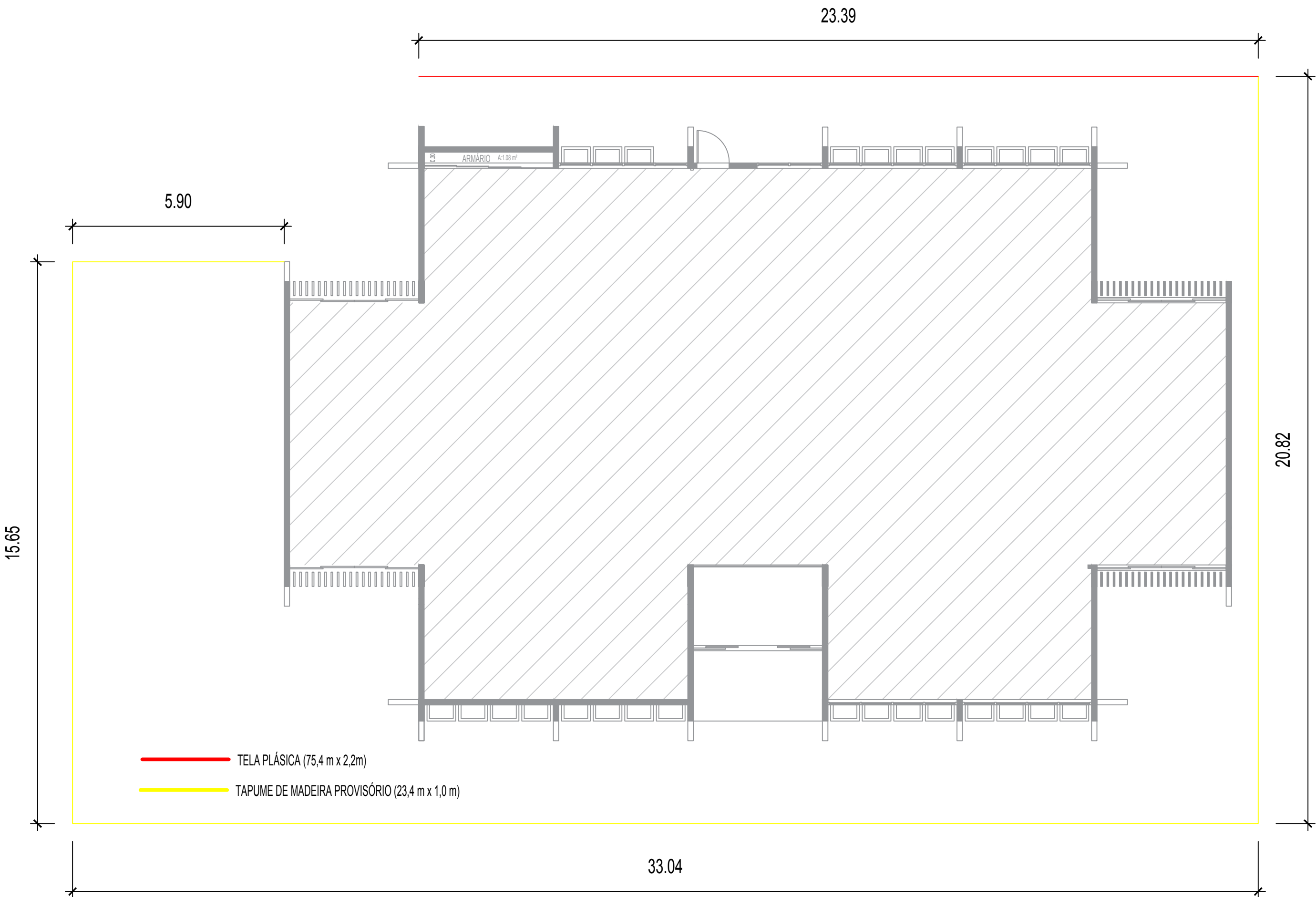


LAJE DE CONCRETO/DIVISÓRIAS/BANCADAS A DEMOLIR



LAJE DE CONCRETO À CONSTRUIR

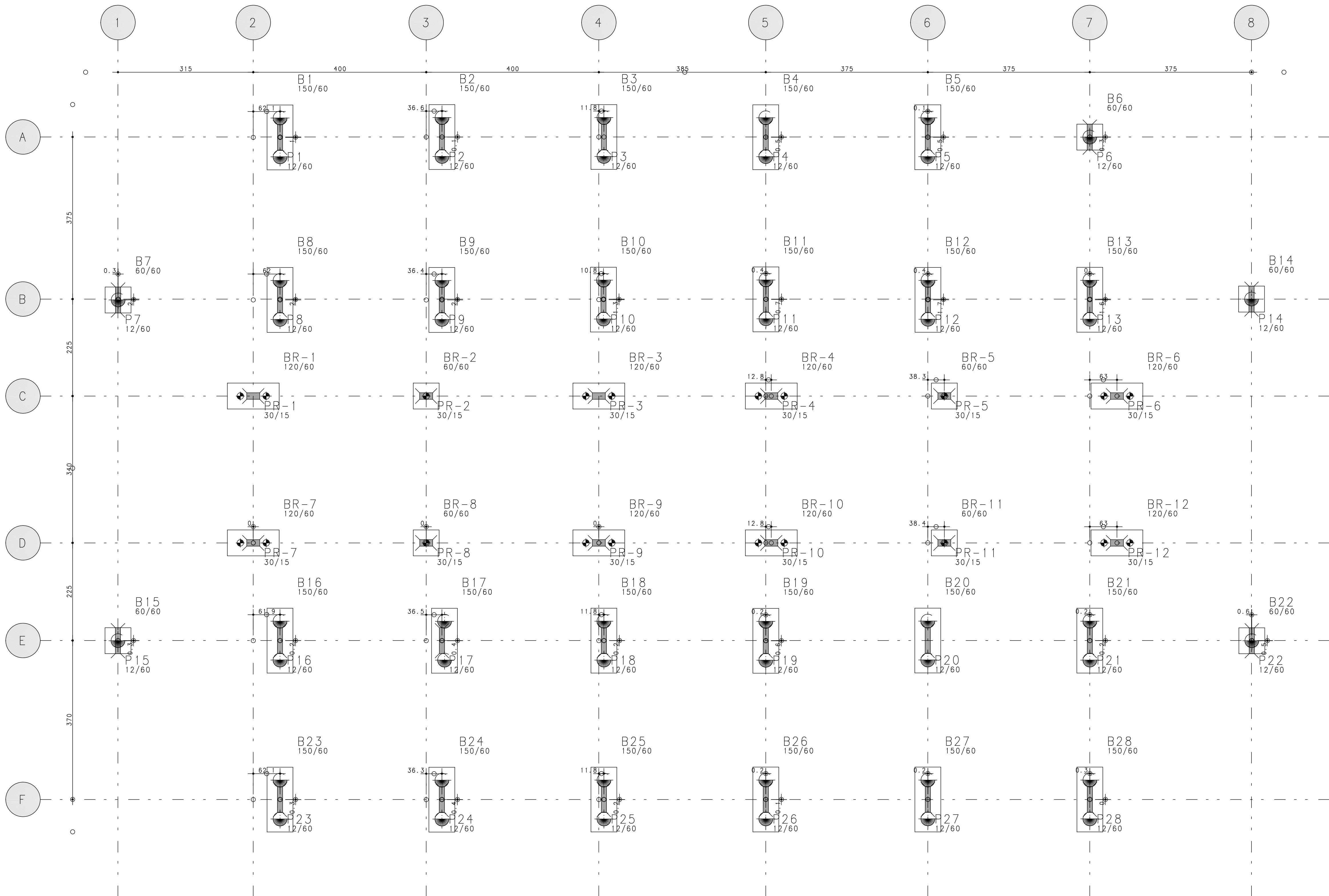


CERCAMENTO DA OBRA

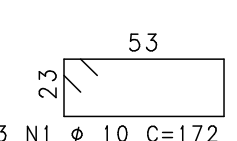
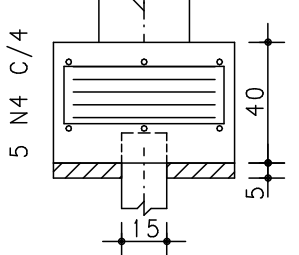
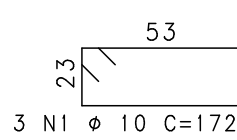
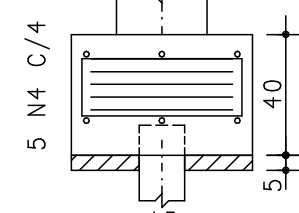
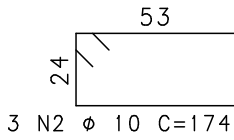
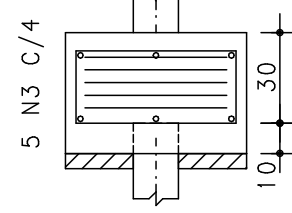
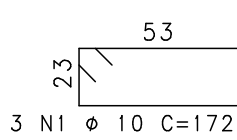
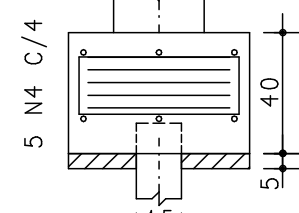
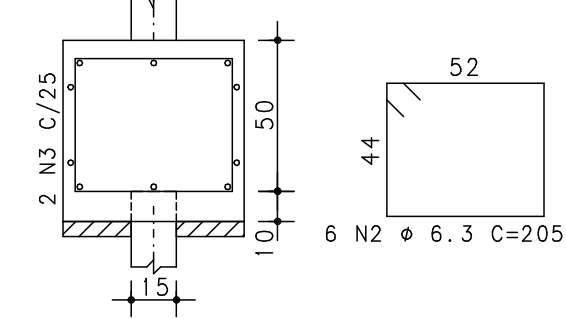
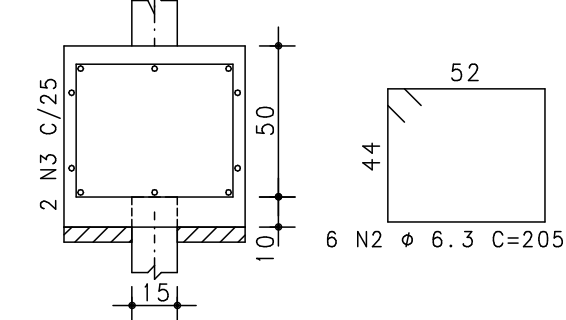
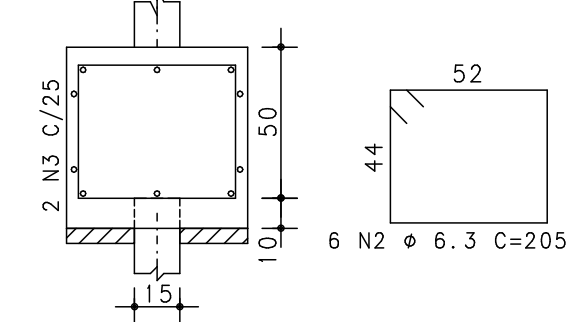
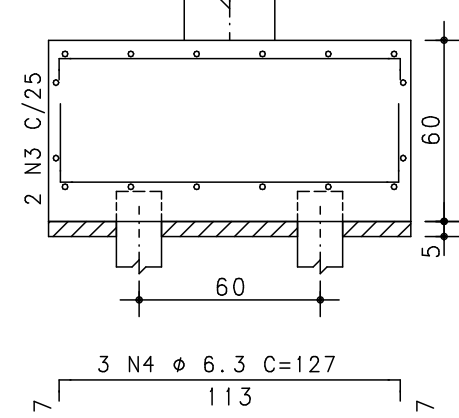
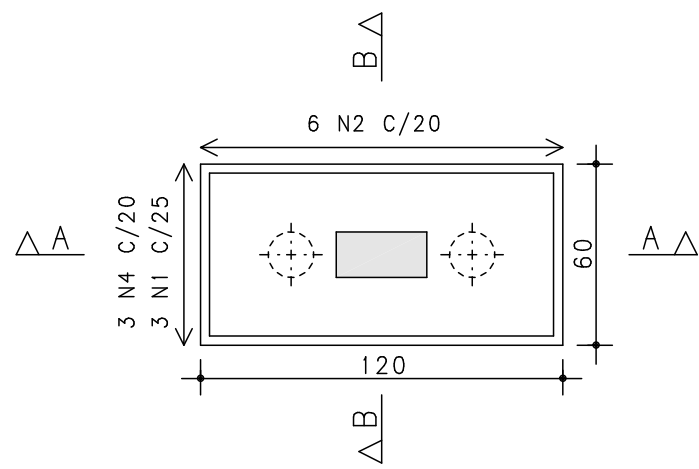
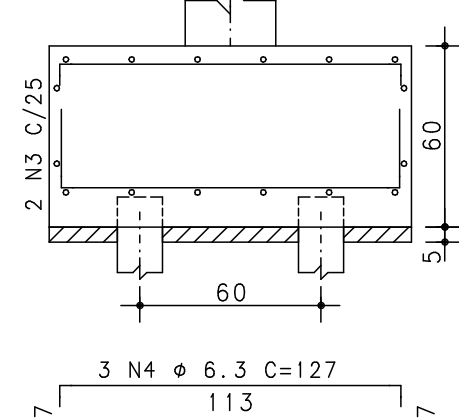
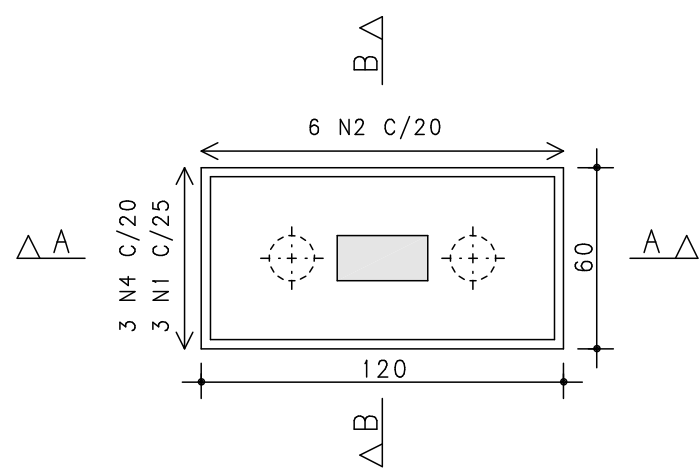
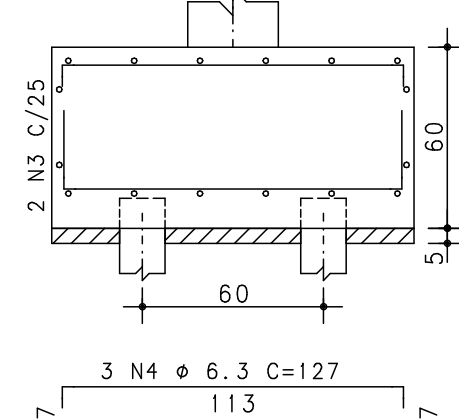
OBSERVAÇÕES:
1 - CONFERIR MEDIDAS NO LOCAL.

