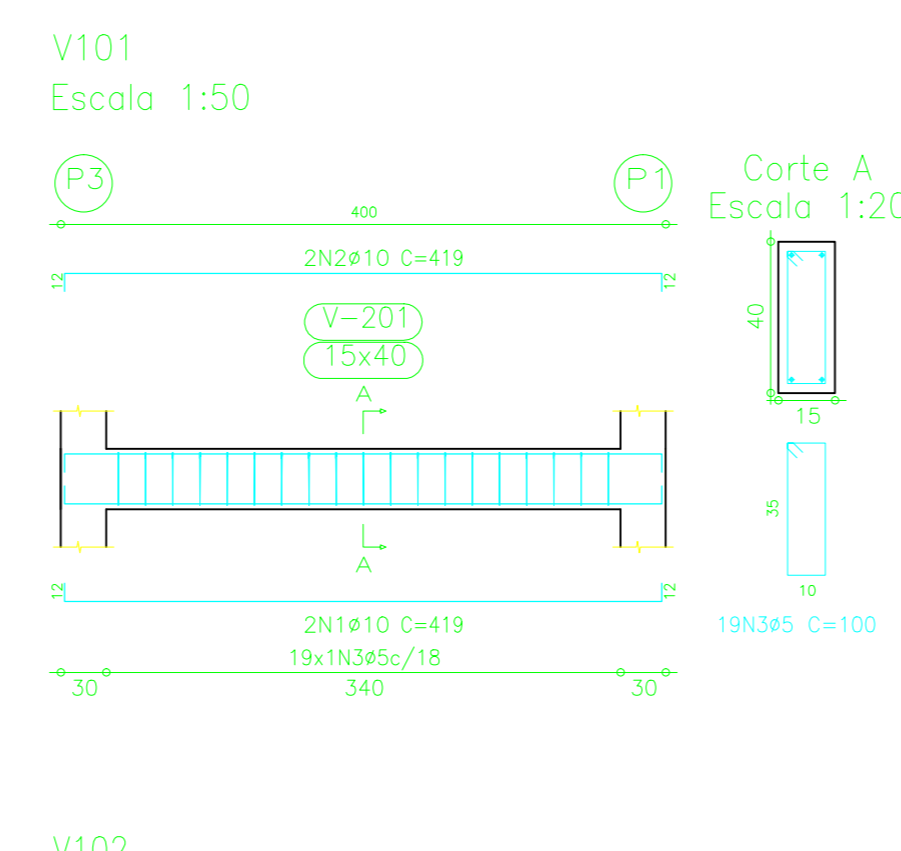


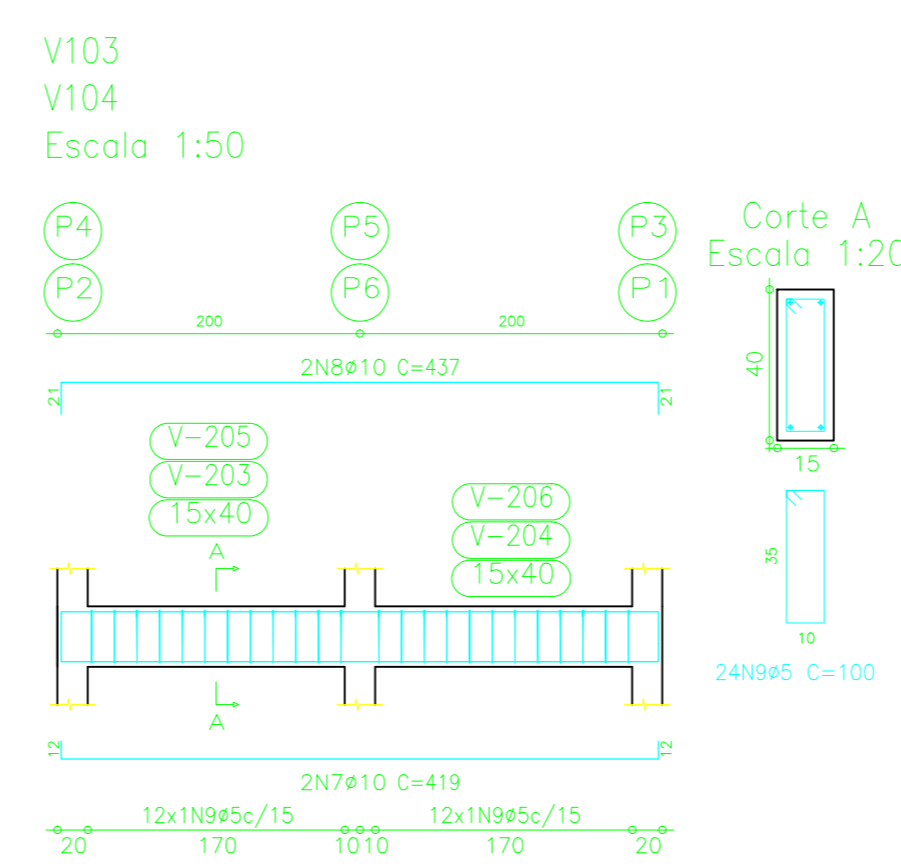
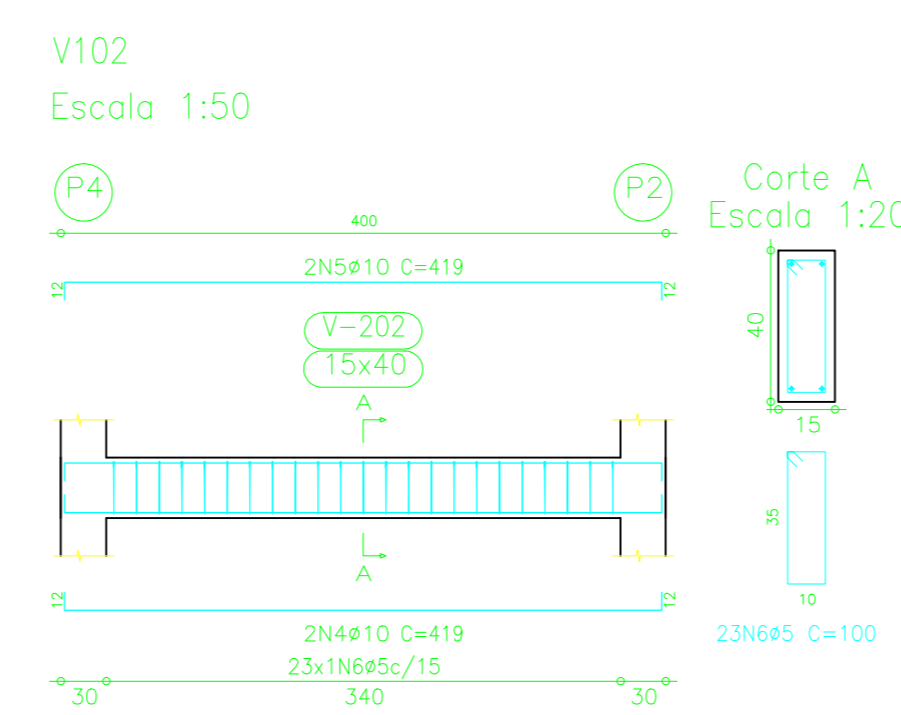
