAN	6	CURRENT MAIN CHANNEL SPAN	6
BANK CONDITION-UPSTREAM	Good		
BANK CONDITION-SITE	Good		
BANK CONDITION-DOWNSTREAM	Good		
SCOUR COUNTERMEASURES	Good		

<input type="checkbox"/> SPURS	<input type="checkbox"/> BENDWAY WEIRS	<input type="checkbox"/> DROP STRUCTURES	<input type="checkbox"/> HARDPOINTS
<input type="checkbox"/> JACKS	<input type="checkbox"/> LONGITUDINAL DIKES	<input type="checkbox"/> GUIDE BANKS	<input checked="" type="checkbox"/> RIPRAP
<input type="checkbox"/> GABIONS	<input type="checkbox"/> CRUTCH BENTS/UNDERPINNING	<input type="checkbox"/> CROSS BRACING	<input type="checkbox"/> SHEET PILE/COFFERDAM
<input type="checkbox"/> DEBRIS DEFLECTORS	<input type="checkbox"/> VISUAL SCOUR MONITORING	<input type="checkbox"/> FIXED SCOUR MONITORING INSTRUMENTATION	

STREAMBED MATERIAL

☒ COBBLE/BOULDER ☐ GRAVEL ☒ SAND ☐ SILT ☐ SILT-CLAY

UNKNOWN FOUNDATION

SCOUR EVALUATION DONE

USGS GAGING STATION	1
OBSERVED STREAM VELOCITY	Low
STREAMBED AGGRADATION EVIDENT	None
STREAMBED DEGRADATION EVIDENT	None
ABUTMENTS ENCROACH INTO CHANNEL	No
INDICATIONS OF SCOUR	Yes
EVIDENCE OF ABUTMENT UNDERMINING	No
EVIDENCE OF PIER UNDERMINING	NA
INDICATIONS THAT FLOODWATERS OVERTOP BRIDGE	No
INDICATIONS THAT FLOODWATERS OVERTOP APPROACHES	No

SCOUR NOTES

County:	LAUDERDALE	Structure Number:	210008003812330	Facility Carried:	US 80
Inspection Date:	04/20/2023	Bridge ID:	12377	Feature Intersected:	CHUNKY RIVER

Pictures



PHOTO 1 General, Superstructure
Description back of beam end spalled

Pictures



PHOTO 2 General, Substructure
Description exposed rebar in face of cap

County:	LAUDERDALE	Structure Number:	210008003812330	Facility Carried:	US 80
Inspection Date:	04/20/2023	Bridge ID:	12377	Feature Intersected:	CHUNKY RIVER

Pictures



PHOTO 3 General, Superstructure
Description horizontal crack in beam

Pictures



PHOTO 4 General
Description back of beam end spalled

County:	LAUDERDALE	Structure Number:	210008003812330	Facility Carried:	US 80
Inspection Date:	04/20/2023	Bridge ID:	12377	Feature Intersected:	CHUNKY RIVER

Pictures



PHOTO 5 General
Description horizontal crack in beam

Pictures



PHOTO 6 General
Description us

County:	LAUDERDALE	Structure Number:	210008003812330	Facility Carried:	US 80
Inspection Date:	04/20/2023	Bridge ID:	12377	Feature Intersected:	CHUNKY RIVER

Pictures



PHOTO 7 General
Description ds

Pictures



PHOTO 8 General
Description elev n

County:	LAUDERDALE	Structure Number:	210008003812330	Facility Carried:	US 80
Inspection Date:	04/20/2023	Bridge ID:	12377	Feature Intersected:	CHUNKY RIVER

Pictures



PHOTO 9 General
Description elev s

Pictures



PHOTO 10 General
Description endwall spalled

County:	LAUDERDALE	Structure Number:	210008003812330	Facility Carried:	US 80
Inspection Date:	04/20/2023	Bridge ID:	12377	Feature Intersected:	CHUNKY RIVER

Pictures



PHOTO 11 General
Description cl e

Pictures



PHOTO 12 General
Description deck scaling

County:	LAUDERDALE	Structure Number:	210008003812330	Facility Carried:	US 80
Inspection Date:	04/20/2023	Bridge ID:	12377	Feature Intersected:	CHUNKY RIVER

