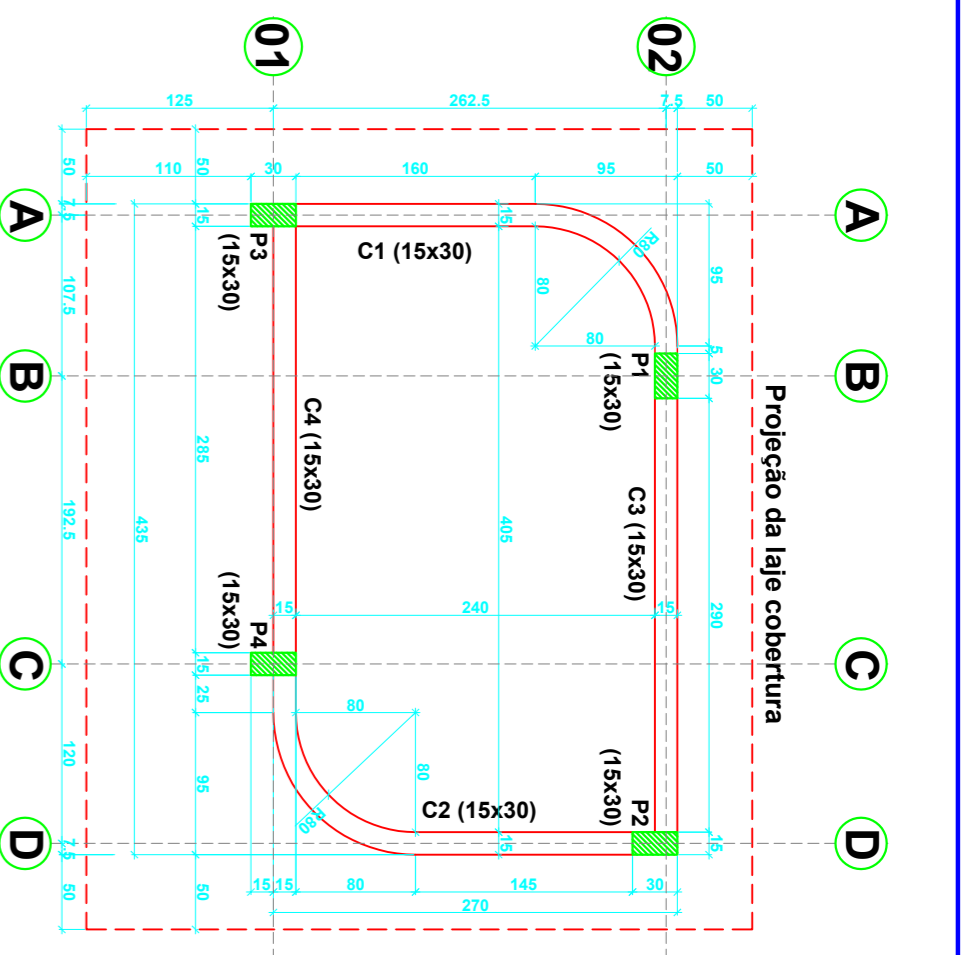
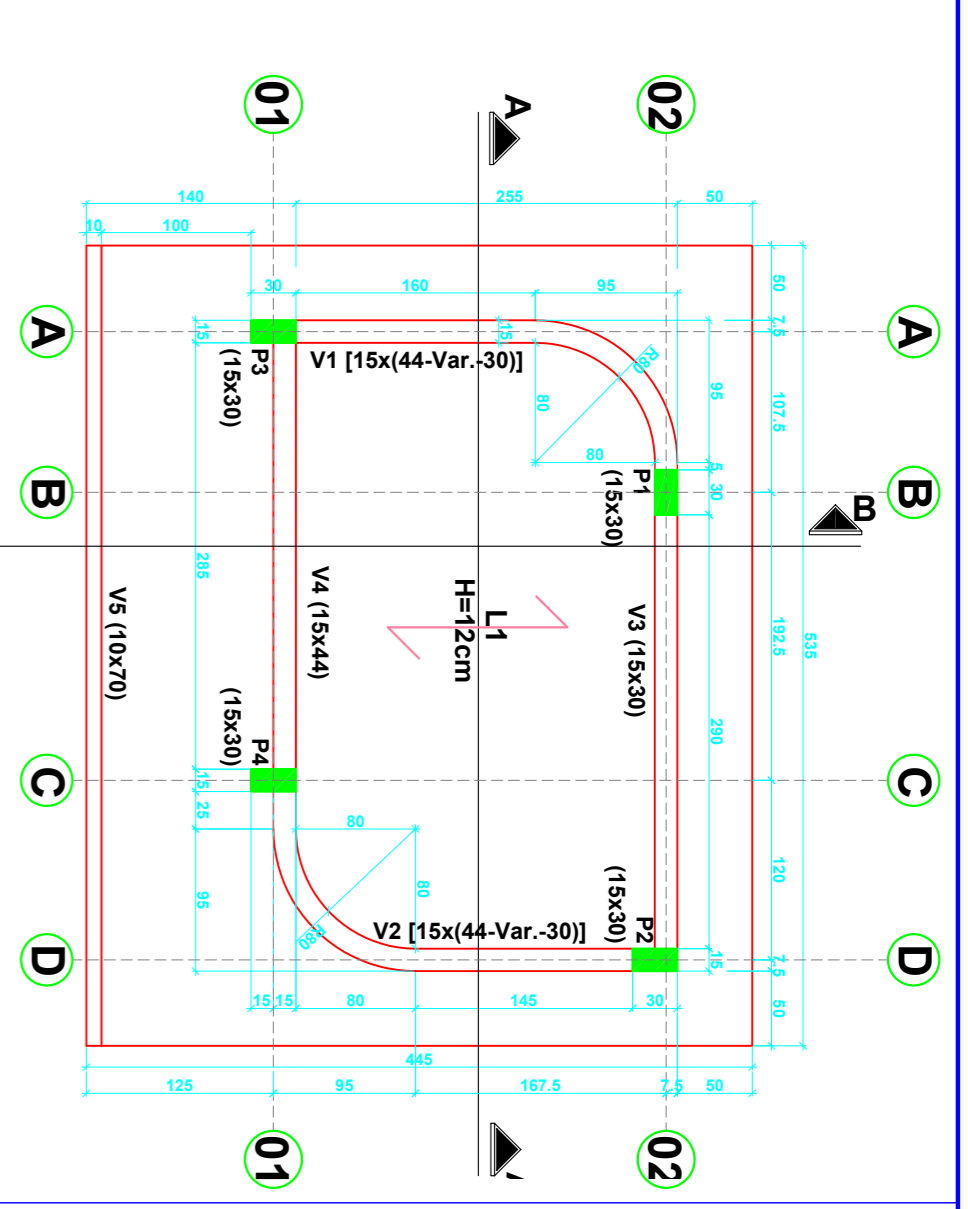


