FOUNDATION LAYOUT

DIMENSIONS LOCATING PILES ARE SHOWN TO PILE CENTERLINE.

ORIENT PILES AS SHOWN.

SEE ROADWAY PLANS AND SECTION 235 OF THE STANDARD SPECIFICATIONS FOR THE SETTLEMENT GAUGES REQUIRED AT END BENT NO.1 AND END BENT NO.2.

FOR PILES, SEE SECTION 450 OF THE STANDARD SPECIFICATIONS.

PILES AT BENT NO.1 ARE DESIGNED FOR A FACTORED RESISTANCE OF 85 TONS PER PILE.

DRIVE PILES AT BENT NO.1 TO A REQUIRED DRIVING RESISTANCE OF 145 TONS PER PILE.

THE SPREAD FOOTINGS AT END BENT NO.1 AND END BENT NO.2 ARE DESIGNED FOR A FACTORED RESISTANCE OF 3.5 TSF.

OBSERVE A 1 MONTH WAITING PERIOD AFTER CONSTRUCTING THE END BENT RETAINING WALL UP TO THE BOTTOM OF FOOTING ELEVATION BEFORE BEGINNING CONSTRUCTION OF THE FOOTING AND CAP AT END BENT NO.1 AND END BENT NO.2. FOR BRIDGE WAITING PERIODS, SEE ROADWAY PLANS AND SPECIAL PROVISIONS.

SURVEY AND RECORD THE BOTTOM OF FOOTING ELEVATION FOR END BENT NO.1 AND END BENT NO 2 AT THE FOLLOWING POINTS DURING CONSTRUCTION. REPORT THESE ELEVATIONS TO THE ENGINEER.

- A. AFTER COMPLETION OF THE FOOTING AND CAP.
- B. AFTER COMPLETION OF THE SUPERSTRUCTURE AND BRIDGE DECK.

TEMPORARY SHORING NOTES:

FOR TEMPORARY SHORING AND POSITIVE PROTECTION FOR TEMPORARY SHORING, SEE PLANS AND TEMPORARY SHORING PROVISION.

BEFORE BEGINNING TEMPORARY SHORING DESIGN OR CONSTRUCTION, SURVEY EXISTING GROUND ELEVATIONS IN THE VICINITY OF SHORING LOCATIONS TO DETERMINE ACTUAL SHORING HEIGHTS.

SEE STANDARD DETAIL NO.1801.01 FOR STANDARD TEMPORARY SHORING AND 1801.02 FOR STANDARD TEMPORARY WALLS.

WHEN BACKFILL FOR RETAINING WALLS OVERLAPS WITH THE REINFORCED ZONE OF TEMPORARY WALLS, USE SHORING BACKFILL OR BACKFILL MATERIAL REQUIRED FOR RETAINING WALLS, WHICHEVER IS BETTER, IN THE REINFORCED ZONE OF TEMPORARY WALLS.

DESIGN TEMPORARY SHORING FOR THE ASSUMED SOIL PARAMETERS AND GROUNDWATER ELEVATION. INFORMATION PROVIDED FOR TEMPORARY SHORING DESIGN MAY NOT BE APPLICABLE TO THE ACTUAL SITE CONDITIONS ENCOUNTERED DURING CONSTRUCTION.

THE ASSUMED SOIL PARAMETERS ARE

FROM STATION 20+60 -Y5-, 40.0 FT LT, TO STATION 21+25 -Y5-, 40.0 FT LT: UNIT WEIGHT (Y) = 120 LB/CF FRICTION ANGLE (φ)= 28 DEGREES COHESION (c) = 0 LB/SF ASSUMED GROUNDWATER ELEVATION = 830 FT

FROM STATION 22+95 -Y5-, 35.0 FT LT, TO STATION 23+60 -Y5-, 35.0 FT LT: UNIT WEIGHT (Y) = 120 LB/CF FRICTION ANGLE (φ)= 28 DEGREES COHESION (c) = 0 LB/SF ASSUMED GROUNDWATER ELEVATION = 830 FT

PROJECT NO. U-2525C GUILFORD COUNTY STATION: 22+29.98 -Y5-

SHEET 2 OF 3

SEAL

11915

John C. Frye

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12/22/2017

STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION RALEIGH

GENERAL DRAWING

BRIDGE ON SR 1001 (NORTH CHURCH ST.) OVER GEL I-85 BYPASS BETWEEN SR 2373 AND SR 2348

SHEET NO. REVISIONS S7-2 NO. BY: DATE: DATE: BY: TOTAL SHEETS 28

PLANS PREPARED BY: P0 Box 700 Fuquay-Varina, NC 27526 (919) 552-2253 www.mottmac.com MOTT www.mottmac.com
MACDONALD LICENSE NO. F-0669

DOCUMENT NOT CONSIDERED

FINAL UNLESS ALL

SIGNATURES COMPLETED

DRAWN BY: L.T.FORBIS DATE: <u>7-2017</u> CHECKED BY: J.E. MONDOLFI DATE: 10-2017 DESIGN ENGINEER OF RECORD: J.E. MONDOLFI DATE: 12-2017

NOTES: