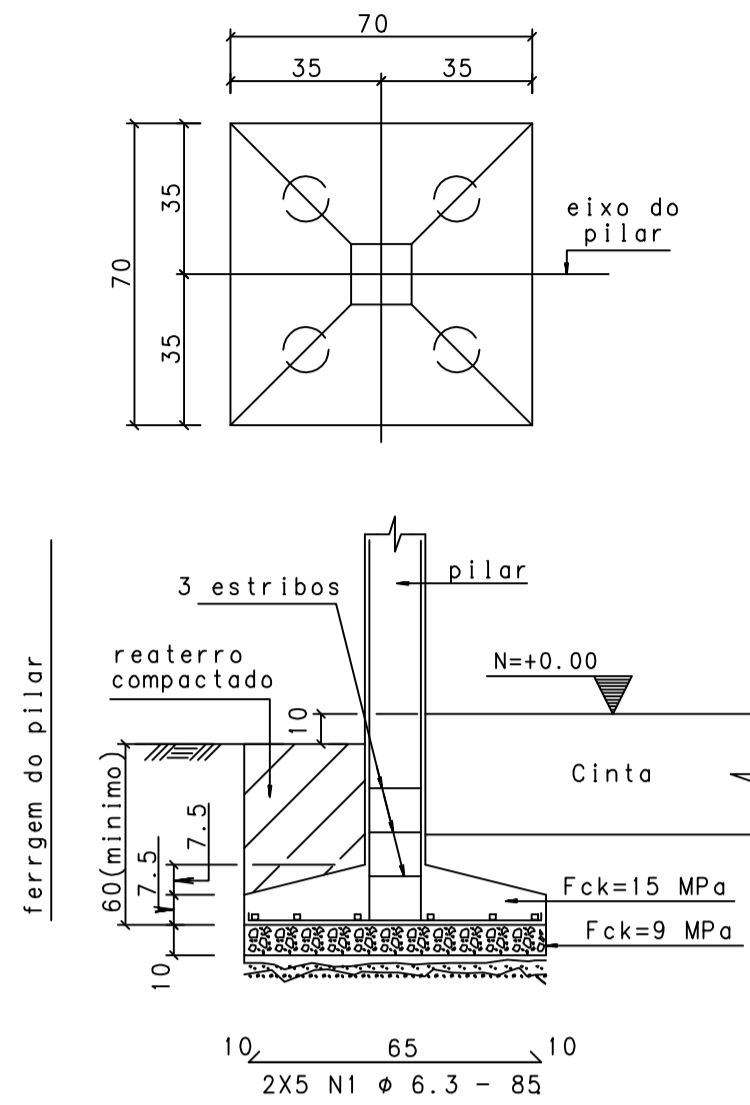


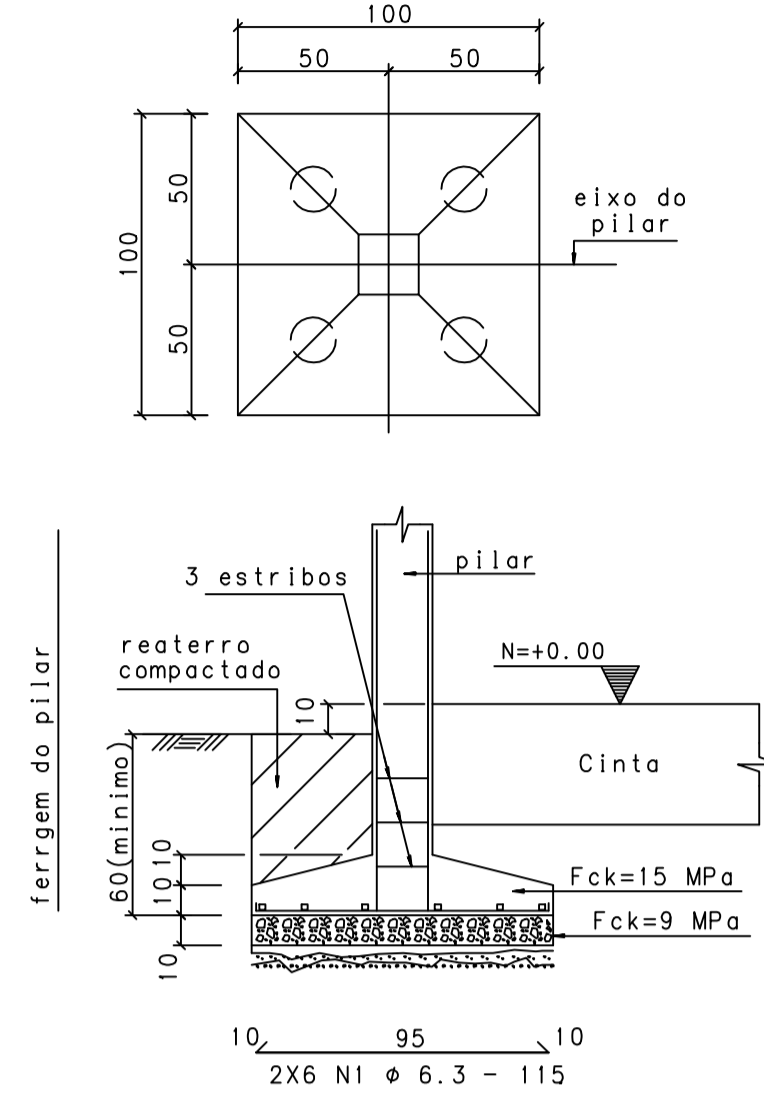
S4=S12=S17
Detalhe das Sapatas

OBS: medidas em cm



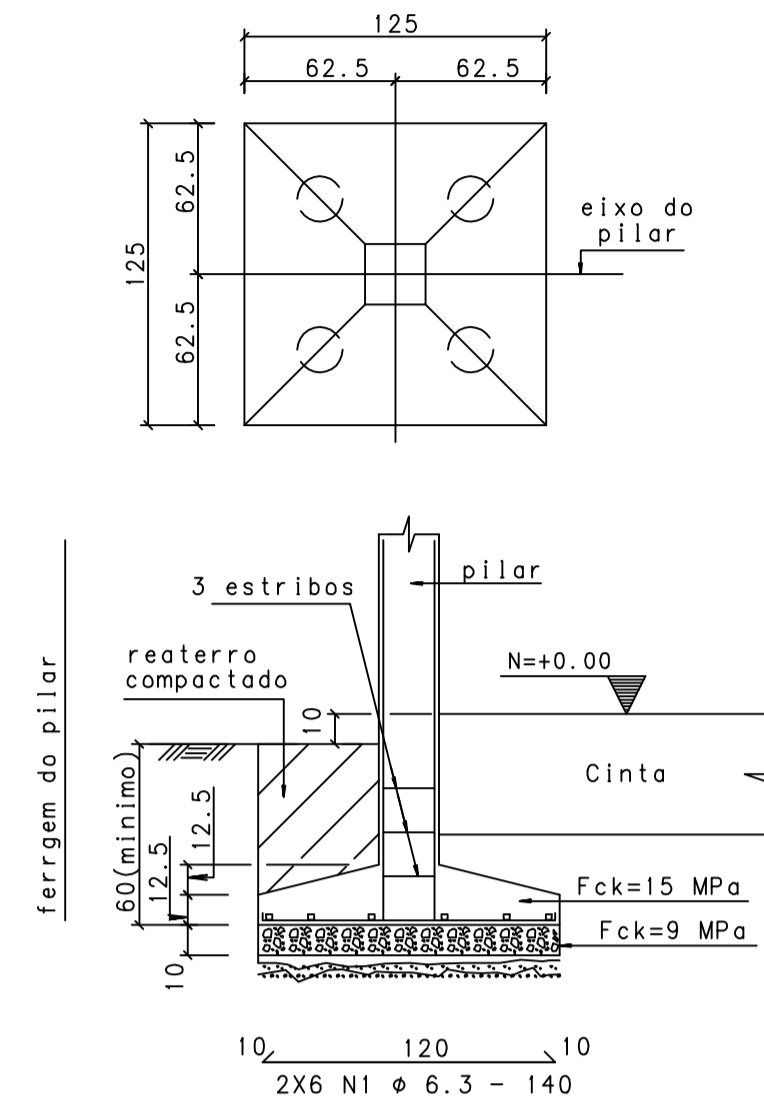
S1=S5=S8=S9=S10=S11=S14=S15=S18
Detalhe das Sapatas

OBS: medidas em cm

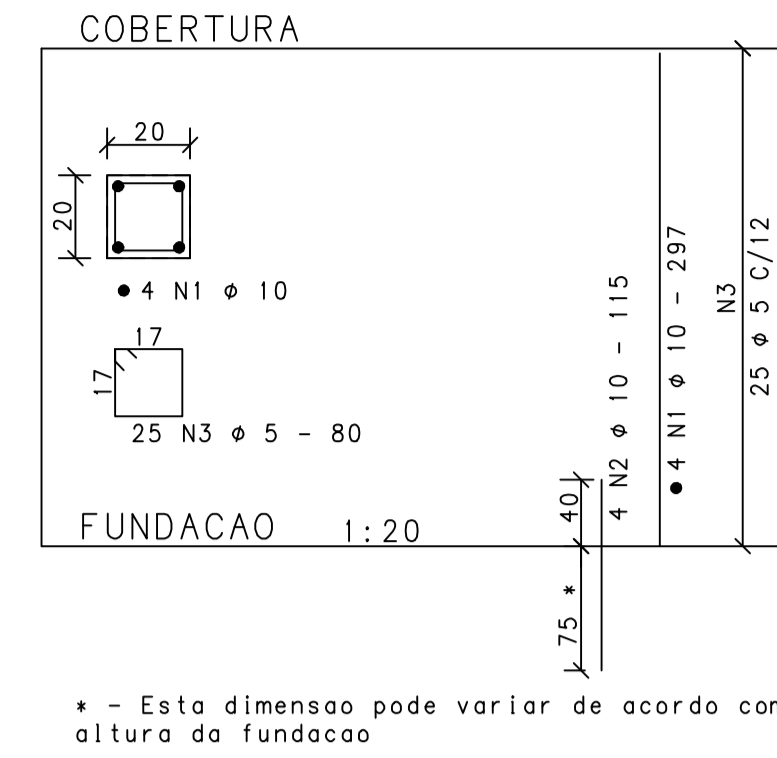


S2=S3=S6=S7=S13=S15=S16
Detalhe das Sapatas

OBS: medidas em cm



P1 AO P17



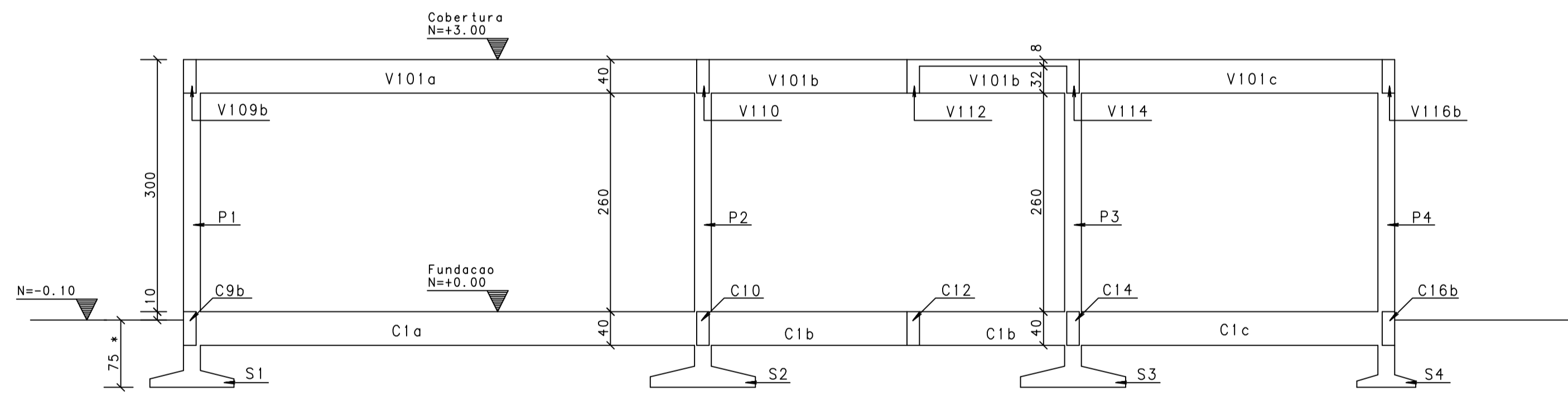
* - Esta dimensao pode variar de acordo com a altura da fundacao

ACO	POS	BIT (mm)	QUANT	COMPRIMENTO	
				UNIT (cm)	TOTAL (cm)
P1 AO P17	(X17)				
50A	1	10	68	297	20196
60B	2	10	68	115	7820
60B	3	5	425	80	34000
S4=S12=S17	(X3)				
50A	1	6.3	30	85	2550
S1=S5=S8=S9=S10=S11=S14=S15=S18	(X9)				
50A	1	6.3	108	115	12420
S2=S3=S6=S7=S13=S15=S16	(X7)				
50A	1	6.3	84	140	11760
Armacao da Laje da Cobertura					
60B	1	4.2	19	170	3230
60B	2	4.2	11	275	3025
50A	3	6.3	32	60	1920

RESUMO ACO CA 50-60			
ACO	BIT (mm)	COMPR (m)	PESO (kg)
50A	6.3	287	72
50A	10	280	177
60B	4.2	63	7
60B	5	340	54
Peso Total		50A =	248 kg
Peso Total		60B =	61 kg

