

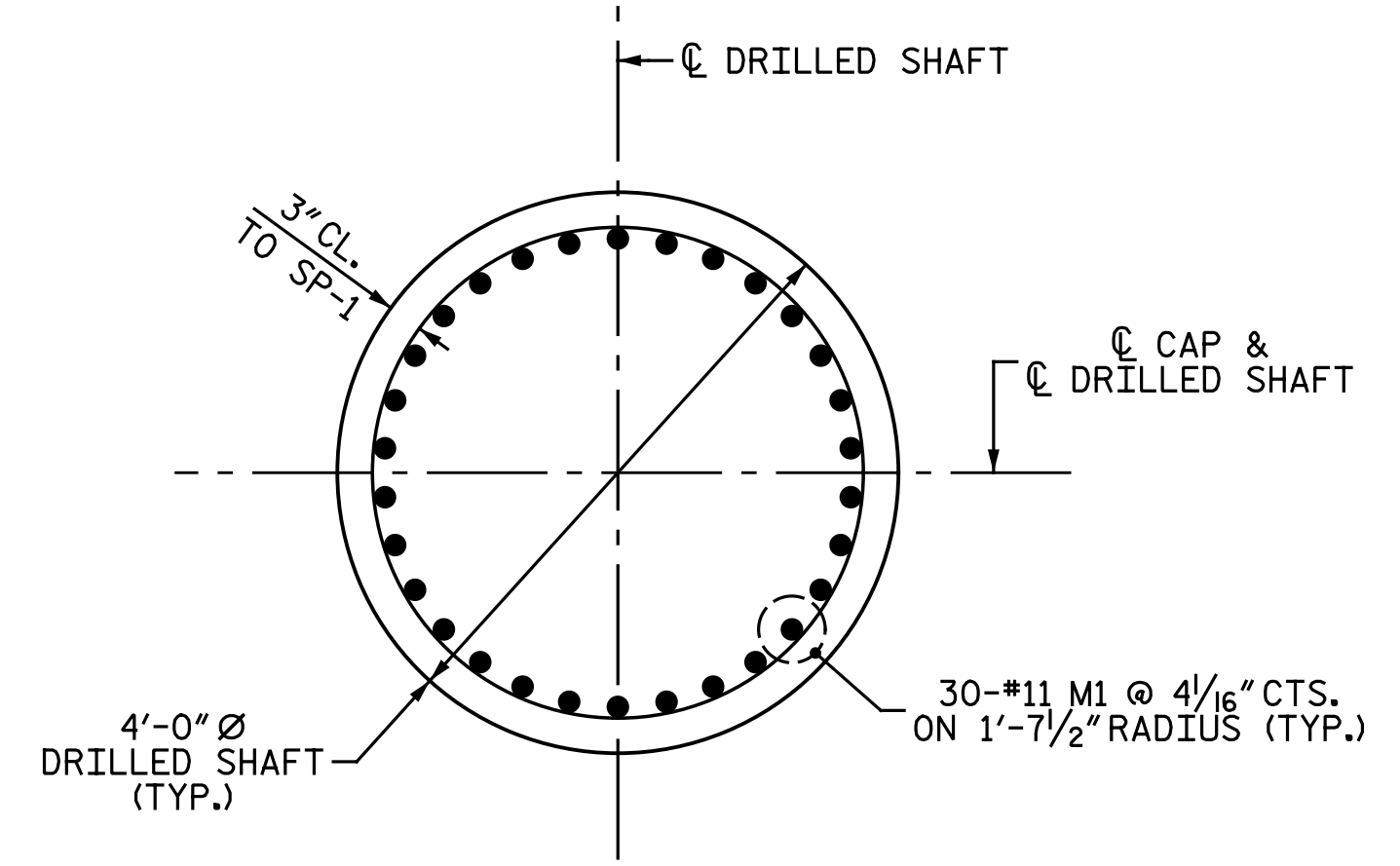
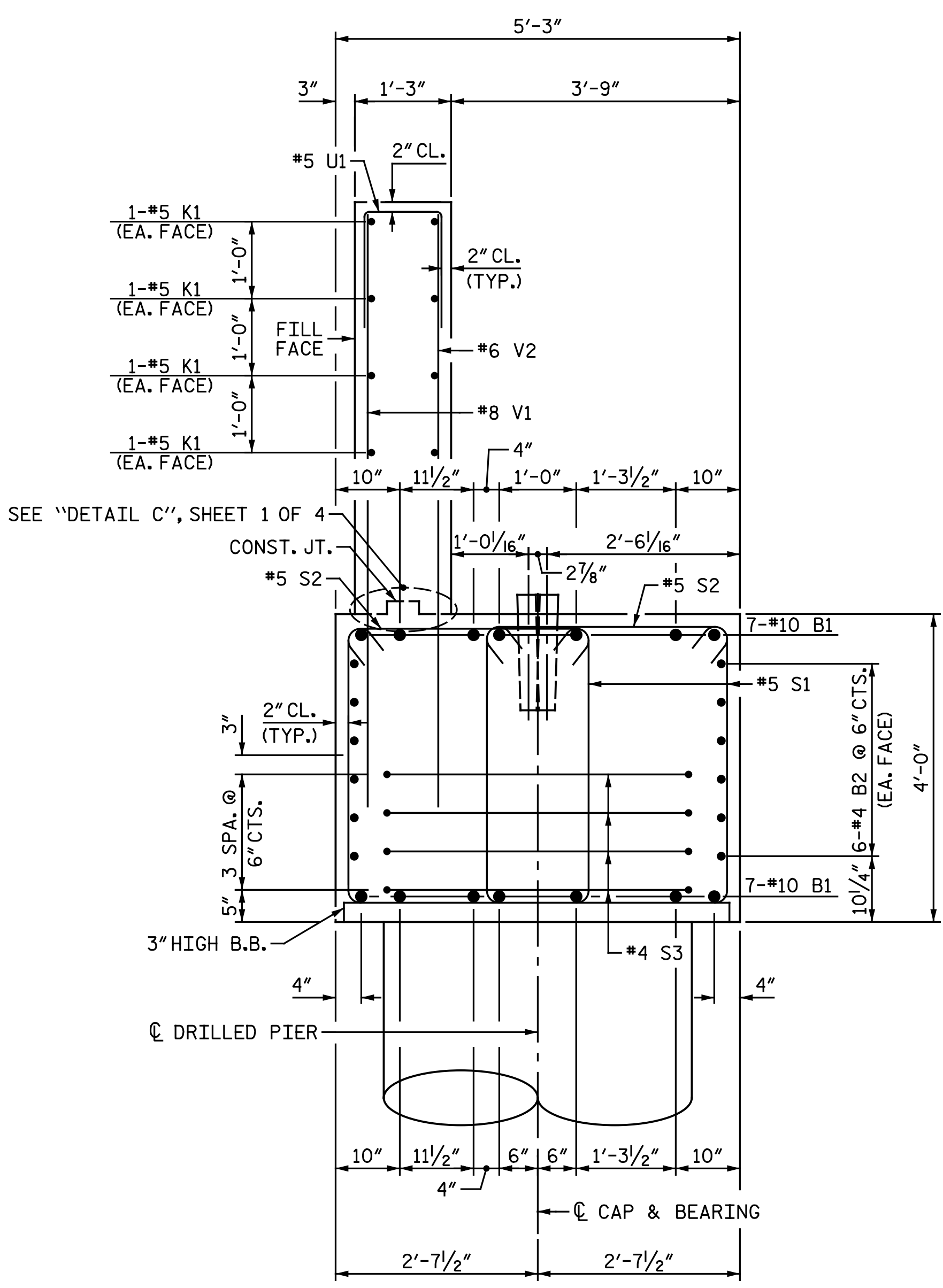
NOTES:

BACKWALL SHALL BE PLACED BEFORE APPLYING EPOXY PROTECTIVE COATING.

THE TOP SURFACE AREAS OF THE ABUTMENT CAPS SHALL BE CURED IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS EXCEPT THE MEMBRANE CURING COMPOUND METHOD SHALL NOT BE USED.

THE CONTRACTOR'S ATTENTION IS CALLED TO THE FACT THAT THE LONGITUDINAL REINFORCEMENT FOR THE DRILLED PIERS IS DETAILED WITH 3 FEET OF EXTRA LENGTH.

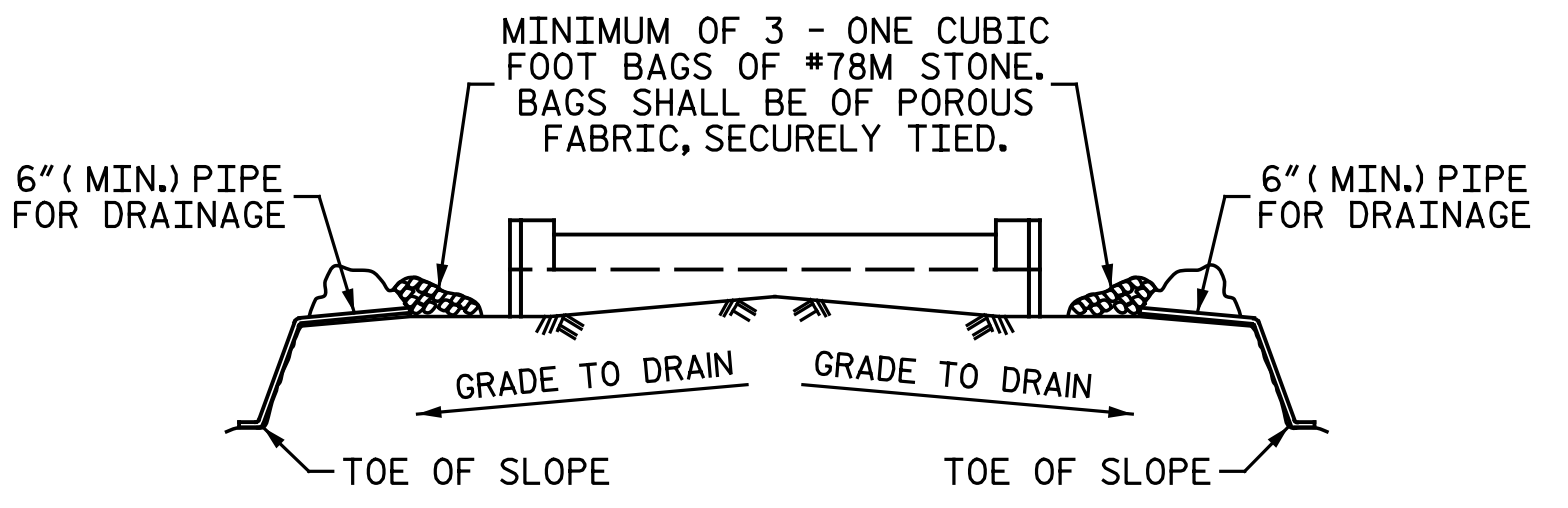
