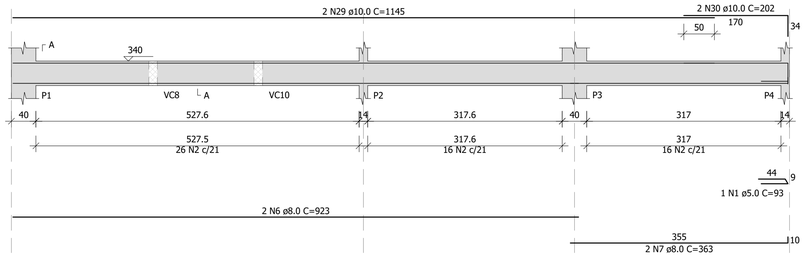
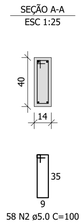
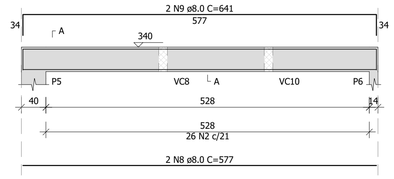
VC1 (14 x 40)
ESC 1:50



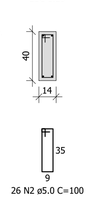
SEÇÃO A-A
ESC 1:25



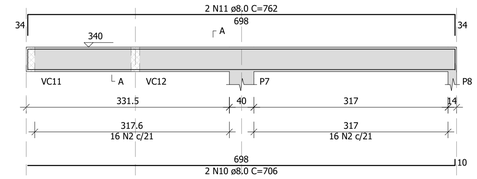
VC2 (14 x 40)
ESC 1:50



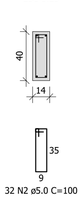
SEÇÃO A-A
ESC 1:25



VC3 (14 x 40)
ESC 1:50



SEÇÃO A-A
ESC 1:25



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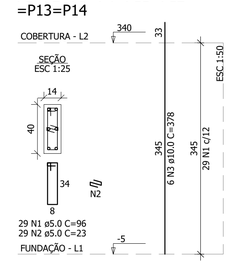
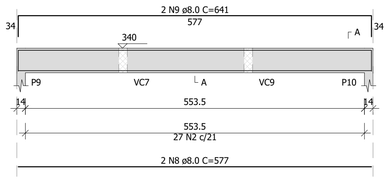
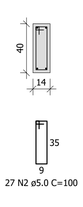


