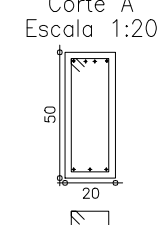
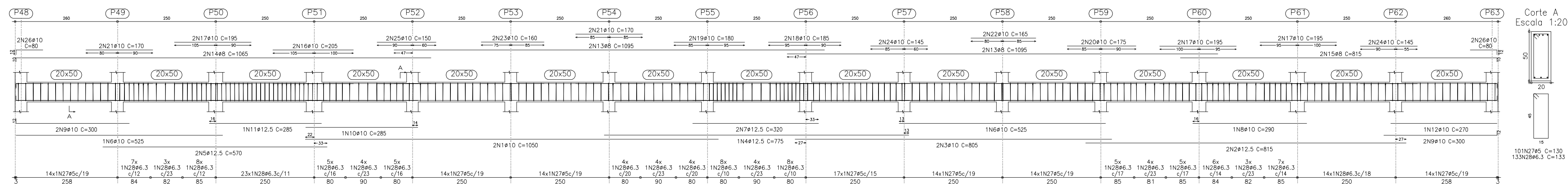
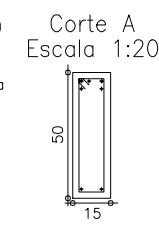
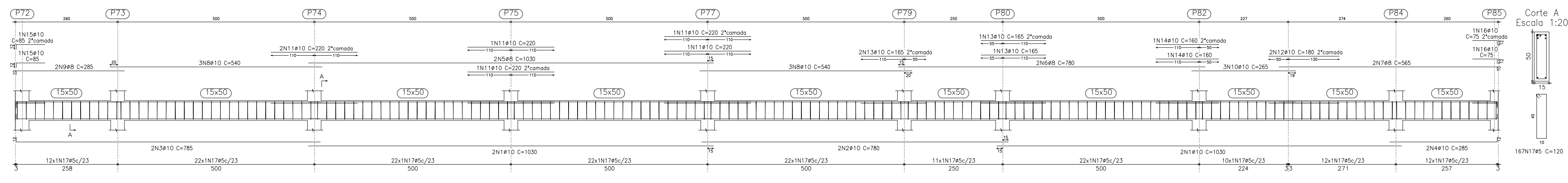


Primeira pis.
Desenho de vigas
Concreto: C25, com destav.
Aço: CA-50 + a CA-60-B
Escala vigas: 1:50
Escala seções: 1:20

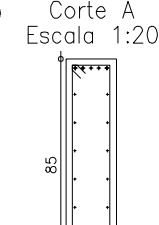
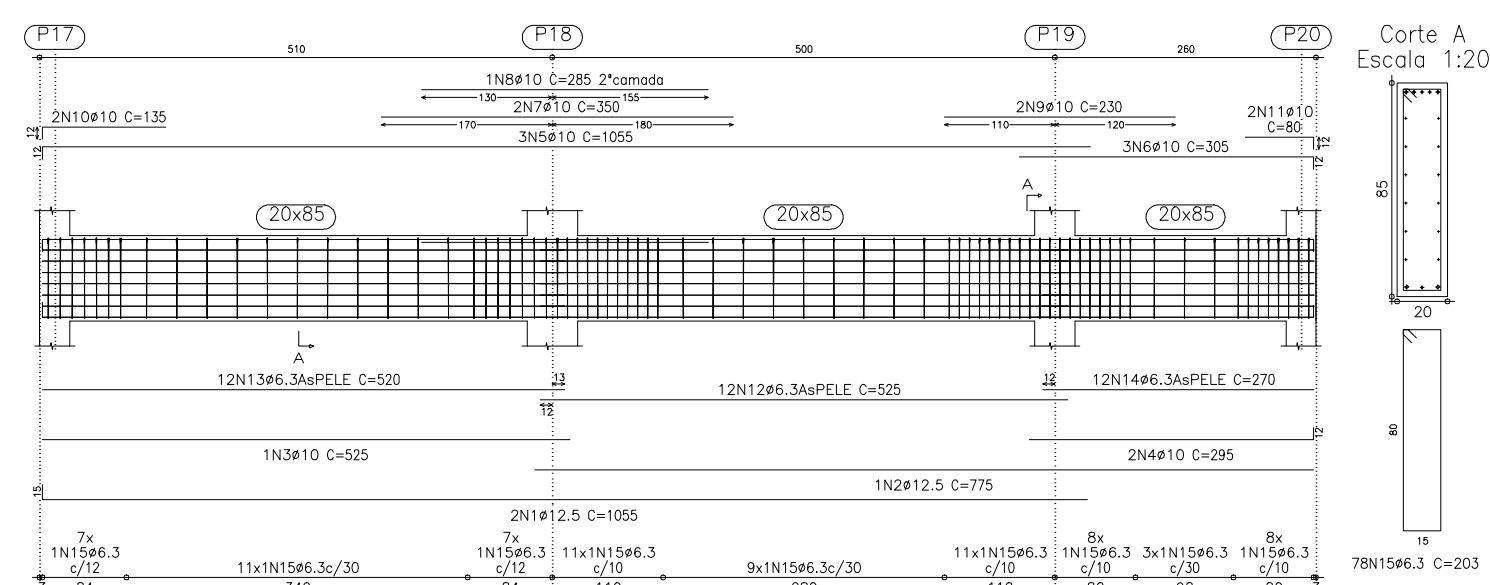
V6
Escala 1:50



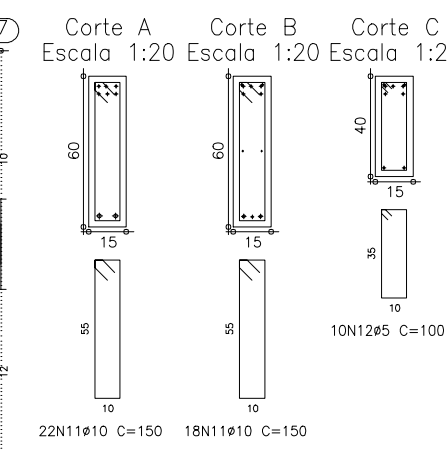
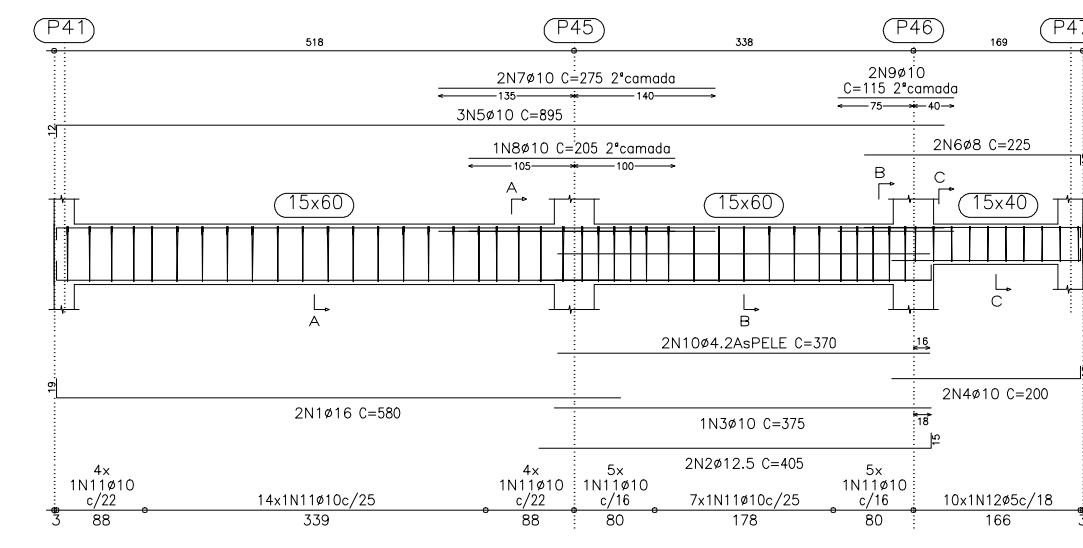
V7
Escala 1:50



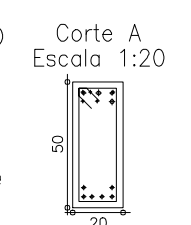
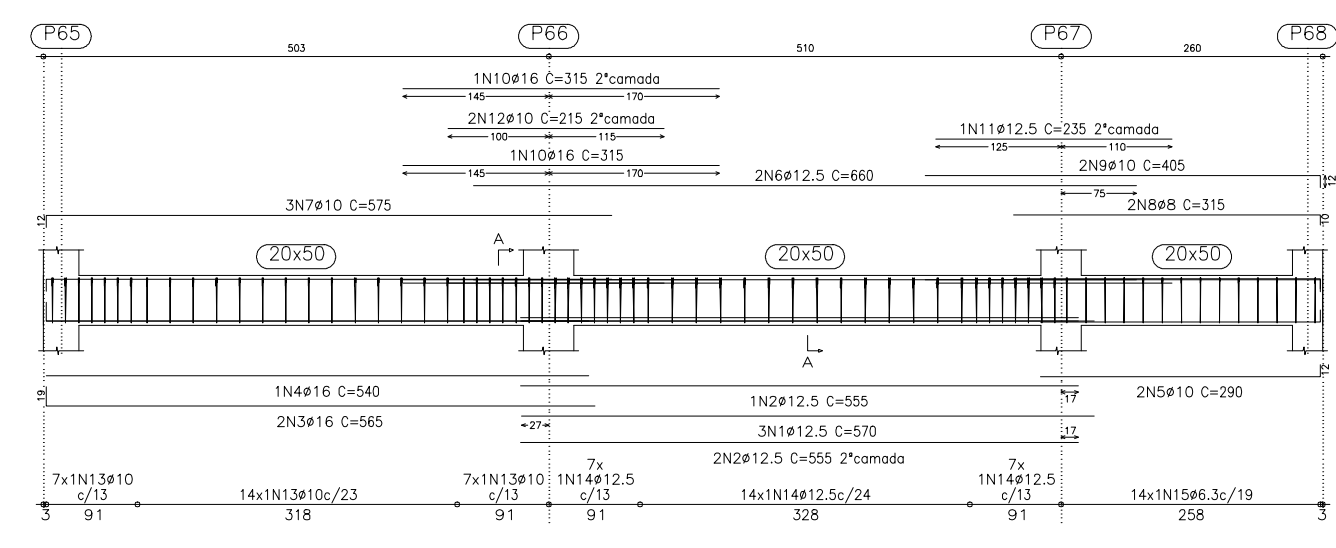
V2
Escala 1:50



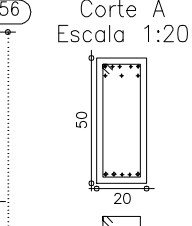
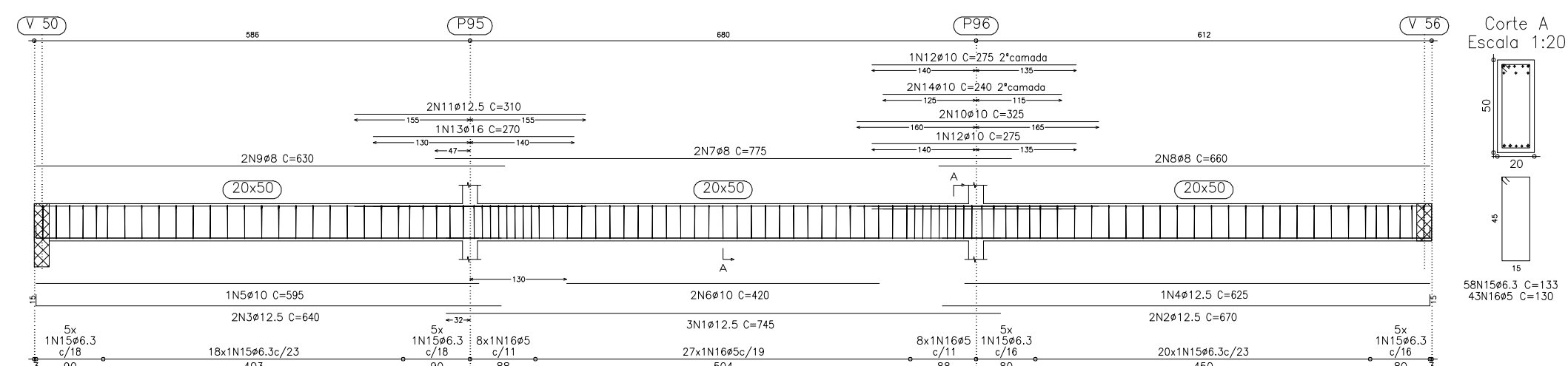
V 7
Escala 1:50



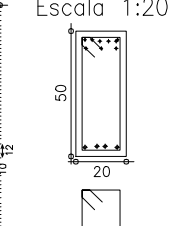
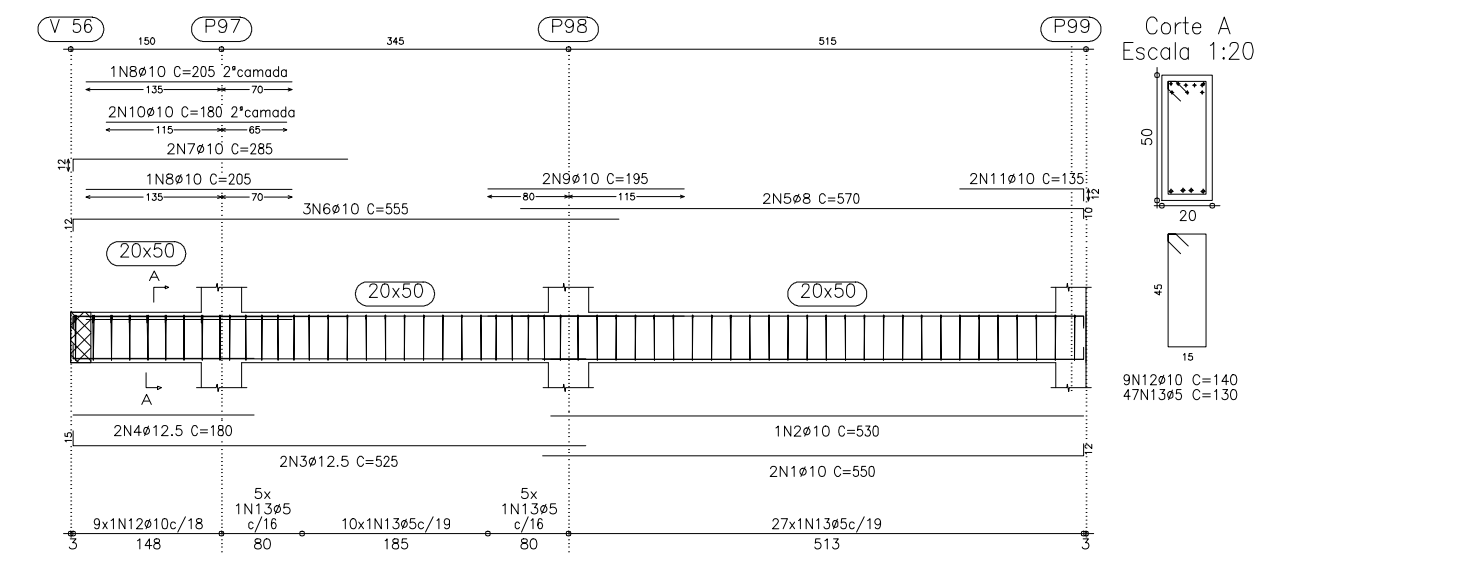
V8
Escala 1:50



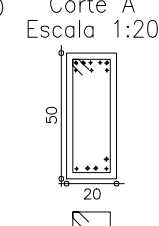
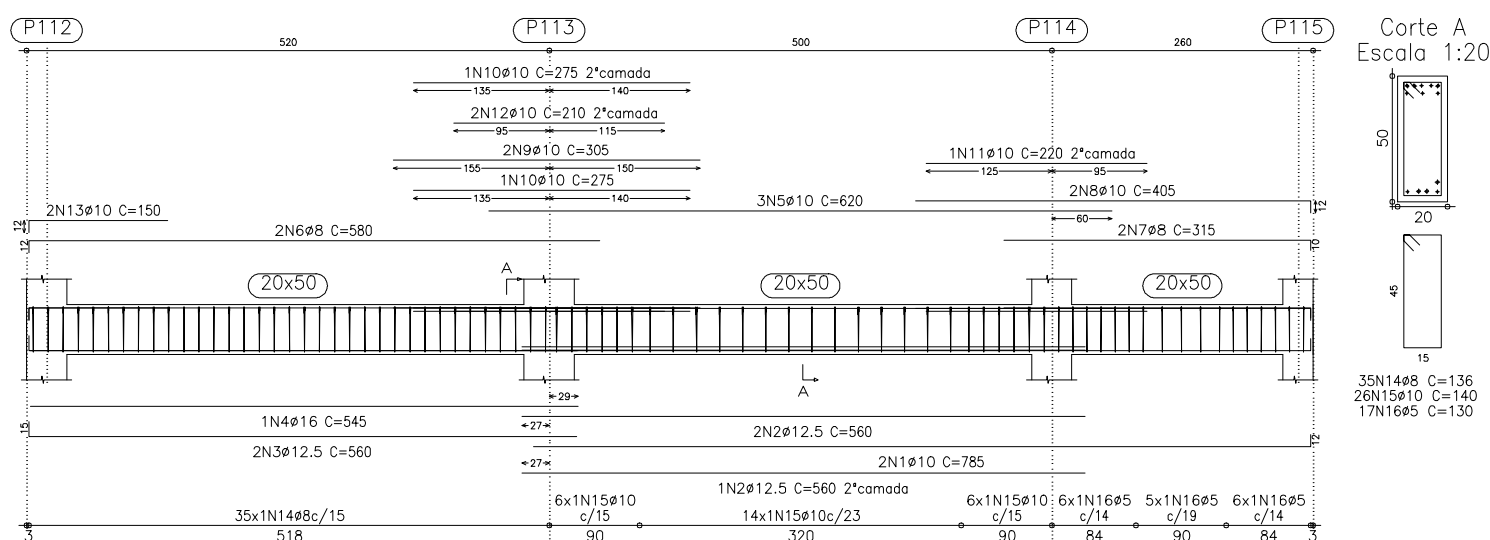
V 11
Escala 1:50



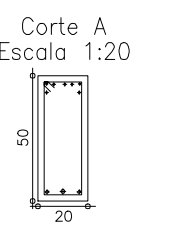
