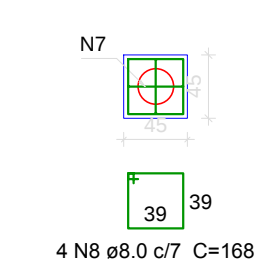
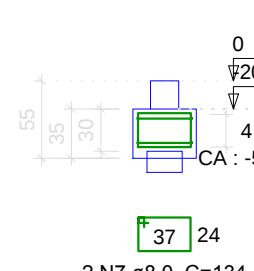


B1=B2=B3=B4=B5=B6=B7=B8=B10=B11=B12=B13
=B14=B15=B16=B19=B20

1xR25
PLANTA
ESC 1:50



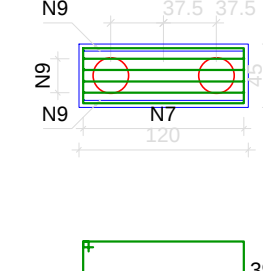
CORTE
ESC 1:50



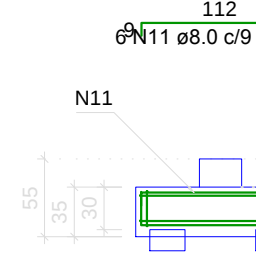
B9=B17=B18

2xR25

PLANTA
ESC 1:50

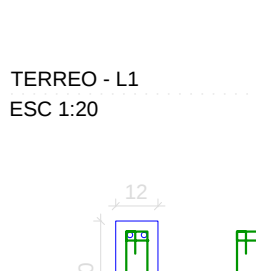


CORTE
ESC 1:50

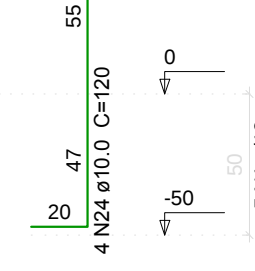


P1=P2=P3=P4=P5=P6=P7=P8=P10=P11=P12=P13 P9=P14
=P16=P17=P18

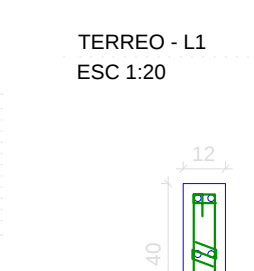
TERREO - L1
ESC 1:20



TERREO - L1
ESC 1:20

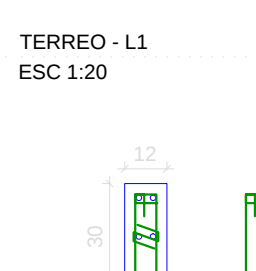


TERREO - L1
ESC 1:20



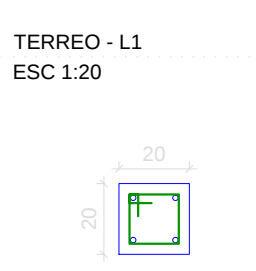
P15

TERREO - L1
ESC 1:20



P19=P20

TERREO - L1
ESC 1:20



Relação do aço

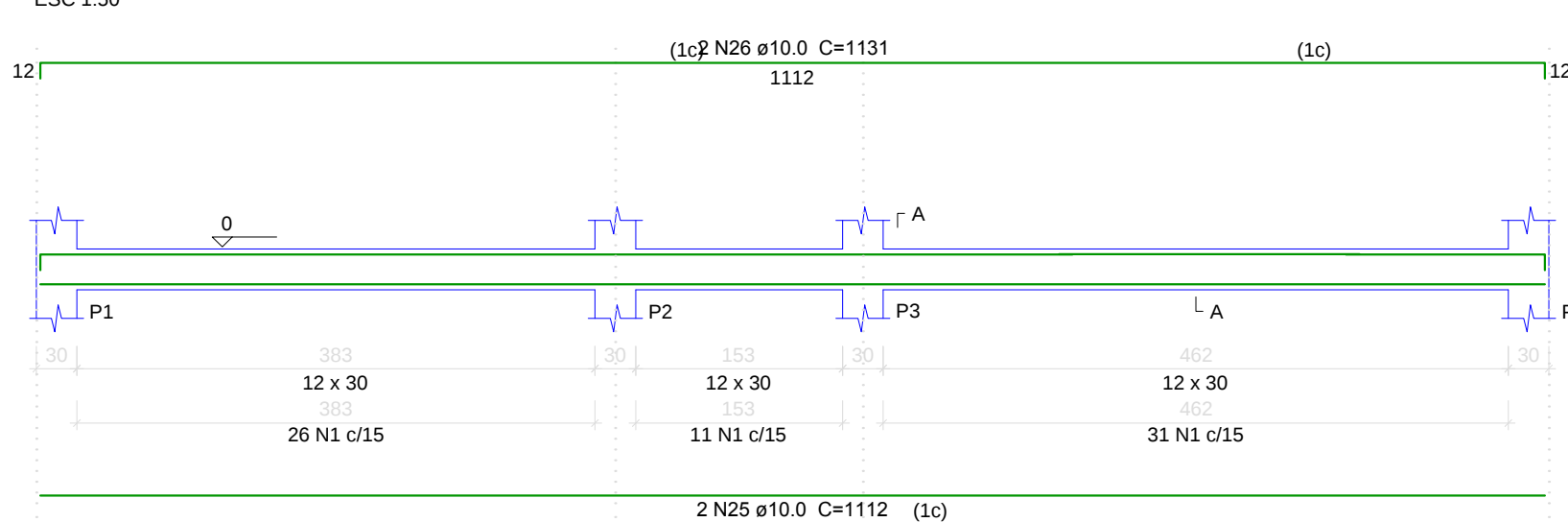
AÇO	N	DIAM (mm)	QUANT (Barras)	UNIT (cm)	C.TOTAL (cm)