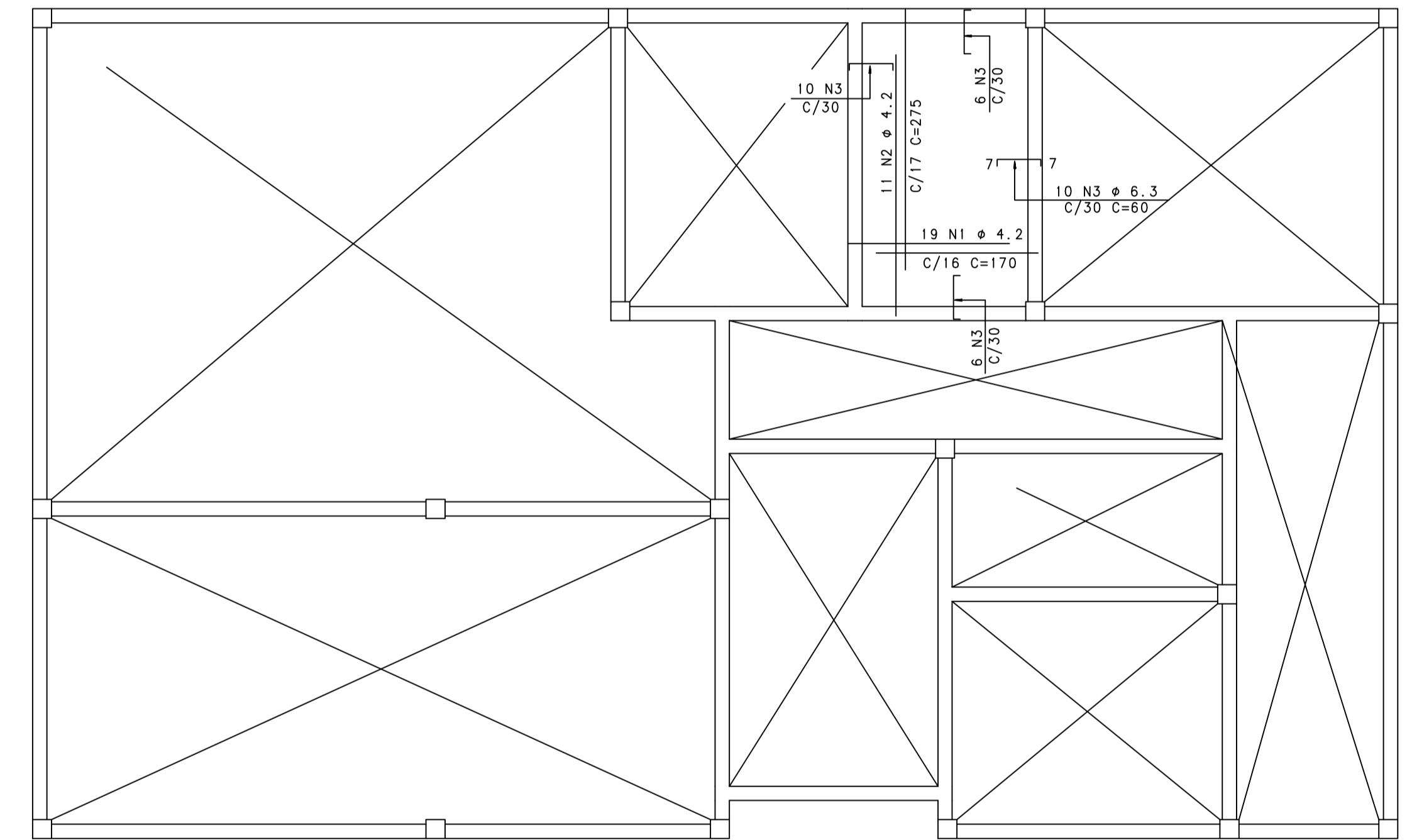
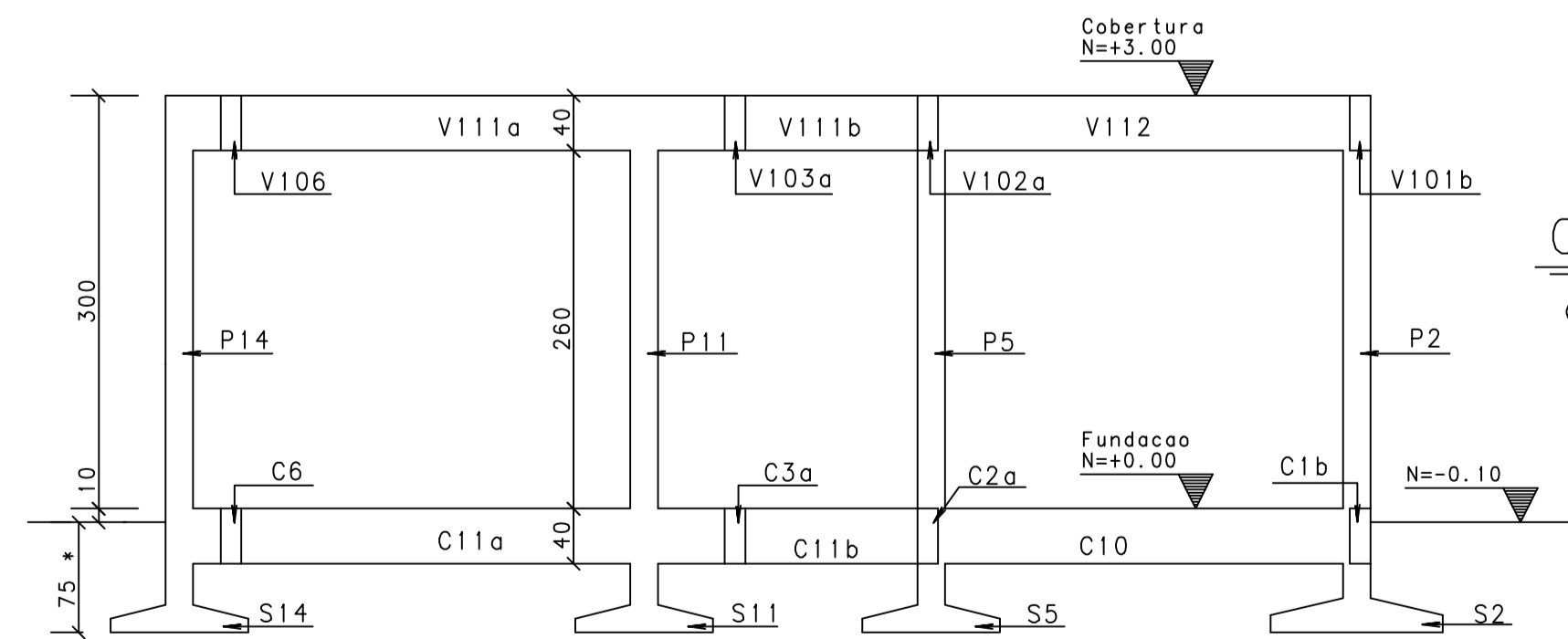
Corte A-A

OBS: escala 1:50



Corte B-B

OBS: escala 1:50



Armacao da Laje da Cobertura

OBS: Concreto Fck=15 MPa
escala 1:50

PREFEITURA MUNICIPAL DE AFUÁ
SECRETARIA MUNICIPAL DE INFRAESTRUTURA

ESTRUTURAL

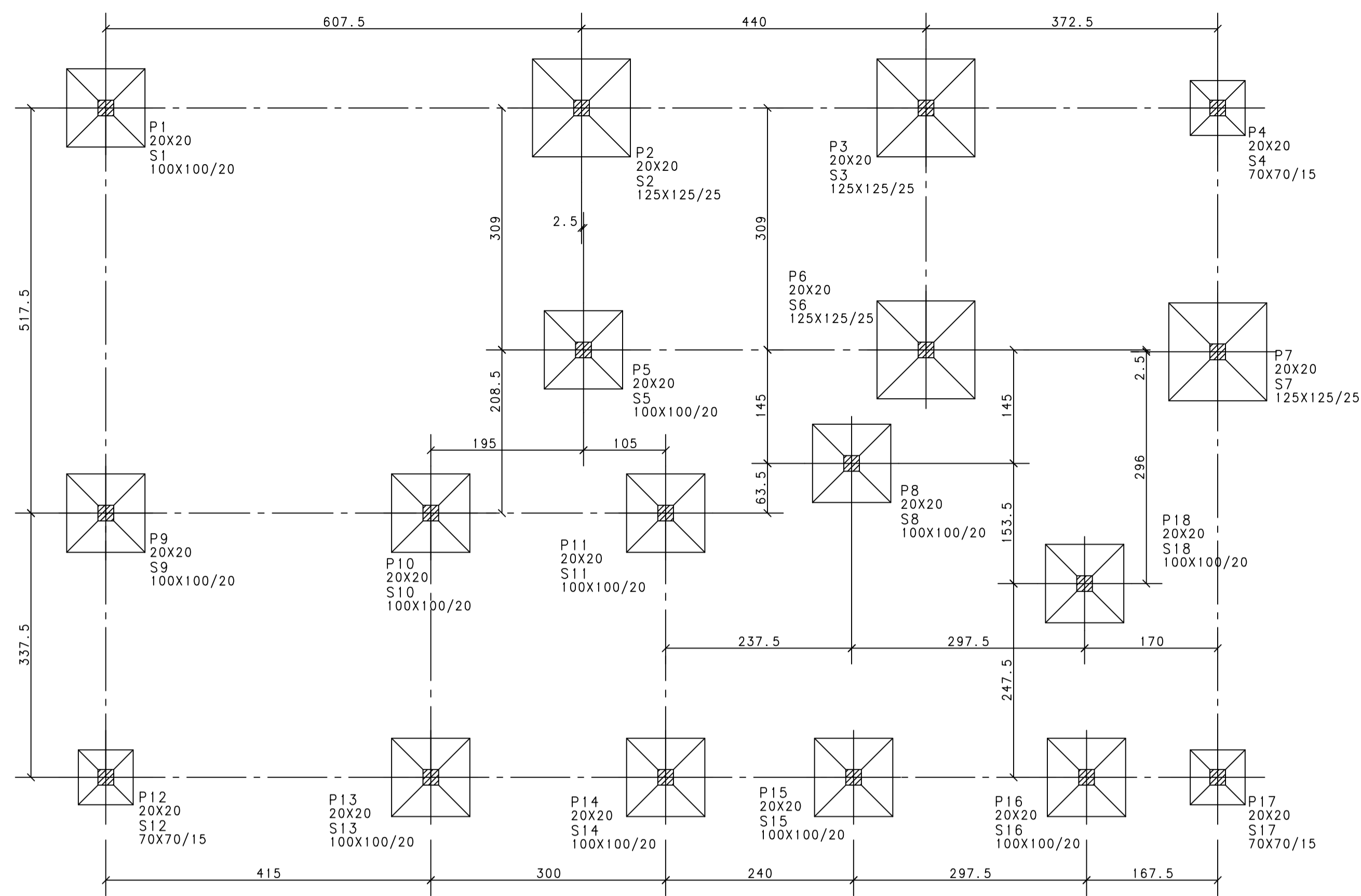
SISTEMA DE ABASTECIMENTO DE ÁGUA
BAIRRO: CAPIM MARINHO

PRANCHA
EST - 01/04

PROJETO BÁSICO
CASA DE QUÍMICA
CORTE, ARMAÇÃO DAS SAPATAS, PILARES E LAJE

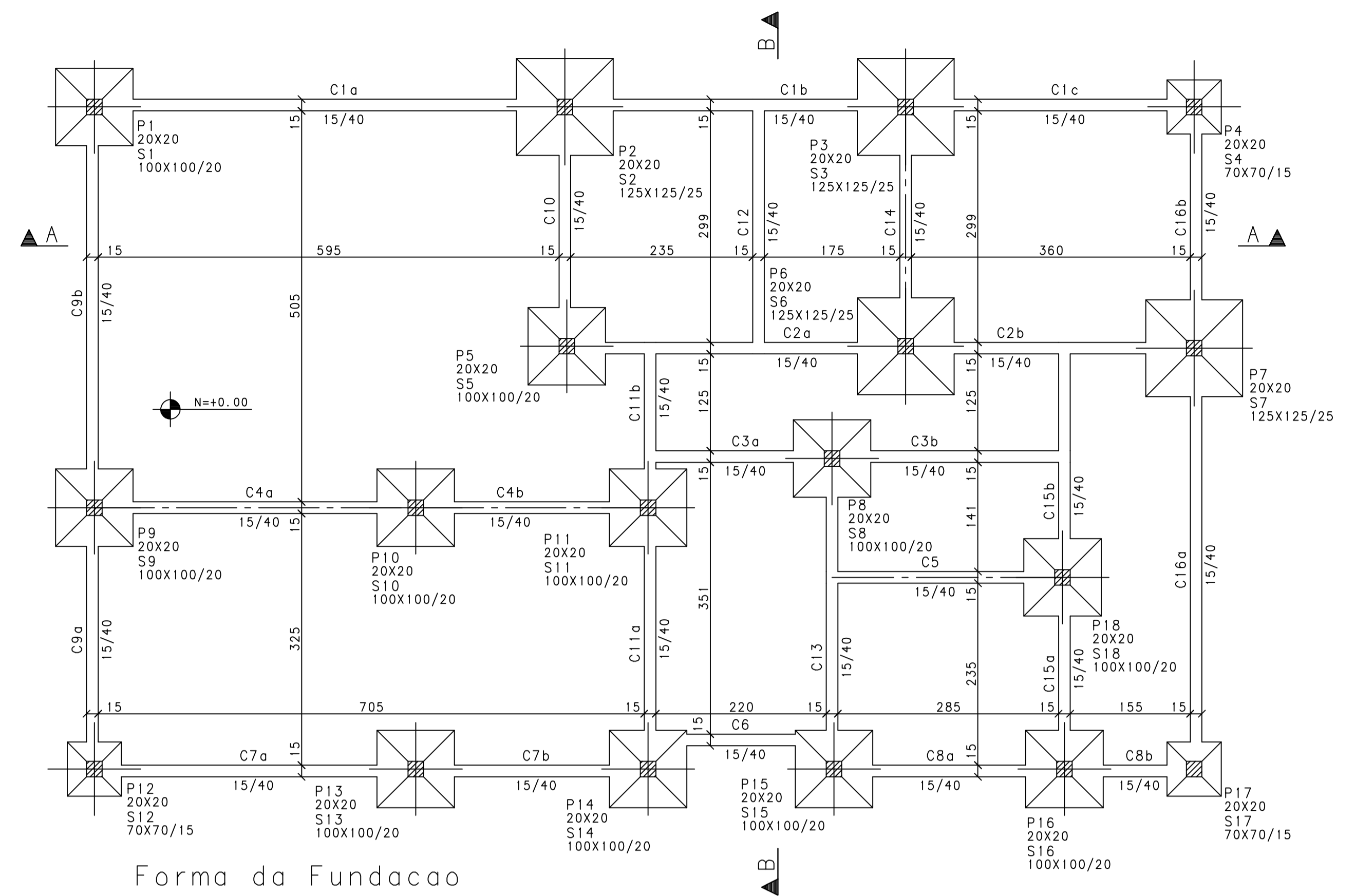
RESP. PROJETO:

DES. CAD: - DATA: DEZEMBRO/2021 ESCALA: INDICADA ENP CIVIL, ESAO ALVES - CREA- 15.0000 PA



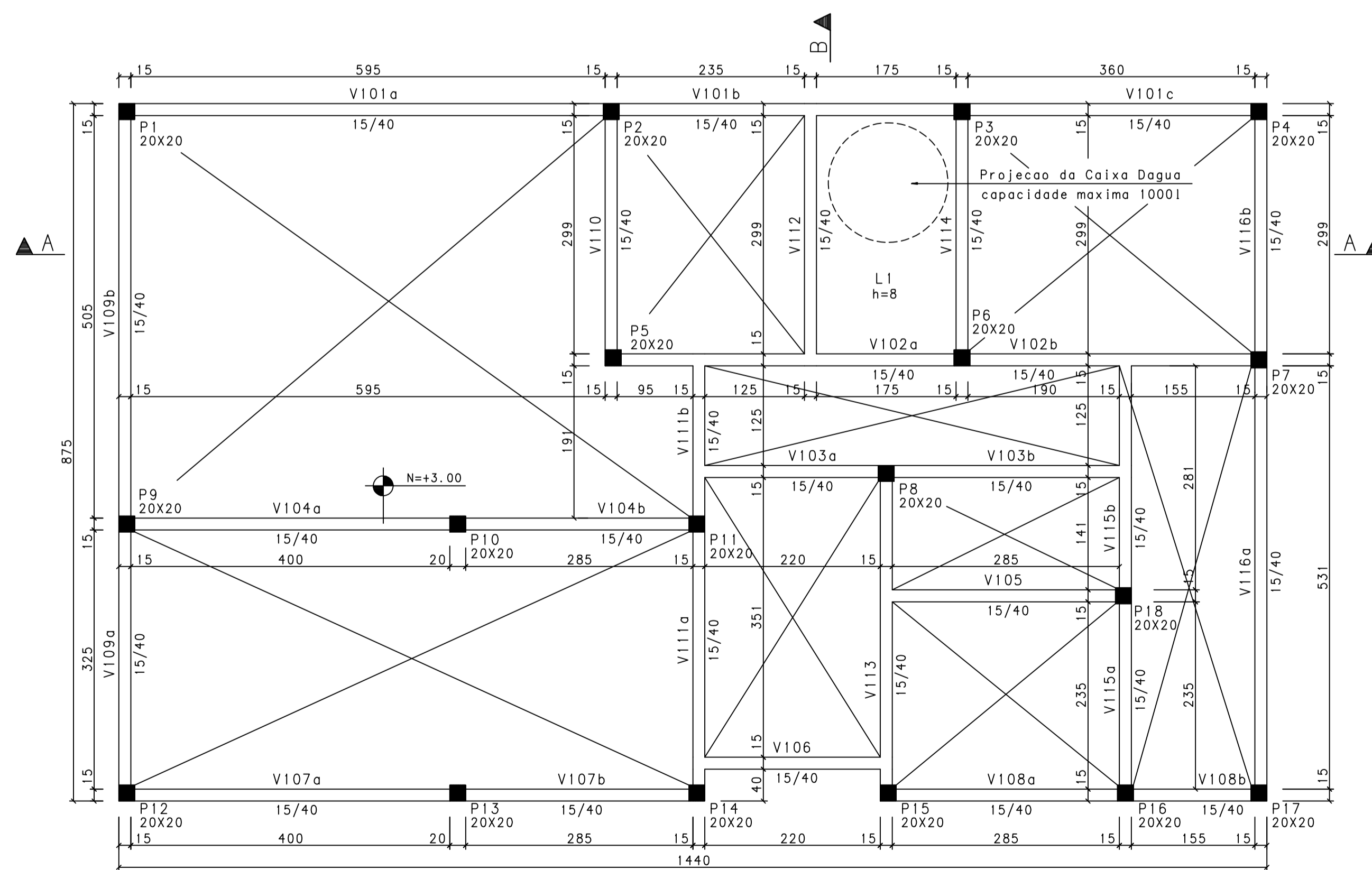
Locação das Sapatas

OBS: Concreto Fck=15 MPa
escala 1:50



Forma da Fundação

OBS: Concreto Fck=15 MPa
escala 1:50



Forma da Cobertura

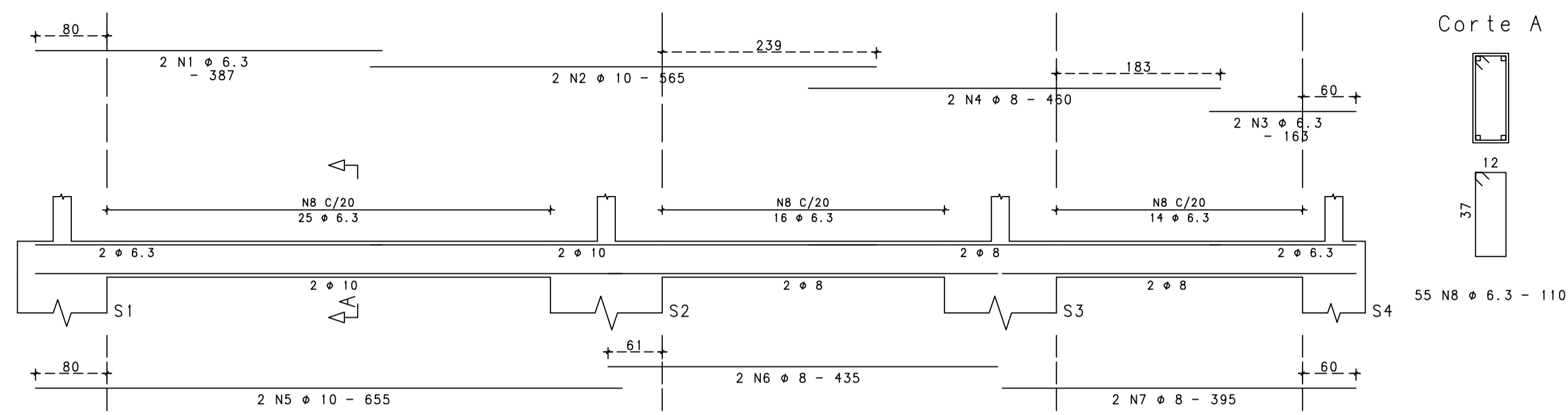
OBS: Concreto Fck=15 MPa
escala 1:50

QUANTITATIVOS:	
CONCRETO ESTRUTURAL fck > 15MPa	16.50m3
CONCRETO DE REGULARIZACAO fck > 9MPa	4.00m3
AREA DE FORMAS	210.00m2

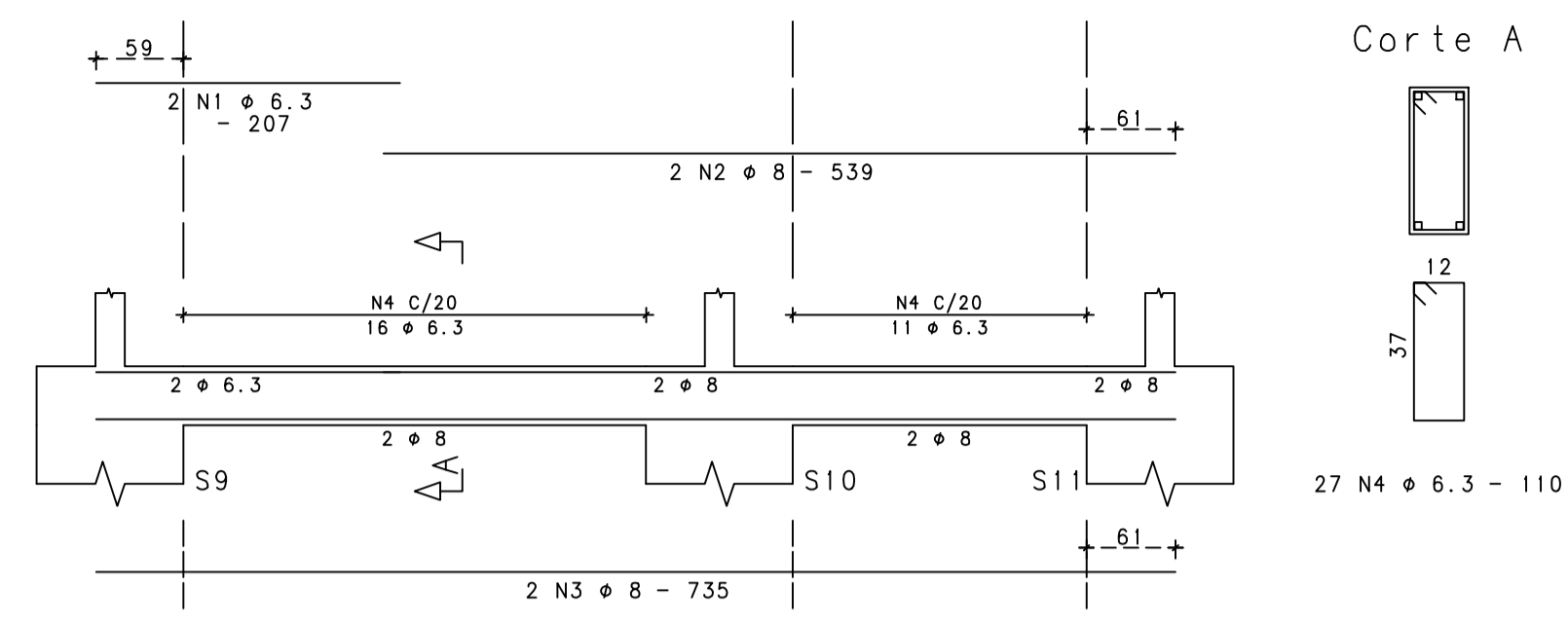
- NOTAS:
- Todas as dimensões são dadas em centímetro e as bitolas em milímetro
 - Cobertura da armadura: sapatas e cintas = 3cm
vigas da cobertura = 1.5cm
 - Aço CA-50A e CA-60B
 - A elevação 0.00 deste projeto corresponde a cota de piso do projeto básico de saneamento.
 - A tensão admissível no terreno na cota de arrasamento das sapatas da fundação deve ser $\sigma > 1\text{kg/cm}^2$ a ser confirmada no local da obra. Caso esta tensão não seja encontrada, deve-se substituir o terreno eventualmente existente por solo devidamente compactado ou utilizar estacas broca $\phi 15\text{cm}$ até uma profundidade mínima de 3m com concreto seco bem socado, traço 1:3:1.

PREFEITURA MUNICIPAL DE AFUÁ SECRETARIA MUNICIPAL DE INFRAESTRUTURA			
ESTRUTURAL			
SISTEMA DE ABASTECIMENTO DE ÁGUA BAIRRO: CAPIM MARINHO			PRANCHA EST - 02/04
PROJETO BÁSICO CASA DE QUÍMICA LOCAÇÃO DAS SAPATAS, FORMAS DAS CINTAS/ FUNDAÇÃO E COBERTURA			RESP. PROJETO:
DES. CAD:	DATA:	ESCALA:	ENº CIVIL: ERÃO ALVES - CREA- 15.0000 PA
-	DEZEMBRO/2021	INDICADA	

