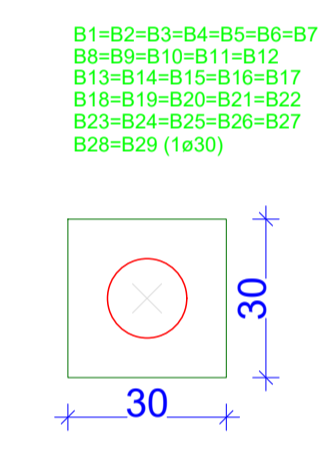




Planta de localização
escala 1:50

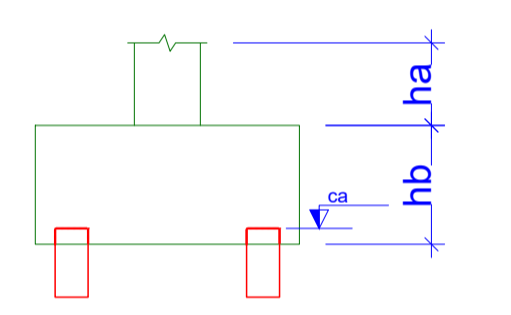
Localização no eixo X		Localização no eixo Y	
Coordenadas (cm)	Nome	Coordenadas (cm)	Nome
179.00	P1, P24	1324.85	P1, P2, P3, P4, P5, P6, P7
184.00	P18	1119.85	P8
628.95	P2, P13	1059.60	P10, P11, P12
630.45	P25	1054.60	P9
633.95	P19	834.85	P16, P17
754.20	P3, P8	799.85	P14, P15
989.15	P26	769.90	P13
989.20	P20	769.85	P18
1104.15	P4	659.90	P19
1109.40	P9	659.85	P21
1379.15	P21	654.85	P20
1382.65	P27	594.85	P22, P23
1384.15	P14	164.85	P24, P25, P26, P27, P28
1574.40	P5, P10	159.85	P29
1834.15	P15, P28		
1839.15	P22		
2044.35	P6, P11		
2104.35	P16		
2274.35	P3, P29		
2279.35	P7, P12, P17		

Nome	Seção (cm)	X (cm)	Y (cm)	Carga Máx. (tf)	Carga Min. (tf)	Mx (kgf.m)	My (kgf.m)	Fx (tf)	Fy (tf)	Fundação		Bloco				
										Lado B (cm)	Lado H (cm)	h0 / ha (cm)	h1 / hb (cm)	ne	de	ca
P1	15x25	179.00	1324.85	6.7	5.8	0	0	0.2	0.3	60	60	0	55	1	30	-40
P2	15x25	628.95	1324.85	5.8	4.7	0	0	0.3	0.4	60	60	0	55	1	30	-40
P3	15x25	754.20	1324.85	3.5	1.6	0	0	0.1	0.2	60	60	0	55	1	30	-40
P4	15x25	1104.15	1324.85	6.5	5.2	0	0	0.2	0.3	60	60	0	55	1	30	-40
P5	15x25	1574.40	1324.85	6.8	5.3	0	0	0.1	0.2	60	60	0	55	1	30	-40
P6	15x25	2044.35	1324.85	5.4	4.1	0	0	0.2	0.2	60	60	0	55	1	30	-40
P7	15x25	2279.35	1324.85	2.9	2.0	0	0	0.1	0.2	60	60	0	55	1	30	-40
P8	15x25	754.20	1119.85	2.7	1.0	0	0	0.2	0.3	60	60	0	55	1	30	-40
P9	15x25	1109.40	1054.60	4.5	3.3	0	0	0.4	0.4	60	60	0	55	1	30	-40
P10	15x25	1574.40	1059.60	7.8	6.0	0	0	0.2	0.2	60	60	0	55	1	30	-40
P11	15x25	2044.35	1059.60	4.3	3.0	0	0	0.3	0.2	60	60	0	55	1	30	-40
P12	15x25	2279.35	1059.60	3.5	2.8	0	0	0.2	0.4	60	60	0	55	1	30	-40
P13	15x25	628.95	769.90	12.4	9.6	0	0	0.3	0.6	60	60	0	55	1	30	-40
P14	15x25	1384.15	799.85	6.0	3.6	0	0	0.2	0.3	60	60	0	55	1	30	-40
P15	15x25	1834.15	799.85	4.7	3.2	0	0	0.3	0.2	60	60	0	55	1	30	-40
P16	15x25	2104.35	834.85	2.2	1.4	0	0	0.1	0.1	60	60	0	55	1	30	-40
P17	15x25	2279.35	834.85	3.0	2.2	0	0	0.1	0.3	60	60	0	55	1	30	-40
P18	15x25	184.00	769.85	10.1	8.7	0	0	0.2	0.5	60	60	0	55	1	30	-40
P19	15x25	633.95	659.90	3.7	2.2	0	0	0.2	0.6	60	60	0	55	1	30	-40
P20	15x25	989.20	654.85	5.1	4.1	0	0	0.3	0.4	60	60	0	55	1	30	-40
P21	15x25	1379.15	659.85	8.0	5.6	0	0	0.2	0.6	60	60	0	55	1	30	-40
P22	15x25	1839.15	594.85	7.3	5.6	0	0	0.3	0.5	60	60	0	55	1	30	-40
P23	15x25	2274.35	594.85	6.3	5.1	0	0	0.3	0.4	60	60	0	55	1	30	-40
P24	15x25	179.00	164.85	6.8	5.9	0	0	0.2	0.4	60	60	0	55	1	30	-40
P25	18x25	630.45	164.85	7.9	6.7	0	0	0.2	0.4	60	60	0	55	1	30	-40
P26	15x25	989.15	164.85	6.8	5.6	0	0	0.2	0.3	60	60	0	55	1	30	-40
P27	18x25	1382.65	164.85	8.0	6.9	0	0	0.2	0.5	60	60	0	55	1	30	-40
P28	15x25	1834.15	164.85	6.9	5.9	0	0	0.2	0.3	60	60	0	55	1	30	-40
P29	15x25	2274.35	159.85	6.2	5.3	0	0	0.3	0.2	60	60	0	55	1	30	-40

