

# Bridge Inspection Report

**02504**  
**SH 140-01- LM 9.93**  
**over**  
**LITTLE RIVER**



**Inspection Date:**

**Inspected By:**

**Inspection Type(s):**

Inspector:

Structure Number: 02504

Inspection Date:

Facility Carried: SH 140-01- LM 9.93

## Bridge Inspection Report

## National Bridge Inventory

| IDENTIFICATION   |                                      | INSPECTIONS   |                       |
|--|--------------------------------------|---|-----------------------|
| (1) STATE CODE   | 056 - Arkansas                       | (90) INSPECTION DATE  | 01/27/2017            |
| (8) STRUCTURE NUMBER   | 02504                                | (91) DESIGNATED INSPECTION FREQUENCY                        | 24                    |
| (5) INV. ROUTE (ON/UNDER)                                    | 1 3 1 140 0                          | (92) CRITICAL FEATURE INSPECTION                            | (93) CFI DATE         |
| (2) HIGHWAY AGENCY   | 10 (3) COUNTY CODE 111               | A. FRACTURE CRITICAL DETAIL                                 | N                     |
| (4) PLACE CODE   | 37980                                | B. UNDERWATER INSPECTION                                    | N                     |
| (6) FEATURES INTERSECTED                                     | LITTLE RIVER                         | C. OTHER SPECIAL  | N                     |
| (7) FACILITY CARRIED   | SH 140-01- LM 9.93                   |   |                       |
| (9) LOCATION   | 0.2 MI E JCT SH 135                  |   |                       |
| (11) MILEPOINT 9.930   | (12) BASE HIGHWAY NETWORK 1          |   |                       |
| (13A) LRS INVENTORY ROUTE                                    | 0000140010 (13B) SUBROUTE NUMBER 00  |   |                       |
| (16) LATITUDE 35.61341                                       | (17) LONGITUDE -90.33049             |   |                       |
| (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 7 |
| B) TYPE OF DESIGN/CONSTR: 02 - Stringer/Multi-beam or Girder |                                      | (61) CHANNEL & CHANNEL PROTECTION                           | 6 (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                                 | 11 (46) NUMBER OF APPROACH           |   |                       |
| (107) DECK STRUCTURE TYPE                                    | 1 (108A) WEARING SURFACE             |   |                       |
| (108B) DECK MEMBRANE   | 0 (108C) DECK PROTECTION             |   |                       |
|  |                                      |   |                       |
| AGE OF SERVICE   |                                      | LOAD RATING AND POSTING                                     |                       |
| (27) YEAR BUILT  | 1948 (106) YEAR RECONSTRUCTED        | (31) DESIGN LOAD  | 2                     |
| (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                                       | 46.0                  |
| (29) AVERAGE DAILY TRAFFIC                                   | 3600 (19) BYPASS DETOUR LENGTH       | (65) METHOD USED TO DETERMINE INVENTORY RATING              | 1                     |
| (30) YEAR OF AVERAGE DAILY TRAFFIC                           | 2014                                 | (66) INVENTORY RATING                                       | 27.0                  |
| (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.)                                | 34 (49) STRUCTURE LENGTH (ft.)       | (67) STRUCTURAL EVALUATION                                  | 5                     |
| (50) CURB/SIDEWALK WIDTHS (ft.)                              | LEFT 1.5 RIGHT 1.5                   | (68) DECK GEOMETRY  | 2                     |
| (51) BRDG RDWY WIDTH CURB-TO-CURB (ft.)                      | 24.0                                 | (69) UNDERCLEARANCES, VERTICAL & HORIZONTAL                 | N                     |
| (52) DECK WIDTH, OUT-TO-OUT (ft.)                            | 29.5                                 | (71) WATERWAY ADEQUACY                                      | 7                     |
| (32) APPROACH ROADWAY WIDTH (ft.)                            | 27.9                                 | (72) APPROACH ROADWAY ALIGNMENT                             | 8                     |
| (33) BRIDGE MEDIAN   | 0 (34) SKEW (DEG.)                   | (36) TRAFFIC SAFETY FEATURE                                 |                       |
| (35) STRUCTURE FLARED  | 0 (10) INV RTE, MIN VERT CLEAR (ft.) | 36A) BRIDGE RAILINGS:                                       | 0                     |
| (47) TOTAL HORIZONTAL CLEARANCE (ft.)                        | 26.9                                 | 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                                | 5                     |
| (56) MIN LATERAL UNDER CLEARANCE (ft.)                       | 0                                    | SUFFICIENCY RATING  | 2 STATUS 58.2         |
| PROPOSED IMPROVEMENTS  |                                      | CLASSIFICATION  |                       |
| (75A) TYPE OF WORK PROPOSED                                  | 31 (75B) WORK DONE BY                | (112) NBIS BRIDGE LENGTH                                    | Y                     |
| (76) LENGTH OF STRUCTURE IMPROVEMENT (ft.)                   | 414.0                                | (104) HIGHWAY SYSTEM OF THE INVENTORY ROUTE                 | 0                     |
| (94) BRIDGE IMPROVEMENT COST (\$)                            | 0                                    | (26) FUNCTIONAL CLASSIFICATION OF INVENTORY ROUTE           | 06                    |
| (95) ROADWAY IMPROVEMENT COST (\$)                           | 156                                  | (100) STRAHNET HIGHWAY DESIGNATION                          | 0                     |
| (96) TOTAL PROJECT COST                                      | 1032                                 | (101) PARALLEL STRUCTURE DESIGNATION                        | N                     |
| (97) YEAR OF IMPROVEMENT COST ESTIMATE                       | 2003                                 | (102) DIRECTION OF TRAFFIC                                  | 2                     |
| (114) FUTURE ADT   | 4222 (115) YEAR OF FUTURE ADT        | (103) TEMP STRUCTURE  |                       |
|  | 2028                                 | (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                                     | 0                     |
|  |                                      | (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:

Structure Number: 02504

Inspection Date:

Facility Carried: SH 140-01- LM 9.93

## Bridge Inspection Report

## Element Inspection

Note: 2" of ACHM overlay on deck

|  | Environment | Total Quantity | Units   | Condition State 1 | Condition State 2 | Condition State 3 | Condition State 4 |
|--|-------------|----------------|---------|-------------------|-------------------|-------------------|-------------------|
| 12 - Reinforced Concrete Deck                    | 1- Ben.     | 11011          | sq. ft. | 9955              | 1056              | 0                 | 0                 |
| 1120 - Efflorescence/Rust Staining               |             | 1056           |         |                   | 1056              |                   |                   |
| 510 - Wearing Surfaces                           |             | 8958           | sq. ft. | 8670              | 288               | 0                 | 0                 |
| 3220 - Crack (Wearing Surface)                   |             | 288            |         |                   | 288               |                   |                   |
| 107 - Steel Open Girder/Beam                     | 1- Ben.     | 1866           | ft.     | 1426              | 0                 | 332               | 108               |
| 1000 - Corrosion                                 |             | 440            |         |                   |                   | 332               | 108               |
| 515 - Steel Protective Coating                   |             | 11620          | sq. ft. | 0                 | 0                 | 8971              | 2649              |
| 3440 - Effectiveness (Steel Protective Coatings) |             | 11620          |         |                   |                   | 8971              | 2649              |
| 215 - Reinforced Concrete Abutment               | 1- Ben.     | 68             | ft.     | 68                |                   |                   |                   |
| 227 - Reinforced Concrete Pile                   | 1- Ben.     | 40             | each    | 37                | 0                 | 3                 | 0                 |
| 1130 - Cracking (RC and Other)                   |             | 3              |         |                   |                   | 3                 |                   |
| 234 - Reinforced Concrete Pier Cap               | 1- Ben.     | 246            | ft.     | 0                 | 246               |                   |                   |
| 303 - Assembly Joint with Seal                   | 1- Ben.     | 288            | ft.     | 0                 | 288               |                   |                   |
| 311 - Movable Bearing                            | 1- Ben.     | 55             | each    | 0                 | 0                 | 55                | 0                 |
| 1000 - Corrosion                                 |             | 55             |         |                   |                   | 55                |                   |
| 313 - Fixed Bearing                              | 1- Ben.     | 55             | each    | 0                 | 0                 | 55                | 0                 |
| 1000 - Corrosion                                 |             | 55             |         |                   |                   | 55                |                   |
| 331 - Reinforced Concrete Bridge Railing         | 1- Ben.     | 752            | ft.     | 0                 | 752               |                   |                   |

Inspector:

Structure Number: 02504

Inspection Date:

Facility Carried: SH 140-01- LM 9.93

Bridge Inspection Report

Maintenance Needs

Date Reported: 2/4/2011 12:00:00 AM

Priority: C - Important

Work Code:

---

Deficiency Description:

Sp. 2 Steel Girder 2 over Bt. 2

Girder have holes rusted thru web at conc. haunch.

