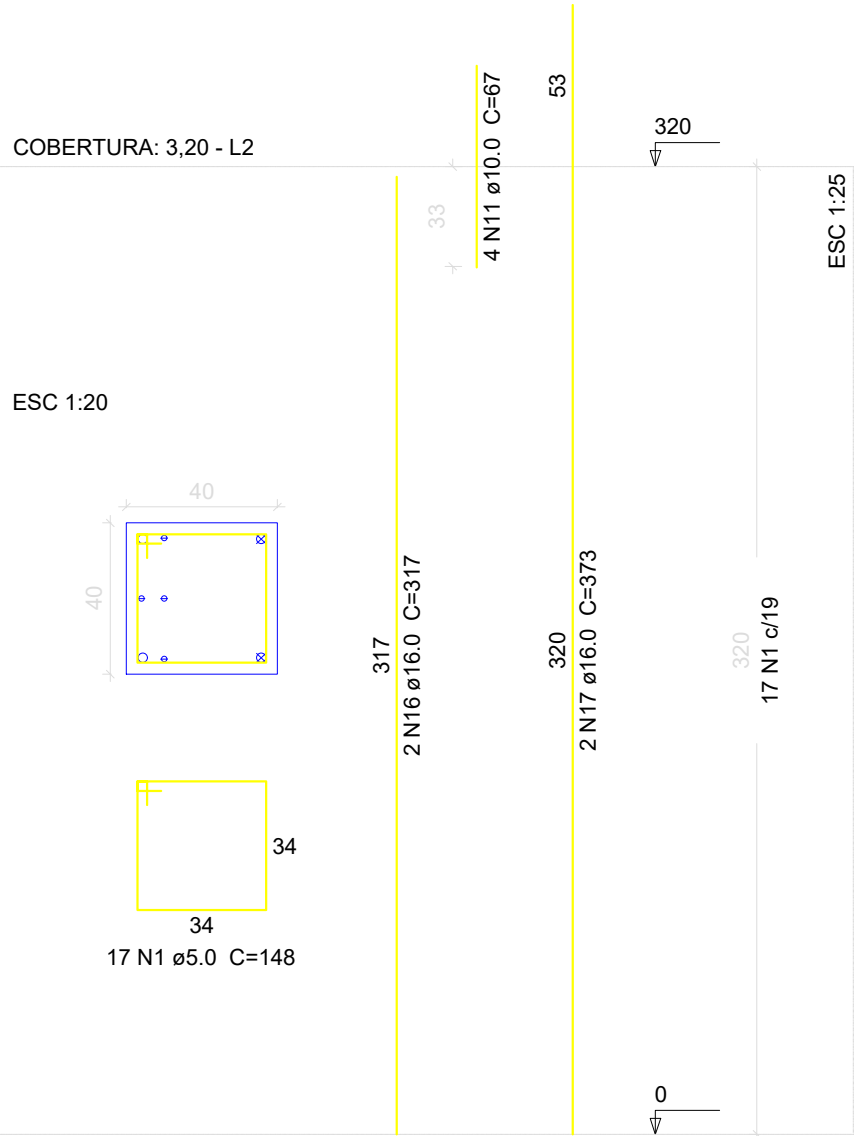
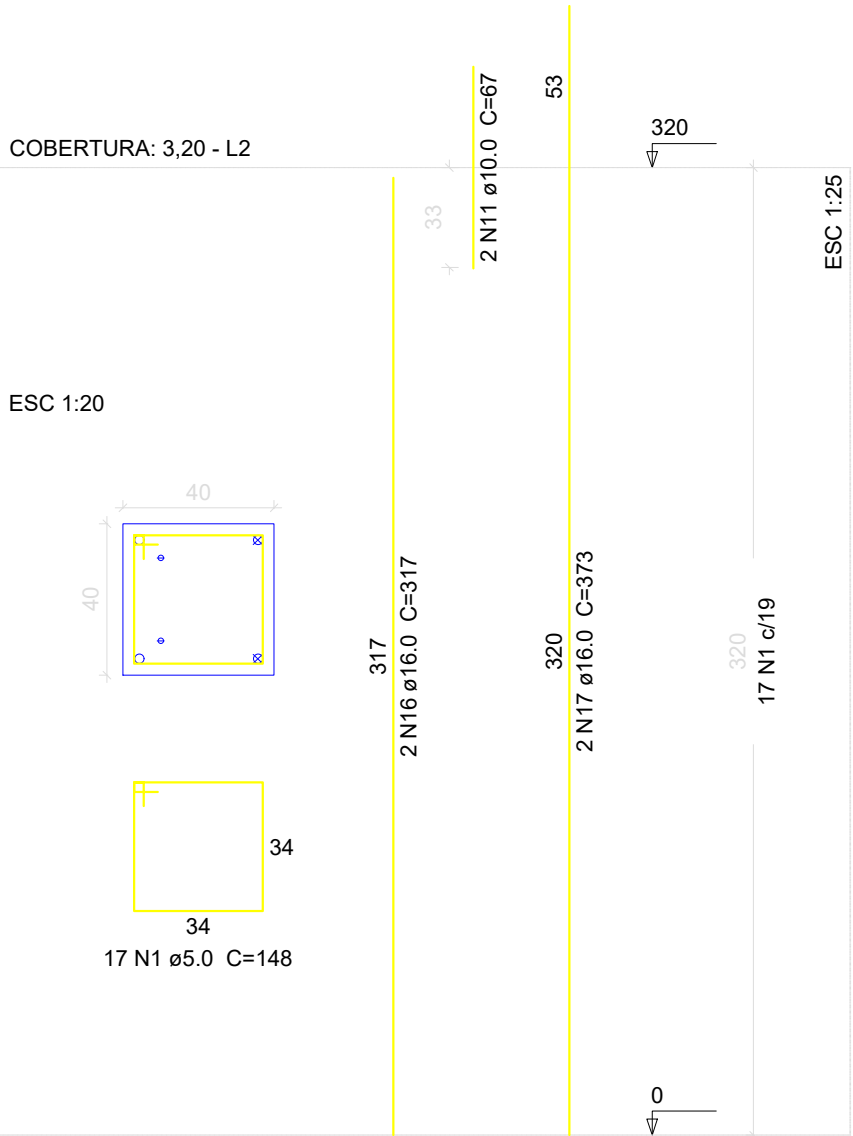