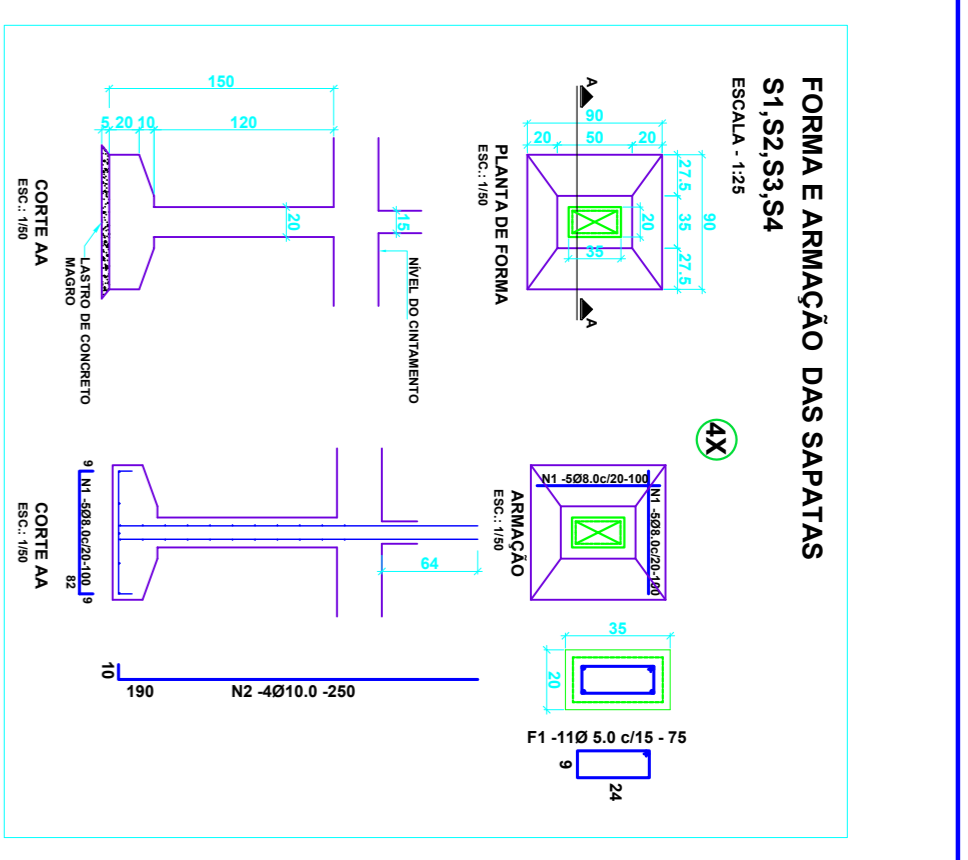
PLANTA DE LOCAÇÃO DA FUNDAÇÃO
ESC: 1/50



PLANTA DE FORMA DO CINTAMENTO
ESC: 1/50



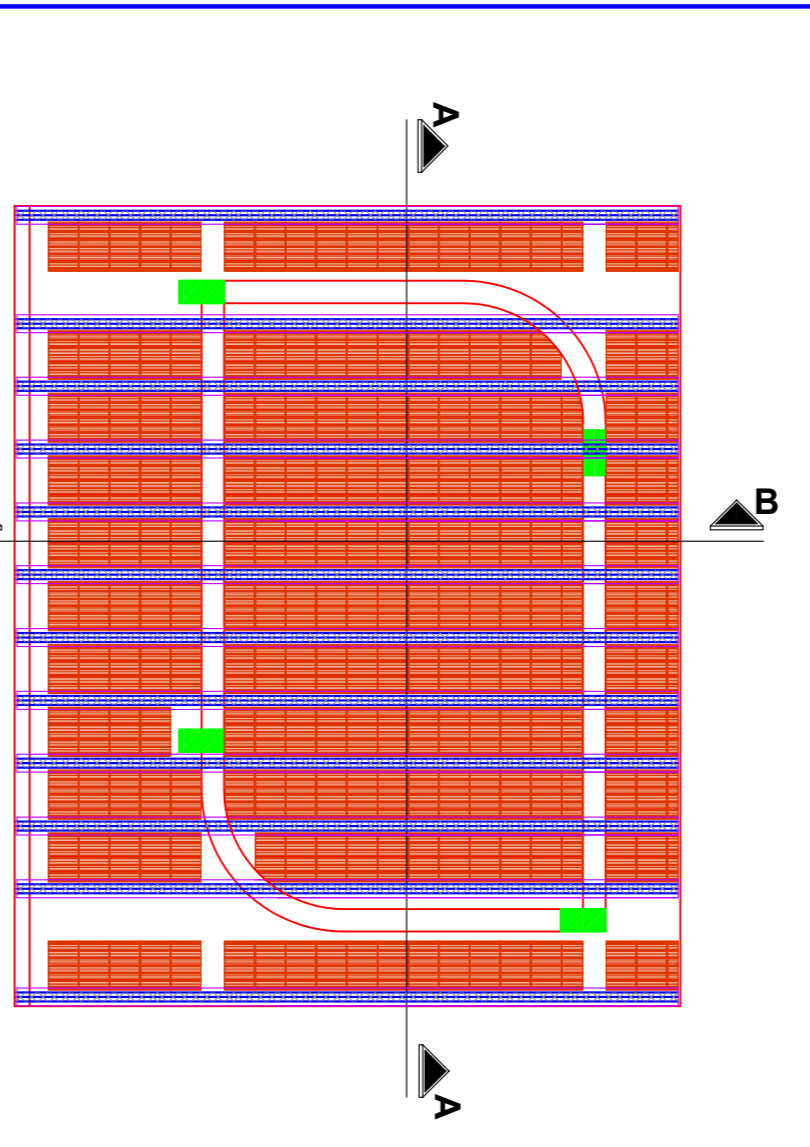
PLANTA DE FORMA DA LAJE
ESC: 1/50



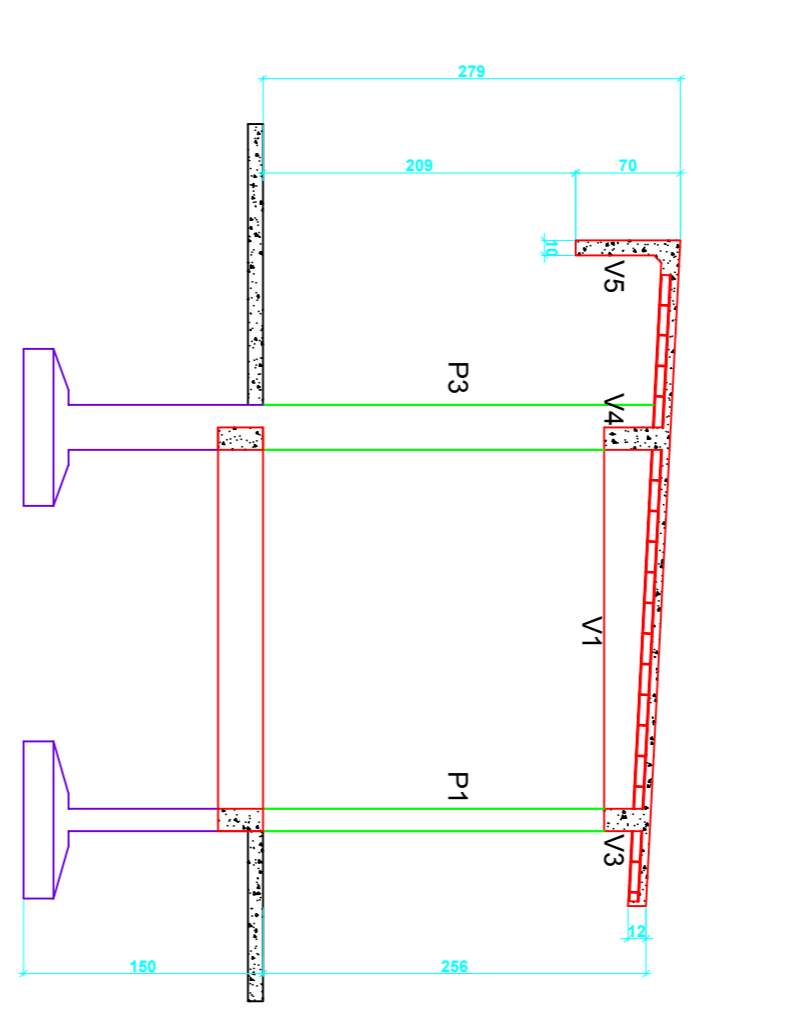
FORMA E ARMAÇÃO DAS SAPATAS
ESC: 1/25

TABELA DE AÇO CA - 60 B				
F Ø (mm)	Quant	C. Unit. (cm)	C. Total (m)	Peso (kg)
1 Ø 5,0	93	75	69,75	11,16
TOTAL GERAL (AÇO CA-60B)				69,75

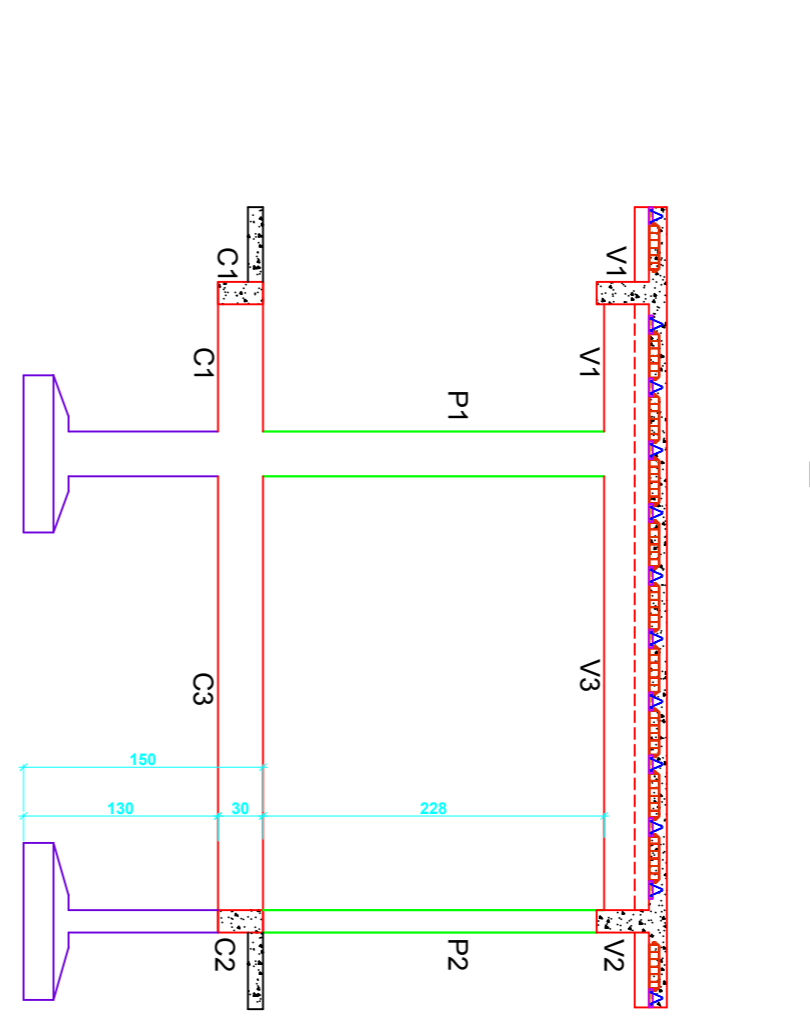
TABELA DE AÇO CA - 50 A				
N Ø (mm)	Quant	C. Unit. (cm)	C. Total (m)	Peso (kg)
1 Ø 8,0	40	100	40,00	16,00
2 Ø 10,0	16	250	40,00	24,80
3 Ø 10,0	4	435	17,40	10,79
4 Ø 10,0	4	425	17,00	10,54
5 Ø 10,0	4	360	14,40	8,93
6 Ø 10,0	4	340	13,60	8,43
TOTAL GERAL (AÇO CA-50A)				79,49



