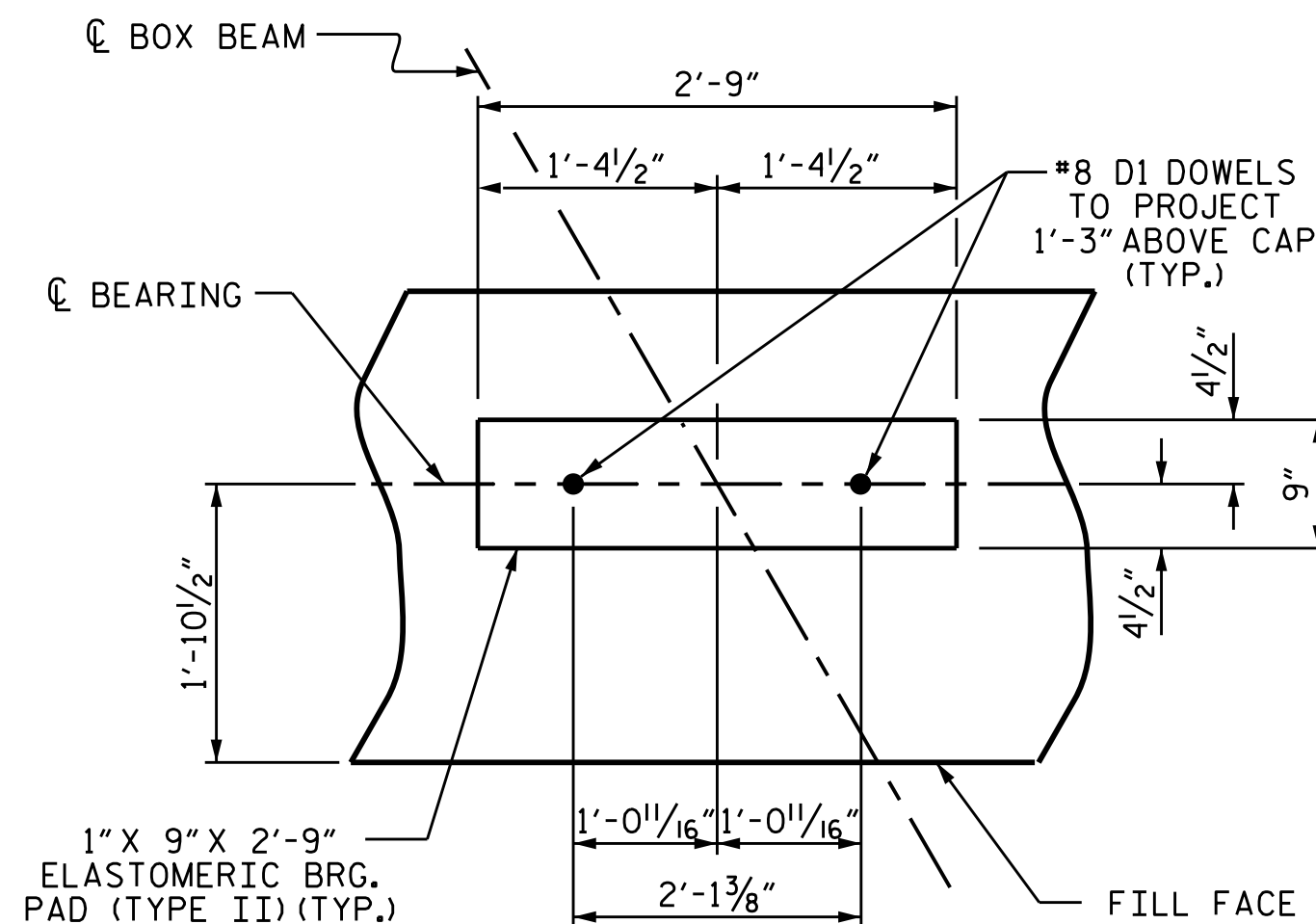


BAGGED STONE AND PIPE SHALL BE PLACED IMMEDIATELY AFTER COMPLETION OF END BENT EXCAVATION. PIPE MAY BE EITHER CONCRETE, CORRUGATED STEEL, CORRUGATED ALUMINUM ALLOY, OR CORRUGATED PLASTIC. PERFORATED PIPE WILL NOT BE ALLOWED.

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.

