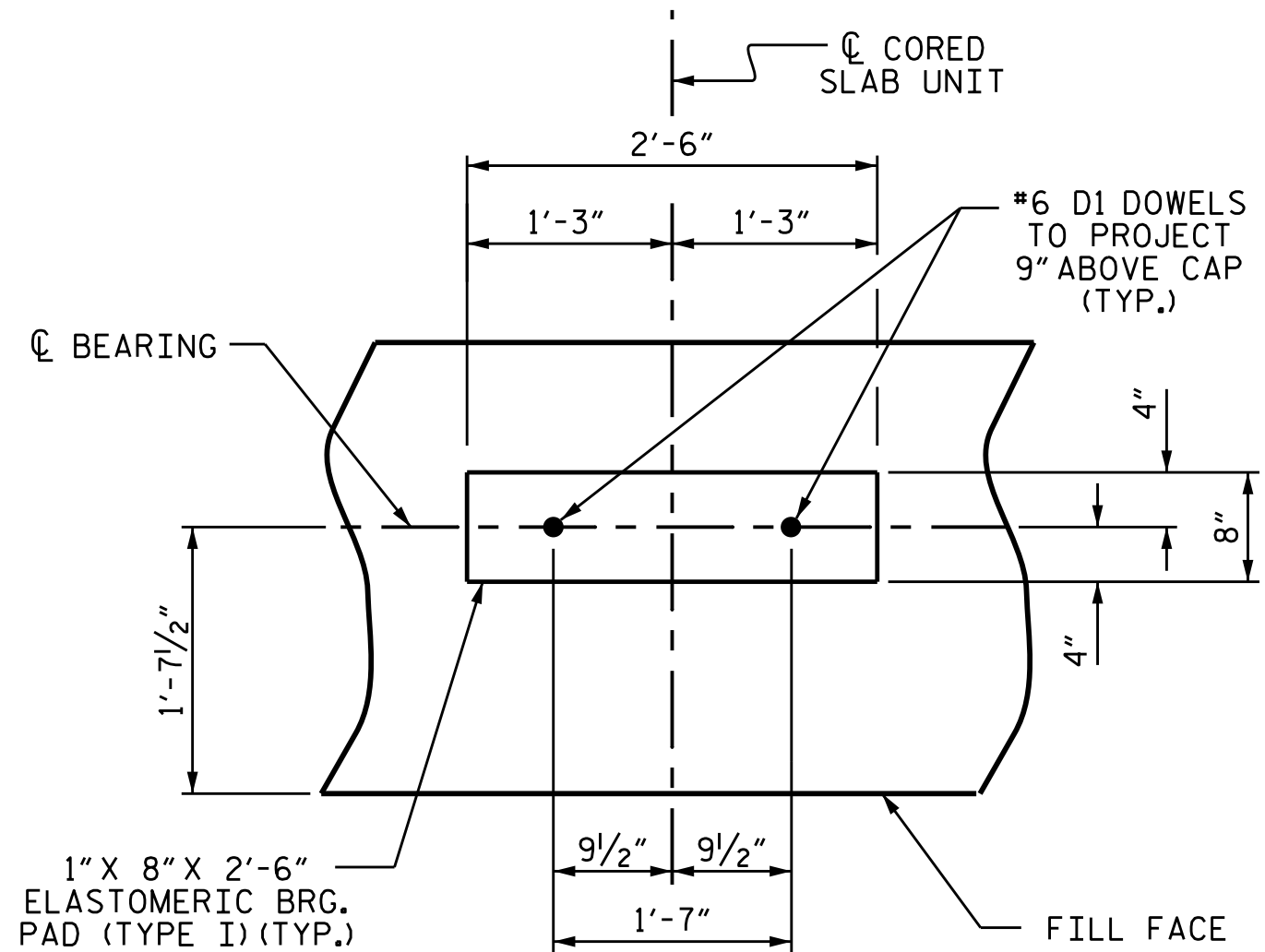


BAGGED STONE AND PIPE SHALL BE PLACED IMMEDIATELY AFTER COMPLETION OF END BENT EXCAVATION. PIPE MAY BE EITHER CONCRETE, CORRUGATED STEEL, CORRUGATED ALUMINUM ALLOY, OR CORRUGATED PLASTIC. PERFORATED PIPE WILL NOT BE ALLOWED.

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.

