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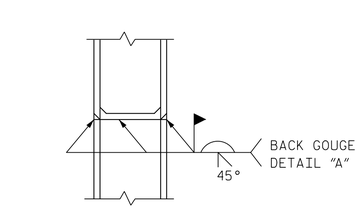
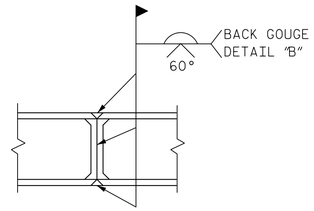
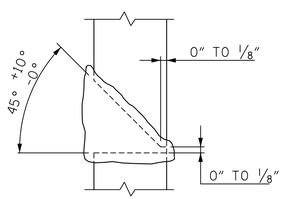


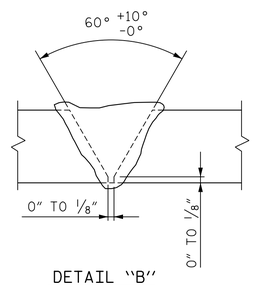
✱PILE VERTICAL



✱PILE HORIZONTAL OR VERTICAL



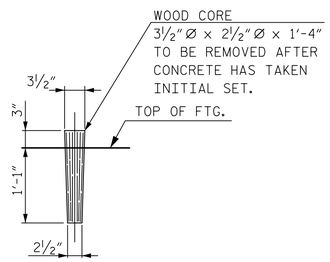
DETAIL "A"



DETAIL "B"

✱POSITION OF PILE DURING WELDING

PILE SPLICE DETAILS

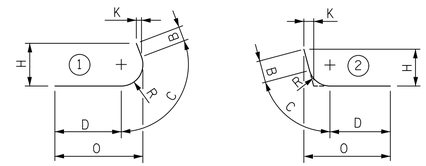


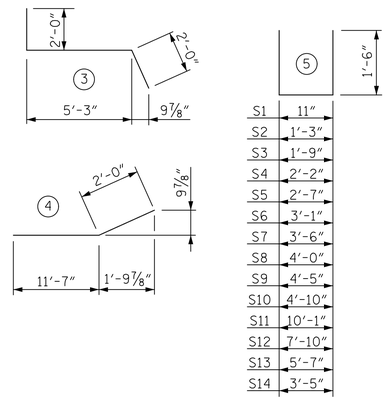
DETAIL OF WOOD CORE FOR ANCHOR BOLT HOLES

BAR TYPES

MARK	B	C	D	H	K	O	R
H1	5'-7"	3'-0 9/16"	8'-8 7/16"	7'-2 15/16"	2'-5 1/8"	10'-2 13/16"	1'-6 3/8"
H2	5'-3"	4'-5 3/4"	8'-8 1/4"	7'-11 1/2"	2'-4 1/4"	10'-11 1/4"	2'-3"
H3	3'-1"	1'-9 1/16"	11'-10 15/16"	3'-8 9/16"	1'-8 1/16"	14'-6 7/8"	1'-6 3/8"
H4	3'-5"	2'-6 13/16"	11'-11 1/16"	4'-5 1/4"	2'-0"	15'-4 1/2"	2'-3"

NOTE: "D" IS PARALLEL TO WINGWALL.





