



NC DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
BRIDGE MANAGEMENT UNIT

ATTENTION

SHORED STRUCTURE: CRUTCHBENT  
STRUCTURE DATA CHANGES

# BRIDGE INSPECTION REPORT

INSPECTION TYPE: Routine Inspection

COUNTY ROBESON BRIDGE NUMBER 770435 INSPECTION CYCLE 2 YRS  
ROUTE SR2101 ACROSS JACKSON SWAMP M.P. 0

LOCATION 0.9 MI.N.JCT.SR2103

SUPERSTRUCTURE PRESTRESSED CONCRETE CHANNELS STD BMD-13

SUBSTRUCTURE E.BTS&INT.BTS:PPC CAPS/TIMBER PILES;TIM.CRUTCH BNT.

SPANS 3@30'6

LONGITUDE 78° 52' 38.65"

LATITUDE 34° 37' 49.04"

INSPECTION DATE 05/27/2014

PRESENT CONDITION FAIR

PRESENT POSTING Y SV 21; TTST 24

PROPOSED POSTING

OTHER SIGNS PRESENT 4 DELINEATORS



LOOKING NORTH ( MERCER MILL ROAD )

|                   |            |
|-------------------|------------|
| Fracture Critical | <u>No</u>  |
| Temporary Shoring | <u>No</u>  |
| Scour Critical    | <u>No</u>  |
| Scour POA         | <u>Yes</u> |

| SIGN NOTICE<br>ISSUED FOR |                 | NUMBERED<br>REQUIRED |
|---------------------------|-----------------|----------------------|
| <u>No</u>                 | WEIGHT LIMIT    |                      |
| <u>No</u>                 | DELINEATORS     |                      |
| <u>No</u>                 | NARROW BRIDGE   |                      |
| <u>No</u>                 | ONE LANE BRIDGE |                      |
| <u>No</u>                 | LOW CLEARANCE   |                      |

## NATIONAL BRIDGE INVENTORY----- STRUCTURE INVENTORY AND APPRAISAL

Run Date: 07/07/2014

| IDENTIFICATION                                           |                       |                 |          |                                                                      |                        |            |  |
|----------------------------------------------------------|-----------------------|-----------------|----------|----------------------------------------------------------------------|------------------------|------------|--|
| (1) STATE NAME -NORTH CAROLINA                           | BRIDGE                | 770435          |          | SUFFICIENCY RATING =                                                 |                        | 38.2       |  |
| (8) STRUCTURE NUMBER(FEDERAL)                            |                       | 000000001550435 |          | STATUS =                                                             | Structurally Deficient |            |  |
| (5) INVENTORY ROUTE (ON/UNDER) - ON                      |                       | 31021010        |          |                                                                      |                        |            |  |
| (2) STATE HIGHWAY DEPARTMENT DISTRICT                    |                       | 1               |          |                                                                      |                        |            |  |
| (3) COUNTY CODE                                          | 155                   | (4) PLACE CODE  | 0        |                                                                      |                        |            |  |
| (6) FEATURE INTERSECTED - JACKSON SWAMP                  |                       |                 |          |                                                                      |                        |            |  |
| (7) FACILITY CARRIED SR2101                              |                       |                 |          |                                                                      |                        |            |  |
| (9) LOCATION 0.9 MI.N.JCT.SR2103                         |                       |                 |          |                                                                      |                        |            |  |
| (11)MILEPOINT                                            |                       | 0               |          |                                                                      |                        |            |  |
| (16)LAT 34° 37' 49.04"                                   | (17)LONG              | 78° 52' 38.65"  |          |                                                                      |                        |            |  |
| (98)BORDER BRIDGE STATE CODE                             | PCT SHARE             |                 |          |                                                                      |                        |            |  |
| (99)BORDER BRIDGE STRUCTURE NO                           |                       |                 |          |                                                                      |                        |            |  |
| STRUCTURE TYPE AND MATERIAL                              |                       |                 |          |                                                                      |                        |            |  |
| (43) STRUCTURE TYPE MAIN: Prestressed Concrete           |                       |                 |          |                                                                      |                        |            |  |
| TYPE - Channel Beam                                      |                       | CODE            | 522      |                                                                      |                        |            |  |
| (44) STRUCTURE TYPE APPR :                               |                       |                 |          |                                                                      |                        |            |  |
| TYPE -                                                   |                       | CODE            | 000      |                                                                      |                        |            |  |
| (45) NUMBER OF SPANS IN MAIN UNIT                        |                       |                 | 3        |                                                                      |                        |            |  |
| (46) NUMBER OF APPROACH SPANS                            |                       |                 |          |                                                                      |                        |            |  |
| (107)DECK STRUCTURE TYPE - 1                             |                       | CODE            |          |                                                                      |                        |            |  |
| (108)WEARING SURFACE / PROTECTIVE SYSTEM :               |                       |                 |          |                                                                      |                        |            |  |
| (A) TYPE OF WEARING SURFACE -                            |                       | CODE            |          |                                                                      |                        |            |  |
| (B) TYPE OF MEMBRANE -                                   |                       | CODE            |          |                                                                      |                        |            |  |
| (C) TYPE OF DECK PROTECTION -                            |                       | CODE            |          |                                                                      |                        |            |  |
| AGE AND SERVICE                                          |                       |                 |          |                                                                      |                        |            |  |
| (27) YEAR BUILT                                          |                       |                 | 1971     |                                                                      |                        |            |  |
| (106)YEAR RECONSTRUCTED                                  |                       |                 |          |                                                                      |                        |            |  |
| (42) TYPE OF SERVICE : ON - Highway                      |                       |                 |          |                                                                      |                        |            |  |
| UNDER - Waterway                                         |                       | CODE            | 15       |                                                                      |                        |            |  |
| (28) LANES: ON STRUCTURE 2 UNDER STRUCTURE               |                       |                 | 0        |                                                                      |                        |            |  |
| (29) AVERAGE DAILY TRAFFIC                               |                       |                 | 430      |                                                                      |                        |            |  |
| (30) YEAR OF ADT 2012                                    | (109) TRUCK ADT PCT   |                 | 6%       |                                                                      |                        |            |  |
| (19) BYPASS OR DETOUR LENGTH                             |                       |                 | 7 MI     |                                                                      |                        |            |  |
| GEOMETRIC DATA                                           |                       |                 |          |                                                                      |                        |            |  |
| (48) LENGTH OF MAXIMUM SPAN                              |                       |                 | 30 FT    |                                                                      |                        |            |  |
| (49) STRUCTURE LENGTH                                    |                       |                 | 91 FT    |                                                                      |                        |            |  |
| (50)CURB OR SIDEWALK: LEFT .5 FT RIGHT .5 FT             |                       |                 | .5 FT    |                                                                      |                        |            |  |
| (51) BRIDGE ROADWAY WIDTH CURB TO CURB                   |                       |                 | 29 FT    |                                                                      |                        |            |  |
| (52) DECK WIDTH OUT TO OUT                               |                       |                 | 30.5 FT  |                                                                      |                        |            |  |
| (32) APPROACH ROADWAY WIDTH (W/SHOULDERS)                |                       |                 | 20 FT    |                                                                      |                        |            |  |
| (33) BRIDGE MEDIAN - No Median                           |                       | CODE            | 0        |                                                                      |                        |            |  |
| (34) SKEW 0°                                             | (35) STRUCTURE FLARED |                 | 0        |                                                                      |                        |            |  |
| (10) INVENTORY ROUTE MIN VERT CLEAR                      |                       |                 | 999.9 FT |                                                                      |                        |            |  |
| (47) INVENTORY ROUTE TOTAL HORIZ CLEAR                   |                       |                 | 29 FT    |                                                                      |                        |            |  |
| (53) MIN VERT CLEAR OVER BRIDGE RDWY                     |                       |                 | 999.9 FT |                                                                      |                        |            |  |
| (54) MIN VERT UNDERCLEAR REF Not a Highway or Railroad   |                       |                 | 0 FT     |                                                                      |                        |            |  |
| (55) MIN LAT UNDERCLEAR RT REF Not a Highway or Railroad |                       |                 | 000 FT   |                                                                      |                        |            |  |
| (56) MIN LAT UNDERCLEAR LT REF -                         |                       |                 | 000 FT   |                                                                      |                        |            |  |
| NAVIGATION DATA                                          |                       |                 |          |                                                                      |                        |            |  |
| (38) NAVIGATION CONTROL - No Navigational Control        |                       | CODE            | 0        |                                                                      |                        |            |  |
| (111)PIER PROTECTION -                                   |                       | CODE            |          |                                                                      |                        |            |  |
| (39) NAVIGATION VERTICAL CLEARANCE                       |                       |                 | 0        |                                                                      |                        |            |  |
| (116)VERT - LIFT BRIDGE NAV MIN VERT CLEAR               |                       |                 | FT       |                                                                      |                        |            |  |
| (40) NAVIGATION HORIZONTAL CLEARANCE                     |                       |                 | 0 FT     |                                                                      |                        |            |  |
|                                                          |                       |                 |          | CLASSIFICATION                                                       |                        |            |  |
|                                                          |                       |                 |          | (112)NBIS BRIDGE SYSTEM -                                            |                        | YES        |  |
|                                                          |                       |                 |          | (104)HIGHWAY SYSTEM Is not on NHS                                    |                        | 0          |  |
|                                                          |                       |                 |          | (26) FUNCTIONAL CLASS - Local                                        |                        | 09         |  |
|                                                          |                       |                 |          | (100)STRAHNET HIGHWAY - Not a STRAHNET Route                         |                        | 0          |  |
|                                                          |                       |                 |          | (101)PARALLEL STRUCTURE - No Parallel Structure                      |                        | N          |  |
|                                                          |                       |                 |          | (102)DIRECTION OF TRAFFIC - 2-way Traffic                            |                        | 2          |  |
|                                                          |                       |                 |          | (103)TEMPORARY STRUCTURE - Temporary Structure/Conditions            |                        | T          |  |
|                                                          |                       |                 |          | (110)DESIGNATED NATIONAL NETWORK - Not on the National Network       |                        | 0          |  |
|                                                          |                       |                 |          | (20) TOLL On Free Road                                               |                        | 3          |  |
|                                                          |                       |                 |          | (31) MAINTAIN - State Highway Agency                                 |                        | 01         |  |
|                                                          |                       |                 |          | (22) OWNER - State Highway Agency                                    |                        | 01         |  |
|                                                          |                       |                 |          | (37) HISTORICAL SIGNIFICANCE - Not Eligible                          |                        | 5          |  |
|                                                          |                       |                 |          | CONDITION                                                            |                        |            |  |
|                                                          |                       |                 |          | (58) DECK                                                            |                        | 5          |  |
|                                                          |                       |                 |          | (59) SUPERSTRUCTURE                                                  |                        | 5          |  |
|                                                          |                       |                 |          | (60) SUBSTRUCTURE                                                    |                        | 4          |  |
|                                                          |                       |                 |          | (61) CHANNEL & CHANNEL PROTECTION                                    |                        | 5          |  |
|                                                          |                       |                 |          | (62) CULVERTS                                                        |                        | N          |  |
|                                                          |                       |                 |          | LOAD RATING AND POSTING                                              |                        |            |  |
|                                                          |                       |                 |          | (31) DESIGN LOAD H 10                                                |                        | 1          |  |
|                                                          |                       |                 |          | (63) OPERATING RATING METHOD - Allowable Stress                      |                        | 2          |  |
|                                                          |                       |                 |          | (64) OPERATING RATING - HS-1                                         |                        | 1          |  |
|                                                          |                       |                 |          | (65) INVENTORY RATING METHOD - Allowable Stress                      |                        | 2          |  |
|                                                          |                       |                 |          | (66) INVENTORY RATING - HS-1                                         |                        | 1          |  |
|                                                          |                       |                 |          | (70) BRIDGE POSTING - Posting Required                               |                        | 2          |  |
|                                                          |                       |                 |          | (41) STRUCTURE OPEN, POSTED ,OR CLOSED DESCRIPTION - Posted for Load |                        | P          |  |
|                                                          |                       |                 |          | APPRAISAL                                                            |                        |            |  |
|                                                          |                       |                 |          | (67) STRUCTURAL EVALUATION                                           |                        | 3          |  |
|                                                          |                       |                 |          | (68) DECK GEOMETRY                                                   |                        | 5          |  |
|                                                          |                       |                 |          | (69) UNDERCLEARANCES,VERTI & HORIZ                                   |                        | N          |  |
|                                                          |                       |                 |          | (71) WATERWAY ADEQUACY                                               |                        | 7          |  |
|                                                          |                       |                 |          | (72) APPROACH ROADWAY ALIGNMENT                                      |                        | 8          |  |
|                                                          |                       |                 |          | (36) TRAFFIC SAFETY FEATURES                                         |                        | 0000       |  |
|                                                          |                       |                 |          | (113)SCOUR CRITICAL BRIDGES                                          |                        | U          |  |
|                                                          |                       |                 |          | PROPOSED IMPROVEMENTS                                                |                        |            |  |
|                                                          |                       |                 |          | (75) TYPE OF WORK -                                                  |                        | CODE       |  |
|                                                          |                       |                 |          | (76) LENGTH OF STRUCTURE IMPROVEMENT                                 |                        |            |  |
|                                                          |                       |                 |          | (94) BRIDGE IMPROVEMENT COST                                         |                        |            |  |
|                                                          |                       |                 |          | (95) ROADWAY IMPROVEMENT COST                                        |                        |            |  |
|                                                          |                       |                 |          | (96) TOTAL PROJECT COST                                              |                        |            |  |
|                                                          |                       |                 |          | (97) YEAR OF IMPROVEMENT COST ESTIMATE                               |                        |            |  |
|                                                          |                       |                 |          | (114)FUTURE ADT 860                                                  | (115) YEAR FUTURE ADT  | 2025       |  |
|                                                          |                       |                 |          | INSPECTIONS                                                          |                        |            |  |
|                                                          |                       |                 |          | (90) INSPECTION DATE                                                 |                        | 05/27/2014 |  |
|                                                          |                       |                 |          | (92) CRITICAL FEATURE INSPECTION :                                   | (93) CFI DATE          |            |  |
|                                                          |                       |                 |          | A) FRACTURE CRIT DETAIL - NO                                         | A)                     |            |  |
|                                                          |                       |                 |          | B) UNDERWATER INSP - YES 48Mo                                        | B)                     | 11/20/2012 |  |
|                                                          |                       |                 |          | C) OTHER SPECIAL INSP NO                                             | C)                     |            |  |
|                                                          |                       |                 |          | SCOUR                                                                |                        |            |  |

