

Bridge Inspection Report

21595

CR 7/5551 Madison

over

WAR EAGLE CREEK



Inspection Date:

Inspected By:

Inspection Type(s):

TABLE OF CONTENTS

	PAGE NUMBER
LOCATION MAP	3
NATIONAL BRIDGE INVENTORY	10
ELEMENTS	11
PICTURES	12
SKETCHES	13

Inspector:

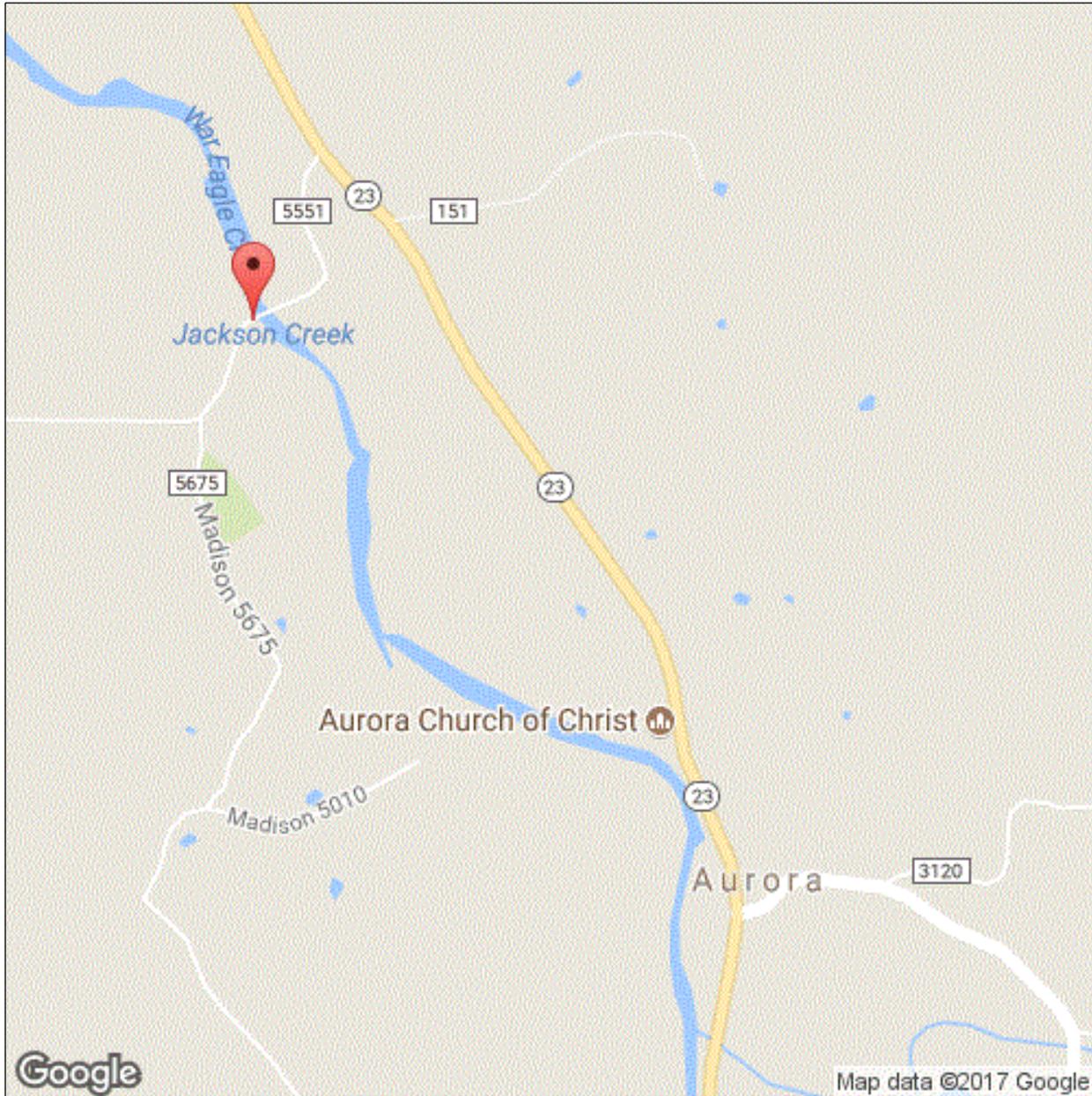
Structure Number: 21595

Inspection Date:

Facility Carried: CR 7/5551 Madison

Bridge Inspection Report

Location Map



Latitude: 36.00669

Longitude: -93.71179

Inspector:

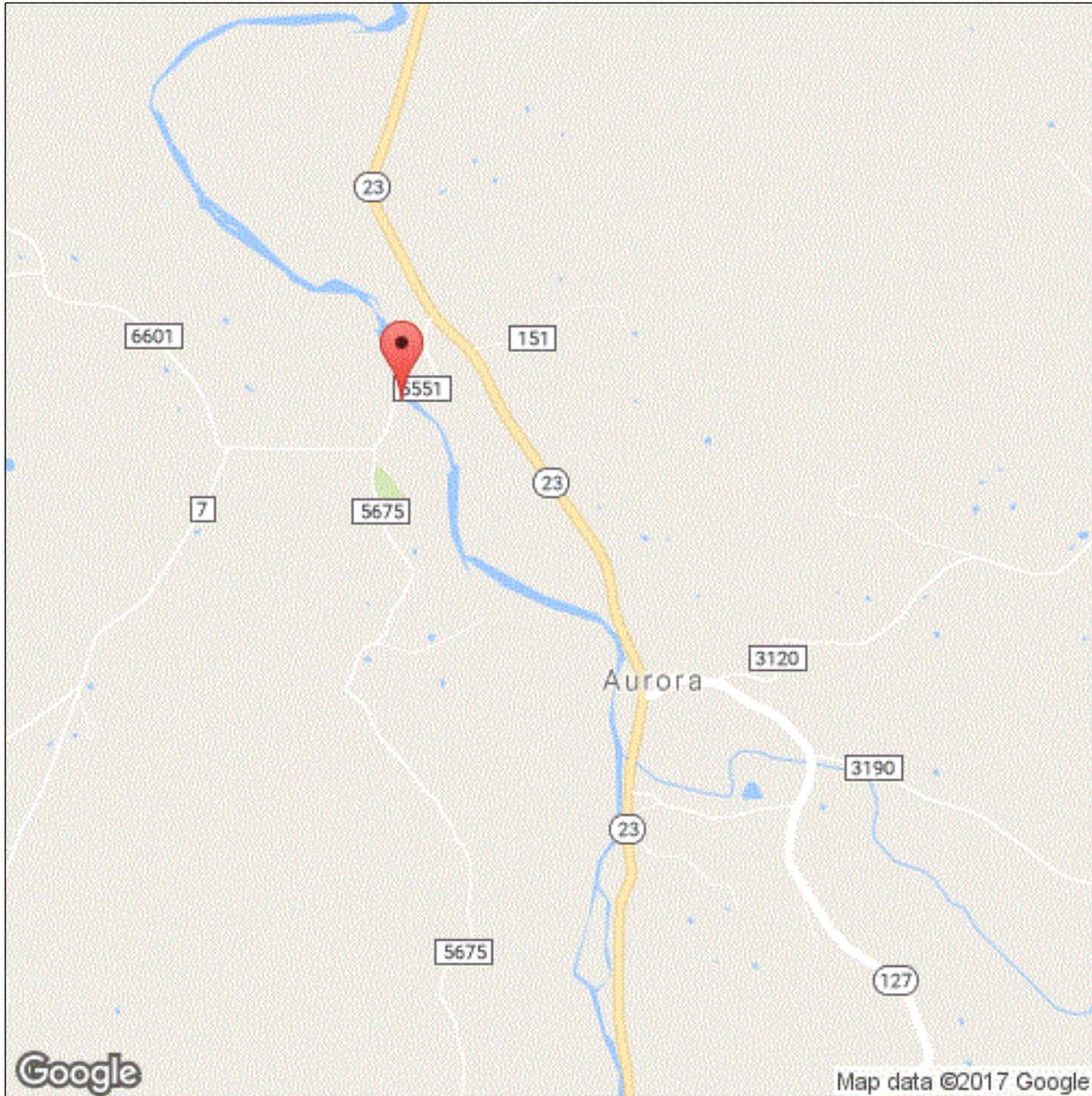
Structure Number: 21595

Inspection Date:

Facility Carried: CR 7/5551 Madison

Bridge Inspection Report

Location Map



Latitude: 36.00669

Longitude: -93.71179

Inspector:

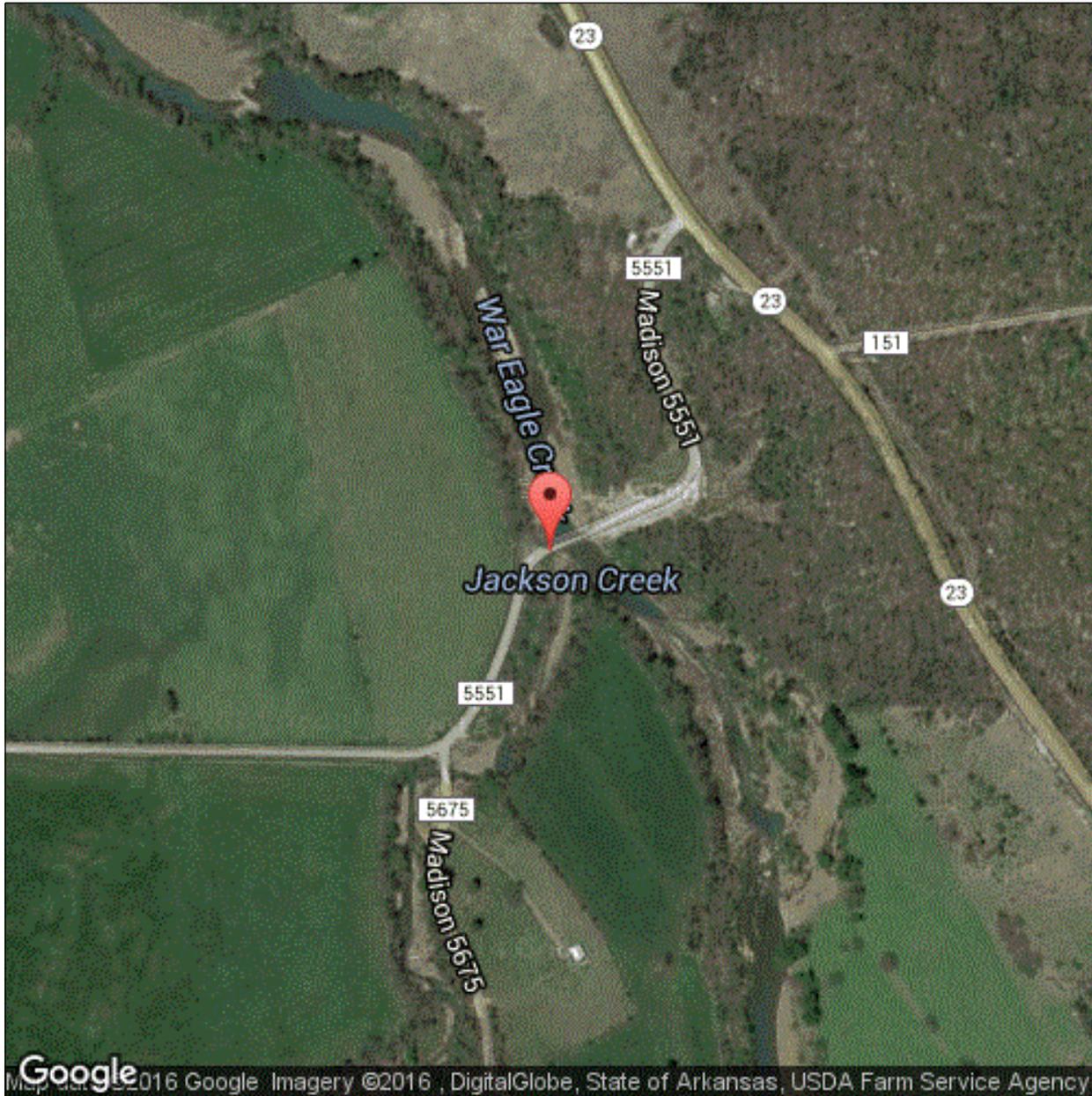
Structure Number: 21595

Inspection Date:

Facility Carried: CR 7/5551 Madison

Bridge Inspection Report

Location Map



Latitude: 36.00669

Longitude: -93.71179

Inspector:

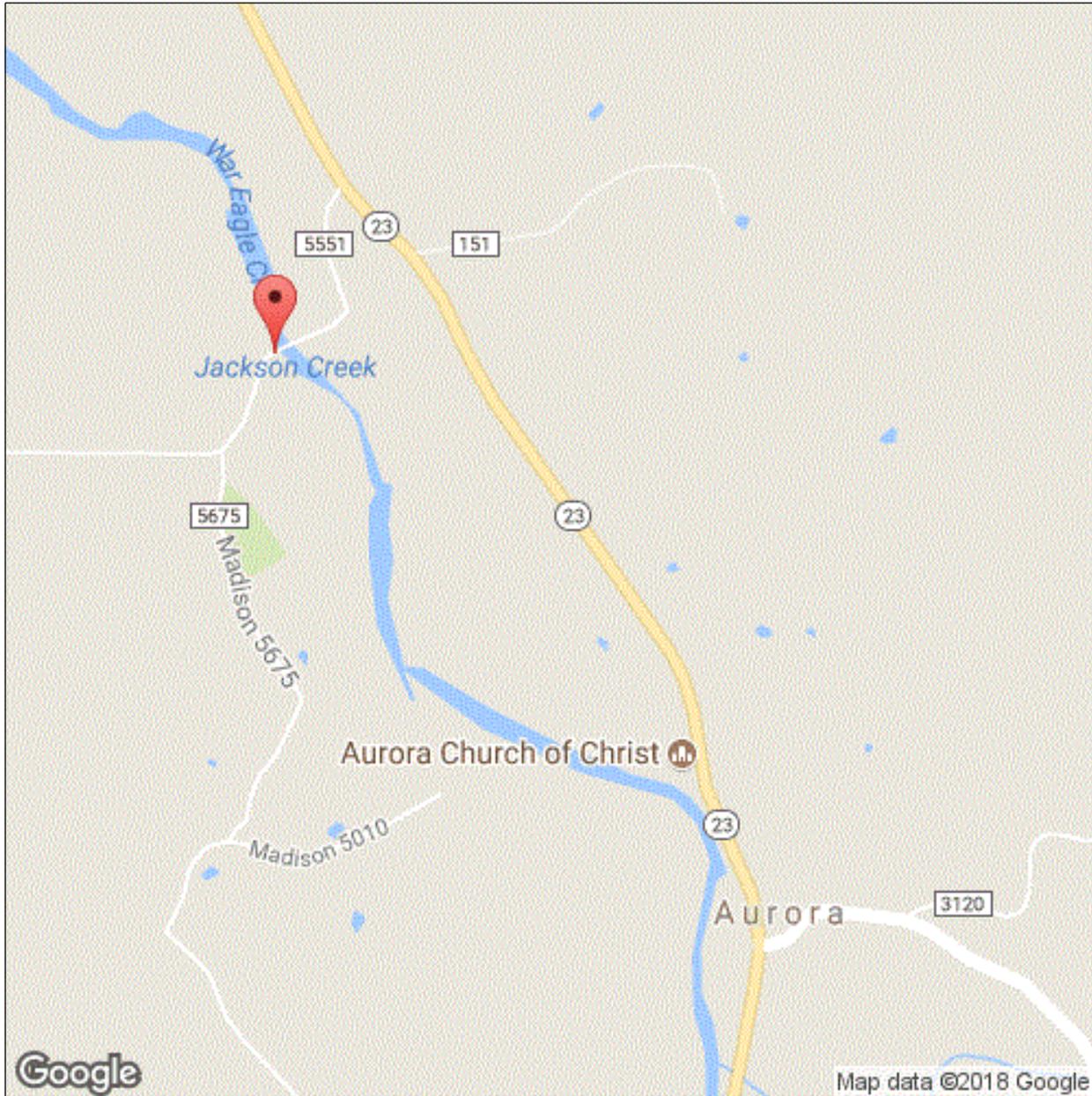
Structure Number: 21595

Inspection Date:

Facility Carried: CR 7/5551 Madison

Bridge Inspection Report

Location Map



Latitude: 36.00669

Longitude: -93.71179

Inspector:

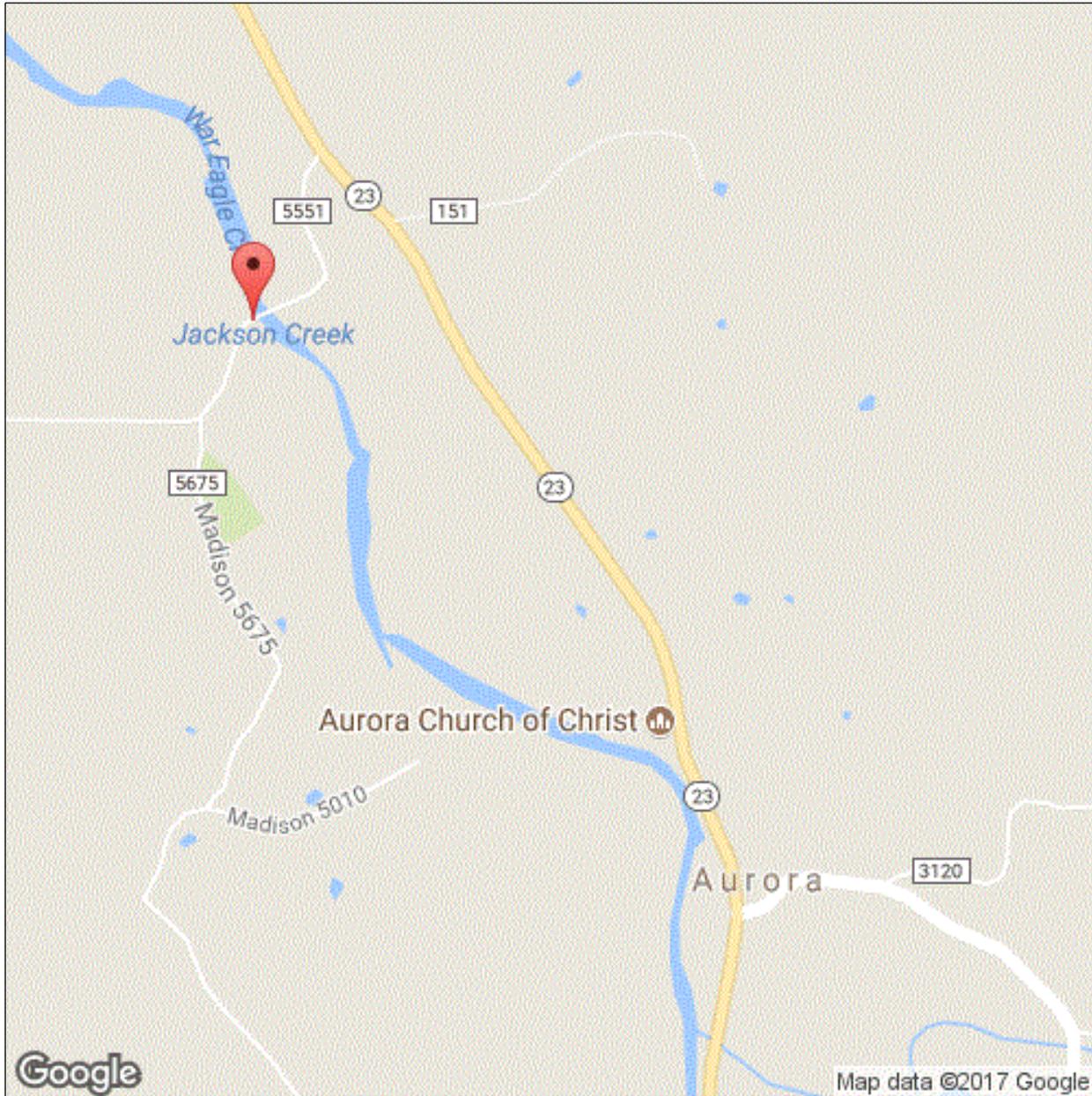
Structure Number: 21595

Inspection Date:

Facility Carried: CR 7/5551 Madison

Bridge Inspection Report

Location Map



Latitude: 36.00669

Longitude: -93.71179

Inspector:

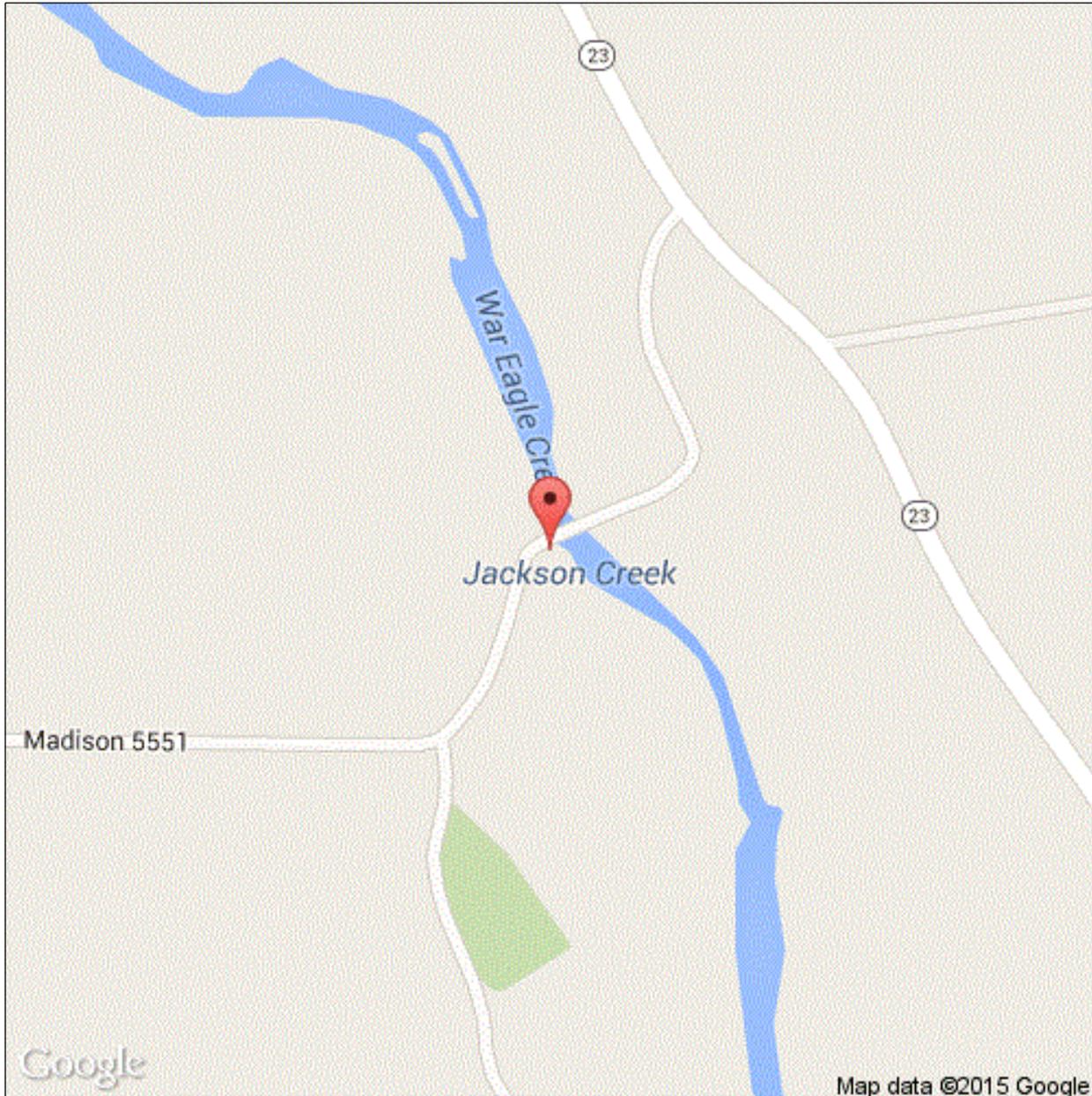
Structure Number: 21595

Inspection Date:

Facility Carried: CR 7/5551 Madison

Bridge Inspection Report

Location Map



Latitude: 36.00669

Longitude: -93.71179

Inspector:

Inspection Date:

Structure Number: 21595

Facility Carried: CR 7/5551 Madison

Bridge Inspection Report

Executive Summary

Logged West to East.

Inspector:

Structure Number: 21595

Inspection Date:

Facility Carried: CR 7/5551 Madison

Bridge Inspection Report

National Bridge Inventory

IDENTIFICATION	
(1) STATE CODE	056 - Arkansas
(8) STRUCTURE NUMBER	21595
(5) INV. ROUTE (ON/UNDER)	1 4 1 7 0
(2) HIGHWAY AGENCY	09
(3) COUNTY CODE	087
(4) PLACE CODE	00000
(6) FEATURES INTERSECTED	WAR EAGLE CREEK
(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	
(43) STRUCTURE TYPE, MAIN	
A) KIND OF MATERIAL/DESIGN:	3 - Steel
B) TYPE OF DESIGN/CONSTR:	08 - Orthotropic
(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	
(27) YEAR BUILT	1995
(106) YEAR RECONSTRUCTED	0000
(42) TYPE OF SERVICE	ON 1 UNDER 5
(28) LANES	ON 01 UNDER 00
(29) AVERAGE DAILY TRAFFIC	138
(19) BYPASS DETOUR LENGTH	15
(30) YEAR OF AVERAGE DAILY TRAFFIC	1987
(109) AVERAGE DAILY TRUCK TRAFFIC	1

