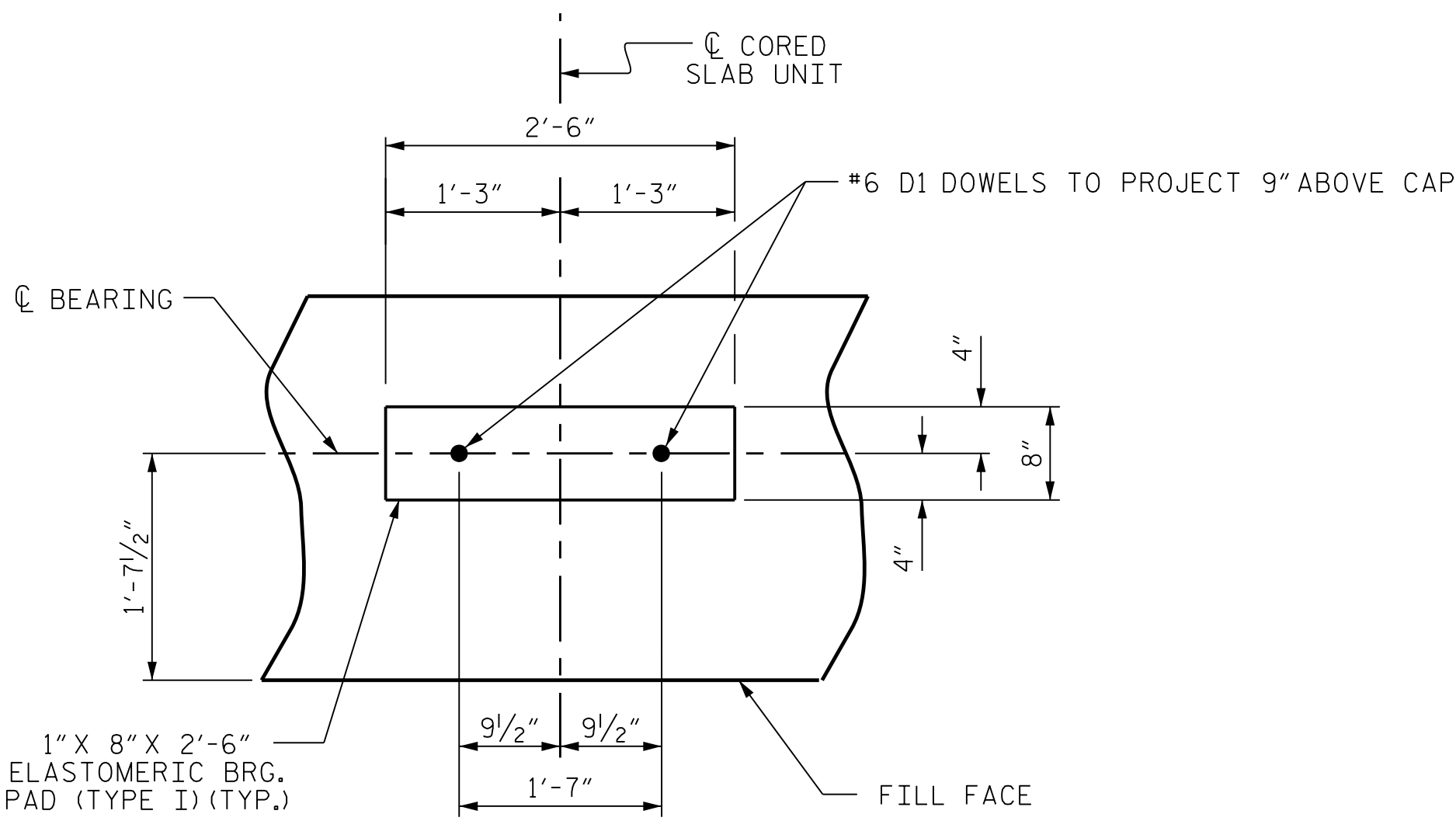


BAGGED STONE AND PIPE SHALL BE PLACED IMMEDIATELY AFTER COMPLETION OF END BENT EXCAVATION. PIPE MAY BE EITHER CONCRETE, CORRUGATED STEEL, CORRUGATED ALUMINUM ALLOY, OR CORRUGATED PLASTIC. PERFORATED PIPE WILL NOT BE ALLOWED.

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.

