

Bridge Inspection Report

B5203
I-555-03NB-LM40.29
over
Union Pacific R/R



Inspection Date:

Inspected By:

Inspection Type(s):

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Inspector:

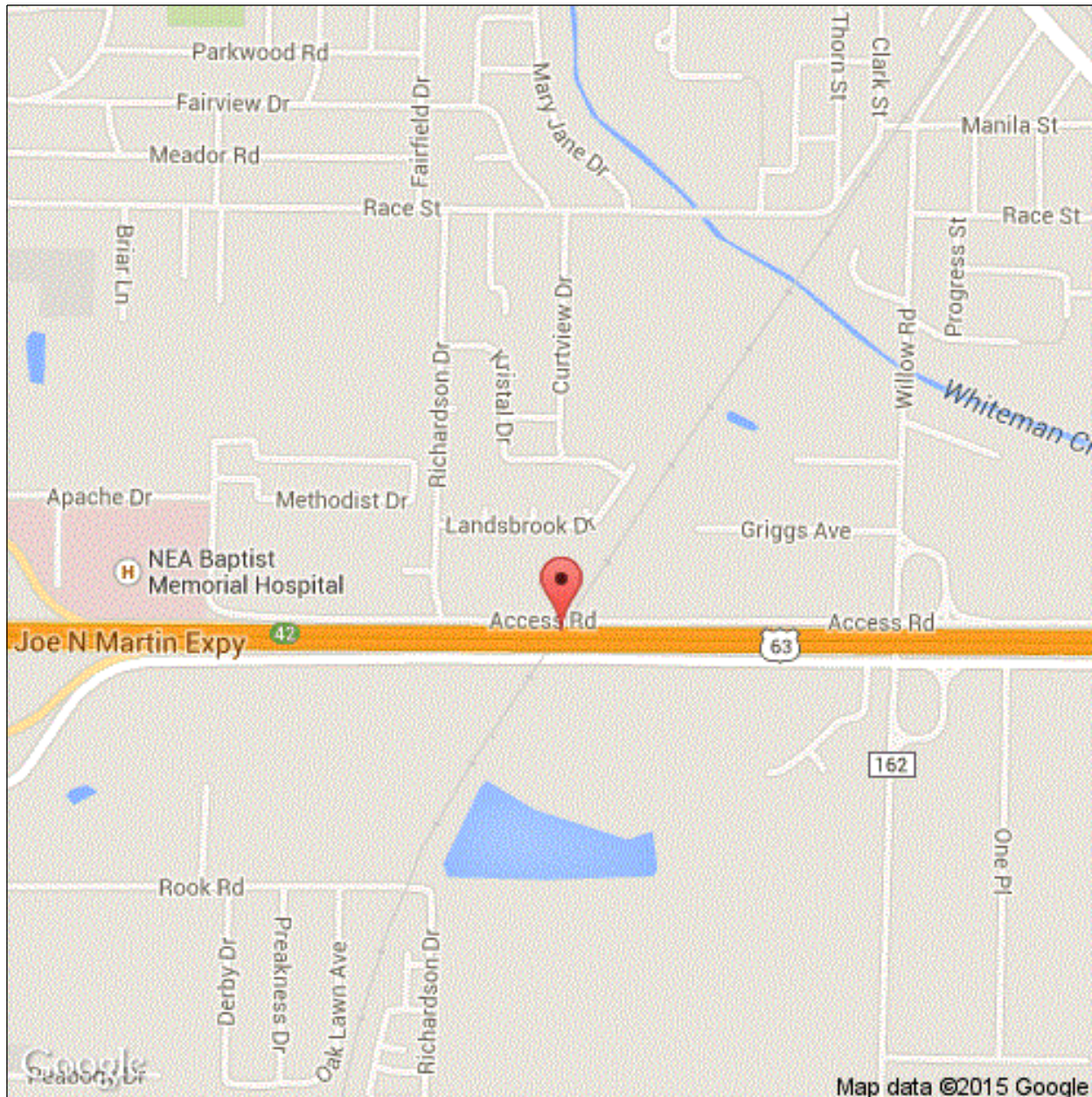
Structure Number: B5203

Inspection Date:

Facility Carried: I-555-03NB-LM40.29

Bridge Inspection Report

Location Map



Latitude: 35.807106241174

Longitude: -90.6574926538865

Inspector:

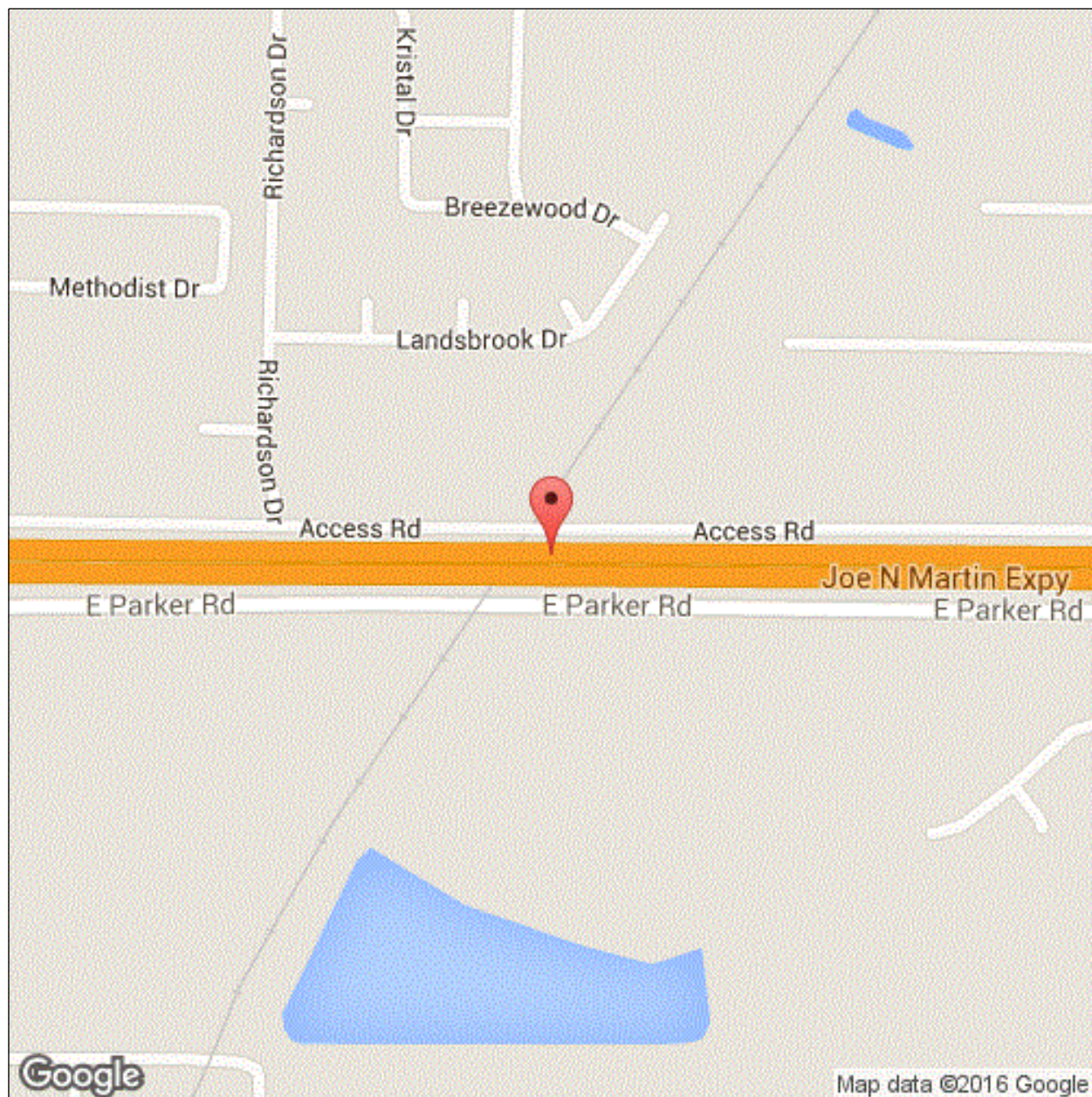
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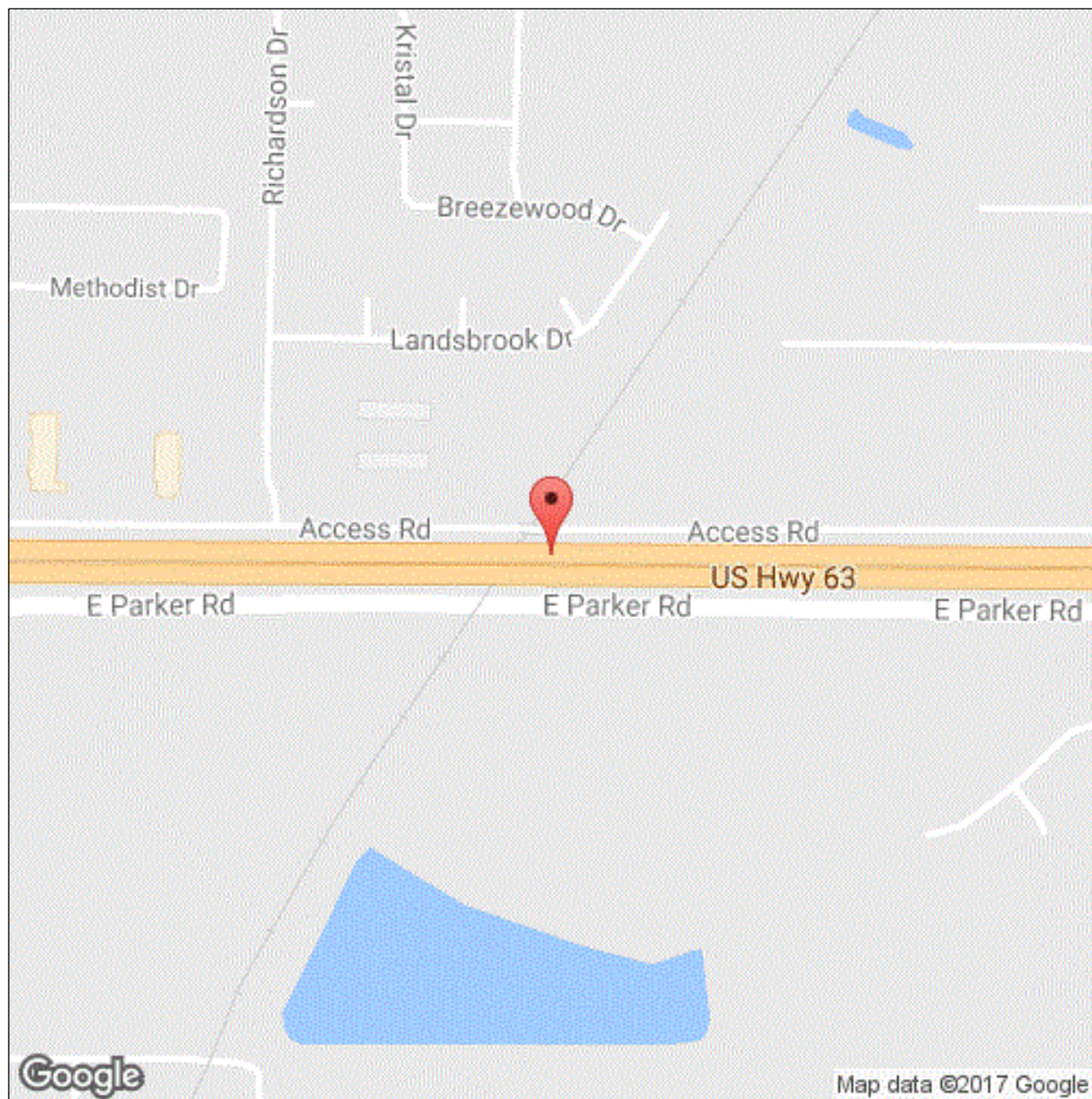