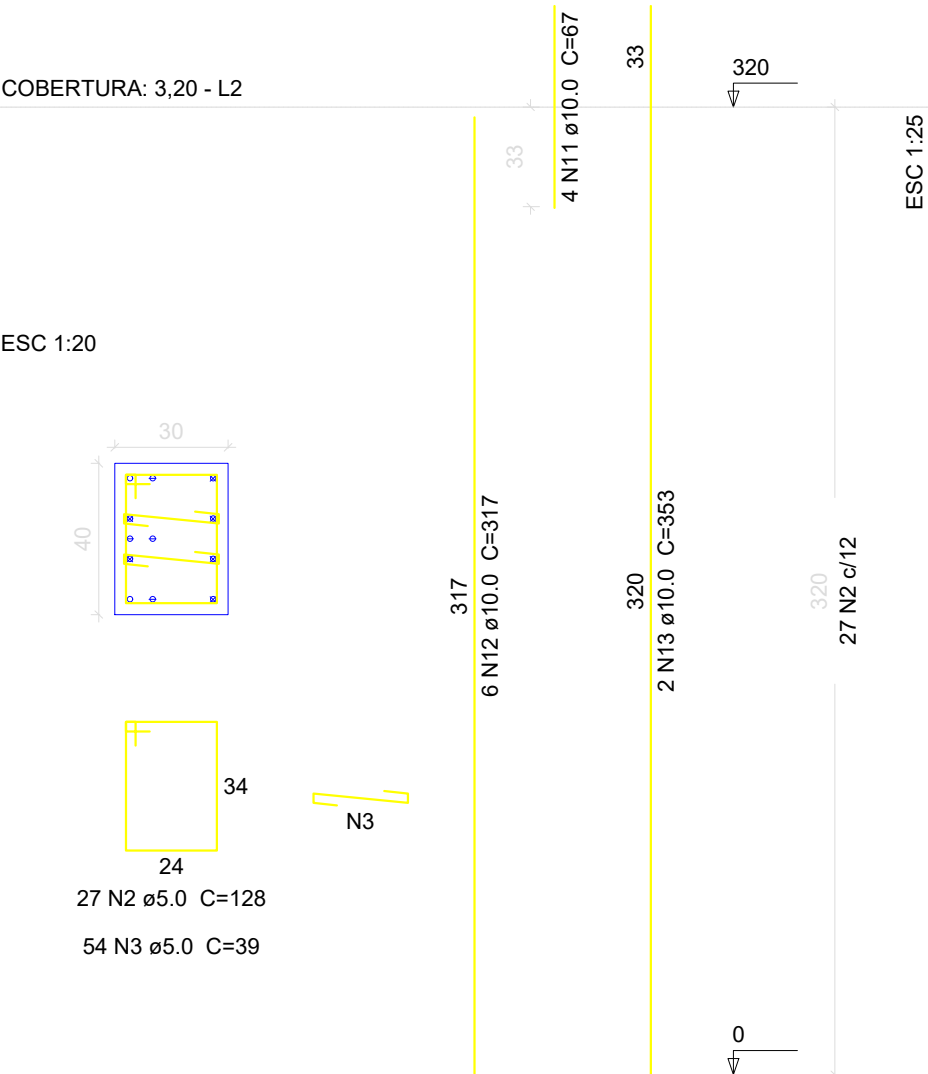
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=P15=P45=P47=P69



