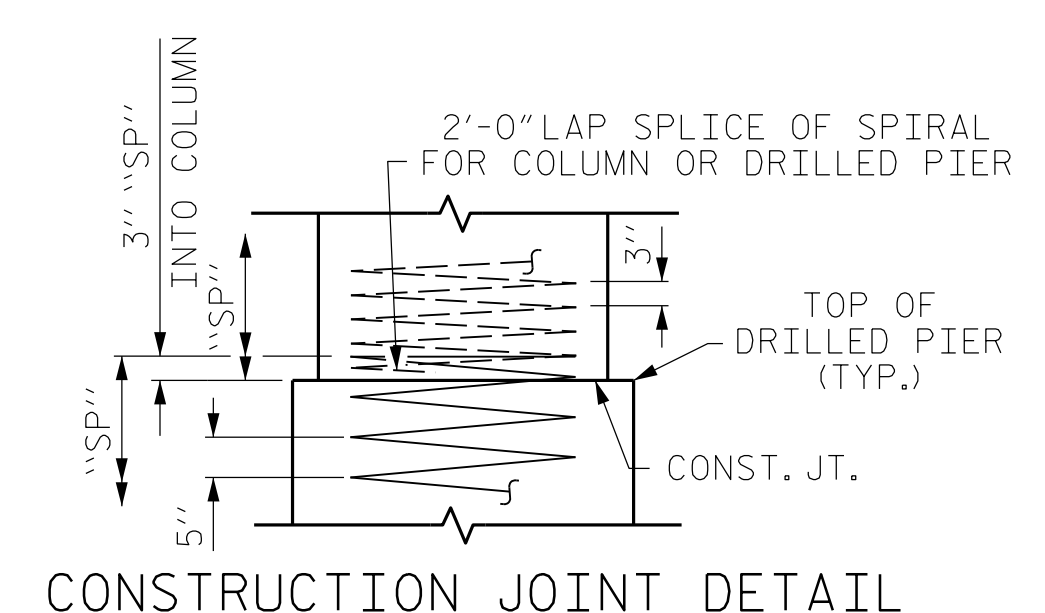
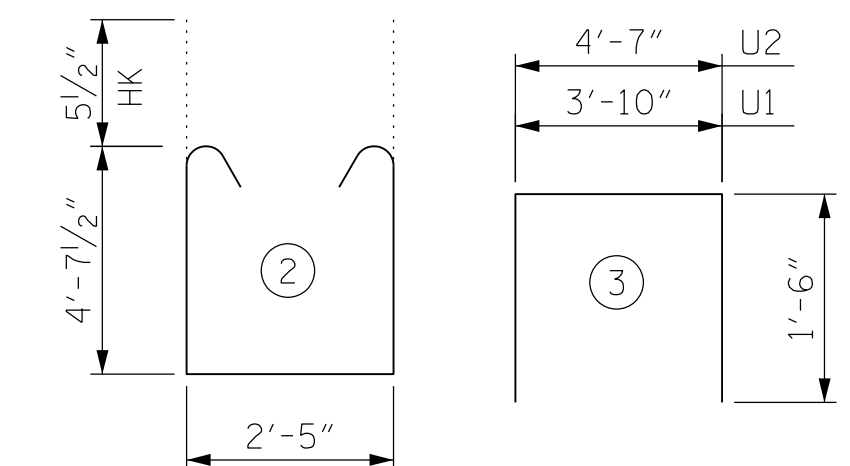