ALL STEEL IN THE DRILLED PIERS IS INCLUDED IN THE PAY ITEMS FOR "REINFORCING STEEL" AND "SPIRAL COLUMN REINFORCING STEEL".



SECTION B-B

SECTION A-A

DRILLED SHAFT REINFORCEMENT NOT SHOWN FOR CLARITY.



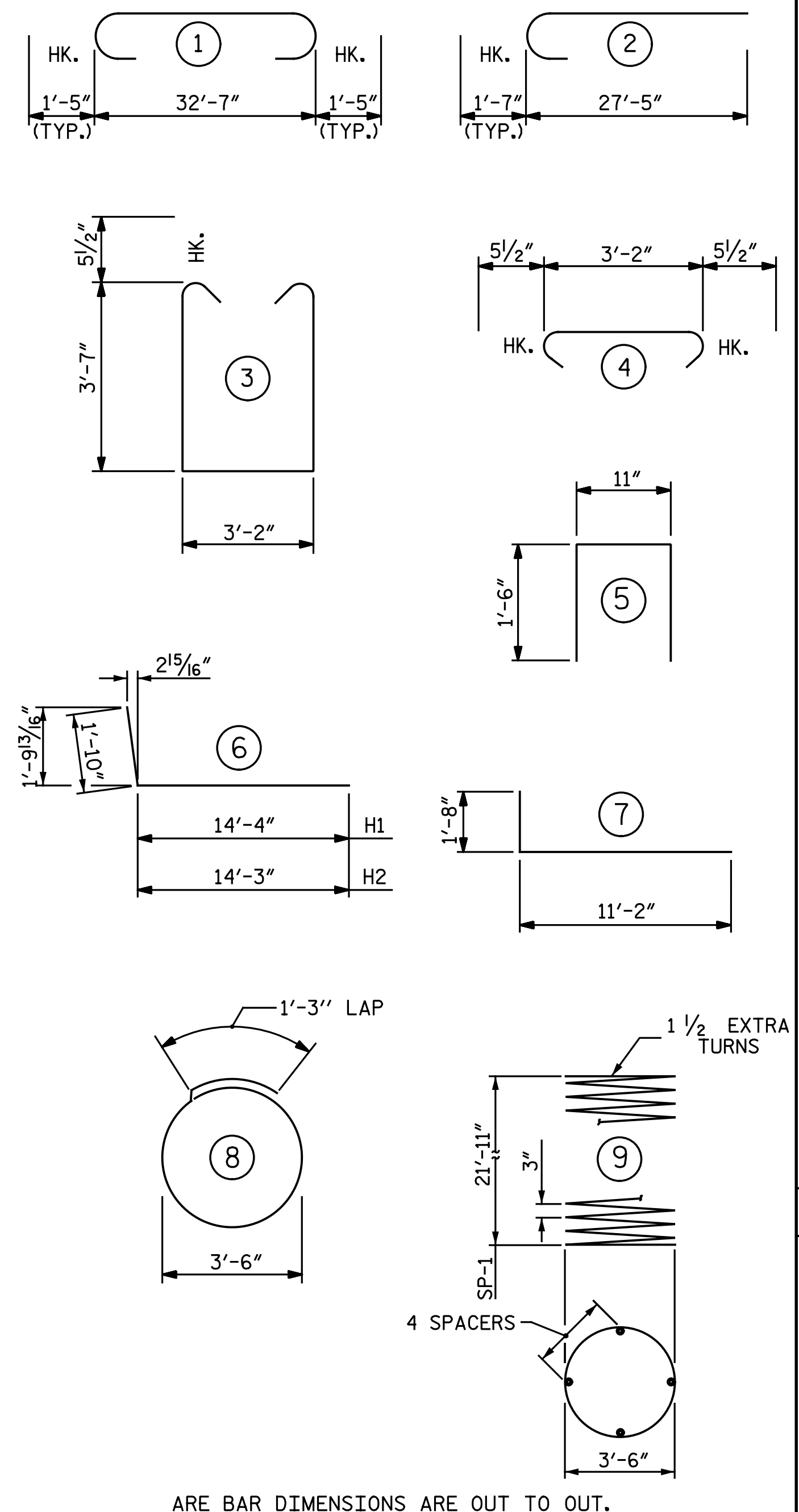
BAGGED STONE AND PIPE SHALL BE PLACED IMMEDIATELY AFTER COMPLETION OF END BENT EXCAVATION. PIPE MAY BE EITHER CONCRETE, CORRUGATED STEEL, CORRUGATED ALUMINUM ALLOY, OR CORRUGATED PLASTIC. PERFORATED PIPE WILL NOT BE ALLOWED.