LEGENDA:
ÁREA À DEMOLIR (192,5 m²)
LAJE À CONSTRUIR (192,5 m²)

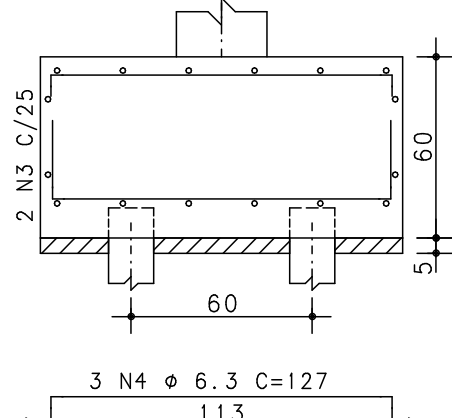
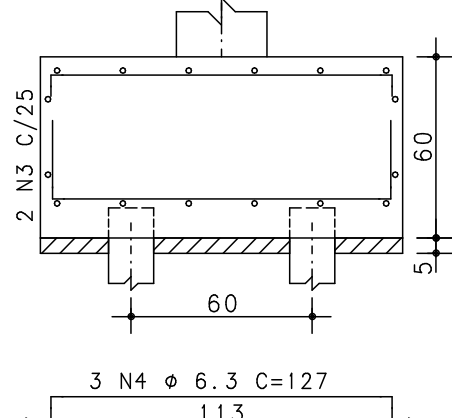
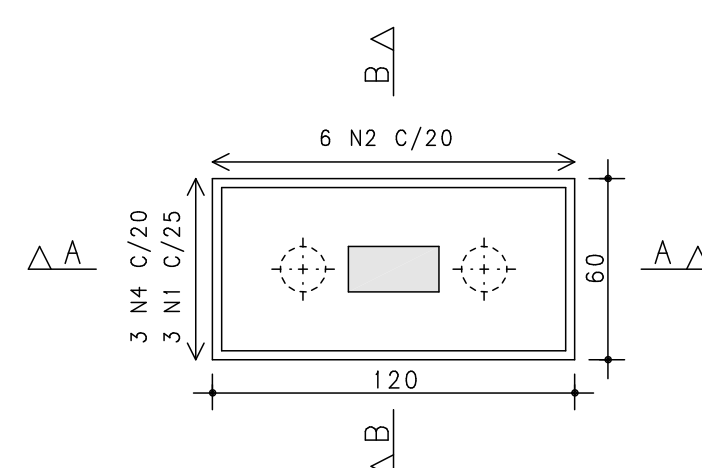
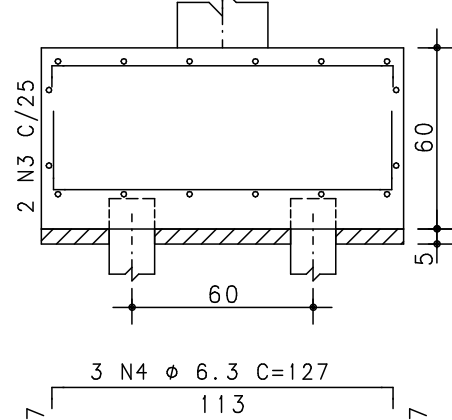
03				
02				
01				
00	22/05/2019	Emissão Inicial		Alvaro
			Assunto	Resp. técnico
<div><div></div><div>A.S. NETO ENGENHARIA Perícias - Avaliações - Projetos</div></div>				
A1 - C:\C:\PROJETOS\NETO\AVALIAÇAO\PROJETO\001\0				



Technical drawing of a rectangular plate. The overall width is 120 and the overall height is 60. The plate has a central rectangular hole with a width of 30 and a height of 10. The hole is centered horizontally and vertically. The plate is divided into three horizontal sections: a top section of height 3, a middle section of height 4, and a bottom section of height 3. The top and bottom sections are labeled 'N4 C/20' and the middle section is labeled 'N1 C/25'. Section lines are shown as dashed lines with arrows pointing outwards from the hole. The drawing is labeled 'B' at the top and 'A' at the bottom.

