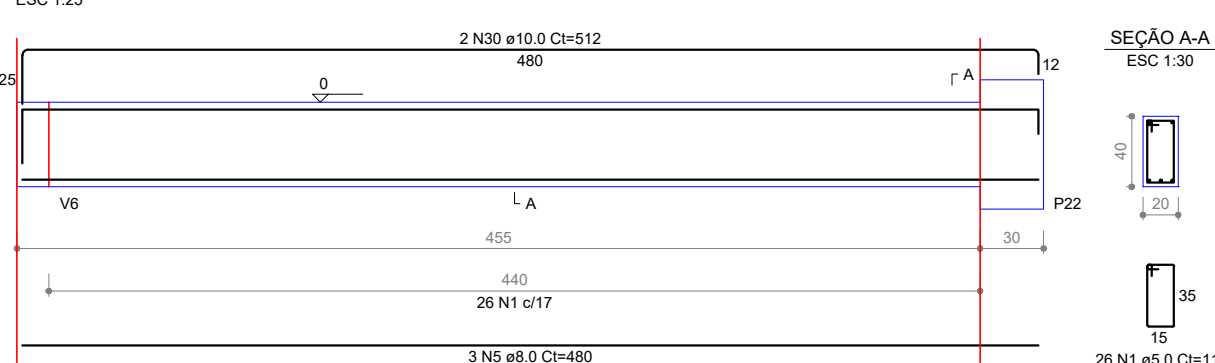
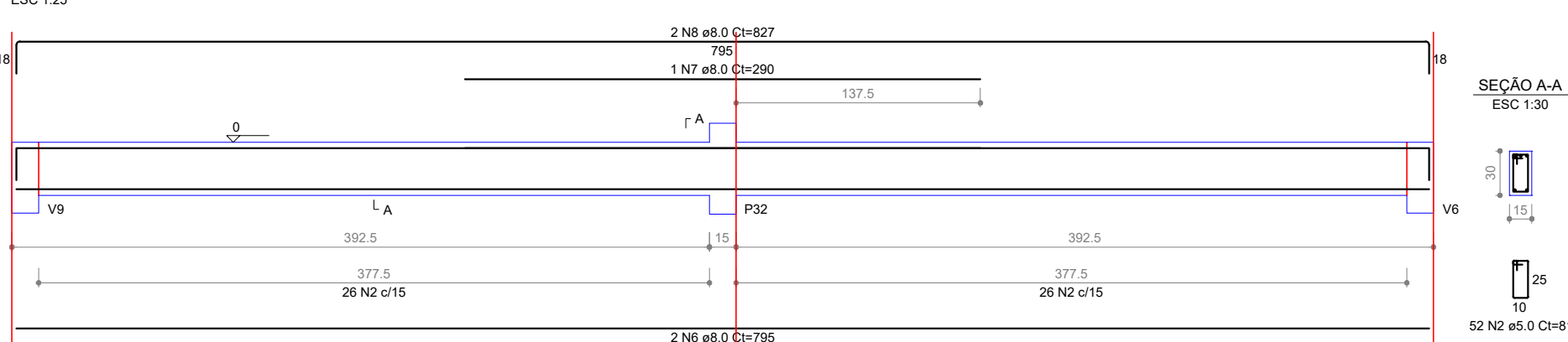


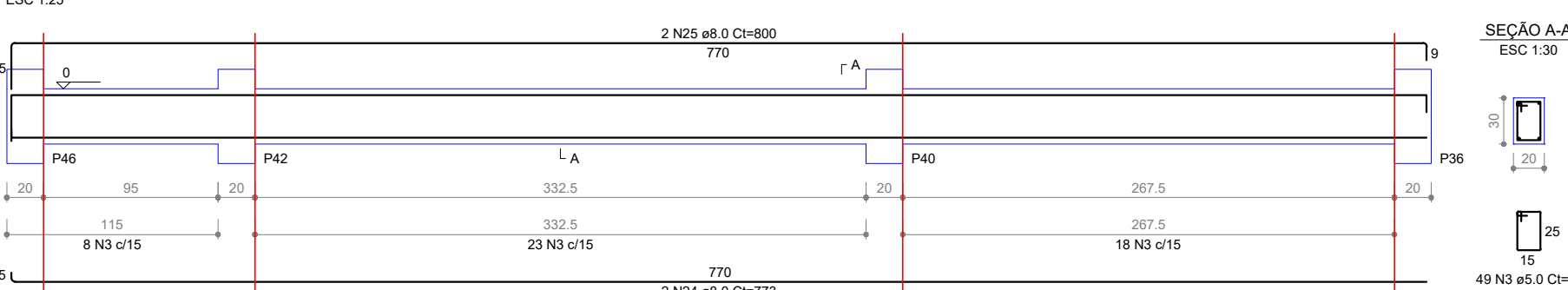
V14 (20 x 40)



