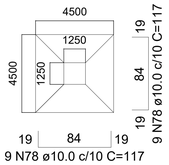
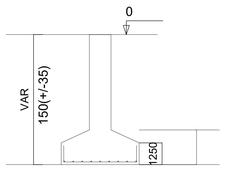
S1=S17=S18

PLANTA
ESC 1:25



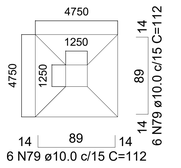
Solo compactado sobre a sapata
peso específico > 1600.00 kgf/m³

CORTE
ESC 1:25



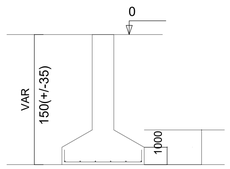
S2

PLANTA
ESC 1:25



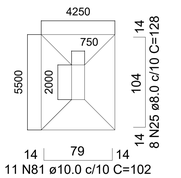
Solo compactado sobre a sapata
peso específico > 1600.00 kgf/m³

CORTE
ESC 1:25



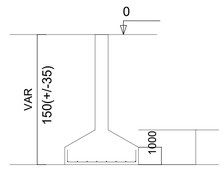
S10=S12

PLANTA
ESC 1:25



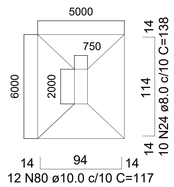
Solo compactado sobre a sapata
peso específico > 1600.00 kgf/m³

CORTE
ESC 1:25



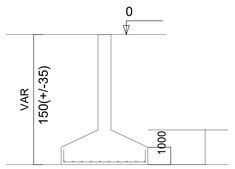
S8

PLANTA
ESC 1:25



Solo compactado sobre a sapata
peso específico > 1600.00 kgf/m³

CORTE
ESC 1:25



RELAÇÃO DO AÇO

Negativos	Positivos	
2xP2	4xP3	2xP1
8xP7	P16	P6
S2	6xS4	3xS1
2xS10	3xS11	S8
V1	V2	2xS13
V4	V5	V3
V7	V8	V6
V10	V11	V9
V13	V14	V12

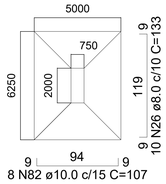
Armaduras de distribuição

Armadura	Armadura de distribuição
N15	5 N1 ø5.0 c/20 C=454
N15	5 N1 ø5.0 c/20 C=454
N16	5 N2 ø5.0 c/20 C=455
N16	5 N2 ø5.0 c/20 C=455
N15	5 N3 ø5.0 c/20 C=468
N15	5 N4 ø5.0 c/20 C=460
N15	5 N3 ø5.0 c/20 C=468

