

Bridge Inspection Report

02648

State Highway 28

over

Thompson Creek-Scott Co.



Inspection Date:

Inspected By:

Inspection Type(s):

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Inspector:

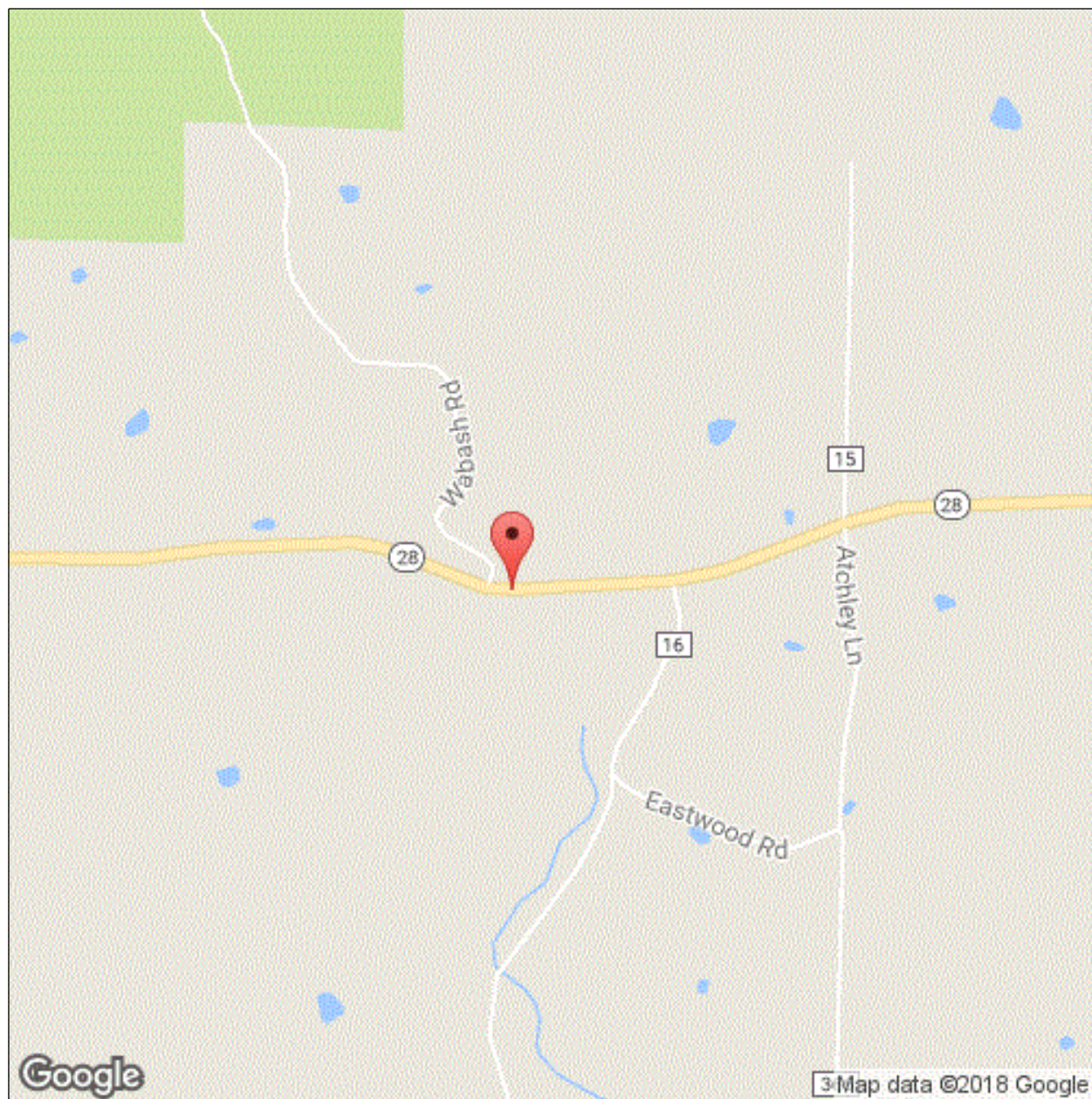
Structure Number: 02648

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Facility Carried: State Highway 28