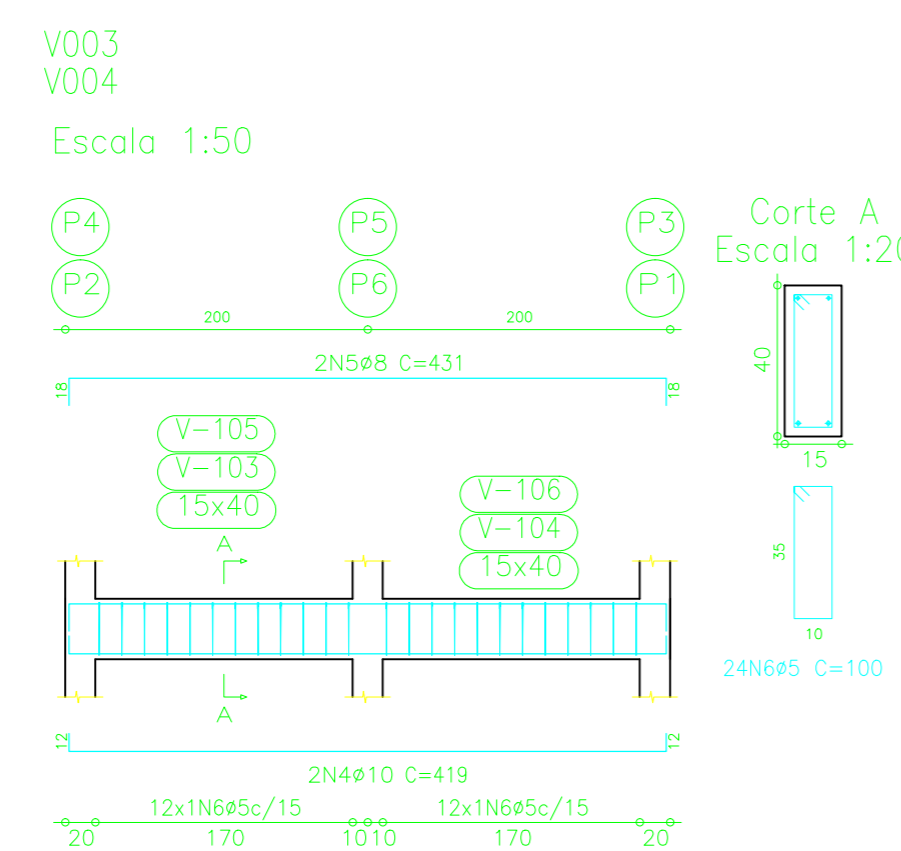
Baldrames
Desenho de vigas
Concreto: C20, em geral
Aço: CA-50-A e CA-60-B
Escala vigas: 1:50
Escala seções: 1:20