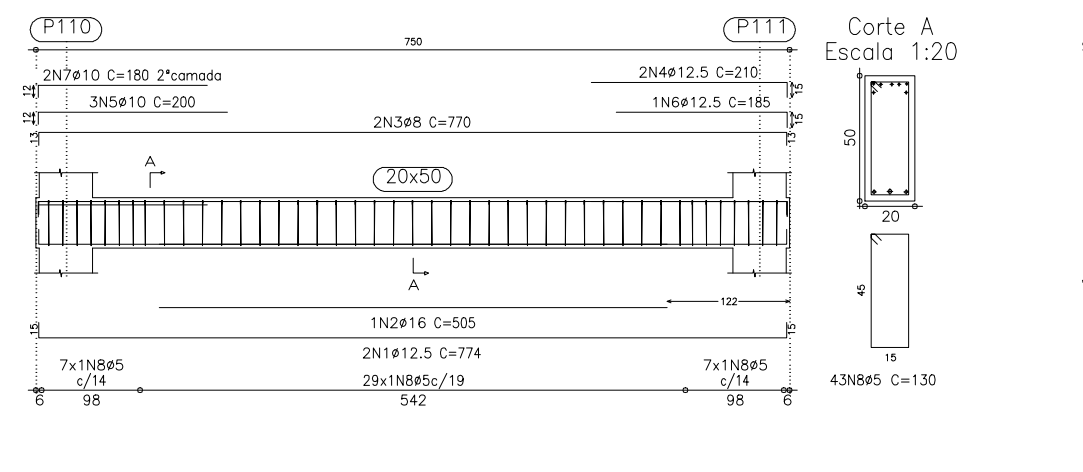
V 12
Escala 1:50



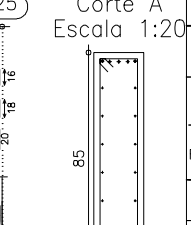
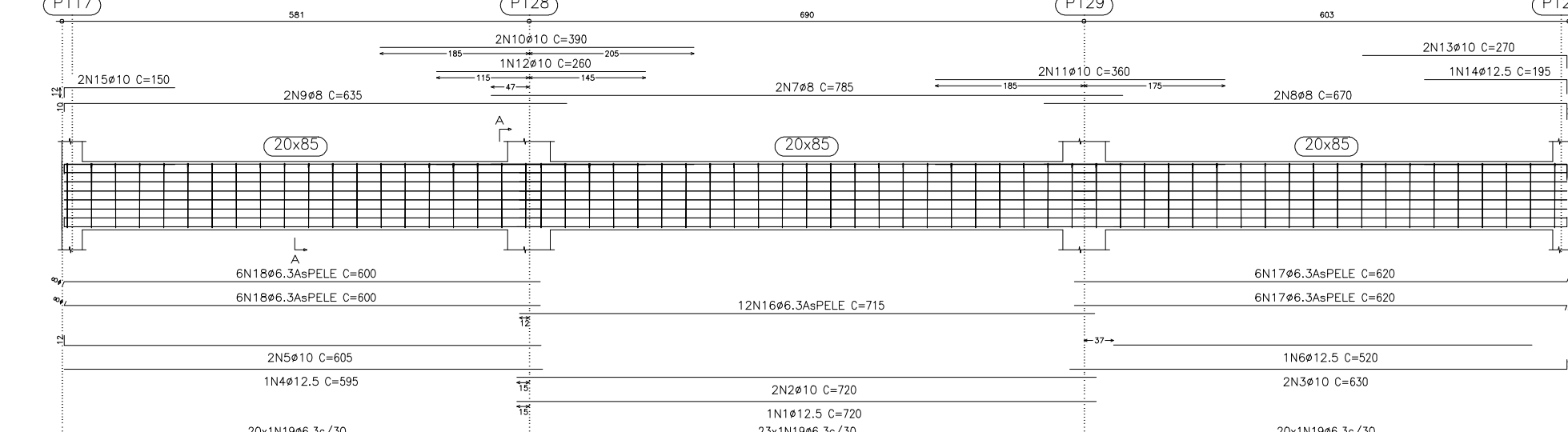
V 14
Escala 1:50



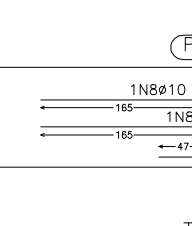
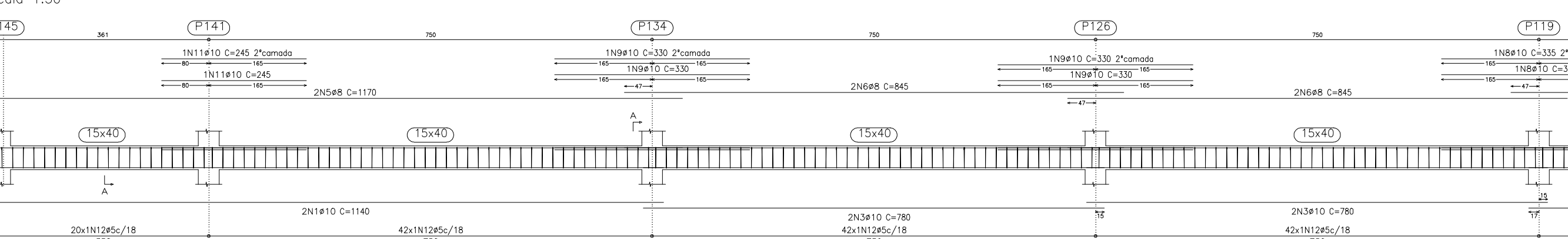
V 15
Escala 1:50



V 16
Escala 1:50



V 17
Escala 1:50



Elemento	Pos.	Diam.	Q.	Doç.	Retç.	Doç.	Comp.	Total	CA-50-A	CA-60-B					
V 12	1	ø10	2	538	12	560	1100	6.9	775	2110	20.7				
	2	ø12.5	3	530	12	560	1100	6.9	775	2110	20.7				
	3	ø12.5	2	510	12	525	1050	10.3	525	525	3.3				
	4	ø10	1	180	12	360	540	8.6	285	285	3.7				
	5	ø8	2	560	10	560	1100	4.5	560	560	1.9				
	6	ø10	3	540	12	540	1080	10.5	540	540	5.7				
	7	ø10	12	275	12	285	570	3.6	285	285	3.6				
	8	ø10	2	205	10	205	410	2.6	205	205	1.8				
	9	ø10	2	195	12	195	390	2.4	195	195	1.9				
	10	ø10	2	180	12	180	360	2.3	180	180	1.7				
	11	ø10	2	270	12	270	540	1.7	270	270	1.0				
	12	ø10	9	140	1260	140	1260	7.9	140	1260	15.6				
