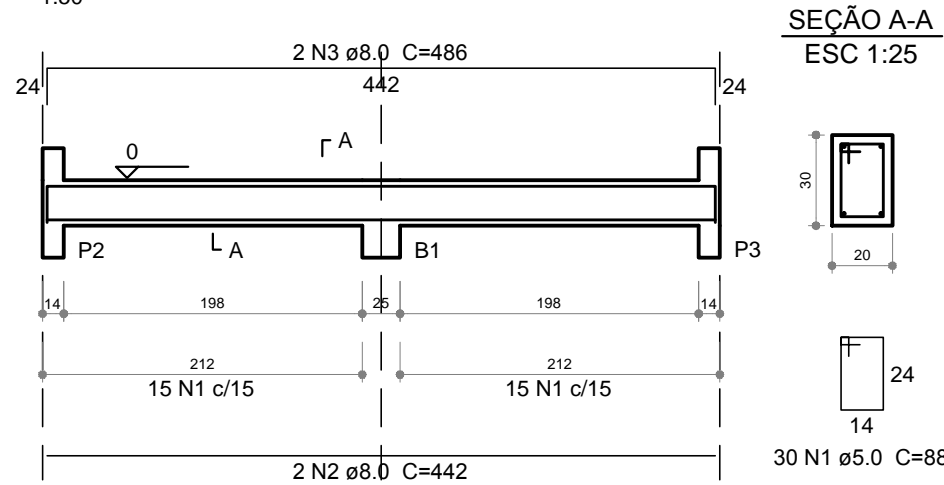
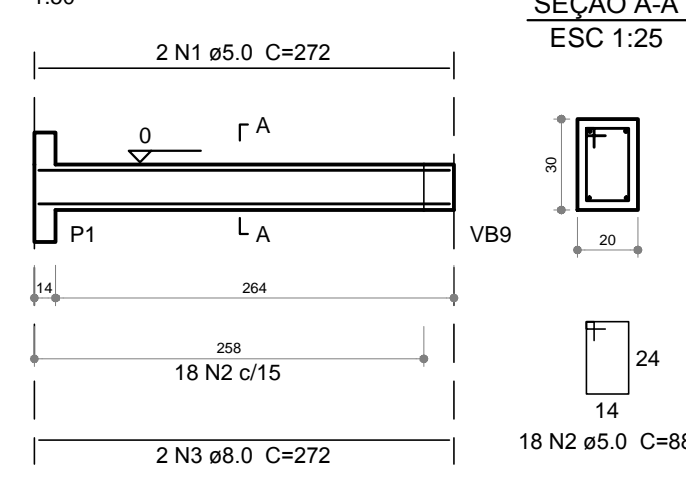


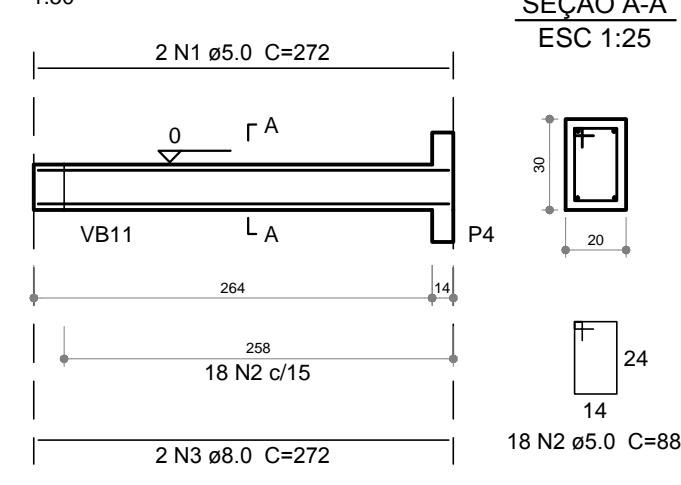
VB1 (20 x 30)



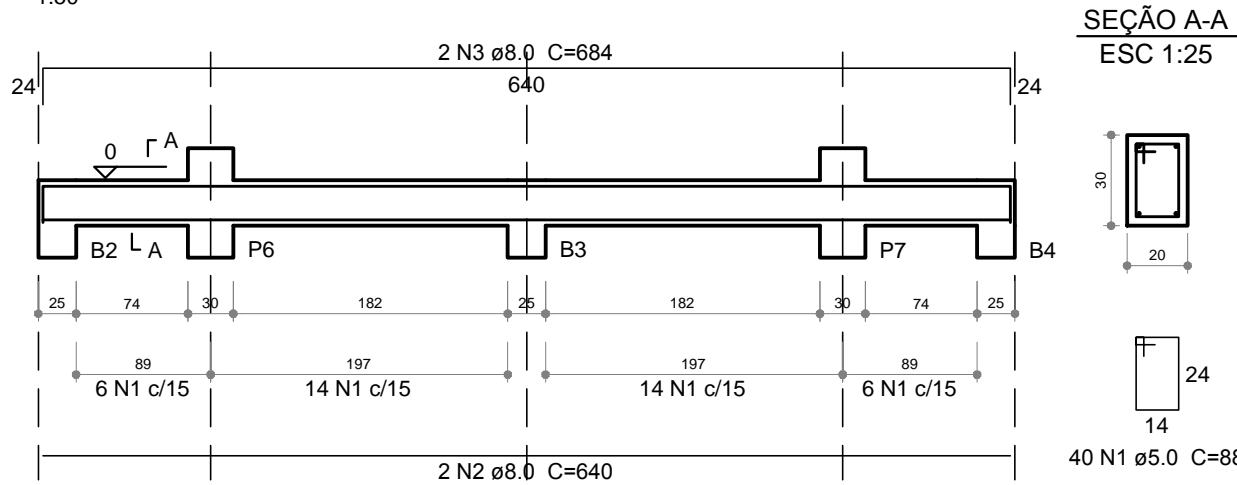
VB2 (20 x 30)