Bridge Inspection Report

Location Map



Latitude: 34.80760

Longitude: -94.01520

Inspector:

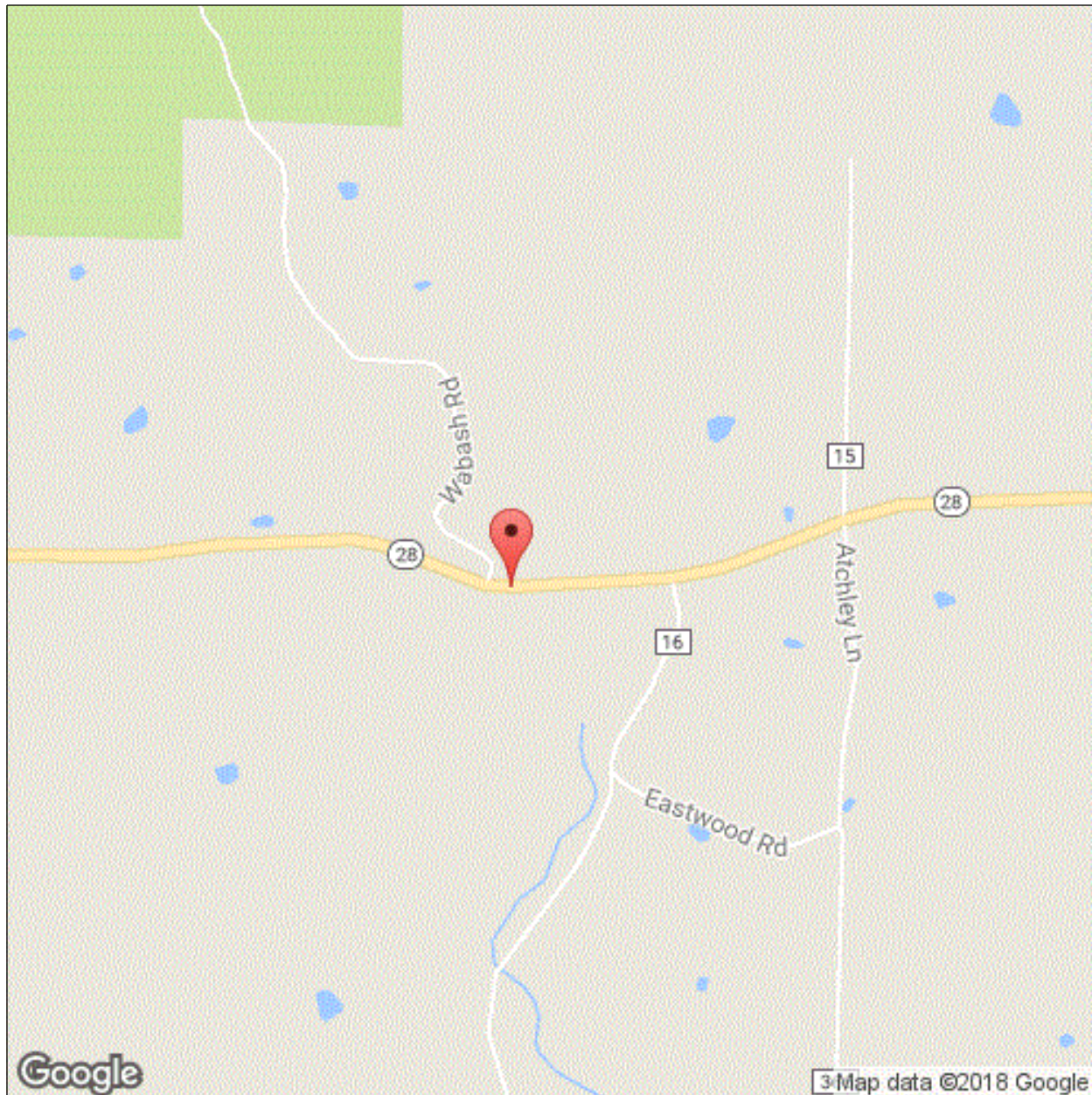
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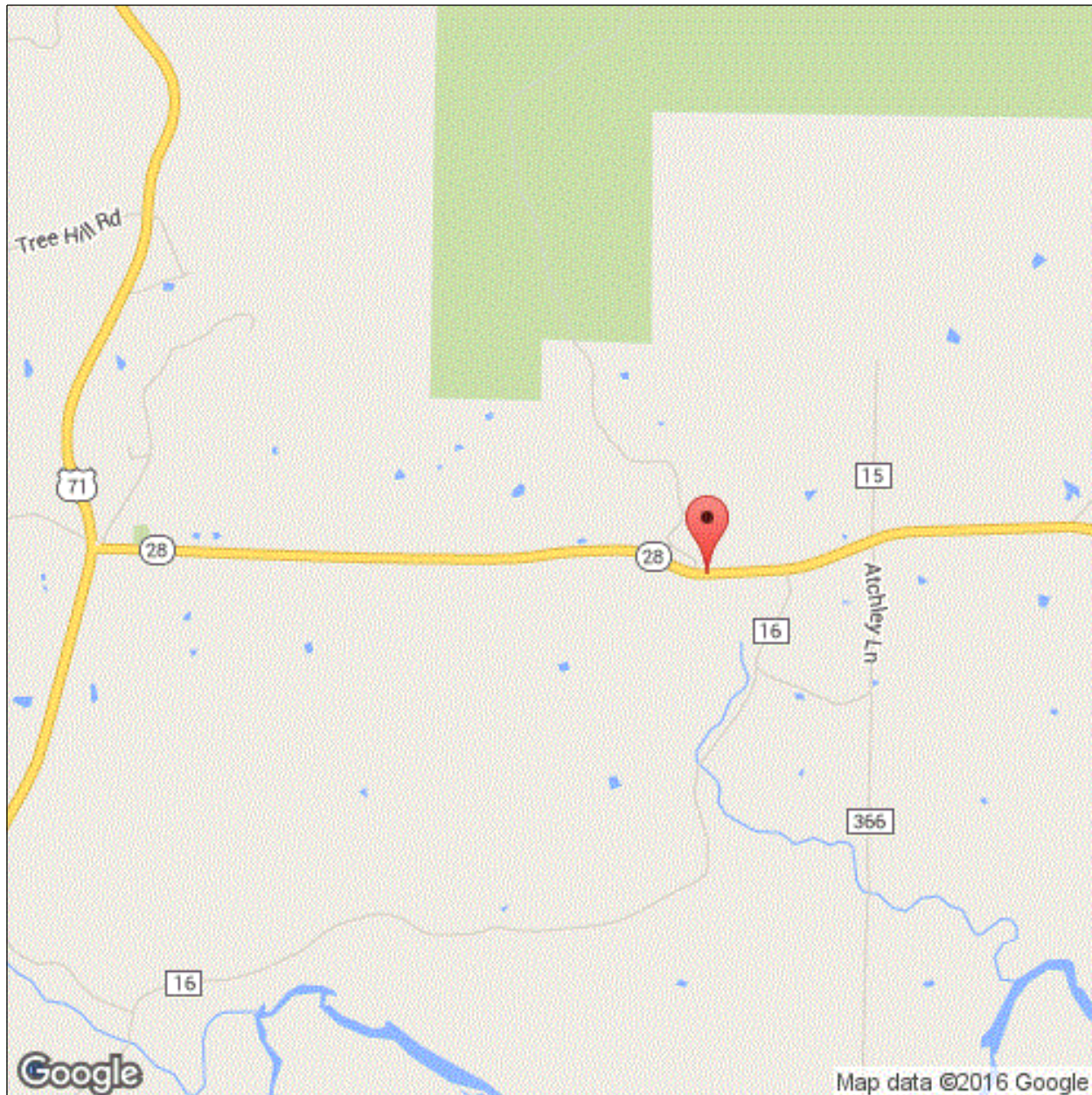
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Executive Summary

07/29/2019 - EJW - Updated wearing surface thickness on this date based on email from Chad Davis indicating that the wearing surface was milled off and replaced with 3/4" asphalt.