Pictures



PHOTO 13 General
Description top of bridgerail spalled

Pictures



PHOTO 14 General
Description horizontal crack in beam

County:	LAUDERDALE	Structure Number:	210008003812330	Facility Carried:	US 80
Inspection Date:	04/20/2023	Bridge ID:	12377	Feature Intersected:	CHUNKY RIVER

Pictures

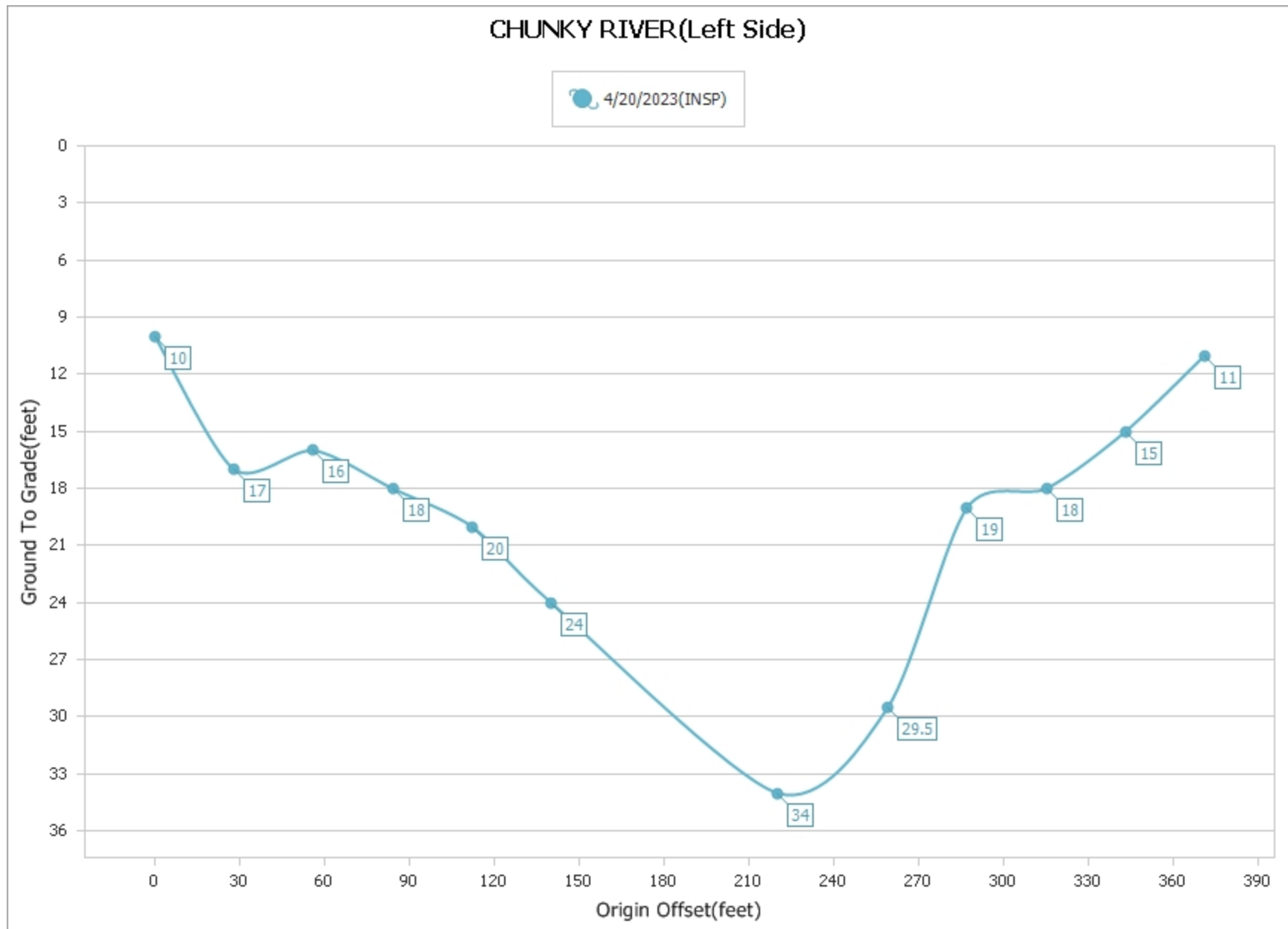


PHOTO 15 General
Description cl w