Resumo Aço	Comp. total (m)	Peso+10% (kg)	Total
CA-50-A-φ8	34.0	15	38
φ10	33.5	23	16
CA-60-B-φ5	94.0	16	16
Total			54



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

Resumo Aço	Comp. total (m)	Peso+10% (kg)	Total
CA-50-A-φ10	67.8	47	47
CA-60-B-φ5	90.0	16	16
Total			63

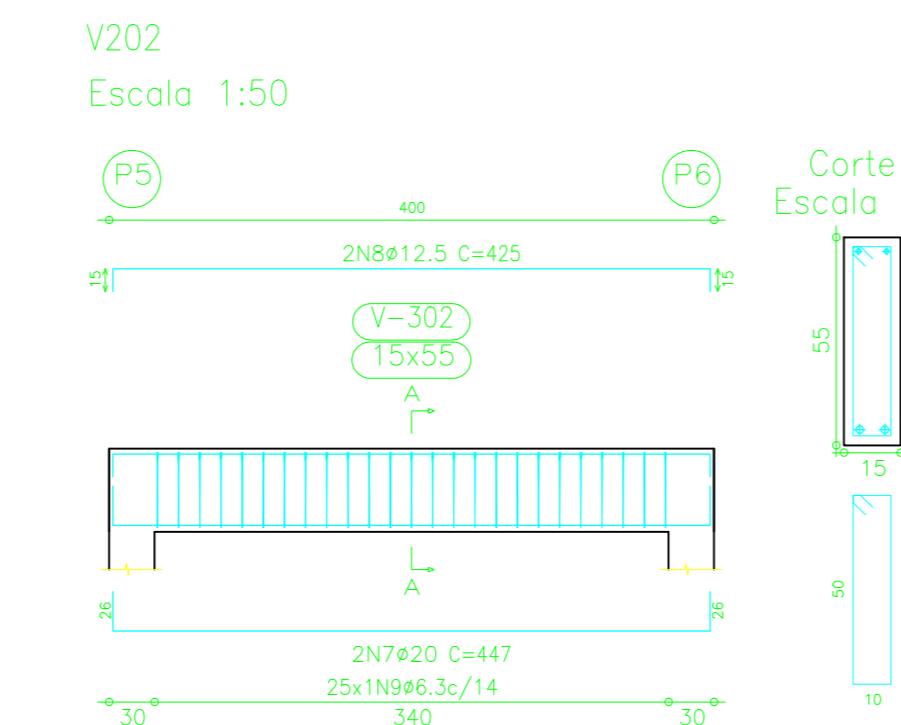
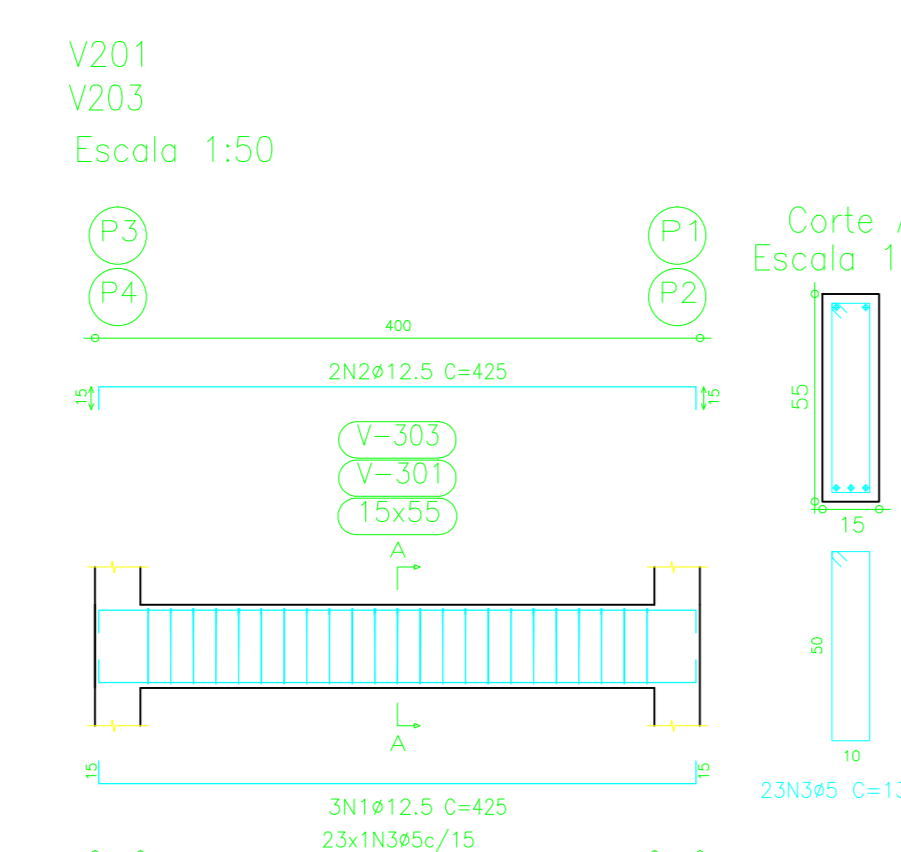


Elemento	Pos.	Diam.	Q	Dob.	Retq	Dob.	Comp.	Total	CA-50-A	CA-60-B	
		(cm)	(cm)	(cm)	(cm)	(cm)	(cm)	(kg)	(kg)	(kg)	
V 1+V 2	1	φ10	2	12	395	12	419	838	5.3	3.3	
	2	φ8	2	10	395	10	415	830	3.3	3.3	
	3	φ5	23	100	2300			19.0	4.0	8.0	
Total+10%									9.5	4.0	8.4
									φ5:	0.0	16.4
									φ8:	16.8	0.0
									φ10:	23.2	0.0
									Total:	38.0	16.4

Elemento	Pos.	Diam.	Q	Dob.	Retq	Dob.	Comp.	Total	CA-50-A	CA-60-B	
		(cm)	(cm)	(cm)	(cm)	(cm)	(cm)	(kg)	(kg)	(kg)	
V 1+V 3	1	φ12.5	3	15	395	15	425	1275	12.5	4.7	
	2	φ12.5	2	15	395	15	425	850	8.3	4.7	
	3	φ5	23	130	2990			45.8	10.4	10.4	
Total+10%									22.9	5.2	10.4
									φ5:	0.0	16.4
									φ8:	16.8	0.0
									φ10:	23.2	0.0
									Total:	38.0	16.4