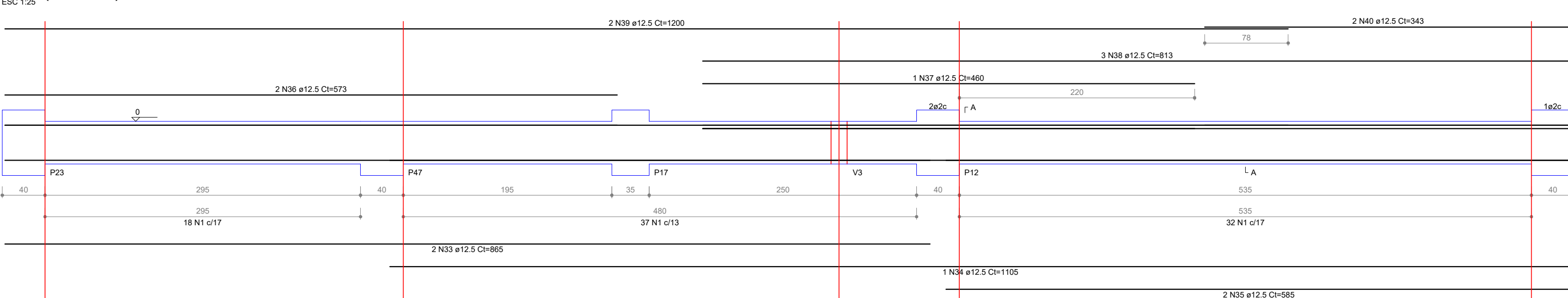
V15 (15 x 30)



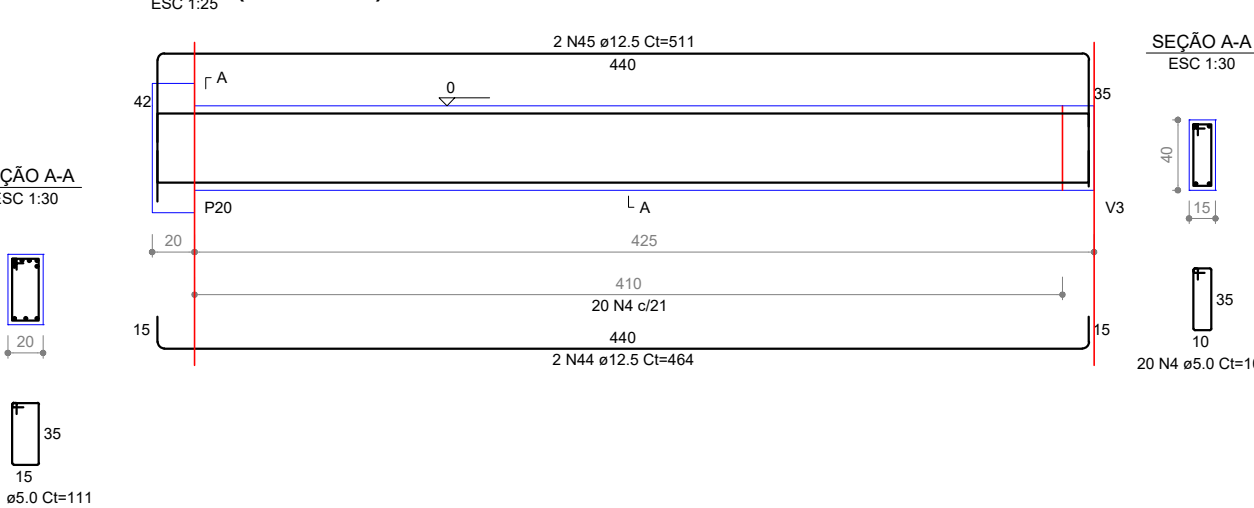
V21 (20 x 30)



