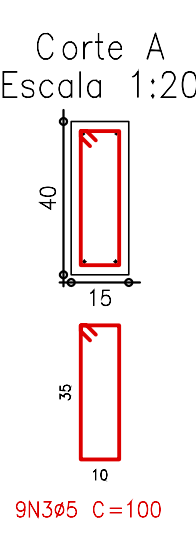
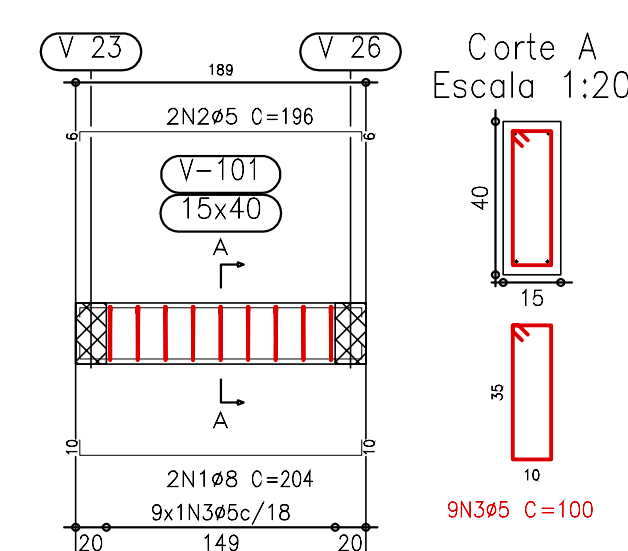
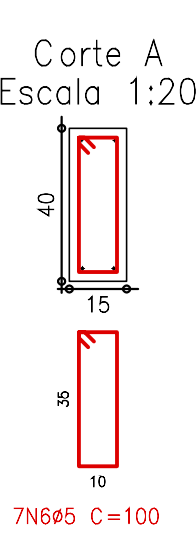
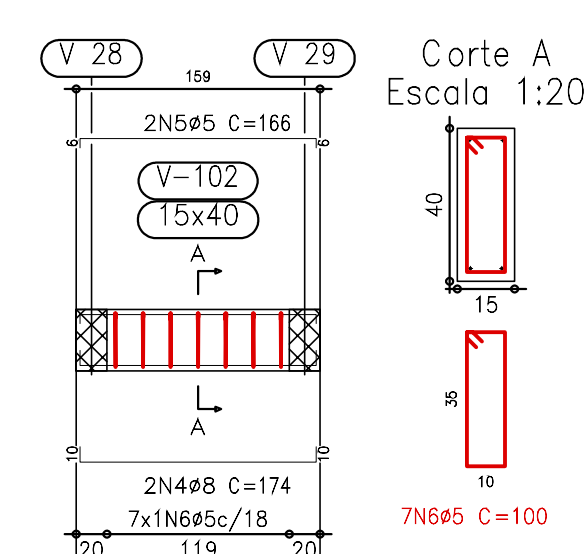


V 1
Escala 1:50

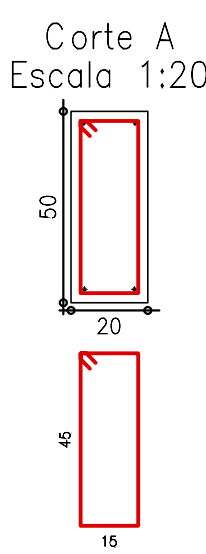
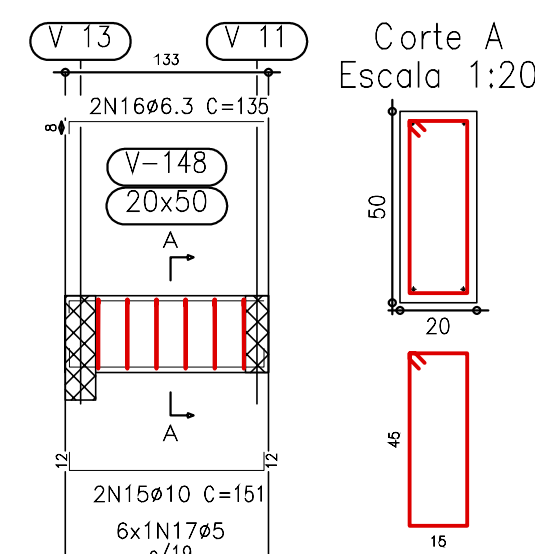