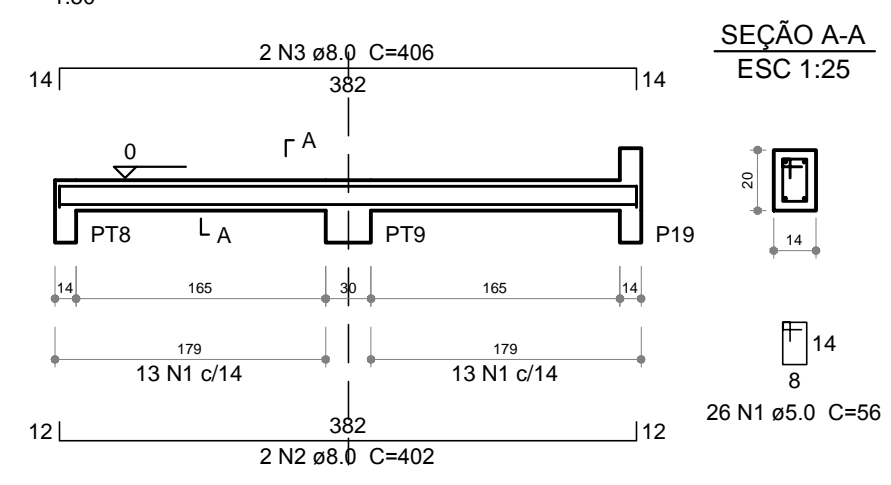
VB3 (20 x 30)



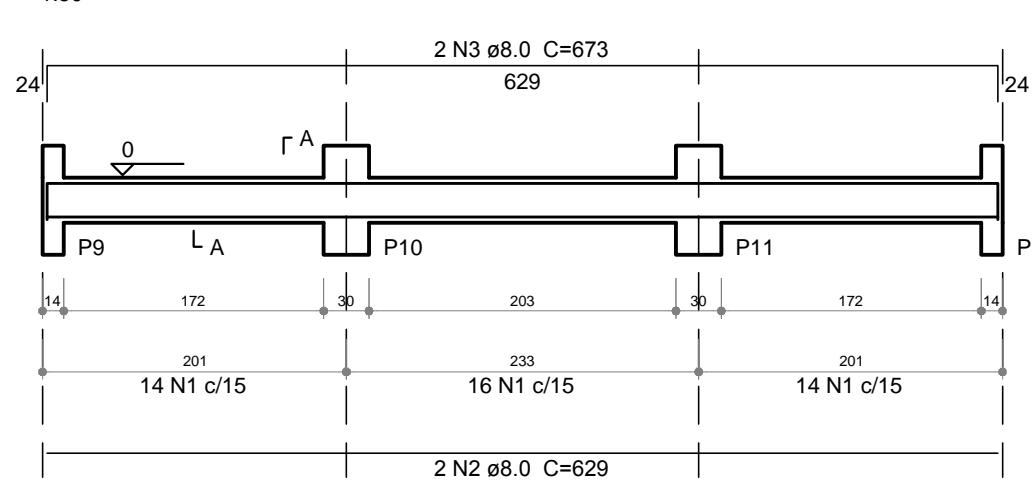
VB4 (20 x 30)



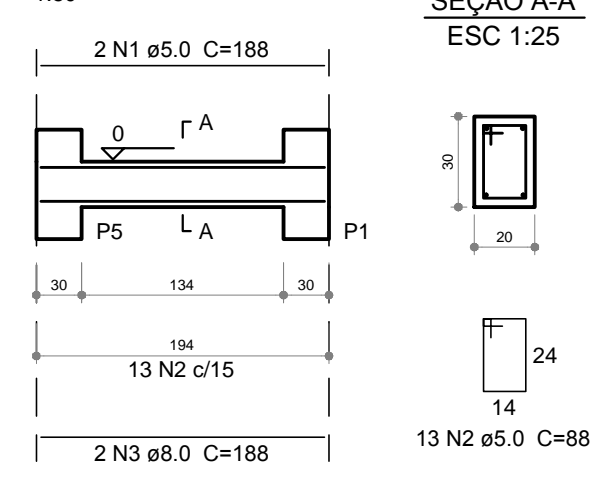
VB6 (14 x 20)



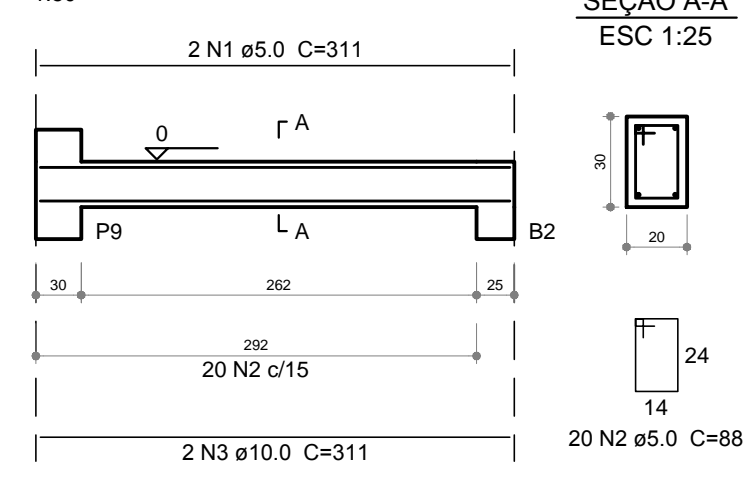
VB5 (20 x 30)



