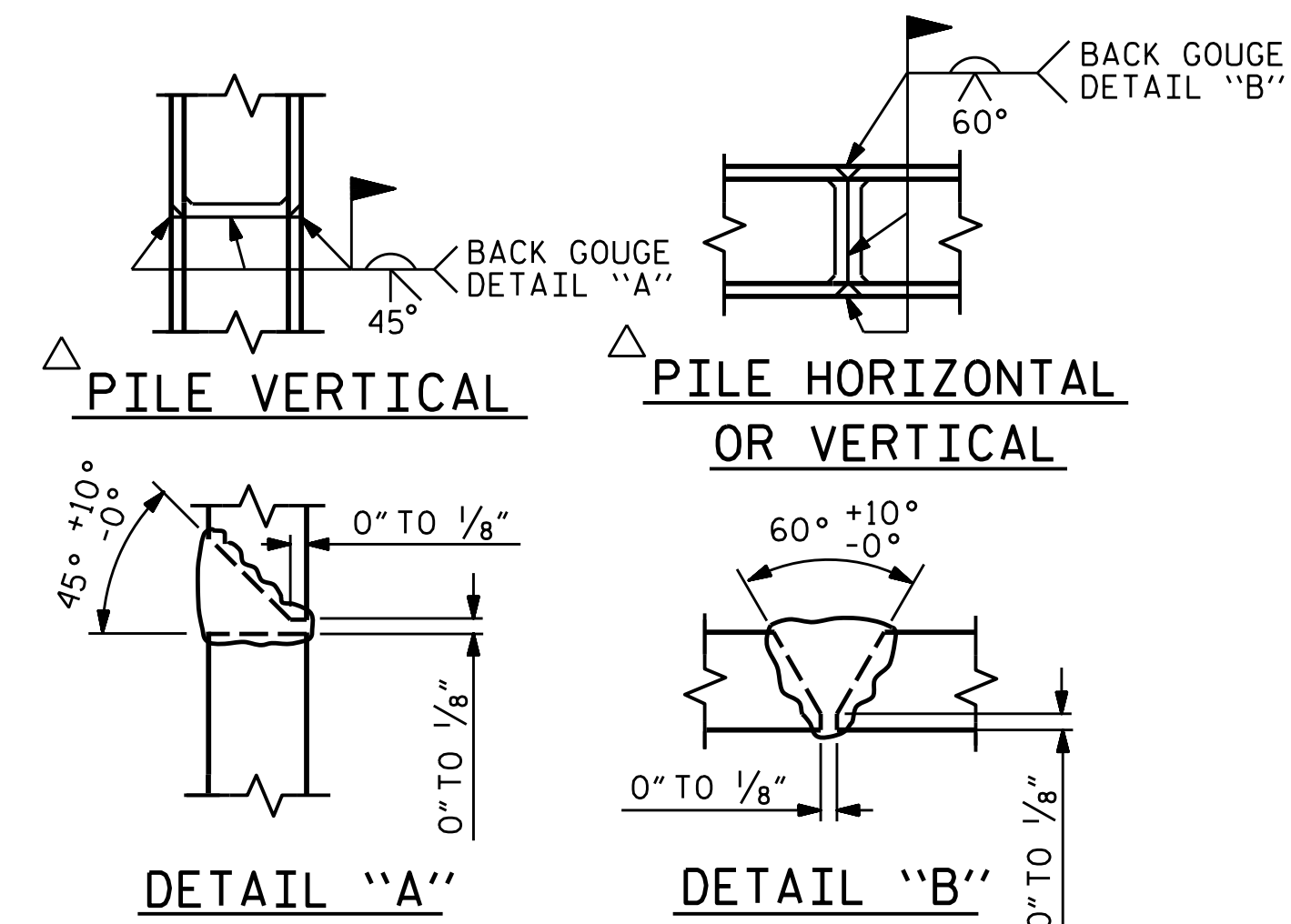


BAGGED STONE AND PIPE SHALL BE PLACED IMMEDIATELY AFTER COMPLETION OF END BENT EXCAVATION. PIPE MAY BE EITHER CONCRETE, CORRUGATED STEEL, CORRUGATED ALUMINUM ALLOY, OR CORRUGATED PLASTIC. PERFORATED PIPE WILL NOT BE ALLOWED.

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.

