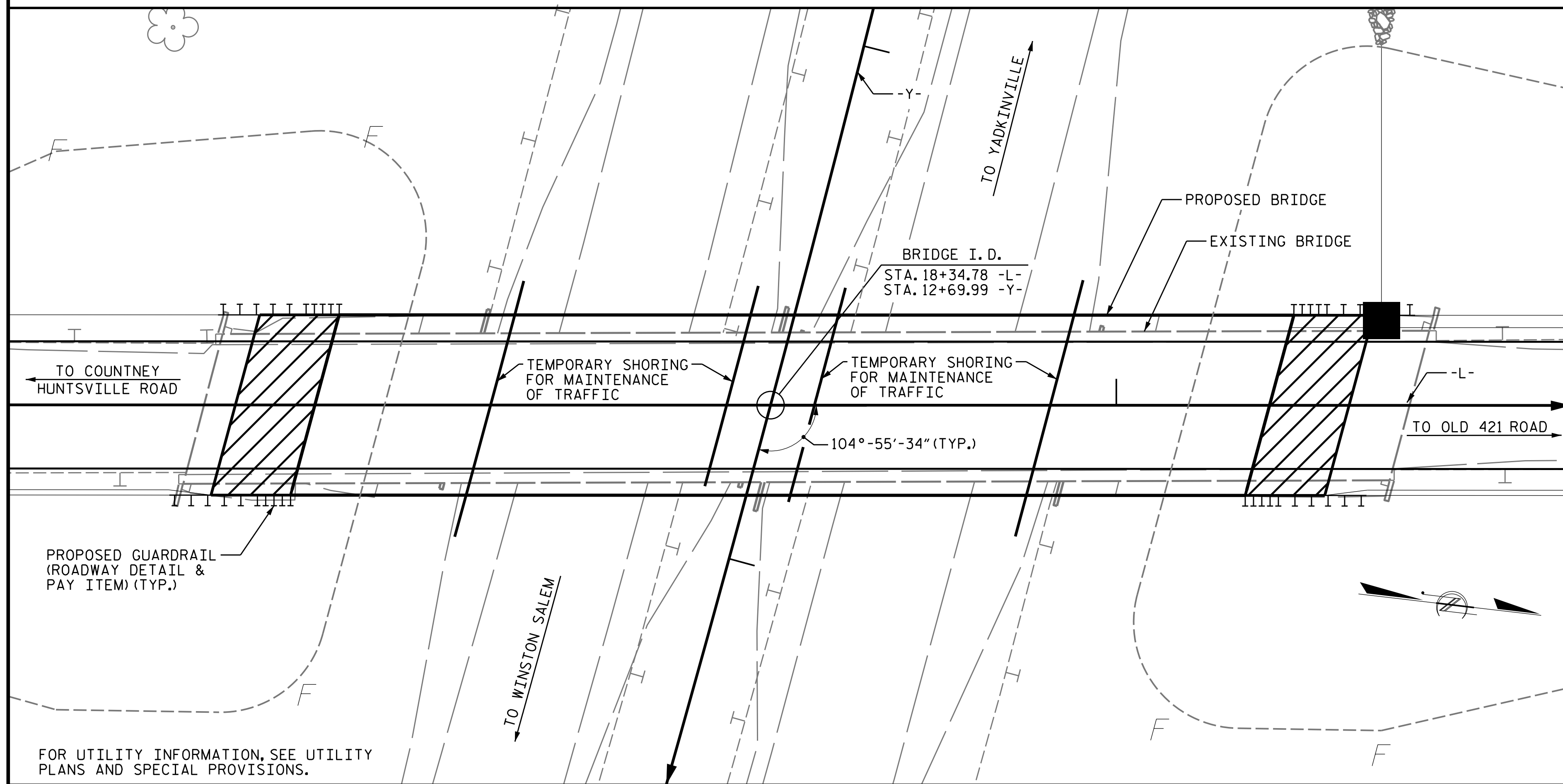


BENCHMARK #1: RR SPIKE SET IN BASE OF 22" POPLAR TREE, 562.93' LT. OF STA. 17+86.23 -L-, EL. 767.17



LOCATION SKETCH

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 SUBMITTAL OF WORKING DRAWINGS, SEE SPECIAL PROVISIONS.
- FOR FALSEWORK AND FORMWORK, SEE SPECIAL PROVISIONS.
- FOR CRANE SAFETY, SEE SPECIAL PROVISIONS.
- FOR GROUT FOR STRUCTURES, SEE SPECIAL PROVISIONS.
- FOR ASBESTOS ASSESSMENT FOR BRIDGE DEMOLITION AND RENOVATION ACTIVITIES SEE SPECIAL PROVISIONS.
- 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.
- THE CLASS AA CONCRETE IN THE BRIDGE DECK SHALL CONTAIN FLY ASH OR GROUND GRANULATED BLAST FURNACE SLAG AT THE SUBSTITUTION RATE SPECIFIED IN ARTICLE 1024-1 AND IN ACCORDANCE WITH ARTICLES 1024-5 AND 1024-6 OF THE STANDARD SPECIFICATIONS. NO PAYMENT WILL BE MADE FOR THIS SUBSTITUTION AS IT IS CONSIDERED INCIDENTAL TO THE COST OF THE REINFORCED CONCRETE DECK SLAB.
- WORK SHALL NOT BE STARTED ON THIS BRIDGE UNTIL ROADWAY SECTION HAS BEEN EXCAVATED.
- 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 OF REINFORCED CONCRETE DECK ON PRESTRESSED CONCRETE GIRDERS, 1 @ 48'-0", 2 @ 60'-6" AND 1 @ 60'-10" ON REINFORCED CONCRETE CAP ON PILES AT END BENT 1, REINFORCED CONCRETE POST AND BEAM ON FOOTINGS AT INTERIOR BENTS AND REINFORCED CONCRETE CAP ON FOOTING AT END BENT 2 SHALL BE REMOVED. THE EXISTING BRIDGE IS PRESENTLY NOT POSTED FOR LOAD LIMIT. FOR REMOVAL OF EXISTING STRUCTURE, SEE SPECIAL PROVISIONS.
- 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 DIFFERENCE 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.