	13	ø10	5	130	6110	130	6110	2.9	130	6110	15.4				
	14	ø10	5	130	6110	130	6110	2.9	130	6110	15.4				
	15	ø10	5	130	6110	130	6110	2.9	130	6110	15.4				
	V 14	1	ø10	2	713	12	785	1570	65.5	1086	164.2	1.6			
2		ø12.5	3	560	12	560	1100	7.9	560	1100	7.9				
3		ø12.5	2	545	12	545	1090	8.8	545	1090	8.8				
4		ø10	1	620	12	620	1240	11.9	620	1240	11.9				
5		ø8	2	560	10	560	1100	4.5	560	1100	4.5				
6		ø10	3	540	12	540	1080	10.5	540	1080	10.5				
7		ø8	2	560	10	560	1100	4.5	560	1100	4.5				
8		ø10	3	540	12	540	1080	10.5	540	1080	10.5				
9		ø10	3	305	10	315	630	3.8	315	630	3.8				
10		ø10	2	220	10	220	440	3.5	220	440	3.5				
11		ø10	1	220	10	220	440	3.5	220	440	3.5				
12		ø10	2	210	12	210	420	2.6	210	420	2.6				
13		ø10	2	180	12	180	360	2.3	180	360	2.3				
14		ø8	35	136	3640	136	3640	18.7	136	3640	18.7				
15		ø10	26	140	2640	140	2640	22.9	140	2640	22.9				
V 15		1	ø12.5	2	545	15	744	15	744	155.2	3.9	0.8			
	2	ø10	1	505	13	505	505	7.9	505	505	7.9				