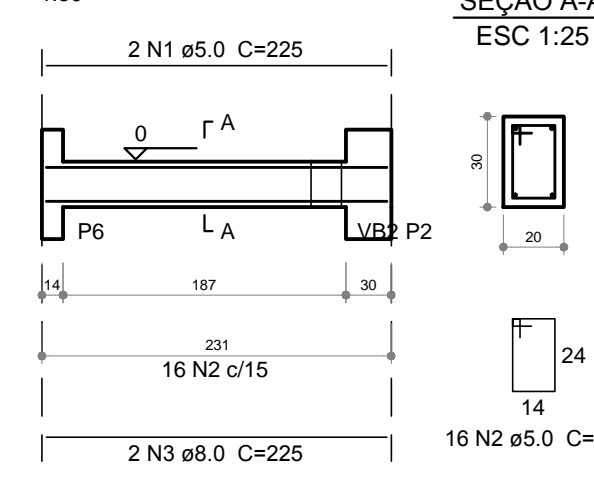
VB7 (20 x 30)



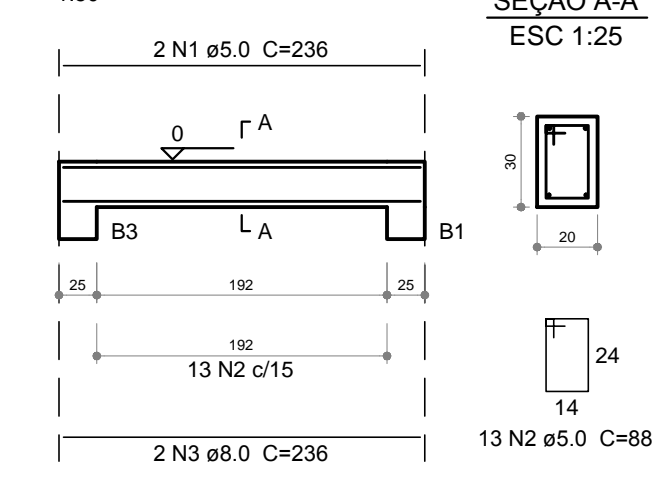
VB8 (20 x 30)



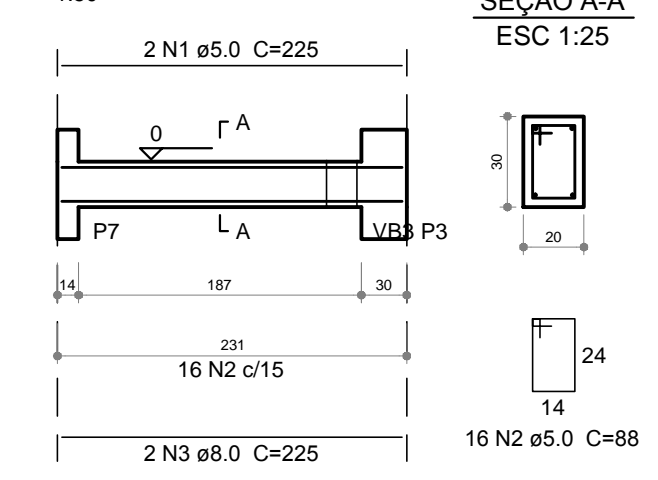
VB9 (20 x 30)



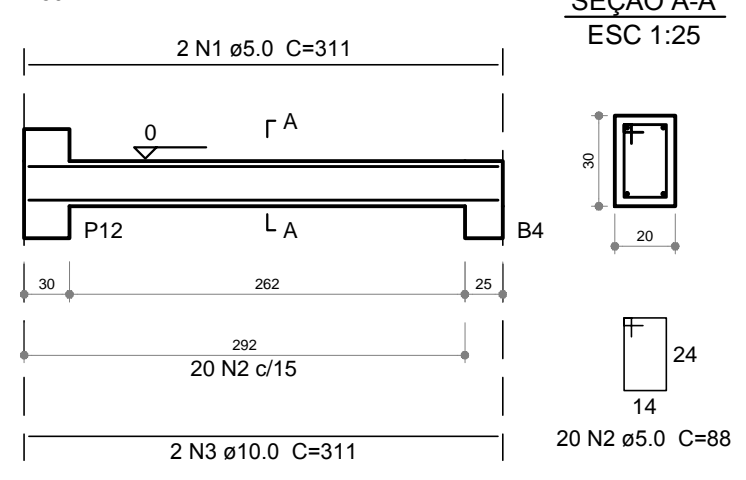
VB10 (20 x 30)



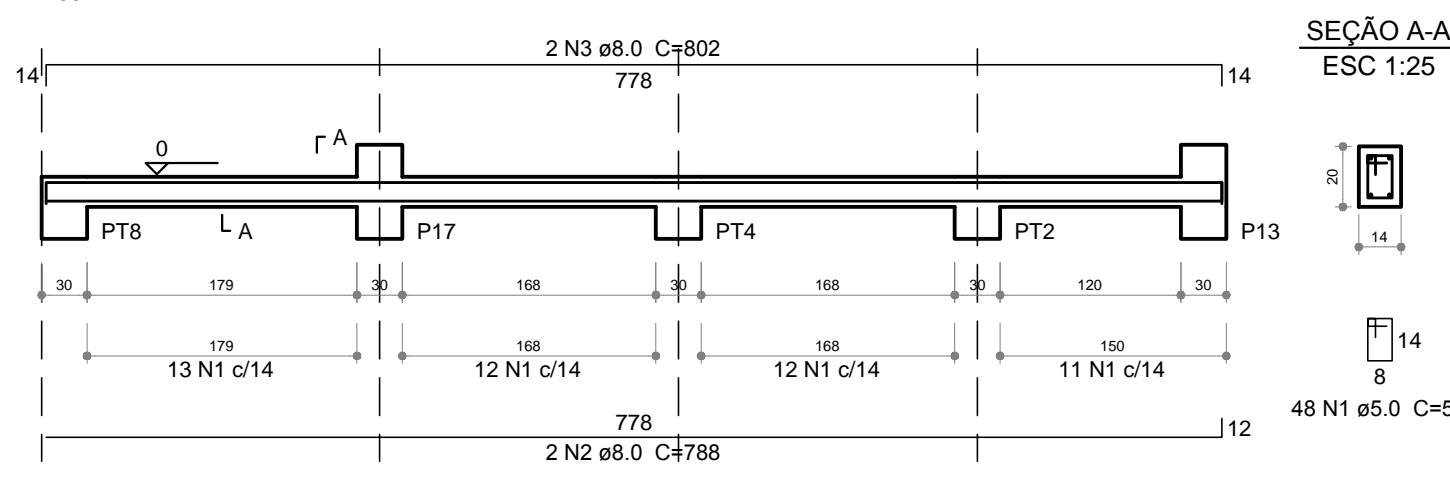
VB11 (20 x 30)



