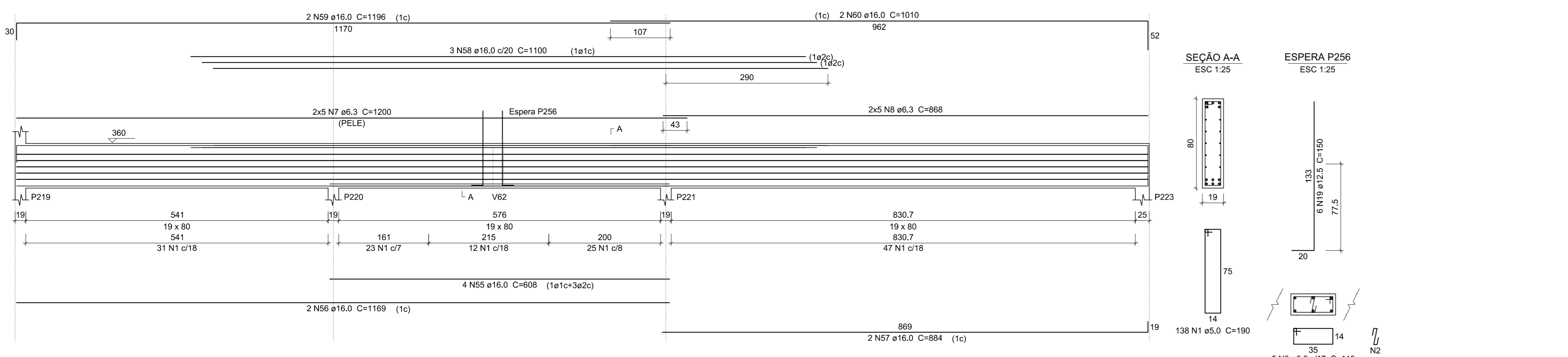
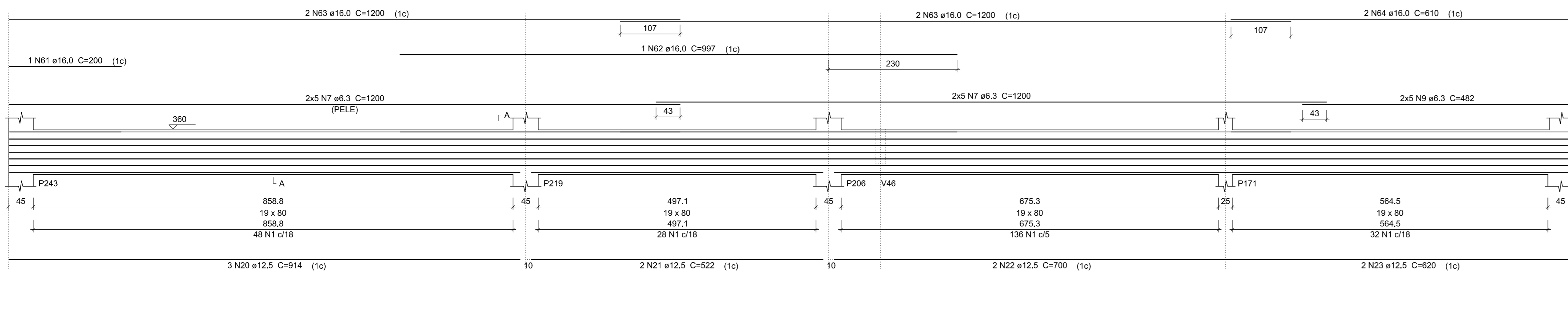