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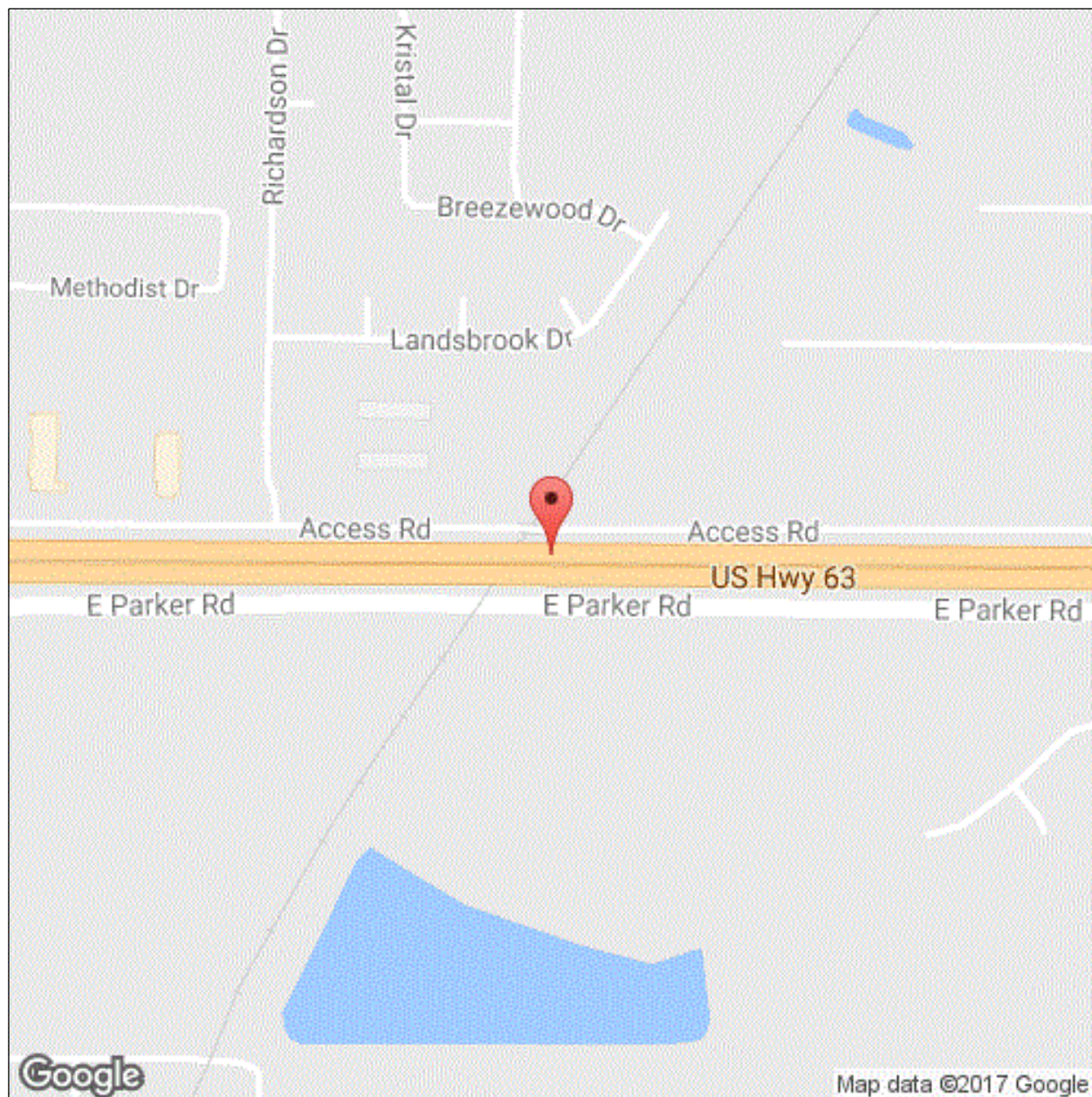
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