

Bridge Inspection Report

07153
SH 21 Carroll
over
Osage Creek



Inspection Date:

Inspected By:

Inspection Type(s):

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Inspector:

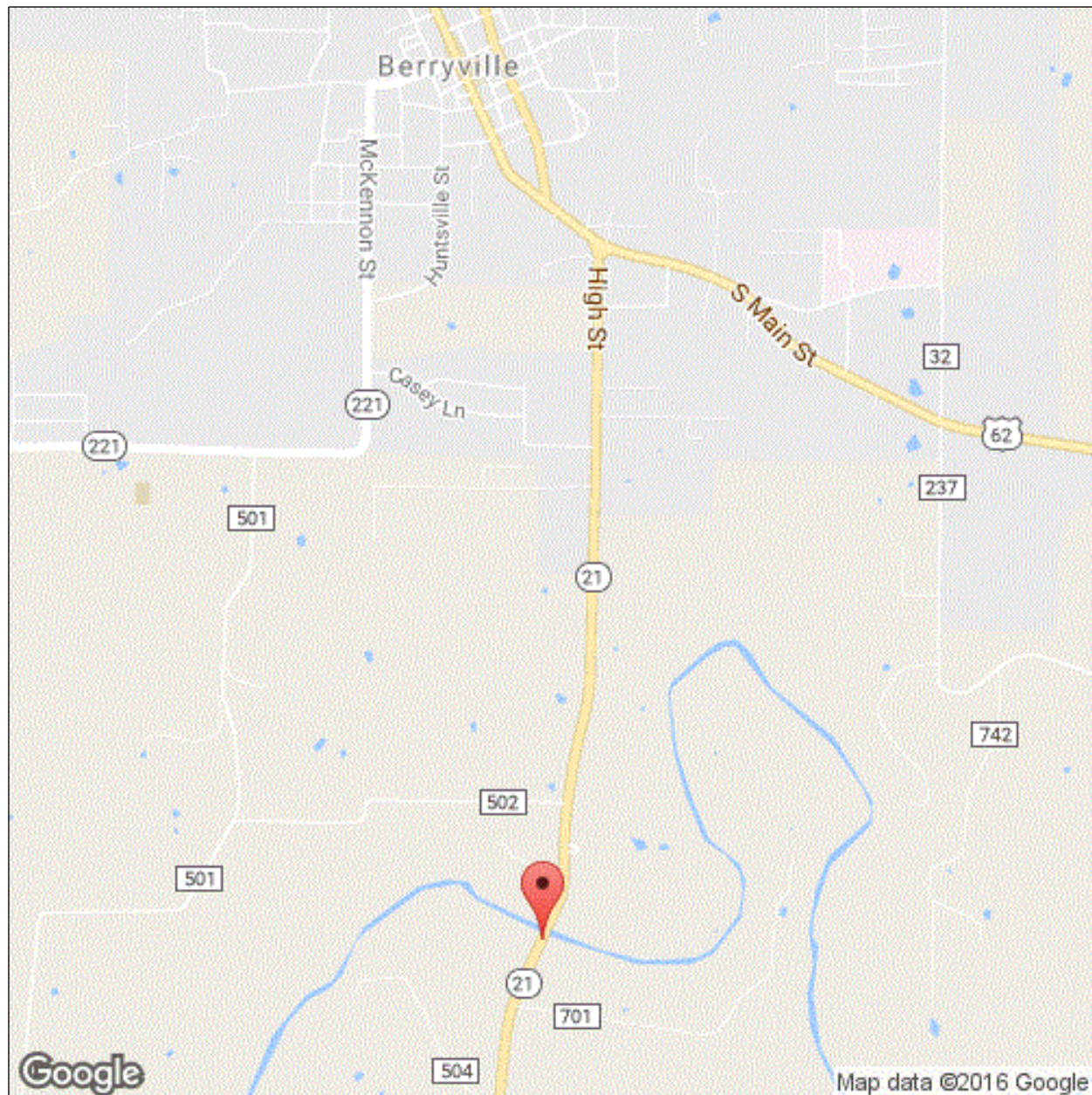
Structure Number: 07153

Inspection Date:

Facility Carried: SH 21 Carroll

Bridge Inspection Report

Location Map



Latitude: 36.33710597722136

Longitude: -93.56423362334823

Inspector:

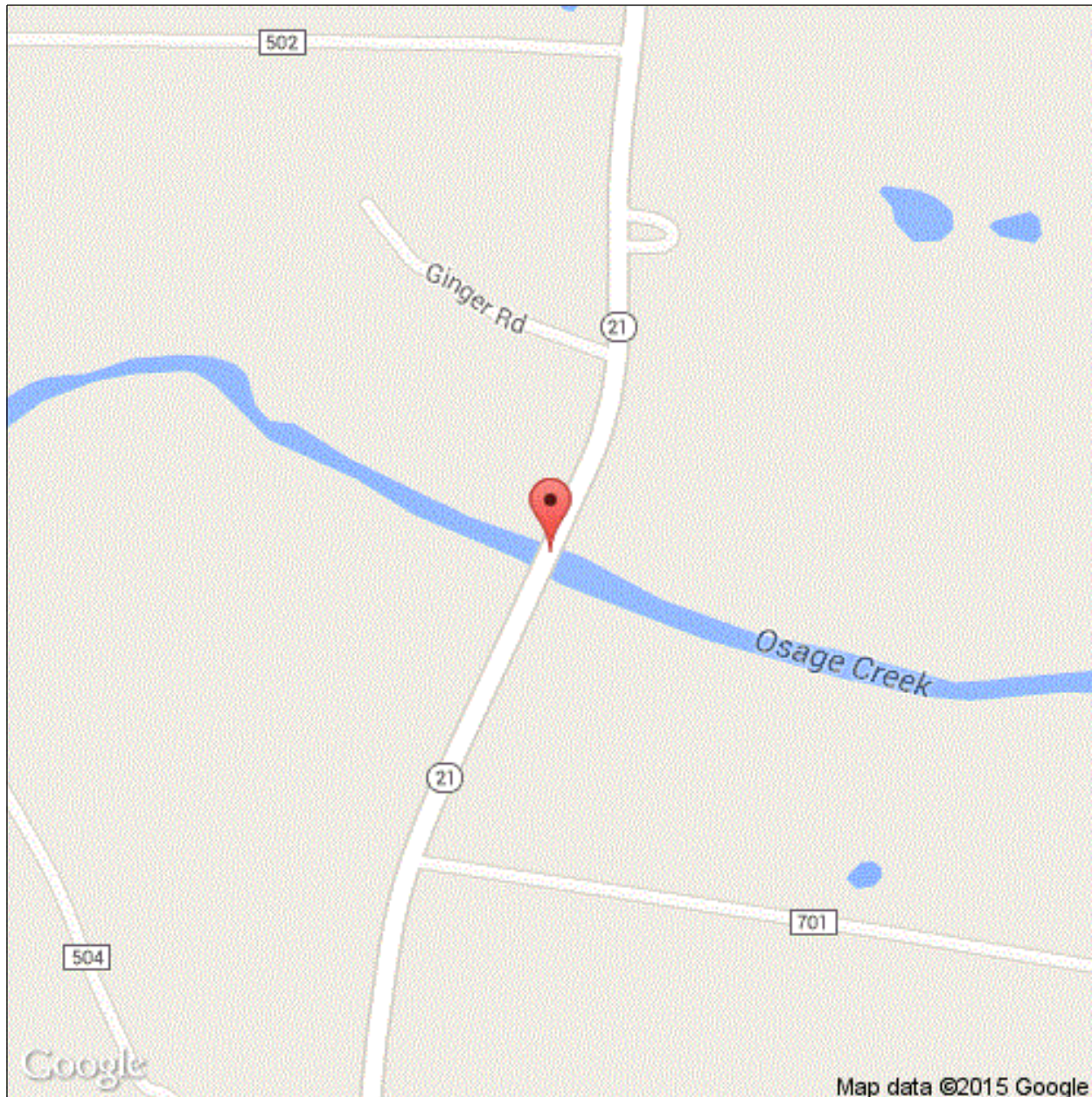
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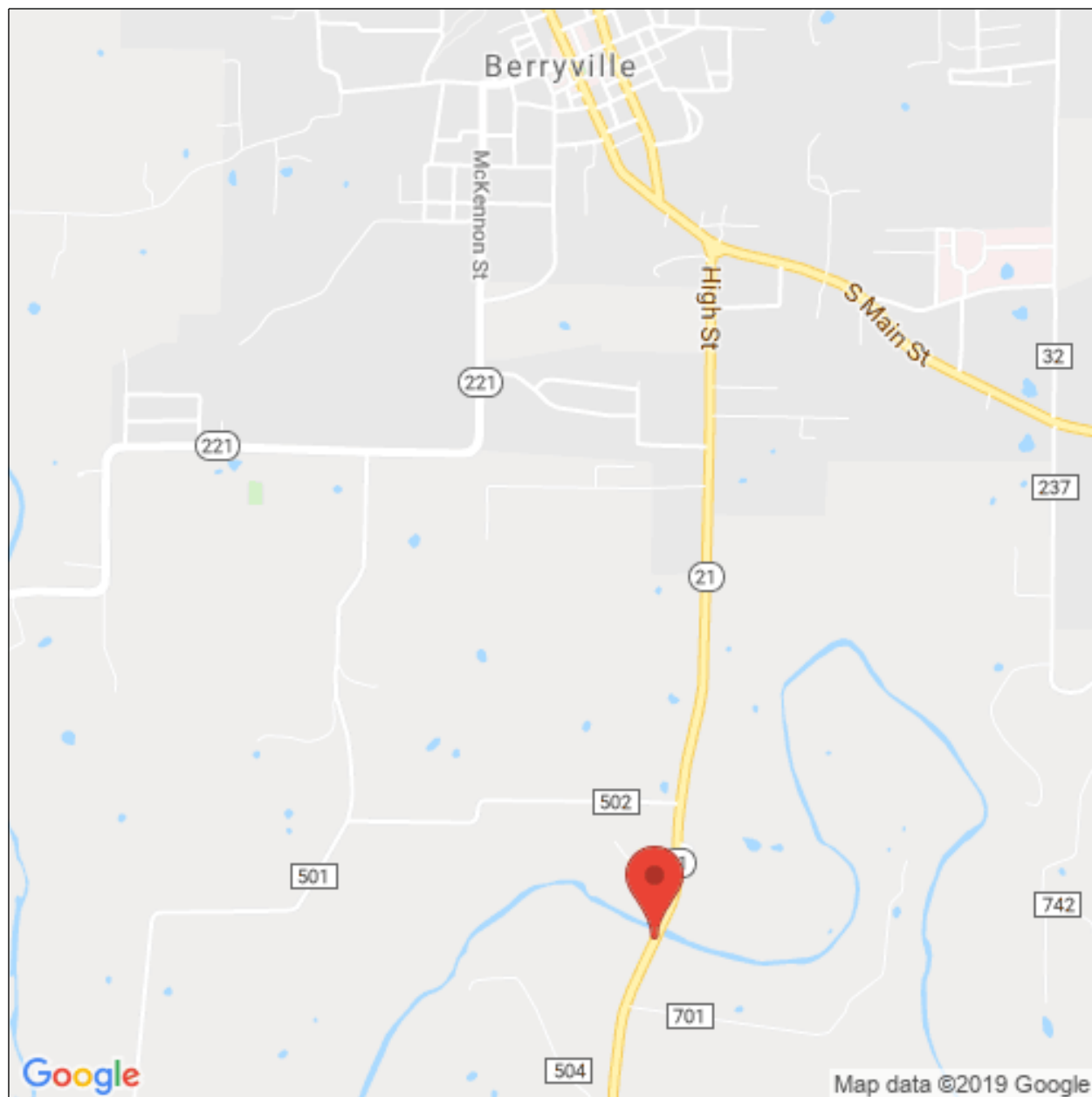
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Executive Summary

