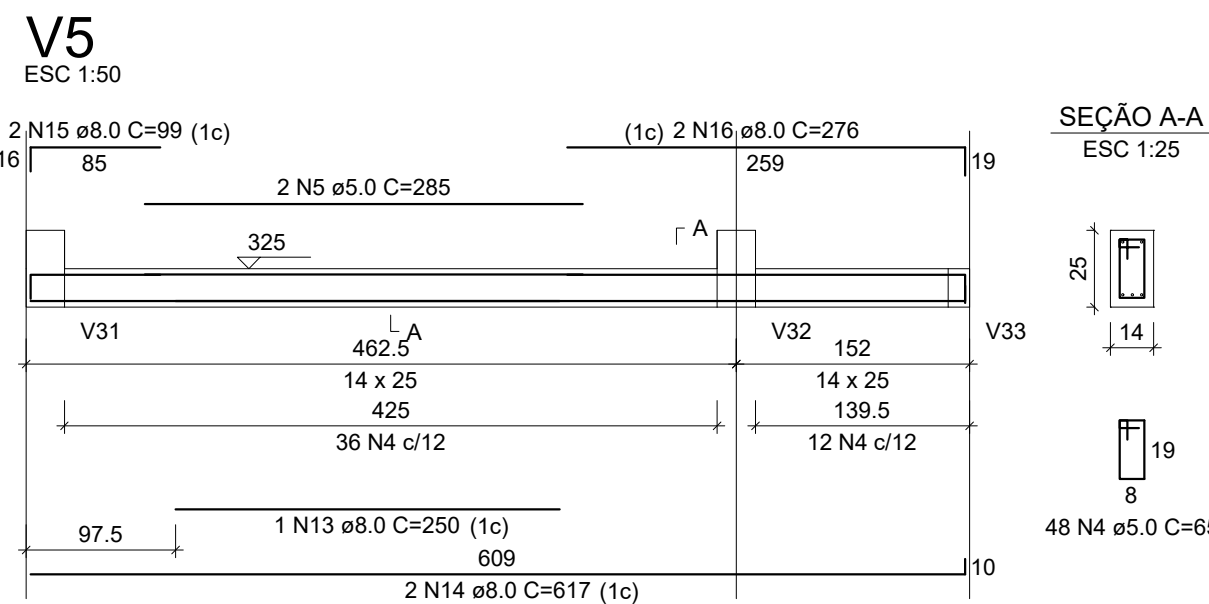
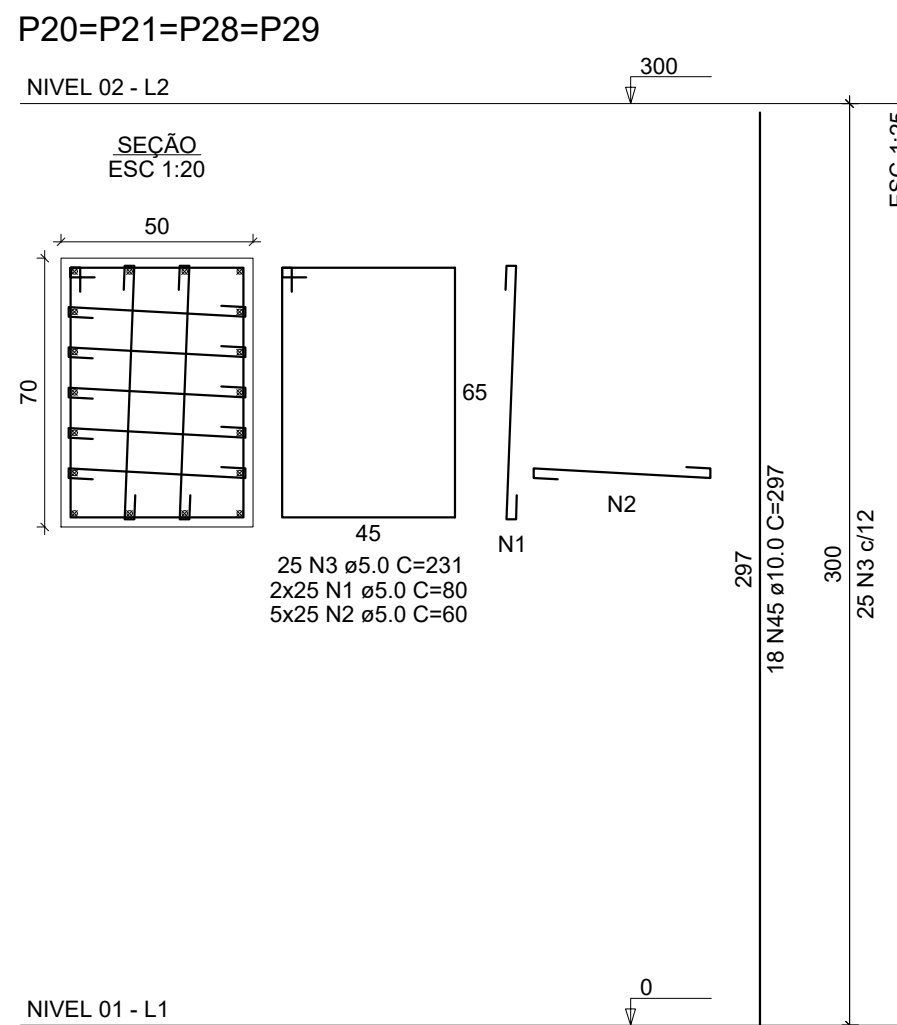
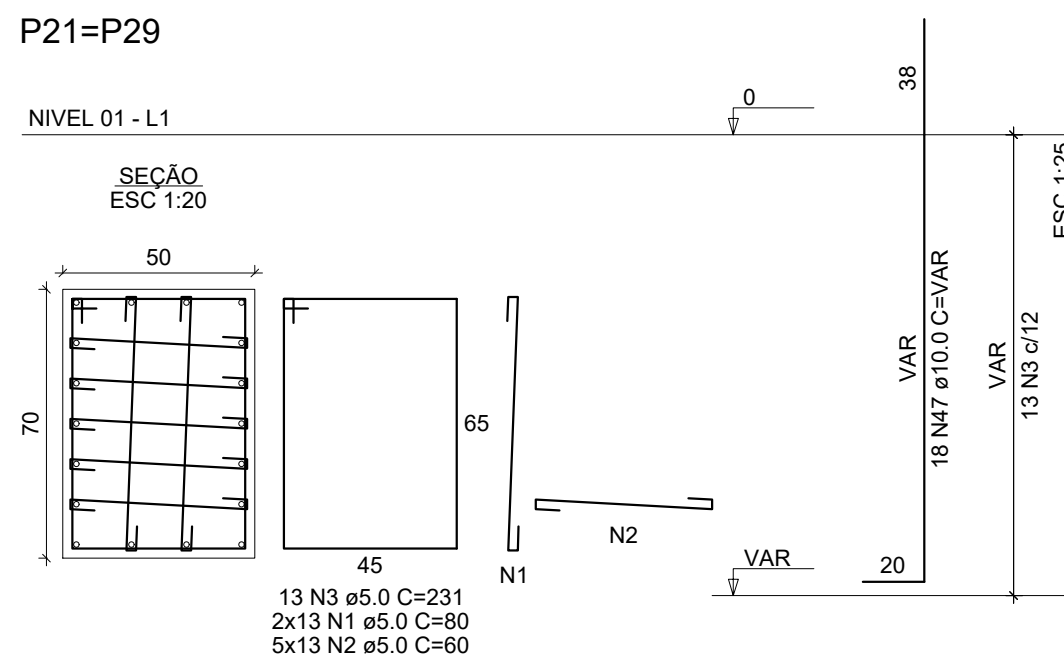
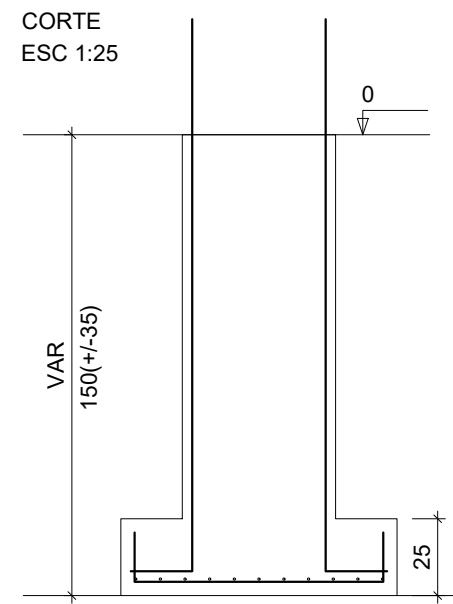
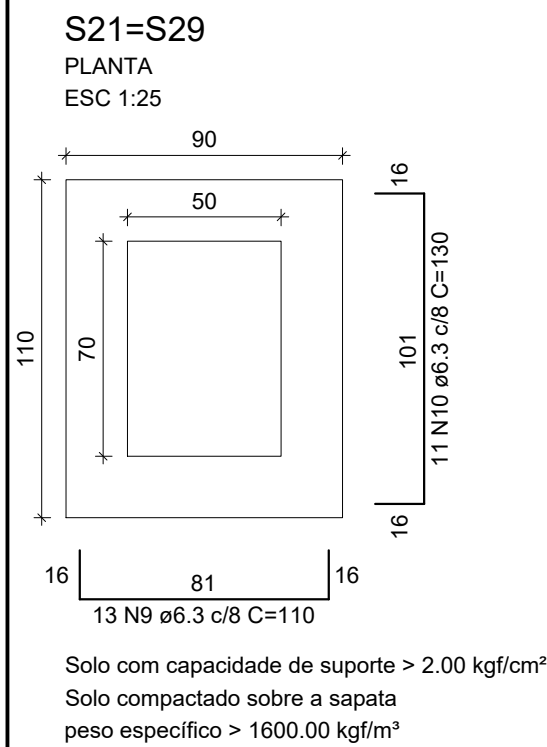
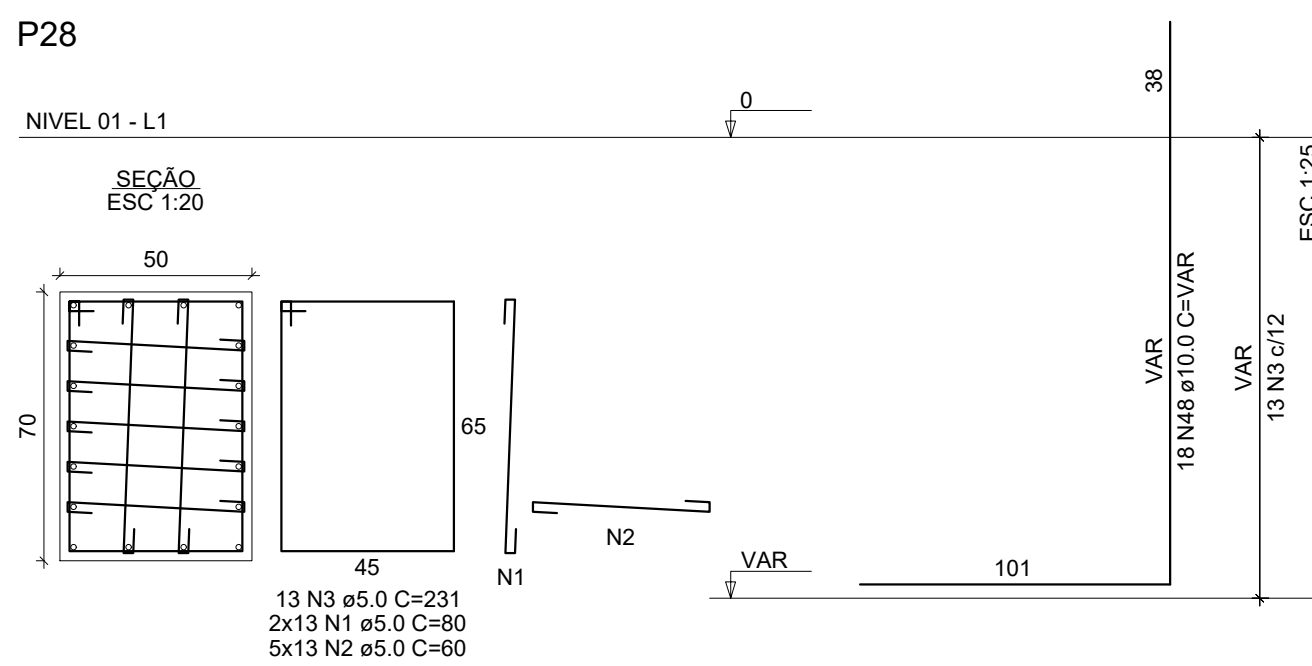
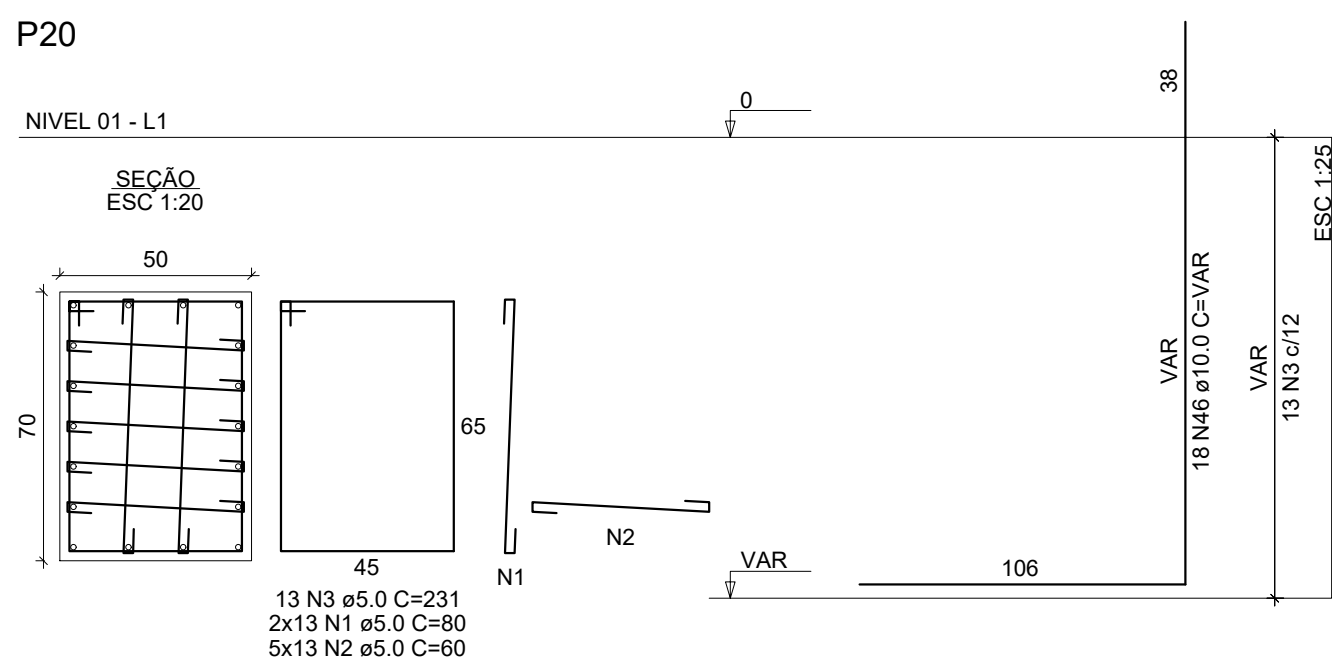
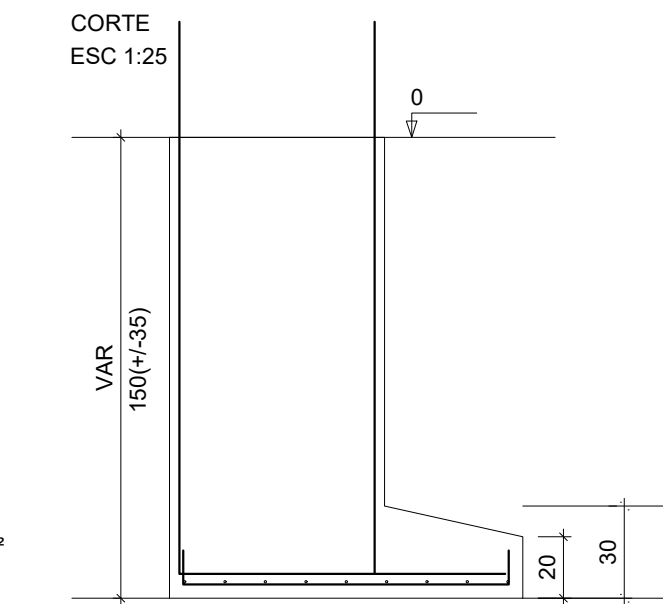
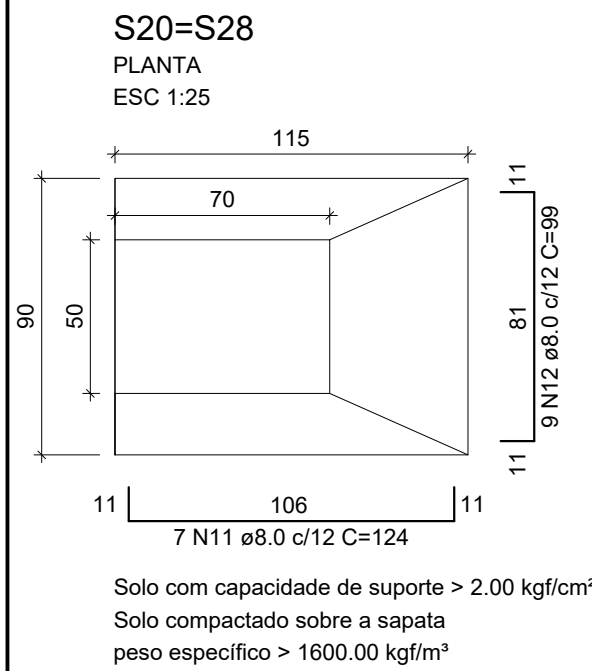