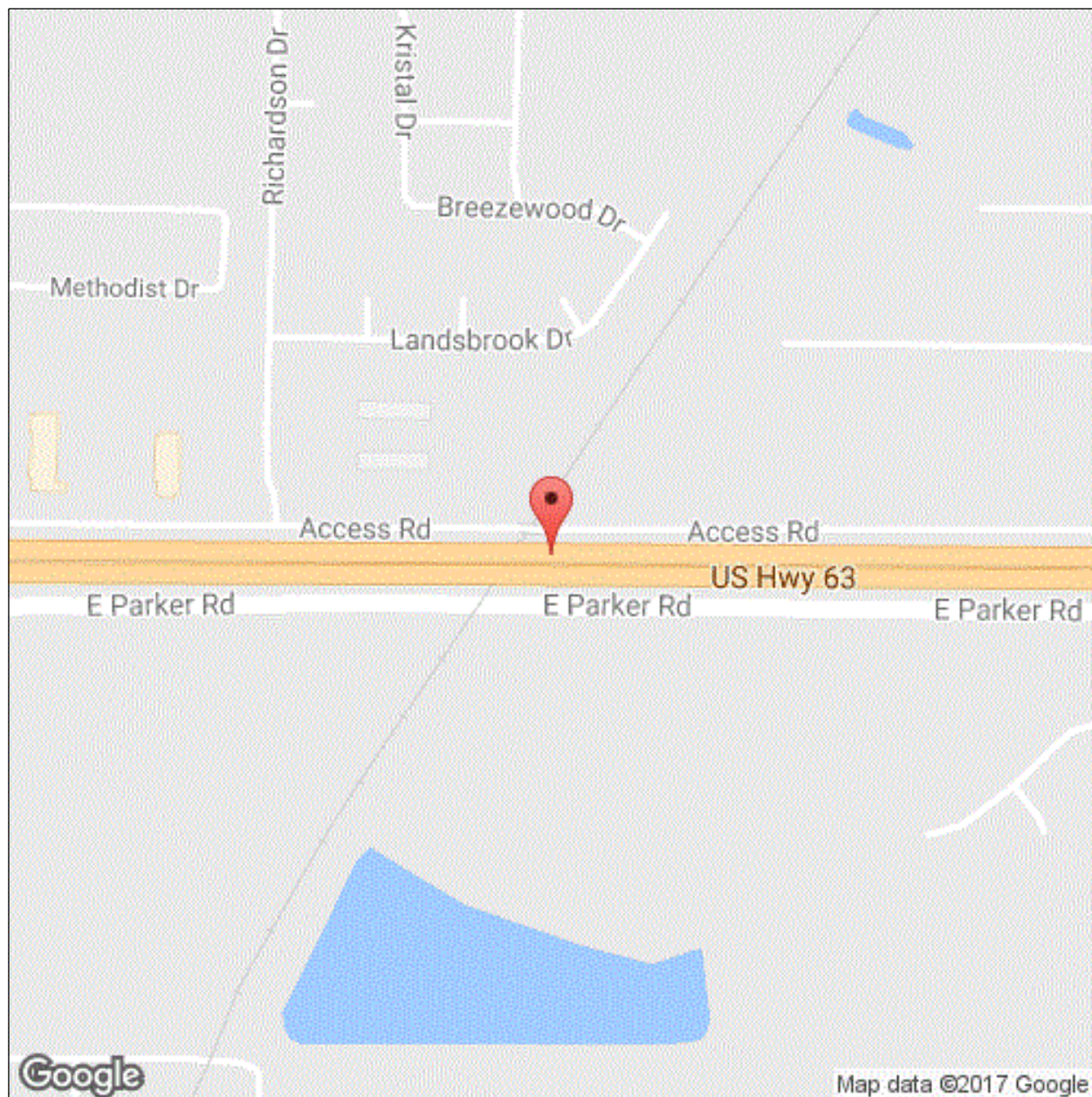
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Executive Summary