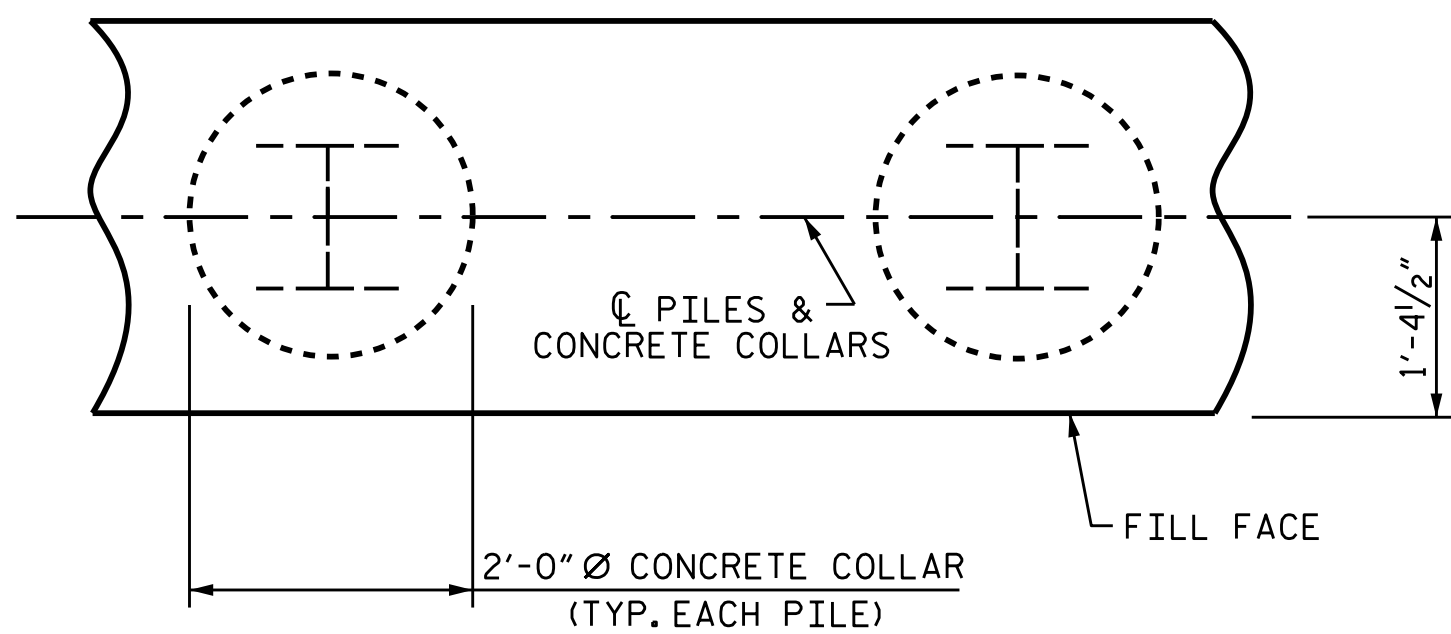
NO SEPARATE PAYMENT WILL BE MADE FOR THIS WORK AND THE ENTIRE COST OF THIS WORK SHALL BE INCLUDED IN THE UNIT CONTRACT PRICE BID FOR THE SEVERAL PAY ITEMS.

