

Bridge Inspection Report

05364
SH 229 S-O LM 1.25
over
COOKS CREEK



Inspection Date:

Inspected By:

Inspection Type(s):

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Inspector:

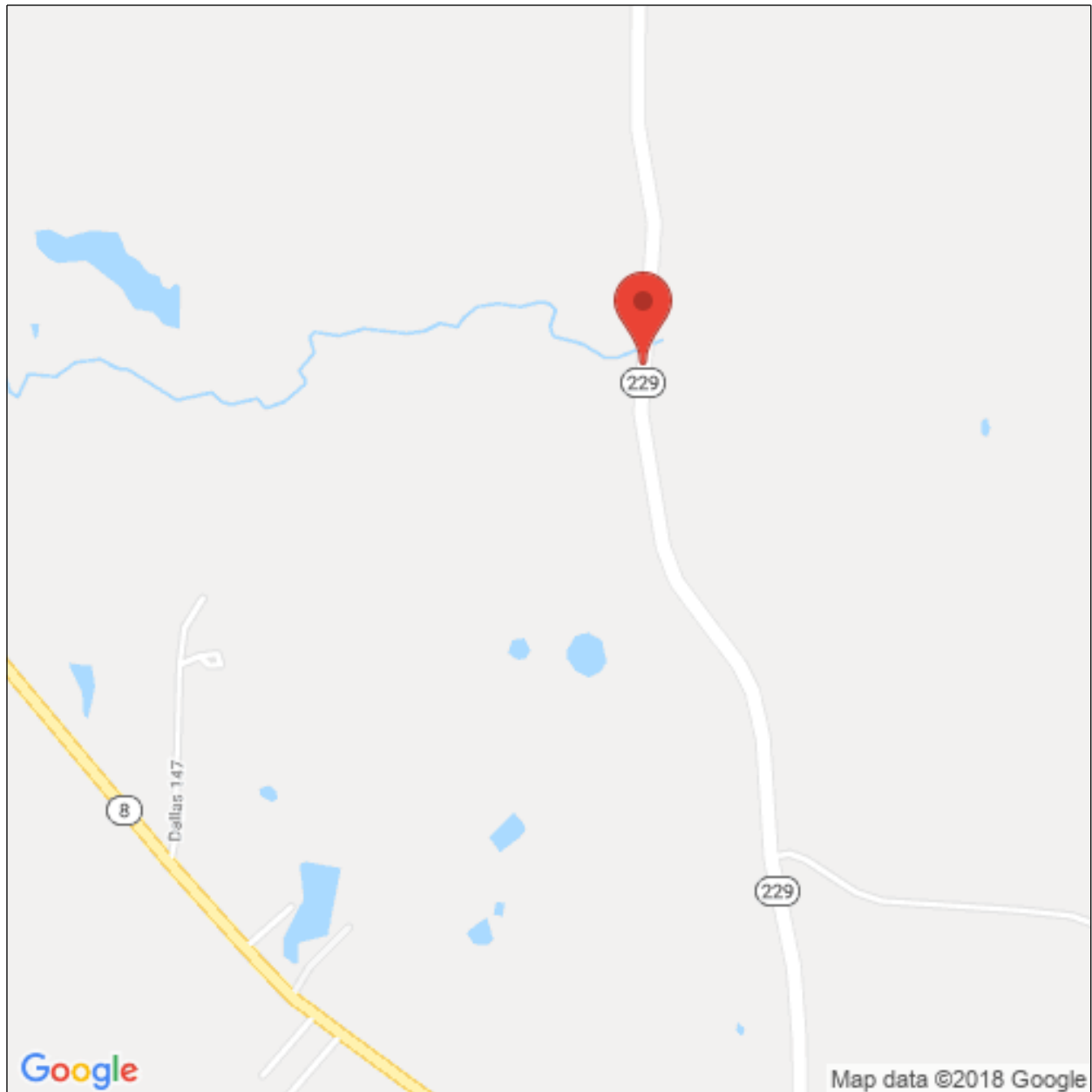
Inspection Date:

Structure Number: 05364

Facility Carried: SH 229 S-O LM 1.25

Bridge Inspection Report

Location Map



Latitude: 33.84693

Longitude: -92.43543

Inspector:

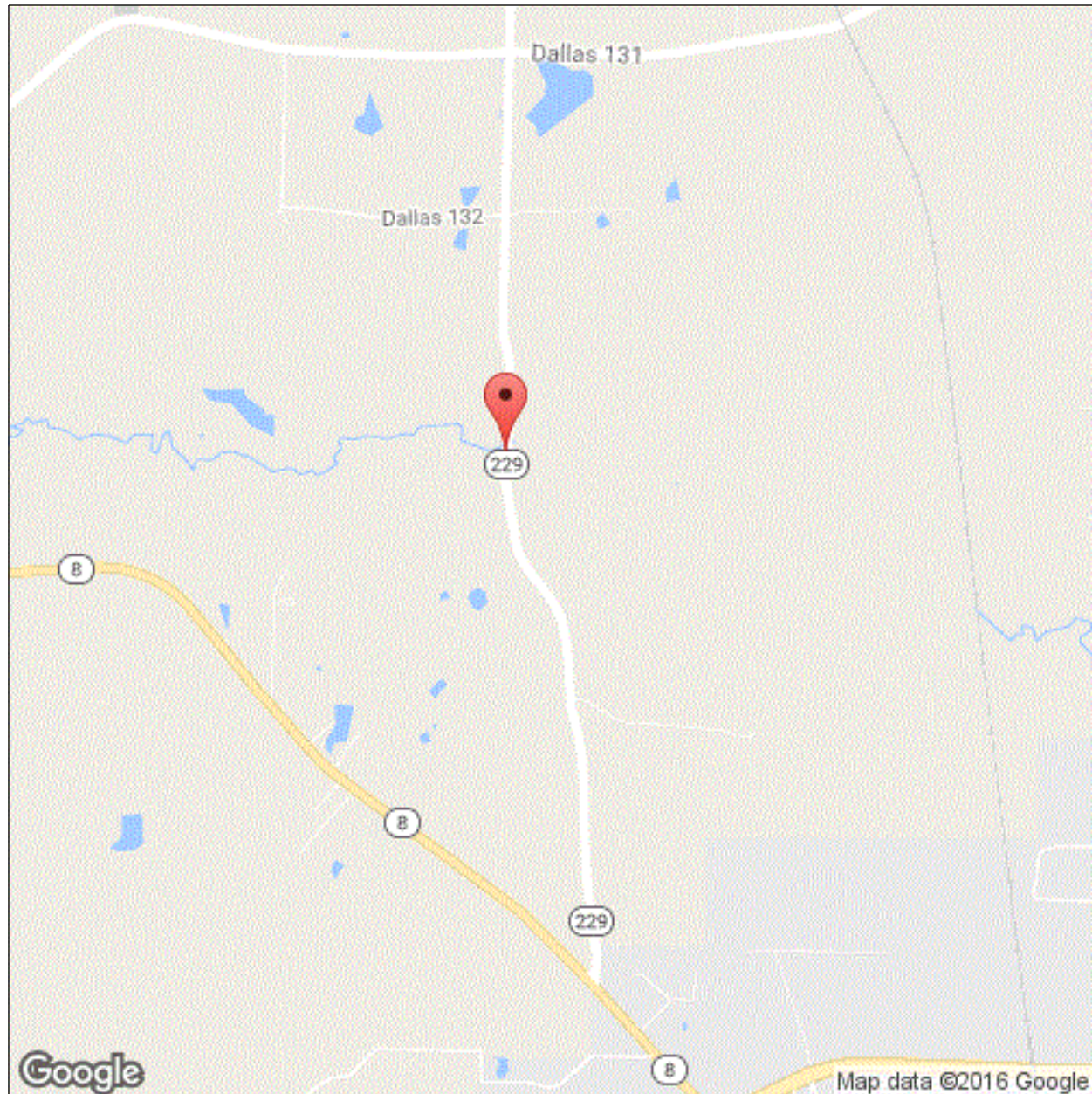
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