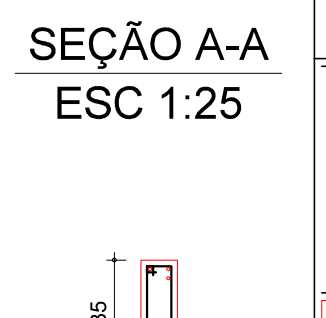
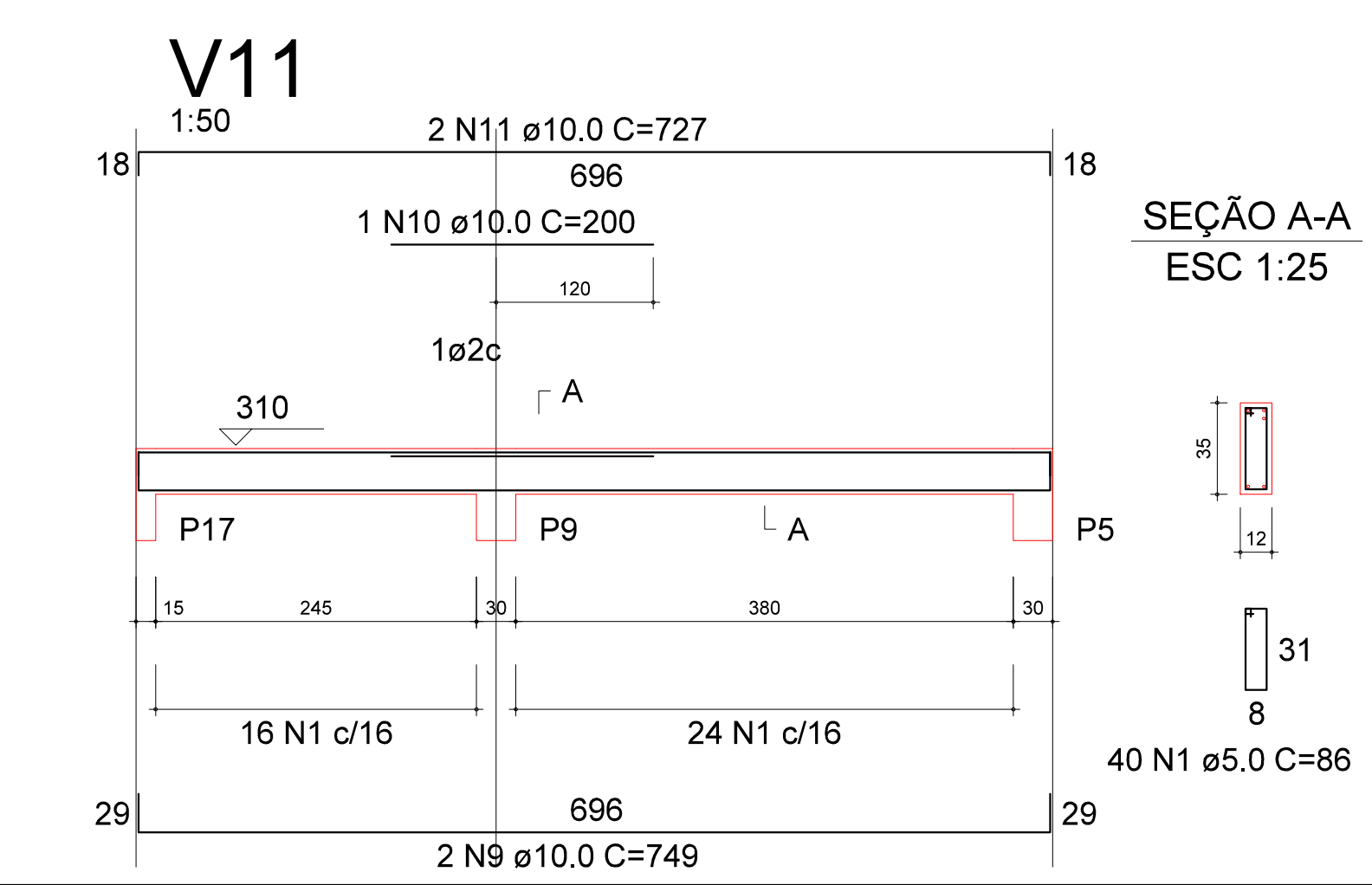
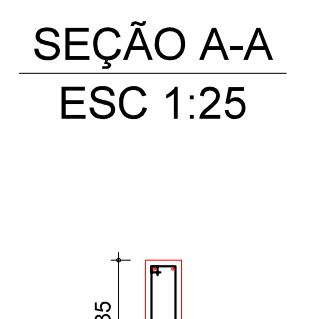
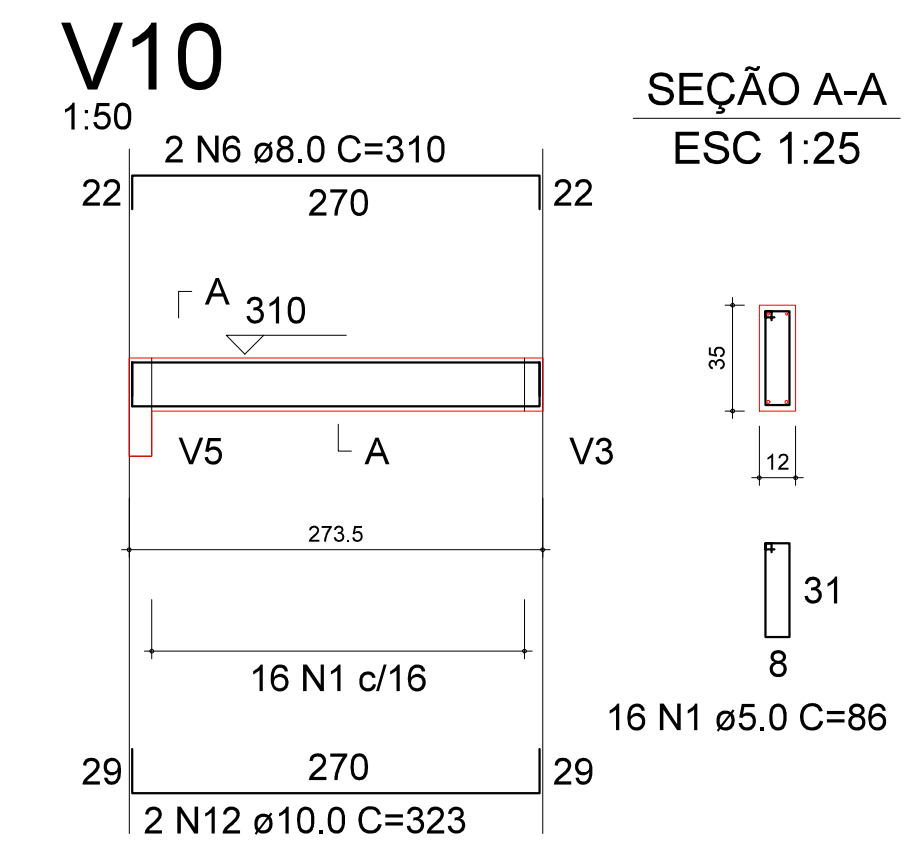
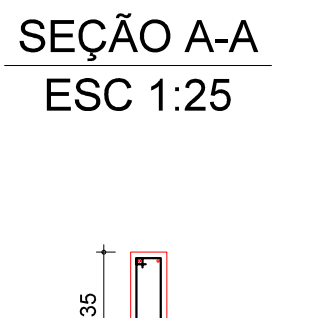
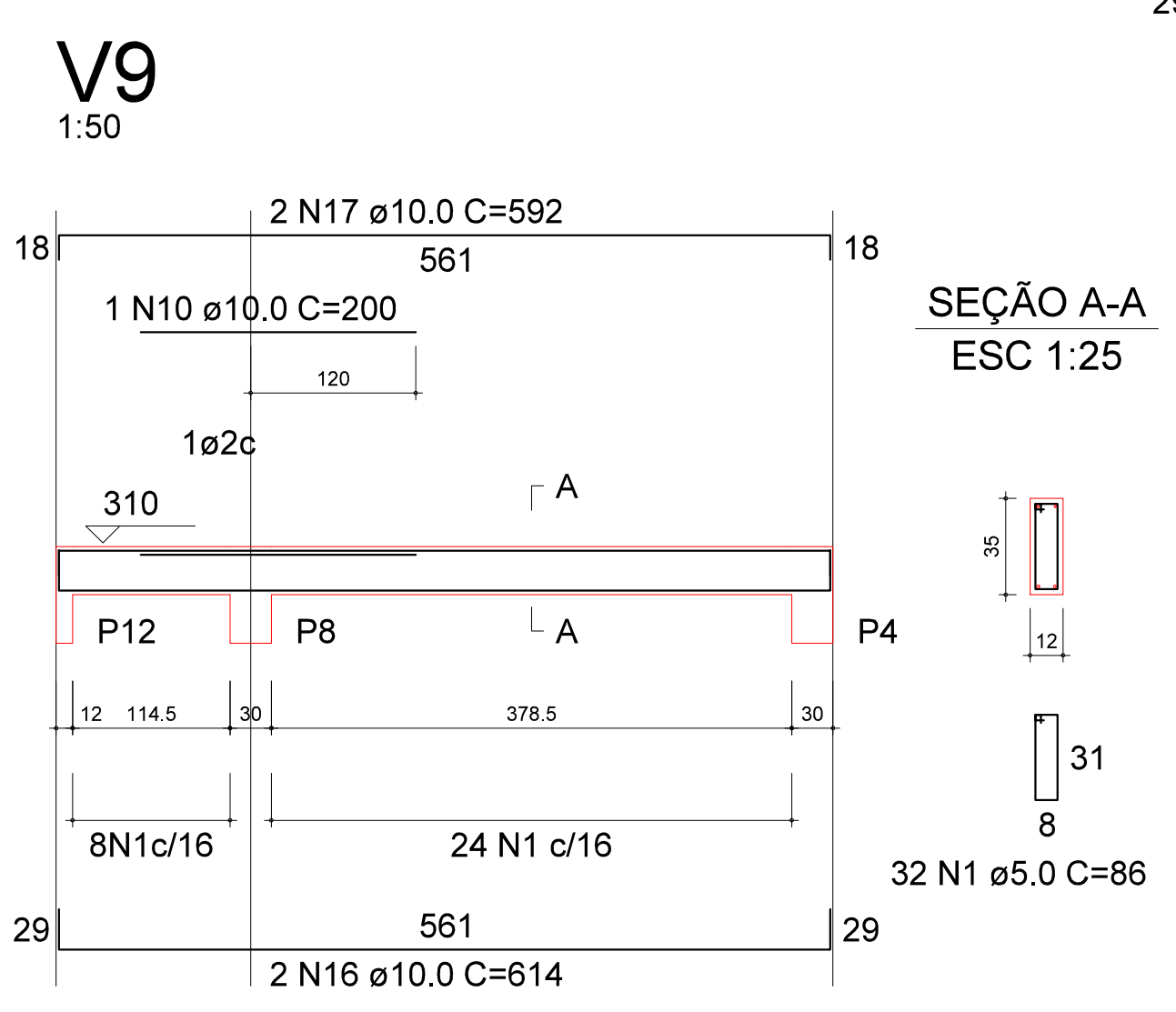
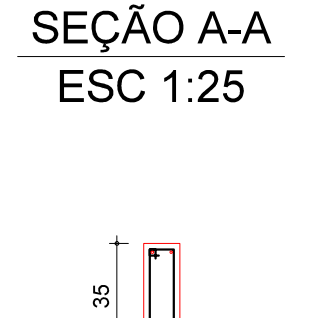