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 ABUTMENT

BAR TYPES



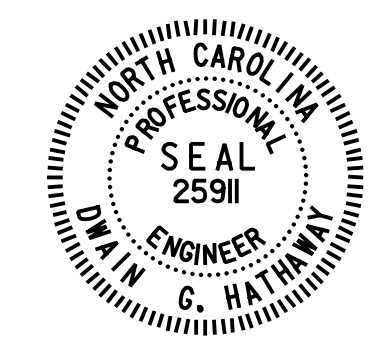
ARE BAR DIMENSIONS ARE OUT TO OUT.

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

BILL OF MATERIAL
ABUTMENT I

BAR NO.	NO.	SIZE	TYPE	LENGTH	WEIGHT
B1	14	10	1	35' - 5"	2,134
B2	24	4	STR	17' - 6"	281
B3	2	5	STR	1' - 6"	3
B4	3	5	STR	1' - 10"	6
B5	1	5	STR	3' - 6"	4
B6	1	5	STR	7' - 3"	8
H1	26	10	6	16' - 2"	1,809
H2	26	10	6	16' - 1"	1,799
H3	4	10	STR	3' - 4"	57
H4	4	10	STR	2' - 8"	46
H5	18	5	7	12' - 10"	241
K1	8	5	STR	32' - 7"	272
S1	66	5	3	11' - 3"	774
S2	66	5	4	4' - 1"	281
S3	16	4	8	12' - 3"	131
M1	120	11	2	29' - 0"	18,489
U1	27	5	5	3' - 11"	110
V1	53	8	STR	8' - 11"	1,262
V2	53	6	STR	8' - 11"	710
V3	12	8	STR	10' - 6"	336
V4	12	6	STR	10' - 6"	189
V5	32	9	STR	10' - 6"	1,142
V6	14	5	STR	10' - 6"	153
V7	18	5	STR	8' - 8"	163
SP-1	4	*	9	966' - 1"	4,032
REINFORCING STEEL				LBS.	30,400
SPIRAL COLUMN REINF. STEEL				LBS.	4,032
CLASS "AA" CONCRETE BREAKDOWN					
POUR #2 CAP, LOWER & WING WALLS				C.Y.	30.1
POUR #3 BACKWALL & UPPER WING WALLS				C.Y.	15.6
TOTAL CLASS "AA" CONCRETE				C.Y.	45.7
DRILLED PIERS					
4'-0" DIA. DRILLED PIERS IN SOIL				L.F.	59.5
4'-0" DIA. DRILLED PIERS NOT IN SOIL				L.F.	30.0
DRILLED PIER CONCRETE BREAKDOWN					
POUR #1 DRILLED PIERS				C.Y.	41.7
CSL TUBES				L.F.	382.08

PROJECT NO. U-3308
 DURHAM COUNTY
 STATION: 24+55.20 -LALT-
13+22.18 -CSXN-
 SHEET 4 OF 4



STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH
 SUBSTRUCTURE
 ABUTMENT I

Michael Baker INTERNATIONAL
 Michael Baker Engineering
 8000 Regency Parkway, Suite 600
 Cary, North Carolina 27518
 NC License No.: F-1084

REVISIONS						SHEET NO.	
NO.	BY:	DATE:	NO.	BY:	DATE:	S4-31	
1			3			TOTAL SHEETS	
2			4			68	

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