

# Bridge Inspection Report

**06351**  
**WILLOW STREET**  
**over**  
**I-555, ML AND FR RDS**



**Inspection Date:**

**Inspected By:**

**Inspection Type(s):**

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Inspector:

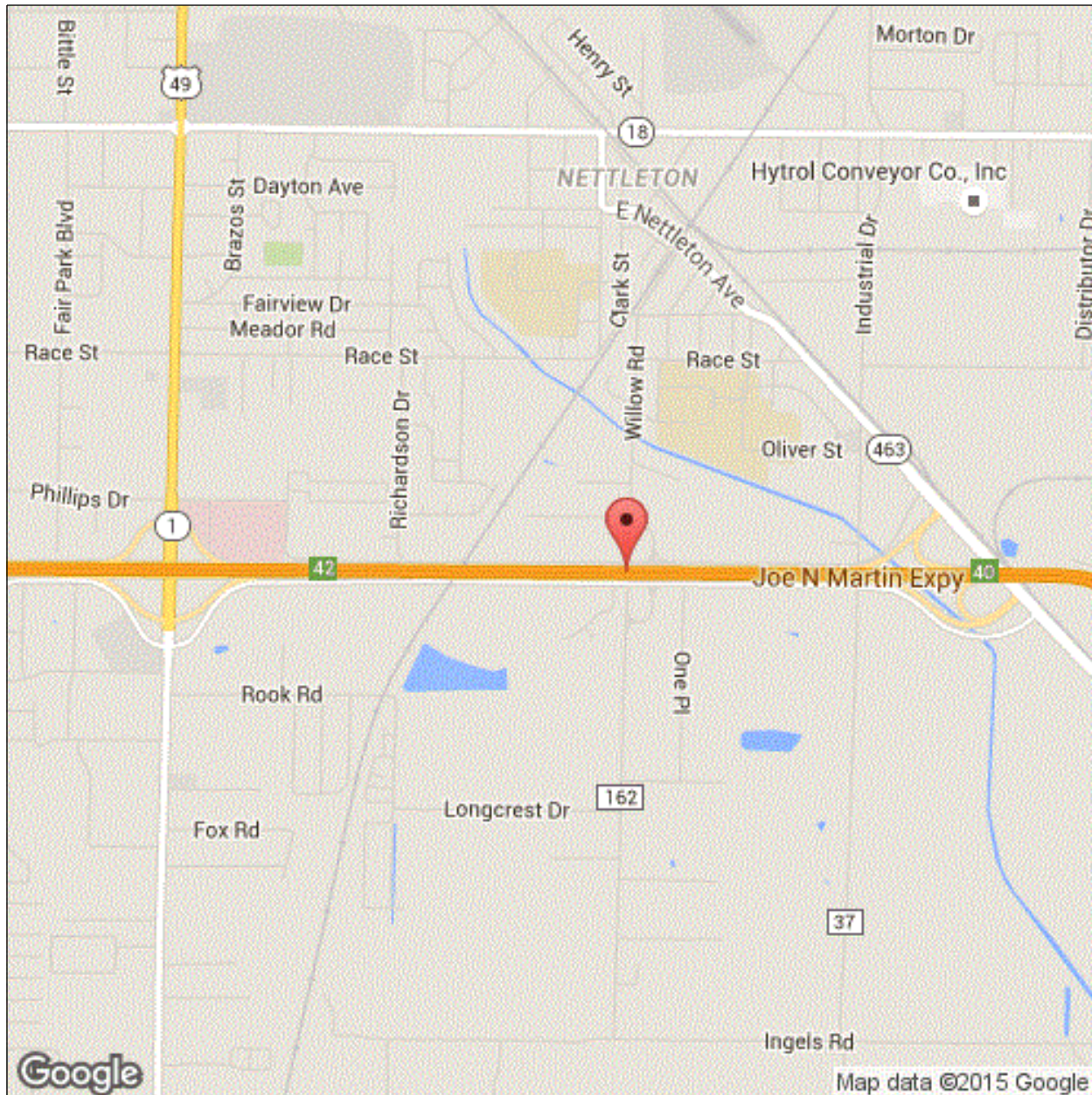
Structure Number: 06351

Inspection Date:

Facility Carried: WILLOW STREET

### Bridge Inspection Report

### Location Map



Latitude: 35.80648

Longitude: -90.65126



Inspector:

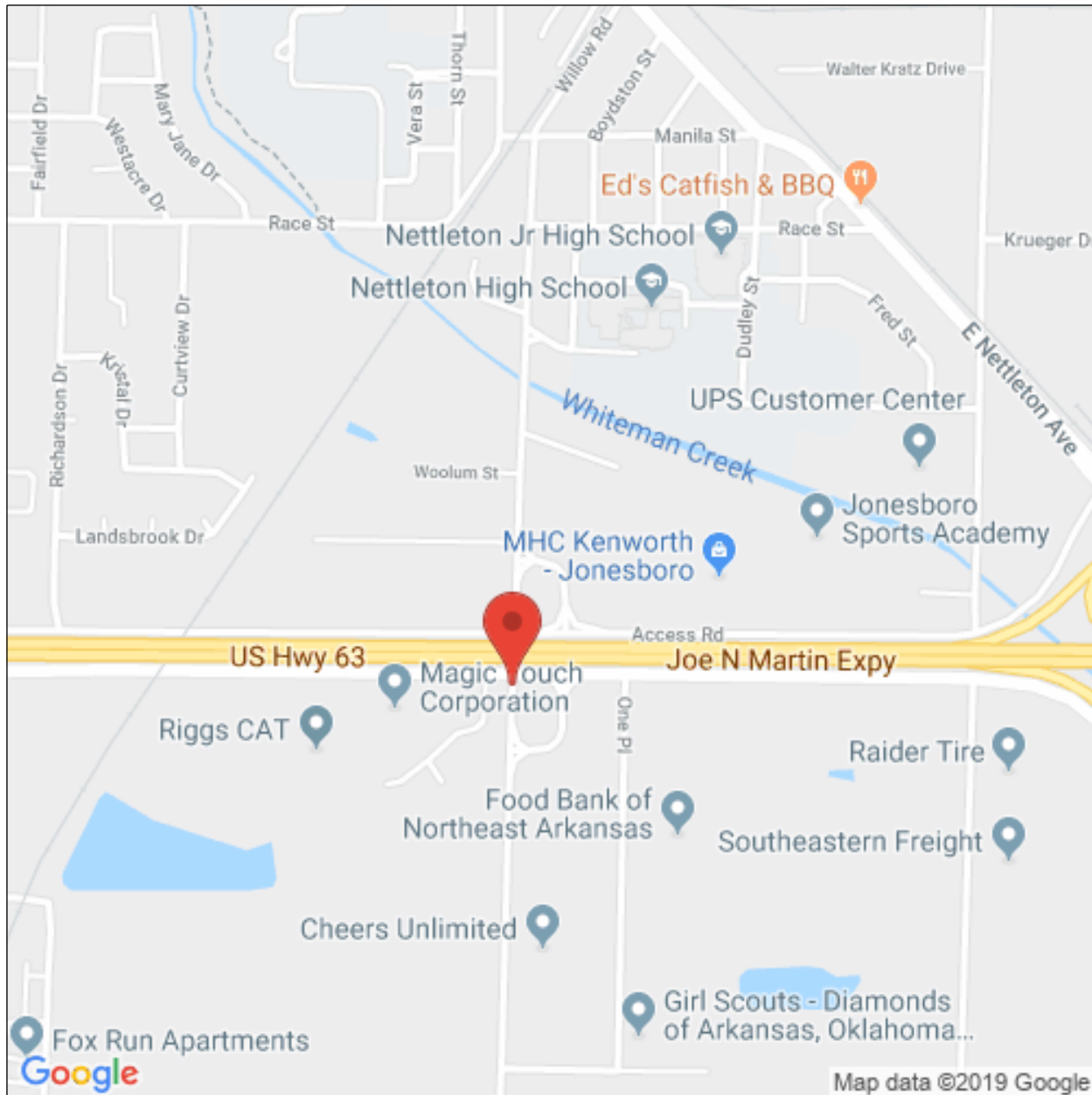
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### Bridge Inspection Report

### Location Map



Latitude: 35.80648

Longitude: -90.65126

Inspector:

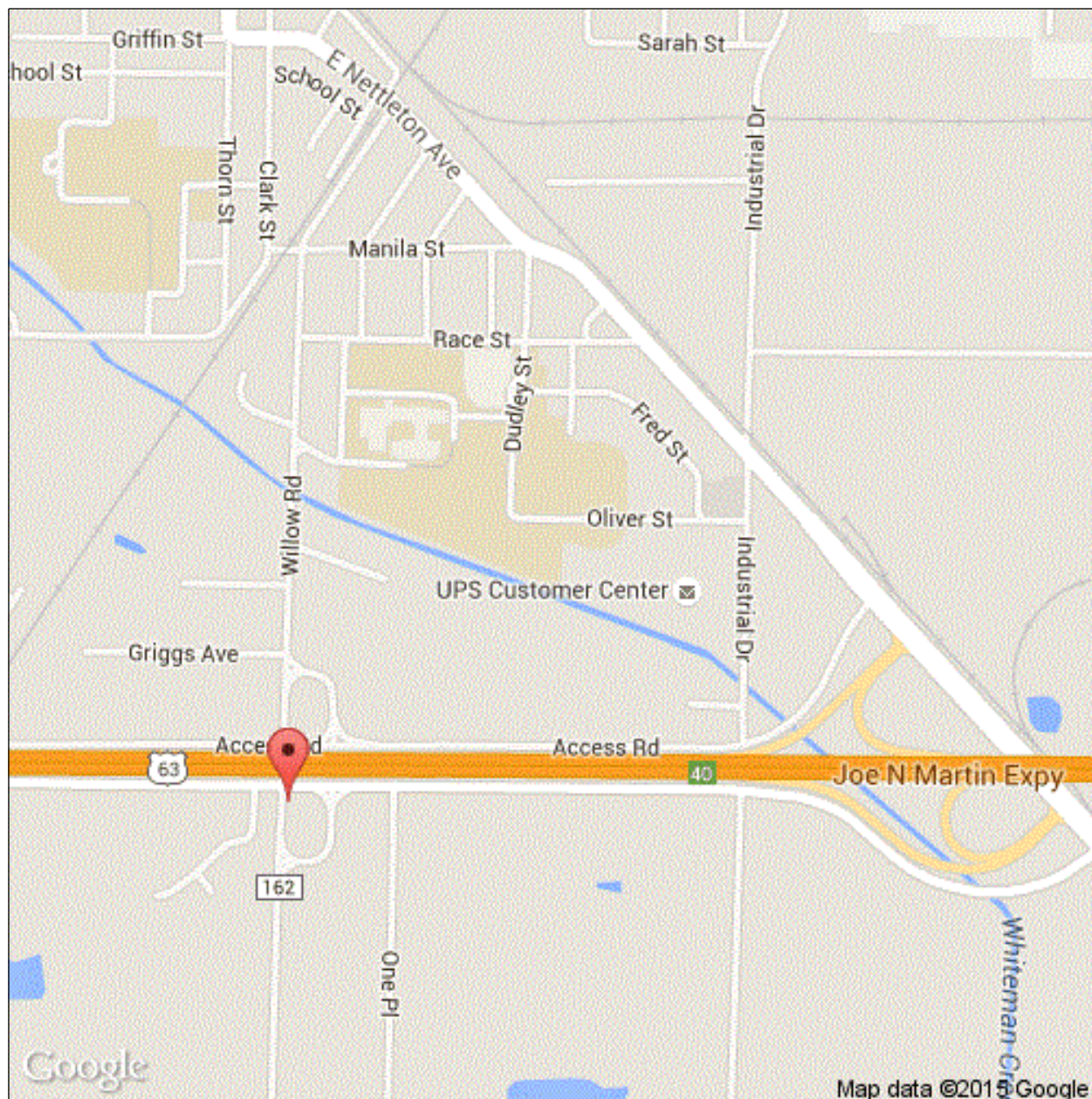
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### Bridge Inspection Report