## BRIDGE MANAGEMENT UNIT

## DATA ON EXISTING STRUCTURE

Run Date: 07/07/2014

|          |            |            |                    |          |      |
|----------|------------|------------|--------------------|----------|------|
| COUNTY : | DIVISION : | DISTRICT : | STRUCTURE NUMBER : | LENGTH : |      |
| ROBESON  | 6          | 1          | 770435             | 91       | FEET |

|                 |                       |
|-----------------|-----------------------|
| ROUTE CARRIED : | FEATURE INTERSECTED : |
| SR2101          | JACKSON SWAMP         |

|                     |               |        |
|---------------------|---------------|--------|
| LOCATED :           | BRIDGE NAME : | CITY : |
| 0.9 MI.N.JCT.SR2103 |               |        |

|               |           |              |            |               |
|---------------|-----------|--------------|------------|---------------|
| FUNC. CLASS : | SYST.ON : | SYST.UNDER : | ADT & YR : | RAIL TYPE :   |
| 09            | NFA       | NFA          | 430 2012   | LT 233 RT 233 |

|         |      |        |                |               |
|---------|------|--------|----------------|---------------|
| BUILT : | BY : | PROJ : | FED.AID PROJ : | DESIGN LOAD : |
| 1971    | BMU  |        |                | H 10          |

|         |      |        |             |        |         |       |   |
|---------|------|--------|-------------|--------|---------|-------|---|
| REHAB : | BY : | PROJ : | ALIGNMENT : | SKEW : | LANES : |       |   |
|         |      |        | TAN         | 90     | ON 2    | UNDER | 0 |

|              |         |  |                   |  |               |  |    |
|--------------|---------|--|-------------------|--|---------------|--|----|
| NAVIGATION : |         |  | HT. CRN. TO BED : |  | WATER DEPTH : |  |    |
| VC 0 FT      | HC 0 FT |  | 14 FT             |  | 8             |  | FT |

|                  |                                          |
|------------------|------------------------------------------|
| SUPERSTRUCTURE : | PRESTRESSED CONCRETE CHANNELS STD BMD-13 |
|------------------|------------------------------------------|

|                |                                                     |
|----------------|-----------------------------------------------------|
| SUBSTRUCTURE : | E.BTS&INT.BTS:PPC CAPS/TIMBER PILES;TIM.CRUTCH BNT. |
|----------------|-----------------------------------------------------|

|         |        |
|---------|--------|
| SPANS : | 3@30'6 |
|---------|--------|

|                    |                                                  |
|--------------------|--------------------------------------------------|
| BEAMS OR GIRDERS : | 12 LNS 31" PRESTRESSED CONCRETE CHANNEL SECTIONS |
|--------------------|--------------------------------------------------|

|              |                |                     |
|--------------|----------------|---------------------|
| FLOOR :      | ENCROACHMENT : | DECK (OUT TO OUT) : |
| PPC CH/3 AWS |                | 30.5 FT             |

|                 |                 |                    |
|-----------------|-----------------|--------------------|
| CLEAR ROADWAY : | BETWEEN RAILS : | SIDEWALK OR CURB : |
| 29 FT           | 30 FT           | LT .5 FT RT .5 FT  |

|                |
|----------------|
| VERT.CL.OVER : |
| 999.9 FT       |

|            |            |                |          |      |            |
|------------|------------|----------------|----------|------|------------|
| INV.RTG. : | OPE.RTG. : | CONTR.MEMBER : | POSTED : | TTST | DATE       |
| HS-1       | HS-1       | Pile           | SV 23    | 26   | 07/02/2014 |

|                      |                    |
|----------------------|--------------------|
| SYSTEM :             | GREEN LINE ROUTE : |
| Secondary S.R. Route | N                  |

UNDER ROUTES AND CLEARANCES

REMARKS :

# BRIDGE INSPECTION RECORD AND SUMMARY

INSPECTION TYPE Routine Inspection  
 BRIDGE NO. 770435 COUNTY ROBESON ROUTE SR2101 OVER JACKSON SWAMP  
 STRUCTURE TYPE PRESTRESSED CONCRETE CHANNELS STD BMD-13  
 ROUTE ORIENTATION S - N SPANS 3@30'6