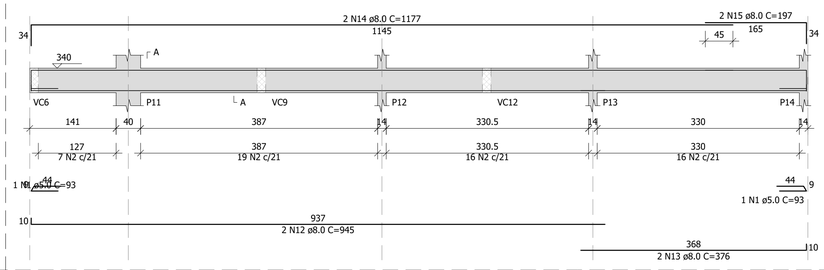
VC4 (14 x 40)
ESC 1:50



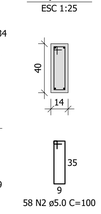
SEÇÃO A-A
ESC 1:25



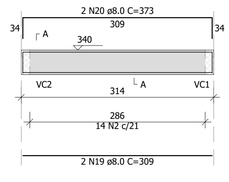
VC5 (14 x 40)
ESC 1:50



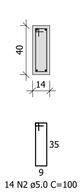
SEÇÃO A-A
ESC 1:25



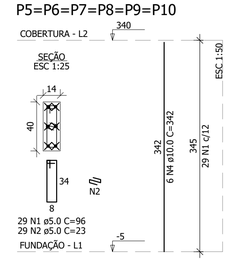
VC10 (14 x 40)
ESC 1:50



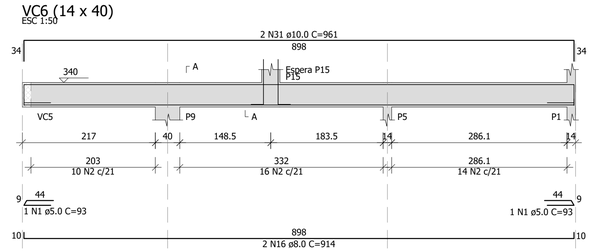
SEÇÃO A-A
ESC 1:25



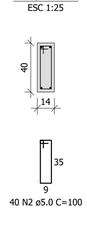
P5=P6=P7=P8=P9=P10



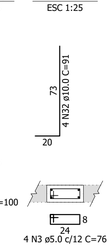
VC6 (14 x 40)
ESC 1:50



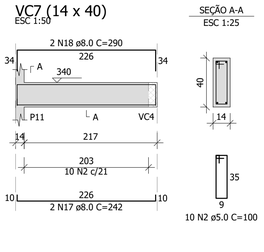
SEÇÃO A-A
ESC 1:25



ESPERA P15
ESC 1:25

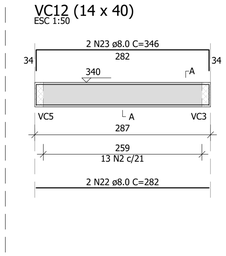


VC7 (14 x 40)
ESC 1:50

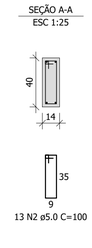


SEÇÃO A-A
ESC 1:25

VC12 (14 x 40)
ESC 1:50



SEÇÃO A-A
ESC 1:25



Relação do aço

VC1	VC2	VC3	
VC4	VC5	VC6	
VC7	VC8	VC9	
VC10	VC11	VC12	
VC13	VC14		

AÇO	N	DIAM (mm)	QUANT	C.UNIT (cm)	C.TOTAL (cm)
CA60	1	5.0	5	93	465
	2	5.0	391	100	39100
	3	5.0	12	76	912
	4	5.0	6	407	2442
	5	5.0	51	70	3570
CA50	6	8.0	2	923	1846
	7	8.0	2	363	726
	8	8.0	4	577	2308
	9	8.0	4	641	2564
	10	8.0	2	706	1412
	11	8.0	2	762	1524
	12	8.0	2	945	1890
	13	8.0	2	376	752
	14	8.0	2	1177	2354
	15	8.0	2	197	394
	16	8.0	2	914	1828
	17	8.0	2	242	484
	18	8.0	4	290	1160
	19	8.0	4	309	1236
	20	8.0	4	373	1492
	21	8.0	2	226	452
	22	8.0	2	282	564
	23	8.0	2	346	692
	24	8.0	2	290	580
	25	8.0	2	655	1310
	26	8.0	1	480	480
	27	8.0	2	915	1830
	28	8.0	2	898	1796
	29	10.0	2	1145	2290
	30	10.0	2	202	404
	31	10.0	2	961	1922
	32	10.0	12	91	1092
	33	10.0	2	906	1812
	34	10.0	4	898	3592

Resumo do aço

AÇO	DIAM (mm)	C.TOTAL (m)	PESO (kg)
CA50	8.0	296.8	117.1
	10.0	111.2	68.5
CA60	5.0	464.9	71.7

PESO TOTAL (kg)	
CA50	185.6
CA60	71.7

Volume de concreto (C-30) = 5.13 m³
Área de forma = 86.44 m²

Relação do aço

8xP1 6xP5

AÇO	N	DIAM (mm)	QUANT	C.UNIT (cm)	C.TOTAL (cm)
CA60	1	5.0	406	96	38976
CA50	2	5.0	406	23	9338
	3	10.0	48	378	18144
	4	10.0	36	342	12312

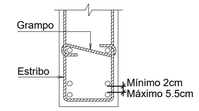
Resumo do aço

AÇO	DIAM (mm)	C.TOTAL (m)	PESO (kg)
CA50	10.0	304.6	187.8
CA60	5.0	483.2	74.5

PESO TOTAL (kg)	
CA50	187.8
CA60	74.5

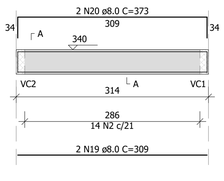
Volume de concreto (C-30) = 2.7 m³
Área de forma = 52.16 m²

