

Bridge Inspection Report

B6458
US 412 Sec 2, EB L
over
Wildcat Creek-Washington



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:

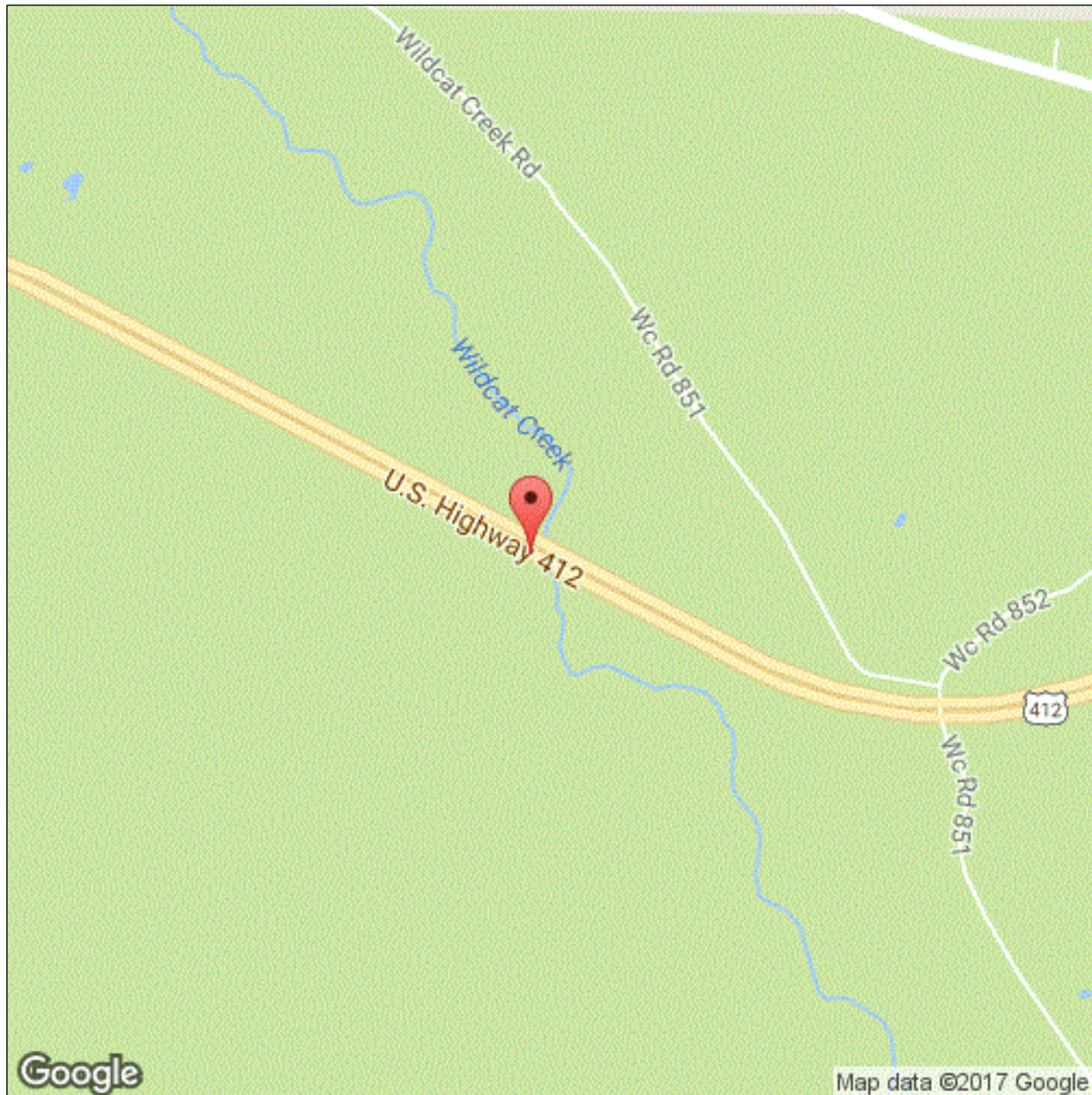
Structure Number: B6458

Inspection Date:

Facility Carried: US 412 Sec 2, EB L

Bridge Inspection Report

Location Map



Latitude: 36.17666

Longitude: -94.32527

Inspector:

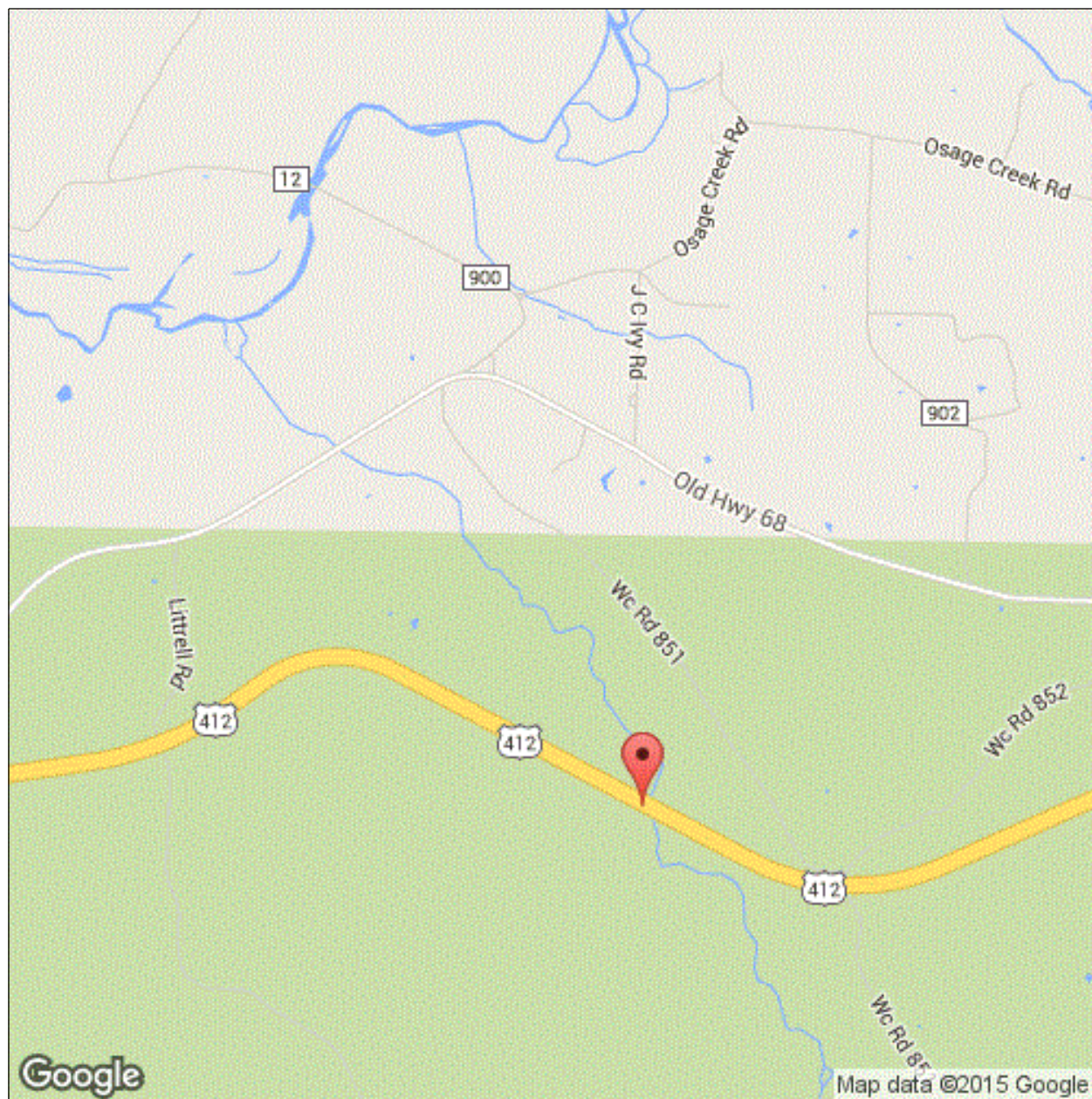
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