Structure#: 210008003812330
Bridge ID: 12377

County: Lauderdale
Facility: US 80

Feature Intersected: CHUNKY RIVER
Location: 0.3 MI E NEWTON CL

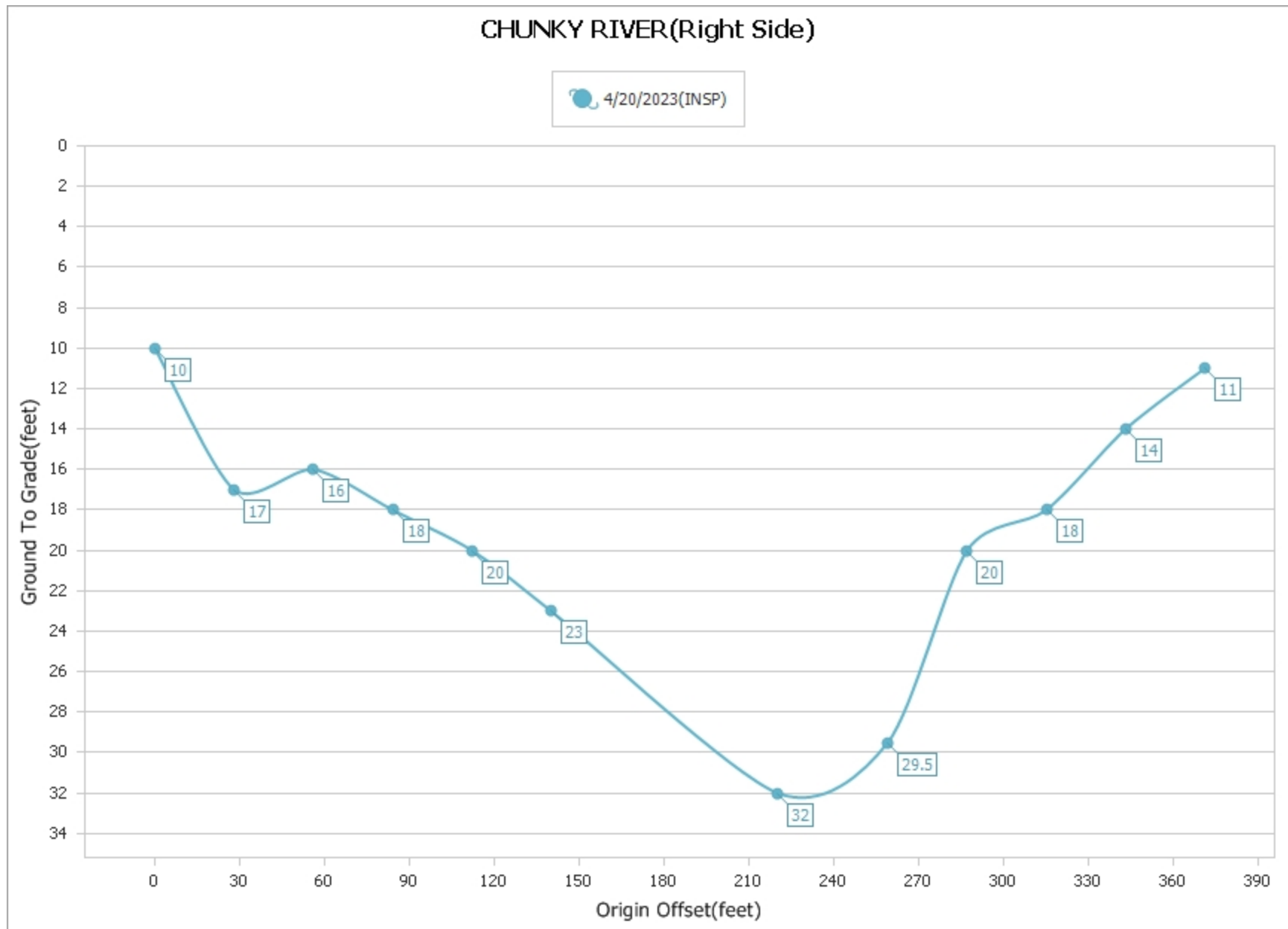


Print Date: 4/20/2023

Structure#: 210008003812330
Bridge ID: 12377

County: Lauderdale
Facility: US 80

Feature Intersected: CHUNKY RIVER
Location: 0.3 MI E NEWTON CL



Print Date: 4/20/2023