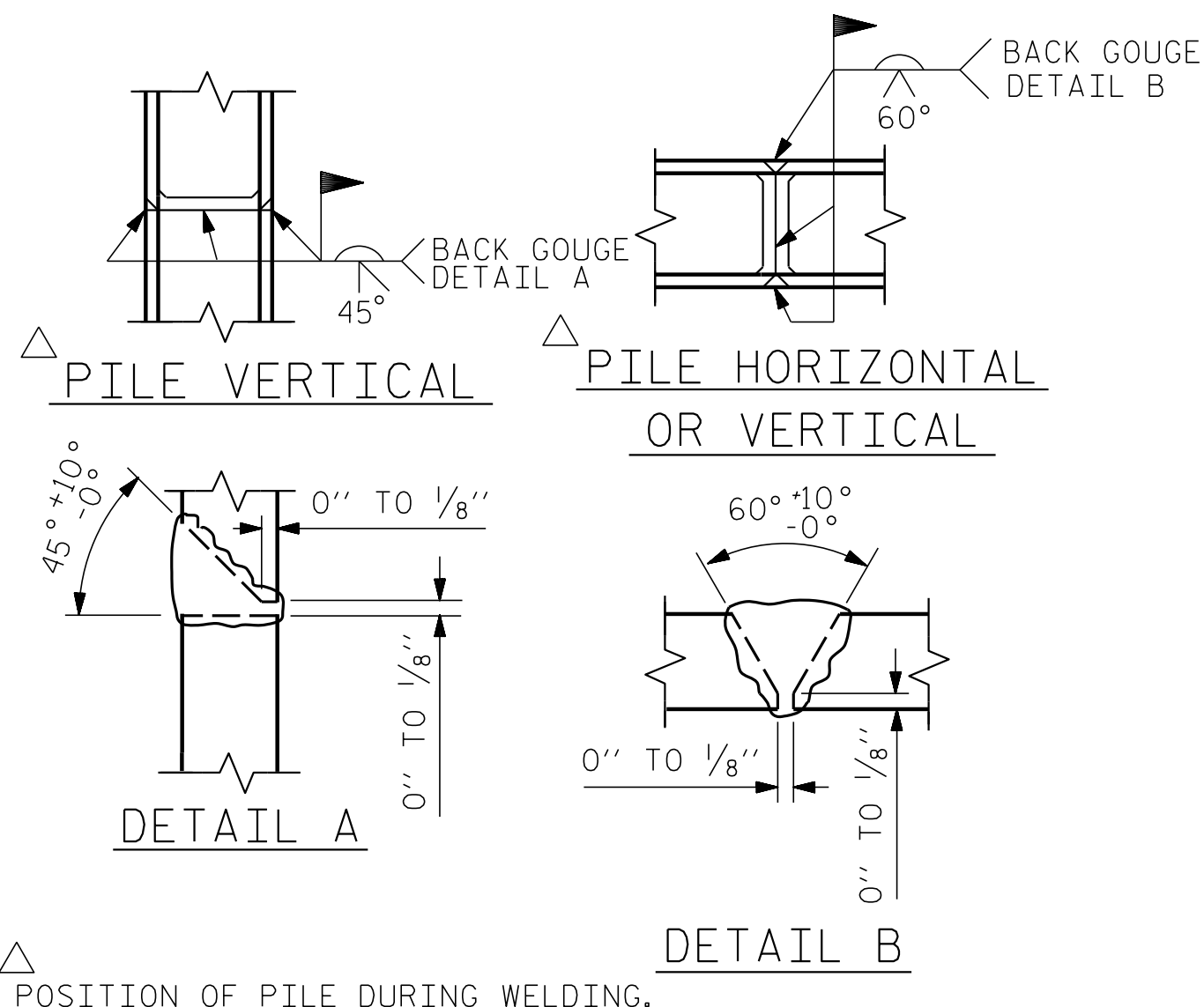


BAGGED STONE AND PIPE SHALL BE PLACED IMMEDIATELY AFTER COMPLETION OF END BENT EXCAVATION. PIPE MAY BE EITHER CONCRETE, CORRUGATED STEEL, CORRUGATED ALUMINUM ALLOY, OR CORRUGATED PLASTIC. PERFORATED PIPE WILL NOT BE ALLOWED.