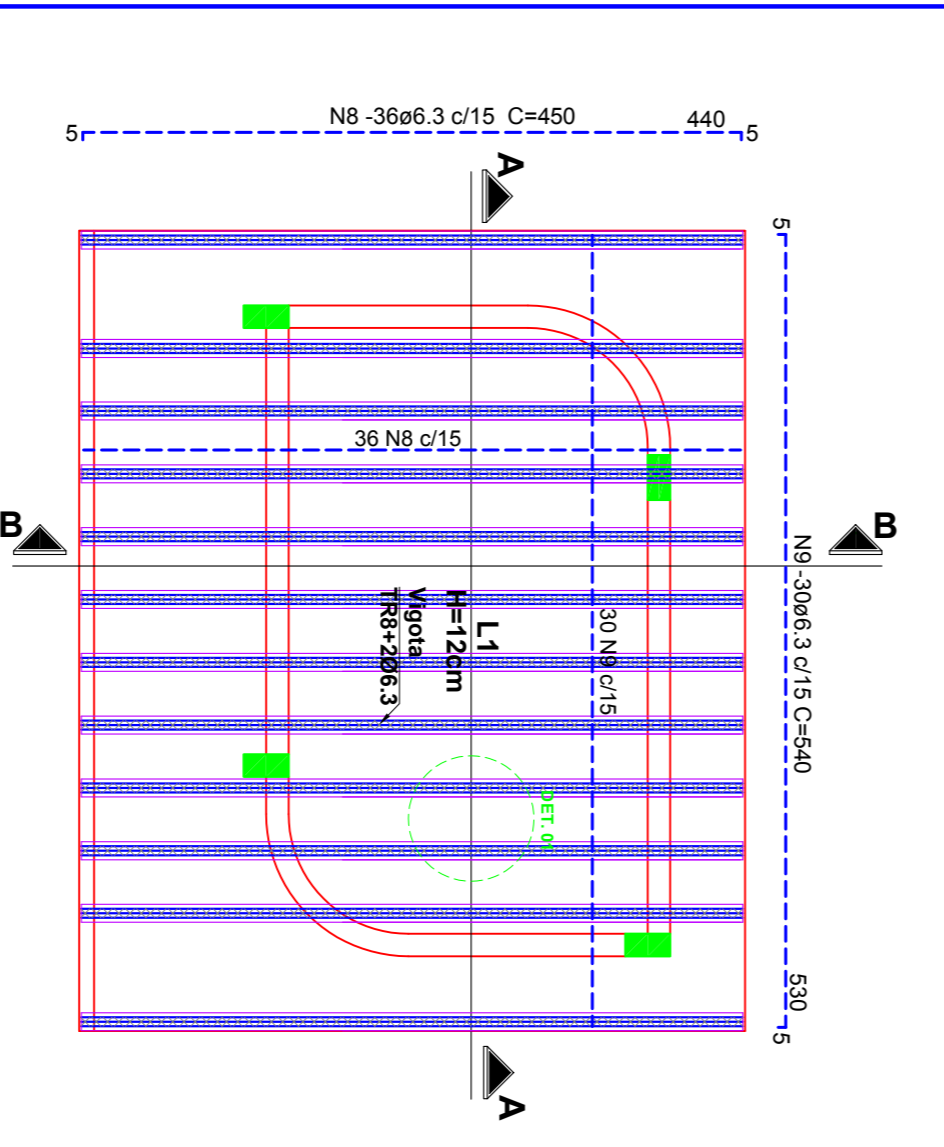
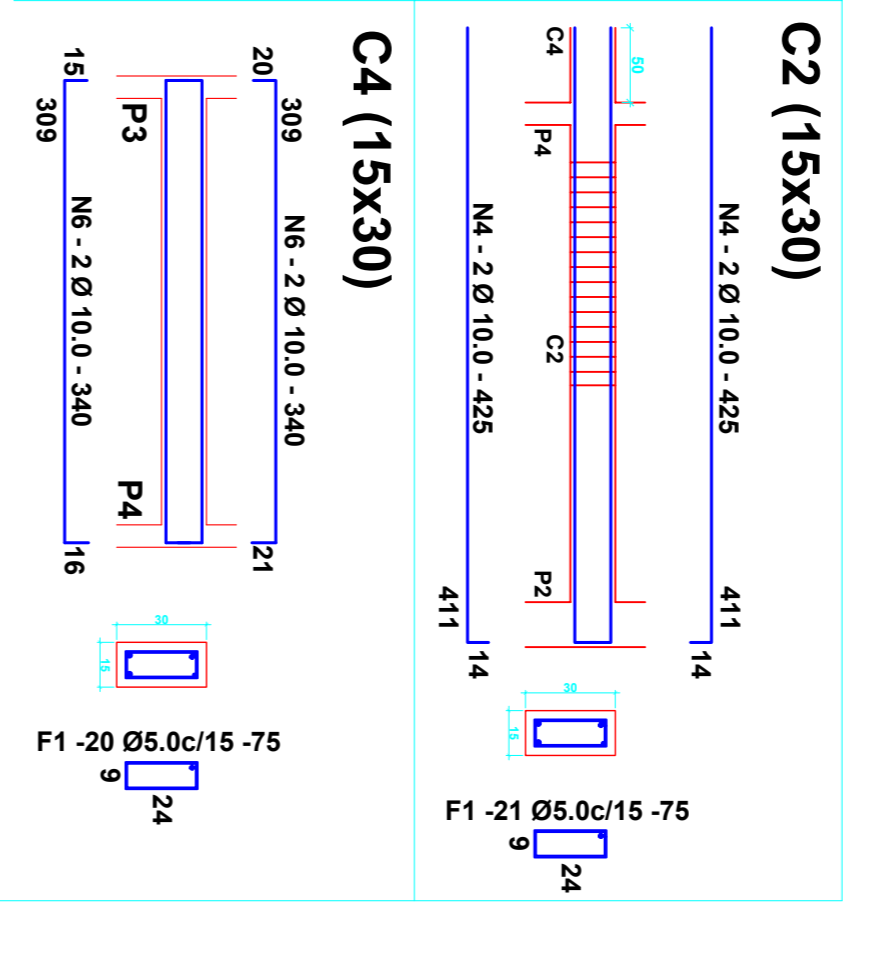
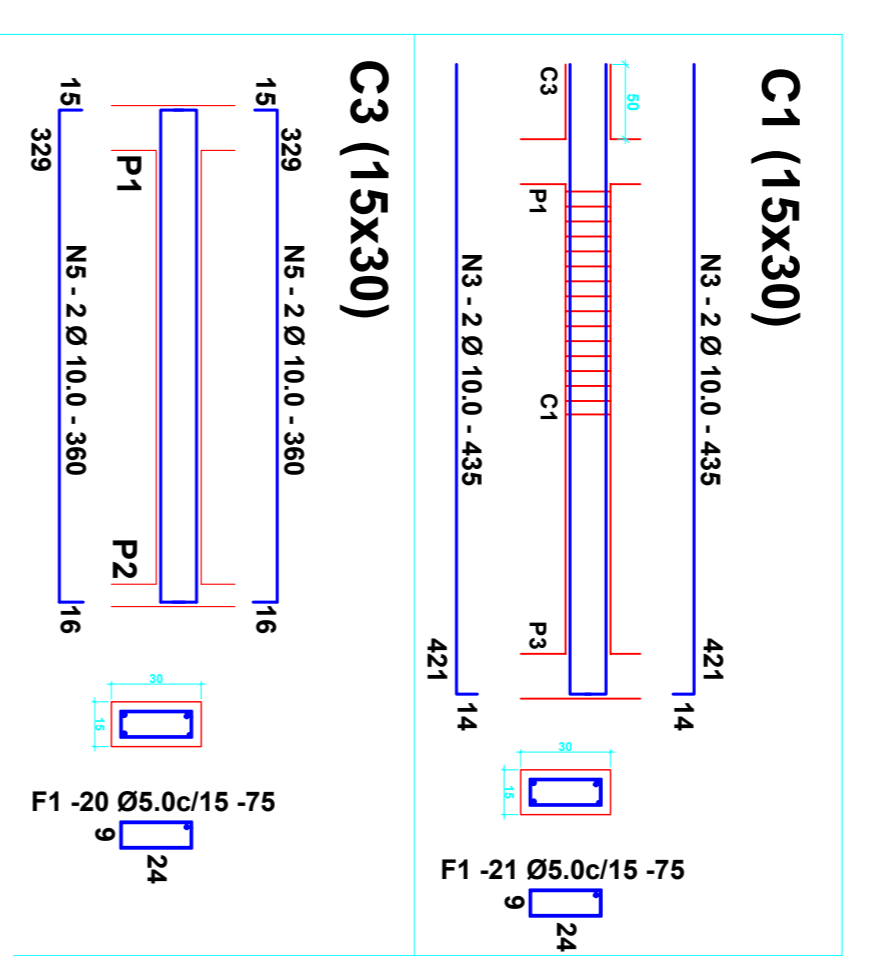
PLANTA DE LOCAÇÃO DAS VIGOTAS e DAS LAIOTAS CERÂMICAS DA LAJE
ESC: 1/50



