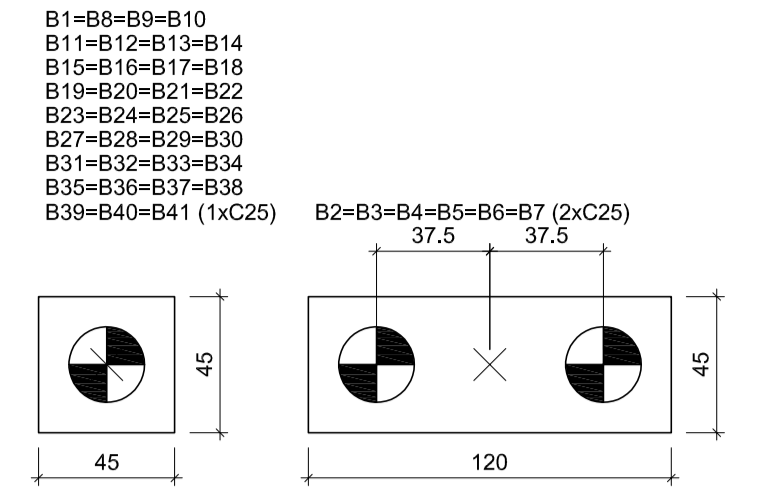


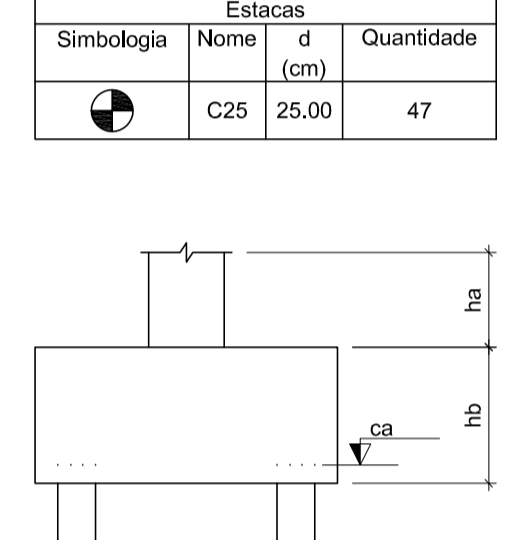
Nome	Seção (cm)	Carga Máx. (kN)	Carga Min. (kN)	Bloco ne Estaca
P1	15x30	50	43	1 C25
P2	15x30	87	80	2 C25
P3	15x30	85	77	2 C25
P4	15x30	84	76	2 C25
P5	15x30	85	77	2 C25
P6	15x30	85	77	2 C25
P7	15x30	76	69	2 C25
P8	15x30	65	57	1 C25
P9	15x30	42	34	1 C25
P10	15x30	27	21	1 C25
P11	15x30	44	33	1 C25
P12	15x30	68	64	1 C25
P13	15x30	43	32	1 C25
P14	15x30	35	34	1 C25
P15	15x30	43	32	1 C25
P16	15x30	68	64	1 C25
P17	15x30	43	31	1 C25
P18	15x30	35	34	1 C25
P19	15x30	43	32	1 C25
P20	15x30	67	63	1 C25
P21	15x30	46	32	1 C25
P22	15x30	61	57	1 C25
P23	15x30	63	57	1 C25
P24	15x30	52	48	1 C25
P25	L 20x20x15x15x111.57"	39	27	1 C25
P26	L 20x20x15x15x111.57"	39	26	1 C25
P27	L 20x20x15x15x111.57"	40	27	1 C25
P28	L 20x20x15x15x111.57"	40	26	1 C25
P29	L 20x20x15x15x111.57"	41	27	1 C25
P30	L 20x20x15x15x111.57"	41	26	1 C25
P31	15x30	50	42	1 C25
P32	15x30	50	42	1 C25
P33	L 20x20x15x15x136.66"	61	53	1 C25
P34	L 20x20x15x15x136.66"	61	53	1 C25
P35	L 20x20x15x15x136.66"	62	53	1 C25
P36	15x30	42	36	1 C25
P37	25x25	44	38	1 C25
P38	15x15	6	5	1 C25
P39	15x30	41	32	1 C25
P40	15x30	41	32	1 C25
P41	15x15	6	5	1 C25



**Legenda dos blocos**  
escala 1:25

**LEGENDA DOS PILARES**

- PILAR QUE NASCE
- PILAR QUE SEGUE
- PILAR QUE MORRE
- ESTACA BROCA Ø 25 cm



**RELAÇÃO DO AÇO**

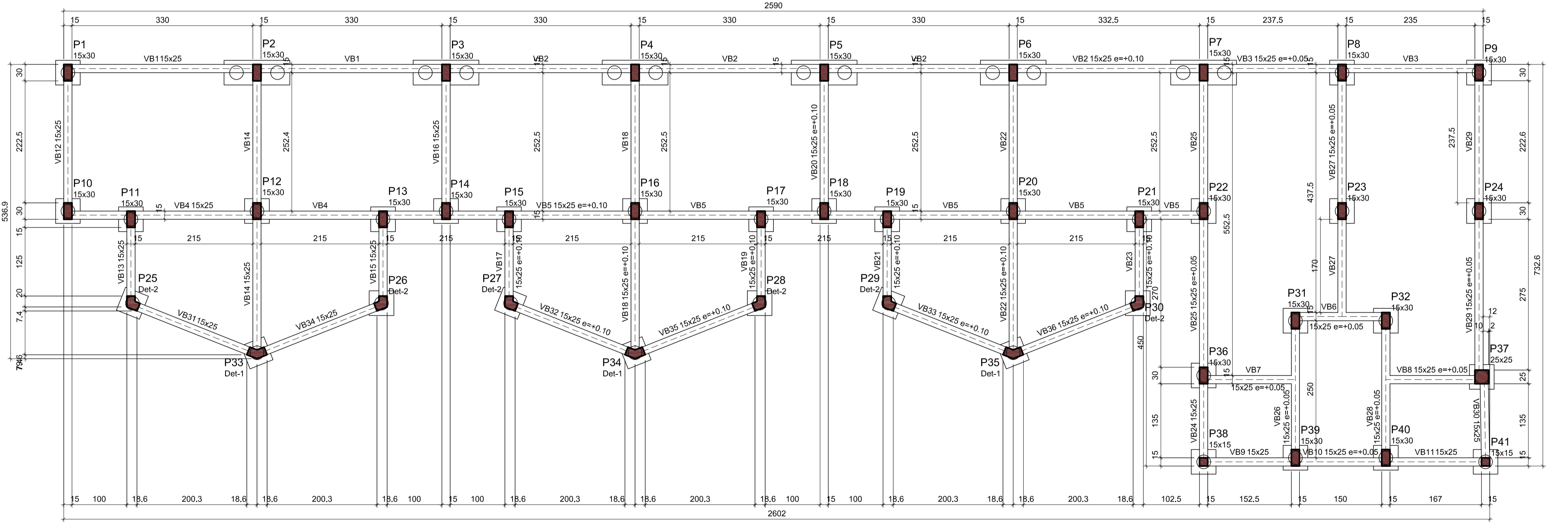
AÇO	N	DIAM	Q	UNIT	C.TOTAL (cm)
50A	1	8.0	180	168	30240

**RESUMO DO AÇO**

AÇO	DIAM	C.TOTAL (m)	PESO+10% (kg)
CA50A	8.0	302.4	131.4
<b>PESO TOTAL</b>			<b>131.4</b>

Vol. concreto total = 17.7 m<sup>3</sup>  
Área de forma total = 00.00 m<sup>2</sup>  
fck = 20.00 MPa

Planta de locação  
escala 1:50



Forma do pavimento baldrame (Nível 0.40)  
escala 1:50

**Vigas**

Nome	Seção (cm)	Elevação (m)	Nível (m)
VB1	15x25	0.00	0.40
VB2	15x25	0.10	0.50
VB3	15x25	0.05	0.45
VB4	15x25	0.00	0.40
VB5	15x25	0.10	0.50
VB6	15x25	0.05	0.45
VB7	15x25	0.05	0.45
VB8	15x25	0.05	0.45
VB9	15x25	0.00	0.40
VB10	15x25	0.05	0.45
VB11	15x25	0.00	0.40
VB12	15x25	0.00	0.40
VB13	15x25	0.00	0.40
VB14	15x25	0.00	0.40
VB15	15x25	0.00	0.40
VB16	15x25	0.00	0.40
VB17	15x25	0.10	0.50
VB18	15x25	0.10	0.50
VB19	15x25	0.10	0.50
VB20	15x25	0.10	0.50
VB21	15x25	0.10	0.50
VB22	15x25	0.10	0.50
VB23	15x25	0.10	0.50
VB24	15x25	0.00	0.40
VB25	15x25	0.05	0.45
VB26	15x25	0.05	0.45
VB27	15x25	0.05	0.45
VB28	15x25	0.05	0.45
VB29	15x25	0.05	0.45
VB30	15x25	0.00	0.40
VB31	15x25	0.00	0.40
VB32	15x25	0.10	0.50
VB33	15x25	0.10	0.50
VB34	15x25	0.00	0.40
VB35	15x25	0.10	0.50
VB36	15x25	0.10	0.50

**Pilares**

Nome	Seção	Elevação (m)	Nível (m)
P1	15x30	0.00	0.40
P2	15x30	0.00	0.40
P3	15x30	0.00	0.40
P4	15x30	0.10	0.50
P5	15x30	0.10	0.50
P6	15x30	0.10	0.50
P7	15x30	0.05	0.45
P8	15x30	0.05	0.45
P9	15x30	0.05	0.45
P10	15x30	0.00	0.40
P11	15x30	0.00	0.40
P12	15x30	0.00	0.40
P13	15x30	0.00	0.40
P14	15x30	0.00	0.40
P15	15x30	0.10	0.50
P16	15x30	0.10	0.50
P17	15x30	0.10	0.50
P18	15x30	0.10	0.50
P19	15x30	0.10	0.50
P20	15x30	0.10	0.50
P21	15x30	0.10	0.50
P22	15x30	0.05	0.45
P23	15x30	0.05	0.45
P24	15x30	0.05	0.45
P25	L aberto 20x20x15x15	0.00	0.40
P26	L aberto 20x20x15x15	0.00	0.40
P27	L aberto 20x20x15x15	0.10	0.50
P28	L aberto 20x20x15x15	0.10	0.50
P29	L aberto 20x20x15x15	0.10	0.50
P30	L aberto 20x20x15x15	0.10	0.50
P31	15x30	0.05	0.45
P32	15x30	0.05	0.45
P33	L aberto 20x20x15x15	0.00	0.40
P34	L aberto 20x20x15x15	0.10	0.50
P35	L aberto 20x20x15x15	0.10	0.50
P36	15x30	0.05	0.45
P37	25x25	0.05	0.45
P38	15x15	0.05	0.45
P39	15x30	0.05	0.45
P40	15x30	0.05	0.45
P41	15x15	0.00	0.40

**Características dos materiais**

fck (MPa)	Ecs (MPa)
20	21287

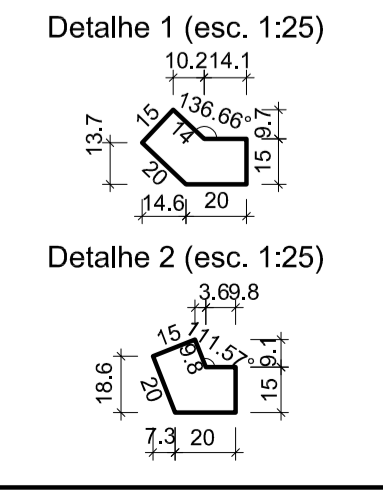
Dimensão máxima do agregado = 19 mm

**Legenda dos pilares**

- Pilar que passa

**Legenda das vigas e paredes**

- Viga



ART 28027230211581587

**PROJETO ESTRUTURAL** 1/5

**PREFEITURA DE ITARARÉ**  
SECRETARIA DE DESENVOLVIMENTO MUNICIPAL

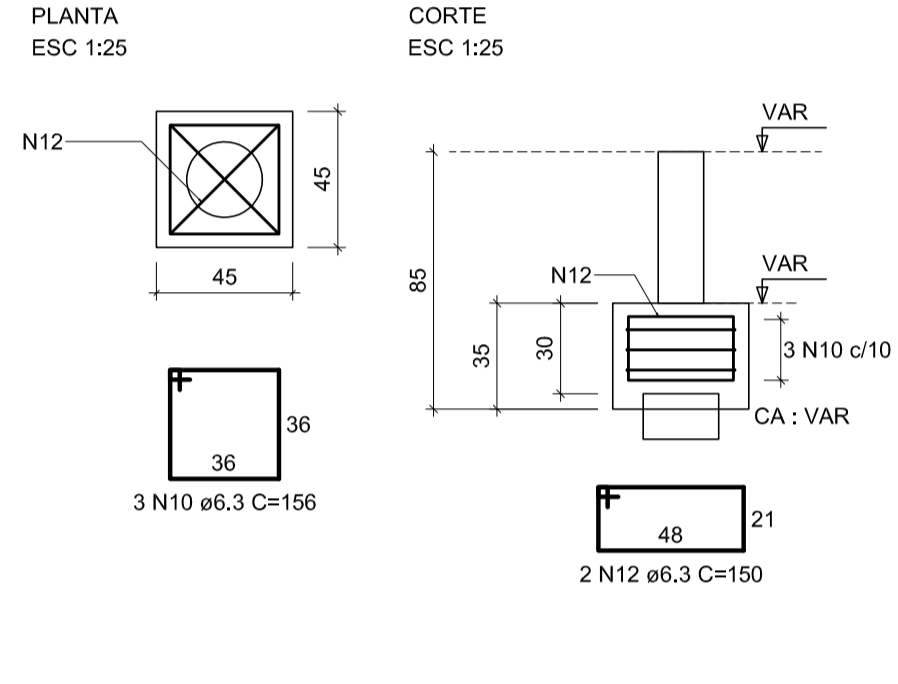
CONSTRUÇÃO DE PRAÇA DE ALIMENTAÇÃO

Rua XV de Novembro, esq. com a Rua Major Queiroz-Itararé/SP

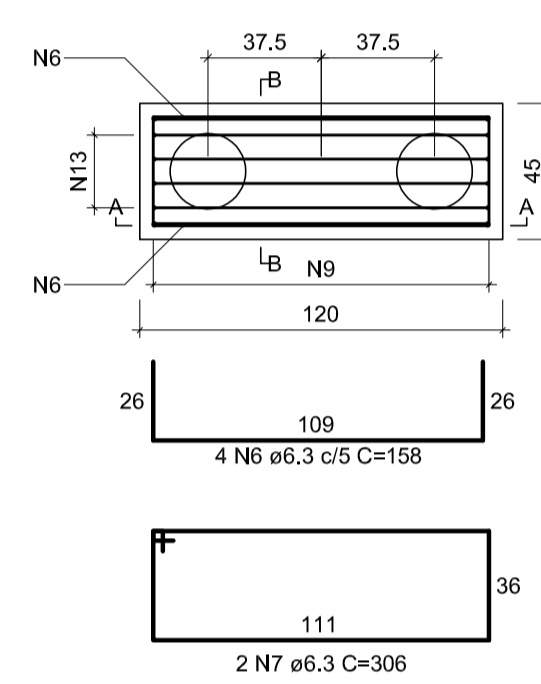
PROJETO: PLANTA DE LOCAÇÃO DE ESTACAS E PILARES

RES.P. TÉCNICO: JOÃO BATISTA ALVES DOS SANTOS  
Engenheiro Civil - CREA/SP: 5.061.202.902

