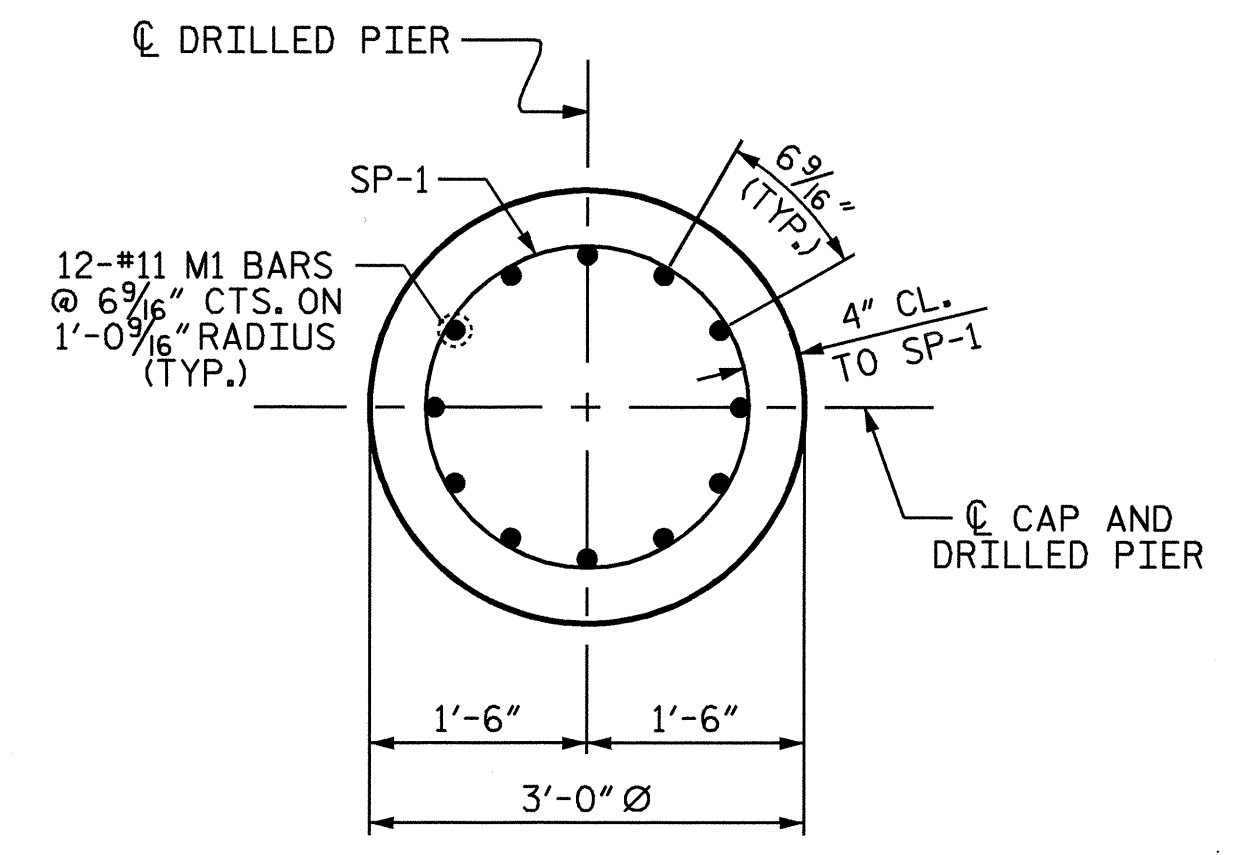


BAGGED STONE AND PIPE SHALL BE PLACED IMMEDIATELY AFTER COMPLETION OF END BENT EXCAVATION. PIPE MAY BE EITHER CONCRETE, CORRUGATED STEEL, CORRUGATED ALUMINUM ALLOY, OR CORRUGATED PLASTIC. PERFORATED PIPE WILL NOT BE ALLOWED.