RELAÇÃO DO AÇO					
AÇO	N	DIAM (mm)	QUANT	C.UNIT (cm)	C.TOTAL (cm)
CA80	1	5.0	304	80	24320
	2	5.0	760	60	45600
	3	5.0	152	231	35112
	4	5.0	171	65	11115
CA50	5	5.0	2	285	570
	6	5.0	174	137	23838
	7	5.0	2	295	590
	8	5.0	2	277	554
	9	6.3	26	110	2860
	10	6.3	22	130	2860
	11	8.0	14	124	1736
	12	8.0	18	99	1782
	13	8.0	1	250	250
	14	8.0	4	617	2468
	15	8.0	4	99	396
	16	8.0	2	276	552
	17	8.0	1	255	255
	18	8.0	2	457	914
	19	8.0	4	72	288
	20	8.0	4	639	2556
CA60	21	8.0	2	163	326
	22	8.0	2	220	440
	23	8.0	2	583	1166
	24	8.0	4	699	2796
	25	8.0	4	260	1040
	26	8.0	2	296	592
	27	8.0	2	213	426
	28	8.0	2	262	524
	29	8.0	2	747	1494
	30	8.0	1	367	367
	31	8.0	1	357	357
	32	8.0	2	183	366
	33	8.0	2	807	1614
	34	8.0	4	262	1048
	35	8.0	4	322	1288
	36	8.0	2	83	166
PESO TOTAL (kg)	37	8.0	2	242	484
	38	8.0	2	75	150
	39	8.0	2	964	1928
	40	8.0	4	280	1120
	41	8.0	2	1032	2064
	42	8.0	2	948	1896
	43	8.0	2	354	708
	44	8.0	2	366	732
	45	10.0	72	297	21384
	46	10.0	18	VAR	VAR
RESUMO DO AÇO	47	10.0	36	VAR	VAR
	48	10.0	18	VAR	VAR

AÇO	DIAM (mm)	C.TOTAL (m)	PESO + 10% (kg)
CA50	6.3	57.2	15.4
	8.0	342.5	148.7
CA60	5.0	1417	240.2
PESO TOTAL (kg)			
CA50	428.1		
CA60	240.2		

