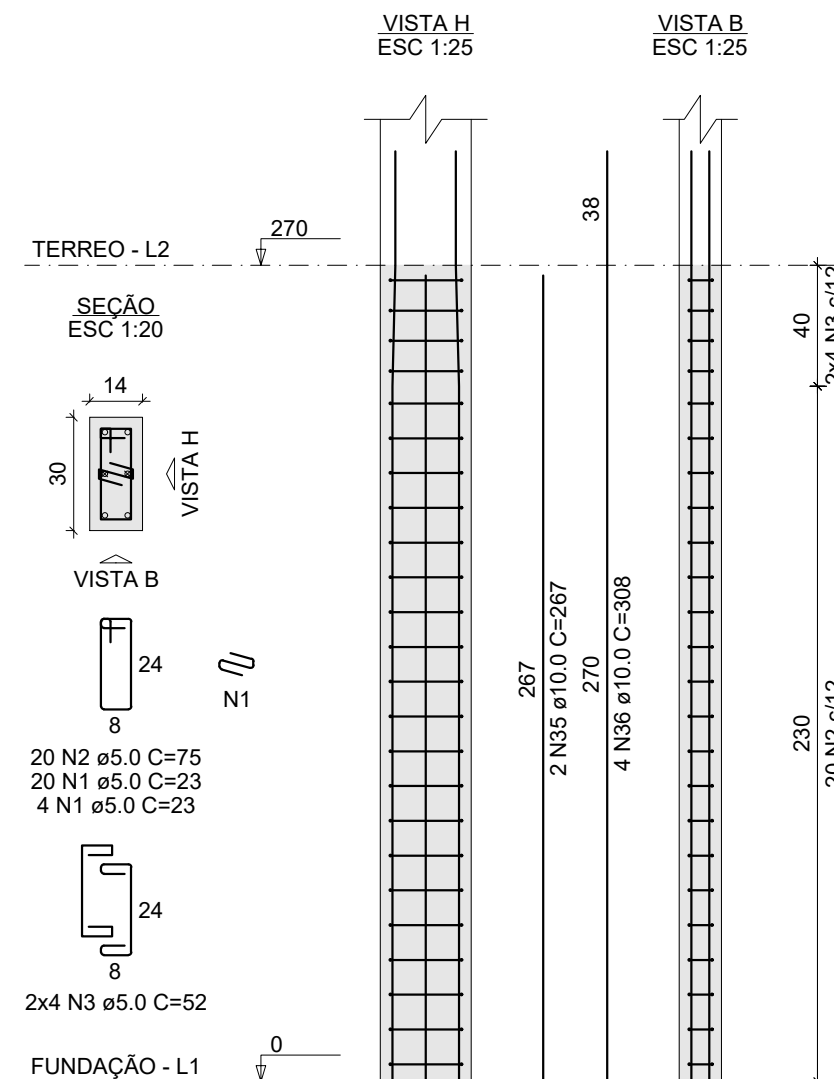
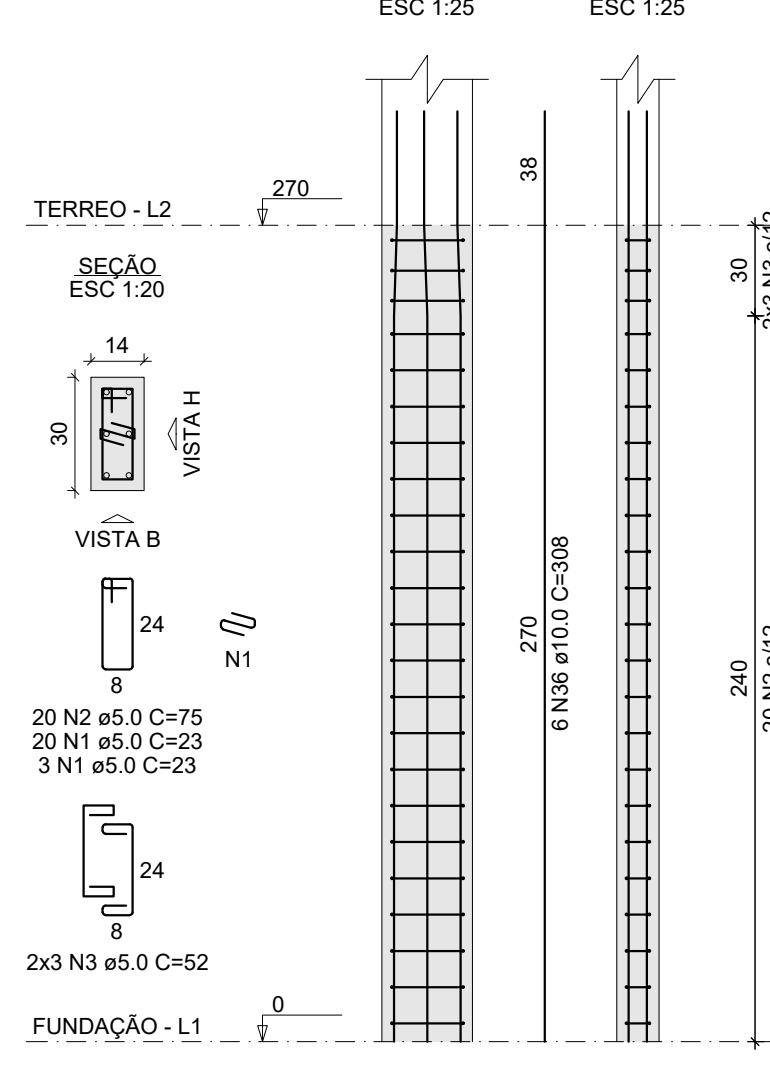


