

BRIDGE INSPECTION REPORT

INSPECTION TYPE: Routine Inspection **COUNTY JOHNSTON BRIDGE NUMBER** 500082 INSPECTION CYCLE 2 YRS ACROSS BLACK CREEK ROUTE I95 NBL M.P. 90500 LOCATION 0.8MI N JCT US301/70 SUPERSTRUCTURE RC FLOOR/I-BEAMS SUBSTRUCTURE EBTS:RC CAP H-PILES;INT.BTS.RCP&BEAM SPANS 1 @ 50'3;2 @ 50'0;1 @ 51'6 35° 28' 0.4" LONGITUDE 78° 22' 48.4" LATITUDE PRESENT CONDITION FAIR **INVENTORY RATING** INSPECTION DATE 04/09/2010 **OPERATING RATING** PRESENT POSTING Not Posted **PROPOSED POSTING COMPUTER UPDATE ANALYSIS DATE**

SUFFICIENCY RATING

OTHER SIGNS PRESENT 2 DELINEATORS SOUTH END ONLY



| | 140 | |
|-----|-----|--|
| ų Š | No | |
| | No | |
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| | | |
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| SIGN NOT ISSUED FO | · | NUMBEREI REQUIRED |
|-----------------------|-----------------|----------------------|
| No | WEIGHT LIMIT | |
| No | DELINEATORS | |
| No | NARROW BRIDGE | |
| No | ONE LANE BRIDGE | |
| No | LOW CLEARANCE | |

LOOKING NORTH

POSTING LETTER DATE

NATIONAL BRIDGE INVENTORY------ STRUCTURE INVENTORY AND APPRAISAL Run Date: 06/08/2010

| IDENTIFICATION | | | |
|--|---------------|--|-----------|
| (1) STATE NAME -NORTH CAROLINA BRIDGE | 500082 | SUFFICIENCY RATING = | 68.9 |
| (8) STRUCTURE NUMBER(FEDERAL) 00 | 0000001010082 | STATUS = Not Deficient | |
| INVENTORY ROUTE (ON/UNDER) - ON | 111000950 | | |
| (2) STATE HIGHWAY DEPARTMENT DISTRICT | 4 | | CODE |
| (3) COUNTY CODE 101 (4) PLACE CODE | 00000 | (112)NBIS BRIDGE SYSTEM - | YES |
| (6) FEATURE INTERSECTED - BLACK CREEK | | (104)HIGHWAY SYSTEM NHS Route | 1 |
| (7) FACILITY CARRIED 195 NBL | | (26) FUNCTIONAL CLASS - Arterial - Interstate | 01 |
| (9) LOCATION 0.8MI N JCT US301/70 | | (100)STRAHNET HIGHWAY - Interstate STRAHNET Route | 1 |
| (11)MILEPOINT | 90500 | (101)PARALLEL STRUCTURE - Right Parallel Structure | R |
| (16)LAT 35° 28' 0.4" (17)LONG 78° 22' 4 | 18.4" | (102)DIRECTION OF TRAFFIC - 1-way Traffic | 1 |
| (98)BORDER BRIDGE STATE CODE PCT SH | ARE | (103)TEMPORARY STRUCTURE - Not Temporary | |
| (99)BORDER BRIDGE STRUCTURE NO | | (110)DESIGNATED NATIONAL NETWORK - Is Part of | 1 |
| · <i>'</i> | | (20) TOLL On Free Road | 3 |
| STRUCTURE TYPE AND MATERIAL — | | (31) MAINTAIN - State Highway Agency | 01 |
| (43) STRUCTURE TYPE MAIN: Steel | | (22) OWNER - State Highway Agency | 01 |
| TYPE - Stringer Mutlibeam or Girder COI | DE 302 | (37) HISTORICAL SIGNIFICANCE - Not Eligible | 5 |
| (44) STRUCTURE TYPE APPR : | | (e., <u>g</u> | |
| TYPE - COL | DE | CONDITION | CODE . |
| (45) NUMBER OF SPANS IN MAIN UNIT | 4 | (58) DECK | 5 |
| (46) NUMBER OF APPROACH SPANS | | (59) SUPERSTRUCTURE | 6 |
| (107)DECK STRUCTURE TYPE - Concrete cast-in-place | CODE 1 | (60) SUBSTRUCTURE | 5 |
| (108)WEARING SURFACE / PROTECTIVE SYSTEM: | | (61) CHANNEL & CHANNEL PROTECTION | 7 |
| (A) TYPE OF WEARING SURFACE - Bituminous | CODE 6 | (62) CULVERTS | N |
| (B) TYPE OF MEMBRANE - None | CODE 0 | | |
| (C) TYPE OF DECK PROTECTION - None | CODE 0 | LOAD RATING AND POSTING | CODE |
| (0, 0 | | (31) DESIGN LOAD HS 20+MOD | 6 |
| AGE AND SERVICE | | (64) OPERATING RATING - HS-34 | 161 |
| (27) YEAR BUILT | 1958 | (66) INVENTORY RATING - HS-21 | 137 |
| (106)YEAR RECONSTRUCTED | | (70) BRIDGE POSTING - No Posting Required | 5 |
| (42) TYPE OF SERVICE : ON - Highway | | (41) STRUCTURE OPEN, POSTED ,OR CLOSED | A |
| | CODE 15 | DESCRIPTION - Open, No Restriction | |
| (28) LANES: ON STRUCTURE 2 UNDER STRUCTUR | | | |
| (29) AVERAGE DAILY TRAFFIC | 18500 | APPRAISAL | CODE |
| (30) YEAR OF ADT 2008 (109) TRUCK ADT PCT | 23 % | (67) STRUCTURAL EVALUATION | 5 |
| (19) BYPASS OR DETOUR LENGTH | 1 MI | (68) DECK GEOMETRY | 4 |
| GEOMETRIC DATA | | (69) UNDERCLEARANCES, VERTI & HORIZ | N |
| (48) LENGTH OF MAXIMUM SPAN | 52 FT | (71) WATERWAY ADEQUACY | 8 |
| (49) STRUCTURE LENGTH | 202 FT | (72) APPROACH ROADWAY ALIGNMENT | 8 |
| (50)CURB OR SIDEWALK: LEFT 0.0 FT RIGHT | 0.0 FT | (36) TRAFFIC SAFETY FEATURES | 0111 |
| (51) BRIDGE ROADWAY WIDTH CURB TO CURB | 28.3 FT | (11)SCOUR CRITICAL BRIDGES | 8 |
| (52) DECK WIDTH OUT TO OUT | 31.5 FT | | |
| (32) APPROACH ROADWAY WIDTH (W/SHOULDERS) | 38.0 FT | PROPOSED IMPROVEMENTS | |
| | ODE 1 | (75) TYPE OF WORK - CODE | 311 |
| (34) SKEW 0° (35) STRUCTURE FLARED | NO | (76) LENGTH OF STRUCTURE IMPROVEMENT | 230 FT |
| (10) INVENTORY ROUTE MIN VERT CLEAR | 99 FT 99 IN | | \$747,000 |
| (47) INVENTORY ROUTE TOTAL HORIZ CLEAR | 28.3 FT | | \$187,000 |
| (53) MIN VERT CLEAR OVER BRIDGE RDWY | 99 FT 99 IN | | ,121,000 |
| (54) MIN VERT UNDERCLEAR REF Not a Highway or Railroad | | (97) YEAR OF IMPROVEMENT COST ESTIMATE | 2007 |
| (55) MIN LAT UNDERCLEAR RT REF Not a Highway or Railroad | 99.9 FT | (114)FUTURE ADT 37000 (115) YEAR FUTURE ADT | 2025 |
| (56) MIN LAT UNDERCLEAR LT REF - | 0.0 FT | | |
| | | (90) INSPECTION DATE | /00/2040 |
| ———NAVIGATION DATA | | • | /09/2010 |
| (38) NAVIGATION CONTROL - No Navigational Control | CODE 0 | (92) CRITICAL FEATURE INSPECTION: (93) CFI DATE | |
| (111)PIER PROTECTION - Not Applicable | CODE | A) FRACTURE CRIT DETAIL - NO A) | |
| (39) NAVIGATION VERTICAL CLEARANCE | 0 | B) UNDERWATER INSP - NO B) | |
| (116)VERT - LIFT BRIDGE NAV MIN VERT CLEAR | | C) OTHER SPECIAL INSP NO C) | |
| (40) NAVIGATION HORIZONTAL CLEARANCE | 0 | SCOUR | |