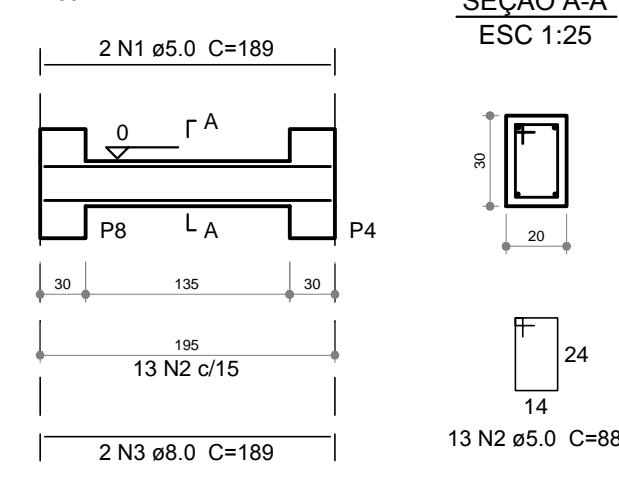
VB12 (20 x 30)



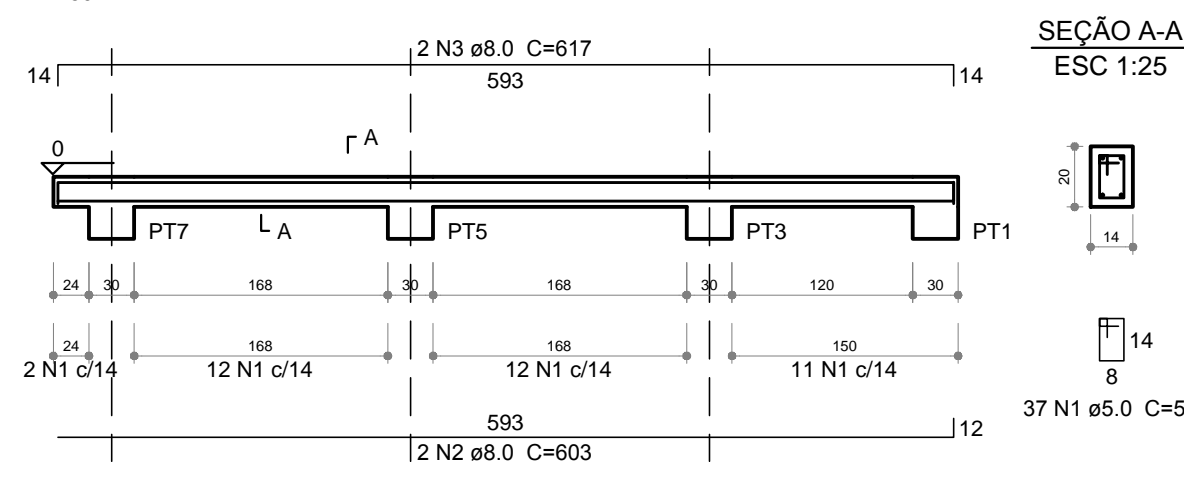
VB13 (14 x 20)



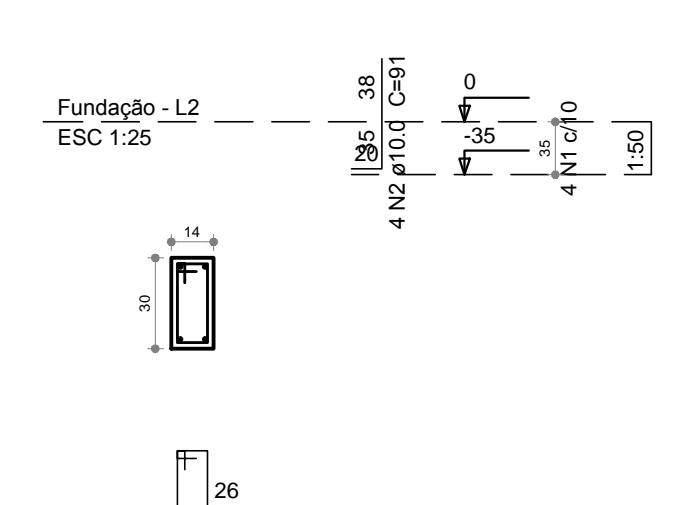
VB14 (20 x 30)



