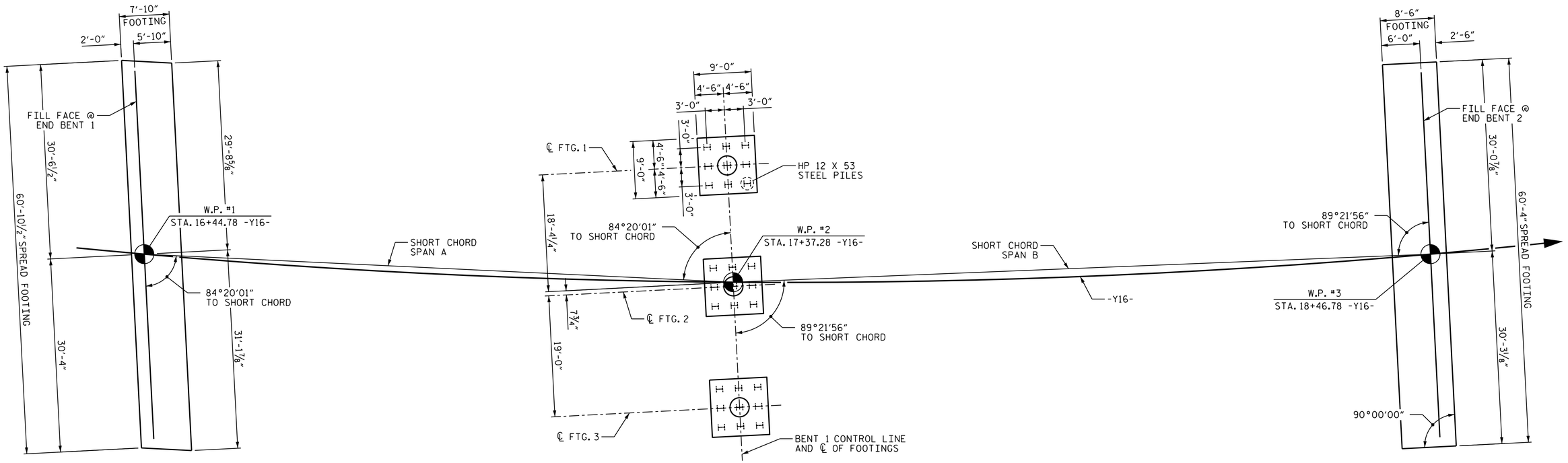

END BENT 1 | BENT 1 | END BENT 2

FOUNDATION LAYOUT

DIMENSIONS LOCATING PILES ARE SHOWN TO PILE CENTERLINE.

ORIENT PILES AS SHOWN.

NOTES:

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 90 TONS PER PILE.

DRIVE PILES AT BENT NO. 1 TO A REQUIRED DRIVING RESISTANCE OF 150 TONS PER PILE.

STEEL H-PILE POINTS ARE REQUIRED FOR STEEL H-PILES AT BENT NO. 1. FOR STEEL PILE POINTS, SEE SECTION 450 OF THE STANDARD SPECIFICATIONS.

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 16+05 -Y16-, 65.0 FT LT, TO STATION 16+45 -Y16-, 65.0 FT LT:
AT THE CONTRACTOR'S OPTION, USE STANDARD SHORING
UNIT WEIGHT (γ) = 120 LB/CF
FRICTION ANGLE (ϕ)= 30 DEGREES
COHESION (c) = 0 LB/SF
ASSUMED GROUNDWATER ELEVATION = 828 FT

FROM STATION 18+40 -Y16-, 70.0 FT LT, TO STATION 18+80 -Y16-, 70.0 FT LT:
AT THE CONTRACTOR'S OPTION, USE STANDARD SHORING
UNIT WEIGHT (γ) = 120 LB/CF
FRICTION ANGLE (ϕ)= 30 DEGREES
COHESION (c) = 0 LB/SF
ASSUMED GROUNDWATER ELEVATION = 825 FT

DRAWN BY: J. T. WILLIAMS DATE: 2-2017
CHECKED BY: J. E. MONDOLFI DATE: 10-2017
DESIGN ENGINEER OF RECORD: J. E. MONDOLFI DATE: 11-2017

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

PLANS PREPARED BY:
MOTT MACDONALD
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Fuquay-Varina, NC 27526
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www.mottmac.com
LICENSE NO. F-0669

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 11915 JOHN C. FRYE

Docusigned by: John C. Frye
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12/22/2017

PROJECT NO. U-2525C
GUILFORD COUNTY
STATION: 17+37.28 -Y16-

SHEET 2 OF 4

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

GENERAL DRAWING

BRIDGE ON SR 2526
(SUMMIT AVE.) OVER
GEL I-85 BYPASS BETWEEN
SR 2567 AND SR 2565

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S1-2
1			3			TOTAL SHEETS
2			4			29

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