

Bridge Inspection Report

05260
SH 23-Franklin Co.
over
Rock Creek



Inspection Date:

Inspected By:

Inspection Type(s):

TABLE OF CONTENTS

	PAGE NUMBER
LOCATION MAP	3
NATIONAL BRIDGE INVENTORY	7
ELEMENTS	8
PICTURES	10
SKETCHES	11

Inspector:

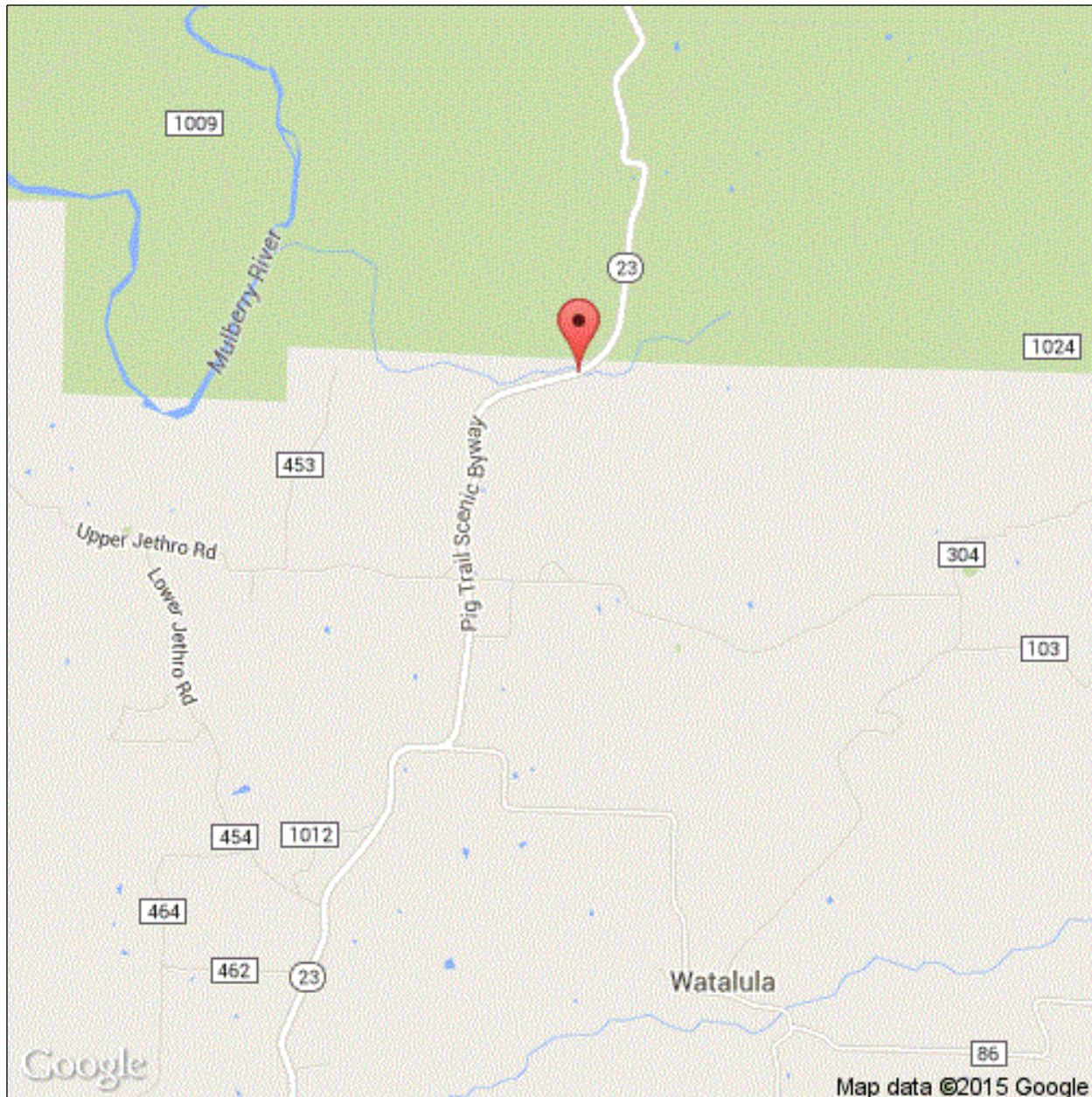
Structure Number: 05260

Inspection Date:

Facility Carried: SH 23-Franklin Co.