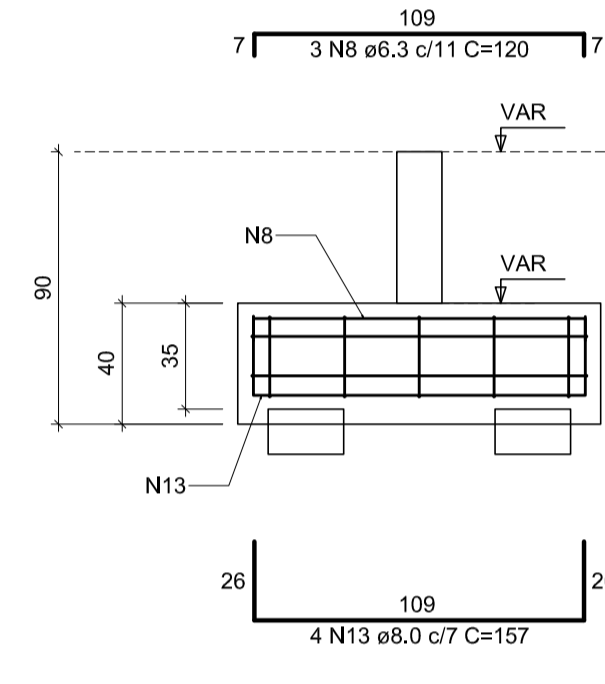
B1=B8=B9=B10=B11=B12=B13=B14=B15=B16  
 =B17=B18=B19=B20=B21=B22=B23=B24=B25  
 =B26=B27=B28=B29=B30=B31=B32=B36=B37  
 =B38=B39=B40=B41  
 1xC25



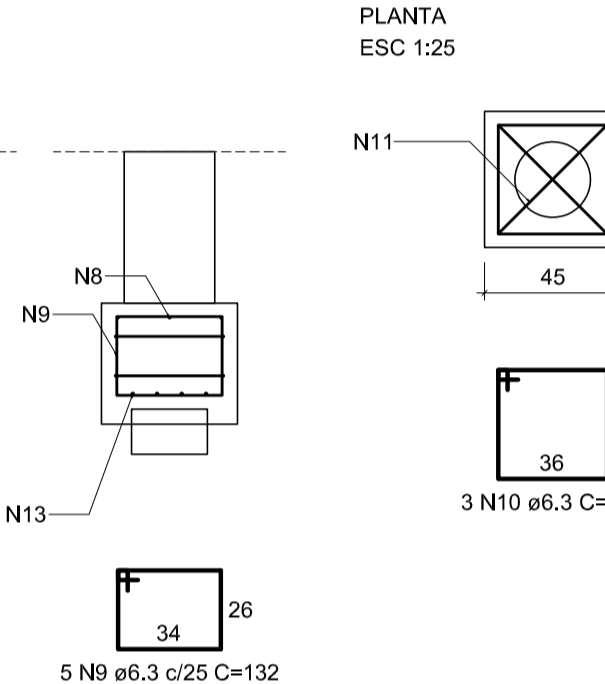
B2=B3=B4=B5=B6=B7  
 2xC25



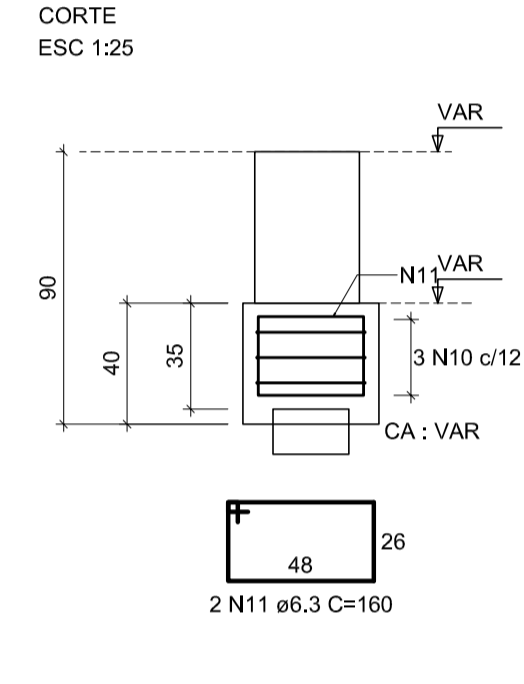
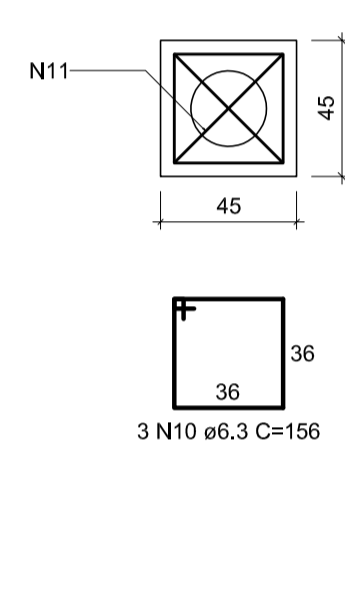
CORTE A-A  
 ESC 1:25



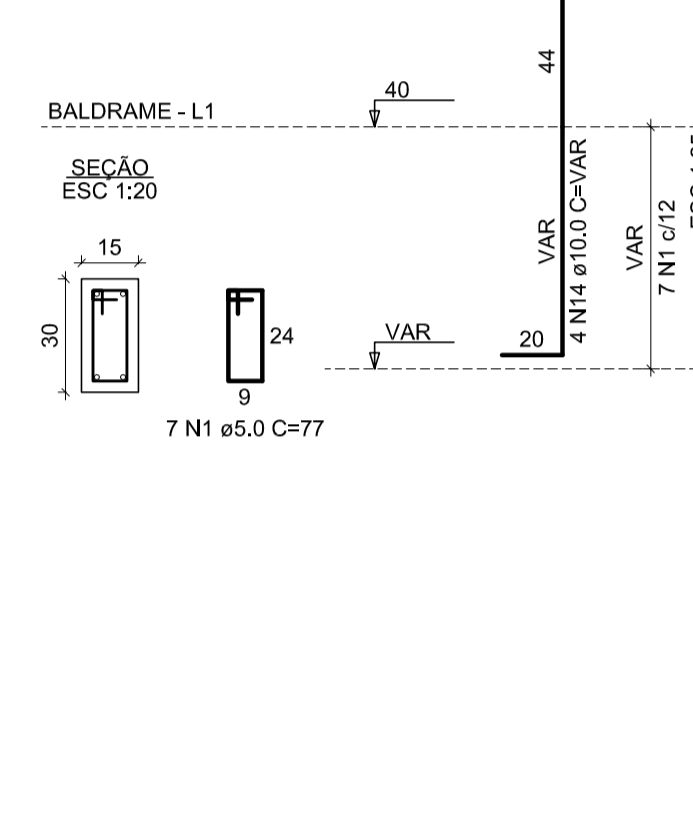
CORTE B-B  
 ESC 1:25



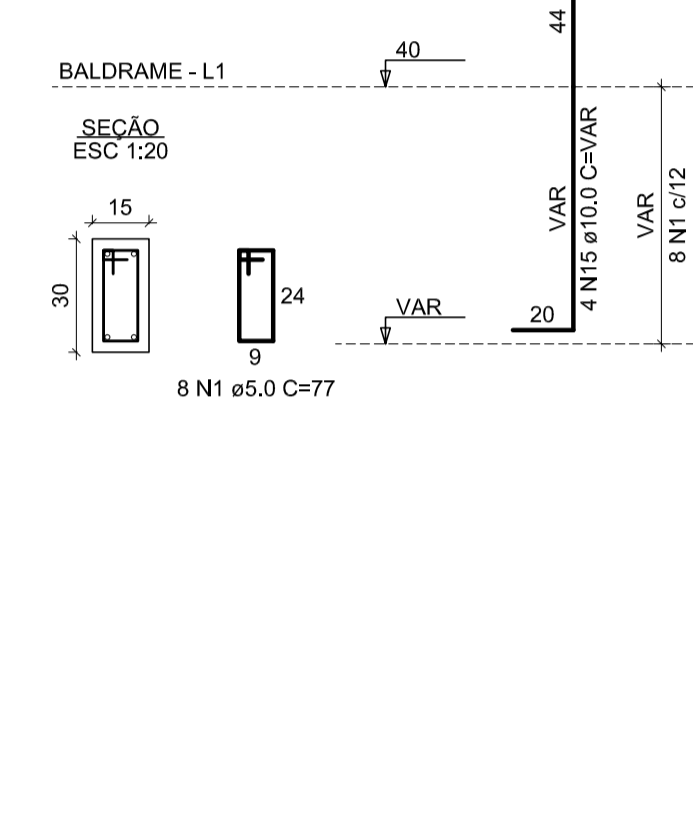
B33=B34=B35  
 1xC25



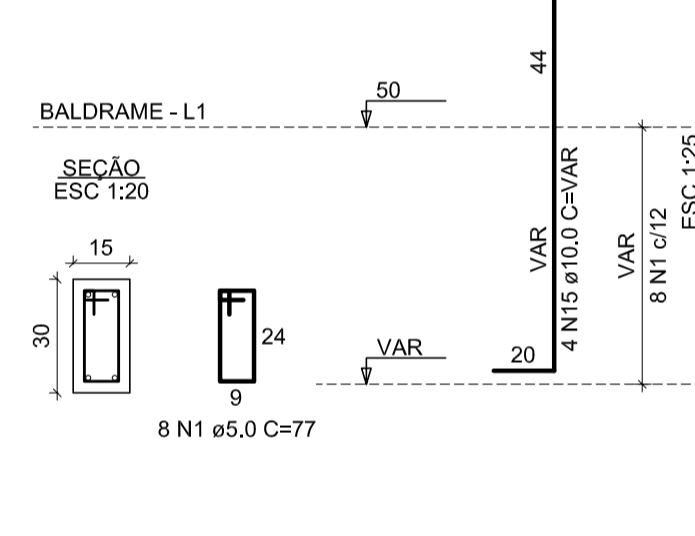
P1=P10=P11=P12=P13=P14



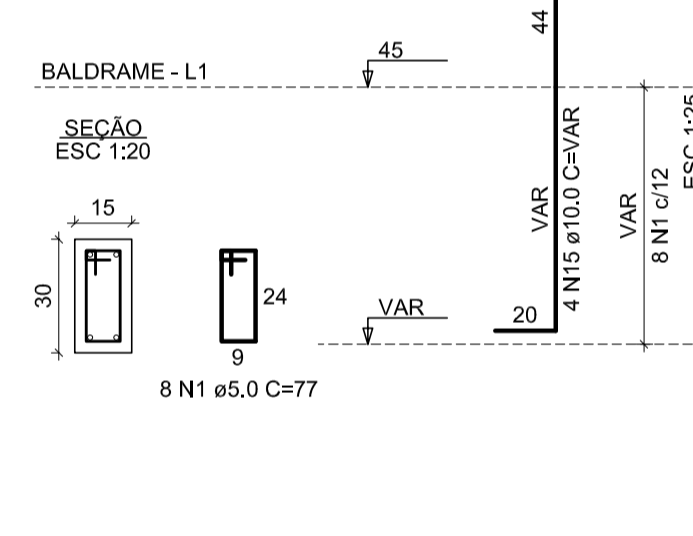
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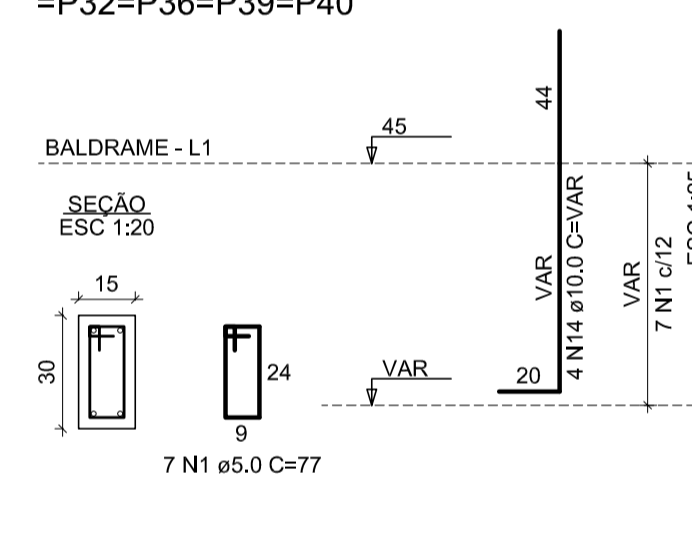
P4=P5=P6



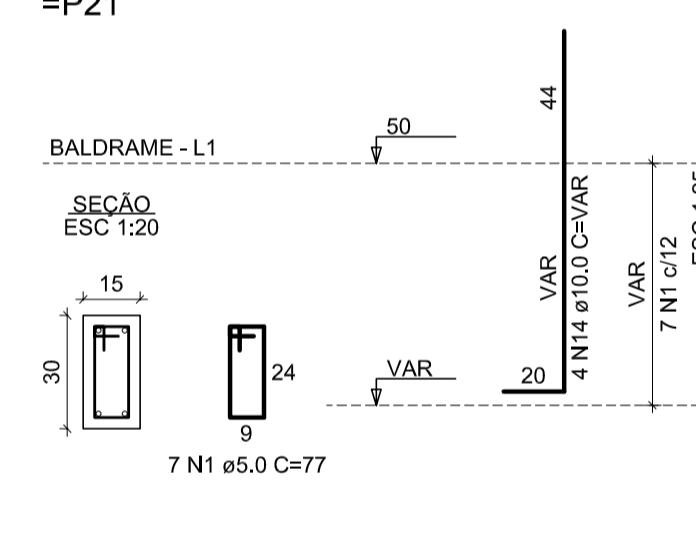
P7



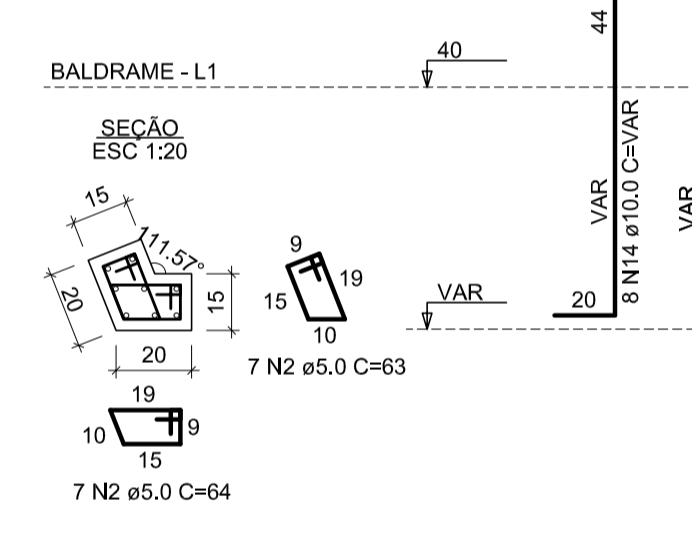
P8=P9=P22=P23=P24=P31=  
 =P32=P36=P39=P40



