



Bridge Inspection Report

US 80

over

TONACANA CREEK

NEWTON County

- INSPECTION DATE
02/14/2023
- STRUCTURE NUMBER
210008005112140
- BRIDGE ID
13541



Sufficiency Rating:
50.0

Health Index:
100.00

Status:
OK

Inspected By: Team Leader Jeff McGee

Taylor Coker, Jeff McGee, Bryan Nutt,

Inspection Type(s): Routine

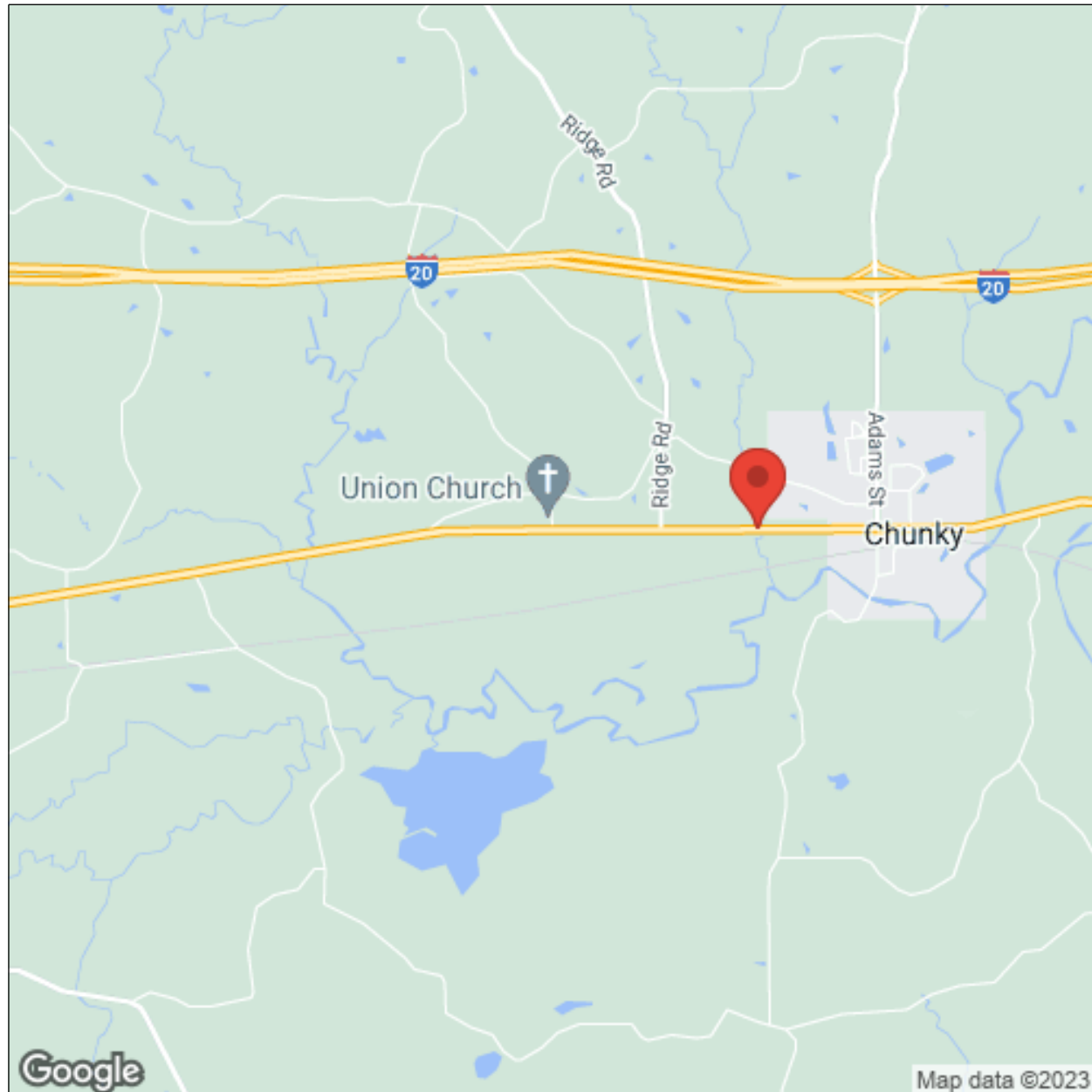
Inspection Performed By: State

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Location Map



Latitude: 32.325951
Longitude: -88.940484

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Executive Summary

2023 Inspection:

DECK: Fair Condition

- 1.HEAVY DECK SCALING ALSO SMALL AREA EXP. REBAR SPAN 1.
- 2.LIGHT COLLISION DAMAGE TO POST 3 AND 5 AT SPAN 3 SOUTH SIDE