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.

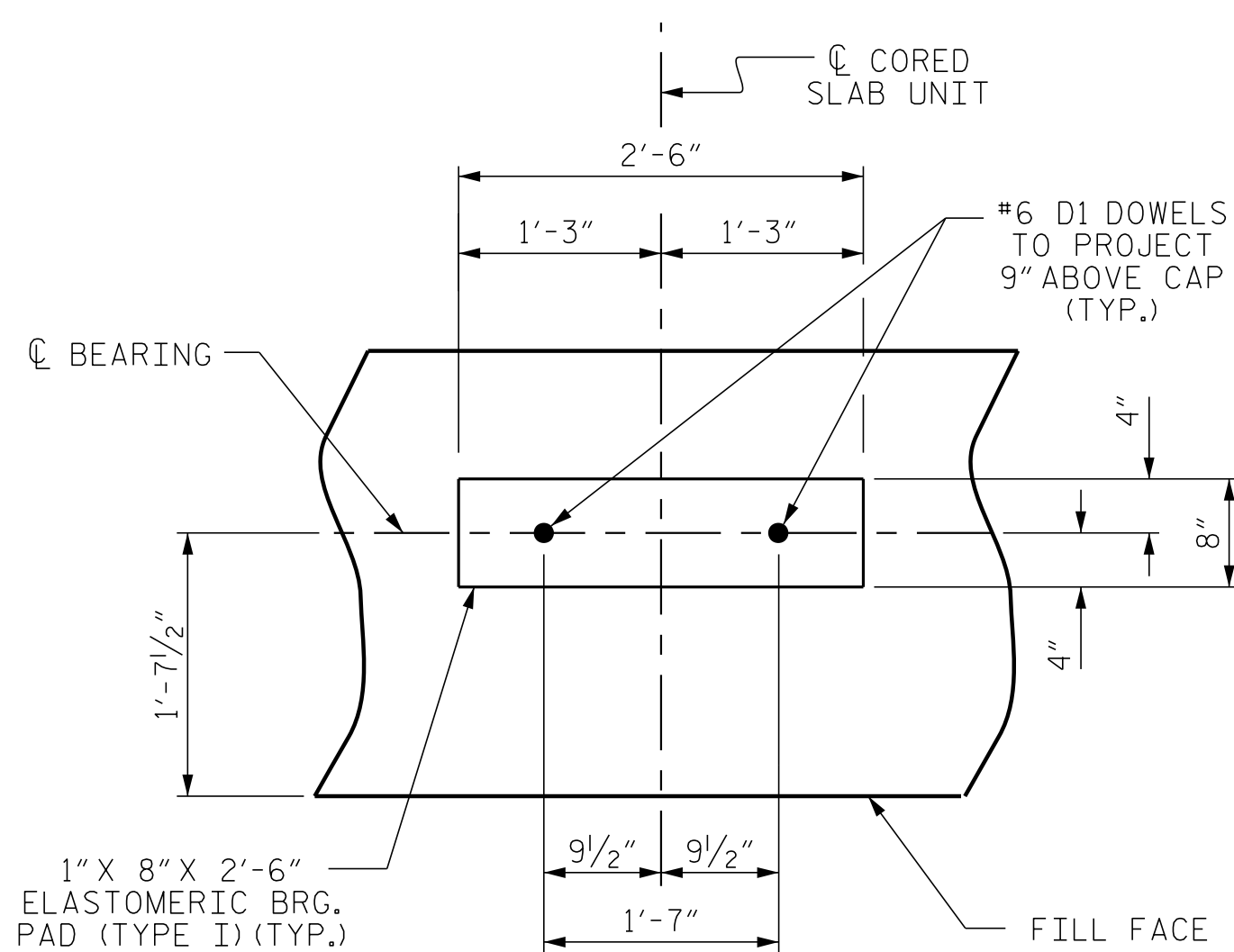
TEMPORARY DRAINAGE AT END BENT



PILE SPLICE DETAILS

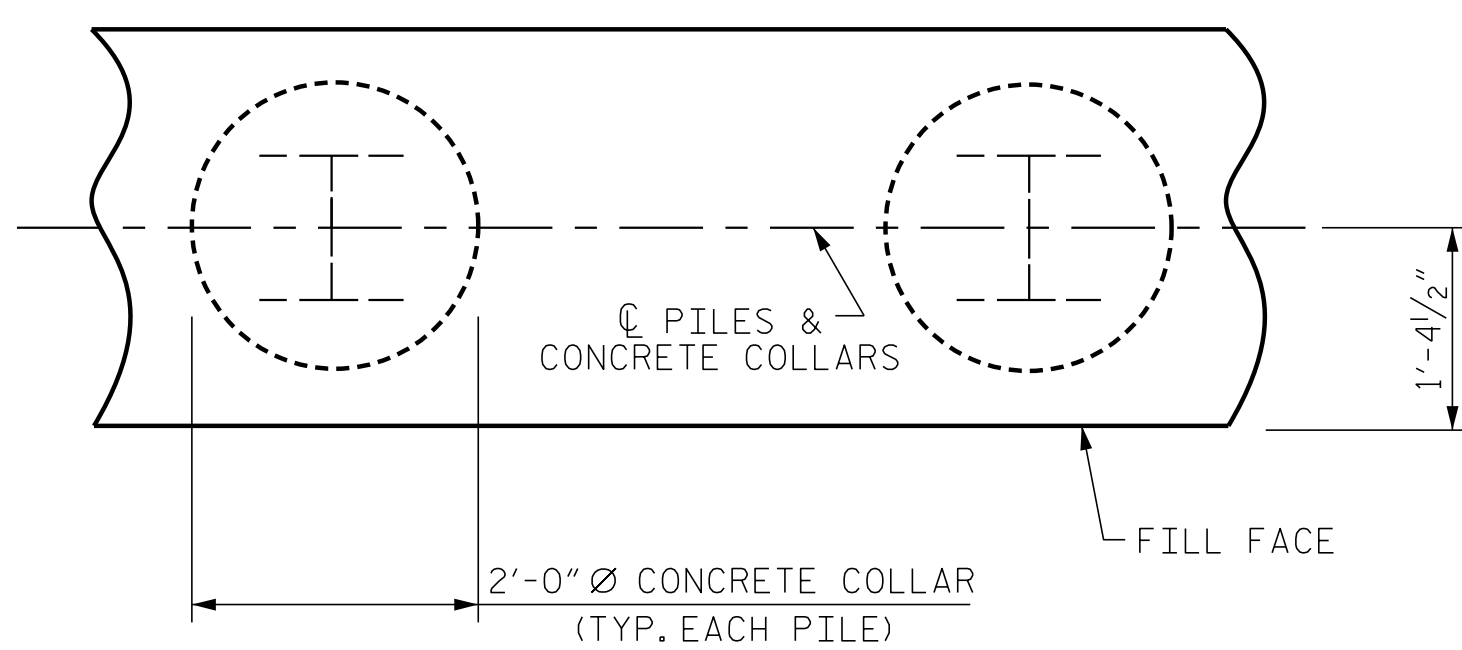
BAR TYPES		BILL OF MATERIAL FOR ONE END BENT				
BAR NO.	SIZE	TYPE	LENGTH	WEIGHT		
B1	#9	1	41'-0"	1115		
B2	#4	STR	20'-7"	385		
B3	#4	STR	2'-5"	16		
D1	#6	STR	1'-6"	50		
H1	#4	2	9'-4"	249		
K1	#4	STR	2'-11"	31		
S1	#4	3	10'-5"	348		
S2	#4	4	3'-2"	106		
S3	#4	5	6'-6"	122		
V1	#4	STR	6'-2"	214		
REINFORCING STEEL (FOR ONE END BENT)				2636	LBS.	
CLASS A CONCRETE BREAKDOWN (FOR ONE END BENT)						
POUR #1 CAP, LOWER PART OF WINGS & COLLARS				19.5	C.Y.	
POUR #2 UPPER PART OF WINGS				2.1	C.Y.	
TOTAL CLASS A CONCRETE				21.6	C.Y.	
END BENT No. 1		END BENT No. 2				
HP 12 X 53 STEEL PILES NO: 7 LIN. FT. = 350		HP 12 X 53 STEEL PILES NO: 7 LIN. FT. = 385				
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				
PILE REDRIVES NO: 4		PILE REDRIVES NO: 4				

ALL BAR DIMENSIONS ARE OUT TO OUT.