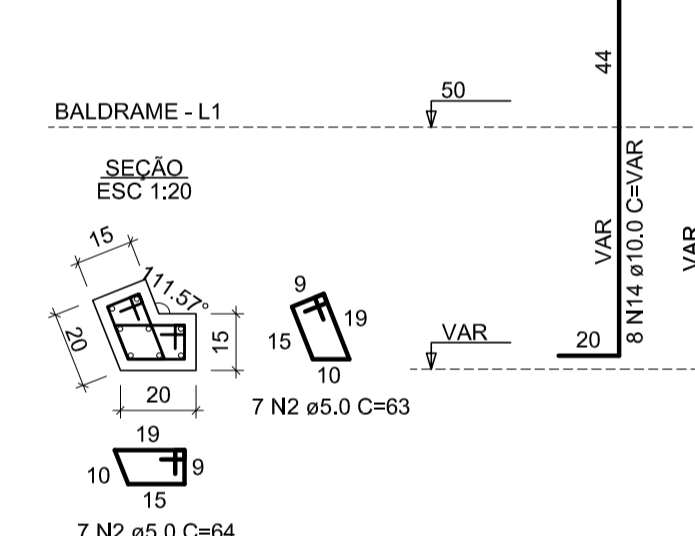
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 =P21



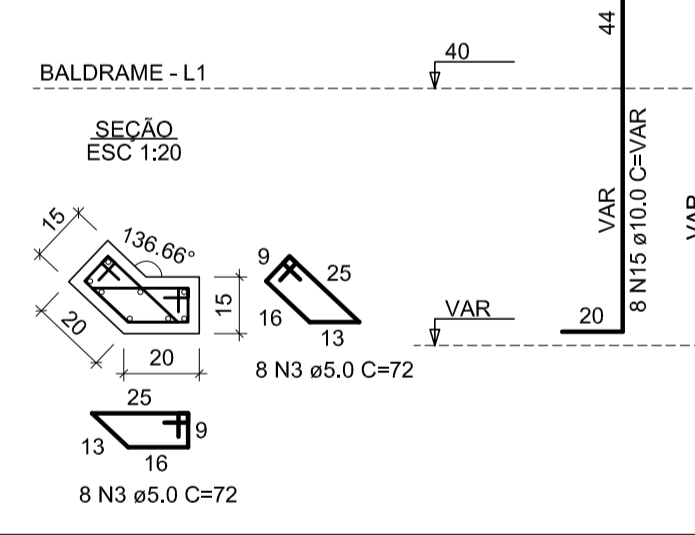
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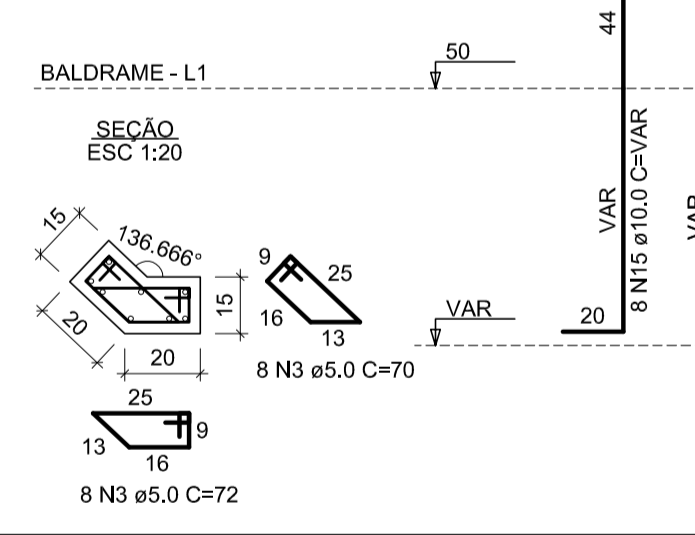
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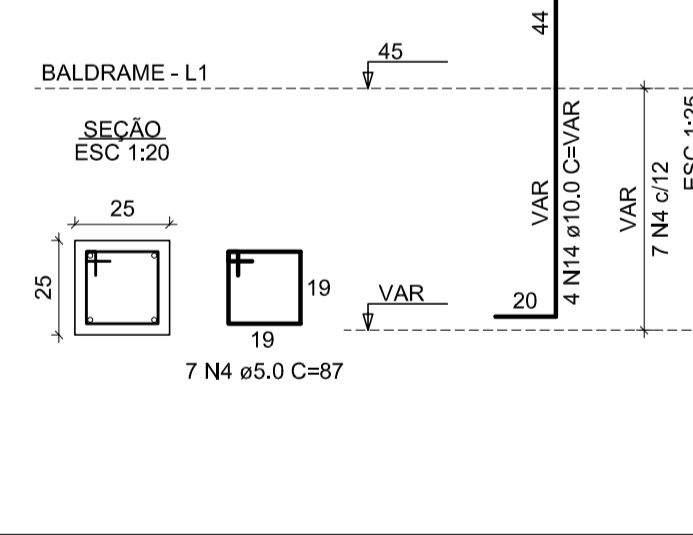
P33



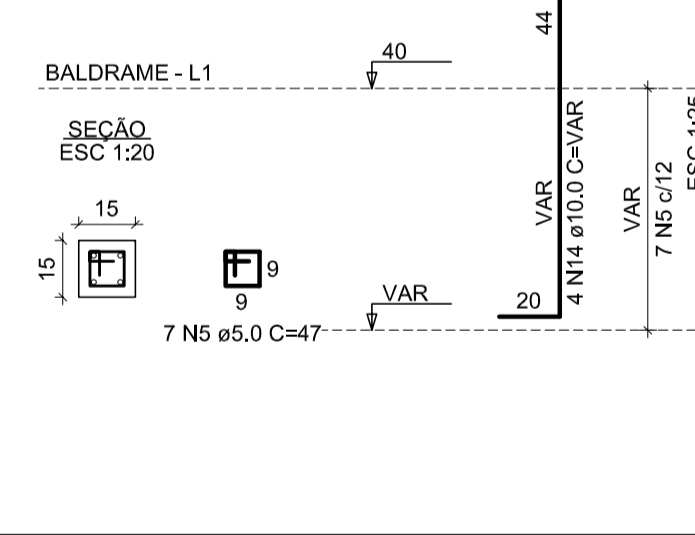
P34=P35



P37



P38=P41



RELAÇÃO DO AÇO

AÇO	N	DIAM (mm)	QUANT	C.UNIT (cm)	C.TOTAL (cm)
6xB7	3xB35	32xB41			
6xP1	2xP2	3xP4			
P7	10xP8	7xP15			
2xP25	4xP27	P33			
2xP34	P37	2xP38			
CA60	1	5.0	209	77	16093
	2	5.0	84	64	5376
	3	5.0	48	72	3456
	4	5.0	7	87	609
	5	5.0	14	47	658
	6	6.3	24	158	3722
	7	6.3	12	306	3672
	8	6.3	18	120	2160
	9	6.3	30	132	3960
	10	6.3	105	156	16380
	11	6.3	6	160	960
	12	6.3	64	150	9600
	13	8.0	24	157	3768
	14	10.0	152	VAR	VAR
	15	10.0	48	VAR	VAR

