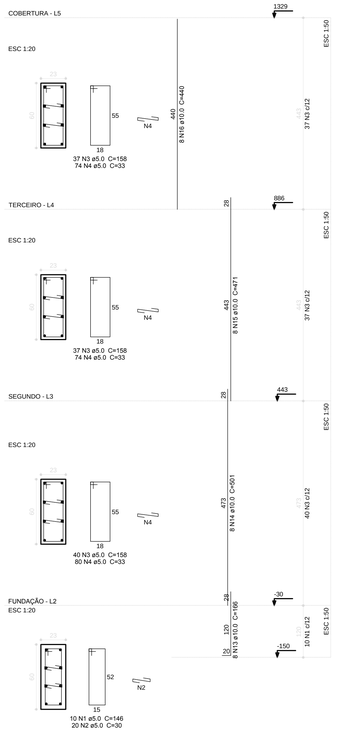
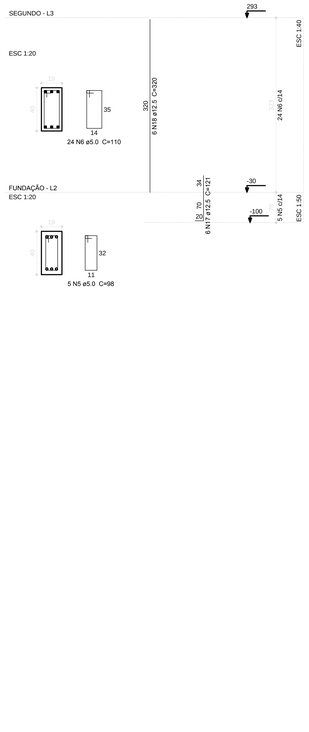
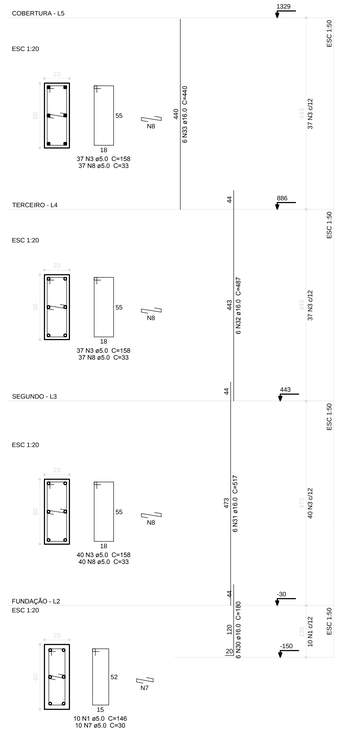
P47



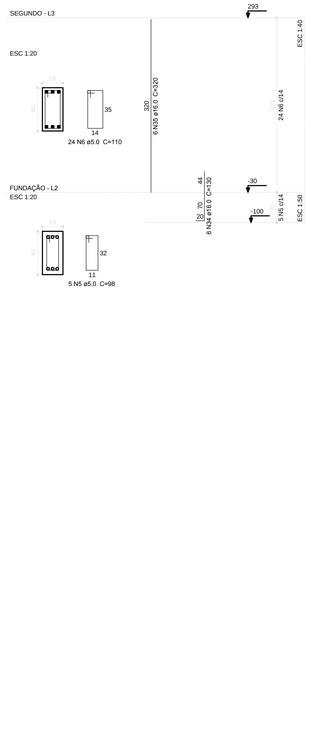
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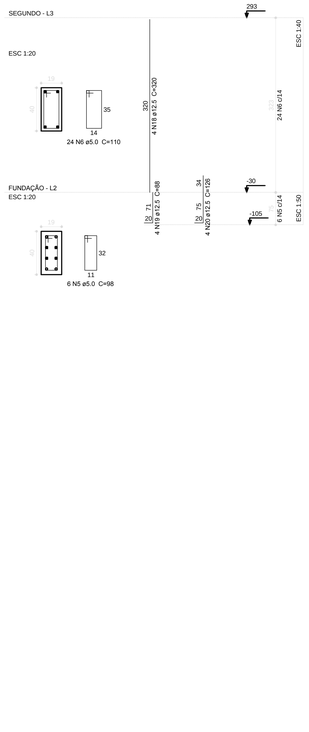
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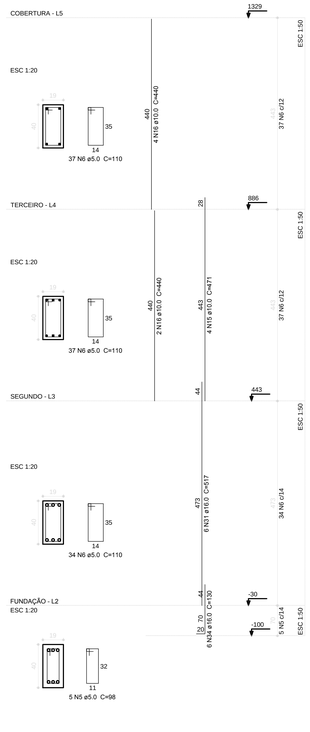
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Relação do aço

