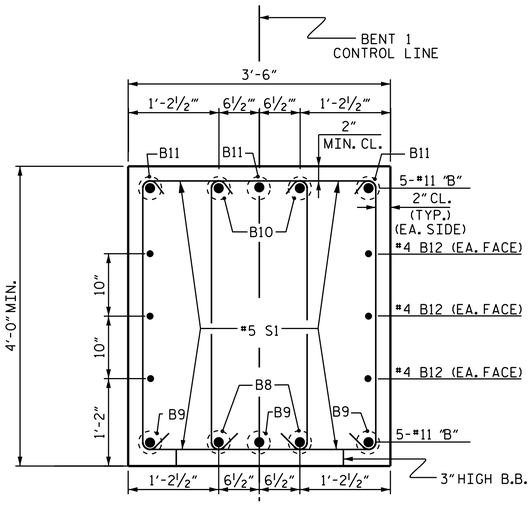
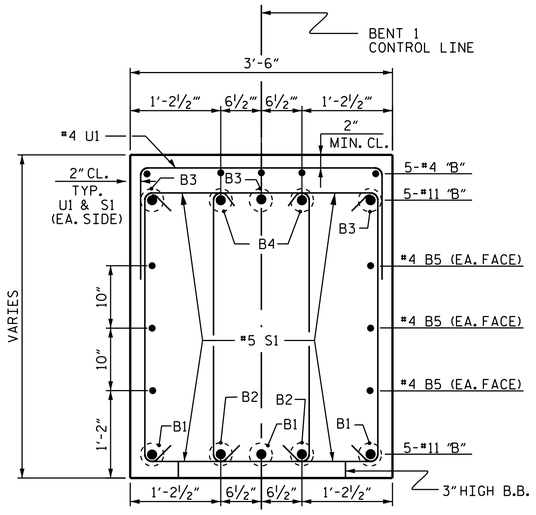
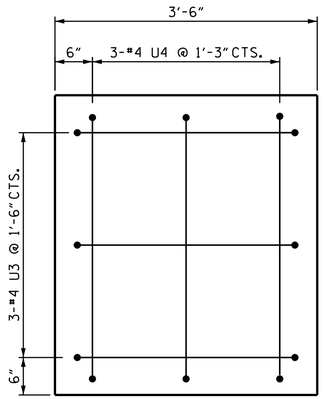


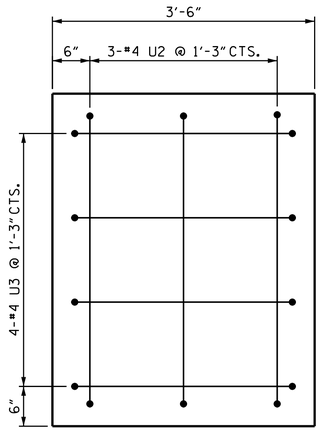
SECTION A-A



SECTION B-B

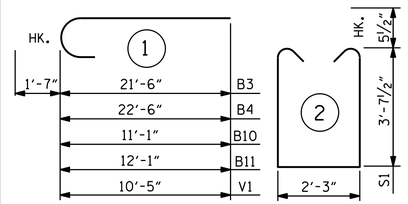


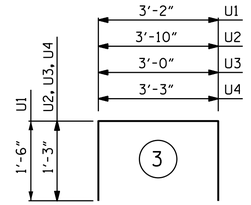
VIEW X-X

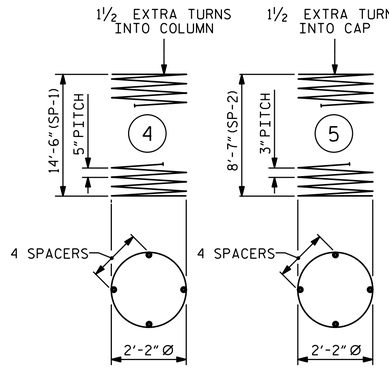


VIEW Y-Y

BAR TYPES







ALL BAR DIMENSIONS ARE OUT TO OUT.

✱ THE SP-1 SPIRAL REINFORCING STEEL SHALL BE W31 OR D-31 COLD DRAWN WIRE OR #5 PLAIN OR DEFORMED BAR.

✱✱ THE SP-2 SPIRAL REINFORCING STEEL SHALL BE W20 OR D-20 COLD DRAWN WIRE OR #4 PLAIN OR DEFORMED BAR.

BILL OF MATERIAL-BENT 1

STAGE I

BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT
B1	3	#11	STR	21'-6"	343
B2	2	#11	STR	22'-6"	239
B3	3	#11	1	23'-1"	368
B4	2	#11	1	24'-1"	256
B5	6	#4	STR	21'-11"	88
B6	5	#4	STR	15'-6"	52
B7	5	#4	STR	3'-10"	13
M1	20	#11	STR	22'-7"	2400
S1	46	#5	2	10'-5"	500
U1	25	#4	3	6'-2"	103
U2	3	#4	3	6'-4"	13
U3	4	#4	3	5'-6"	15
V1	20	#11	1	12'-0"	1275

REINFORCING STEEL 5665 LBS.

SPIRAL REINFORCING STEEL

SP-1	2	✱	4	243'-0"	507
SP-2	2	✱✱	5	240'-9"	321

SPIRAL REINFORCING STEEL 828 LBS.

