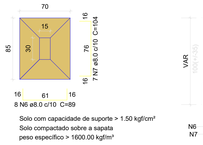
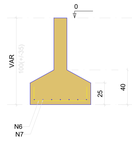
S1=S7=S10=S11=S14=S15=S17

PLANTA
ESC 1:30



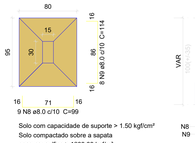
CORTE
ESC 1:25



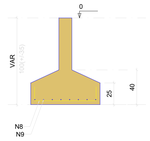
Solo com capacidade de suporte > 1.50 kgf/cm²
Solo compactado sobre a sapata
peso especifico > 1600.00 kgf/m³

S2=S5=S8=S13=S16

PLANTA
ESC 1:30



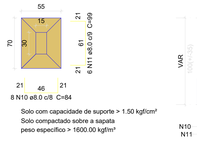
CORTE
ESC 1:25



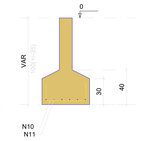
Solo com capacidade de suporte > 1.50 kgf/cm²
Solo compactado sobre a sapata
peso especifico > 1600.00 kgf/m³

S3=S4

PLANTA
ESC 1:30



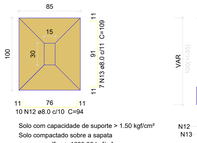
CORTE
ESC 1:25



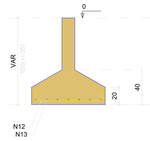
Solo com capacidade de suporte > 1.50 kgf/cm²
Solo compactado sobre a sapata
peso especifico > 1600.00 kgf/m³

S6

PLANTA
ESC 1:30



CORTE
ESC 1:25

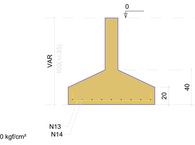


Solo com capacidade de suporte > 1.50 kgf/cm²
Solo compactado sobre a sapata
peso especifico > 1600.00 kgf/m³

S9

PLANTA
ESC 1:30

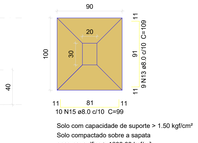
CORTE
ESC 1:25



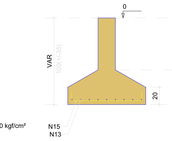
Solo com capacidade de suporte > 1.50 kgf/cm²
Solo compactado sobre a sapata
peso especifico > 1600.00 kgf/m³

S12

PLANTA
ESC 1:30



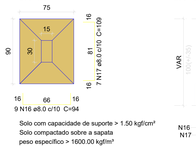
CORTE
ESC 1:25



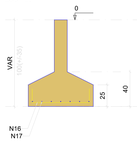
Solo com capacidade de suporte > 1.50 kgf/cm²
Solo compactado sobre a sapata
peso especifico > 1600.00 kgf/m³

S18

PLANTA
ESC 1:30



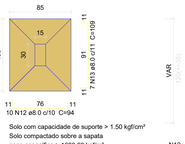
CORTE
ESC 1:25



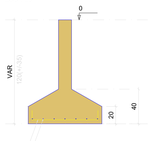
Solo com capacidade de suporte > 1.50 kgf/cm²
Solo compactado sobre a sapata
peso especifico > 1600.00 kgf/m³

S19

PLANTA
ESC 1:30



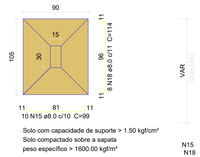
CORTE
ESC 1:25



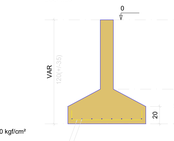
Solo com capacidade de suporte > 1.50 kgf/cm²
Solo compactado sobre a sapata
peso especifico > 1600.00 kgf/m³

S20=S24

PLANTA
ESC 1:30



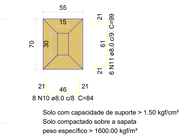
CORTE
ESC 1:25



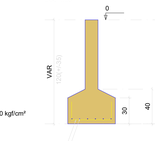
Solo com capacidade de suporte > 1.50 kgf/cm²
Solo compactado sobre a sapata
peso especifico > 1600.00 kgf/m³

S21

PLANTA
ESC 1:30



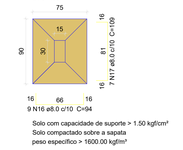
CORTE
ESC 1:25



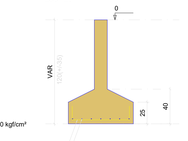
Solo com capacidade de suporte > 1.50 kgf/cm²
Solo compactado sobre a sapata
peso especifico > 1600.00 kgf/m³

S22

PLANTA
ESC 1:30



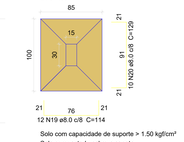
CORTE
ESC 1:25



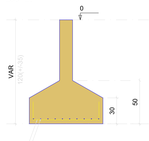
Solo com capacidade de suporte > 1.50 kgf/cm²
Solo compactado sobre a sapata
peso especifico > 1600.00 kgf/m³

