

# Bridge Inspection Report

21595

CR 7/5551 Madison  
over  
WAR EAGLE CREEK



**Inspection Date:**

**Inspected By:**

**Inspection Type(s):**

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Inspector:

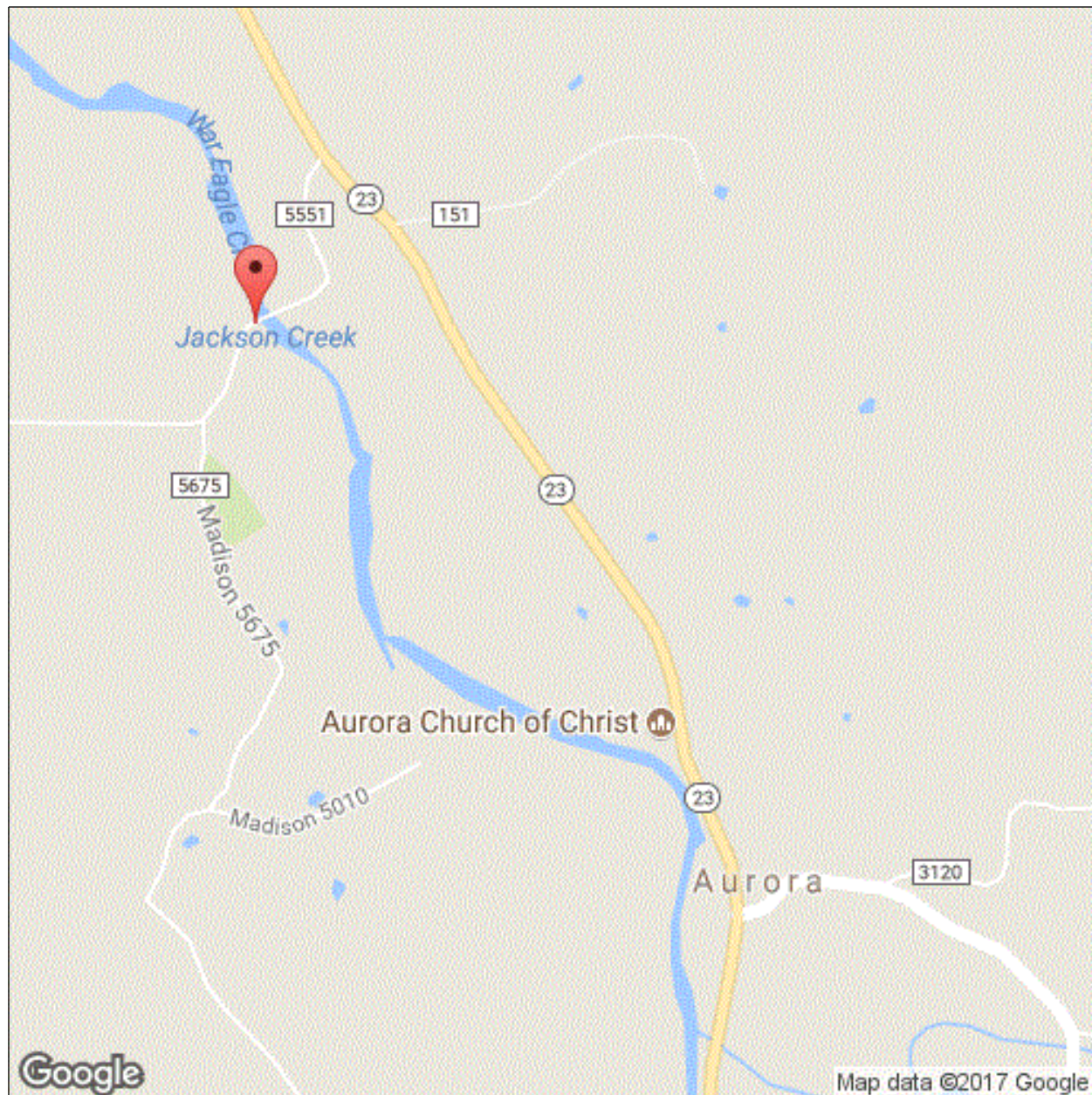
Inspection Date:

Structure Number: 21595

Facility Carried: CR 7/5551 Madison

## Bridge Inspection Report

### Location Map



Latitude: 36.00669

Longitude: -93.71179



Inspector:

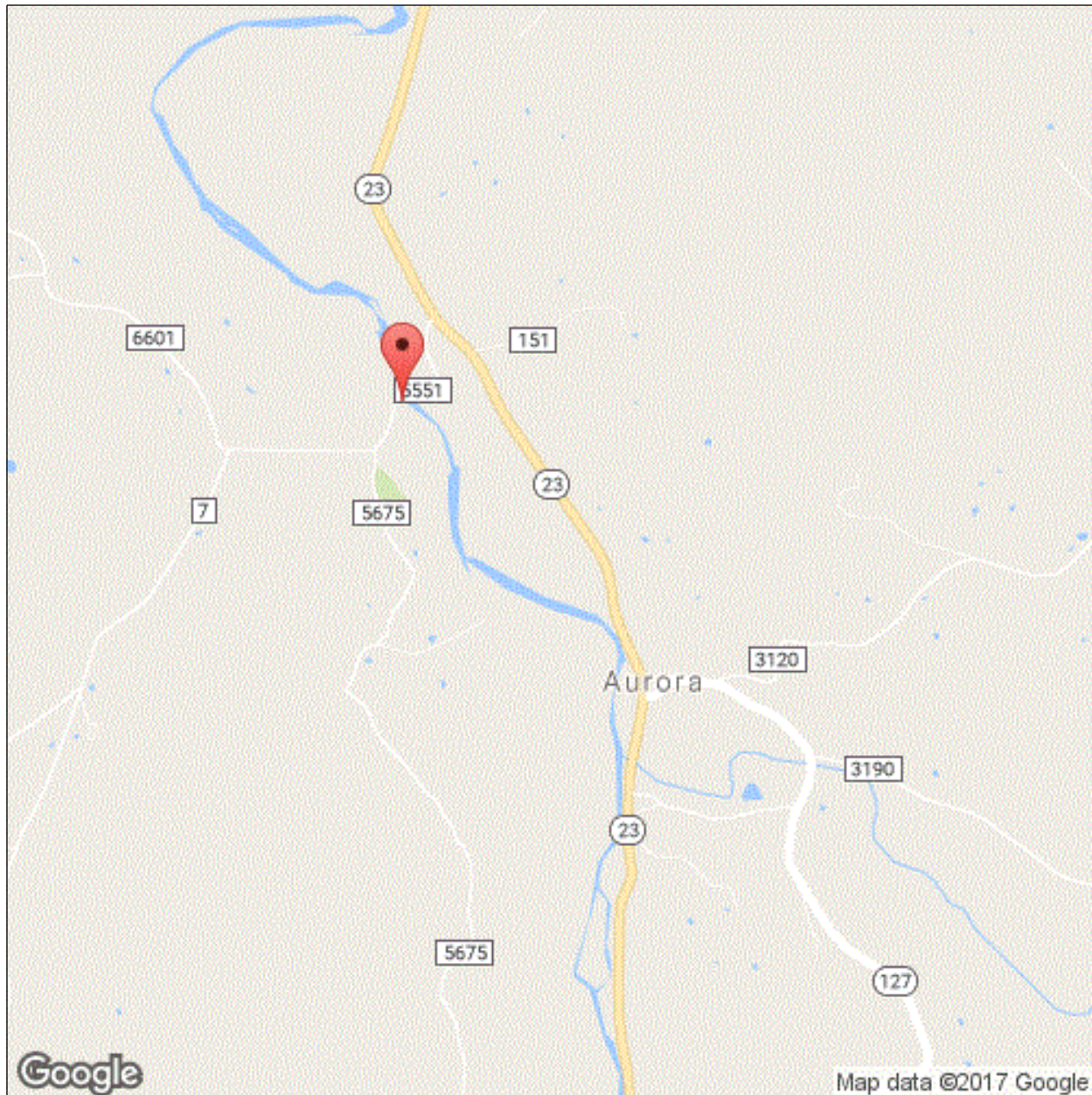
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