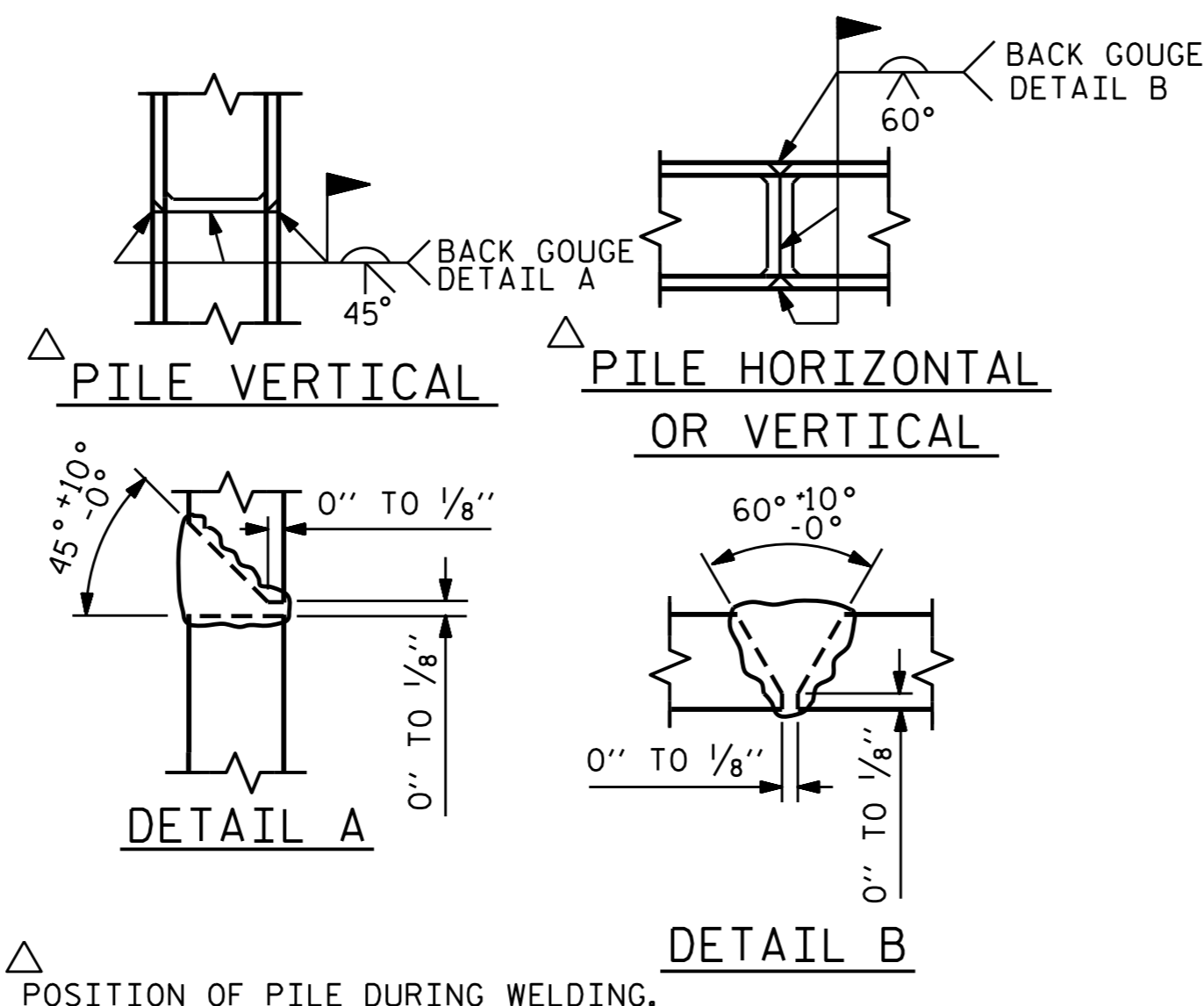


BAGGED STONE AND PIPE SHALL BE PLACED IMMEDIATELY AFTER COMPLETION OF END BENT EXCAVATION. PIPE MAY BE EITHER CONCRETE, CORRUGATED STEEL, CORRUGATED ALUMINUM ALLOY, OR CORRUGATED PLASTIC. PERFORATED PIPE WILL NOT BE ALLOWED.