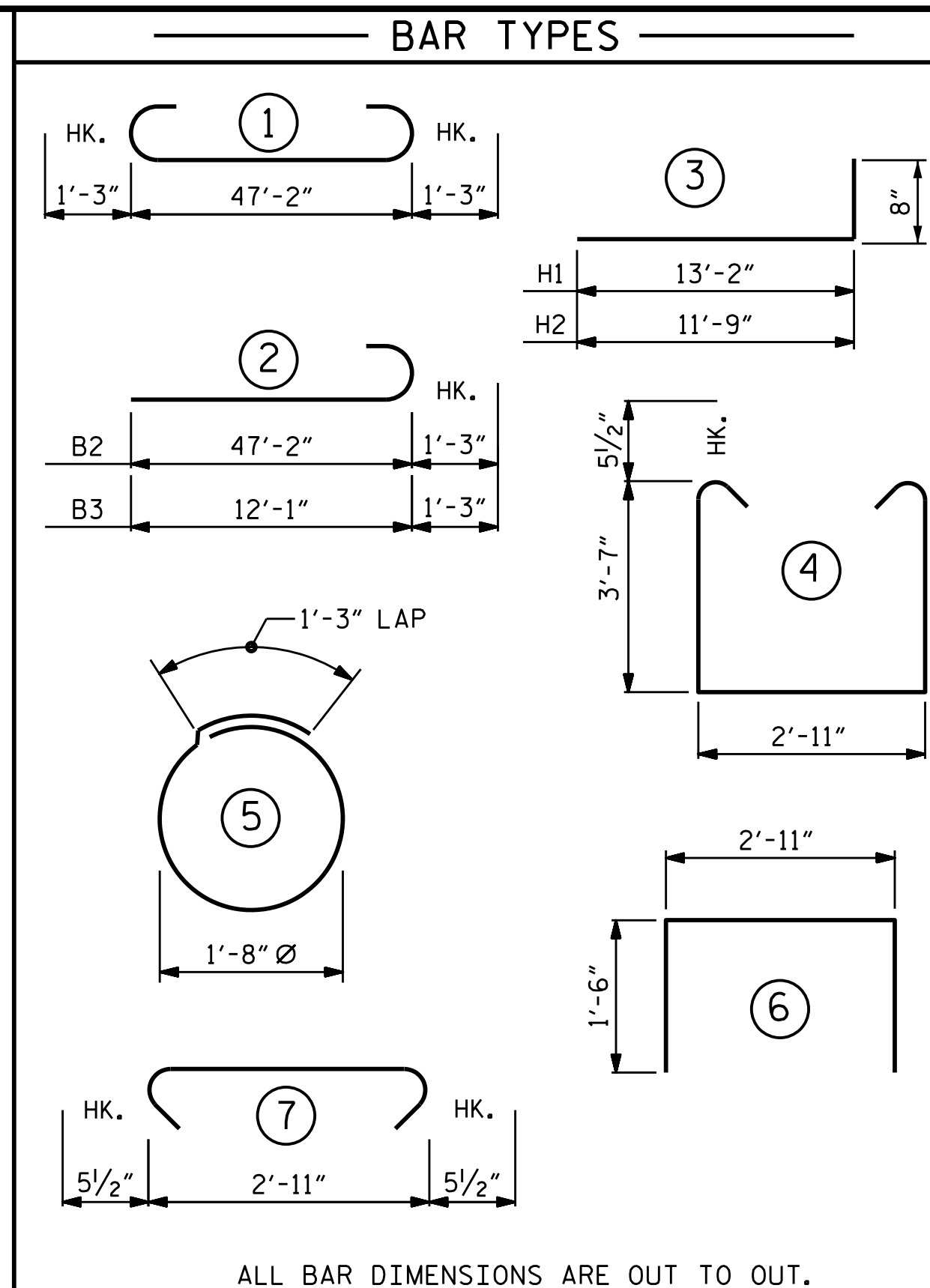
NO SEPARATE PAYMENT WILL BE MADE FOR THIS WORK AND THE ENTIRE COST OF THIS WORK SHALL BE INCLUDED IN THE UNIT CONTRACT PRICE BID FOR THE SEVERAL PAY ITEMS.