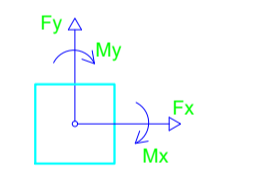


escala 1:25

Simbologia	Estacas	Quantidade
	30	29



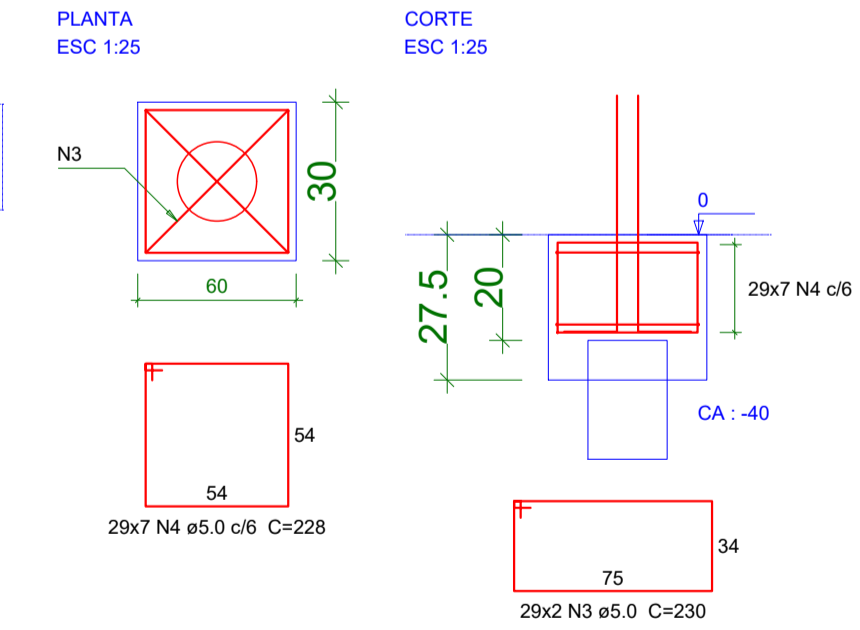
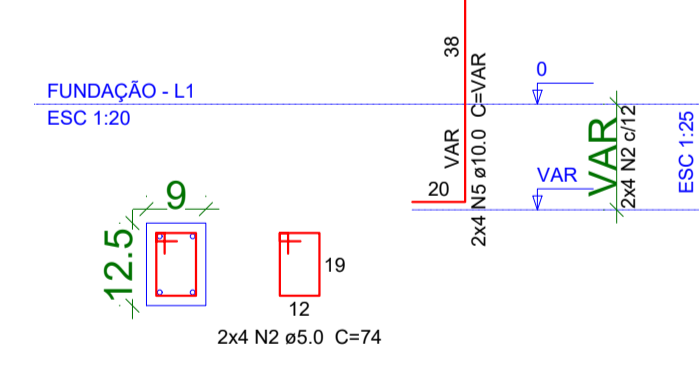
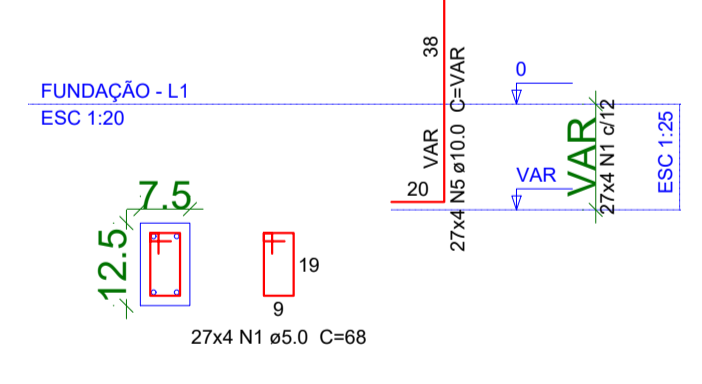
Legenda dos blocos



