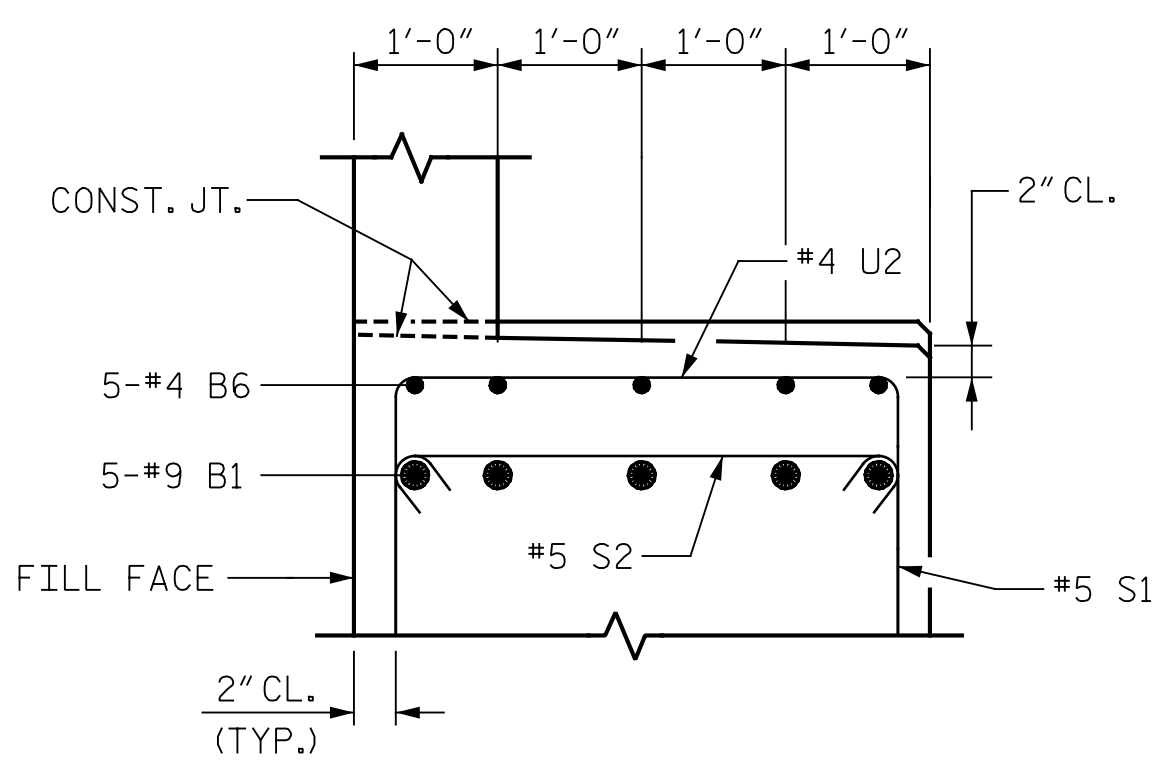


BAGGED STONE AND PIPE SHALL BE PLACED IMMEDIATELY AFTER COMPLETION OF END BENT EXCAVATION. PIPE MAY BE EITHER CONCRETE, CORRUGATED STEEL, CORRUGATED ALUMINUM ALLOY, OR CORRUGATED PLASTIC. PERFORATED PIPE WILL NOT BE ALLOWED.

