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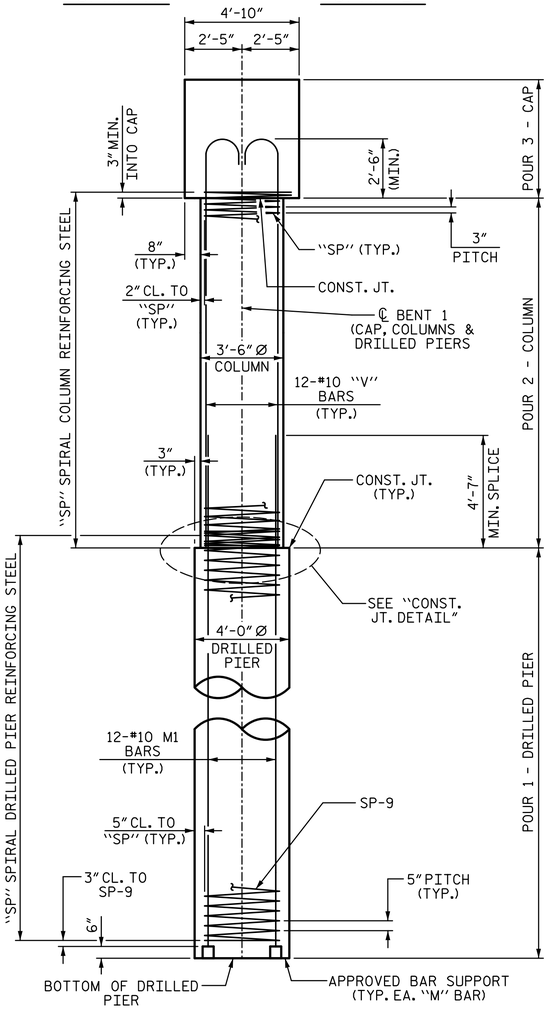
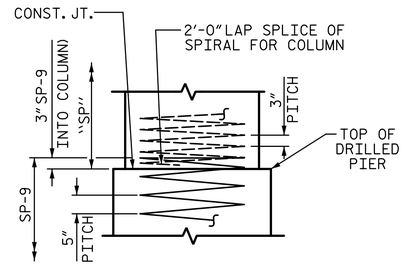
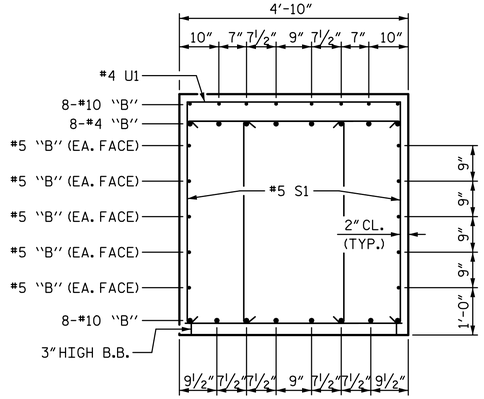


END ELEVATION

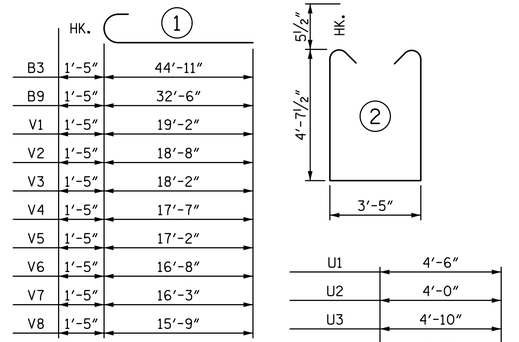


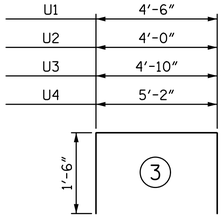
CONSTRUCTION JOINT DETAIL

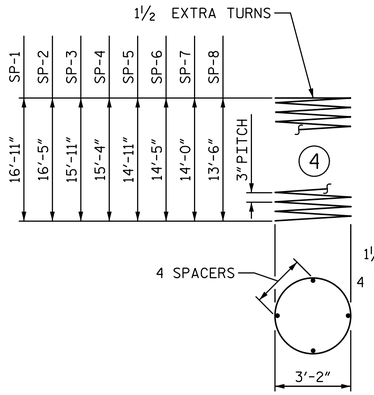


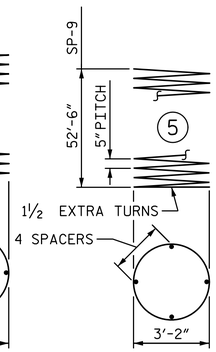
SECTION A-A

BAR TYPES









ALL BAR DIMENSIONS ARE OUT TO OUT

✻✻ THE SP-9 SPIRAL REINFORCING STEEL SHALL BE W31 OR D-31 COLD DRAWN WIRE OR #5 PLAIN OR DEFORMED BAR.