01/23/2018 - EJW & JRT - Underwater Type II inspection conducted on this date. Wading and probing indicates the footings have voids along and under the edges of the footings. Some voids penetrate under the edge of the pier wall of Bent # 2 in isolated areas. No apparent repairs since the last inspection.

01/26/2016 JPB & RSM - Routine inspection conducted this date.

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National Bridge Inventory

IDENTIFICATION		INSPECTIONS	
(1) STATE CODE	056 - Arkansas	(90) INSPECTION DATE	01/22/2018
(8) STRUCTURE NUMBER	02648	(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	Thompson Creek-Scott Co.	C. OTHER SPECIAL	N
(7) FACILITY CARRIED	State Highway 28		
(9) LOCATION	1.39 M E US 71		
(11) MILEPOINT 1.390	(12) BASE HIGHWAY NETWORK 0		
(13A) LRS INVENTORY ROUTE	0000000000 (13B) SUBROUTE NUMBER 00		
(16) LATITUDE 34.80760	(17) LONGITUDE -94.01520		
(98A) BORDER BRIDGE CODE			
PERCENT RESPONSIBILITY	(99) BORDER BRIDGE STRUCT		
STRUCTURE TYPE AND MATERIAL		CONDITION	
(43) STRUCTURE TYPE, MAIN		(58) DECK	6
A) KIND OF MATERIAL/DESIGN: 1 - Concrete		(59) SUPERSTRUCTURE	6 (60) SUBSTRUCTURE 5
B) TYPE OF DESIGN/CONSTR: 01 - Slab		(61) CHANNEL & CHANNEL PROTECTION	6 (62) CULVERT N
(44) STRUCTURE TYPE, APPROACH SPANS			
A) KIND OF MATERIAL/DESIGN: 0 - Other			
B) TYPE OF DESIGN/CONSTR: 00 - Other			
(45) NUMBER OF SPANS IN MAIN 2	(46) NUMBER OF APPROACH 0		
(107) DECK STRUCTURE TYPE 1	(108A) WEARING SURFACE 6		
(108B) DECK MEMBRANE 0	(108C) DECK PROTECTION 0		
AGE OF SERVICE		LOAD RATING AND POSTING	
(27) YEAR BUILT 1950	(106) YEAR RECONSTRUCTED 0000	(31) DESIGN LOAD	2
(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	39.0
(29) AVERAGE DAILY TRAFFIC 700	(19) BYPASS DETOUR LENGTH 14	(65) METHOD USED TO DETERMINE INVENTORY RATING	1
(30) YEAR OF AVERAGE DAILY TRAFFIC 2014		(66) INVENTORY RATING	23.0
(109) AVERAGE DAILY TRUCK TRAFFIC 1		(70) BRIDGE POSTING	5
		(41) STRUCTURE OPEN/POSTED/CLOSED	A
GEOMETRIC DATA		APPRAISAL	
(48) LENGTH OF MAX SPAN (ft.) 18	(49) STRUCTURE LENGTH (ft.) 37	(67) STRUCTURAL EVALUATION	5
(50) CURB/SIDEWALK WIDTHS (ft.) LEFT 1 RIGHT 1		(68) DECK GEOMETRY	4
(51) BRDG RDWY WIDTH CURB-TO-CURB (ft.)	22.0	(69) UNDERCLEARANCES, VERTICAL & HORIZONTAL	N
(52) DECK WIDTH, OUT-TO-OUT (ft.)	24	(71) WATERWAY ADEQUACY	6
(32) APPROACH ROADWAY WIDTH (ft.)	24.0	(72) APPROACH ROADWAY ALIGNMENT	6
(33) BRIDGE MEDIAN 0	(34) SKEW (DEG.) 0	(36) TRAFFIC SAFETY FEATURE	
(35) STRUCTURE FLARED 0	(10) INV RTE, MIN VERT CLEAR (ft.) 99.99	36A) BRIDGE RAILINGS:	0
(47) TOTAL HORIZONTAL CLEARANCE (ft.)	23.6	36B) TRANSITIONS:	0
(53) VERTICAL CLEARANCE OVER BRIDGE ROADWAY (ft.)	99.99	36C) APPROACH GUARDRAIL:	0
(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	5
(56) MIN LATERAL UNDER CLEARANCE (ft.)	0	SUFFICIENCY RATING	57.4 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 927	(115) YEAR OF FUTURE ADT 2028	(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
38 - Reinforced Concrete Slab	1- Ben.	888	sq. ft.	868	18	2	0
	-Minor cracking with light efflorescence visible in the undersurface of span #1. -Span #2 has a longitudinal crack near centerline the entire length of span with several short duration cracks that have efflorescence. -Spalling with exposed reinforcing steel at the deck drains. -The West approach roadway has erosion to the North slope that has reached the approach roadway undermining the asphalt shoulder approximately 6 inches.						
1090 - Exposed Rebar		2				2	
1120 - Efflorescence/Rust Staining		9			9		
1130 - Cracking (RC and Other)		9			9		
510 - Wearing Surfaces		814	sq. ft.	748	0	66	0
3220 - Crack (Wearing Surface)		66				66	
213 - Masonry Pier Wall	1- Ben.	20	ft.	0	2	18	0
	-Rock Masonry substructure with grout deterioration at base of walls. -Areas of minor efflorescence between the stones.						
1120 - Efflorescence/Rust Staining		2			2		
1610 - Mortar Breakdown (Masonry)		3				3	
6000 - Scour		15				15	
217 - Masonry Abutment	1- Ben.	65	ft.	0	0	65	0
	-Maintenance forces have made grouted repairs to the west abutment breast wall. -The abutments still have minor grout cracking/deterioration.						
1610 - Mortar Breakdown (Masonry)		59				59	
1630 - Patched Area (Masonry)		6				6	
220 - Reinforced Concrete Pile Cap/Footing	1- Ben.	20	ft.	0	0	17	3
	-The footings are exposed at this inspection. -Bent # 2 has areas of undermining along the Right half of the footing on the Span # 1 side with voids that penetrate under the pier wall at the outlet end of footing.						
6000 - Scour		20				17	3
234 - Reinforced Concrete Pier Cap	1- Ben.	52	ft.	51	0	1	0
	-One shallow vertical spall with exposed reinforcing steel in the Left side of Bent # 2 cap. -Exposed reinforcing steel has very little concrete cover from the construction process with no apparent section loss at this inspection.						
1090 - Exposed Rebar		1				1	