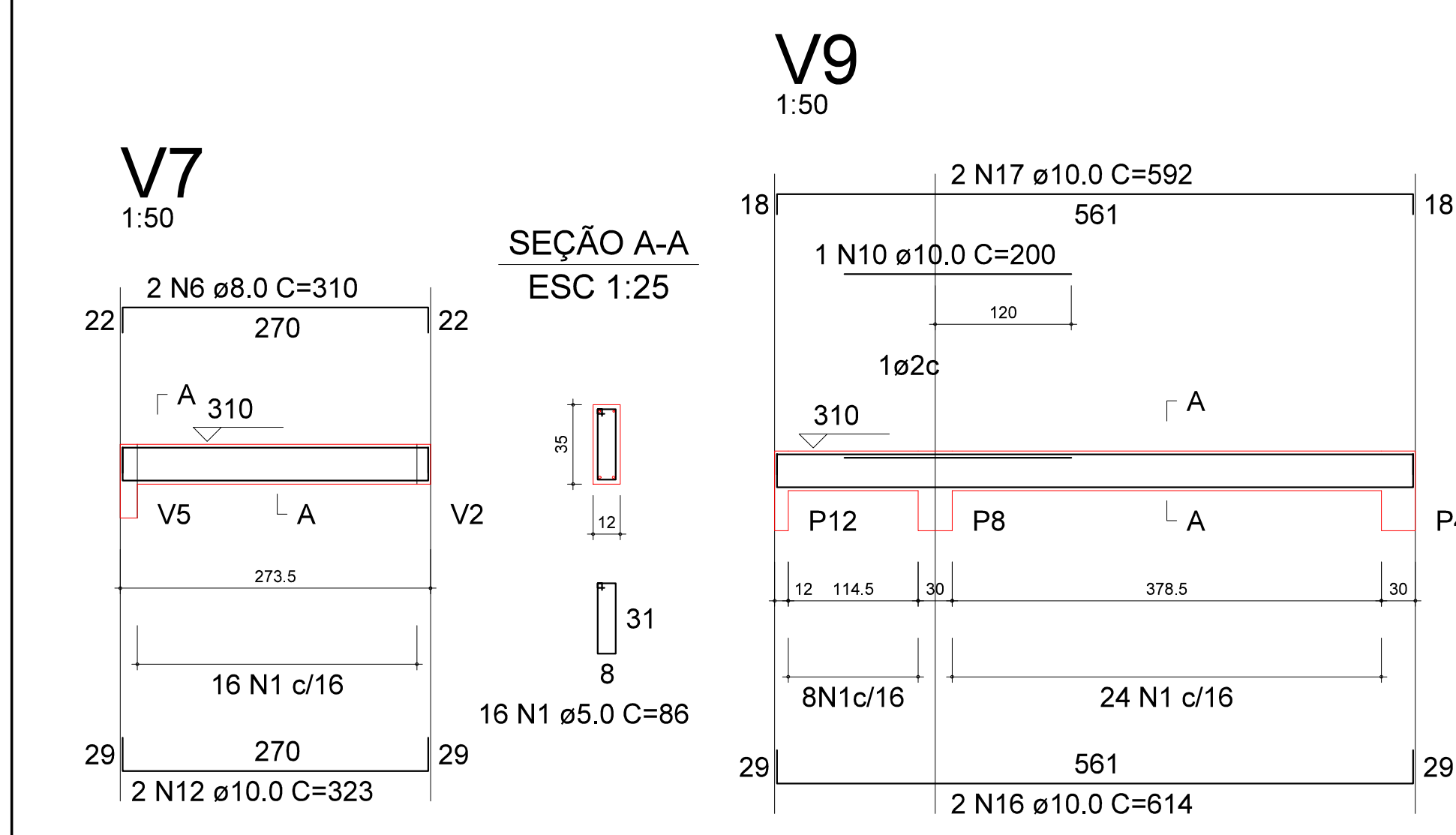
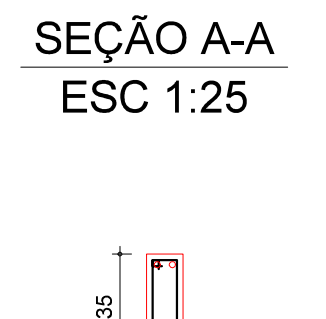
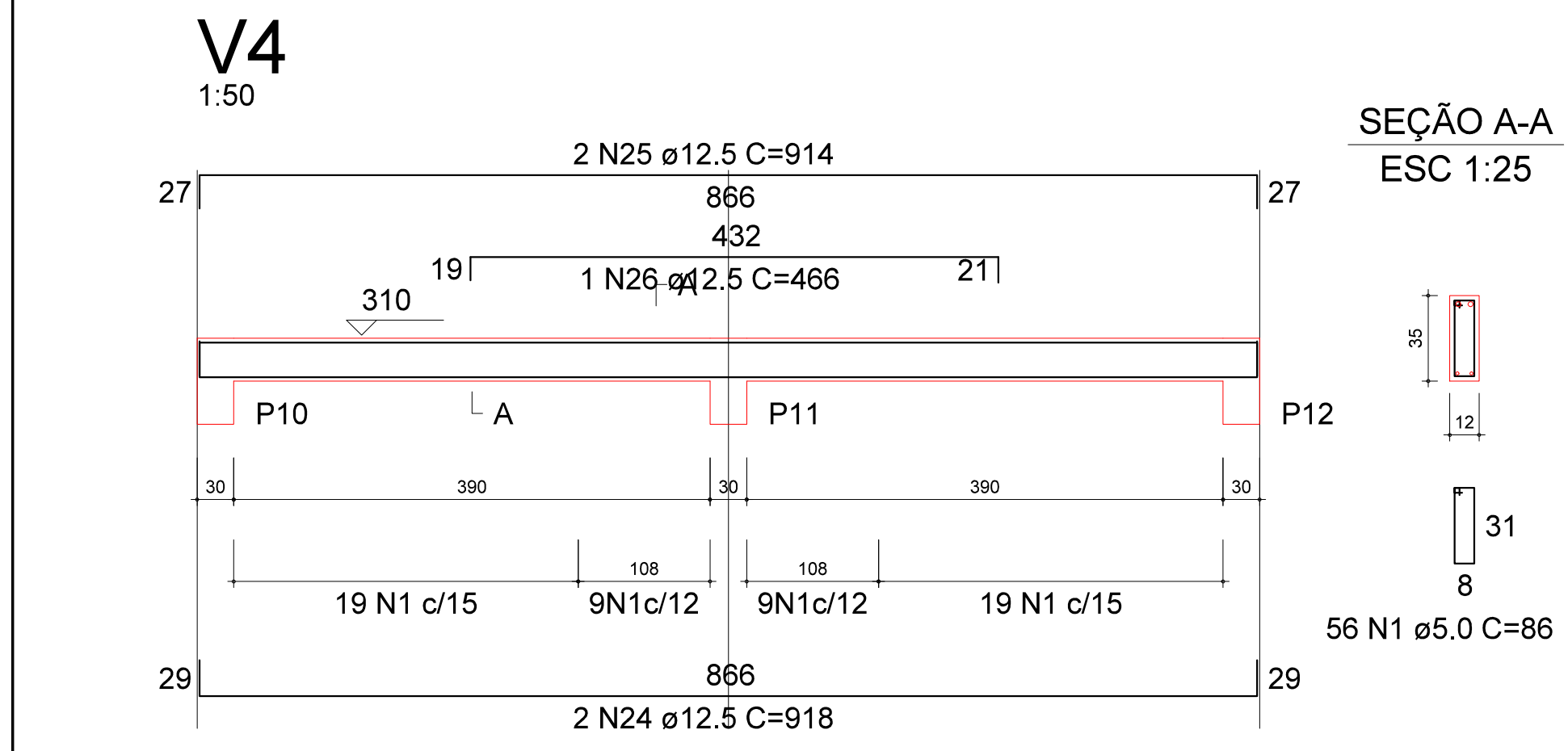
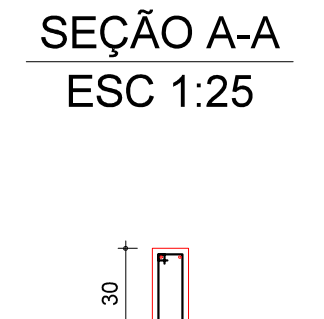
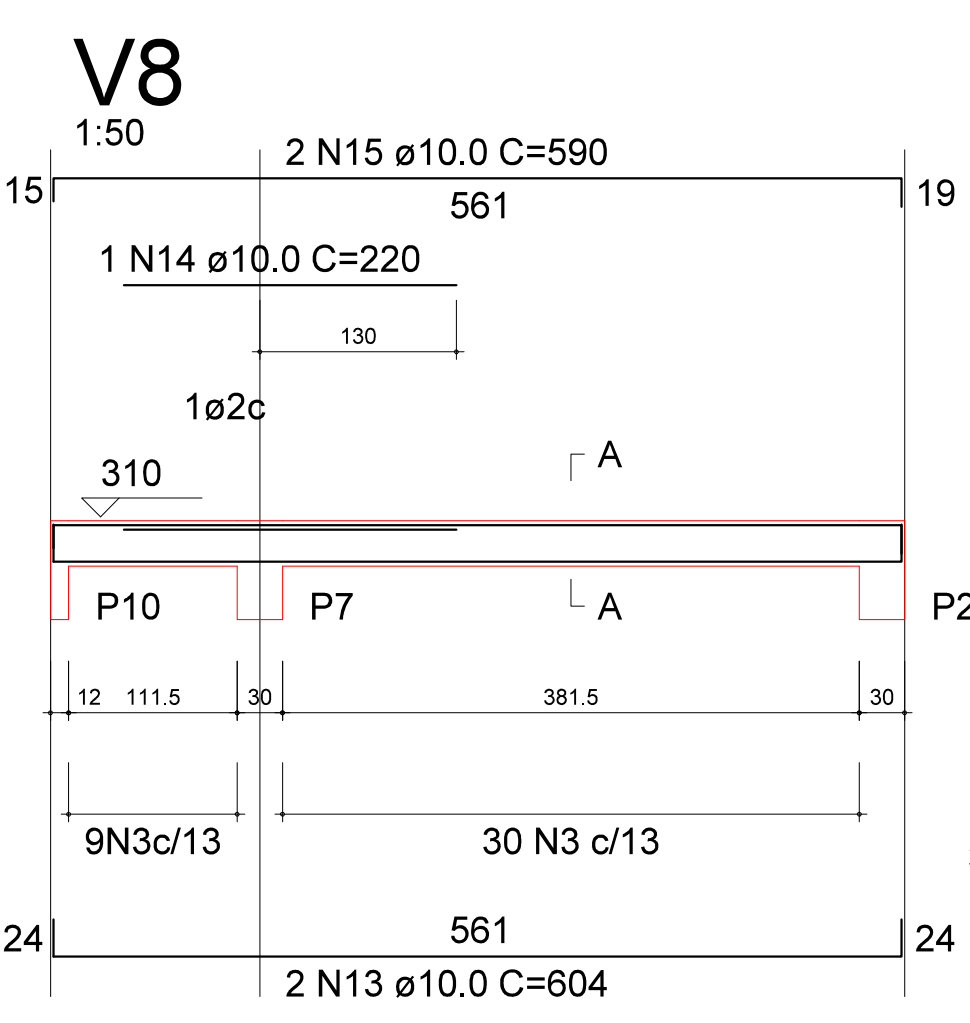
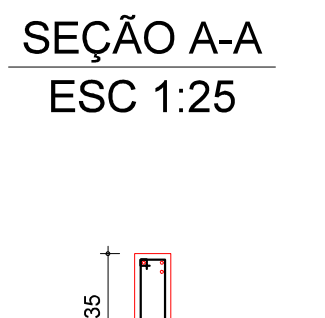