AÇO	N	DIAM (mm)	QUANT	C.UNIT (cm)	C.TOTAL (cm)
CA60	1	5.0	10	454	4540
	2	5.0	10	455	4550
	3	5.0	10	468	4680
	4	5.0	5	460	2300
	5	5.0	44	127	5588
	6	5.0	150	95	14250
	7	5.0	120	26	3120
	8	5.0	120	105	12600
	9	5.0	745	125	93125
	10	5.0	2	243	486
	11	5.0	2	229	458
	12	5.0	4	225	900
	13	5.0	8	1381	11048
	14	5.0	8	1869	14952
CA50	15	6.3	115	134	15410
	16	6.3	60	141	8460
	17	6.3	12	466	5592
	18	6.3	4	467	1868
	19	6.3	4	466	1864
	20	6.3	4	480	1920
	21	6.3	2	472	944
	22	6.3	3	90	270
	23	8.0	144	128	18432
	24	8.0	10	138	1380
	25	8.0	16	128	2048
	26	8.0	30	133	3990
	27	8.0	22	143	3146
	28	8.0	4	597	2388
	29	8.0	2	62	124
	30	8.0	4	708	2832
	31	8.0	13	102	1326
	32	8.0	1	94	94
	33	8.0	4	152	608
	34	8.0	2	64	128
	35	8.0	1	301	301
	36	8.0	2	48	96
	37	8.0	4	562	2248
	38	8.0	1	306	306
	39	8.0	1	89	89
	40	8.0	2	273	546
	41	8.0	1	255	255
	42	8.0	4	929	3716
	43	8.0	2	469	938
	44	8.0	6	92	552
	45	8.0	2	160	320
	46	8.0	1	140	140
	47	8.0	2	81	162
	48	8.0	2	1108	2216
	49	8.0	1	264	264
	50	8.0	1	259	259
	51	8.0	2	918	1836
	52	8.0	2	634	1268
	53	8.0	2	275	550
	54	8.0	1	424	424
	55	8.0	2	884	1768
	56	8.0	4	461	1844
	57	8.0	2	83	166
	58	8.0	4	128	512
	59	8.0	2	120	240
	60	8.0	2	693	1386
	61	8.0	1	249	249
	62	8.0	1	214	214
	63	8.0	2	913	1826
	64	8.0	2	245	490
	65	8.0	2	106	212
	66	8.0	4	165	660
	67	8.0	2	102	204
	68	8.0	2	1200	2400
	69	8.0	2	240	480
	70	8.0	1	223	223
	71	8.0	2	923	1846
	72	8.0	1	235	235
	73	8.0	1	253	253
	74	8.0	1	190	190
	75	8.0	2	1198	2396
	76	8.0	2	730	1460
	77	10.0	48	VAR	VAR
	78	10.0	54	117	6318
	79	10.0	12	112	1344
	80	10.0	12	117	1404
	81	10.0	22	102	2244
	82	10.0	24	107	2568
	83	10.0	18	117	2106
	84	10.0	4	171	684
	85	10.0	1	160	160
	86	10.0	1	200	200
	87	10.0	1	225	225
	88	10.0	4	745	2980
	89	10.0	12	609	7308
	90	10.0	4	426	1704
	91	10.0	2	133	266
	92	10.0	2	190	380
	93	10.0	4	606	2424
	94	10.0	2	210	420
	95	12.5	50	75	3750
	96	12.5	36	VAR	VAR
	97	12.5	4	VAR	VAR
	98	12.5	6	221	1326
	99	12.5	2	220	440
	100	12.5	2	265	530
	101	12.5	6	770	4620
	102	12.5	1	200	200
	103	12.5	1	225	225
	104	12.5	2	606	1212
	105	12.5	4	778	3112
	106	12.5	1	235	235
	107	12.5	1	260	260
	108	16.0	6	96	576

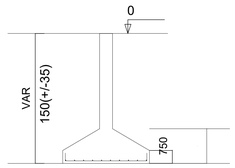
S9=S11=S14

PLANTA
ESC 1:25



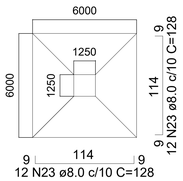
Solo compactado sobre a sapata
peso específico > 1600.00 kgf/m³

CORTE
ESC 1:25



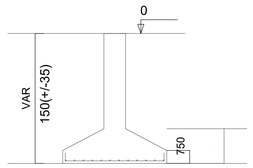
S3=S4=S5=S6=S15=S16

PLANTA
ESC 1:25



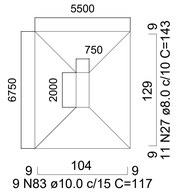
Solo compactado sobre a sapata
peso específico > 1600.00 kgf/m³

CORTE
ESC 1:25



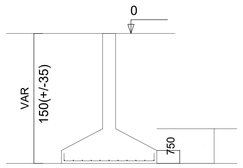
S7=S13

PLANTA
ESC 1:25



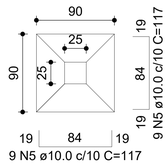
Solo compactado sobre a sapata
peso específico > 1600.00 kgf/m³

CORTE
ESC 1:25



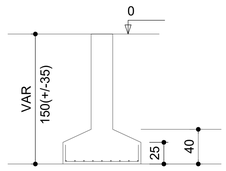
S1=S17=S18

PLANTA
ESC 1:25



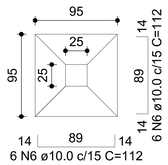
Solo compactado sobre a sapata
peso específico > 1600.00 kgf/m³

CORTE
ESC 1:25



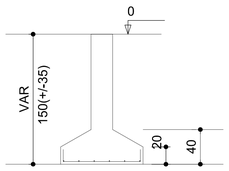
S2

PLANTA
ESC 1:25



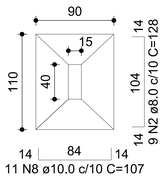
Solo compactado sobre a sapata
peso específico > 1600.00 kgf/m³

