



PREFEITURA MUNICIPAL DE PAINS
CRONOGRAMA FÍSICO-FINANCEIRO



OBRA: CONSTRUÇÃO DE VESTIÁRIO E SANITÁRIO PNE NA QUADRA POLIESPORTIVA DA PRAÇA DE ESPORTES

04/08/2026

BASE (MG): SICOR-MG 04-2026 DES. - SINAPI-MG: 06-2026 DES. - SUDECAP 04-2026 DES. - COPASA-MG 06-2026

BDI: 25,01%

ITEM	DESCRIÇÃO DOS SERVIÇOS	TOTAL		1º MÊS	2º MÊS	3º MÊS	4º MÊS	5º MÊS	TOTAIS (R\$)
1	INSTALAÇÕES INICIAIS DAS OBRAS	7.495,57	% Físico	100,00%					100,00%
			Financeiro	R\$ 7.495,57	R\$ -	R\$ -	R\$ -	R\$ -	R\$ 7.495,57
2	DEMOLIÇÃO - ENTRADA	2.064,85	% Físico	100,00%					100,00%
			Financeiro	R\$ 2.064,85	R\$ -	R\$ -	R\$ -	R\$ -	R\$ 2.064,85
3	INFRAESTRUTURA - SAPATAS E BALDRAME	14.099,11	% Físico	75,00%	25,00%				100,00%
			Financeiro	R\$ 10.574,33	R\$ 3.524,78	R\$ -	R\$ -	R\$ -	R\$ 14.099,11
4	SUPERESTRUTURA	41.435,29	% Físico		35,00%	65,00%			100,00%
			Financeiro	R\$ -	R\$ 14.502,35	R\$ 26.932,94	R\$ -	R\$ -	R\$ 41.435,29
5	ALVENARIA	26.124,43	% Físico		100,00%				100,00%
			Financeiro	R\$ -	R\$ 26.124,43	R\$ -	R\$ -	R\$ -	R\$ 26.124,43
6	REVESTIMENTO	25.482,96	% Físico			25,00%	75,00%		100,00%
			Financeiro	R\$ -	R\$ -	R\$ 6.370,74	R\$ 19.112,22	R\$ -	R\$ 25.482,96
7	PISO	8.353,74	% Físico			50,00%	50,00%		100,00%
			Financeiro	R\$ -	R\$ -	R\$ 4.176,87	R\$ 4.176,87	R\$ -	R\$ 8.353,74
8	DIVISÓRIAS	15.895,18	% Físico					100,00%	100,00%
			Financeiro	R\$ -	R\$ -	R\$ -	R\$ -	R\$ 15.895,18	R\$ 15.895,18
9	INSTALAÇÕES ELÉTRICAS	17.115,72	% Físico				25,00%	75,00%	100,00%
			Financeiro	R\$ -	R\$ -	R\$ -	R\$ 4.278,93	R\$ 12.836,79	R\$ 17.115,72
10	INSTALAÇÕES DE ÁGUA FRIA	17.169,24	% Físico				60,00%	40,00%	100,00%
			Financeiro	R\$ -	R\$ -	R\$ -	R\$ 10.301,54	R\$ 6.867,70	R\$ 17.169,24
11	INSTALAÇÕES DE ESGOTO SANITÁRIO	10.005,62	% Físico		50,00%	50,00%			100,00%
			Financeiro	R\$ -	R\$ 5.002,81	R\$ 5.002,81	R\$ -	R\$ -	R\$ 10.005,62
12	ESQUADRIAS	13.925,94	% Físico				70,00%	30,00%	100,00%
			Financeiro	R\$ -	R\$ -	R\$ -	R\$ 9.748,16	R\$ 4.177,78	R\$ 13.925,94
13	PINTURA	7.390,91	% Físico					100,00%	100,00%
			Financeiro	R\$ -	R\$ -	R\$ -	R\$ -	R\$ 7.390,91	R\$ 7.390,91
14	ACESSÓRIOS PNE	1.880,83	% Físico					100,00%	100,00%
			Financeiro	R\$ -	R\$ -	R\$ -	R\$ -	R\$ 1.880,83	R\$ 1.880,83
15	ADAPTAÇÃO ARQUIBANCADA	4.405,44	% Físico	80,00%	20,00%				100,00%
			Financeiro	R\$ 3.524,35	R\$ 881,09	R\$ -	R\$ -	R\$ -	R\$ 4.405,44
16	COBERTURA	18.043,94	% Físico				100,00%		100,00%
			Financeiro	R\$ -	R\$ -	R\$ -	R\$ 18.043,94	R\$ -	R\$ 18.043,94
17	EQUIPAMENTOS E ACESSÓRIOS	5.268,56	% Físico					100,00%	100,00%
			Financeiro	R\$ -	R\$ -	R\$ -	R\$ -	R\$ 5.268,56	R\$ 5.268,56
18	LIMPEZA FINAL	837,86	% Físico					100,00%	100,00%
			Financeiro	R\$ -	R\$ -	R\$ -	R\$ -	R\$ 837,86	R\$ 837,86
	TOTAIS (R\$)	236.995,19		23.659,10	50.035,46	42.483,36	65.661,66	55.155,61	236.995,19
	TOTAIS (%)			9,98%	21,11%	17,93%	27,71%	23,27%	100,00%
	ACUMULADO		-	23.659,10	73.694,56	42.483,36	139.356,22	97.638,97	236.995,19



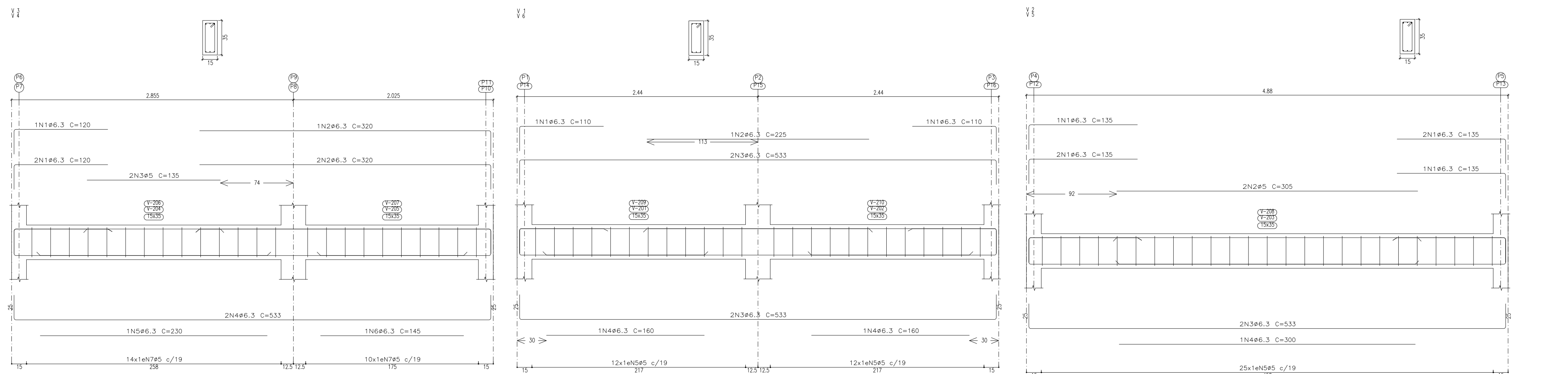
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Vinicius Henrique Alves
Engenheiro Civil
CREA-MG 253.246/D