DETAIL "A"

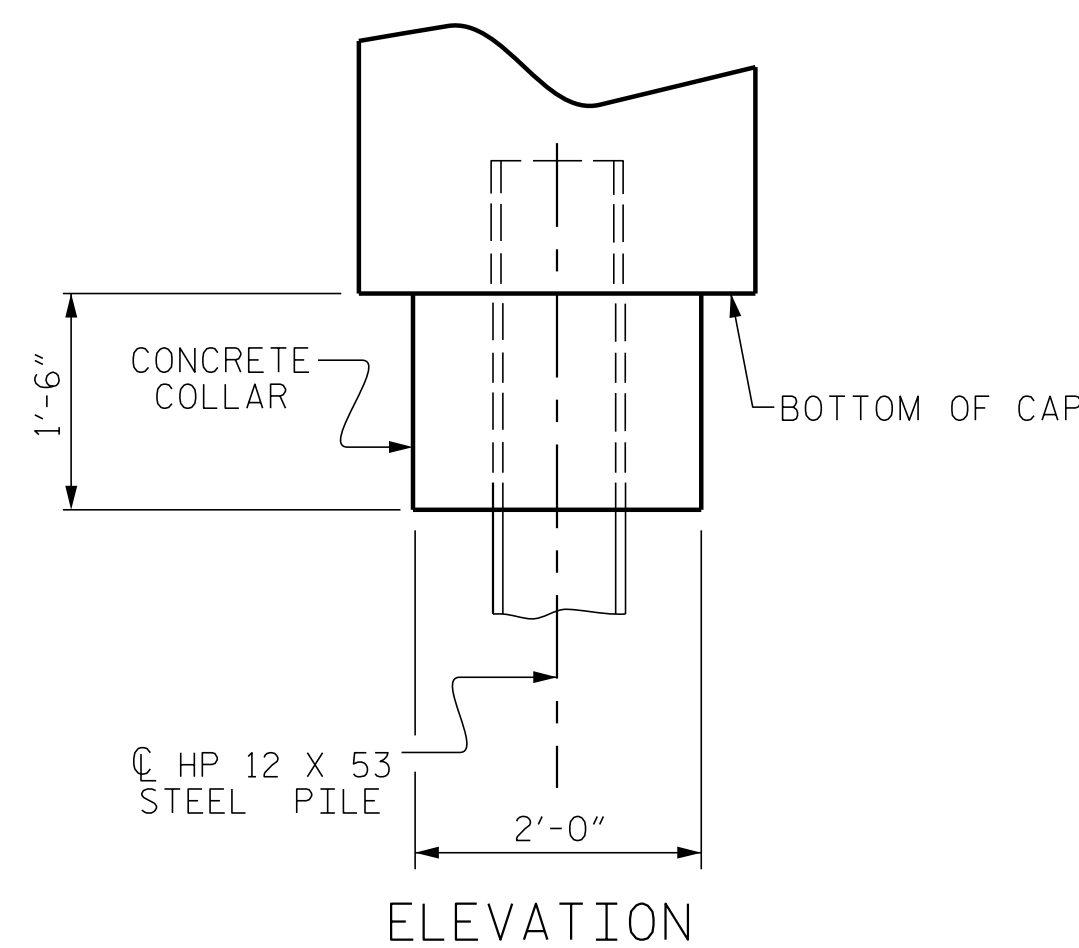
(END BENT No. 1 SHOWN, END BENT No. 2 SIMILAR BY ROTATION)