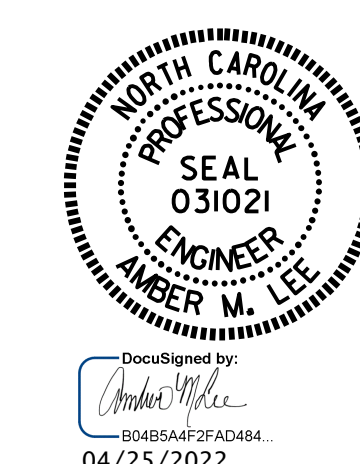
TOTAL BILL OF MATERIAL

| | REMOVAL OF EXISTING STRUCTURE | ASBESTOS ASSESSMENT | FOUNDATION EXCAVATION FOR BENT | REINFORCED CONCRETE DECK SLAB | GROOVING BRIDGE FLOORS | CLASS A CONCRETE | BRIDGE APPROACH SLABS | REINFORCING STEEL | SPIRAL COLUMN REINFORCING STEEL |
|----------------|-------------------------------|---------------------|--------------------------------|-------------------------------|------------------------|------------------|-----------------------|-------------------|---------------------------------|
| | LUMP SUM | LUMP SUM | LUMP SUM | SO. FT. | SO. FT. | CU. YDS. | LUMP SUM | LBS. | LBS. |
| SUPERSTRUCTURE | | LUMP SUM | | 6,324 | 6,259 | | LUMP SUM | | |
| END BENT 1 | | | | | | 34.3 | | 4,460 | |
| BENT 1 | | | LUMP SUM | | | 49.5 | | 7,264 | 877 |
| END BENT 2 | | | | | | 35.4 | | 4,515 | |
| TOTAL | LUMP SUM | LUMP SUM | LUMP SUM | 6,324 | 6,259 | 119.2 | LUMP SUM | 16,239 | 877 |

| | 54" PRESTRESSED CONCRETE GIRDERS | | PILE DRIVING EQUIPMENT SETUP FOR HP 12 X 53 STEEL PILES | | HP 12 X 53 STEEL PILES | | TWO BAR METAL RAIL | 1'-2" X 2'-6" CONCRETE PARAPET | 4" SLOPE PROTECTION | ELASTOMERIC BEARINGS |
|----------------|----------------------------------|----------|---|-----|------------------------|----------|--------------------|--------------------------------|---------------------|----------------------|
| | NO. | LIN. FT. | EACH | NO. | LIN. FT. | LIN. FT. | LIN. FT. | SO. YDS. | LUMP SUM | |
| SUPERSTRUCTURE | 8 | 684.83 | | | | 330.08 | 345.71 | | LUMP SUM | |
| END BENT 1 | | | 6 | 6 | 450 | | | 373 | | |
| BENT 1 | | | 12 | 12 | 540 | | | | | |
| END BENT 2 | | | 6 | 6 | 390 | | | 241 | | |
| TOTAL | 8 | 684.83 | 24 | 24 | 1380 | 330.08 | 345.71 | 614 | LUMP SUM | |

PROJECT NO. BR-0051
 YADKIN COUNTY
 STATION: 18+34.78 -L-

SHEET 3 OF 3



STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH
 GENERAL DRAWING
 FOR BRIDGE OVER
 US 421 ON SR 1711 BETWEEN
 COURTNEY HUNTSVILLE RD.
 AND OLD 421 RD.

DRAWN BY : M. G. SHAIKH DATE : 04/2020
 CHECKED BY : H.A. LOCKLEAR DATE : 03/2022
 DESIGN ENGINEER OF RECORD: E. BAYISSA DATE : 08/2019

4/25/2022
 R:\Structures\OBD.FINAL PLANS\400.007.BR-0051.SMU.GD.003.980090.dgn
 omlee

DOCUMENT NOT CONSIDERED
 FINAL UNLESS ALL
 SIGNATURES COMPLETED

| REVISIONS | | | | | | SHEET NO. |
|-----------|-----|-------|-----|-----|-------|--------------|
| NO. | BY: | DATE: | NO. | BY: | DATE: | S-3 |
| 1 | | | 3 | | | TOTAL SHEETS |
| 2 | | | 4 | | | 32 |