	3	ø8	2	744	10	744	1488	11.9	744	1488	11.9				
	4	ø10	1	195	15	195	15	420	4.1	195	15	420	4.1		
	5	ø10	2	180	20	180	20	420	4.1	180	20	420	4.1		
	6	ø12.5	1	170	15	170	15	185	1.8	170	15	185	1.8		
	7	ø10	1	168	18	168	18	2.3	168	18	2.3	8.8			
	8	ø8	43	130	5090	130	5090	2.8	130	5090	2.8	8.8			
	V 16	1	ø12.5	2	720	12	720	1440	45.7	9.7	720	1440	45.7	9.7	
		2	ø10	1	620	12	620	1240	9.0	620	1240	9.0	9.0		
		3	ø10	1	595	12	595	1190	5.1	595	1190	5.1	5.1		
		4	ø12.5	1	595	12	595	1190	5.1	595	1190	5.1	5.1		
		5	ø12.5	1	595	12	595	1190	5.1	595	1190	5.1	5.1		
		6	ø12.5	1	595	12	595	1190	5.1	595	1190	5.1	5.1		
		7	ø8	785	785	1570	785	1570	6.2	785	1570	6.2	6.2		
		8	ø8	620	620	1240	620	1240	6.1	620	1240	6.1	6.1		
9		ø10	2	620	12	620	1240	9.0	620	1240	9.0	9.0			
10		ø10	2	360	720	360	720	4.5	360	720	4.5	4.5			
11		ø10	2	360	720	360	720	4.5	360	720	4.5	4.5			
12		ø10	2	254	16	254	16	344	3.4	254	16	344	3.4		
13		ø10	2	177	18	177	18	210	1.9	177	18	210	1.9		
