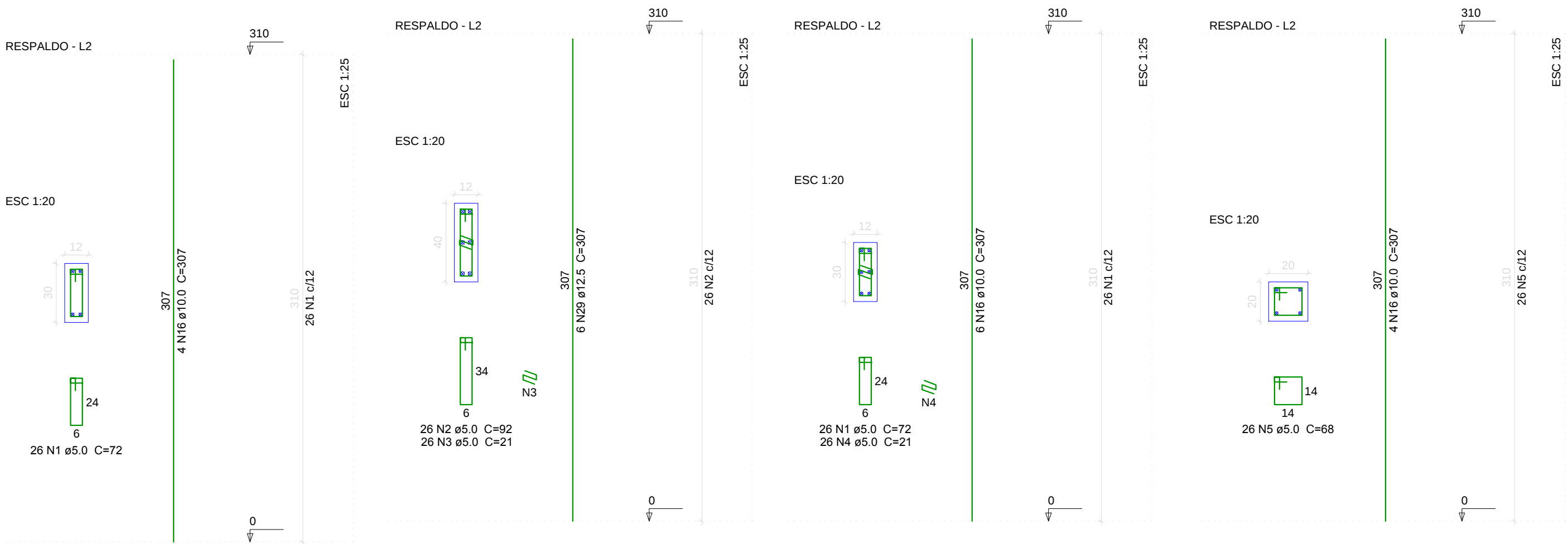
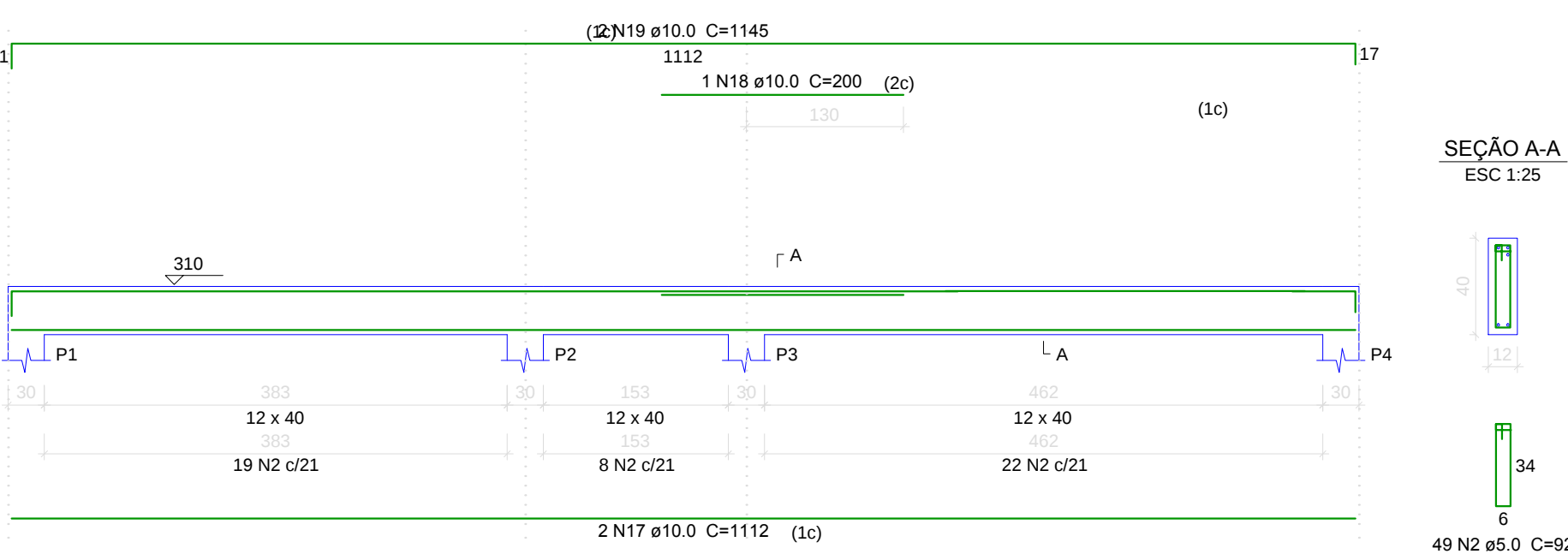


