

NOTES

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 MAINTENANCE AND PROTECTION OF TRAFFIC BENEATH PROPOSED STRUCTURE AT STATION 381+40.00 -L-, SEE SPECIAL PROVISIONS.
 FOR PRECAST CONCRETE ARCH BRIDGE, SEE SPECIAL PROVISIONS.
 FOR MEMBRANE WATERPROOFING SYSTEM, 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 DETAILS SHOWN HERE ARE FOR GENERAL LAYOUT ONLY. THE CONTRACTOR SHALL SUPPLY DESIGNS AND DETAILS FOR REVIEW AND APPROVAL THAT MEET THE REQUIREMENTS OF AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS AND SHALL BE SEALED BY A NORTH CAROLINA REGISTERED PROFESSIONAL ENGINEER.

THESE PLANS SHALL BE USED IN CONJUNCTION AND COORDINATE WITH THE PRECAST CONCRETE ARCH BRIDGE MANUFACTURER'S PLANS. THE CONTRACTOR SHALL REPORT ANY DISCREPANCIES TO THE ENGINEER PRIOR TO COMMENCING WITH CONSTRUCTION.

ARCHITECTURAL CONCRETE SURFACE TREATMENT SHALL BE APPLIED TO THE OUTSIDE FACES OF THE CONCRETE ARCH LAND BRIDGE, CONCRETE BENTS AND CONCRETE PARAPETS AS DETAILED ON THE PLANS. FOR ARCHITECTURAL CONCRETE SURFACE TREATMENT, SEE SPECIAL PROVISIONS.

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.

FOR PAYMENT FOR WILDLIFE FENCE, SEE ROADWAY PLANS AND SPECIAL PROVISIONS.

THE WILDLIFE FENCE ON THE PRECAST CONCRETE ARCH BRIDGE SHALL BE INSTALLED PRIOR TO FILL BEING PLACED ON THE UNITS.

FINAL ELEVATIONS OF THE PRECAST REINFORCED ARCH BRIDGE, INCLUDING TOP OF PARAPET ELEVATIONS, ARCH PEDESTAL ELEVATIONS AND FOOTING ELEVATIONS SHALL BE DETERMINED BY THE CONTRACTOR IN ACCORDANCE WITH THE REQUIRED MINIMUM VERTICAL AND HORIZONTAL CLEARANCES, FIELD CONDITIONS AND DIMENSIONS AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

ALL PRECAST CONCRETE ARCH UNITS SHALL BE INSTALLED IN PLACE BEFORE ANY FILL CAN BE PLACED ON THE UNITS.

