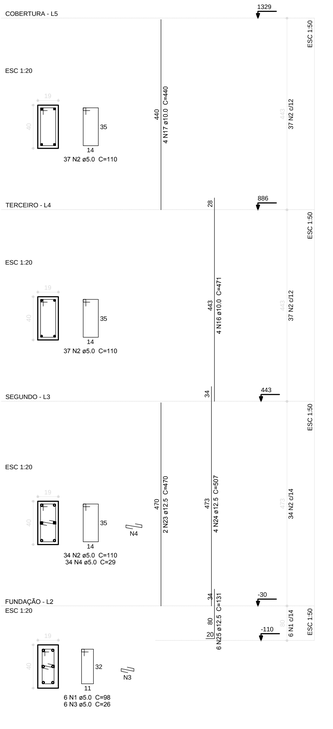
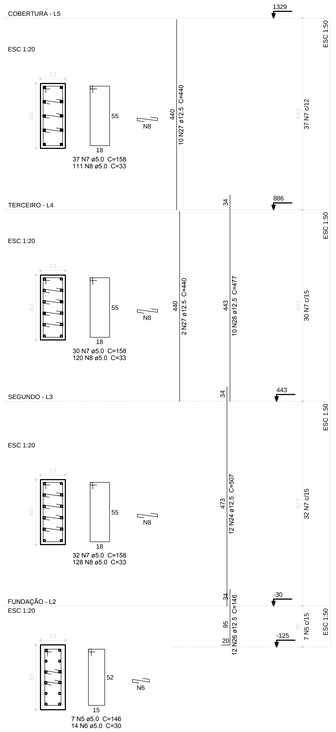
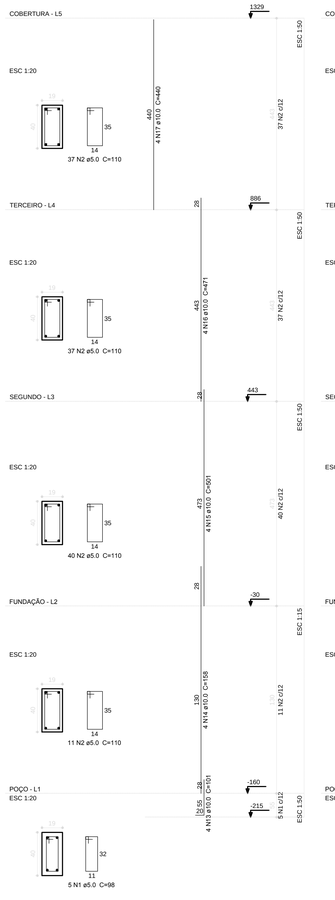
P59



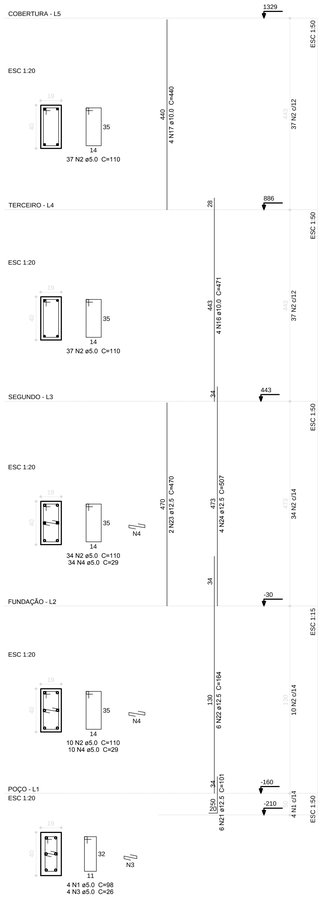
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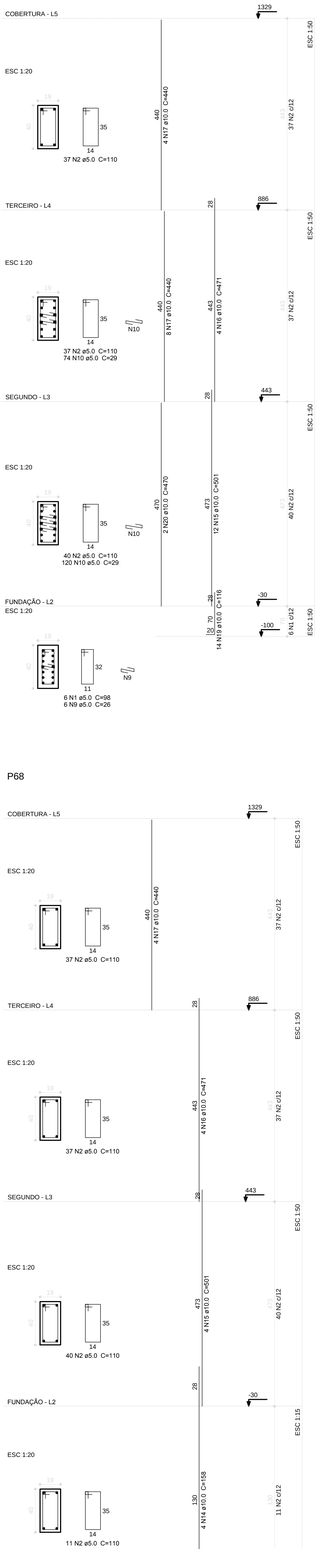
P61