EVALUATION CODES: CRITICAL (C, 0 - 3); POOR (P, 4); FAIR (F, 5, 6); GOOD (G, 7 - 9)

| INSPECTION ITEM                                       |                                     |   |        | ITEM 61                                             |                                      |     |      |
|-------------------------------------------------------|-------------------------------------|---|--------|-----------------------------------------------------|--------------------------------------|-----|------|
| DECK ITEMS                                            |                                     |   | GRADES |                                                     |                                      |     |      |
| 1. WEARING SURFACE                                    |                                     |   | G      | 45. CHANNEL & CHANNEL PROT.                         | a. WATERWAY                          | G   |      |
|                                                       |                                     |   |        |                                                     | b. ALIGNMENT                         | G   |      |
|                                                       |                                     |   |        |                                                     | c. SCOUR                             | F   |      |
|                                                       |                                     |   |        |                                                     | d. SLOPE PROT., RIP-RAP, DIKES, ETC. |     |      |
| 2. DECK NO. OF EA TYPE SPN GRADE RATES SI & A ITEM 58 | a. CONCRETE                         | 3 | F      | 50. APPROACH ROADWAY CONDITION                      |                                      |     | F    |
|                                                       | b. TIMBER                           |   |        | 51. APPROACH SLABS                                  |                                      |     |      |
|                                                       | c. STEEL PLANK                      |   |        | 52. PAINT SYSTEM                                    |                                      |     | CODE |
|                                                       | d. OPEN GRID                        |   |        | 53. UTILITIES                                       |                                      |     |      |
| 3. RAILING                                            | a. CONCRETE                         |   |        | 54. RESPONSE TO LIVE LOAD                           |                                      |     | G    |
|                                                       | b. TIMBER                           |   |        | 55. ESTIMATED REMAINING LIFE                        |                                      |     | 12   |
|                                                       | c. ALUMINUM                         |   |        |                                                     |                                      |     |      |
|                                                       | d. STEEL                            |   | G      |                                                     |                                      |     |      |
| 4. CURBS, WHEELGUARDS, PARAPETS, MEDIANS              |                                     |   | F      |                                                     |                                      |     |      |
| 5. WALKWAYS (ON OR ATTACHED TO STRUCTURE)             |                                     |   |        | 60. REGULATORY SIGN NOTICE ISSUED                   |                                      |     | NO   |
| 6. DECK EXP JTS. OR DEVICES. NO. OF EACH              | a. STEEL PL OR FINGER               |   |        | 61. PROMPT-ACTION NOTICE ISSUED                     |                                      |     | NO   |
|                                                       | b. MISC PREFAB                      |   |        | 62. PRESENTLY POSTED                                |                                      |     | YES  |
|                                                       | c. COMPRESSION SEAL                 |   |        | 63. TOT. FIELD INSP TIME (INCLUDE WRITE UP)(MAN HR) |                                      |     | 10   |
|                                                       | d. STANDARD JOINTS                  | 2 | F      | 64. TOTAL SNOOPER INSP. TIME (HRS)                  |                                      |     |      |
|                                                       | e. OPEN JOINTS                      |   |        | 65. TOTAL TRAFFIC CONTROL TIME (MAN HRS)            |                                      |     |      |
| 7. DECK DEBRIS (INCLUDES EXCESS SAND/GRAVEL)          |                                     |   | G      |                                                     |                                      |     |      |
|                                                       |                                     |   |        | 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                     |                                     |   | F      | b. SUPERSTRUCTURE                                   | ITEM 59                              | 5   |      |
| 11. LONGITUDINAL JOIST OR STRINGERS                   |                                     |   |        | c. SUBSTRUCTURE                                     | ITEM 60                              | 5   |      |
| 12. INT. DIAP'S, X-FRAMES, BRACING & CONN'S           |                                     |   |        | d. CHANNEL & CHANNEL PROT.                          | ITEM 61                              | 5   |      |
| 13. END DIAP'S, CURTAIN WALLS, & CONN'S               |                                     |   | F      |                                                     |                                      |     |      |
| 14. FLOOR BEAMS AND CONNECTIONS                       |                                     |   |        | 71. SI&A FIELD APPRAISAL RATINGS                    |                                      |     |      |
| 15. BEARING ASSEMBLIES (INCLUDING MISALIGN)           |                                     |   | F      | a. WATERWAY ADAQUACY                                |                                      | 7   |      |
| 16. DRAINAGE SYSTEM (ON STRUCTURE)                    |                                     |   | G      | b. APPR. RDWY. ALIGNMENT                            |                                      | 8   |      |
| 17. MOVABLE SPAN MACHINERY                            |                                     |   |        |                                                     |                                      |     |      |
|                                                       |                                     |   |        | 72. FIELD SCOUR EVALUATION                          |                                      |     | O    |
| SUB STR. ITEMS. ITEM 60 (INCLUDE SCOUR)               |                                     |   |        |                                                     |                                      |     |      |
| 35. TIM SUB STR.                                      | a. ABUT. & INT. BENT CAPS & RISERS  |   |        | USE OF INSP. ACCESSIBILITY EQUIPMENT                |                                      |     |      |
|                                                       | b. PILES, POST, SILLS, & BRACING    |   | F      | SNOOPER (CODE S, 4, OR N)                           |                                      | HRS | NO   |
|                                                       | c. BULKHEADS, WING'S, & TIE BACKS   |   | G      | LADDER                                              |                                      |     | NO   |
| 36. CONC SUB STR.                                     | a. ABUT. & INT. BENT CAPS           |   | F      | BUCKET TRUCK                                        |                                      |     | NO   |
|                                                       | b. ABUT. & BENT COL'S BREASTWALLS   |   |        | BOAT                                                |                                      |     | YES  |
|                                                       | c. ABUT. & INT. BENT PILES          |   |        | OTHER                                               |                                      |     | YES  |
|                                                       | d. BACKWALLS, WING'S, RETAIN. WALLS |   |        |                                                     |                                      |     |      |
|                                                       | e. ABUT. & BENT FOOTINGS & SILLS    |   |        |                                                     |                                      |     |      |
| 37. STEEL SUB STR.                                    | a. ABUT. & INT. BENT CAPS & RISERS  |   | G      | SPECIAL INSPECTION REQUESTED FOR                    |                                      |     |      |
|                                                       | b. PILES, BRACING, AND BULKHEADS    |   | G      |                                                     |                                      |     |      |
| 38. FOUNDATION PILES TYPE MATERIAL                    |                                     |   |        | NOTE                                                |                                      |     |      |
| 39. SLOPE PROT., RIP-RAP (INCLUDE DRAINAGE)           |                                     |   |        |                                                     |                                      |     |      |
| 40. FENDER SYSTEMS                                    |                                     |   |        | 80. INSPECTED BY:                                   | RDH                                  |     |      |
| 41. DRIFT                                             |                                     |   | G      | 81. REVIEWED BY:                                    |                                      |     |      |

# **BRIDGE INSPECTION RECORD AND SUMMARY FOR SHORED STRUCTURES**

BRIDGE # 770435

COUNTY ROBESON

DATE 07/31/03

**THE FOLLOWING S. I. & A. ITEMS ARE TO BE CODED TO REFLECT THE  
FACT THAT THE STRUCTURE IS SHORED UP:**

|                                                   |                              | <u>CODE</u> | <u>BY</u>  |
|---------------------------------------------------|------------------------------|-------------|------------|
| SI & A ITEM 103 - TEMPORARY STRUCTURE DESIGNATION |                              | <u>1</u>    | <u>JRV</u> |
| SI & A ITEM 59 - SUPERSTRUCTURE                   |                              | <u>—</u>    |            |
| SI & A ITEM 60 - SUBSTRUCTURE                     |                              | <u>4</u>    | <u>JRV</u> |
| SI & A ITEM 64 - OPERATING RATING                 | HS <u>0.00</u> BY <u>CAL</u> | <u>01</u>   | <u>VPP</u> |
| SI & A ITEM 64 - INVENTORY RATING                 | HS <u>0.00</u> BY <u>CAL</u> | <u>01</u>   | <u>VPP</u> |

**COMMENTS:**

TWO PILE CRUTCH BENT @ PILE #6, BENT #2

| Bridge I&A Form 1(82)H<br>State of North Carolina<br>Dept. of Transportation<br>Division of Highways |       | <h1>FIELD INSPECTION REPORT</h1> <p><u>Bridge Inspection &amp; Analysis</u></p>                                                                                                                                                                                                                                                                                                                                     |  |
|------------------------------------------------------------------------------------------------------|-------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| Team Leader R.D. HEATH                                                                               |       |                                                                                                                                                                                                                                                                                                                                                                                                                     |  |
| Assisted By R.L. KISNER                                                                              |       |                                                                                                                                                                                                                                                                                                                                                                                                                     |  |
| Item No.                                                                                             | Grade |                                                                                                                                                                                                                                                                                                                                                                                                                     |  |
| 1                                                                                                    | G     | ( ASPHALT WEARING SURFACE ) THERE ARE SEALED LONGITUDINAL CRACKS REFLECTIVE OF THE CHANNEL BEAMS ON ALL THREE SPANS. (PHOTO)<br><br>THERE ARE SEALED TRANSVERSE CRACKS AT ALL OF THE JOINTS. (PHOTO)<br><br>THERE ARE 1/8" WIDE LONGITUDINAL CRACKS IN BOTH SHOULDERS IN ALL SPANS. (PHOTO)<br><br>THE BENT JOINTS IN BOTH SHOULDERS ARE CRACKED UP TO 3/4" WIDE AND FULL OF SAND AND VEGETATION. (PHOTO)           |  |
| 3d                                                                                                   | G     | ( STEEL RAILS ) THERE IS GRAFITTI ON THE LEFT RAIL IN ALL SPANS. (PHOTO)<br><br>THERE IS SURFACE RUST ON EXTERIOR RAIL POST 6 AT SPAN 2 RIGHT RAIL. (PHOTO)<br><br>THERE IS RUST ON RAIL POST 1 BOLT AT SPAN 3 EXTERIOR, RIGHT RAIL. (PHOTO)<br><br>THE RIGHT RAIL IS DAMAGED IN SPAN 3. (PHOTO)                                                                                                                    |  |
| 4                                                                                                    | F     | THERE IS RIGHT RAIL GRAFITTI IN SPAN 2. (PHOTO)<br>( CONC CURBS ) SPAN 1 RIGHT CURB IS SPALLED 24" LONG X UP TO 4" HIGH X 3" WIDE. (PHOTO)<br><br>THE LEFT CURB AT SPAN 3, BENT 2 IS SURFACE SPALLED WITH HAIRLINE MAP CRACKING. (PHOTO)<br><br>THERE ARE HAIRLINE TRANSVERSE AND VERTICAL CRACKS IN BOTH CURBS AT RANDOM. (PHOTO)<br><br>THE CONCRETE CURBS HAS AREAS OF SCALING, STAINING, AND EXPOSED AGGREGATE. |  |
| 6d                                                                                                   | F     | ( STANDARD JOINTS ) THERE ARE SIGNS OF LEAKAGE NOTED ON CAPS.                                                                                                                                                                                                                                                                                                                                                       |  |
| 10                                                                                                   | F     | ( PPC CHANNELS ) THERE IS SOME RUST NOTED AT THE BEARING PLATES.<br><br>THERE ARE SOME SPALLS WITH EXPOSED STEEL THAT WERE ALSO NOTED ON THE BOTTOMS OF BEAMS 4 AND 5 IN SPAN 3 ARE NOW REPAIRED.<br><br>CHANNEL 7 IN SPAN 1 AT MIDSPAN HAS A HAIRLINE TO 1/32" CRACK IN LEFT LEG. (PHOTO)<br><br>CHANNEL 3 RIGHT LEG AT MIDSPAN 3 IS SURFACE SPALLED 3" DIAMETER X UP TO 3/4" DEEP. (PHOTO)                        |  |
| 10A                                                                                                  | NO    | ( CURVED GIRDERS ) NO CURVED GIRDERS.                                                                                                                                                                                                                                                                                                                                                                               |  |

