

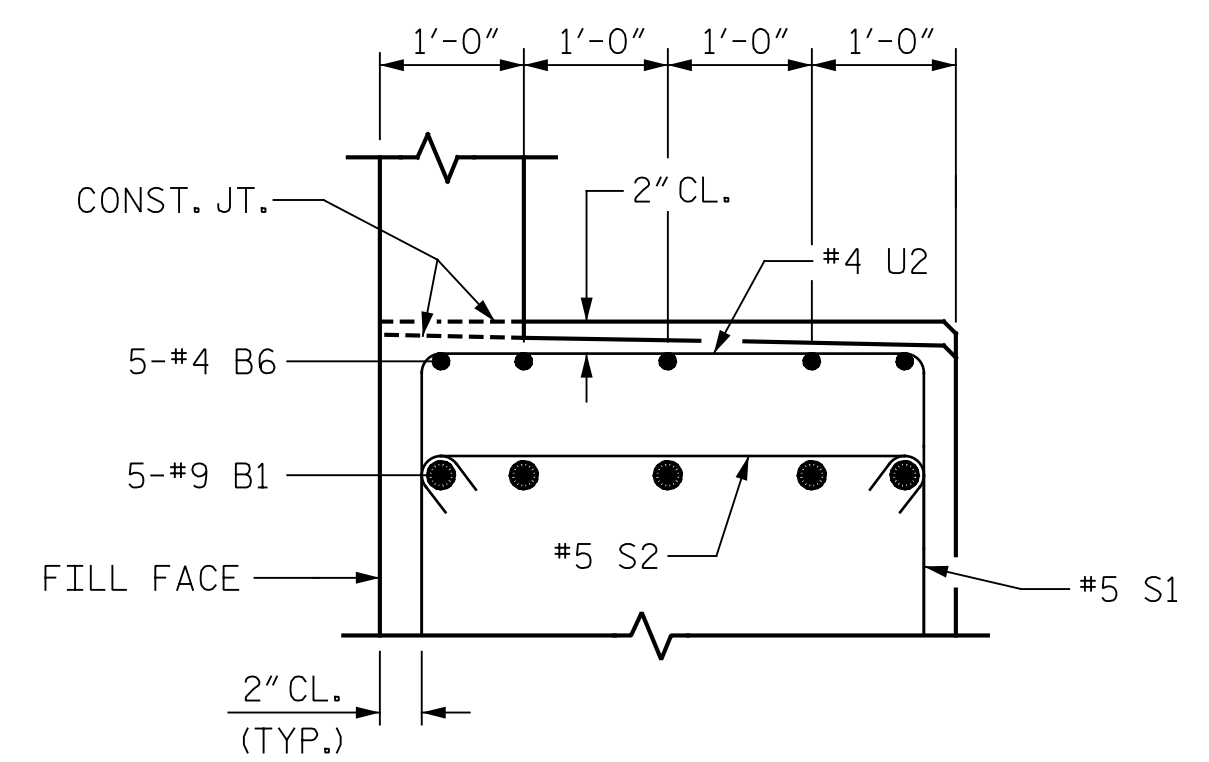
MINIMUM OF 3- ONE CUBIC FOOT BAGS OF #78M STONE. BAGS SHALL BE OF POROUS FABRIC, SECURELY TIED.

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.