14		ø12.5	1	168	12	168	12	180	1.8	168	12	180	1.8		
15		ø10	2	138	10	138	10	300	1.9	138	10	300	1.9		
V 17		1	ø10	2	785	12	785	1570	65.5	1086	164.2	1.6			
	2	ø12.5	3	560	12	560	1100	7.9	560	1100	7.9	7.9			
	3	ø10	1	620	12	620	1240	9.0	620	1240	9.0	9.0			
	4	ø10	1	668	10	668	1336	18.9	668	1336	18.9	18.9			
	5	ø8	2	1040	12	1040	2080	9.2	1040	2080	9.2	9.2			
	6	ø10	3	540	12	540	1080	10.5	540	1080	10.5	10.5			
	7	ø8	2	710	10	710	1420	5.6	710	1420	5.6	5.6			
	8	ø10	3	540	12	540	1080	10.5	540	1080	10.5	10.5			
	9	ø10	4	330	130	330	130	8.3	330	130	8.3	8.3			
	10	ø10	4	245	245	245	490	3.1	245	490	3.1	3.1			
	12	ø5	224	100	22400	100	22400	117.2	100	22400	117.2	117.2			
	V 18	1	ø10	2	12	286	12	310	620	3.9	286	12	310	620	3.9
		2	ø10	2	12	286	12	310	620	3.9	286	12	310	620	3.9
		3	ø10	4	12	80	12	80	12	2.0	12	80	12	2.0	2.8
		4	ø5	16	110	1760	110	1760	9.1	110	1760	9.1	9.1	9.1	
		V 19	1	ø10	2	12	286	12	310	620	3.9	286	12	310	620
