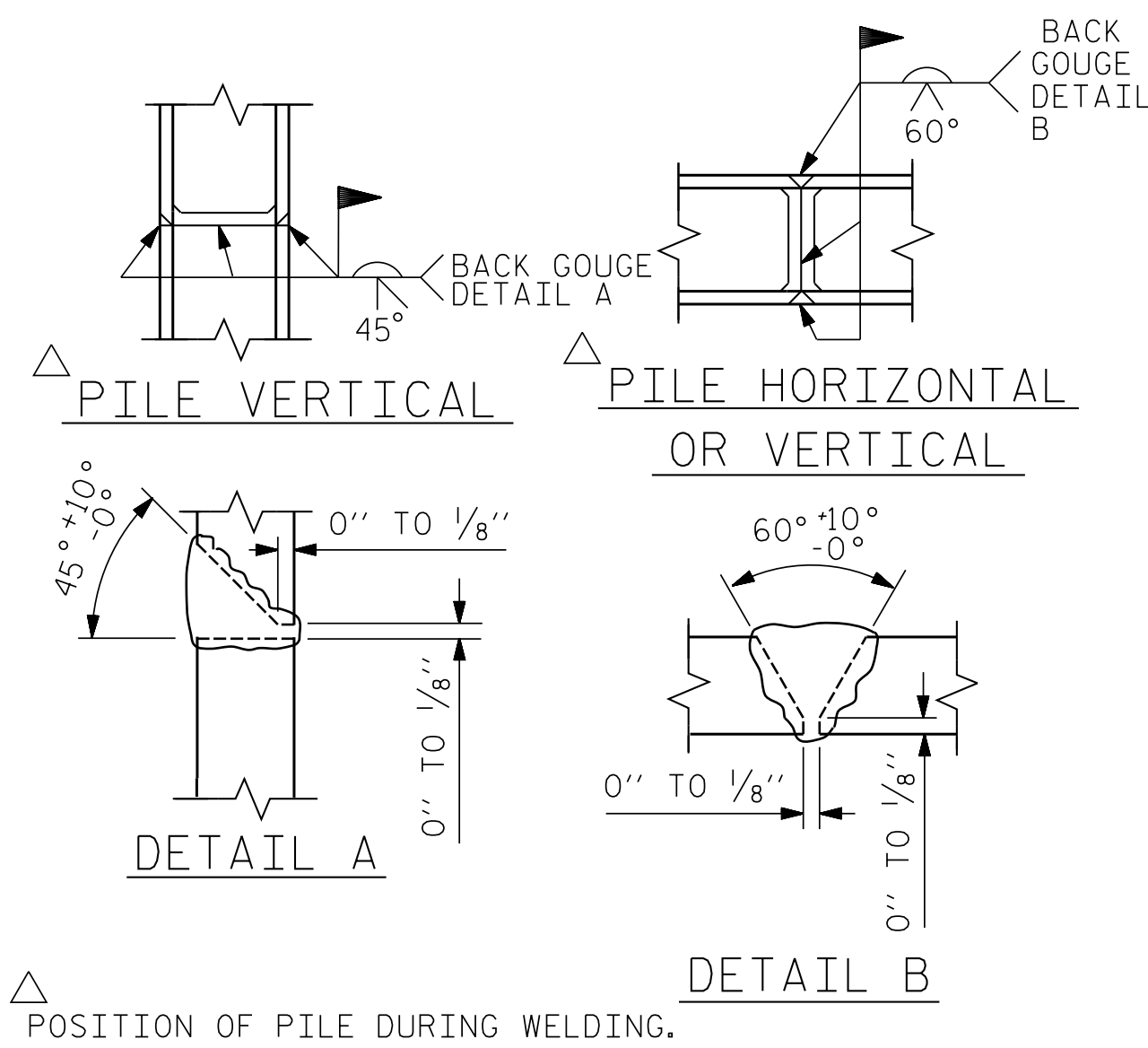


BAGGED STONE AND PIPE SHALL BE PLACED IMMEDIATELY AFTER COMPLETION OF END BENT EXCAVATION. PIPE MAY BE EITHER CONCRETE, CORRUGATED STEEL, CORRUGATED ALUMINUM ALLOY, OR CORRUGATED PLASTIC. PERFORATED PIPE WILL NOT BE ALLOWED.