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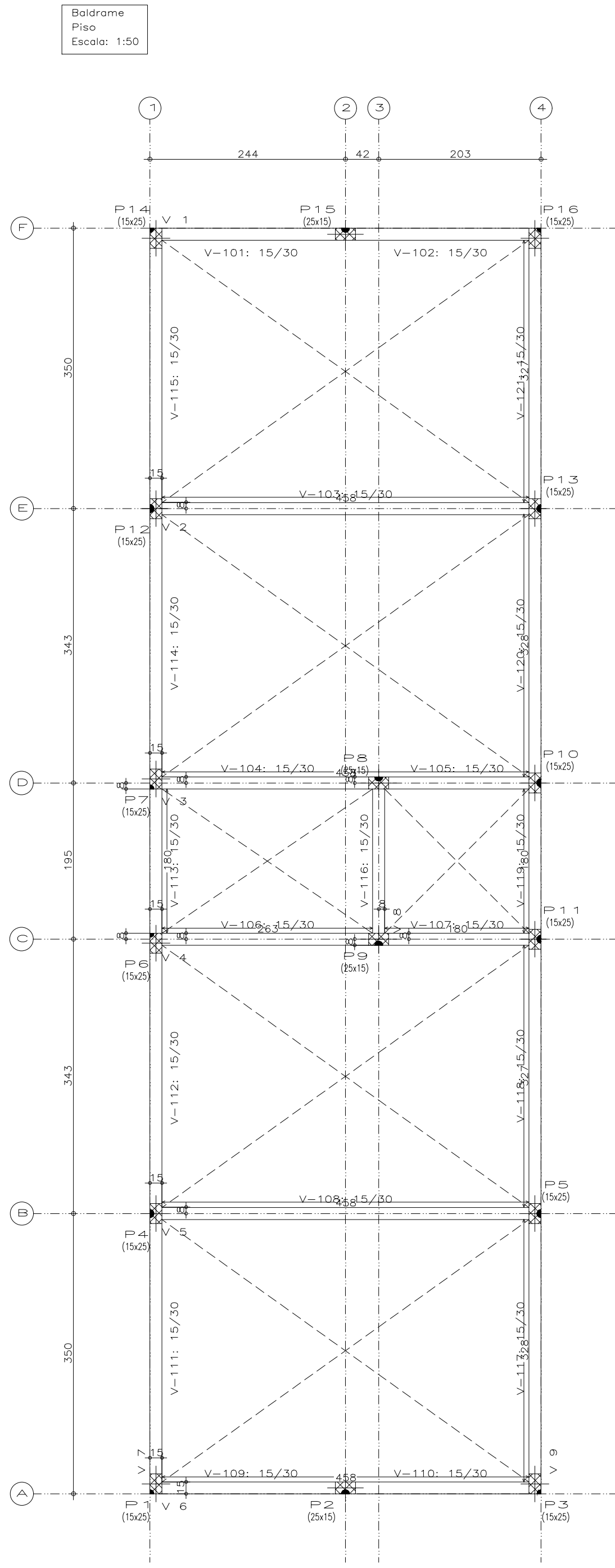
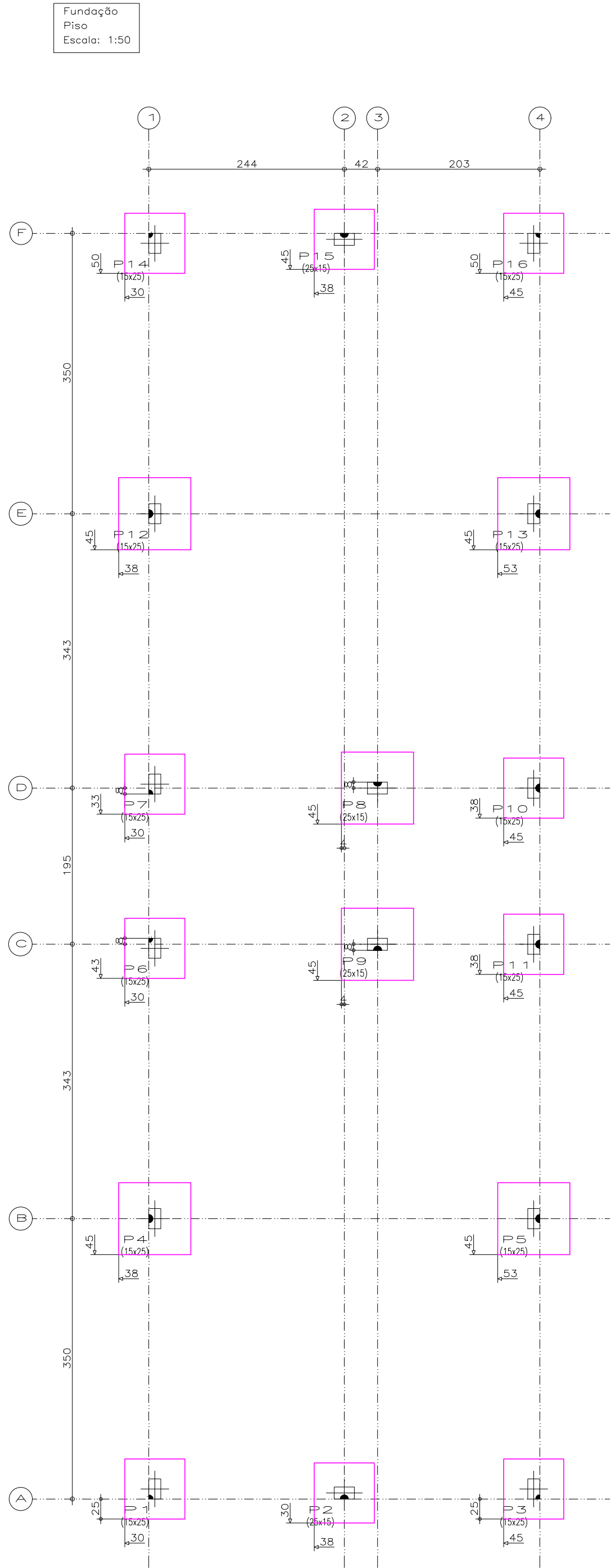
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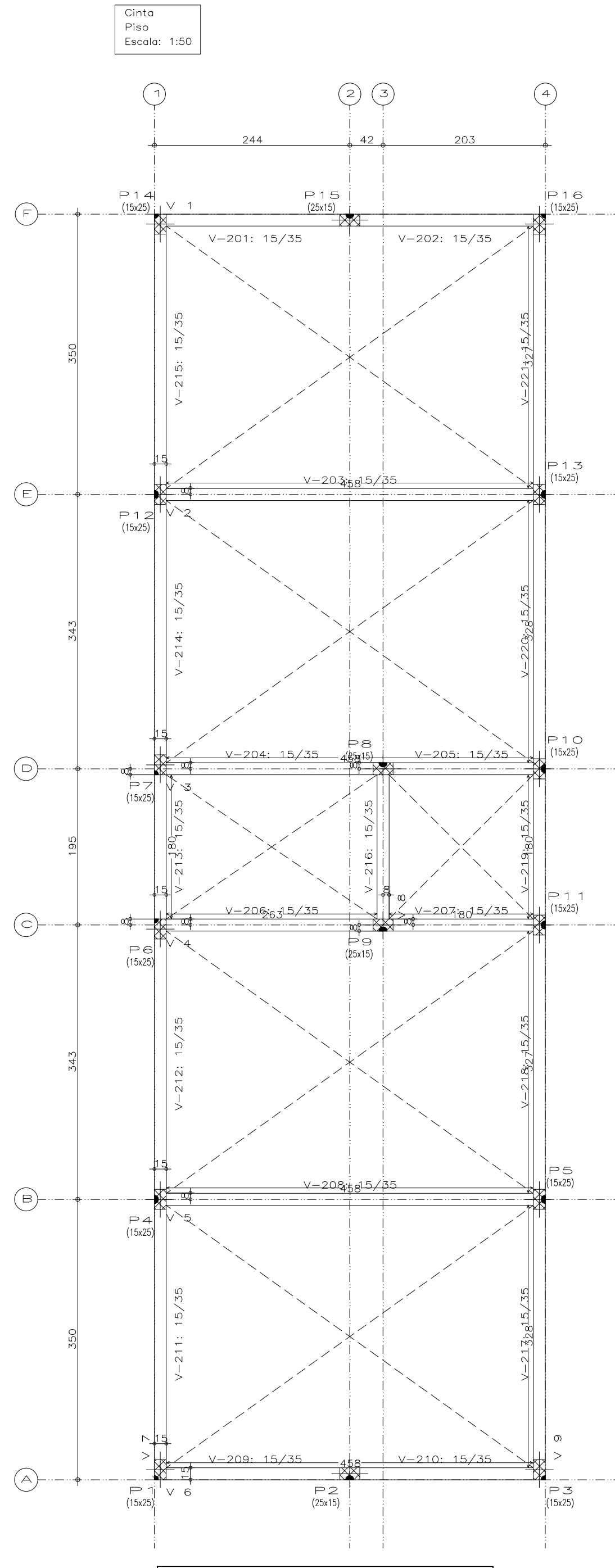
Resumo Aço	Comp. total	Peso+10%	
Desenho de vigas	(m)	(kg)	Total
CA-50			
Ø5	314.9	54	
Ø6.3	330.4	89	143