|                                                                                                      |       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |
|------------------------------------------------------------------------------------------------------|-------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| Bridge I&A Form 1(82)H<br>State of North Carolina<br>Dept. of Transportation<br>Division of Highways |       | <h1 style="text-align: center;">FIELD INSPECTION REPORT</h1> <p style="text-align: center;"><u>Bridge Inspection &amp; Analysis</u></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  |
| Team Leader R.D. HEATH                                                                               |       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |
| Assisted By R.L. KISNER                                                                              |       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |
| Item No.                                                                                             | Grade |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |
| 13                                                                                                   | F     | <p>( END DIAPHRAGMS ) THERE IS SPALLING AND EXPOSED REBAR NOTED AT SEVERAL LOCATIONS.</p> <p>END BENT 1 END DIAPHRAGM IS SPALLED WITH EXPOSED REBAR AT BAYS 6 AND 7. (PHOTO) THIS IS SIMILAR AT BAYS 8, 9, 10, AND 11.</p> <p>END DIAPHRAGMS ARE SPALLED WITH EXPOSED REBAR AT BENT 1 SPAN 2 AT BAYS 1, 2, AND 3. (PHOTO)</p> <p>END BENT 2 HAS SPALLED END DIAPHRAGMS WITH EXPOSED REBAR AT BAYS 2 AND 3. (PHOTO)</p>                                                                                                                                                                                                                                                                                                     |  |
| 15                                                                                                   | F     | <p>( BEARING ASSEMBLIES ) THERE IS SURFACE RUST NOTED AT MOST OF THE BEARING AREAS.</p> <p>CHANNEL 2 AND 3 BEARING PLATES ARE RUSTED AT BENT 2 IN SPAN 3. ALL BEARING PLATES ARE SIMILAR. (PHOTO)</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |  |
| 35b                                                                                                  | F     | <p>( TIMBER PILES AND CROSSBRACING ) THE PILES EXHIBITS AREAS OF CHECKING, SPLITTING, FACIAL SOFTNESS AT THE WATERLINE.</p> <p>THE CROSSBRACING HAS AREAS OF CHECKING, AND SPLITTING AND SURFACE DECAY AT THE ATTACHMENTS.</p> <p>PILE 5 AT END BENT 1 SPOT DECAYED UP TO 1/2" DEEP. (PHOTO)</p> <p>PILE 4 AT END BENT 1 SPOT DECAYED UP TO 1/2" DEEP. (PHOTO)</p> <p>PILE 6 AT BENT 1 IS DECAYED 16" HIGH X 4" WIDE X 1 1/4" DEEP ON EAST FACE. (PHOTO)</p> <p>THERE IS A STEEL CROSSCAP CRUTCHBENT LEFT OF PILE 6 AT BENT 2, SHORED STRUCTURE. (PHOTO)</p> <p>PILE 4 AT BENT 2 EAST FACE IS DECAYED 16" HIGH X 4" WIDE X UP TO 1" DEEP. (PHOTO)</p> <p>PILE 6 AT BENT 2 TOP IS CUT OUT FOR STEEL CRUTCHBENT. (PHOTO)</p> |  |
| 35c                                                                                                  | G     | <p>SEE DIVERS UNDERWATER INSPECTION REPORT DATED 11/20/2012.</p> <p>( TIMBER BULKHEADS WINGWALLS ) THE BULKHEADS AND WINGWALLS HAS AREAS OF CHECKING, AND SPLITTING.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  |

| Bridge I&A Form 1(82)H<br>State of North Carolina<br>Dept. of Transportation<br>Division of Highways |       | <h1 style="text-align: center;">FIELD INSPECTION REPORT</h1> <p style="text-align: center;"><u>Bridge Inspection &amp; Analysis</u></p>                                                                                                                                                                                                                                                                                                                                                                                                |  |
|------------------------------------------------------------------------------------------------------|-------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| Team Leader R.D. HEATH                                                                               |       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |
| Assisted By R.L. KISNER                                                                              |       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |
| Item No.                                                                                             | Grade |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |
| 36a                                                                                                  | F     | <p>( PPC CAPS ) THE CONCRETE CAPS EXHIBITS AREAS OF STAINING DUE TO JOINT LEAKAGE.</p> <p>THERE ARE EXPOSED CABLE ENDS AT EAST END OF BENT 1 CAP. THIS IS SIMILAR ON ALL CAP ENDS. (PHOTO)</p> <p>BENT 2 CAP SPAN 3 FACE IS SPALLED 8" HIGH X 6" WIDE X 1" DEEP UNDER CHANNEL 1 RIGHT LEG. (PHOTO)</p> <p>THERE ARE TWO SURFACE SPALLS 4" WIDE X 3" HIGH X 3/4" DEEP IN BENT 2 CAP UNDER CHANNELS 7 AND 8. (PHOTO)</p> <p>BENT 2 CAP SPAN 3 FACE IS SPALLED 12' WIDE X 6" HIGH X UP TO 3" DEEP UNDER CHANNEL 12 RIGHT LEG. (PHOTO)</p> |  |
| 37a                                                                                                  | G     | ( STEEL CAP ) THERE IS A STEEL CRUTCHBENT ADDED AT PILE 6 BENT 2. (PHOTO)                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  |
| 37b                                                                                                  | G     | <p>( STEEL PILES ) STEEL CRUTCHBENT ADDED AT PILE 6 BENT 2. (PHOTO)</p> <p>SEE DIVERS UNDERWATER INSPECTION REPORT DATED 11/20/2012.</p>                                                                                                                                                                                                                                                                                                                                                                                               |  |
| 41                                                                                                   | G     | ( DRIFT ) THERE IS A BEAVERDAM / LODGE UPSTREAM WEST 30' FROM SPANS 1 AND 2. (PHOTO)                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  |
| 45a                                                                                                  | G     | ( WATERWAY ) THERE IS A BEAVERDAM / LODGE UPSTREAM WEST 30' FROM SPANS 1 AND 2. (PHOTO)                                                                                                                                                                                                                                                                                                                                                                                                                                                |  |
| 45b                                                                                                  | G     | ( CHANNEL ALIGNMENT ) THE ALIGNMENT OF THE CHANNEL IS PERPENDICULAR TO THE BRIDGE AT BOTH UPSTREAM AND DOWNSTREAM.                                                                                                                                                                                                                                                                                                                                                                                                                     |  |
| 45c                                                                                                  | F     | <p>THE MAIN CHANNEL APPEARS TO BE CENTERED UNDER THE MIDDLE SPAN.</p> <p>( SCOUR ) THERE IS LATERAL BANK EROSION IN SPAN 1. (PHOTO)</p> <p>THERE IS SLOPE EROSION AT END BENT 2. (PHOTO)</p> <p>THERE IS SLOPE EROSION AT END BENT 2 IN NORTHWEST CORNER. (PHOTO)</p> <p>SEE SCOUR REPORT DATED 6/24/2010.</p>                                                                                                                                                                                                                         |  |
| 50                                                                                                   | F     | <p>( APPROACH ROADWAY ) THERE ARE SEALED CRACKS IN BOTH APPROACHES. (PHOTOS)</p> <p>THE NORTH APPROACH SHOULDER IS SETTLED UP TO 2" IN THE NORTHWEST CORNER. (PHOTO)</p>                                                                                                                                                                                                                                                                                                                                                               |  |
| 54                                                                                                   | G     | ( RESPONSE TO LIVE LOAD ) THERE IS SOME VIBRATION AND NOISE UNDER NORMAL TRAFFIC LOAD.                                                                                                                                                                                                                                                                                                                                                                                                                                                 |  |



|                                                                                                      |       |                                                                           |  |
|------------------------------------------------------------------------------------------------------|-------|---------------------------------------------------------------------------|--|
| Bridge I&A Form 1(82)H<br>State of North Carolina<br>Dept. of Transportation<br>Division of Highways |       | <b>FIELD INSPECTION REPORT</b><br><u>Bridge Inspeccion &amp; Analysis</u> |  |
| Team Leader R.D. HEATH                                                                               |       |                                                                           |  |
| Assisted By R.L. KISNER                                                                              |       |                                                                           |  |
| Item No.                                                                                             | Grade |                                                                           |  |
| 62                                                                                                   | YES   | ( PRESENTLY POSTED )<br>SV - 21 TONS, TTST - 24TONS                       |  |
| 73f                                                                                                  | YES   | ( OTHER EQUIPMENT ) BOOTS                                                 |  |