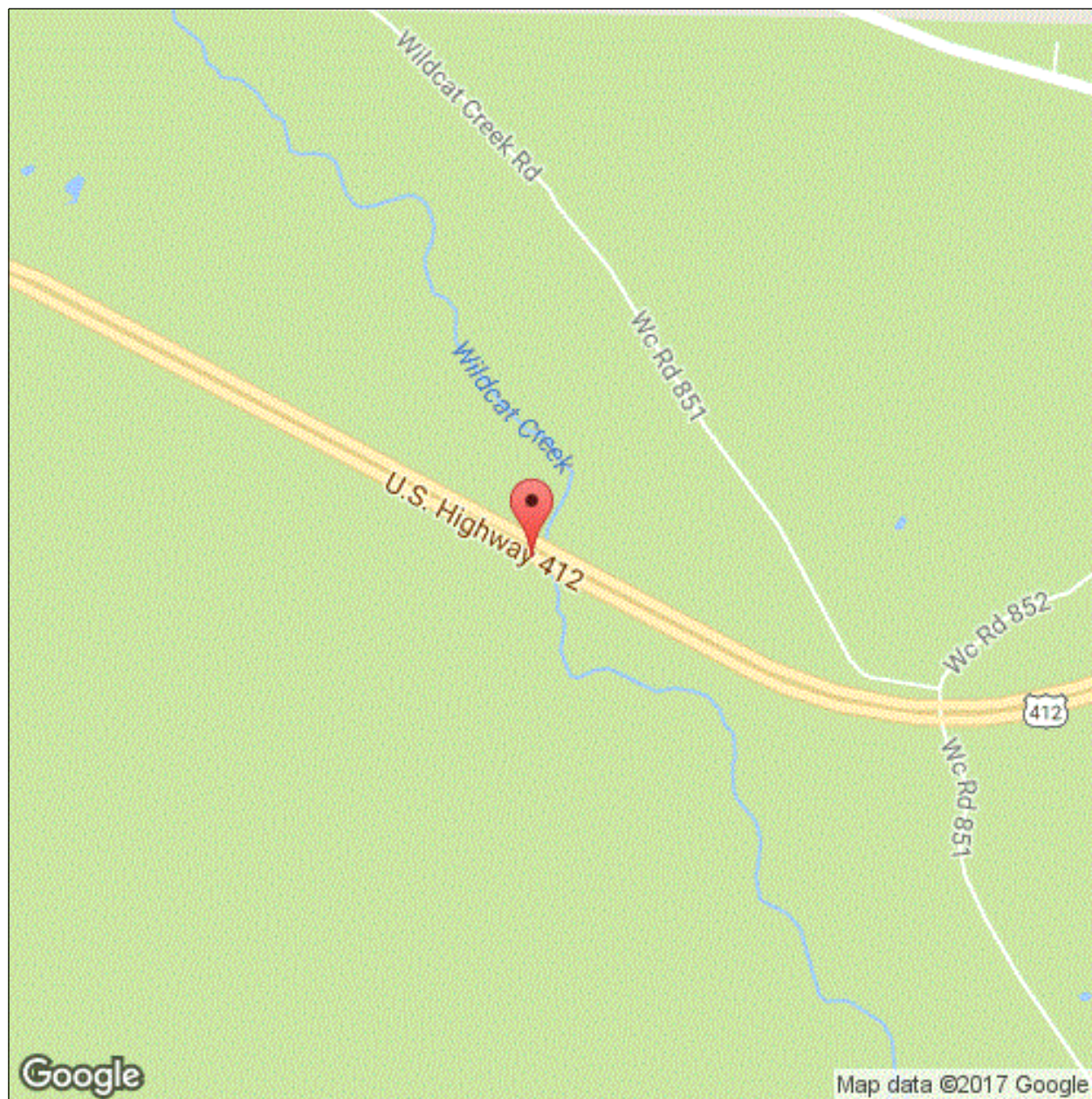
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Bridge Inspection Report