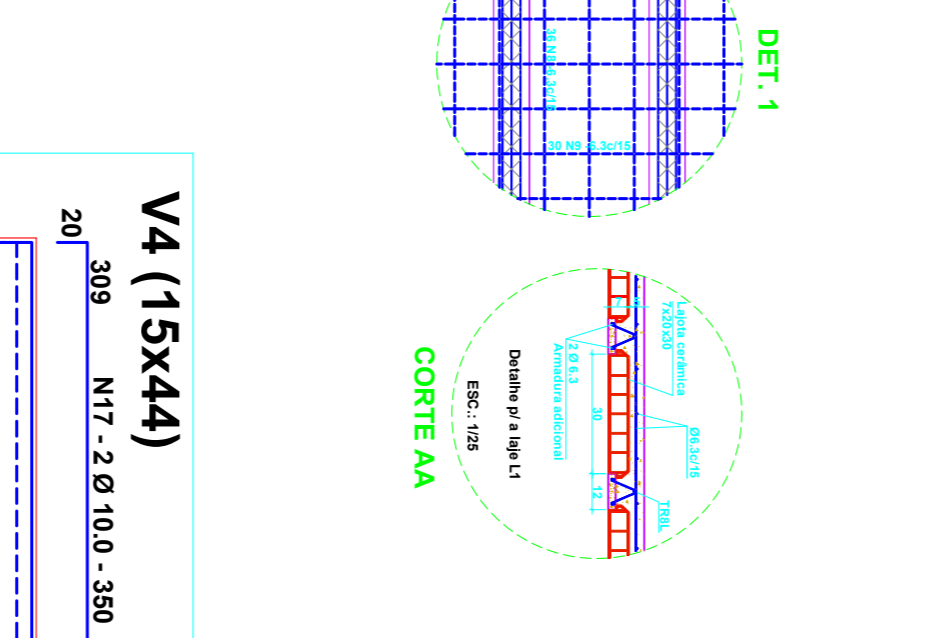
CORTE BB
ESC: 1/50



CORTE AA
ESC: 1/50



ARMAÇÃO POSITIVA E NEGATIVA DA LAJE
ESC: 1/50



CORTE BB
ESC: 1/50

CORTE AA
ESC: 1/50

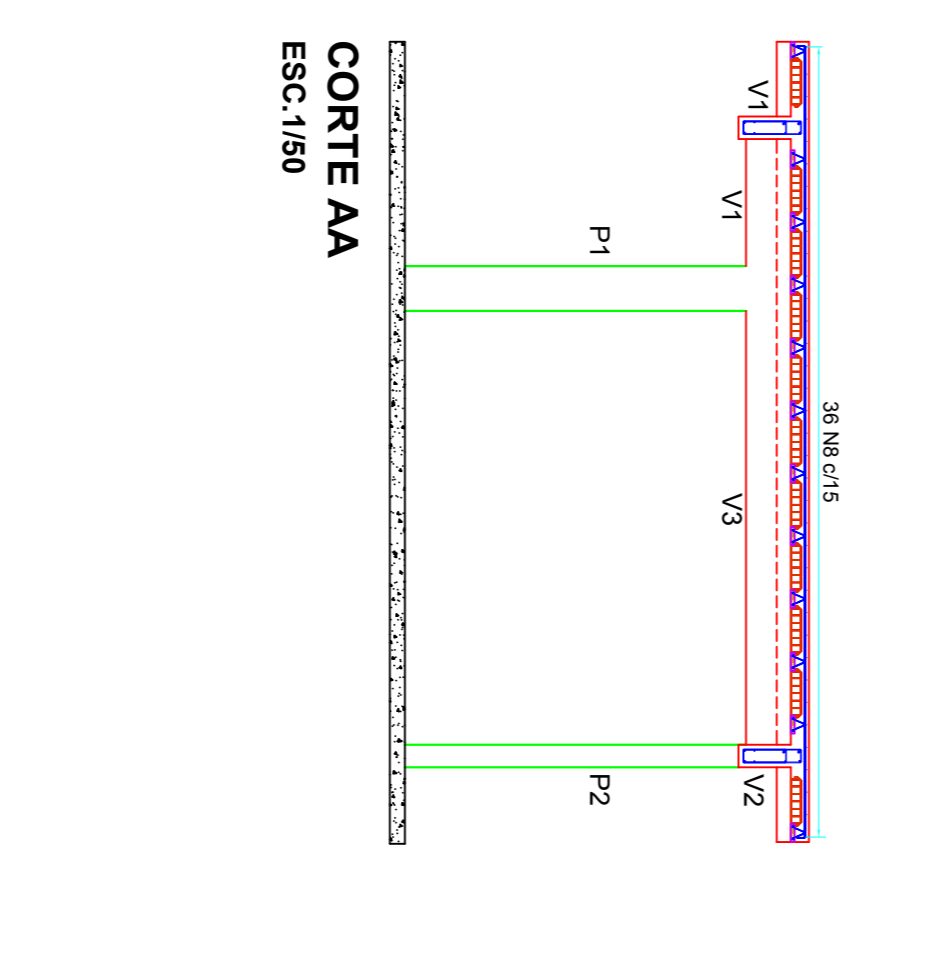
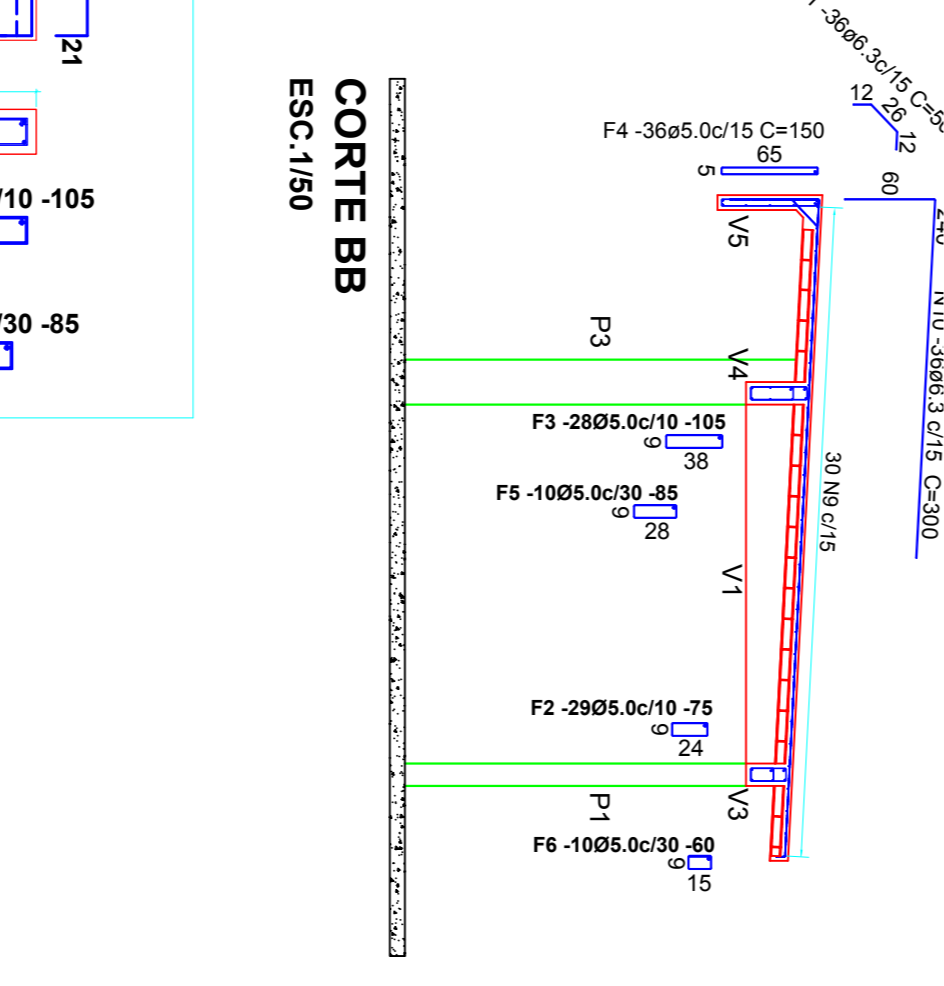


