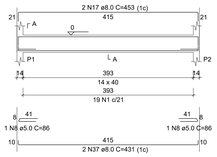
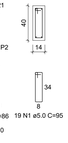
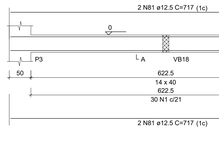
VB1
ESC 1:50



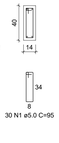
SEÇÃO A-A
ESC 1:25



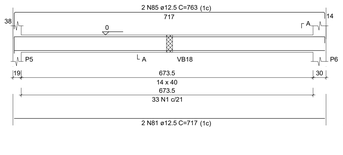
VB2
ESC 1:50



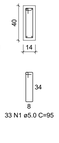
SEÇÃO A-A
ESC 1:25



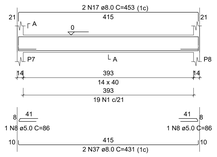
VB3
ESC 1:50



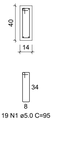
SEÇÃO A-A
ESC 1:25



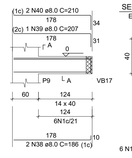
VB4
ESC 1:50



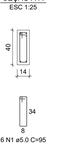
SEÇÃO A-A
ESC 1:25



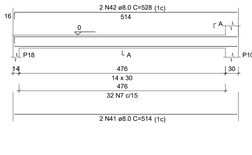
VB5
ESC 1:50



SEÇÃO A-A
ESC 1:25

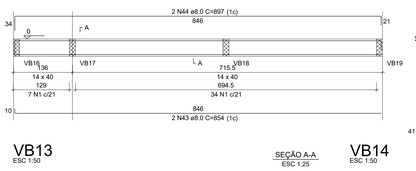


VB6
ESC 1:50

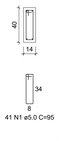


SEÇÃO A-A
ESC 1:25

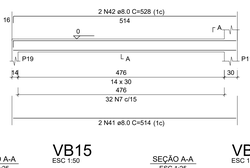
VB7
ESC 1:50



SEÇÃO A-A
ESC 1:25

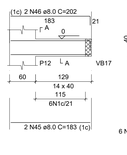


VB8
ESC 1:50

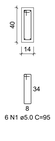


SEÇÃO A-A
ESC 1:25

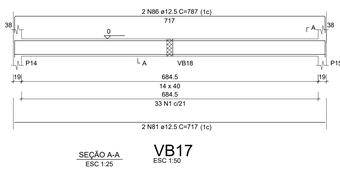
VB9
ESC 1:50



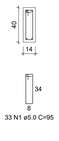
SEÇÃO A-A
ESC 1:25



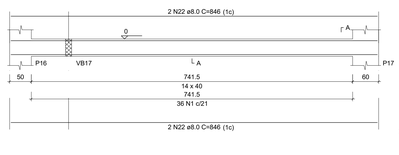
VB10
ESC 1:50



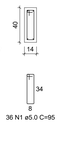
SEÇÃO A-A
ESC 1:25



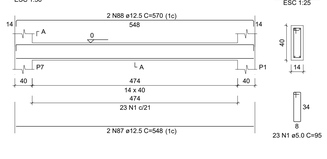
VB11
ESC 1:50



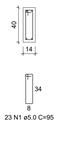
SEÇÃO A-A
ESC 1:25



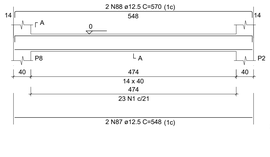
VB12