P1=P2=P3=P4=P5=P6=P7=P8=P10=P11=P12=P13=P14
=P16=P17=P18

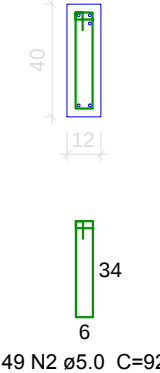


V1 (12 x 40)

ESC 1:50



SEÇÃO A-A
ESC 1:25

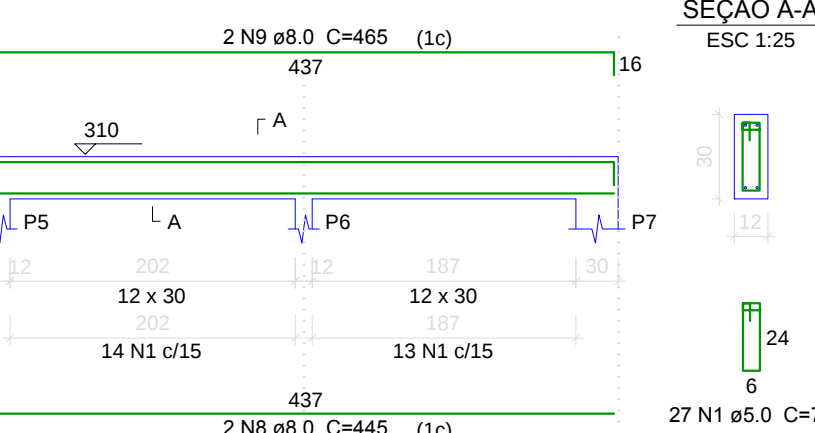


Relação do aço

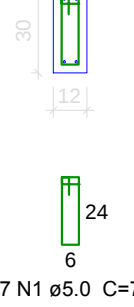
AÇO	N	DIAM (mm)	QUANT (Barras)	UNIT (cm)	C.TOTAL (cm)
15xP1	2xP9	P15			
2xP19	V1	V2			
V3	V4	V5			
V6	V7	V8			
V9	V10	V11			
V12					
CA60	1	5.0	757	72	54504
	2	5.0	168	92	15456
	3	5.0	52	21	1092
	4	5.0	26	21	546
	5	5.0	52	68	3536
	6	5.0	2	262	524
	7	6.3	4	105	420
	8	8.0	4	445	1780
	9	8.0	2	465	930
	10	8.0	2	468	936
	11	8.0	2	187	374
	12	8.0	2	215	430
	13	8.0	4	929	3716
	14	8.0	4	1059	4236
	15	8.0	4	1079	4316
	16	10.0	74	307	22718
	17	10.0	2	1112	2224
	18	10.0	1	200	200
	19	10.0	2	1145	2290
	20	10.0	2	67	134
	21	10.0	2	192	384
	22	10.0	2	252	504
	23	10.0	1	154	154
	24	10.0	2	557	1114
	25	10.0	2	437	874
	26	10.0	2	496	992
	27	10.0	2	545	1090
	28	10.0	4	920	3680
	29	12.5	12	307	3684
	30	12.5	7	516	3612