Volume de concreto (C-25) = 12.15 m³
Área de forma = 101.39 m²

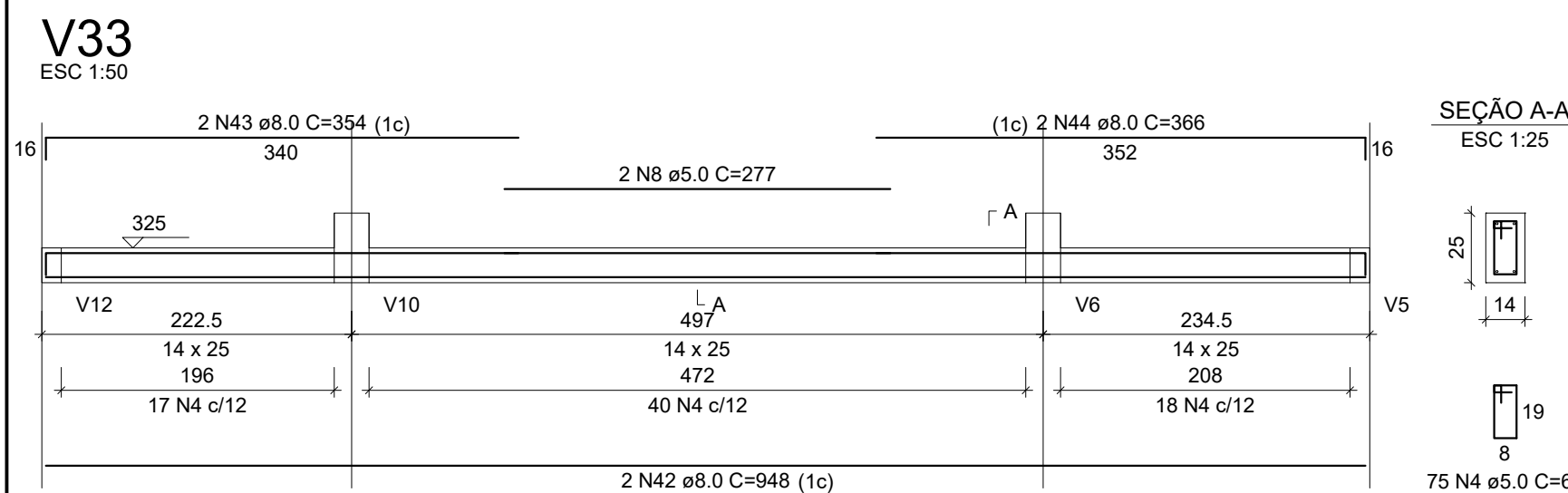
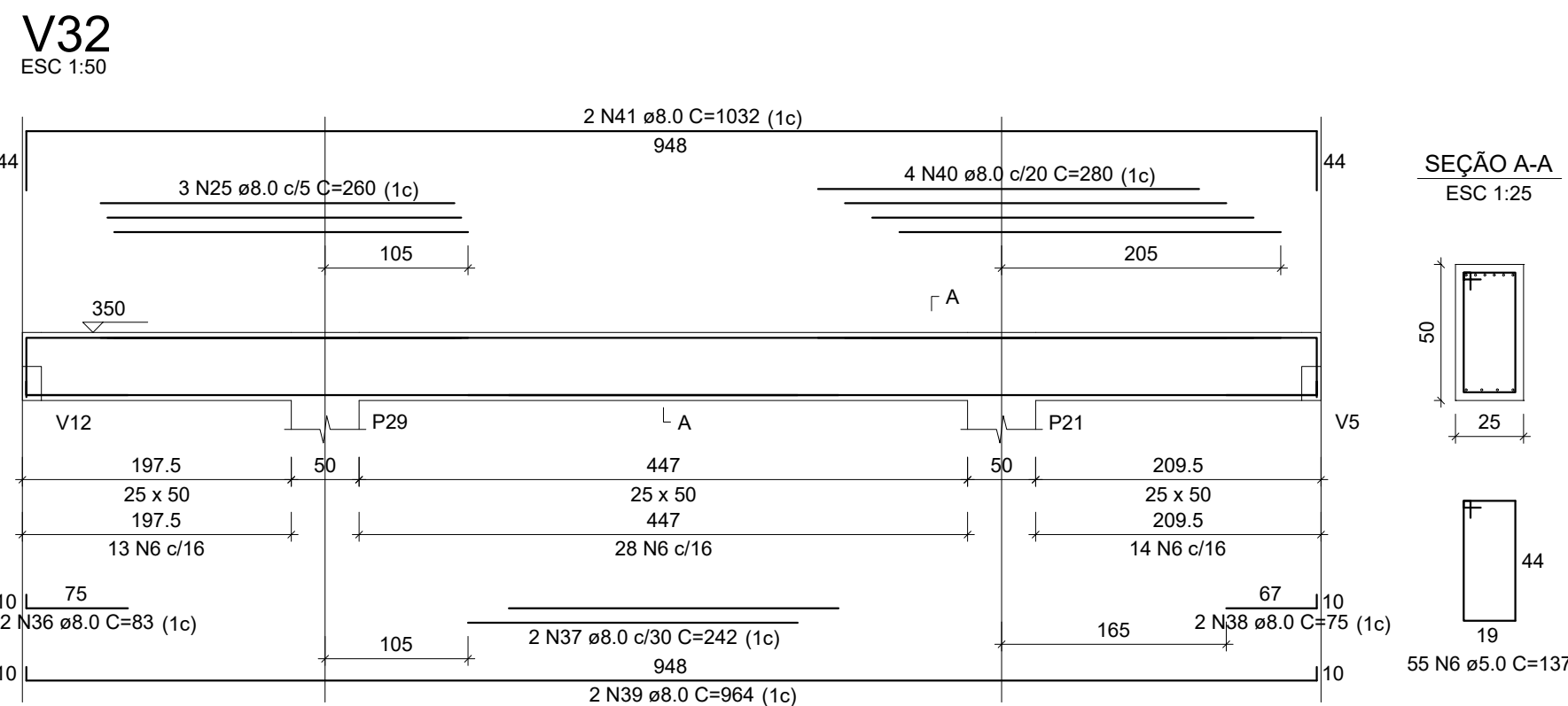
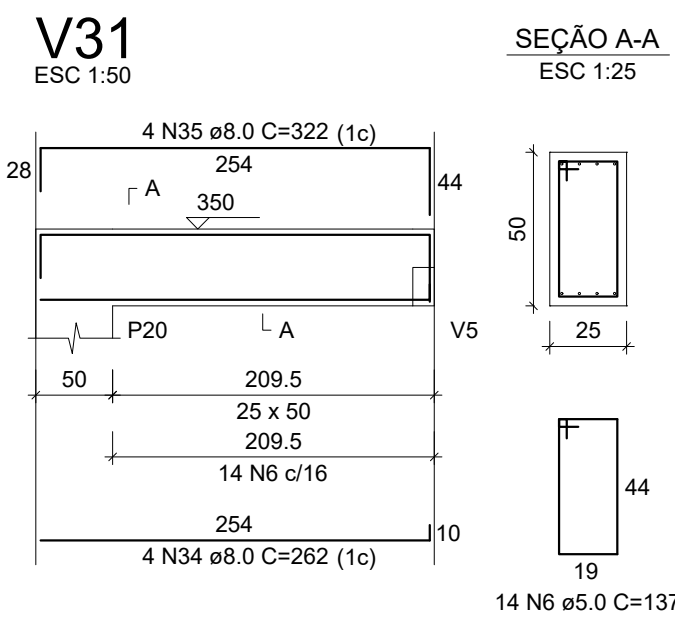
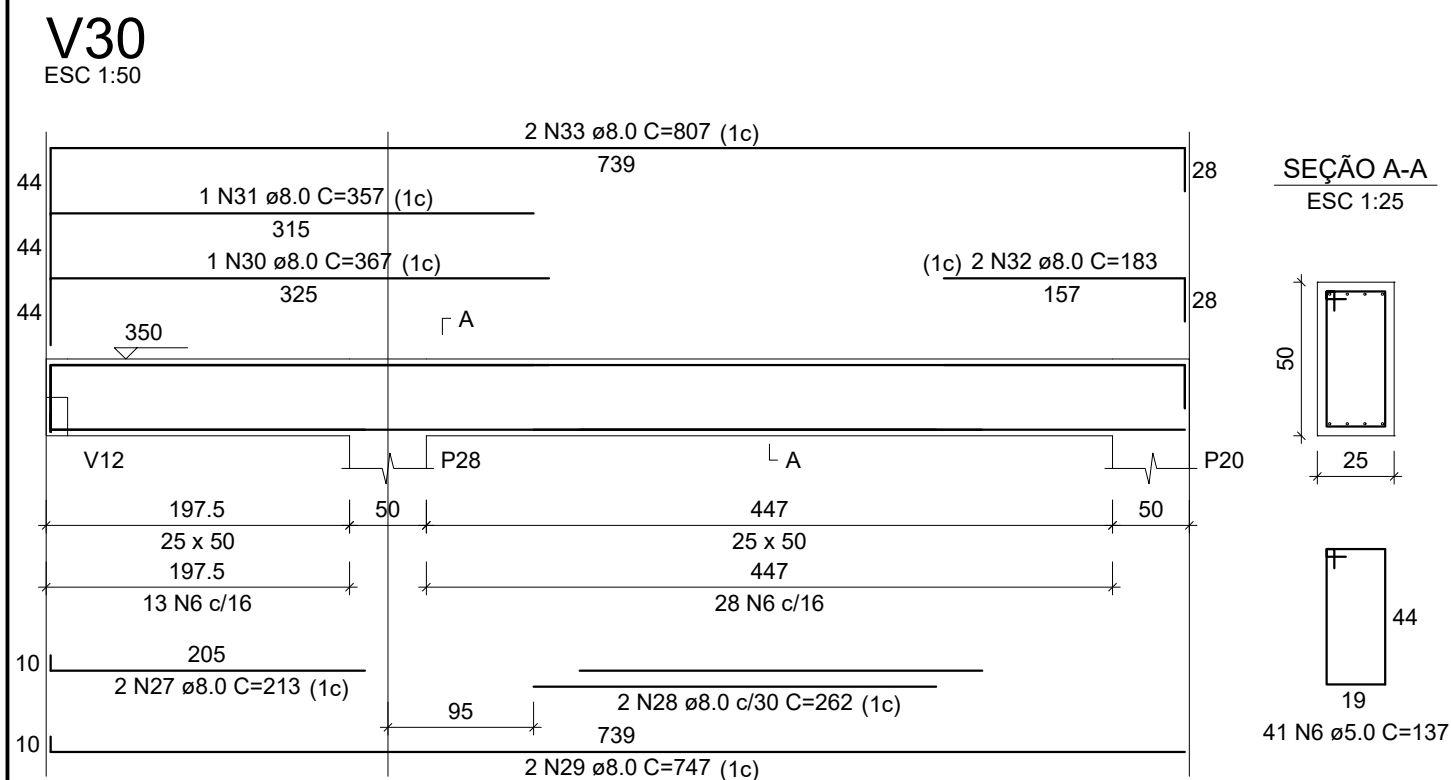
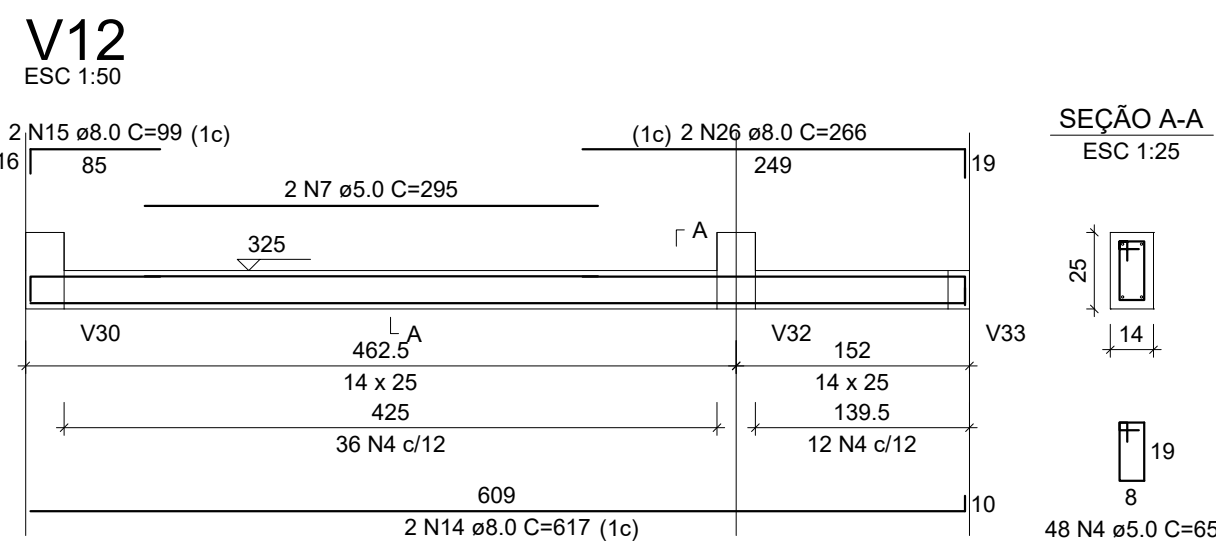
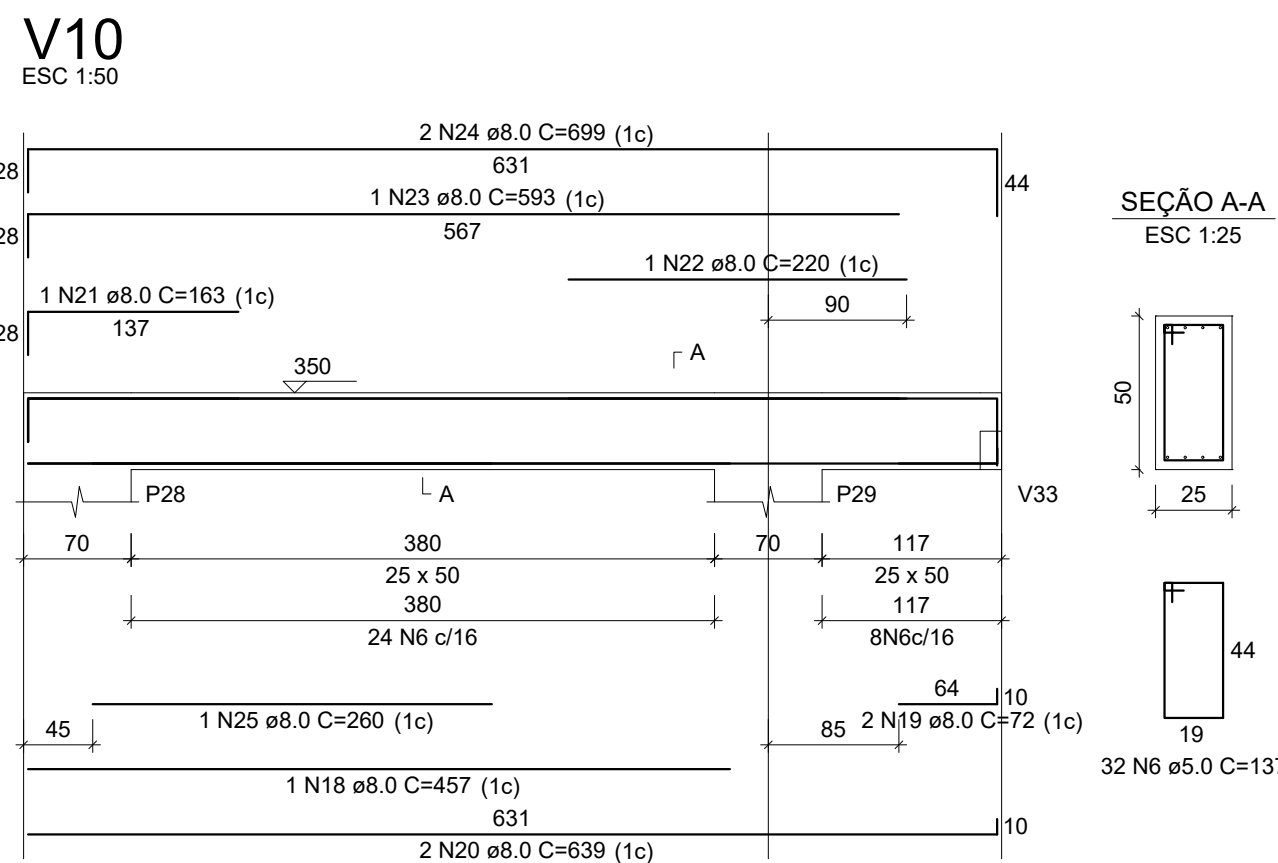
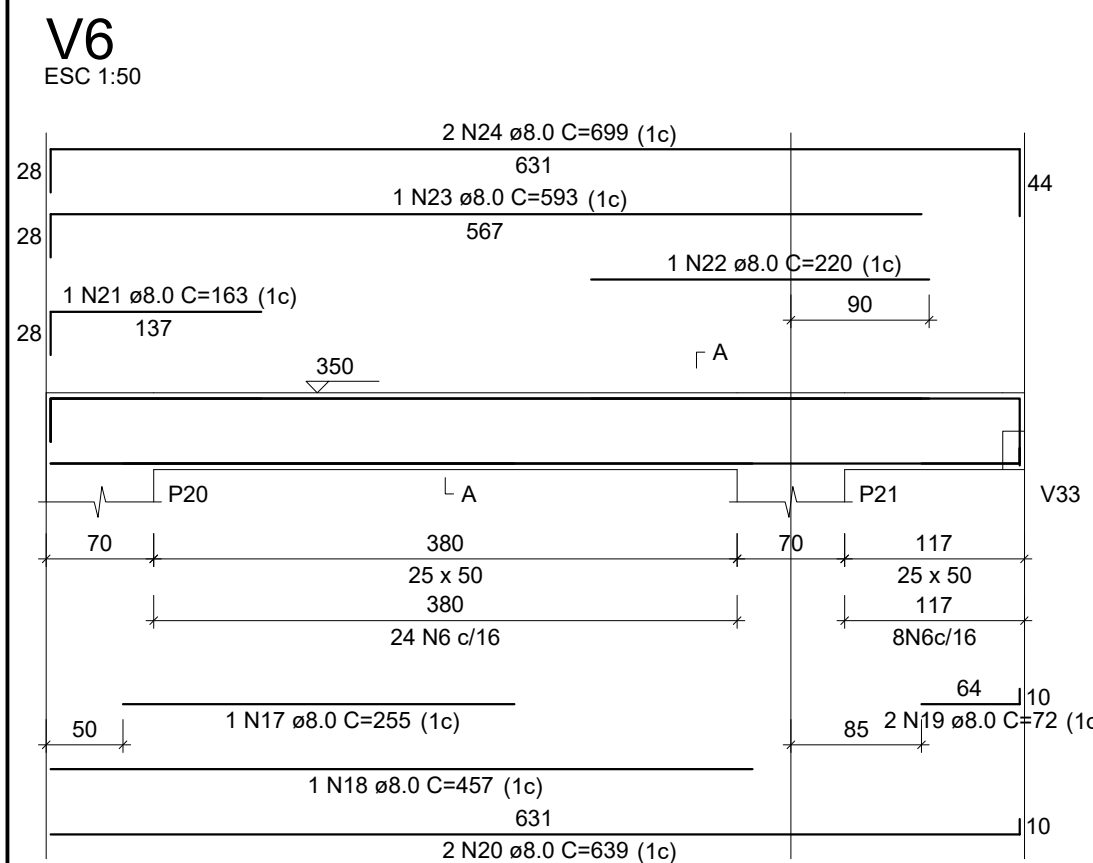
PROJETO ESTRUTURAL FACHADA			
LOCAL: Rod. MG 202 nº 1165 - Bairro Vale Verde I - CEP: 39.330-000 - Brasília de Minas-MG			
RESPONSÁVEL TÉCNICO:		CISNORTE	
MATHEUS PINHEIRO FELIX		Welson Gonçalves da Silva	
MATHEUS PINHEIRO FELIX		Presidente	
DATA: 04/2025		ESCALA: INDICADAS	



