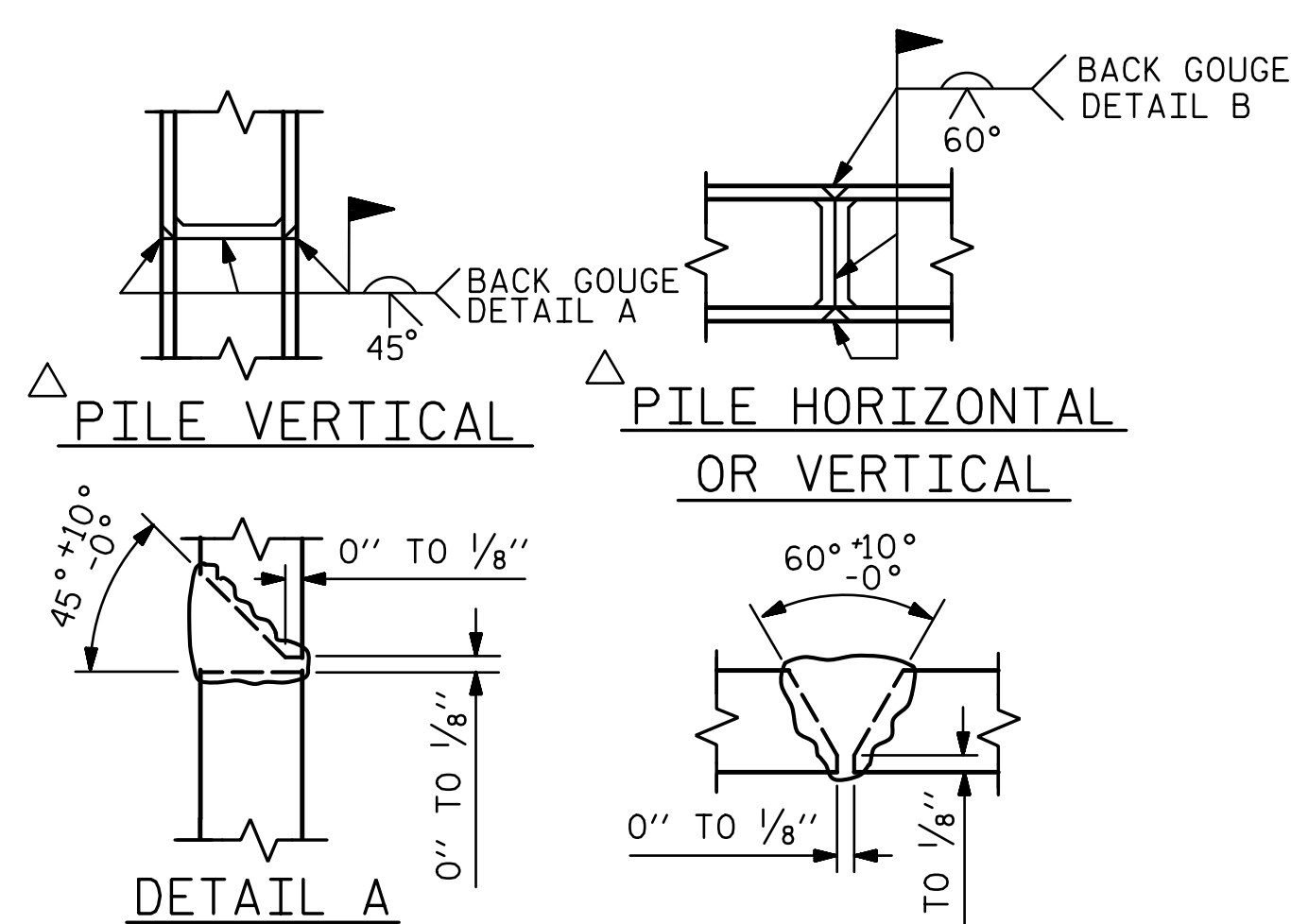


BAGGED STONE AND PIPE SHALL BE PLACED IMMEDIATELY AFTER COMPLETION OF END BENT EXCAVATION. PIPE MAY BE EITHER CONCRETE, CORRUGATED STEEL, CORRUGATED ALUMINUM ALLOY, OR CORRUGATED PLASTIC. PERFORATED PIPE WILL NOT BE ALLOWED.

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.