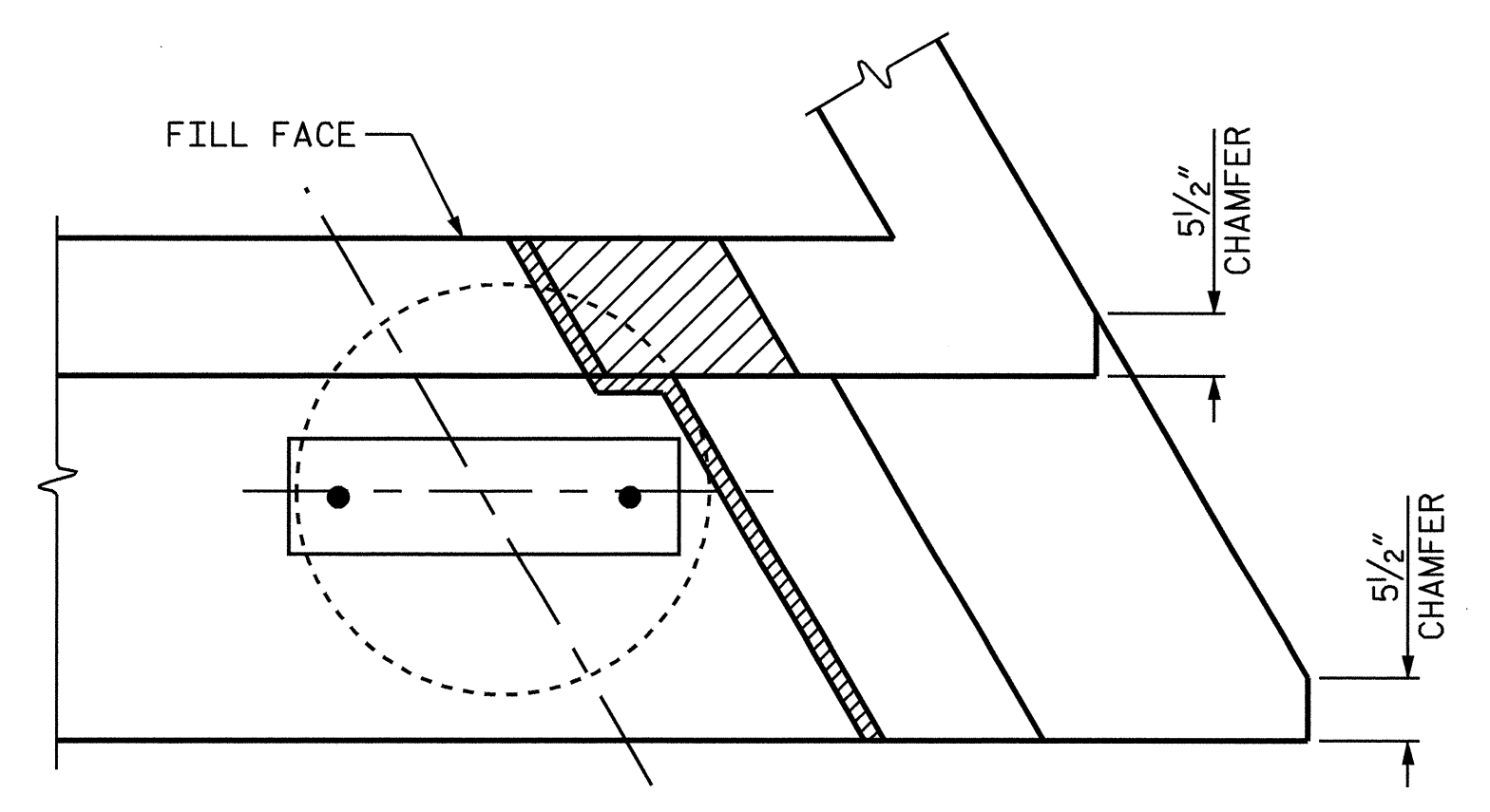
BAGGED STONE SHALL REMAIN IN PLACE UNTIL THE ENGINEER DIRECTS THAT IT BE REMOVED. THE CONTRACTOR SHALL REMOVE AND DISPOSE OF SILT ACCUMULATIONS AT BAGGED STONE WHEN SO DIRECTED BY THE ENGINEER. BAGS SHALL BE REMOVED AND REPLACED WHENEVER THE ENGINEER DETERMINES THAT THEY HAVE DETERIORATED AND LOST THEIR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