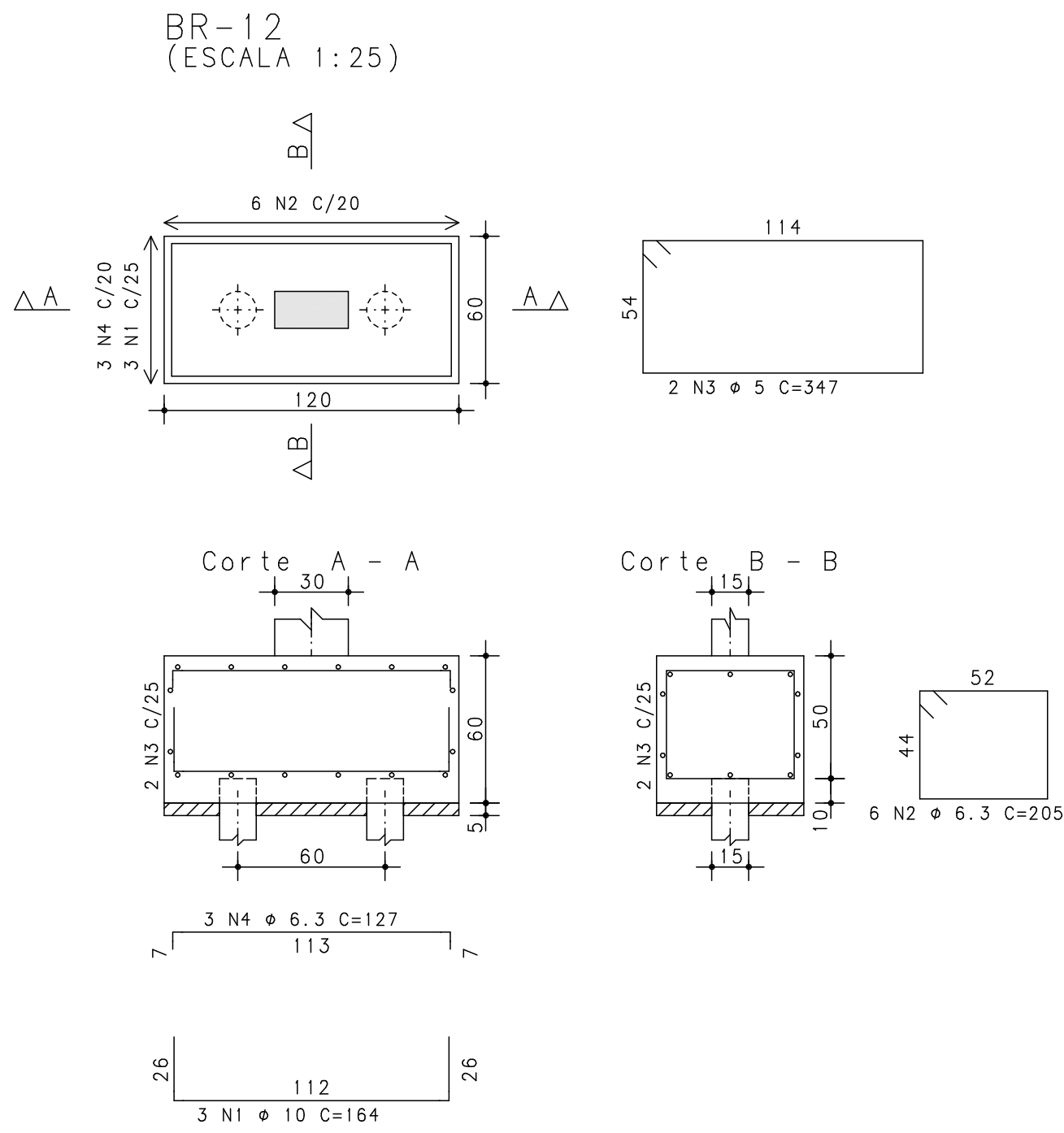
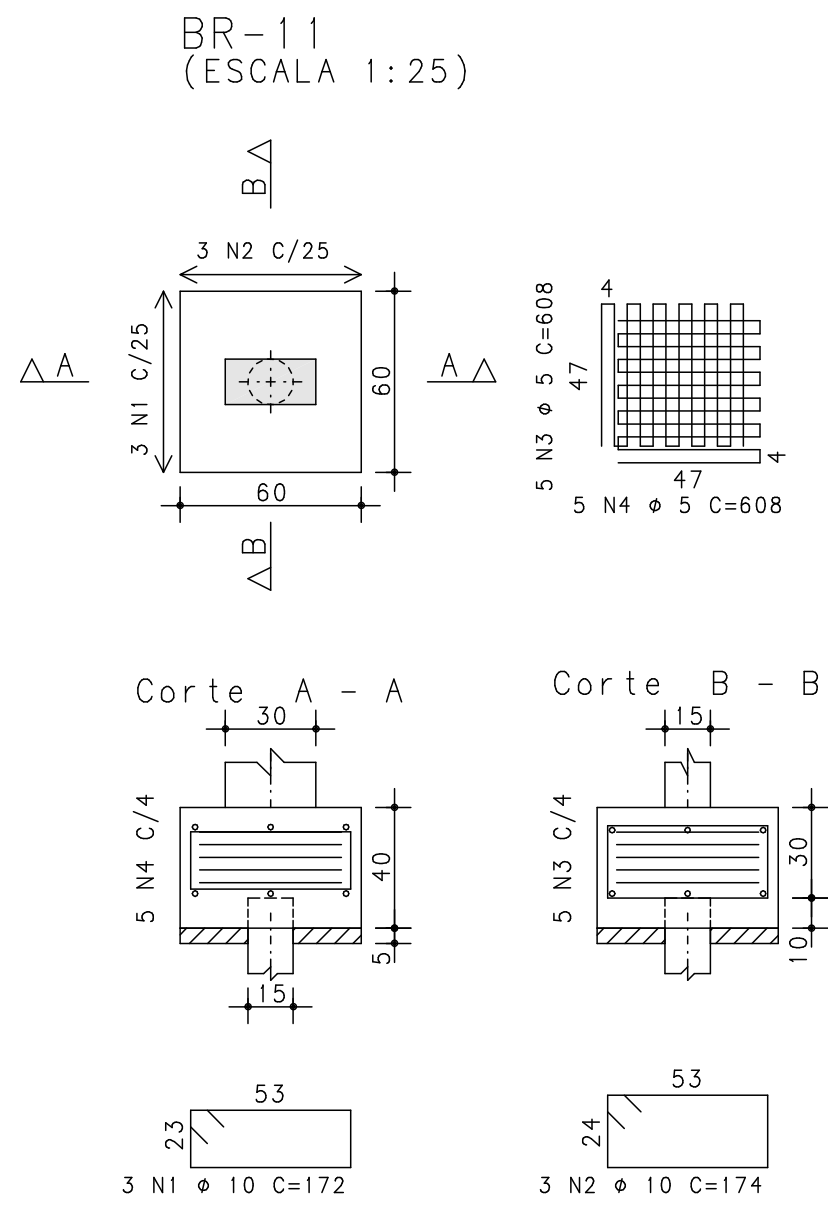
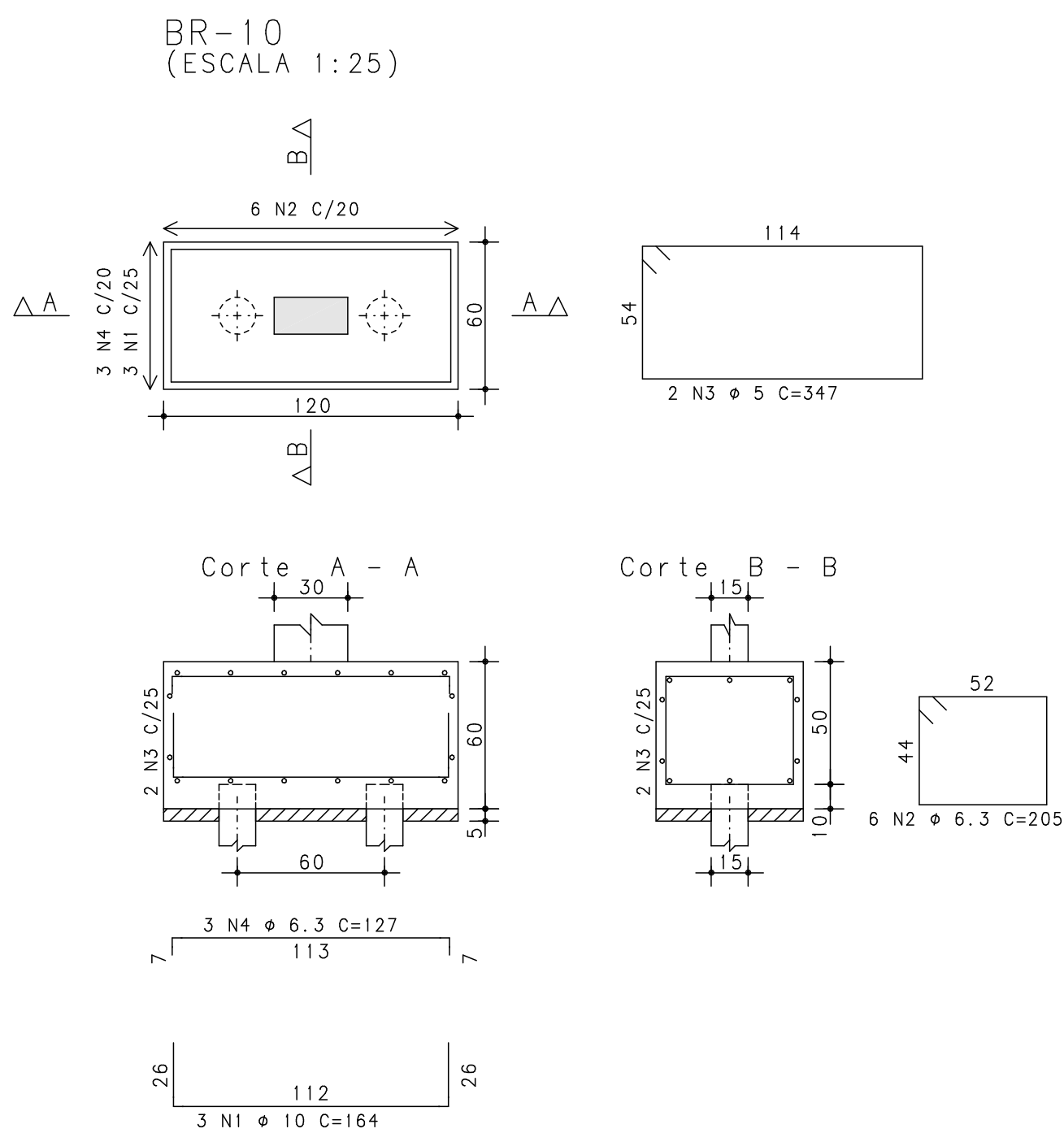
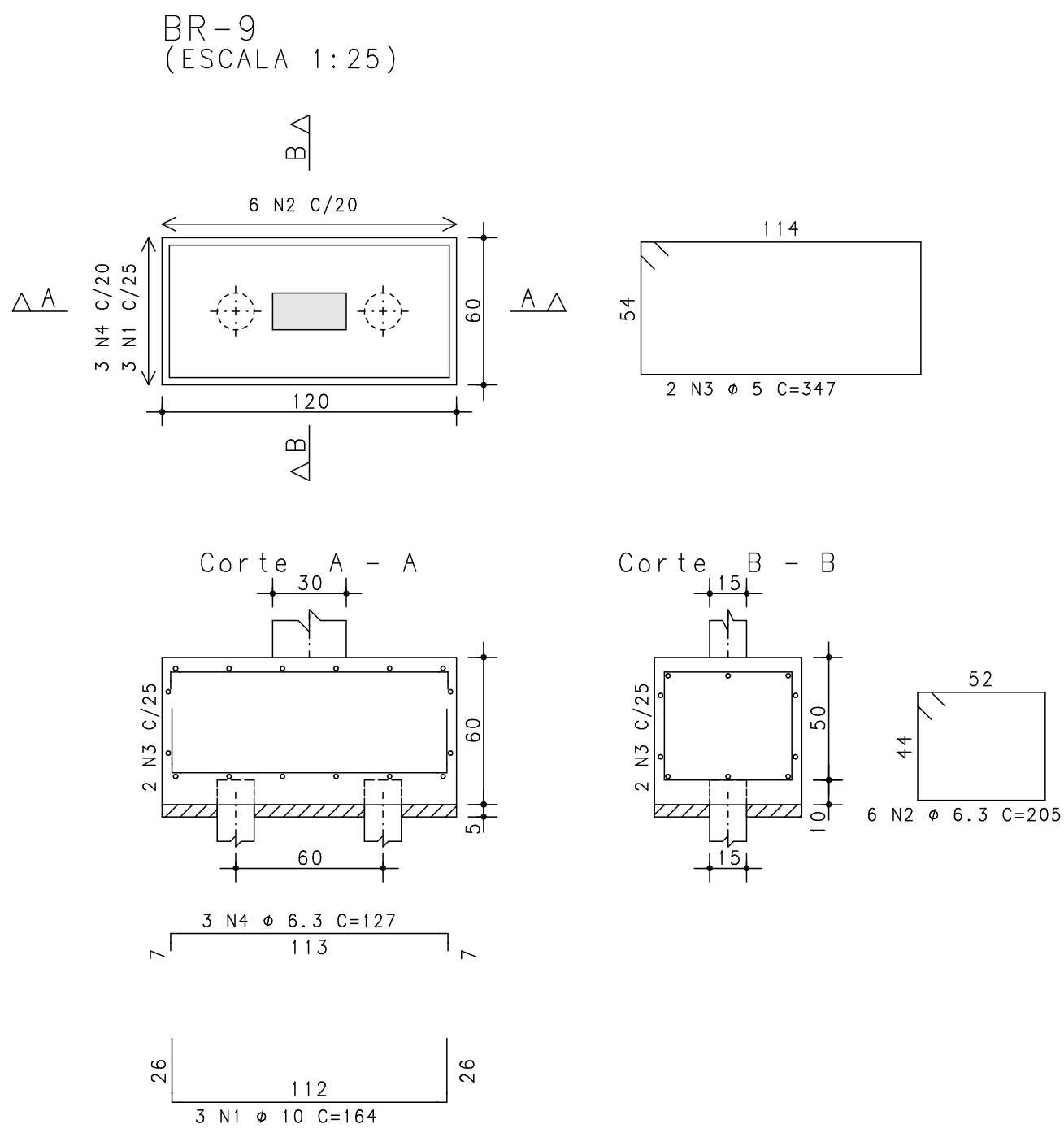


Technical drawing of a rectangular plate. The overall dimensions are 120 (width) and 60 (height). The plate has four holes: two on the left side (3 N4 C/20 and 3 N1 C/25) and two on the right side (6 N2 C/20). The drawing includes dimension lines and labels for the holes and overall size.