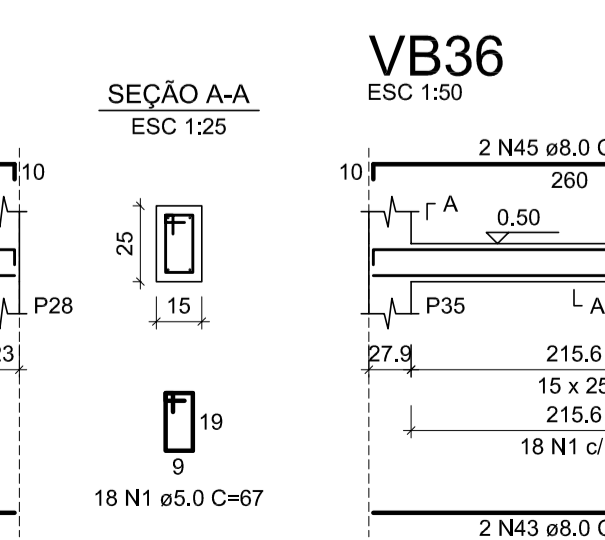
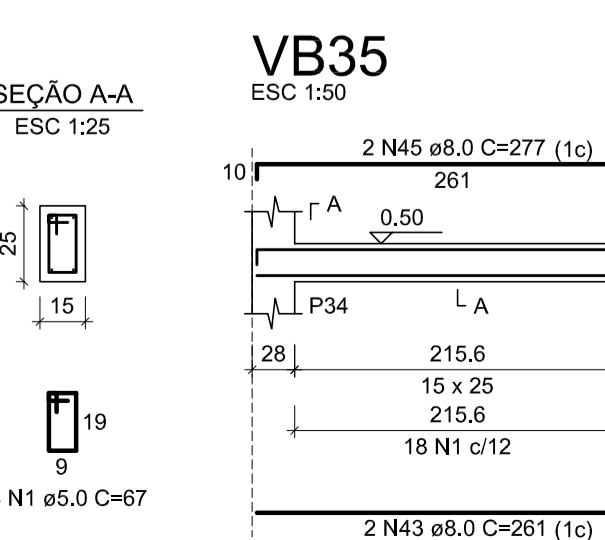
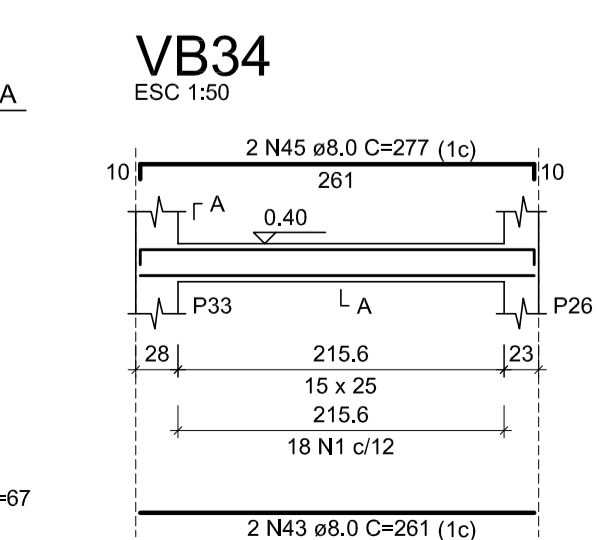
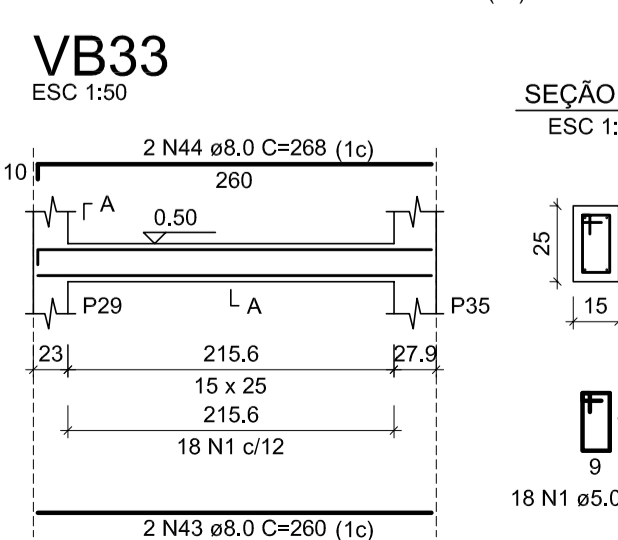
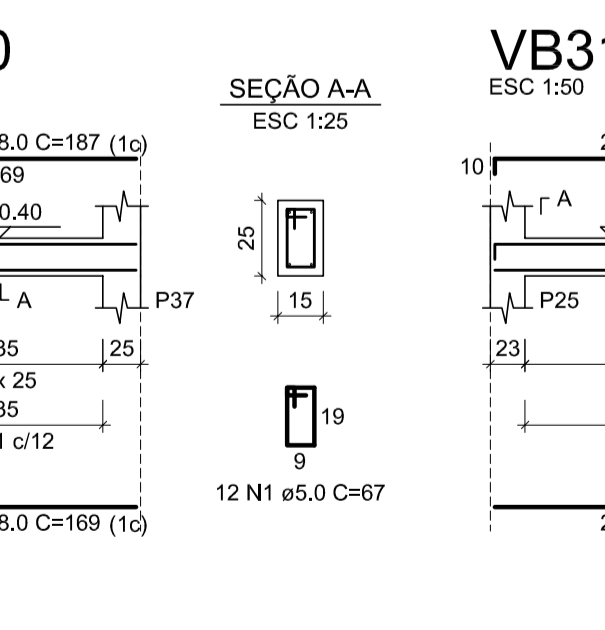
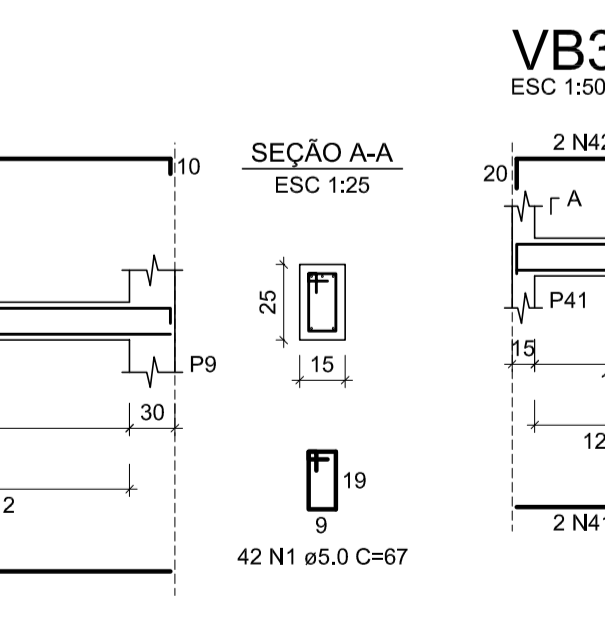
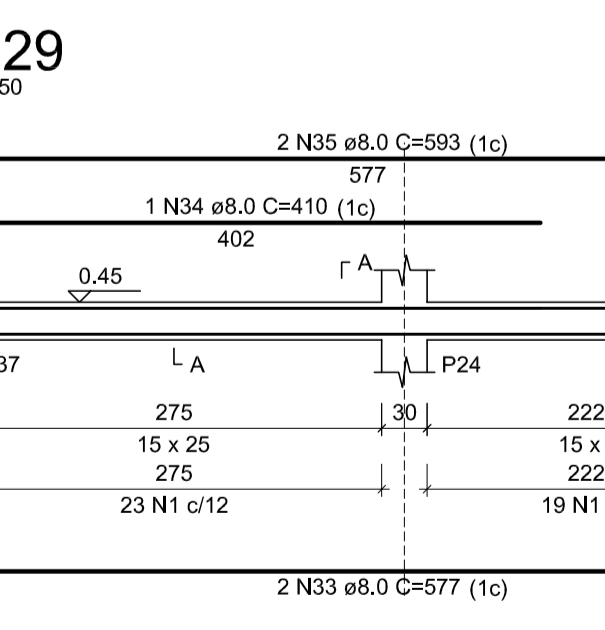
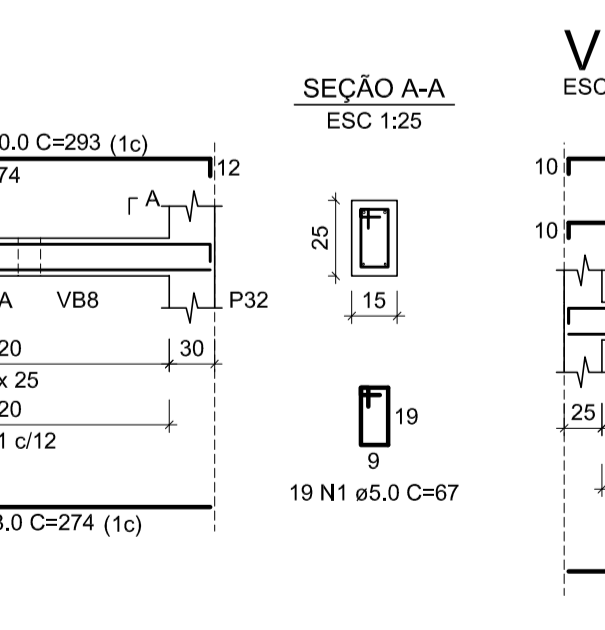
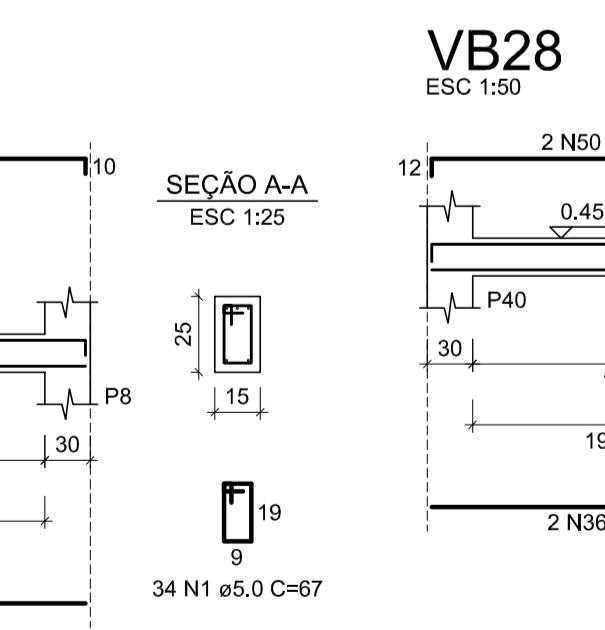
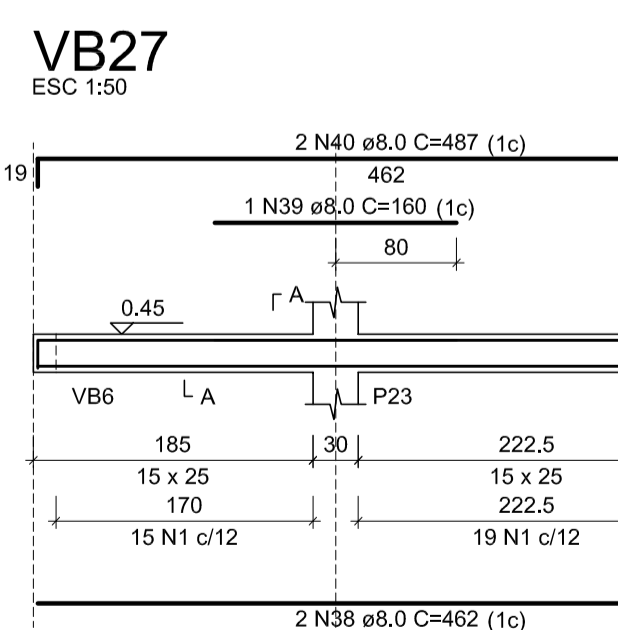
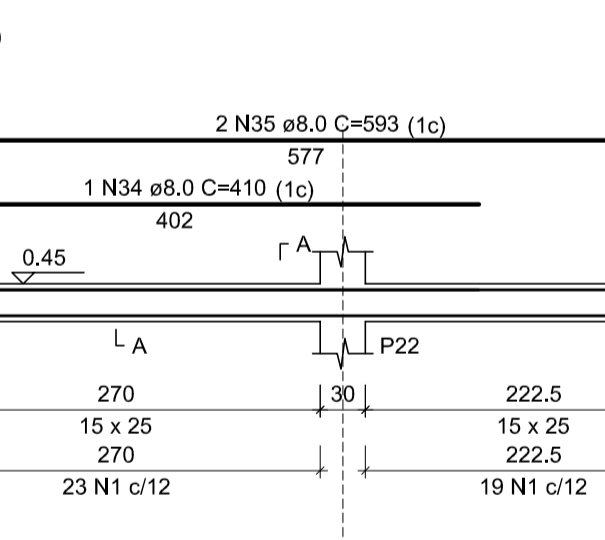
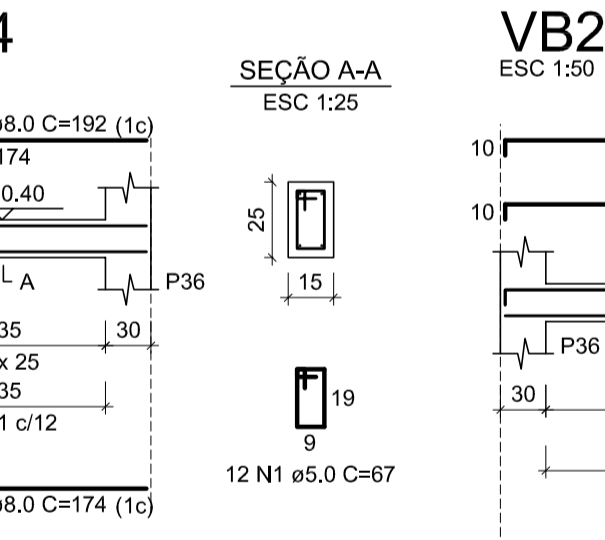
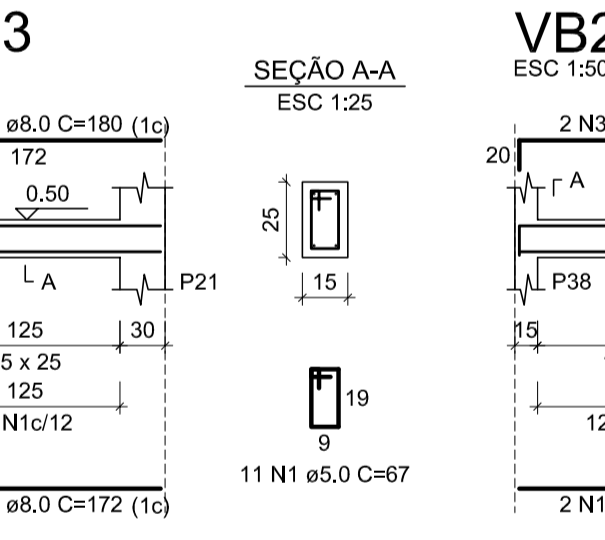
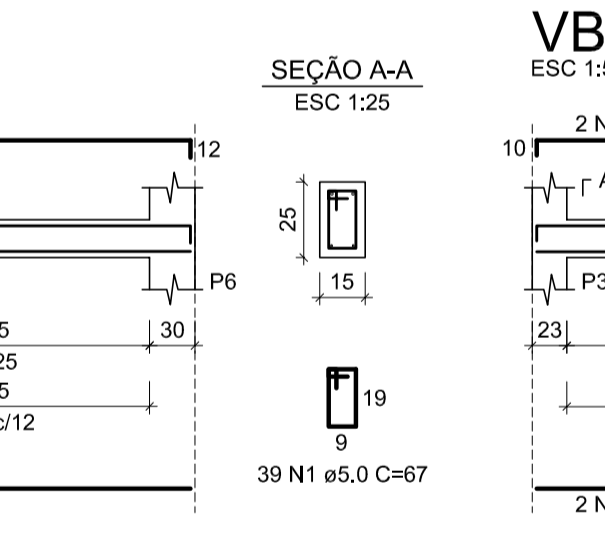
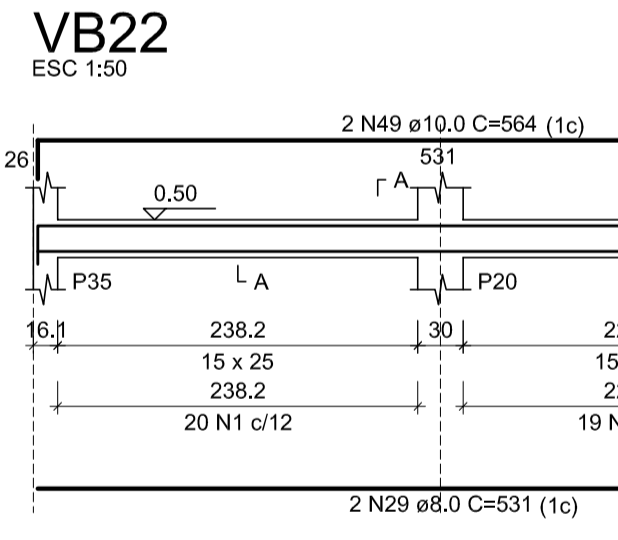
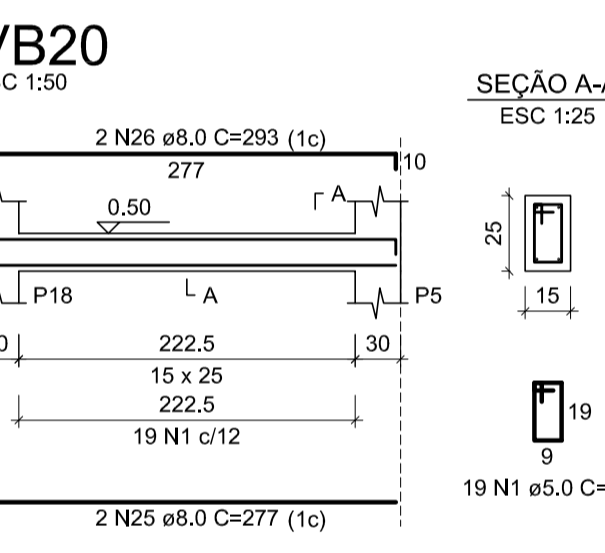
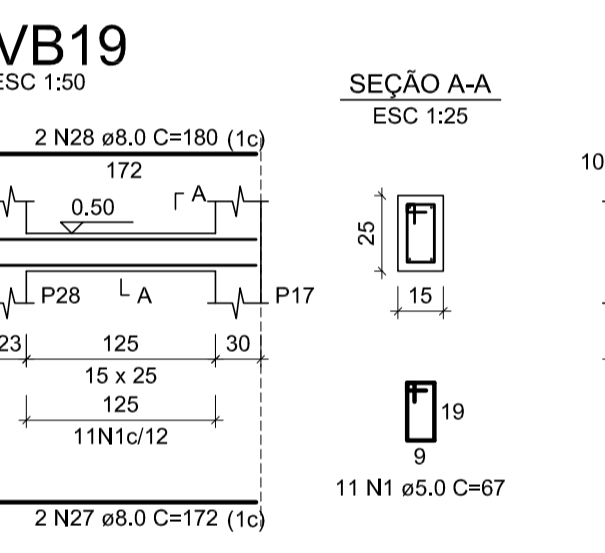
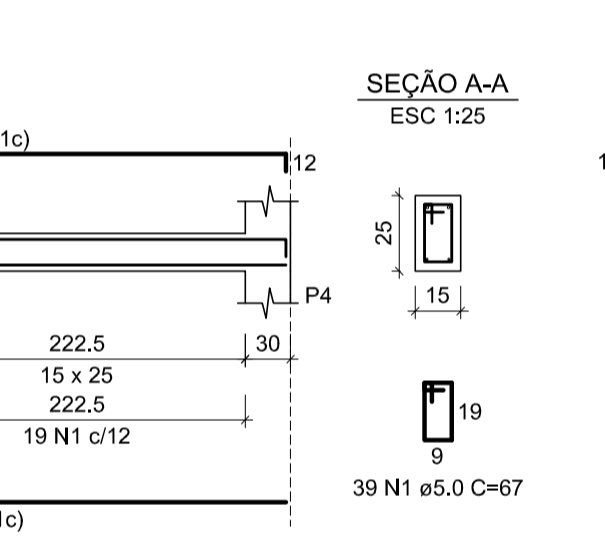