P1=P2=P3=P4=P5=P6=P7=P8=P9=P10=P11=P12
=P13=P14=P15=P16=P17=P18=P19=P20=P21
=P22=P23=P24=P26=P28=P29

P25=P27

B1=B2=B3=B4=B5=B6=B7=B8=B9=B10=B11=B12
=B13=B14=B15=B16=B17=B18=B19=B20=B21
=B22=B23=B24=B25=B26=B27=B28=B29



Relação do aço

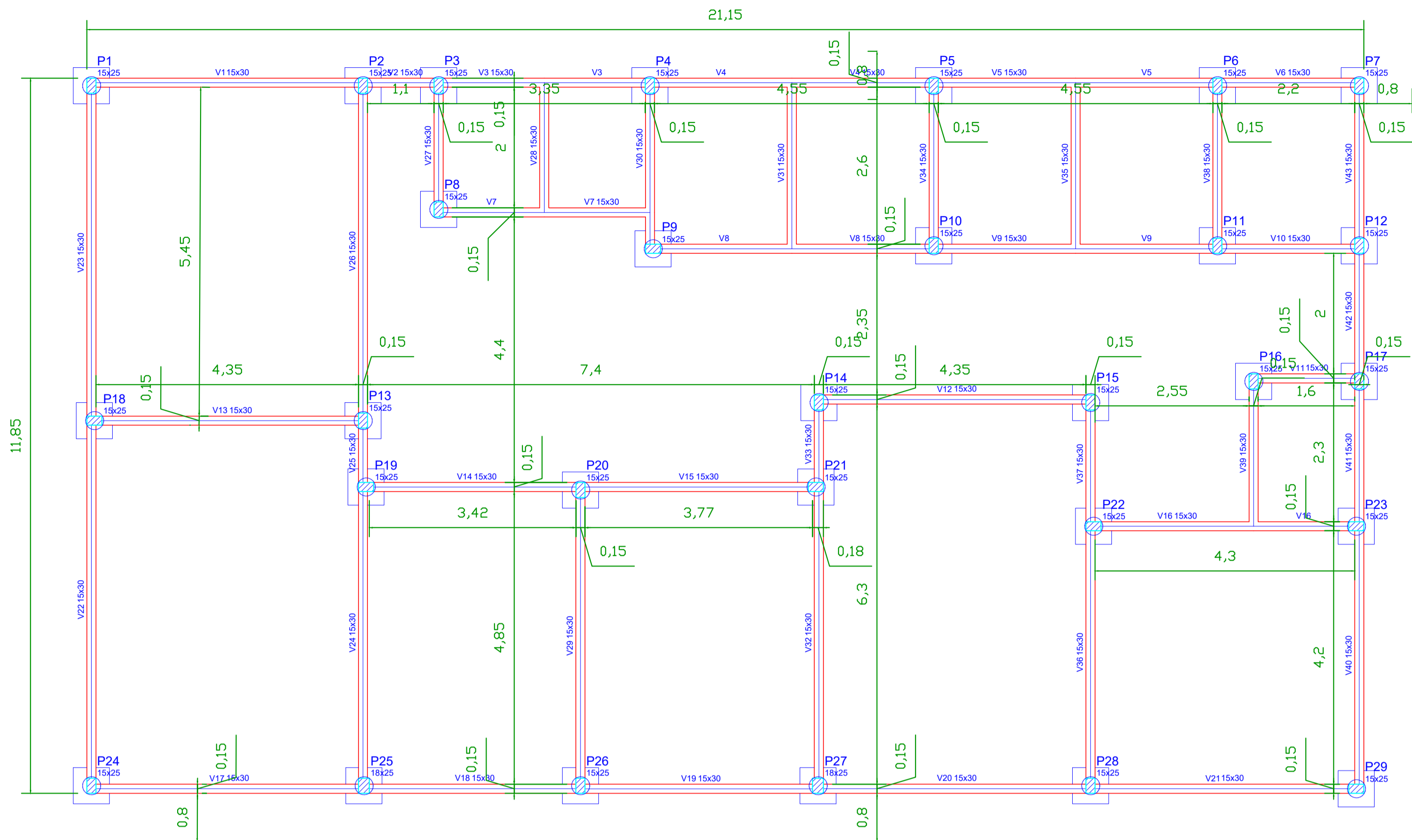
AÇO	N	DIAM	Q	UNIT (cm)	C.TOTAL (cm)
CA60	1	5.0	108	68	7344
CA60	2	5.0	8	74	592
CA60	3	5.0	58	230	13340
CA50	4	5.0	203	228	46284
CA50	5	10.0	116	VAR	VAR