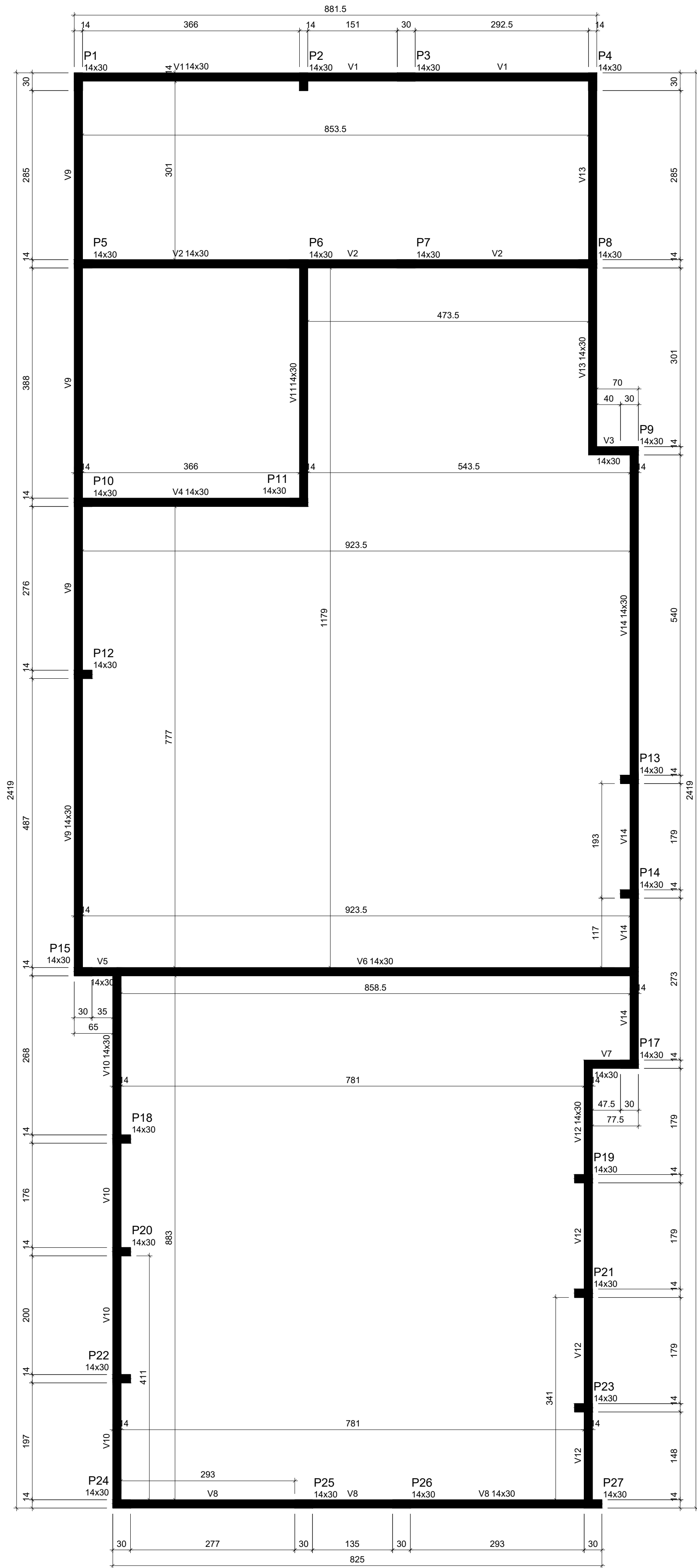
RELAÇÃO DO AÇO					
AÇO	N	DIAM (mm)	QUANT	C.UNIT (cm)	C.TOTAL (cm)
CA60	1	5.0	304	80	24320
	2	5.0	760	60	45600
	3	5.0	152	231	35112
	4	5.0	171	65	11115
	5	5.0	2	285	570
	6	5.0	174	137	23838
	7	5.0	2	295	590
	8	5.0	2	277	554
	9	6.3	26	110	2860
	10	6.3	22	130	2860
CA50	11	8.0	14	124	1736
	12	8.0	18	99	1782
	13	8.0	1	250	250
	14	8.0	4	617	2468
	15	8.0	4	99	396
	16	8.0	2	276	552
	17	8.0	1	255	255
	18	8.0	2	457	914
	19	8.0	4	72	288
	20	8.0	4	639	2556
	21	8.0	2	163	326
	22	8.0	2	220	440
	23	8.0	2	593	1186
	24	8.0	4	699	2796
	25	8.0	4	260	1040
	26	8.0	2	266	532
	27	8.0	2	213	426
	28	8.0	2	262	524
CA60	29	8.0	2	747	1494
	30	8.0	1	367	367
	31	8.0	1	357	357
	32	8.0	2	183	366
	33	8.0	2	807	1614
	34	8.0	4	262	1048
	35	8.0	4	322	1288
	36	8.0	2	83	166
	37	8.0	2	242	484
	38	8.0	2	75	150
	39	8.0	2	964	1928
	40	8.0	4	280	1120
	41	8.0	2	1032	2064
	42	8.0	2	948	1896
	43	8.0	2	354	708
	44	8.0	2	366	732
	45	10.0	72	207	21384
	46	10.0	18	VAR	VAR
	47	10.0	36	VAR	VAR
	48	10.0	18	VAR	VAR

RESUMO DO AÇO			
AÇO	DIAM (mm)	C.TOTAL (m)	PESO + 10% (kg)
CA50	6.3	57.2	15.4
	8.0	342.5	148.7
	10.0	389.3	264
CA60	5.0	1417	240.2
PESO TOTAL (kg)			
CA50		428.1	
CA60		240.2	

Volume de concreto (C-25) = 12.15 m³
Área de forma = 101.39 m²



PROJETO ESTRUTURAL FACHADA		
LOCAL: Rod. MG 202 nº 1165 - Bairro Vale Verde I - CEP: 39.330-000 - Brasília de Minas-MG		
RESPONSÁVEL TÉCNICO: MATHEUS PINHEIRO FELIX ING. CIVIL - CREA-MG 199-643/D		CISNORTE Controladora e Empreendedoras de São Paulo de Minas CNPJ: 06.850.208/0001-44 Welson Gonçalves da Silva Presidente
	DATA: 04/2025	ESCALA: INDICADAS



Vigas			
Nome	Seção (cm)	Elevação (cm)	Nível (cm)
V1	14x30	0	600
V2	14x30	0	600
V3	14x30	0	600
V4	14x30	0	600
V5	14x30	0	600
V6	14x30	0	600
V7	14x30	0	600
V8	14x30	0	600
V9	14x30	0	600
V10	14x30	0	600
V11	14x30	0	600
V12	14x30	0	600
V13	14x30	0	600
V14	14x30	0	600

Características dos materiais	
fck	Ecs
(kgf/cm²)	(kgf/cm²)
250	241500

Dimensão máxima do agregado = 19 mm

Pilares			
Nome	Seção (cm)	Elevação (cm)	Nível (cm)
P1	14x30	0	600
P2	14x30	0	600
P3	14x30	0	600
P4	14x30	0	600
P5	14x30	0	600
P6	14x30	0	600
P7	14x30	0	600
P8	14x30	0	600
P9	14x30	0	600
P10	14x30	0	600
P11	14x30	0	600
P12	14x30	0	600
P13	14x30	0	600
P14	14x30	0	600
P15	14x30	0	600
P17	14x30	0	600
P18	14x30	0	600
P19	14x30	0	600
P20	14x30	0	600
P21	14x30	0	600
P22	14x30	0	600
P23	14x30	0	600
P24	14x30	0	600
P25	14x30	0	600
P26	14x30	0	600
P27	14x30	0	600

Legenda dos pilares	
<div></div>	Pilar que morre

Legenda das vigas e paredes	
<div></div>	Viga

Forma do pavimento NIVEL 3 (Nível 600)

escala 1:50

PROJETO ESTRUTURAL
PAVIMENTO 02

LOCAL: Rod. MG 202 nº 1165 - Bairro Vale Verde I -CEP: 39.330-000 - Brasília de Minas-MG

RESPONSÁVEL TÉCNICO:

MATHEUS PINHEIRO FELIX
Engenheiro Civil
CREA-MG 199-04330

CISNORTE

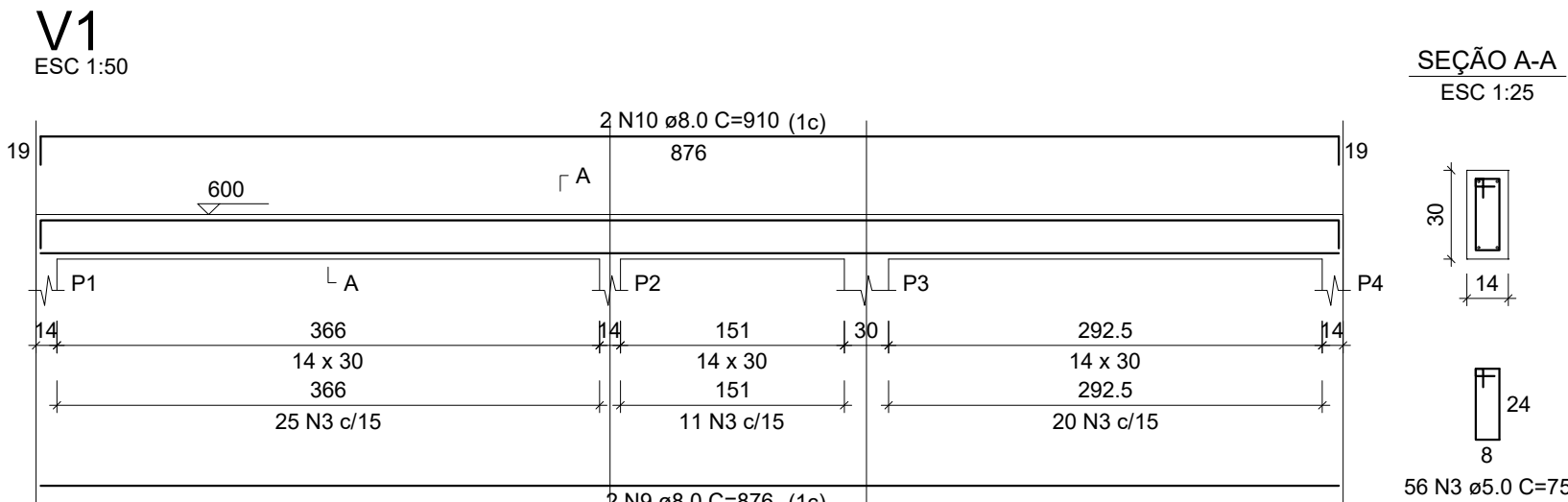
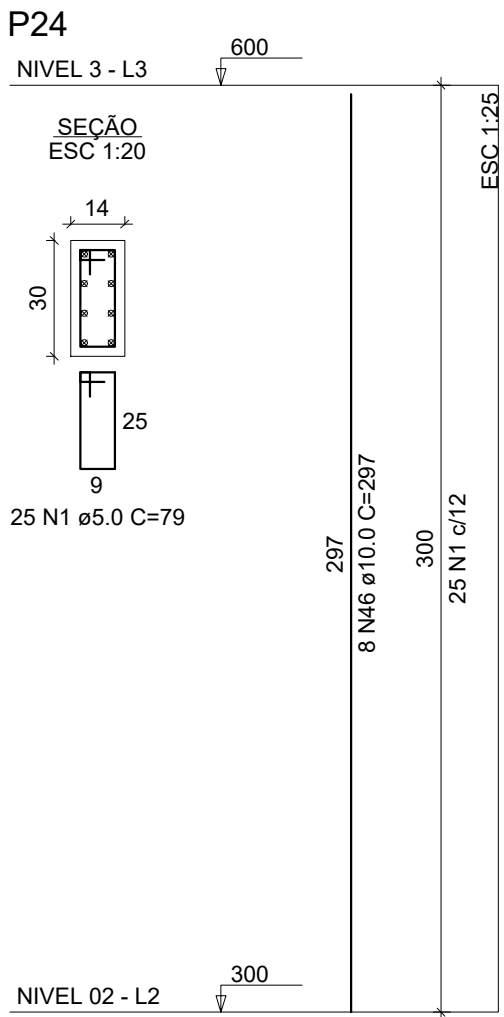
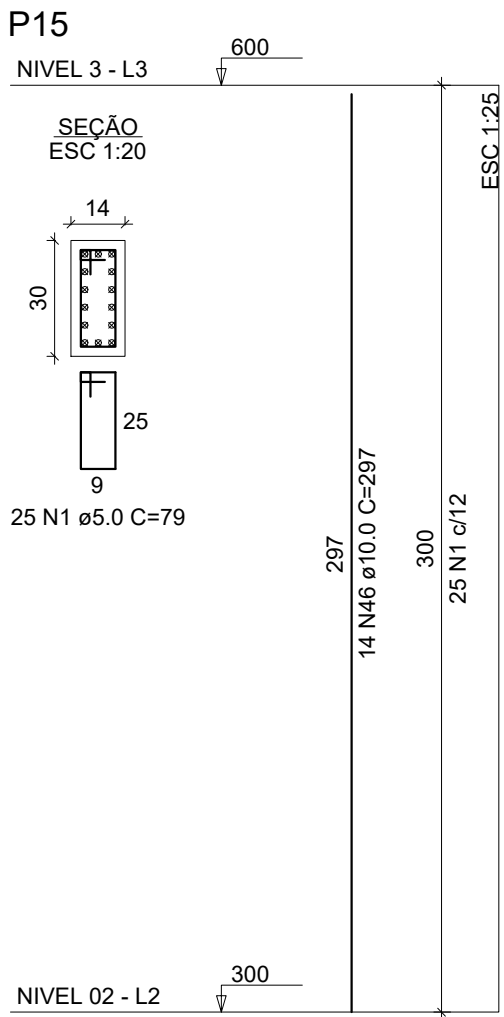
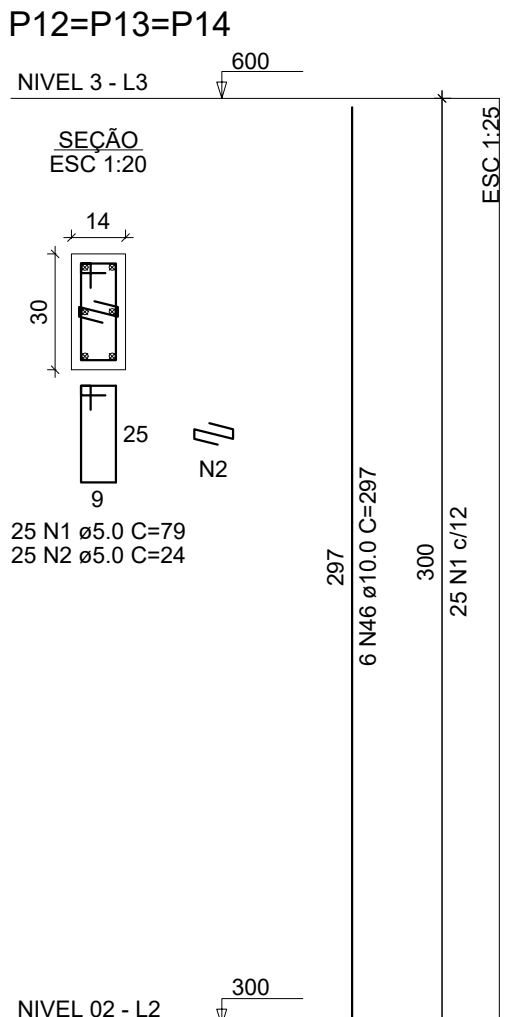
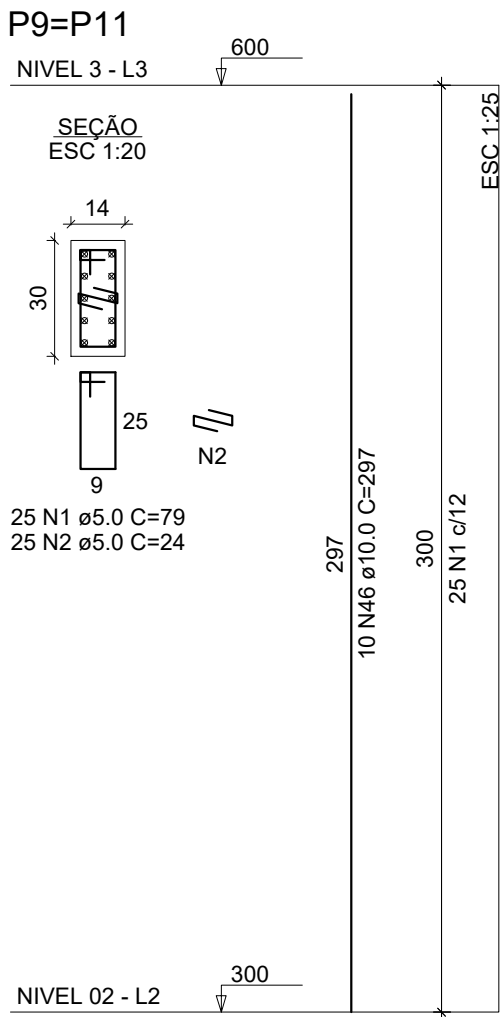
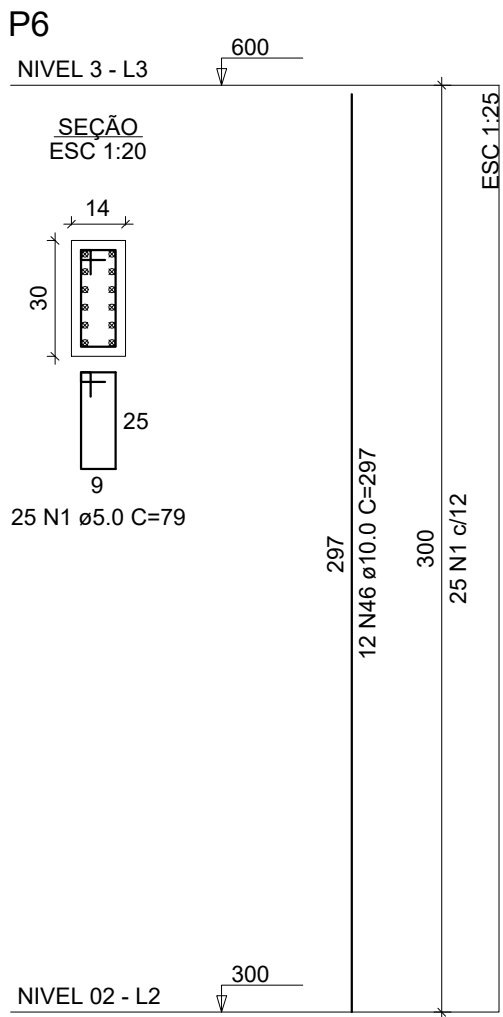
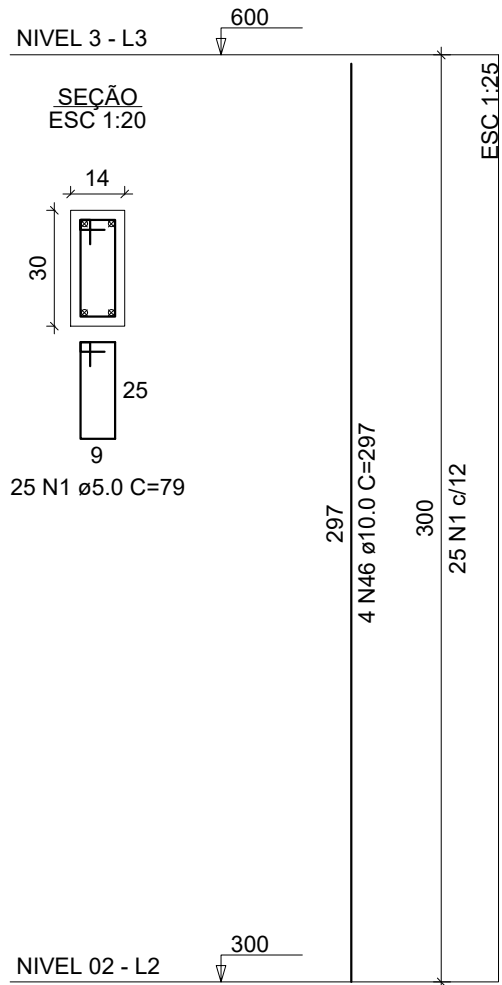
Consultoria e Engenharia de Projetos de Obras e Obras
CNPJ: 08.988.310/0001-44

Welson Gonçalves da Silva
Presidente

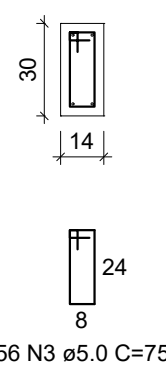
DATA: 04/2025

ESCALA:
INDICADAS

P1=P2=P3=P4=P5=P7=
=P8=P10=P16=P17=
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SEÇÃO A-A
ESC 1:25