CA60	1	5.0	609	72	43848
	2	5.0	10	92	920
	3	5.0	10	21	210
	4	5.0	5	21	105
	5	5.0	10	68	680
CA50	6	6.3	4	103	412
	7	8.0	49	134	6566
	8	8.0	68	168	11424
	9	8.0	18	156	2808
	10	8.0	12	318	3816
	11	8.0	12	126	1512
	12	8.0	2	187	374
	13	8.0	2	199	398
	14	8.0	4	445	1780
	15	8.0	4	451	1804
	16	8.0	4	187	748
	17	8.0	4	917	3668
	18	8.0	4	929	3716
	19	8.0	2	279	558
	20	8.0	2	285	570
	21	8.0	4	1059	4236
	22	8.0	2	1067	2134
	23	8.0	2	1065	2130
	24	10.0	74	120	8880
	25	10.0	2	1112	2224
	26	10.0	2	1131	2262
	27	10.0	6	516	3096
	28	10.0	1	127	127
	29	10.0	4	526	2104
	30	10.0	1	122	122
	31	10.0	2	437	874
	32	10.0	2	447	894
	33	10.0	2	535	1070
	34	12.5	12	119	1428

Resumo do aço

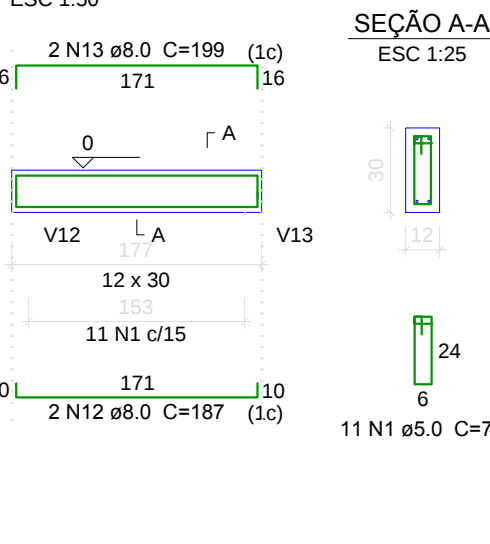
AÇO	DIAM (mm)	C.TOTAL (m)	PESO (kg)
CA50	6.3	4.2	1.03
	8.0	482.5	190.59
	10.0	216.6	133.65
	12.5	14.3	13.78
CA60	5.0	457.7	70.49