Bridge Inspection Report

Location Map



Latitude: 35.61225

Longitude: -93.83878

Inspector:

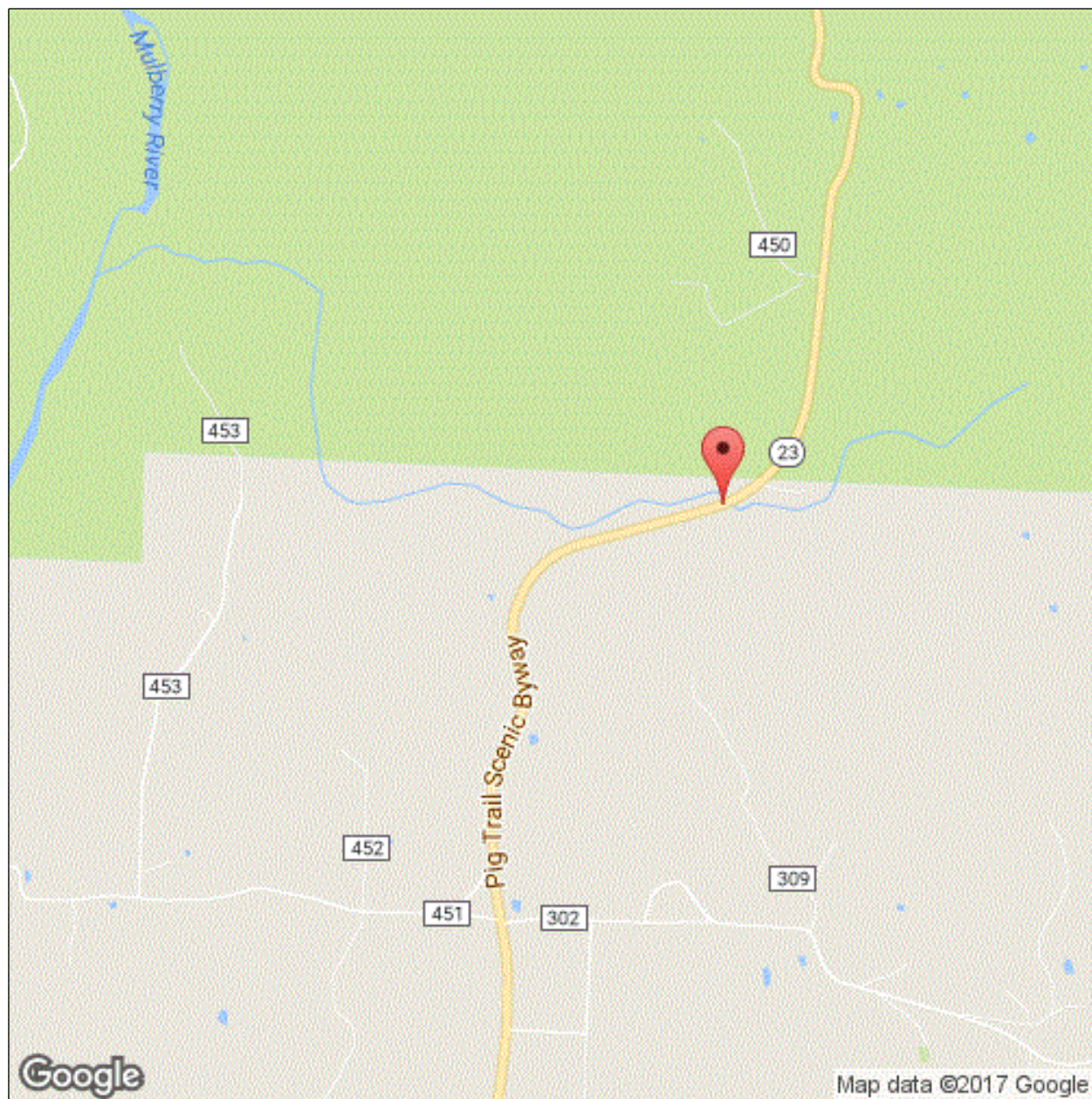
