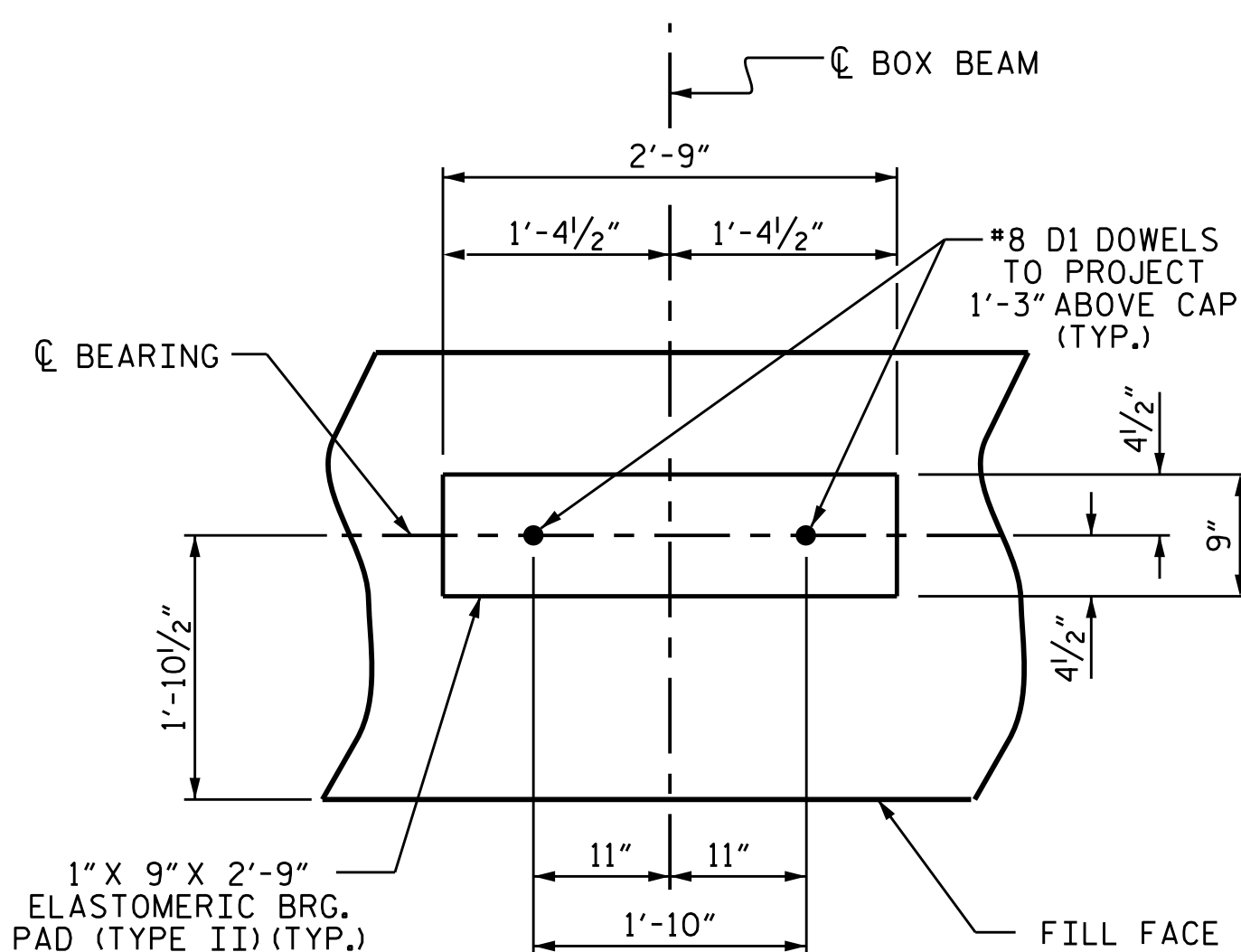


BAGGED STONE AND PIPE SHALL BE PLACED IMMEDIATELY AFTER COMPLETION OF END BENT EXCAVATION. PIPE MAY BE EITHER CONCRETE, CORRUGATED STEEL, CORRUGATED ALUMINUM ALLOY, OR CORRUGATED PLASTIC. PERFORATED PIPE WILL NOT BE ALLOWED.

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.

