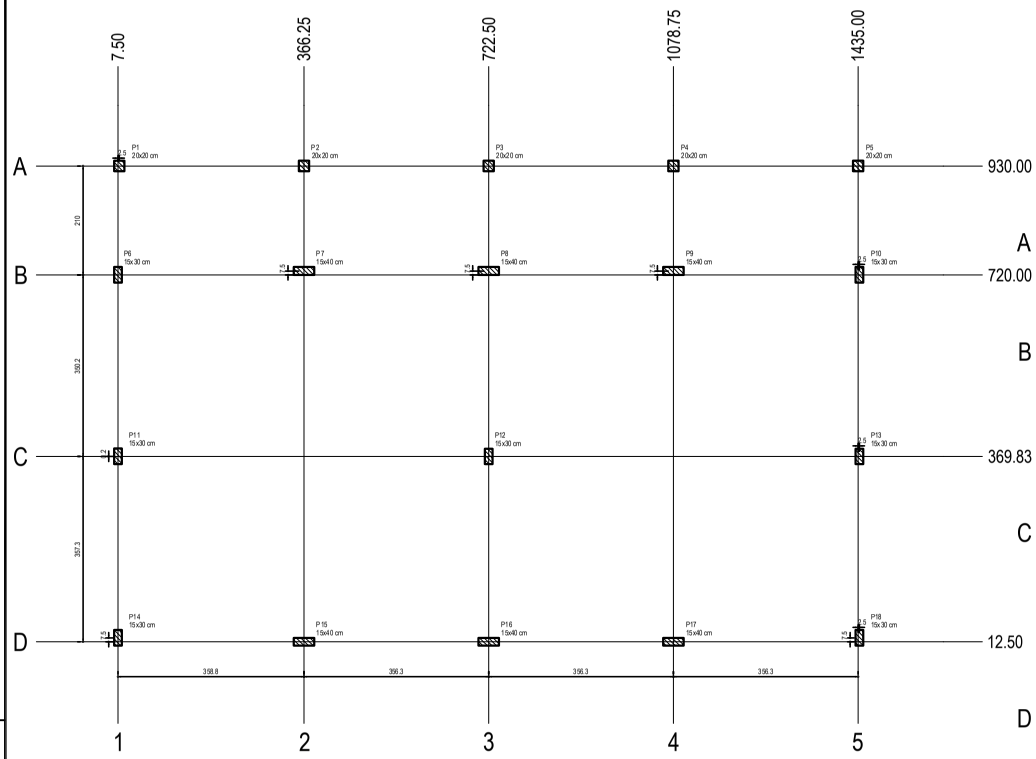
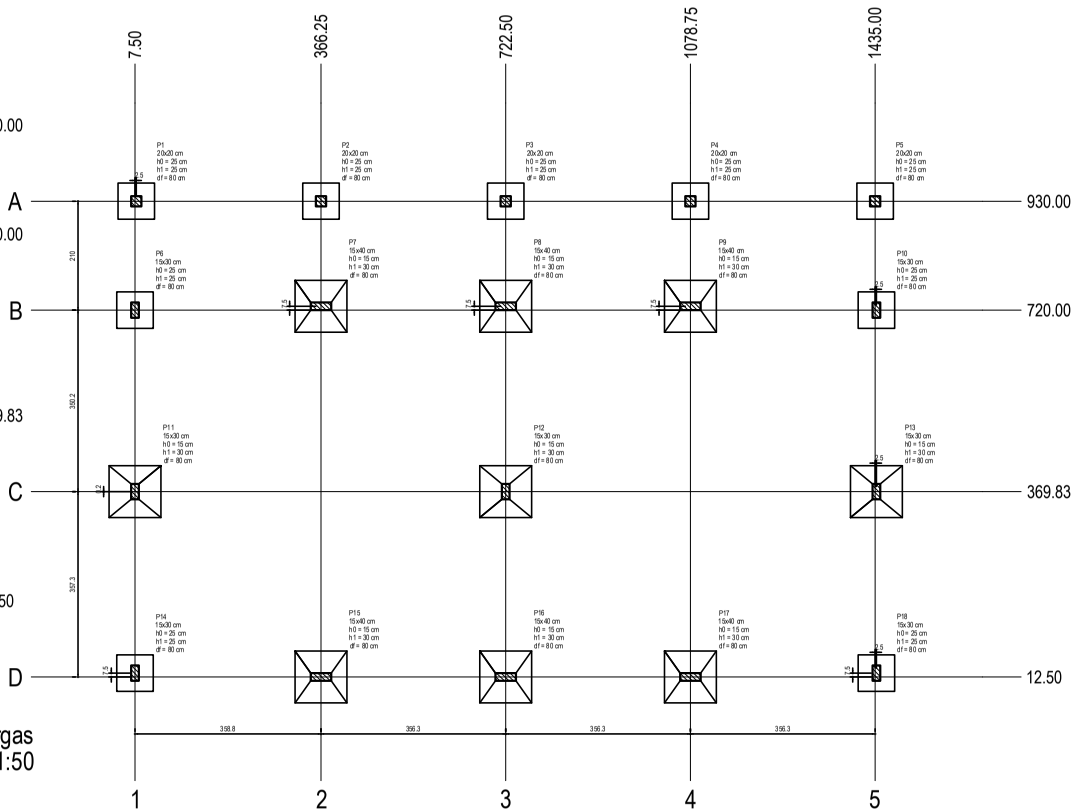


