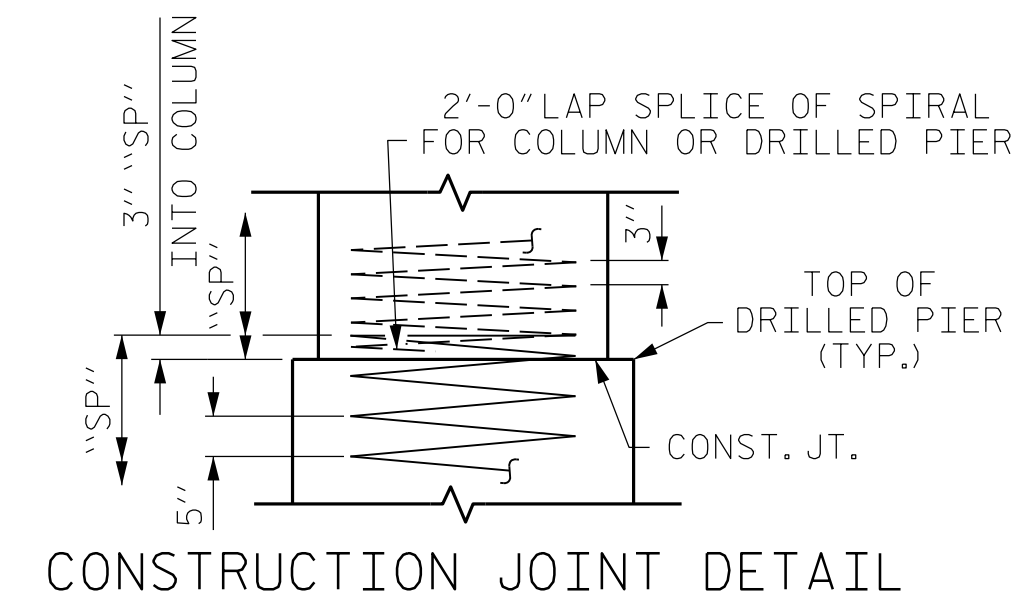
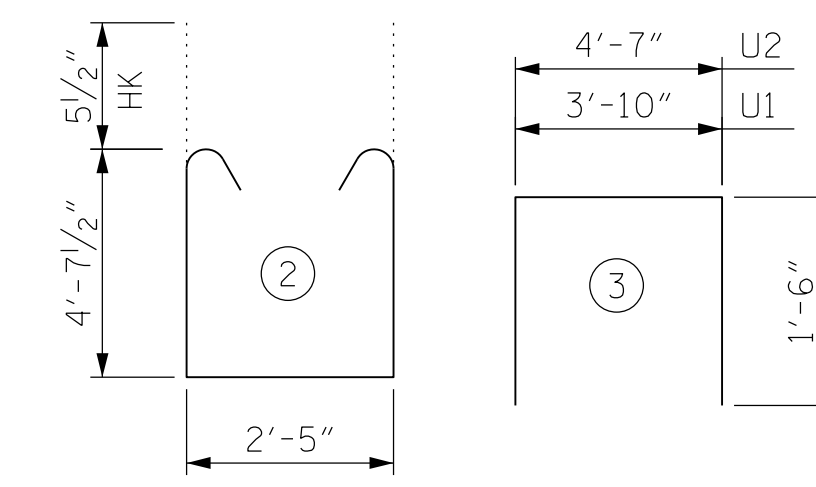