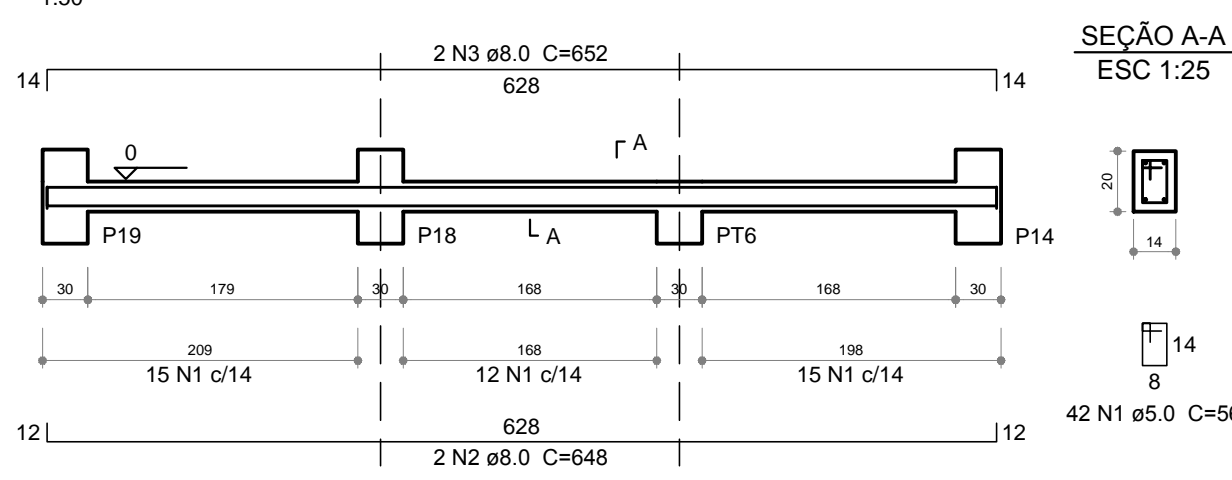
VB15 (14 x 20)



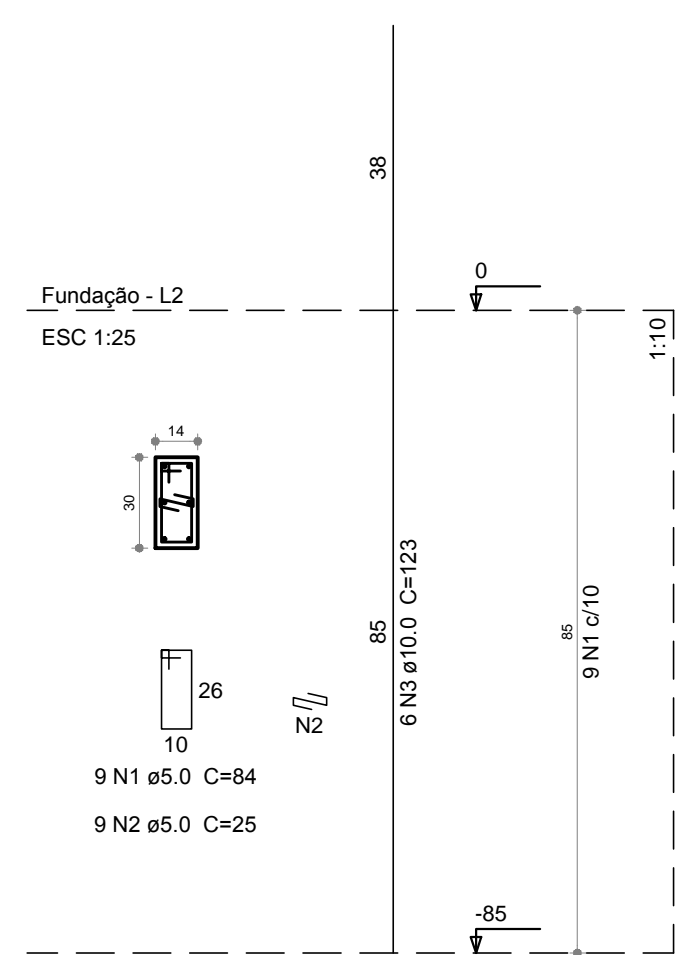
P1=P2=P3=P4=P5=P6=P7=P9=P10=P12



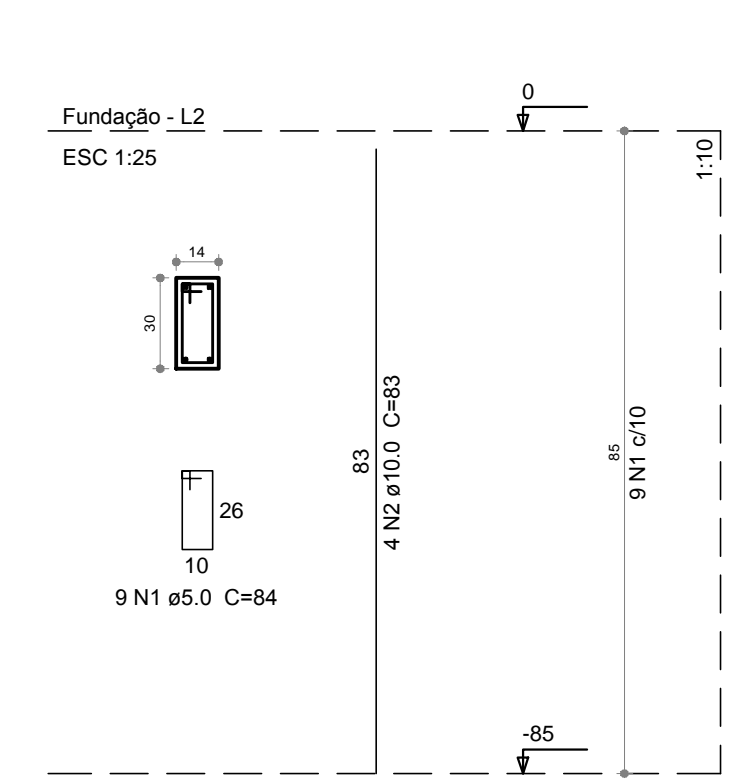
VB16 (14 x 20)