### TEMPORARY DRAINAGE AT END BENT



### DETAIL "A"

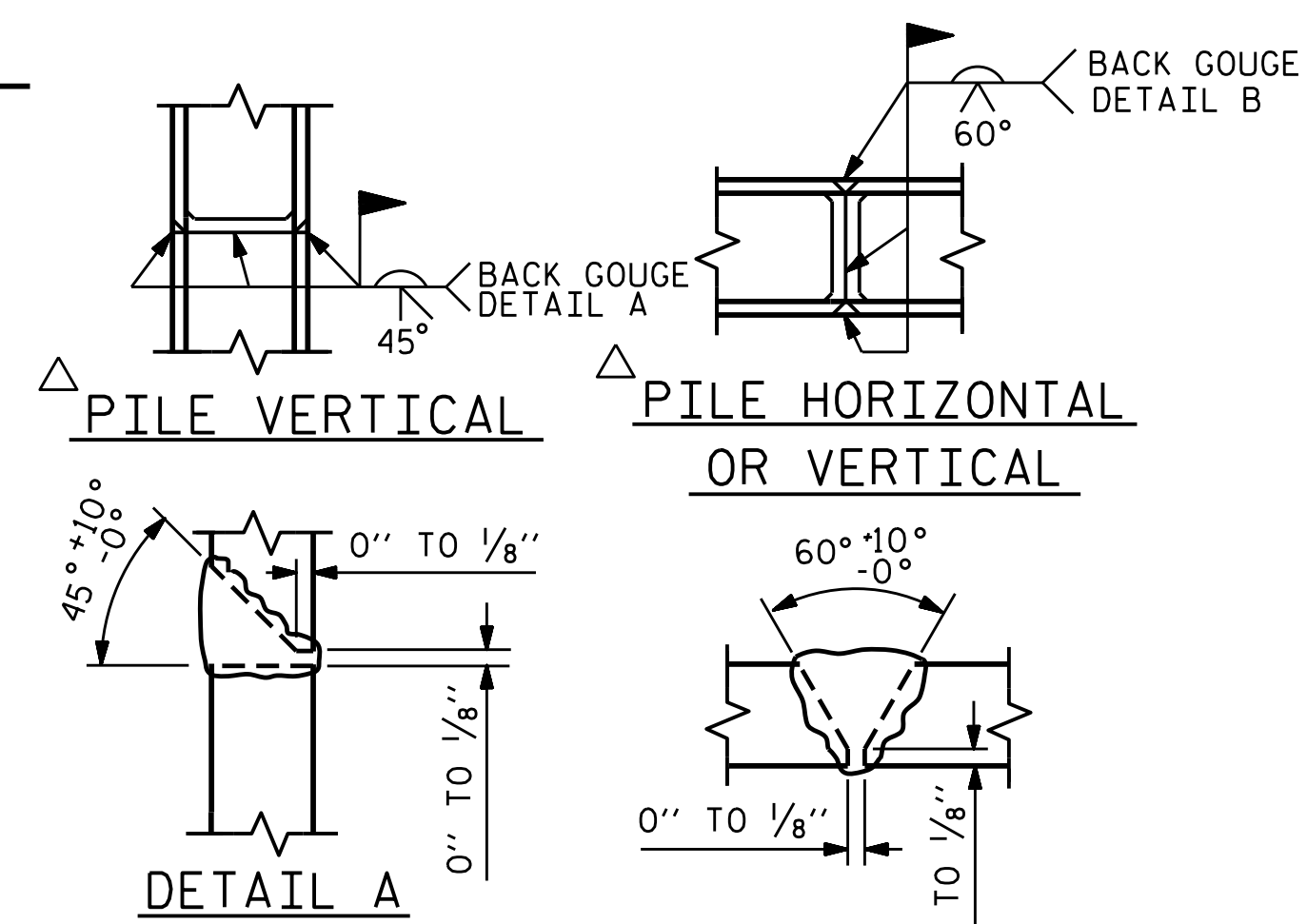
(END BENT No.1 SHOWN, END BENT No.2 SIMILAR BY ROTATION)



