

Bridge Inspection Report

02661
SH 28-Scott Co.
over
Little Cedar Creek



Inspection Date:

Inspected By:

Inspection Type(s):

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Inspector:

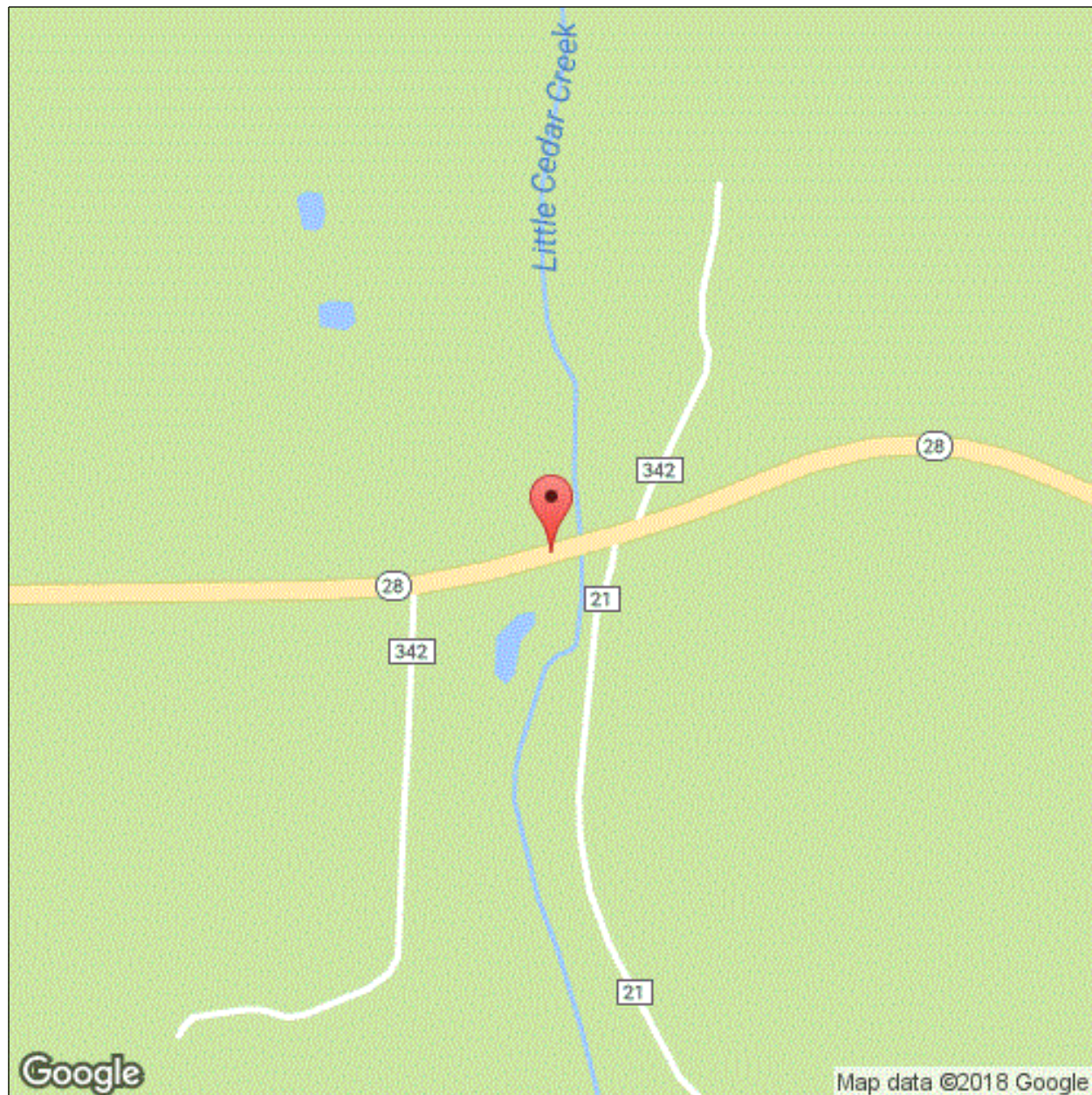
Inspection Date:

Structure Number: 02661

Facility Carried: SH 28-Scott Co.

