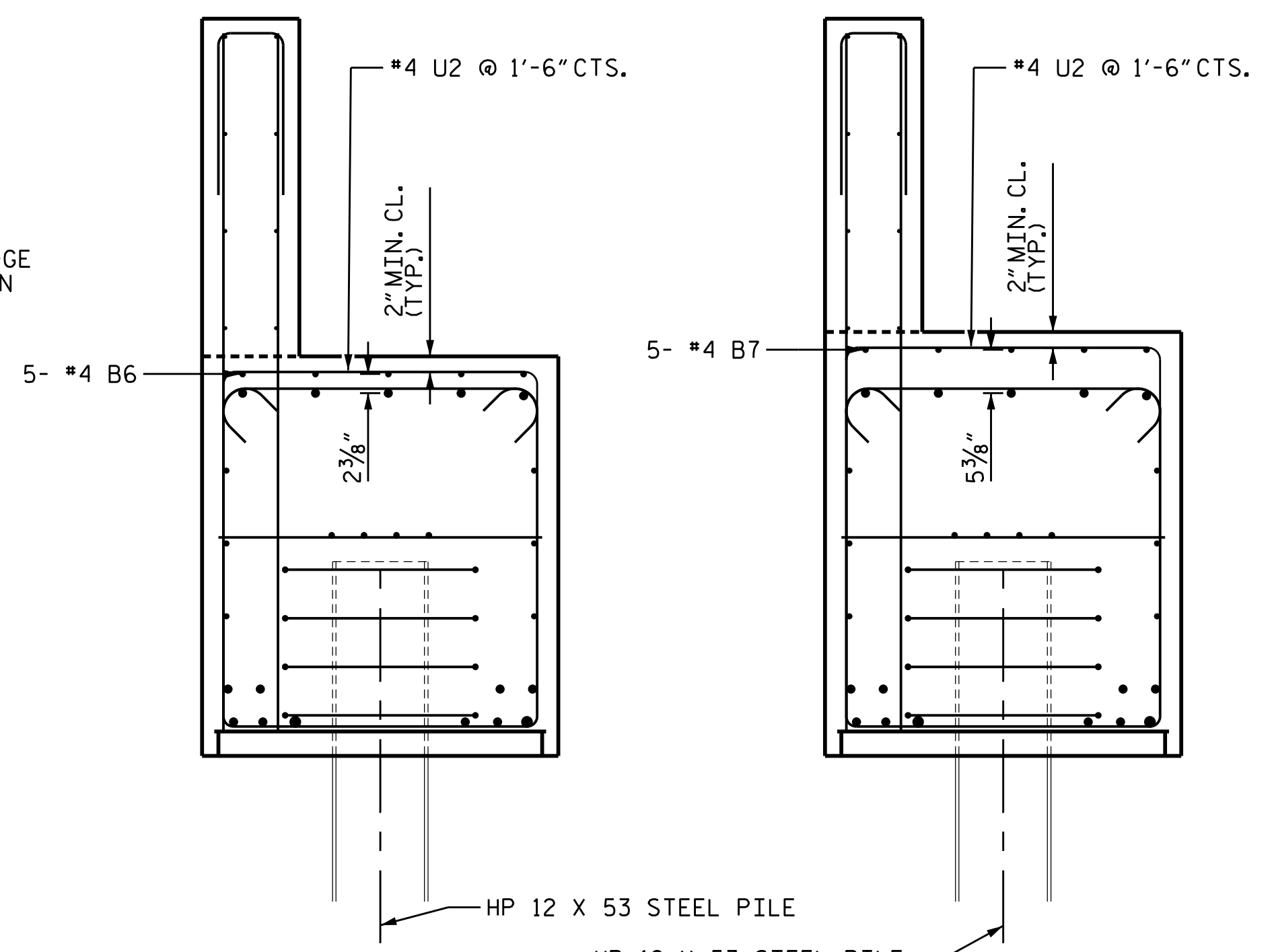