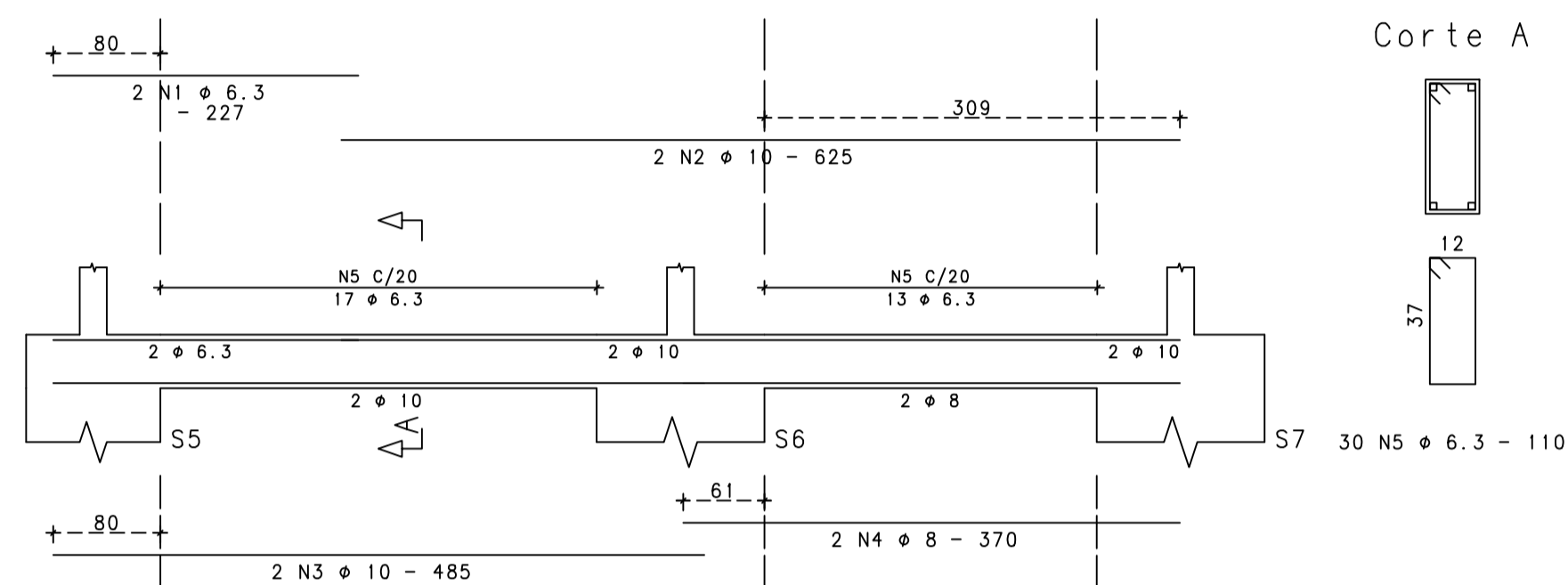
C1 15/40



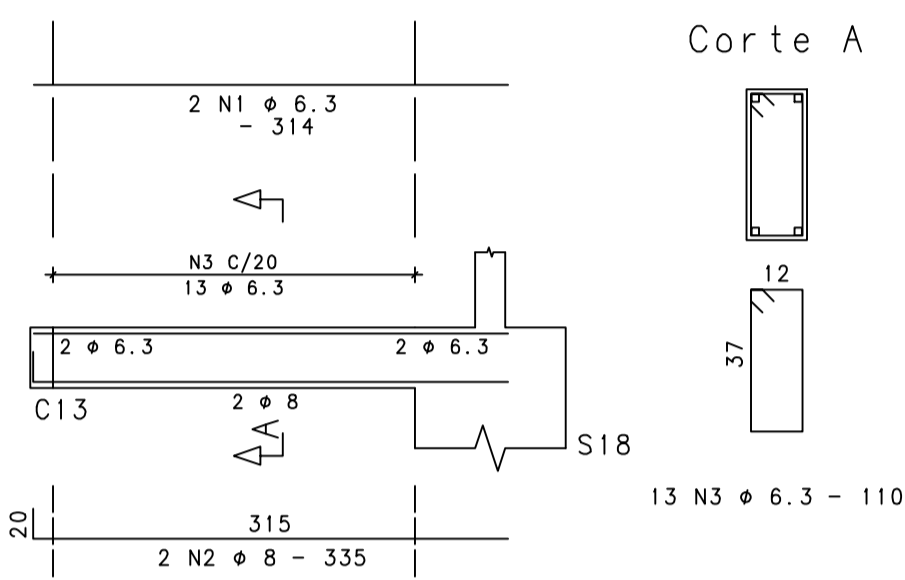
C4 15/40



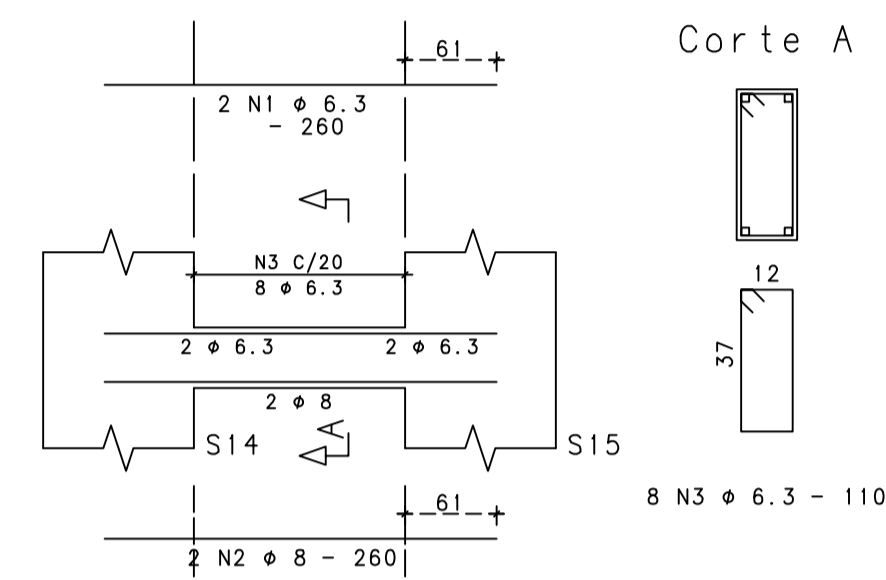
C2 15/40



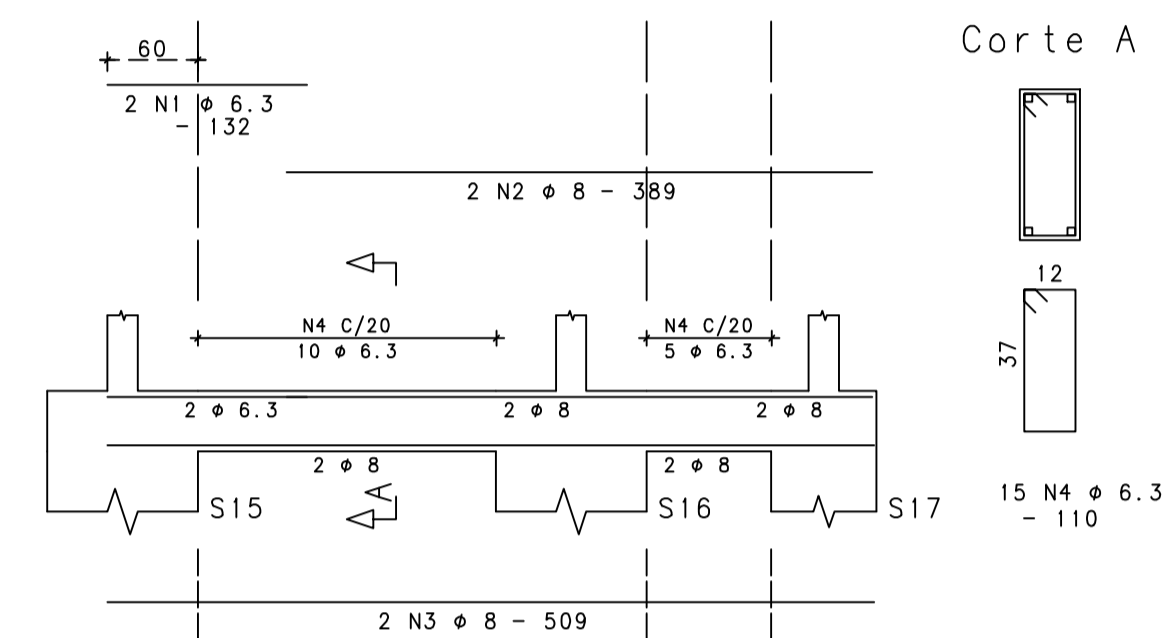
C5 15/40



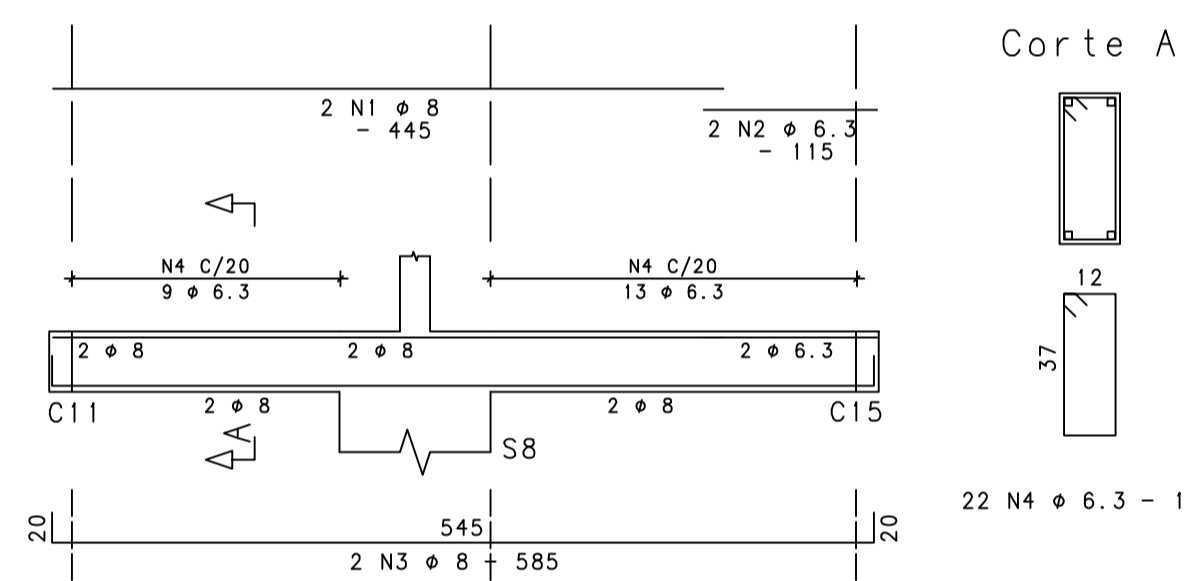
C6 15/40



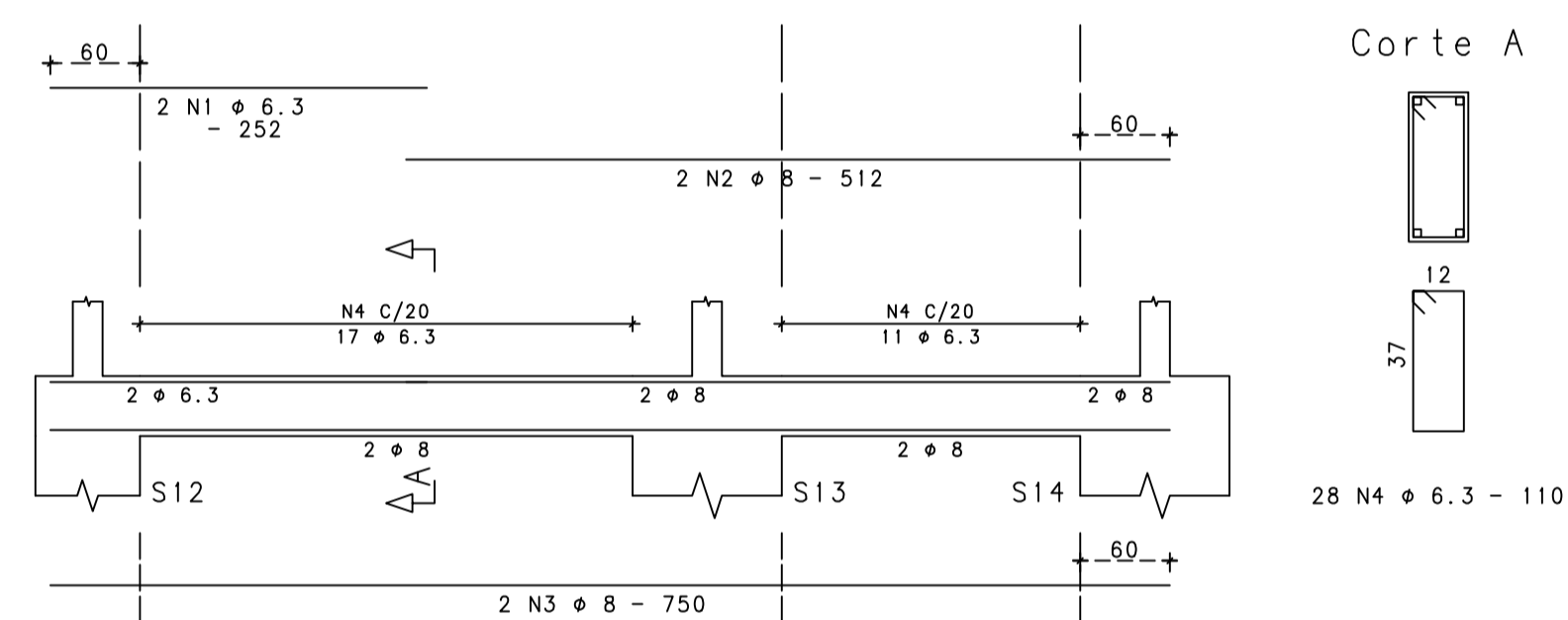
C8 15/40



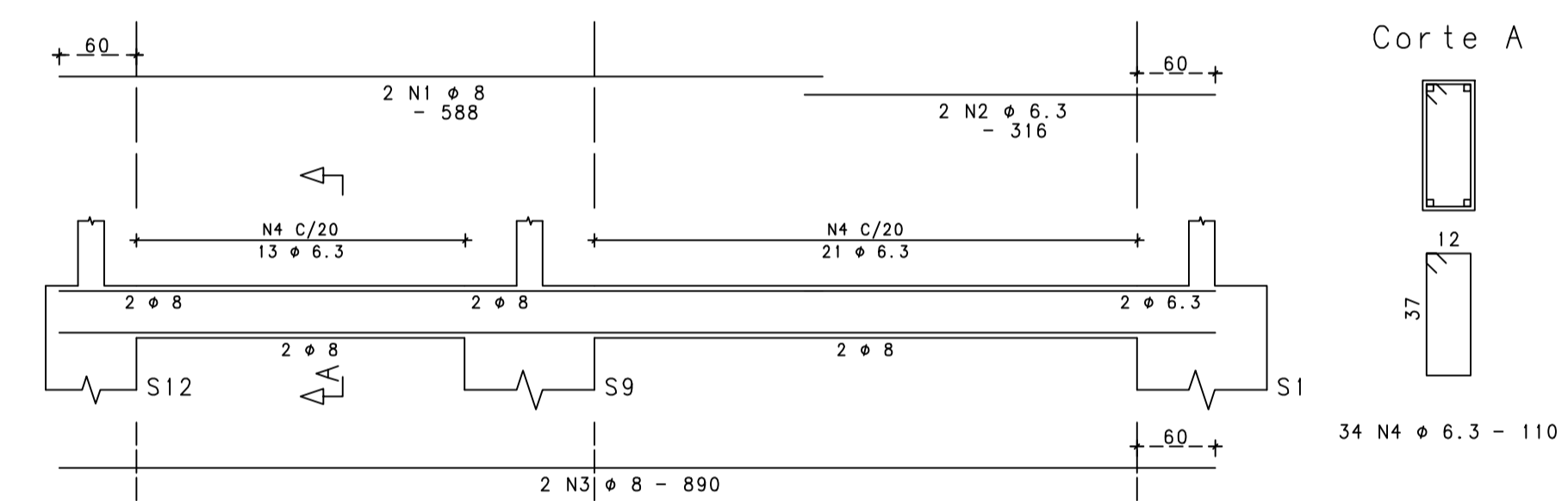
C3 15/40



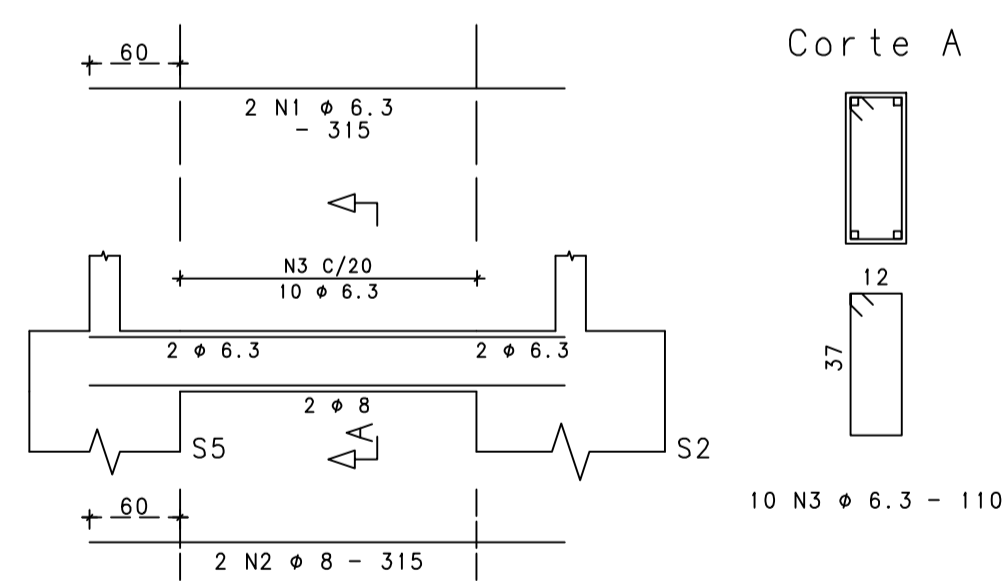
C7 15/40



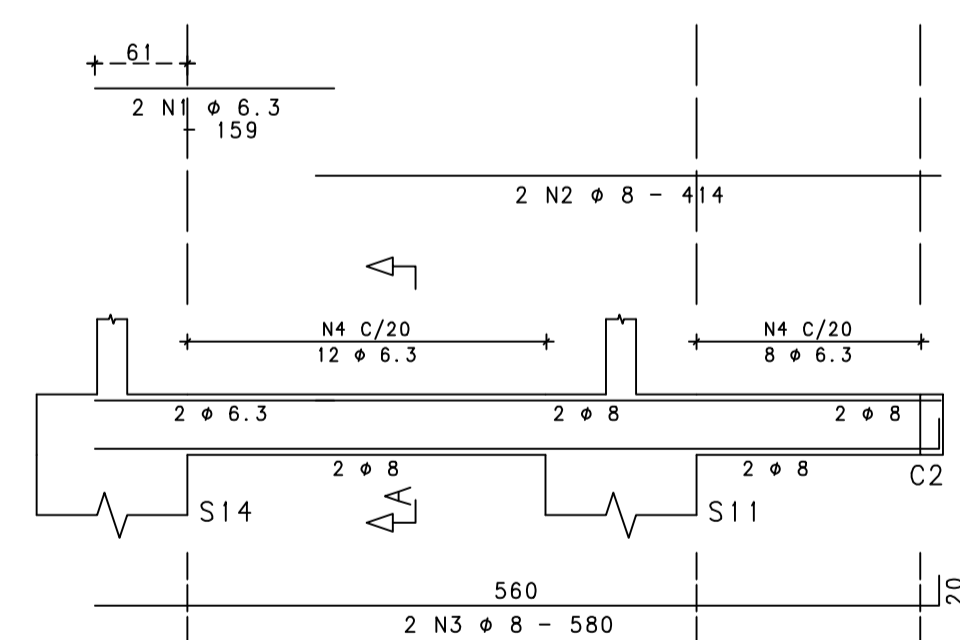
C9 15/40



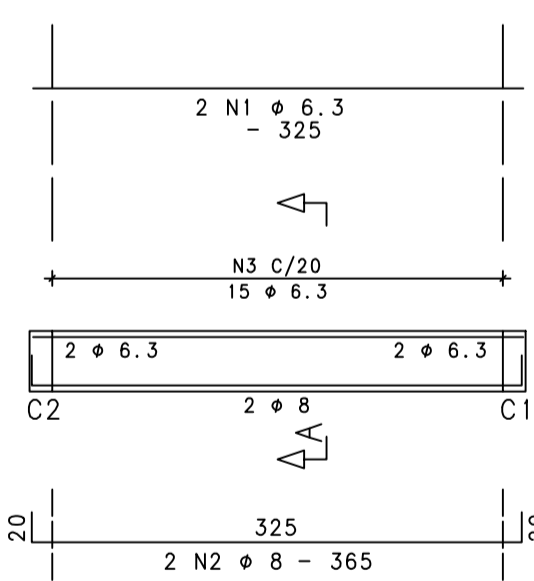
C10 15/40



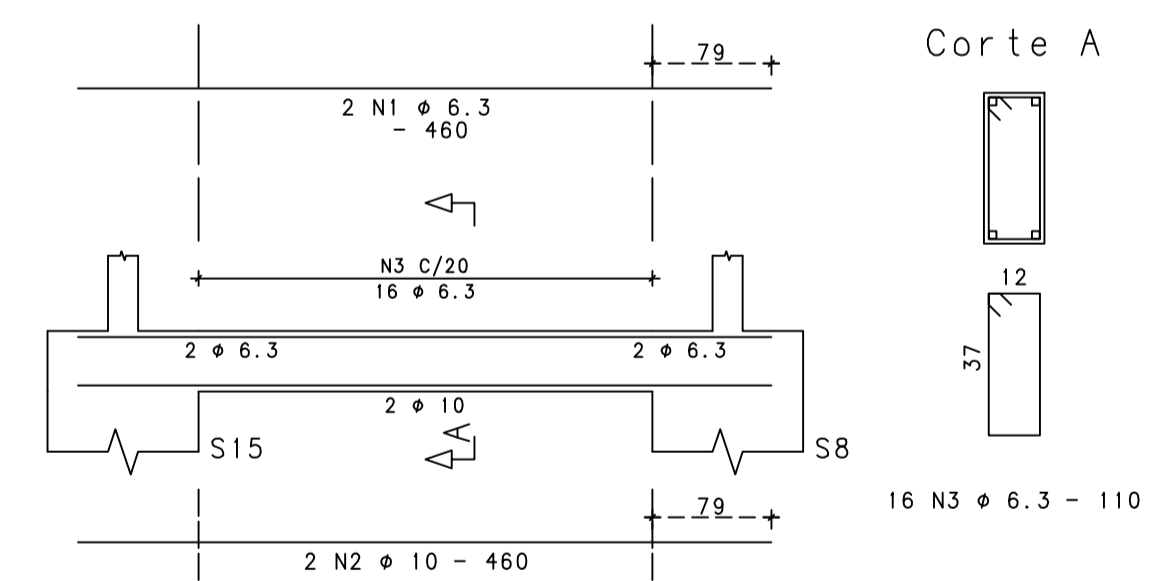
C11 15/40



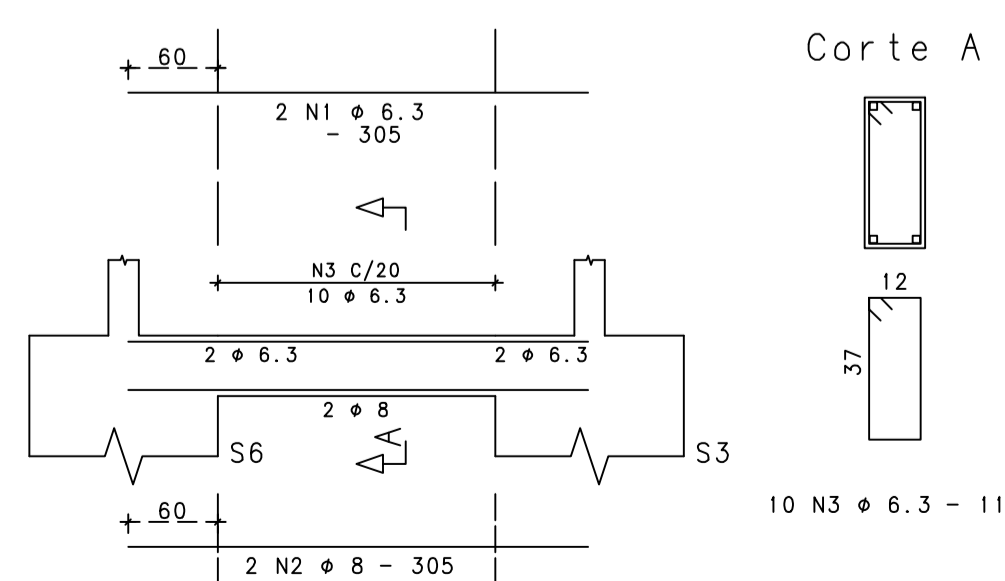
C12 15/40



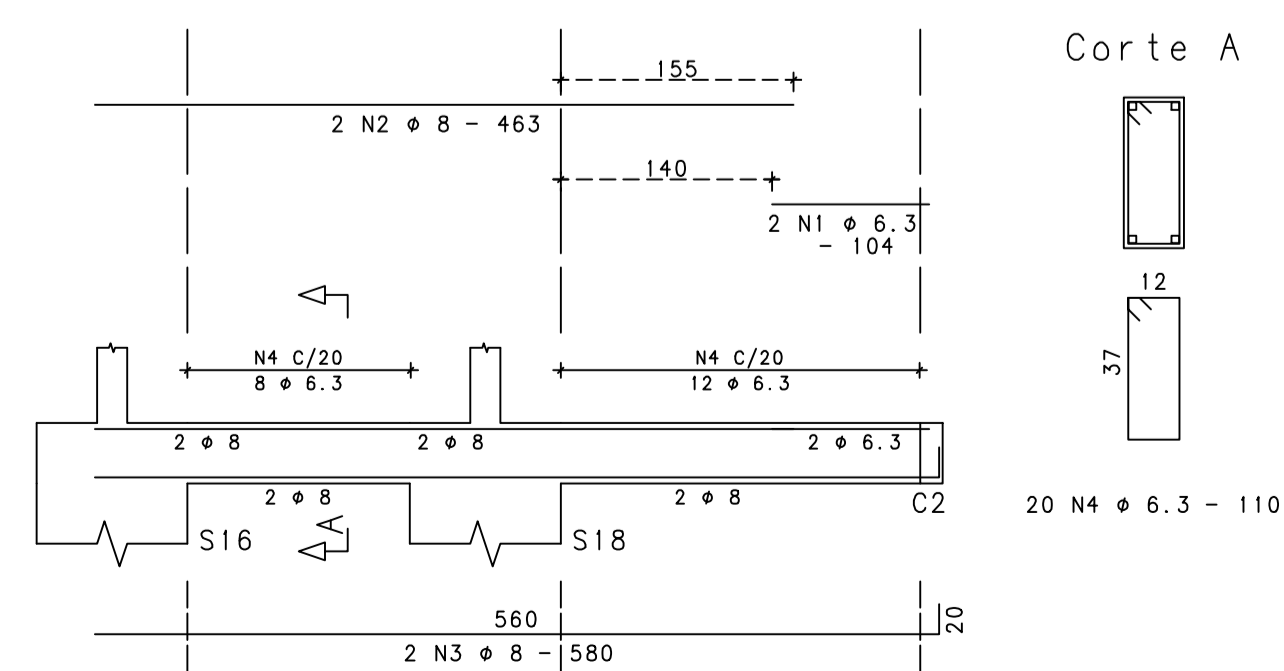
C13 15/40



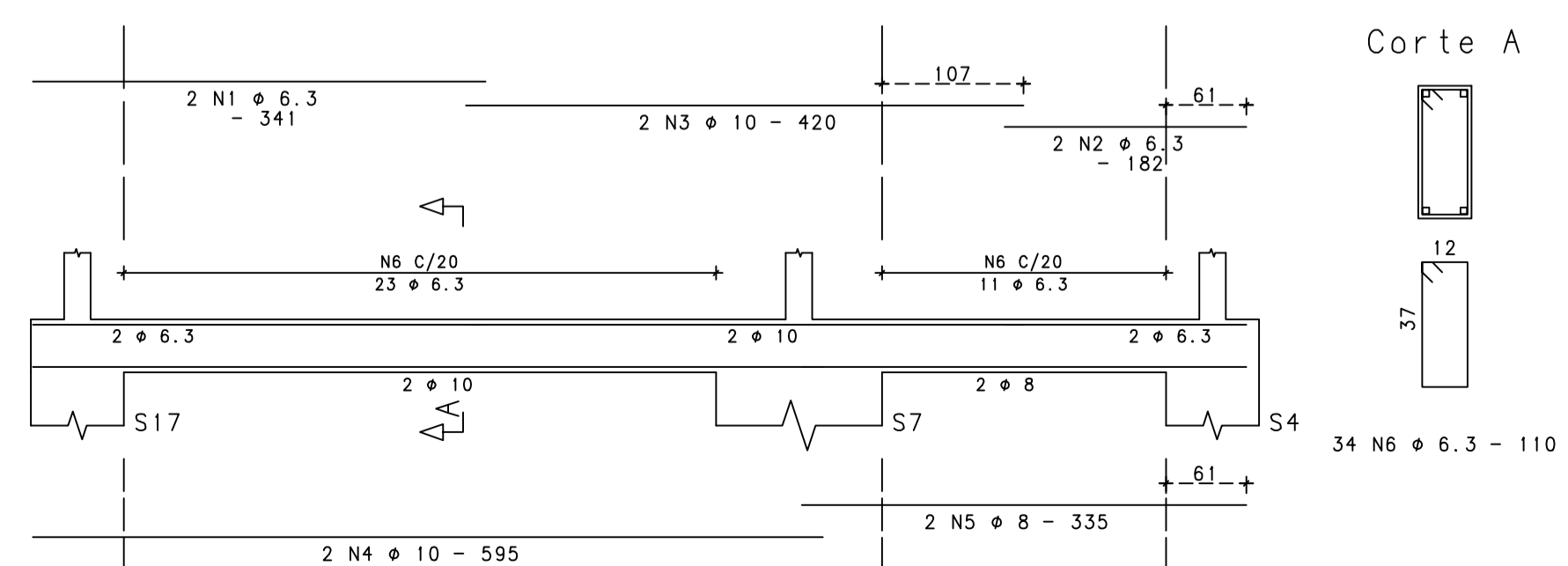
C14 15/40



C15 15/40



C16 15/40



ACO	POS	BIT (mm)	QUANT	COMPRIMENTO		
				UNIT (cm)	TOTAL (cm)	
C1	50A	1	6.3	2	387	774
	50A	2	10	2	565	1130
	50A	3	6.3	2	163	326
	50A	4	8	2	460	920
	50A	5	10	2	655	1310
	50A	6	8	2	435	870
	50A	7	8	2	395	790
	50A	8	6.3	55	110	6050
C2	50A	1	6.3	2	227	454
	50A	2	10	2	625	1250
	50A	3	10	2	485	970
	50A	4	8	2	370	740
	50A	5	6.3	30	110	3300