BRIDGE I & A FORM1 (90)A

BRIDGE INSPECTION RECORD AND SUMMARY

INSPECTION TYPE Routine Inspection

BRIDGE NO. 500082 COUNTY JOHNSTON

STRUCTURE TYPE RC FLOOR/I-BEAMS

ROUTE ORIENTATION S - N

ROUTE 195 NBL

OVER BLACK CREEK

SPANS 1 @ 50'3;2 @ 50'0;1 @ 51'6

| | E)/ALLIATION | 0005 00 | ODITIO | | | 2000 | | |
|--|---|-----------|------------------------------------|------------------------------------|--|-------------|------------------|-----|
| | | CODE: 0-2 | CRITICA | L, 3 & 4 POOR, : | 5 & 6 FAIR, 7-9 | | | |
| | INSPECTION ITEM | | 20.4050 | 45 0114415151 | 14/4-7-514/4 | ITEM 61 | | |
| | DECK ITEMS | (| GRADES | 45. CHANNEL & CHANNEL | a. WATERWA | | | 8 |
| 1. WEARING S | | | 7 | PROT. | b. ALIGNMEN | IT | | 8 |
| 2. DECK NO. OF EA TYPE | a. CONCRETE | 4 | 5 | _ | | 8 | | |
| SPN GRADE | b. TIMBER | | | | | | P, DIKES, ETC. | 7 |
| RATES SI & A | c. STEEL PLANK | | | 50. APPROAC | | CONDITION | | 7 |
| ITEM 58 | d. OPEN GRID | | | 51. APPROAC | | | | |
| 3. RAILING | a. CONCRETE | | 5 | 52. PAINT SYS | STEM | CODE | A | 5 |
| | b. TIMBER | | | 53. UTILITIES | | | | |
| | c. ALUMINUM | | | 54. RESPONS | E TO LIVE LOA | AD. | | 8 |
| | d. STEEL 5 55. ESTIMATED REMAINING LIFE | | | | | | | |
| | HEELGUARDS, PARAPETS, MEDIA | | 6 | | | | | |
| 5. WALKWAY | S (ON OR ATTACHED TO STRUCT | URE) | | 60. REGULAT | ORY SIGN NO | TICE ISSUED |) | NO |
| 6. DECK EXP | a. STEEL PL OR FINGER | | | 61. PROMPT-A | ACTION NOTIC | E ISSUED | | YES |
| JTS. OR DEVICES. | b. MISC PREFAB | | | 62. PRESENTI | LY POSTED | | | NO |
| NO. OF EACH | c. COMPRESSION SEAL | | | 63. TOT. FIELI | D INSP TIME (I | NCLUDE WR | RITE UP)(MAN HR) | 6 |
| | d. STANDARD JOINTS | 5 | 5 | 64. TOTAL SN | OOPER INSP. | TIME (HRS) | | 0 |
| | e. OPEN JOINTS | | | 65. TOTAL TR | 65. TOTAL TRAFFIC CONTROL TIME (MAN HRS) | | | |
| 7. DECK DEBI | RIS (INCLUDES EXCESS SAND/GF | RAVEL) | 7 | | | | | |
| | | | 70. SI&A GENERAL CONDITION RATINGS | | | | | |
| SUPER STR. (FM. 1 (90)B TRUSS) ITEM 59 | | | | a. DECK ITEM 58 | | | | 5 |
| 10. LONGITUDINAL BEAMS OR GIRDERS | | | | b. SUPERSTRUCTURE ITEM 59 | | | 6 | |
| 11. LONGITUE | 11. LONGITUDINAL JOIST OR STRINGERS | | | | CTURE | | ITEM 60 | 5 |
| 12. INT. DIAP | S, X-FRAMES, BRACING & CONN'S | 3 | | d. CHANNEL & CHANNEL PROT. ITEM 61 | | | | 7 |
| 13. END DIAP | 'S, CURTAIN WALLS, & CONN'S | | 5 | | | | | |
| 14. FLOOR BE | AMS AND CONNECTIONS | | | 71. SI&A FIELD APPRAISAL RATINGS | | | | |
| 15. BEARING | ASSEMBLIES (INCLUDING MISALI | GN) | 5 | a. WATERWAY ADAQUACY | | | 7 | |
| 16. DRAINAGE | SYSTEM (ON STRUCTURE) | | 6 | b. APPR. RDWY. ALIGNMENT | | | 8 | |
| 17. MOVABLE | SPAN MACHINERY | | | | | | | |
| | | | | 72. FIELD SCOUR EVALUATION | | | | G |
