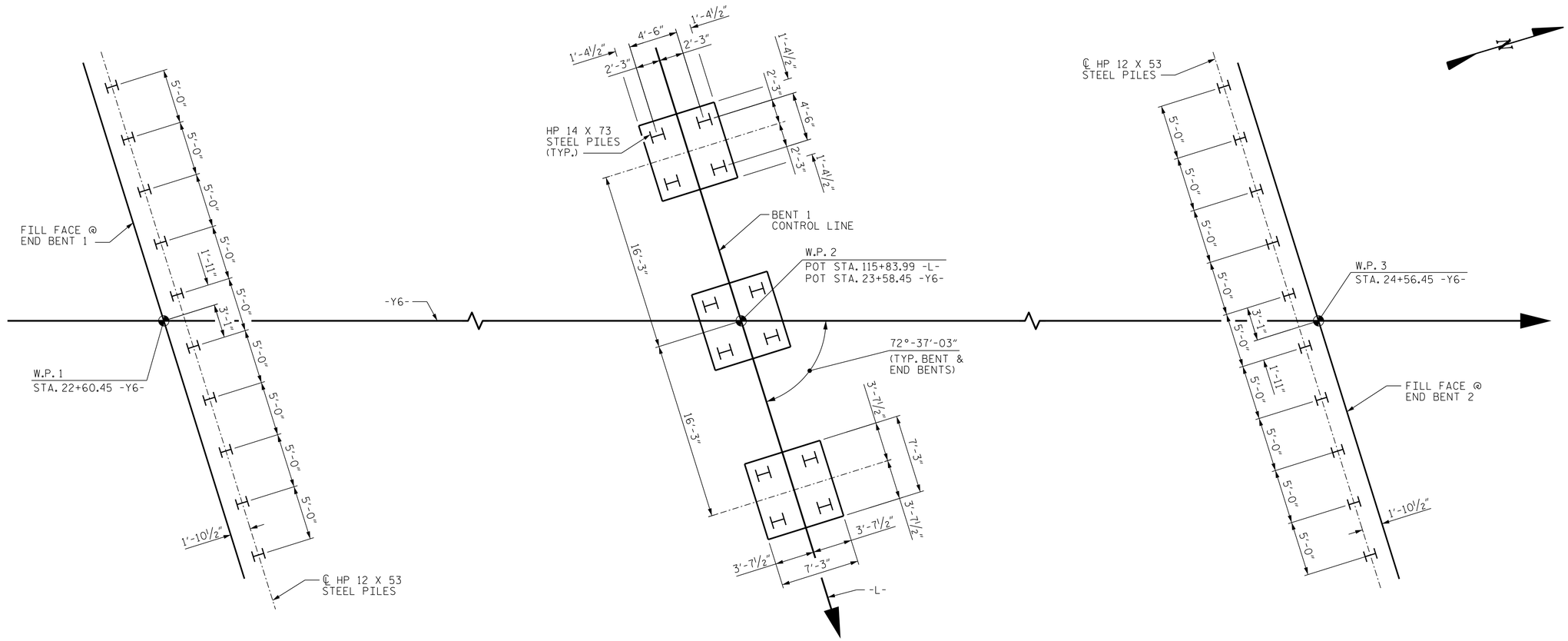

END BENT 1 BENT 1 END BENT 2

FOUNDATION LAYOUT

DIMENSIONS LOCATING PILES ARE SHOWN TO THE PILE CENTERLINE AT THE BOTTOM OF CAP OR FOOTING.

FOOTING DIMENSIONS ARE TYPICAL FOR EACH FOOTING AT BENT 1.

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 200 TONS PER PILE.

PILES AT BENT 1 ARE DESIGNED FOR A FACTORED RESISTANCE OF 160 TONS PER PILE.

DRIVE PILES AT BENT 1 TO A REQUIRED DRIVING RESISTANCE OF 270 TONS PER PILE.

STEEL H-PILE POINTS ARE REQUIRED FOR STEEL H-PILES AT END BENT 1, END BENT 2 AND BENT 1. FOR STEEL PILE POINTS, SEE SECTION 450 OF THE STANDARD SPECIFICATIONS.

IT HAS BEEN ESTIMATED THAT A HAMMER WITH AN EQUIVALENT RATED ENERGY IN THE RANGE OF 35 TO 50 FT-KIPS PER BLOW WILL BE REQUIRED TO DRIVE PILES AT END BENT 1, BENT 1 AND END BENT 2. 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 PILES WITH THE PDA DURING DRIVING, RESTRIKING OR REDRIVING MAY BE REQUIRED. THE ENGINEER WILL DETERMINE THE NEED FOR PDA TESTING. FOR PDA TESTING, SEE SECTION 450 OF THE STANDARD SPECIFICATIONS (AND FOR PILE DRIVING CRITERIA, SEE PILE DRIVING CRITERIA PROVISION).

PROJECT NO. W-5107
JOHNSTON COUNTY
STATION: 115+83.99 -L-

SHEET 2 OF 3

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

GENERAL DRAWING
FOR BRIDGE ON SR 2310
OVER US 70
BETWEEN SR 2562 AND
US 70-A

NORTH CAROLINA PROFESSIONAL SEAL 027799 ENGINEER ALLYSON K. ORR
Docusigned by:
DocuSigned by: 6A9A77D5A7D4E4...
11/26/2014

MI ENGINEERING
1011 SCHAUB DRIVE, SUITE 100
RALEIGH, NC 27606
(919) 851-6606
FIRM PE NUMBER : P-0671

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

SHEET NO. S-42
TOTAL SHEETS 70

DRAWN BY :	B.E. ATKINSON	DATE :	10/14
CHECKED BY :	G.R. COLS	DATE :	10/14
DESIGN ENGINEER OF RECORD :	A.K. ORR	DATE :	11/14

11/25/2014
2:36:23 PM
User: blanning
Filename: P:\NC Bridges\MI2005 - W-5107 Johnston Co\MI2005.02_Site 2\Structures\402.010.S02.W5107.SMU.GD2.dgn