V2 (12 x 30)

ESC 1:50

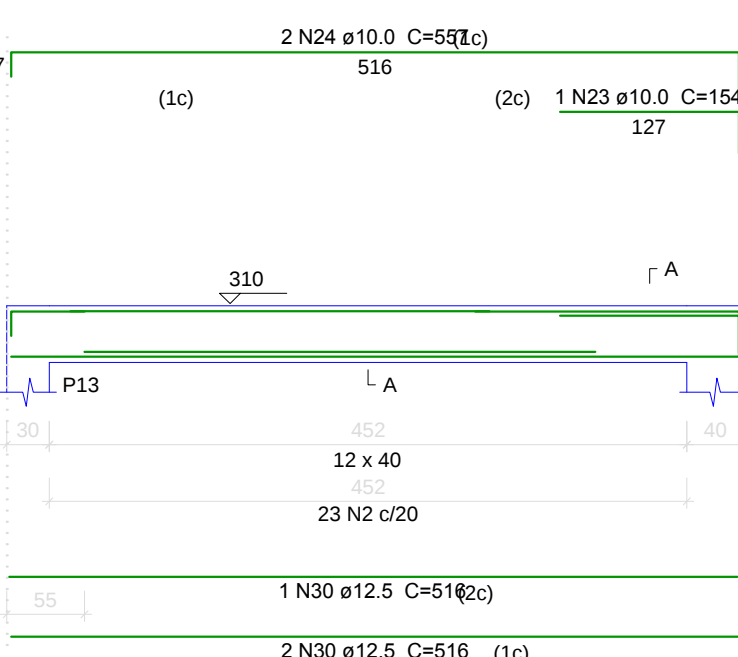


SEÇÃO A-A
ESC 1:25



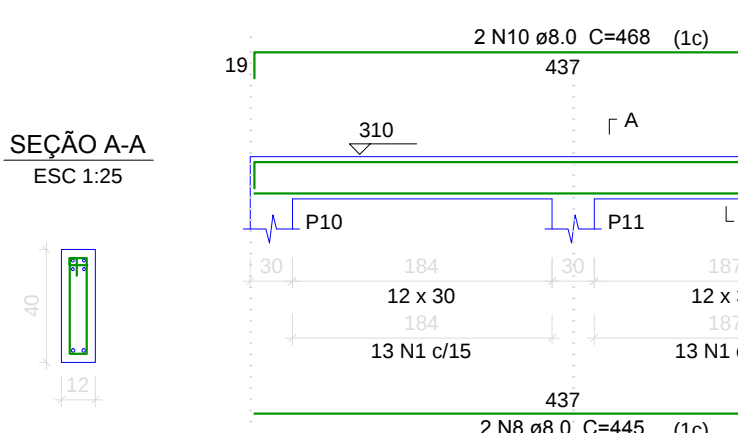
V3 (12 x 40)

ESC 1:50

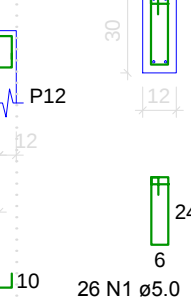


V4 (12 x 30)