C3	50A	1	8	2	445	890
	50A	2	6.3	2	115	230
	50A	3	8	2	585	1170
	50A	4	6.3	22	110	2420
C4	50A	1	6.3	2	207	414
	50A	2	8	2	539	1078
	50A	3	8	2	735	1470
	50A	4	6.3	27	110	2970
C5	50A	1	6.3	2	314	628
	50A	2	8	2	335	670
	50A	3	6.3	13	110	1430
C6	50A	1	6.3	2	260	520
	50A	2	8	2	260	520
	50A	3	6.3	8	110	880
C7	50A	1	6.3	2	252	504
	50A	2	8	2	512	1024
	50A	3	8	2	750	1500
	50A	4	6.3	28	110	3080
C8	50A	1	6.3	2	132	264
	50A	2	8	2	389	778
	50A	3	8	2	509	1018
	50A	4	6.3	15	110	1650
C9	50A	1	8	2	588	1176
	50A	2	6.3	2	316	632
	50A	3	8	2	890	1780
	50A	4	6.3	34	110	3740
C10	50A	1	6.3	2	315	630
	50A	2	8	2	315	630
	50A	3	6.3	10	110	1100
C11	50A	1	6.3	2	159	318
	50A	2	8	2	414	828
	50A	3	8	2	580	1160
	50A	4	6.3	20	110	2200
C12	50A	1	6.3	2	325	650
	50A	2	8	2	365	730
	50A	3	6.3	15	110	1650
C13	50A	1	6.3	2	460	920
	50A	2	10	2	460	920
	50A	3	6.3	16	110	1760
C14	50A	1	6.3	2	305	610
	50A	2	8	2	305	610
	50A	3	6.3	10	110	1100
C15	50A	1	6.3	2	104	208
	50A	2	8	2	463	926
	50A	3	8	2	580	1160
	50A	4	6.3	20	110	2200
C16	50A	1	6.3	2	341	682
	50A	2	6.3	2	182	364
	50A	3	10	2	420	840
	50A	4	10	2	595	1190
	50A	5	8	2	335	670
	50A	6	6.3	34	110	3740

