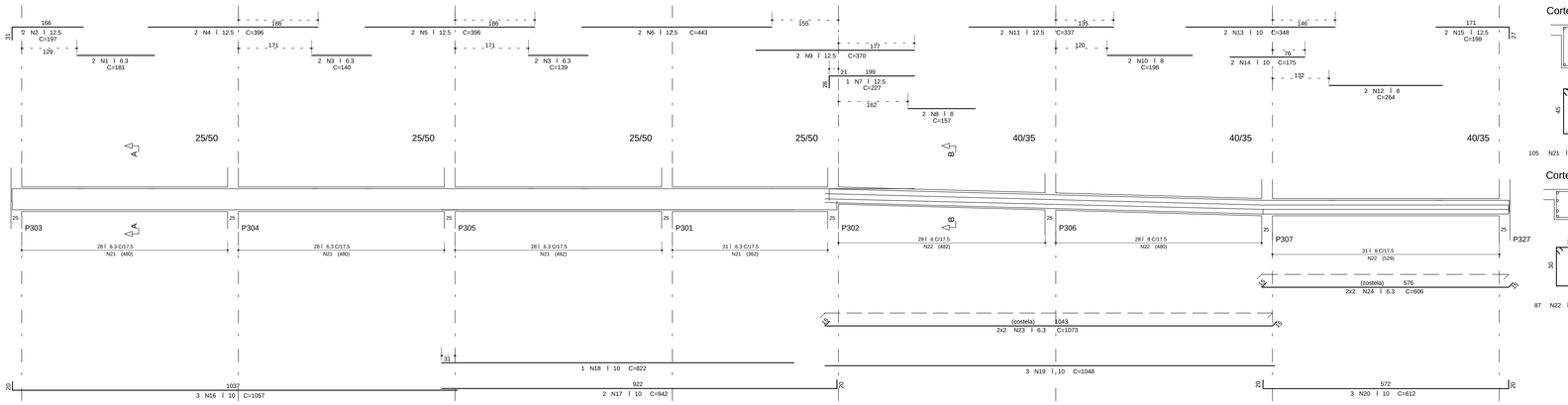

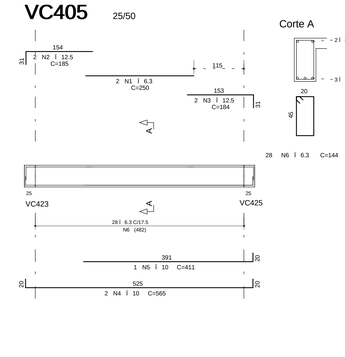

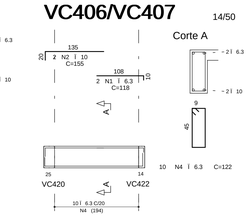

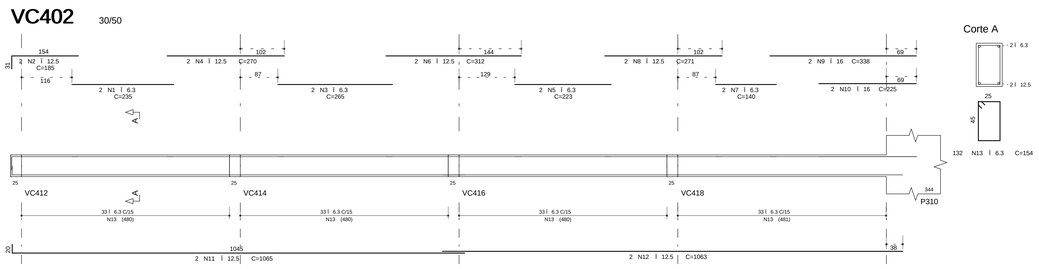

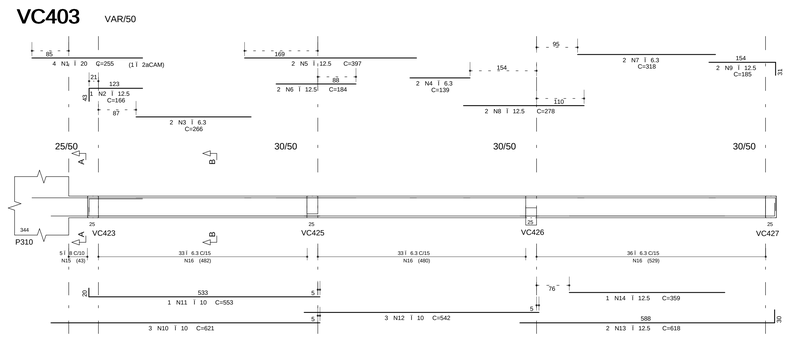

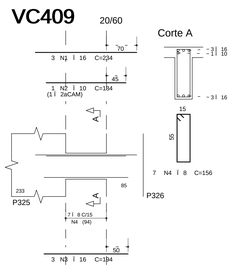

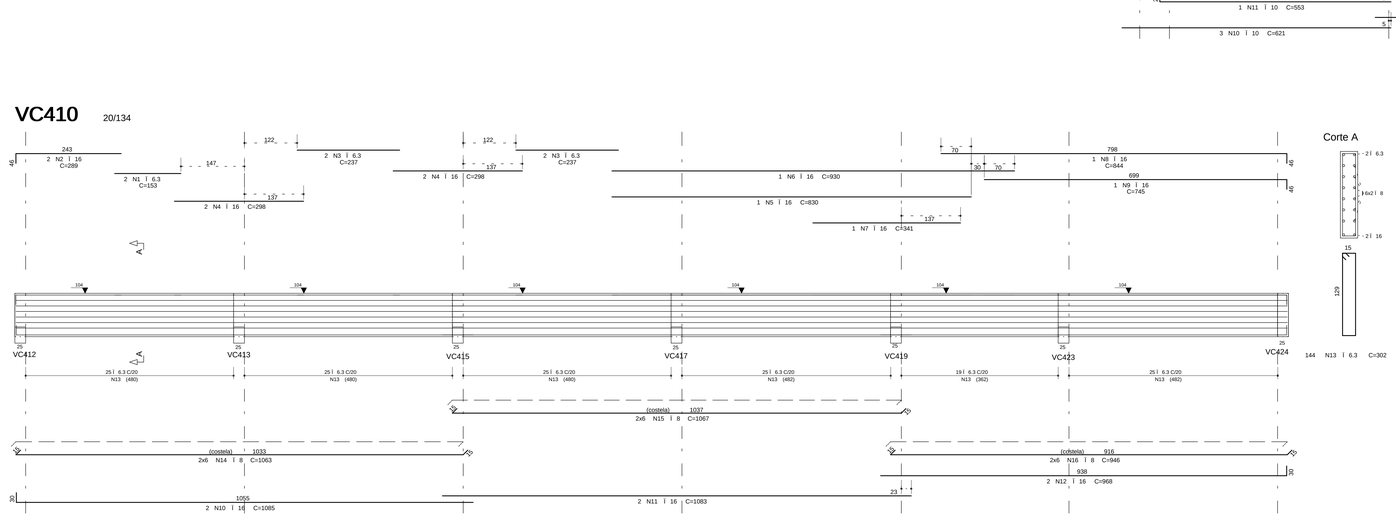

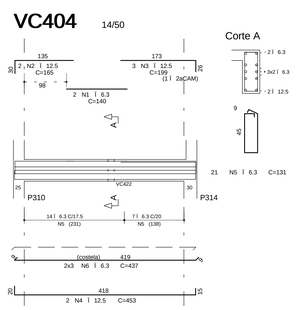

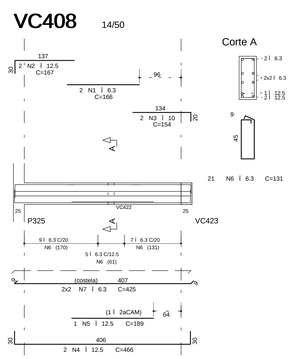

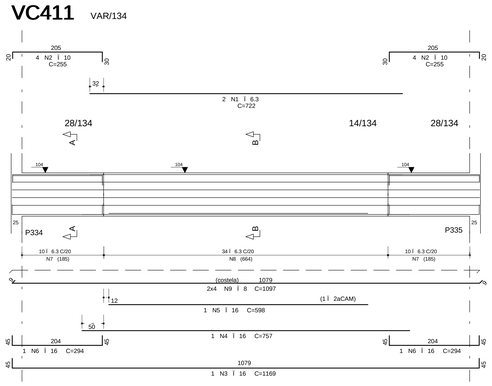

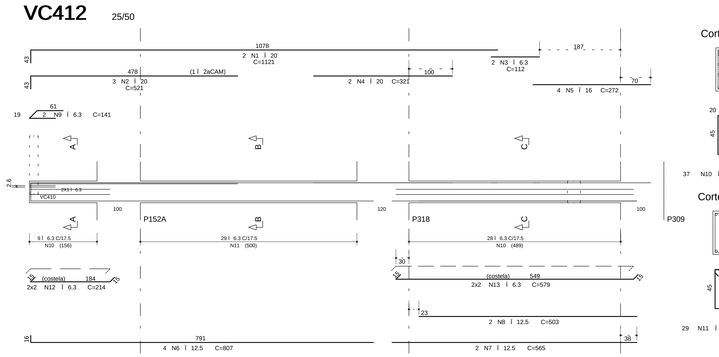

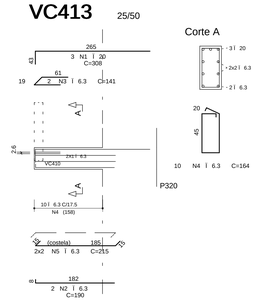

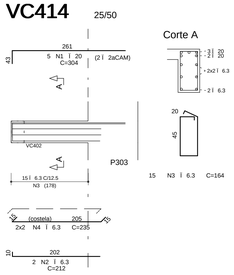

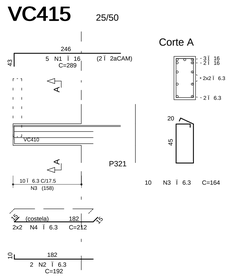

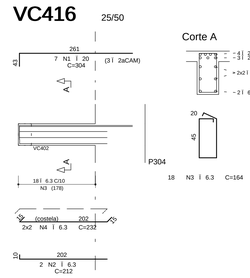

A4 O	POS	BIT (mm)	QUANT	COMPRIMENTO UNIT (cm)	COMPRIMENTO TOTAL (cm)
VC401					
50A	1	6.3	2	187	362
50A	2	12.5	2	147	284
50A	3	6.3	4	140	542
50A	4	12.5	2	298	576
50A	5	12.5	1	443	286
50A	6	6.3	2	139	268
50A	7	12.5	2	396	764
50A	8	12.5	2	370	714
50A	9	12.5	2	370	714
50A	10	8	2	198	382
50A	11	12.5	2	337	650
50A	12	8	2	264	510
50A	13	12.5	2	348	672
50A	14	10	2	175	338
50A	15	12.5	2	138	266
50A	16	12.5	2	175	338
50A	17	10	2	942	1818
50A	18	10	1	822	822
50A	19	10	3	1048	3144
50A	20	10	3	612	1836
50A	21	6.3	105	144	15120
50A	22	8	2	157	314
50A	23	8.0	4	1073	4292
50A	24	6.3	4	306	1224