Work Description:

---

Date Repairs Completed:

Maintenance Comments:

---

Date Reported: 2/4/2011 12:00:00 AM

Priority: C - Important

Work Code:

---

Deficiency Description:

Deck joints at Bt. 2

Bt. 2 has 3 ft. of sliding plate broken and missing.

Work Description:

---

Date Repairs Completed:

Maintenance Comments:

---

Date Reported: 2/4/2011 12:00:00 AM

Priority: C - Important

Work Code:

---

Deficiency Description:

Steel Girders

Girders have 50% paint deter. and surface rust.

4 ft. on ends of several girders are rusted with initial loss of sect.

Work Description:

---

Date Repairs Completed:

Maintenance Comments:

---

Inspector:

Structure Number: 02504

Inspection Date:

Facility Carried: SH 140-01- LM 9.93

Bridge Inspection Report

**Maintenance Needs**

Date Reported: 2/4/2011 12:00:00 AM

Priority: C - Important

Work Code:

---

Deficiency Description:

Bearings and Anchor bolts

Bearings are rusted with initial loss of sect.

Anchor Bolts and Nuts are rusted with up to 60% loss of sect.

Work Description:

---

Date Repairs Completed:

Maintenance Comments:

---

Date Reported: 2/4/2011 12:00:00 AM

Priority: C - Important

Work Code:

---

Deficiency Description:

Conc. Caps

Conc. Caps have areas of moder. deter. and cracking.

Work Description:

---

Date Repairs Completed:

Maintenance Comments:

---

Date Reported: 2/4/2011 12:00:00 AM

Priority: C - Important

Work Code:

---

Deficiency Description:

Embankment Erosion under Sp. 1, & 11.

Moder. erosion is beginning to undermine Abutments Bt. 1, & 12.

Work Description:

---

Date Repairs Completed:

Maintenance Comments:

---

Inspector:

Structure Number: 02504

Inspection Date:

Facility Carried: SH 140-01- LM 9.93

Bridge Inspection Report

## Maintenance Needs

Date Reported: 2/4/2011 12:00:00 AM

Priority: C - Important

Work Code:

---

Deficiency Description:

Conc. Deck W/Asp. overlay

Several spalled areas up to 1 1/2 in. deep. Numerous asphalt patches are shelling out.

Work Description:

---

Date Repairs Completed:

Maintenance Comments:

---

Date Reported: 2/8/2013 12:00:00 AM

Priority: C - Important

Work Code:

---

Deficiency Description:

Sp. 8 Girder 5 over Bt. 9.

Girder have holes rusted thru web at conc. haunch.

Work Description:

---

Date Repairs Completed:

Maintenance Comments:

---

Date Reported: 2/8/2013 12:00:00 AM

Priority: D - Routine

Work Code:

---

Deficiency Description:

Deck joints at Bt.9

Bt. 9 sliding plate is cracked and loose.

Work Description:

---

Date Repairs Completed:

Maintenance Comments:

---

Inspector:

Structure Number: 02504

Inspection Date:

Facility Carried: SH 140-01- LM 9.93

Bridge Inspection Report

## Maintenance Needs

Date Reported: 2/8/2013 12:00:00 AM

Priority: C - Important

Work Code:

---

Deficiency Description:

Sp. 1 Girder 1 over Bt. 2.

Girder have holes rusted thru web at conc. haunch. See photo 2013

Work Description:

---

Date Repairs Completed:

Maintenance Comments:

---

Date Reported: 2/8/2013 12:00:00 AM

Priority: C - Important

Work Code:

---

Deficiency Description:

Sp.5 Girder 5 over Bt. 6.

Girder have holes rusted thru web at conc. haunch. See photo 2013

Work Description:

---

Date Repairs Completed:

Maintenance Comments:

---

Date Reported: 2/8/2013 12:00:00 AM

Priority: C - Important

Work Code:

---

Deficiency Description:

Sp. 2 Steel Girder 3 over Bt. 2

Girder have holes rusted thru web at conc. haunch.

Work Description:

---

Date Repairs Completed:

Maintenance Comments:

---

Inspector:

Structure Number: 02504

Inspection Date:

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Bridge Inspection Report

Maintenance Needs

Date Reported: 2/8/2013 12:00:00 AM

Priority: C - Important

Work Code:

---

Deficiency Description:

Deck joints at Bt. 6  
Bt. 6 has 3 ft. of sliding plate broken and missing.