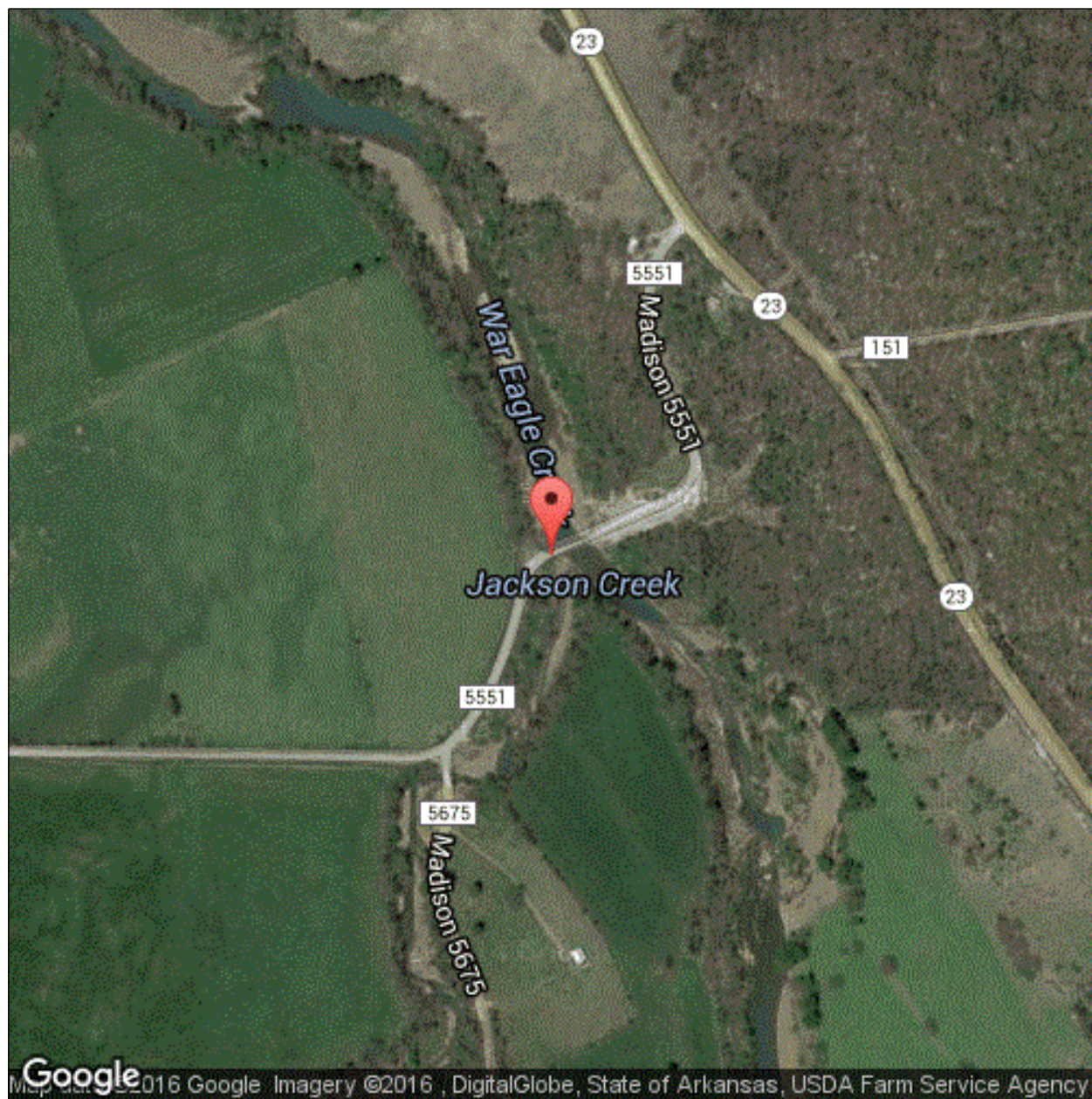
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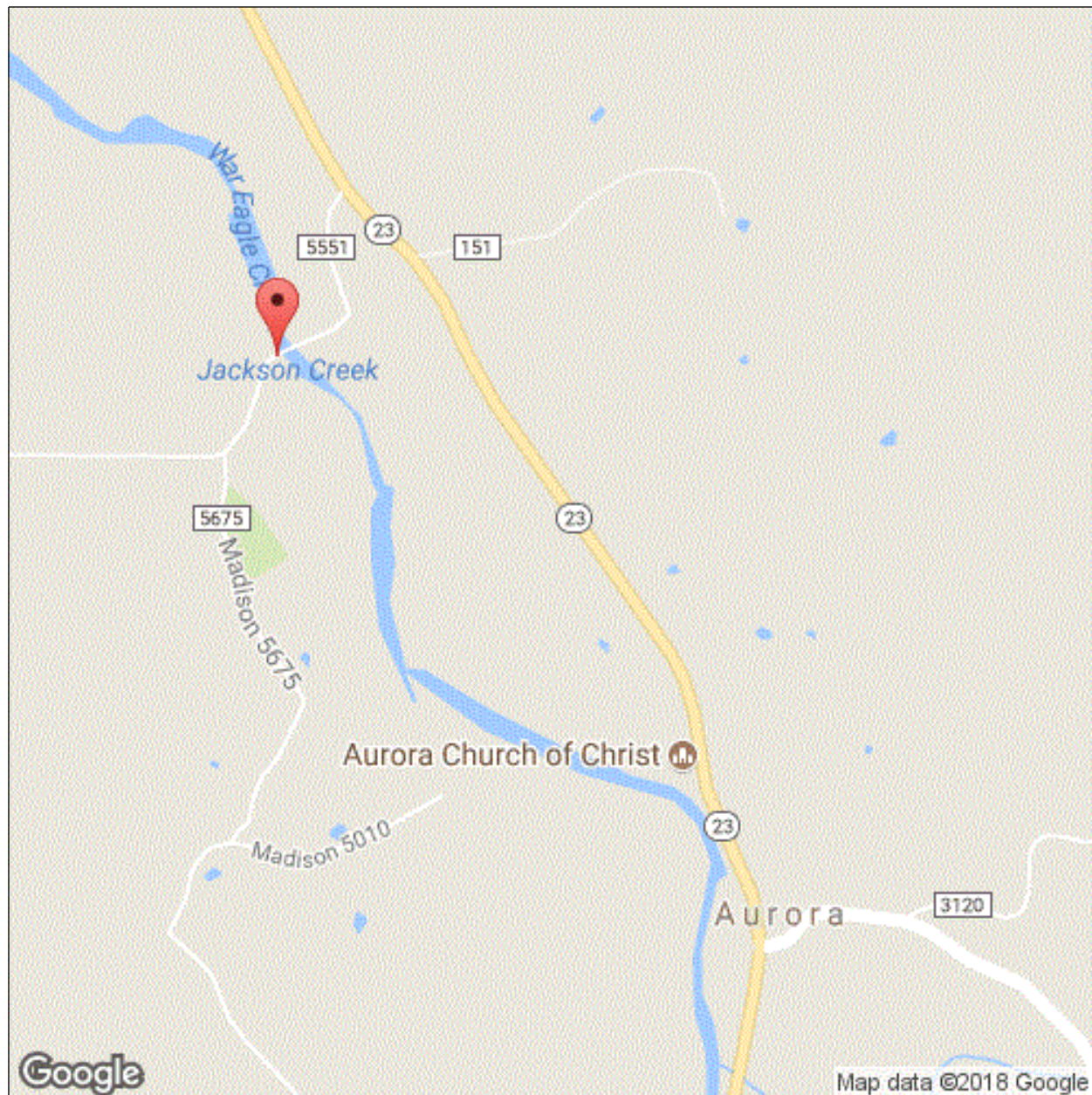