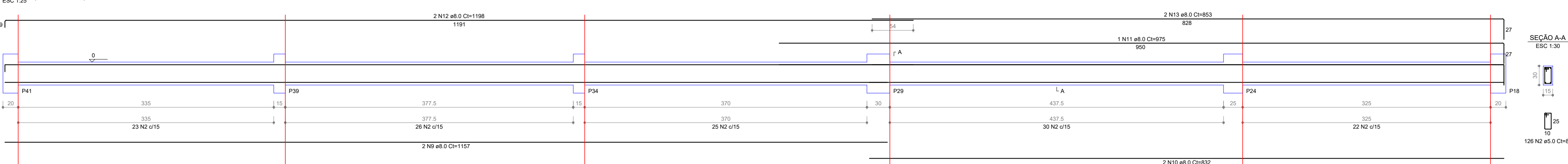
V16 (20 x 40)



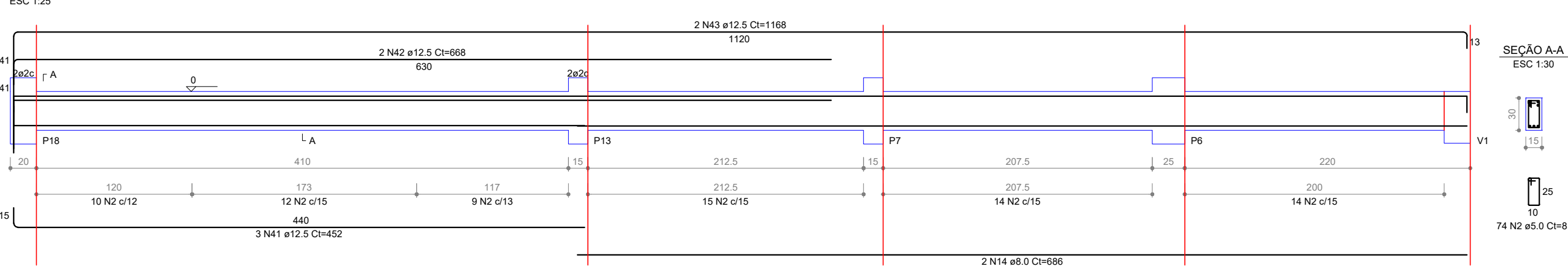
V22 (15 x 40)



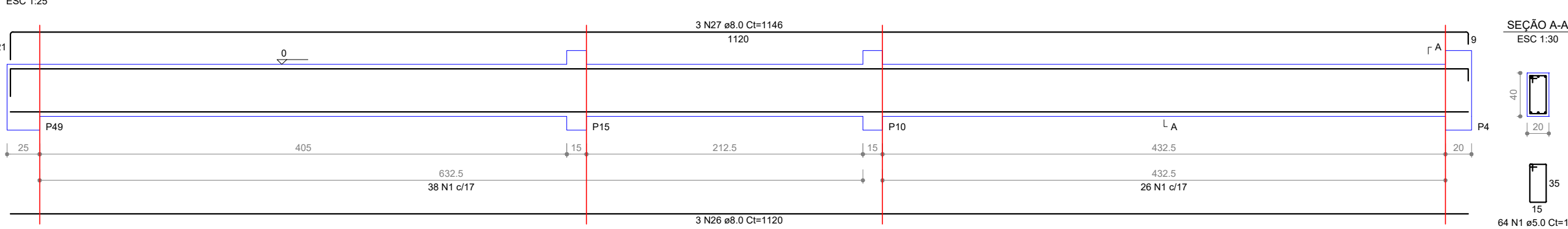
V18 (15 x 30)



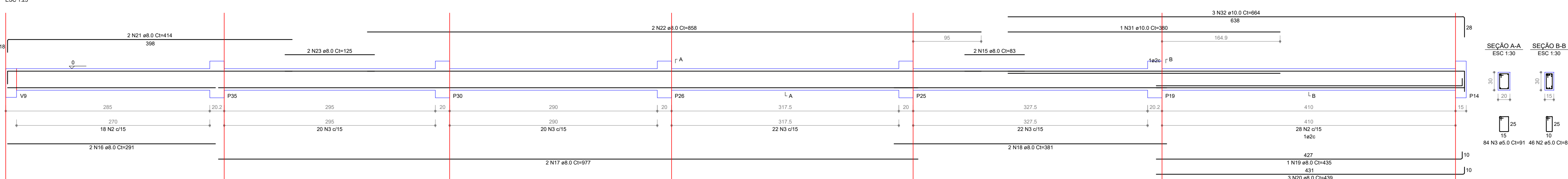
V19 (15 x 30)