Inspector:

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Bridge Inspection Report

National Bridge Inventory

IDENTIFICATION		INSPECTIONS	
(1) STATE CODE	056 - Arkansas	(90) INSPECTION DATE	05/15/2018
(8) STRUCTURE NUMBER	B5203	(91) DESIGNATED INSPECTION FREQUENCY	24
(5) INV. ROUTE (ON/UNDER)	1 1 1 555 1	(92) CRITICAL FEATURE INSPECTION	(93) CFI DATE
(2) HIGHWAY AGENCY	10 (3) COUNTY CODE 031	A. FRACTURE CRITICAL DETAIL	N
(4) PLACE CODE	00000	B. UNDERWATER INSPECTION	N
(6) FEATURES INTERSECTED	Union Pacific R/R	C. OTHER SPECIAL	Y 24 04/10/2019
(7) FACILITY CARRIED	I-555-03NB-LM40.29		
(9) LOCATION	2.26 MI E JCT SH 1		
(11) MILEPOINT 40.79	(12) BASE HIGHWAY NETWORK 1		
(13A) LRS INVENTORY ROUTE	0000063070 (13B) SUBROUTE NUMBER 1		
(16) LATITUDE	35.807106241174 (17) LONGITUDE -90.65749265388865		
(98A) BORDER BRIDGE CODE			
PERCENT RESPONSIBILITY	(99) BORDER BRIDGE STRUCT		
STRUCTURE TYPE AND MATERIAL		CONDITION	
(43) STRUCTURE TYPE, MAIN		(58) DECK	4
A) KIND OF MATERIAL/DESIGN: 3 - Steel		(59) SUPERSTRUCTURE	7 (60) SUBSTRUCTURE 6
B) TYPE OF DESIGN/CONSTR: 02 - Stringer/Multi-beam or Girder		(61) CHANNEL & CHANNEL PROTECTION	N (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	6	
(108B) DECK MEMBRANE	0 (108C) DECK PROTECTION	0	
AGE OF SERVICE		LOAD RATING AND POSTING	
(27) YEAR BUILT	1970 (106) YEAR RECONSTRUCTED	0000	
(42) TYPE OF SERVICE	ON 1 UNDER 2	(31) DESIGN LOAD 5	
(28) LANES	ON 02 UNDER 00	(63) METHOD USED TO DETERMINE OPERATING RATING	
(29) AVERAGE DAILY TRAFFIC	24000 (19) BYPASS DETOUR LENGTH	3	
(30) YEAR OF AVERAGE DAILY TRAFFIC	2013	(64) OPERATING RATING 60.0	
(109) AVERAGE DAILY TRUCK TRAFFIC	1	(65) METHOD USED TO DETERMINE INVENTORY RATING	
		1	
		(66) INVENTORY RATING 36.0	
		(70) BRIDGE POSTING 5	
		(41) STRUCTURE OPEN/POSTED/CLOSED A	
GEOMETRIC DATA		APPRAISAL	
(48) LENGTH OF MAX SPAN (ft.)	77 (49) STRUCTURE LENGTH (ft.)	6	
(50) CURB/SIDEWALK WIDTHS (ft.)	LEFT 0.4 RIGHT 0.4	(67) STRUCTURAL EVALUATION	
(51) BRDG RDWY WIDTH CURB-TO-CURB (ft.)	39.0	(68) DECK GEOMETRY 6	
(52) DECK WIDTH, OUT-TO-OUT (ft.)	42	(69) UNDERCLEARANCES, VERTICAL & HORIZONTAL	
(32) APPROACH ROADWAY WIDTH (ft.)	40.0	7	
(33) BRIDGE MEDIAN	0 (34) SKEW (DEG.)	35	
(35) STRUCTURE FLARED	0 (10) INV RTE, MIN VERT CLEAR (ft.)	99.99	
(47) TOTAL HORIZONTAL CLEARANCE (ft.)	39.7	(71) WATERWAY ADEQUACY N	
(53) VERTICAL CLEARANCE OVER BRIDGE ROADWAY (ft.)	99.99	(72) APPROACH ROADWAY ALIGNMENT	
(54) VERTICAL UNDER CLEARANCE (ft.)	R 22.98	8	
(55) LATERAL UNDER CLEARANCE RIGHT (ft.)	R 29.8	(36) TRAFFIC SAFETY FEATURE	