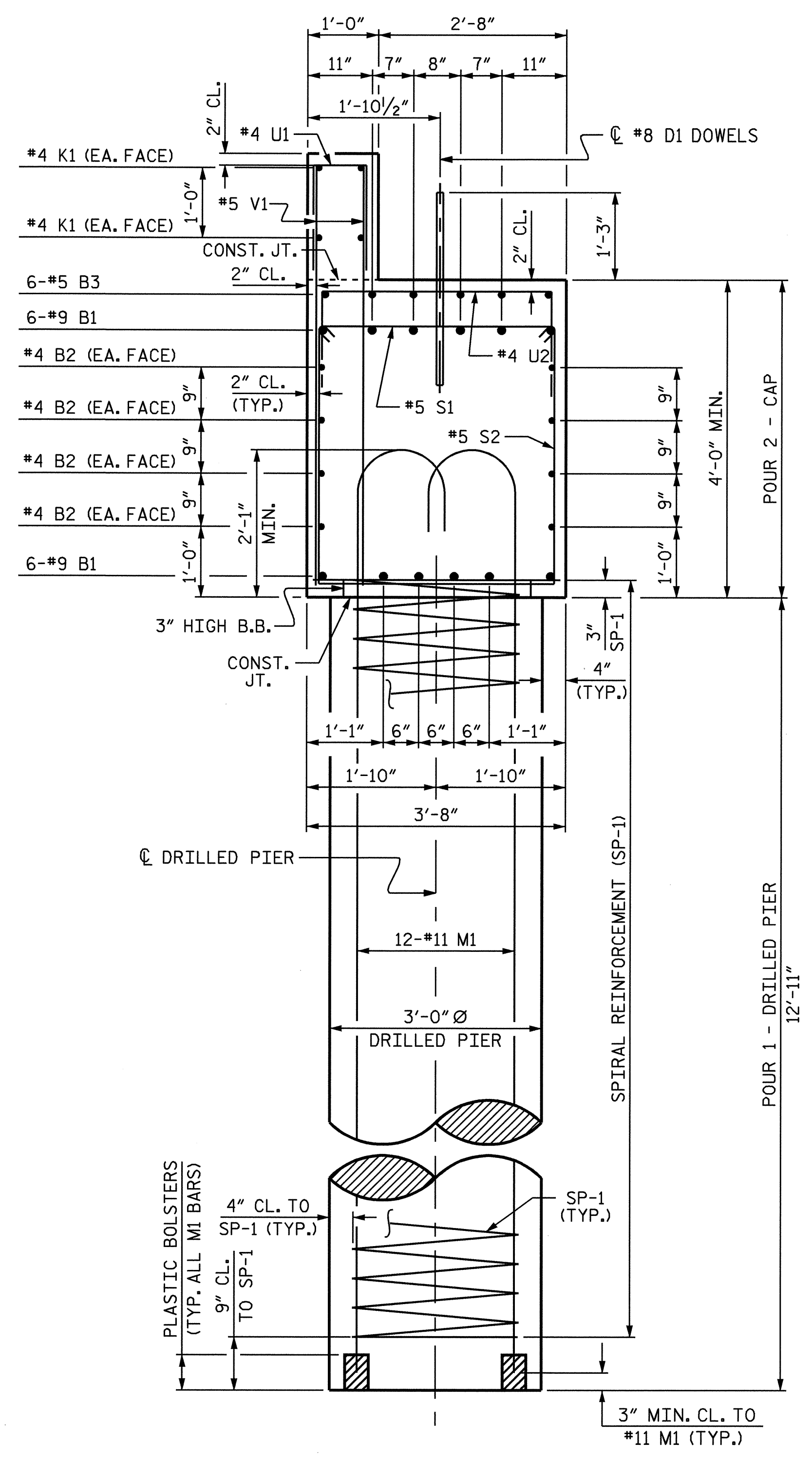
TEMPORARY DRAINAGE AT END BENT



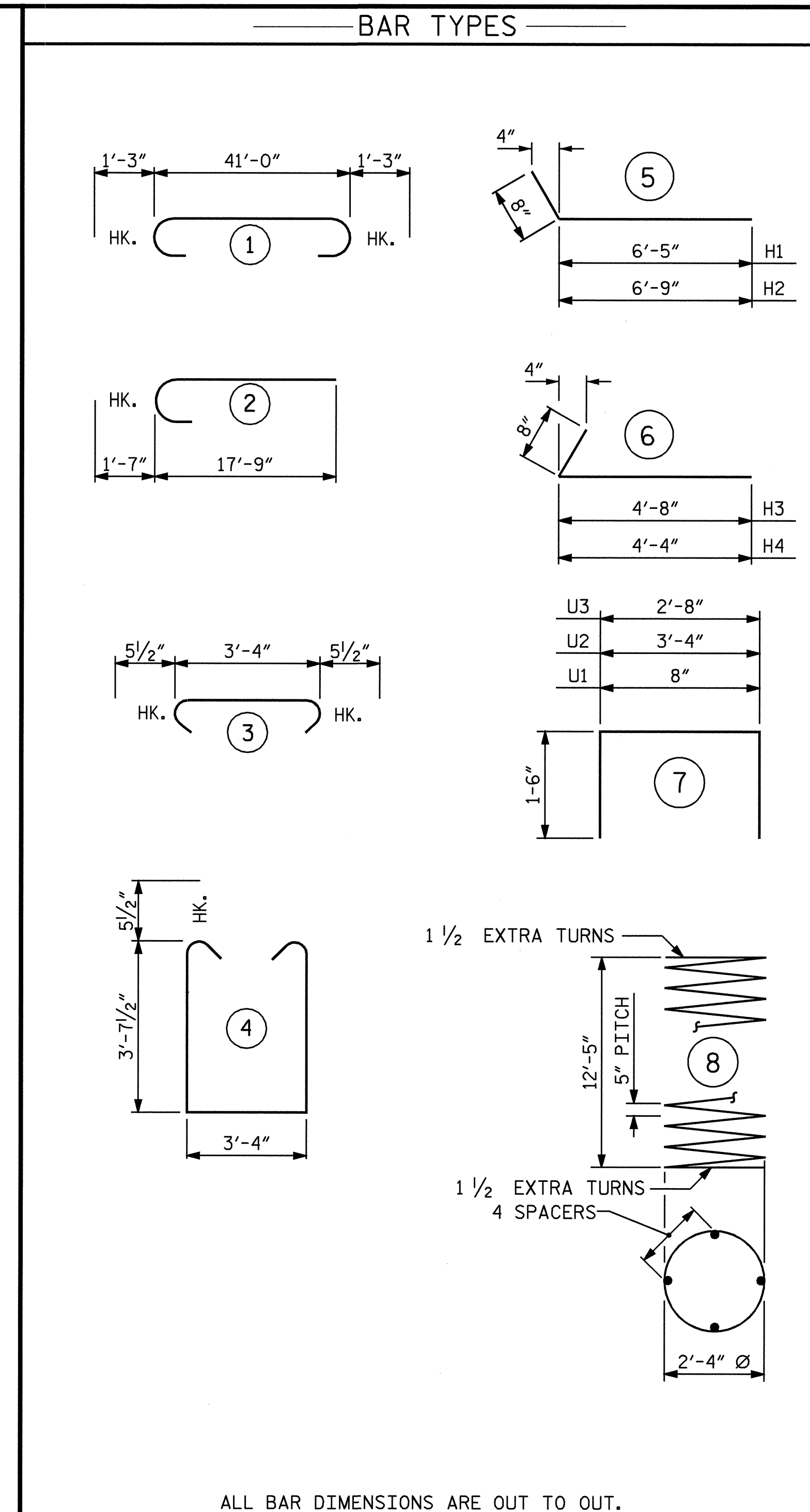
SECTION THRU DRILLED PIER



CHAMFER DETAIL



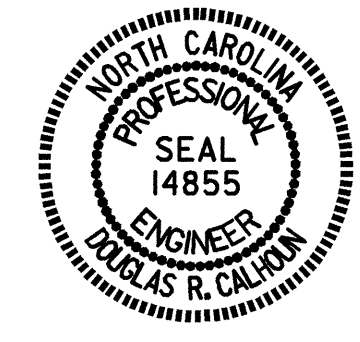
SECTION A-A



ALL BAR DIMENSIONS ARE OUT TO OUT.
 ** THE SP-1 SPIRAL REINFORCING STEEL SHALL BE W31 OR D-31 COLD DRAWN WIRE OR #5 PLAIN OR DEFORMED BAR.

BILL OF MATERIAL					
END BENT 2					
BAR NO.	SIZE	TYPE	LENGTH	WEIGHT	
B1	12	9	1	43 - 6	1775
B2	16	4	STR	21 - 10	233
B3	6	5	STR	28 - 0	175
D1	20	8	STR	2 - 3	120
H1	9	4	5	7 - 1	43
H2	9	4	5	7 - 5	45
H3	9	4	6	5 - 4	32