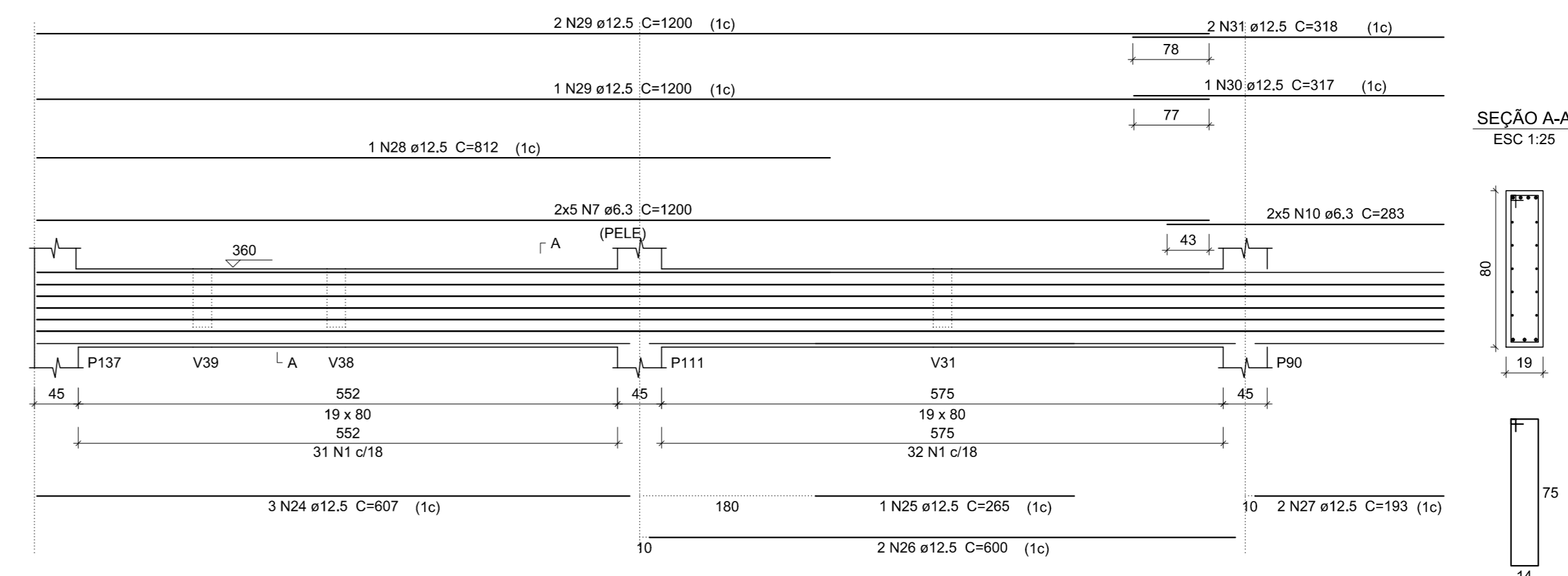
V50
ESC 1:50



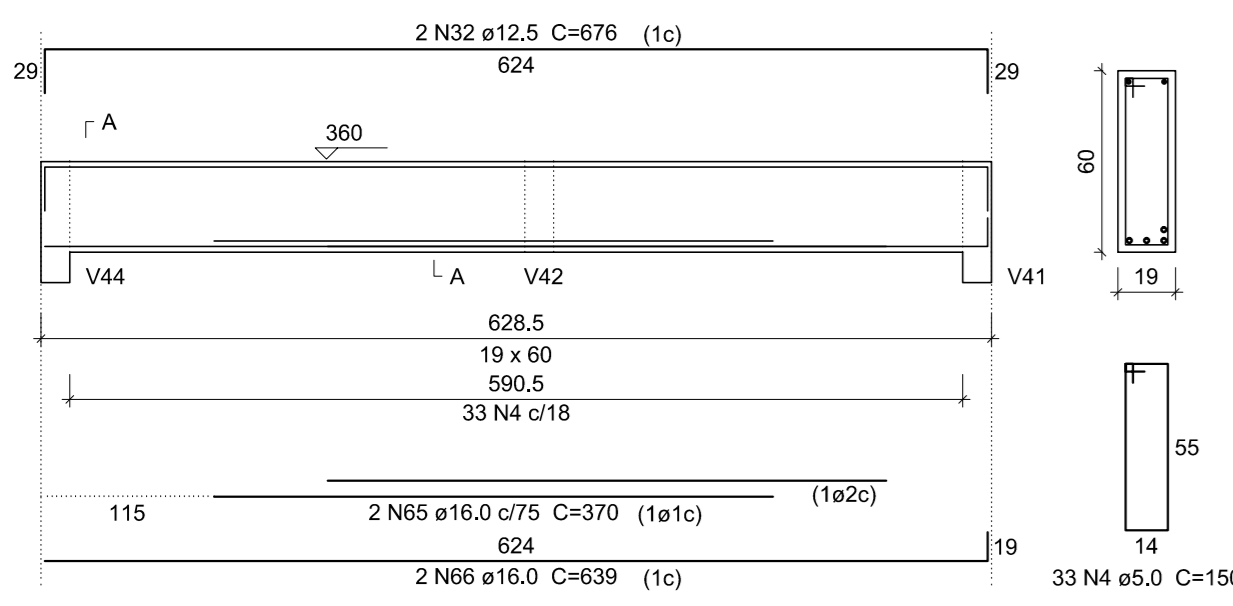
V51
ESC 1:50



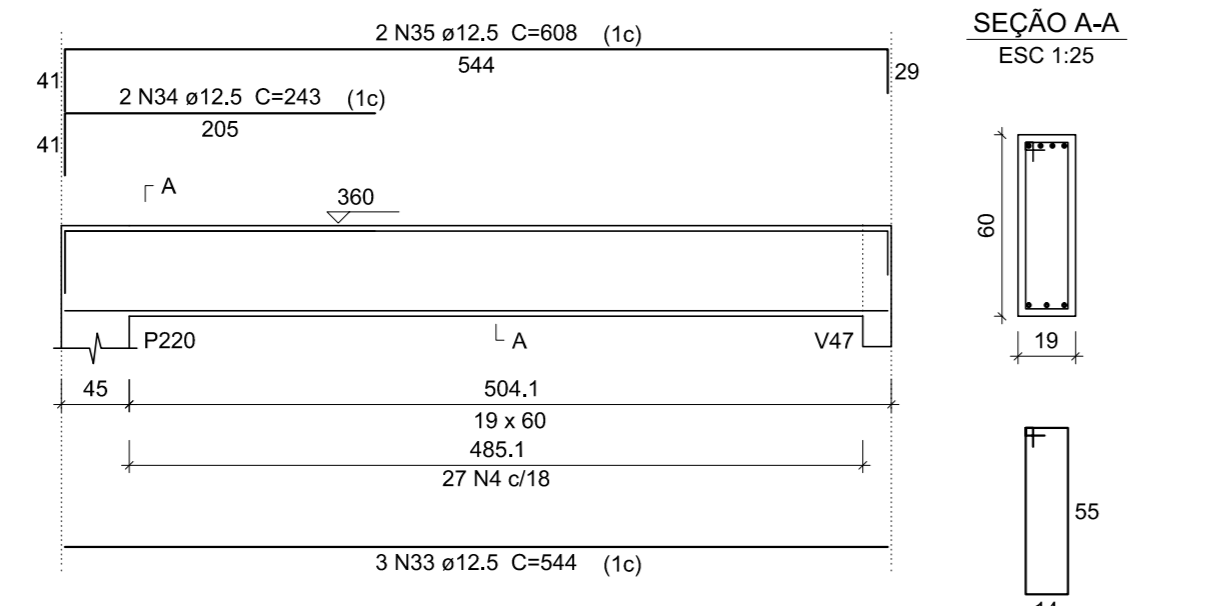
V52
ESC 1:50



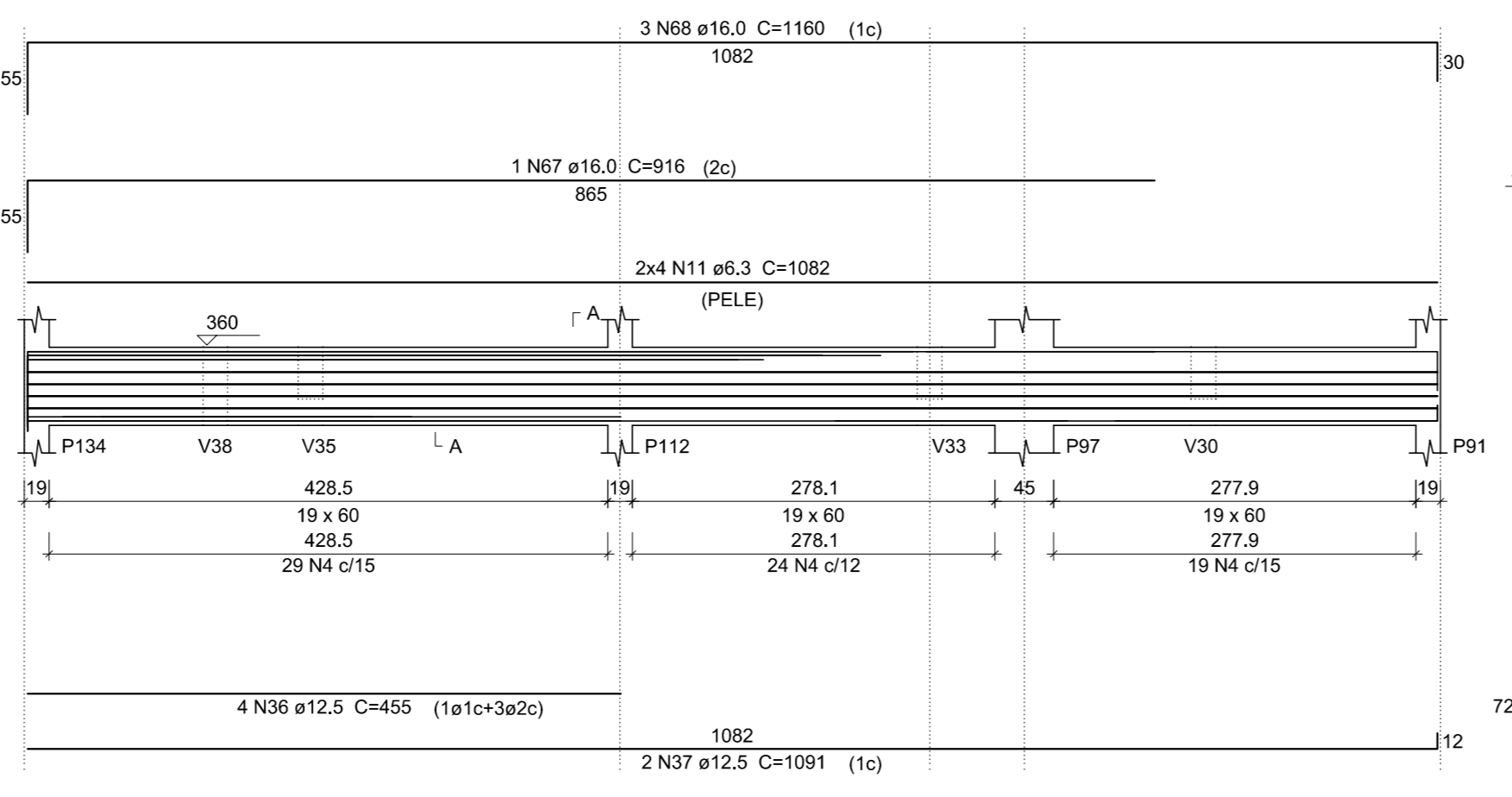
V55
ESC 1:50



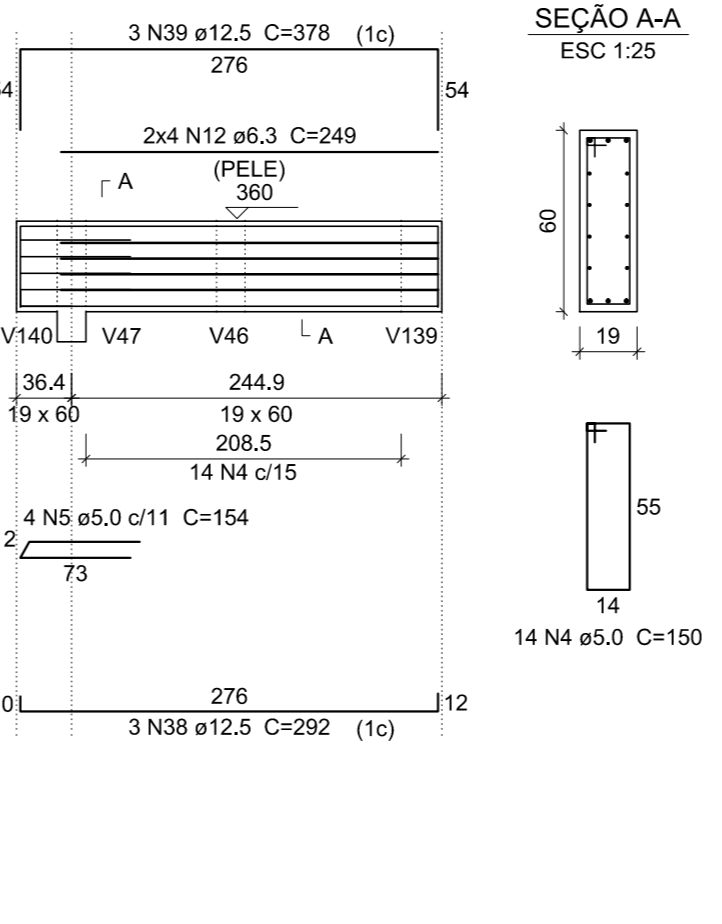
V56
ESC 1:50



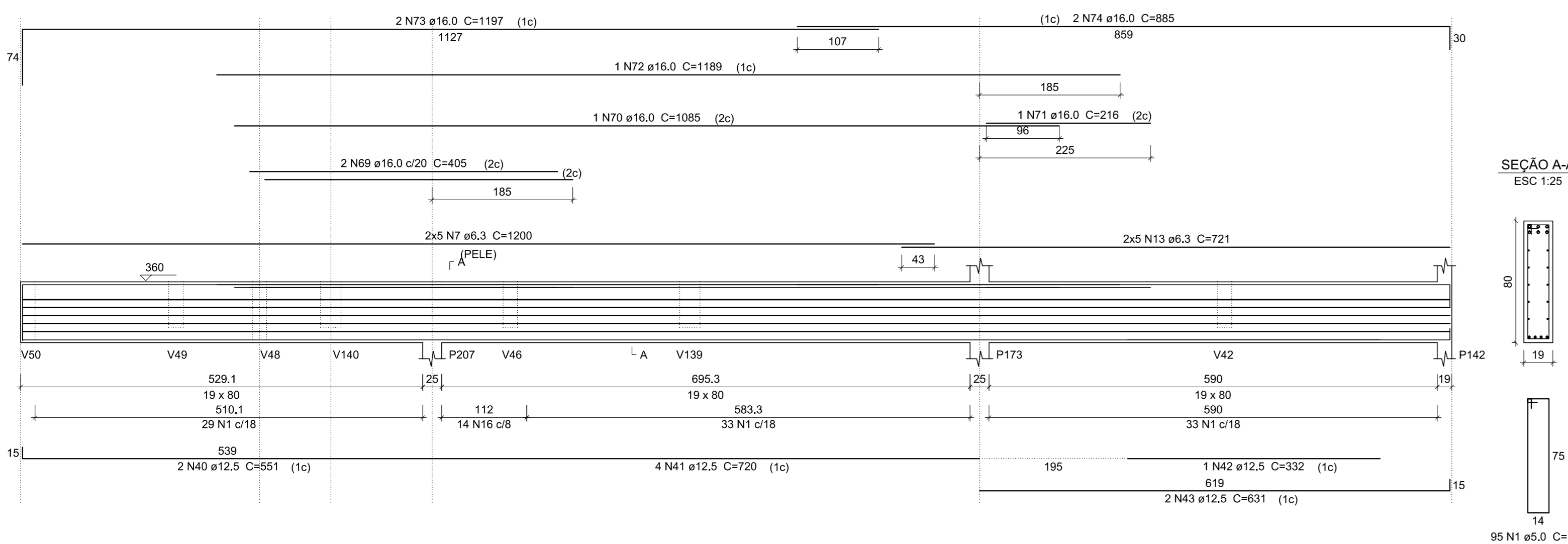
V57
ESC 1:50



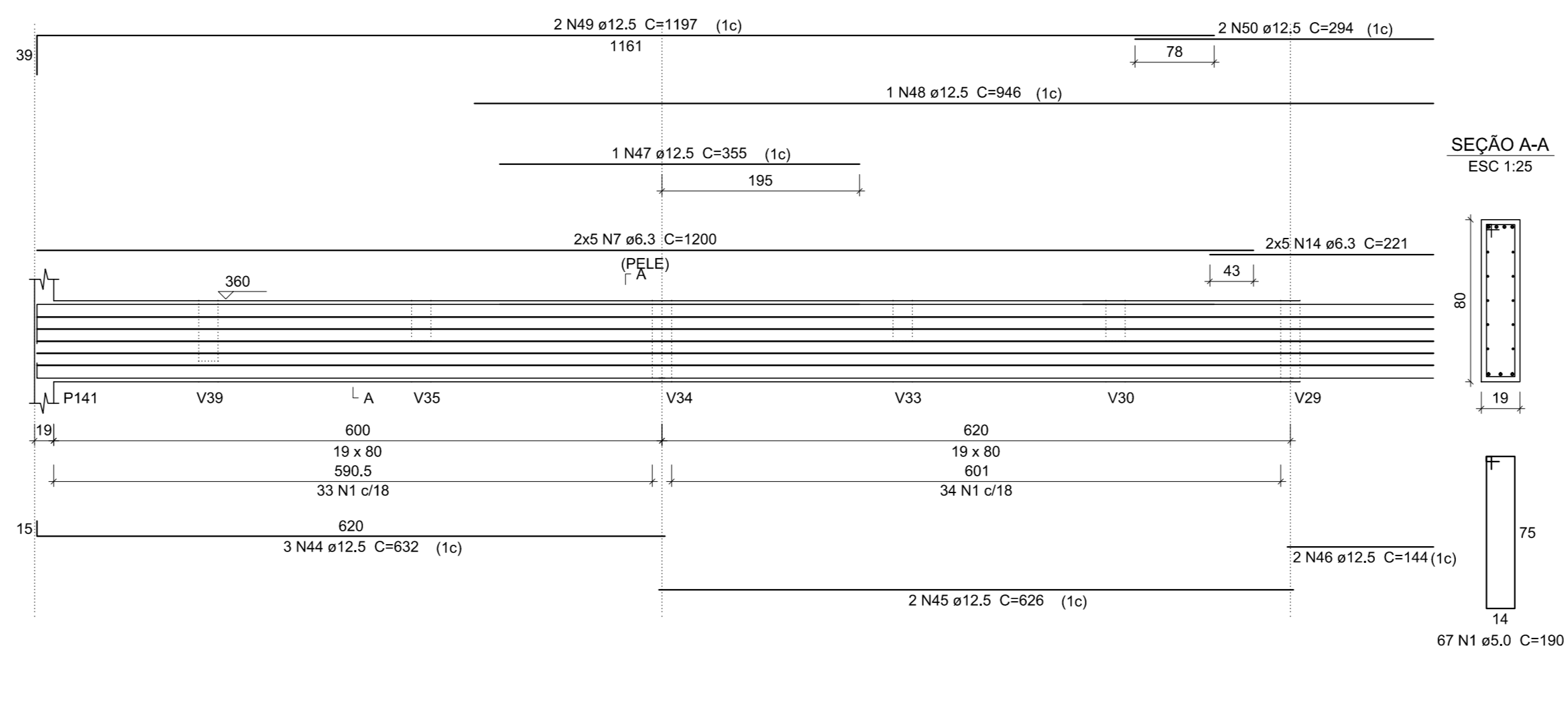
V58
ESC 1:50



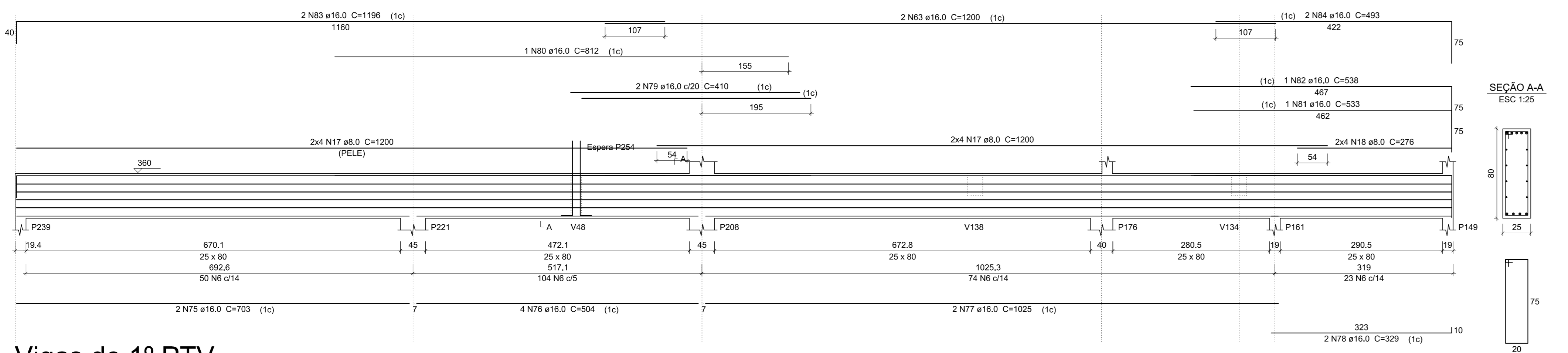
V62
ESC 1:50