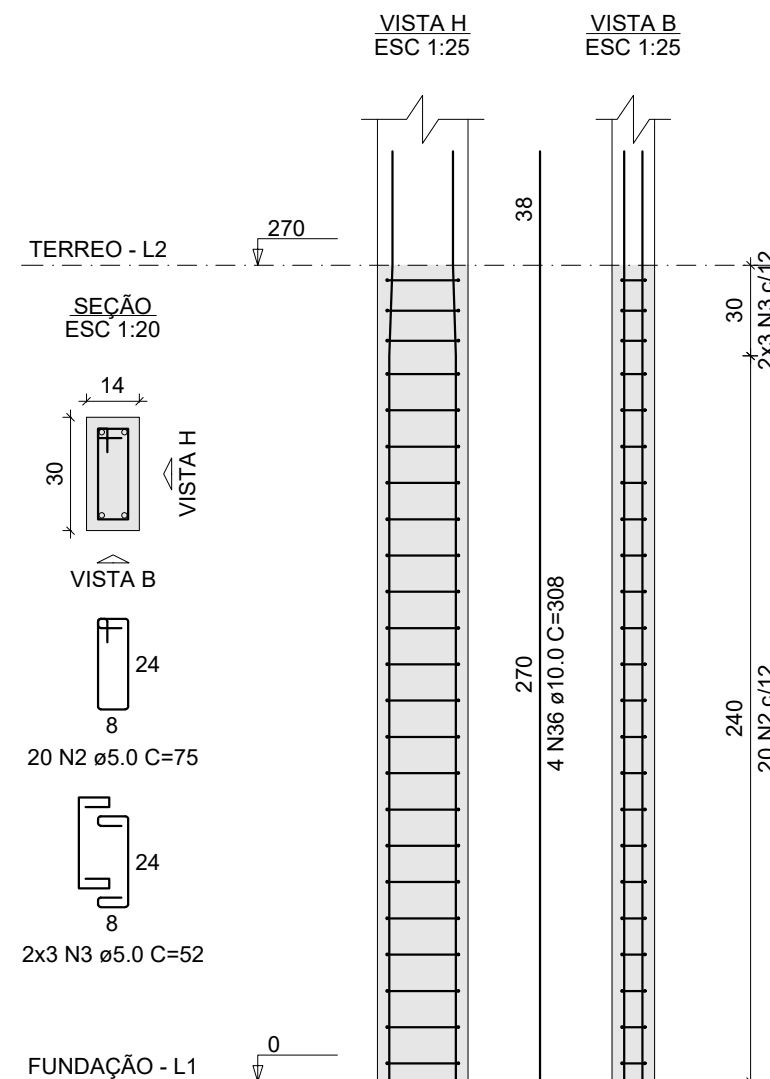
P1=P10=P12



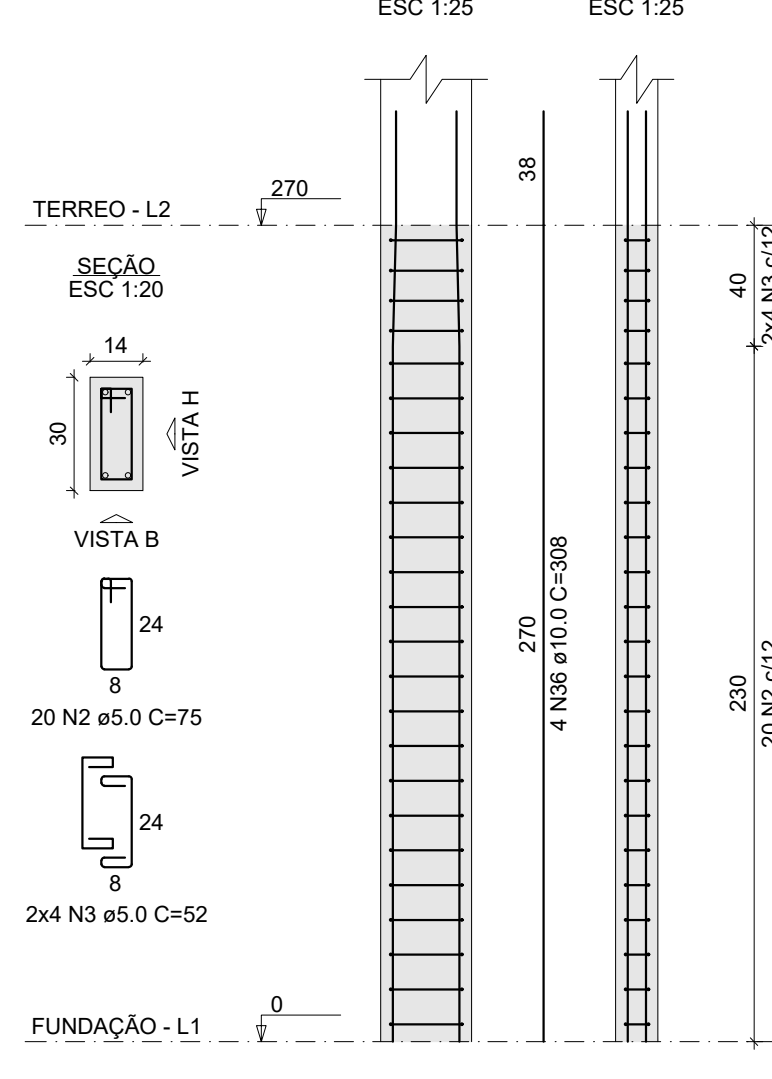
P2



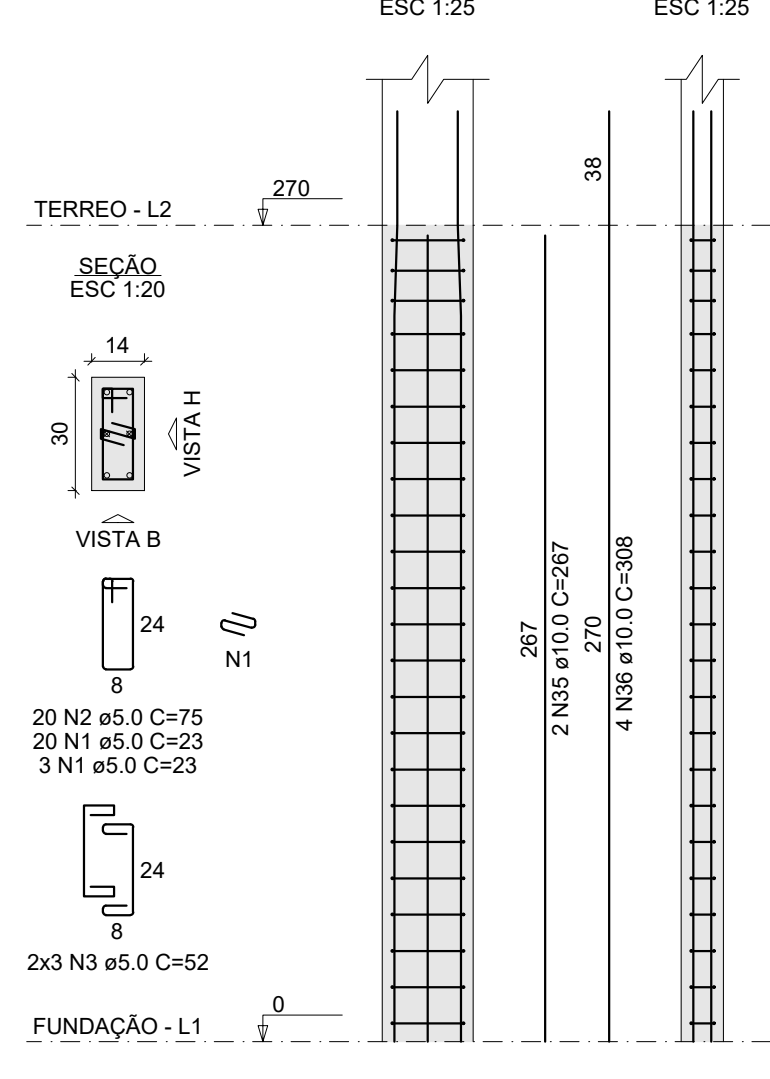
P3=P5=P6=P9



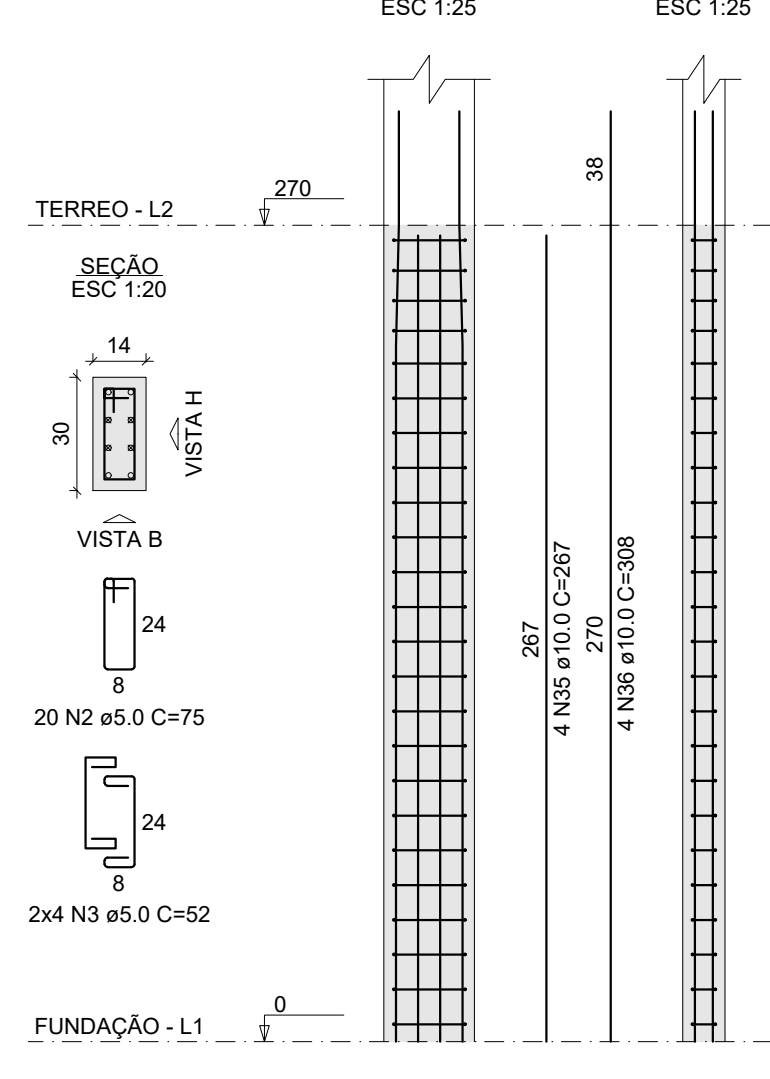
P4=P7



P8

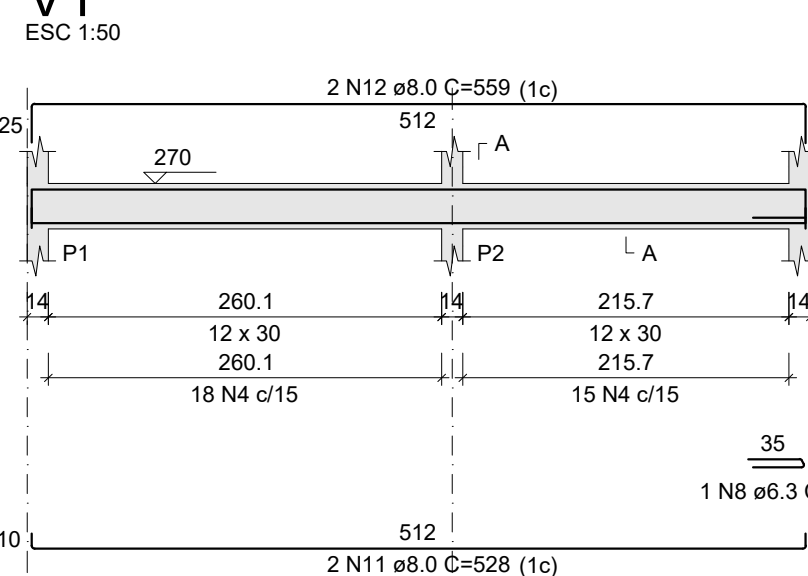


P11

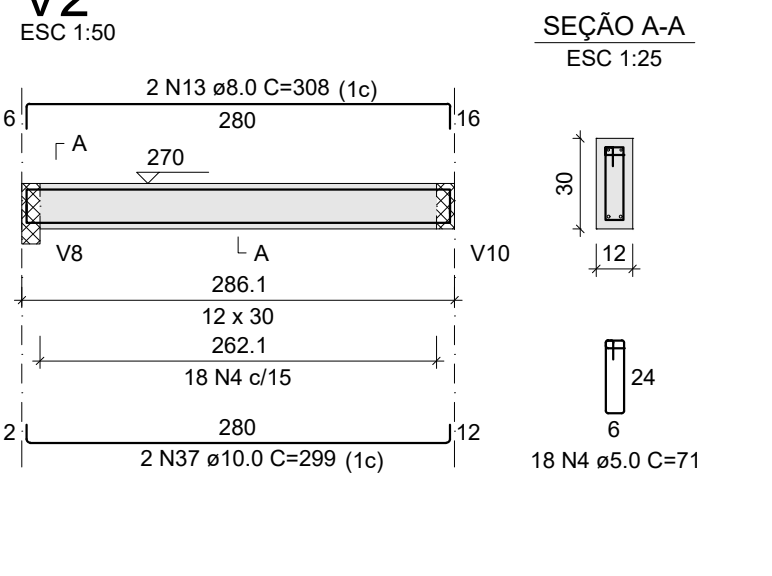


RELAÇÃO DO AÇO				