### Location Map



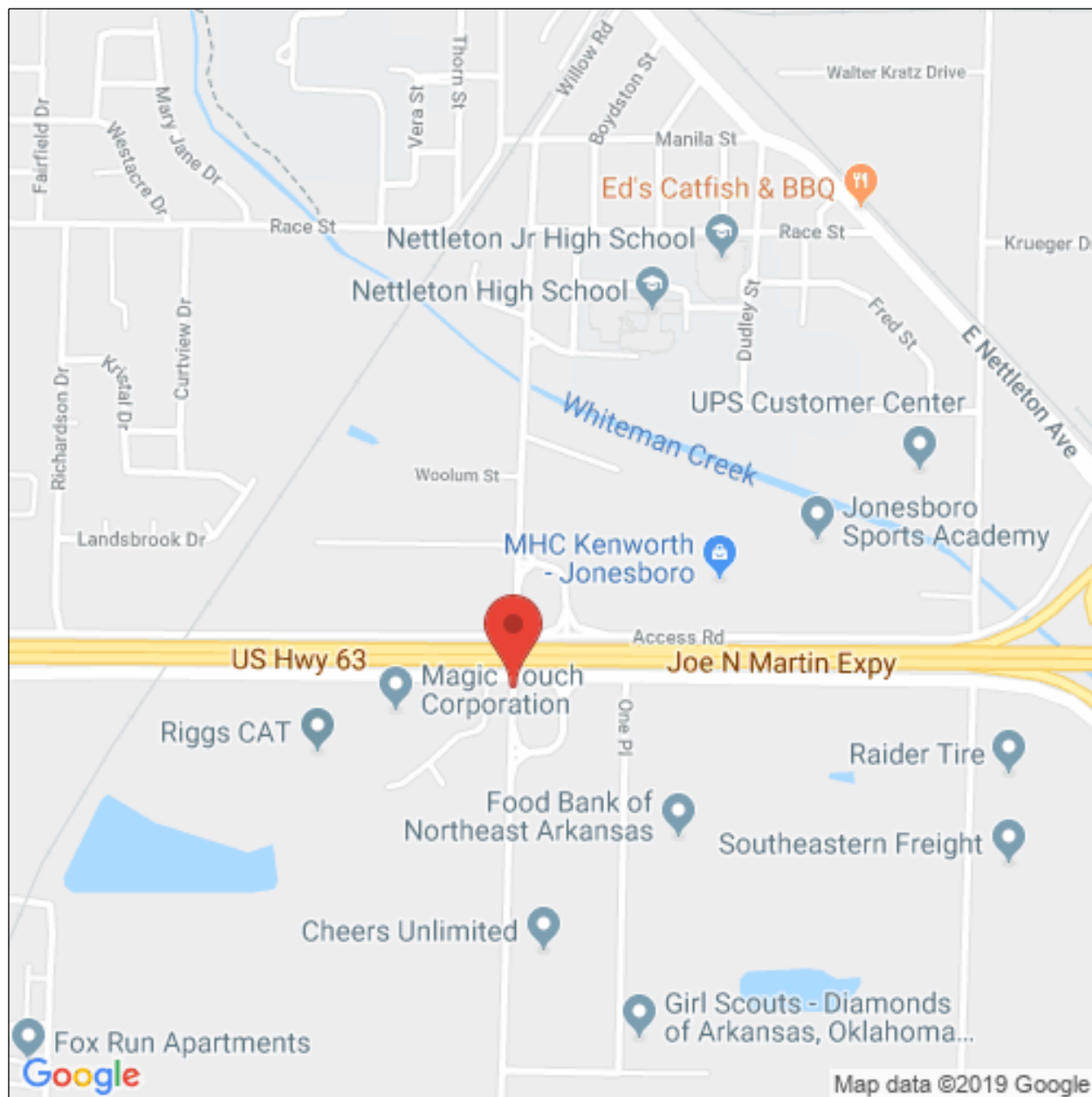
Latitude: 35.80648

Longitude: -90.65126

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## Location Map



**Longitude: -90.65126**



Inspector:

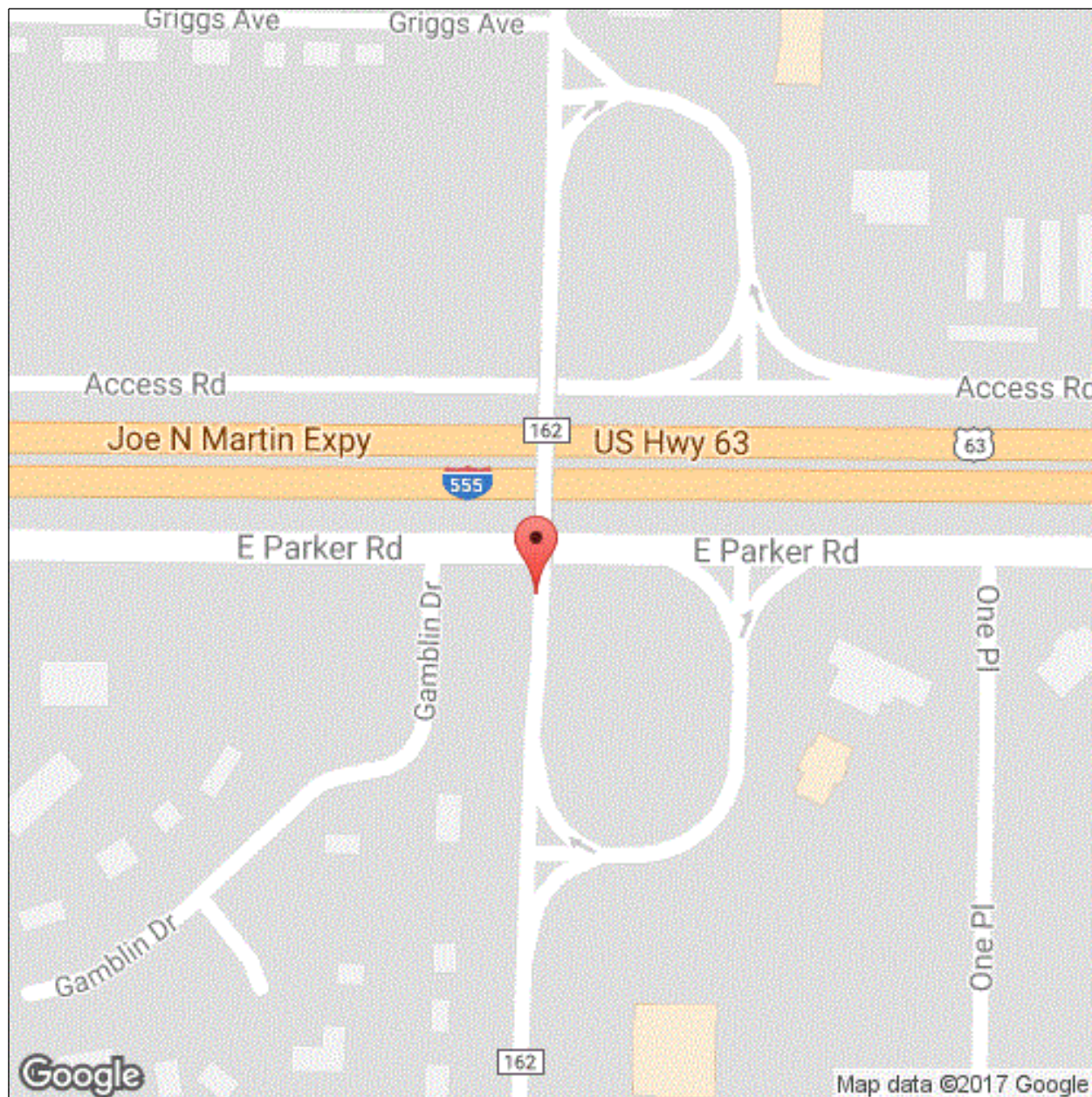
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### Bridge Inspection Report