| Sl | JB STR. ITEMS. ITEM 60 (INCLUDE | SCOUR) | | | | | | |
| 35. TIM SUB | a. ABUT. & INT. BENT CAPS & RIS | SERS | | l | JSE OF INSP. | ACCESSIBIL | ITY EQUIPMENT | |
| STR. | b. PILES, POST, SILLS, & BRACIN | IG | | SNOOPER (C | ODE S, 4, OR | N) | HRS | NO |
| | c. BULKHEADS, WING'S, & TIE BA | ACKS | | LADDER | | | ' | YES |
| 36. CONC | a. ABUT. & INT. BENT CAPS | | 5 | BUCKET TRU | ICK | | | NO |
| SUB STR. | b. ABUT. & BENT COL'S BREAST | WALLS | 6 | BOAT | | | | NO |
| | c. ABUT. & INT. BENT PILES | | | OTHER | | | | NO |
| | d. BACKWALLS, WING'S, RETAIN | . WALLS | 6 | | | | | |
| | e. ABUT. & BENT FOOTINGS & SI | | | | | | | |
| 37. STEEL | a. ABUT. & INT. BENT CAPS & RIS | | SPECIAL INS | PECTION REQ | UESTED FO | R | | |
| SUB STR. | b. PILES, BRACING, AND BULKHI | | | | | | | |
| 38. FOUNDAT | ION PILES TYPE MATERIAL | | | NOTE | | | | |
| | OT., RIP-RAP (INCLUDE DRAINAC | SE) | 6 | | | | | |
| 40. FENDER S | · | , | - | 80. INSPECTE | D BY: | | Wille C My | |
| | - ···· - | | | 1 | | | W. | |

Bridge I&A Form 1(82)H

State of North Carolina Dept. of Transportation Division of Highways

FIELD INSPECTION REPORT

Bridge Inspecion & Analysis

Team Leader WILLIS C MAY

Assisted By WTW

| Assisted by | | |
|-------------|-------|---|
| Item No. | Grade | |
| 2a | 5 | CONCRETE DECK 5 RANDOM TRANSVERSE CRACKS WITH EFFLORESCENCE IN BOTTOM OF DECK OF ALL SPANS. |
| 3 a | 5 | TRANSVERSE CRACKS WITH EFFLORESCENCE IN BOTTOM OF OVERHANGS. CONCRETE RAILS 5 SPALLING AT RAIL POST BASE # 5 WITH REBAR EXPOSED IN SPAN 3 AT BENT 3 LEFT SIDE WITH 1/4 IN. WIDE CRACK IN RAIL AT EACH SIDE OF POST. RAIL IS BOWED OUT 1/2 IN. AT THIS LOCATION. SCATTERED TRANSVERSE HAIRLINE CRACKS AT EACH SPAN. |
| 3d | 5 | STEEL RAILS 5 40 FT. OF GUARDRAIL DAMAGE AT LEFT SIDE OF SPAN 2. 60 FT. OF GUARDRAIL DAMAGE AT RIGHT SIDE OF SPAN 2 AND SPAN 3. 20 FT. OF GUARDRAIL DAMAGE AT THE RIGHT SIDE OF SPAN 4. |
| 4 | 6 | CURBS 6 SCALING WITH EXPOSED COARSE AGGREGATE IN FACES. RANDOM TRANSVERSE HAIRLINE CRACKS ON TOPS OF CURBS. |
| 6d | 5 | STANDARD JOINTS 5 JOINTS ARE LEAKING. |
| 10 | 6 | LONGITUDINAL BEAMS 6 SURFACE RUST AND PITTING IN SPOTS THROUGHOUT. |
| 13 | 5 | END DIAPHRAGMS 5 VERTICAL AND DIAGONAL CRACKS SOME WITH EFFLO LEAKAGE IN DIAPHRAGMS AT ALL INTERIOR BENTS. |
| 15 | 5 | BEARING ASSEMBLIES 5 RUSTING , FLAKING, AND UP TO 1/8 IN. SECTION LOSS IN FACES OF BEARING ASSEMBLIES . BROKEN ANCHOR BOLT AT LEFT AND RIGHT SIDE OF BEAM 2 SPAN 2 AT BENT 1 AND LEFT SIDE OF BEAM 3 SPAN 2 BENT 1. PRIORITY MAINTENANCE ISSUED |
| 16 | 6 | DRAIN SYSTEM 6 50 PERCENT OF THE DRAIN HOLES ARE CLOGGED. |
| 52 | 5 | PAINT SYSTEM 5 SPOTS OF PEELING PAINT THROUGH OUT . |