Work Description:

---

Date Repairs Completed:

Maintenance Comments:

---

Date Reported: 2/8/2013 12:00:00 AM

Priority: C - Important

Work Code:

---

Deficiency Description:

Sp. 2 Steel Girder 4 over Bt. 2  
Girder have holes rusted thru web at conc. haunch.

Work Description:

---

Date Repairs Completed:

Maintenance Comments:

---

Date Reported: 2/8/2013 12:00:00 AM

Priority: C - Important

Work Code:

---

Deficiency Description:

Deck joints at Bt.5  
Bt. 5 has 12 ft. of sliding plate broken and missing.

Work Description:

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Date Repairs Completed:

Maintenance Comments:

---



Inspector:

Structure Number: 02504

Inspection Date:

Facility Carried: SH 140-01- LM 9.93

Bridge Inspection Report

Maintenance Needs

Date Reported: 2/8/2013 12:00:00 AM

Priority: C - Important

Work Code:

---

Deficiency Description:

Sp.2 Girder 3 over Bt. 3,  
Girder have holes rusted thru web at conc. haunch. See photo 2013

Work Description:

---

Date Repairs Completed:

Maintenance Comments:

---

Date Reported: 1/23/2015 12:00:00 AM

Priority: C - Important

Work Code:

---

Deficiency Description:

Span 5, Bent 6, Girder 2 has a hole in web at diaphragm connection.

Work Description:

---

Date Repairs Completed:

Maintenance Comments:

---

Date Reported: 1/23/2015 12:00:00 AM

Priority: D - Routine

Work Code:

---

Deficiency Description:

A few broken concrete bridge rail post with exposed rebar.

Work Description:

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Date Repairs Completed:

Maintenance Comments:

---

Inspector:

Structure Number: 02504

Inspection Date:

Facility Carried: SH 140-01- LM 9.93

### Bridge Inspection Report

#### Maintenance Needs

Date Reported: 1/23/2015 12:00:00 AM

Priority: C - Important

Work Code:

---

Deficiency Description:

Span 2, Bent 3 Girder 3 has a hole in web at concrete haunch.

Work Description:

---

Date Repairs Completed:

Maintenance Comments:

---

Date Reported: 1/23/2015 12:00:00 AM

Priority: C - Important

Work Code:

---

Deficiency Description:

Span 6, Bent 7, Girder 2 has a hole in web at concrete haunch.

Work Description:

---

Date Repairs Completed:

Maintenance Comments:

---

Date Reported: 1/23/2015 12:00:00 AM

Priority: C - Important

Work Code:

---

Deficiency Description:

Span 8, Bent 9, Girder 4 has a hole in web at concrete haunch.

Work Description:

---

Date Repairs Completed:

Maintenance Comments:

---

Inspector:

Structure Number: 02504

Inspection Date:

Facility Carried: SH 140-01- LM 9.93

Bridge Inspection Report

**Maintenance Needs**

Date Reported: 1/23/2015 12:00:00 AM

Priority: C - Important

Work Code:

---

Deficiency Description:

Span 9, Bent 10, Girder 5 has a hole in web at concrete haunch.

Work Description:

---

Date Repairs Completed:

Maintenance Comments:

---

Date Reported: 1/23/2015 12:00:00 AM

Priority: C - Important

Work Code:

---

Deficiency Description:

Span 10, Bent 11, Girder 5 has a hole in web at concrete haunch.

Work Description:

---

Date Repairs Completed:

Maintenance Comments:

---

Date Reported: 1/23/2015 12:00:00 AM

Priority: C - Important

Work Code:

---

Deficiency Description:

Span 9, Bent 10, Girder 2 has a hole in web at concrete haunch.

Work Description:

---

Date Repairs Completed:

Maintenance Comments:

---

Inspector:

Structure Number: 02504

Inspection Date:

Facility Carried: SH 140-01- LM 9.93

Bridge Inspection Report

## Maintenance Needs

Date Reported: 1/23/2015 12:00:00 AM

Priority: C - Important

Work Code:

---

Deficiency Description:

Span 6, Bent 7, Girder 3 has a hole in web at concrete haunch.

Work Description:

---

Date Repairs Completed:

Maintenance Comments:

---

Date Reported: 1/23/2015 12:00:00 AM

Priority: C - Important

Work Code:

---

Deficiency Description:

Caps have heavy amounts of dirt and debris buildup around bearings.