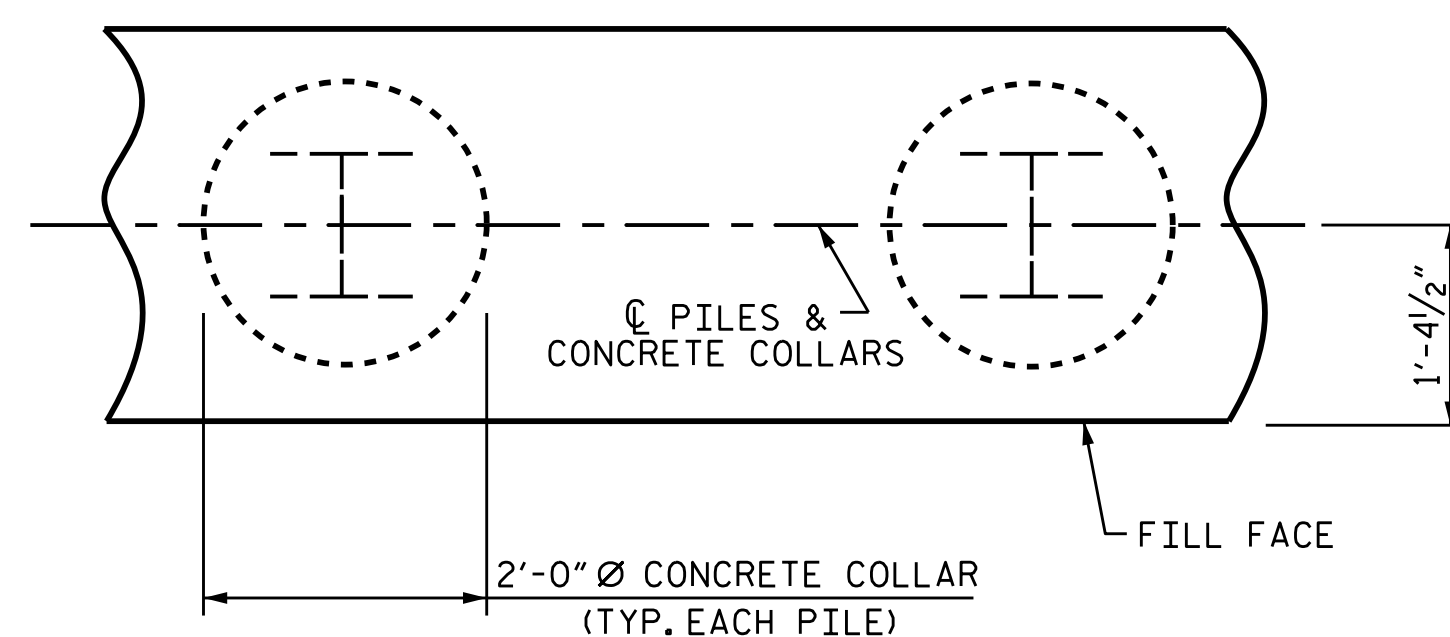
NO SEPARATE PAYMENT WILL BE MADE FOR THIS WORK AND THE ENTIRE COST OF THIS WORK SHALL BE INCLUDED IN THE UNIT CONTRACT PRICE BID FOR THE SEVERAL PAY ITEMS.

TEMPORARY DRAINAGE AT END BENT



DETAIL "A"

