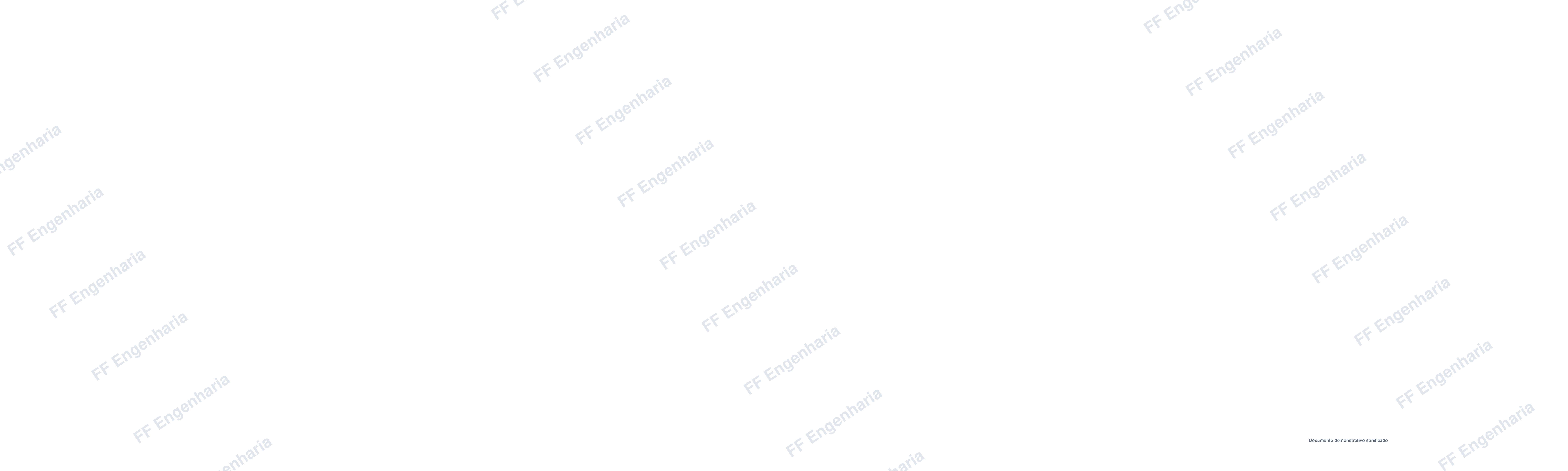
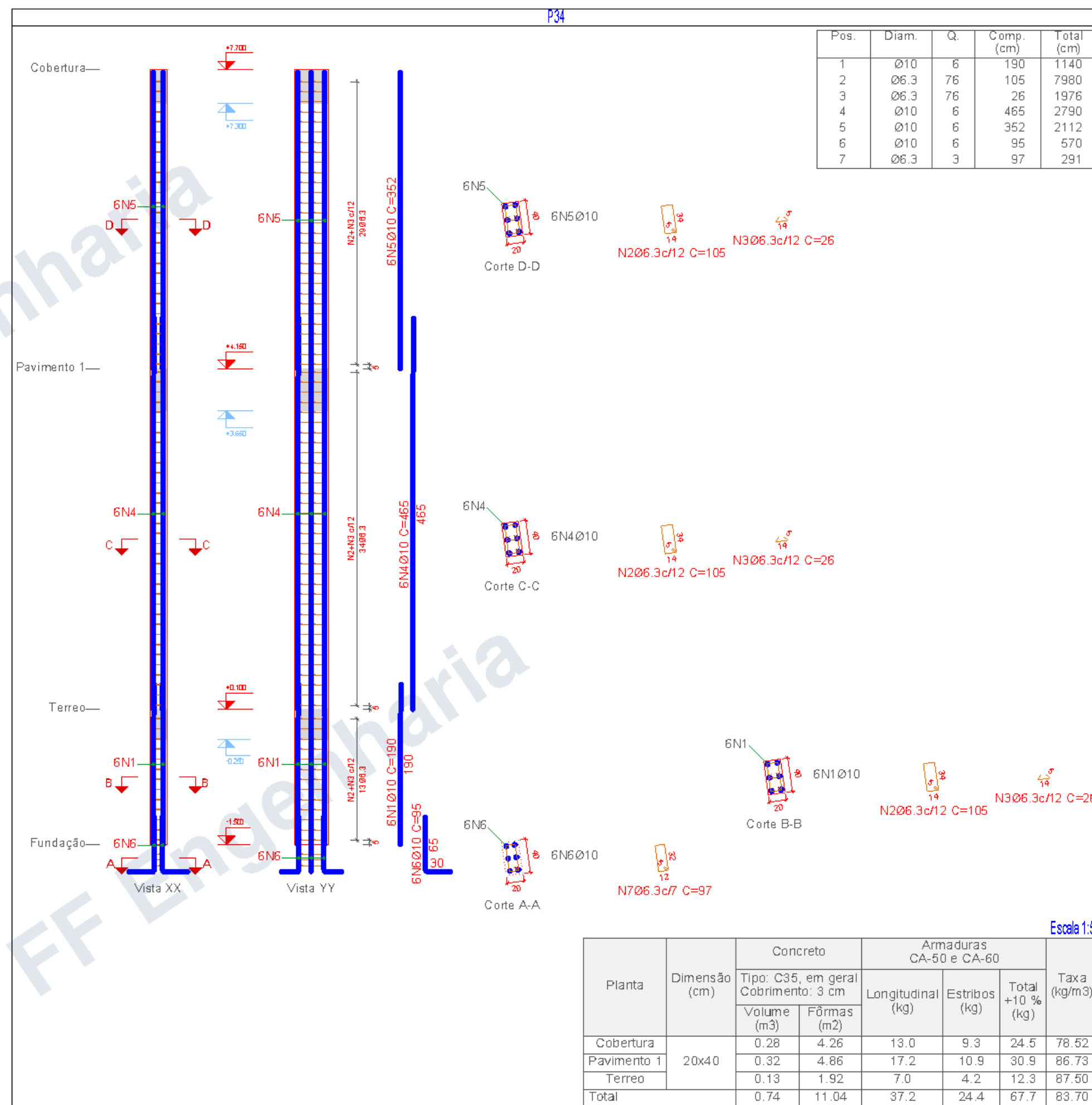
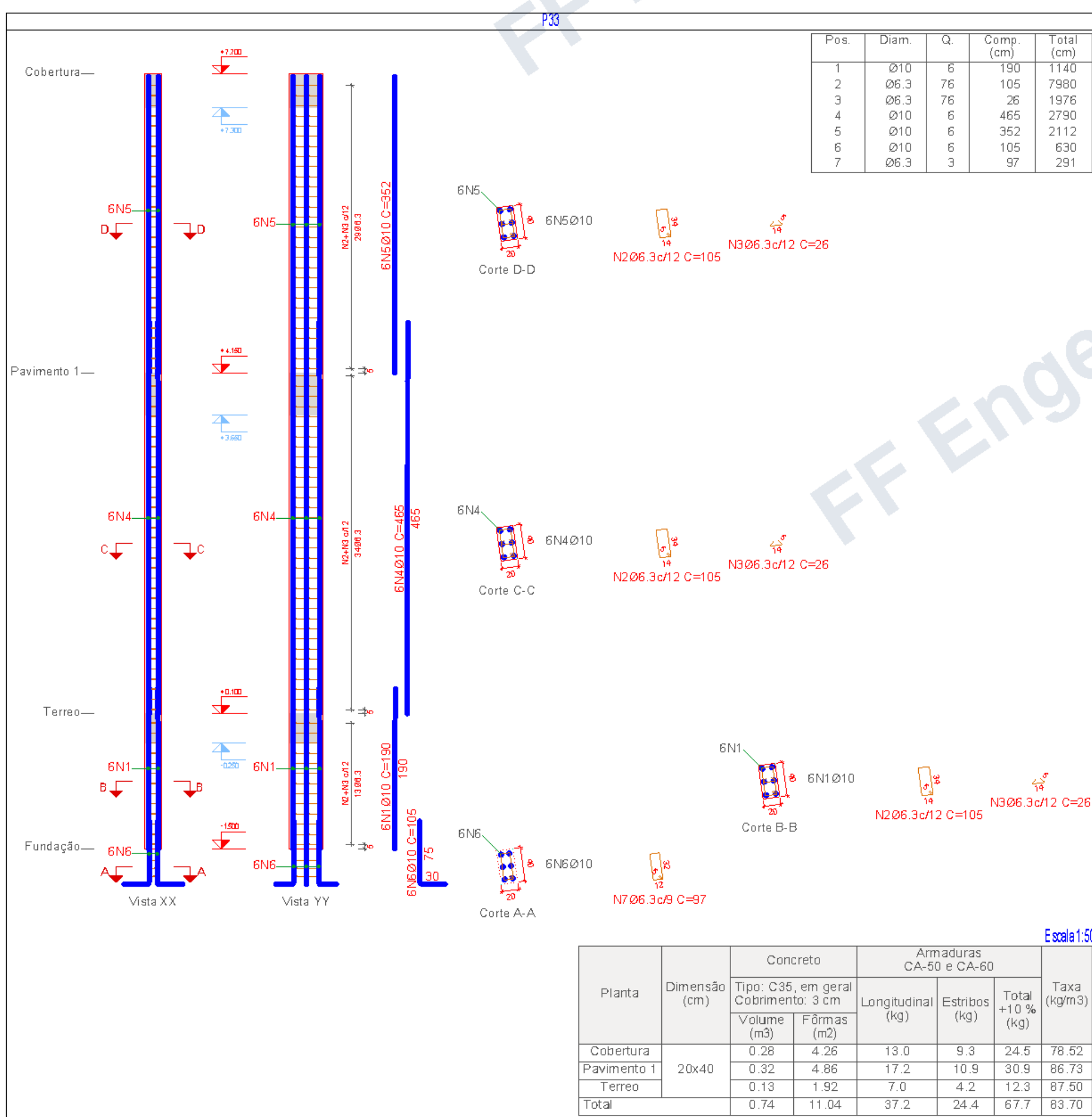
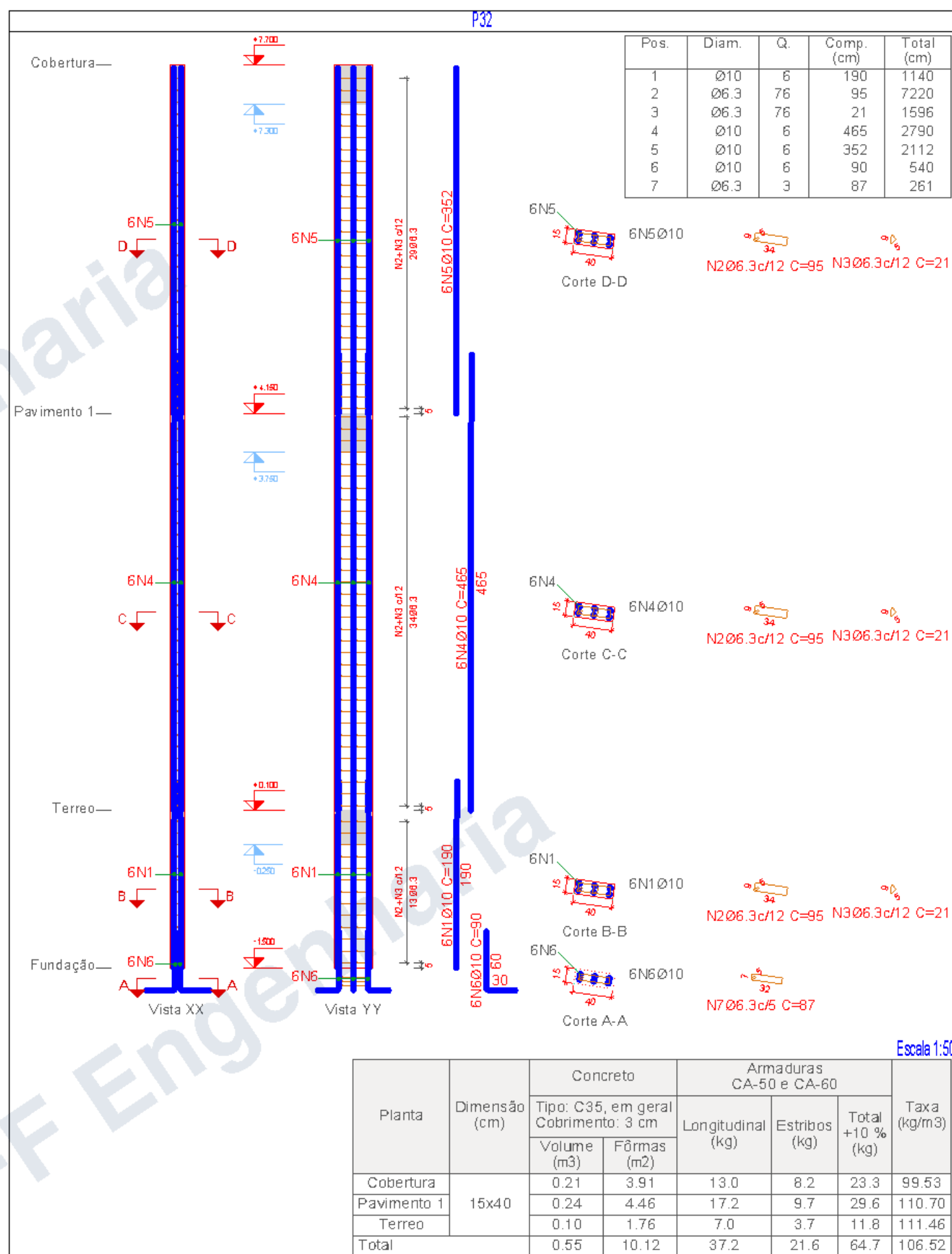
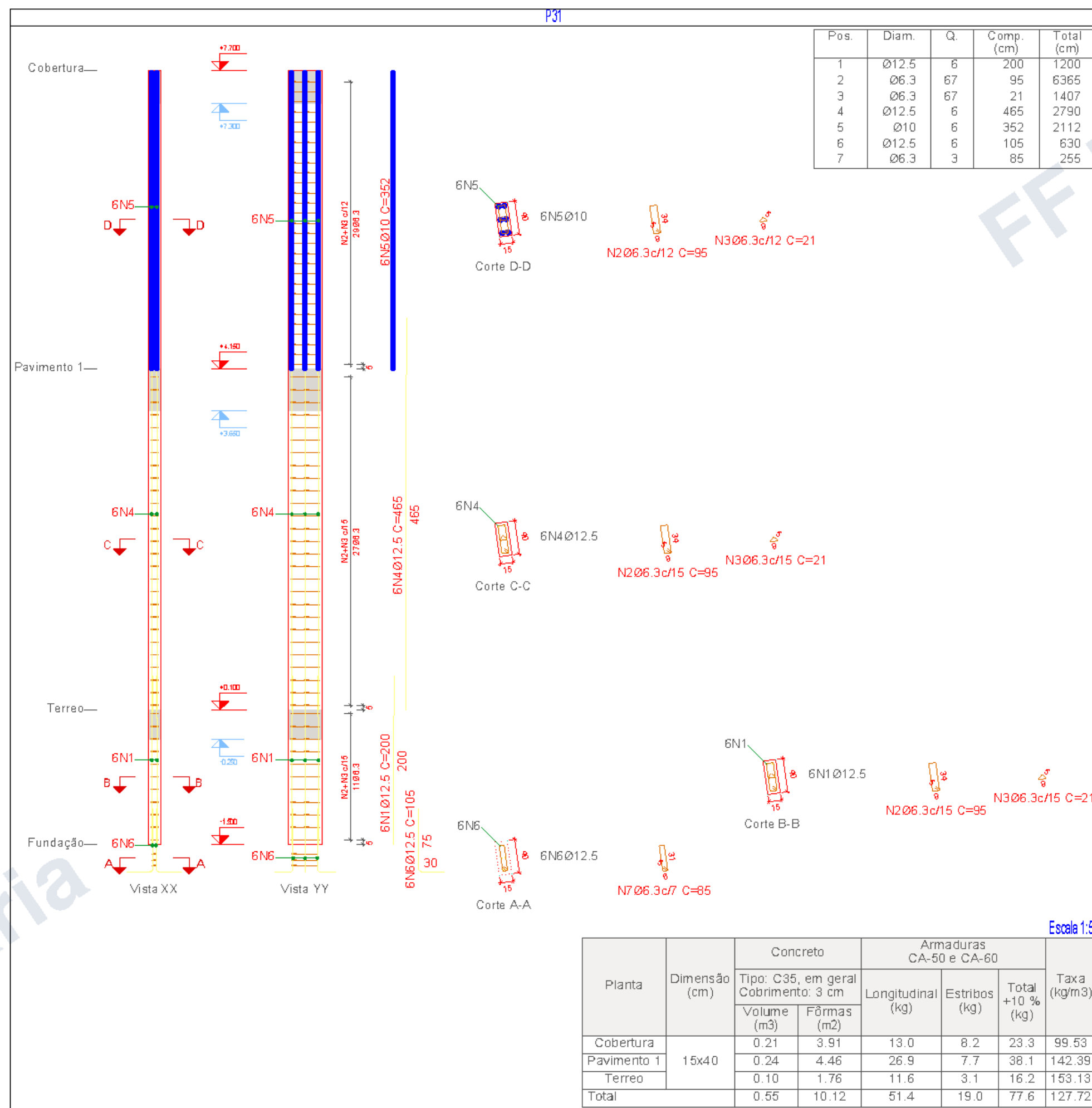
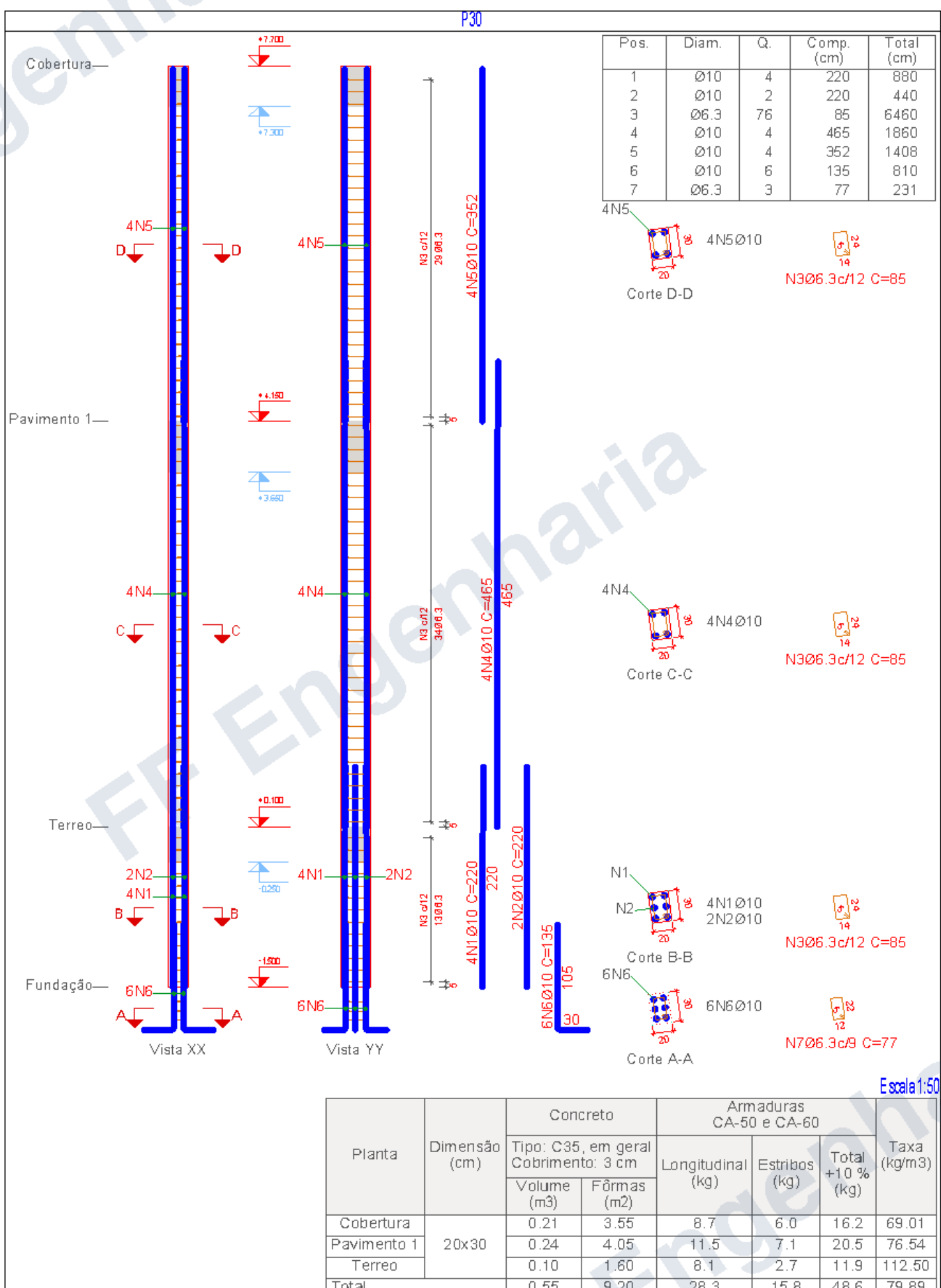
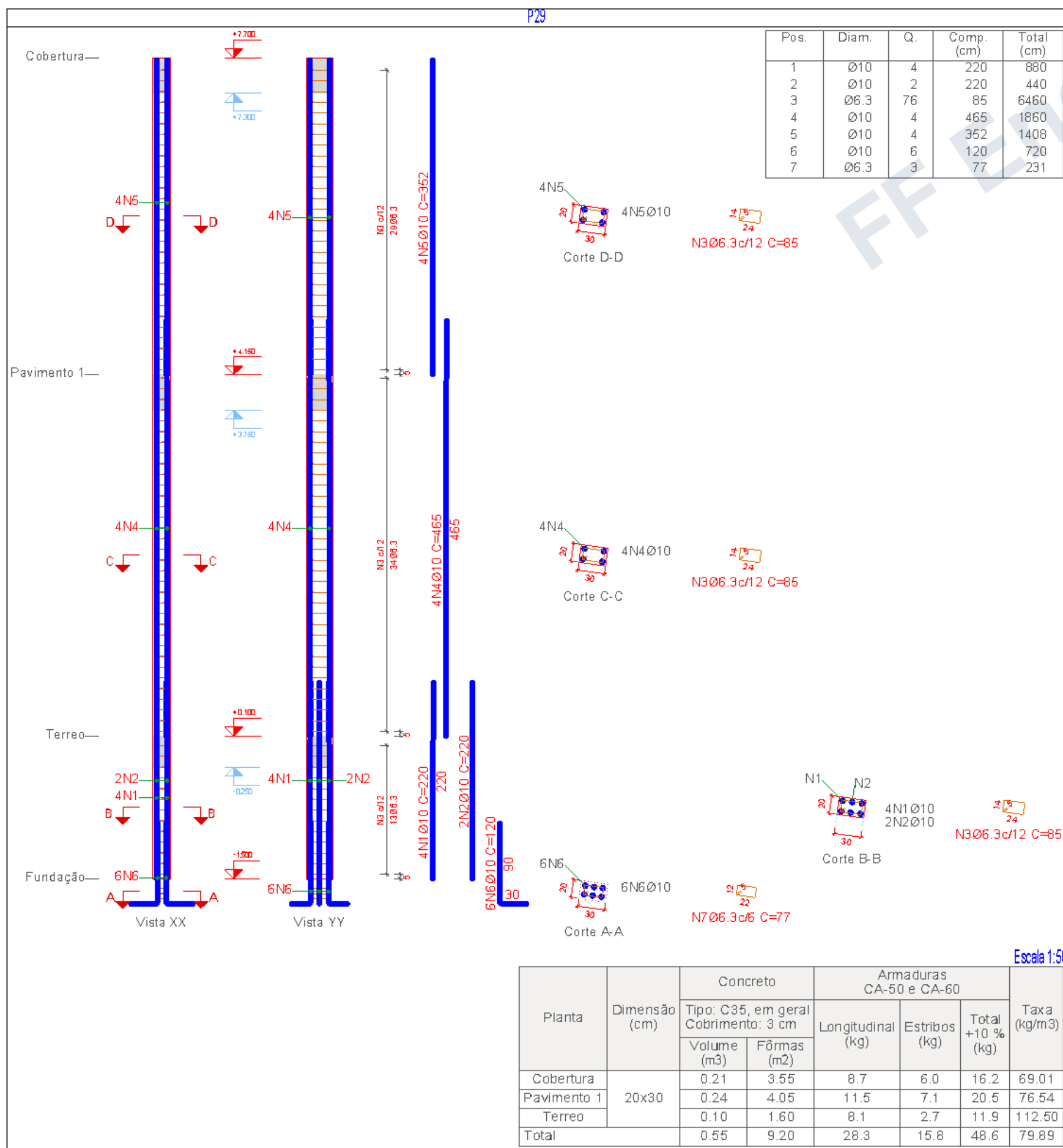