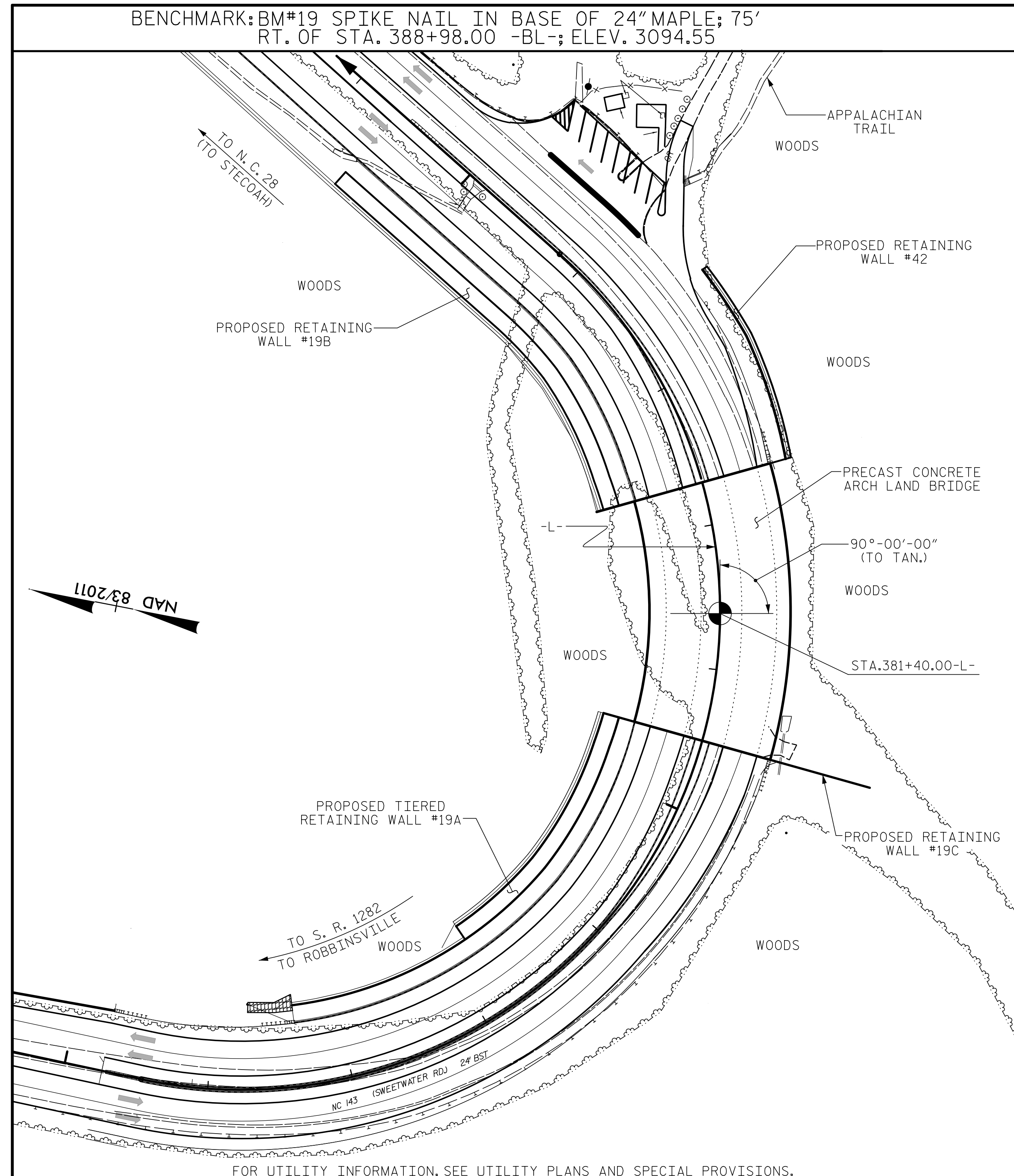
TOTAL STRUCTURE QUANTITIES

PRECAST CONCRETE ARCH BRIDGE	LUMP SUM
MEMBRANE WATERPROOFING SYSTEM	LUMP SUM
ARCHITECTURAL CONCRETE SURFACE TREATMENT	3000 SQ. FT.

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 LENGTHS BASED ON 30" (SAMPLE LENGTH) PLUS TWO SPLICE LENGTHS AND $f_y = 60\text{ksi}$.



LOCATION SKETCH

PROJECT NO. A-0009CB
GRAHAM COUNTY
 STATION: 381+40.00 -L-

SHEET 1 OF 6

STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

PRECAST CONCRETE ARCH LAND BRIDGE
 OVER NC 143 BETWEEN SR 1282 AND NC 28

9/13/2022 | 9:27 AM EDT

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

TGS ENGINEERS
 706 HILLSBOROUGH STREET SUITE 200
 RALEIGH, NC 27603
 PH (919) 773-8887
 CORP. LICENSE NO.: C-0275

REVISIONS

NO.	BY:	DATE:	NO.	BY:	DATE:
1			3		
2			4		

SHEET NO. S-1
 TOTAL SHEETS 6

DRAWN BY : S. B. WILLIAMS DATE : 3-22
 CHECKED BY : MGC DATE : 3-22