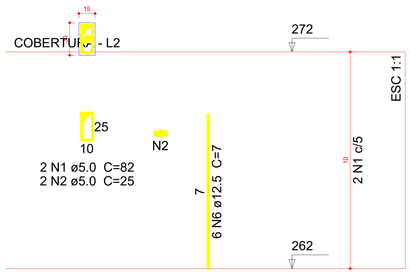
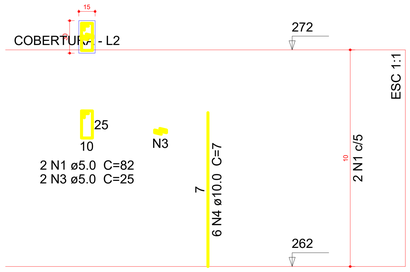
P10=P13=P30

ESC 1:20



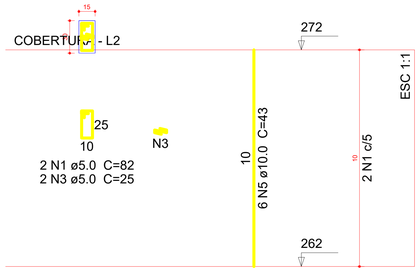
P12=P14=P18=P24=P27=P29=P31=P34

ESC 1:20

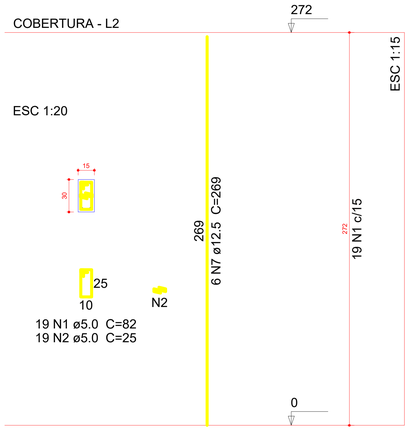


P16

ESC 1:20



P6=P33



Relação do aço

2xP6
P16
3xP10
8xP12

AÇO	N	DIAM (mm)	QUANT (Barras)	UNIT (cm)	C.TOTAL (cm)
CA60	1	5.0	62	82	5084
	2	5.0	44	25	1100
	3	5.0	18	25	450
CA50	4	10.0	48	7	336
	5	10.0	6	43	258
	6	12.5	18	7	126
	7	12.5	12	269	3228

Resumo do aço

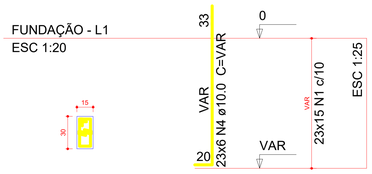
AÇO	DIAM (mm)	C.TOTAL (m)	QUANT + 10 % (Barras)
CA50	10.0	6	1
	12.5	33.6	4
CA60	5.0	66.4	7

