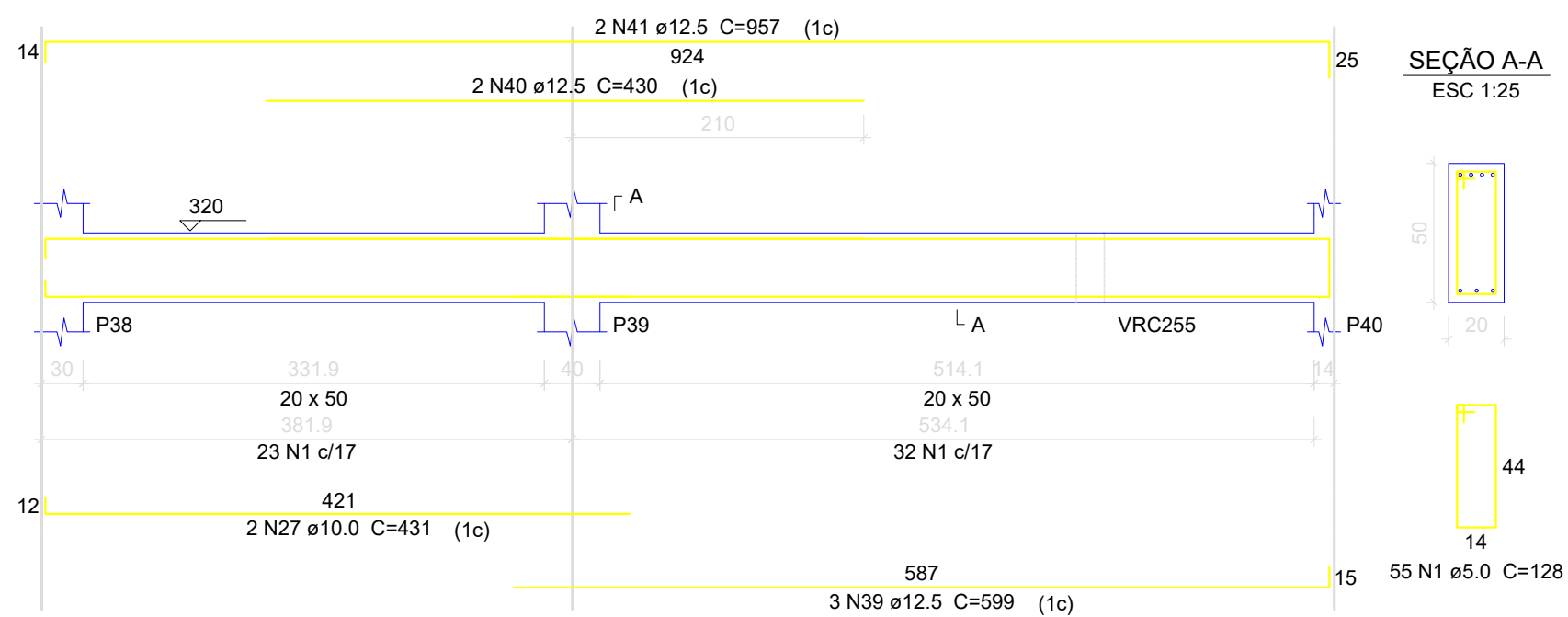


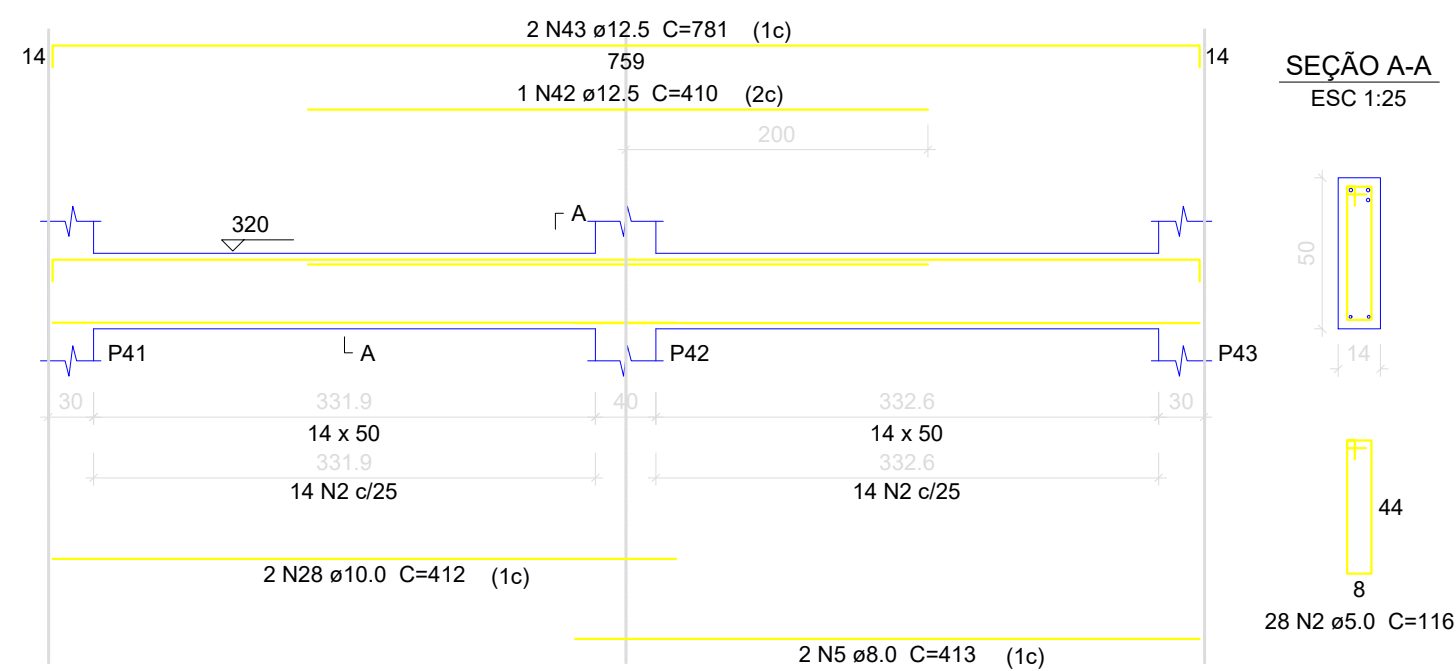
## VRC206

ESC 1:50



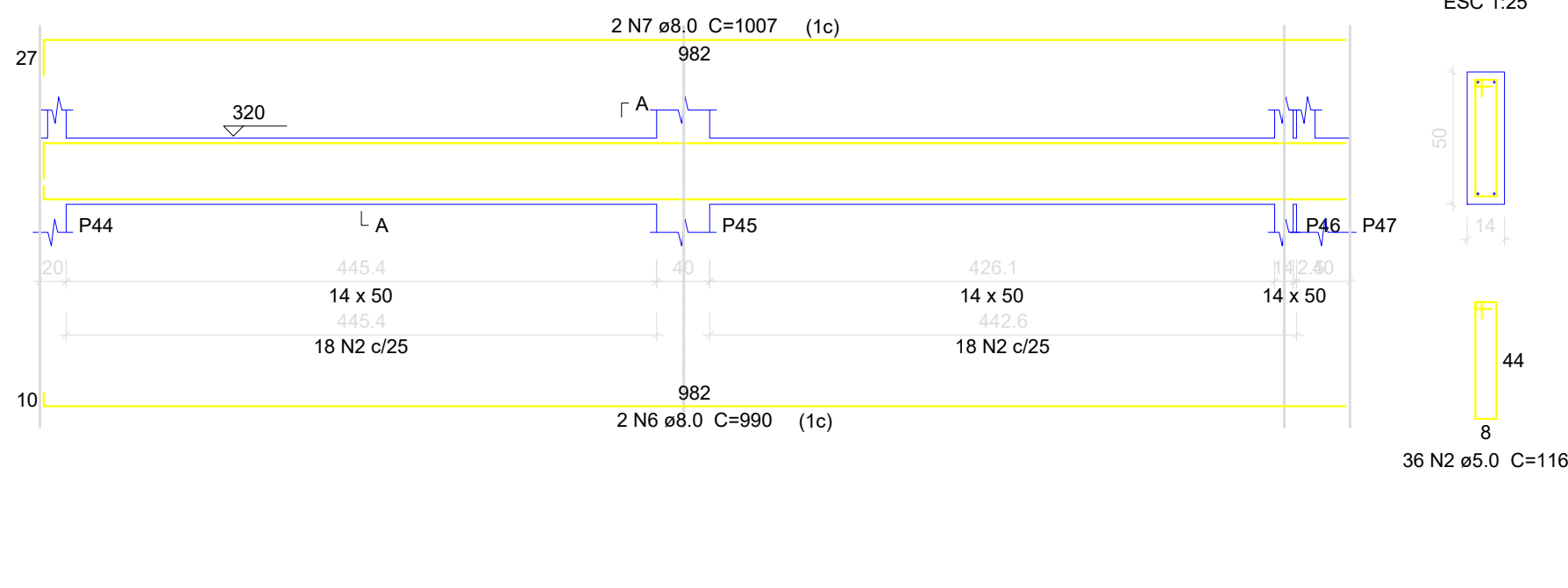
## VRC207

ESC 1:50



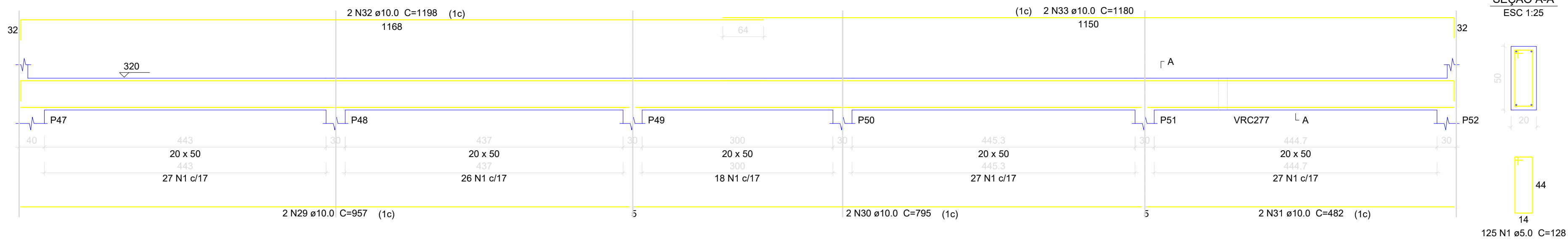
## VRC208

ESC 1:50



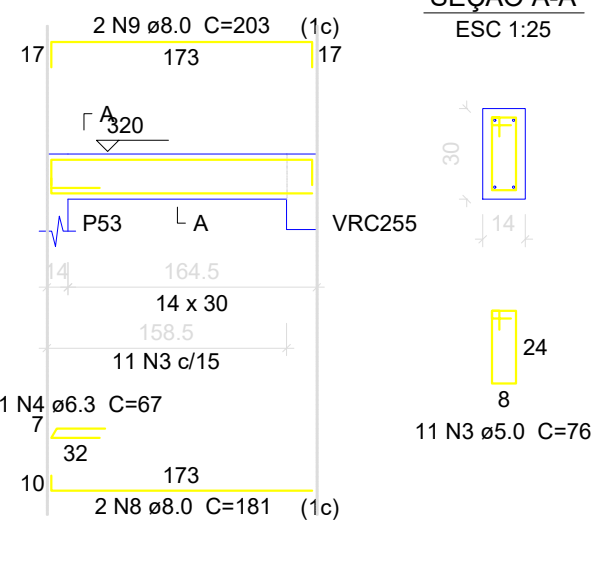
## VRC209

ESC 1:50



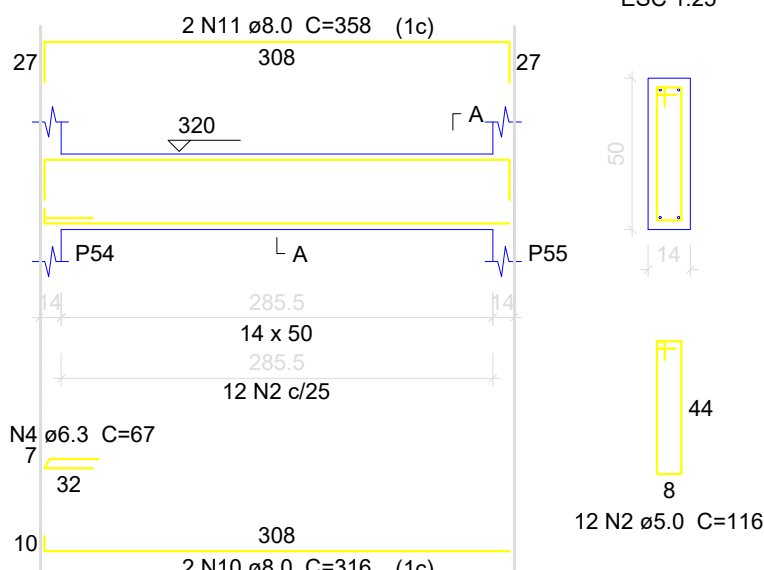