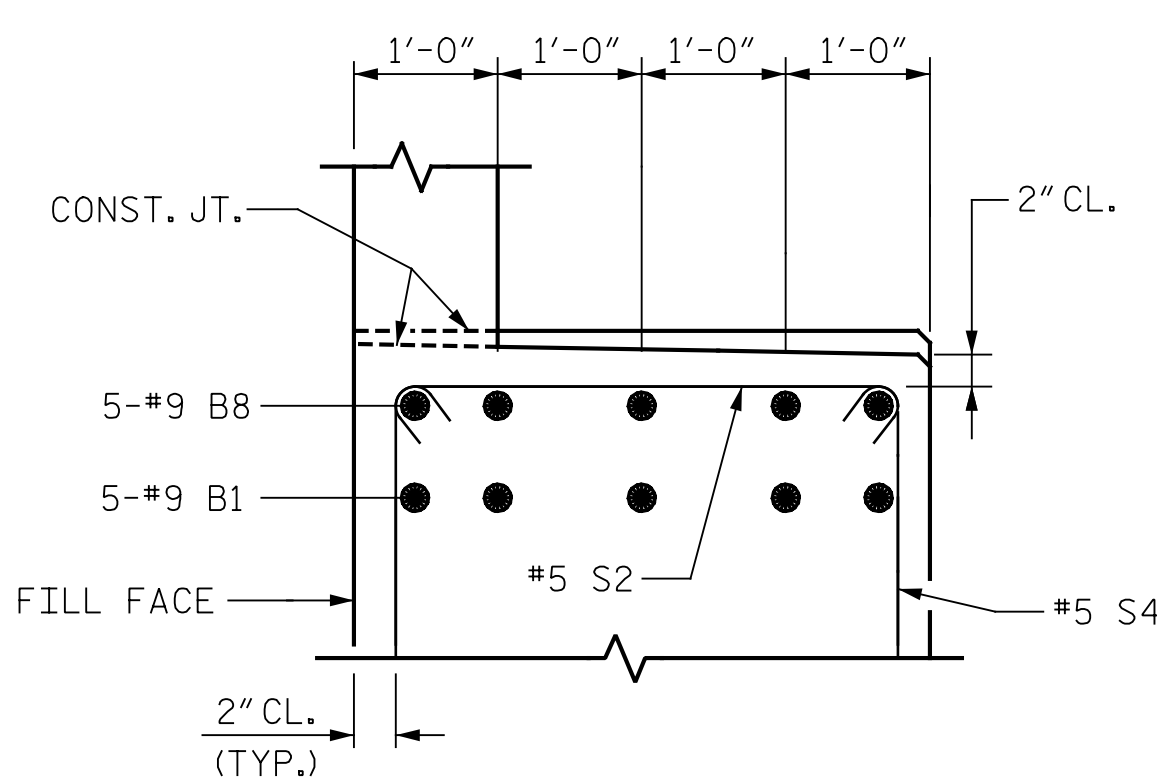
BAGGED STONE SHALL REMAIN IN PLACE UNTIL THE ENGINEER DIRECTS THAT IT BE REMOVED. THE CONTRACTOR SHALL REMOVE AND DISPOSE OF SILT ACCUMULATIONS AT BAGGED STONE WHEN SO DIRECTED BY THE ENGINEER. BAGS SHALL BE REMOVED AND REPLACED WHENEVER THE ENGINEER DETERMINES THAT THEY HAVE DETERIORATED AND LOST THEIR EFFECTIVENESS.

NO SEPARATE PAYMENT WILL BE MADE FOR THIS WORK AND THE ENTIRE COST OF THIS WORK SHALL BE INCLUDED IN THE UNIT CONTRACT PRICE BID FOR THE SEVERAL PAY ITEMS.