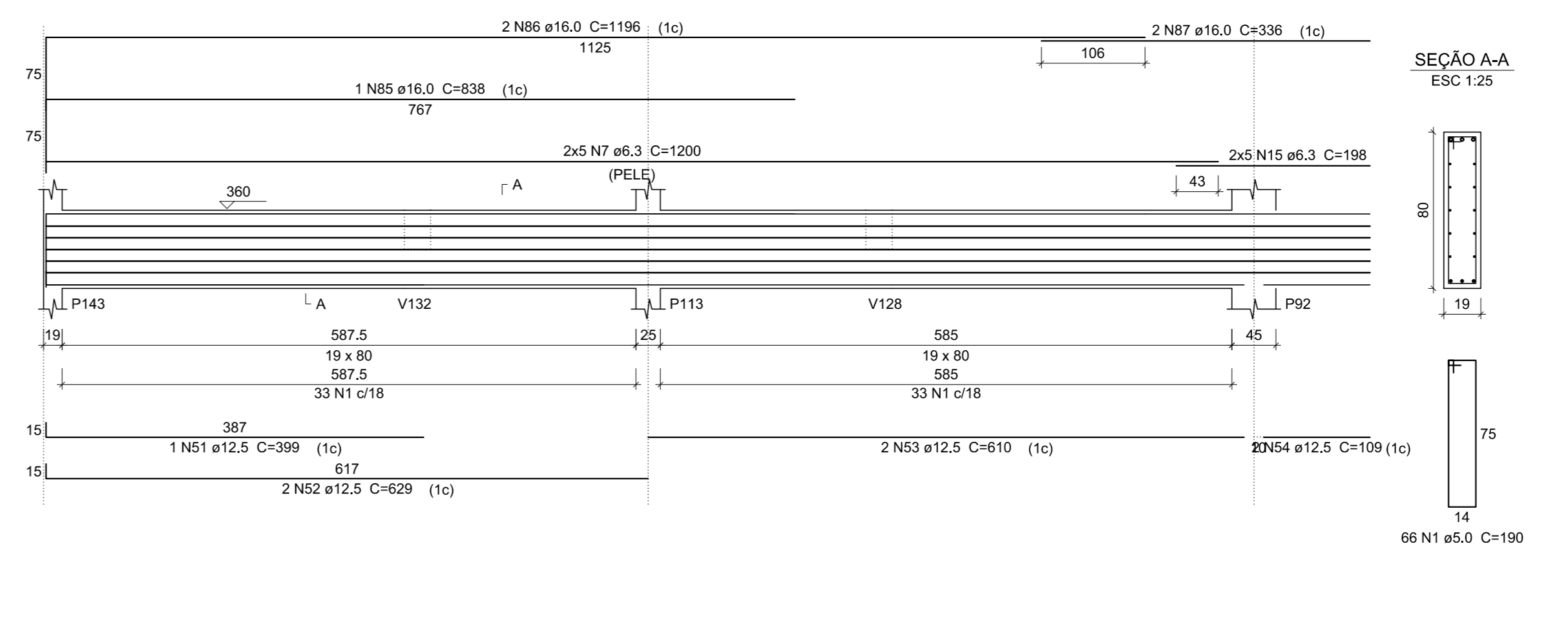
V63
ESC 1:50



V65
ESC 1:50



V66
ESC 1:50



Relação do aço

CA	N	DIAM	Q	UNIT	C.TOTAL
CA60	1	5.0	673	180	127170
	2	5.0	10	29	290
	3	5.0	10	110	1100
	4	5.0	146	150	21900
	5	5.0	4	154	616
	6	5.0	251	202	50702
CA50	7	6.3	70	1200	84000
	8	6.3	10	860	8600
	9	6.3	10	482	4820
	10	6.3	10	283	2830
	11	6.3	8	1082	8656
	12	6.3	8	249	1992
	13	6.3	10	7210	7210
	14	6.3	10	221	2210
	15	6.3	10	198	1980
	16	8.0	14	190	2660
	17	8.0	16	1200	19200
	18	8.0	8	276	2208