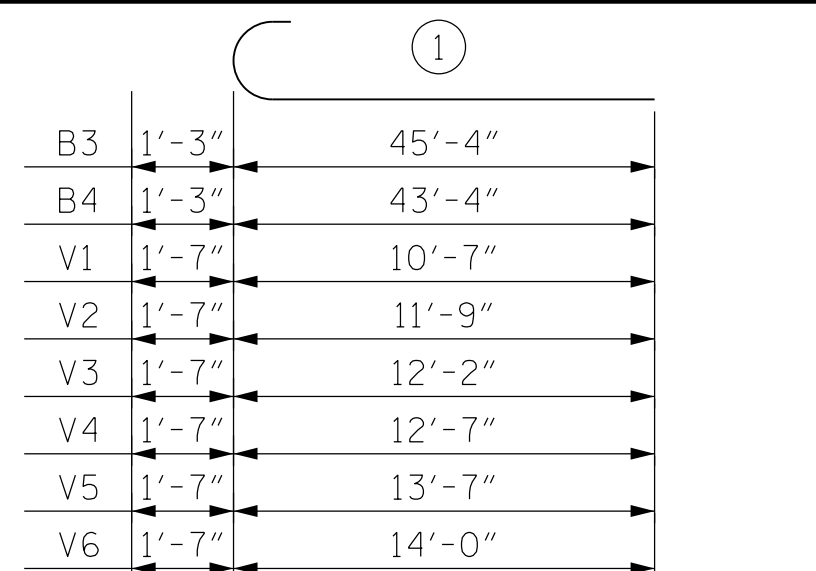