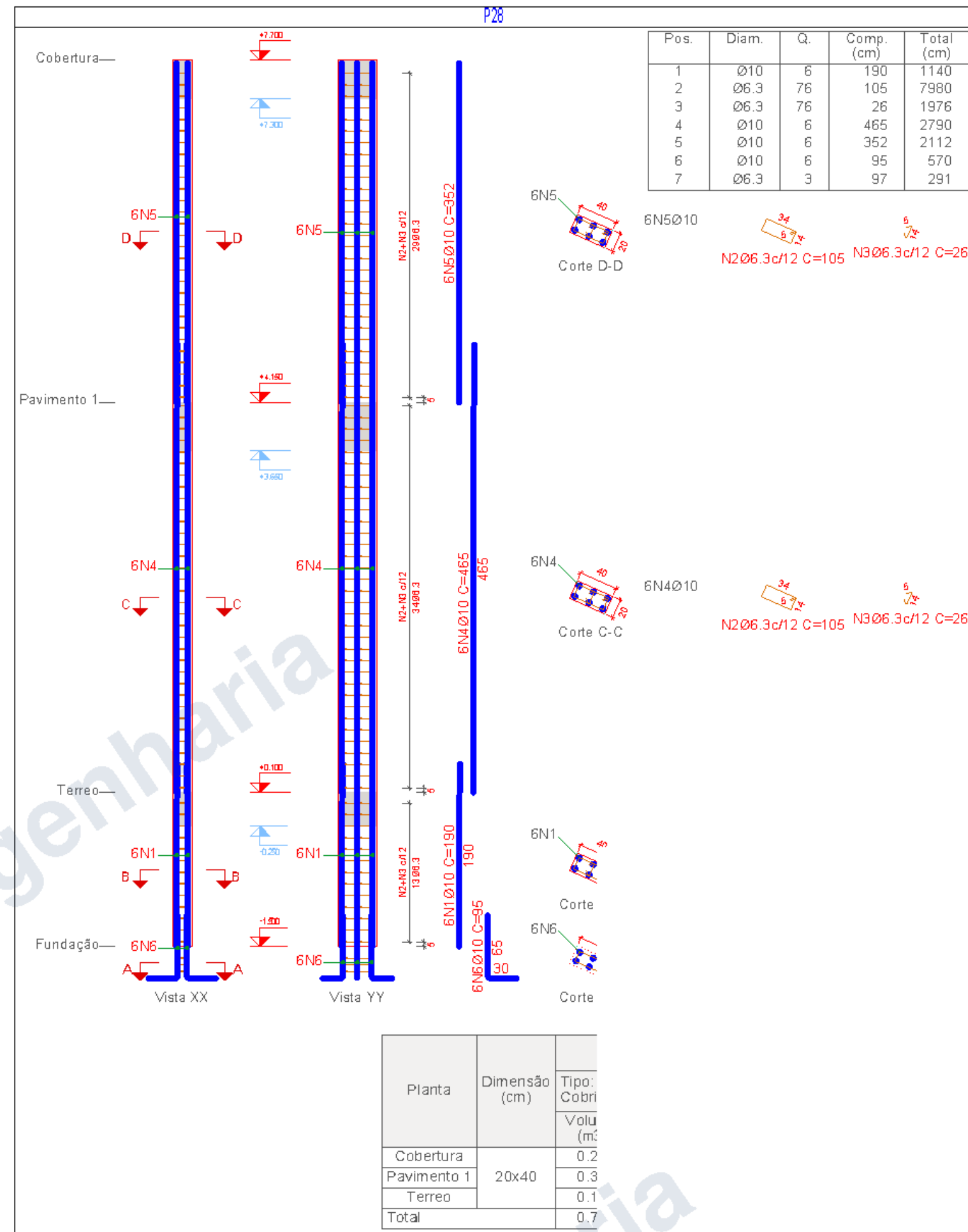
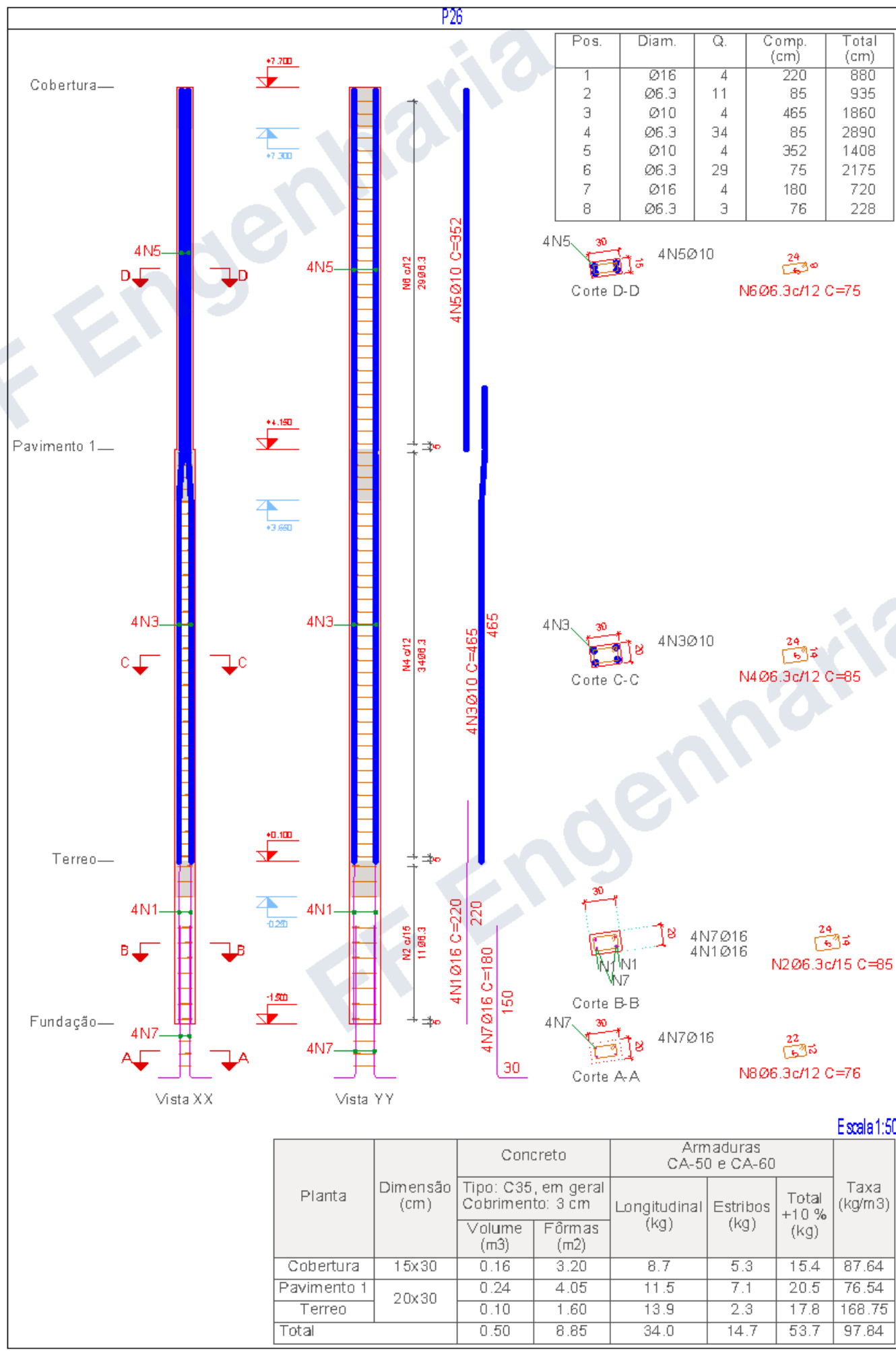
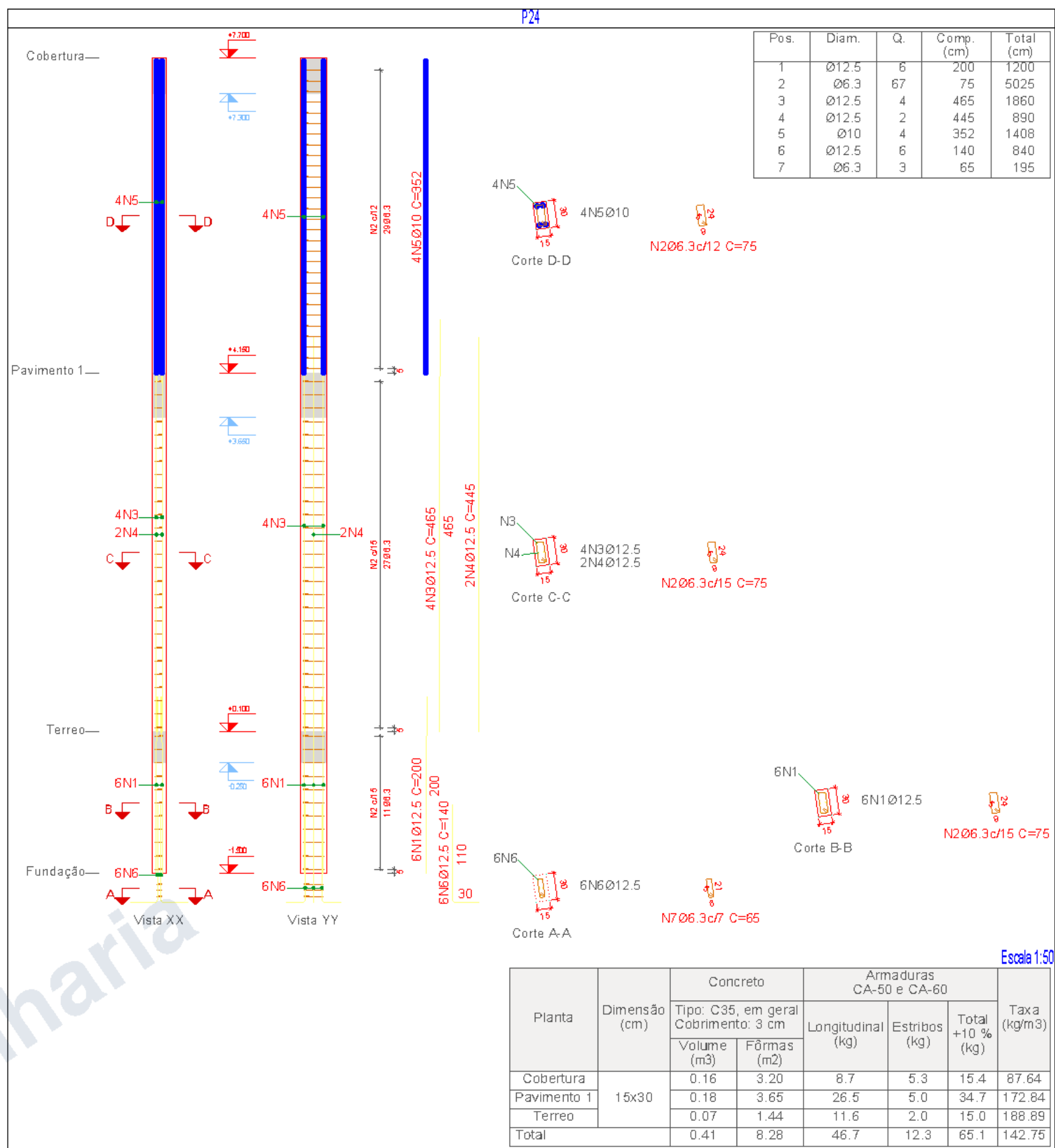
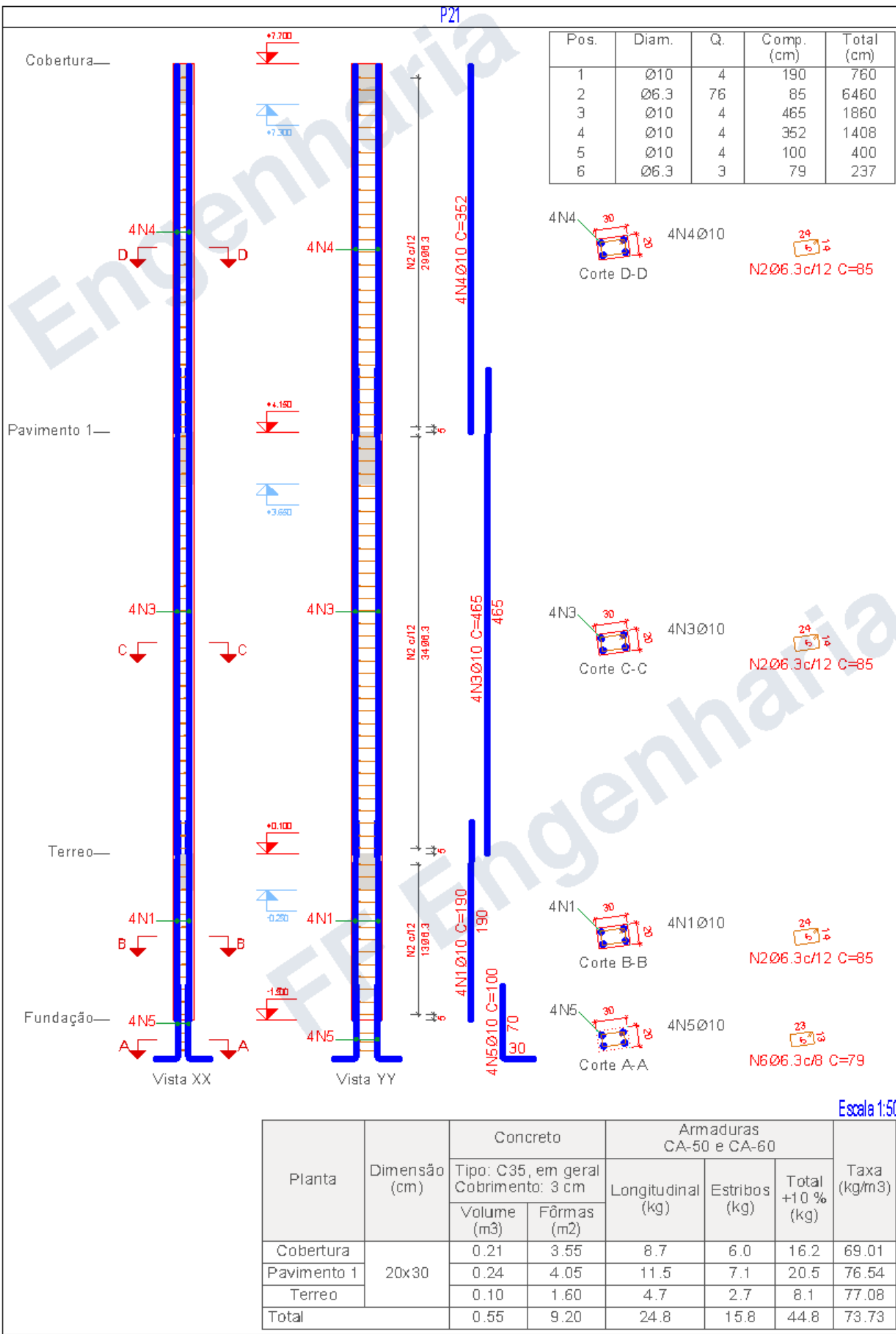
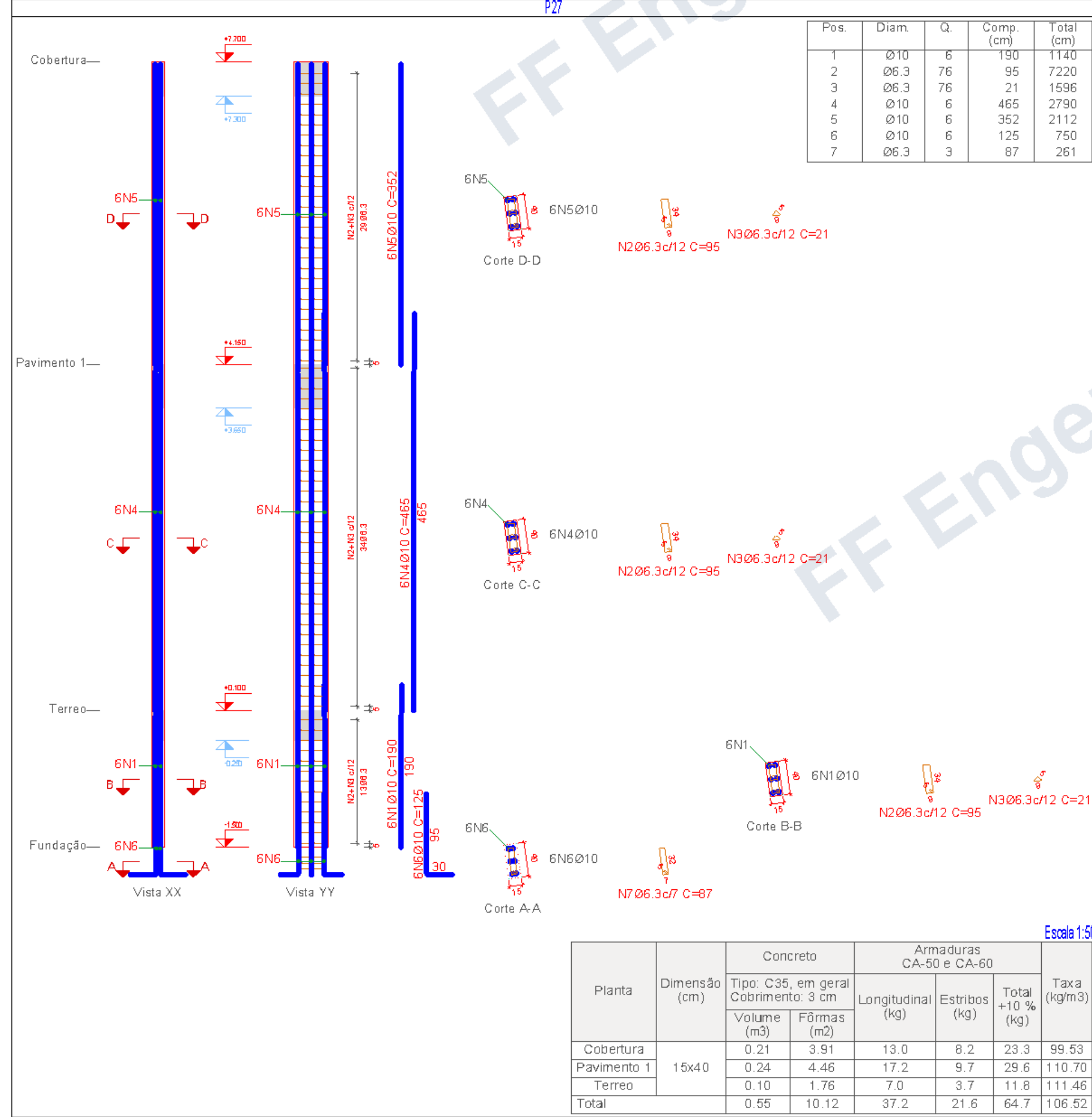
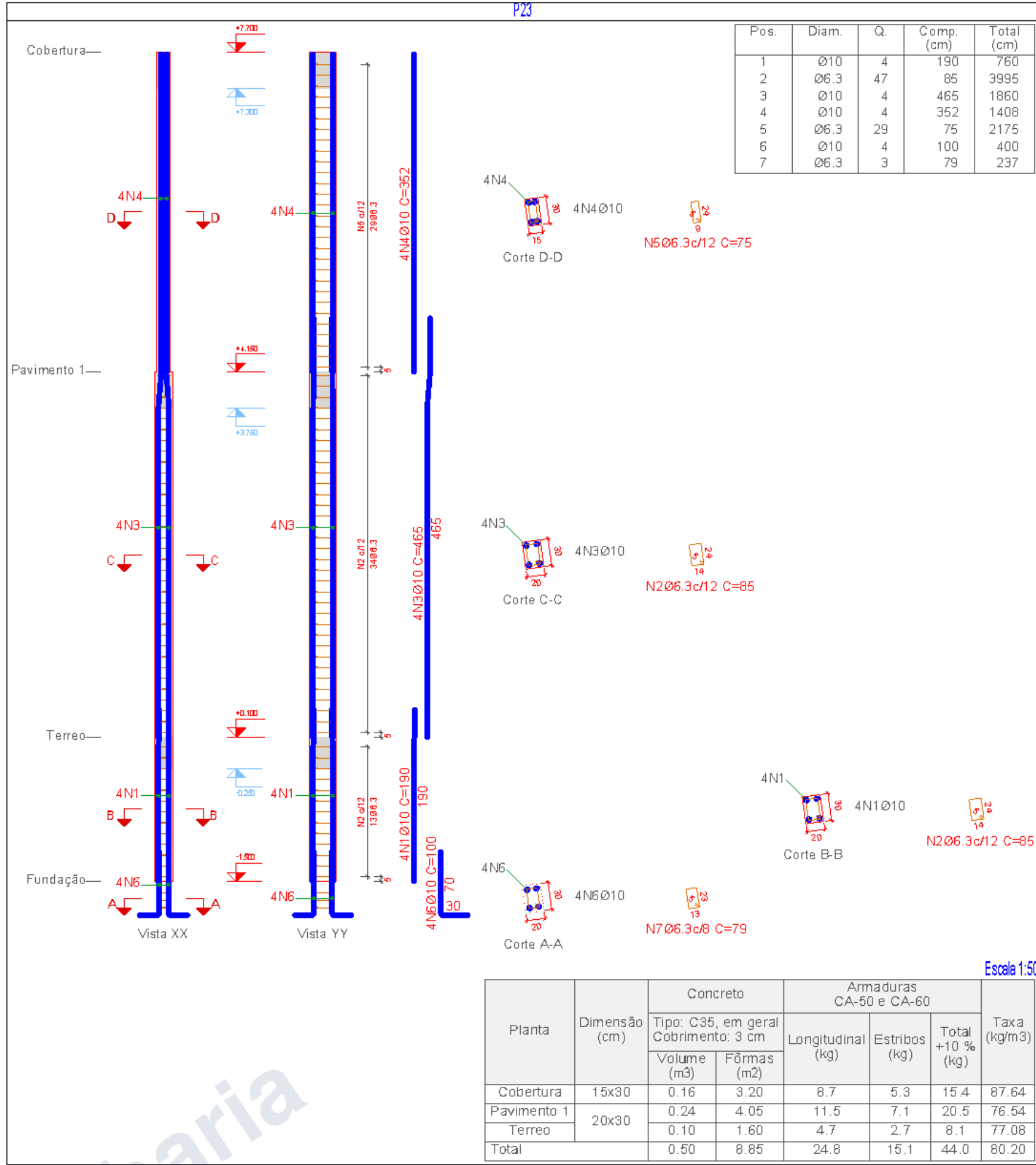
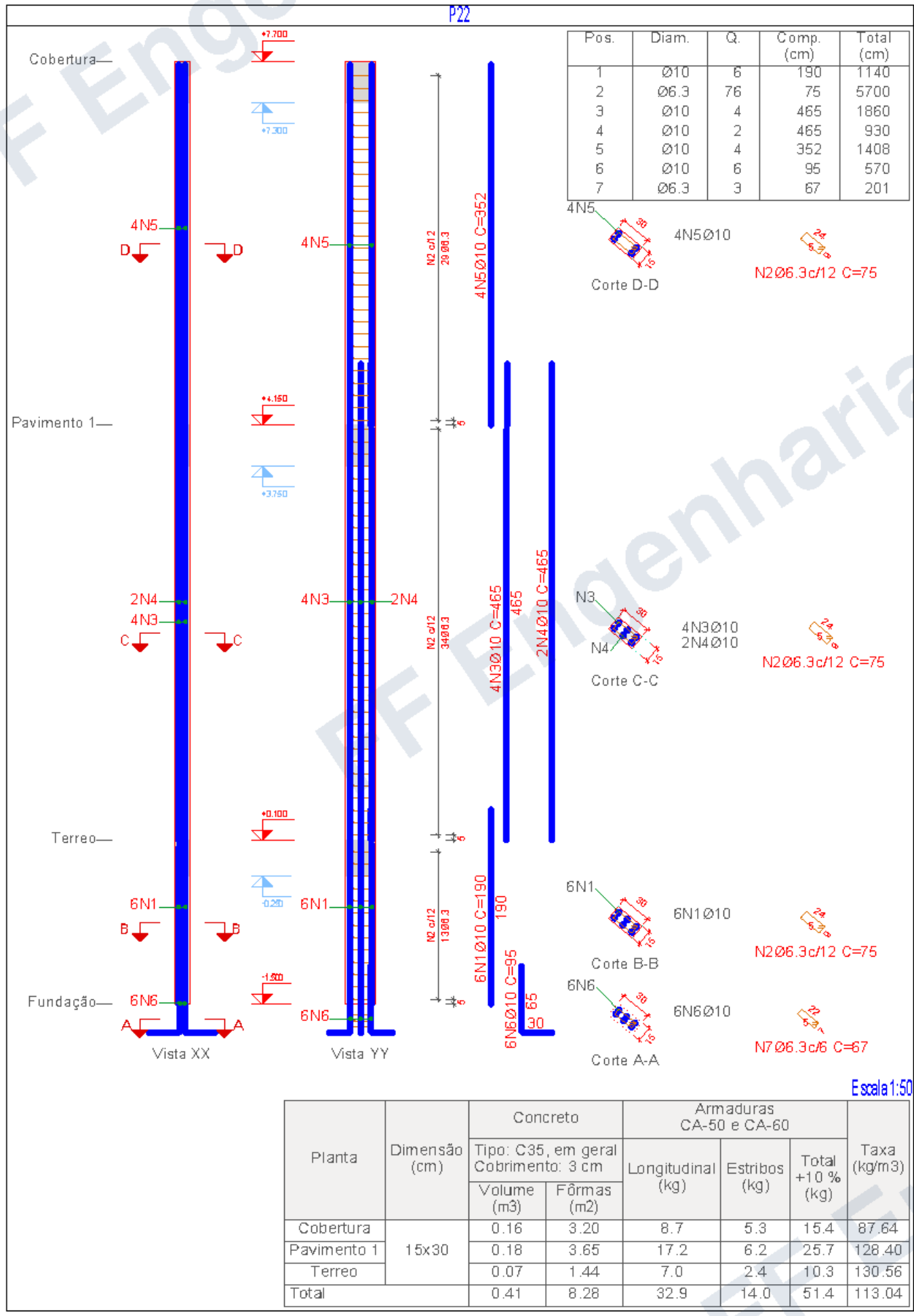
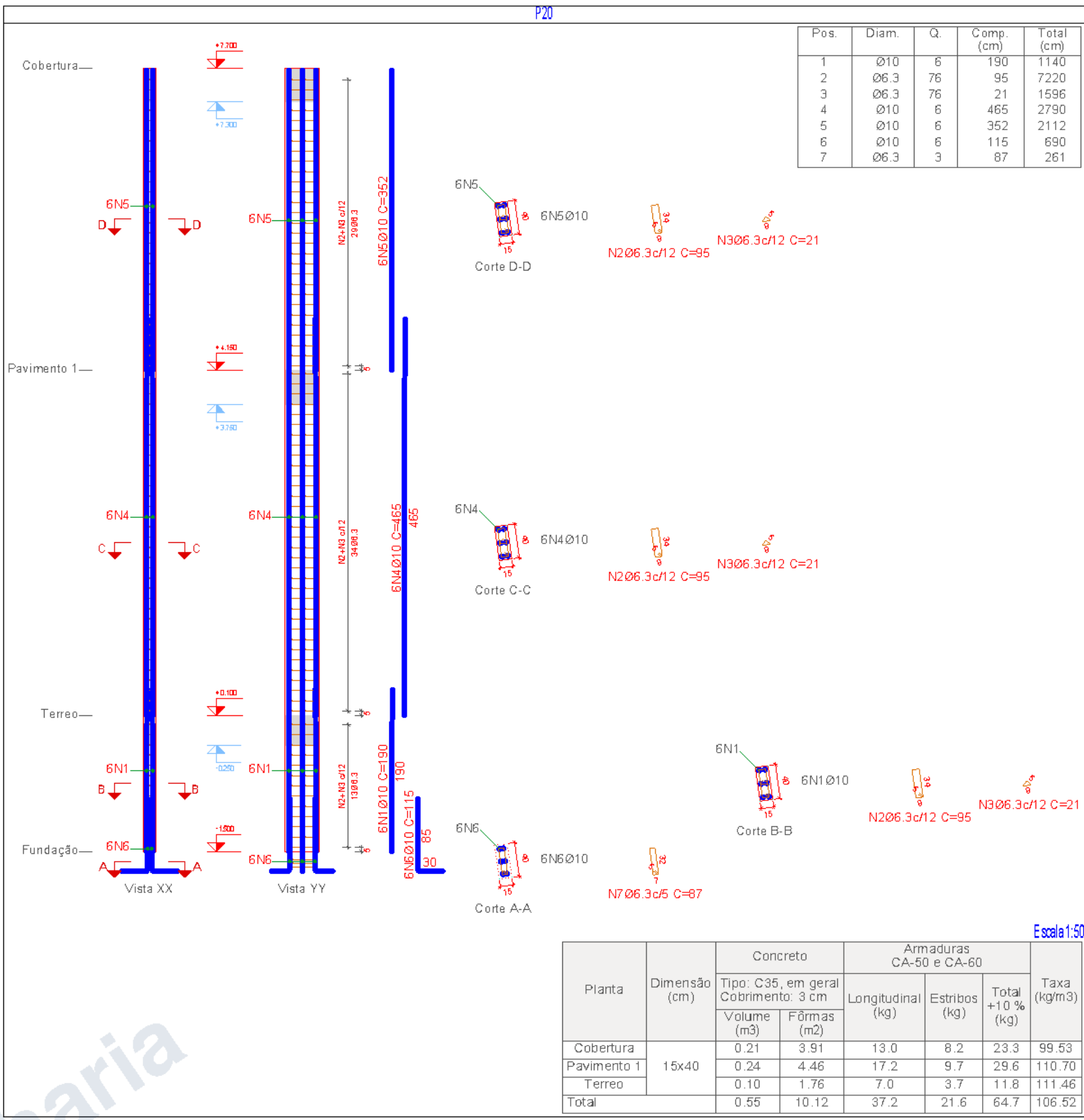