TABELA DE AÇO CA - 60 B				
F Ø (mm)	Quant	C. Unit. (cm)	C. Total (m)	Peso (kg)
1 Ø 5,0	63	105 - Var.	66,15	10,58
2 Ø 5,0	97	75	72,75	11,64
3 Ø 5,0	28	105	29,40	4,70
4 Ø 5,0	38	150	54,00	8,64
5 Ø 5,0	10	85	8,50	1,36
6 Ø 5,0	10	60	6,00	0,96
7 Ø 5,0	22	85 - Var.	18,70	2,99
TOTAL GERAL (AÇO CA-60B)				40,88

TABELA DE AÇO CA - 50 A				
N Ø (mm)	Quant	C. Unit. (cm)	C. Total (m)	Peso (kg)
1 Ø 6,3	2	420	8,40	2,10
2 Ø 6,3	2	420	8,40	2,10
3 Ø 6,3	2	410	8,20	2,05
4 Ø 6,3	2	410	8,20	2,05
5 Ø 6,3	2	330	6,60	1,65
6 Ø 6,3	4	310	12,40	3,10
7 Ø 6,3	6	500	31,60	7,95
8 Ø 6,3	36	450	162,00	40,50
9 Ø 6,3	30	540	162,00	40,50
10 Ø 6,3	36	300	108,00	27,00
11 Ø 6,3	36	50	18,00	4,50
12 Ø 10,0	2	435	8,70	5,39
13 Ø 10,0	2	435	8,70	5,39
14 Ø 10,0	2	425	8,50	5,27
15 Ø 10,0	4	360	14,40	8,93
16 Ø 10,0	4	350	14,00	8,68
17 Ø 10,0	4	380	15,20	9,54
18 Ø 10,0	4	380	15,20	9,54
19 Ø 10,0	8	255	20,40	12,65
20 Ø 10,0	8	270	21,60	13,39
TOTAL GERAL (AÇO CA-50A)				207,40

- NOTAS:**
- COTAS EM CENTÍMETRO
 - RESISTÊNCIA DO CONCRETO FCK = 25MPa
 - PILAR QUE SEGUE
 - TAXA DO SOLO CONSIDERADA = 1,5kg/cm²
 - COBRIMENTO DAS ARMADURAS (PILAR e VIGA) = 3cm
 - COBRIMENTO DAS ARMADURAS (LAJE) = 2,5cm
 - PILAR QUE NASCE
 - PILAR QUE MORRE
 - UTILIZAR ESPAÇADORES TIPO CARANGUEJO NA ARMAÇÃO DA LAJE
 - UTILIZAR ESPAÇADORES DE COBRIMENTO DE ARMADURA DO TIPO PASTILHA PARA CADA ESPESURA DE COBRIMENTO INDICADO ACIMA
 - COLOCAR O PORTA ESTRIBO SUPERIOR DAS VIGAS DO PAVIMENTO LAJE APÓS EXECUTAR O POSICIONAMENTO DAS VIGOTAS PRÉ-MOLDADAS