Terço
Onde as vigas
Concretos C25, em geral
Aço CA-50-A e CA-60-B
Escala vigas: 1:50
Escala seções: 1:20

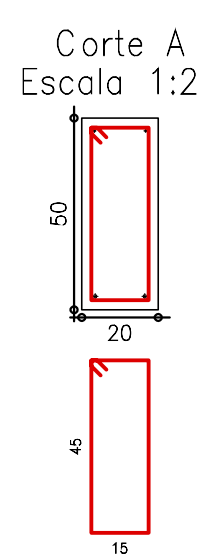
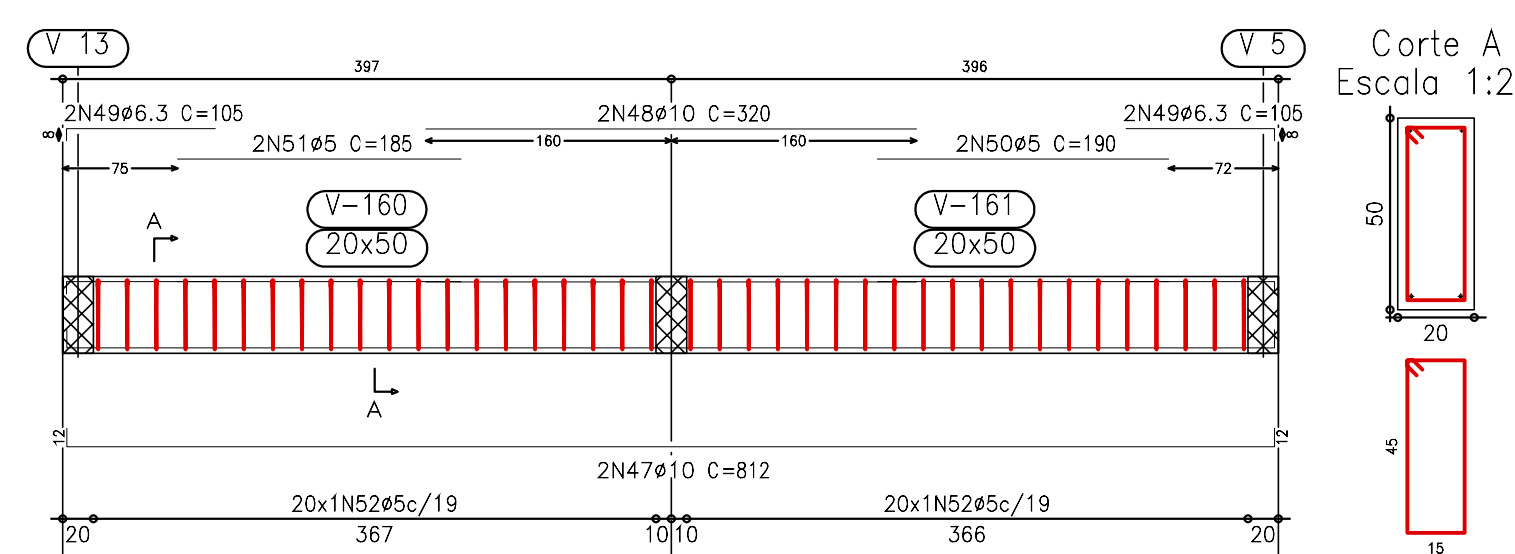
V 2
Escala 1:50



V 24
Escala 1:50

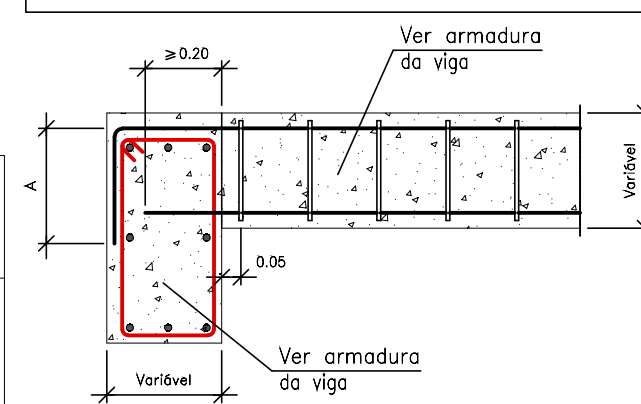


V 30
Escala 1:50



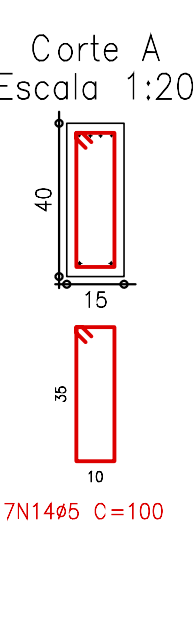
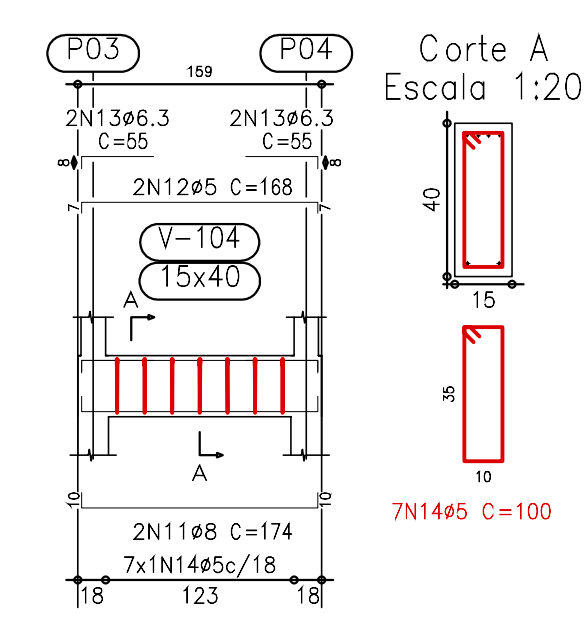
Resumo Aço Terraço Vigas	Comp. total (m)	Peso+10% (kg)	Total
CA-50-A	122.3	33	
Ø8	362.4	156	
Ø10	429.4	297	
Ø12.5	113.5	122	
Ø16	8.0	14	622
CA-60-B	1581.3	273	273
Total			895

Ligação entre viga rasa e viga alta.

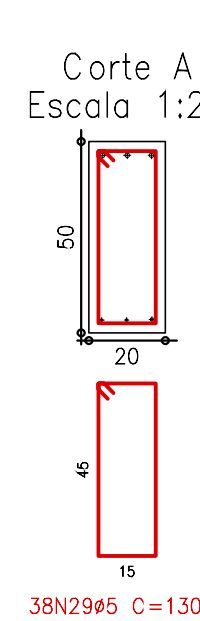
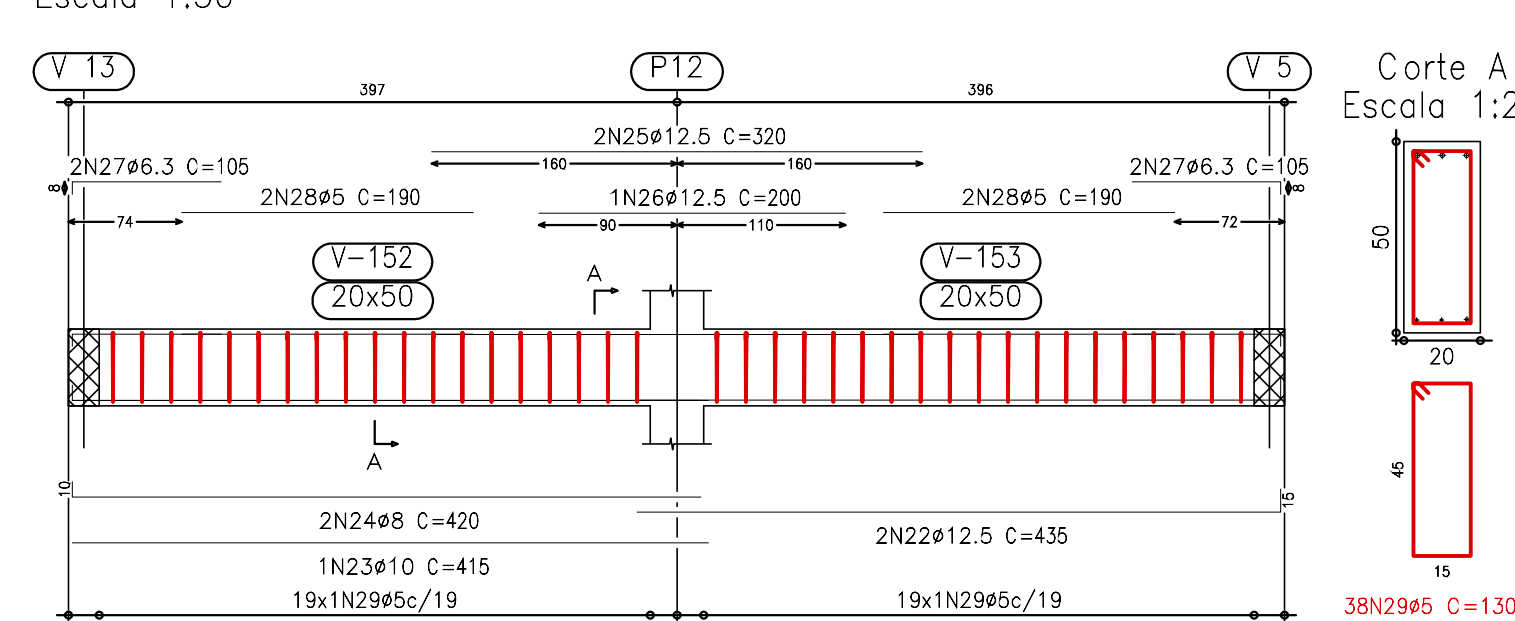


A: A dobra em função da
aplicação deve obedecer ao
art. 8.1.1 - parágrafo 3 do REBAP

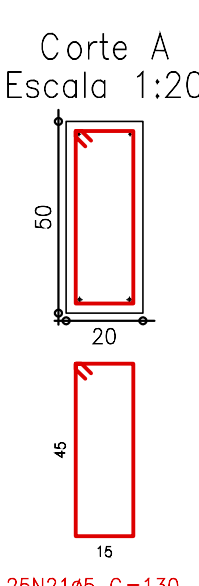
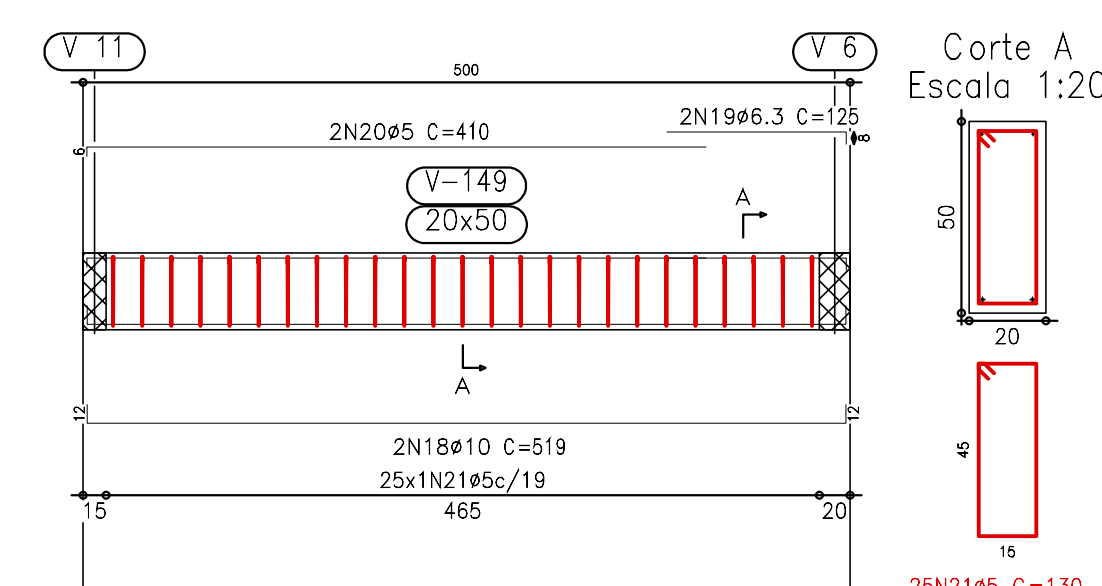
V 4
Escala 1:50



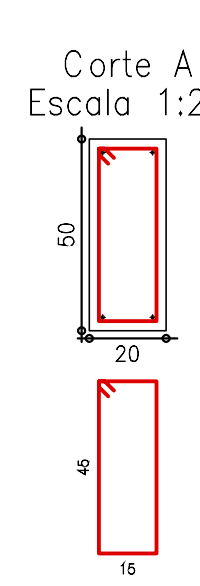
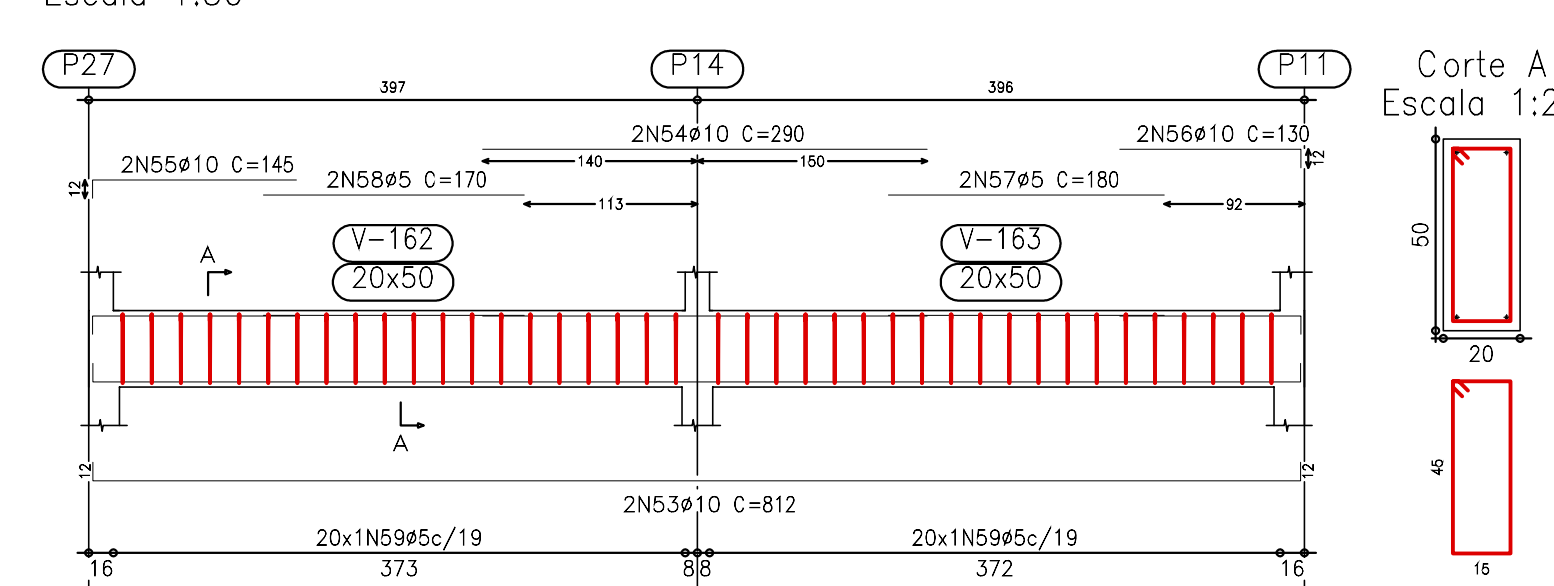
V 27
Escala 1:50