### PLAN

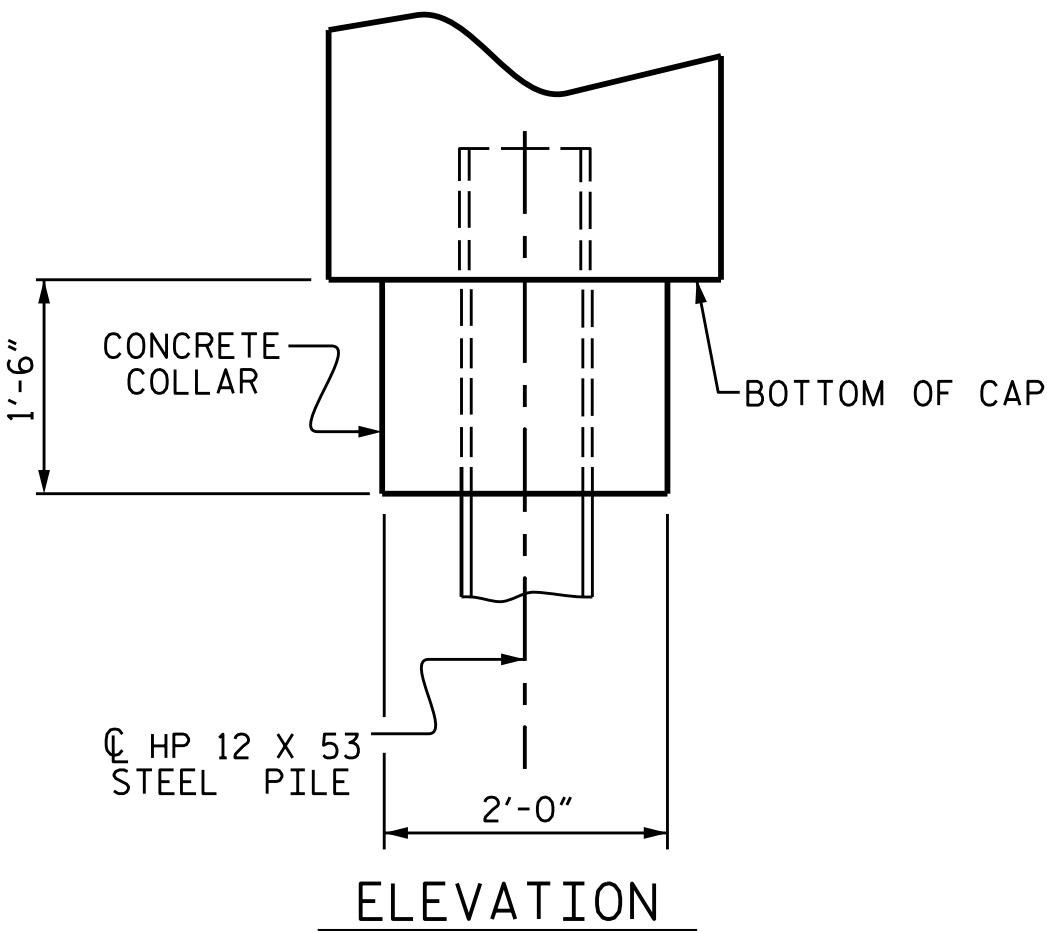
### CORROSION PROTECTION FOR STEEL PILES DETAIL

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