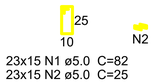
PESO TOTAL (kg)	
CA50	39.6
CA60	11.2

Volume de concreto (C-30) = 0.3 m³
Área de forma = 5.98 m²

P1=P7=P8=P9=P11=P12=P14=P15=P16=P17=P18 =P20=P22=P23=P24=P25=P26=P27=P28=P29 =P31=P32=P34

FUNDAÇÃO - L1
ESC 1:20

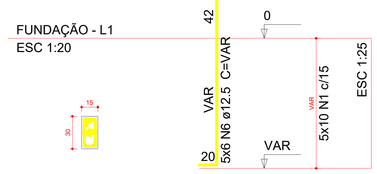


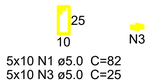


23x15 N1 ø5.0 C=82
23x15 N2 ø5.0 C=25

P6=P10=P13=P30=P33

FUNDAÇÃO - L1
ESC 1:20

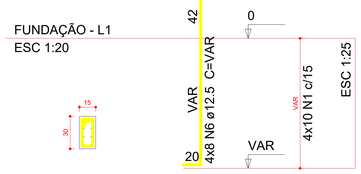


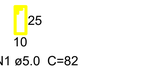


5x10 N1 ø5.0 C=82
5x10 N3 ø5.0 C=25

P4=P5=P19=P21

FUNDAÇÃO - L1
ESC 1:20

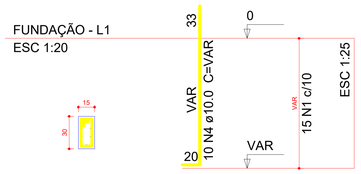


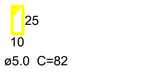


4x10 N1 ø5.0 C=82

P2

FUNDAÇÃO - L1
ESC 1:20



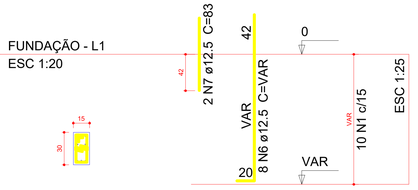


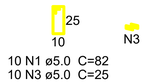
15 N1 ø5.0 C=82

P3

S1=S2=S3=S4=S5=S6=S7=S8=S9=S10=S11=S12 =S13=S14=S15=S16=S17=S18=S19=S20=S21 =S22=S23=S24=S25=S26=S27=S28=S29=S30 =S31=S32=S33=S34

FUNDAÇÃO - L1
ESC 1:20

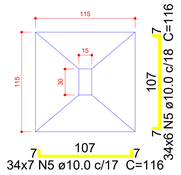


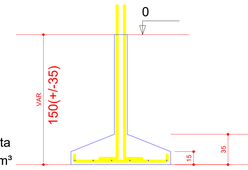


10 N1 ø5.0 C=82
10 N3 ø5.0 C=25

PLANTA
ESC 1:25

CORTE
ESC 1:25





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

Relação do aço

S1

AÇO	N	DIAM (mm)	QUANT (Barras)	UNIT (cm)	C.TOTAL (cm)
CA60	1	5.0	460	82	37720
	2	5.0	345	25	8625
	3	5.0	60	25	1500
CA50	4	10.0	148	VAR	VAR
	5	10.0	442	116	51272
	6	12.5	70	VAR	VAR
	7	12.5	2	83	166

Resumo do aço

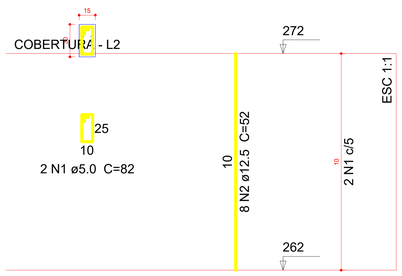
AÇO	DIAM (mm)	C.TOTAL (m)	QUANT + 10 % (Barras)
CA50	10.0	810.2	75
	12.5	148	14
CA60	5.0	478.5	44

PESO TOTAL (kg)	
CA50	706.3
CA60	81.1

Volume de concreto (C-30) = 12.69 m³
Área de forma = 69.36 m²

P21

ESC 1:20



Relação do aço

P21

AÇO	N	DIAM (mm)	QUANT (Barras)	UNIT (cm)	C.TOTAL (cm)
CA60	1	5.0	2	82	164
CA50	2	12.5	8	52	416

Resumo do aço

AÇO	DIAM (mm)	C.TOTAL (m)	QUANT + 10 % (Barras)
CA50	12.5	4.2	1
CA60	5.0	1.7	1

PESO TOTAL (kg)	
CA50	4.4
CA60	0.3

Volume de concreto (C-30) = 0 m³
Área de forma = 0.09 m²

PROJETO ESTRUTURAL

LOCAL: Rua Clemildes Pereira Aroeira - Idelsa Borgo - Montanha - ES	OBRA: CONSTRUÇÃO DE ABRIGO INSTITUCIONAL PARA IDOSO	ESCALA: INDICADA
CONTEÚDO: PROJETO ESTRUTURAL		DATA: ABR/2026
USO: COMERCIAL / REVISÃO: RV00	ÁREA: ÁREA CONSTRUÍDA: 304,08 m²	FOLHA: 09/12
PROPRIETÁRIO: FUNDO MUNICIPAL DE ASSISTÊNCIA SOCIAL DE MONTANHA - ES CNPJ: 14.829.853/0001-45	RESPONSÁVEL TÉCNICO: DAVI GRASSI:13352797765 DAVI GRASSI ENGENHEIRO CIVIL - CREA-ES: 0048103/D	APICE