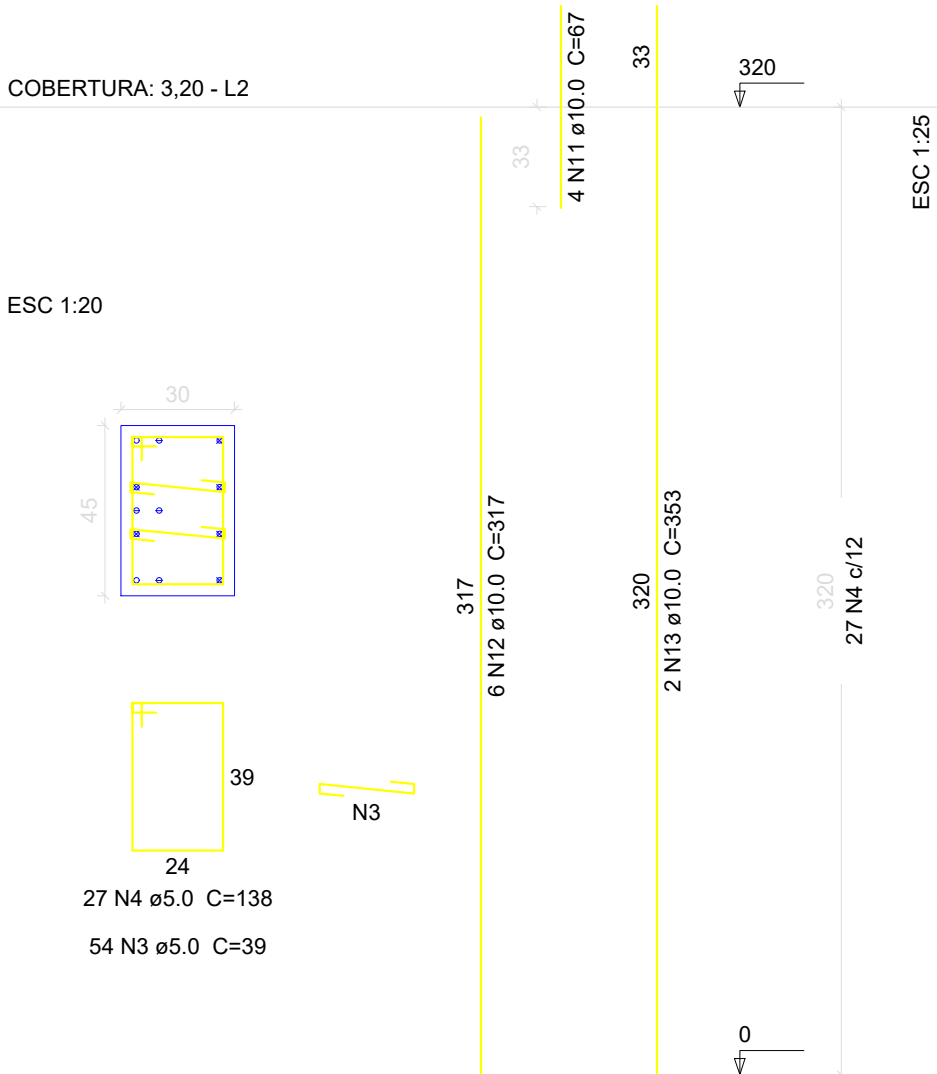
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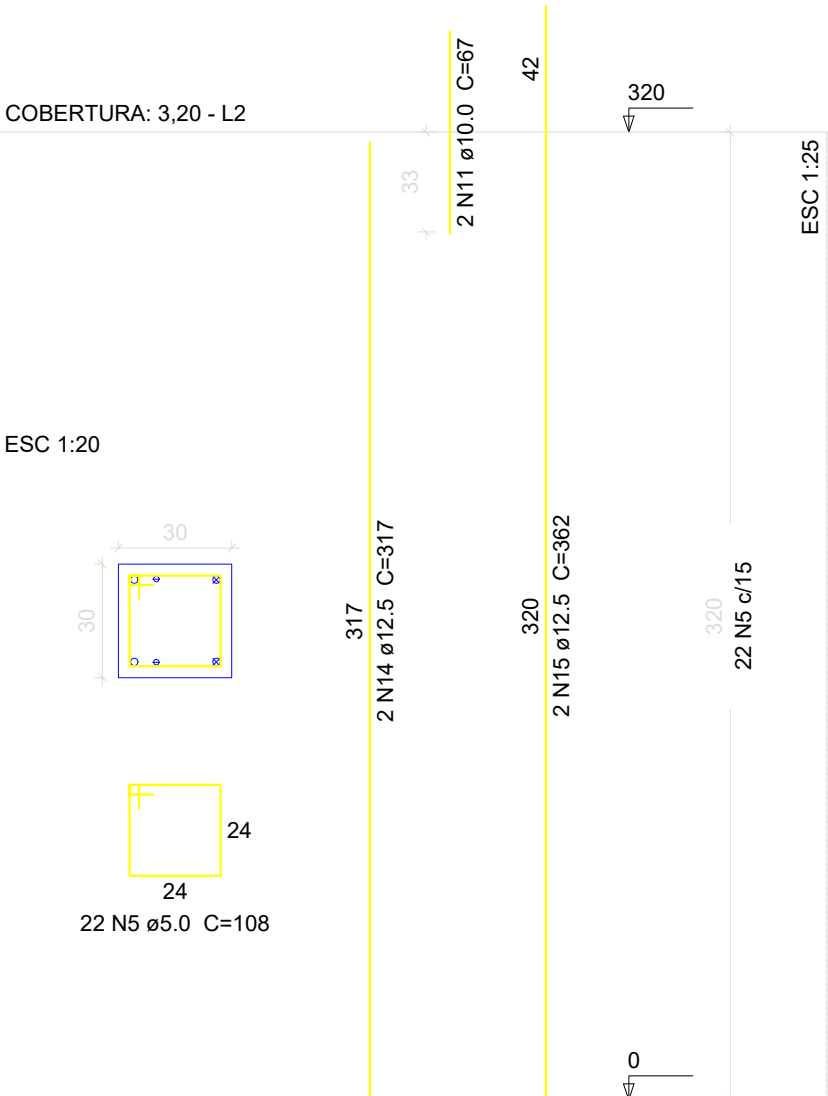
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P11=P16



