


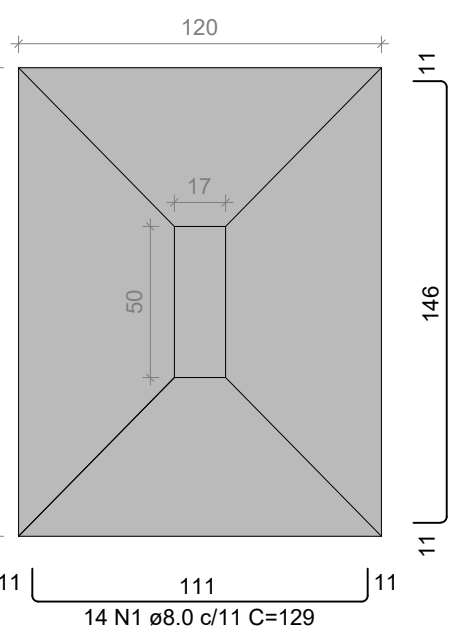
escala 1:100

b) Para a locação pelo eixo acumulados dos pilares, há uma planilha, com eixos X, Y (0,0 / 0,0), com eixos acumulados por pilar, por eixo X e por eixo Y.

c) Recomenda-se que a locação seja feita por eixos acumulados e posteriormente verificada pela locação face.

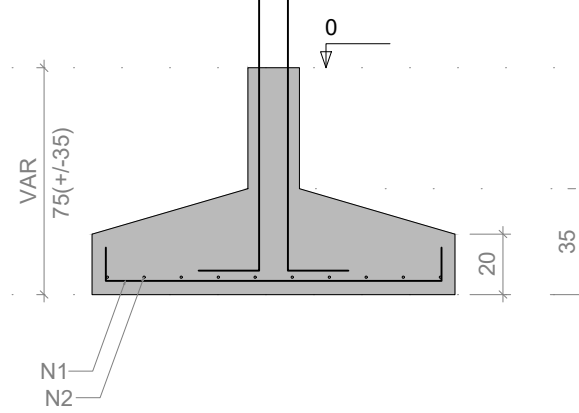
 NORTON ARQUITETURA E ENGENHARIA	PROJETO	ESTRUTURAL - FUNDAÇÃO	
		FINALIDADE: REPARAÇÃO PÚBLICA - PREDIO PREFEITURA	
		OBRA: EDIFICAÇÃO EM ALVENARIA	
		REFERÊNCIA: PLANTA DE LOCAÇÃO	
		AUTORES DO PROJETO <div style="text-align: center;"> <hr/> MARCELO FRANCISCO DOS SANTOS ENGENHEIRO CIVIL CREA PR100332V <hr/> NORTON ARQUITETURA E ENGENHARIA LTDA. - (46)3235-4701 - PATO BRANCO-PR </div>	
END. DA OBRA: PRAÇA CARAMURU, 150 - CENTRO - INDIANÓPOLIS - PR		PRONCHIA:	
PROPRIETÁRIOS: <div style="text-align: center;"> <hr/> MUNICÍPIO DE INDIANÓPOLIS CNPJ 77.798.355/0001-77 </div>		01 / 08	
ESCALA: INDICADA	DATA: 11/10/2021	DESENHO: MARCELO	

S48
PLANTA
ESC 1:25



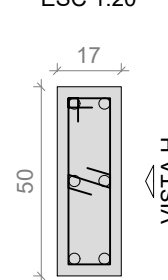
Solo com capacidade de suporte > 1.50 kgf/cm²
Solo compactado sobre a sapata
peso específico > 1600.00 kgf/m³

CORTE
ESC 1:25

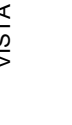


P48

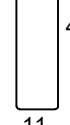
TÉRREO - L1
SEÇÃO
ESC 1:20



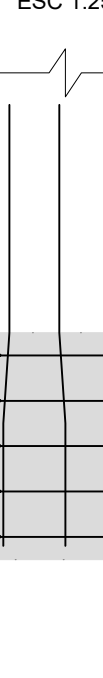
VISTA H
ESC 1:25



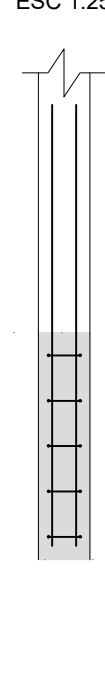
VISTA B
ESC 1:25



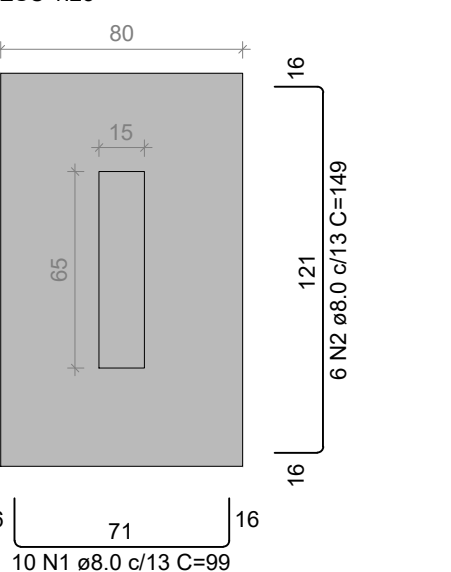
VISTA H
ESC 1:25



VISTA B
ESC 1:25

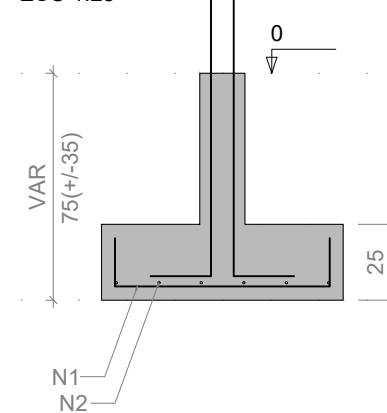


S54
PLANTA
ESC 1:25



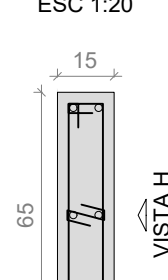
Solo com capacidade de suporte > 1.50 kgf/cm²
Solo compactado sobre a sapata
peso específico > 1600.00 kgf/m³

CORTE
ESC 1:25



P54

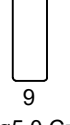
TÉRREO - L1
SEÇÃO
ESC 1:20



VISTA H
ESC 1:25



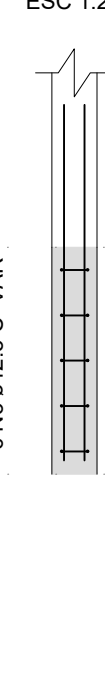
VISTA B
ESC 1:25



VISTA H
ESC 1:25



VISTA B
ESC 1:25



RELAÇÃO DO AÇO

ELEMENTO	AÇO	N	DIAM (mm)	QUANT	C.UNIT (cm)	C.TOTAL (cm)
P48	CA60	1	5.0	5	26	130
	CA60	2	5.0	5	121	605
	CA50	6	20.0	6	VAR	VAR
P54	CA60	1	5.0	5	24	120
	CA60	2	5.0	5	147	735
	CA50	3	12.5	6	VAR	VAR
P57	CA60	1	5.0	12	97	1164
	CA50	2	10.0	8	VAR	VAR
2xP58	CA60	1	5.0	10	124	1240
	CA50	2	12.5	12	VAR	VAR
P61	CA60	1	5.0	5	24	120
	CA60	2	5.0	5	117	585
	CA50	3	16.0	6	VAR	VAR
4xP62	CA60	1	5.0	28	77	2156
	CA50	2	10.0	16	VAR	VAR
P64	CA60	1	5.0	5	77	385
	CA50	2	12.5	4	VAR	VAR
3xP83	CA60	1	5.0	15	24	360
	CA60	2	5.0	15	97	1455
	CA50	3	12.5	18	VAR	VAR
S48	CA50	1	8.0	14	129	1806
	CA50	2	8.0	10	164	1640
S54	CA50	1	8.0	10	99	990
	CA50	2	8.0	6	149	894
S57	CA50	1	8.0	34	159	5406
S61	CA50	1	8.0	7	79	553
	CA50	2	8.0	6	114	684
8xS62	CA50	1	8.0	64	109	6976
	CA50	2	8.0	56	124	6944
2xS75	CA50	1	8.0	84	199	16716

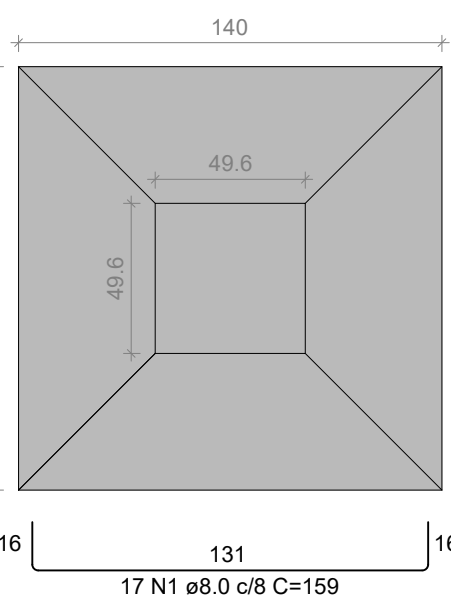
RESUMO DO AÇO

AÇO	DIAM (mm)	C.TOTAL (m)	QUANT + 10% (Barras)	UNIT	PESO + 10% (kg)
CA50	8.0	426.1	40	12 m	184.9
	10.0	30	3	12 m	20.3
	12.5	53.3	5	12 m	56.5
	16.0	8.8	1	12 m	15.3
	20.0	9.6	1	12 m	26
CA60	5.0	90.5	9	12 m	15.4
PESO TOTAL (kg)					
CA50			303.1		
CA60			15.4		

Volume de concreto (C-25) = 6.60 m³

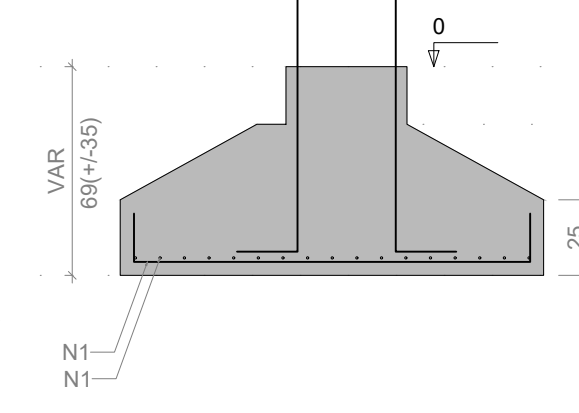
Área de forma = 27.03 m²

S57
PLANTA
ESC 1:25



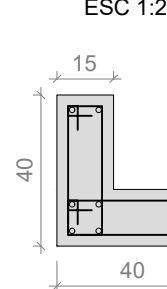
Solo com capacidade de suporte > 1.50 kgf/cm²
Solo compactado sobre a sapata
peso específico > 1600.00 kgf/m³