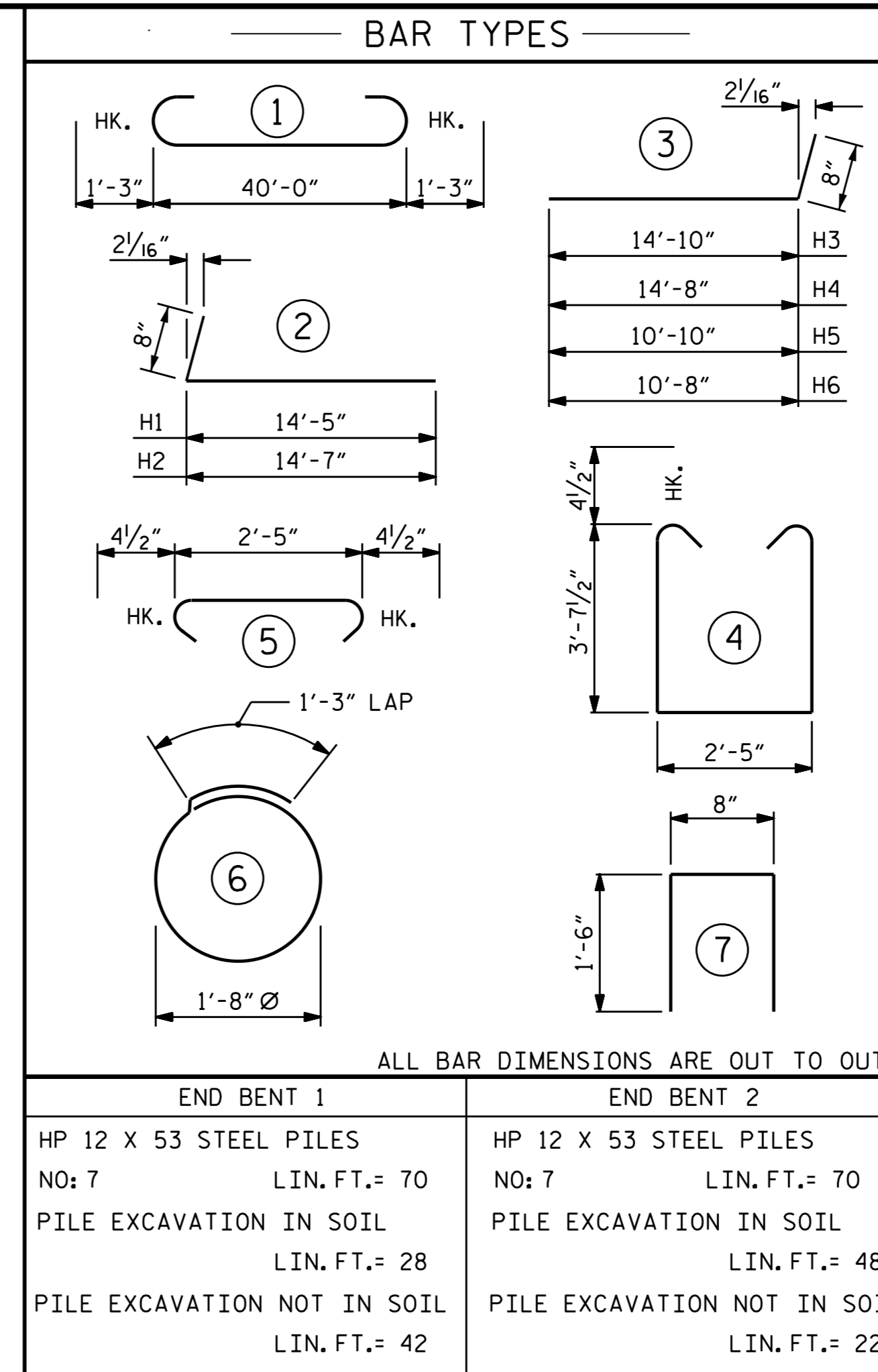
BAGGED STONE SHALL REMAIN IN PLACE UNTIL THE ENGINEER DIRECTS THAT IT BE REMOVED. THE CONTRACTOR SHALL REMOVE AND DISPOSE OF SILT ACCUMULATIONS AT BAGGED STONE WHEN SO DIRECTED BY THE ENGINEER. BAGS SHALL BE REMOVED AND REPLACED WHENEVER THE ENGINEER DETERMINES THAT THEY HAVE DETERIORATED AND LOST THEIR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