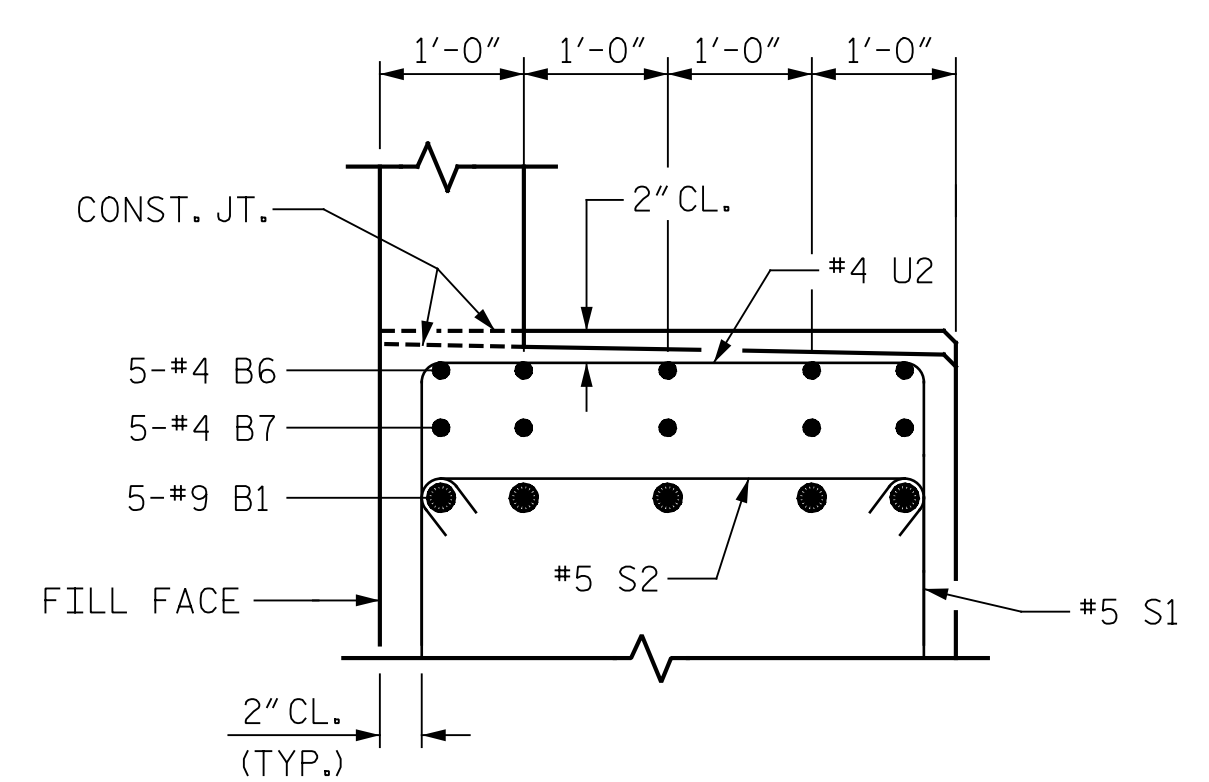
BAGGED STONE SHALL REMAIN IN PLACE UNTIL THE ENGINEER DIRECTS THAT IT BE REMOVED. THE CONTRACTOR SHALL REMOVE AND DISPOSE OF SILT ACCUMULATIONS AT BAGGED STONE WHEN SO DIRECTED BY THE ENGINEER. BAGS SHALL BE REMOVED AND REPLACED WHENEVER THE ENGINEER DETERMINES THAT THEY HAVE DETERIORATED AND LOST THEIR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