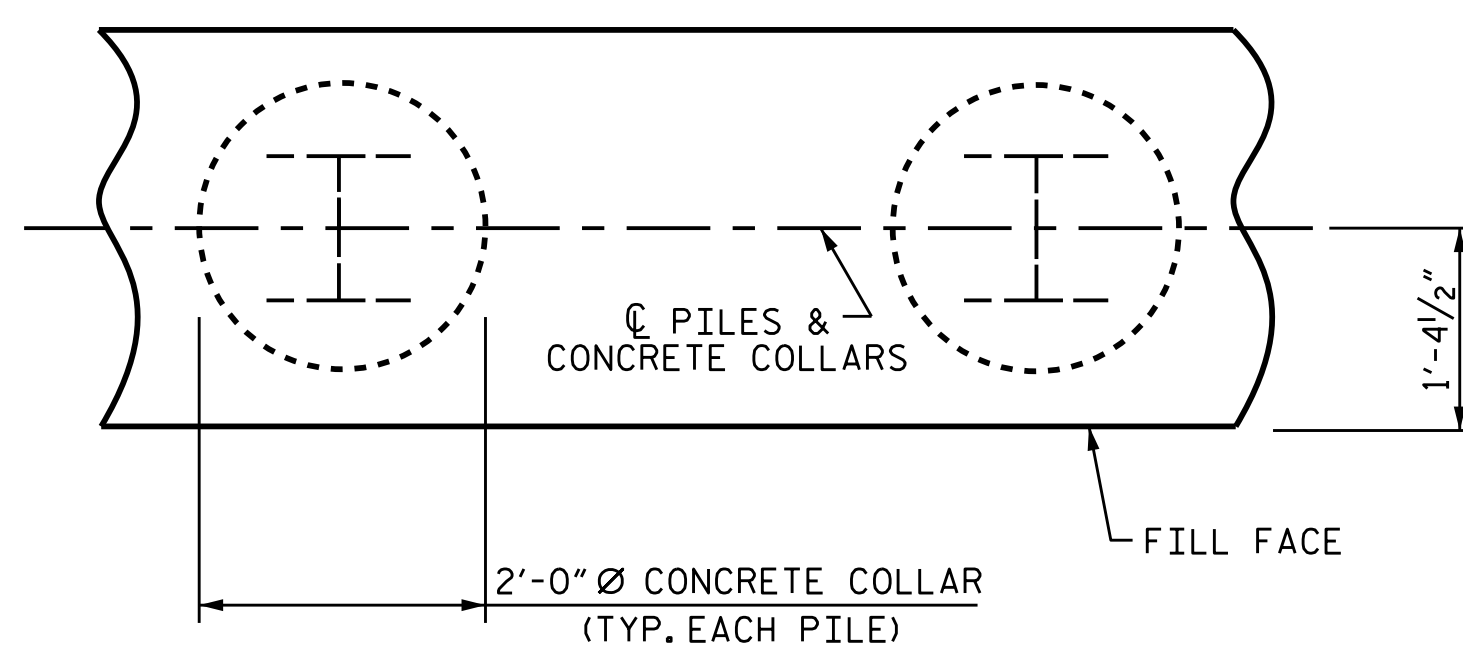
NO SEPARATE PAYMENT WILL BE MADE FOR THIS WORK AND THE ENTIRE COST OF THIS WORK SHALL BE INCLUDED IN THE UNIT CONTRACT PRICE BID FOR THE SEVERAL PAY ITEMS.

TEMPORARY DRAINAGE AT END BENT



DETAIL "A"

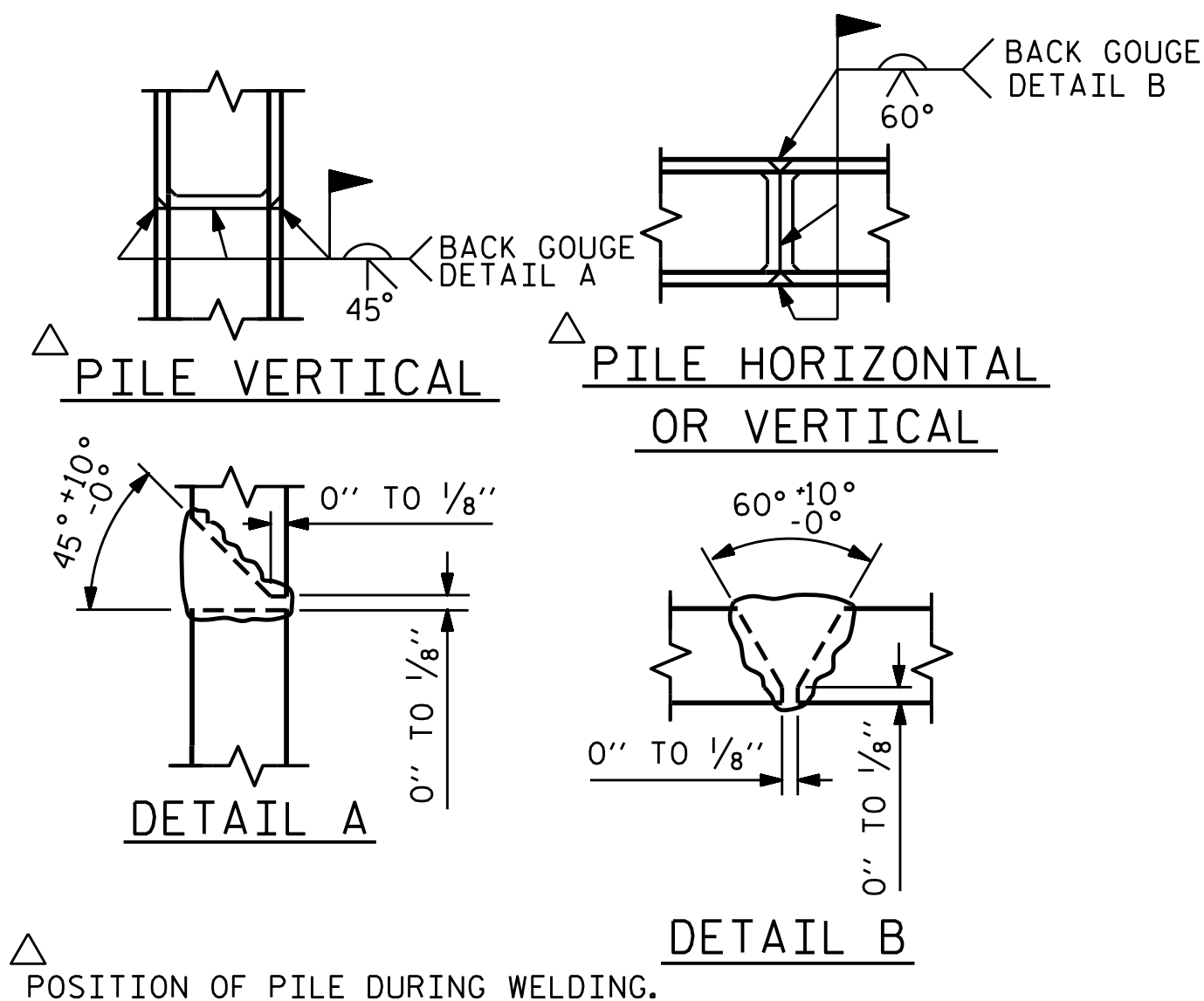
(END BENT No. 1 SHOWN, END BENT No. 2 SIMILAR BY ROTATION)



PLAN

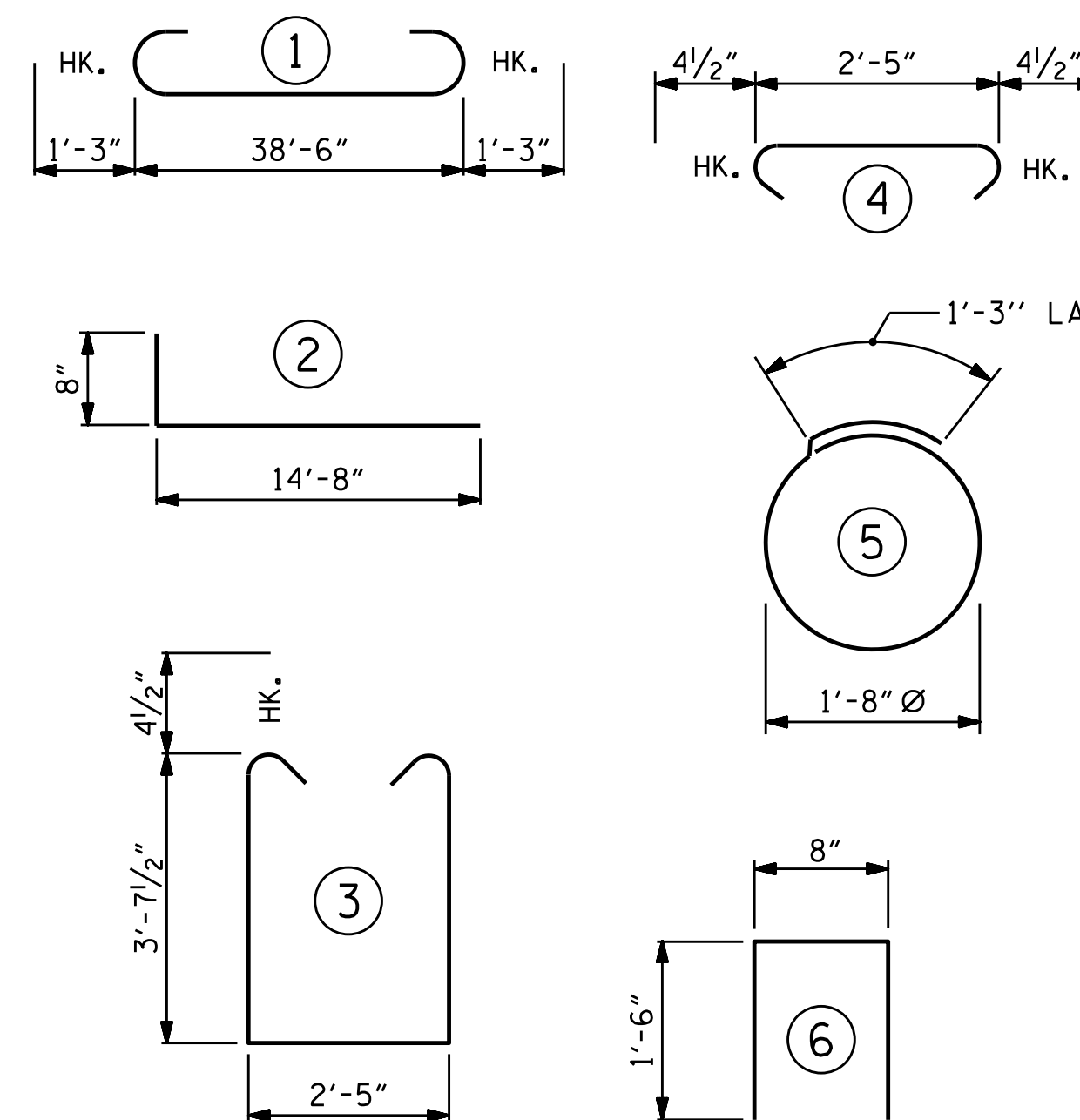
CORROSION PROTECTION FOR STEEL PILES DETAIL