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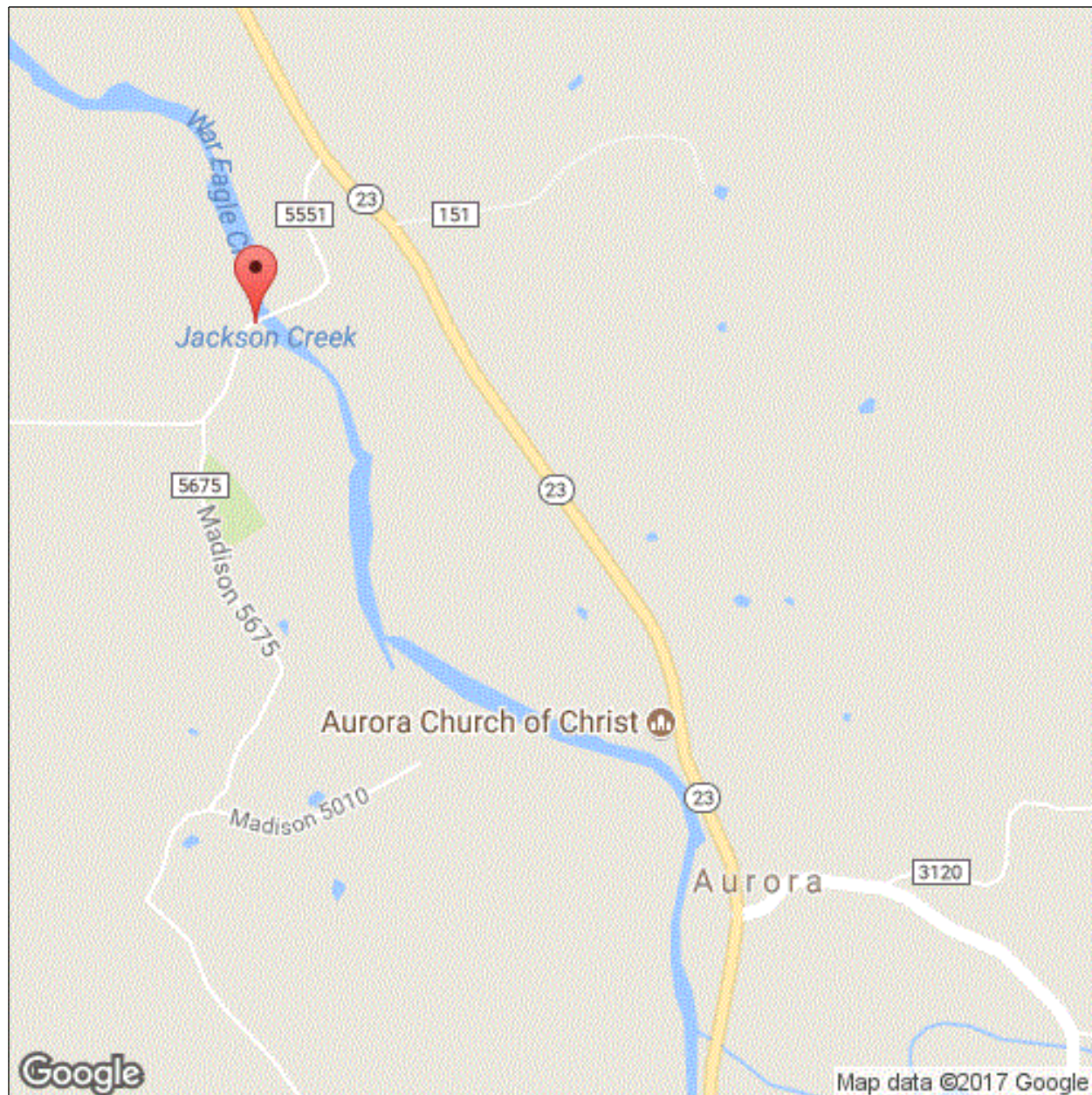
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