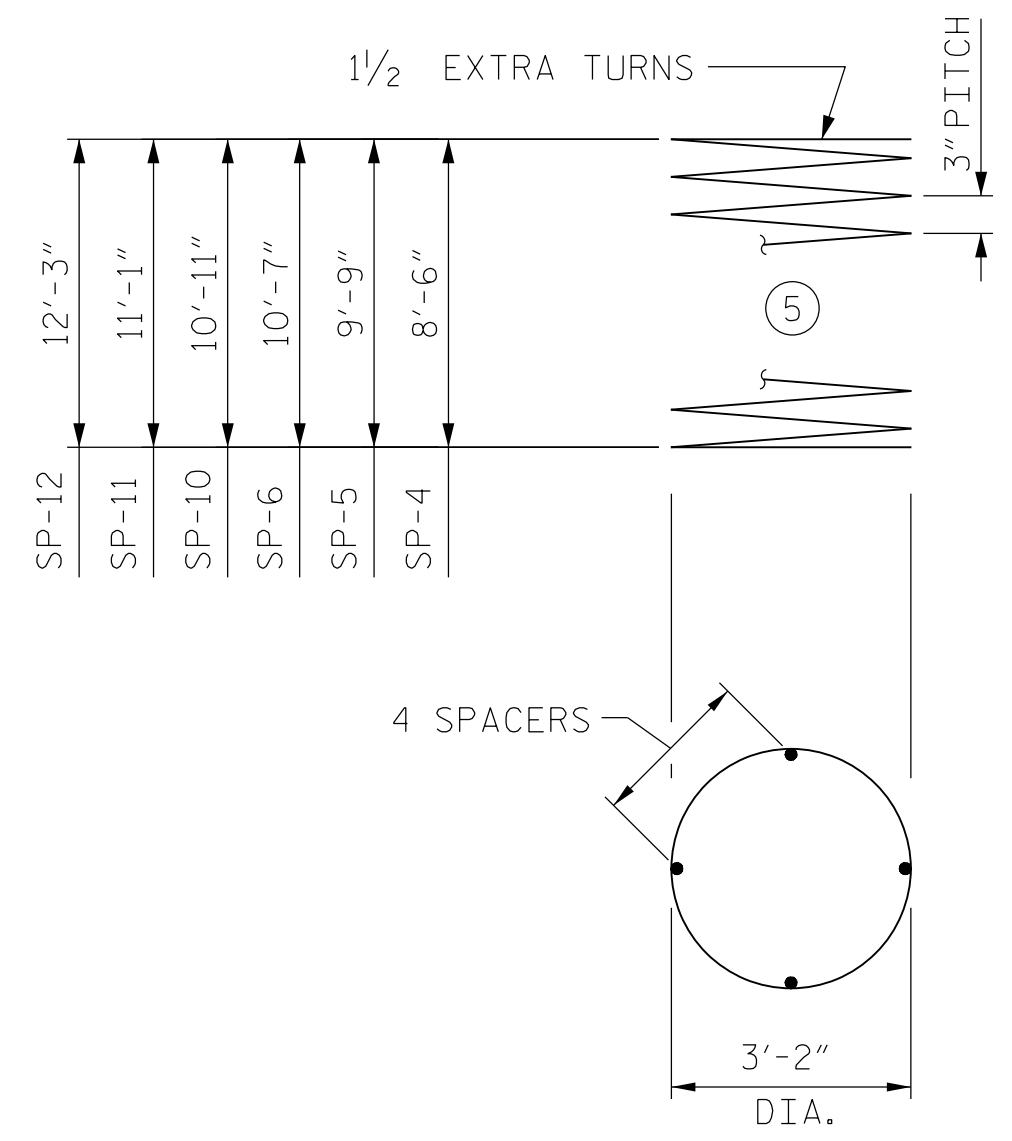