Bridge Inspection Report

Location Map



Latitude: 34.78830

Longitude: -93.88855

Inspector:

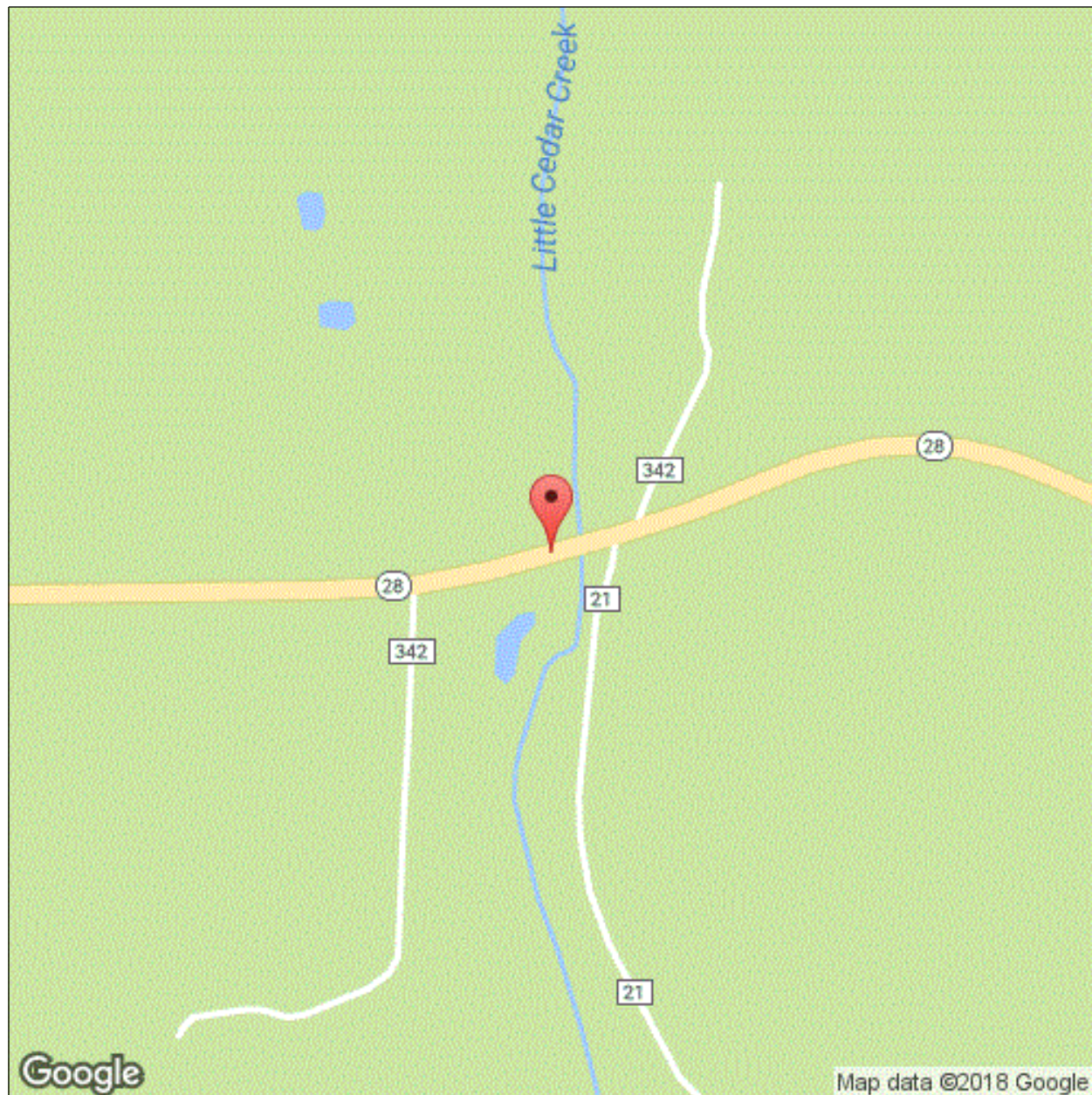
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Bridge Inspection Report