GEOMETRIC DATA	
(48) LENGTH OF MAX SPAN (ft.)	82
(49) STRUCTURE LENGTH (ft.)	136
(50) CURB/SIDEWALK WIDTHS (ft.)	LEFT 0.2 RIGHT 0.2
(51) BRDG RDWY WIDTH CURB-TO-CURB (ft.)	16.7
(52) DECK WIDTH, OUT-TO-OUT (ft.)	17.5
(32) APPROACH ROADWAY WIDTH (ft.)	18.0
(33) BRIDGE MEDIAN	0
(34) SKEW (DEG.)	0
(35) STRUCTURE FLARED	0
(10) INV RTE, MIN VERT CLEAR (ft.)	99.99
(47) TOTAL HORIZONTAL CLEARANCE (ft.)	17.1
(53) VERTICAL CLEARANCE OVER BRIDGE ROADWAY (ft.)	99.99
(54) VERTICAL UNDER CLEARANCE (ft.)	N 0
(55) LATERAL UNDER CLEARANCE RIGHT (ft.)	N 99.9
(56) MIN LATERAL UNDER CLEARANCE (ft.)	0

PROPOSED IMPROVEMENTS	
(75A) TYPE OF WORK PROPOSED	(75B) WORK DONE BY
(76) LENGTH OF STRUCTURE IMPROVEMENT (ft.)	0
(94) BRIDGE IMPROVEMENT COST (\$)	0
(95) ROADWAY IMPROVEMENT COST (\$)	0
(96) TOTAL PROJECT COST	0
(97) YEAR OF IMPROVEMENT COST ESTIMATE	
(114) FUTURE ADT	183
(115) YEAR OF FUTURE ADT	2007

INSPECTIONS	
(90) INSPECTION DATE	07/23/2018
(91) DESIGNATED INSPECTION FREQUENCY	24
(92) CRITICAL FEATURE INSPECTION	
(93) CFI DATE	07/23/2018
A. FRACTURE CRITICAL DETAIL	Y 24
B. UNDERWATER INSPECTION	N
C. OTHER SPECIAL	N

CONDITION	
(58) DECK	5
(59) SUPERSTRUCTURE	5
(60) SUBSTRUCTURE	3
(61) CHANNEL & CHANNEL PROTECTION	4
(62) CULVERT	N

LOAD RATING AND POSTING	
(31) DESIGN LOAD	0
(63) METHOD USED TO DETERMINE OPERATING RATING	1
(64) OPERATING RATING	6
(65) METHOD USED TO DETERMINE INVENTORY RATING	1
(66) INVENTORY RATING	4
(70) BRIDGE POSTING	0
(41) STRUCTURE OPEN/POSTED/CLOSED	P

APPRAISAL	
(67) STRUCTURAL EVALUATION	3
(68) DECK GEOMETRY	2
(69) UNDERCLEARANCES, VERTICAL & HORIZONTAL	N
(71) WATERWAY ADEQUACY	3
(72) APPROACH ROADWAY ALIGNMENT	6
(36) TRAFFIC SAFETY FEATURE	
36A) BRIDGE RAILINGS:	0
36B) TRANSITIONS:	0
36C) APPROACH GUARDRAIL:	0
36D) APPROACH GUARDRAIL ENDS:	0
(113) SCOUR CRITICAL BRIDGES	U
SUFFICIENCY RATING	25.9
STATUS	1

CLASSIFICATION	
(112) NBIS BRIDGE LENGTH	Y
(104) HIGHWAY SYSTEM OF THE INVENTORY ROUTE	0
(26) FUNCTIONAL CLASSIFICATION OF INVENTORY ROUTE	08
(100) STRAHNET HIGHWAY DESIGNATION	0
(101) PARALLEL STRUCTURE DESIGNATION	N
(102) DIRECTION OF TRAFFIC	3
(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

Inspector:

Inspection Date:

Structure Number: 21595

Facility Carried: CR 7/5551 Madison

Bridge Inspection Report

Element Inspection

- No items available

Inspector:

Inspection Date:

Structure Number: 21595

Facility Carried: CR 7/5551 Madison

Bridge Inspection Report

Pictures

PHOTO 1

Description 21595_POA(2018).doc

PHOTO 1

Description

Inspector:

Inspection Date:

Structure Number: 21595

Facility Carried: CR 7/5551 Madison

Bridge Inspection Report

Sketches

Inspector:

Structure Number: 21595

Inspection Date:

Facility Carried: CR 7/5551 Madison

Bridge Inspection Report

Maintenance Needs

Date Reported: 07/15/2015

Priority: C - Important

Work Code:

Deficiency Description:

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

Work Description:

Date Repairs Completed:

Maintenance Comments:

Inspector:

Structure Number: 21595

Inspection Date:

Facility Carried: CR 7/5551 Madison

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:

Inspection Date:

Structure Number: 21595

Facility Carried: CR 7/5551 Madison

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.
---------	-------------	---