# BRIDGE INSPECTOR'S RECOMMENDATION FOR MAINTENANCE REPAIRS

Bridge: 770435

County ROBESON

Date: 05/27/2014

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

| MMS Code | Description of Function                     | Unit | Quantity | Remarks                                                                                                  | Est. Cost |
|----------|---------------------------------------------|------|----------|----------------------------------------------------------------------------------------------------------|-----------|
| 2816     | Asphalt Surface Repair or Replacement       | SY   | 1        | NORTH APPROACH SHOULDER IS SETTLED 2" IN THE NORTHWEST CORNER                                            |           |
| 2816     | Asphalt Surface Repair or Replacement       | SY   | 1        | BENT JOINTS IN BOTH SHOULDERS ARE CRACKED UP TO 3/4" WIDE AND FULL OF SAND AND VEGETATION                |           |
| 2816     | Asphalt Surface Repair or Replacement       | SY   | 2        | 1/8" WIDE LONGITUDINAL CRACKS IN BOTH SHOULDERS IN ALL SPANS                                             |           |
| 3306     | Maintain Concrete Superstructure Components | SF   | 2        | END BENT 2 HAS SPALLED END DIAPHRAGMS WITH EXPOSED REBAR AT BAYS 2 AND 3                                 |           |
| 3306     | Maintain Concrete Superstructure Components | SF   | 3        | END DIAPHRAGMS SPALLED WITH EXPOSED REBAR AT BENT 1 SPAN 2 AT BAYS 1, 2, AND 3                           |           |
| 3306     | Maintain Concrete Superstructure Components | SF   | 8        | END BENT 1 END DIAPHRAGM IS SPALLED WITH EXPOSED REBAR AT BAYS 6 AND 7, SIMILAR AT BAYS 8, 9, 10, AND 11 |           |
| 3322     | Maint to Steel Handrail                     | LF   | 50       | GRAFITTI ON RIGHT RAIL AT SPAN 2                                                                         |           |
| 3322     | Maint to Steel Handrail                     | LF   | 10       | RIGHT RAIL IS DAMAGED AT SPAN 3                                                                          |           |
| 3322     | Maint to Steel Handrail                     | LF   | 87       | GRAFITTI ON LEFT RAIL IN ALL SPANS                                                                       |           |
| 3326     | Maintain Concrete Deck                      | SF   | 2        | SPAN 1 RIGHT CURB IS SPALLED 24" LONG X UP TO 4" HIGH X 3" WIDE                                          |           |
| 3342     | Clean and Paint Structural Steel            | SF   | 72       | CHANNELS 2 AND 3 BEARING PLATES AT BENT 2 ARE RUSTED, ALL BEARING PLATES ARE SIMILAR                     |           |
| 3348     | Maintain Concrete Substructure Components   | LF   | 1        | BENT 2 CAP SPAN 3 FACE IS SPALLED 12' WIDE X 6" HIGH X UP TO 3" DEEP UNDER CHANNEL 12 RIGHT LEG          |           |
| 3348     | Maintain Concrete Substructure Components   | LF   | 1        | BENT 2 CAP SPAN 3 FACE IS SPALLED 8" HIGH X 6" WIDE X 1" DEEP UNDER CHANNEL 1 RIGHT LEG                  |           |

Key



Priority Maintenance Item



Critical Finding Item



Priority Maintenance Level Not Determined

## BRIDGE INSPECTOR'S RECOMMENDATION FOR MAINTENANCE REPAIRS

Bridge: 770435

County ROBESON

Date: 05/27/2014

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

| MMS Code | Description of Function                   | Unit | Quantity | Remarks                                                                                         | Est. Cost |
|----------|-------------------------------------------|------|----------|-------------------------------------------------------------------------------------------------|-----------|
| 3348     | Maintain Concrete Substructure Components | LF   | 1        | THERE ARE TWO SURFACE SPALLS 4" WIDE X 3" HIGH X 3/4" DEEP IN BENT 2 CAP UNDER CHANNELS 7 AND 8 |           |
| 3352     | Maint Slope Protection                    | SF   | 60       | THERE IS SLOPE EROSION AT END BENT 2 TWO AREAS 10' LONG X UP TO 3' WIDE X 1' DEEP               |           |
| 3352     | Maint Slope Protection                    | SF   | 80       | THERE IS END BENT 2 SLOPE EROSION 5' TO 8' WIDE X 8' LONG X UP TO 2' DEEP AT NORTHWEST CORNER   |           |
| 3366     | Drift and Debris Removal                  | HR   | 75       | THERE IS A BEAVERDAM / LODGE UPSTREAM WEST 30' FROM SPANS 1 AND 2                               |           |