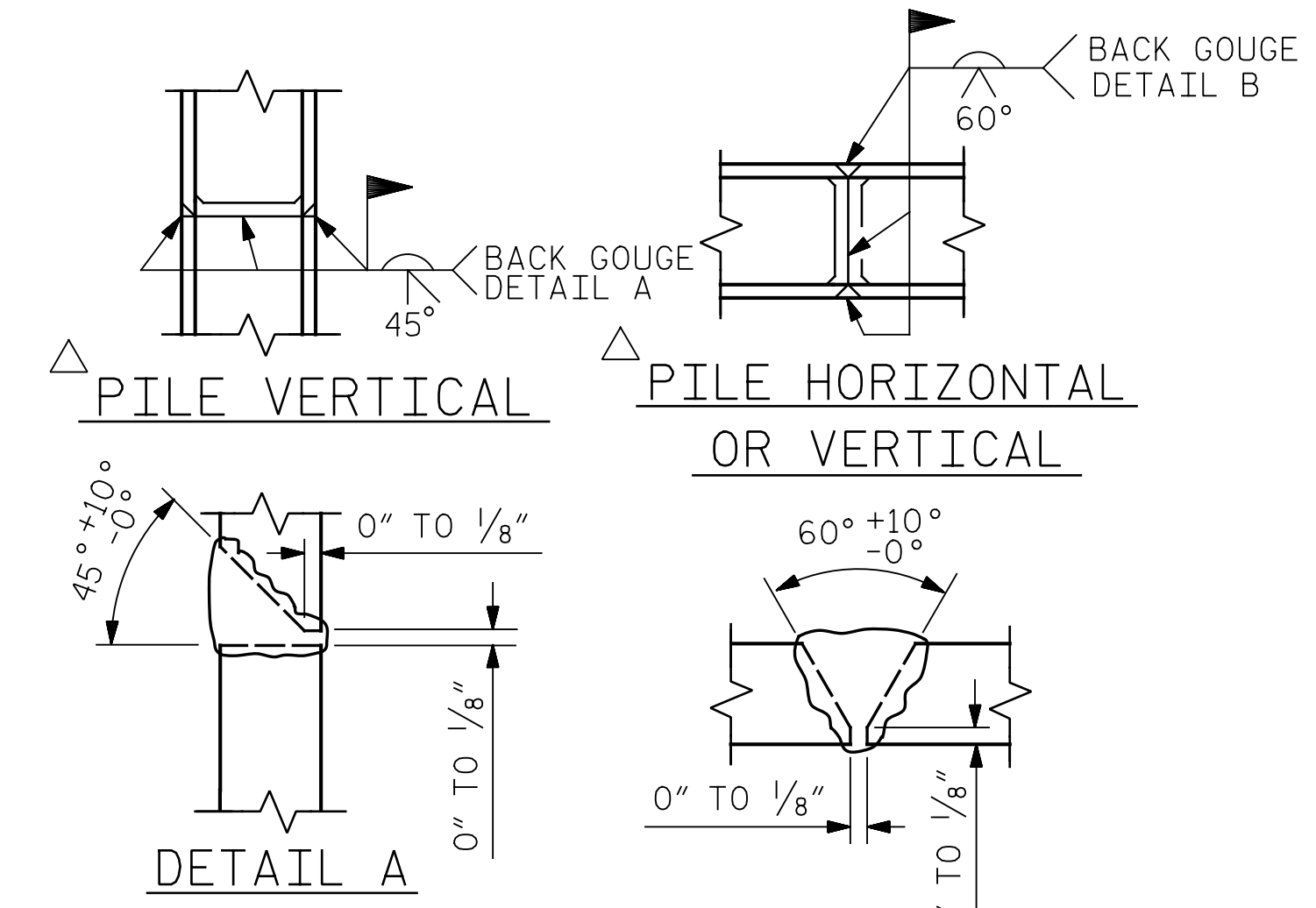
TEMPORARY DRAINAGE AT END BENT