VC402					
50A	1	6.3	2	139	278
50A	2	12.5	2	185	370
50A	3	6.3	2	270	540
50A	4	12.5	2	245	490
50A	5	6.3	2	223	446
50A	6	12.5	2	312	624
50A	7	6.3	2	265	530
50A	8	12.5	2	271	542
50A	9	16	2	338	676
50A	10	10	2	135	270
50A	11	12.5	2	338	676
50A	12	12.5	2	1063	2126
50A	13	6.3	110	194	21335
VC403					
50A	1	6.3	2	255	510
50A	2	12.5	1	166	166
50A	3	6.3	2	266	532
50A	4	6.3	2	139	278
50A	5	12.5	2	397	794
50A	6	12.5	2	278	556
50A	7	6.3	2	318	636
50A	8	12.5	2	278	556
50A	9	16	2	185	370
50A	10	10	2	921	1842
50A	11	10	1	553	553
50A	12	6.3	2	542	1084
50A	13	12.5	2	618	1236
50A	14	12.5	1	359	359
50A	15	6.3	2	621	1242
50A	16	6.3	110	194	21335
VC404					
50A	1	6.3	21	140	294
50A	2	12.5	2	165	330
50A	3	12.5	2	199	398
50A	4	12.5	2	453	906
50A	5	6.3	21	131	2751
50A	6	12.5	2	453	906
VC405					
50A	1	6.3	2	250	500
50A	2	12.5	2	184	368
50A	3	6.3	2	565	1130
50A	4	10	2	411	822
50A	5	6.3	28	144	4032
VC406/VC407					
50A	1	6.3	2	118	236
50A	2	10	2	155	310
50A	3	10	2	276	552
50A	4	6.3	10	122	1220
VC408					
50A	1	6.3	2	167	334
50A	2	12.5	2	166	332
50A	3	10	2	154	308
50A	4	6.3	21	131	2751
50A	5	6.3	21	131	2751
VC409					
50A	1	10	1	234	234
50A	2	16	3	234	702
50A	3	10	7	184	1288
50A	4	16	7	184	1288
VC410					