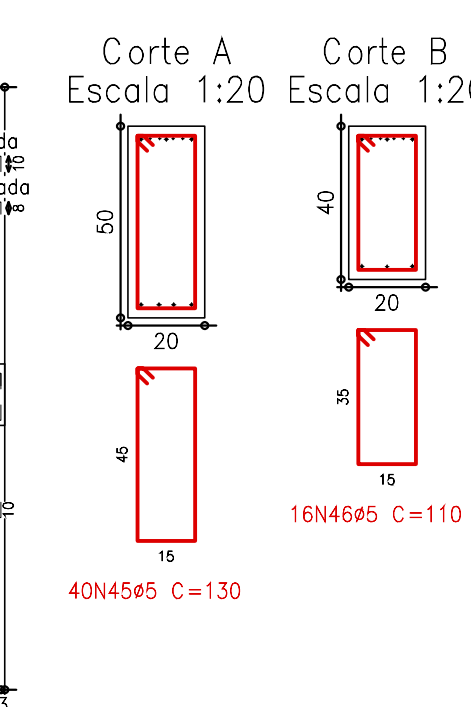
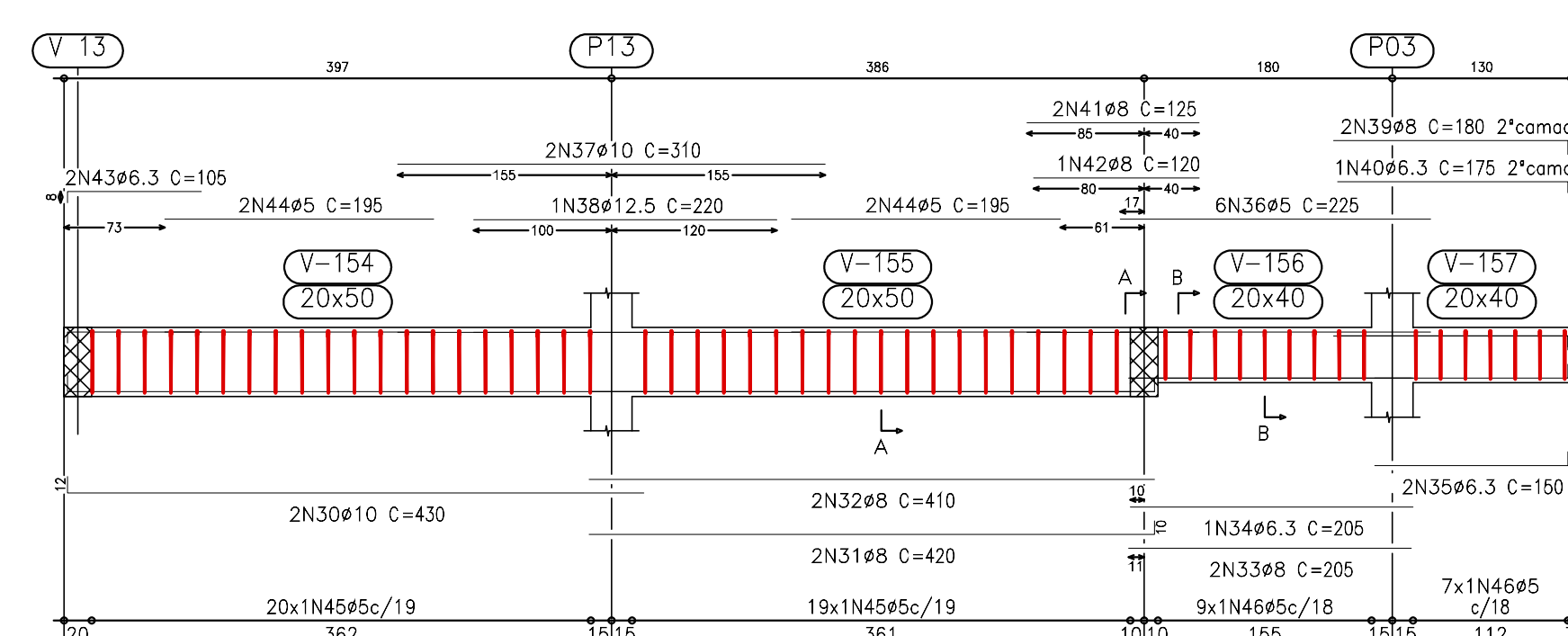
V 25
Escala 1:50



