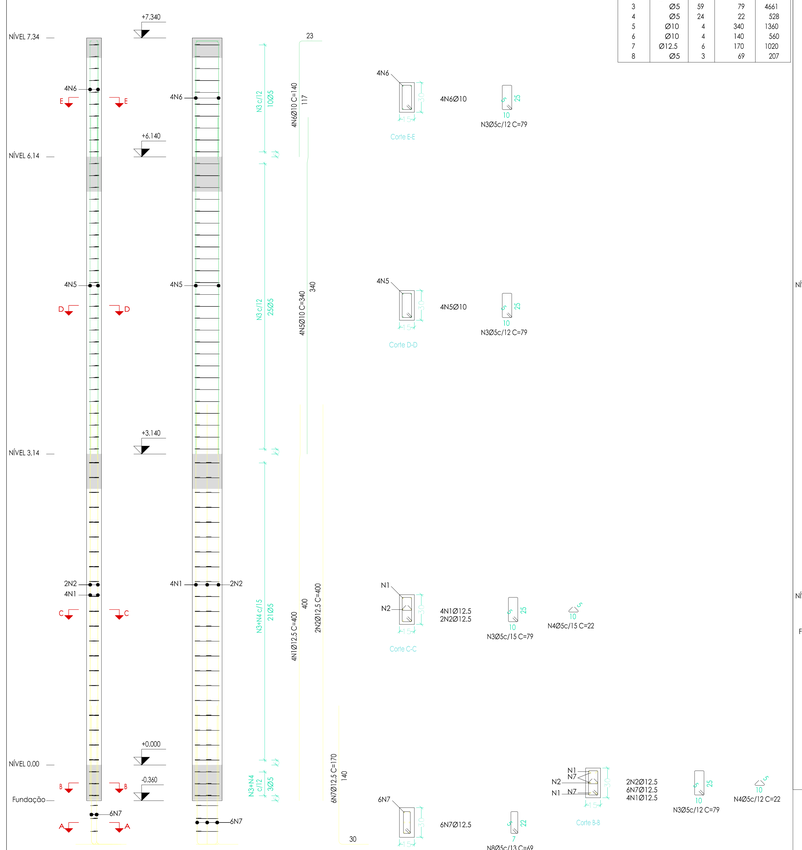
P4

Pos.	Diam.	Q.	Comp. (cm)	Total (cm)
1	Ø12.5	4	400	1600
2	Ø12.5	2	400	800
3	Ø5	59	79	4661
4	Ø5	24	22	528
5	Ø10	4	340	1360
6	Ø10	4	140	560
7	Ø12.5	6	170	1020
8	Ø5	3	69	207

