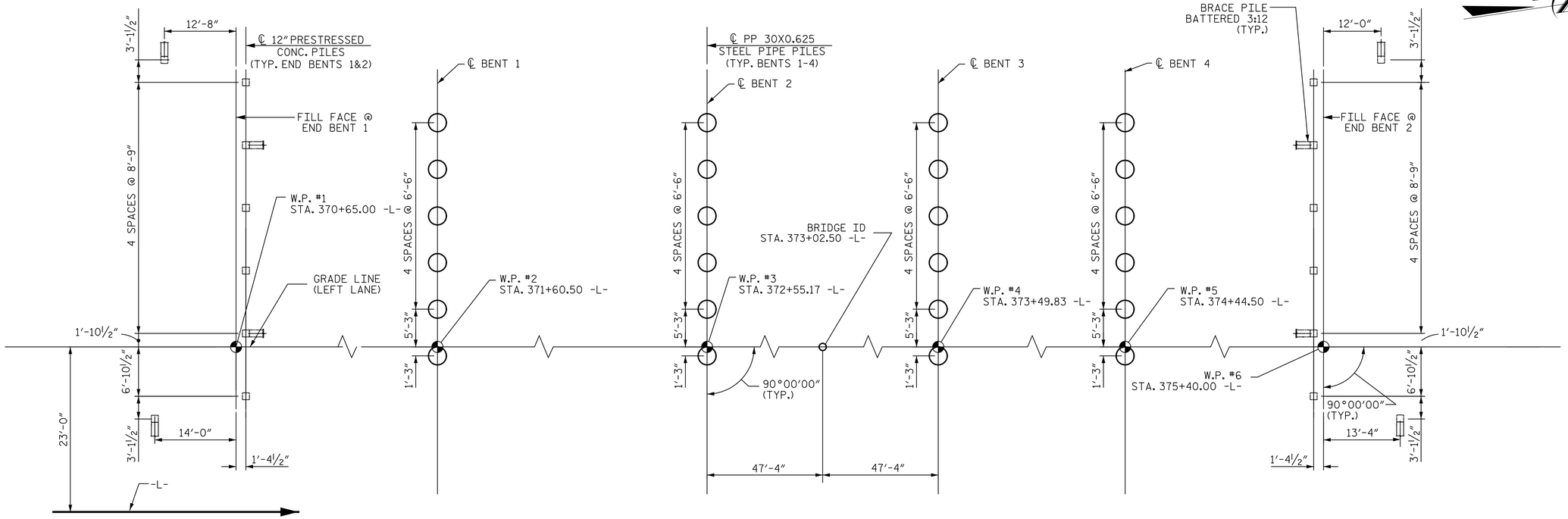

END BENT 1 | BENT 1 | BENT 2 | BENT 3 | BENT 4 | END BENT 2

FOUNDATION LAYOUT PLAN

FOUNDATION NOTES

FOR PILES, SEE SECTION 450 OF THE STANDARD SPECIFICATIONS.

PILES AT END BENT 1 AND END BENT 2 ARE DESIGNED FOR A FACTORED RESISTANCE OF 120 TONS PER PILE.

DRIVE PILES AT END BENT 1 AND END BENT 2 TO A REQUIRED DRIVING RESISTANCE OF 160 TONS PER PILE.

PILES AT BENT 1 THROUGH BENT 4 ARE DESIGNED FOR A FACTORED RESISTANCE OF 225 TONS PER PILE.

DRIVE PILES AT BENT 1 THROUGH BENT 4 TO A REQUIRED DRIVING RESISTANCE OF 305 TONS PER PILE. THIS REQUIRED DRIVING RESISTANCE INCLUDES ADDITIONAL RESISTANCE FOR DOWNDRAG OR SCOUR.

INSTALL PILES AT BENT 1, BENT 2, BENT 3 AND BENT 4 TO A TIP ELEVATION NO HIGHER THAN -30 FT, -45 FT, -45 FT AND -35 FT, RESPECTIVELY.