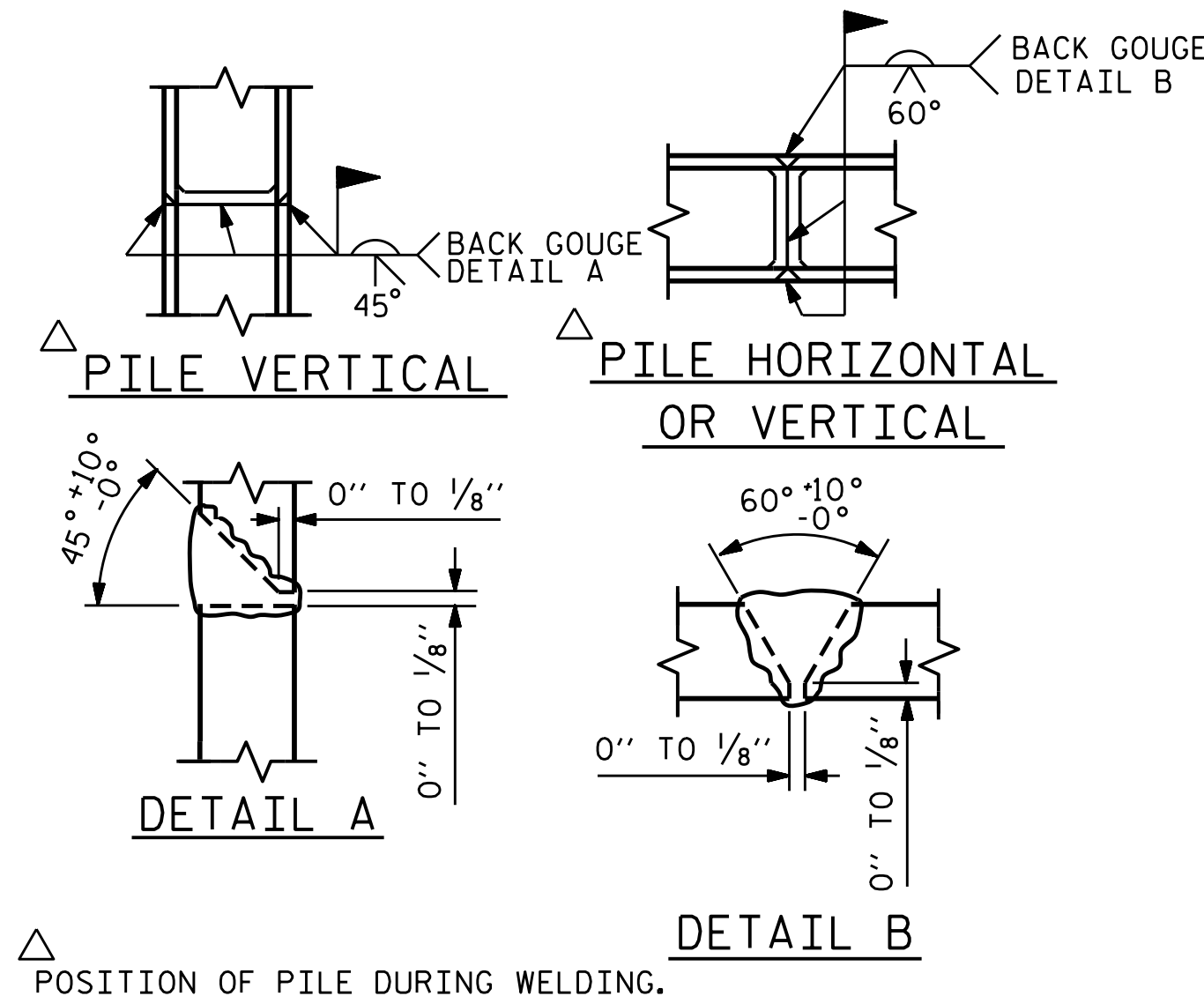
(END BENT No. 1 SHOWN, END BENT No. 2 SIMILAR BY ROTATION)



