

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

6" (MIN.) PIPE FOR DRAINAGE

GRADE TO DRAIN

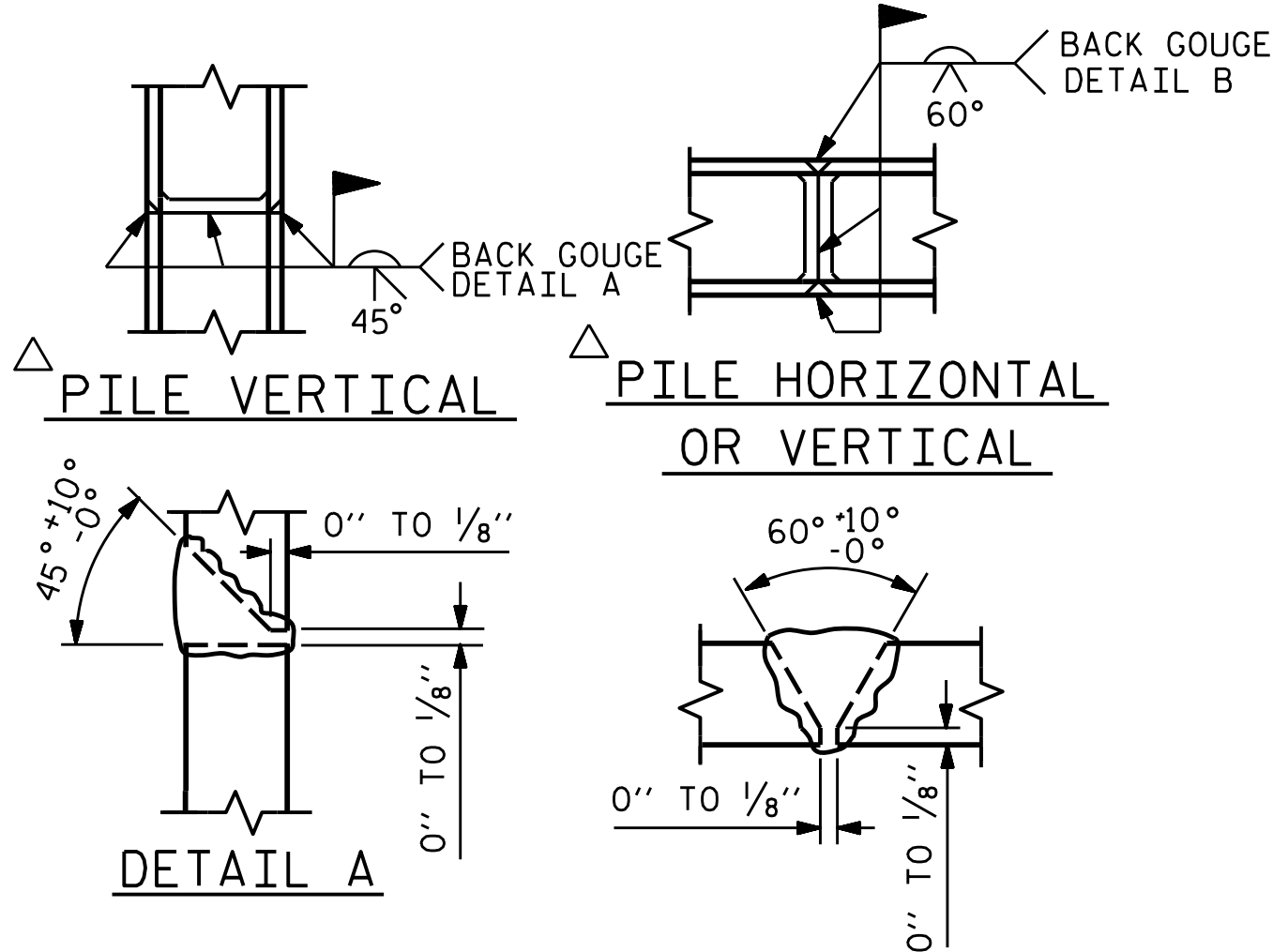
TOE OF SLOPE

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.

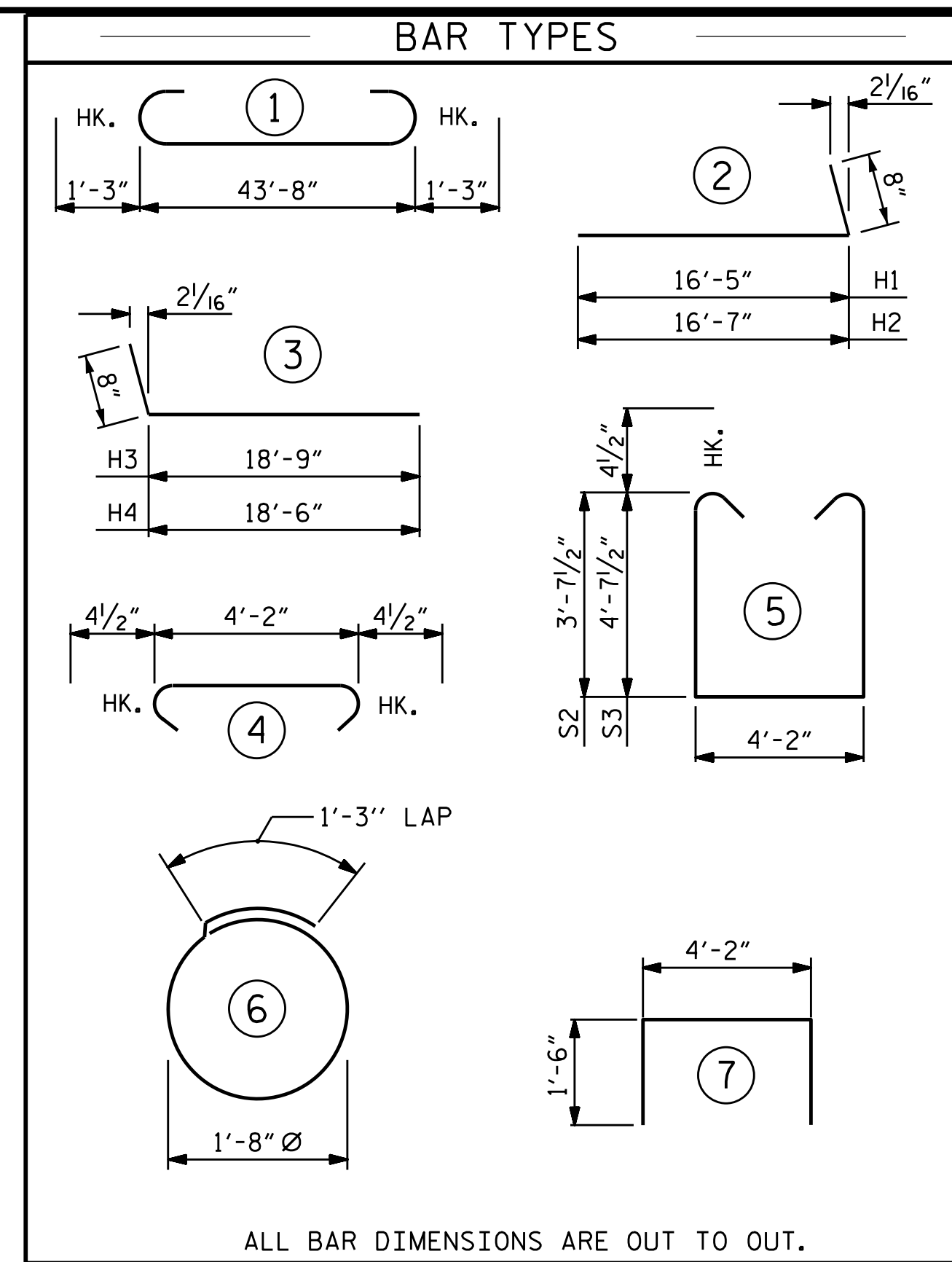
BAGGED STONE SHALL REMAIN IN PLACE UNTIL THE ENGINEER DIRECTS THAT IT BE REMOVED. THE CONTRACTOR SHALL REMOVE AND DISPOSE OF SILT ACCUMULATIONS AT BAGGED STONE WHEN SO DIRECTED BY THE ENGINEER. BAGS SHALL BE REMOVED AND REPLACED WHENEVER THE ENGINEER DETERMINES THAT THEY HAVE DETERIORATED AND LOST THEIR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

