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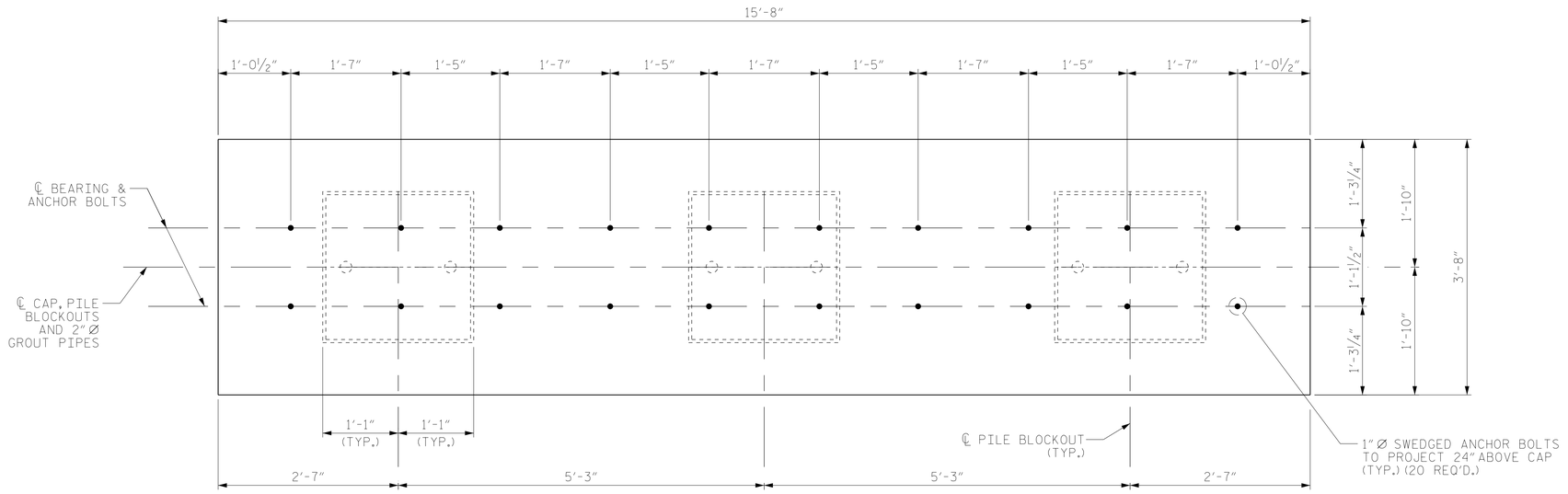
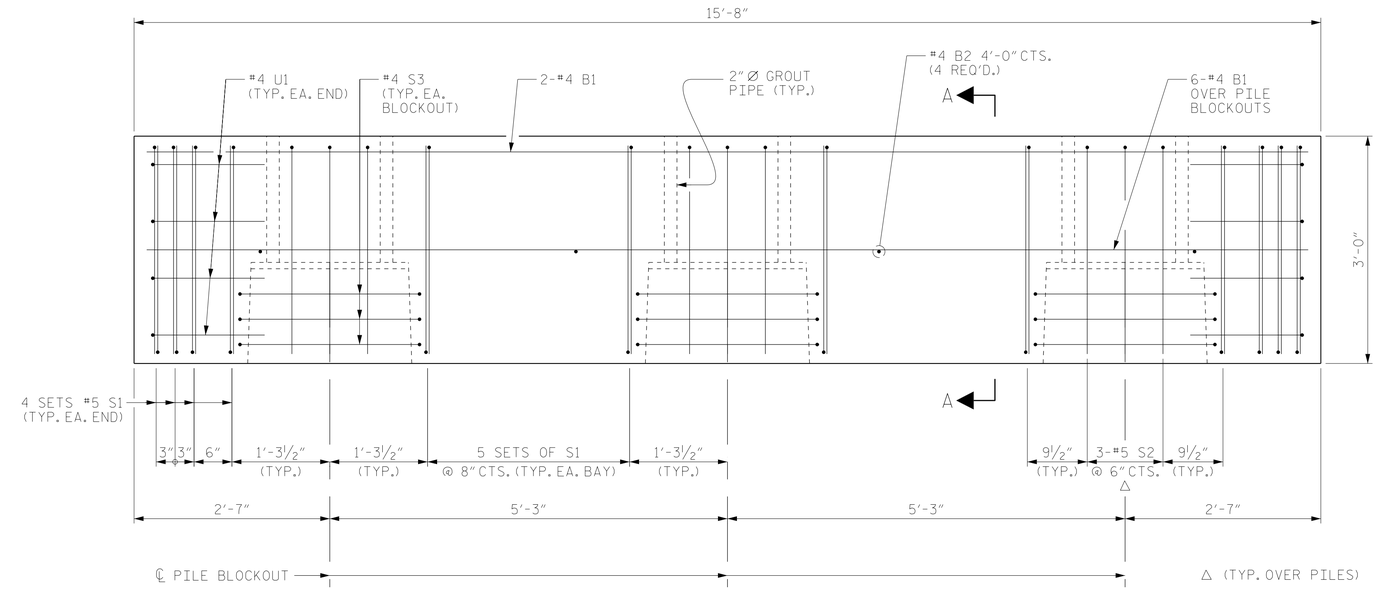