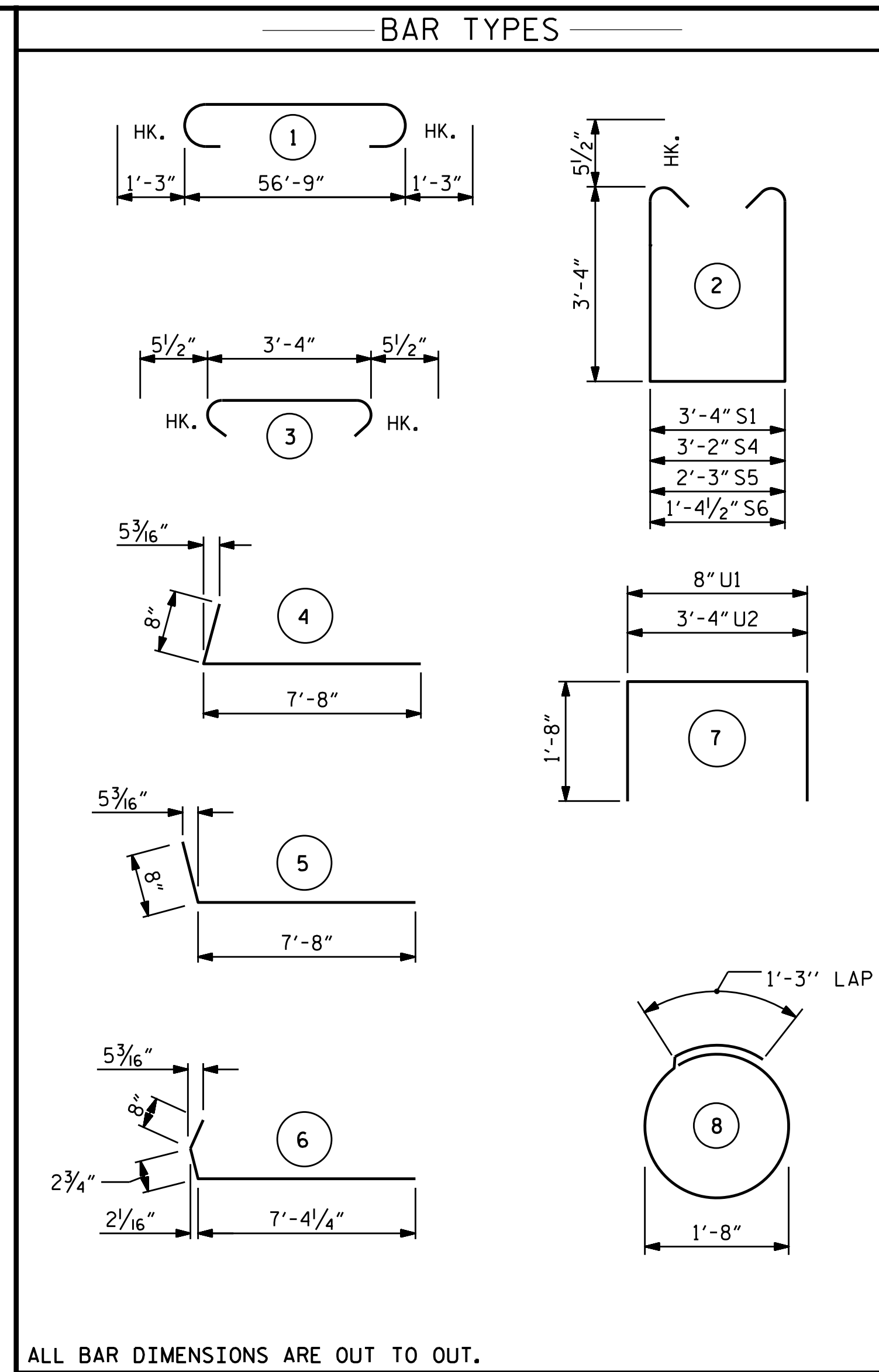


