

Bridge Inspection Report

05584
HUGHES STREET
over
I-630 LOG 5.00



Inspection Date:

Inspected By:

Inspection Type(s):

Inspector:

Structure Number: 05584

Inspection Date:

Facility Carried: HUGHES STREET

Bridge Inspection Report

National Bridge Inventory

| IDENTIFICATION | | INSPECTIONS | |
|--|--|---|-----------------------|
| (1) STATE CODE | 056 - Arkansas | (90) INSPECTION DATE | 08/09/2017 |
| (8) STRUCTURE NUMBER | 05584 | (91) DESIGNATED INSPECTION FREQUENCY | 24 |
| (5) INV. ROUTE (ON/UNDER) | 1 5 1 27740 0 | (92) CRITICAL FEATURE INSPECTION | (93) CFI DATE |
| (2) HIGHWAY AGENCY | 06 (3) COUNTY CODE 119 | A. FRACTURE CRITICAL DETAIL | N |
| (4) PLACE CODE | 39020 | B. UNDERWATER INSPECTION | N |
| (6) FEATURES INTERSECTED | I-630 LOG 5.00 | C. OTHER SPECIAL | N |
| (7) FACILITY CARRIED | HUGHES STREET | | |
| (9) LOCATION | 2.4 E OF I-430 | | |
| (11) MILEPOINT 0.470 | (12) BASE HIGHWAY NETWORK 0 | | |
| (13A) LRS INVENTORY ROUTE | 0000000000 (13B) SUBROUTE NUMBER 00 | | |
| (16) LATITUDE 34.74581 | (17) LONGITUDE -92.35023 | | |
| (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 7 |
| B) TYPE OF DESIGN/CONSTR: 02 - Stringer/Multi-beam or Girder | | (61) CHANNEL & CHANNEL PROTECTION | N (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 1 | (108A) WEARING SURFACE 1 | | |
| (108B) DECK MEMBRANE 0 | (108C) DECK PROTECTION 0 | | |
| AGE OF SERVICE | | LOAD RATING AND POSTING | |
| (27) YEAR BUILT 1977 | (106) YEAR RECONSTRUCTED 0000 | (31) DESIGN LOAD | 5 |
| (42) TYPE OF SERVICE ON 1 UNDER 1 | | (63) METHOD USED TO DETERMINE OPERATING RATING | 1 |
| (28) LANES ON 02 UNDER 08 | | (64) OPERATING RATING | 48 |
| (29) AVERAGE DAILY TRAFFIC 1742 | (19) BYPASS DETOUR LENGTH 1 | (65) METHOD USED TO DETERMINE INVENTORY RATING | 1 |
| (30) YEAR OF AVERAGE DAILY TRAFFIC 1987 | | (66) INVENTORY RATING | 29 |
| (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.) 93 | (49) STRUCTURE LENGTH (ft.) 174 | (67) STRUCTURAL EVALUATION | 6 |
| (50) CURB/SIDEWALK WIDTHS (ft.) LEFT 4.4 RIGHT 4.4 | | (68) DECK GEOMETRY | 6 |
| (51) BRDG RDWY WIDTH CURB-TO-CURB (ft.) 36.1 | | (69) UNDERCLEARANCES, VERTICAL & HORIZONTAL | 3 |
| (52) DECK WIDTH, OUT-TO-OUT (ft.) 47 | | (71) WATERWAY ADEQUACY | N |
| (32) APPROACH ROADWAY WIDTH (ft.) 36.1 | | (72) APPROACH ROADWAY ALIGNMENT | 7 |
| (33) BRIDGE MEDIAN 0 | (34) SKEW (DEG.) 6 | (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.) 44.9 | | 36B) TRANSITIONS: | 0 |
| (53) VERTICAL CLEARANCE OVER BRIDGE ROADWAY (ft.) 99.99 | | 36C) APPROACH GUARDRAIL: | 0 |
| (54) VERTICAL UNDER CLEARANCE (ft.) H 16.17 | | 36D) APPROACH GUARDRAIL ENDS: | 0 |
| (55) LATERAL UNDER CLEARANCE RIGHT (ft.) H 8 | | (113) SCOUR CRITICAL BRIDGES | N |
| (56) MIN LATERAL UNDER CLEARANCE (ft.) 9.3 | | SUFFICIENCY RATING | 2 STATUS 87.9 |
| 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 | 17 |
| (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 2258 | (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 | 01 |
| | | (22) OWNER | 01 |
| | | (37) HISTORICAL | 5 |
| | | NAVIGATION DATA | |
| | | (38) NAVIGATION CONTROL | N |
| | | (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: 05584

Inspection Date:

Facility Carried: HUGHES STREET

Bridge Inspection Report

National Bridge Inventory

UNDER RECORD A

IDENTIFICATION

| | | | |
|---------------------------|----------------|---------------------------|--|
| (1) STATE CODE | 056 - Arkansas | (7) FACILITY CARRIED | HUGHES STREET |
| (3) COUNTY CODE | 119 | (8) STRUCTURE NUMBER | 05584 |
| (4) PLACE CODE | 39020 | (9) LOCATION | 2.4 E OF I-430 |
| (5) INV. ROUTE (ON/UNDER) | A 1 1 630 4 | (11) MILEPOINT | 4.999 (12) BASE HIGHWAY NETWORK 1 |
| (6) FEATURES INTERSECTED | I-630 LOG 5.00 | (13A) LRS INVENTORY ROUTE | 0000630210 (13B) SUBROUTE NUMBER 00 |
| | | (16) LATITUDE | 34. 7452222222222 (17) LONGITUDE -92.3503333333333 |