Positivos X	3xP1	P2		
4xP3	2xP4	P6		
P11	V1	V2		
V3	V6	V5		
V10	V11	V9		
AÇO	N	DIAM (mm)	QUANT	C.UNIT (cm)
CA60	1	5.0	118	23
	2	5.0	240	75
CA50	3	5.0	84	52
	4	5.0	237	71
	5	5.0	69	91
	6	5.0	9	115
	7	6.3	5	130
	8	6.3	2	144
	9	6.3	4	338
	10	6.3	4	357
	11	8.0	6	528
	12	8.0	2	559
	13	8.0	4	308
	14	8.0	1	403
	15	8.0	2	560
	16	8.0	1	403
	17	8.0	2	560
	18	8.0	2	296
	19	8.0	2	245
	20	8.0	1	165
	21	8.0	2	559
	22	8.0	2	959
	23	8.0	1	160
	24	8.0	1	408
	25	8.0	2	991
	26	8.0	2	229
	27	8.0	2	297
	28	8.0	1	169
	29	8.0	4	855
	30	8.0	1	107
	31	8.0	1	140
	32	8.0	1	399
	33	8.0	2	860
	34	8.0	4	863
	35	10.0	12	267
	36	10.0	50	308
	37	10.0	2	299
	38	10.0	2	291
	39	10.0	1	195

