

Bridge Inspection Report

M3111

State Highway 28

over

Six Mile Creek-Scott Co.



Inspection Date:

Inspected By:

Inspection Type(s):

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Inspector:

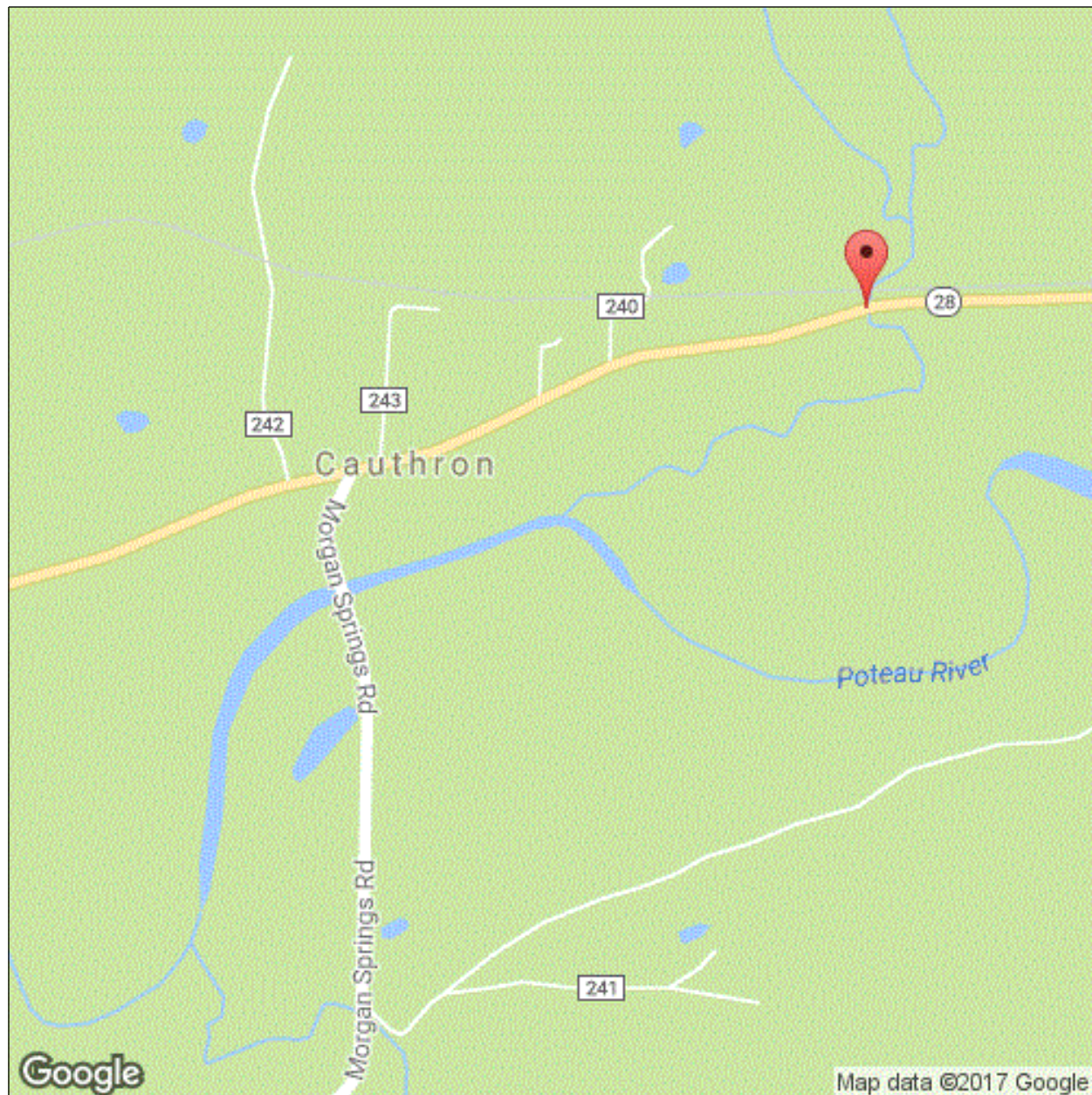
Inspection Date:

Structure Number: M3111

Facility Carried: State Highway 28

Bridge Inspection Report

Location Map



Latitude: 34.92343

Longitude: -94.28831

Inspector:

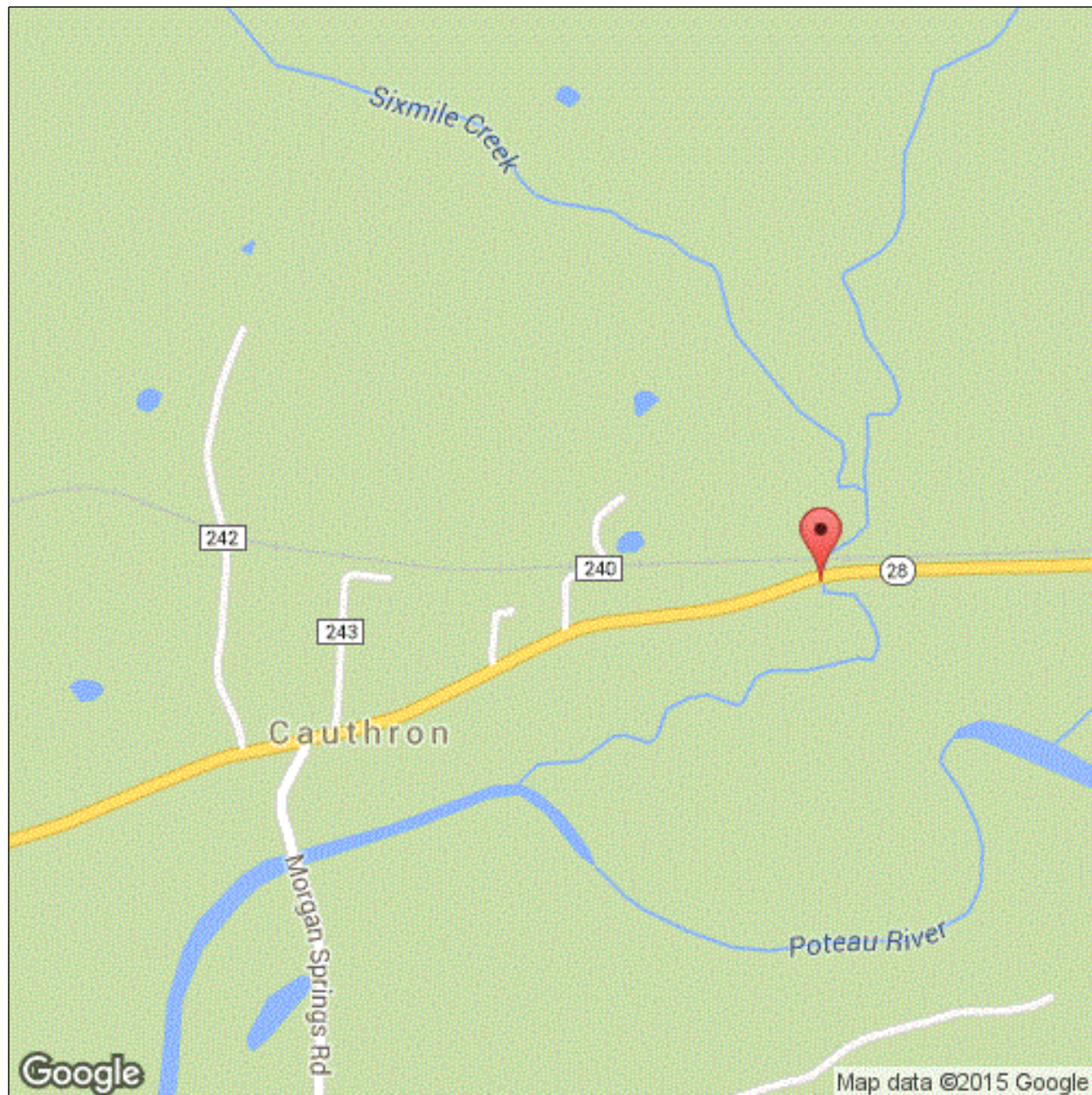
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