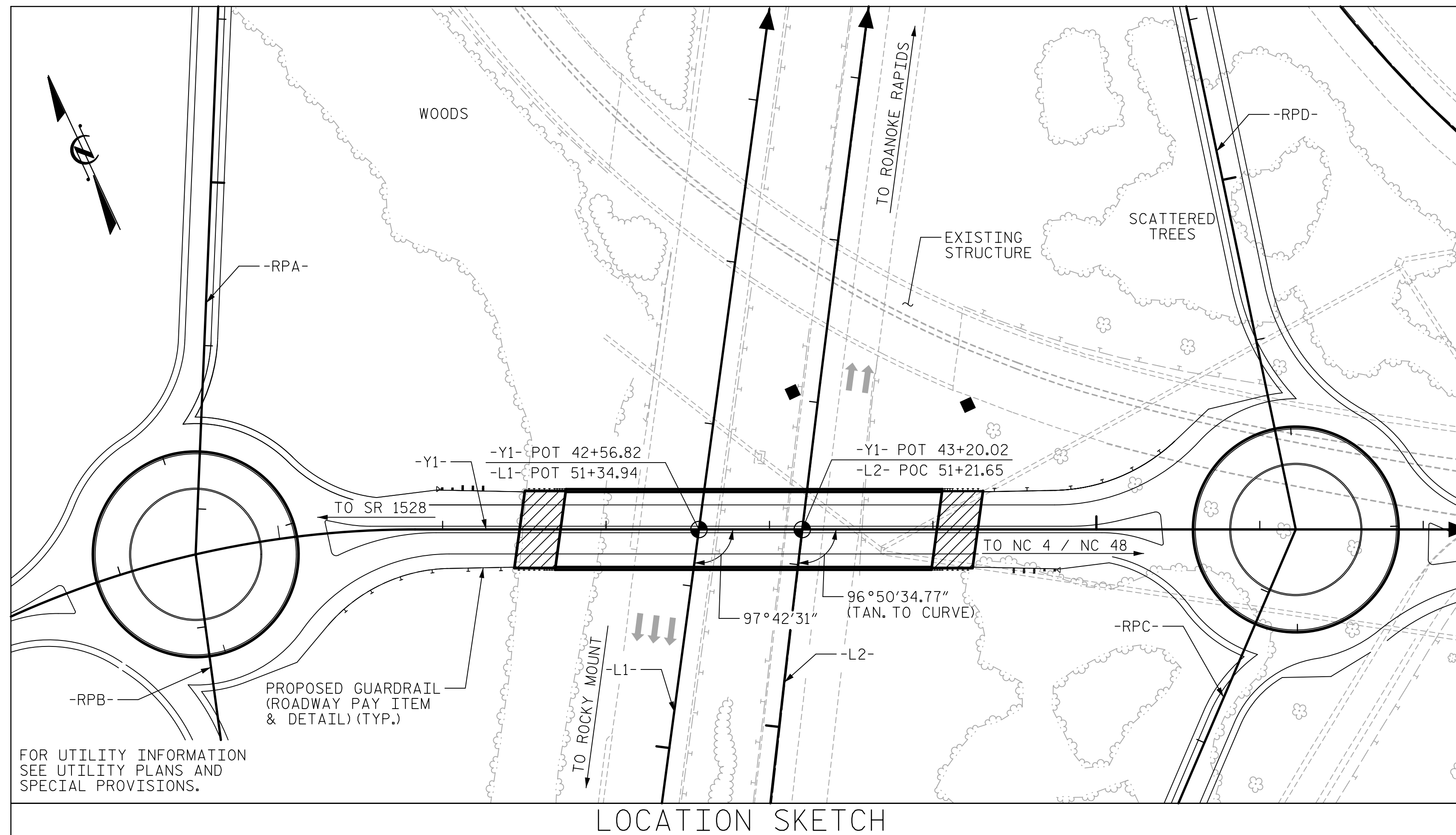


BENCHMARK: BM#1 BENCHTIE NAIL IN 32" PINE, 592.96' LT. OF -Y1- STA. 49+61.76, ELEV. 139.57, COORDINATES: N 844439 E 2348872



DATE: 4/28/2020  
TIME: 2:46:38 PM

**GENERAL NOTES:**

ASSUMED LIVE LOAD = HL-93 OR ALTERNATE LOADING.