S23

PLANTA
ESC 1:30



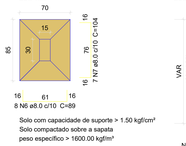
CORTE
ESC 1:25



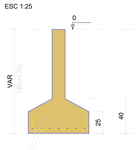
Solo com capacidade de suporte > 1.50 kgf/cm²
Solo compactado sobre a sapata
peso especifico > 1600.00 kgf/m³

S25

PLANTA
ESC 1:30



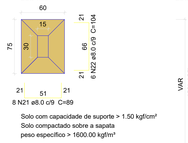
CORTE
ESC 1:25



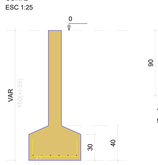
Solo com capacidade de suporte > 1.50 kgf/cm²
Solo compactado sobre a sapata
peso especifico > 1600.00 kgf/m³

S26=S29

PLANTA
ESC 1:30



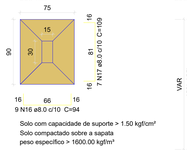
CORTE
ESC 1:25



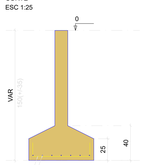
Solo com capacidade de suporte > 1.50 kgf/cm²
Solo compactado sobre a sapata
peso especifico > 1600.00 kgf/m³

S27=S28

PLANTA
ESC 1:30



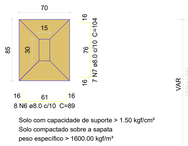
CORTE
ESC 1:25



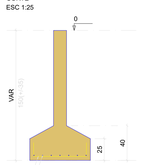
Solo com capacidade de suporte > 1.50 kgf/cm²
Solo compactado sobre a sapata
peso especifico > 1600.00 kgf/m³

S30

PLANTA
ESC 1:30



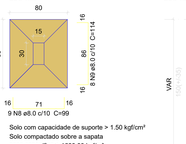
CORTE
ESC 1:25



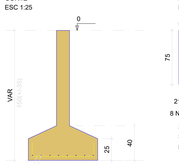
Solo com capacidade de suporte > 1.50 kgf/cm²
Solo compactado sobre a sapata
peso especifico > 1600.00 kgf/m³

S31

PLANTA
ESC 1:30



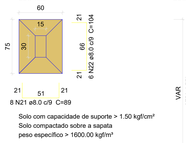
CORTE
ESC 1:25



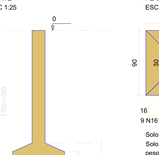
Solo com capacidade de suporte > 1.50 kgf/cm²
Solo compactado sobre a sapata
peso especifico > 1600.00 kgf/m³

S32

PLANTA
ESC 1:30



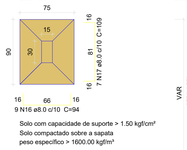
CORTE
ESC 1:25



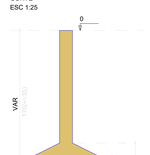
Solo com capacidade de suporte > 1.50 kgf/cm²
Solo compactado sobre a sapata
peso especifico > 1600.00 kgf/m³

S33=S34

PLANTA
ESC 1:30



CORTE
ESC 1:25

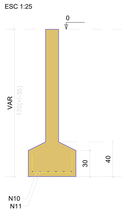


Solo com capacidade de suporte > 1.50 kgf/cm²
Solo compactado sobre a sapata
peso especifico > 1600.00 kgf/m³

S35=S39

PLANTA
ESC 1:30

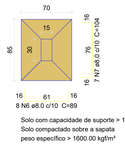
CORTE
ESC 1:25



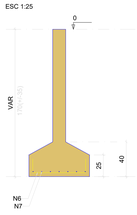
Solo com capacidade de suporte > 1.50 kgf/cm²
Solo compactado sobre a sapata
peso especifico > 1600.00 kgf/m³

S36=S37=S38

PLANTA
ESC 1:30



CORTE
ESC 1:25



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

Relação do aço

2xP1	12xP2	2xP5
P8	P12	6xP19
P23	6xP26	8xP32
7xS1	2xS3	S6
S9	S12	5xS13
S18	S19	2xS20
S21	S22	S23
S25	2xS26	2xS27
S30	S31	S32
2xS33	2xS35	3xS36

AÇO	N	DIAM (mm)	QUANT	C.UNIT (cm)	C.TOTAL (cm)
CA60	1	5.0	312	81	25272
	2	5.0	226	57	12882
	3	5.0	6	91	546
	4	5.0	6	67	402
	5	5.0	8	25	200
CA50	6	8.0	96	89	8544
	7	8.0	84	104	8736
	8	8.0	54	99	5346
	9	8.0	48	114	5472
	10	8.0	40	84	3360
	11	8.0	30	99	2970
	12	8.0	20	94	1880
	13	8.0	34	109	3706
	14	8.0	9	124	1116
	15	8.0	30	99	2970
	16	8.0	54	94	5076
	17	8.0	42	109	4578
	18	8.0	16	114	1824
	19	8.0	12	114	1368
	20	8.0	10	129	1290
	21	8.0	24	89	2136
	22	8.0	18	104	1872
	23	10.0	96	152	14592
	24	10.0	24	172	4128
	25	10.0	24	202	4848
	26	10.0	32	222	7104
	27	12.5	6	180	1080