CLASS A CONCRETE
POUR 3 (CAP)) 11.3 C.Y.
POUR 2 (COLUMN) 3.0 C.Y.
TOTAL 14.3 C.Y.

DRILLED PIERS

DRILLED PIER CONCRETE
POUR 1 (DRILLED PIERS) 7.9 C.Y.
3'-0" Ø DRILLED PIERS IN SOIL 16 LIN. FT.
3'-0" Ø DRILLED PIERS NOT IN SOIL 14 LIN. FT.

CSL TUBES 132 FT.

CSL TESTING 1 EACH

STAGE II

BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT
B8	2	#11	STR	11'-1"	118
B9	3	#11	STR	12'-1"	193
B10	2	#11	1	12'-8"	135
B11	3	#11	1	13'-8"	218
B12	6	#4	STR	14'-0"	56
M1	10	#11	STR	22'-7"	1200
S1	38	#5	2	10'-5"	413
U1	18	#4	3	6'-2"	74
U3	3	#4	3	5'-6"	11
U4	3	#4	3	5'-9"	12
V1	10	#11	1	12'-0"	638

REINFORCING STEEL 3068 LBS.

SPIRAL REINFORCING STEEL

SP-1	1	✱	4	243'-0"	253
SP-2	1	✱✱	5	240'-7"	161

SPIRAL REINFORCING STEEL 414 LBS.

CLASS A CONCRETE
POUR 3 (CAP) 7.6 C.Y.
POUR 2 (COLUMN) 1.5 C.Y.
TOTAL 9.1 C.Y.

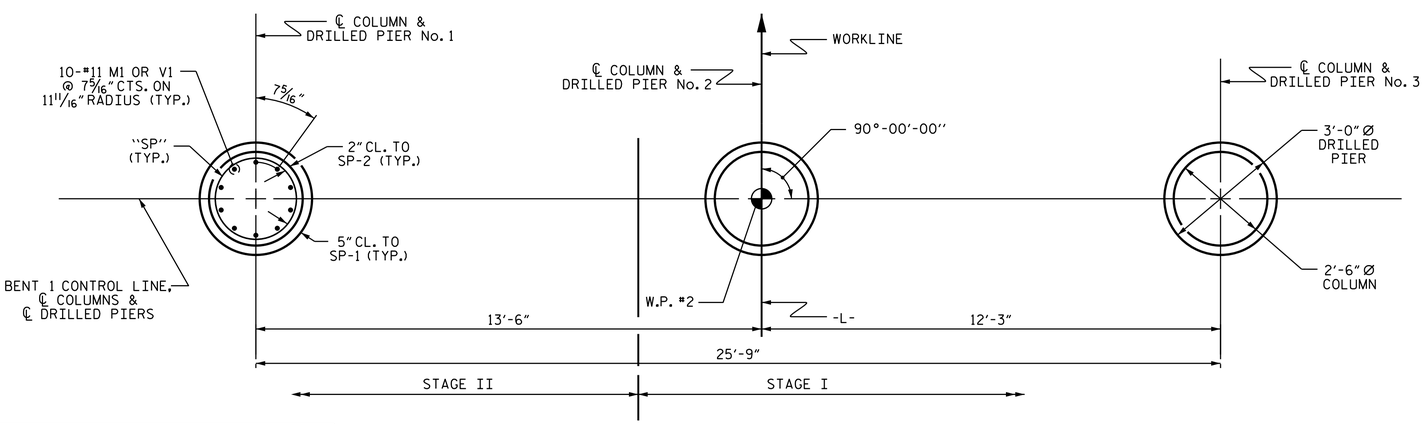
DRILLED PIER

DRILLED PIER CONCRETE
POUR 1 (DRILLED PIER) 3.9 C.Y.
3'-0" Ø DRILLED PIER IN SOIL 8 LIN. FT.
3'-0" Ø DRILLED PIER NOT IN SOIL 7 LIN. FT.

CSL TUBES 66 FT.

SUMMARY BILL OF MATERIAL

REINFORCING STEEL	= 8733 LBS.
SPIRAL REINFORCING STEEL	= 1242 LBS.
CLASS A CONCRETE	= 23.4 C.Y.
DRILLED PIER CONCRETE	= 11.8 C.Y.
CSL TESTING	= 1 EACH
3'-0" Ø DRILLED PIERS IN SOIL	= 24 LIN. FT.
3'-0" Ø DRILLED PIERS NOT IN SOIL	= 21 LIN. FT.



PLAN OF COLUMNS AND DRILLED PIERS

PROJECT NO. BR-0002
ASHE COUNTY
STATION: 23+80.00 -L-

SHEET 3 OF 3

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

SUBSTRUCTURE
BENT 1
(STAGE I & II)

NORTH CAROLINA PROFESSIONAL SEAL 031021 ENGINEER AMBER M. LEE

DocuSigned by:
B04B5A4F2FAD484...
8/3/2021

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	S-30
1			3			TOTAL SHEETS
2			4			40

DRAWN BY : K. PUROHIT DATE : 01/2020
CHECKED BY : H. LOCKLEAR DATE : 01/2020
DESIGN ENGINEER OF RECORD: K. PUROHIT DATE : 01/2020

28-JUL-2021 15:49
R:\Structures\FinalPlans\400_061_BR-0002_SMU_ B1_0030_040008.dgn
amlee