Volume de concreto (C-25) = 5.18 m³
Área de forma = 84.57 m²

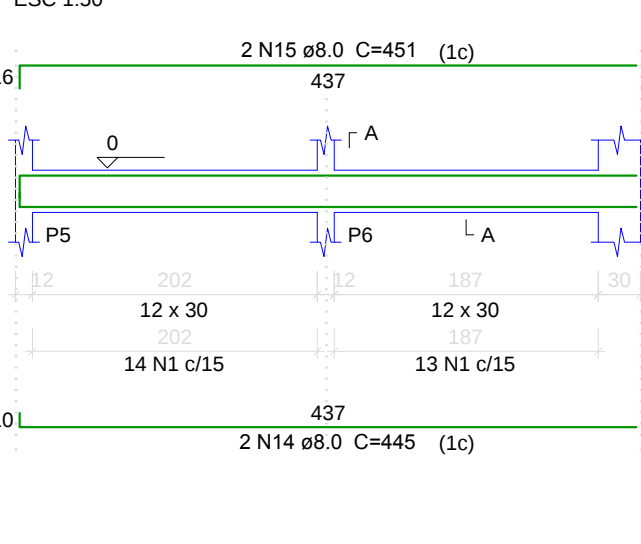
V1 (12 x 30)
ESC 1:50



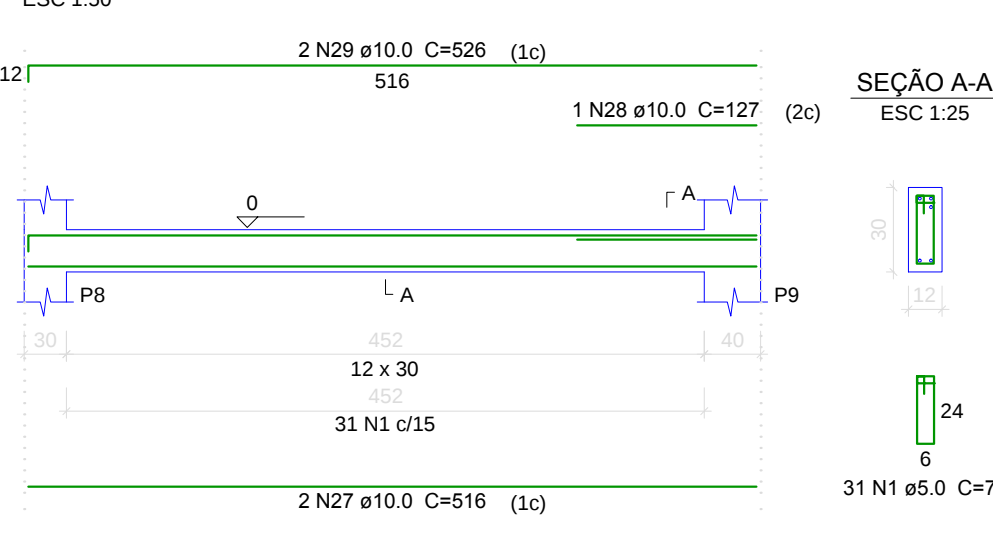
V2 (12 x 30)
ESC 1:50



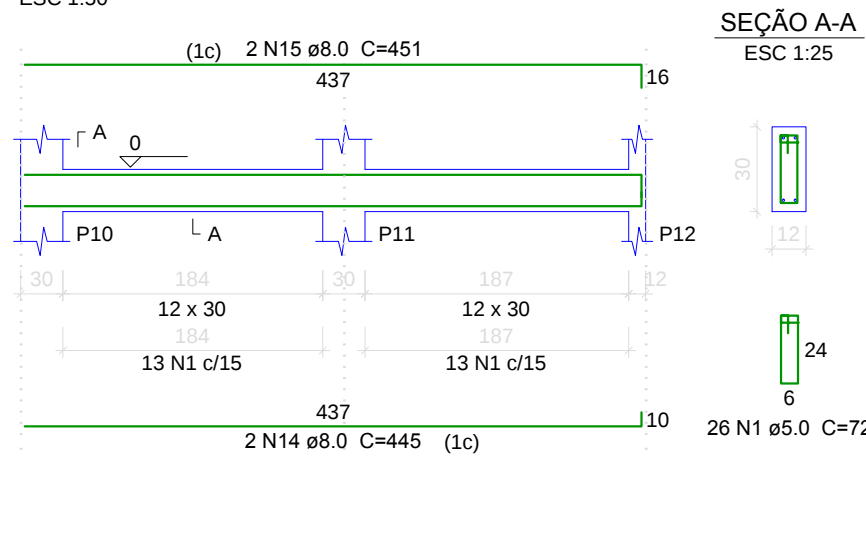
V3 (12 x 30)
