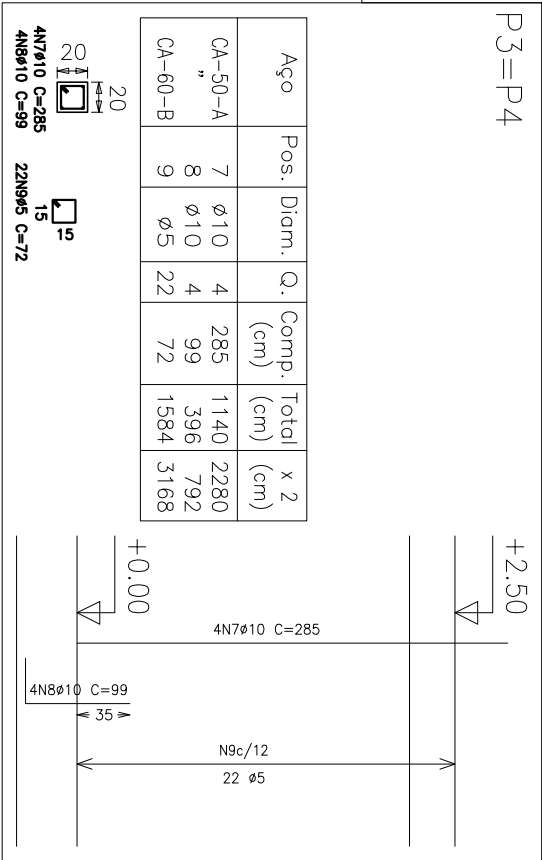


Pilares que terminam em
Piso 1
Concreto: C25, usina.rigor
Aço: CA-50-A e CA-60-B
Escala: 1:50

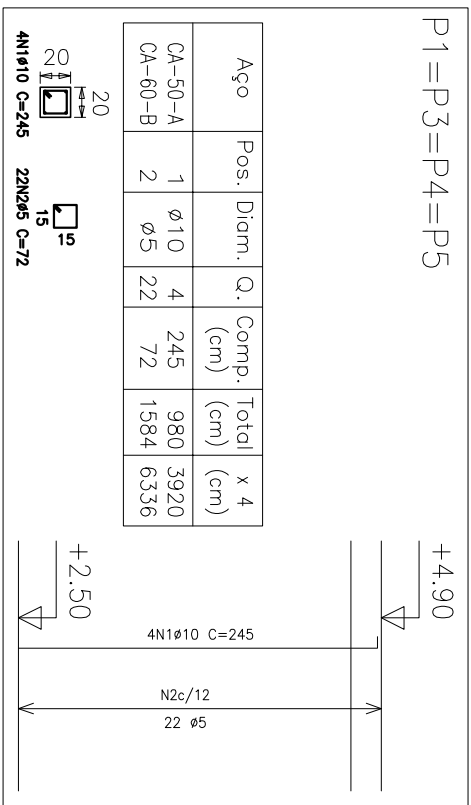
Resumo Aço	Comp. total (m)	Peso+10% (kg)	Total
Piso 1			
Pilares			
CA-50-A ø10	89.2	62	62
CA-60-B ø5	95.0	16	16
Total			78