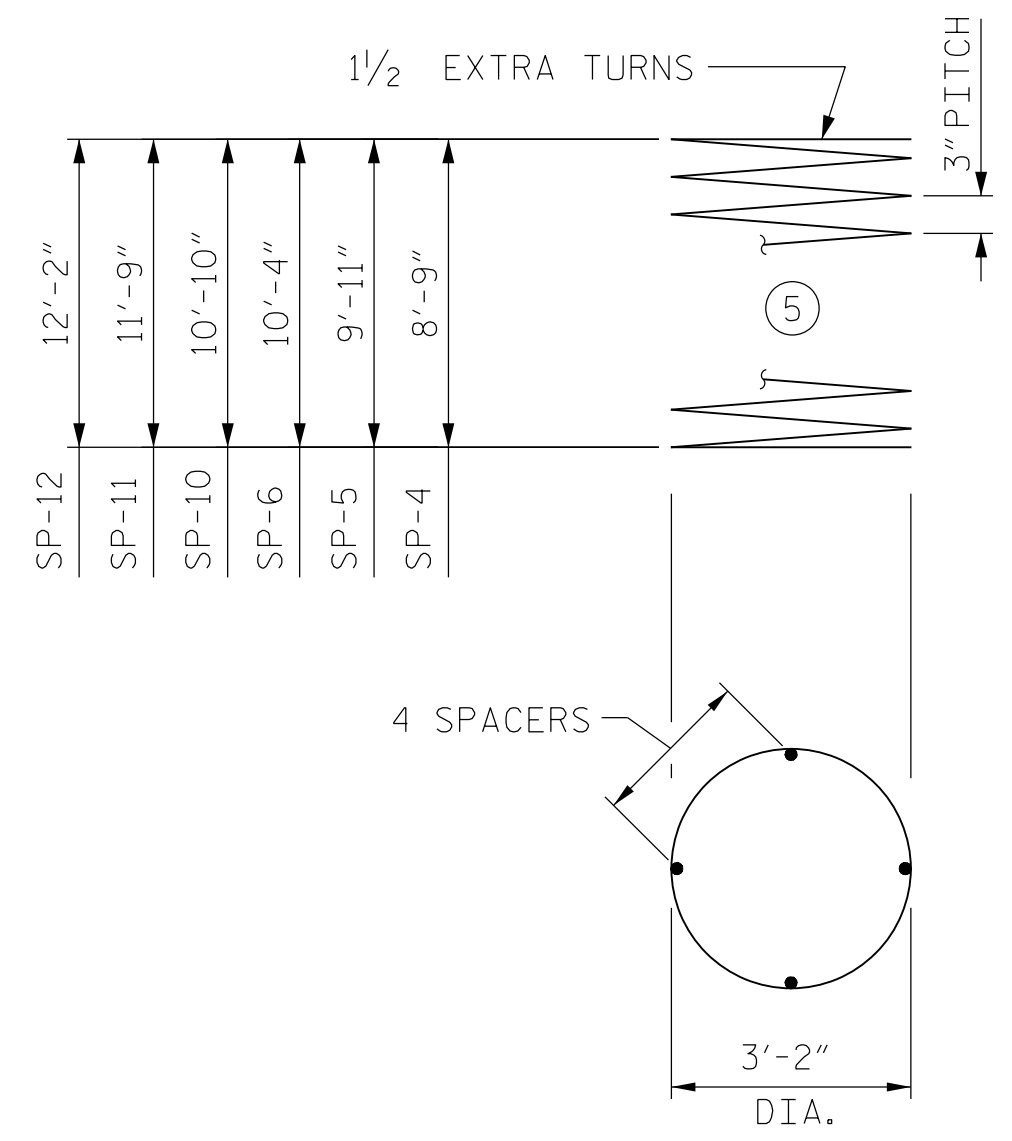
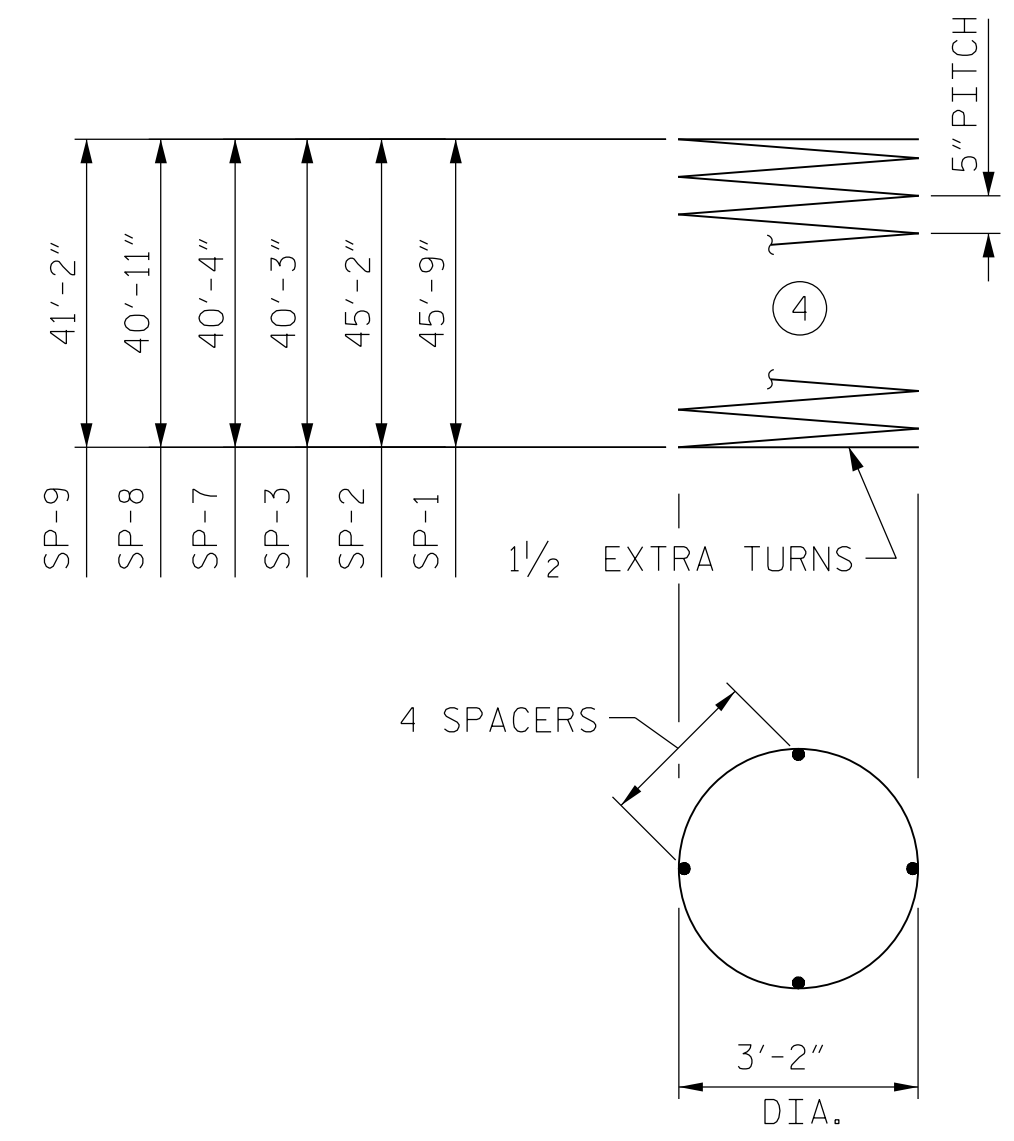