Resumo do aço

AÇO	DIAM	C.TOTAL (m)	PESO + 10% (kg)
CA50	10.0	114.4	75.5
CA60	5.0	675.6	114.5
PESO TOTAL			
CA50	75.5		
CA60	114.5		

Vol. de concreto total (C-25) = 5.88 m³
Área de forma total = 47.81 m²

UEMS CLIENTE: UNIVERSIDADE ESTADUAL DE MATO GROSSO DO SUL
 TÍTULO: NÚCLEO DE PRÁTICAS JURÍDICAS PROJETO: ESTRUTURAL
 LOCAL: UNIDADE UNIVERSITÁRIA DE NAVIRAÍ NAVIRAÍ - MS
 AUTOR DO PROJETO: WAGNER LUIZ MANARA - CREA 27.190/D PROPRIETÁRIO:
 RESPONSÁVEL TÉCNICO: UNIVERSIDADE ESTADUAL DE MATO GROSSO DO SUL CNPJ: 86.891.363/0001-80
 REFERÊNCIA: CARGAS DA FUNDAÇÃO E LOCAÇÃO DOS BLOCOS E ESTACAS FOLHA Nº/TP: ARQ-AP 01/13
 ESCALA: INDICADAS UNIDADE: METRO ARQUIVO: DATA: 06/10/2022 DESENHO: TIAGO REVISÃO: R00 VISTO:



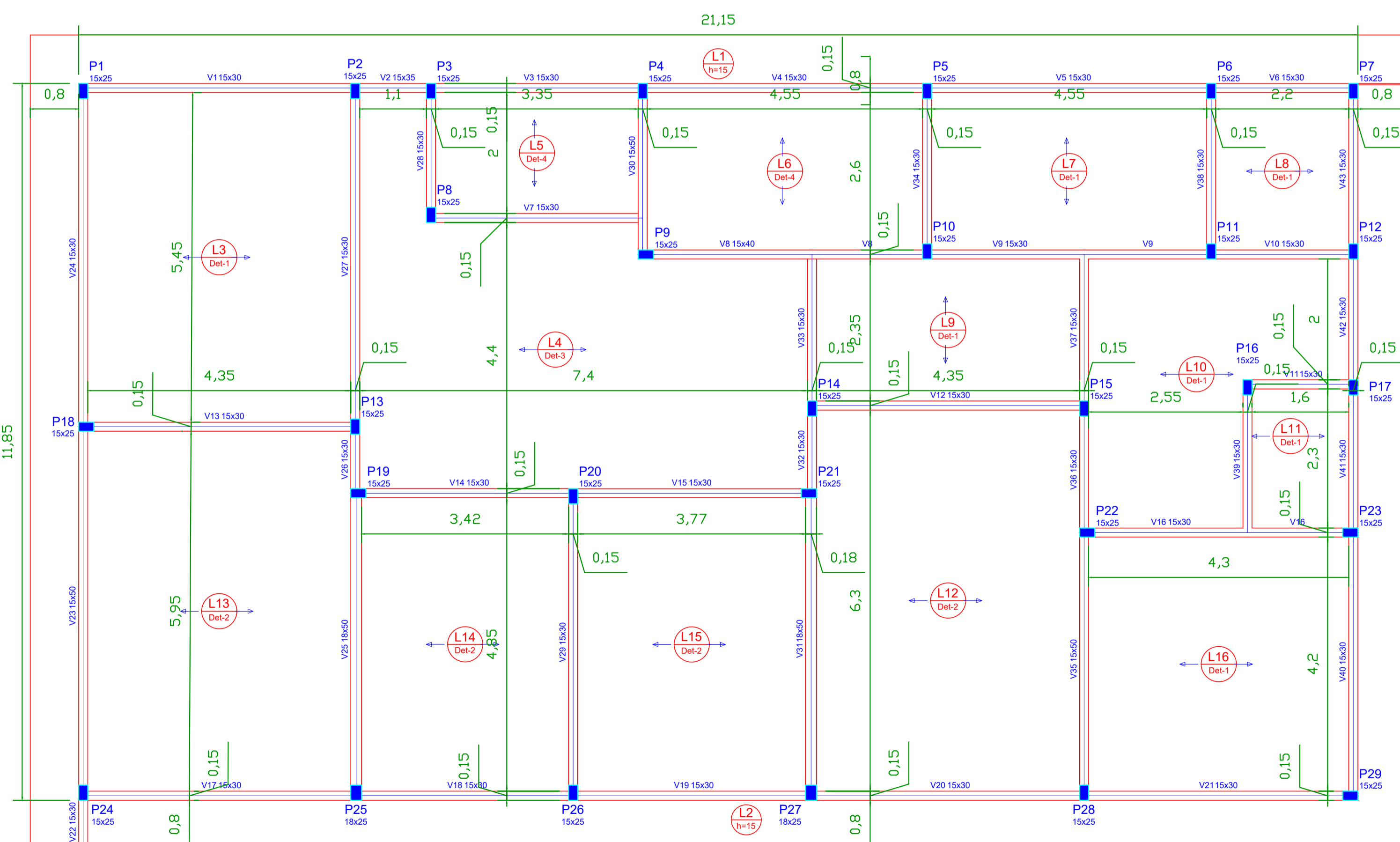
Forma do pavimento fundação escala 1:50

Vigas			
Nome	Seção (cm)	Elevação (cm)	Nível (cm)
V1	15x30	0	0
V2	15x30	0	0
V3	15x30	0	0
V4	15x30	0	0
V5	15x30	0	0
V6	15x30	0	0
V7	15x30	0	0
V8	15x30	0	0
V9	15x30	0	0
V10	15x30	0	0
V11	15x30	0	0
V12	15x30	0	0
V13	15x30	0	0
V14	15x30	0	0
V15	15x30	0	0
V16	15x30	0	0
V17	15x30	0	0
V18	15x30	0	0
V19	15x30	0	0
V20	15x30	0	0
V21	15x30	0	0
V22	15x30	0	0
V23	15x30	0	0
V24	15x30	0	0
V25	15x30	0	0
V26	15x30	0	0
V27	15x30	0	0
V28	15x30	0	0
V29	15x30	0	0
V30	15x30	0	0
V31	15x30	0	0
V32	15x30	0	0
V33	15x30	0	0
V34	15x30	0	0
V35	15x30	0	0
V36	15x30	0	0
V37	15x30	0	0
V38	15x30	0	0
V39	15x30	0	0
V40	15x30	0	0
V41	15x30	0	0
V42	15x30	0	0
V43	15x30	0	0