Elemento	Pos.	Diam.	Q.	Esquema (cm)	Comp. Total (cm)	Total (kg)	CA-50	CA-60
P29	1	Ø10	4		220	880	5.4	
	2	Ø10	2		220	440	2.7	
	3	Ø6.3	76		85	6460	15.8	
	4	Ø10	4		455	1860	11.5	
	5	Ø10	4		352	1408	8.7	
	6	Ø10	6		135	810	4.4	
	7	Ø6.3	3		77	231	0.6	
Total+10%					54.0			
P30	1	Ø10	4		220	880	5.4	
	2	Ø10	2		220	440	2.7	
	3	Ø6.3	76		85	6460	15.8	
	4	Ø10	4		455	1860	11.5	
	5	Ø10	4		352	1408	8.7	
	6	Ø10	6		135	810	5.0	
	7	Ø6.3	3		77	231	0.6	
Total+10%					54.7			
P31	1	Ø12.5	6		200	1200	11.6	
	2	Ø6.3	67		95	6365	15.6	
	3	Ø6.3	67		21	1407	3.4	
	4	Ø12.5	6		455	2730	26.9	
	5	Ø10	6		352	2112	13.0	
	6	Ø12.5	6		105	630	6.1	
	7	Ø6.3	3		85	255	0.6	
Total+10%					84.9			
P32	1	Ø10	6		190	1140	7.0	
	2	Ø6.3	76		95	7220	17.7	
	3	Ø6.3	76		21	1596	3.9	
	4	Ø10	6		455	2730	17.2	
	5	Ø10	6		352	2112	13.0	
	6	Ø10	6		90	540	3.3	
	7	Ø6.3	3		87	261	0.6	
Total+10%					68.6			
P33	1	Ø10	6		190	1140	7.0	
	2	Ø6.3	76		105	7980	19.5	
	3	Ø6.3	76		26	1976	4.8	
	4	Ø10	6		455	2730	17.2	
	5	Ø10	6		352	2112	13.0	
	6	Ø10	6		105	630	3.3	
	7	Ø6.3	3		97	291	0.7	
Total+10%					72.7			
P34	1	Ø10	6		190	1140	7.0	
	2	Ø6.3	76		105	7980	19.5	
	3	Ø6.3	76		26	1976	4.8	
	4	Ø10	6		455	2730	17.2	
	5	Ø10	6		352	2112	13.0	
	6	Ø10	6		95	570	3.5	
	7	Ø6.3	3		97	291	0.7	
Total+10%					72.3			
					Ø6.3	137.6	0.0	
					Ø10	221.5	0.0	
					Ø12.5	49.1	0.0	
					Total	407.6	0.0	

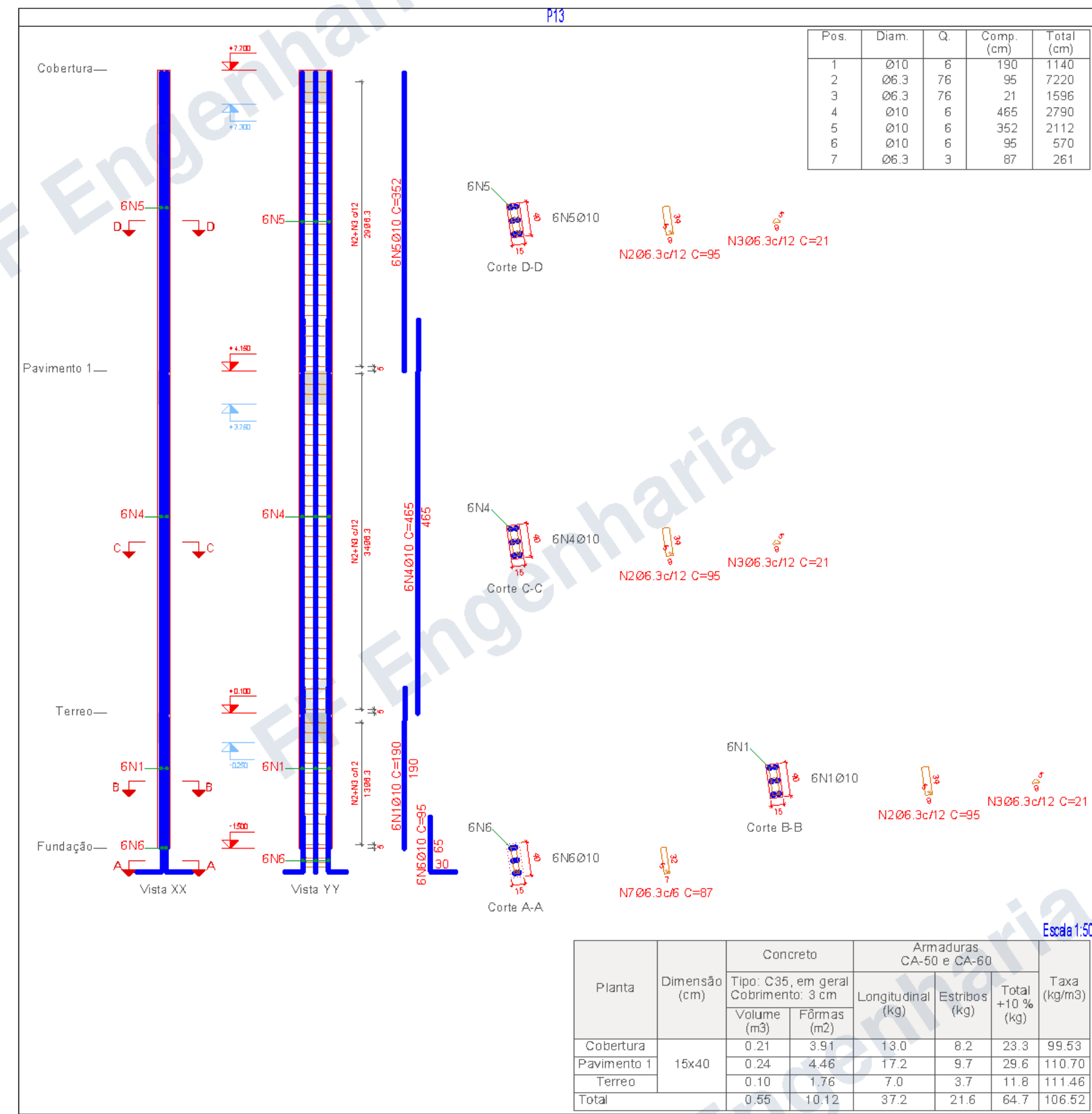
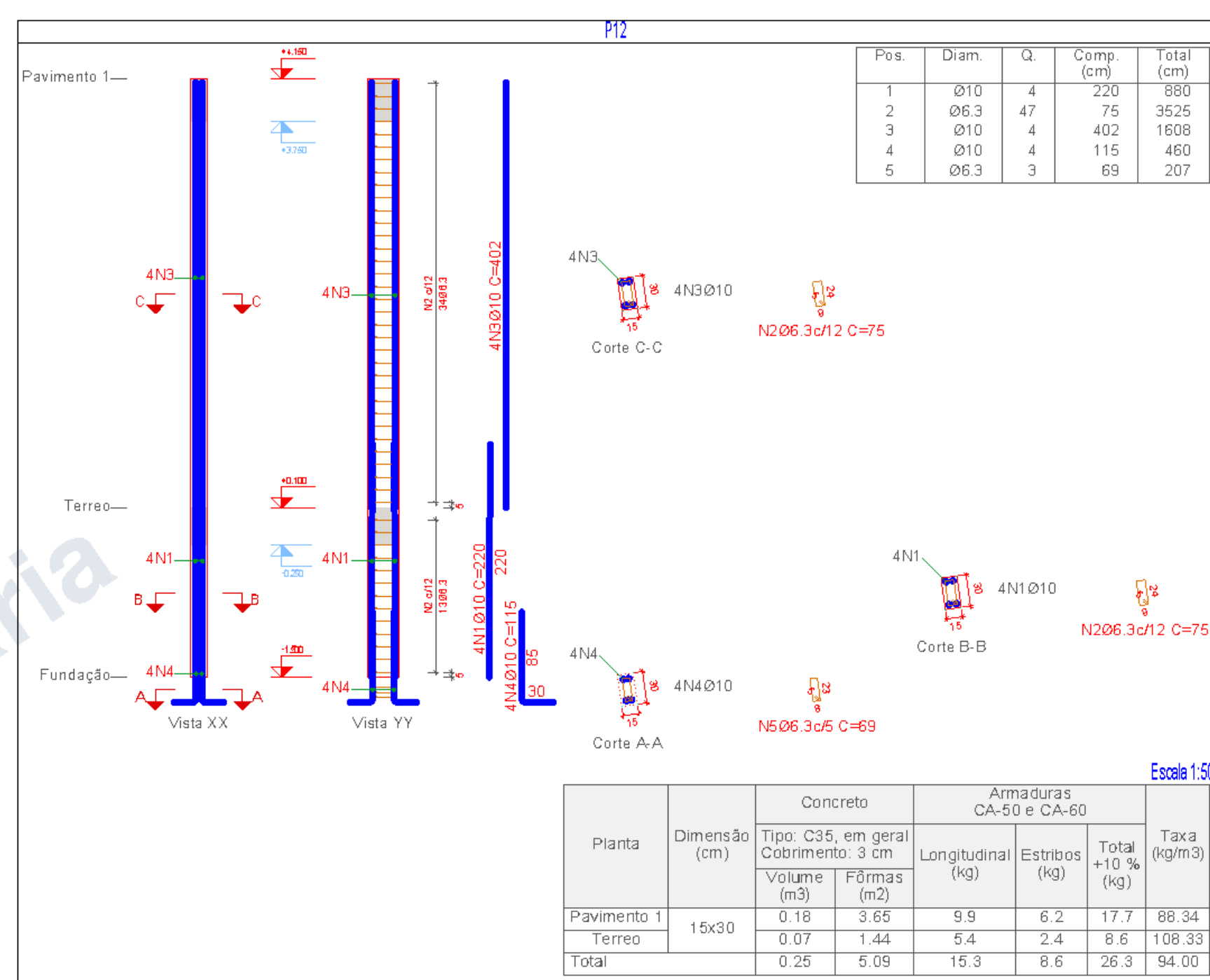
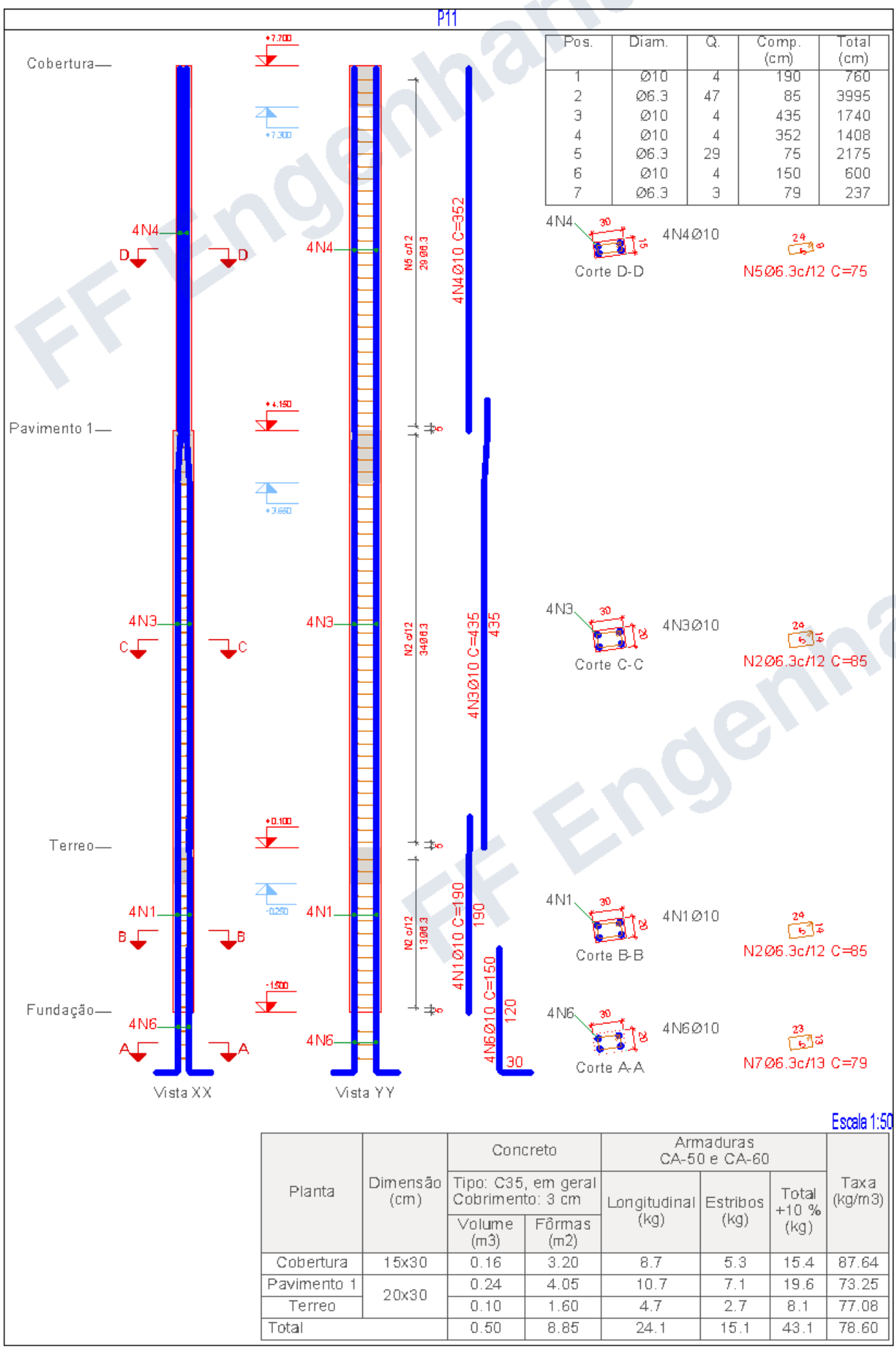
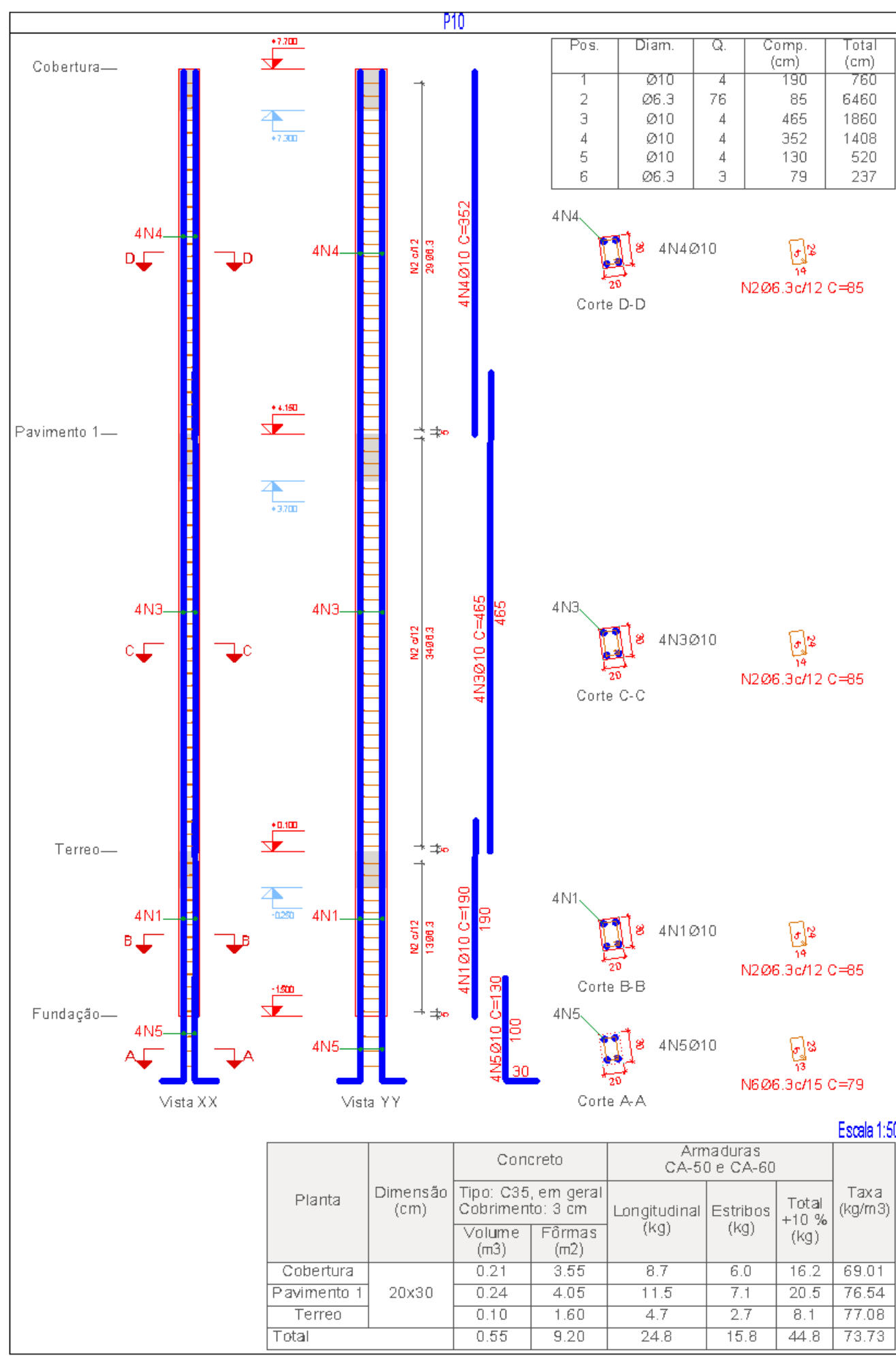
Resumo Aço Pilares	Comp. total (m)	Peso+10% (kg)	Total
CA-50 Ø6.3	2553.1	688	
Ø10	1612.0	1093	
Ø12.5	285.6	303	
Ø16	38.8	67	2151