ESC 1:50



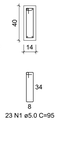
SEÇÃO A-A
ESC 1:25



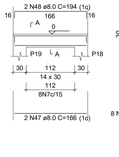
VB13
ESC 1:50



SEÇÃO A-A
ESC 1:25

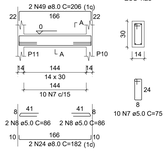


VB14
ESC 1:50



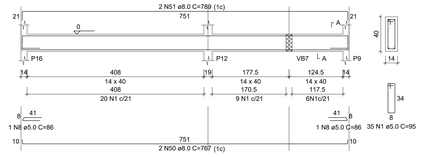
SEÇÃO A-A
ESC 1:25

VB15
ESC 1:50

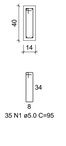


SEÇÃO A-A
ESC 1:25

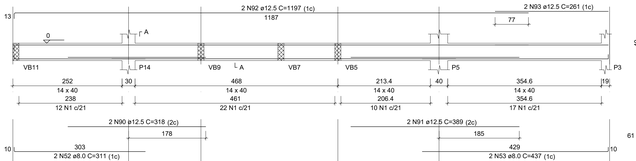
VB16
ESC 1:50



SEÇÃO A-A
ESC 1:25

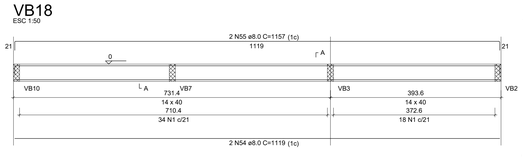


VB17
ESC 1:50

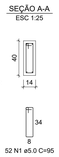


SEÇÃO A-A
ESC 1:25

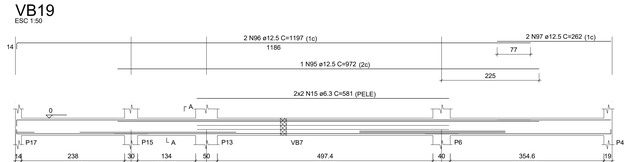
VB18
ESC 1:50



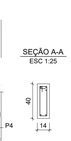
SEÇÃO A-A
ESC 1:25



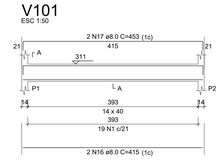
VB19
ESC 1:50



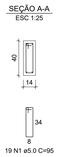
SEÇÃO A-A
ESC 1:25



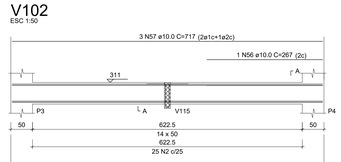
V101
ESC 1:50



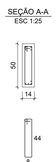
SEÇÃO A-A
ESC 1:25



V102
ESC 1:50

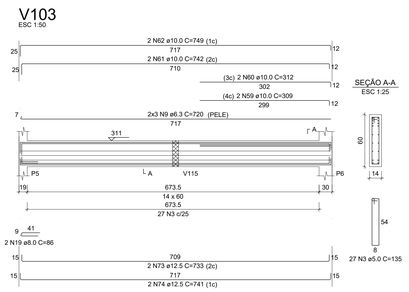


SEÇÃO A-A
ESC 1:25



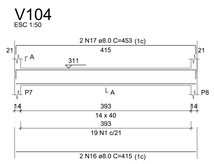
SUSPENSÃO V115
ESC 1:25

V103
ESC 1:50

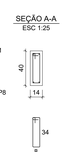


SEÇÃO A-A
ESC 1:25

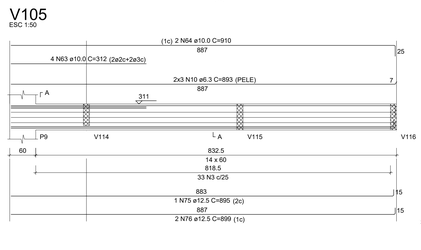
V104
ESC 1:50



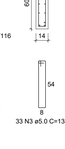
SEÇÃO A-A
ESC 1:25



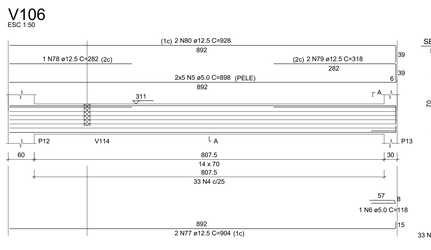
V105
ESC 1:50



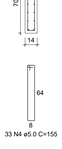
SEÇÃO A-A
ESC 1:25