2			ø10	2	12	286	12	310	620	3.9	286	12	310	620	3.9
3			ø10	4	12	80	12	80	12	2.0	12	80	12	2.0	2.8
4			ø5	16	110	1760	110	1760	9.1	110	1760	9.1	9.1	9.1	
V 20			1	ø12.5	3	560	12	560	1100	7.9	560	1100	7.9	7.9	
			2	ø10	1	620	12	620	1240	9.0	620	1240	9.0	9.0	
			3	ø10	1	595	12	595	1190	5.1	595	1190	5.1	5.1	
			4	ø12.5	1	595	12	595	1190	5.1	595	1190	5.1	5.1	
			5	ø12.5	1	595	12	595	1190	5.1	595	1190	5.1	5.1	
			6	ø12.5	1	595	12	595	1190	5.1	595	1190	5.1	5.1	
			7	ø8	785	785	1570	785	1570	6.2	785	1570	6.2	6.2	
			8	ø8	620	620	1240	620	1240	6.1	620	1240	6.1	6.1	
	9		ø10	2	620	12	620	1240	9.0	620	1240	9.0	9.0		
	10		ø10	2	360	720	360	720	4.5	360	720	4.5	4.5		
	11		ø10	2	360	720	360	720	4.5	360	720	4.5	4.5		
	12		ø10	2	254	16	254	16	344	3.4	254	16	344	3.4	
	13	ø10	2	177	18	177	18	210	1.9	177	18	210	1.9		
	14	ø12.5	1	168	12	168	12	180	1.8	168	12	180	1.8		
	15	ø10	2	138	10	138	10	300	1.9	138	10	300	1.9		
	V 21	1	ø10	2	785	12	785	1570	65.5	1086	164.2	1.6			