Pilares que nascem em Terreo e chegam em Cobertura
 Concreto: C35, em geral
 Aço das barras: CA-50 e CA-60

Plataes que nascem em Terreo e chegam em Cobertura
Concreto: C35, em geral
Aço das barras: CA-50 e CA-60
Aço dos estribos: CA-50 e CA-60

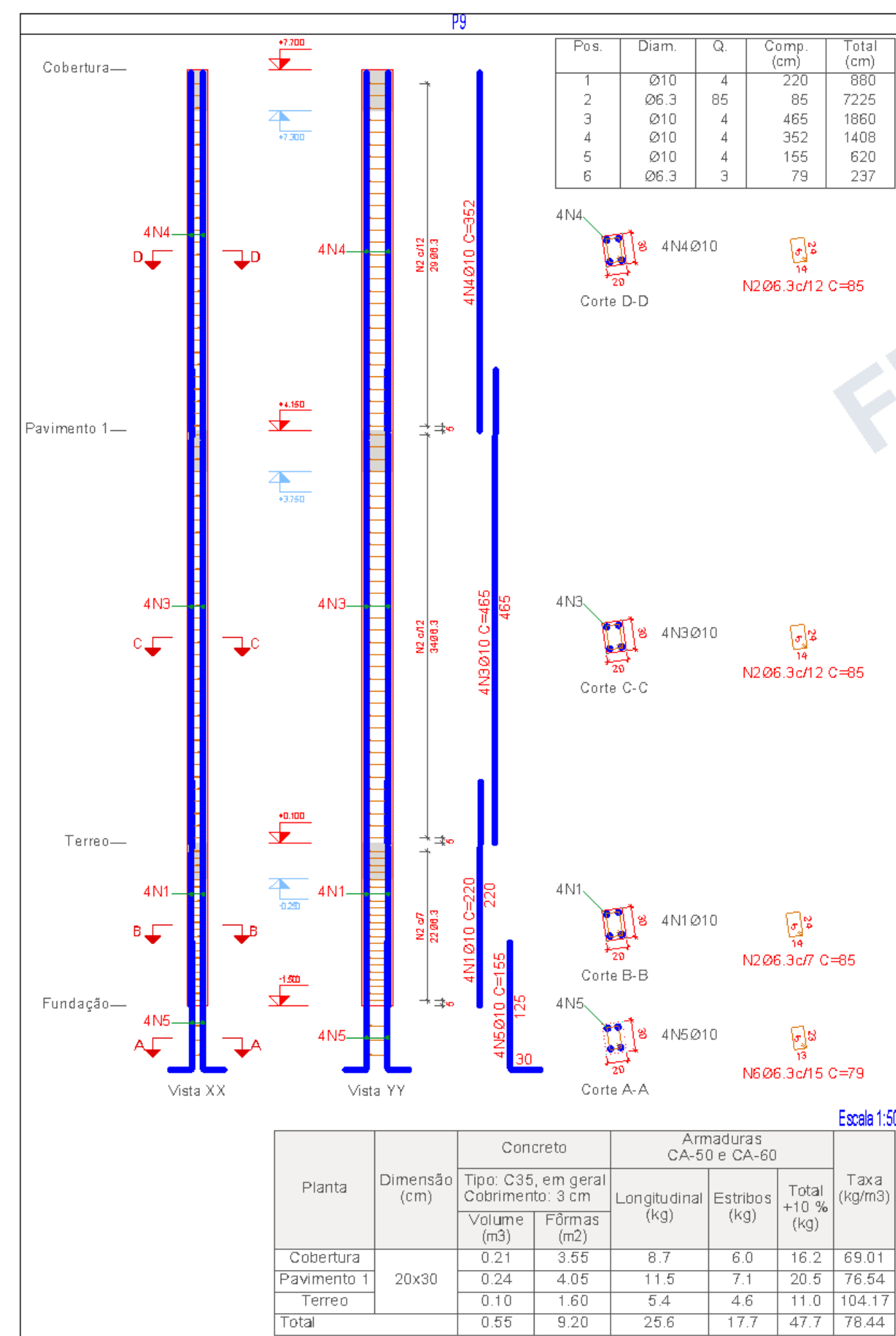
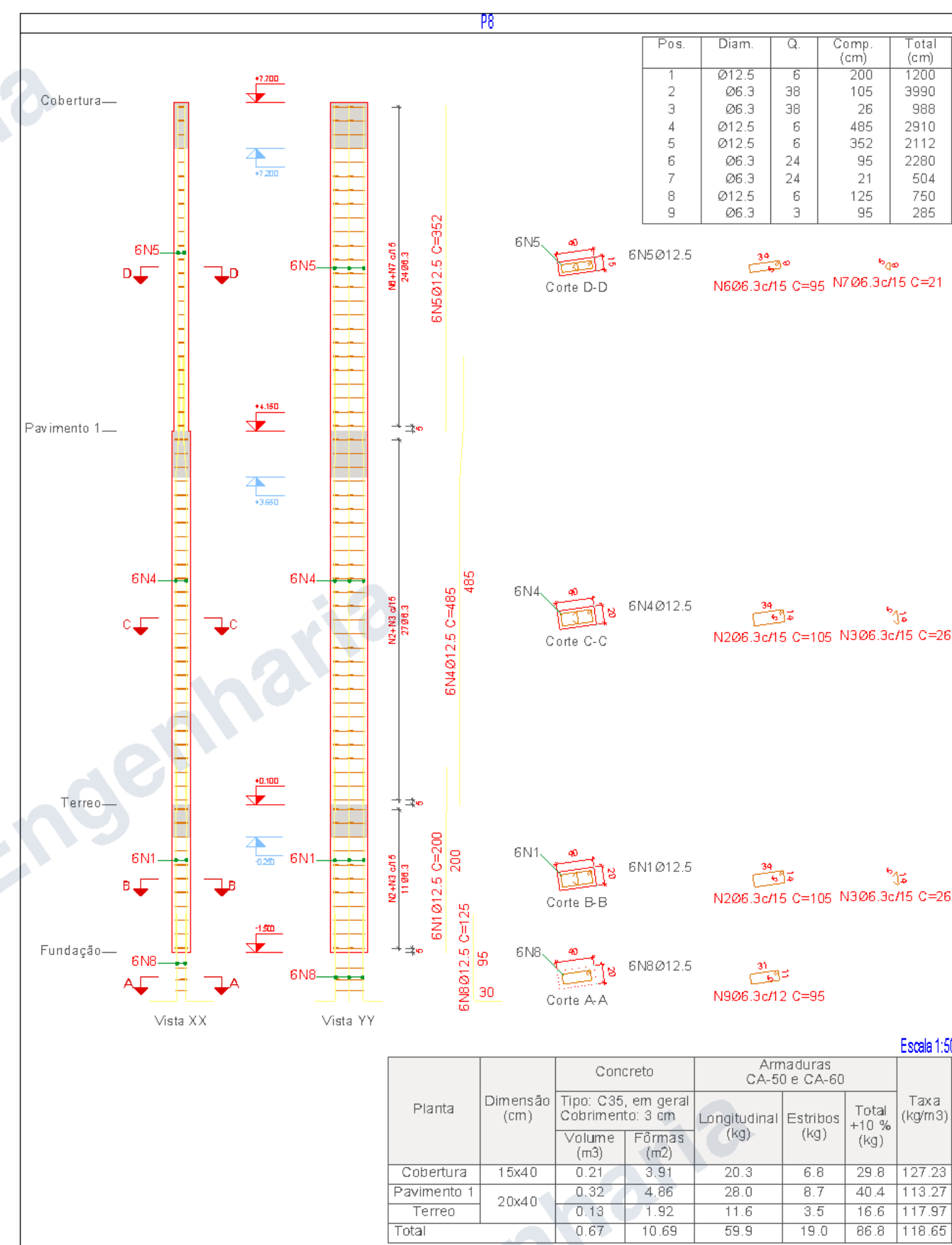
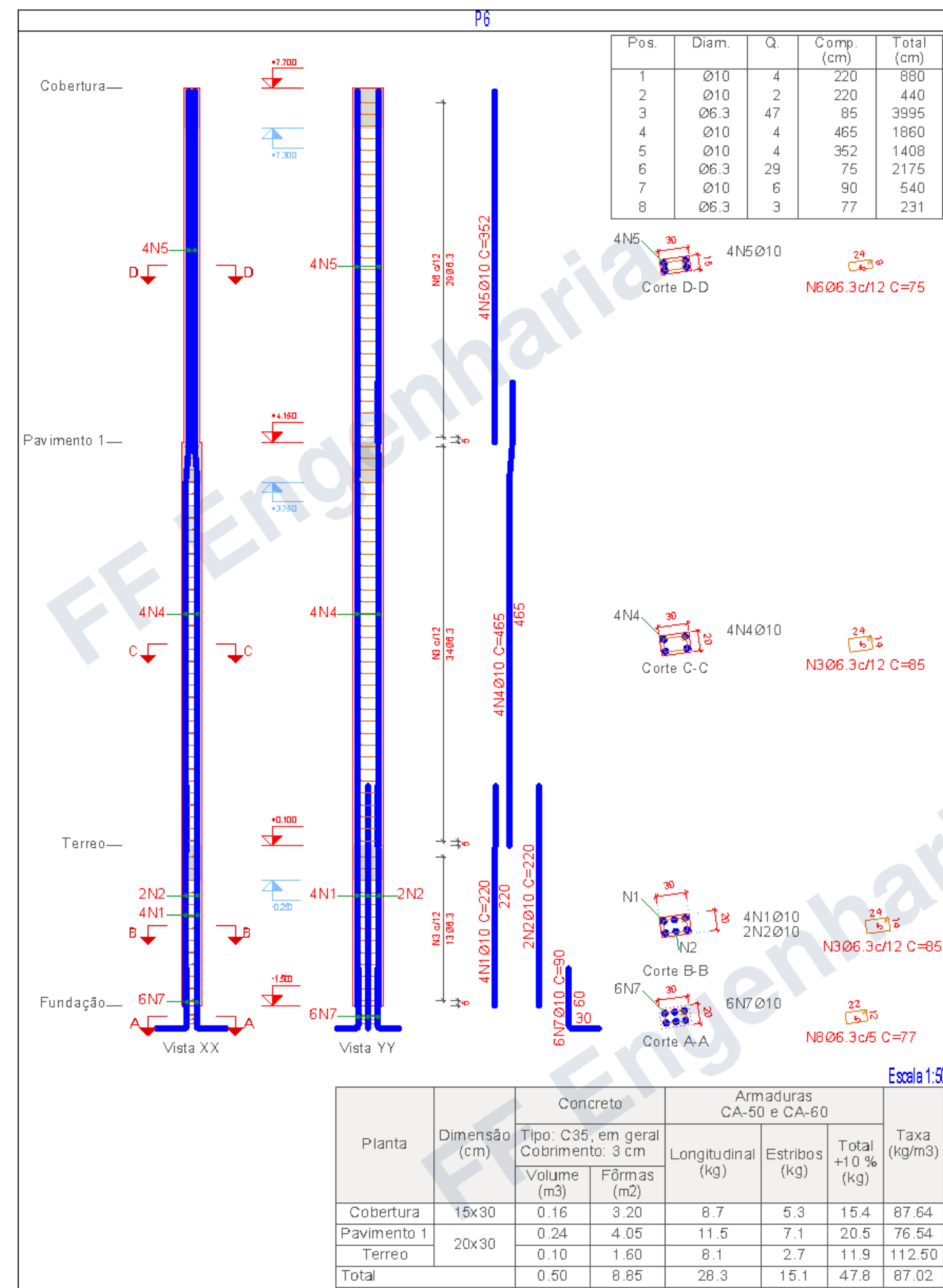
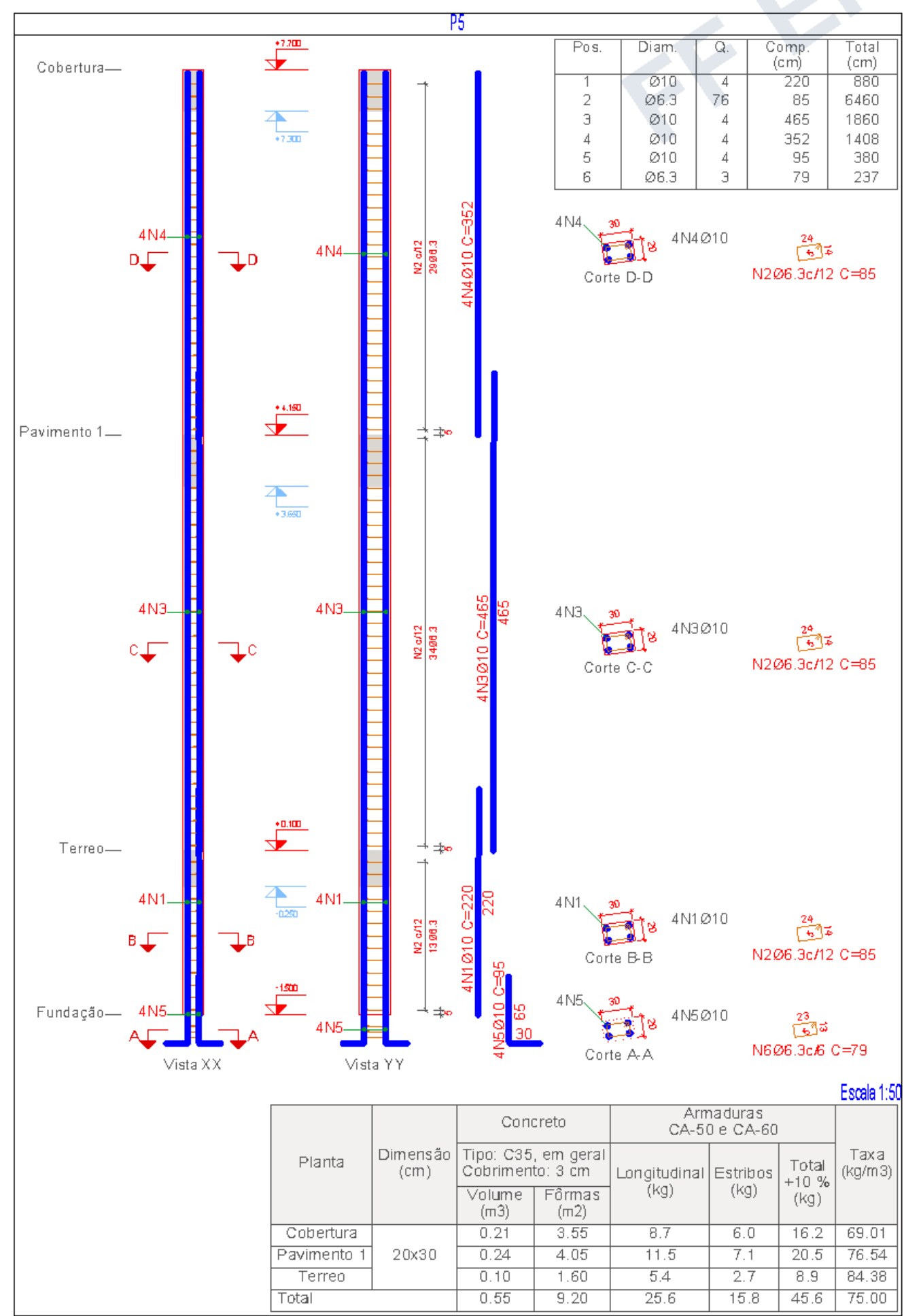
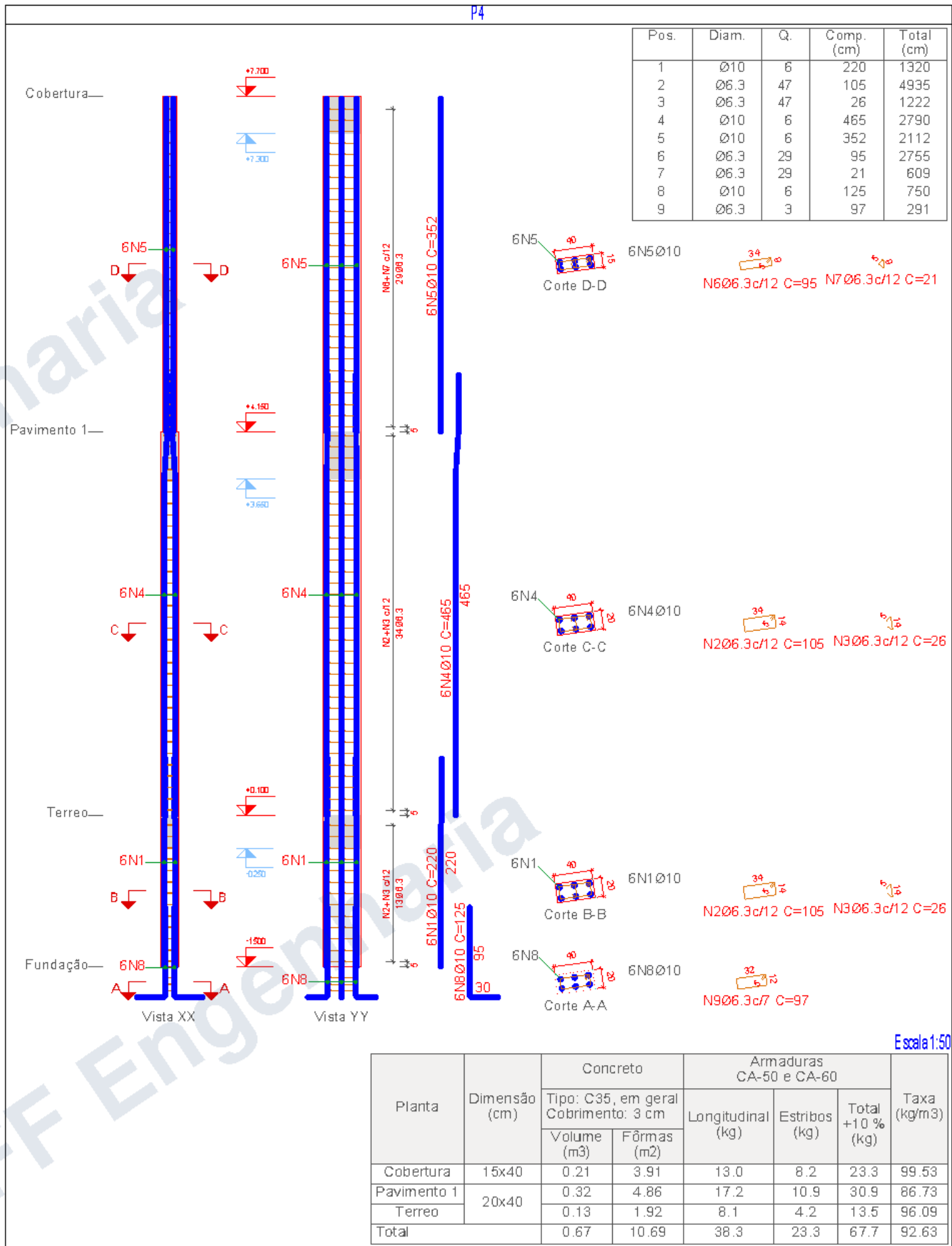
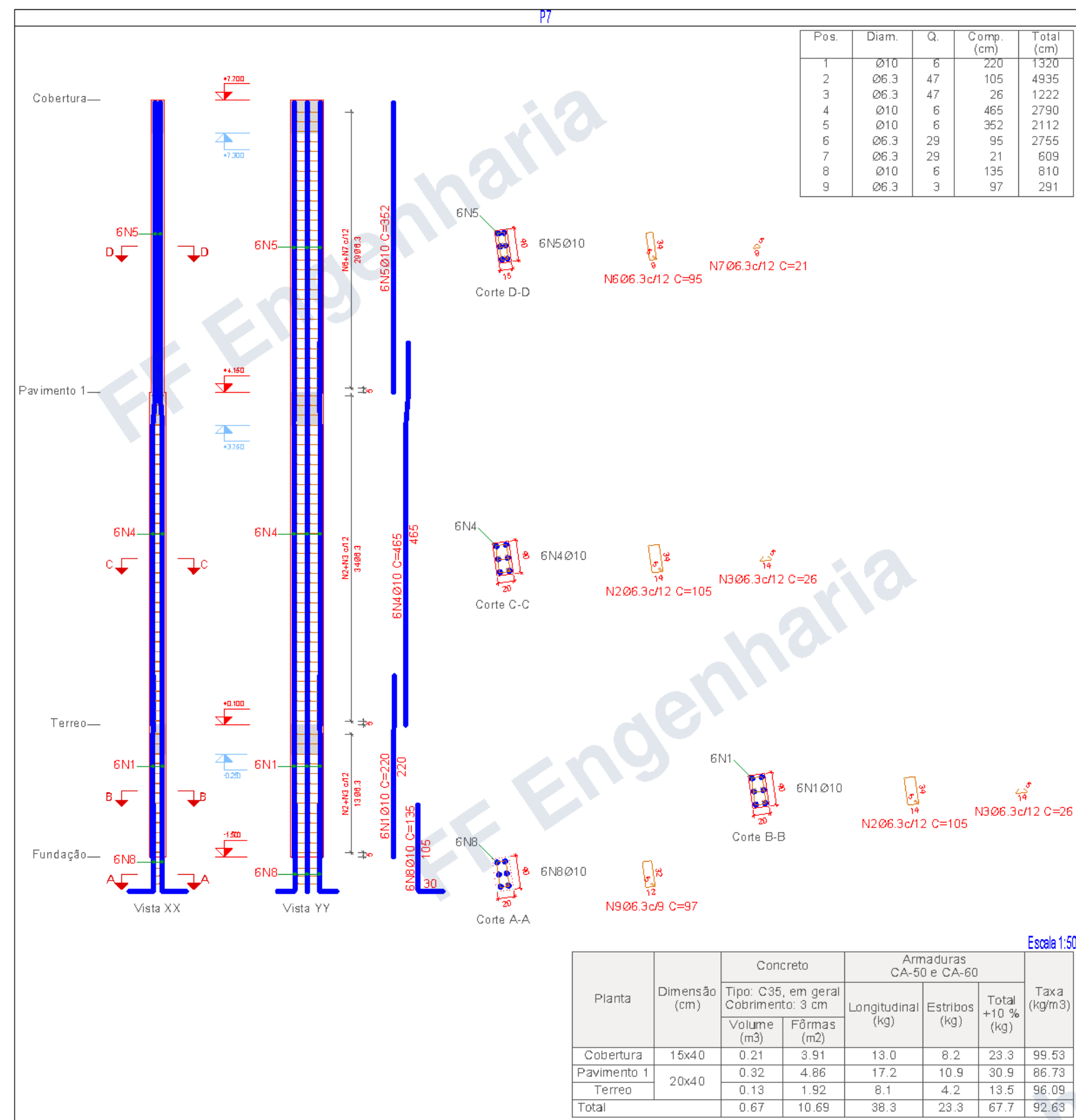
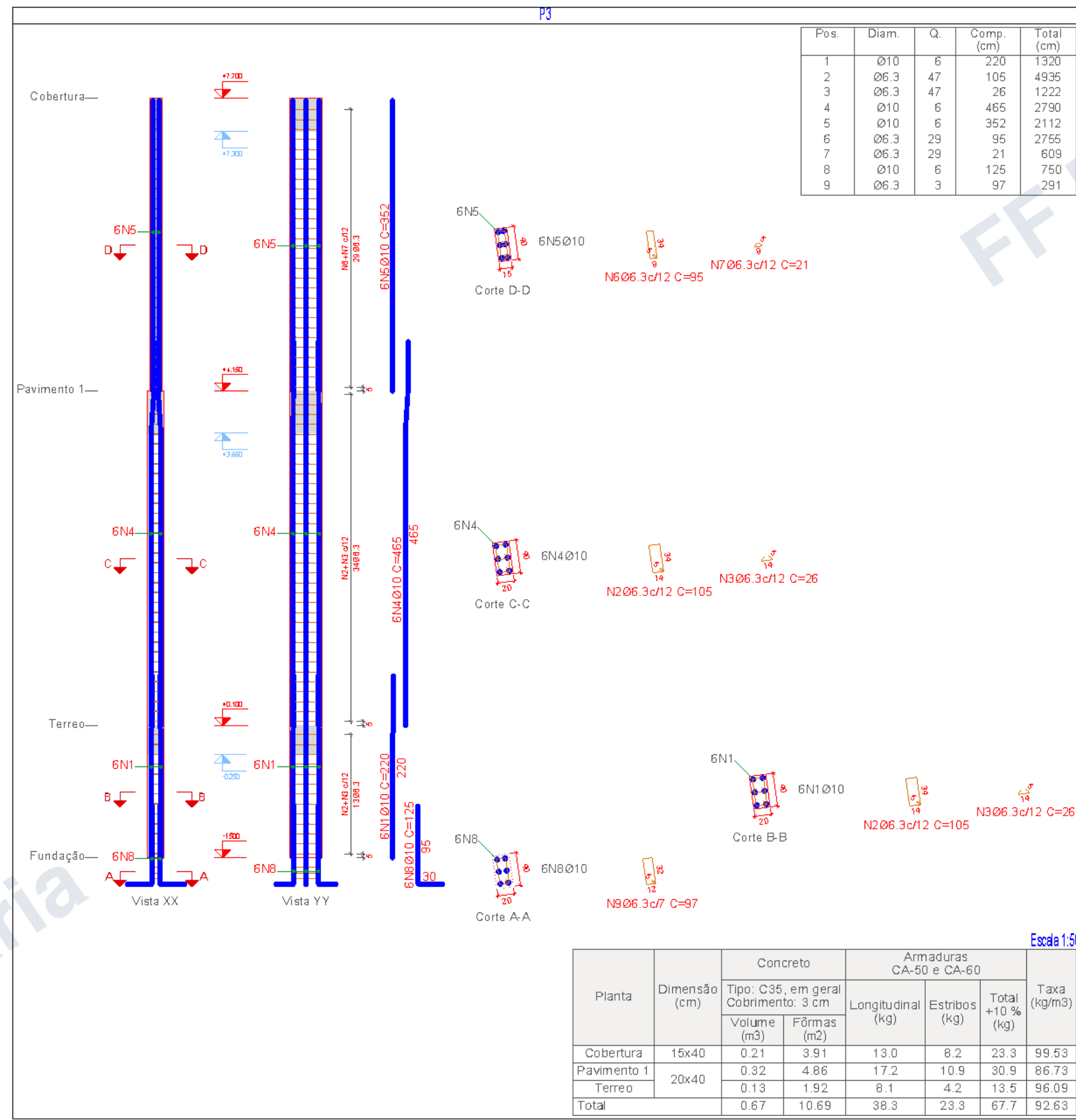
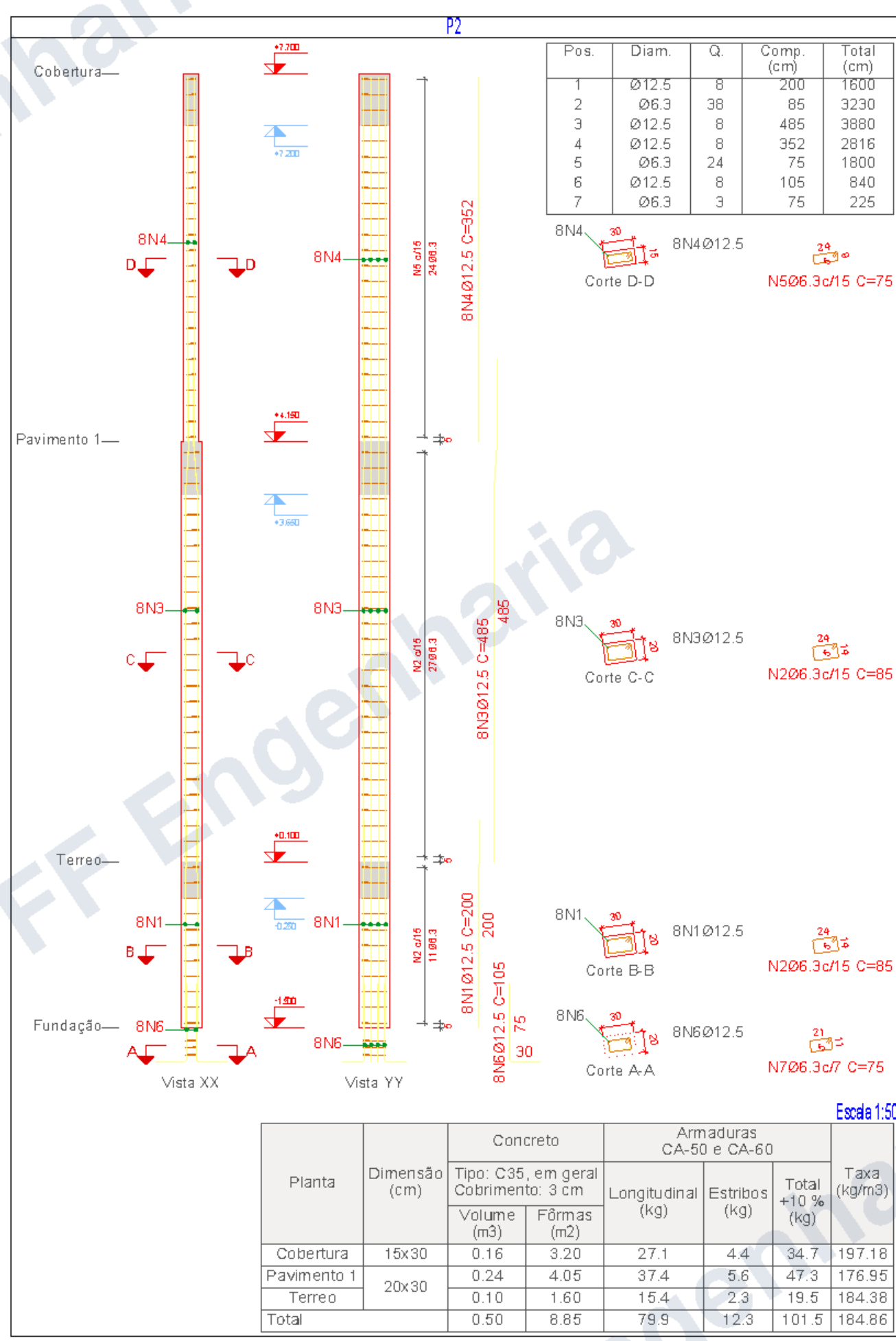
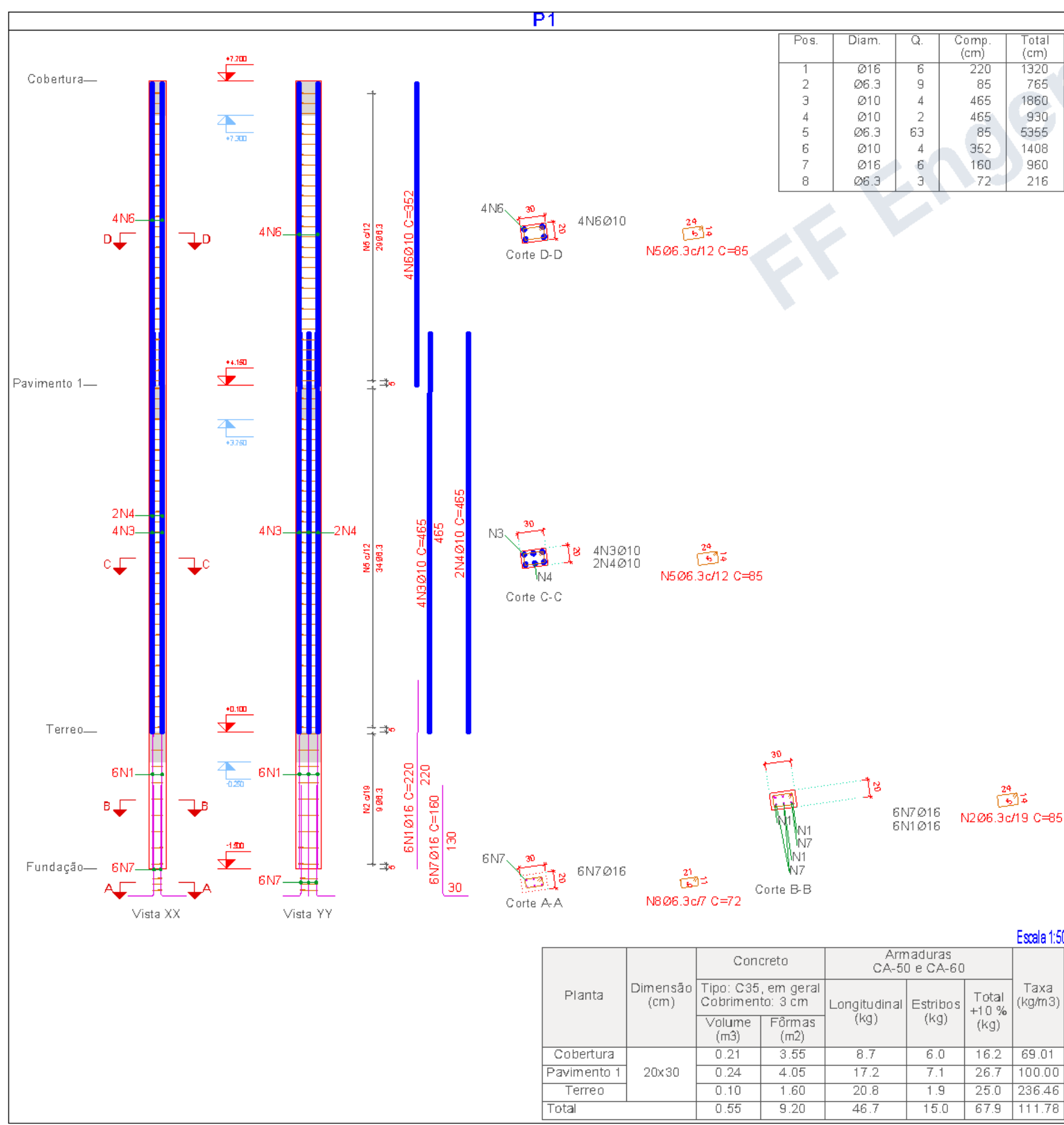