### Location Map



Latitude: 35.80648

Longitude: -90.65126

**Inspector:**

**Structure Number:** 06351

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**Bridge Inspection Report**

**Executive Summary**

Bridge # 06351, 10-14-2015

Special Inspection for accident:

Collision impact damage caused from Dump Truck with bed up.

Span 5, Girders 1 & 2 and diaphragm 3, Girder 1 is bowed and twisted approximately 1/2 inch at diaphragm 3 connection. Girder 2 has a slight bow at diaphragm 3 connection, and diaphragm 3 has a slight bow.

Span 5, Girder 1, at diaphragm 3, weld is cracked at diaphragm connection plate to web of girder 1. NOTE this connection plate has been repaired in past from previous impact damage.



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## Bridge Inspection Report

## National Bridge Inventory

IDENTIFICATION		INSPECTIONS	
(1) STATE CODE	056 - Arkansas	(90) INSPECTION DATE	07/25/2019
(8) STRUCTURE NUMBER	06351	(91) DESIGNATED INSPECTION FREQUENCY	24
(5) INV. ROUTE (ON/UNDER)	1 5 1 62620 0	(92) CRITICAL FEATURE INSPECTION	(93) CFI DATE
(2) HIGHWAY AGENCY	10 (3) COUNTY CODE 031	A. FRACTURE CRITICAL DETAIL	N
(4) PLACE CODE	34720	B. UNDERWATER INSPECTION	N
(6) FEATURES INTERSECTED	I-555, ML AND FR RDS	C. OTHER SPECIAL	N
(7) FACILITY CARRIED	WILLOW STREET		
(9) LOCATION	JCT I-555 & WILLOW ST		
(11) MILEPOINT 0.920	(12) BASE HIGHWAY NETWORK 0		
(13A) LRS INVENTORY ROUTE	0000000000 (13B) SUBROUTE NUMBER 00		
(16) LATITUDE 35.80648	(17) LONGITUDE -90.65126		
(98A) BORDER BRIDGE CODE			
PERCENT RESPONSIBILITY	(99) BORDER BRIDGE STRUCT		
STRUCTURE TYPE AND MATERIAL		CONDITION	
(43) STRUCTURE TYPE, MAIN		(58) DECK	7
A) KIND OF MATERIAL/DESIGN: 4 - Steel continuous		(59) SUPERSTRUCTURE	7
B) TYPE OF DESIGN/CONSTR: 02 - Stringer/Multi-beam or Girder		(60) SUBSTRUCTURE	7
(44) STRUCTURE TYPE, APPROACH SPANS		(61) CHANNEL & CHANNEL PROTECTION	N
A) KIND OF MATERIAL/DESIGN: 3 - Steel		(62) CULVERT	N
B) TYPE OF DESIGN/CONSTR: 02 - Stringer/Multi-beam or Girder			
(45) NUMBER OF SPANS IN MAIN 4	(46) NUMBER OF APPROACH 2		
(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 1991	(106) YEAR RECONSTRUCTED 0000	(31) DESIGN LOAD	5
(42) TYPE OF SERVICE ON 1 UNDER 1		(63) METHOD USED TO DETERMINE OPERATING RATING	1
(28) LANES ON 02 UNDER 08		(64) OPERATING RATING	60
(29) AVERAGE DAILY TRAFFIC 755	(19) BYPASS DETOUR LENGTH 0	(65) METHOD USED TO DETERMINE INVENTORY RATING	1
(30) YEAR OF AVERAGE DAILY TRAFFIC 1987		(66) INVENTORY RATING	36
(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.) 82	(49) STRUCTURE LENGTH (ft.) 394	(67) STRUCTURAL EVALUATION	7
(50) CURB/SIDEWALK WIDTHS (ft.) LEFT 0 RIGHT 0		(68) DECK GEOMETRY	7
(51) BRDG RDWY WIDTH CURB-TO-CURB (ft.) 38.1		(69) UNDERCLEARANCES, VERTICAL & HORIZONTAL	5
(52) DECK WIDTH, OUT-TO-OUT (ft.) 40.8		(71) WATERWAY ADEQUACY	N
(32) APPROACH ROADWAY WIDTH (ft.) 38.1		(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.) 39.0		36B) TRANSITIONS:	0
(53) VERTICAL CLEARANCE OVER BRIDGE ROADWAY (ft.) 99.99		36C) APPROACH GUARDRAIL:	0
(54) VERTICAL UNDER CLEARANCE (ft.) H 16.41		36D) APPROACH GUARDRAIL ENDS:	0
(55) LATERAL UNDER CLEARANCE RIGHT (ft.) H 21.3		(113) SCOUR CRITICAL BRIDGES	N
(56) MIN LATERAL UNDER CLEARANCE (ft.) 8		SUFFICIENCY RATING 97.0	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	16
(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	0000	(102) DIRECTION OF TRAFFIC	2
(114) FUTURE ADT 1013	(115) YEAR OF FUTURE ADT 2007	(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	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