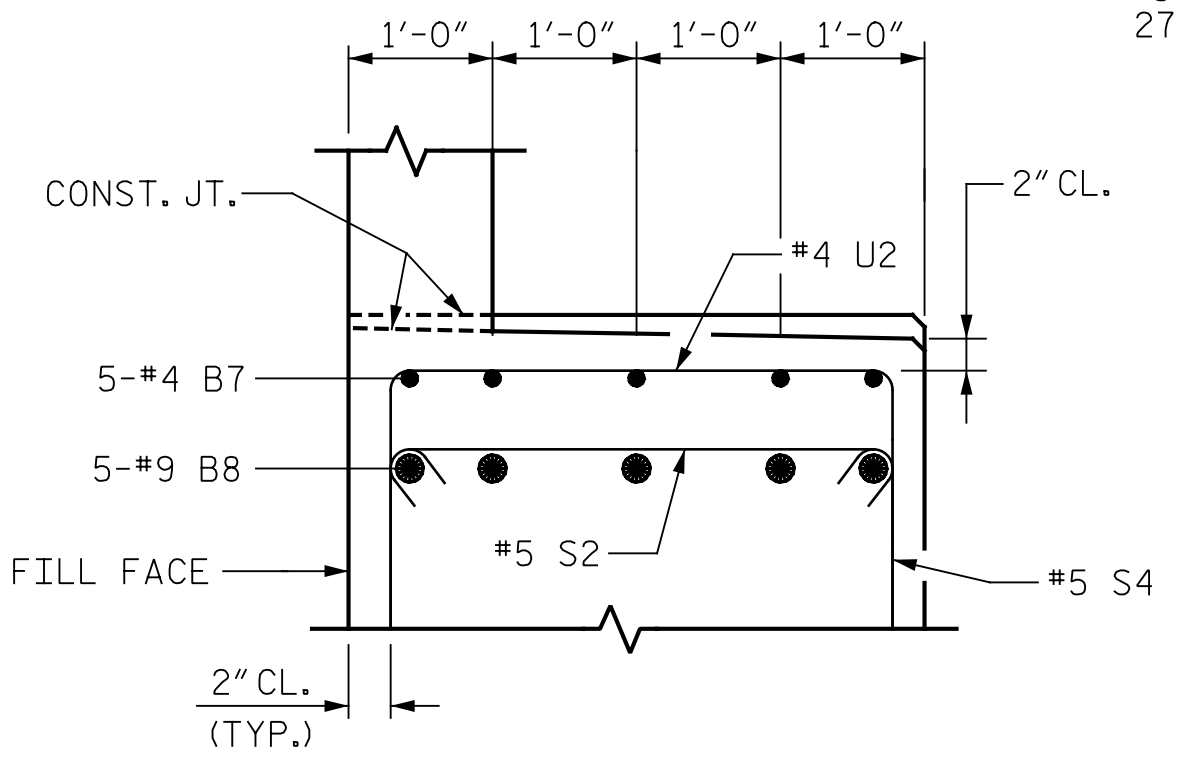
TEMPORARY DRAINAGE AT END BENT



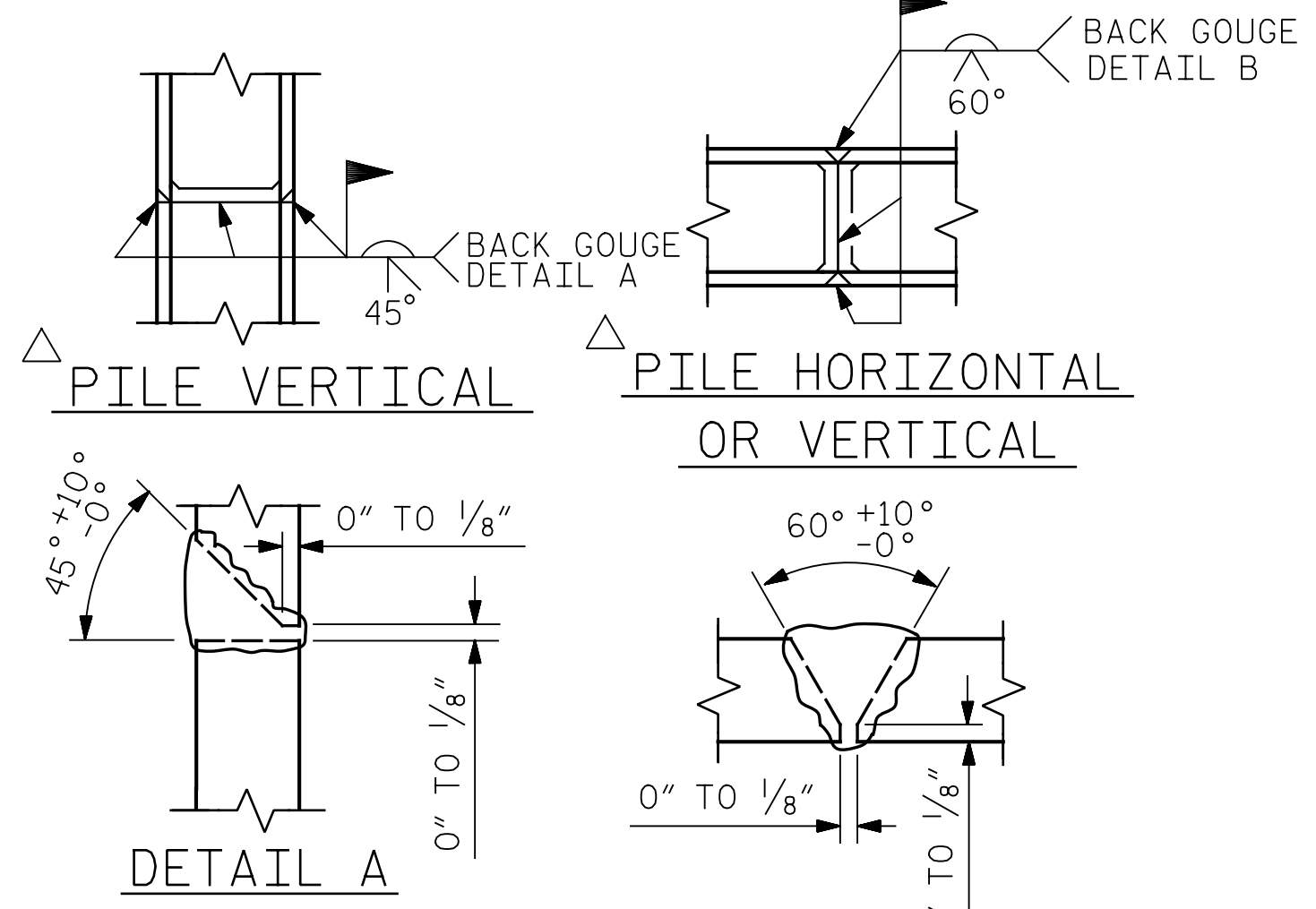