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

BAR TYPES		
1'-5"	57'-6"	B1
1'-3"	57'-6"	B5
1'-5"	46'-6"	B10
1'-3"	46'-6"	B13

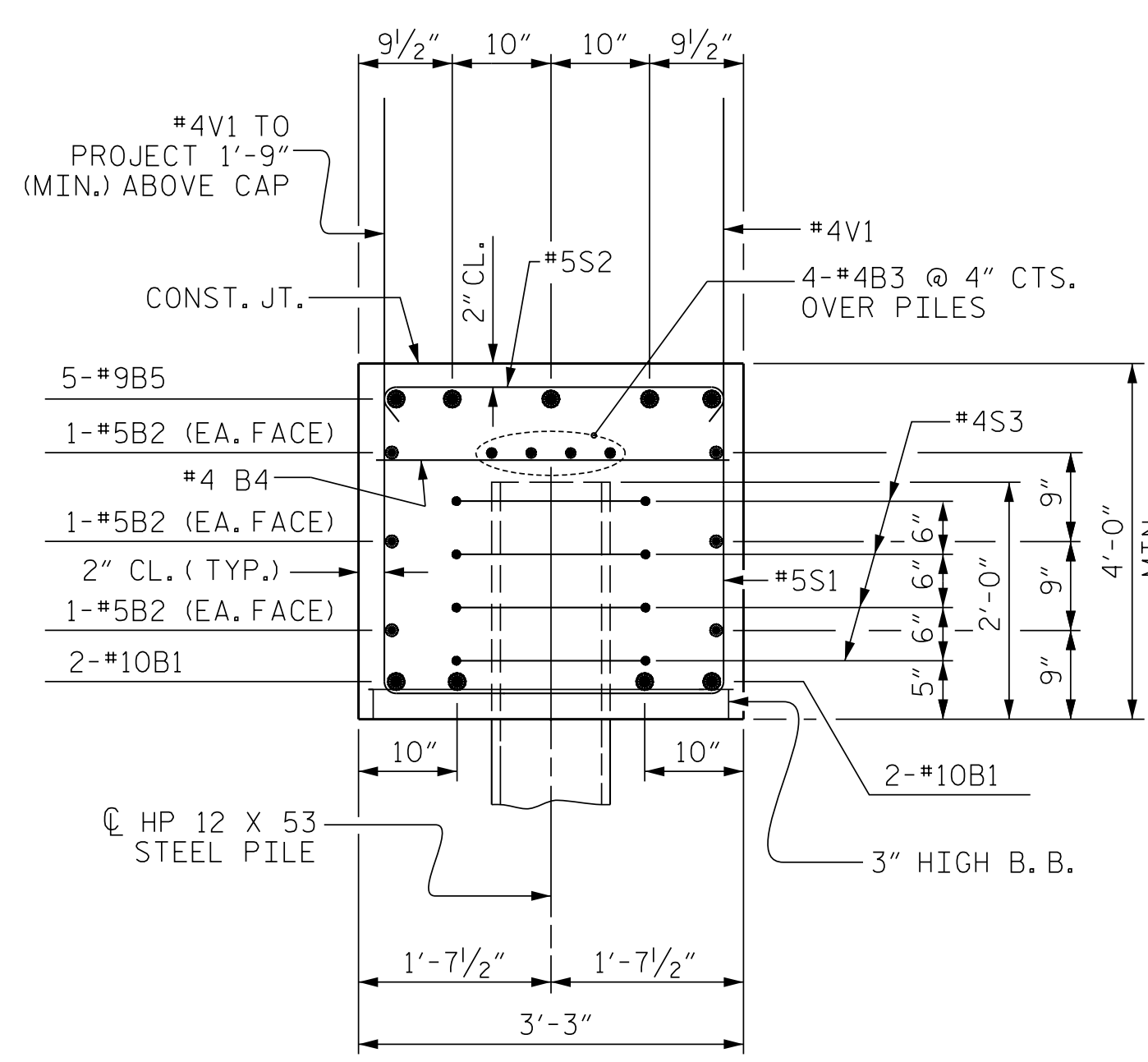
8'-5"	H1
9'-5"	H2
10'-5"	H3
11'-5"	H4
12'-5"	H6
13'-5"	H7
14'-5"	H8
15'-0"	H9
8'-5"	H10
9'-5"	H11
10'-5"	H12
11'-5"	H13
12'-6"	H15
13'-6"	H16
14'-6"	H17
15'-3"	H18

ALL BAR DIMENSIONS ARE OUT TO OUT.

