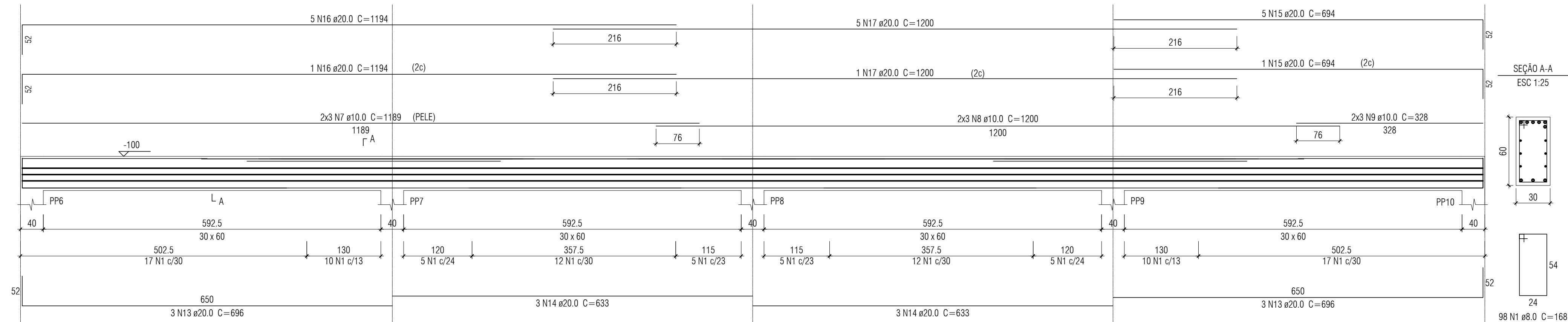


VP1=VP2
ESC 1:50



Technical drawing of a reinforced concrete slab (L A) showing top and bottom views with dimensions and reinforcement details.

Top View (Superior):

- Overall width: 54
- Reinforcement: 3 N20 ø20.0 C=1194 (top), 2x2 N7 ø10.0 C=1189 (PELE) (middle), 3 N21 ø20.0 C=467 (bottom), 2x2 N10 ø10.0 C=312 (bottom).
- Dimensions: 1146 (total width), 1189 (width between reinforcement), 141 (width of top reinforcement), 419 (width of bottom reinforcement), 76 (width of middle reinforcement), 312 (width of bottom reinforcement).
- Section line: L A
- Level: -100

Bottom View (Inferior):