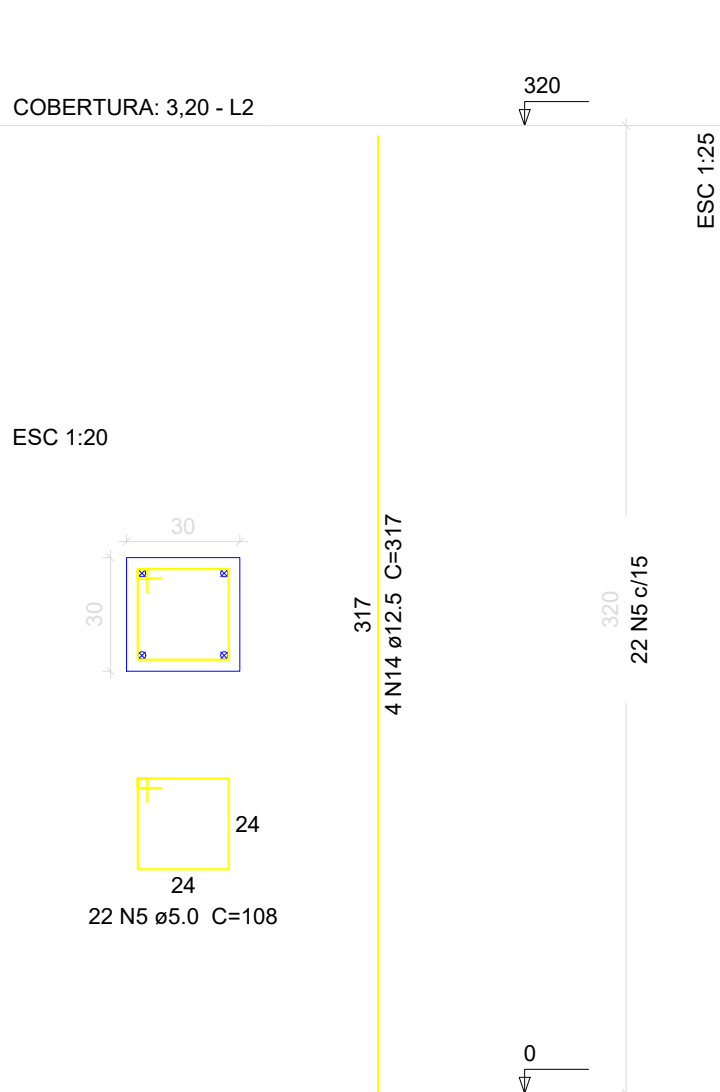
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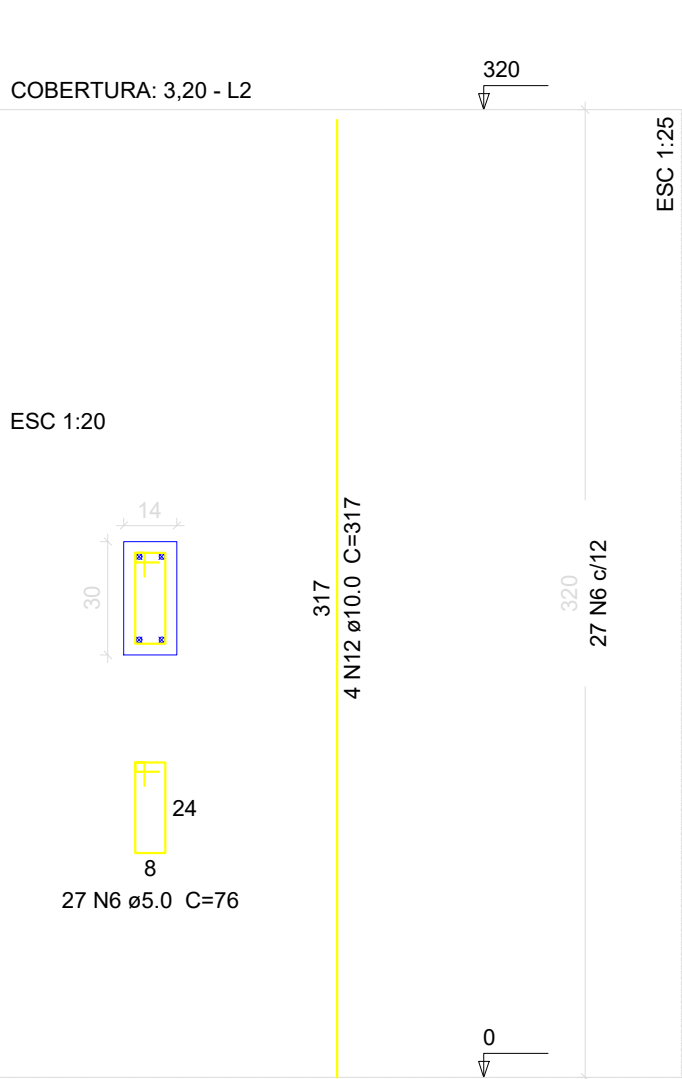
Relação do aço					
15xP1	P5	2xP6			
2xP11	9xP17	9xP18			
22xP19	13xP23	7xP28			
P30	5xP31	P39			
2xP40	P43	2xP44			
AÇO	N	DIAM	Q	UNIT (cm)	C.TOTAL (cm)
CA60	1	5.0	272	148	40256
	2	5.0	54	128	6912
	3	5.0	216	39	8424
	4	5.0	54	138	7452
	5	5.0	808	108	87264
	6	5.0	752	76	57152
	7	5.0	189	98	18522
	8	5.0	216	23	4968
	9	5.0	81	98	7776
	10	5.0	54	88	4752
CA50	11	10.0	100	67	6700
	12	10.0	202	317	64034
	13	10.0	30	353	10590
	14	12.5	58	317	18386
	15	12.5	74	362	26788
	16	16.0	32	317	10144
	17	16.0	32	373	11936

