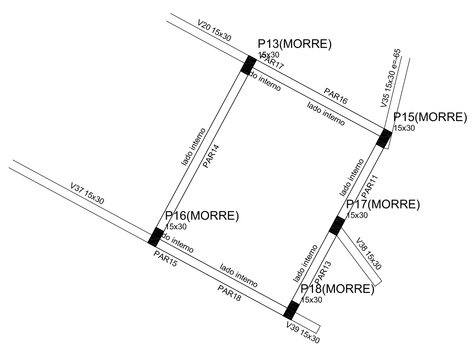
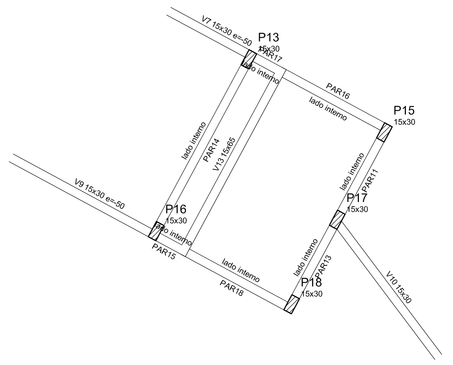
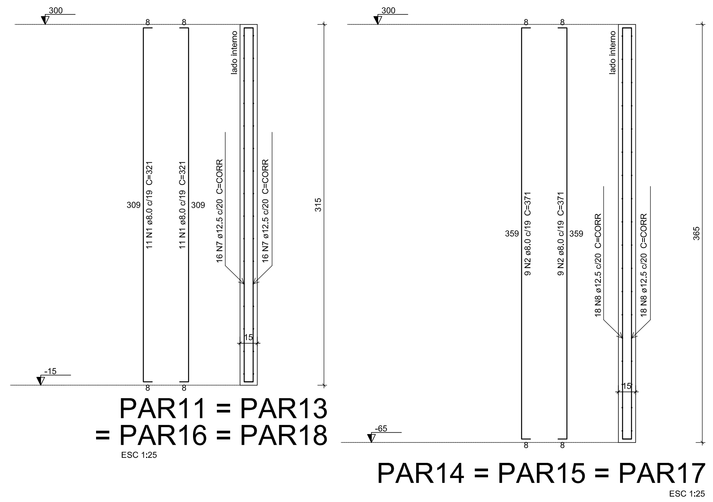