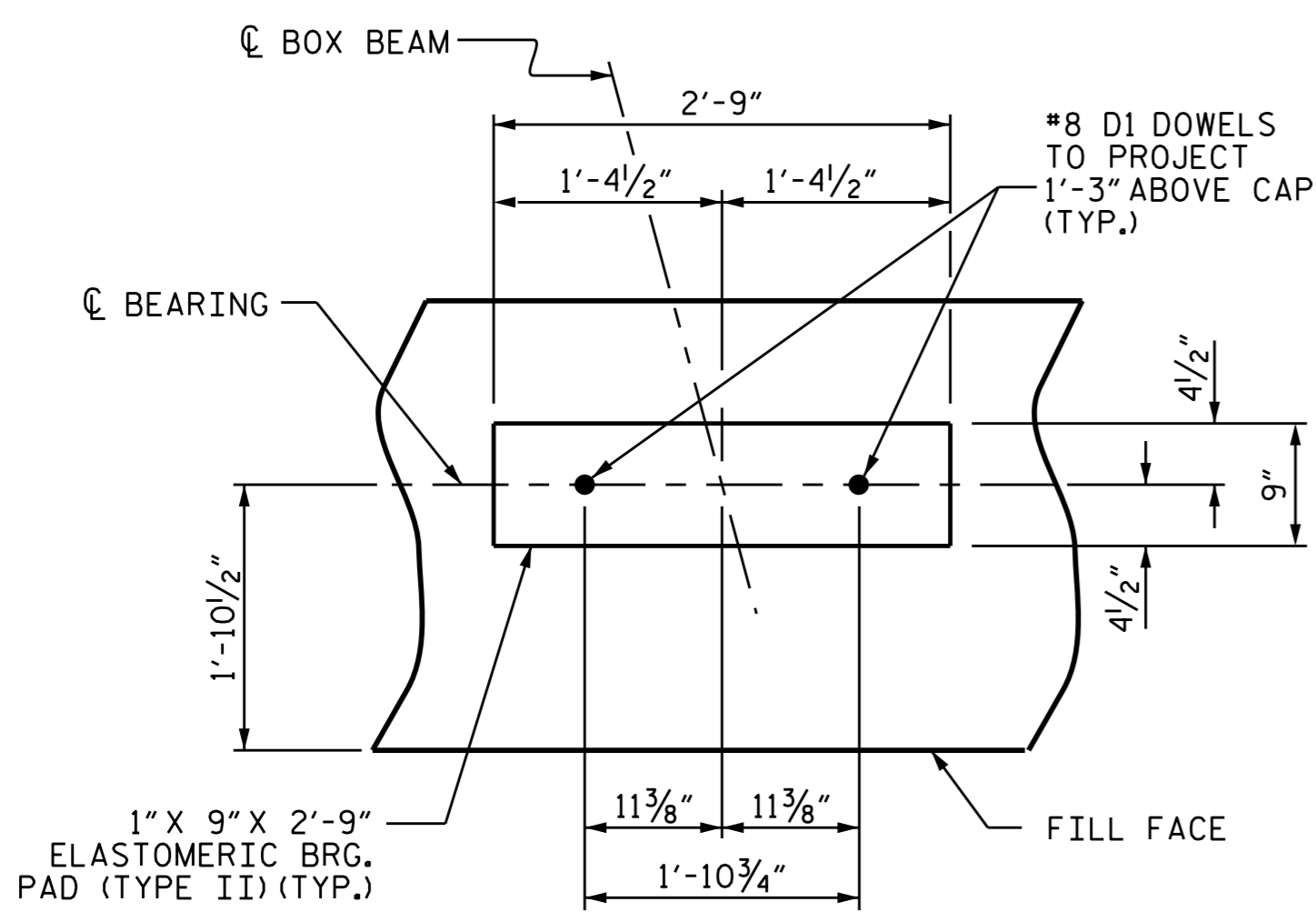


PILE SPLICE DETAILS



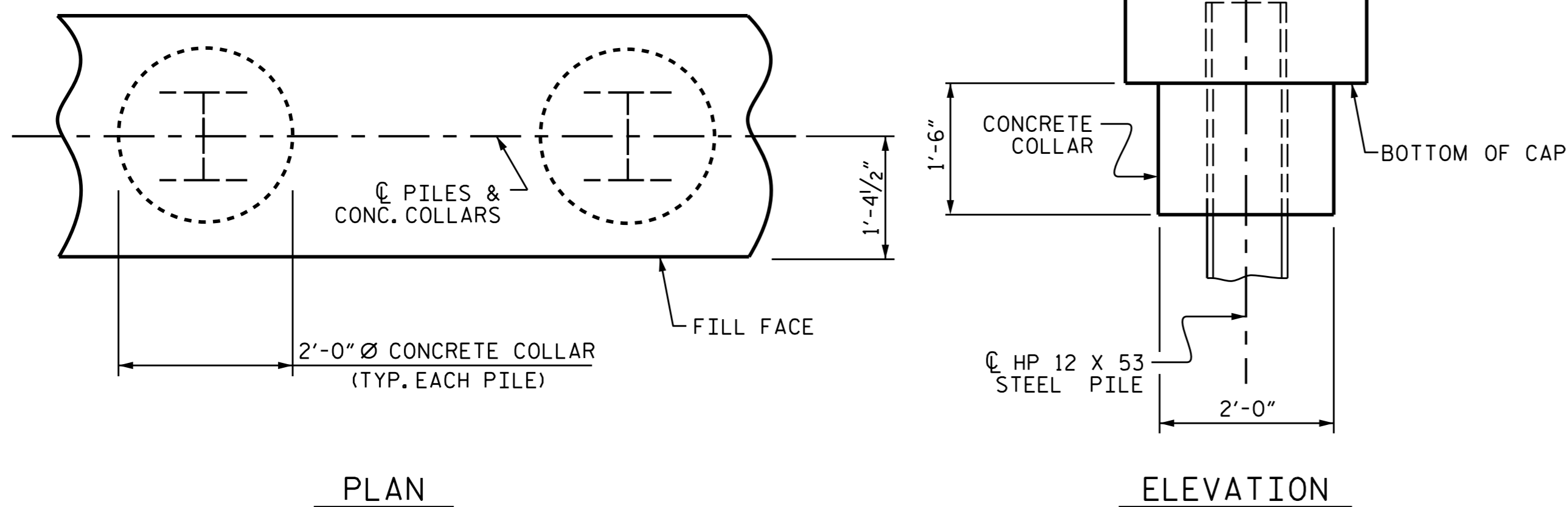
END BENT 1		END BENT 2	
HP 12 X 53 STEEL PILES	NO: 7 LIN. FT.= 70	HP 12 X 53 STEEL PILES	NO: 7 LIN. FT.= 70
PILE EXCAVATION IN SOIL	LIN. FT.= 28	PILE EXCAVATION IN SOIL	LIN. FT.= 48
PILE EXCAVATION NOT IN SOIL	LIN. FT.= 42	PILE EXCAVATION NOT IN SOIL	LIN. FT.= 22

BILL OF MATERIAL									
END BENT 1					END BENT 2				
BAR NO.	SIZE	TYPE	LENGTH	WEIGHT	BAR NO.	SIZE	TYPE	LENGTH	WEIGHT
B1	#9	1	42'-6"	1156	B1	#9	1	42'-6"	1156
B2	#4	STR	21'-4"	399	B2	#4	STR	21'-4"	399
B3	#4	STR	2'-5"	16	B3	#4	STR	2'-5"	16
D1	#8	STR	2'-3"	132	D1	#8	STR	2'-3"	132
H1	#6	2	15'-1"	362	H1	#6	2	15'-1"	362
H2	#6	2	15'-3"	366	H2	#6	2	15'-3"	366
H3	#6	3	15'-6"	372	H5	#5	3	11'-6"	192