Elemento	Pos.	Diam.	Q.	Esquema (cm)	Comp. (cm)	Total (cm)	CA-50 (kg)	CA-60 (kg)	
P20	1	Ø10	6		190	1140	7,0		
	2	Ø6,3	76		85	7220	17,7		
	3	Ø6,3	76		21	1596	3,9		
	4	Ø10	6		465	2790	17,2		
	5	Ø10	6		352	2112	13,0		
	6	Ø10	6		115	690	4,3		
	7	Ø6,3	3		87	261	0,6		
Total (+10%)							70,1		
P21	1	Ø10	4		190	760	4,7		
	2	Ø6,3	76		85	6460	15,8		
	3	Ø10	4		465	1960	11,5		
	4	Ø10	4		352	1408	8,7		
	5	Ø10	4		100	400	2,5		
	6	Ø6,3	3		79	237	0,6		
	Total (+10%)							49,2	
P22	1	Ø10	6		190	1140	7,0		
	2	Ø6,3	76		75	5700	14,0		
	3	Ø10	4		465	1960	11,5		
	4	Ø10	2		455	930	5,7		
	5	Ø10	4		352	1408	8,7		
	6	Ø10	6		95	570	3,5		
	7	Ø6,3	3		67	201	0,5		
Total (+10%)							56,0		
P23	1	Ø10	4		190	760	4,7		
	2	Ø6,3	47		85	3995	9,8		
	3	Ø10	4		465	1960	11,5		
	4	Ø10	4		352	1408	8,7		
	5	Ø6,3	29		75	2175	5,3		
	6	Ø10	4		100	400	2,5		
	7	Ø6,3	3		79	237	0,6		
Total (+10%)							47,4		
P24	1	Ø12,5	6		200	1200	11,6		
	2	Ø6,3	67		75	6025	12,3		
	3	Ø12,5	4		465	1960	17,9		
	4	Ø12,5	2		445	890	8,6		
	5	Ø10	4		352	1408	8,7		
	6	Ø12,5	6		140	840	8,1		
	7	Ø6,3	3		65	195	0,5		
Total (+10%)							74,5		
P25	1	Ø10	4		220	880	5,4		
	2	Ø6,3	85		85	7225	17,7		
	3	Ø10	4		465	1960	11,5		
	4	Ø10	4		352	1408	8,7		
	5	Ø10	4		135	540	3,3		
	6	Ø6,3	3		79	237	0,6		
Total (+10%)							51,9		
P26	1	Ø16	4		220	880	11,6		
	2	Ø6,3	11		85	935	2,3		
	3	Ø10	4		465	1960	11,5		
	4	Ø6,3	34		85	2990	7,1		
	5	Ø10	4		352	1408	8,7		
	6	Ø6,3	29		75	2175	5,3		
	7	Ø16	4		180	720	11,4		
	8	Ø6,3	3		76	228	0,6		
Total (+10%)							66,9		
P27	1	Ø10	6		190	1140	7,0		
	2	Ø6,3	76		85	7220	17,7		
	3	Ø6,3	76		21	1596	3,9		
	4	Ø10	6		465	2790	17,2		
	5	Ø10	6		352	2112	13,0		
	6	Ø10	6		125	750	4,5		
	7	Ø6,3	3		87	261	0,6		
Total (+10%)							70,4		
P28	1	Ø10	6		190	1140	7,0		
	2	Ø6,3	76		105	7880	19,5		
	3	Ø6,3	76		26	1976	4,8		
	4	Ø10	6		465	2790	17,2		
	5	Ø10	6		352	2112	13,0		
	6	Ø10	6		95	570	3,5		
	7	Ø6,3	3		97	291	0,7		
	Total (+10%)							72,3	
								Ø6,3 176,8	0,0
							Ø10 300,3	0,0	
							Ø12,5 50,8	0,0	
							Ø16 27,6	0,0	
							Total 557,7	0,0	



Elemento	Pos.	Diam.	Q.	Esquema (cm)	Comp. (cm)	Total (cm)	CA-50 (kg)	CA-60 (kg)
P10	1	Ø10	4		190	760	4.7	
	2	Ø6.3	76		85	6460	15.8	
	3	Ø10	4		465	1860	11.5	
	4	Ø10	4		352	1408	8.7	
	5	Ø10	4		130	520	3.2	
	6	Ø6.3	3		79	237	0.6	
Total+10%							43.0	
P11	1	Ø10	4		190	760	4.7	
	2	Ø6.3	47		85	3955	9.8	
	3	Ø10	4		435	1740	10.7	
	4	Ø10	4		352	1408	8.7	
	5	Ø6.3	29		75	2115	5.3	
	6	Ø10	4		150	600	3.7	
	7	Ø6.3	3		79	237	0.6	
Total+10%							47.9	
P12	1	Ø10	4		220	880	5.4	
	2	Ø6.3	47		85	3955	9.8	
	3	Ø10	4		402	1608	9.8	
	4	Ø10	4		115	460	2.8	
	5	Ø6.3	3		69	207	0.5	
Total+10%							29.9	
P13	1	Ø10	6		190	1140	7.0	
	2	Ø6.3	76		85	7220	17.7	
	3	Ø6.3	76		21	1596	3.8	
	4	Ø10	6		465	2790	17.2	
	5	Ø10	6		352	2112	13.0	
	6	Ø10	6		95	570	3.5	
	7	Ø6.3	3		87	261	0.6	
Total+10%							69.2	
P14	1	Ø10	4		220	880	5.4	
	2	Ø6.3	76		85	6460	15.8	
	3	Ø10	4		465	1860	11.5	
	4	Ø10	4		352	1408	8.7	
	5	Ø10	4		95	380	2.3	
	6	Ø6.3	3		79	237	0.6	
Total+10%							48.7	
P15	1	Ø10	4		190	760	4.7	
	2	Ø6.3	76		85	6460	15.8	
	3	Ø10	4		465	1860	11.5	
	4	Ø10	4		352	1408	8.7	
	5	Ø10	4		95	380	2.3	
	6	Ø6.3	3		79	237	0.6	
	Total+10%						48.0	
	1	Ø12.5	4		200	800	7.7	
	2	Ø10	2		220	440	2.7	
P16	3	Ø6.3	76		85	6460	15.8	
	4	Ø12.5	4		465	1860	17.9	
	5	Ø10	2		465	930	5.7	
	6	Ø10	4		352	1408	8.7	
	7	Ø12.5	4		95	380	3.7	
	8	Ø10	2		90	180	1.1	
	9	Ø6.3	3		77	231	0.6	
	Total+10%						70.3	
P17	1	Ø10	4		220	880	5.4	
	2	Ø6.3	85		85	7225	17.7	
	3	Ø10	4		465	1860	11.5	
	4	Ø10	4		352	1408	8.7	
	5	Ø10	4		150	600	3.7	
	6	Ø6.3	3		79	237	0.6	
Total+10%							52.4	
P18	1	Ø10	4		220	880	5.4	
	2	Ø6.3	85		85	7225	17.7	
	3	Ø10	4		465	1860	11.5	
	4	Ø10	4		352	1408	8.7	
	5	Ø10	4		140	560	3.5	
	6	Ø6.3	3		79	237	0.6	
Total+10%							52.1	
P19	1	Ø10	4		220	880	5.4	
	2	Ø6.3	85		85	7225	17.7	
	3	Ø10	4		465	1860	11.5	
	4	Ø10	4		352	1408	8.7	
	5	Ø10	4		135	540	3.3	
	6	Ø6.3	3		79	237	0.6	
Total+10%							51.9	
							0.0	0.0
							0.0	0.0
							0.0	0.0
							0.0	0.0

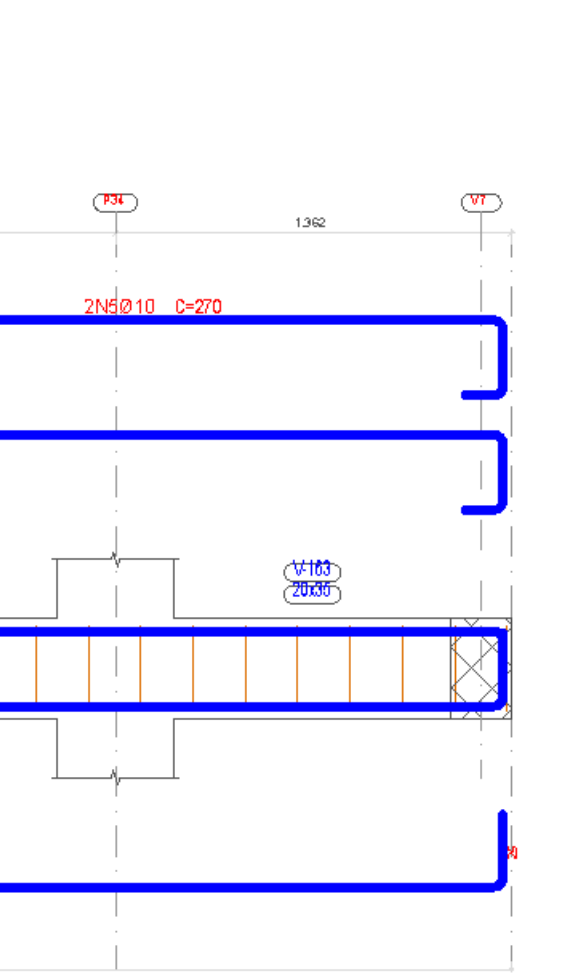
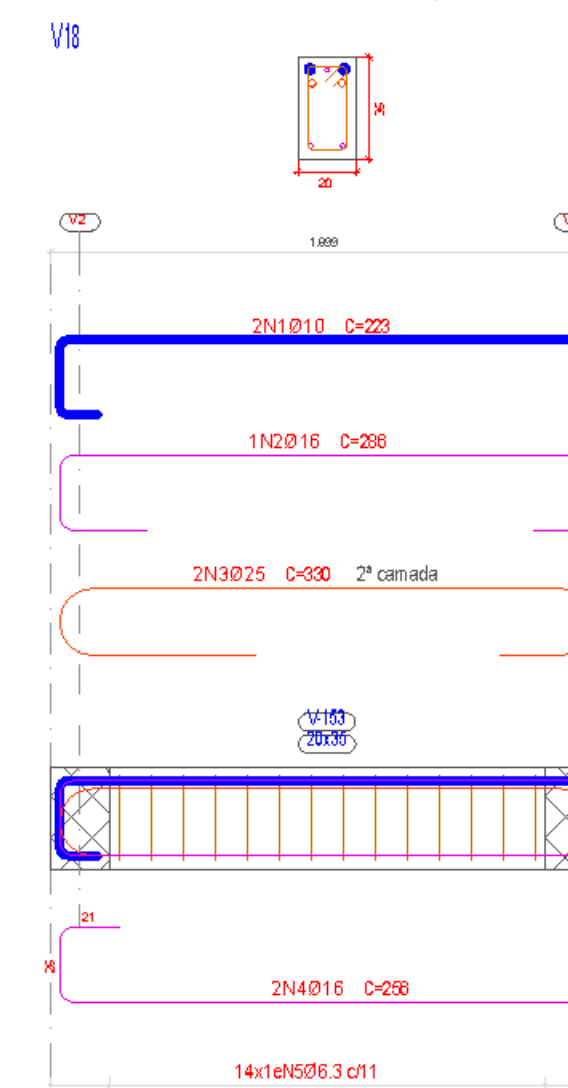
Pilares que nascem em Terreno e chegam em Cobertura
Concreto: C35, em geral
Apo dos estribos: CA-50 e CA-60
Apo dos estribos: CA-50 e CA-60