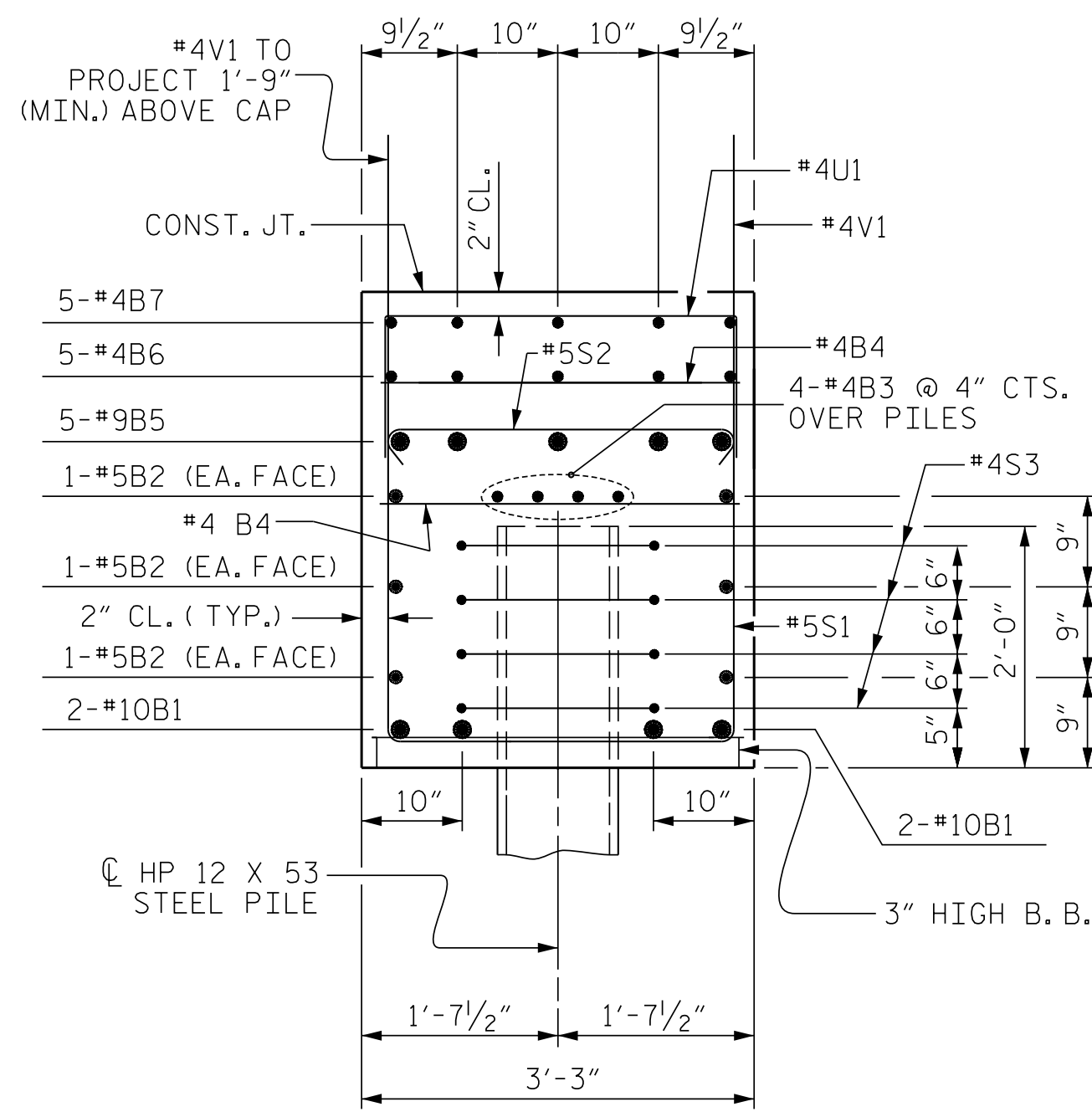
STAGE I	STAGE II
HP 12 X 53 STEEL PILES NO: 12 LIN. FT.= 300	HP 12 X 53 STEEL PILES NO: 8 LIN. FT.= 200
PILE DRIVING EQUIPMENT SETUP FOR HP 12 X 53 STEEL PILES NO: 12	PILE DRIVING EQUIPMENT SETUP FOR HP 12 X 53 STEEL PILES NO: 8