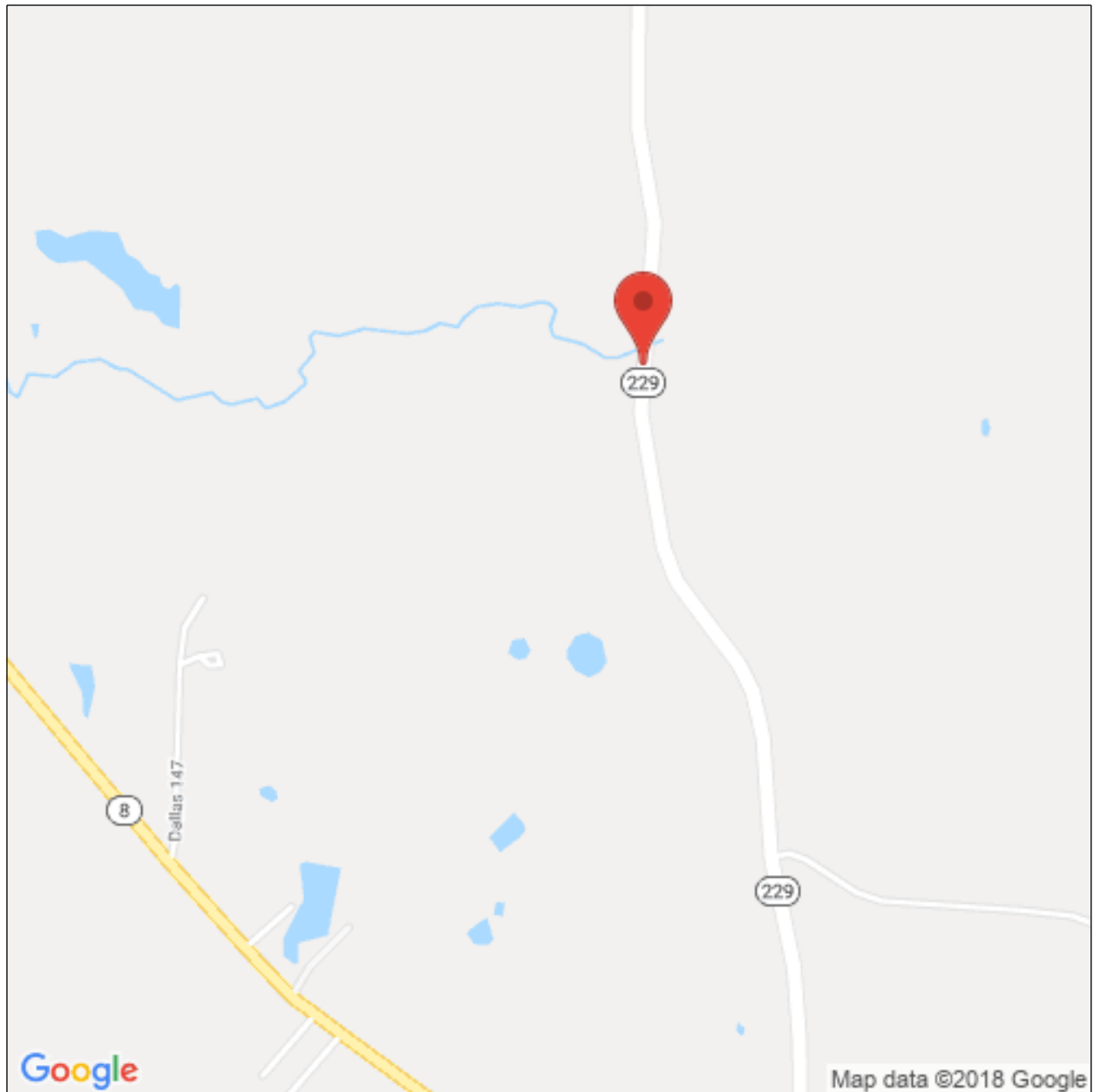
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Executive Summary

