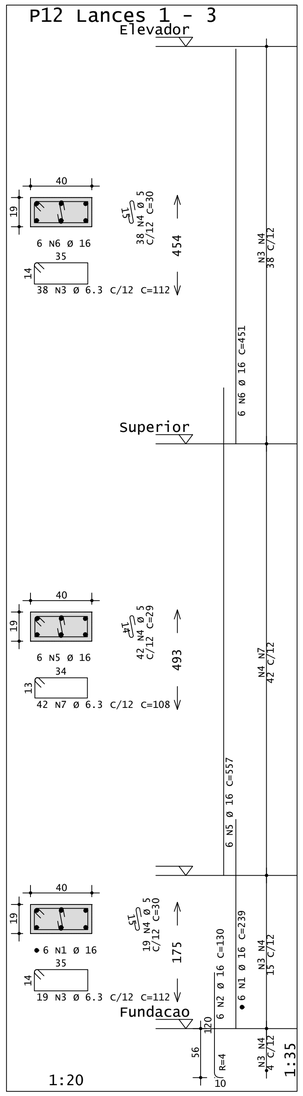
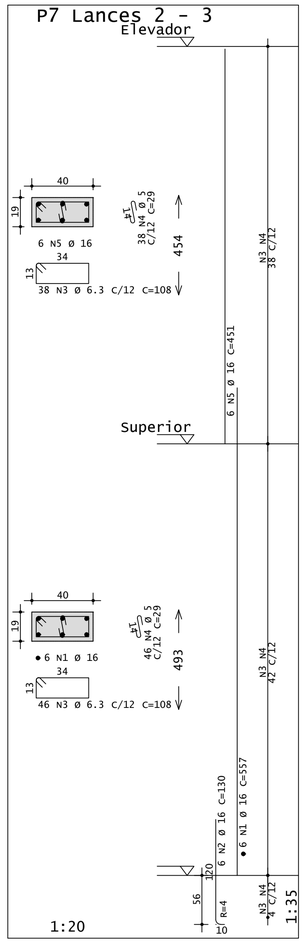
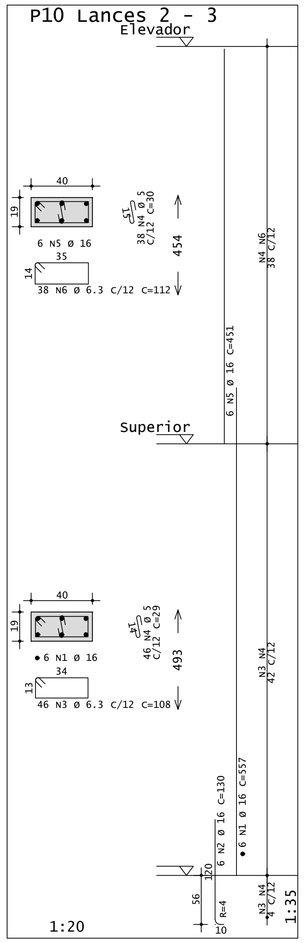