CORTE
ESC 1:25



P57

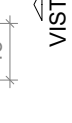
TÉRREO - L1
SEÇÃO
ESC 1:20



VISTA H
ESC 1:25



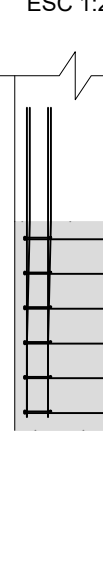
VISTA B
ESC 1:25



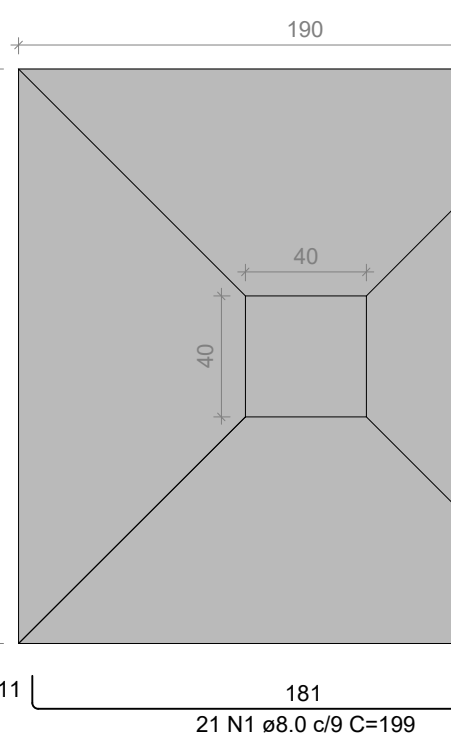
VISTA H
ESC 1:25



VISTA B
ESC 1:25

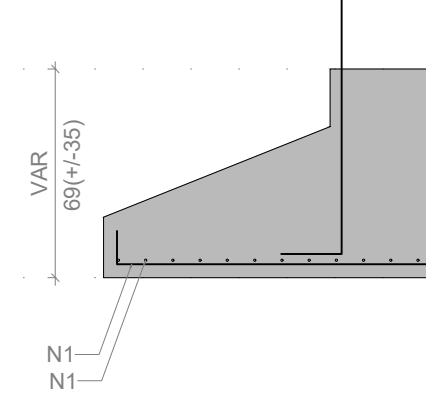


S58=S75
PLANTA
ESC 1:25



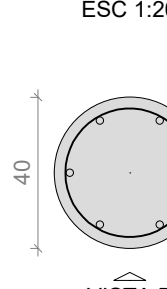
Solo com capacidade de suporte > 1.50 kgf/cm²
Solo compactado sobre a sapata
peso específico > 1600.00 kgf/m³

CORTE
ESC 1:25



P58=P75

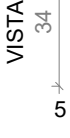
TÉRREO - L1
SEÇÃO
ESC 1:20



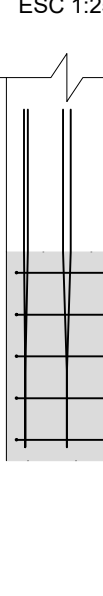
VISTA H
ESC 1:25



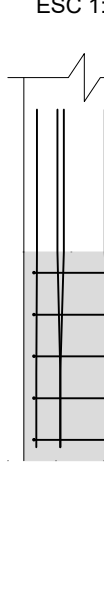
VISTA B
ESC 1:25



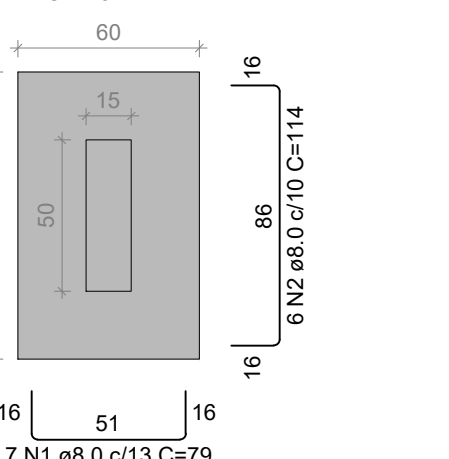
VISTA H
ESC 1:25



VISTA B
ESC 1:25

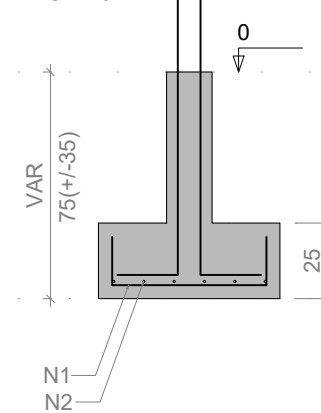


S61
PLANTA
ESC 1:25



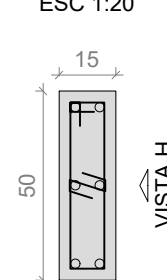
Solo com capacidade de suporte > 1.50 kgf/cm²
Solo compactado sobre a sapata
peso específico > 1600.00 kgf/m³

CORTE
ESC 1:25

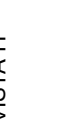


P61

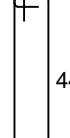
TÉRREO - L1
SEÇÃO
ESC 1:20



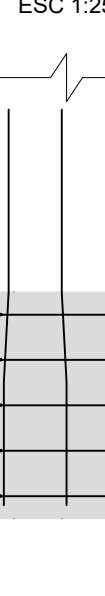
VISTA H
ESC 1:25



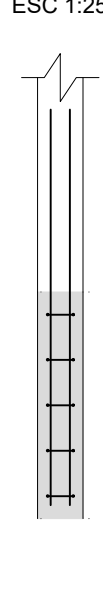
VISTA B
ESC 1:25



VISTA H
ESC 1:25

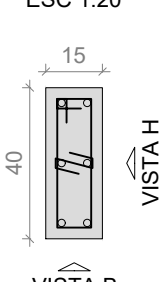


VISTA B
ESC 1:25



P83=P84=P102

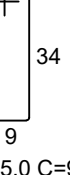
TÉRREO - L1
SEÇÃO
ESC 1:20



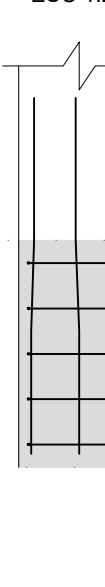
VISTA H
ESC 1:25



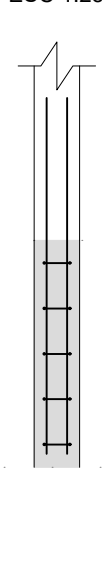
VISTA B
ESC 1:25



VISTA H
ESC 1:25

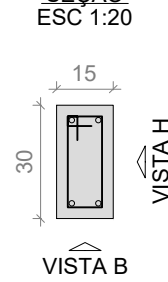


VISTA B
ESC 1:25

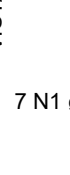


P62=P63=P67=P81

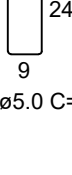
TÉRREO - L1
SEÇÃO
ESC 1:20



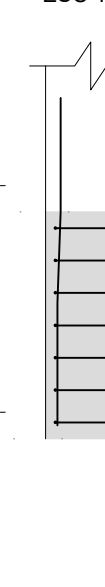
VISTA H
ESC 1:25



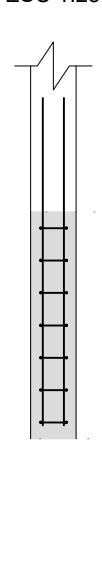
VISTA B
ESC 1:25



VISTA H
ESC 1:25

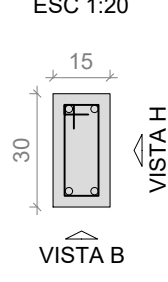


VISTA B
ESC 1:25

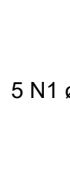


P64

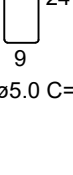
TÉRREO - L1
SEÇÃO
ESC 1:20



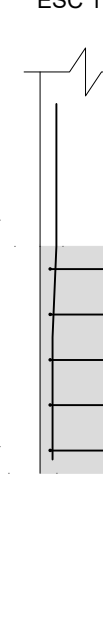
VISTA H
ESC 1:25



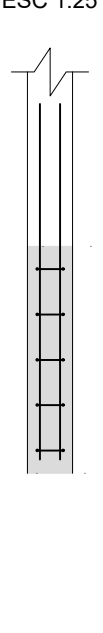
VISTA B
ESC 1:25



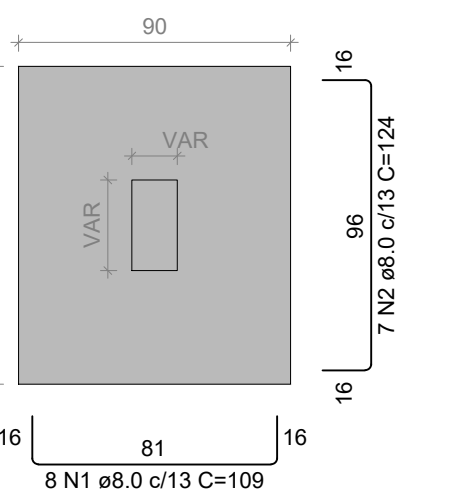
VISTA H
ESC 1:25



VISTA B
ESC 1:25

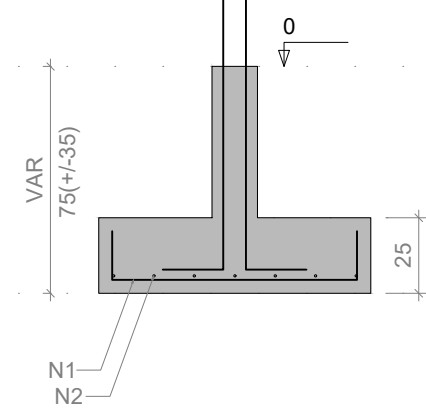


S62=S63=S64=S67=S81=S83=S84=S102
PLANTA
ESC 1:25



Solo com capacidade de suporte > 1.50 kgf/cm²
Solo compactado sobre a sapata
peso específico > 1600.00 kgf/m³

CORTE
ESC 1:25



PROJETO: ESTRUTURAL - FUNDAÇÃO

FINALIDADE: REPARTIÇÃO PÚBLICA - PRÉDIO PREFEITURA

OBRA: EDIFICAÇÃO EM ALVENARIA

REFERÊNCIA: DETALHAMENTO FUNDAÇÃO

AUTORES DO PROJETO

MARCELO FRANCISCO DOS SANTOS
ENGENHEIRO CIVIL
CREA PR100332/V

NORTON ARQUITETURA E ENGENHARIA LTDA - (46)3225-4701 - PATO BRANCO-PR

END. DA OBRA:
PRAÇA CARAMURU, 150 - CENTRO - INDIANÓPOLIS - PR

PROPRIETÁRIOS:

MUNICÍPIO DE INDIANÓPOLIS
CNPJ 77.798.355/0001-77

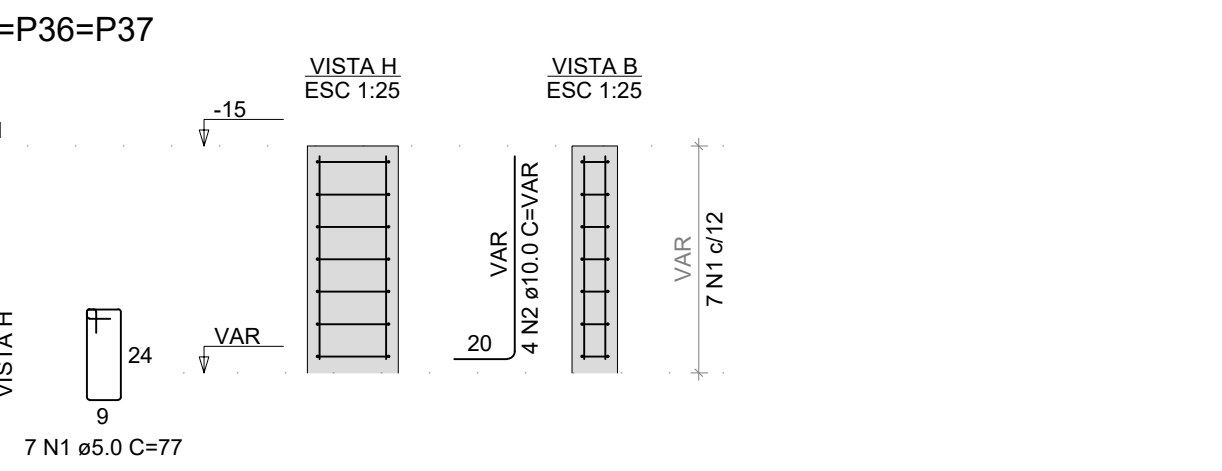
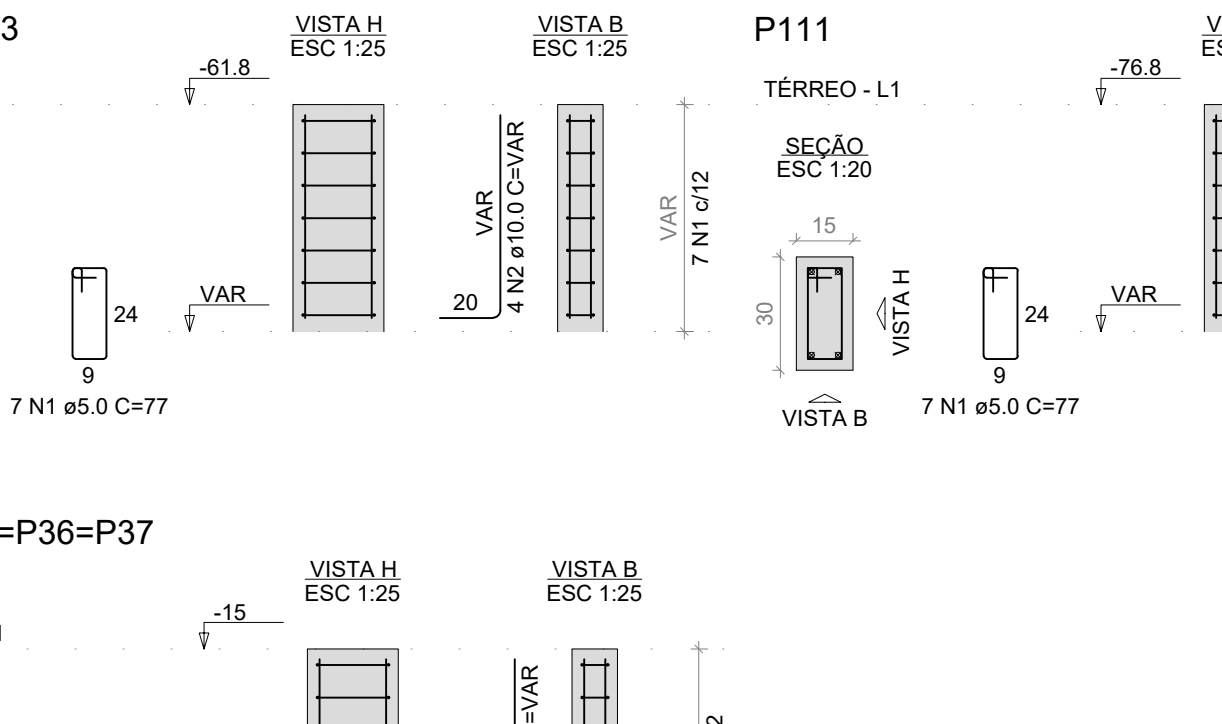
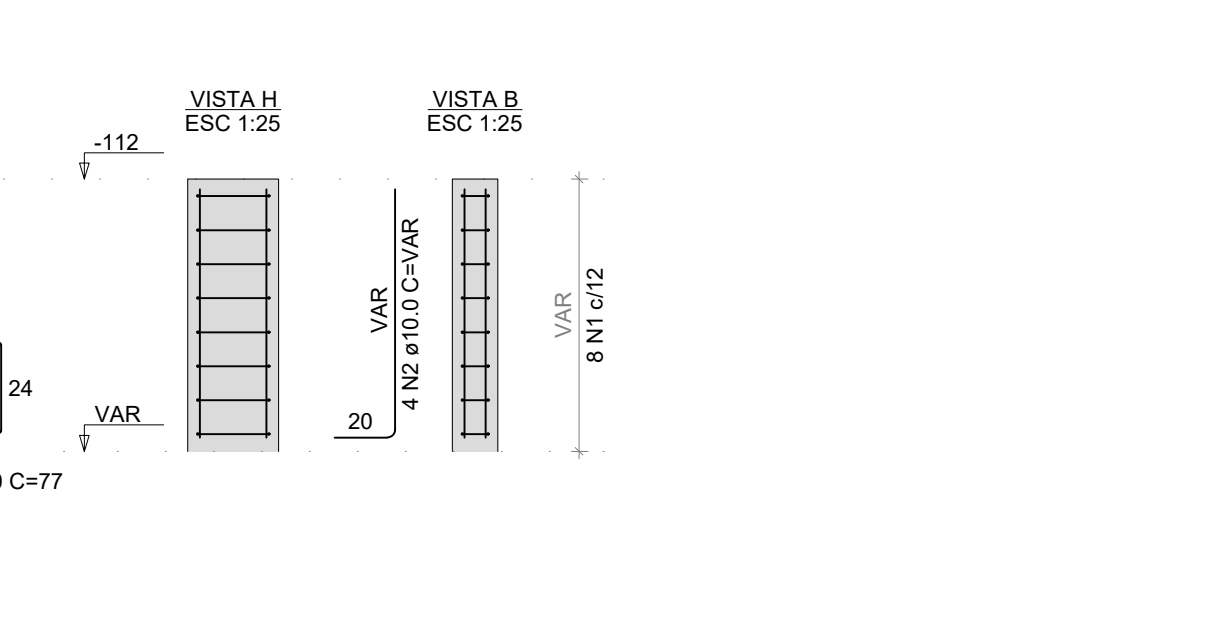
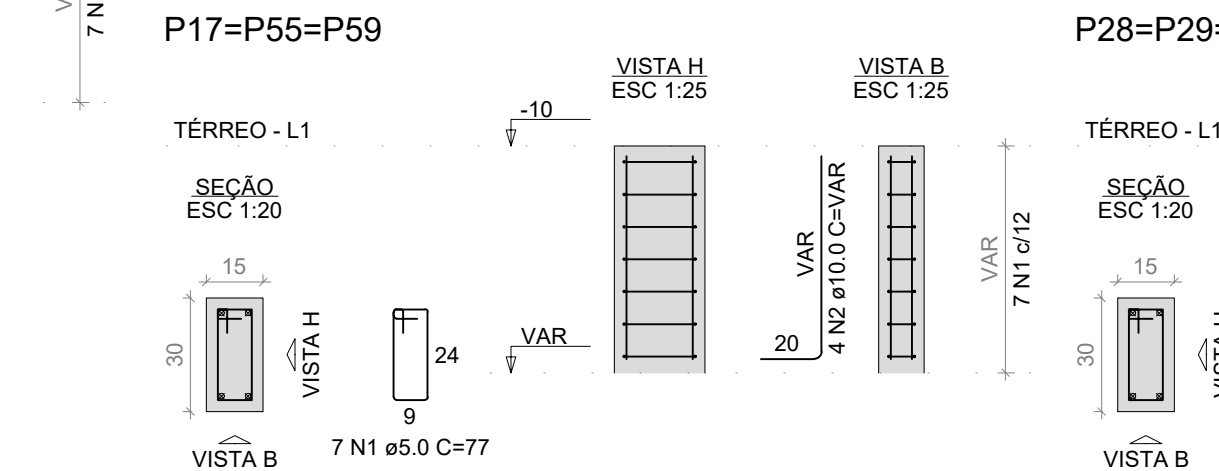
