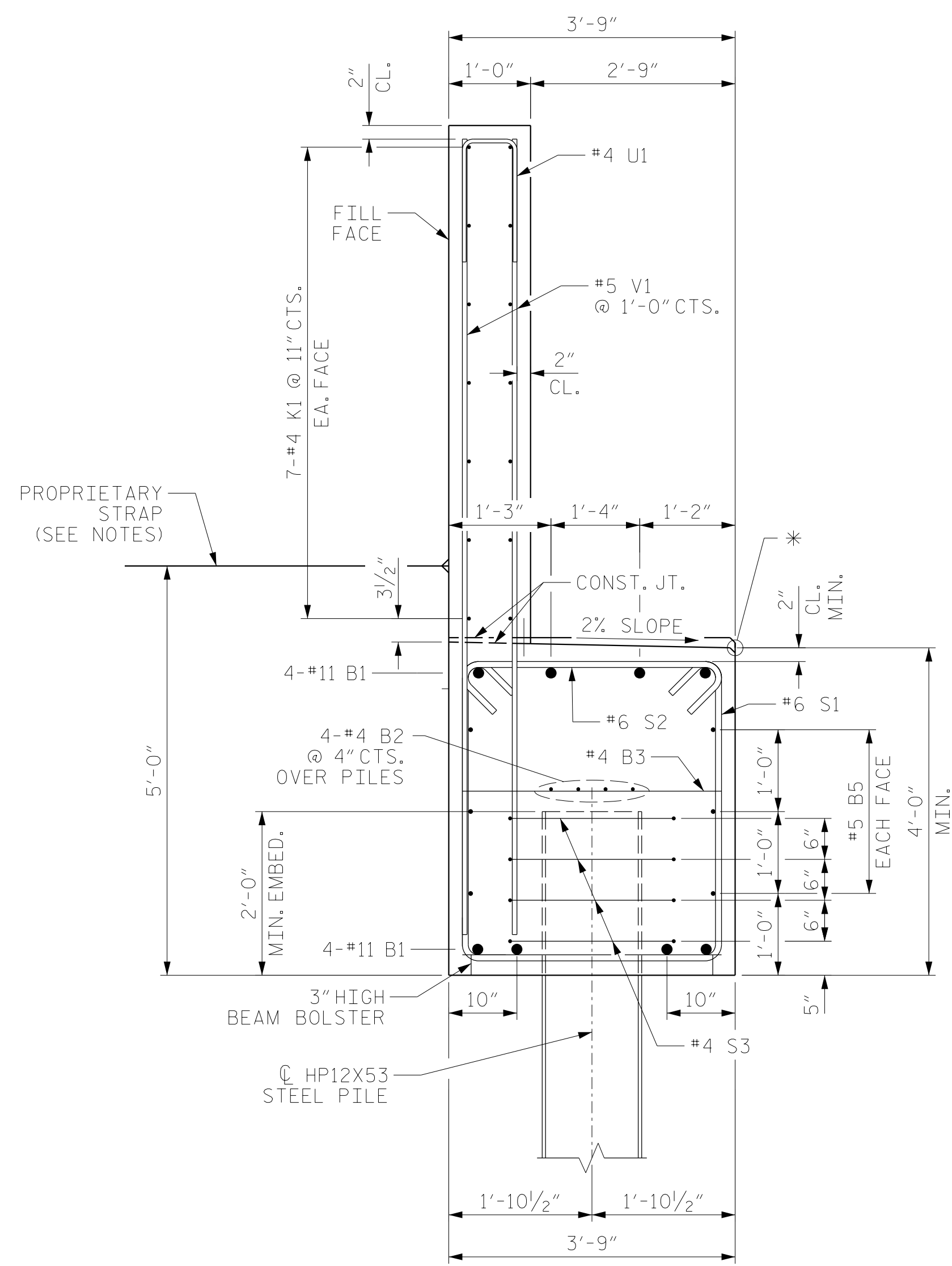


BAGGED STONE AND PIPE SHALL BE PLACED IMMEDIATELY AFTER COMPLETION OF END BENT EXCAVATION. PIPE MAY BE EITHER CONCRETE, CORRUGATED STEEL, CORRUGATED ALUMINUM ALLOY, OR CORRUGATED PLASTIC. PERFORATED PIPE WILL NOT BE ALLOWED.