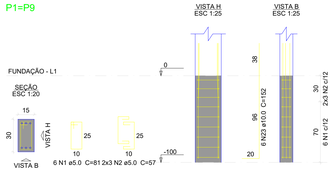
Resumo do aço

AÇO	DIAM (mm)	C.TOTAL (m)	QUANT + 10 % (Barras)	PESO + 10 % (kg)
CA50	8.0	622.5	58	270.2
	10.0	306.8	29	208
	12.5	10.8	1	11.4
CA60	5.0	393.1	-	66.6

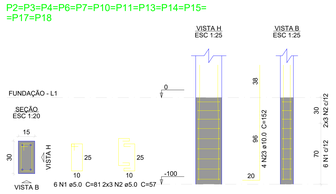
PESO TOTAL (kg)	
CA50	489.6
CA60	66.6

Volume de concreto (C-25) = 9.57 m³
Área de forma = 61.48 m²

P1=P9



P2=P3=P4=P6=P7=P10=P11=P13=P14=P15= =P17=P18



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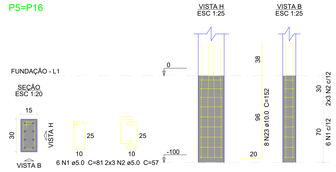

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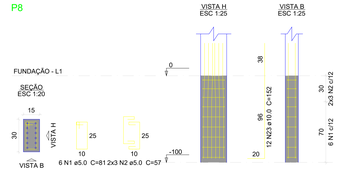

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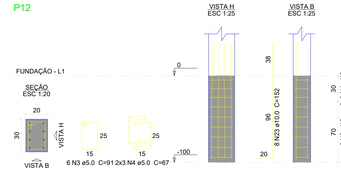

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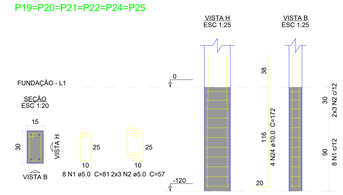

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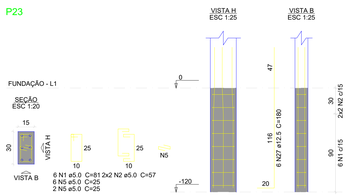

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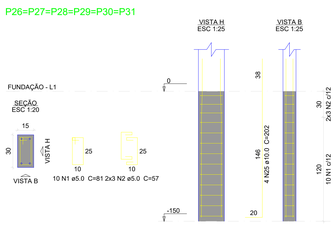

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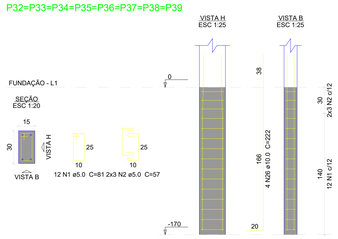

CONTRATANTE:

PREFEITURA MUNICIPAL DE SÃO JOÃO DA LAGOA/MG
CNPJ Nº: 01.612.494/0001-28
AVENIDA CORAÇÃO DE JESUS, Nº 1005 - CENTRO
SÃO JOÃO DA LAGOA/MG - CEP: 39330-000

RESP. TÉCNICO:
Documento assinado digitalmente
LEONARDO PETERSON AMARAL LIMA
Data: 23/09/2025 22:32:01-0300
Verifique em https://validar.iti.gov.br
LEONARDO PETERSON AMARAL LIMA
CREA - MG 231873/D

RESP. LEGAL:
RONALDO SOARES MOTA
DIAS:11086781651
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Assinado de forma digital por RONALDO SOARES MOTA DIAS:11086781651
Dados: 2025.09.24 10:28:20
PREF. MUNICIPAL DE SÃO JOÃO DA LAGOA
CNPJ 01.612.494/0001-28

CONSTRUÇÃO DA NOVA UNIDADE ESCOLAR MUNICIPAL BENEDITO PEREIRA LIMA

DESCRIÇÃO: SAPATAS E PILARES DO BLOCO ADM.
ENDEREÇO DA OBRA: RUA JOAQUIM FERREIRA ESQUINA COM RUA LEOPOLDINO
MUNICÍPIO: SÃO JOÃO DA LAGOA
DATA INICIAL: 10/04/2025
FASE DO PROJETO: INICIAL
DATA FINAL: 15/07/2025
ART: - - - - - - - - - - - - - - - -
ESCALAS: INDICADAS
PRANCHA: 03/16

PROJ. ESTRUTURAL