Piares			
Nome	Seção (cm)	Elevação (cm)	Nível (cm)
P1	15 x 25	0	0
P2	15 x 25	0	0
P3	15 x 25	0	0
P4	15 x 25	0	0
P5	15 x 25	0	0
P6	15 x 25	0	0
P7	15 x 25	0	0
P8	15 x 25	0	0
P9	15 x 25	0	0
P10	15 x 25	0	0
P11	15 x 25	0	0
P12	15 x 25	0	0
P13	15 x 25	0	0
P14	15 x 25	0	0
P15	15 x 25	0	0
P16	15 x 25	0	0
P17	15 x 25	0	0
P18	15 x 25	0	0
P19	15 x 25	0	0
P20	15 x 25	0	0
P21	15 x 25	0	0
P22	15 x 25	0	0
P23	15 x 25	0	0
P24	15 x 25	0	0
P25	15 x 25	0	0
P26	15 x 25	0	0
P27	15 x 25	0	0
P28	15 x 25	0	0
P29	15 x 25	0	0



Características dos materiais		
f _k (kgf/cm ²)	E _c (kgf/cm ²)	f _{ctd} (kgf/cm ²)
250	238000	



Forma do pavimento 1o pavimento escala 1:50

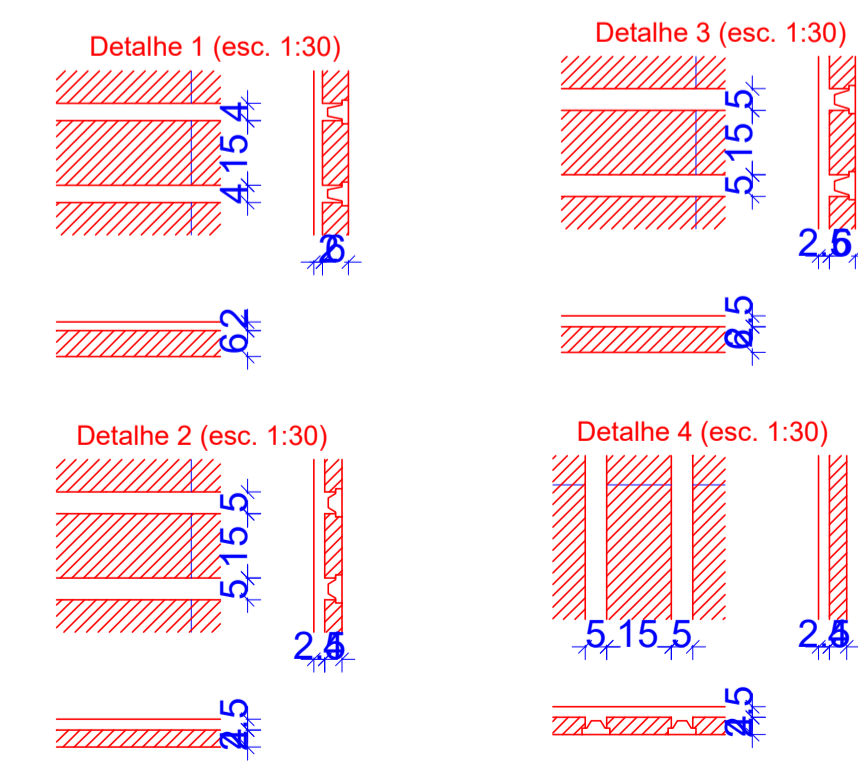
Vigas			
Nome	Seção (cm)	Elevação (cm)	Nível (cm)
V1	15x30	0	340
V2	15x35	0	340
V3	15x30	0	340
V4	15x30	0	340
V5	15x30	0	340
V6	15x30	0	340
V7	15x30	0	340
V8	15x40	0	340
V9	15x30	0	340
V10	15x30	0	340
V11	15x30	0	340
V12	15x30	0	340
V13	15x30	0	340
V14	15x30	0	340
V15	15x30	0	340
V16	15x30	0	340
V17	15x30	0	340
V18	15x30	0	340
V19	15x30	0	340
V20	15x30	0	340
V21	15x30	0	340
V22	15x30	0	340
V23	15x50	0	340
V24	15x30	0	340
V25	18x50	0	340
V26	15x30	0	340
V27	15x30	0	340
V28	15x30	0	340
V29	15x30	0	340
V30	15x50	0	340
V31	18x50	0	340
V32	15x30	0	340
V33	15x30	0	340
V34	15x30	0	340
V35	15x30	0	340
V36	15x30	0	340
V37	15x30	0	340
V38	15x30	0	340
V39	15x30	0	340
V40	15x30	0	340
V41	15x30	0	340
V42	15x30	0	340
V43	15x30	0	340