P62

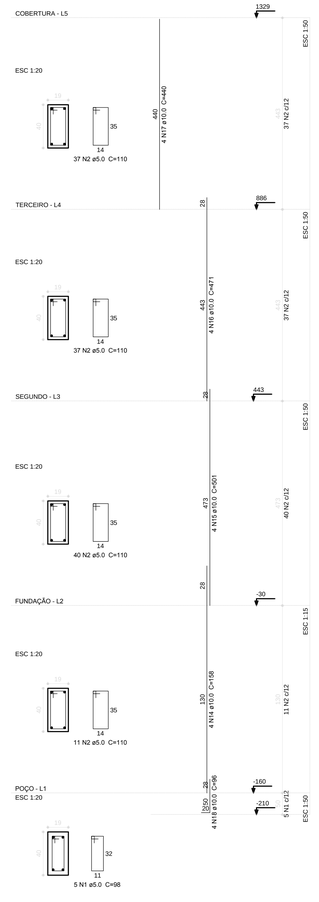


P63

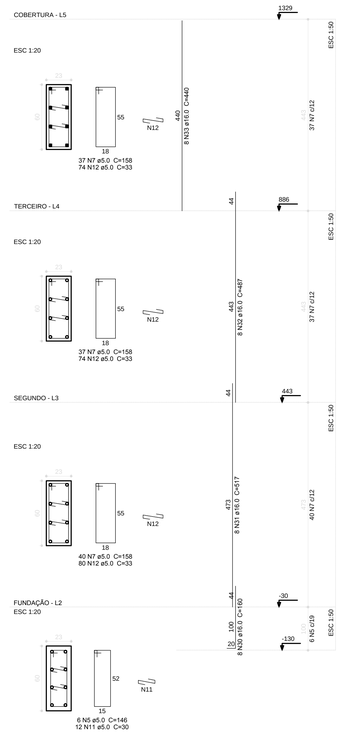


P68

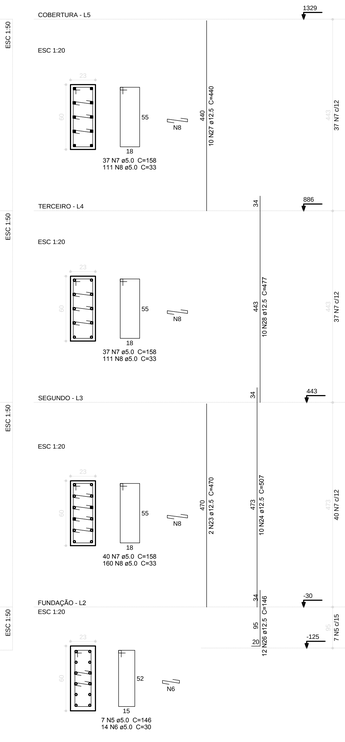
P64



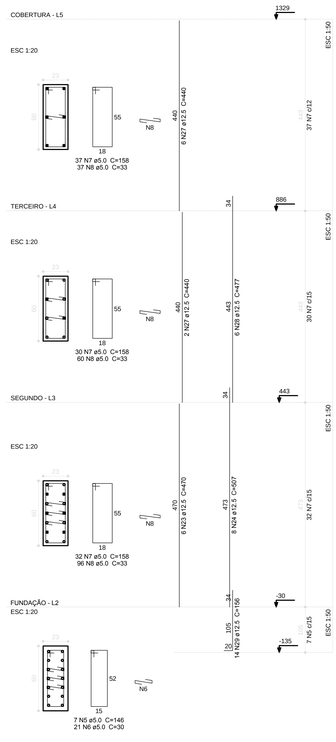
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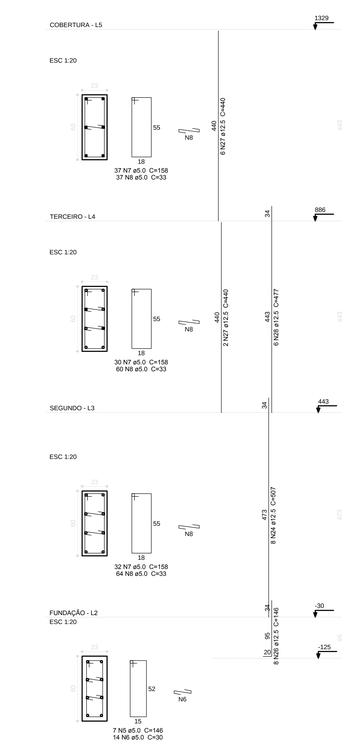
P66



P67



P69



Relação do aço

fundação: P59, P60, P63, P65, P66, P67, P69

poço: P61, P62, P64, P68

AÇO	N	DIAM (mm)	QUANT (Barras)	UNIT (cm)	C.TOTAL (cm)
CA60	1	5.0	31	98	3038
	2	5.0	715	110	78650
	3	5.0	10	26	260
	4	5.0	78	29	2262
	5	5.0	34	146	4964
	6	5.0	63	30	1890
	7	5.0	525	158	82950
	8	5.0	1095	33	36135
	9	5.0	6	26	156
	10	5.0	194	29	5626
	11	5.0	12	30	360
	12	5.0	228	33	7524
CA50	13	10.0	4	101	404
	14	10.0	12	158	1896
	15	10.0	24	501	12024
	16	10.0	24	471	11304
	17	10.0	32	440	14080
	18	10.0	8	96	768
	19	10.0	14	116	1624
	20	10.0	2	470	940
	21	12.5	6	101	606
	22	12.5	6	164	984