## VRC210

ESC 1:50



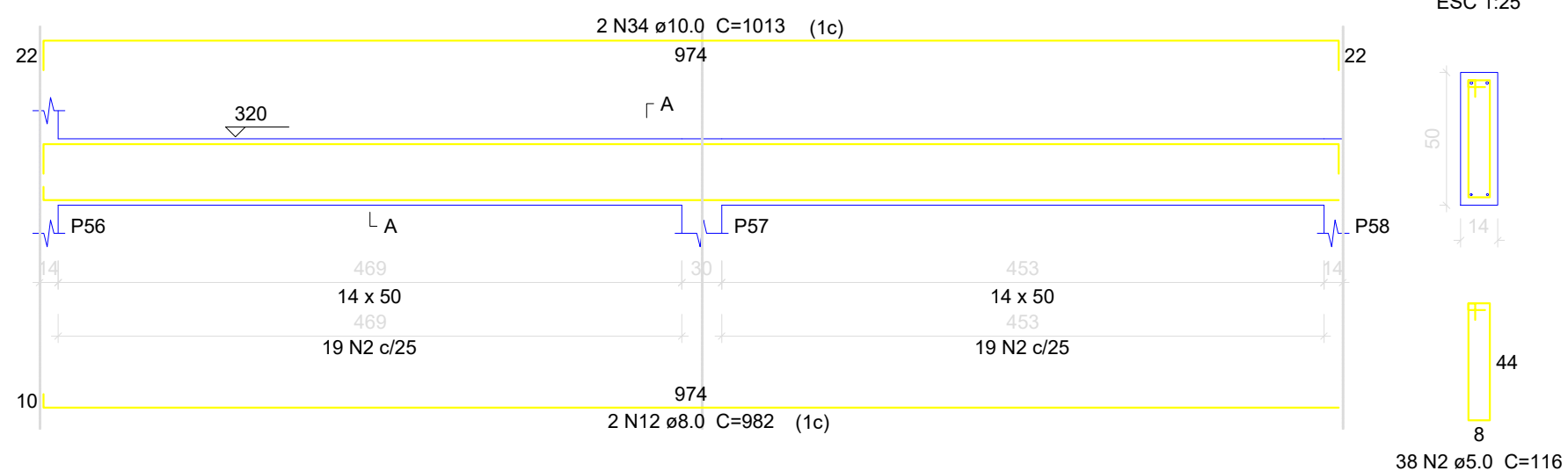
## VRC211

ESC 1:50



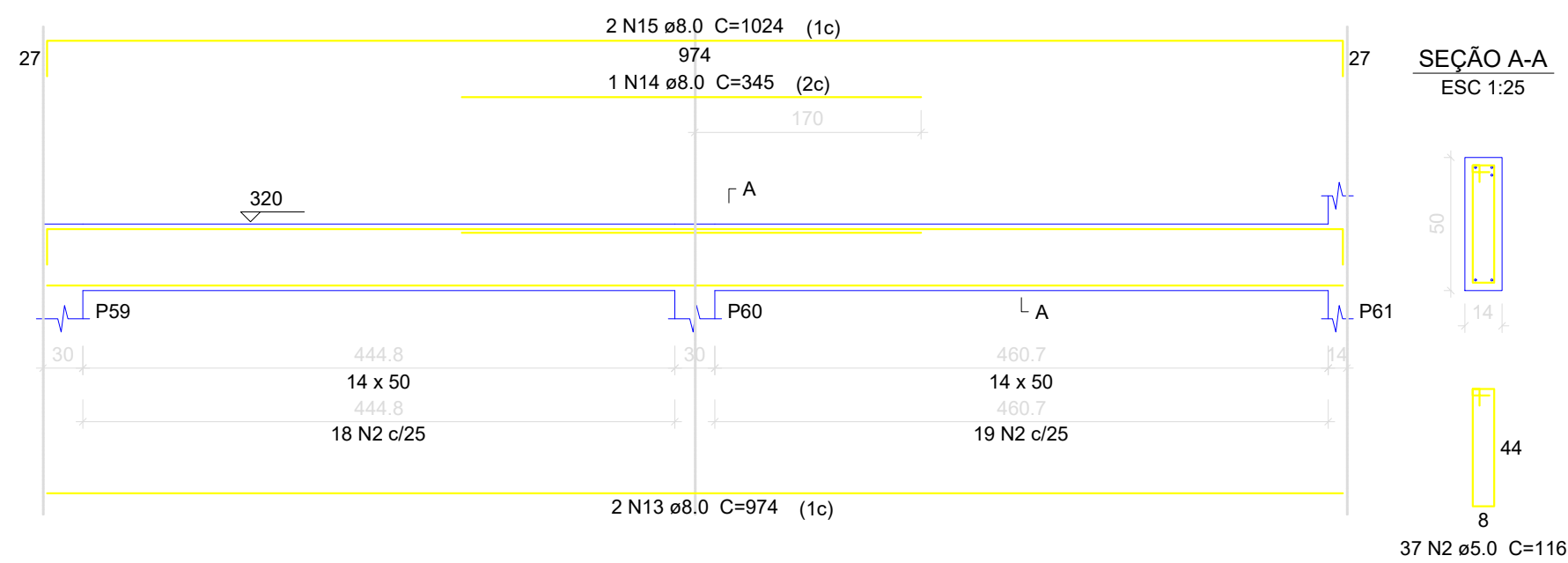
## VRC212

ESC 1:50



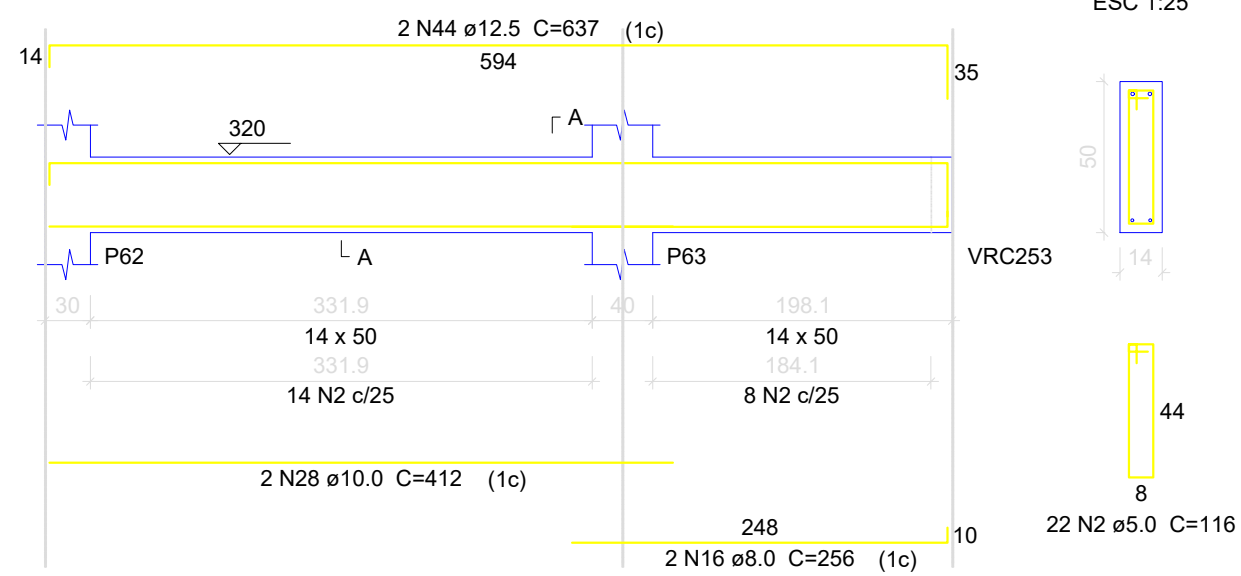
## VRC213

ESC 1:50



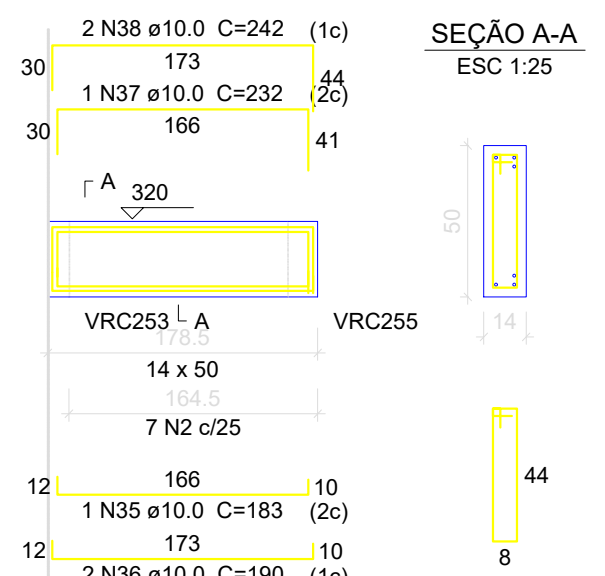
## VRC214

ESC 1:50



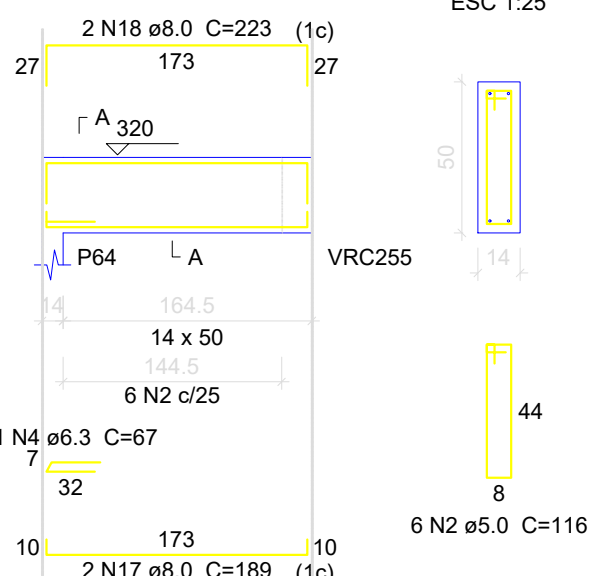
## VRC215

ESC 1:50