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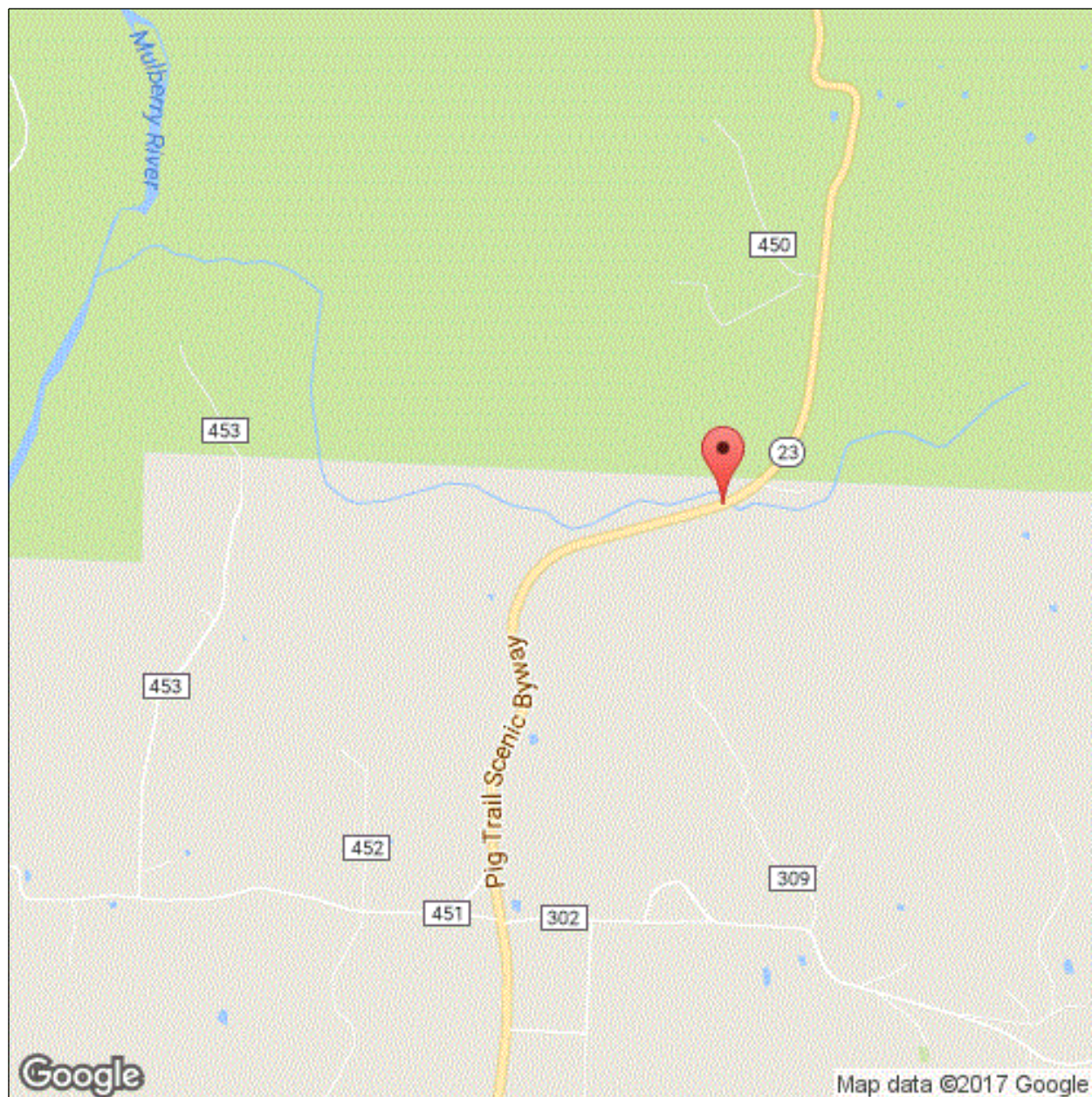
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Bridge Inspection Report