Inspector:

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## Bridge Inspection Report

## Element Inspection

## Rollup

	Environment	Total Quantity	Units	Condition State 1	Condition State 2	Condition State 3	Condition State 4
<b>12 - Reinforced Concrete Deck</b>	1- Ben.	16007	sq. ft.	12263	3744	0	0
1130 - Cracking (RC and Other)		608		0	608	0	0
1190 - Abrasion/Wear (PSC/RC)		3136		0	3136	0	0
<b>107 - Steel Open Girder/Beam</b>	1- Ben.	2352	ft.	2276	76	0	0
1000 - Corrosion		72		0	72	0	0
1020 - Connection		4		0	4	0	0
515 - Steel Protective Coating		24077	sq. ft.	23668	409	0	0
3440 - Effectiveness (Steel Protective Coatings)		409		0	409	0	0
<b>205 - Reinforced Concrete Column</b>	1- Ben.	10	each	0	10	0	0
1130 - Cracking (RC and Other)		10		0	10	0	0
<b>215 - Reinforced Concrete Abutment</b>	1- Ben.	120	ft.	107	13	0	0
1120 - Efflorescence/Rust Staining		11		0	11	0	0
1130 - Cracking (RC and Other)		2		0	2	0	0
<b>234 - Reinforced Concrete Pier Cap</b>	1- Ben.	200	ft.	0	200	0	0
1130 - Cracking (RC and Other)		200		0	200	0	0
<b>301 - Pourable Joint Seal</b>	1- Ben.	152	ft.	38	114	0	0
2310 - Leakage		114		0	114	0	0
<b>310 - Elastomeric Bearing</b>	1- Ben.	54	each	54	0	0	0
<b>331 - Reinforced Concrete Bridge Railing</b>	1- Ben.	784	ft.	496	273	15	0
1080 - Delamination/Spall/Patched Area		1		0	1	0	0
1120 - Efflorescence/Rust Staining		32		0	17	15	0
1130 - Cracking (RC and Other)		255		0	255	0	0

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## Bridge Inspection Report

## Element Inspection

## Main - 308' Continuous W beam

	Environment	Total Quantity	Units	Condition State 1	Condition State 2	Condition State 3	Condition State 4
<b>12 - Reinforced Concrete Deck</b>	1- Ben.	12577	sq. ft.	9657	2920	0	0
1130 - Cracking (RC and Other)		456		0	456	0	0
1190 - Abrasion/Wear (PSC/RC)		2464		0	2464	0	0
<b>107 - Steel Open Girder/Beam</b>	1- Ben.	1848	ft.	1796	52	0	0
1000 - Corrosion		48		0	48	0	0
1020 - Connection		4		0	4	0	0
515 - Steel Protective Coating		19352	sq. ft.	19256	96	0	0
3440 - Effectiveness (Steel Protective Coatings)		96		0	96	0	0
<b>205 - Reinforced Concrete Column</b>	1- Ben.	10	each	0	10	0	0
1130 - Cracking (RC and Other)		10		0	10	0	0
<b>234 - Reinforced Concrete Pier Cap</b>	1- Ben.	200	ft.	0	200	0	0
1130 - Cracking (RC and Other)		200		0	200	0	0
<b>310 - Elastomeric Bearing</b>	1- Ben.	30	each	30	0	0	0
<b>331 - Reinforced Concrete Bridge Railing</b>	1- Ben.	616	ft.	367	234	15	0
1080 - Delamination/Spall/Patched Area		1		0	1	0	0
1120 - Efflorescence/Rust Staining		32		0	17	15	0
1130 - Cracking (RC and Other)		216		0	216	0	0