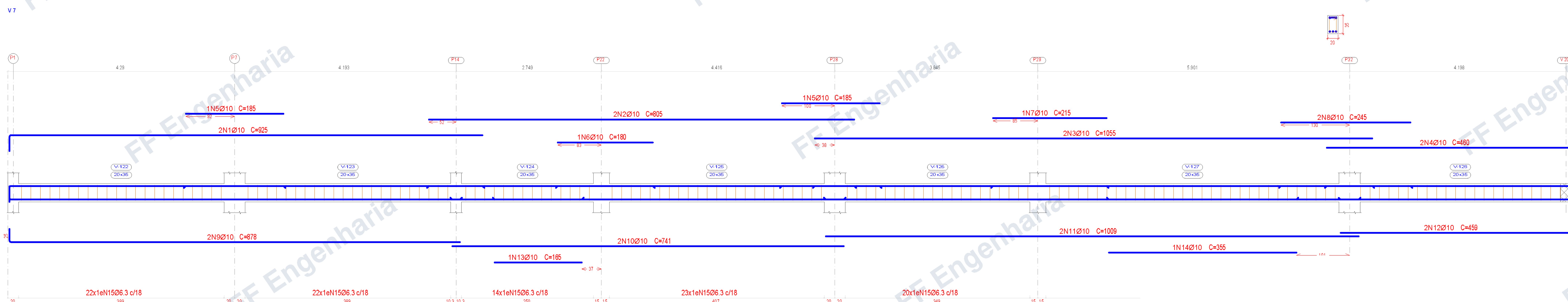
Elemento	Pos.	Diam.	Q.	Esquema (cm)	Comp. (cm)	Total (cm)	CA-50 (kg)	CA-60 (kg)
P1	1	Ø16	6		220	1320	20.8	
	2	Ø6.3	9		85	765	1.9	
	3	Ø10	4		465	1860	11.5	
	4	Ø10	2		465	930	5.7	
	5	Ø6.3	63		85	5355	13.1	
	6	Ø10	4		362	1448	8.7	
	7	Ø16	6		160	960	15.2	
	8	Ø6.3	3		72	216	0.5	
	Total+10%							65.1
P2	1	Ø12.5	8		200	1600	15.4	
	2	Ø6.3	30		85	2550	7.9	
	3	Ø12.5	8		485	3880	37.4	
	4	Ø12.5	8		352	2816	27.1	
	5	Ø6.3	24		75	1800	4.4	
	6	Ø12.5	8		105	840	8.1	
	7	Ø6.3	3		75	225	0.6	
	Total+10%							111.0
P3	1	Ø10	6		220	1320	8.1	
	2	Ø6.3	47		105	4935	12.1	
	3	Ø6.3	47		26	1222	3.0	
	4	Ø10	6		465	2790	17.2	
	5	Ø10	6		352	2112	13.0	
	6	Ø6.3	29		95	2755	6.7	
	7	Ø6.3	29		21	609	1.5	
	8	Ø10	6		125	750	4.6	
	9	Ø6.3	3		97	291	0.7	
	Total+10%							73.6
P4	1	Ø10	6		220	1320	8.1	
	2	Ø6.3	47		105	4935	12.1	
	3	Ø6.3	47		26	1222	3.0	
	4	Ø10	6		465	2790	17.2	
	5	Ø10	6		352	2112	13.0	
	6	Ø6.3	29		95	2755	6.7	
	7	Ø6.3	29		21	609	1.5	
	8	Ø10	6		125	750	4.6	
	9	Ø6.3	3		97	291	0.7	
	Total+10%							73.6
P5	1	Ø10	4		220	880	5.4	
	2	Ø6.3	76		85	6460	16.8	
	3	Ø10	4		465	1860	11.5	
	4	Ø10	4		362	1448	8.7	
	5	Ø10	4		352	1408	8.7	
	6	Ø6.3	3		79	237	0.6	
	Total+10%							48.7
P6	1	Ø10	4		220	880	5.4	
	2	Ø10	2		220	440	2.7	
	3	Ø6.3	47		85	3995	9.8	
	4	Ø10	4		465	1860	11.5	
	5	Ø10	4		362	1448	8.7	
	6	Ø6.3	29		75	2175	5.3	
	7	Ø10	6		90	540	3.3	
	8	Ø6.3	3		77	231	0.6	
	Total+10%							52.0
P7	1	Ø10	6		220	1320	11.6	
	2	Ø6.3	47		105	4935	12.1	
	3	Ø6.3	47		26	1222	3.0	
	4	Ø10	6		465	2790	17.2	
	5	Ø10	6		352	2112	13.0	
	6	Ø6.3	29		95	2755	6.7	
	7	Ø6.3	29		21	609	1.5	
	8	Ø10	6		135	810	5.0	
	9	Ø6.3	3		97	291	0.7	
	Total+10%							74.0
P8	1	Ø12.5	6		200	1200	11.6	
	2	Ø6.3	30		85	2550	9.8	
	3	Ø6.3	30		26	990	2.4	
	4	Ø12.5	6		485	2910	28.0	
	5	Ø12.5	6		352	2112	20.3	
	6	Ø6.3	24		95	2280	5.8	
	7	Ø6.3	24		21	504	1.2	
	8	Ø12.5	6		125	750	7.2	
	9	Ø6.3	3		95	285	0.7	
	Total+10%							95.5
P9	1	Ø10	4		220	880	5.4	
	2	Ø6.3	85		85	7225	17.7	
	3	Ø10	4		465	1860	11.5	
	4	Ø10	4		362	1448	8.7	
	5	Ø10	4		352	1408	8.7	
	6	Ø6.3	3		79	237	0.6	
	Total+10%							62.6
	Ø10	4			262	1044	0.0	
	Ø12.5	6			70.8	0.0		
	Ø16	6			38.6	0.0		
	Total							206.0

Pilares que nascem em Terço e chegam em Cobertura
 Concreto: C35, em geral
 Aço das barras: CA-50 e CA-60
 Aço dos estribos: CA-50 e CA-60

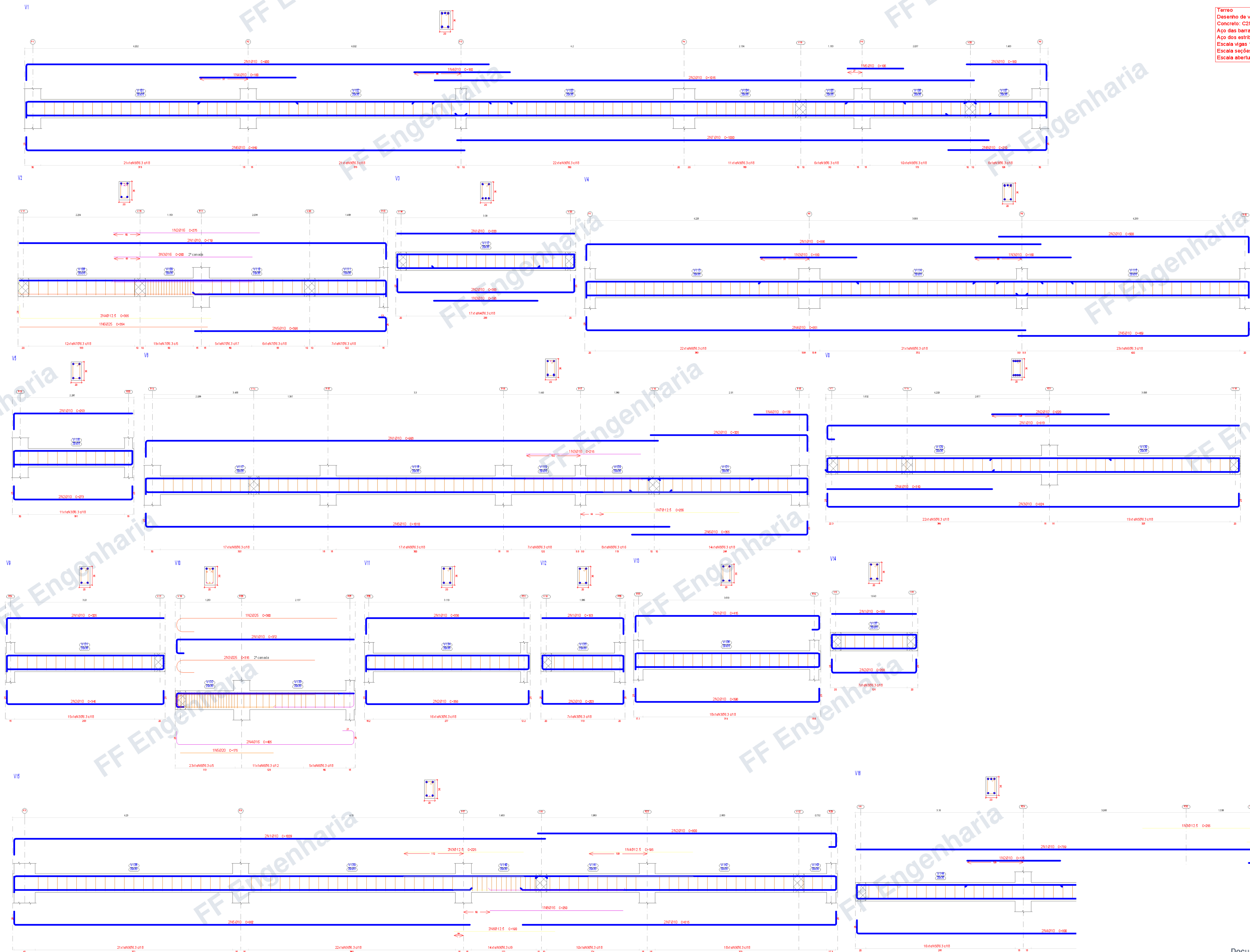
Tipo de Tensão	Elemento	Pos	Diã	Q	Esquadra (cm)	Comp (cm)	Total (cm)	CA-50 (kg)	CA-60 (kg)
Desmoldagem de vigas	V17	1	Ø10	2	112	910	1020	11,2	
Concreto C25, em geral		2	Ø10	2	104	785	1650	9,7	
Aço das barras: CA-50 e CA-60		3	Ø10	2	104	255	510	3,1	
Aço dos estribos: CA-50 e CA-60		4	Ø10	1	112	170	170	1,0	
Escala vigas 1.25		5	Ø10	1	102	160	160	1,0	
Escala seções 1.25	V18	6	Ø10	2	112	877	1754	10,8	
Escala aberturas 1.25		7	Ø10	2	112	877	1754	10,8	

[illegible]

Elemento	Pos	Diam	Q	Esquema (cm)	Comp (cm)	Total (cm)	CA-50 (kg)	CA-60 (kg)	
V17	1	Ø10	2		180	910	1820	11.2	0.0
	2	Ø10	2		180	965	1910	3.1	0.0
	3	Ø10	1		180	170	170	1.0	0.0
	4	Ø10	2		180	160	160	1.0	0.0
	5	Ø10	2		180	917	1754	10.8	0.0
	6	Ø10	2		180	738	1476	3.1	0.0
	8	Ø10	1		180	195	195	1.2	0.0
	9	Ø6.3	70		180	96	7584	18.6	0.0
					Total=10% 72.3				
	V18	1	Ø10	2		220	440	2.7	0.0
2		Ø10	1		220	380	2.8	4.5	
3		Ø10	2		220	380	2.8	4.5	
4		Ø10	2		220	265	512	8.1	0.0
5		Ø6.3	14		220	95	1344	3.3	0.0
				Total=10% 92.4					
V19	1	Ø10	2		745	1490	9.2	0.0	
	2	Ø10	2		745	1400	8.6	0.0	
	3	Ø10	2		745	840	5.2	13.2	
	4	Ø10	2		745	535	535	13.2	
	5	Ø10	2		745	410	820	12.8	
	6	Ø20	3		435	1305	32.2	0.0	
	7	Ø16	2		325	650	10.0	17.0	
	8	Ø10	2		265	530	3.3	0.0	
	9	Ø10	2		100	1020	16.1	0.0	
	10	Ø16	2		540	1000	17.0	0.0	
	11	Ø16	2		400	980	17.5	0.0	
	12	Ø10	2		410	820	12.8	0.0	
	13	Ø25	1		560	560	25.2	0.0	
	14	Ø6.3	111		96	10696	36.1	0.0	
					Total=10% 315.6				
V20	1	Ø10	2		800	1760	10.8	0.0	
	2	Ø10	2		800	1040	20.0	12.8	
	3	Ø10	1		250	250	1.5	0.0	
	4	Ø10	1		175	175	1.1	0.0	
	5	Ø10	2		270	540	3.3	0.0	
	6	Ø10	2		887	1774	10.8	0.0	
	7	Ø10	2		1007	2014	12.4	0.0	
	8	Ø6.3	95		95	9100	22.3	0.0	
				Total=10% 82.8					
				Ø6.3	77.3	0.0	0.0		
				Ø10	107.6	0.0	0.0		
				Ø20	52.8	0.0	0.0		
				Ø25	49.8	0.0	0.0		
				Total	418.8	0.0	0.0		

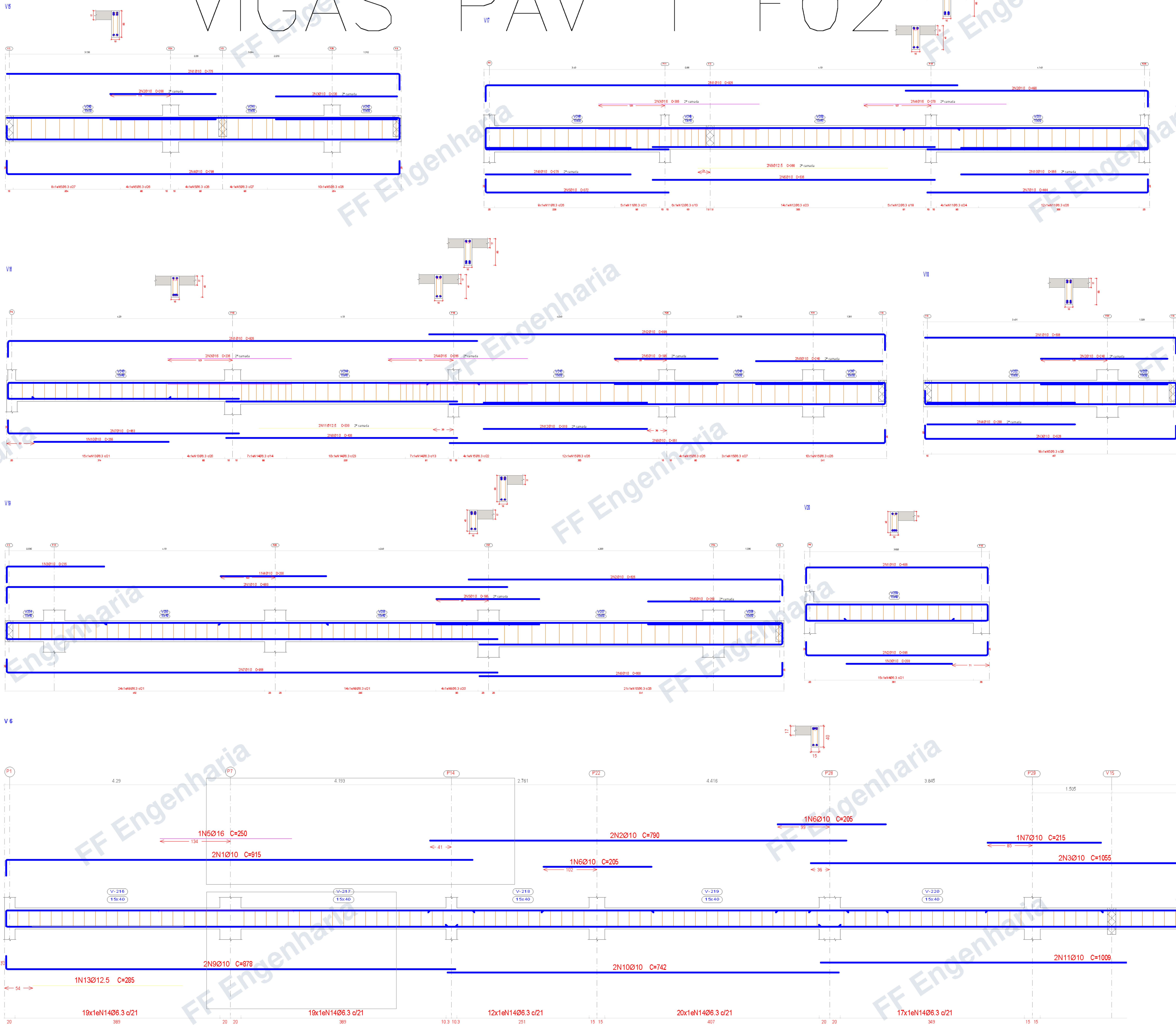


VIGAS TERREO F01



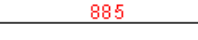
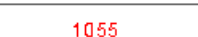
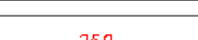
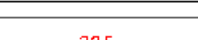
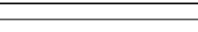
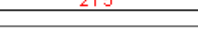
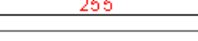
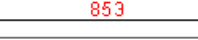
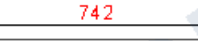
Terreo						CA-50 CA-60	
Desenho de vigas							
Concreto: C25, em geral							
Aço das barras: CA-50 e CA-60							
Escala vigas 1:25							
Escala seções 1:25							
Escala aberturas 1:25							
Elemento	Pos.	Diam.	Q.	Esquema (cm)	Comp. (cm)	Total (cm)	CA-50 CA-60 (kg)
V1	1	Ø10	2	180	360	1800	11.1
	2	Ø10	2	180	360	1800	11.1
	3	Ø10	2	180	360	1800	11.1
	4	Ø10	2	180	360	1800	11.1
	5	Ø10	2	180	360	1800	11.1
	6	Ø10	2	180	360	1800	11.1
	7	Ø10	2	180	360	1800	11.1
	8	Ø10	2	180	360	1800	11.1
	9	Ø10	2	180	360	1800	11.1
V2	1	Ø10	2	180	360	1800	11.1
	2	Ø10	2	180	360	1800	11.1
	3	Ø10	2	180	360	1800	11.1
	4	Ø10	2	180	360	1800	11.1
	5	Ø10	2	180	360	1800	11.1
	6	Ø10	2	180	360	1800	11.1
	7	Ø10	2	180	360	1800	11.1
	8	Ø10	2	180	360	1800	11.1
	9	Ø10	2	180	360	1800	11.1
V3	1	Ø10	2	180	360	1800	11.1
	2	Ø10	2	180	360	1800	11.1
	3	Ø10	2	180	360	1800	11.1
	4	Ø10	2	180	360	1800	11.1
	5	Ø10	2	180	360	1800	11.1
	6	Ø10	2	180	360	1800	11.1
	7	Ø10	2	180	360	1800	11.1
	8	Ø10	2	180	360	1800	11.1
	9	Ø10	2	180	360	1800	11.1
V4	1	Ø10	2	180	360	1800	11.1
	2	Ø10	2	180	360	1800	11.1
	3	Ø10	2	180	360	1800	11.1
	4	Ø10	2	180	360	1800	11.1
	5	Ø10	2	180	360	1800	11.1
	6	Ø10	2	180	360	1800	11.1
	7	Ø10	2	180	360	1800	11.1
	8	Ø10	2	180	360	1800	11.1
	9	Ø10	2	180	360	1800	11.1
V5	1	Ø10	2	180	360	1800	11.1
	2	Ø10	2	180	360	1800	11.1
	3	Ø10	2	180	360	1800	11.1
	4	Ø10	2	180	360	1800	11.1
	5	Ø10	2	180	360	1800	11.1
	6	Ø10	2	180	360	1800	11.1
	7	Ø10	2	180	360	1800	11.1
	8	Ø10	2	180	360	1800	11.1
	9	Ø10	2	180	360	1800	11.1
V6	1	Ø10	2	180	360	1800	11.1
	2	Ø10	2	180	360	1800	11.1
	3	Ø10	2	180	360	1800	11.1
	4	Ø10	2	180	360	1800	11.1
	5	Ø10	2	180	360	1800	11.1
	6	Ø10	2	180	360	1800	11.1
	7	Ø10	2	180	360	1800	11.1
	8	Ø10	2	180	360	1800	11.1
	9	Ø10	2	180	360	1800	11.1
V7	1	Ø10	2	180	360	1800	11.1
	2	Ø10	2	180	360	1800	11.1
	3	Ø10	2	180	360	1800	11.1
	4	Ø10	2	180	360	1800	11.1
	5	Ø10	2	180	360	1800	11.1
	6	Ø10	2	180	360	1800	11.1
	7	Ø10	2	180	360	1800	11.1
	8	Ø10	2	180	360	1800	11.1
	9	Ø10	2	180	360	1800	11.1
V8	1	Ø10	2	180	360	1800	11.1
	2	Ø10	2	180	360	1800	11.1
	3	Ø10	2	180	360	1800	11.1
	4	Ø10	2	180	360	1800	11.1
	5	Ø10	2	180	360	1800	11.1
	6	Ø10	2	180	360	1800	11.1
	7	Ø10	2	180	360	1800	11.1
	8	Ø10	2	180	360	1800	11.1
	9	Ø10	2	180	360	1800	11.1
V9	1	Ø10	2	180	360	1800	11.1
	2	Ø10	2	180	360	1800	11.1
	3	Ø10	2	180	360	1800	11.1
	4	Ø10	2	180	360	1800	11.1
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	6	Ø10	2	180	360	1800	11.1
	7	Ø10	2	180	360	1800	11.1
	8	Ø10	2	180	360	1800	11.1
	9	Ø10	2	180	360	1800	11.1
V10	1	Ø10	2	180	360	1800	11.1
	2	Ø10	2	180	360	1800	11.1
	3	Ø10	2	180	360	1800	11.1
	4	Ø10	2	180	360	1800	11.1
	5	Ø10	2	180	360	1800	11.1
	6	Ø10	2	180	360	1800	11.1
	7	Ø10	2	180	360	1800	11.1
	8	Ø10	2	180	360	1800	11.1
	9	Ø10	2	180	360	1800	11.1
V11	1	Ø10	2	180	360	1800	11.1
	2	Ø10	2	180	360	1800	11.1
	3	Ø10	2	180	360	1800	11.1
	4	Ø10	2	180	360	1800	11.1
	5	Ø10	2	180	360	1800	11.1
	6	Ø10	2	180	360	1800	11.1
	7	Ø10	2	180	360	1800	11.1
	8	Ø10	2	180	360	1800	11.1
	9	Ø10	2	180	360	1800	11.1
V12	1	Ø10	2	180	360	1800	11.1
	2	Ø10	2	180	360	1800	11.1
	3	Ø10	2	180	360	1800	11.1
	4	Ø10	2	180	360	1800	11.1
	5	Ø10	2	180	360	1800	11.1
	6	Ø10	2	180	360	1800	11.1
	7	Ø10	2	180	360	1800	11.1
	8	Ø10	2	180	360	1800	11.1
	9	Ø10	2	180	360	1800	11.1
V13	1	Ø10	2	180	360	1800	11.1
	2	Ø10	2	180	360	1800	11.1
	3	Ø10	2	180	360	1800	11.1
	4	Ø10	2	180	360	1800	11.1
	5	Ø10	2	180	360	1800	11.1
	6	Ø10	2	180	360	1800	11.1
	7	Ø10	2	180	360	1800	11.1
	8	Ø10	2	180	360	1800	11.1
	9	Ø10	2	180	360	1800	11.1
V14	1	Ø10	2	180	360	1800	11.1
	2	Ø10	2	180	360	1800	11.1
	3	Ø10	2	180	360	1800	11.1
	4	Ø10	2	180	360	1800	11.1
	5	Ø10	2	180	360	1800	11.1
	6	Ø10	2	180	360	1800	11.1
	7	Ø10	2	180	360	1800	11.1
	8	Ø10	2	180	360	1800	11.1
	9	Ø10	2	180	360	1800	11.1
V15	1	Ø10	2	180	360	1800	11.1
	2	Ø10	2	180	360	1800	11.1
	3	Ø10	2	180	360	1800	11.1
	4	Ø10	2	180	360	1800	11.1
	5	Ø10	2	180	360	1800	11.1
	6	Ø10	2	180	360	1800	11.1
	7	Ø10	2	180	360	1800	11.1
	8	Ø10	2	180	360	1800	11.1
	9	Ø10	2	180	360	1800	11.1
V16	1	Ø10	2	180	360	1800	11.1
	2	Ø10	2	180	360	1800	11.1
	3	Ø10	2	180	360	1800	11.1
	4	Ø10	2	180	360	1800	11.1
	5	Ø10	2	180	360	1800	11.1
	6	Ø10	2	180	360	1800	11.1
	7	Ø10	2	180	360	1800	11.1
	8	Ø10	2	180	360	1800	11.1
	9	Ø10	2	180	360	1800	11.1
Total						18000	111.1