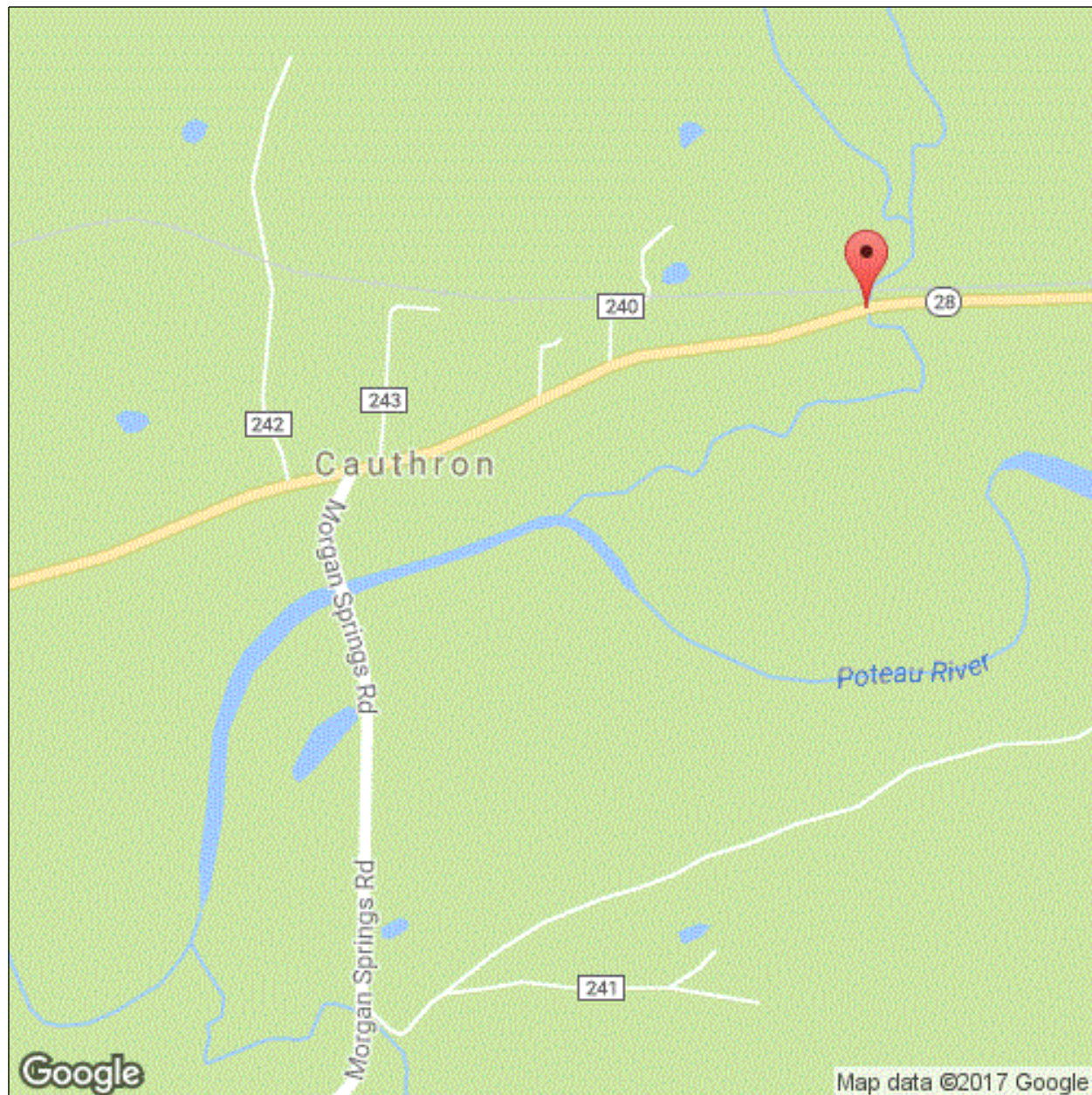
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Location Map