RESUMO ACO CA 50-60			
ACO	BIT (mm)	COMPR (m)	PESO (kg)
50A	6.3	484	121
50A	8	231	92
50A	10	76	48
Peso Total			50A = 261 kg

PREFEITURA MUNICIPAL DE AFUÁ
SECRETARIA MUNICIPAL DE INFRAESTRUTURA

ESTRUTURAL

SISTEMA DE ABASTECIMENTO DE ÁGUA
BAIRRO: CAPIM MARINHO

PRANCHA
EST - 01/03

PROJETO BÁSICO
CASA DE QUÍMICA
ARMAÇÃO DAS VIGAS DO CINTAMENTO

RESP. PROJETO:

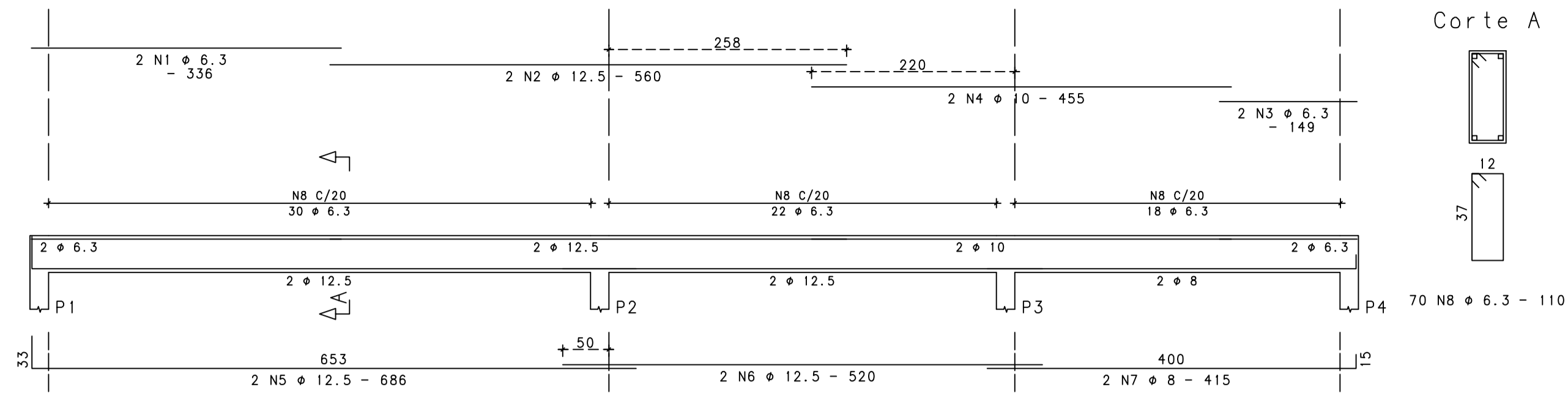
DES. CAD: -

DATA: DEZEMBRO/2021

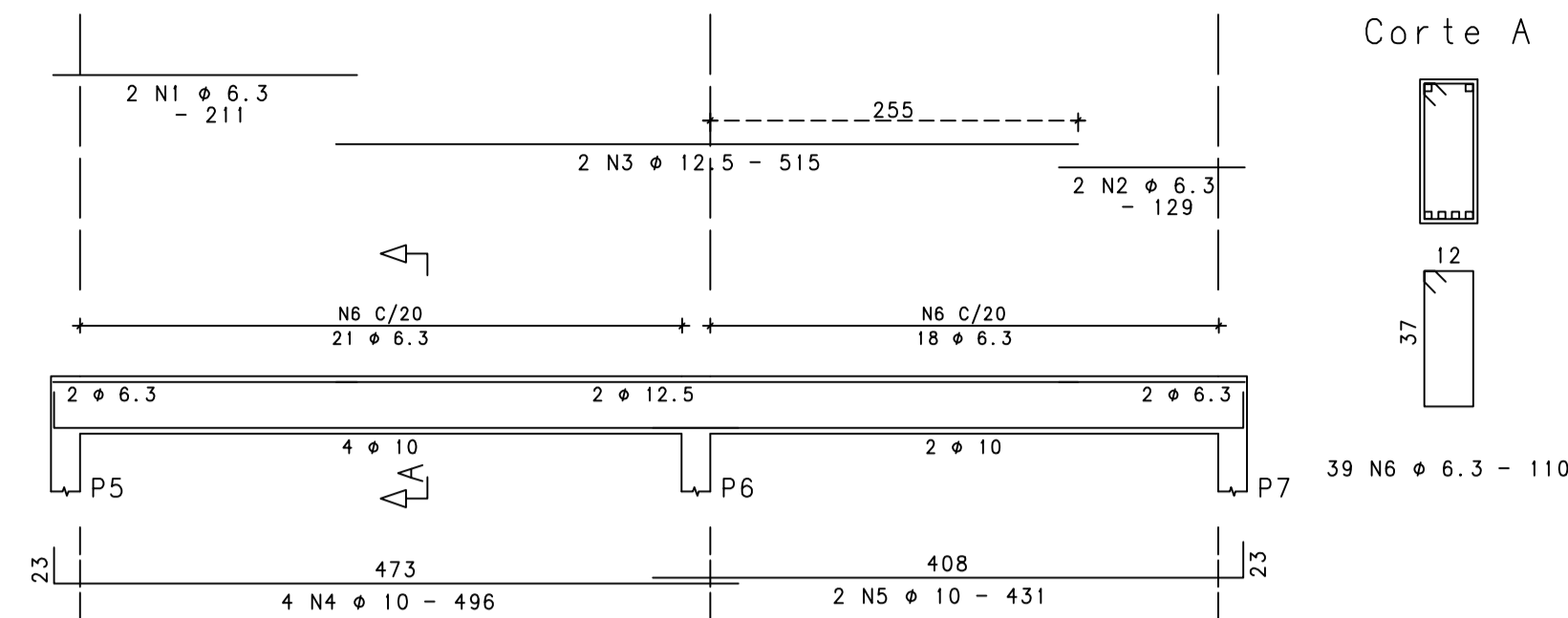
ESCALA: INDICADA

ENQ CIVIL, ESAO ALVES - CREA- 15.8000 PA

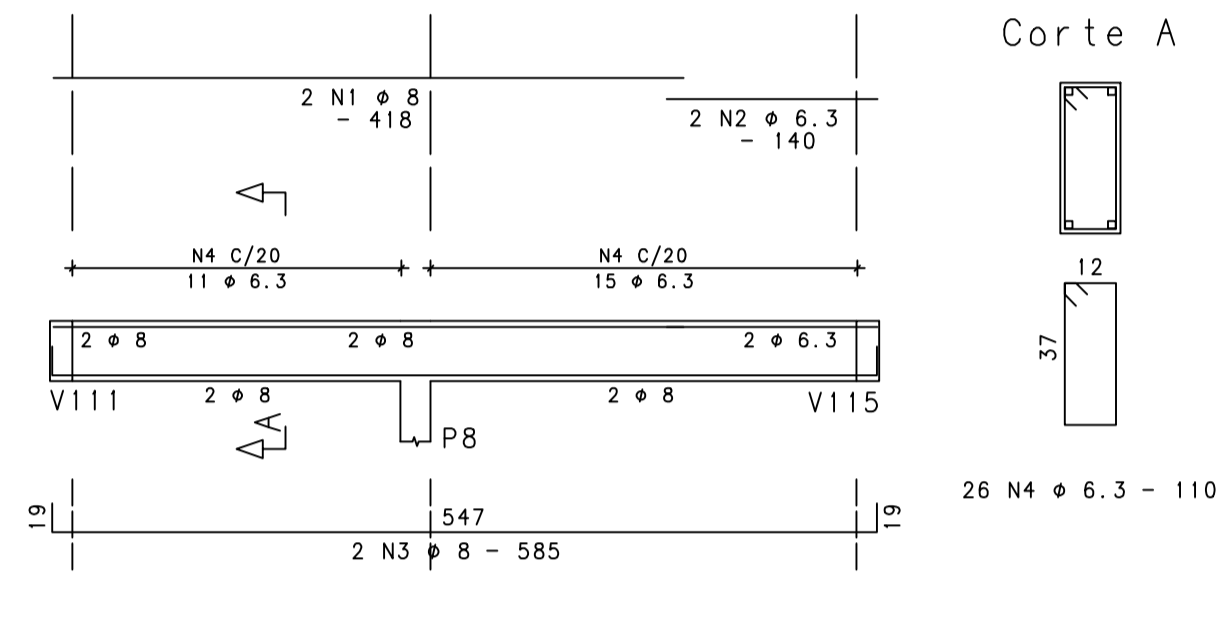
V101 15/40



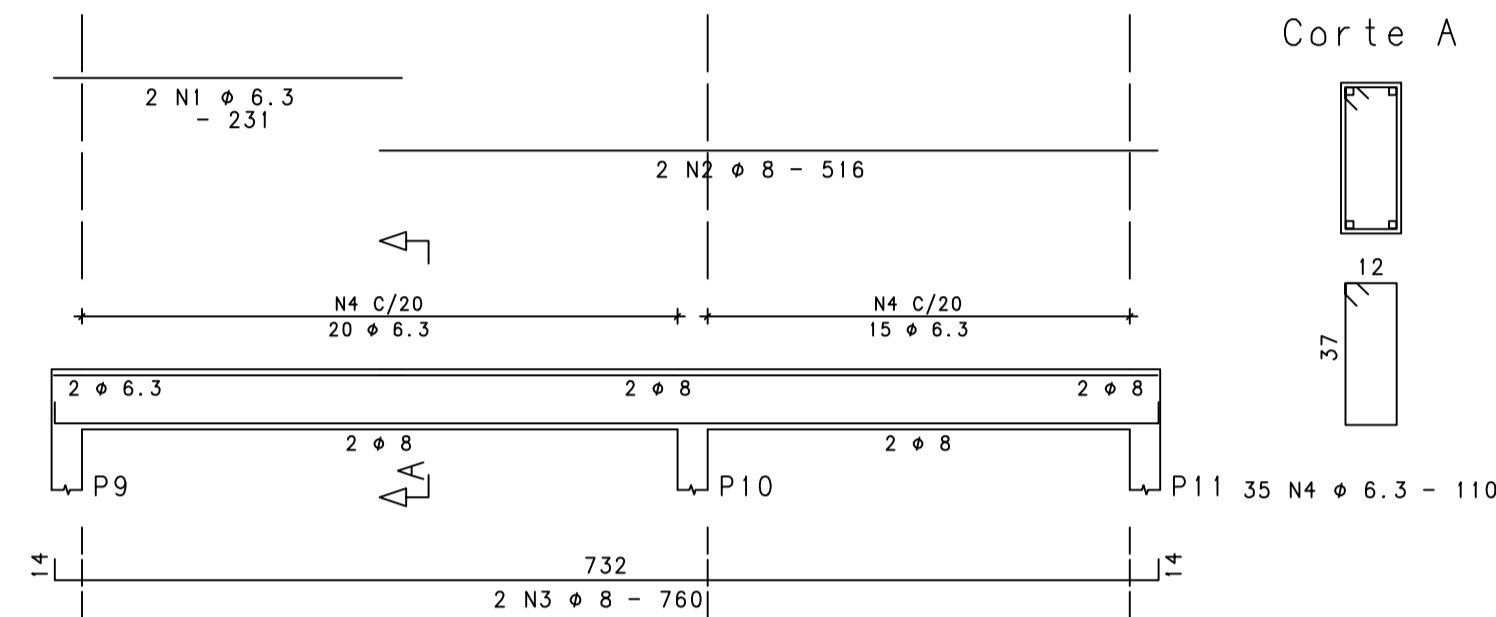
V102 15/40



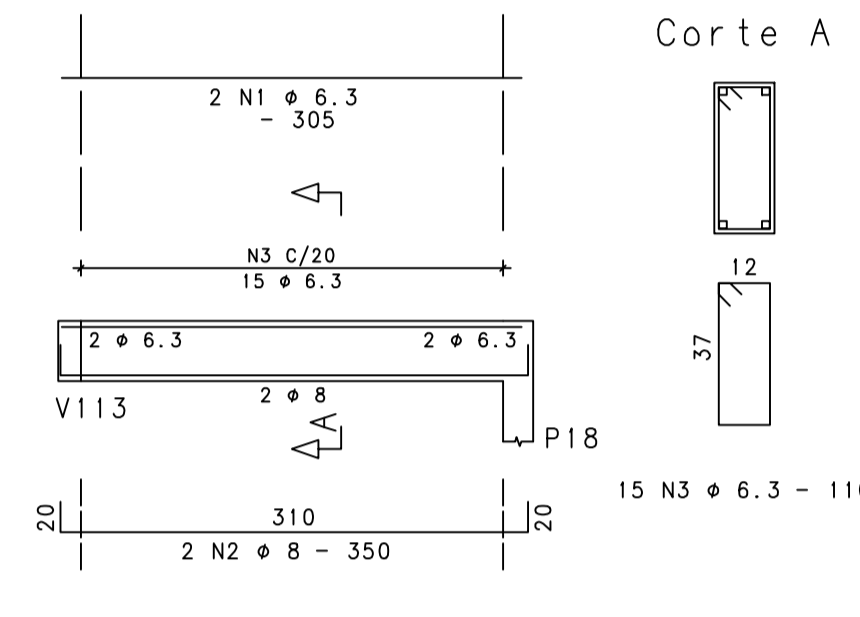
V103 15/40



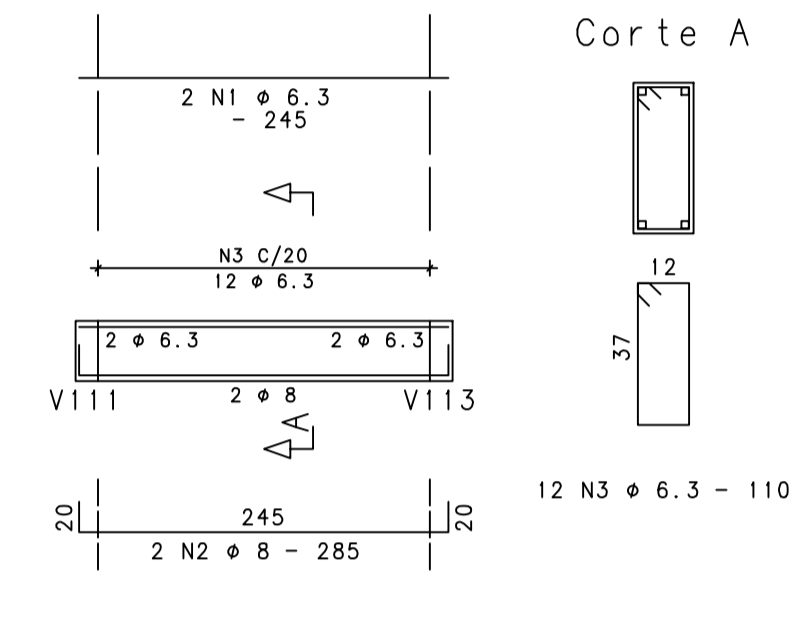
V104 15/40



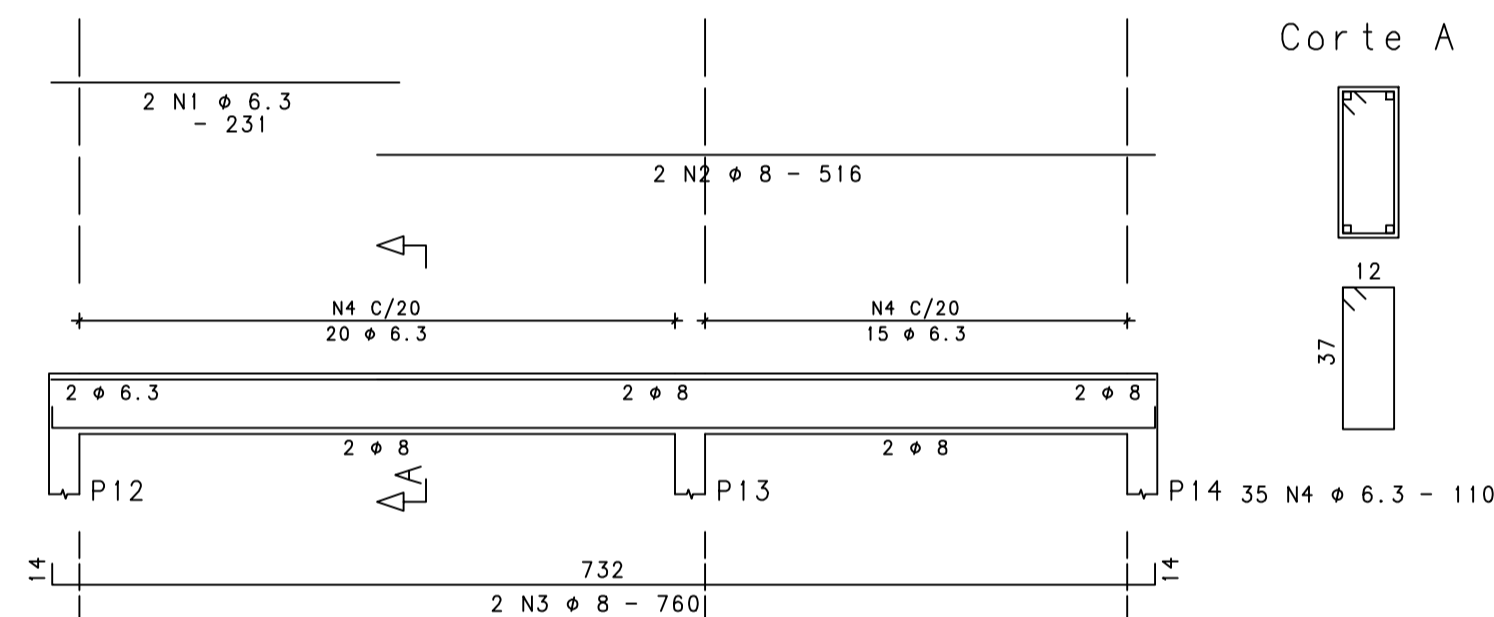
V105 15/40



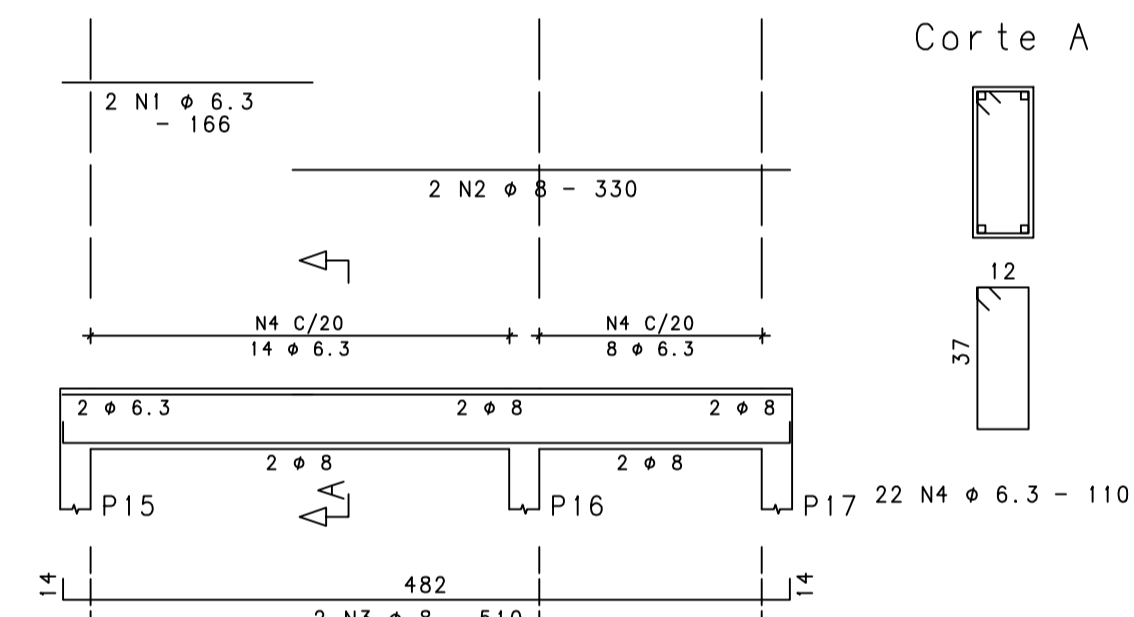
V106 15/40



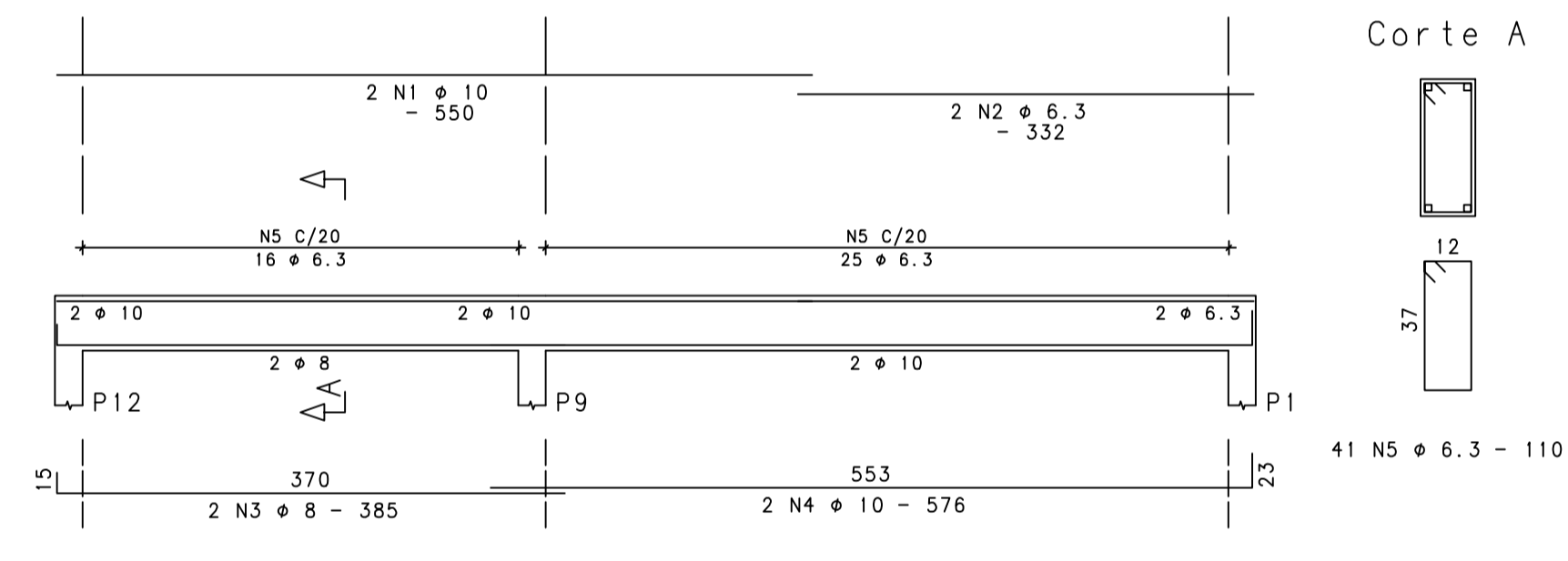
V107 15/40



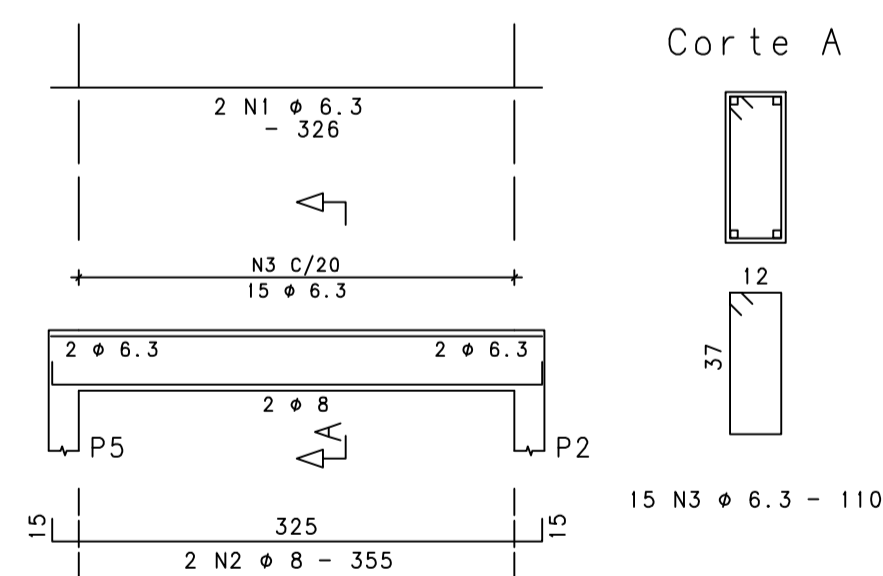
V108 15/40



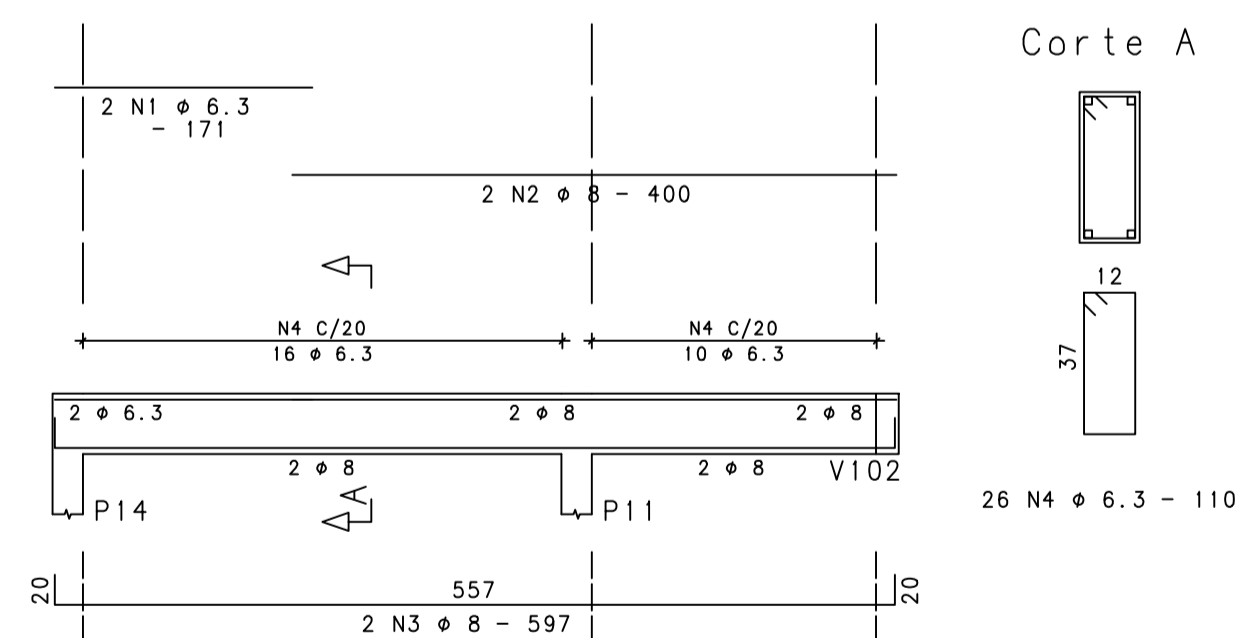
V109 15/40



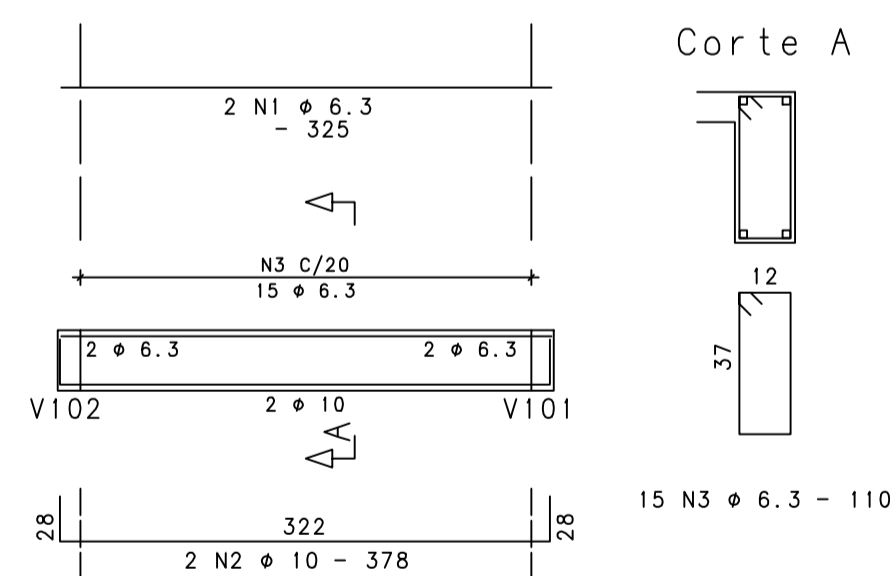
V110 15/40