Projeto: 868		ESTRUTURAL	Data: 24/07/2026
Local:		RUA PADRE JOSÉ VENÂNCIO	
Nome:		PRAÇA DE ESPORTES	
Des.no.:		Planta: VESTIÁRIO DA QUADRA EST-CINTA	
Autor:			
VINICIUS H. ALVES			

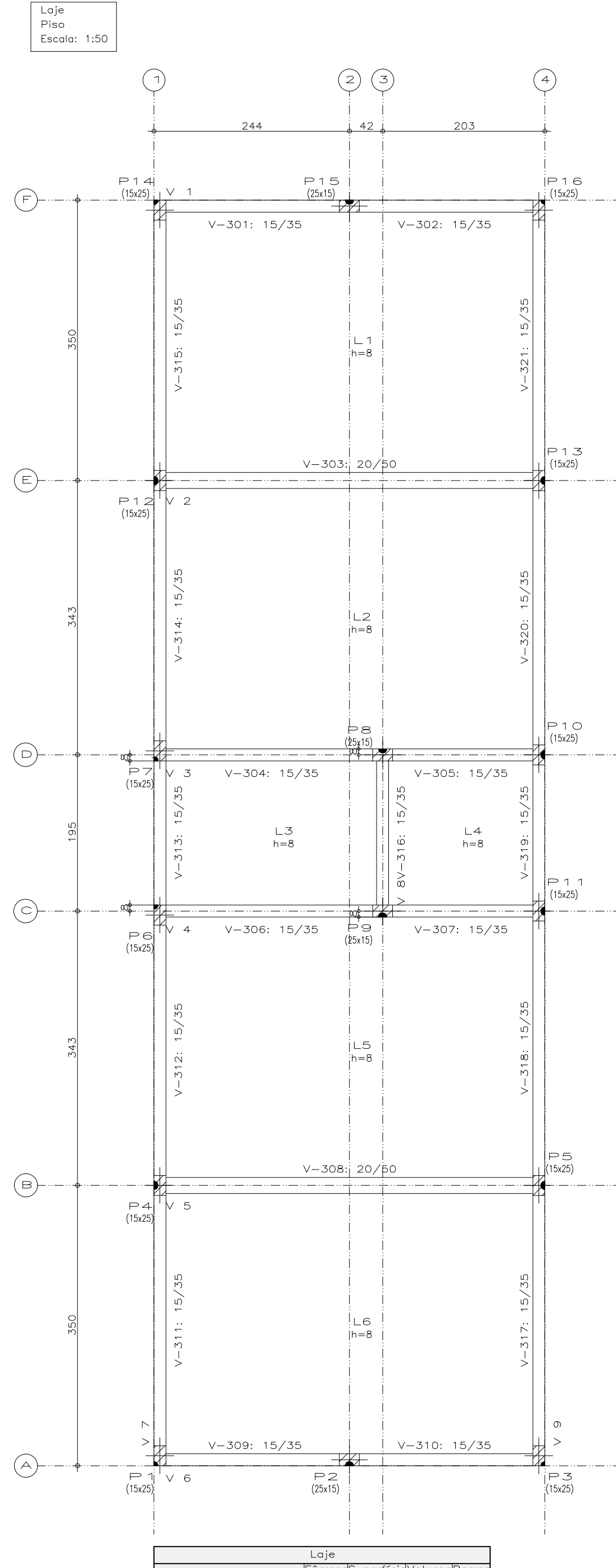
Elemento	Pos.	Diam.	Q.	Esquema (cm)	Comp. (cm)	Total (cm)	CA-50 (kg)
V 7	1	ø6.3	6		160	960	2.4
	2	ø6.3	6		250	1500	3.7
	3	ø6.3	3		455	1365	3.3
	4	ø5	8		130	1040	1.6
	5	ø6.3	2		925	1850	4.5
	6	ø6.3	2		720	1440	3.5
	7	ø6.3	4		245	980	2.4
	8	ø6.3	1		125	125	0.4
	9	ø5	78		88	6864	10.6
	Total+10% (x2):						35.8
V 9	1	ø6.3	6		160	960	2.4
	2	ø6.3	6		220	1320	3.2
	3	ø6.3	3		385	1155	2.8
	4	ø5	4		130	520	0.8
	5	ø5	4		200	800	1.3
	6	ø6.3	2		920	1840	4.5
	7	ø6.3	2		725	1450	3.6
	8	ø6.3	2		245	490	1.2
	9	ø6.3	2		260	520	1.3
	10	ø5	77		88	6776	10.6
Total+10% (x2):						34.9	
V 3=V 4	1	ø6.3	3		120	360	0.9
	2	ø6.3	3		320	960	2.4
	3	ø5	2		135	270	0.4
	4	ø6.3	2		533	1066	2.6
	5	ø6.3	1		230	230	0.6
	6	ø6.3	1		145	145	0.4
	7	ø5	24		88	2112	3.3
Total+10% (x2):						11.7 23.4	
V 1=V 6	1	ø6.3	2		110	220	0.5
	2	ø6.3	1		225	225	0.6
	3	ø6.3	4		533	2132	5.2
	4	ø6.3	2		160	320	0.8
	5	ø5	24		88	2112	3.3
Total+10% (x2):						11.4 22.8	
V 2=V 5	1	ø6.3	6		135	810	2.0
	2	ø5	2		305	610	1.0
	3	ø6.3	2		533	1066	2.6
	4	ø6.3	1		300	300	0.7
	5	ø5	25		88	2200	3.5
Total+10% (x2):						10.8 21.6	
V 8	1	ø6.3	5		255	1275	3.1
	2	ø6.3	1		145	145	0.4
	3	ø5	10		88	880	1.4
Total+10% (x2):						5.4 ø5: 54.6 ø6.3: 89.3 Total: 143.9	



