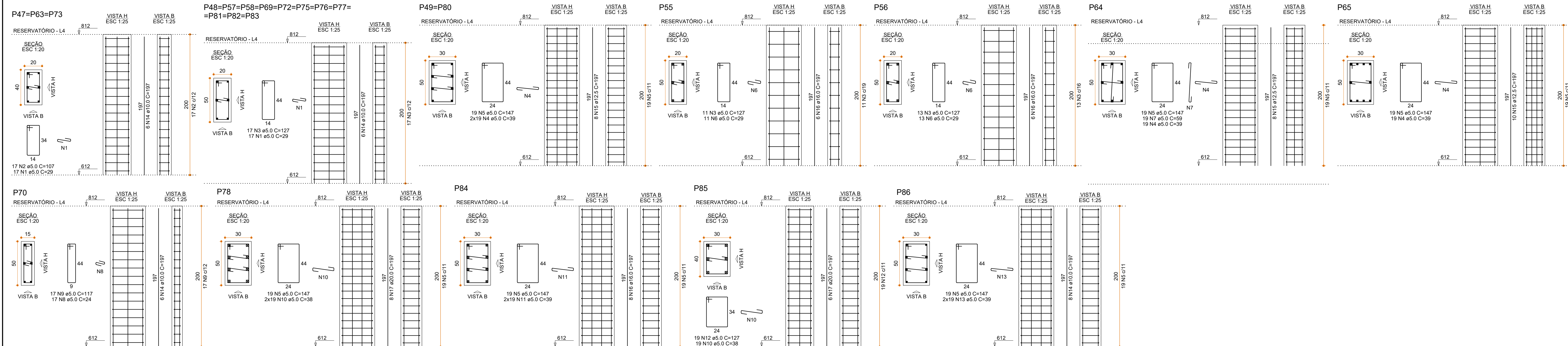


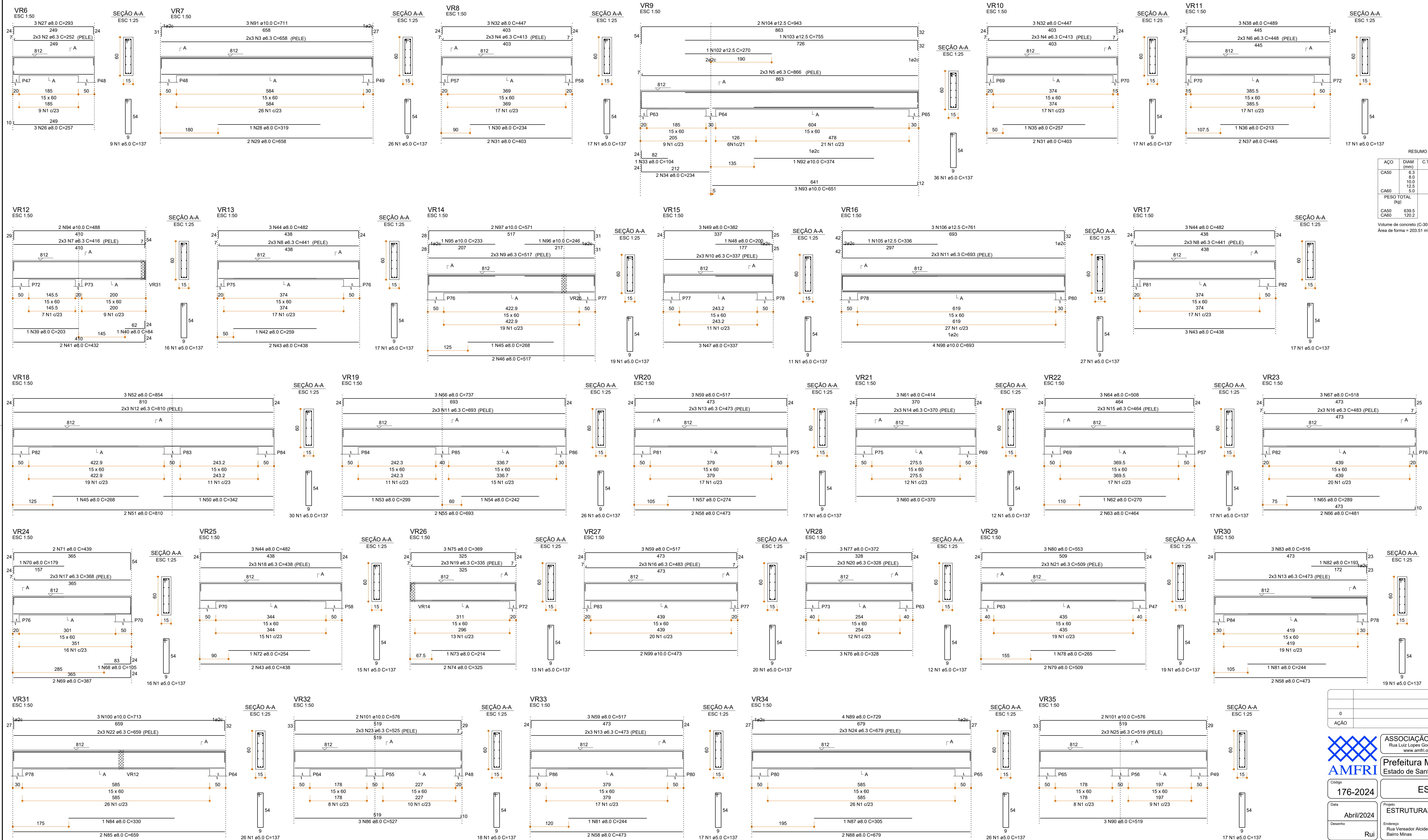
## PILARES



RELAÇÃO DO AÇO					
3xP47	11xP48		2xP49		
P55	P56	P57	P66	P67	P68
P65	P66	P70	P76	P77	P78
P84	P85	P86	P86		
AÇO	N	DIAM (mm)	QUANT	C.LUNIT (cm)	C.TOTAL (cm)
CA60	1	5,0	238	29	6902
	5	1	51	107	5407
	1	5,0	211	127	26797
	5	1,0	114	89	10151
	5	5,0	133	147	19551
	6	5,0	24	29	696
	5	5,0	19	112	2121
	8	5,0	17	24	408
	17	11	8	1989	15899
	10	5,0	57	38	2166
	15	5,0	38	39	1482
	12	5,0	19	127	2413
CA50	13	5,0	38	39	1482
	14	10,0	98	197	19306
	15	12,5	34	197	6698
	16	10,0	20	197	3940
	17	12,5	14	197	2758

RESUMO DO AÇO			
AÇO	DIAM (mm)	C.TOTAL (m)	PESO + 0% (kg)
CA50	10.0	193.1	119
	12.5	67	84.5
	16.0	39.4	62.2
	20.0	27.6	88.8
CA60	5.0	749.1	115.5
PESO TOTAL (kg)			