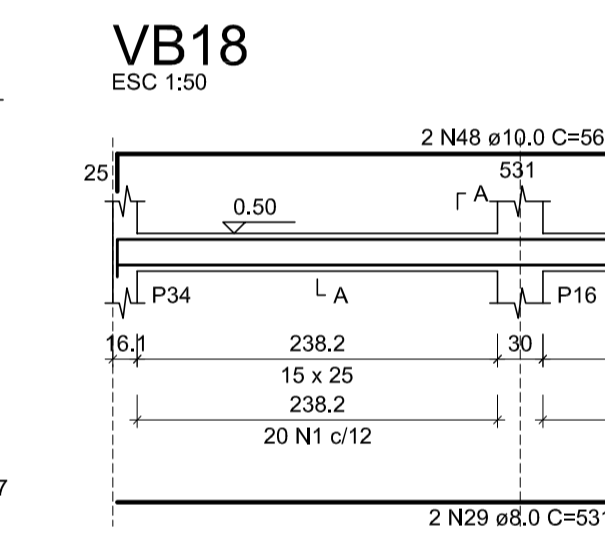
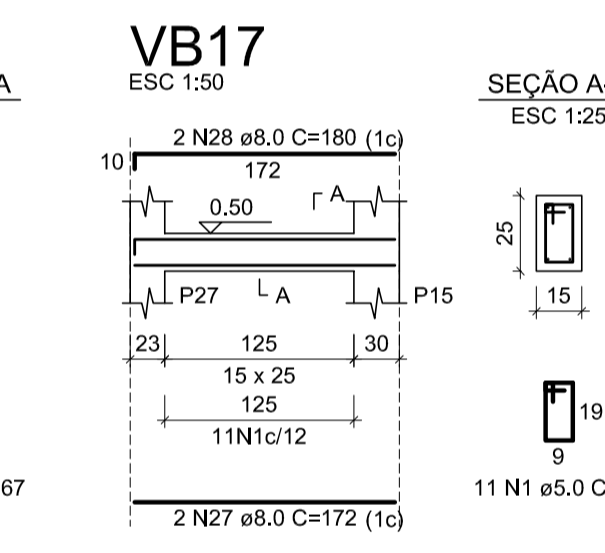
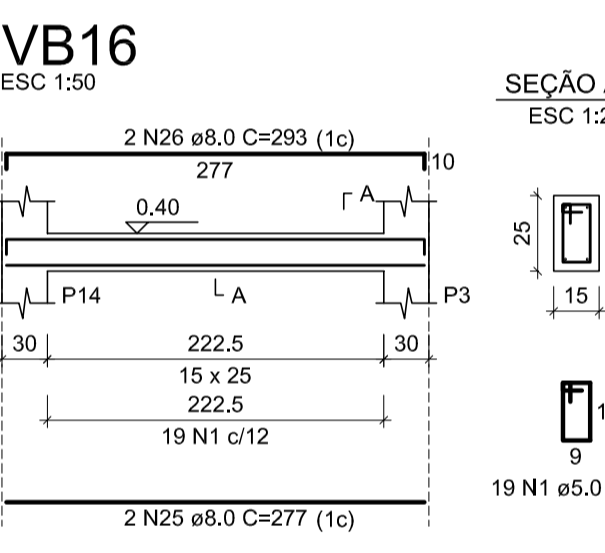
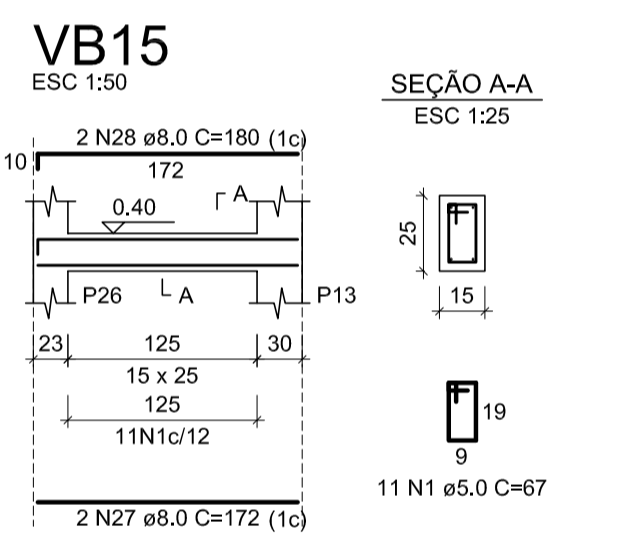
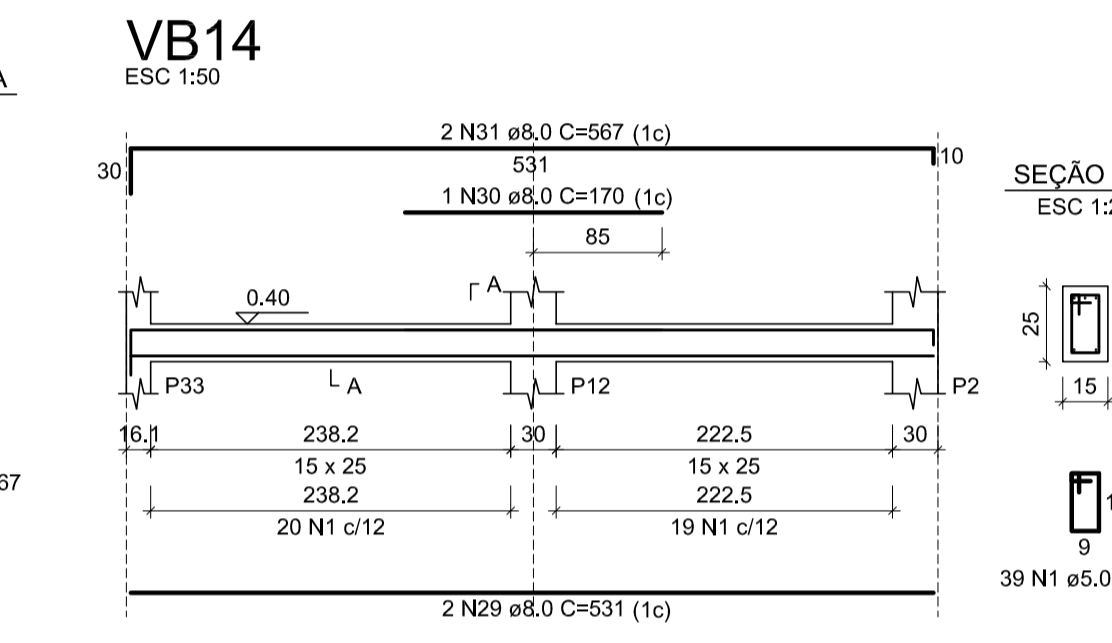
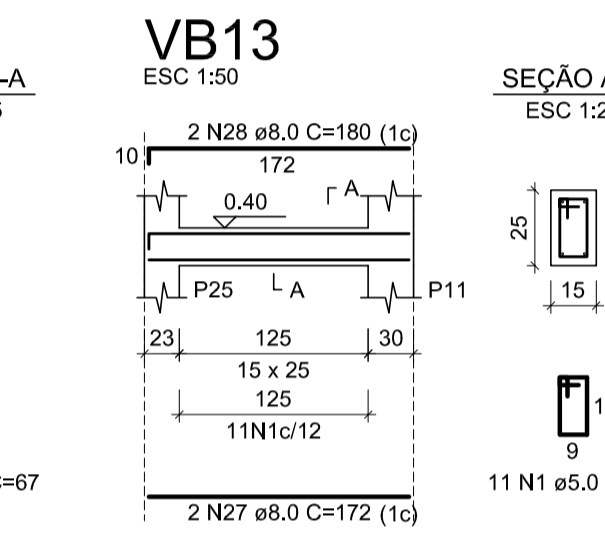
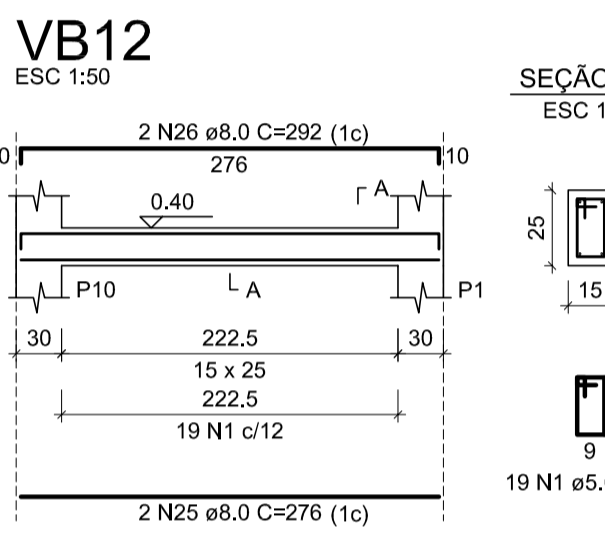
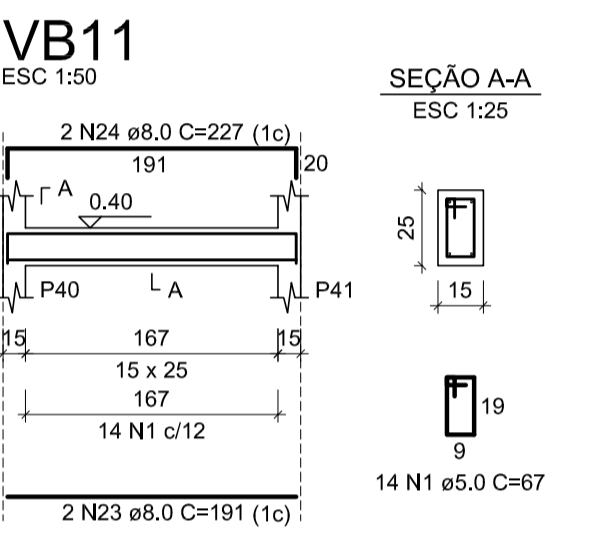
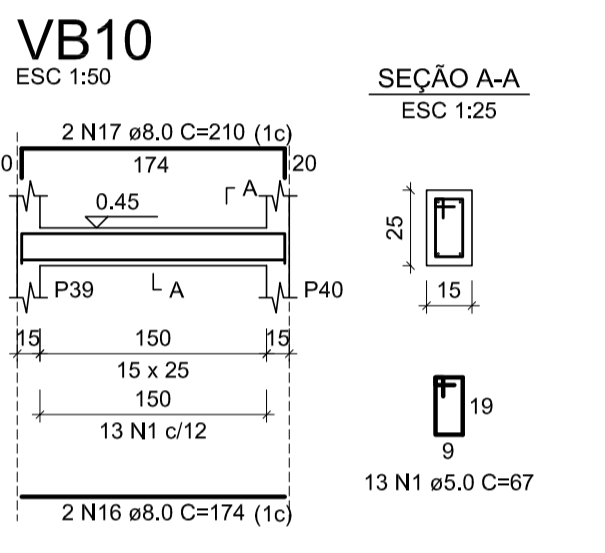
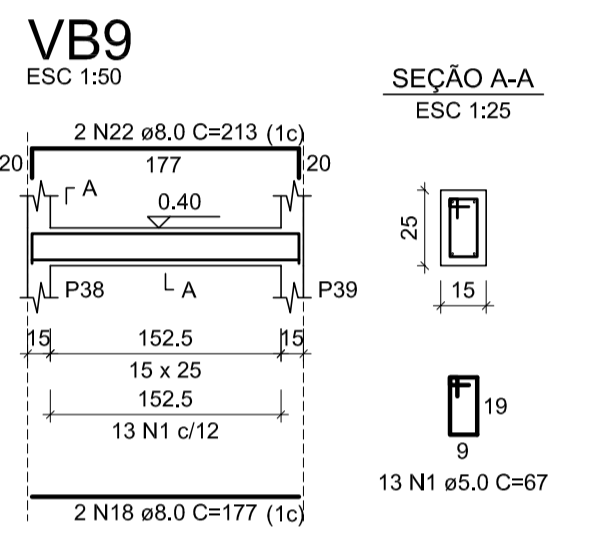
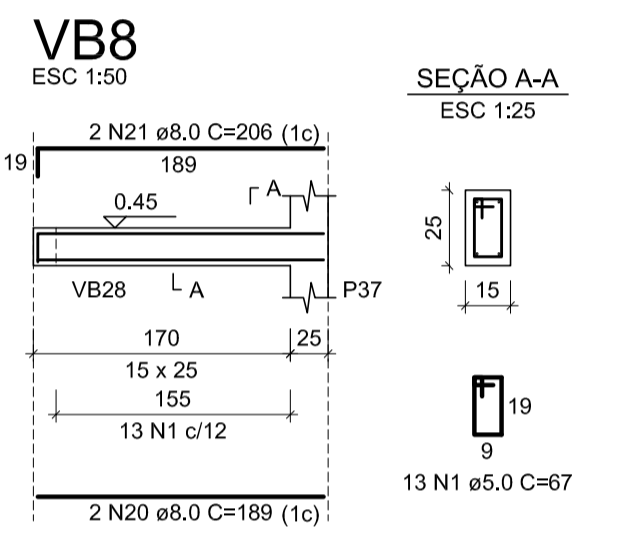
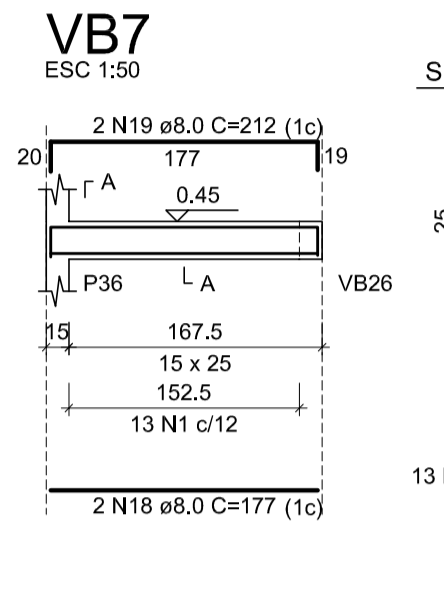
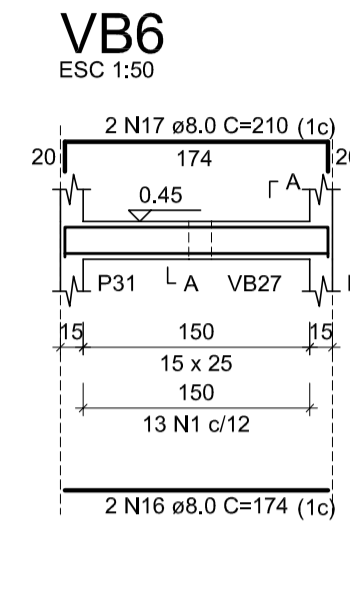
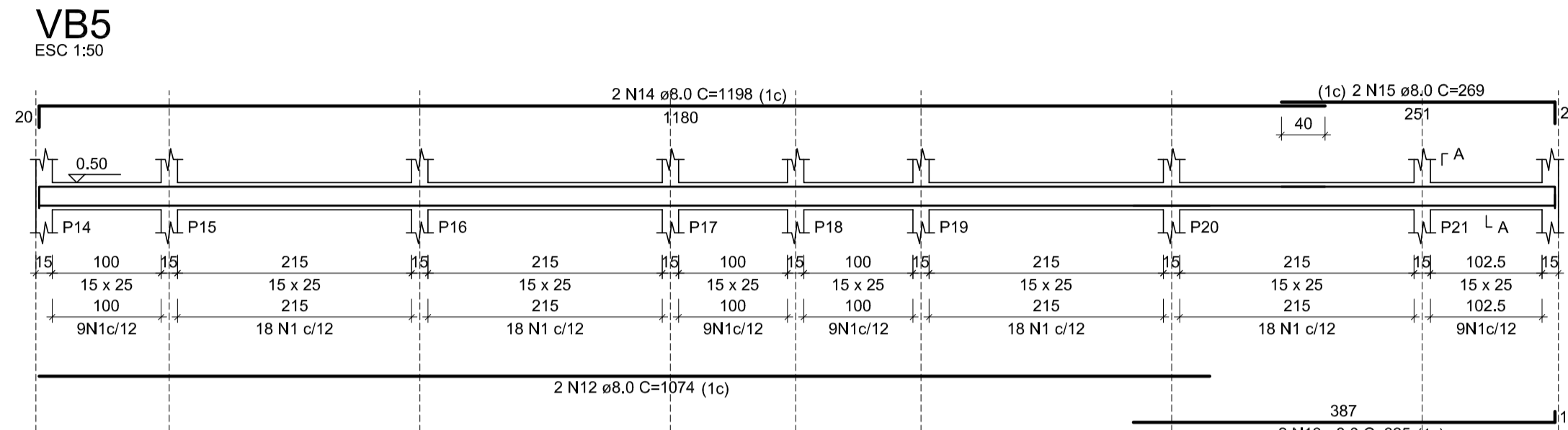
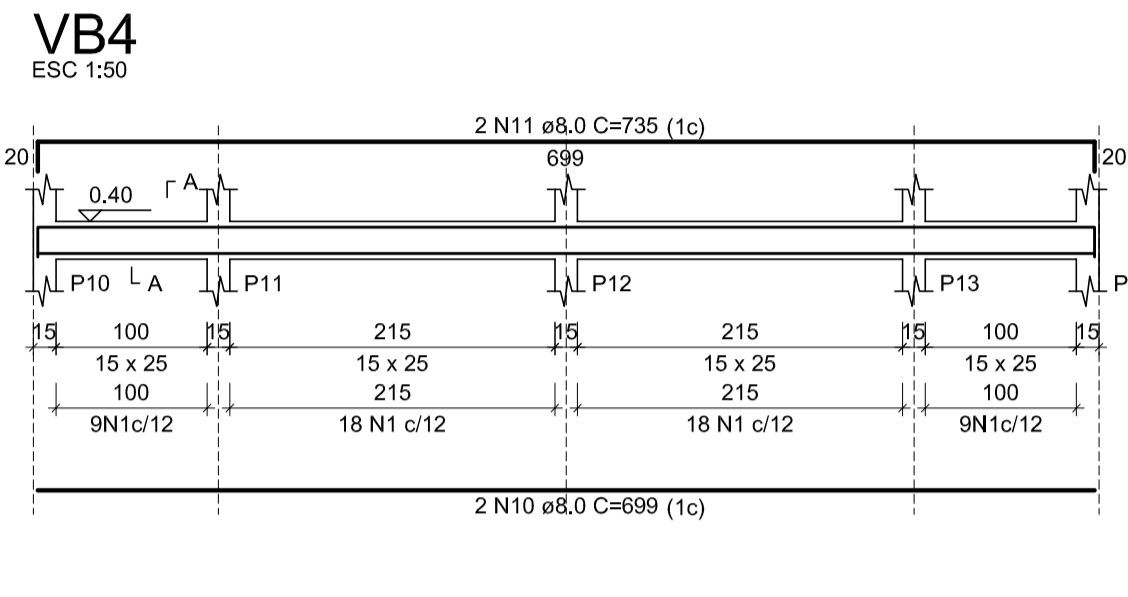
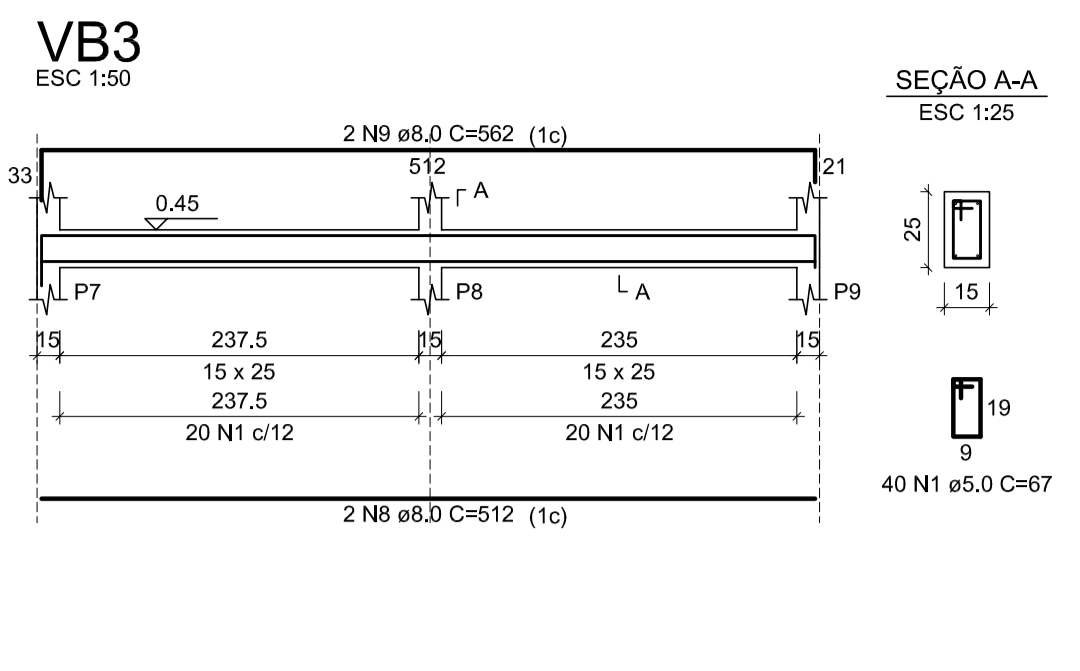
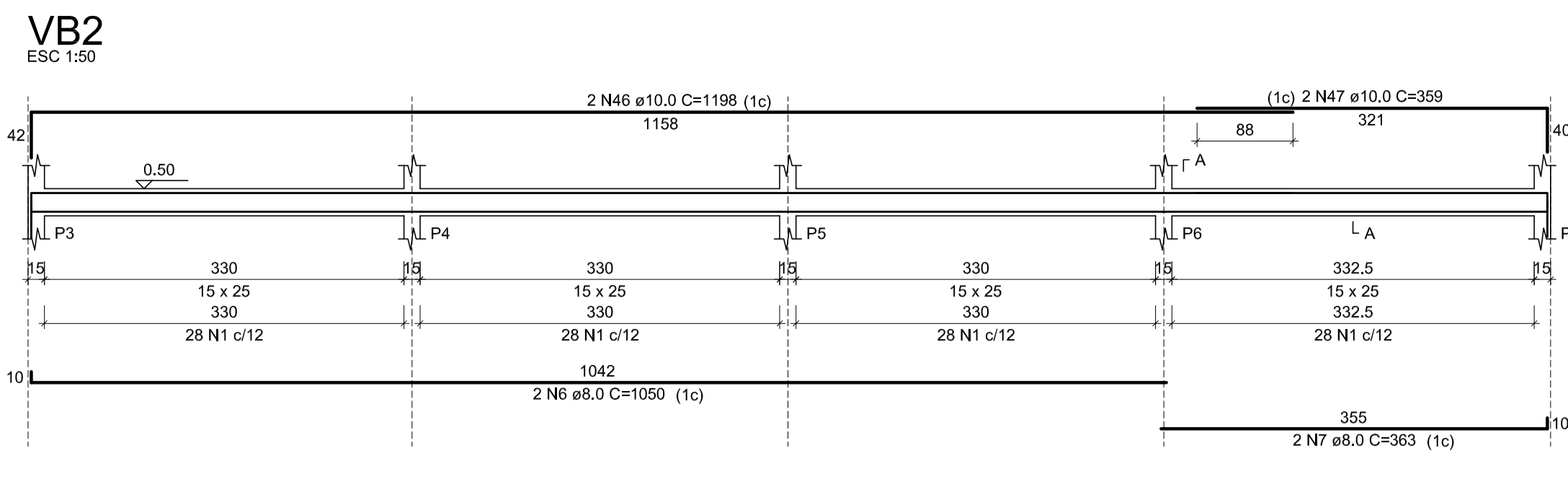
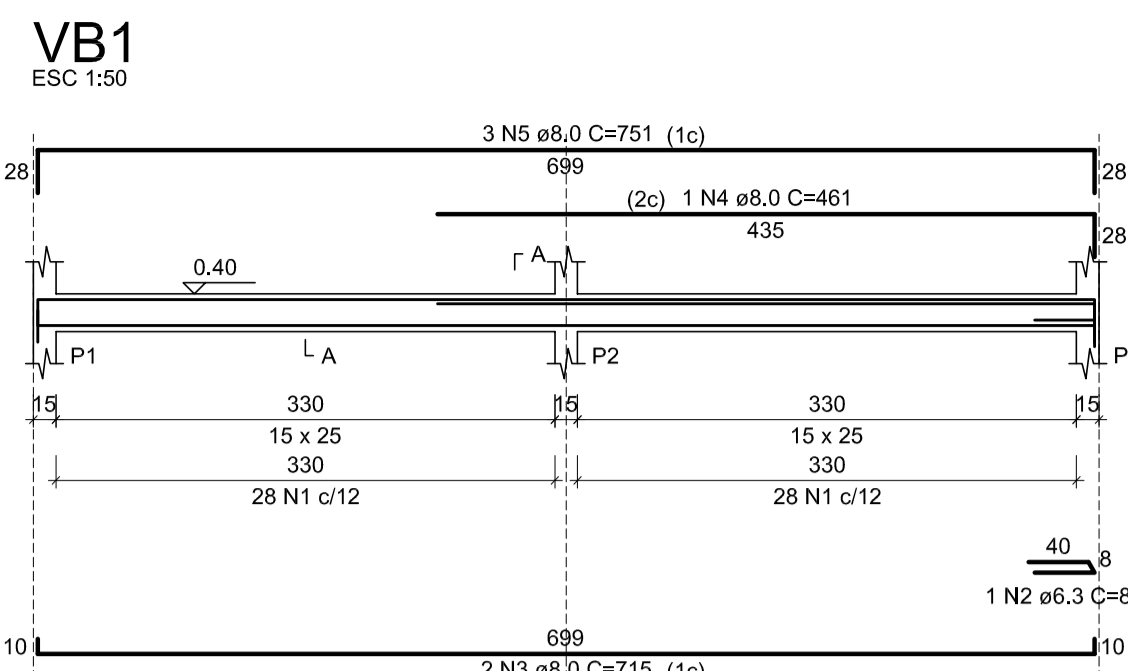
RESUMO DO AÇO