Executive Summary

01/17/2018 EJW & JRT - Underwater Type 2 inspection conducted on this date. Wading, probing and visual observation with low clear water conditions. The intermediate bent footings are exposed with heavy abrasion typical. Approximately 12" of the edges of the footings are exposed. Footings have no apparent significant scour problems at this inspection.

01/28/2016 JPB & RSM-Routine inspection conducted this date.

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Bridge Inspection Report

National Bridge Inventory

| IDENTIFICATION | | INSPECTIONS | |
|---|--|---|-----------------------|
| (1) STATE CODE | 056 - Arkansas | (90) INSPECTION DATE | 01/17/2018 |
| (8) STRUCTURE NUMBER | 02661 | (91) DESIGNATED INSPECTION FREQUENCY | 24 |
| (5) INV. ROUTE (ON/UNDER) | 1 3 1 28 0 | (92) CRITICAL FEATURE INSPECTION | (93) CFI DATE |
| (2) HIGHWAY AGENCY | 04 (3) COUNTY CODE 127 | A. FRACTURE CRITICAL DETAIL | N |
| (4) PLACE CODE | 00000 | B. UNDERWATER INSPECTION | N |
| (6) FEATURES INTERSECTED | Little Cedar Creek | C. OTHER SPECIAL | N |
| (7) FACILITY CARRIED | SH 28-Scott Co. | | |
| (9) LOCATION | 8.92 MI E JCT OF US 71 | | |
| (11) MILEPOINT 8.918 | (12) BASE HIGHWAY NETWORK 0 | | |
| (13A) LRS INVENTORY ROUTE | 0000000000 (13B) SUBROUTE NUMBER 00 | | |
| (16) LATITUDE 34.78830 | (17) LONGITUDE -93.88855 | | |
| (98A) BORDER BRIDGE CODE | | | |
| PERCENT RESPONSIBILITY | (99) BORDER BRIDGE STRUCT | | |
| STRUCTURE TYPE AND MATERIAL | | CONDITION | |
| (43) STRUCTURE TYPE, MAIN | | (58) DECK | 6 |
| A) KIND OF MATERIAL/DESIGN: 1 - Concrete | | (59) SUPERSTRUCTURE | 6 (60) SUBSTRUCTURE 6 |
| B) TYPE OF DESIGN/CONSTR: 01 - Slab | | (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 7 | (46) NUMBER OF APPROACH 0 | | |
| (107) DECK STRUCTURE TYPE 1 | (108A) WEARING SURFACE 6 | | |
| (108B) DECK MEMBRANE 0 | (108C) DECK PROTECTION 0 | | |
| AGE OF SERVICE | | LOAD RATING AND POSTING | |
| (27) YEAR BUILT 1950 | (106) YEAR RECONSTRUCTED 0000 | (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 | 40.0 |
| (29) AVERAGE DAILY TRAFFIC 280 | (19) BYPASS DETOUR LENGTH 14 | (65) METHOD USED TO DETERMINE INVENTORY RATING | 1 |
| (30) YEAR OF AVERAGE DAILY TRAFFIC 2014 | | (66) INVENTORY RATING | 24.0 |
| (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.) 18 | (49) STRUCTURE LENGTH (ft.) 126 | (67) STRUCTURAL EVALUATION | 6 |
| (50) CURB/SIDEWALK WIDTHS (ft.) LEFT 0.8 RIGHT 0.8 | | (68) DECK GEOMETRY | 4 |
| (51) BRDG RDWY WIDTH CURB-TO-CURB (ft.) 22.0 | | (69) UNDERCLEARANCES, VERTICAL & HORIZONTAL | N |
| (52) DECK WIDTH, OUT-TO-OUT (ft.) 24 | | (71) WATERWAY ADEQUACY | 8 |
| (32) APPROACH ROADWAY WIDTH (ft.) 24.0 | | (72) APPROACH ROADWAY ALIGNMENT | 7 |
| (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.) 23.6 | | 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 | 8 |
| (56) MIN LATERAL UNDER CLEARANCE (ft.) 0 | | SUFFICIENCY RATING | 69.8 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 | 0 |
| (94) BRIDGE IMPROVEMENT COST (\$) | 0 | (26) FUNCTIONAL CLASSIFICATION OF INVENTORY ROUTE | 07 |
| (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 | 2 |
| (114) FUTURE ADT 366 | (115) YEAR OF FUTURE ADT 2028 | (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 | 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:

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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 |
|---|--|----------------|---------|-------------------|-------------------|-------------------|-------------------|
| 38 - Reinforced Concrete Slab | 1- Ben. | 2772 | sq. ft. | 2581 | 171 | 20 | 0 |
| | -Concrete slab span with ACHM overlay. -Transverse cracks in the asphalt driving surface over the intermediate bents. -Shallow spalling exposes reinforcing steel with initial section loss adjacent to the deck drains. -Undersurface of the slab along spans 2,3,4,5,6,7 has spalling exposing reinforcing steel with measurable section loss. -Repaired spalls at the undersurface of Spans 4 & 7 are showing signs of deterioration. -Hairline longitudinal cracks near centerline visible on the undersurface of the deck. | | | | | | |
| 1080 - Delamination/Spall/Patched Area | | 7 | | | 5 | 2 | |
| 1090 - Exposed Rebar | | 20 | | | 2 | 18 | |
| 1130 - Cracking (RC and Other) | | 164 | | | 164 | | |
| 510 - Wearing Surfaces | | 2772 | sq. ft. | 2632 | 0 | 140 | 0 |
| 3220 - Crack (Wearing Surface) | | 140 | | | | 140 | |
| 205 - Reinforced Concrete Column | 1- Ben. | 14 | each | 3 | 0 | 11 | 0 |
| | - Medium/heavy abrasion at the base of columns. - Bent 4 Column 1 has a softball size spall exposing the reinforcing steel with initial section loss. - Bent 3 columns 1 & 2 have spalling that exposes reinforcing steel with approximately 25% section loss. Column 2 being the worse. - Bent 2 column 2 has approximately 6" of concrete deterioration | | | | | | |
| 1080 - Delamination/Spall/Patched Area | | 2 | | | | 2 | |
| 1090 - Exposed Rebar | | 3 | | | | 3 | |
| 1190 - Abrasion/Wear (PSC/RC) | | 6 | | | | 6 | |
| 220 - Reinforced Concrete Pile Cap/Footing | 1- Ben. | 72 | ft. | 0 | 0 | 72 | 0 |
| | - Bents 3, 4, 5, 6 & 7 footings are exposed but appear to still be well keyed into the solid channel floor. There is no evidence of undermining at this inspection. . -Tops of footings and approximately 12" of the edges of the footings are exposed. All exposed footings have medium/heavy abrasion. -Footings have no apparent significant scour problems at this inspection. | | | | | | |
| 1190 - Abrasion/Wear (PSC/RC) | | 72 | | | | 72 | |