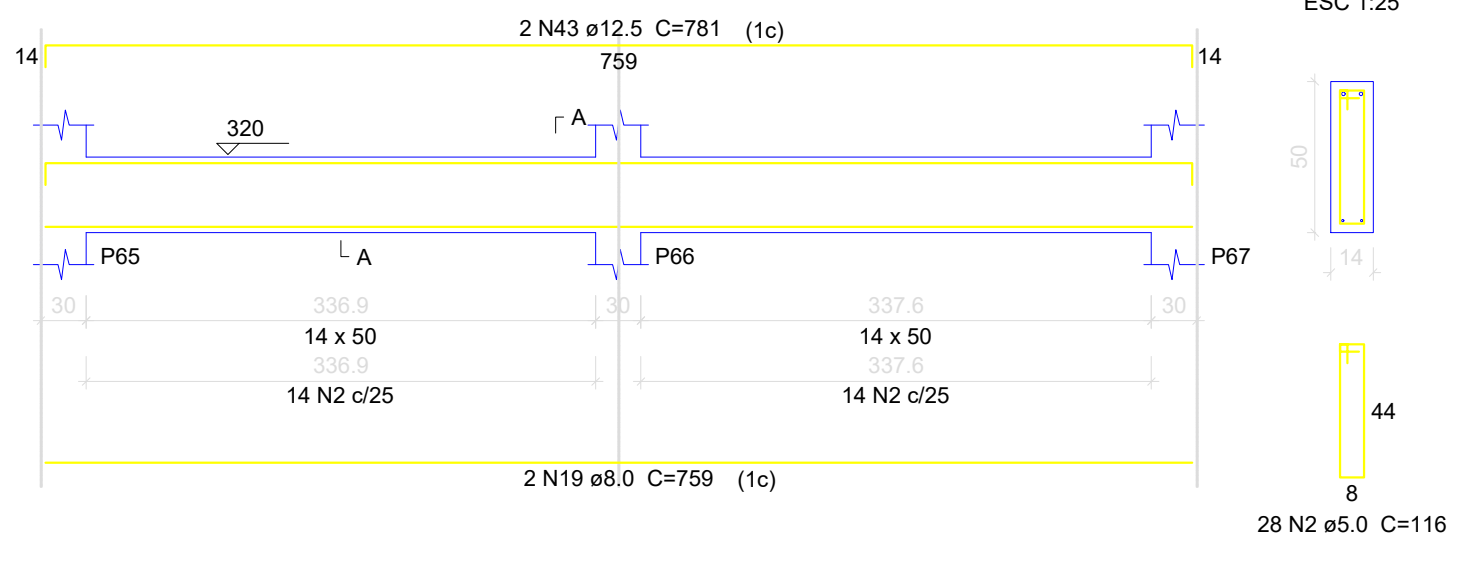
## VRC216

ESC 1:50



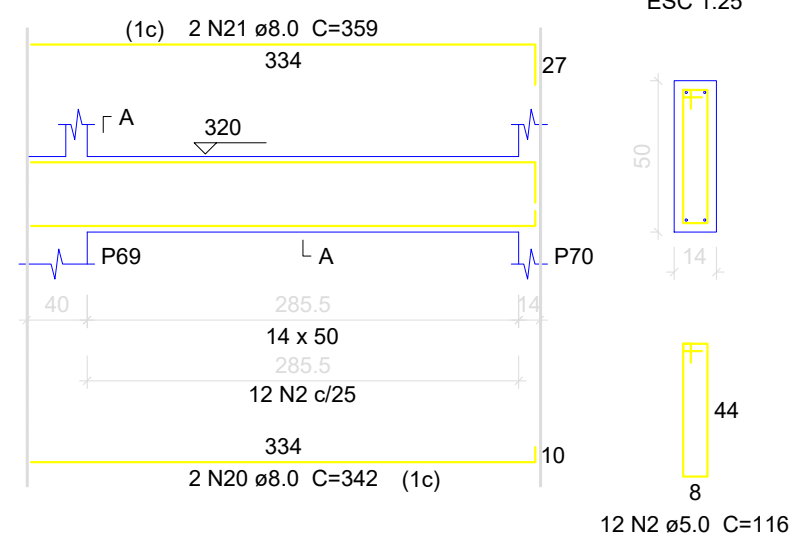
## VRC217

ESC 1:50



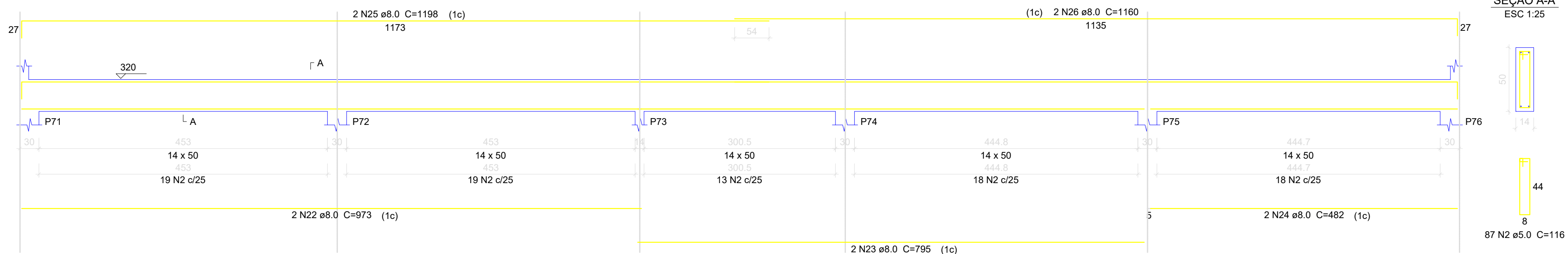
## VRC218

ESC 1:50



## VRC219

ESC 1:50



## Relação do aço


AÇO	N	DIAM	Q	UNIT (cm)	C.TOTAL (cm)
CA60	1	5.0	180	128	23040
	2	5.0	313	116	36308
	3	5.0	11	76	836