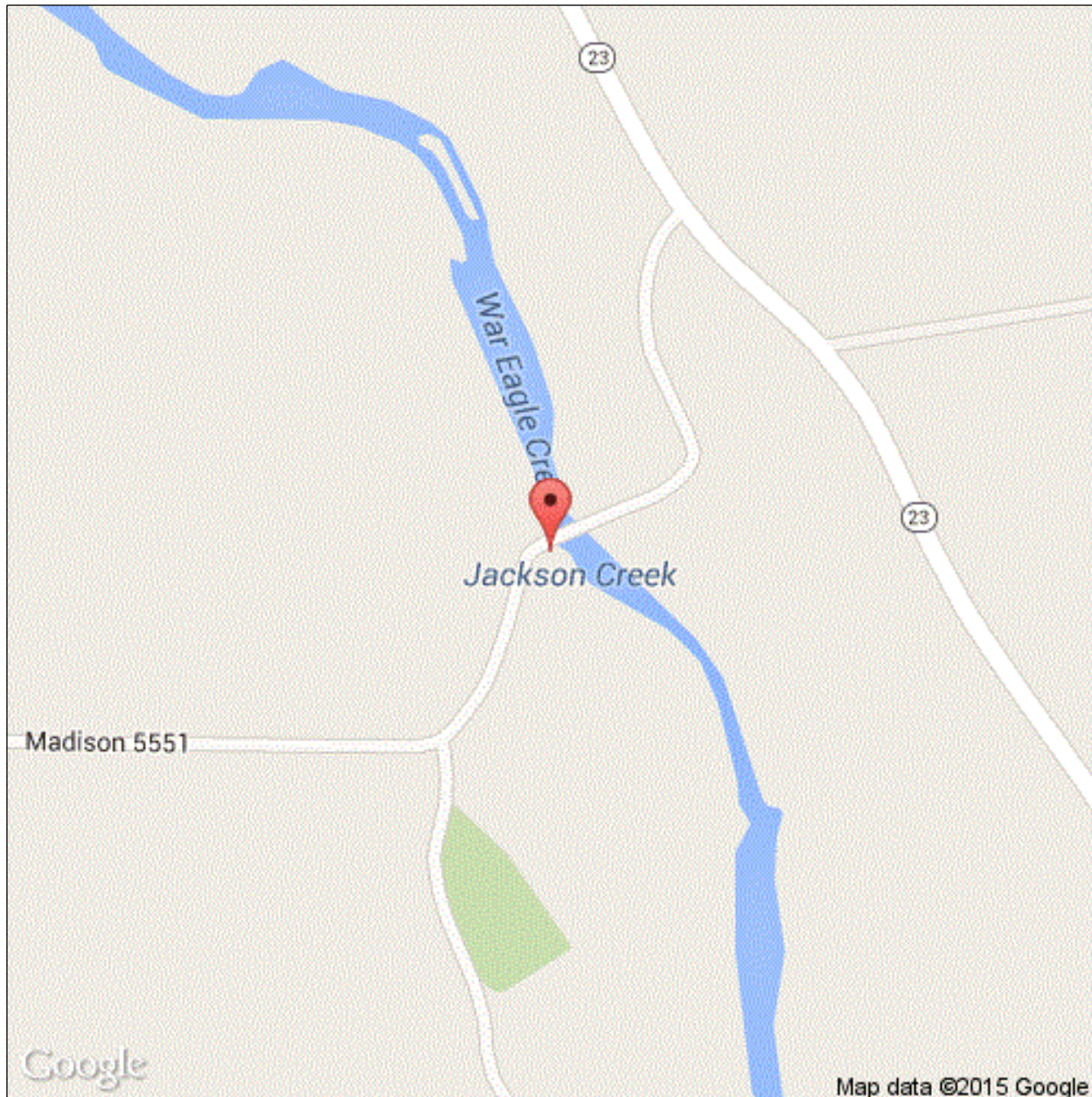
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## **Bridge Inspection Report**