RELAÇÃO DO AÇO

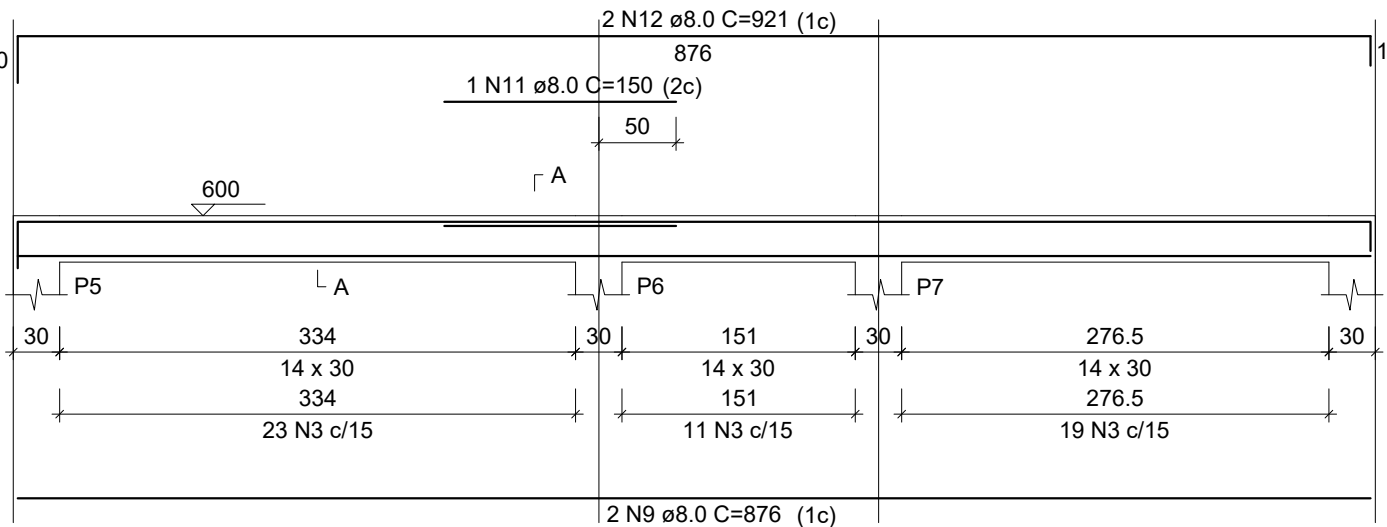
AÇO	N	DIAM (mm)	QUANT	C.UNIT (cm)	C.TOTAL (cm)
CA60	1	5.0	625	79	49375
	2	5.0	125	24	3000
	3	5.0	539	75	40425
	4	5.0	2	280	560
	5	5.0	2	623	1246
	6	5.0	2	223	446
	7	5.0	2	266	532
	8	5.0	2	672	1344
CA50	9	8.0	4	876	3504
	10	8.0	2	910	1820
	11	8.0	1	150	150
	12	8.0	1	921	1842
	13	8.0	6	81	486
	14	8.0	2	86	172
	15	8.0	2	121	242
	16	8.0	2	388	776
	17	8.0	1	424	424
	18	8.0	2	430	860
	19	8.0	2	81	162
	20	8.0	1	443	443
	21	8.0	2	881	1762
	22	8.0	1	108	108
	23	8.0	2	216	432
	24	8.0	2	101	202
	25	8.0	2	94	188
	26	8.0	2	125	250
	27	8.0	2	819	1638
	28	8.0	1	185	185
	29	8.0	2	491	982
	30	8.0	1	160	160
	31	8.0	2	163	326
	32	8.0	2	798	1596
	33	8.0	2	322	644
	34	8.0	2	126	252
	35	8.0	1	862	862
	36	8.0	2	1183	2366
	37	8.0	2	913	1826
	38	8.0	2	939	1878
	39	8.0	2	905	1810
	40	8.0	2	212	424
	41	8.0	2	202	404
	42	8.0	2	426	852
	43	8.0	2	464	928
	44	8.0	2	323	646
	45	8.0	2	357	714
	46	10.0	140	297	41580
	47	10.0	2	407	814
	48	10.0	2	121	242
	49	10.0	2	124	248
	50	10.0	2	408	816

RESUMO DO AÇO

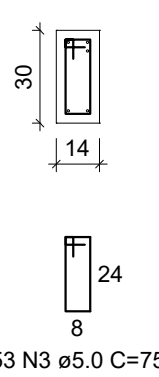
AÇO	DIAM (mm)	C.TOTAL (m)	PESO + 10% (kg)
CA50	8.0	323.2	140.3
CA60	10.0	437	296.4
PESO TOTAL (kg)		969.3	164.3
CA50	436.6		
CA60	164.3		