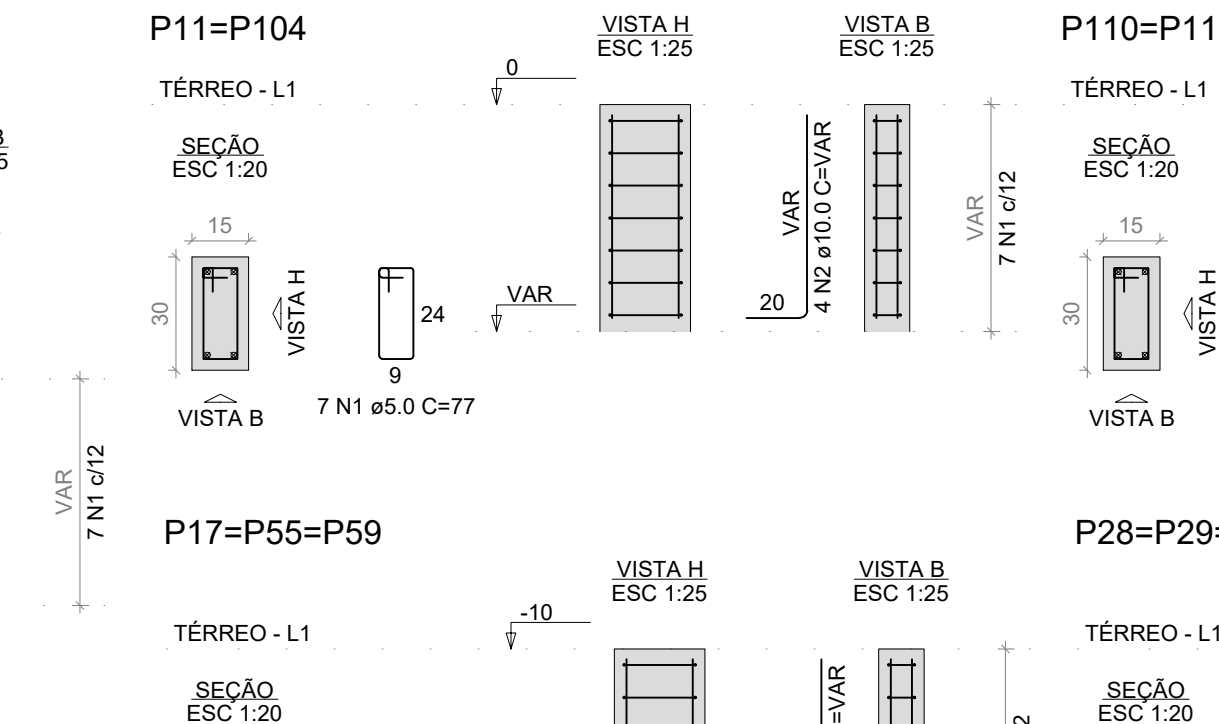
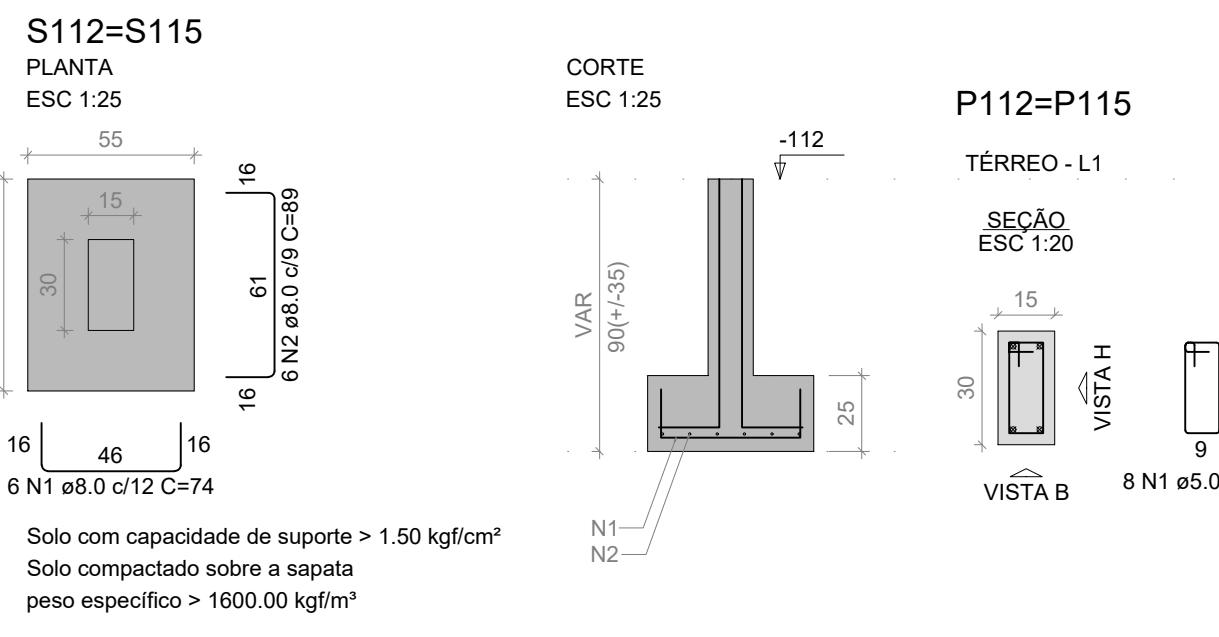
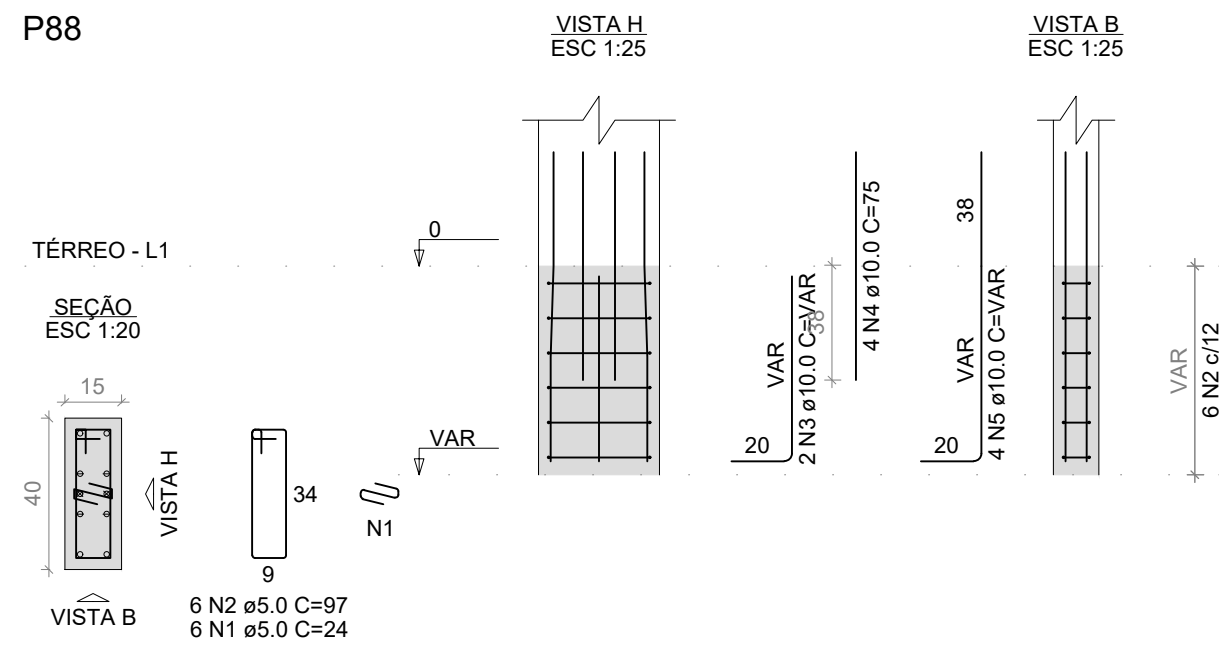
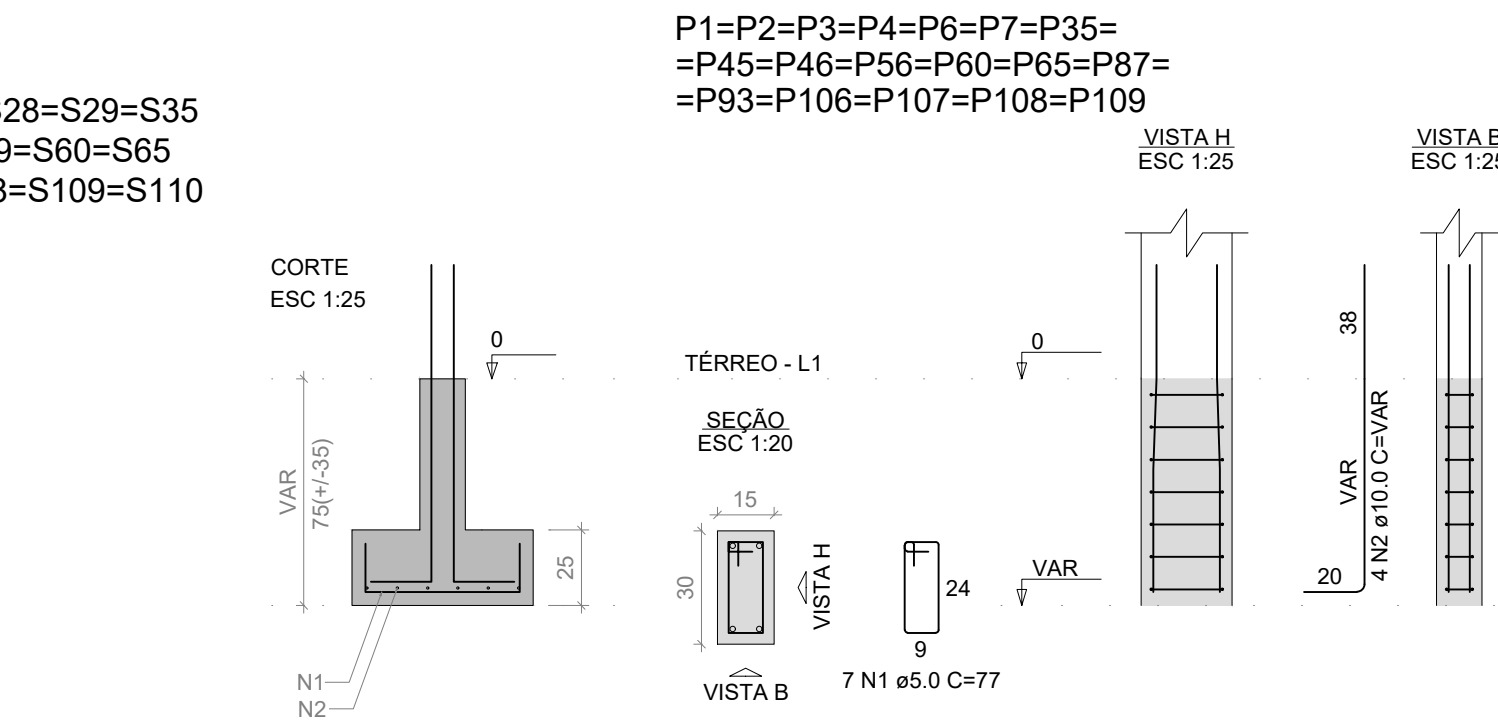
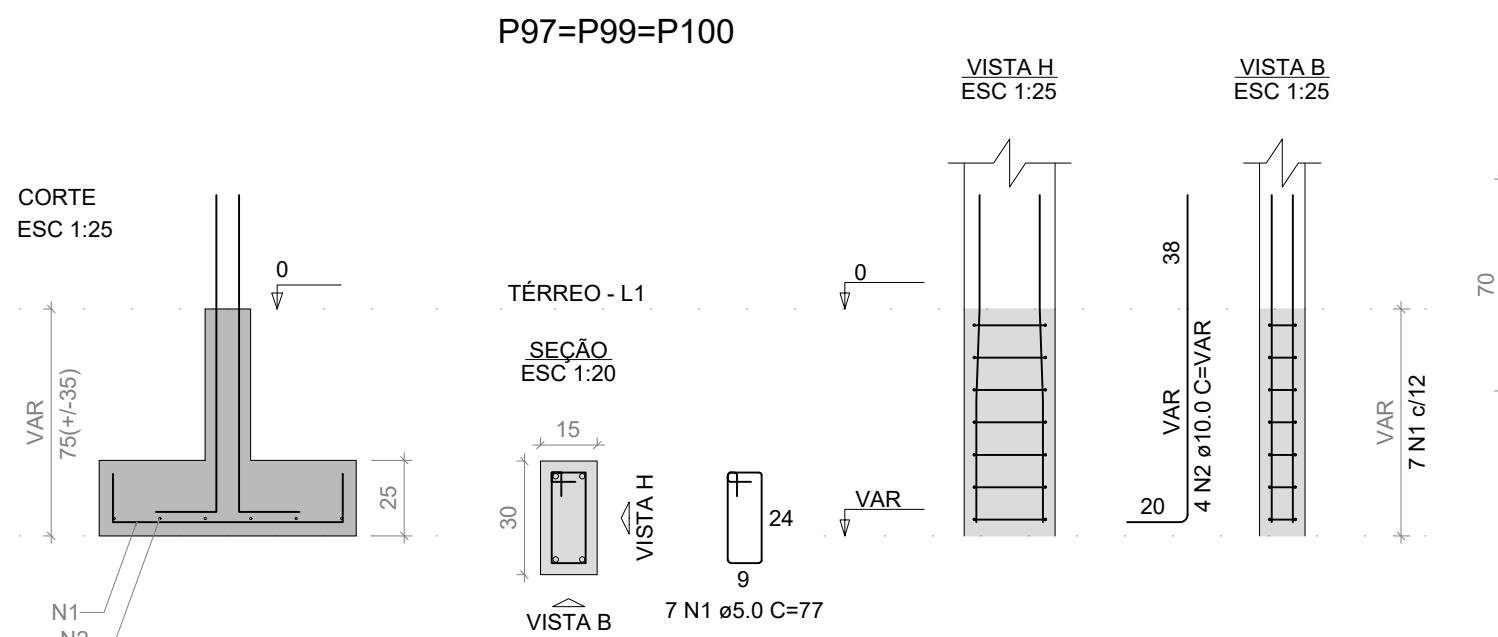
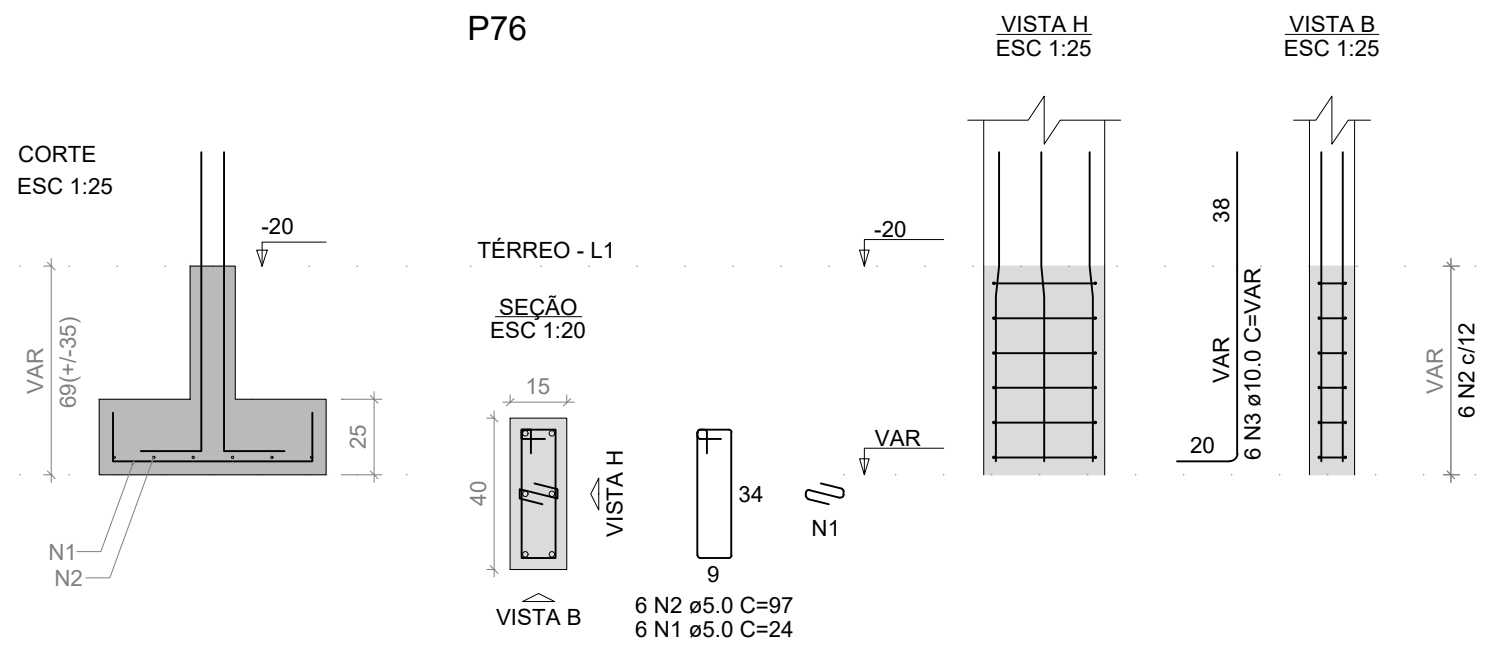