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



PILE SPLICE DETAILS

BAR TYPES



ALL BAR DIMENSIONS ARE OUT TO OUT.

END BENT No. 1		END BENT No. 2	
HP 12 X 53 STEEL PILES	NO: 7	HP 12 X 53 STEEL PILES	NO: 7
LIN. FT. = 70		LIN. FT. = 70	
PILE EXCAVATION IN SOIL	NO: 7	PILE EXCAVATION IN SOIL	NO: 7
LIN. FT. = 37		LIN. FT. = 60	
PILE EXCAVATION NOT IN SOIL	NO: 7	PILE EXCAVATION NOT IN SOIL	NO: 7
LIN. FT. = 33		LIN. FT. = 10	
		STEEL PILE POINTS	NO = 7

BILL OF MATERIAL FOR ONE END BENT

BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT
B1	8	#9	1	41'-0"	1115
B2	28	#4	STR	20'-7"	385
B3	10	#4	STR	2'-5"	16
D1	22	#8	STR	2'-3"	132
H1	64	#6	2	15'-4"	1474
K1	12	#4	STR	3'-1"	25
K2	12	#4	STR	20'-7"	165
S1	50	#4	3	10'-5"	348
S2	50	#4	4	3'-2"	106
S3	28	#4	5	6'-6"	122
U1	33	#4	6	3'-8"	81
V1	76	#4	STR	7'-8"	389
V2	66	#4	STR	5'-9"	254