Planta de cargas
escala 1:50

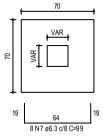


Planta de locação
escala 1:50

Pilar					
Nome	Seção (cm)	X (cm)	Y (cm)	Carga Máx. (tf)	Carga Mín. (tf)
P1	20x20	10.00	930.00	1.9	1.8
P2	20x20	366.25	930.00	2.4	2.3
P3	20x20	722.50	930.00	3.0	2.9
P4	20x20	1078.75	930.00	2.4	2.3
P5	20x20	1435.00	930.00	1.9	1.8
P6	15x30	7.50	720.00	3.0	2.9
P7	15x40	366.25	727.50	5.6	5.5
P8	15x40	722.50	727.50	4.2	4.1
P9	15x40	1078.75	727.50	5.6	5.5
P10	15x30	1437.50	720.00	3.0	2.9
P11	15x30	7.50	370.00	4.0	4.0
P12	15x30	722.50	369.83	6.6	6.6
P13	15x30	1437.50	369.83	4.0	4.0
P14	15x30	7.50	20.00	2.3	2.2
P15	15x40	366.25	12.50	4.2	4.1
P16	15x40	722.50	12.50	3.4	3.3
P17	15x40	1078.75	12.50	4.2	4.1
P18	15x30	1437.50	20.00	2.3	2.2

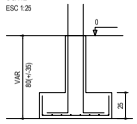
S1=S2=S3=S4=S5=S6=S10=S14=S18

PLANTA
ESC 1:25

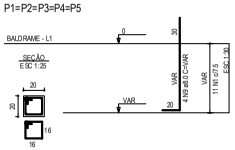


Solo compactado sobre a sapata
peso específico > 1600.00 kgf/m³

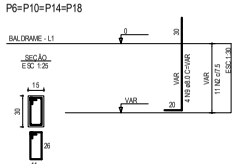
CORTE
ESC 1:25



P1=P2=P3=P4=P5



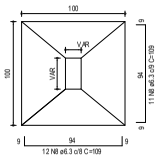
P6=P10=P14=P18



Pilar						Fundação				
Nome	Seção (cm)	X (cm)	Y (cm)	Carga Máx. (tf)	Carga Mín. (tf)	Lado B (cm)	Lado H (cm)	h0 / ha (cm)	h1 / hb (cm)	df (cm)
P1	20x20	10.00	930.00	1.9	1.8	70	70	25	25	80
P2	20x20	366.25	930.00	2.4	2.3	70	70	25	25	80
P3	20x20	722.50	930.00	3.0	2.9	70	70	25	25	80
P4	20x20	1078.75	930.00	2.4	2.3	70	70	25	25	80
P5	20x20	1435.00	930.00	1.9	1.8	70	70	25	25	80
P6	15x30	7.50	720.00	3.0	2.9	70	70	25	25	80
P7	15x40	366.25	727.50	5.6	5.5	100	100	15	30	80
P8	15x40	722.50	727.50	4.2	4.1	100	100	15	30	80
P9	15x40	1078.75	727.50	5.6	5.5	100	100	15	30	80
P10	15x30	1437.50	720.00	3.0	2.9	70	70	25	25	80
P11	15x30	7.50	370.00	4.0	4.0	100	100	15	30	80
P12	15x30	722.50	369.83	6.6	6.5	100	100	15	30	80
P13	15x30	1437.50	369.83	4.0	4.0	100	100	15	30	80
P14	15x30	7.50	20.00	2.3	2.2	70	70	25	25	80
P15	15x40	366.25	12.50	4.2	4.1	100	100	15	30	80
P16	15x40	722.50	12.50	3.4	3.3	100	100	15	30	80
P17	15x40	1078.75	12.50	4.2	4.1	100	100	15	30	80
P18	15x30	1437.50	20.00	2.3	2.2	70	70	25	25	80