RESUMO AÇO CA 50-60			
AÇO	BIT (mm)	COMPR (m)	PESO (kg)
60B	5	217	35
50A	6.3	81	20
50A	10	56	35
Peso Total	60B =		35 kg
Peso Total	50A =		55 kg

					OBRA N.º	0001
CLIENTE					DES. N.º	
EMBRAPA						
OBRA						01/02
EMBRAPA-CTAA						
TÍTULO						
BLOCOS DE FUNDAÇÃO ARMAÇÃO DOS BLOCOS						
BR-1 / BR-2 / BR-3 / BR-4 BR-5 / BR-6 / BR-7 / BR-8					REV. N.º	00
DATA	ESCALA	FOK	DESENHO	VERIF.	ENG.º	
01/03/2019	1:25	250				



ACO	POS	BIT (mm)	QUANT	COMPRIMENTO	
				UNIT (cm)	TOTAL (cm)
BR-9	50A	1	10	3	164
	50A	2	6.3	6	205
	60B	3	5	2	347
	50A	4	6.3	3	127
BR-10	50A	1	10	3	164
	50A	2	6.3	6	205
	60B	3	5	2	347
	50A	4	6.3	3	127
BR-11	50A	1	10	3	172
	50A	2	10	3	174
	60B	3	5	5	608
	60B	4	5	5	608
BR-12	50A	1	10	3	164
	50A	2	6.3	6	205
	60B	3	5	2	347
	50A	4	6.3	3	127
BR-1	50A	1	10	3	164
	50A	2	6.3	6	205
	60B	3	5	2	347
	50A	4	6.3	3	127
BR-2	50A	1	10	3	172
	50A	2	10	3	174
	60B	3	5	5	608
	60B	4	5	5	608

RESUMO ACO CA 50-60			
ACO	BIT (mm)	COMPR (m)	PESO (kg)
60B	5	149	24
50A	6.3	64	16
50A	10	40	25
Peso Total		60B =	24 kg
Peso Total		50A =	42 kg

CLIENTE EMBRAPA				OBRA N ° 0001	
OBRA EMBRAPA-CTAA				DES. N ° 02/02	
TITULO BLOCOS DE FUNDAÇÃO ARMAÇÃO DOS BLOCOS				REV. N ° 00	
BR-1 / BR-2 / BR-9 / BR-10 BR-11 / BR-12				ENG °	
DATA 01/03/2019	ESCALA 1:25	FOK 250	DESENHO	VERIF.	

CORTE AA

CORTE AA

JUNTA 2,5 CM
VIGA EXISTENTE

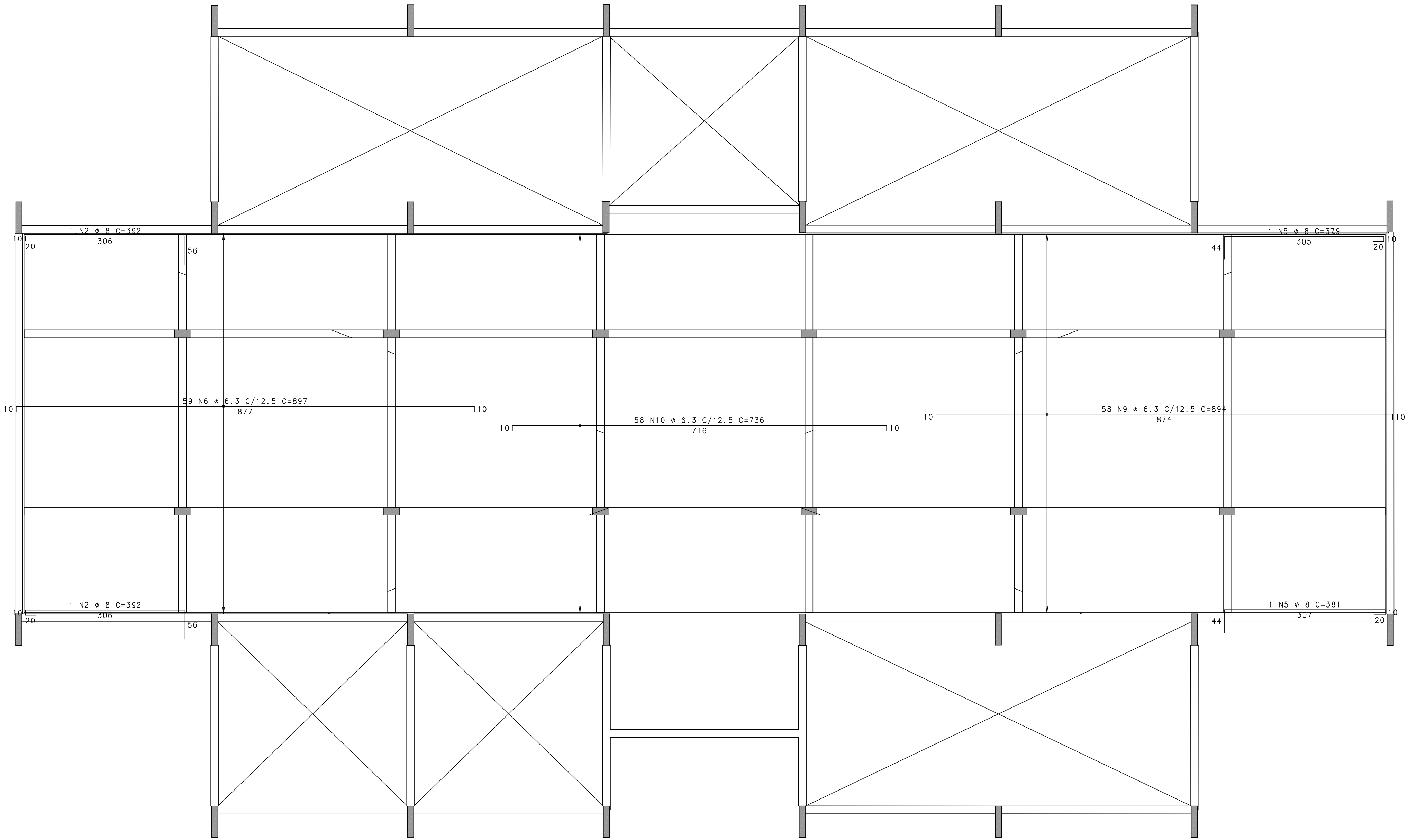
JUNTA 2,5 CM
VIGA EXISTENTE

CORTE AA

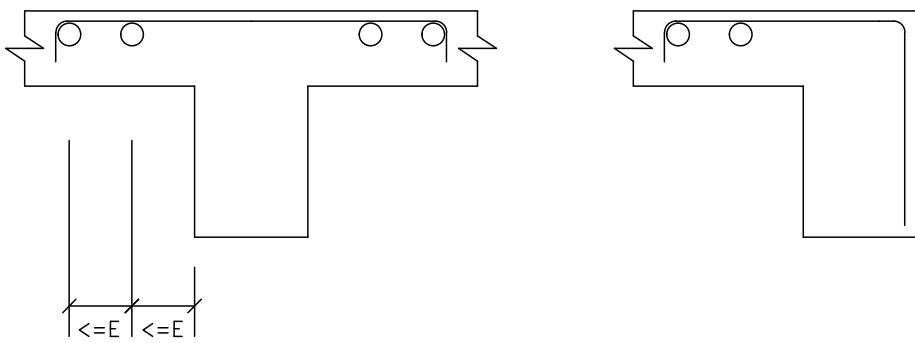
OBRA N.º					0001
CLIENTE					EMBRAPA
OBRA					EMBRAPA-CTAA
TÍTULO					PAVIMENTO TÉRREO FORMAS
DATA					27/02/2019
ESCALA					1:50
FCX					
DESENHO					
VERIF.					
REV. N.º					00
ENG.º					

Terreo - Armadura negativa horizontal

1X



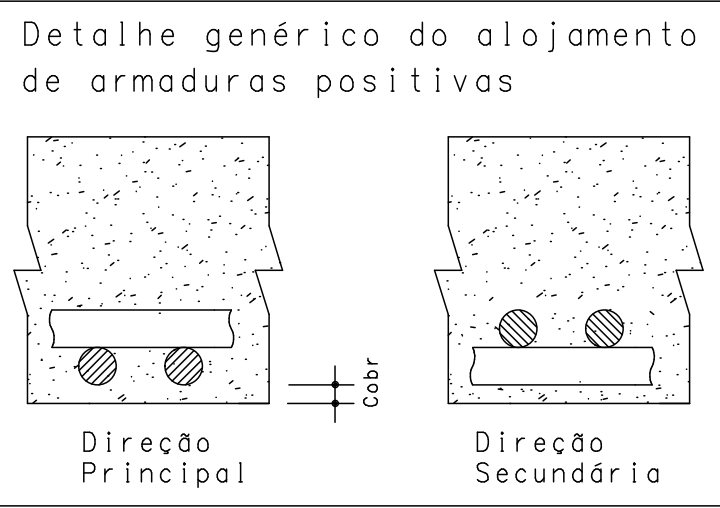
DETALHE TÍPICO DE FERROS DE DISTRIBUIÇÃO DE ARMADURA NEGATIVA



60 N25 Ø 5 C/20 C=1140

ACO	POS	BIT (mm)	QUANT	COMPRIMENTO UNIT (cm)	TOTAL (cm)
Terreo - Armadura negativa horizontal					
50A	2	8	2	392	784
50A	5	8	2	379	758
50A	6	6.3	59	738	43542
50A	9	6.3	58	736	42688
50A	10	6.3	58	736	42688
60B	25	5	60	1140	68400

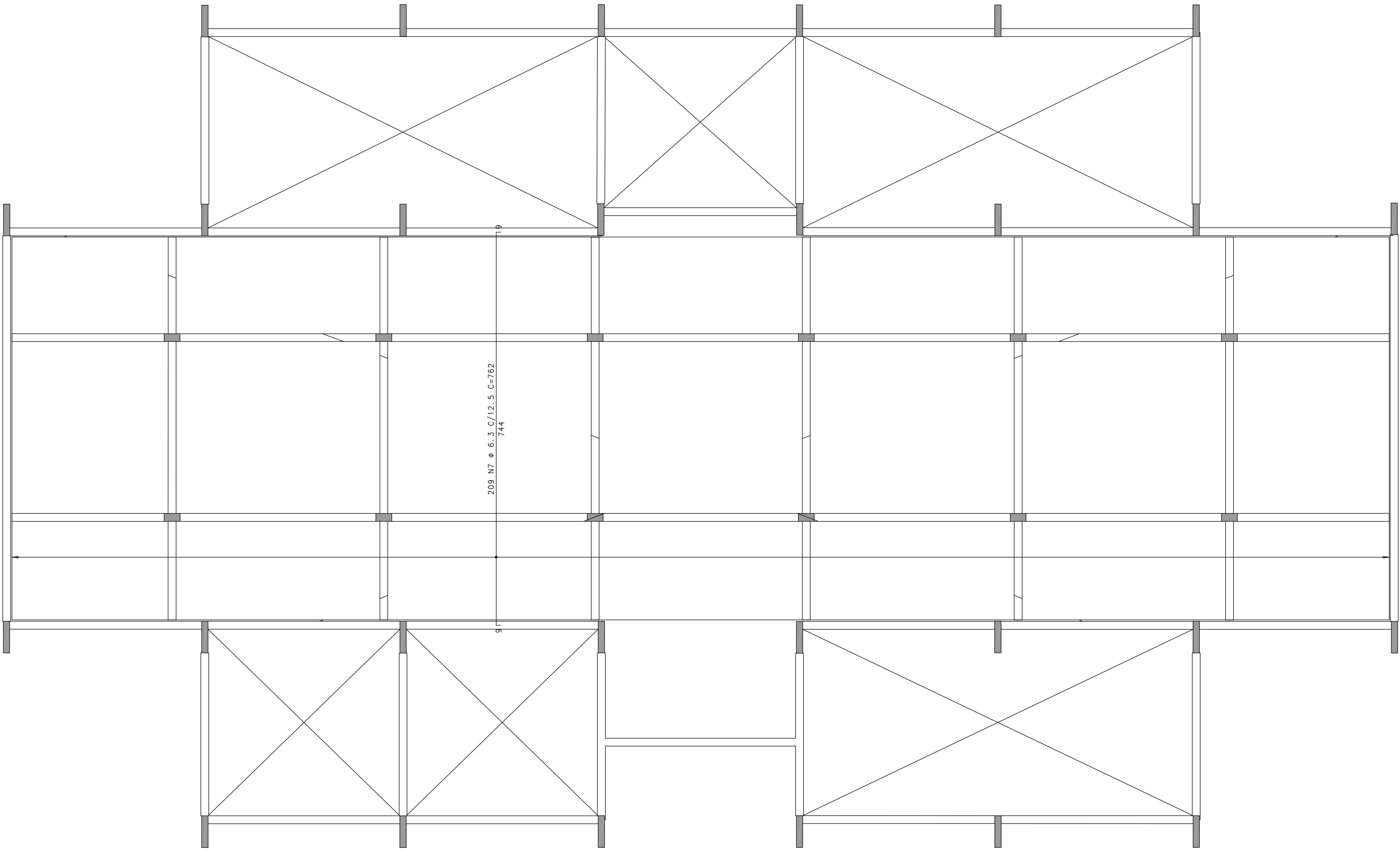
RESUMO ACO CA 50-60			
ACO	BIT (mm)	COMPR (m)	PESO (kg)
60B	5	684	105
50A	6.3	1289	316
50A	8	15	6
Peso Total		60B =	105 kg
Peso Total		50A =	322 kg