CORTE
ESC 1:25



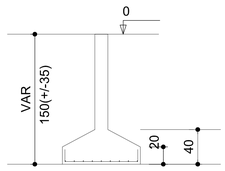
S10=S12

PLANTA
ESC 1:25



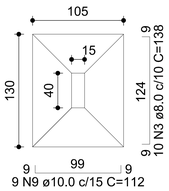
Solo compactado sobre a sapata
peso específico > 1600.00 kgf/m³

CORTE
ESC 1:25



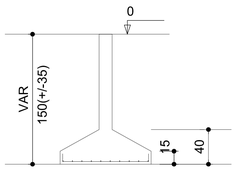
S8=S9=S11=S14

PLANTA
ESC 1:25



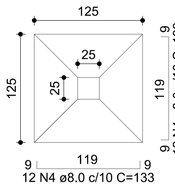
Solo compactado sobre a sapata
peso específico > 1600.00 kgf/m³

CORTE
ESC 1:25



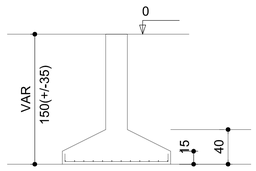
S3=S4=S5=S6=S15=S16

PLANTA
ESC 1:25



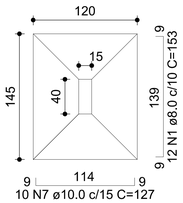
Solo compactado sobre a sapata
peso específico > 1600.00 kgf/m³

CORTE
ESC 1:25



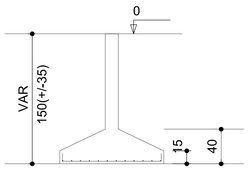
S7=S13

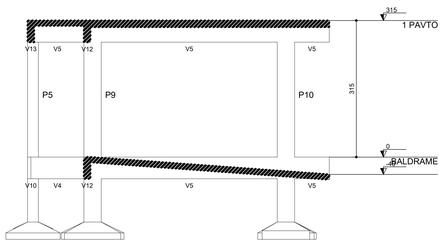
PLANTA
ESC 1:25



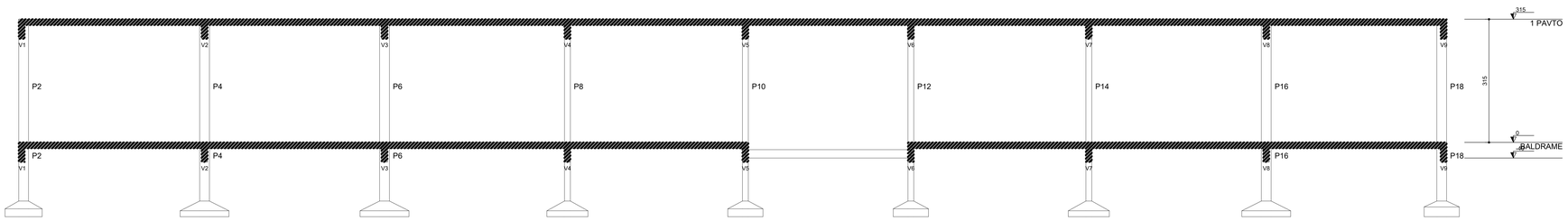
Solo compactado sobre a sapata
peso específico > 1600.00 kgf/m³

CORTE
ESC 1:25





Corte B-B
escala 1:50



Corte A-A
escala 1:50

RESUMO DO AÇO

AÇO	DIAM (mm)	C.TOTAL (m)	PESO + 10% (kg)
CA50	6.3	363.3	97.8
	8.0	722.4	313.5
	10.0	420.9	285.5
	12.5	238.3	252.5
	16.0	5.8	10
CA60	5.0	1726	292.6

PESO TOTAL (kg)	
CA50	959.3
CA60	292.6

Volume de concreto (C-35) = 31.22 m³
Área de forma = 198.67 m²

PREFEITURA MUNICIPAL DE BALNEÁRIO CAMBORIÚ

Contratante:
MUNICÍPIO DE BALNEÁRIO CAMBORIÚ

Obra:
ESCOLA MUNICIPAL ARMANDO C. GHISLANDI
RUA DOM DINIZ, N° 450 - BAIRRO VILA REAL - BALNEÁRIO CAMBORIÚ

Projeto:
PROJETO ESTRUTURAL

Conteúdo:
CORTES AA, BB E SAPATAS

Prancha:
06/09

ART Nº:

Área Total (Construída)
3.875m²

Escala:
Indicada

Data:
03/2019

Assinaturas:

Eng. Civil -

MUNICÍPIO DE BALNEÁRIO CAMBORIÚ
CONTRATANTE