BAR TYPES



CONSTRUCTION JOINT DETAIL

COLUMN	LENGTH	DRILLED PIER	LENGTH
1	8'-5 7/8"	1	47'-2 5/8"
2	9'-7 1/2"	2	46'-7"
3	10'-0 3/4"	3	40'-8 1/4"
4	10'-6 1/8"	4	40'-9 3/4"
5	11'-5 7/8"	5	41'-5"
6	6'-10 1/2"	6	41'-7 3/8"



ALL BAR DIMENSIONS ARE OUT TO OUT.

BENT 1 - 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	57'-2"	4860	M7	16	#11	STR	50'-9"	4314
M2	8	#11	STR	49'-7"	2107	M8	8	#11	STR	43'-2"	1835
M3	16	#11	STR	56'-7"	4810	M9	16	#11	STR	51'-4"	4364
M4	8	#11	STR	49'-0"	2083	M10	8	#11	STR	43'-9"	1860
M5	16	#11	STR	50'-8"	4307	M11	16	#11	STR	51'-7"	4385
M6	8	#11	STR	43'-1"	1831	M12	8	#11	STR	44'-0"	1870
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)	12'-2"	1034	V4	16	#11	(1)	14'-3"	1211
V2	16	#11	(1)	13'-4"	1133	V5	16	#11	(1)	15'-2"	1289
V3	16	#11	(1)	13'-9"	1169	V6	16	#11	(1)	15'-7"	1325

REINFORCING STEEL					REINFORCING STEEL						
LBS. 28555					LBS. 30787						
SP-1	1	*	(4)	1116'-6"	1165	SP-7	1	*	(4)	969'-7"	1011
SP-2	1	*	(4)	1106'-9"	1154	SP-8	1	*	(4)	979'-5"	1022
SP-3	1	*	(4)	969'-7"	1011	SP-9	1	*	(4)	989'-2"	1032
SP-4	1	**	(5)	363'-5"	243	SP-10	1	**	(5)	442'-0"	295
SP-5	1	**	(5)	412'-6"	276	SP-11	1	**	(5)	481'-3"	321
SP-6	1	**	(5)	422'-4"	282	SP-12	1	**	(5)	500'-11"	335

SPIRAL REINFORCING STEEL					SPIRAL REINFORCING STEEL				
4131 LBS.					4016 LBS.				

* 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 1 TOTAL QUANTITIES

CLASS A CONCRETE		CLASS A CONCRETE	
POUR 2 (COLUMNS)	10.0 C.Y.	POUR 2 (COLUMNS)	12.1 C.Y.
POUR 3 (CAP)	34.1 C.Y.	POUR 3 (CAP)	48.0 C.Y.
TOTAL CLASS A CONCRETE	44.1 C.Y.	TOTAL CLASS A CONCRETE	60.1 C.Y.

DRILLED PIERS:		DRILLED PIERS:	
DRILLED PIER CONCRETE POUR 1 (DRILLED PIERS)	62.6 C.Y.	DRILLED PIER CONCRETE POUR 1 (DRILLED PIERS)	57.6 C.Y.
4'-0" Ø DRILLED PIER NOT IN SOIL	37.0 LIN. FT.	4'-0" Ø DRILLED PIER NOT IN SOIL	37.0 LIN. FT.
4'-0" Ø DRILLED PIER IN SOIL	97.5 LIN. FT.	4'-0" Ø DRILLED PIER IN SOIL	86.8 LIN. FT.
PERMANENT STEEL CASING FOR 4'-0" Ø DRILLED PIER	62.5 LIN. FT.	PERMANENT STEEL CASING FOR 4'-0" Ø DRILLED PIER	61.8 LIN. FT.

DATE: 11/30/2016 TIME: 10:53:58 AM

USER: H:\aecom\001\14910A\Sub\Structural\08_Structural\08_003_14910A_SML_S42_B101_04.dgn

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

SPLICE LENGTHS		
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 1
 SECTION AND DETAILS

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