### Key



Priority Maintenance Item



Critical Finding Item



Priority Maintenance Level Not Determined



EXPOSED CABLE ENDS AT EAST END OF BENT 1 CAP, SIMILAR ON ALL CAP ENDS



PILE 5 AT END BENT 1 SPOT DECAYED UP TO 1/2" DEEP





PILE 4 AT END BENT 1 SPOT DECAYED UP TO 1/2" DEEP



PILE 6 AT BENT 1 IS DECAYED 16" HIGH X 4" WIDE X 1 1/4" DEEP ON EAST FACE



THERE IS A STEEL CROSSCAP CRUTCHBENT LEFT OF PILE 6 AT BENT 2, SHORED STRUCTURE



CHANNELS 2 AND 3 BEARING PLATES AT BENT 2 ARE RUSTED, ALL BEARING PLATES ARE SIMILAR





END BENT 1 END DIAPHRAGM IS SPALLED WITH EXPOSED REBAR AT BAYS 6 AND 7, SIMILAR AT BAYS 8, 9, 10, AND 11



CHANNEL 7 IN SPAN 1 AT MIDSPAN HAS A HAIRLINE TO 1/32" CRACK IN LEFT LEG





THERE IS A BEAVERDAM / LODGE UPSTREAM WEST 30' FROM SPANS 1 AND 2



END DIAPHRAGMS SPALLED WITH EXPOSED REBAR AT BENT 1 SPAN 2 AT BAYS 1, 2, AND 3





PILE 4 AT BENT 2 EAST FACE IS DECAYED 16" HIGH X 4' WIDE X UP TO 1" DEEP



THERE IS SLOPE EROSION AT END BENT 2 TWO AREAS 10' LONG X UP TO 3' WIDE X 1' DEEP





THERE IS END BENT 2 SLOPE EROSION 5' TO 8' WIDE X 8' LONG X UP TO 2' DEEP AT NORTHWEST CORNER



PILE 6 AT BENT 2 CUT OUT FOR STEEL CRUTCHBENT



CHANNEL 3 RIGHT LEG AT MIDSPAN 3 IS SURFACE SPALLED 3" DIAMETER X UP TO 3/4" DEEP



BENT 2 CAP SPAN 3 FACE IS SPALLED 8" HIGH X 6" WIDE X 1" DEEP UNDER CHANNEL 1 RIGHT LEG





THERE ARE TWO SURFACE SPALLS 4" WIDE X 3" HIGH X 3/4" DEEP IN BENT 2 CAP UNDER CHANNELS 7 AND 8



BENT 2 CAP SPAN 3 FACE IS SPALLED 12' WIDE X 6" HIGH X UP TO 3" DEEP UNDER CHANNEL 12 RIGHT LEG





END BENT 2 HAS SPALLED END DIAPHRAGMS WITH EXPOSED REBAR AT BAYS 2 AND 3



THERE IS A STEEL CRUTCH BENT AT BENT 2 LEFT OF ORIGINAL PILE 6





THERE IS LATERAL BANK EROSION IN SPAN 1



SEALED CRACKS IN SOUTH APPROACH ASPHALT WEARING SURFACE





SEALED LONGITUDINAL CRACKS IN SPAN 1 ASPHALT WEARING SURFACE, ALL SPANS ARE SIMILAR



1/8" WIDE LONGITUDINAL CRACKS IN BOTH SHOULDERS IN ALL SPANS





SEALED TRANSVERSE CRACKS OVER BOTH BENTS



BENT JOINTS IN BOTH SHOULDERS ARE CRACKED UP TO 3/4" WIDE AND FULL OF SAND AND VEGETATION





GRAFITTI ON LEFT RAIL IN ALL SPANS



SURFACE RUST ON EXTERIOR RIGHT RAIL POST 6 IN SPAN 2





SURFACE RUST ON EXTERIOR RIGHT RAIL POST 1 BOLT AT SPAN 3



RIGHT RAIL IS DAMAGED AT SPAN 3





GRAFITTI ON RIGHT RAIL AT SPAN 2



SPAN 1 RIGHT CURB IS SPALLED 24" LONG X UP TO 4" HIGH X 3" WIDE





LEFT CURB AT SPAN 3, BENT 2 IS SURFACE SPALLED WITH HAIRLINE MAP CRACKING



NORTH APPROACH SHOULDER IS SETTLED 2" IN THE NORTHWEST CORNER





SEALED CRACKS IN NORTH APPROACH ASPHALT WEARING SURFACE



HAIRLINE TRANSVERSE AND VERTICAL CRACKS IN BOTH CURBS AT RANDOM

# Structure Data Worksheet

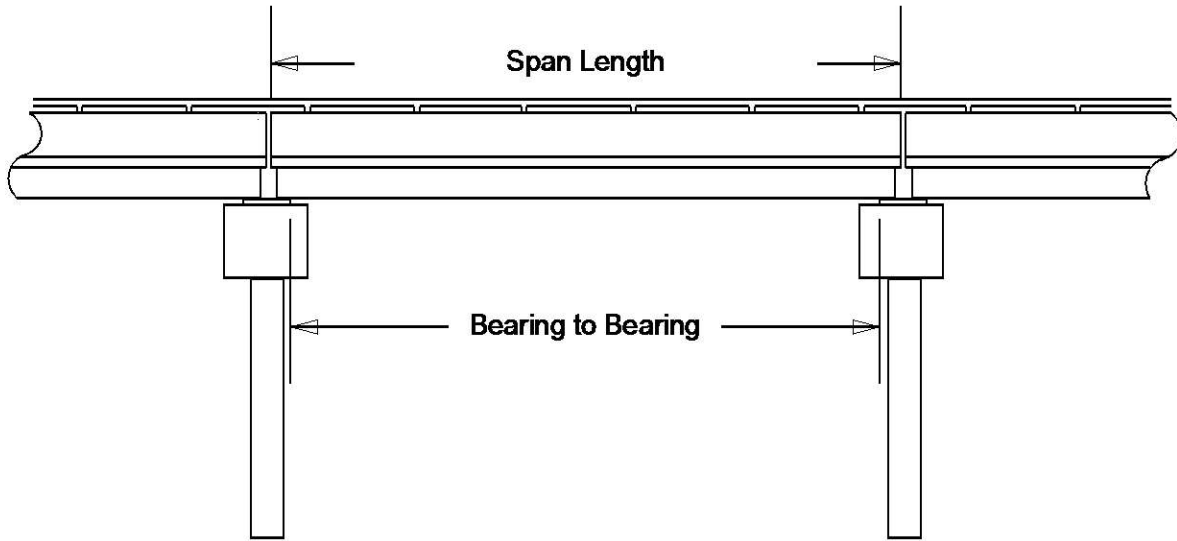
*Spans*

County: ROBESON

Structure No: 770435

Date: 05/27/2014

Inspected By: RDH



| Span No | Span Length | Bearing to Bearing | Comments                            |
|---------|-------------|--------------------|-------------------------------------|
| 1       | 30.5 FT.    | 29.5 FT.           | MEASUREMENTS REVISED BY RLK 5/27/14 |
| 2       | 30.5 FT.    | 29.0 FT.           |                                     |
| 3       | 30.5 FT.    | 29.5 FT.           |                                     |
| TOTAL   | 91.0 FT.    |                    | NBIS 87.75 FT.                      |



# Stream Bed Soundings

(See next sheet for profile sketch)

Bridge No: 770435 County: ROBESON Date: 05/27/2014 By: RDH

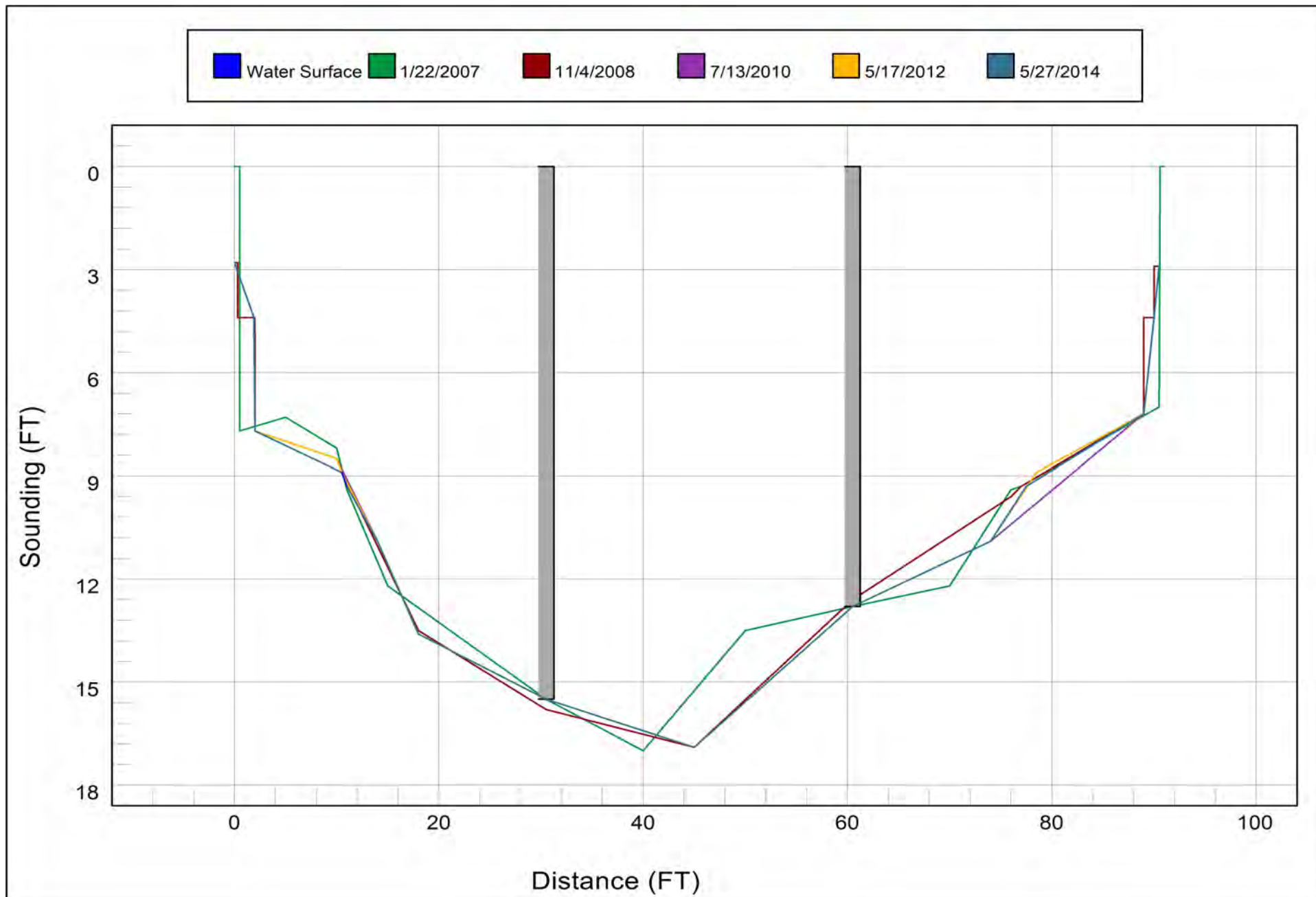
Record sounding from top of rail. Other location if needed: TOP OF RAIL

Distance from Highwater Mark to top of rail: 7 Location of Highwater Mark: ON PILES

| DOWNSTREAM                 |                  |                 | UPSTREAM                   |                  |               |
|----------------------------|------------------|-----------------|----------------------------|------------------|---------------|
| Distance<br>(Station) (ft) | Sounding<br>(ft) | Description     | Distance<br>(Station) (ft) | Sounding<br>(ft) | Description   |
| 0                          | 2.8              | TOP OF BULKHEAD |                            |                  |               |
| 1.9                        | 4.4              | Top of Cap      |                            |                  |               |
| 2                          | 7.7              | GROUND AT CAP   | 2                          | 7                | GROUND AT CAP |
| 10.5                       | 8.9              | WSWE ( EAST )   |                            |                  |               |
| 11                         | 9.3              | WSWE ( EAST )   |                            |                  |               |
| 14                         | 10.9             |                 |                            |                  |               |
| 18                         | 13.6             |                 |                            |                  |               |
| 30.5                       | 15.5             | BENT 1          | 30.5                       | 16               | BENT 1        |
| 45                         | 16.9             |                 |                            |                  |               |
| 60.5                       | 12.8             | BENT 2          | 60.5                       | 15               | BENT 2        |
| 74                         | 10.9             |                 |                            |                  |               |
| 77.5                       | 9.3              | WSWE            |                            |                  |               |
| 89                         | 7.2              | GROUND AT CAP   | 89                         | 8.3              | GROUND AT CAP |
| 90                         | 4.4              | Top of Cap      |                            |                  |               |
| 90.5                       | 2.9              | TOP OF BULKHEAD |                            |                  |               |

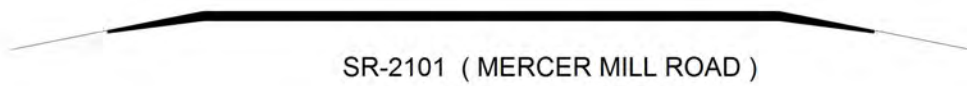
## STREAMBED PROFILE (Downstream)

Top of Rail = 0 FT (Sounding)





# Bridge Inspection Field Sketch



|                 |           |               |               |
|-----------------|-----------|---------------|---------------|
| Roadway         | 20ft Wide | 2 Paved Lanes | Looking North |
| Left Shoulder   | 4ft Wide  |               | 4ft Unpaved   |
| Right Shoulder  | 4ft Wide  |               | 4ft Unpaved   |
| Left Guardrail  |           |               |               |
| Right Guardrail |           |               |               |