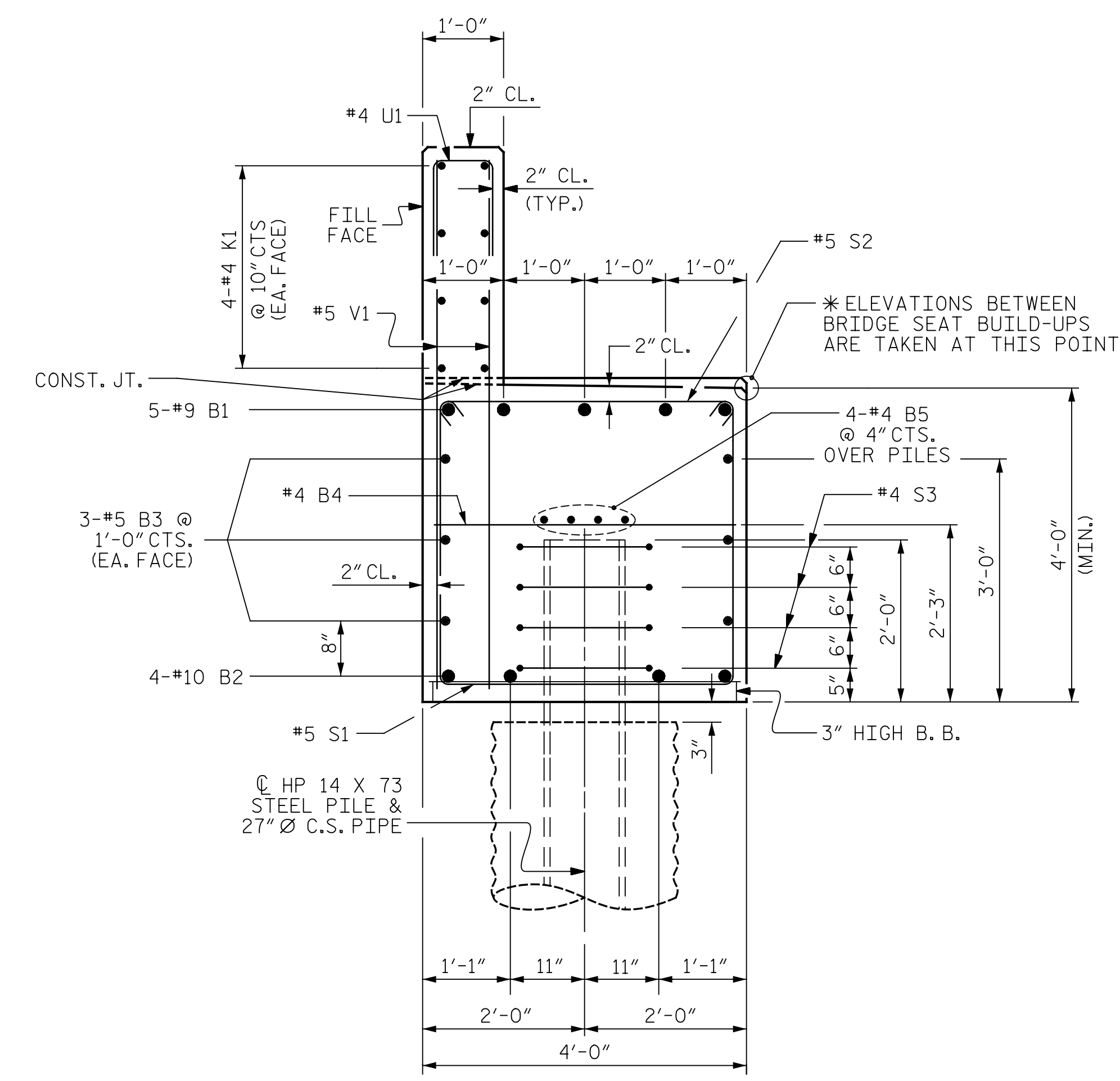
PARTIAL SECTION B-B
(TYP. @ BRG. 2 & 3)



