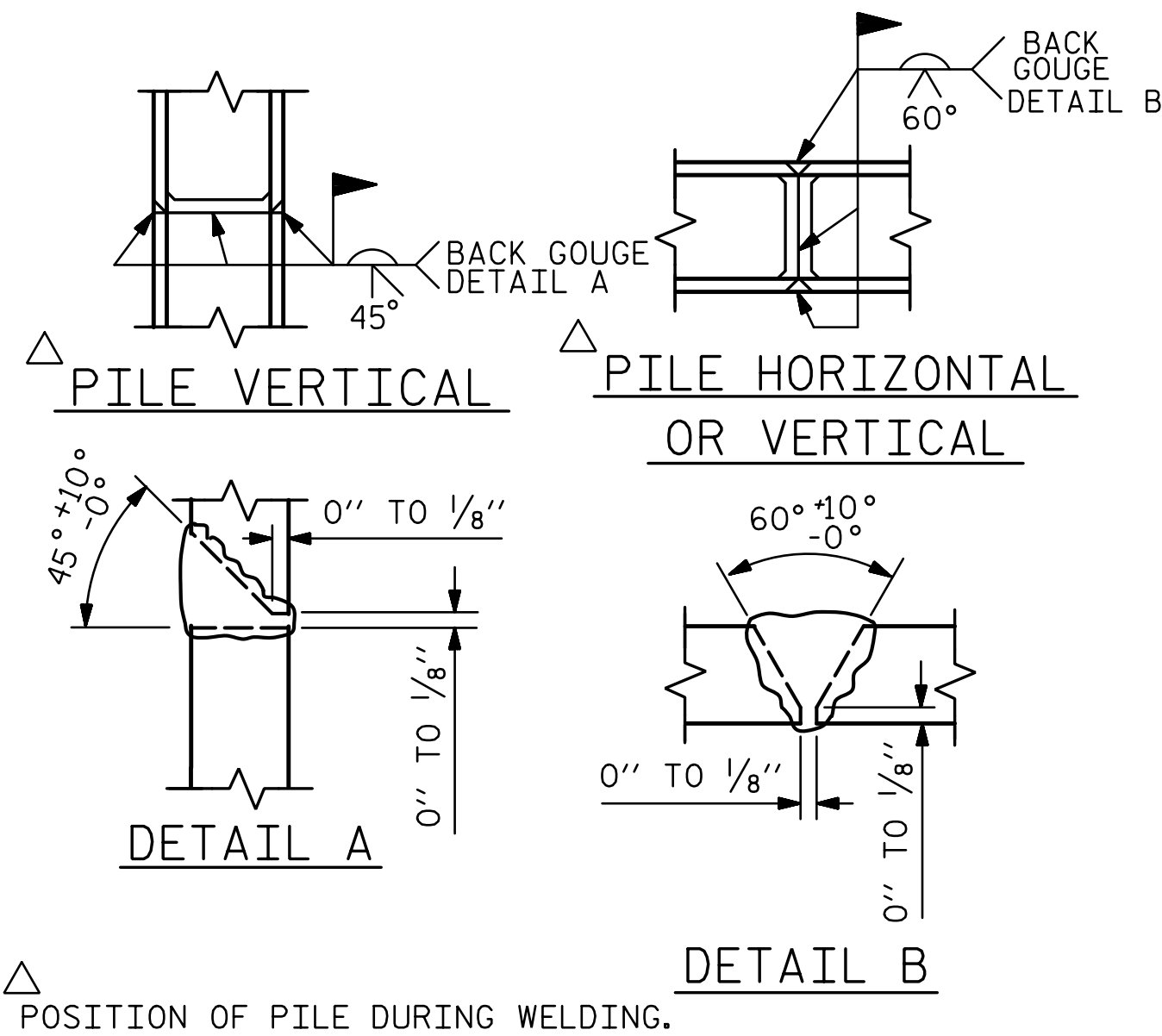


BAGGED STONE AND PIPE SHALL BE PLACED IMMEDIATELY AFTER COMPLETION OF END BENT EXCAVATION. PIPE MAY BE EITHER CONCRETE, CORRUGATED STEEL, CORRUGATED ALUMINUM ALLOY, OR CORRUGATED PLASTIC. PERFORATED PIPE WILL NOT BE ALLOWED.