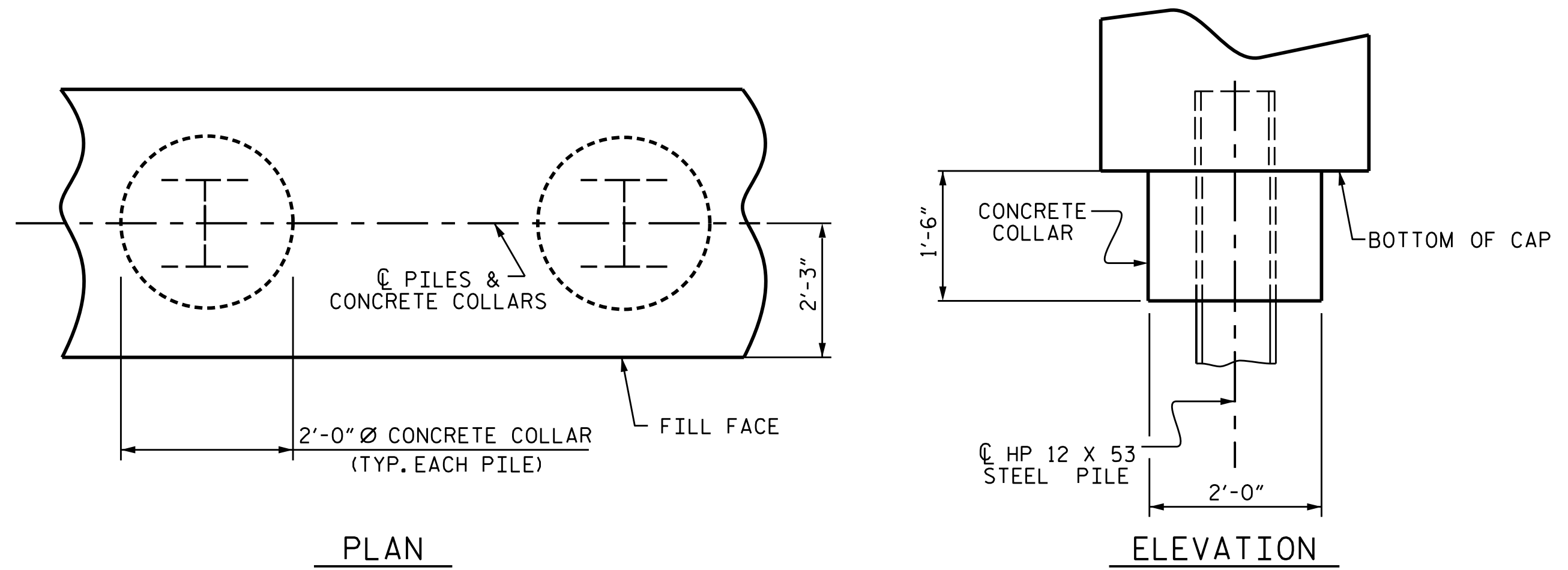


**PILE SPLICE DETAILS**

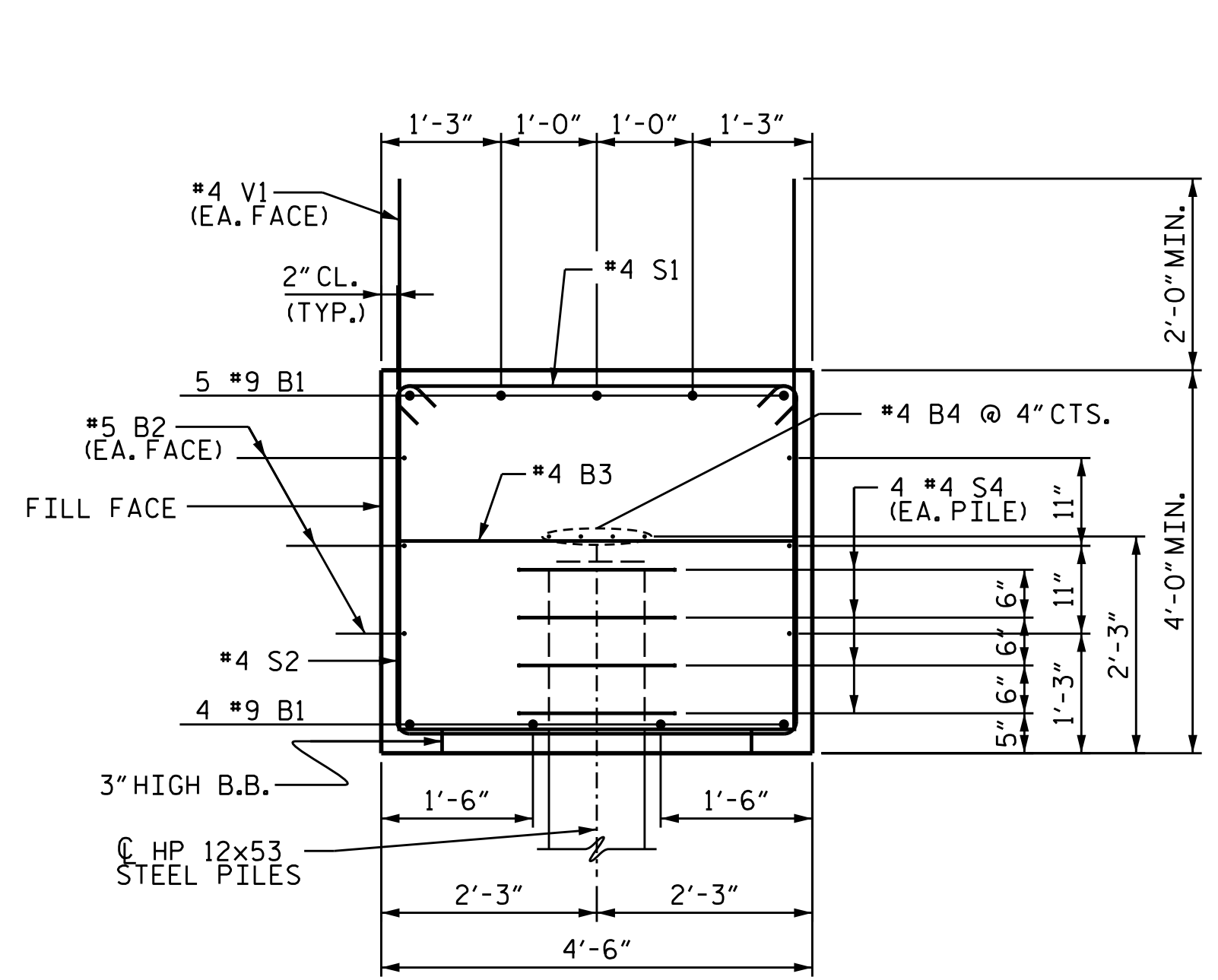


ALL BAR DIMENSIONS ARE OUT TO OUT.

BILL OF MATERIAL FOR END BENT 1					
BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT
B1	9	#9	1	46'-2"	1,413
B2	6	#5	STR	43'-9"	274
B3	13	#4	STR	4'-2"	36
B4	8	#4	STR	23'-1"	123
B5	5	#4	STR	21'-0"	70
B6	1	#9	STR	8'-8"	29
B7	1	#9	STR	8'-5"	29
B8	1	#9	STR	8'-2"	28
B9	1	#9	STR	7'-10"	27
B10	1	#9	STR	7'-7"	26
H1	8	#6	2	17'-1"	205
H2	8	#6	2	17'-3"	207
H3	10	#6	3	19'-5"	292
H4	10	#6	3	19'-2"	288
S1	36	#4	4	4'-11"	118
S2	30	#4	5	12'-2"	244
S3	6	#4	5	14'-2"	57
S4	36	#4	6	6'-6"	156
U1	13	#4	7	7'-2"	62
V1	56	#4	STR	4'-6"	168
V2	34	#5	STR	10'-2"	361
V3	38	#5	STR	11'-5"	452
REINFORCING STEEL					4665 LBS.
CLASS A CONCRETE BREAKDOWN					
CAP, LOWER PART OF WINGS & COLLARS					38.6 C.Y.