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.

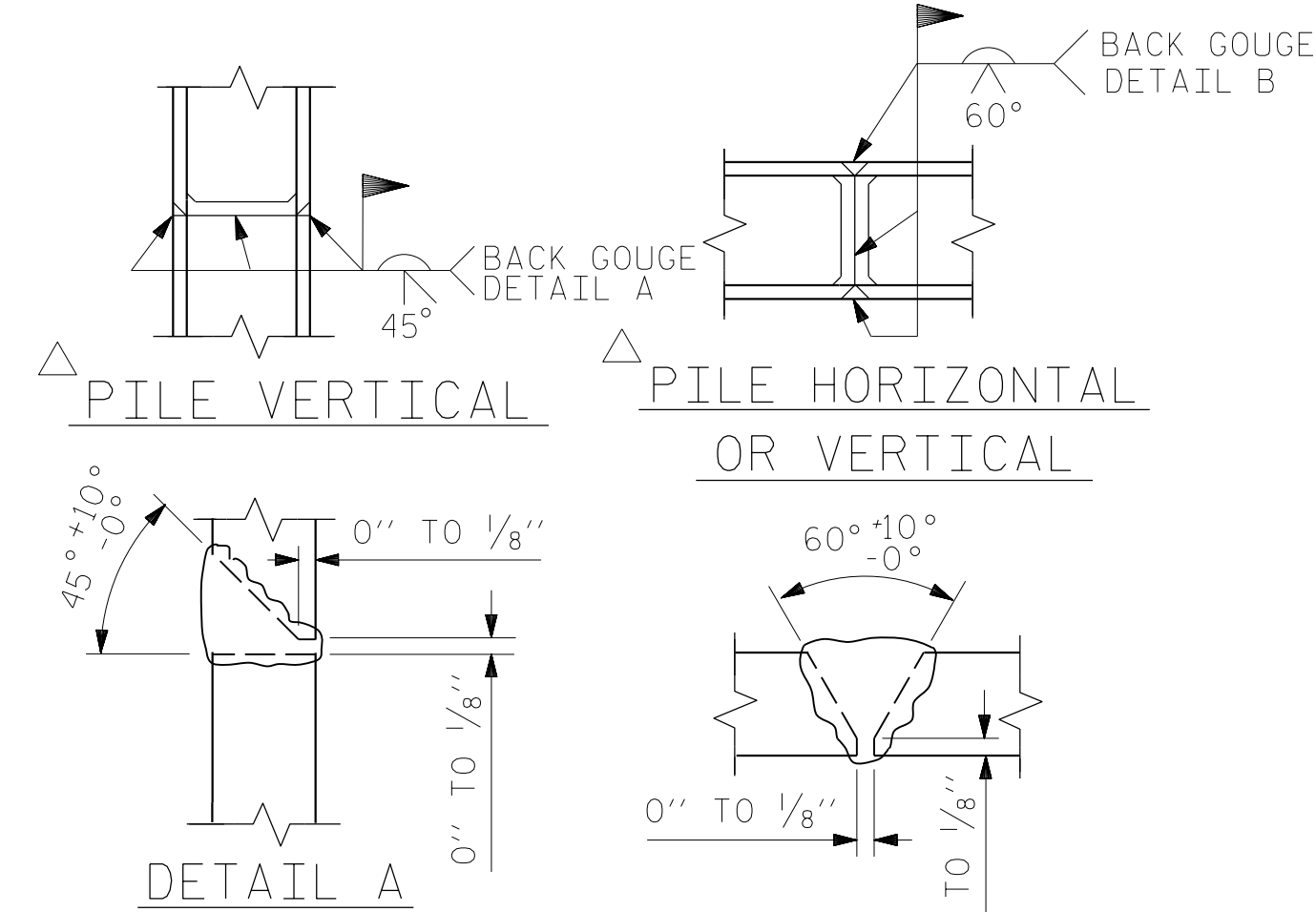
TEMPORARY DRAINAGE AT END BENT



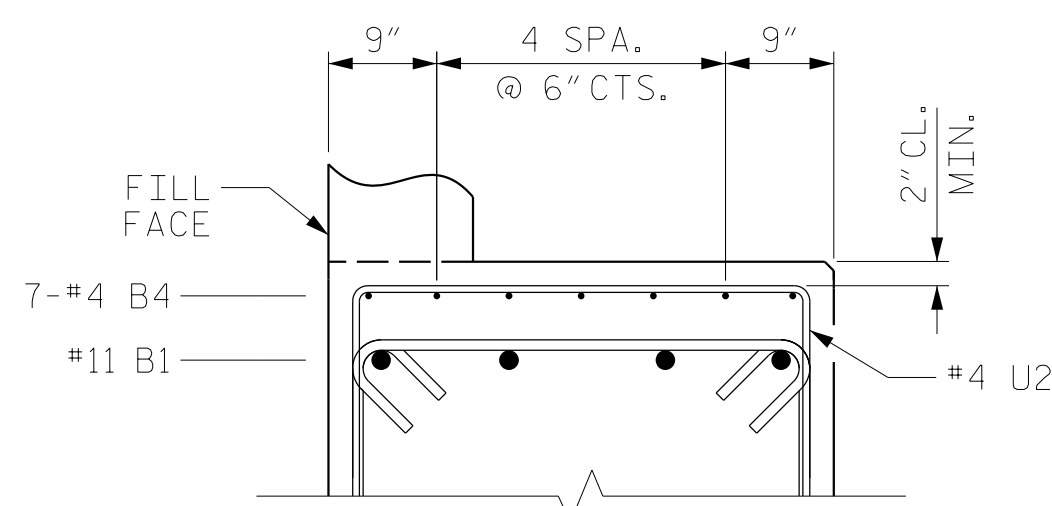
SECTION A-A
*ELEVATIONS BETWEEN BRIDGE SEAT BUILDUPS ARE SHOWN AT THIS POINT

NOTES

THE CONTRACTOR SHALL DESIGN, FURNISH AND INSTALL, A TIE BACK SYSTEM CAPABLE OF RESISTING THE FOLLOWING HORIZONTAL FORCES: 9.5 K/FT UNDER STRENGTH LOADING DEMAND AND 6.6 K/FT UNDER SERVICE LOADING DEMAND. THE CONTRACTOR MAY CHANGE THE STRAP LOCATION SHOWN ABOVE AS LONG AS THE FORCE IS RECALCULATED FOR THE NEW LOCATION. THE TIE BACK SYSTEM SHALL BE SUBMITTED FOR APPROVAL BY THE ENGINEER IN THE FORM OF SHOP DRAWINGS.