STRUCTURE TYPE AND MATERIAL

(43) STRUCTURE TYPE, MAIN A) KIND OF MATERIAL/DESIGN: 4 - Steel continuous
 B) TYPE OF DESIGN/CONSTR: 02 - Stringer/Multi-beam or Girder

AGE OF SERVICE

| | | | |
|----------------------------|----------------|------------------------------------|--------------|
| (19) BYPASS DETOUR LENGTH | 1 | (30) YEAR OF AVERAGE DAILY TRAFFIC | 2014 |
| (27) YEAR BUILT | 1977 | (42) TYPE OF SERVICE | ON 1 UNDER 1 |
| (28) LANES | ON 04 UNDER 02 | (109) AVERAGE DAILY TRUCK TRAFFIC | 3 |
| (29) AVERAGE DAILY TRAFFIC | 52500 | | |

GEOMETRIC DATA

| | | | |
|----------------------------------|-------|-----------------------------|------------------------------|
| (10) INV RTE, MIN VERT CLEARANCE | 16.17 | (48) LENGTH OF MAXIMUM SPAN | 93 (49) STRUCTURE LENGTH 174 |
| (47) TOTAL HORIZONTAL CLEARANCE | 65.2 | | |

CLASSIFICATION

| | | | |
|---|----|---|---|
| (20) TOLL | 3 | (102) DIRECTION OF TRAFFIC | 1 |
| (26) FUNCTIONAL CLASSIFICATION OF INVENTORY ROUTE | 11 | (103) TEMP STRUCTURE | |
| (100) STRAHNET HIGHWAY DESIGNATION | 1 | (104) HIGHWAY SYSTEM OF THE INVENTORY ROUTE | 1 |
| (101) PARALLEL STRUCTURE DESIGNATION | N | (110) DESIGNATED NATIONAL NETWORK | 1 |

UNDER RECORD B

IDENTIFICATION

| | | | |
|---------------------------|----------------|---------------------------|--|
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| (47) TOTAL HORIZONTAL CLEARANCE | 65.3 | | |

CLASSIFICATION

| | | | |
|---|----|---|---|
| (20) TOLL | 3 | (102) DIRECTION OF TRAFFIC | 1 |
| (26) FUNCTIONAL CLASSIFICATION OF INVENTORY ROUTE | 11 | (103) TEMP STRUCTURE | |
| (100) STRAHNET HIGHWAY DESIGNATION | 1 | (104) HIGHWAY SYSTEM OF THE INVENTORY ROUTE | 1 |
| (101) PARALLEL STRUCTURE DESIGNATION | N | (110) DESIGNATED NATIONAL NETWORK | 1 |

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Element Inspection

| | Environment | Total Quantity | Units | Condition State 1 | Condition State 2 | Condition State 3 | Condition State 4 |
|--|---|----------------|---------|-------------------|-------------------|-------------------|-------------------|
| 12 - Reinforced Concrete Deck | 1- Ben. | 8256 | sq. ft. | 7196 | 910 | 150 | 0 |
| | All spans have map cracking and transverse cracks up to .040". | | | | | | |
| 1130 - Cracking (RC and Other) | | 1060 | | | 910 | 150 | |
| 107 - Steel Open Girder/Beam | 1- Ben. | 1032 | ft. | 822 | 210 | 0 | 0 |
| | Freckling rust on all beam ends, bottom flange and lower webs. | | | | | | |
| 1000 - Corrosion | | 210 | | | 210 | | |
| 515 - Steel Protective Coating | | 8514 | sq. ft. | 0 | 3405 | 3405 | 1704 |
| 3440 - Effectiveness (Steel Protective Coatings) | | 8514 | | | 3405 | 3405 | 1704 |
| 205 - Reinforced Concrete Column | 1- Ben. | 3 | each | 3 | | | |
| 215 - Reinforced Concrete Abutment | 1- Ben. | 227 | ft. | 208 | 19 | 0 | 0 |
| | Cracks in both abutments. | | | | | | |
| 1130 - Cracking (RC and Other) | | 19 | | | 19 | | |
| 234 - Reinforced Concrete Pier Cap | 1- Ben. | 36 | ft. | 36 | | | |
| 302 - Compression Joint Seal | 1- Ben. | 90 | ft. | 0 | 0 | 90 | 0 |
| | Both joint seals are torn and leaking causing bearings to corrode. | | | | | | |
| 2310 - Leakage | | 90 | | | | 90 | |
| 311 - Movable Bearing | 1- Ben. | 12 | each | 0 | 12 | 0 | 0 |
| | Bearing at both abutments have corrosion due to joint seal failure. | | | | | | |
| 1000 - Corrosion | | 12 | | | 12 | | |
| 313 - Fixed Bearing | 1- Ben. | 6 | each | 6 | | | |
| 321 - Reinforced Concrete Approach Slab | 1- Ben. | 1440 | sq. ft. | 911 | 327 | 202 | 0 |
| | Both approach slabs have spalls and spalls filled with asphalt. | | | | | | |
| 1080 - Delamination/Spall/Patched Area | | 370 | | | 168 | 202 | |
| 1130 - Cracking (RC and Other) | | 159 | | | 159 | | |
| 330 - Metal Bridge Railing | 1- Ben. | 344 | ft. | 344 | | | |
| 331 - Reinforced Concrete Bridge Railing | 1- Ben. | 344 | ft. | 344 | | | |