THIS BRIDGE HAS BEEN DESIGNED IN ACCORDANCE WITH THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS.

THIS BRIDGE IS LOCATED IN SEISMIC ZONE 1.

FOR OTHER DESIGN DATA AND GENERAL NOTES, SEE SHEET SN.

FOR FALSEWORK AND FORMWORK, SEE SPECIAL PROVISIONS.

FOR SUBMITTAL OF WORKING DRAWINGS, SEE SPECIAL PROVISIONS.

FOR CRANE SAFETY, SEE SPECIAL PROVISIONS.

FOR GROUT FOR STRUCTURES, SEE SPECIAL PROVISIONS.

THE CONTRACTOR SHALL PROVIDE INDEPENDENT ASSURANCE SAMPLES OF REINFORCING STEEL AS FOLLOWS: FOR PROJECTS REQUIRING UP TO 400 TONS OF REINFORCING STEEL, ONE 30 INCH SAMPLE OF EACH SIZE BAR USED, AND FOR PROJECTS REQUIRING OVER 400 TONS OF REINFORCING STEEL, TWO 30 INCH SAMPLES OF EACH SIZE BAR USED. THE SAMPLE BARS SHOULD COME FROM STEEL ACTUALLY USED IN THE PROJECT AND THE SAMPLE BARS SHOULD BE REPLACED BY SPLICED BARS AS SPECIFIED IN THE SAMPLE BAR REPLACEMENT CHART. PAYMENT FOR THE SAMPLE BARS AND REPLACEMENT REINFORCING STEEL SHALL BE CONSIDERED INCIDENTAL TO VARIOUS PAY ITEMS.

THE ELEVATIONS AND CLEARANCES SHOWN ON THE PLANS AT THE POINTS OF MINIMUM VERTICAL CLEARANCE ARE FROM THE BEST INFORMATION AVAILABLE. PRIOR TO BEGINNING BRIDGE CONSTRUCTION, VERIFY THE ELEVATIONS ON THE EXISTING PAVEMENT AND CHECK THE CLEARANCE. REPORT ANY VARIATIONS TO THE ENGINEER. ANY PLAN REVISIONS NECESSARY TO ACHIEVE THE REQUIRED MINIMUM VERTICAL CLEARANCE WILL BE PROVIDED BY THE DEPARTMENT.

FOR MAINTENANCE AND PROTECTION OF TRAFFIC BENEATH PROPOSED STRUCTURE, SEE SPECIAL PROVISIONS.

PRESTRESSED CONCRETE DECK PANELS MAY BE USED IN LIEU OF METAL STAY-IN-PLACE FORMS IN ACCORDANCE WITH ARTICLE 420-3 OF THE STANDARD SPECIFICATIONS.

REMOVABLE FORMS MAY BE USED IN LIEU OF METAL STAY-IN-PLACE FORMS IN ACCORDANCE WITH ARTICLE 420-3 OF THE STANDARD SPECIFICATIONS.

NEEDLE BEAMS WILL NOT BE ALLOWED UNLESS OTHERWISE CALLED FOR ON THE PLANS OR APPROVED BY THE ENGINEER.

INASMUCH THE PAINT SYSTEM ON THE EXISTING STRUCTURAL STEEL CONTAINS LEAD, THE CONTRACTOR'S ATTENTION IS DIRECTED TO ARTICLE 107-1 OF THE STANDARD SPECIFICATIONS. ANY COSTS RESULTING FROM COMPLIANCE WITH APPLICABLE STATE OR FEDERAL REGULATIONS PERTAINING TO HANDLING OF MATERIALS CONTAINING LEAD BASED PAINT SHALL BE INCLUDED IN THE BID PRICE FOR REMOVAL OF EXISTING STRUCTURE AT STATION 42+56.82 -Y1- AND STATION 17+07.50 -Y2-.