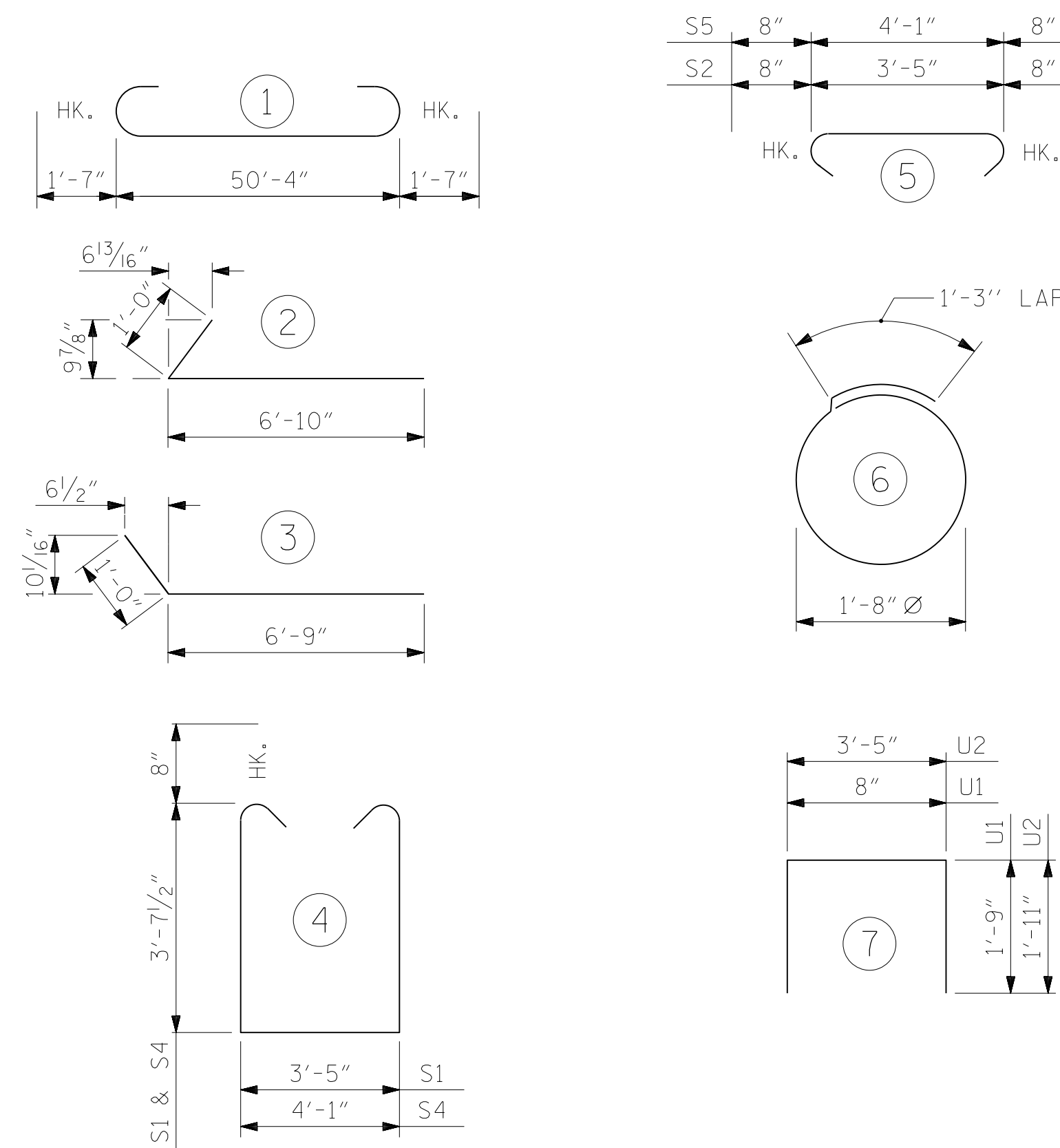


POSITION OF PILE DURING WELDING.
PILE SPLICE DETAILS



SECTION THRU BRIDGE SEAT

BAR TYPE



ALL BAR DIMENSIONS ARE OUT TO OUT.

BILL OF MATERIAL

END BENT #2					
BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT
B1	8	#11		53'-6"	2274
B2	8	#4	STR	26'-1"	139
B3	12	#4	STR	3'-5"	27
B4	35	#4	STR	3'-2"	74
B5	6	#5	STR	50'-4"	315
H1	22	#4		7'-10"	115
H2	22	#4		7'-9"	114
K1	28	#4	STR	26'-6"	496
S1	77	#6		12'-0"	1388
S2	77	#6		4'-9"	549
S3	32	#4		6'-6"	139
S4	2	#6		12'-8"	38
S5	2	#6		5'-5"	16
U1	49	#4		4'-2"	136
U2	35	#4		7'-3"	170
V1	98	#5	STR	10'-0"	1022
V2	32	#4	STR	10'-0"	214
REINFORCING STEEL					7,226 LBS.
CLASS A CONCRETE BREAKDOWN					
POUR #1 CAP & LOWER PART OF CHEEKWALL				29.5 C.Y.	
POUR #2 UPPER PART OF CHEEKWALL & BACKWALL				14.6 C.Y.	
TOTAL CLASS A CONCRETE				44.1 C.Y.	
HP 12 X 53 STEEL PILES					
NO: 8				LIN. FT.= 240	
PILE DRIVING EQUIPMENT SETUP					
HP 12 X 53				No. 8	

PROJECT NO. R-2707C
CLEVELAND COUNTY
STATION: 29+07.16 -Y2-

SHEET 3 OF 3



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH
SUBSTRUCTURE
END BENT NO. 2

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S3-33
1			3			TOTAL SHEETS
2			4			36

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

DRAWN BY: MAL, MKO DATE: 12/2016
CHECKED BY: JMR DATE: 12/2016
DESIGN ENGINEER OF RECORD: MKO DATE: 12/2016