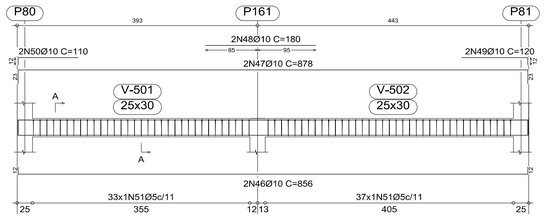
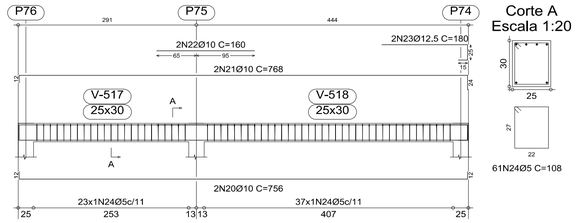
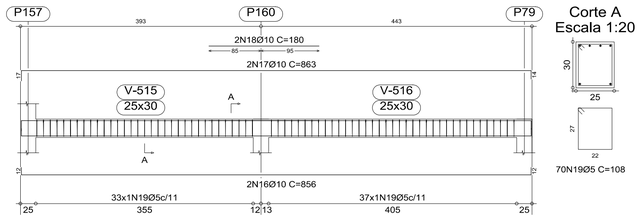
V A501
Escala 1:50