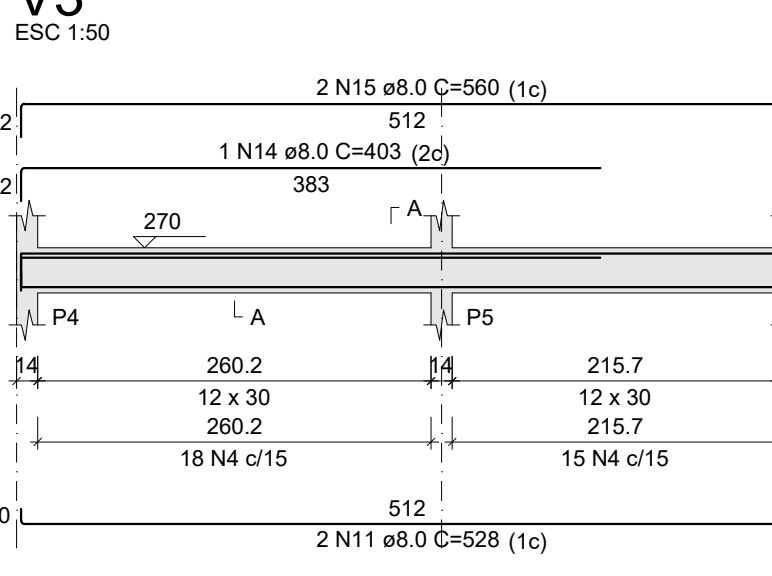
V1



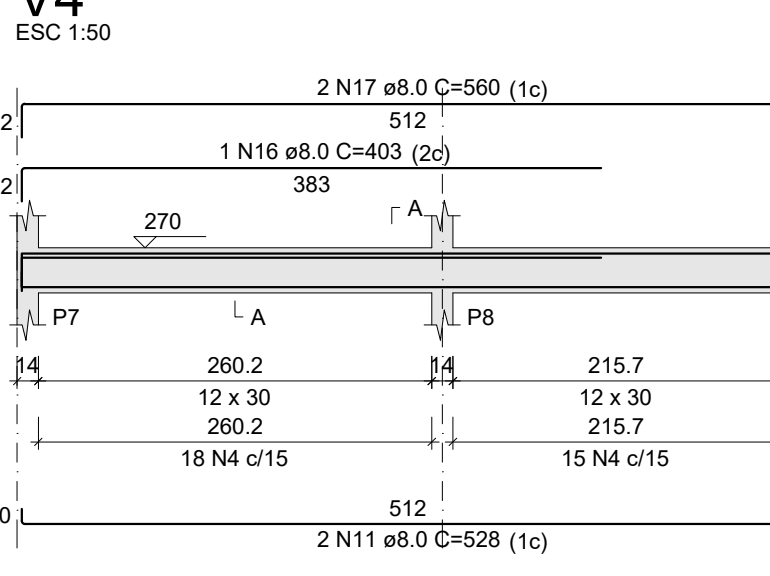
V2



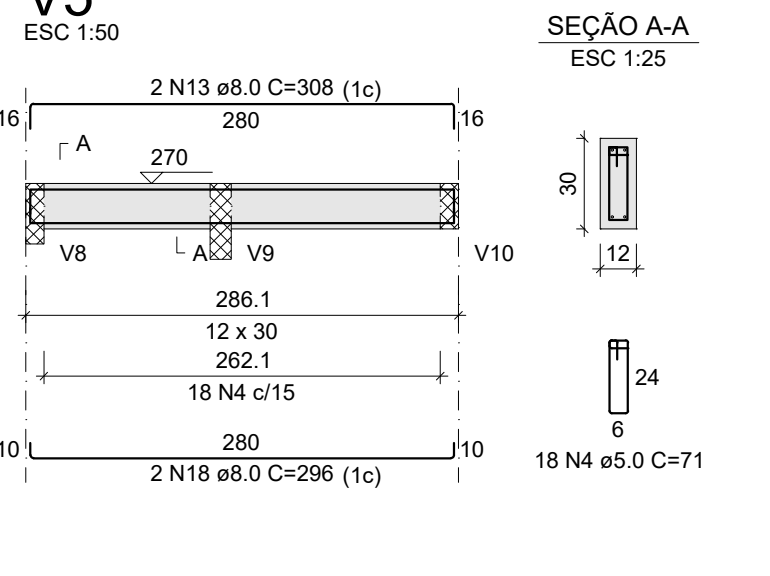
V3



V4



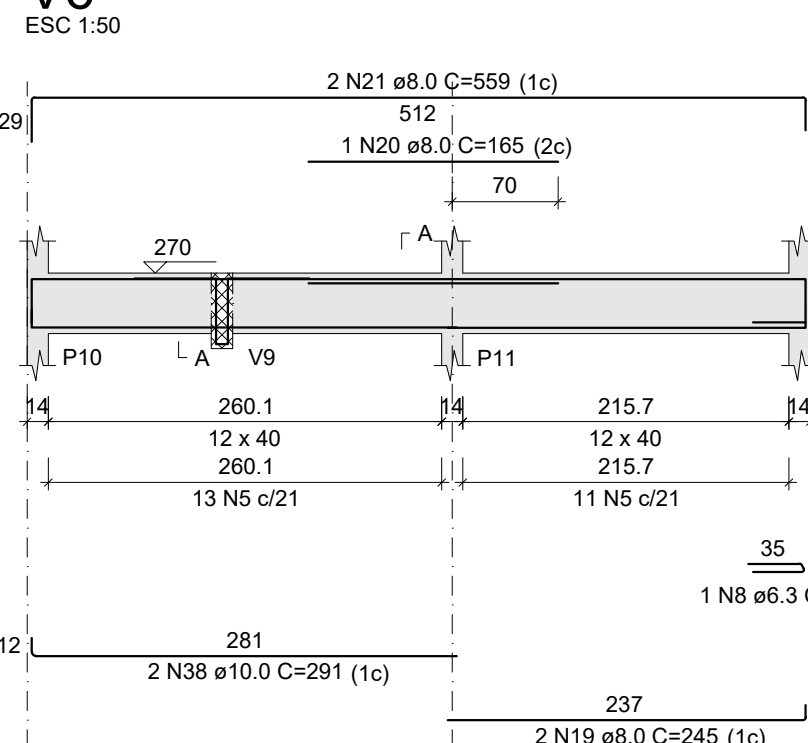
V5