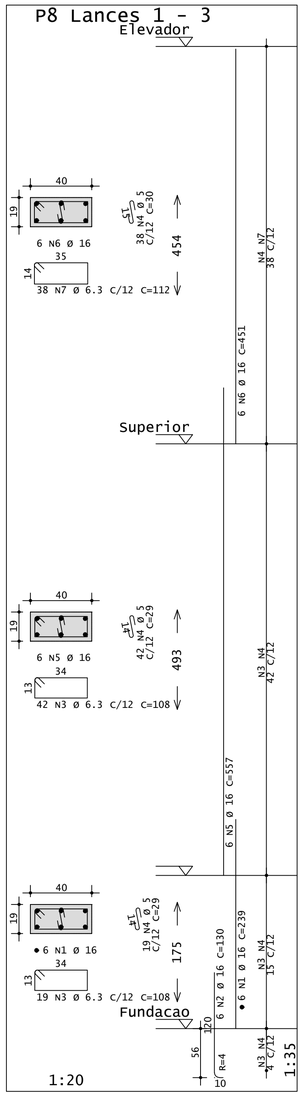
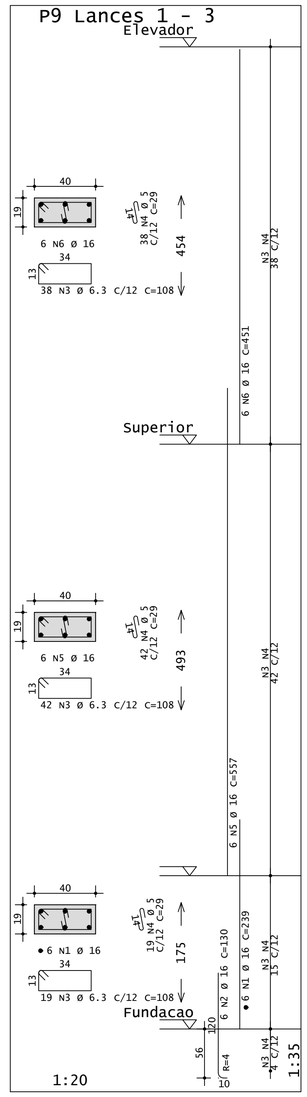
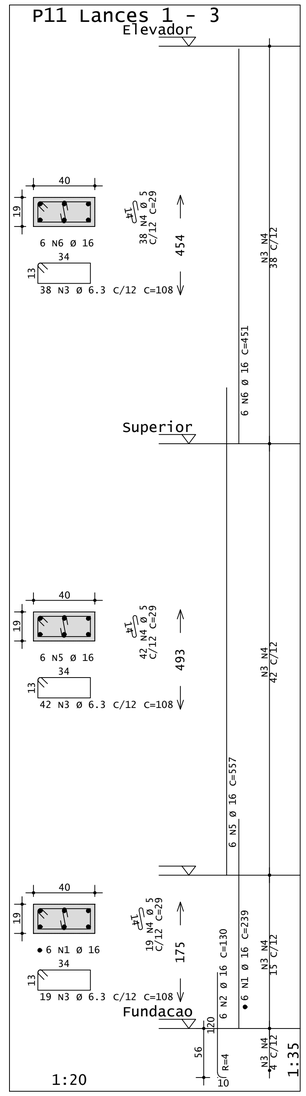