### **Executive Summary**

**Logged West to East.**



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## Bridge Inspection Report

## National Bridge Inventory

IDENTIFICATION		INSPECTIONS	
(1) STATE CODE	056 - Arkansas	(90) INSPECTION DATE	07/23/2018
(8) STRUCTURE NUMBER	21595	(91) DESIGNATED INSPECTION FREQUENCY	24
(5) INV. ROUTE (ON/UNDER)	1 4 1 7 0	(92) CRITICAL FEATURE INSPECTION	(93) CFI DATE
(2) HIGHWAY AGENCY	09 (3) COUNTY CODE 087	A. FRACTURE CRITICAL DETAIL	Y 24 07/23/2018
(4) PLACE CODE	00000	B. UNDERWATER INSPECTION	N
(6) FEATURES INTERSECTED	WAR EAGLE CREEK	C. OTHER SPECIAL	N
(7) FACILITY CARRIED	CR 7/5551 Madison		
(9) LOCATION	1.0 M NW AURORA		
(11) MILEPOINT 9.568	(12) BASE HIGHWAY NETWORK 0		
(13A) LRS INVENTORY ROUTE	0000000000 (13B) SUBROUTE NUMBER 00		
(16) LATITUDE 36.00669	(17) LONGITUDE -93.71179		
(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: 3 - Steel		(59) SUPERSTRUCTURE	5 (60) SUBSTRUCTURE 3
B) TYPE OF DESIGN/CONSTR: 08 - Orthotropic		(61) CHANNEL & CHANNEL PROTECTION	4 (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 5	(108A) WEARING SURFACE 9		
(108B) DECK MEMBRANE 0	(108C) DECK PROTECTION 0		
AGE OF SERVICE		LOAD RATING AND POSTING	
(27) YEAR BUILT 1995	(106) YEAR RECONSTRUCTED 0000	(31) DESIGN LOAD	0
(42) TYPE OF SERVICE ON 1 UNDER 5		(63) METHOD USED TO DETERMINE OPERATING RATING	1
(28) LANES ON 01 UNDER 00		(64) OPERATING RATING	6
(29) AVERAGE DAILY TRAFFIC 138	(19) BYPASS DETOUR LENGTH 15	(65) METHOD USED TO DETERMINE INVENTORY RATING	1
(30) YEAR OF AVERAGE DAILY TRAFFIC 1987		(66) INVENTORY RATING	4
(109) AVERAGE DAILY TRUCK TRAFFIC 1		(70) BRIDGE POSTING	0
		(41) STRUCTURE OPEN/POSTED/CLOSED	P
GEOMETRIC DATA		APPRAISAL	
(48) LENGTH OF MAX SPAN (ft.) 82	(49) STRUCTURE LENGTH (ft.) 136	(67) STRUCTURAL EVALUATION	3
(50) CURB/SIDEWALK WIDTHS (ft.) LEFT 0.2 RIGHT 0.2		(68) DECK GEOMETRY	2
(51) BRDG RDWY WIDTH CURB-TO-CURB (ft.) 16.7		(69) UNDERCLEARANCES, VERTICAL & HORIZONTAL	N
(52) DECK WIDTH, OUT-TO-OUT (ft.) 17.5		(71) WATERWAY ADEQUACY	3
(32) APPROACH ROADWAY WIDTH (ft.) 18.0		(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.) 17.1		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	U
(56) MIN LATERAL UNDER CLEARANCE (ft.) 0		SUFFICIENCY RATING	25.9 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	0
(94) BRIDGE IMPROVEMENT COST (\$)	0	(26) FUNCTIONAL CLASSIFICATION OF INVENTORY ROUTE	08
(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	3
(114) FUTURE ADT 183	(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	02
		(22) OWNER	02
		(37) HISTORICAL	4
		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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## Bridge Inspection Report

### Element Inspection

**- No items available**



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**Bridge Inspection Report**

**Pictures**

PHOTO 1

Description 21595\_POA(2018).doc

PHOTO 1

Description

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**Bridge Inspection Report**

**Sketches**



**Inspector:**

**Inspection Date:**

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**Bridge Inspection Report**

**Maintenance Needs**

**Date Reported:** 07/15/2015

**Priority:** C - Important

**Work Code:**

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**Deficiency Description:**

Span #1 left railroad car right side of centersill at floorbeam #3-weld broken.

**Work Description:**

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**Date Repairs Completed:**

**Maintenance Comments:**

---

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## Bridge Inspection Report

### Maintenance Needs

Date Reported: 07/15/2015

Priority: C - Important

Work Code:

#### Deficiency Description:

Superstructure - Span #2 left railroad car has cracked welds where the interior stringers are attached to the transverse cantilever supports and where the wheel assemblies are attached to the center sills.

Span #2, car #1 has a crack in the top flange of access hole on the interior side of center sill.