Resumo do aço			
AÇO	DIAM	C.TOTAL (m)	PESO + 10 % (kg)
CA50	10.0	813.3	551.5
	12.5	451.8	478.7
	16.0	220.8	383.3
CA60	5.0	2434.8	412.8
PESO TOTAL			
CA50		1413.6	
CA60		412.8	
Vol. de concreto total (C-30) = 25.4 m³			
Área de forma total = 343.62 m²			

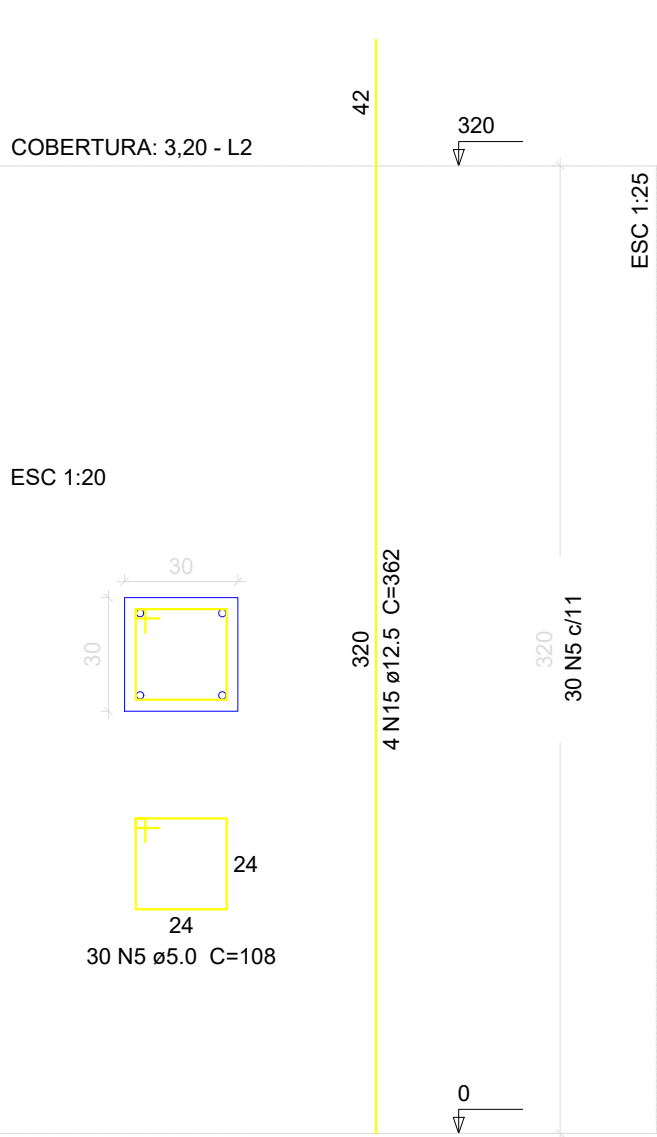
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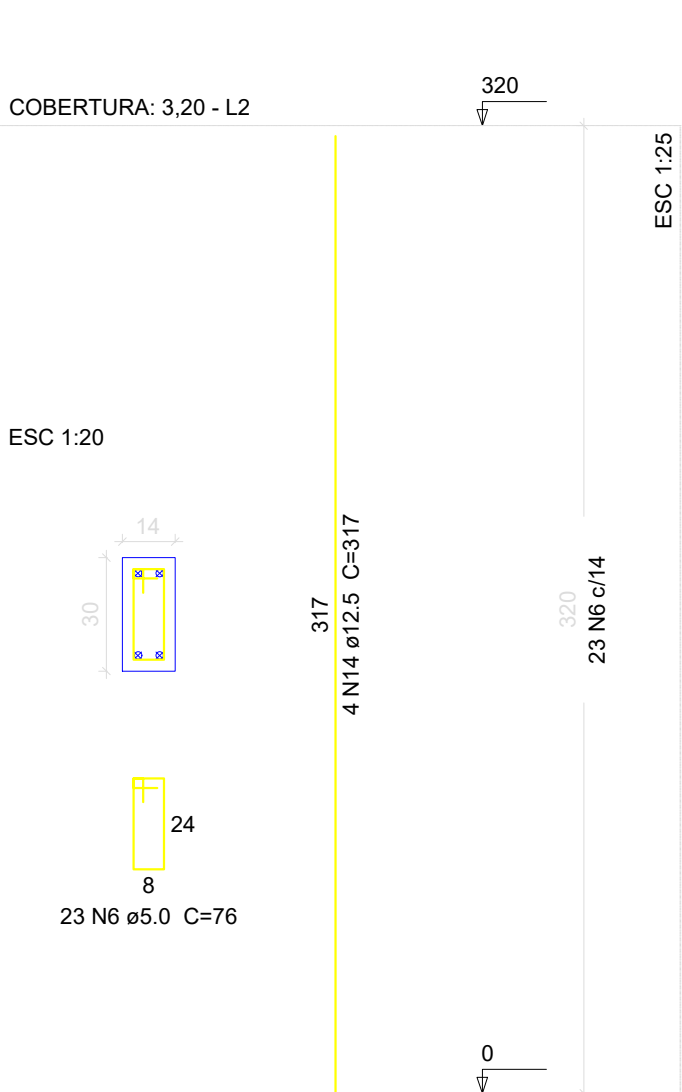
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=P110=P117=P120=P152



