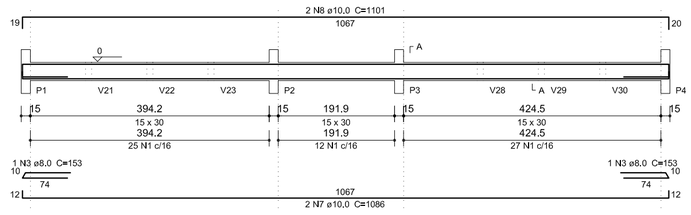
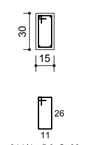
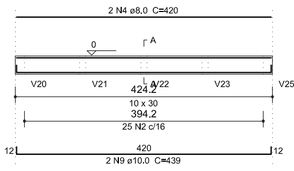
V1
ESC 1:50



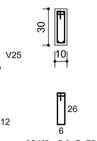
SEÇÃO A-A
ESC 1:25



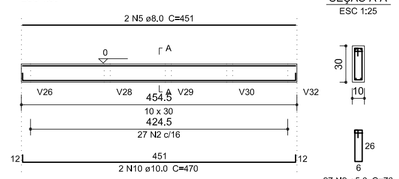
V2
ESC 1:50



SEÇÃO A-A
ESC 1:25

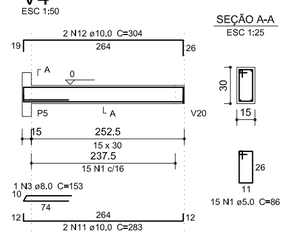


V3
ESC 1:50

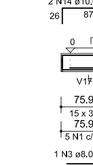


SEÇÃO A-A
ESC 1:25

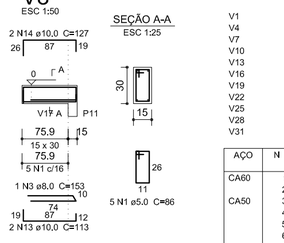
V4
ESC 1:50



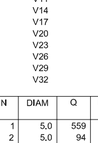
SEÇÃO A-A
ESC 1:25



V8
ESC 1:50



SEÇÃO A-A
ESC 1:25



Relação do aço

V1	V2	V3
V4	V5	V6
V7	V8	V9
V10	V11	V12
V13	V14	V15
V16	V17	V18
V19	V20	V21
V22	V23	V24
V25	V26	V27
V28	V29	V30
V31	V32	V35

AÇO	N	DIAM	Q	UNIT (cm)	C.TOTAL (cm)
CA60	1	5,0	559	86	48074
	2	5,0	94	76	7144
CA50	3	8,0	18	153	2754
	4	8,0	2	420	840
	5	8,0	2	451	902
	6	8,0	2	218	436
	7	10,0	6	1086	6516
	8	10,0	2	1101	2202
	9	10,0	2	439	878
	10	10,0	2	470	940
	11	10,0	4	283	1132
	12	10,0	4	304	1216
	13	10,0	12	113	1356
	14	10,0	12	127	1524
	15	10,0	2	237	474
	16	10,0	4	1100	4400
	17	10,0	2	390	780
	18	10,0	2	423	846
	19	10,0	4	810	3240
	20	10,0	4	830	3320
	21	10,0	4	193	772
	22	10,0	4	216	864
	23	10,0	4	854	3416
	24	10,0	2	357	714
	25	10,0	2	390	780
	26	10,0	8	314	2512
	27	10,0	12	151	1812
	28	10,0	12	166	1992
	29	10,0	4	191	764
	30	10,0	4	205	820
	31	10,0	4	324	1296
	32	10,0	4	331	1324

Resumo do aço

AÇO	DIAM	C.TOTAL (m)	PESO + 10 % (kg)
CA50	8.0	49.4	21.4
	10.0	458.9	311.2
CA60	5.0	552.2	93.6
PESO TOTAL			
CA50	332.6		
CA60	93.6		