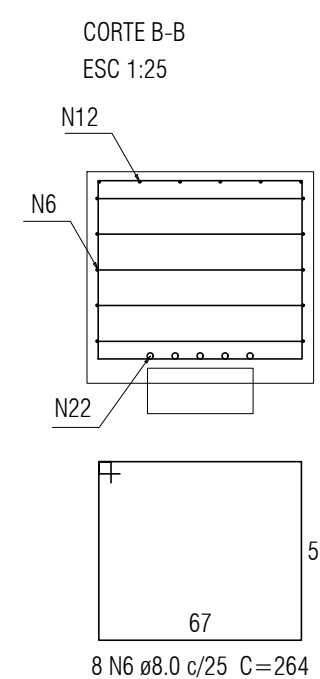
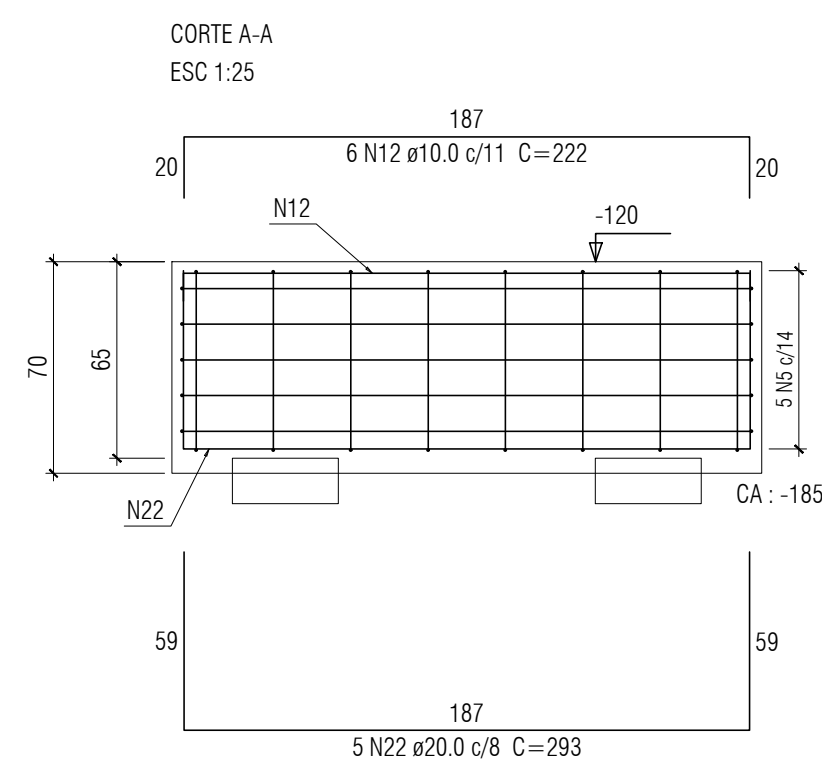
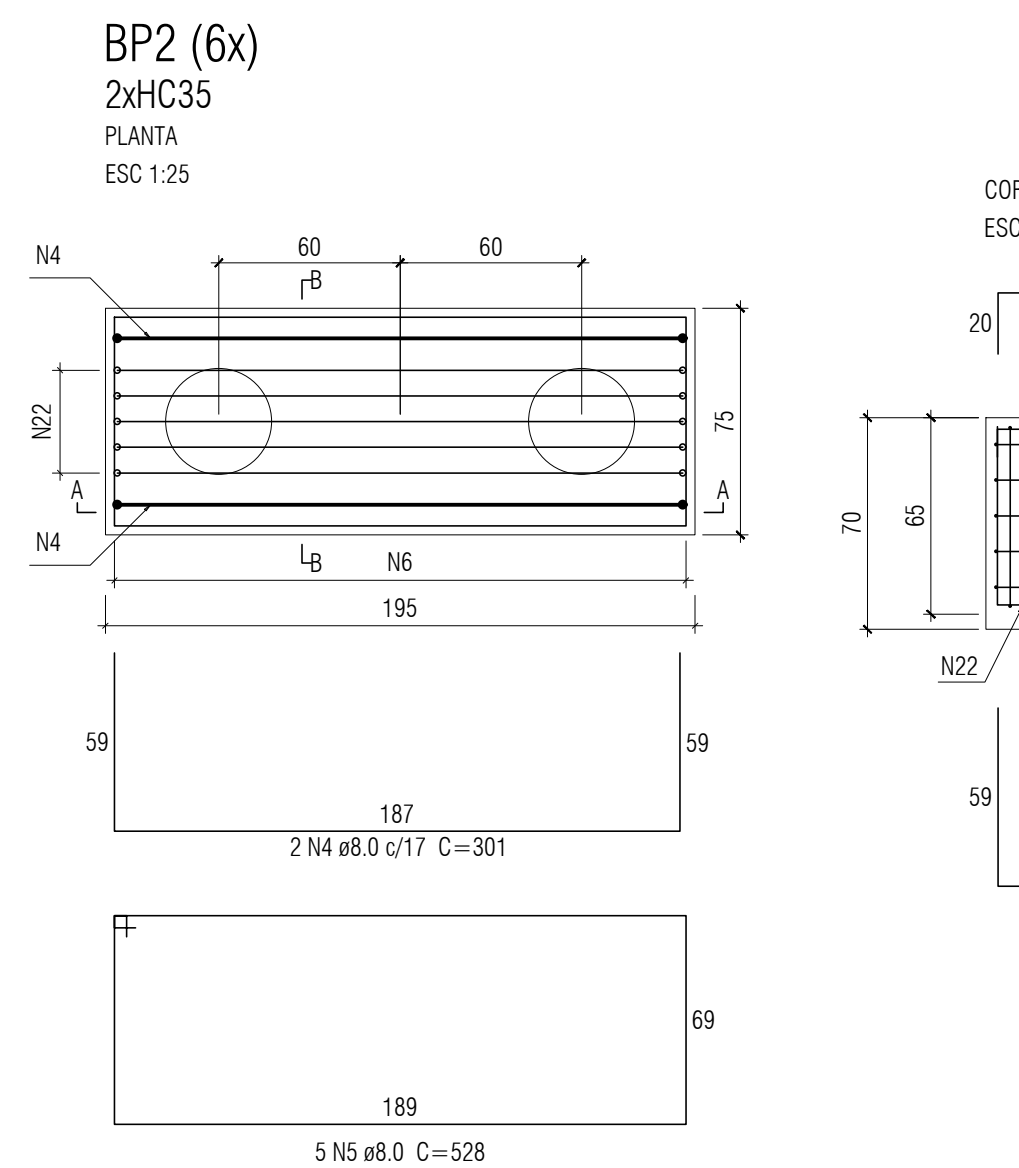
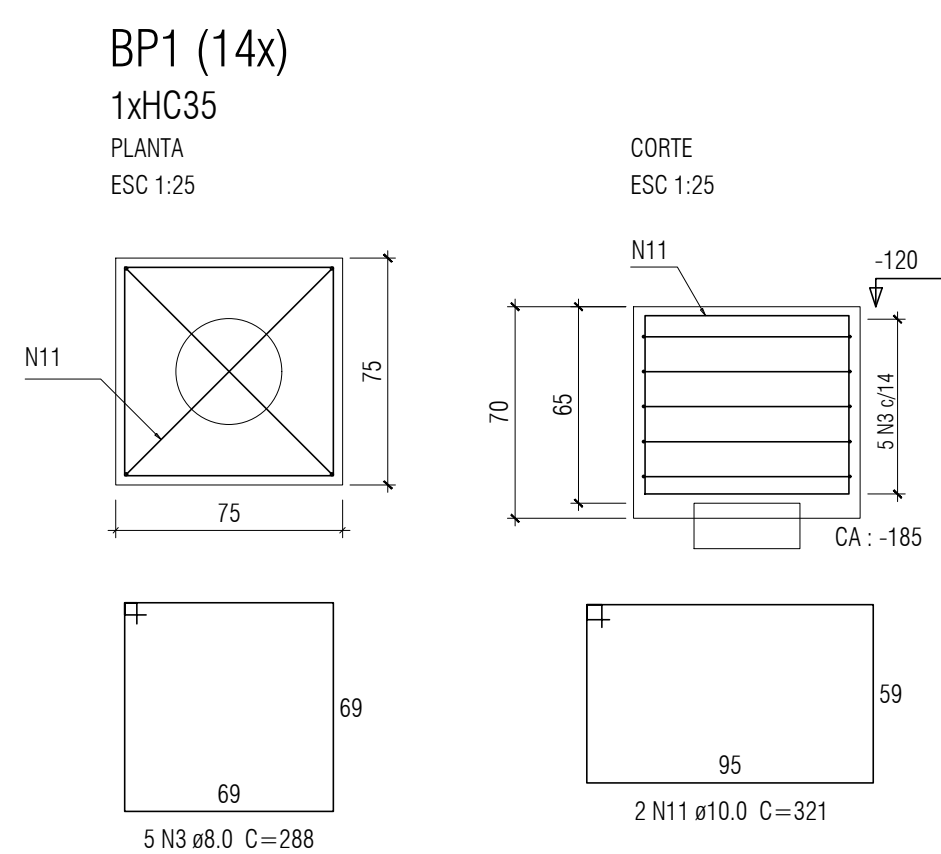
- Overall width: 47
- Reinforcement: 12 N2 c/30 (left), 5 N2 c/22 (middle), 15 N2 c/30 (right), 2 N18 ø20.0 C=988 (bottom), 2 N19 ø20.0 C=518 (bottom).
- Dimensions: 40 (width of left reinforcement), 420 (width of middle reinforcement), 430 (width of right reinforcement), 40 (width of bottom reinforcement), 350 (width of left reinforcement), 110 (width of middle reinforcement), 477 (width of bottom reinforcement), 350 (width of right reinforcement).
- Section line: L A
- Level: -100