Baldrame				
Elemento	Fôrma (m ²)	Superfície (m ²)	Volume (m ³)	Barra (kg)
Vigas	34.13	8.53	2.840	137
Pilares	1.60	-	0.160	241
Total	-	8.53	3.000	378
Índices (por m ²)	-	-	0.329	41.40
Superfície total: 9.13 m ²				



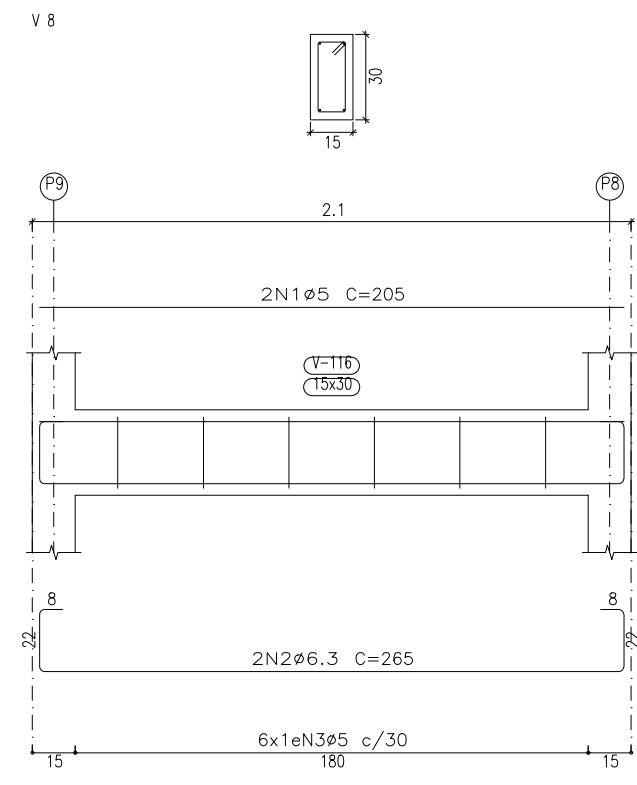
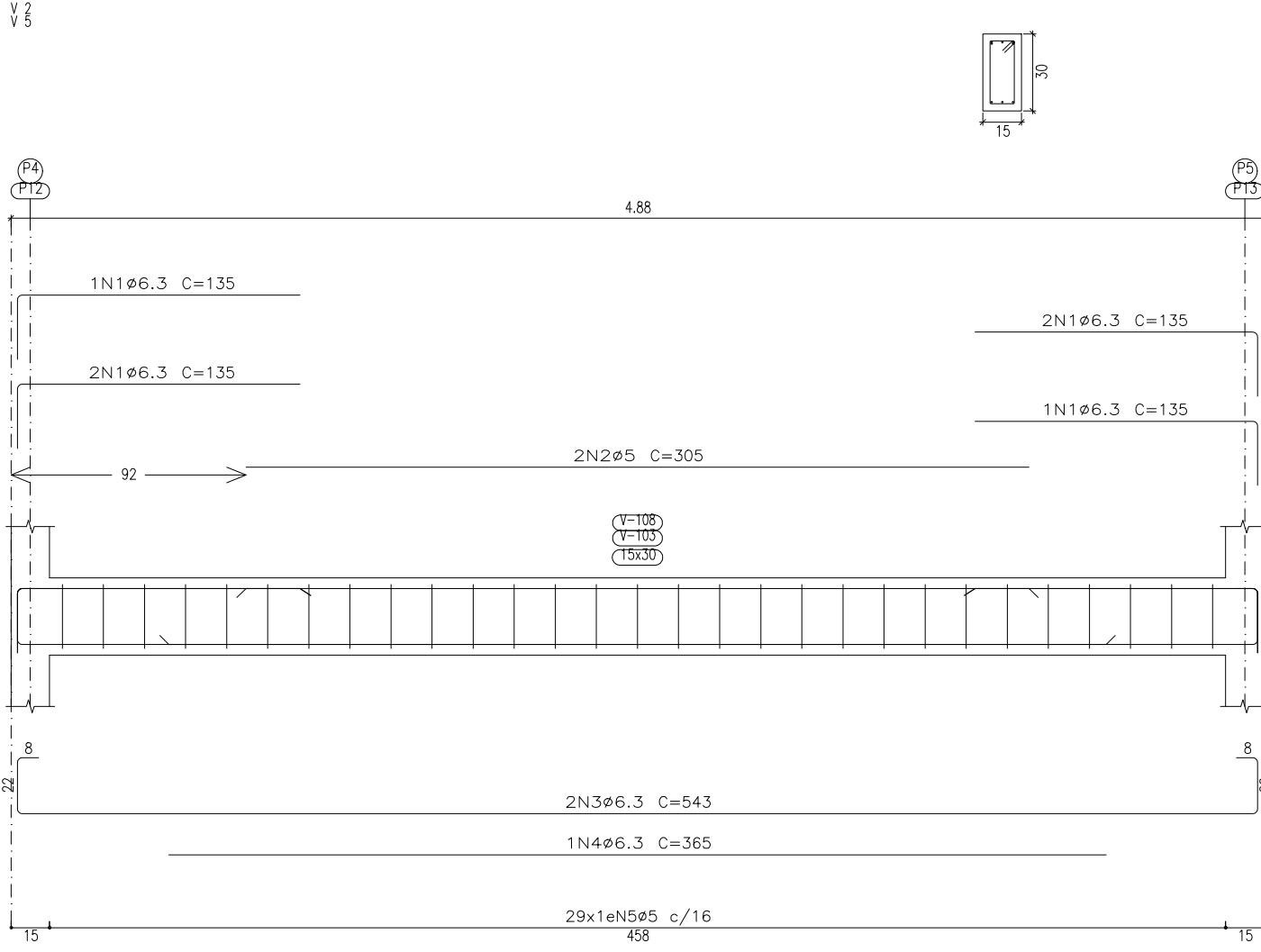
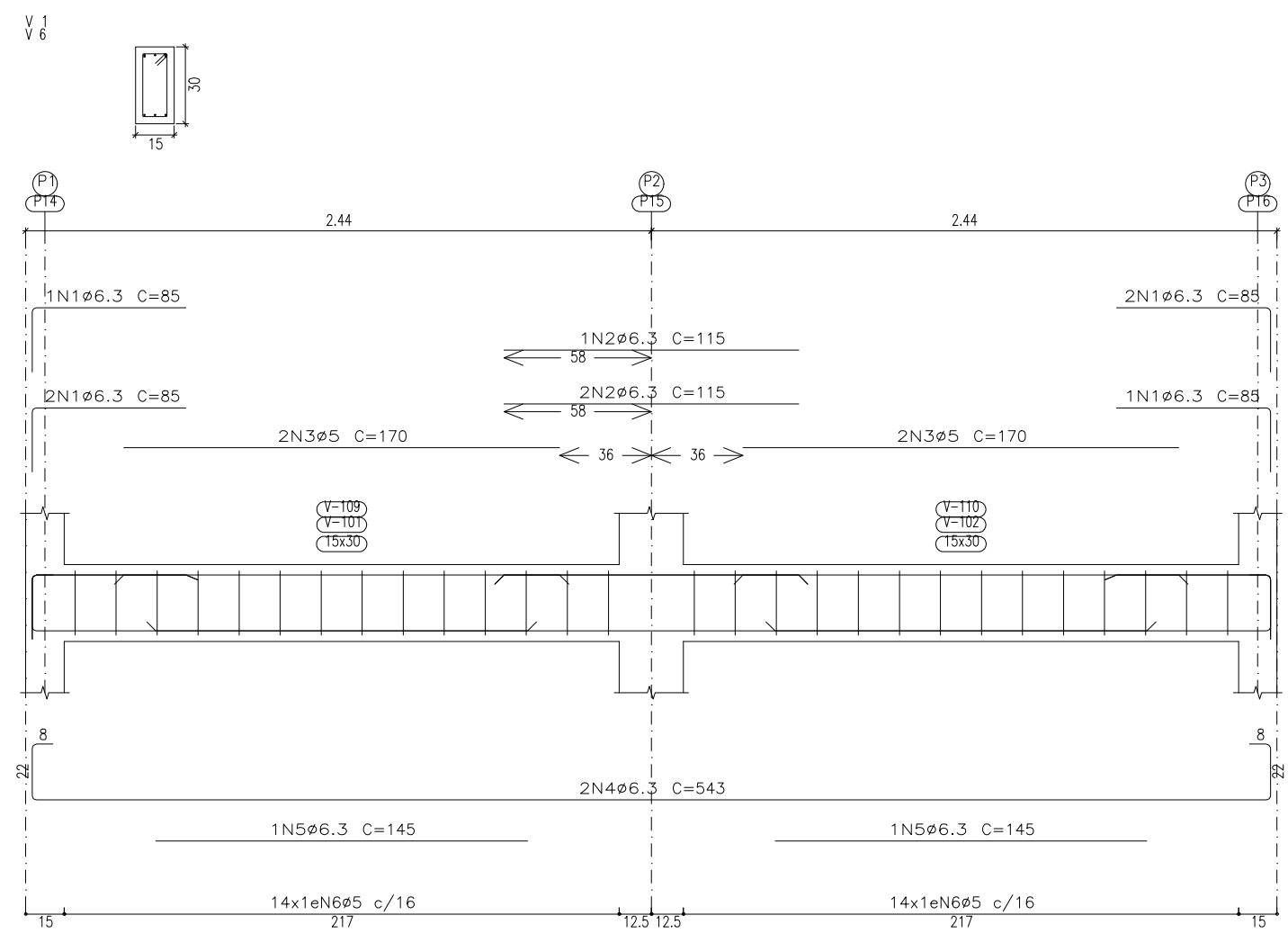
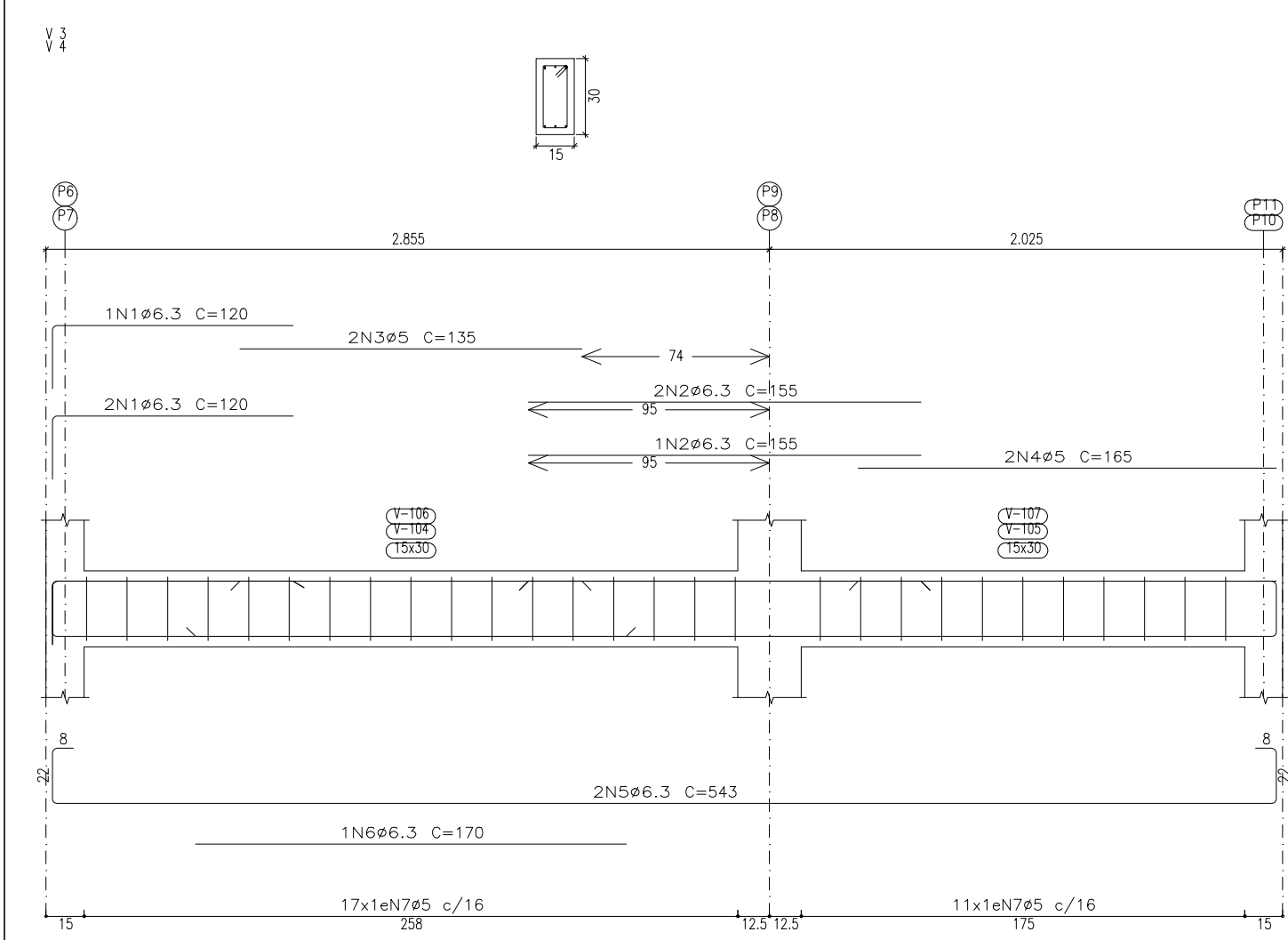
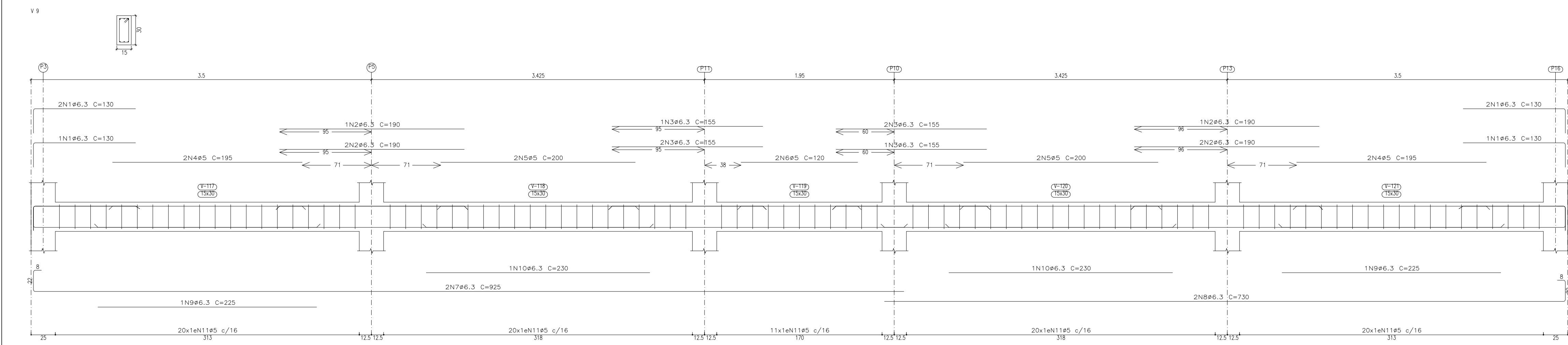
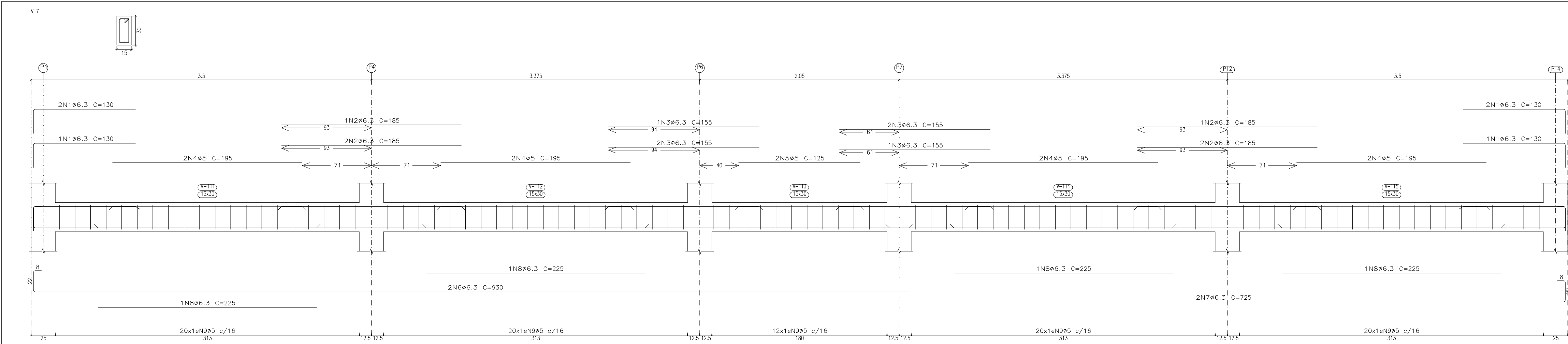
Cinta				
Elemento	Fôrma (m ²)	Superfície (m ²)	Volume (m ³)	Barra (kg)
Vigas	39.82	8.53	3.310	143
Pilares	7.68	-	0.320	18
Total	-	8.53	3.630	161
Índices (por m ²)	-	-	0.398	17.63
Superfície total: 9.13 m ²				