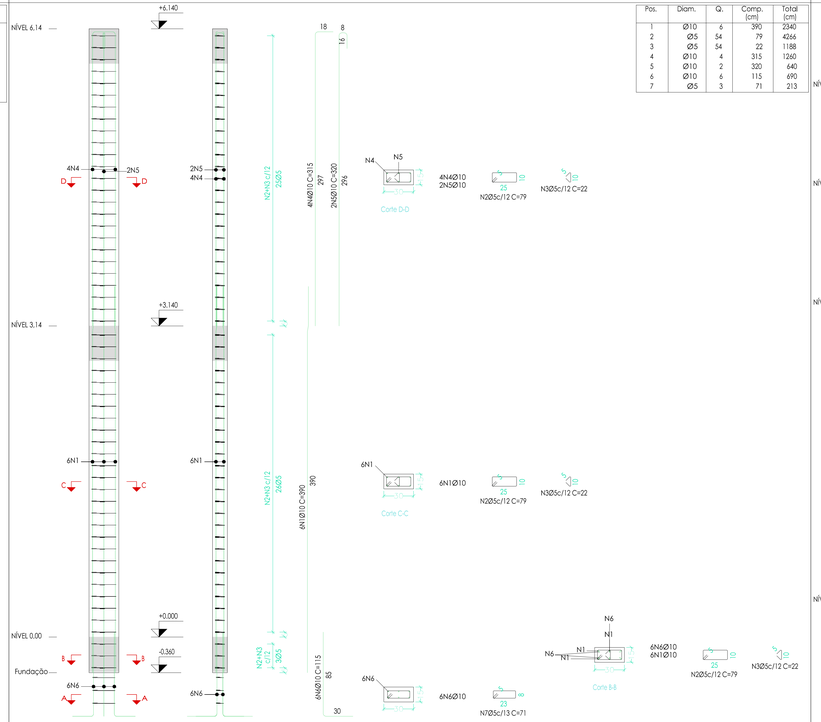


Planta	Dimensão (cm)	Concreto Tipo: C25, em geral Cobrimento: 2.5 cm Volume (m3)	Concreto Fôrmas (m2)	Armaduras CA-50 e CA-60 Longitudinal (kg)	Armaduras CA-50 e CA-60 Estribos (kg)	Armaduras CA-50 e CA-60 Total +10 % (kg)	Taxa (kg/m3)
NÍVEL 7.34	15x30	0.05	1.08	3.3	1.2	5.2	87.04
NÍVEL 6.14		0.14	2.70	8.4	3.1	12.7	85.19
NÍVEL 3.14		0.14	2.83	-	3.3	3.6	23.35
NÍVEL 0.00		0.02	0.32	23.1	0.5	24.0	1456.79
Total		0.35	6.93	34.9	8.1	47.5	124.39

Escala 1:20

P5

Pos.	Diam.	Q.	Comp. (cm)	Total (cm)
1	Ø10	6	390	2340
2	Ø5	54	79	4266
3	Ø5	54	22	1188
4	Ø10	4	315	1260
5	Ø10	2	320	640
6	Ø10	6	115	690
7	Ø5	3	71	213

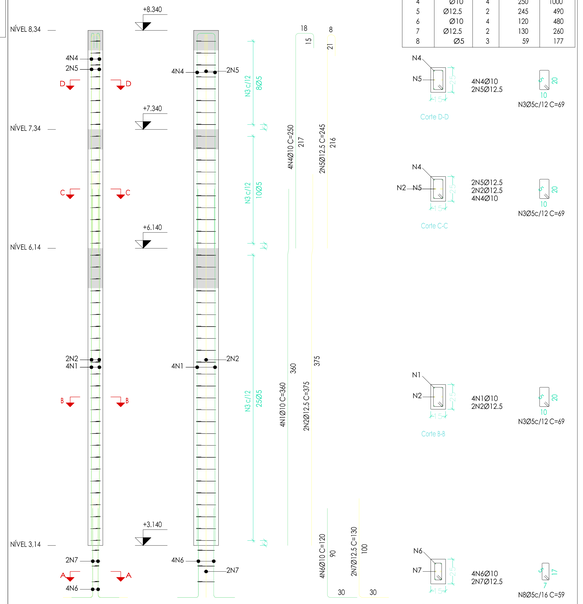


Planta	Dimensão (cm)	Concreto Tipo: C25, em geral Cobrimento: 2.5 cm Volume (m3)	Concreto Fôrmas (m2)	Armaduras CA-50 e CA-60 Longitudinal (kg)	Armaduras CA-50 e CA-60 Estribos (kg)	Armaduras CA-50 e CA-60 Total +10 % (kg)	Taxa (kg/m3)
NÍVEL 6.14	30x15	0.14	2.70	11.7	4.0	17.3	116.30
NÍVEL 3.14		0.14	2.83		4.1	4.5	29.02
NÍVEL 0.00		0.02	0.32	14.4	0.5	16.4	919.75
Total		0.29	5.85	26.1	8.6	38.2	118.63

Escala 1:20

P30

Pos.	Diam.	Q.	Comp. (cm)	Total (cm)
1	Ø10	4	360	1440
2	Ø12.5	2	375	750
3	Ø5	43	69	2967
4	Ø10	4	250	1000
5	Ø12.5	2	245	490
6	Ø10	4	120	480
7	Ø12.5	2	130	260
8	Ø5	3	59	177

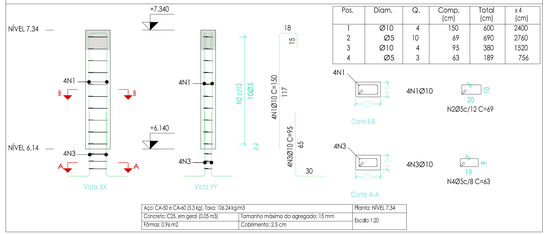


Planta	Dimensão (cm)	Concreto Tipo: C25, em geral Cobrimento: 2.5 cm Volume (m3)	Concreto Fôrmas (m2)	Armaduras CA-50 e CA-60 Longitudinal (kg)	Armaduras CA-50 e CA-60 Estribos (kg)	Armaduras CA-50 e CA-60 Total +10 % (kg)	Taxa (kg/m3)
NÍVEL 8.34	15x25	0.04	0.80		0.9	1.0	24.00
NÍVEL 7.34		0.05	0.96	10.9	1.1	13.2	266.67
NÍVEL 6.14		0.11	2.40	16.1	2.7	20.7	167.31
Total		0.20	4.16	27.0	4.7	34.9	162.56

