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| | | | $\top \bigcirc \top$ | AL | BILL | | DF MA | TERIA | | | | | | | | |
|----------------|--|---|-----------------------------|-----------------------|-----------------------|-----------------|---------------------|-----------------------|----------------------|----------------|------------------------------|--|---|---|------------------|--------------------------|
| | FOUNDATION Excavation For bent no.1 | PDA TESTING | REINF CONC DECK | ORCED RETE SLAB | GROOV BRID FLOO | ING Ge RS | CLASS A Concrete | BRID APPRO SLAE | GE ACH 3S | REI | NFORCING STEEL | SPIRAL COLUMN REINFORCI STEEL | ENG ST | APPROX. 3,600 LBS Ructural Steel | | |
| | LUMP SUM | EACH | SQ. | FT. | SQ.F | T. | CU. YDS. | LUMP | SUM | | LBS. | LBS. | L | UMP SUM | | |
| SUPERSTRUCTURE | | | 13,4 | 130 | 10,28 | 86 | | | | | | | | | | |
| END BENT NO.1 | | | | | | | 122.4 | | | - | 18,822 | | | | | |
| BENT NO.1 | | 1 | | | | | 160.6 | | | 6 | 23,538 | 1,368 | | | | |
| END BENT NO.2 | | | | | | | 101.1 | | | | 11,931 | | | | | |
| TOTAL | LUMP SUM | 1 | 13,4 | 130 | 10,28 | 86 | 384.1 | LUMP | SUM | 1 | 54,291 | 1,368 | | UMP SUM | | |
| | PILE DRIVING EQUIPMENT SETUP FOR HP 12X53 STEEL PILES | PILE DRIV EQUIPMENT FOR HP 14 STEEL PI | /ING SETUP X73 LES | HP 1 Steel | 2X53 PILES | HF Ste | P 14X73 El PILES | STEEL PILE POINTS | TWO E Meta Rai | BAR Al I | 1'-2" X 2 Concre Parap | 2'-6" 1'-2" ETE CC ET P, | X 3'-3 ¹ /2' NCRETE ARAPET | " 4" SLOPE PROTECTION | DISC BEARINGS | EXPANSION Joint seals |
| | EACH | EACH | | NO. L | IN.FT. | NO. | LIN.FT. | EACH | LIN. | FT. | LIN.F | T. L | IN.FT. | SY | LUMP SUM | LUMP SUM |
| SUPERSTRUCTURE | | | | | | | | | 687. | .8 | 351.6 | 5 | 354.1 | | | |
| END BENT NO.1 | 20 | | | 20 | 400 | | | | | | | | | 234 | | |
| BENT NO.1 | | 27 | | | | 27 | 608 | 27 | | | | | | | | |
| END BENT NO.2 | 19 | | | 19 | 1,180 | | | | | | | | | 259 | | |
| TOTAL | 39 | 27 | | 39 | 1,580 | 27 | 608 | 27 | 687 | .8 | 351.6 | $\hat{\mathbf{D}}$ | 354.1 | 493.0 | LUMP SUM | LUMP SUM |

| DRAWN BY : | TWL | | DATE : . | 11/2019 |
|-----------------|------------|-----|----------|---------|
| CHECKED BY : | MAL | | DATE : . | 11/2019 |
| DESIGN ENGINEER | OF RECORD: | MAL | DATE : | 11/2019 |

10/14/2021 X:\P\1031785002 U-2579AB WS North Beltway\Design\Structures\CAD\Site 1\401_007_U2579AB_SMU_GD4_S-4_330722.dgn CuanyN

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

NOTE:

SAMPLE BAR REPLACEMENT LEI BASED ON 30" (SAMPLE LENGTH SPLICE LENGTHS AND Fy = 60

NOTES

ASSUMED LIVE LOAD = HL-93 OR ALTERNATE LOADING.

THIS BRIDGE HAS BEEN DESIGNED IN ACCORDANCE WITH THE REQUIREMENTS OF 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 SAFTEY, SEE SPECIAL PROVISIONS.

FOR GROUT FOR STRUCTURES, SEE SPECIAL PROVISIONS.

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.

ALL STRUCTURAL STEEL SHALL BE AASHTO M270 GRADE 50W AND PAINTED IN ACCORDANCE WITH SYSTEM 5 OR SYSTEM 6 OF THE STRUCTURAL STEEL SHOP COATINGS PROGRAM AND SECTION 442-8 OF THE STANDARD SPECIFICATIONS UNLESS OTHERWISE NOTED ON THE PLANS.

WORK SHALL NOT BE STARTED ON THIS BRIDGE UNTIL ROADWAY SECTION HAS BEEN EXCAVATED.

FOR EROSION CONTROL MEASURES, SEE EROSION CONTROL PLANS.

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.

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.

|)″ | | PROJE | CT NO | U-2 | 579A | <u>B</u> | | | |
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|) //) // | | F | FORSYTH | - | CO | UNTY | | | |
| <u>)</u> " | | STATION: 22+26.35 -Y1B- | | | | | | | |
| AND EX - 60 KST | SHEET 4 OF 4 | | | | | | | | |
| AND TY - OU KSI. | STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPOF RALEIGH | | | | | | | | |
| | GENERAL DRAWI | | | | | | | | |
| | RSSH | C NORT S | VER WINS HERN BEL R 2667 A | STON TWA` ND S | -SALEN Y BETN R 265 | A WEEN 9 | | | |
| | RS&H Architects-Engineers-Planners, Inc. | | REVISIONS | | | SHEET NO. | | | |
| OCUMENT NOT CONSIDERED FINAL UNLESS ALL | 8521 Six Forks Road, Suite 400 919-926-4100 FAX 919-846-9080 | NO. ВҮ: | DATE: NO. | BY: | DATE: | S1-4 total sheets | | | |
| SIGNATURES COMPLETED | North Carolina License Nos. 50073 * F-0493 * C-28 | 2 | <u>A</u> | | | 47 | | | |