Contenções - NIVEL 3000
escala 1:50

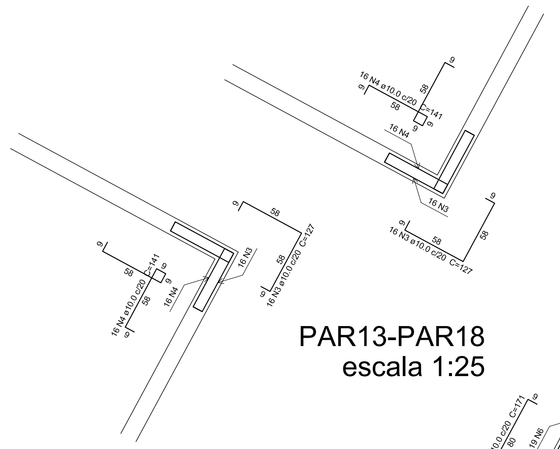


Contenções - NIVEL 2700
escala 1:50

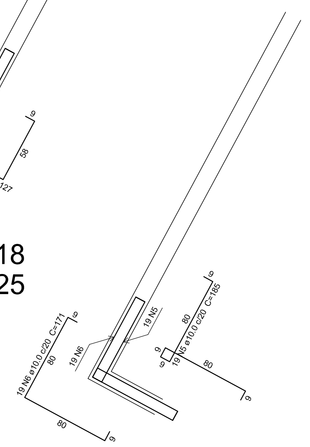


PAR11 = PAR13
= PAR16 = PAR18
ESC 1:25

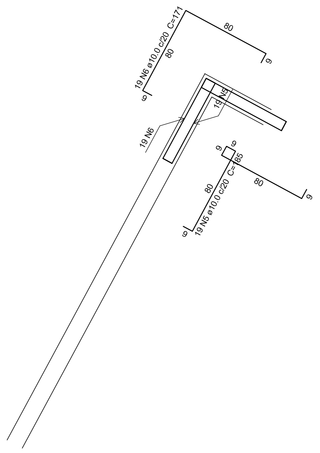
PAR14 = PAR15 = PAR17
ESC 1:25



PAR13-PAR18
escala 1:25



PAR14-PAR15
escala 1:25



PAR14-PAR17
escala 1:25

Relação do aço

4xPAR11
PAR13-PAR18

3xPAR14
PAR14-PAR15

PAR11-PAR16
PAR14-PAR17

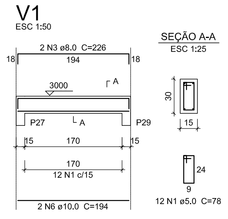
AÇO	N	DIAM (mm)	QUANT (Barras)	UNIT (cm)	C.TOTAL (cm)
CA50	1	8,0	88	321	28248
	2	8,0	54	371	20034
	3	10,0	32	127	4064
	4	10,0	32	141	4512
	5	10,0	38	185	7030
	6	10,0	38	171	6498
	7	12,5	128	CORR	26752
	8	12,5	108	CORR	18684

Resumo do aço

AÇO	DIAM (mm)	C.TOTAL (m)	PESO + 10 % (kg)
CA50	8,0	492,9	209,6
	10,0	221,1	149,9
	12,5	454,4	481,5
PESO TOTAL (kg)			
CA50	840,9		

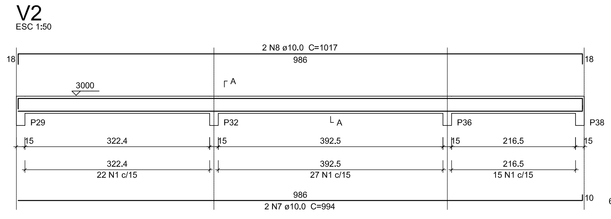
Volume de concreto (C-30) = 6,26 m³
Área de forma = 85,36 m²