2		ø12.5	3	560	12	560	1100	7.9	560	1100	7.9	7.9			
3		ø10	1	620	12	620	1240	9.0	620	1240	9.0	9.0			
4		ø10	1	668	10	668	1336	18.9	668	1336	18.9	18.9			
5		ø8	2	1040	12	1040	2080	9.2	1040	2080	9.2	9.2			
6		ø10	3	540	12	540	1080	10.5	540	1080	10.5	10.5			
7		ø8	2	710	10	710	1420	5.6	710	1420	5.6	5.6			
8		ø10	3	540	12	540	1080	10.5	540	1080	10.5	10.5			
9		ø10	4	330	130	330	130	8.3	330	130	8.3	8.3			
10		ø10	4	245	245	245	490	3.1	245	490	3.1	3.1			
12		ø5	224	100	22400	100	22400	117.2	100	22400	117.2	117.2			
V 22		1	ø10	2	12	286	12	310	620	3.9	286	12	310	620	3.9
		2	ø10	2	12	286	12	310	620	3.9	286	12	310	620	3.9
		3	ø10	4	12	80	12	80	12	2.0	12	80	12	2.0	2.8
		4	ø5	16	110	1760	110	1760	9.1	110	1760	9.1	9.1	9.1	
		V 23	1	ø10	2	785	12	785	1570	65.5	1086	164.2	1.6		
	2		ø12.5	3	560	12	560	1100	7.9	560	1100	7.9	7.9		
	3		ø10	1	620	12	620	1240	9.0	620	1240	9.0	9.0		
	4		ø10	1	668	10	668	1336	18.9	668	1336	18.9	18.9		