CA50	4	6.3	3	67	201
	5	8.0	2	413	826
	6	8.0	2	990	1980
	7	8.0	2	1007	2014
	8	8.0	2	181	362
	9	8.0	2	203	406
	10	8.0	2	316	632
	11	8.0	2	358	716
	12	8.0	2	982	1964
	13	8.0	2	974	1948
	14	8.0	1	345	345
	15	8.0	2	1024	2048
	16	8.0	2	256	512
	17	8.0	2	189	378
	18	8.0	2	223	446
	19	8.0	2	759	1518
	20	8.0	2	342	684
	21	8.0	2	359	718
	22	8.0	2	973	1946
	23	8.0	2	795	1590
	24	8.0	2	482	964
	25	8.0	2	1198	2396
	26	8.0	2	1160	2320
	27	10.0	2	431	862
	28	10.0	4	412	1648
	29	10.0	2	957	1914
	30	10.0	2	795	1590
	31	10.0	2	482	964
	32	10.0	2	1198	2396
	33	10.0	2	1180	2360
	34	10.0	2	1013	2026
	35	10.0	1	183	183
	36	10.0	2	190	380
	37	10.0	1	232	232
	38	10.0	2	242	484
	39	12.5	3	599	1797
	40	12.5	2	430	860
	41	12.5	2	957	1914
	42	12.5	1	410	410
	43	12.5	4	781	3124
	44	12.5	2	637	1274

## Resumo do aço

AÇO	DIAM	C.TOTAL (m)	PESO + 10 % (kg)
CA50	6.3	2.1	0.5
	8.0	267.2	115.9
	10.0	150.4	102
	12.5	93.8	99.4
CA60	5.0	601.9	102
PESO TOTAL			
CA50	317.9		
CA60	102		

Vol. de concreto total (C=30) = 9.11 m³

Área de forma total = 134.75 m²

	<b>ARQUITETURA E ENGENHARIA</b> > PROJETOS INDUSTRIAIS / COMERCIAIS / RESIDENCIAIS E PÚBLICOS > ASSESSORIA / CONSULTORIA > GESTÃO DE OBRAS > PERÍCIAS > EXECUÇÃO DE OBRAS  AV. BRASIL, 1225 - SALA 03 UNIVERSITÁRIO CSP 04609-011 - JARDIM TEL: (49) 99923 2944 CNPJ 23.370.410/0001-49	<b>30</b>	
<b>RESP. TÉCN.:</b> James André Clauberg Eng. Civil - CREA 45.160-6		<b>OBRA:</b>  <b>PROJETO ESTRUTURAL</b> <b>ESCOLA MUNICIPAL DE RIO RUFINO</b>  PLANTA DAS VIGAS DE RESPALDO DA COBERTURA	
<b>RESP. TÉCN.:</b> Indiamara de Oliveira Ribeiro Eng. Civil - CREA 13.4548-3			
<b>CLIENTE:</b> Prefeitura Municipal de Rio Rufino			
<b>DESENHO:</b>		<b>ESCALA:</b>	<b>DATA:</b> OUT/2022