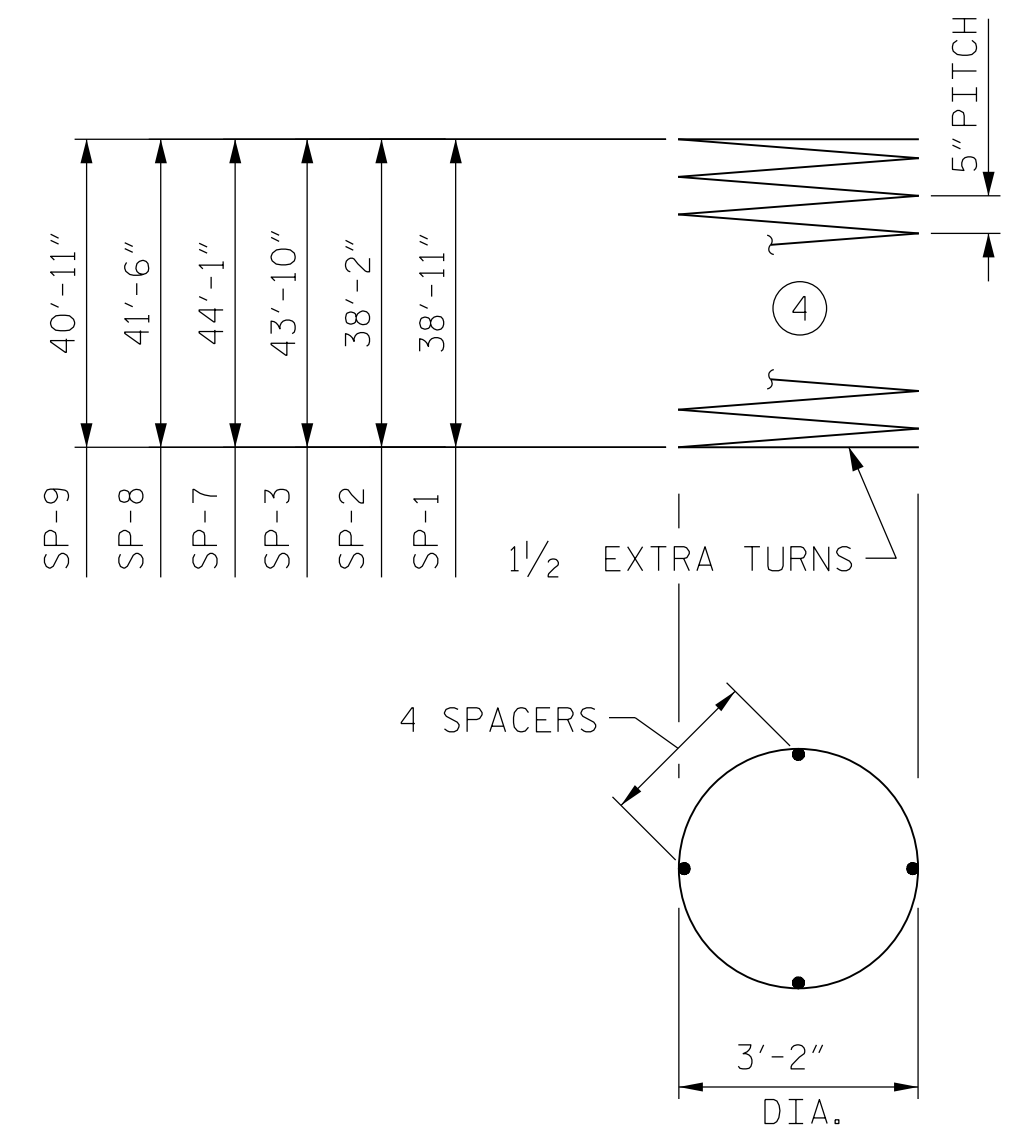
BAR TYPES