Volume de concreto (C-25) = 6.76 m³
Área de forma = 129.68 m²

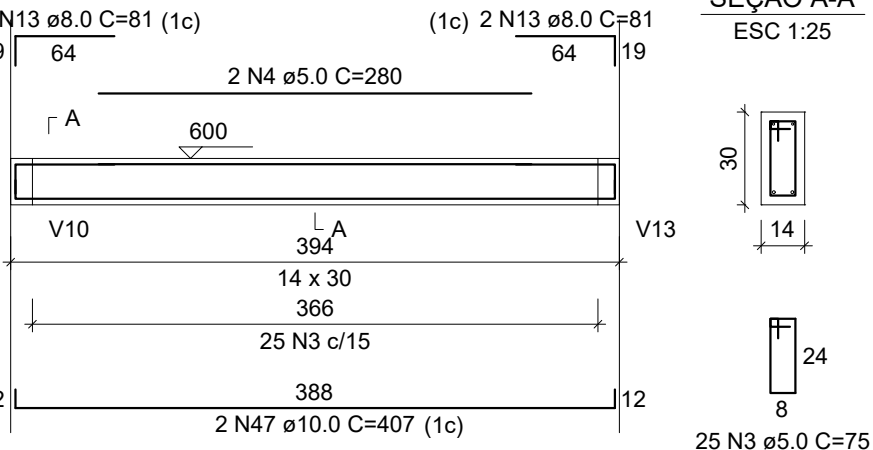
V2
ESC 1:50



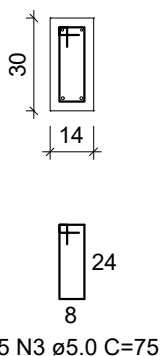
SEÇÃO A-A
ESC 1:25



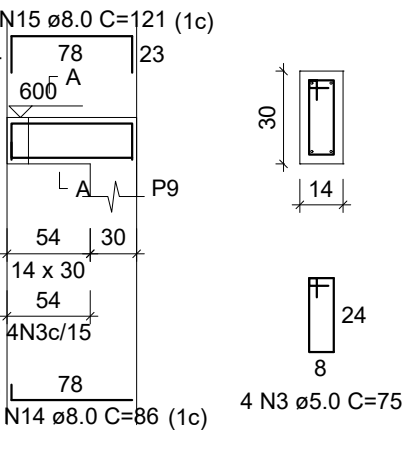
V3
ESC 1:50



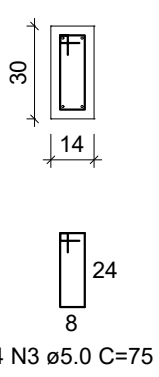
SEÇÃO A-A
ESC 1:25



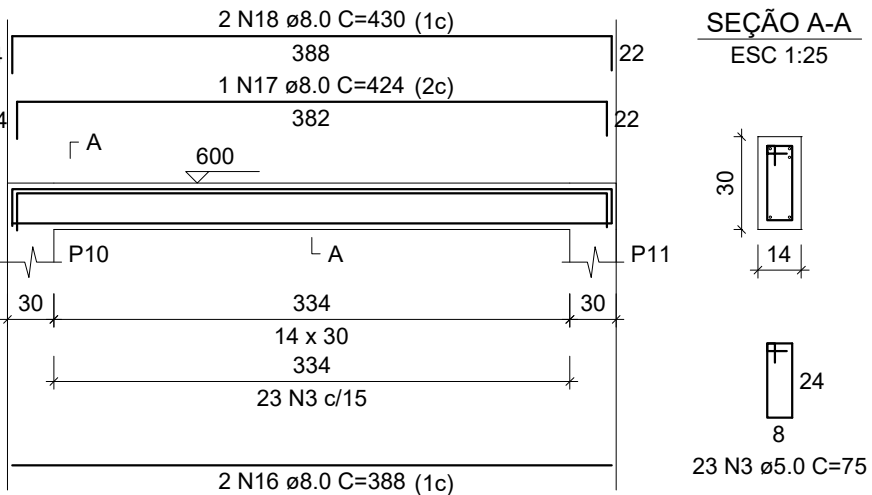
V4
ESC 1:50



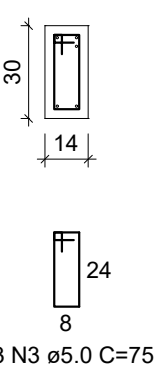
SEÇÃO A-A
ESC 1:25



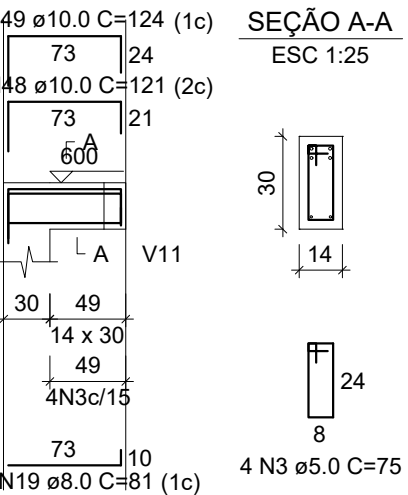
V5
ESC 1:50



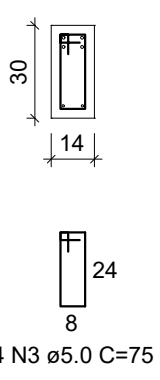
SEÇÃO A-A
ESC 1:25



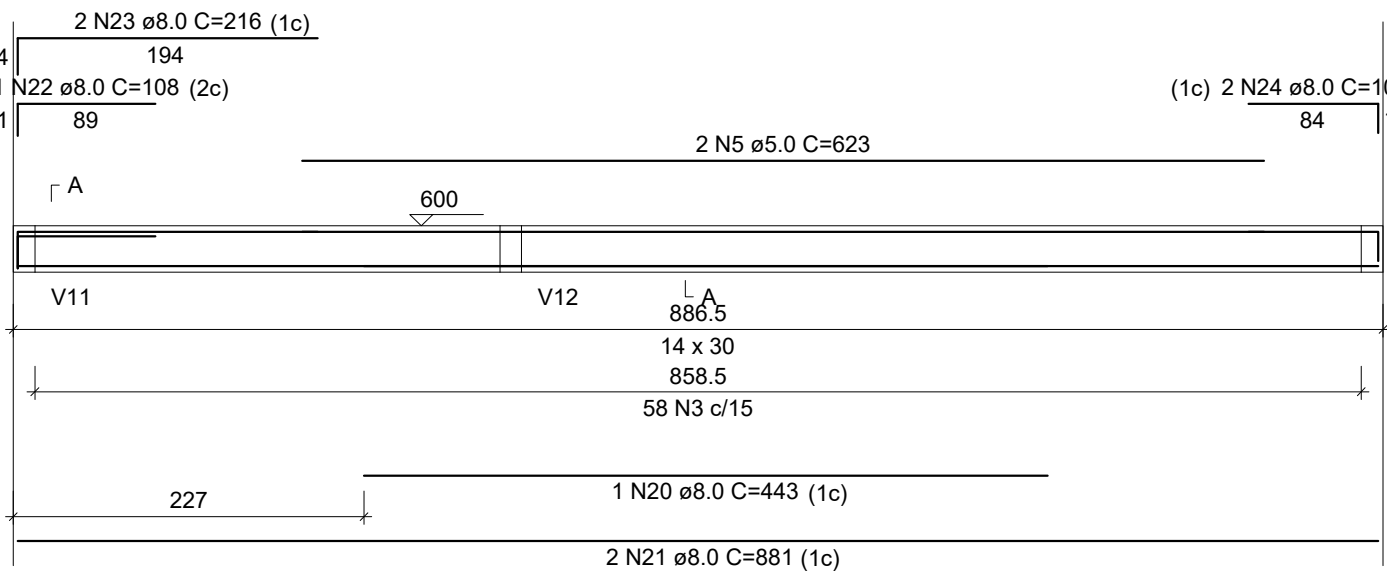
V6
ESC 1:50



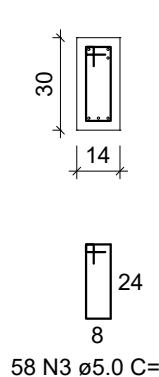
SEÇÃO A-A
ESC 1:25



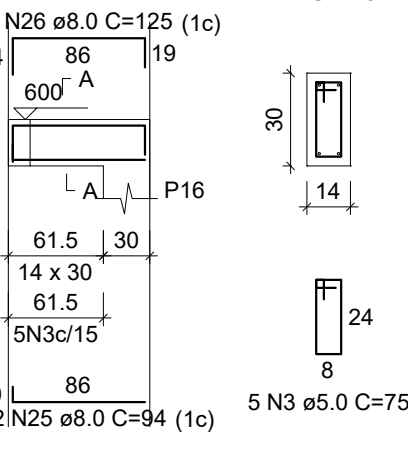
V7
ESC 1:50



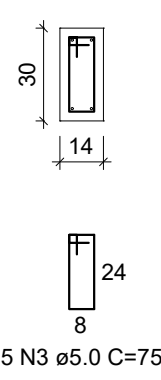
SEÇÃO A-A
ESC 1:25



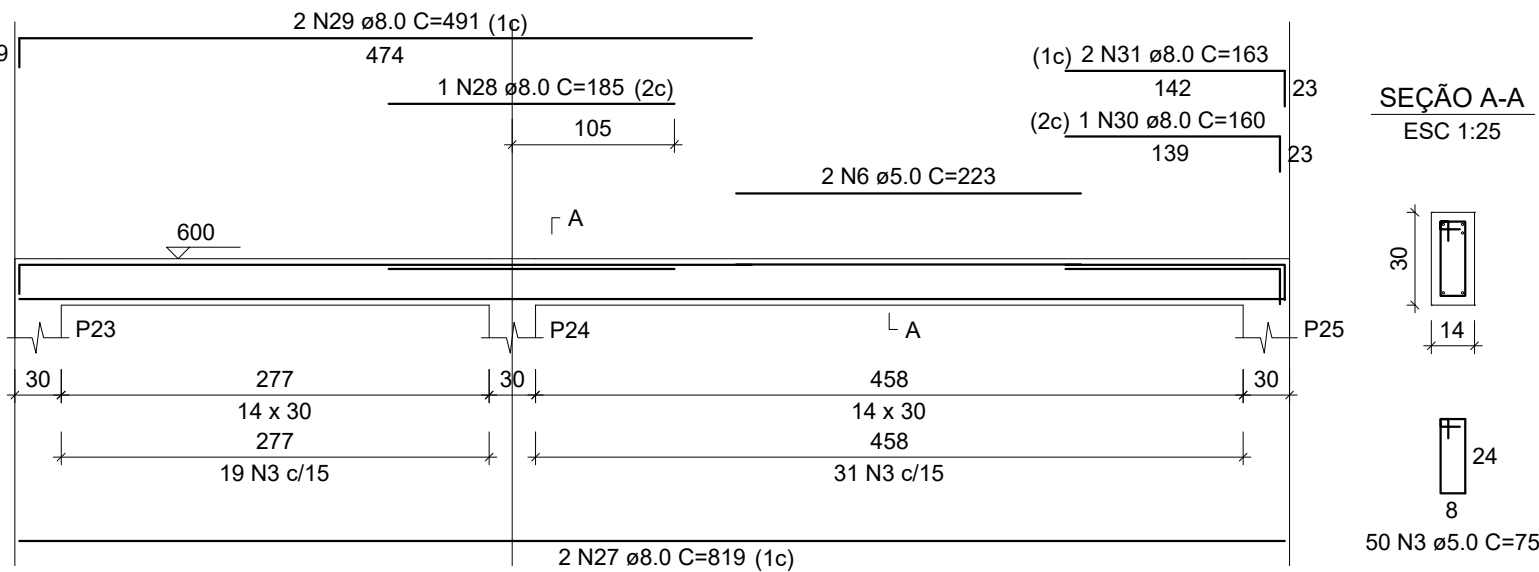
V8
ESC 1:50



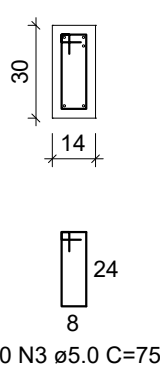
SEÇÃO A-A
ESC 1:25



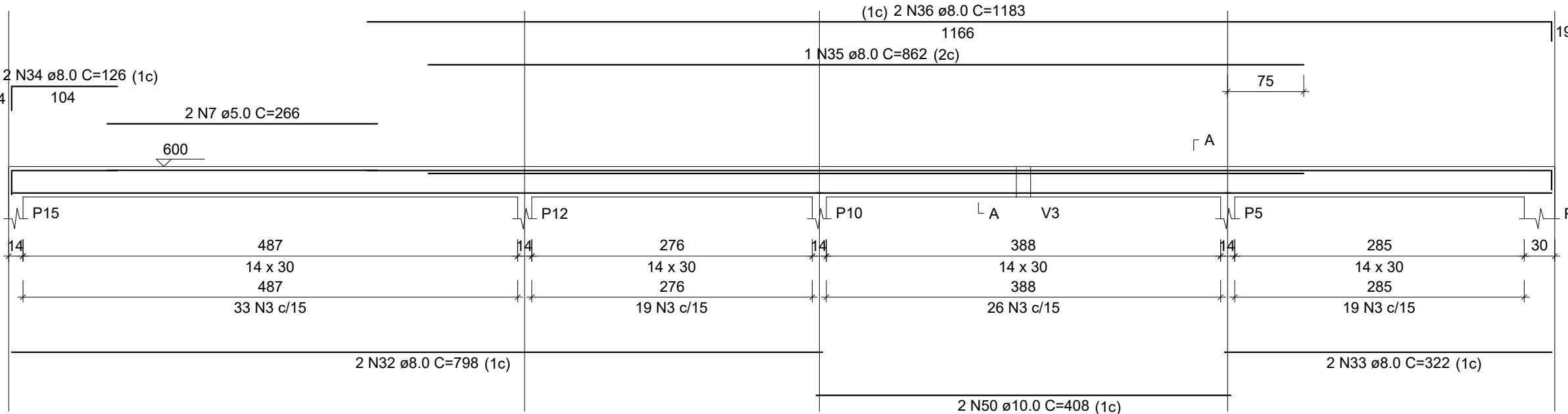
V9
ESC 1:50



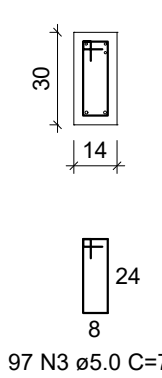
SEÇÃO A-A
ESC 1:25



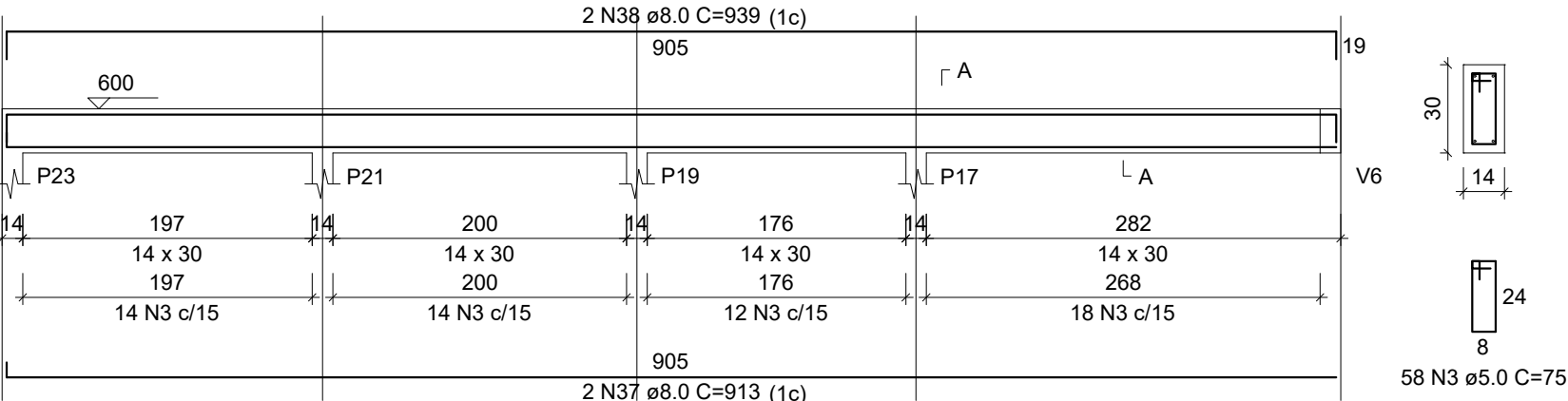
V10
ESC 1:50



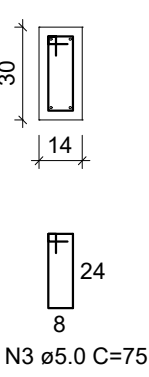
SEÇÃO A-A
ESC 1:25



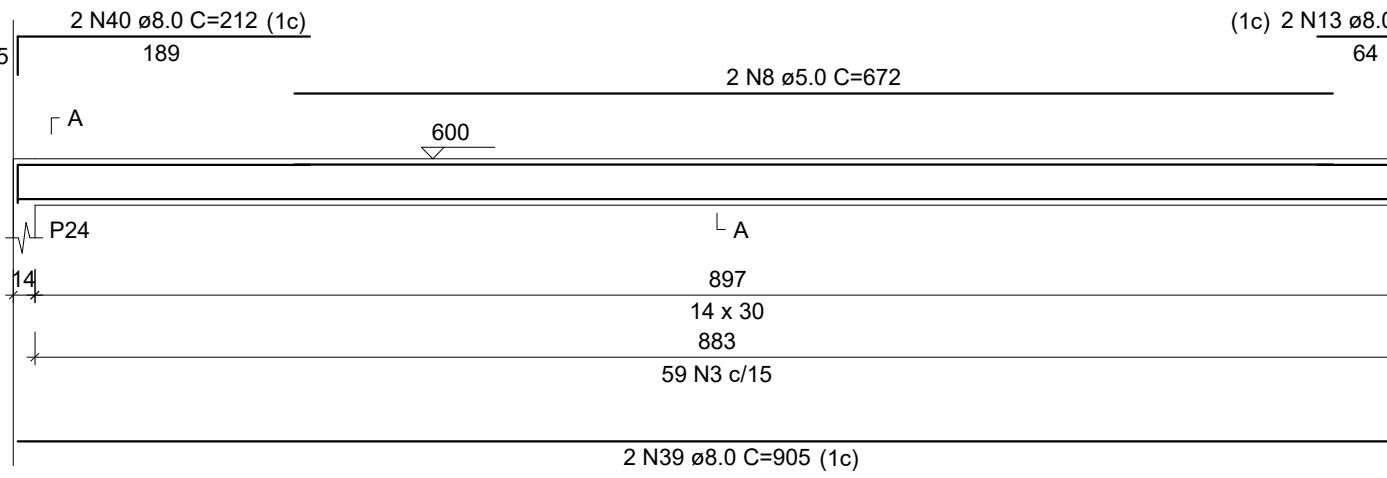
V11
ESC 1:50



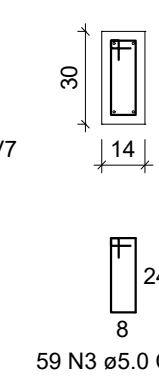
SEÇÃO A-A
ESC 1:25



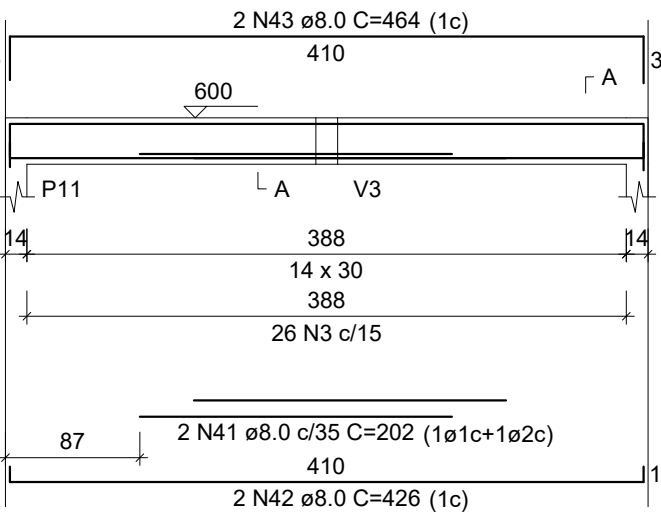
V12
ESC 1:50



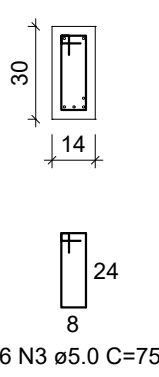
SEÇÃO A-A
ESC 1:25



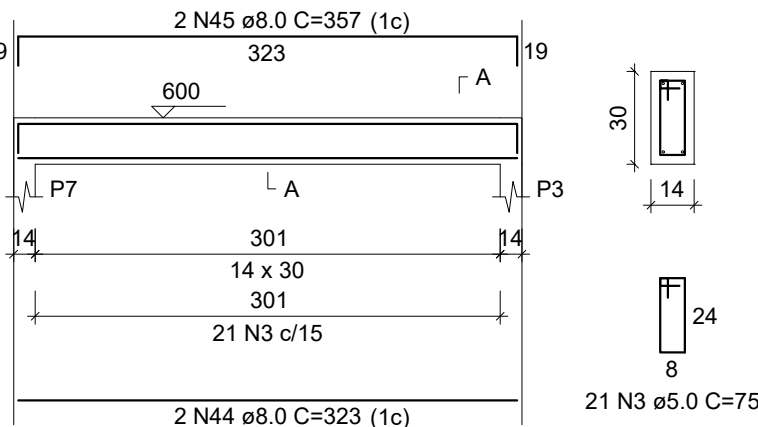
V13
ESC 1:50



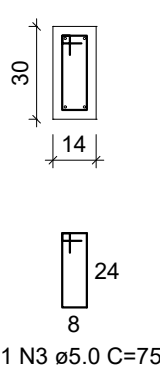
SEÇÃO A-A