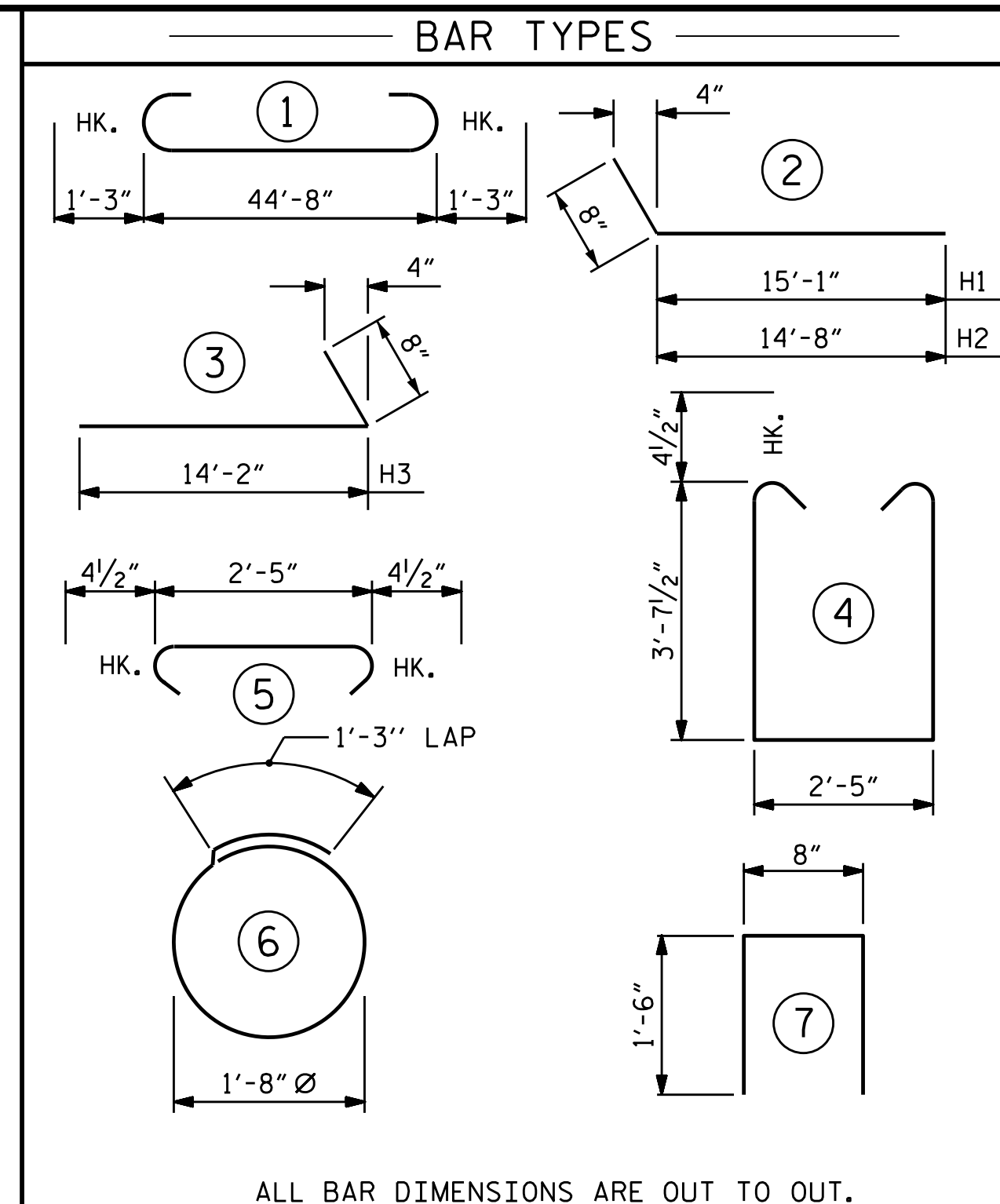
PLAN

CORROSION PROTECTION FOR STEEL PILES DETAIL

(END BENT No. 1 SHOWN, END BENT No. 2 SIMILAR BY ROTATION)