FOR LIMITS OF TEMPORARY SHORING FOR MAINTENANCE OF TRAFFIC, SEE TRAFFIC CONTROL PLANS. FOR PAY ITEM FOR TEMPORARY SHORING FOR MAINTENANCE OF TRAFFIC, SEE ROADWAY PLANS.

THE EXISTING STRUCTURE, CONSISTING OF 4 SPANS: 1 @ 42.5', 1 @ 66', 1 @ 60.5' & 1 @ 42.5', 41.08' CLEAR ROADWAY WIDTH AND A 7/4" REINFORCED CONCRETE DECK WITH A 4" ASPHALT WEARING SURFACE ON I-BEAMS; AND END BENTS CONSISTING OF REINFORCED CONCRETE CAP WITH STEEL PILES AT END BENT 1, SPREAD FOOTINGS AT END BENT 2, AND INTERIOR BENTS CONSISTING OF REINFORCED CONCRETE POST AND BEAM COLUMNS ON PILE FOOTINGS AND LOCATED AT AND EAST OF THE PROPOSED BRIDGE SHALL BE REMOVED. THE EXISTING BRIDGE IS PRESENTLY NOT POSTED FOR LOAD LIMIT. SHOULD THE STRUCTURAL INTEGRITY OF THE BRIDGE DETERIORATE DURING CONSTRUCTION OF THE PROPOSED BRIDGE, A LOAD LIMIT MAY BE POSTED AND MAY BE REDUCED AS FOUND NECESSARY DURING THE LIFE OF THE PROJECT.

THE SUBSTRUCTURE OF THE EXISTING BRIDGE INDICATED ON THE PLANS IS FROM THE BEST INFORMATION AVAILABLE. THIS INFORMATION IS SHOWN FOR THE CONVENIENCE OF THE CONTRACTOR. THE CONTRACTOR SHALL HAVE NO CLAIM WHATSOEVER AGAINST THE DEPARTMENT OF TRANSPORTATION FOR ANY DELAYS OR ADDITIONAL COST INCURRED BASED ON DIFFERENCES BETWEEN THE EXISTING BRIDGE SUBSTRUCTURE SHOWN ON THE PLANS AND THE ACTUAL CONDITIONS AT THE PROJECT SITE.

FOR EROSION CONTROL MEASURES, SEE EROSION CONTROL PLANS.

FOR ASBESTOS ASSESSMENT FOR BRIDGE DEMOLITION AND RENOVATION ACTIVITIES, SEE SPECIAL PROVISIONS.

**TOTAL BILL OF MATERIAL**

|                | REMOVAL OF EXISTING STRUCTURE AT STA. 42+56.82 -Y1- | REMOVAL OF EXISTING STRUCTURE AT STA. 17+07.50 -Y2- | ASBESTOS ASSESSMENT | FOUNDATION EXCAVATION FOR BENT 1 | PDA TESTING | REINFORCED CONCRETE DECK SLAB | GROOVING BRIDGE FLOORS | CLASS A CONCRETE | BRIDGE APPROACH SLABS | REINFORCING STEEL | SPIRAL COLUMN REINFORCING STEEL | MODIFIED 63" PRESTRESSED CONCRETE GIRDERS | PILE DRIVING EQUIPMENT SETUP FOR HP12x53 STEEL PILES | HP12x53 STEEL PILES | STEEL PILE POINTS | CONCRETE BARRIER RAIL | 4" SLOPE PROTECTION | ELASTOMERIC BEARINGS | FIBER OPTIC CONDUIT SYSTEM WITH HANGERS | JUNCTION BOX (OVER-SIZED, HEAVY DUTY) |          |     |
|----------------|---|---|---------------------|----------------------------------|-------------|-------------------------------|------------------------|------------------|-----------------------|-------------------|---------------------------------|---|--|---------------------|-------------------|-----------------------|---------------------|----------------------|---|---------------------------------------|----------|-----|
|                | LUMP SUM  | LUMP SUM  | LUMP SUM            | LUMP SUM                         | EACH        | SQ. FT.                       | SQ. FT.                | CU. YDS.         | LUMP SUM              | LBS.              | LBS.                            | NO.                                       | LIN. FT.   | EA.                 | NO.               | LIN. FT.              | EACH                | LIN. FT.             | SQ. YDS.                                | LUMP SUM                              | LIN. FT. | EA. |
| SUPERSTRUCTURE |   |   |                     |                                  |             | 11,343                        | 12,011                 |                  |                       |                   |                                 | 10  | 1143.33  |                     |                   | 461                   |                     |                      |   | 284                                   |          |     |
| END BENT 1     |   |   |                     |                                  |             |                               |                        | 47.2             |                       | 7,418             |                                 |   | 9  | 9                   | 495               |                       |                     | 206                  |   |                                       |          |     |
| BENT 1         |   |   |                     |                                  |             |                               |                        | 91.5             |                       | 17,063            | 1,679                           |   | 24   | 24                  | 720               | 24                    |                     |                      |   |                                       |          |     |
| END BENT 2     |   |   |                     |                                  |             |                               |                        | 47.0             |                       | 7,441             |                                 |   | 9  | 9                   | 585               |                       |                     | 191                  |   |                                       |          |     |
| TOTAL          | LUMP SUM  | LUMP SUM  | LUMP SUM            | LUMP SUM                         | 2           | 11,343                        | 12,011                 | 185.7            | LUMP SUM              | 31,922            | 1,679                           | 10  | 1143.33  | 42                  | 42                | 1800                  | 24                  | 461                  | 397                                     | LUMP SUM                              | 284      | 2   |