Executive Summary

Inspector:

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Bridge Inspection Report

National Bridge Inventory

IDENTIFICATION		INSPECTIONS	
(1) STATE CODE	056 - Arkansas	(90) INSPECTION DATE	08/16/2017
(8) STRUCTURE NUMBER	05260	(91) DESIGNATED INSPECTION FREQUENCY	24
(5) INV. ROUTE (ON/UNDER)	1 3 1 23 0	(92) CRITICAL FEATURE INSPECTION	(93) CFI DATE
(2) HIGHWAY AGENCY	04 (3) COUNTY CODE 047	A. FRACTURE CRITICAL DETAIL	N
(4) PLACE CODE	00000	B. UNDERWATER INSPECTION	N
(6) FEATURES INTERSECTED	Rock Creek	C. OTHER SPECIAL	N 48 08/10/2015
(7) FACILITY CARRIED	SH 23-Franklin Co.		
(9) LOCATION	5.0 MI N JCT SH 352		
(11) MILEPOINT 10.228	(12) BASE HIGHWAY NETWORK 1		
(13A) LRS INVENTORY ROUTE	0000023070 (13B) SUBROUTE NUMBER 00		
(16) LATITUDE 35.61225	(17) LONGITUDE -93.83878		
(98A) BORDER BRIDGE CODE			
PERCENT RESPONSIBILITY	(99) BORDER BRIDGE STRUCT		
STRUCTURE TYPE AND MATERIAL		CONDITION	
(43) STRUCTURE TYPE, MAIN		(58) DECK	5
A) KIND OF MATERIAL/DESIGN: 1 - Concrete		(59) SUPERSTRUCTURE	5
B) TYPE OF DESIGN/CONSTR: 01 - Slab		(60) SUBSTRUCTURE	5
(44) STRUCTURE TYPE, APPROACH SPANS		(61) CHANNEL & CHANNEL PROTECTION	5
A) KIND OF MATERIAL/DESIGN: 0 - Other		(62) CULVERT	N
B) TYPE OF DESIGN/CONSTR: 00 - Other			
(45) NUMBER OF SPANS IN MAIN	4 (46) NUMBER OF APPROACH		
(107) DECK STRUCTURE TYPE	1 (108A) WEARING SURFACE		
(108B) DECK MEMBRANE	0 (108C) DECK PROTECTION		
AGE OF SERVICE		LOAD RATING AND POSTING	
(27) YEAR BUILT	1972 (106) YEAR RECONSTRUCTED	(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	60.0
(29) AVERAGE DAILY TRAFFIC	1900 (19) BYPASS DETOUR LENGTH	(65) METHOD USED TO DETERMINE INVENTORY RATING	1
(30) YEAR OF AVERAGE DAILY TRAFFIC	2014	(66) INVENTORY RATING	36.0
(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.)	35 (49) STRUCTURE LENGTH (ft.)	(67) STRUCTURAL EVALUATION	5
(50) CURB/SIDEWALK WIDTHS (ft.)	LEFT 0.5 RIGHT 0.5	(68) DECK GEOMETRY	6
(51) BRDG RDWY WIDTH CURB-TO-CURB (ft.)	34.1	(69) UNDERCLEARANCES, VERTICAL & HORIZONTAL	N
(52) DECK WIDTH, OUT-TO-OUT (ft.)	37.8	(71) WATERWAY ADEQUACY	8
(32) APPROACH ROADWAY WIDTH (ft.)	34.1	(72) APPROACH ROADWAY ALIGNMENT	7
(33) BRIDGE MEDIAN	0 (34) SKEW (DEG.)	(36) TRAFFIC SAFETY FEATURE	
(35) STRUCTURE FLARED	0 (10) INV RTE, MIN VERT CLEAR (ft.)	36A) BRIDGE RAILINGS:	1
(47) TOTAL HORIZONTAL CLEARANCE (ft.)	35.1	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	79.4 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	06
(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	2542 (115) YEAR OF FUTURE ADT	(103) TEMP STRUCTURE	
	2028	(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