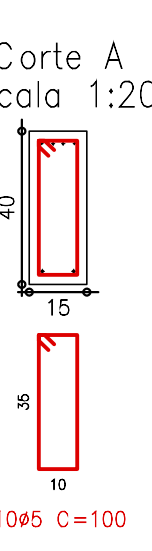
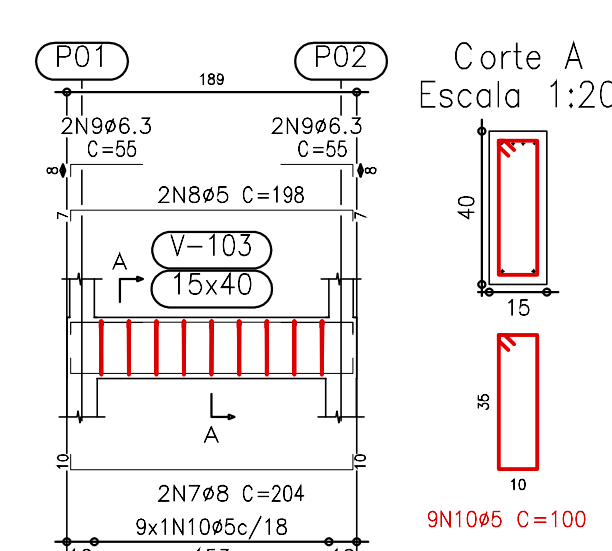
V 31
Escala 1:50