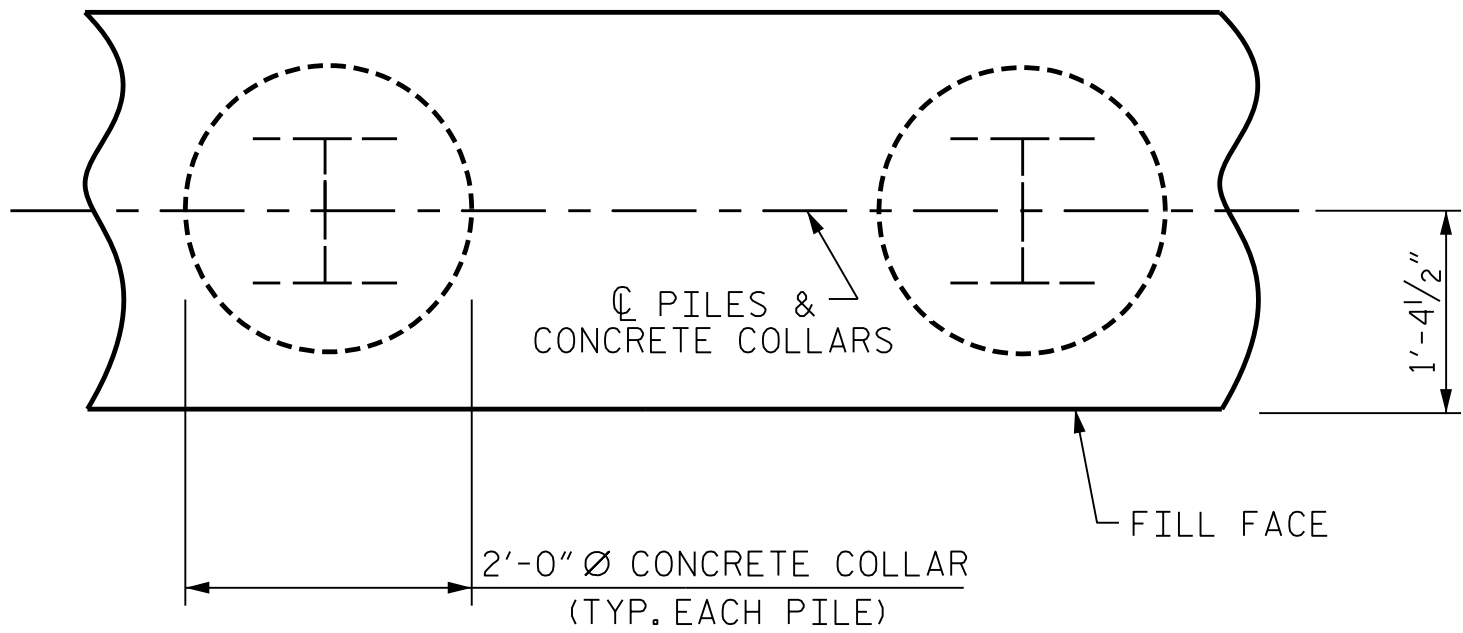
NO SEPARATE PAYMENT WILL BE MADE FOR THIS WORK AND THE ENTIRE COST OF THIS WORK SHALL BE INCLUDED IN THE UNIT CONTRACT PRICE BID FOR THE SEVERAL PAY ITEMS.

TEMPORARY DRAINAGE AT END BENT



DETAIL "A"