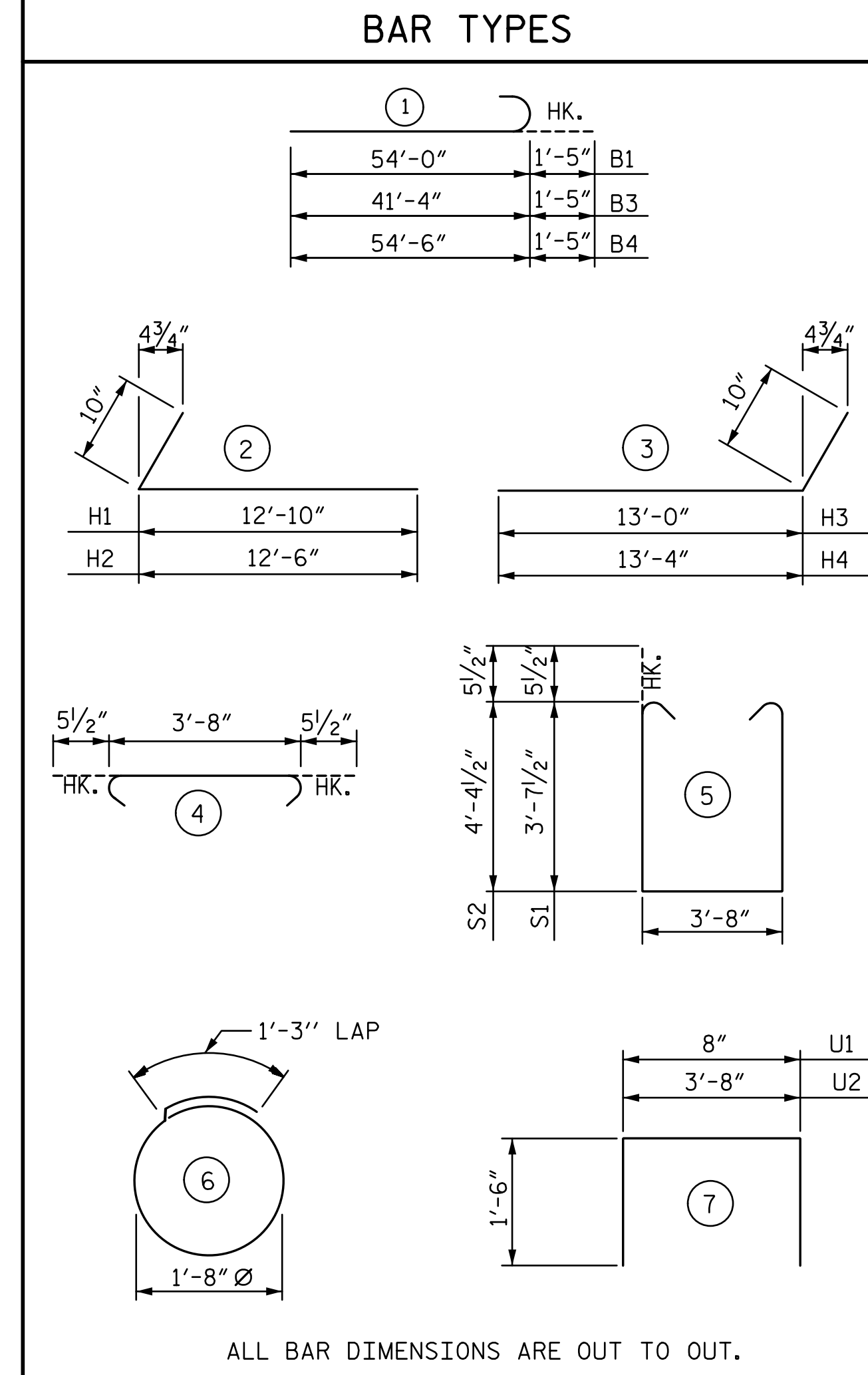
BAGGED STONE SHALL REMAIN IN PLACE UNTIL THE ENGINEER DIRECTS THAT IT BE REMOVED. THE CONTRACTOR SHALL REMOVE AND DISPOSE OF SILT ACCUMULATIONS AT BAGGED STONE WHEN SO DIRECTED BY THE ENGINEER. BAGS SHALL BE REMOVED AND REPLACED WHENEVER THE ENGINEER DETERMINES THAT THEY HAVE DETERIORATED AND LOST THEIR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