ALL BAR DIMENSIONS ARE OUT TO OUT

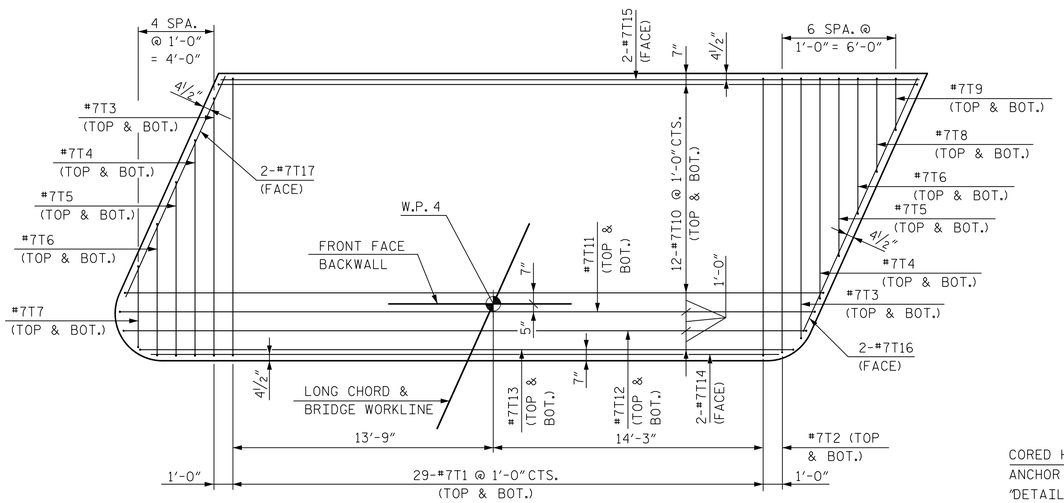
BILL OF REINFORCING

ABUTMENT 2

BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT	BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT
H1	12	5	1	17'-4"	217	T1	58	7	6	17'-0"	2,015
H2	12	5	1	18'-5"	231	T2	2	7	6	16'-9"	68
H3	12	5	2	16'-9"	210	T3	4	7	6	16'-0"	131
H4	12	5	2	17'-11"	224	T4	4	7	6	13'-9"	112
						T5	4	7	6	11'-7"	95
K1	12	5	STR.	31'-11"	399	T6	4	7	6	9'-4"	76
K2	6	5	3	9'-3"	58	T7	2	7	6	6'-8"	27
K3	6	5	4	13'-7"	85	T8	2	7	6	7'-3"	30
						T9	2	7	6	5'-1"	21
S1	23	5	5	3'-11"	94	T10	24	7	6	39'-2"	1,921
S2	1	5	5	4'-3"	4	T11	2	7	6	39'-0"	159
S3	1	5	5	4'-9"	5	T12	2	7	6	38'-4"	157
S4	1	5	5	5'-2"	5	T13	2	7	6	36'-5"	149
S5	1	5	5	5'-7"	6	T14	2	7	STR	33'-1"	135
S6	1	5	5	6'-1"	6	T15	2	7	STR.	36'-10"	151
S7	1	5	5	6'-6"	7	T16	2	7	STR.	15'-2"	62
S8	1	5	5	7'-0"	7	T17	2	7	STR.	13'-3"	54
S9	1	5	5	7'-5"	8						
S10	1	5	5	7'-10"	8	V1	46	7	STR.	8'-6"	799
S11	1	5	5	13'-1"	14	V2	23	5	STR.	8'-6"	204
S12	1	5	5	10'-10"	11	V3	29	7	STR.	14'-2"	840
S13	1	5	5	8'-7"	9	V4	58	5	STR.	14'-2"	857
S14	1	5	5	6'-5"	7	V5	2	5	STR.	10'-10"	23
						V6	14	5	STR.	8'-4"	122

QUANTITIES

ITEM		TOTAL
REINFORCING STEEL	LBS.	9,823
CAST-IN-PLACE CONCRETE (4,000 PSI):		
POUR 1 - FOOTING	CU. YDS.	94.0
POUR 2 - BACKWALL & WINGS	CU. YDS.	29.0
TOTAL	CU. YDS.	123.0
HP 12 X 53 STEEL PILES	NO.	15
	L.F.	1,200

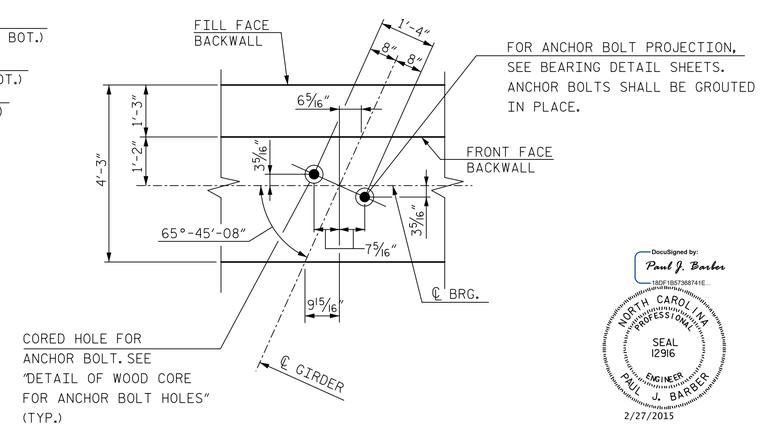


FOOTING REINFORCING PLAN

NOTES:

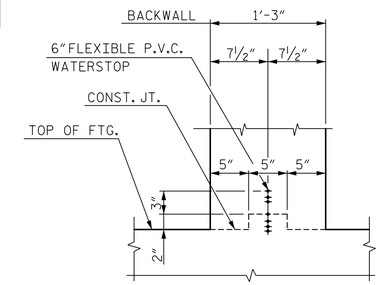
"T" BARS MAY BE SHIFTED SLIGHTLY AS NECESSARY TO CLEAR ANCHOR BOLTS.

FOR FOOTING LAYOUT AND DIMENSIONS, SEE SHEET 1 OF 3.



FOR ANCHOR BOLT PROJECTION, SEE BEARING DETAIL SHEETS. ANCHOR BOLTS SHALL BE GROUTED IN PLACE.

ANCHOR BOLT LAYOUT DETAIL



WATERSTOP DETAIL

PROJECT NO. P-4900A

ROBESON COUNTY

STATION: POC 38+93.36 -L-

MILE POST: 0.55

SHEET 3 OF 3

DocuSigned by: Paul J. Barber
18DF1B73687414E...
NORTH CAROLINA PROFESSIONAL SEAL 12916 ENGINEER PAUL J. BARBER
2/27/2015

DocuSigned by: David W. Hawkins
A9EDT52AB65487...
NORTH CAROLINA PROFESSIONAL SEAL 27812 ENGINEER DAVID W. HAWKINS
2/27/2015

HNTB NORTH CAROLINA, P.C.
License No. C-1554
343 E. Six Forks Rd., Suite 200, Raleigh, N.C. 27609

DRAWN BY M. WRIGHT DATE 8/14
CHECKED BY D. RAGAN DATE 9/14

DWG. NO. 29

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

SHEET NO. S-48

TOTAL SHEETS 54

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

SUBSTRUCTURE

ABUTMENT 2