| Bridge I&A Form 1(82)H |
|-------------------------|
| State of North Carolina |
| Dept. of Transportation |

Division of Highways

FIELD INSPECTION REPORT

Bridge Inspecion & Analysis

Team Leader WILLIS C MAY

Assisted By WTW

| Assisted by | VVIVV | |
|-------------|-------|--|
| Item No. | Grade | |
| 36a | 5 | CONCRETE CAPS 5 END BENT 1 PANDOM HAIDLINE VERTICAL CRACKS IN EACE |
| | | RANDOM HAIRLINE VERTICAL CRACKS IN FACE. BENT 1 |
| | | DELAMINATION AT BENT 1 CAP SPAN 1 SIDE UNDER BEAM 3. HAIRLINE VERTICAL IN FACE OF CAP SPAN 1 SIDE UNDER BEAM 2. 22 IN. X 48 IN. X 8 IN. DEEP SPALL AT BEAM 3 SPAN 2 SIDE BENT 1 EXTENDING 4 IN. UNDER BEARING PLATE, PLATE IS TILTED AND CRUSHED 1/2 IN. INTO CAP. PRIORITY MAINTENANCE ISSUED END BENT 2 |
| | | HAIRLINE MAP AND VERTICAL CRACKS IN TOP AND FACE . CONCRETE COLUMNS 6 |
| 36b | 6 | BENT 1 |
| | | COLUMN 1 HONEYCOMBING IN RIGHT CORNER OF SPAN 2 SIDE AND IN LOWER FILLET AT COLUMN 1. |
| | | COLUMN 2 HONEYCOMBING IN LEFT AND RIGHT CORNER OF SPAN 2 SIDE . |
| | | BENT 2 COLUMN 2 RIGHT SIDE 1/16 IN. VERTICAL CRACK FROM GROUND LINE UP 8 FT BENT 3 |
| | | HAIRLINE VERTICAL CRACK 2 FT. LONG IN COLUMN 1. |
| 36d | 6 | CONCRETE RETAINING WALLS 6 END BENT 1 HORIZONTAL HAIRLINE CRACKING AT BAY 2 END BENT 1 BACKWALL. |
| | | |
| 39 | 6 | SLOPE PROTECTION 6 RIGHT SIDE CONCRETE GUTTER AT END BENT 2 IS CRACKED AND SETTLED 6 IN. |

BRIDGE INSPECTOR'S RECOMMENDATION FOR MAINTENANCE REPAIRS

Bridge: 500082 County JOHNSTON Date: 04/09/2010

These Repairs Should Be Made Within Twelve Months From Date Of This Inspection

| MMS Code | Description of Function | Unit | Quantity | Remarks | Est. Cost |
|-------------|--|------|----------|---|--------------|
| 3318 | Maint to Concrete Handrail | LF | 10 | SPALLING AT RAIL POST BASE # 5 WITH REBAR EXPOSED IN SPAN 3 AT BENT 3 LEFT SIDE WITH 1/4 IN. WIDE CRACK IN RAIL AT EACH SIDE OF POST. RAIL IS BOWED OUT 1/2 IN. AT THIS LOCATION. | |
| 3322 | Maint to Steel Handrail | LF | 120 | GUARDRAIL DAMAGE AT LEFT AND RIGHT SIDE. | |
| 3334 | Bridge Bearings | EA | 1 | BRIDGE NOT POSTED BROKEN ANCHOR BOLT AT THE LEFT SIDE OF BEAM 2 SPAN 2 AT BENT 1. | |
| 3334 | Bridge Bearings | EA | 1 | BROKEN ANCHOR BOLT AT THE LEFT SIDE OF BEAM 3 SPAN 2 BENT 1. | |
| 3334 | Bridge Bearings | EA | 1 | BROKEN ANCHOR BOLT AT THE RIGHT SIDE OF BEAM 2 SPAN 2 BENT 1. | |
| 3342 | Clean and Paint Structural Steel | SF | 1800 | PEELING PAINT WITH SURFACE RUST THROUGH OUT, BEARINGS RUSTY WITH SECTION LOSS IN FACES. | |
| 3348 | Maintain Concrete Substructure Components | LF | 4 | 8 IN. X 22 IN. X 48 IN. SPALL WITH EXPOSED REBAR EXTENDING 4 IN. UNDER BEARING AT BEAM 3 BENT 1 SPAN 2 SIDE. MASONRY PLATE IS TILTED AND CRUSHED INTO CAP 1/2 IN. | |
| 3348 | Maintain Concrete Substructure Components | LF | 5 | HONEYCOMBED AREAS IN COLUMNS 1 AND 2 BENT 1 . | |
| 3376 | Clean/Wash Bridge Decks | SF | 400 | DEBRIS CLOGGING DRAIN HOLES. | |