SUPER: Fair Condition

- 1.SPAN 1 BENT 2 BEAMS 1 AND 3 CRACKING AT END OF BEAMS.
- 2.SPAN 2 BENT 2 BEAMS 1 AND 3 CRACKING AT END OF BEAMS.
- 3.SPAN 2 BENT 3 BEAMS 1 AND 3 CRACKING AT END OF BEAMS.
- 4.VERT CRACK AT ABUTMENT AT BENT 1 AND 4 ST CENTER, 3 CRACKS.
- 5.LIGHT VC AT CONC. BEAMS.
- 6.EXP REBAR AT BOTTOM OF BEAM 1 SPAN 1 6".
- 7.EXP REBAR AT BOTTOM OF BEAM 1 SPAN 2, 5 LOCATIONS 6".
- 8.SOFFIT AT SPAN 1 SOUTH SIDE 1 SPALL AND 1 DELAM.
- 9.DIA. 4 AT B-1, SPALLED 2'X1'.

SUB: Fair Condition

- 1.COL 2 AT BENT 2 AT EAST FACE OF COL ON CORNER IS SPALLING 8'X 4"EXP. REBAR.
- 2.SPALL IN CAP AT B-2 1'X 1', SOUTH END.
- 3.1'X 1' SPALL B-2 SPAN 1 UNDER BEAM 1.

Recommendations:

Monitor of measure beam ends for any bearing loss.