Inspector:

Structure Number: 21595

Inspection Date:

Facility Carried: CR 7/5551 Madison

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

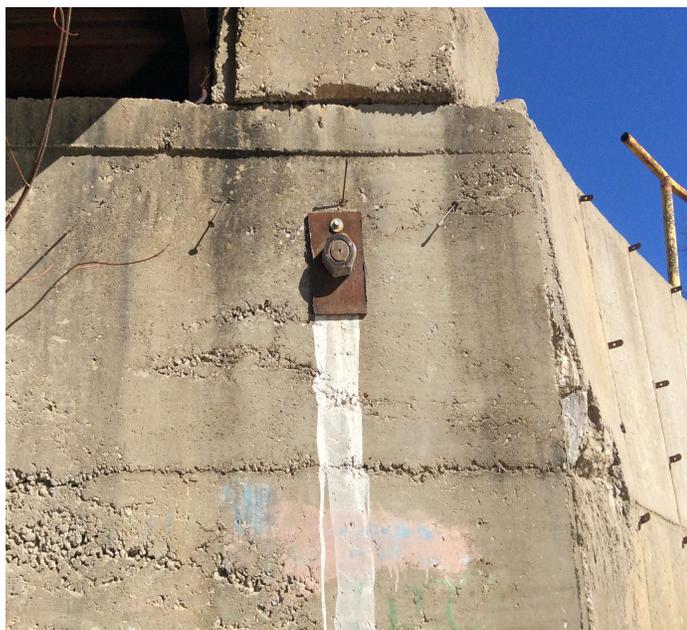


PHOTO 1 Description Abutment #2, right side-Anchor to prevent further rotation.

Stage: Forward Local



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

Inspector:

Structure Number: 21595

Inspection Date:

Facility Carried: CR 7/5551 Madison

Bridge Inspection Report

Maintenance Needs

Stage: Forward Local



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

Stage: Forward Local



PHOTO 5 Description Abutment #2 left side - rotation measurement

Stage: Forward Local



PHOTO 4 Description Abutment #2 right side - rotation measurement

Stage: Open



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

Inspector:

Structure Number: 21595

Inspection Date:

Facility Carried: CR 7/5551 Madison

Bridge Inspection Report

Maintenance Needs

Date Reported: 07/20/2017

Priority: C - Important

Work Code:

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:

Date Repairs Completed:

Maintenance Comments:

Stage: Open



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

Stage: Forward Local

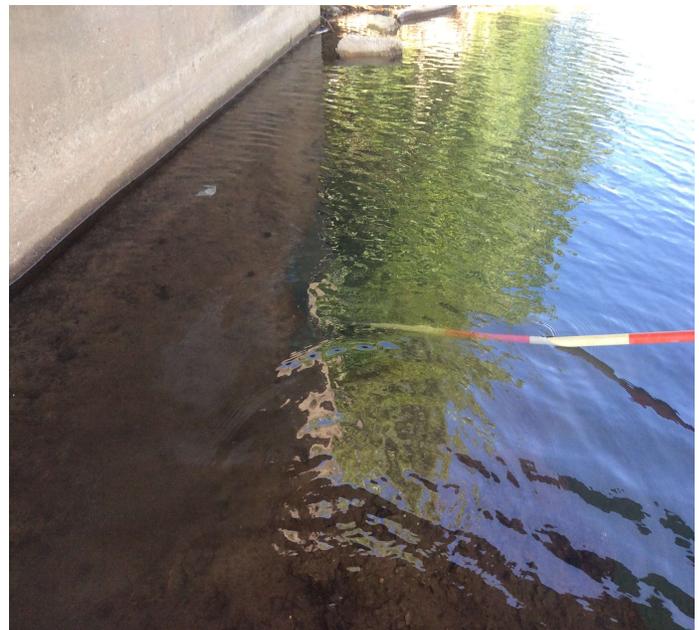


PHOTO 2 Description Abutment 1 undermining at irregular footing in breast wall

Inspector:

Structure Number: 21595

Inspection Date:

Facility Carried: CR 7/5551 Madison

Bridge Inspection Report

Maintenance Needs

Stage: Open



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

Inspector:

Structure Number: 21595

Inspection Date:

Facility Carried: CR 7/5551 Madison

Bridge Inspection Report

Maintenance Needs

Date Reported: 07/23/2018

Priority: C - Important

Work Code:

Deficiency Description:

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

Work Description:

Date Repairs Completed:

Maintenance Comments:

Stage: Open



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