50A	1	6.3	2	133	266
50A	2	16	4	289	1156
50A	3	6.3	4	298	1192
50A	4	16	4	298	1192
50A	5	16	1	598	598
50A	6	16	1	341	341
50A	7	16	1	341	341
50A	8	16	1	664	664
50A	9	16	1	746	746
50A	10	16	2	1185	2370
50A	11	16	2	1063	2126
50A	12	16	1	968	968
50A	13	6.3	144	302	43488
50A	14	16	2	1097	2194
50A	15	6	4	1067	12804
50A	16	8	2	946	11352
VC411					
50A	1	6.3	2	133	266
50A	2	10	4	255	1020
50A	3	16	2	722	2888
50A	4	16	4	297	1188
50A	5	16	1	598	598
50A	6	16	1	294	588
50A	7	6.3	21	294	6174
50A	8	6.3	10	298	2980
50A	9	6.3	2	1097	2194
VC412					
50A	1	10	1	1121	1121
50A	2	16	2	521	1042
50A	3	6.3	2	112	224
50A	4	16	2	521	1042
50A	5	16	4	272	1088
50A	6	12.5	4	307	5226
50A	7	12.5	2	521	1042
50A	8	12.5	2	503	1006
50A	9	6.3	2	141	282
50A	10	6.3	21	141	2961
50A	11	6.3	24	144	3456
50A	12	6.3	4	214	856
50A	13	6.3	4	574	2296
VC413					
50A	1	6.3	2	308	616
50A	2	12.5	2	141	282
50A	3	6.3	2	141	282
50A	4	6.3	10	164	1640
50A	5	6.3	2	164	328
VC414					
50A	1	6.3	1	304	304
50A	2	6.3	1	212	424
50A	3	6.3	21	164	3480
50A	4	6.3	2	164	328
VC415					
50A	1	6.3	1	189	189
50A	2	6.3	21	164	3480
50A	3	6.3	2	212	424
50A	4	6.3	4	212	848
VC416					
50A	1	6.3	1	304	304
50A	2	6.3	21	164	3480
50A	3	6.3	2	232	464
50A	4	6.3	4	232	928