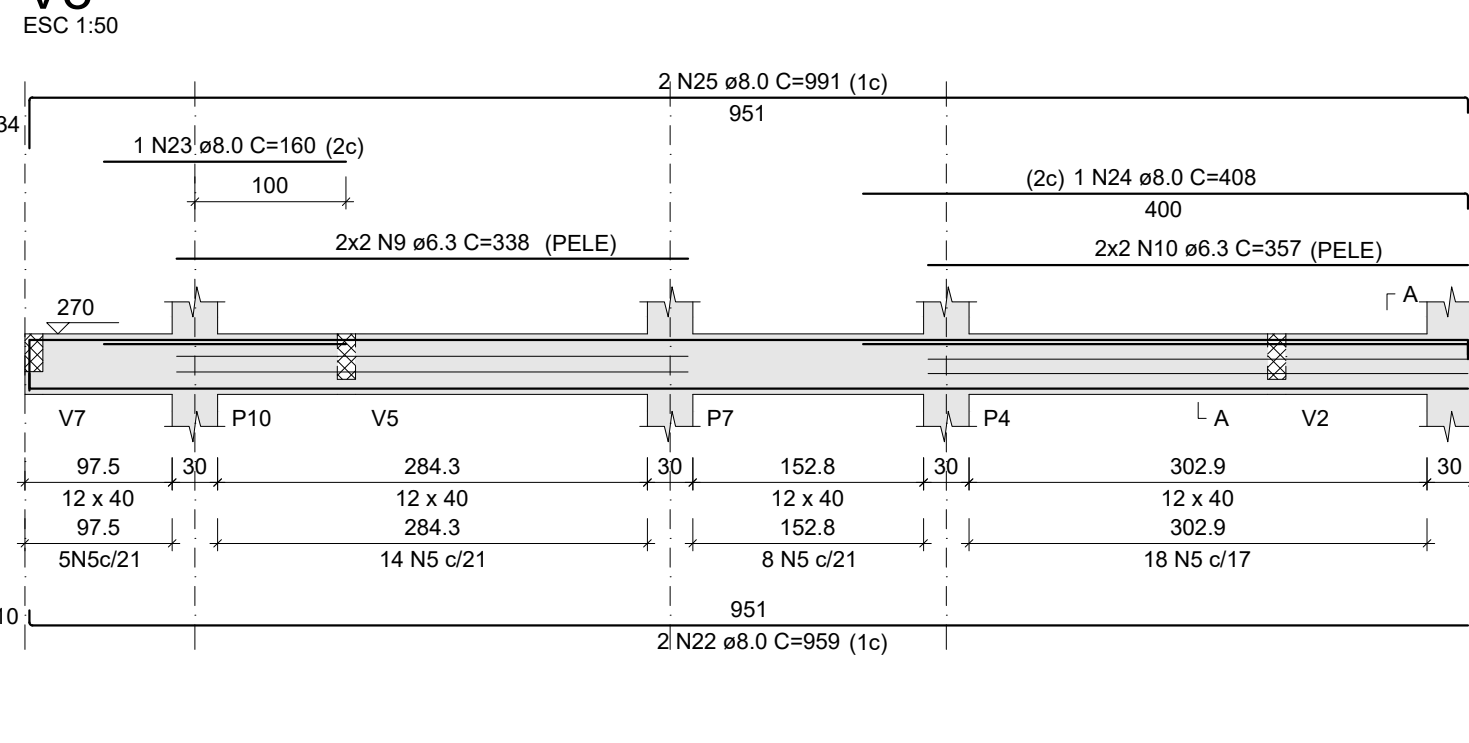
RESUMO DO AÇO			
AÇO	DIAM (mm)	C.TOTAL (m)	PESO + 10% (kg)
CA50	6.3	35.7	9.6
	8.0	258.6	112.2
	10.0	199.8	135.5
	5.0	492.2	83.5
PESO TOTAL (kg)			
CA50	257.3		
CA60	83.5		