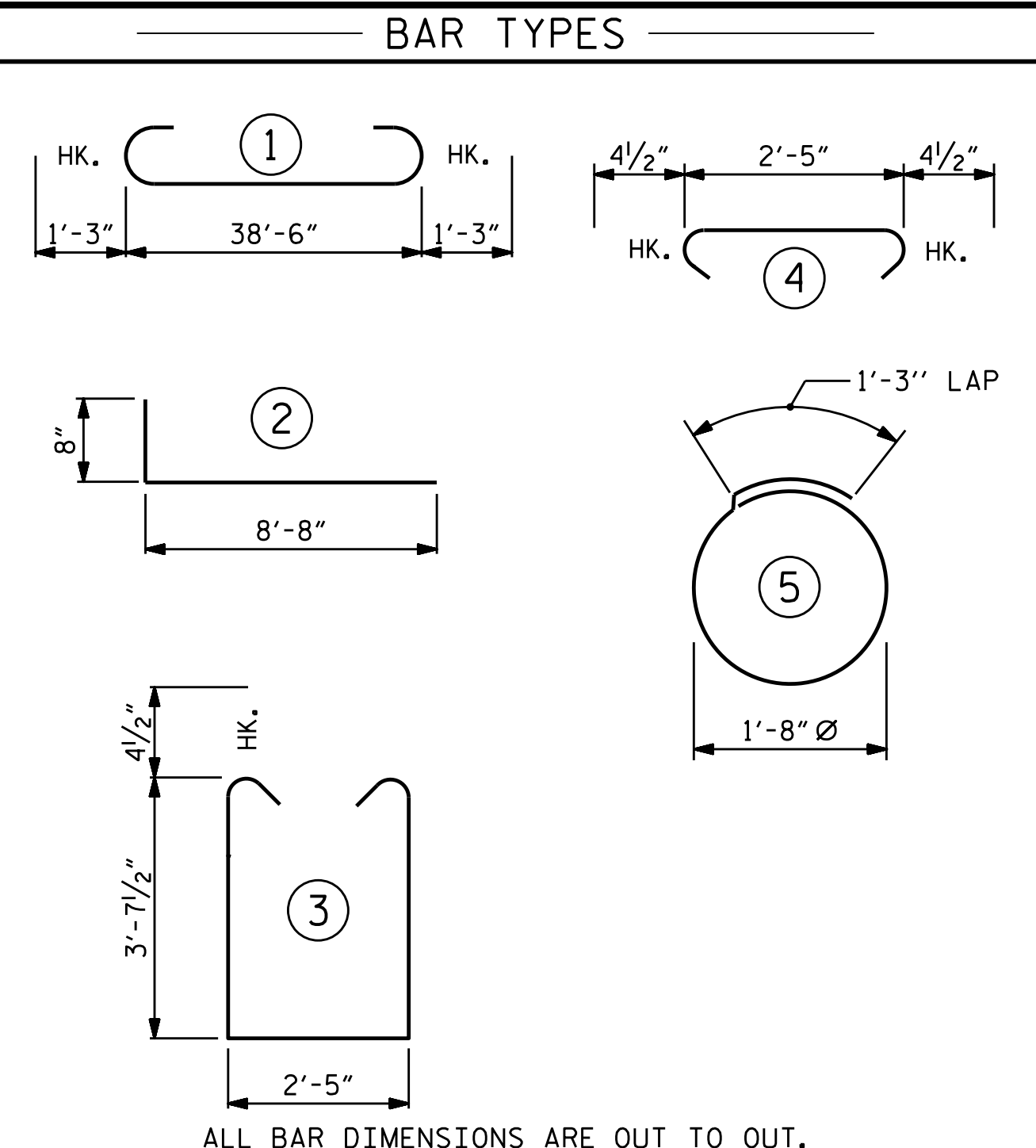


### PILE SPLICE DETAILS

POSITION OF PILE DURING WELDING.