V 28
Escala 1:50



V 3
Escala 1:50



Elemento	Pos.	Diam.	Q.	Dob. (cm)	Reto (cm)	Dob. (cm)	Comp. (cm)	Total (cm)	CA-50-A (kg)	CA-60-B (kg)
V 1	1	Ø8	2	10	184	10	204	408	1.6	0.6
	2	Ø8	2	6	184	6	186	332		1.4
	3	Ø8	9				100	900		2.2
								Total+10%	1.8	
V 2	4	Ø8	2	10	154	10	174	348	1.4	
	5	Ø8	2	6	154	6	166	332		0.6
	6	Ø8	7				100	700		1.1
								Total+10%	1.5	1.8
V 3	7	Ø8	2	10	184	10	204	408	1.6	
	8	Ø8	2	7	184	7	186	396		0.6
	9	Ø8	4				55	220		0.5
	10	Ø8	5				100	900		1.4
								Total+10%	2.3	2.2
V 4	11	Ø8	2	10	154	10	174	348	1.4	
	12	Ø8	2	7	154	7	166	336		0.6
	13	Ø8	4				55	220		0.5
	14	Ø8	5				100	700		1.1
								Total+10%	2.1	1.8
V 24	15	Ø10	2	12	127	12	151	302	1.9	
	16	Ø6.3	2	8	127	8	130	270		0.7
	17	Ø5	5				130	650		1.2
								Total+10%	2.9	1.3
V 25	18	Ø10	2	12	495	12	519	1038	6.5	
	19	Ø6.3	2	8	117	8	125	250		0.6
	20	Ø5	2	6	404		410	820		1.3
	21	Ø5	25				130	3250		6.1
								Total+10%	7.8	7.0
V 27	22	Ø12.5	2		420	15	435	870	8.5	
	23	Ø10	1		415		415	415	2.6	
	24	Ø8	2	10	410		420	840	3.3	
	25	Ø12.5	2		200		200	400	6.3	
	26	Ø12.5	1		200		200	200	2.0	
	27	Ø6.3	4	8	97		105	420	1.0	
	28	Ø5	4		190		190	760		1.2
	29	Ø5	38				130	4940		7.8
								Total+10%	26.1	9.9
V 28	30	Ø10	2	12	418		430	860	5.4	
	31	Ø8	2		410	10	420	840	3.3	
	32	Ø8	2		410		410	820	3.2	
	33	Ø8	2		205		205	410	1.6	
	34	Ø6.3	1		205		205	205	0.5	
	35	Ø6.3	2		140	10	150	300	0.7	
	36	Ø5	6		225		225	1350		2.1
	37	Ø10	2		310		310	620	3.9	
	38	Ø12.5	1		200		200	200	2.2	
	39	Ø8	2		170	10	180	360	1.4	
	40	Ø6.3	1		167	8	175	350	0.4	
	41	Ø8	2		125		125	250	1.0	
	42	Ø8	1		120		120	120	0.5	
	43	Ø6.3	2		8	97	105	210	0.5	
	44	Ø5	4		185		185	740		1.2
	45	Ø5	39				130	5070		8.0
	46	Ø5	16				110	1760		2.8
								Total+10%	27.1	16.5
V 30	47	Ø10	2	12	788	12	812	1624	10.2	
	48	Ø10	2		320		320	640	4.0	
	49	Ø6.3	4	8	97		105	420	1.0	
	50	Ø5	2		180		180	360		0.6
	51	Ø5	2		185		185	370		0.6
	52	Ø5	40				130	5200		8.2
								Total+10%	16.7	10.3
V 31	53	Ø10	2	12	788	12	812	1624	10.2	
	54	Ø10	2		290		290	580	3.6	
	55	Ø10	2	12	133		145	290	1.8	
	56	Ø10	2		118	12	130	260	1.6	
	57	Ø5	2		180		180	360		0.6
	58	Ø5	2		170		170	340		0.5
	59	Ø5	40				130	5200		8.2
								Total+10%	18.9	10.2
								Ø5:	0.0	62.2
								Ø6.3:	7.0	0.0
								Ø8:	22.4	0.0
								Ø10:	56.8	0.0
								Ø12.5:	21.0	0.0
								Total:	107.2	62.2

NOTAS:

- 1- Dimensões em centímetros
- 2- Concreto: FCK 25.0>=MPa (UTILIZAR PLASTIFICANTE)
α/c= 0.55
- 3- Aço CA-50 FVK >= 500,0MPa;
- 4- Cobrimento (C.A.A. 1) mínimo: >= Laje cm 2,0
>= Vigas/pilares 2.5cm
>= Sapatas 5.0cm
- 5- Raio de dobramento: BARRAS >= 5,0α
ESTRIBOS >= 6,0α.
- 6- As emendas por transpasse deverão ter no mínimo 60α
- 7- Solo: β >= 0,20 MPa
- 8- Este projeto foi desenvolvido em conformidade com a
NBR 6118/07.
devem respeitar a mesma norma da ABNT
- 9- As medidas serão conferidas no local pelo responsável
na execução. Eventuais omissões ou adaptações

REVISÃO DATA MODIFICAÇÃO

UERJ - LCR



OBRA LCR - UERJ	ESCALA Indicada
FASE PROJETO ESTRUTURAL	DATA NOV/2017
PROJETO Viga Armação	SERVIÇO ARMA01

VISTO DATA 23

MARC ENGENHARIA & PROJETOS RESPONSÁVEL TÉCNICO: JULIO CERVEIRA Jr. CREA 187580 - PR

UNIVERSIDADE DO ESTADO DO RIO DE JANEIRO
PREFEITURA DOS CAMPI/DEMOP

Obra: PAV. HAROLD O. DA CUNHA - ANEXO	Projeto por: Francisca 01/01
Unidade: LCR - LABORATÓRIO DE CIÊNCIAS RADIOLOGICAS	Escala: INDICADA
Projeto: ESTRUTURAS	DATA: NOV/2017
Assinatura: ARMAÇÃO DAS VIGAS 1	Desenhista

PHL AR 24