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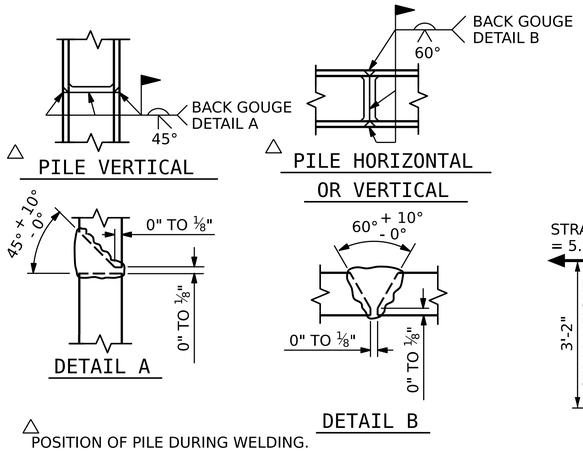
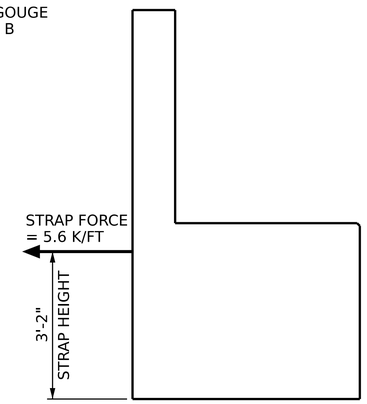


PILE SPLICE DETAILS

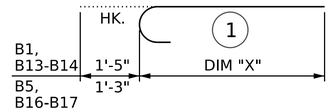


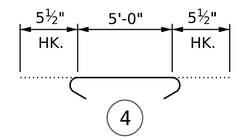
STRAP FORCE

(SEE MSE WALL PLANS)

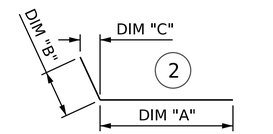
BAR TYPES

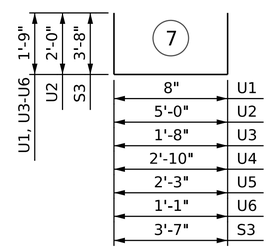
BAR	DIM. "X"
B1	37'-6"
B5	54'-10"
B13	38'-0"
B14	36'-0"
B16	38'-0"
B17	36'-0"

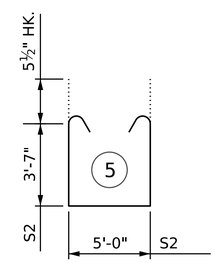


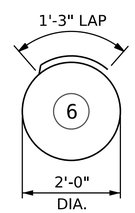


BAR	DIM. "A"	DIM. "B"	DIM. "C"
B10	7'-3"	4'-0"	0"
K2	38'-8"	3'-1"	1'-5"
K3	38'-4"	3'-5"	1'-6"
K4	6'-0"	5'-3"	5'-4"
K5	6'-1"	5'-4"	5'-5"
K7	5'-7"	3'-2"	0"
H2	8'-2"	11"	0"









ALL BAR DIMENSIONS ARE OUT TO OUT.

BILL OF MATERIAL

END BENT 1

STAGE I

BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT
B1	6	10	1	38'-11''	1005
B2	3	10	STR	51'-7''	666
B3	3	10	STR	53'-7''	692
B4	16	5	STR	44'-11''	750
B5	5	9	1	56'-1''	953
B6	3	9	STR	35'-0''	357
B7	2	9	STR	37'-0''	252
B8	5	4	STR	3'-5''	11
B9	5	4	STR	25'-5''	85
B10	10	5	2	11'-3''	117
B11	24	4	STR	29'-9''	477
B12	21	4	STR	5'-0''	70
K1	10	4	STR	38'-8''	258
K2	5	4	2	41'-9''	139
K3	5	4	2	41'-9''	139
K4	7	4	2	11'-2''	52
K5	7	4	2	11'-5''	54
S1	90	5	4	5'-11''	555
S2	90	5	5	13'-1''	1228
S3	5	5	7	10'-11''	57
S4	52	4	6	7'-7''	264
U1	88	4	7	4'-2''	245
U2	21	4	7	9'-0''	126
V1	150	5	STR	8'-0''	1252
V2	26	5	STR	9'-8''	262

REINFORCING STEEL 10,066 LBS.