PARTIAL SECTION B-B



PARTIAL SECTION C-C

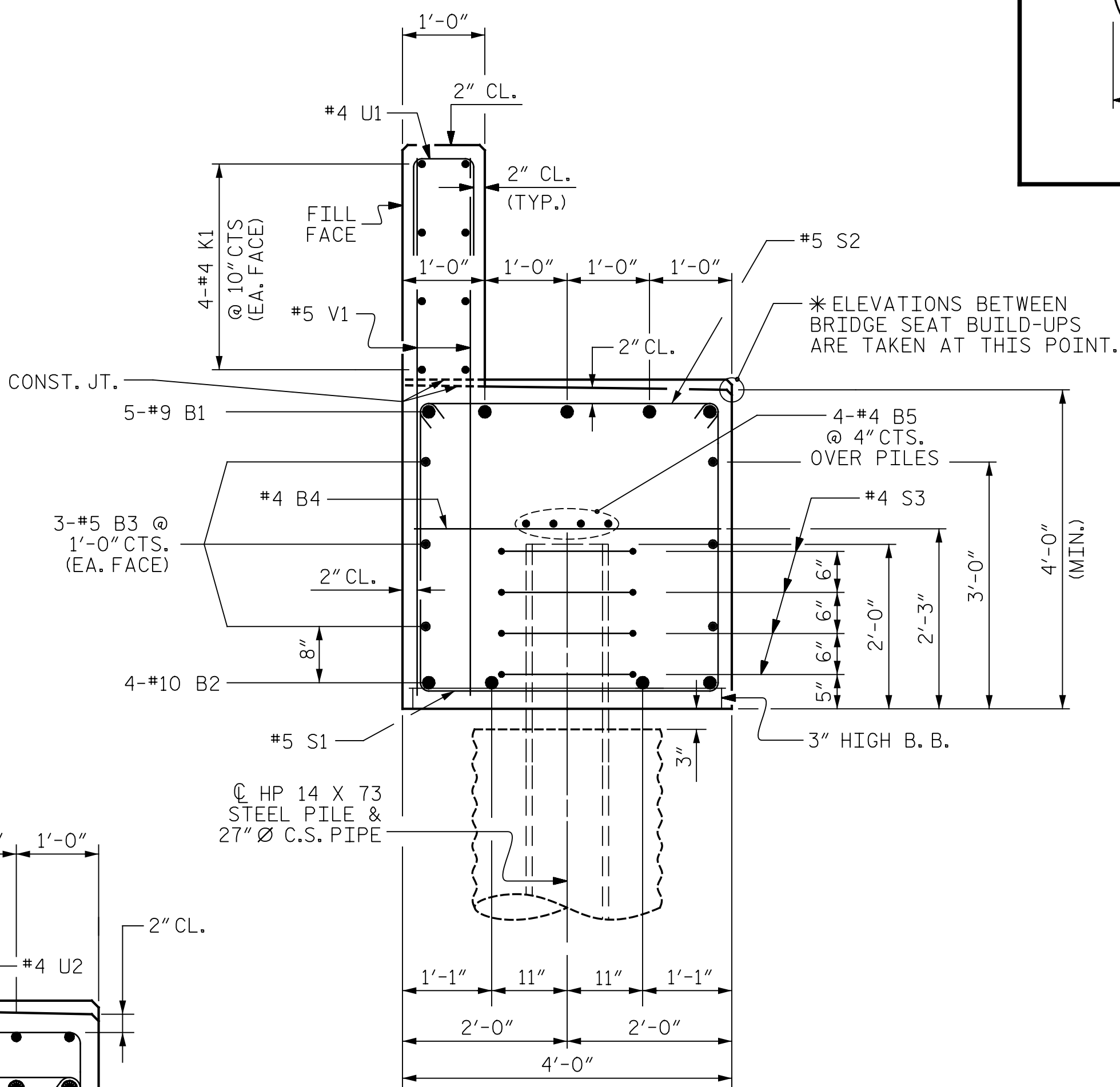