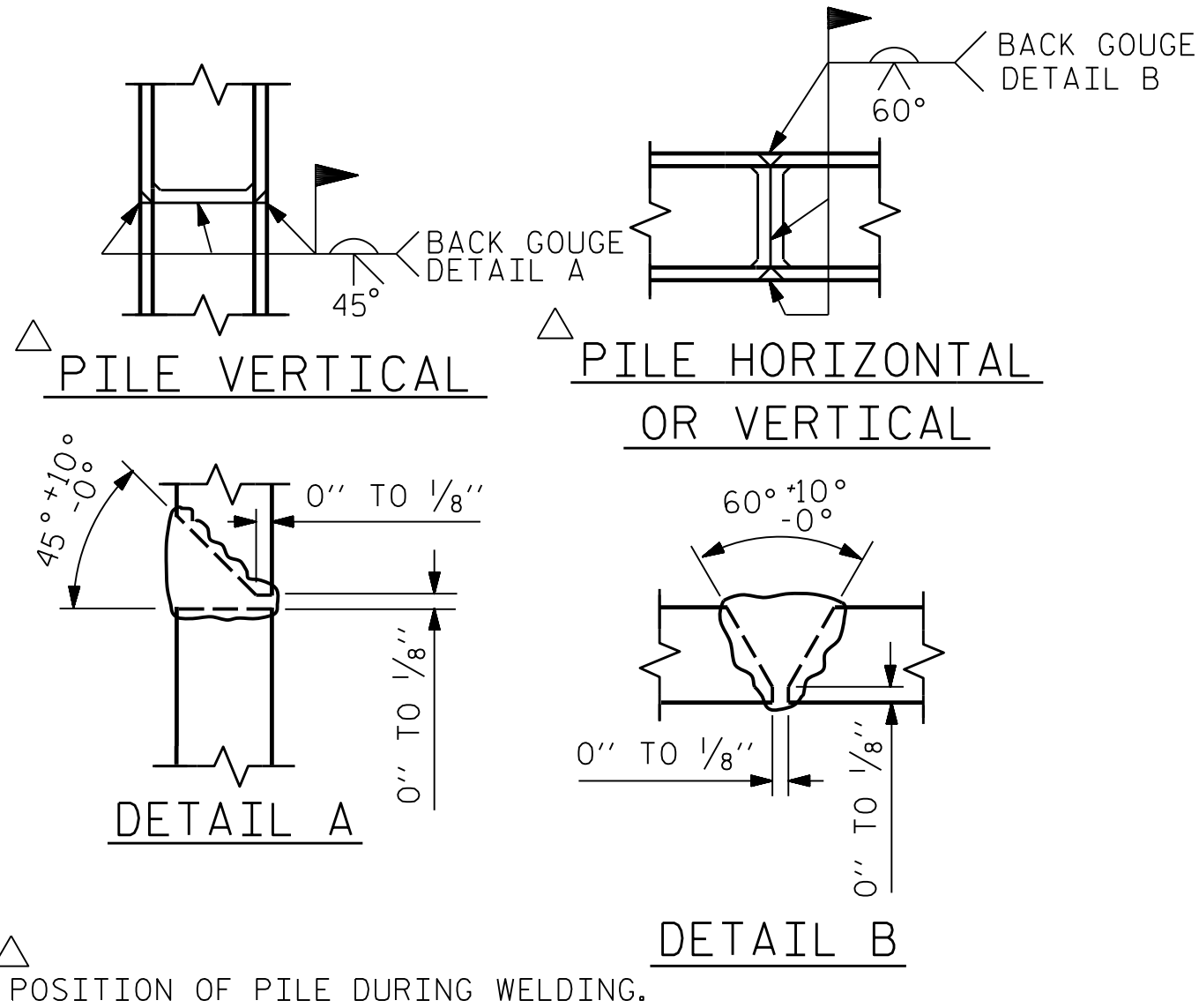
(END BENT No. 1 SHOWN, END BENT No. 2 SIMILAR BY ROTATION)