V1
ESC 1:50

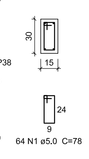


SEÇÃO A-A
ESC 1:25

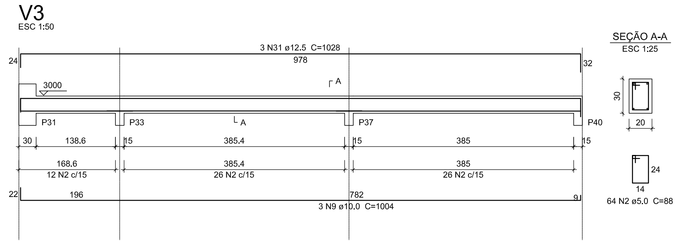
V2
ESC 1:50



SEÇÃO A-A
ESC 1:25

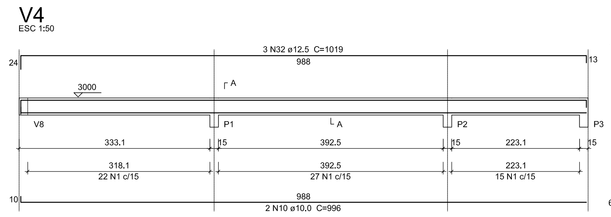


V3
ESC 1:50

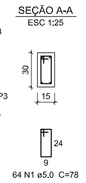


SEÇÃO A-A
ESC 1:25

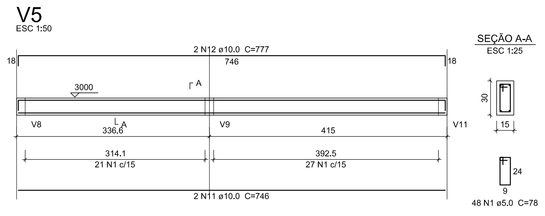
V4
ESC 1:50



SEÇÃO A-A
ESC 1:25

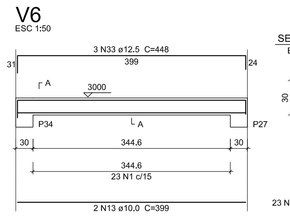


V5
ESC 1:50

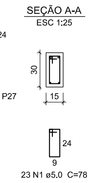


SEÇÃO A-A
ESC 1:25

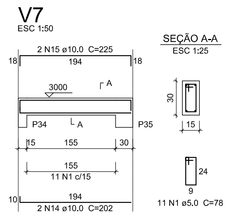
V6
ESC 1:50



SEÇÃO A-A
ESC 1:25

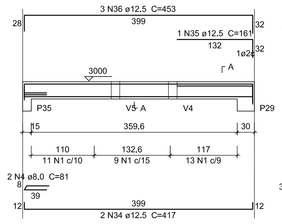


V7
ESC 1:50

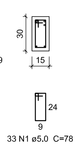


SEÇÃO A-A
ESC 1:25

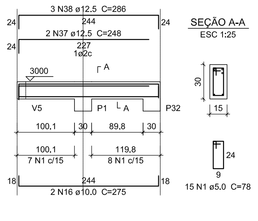
V8
ESC 1:50



SEÇÃO A-A
ESC 1:25

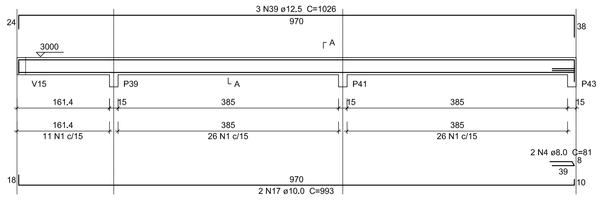


V9
ESC 1:50



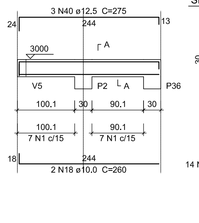
SEÇÃO A-A
ESC 1:25

V10
ESC 1:50

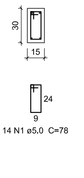


SEÇÃO A-A
ESC 1:25

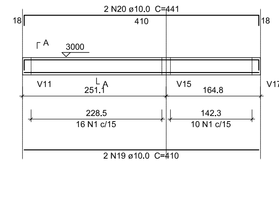
V11
ESC 1:50



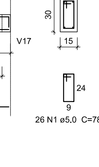
SEÇÃO A-A
ESC 1:25



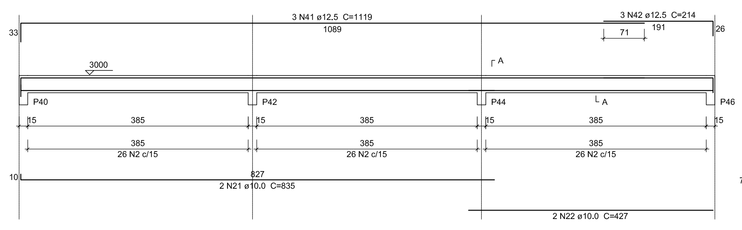
V12
ESC 1:50



SEÇÃO A-A
ESC 1:25

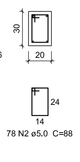


V13
ESC 1:50

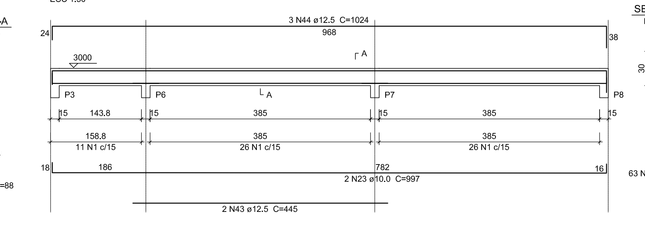


3 N42 ø12.5 C=214
71
191

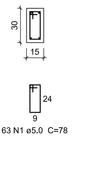
SEÇÃO A-A
ESC 1:25



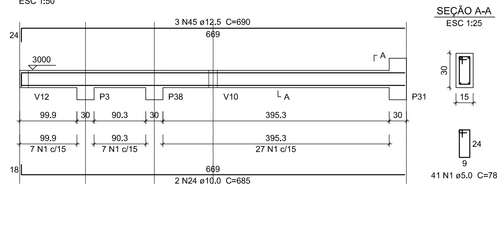
V14
ESC 1:50



SEÇÃO A-A
ESC 1:25



V15
ESC 1:50



SEÇÃO A-A