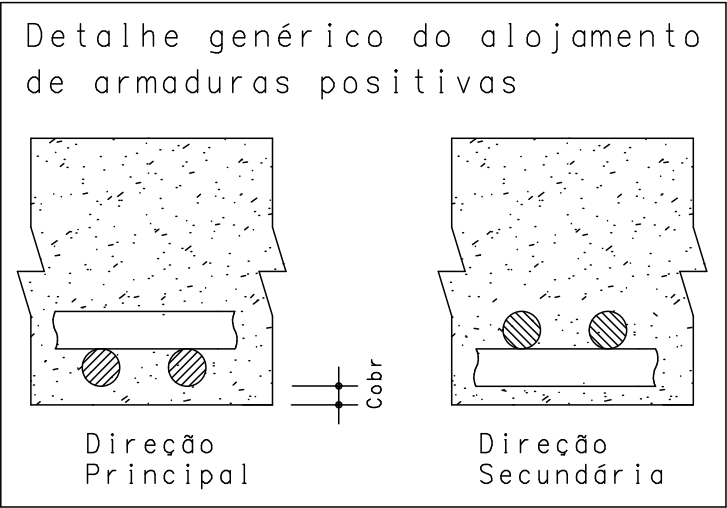
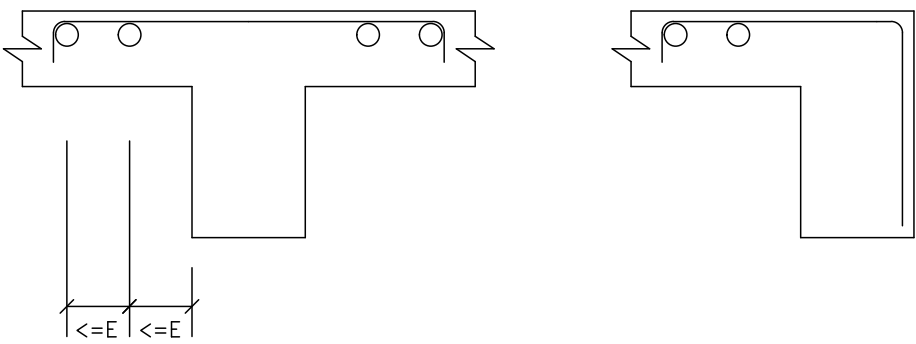
CLIENTE				OBRA N.º
EMBRAPA				0001
OBRA				DES. N.º
EMBRAPA-CTAA				01/04
TÍTULO				REV. N.º
PAVIMENTO TÉRREO ARMAÇÃO DAS LAJES				00
Terreo - Armadura negativa horizontal				ENG.º
DATA	ESCALA	FOK	DESENHO	VERIF.
27/02/2019	1:50	300		

ACO	POS	BIT (mm)	QUANT	COMPRIMENTO	
				UNIT (cm)	TOTAL (cm)
Terreo - Armadura negativa vertical					
50A	7	6.3	209	762	159258

RESUMO ACO CA 50-60				
ACO	BIT (mm)	COMPR (m)	PESO (kg)	
50A	6.3	1593	390	
Peso Total		50A =	390 kg	



DETALHE TÍPICO DE FERROS
DE DISTRIBUIÇÃO DE
ARMADURA NEGATIVA



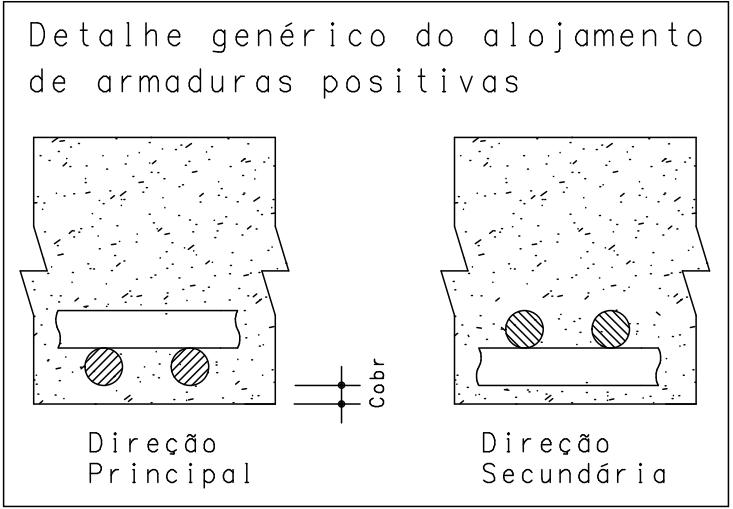
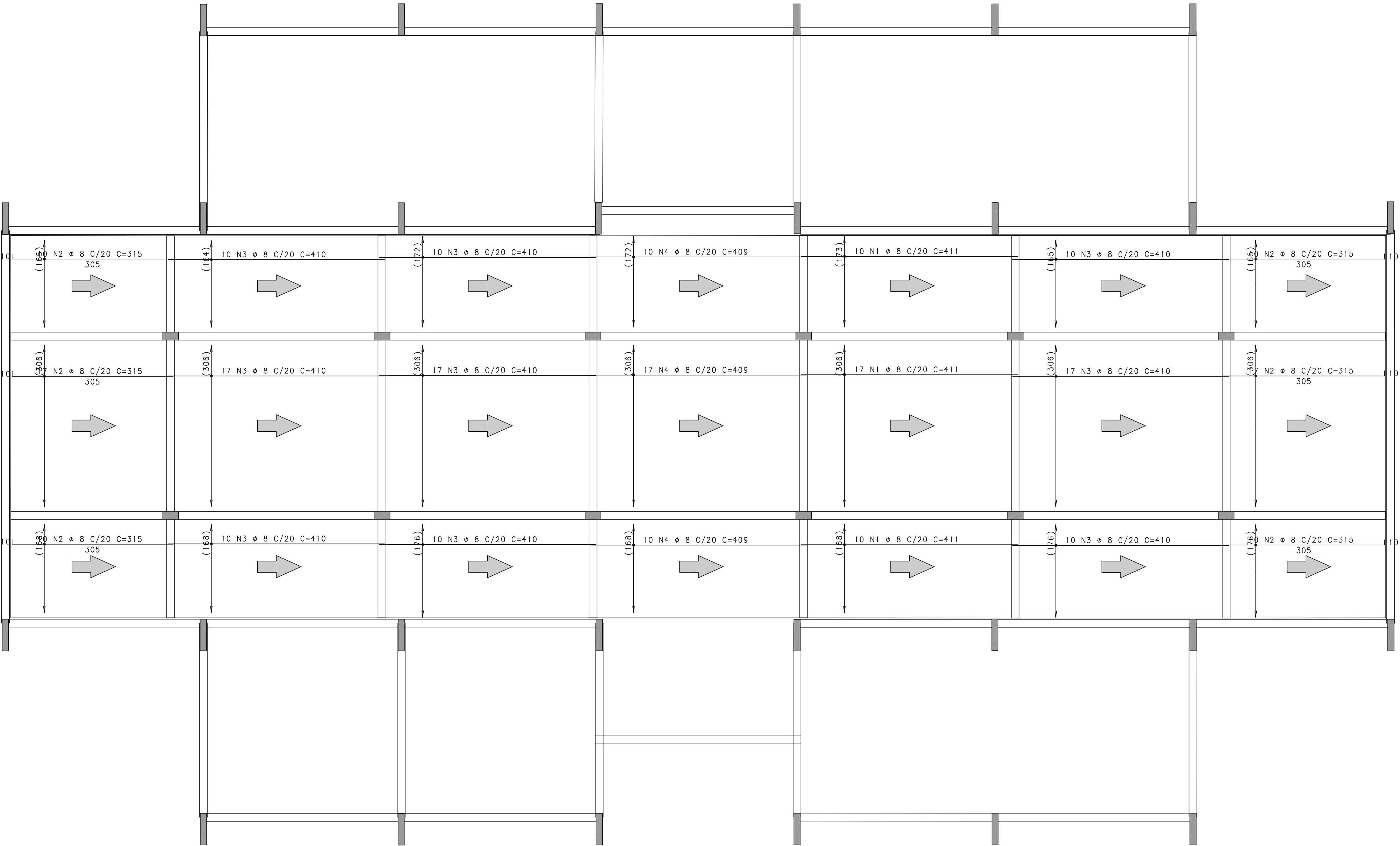
OBRA N.º					0001
CLIENTE					EMBRAPA
OBRA					EMBRAPA-CTAA
TÍTULO					PAVIMENTO TÉRREO ARMAÇÃO DAS LAJES
Terreo - Armadura negativa vertical					00
DATA	27/02/2019	ESCALA	1:50	FOK	300
DESENHO		VERIF.		ENG.º	

ACO	POS	BIT (mm)	QUANT	COMPRIMENTO	
				UNIT	TOTAL
Terreo - Armadura positiva horizontal					
50A	1	8	37	411	15207
50A	2	8	74	315	23310
50A	3	8	111	410	45510
50A	4	8	37	409	15133

RESUMO AÇO CA 50-60			
ACO	BIT (mm)	COMPR (m)	PESO (kg)
50A	8	992	392
Peso Total		50A =	392 kg