TEMPORARY DRAINAGE AT END BENT

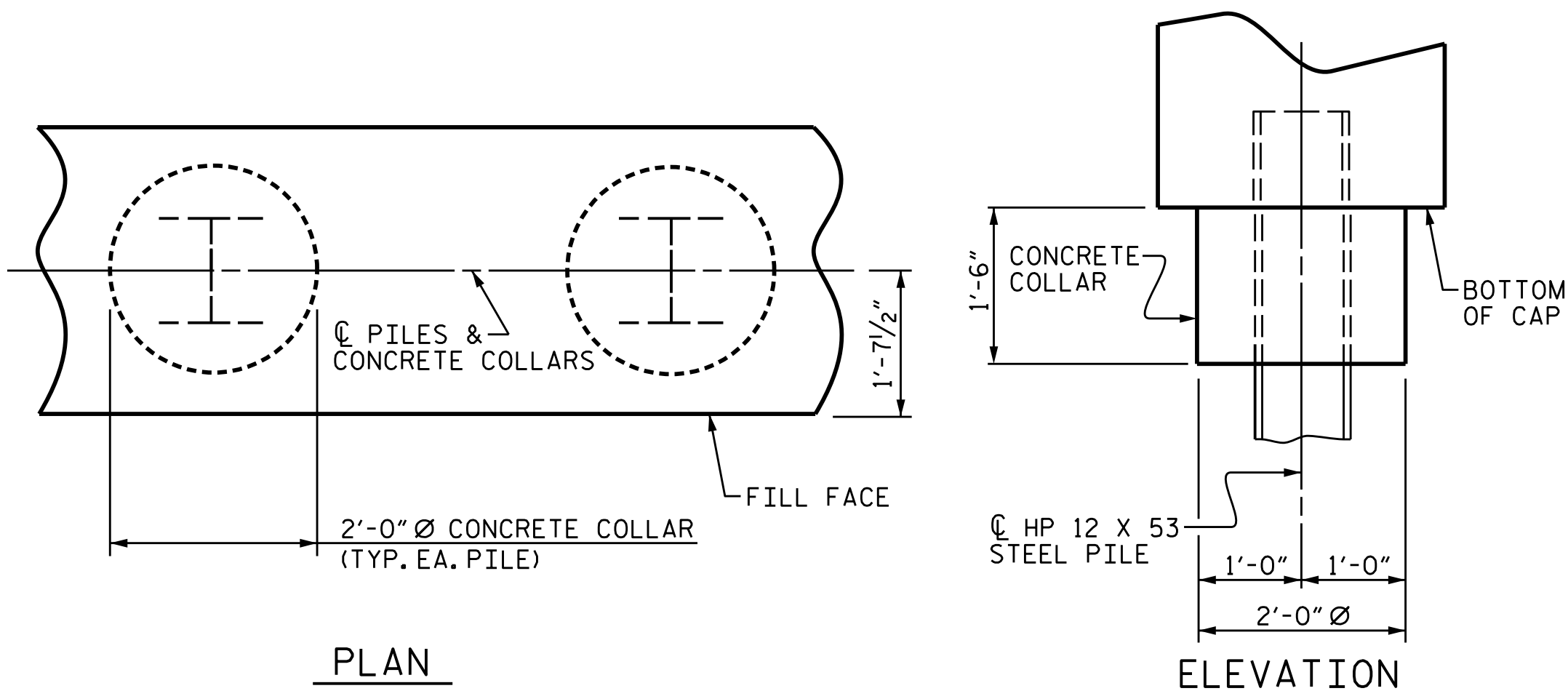


POSITION OF PILE DURING WELDING.