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Bridge Inspection Report

Executive Summary

10/05/2017 JPB & SPC-Routine Inspection conducted on this date.

10/01/2015 - JCJ & JML - There are no apparent significant changes since the last inspection.

10/01/2015 - JCJ & JML - Underwater Inspection - Footings have cover with no apparent scour problems at this inspection.

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Bridge Inspection Report

National Bridge Inventory

IDENTIFICATION		INSPECTIONS	
(1) STATE CODE	056 - Arkansas	(90) INSPECTION DATE	10/05/2017
(8) STRUCTURE NUMBER	M3111	(91) DESIGNATED INSPECTION FREQUENCY	24
(5) INV. ROUTE (ON/UNDER)	1 3 1 28 0	(92) CRITICAL FEATURE INSPECTION	(93) CFI DATE
(2) HIGHWAY AGENCY	04 (3) COUNTY CODE 127	A. FRACTURE CRITICAL DETAIL	N
(4) PLACE CODE	00000	B. UNDERWATER INSPECTION	N
(6) FEATURES INTERSECTED	Six Mile Creek-Scott Co.	C. OTHER SPECIAL	Y 48 10/01/2015
(7) FACILITY CARRIED	State Highway 28	CONDITION	
(9) LOCATION	6.2 MI W JCT SH 80 & 28	(58) DECK	6
(11) MILEPOINT 9.548	(12) BASE HIGHWAY NETWORK 0	(59) SUPERSTRUCTURE	5 (60) SUBSTRUCTURE 6
(13A) LRS INVENTORY ROUTE	0000000000 (13B) SUBROUTE NUMBER 00	(61) CHANNEL & CHANNEL PROTECTION	7 (62) CULVERT N
(16) LATITUDE 34.92343	(17) LONGITUDE -94.28831	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	55
(43) STRUCTURE TYPE, MAIN		(65) METHOD USED TO DETERMINE INVENTORY RATING	1
A) KIND OF MATERIAL/DESIGN:	1 - Concrete	(66) INVENTORY RATING	33
B) TYPE OF DESIGN/CONSTR:	22 - Channel Beam	(70) BRIDGE POSTING	5
(44) STRUCTURE TYPE, APPROACH SPANS		(41) STRUCTURE OPEN/POSTED/CLOSED	A
A) KIND OF MATERIAL/DESIGN:	0 - Other	APPRAISAL	
B) TYPE OF DESIGN/CONSTR:	00 - Other	(67) STRUCTURAL EVALUATION	5
(45) NUMBER OF SPANS IN MAIN	4 (46) NUMBER OF APPROACH	(68) DECK GEOMETRY	4
(107) DECK STRUCTURE TYPE	2 (108A) WEARING SURFACE	(69) UNDERCLEARANCES, VERTICAL & HORIZONTAL	N
(108B) DECK MEMBRANE	0 (108C) DECK PROTECTION	(71) WATERWAY ADEQUACY	8
AGE OF SERVICE		(72) APPROACH ROADWAY ALIGNMENT	6
(27) YEAR BUILT	1968 (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	790 (19) BYPASS DETOUR LENGTH	36C) APPROACH GUARDRAIL:	0
(30) YEAR OF AVERAGE DAILY TRAFFIC	2014	36D) APPROACH GUARDRAIL ENDS:	1
(109) AVERAGE DAILY TRUCK TRAFFIC	1	(113) SCOUR CRITICAL BRIDGES	5
GEOMETRIC DATA		SUFFICIENCY RATING	0 STATUS 52.5
(48) LENGTH OF MAX SPAN (ft.)	31 (49) STRUCTURE LENGTH (ft.)	CLASSIFICATION	
(50) CURB/SIDEWALK WIDTHS (ft.)	LEFT 0.5 RIGHT 0.5	(112) NBIS BRIDGE LENGTH	Y
(51) BRDG RDWY WIDTH CURB-TO-CURB (ft.)	24.0	(104) HIGHWAY SYSTEM OF THE INVENTORY ROUTE	0
(52) DECK WIDTH, OUT-TO-OUT (ft.)	25.1	(26) FUNCTIONAL CLASSIFICATION OF INVENTORY ROUTE	07
(32) APPROACH ROADWAY WIDTH (ft.)	24.0	(100) STRAHNET HIGHWAY DESIGNATION	0
(33) BRIDGE MEDIAN	0 (34) SKEW (DEG.)	(101) PARALLEL STRUCTURE DESIGNATION	N
(35) STRUCTURE FLARED	0 (10) INV RTE, MIN VERT CLEAR (ft.)	(102) DIRECTION OF TRAFFIC	2
(47) TOTAL HORIZONTAL CLEARANCE (ft.)	25.6	(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 99.9	(20) TOLL	3
(56) MIN LATERAL UNDER CLEARANCE (ft.)	0	(21) MAINTENANCE RESPONSIBILITY	01
PROPOSED IMPROVEMENTS		(22) OWNER	01
(75A) TYPE OF WORK PROPOSED	(75B) WORK DONE BY	(37) HISTORICAL	5
(76) LENGTH OF STRUCTURE IMPROVEMENT (ft.)	0	NAVIGATION DATA	
(94) BRIDGE IMPROVEMENT COST (\$)	0	(38) NAVIGATION CONTROL	0
(95) ROADWAY IMPROVEMENT COST (\$)	0	(111) PIER OR ABUTMENT PROTECTION	1
(96) TOTAL PROJECT COST	0	(39) NAV VERT CLEARANCE (ft.)	0
(97) YEAR OF IMPROVEMENT COST ESTIMATE		(116) MIN NAVIGATION VERT CLEARANCE, VERT LIFT BRIDGE (ft.)	0
(114) FUTURE ADT	1342 (115) YEAR OF FUTURE ADT	(40) NAV HORIZONTAL CLEARANCE (ft.)	0