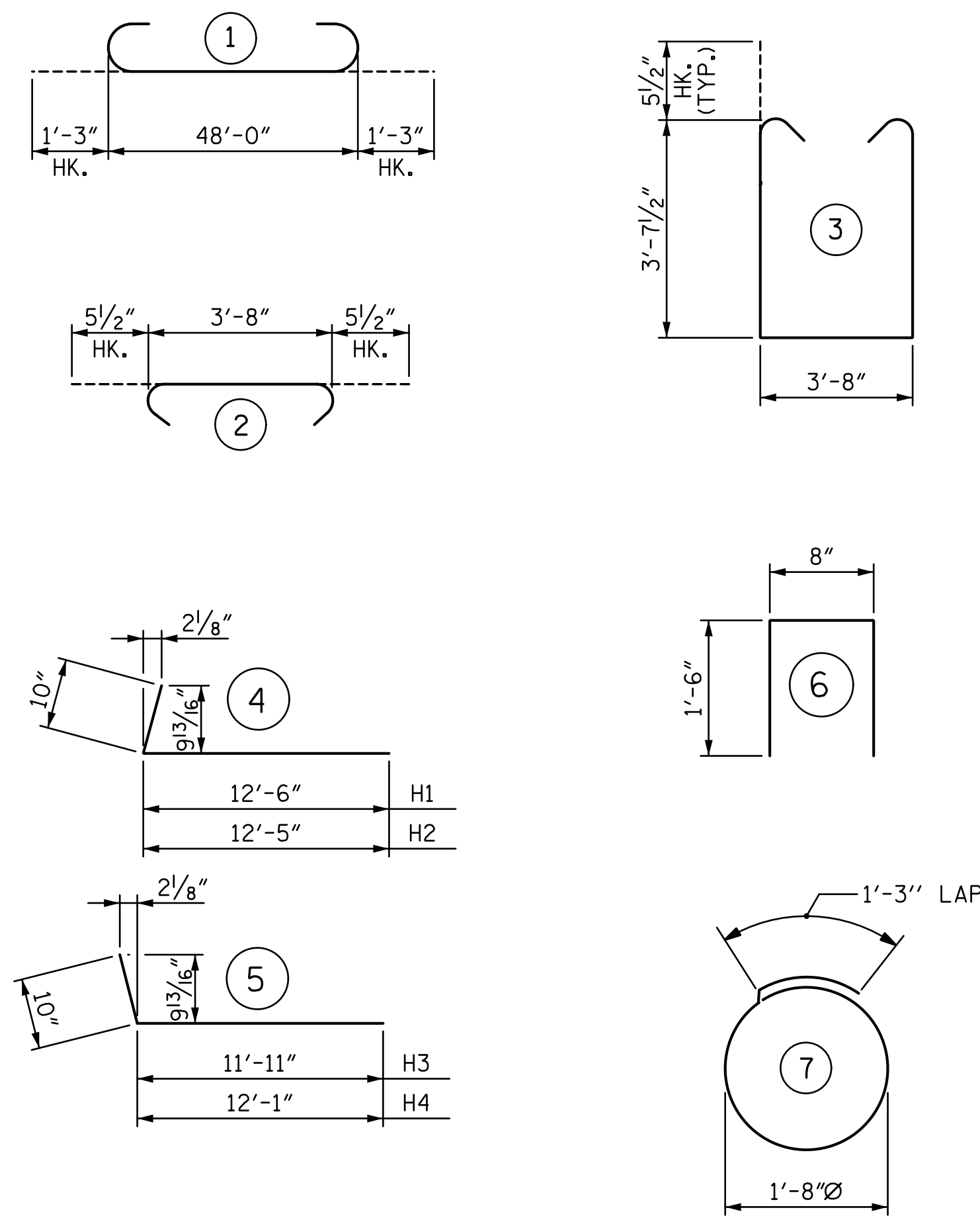
NO SEPARATE PAYMENT WILL BE MADE FOR THIS WORK AND THE ENTIRE COST OF THIS WORK SHALL BE INCLUDED IN THE UNIT CONTRACT PRICE BID FOR THE SEVERAL PAY ITEMS.

TEMPORARY DRAINAGE AT END BENT



POSITION OF PILE DURING WELDING.
PILE SPLICE DETAILS

BAR TYPES



ALL BAR DIMENSIONS ARE OUT TO OUT.