BRIDGE INSPECTOR'S RECOMMENDATION FOR PRIORITY MAINTENANCE REPAIRS

Bridge: 500082 County JOHNSTON

THE FOLLOWING MAINTENANCE ITEMS HAVE BEEN SUBMITTED IN CONJUNCTION WITH A PRIORITY MAINTENANCE REQUEST

| MMS Code | Code MMS Description | | | Quantity | | | |
|--|---|------|------------------------|-------------------|---|----|--|
| 3334 | Bridge Be | ırin | gs | | 1 | EA | |
| Location: | Location: | | | | | | |
| Beams and Girders Bent/Span No. 2 BEAM 2 ANCHOR BOLT | | | | | | | |
| Priority Leve | ı | | Status | | | | |
| Priority Maintenance | | | SIA Updates in Process | | | | |
| Submitted Da | ate: Subn | itte | d By: | Assisted By: | | | |
| 04/13/2010 | WIL | JS | C MAY V | VAYNE T WILKINSON | | | |
| Details | | | | | | | |
| BROKEN AN | BROKEN ANCHOR BOLT AT THE RIGHT SIDE OF BEAM 2 SPAN 2 BENT 1. | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

| MMS Code | MMS | MMS Description | | | | |
|---|-----------------------------------|-----------------|-----------------|--------------------|--|--|
| 3334 | Bridge | e Bearing | 1 | EA | | |
| Location: | | | | | | |
| Beams and C | Girders | | Bent/Span No. 2 | BEAM 2 ANCHOR BOLT | | |
| Priority Level | I | | Status | | | |
| Priority Maint | aintenance SIA Updates in Process | | | | | |
| Submitted Da | ate: S | Submitted | d By: | Assisted By: | | |
| 04/13/2010 | , | WILLIS | C MAY | WAYNE T WILKINSON | | |
| Details | | | | | | |
| BRIDGE NOT POSTED BROKEN ANCHOR BOLT AT THE LEFT SIDE OF BEAM 2 SPAN 2 AT BENT 1. | | | | | | |

BRIDGE INSPECTOR'S RECOMMENDATION FOR PRIORITY MAINTENANCE REPAIRS

Bridge: 500082 County JOHNSTON

THE FOLLOWING MAINTENANCE ITEMS HAVE BEEN SUBMITTED IN CONJUNCTION WITH A PRIORITY MAINTENANCE REQUEST

| MMS Code | MMS D | escrip | tion | | Quantity | | |
|----------------------|--|---------|--|--|------------|------|--|
| 3348 | Maintain | Conc | rete Substructure Components | | 4 | LF | |
| Location: | | | | | | | |
| Pier Cap | Bent/Span No. 1 BENT 1 CAP SPAN 2 SIDE | | | | | | |
| Priority Leve | I | | Status | | | | |
| Priority Maintenance | | | SIA Updates in Process | | | | |
| Submitted Da | ate: Sub | bmitted | d By: | Assisted By: | | | |
| 04/13/2010 | WI | ILLIS (| C MAY | WAYNE T WILKINSON | | | |
| Details | | | | | | | |
| | | | L WITH EXPOSED REBAR EXTE PLATE IS TILTED AND CRUSHED | NDING 4 IN. UNDER BEARING AT I INTO CAP 1/2 IN. | 3EAM 3 BEN | NT 1 | |

| MMS Code | MN | MMS Description Quantity | | | | | |
|--|--------|--------------------------|------------------------|--------------------|--|--|--|
| 3334 | Brid | dge Bearings 1 E | | | | | |
| Location: | | | | | | | |
| Beams and | Girder | ·s | Bent/Span No. 2 | BEAM 3 ANCHOR BOLT | | | |
| Priority Leve | el | | Status | | | | |
| Priority Maintenance | | ce | SIA Updates in Process | | | | |
| Submitted D | ate: | Submitte | d By: | Assisted By: | | | |
| 04/13/2010 | | WILLIS | C MAY | WAYNE T WILKINSON | | | |
| Details | | | | | | | |
| BROKEN ANCHOR BOLT AT THE LEFT SIDE OF BEAM 3 SPAN 2 BENT 1. | | | | | | | |
| | | | | | | | |
| | | | | | | | |