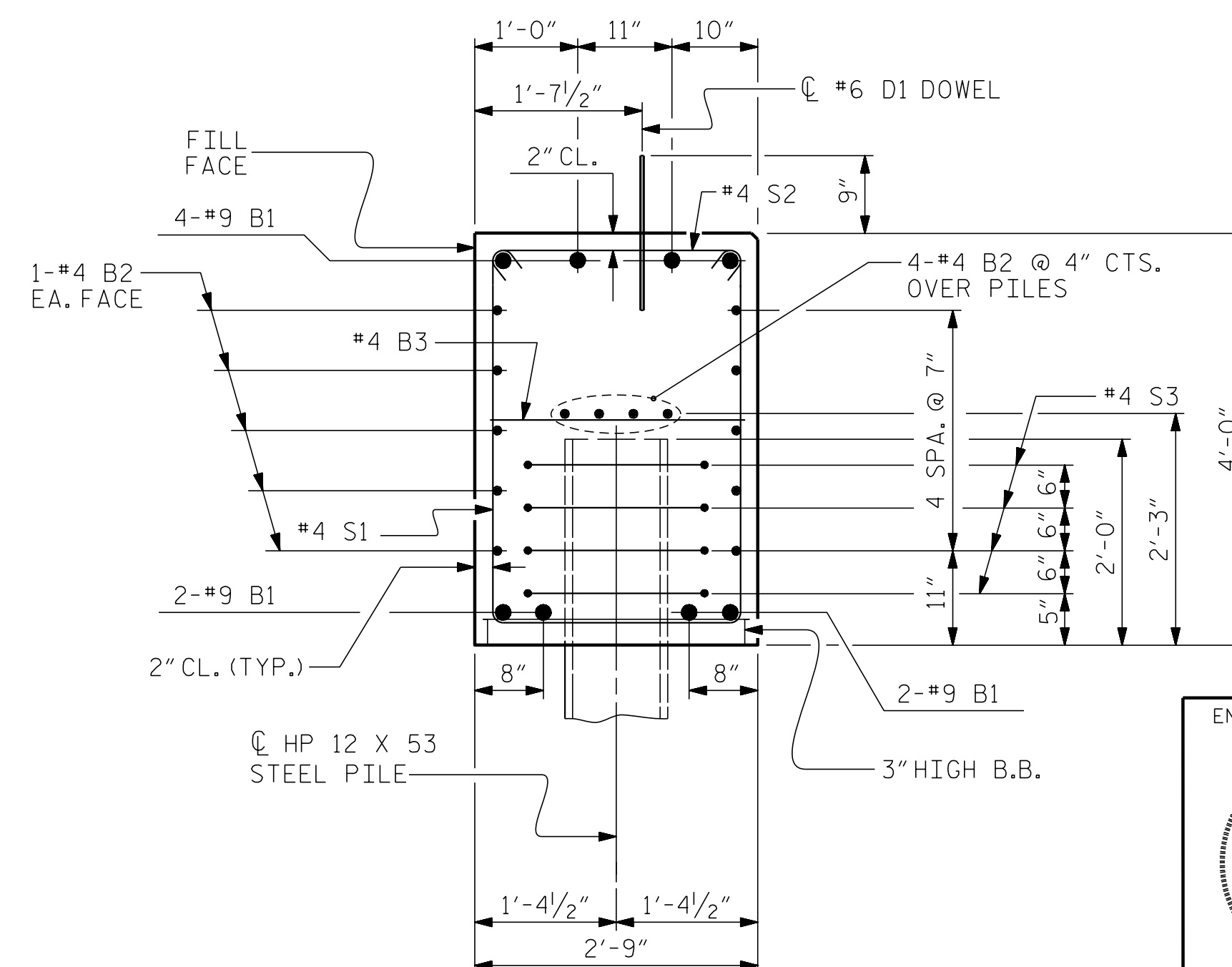
PLAN

CORROSION PROTECTION FOR STEEL PILES DETAIL

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



ELEVATION



SECTION A-A

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

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

PROJECT NO. BR-0113
 HALIFAX COUNTY
 STATION: 16+10.00 -L-

SHEET 4 OF 4

ENGINEER OF RECORD
 4/29/2020

 SEAL
 22072
 ENGINEER
 ARTHUR DILWORTH
 Decoupled by:
 John Arthur Dilworth
 02130220000100

 WETHERILL
 ENGINEERING
 1223 Jones Franklin Rd.
 Raleigh, N.C. 27606
 Bus: 919 851 8077
 Fax: 919 851 8107
 LICENSE NO. F-0377

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

REVISIONS

NO.	BY:	DATE:	NO.	BY:	DATE:	SHEET NO.
1			3			S-14
2			4			TOTAL SHEETS 18

STD. NO. EB-33-90S4