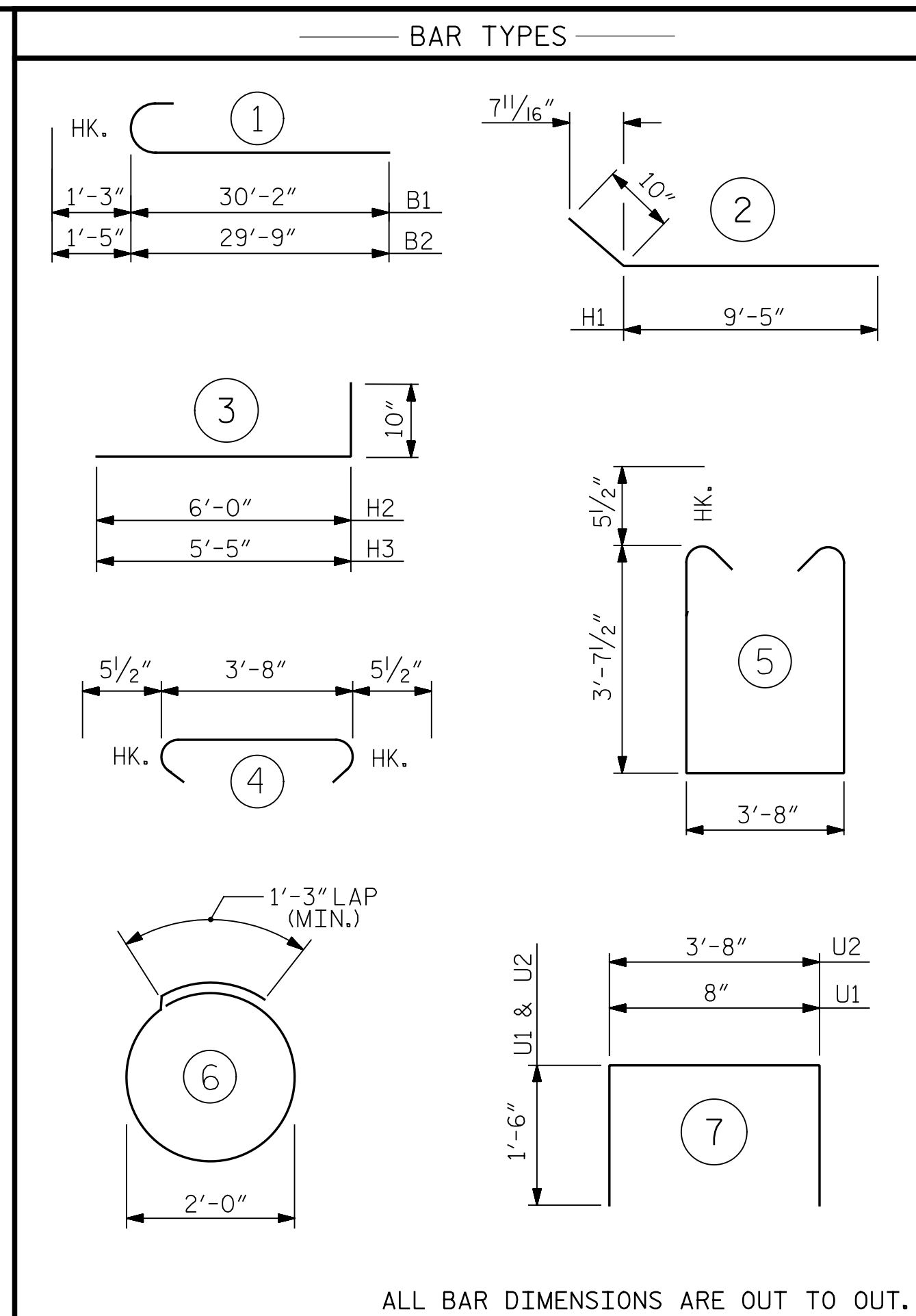
PARTIAL SECTION C-C
(TYP. @ BRG. 4)