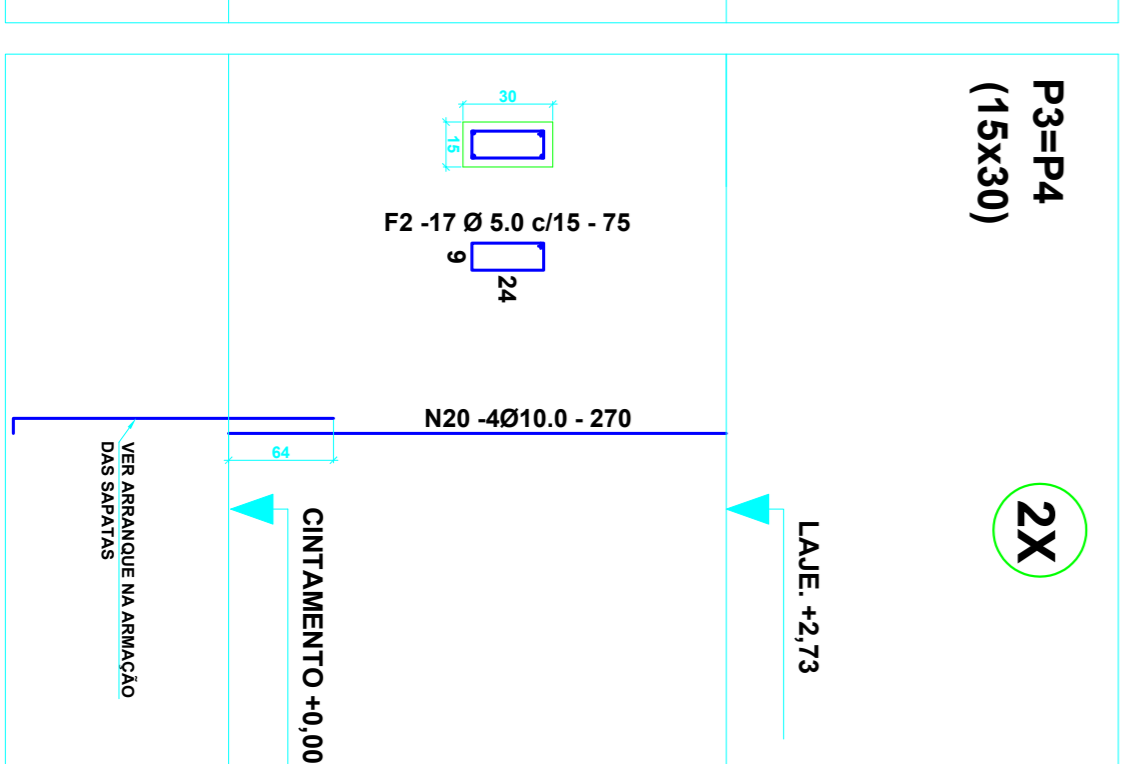
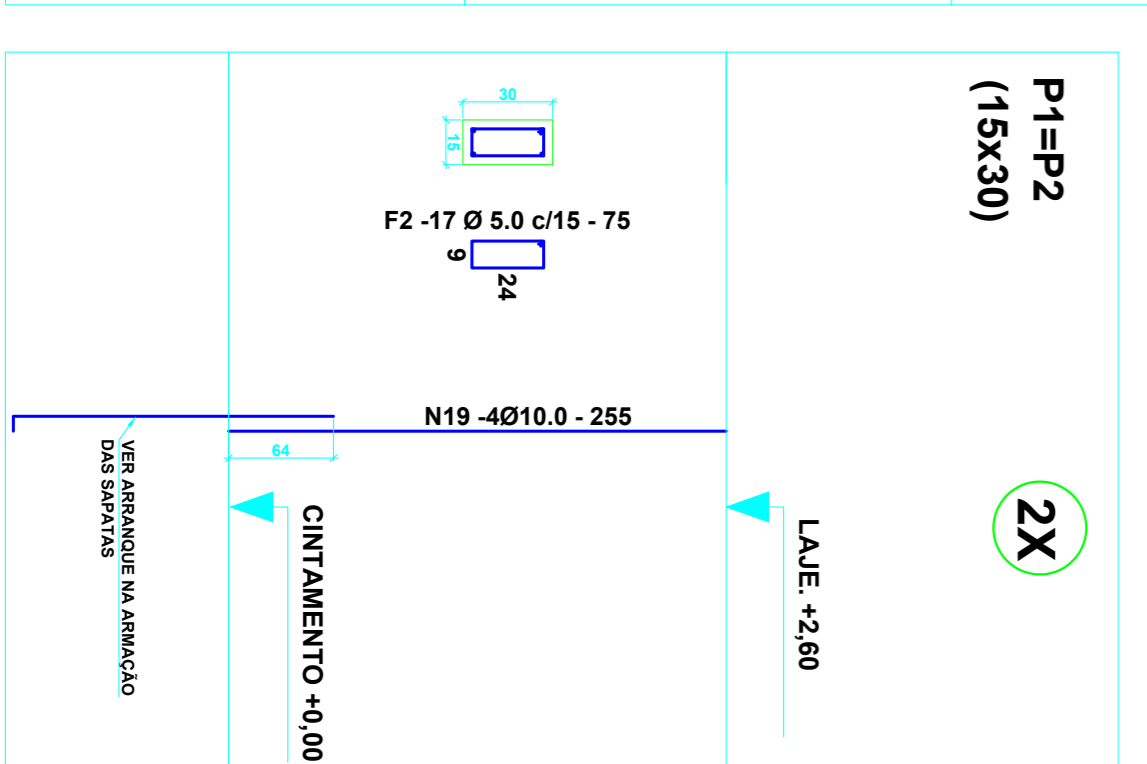