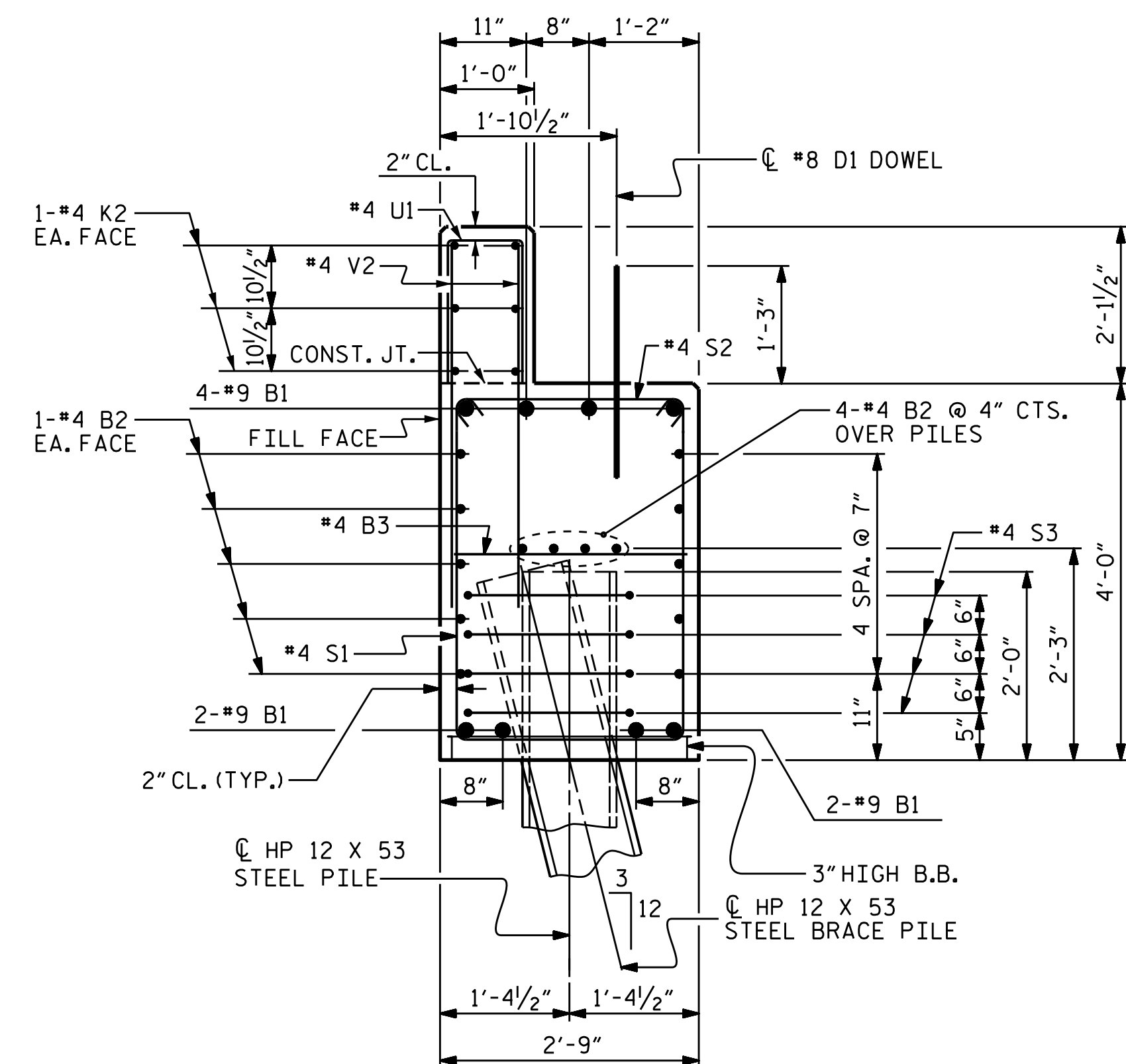


PILE SPLICE DETAILS

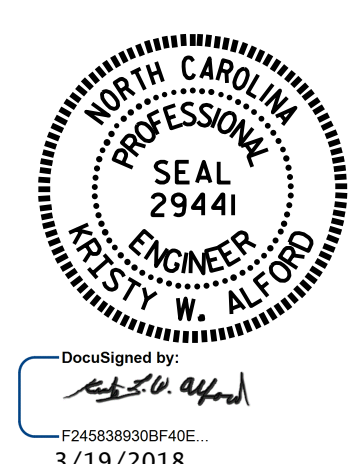


END BENT No. 1 HP 12 X 53 STEEL PILES NO: 7 LIN. FT. = 195	END BENT No. 2 HP 12 X 53 STEEL PILES NO: 7 LIN. FT. = 160
PILE DRIVING EQUIPMENT SETUP FOR HP 12 X 53 STEEL PILES NO: 7	PILE DRIVING EQUIPMENT SETUP FOR HP 12 X 53 STEEL PILES NO: 7

BILL OF MATERIAL FOR ONE END BENT					
BAR NO.	SIZE	TYPE	LENGTH	WEIGHT	
B1	#9	1	47'-2"	1283	
B2	#4	STR	23'-8"	443	
B3	#4	STR	2'-5"	19	
D1	#8	STR	2'-3"	132	
H1	#6	2	15'-9"	379	
H2	#6	2	15'-4"	368	
H3	#6	3	14'-10"	713	
K1	#4	STR	3'-3"	26	
K2	#4	STR	23'-8"	190	
S1	#4	4	10'-5"	390	
S2	#4	5	3'-2"	118	
S3	#4	6	6'-6"	122	
U1	#4	7	3'-8"	93	
V1	#4	STR	7'-8"	394	
V2	#4	STR	5'-9"	292	
REINFORCING STEEL (FOR ONE END BENT)				4962 LBS.	
CLASS A CONCRETE BREAKDOWN (FOR ONE END BENT)					
POUR #1 CAP, LOWER PART OF WINGS & COLLARS				23.8 C.Y.	
POUR #2 BACKWALL & UPPER PART OF WINGS				8.3 C.Y.	
TOTAL CLASS A CONCRETE				32.1 C.Y.	



PROJECT NO. B-5320
 GRANVILLE COUNTY
 STATION: 15+98.00 -L-
 SHEET 4 OF 4



STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH
 SUBSTRUCTURE
 END BENT No. 1 & 2
 DETAILS

ASSEMBLED BY : M. A. LESHURE	DATE : 1/18
CHECKED BY : K. W. ALFORD	DATE : 2/18
DRAWN BY : WJH	12/11
CHECKED BY : AAC	12/11
REV. 4/17	MAA/THC

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S-20
1			3			TOTAL SHEETS 26
2			4			