Executive Summary

Inspector:

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Bridge Inspection Report

National Bridge Inventory

| IDENTIFICATION | | INSPECTIONS | |
|--|--|---|-----------------------|
| (1) STATE CODE | 056 - Arkansas | (90) INSPECTION DATE | 09/27/2017 |
| (8) STRUCTURE NUMBER | B6458 | (91) DESIGNATED INSPECTION FREQUENCY | 24 |
| (5) INV. ROUTE (ON/UNDER) | 1 2 1 412 2 | (92) CRITICAL FEATURE INSPECTION | (93) CFI DATE |
| (2) HIGHWAY AGENCY | 04 (3) COUNTY CODE 143 | A. FRACTURE CRITICAL DETAIL | N |
| (4) PLACE CODE | 00000 | B. UNDERWATER INSPECTION | N |
| (6) FEATURES INTERSECTED | Wildcat Creek-Washington | C. OTHER SPECIAL | N |
| (7) FACILITY CARRIED | US 412 Sec 2, EB L | | |
| (9) LOCATION | 0.6 Mi E BENTON CO LINE | | |
| (11) MILEPOINT 0.630 | (12) BASE HIGHWAY NETWORK 1 | | |
| (13A) LRS INVENTORY ROUTE | 0000412020 (13B) SUBROUTE NUMBER 00 | | |
| (16) LATITUDE 36.17666 | (17) LONGITUDE -94.32527 | | |
| (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 (60) SUBSTRUCTURE 8 |
| B) TYPE OF DESIGN/CONSTR: 02 - Stringer/Multi-beam or Girder | | (61) CHANNEL & CHANNEL PROTECTION | 8 (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 4 | (46) NUMBER OF APPROACH 0 | | |
| (107) DECK STRUCTURE TYPE 1 | (108A) WEARING SURFACE 1 | | |
| (108B) DECK MEMBRANE 8 | (108C) DECK PROTECTION 1 | | |
| AGE OF SERVICE | | LOAD RATING AND POSTING | |
| (27) YEAR BUILT 1994 | (106) YEAR RECONSTRUCTED 0000 | (31) DESIGN LOAD | 5 |
| (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 19000 | (19) BYPASS DETOUR LENGTH 10 | (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.) 69 | (49) STRUCTURE LENGTH (ft.) 253 | (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.) 40.0 | | (69) UNDERCLEARANCES, VERTICAL & HORIZONTAL | N |
| (52) DECK WIDTH, OUT-TO-OUT (ft.) 42.9 | | (71) WATERWAY ADEQUACY | 8 |
| (32) APPROACH ROADWAY WIDTH (ft.) 40.0 | | (72) APPROACH ROADWAY ALIGNMENT | 9 |
| (33) BRIDGE MEDIAN 0 | (34) SKEW (DEG.) 40 | (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.) 41.0 | | 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 | 5 |
| (56) MIN LATERAL UNDER CLEARANCE (ft.) 0 | | SUFFICIENCY RATING | 85.8 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 | 1 |
| (94) BRIDGE IMPROVEMENT COST (\$) | 0 | (26) FUNCTIONAL CLASSIFICATION OF INVENTORY ROUTE | 02 |
| (95) ROADWAY IMPROVEMENT COST (\$) | 0 | (100) STRAHNET HIGHWAY DESIGNATION | 0 |
| (96) TOTAL PROJECT COST | 0 | (101) PARALLEL STRUCTURE DESIGNATION | R |
| (97) YEAR OF IMPROVEMENT COST ESTIMATE | | (102) DIRECTION OF TRAFFIC | 1 |
| (114) FUTURE ADT 11955 | (115) YEAR OF FUTURE ADT 2028 | (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 | 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