H4	#6	3	15'-4"	368	H6	#5	3	11'-4"	188
K1	#4	STR	3'-1"	25	K1	#4	STR	3'-1"	25
K2	#4	STR	21'-4"	171	K2	#4	STR	21'-4"	171
S1	#4	4	10'-5"	362	S1	#4	4	10'-5"	362
S2	#4	5	3'-2"	110	S2	#4	5	3'-2"	110
S3	#4	6	6'-6"	122	S3	#4	6	6'-6"	122
U1	#4	7	3'-8"	83	U1	#4	7	3'-8"	83
V1	#4	STR	7'-8"	394	V1	#4	STR	7'-8"	353
V2	#4	STR	5'-9"	261	V2	#4	STR	5'-9"	261
REINFORCING STEEL				4699 LBS.	REINFORCING STEEL				4298 LBS.
CLASS A CONCRETE BREAKDOWN					CLASS A CONCRETE BREAKDOWN				
POUR #1 CAP, LOWER PART OF WINGS & COLLARS				21.9 C.Y.	POUR #1 CAP, LOWER PART OF WINGS & COLLARS				21.3 C.Y.
POUR #2 BACKWALL & UPPER PART OF WINGS				7.8 C.Y.	POUR #2 BACKWALL & UPPER PART OF WINGS				7.2 C.Y.
TOTAL CLASS A CONCRETE				29.7 C.Y.	TOTAL CLASS A CONCRETE				28.5 C.Y.