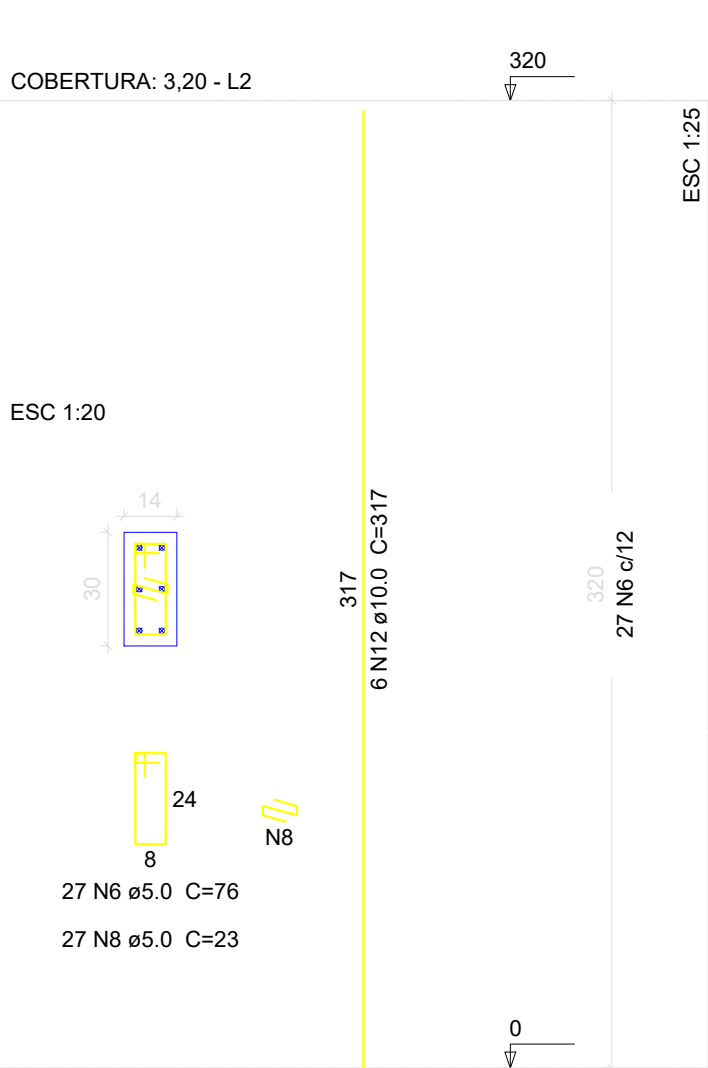
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=P65=P66=P67