MEASUREMENTS VERIFIED BY RLK 7/13/10

MEASUREMENTS VERIFIED BY RLK 5/17/12

MEASUREMENTS VERIFIED BY RLK 5/27/14

## Title

APPROACH ROADWAY

## Description

LOOKING NORTH

Bridge No: 770435

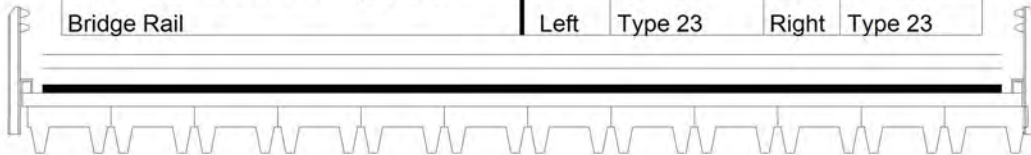
Drawn By: RLB

Date: 01/22/2007

File Name: S0274002441

# Bridge Inspection Field Sketch

|                                     |        |                 |         |       |         |
|-------------------------------------|--------|-----------------|---------|-------|---------|
| Deck Width/Out to Out               | 30.5ft | Between Rails   |         |       | 30ft    |
| Clear Roadway                       | 29ft   | Wearing Surface |         |       | 0.25ft  |
| Median Width                        |        | Median Height   |         |       |         |
| Curb Height                         |        | Left            | 0.583ft | Right | 0.583ft |
| Sidewalk Width                      |        | Left            |         | Right |         |
| Clear Roadway (Rail to Median)      |        | Left            |         | Right |         |
| Guardrail Width                     |        | Left            | 0.687ft | Right | 0.687ft |
| Top of Rail to Deck/Wearing Surface |        | Left            | 2.667ft | Right | 2.667ft |
| Bridge Rail                         |        | Left            | Type 23 | Right | Type 23 |



|                               |       |                   |       |
|-------------------------------|-------|-------------------|-------|
| Measurements for Span #       | 1     | ALL SPANS SIMILAR |       |
| Deck Thickness                | 0.417 | Left Overhang     | 0.167 |
| Top of Rail to Bottom of Beam | 4.417 | Right Overhang    | 0.167 |

|                      |         |
|----------------------|---------|
| Number of Channels   | 12      |
| Leg Width            | 0.209ft |
| Leg Height           | 1.0ft   |
| Leg to Leg (Centers) | 2.0ft   |
| Channel Width        | 2.542ft |
| Channel Height       | 1.417ft |
| Comments             |         |

## Title

SUPERSTRUCTURE

## Description

SIMILAR SECTION

Bridge No: 770435

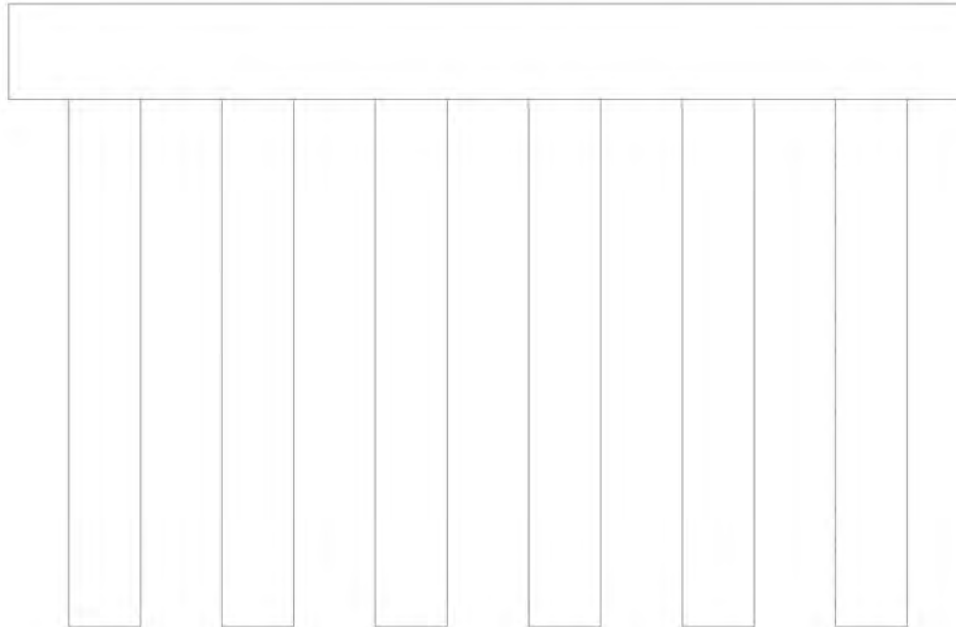
Drawn By: RLK

Date: 5/27/2014

File Name: S0274002442



# Bridge Inspection Field Sketch



END BENT 1 & 2 SIMILAR

|                |               |                      |              |
|----------------|---------------|----------------------|--------------|
| Bent #         | 1             |                      |              |
| Cap - Pre-Cast |               |                      |              |
| Cap Size       | 30.835ft Long | 1.333ft Wide         | 1.042ft High |
| Left Overhang  | 1.25ft        | Lt Cap/Beam Overhang | .417 FT.     |
| Right Overhang | 1.25ft        | Rt Cap/Beam Overhang | .417 FT.     |

| Pile # | Material       | Pile Type | Spacing | Length | Width/Diam. | Height | Orientation |
|--------|----------------|-----------|---------|--------|-------------|--------|-------------|
| 1      | Wood or Timber | Pile Bent | 5.667   |        | 1.0 ROUND   |        | Vertical    |
| 2      | Wood or Timber | Pile Bent | 5.667   |        | 1.0 ROUND   |        | Vertical    |
| 3      | Wood or Timber | Pile Bent | 5.667   |        | 1.0 ROUND   |        | Vertical    |
| 4      | Wood or Timber | Pile Bent | 5.667   |        | 1.0 ROUND   |        | Vertical    |
| 5      | Wood or Timber | Pile Bent | 5.667   |        | 1.0 ROUND   |        | Vertical    |
| 6      | Wood or Timber | Pile Bent | 5.667   |        | 1.0 ROUND   |        | Vertical    |

MEASUREMENTS VERIFIED BY RLK 7/13/10

MEASUREMENTS VERIFIED BY RLK 5/17/12

MEASUREMENTS REVISED BY RLK 5/27/14

## Title

SUBSTRUCTURE

## Description

END BENTS 1&2, BENT 1

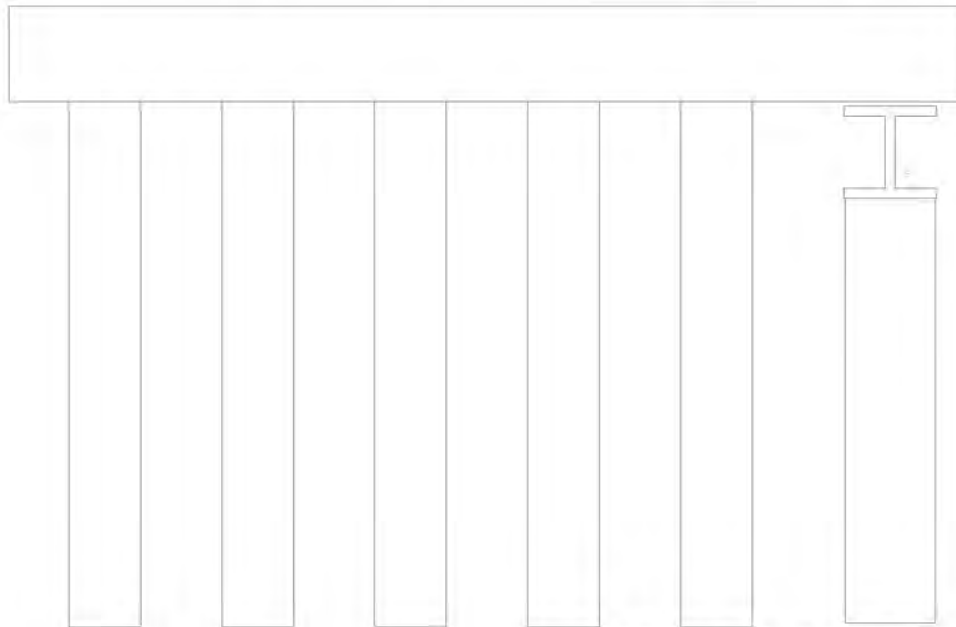
Bridge No: 770435

Drawn By: RLB

Date: 01/22/2007

File Name: S0274002446

# Bridge Inspection Field Sketch



SEE CRUTCHBENT SKETCH FOR SIZES

|                |               |                      |              |
|----------------|---------------|----------------------|--------------|
| Bent #         | 2             |                      |              |
| Cap - Pre-Cast |               |                      |              |
| Cap Size       | 30.835ft Long | 1.333ft Wide         | 1.042ft High |
| Left Overhang  | 1.25ft        | Lt Cap/Beam Overhang | .417 FT.     |
| Right Overhang | 1.833ft       | Rt Cap/Beam Overhang | .417 FT.     |

| Pile # | Material       | Pile Type | Spacing | Length | Width/Diam.      | Height | Orientation |
|--------|----------------|-----------|---------|--------|------------------|--------|-------------|
| 1      | Wood or Timber | Pile Bent | 5.667   |        | 1.0 ROUND        |        | Vertical    |
| 2      | Wood or Timber | Pile Bent | 5.667   |        | 1.0 ROUND        |        | Vertical    |
| 3      | Wood or Timber | Pile Bent | 5.667   |        | 1.0 ROUND        |        | Vertical    |
| 4      | Wood or Timber | Pile Bent | 5.667   |        | 1.0 ROUND        |        | Vertical    |
| 5      | Wood or Timber | Pile Bent | 5.083   |        | 1.0 ROUND        |        | Vertical    |
| 6      | Steel          | Pile Bent |         |        | .833x.833 CRUTCH |        | Vertical    |