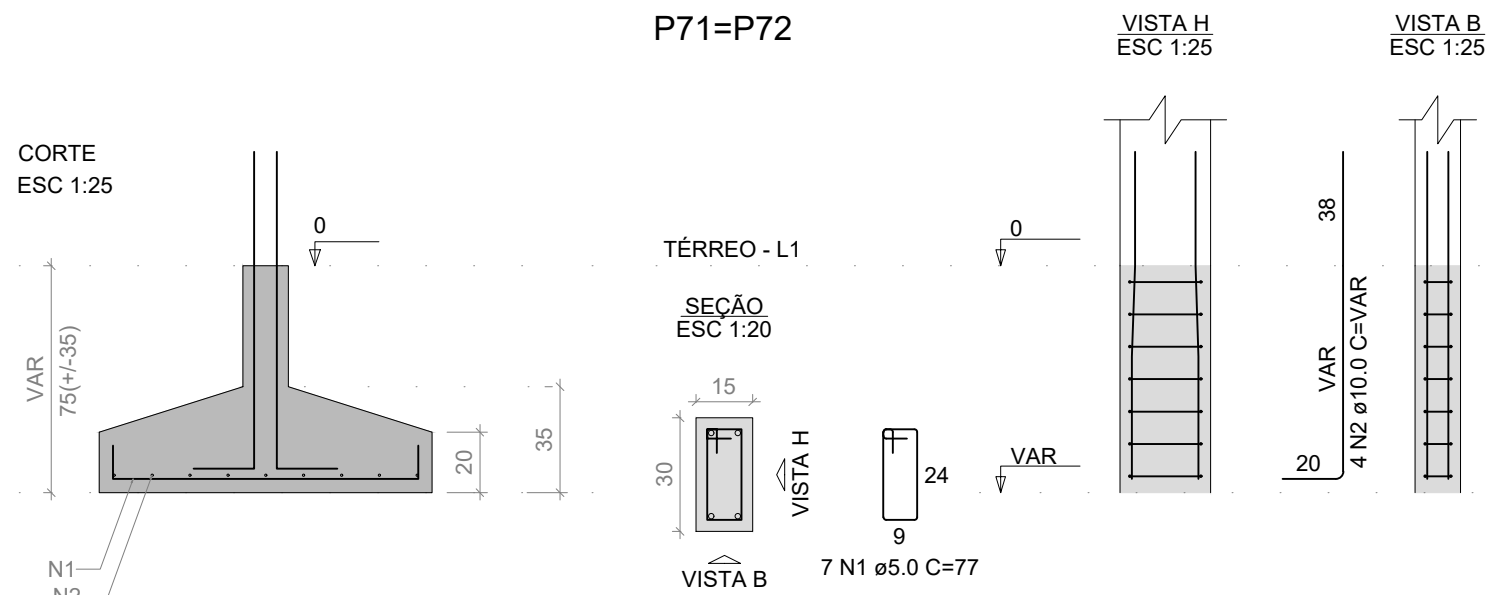
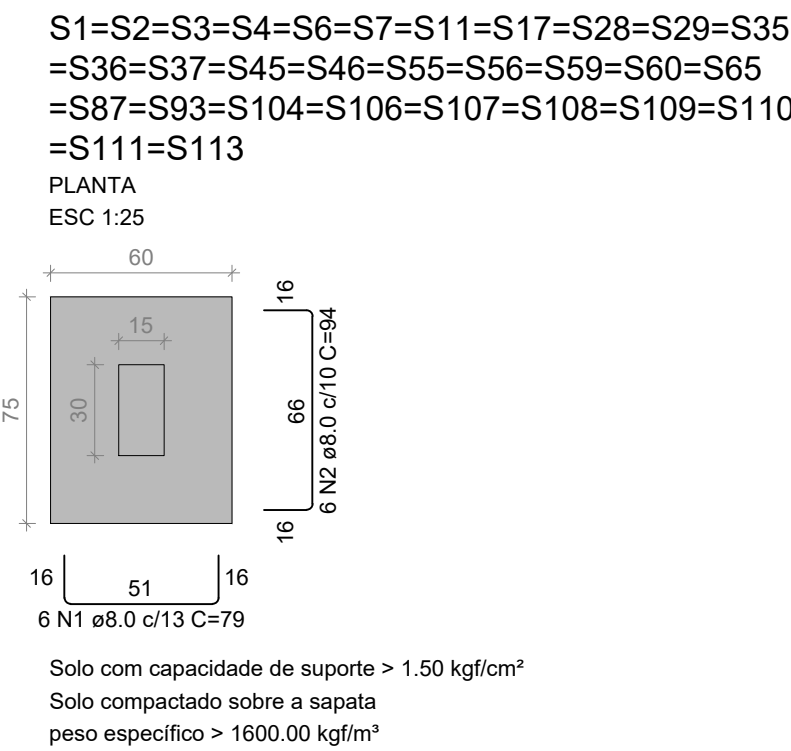
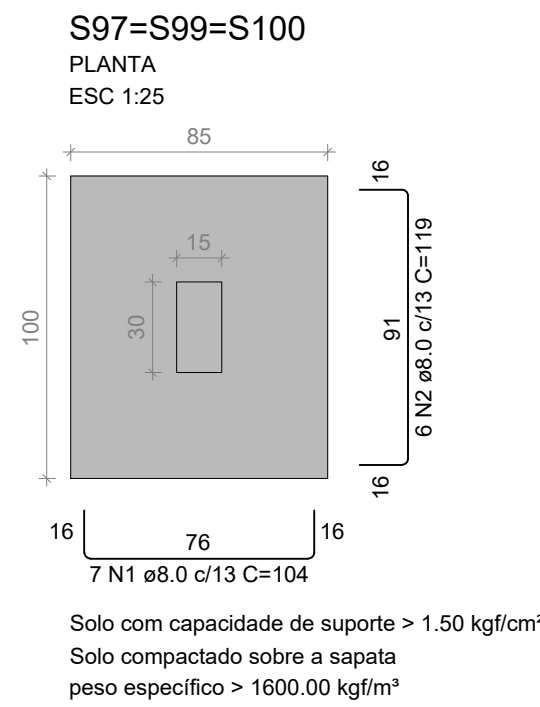
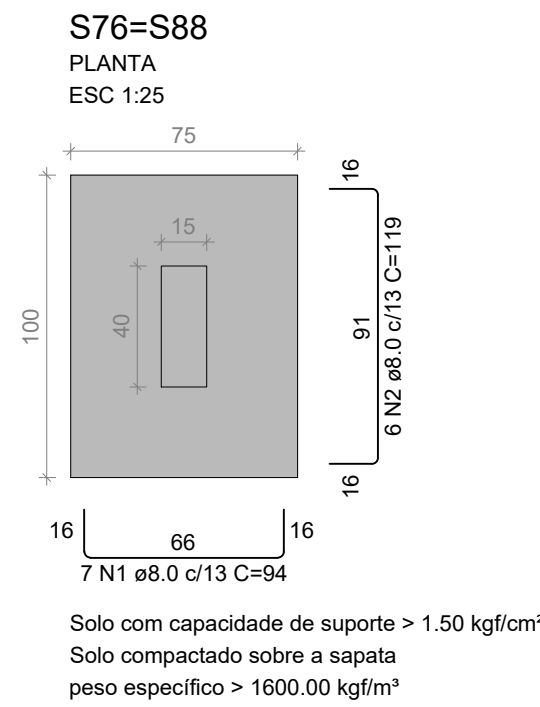
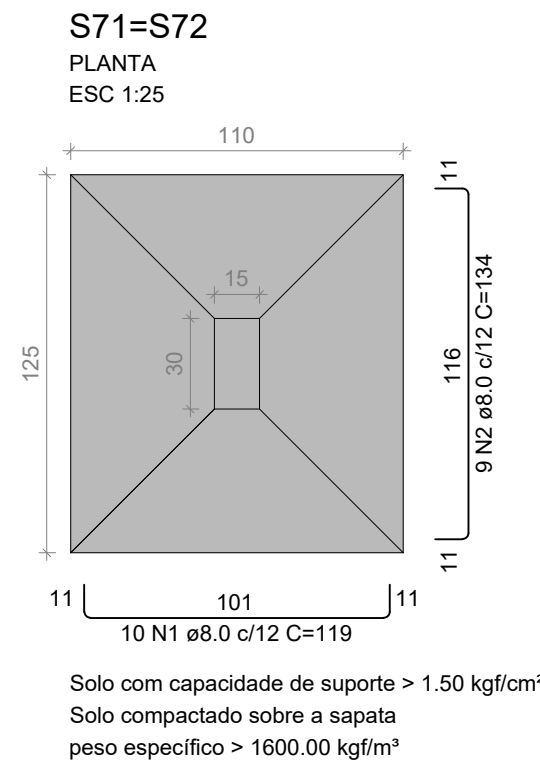
ESCALA: INDICADA