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National Bridge Inventory

IDENTIFICATION		INSPECTIONS	
(1) STATE CODE	284 - Mississippi	(90) INSPECTION DATE	02/14/2023
(8) STRUCTURE NUMBER	210008005112140	(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 101	A. FRACTURE CRITICAL DETAIL	N
(4) PLACE CODE	93411	B. UNDERWATER INSPECTION	N
(6) FEATURES INTERSECTED	TONACANA CREEK	C. OTHER SPECIAL	N
(7) FACILITY CARRIED	US 80	CONDITION	
(9) LOCATION	5.1 MI E SR 503	(58) DECK	5
(11) MILEPOINT 23.16 (12) BASE HIGHWAY NETWORK 0		(59) SUPERSTRUCTURE	5 (60) SUBSTRUCTURE 5
(13A) LRS INVENTORY ROUTE 000000080P (13B) SUBROUTE NUMBER 1		(61) CHANNEL & CHANNEL PROTECTION	8 (62) CULVERT N
(16) LATITUDE 32.325951 (17) LONGITUDE -88.940484		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		(64) OPERATING RATING	40.1
(43) STRUCTURE TYPE, MAIN		(65) METHOD USED TO DETERMINE INVENTORY RATING	1
A) KIND OF MATERIAL/DESIGN: 1 - Concrete		(66) INVENTORY RATING	24.1
B) TYPE OF DESIGN/CONSTR: 04 - Tee Beam		(70) BRIDGE POSTING	3
(44) STRUCTURE TYPE, APPROACH SPANS		(41) STRUCTURE OPEN/POSTED/CLOSED	P
A) KIND OF MATERIAL/DESIGN:		APPRAISAL	
B) TYPE OF DESIGN/CONSTR:		(67) STRUCTURAL EVALUATION	5
(45) NUMBER OF SPANS IN MAIN 3 (46) NUMBER OF APPROACH 0		(68) DECK GEOMETRY	3
(107) DECK STRUCTURE TYPE 1 (108A) WEARING SURFACE 0		(69) UNDERCLEARANCES, VERTICAL & HORIZONTAL	N
(108B) DECK MEMBRANE 0 (108C) DECK PROTECTION 0		(71) WATERWAY ADEQUACY	3
AGE OF SERVICE		(72) APPROACH ROADWAY ALIGNMENT	8
(27) YEAR BUILT 1929 (106) YEAR RECONSTRUCTED		(36) TRAFFIC SAFETY FEATURE	
(42) TYPE OF SERVICE ON 1 UNDER 5		36A) BRIDGE RAILINGS:	0
(28) LANES ON 02 UNDER 00		36B) TRANSITIONS:	0
(29) AVERAGE DAILY TRAFFIC 1000 (19) BYPASS DETOUR LENGTH 12		36C) APPROACH GUARDRAIL:	0
(30) YEAR OF AVERAGE DAILY TRAFFIC 2020		36D) APPROACH GUARDRAIL ENDS:	1
(109) AVERAGE DAILY TRUCK TRAFFIC 11		(113) SCOUR CRITICAL BRIDGES	5
GEOMETRIC DATA		SUFFICIENCY RATING	50.0 STATUS 2
(48) LENGTH OF MAX SPAN (ft.) 29.9 (49) STRUCTURE LENGTH (ft.) 98.1		CLASSIFICATION	
(50) CURB/SIDEWALK WIDTHS (ft.) LEFT .7 RIGHT .7		(112) NBIS BRIDGE LENGTH	Y
(51) BRDG RDWY WIDTH CURB-TO-CURB (ft.)	20	(104) HIGHWAY SYSTEM OF THE INVENTORY ROUTE	0
(52) DECK WIDTH, OUT-TO-OUT (ft.)	23.6	(26) FUNCTIONAL CLASSIFICATION OF INVENTORY ROUTE	07
(32) APPROACH ROADWAY WIDTH (ft.)	29.9	(100) STRAHNET HIGHWAY DESIGNATION	0
(33) BRIDGE MEDIAN 0 (34) SKEW (DEG.) 0		(101) PARALLEL STRUCTURE DESIGNATION	N
(35) STRUCTURE FLARED 0 (10) INV RTE, MIN VERT CLEAR (ft.) 99.99		(102) DIRECTION OF TRAFFIC	2
(47) TOTAL HORIZONTAL CLEARANCE (ft.)	19.7	(103) TEMP STRUCTURE	
(53) VERTICAL CLEARANCE OVER BRIDGE ROADWAY (ft.)	99.99	(105) FEDERAL LANDS HIGHWAYS	0
(54) VERTICAL UNDER CLEARANCE (ft.)	N 0	(110) DESIGNATED NATIONAL NETWORK	0
(55) LATERAL UNDER CLEARANCE RIGHT (ft.)	N 0	(20) TOLL	3
(56) MIN LATERAL UNDER CLEARANCE (ft.)	0	(21) MAINTENANCE RESPONSIBILITY	01
PROPOSED IMPROVEMENTS		(22) OWNER	01
(75A) TYPE OF WORK PROPOSED 31 (75B) WORK DONE BY 1		(37) HISTORICAL	5
(76) LENGTH OF STRUCTURE IMPROVEMENT (ft.)	130.9	NAVIGATION DATA	
(94) BRIDGE IMPROVEMENT COST (\$)	309000	(38) NAVIGATION CONTROL	0
(95) ROADWAY IMPROVEMENT COST (\$)	31000	(111) PIER OR ABUTMENT PROTECTION	
(96) TOTAL PROJECT COST	921000	(39) NAV VERT CLEARANCE (ft.)	0
(97) YEAR OF IMPROVEMENT COST ESTIMATE	2011	(116) MIN NAVIGATION VERT CLEARANCE, VERT LIFT BRIDGE (ft.)	
(114) FUTURE ADT 1000 (115) YEAR OF FUTURE ADT 2041		(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.	1962	sq. ft.	0	0	1962	0
1080 - Delamination/Spall/Patched Area		3		0	0	3	0
1090 - Exposed Rebar		1		0	0	1	0
1190 - Abrasion/Wear (PSC/RC)		1958		0	0	1958	0
110 - Reinforced Concrete Open Girder/Beam	Ben.	280	ft.	274	6	0	0
1090 - Exposed Rebar		6		0	6	0	0
205 - Reinforced Concrete Column	Ben.	4	each	4	0	0	0
215 - Reinforced Concrete Abutment	Ben.	60	ft.	52	6	2	0
1130 - Cracking (RC and Other)		8		0	6	2	0
234 - Reinforced Concrete Pier Cap	Ben.	48	ft.	48	0	0	0
301 - Pourable Joint Seal	Ben.	40	ft.	0	0	0	40
2330 - Seal Damage		40		0	0	0	40
331 - Reinforced Concrete Bridge Railing	Ben.	197	ft.	175	2	0	20
7000 - Damage		22		0	2	0	20