MEASUREMENTS VERIFIED BY RLK 7/13/10

MEASUREMENTS VERIFIED BY RLK 5/17/12

MEASUREMENTS REVISED BY RLK 5/27/14

## Title

SUBSTRUCTURE 2

## Description

BENT 2

Bridge No: 770435

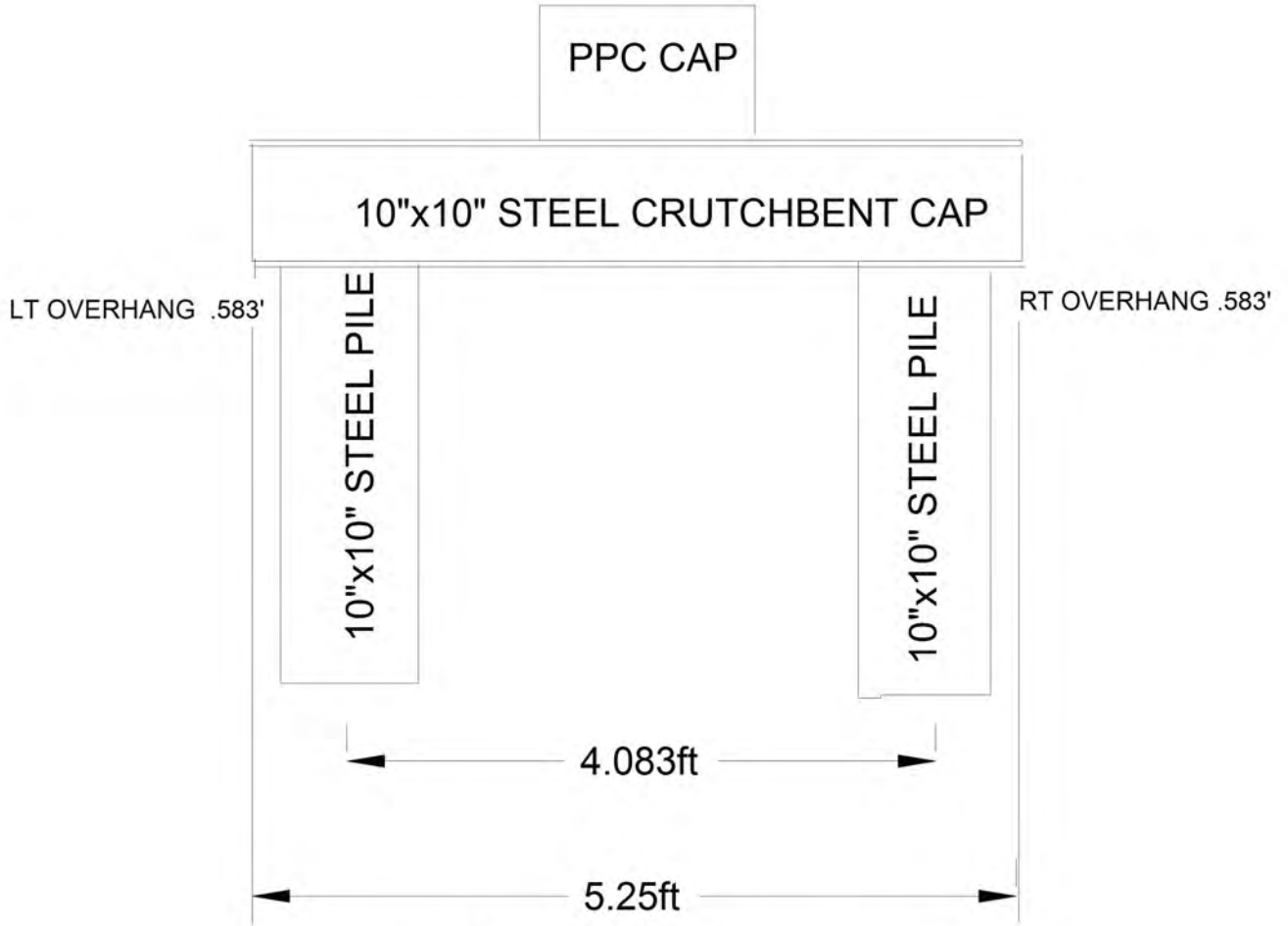
Drawn By: RLB

Date: 01/22/2007

File Name: S0274002447

# Bridge Inspection Field Sketch

BENT 2 CRUTCHBENT PILE FOR PILE 6



PROFILE VIEW

MEASUREMENTS VERIFIED BY RLK 7/13/10  
MEASUREMENTS VERIFIED BY RLK 5/17/12  
MEASUREMENTS REVISED BY RLK 5/27/14

## Title

CRUTCHBENT PILE SKETCH

## Description

CRUTCHBENT PILE 6 SKETCH

Bridge No: 770435

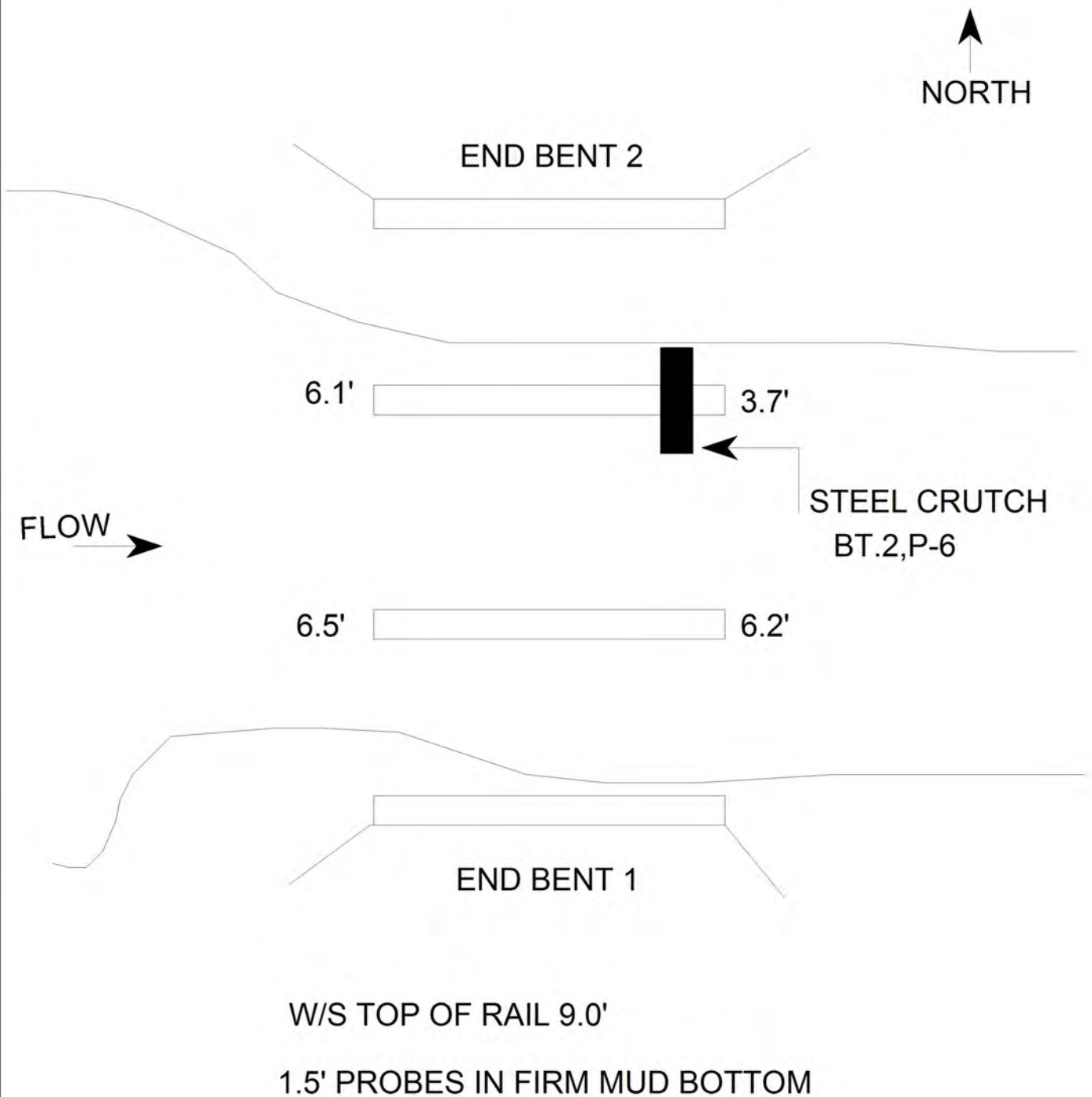
Drawn By: RLB

Date: 01/22/2007

File Name: S0274002448



# Bridge Inspection Field Sketch



**Title**  
PLAN VIEW

**Description**  
TOP VIEW

Bridge No: 770435

Drawn By: PGR

Date: 11/7/2008

File Name: S0178000688



EAST PROFILE



EAST END OF BENT 1





END BENT 1



WEST PROFILE





BENT 2



SPAN 2 UNDERSIDE, ALL SPANS ARE SIMILAR





UPSTREAM WEST, THRU SPAN 2



DOWNSTREAM EAST, THRU SPAN 2





END BENT 2



BENT 1, SPAN 2 SIDE





SPAN 1 UNDERSIDE, ALL SPANS ARE SIMILAR



LOOKING NORTH ( MERCER MILL ROAD )





LOOKING NORTH



LOOKING SOUTH, OFF BRIDGE





LOOKING NORTH, OFF BRIDGE



UPSTREAM WEST





DOWNSTREAM EAST



LOOKING SOUTH





LOOKING SOUTH