(56) MIN LATERAL UNDER CLEARANCE (ft.)	0	36A) BRIDGE RAILINGS: 1	
		36B) TRANSITIONS: 0	
		36C) APPROACH GUARDRAIL: 0	
		36D) APPROACH GUARDRAIL ENDS: 0	
		(113) SCOUR CRITICAL BRIDGES N	
		SUFFICIENCY RATING 87.2 STATUS 1	
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 1	
(94) BRIDGE IMPROVEMENT COST (\$)	0	(26) FUNCTIONAL CLASSIFICATION OF INVENTORY ROUTE	
(95) ROADWAY IMPROVEMENT COST (\$)	0	11	
(96) TOTAL PROJECT COST	0	(100) STRAHNET HIGHWAY DESIGNATION 1	
(97) YEAR OF IMPROVEMENT COST ESTIMATE	0000	(101) PARALLEL STRUCTURE DESIGNATION R	
(114) FUTURE ADT	14091 (115) YEAR OF FUTURE ADT	2028	
		(102) DIRECTION OF TRAFFIC 1	
		(103) TEMP STRUCTURE	
		(105) FEDERAL LANDS HIGHWAYS 0	
		(110) DESIGNATED NATIONAL NETWORK 1	
		(20) TOLL 3	
		(21) MAINTENANCE RESPONSIBILITY 01	
		(22) OWNER 01	
		(37) HISTORICAL 5	
		NAVIGATION DATA	
		(38) NAVIGATION CONTROL N	
		(111) PIER OR ABUTMENT PROTECTION 5	
		(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.	9828	sq. ft.	1684	0	402	7742
1080 - Delamination/Spall/Patched Area		7742		0	0	0	7742
1090 - Exposed Rebar		252		0	0	252	0
1120 - Efflorescence/Rust Staining		150		0	0	150	0
510 - Wearing Surfaces		9009	sq. ft.	9005	0	4	0
3210 - Delamination/Spall/Patched Area/Pothole (Wearing Surfaces)		4		0	0	4	0
107 - Steel Open Girder/Beam	1- Ben.	1617	ft.	1575	42	0	0
1000 - Corrosion		42		0	42	0	0
515 - Steel Protective Coating		14168	sq. ft.	2867	0	0	11301
3440 - Effectiveness (Steel Protective Coatings)		11301		0	0	0	11301
205 - Reinforced Concrete Column	1- Ben.	4	each	2	2	0	0
1090 - Exposed Rebar		2		0	2	0	0
215 - Reinforced Concrete Abutment	1- Ben.	120	ft.	105	0	15	0
1130 - Cracking (RC and Other)		15		0	0	15	0
234 - Reinforced Concrete Pier Cap	1- Ben.	98	ft.	50	20	28	0
1090 - Exposed Rebar		20		0	20	0	0
1130 - Cracking (RC and Other)		28		0	0	28	0
301 - Pourable Joint Seal	1- Ben.	94	ft.	0	0	94	0
2330 - Seal Damage		94		0	0	94	0
302 - Compression Joint Seal	1- Ben.	94	ft.	0	0	94	0
2330 - Seal Damage		94		0	0	94	0
311 - Movable Bearing	1- Ben.	21	each	0	0	21	0
1000 - Corrosion		21		0	0	21	0
313 - Fixed Bearing	1- Ben.	21	each	0	0	21	0
1000 - Corrosion		20		0	0	20	0
1020 - Connection		1		0	0	1	0
321 - Reinforced Concrete Approach Slab	1- Ben.	1584	sq. ft.	1577	0	7	0
1130 - Cracking (RC and Other)		7		0	0	7	0
330 - Metal Bridge Railing	1- Ben.	468	ft.	468	0	0	0
515 - Steel Protective Coating		966	sq. ft.	966	0	0	0
331 - Reinforced Concrete Bridge Railing	1- Ben.	468	ft.	266	202	0	0
1090 - Exposed Rebar		2		0	2	0	0
1130 - Cracking (RC and Other)		200		0	200	0	0