PARTIAL SECTION D-D

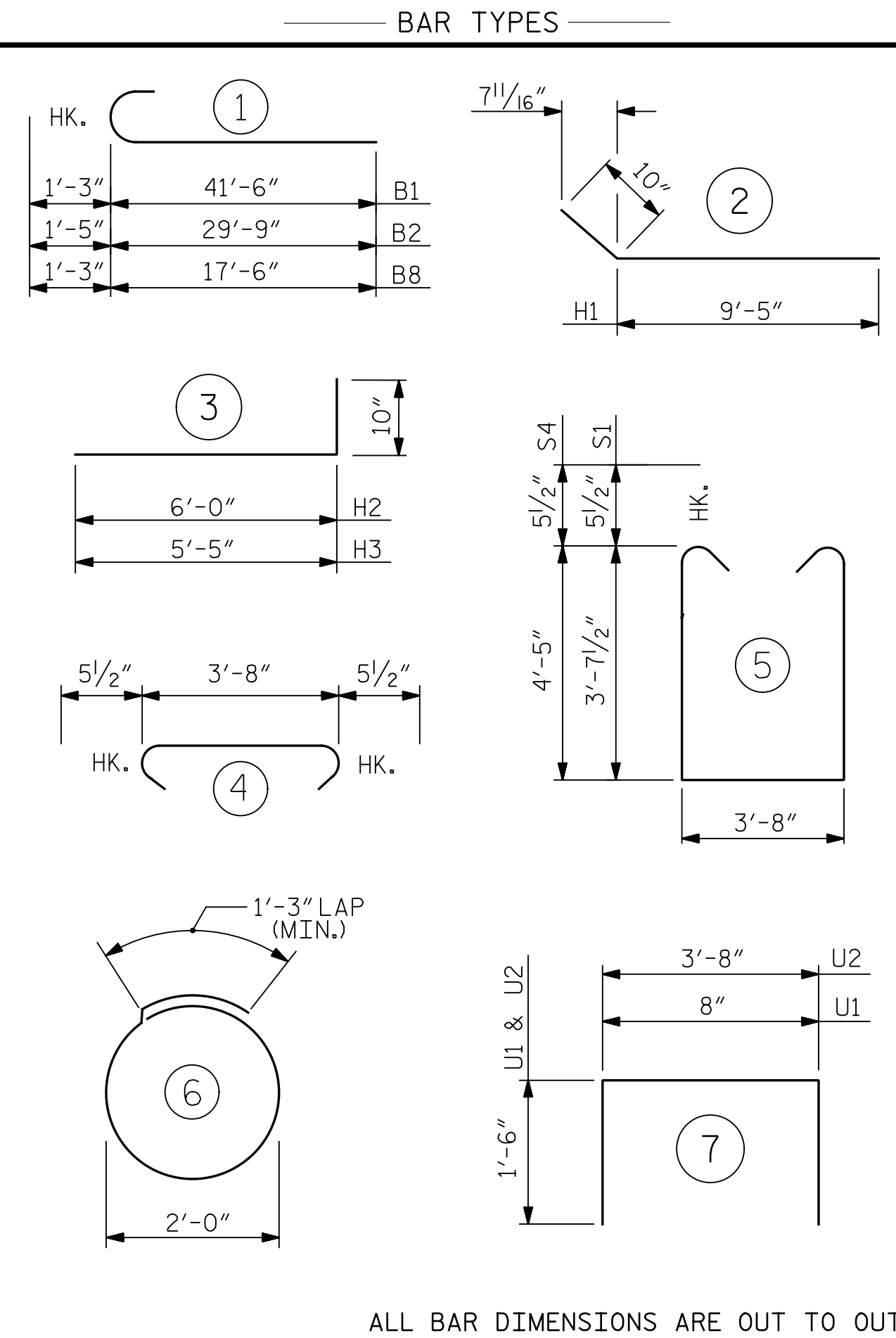


POSITION OF PILE DURING WELDING.