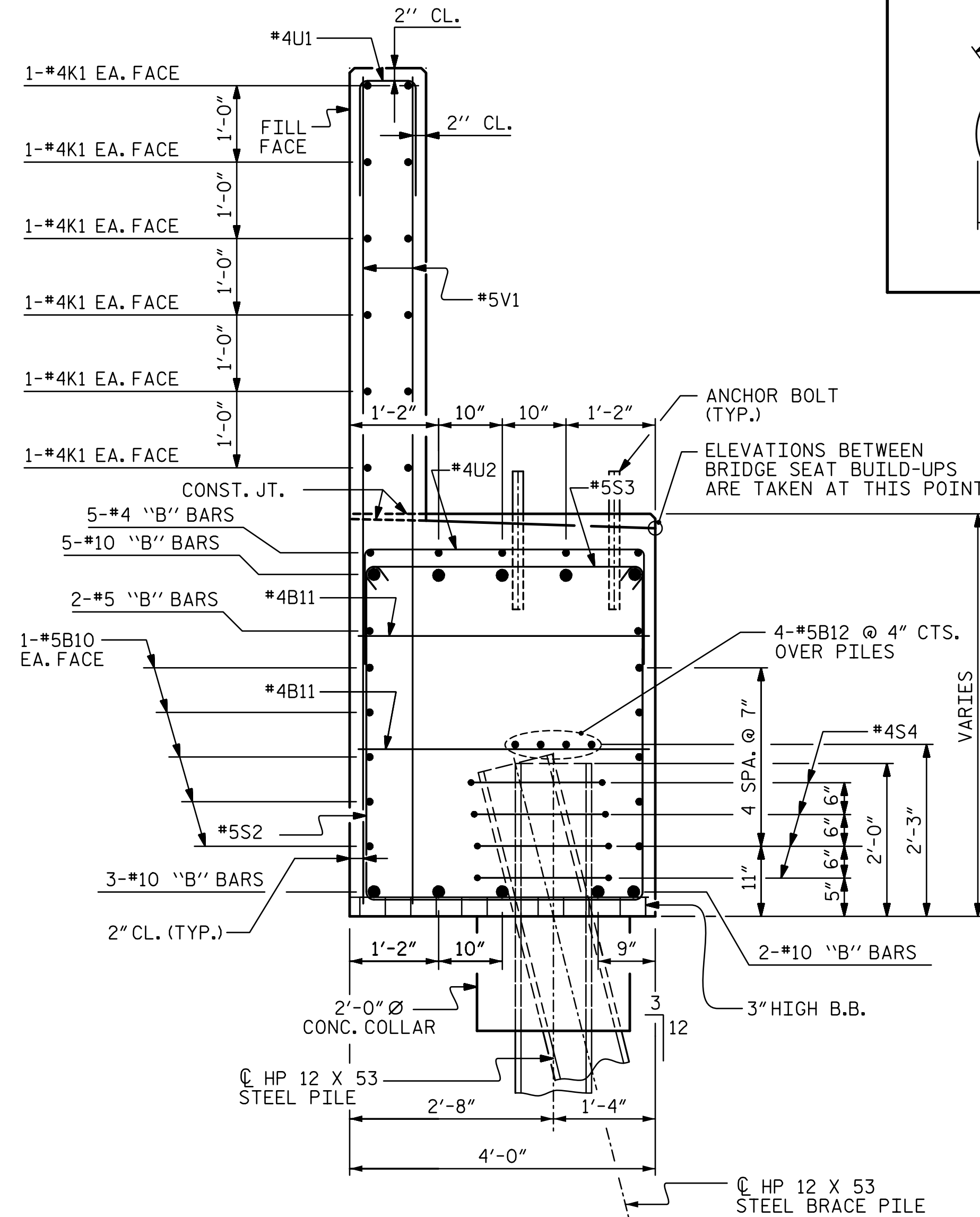
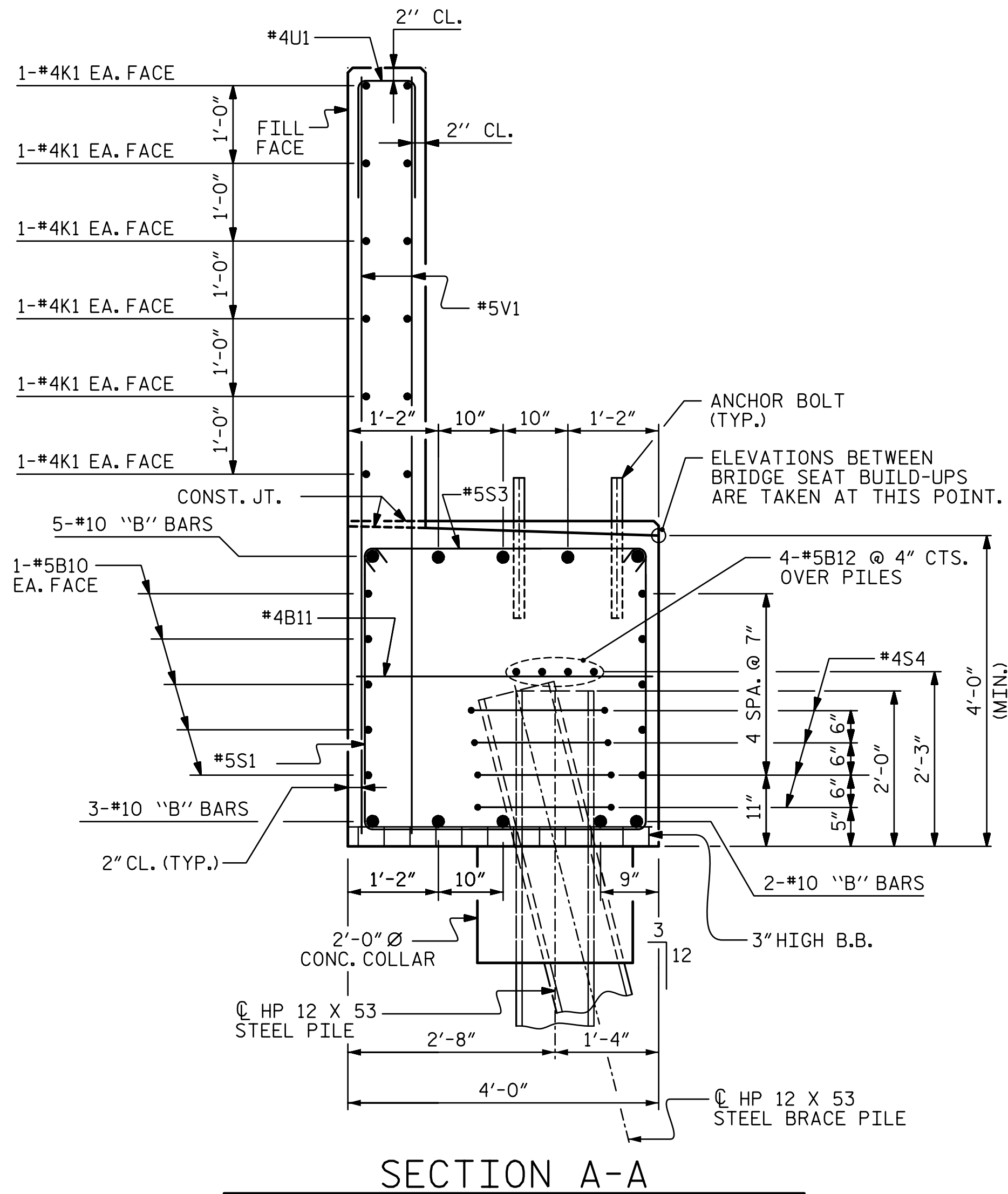