	19	12.5	12	150	1800
	20	12.5	3	914	2742
	21	12.5	2	1032	1034
	22	12.5	2	700	1400
	23	12.5	2	620	1240
	24	12.5	3	607	1821
	25	12.5	2	265	265
	26	12.5	2	620	1240
	27	12.5	2	193	386
	28	12.5	1	612	612
	29	12.5	3	1200	3600
	30	12.5	3	317	317
	31	12.5	2	318	636
	32	12.5	2	676	1352
	33	12.5	3	644	1932
	34	12.5	2	243	486
	35	12.5	2	608	1216
	36	12.5	4	160	1600
	37	12.5	2	1091	2182
	38	12.5	3	292	876
	39	12.5	3	378	1134
	40	12.5	2	551	1102
	41	12.5	4	720	2880
	42	12.5	1	332	332
	43	12.5	2	631	1262
	44	12.5	3	632	1896
	45	12.5	2	620	1240
	46	12.5	2	268	268
	47	12.5	1	355	355
	48	12.5	1	540	540
	49	12.5	2	1187	2374
	50	12.5	2	294	588
	51	12.5	1	399	399
	52	12.5	2	629	1258
	53	12.5	2	610	1220
	54	12.5	2	109	218
	55	16.0	4	686	2744
	56	16.0	2	1169	2338
	57	16.0	2	884	1768
	58	16.0	3	1190	3570
	59	16.0	2	1198	2396
	60	16.0	2	1010	2020
	61	16.0	1	200	200
	62	16.0	1	997	997
	63	16.0	6	1200	7200
	64	16.0	2	610	1220
	65	16.0	2	370	740