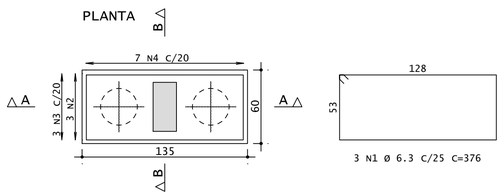


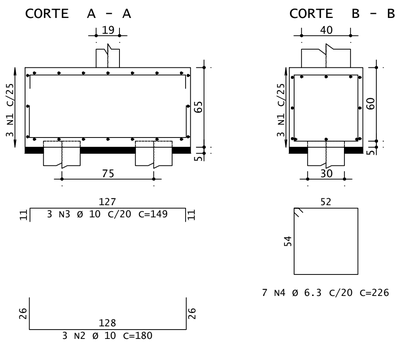


AÇO	POS	BIT	QUANT	COMPRIMENTO	
				UNIT	TOTAL
		mm		cm	cm
B15=B16=B17=B18=B19=B20			(X6)		
50A	1	6.3	18	376	6768
50A	2	10	18	180	3240
50A	3	10	18	149	2682
50A	4	6.3	42	226	9492
P7 Lances 2 - 3					
50A	1	16	6	557	3342
50A	2	16	6	130	780
50A	3	6.3	84	108	9072
60A	4	5	84	29	2436
50A	5	16	6	451	2706
P8 Lances 1 - 3					
50A	1	16	6	239	1434
50A	2	16	6	130	780
50A	3	6.3	61	108	6588
60A	4	5	99	29	2871
50A	5	16	6	557	3342
50A	6	16	6	451	2706
50A	7	6.3	38	112	4256
P9 Lances 1 - 3					
50A	1	16	6	239	1434
50A	2	16	6	130	780
50A	3	6.3	99	108	10692
60A	4	5	99	29	2871
50A	5	16	6	557	3342
50A	6	16	6	451	2706
P10 Lances 2 - 3					
50A	1	16	6	557	3342
50A	2	16	6	130	780
50A	3	6.3	46	108	4968
60A	4	5	84	29	2436
50A	5	16	6	451	2706
50A	6	6.3	38	112	4256
P11 Lances 1 - 3					
50A	1	16	6	239	1434
50A	2	16	6	130	780
50A	3	6.3	99	108	10692
60A	4	5	99	29	2871
50A	5	16	6	557	3342
50A	6	16	6	451	2706
P12 Lances 1 - 3					
50A	1	16	6	239	1434
50A	2	16	6	130	780
50A	3	6.3	57	112	6384
60A	4	5	99	30	2970
50A	5	16	6	557	3342
50A	6	16	6	451	2706
50A	7	6.3	42	108	4536
V100					
50A	1	12.5	6	120	720
60A	2	5	4	102	408
V101					
50A	1	12.5	3	150	450
50A	2	12.5	3	165	495
60A	3	5	6	102	612
V103					
50A	1	12.5	3	199	597
50A	2	12.5	3	205	615
60A	3	5	9	102	918

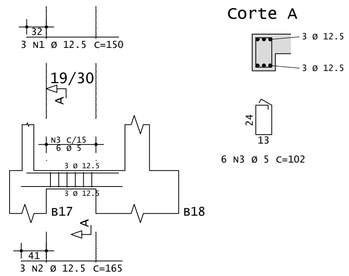
RESUMO DE AÇO			
AÇO	BIT	COMPR	PESO
	mm	m	kgf
60A	5	184	28
50A	6.3	777	190
50A	10	59	37
50A	12.5	29	28
50A	16	467	737
Peso Total		60A =	28 kgf
Peso Total		50A =	992 kgf

B15=B16=B17=B18=B19=B20
(ESCALA 1:25)

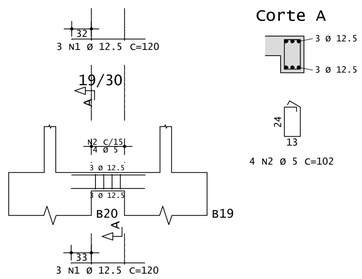




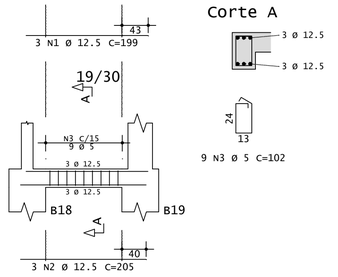
V101



V100



V103



PROPRIETÁRIO

RESPONSÁVEL TÉCNICO:

REVISÃO	DESCRIÇÃO	CORREÇÃO	DATA	RESP.

FFF ENGENHARIA
PROJETOS E ASSESSORIA EM CONSTRUÇÃO
ENGENHARIA * ARQUITETURA * PROJETOS * LAUDOS
AVENIDA CORRADI II, 1505 - RES. CATTAI - CERQUILHO/SP
E-mail: fffengenharia@gmail.com TEL.: (15) 99647-5559
www.fffengenharia.com.br CEL.: (15) 3384-1170

OBRA: REFORMA DA FUMEC DESCENTRALIZADA CAMPO GRANDE EM CAMPINAS/SP

PROPRIETÁRIO: FUNDAÇÃO MUNICIPAL P/ EDUCAÇÃO COMUNITÁRIA - CNPJ: 57.500.902/0001-04

LOCAL: RUA EDSON LUIZ RIGONATTO, Nº 1343 - JARDIM MARACANÃ - CAMPINAS/SP

TÍTULO: PROJETO ESTRUTURAL - DETALHE BLOCOS, VIGAS E PILARES

ESCALA: INDICADA

AUTOR DO PROJETO: FELLIPE FERRARI FAKRI - **CREA:** 506.970.406-3

RESP. TÉCNICO: FELLIPE FERRARI FAKRI - **CREA:** 506.970.406-3

FOLHA: 05 07

ART: 28027230210026732

DATA: 07/12/2020