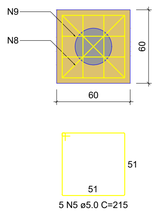
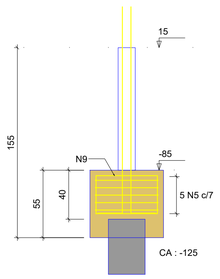
B1=B4=B9=B10=B13=B15=B18=B19=B20
1xR20

PLANTA
ESC 1:25



5 N5 ø5.0 C=215

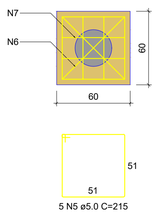
CORTE
ESC 1:25



2 N8 ø5.0 C=213 4 N9 ø5.0 C=171

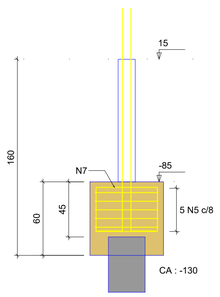
B2=B16=B17
1xR20

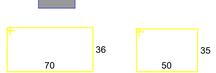
PLANTA
ESC 1:25



5 N5 ø5.0 C=215

CORTE
ESC 1:25

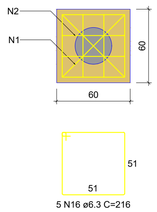




2 N6 ø5.0 C=223 4 N7 ø5.0 C=181

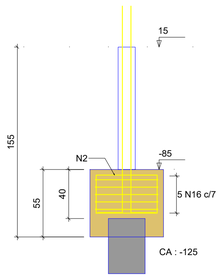
B3=B5=B6=B7=B8=B11
1xR20

PLANTA
ESC 1:25



5 N16 ø6.3 C=216

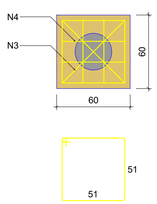
CORTE
ESC 1:25



2 N1 ø5.0 C=213 4 N2 ø5.0 C=167

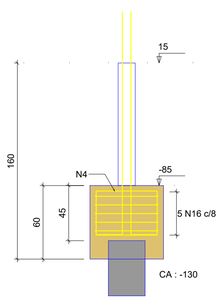
B12=B14
1xR20

PLANTA
ESC 1:25



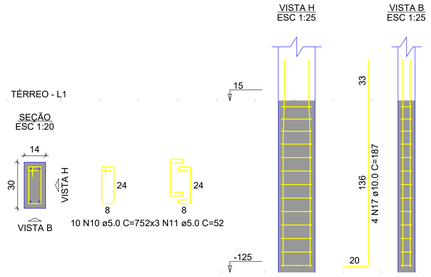
5 N16 ø6.3 C=216

CORTE
ESC 1:25



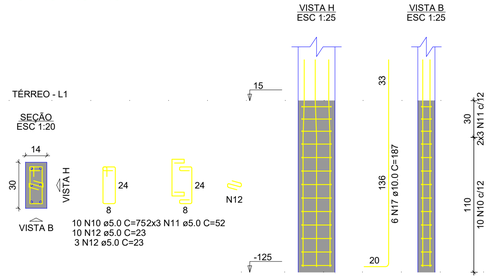
2 N3 ø5.0 C=223 4 N4 ø5.0 C=177

P1=P4=P13



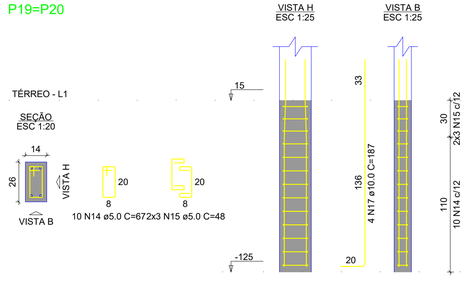
10 N10 ø5.0 C=752x3 N11 ø5.0 C=52

P9=P10=P15=P18



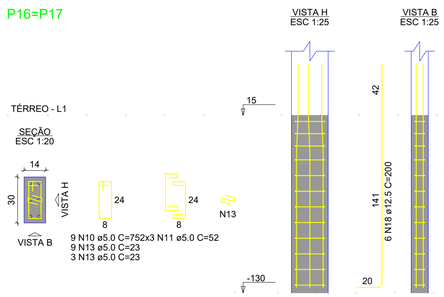
10 N10 ø5.0 C=752x3 N11 ø5.0 C=52
10 N12 ø5.0 C=23
3 N12 ø5.0 C=23

P19=P20



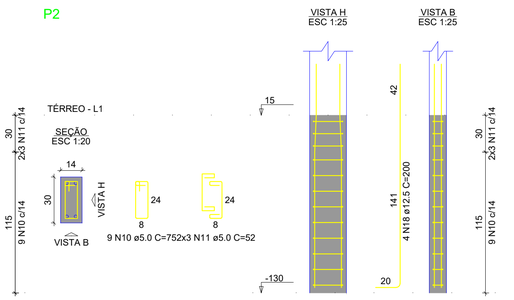
10 N14 ø5.0 C=672x3 N15 ø5.0 C=48

P16=P17



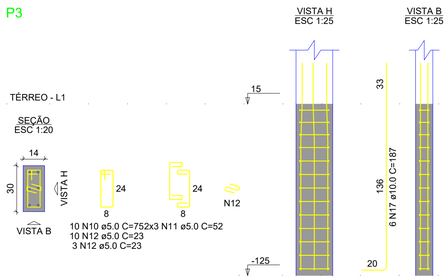
9 N10 ø5.0 C=752x3 N11 ø5.0 C=52
9 N13 ø5.0 C=23
3 N13 ø5.0 C=23