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Pictures

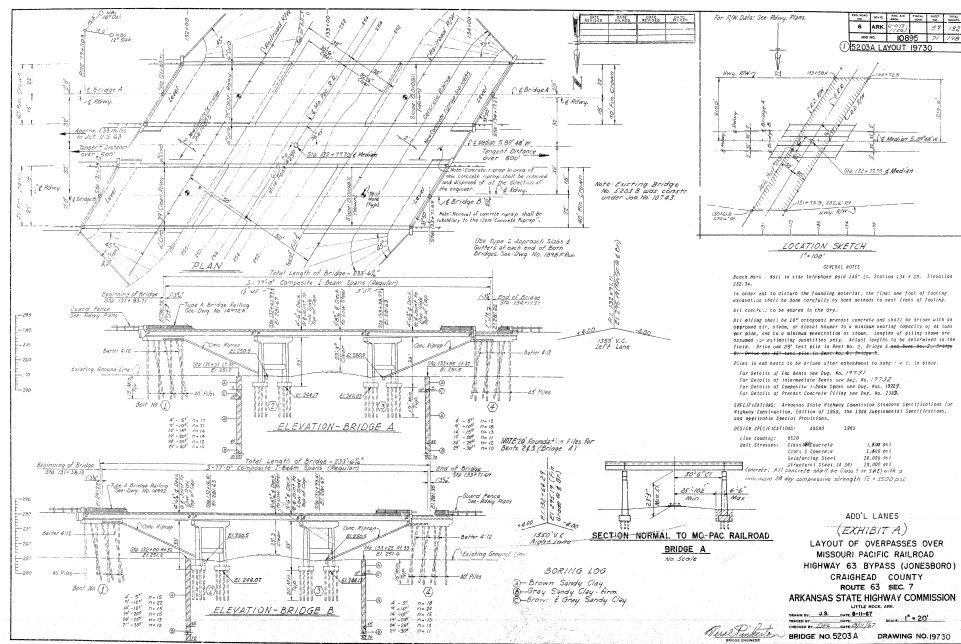


PHOTO 1

Description Layout View

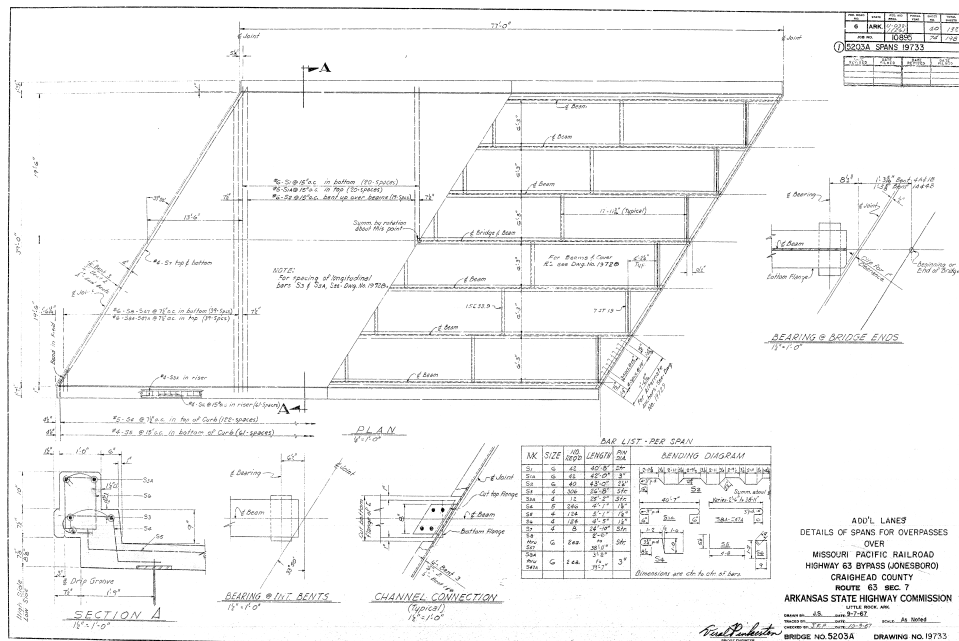


PHOTO 2

Description Cross Section View

Inspector:

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Bridge Inspection Report

Sketches

Inspector:

Structure Number: B5203

Inspection Date:

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Bridge Inspection Report

Maintenance Needs

Date Reported: 4/24/2012 12:00:00 AM

Priority: C - Important

Work Code:

Deficiency Description:

Compression Seal

Bt. 1 & 4 seals are deteriorated, split and losing adhesion.

Bt. 2 & 3 pourable seals are torn allowing leakage & debris on to caps.

Work Description:

Date Repairs Completed:

Maintenance Comments:

Date Reported: 4/24/2012 12:00:00 AM

Priority: C - Important

Work Code:

Deficiency Description:

Approach Slabs

Both approach slabs have medium scale and numerous unsealed cracks.

Work Description:

Date Repairs Completed:

Maintenance Comments:

Date Reported: 4/24/2012 12:00:00 AM

Priority: C - Important

Work Code:

Deficiency Description:

Steel Girders

Girders have 80% paint deterioration and rust with minor pitting.

Work Description:

Date Repairs Completed:

Maintenance Comments:

Inspector:

Structure Number: B5203

Inspection Date:

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Bridge Inspection Report

Maintenance Needs

Date Reported: 4/24/2012 12:00:00 AM

Priority: C - Important

Work Code:

Deficiency Description:

Bent 1 Bearing 5
are rust covered with pitting and has one anchor bolt sheared off.
Girders 1 & 3 Bt.4 sheared off.

Work Description:

Date Repairs Completed:

Maintenance Comments:

Inspector:

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Bridge Inspection Report

Maintenance Needs

Date Reported: 4/24/2012 12:00:00 AM

Priority: C - Important

Work Code:

Deficiency Description:

Bt. 2 Conc. Cap on Sp. 2 side.

20 ft. horz. crack 3 in. up from bottom of cap.

5 ft. horz. crack 3 in. down from top of cap between Column 1, & 2. See 2016 photo.

Work Description:

Date Repairs Completed:

Maintenance Comments:

Stage: Monitor



PHOTO 1 Description

Inspector:

Structure Number: B5203

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Bridge Inspection Report

Maintenance Needs

Date Reported: 4/24/2012 12:00:00 AM

Priority: C - Important

Work Code:

Deficiency Description:

Bt. 2 Conc. Cap on Sp. 1 side.

2 ft. X 4 ft. area of small spalls with exposed rebar at column 1.

2 ft. X 2 ft. X 2 in. deep spall with exposed rebar at column 2,

Work Description:

Date Repairs Completed:

Maintenance Comments:

Stage: Open



PHOTO 1 Description

Inspector:

Structure Number: B5203

Inspection Date:

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Bridge Inspection Report

Maintenance Needs

Date Reported: 4/9/2013 12:00:00 AM

Priority: C - Important

Work Code:

Deficiency Description:

Bents 2, & 3 Rocker Bearings.
are rust covered with pitting and are tilted up to 15 degrees.

Work Description:

Date Repairs Completed:

Maintenance Comments:

Stage: Monitor



PHOTO 1 Description

Inspector:

Structure Number: B5203

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Bridge Inspection Report

Maintenance Needs

Date Reported: 04/19/2017

Priority: C - Important

Work Code:

Deficiency Description:

Concrete deck has some delamination with a few spalls with some exposed rebar, 252SF of exposed rebar visible. Majority of deck has new concrete and / or epoxy patch repairs that are in good to fair condition at this time. Old patches are loose and beginning to shell out exposing some rebar and small and large portion of concrete debris in gutter lines. See 2018 photos.

Work Description:

Deck received an asphalt overlay in 2018.

Date Repairs Completed:

Maintenance Comments:

this bridge is scheduled for rehabilitation next year. KAW

Stage: Monitor



PHOTO 1 Description

Stage: Open



PHOTO 2 Description Deck spalls with rebar exposed

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Bridge Inspection Report

Maintenance Needs

Stage: Monitor



PHOTO 3 Description

Stage: Monitor



PHOTO 4 Description

Stage: Monitor



PHOTO 5 Description

Stage: Open



PHOTO 6 Description Deck spalls with rebar exposed