BILL OF REINFORCING

BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT
B1	10	#10		55'-5"	2,385
B2	5	#10	STR	48'-9"	1,049
B3	5	#10	1	42'-9"	920
B4	5	#10	1	55'-11"	1,203
B5	10	#10	STR	37'-0"	1,592
B6	5	#4	STR	20'-0"	67
B7	25	#4	STR	12'-4"	206
B8	5	#4	STR	15'-4"	51
B9	2	#5	STR	51'-6"	107
B10	30	#5	STR	49'-0"	1,533
B11	39	#4	STR	3'-8"	96
B12	12	#5	STR	49'-0"	613
H1	24	#6	2	13'-8"	493
H2	24	#6	2	13'-4"	481
H3	23	#6	3	13'-10"	478
H4	23	#6	3	14'-2"	489
K1	72	#4	STR	25'-7"	1,230
K2	8	#4	STR	2'-11"	16
S1	81	#5	5	11'-10"	1,000
S2	72	#5	5	13'-4"	1,001
S3	153	#5	4	4'-7"	731
S4	72	#4	6	6'-6"	313
U1	134	#4	7	3'-8"	328
U2	70	#4	7	6'-8"	312
V1	268	#5	STR	9'-5"	2,632
V2	34	#5	STR	11'-4"	402
V3	35	#5	STR	11'-0"	402

QUANTITIES

REINFORCING STEEL	LBS.	20,130
CLASS A CONCRETE:		
POUR 1:		
CAP, COLLAR & LOWER WINGS	C.Y.	103.9
POUR 2:		
BACKWALL & UPPER WINGS	C.Y.	35.3
TOTAL	C.Y.	139.2
HP 12x53 STEEL PILES	NO.	18
	LIN. FEET	1,440
PILE SETUP FOR HP 12x53	EA.	18
PILE REDRIVES	EA.	9



PROJECT NO. U-4751

NEW HANOVER COUNTY

STATION: 62+99.10 -L-

SHEET 3 OF 3

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

SUBSTRUCTURE
END BENT 1

6/29/2017

STV 100 years
STV ENGINEERS, INC.
900 West Trade St., Suite 715
Charlotte, NC 28202
NC License Number F-5991

REVISIONS

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

SHEET NO. S2-24

TOTAL SHEETS 30

6/27/2017 14:01:09 R:\402_047_U4751_SMU_EL_024_640202.dgn

DRAWN BY: TJT DATE: 3-17
CHECKED BY: TRL DATE: 5-17
DESIGN ENGINEER OF RECORD: T. TOWNSEND DATE: 3-17