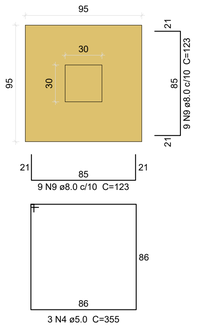
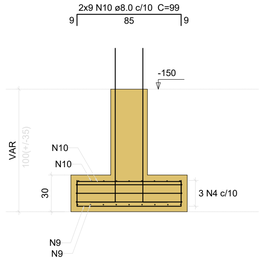
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PLANTA
ESC 1:25

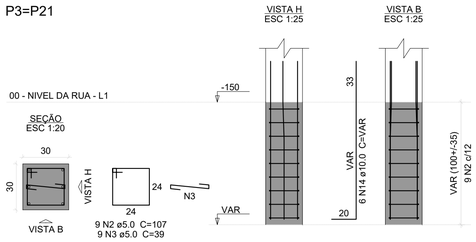


CORTE
ESC 1:25



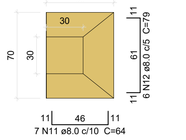
Solo com capacidade de suporte > 1.50 kgf/cm²
Solo compactado sobre a sapata
peso específico > 1600.00 kgf/m³

P3=P21

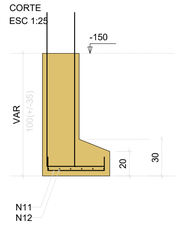


S6=S10=S11=S12=S13

PLANTA
ESC 1:25

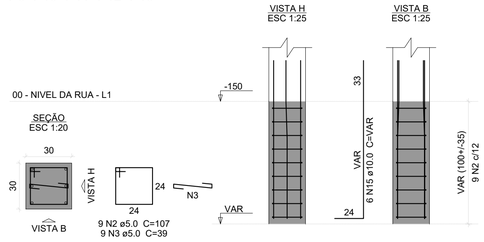


CORTE
ESC 1:25



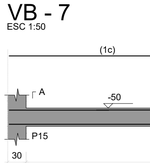
Solo com capacidade de suporte > 1.50 kgf/cm²
Solo compactado sobre a sapata
peso específico > 1600.00 kgf/m³

P6=P10=P11=P12=P13



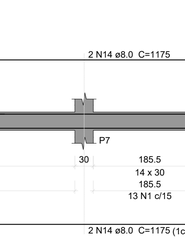
S7=S8=S9=S15=S16

PLANTA
ESC 1:25

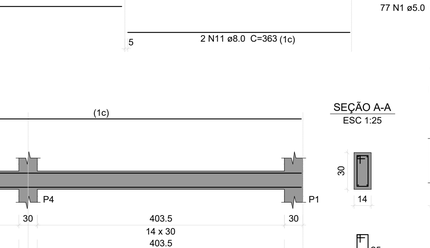


Solo com capacidade de suporte > 1.50 kgf/cm²
Solo compactado sobre a sapata
peso específico > 1600.00 kgf/m³

CORTE
ESC 1:25

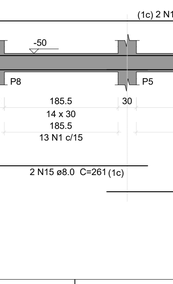


P7=P8=P9=P15=P16



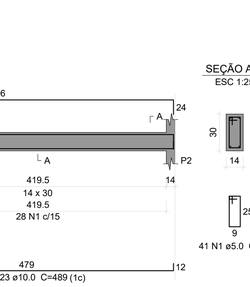
S19=S20

PLANTA
ESC 1:25

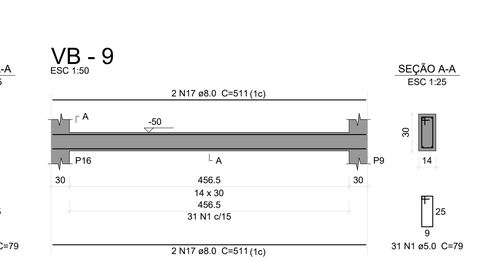


Solo com capacidade de suporte > 1.50 kgf/cm²
Solo compactado sobre a sapata
peso específico > 1600.00 kgf/m³

CORTE
ESC 1:25

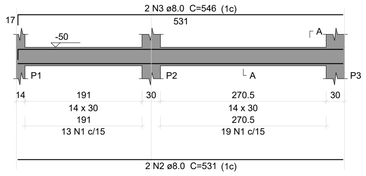


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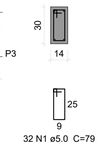