08/14/2108 JPR -- This structure is logged from South to North.

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Bridge Inspection Report

National Bridge Inventory

IDENTIFICATION		INSPECTIONS	
(1) STATE CODE	056 - Arkansas	(90) INSPECTION DATE	08/14/2018
(8) STRUCTURE NUMBER	05364	(91) DESIGNATED INSPECTION FREQUENCY	24
(5) INV. ROUTE (ON/UNDER)	1 3 1 229 0	(92) CRITICAL FEATURE INSPECTION	(93) CFI DATE
(2) HIGHWAY AGENCY	07 (3) COUNTY CODE 039	A. FRACTURE CRITICAL DETAIL	N
(4) PLACE CODE	00000	B. UNDERWATER INSPECTION	N
(6) FEATURES INTERSECTED	COOKS CREEK	C. OTHER SPECIAL	N
(7) FACILITY CARRIED	SH 229 S-O LM 1.25		
(9) LOCATION	1.19 MI N JCT SH 8		
(11) MILEPOINT 1.250	(12) BASE HIGHWAY NETWORK 0		
(13A) LRS INVENTORY ROUTE	0000000000 (13B) SUBROUTE NUMBER 00		
(16) LATITUDE 33.84693	(17) LONGITUDE -92.43543		
(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 7
B) TYPE OF DESIGN/CONSTR: 01 - Slab		(61) CHANNEL & CHANNEL PROTECTION	5 (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 3	(46) NUMBER OF APPROACH 0		
(107) DECK STRUCTURE TYPE 1	(108A) WEARING SURFACE 1		
(108B) DECK MEMBRANE 0	(108C) DECK PROTECTION 0		
AGE OF SERVICE		LOAD RATING AND POSTING	
(27) YEAR BUILT 1971	(106) YEAR RECONSTRUCTED 0000	(31) DESIGN LOAD	4
(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	58
(29) AVERAGE DAILY TRAFFIC 760	(19) BYPASS DETOUR LENGTH 2	(65) METHOD USED TO DETERMINE INVENTORY RATING	1
(30) YEAR OF AVERAGE DAILY TRAFFIC 2014		(66) INVENTORY RATING	35
(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.) 28	(49) STRUCTURE LENGTH (ft.) 84	(67) STRUCTURAL EVALUATION	6
(50) CURB/SIDEWALK WIDTHS (ft.) LEFT 0 RIGHT 0		(68) DECK GEOMETRY	5
(51) BRDG RDWY WIDTH CURB-TO-CURB (ft.) 27.9		(69) UNDERCLEARANCES, VERTICAL & HORIZONTAL	N
(52) DECK WIDTH, OUT-TO-OUT (ft.) 31.8		(71) WATERWAY ADEQUACY	8
(32) APPROACH ROADWAY WIDTH (ft.) 27.9		(72) APPROACH ROADWAY ALIGNMENT	8
(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:	1
(47) TOTAL HORIZONTAL CLEARANCE (ft.) 28.9		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:	0
(55) LATERAL UNDER CLEARANCE RIGHT (ft.) N 99.9		(113) SCOUR CRITICAL BRIDGES	5
(56) MIN LATERAL UNDER CLEARANCE (ft.) 0		SUFFICIENCY RATING	89.2 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 835	(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.	2671	sq. ft.	319	1922	430	0
	Full length spalls spans 1 & 3 right side. Deck has wear with exposed aggregates all spans, pourable joint material has failed and water is leaking onto caps.						
1080 - Delamination/Spall/Patched Area		430		0	0	430	0
1130 - Cracking (RC and Other)		242		0	242	0	0
1190 - Abrasion/Wear (PSC/RC)		1680		0	1680	0	0
215 - Reinforced Concrete Abutment	1- Ben.	64	ft.	32	32	0	0
	Span 3 has a large scour hole that has eroded the slope. The area under and back of abutment 2 has eroded and the void is undercutting the load path and approach roadway.						
6000 - Scour		32		0	32	0	0
227 - Reinforced Concrete Pile	1- Ben.	8	each	1	6	1	0
	Pile 1 abutment 2 has exposed aggregates, pile 3 has a 1' spall. No exposed steel.						
1080 - Delamination/Spall/Patched Area		1		0	0	1	0
1190 - Abrasion/Wear (PSC/RC)		6		0	6	0	0
234 - Reinforced Concrete Pier Cap	1- Ben.	64	ft.	64	0	0	0
301 - Pourable Joint Seal	1- Ben.	64	ft.	0	64	0	0
	Failed and leaking.						
2310 - Leakage		24		0	24	0	0
2320 - Seal Adhesion		20		0	20	0	0
2330 - Seal Damage		20		0	20	0	0
330 - Metal Bridge Railing	1- Ben.	168	ft.	168	0	0	0

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Pictures

PHOTO 1

Description

PHOTO 1

Description

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Sketches

Inspector:

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Maintenance Needs

Date Reported: 8/7/2012 12:00:00 AM

Priority: D - Routine

Work Code:

Deficiency Description:

Large deck spalls along right gutter line span 1 and span 3. These are up to 2 feet wide and are full length of the spans.

Work Description:

Date Repairs Completed:

Maintenance Comments:

Stage: Assigned



PHOTO 1 Description

Stage: Monitor



PHOTO 2 Description Deck

Inspector:

Structure Number: 05364

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Bridge Inspection Report

Maintenance Needs

Stage: Monitor



PHOTO 3 Description Spall span 3 right side

Stage: Assigned



PHOTO 4 Description

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Maintenance Needs

Date Reported: 08/14/2014

Priority: C - Important

Work Code:

Deficiency Description:

Abutment 2 entire length of abutment cap, has scoured back and under abutment cap and there is no slope protection. There is 3' - 4' of piling exposed on abutment 2. The area under and back of the abutment has eroded and the void is undercutting the load path and approach roadway. 08/14/2018 JPR -- Looking @ Photo 1 it appears that maintenance has added millings or ACHM from ahead side of the abutment, but there is still some scouring below the bottom of abutment cap. There is also a ACHM patch @ BR end abutment 2, for roadway settlement.

Work Description:

Date Repairs Completed:

Maintenance Comments:

Stage: Assigned



PHOTO 1 Description Scour under abutment 2

Stage: Assigned



PHOTO 2 Description 05364 scour hole under span 3 columns 1-3 shown .

Inspector:

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Maintenance Needs

Stage: Assigned



PHOTO 3 Description Abutment 2 erosion

Stage: Assigned



PHOTO 4 Description Erosion abutment 2

Stage: Assigned



PHOTO 5 Description Abutment and slope erosion note visible aggregates column 1