SECTION A-A



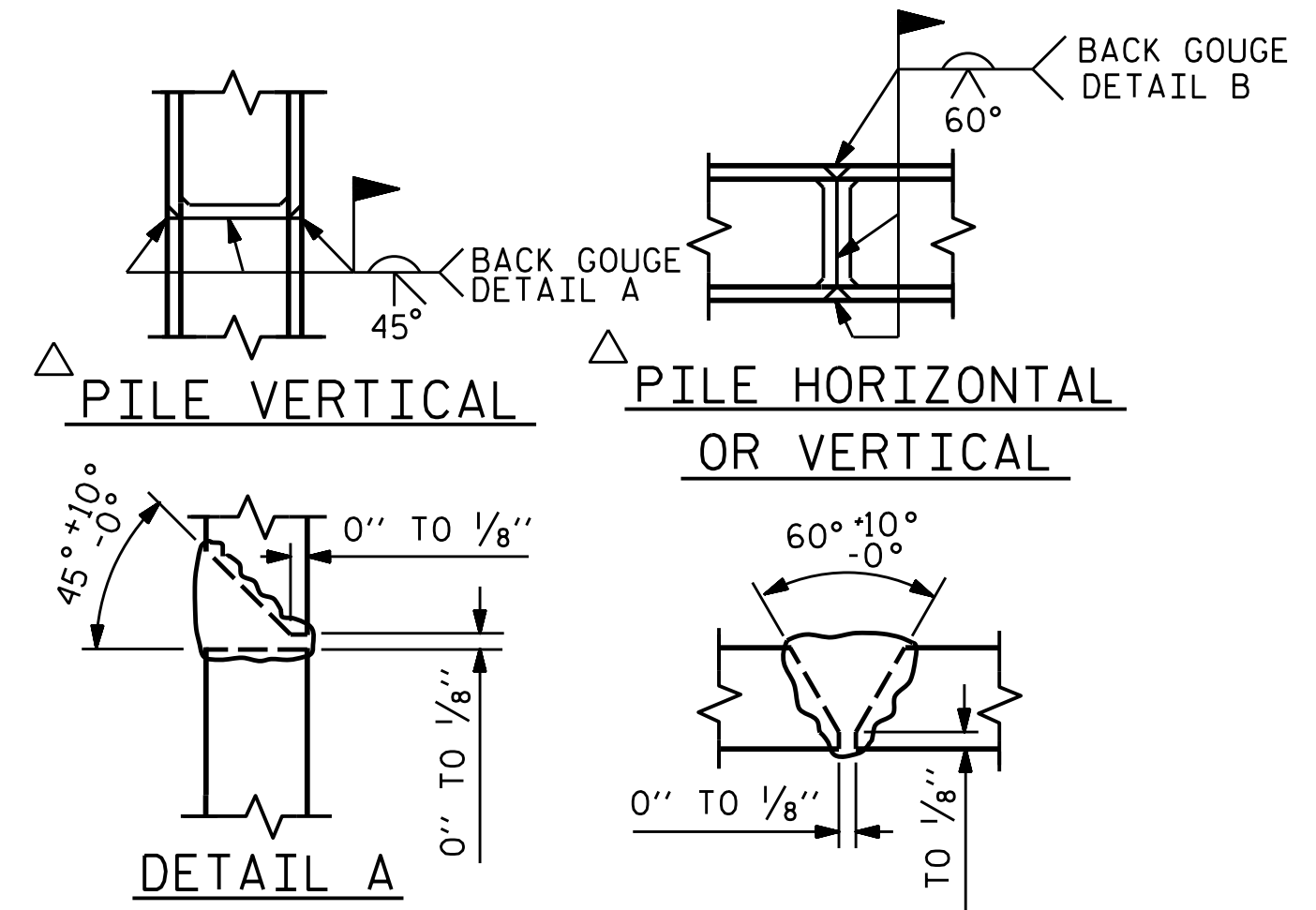
SECTION B-B

SECTION C-C

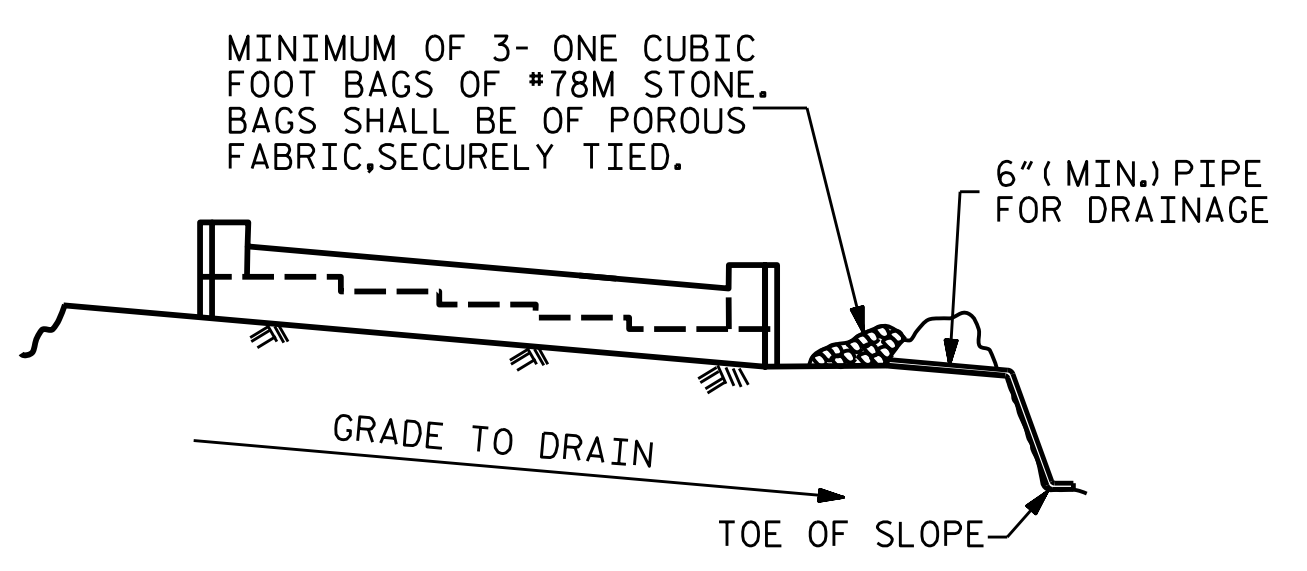


ALL BAR DIMENSIONS ARE OUT TO OUT.

BILL OF MATERIAL					
END BENT #1					
BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT
B1	5	9	1	59'-3"	1007
B2	6	9	1	59'-3"	1209
B3	4	9	STR	56'-9"	772
B4	14	4	STR	29'-7"	277
B5	14	4	STR	3'-4"	31
B6	5	4	STR	21'-0"	70
B7	5	4	STR	8'-2"	27
B8	25	4	STR	3'-2"	53
H1	22	5	5	8'-4"	191
H2	10	5	6	8'-3"	86
H3	10	5	4	8'-4"	87
K1	8	4	STR	29'-7"	158
K2	6	4	STR	3'-6"	14
K3	2	4	STR	3'-4"	4
S1	60	5	2	7'-11"	495
S2	66	5	3	4'-3"	293
S3	28	5	8	6'-6"	190
S4	2	5	2	7'-9"	16
S5	2	5	2	6'-10"	14
S6	2	5	2	5'-11 1/2"	12
U1	49	4	7	4'-0"	131
U2	35	4	7	6'-8"	156
V1	98	5	STR	7'-2"	733
V2	24	5	STR	9'-2"	229
V3	24	5	STR	8'-6"	213
REINFORCING STEEL				LBS.	6468
CLASS "A" CONCRETE BREAKDOWN					
POUR #1 CAP AND LOWER WINGS				34.6	C.Y.
POUR #2 BACKWALL & UPPER WINGS				10.6	C.Y.
TOTAL				45.2	C.Y.
HP 12 x 53 STEEL PILES				No. = 7	LIN. FEET. 630
PILE REDRIVES					EA. 4