Terreo - Armadura positiva horizontal

1X



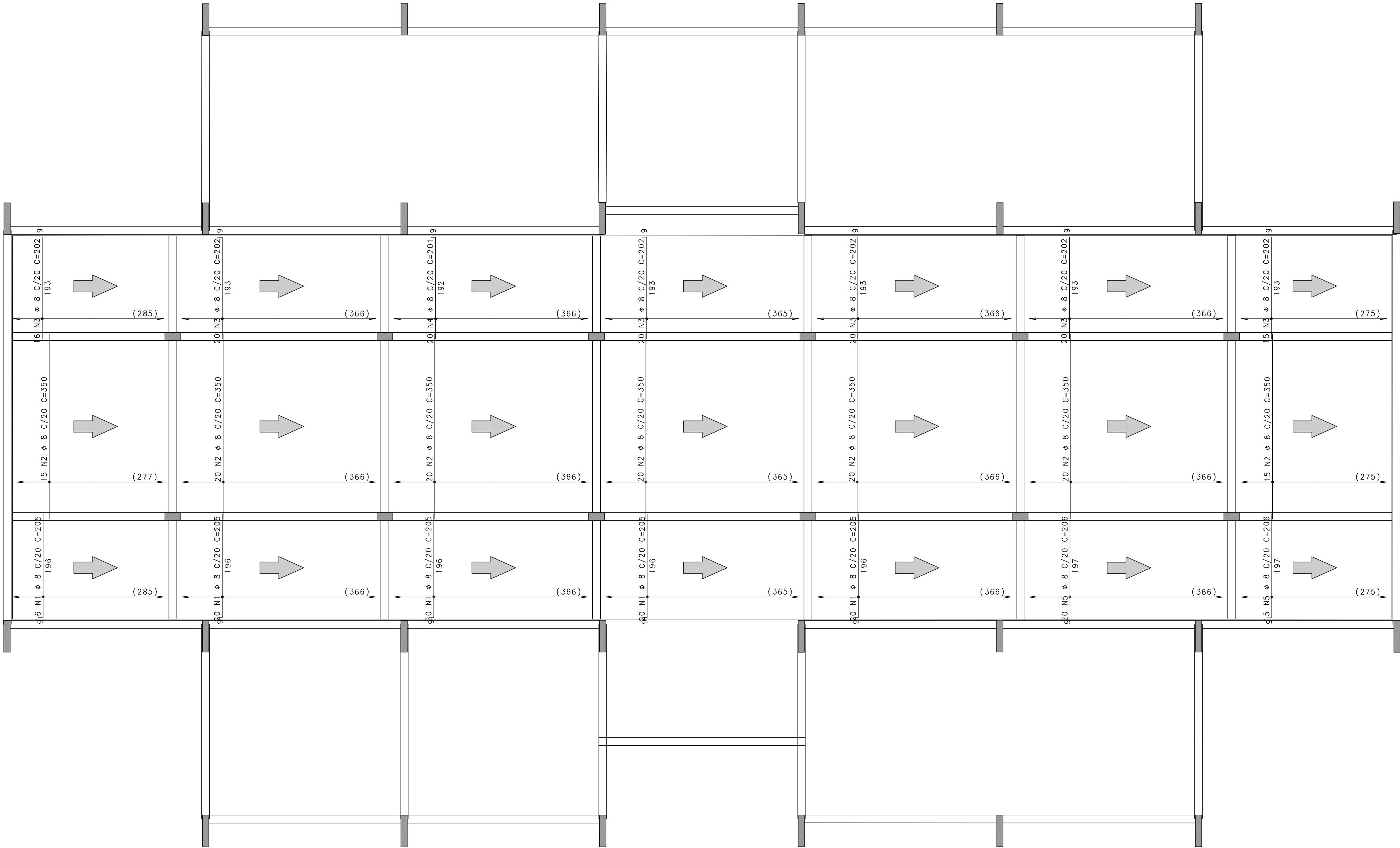
CLIENTE EMBRAPA					OBRA N.º	0001
OBRA EMBRAPA-CTAA					DES. N.º	03/04
TÍTULO PAVIMENTO TÉRREO ARMAÇÃO DAS LAJES					REV. N.º	00
Terreo - Armadura positiva horizontal					ENG.º	
DATA 27/02/2019	ESCALA 1:50	FOK 300	DESENHO	VERIF.		

AÇO	POS	BIT (mm)	QUANT	COMPRIMENTO	
				UNIT (cm)	TOTAL (cm)
Terreo - Armadura positiva vertical					
50A	1	8	96	205	19680
50A	2	8	130	350	45500
50A	3	8	111	202	22422
50A	4	8	20	201	4020
50A	5	8	35	206	7210

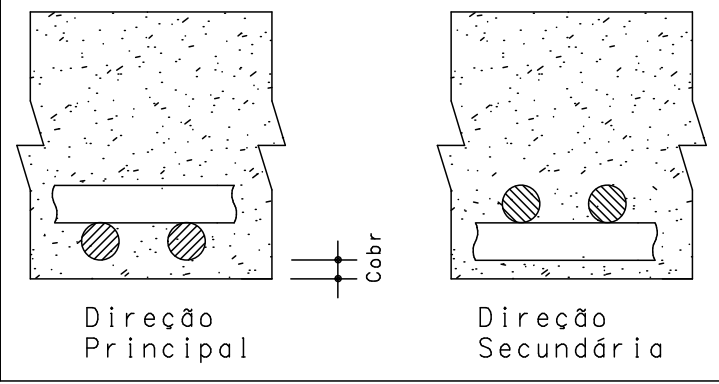
RESUMO AÇO CA 50-60			
AÇO	BIT (mm)	COMPR (m)	PESO (kg)
50A	8	988	390
Peso Total		50A =	390 kg

Terreo - Armadura positiva vertical

1x



Detalhe genérico do alojamento de armaduras positivas



CLIENTE EMBRAPA					OBRA N.º	0001
OBRA EMBRAPA-CTAA					DES. N.º	04/04
TÍTULO PAVIMENTO TÉRREO ARMAÇÃO DAS LAJES					REV. N.º	00
Terreo - Armadura positiva vertical					ENG.º	
DATA 27/02/2019	ESCALA 1:50	FOK 300	DESENHO	VERIF.		

Technical drawing of a bridge deck layout, showing various structural elements, dimensions, and reinforcement details. The drawing is divided into sections by vertical dashed lines, with labels A, B, and C indicating specific points or sections.

Top Section (Deck Surface):

- Reinforcement: 17 # 5 C/17 N11 (288), 22 # 5 C/17 N11 (371), 22 # 5 C/17 N11 (370), 22 # 5 C/17 N11 (369), 22 # 5 C/17 N11 (371), 22 # 5 C/17 N11 (370), 17 # 5 C/17 N11 (287).
- Dimensions: 3 # 16, 3 # 12.5, 5 # 12.5, 2 # 12.5, 3 # 12.5, 4 # 12.5, 3 # 16, 3 # 16.
- Labels: 15/60, 15/60, 15/60, 15/60.

Bottom Section (Deck Surface):

- Reinforcement: 2X3 # 6.3, 2 # 10, 2 # 12.5, 2 # 12.5, 2 # 12.5, 2 # 12.5, 2 # 12.5, 2 # 10.
- Labels: PR-1, PR-2, PR-3, PR-4, PR-5, PR-6.

Internal Structure (Girders and Bracing):

- Reinforcement: 3 N1 # 16 C=700, 3 N2 # 12.5 C=340, 2 N3 # 12.5 C=890, 1 N4 # 12.5 (1 # 2aCAM) C=215, 2 N5 # 12.5 C=365, 3 N1 # 16 C=700, 3 N2 # 12.5 C=340, 2 N7 # 12.5 C=840, 2 N8 # 10 C=400, 2 N7 # 12.5 C=840, 2 N10 # 10 C=320.
- Dimensions: 649, 139, 260, 92, 134, 92, 649, 91, 305, 310, 50.
- Labels: (1 # 2aCAM), 78, 16, 51.

Costela (Ribs) Details:

- (costela) 408: 2x3 N13 # 6.3 C=408
- (costela) 407: 2x3 N15 # 6.3 C=407
- (costela) 408: 2x3 N14 # 6.3 C=408
- (costela) 409: 2x3 N16 # 6.3 C=409
- (costela) 408: 2x3 N14 # 6.3 C=408
- (costela) 303: 2x3 N17 # 6.3 C=303
- (costela) 304: 2x3 N12 # 6.3 C=304



RESUMO AÇO CA 50-60			
ACO	BIT (mm)	COMP (m)	PESO (kg)
60B	5	521	83
50A	6,3	409	102
50A	10	79	50
50A	12,5	213	213
50A	16	84	134
Peso Total		60B =	83 kg
Peso Total		50A =	500 kg

Technical drawing of a bridge deck layout, showing reinforcement details and dimensions. The drawing is divided into sections by vertical dashed lines, with dimensions 15/60 indicated above each section.

Longitudinal Reinforcement (Top):

- Top layer: 17 # 5 C/17 N10 (288), 22 # 5 C/17 N10 (371), 22 # 5 C/17 N10 (370), 22 # 5 C/17 N10 (369), 22 # 5 C/17 N10 (371), 22 # 5 C/17 N10 (370), 17 # 5 C/17 N10 (287).
- Bottom layer: 3 # 16, 3 # 12.5, 3 # 12.5, 3 # 12.5, 3 # 12.5, 3 # 12.5, 3 # 16, 3 # 16.

Longitudinal Reinforcement (Bottom):

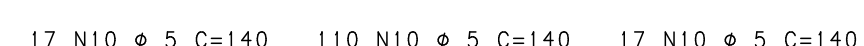
- 2 # 10, 2 # 12.5, 2 # 12.5, 2 # 12.5, 2 # 12.5, 2 # 12.5, 2 # 12.5, 2 # 10.

Transverse Reinforcement (Stirrups):

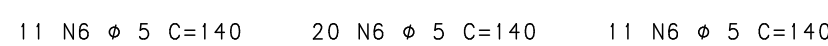
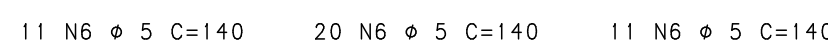
- PR-7, PR-8, PR-9, PR-10, PR-11, PR-12.

Other Details:

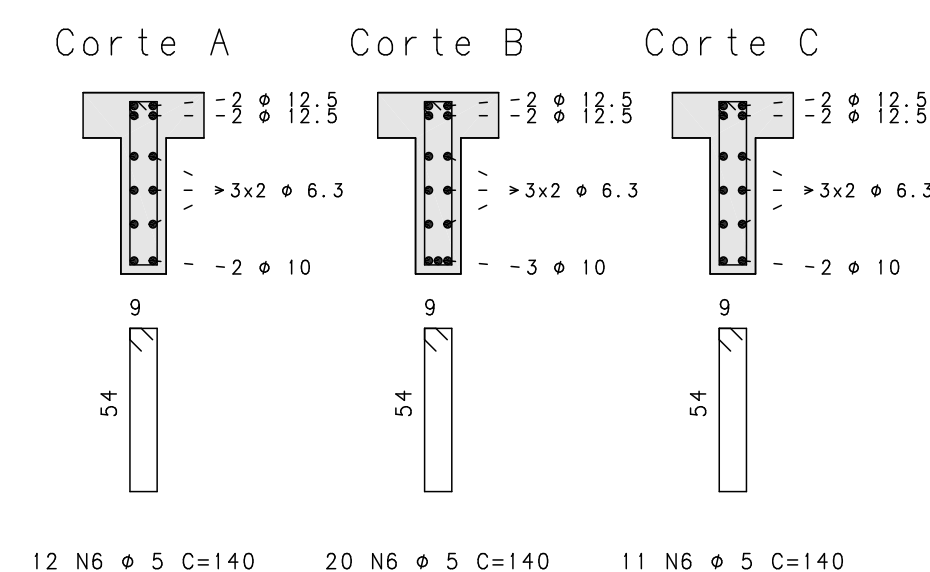
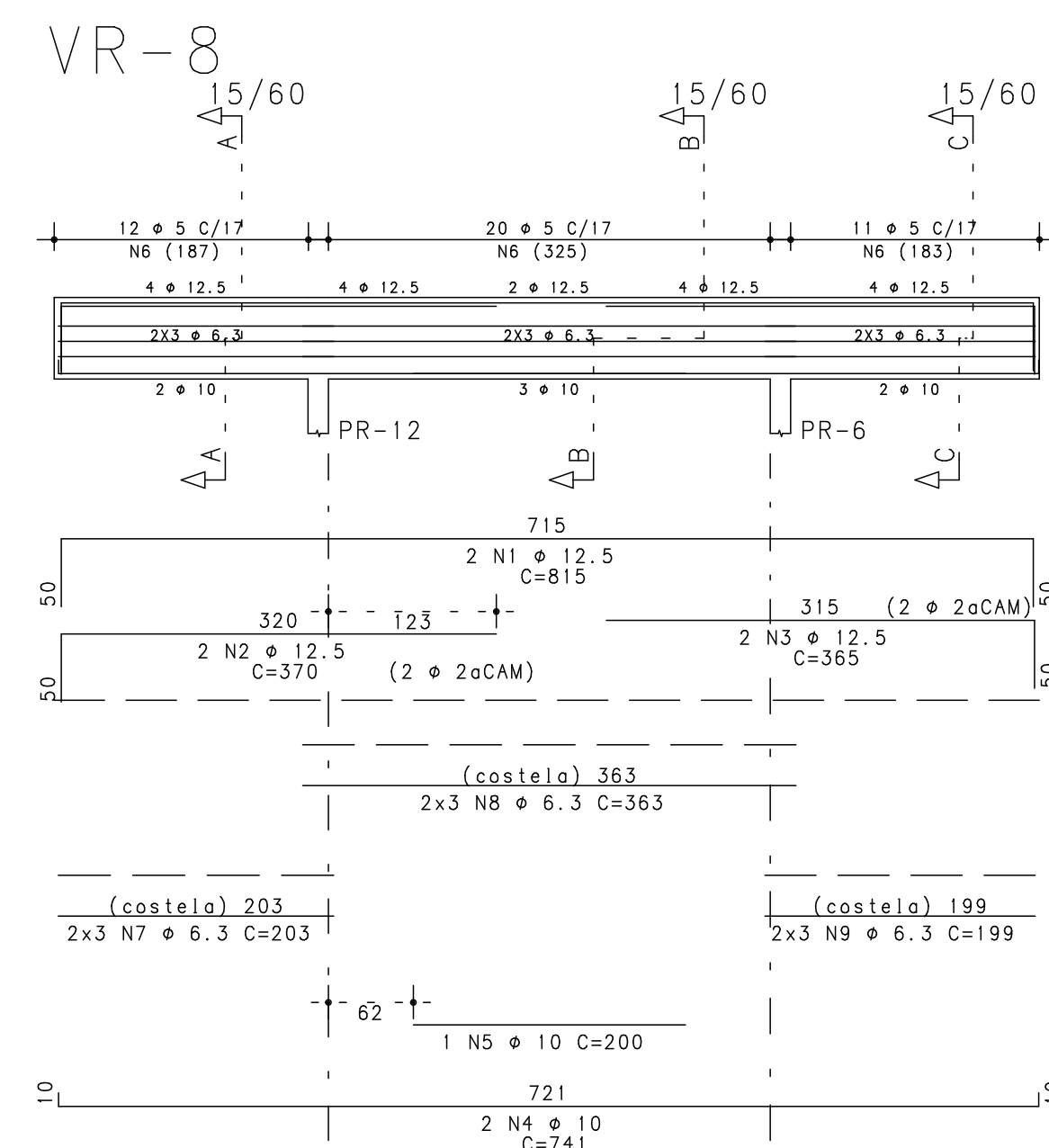
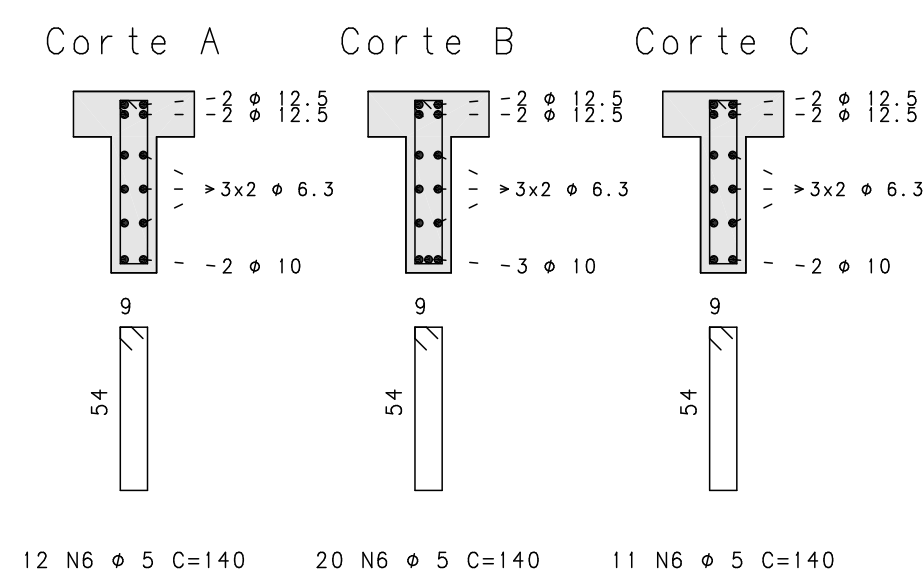
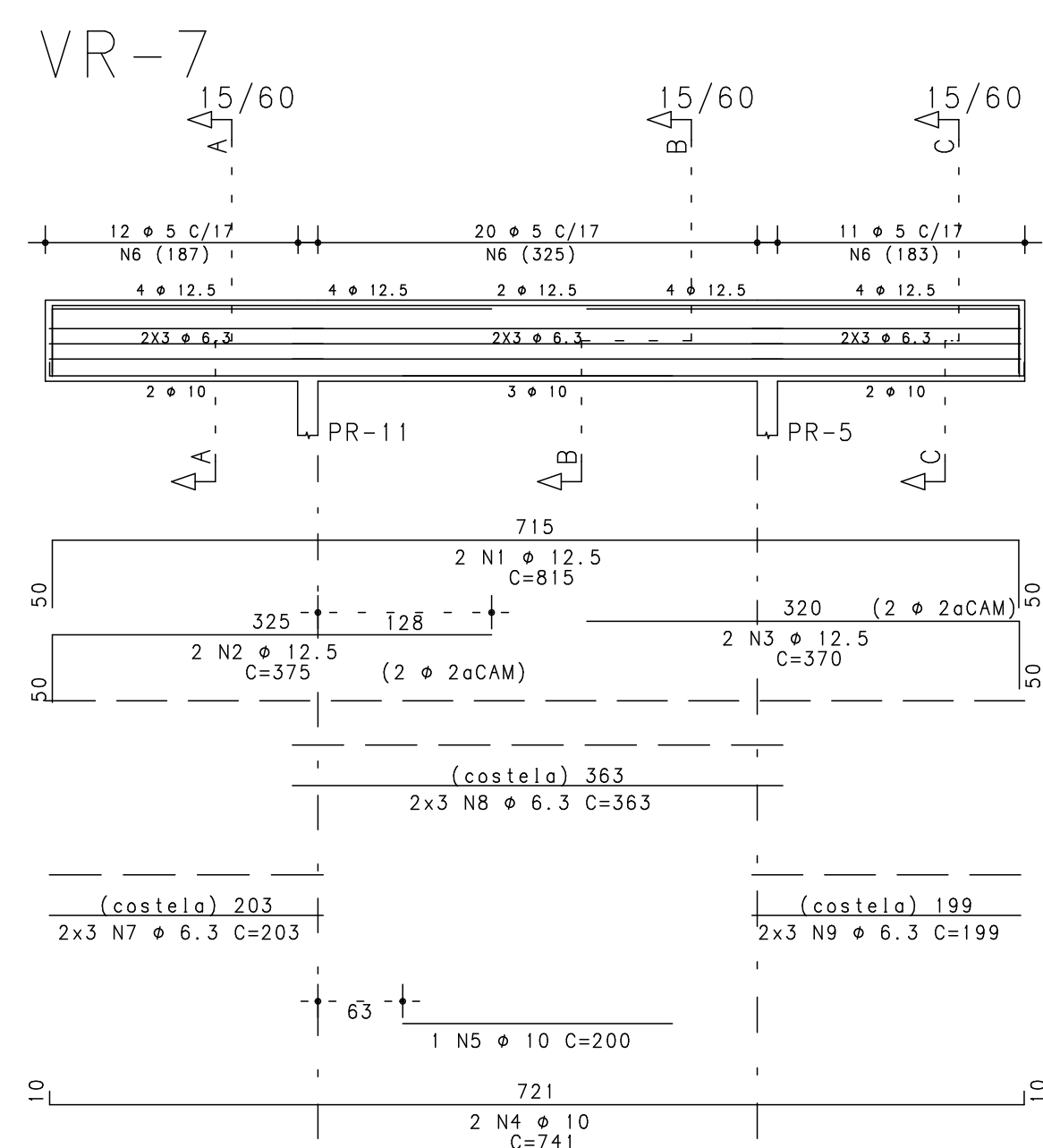
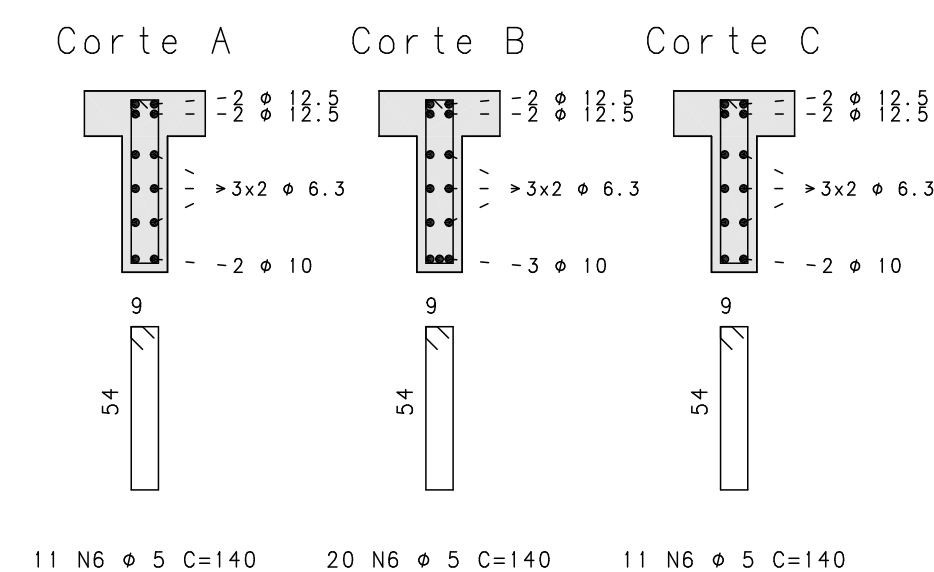
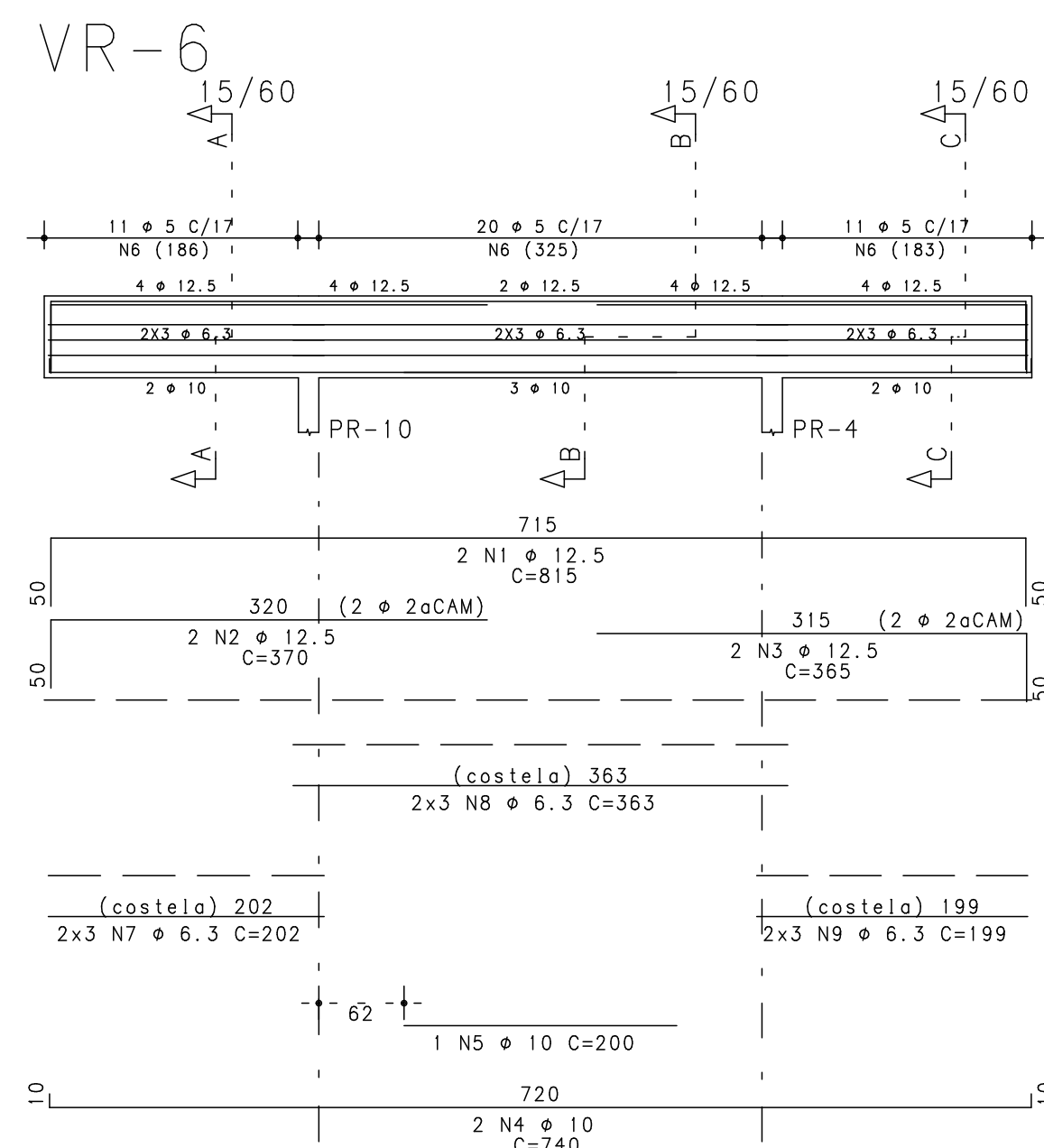
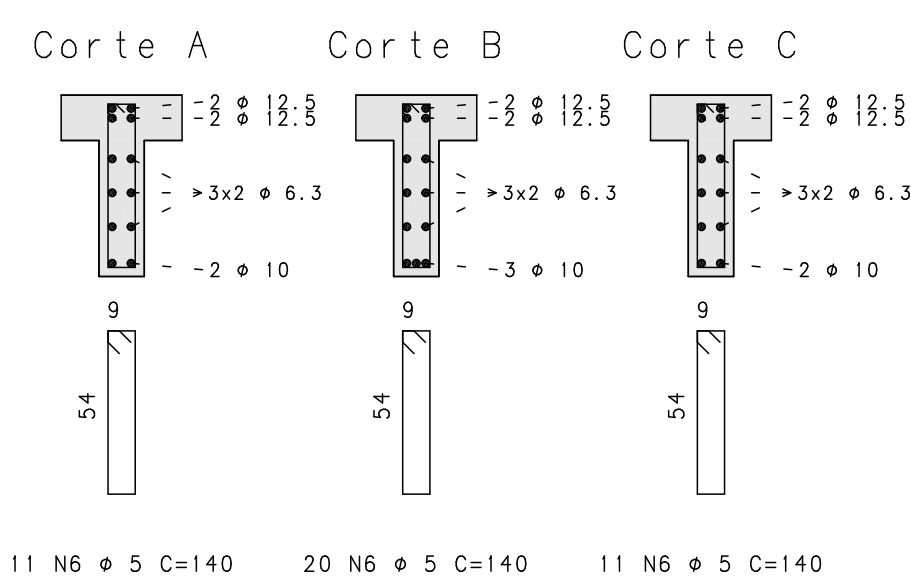
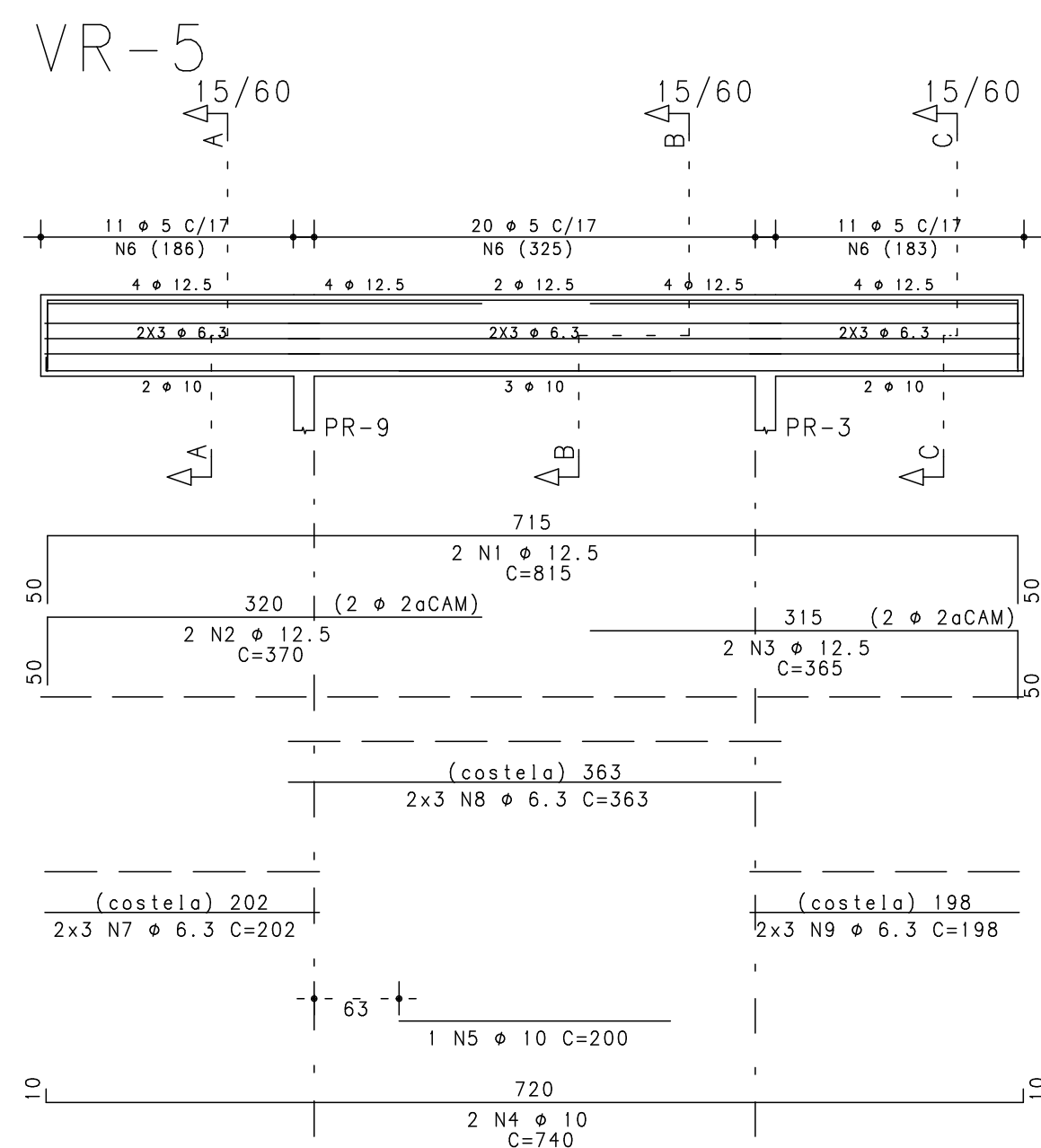
- Dimensions: 310, 51, 161, 78, 30, 310, 19, 649, 139, 260, 134, 92, 92, 111, 111, 111, 111.
- Reinforcement labels: 2 N3 # 12.5 C=890, 2 N5 # 12.5 C=365, 1 N4 # 12.5 C=215 (1 # 2 # CAM), 3 N1 # 16 C=700, 3 N2 # 12.5 C=340, 2 N6 # 10 C=320, 2 N7 # 12.5 C=840, 2 N8 # 10 C=400, 2 N9 # 10 C=215, 2 N10 # 12.5 C=840, 2 N11 # 6.3 C=304, 2 N12 # 6.3 C=408, 2 N13 # 6.3 C=408, 2 N14 # 6.3 C=407, 2 N15 # 6.3 C=409, 2 N16 # 6.3 C=303.
- Costela labels: (costela) 304, (costela) 408, (costela) 407, (costela) 408, (costela) 409, (costela) 303.