	5		ø8	2	1040	12	1040	2080	9.2	1040	2080	9.2	9.2		
	6		ø10	3	540	12	540	1080	10.5	540	1080	10.5	10.5		
	7		ø8	2	710	10	710	1420	5.6	710	1420	5.6	5.6		
	8		ø10	3	540	12	540	1080	10.5	540	1080	10.5	10.5		
	9		ø10	4	330	130	330	130	8.3	330	130	8.3	8.3		
	10		ø10	4	245	245	245	490	3.1	245	490	3.1	3.1		
	12		ø5	224	100	22400	100	22400	117.2	100	22400	117.2	117.2		
	V 24		1	ø10	2	785	12	785	1570	65.5	1086	164.2	1.6		
2			ø12.5	3	560	12	560	1100	7.9	560	1100	7.9	7.9		
3			ø10	1	620	12	620	1240	9.0	620	1240	9.0	9.0		
4			ø10	1	668	10	668	1336	18.9	668	1336	18.9	18.9		
5			ø8	2	1040	12	1040	2080	9.2	1040	2080	9.2	9.2		
6		ø10	3	540	12	540	1080	10.5	540	1080	10.5	10.5			
7		ø8	2	710	10	710	1420	5.6	710	1420	5.6	5.6			
8		ø10	3	540	12	540	1080	10.5	540	1080	10.5	10.5			
9		ø10	4	330	130	330	130	8.3	330	130	8.3	8.3			
10		ø10	4	245	245	245	490	3.1	245	490	3.1	3.1			
12		ø5	224	100	22400	100	22400	117.2	100	22400	117.2	117.2			
V 25		1	ø10	2	785	12	785	1							