RESUMO A4 O.QA. 50x90			
A4 O	BIT (mm)	COMPR (cm)	PESO (kg)
50A	6.3	1668	462
50A	8	619	245
50A	10	2000	1233
50A	12.5	1748	1679
50A	16	1186	2371
50A	20	185	569
Peso Total 50A =			1612 kg

COBRIMENTO DA ARMADURA:

- LAJES = 2,0 cm
- VIGAS E PILARES = 2,5 cm
- BLOCOS,BALDRAMES E CONTENCOES (FACE EM CONTATO COM A TERRA) = 3,0 cm

1. ESSES COBRIMENTOS DEVERAO SER GARANTIDOS COM O USO DE ESPACADORES OU PASTILHAS.
COBRIMENTOS ESPECIFICOS EM CONTRARIO AOS VALORES INDICADOS ACIMA, ESTAO INDICADOS NOS DESENHOS DE FORMAS DOS PAVIMENTOS.

NORMAS UTILIZADAS:

NBR-6118/2003 - PROJETO E EXECUCAO DE OBRAS DE CONCRETO ARMADO
NBR-6120/1980 - CARGAS PARA O CALCULO DE ESTRUTURAS DE EDIFICACOES

INDICE:

VC401 A VC416

FCK= 35 MPa
EC = 28 GPa (MODULO DE ELASTICIDADE SECANTE AOS 28 DIAS).
A/C = 0,65 (FATOR AGUA CIMENTO)

REV	DATA	DESCRICAO
1	29/08/2014	NUMERACAO FINAL
0	13/12/2012	EMISSAO INICIAL

Simetria Engenharia
SIA QUADRA AC No 53 SALAS 201 A 203
BRASILIA,DF CEP: 71200-045
PABX: (0XX61) 3036-9633
simetria@simetria.eng.br

PROJETO ESTRUTURAL

CLIENTE: GENT INCORPORADORA LTDA
OBRA: ED. RESIDENCIAL/COMERCIAL COSMOPOLITAN — No OBRA: XXX
ENDERECO OBRA: RUA 30 NORTE LOTE 03 - RUA DAS PAINEIRAS - AGUAS CLARAS DF
DESCRICAO: ARMACAO DAS VIGAS DO PISO DA SOBRELOJA TORRE 3 - JUNTA C (01/02)
DESENHO No: BL3 031-076

DESENHISTA:	DATA:	ESCALA:	UNIDADE	No PROJ. SIMETRIA:
TQS/ PRISCILLA	13/12/2012	1:50	CM	478

ARQUIVO PLT: 478 -EST-BL3- 031-076 -R01 -VIG.PLT

PROPRIETARIO: RESPONSAVEL TECNICO

RESPONSAVEL TECNICO PELO PROJETO ESTRUTURAL
SIMETRIA ENGENHARIA E PROJETOS S/C LTDA
CREA:2725/RF

SIMETRIA ENGENHARIA DE PROJETOS S/C LTDA PL C:\TQS\WORK\TF - COSMOPOLITAN - TORRE 3 - JUNTA C\478-EST\BRUCE\DAN\VIGAS\BL3 R1 29/08/2014 15:44:14