B3	1'-3"	45'-4"
B4	1'-3"	43'-4"
V1	1'-7"	10'-4"
V2	1'-7"	11'-7"
V3	1'-7"	12'-5"
V4	1'-7"	12'-9"
V5	1'-7"	12'-11"
V6	1'-7"	14'-1"



CONSTRUCTION JOINT DETAIL

COLUMN	LENGTH	DRILLED PIER	LENGTH
1	8'-2"	1	39'-5"
2	9'-5 3/8"	2	38'-7 3/4"
3	10'-3 1/2"	3	44'-3 3/4"
4	10'-7 1/4"	4	44'-7"
5	10'-9 5/8"	5	41'-11 5/8"
6	11'-11 1/4"	6	41'-5"



ALL BAR DIMENSIONS ARE OUT TO OUT.

BENT 2 - BILL OF MATERIAL

STAGE I						STAGE II					
BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT	BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT
B1	5	#9	STR	45'-4"	771	B1	10	#9	STR	45'-4"	1541
B2	5	#9	STR	43'-4"	737	B3	10	#9	(1)	46'-7"	1584
B3	5	#9	(1)	46'-7"	792	B6	42	#4	STR	4'-5"	124
B4	5	#9	(1)	44'-7"	758	B7	10	#9	STR	20'-9"	706
B5	8	#5	STR	45'-10"	382	B8	10	#9	STR	23'-3"	791
B6	30	#4	STR	4'-5"	89	B9	16	#5	STR	31'-8"	528
M1	16	#11	STR	49'-4"	4194	M4	16	#11	STR	54'-6"	4633
M2	8	#11	STR	41'-9"	1775	M5	8	#11	STR	46'-11"	1994
M3	16	#11	STR	48'-7"	4130	M6	16	#11	STR	51'-11"	4413
M4	8	#11	STR	41'-0"	1743	M7	8	#11	STR	44'-4"	1884
M5	16	#11	STR	54'-3"	4612	M8	16	#11	STR	51'-4"	4364
M6	8	#11	STR	46'-8"	1984	M9	8	#11	STR	43'-9"	1860
S1	110	#5	(2)	12'-7"	1444	S1	208	#5	(2)	12'-7"	2730
U1	50	#4	(3)	6'-10"	228	U1	68	#4	(3)	6'-10"	310
U2	4	#4	(3)	7'-7"	20	U2	4	#4	(3)	7'-7"	20
V1	16	#11	(1)	11'-11"	1013	V4	16	#11	(1)	14'-4"	1218
V2	16	#11	(1)	13'-2"	1119	V5	16	#11	(1)	14'-6"	1233
V3	16	#11	(1)	14'-0"	1190	V6	16	#11	(1)	15'-8"	1332

REINFORCING STEEL	LBS.	26981	REINFORCING STEEL	LBS.	31265
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SP-1	1	*	(4)	930'-5"	970	SP-7	1	*	(4)	1057'-9"	1103
SP-2	1	*	(4)	920'-8"	960	SP-8	1	*	(4)	999'-0"	1042
SP-3	1	*	(4)	1048'-0"	1093	SP-9	1	*	(4)	979'-5"	1022
SP-4	1	**	(5)	353'-7"	236	SP-10	1	**	(5)	451'-10"	302
SP-5	1	**	(5)	402'-8"	269	SP-11	1	**	(5)	451'-10"	302
SP-6	1	**	(5)	432'-2"	289	SP-12	1	**	(5)	500'-11"	335

* THE "SP" 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.

BENT 2 TOTAL QUANTITIES			BENT 2 TOTAL QUANTITIES		
CLASS A CONCRETE			CLASS A CONCRETE		
POUR 2 (COLUMNS)	9.9	C.Y.	POUR 2 (COLUMNS)	11.9	C.Y.
POUR 3 (CAP)	34.2	C.Y.	POUR 3 (CAP)	48.1	C.Y.
TOTAL CLASS A CONCRETE	44.1	C.Y.	TOTAL CLASS A CONCRETE	60.0	C.Y.

DRILLED PIERS:		DRILLED PIERS:			
DRILLED PIER CONCRETE POUR 1 (DRILLED PIERS)	57.0	C.Y.	DRILLED PIER CONCRETE POUR 1 (DRILLED PIERS)	59.6	C.Y.
4'-0" Ø DRILLED PIER NOT IN SOIL	25.0	LIN. FT.	4'-0" Ø DRILLED PIER NOT IN SOIL	25.0	LIN. FT.
4'-0" Ø DRILLED PIER IN SOIL	97.4	LIN. FT.	4'-0" Ø DRILLED PIER IN SOIL	103.0	LIN. FT.
PERMANENT STEEL CASING FOR 4'-0" Ø DRILLED PIER	62.4	LIN. FT.	PERMANENT STEEL CASING FOR 4'-0" Ø DRILLED PIER	62.0	LIN. FT.

DATE: 11/30/2016 TIME: 10:44:54 AM

USER: H:\aecom\08_Structural\08_Structural\08_14910A_SML_546_B102_04.dgn

DRAWN BY : K.H. COMPTON DATE : 3/2016
 CHECKED BY : J.C. MORRISON DATE : 7/2016
 DESIGNED BY : K.H. COMPTON DATE : 3/2016

BAR SIZE	TOP BAR	BASIC
#5	3'-0"	2'-2"
#9	8'-9"	6'-3"

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED



PROJECT NO. U-4910A
 CABARRUS COUNTY
 STATION: 147+80.00 -L-
 SHEET 4 OF 4

STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH

SUBSTRUCTURE
 BENT 2
 SECTION AND DETAILS

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	
1			3			TOTAL SHEETS
2			4			55