VB - 1

ESC 1:50

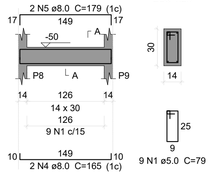


SEÇÃO A-A
ESC 1:25



VB - 2

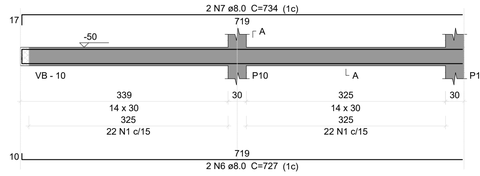
ESC 1:50



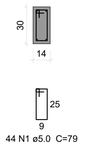
SEÇÃO A-A
ESC 1:25

VB - 3

ESC 1:50

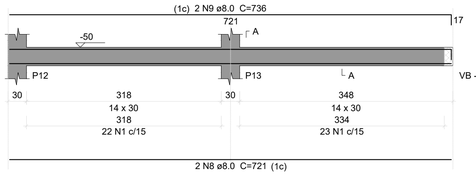


SEÇÃO A-A
ESC 1:25

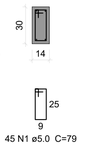


VB - 4

ESC 1:50

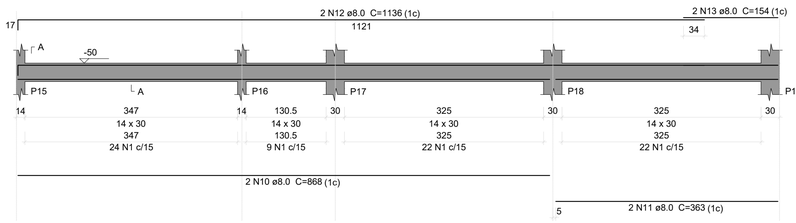


SEÇÃO A-A
ESC 1:25

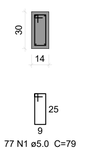


VB - 5

ESC 1:50

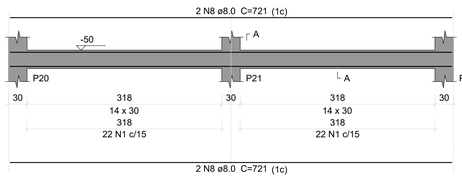


SEÇÃO A-A
ESC 1:25

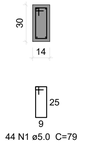


VB - 6

ESC 1:50



SEÇÃO A-A
ESC 1:25



VB - 7

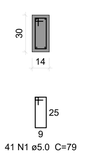
ESC 1:50

SEÇÃO A-A
ESC 1:25

VB - 8

ESC 1:50

SEÇÃO A-A
ESC 1:25



VB - 9

ESC 1:50

SEÇÃO A-A
ESC 1:25

Relação do aço

VB - 1	VB - 2	VB - 3
VB - 4	VB - 5	VB - 6
VB - 7	VB - 8	VB - 9
VB - 10	VB - 11	VB - 12
VB - 13	VB - 14	VB - 15

Resumo do aço

AÇO	N	DIAM (mm)	QUANT	C.UNIT (cm)	C.TOTAL (cm)
CA60	1	5.0	585	79	46215
CA50	2	8.0	2	531	1062
	3	8.0	2	546	1092
	4	8.0	2	165	330
	5	8.0	2	179	358
	6	8.0	2	727	1454
	7	8.0	2	734	1468
	8	8.0	6	721	4326
	9	8.0	2	736	1472
	10	8.0	2	868	1736
	11	8.0	2	363	726
	12	8.0	2	1136	2272
	13	8.0	2	154	308
	14	8.0	4	1175	4700
	15	8.0	2	261	522
	16	8.0	2	696	1392
	17	8.0	4	511	2044
	18	8.0	4	1187	4748
	19	8.0	8	399	3192
	20	8.0	8	400	3200
	21	8.0	2	408	816
	22	8.0	2	423	846
	23	10.0	2	489	978

AÇO	DIAM (mm)	C.TOTAL (m)	QUANT + 10 % (Barras)	PESO + 10 % (kg)
CA50	8.0	380.7	35	165.2
	10.0	9.8	1	6.6
CA60	5.0	462.2	-	78.4
PESO TOTAL (kg)				
CA50	171.8			
CA60	78.4			

Volume de concreto (C-30) = 3.61 m³
Área de forma = 63.68 m²

PROJETO ESTRUTURAL

REFORMA E AMPLIAÇÃO DA ESCOLA MUNICIPAL JOAQUIM PESSOA

Descrição do Projeto: Armação Sapatas e Vigas Baldrames e Resumo de aço.

Endereço: Comunidade de Macauba, no município de Olhos d' Água-MG.

Responsável Tecnico:
KAREN MARIANA SOARES VIEIRA:09588911680
Assinado de forma digital por KAREN MARIANA SOARES VIEIRA:09588911680
Dados: 2026.05.19 13:37:31 -03'00'
Káren Mariana Soares Vieira
Engenheiro(a) Civil - Crea: 332.425-D/MG

Contratante:
RODRIGO VIEIRA DE MATOS:09977653640
Assinado de forma digital por RODRIGO VIEIRA DE MATOS:09977653640
Dados: 2026.05.19 13:15:51 -03'00'
Rodrigo Vieira de Matos
Prefeito Municipal de Olhos d' Agua-MG

Area (m²): 235,00m²	Tipo da Edificação: Infraestrutura	Prancha: 03/06
Data: 18 de Maio 2026.	Art.:	
Referência / Número da pasta: VLK - 3PSP - OLH -21	Escala: Indicada	

Contratada:
ENGENHARIA
(38) 9 9977-6300
CNPJ: 57.955.661/0001-98
engenhariavlk@gmail.com
Avenida Coronel Prates, nº 409, Sala 301
Centro, Montes Claros-MG

Contratante:
PREFEITURA MUNICIPAL DE OLHOS D'ÁGUA
Praça Dona Quita, 90, Centro, Olhos D' Água – MG.
CEP 39.390-000 - CNPJ 01.612.547/0001-00
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Olhos d' Agua-MG