H4	9	4	6	5 - 0	30
K1	8	4	STR	21 - 10	117
K2	8	4	STR	3 - 5	18
M1	36	11	2	19 - 4	3698
S1	40	5	3	4 - 3	177
S2	40	5	4	11 - 6	480
U1	34	4	7	3 - 8	83
U2	19	4	7	6 - 4	80
U3	4	4	7	5 - 8	15
V1	68	5	STR	5 - 6	390
V2	24	5	STR	7 - 6	188
V3	20	5	STR	7 - 2	149
SP-1	3	**	9	235 - 6	737
REINFORCING STEEL				LBS.	7848
SPIRAL COLUMN REINFORCING STEEL				LBS.	737
CLASS A CONCRETE BREAKDOWN					
POUR 2 (CAP & LOWER PART OF WINGS)				C.Y.	28.0
POUR 3 (BACKWALL & UPPER PART OF WINGS)				C.Y.	4.7
POUR 4 (LATERAL GUIDE)				C.Y.	0.1
CLASS A TOTAL				C.Y.	32.8
DRILLED PIER CONCRETE					
POUR 1 (DRILLED PIERS)				C.Y.	10.1
3'-0" Ø DRILLED PIER IN SOIL				LIN. FT.	17.75
3'-0" Ø DRILLED PIER NOT IN SOIL				LIN. FT.	21.00
SID INSPECTION					1 PER BENT
CROSSHOLE SONIC LOGGING					1 PER BENT
CSL TUBES				LIN. FT.	185.00

PROJECT NO. B-3205
 MADISON COUNTY
 STATION: 14+81.00 -L-
 SHEET 3 OF 3



STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH
 SUBSTRUCTURE
 END BENT 2

DRAWN BY: T. A. HARRIS DATE: 5/26/05
 CHECKED BY: K. P. SEDA DATE: 6/20/05

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S-18
1			3			TOTAL SHEETS
2			4			21