AÇO	DIAM (mm)	C.TOTAL (m)	PESO + 10% (kg)
CA50	6.3	405.2	109.1
	8.0	37.7	16.4
	10.0	278.4	188.8
	5.0	261.2	44.3
PESO TOTAL (kg)			
CA50		314.2	
CA60		44.3	

Volume de concreto (C-20) = 5,18 m³  
 Área de forma = 59,95 m²

ART 28027230211581587

<b>PROJETO ESTRUTURAL</b>		FOLHA <b>2/5</b>
<b>PREFEITURA DE ITARARÉ</b>		DESENHADOR JBAS
SECRETARIA DE DESENVOLVIMENTO MUNICIPAL		DATA OUT / 2021
OBRA <b>CONSTRUÇÃO DE PRAÇA DE ALIMENTAÇÃO</b>		
ENDEREÇO <b>Rua XV de Novembro, esq. com a Rua Major Queiroz-Itararé/SP</b>		
RESP. TÉCNICO <b>JOÃO BATISTA ALVES DOS SANTOS</b> Engenheiro Civil - CREA/SP: 5.061.202.902	PROJETO <b>PLANTA DE LOCAÇÃO DE ESTACAS E PILARES</b>	



RELAÇÃO DO AÇO

AÇO	N	DIAM (mm)	QUANT	C.LINHT (cm)	C.TOTAL (cm)
CA50	1	5.0	977	67	65459
CA50	2	6.3	1	84	84
CA50	3	8.0	2	715	1430
CA50	4	8.0	1	461	461
CA50	5	8.0	3	751	2253
CA50	6	8.0	2	1050	2100
CA50	7	8.0	2	363	726
CA50	8	8.0	2	512	1024
CA50	9	8.0	2	562	1124
CA50	10	8.0	2	699	1398
CA50	11	8.0	2	735	1470
CA50	12	8.0	2	1074	2148
CA50	13	8.0	2	395	790
CA50	14	8.0	2	1198	2396
CA50	15	8.0	2	269	538
CA50	16	8.0	6	174	1044
CA50	17	8.0	4	210	840
CA50	18	8.0	4	177	708
CA50	19	8.0	2	212	424
CA50	20	8.0	2	189	378
CA50	21	8.0	2	206	412
CA50	22	8.0	2	213	426
CA50	23	8.0	2	191	382
CA50	24	8.0	2	227	454
CA50	25	8.0	6	276	1656
CA50	26	8.0	6	292	1752
CA50	27	8.0	12	172	2064
CA50	28	8.0	12	180	2160
CA50	29	8.0	6	531	3186
CA50	30	8.0	1	170	170
CA50	31	8.0	2	567	1134
CA50	32	8.0	2	192	384
CA50	33	8.0	4	577	2308
CA50	34	8.0	2	410	820
CA50	35	8.0	4	593	2372
CA50	36	8.0	4	274	1096
CA50	37	8.0	3	290	870
CA50	38	8.0	2	462	924
CA50	39	8.0	1	160	160
CA50	40	8.0	2	487	974
CA50	41	8.0	2	189	378
CA50	42	8.0	2	187	374
CA50	43	8.0	12	260	3120
CA50	44	8.0	6	268	1608
CA50	45	8.0	6	277	1662
CA50	46	10.0	2	1198	2396
CA50	47	10.0	2	359	718
CA50	48	10.0	2	563	1126
CA50	49	10.0	2	564	1128
CA50	50	10.0	2	293	586

RESUMO DO AÇO

AÇO	DIAM (mm)	C.TOTAL (m)	PESO + 10% (kg)
CA50	6.3	0.8	0.2
CA50	8.0	520.7	226
CA50	10.0	59.5	40.4
CA50	5.0	654.6	111
<b>PESO TOTAL (kg)</b>			<b>367.6</b>
CA50	266.6		
CA60	111		

Volume de concreto (C=20) = 5,07 m³  
Área de forma = 87,83 m²

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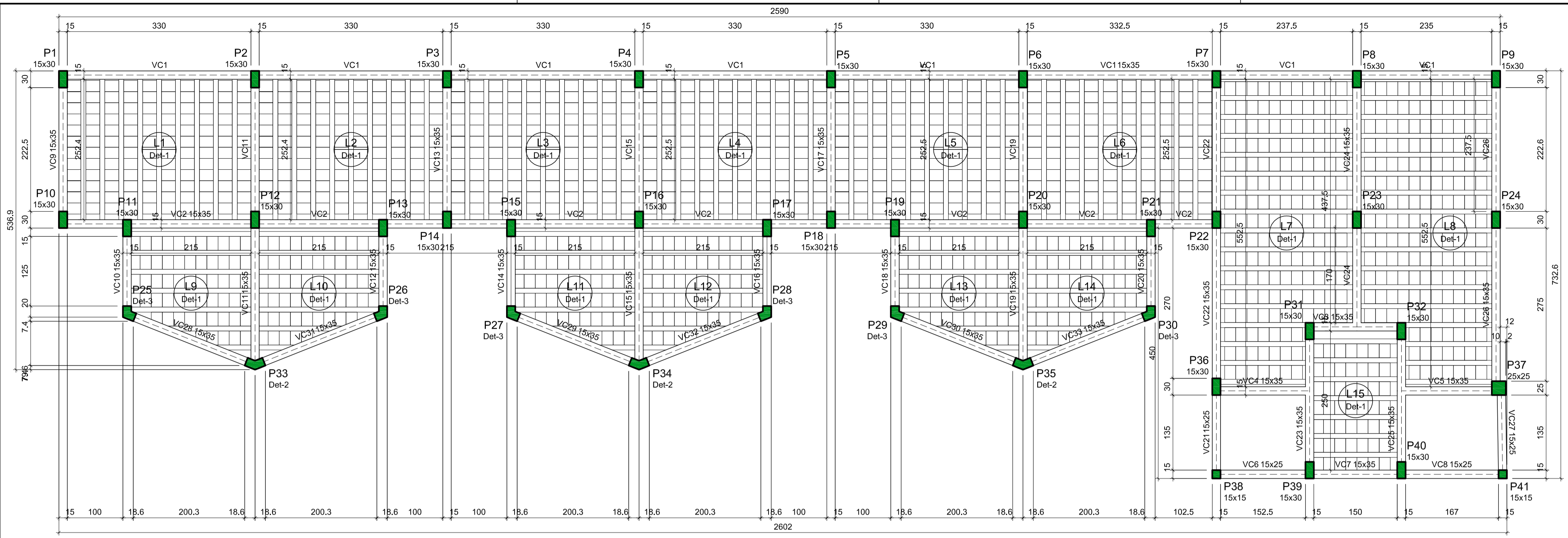
**PROJETO ESTRUTURAL** 3/5

**PREFEITURA DE ITARARÉ**  
SECRETARIA DE DESENVOLVIMENTO MUNICIPAL

CONSTRUÇÃO DE PRAÇA DE ALIMENTAÇÃO

Rua XV de Novembro, esq. com a Rua Major Queiroz-Itararé/SP

PLANTA DE LOCAÇÃO DE ESTACAS E PILARES



Vigas			
Nome	Seção (cm)	Elevação (m)	Nível (m)
VC1	15x35	0.00	3.62
VC2	15x35	0.00	3.62
VC3	15x35	0.00	3.62
VC4	15x35	0.00	3.62
VC5	15x35	0.00	3.62
VC6	15x25	0.00	3.62
VC7	15x35	0.00	3.62
VC8	15x25	0.00	3.62
VC9	15x35	0.00	3.62
VC10	15x35	0.00	3.62
VC11	15x35	0.00	3.62
VC12	15x35	0.00	3.62
VC13	15x35	0.00	3.62
VC14	15x35	0.00	3.62
VC15	15x35	0.00	3.62
VC16	15x35	0.00	3.62
VC17	15x35	0.00	3.62
VC18	15x35	0.00	3.62
VC19	15x35	0.00	3.62
VC20	15x35	0.00	3.62
VC21	15x25	0.00	3.62
VC22	15x35	0.00	3.62
VC23	15x35	0.00	3.62
VC24	15x35	0.00	3.62
VC25	15x35	0.00	3.62
VC26	15x35	0.00	3.62
VC27	15x25	0.00	3.62
VC28	15x35	0.00	3.62
VC29	15x35	0.00	3.62
VC30	15x35	0.00	3.62
VC31	15x35	0.00	3.62
VC32	15x35	0.00	3.62
VC33	15x35	0.00	3.62

Blocos de enchimento				
Detalhe	Tipo	Nome	Dimensões (cm)	Quantidade
1	Lejota cerâmica	B8/25/20	8 25 20	1445