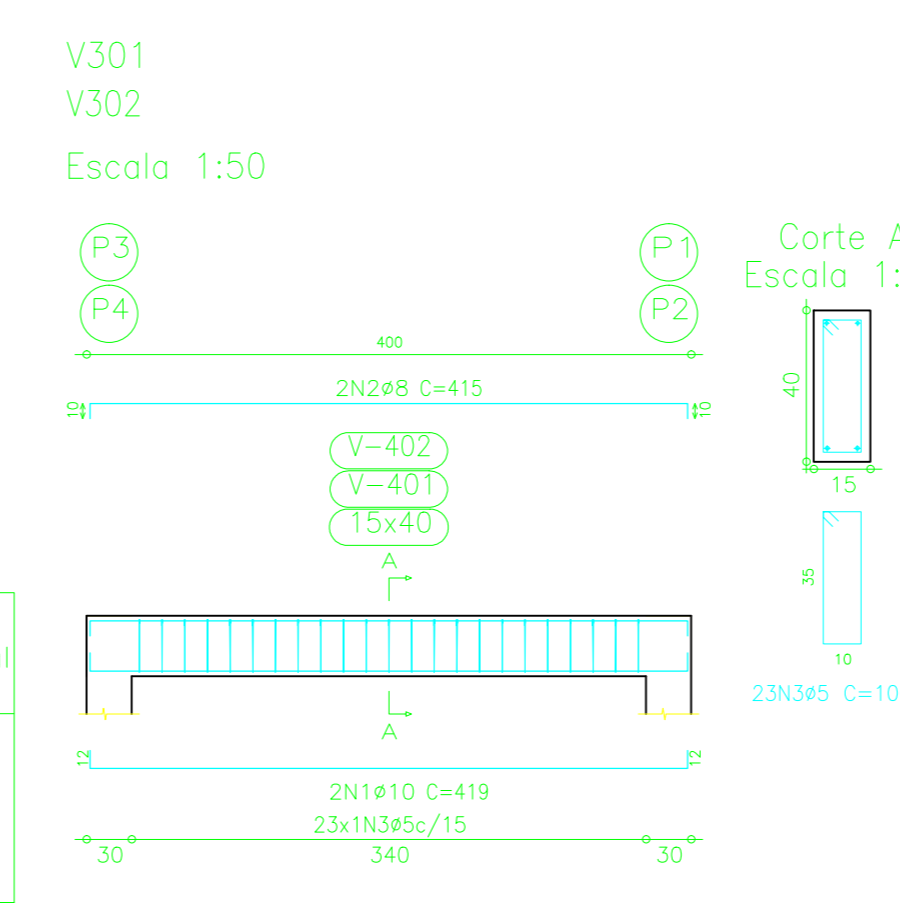
Elemento	Pos.	Diam.	Q	Dob.	Retq	Dob.	Comp.	Total	CA-50-A	CA-60-B	
		(cm)	(cm)	(cm)	(cm)	(cm)	(cm)	(kg)	(kg)	(kg)	
V 1	1	φ10	2	12	395	12	419	838	5.3	3.3	
	2	φ10	2	12	395	12	419	838	5.3	3.3	
	3	φ5	23	100	2300			19.0	4.0	8.0	
Total+10%									11.7	3.3	8.4
									φ5:	0.0	16.4
									φ8:	16.8	0.0
									φ10:	23.2	0.0
									Total:	38.0	16.4

Elemento	Pos.	Diam.	Q	Dob.	Retq	Dob.	Comp.	Total	CA-50-A	CA-60-B	
		(cm)	(cm)	(cm)	(cm)	(cm)	(cm)	(kg)	(kg)	(kg)	
V 1+V 2	1	φ10	2	12	395	12	419	838	5.3	3.3	
	2	φ8	2	10	395	10	415	830	3.3	3.3	
	3	φ5	23	100	2300			19.0	4.0	8.0	
Total+10%									9.5	4.0	8.4
									φ5:	0.0	16.4
									φ8:	16.8	0.0
									φ10:	23.2	0.0
									Total:	38.0	16.4