BENT STRUTS SCALED WITH COARSE AGGREGATE EXPOSED



BENT COLUMNS SCALED WITH COARSE AGGREGATE EXPOSED UP TO HIGH WATERMARK



HAIRLINE VERTICAL AND DIAGONAL CRACKS WITH EFFLORESCENCE IN SPAN 3 END DIAPHRAGM AT BENT 2



SPALLING WITH EXPOSED REBAR IN GUARDRAIL END POST BASE AT THE LEFT SIDE OF BENT 3 SPAN 3 SIDE



HAIRLINE LONGITUDINAL AND TRANSVERSE CRACKS IN BOTTOM OF DECK OF SPAN 4



HAIRLINE MAP CRACKING IN FACE OF CAP AT END BENT 2 UNDER BEAM 1



PEELING PAINT & SURFACE RUST IN THE BOTTOM OF COVER PLATES FOR BEAMS 2 & 3 IN SPAN 4



PEELING PAINT & SURFACE RUST IN THE RIGHT SIDE BOTTOM FLANGE OF BEAM 4 IN SPAN 4 OUT 10 FT. FROM END BENT 2



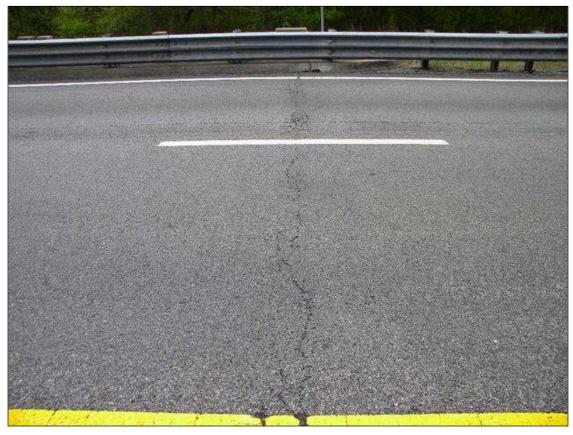
TRANSVERSE CRACK IN WEARING SURFACE OVER END BENT 2



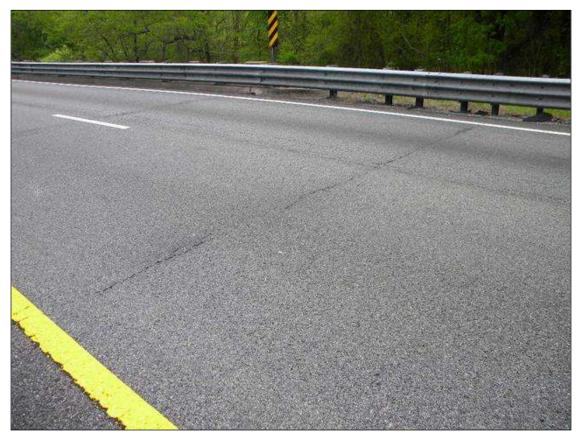
LEFT SIDE GUARDRAIL IN SPAN 2 IS CRACKED AND SPALLING FROM IMPACT DAMAGE



IMPACT DAMAGE ALONG THE LEFT SIDE STEEL GUARDRAIL OF SPAN 2



TRANSVERSE CRACK IN WEARING SURFACE OVER END BENT 1



TRANSVERSE CRACK IN APPROACH 1



TWO "HONEYCOMBED" AREAS WITH EXPOSED REBAR IN COLUMN 2 AT BENT 1 SPAN 2 SIDE



HONEYCOMBED AREA IN THE LOWER FILLET OF COLUMN 1 AT BENT 1



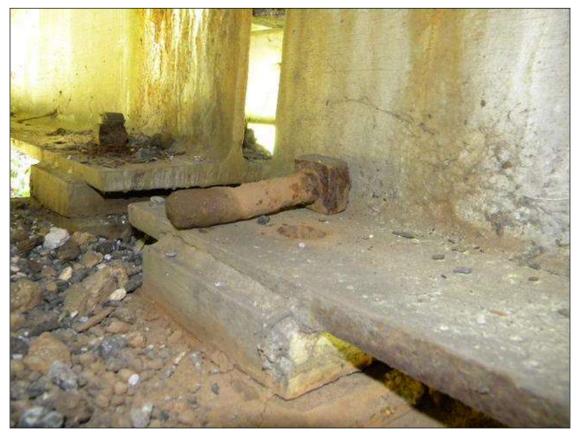
SPALL IN BENT 1 CAP SPAN 2 SIDE AT BEAM 3, PHOTO 1 OF 2 (PRIORITY MAINTENACNE ISSUED)



BROKEN ANCHOR BOLT IN THE LEFT SIDE OF BEAM 3 BEARING ASSEMBLY AT BENT 1 SPAN 2 (PRIORITY MAINTENACNE ISSUED)



LAREG SPALL WITH EXPOSED MASONRY PLATE AT BEAM 3 BENT 1 SPAN 2 SIDE, PHOTO 2 OF 2 (PRIORITY MAINTENACNE ISSUED)



BROKEN ANCHOR BOLT IN THE RIGHT SIDE OF BEAM 2 BEARING ASSEMBLY AT BENT 1 SPAN 2 (PRIORITY MAINTENACNE ISSUED)



BROKEN ANCHOR BOLT IN THE LEFT SIDE OF BEAM 2 BEARING ASSEMBLY AT BENT 1 SPAN 2 (PRIORITY MAINTENACNE ISSUED)