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## Bridge Inspection Report

## Element Inspection

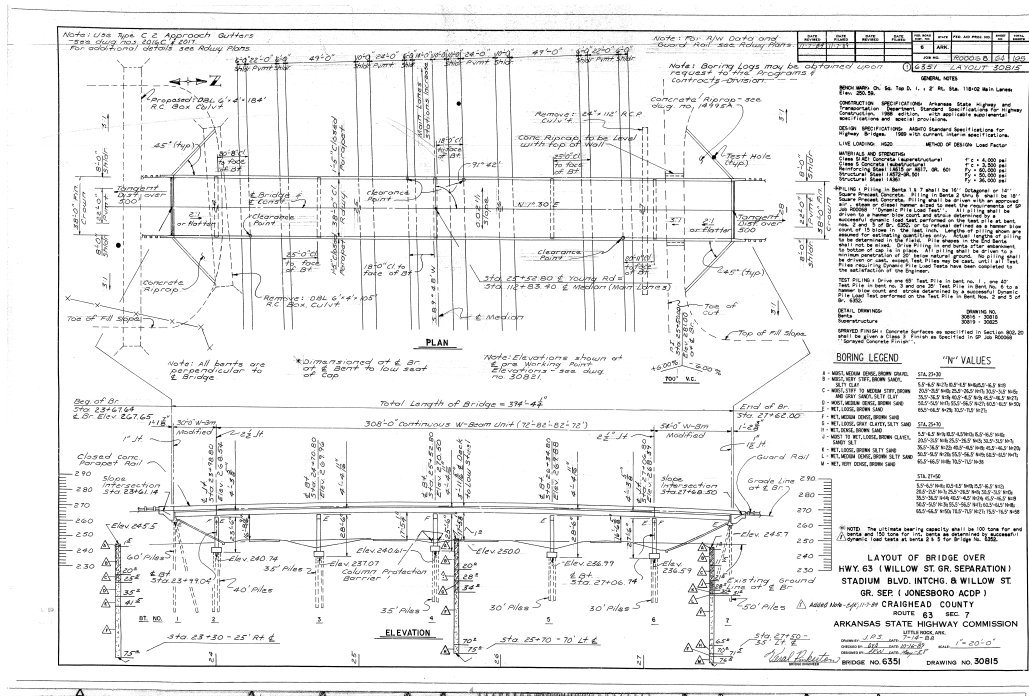
## Approach - Modified W beam

	Environment	Total Quantity	Units	Condition State 1	Condition State 2	Condition State 3	Condition State 4
<b>12 - Reinforced Concrete Deck</b>	1- Ben.	3430	sq. ft.	2606	824	0	0
1130 - Cracking (RC and Other)		152		0	152	0	0
1190 - Abrasion/Wear (PSC/RC)		672		0	672	0	0
<b>107 - Steel Open Girder/Beam</b>	1- Ben.	504	ft.	480	24	0	0
1000 - Corrosion		24		0	24	0	0
515 - Steel Protective Coating		4725	sq. ft.	4412	313	0	0
3440 - Effectiveness (Steel Protective Coatings)		313		0	313	0	0
<b>215 - Reinforced Concrete Abutment</b>	1- Ben.	120	ft.	107	13	0	0
1120 - Efflorescence/Rust Staining		11		0	11	0	0
1130 - Cracking (RC and Other)		2		0	2	0	0
<b>301 - Pourable Joint Seal</b>	1- Ben.	152	ft.	38	114	0	0
2310 - Leakage		114		0	114	0	0
<b>310 - Elastomeric Bearing</b>	1- Ben.	24	each	24	0	0	0
<b>331 - Reinforced Concrete Bridge Railing</b>	1- Ben.	168	ft.	129	39	0	0
1130 - Cracking (RC and Other)		39		0	39	0	0

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## Pictures



Description	06351 Layout View
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Description	2019 underclearance
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# Bridge Inspection Report