Vol. de concreto total (C-20) = 4.88 m³
Área de forma total = 84.65 m²

V5
ESC 1:50

SEÇÃO A-A
ESC 1:25

V6
ESC 1:50

SEÇÃO A-A
ESC 1:25

V7
ESC 1:50

SEÇÃO A-A
ESC 1:25

V9
ESC 1:50

SEÇÃO A-A
ESC 1:25

V10
ESC 1:50

SEÇÃO A-A
ESC 1:25

V11
ESC 1:50

SEÇÃO A-A
ESC 1:25

V12
ESC 1:50

SEÇÃO A-A
ESC 1:25

V13
ESC 1:50

SEÇÃO A-A
ESC 1:25

V14
ESC 1:50

SEÇÃO A-A
ESC 1:25

V15
ESC 1:50

SEÇÃO A-A
ESC 1:25

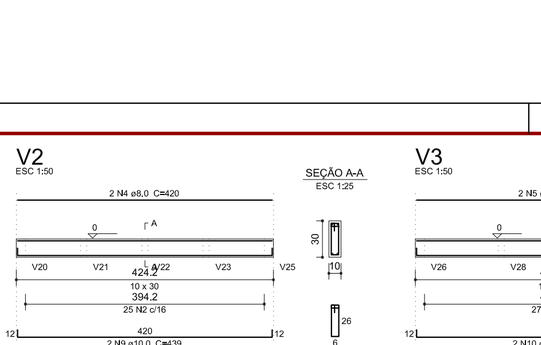
V19
ESC 1:50

SEÇÃO A-A
ESC 1:25

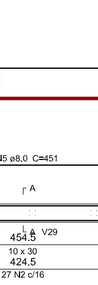
V16
ESC 1:50

SEÇÃO A-A
ESC 1:25

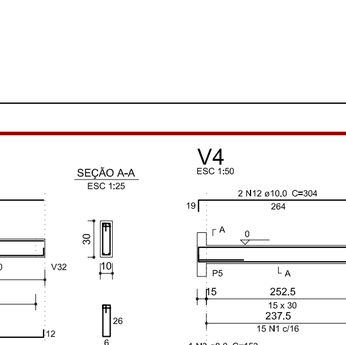
V17
ESC 1:50



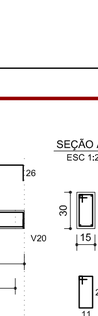
SEÇÃO A-A
ESC 1:25



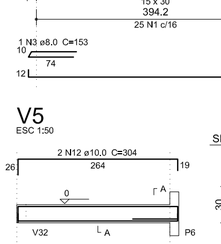
V18
ESC 1:50



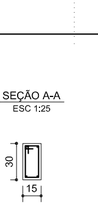
SEÇÃO A-A
ESC 1:25



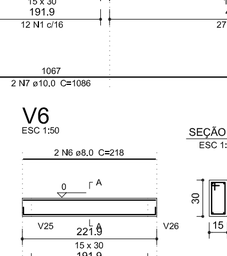
V20
ESC 1:50



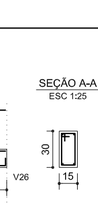
SEÇÃO A-A
ESC 1:25



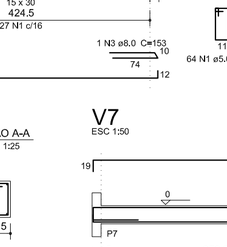
V21
ESC 1:50



SEÇÃO A-A
ESC 1:25

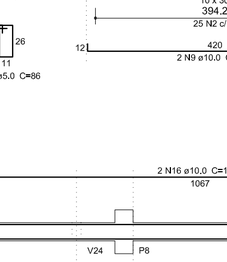


V22
ESC 1:50

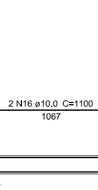


SEÇÃO A-A
ESC 1:25

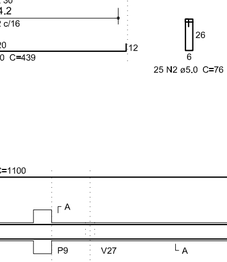
V23
ESC 1:50



SEÇÃO A-A
ESC 1:25

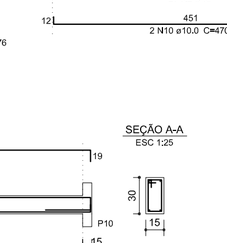


V24
ESC 1:50

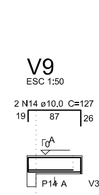


SEÇÃO A-A
ESC 1:25

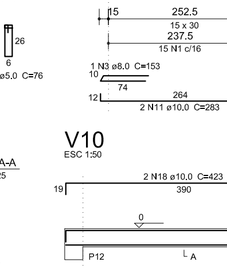
V25
ESC 1:50



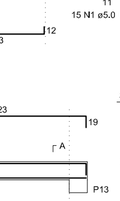
SEÇÃO A-A
ESC 1:25



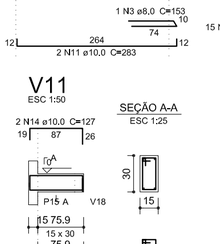
V27
ESC 1:50



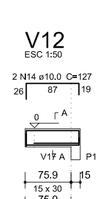
SEÇÃO A-A
ESC 1:25



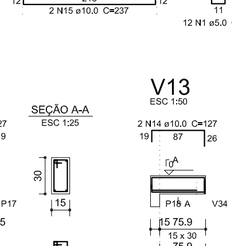
V26
ESC 1:50



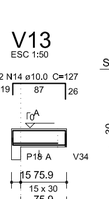
SEÇÃO A-A
ESC 1:25



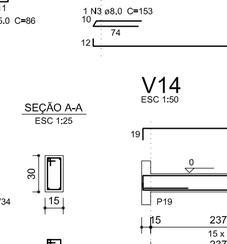
V28
ESC 1:50