Inspector:

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Inspection Date:

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Bridge Inspection Report

Element Inspection

	Environment	Total Quantity	Units	Condition State 1	Condition State 2	Condition State 3	Condition State 4
12 - Reinforced Concrete Deck	1- Ben.	2420	sq. ft.	1718	685	17	0
	-The ends of the channels have concrete repairs that are deterioration and causing potholes to form over the intermediate bents. -The epoxy repairs appear to be failing. -The grout joints appear to leak water that is contributing to the cracking in the stems of the channels in Spans 1 & 4. -The driving surface has light wear. -The driving surface has areas with light superficial cracking.						
1080 - Delamination/Spall/Patched Area		52			35	17	
1130 - Cracking (RC and Other)		350			350		
1190 - Abrasion/Wear (PSC/RC)		300			300		
110 - Reinforced Concrete Open Girder/Beam	1- Ben.	700	ft.	490	0	210	0
	-Span 1 & 4 has cracking in the stems of the channels. -Isolated areas of shallow baseball size spalls in the bottom of the stems of some units with exposed reinforcing steel stirrups visible with section loss to reinforcing steel. -Concrete spalling with exposed reinforcing steel in the ends of Channel 1 in Span 1 and Channels 1 & 2 in Span 4. Initial section loss to reinforcing steel. -Vertical hairline flexure cracking at approximately 12" centers in the stems of channels.						
1080 - Delamination/Spall/Patched Area		134				134	
1090 - Exposed Rebar		66				66	
1120 - Efflorescence/Rust Staining		10				10	
205 - Reinforced Concrete Column	1- Ben.	6	each	1	5	0	0
	-Light abrasion at the base of the columns.						
1130 - Cracking (RC and Other)		1			1		
1190 - Abrasion/Wear (PSC/RC)		4			4		
215 - Reinforced Concrete Abutment	1- Ben.	54	ft.	53	1	0	0
	-One shallow softball size spall with no exposed reinforcing steel.						
1080 - Delamination/Spall/Patched Area		1			1		
234 - Reinforced Concrete Pier Cap	1- Ben.	76	ft.	56	12	8	0
	-Shallow spalling and concrete deterioration in the ends of caps of all intermediate bents. Maintenance forces have grouted over the spalls in the caps in the past. Repairs appear to be delaminated in areas and sound hollow when sounded. -Shallow spalling ranging from softball to basket ball size is visible in the bearing areas under the stems of channels with no exposed reinforcing steel. -Vertical hairline cracks are in the caps adjacent to the columns.						
1080 - Delamination/Spall/Patched Area		17			9	8	
1130 - Cracking (RC and Other)		3			3		

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Bridge Inspection Report

Element Inspection

330 - Metal Bridge Railing	1- Ben.	200	ft.	100	100	0	0
	-Superficial rust is showing through the protective steel coating. -The Lt bridge railing has two missing anchor bolts at Span 1, Post 4 and at Span 3, Post 4.						
1000 - Corrosion		100			100		
515 - Steel Protective Coating		400	sq. ft.	200	100	50	50
3440 - Effectiveness (Steel Protective Coatings)		200			100	50	50

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Bridge Inspection Report

Pictures

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Bridge Inspection Report

Sketches

Inspector:

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Bridge Inspection Report

Maintenance Needs

Date Reported: 10/05/2017

Priority: D - Routine

Work Code:

Deficiency Description:

Dirt and debris along the gutters.