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P56	P57	P58	

AÇO	N	DIAM (mm)	QUANT (Barras)	UNIT (cm)	C.TOTAL (cm)
CA60	1	5.0	41	146	5986
	2	5.0	20	30	600
	3	5.0	555	158	87690
	4	5.0	228	33	7524
	5	5.0	40	98	3920
	6	5.0	490	110	53900
	7	5.0	10	30	300
	8	5.0	114	33	3762
	9	5.0	49	30	1470
	10	5.0	959	33	31647
	11	5.0	196	29	5684
	12	5.0	10	26	260
CA50	13	10.0	8	166	1328
	14	10.0	8	501	4008
	15	10.0	20	471	9420
	16	10.0	22	440	9680
	17	12.5	14	121	1694
	18	12.5	10	320	3200
	19	12.5	4	88	352
	20	12.5	4	126	504
	21	12.5	6	161	966
	22	12.5	6	470	2820
	23	12.5	50	507	25350
	24	12.5	12	151	1812
	25	12.5	32	477	15264
	26	12.5	42	440	18480
	27	12.5	22	146	3212
	28	12.5	8	131	1048
	29	12.5	4	83	332
	30	16.0	6	180	1080
	31	16.0	12	517	6204
	32	16.0	6	487	2922
	33	16.0	6	440	2640
	34	16.0	12	130	1560
	35	16.0	6	320	1920

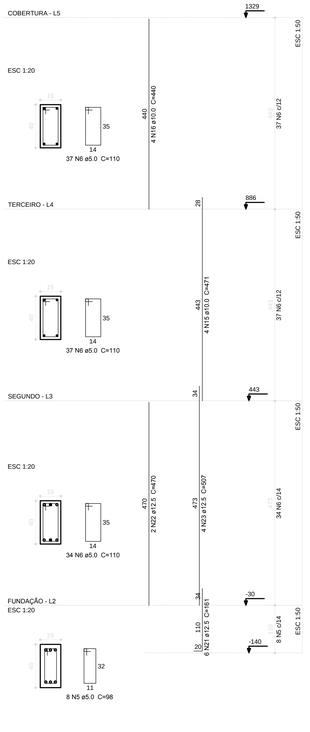
Resumo do aço

AÇO	DIAM (mm)	C.TOTAL (m)	PESO + 10 % (kg)
CA50	10.0	244.4	165.7
	12.5	750.4	795.1
	16.0	163.3	283.4
CA60	5.0	2027.5	343.7