## Pictures

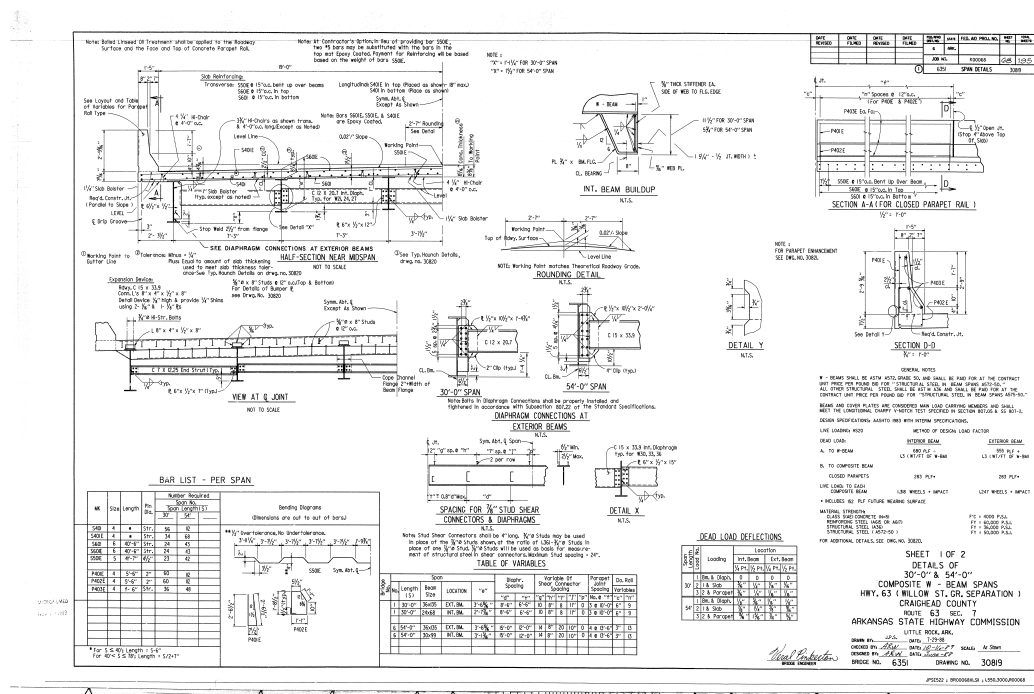


PHOTO 2

Description 06351 Cross Section View



**Inspector:**

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**Bridge Inspection Report**

**Sketches**

Inspector:

Structure Number: 06351

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Facility Carried: WILLOW STREET

### Bridge Inspection Report

## Maintenance Needs

Date Reported: 07/25/2019

Priority: C - Important

Work Code:

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### Deficiency Description:

Deck has a few unsealed transverse and longitudinal cracks.  
Deck has areas of abrasion and minor traffic wear in wheel path.

### Work Description:

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Date Repairs Completed:

Maintenance Comments:

---

Stage: Monitor



PHOTO 1    Description    Overall view of deck

Inspector:

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### Bridge Inspection Report

#### Maintenance Needs

Date Reported: 06/30/2015

Priority: G - General/ Preventive maintenance

Work Code:

---

#### Deficiency Description:

Field splice connections have a few loose bolts on bottom flange:

Span 2 girder 1 has 2 loose bolts.

Span 2 girder 2 has 1 loose bolt.

Span 2 girder 3 has 1 loose bolt.

Span 2 girder 4 has 2 loose bolts.

#### Work Description:

---

Date Repairs Completed:

Maintenance Comments:

---



Inspector:

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## Bridge Inspection Report

### Maintenance Needs

Date Reported: 07/25/2019

Priority: G - General/ Preventive maintenance

Work Code:

---

#### Deficiency Description:

Poured joints at bents 1, 2, 6, and 7 are beginning to lose adhesion due to pack rust along road irons.

#### Work Description:

---

Date Repairs Completed:

Maintenance Comments:

---

Stage: Monitor



PHOTO 1    Description    Bent 6 joint

Inspector:

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### Bridge Inspection Report

#### Maintenance Needs

Date Reported: 10/14/2015

Priority: C - Important

Work Code:

---

#### Deficiency Description:

Collision impact damage caused from Dump Truck with bed up.

Span 5, Girders 1 & 2 and diaphragm 3, Girder 1 is bowed and twisted approximately 1/2 inch at diaphragm 3 connection. Girder 2 has a slight bow at diaphragm 3 connection, and diaphragm 3 has a slight bow.

Span 5, Girder 1, at diaphragm 3, weld is cracked at diaphragm connection plate to web of girder 1. NOTE this connection plate has been repaired in past from previous impact damage.

#### Work Description:

beams have been heat straightened in the past. Welds have been repaired at diaphragm connections.

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Date Repairs Completed: 07/25/2019

#### Maintenance Comments:

observed during inspection

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