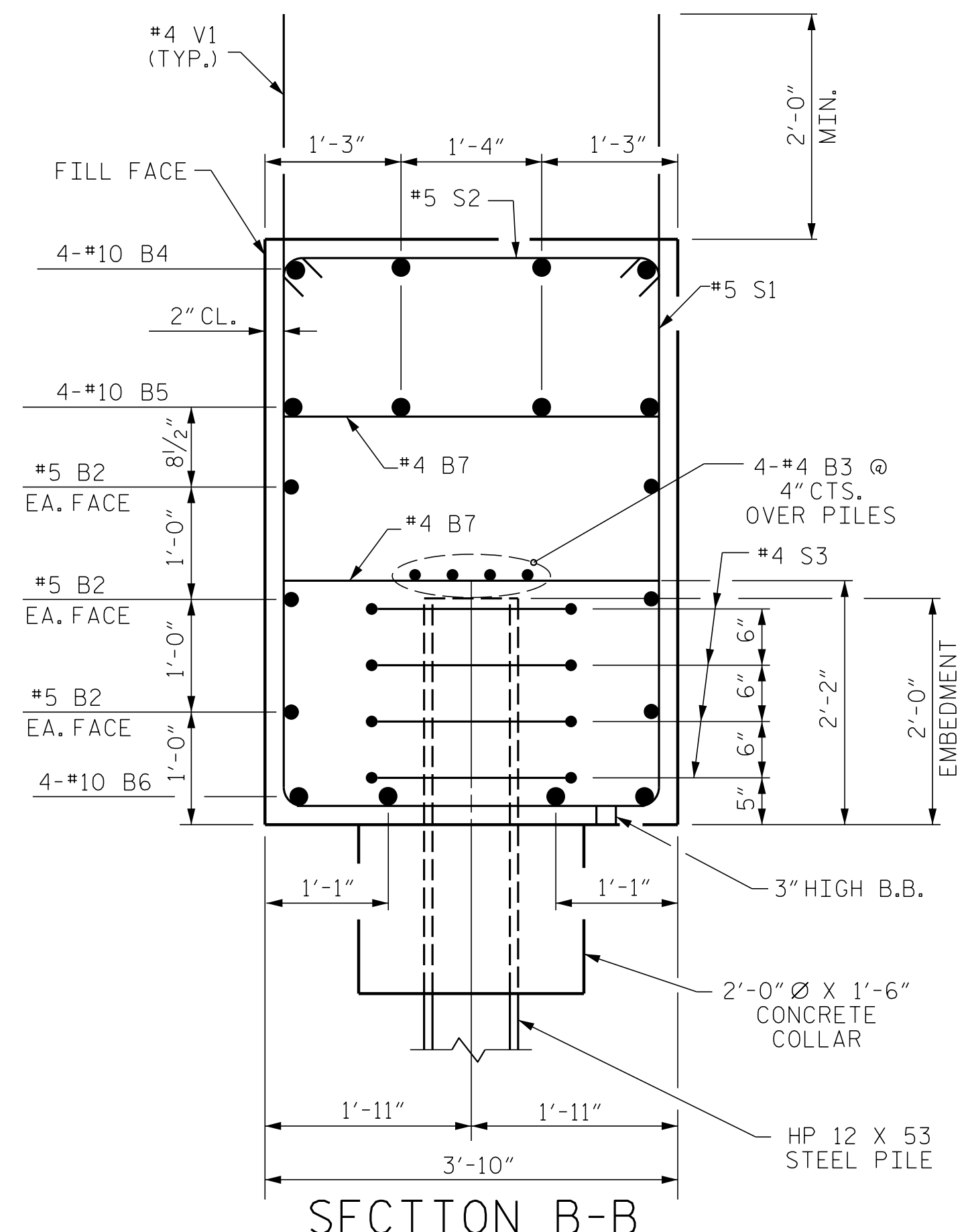
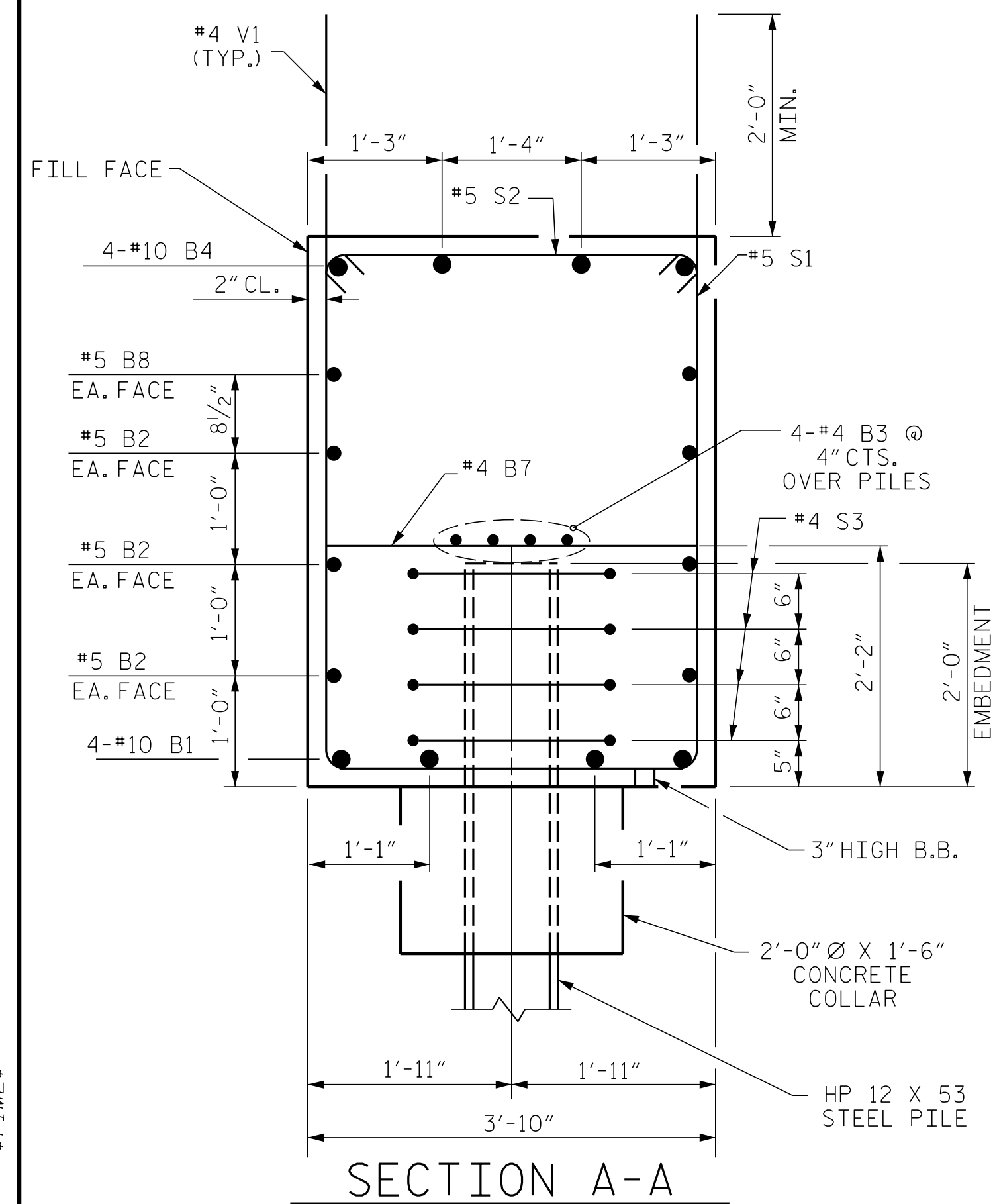


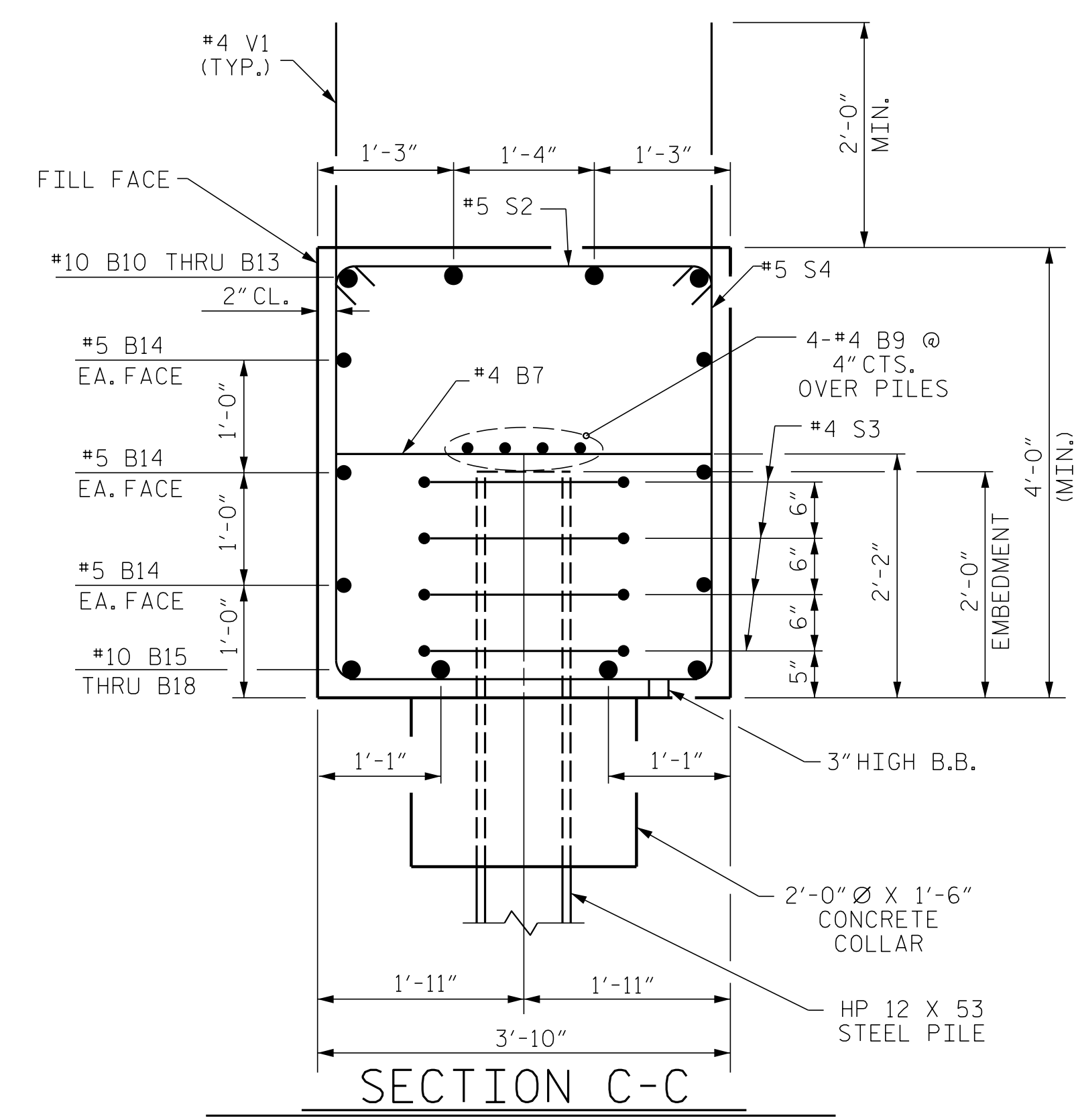
POSITION OF PILE DURING WELDING.  
**PILE SPLICING DETAILS**



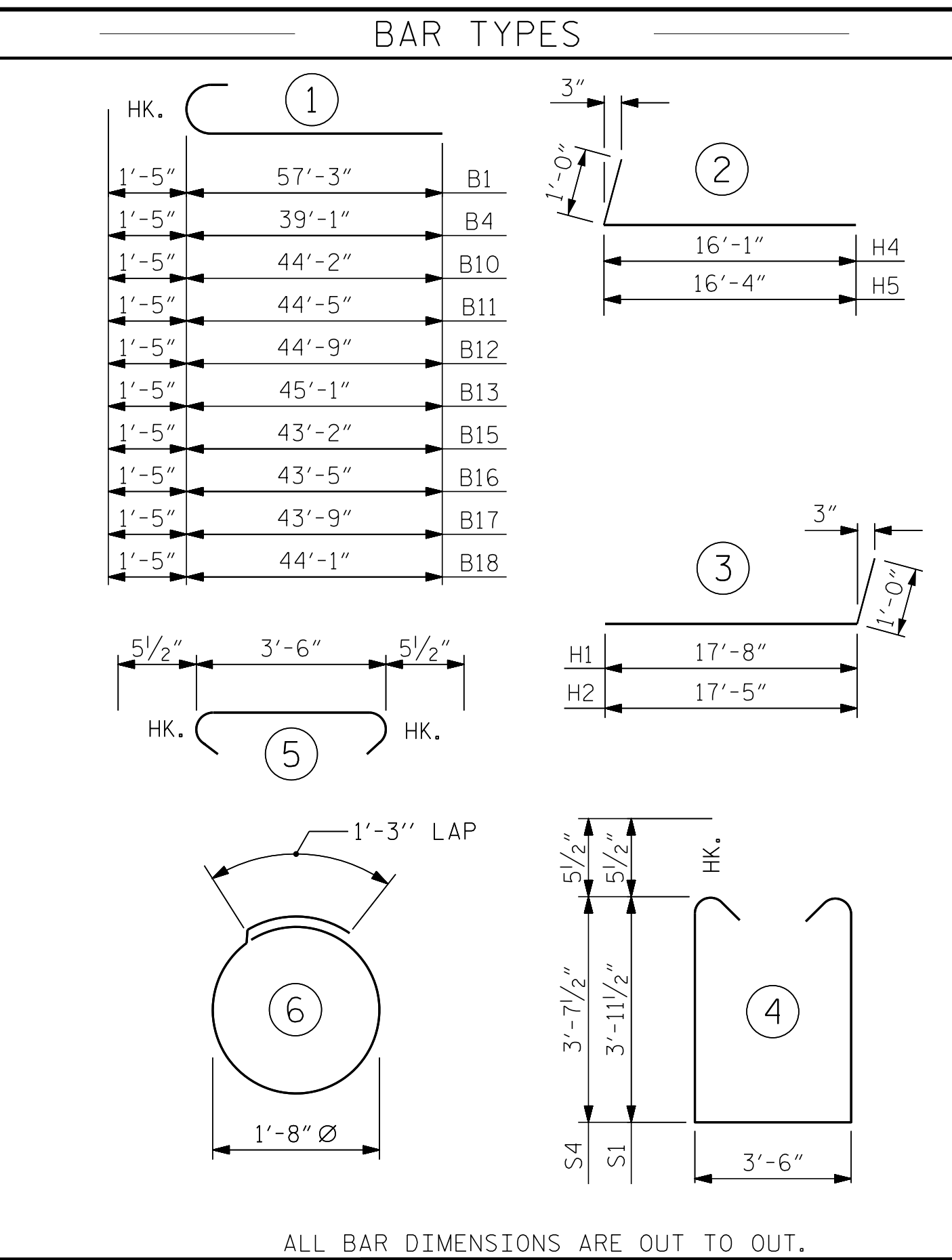
**SECTION B-B**



**SECTION A-A**



**SECTION C-C**



ALL BAR DIMENSIONS ARE OUT TO OUT.

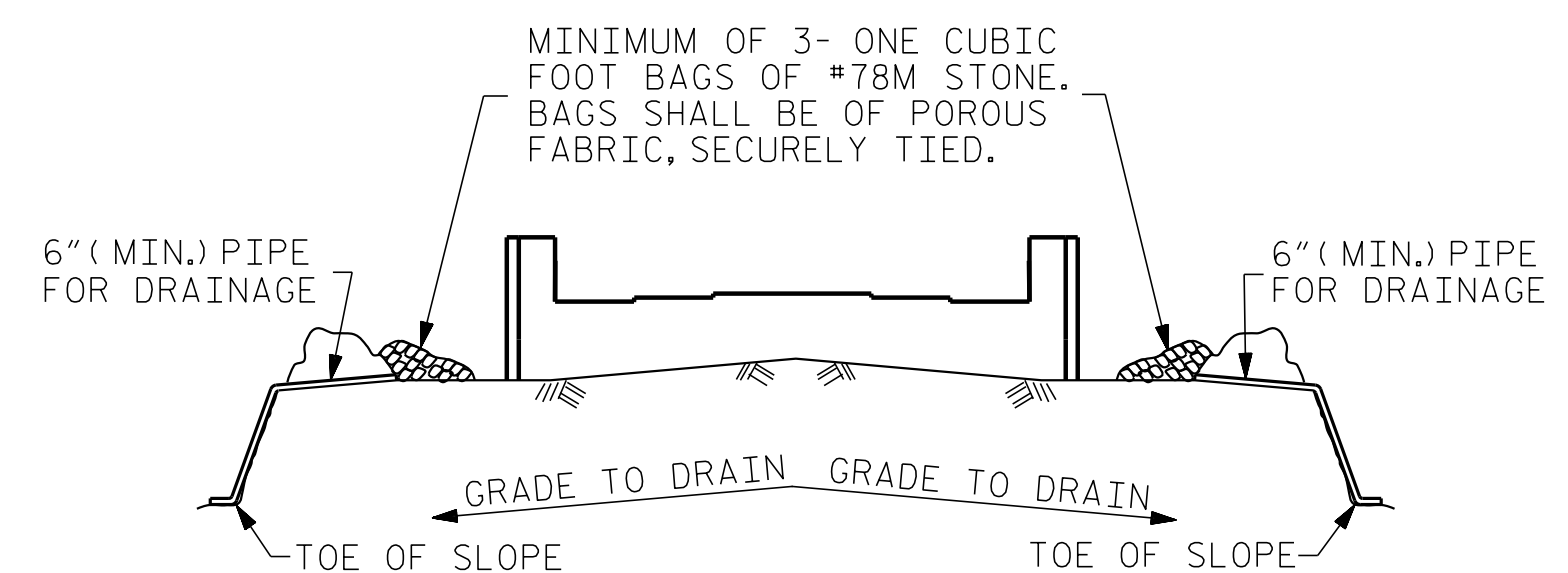
TOTAL QUANTITIES	
REINFORCING STEEL	13,212 LBS.
CLASS "A" CONCRETE TOTAL	94.9 C.Y.
HP 12 X 53 STEEL PILES NO: 20	290.0 L.F.
PILE EXCAVATION IN SOIL PILE EXCAVATION NOT IN SOIL	160.0 L.F. 40.0 L.F.
PILE DRIVING EQUIPMENT SETUP FOR HP 12 X 53 STEEL PILES	20 EA.

BILL OF MATERIAL											
END BENT No. 2											
STAGE I					STAGE II						
BAR NO.	SIZE	TYPE	LENGTH	WEIGHT	BAR NO.	SIZE	TYPE	LENGTH	WEIGHT		
B1	4	#10	1	58'-8"	1010	B7	12	#4	STR	3'-6"	28
B2	12	#5	STR	37'-3"	466	B9	8	#4	STR	23'-8"	126
B3	12	#4	STR	25'-3"	202	B10	1	#10	1	45'-7"	196
B4	8	#10	1	40'-6"	1394	B11	1	#10	1	45'-10"	197
B5	4	#10	STR	7'-6"	129	B12	1	#10	1	46'-2"	199
B6	4	#10	STR	19'-11"	343	B13	1	#10	1	46'-6"	200
B7	19	#4	STR	3'-6"	44	B14	12	#5	STR	24'-0"	300
B8	4	#5	STR	33'-5"	139	B15	1	#10	1	44'-7"	192
						B16	1	#10	1	44'-10"	193
H1	27	#6	3	18'-8"	757	B17	1	#10	1	45'-2"	194
H2	27	#6	3	18'-5"	747	B18	1	#10	1	45'-6"	196
H3	16	#4	STR	3'-5"	37						
						H4	26	#6	2	17'-1"	667
S1	80	#5	4	12'-4"	1029	H5	26	#6	2	17'-4"	677
S2	82	#5	5	4'-5"	378	H6	16	#4	STR	4'-1"	44
S3	48	#4	6	6'-6"	208						
S4	2	#5	4	11'-8"	24	S2	54	#5	5	4'-5"	249
						S3	52	#4	6	6'-6"	139
V1	114	#4	STR	7'-0"	533	S4	54	#5	4	11'-8"	657
V2	44	#5	STR	11'-0"	505						
						V1	70	#4	STR	7'-0"	327
						V3	44	#5	STR	10'-7"	486

REINFORCING STEEL 7,945 LBS. REINFORCING STEEL 5,267 LBS.

CLASS A CONCRETE BREAKDOWN		CLASS A CONCRETE BREAKDOWN	
POUR #1 CAP, CONC. COLLARS & LOWER PART OF WINGS	49.8 C.Y.	POUR #1 CAP, CONC. COLLARS & LOWER PART OF WINGS	32.7 C.Y.
POUR #2 UPPER PART OF WINGS	6.4 C.Y.	POUR #2 UPPER PART OF WINGS	6.0 C.Y.
<b>TOTAL CLASS A CONCRETE</b>	<b>56.2 C.Y.</b>	<b>TOTAL CLASS A CONCRETE</b>	<b>38.7 C.Y.</b>

HP 12 X 53 STEEL PILES NO: 13	206.0 L.F.	HP 12 X 53 STEEL PILES NO: 7	84.0 L.F.
PILE EXCAVATION IN SOIL	104.0 L.F.	PILE EXCAVATION IN SOIL	56.0 L.F.
PILE EXCAVATION NOT IN SOIL	26.0 L.F.	PILE EXCAVATION NOT IN SOIL	14.0 L.F.
PILE DRIVING EQUIPMENT SETUP FOR HP 12 X 53 STEEL PILES	13 EA.	PILE DRIVING EQUIPMENT SETUP FOR HP 12 X 53 STEEL PILES	7 EA.



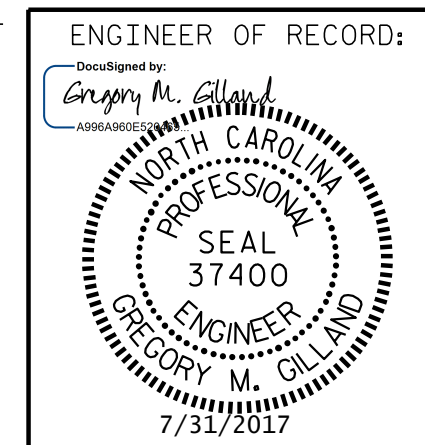
BAGGED STONE AND PIPE SHALL BE PLACED IMMEDIATELY AFTER COMPLETION OF END BENT EXCAVATION. PIPE MAY BE EITHER CONCRETE, CORRUGATED STEEL, CORRUGATED ALUMINUM ALLOY, OR CORRUGATED PLASTIC. PERFORATED PIPE WILL NOT BE ALLOWED.

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**

PROJECT NO. I-5506  
WAKE COUNTY  
STATION: 50+61.09 -L-  
SHEET 4 OF 4



STATE OF NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION  
RALEIGH  
SUBSTRUCTURE  
END BENT No. 2

REVISIONS				SHEET NO.	
NO.	BY:	DATE:	NO.	BY:	DATE:
1			3		
2			4		

TOTAL SHEETS 46

DRAWN BY: D. HODGE DATE: 9/16  
CHECKED BY: B.C. HUNT DATE: 12/16

DOCUMENT NOT CONSIDERED FINAL  
UNLESS ALL SIGNATURES COMPLETED

ETHERILL ENGINEERING  
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Raleigh, N.C. 27606  
Bus: 919 851 8077  
Fax: 919 851 8107  
LICENSE NO. F-0377