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ADMINISTRATION

Structure Assessment

Structural/Functional Classification:	OK	Health Index:	100.00
Sufficiency Rating:	50.0	Replacement Index:	50.6

Proposed Improvements

75A Type of Work Proposed:	31 - Replacement -	94 Bridge Improvement Cost:	309000	\$
75B Work Done By:	1 - Work to be done by contract	95 Roadway Improvement Cost:	31000	\$
76 Length Of Structure Improvement:	130.9	Ft.	96 Total Project Cost:	921000
Project Notes:	921207.2507410401	97 Year Of Improvement Cost Estimate:	2011	

Original Construction

Project Number:	FAP-6 REOP	Plans Available:	Unknown
Station:	630+82		

Site Conditions

Snooper Required:	No	Site Vegetation:	None
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Traffic control required: None

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

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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	8 - Equal to present desirable criteria

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	

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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	.5	FT.
RIGHT SHOULDER WIDTH	.5	FT.
ASBESTOS DRAINS	U	
DECK AREA	2315	SQ FT.

Full Bridge

	<u>Condition</u>	<u>Notes</u>
Structure:	Fair	
Wearing Surface:	Fair	
Curbs:	NA	
Median:	NA	
Sidewalk:	NA	
Joints:	Good	
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

	<u>Condition</u>	<u>Notes</u>
Girders:	Fair	
Floor Beams:	NA	
Stringers:	NA	
Steel Risers:	NA	
Bearings:	NA	
Hinge Pins/Hangers:	NA	
Diaphragms/Cross Frames:	NA	
Paint:	NA	
Collision Damage:	NA	
Deflection/Vibration:	Good	
Cap/Girder Debris:	Good	
Navigation Lighting:	NA	

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SUBSTRUCTURE

NBI Info

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

(111) PIER PROTECTION

Abutments

	<u>Condition</u>	<u>Notes</u>
Backwall:	Good	
Bulkhead:	NA	
Wing Walls:	Good	
Cap:	Good	
Footings:	NA	
Piles:	NA	
Embankment:	Good	
Slope Paving:	NA	

Full Bridge

	<u>Condition</u>	<u>Notes</u>
Cap:	Good	
Risers:	NA	
Columns/Piles:	Fair	
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
 (71) WATERWAY ADEQUACY 3 - Frequent Flooding - Significant Delays

Hydraulics

DESIGN MAIN CHANNEL SPAN	2	CURRENT MAIN CHANNEL SPAN	2
BANK CONDITION-UPSTREAM	Good		
BANK CONDITION-SITE	Good		
BANK CONDITION-DOWNSTREAM	Good		
SCOUR COUNTERMEASURES	Good	CONTRACTOR ADDED RIP RAP TO BOTH BANKS, PUT CHANNEL BACK IN SPAN 2.	

<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

<input type="checkbox"/> COBBLE/BOULDER	<input type="checkbox"/> GRAVEL	<input checked="" type="checkbox"/> SAND	<input type="checkbox"/> SILT	<input type="checkbox"/> SILT-CLAY
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UNKNOWN FOUNDATION