Volume de concreto (C-25) = 5.47 m³  
Área de forma = 59.81 m²

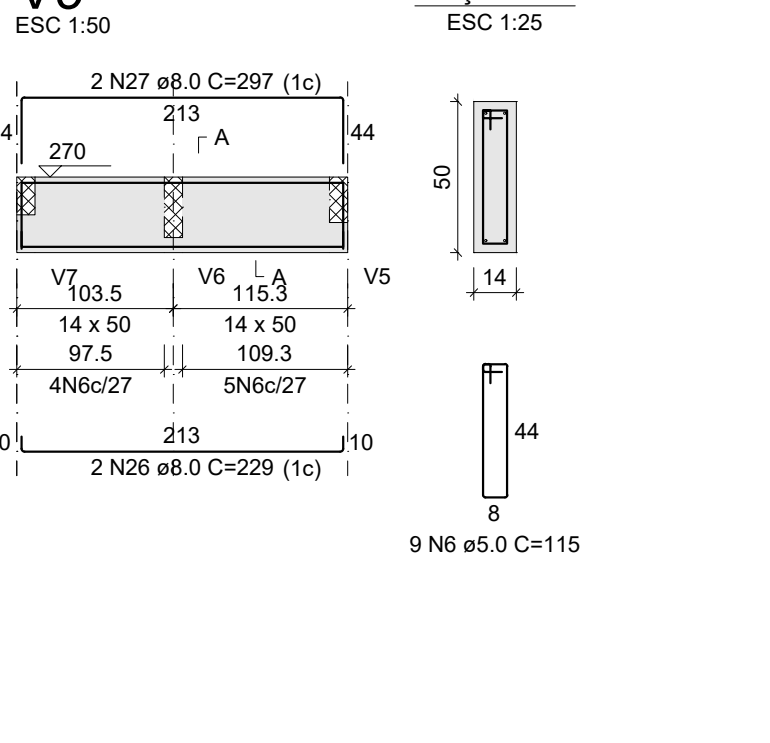
V6



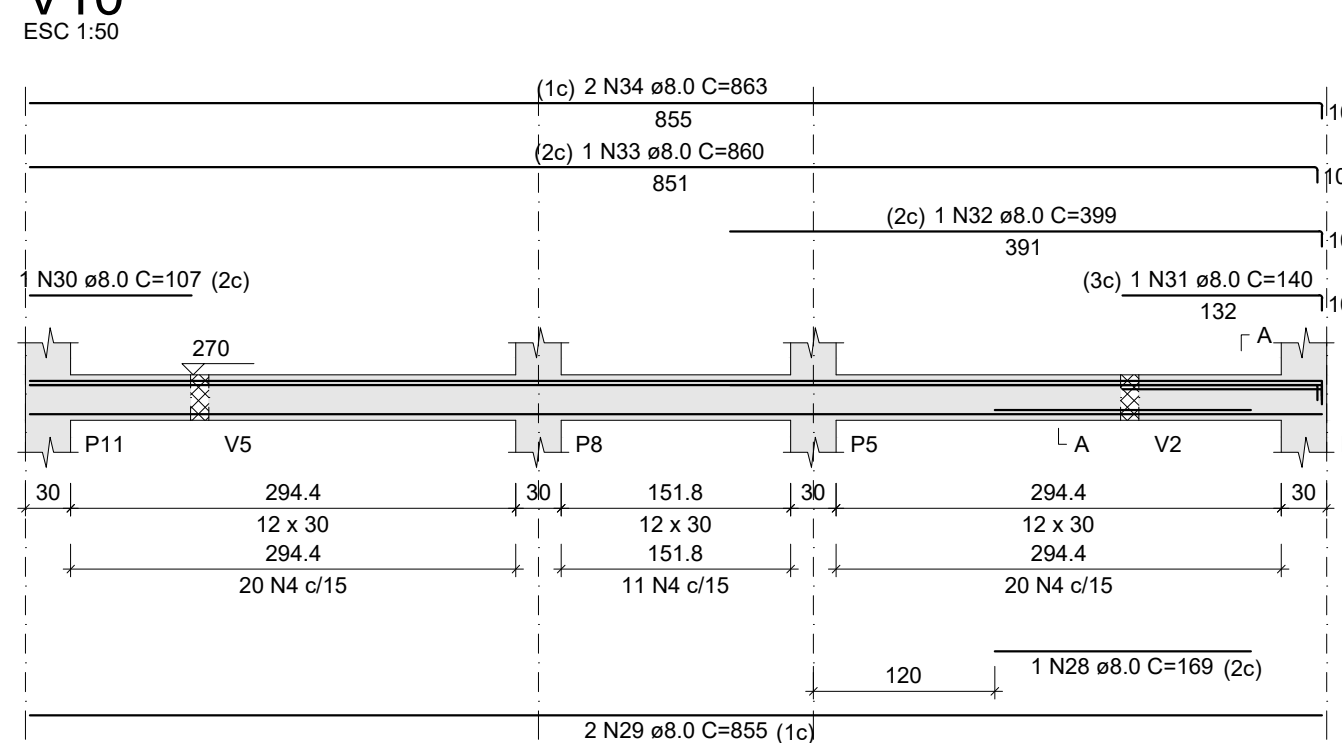
V8



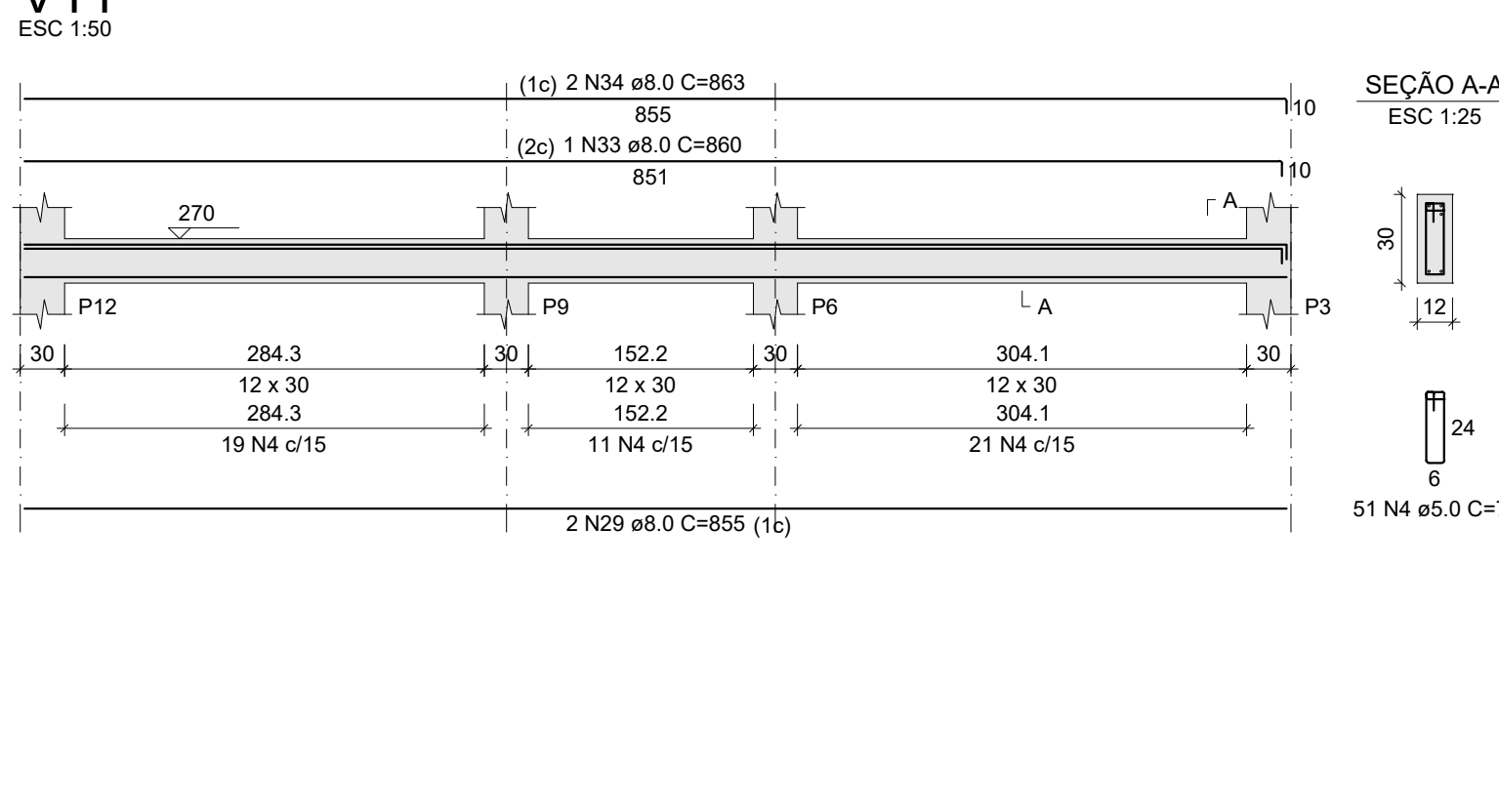
V9



V10



V11

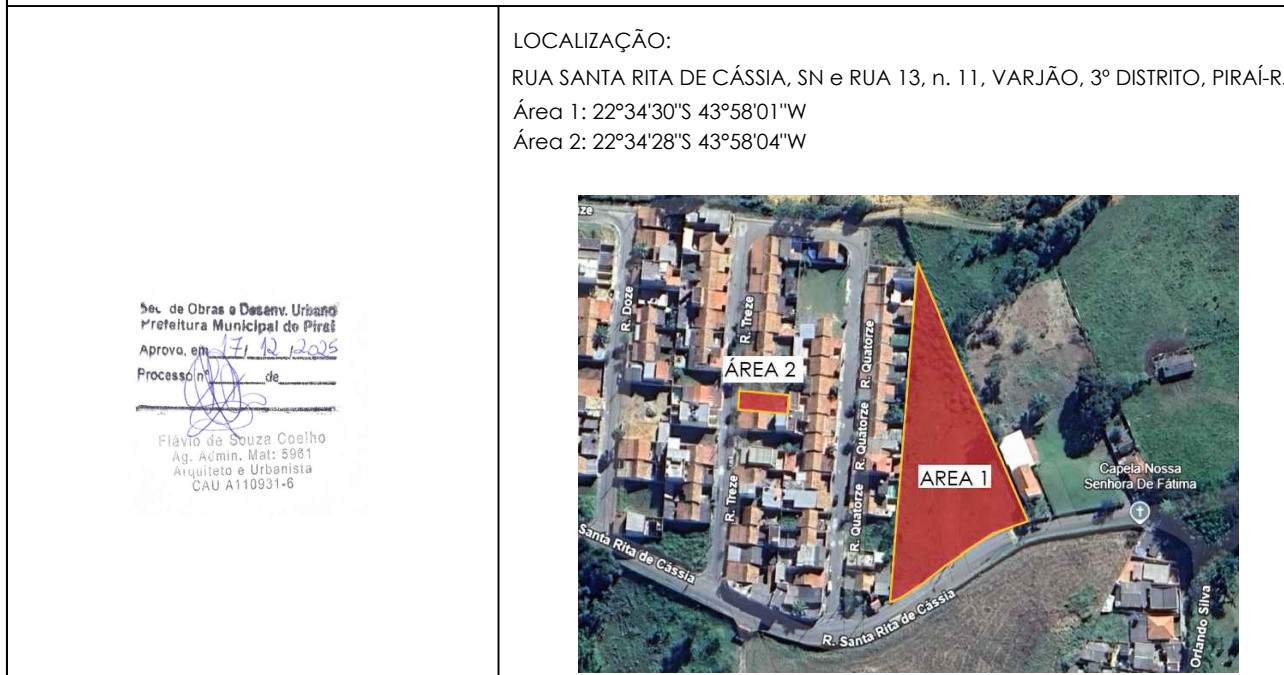


## PROJETO DE ENGENHARIA

OBRA: CONSTRUÇÃO DE UNIDADES HABITACIONAIS NO MUNICÍPIO DE PIRAÍ - VARJÃO

ESCALA: INDICADA  
DESENHO: DATA: DEZEMBRO/2025  
TÍTULO: PILARES E VIGAS DO PAVIMENTO TERREO

AUTOR: SECRETARIA MUNICIPAL DE OBRAS, URBANISMO E HABITAÇÃO  
SOLICITADO POR: SECRETARIA MUNICIPAL DE OBRAS, URBANISMO E HABITAÇÃO



REVISÃO: 004

PREFEITURA MUNICIPAL DE PIRAÍ  
SECRETARIA MUNICIPAL DE OBRAS, URBANISMO E HABITAÇÃO

Documento assinado digitalmente:  
JOÃO DE PAULA JUNIOR  
Data: 22/12/2025 11:45:29-0300  
Verifique em https://verificador.digov.br

ENGº JOÃO DE PAULA JUNIOR - CREA-RJ Nº 4697-D - AUTOR DO PROJETO  
GERENTE DE GESTÃO E ESTRATÉGIA

ALEXSANDRO SENA SILVA  
SECRETARIO DE OBRAS, URBANISMO E HABITAÇÃO

LUIZ FERNANDO DE SOUZA  
PREFEITO MUNICIPAL DE PIRAÍ