PILE SPLICE DETAILS

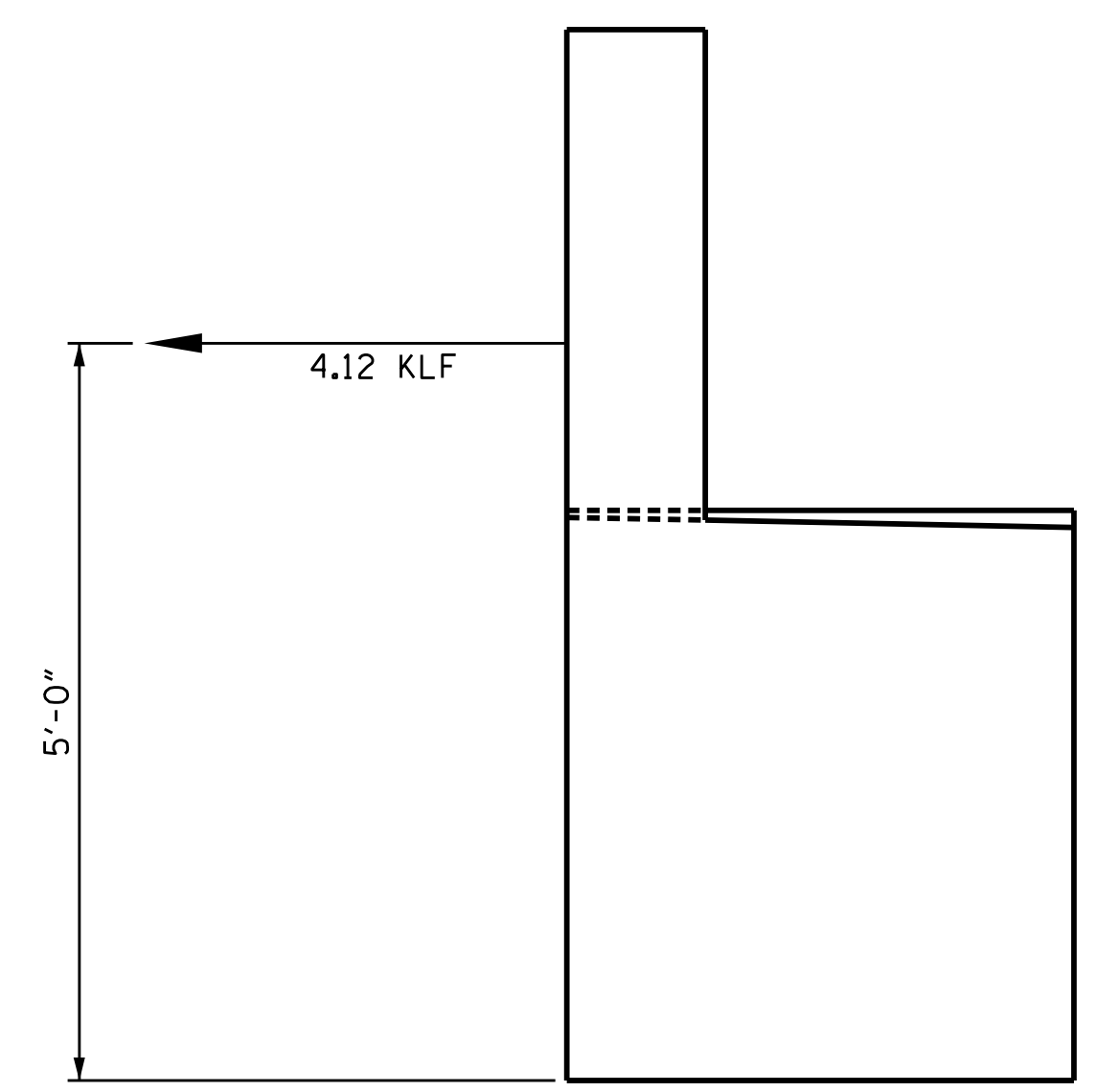


BAGGED STONE AND PIPE SHALL BE PLACED IMMEDIATELY AFTER COMPLETION OF END BENT EXCAVATION. PIPE MAY BE EITHER CONCRETE, CORRUGATED STEEL, CORRUGATED ALUMINUM ALLOY, OR CORRUGATED PLASTIC. PERFORATED PIPE WILL NOT BE ALLOWED.

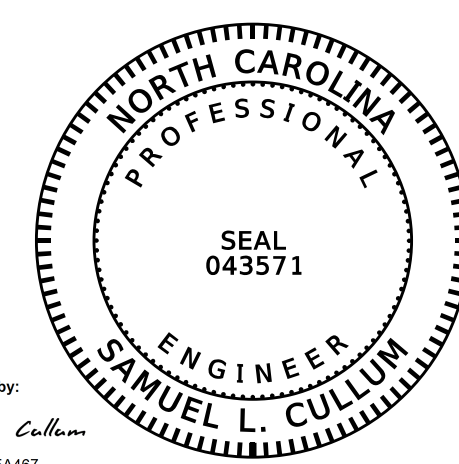
BAGGED STONE SHALL REMAIN IN PLACE UNTIL THE ENGINEER DIRECTS THAT IT BE REMOVED. THE CONTRACTOR SHALL REMOVE AND DISPOSE OF SILT ACCUMULATIONS AT BAGGED STONE WHEN SO DIRECTED BY THE ENGINEER. BAGS SHALL BE REMOVED AND REPLACED WHENEVER THE ENGINEER DETERMINES THAT THEY HAVE DETERIORATED AND LOST THEIR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



STRAP LOAD DETAIL



PROJECT NO. U-4405
CUMBERLAND COUNTY
 STATION: 26+78.00 -RPB-

SHEET 3 OF 3

STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

**SUBSTRUCTURE
 END BENT #1**

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S-19
1			3			TOTAL SHEETS
2			4			26

KCA 4800 SIX FORKS ROAD SUITE 120
 KISINGER CAMPO & ASSOCIATES RALEIGH, NC 27609
 (919) 882-7839

DRAWN BY: J. B. HANNA DATE: 05-17
 CHECKED BY: L. MARTINEZ DATE: 05-17
 DESIGN ENGINEER OF RECORD: S. CULLUM DATE: 05-17