DATA: 11/10/2021

DESENHO: MARCELO

FRANCHA:

05 / 08



RELAÇÃO DO AÇO						
ELEMENTO	AÇO	N	DIAM (mm)	QUANT	C.UNIT (cm)	C.TOTAL (cm)
2xP71	CA60	1	5.0	14	77	1078
	CA50	2	10.0	8	VAR	VAR
	CA60	1	5.0	6	24	144
P76	CA60	2	5.0	6	97	582
	CA50	3	10.0	6	VAR	VAR
	CA60	1	5.0	6	24	144
P88	CA60	2	5.0	6	97	582
	CA50	3	10.0	2	VAR	VAR
	CA50	4	10.0	4	75	300
3xP97	CA60	5	10.0	4	VAR	VAR
	CA50	1	5.0	21	77	1617
	CA50	2	10.0	12	VAR	VAR
2xP112	CA60	1	5.0	16	77	1232
	CA50	2	10.0	8	VAR	VAR
	CA50	1	8.0	20	119	2380
2xS71	CA50	2	8.0	18	134	2412
	CA50	1	8.0	14	94	1316
	CA50	2	8.0	12	119	1428
3xS100	CA50	2	8.0	18	119	2142
	CA50	1	8.0	12	74	888
	CA50	2	8.0	12	89	1068

RESUMO DO AÇO				
AÇO	DIAM (mm)	C.TOTAL (m)	QUANT + 10% (Barras)	PESO + 10% (kg)
CA50	8.0	138.2	13	12 m
CA60	10.0	50.1	5	12 m
CA60	5.0	53.8	5	12 m
PESO TOTAL (kg)				
CA50	93.9			
CA60	9.1			
Volume de concreto (C-25) = 2.25 m³				
Área de forma = 14.17 m²				

RELAÇÃO DO AÇO						
ELEMENTO	AÇO	N	DIAM (mm)	QUANT	C.UNIT (cm)	C.TOTAL (cm)
18xP1	CA60	1	5.0	126	77	9702
	CA50	2	10.0	72	VAR	VAR
	CA60	1	5.0	14	77	1078
2xP11	CA50	2	10.0	8	VAR	VAR
	CA60	1	5.0	21	77	1617
	CA50	2	10.0	12	VAR	VAR
4xP28	CA60	1	5.0	28	77	2156
	CA50	2	10.0	16	VAR	VAR
	CA60	1	5.0	14	77	1078
2xP110	CA50	2	10.0	8	VAR	VAR
	CA60	1	5.0	7	77	539
	CA50	2	10.0	4	VAR	VAR
30xS4	CA50	1	8.0	180	79	14220
	CA50	2	8.0	180	94	16920

RESUMO DO AÇO				
AÇO	DIAM (mm)	C.TOTAL (m)	QUANT + 10% (Barras)	PESO + 10% (kg)
CA50	8.0	311.4	29	135.2
CA60	10.0	132.2	13	88.7
CA60	5.0	161.7	15	27.4
PESO TOTAL (kg)				
CA50	224.8			
CA60	27.4			
Volume de concreto (C-25) = 4.39 m³				
Área de forma = 40.50 m²				

NORTON

ARQUITETURA E ENGENHARIA

PROJETO: ESTRUTURAL - FUNDAÇÃO

FINALIDADE: REPARTIÇÃO PÚBLICA - PRÉDIO PREFEITURA

OBRA: EDIFICAÇÃO EM ALVENARIA

REFERÊNCIA: DETALHAMENTO FUNDAÇÃO

AUTORES DO PROJETO

MARCELO FRANCISCO DOS SANTOS
ENGENHEIRO CIVIL
CREA PR100332IV

NORTON ARQUITETURA E ENGENHARIA LTDA - (46)3225-4701 - PATO BRANCO-PR

END. DA OBRA: PRAÇA CARAMURU, 150 - CENTRO - INDIANÓPOLIS - PR

PROPRIETÁRIOS: MUNICÍPIO DE INDIANÓPOLIS
CNPJ 77.735.355/0001-77

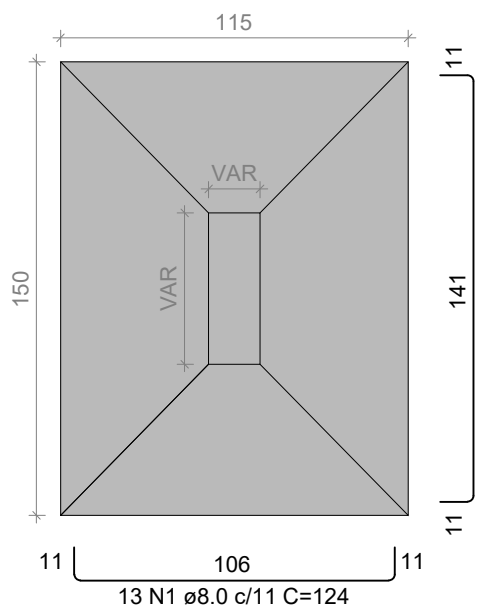
FRANCHA: 06 / 08

ESCALA: INDICADA

DATA: 11/10/2021

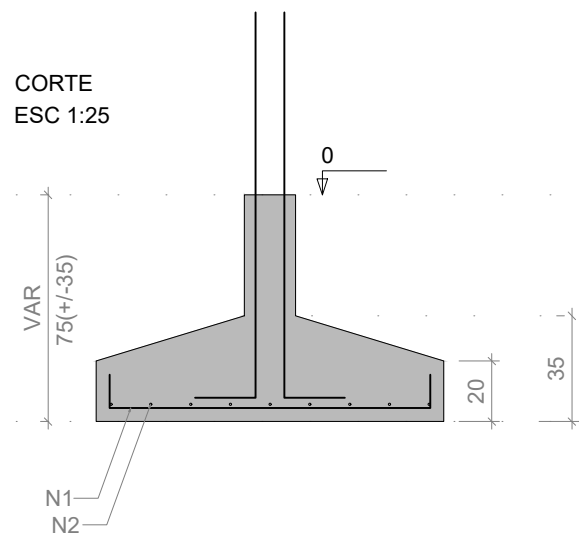
DESENHO: MARCELO

S16=S25=S32=S52
PLANTA
ESC 1:25

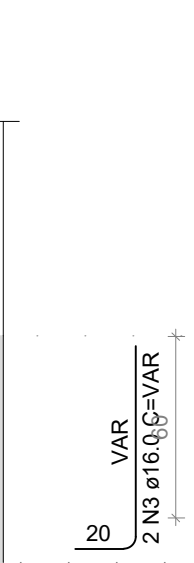
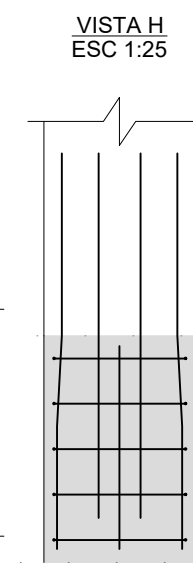
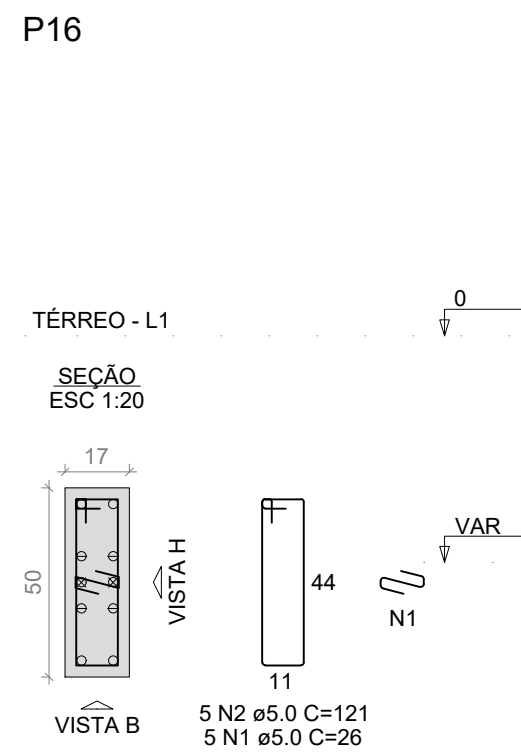