ESC 1:50



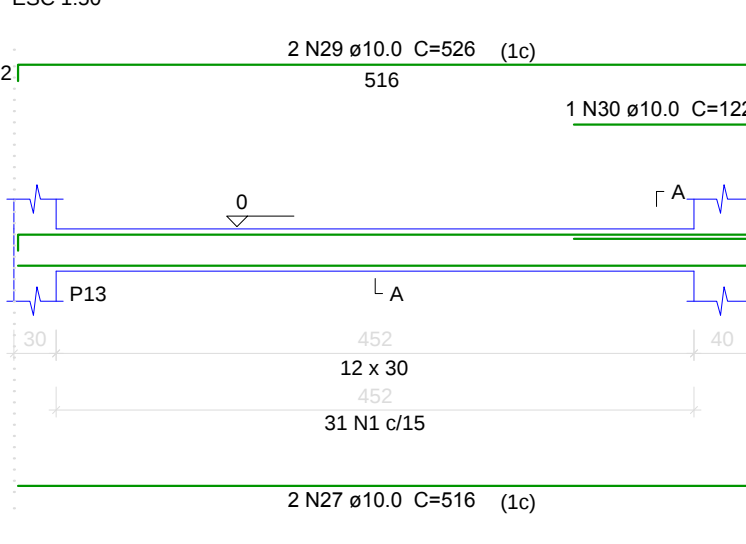
V4 (12 x 30)
ESC 1:50



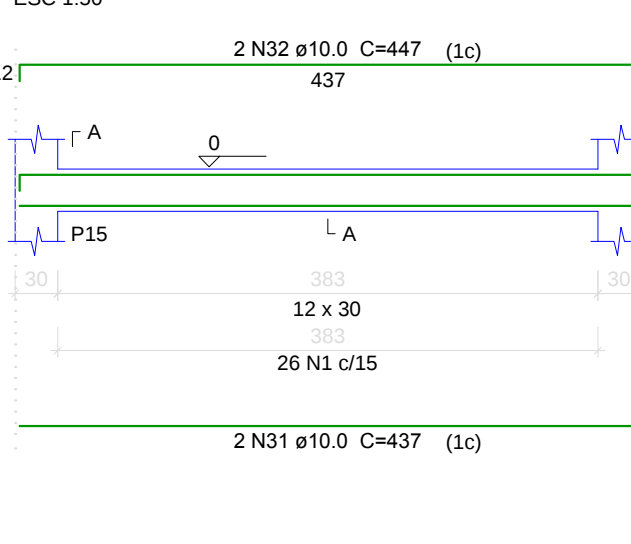
V5 (12 x 30)
ESC 1:50



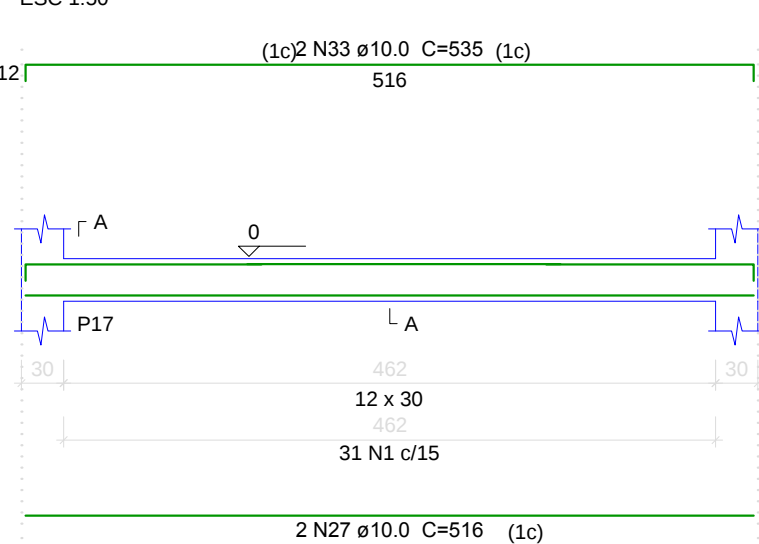
V6 (12 x 30)
ESC 1:50



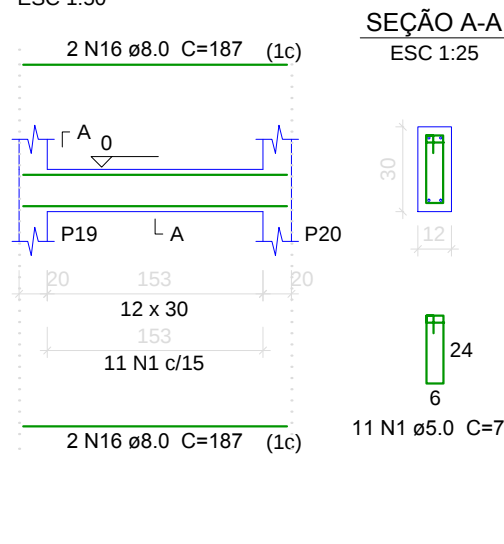