| | Environment | Total Quantity | Units | Condition State 1 | Condition State 2 | Condition State 3 | Condition State 4 |
|---|--|----------------|---------|-------------------|-------------------|-------------------|-------------------|
| 12 - Reinforced Concrete Deck | 1- Ben. | 10040 | sq. ft. | 8554 | 1412 | 74 | 0 |
| | Numerous sealable cracks on the driving surface. Longitudinal cracks that appear to correspond with the top flanges of the beams. Active corrosion on the metal stay in place forms that appear to correspond with the saw joints. Transverse hairline cracks that correspond with joints in the parapet wall are visible from the undersurface of the soffit. Numerous pop outs due to shale inclusion in the concrete from the construction process. | | | | | | |
| 1130 - Cracking (RC and Other) | | 1486 | | | 1412 | 74 | |
| 107 - Steel Open Girder/Beam | 1- Ben. | 1506 | ft. | 1482 | 24 | 0 | 0 |
| | A588 weathering steel with dark layers of rust at the beam ends adjacent to the abutments where water and debris leaks through the failing joint seals. No significant measurable section loss at this inspection. No visible cracks at this inspection. | | | | | | |
| 1000 - Corrosion | | 24 | | | 24 | | |
| 515 - Steel Protective Coating | | 11512 | sq. ft. | 11488 | 24 | | |
| 205 - Reinforced Concrete Column | 1- Ben. | 9 | each | 7 | 2 | 0 | 0 |
| | Light abrasion at the base of columns # 1 & 2 at Bent # 2. | | | | | | |
| 1190 - Abrasion/Wear (PSC/RC) | | 2 | | | 2 | | |
| 215 - Reinforced Concrete Abutment | 1- Ben. | 108 | ft. | 53 | 55 | 0 | 0 |
| | The East abutment has a 20' long patched area in the top of the back wall. Dirt and debris accumulation on the abutments from leaking expansion joints. Transverse cracking visible on the tops of both back walls typical. | | | | | | |
| 1080 - Delamination/Spall/Patched Area | | 20 | | | 20 | | |
| 1130 - Cracking (RC and Other) | | 35 | | | 35 | | |
| 234 - Reinforced Concrete Pier Cap | 1- Ben. | 265 | ft. | 253 | 12 | 0 | 0 |
| | Hairline vertical cracks over Columns 1 & 3 at Bents 2, 3 and 4. | | | | | | |
| 1130 - Cracking (RC and Other) | | 12 | | | 12 | | |
| 301 - Pourable Joint Seal | 1- Ben. | 112 | ft. | 0 | 0 | 112 | 0 |
| | The joint seals have failed and leak water and debris on the caps. No apparent repairs since the last inspection. The joint anchorage appears solid at this inspection. | | | | | | |
| 2320 - Seal Adhesion | | 112 | | | | 112 | |
| 310 - Elastomeric Bearing | 1- Ben. | 30 | each | 30 | | | |
| | No apparent noteworthy deficiencies at this inspection. A few of the bearing plates at the abutments have minor thin layers of rust beginning to form. | | | | | | |

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Element Inspection

| | | | | | | | |
|--|---------|------|---------|------|-----|-----|----|
| 321 - Reinforced Concrete Approach Slab | 1- Ben. | 1776 | sq. ft. | 1596 | 45 | 101 | 34 |
| Sealable cracking at both slabs. | | | | | | | |
| 1130 - Cracking (RC and Other) | | 180 | | | 45 | 101 | 34 |
| 331 - Reinforced Concrete Bridge Railing | 1- Ben. | 506 | ft. | 0 | 506 | 0 | 0 |
| Areas of hairline map cracking in the face of parapet. | | | | | | | |
| 1130 - Cracking (RC and Other) | | 506 | | | 506 | | |

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Pictures

Inspector:

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Bridge Inspection Report

Sketches

Inspector:

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Bridge Inspection Report

Maintenance Needs

Date Reported: 10/24/2011 12:00:00 AM

Priority: D - Routine

Work Code: Repair

Deficiency Description:

Poured Silicone Joint Seals

The poured silicone joint seals have failed at the east and west abutments. The leak water and dirt on the abutments.

Work Description:

Date Repairs Completed:

Maintenance Comments:

Stage: Assigned



PHOTO 1 Description Compression joint seals at the abutments and the poured joint material at the intermediate expansion joints have deteriorated and are failing.

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Maintenance Needs

Date Reported: 10/24/2011 12:00:00 AM

Priority: G - General/ Preventive maintenance

Work Code: Repair

Deficiency Description:

Deck

Deck has sealable cracking in all spans.

Work Description:

Date Repairs Completed:

Maintenance Comments:

Stage: Assigned



PHOTO 1 Description Sealable cracking at both slabs.

Stage: Assigned



PHOTO 2 Description Deck has sealable cracking in all spans.

Inspector:

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Inspection Date:

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Maintenance Needs

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

Priority: D - Routine

Work Code: Replace

Deficiency Description:

Poured Sawn Joint Sealant

The poured saw joint sealant is deteriorated and missing in locations.

Work Description:

Date Repairs Completed:

Maintenance Comments:

Stage: Assigned



PHOTO 1 Description The poured saw joint seals are deteriorated and missing in locations.