PLAN

CORROSION PROTECTION FOR STEEL PILES DETAIL

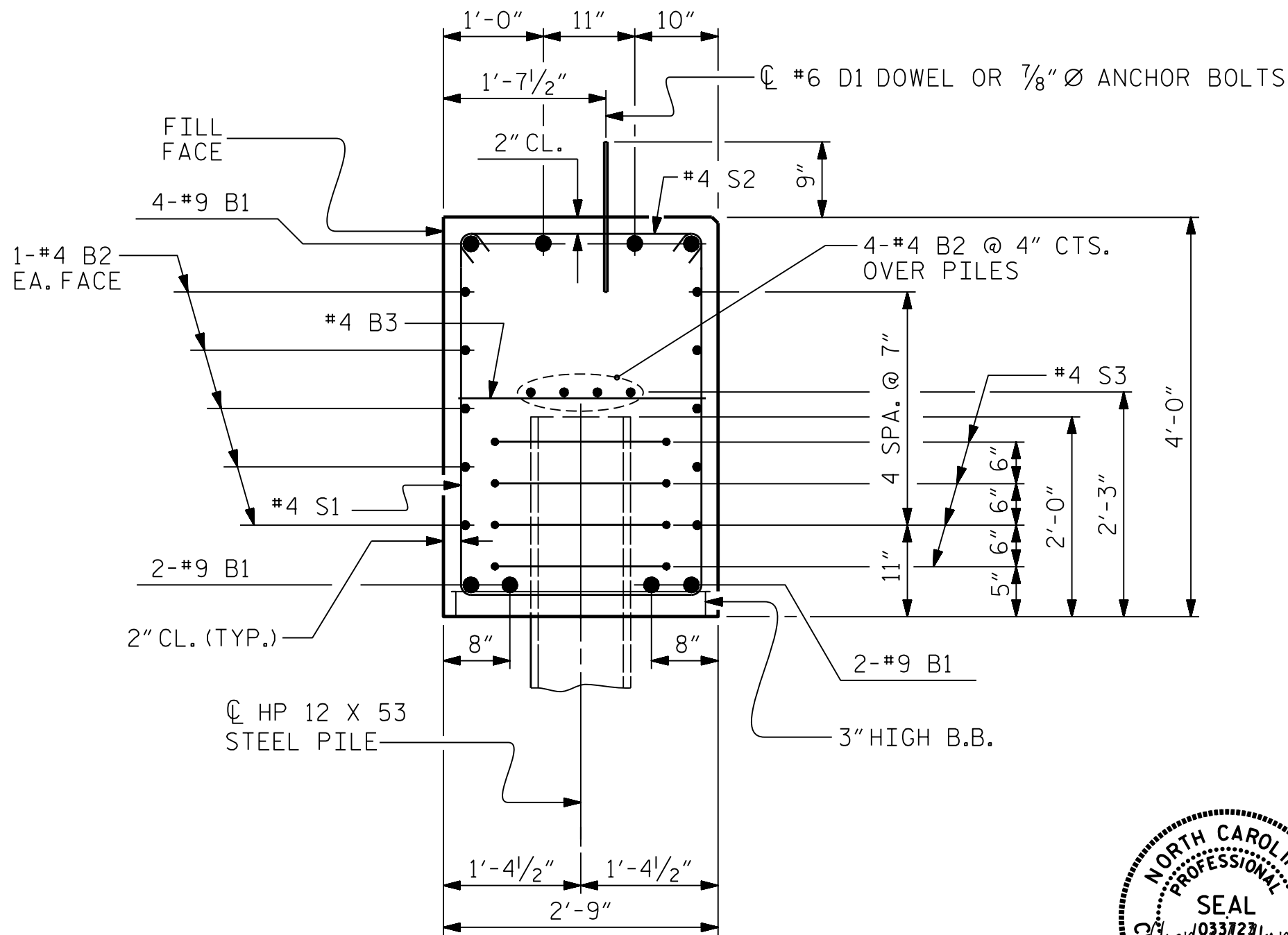
(END BENT No. 1 SHOWN, END BENT No. 2 SIMILAR BY ROTATION)



PILE SPLICE DETAILS

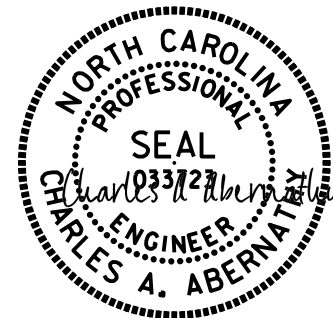
BAR TYPES				BILL OF MATERIAL						
				END BENT 1						
BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT					
B1	16	#9	1	22'-0"	1197					
B2	28	#4	STR	19'-4"	362					
B3	9	#4	STR	2'-5"	15					
D1	20	#6	STR	1'-6"	46					
H1	20	#4	2	9'-4"	125					
H2	10	#4	6	9'-4"	63					
H3	10	#4	6	9'-5"	63					
K1	8	#4	STR	3'-0"	17					
K2	8	#4	STR	3'-3"	18					
S1	47	#4	3	10'-5"	328					
S2	47	#4	4	3'-2"	100					
S3	20	#4	5	6'-6"	87					
V1	52	#4	STR	6'-5"	220					
REINFORCING STEEL (FOR ONE END BENT)					2641					
CLASS A CONCRETE BREAKDOWN										
POUR #1 CAP, LOWER PART OF WINGS & COLLARS					18.1 C.Y.					
POUR #2 UPPER PART OF WINGS					2.4 C.Y.					
TOTAL CLASS A CONCRETE					20.5 C.Y.					

ALL BAR DIMENSIONS ARE OUT TO OUT.



SECTION A-A

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



12/15/2025

DES BY: D. MAST	DATE : 03/25	DWG BY: B. PETERSON	DATE : 03/25
DES CHK: A. ABERNATHY	DATE : 03/25	CHK BY: D. MAST	DATE : 03/25

HDR HDR Engineering, Inc. of the Carolinas
555 Fayetteville St., Suite 900 Raleigh, N.C. 27601
N.C.B.E.L.S. License Number: F-0116

DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED

PROJECT NO. DF18314.2044195
HAYWOOD COUNTY
STATION: 13+39.86 -L-

SHEET 3 OF 3

DEPARTMENT OF TRANSPORTATION RALEIGH					
SUBSTRUCTURE END BENT 1 DETAILS					
REVISIONS					
NO.	BY:	DATE:	NO.	BY:	DATE:
1	--	--	3	--	--
2	--	--	4	--	--
TOTAL SHEETS 18					SHEET NO. S-12