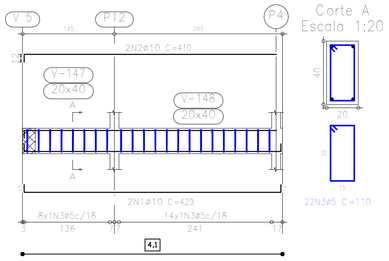
Térreo
Desenho de vigas
Concreto: C25, usina,rigor.
Aço: CA-50-A e CA-60-B
Escala vigas: 1:50
Escala seções: 1:20

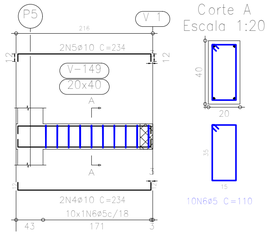
V 20
Escala 1:50



Corte A
Escala 1:20

22N3ø5 C=110

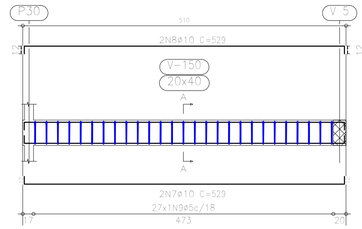
V 21
Escala 1:50



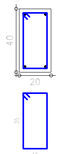
Corte A
Escala 1:20

10N6ø5 C=110

V 22
Escala 1:50

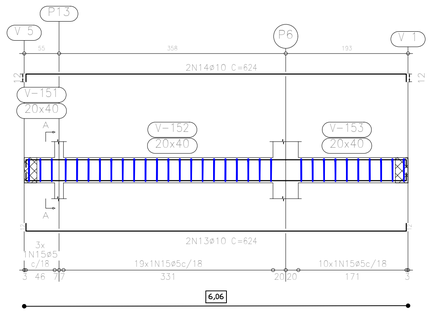


Corte A
Escala 1:20

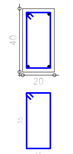


27N9ø5 C=110

V 23
Escala 1:50

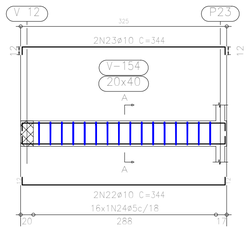


Corte A
Escala 1:20

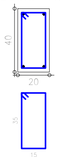


32N15ø5 C=110

V 24
Escala 1:50

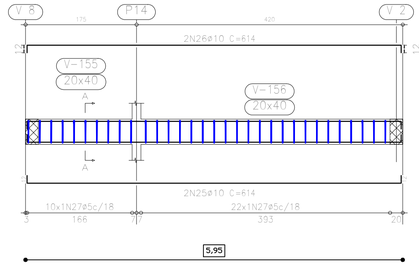


Corte A
Escala 1:20

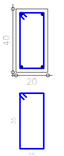


16N24ø5 C=110

V 25
Escala 1:50

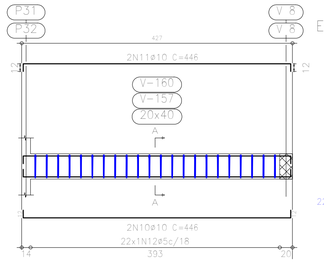


Corte A
Escala 1:20

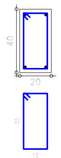


32N27ø5 C=110

V 26
V 28
Escala 1:50

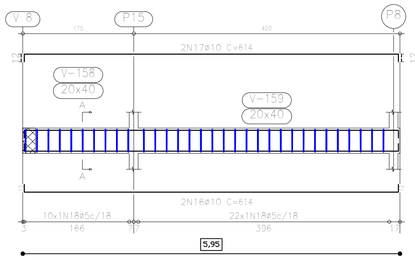


Corte A
Escala 1:20

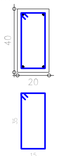


22N12ø5 C=110

V 27
Escala 1:50

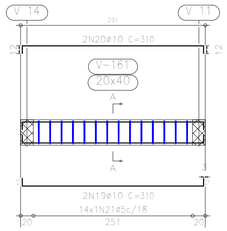


Corte A
Escala 1:20

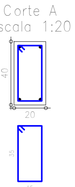


32N18ø5 C=110

V 29
Escala 1:50

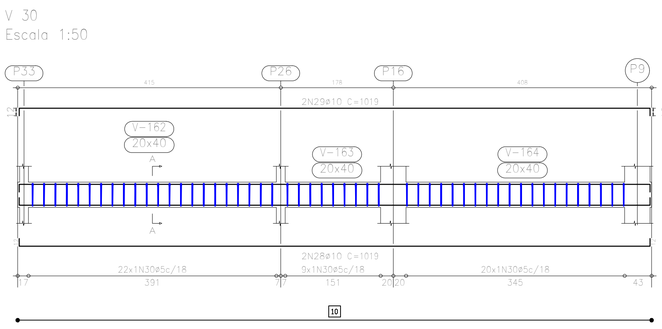


Corte A
Escala 1:20



14N21ø5 C=110

V 30
Escala 1:50

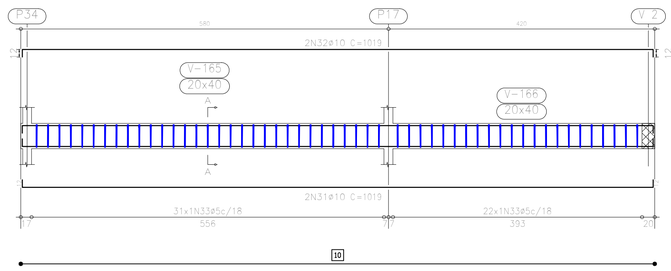


Corte A
Escala 1:20

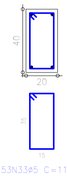


51N30ø5 C=110

V 31
Escala 1:50

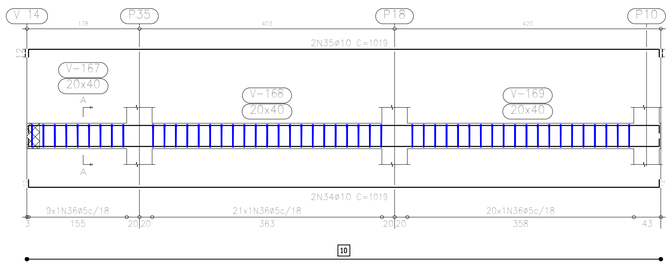


Corte A
Escala 1:20

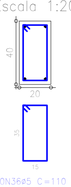


53N33ø5 C=110

V 32
Escala 1:50



Corte A
Escala 1:20



50N36ø5 C=110

Elemento	Pos.	Diam.	Q.	Dob. (cm)	Reta (cm)	Dob. (cm)	Comp. (cm)	Total (cm)	CA-50-A (kg)	CA-60-B (kg)
V 20	1	ø10	2	12	405	12	429	858	5,4	
	2	ø10	2	12	398		410	820	5,1	
	3	ø5	22				110	2420		3,8
								Total+10%	11,6	4,2
V 21	4	ø10	2	12	210	12	234	468	2,9	
	5	ø10	2	12	210	12	234	468	2,9	
	6	ø5	10				110	1100		1,7