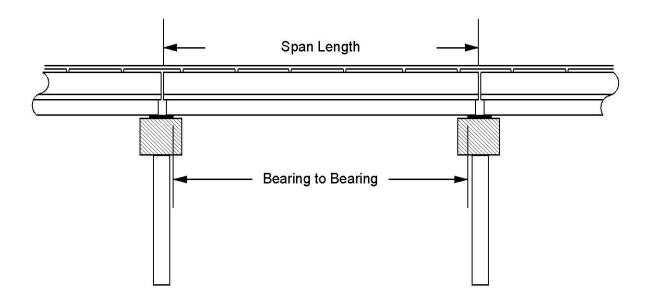
BRIDGE MANAGEMENT UNIT

DATA ON EXISTING STRUCTURE Run Date: 06/08/2010

| COUNTY: JOHNSTON | DIV : | | ST: 3 | | | MBER : 5000 | LEI 82 | NGTH : | 202 FEET |
|------------------------|--------------|-------------|--|-----------|------------|----------------|------------|--------|--------------|
| ROUTE CARRIED : | 5 NBL | | FEATURE INT | ERSECT | | .CK CRE | ΞK | | |
| LOCATED : 0.8MI N J | ICT US301/70 | | BRIDGE NAM | E : | | | CITY: | | |
| FUNC. CLASS: | SYST.ON: | SYST.UND | ER: | ADT | & YR : | | RAIL | TYPE : | |
| 01 | FA | | NFA | | 18500 | 2008 | LT | 333 | RT 333 |
| BUILT : | BY: | PROJ: | | FE | D.AID PR | OJ: | DESIGN L | OAD : | |
| 1958 | SHC | | 8.12339 | | | | | | HS 20+MOD |
| REHAB: B | Y: PRO | OJ: | ALIGNMEN | NT: | SKEV | V : | LANES: | | |
| | | | | TAN. | | 90 | ON 2 | 2 U | NDER |
| NAVIGATION : | | | HT. CRN | I. TO BEI | D : | | WATER DE | EPTH : | |
| VC 0.0 | FT HC | 0.0 F | T | | 27 | FT | | 6 | FT |
| SUPERSTRUCTURE : | RC FLOOR | /I-BEAMS | | | | | | | |
| SUBSTRUCTURE : SPANS : | | CAP H-PILE | ES;INT.BTS.F | RCP&BE | AM | | | | |
| BEAMS OR GIRDERS | | /33X130 I-B | EAMS @ 8'0 | CENTE | RS | | | | |
| FLOOR: | ENG | CROACHMEN | NT : | | DECK (| OUT TO O | UT) : | | |
| 7 RC/4.8 AWS | | | | | ` | | 31.5 FT | | |
| CLEAR ROADWAY: | BET\ | WEEN RAILS | ······································ | | SIDEV | /ALK OR C | CURB : | | |
| 28.3 | | | 28.3 FT | | | LT | 0.0 F1 | ГВ | T 0.0 F |
| VERT.CL.OVER: | VERT | .CL.UNDER : | : | HOR. | .CL.UNDI | ER: | | | |
| 99 FT 99 IN | | 00 FT 00 IN | 1 | | | 0.0 F | Т | | |
| INV.RTG. : | OPE.RTG. : | CONTR.I | MEMBER : | F | POSTED | | | | |
| HS-21 | HS-34 | | BEAM EXT. | \$ | SV | TTST | D | ATE | |
| SYSTEM: | | | | | | GREEN | LINE ROUTE | ≣: | |
| Primary Interstate | | | | | | | | Υ | |
| 2ND OPENING : | 3RD | OPENING : | | 4TH OF | PENING : | | 5TH O | PENIN | G: |
| REMARKS: | | | | | | | | | |

Structure Data Worksheet

County: JOHNSTON Structure No: 500082 Date: 04/09/2010 Inspected By: WCM



| Span No | Span Length | Bearing to Bearing | Comments |
|---------|----------------|-----------------------|----------|
| 1 | 50.25 | SEE PLANS | |
| 2 | 50.0 | | |
| 3 | 50.0 | | |
| 4 | 51.5 | | |

Stream Bed Soundings

(See next sheet for profile sketch)

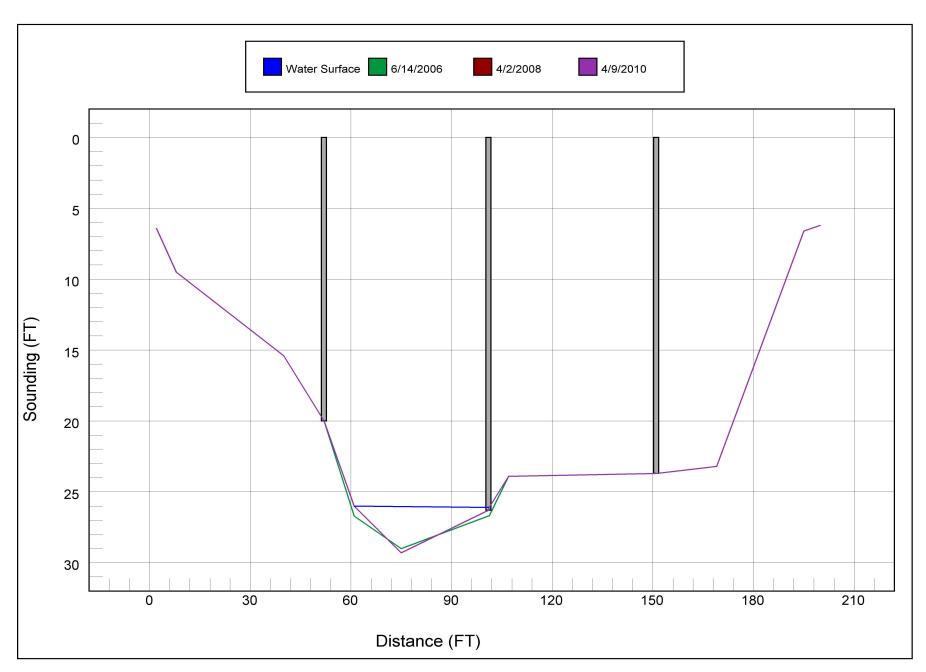
| Bridge No: 500082 | County: JOHNSTON | Date: 04/09/2010 | Ву: | WCM |
|---|--------------------|-----------------------------|-----|-----|
| Record sounding from top of rail. Other location if needed: | | | | |
| Distance from Highwater Ma | rk to top of rail: | Location of Highwater Mark: | | |

| DOWNSTREAM | | | UPSTREAM | | | |
|----------------------------|---------------|---------------------------------|----------------------------|------------------|---------------------|--|
| Distance (Station) (ft) | Sounding (ft) | Description | Distance (Station) (ft) | Sounding (ft) | Description | |
| 2 | 6.4 | ABUT.1FILL FACE | 2 | 7.0 | FILL FACE E.BT.1 | |
| 8 | 9.5 | | | | | |
| 40 | 15.4 | | | | | |
| 52 | 20 | BENT 1 | 52 | 26.6 | BENT 1 | |
| 61 | 26 | Water Surface/Water Edge (WSWE) | | | | |
| 75 | 29.3 | | | | | |
| 101 | 26.3 | BENT 2 | 101 | 27.6 | BENT 2 | |
| 101.2 | 26.1 | Water Surface/Water Edge (WSWE) | | | | |
| 107 | 23.9 | | | | | |
| 151 | 23.7 | BENT 3 | 151 | 23.1 | BENT 3 | |
| 169 | 23.2 | TOE OF SLOPE | | | | |
| 195 | 6.6 | TOP OF SLOPE | 195 | 6.9 | TOP OF SLOPE E.BT.2 | |
| 200 | 6.2 | E.BT.2FILL FACE | | | | |