Structure is logged from South to North. A large extension ladder is needed (32'). A snooper is required during periods of high water.

No bat activity was noted.

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National Bridge Inventory

IDENTIFICATION		INSPECTIONS	
(1) STATE CODE	056 - Arkansas	(90) INSPECTION DATE	05/14/2019
(8) STRUCTURE NUMBER	07153	(91) DESIGNATED INSPECTION FREQUENCY	24
(5) INV. ROUTE (ON/UNDER)	1 3 1 21 0	(92) CRITICAL FEATURE INSPECTION	(93) CFI DATE
(2) HIGHWAY AGENCY	09 (3) COUNTY CODE 015	A. FRACTURE CRITICAL DETAIL	N
(4) PLACE CODE	00000	B. UNDERWATER INSPECTION	N
(6) FEATURES INTERSECTED	Osage Creek	C. OTHER SPECIAL	N
(7) FACILITY CARRIED	SH 21 Carroll		
(9) LOCATION	1.54 Miles South of US 62		
(11) MILEPOINT 16.020	(12) BASE HIGHWAY NETWORK 0		
(13A) LRS INVENTORY ROUTE	0000000000 (13B) SUBROUTE NUMBER 00		
(16) LATITUDE 36.33710597722136	(17) LONGITUDE -93.56423362334823		
(98A) BORDER BRIDGE CODE			
PERCENT RESPONSIBILITY	(99) BORDER BRIDGE STRUCT		
STRUCTURE TYPE AND MATERIAL		CONDITION	
(43) STRUCTURE TYPE, MAIN		(58) DECK	7
A) KIND OF MATERIAL/DESIGN: 5 - Prestressed concrete		(59) SUPERSTRUCTURE	9
B) TYPE OF DESIGN/CONSTR: 02 - Stringer/Multi-beam or Girder		(60) SUBSTRUCTURE	9
(44) STRUCTURE TYPE, APPROACH SPANS		(61) CHANNEL & CHANNEL PROTECTION	8
A) KIND OF MATERIAL/DESIGN: 0 - Other		(62) CULVERT	N
B) TYPE OF DESIGN/CONSTR: 00 - Other			
(45) NUMBER OF SPANS IN MAIN 3	(46) NUMBER OF APPROACH 0		
(107) DECK STRUCTURE TYPE 1	(108A) WEARING SURFACE 1		
(108B) DECK MEMBRANE 0	(108C) DECK PROTECTION 1		
AGE OF SERVICE		LOAD RATING AND POSTING	
(27) YEAR BUILT 2011	(106) YEAR RECONSTRUCTED 0000	(31) DESIGN LOAD	A
(42) TYPE OF SERVICE ON 1 UNDER 5		(63) METHOD USED TO DETERMINE OPERATING RATING	1
(28) LANES ON 02 UNDER 00		(64) OPERATING RATING	56.0
(29) AVERAGE DAILY TRAFFIC 2800	(19) BYPASS DETOUR LENGTH 15	(65) METHOD USED TO DETERMINE INVENTORY RATING	1
(30) YEAR OF AVERAGE DAILY TRAFFIC 2014		(66) INVENTORY RATING	34.0
(109) AVERAGE DAILY TRUCK TRAFFIC 11		(70) BRIDGE POSTING	5
		(41) STRUCTURE OPEN/POSTED/CLOSED	A
GEOMETRIC DATA		APPRAISAL	
(48) LENGTH OF MAX SPAN (ft.) 67.0	(49) STRUCTURE LENGTH (ft.) 201	(67) STRUCTURAL EVALUATION	7
(50) CURB/SIDEWALK WIDTHS (ft.) LEFT 0 RIGHT 0		(68) DECK GEOMETRY	6
(51) BRDG RDWY WIDTH CURB-TO-CURB (ft.) 40.0		(69) UNDERCLEARANCES, VERTICAL & HORIZONTAL	N
(52) DECK WIDTH, OUT-TO-OUT (ft.) 43.2		(71) WATERWAY ADEQUACY	8
(32) APPROACH ROADWAY WIDTH (ft.) 40.0		(72) APPROACH ROADWAY ALIGNMENT	8
(33) BRIDGE MEDIAN 1	(34) SKEW (DEG.) 0	(36) TRAFFIC SAFETY FEATURE	
(35) STRUCTURE FLARED 0	(10) INV RTE, MIN VERT CLEAR (ft.) 99.99	36A) BRIDGE RAILINGS:	1
(47) TOTAL HORIZONTAL CLEARANCE (ft.) 40.6		36B) TRANSITIONS:	1
(53) VERTICAL CLEARANCE OVER BRIDGE ROADWAY (ft.) 99.99		36C) APPROACH GUARDRAIL:	1
(54) VERTICAL UNDER CLEARANCE (ft.) N 0		36D) APPROACH GUARDRAIL ENDS:	1