SCOUR EVALUATION DONE

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

SCOUR NOTES

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Pictures



PHOTO 1 General

Description CL WB

Pictures



PHOTO 2 General

Description COLLISION DAMAGE

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Pictures



PHOTO 3 General
Description DECK SCALING

Pictures



PHOTO 4 General
Description DS

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Pictures



PHOTO 5 General
Description BEAM END CRACKED

Pictures



PHOTO 6 General
Description BEAM END CRACKED

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Pictures



PHOTO 7 General
Description CAP SPALLED

Pictures



PHOTO 8 General
Description DIA SPALLED

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Pictures



PHOTO 9 General
Description US

Pictures



PHOTO 10 General
Description SPALL COLUMN 2 BENT 2

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Pictures



PHOTO 11 General
Description CRAK IN ENDWALL

Pictures



PHOTO 12 General
Description ELEV N

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Pictures



PHOTO 13 General
Description CL EB

Pictures

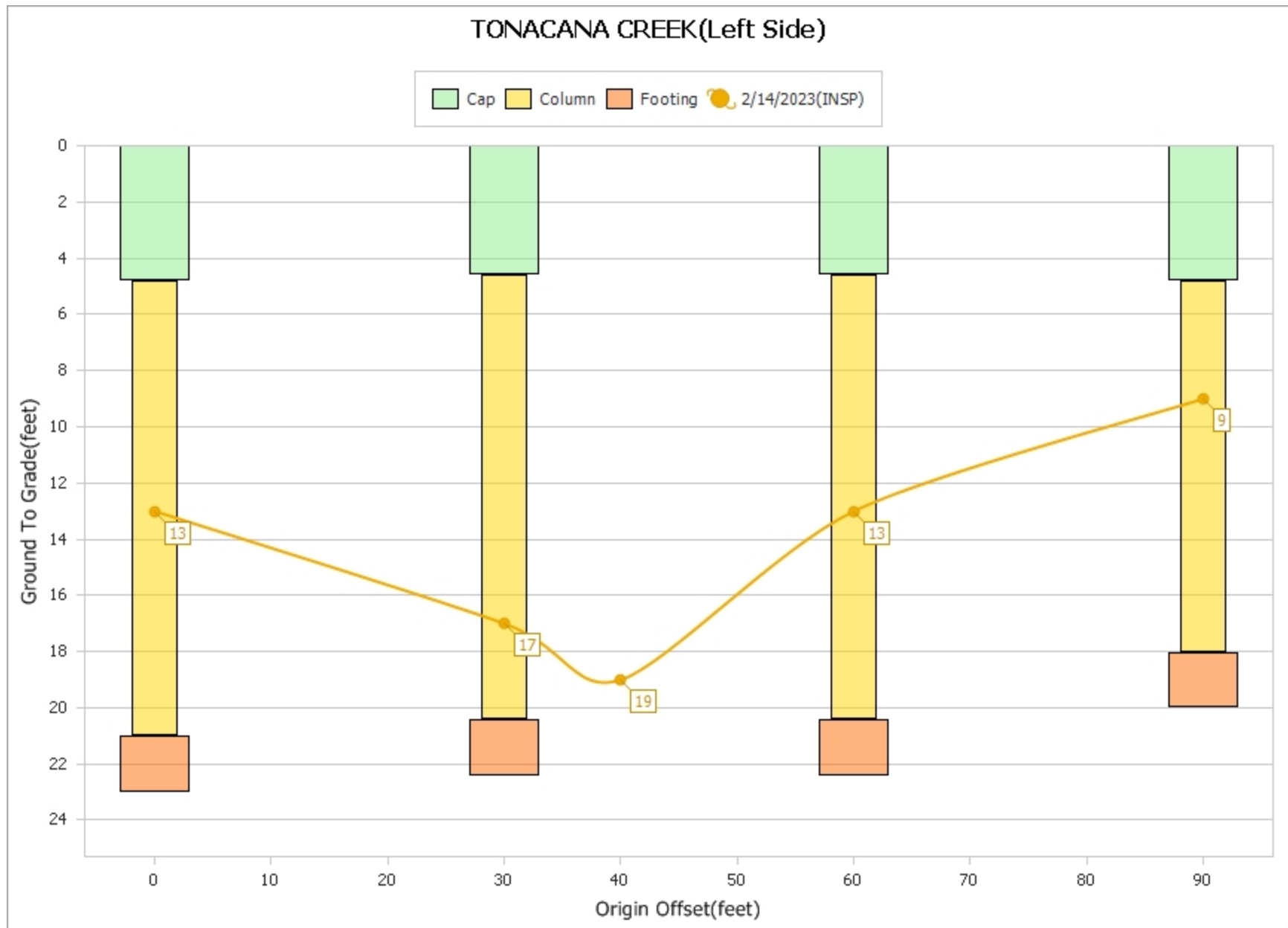


PHOTO 14 General
Description ELEV S

Structure#: 210008005112140
Bridge ID: 13541

County: Newton
Facility: US 80

Feature Intersected: TONACANA CREEK
Location: 5.1 MI E SR 503

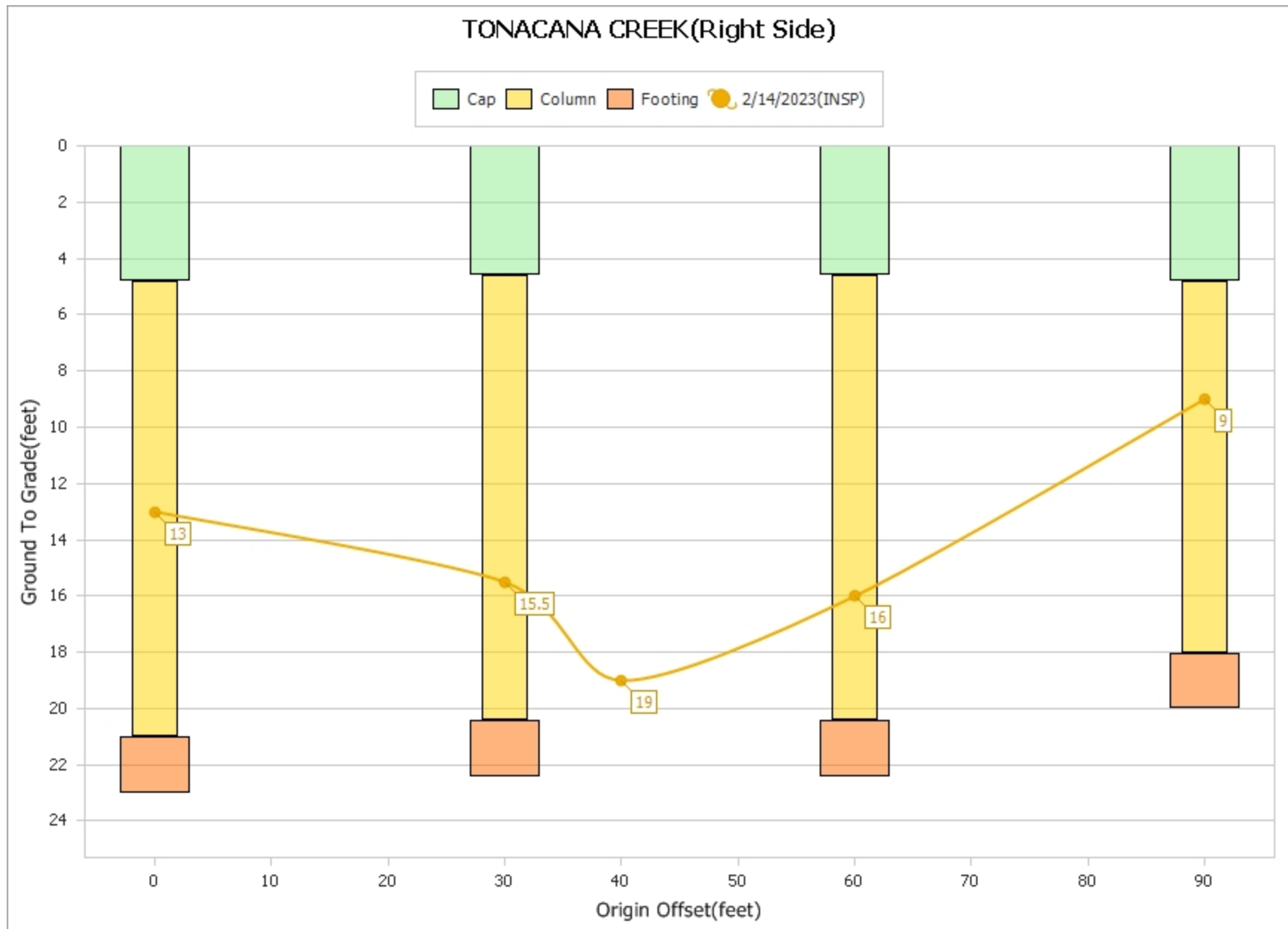


Print Date: 2/14/2023

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Location: 5.1 MI E SR 503



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