BILL OF MATERIAL											
STAGE I					STAGE II						
BAR NO.	NO.	SIZE	TYPE	LENGTH	WEIGHT	BAR NO.	NO.	SIZE	TYPE	LENGTH	WEIGHT
B1	4	#10	1	58'-11"	1014	B10	4	#10	1	47'-11"	825
B2	6	#5	STR	59'-2"	370	B11	6	#5	STR	45'-9"	286
B3	8	#4	STR	30'-10"	165	B12	8	#4	STR	24'-0"	128
B4	17	#4	STR	2'-11"	33	B4	14	#4	STR	2'-11"	27
B5	5	#9	1	58'-9"	999	B13	5	#9	1	47'-9"	812
B6	10	#4	STR	18'-6"	124	B14	5	#4	STR	23'-2"	77
B7	5	#4	STR	15'-7"	52	B15	5	#4	STR	5'-10"	19
H1	4	#6	2	9'-1"	55	H10	4	#6	2	9'-1"	55
H2	4	#6	2	10'-1"	61	H11	4	#6	2	10'-1"	61
H3	4	#6	2	11'-1"	67	H12	4	#6	2	11'-1"	67
H4	4	#6	2	12'-1"	73	H13	4	#6	2	12'-1"	73
H5	2	#6	STR	9'-7"	29	H14	2	#6	STR	9'-11"	30
H6	4	#6	2	13'-1"	79	H15	4	#6	2	13'-2"	79
H7	4	#6	2	14'-1"	85	H16	4	#6	2	14'-2"	85
H8	4	#6	2	15'-1"	91	H17	4	#6	2	15'-2"	91
H9	18	#6	2	15'-8"	424	H18	18	#6	2	15'-11"	430
K1	30	#4	STR	2'-8"	53	K1	30	#4	STR	2'-8"	53
S1	73	#5	3	11'-1"	844	S1	62	#5	3	11'-1"	717
S2	73	#5	4	3'-10"	292	S2	62	#5	4	3'-10"	248
S3	44	#4	5	6'-6"	191	S3	36	#4	5	6'-6"	156
U1	22	#4	6	5'-11"	87	U1	17	#4	6	5'-11"	67
V1	86	#4	STR	6'-6"	373	V1	68	#4	STR	6'-6"	295
V2	24	#5	STR	11'-2"	280	V10	24	#5	STR	11'-3"	282
V3	2	#5	STR	10'-6"	22	V11	2	#5	STR	10'-5"	22
V4	2	#5	STR	9'-4"	19	V12	2	#5	STR	9'-5"	20
V5	2	#5	STR	8'-2"	17	V13	2	#5	STR	8'-5"	18
V6	2	#5	STR	7'-0"	15	V14	2	#5	STR	7'-5"	15
V7	2	#5	STR	5'-10"	12	V15	2	#5	STR	6'-5"	13
V8	2	#5	STR	4'-8"	10	V16	2	#5	STR	5'-5"	11
V9	2	#5	STR	3'-6"	7	V17	2	#5	STR	4'-5"	9