ESC 1:50

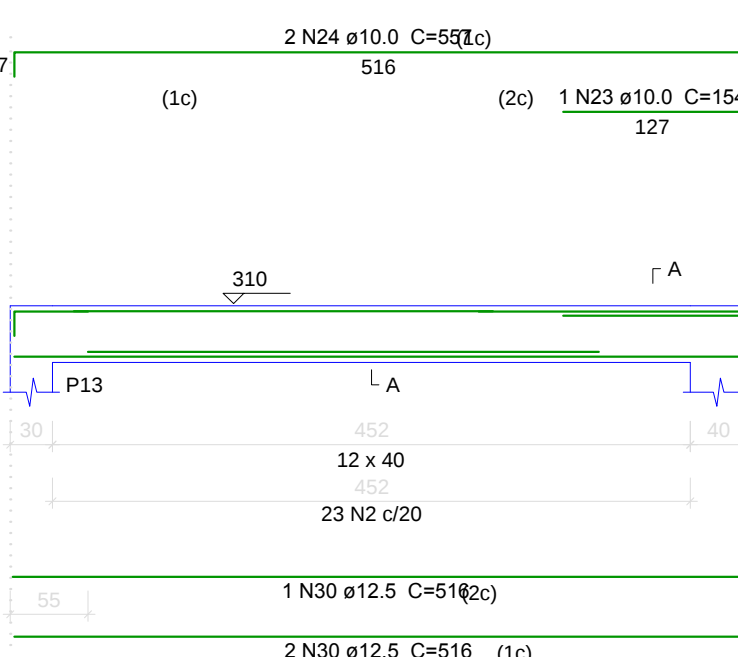


SEÇÃO A-A
ESC 1:25



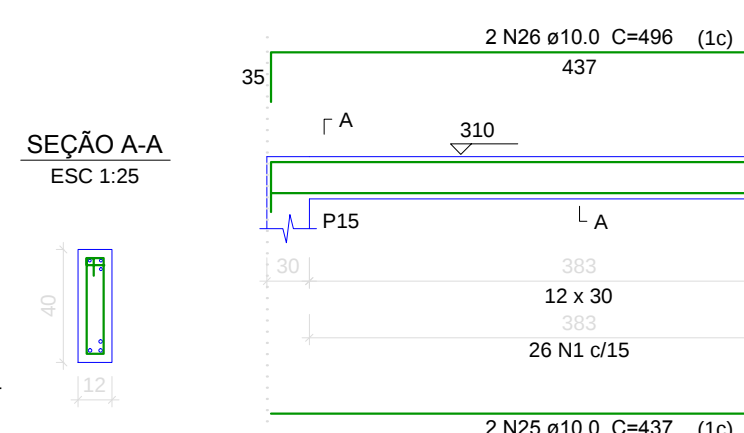
V5 (12 x 40)

ESC 1:50

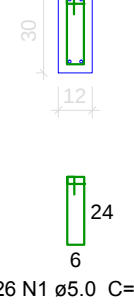


V6 (12 x 30)

ESC 1:50



SEÇÃO A-A
ESC 1:25



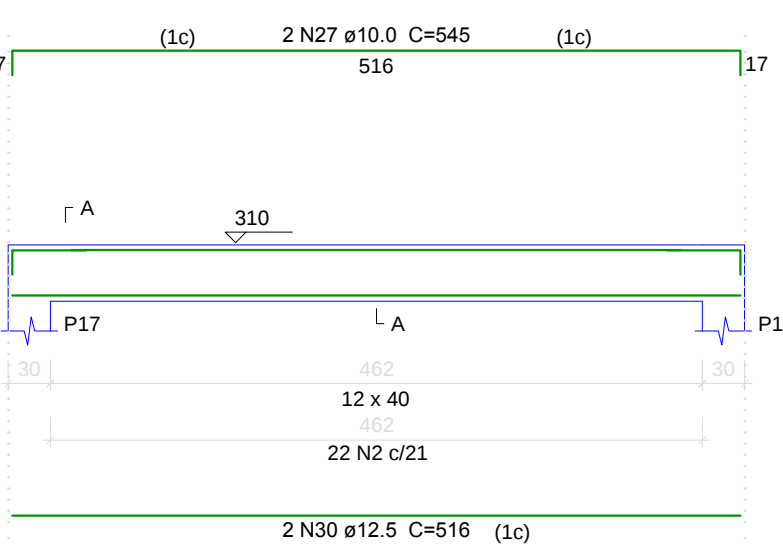
Resumo do aço

AÇO	DIAM (mm)	C.TOTAL (m)	PESO (kg)
CA50	6.3	4.2	1.03
	8.0	167.2	66.05
	10.0	363.6	224.35
	12.5	73	70.3
CA60	5.0	756.6	116.51