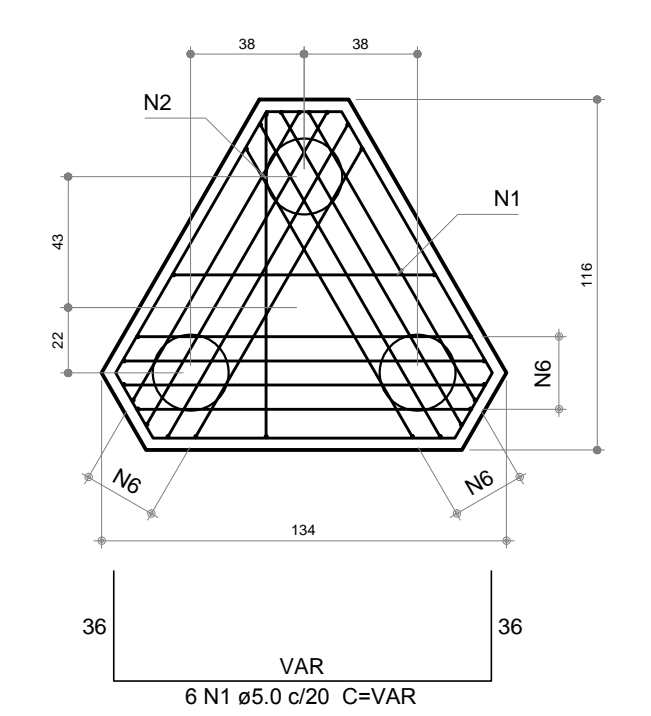
P13=P14=P17=P18=P19



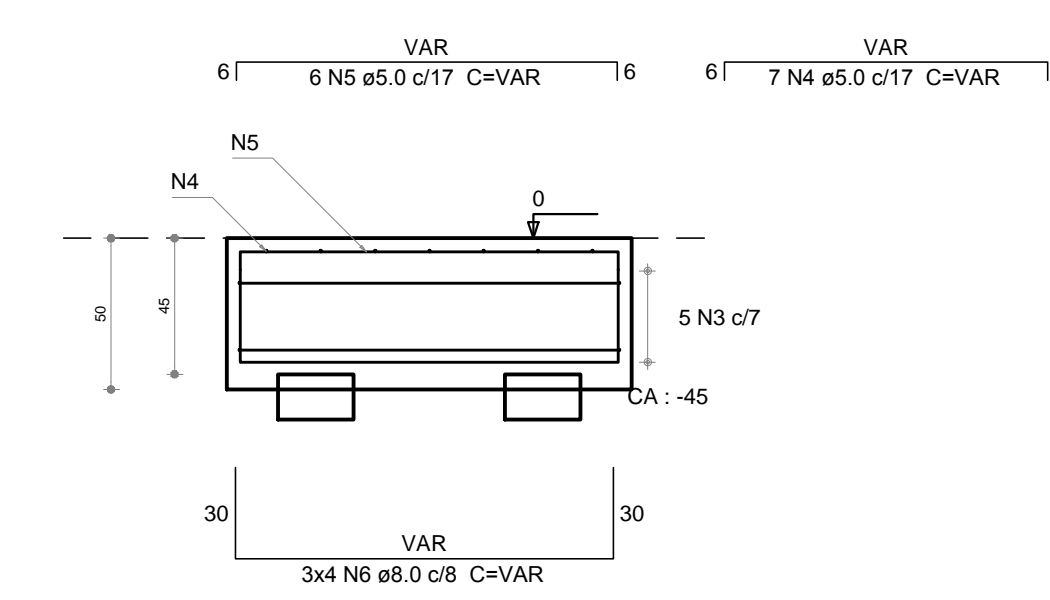
PT1=PT2=PT3=PT4=PT5=PT6=PT7=PT8=PT9



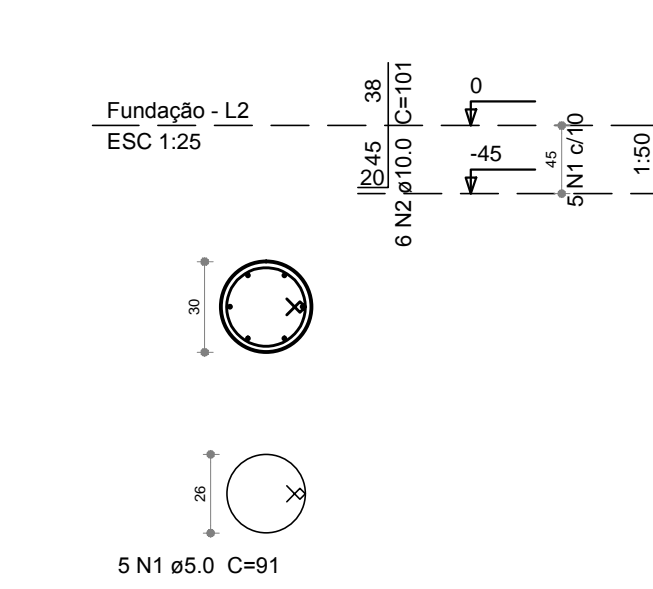
B15=B16 3ø25



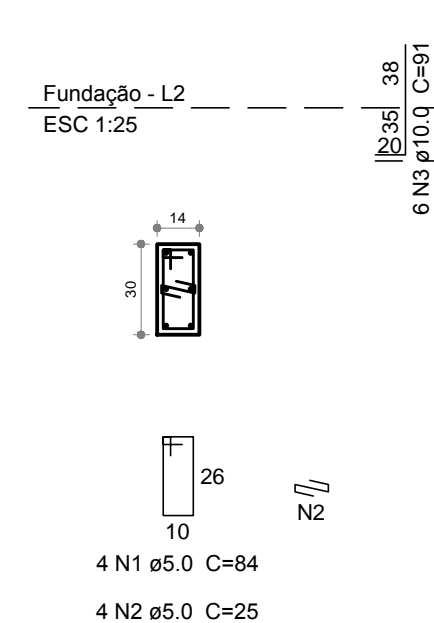
Corte ESC 1:25



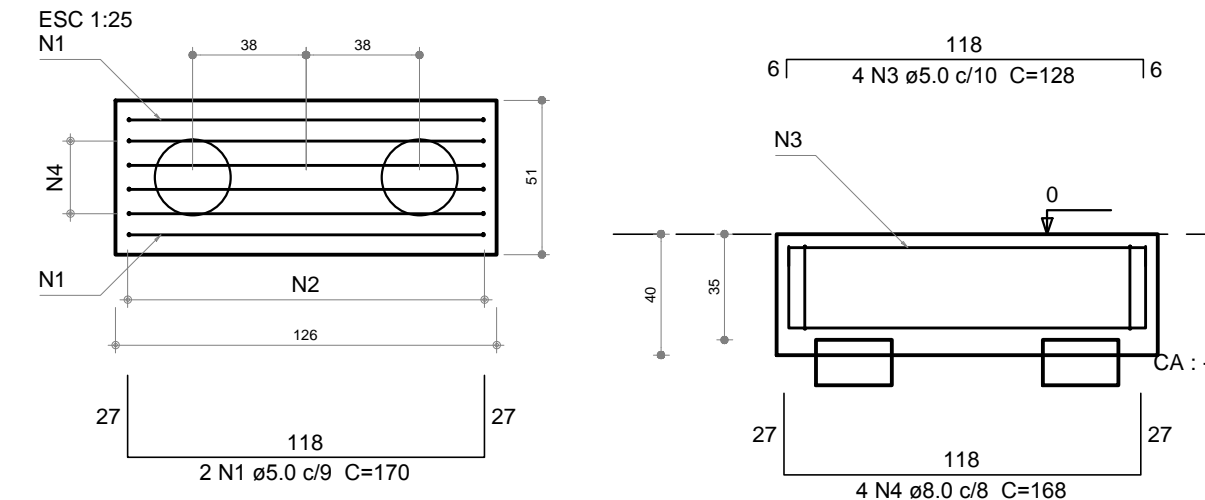
P15=P16



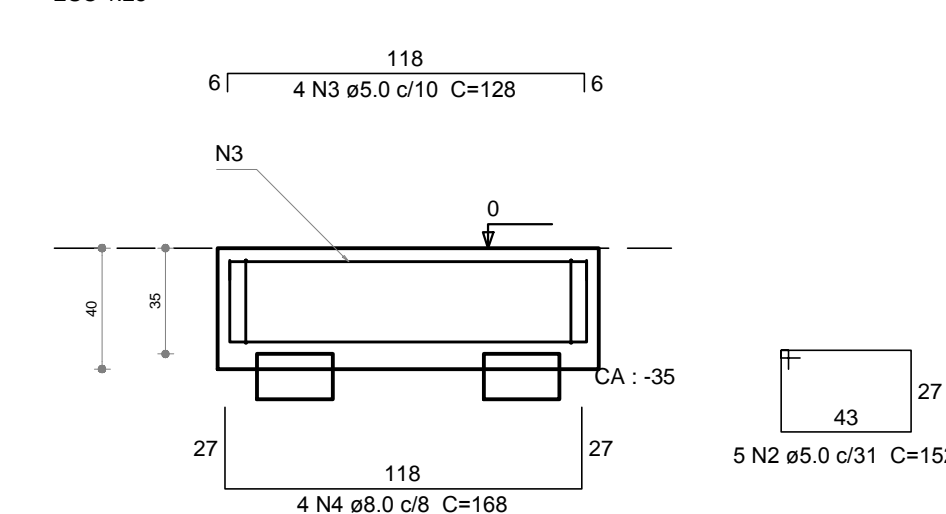
P8=P11



B6=B8=B9=B11 2ø25



Corte ESC 1:25



NOTAS:

- Conferir medidas na obra.
- O nível +20 foi tomado como sendo o nível do piso acabado.
- Verificar a estanqueidade das formas.
- Molhar as formas antes do lançamento do concreto.
- Conferir a disposição das armaduras antes da concretagem.
- Garantir um bom alinhamento vertical e horizontal.
- A Responsabilidade pela fiscalização da obra é do Engº resp Técnico.
- Concreto calculado utilizando agregado graúdo tipo "brita 1 e brita 2", slump 6 ± 1.
- Aconselhamos moldagem de corpos de prova para cada caminho betoneira.
- Respeitar os prazos mínimos para retirada de formas e escoramentos.
- Evitar romper concreto após endurecido, com marreta e talhadeira.
- Toda e qualquer alteração no respectivo projeto, o calculista deverá ser consultado, e o mesmo deverá emitir seu parecer por escrito.
- Concreto das estacas C-20 (fck=20,0MPa), demais elementos C-25 (fck=25,0 MPa).
- Aço CA-50A/CA-60.