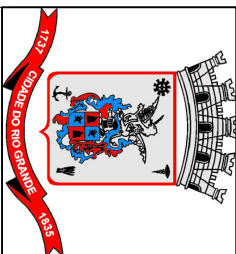
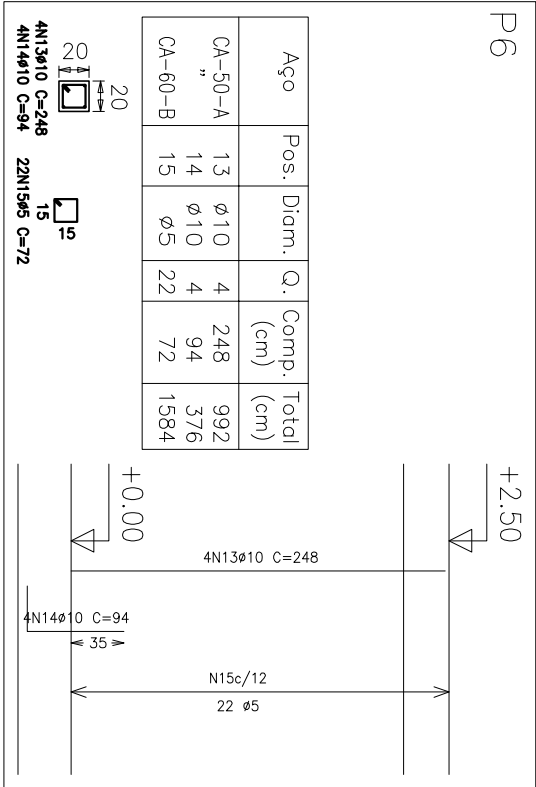
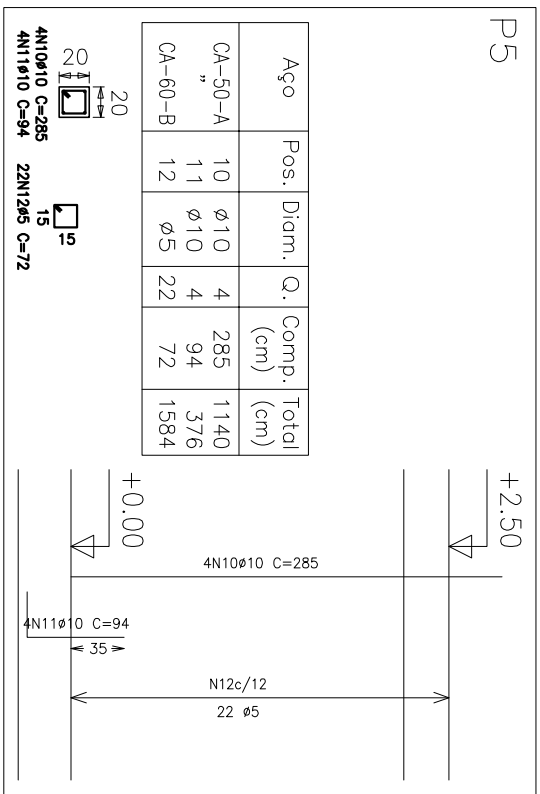
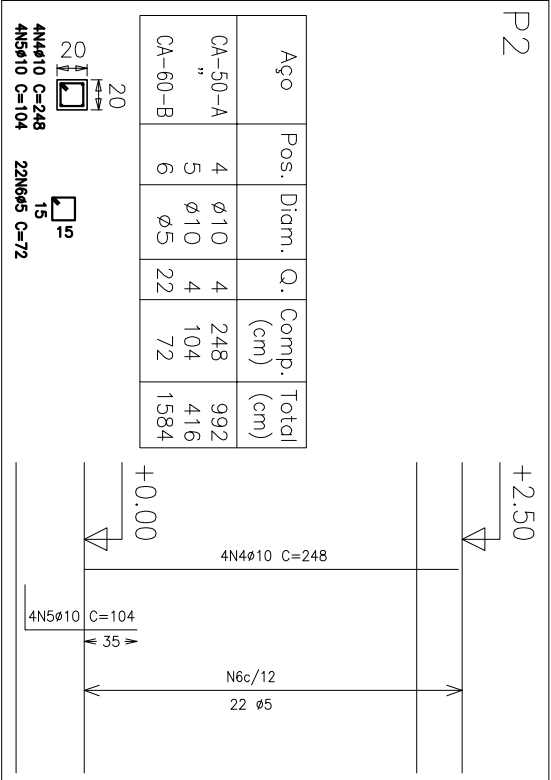
Elemento	Pos.	Diam.	Q.	Dob. (cm)	Retq (cm)	Dob. (cm)	Comp. (cm)	Total (cm)	CA-50-A (kg)	CA-60-B (kg)
P1	1	ø10	4	285		285	285	1140	7.2	
	2	ø10	4	30	74	104	416	26		2.5
	3	ø5	22	72		72	1584	10.8	2.8	
Total+10%:									2.8	
P2	4	ø10	4	248		248	992	6.2		
	5	ø10	4	30	74	104	416	2.6		2.5
	6	ø5	22	72		72	1584	9.7	2.8	
Total+10%:									2.8	
P3=P4	7	ø10	4	285		285	1140	7.2		
	8	ø10	4	30	69	99	396	2.5		2.5
	9	ø5	22	72		72	1584	10.7	2.8	
Total+10%:									2.8	
(x2):									5.6	
P5	10	ø10	4	285		285	1140	7.2		
	11	ø10	4	30	64	94	376	2.4		2.5
	12	ø5	22	72		72	1584	10.6	2.8	
Total+10%:									2.8	
P6	13	ø10	4	248		248	992	6.2		
	14	ø10	4	30	64	94	376	2.4		2.5
	15	ø5	22	72		72	1584	9.5	2.8	
Total+10%:									2.8	
ø5:									0.0	16.8
ø10:									62.0	0.0
Total:									62.0	16.8

Resumo Aço	Comp. total (m)	Peso+10% (kg)	Total
Cobertura			
Pilares			
CA-50-A ø10	39.2	27	27
CA-60-B ø5	63.4	11	11
Total			38

Elemento	Pos.	Diam.	Q.	Dob. (cm)	Retq (cm)	Dob. (cm)	Comp. (cm)	Total (cm)	CA-50-A (kg)	CA-60-B (kg)
P1=P3=P4=P5	1	ø10	4	7	236		245	980	6.2	
	2	ø5	22	72		72	1584	6.8	2.5	
	Total+10%:									2.8
(x4):									27.2	11.2
ø5:									0.0	11.2
ø10:									27.2	0.0
Total:									27.2	11.2



Pilares que terminam em
Cobertura
Concreto: C25, usina.rigor
Aço: CA-50-A e CA-60-B
Escala: 1:50



PREFEITURA MUNICIPAL DO RIO GRANDE
UNIDADE GESTORA DE PROJETOS - UGP

OBRA:

REFORMA DO PRÉDIO - DATC

Projeto Estrutural

RESP. PROJETO: ENGº FELIPE CANDIDO VELOSO COSTA

CREA/RS 159649

PRANCHA:
02/04

ESCALA: 1:50

DATA: 05/2011

ESPECIFICAÇÃO:

PLANTA DE ARMAÇÃO DOS PILARES