Inspector:

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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
38 - Reinforced Concrete Slab	1- Ben.	5355	sq. ft.	4268	1063	24	0
	Span 3 Rt lane has a spalled area with exposed reinforcing steel in the wheel path. Spalling adjacent to the deck joints over Bents 2, 3 & 4 has been repaired and appears to be holding, however additional cracking and delaminations are forming adjacent to the repaired areas. Concrete deterioration and scale in the gutters in random locations and on the Rt half of Span 3. All spans have longitudinal cracks visible on the undersurface of the deck.						
1080 - Delamination/Spall/Patched Area		64			49	15	
1090 - Exposed Rebar		9				9	
1130 - Cracking (RC and Other)		334			334		
1190 - Abrasion/Wear (PSC/RC)		680			680		
205 - Reinforced Concrete Column	1- Ben.	9	each	1	3	5	0
	Concrete spalling and deterioration at the base of Bent 2, Column 1 with no exposed reinforcing steel. Bent 4, Column 1 & 2 have spalls with exposed reinforcing steel with initial section loss. Bent # 2 column # 2, Bent # 3 column # 1 & 2, Bent # 4 column # 1 has cracking in the columns.						
1080 - Delamination/Spall/Patched Area		1				1	
1090 - Exposed Rebar		4				4	
1130 - Cracking (RC and Other)		3			3		
210 - Reinforced Concrete Pier Wall	1- Ben.	75	ft.	39	26	10	0
	Concrete web walls: Bent # 2 has horizontal cracking between columns # 1 & 2. Bent # 3 has horizontal cracking between columns # 1 & 2. Bent # 4 has large areas of medium scale from water leakage at the key ways and cracking between columns # 1 & 2.						
1080 - Delamination/Spall/Patched Area		10				10	
1130 - Cracking (RC and Other)		26			26		
215 - Reinforced Concrete Abutment	1- Ben.	80	ft.	25	53	2	0
	The left side of Bent # 1 has concrete deterioration and section loss in the end of the abutment. The abutment has 3 vertical cracks and horizontal cracking that is located near centerline of the bent. Water leakage is apparent at the key ways. Bent # 1 has large areas of light scale forming at this inspection. Bent # 5 has vertical cracking and light scale forming.						
1080 - Delamination/Spall/Patched Area		2				2	
1130 - Cracking (RC and Other)		8			8		
1190 - Abrasion/Wear (PSC/RC)		45			45		
234 - Reinforced Concrete Pier Cap	1- Ben.	105	ft.	73	17	15	0
	Bents 2, 3 & 4 have concrete spalling with exposed reinforcing steel at the keyways. Cracking is beginning to form in locations from apparent water leakage at the keyways.						
1080 - Delamination/Spall/Patched Area		6			2	4	

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Element Inspection

1090 - Exposed Rebar		11				11	
1130 - Cracking (RC and Other)		15			15		
302 - Compression Joint Seal	1- Ben.	200	ft.	73	31	96	0
The compression joint seals are in place but appear to have adhesion failure and are losing bond with the concrete slabs. Several areas are filling with dirt and vegetation is growing through the joints.							
2310 - Leakage		20				20	
2320 - Seal Adhesion		76				76	
2350 - Debris Impaction		31			31		
321 - Reinforced Concrete Approach Slab	1- Ben.	2450	sq. ft.	2450			
The approach slabs have an asphalt overlay and are not visible at this inspection.							
330 - Metal Bridge Railing	1- Ben.	280	ft.	280			
The bridge railing appears to be misaligned due to the deck misalignment.							