Solo com capacidade de suporte > 1.50 kgf/cm²
Solo compactado sobre a sapata
peso específico > 1600.00 kgf/m³

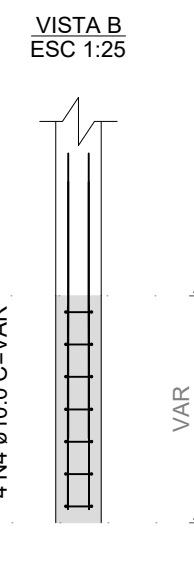
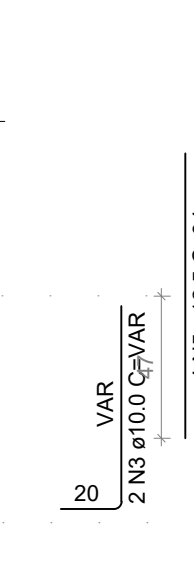
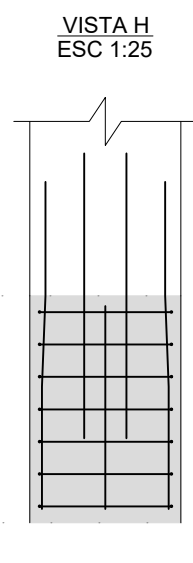
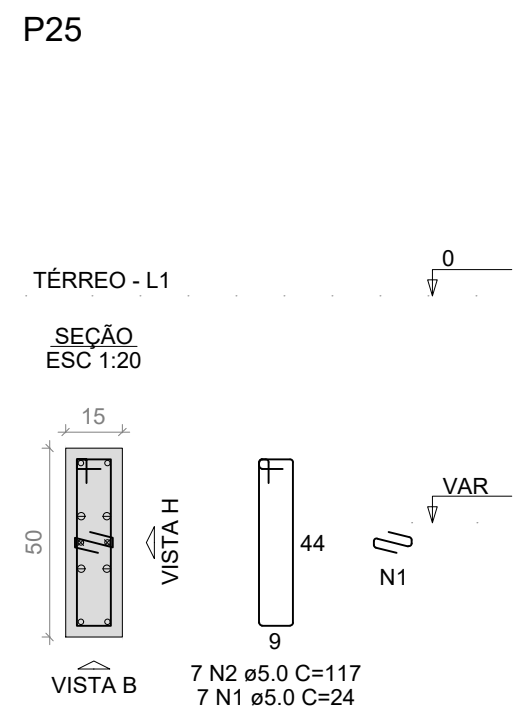
CORTE
ESC 1:25



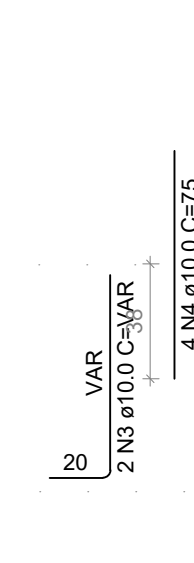
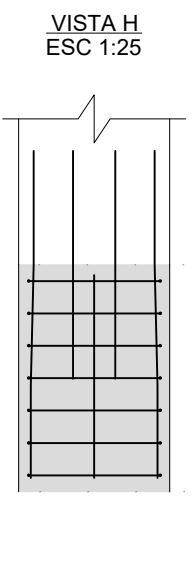
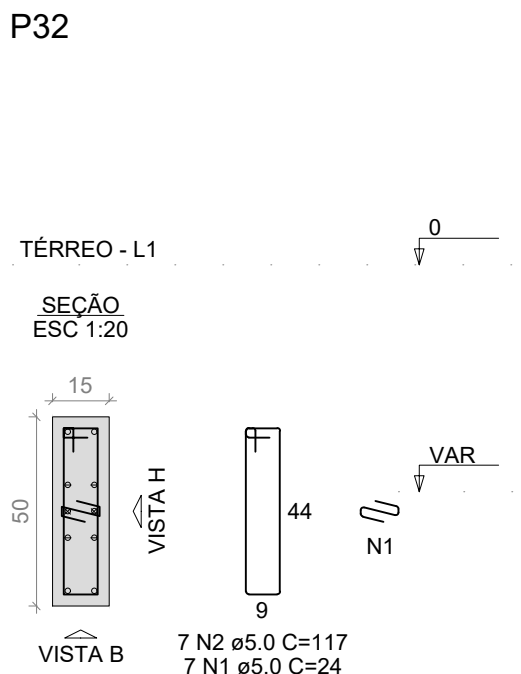
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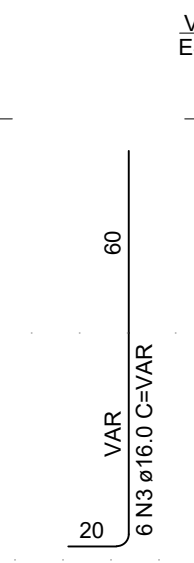
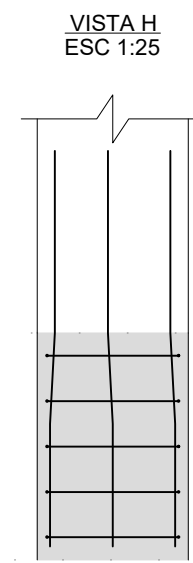
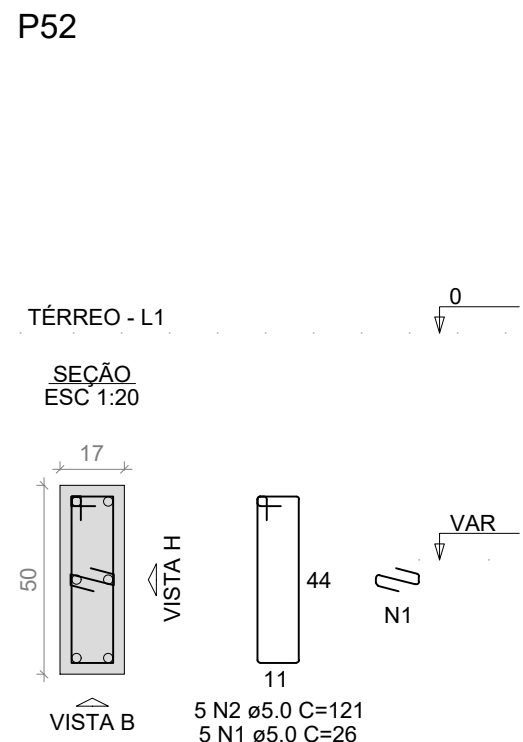
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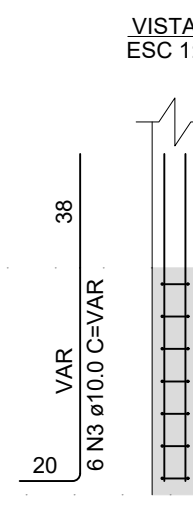
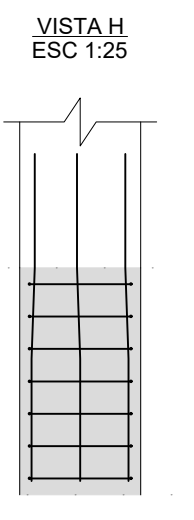
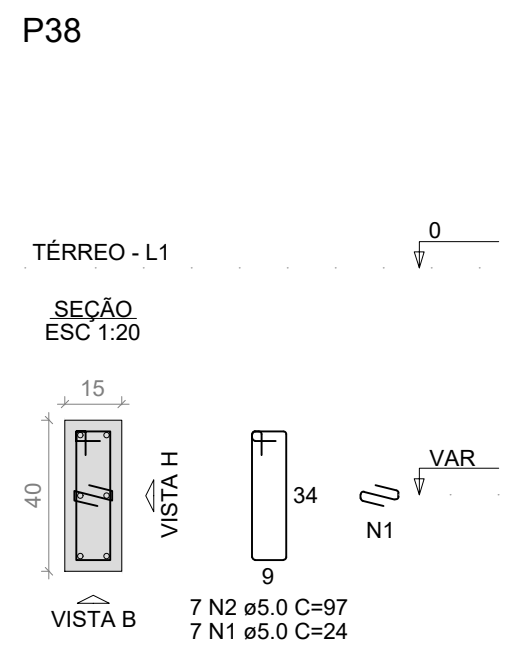
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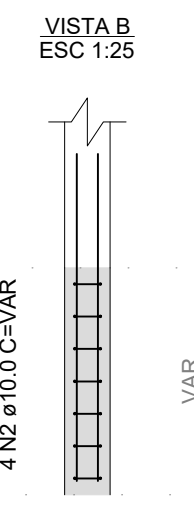
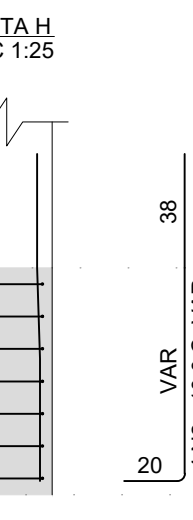
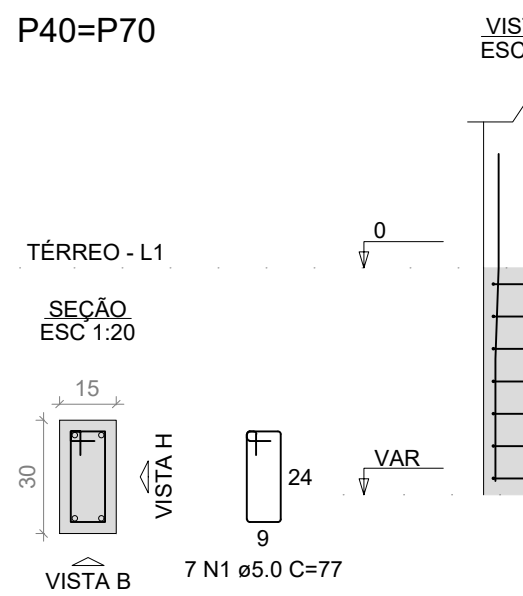
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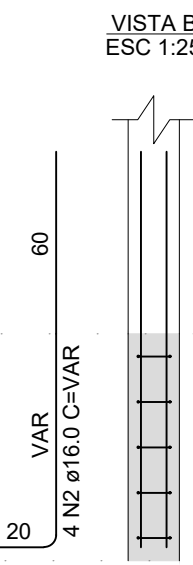
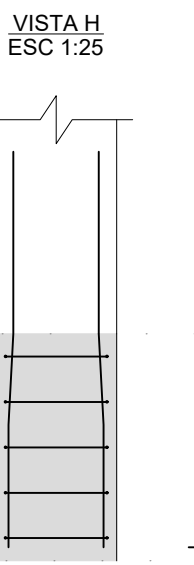
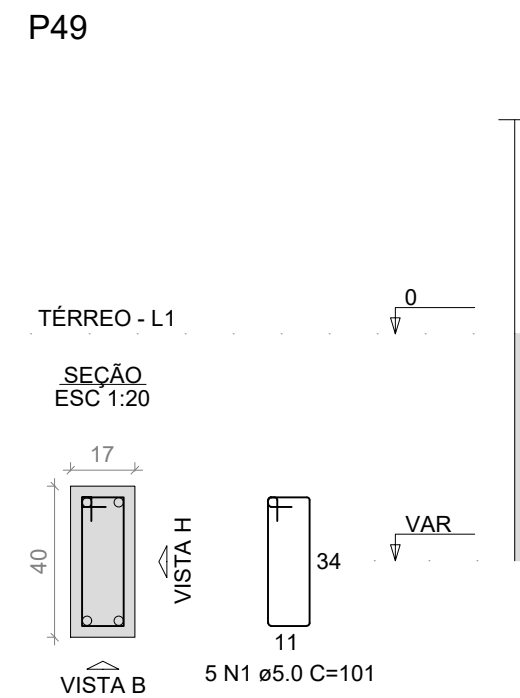
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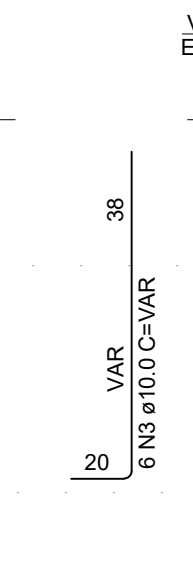
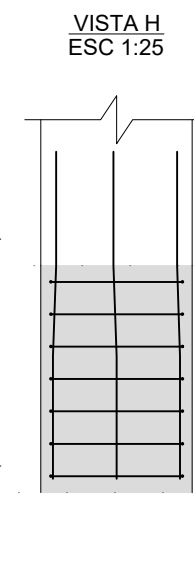
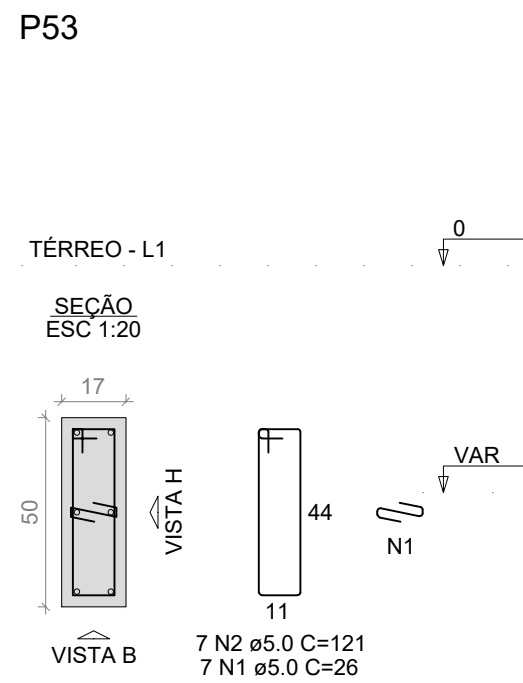
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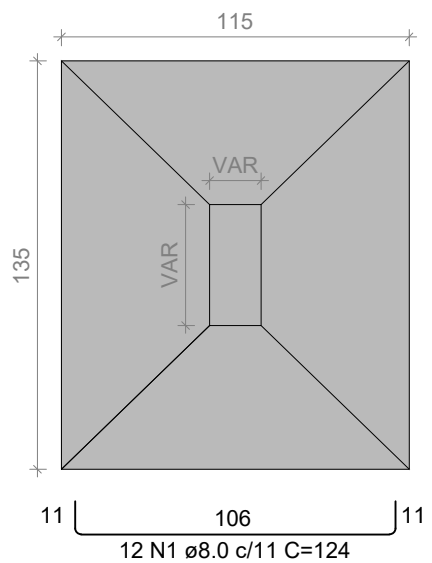
P49