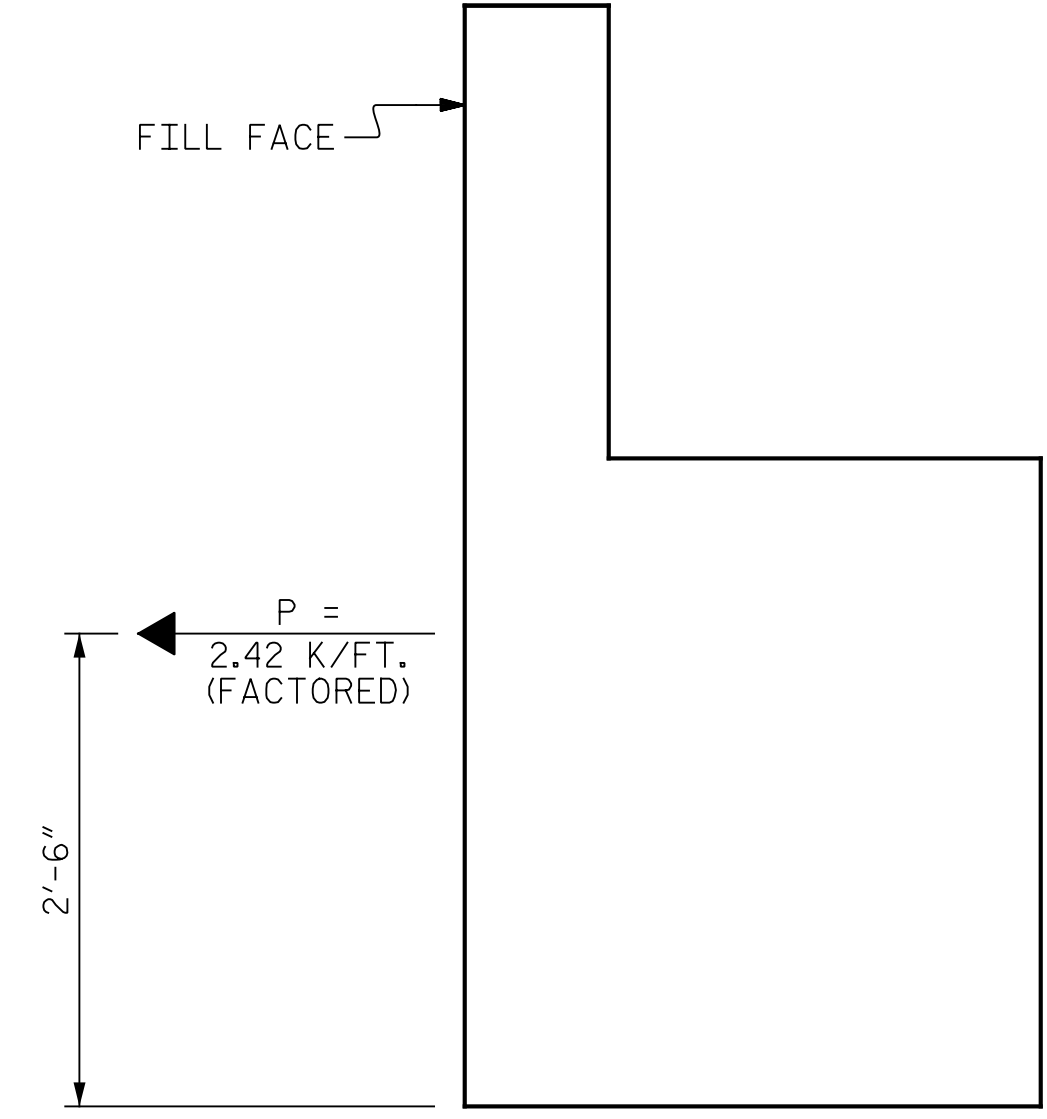
PILE SPLICE DETAILS



SECTION A-A



ALL BAR DIMENSIONS ARE OUT TO OUT.



TIE BACK DETAILS

(DETAIL SHOWING TIE BACK RESTRAINT FOR END BENT)

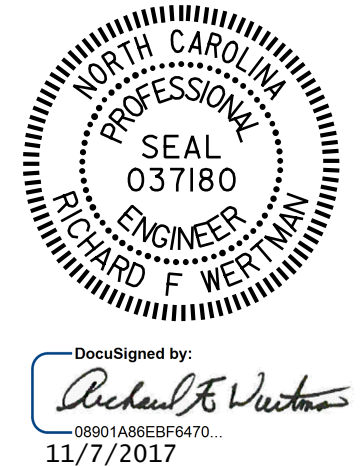
BILL OF MATERIAL					
END BENT #1					
BAR	No.	SIZE	TYPE	LENGTH	WEIGHT
B1	5	#9	1	42'-9"	727
B2	8	#10	1	31'-2"	1073
B3	12	#5	STR	27'-4"	342
B4	12	#4	STR	3'-8"	30
B5	8	#4	STR	27'-0"	145
B6	5	#4	STR	10'-9"	36
B7	10	#4	STR	6'-6"	44
B8	5	#9	STR	18'-9"	319
H1	30	#5	2	10'-3"	321
H2	13	#5	3	6'-10"	93
H3	13	#5	3	6'-3"	85
K1	16	#4	STR	24'-8"	264
K2	6	#4	STR	4'-8"	19
K3	3	#4	STR	1'-8"	4
K4	3	#4	STR	2'-5"	5
S1	39	#5	5	11'-10"	481
S2	59	#5	4	4'-7"	282
S3	28	#4	6	7'-7"	142
S4	20	#5	5	13'-5"	280
U1	41	#4	7	3'-8"	101
U2	16	#4	7	6'-8"	72
V1	82	#5	STR	6'-5"	549
V2	30	#4	STR	9'-4"	187
V3	19	#4	STR	8'-1"	103
REINFORCING STEEL					5,704 LBS.
CLASS A CONCRETE					
POUR #1 (CAP & LOWER WINGS)					34.3 C.Y.
POUR #2 (UPPER WINGS & BACKWALL)					8.1 C.Y.
TOTAL					42.4 C.Y.
HP 14 X 73 STEEL PILES					
No. = 7					504 LIN. FT.
PILE DRIVING EQUIPMENT SETUP FOR HP 14 X 73 STEEL PILES					7 EACH
PILE REDRIVES					7 EACH

PROJECT NO. 41665.7A
 CUMBERLAND COUNTY
 STATION: 21+57.23 -L-
 109+69.94 -L2-

SHEET 3 OF 3

STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

SUBSTRUCTURE
 END BENT #2



DRAWN BY : J.A. BOYER DATE : 09/26/17
 CHECKED BY : R.F. WERTMAN DATE : 10/07/17
 DESIGN ENGINEER OF RECORD : R.F. WERTMAN DATE : 11/06/17

PLANS PREPARED BY:
Gannett Fleming
 Excellence Delivered As Promised

2610 Wycliff Road
 Suite 102
 Raleigh NC 27607-3073
 (919) 420-7660
 NC Lic. No. F-0270

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

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

SHEET NO. S01-21
 TOTAL SHEETS 24