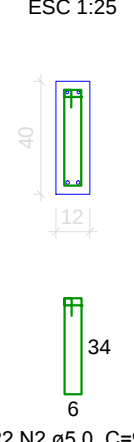
Volume de concreto (C-25) = 5.58 m³
Área de forma = 117.01 m²

V7 (12 x 40)

ESC 1:50

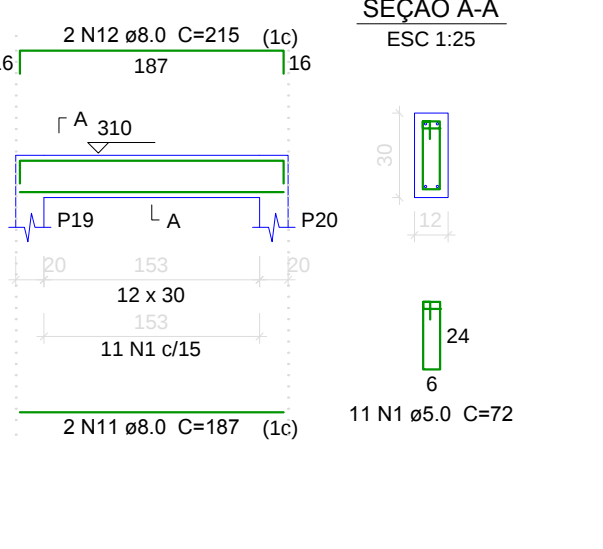


SEÇÃO A-A
ESC 1:25



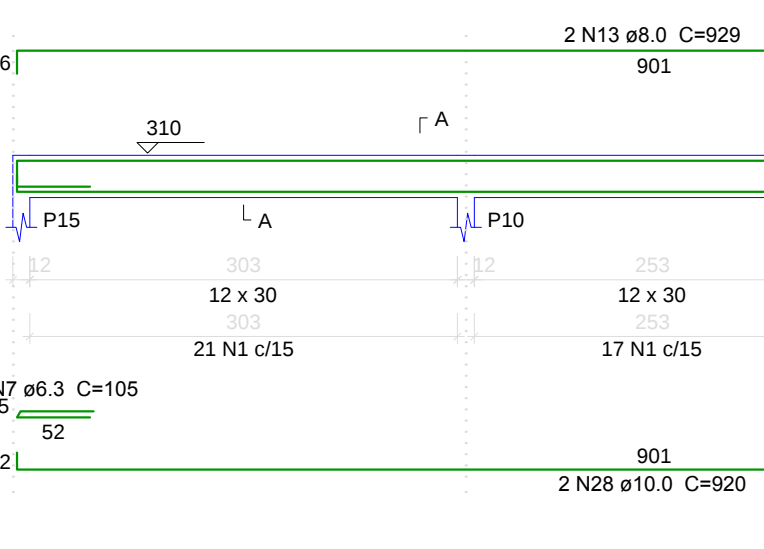
V8 (12 x 30)

ESC 1:50

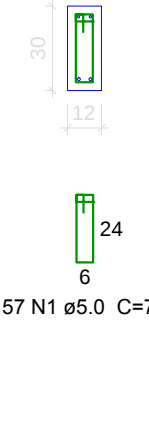


V9 (12 x 30)

ESC 1:50

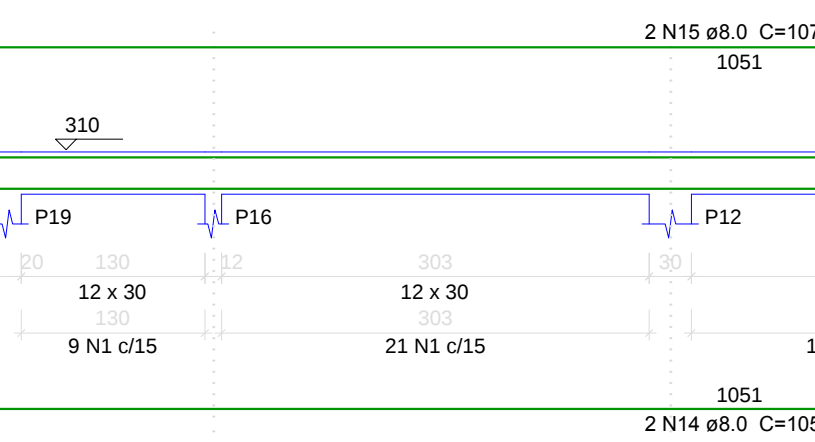


SEÇÃO A-A
ESC 1:25

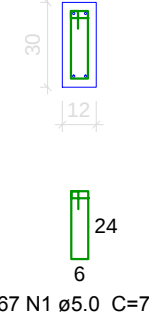


V10 (12 x 30)