VIGAS PAV 1 F02

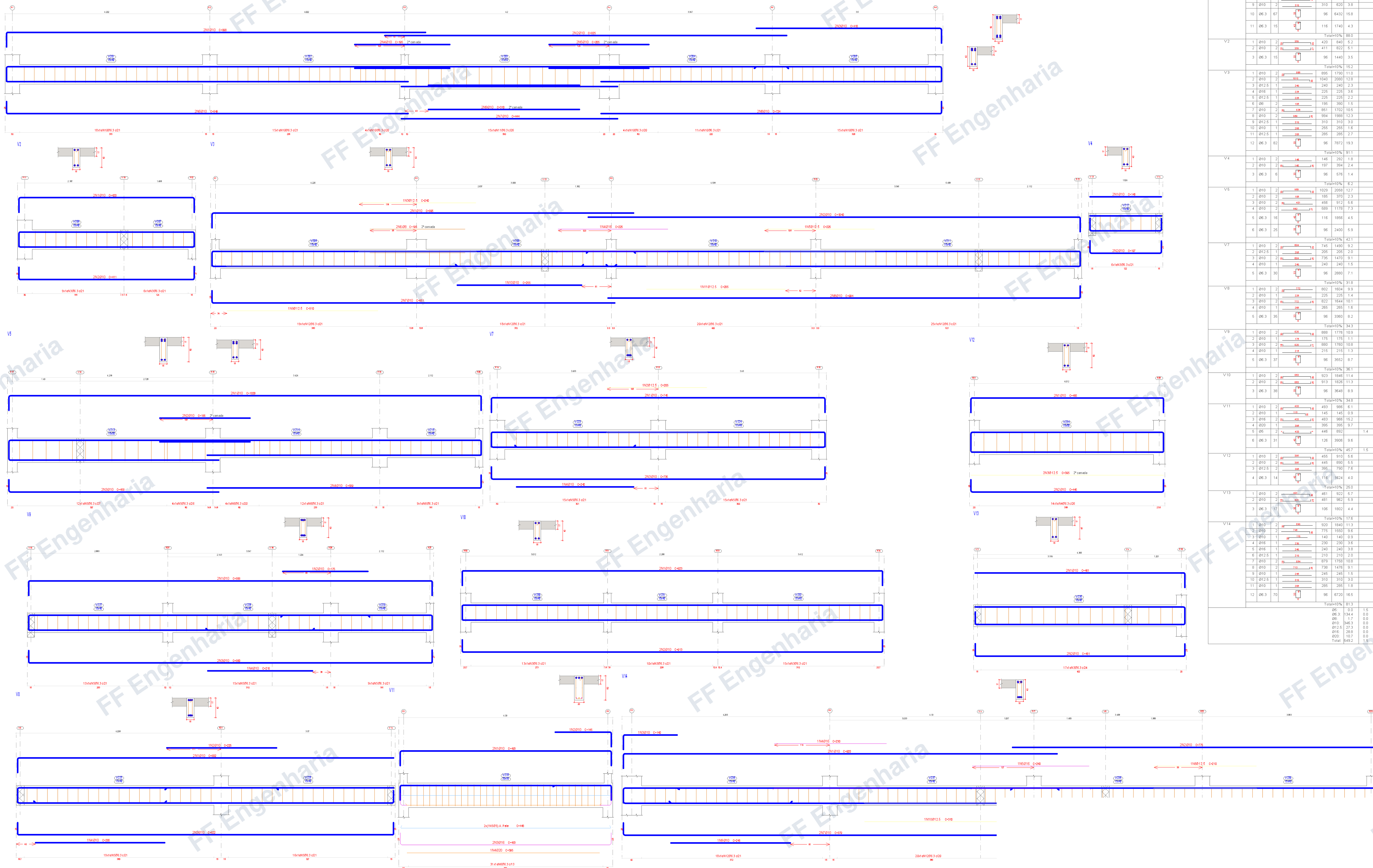


Pavimento 1
 Desenho de vigas
 Concreto: C25, em geral
 Apo das barras: CA-50 e CA-60
 Apo dos estribos: CA-50 e CA-60
 Escala seções 1:25
 Escala aberturas 1:25

Elemento	Pos.	Diam.	Q.	Esquema (cm)	Comp. (cm)	Total (cm)	CA-50 (kg)	CA-60 (kg)	
V 15	1	Ø10	2		775	1550	9.6		
	2	Ø10	2		200	400	2.5		
	3	Ø10	2		330	660	3.8		
	4	Ø10	2		798	1592	9.8		
	5	Ø6.3	30		116	3480	8.5		
Total+10%							36.5		
V 16	1	Ø10	2		920	1840	11.3		
	2	Ø10	2		895	1790	11.0		
	3	Ø10	2		235	470	2.4		
	4	Ø10	2		255	510	2.4		
	5	Ø10	2		195	390	2.4		
	6	Ø10	2		240	480	2.5		
	7	Ø10	2		443	886	5.7		
	8	Ø10	2		438	876	5.4		
	9	Ø10	2		851	1702	10.5		
	10	Ø10	1		255	255	1.9		
	11	Ø12.5	2		330	660	6.4		
	12	Ø10	2		310	620	3.8		
	13	Ø6.3	19		96	1824	4.5		
	14	Ø6.3	24		108	2544	6.2		
	15	Ø6.3	31		116	3828	9.4		
Total+10%							106.7		
V 17	1	Ø10	2		925	1850	11.4		
	2	Ø10	2		895	1790	11.0		
	3	Ø10	2		235	470	2.4		
	4	Ø10	2		270	540	2.5		
	5	Ø10	2		272	544	2.5		
	6	Ø10	2		535	1070	6.6		
	7	Ø10	2		444	888	5.5		
	8	Ø10	2		275	550	3.4		
	9	Ø12.5	2		360	720	6.9		
	10	Ø10	2		355	710	4.4		
	11	Ø6.3	30		116	3480	8.5		
	12	Ø6.3	25		108	2650	6.5		
Total+10%							90.1		
V 18	1	Ø10	2		605	1210	6.2		
	2	Ø10	2		240	480	2.5		
	3	Ø10	2		535	1070	6.6		
	4	Ø10	2		260	520	3.5		
	5	Ø6.3	19		116	2088	5.1		
Total+10%							28.7		
V 19	1	Ø10	2		980	1960	12.1		
	2	Ø10	2		825	1650	7.7		
	3	Ø10	1		215	215	1.3		
	4	Ø10	1		200	200	1.2		
	5	Ø10	2		195	390	2.4		
	6	Ø10	2		240	480	2.5		
	7	Ø10	2		444	888	5.5		
	8	Ø10	2		500	1000	7.4		
	9	Ø6.3	42		96	4032	9.9		
	10	Ø6.3	21		116	2436	6.0		
Total+10%							69.2		
V 20	1	Ø10	2		455	910	5.0		
	2	Ø10	2		395	790	4.5		
	3	Ø10	1		200	200	1.2		
	4	Ø6.3	15		96	1440	3.5		
Total+10%							16.1		
							Ø6.3	74.9	0.0
							Ø10	218.6	0.0
							Ø12.5	14.6	0.0
							Ø16	4.3	0.0
							Total	345.3	0.0

Elemento	Pos.	Diam.	Q.	Esquema (cm)	Comp (cm)	Total (cm)	CA-50 (kg)	CA-60 (kg)	
V 6	1	Ø10	2		915	1830	11.3		
	2	Ø10	2		790	1580	9.7		
	3	Ø10	2		1055	2110	13.0		
	4	Ø10	2		460	920	5.7		
	5	Ø16	1		250	250	3.9		
	6	Ø10	2		205	410	2.5		
	7	Ø10	1		215	215	1.3		
	8	Ø10	1		255	255	1.6		
	9	Ø10	2		878	1756	10.8		
	10	Ø10	2		742	1484	9.1		
	11	Ø10	2		1009	2018	12.4		
	12	Ø10	2		456	912	5.6		
	13	Ø12.5	1		285	285	2.7		
	14	Ø6.3	133		96	12768	31.3		
Total+10%:							133.0		
							Ø6.3:	34.4	0.0
							Ø10:	91.3	0.0
							Ø12.5:	3.0	0.0
							Ø16:	4.3	0.0
							Total:	133.0	0.0

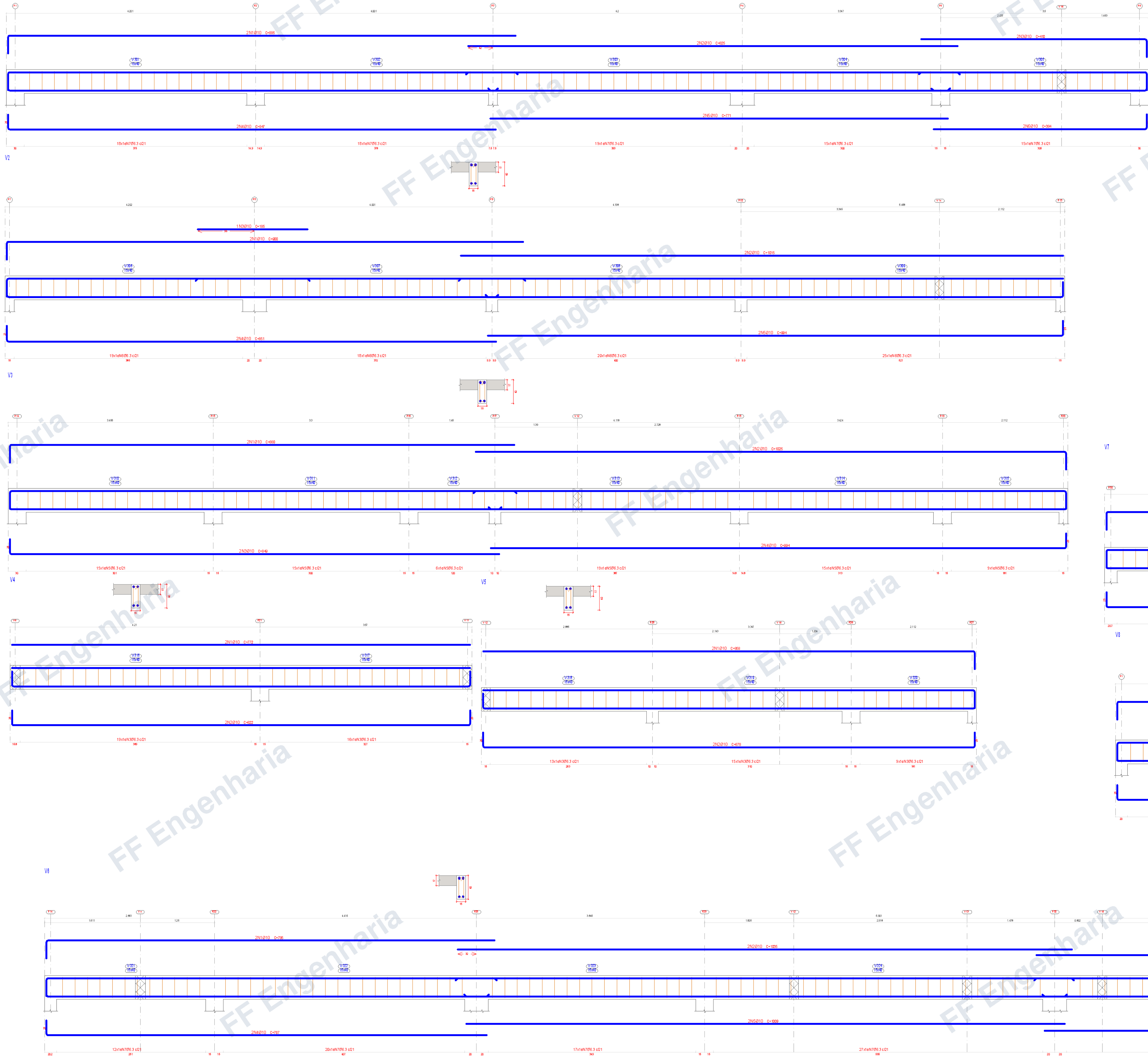
VIGAS PAV 1 F01



Pavimento 1
Desenho de vigas
Concreto: C25, em geral
Aço das barras: CA-50 e CA-60
Escala vigas 1:25
Escala seções 1:25
Escala aberturas 1:25

Elemento	Pos.	Diam.	O.	Esquema (cm)	Comp. (cm)	Total (cm)	CA-50 (kg)	CA-60 (kg)
V1	1	Ø10	2	180	890	1780	11.0	
	2	Ø10	2	120	825	1650	10.2	
	3	Ø10	2	180	410	820	5.1	
	4	Ø10	2	180	195	390	2.4	
	5	Ø10	2	180	205	410	2.5	
	6	Ø10	2	180	849	1698	10.5	
	7	Ø10	2	180	444	888	5.5	
	8	Ø10	2	180	724	1448	8.9	
	9	Ø10	2	180	310	620	3.8	
	10	Ø6.3	67		96	6432	15.8	
	11	Ø6.3	15		116	1740	4.3	
Total+10%							88.0	
V2	1	Ø10	2	180	420	840	5.2	
	2	Ø10	2	180	411	822	5.1	
	3	Ø6.3	15		96	1440	3.5	
Total+10%							15.2	
V3	1	Ø10	2	180	895	1790	11.0	
	2	Ø10	2	180	1040	2080	12.8	
	3	Ø12.5	1	180	240	240	2.3	
	4	Ø16	1	180	225	225	3.6	
	5	Ø12.5	1	180	225	225	2.2	
	6	Ø8	2	180	155	310	1.5	
	7	Ø10	2	180	851	1702	10.5	
	8	Ø10	2	180	994	1988	12.3	
	9	Ø12.5	1	180	310	310	3.0	
	10	Ø10	1	180	255	255	1.8	
	11	Ø12.5	1	180	295	295	2.7	
	12	Ø6.3	82		96	7872	19.3	
Total+10%							91.1	
V4	1	Ø10	2	180	145	290	1.8	
	2	Ø10	2	180	197	394	2.4	
	3	Ø6.3	6		96	576	1.4	
Total+10%							6.2	
V5	1	Ø10	2	180	1029	2058	12.7	
	2	Ø10	2	180	185	370	2.3	
	3	Ø10	2	180	456	912	5.6	
	4	Ø10	2	180	569	1138	7.3	
	5	Ø6.3	16		116	1856	4.5	
	6	Ø6.3	25		96	2400	5.9	
Total+10%							42.1	
V7	1	Ø10	2	180	745	1490	9.2	
	2	Ø12.5	1	180	205	205	2.0	
	3	Ø10	2	180	735	1470	9.1	
	4	Ø10	1	180	240	240	1.5	
	5	Ø6.3	30		96	2880	7.1	
Total+10%							31.8	
V8	1	Ø10	2	180	802	1604	9.9	
	2	Ø10	1	180	225	225	1.4	
	3	Ø10	2	180	822	1644	10.1	
	4	Ø10	1	180	265	265	1.6	
	5	Ø6.3	35		96	3360	8.2	
Total+10%							34.3	
V9	1	Ø10	2	180	888	1776	10.9	
	2	Ø10	1	180	175	175	1.1	
	3	Ø10	2	180	880	1760	10.8	
	4	Ø10	1	180	215	215	1.3	
	5	Ø6.3	37		96	3552	8.7	
Total+10%							36.1	
V10	1	Ø10	2	180	923	1846	11.4	
	2	Ø10	2	180	913	1826	11.3	
	3	Ø6.3	30		96	3648	8.9	
Total+10%							34.8	
V11	1	Ø10	2	180	453	906	6.1	
	2	Ø10	1	180	145	145	0.9	
	3	Ø16	2	180	483	966	15.2	
	4	Ø20	1	180	395	395	9.7	
	5	Ø6	2	180	445	892		1.4
	6	Ø6.3	31		126	3906	9.6	
Total+10%							45.7	1.5
V12	1	Ø10	2	180	455	910	6.6	
	2	Ø10	2	180	445	890	5.5	
	3	Ø12.5	2	180	395	790	7.6	
	4	Ø6.3	14		116	1624	4.0	
Total+10%							25.0	
V13	1	Ø10	2	180	461	922	6.7	
	2	Ø10	2	180	481	962	5.9	
	3	Ø6.3	17		105	1802	4.4	
Total+10%							17.6	
V14	1	Ø10	2	180	920	1840	11.3	
	2	Ø10	2	180	775	1550	9.6	
	3	Ø10	1	180	140	140	0.9	
	4	Ø16	1	180	230	230	3.6	
	5	Ø16	1	180	240	240	3.8	
	6	Ø12.5	1	180	210	210	2.0	
	7	Ø10	2	180	879	1758	10.8	
	8	Ø10	2	180	730	1460	9.1	
	9	Ø10	1	180	245	245	1.5	
	10	Ø12.5	1	180	310	310	3.0	
	11	Ø10	1	180	285	285	1.8	
	12	Ø6.3	70		96	6720	16.5	
Total+10%							81.3	
							06	1.5
							08	1.7
							010	34.4
							012.5	27.3
							016	28.8
							020	10.7
							Total	449.2

VIGAS COBERTURA F02

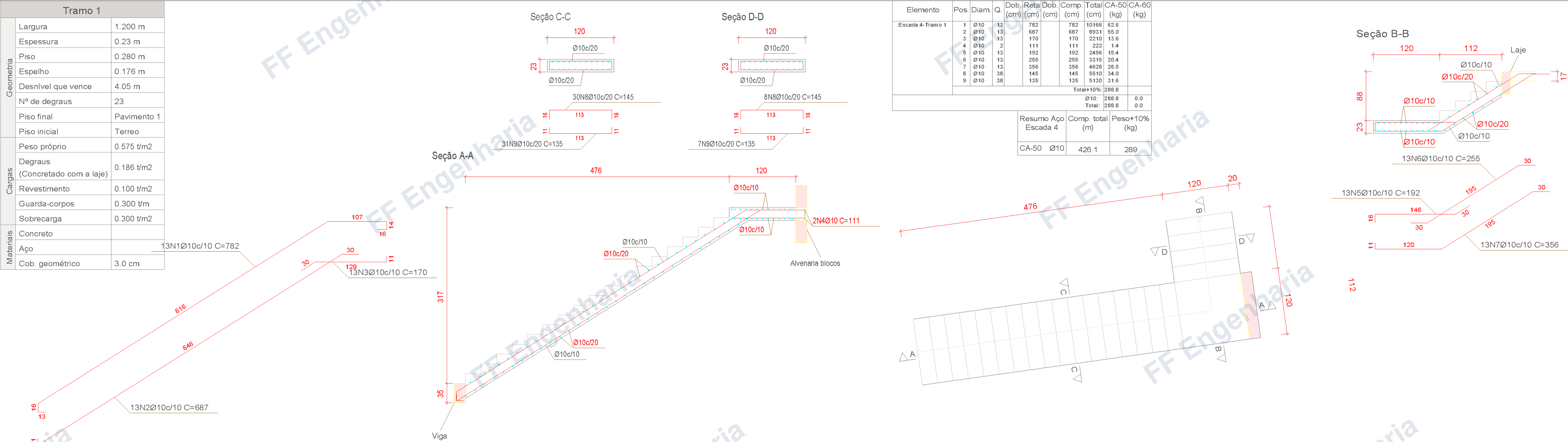


Cobertura
Desenho de vigas
Concreto: C25, em geral
Aço das barras: CA-50 e CA-60
Aço dos eixos: CA-50 e CA-60
Escala vigas 1:25
Escala seções 1:25
Escala aberturas 1:25

Elemento	Pos.	Diam.	Q.	Esquema (cm)	Comp. (cm)	Total (cm)	CA-50 (kg)	CA-60 (kg)	
V1	1	Ø10	2		885	1770	10.9		
	2	Ø10	2		825	1650	10.2		
	3	Ø10	2		116	820	5.1		
	4	Ø10	2		847	1694	10.4		
	5	Ø10	2		771	1542	9.5		
	6	Ø10	2		384	768	4.7		
	7	Ø6.3	85		96	8160	20.0		
Total+10%							77.9		
V2	1	Ø10	2		825	909	1600	11.1	
	2	Ø10	2		1015	2030	12.5		
	3	Ø10	1		185	185	1.1		
	4	Ø10	2		851	1702	10.5		
	5	Ø10	2		994	1988	12.3		
	6	Ø6.3	82		96	7872	19.3		
Total+10%							73.5		
V3	1	Ø10	2		885	1770	10.9		
	2	Ø10	2		825	1650	10.2		
	3	Ø10	2		849	1698	10.5		
	4	Ø10	2		894	1788	11.3		
	5	Ø6.3	79		96	7584	18.6		
Total+10%							71.3		
V4	1	Ø10	2		772	1544	9.5		
	2	Ø10	2		822	1644	10.1		
	3	Ø6.3	35		96	3360	8.2		
Total+10%							35.6		
V5	1	Ø10	2		825	1650	10.2		
	2	Ø10	2		878	1756	10.8		
	3	Ø6.3	37		96	3552	8.7		
Total+10%							33.1		
V6	1	Ø10	2		785	1570	9.7		
	2	Ø10	2		1035	2070	12.8		
	3	Ø10	2		445	890	5.5		
	4	Ø10	2		767	1534	9.5		
	5	Ø10	2		1009	2018	12.4		
	6	Ø10	2		456	912	5.6		
	7	Ø6.3	95		96	9120	22.3		
Total+10%							85.6		
V7	1	Ø10	2		893	1786	11.0		
	2	Ø10	2		913	1826	11.3		
	3	Ø6.3	38		96	3648	8.9		
Total+10%							34.9		
V8	1	Ø10	2		912	1824	11.2		
	2	Ø10	2		902	1804	11.1		
	3	Ø6.3	38		96	3648	8.9		
Total+10%							34.9		
V9	1	Ø10	2		488	976	6.0		
	2	Ø10	2		491	982	5.9		
	3	Ø20	1		480	480	11.8		
	4	Ø6.3	15		126	1890	4.6		
Total+10%							31.1		
							06.3	131.4	0.0
							819	107.3	0.0
							820	13.0	0.0
							Total	171.7	0.0