CA50		313.8	
CA60		115.5	

## VIGAS



RELATÓ DO AÇO						
		VR6 VR12 VR15 VR18 VR22 VR21 VR27 VR30 VR32	VR17 VR10 VR16 VR19 VR28 VR25 VR26 VR28 VR31 VR34	VR8 VR11 VR14 VR17 VR20 VR23 VR26 VR29 VR32 VR35		
CAÇO	N	DIAM (mm)	QUANT	CUT (mm)	G. TOTAL	(mm)
NABO	6	5,0	589	137	77953	
CASO	2	6,3	6	152	1860	
	3	6,3	6	658	3948	
	4	6,3	12	413	4956	
	5	6,3	3	686	2160	
	6	6,3	6	448	2688	
	7	6,3	6	116	2406	
	8	6,3	12	441	5292	
	9	6,3	6	517	3102	
	10	6,3	6	337	2022	
	11	6,3	12	693	8316	
	12	6,3	6	116	1860	

AÇO	DIAM (mm)	C.TOTAL (m)	PESO + 0% (kg)
CA50	6,3	898,6	219,9
	8,0	690,6	272,5
	10,0	152,2	93,8
	12,5	55,3	53,3
CA60	5,0	779,5	120,2
<b>PESO TOTAL (kg)</b>			
CA50		839,5	
CA60		120,2	

Volume de concreto (C-30) = 13,57 m³  
 Área de forma = 203,51 m²

[illegible]