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Element Inspection

330 - Metal Bridge Railing	1- Ben.	74	ft.	33	36	4	1
	-Post #1 on the Right side at the West bridge end is fractured at the base due to collision damage. The post appears to be held in place by the Bridge railing and the exposed reinforcing steel. -The paint system is failing with rust showing through the paint system typical.						
1000 - Corrosion		36			36		
1010 - Cracking		1					1
7000 - Damage		4				4	
515 - Steel Protective Coating		168	sq. ft.	0	0	84	84
3440 - Effectiveness (Steel Protective Coatings)		168				84	84

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Pictures

PHOTO 1

Description

PHOTO 2

Description

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Bridge Inspection Report

Sketches

Inspector:

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Bridge Inspection Report

Maintenance Needs

Date Reported: 01/26/2016

Priority: C - Important

Work Code: Repair

Deficiency Description:

Bridge railing

Post #1 on the Right side at the West bridge end is fractured at the base due to collision damage. The post appears to be held in place by the Bridge railing and the exposed reinforcing steel.

Work Description:

Date Repairs Completed:

Maintenance Comments:

Stage: Open



PHOTO 1 Description Collision damage to Post #1 on Right side of West abutment.

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Maintenance Needs

Date Reported: 01/26/2016

Priority: C - Important

Work Code: Repair

Deficiency Description:

Rock Masonry Substructure

The footings are exposed at this inspection. Bent # 2 has areas of undermining along the Right side of footing on the Span # 1 side with voids that penetrate under the pier wall at the outlet end of footing.

Work Description:

Date Repairs Completed:

Maintenance Comments:

Stage: Open



PHOTO 1 Description Voids under Bent #2 footing.