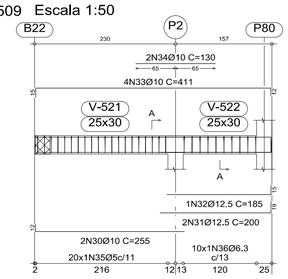
V A507
Escala 1:50



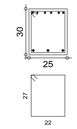
V A506
Escala 1:50



V A509 Escala 1:50

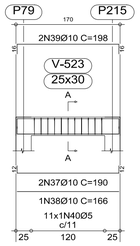


Corte A
Escala 1:20

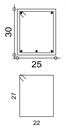


20N35Ø5 C=108
10N36Ø6.3 C=111

V A510 Escala 1:50

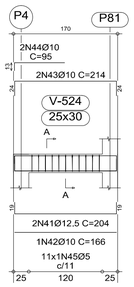


Corte A
Escala 1:20

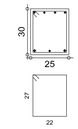


11N40Ø5 C=108

V A511
Escala 1:50

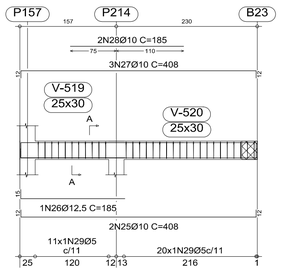


Corte A
Escala 1:20

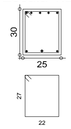


11N45Ø5 C=108

V A508
Escala 1:50

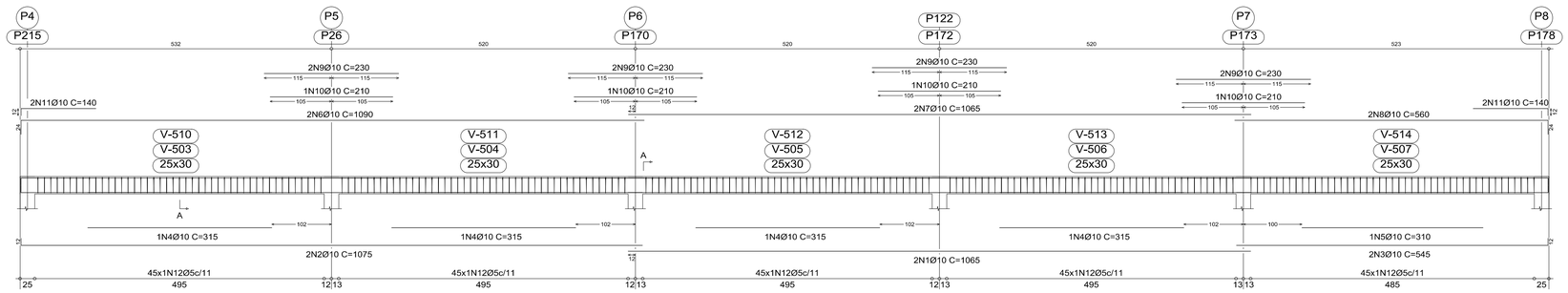


Corte A
Escala 1:20

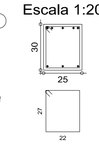


31N29Ø5 C=108

V A502
V A505
Escala 1:50

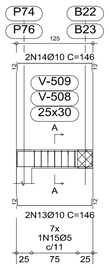


Corte A
Escala 1:20

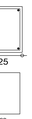


225N12Ø5 C=108

V A503
V A504
Escala 1:50



Corte A
Escala 1:20



7N15Ø5 C=108

Elemento	Pos.	Diam.	Q.	Dob. (cm)	Reta (cm)	Dob. (cm)	Comp. (cm)	Total (cm)	CA-50-A (kg)	CA-60-B (kg)
V A502=V A505	1	Ø10	2		1065		1065	2130	13.4	
	2	Ø10	2	12	1063		1075	2150	13.5	
	3	Ø10	2		533	12	545	1090	6.8	
	4	Ø10	4		315		315	1260	7.9	
	5	Ø10	1		310		310	310	1.9	
	6	Ø10	2	24	1066		1090	2180	13.7	
	7	Ø10	2		1065		1065	2130	13.4	
	8	Ø10	2		536	24	560	1120	7.0	
	9	Ø10	8		230		230	1840	11.6	
	10	Ø10	4		210		210	840	5.3	
	11	Ø10	4	12	128		140	560	3.5	
	12	Ø5	225				108	24300		38.2
								Total+10%:	107.8	42.0
								(x2):	215.6	84.0
V A503=V A504	13	Ø10	2	12	122	12	146	292	1.8	
	14	Ø10	2	12	122	12	146	292	1.8	
	15	Ø5	7				108	756		1.2
								Total+10%:	4.0	1.3
								(x2):	8.0	2.6
V A506	16	Ø10	2	12	832	12	856	1712	10.8	
	17	Ø10	2	17	832	14	863	1726	10.8	
	18	Ø10	2		180		180	360	2.3	
	19	Ø5	70				108	7560		11.9
								Total+10%:	26.3	13.1
V A507	20	Ø10	2	12	732	12	756	1512	9.5	
	21	Ø10	2	12	732	24	768	1536	9.6	
	22	Ø10	2		160		160	320	2.0	
	23	Ø12.5	2		140	40	180	360	3.5	
	24	Ø5	60				108	6480		10.2
								Total+10%:	27.1	11.2
V A508	25	Ø10	2	12	384	12	408	816	5.1	
	26	Ø12.5	1	15	170		185	185	1.8	
	27	Ø10	3	12	384	12	408	1224	7.7	
	28	Ø10	2		185		185	370	2.3	
	29	Ø5	31				108	3348		5.3
								Total+10%:	18.6	5.8
V A509	30	Ø10	2	12	243		255	510	3.2	
	31	Ø12.5	2		181	19	200	400	3.9	
	32	Ø12.5	1		170	15	185	185	1.8	
	33	Ø10	4	15	384	12	411	1644	10.3	
	34	Ø10	2		130		130	260	1.6	
	35	Ø5	20				108	2160		3.4
	36	Ø6.3	10				111	1110	2.7	
								Total+10%:	25.9	3.7
V A510	37	Ø10	2	12	166	12	190	380	2.4	
	38	Ø10	1		166		166	166	1.0	
	39	Ø10	2	16	166	16	198	396	2.5	
	40	Ø5	11				108	1188		1.9
								Total+10%:	6.5	2.1
V A511	41	Ø12.5	2	19	166	19	204	408	4.0	
	42	Ø10	1		166		166	166	1.0	
	43	Ø10	2	24	166	24	214	428	2.7	
	44	Ø10	2	13	82		95	190	1.2	
	45	Ø5	11				108	1188		1.9
								Total+10%:	9.8	2.1
V A501	46	Ø10	2	12	832	12	856	1712	10.8	
	47	Ø10	2	23	832	23	878	1756	11.0	
	48	Ø10	2		180		180	360	2.3	
	49	Ø10	2		108	12	120	240	1.5	
	50	Ø10	2	12	98		110	220	1.4	
	51	Ø5	70				108	7560		11.9
								Total+10%:	29.7	13.1
								Ø5:	0.0	137.7
								Ø6,3:	3.0	0.0
								Ø10:	347.9	0.0
								Ø12.5:	16.6	0.0
								Total:	367.5	137.7

Resumo Aço APOIO DA COBERTURA Vigas		Comp. total (m)	Peso+10% (kg)	Total
CA-50-A	Ø6.3	11.1	3	
	Ø10	503.9	348	
	Ø12.5	15.4	17	368
CA-60-B	Ø5	796.0	137	137
Total				505

APOIO DA COBERTURA
Desenho de vigas
Concreto: C20, em geral
Aço: CA-50-A e CA-60-B
Escala vigas: 1:50
Escala seções: 1:20

REVISÕES			
NR.	-	AUTOR	DATA
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-

PARA APROVAÇÃO	ASS:	DATA:	ORDEM DE SERVIÇO: 01618
X LIBERADO P/ FABRICAÇÃO	ASS: ENG. REINALDO	DATA: 16/08/2010	

CONNECT DESIGN
TODOS OS DIREITOS RESERVADOS
PROIBIDA A REPRODUÇÃO SEM AUTORIZAÇÃO PRÉVIA

CONNECT TECNOLOGIA EM PROJETOS
Rua João Passos, 1880 - CEP 18602-140
Botucatu - SP
Fone/Fax + 55 14 3815-1873 / 3813-4563
connect@connectdesign.com.br
www.connectdesign.com.br
CREA: 1161900

Des: ENG. REINALDO	Data: 16/08/2010		
Proj.: CONNECT	Data: 16/08/2010		
Dimensões: CM	Arquivo: STR-01618-045-REV00		

ASSESSORIA TÉCNICA DE PLANEJAMENTO
E ENGENHARIA
HOSPITAL DAS CLÍNICAS
UNESP - Campus de Botucatu - Distrito de Rubião Junior , S/N
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Tel. (14) 3811-6215 | 3811-6218 | 3811-6050 | www.hcfmb.unesp.br

OBRA: AMPLIAÇÃO DO AMBULATÓRIO MÉDICO DE ESPECIALIDADES		ESTRUTURAL
LOCAL: HOSPITAL DAS CLÍNICAS - BOTUCATU	REVISÃO: 00	FOLHA: 45/56
PRANCHA: VIGAS DO APOIO DAS TESOURAS - SETOR A- COTA 104.50	ESCALAS: 1:50	