Bridge: 500082 County JOHNSTON Date: 04/09/2010

STREAMBED PROFILE (Downstream)

Top of Rail = 0 FT (Sounding)



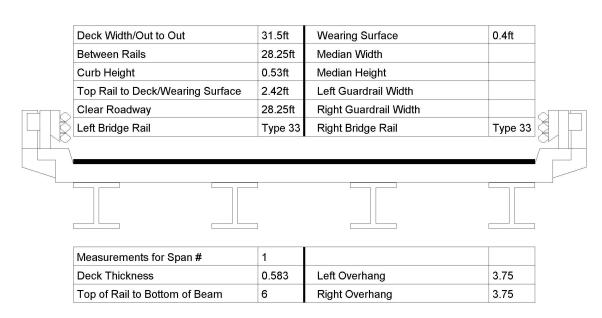
Bridge Inspection Field Sketch

| Roadway | 24ft Wide | 2 Paved Lanes | Looking North |
|-----------------|-----------|---------------|---------------|
| Left Shoulder | 4ft Wide | 4ft Paved | |
| Right Shoulder | 10ft Wide | 10ft Paved | |
| Left Guardrail | | | |
| Right Guardrail | | | |

CHECKED: 4/9/10 WCM

| Title | | Description | | | | |
|-------------------|---------------|-------------|------------------|------------------------|--|--|
| APPROACH ROADWAY | | LOOKII | NG NORTH | | | |
| Bridge No: 500082 | Drawn By: ERB | | Date: 06/14/2006 | File Name: S0214000316 | | |

Bridge Inspection Field Sketch



| Beam No | Beam Type | Spacing | Comments |
|---------|--------------|---------|----------|
| 1 | Steel I Beam | 8ft | |
| 2 | Steel I Beam | 8ft | |
| 3 | Steel I Beam | 8ft | |
| 4 | Steel I Beam | | |

CHECKED: 4/9/10 WCM

| Title | | Descri | otion | |
|-------------------|---------------|--------|------------------|------------------------|
| TYPICAL SECTION | | LOOKII | NG NORTH | |
| Bridge No: 500082 | Drawn By: ERB | | Date: 06/14/2006 | File Name: S0214000317 |

| | Bridge Inspectio | on Field Sketch | | | |
|-------------------|------------------|----------------------|------------------------|--|--|
| | | | | | |
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| | | | | | |
| Title PLAN VIEW | | Description WATERWAY | | | |
| Bridge No: 500082 | Drawn By: BZC | Date: 7/18/2007 | File Name: S0158000431 | | |



BENT 1 SPAN 2 SIDE



SUPERSTRUCTURE OVERVIEW, ALL SPANS SIMILAR



BENT 2 SPAN 3 SIDE



BENT 3 SPAN 3 SIDE



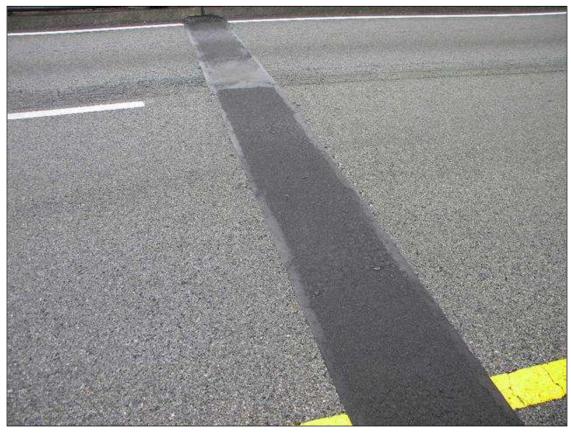
END BENT 2 OVERVIEW



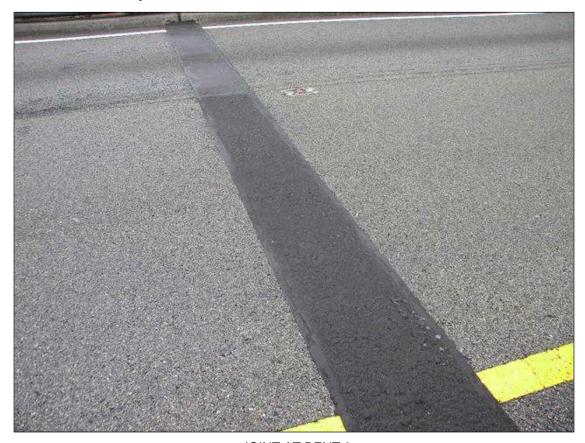
TYPICAL BEARING ASSEMBLY



APPROACH 2



JOINT AT BENT 3



JOINT AT BENT 2



JOINT AT BENT 1



SPAN 1 OVERVIEW, OTHER SPANS SIMILAR



LOOKING NORTH



WEST PROFILE



END BENT 1 OVERVIEW



LOOKING WEST UPSTREAM UNDER THE SOUTHBOUND STRUCTURE



LOOKING EAST DOWNSTREAM



EAST PROFILE



LOOKING SOUTH