PROJECT NO. B-5980

NASH COUNTY

STATION: 42+56.82 -Y1-

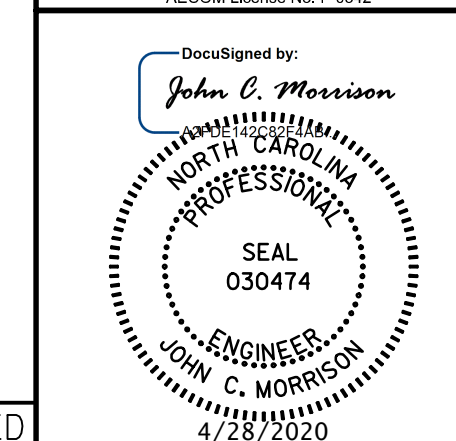
SHEET 3 OF 3

| SAMPLE BAR REPLACEMENT |         |      |         |
|------------------------|---------|------|---------|
| SIZE                   | LENGTH  | SIZE | LENGTH  |
| #3                     | 6'-2"   | #8   | 12'-0"  |
| #4                     | 7'-4"   | #9   | 13'-2"  |
| #5                     | 8'-6"   | #10  | 14'-6"  |
| #6                     | 9'-8"   | #11  | 15'-10" |
| #7                     | 10'-10" |      |         |

NOTE: SAMPLE BAR REPLACEMENT LENGTHS BASED ON 30" (SAMPLE LENGTH) PLUS TWO SPLICE LENGTHS AND  $f_s = 60$  ksi.

**SAMPLE BAR REPLACEMENT FOR FEDERAL AID PROJECTS**

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED



STATE OF NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION  
RALEIGH

GENERAL DRAWING  
BRIDGE ON SR 1544 (HALIFAX RD.) OVER I-95 BETWEEN SR 1528 & NC 4 / NC 48

| REVISIONS |     |       |     |     |       | SHEET NO.    |
|-----------|-----|-------|-----|-----|-------|--------------|
| NO.       | BY: | DATE: | NO. | BY: | DATE: | S-03         |
| 1         |     |       | 3   |     |       | TOTAL SHEETS |
| 2         |     |       | 4   |     |       | 34           |

|                                   |               |
|-----------------------------------|---------------|
| DRAWN BY : T.B. STUMP             | DATE : 1/2019 |
| CHECKED BY : J.C. MORRISON        | DATE : 1/2019 |
| DESIGNED BY : T.B. STUMP          | DATE : 1/2019 |
| DESIGN CHECKED BY : J.C. MORRISON | DATE : 1/2019 |

USER: tump, C:\Users\tump\Desktop\400\_05\_501\_B5980\_SML\_LOC.dgn