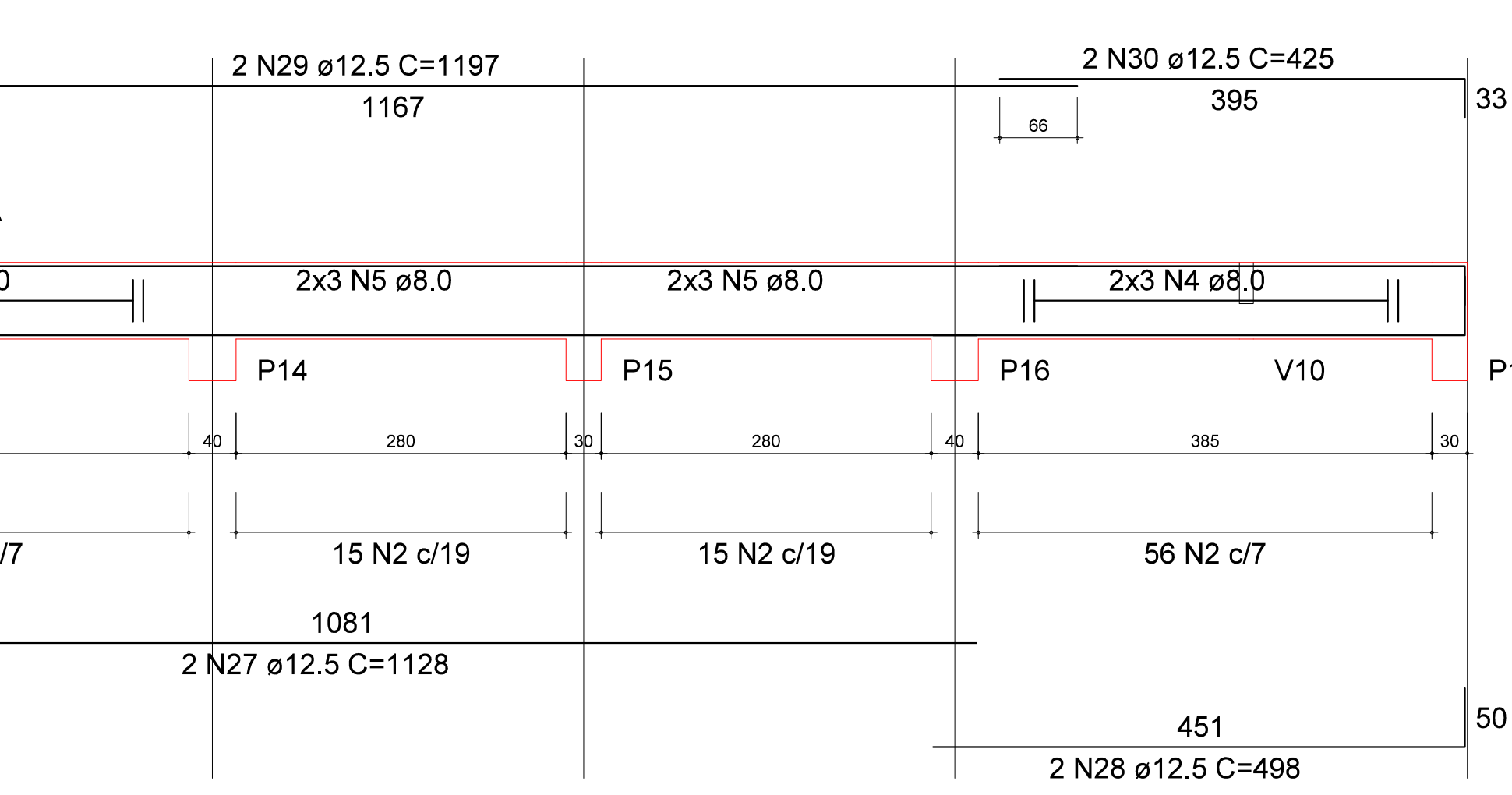
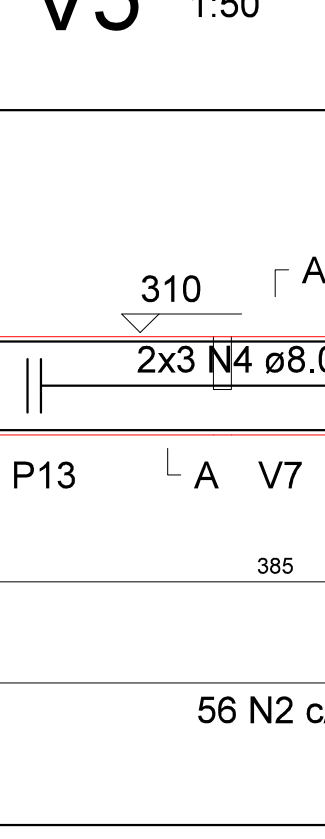


RELAÇÃO DO AÇO

AÇO	N	DIAM	Q	UNIT (cm)	C.TOTAL (cm)
60	1	5.0	338	86	29068
	2	5.0	142	152	21584
	3	5.0	39	76	2964
50	4	8.0	12	corr	5220
	5	8.0	12	corr	3780
	6	8.0	4	310	1240
	7	10.0	4	373	1492