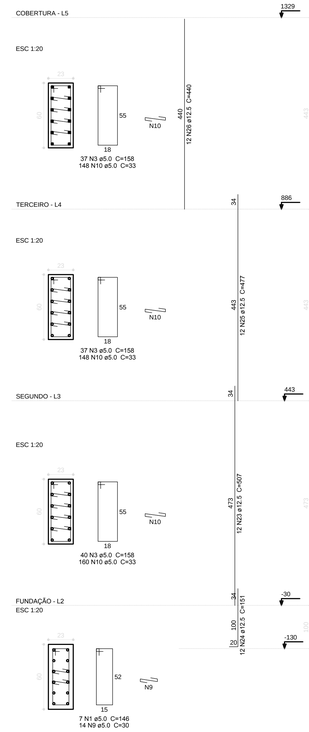
PESO TOTAL (kg)	
CA50	1244.3
CA60	343.7

Volume de concreto (C-40) = 15.39 m³
Área de forma = 203.61 m²

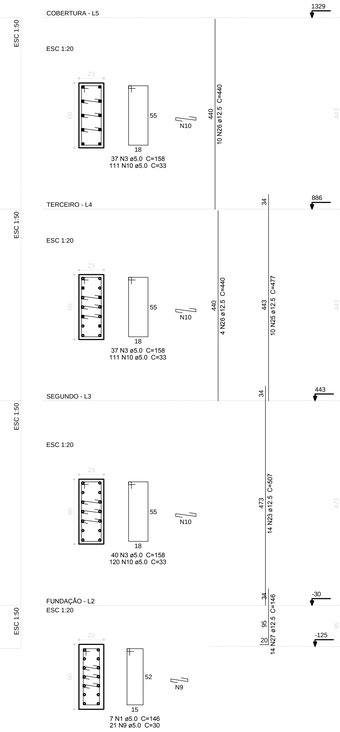
P53



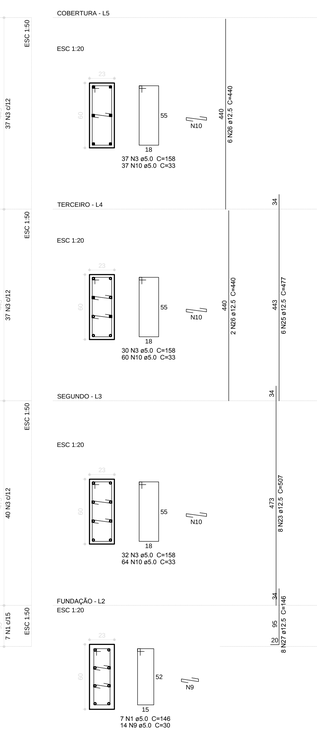
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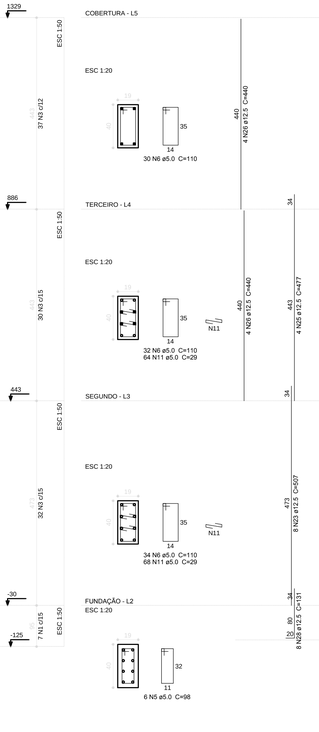
P55



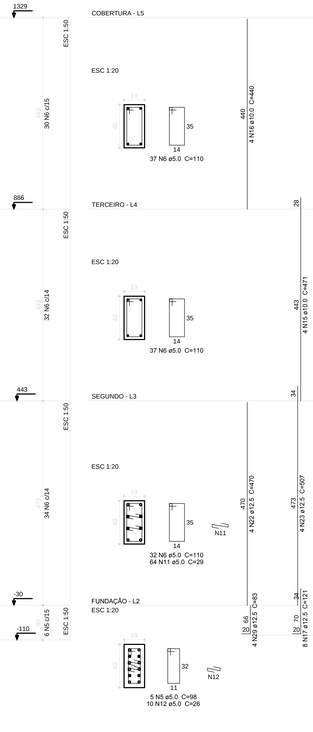
P56



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REVISÃO	OBSERVAÇÃO	DATA

MINISTÉRIO DA EDUCAÇÃO
UNIVERSIDADE FEDERAL DE LAVRAS

PROJETO

TITULO:

PROJETO EXECUTIVO - ENGENHARIAS

CONTEÚDO:

PROJETO DE ESTRUTURA

PILARES: P47 À P58

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	37/40