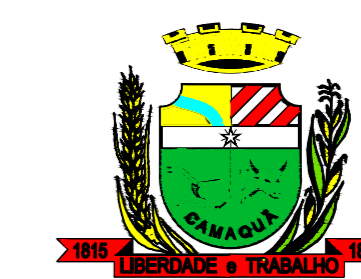
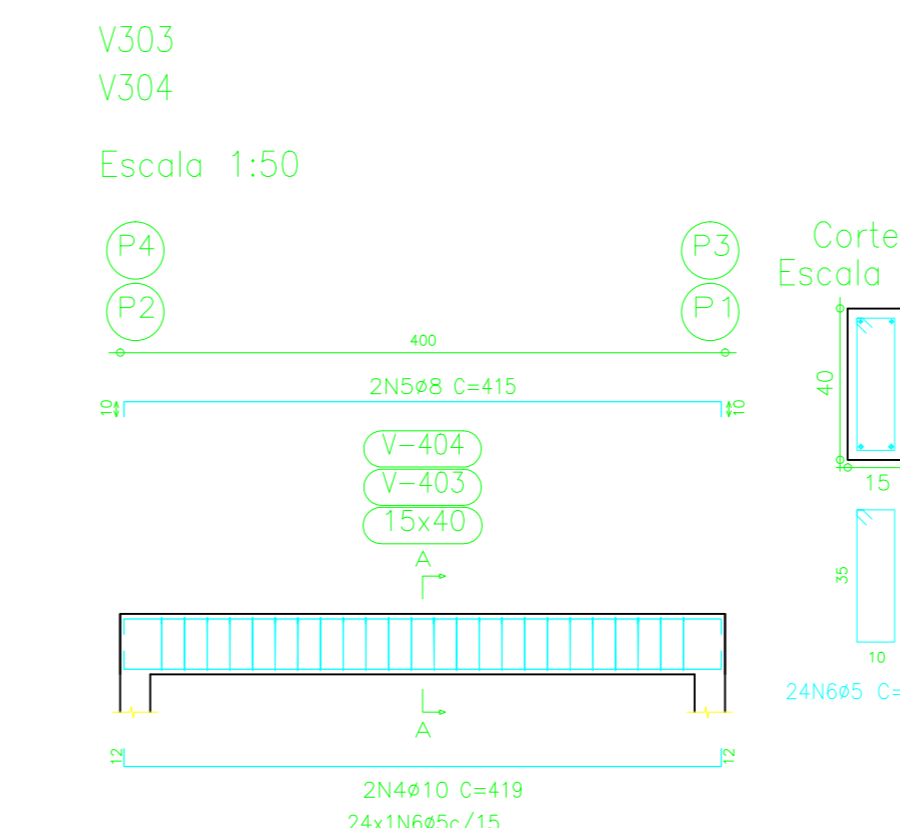
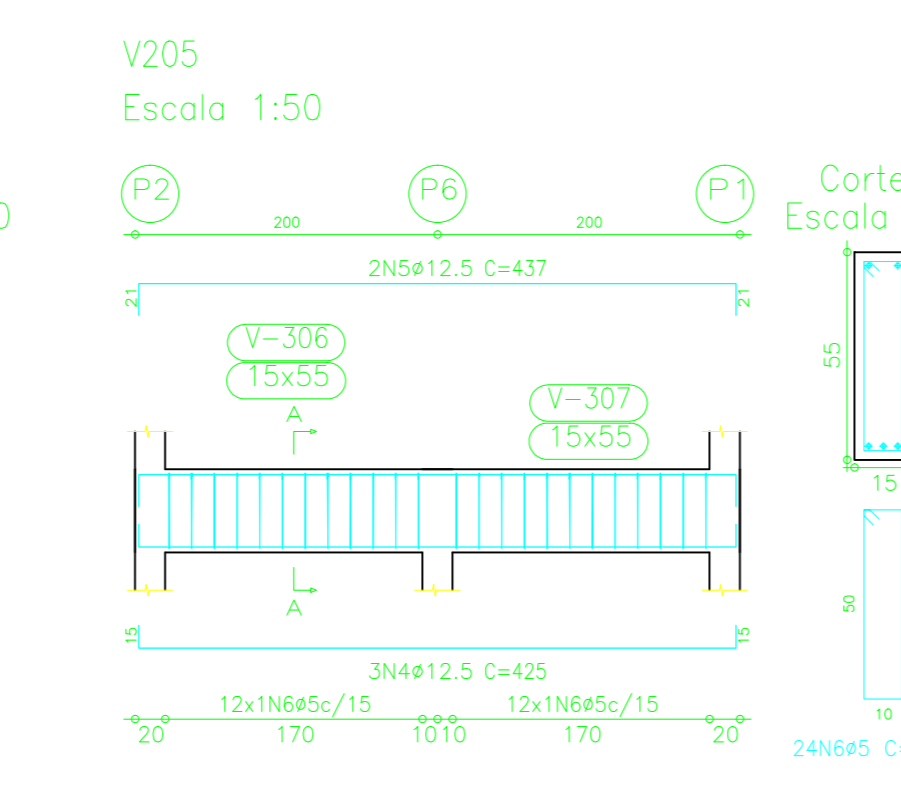
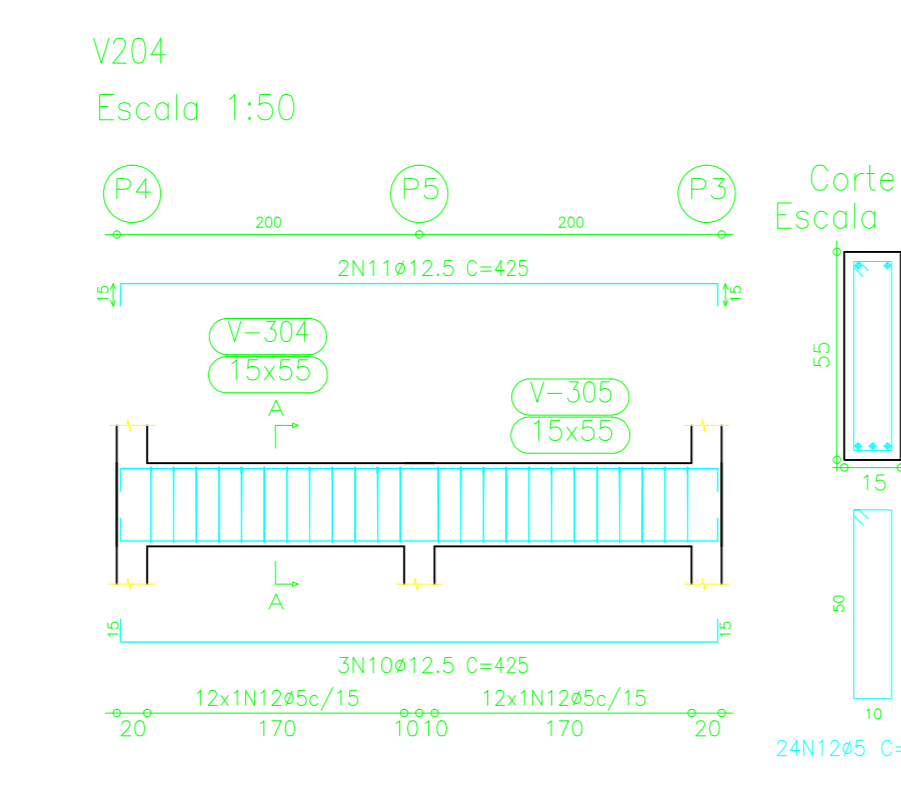
Base do Reservatório
Desenho de vigas
Concreto: C20, em geral
Aço: CA-50-A e CA-60-B
Escala vigas: 1:50
Escala seções: 1:20