(55) LATERAL UNDER CLEARANCE RIGHT (ft.) N 99.9		(113) SCOUR CRITICAL BRIDGES	8
(56) MIN LATERAL UNDER CLEARANCE (ft.) 0		SUFFICIENCY RATING	96.2
		STATUS	0
PROPOSED IMPROVEMENTS		CLASSIFICATION	
(75A) TYPE OF WORK PROPOSED	(75B) WORK DONE BY	(112) NBIS BRIDGE LENGTH	Y
(76) LENGTH OF STRUCTURE IMPROVEMENT (ft.) 0		(104) HIGHWAY SYSTEM OF THE INVENTORY ROUTE	0
(94) BRIDGE IMPROVEMENT COST (\$)	0	(26) FUNCTIONAL CLASSIFICATION OF INVENTORY ROUTE	07
(95) ROADWAY IMPROVEMENT COST (\$)	0	(100) STRAHNET HIGHWAY DESIGNATION	0
(96) TOTAL PROJECT COST	0	(101) PARALLEL STRUCTURE DESIGNATION	N
(97) YEAR OF IMPROVEMENT COST ESTIMATE		(102) DIRECTION OF TRAFFIC	2
(114) FUTURE ADT 3750	(115) YEAR OF FUTURE ADT 2029	(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	1
		(39) NAV VERT CLEARANCE (ft.)	0
		(116) MIN NAVIGATION VERT CLEARANCE, VERT LIFT BRIDGE (ft.)	0
		(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
12 - Reinforced Concrete Deck	1- Ben.	8683	sq. ft.	8174	509	0	0
	<p>Driving surface- has a tined finish that is showing insignificant wear in the wheel paths. Hairline longitudinal cracking extends the length of the span in all spans, with random intermittent transverse hairline cracking.</p> <p>Undersurface- has sip forms in all bays. The left and right deck overhangs have a total of 10' of cs2 efflorescence cracking.</p>						
1120 - Efflorescence/Rust Staining		10		0	10	0	0
1130 - Cracking (RC and Other)		499		0	499	0	0
109 - Prestressed Concrete Open Girder/Beam	1- Ben.	1005	ft.	1005	0	0	0
	<p>The grout is missing under girder #1 at abutment #2.</p> <p>Span #1- No deficiencies noted on the girders.</p> <p>Span #2- No deficiencies noted.</p> <p>Span #3- No deficiencies noted.</p> <p>The diaphragms are metal. No deficiencies noted.</p>						
205 - Reinforced Concrete Column	1- Ben.	4	each	4	0	0	0
	<p>Pier #1 columns- No deficiencies noted.</p> <p>Pier #2 columns- No deficiencies noted. Column #2 has drift accumulation.</p>						
215 - Reinforced Concrete Abutment	1- Ben.	126	ft.	123	3	0	0
	<p>Abutment #1- No deficiencies noted. The rip rap is in place and functioning as intended.</p> <p>Abutment #2- has short duration hairline efflorescence cracking in the back wall, extending away from the bottom flanges of girders #3,4. The rip rap is in place and functioning as intended.</p>						
1120 - Efflorescence/Rust Staining		3		0	3	0	0
234 - Reinforced Concrete Pier Cap	1- Ben.	80	ft.	75	5	0	0
	<p>Pier #1 cap- has 2 vertical hairline cracks.</p> <p>Pier #2 cap- has 3 vertical hairline cracks at the step downs.</p>						
1130 - Cracking (RC and Other)		5		0	5	0	0
310 - Elastomeric Bearing	1- Ben.	20	each	20	0	0	0
	<p>Abutment #1 bearings- The bearings are concealed.</p> <p>Pier #1 bearings- No deficiencies noted on all 10.</p> <p>Pier #2 bearings- No deficiencies noted on all 10.</p> <p>Abutment #2 bearings- The bearings are concealed.</p>						