Loje				
Elemento	Fôrma (m ²)	Superfície (m ²)	Volume (m ³)	Barra (kg)
Lojes maciças	67.51	5.400	276	
Vigas	36.44	8.99	3.770	162
Pilares	26.88	-	1.280	98
Total	-	76.50	10.450	536
Índices (por m ²)	-	-	0.136	6.95
Superfície total: 77.10 m ²				

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Data de emissão: 2026.08.04
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Projeto: 868	ESTRUTURAL	Data: 24/07/2026
Local: Nome:	RUA PADRE JOSÉ VENÂNCIO PRAÇA DE ESPORTES	
Des.no.:	Planta: VESTIÁRIO DA QUADRA EST-FORMA	
Autor: VINICIUS H. ALVES		



Elemento	Pos.	Diam.	Q.	Esquema (cm)	Comp. (cm)	Total (cm)	CA-50 (kg)	
V 7	1	ø6.3	6		130	780	1.9	
	2	ø6.3	6		185	1110	2.7	
	3	ø6.3	6		155	930	2.3	
	4	ø5	8		195	1560	2.4	
	5	ø5	2		125	250	0.4	
	6	ø6.3	2		900	930	1860	4.6
	7	ø6.3	2		695	725	1450	3.6
	8	ø6.3	4		225	900	2.2	
	9	ø5	92		78	7176	11.3	
							Total+10%	34.5
V 9	1	ø6.3	6		130	780	1.9	
	2	ø6.3	6		190	1140	2.8	
	3	ø6.3	6		155	930	2.3	
	4	ø5	4		195	780	1.2	
	5	ø5	4		200	800	1.3	
	6	ø5	2		120	240	0.4	
	7	ø6.3	2		895	925	1850	4.5
	8	ø6.3	2		700	730	1460	3.6
	9	ø6.3	2		225	225	450	1.1
	10	ø6.3	2		230	230	460	1.1
	11	ø5	91		78	7098	11.1	
						Total+10%	34.4	
V 3=V 4	1	ø6.3	3		95	120	360	0.9
	2	ø6.3	3		155	155	465	1.1
	3	ø5	2		135	135	270	0.4
	4	ø5	2		165	165	330	0.5
	5	ø6.3	2		481	543	1086	2.7
	6	ø6.3	1		170	170	170	0.4
	7	ø5	28		78	2184	3.4	
						Total+10% (x2):	10.3	
							20.6	
V 1=V 6	1	ø6.3	6		60	85	510	1.2
	2	ø6.3	3		115	115	345	0.8
	3	ø5	4		170	170	680	1.1
	4	ø6.3	2		481	543	1086	2.7
	5	ø6.3	2		145	145	290	0.7
	6	ø5	28		78	2184	3.4	
						Total+10% (x2):	10.9	
							21.8	
V 2=V 5	1	ø6.3	6		110	135	810	2.0
	2	ø5	2		305	305	610	1.0
	3	ø6.3	2		481	543	1086	2.7
	4	ø6.3	1		365	365	365	0.9
	5	ø5	29		78	2262	3.6	
						Total+10% (x2):	11.2	
							22.4	
V 8	1	ø5	2		205	205	410	0.6
	2	ø6.3	2		205	265	530	1.3
	3	ø5	6		78	468	0.7	
						Total+10%:	2.9	
						ø5:	61.7	
						ø6.3:	74.9	
						Total:	136.6	

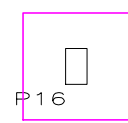
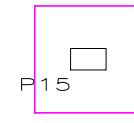
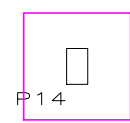
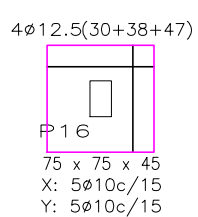
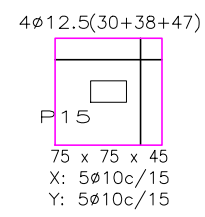
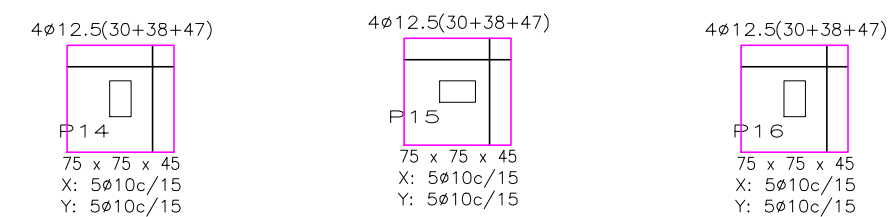
Resumo Aço	Comp. total	Peso+10%	Total
Desenho de vigas	(m)	(kg)	
CA-50	ø5	358.2	62
	ø6.3	277.8	75
			137

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Nome:	PRAÇA DE ESPORTES		
Des.no.:	Planta: VESTIÁRIO DA QUADRA EST - FUNDAÇÃO E BALDRAME		
Autor:	VINICIUS H. ALVES		

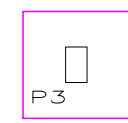
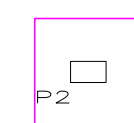
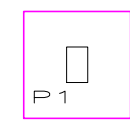
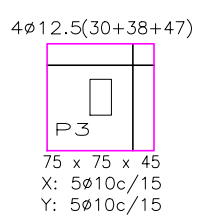
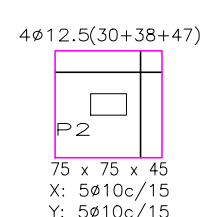
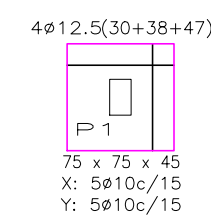
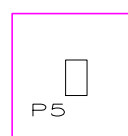
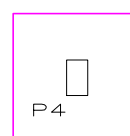
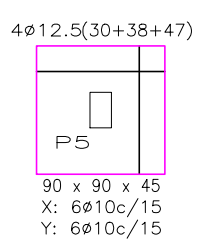
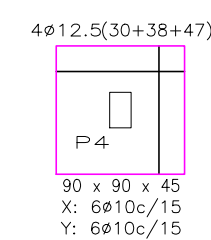
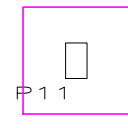
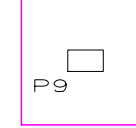
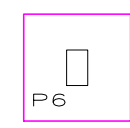
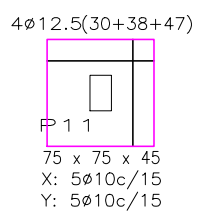
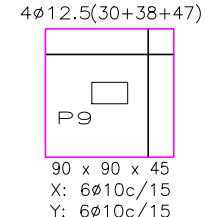
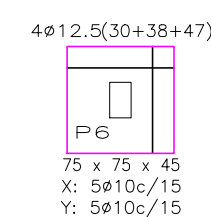
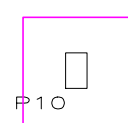
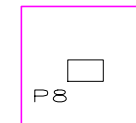
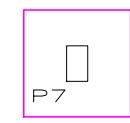
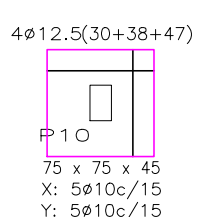
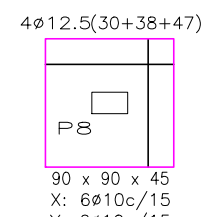
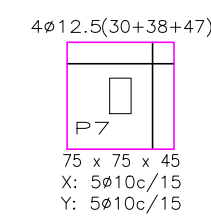
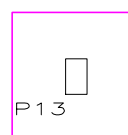
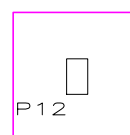
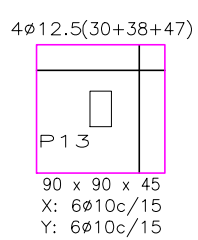
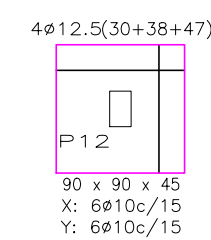
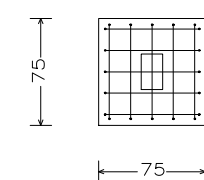
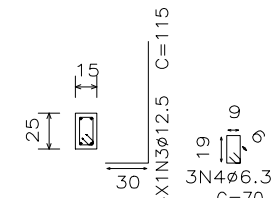
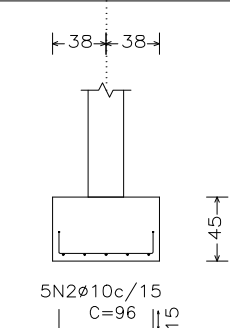
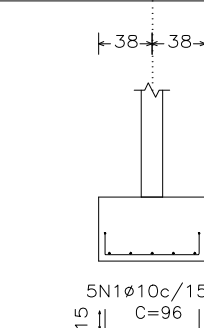