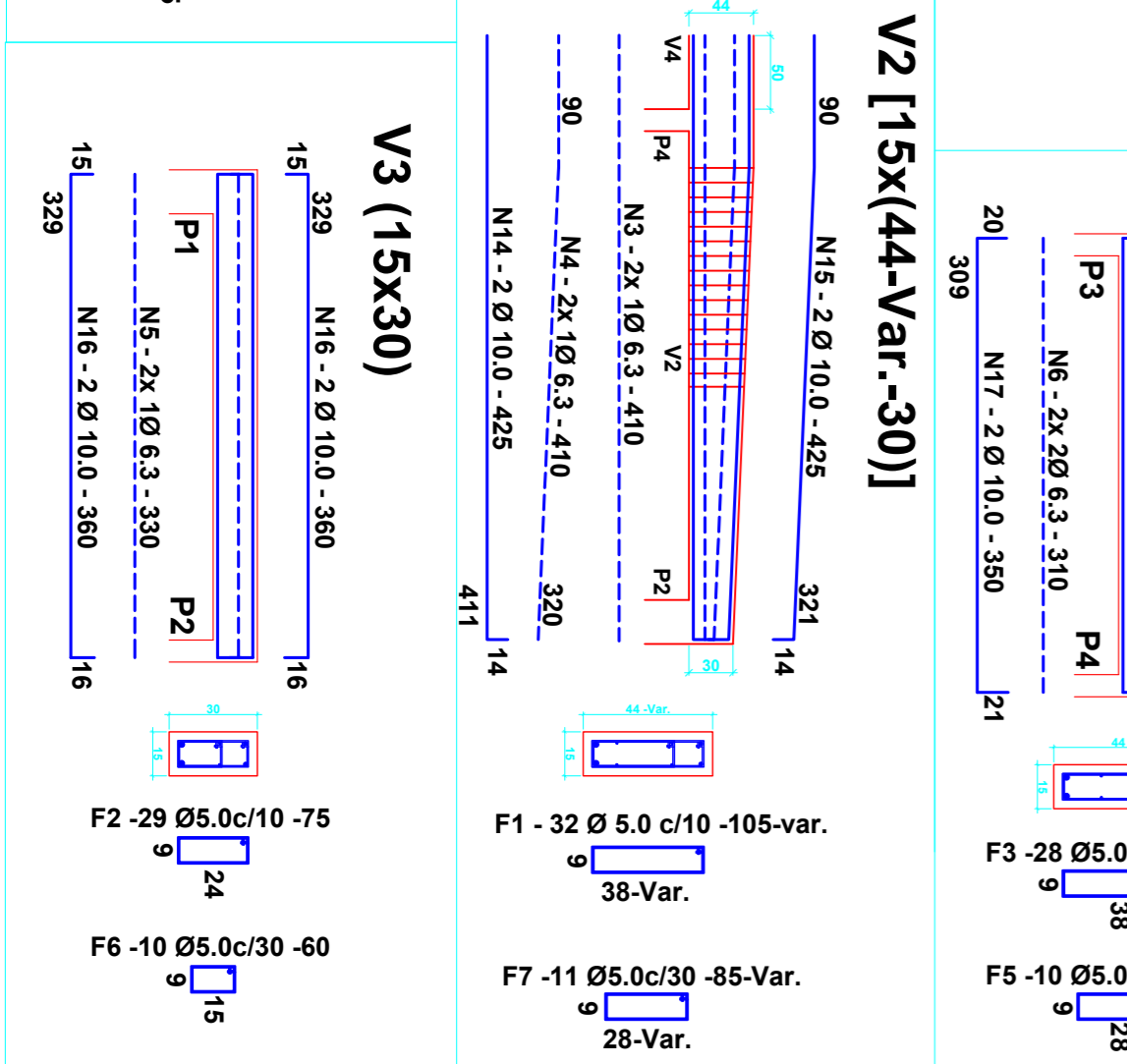
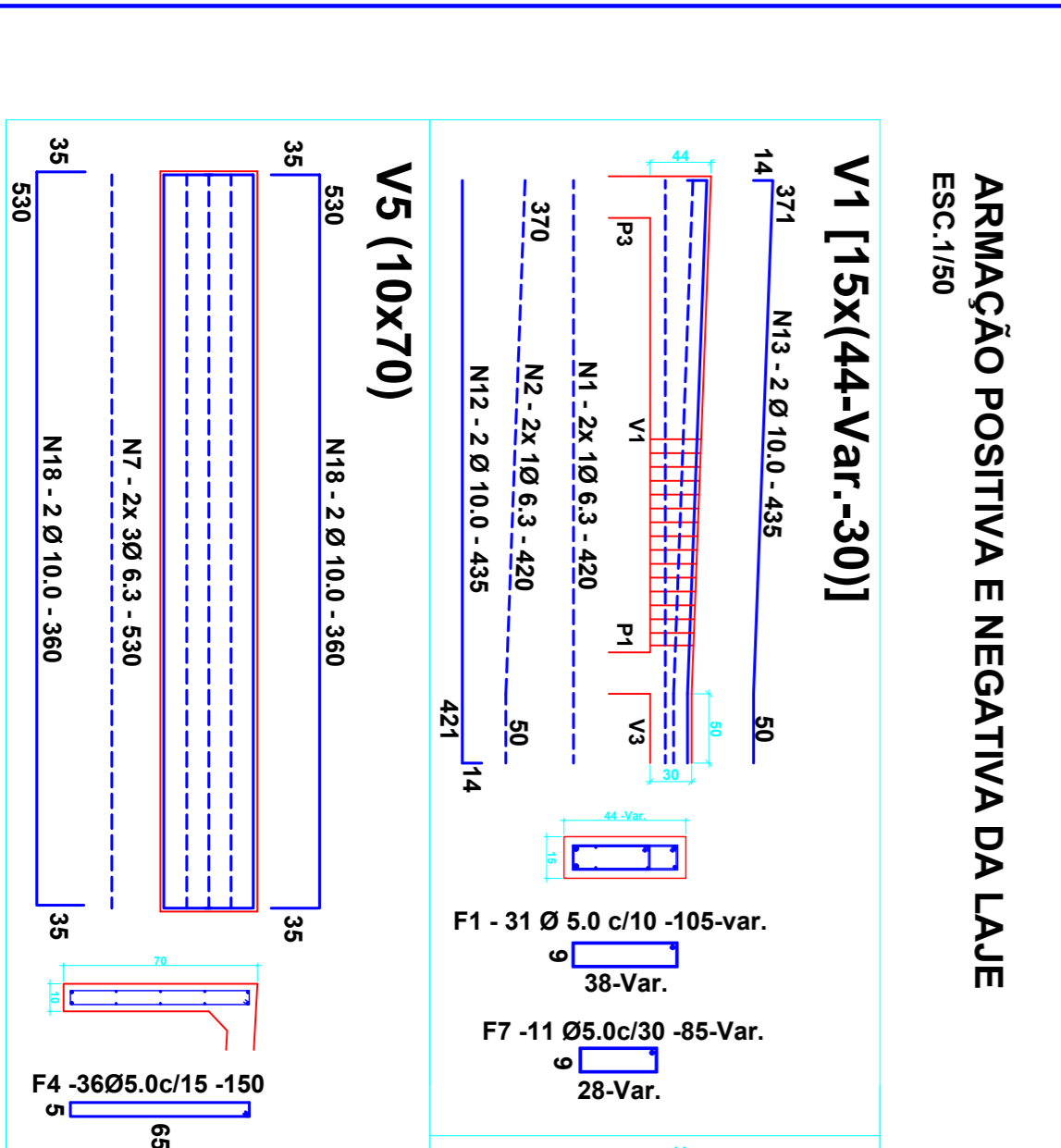