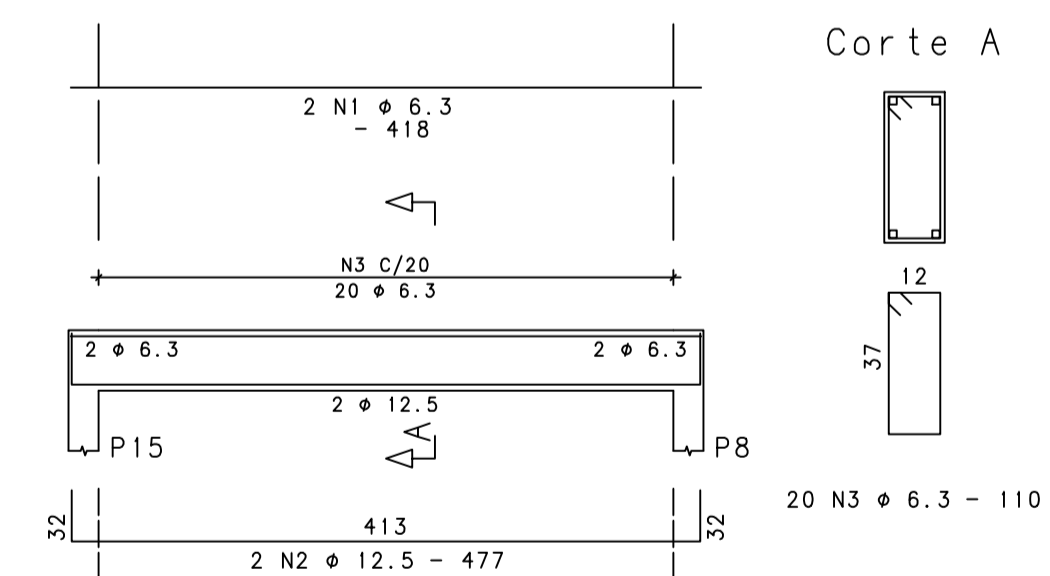
V111 15/40



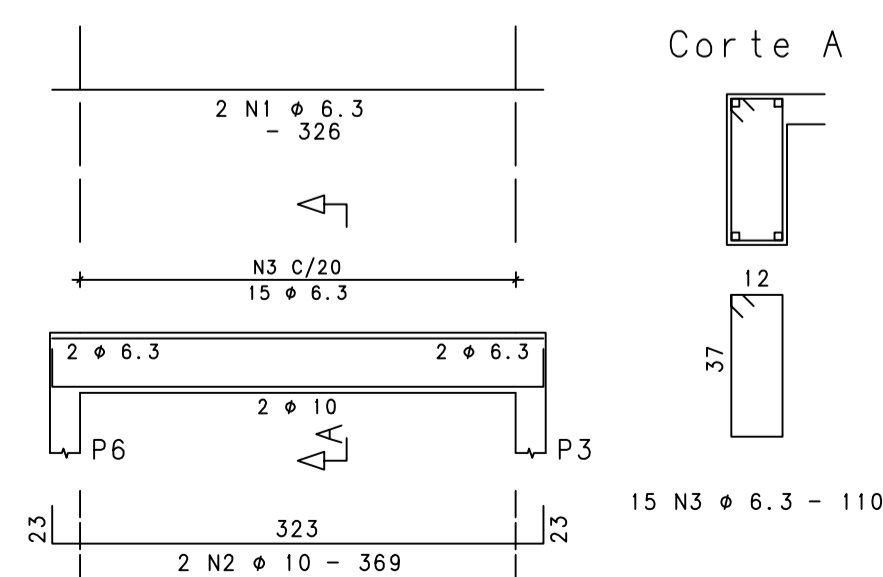
V112 15/40



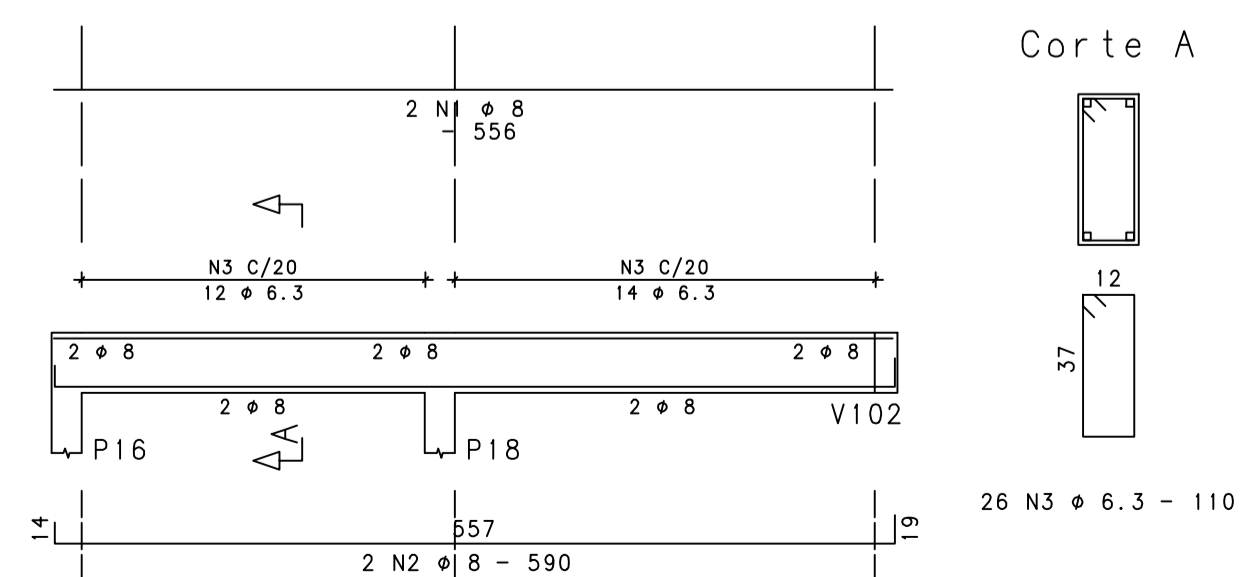
V113 15/40



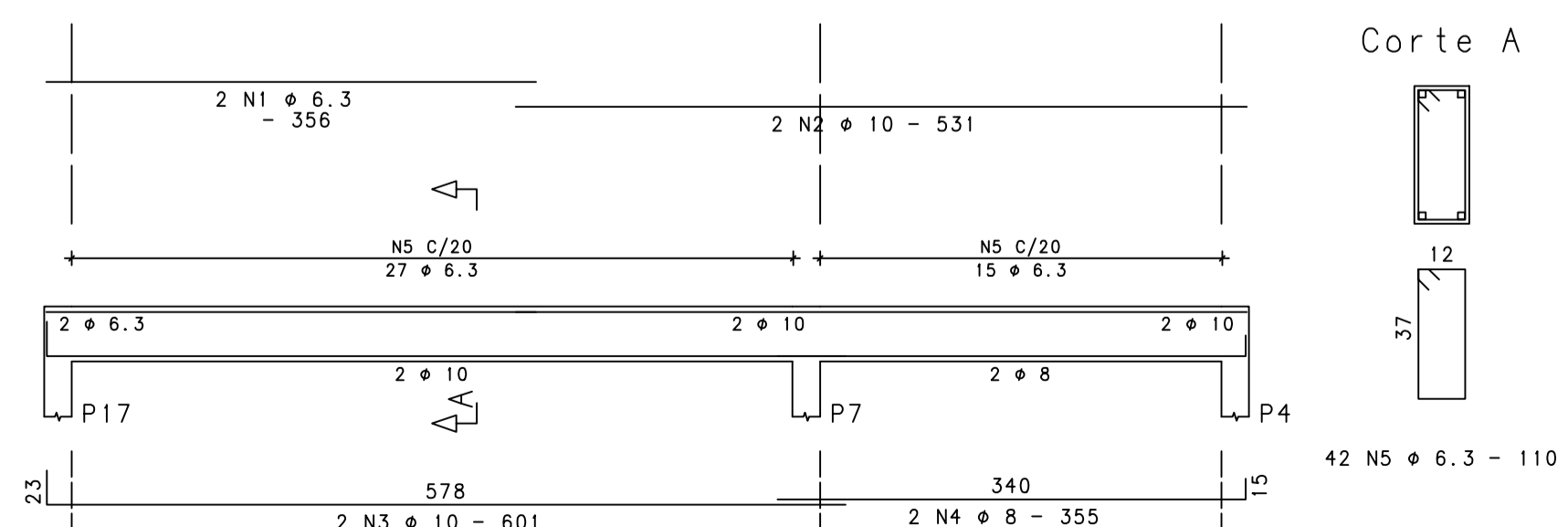
V114 15/40



V115 15/40



V116 15/40



ACO	POS	BIT (mm)	QUANT	COMPRIMENTO		
				UNIT (cm)	TOTAL (cm)	
V101	50A	1	6.3	2	336	672
	50A	2	12.5	2	560	1120
	50A	3	6.3	2	149	298
	50A	4	10	2	455	910
	50A	5	12.5	2	686	1372
	50A	6	12.5	2	520	1040
	50A	7	8	2	415	830
	50A	8	6.3	70	110	7700
V102	50A	1	6.3	2	211	422
	50A	2	6.3	2	129	258
	50A	3	12.5	2	515	1030
	50A	4	10	4	496	1984
	50A	5	10	2	431	862
	50A	6	6.3	39	110	4290
V103	50A	1	8	2	418	836
	50A	2	6.3	2	140	280
	50A	3	8	2	585	1170
	50A	4	6.3	26	110	2860
V104	50A	1	6.3	2	231	462
	50A	2	8	2	516	1032
	50A	3	8	2	760	1520
	50A	4	6.3	35	110	3850
V105	50A	1	6.3	2	305	610
	50A	2	8	2	350	700
	50A	3	6.3	15	110	1650
V106	50A	1	6.3	2	245	490
	50A	2	8	2	285	570
	50A	3	6.3	12	110	1320
V107	50A	1	6.3	2	231	462
	50A	2	8	2	516	1032
	50A	3	8	2	760	1520
	50A	4	6.3	35	110	3850
V108	50A	1	6.3	2	166	332
	50A	2	8	2	330	660
	50A	3	8	2	510	1020
	50A	4	6.3	22	110	2420