ESC 1:25



V14
ESC 1:50



SEÇÃO A-A
ESC 1:25



PROJETO ESTRUTURAL NIVEL 02

LOCAL: Rod. MG 202 nº 1165 - Bairro Vale Verde I -CEP: 39.330-000 - Brasília de Minas-MG

RESPONSÁVEL TÉCNICO:

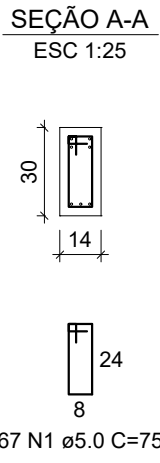
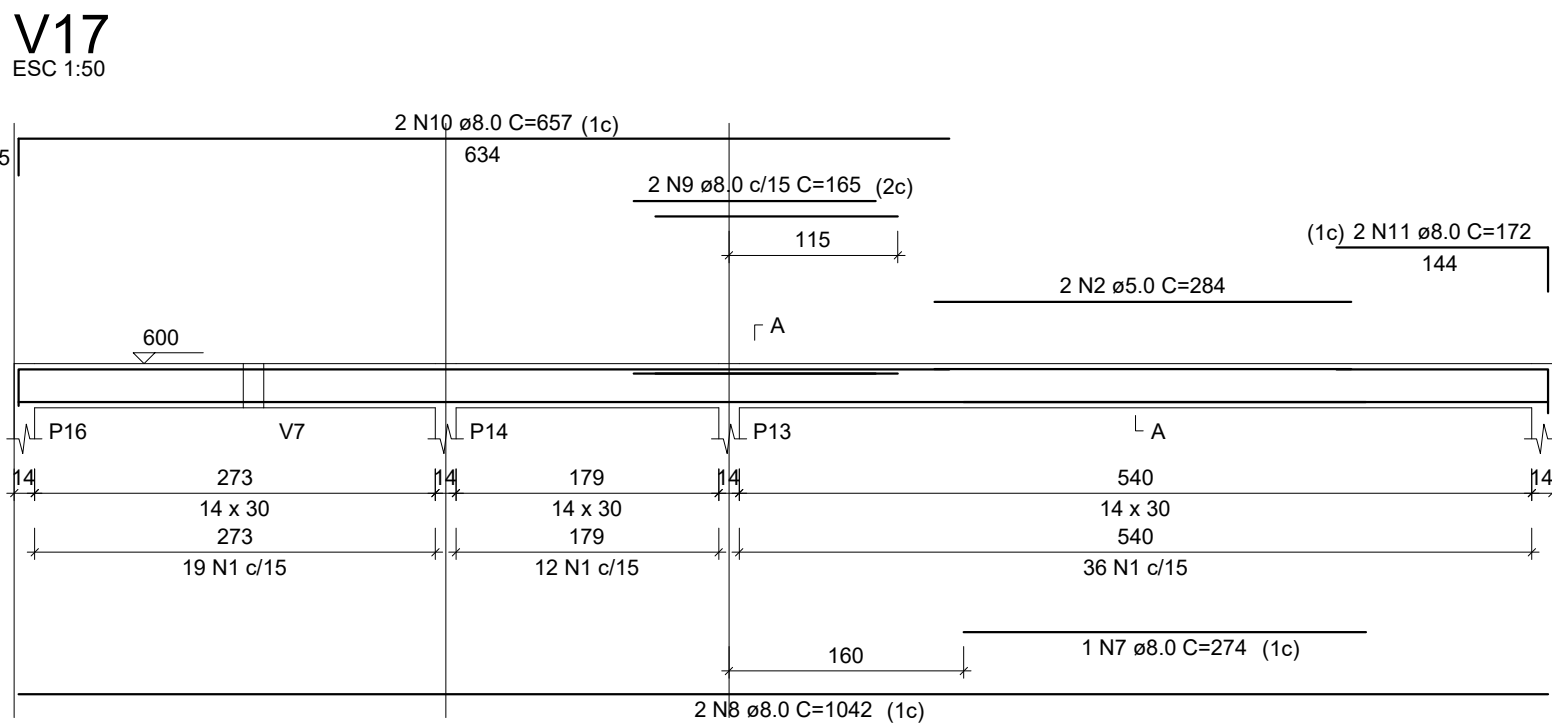
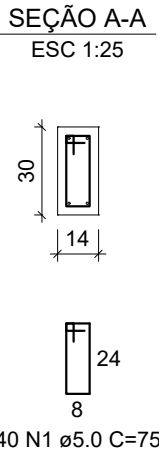
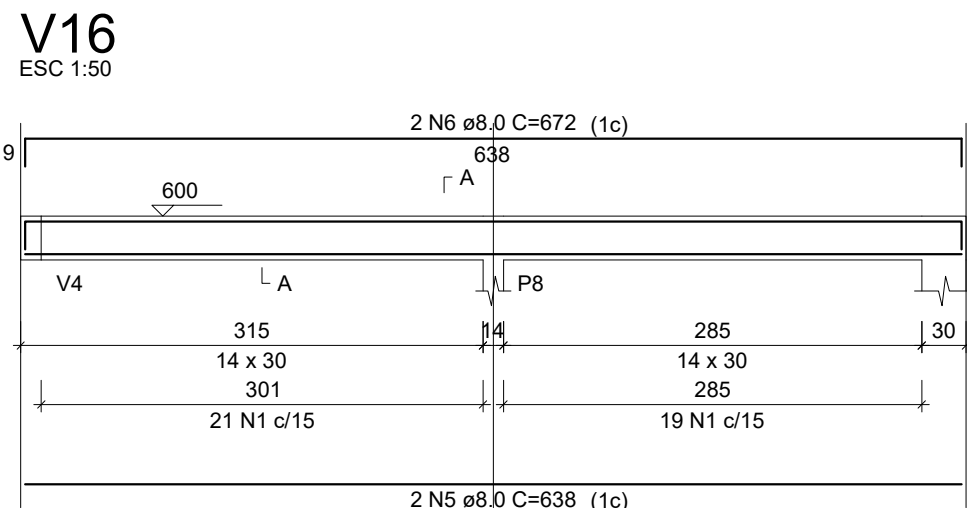
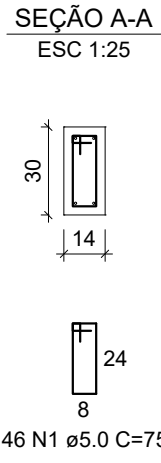
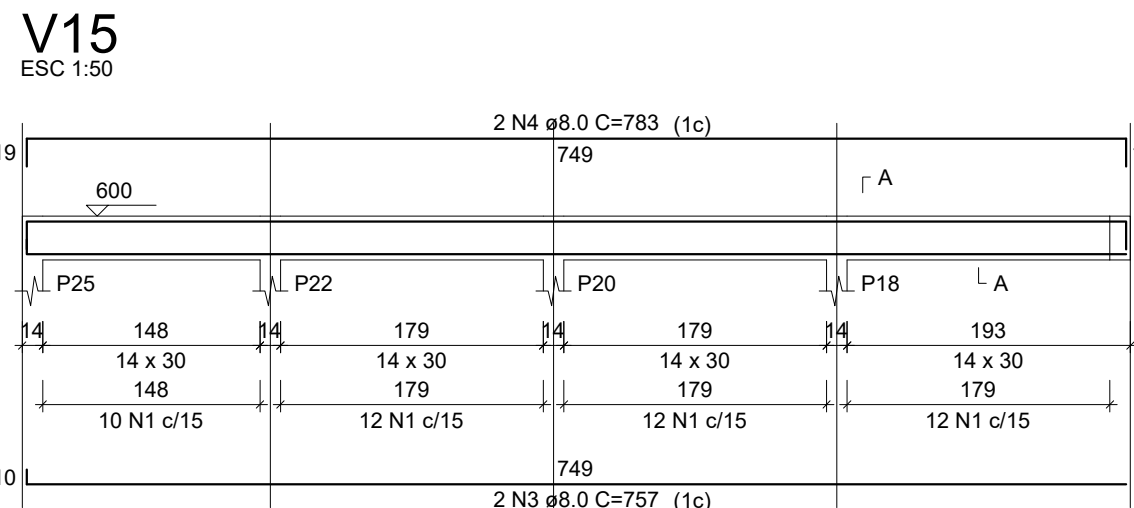
MATHEUS PINHEIRO FELIX
MATHEUS PINHEIRO FELIX
ENS. CIVIL CREA-MG 189-643/D

CISNORTE

Welson Gonçalves da Silva
Presidente

DATA: 04/2025

ESCALA:
INDICADAS



RELAÇÃO DO AÇO					
	V15	V16	V17		
AÇO	N	DIAM (mm)	QUANT	C.UNIT (cm)	C.TOTAL (cm)
CA60	1	5.0	153	75	11475
	2	5.0	2	294	588
	3	8.0	2	757	1514
	4	8.0	2	783	1566
	5	8.0	2	638	1276
	6	8.0	2	672	1344
	7	8.0	1	274	274
	8	8.0	2	1042	2084
	9	8.0	2	165	330
	10	8.0	2	657	1314
	11	8.0	2	172	344

RESUMO DO AÇO			
AÇO	DIAM (mm)	C.TOTAL (m)	PESO + 10% (kg)
CA50	8.0	100.5	43.6
CA60	5.0	120.4	20.4
PESO TOTAL (kg)			
CA50		43.6	
CA60		20.4	

Volume de concreto (C-25) = 2.00 m³
Área de forma = 18.11 m²

Armação positiva das lajes do pavimento NIVEL 3 (Eixo Y)

escala 1:50

Planta de vigotas pré-moldadas

escala 1:50

PROJETO ESTRUTURAL NIVEL 02		
LOCAL: Rod. MG 202 nº 1165 - Bairro Vale Verde I -CEP: 39.330-000 - Brasília de Minas-MG		
RESPONSÁVEL TÉCNICO:		CISNORTE
MATHEUS PINHEIRO FELIX MATHEUS PINHEIRO FELIX ENG. CIVIL - CREA-MG 199-04310		Presidente
	DATA: 04/2025	ESCALA: INDICADAS