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Element Inspection

| | | | | | | | |
|--|--|-----|---------|-----|-----|-----|---|
| 234 - Reinforced Concrete Pier Cap | 1- Ben. | 200 | ft. | 178 | 15 | 7 | 0 |
| | -Bent 2 has two 8" shallow spall with exposed reinforcing steel located 2' Lt of centerline. -Bent 3 has a 12" delaminated area on the bottom of the cap adjacent to Column 2. -Bent 5 has one baseball size spall with exposed reinforcing steel in the Right side of cap. -Bent 8 has one basketball size spall with exposed reinforcing steel in the bottom RT side of cap. -Bent 1 & Bent 8 have minor embankment settlement from high water events. -Caps typically have hairline vertical cracking near mid-span of the caps. | | | | | | |
| 1080 - Delamination/Spall/Patched Area | | 2 | | | | 2 | |
| 1090 - Exposed Rebar | | 5 | | | | 5 | |
| 1130 - Cracking (RC and Other) | | 15 | | | 15 | | |
| 330 - Metal Bridge Railing | 1- Ben. | 252 | ft. | 116 | 130 | 6 | 0 |
| | -The metal rail has a failing paint system with rust showing through the paint typical through out the metal railing. -The east bound lane has a 4' damage area of metal bridge railing. -There are 6 separate areas of missing hardware along both sides of the bridge railing. | | | | | | |
| 1000 - Corrosion | | 126 | | | 126 | | |
| 1020 - Connection | | 6 | | | | 6 | |
| 7000 - Damage | | 4 | | | 4 | | |
| 515 - Steel Protective Coating | | 504 | sq. ft. | 0 | 0 | 504 | 0 |
| 3440 - Effectiveness (Steel Protective Coatings) | | 504 | | | | 504 | |

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Bridge Inspection Report

Pictures

PHOTO 1

Description

PHOTO 2

Description

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Bridge Inspection Report

Sketches

Inspector:

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Bridge Inspection Report

Maintenance Needs

Date Reported: 4/12/2012 12:00:00 AM

Priority: G - General/ Preventive maintenance

Work Code: Repair

Deficiency Description:

Deck

Water stains on the substructure caps indicate that the deck joints are leaking water.

Work Description:

Date Repairs Completed:

Maintenance Comments:

Stage: Assigned



PHOTO 1 Description

Stage: Assigned



PHOTO 2 Description

Inspector:

Structure Number: 02661

Inspection Date:

Facility Carried: SH 28-Scott Co.

Bridge Inspection Report

Maintenance Needs

Date Reported: 1/30/2014 12:00:00 AM

Priority: D - Routine

Work Code: Repair

Deficiency Description:

Concrete Slab Span

Shallow spalling with exposed reinforcing steel on the undersurface of the slab.

Work Description:

Date Repairs Completed:

Maintenance Comments:

Stage: Assigned



PHOTO 1 Description

Stage: Assigned



PHOTO 2 Description Shallow spalling with exposed reinforcing steel adjacent to the deck drains.

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Bridge Inspection Report

Maintenance Needs

Date Reported: 1/30/2014 12:00:00 AM

Priority: D - Routine

Work Code: Repair

Deficiency Description:

R.C. Concrete Caps

Shallow spalling with exposed reinforcing steel in the caps.

Work Description:

Date Repairs Completed:

Maintenance Comments:

Stage: Assigned



PHOTO 1 Description

Stage: Assigned



PHOTO 2 Description

Inspector:

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Bridge Inspection Report

Maintenance Needs

Date Reported: 1/30/2014 12:00:00 AM

Priority: D - Routine

Work Code: Repair

Deficiency Description:

Substructure

The bases of the columns have areas of heavy abrasion with concrete deterioration and collision damage. The most extreme case is columns # 1 and # 2 of Bent # 3 which has areas of spalling with exposed reinforcing steel in the bases of columns. The exposed reinforcing steel has measurable section loss.

Work Description:

Date Repairs Completed:

Maintenance Comments:

Stage: Open



PHOTO 1 Description One softball size spall with exposed reinforcing steel at the base of the Lt & Rt Columns of Bent 3 with section loss at this inspection.

Stage: Monitor



PHOTO 2 Description

Inspector:

Inspection Date:

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Bridge Inspection Report

Maintenance Needs

Stage: Monitor



PHOTO 3 Description