V109	50A	1	10	2	550	1100
	50A	2	6.3	2	332	664
	50A	3	8	2	369	738
	50A	4	10	2	576	1152
	50A	5	6.3	41	110	4510
V110	50A	1	6.3	2	326	652
	50A	2	8	2	355	710
	50A	3	6.3	15	110	1650
V111	50A	1	6.3	2	171	342
	50A	2	8	2	400	800
	50A	3	8	2	597	1194
	50A	4	6.3	26	110	2860
V112	50A	1	6.3	2	325	650
	50A	2	10	2	378	756
	50A	3	6.3	15	110	1650
V113	50A	1	6.3	2	418	836
	50A	2	12.5	2	477	954
	50A	3	6.3	20	110	2200
V114	50A	1	6.3	2	326	652
	50A	2	10	2	369	738
	50A	3	6.3	15	110	1650
V115	50A	1	8	2	556	1112
	50A	2	8	2	590	1180
	50A	3	6.3	26	110	2860
V116	50A	1	6.3	2	356	712
	50A	2	10	2	531	1062
	50A	3	10	2	601	1202
	50A	4	8	2	355	710
	50A	5	6.3	42	110	4620

RESUMO ACO CA 50-60			
ACO	BIT (mm)	COMPR (m)	PESO (kg)
50A	6.3	587	147
50A	8	174	69
50A	10	98	62
50A	12.5	55	55
Peso Total		50A =	333 kg

PREFEITURA MUNICIPAL DE AFUÁ
SECRETARIA MUNICIPAL DE INFRAESTRUTURA

ESTRUTURAL

SISTEMA DE ABASTECIMENTO DE ÁGUA BAIRRO: CAPIM MARINHO	PRANCHA EST - 04/04
PROJETO BÁSICO CASA DE QUÍMICA ARMAÇÃO DAS VIGAS DE COBERTURA	RESP. PROJETO:
DES. CAD:	DATA: DEZEMBRO/2021
ESCALA:	INDICADA
ENP CIVIL ESAO ALVES - CREA- 15.8000 PA	