P53

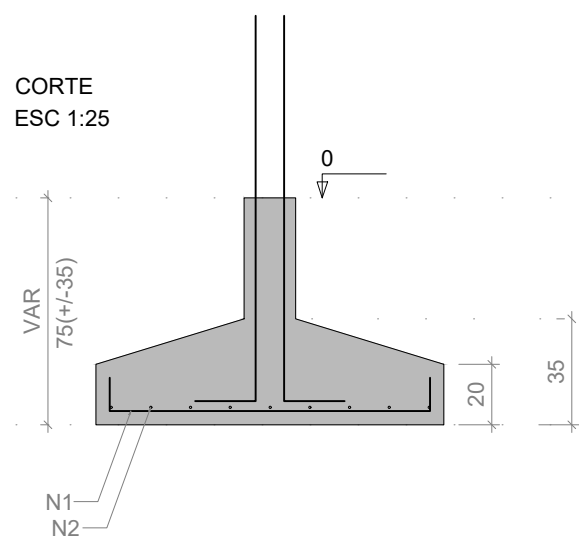


S38=S40=S49=S53=S70
PLANTA
ESC 1:25



Solo com capacidade de suporte > 1.50 kgf/cm²
Solo compactado sobre a sapata
peso específico > 1600.00 kgf/m³

CORTE
ESC 1:25



RELAÇÃO DO AÇO

ELEMENTO	AÇO	N	DIAM (mm)	QUANT	C.UNIT (cm)	C.TOTAL (cm)
P16	CA60	1	5.0	5	26	130
	CA60	2	5.0	5	121	605
	CA50	3	16.0	2	VAR	VAR
	CA50	4	16.0	4	121	484
	CA50	5	16.0	4	VAR	VAR
P25	CA60	1	5.0	7	24	168
	CA60	2	5.0	7	117	819
	CA50	3	10.0	2	VAR	VAR
	CA50	4	10.0	4	VAR	VAR
	CA50	5	12.5	4	VAR	VAR
P32	CA60	1	5.0	7	24	168
	CA60	2	5.0	7	117	819
	CA50	3	10.0	2	VAR	VAR
	CA50	4	10.0	4	VAR	VAR
	CA50	5	12.5	4	VAR	VAR
P52	CA60	1	5.0	7	24	168
	CA60	2	5.0	7	117	819
	CA50	3	10.0	2	VAR	VAR
	CA50	4	10.0	4	VAR	VAR
	CA50	5	12.5	4	VAR	VAR
4xS16	CA60	1	5.0	5	26	130
	CA60	2	5.0	5	121	605
	CA50	3	16.0	6	VAR	VAR
	CA50	1	8.0	52	124	6448
	CA50	2	8.0	36	159	5724

RESUMO DO AÇO

AÇO	DIAM (mm)	C.TOTAL (m)	QUANT + 10% (Barras)	UNIT	PESO + 10% (kg)
CA50	8.0	121.7	12	12 m	52.8
	10.0	16.6	2	12 m	11.2
	12.5	3.8	1	12 m	4
	16.0	21.2	2	12 m	36.8
	5.0	34.4	4	12 m	5.8
PESO TOTAL (kg)					
CA50	104.9				
CA60	5.8				

Volume de concreto (C-25) = 2.06 m³
Área de forma = 8.20 m²

RELAÇÃO DO AÇO

ELEMENTO	AÇO	N	DIAM (mm)	QUANT	C.UNIT (cm)	C.TOTAL (cm)
P38	CA60	1	5.0	7	24	168
	CA60	2	5.0	7	97	679
	CA50	3	10.0	6	VAR	VAR
	CA60	1	5.0	14	77	1078
	CA50	2	10.0	8	VAR	VAR
2xP40	CA60	1	5.0	5	101	505
	CA50	2	16.0	4	VAR	VAR
	CA60	1	5.0	7	26	182
	CA60	2	5.0	7	121	847
	CA50	3	10.0	6	VAR	VAR
P53	CA60	1	5.0	7	26	182
	CA60	2	5.0	7	121	847
	CA50	3	10.0	6	VAR	VAR
	CA50	1	8.0	60	124	7440
	CA50	2	8.0	45	144	6480

RESUMO DO AÇO

AÇO	DIAM (mm)	C.TOTAL (m)	QUANT + 10% (Barras)	UNIT	PESO + 10% (kg)
CA50	8.0	139.2	13	12 m	60.4
	10.0	25.4	3	12 m	17.2
	16.0	5.9	1	12 m	10.2
	5.0	34.6	4	12 m	5.9
PESO TOTAL (kg)					
CA50	87.9				
CA60	5.9				

Volume de concreto (C-25) = 2.27 m³
Área de forma = 9.04 m²

	FINALIDADE:	REPARTIÇÃO PÚBLICA - PRÉDIO PREFEITURA	
	OBRA:	EDIFICAÇÃO EM ALVENARIA	
	REFERÊNCIA:	DETALHAMENTO FUNDAÇÃO	
	AUTORES DO PROJETO	MARCELO FRANCISCO DOS SANTOS ENGENHEIRO CIVIL CREA PR100332/V	
	END. DA OBRA:	PRAÇA CARAMURU, 150 - CENTRO - INDIANÓPOLIS - PR	
	PROPRIETÁRIOS:	MUNICÍPIO DE INDIANÓPOLIS CNPJ 77.798.355/0001-77	PRANCHA:
	ESCALA:	INDICADA	DATA:
	DESENHO:	MARCELO	07 / 08