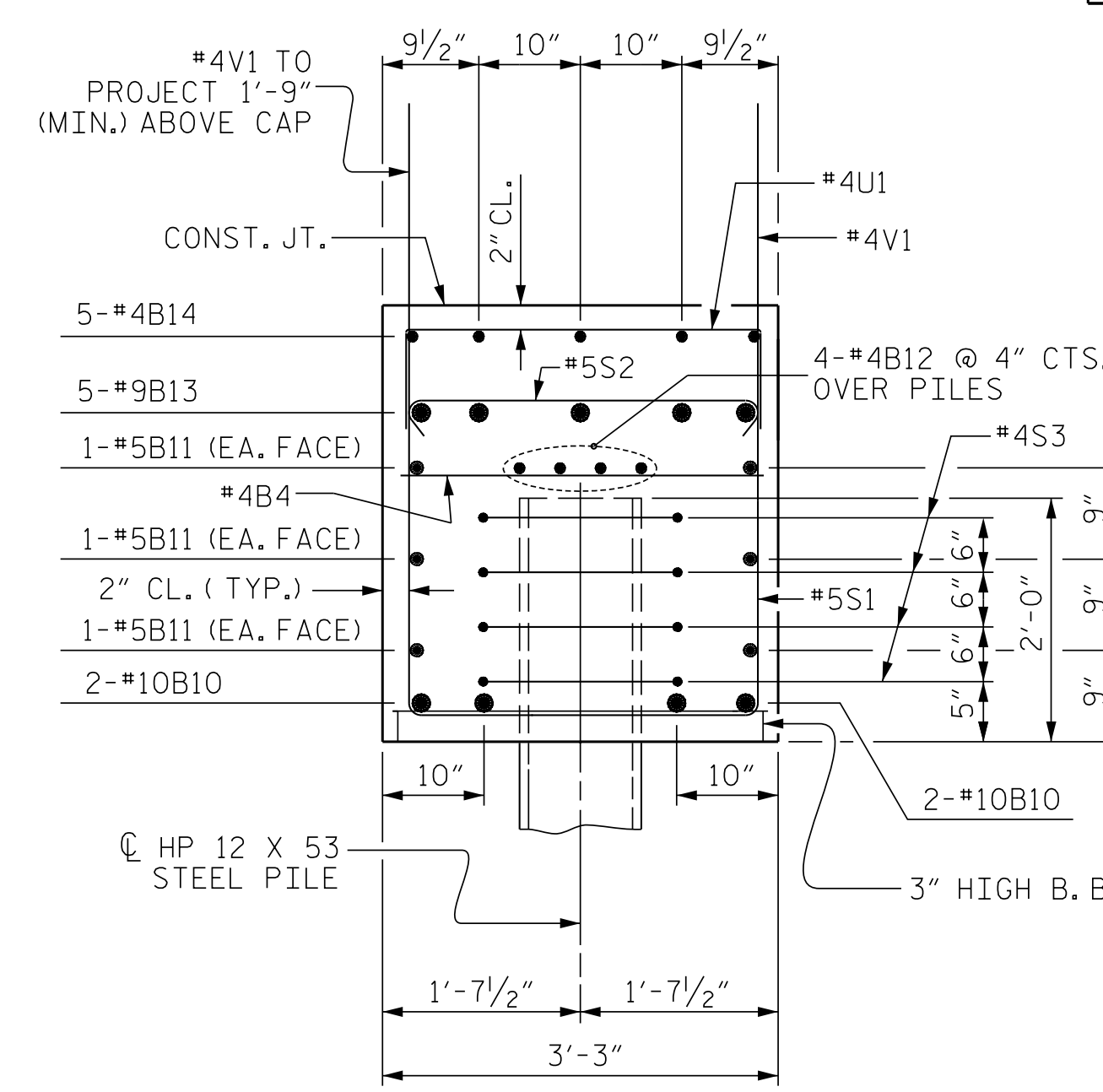
REINFORCING STEEL	5943 LBS.	REINFORCING STEEL	5071 LBS.
CLASS A CONCRETE BREAKDOWN		CLASS A CONCRETE BREAKDOWN	
POUR #1 CAP, LOWER PART OF WING & COLLARS	33.3 C.Y.	POUR #1 CAP, LOWER PART OF WING & COLLARS	27.6 C.Y.
POUR #2 UPPER PART OF WING	4.6 C.Y.	POUR #2 UPPER PART OF WING	4.7 C.Y.
TOTAL CLASS A CONCRETE	37.9 C.Y.	TOTAL CLASS A CONCRETE	32.3 C.Y.



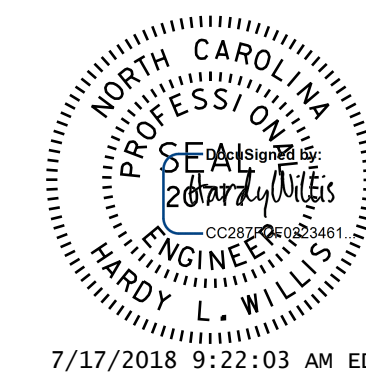
(STAGE I)
(CONCRETE COLLAR NOT SHOWN FOR CLARITY)



(STAGE I)
(CONCRETE COLLAR NOT SHOWN FOR CLARITY)



(STAGE II)
(CONCRETE COLLAR NOT SHOWN FOR CLARITY)



DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

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PROJECT NO. R-3825B
JOHNSTON COUNTY
STATION: 64+20.00 -L-

SHEET 4 OF 4

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

SUBSTRUCTURE
END BENT 2
DETAILS

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S-54
1			3			TOTAL SHEETS
2			4			59

DWN. BY: WDC DATE: 7/2017
CHKD. BY: ACO DATE: 12/017
DES. EGR. OF RECORD: ACO DATE: 12/017