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Element Inspection

321 - Reinforced Concrete Approach Slab	1- Ben.	1296	sq. ft.	1296	0	0	0
	<p>Approach slab #1- has minor insignificant wear with no deficiencies noted.</p> <p>Approach slab #2- has minor insignificant wear with no deficiencies noted.</p> <p>The right ending approach gutter has diagonal cracking. (Not quantified)</p>						
331 - Reinforced Concrete Bridge Railing	1- Ben.	442	ft.	340	102	0	0
	<p>Left side parapet- Has 59' of hairline vertical cracking in random locations.</p> <p>Right side parapet- Has 43' of hairline vertical cracking in random locations. A large spall with no exposed rebar was noted on the beginning right parapet.</p>						
1130 - Cracking (RC and Other)		102		0	102	0	0

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Pictures

PHOTO 1

Description

PHOTO 2

Description

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Facility Carried: SH 21 Carroll

Bridge Inspection Report

Pictures

PHOTO 3

Description

Inspector:

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Facility Carried: SH 21 Carroll

Bridge Inspection Report

Sketches

Inspector:

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Maintenance Needs

Date Reported: 05/15/2017

Priority: D - Routine

Work Code:

Deficiency Description:

Unsealed longitudinal hairline cracks exist in the deck that extend the length of the spans.

Work Description:

Date Repairs Completed:

Maintenance Comments:

Inspector:

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Maintenance Needs

Date Reported: 05/14/2019

Priority: D - Routine

Work Code:

Deficiency Description:

Column #2 of bent #2 has drift accumulation.

Work Description:

Date Repairs Completed:

Maintenance Comments:

Stage: Open



PHOTO 1 Description Drift accumulation on the right column of bent #2.