P2



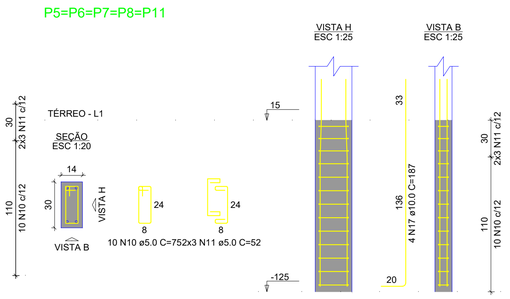
9 N10 ø5.0 C=752x3 N11 ø5.0 C=52

P3



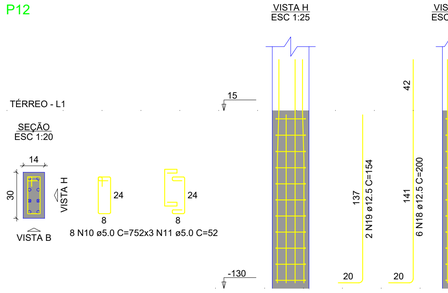
10 N10 ø5.0 C=752x3 N11 ø5.0 C=52
10 N12 ø5.0 C=23
3 N12 ø5.0 C=23

P5=P6=P7=P8=P11



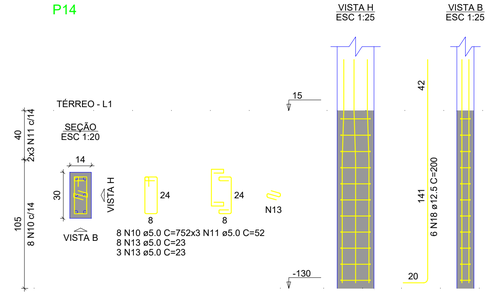
10 N10 ø5.0 C=752x3 N11 ø5.0 C=52

P12



8 N10 ø5.0 C=752x3 N11 ø5.0 C=52

P14



8 N10 ø5.0 C=752x3 N11 ø5.0 C=52
8 N13 ø5.0 C=23
3 N13 ø5.0 C=23

RELAÇÃO DO AÇO

6xB11	2xB14	3xB17
9xB20	3xP1	P2
P3	5xP5	4xP9
P12	P14	2xP16
2xP19		

AÇO	N	DIAM (mm)	QUANT	C.UNIT (cm)	C.TOTAL (cm)
CA60	1	5.0	12	213	2556
	2	5.0	24	167	4008
	3	5.0	4	223	892
	4	5.0	8	177	1416
	5	5.0	60	215	12900
	6	5.0	6	223	1338
	7	5.0	12	181	2172
	8	5.0	18	213	3834
	9	5.0	36	171	6156
	10	5.0	173	75	12975
	11	5.0	108	52	5616
	12	5.0	65	23	1495
	13	5.0	35	23	805
	14	5.0	20	67	1340
	15	5.0	12	48	576
CA50	16	6.3	40	216	8640
	17	10.0	70	187	13090
	18	12.5	28	200	5600
	19	12.5	2	154	308

RESUMO DO AÇO

AÇO	DIAM (mm)	C.TOTAL (m)	PESO + 0% (kg)
CA50	6.3	86.4	21.1
	10.0	130.9	80.7
	12.5	59.1	56.9
CA60	5.0	580.8	89.5

PESO TOTAL (kg)	
CA50	158.8
CA60	89.5

Volume de concreto (C-30) = 4.67 m³
Área de forma = 51.64 m²

APROVAÇÕES / OBSERVAÇÕES:

SISTEMA	NORMAS TÉCNICAS ADOTADAS	SISTEMA	NORMAS TÉCNICAS ADOTADAS

PEQUENAS ALTERAÇÕES NA EXECUÇÃO PODERÃO SER FEITAS COM AUTORIZAÇÃO E SUPERVISÃO DO ENGENHEIRO FISCAL RESPONSÁVEL E DE ACORDO COM AS NORMAS TÉCNICAS APLICÁVEIS, TODAVIA MUDANÇAS DIMENSIONAIS DE PORTE NÃO DEVEM SER EXECUTADAS SEM PRÉVIA AUTORIZAÇÃO DO PROJETISTA

REVISÃO	DESCRIÇÃO	RESPONSÁVEL	DATA

POLÍCIA MILITAR
ESTADO DE SANTA CATARINA
Segurança. Por pessoas do bem, para o bem das pessoas.

Responsável Técnico:

EVERTON VALNER DE SOUZA
CREA-SC: 150911-4
Engenheiro Civil e Eletricista

Proprietário:

FUNDO DE MELHORIA DA POLÍCIA MILITAR
CNPJ: 13.925.994/0001-07

OBRA
Construção do Novo Grupamento da PMSC em Maracajá
Avenida Nossa Senhora da Conceição, Lotes 245 e 252, Vila Beatriz - Maracajá/SC.

TIPO DE PROJETO	FASE DO PROJETO
Projeto Estrutural	APROVAÇÃO
DESCRIÇÃO DA FOLHA	FOLHA
Detalhamento da Fundação	05 de 11

ESCALA	DATA	DESENHISTA	ARQUIVO PROJETISTA	PROJETO	APROVAÇÃO
Indicada	MAI/2023	1º Sgt Valner	Projeto Estrutural Grupo.dwg		