Escala 1:20

P45=P46=P47=P48

Pos.	Diam.	Q.	Comp. (cm)	Total (cm)	x 4 (cm)
1	Ø10	4	150	600	2400
2	Ø5	10	69	690	2760
3	Ø10	4	95	380	1520
4	Ø5	3	63	189	756



Aço: CA-50 e CA-60 (5.3 kg); Total: 106.24 kg/m3
Concreto: C25, em geral (0.05 m3) | Tamanho máximo do agregado: 15 mm
Fôrma: 0.96 m2 | Cobrimento: 2.5 cm
Planta: NÍVEL 7.34
Escala 1:20

Elemento	Pos.	Diam.	Q.	Dob. (cm)	Reta (cm)	Dob. (cm)	Comp. (cm)	Total (cm)	CA-50 (kg)	CA-60 (kg)
P4	1	Ø12.5	4				400	1600	15.4	
	2	Ø12.5	2				400	800	7.7	
	3	Ø5	59				79	4661		7.3
	4	Ø5	24				22	528		0.8
	5	Ø10	4				340	1360	8.4	
	6	Ø10	4				140	560	3.5	
	7	Ø12.5	6				170	1020	9.8	
	8	Ø5	3				69	207		0.3
								Total+10%:	49.3	9.2
								Ø5:	0.0	9.2
								Ø10:	13.1	0.0
								Ø12.5:	36.2	0.0
								Total:	49.3	9.2
Elemento	Pos.	Diam.	Q.	Dob. (cm)	Reta (cm)	Dob. (cm)	Comp. (cm)	Total (cm)	CA-50 (kg)	CA-60 (kg)
P5	1	Ø10	6				390	2340	14.4	
	2	Ø5	54				79	4266		6.7
	3	Ø5	54				22	1188		1.9
	4	Ø10	4				315	1260	7.8	
	5	Ø10	2				320	640	3.9	
	6	Ø10	6				115	690	4.3	
	7	Ø5	3				71	213		0.3
								Total+10%:	33.4	9.8
P30	1	Ø10	4				360	1440	8.9	
	2	Ø12.5	2				375	750	7.2	
	3	Ø5	43				69	2967		4.7
	4	Ø10	4				250	1000	6.2	
	5	Ø12.5	2				245	490	4.7	
	6	Ø10	4				120	480	3.0	
	7	Ø12.5	2				130	260	2.5	
	8	Ø5	3				59	177		0.3
								Total+10%:	35.8	5.5
								Ø5:	0.0	15.3
								Ø10:	53.3	0.0
								Ø12.5:	15.9	0.0
								Total:	69.2	15.3
Elemento	Pos.	Diam.	Q.	Dob. (cm)	Reta (cm)	Dob. (cm)	Comp. (cm)	Total (cm)	CA-50 (kg)	CA-60 (kg)
P45=P46=P47 P48	1	Ø10	4				150	600	3.7	
	2	Ø5	10				69	690		1.1
	3	Ø10	4				95	380	2.3	
	4	Ø5	3				63	189		0.3
								Total+10%:	6.6	1.5
								(+6):	26.4	6.0
								Ø5:	0.0	6.0
								Ø10:	26.4	0.0
								Total:	26.4	6.0

CSPB - BARBAGALLO
GIULIANO BARBAGALLO
ENGENHEIRO CIVIL CREA 5069067476
RUA: FRANCISCO NEVES, 1940 CAPIM AZEDO-IBIUNA/SP FONE: 15 - 99793-0613

GIULIANO BARBAGALLO:30197886841
Assinado de forma digital por GIULIANO BARBAGALLO:30197886841
Dados: 2026.03.31 10:15:47 -03'00'

ASSUNTO	PILARES		ART: 2620260778629
PROPRIETÁRIO	CAMARA MUNICIPAL DA ESTANCIA TURISTICA DE IBIUNA		
ESCALA	INDICADAS	DATA 02/2026	DES. GIULIANO FL. 04/19