	23	12.5	12	470	5640
	24	12.5	46	507	23322
	25	12.5	6	131	786
	26	12.5	32	146	4672
	27	12.5	38	440	16720
	28	12.5	32	477	15264
	29	12.5	14	156	2184
	30	16.0	8	160	1280
	31	16.0	8	517	4136
	32	16.0	8	487	3896
	33	16.0	8	440	3520

Resumo do aço

AÇO	DIAM (mm)	C.TOTAL (m)	PESO + 10 % (kg)
CA50	10.0	430.4	291.9
	12.5	701.8	743.7
	16.0	128.4	222.8
CA60	5.0	2238.2	379.5
PESO TOTAL (kg)			
CA50	1258.3		
CA60	379.5		

Volume de concreto (C-40) = 16.92 m³
Área de forma = 227.47 m²

REVISÃO	OBSERVAÇÃO	DATA

MINISTÉRIO DA EDUCAÇÃO
UNIVERSIDADE FEDERAL DE LAVRAS

PROJETO

TÍTULO:
PROJETO EXECUTIVO - ENGENHARIAS

CONTEÚDO:
PROJETO DE ESTRUTURA
PILARES: P59 À P69

AUTOR DO PROJETO:
MARIUS OLIVEIRA COSTA CREA 90786/D

EXECUÇÃO DE OBRA:

APROVAÇÃO DO LAYOUT (PROF. RESPONSÁVEL):

DATA:	REVISÃO DATA:	PROJETO:
03/09/2018		ESTRUTURA
ESCALA:	ÁREA: (m²)	FOLHA:
INDICADA	4772.00 m²	38/40