Work Description:

---

Date Repairs Completed:

Maintenance Comments:

---

Date Reported: 1/23/2015 12:00:00 AM

Priority: C - Important

Work Code:

---

Deficiency Description:

Span 2, Bent 3, Girder 4 has hole in web at concrete haunch.

Work Description:

---

Date Repairs Completed:

Maintenance Comments:

---

Inspector:

Structure Number: 02504

Inspection Date:

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Bridge Inspection Report

**Maintenance Needs**

Date Reported: 1/23/2015 12:00:00 AM

Priority: C - Important

Work Code:

---

Deficiency Description:

Span 1,

Work Description:

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Date Repairs Completed:

Maintenance Comments:

---

Date Reported: 1/23/2015 12:00:00 AM

Priority: D - Routine

Work Code:

---

Deficiency Description:

Bent 3 Pile 1 has vertical cracking in top 1.5 ft. of piling below cap.

Work Description:

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Date Repairs Completed:

Maintenance Comments:

---

Date Reported: 1/23/2015 12:00:00 AM

Priority: C - Important

Work Code:

---

Deficiency Description:

Span 6, Bent 7, Girder 4 has a hole in web at concrete haunch.

Work Description:

---

Date Repairs Completed:

Maintenance Comments:

---

Inspector:

Structure Number: 02504

Inspection Date:

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Bridge Inspection Report

Maintenance Needs

Date Reported: 1/23/2015 12:00:00 AM

Priority: C - Important

Work Code:

---

Deficiency Description:

Span 7, Bent 8, Girder 3 has a hole in web at concrete haunch.

Work Description:

---

Date Repairs Completed:

Maintenance Comments:

---

Date Reported: 1/23/2015 12:00:00 AM

Priority: C - Important

Work Code:

---

Deficiency Description:

Span 3, Bent 4, Girder2 has a hole in web at concrete haunch.

Work Description:

---

Date Repairs Completed:

Maintenance Comments:

---

Date Reported: 1/23/2015 12:00:00 AM

Priority: C - Important

Work Code:

---

Deficiency Description:

Span 8, Bent 8, Girder 5 has a hole in web at concrete haunch.

Work Description:

---

Date Repairs Completed:

Maintenance Comments:

---

Inspector:

Structure Number: 02504

Inspection Date:

Facility Carried: SH 140-01- LM 9.93

Bridge Inspection Report

**Maintenance Needs**

Date Reported: 1/23/2015 12:00:00 AM

Priority: D - Routine

Work Code:

---

Deficiency Description:

Bent 11 Pile 3 has vertical cracking in top 1.0 ft. of piling below cap.

Work Description:

---

Date Repairs Completed:

Maintenance Comments:

---

Date Reported: 1/23/2015 12:00:00 AM

Priority: C - Important

Work Code:

---

Deficiency Description:

Span 1, Bt. 2, Girders 3 & 4 each have holes in web at concrete haunch.

Work Description:

---

Date Repairs Completed:

Maintenance Comments:

---

Date Reported: 1/23/2015 12:00:00 AM

Priority: C - Important

Work Code:

---

Deficiency Description:

Span 8, Bent 9, Girder 3 has a hole in web at concrete haunch.

Work Description:

---

Date Repairs Completed:

Maintenance Comments:

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Maintenance Needs

Date Reported: 1/23/2015 12:00:00 AM

Priority: D - Routine

Work Code:

---

Deficiency Description:

Bent 10 Pile 4 has vertical cracking in top 7.0 ft. of piling below cap.

Work Description:

---

Date Repairs Completed:

Maintenance Comments:

---

Date Reported: 1/23/2015 12:00:00 AM

Priority: C - Important

Work Code:

---

Deficiency Description:

Span 3, Bent 4, girder 4 has a hole in web at concrete haunch.

Work Description:

---

Date Repairs Completed:

Maintenance Comments:

---

Date Reported: 01/27/2017

Priority: C - Important

Work Code:

---

Deficiency Description:

Span4 Bent 5 Girder 2, Span 7 Bent 8 Girder 5 have pin hole rusted thru web at haunch.

Span 8 Bent 8 Girder 3 has 1/2 in. hole rusted thru web at haunch.

Span 11 Bent 12 Girder 5 has 1in. hole rusted thru web at haunch.

Work Description:

---

Date Repairs Completed:

Maintenance Comments:

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