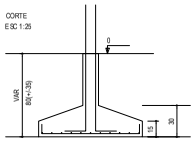
S7=S8=S9=S11=S12=S13=S15=S16=S17

PLANTA
ESC 1:25

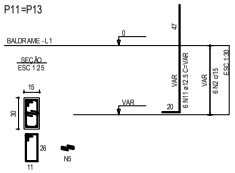


Solo compactado sobre a sapata
peso específico > 1600.00 kgf/m³

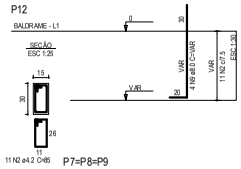
CORTE
ESC 1:25



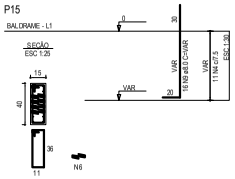
P11=P13



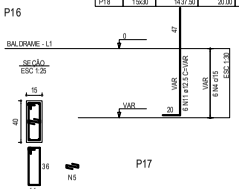
P12



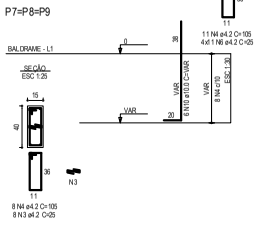
P15



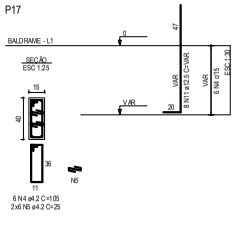
P16



P7=P8=P9



P17



RELAÇÃO DO AÇO

5xP1 2xP11 P18 9xS11	4xP6 P12 P17	3xP7 P15 9xS1

AÇO	N	DIAM (mm)	QUANT	C.UNIT (cm)	C.TOTAL (cm)
CA60	1	4.2	55	75	4125
	2	4.2	67	85	5695
	3	4.2	24	25	600
	4	4.2	47	105	4935
	5	4.2	30	25	750
CA50	6	4.2	44	25	1100
	7	6.3	144	99	14256
	8	6.3	207	109	22563
	9	8.0	56	VAR	VAR
	10	10.0	18	VAR	VAR
	11	12.5	26	VAR	VAR

RESUMO DO AÇO

AÇO	DIAM (mm)	C.TOTAL (m)	PESO + 10% (kg)
CA50	6.3	348.2	99.1
	8.0	70	30.4
	10.0	23.9	16.2
	12.5	36.7	38.8
CA60	4.2	172.1	20.6

PESO TOTAL (kg)	
CA50	184.6
CA60	20.6

Volume de concreto (C-25) = 3.72 m³
Área de forma = 25.22 m²

	Revisões da Prancha		
001	Revisão Geral	Rubens	15/02/2021
Nu.	Comentários	Autor	Data

PROJETO ESTRUTURAL

RUBENS L. R. SOUZA
Rua Dr. Luiz Oscar Pleuchner 1079
Fone/Fax: (42) 3268-3598
rubensluiz@globomail.com

PREFEITURA MUNICIPAL DE CAPANEMA

AMPLIAÇÃO NA ESCOLA MUNICIPAL BENJAMIM CONSTANT
PLANTA DE LOCAÇÃO E CARGAS
DETALHE SAPATAS

Lote Nº 74 Gleba 119-CP - Distrito de Pinheiro em Capanema-PR

Escala: 01/50

Desenho: Eng Rubens | Área: 136,64 m2

Data: 15/02/2021 | Unidade: cm

Prancha 01/04