Resumo Aço	Comp. total (m)	Peso+10% (kg)	Total
CA-50-A-φ6.3	33.3	9	9
φ12.5	93.7	101	134
φ20	8.9	24	21
CA-60-B-φ5	122.2	21	155
Total			165



Cobertura do Reservatório
Desenho de vigas
Concreto: C20, em geral
Aço: CA-50-A e CA-60-B
Escala vigas: 1:50
Escala seções: 1:20

Resumo Aço	Comp. total (m)	Peso+10% (kg)	Total
CA-50-A-φ8	33.2	14	14
φ10	33.5	23	37
CA-60-B-φ5	94.0	16	16
Total			53



ESTADO DO RIO GRANDE DO SUL
PREFEITURA MUNICIPAL DE CAMAQUÃ
SECRETARIA MUNICIPAL DA INFRAESTRUTURA

Objeto: PROJETO DE DRENAGEM		 SECRETARIA MUNICIPAL DA INFRAESTRUTURA	
Endereço: Baixo Vila Nova - Camaquã, RS		 Escala: 1/1000	
Proponente: Prefeitura Municipal de Camaquã - CNPJ: 88696810/0001-75		Data: 15/07/2014 Dim.: 683x518mm	
Resp. Técnico: Geovana Monte Silveira - CREA: 133364		Assinatura: DrenagemVilaNova.rtg	
Prancha: Rede de Drenagem		Desenhista: Geovana Prancha: 03	