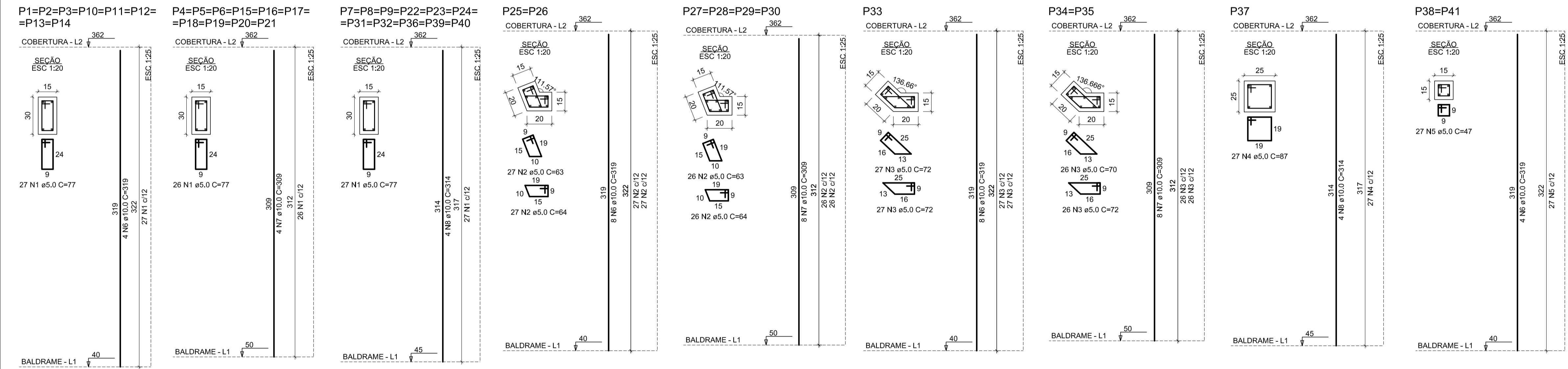
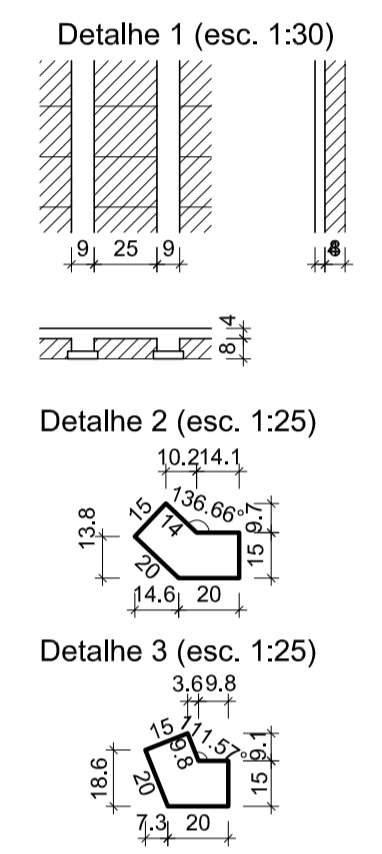
Lajes								
Nome	Tipo	Altura (cm)	Elevação (m)	Nível (m)	Sobrecarga (kN/m²)			
					Peso próprio (kN/m²)	Adicional	Acidental	Localizada
L1	Trelçada 1D	12	0.00	3.62	2.59	1.85	0.50	-
L2	Trelçada 1D	12	0.00	3.62	2.59	1.85	0.50	-
L3	Trelçada 1D	12	0.00	3.62	2.59	1.85	0.50	-
L4	Trelçada 1D	12	0.00	3.62	2.59	1.85	0.50	-
L5	Trelçada 1D	12	0.00	3.62	2.59	1.85	0.50	-
L6	Trelçada 1D	12	0.00	3.62	2.59	1.85	0.50	-
L7	Trelçada 1D	12	0.00	3.62	2.59	1.85	0.50	-
L8	Trelçada 1D	12	0.00	3.62	2.59	1.85	0.50	-
L9	Trelçada 1D	12	0.00	3.62	2.59	1.85	0.50	-
L10	Trelçada 1D	12	0.00	3.62	2.59	1.85	0.50	-
L11	Trelçada 1D	12	0.00	3.62	2.59	1.85	0.50	-
L12	Trelçada 1D	12	0.00	3.62	2.59	1.85	0.50	-
L13	Trelçada 1D	12	0.00	3.62	2.59	1.85	0.50	-
L14	Trelçada 1D	12	0.00	3.62	2.59	1.85	0.50	-
L15	Trelçada 1D	12	0.00	3.62	2.59	1.85	0.50	-

Características dos materiais

f <sub>ck</sub> (MPa)	Ecs (MPa)
20	21287

Dimensão máxima do agregado = 19 mm

Forma do pavimento cobertura (Nível 3.62)  
escala 1:50



RELAÇÃO DO AÇO					
AÇO	N	DIAM (mm)	QUANT	C.UNIT (cm)	C.TOTAL (cm)
CA80	1	5.0	773	77	59521
	2	5.0	316	64	20224
	3	5.0	158	72	11376
CA50	4	5.0	27	87	2349
	5	5.0	54	47	2538
	6	10.0	64	319	20416
	7	10.0	88	309	27192
	8	10.0	48	314	15072

RESUMO DO AÇO			
AÇO	DIAM (mm)	C.TOTAL (m)	PESO + 10% (kg)
CA50	10.0	626.8	425.1
CA80	5.0	957.5	162.3
PESO TOTAL (kg)			
CA50			425.1
CA80			162.3