Technical drawing of a bridge structure showing three spans. The top part shows the bridge deck with reinforcement bars (11 # 5 C/17, 4 # 12.5, 2 # 10) and dimensions (15/60, 15/60, 15/60). The middle part shows the bridge piers (PR-7, PR-1) and the bridge deck (2x3 # 6.3, 2x3 # 6.3, 2x3 # 6.3). The bottom part shows the bridge piers (PR-7, PR-1) and the bridge deck (2x3 # 6.3, 2x3 # 6.3, 2x3 # 6.3). The drawing includes various dimensions and reinforcement details.

[illegible]

					OBRA N.º 0001
CLIENTE EMBRAPA					DES. N.º 01/02
OBRA EMBRAPA-CTAA					
TÍTULO TÉRREO ARMAÇÃO DAS VIGAS VR-1 / VR-2 / VR-3 / VR-4					REV. N.º 00
DATA 27/02/2019	ESCALA 1:50	FOK 300	DESENHO	VERIF.	ENG.º



	ACO	POS	BIT (mm)	QUANT	COMPRIMENTO UNIT	TOTAL (cm)
VR-5						
	50A	1	12.5	2	815	1630
	50A	2	12.5	2	370	740
	50A	3	12.5	2	365	730
	50A	4	10	2	740	1480
	50A	5	10	1	200	200
	60B	6	5	42	140	5880
	50A	7	6.3	6	202	1212
	50A	8	6.3	6	363	2178
	50A	9	6.3	6	199	1188
VR-6						
	50A	1	12.5	2	815	1630
	50A	2	12.5	2	370	740
	50A	3	12.5	2	365	730
	50A	4	10	2	740	1480
	50A	5	10	1	200	200
	60B	6	5	42	140	5880
	50A	7	6.3	6	202	1212
	50A	8	6.3	6	363	2178
	50A	9	6.3	6	199	1194
VR-7						
	50A	1	12.5	2	815	1630
	50A	2	12.5	2	375	750
	50A	3	12.5	2	370	740
	50A	4	10	2	741	1482
	50A	5	10	1	200	200
	60B	6	5	43	140	6020
	50A	7	6.3	6	203	1218
	50A	8	6.3	6	363	2178
	50A	9	6.3	6	199	1194
VR-8						
	50A	1	12.5	2	815	1630
	50A	2	12.5	2	370	740
	50A	3	12.5	2	365	730
	50A	4	10	2	741	1482
	50A	5	10	1	200	200
	60B	6	5	43	140	6020
	50A	7	6.3	6	203	1218
	50A	8	6.3	6	363	2178
	50A	9	6.3	6	199	1194

RESUMO AÇO CA 50-60			
AÇO	BIT (mm)	COMPR (m)	PESO (kg)
60B	5	238	38
50A	6.3	183	46
50A	10	67	42
50A	12.5	124	124
Peso Total	60B =		38 kg
Peso Total	50A =		212 kg

				OBRA N.º 0001	
CLIENTE EMBRAPA				DES. N.º 02/02	
OBRA EMBRAPA-CTAA					
TÍTULO TÉRREO ARMAÇÃO DAS VIGAS VR-5 / VR-6 / VR-7 / VR-8				REV. N.º 00	
DATA 27/02/2019	ESCALA 1:50	FOK 300	DESENHO	VERIF.	ENG.º