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

BILL OF MATERIAL
BENT 1 - STAGE II

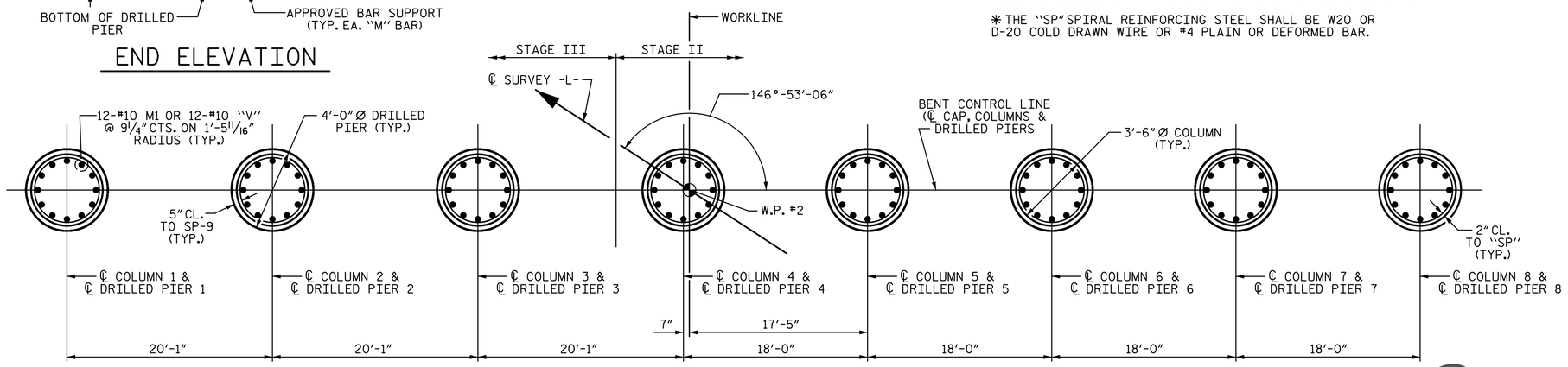
BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT
B1	16	#10	STR	46'-8"	3213
B2	20	#5	STR	45'-1"	940
B3	8	#10	1	46'-4"	1595
B4	8	#10	STR	51'-3"	1764
B5	48	#4	STR	15'-3"	489
M1	60	#10	STR	60'-0"	15491
S1	202	#5	2	13'-7"	2862
U1	94	#4	3	7'-6"	471
U2	5	#4	3	7'-0"	23
U3	4	#4	3	7'-10"	21
V4	12	#10	1	19'-0"	981
V5	12	#10	1	18'-7"	960
V6	12	#10	1	18'-1"	934
V7	12	#10	1	17'-8"	912
V8	12	#10	1	17'-2"	886
SP-4	1	✻	4	618'-9"	413
SP-5	1	✻	4	608'-11"	407
SP-6	1	✻	4	589'-3"	394
SP-7	1	✻	4	569'-8"	381
SP-8	1	✻	4	550'-0"	367
SP-9	5	✻✻	5	1253'-7"	6537

REINFORCING STEEL	31542	LB
SPIRAL COL. REINF. STEEL	8499	LB
CLASS "A" CONCRETE BREAKDOWN		
POUR 2 (COLUMNS)	25.3	CY
POUR 3 (CAP)	80.3	CY
TOTAL	105.6	CY
DRILLED PIERS:		
DRILLED PIER CONCRETE POUR 1 (DRILLED PIERS)	123.2	CY
4'-0" Ø DRILLED PIER NOT IN SOIL	59.4	LF
4'-0" Ø DRILLED PIER IN SOIL	205.2	LF
CSL TUBES	1088.3	LF

BILL OF MATERIAL
BENT 1 - STAGE III

BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT
B6	8	#10	STR	59'-0"	2031
B7	20	#5	STR	31'-0"	647
B8	8	#10	STR	32'-6"	1119
B9	8	#10	1	33'-11"	1168
B10	24	#4	STR	14'-6"	232
B11	8	#4	STR	4'-5"	24
M1	36	#10	STR	60'-0"	9294
S1	148	#5	2	13'-7"	2097
U1	64	#4	3	7'-6"	321
U2	5	#4	3	7'-0"	23
U4	4	#4	3	8'-2"	22
V1	12	#10	1	20'-7"	1063
V2	12	#10	1	20'-1"	1037
V3	12	#10	1	19'-7"	1011
SP-1	1	✻	4	687'-6"	459
SP-2	1	✻	4	667'-10"	446
SP-3	1	✻	4	648'-2"	433
SP-9	3	✻✻	5	1253'-7"	3922

REINFORCING STEEL	20089	LB
SPIRAL COL. REINF. STEEL	5260	LB
CLASS "A" CONCRETE BREAKDOWN		
POUR 2 (COLUMNS)	17.3	CY
POUR 3 (CAP)	60.2	CY
TOTAL	77.5	CY
DRILLED PIERS:		
DRILLED PIER CONCRETE POUR 1 (DRILLED PIERS)	73.9	CY
4'-0" Ø DRILLED PIER NOT IN SOIL	35.6	LF
4'-0" Ø DRILLED PIER IN SOIL	123.2	LF
CSL TUBES	653.0	LF



STAGE III STAGE II

PLAN OF DRILLED PIERS AND COLUMNS

PROJECT NO. B-5869
BURKE COUNTY
STATION: 21+62.39 -L-

SHEET 3 OF 3

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH
SUBSTRUCTURE

BENT 1

STAGE II & III

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

SHEET NO. S-58
TOTAL SHEETS 72

DRAWN BY: S.D. COOPER DATE: 3-2022
CHECKED BY: M. AVERETTE DATE: 3-2022
DESIGN ENGINEER OF RECORD: M. AVERETTE DATE: 3-2022

WGI
5640 Dillard Drive, Suite 200
Cary, NC 27518
LICENSURE NO. C-4434

Digitally signed by NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 023908 MARK A. AVERETTE
11/21/2022 | 7:43 AM EST

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

11/21/2022 10:19:06 AM P:\Raleigh\Projects\2018\Division 13 (SEA)\B-5869 (Burke 99)\Structures\Drawings(2)\Final(2)\B5869_SMU_B1_110099(2).dgn