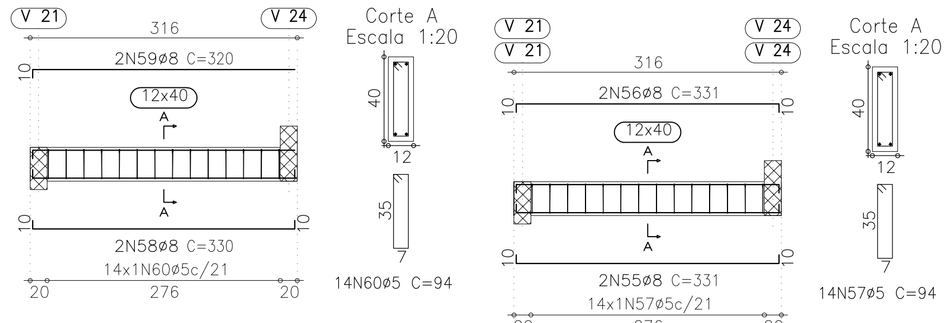
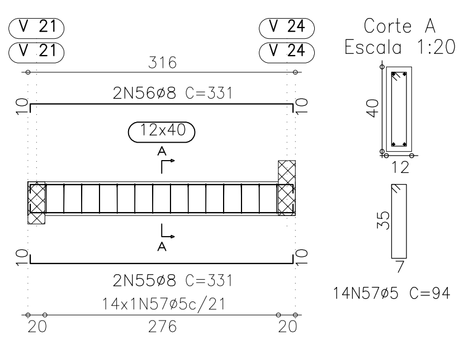
NÍVEL-C VIGAS SUPORTE/RESERV.
Desenho de vigas
Concreto: C25, em geral
Aço: CA-50-A e CA-60-B
Escala vigas: 1:50
Escala seções: 1:20

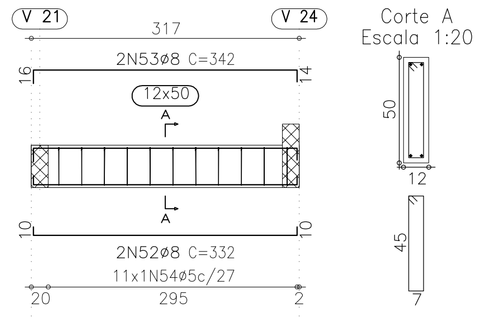
V c13
Escala 1:50



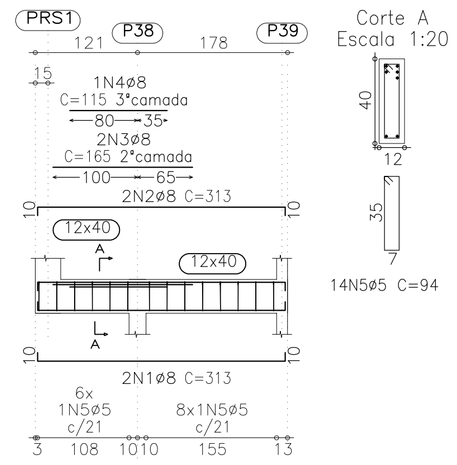
V c14
V c15
Escala 1:50



V c16
Escala 1:50

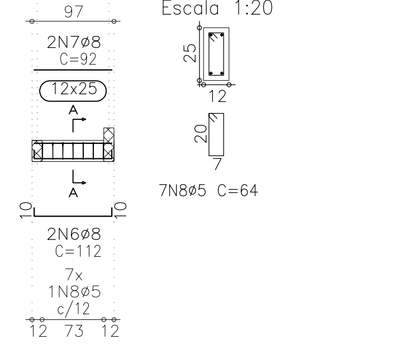


V c17
Escala 1:50

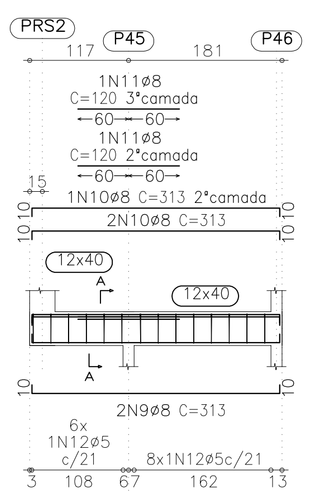


Pilar ou muro apoiado:PRS1
Ver esperas no detalhamento de pilares ou vista de muros

V c18
Escala 1:50

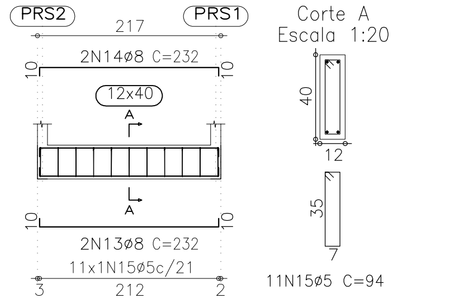


V c19
Escala 1:50



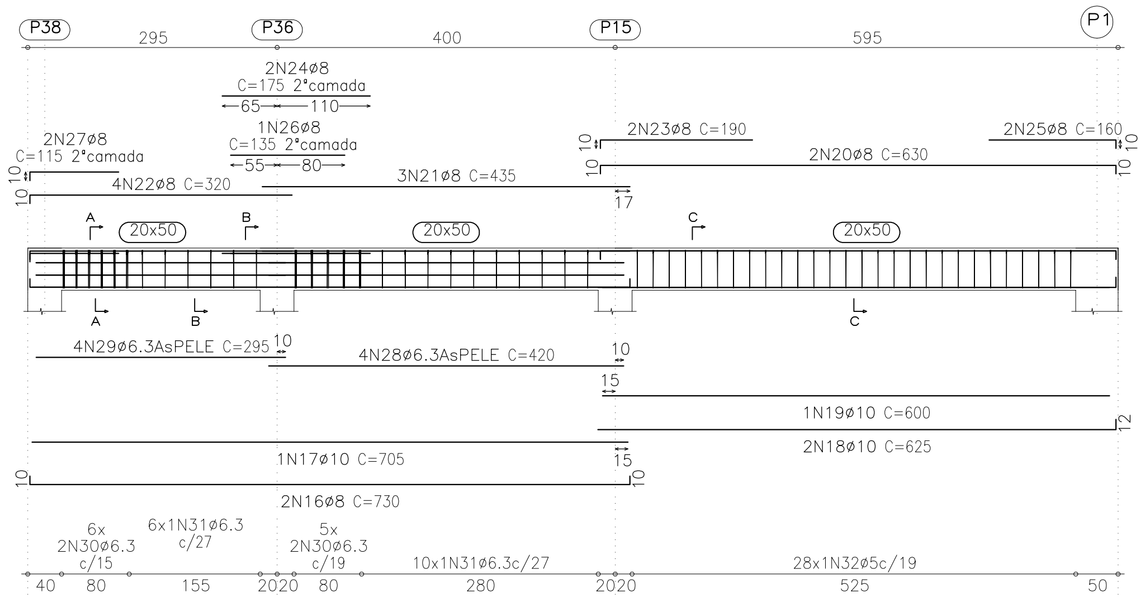
Pilar ou muro apoiado:PRS2
Ver esperas no detalhamento de pilares ou vista de muros

V c20
Escala 1:50



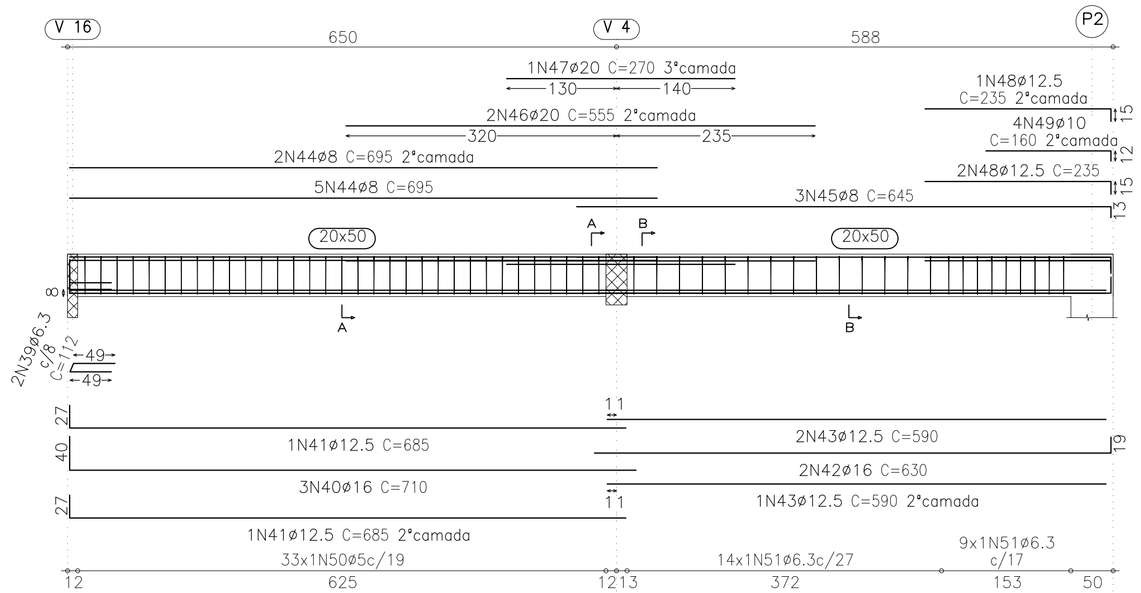
Pilar ou muro apoiado:PRS2 e PRS1
Ver esperas no detalhamento de pilares ou vista de muros

V c21
Escala 1:50

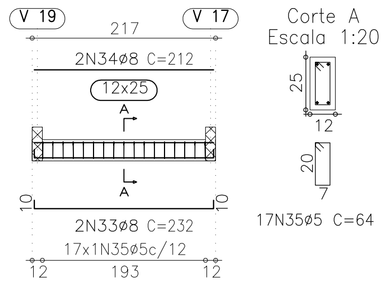


NÍVEL-D VIGAS RESP/RESERV.
Desenho de vigas
Concreto: C25, em geral
Aço: CA-50-A e CA-60-B
Escala vigas: 1:50
Escala seções: 1:20

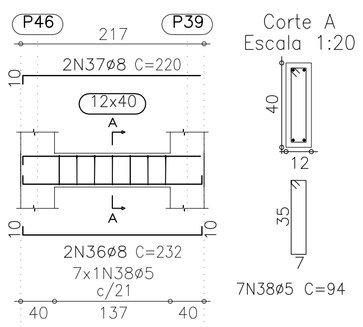
V c24
Escala 1:50



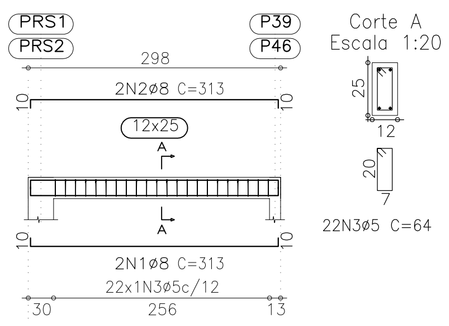
V c22
Escala 1:50



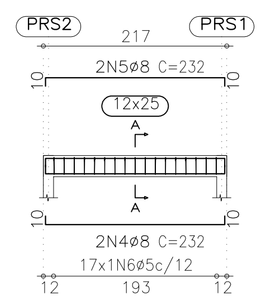
V c23
Escala 1:50



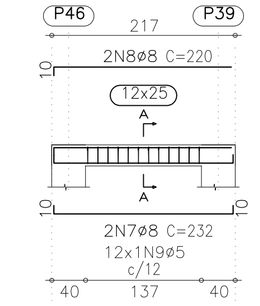
V d1
V d2
Escala 1:50



V d3
Escala 1:50



V d4
Escala 1:50



Elemento	Pos.	Diam.	Q.	Dob. (cm)	Reta (cm)	Dob. (cm)	Comp. (cm)	Total (cm)	CA-50-A (kg)	CA-60-B (kg)
V c17	1	ø8	2	10	293	10	313	626	2.5	
	2	ø8	2	10	293	10	313	626	2.5	
	3	ø8	2		165		165	330	1.3	
	4	ø8	1		115		115	115	0.5	
	5	ø5	14				94	1316		2.1
								Total+10%	7.5	2.3
V c18	6	ø8	2	10	92	10	112	224	0.9	
	7	ø8	2		92		92	184	0.7	
	8	ø5	7				64	448		0.7
								Total+10%	1.8	0.8
V c19	9	ø8	2	10	293	10	313	626	2.5	
	10	ø8	3	10	293	10	313	939	3.7	
	11	ø8	2		120		120	240	0.9	
	12	ø5	14				94	1316		2.1
								Total+10%	7.8	2.3
V c20	13	ø8	2	10	212	10	232	464	1.8	
	14	ø8	2	10	212	10	232	464	1.8	
	15	ø5	11				94	1034		1.6
								Total+10%	4.0	1.8
V c21	16	ø8	2	10	710	10	730	1460	5.7	
	17	ø10	1		705		705	705	4.4	
	18	ø10	2		613	12	625	1250	7.9	
	19	ø10	1		600		600	600	3.8	
	20	ø8	2	10	610	10	630	1260	4.9	
	21	ø8	3		435		435	1305	5.1	
	22	ø8	4	10	310		320	1280	5.0	
	23	ø8	2	10	180		190	380	1.5	
	24	ø8	2		175		175	350	1.4	
	25	ø8	2		150	10	160	320	1.3	
	26	ø8	1		135		135	135	0.5	
	27	ø8	2	10	105		115	230	0.9	
	28	ø6.3	4		420		420	1680	4.2	
	29	ø6.3	4		295		295	1180	2.9	
	30	ø6.3	22				123	2706	6.7	
	31	ø6.3	16				133	2128	5.3	
	32	ø5	28				130	3640		5.7
								Total+10%	67.7	6.3
V c22	33	ø8	2	10	212	10	232	464	1.8	
	34	ø8	2		212		212	424	1.7	
	35	ø5	17				64	1088		1.7
								Total+10%	3.9	1.9
V c23	36	ø8	2	10	212	10	232	464	1.8	
	37	ø8	2	10	210		220	440	1.7	
	38	ø5	7				94	658		1.0
								Total+10%	3.9	1.1
V c24	39	ø6.3	2	49	14	49	112	224	0.6	
	40	ø16	3	40	670		710	2130	33.4	
	41	ø12.5	2	27	658		685	1370	13.4	
	42	ø16	2		611	19	630	1260	19.8	
	43	ø12.5	3		590		590	1770	17.4	
	44	ø8	7		695		695	4865	19.1	
	45	ø8	3		632	13	645	1935	7.6	
	46	ø20	2		555		555	1110	27.4	
	47	ø20	1		270		270	270	6.7	
	48	ø12.5	3		220	15	235	705	6.9	
	49	ø10	4		148	12	160	640	4.0	
	50	ø5	33				130	4290		6.7
	51	ø6.3	23				133	3059	7.6	
								Total+10%	180.3	7.4
V c16	52	ø8	2	10	312	10	332	664	2.6	
	53	ø8	2	16	312	14	342	684	2.7	
	54	ø5	11				114	1254		2.0
								Total+10%	5.8	2.2
V c14=V c15	55	ø8	2	10	311	10	331	662	2.6	
	56	ø8	2	10	311	10	331	662	2.6	
	57	ø5	14				94	1316		2.1
								Total+10%	5.7	2.3
								(x2)	11.4	4.6
V c13	58	ø8	2	10	310	10	330	660	2.6	
	59	ø8	2	10	310		320	640	2.5	
	60	ø5	14				94	1316		2.1
								Total+10%	5.6	2.3
								ø5:	0.0	33.0
								ø6.3:	30.1	0.0
								ø8:	110.0	0.0
								ø10:	22.1	0.0
								ø12.5:	41.5	0.0
								ø16:	58.5	0.0
								ø20:	37.5	0.0
								Total:	299.7	33.0

Elemento	Pos.	Diam.	Q.	Dob. (cm)	Reta (cm)	Dob. (cm)	Comp. (cm)	Total (cm)	CA-50-A (kg)	CA-60-B (kg)
V d1=V d2	1	ø8	2	10	293	10	313	626	2.5	
	2	ø8	2	10	293	10	313	626	2.5	
	3	ø5	22				64	1408		2.2
								Total+10%	5.5	2.4
								(x2)	11.0	4.8
V d3	4	ø8	2	10	212	10	232	464	1.8	
	5	ø8	2	10	212	10	232	464	1.8	
	6	ø5	17				64	1088		1.7
								Total+10%	4.0	1.9
V d4	7	ø8	2	10	212	10	232	464	1.8	
	8	ø8	2	10	210		220	440	1.7	
	9	ø5	12				64	768		1.2
								Total+10%	3.9	1.3
								ø5:	0.0	8.0
								ø8:	18.9	0.0
								Total:	18.9	8.0

Resumo Aço NÍVEL-D VIGAS RESP/RESERV. Vigas		Comp. total (m)	Peso+10% (kg)	Total
CA-50-A	ø8	43.4	19	19
CA-60-B	ø5	46.7	8	8
Total				27

CONTEÚDO:
ARMAÇÃO VIGAS SUPORTE-RESERVATÓRIO (02)
ARMAÇÃO VIGAS RESPALDO-RESERVATÓRIO

Nº	DATA	REVISÃO	EXECUTADO	APROVADO	DESENHOS DE REFERÊNCIA	NÚMEROS

CONTRATANTE
VISTO E ACEITO
ESTA ACEITAÇÃO NÃO ISENTA A CONTRATADA DAS RESPONSABILIDADES E OBRIGAÇÕES ESTABELECIDAS NO CONTRATO
ANALISADO
ACEITO
VISTO

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Rua Jatai, 711 - Nova Bandeirantes - CEP 79.086 - 330
Campo Grande - MS - Fone: (67) 3042.9684
e-mail: wrj@2wlengenharia.com.br
RESP. TÉCNICO
Engº Civil - Walter Radich Júnior
CREA nº 8.039/D - MS
VISTO
RESP. TÉCNICO
Engº Civil - Luiz André Radich
CREA nº 15.500/D - MS
VISTO

DATA: AGOSTO/2016
ESCALA: INDICADA
ART: 1320160003214
PRANCHA Nº: 06/20

TRIBUNAL REGIONAL ELEITORAL MATO GROSSO DO SUL
CARTÓRIO ELEITORAL - CASSILÂNDIA/MS
PROJETO ESTRUTURAL
ARMAÇÃO VIGAS SUPORTE-RESERVATÓRIO (02)
ARMAÇÃO VIGAS RESPALDO-RESERVATÓRIO
REVISÃO 0

LOCAL: RUA OLIMPIO DIAS DOS SANTOS - QUADRA "F" - LOTES 01,04 e 28
LOTEAMENTO ALTO IZANÓPOLIS

CONFERIR MEDIDAS NO LOCAL DA OBRA