Volume de concreto (C-20) = 5.80 m³  
Área de forma = 115.91 m²

ART 28027230211581587

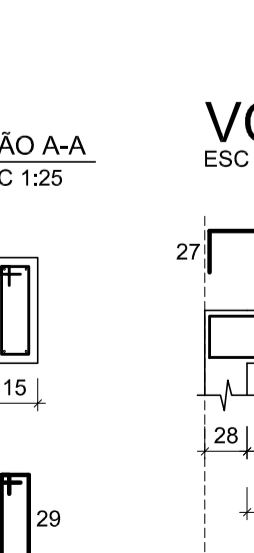
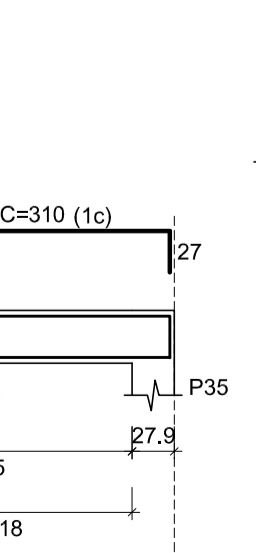
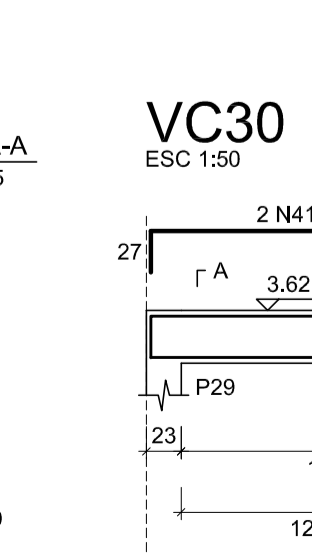
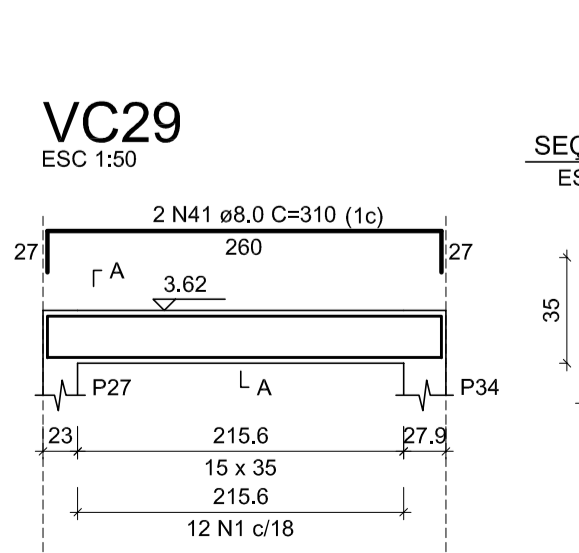
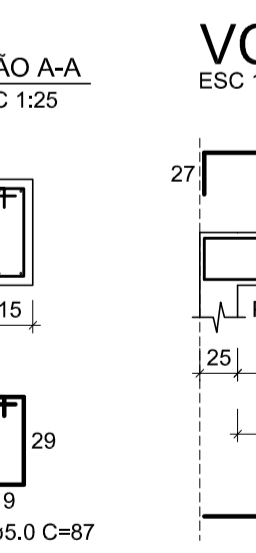
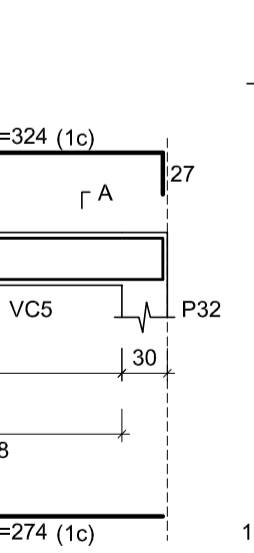
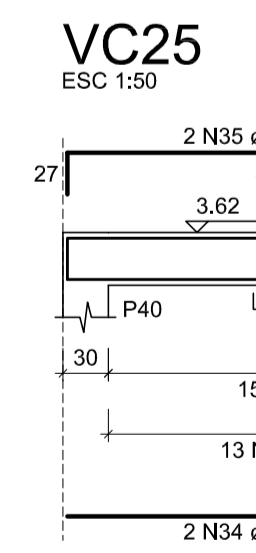
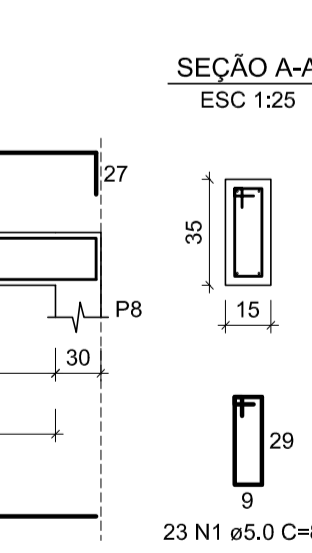
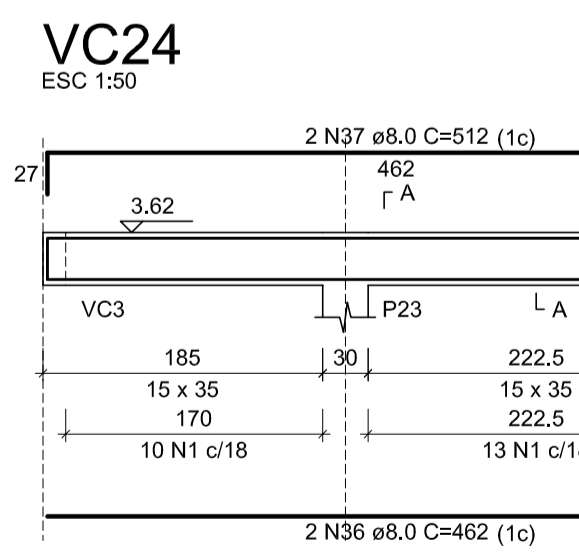
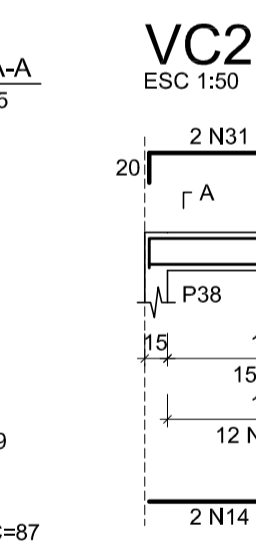
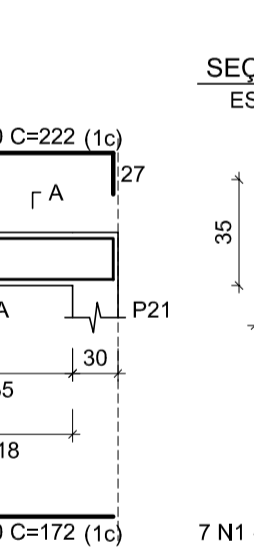
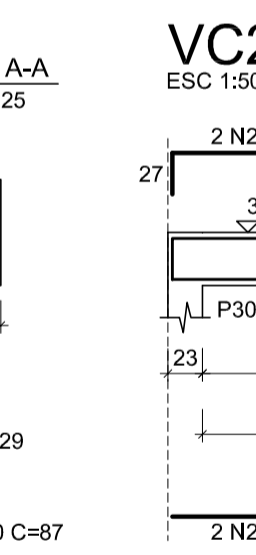
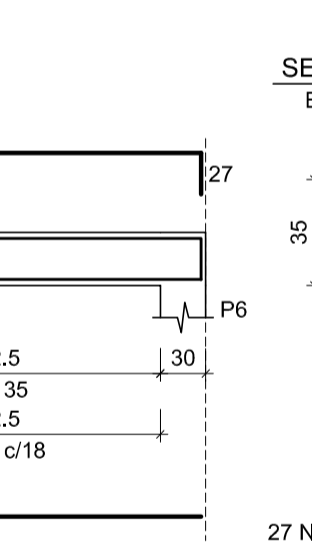
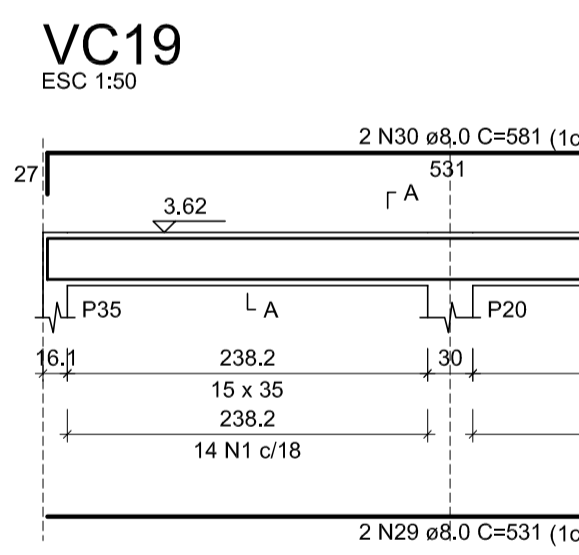
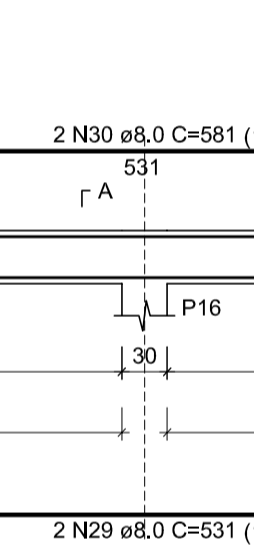
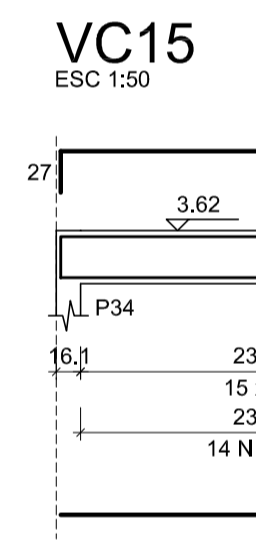
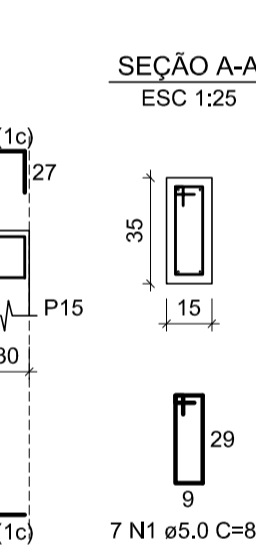
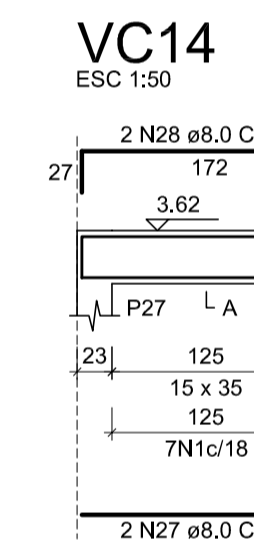
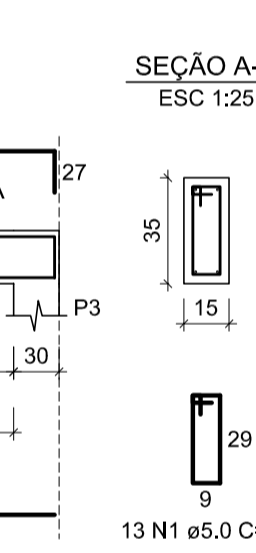
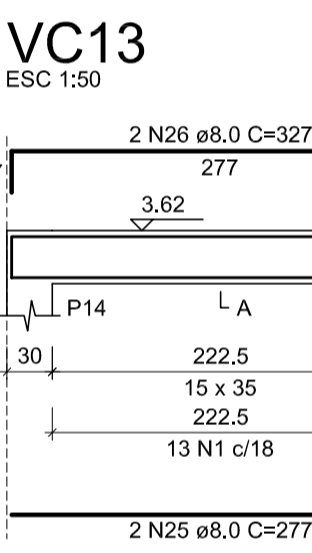
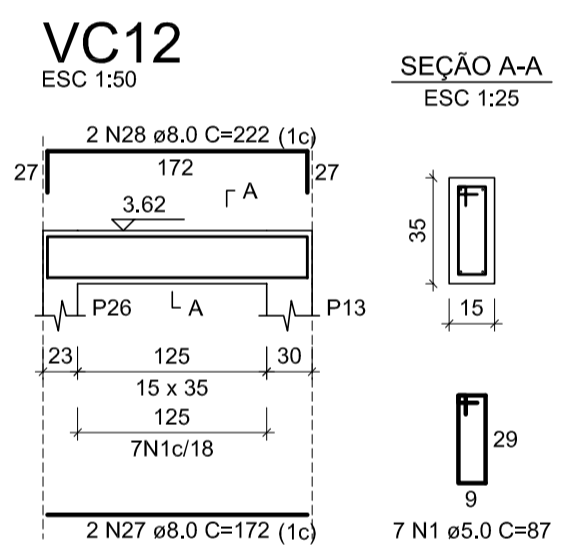
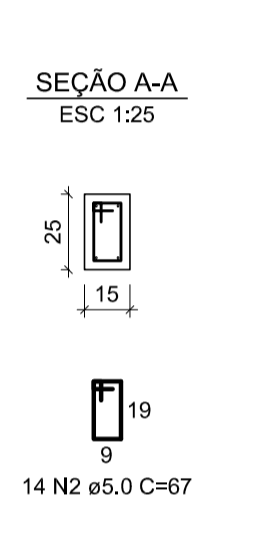
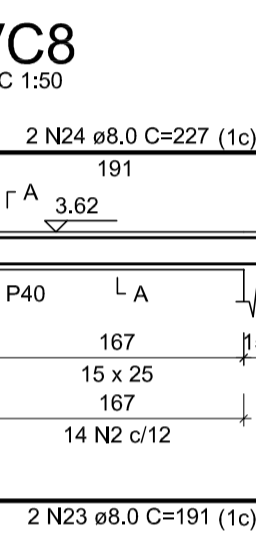
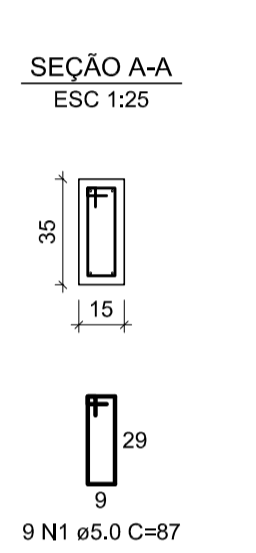
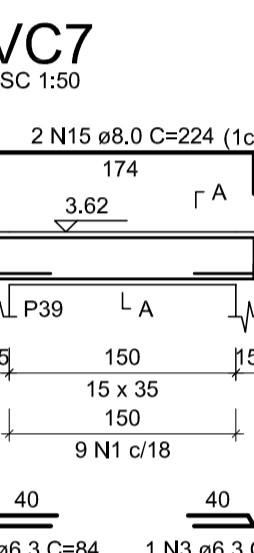
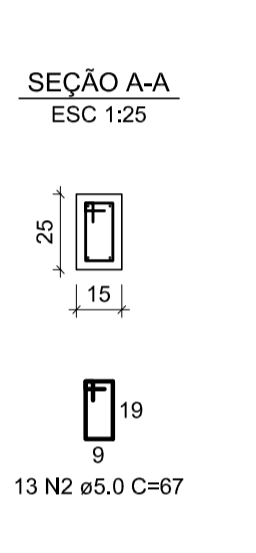
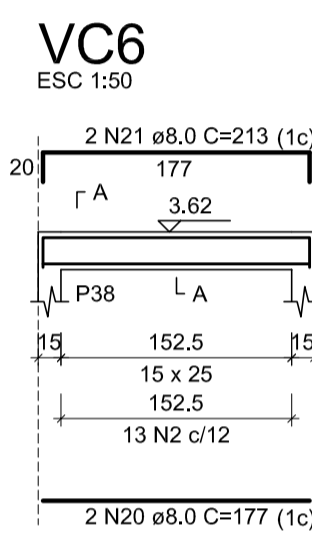
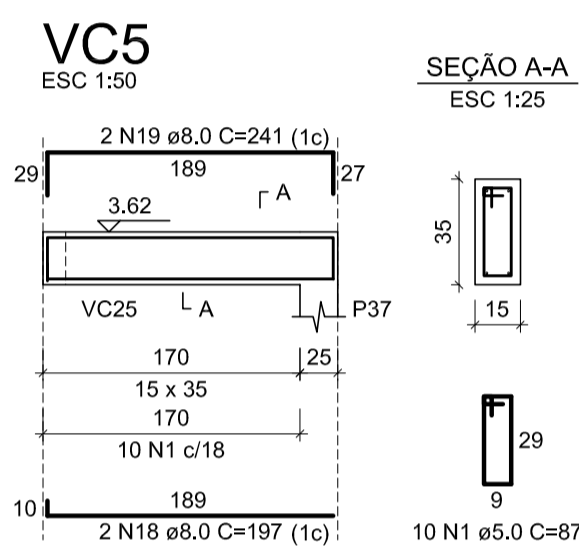
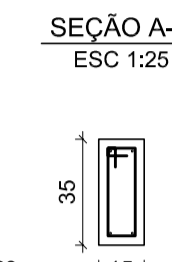
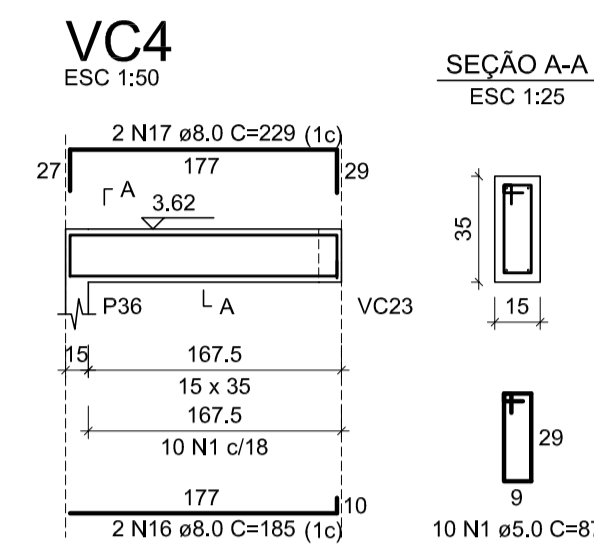
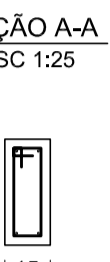
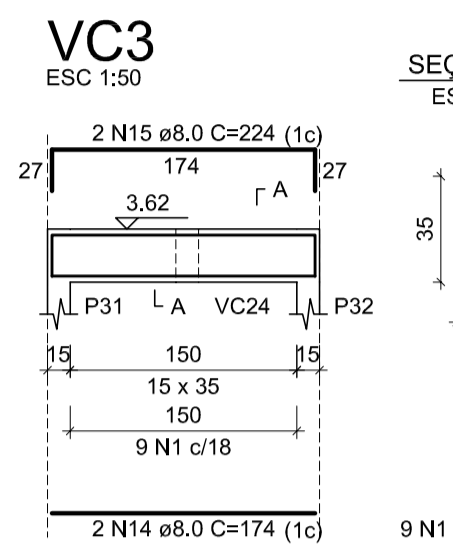
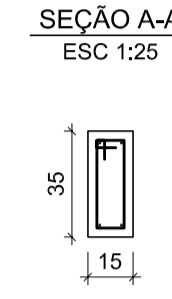
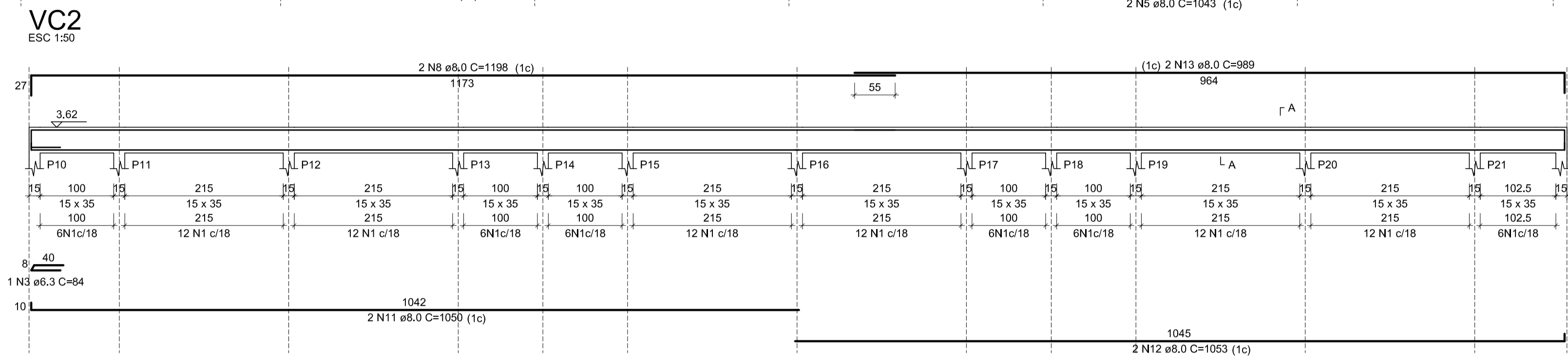
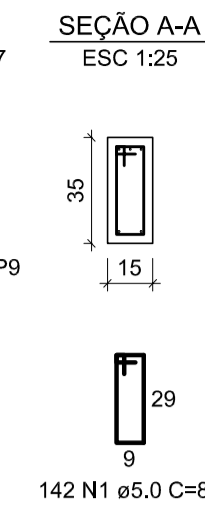
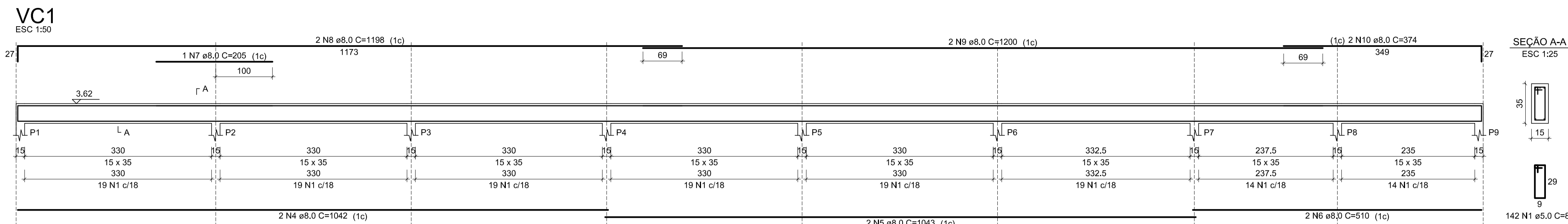
**PROJETO ESTRUTURAL** 4/5

**PREFEITURA DE ITARARÉ**  
SECRETARIA DE DESENVOLVIMENTO MUNICIPAL

CONSTRUÇÃO DE PRAÇA DE ALIMENTAÇÃO

Rua XV de Novembro, esq. com a Rua Major Queiroz-Itararé/SP

PLANTA DE LOCAÇÃO DE ESTACAS E PILARES



RELAÇÃO DO AÇO

VC1	VC2	VC3
VC4	VC5	VC6
VC7	VC8	VC9
VC10	VC11	VC12
VC13	VC14	VC15
VC16	VC17	VC18
VC19	VC20	VC21
VC22	VC23	VC24
VC25	VC26	VC27
VC28	VC29	VC30
VC31	VC32	VC33

AÇO	N	DIAM (mm)	QUANT	C.UNIT (cm)	C.TOTAL (cm)
CA60	1	5.0	628	87	54636
CA50	2	5.0	51	87	3417
	3	6.3	3	84	252
	4	8.0	2	1042	2084
	5	8.0	2	1043	2086
	6	8.0	2	510	1020
	7	8.0	1	205	205
	8	8.0	4	1198	4792
	9	8.0	2	1200	2400
	10	8.0	2	374	748
	11	8.0	2	1050	2100
	12	8.0	2	1053	2106
	13	8.0	2	989	1978
	14	8.0	4	174	696
	15	8.0	4	224	896
	16	8.0	2	185	370
	17	8.0	2	229	458
	18	8.0	2	197	394
	19	8.0	2	241	482
	20	8.0	2	177	354
	21	8.0	2	113	226
	22	8.0	2	210	380
	23	8.0	2	191	382
	24	8.0	2	227	454
	25	8.0	6	276	1656
	26	8.0	6	326	1956
	27	8.0	12	172	2064
	28	8.0	12	222	2664
	29	8.0	6	531	3186
	30	8.0	6	581	3486
	31	8.0	2	210	420
	32	8.0	4	577	2308
	33	8.0	2	2508	2508
	34	8.0	4	274	1096
	35	8.0	4	324	1296
	36	8.0	2	462	924
	37	8.0	2	512	1024
	38	8.0	2	169	338
	39	8.0	2	205	410
	40	8.0	12	260	3120
	41	8.0	12	310	3720

RESUMO DO AÇO

AÇO	DIAM (mm)	C.TOTAL (m)	PESO = 10% (kg)
CA50	6.3	2.5	0.7
CA60	8.0	570	247.4
	6.0	580.5	96.4
<b>PESO TOTAL (kg)</b>			
CA50	248.1		
CA60	98.4		

Volume de concreto (C=20) = 6.96 m³  
Área de forma = 113.00 m²

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**PROJETO ESTRUTURAL** 5/5

**PREFEITURA DE ITARARÉ**  
SECRETARIA DE DESENVOLVIMENTO MUNICIPAL

CONSTRUÇÃO DE PRAÇA DE ALIMENTAÇÃO

Rua XV de Novembro, esq. com a Rua Major Queiroz-Itararé/SP

PROJETO: PLANTA DE LOCAÇÃO DE ESTACAS E PILARES