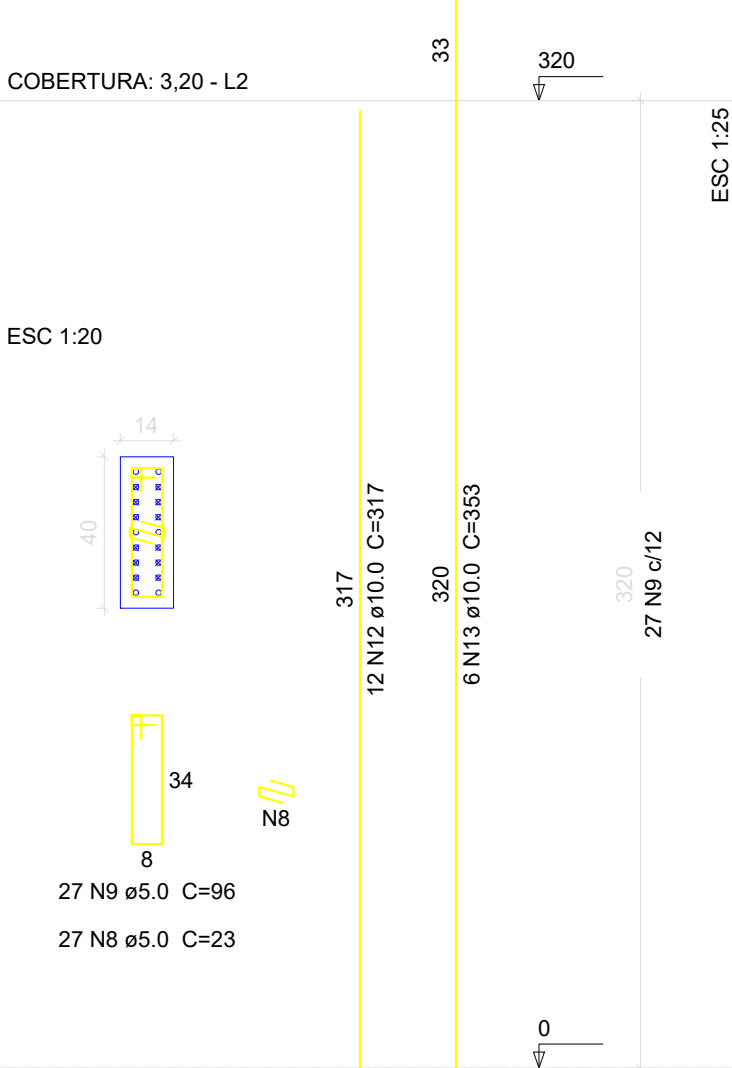
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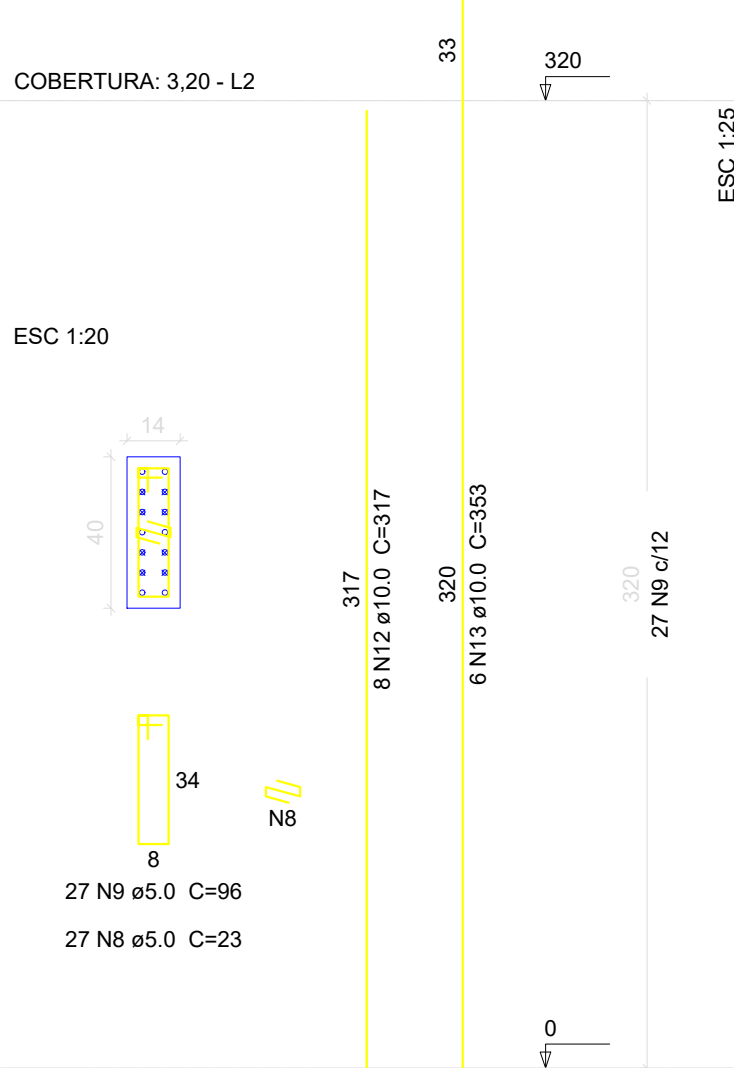
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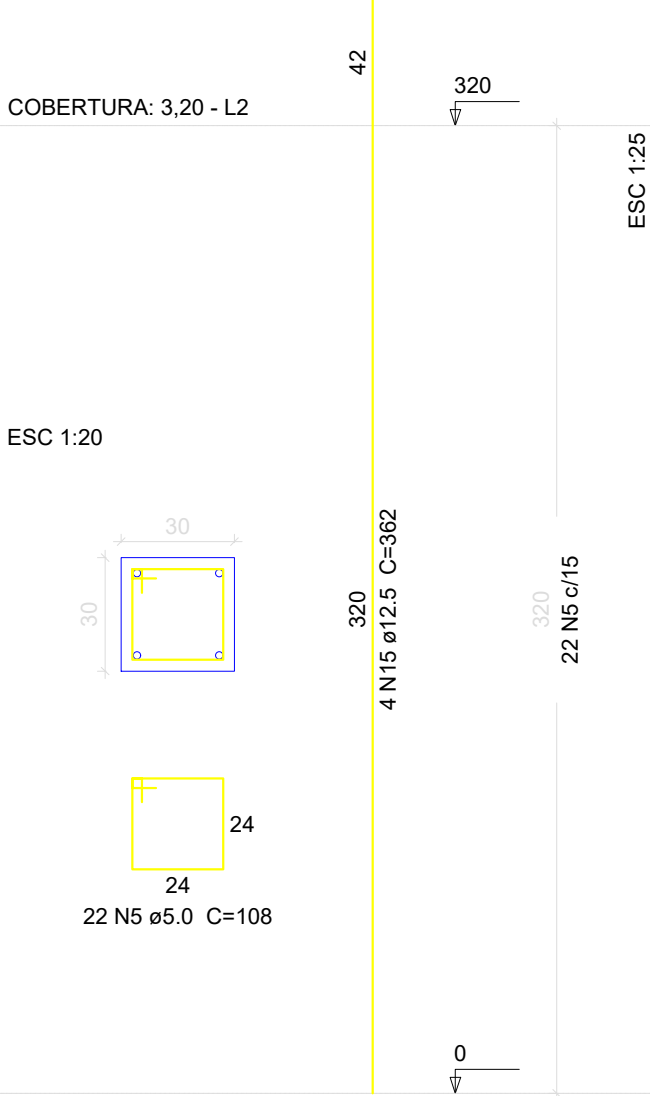
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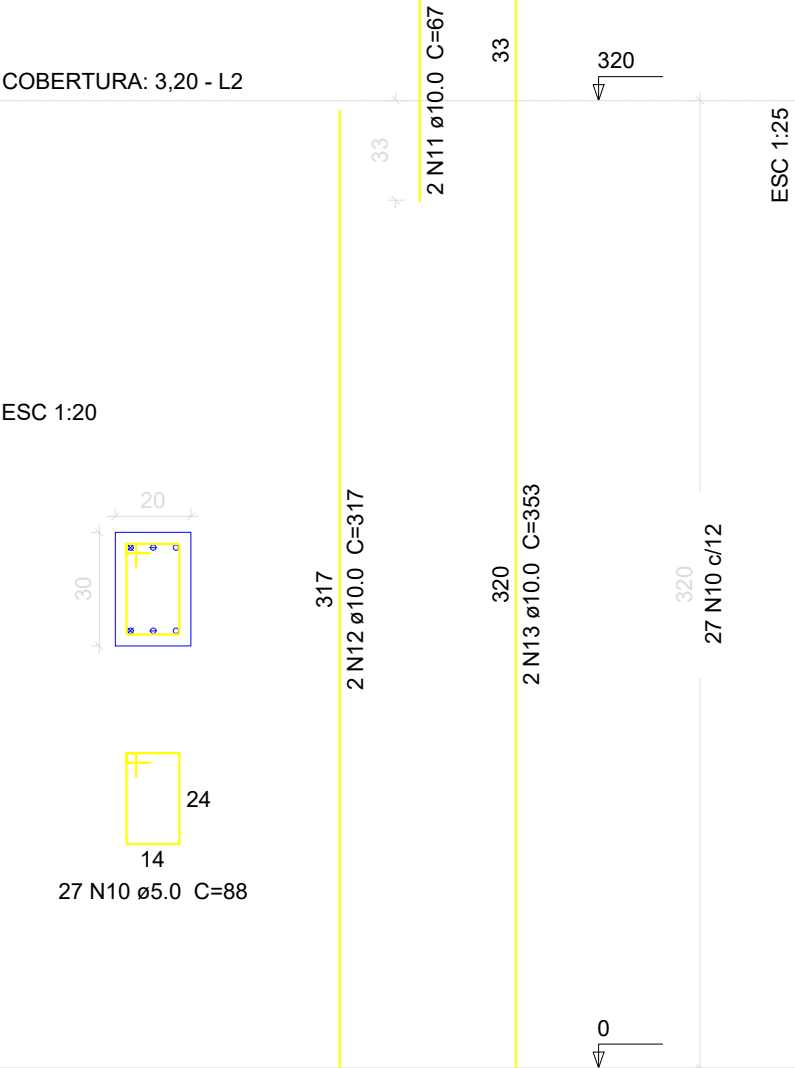
P40=P42



P43



P44=P92





ARQUITETURA E ENGENHARIA

> PROJETOS INDUSTRIAIS / COMERCIAIS / RESIDENCIAIS E PÚBLICAS

> ASSESSORIA / CONSULTORIA

> GESTÃO DE OBRAS

> PERÍCIAS

> EXECUÇÃO DE OBRAS

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Eng. Civil - CREA 13.4548-3

CLIENTE: Prefeitura Municipal de Rio Rufino

OBRA:

PROJETO ESTRUTURAL
ESCOLA MUNICIPAL DE RIO RUFINO

PLANTA DOS PILARES DA COBERTURA

DESENHO:

ESCALA:

DATA: OUT/2022

TAMANHO DE FOLHA A1