CLASS A CONCRETE

POUR #1 (CAP & LOWER WINGWALL) 70.5 C.Y.

POUR #2 (BACKWALL & UPPER WINGWALL) 12.9 C.Y.

TOTAL = 83.4 C.Y.

STAGE II

BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT
B12	10	4	STR	5'-0''	33
B13	3	10	1	39'-5''	509
B14	3	10	1	37'-5''	483
B15	8	5	STR	38'-10''	324
B16	3	9	1	39'-3''	400
B17	2	9	1	37'-3''	253
B18	5	4	STR	38'-10''	130
B19	8	4	STR	38'-10''	208
K6	10	4	STR	38'-10''	260
K7	5	4	2	5'-7''	19
K8	4	4	STR	5'-6''	15
H1	30	5	2	9'-1''	283
S1	42	5	4	5'-11''	259
S2	42	5	5	13'-1''	573
S4	24	4	6	7'-7''	122
U1	30	4	7	4'-2''	84
U2	26	4	7	9'-0''	156
U3	2	4	7	5'-2''	7
U4	1	4	7	6'-4''	4
U5	1	4	7	5'-9''	4
U6	1	4	7	4'-7''	3
V3	72	5	STR	8'-5''	632
V4	30	5	STR	10'-5''	326

REINFORCING STEEL 5,087 LBS.

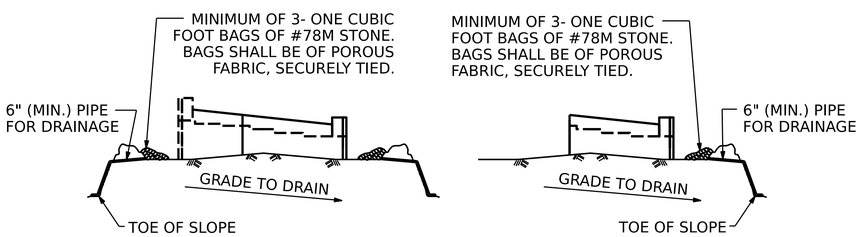
CLASS A CONCRETE

POUR #1 (CAP & LOWER WINGWALL) 35.4 C.Y.

POUR #2 (BACKWALL & UPPER WINGWALL) 9.8 C.Y.

TOTAL = 45.2 C.Y.

NOTE: SEE GEOTECHNICAL FOUNDATION TABLES FOR ADDITIONAL PILE INFORMATION

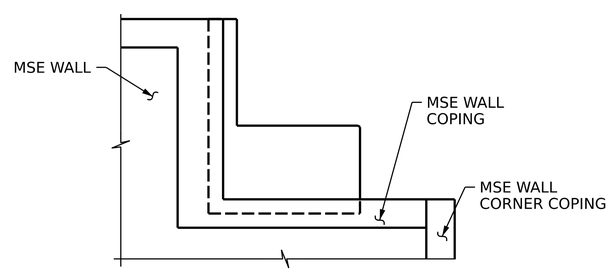


TEMPORARY DRAINAGE AT END BENT

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.



END VIEW

PROJECT NO. B-3186 / B-5898

HAYWOOD COUNTY

STATION: 32+21.34 -L_LT-

SHEET 6 OF 6

AECOM
AECOM TECHNICAL SERVICES OF NC, INC.
5438 WADE PARK BOULEVARD, SUITE 200
RALEIGH, NC 27607
(919) 854-6200 www.aecom.com
AECOM License No. F-0342

NORTH CAROLINA PROFESSIONAL SEAL 047572 ENGINEER DANNERYS RITACCO

DocuSigned by: Danneys Ritacco
BF16E95D917...
10/16/2023

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

SUBSTRUCTURE

END BENT 1

BILL OF MATERIALS & DETAILS

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S1-33
1			3			TOTAL SHEETS
2			4			43

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

DRAWN BY :	D. RITACCO	DATE :	03/2023
CHECKED BY :	S. NATARAJAN	DATE :	04/2023
DESIGN ENGINEER OF RECORD:	D. RITACCO	DATE :	04/2023

8/3/2023
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