Work Description:

Date Repairs Completed:

Maintenance Comments:

Stage: Open



PHOTO 1 Description Dirt and debris along the gutters. Lt side pictured.

Stage: Open



PHOTO 2 Description Dirt and debris along the gutters. Rt side pictured.

Inspector:

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Inspection Date:

Facility Carried: State Highway 28

Bridge Inspection Report

Maintenance Needs

Date Reported: 10/05/2017

Priority: D - Routine

Work Code:

Deficiency Description:

The Lt bridge railing is missing 2 anchor bolts at Span 1 and Span 3.

Work Description:

Date Repairs Completed:

Maintenance Comments:

Stage: Open



PHOTO 1 Description The Lt bridge railing is missing 2 anchor bolts at Span 1 and Span 3. Span 1, Post 4 pictured.

Inspector:

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Bridge Inspection Report

Maintenance Needs

Date Reported: 10/05/2017

Priority: D - Routine

Work Code:

Deficiency Description:

The asphalt approach roadway at both bridge ends has settled and has map cracking.

Work Description:

Date Repairs Completed:

Maintenance Comments:

Stage: Open



PHOTO 1 Description The asphalt approach roadway at both bridge ends has settled and has map cracking. Bent 1 pictured.

Inspector:

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Inspection Date:

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Bridge Inspection Report

Maintenance Needs

Date Reported: 10/3/2013 12:00:00 AM

Priority: C - Important

Work Code: Repair

Deficiency Description:

The concrete repairs over the intermediate bents is failing and causing potholes on the driving surface

Work Description:

Date Repairs Completed:

Maintenance Comments:

Stage: Assigned



PHOTO 1 Description The concrete repairs over the intermediate bents is failing and causing potholes on the driving surface. Bent 4 pictured.

Stage: Assigned



PHOTO 2 Description The concrete repairs over the intermediate bents is failing and causing potholes on the driving surface. Bent 2 pictured.

Inspector:

Structure Number: M3111

Inspection Date:

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Bridge Inspection Report

Maintenance Needs

Date Reported: 10/3/2013 12:00:00 AM

Priority: D - Routine

Work Code: Repair

Deficiency Description:

Spans 1 & 4 have longitudinal cracks, delaminated areas, and spalls with exposed reinforcing steel.

Work Description:

Date Repairs Completed:

Maintenance Comments:

Stage: Assigned



PHOTO 1 Description Spans 1 & 4 have longitudinal cracks, delaminated areas, and spalls with exposed reinforcing steel. Span 4, Unit 2 pictured.

Stage: Assigned



PHOTO 2 Description Spans 1 & 4 have longitudinal cracks, delaminated areas, and spalls with exposed reinforcing steel. Span 1, Unit 1 pictured.

Inspector:

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Bridge Inspection Report

Maintenance Needs

Date Reported: 10/3/2013 12:00:00 AM

Priority: D - Routine

Work Code: Repair

Deficiency Description:

The grout joints between the units are deteriorating and appear to leak water on the superstructure and substructure.

Work Description:

Date Repairs Completed:

Maintenance Comments:

Stage: Assigned



PHOTO 1 Description The grout joints between the units are deteriorating and appear to leak water on the superstructure and substructure. Span 4 at Units 2 & 3.

Stage: Assigned



PHOTO 2 Description The grout joints between the units are deteriorating and appear to leak water on the superstructure and substructure. Span 2 at Units 2 & 3.

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Bridge Inspection Report

Maintenance Needs

Date Reported: 10/01/2015

Priority: D - Routine

Work Code: Repair

Deficiency Description:

Intermediate substructure caps have shallow spalling in the bearing area under the units.

Work Description:

Date Repairs Completed:

Maintenance Comments:

Stage: Assigned



PHOTO 1 Description Intermediate substructure caps have shallow spalling in the bearing area under the units. Bent 2, Span 1 pictured.

Stage: Assigned



PHOTO 2 Description Intermediate substructure caps have shallow spalling in the bearing area under the units. Bent 3, Span 3 pictured.