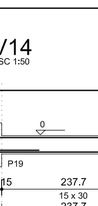
SEÇÃO A-A
ESC 1:25



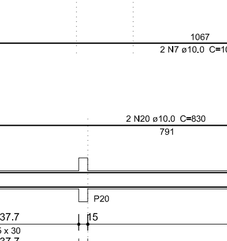
V29
ESC 1:50



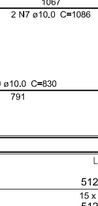
SEÇÃO A-A
ESC 1:25



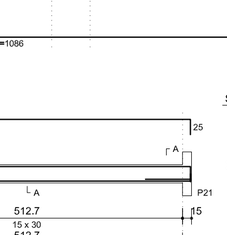
V30
ESC 1:50



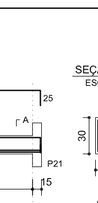
SEÇÃO A-A
ESC 1:25



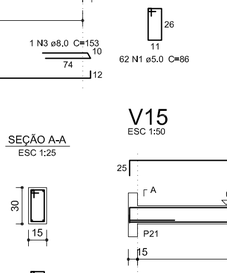
V31
ESC 1:50



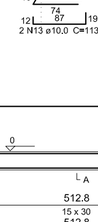
SEÇÃO A-A
ESC 1:25



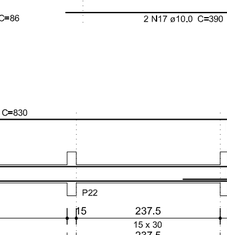
V32
ESC 1:50



SEÇÃO A-A
ESC 1:25



V35
ESC 1:50



SEÇÃO A-A
ESC 1:25

APROVAÇÕES:

TAXA DE OCUPAÇÃO DO SOLO:

ZONA		MUNICÍPIO :	
ÁREA TERRENO			
TAXA DE OCUPAÇÃO			
ÍNDICE DE APROVEITAMENTO			
TAXA PERMEABILIDADE			
Nº DE PAVIMENTOS			
ÁREA DO PROJETO			

OBS.: PROJETO

CÓDIGO INT.: 0018/2019

OBSERVAÇÕES DO PROJETISTA:

- Direitos autorais reservados - Lei 5988/73.
- Consultar projetos complementares.
- Verificar medidas na obra.
- Medidas em metros. Divergência entre cotas e escala, prevalecerão as cotas. Qualquer alteração deverá ser autorizado pelo responsável técnico após aprovação do projeto não implica no recolhimento de taxas, nem do direito de propriedade do terreno

CASAGRANDE ENGENHARIA

Kauanne Thays Casagrande
Engenheira Civil
CREA SC 133167-1

99985-7223
engcasag@gmail.com
Rua Antonio Macarini, nº 195, Centro
Capinzal - SC CEP 89665-000

OBRA: PROJETO DE UM QUIOSQUE EM ALVENARIA.

LOCAL: AV. 18 DE FEVEREIRO, Nº 2.455, BALNEÁRIO, PIRATUBA - SC

ESPECIFICAÇÕES: PROJETO ESTRUTURAL:

PILARES E VIGAS FUNDAÇÃO

ÁREA: 167,54m²

DATA: MAIO /2019

ESCALA: INDICADA

DESENHO: CESAR A. BOTARI

PRANCHA: EST.-01

03

03 / 05

PROPRIETÁRIO: KAUANNE THAYS CASAGRANDE - ENGENHEIRA CIVIL
CREA / SC - 133167-1

PROPRIETÁRIO: COMPANHIA HIDROMINERAL DE PIRATUBA