Details:

- Reinforcement bars: PP17, PP12, PP7, PP2
- Reinforcement bars: 25 x 60
- Reinforcement bars: 12 N2 c/30, 5 N2 c/22, 15 N2 c/30, 2 N18 ø20.0 C=988, 2 N19 ø20.0 C=518
- Reinforcement bars: 49 N2 ø8.0 C=158

Section A-A:

- Scale: ESC 1:25
- Dimensions: 80 (height), 25 (width), 19 (width)



ESQUEMA PARA DOBRAMENTOS E DESCONTOS DAS BARRAS

BARRAS (mm)	R (mm)	C (mm)	L (mm)	DESCONTO
Ø10	2,50	5,00	4,00	1,00
Ø12	3,00	6,00	5,00	1,50
Ø16	4,00	8,00	6,20	2,00
Ø20	5,00	10,00	7,85	2,50
Ø10	6,40	12,80	10,00	3,00
Ø12	14,00	28,00	22,00	6,00
Ø16	17,5	35,00	27,50	7,50

- 1- MEDIDAS EM cm, NÍVEIS EM m
- 2- COBRIMENTO: 3,0cm. (usar espaçadores)
- 3- AÇO CA-50 $f_{yk}=500$ MPa, CA-60 $f_{yk}=600$ MPa
- 4- $f_{ck} = 25$ MPa
- 5- CONFERIR MEDIDAS NA OBRA
- 6- NÃO TOMAR MEDIDAS EM ESCALA

Relação do aço			
DIAM (mm)	QUANT	C.UNIT (cm)	C.TOTAL (cm)
8.0	196	168	32928
8.0	147	158	23226
8.0	70	288	20160
8.0	12	301	3612
8.0	30	528	15840
8.0	48	264	12672
10.0	24	1189	28536
10.0	12	1200	14400
10.0	12	328	3936
10.0	12	312	3744
10.0	28	321	8988
10.0	36	222	7992
20.0	12	696	8352
20.0	12	633	7596
20.0	12	694	8328
20.0	12	1194	14328
20.0	12	1200	14400
20.0	6	988	5928
20.0	6	518	3108
20.0	9	1194	10746
20.0	9	467	4203
20.0	30	293	8790

AÇO	DIAM (mm)	C.TOTAL (m)	PESO + 10 % (kg)
CA50	8.0	1084.4	470.7
	10.0	676	458.4
	20.0	857.8	2327
PESO TOTAL (kg)			
CA50	3256.1		

TÍTULO: UNIDADE ESCOLAR

PROJETO: CONSTRUÇÃO DE ESCOLA

OBRA: ESCOLA DE TEMPO INTEGRAL VALE DO SOL

LOCAL DO IMÓVEL: RODOVIA ENGENHEIRO RENÊ BENEDITO
DA SILVA, S/N, VALE DO SOL

PROPRIETÁRIO: PREFEITURA MUNICIPAL DE ITAPEVI

<p>Marcos de Oliveira Anjos Secretário de Infraestrutura e Serviços Urbanos</p> <p>Prefeitura Municipal de Itapevi</p> <p>CNPJ nº: 46.523.031.0001-28</p>	<p>Responsável técnico</p> <p>Engº. Fábio das Virgens Junior</p> <p>CREA nº 5070331130</p>
---	--

ASSUNTO: ARMAÇÃO DAS VIGAS E BLOCOS DA PISCINA		
PAVIMENTO:	ESCALA: INDICADA	TIPO DE PROJETO: ESTRUTURA
ZONEAMENTO:	DATA: MAR/2023	ETAPA: BÁSICO
DESENHISTA:	IMPRRESSO EM: 03/03/2023	REVISÃO: 00