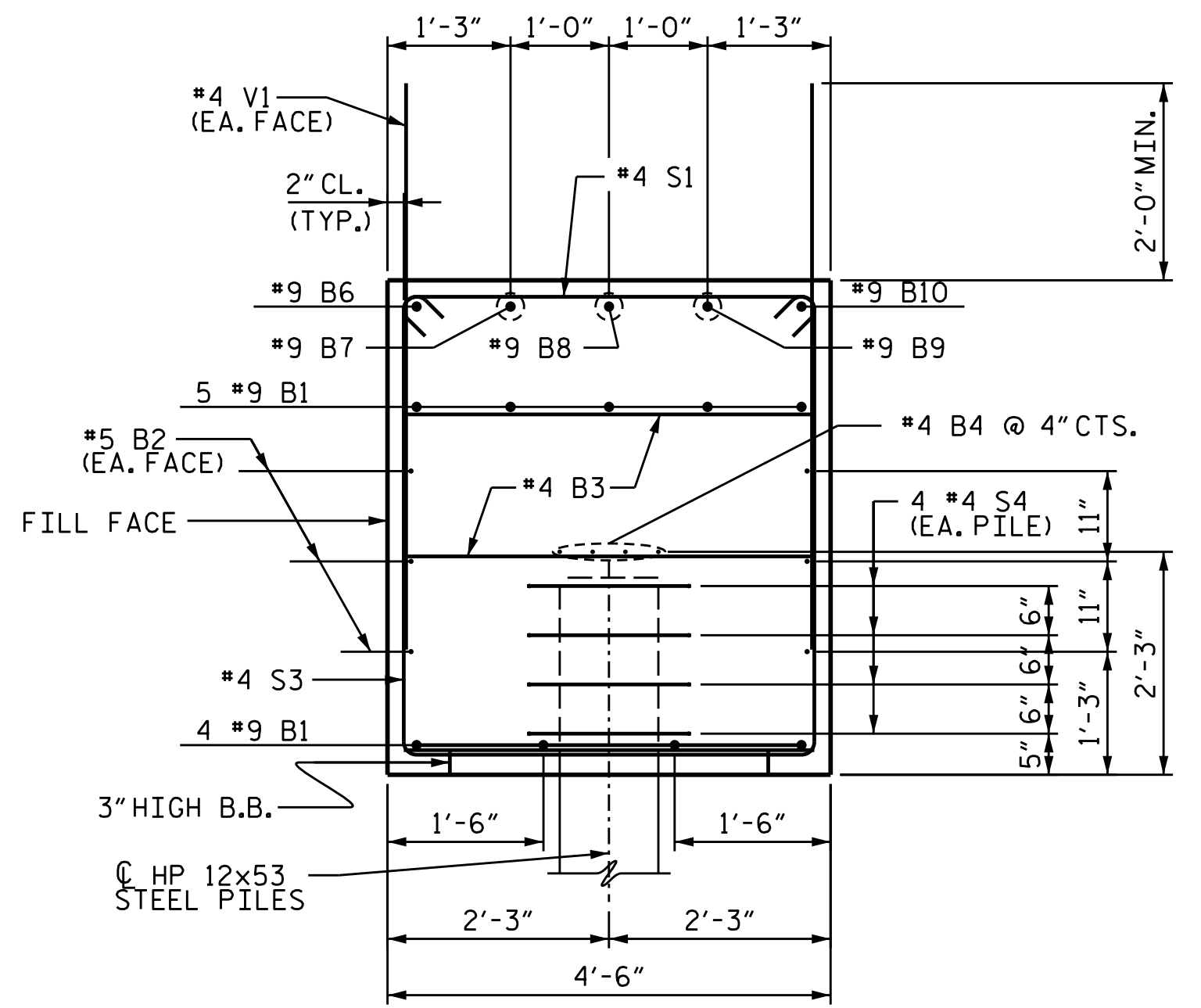


**CORROSION PROTECTION FOR STEEL PILES DETAIL**



**SECTION A-A**

(CONCRETE COLLAR NOT SHOWN FOR CLARITY. SEE "CORROSION PROTECTION FOR STEEL PILES DETAIL.")



**SECTION B-B**

(CONCRETE COLLAR NOT SHOWN FOR CLARITY. SEE "CORROSION PROTECTION FOR STEEL PILES DETAIL.")

PROJECT NO. B-5845  
 CLEVELAND COUNTY  
 STATION: 22+56.00-L-  
 SHEET 4 OF 4

6/27/2024

STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION RALEIGH					
SUBSTRUCTURE INTEGRAL END BENT 1 DETAILS					
REVISIONS					
NO.	BY:	DATE:	NO.	BY:	DATE:
1			3		
2			4		

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED					SHEET NO.
TGS ENGINEERS 201 W. MARION ST STE 200 SHELBY, NC 28150 PH (704) 476-0003 CORP. LICENSE NO.: C-0275					S-31
					TOTAL SHEETS 40

DRAWN BY: NMW DATE: 8/21  
 CHECKED BY: MGC DATE: 5/22  
 DESIGN ENGINEER OF RECORD: ZCS DATE: 3/23