P1, P3, P6, P7, P10, P11, P14 e P16

(P1, P3, P6, P7, P10, P11, P14 e P16)

(P1, P3, P6, P7, P10, P11, P14 e P16)

P1, P3, P6, P7, P10, P11, P14 e P16



Fundação
Detalhamento fundação
Concreto: C30, em geral
Escala: 1:50

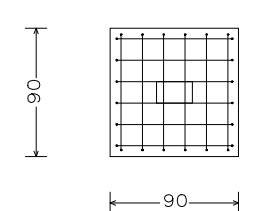
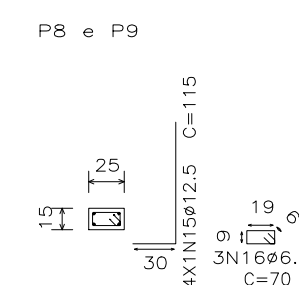
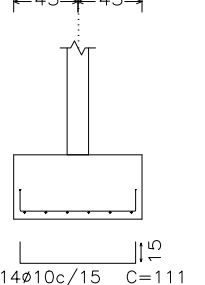
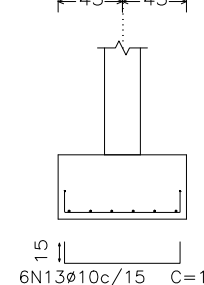
Fundação
Detalhamento fundação
Concreto: C30, em geral
Escala: 1:50

P8 e P9

(P8 e P9)

(P8 e P9)

P8 e P9

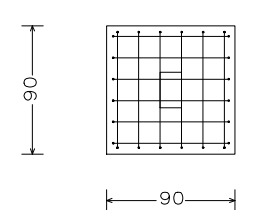
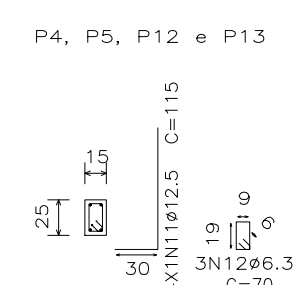
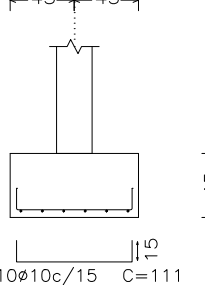
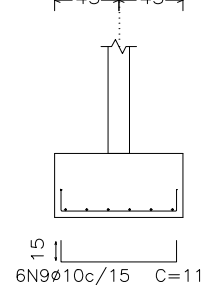


P4, P5, P12 e P13

(P4, P5, P12 e P13)

(P4, P5, P12 e P13)

P4, P5, P12 e P13

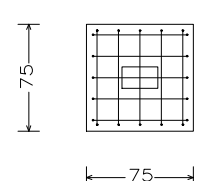
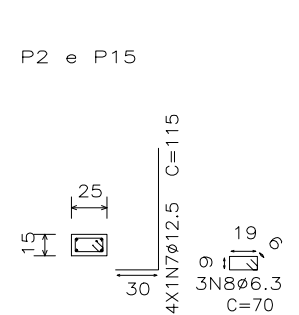
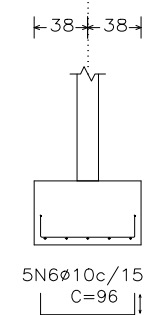
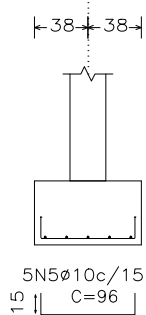


P2 e P15

(P2 e P15)

(P2 e P15)

P2 e P15



ITAMAR
RAFAEL DE
CASTRO:363
15338615

Assinado de forma
digital por ITAMAR
RAFAEL DE
CASTRO:36315338615
Dados: 2026.08.04
12:21:23 -03'00'

Documento assinado digitalmente
VINÍCIUS MENRIQUE ALVES
Data: 2026.08.04 12:21:23 -03'00'
Verifique em: https://validar.it.gov.br/

Elemento	Pos.	Diam.	Q.	Dob.	Ret.	Dob.	Comp.	Tota	CA-50
P1=P3=P6=P7=P10 P11=P14=P16	1	ø10	5	15	66	15	96	480	3.0
	2	ø10	5	15	66	15	96	480	3.0
	3	ø12.5	4	30	85	15	115	460	4.4
	4	ø6.3	3		70		70	210	0.5
Total+10% (x8): 96.0									12.0
P2=P15	5	ø10	5	15	66	15	96	480	3.0
	6	ø10	5	15	66	15	96	480	3.0
	7	ø12.5	4	30	85	15	115	460	4.4
	8	ø6.3	3		70		70	210	0.5
Total+10% (x2): 24.0									12.0
P4=P5=P12=P13	9	ø10	6	15	81	15	111	666	4.1
	10	ø10	6	15	81	15	111	666	4.1
	11	ø12.5	4	30	85	15	115	460	4.4
	12	ø6.3	3		70		70	210	0.5
Total+10% (x4): 57.6									14.4
P8=P9	13	ø10	6	15	81	15	111	666	4.1
	14	ø10	6	15	81	15	111	666	4.1
	15	ø12.5	4	30	85	15	115	460	4.4
	16	ø6.3	3		70		70	210	0.5
Total+10% (x2): 28.8									14.4
									ø6.3: 9.0
									ø10: 120.0
									ø12.5: 77.4
									Total: 206.4

Resumo Aço	Comp. total	Peso+10%	Total
Fundação	(m)	(kg)	
Detalhamento fundação			
CA-50	ø6.3	33.6	9
	ø10	175.9	119
	ø12.5	73.6	78
			206

QUADRO DE ELEMENTOS DE FUNDAÇÃO				
Referências	Dimensões (cm)	Altura (cm)	Armadura inf. X	Armadura inf. Y
P1, P2, P3, P6, P7, P10, P11, P14, P15 e P16	75x75	45	5ø10c/15	5ø10c/15
P4, P5, P8, P9, P12 e P13	90x90	45	6ø10c/15	6ø10c/15

Arranques
nºxx(ao+bb+cc)
Kc
bb

Projeto:	ESTRUTURAL	Data:	24/07/2026
Local:	RUA PADRE JOSÉ VENÂNCIO		
Nome:	PRAÇA DE ESPORTES		
Des.no.:	Planta: VESTIÁRIO DA QUADRA EST - FUNDAÇÃO E BALDRAME		
Autor:	VINÍCIUS H. ALVES		