								Total+10%	8,4	1,9
V 22	7	ø10	2	12	505	12	529	1058	6,6	
	8	ø10	2	12	505	12	529	1058	6,6	
	9	ø5	27				110	2970		4,7
								Total+10%	14,5	5,2
V 26=V 28	10	ø10	2	12	422	12	446	892	5,6	
	11	ø10	2	12	422	12	446	892	5,6	
	12	ø5	22				110	2420		3,8
								Total+10%	12,3	4,2
								(x2)	24,6	8,4
V 23	13	ø10	2	12	600	12	624	1248	7,8	
	14	ø10	2	12	600	12	624	1248	7,8	
	15	ø5	32				110	3520		5,5
								Total+10%	17,2	6,1
V 27	16	ø10	2	12	590	12	614	1228	7,7	
	17	ø10	2	12	590	12	614	1228	7,7	
	18	ø5	32				110	3520		5,5
								Total+10%	16,9	6,1
V 29	19	ø10	2	12	286	12	310	620	3,9	
	20	ø10	2	12	286	12	310	620	3,9	
	21	ø5	14				110	1540		2,4
								Total+10%	8,6	2,6
V 24	22	ø10	2	12	320	12	344	688	4,3	
	23	ø10	2	12	320	12	344	688	4,3	
	24	ø5	16				110	1760		2,8
								Total+10%	9,5	3,1
V 25	25	ø10	2	12	590	12	614	1228	7,7	
	26	ø10	2	12	590	12	614	1228	7,7	
	27	ø5	32				110	3520		5,5
								Total+10%	16,9	6,1
V 30	28	ø10	2	12	995	12	1019	2038	12,8	
	29	ø10	2	12	995	12	1019	2038	12,8	
	30	ø5	51				110	5610		8,8
								Total+10%	28,2	9,7
V 31	31	ø10	2	12	995	12	1019	2038	12,8	
	32	ø10	2	12	995	12	1019	2038	12,8	
	33	ø5	55				110	6830		9,2
								Total+10%	28,2	10,1
V 32	34	ø10	2	12	995	12	1019	2038	12,8	
	35	ø10	2	12	995	12	1019	2038	12,8	
	36	ø5	50				110	5500		8,6
								Total+10%	28,2	9,5
								ø5:	0,0	73,0
								ø10:	210,8	0,0
								Total:	210,8	73,0

HAMILTON LIMA PAULA:00251548694

Assinado de forma digital por HAMILTON LIMA PAULA:00251548694
Dados: 2026.08.06 13:16:07 -03'00'

PROP	ASS: HAMILTON LIMA PAULA – PREFEITO MUNICIPAL	PREFEITURA MUNICIPAL DE MARLIÉRIA/MG	ESCALA: INDICADAS
RT	ASS: LUIZ JOSE DE FREITAS:34506853687 (Assinado de forma digital por LUIZ JOSE DE FREITAS:34506853687 Dados: 2026.08.06 11:13:17 -03'00') LUIZ JOSÉ DE FREITAS – CREA MG 177.128/D	DATA:09/2026 VISTO	PROJETO: REGIONAL DE CAVA GRANDE
DES.	APROV.	APROV.	CONTEUDO: ARMAÇÃO DE VIGAS BALDRAME
CONF.:	DATA:		LOCALIDADE: CAVA GRANDE MARLIÉRIA – MG
			NÚMERO: FOLHA 06/15
			SEM ESCALA — ESTR.