ESC 1:25

Relação do aço

V1	V2	V3
V4	V5	V6
V7	V8	V9
V10	V11	V12
V13	V14	V15
V16	V17	V18
V19	V20	

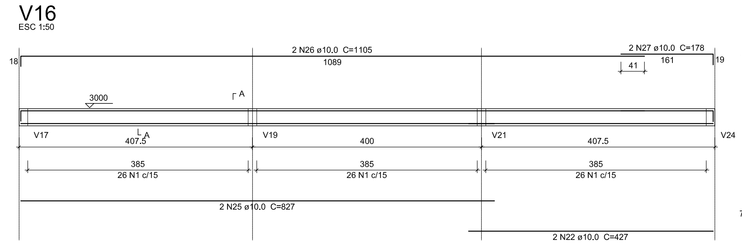
AÇO	N	DIAM (mm)	QUANT (Barras)	UNIT (cm)	C.TOTAL (cm)
CA60	1	5,0	793	78	61854
	2	5,0	142	88	12496
CA50	3	8,0	2	226	452
	4	8,0	8	81	648
	5	8,0	1	111	111
	6	10,0	2	194	388
	7	10,0	2	994	1988
	8	10,0	2	1017	2034
	9	10,0	3	1004	3012
	10	10,0	2	996	1992
	11	10,0	2	746	1492
	12	10,0	2	777	1554
	13	10,0	2	399	798
	14	10,0	2	202	404
	15	10,0	2	225	450
	16	10,0	2	275	550
	17	10,0	2	993	1986
	18	10,0	2	260	520
	19	10,0	2	410	820
	20	10,0	2	441	882
	21	10,0	4	835	3340
	22	10,0	4	427	1708
	23	10,0	2	997	1994
	24	10,0	4	685	2740
	25	10,0	2	827	1654
	26	10,0	2	1105	2210
	27	10,0	2	178	356
	28	10,0	2	824	1648
	29	10,0	2	692	1384
	30	10,0	2	454	908
	31	12,5	3	1028	3084
	32	12,5	3	1019	3057
	33	12,5	3	448	1344
	34	12,5	2	417	834
	35	12,5	1	161	161
	36	12,5	3	453	1359
	37	12,5	2	248	496
	38	12,5	3	286	858
	39	12,5	3	1026	3078
	40	12,5	3	275	825
	41	12,5	3	1119	3357
	42	12,5	3	214	642
	43	12,5	4	445	1780
	44	12,5	3	1024	3072
	45	12,5	3	690	2070
	46	12,5	3	710	2130
	47	12,5	3	879	2637
	48	12,5	2	243	486
	49	12,5	3	712	2136
	50	12,5	3	1197	3591
	51	12,5	3	569	1707

Resumo do aço

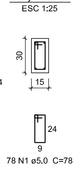
AÇO	DIAM (mm)	C.TOTAL (m)	PESO + 10 % (kg)
CA50	8,0	12,2	5,3
	10,0	368,2	249,7
	12,5	387,1	410,1
CA60	5,0	743,5	126,1
PESO TOTAL (kg)			
CA50	665		
CA60	126,1		