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Bridge Inspection Report

Pictures

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Bridge Inspection Report

Sketches

Inspector:

Structure Number: 05260

Inspection Date:

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Bridge Inspection Report

Maintenance Needs

Date Reported: 2/2/2012 12:00:00 AM

Priority: C - Important

Work Code:

Deficiency Description:

Substructure - Bents # 2, # 3 and # 4

The caps at bents # 2, # 3 and # 4 have spalling at the keyways. The spall at bent # 3 of span # 2 has exposed reinforcing steel.

Work Description:

Date Repairs Completed:

Maintenance Comments:

Stage: Open



PHOTO 1 Description Bents 2, 3 & 4 have concrete spalling with exposed reinforcing steel at the keyways. Bent 2 pictured.

Stage: Open



PHOTO 2 Description Bents 2, 3 & 4 have concrete spalling with exposed reinforcing steel at the keyways. Bent 3 pictured.

Inspector:

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Inspection Date:

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Bridge Inspection Report

Maintenance Needs

Date Reported: 8/13/2013 12:00:00 AM

Priority: D - Routine

Work Code:

Deficiency Description:

Substructure

Bent # 4 Columns # 1 & 2 areas of spalling with exposed reinforcing steel. Bent # 2 Column # 1 has concrete deterioration and section loss at the base.

Work Description:

Date Repairs Completed:

Maintenance Comments:

Stage: Open



PHOTO 1 Description Concrete spalling and deterioration at the base of Bent 2, Column 1 with no exposed reinforcing steel.

Stage: Monitor



PHOTO 2 Description

Inspector:

Inspection Date:

Structure Number: 05260

Facility Carried: SH 23-Franklin Co.

Bridge Inspection Report

Maintenance Needs

Stage: Open



PHOTO 3 Description Bent 4, Column 2 has a 3' long spall with exposed reinforcing steel with initial section loss.

Inspector:

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Inspection Date:

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Bridge Inspection Report

Maintenance Needs

Date Reported: 08/10/2015

Priority: C - Important

Work Code:

Deficiency Description:

Concrete Slab Span

Span 3 Right lane has a 3' x 2' spalled area with exposed reinforcing steel in the wheel path. The exposed reinforcing steel has initial section loss.

Work Description:

Date Repairs Completed:

Maintenance Comments:

Stage: Open



PHOTO 1	Description	Span 3 Rt lane has a 2' x 1' spalled area with exposed reinforcing steel in the wheel path.
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Maintenance Needs

Date Reported: 08/16/2017

Priority: D - Routine

Work Code:

Deficiency Description:

Deck Joint Seals

The deck joints seals leak water on the substructure which appears to be contributing to the cracking and spalling in the substructure.

Work Description:

Date Repairs Completed:

Maintenance Comments:

Stage: Open



PHOTO 1 Description

Inspector:

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Bridge Inspection Report

Maintenance Needs

Date Reported: 08/16/2017

Priority: D - Routine

Work Code:

Deficiency Description:

Substructure

The left side of Bent # 1 abutment has a 12" long area of concrete deterioration and section loss.

Work Description:

Date Repairs Completed:

Maintenance Comments:

Stage: Open



PHOTO 1 Description

Inspector:

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Maintenance Needs

Date Reported: 08/16/2017

Priority: D - Routine

Work Code:

Deficiency Description:

Driving Surface

The concrete slab spans have several large areas of medium scale / abrasion visible on the driving surface of the deck.

Work Description:

Date Repairs Completed:

Maintenance Comments:

Stage: Open



PHOTO 1 Description