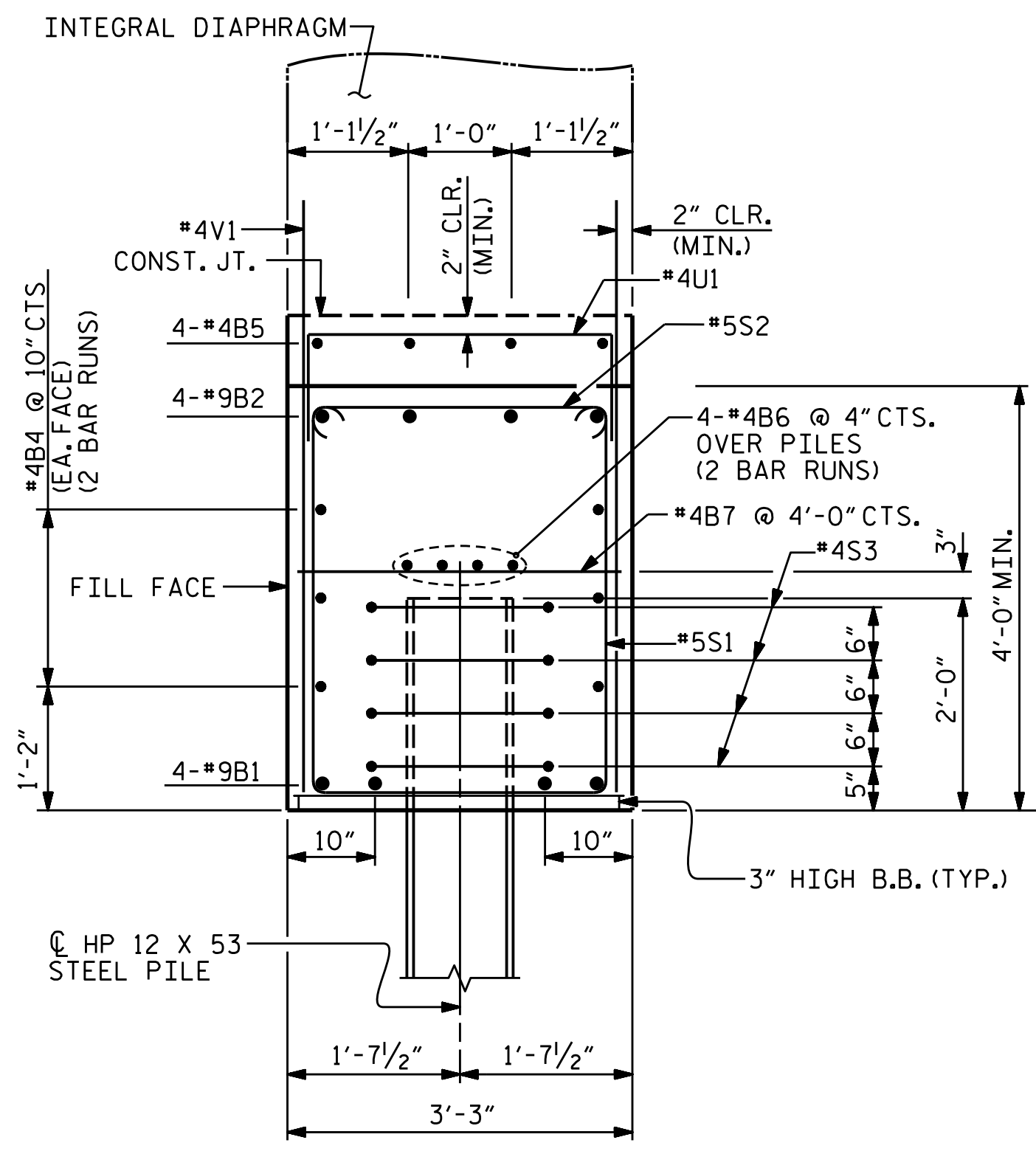
PILE SPLICE DETAILS



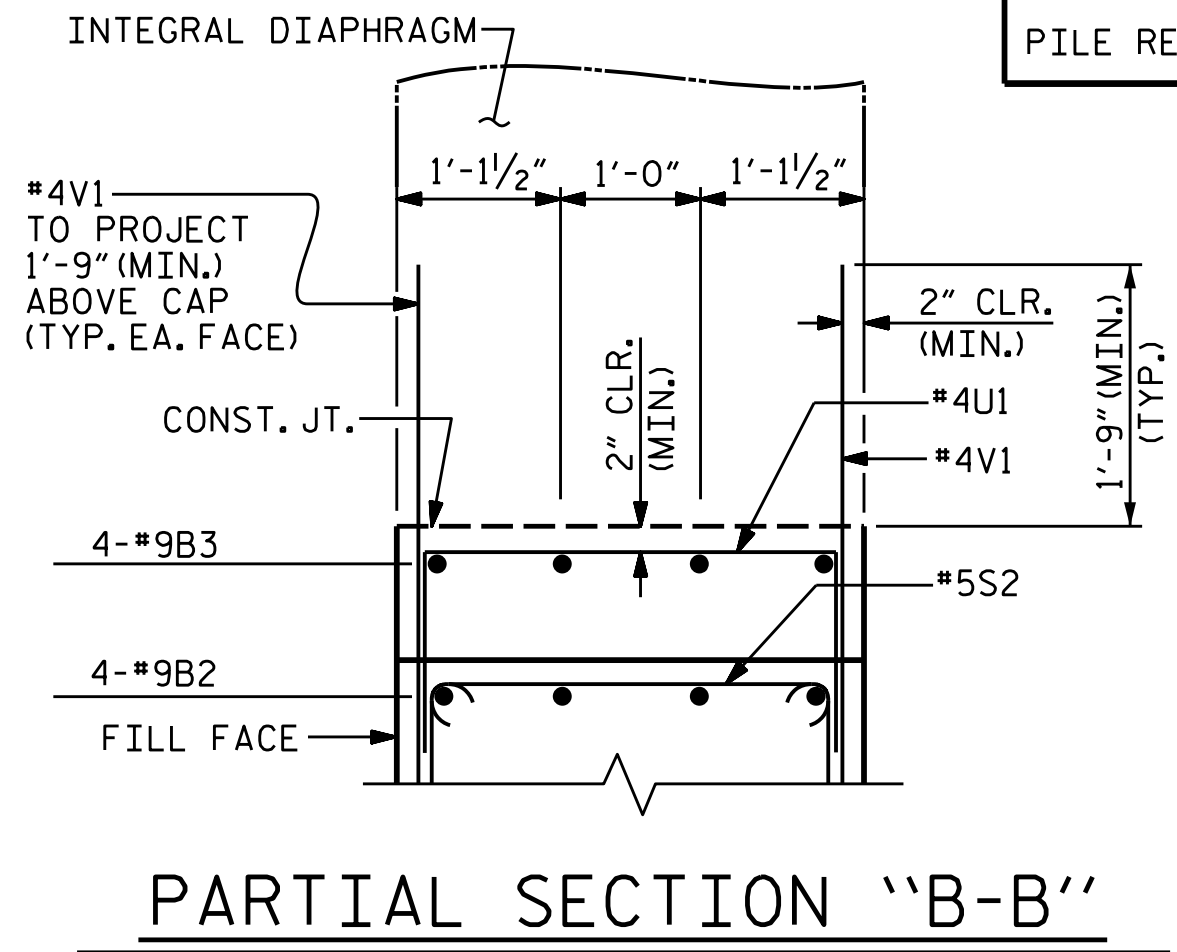
BILL OF MATERIAL						
INTEGRAL END BENT NO. 2						
BAR NO.	NO.	SIZE	TYPE	LENGTH	WEIGHT	
B1	4	#9	1	49'-8"	675	
B2	4	#9	2	48'-5"	658	
B3	4	#9	2	13'-4"	181	
B4	12	#4	STR	24'-10"	199	
B5	8	#4	STR	13'-9"	73	
B6	8	#4	STR	24'-10"	133	
B7	12	#4	STR	2'-11"	23	
H1	14	#5	3	13'-10"	202	
H2	10	#5	3	12'-5"	130	
S1	44	#5	4	11'-0"	505	
S2	44	#5	7	3'-10"	176	
S3	32	#4	5	6'-6"	139	
V1	78	#4	STR	6'-5"	334	
V2	25	#5	STR	10'-1"	263	
V3	23	#4	STR	9'-2"	141	
U1	32	#4	6	5'-11"	126	
REINFORCING STEEL					3958	
CLASS A CONCRETE BREAKDOWN						
POUR #1 CAP, LOWER PART OF WINGS & COLLARS					29.8 C.Y.	
TOTAL CLASS A CONCRETE					29.8 C.Y.	
HP 12 X 53 STEEL PILES NO. = 8					600 L.F.	
PILE REDRIVES					4 EA.	



CORROSION PROTECTION FOR STEEL PILES DETAIL



(CONCRETE COLLAR NOT SHOWN FOR CLARITY. SEE "CORROSION PROTECTION FOR STEEL PILES DETAIL.")



PROJECT NO. R-2514D

JONES COUNTY

STATION: 561+15.20 -L-
=17+04.80 -Y7-

SHEET 4 OF 5

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

SUBSTRUCTURE
END BENT NO. 2
DETAILS
RIGHT LANE

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

SHEET NO. S14-18

TOTAL SHEETS 21

DRAWN BY: JD GOODIN DATE: 5/16/14
CHECKED BY: MEG / JWT DATE: 6/23/14
QC / QA BY: TG ZEBLO DATE: 7/7/14

PLAN PREPARED BY:

ALPHA & OMEGA GROUP
CIVIL & STRUCTURAL ENGINEERS
4601 Lake Boone Trail, Ste. 3C Raleigh, NC 27607
Phone 919 981 0310 Fax 919 981 0451
www.aogroup.com
Firm License No. C-1684

A&O PROJECT NO. 2013.044

DocuSigned by:
Mark Gustafson
9E00EDB87408456...
3/23/2015

North Carolina Professional Engineer
Mark E. Gustafson
SLAL
28601
3-20-2015
www.aogroup.com

REFERENCE NO. 14- 18