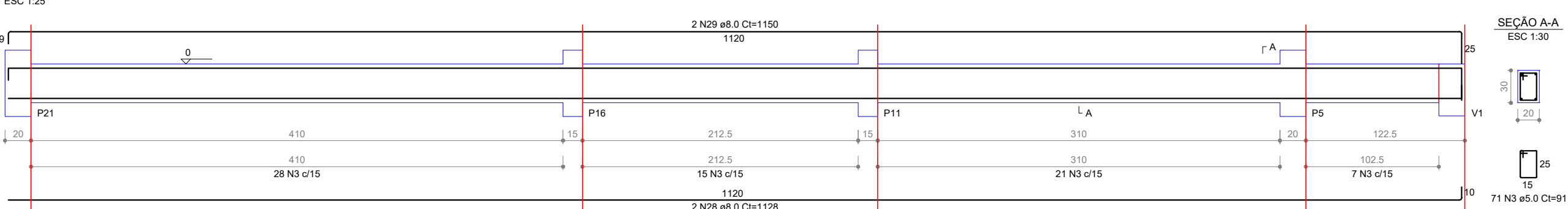
V23 (20 x 40)



V20 (var)



V24 (20 x 30)



RELAÇÃO DO AÇO					
AÇO	N	DIAM (mm)	QUANT	C UNIT (cm)	C TOTAL (cm)
CA60	1	5.0	177	111	19847
	2	5.0	298	81	24138
	3	5.0	204	91	18564
	4	5.0	20	101	2020
CA50	5	8.0	3	480	1440
	6	8.0	2	795	1590
	7	8.0	1	290	290
	8	8.0	2	827	1654
	9	8.0	2	1157	2314
	10	8.0	2	832	1664
	11	8.0	1	975	975
	12	8.0	2	1198	2396
	13	8.0	2	853	1706
	14	8.0	2	686	1372
	15	8.0	2	83	166
	16	8.0	2	291	582
	17	8.0	2	977	1954
	18	8.0	2	381	762
	19	8.0	1	435	435
	20	8.0	3	439	1317
CA40	21	8.0	2	414	828
	22	8.0	2	858	1716
	23	8.0	2	125	250
	24	8.0	2	773	1546
	25	8.0	2	800	1600
	26	8.0	3	1120	3360
	27	8.0	3	1146	3438
	28	8.0	3	1128	3384
	29	8.0	2	1150	2300
	30	10.0	2	512	1024
	31	10.0	1	380	380
	32	10.0	3	694	1992
	33	12.5	2	865	1730
	34	12.5	1	1105	1105
	35	12.5	2	585	1170
	36	12.5	2	573	1146
CA50	37	12.5	1	460	460
	38	12.5	3	813	2439
	39	12.5	2	1200	2400
	40	12.5	2	343	686
	41	12.5	3	452	1356
	42	12.5	2	668	1336
	43	12.5	2	1168	2336
	44	12.5	2	454	908
	45	12.5	2	511	1022
	46	12.5	2	511	1022

RESUMO DO AÇO			
AÇO	DIAM (mm)	C TOTAL (m)	PESO + 10% (kg)
CA50	8.0	379.1	164.5
CA50	10.0	34	23
CA50	12.5	181.1	191.9
CA60	5.0	643.7	109.1
PESO TOTAL (kg)			
CA50	379.5		
CA60	109.1		

Volume de concreto (C-30) = 6.74 m³  
Área de forma = 95.40 m²



OBRA

LOCAL  
Rua José Zanette, Cotiporã/RS

**CONSTRUÇÃO DO BERÇÁRIO E.M.E.I AMOR E CARINHO**

PROJETO ARQUITETÔNICO

Eng. Civil Camila Caccia

Eng. Civil Cristiano Fugali

PROPRIETÁRIO

PREFEITURA MUNICIPAL DE COTIPORÃ | CNPJ: 90.898.487/0001-64

EXECUÇÃO

COLABORAÇÃO

Jordana Bergamin Regia

ASSUNTO

PROJETO ESTRUTURAL: VIGAS\_03

PROTOCOLADO EM:

APROVADO EM:

VERSÃO

DATA

10/07/2021

PRANCHA

14/16