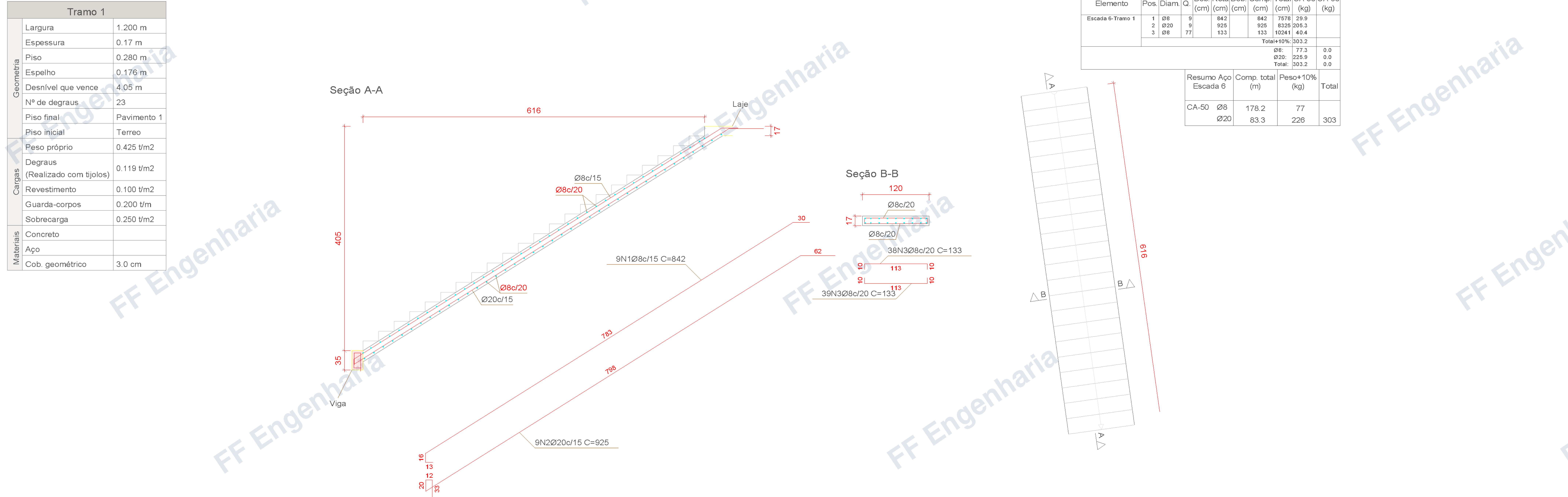
Escada salão

Tramo 1		
Geometria	Largura	1.200 m
	Espessura	0.23 m
	Piso	0.280 m
	Espelho	0.176 m
	Desnível que vence	4.05 m
Cargas	Nº de degraus	23
	Piso final	Pavimento 1
	Piso inicial	Terreo
	Peso próprio	0.575 t/m2
	Degraus (Concretado com a laje)	0.186 t/m2
Materiais	Revestimento	0.100 t/m2
	Guarda-corpos	0.300 t/m
	Sobrecarga	0.300 t/m2
Materiais	Concreto	
	Aço	13N1Ø10c/10 C=782
	Cob. geométrico	3.0 cm

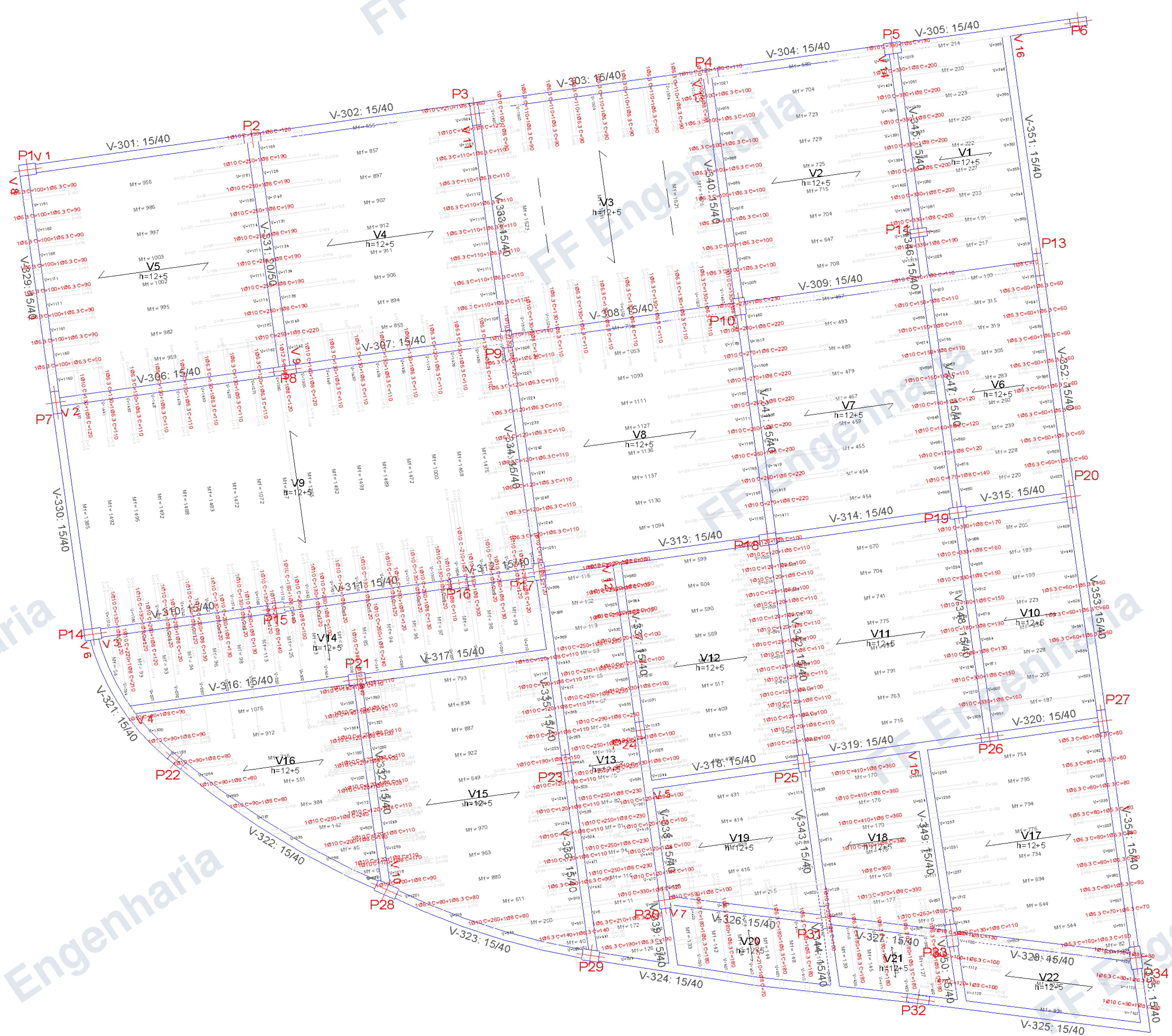


Escada Lojas

Tramo 1		
Geometria	Largura	1.200 m
	Espessura	0.17 m
	Piso	0.280 m
	Espelho	0.176 m
	Desnível que vence	4.05 m
Cargas	Nº de degraus	23
	Piso final	Pavimento 1
	Piso inicial	Terreo
	Peso próprio	0.425 t/m2
	Degraus (Realizado com tijolos)	0.119 t/m2
Materiais	Revestimento	0.100 t/m2
	Guarda-corpos	0.200 t/m
	Sobrecarga	0.250 t/m2
Materiais	Concreto	
	Aço	
	Cob. geométrico	3.0 cm

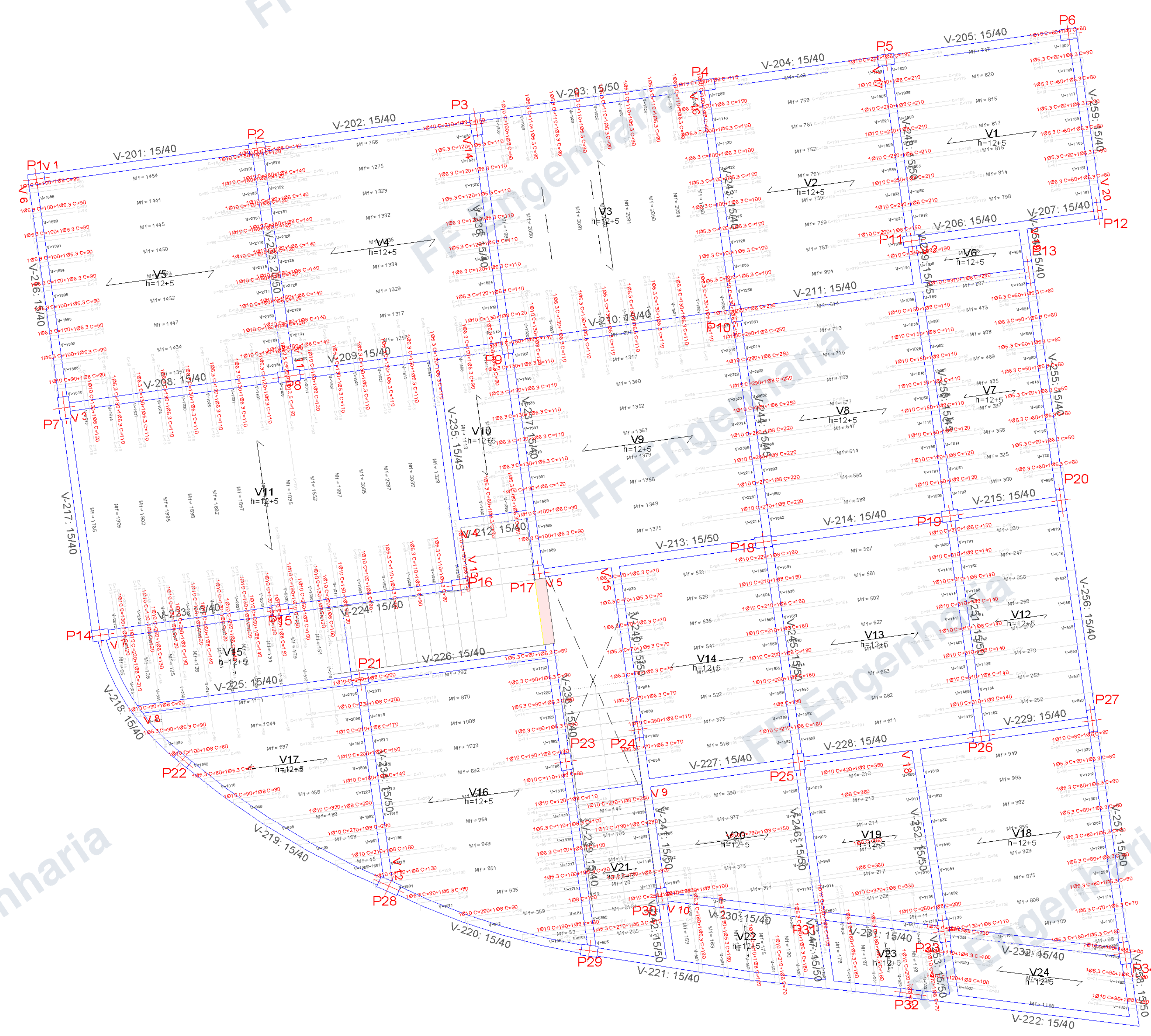


PLANTA LAJE COBERTURA PLANTA LAJE PAVIMENTO 1



Cobertura
Fôrmas
Concreto: C25, em geral
Aços em lajes: CA-50 e CA-60
Mf: Momento fletor de cálculo por metro de largura (kgf x mm)
V: Esforço cortante de cálculo por metro de largura (kgf/m)
Escala: 1:50

Tabela de características de lajes de vigotas (Grupo 3)
LAJE DE VIGOTAS DE CONCRETO
Altura do bloco/moldo: 12 cm
Espessura camada de compressão: 5 cm
Entre-eixos: 45 cm
Bloco/Moldo: De poliestireno
Largura da nervura: 12 cm
Volume de concreto: 0,088 m³/m²
Peso próprio: 0,23 tm/m² (Simplex), 0,29 tm/m² (Dupla)
Nota: Consulte os detalhes referentes a unidades com lajes de estrutura principal e das zonas marcadas.



Pavimento 1
Fôrmas
Concreto: C25, em geral
Aços em lajes: CA-50 e CA-60
Mf: Momento fletor de cálculo por metro de largura (kgf x mm)
V: Esforço cortante de cálculo por metro de largura (kgf/m)
Escala: 1:50

Tabela de características de lajes de vigotas (Grupo 3)
LAJE DE VIGOTAS DE CONCRETO
Altura do bloco/moldo: 12 cm
Espessura camada de compressão: 5 cm
Entre-eixos: 45 cm
Bloco/Moldo: De poliestireno
Largura da nervura: 12 cm
Volume de concreto: 0,088 m³/m²
Peso próprio: 0,23 tm/m² (Simplex), 0,29 tm/m² (Dupla)
Nota: Consulte os detalhes referentes a unidades com lajes de estrutura principal e das zonas marcadas.

PLANTA LOCAÇÃO FUNDAÇÃO

PLANTA VIGAS TERREO

Identificação	Dimensão (cm)	Área (cm²)	Armadura Ref. X	Armadura Ref. Y
P1	120x100	40	4B 12/500	4B 12/500
P2, P3 e P4	140x140	40	6B 12/500	6B 12/500
P5	120x100	35	6B 10/500	6B 10/500
P6 e P16	120x100	30	4B 10/500	4B 10/500
P7 e P10	170x100	50	6B 12/500	6B 12/500
P8	140x100	30	6B 10/500	6B 10/500
P9	100x100	20	2B 10/500	2B 10/500
P11 e P17	100x100	20	2B 10/500	2B 10/500
P12	80x80	15	2B 10/500	2B 10/500
P13 e P19	120x100	30	6B 10/500	6B 10/500
P14, P15 e P20	120x100	30	4B 12/500	4B 12/500
P18	100x100	20	6B 10/500	6B 10/500
P19	120x100	30	7B 12/500	6B 12/500
P20	80x100	20	4B 10/500	4B 10/500
P21	100x100	20	6B 12/500	6B 12/500
P22	100x100	20	6B 10/500	6B 10/500
P23 e P24	100x100	20	6B 12/500	6B 12/500
P25 e P26	120x100	30	7B 12/500	6B 12/500
P27	140x100	30	10B 10/500	10B 10/500
P28	120x100	30	6B 12/500	6B 12/500
P29	80x100	20	6B 10/500	6B 10/500
P30	100x100	20	6B 12/500	6B 12/500

Fundação:
Fundação
Concreto C30, em geral
Aço em fundações: CA-50 e CA-60
Escala: 1:50

Elemento	Superfície (m²)	Volumenário (m³)	Peso (kg)
Vigas	175,00	33,75	12.870
Pilares	44,54	-	2.800
Total	-	33,75	15.670
Índice (kg/m²)	-	-	0,431
Superfície total	55,33 m²	-	-

PLANTA VIGAS PAV 1

PLANTA VIGAS COBERTURA

Elemento	Superfície (m²)	Volumenário (m³)	Peso (kg)
Lajes de vigas	108,08	21,62	7.920
Vigas	127,85	-	7.610
Pilares	24,82	-	1.550
Escadas	-	-	293
Total	-	23,13	9.773
Índice (kg/m²)	-	-	0,173
Superfície total	252,95 m²	-	-

Tablão de características de lajes de vigas (Chapa 2):
Laje de vigas 12 cm de concreto
Ala de concreto: 12 cm
Espessura camada de compressão: 5 cm
Esp. total: 17 cm
Revestimento: De poliestireno
Largura de laje: 12 cm
Volumenário de concreto: 0,008 m³/m²
Peso próprio: 0,22 kN/m² (concreto), 0,20 kN/m² (chapa)
Nota: Cálculo de laje realizado a partir de lajes de concreto pré-moldado e de lajes moldadas.

Elemento	Superfície (m²)	Volumenário (m³)	Peso (kg)
Lajes de vigas	82,25	24,68	8.920
Vigas	106,36	-	6.080
Pilares	-	-	644
Total	-	24,68	15.644
Índice (kg/m²)	-	-	0,144
Superfície total	270,95 m²	-	-

Tablão de características de lajes de vigas (Chapa 2):
Laje de vigas 12 cm de concreto
Ala de concreto: 12 cm
Espessura camada de compressão: 5 cm
Esp. total: 17 cm
Revestimento: De poliestireno
Largura de laje: 12 cm
Volumenário de concreto: 0,008 m³/m²
Peso próprio: 0,22 kN/m² (concreto), 0,20 kN/m² (chapa)
Nota: Cálculo de laje realizado a partir de lajes de concreto pré-moldado e de lajes moldadas.

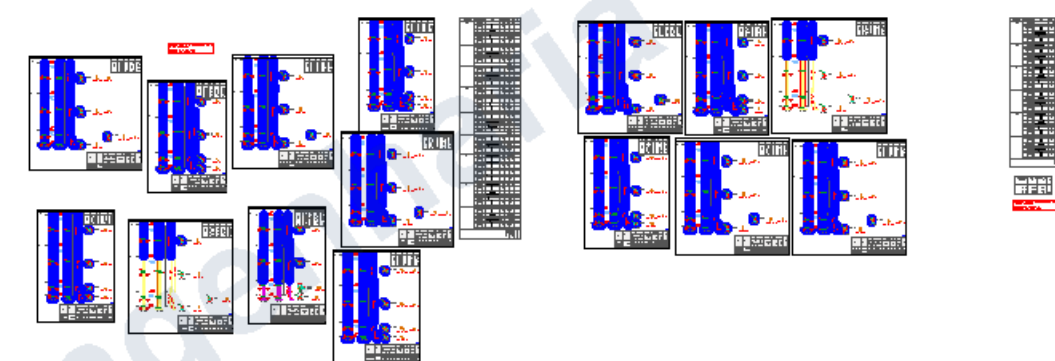
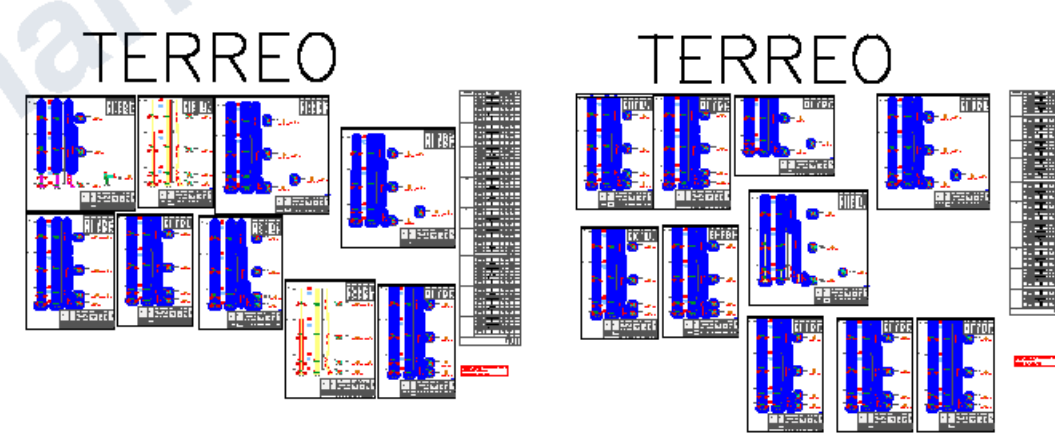
VIGAS COBERTURA F01



Cobertura
Desenho de vigas
Concreto: C25, em geral
Aço das barras: CA-50 e CA-60
Escala vigas 1:25
Escala seções 1:25
Escala aberturas 1:25

Elemento	Pos.	Diam.	Q.	Esquema (cm)	Comp. (cm)	Total (cm)	CA-50 (kg)	CA-60 (kg)	
V10	1	Ø10	2		455	910	5.6		
	2	Ø10	2		445	890	5.5		
	3	Ø10	1		290	290	1.8		
	4	Ø6.3	18		96	1728	4.2		
Total+10%							18.8		
V11	1	Ø10	2		910	1820	11.2		
	2	Ø10	2		770	1540	9.5		
	3	Ø10	2		879	1758	10.8		
	4	Ø10	2		738	1476	9.1		
	5	Ø6.3	69		96	6624	16.2		
Total+10%							62.5		
V12	1	Ø10	2		775	1550	9.6		
	2	Ø10	2		796	1592	9.8		
	3	Ø6.3	35		96	3360	8.2		
Total+10%							30.4		
V13	1	Ø10	2		895	1790	11.0		
	2	Ø10	2		925	1850	11.2		
	3	Ø12.5	1		200	200	1.9		
	4	Ø12.5	1		215	215	2.1		
	5	Ø10	2		876	1752	10.8		
	6	Ø10	2		851	1702	10.5		
	7	Ø12.5	1		255	255	2.7		
	8	Ø6.3	77		96	7392	18.1		
Total+10%							75.1		
V14	1	Ø10	2		930	1860	11.5		
	2	Ø10	2		488	976	5.9		
	3	Ø10	1		265	265	1.6		
	4	Ø12.5	1		215	215	2.1		
	5	Ø10	2		877	1754	10.8		
	6	Ø10	2		443	886	5.5		
	7	Ø10	1		255	255	1.6		
	8	Ø10	1		285	285	1.8		
	9	Ø6.3	59		96	5664	13.9		
Total+10%							65.4		
V15	1	Ø10	2		505	1012	6.2		
	2	Ø10	2		526	1052	6.5		
	3	Ø6.3	23		96	2208	5.4		
Total+10%							19.9		
V16	1	Ø10	2		870	1740	10.7		
	2	Ø10	2		1025	2050	12.6		
	3	Ø10	2		885	1770	10.9		
	4	Ø10	2		1054	2108	12.4		
	5	Ø6.3	82		96	7872	19.3		
Total+10%							72.5		
							Ø6.3	93.8	0.0
							Ø10	236.2	0.0
							Ø12.5	9.6	0.0
							Total	325.6	0.0

Resumo Aço		Comp. total	Peso+10%	Total
Desenho de vigas		(m)	(kg)	
CA-50	Ø6.3	836.8	225	811
	Ø10	830.8	563	
	Ø12.5	9.2	10	
	Ø20	4.8	13	



1 Planta Geral
1:50