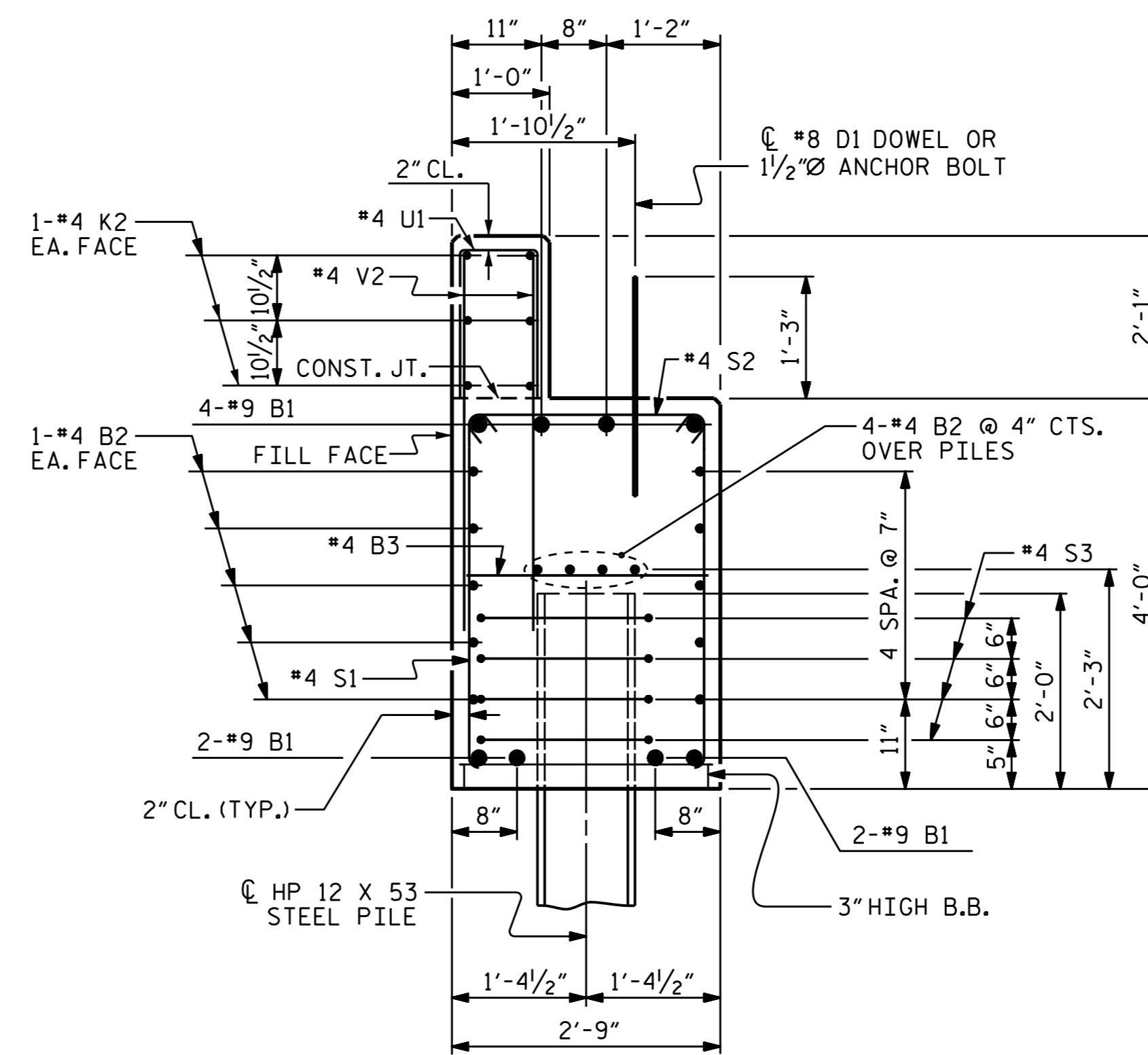
DETAIL "A"

(END BENT 1 SHOWN, END BENT 2 SIMILAR BY ROTATION)



CORROSION PROTECTION FOR STEEL PILES DETAIL

(END BENT 1 SHOWN, END BENT 2 SIMILAR BY ROTATION)



PROJECT NO. B-5344
 GUILFORD COUNTY
 STATION: 17+21.00 -L-

SHEET 4 OF 4



STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

SUBSTRUCTURE

END BENTS 1 & 2
 DETAILS

ASSEMBLED BY : H. B. DESAI	DATE : 5-22-15
CHECKED BY : D. J. POZOS	DATE : 8-03-15
DRAWN BY : WJH 12/11	REV. 8/14 MAA/TMG
CHECKED BY : AAC 12/11	

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

DOCUMENT NOT CONSIDERED
 FINAL UNLESS ALL
 SIGNATURES COMPLETED

REVISIONS						SHEET NO.
						S-14
						TOTAL SHEETS
						16