Relação do aço

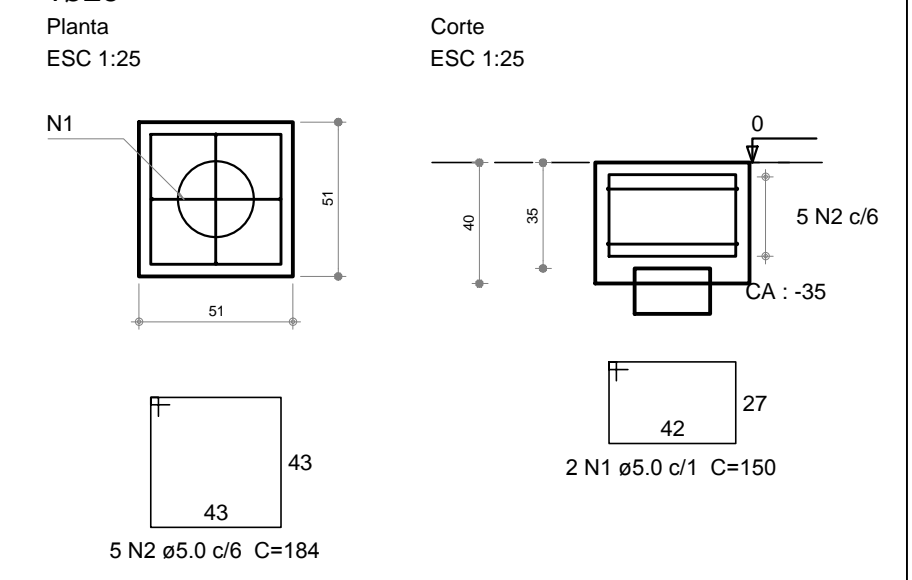
ELEMENTO	AÇO	N	DIAM	Q	UNIT (cm)	C.TOTAL (cm)
4xB11	CA60	1	5.0	8	170	1360
	CA60	2	5.0	20	152	3040
	CA60	3	5.0	16	128	2048
	CA50	4	8.0	16	168	2688
8xB12	CA60	1	5.0	16	150	2400
	CA60	2	5.0	40	184	7360
	CA60	1	5.0	12	VAR	VAR
	CA60	2	5.0	14	VAR	VAR
	CA60	3	5.0	10	387	3870
	CA60	4	5.0	14	VAR	VAR
	CA60	5	5.0	12	VAR	VAR
	CA50	6	8.0	24	VAR	VAR
	CA60	1	5.0	40	84	3360
	CA50	2	10.0	40	91	3640
	CA60	1	5.0	8	84	672
	CA60	2	5.0	8	25	200
	CA50	3	10.0	12	91	1092
5xP13	CA60	1	5.0	45	84	3780
	CA60	2	5.0	45	25	1125
	CA50	3	10.0	30	123	3690
	CA60	1	5.0	10	91	910
	CA50	2	10.0	12	101	1212
	CA60	1	5.0	81	84	6804
	CA50	2	10.0	36	83	2988
	CA60	1	5.0	30	88	2640
	CA50	2	8.0	2	442	884
	CA50	3	8.0	2	486	972
	CA60	1	5.0	2	272	544
	CA60	2	5.0	18	88	1584
	CA50	3	8.0	2	272	544
	CA60	1	5.0	2	272	544
	CA60	2	5.0	18	88	1584
	CA50	3	8.0	2	272	544
	CA60	1	5.0	40	88	3520
	CA50	2	8.0	2	640	1280
	CA50	3	8.0	2	684	1368
	CA60	1	5.0	44	88	3872
	CA50	2	8.0	2	629	1258
	CA50	3	8.0	2	673	1346
	CA60	1	5.0	26	56	1456
	CA50	2	8.0	2	402	804
	CA60	3	8.0	2	406	812
	CA60	1	5.0	2	188	376
	CA60	2	5.0	13	88	1144
	CA50	3	8.0	2	188	376
	CA60	1	5.0	2	311	622
	CA60	2	5.0	20	88	1760
	CA50	3	10.0	2	311	622
	CA60	1	5.0	2	225	450
	CA60	2	5.0	16	88	1408
	CA50	3	8.0	2	225	450
	CA60	1	5.0	2	236	472
	CA60	2	5.0	13	88	1144
	CA50	3	8.0	2	236	472
	CA60	1	5.0	2	225	450
	CA60	2	5.0	16	88	1408
	CA50	3	8.0	2	225	450
	CA60	1	5.0	2	311	622
	CA60	2	5.0	20	88	1760
	CA50	3	10.0	2	311	622
	CA60	1	5.0	48	56	2688
	CA50	2	8.0	2	788	1576
	CA50	3	8.0	2	802	1604
	CA60	1	5.0	2	189	378
	CA60	2	5.0	13	88	1144
	CA50	3	8.0	2	189	378
	CA60	1	5.0	37	56	2072
	CA50	2	8.0	2	603	1206
	CA60	3	8.0	2	617	1234
	CA60	1	5.0	42	56	2352
	CA50	2	8.0	2	648	1296
	CA50	3	8.0	2	652	1304

Resumo do aço

AÇO	DIAM	C.TOTAL (m)	PESO + 10% (kg)
CA50	8.0	271.9	118
	10.0	138.7	94
CA60	5.0	810.2	137.4
PESO TOTAL			
CA50	212.1		
CA60	137.4		

Vol. de concreto total (C-25) = 6.67 m³

B1=B2=B3=B4=B5=B7=B10=B12 1ø25



PREFEITURA MUNICIPAL DE CRAVINHOS
JOSÉ FRANCISCO MATASSO FERDINANDO
JOSÉ AUGUSTO CATAPANI
CENTRO DE FORMAÇÃO DE CONDUTORES
ARMADURA DA FUNDAÇÃO - NÍVEL 0 / 1/1
EC 03/08
arquitetura
Fernando Vercesi Garabolate