PILE SPLICE DETAILS

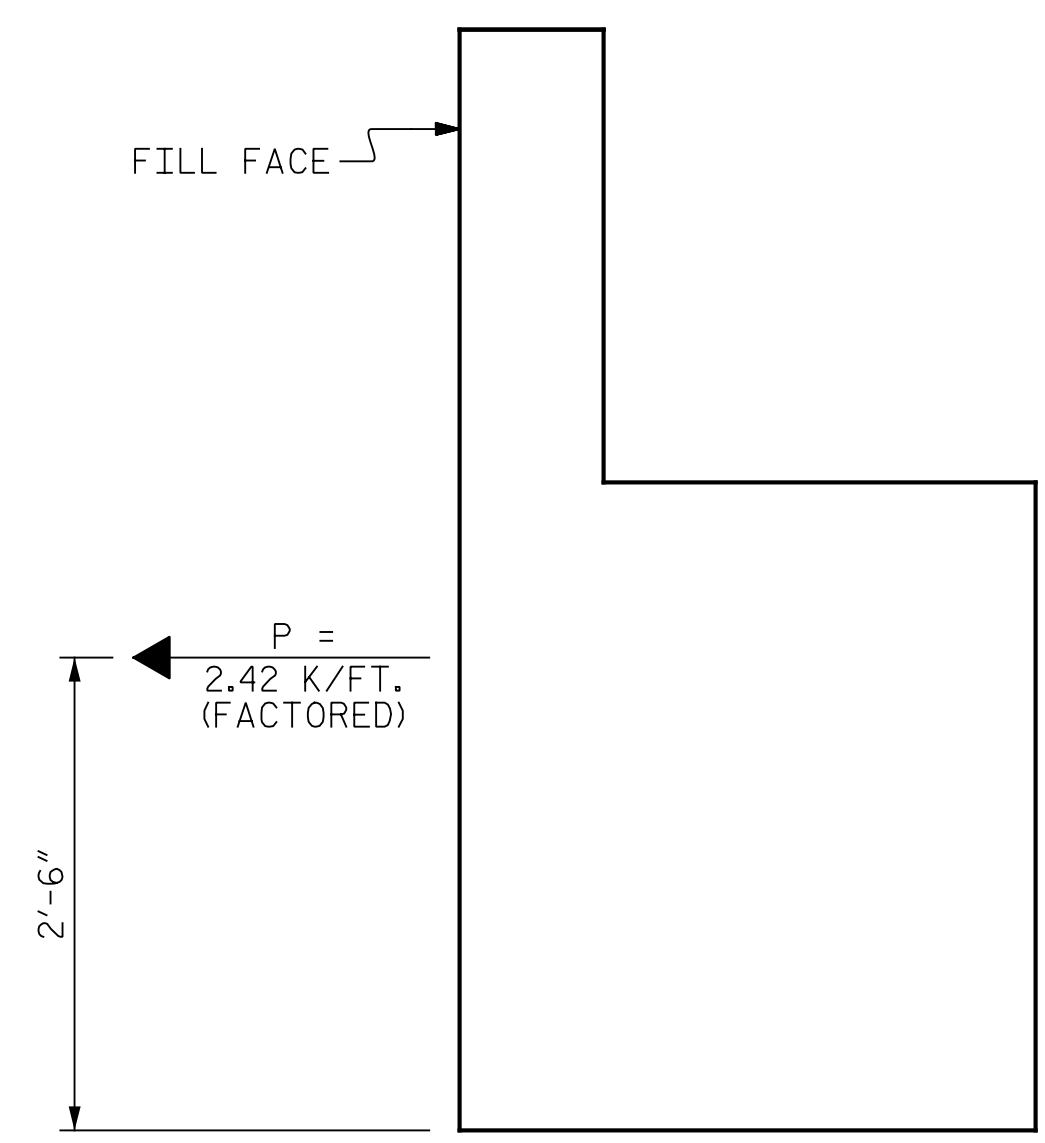


SECTION A-A



ALL BAR DIMENSIONS ARE OUT TO OUT.

BILL OF MATERIAL					
END BENT #1					
BAR	No.	SIZE	TYPE	LENGTH	WEIGHT
B1	10	#9	1	31'-5"	1069
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	15	#4	STR	2'-2"	22
B7	5	#4	STR	15'-0"	50
H1	26	#5	2	10'-3"	278
H2	14	#5	3	6'-10"	100
H3	14	#5	3	6'-3"	93
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	59	#5	5	11'-10"	728
S2	59	#5	4	4'-7"	282
S3	24	#4	6	7'-7"	122
U1	41	#4	7	3'-8"	101
U2	17	#4	7	6'-8"	76
V1	82	#5	STR	6'-7"	563
V2	30	#4	STR	8'-3"	166
V3	19	#4	STR	8'-11"	114
REINFORCING STEEL					5,646 LBS.
CLASS A CONCRETE					
POUR #1 (CAP & LOWER WINGS)					32.4 C.Y.
POUR #2 (UPPER WINGS & BACKWALL)					8.0 C.Y.
TOTAL					40.4 C.Y.
HP 14 X 73 STEEL PILES					
No. = 6					492 LIN. FT.
PILE DRIVING EQUIPMENT SETUP FOR HP 14 X 73 STEEL PILES					6 EACH
PILE REDRIVES					6 EACH



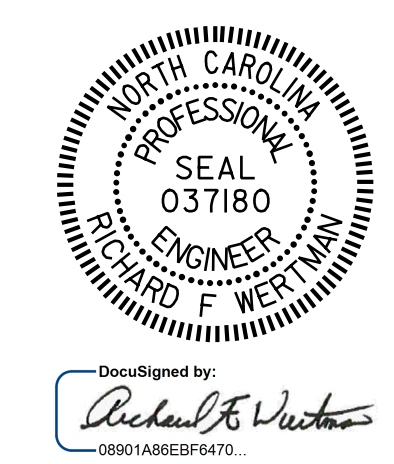
TIE BACK DETAILS
(DETAIL SHOWING TIE BACK RESTRAINT FOR END BENT)

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 #1



DRAWN BY : J.A. BOYER DATE : 09/26/17
CHECKED BY : J.M. FORD DATE : 10/03/17
DESIGN ENGINEER OF RECORD : R.F. WERTMAN DATE : 11/06/17

PLANS PREPARED BY:
Gannett Fleming
2610 Wycliff Road
Suite 102
Raleigh, NC 27607-3073
(919) 420-7660
Excellence Delivered As Promised 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. S01-18
TOTAL SHEETS 24