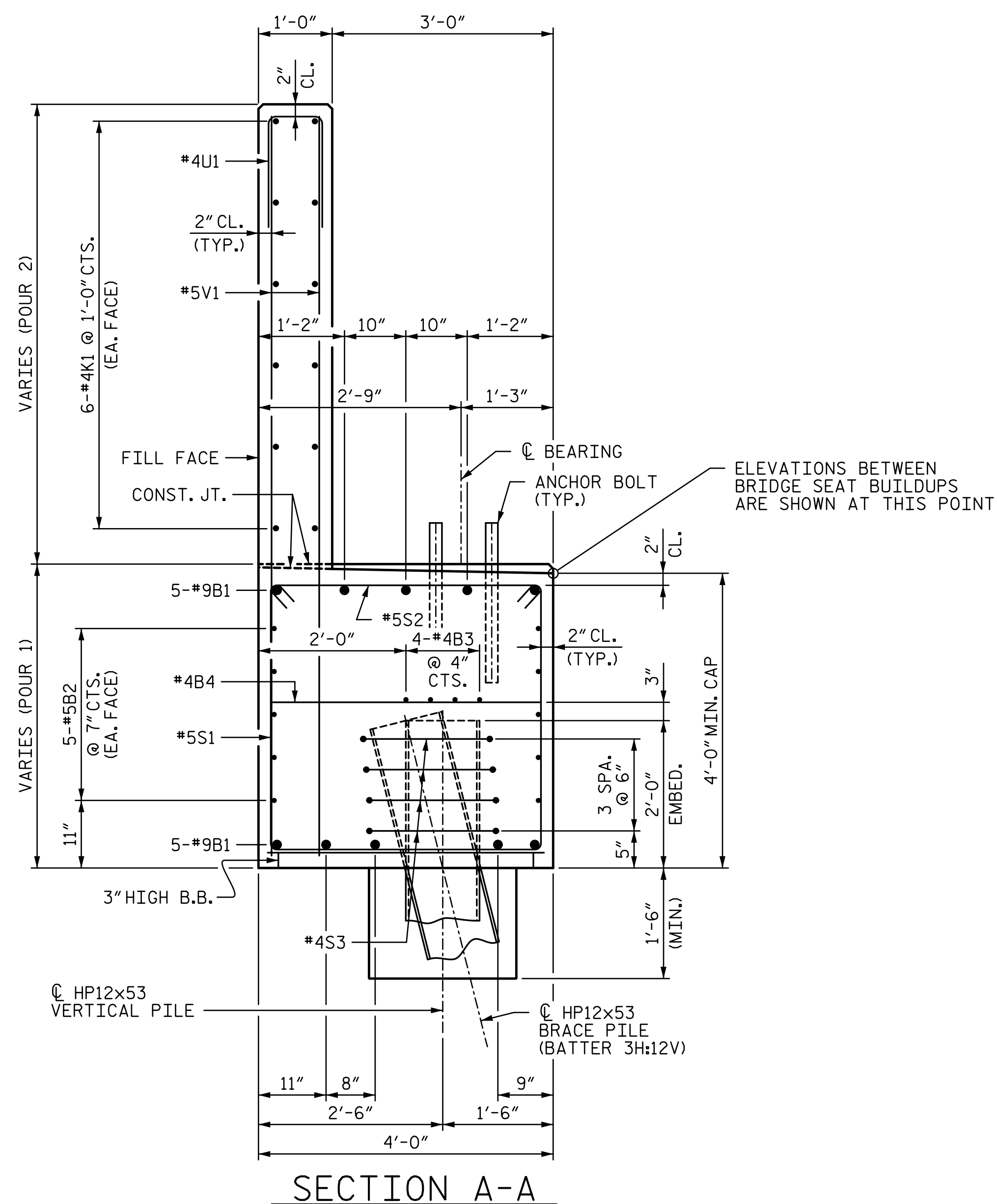
BILL OF MATERIAL

END BENT 1

BAR	NO	SIZE	TYPE	LENGTH	WEIGHT
B1	10	#9	1	50'-6"	1717
B2	10	#5	STR	48'-2"	502
B3	8	#4	STR	25'-4"	135
B4	12	#4	STR	3'-8"	29
H1	25	#6	4	13'-4"	501
H2	25	#6	4	13'-3"	498
H3	24	#6	5	12'-9"	460
H4	24	#6	5	12'-11"	466
K1	12	#4	STR	25'-4"	203
K2	4	#4	STR	2'-9"	7
K3	4	#4	STR	2'-7"	7
S1	70	#5	3	11'-10"	864
S2	70	#5	2	4'-7"	335
S3	28	#4	7	6'-6"	122
U1	43	#4	6	3'-8"	105
V1	86	#5	STR	9'-10"	882
V2	32	#5	STR	11'-11"	398
V3	31	#5	STR	11'-3"	364

QUANTITIES

REINFORCING STEEL	LBS.	7,595
CLASS A CONCRETE:		
POUR 1:		
CAP, COLLARS, & LOWER WING	C.Y.	33.9
POUR 2:		
BACKWALL & UPPER WING	C.Y.	18.3
TOTAL	C.Y.	52.2
HP 12x53 STEEL PILES	NO.	7
	LIN. FEET	490
PILE REDRIVES	EA.	3
PILE SETUP FOR HP 12x53 PILES	EA.	7



SECTION A-A

PROJECT NO. U-4751
NEW HANOVER COUNTY
 STATION: 35+12.05 -Y8RPDB-
 SHEET 3 OF 3

STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

**SUBSTRUCTURE
 END BENT 1**

6/30/2017

REVISIONS

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

STV ENGINEERS, INC. 100 Years
 900 West Trade St., Suite 715
 Charlotte, NC 28202
 NC License Number F-5991

DRAWN BY: MBC DATE: 4-17 DESIGN ENGINEER OF RECORD: T. LAWS DATE: 5-17
 CHECKED BY: TRL DATE: 4-17

r:\404_053_U4751_SMU_EL_027_640204.dgn
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