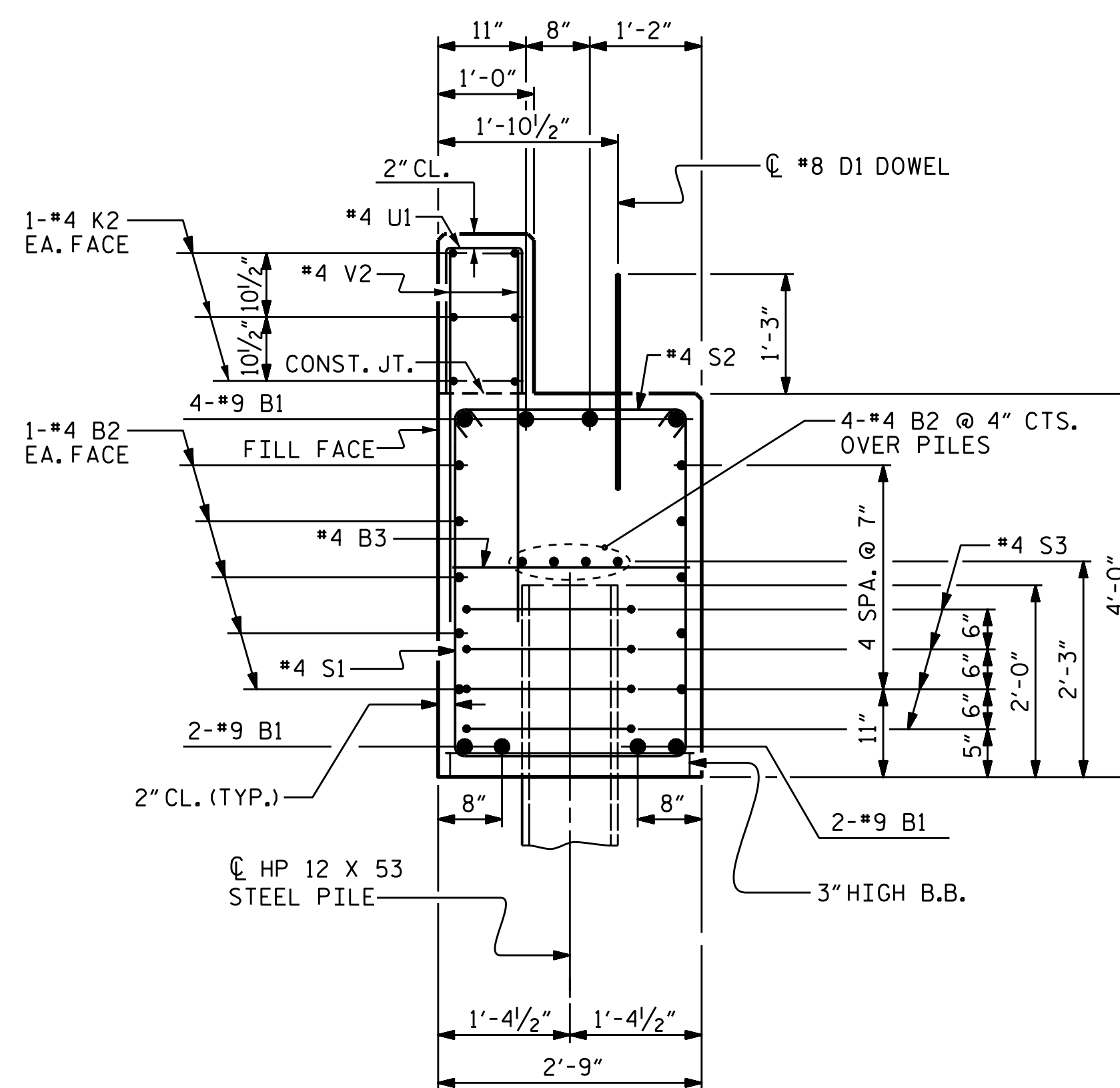
REINFORCING STEEL (FOR ONE END BENT) 4612 LBS.

CLASS A CONCRETE BREAKDOWN (FOR ONE END BENT)

POUR #1 CAP, LOWER PART OF WINGS & COLLARS 21.3 C.Y.

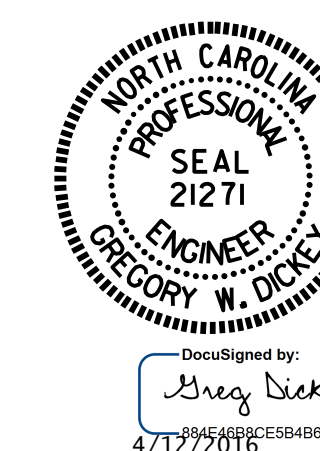
POUR #2 BACKWALL & UPPER PART OF WINGS 7.7 C.Y.

TOTAL CLASS A CONCRETE 29.0 C.Y.



SECTION A-A

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



PROJECT NO. B-4961

GUILFORD COUNTY

STATION: 17+07.00 -L-

SHEET 4 OF 4

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

SUBSTRUCTURE

END BENT No. 1 & 2
DETAILS

ASSEMBLED BY : REZA KOUCHEKI	DATE : 9/10/15
CHECKED BY : K.P. SEDA	DATE : 10/5/15
DRAWN BY : WJH	12/11
CHECKED BY : AAC	12/11
REV. 8/14	MAA/TMG

11-APR-2016 15:29
Z:\Structures\Final Plans\B-4961.SD.BX.dgn
gdickey

DOCUMENT NOT CONSIDERED
FINAL UNLESS ALL
SIGNATURES COMPLETED

REVISIONS						SHEET NO. S-17
NO.	BY:	DATE:	NO.	BY:	DATE:	
1			3			TOTAL SHEETS 19
2			4			

STD. NO. EB.33.90S4.39BB