PLAN

(FOR PILE BLOCKOUT DETAILS, SEE SHEET 4 OF 4)



ELEVATION

(ANCHOR BOLTS NOT SHOWN FOR CLARITY)
FOR SECTION A-A, SEE SHEET 4 OF 4.

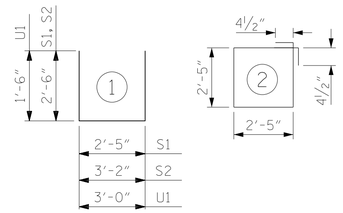
BILL OF MATERIAL

FOR ONE PIECE B-02

BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT
B1	8	#4	STR	15'-2"	81
B2	4	#4	STR	3'-2"	8
S1	72	#5	1	7'-5"	557
S2	9	#5	1	8'-2"	77
S3	9	#4	2	10'-5"	63
U1	8	#4	1	6'-0"	32

REINFORCING STEEL	818 LBS
4000 PSI PRESTRESS CONCRETE	5.8 C.Y.
PILE BLOCKOUT GROUT ▲	0.4 C.Y.
0.6"Ø L.R. STRANDS	No. 18

BAR TYPES



ALL BAR DIMENSIONS ARE OUT TO OUT.

▲ GROUT DISPLACED BY THE 20" PRESTRESSED CONCRETE PILES HAS BEEN DEDUCTED FROM THE GROUT QUANTITY.

GRADE 270 STRANDS	
	0.6"Ø L.R.
AREA (SQUARE INCHES)	0.217
ULTIMATE STRENGTH (LBS. PER STRAND)	58,600
APPLIED PRESTRESS (LBS. PER STRAND)	43,950

NOTES

ANCHOR BOLTS SHALL MEET THE REQUIREMENTS OF ASTM F1554 GR. 105. ANCHOR PLATES, WASHERS, AND NUTS SHALL MEET THE REQUIREMENTS OF THE STANDARD SPECIFICATIONS. ANCHOR BOLTS, ANCHOR PLATES, WASHERS, AND NUTS SHALL BE GALVANIZED IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS.

NO SEPARATE PAYMENT SHALL BE MADE FOR THE ANCHOR BOLTS, ANCHOR PLATES, WASHERS, AND NUTS. THE COST OF THE MATERIAL AND INSTALLATION SHALL BE CONSIDERED INCIDENTAL TO VARIOUS PAY ITEMS.

PROJECT NO. BR-0160

BRUNSWICK COUNTY

STATION: 21+77.50 -L-

SHEET 3 OF 4

DRAWN BY : MRA DATE : 01/2023
CHECKED BY : MKO DATE : 01/2023
DESIGN ENGINEER OF RECORD: RLB DATE : 03/2023

3/28/2023
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DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 18442 RICHARD LEON BOLLINGER III
3/28/2023

RS&H

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STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

SUBSTRUCTURE

ALTERNATE BENT OPTION PRECAST PIECE B-02

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S-37
1			3			TOTAL SHEETS
2			4			42