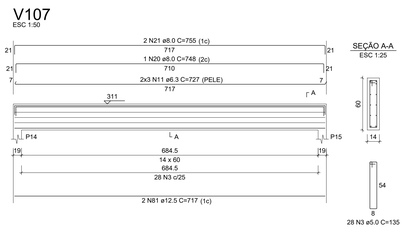
V106
ESC 1:50



SEÇÃO A-A
ESC 1:25

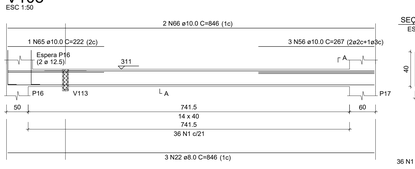


V107
ESC 1:50

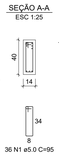


SEÇÃO A-A
ESC 1:25

V108
ESC 1:50

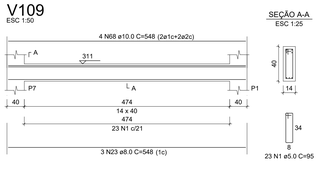


SEÇÃO A-A
ESC 1:25

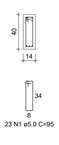


SUSPENSÃO V113
ESC 1:25

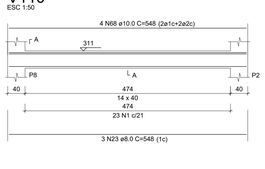
V109
ESC 1:50



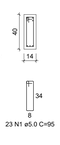
SEÇÃO A-A
ESC 1:25



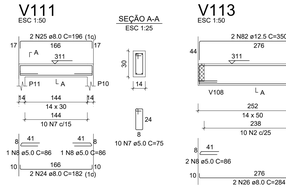
V110
ESC 1:50



SEÇÃO A-A
ESC 1:25

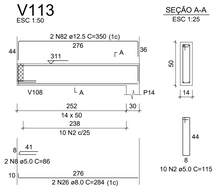


V111
ESC 1:50



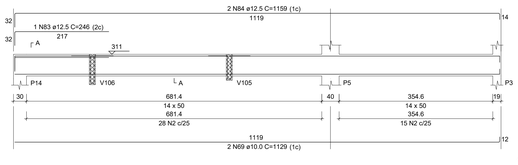
SEÇÃO A-A
ESC 1:25

V113
ESC 1:50

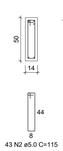


SEÇÃO A-A
ESC 1:25

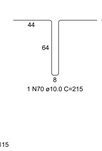
V114
ESC 1:50



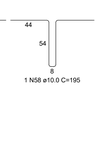
SEÇÃO A-A
ESC 1:25



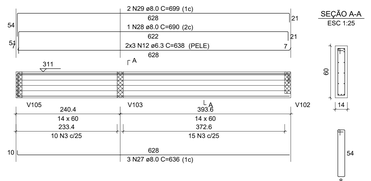
SUSPENSÃO V106
ESC 1:25



SUSPENSÃO V105
ESC 1:25



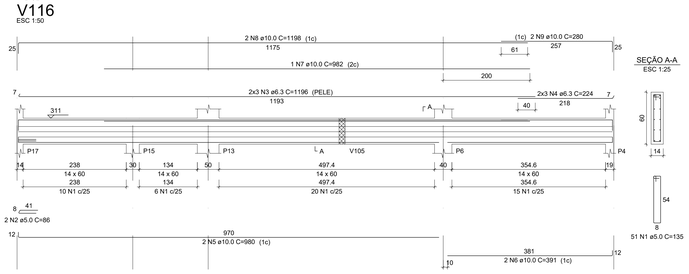
V115
ESC 1:50



SEÇÃO A-A
ESC 1:25

1ª LAJE

V116
ESC 1:50



SEÇÃO A-A
ESC 1:25

RELAÇÃO DO AÇO

V101-L2	V102-L2	V103-L2
V104-L2	V105-L2	V106-L2
V107-L2	V108-L2	V109-L2
V110-L2	V111-L2	V113-L2
V114-L2	V115-L2	V116-L2
VB1-L1	VB2-L1	VB3-L1
VB4-L1	VB5-L1	VB6-L1
VB7-L1	VB8-L1	VB9-L1
VB10-L1	VB11-L1	VB12-L1
VB13-L1	VB14-L1	VB15-L1
VB16-L1	VB17-L1	VB18-L1
VB19-L1		