ESC 1:50

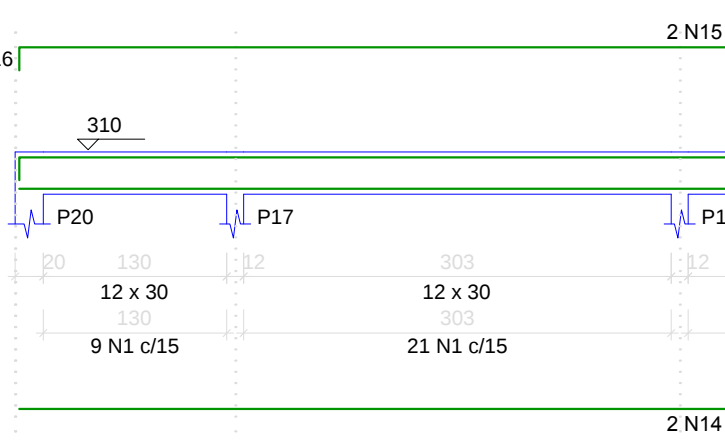


SEÇÃO A-A
ESC 1:25

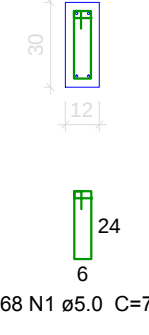


V11 (12 x 30)

ESC 1:50

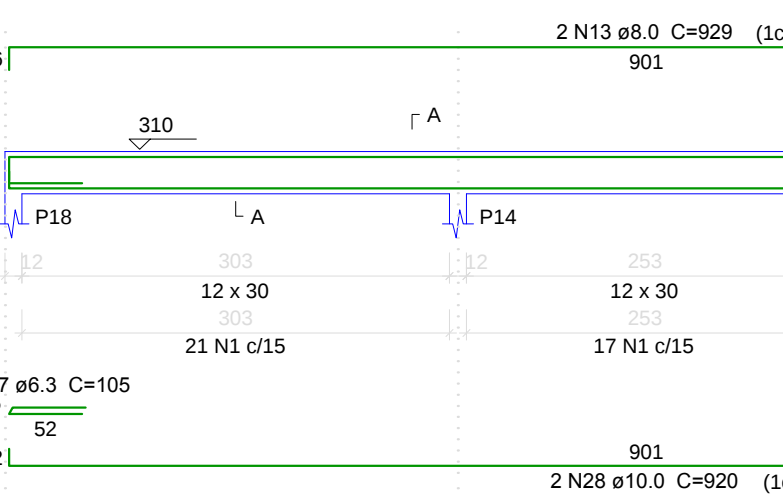


SEÇÃO A-A
ESC 1:25

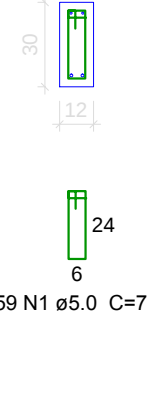


V12 (12 x 30)

ESC 1:50



SEÇÃO A-A
ESC 1:25



PROJETO ESTRUTURAL

OBRA: AMPLIACAO PSF VILA ESPERANCA

ENDEREÇO: UBRATÁ

RESPONSÁVEL TÉCNICO:

REGINALDO DA SILVA RETAMERO CREA: 94820/D-PR

Contribuiçã: VIGAS RESPALDO
PILARES

PAYMENTO:

RESPALDO

UNIDADE: TOTAL DE PRANCHAS

03

PROPRIETÁRIO:

PREFEITURA MUNICIPAL DE UBRATÁ

DESENHO:

EDUARDO

DATA:

16/05/2017

FOLHA:

03 / 03