STEEL PIPE PILE CUTTING SHOES ARE REQUIRED FOR STEEL PIPE PILES AT BENT 1 THROUGH BENT 4. USE "INSIDE FIT" PIPE PILE CUTTING SHOES. FOR STEEL PILE POINTS, SEE SECTION 450 OF THE STANDARD SPECIFICATIONS.

THE SCOUR CRITICAL ELEVATIONS FOR BENT 2, BENT 3 AND BENT 4 ARE ELEVATION -11 FT, -11 FT AND -3 FT, RESPECTIVELY. SCOUR CRITICAL ELEVATIONS ARE USED TO MONITOR POSSIBLE SCOUR PROBLEMS DURING THE LIFE OF THE STRUCTURE.

IT HAS BEEN ESTIMATED THAT A HAMMER WITH AN EQUIVALENT RATED ENERGY IN THE RANGE OF 82,000 FT-LBS TO 152,500 FT-LBS PER BLOW WILL BE REQUIRED TO DRIVE PILES AT BENT 1 THROUGH BENT 4. THIS ESTIMATED ENERGY RANGE DOES NOT RELEASE THE CONTRACTOR FROM PROVIDING DRIVING EQUIPMENT IN ACCORDANCE WITH SUBARTICLE 450-3(D)(2) OF THE STANDARD SPECIFICATIONS.

TESTING THE FIRST 12" PRESTRESSED CONCRETE PRODUCTION PILE WITH THE PDA DURING DRIVING, RESTRIKING OR REDRIVING IS REQUIRED AT END BENT 1 OR END BENT 2. FOR PDA TESTING, SEE SECTION 450 OF THE STANDARD SPECIFICATIONS.

TESTING THE FIRST 30" DIA. PRODUCTION STEEL PIPE PILE WITH THE PDA DURING DRIVING, RESTRIKING OR REDRIVING IS REQUIRED. FOR PDA TESTING, SEE SECTION 450 OF THE STANDARD SPECIFICATIONS.

IF NECESSARY, PREDRILL PILE LOCATIONS AT BENT 1 THROUGH BENT 4 TO NO LOWER THAN ELEVATION -30 FT, -45 FT, -45 FT AND -35 FT, RESPECTIVELY, WITH EQUIPMENT THAT WILL RESULT IN A MAXIMUM PREDRILLING DIAMETER OF 30". FOR PREDRILLING FOR PILES, SEE SECTION 450 OF THE STANDARD SPECIFICATIONS.

CONTRACTOR MAY PREDRILL THROUGH THE CENTER OF THE 30" DIA. STEEL PIPE PILES WITH CUTTING SHOES TO ELEVATIONS AS NOTED IN THE PLANS AT BENT 1 THROUGH BENT 4.

DocuSigned by: DB3C8E45B06D499...

DESIGN ENGINEER OF RECORD: DATE : 4/12/2015

DRAWN BY : R.J. FLORY DATE : 3/17/14

CHECKED BY : R. C. LARSON DATE : 4/01/14

DocuSigned by: DB3C8E45B06D499...

NORTH CAROLINA PROFESSIONAL SEAL 14114 ENGINEER ROBERT C. LARSON

4/12/2015

ENGINEERS ● PLANNERS ● ECOLOGISTS LICENSE NUMBER C-0764

KCI Associates of North Carolina, P.A.

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DWG. REF. NO. 2 OF 34

PROJECT NO. R-2514D

JONES COUNTY

STATION: 373+02.50 -L-

SHEET 2 OF 4

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

GENERAL DRAWING
FOR BRIDGE ON US 17 BYPASS
OVER GOSHEN BRANCH
BETWEEN SR 1337 AND SR 1121
LEFT LANE STR-#5

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

SHEET NO. S05-2

TOTAL SHEETS S05-34