AÇO	N	DIAM (mm)	QUANT	C.UNIT (cm)	C.TOTAL (cm)
CA60	1	5.0	597	95	56715
	2	5.0	78	115	8970
	3	5.0	164	135	22140
	4	5.0	33	155	5115
	5	5.0	10	898	8980
	6	5.0	1	118	118
	7	5.0	92	75	6900
	8	5.0	16	86	1376
CA50	9	6.3	6	720	4320
	10	6.3	6	893	5358
	11	6.3	6	727	4362
	12	6.3	6	638	3828
	13	6.3	6	1196	7176
	14	6.3	6	224	1344
	15	6.3	4	581	2324
	16	8.0	4	415	1660
	17	8.0	8	453	3624
	18	8.0	4	717	2868
	19	8.0	2	86	172
	20	8.0	1	748	748
	21	8.0	2	755	1510
	22	8.0	7	846	5922
	23	8.0	6	548	3288
	24	8.0	4	182	728
	25	8.0	2	196	392
	26	8.0	2	284	568
	27	8.0	3	636	1908
	28	8.0	1	690	690
	29	8.0	2	699	1398
	30	8.0	3	477	1431
	31	8.0	3	389	1167
	32	8.0	1	385	385
	33	8.0	1	977	977
	34	8.0	3	1198	3594
	35	8.0	1	244	244
	36	8.0	1	250	500
	37	8.0	4	431	1724
	38	8.0	2	186	372
	39	8.0	1	207	207
	40	8.0	2	210	420
	41	8.0	4	514	2056
	42	8.0	4	528	2112
	43	8.0	2	854	1708
	44	8.0	2	897	1794
	45	8.0	2	183	366
	46	8.0	2	202	404
	47	8.0	2	166	332
	48	8.0	2	194	388
	49	8.0	2	206	412
	50	8.0	2	767	1534
	51	8.0	2	789	1578
	52	8.0	1	311	1244
	53	8.0	4	437	1748
	54	8.0	4	1159	2236
	55	8.0	2	1157	2314
	56	10.0	1	267	267
	57	10.0	1	717	2151
	58	10.0	2	195	390
	59	10.0	2	309	618
	60	10.0	2	312	624
	61	10.0	2	742	1484
	62	10.0	2	749	1498
	63	10.0	4	312	1248
	64	10.0	2	910	1820
	65	10.0	1	222	222
	66	10.0	2	846	1692
	67	10.0	1	175	175
	68	10.0	8	548	4384
	69	10.0	2	1129	2258
	70	10.0	1	215	215
	71	10.0	2	563	1126
	72	10.0	3	336	1008
	73	12.5	2	733	1466
	74	12.5	2	741	1482
	75	12.5	2	895	1790
	76	12.5	2	899	1798
	77	12.5	2	904	1808
	78	12.5	1	282	282
	79	12.5	3	838	2514
	80	12.5	2	928	1856
	81	12.5	10	717	7170
	82	12.5	2	350	700
	83	12.5	2	246	492
	84	12.5	2	1159	2318
	85	12.5	2	763	1526
	86	12.5	2	787	1574
	87	12.5	4	548	2192
	88	12.5	4	570	2280
	89	12.5	4	794	3176
	90	12.5	2	318	636
	91	12.5	2	389	778
	92	12.5	2	1197	2394
	93	12.5	2	261	522
	94	12.5	2	361	722
	95	12.5	1	972	972
	96	12.5	2	1197	2394
	97	12.5	2	262	524

RESUMO DO AÇO

AÇO	DIAM (mm)	C.TOTAL (m)	PESO + 10% (kg)
CA50	6.3	287.1	77.3
	8.0	567.3	246.2
	10.0	219.8	149.1
	12.5	403.5	427.5
CA60	5.0	1103.1	187
PESO TOTAL (kg)			
CA50	900.1		
CA60	187		

Volume de concreto (C-30) = 12.99 m³
Área de forma = 210.97 m²

govbr
Documento assinado digitalmente
LUCAS FERNANDES DA SILVA GOLTARA
Data: 02/06/2026 07:29:51 -0300
Verifique em https://validar.iti.gov.br

QUADRO DE REVISÕES

Nº REVISÃO	DESCRIÇÃO	DATA
01	Correção de nomenclaturas em desenho, ajuste de detalhamento da laje e utilização de estacas em fundação de arquibancada.	10/05/2024

PREFEITURA MUNICIPAL DE SANTA TERESA

SERPENGE

PROJETO: PROJETO DE REFORMA E AMPLIAÇÃO
ENDEREÇO: ROD. JOSIL ESPÍNDOLA AGOSTINI, 46 - SANTA TERESA-ES
OBRA: EMEIEF PAULINO ROCON
CONTEÚDO: DETALHAMENTO DE VIGAS BALDRAME, VIGAS 1ª LAJE E VIGAS V201 - V205 OBSERVAÇÕES DE PROJETO
FASE DO PROJETO: PROJETO BÁSICO

Autor do Projeto: Eng. Lucas F. S. Goltara CREA ES-462270
Responsável técnico: Nilton Valerio Rosa Valadão CREA ES-042282/D
Engenheiro Coordenador: Daniel Pereira Silva CREA ES-011436/D
Proprietário do Projeto: Prefeitura Municipal de Santa Teresa
ESTRUTURAL
EQUIPE: NICOLE SCHNEIDER
ESCALA: Indicada
DATA: 13/02/2024
FOLHA Nº: EST-03

PMST
SECRETARIA DE PLANEJAMENTO E ASSUNTOS ESSTRATÉGICOS
REVISÃO: REV - 01

DWG: 2026C002-00 - E-DOCS - CÓPIA SIMPLES 10/07/2026 13:39 PÁGINA 1 / 2

INFORMAÇÕES DO DOCUMENTO
Documento capturado em 10/07/2026 13:39:23 (HORÁRIO DE BRASÍLIA - UTC-3)
por ADAUBERTO DO MEIRELES JUNIOR (GESTOR(A) DE PROJETOS - GEPLAN - SMPE - PMST)
Valor Legal: CÓPIA SIMPLES | Natureza: DOCUMENTO NATO-DIGITAL

A disponibilidade do documento pode ser conferida pelo link: https://e-docs.es.gov.br/d/2026-23C6QJ

2026-23C6QJ - E-DOCS - CÓPIA SIMPLES 10/07/2026 13:39 PÁGINA 2 / 2