	66	16.0	2	639	1278
	67	16.0	1	916	916
	68	16.0	3	1160	3480
	69	16.0	2	405	810
	70	16.0	1	1085	1085
	71	16.0	1	216	216
	72	16.0	1	1189	1189
	73	16.0	2	1187	2374
	74	16.0	2	885	1770
	75	16.0	2	703	1406
	76	16.0	4	504	2016
	77	16.0	2	1025	2050
	78	16.0	2	329	658
	79	16.0	2	410	820
	80	16.0	1	612	612
	81	16.0	1	533	533
	82	16.0	1	538	538
	83	16.0	2	1198	2396
	84	16.0	2	493	986
	85	16.0	1	638	638
	86	16.0	2	1198	2396
	87	16.0	2	336	672

Resumo do aço

CA	DIAM	C.TOTAL	PESO + 10 %
CA50	6.3	1223.8	329.4
	8.0	246.7	104.5
	12.5	1433.5	470
	16.0	538.6	935.1
CA60	5.0	2024.6	343.3
PESO TOTAL			
CA50		1838.9	
CA60		343.3	

Vol. de concreto total (C-30) = 29.55 m³
Área de forma total = 336.24 m²

Vigas do 1º PTV
escala 1:50

HB ENGENHARIA
PROFIOS E EXECUÇÕES DE OBRAS

ALEX SANDRO BOLIGON
ENGENHEIRO CIVIL
CREASC 06742-4

ALLAN FELIPE MELCHIORETTO
ENGENHEIRO CIVIL
CREASC 14171-4

RUA NORBERTO SILVEIRA JUNIOR, nº 191, SL. 05
CENTRO - GUARAMIRIM - SC
47.376-2317 / 19125-2640 - 98401-4518

ESCOLA MUNICIPAL IRMÃ FILOMENA

PROJETO ESTRUTURAL

DESENHADO: VIGAS DO 1º PTV
PROPRIETÁRIO: MUNICÍPIO DE TREZE TIJAS
LOCAL: RUA DR. IVÓ DAQUINO Nº 220, BAIRRO CENTRO, TREZE TIJAS/SC.

ESCALA: INDICADA
DESENHADO: RAFAEL
DATA: ABRIL, 2018

RESP. TÉCNICO: _____ CONTRATANTE: _____ FOLHA Nº: _____

ALEX SANDRO BOLIGON
ENGENHEIRO CIVIL
CREASC 06742-4

MUNICÍPIO DE TREZE TIJAS
CNPJ: 02.771.000/41
MAURO DRESCH
CPF: 40.448.608/00
CARGO: PREFEITO