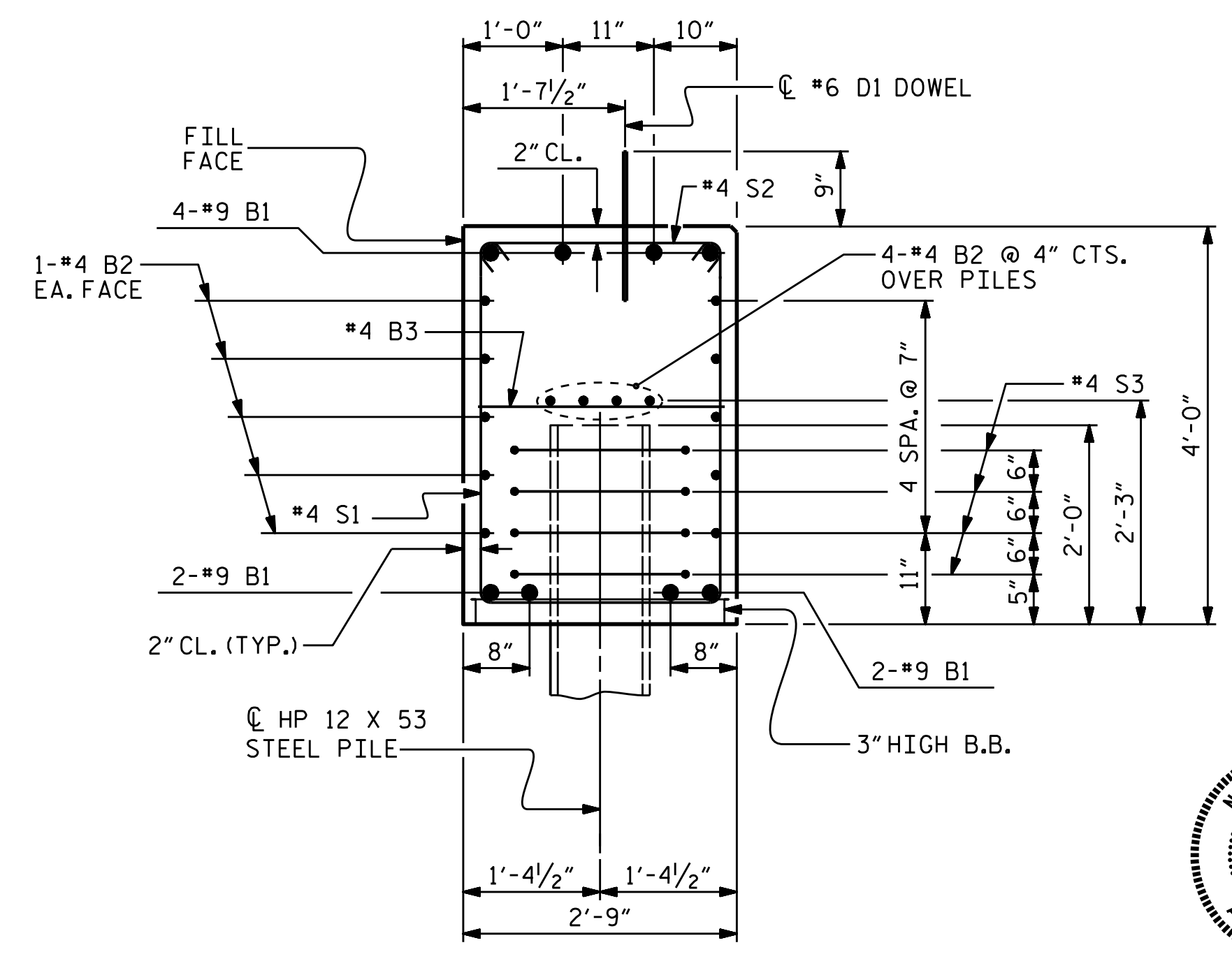


### ELEVATION



ALL BAR DIMENSIONS ARE OUT TO OUT.

BILL OF MATERIAL FOR END BENT 1						BILL OF MATERIAL FOR END BENT 2					
BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT	BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT
B1	8	#9	1	41'-0"	1115	B1	8	#9	1	41'-0"	1115
B2	28	#4	STR	20'-7"	385	B2	28	#4	STR	20'-7"	385
B3	10	#4	STR	2'-5"	16	B3	10	#4	STR	2'-5"	16
D1	22	#6	STR	1'-6"	50	D1	22	#6	STR	1'-6"	50
H1	40	#4	2	9'-4"	249	H1	40	#4	2	9'-4"	249
K1	16	#4	STR	2'-11"	31	K1	16	#4	STR	2'-11"	31
S1	50	#4	3	10'-5"	348	S1	50	#4	3	10'-5"	348
S2	50	#4	4	3'-2"	106	S2	50	#4	4	3'-2"	106
S3	28	#4	5	6'-6"	122	S3	28	#4	5	6'-6"	122
V1	52	#4	STR	6'-2"	214	V1	52	#4	STR	6'-2"	214
REINFORCING STEEL (FOR ONE END BENT)						REINFORCING STEEL (FOR ONE END BENT)					
2636 LBS.						2636 LBS.					
CLASS A CONCRETE BREAKDOWN (FOR ONE END BENT)						CLASS A CONCRETE BREAKDOWN (FOR ONE END BENT)					
POUR #1 CAP, LOWER PART OF WINGS & COLLARS						POUR #1 CAP, LOWER PART OF WINGS & COLLARS					
19.5 C.Y.						19.5 C.Y.					
POUR #2 UPPER PART OF WINGS						POUR #2 UPPER PART OF WINGS					
2.3 C.Y.						2.1 C.Y.					
TOTAL CLASS A CONCRETE						TOTAL CLASS A CONCRETE					
21.8 C.Y.						21.6 C.Y.					
END BENT 1						END BENT 2					
HP 12 X 53 STEEL PILES						HP 12 X 53 STEEL PILES					
NO: 7 LIN. FT.= 405						NO: 7 LIN. FT.= 405					
PILE DRIVING EQUIPMENT SETUP FOR HP 12 X 53 STEEL PILES						PILE DRIVING EQUIPMENT SETUP FOR HP 12 X 53 STEEL PILES					
NO: 7						NO: 7					



### SECTION A-A

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



PROJECT NO. B-5407

POLK COUNTY

STATION: 13+52.00 -L-

SHEET 4 OF 4

STATE OF NORTH CAROLINA

DEPARTMENT OF TRANSPORTATION

RALEIGH

SUBSTRUCTURE

END BENT 1 & 2

DETAILS

REVISIONS						SHEET NO.	
NO.	BY:	DATE:	NO.	BY:	DATE:	S-19	
1			3			TOTAL SHEETS 24	
2			4				

ASSEMBLED BY : A. GODFREY	DATE : 10/2017
CHECKED BY : KOUCHEKI	DATE : 12/2017
DRAWN BY : WJH	12/11
CHECKED BY : AAC	12/11
REV. 4/17	MAA/THC