TABELA DE AÇO CA - 60 B				
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2 Ø 5,0	97	75	72,75	11,64
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TOTAL GERAL (AÇO CA-60B)				40,88

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5 Ø 6,3	2	330	6,60	1,65
6 Ø 6,3	4	310	12,40	3,10
7 Ø 6,3	6	500	31,60	7,95
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10 Ø 6,3	36	300	108,00	27,00
11 Ø 6,3	36	50	18,00	4,50
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20 Ø 10,0	8	270	21,60	13,39
TOTAL GERAL (AÇO CA-50A)				207,40

PROJETO ESTRUTURAL
PROJETO DA PARADA DE ÔNIBUS-TIPO 1

PROPRIETÁRIO: PREFEITURA MUNICIPAL DE MARABÁ
REFERÊNCIA: ESTRUTURA DE CONCRETO

PROFESSOR: MARABÁ - PARÁ

AUTOR DO PROJETO: GABRIEL FERREIS CONCEIÇÃO
ENGENHEIRO CIVIL
CREA Nº 35.971/0

RESPONSÁVEL TÉCNICO: _____
REVISÃO: REV. 02
DATA: SETEMBRO / 2019

OPER. CAD: _____
CONTÉUDO: PLANTA DE LOCAÇÃO, FORMA E ARMAÇÃO DA FUNDAÇÃO, FORMA E ARMAÇÃO DAS VIGAS, PILARES e LAJE
CORTE AA e BB

PRANCHAS: **1**