Volume de concreto (C-30) = 6,95 m³
Área de forma = 111,42 m²

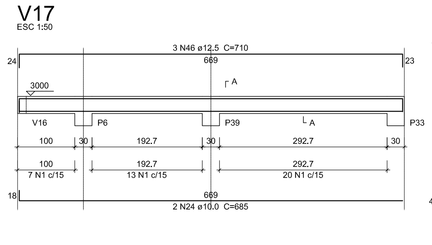
V16
ESC 1:50



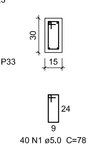
SEÇÃO A-A
ESC 1:25



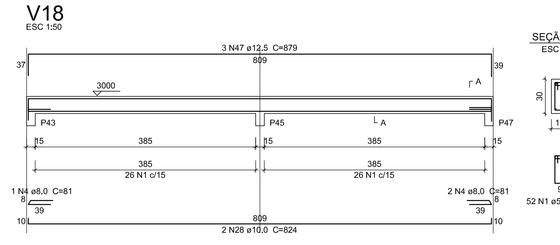
V17
ESC 1:50



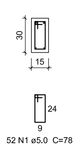
SEÇÃO A-A
ESC 1:25



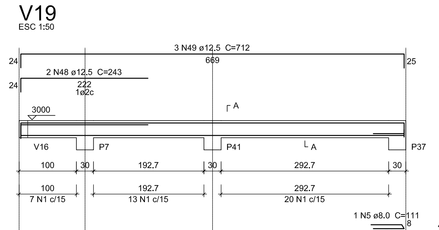
V18
ESC 1:50



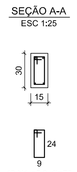
SEÇÃO A-A
ESC 1:25



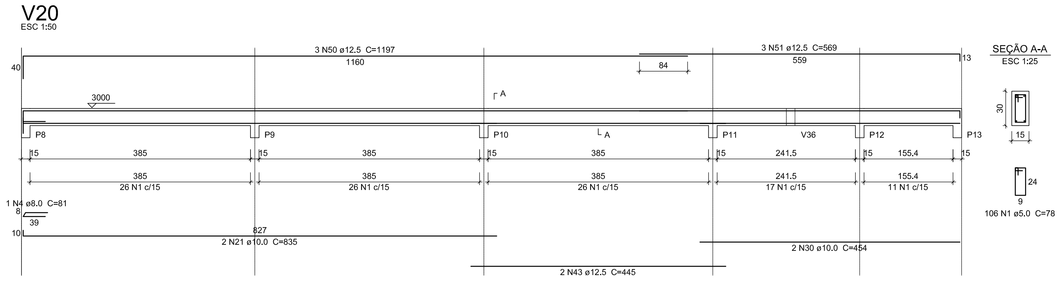
V19
ESC 1:50



SEÇÃO A-A
ESC 1:25



V20
ESC 1:50



SEÇÃO A-A
ESC 1:25

QUADRO DE REVISÕES

REVISÃO	DESCRIÇÃO	DATA	DESENHO

APROVAÇÕES

PROPRIETÁRIO
COMPANHIA HIDROMINERAL DE PIRATUBA
83.075.270/0001-09

RESPONSÁVEL TÉCNICO
JAIME FERNANDO SCHMIDT COSTA:34903180068
Assinado de forma digital por JAIME FERNANDO SCHMIDT COSTA:34903180068 Dados: 2023.06.23 09:34:44 -03'00'
JAIME F. SCHMIDT COSTA
CREA/SC 31169-5

EQUIPE TÉCNICA DA EMPRESA

FERRARI ENGENHARIA

EMESON FERRARI Engenheiro Mecânico CREA/SC: 165014-3	MAURICIO CERUTTI Arquiteto e Urbanista CAU: A1090414-0
JAIME F. SCHMIDT COSTA Engenheiro Civil CREA/SC: 031169-5	RENATO BERGAMO Engenheiro Eletricista CREA/SC: 068830-4

PROPRIETÁRIO: COMPANHIA HIDROMINERAL DE PIRATUBA
EDIFICAÇÃO: ESTRUTURA DE FUNDAÇÃO - ESCADA/PASSARELA - NIVEL 3000
ENDEREÇO: AV. DEZOITO DE FEVEREIRO, 2455 - PIRATUBA- SC

PROJETO: ESTRUTURA DE CONCRETO ARMADO	ARQUIVO: ESTRUTURAL	DATA: 15-06-2023
CONTEÚDO: FORMA E ARMADURA DAS CONTEÇÕES FORMA E ARMADURA - VIGAS I	ETAPA: PROJETO EXECUTIVO ESCALA: INDICADA	FOLHA: E 06-21

FERRARI ENGENHARIA | CREA nº 165014-3 | CNPJ 35.949.171/0001-02
Rua Getúlio Vargas, 234 - SALA 01 - Centro - Concórdia/SC | Fone: (49) 99957-7643 | E-mail: projetos@engenhariaferrari.com.br

Formato A0 (1189 x 841mm