V7 (12 x 30)
ESC 1:50



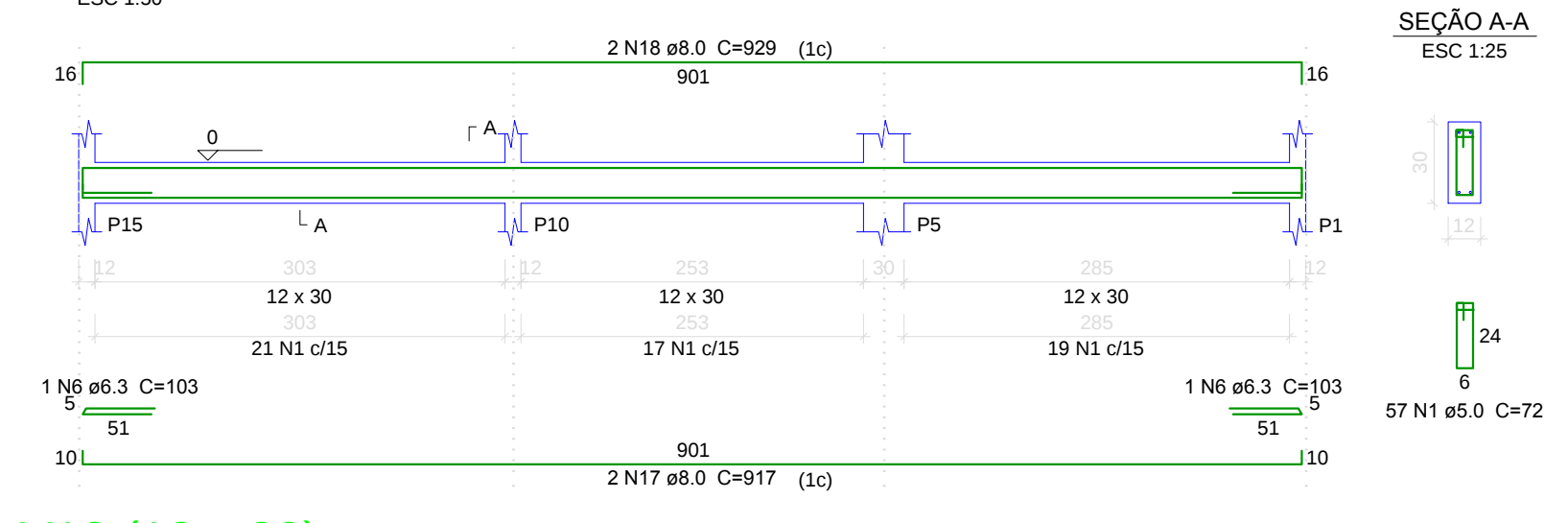
V8 (12 x 30)
ESC 1:50



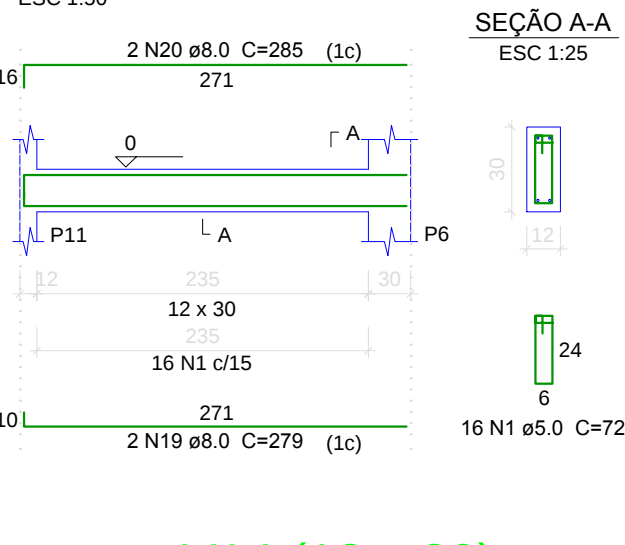
V9 (12 x 30)
ESC 1:50



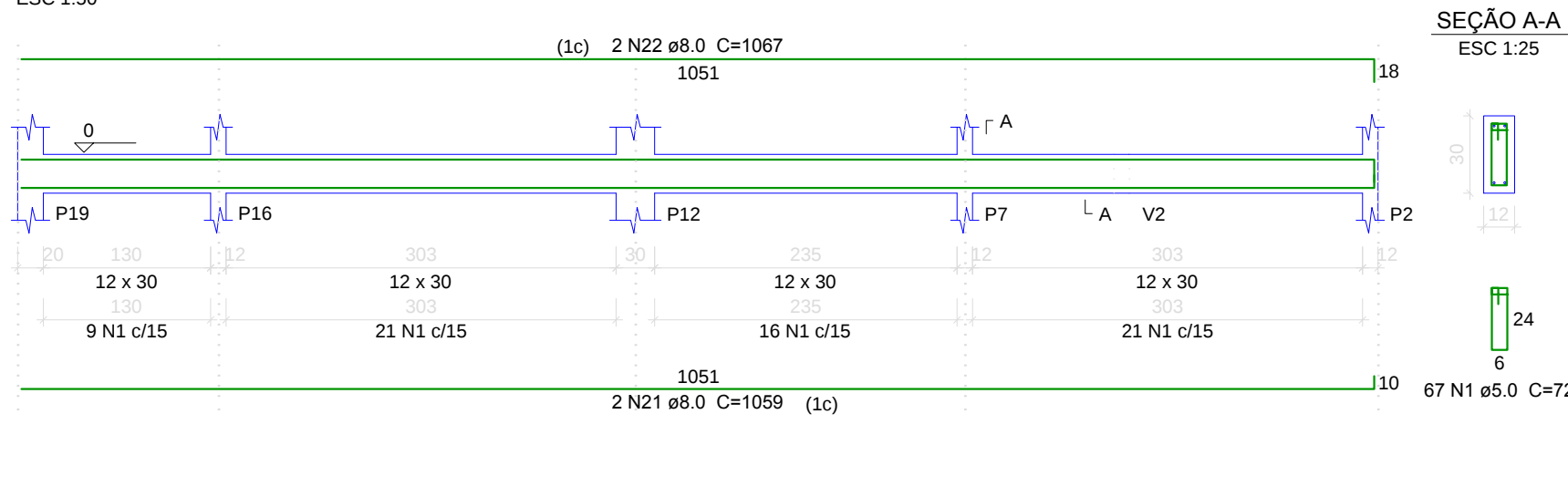
V10 (12 x 30)
ESC 1:50