#### Work Description:

Date Repairs Completed:

Maintenance Comments:

Stage: Forward Local



PHOTO 1 Description Span 2 side of bent 2 crack weld adjacent to wheel assembly

Stage: Forward Local



PHOTO 2 Description Span #2, car #1-Fracture in access hole flange..



Inspector:

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## Bridge Inspection Report

### Maintenance Needs

Stage: Forward Local



PHOTO 3	Description	Span #2 left railroad car has cracked welds where the interior stringer is attached to the transverse cantilever support.
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## Bridge Inspection Report

### Maintenance Needs

Date Reported: 07/15/2015

Priority: C - Important

Work Code: Repair

#### Deficiency Description:

Substructure - Utilizing a plumb-bob on the exterior sides of abutment #2 and bent #1 revealed that abutment #2 is leaning out-of-plumb on the right side 7-1/2" on the right side and 10-3/4" on the left side. The left exterior side of the abutment breastwall is fractured at the base. Bent #1 is leaning out-of-plumb 3" on the left side and 6" on the right side.

#### Work Description:

01/18/2018 - RSM - Changed priority from "B" to "C" due to repairs by Maintenance forces. Maintenance forces have installed a type of threaded bolt or all thread in the upper portion of abutment breastwall on each side to prevent further rotation. The bolts are 2-1/2" in diameter and have steel plates used as washers. The above approach roadway has had fill removed at the bridge end indicating that the bolts are possibly anchored into the approach roadway. Abutment #2 and bent #1 was measured for further rotation utilizing a plumb-bob on the exterior sides of breastwall and pier wall. No change in measurements from last inspection.

#### Date Repairs Completed:

#### Maintenance Comments:

01/18/2018 - RSM - Changed priority from "B" to "C" due to repairs by Maintenance forces. Maintenance forces have installed a type of threaded bolt or all thread in the upper portion of abutment breastwall on each side to prevent further rotation. The bolts are 2-1/2" in diameter and have steel plates used as washers. The above approach roadway has had fill removed at the bridge end indicating that the bolts are possibly anchored into the approach roadway. Abutment #2 and bent #1 was measured for further rotation utilizing a plumb-bob on the exterior sides of breastwall and pier wall. No change in measurements from last inspection.

#### Stage: Open



PHOTO 1 Description Abutment #2, right side-Anchor to prevent further rotation.

#### Stage: Forward Local



PHOTO 2 Description Bent #1 right ahead side - rotation measurement



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## Bridge Inspection Report

### Maintenance Needs

Stage: Forward Local



PHOTO 3 Description Bent #1 left ahead side - rotation measurement

Stage: Forward Local



PHOTO 4 Description Abutment #2 right side - rotation measurement

Stage: Forward Local



PHOTO 5 Description Abutment #2 left side - rotation measurement

Stage: Open



PHOTO 6 Description Abutment #2, left side - Anchor to prevent further rotation.



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## Bridge Inspection Report

### Maintenance Needs

Date Reported: 07/20/2017

Priority: C - Important

Work Code:

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#### Deficiency Description:

Substructure - Abutment #1 has undermining to the left half of abutment that extends the full width of irregular concrete footing and reaches up to 39" past the face of breastwall in locations.

#### Work Description:

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Date Repairs Completed:

Maintenance Comments:

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Stage: Open



PHOTO 1      Description      Abutment #1, Left side-Undermining that extends up to 39" under breastwall. Photo #1.

Stage: Forward Local



PHOTO 2      Description      Abutment 1 undermining at irregular footing in breast wall



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## Bridge Inspection Report

### Maintenance Needs

Stage: Open



PHOTO 3      Description      Abutment #1, Left side-Undermining that extends up to 39" under the breastwall.

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## Bridge Inspection Report

### Maintenance Needs

Date Reported: 07/23/2018

Priority: C - Important

Work Code:

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#### Deficiency Description:

Bridge Railing

- The right bridge railing over bent #1 has drift collision damage.

#### Work Description:

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Date Repairs Completed:

Maintenance Comments:

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Stage: Open



PHOTO 1      Description      Right bridge rail showing collision damage even though maintenance forces have attempted repair.