DETALHE DO GRAMPO

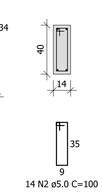


LEGENDA
- BARRA QUE NASCE
- BARRA QUE MORRE
- BARRA QUE SEGUE

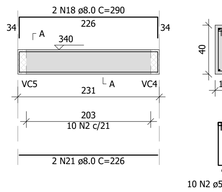
VC8 (14 x 40)
ESC 1:50



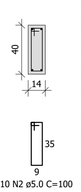
SEÇÃO A-A
ESC 1:25



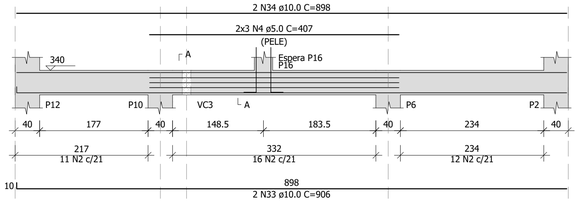
VC9 (14 x 40)
ESC 1:50



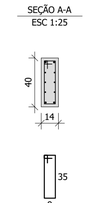
SEÇÃO A-A
ESC 1:25



VC11 (14 x 40)
ESC 1:50

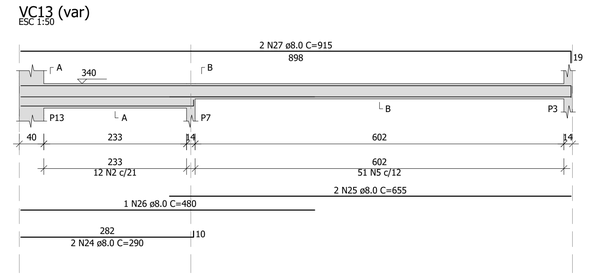


SEÇÃO A-A
ESC 1:25

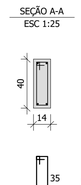


ESPERA P16
ESC 1:25

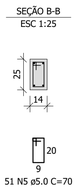
VC13 (var)
ESC 1:50



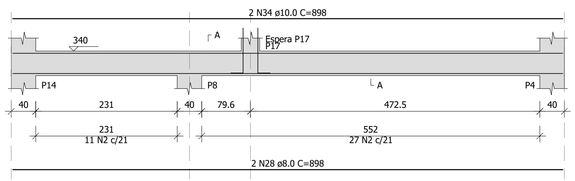
SEÇÃO A-A
ESC 1:25



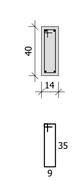
SEÇÃO B-B
ESC 1:25



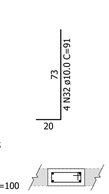
VC14 (14 x 40)
ESC 1:50



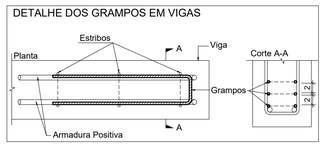
SEÇÃO A-A
ESC 1:25



ESPERA P17
ESC 1:25



DETALHE DOS GRAMPOS EM VIGAS



CARACTERÍSTICAS GERAIS

Características dos Materiais:

Elemento	Fck (kgf/cm²)	Ecs (kgf/cm²)
Todos	300	269918

Cobrimentos mínimo adotados (controle rigoroso + uso de espaçadores)
- Lajes = 2.0cm
- Vigas = 2.5cm
- Pilares = 3.0cm
- Fundação = 4.5cm

R03		
R02		
R01		
R00	EMISSÃO INICIAL	22/02/2022
Nº	DESCRIÇÃO	DATA

OBS.: TODAS AS MEDIDAS DEVEM SER CONFERIDAS EM OBRA. CASO SEJA NECESSÁRIO ALGUMA ALTERAÇÃO, ENTRAR EM CONTATO COM O PROJETISTA RESPONSÁVEL.

ASSINATURAS

CLIENTE:
PREFEITURA MUNICIPAL DE BIGUAÇU
CNPJ.82.892.308/0001-53

RESPONSÁVEL TÉCNICO: GUILHERME SILVEIRA DE OLIVEIRA:00492851905
Assinado de forma digital por GUILHERME SILVEIRA DE OLIVEIRA:00492851905
Dados: 2022.02.24 06:25:07 -03'00'
GUILHERME SILVEIRA DE OLIVEIRA
CREA/SC: 126936-9

PROJETO ESTRUTURAL

ENGEPLANTI
PROJETOS E SUPERVISÃO

Engeplanti Consultoria LTDA./ CREA nº 163388-0 / CNPJ 23.002.667/0001-29
Rua Cristovão Nunes Pires, 110 - CEP 88010-120 - Florianópolis / Fone: (48) 99969-3345 / e-mail: guilherme@engeplanti.com.br

OBRA: CEIM SÃO TOMAZ DE AQUINO
INSCRIÇÃO IMOBILIÁRIA:
ENDEREÇO: RUA ANTÔNIO JOSÉ ADÃO, S/N, BAIRRO ENCRUZILHADA, BIGUAÇU/SC
CONTEÚDO: ARMAÇÃO PILARES/ VIGAS COBERTURA REFEITÓRIO
ETAPA: PROJETO EXECUTIVO
ESCALA: 1:50
PRANCHA: EST 015-R00
ARQUIVO: 118-21_010_EST_PE_205_ARM-COBE-R00