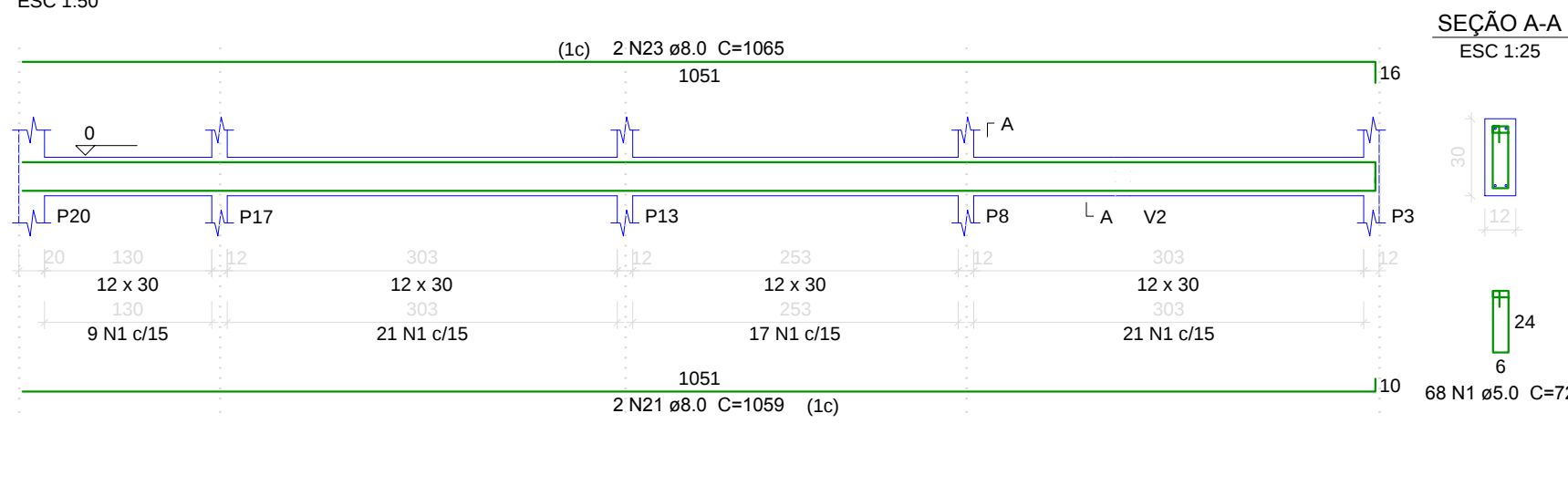
V11 (12 x 30)
ESC 1:50



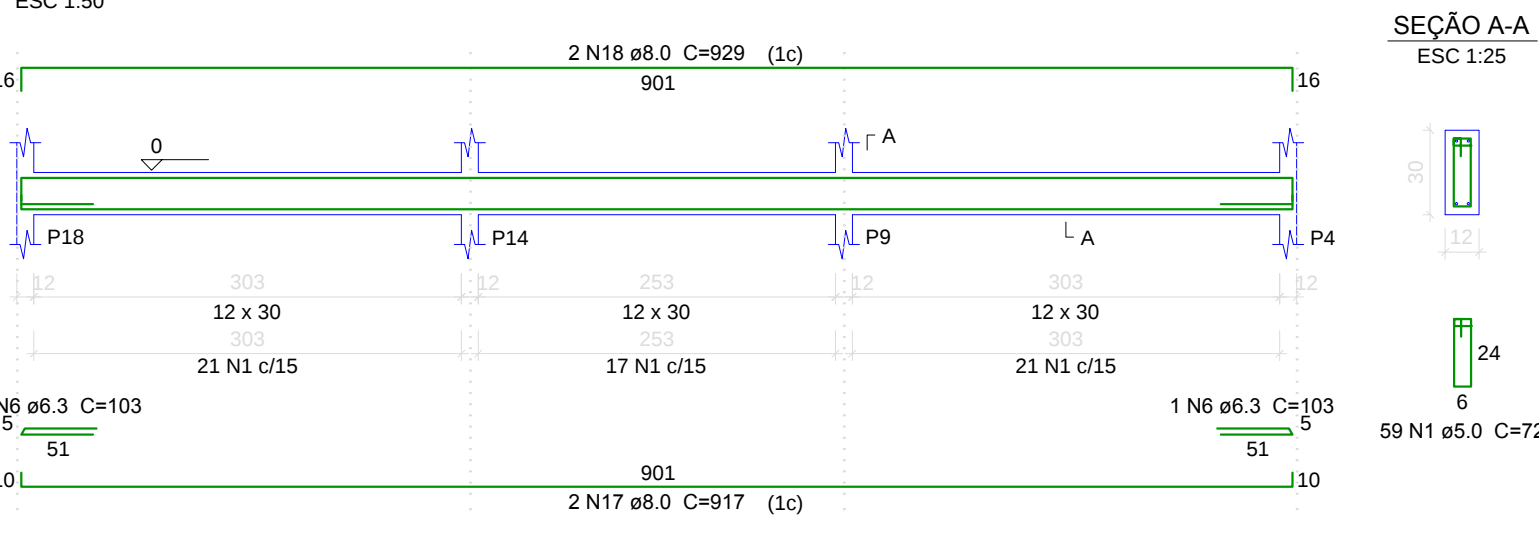
V12 (12 x 30)
ESC 1:50



V13 (12 x 30)
ESC 1:50



V14 (12 x 30)
ESC 1:50



PROJETO ESTRUTURAL

OBRA: AMPLIACAO PSF VILA ESPERANCA
ENDEREÇO: UBRATA

RESPONSÁVEL TÉCNICO: REGINALDO DA SILVA RETAMERO CREA: 94820/D-PR

Contribui: ESPERAS
VIGAS BALDRAME

PAYMENTO: TERREO UNIDADE: cm TOTAL DE PRANCHAS: 03

PROPRIETÁRIO: PREFEITURA MUNICIPAL DE UBRATA

DESENHO: EDUARDO DATA: 16/05/2017 FOLHA: 02 / 03