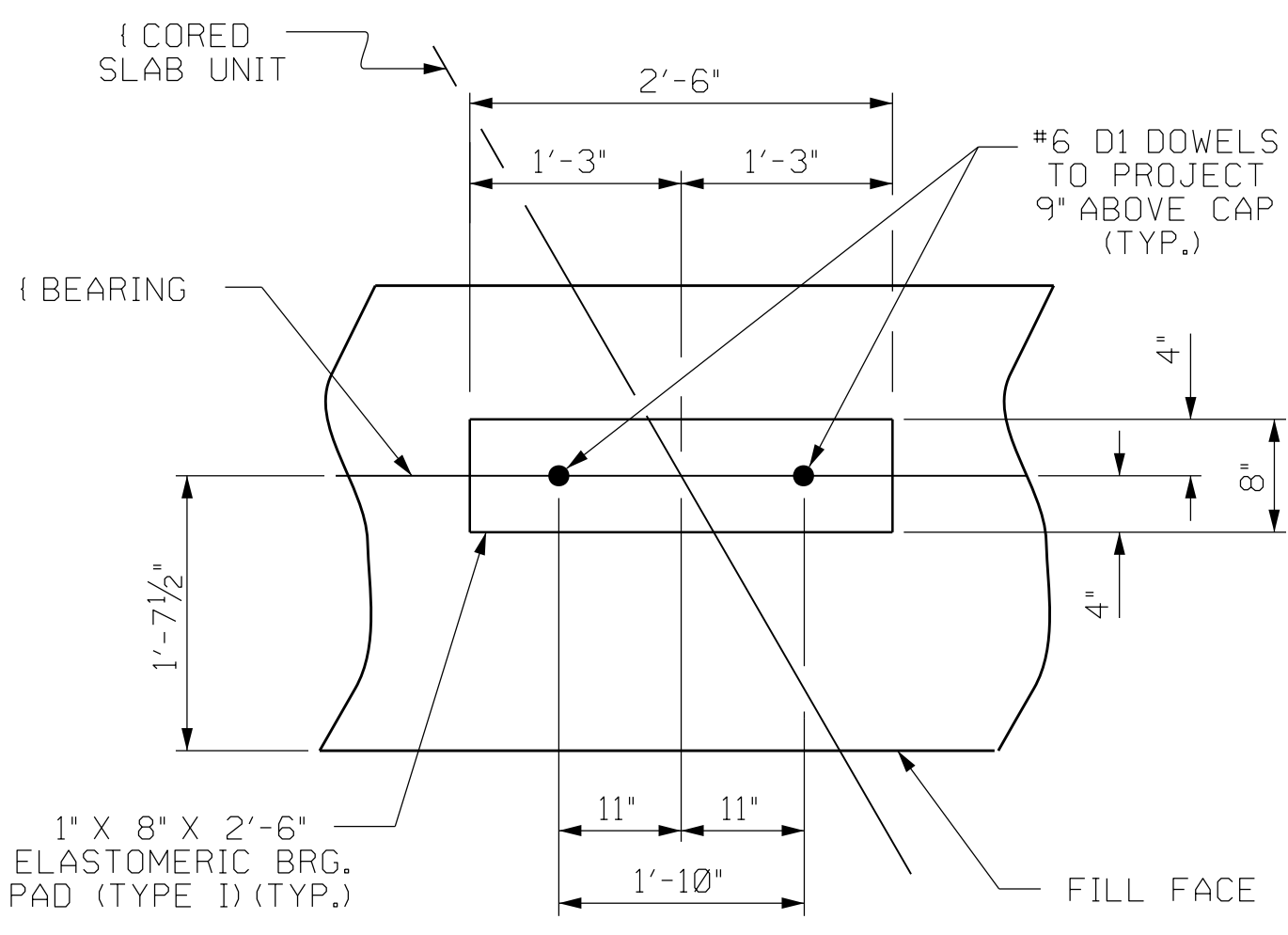


BAGGED STONE AND PIPE SHALL BE PLACED IMMEDIATELY AFTER COMPLETION OF END BENT EXCAVATION. PIPE MAY BE EITHER CONCRETE, CORRUGATED STEEL, CORRUGATED ALUMINUM ALLOY, OR CORRUGATED PLASTIC. PERFORATED PIPE WILL NOT BE ALLOWED.

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.

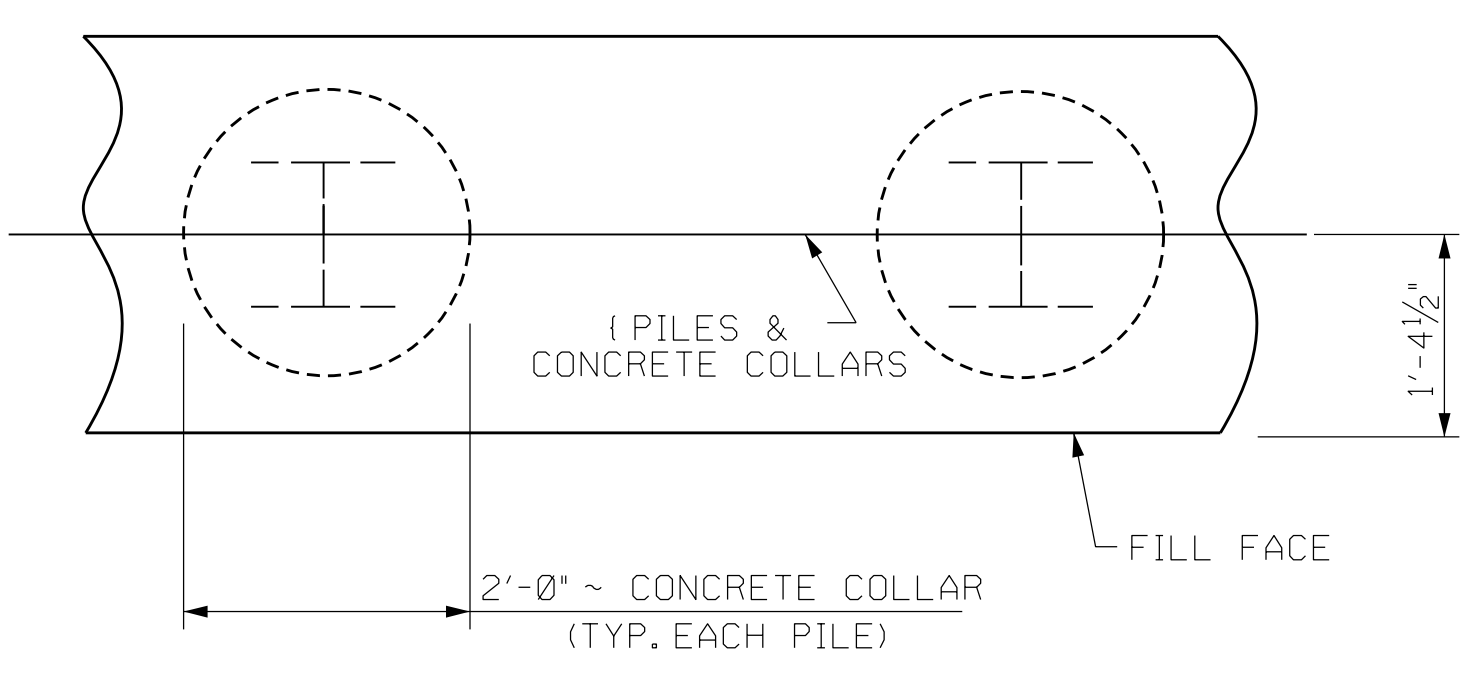
NO SEPARATE PAYMENT WILL BE MADE FOR THIS WORK AND THE ENTIRE COST OF THIS WORK SHALL BE INCLUDED IN THE UNIT CONTRACT PRICE BID FOR THE SEVERAL PAY ITEMS.

TEMPORARY DRAINAGE AT END BENT



DETAIL "A"

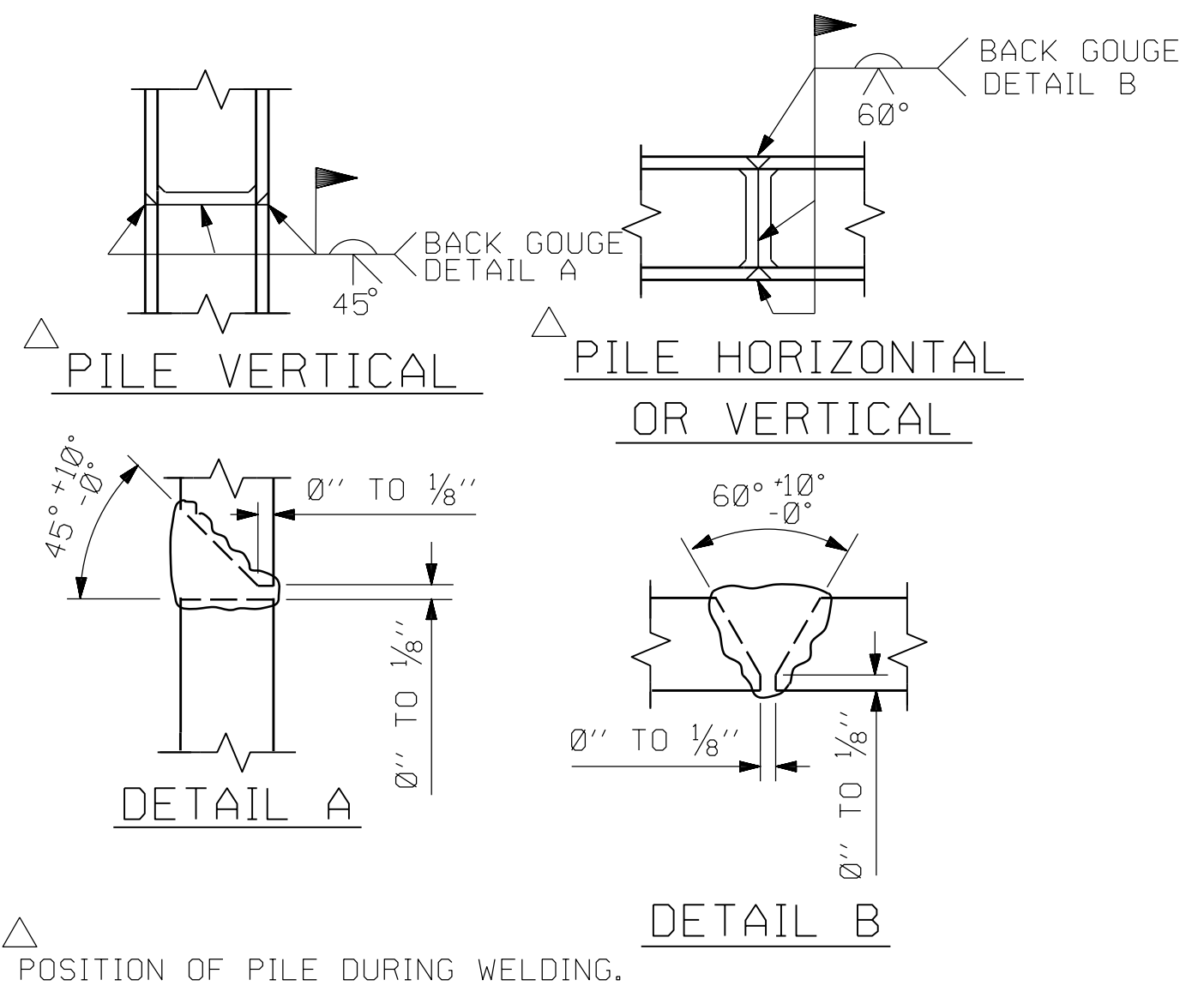
(END BENT No. 1 SHOWN, END BENT No. 2 SIMILAR BY ROTATION)



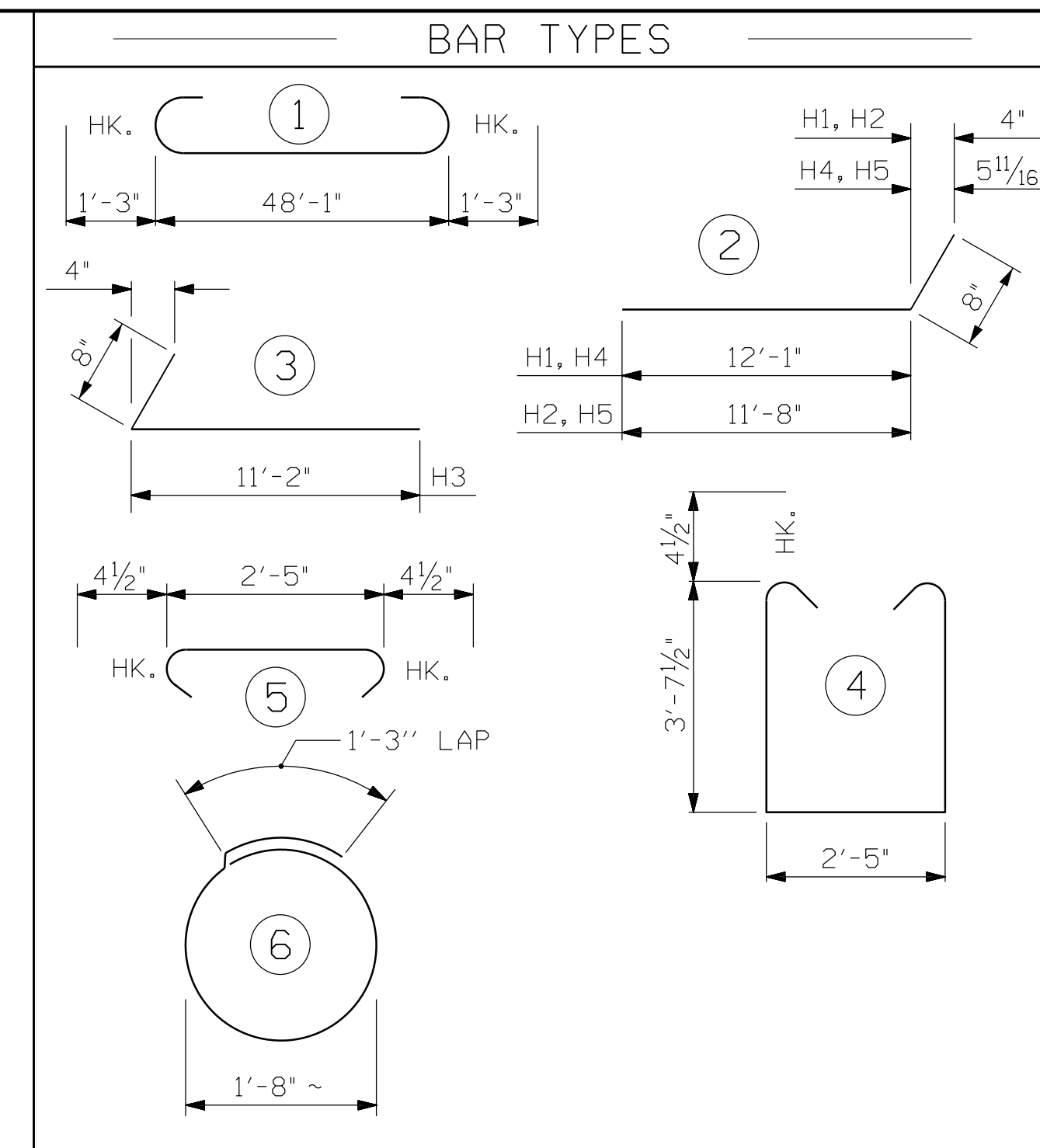
PLAN

CORROSION PROTECTION FOR STEEL PILES DETAIL

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



PILE SPLICE DETAILS



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. = 123		LIN. FT. = 123	
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
STEEL PILE POINTS	NO: 7	STEEL PILE POINTS	NO: 7

BILL OF MATERIAL

END BENT 1

BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT
B1	8	#9	1	50'-7"	1376
B2	28	#4	STR	25'-4"	474
B3	12	#4	STR	2'-5"	19
D1	24	#6	STR	1'-6"	54
H1	10	#4	2	12'-9"	85
H2	10	#4	2	12'-4"	82
H3	20	#4	3	11'-10"	158
K1	8	#4	STR	3'-3"	17
K2	8	#4	STR	4'-0"	21
S1	62	#4	4	10'-5"	431
S2	62	#4	5	3'-2"	131
S3	28	#4	6	6'-6"	122
V1	65	#4	STR	6'-2"	267

REINFORCING STEEL (FOR ONE END BENT) 3239 LBS.

CLASS A CONCRETE BREAKDOWN (FOR ONE END BENT)

POUR #1 CAP, LOWER PART OF WINGS & COLLARS	24.2 C.Y.
POUR #2 UPPER PART OF WINGS	3.2 C.Y.
TOTAL CLASS A CONCRETE	27.4 C.Y.

BILL OF MATERIAL

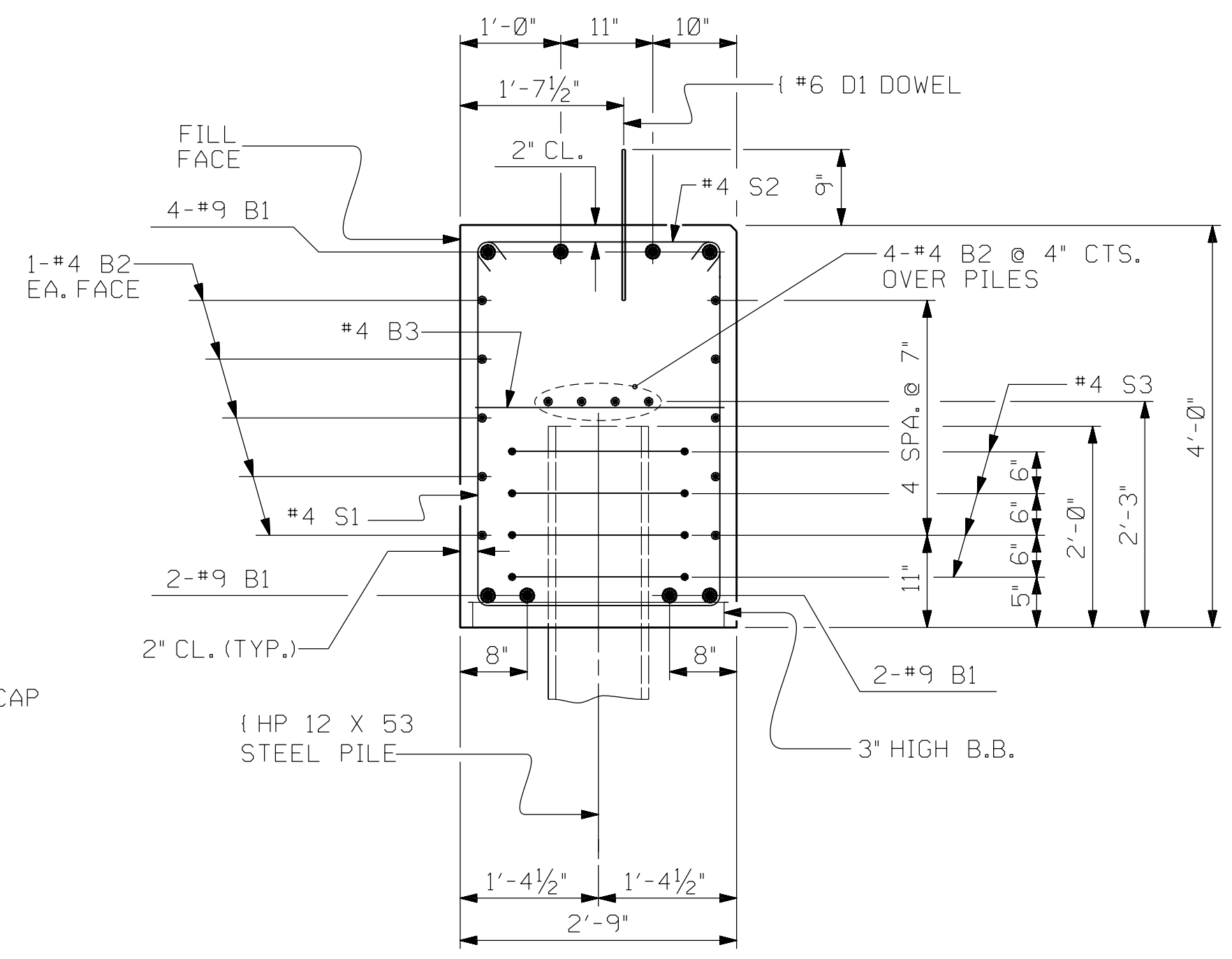
END BENT 2

BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT
B1	8	#9	1	50'-7"	1376
B2	28	#4	STR	25'-4"	474
B3	12	#4	STR	2'-5"	19
D1	24	#6	STR	1'-6"	54
H1	10	#4	2	12'-9"	85
H4	10	#4	2	12'-4"	82
H5	20	#4	3	11'-10"	158
K1	16	#4	STR	3'-3"	35
S1	62	#4	4	10'-5"	431
S2	62	#4	5	3'-2"	131
S3	28	#4	6	6'-6"	122
V1	65	#4	STR	6'-2"	267

REINFORCING STEEL (FOR ONE END BENT) 3235 LBS.

CLASS A CONCRETE BREAKDOWN (FOR ONE END BENT)

POUR #1 CAP, LOWER PART OF WINGS & COLLARS	24.2 C.Y.
POUR #2 UPPER PART OF WINGS	3.2 C.Y.
TOTAL CLASS A CONCRETE	27.4 C.Y.



SECTION A-A

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

PLANS PREPARED BY:

CAROLINA

Transportation Engineers & Architects, PC

4270 Belle Meade Circle
Belmont, NC 28012
(980) 722-6065
www.carolina-TEA.com

License No. C-4307

1/15/2021

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 027292

ENG. NEERU DUREK C. STATION

DocuSigned by: **Dink Staton** 5734371854F7142.

PROJECT NO. BR-0009

BUNCOMBE COUNTY

STATION: 12+94.70 -L-

SHEET 4 OF 4

STATE OF NORTH CAROLINA

DEPARTMENT OF TRANSPORTATION

RALEIGH

SUBSTRUCTURE

END BENT No. 1 & 2

DETAILS

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S-15
1			3			TOTAL SHEETS 18
2			4			

ASSEMBLED BY : J.D. BAKER	DATE : 01-20
CHECKED BY : D.C. STATON	DATE : 01-20
DRAWN BY : WJH 12/11	REV. 4/17
CHECKED BY : AAC 12/11	MAA/THC