	8	10.0	4	351	1404
	9	10.0	4	749	2996
	10	10.0	3	200	600
	11	10.0	4	727	2908
	12	10.0	4	323	1292
	13	10.0	2	604	1208
	14	10.0	1	220	220
	15	10.0	2	590	1180
	16	10.0	2	614	1228
	17	10.0	2	592	1184
	18	12.5	2	1086	2172
	19	12.5	2	186	372
	20	12.5	2	348	696
	21	12.5	1	290	290
	22	12.5	2	1197	2394
	23	12.5	2	452	904
	24	12.5	2	918	1836
	25	12.5	2	914	1828
	26	12.5	1	466	466
	27	12.5	2	1128	2256
	28	12.5	2	498	996
	29	12.5	2	1197	2394
	30	12.5	2	425	850



RESUMO DO AÇO

AÇO	DIAM	C.TOTAL (m)	PESO+10% (kg)
CA50	8.0	102.4	44.5
	10.0	157.2	106.7
	12.5	174.6	185.1
CA60	5.0	538.7	91.2
<b>PESO TOTAL</b>			
CA50		336.3	
CA60		91.2	

Vol. concreto total = 3.99 m<sup>3</sup>  
Área de forma total = 71.16 m<sup>2</sup>  
fck = 200.00 kgf/cm<sup>2</sup>

PREFEITURA MUNICIPAL DE ARARANGUÁ - SC  
SECRETARIA DE OBRAS, VIAÇÃO E SERVIÇOS URBANOS  
RUA DI. VIRGILINO DE QUEI. 200 - CENTRO  
ADM. SANDRO R. MACIEL / RODRIGO TURATTI

OBRA: **ACADEMIA COBERTA** PROJETO: **ESTRUTURAL**

LOCAL: BAIRRO JARDIM DAS AVENIDAS  
AVENIDA VEREADOR MANOEL COSTA

RES.P. TECNICO: \_\_\_\_\_ ASSUNTO: **VIGAS DA COBERTURA**

FASE: 1  
REVISADO: \_\_\_\_\_  
EXTENSÃO: \_\_\_\_\_  
ÁREA: \_\_\_\_\_  
EXTENSÃO: \_\_\_\_\_  
DATA: AGOSTO / 2013  
LEVANTAMENTO: \_\_\_\_\_ PRANCHA: \_\_\_\_\_  
DESENHO: ENG. CIVIL ALISON SILVA  
PROJETO: ENG. ALISON SILVA