Características dos materiais		
f _k (kgf/cm ²)	E _c (kgf/cm ²)	f _{ctd} (kgf/cm ²)
250	238000	

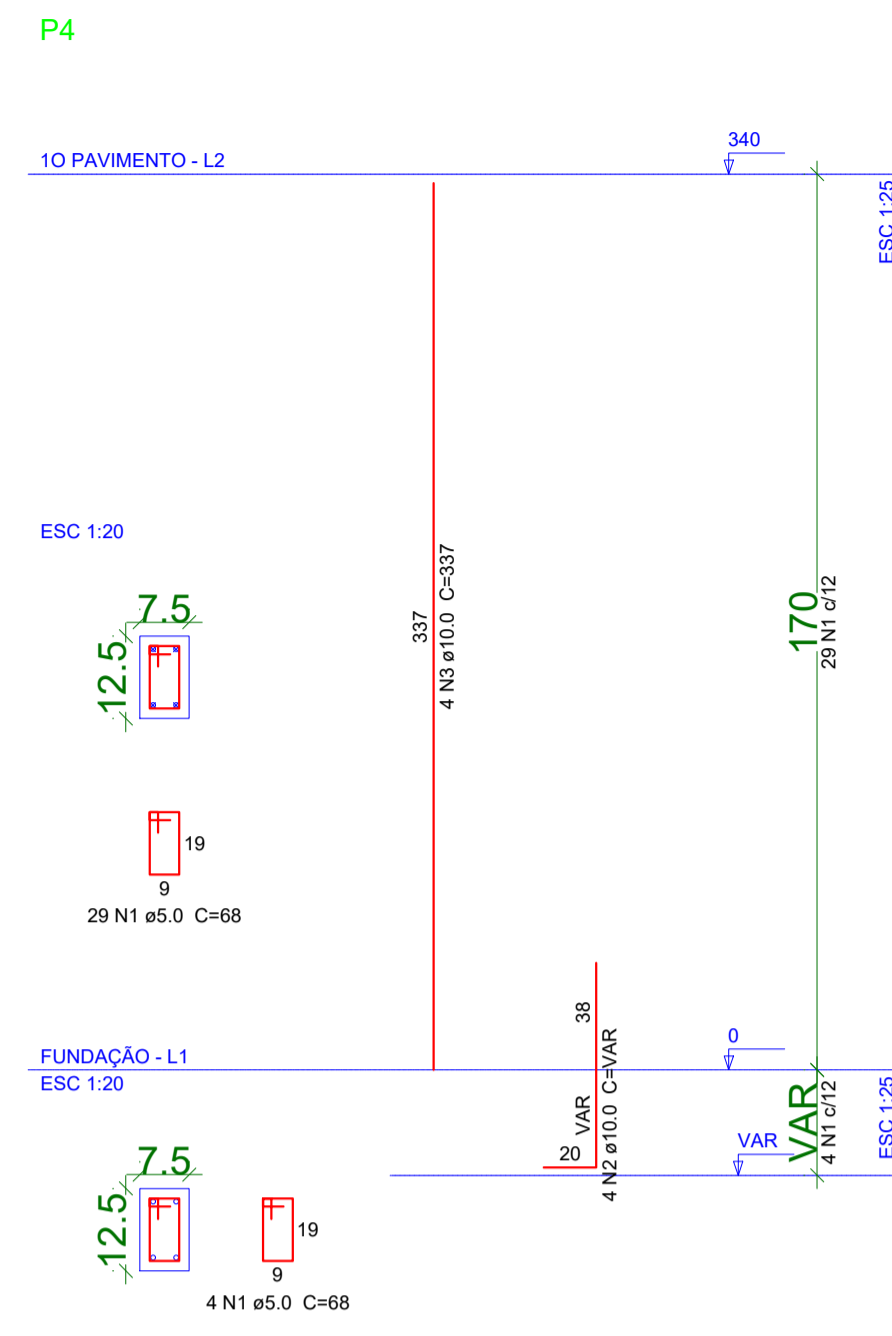
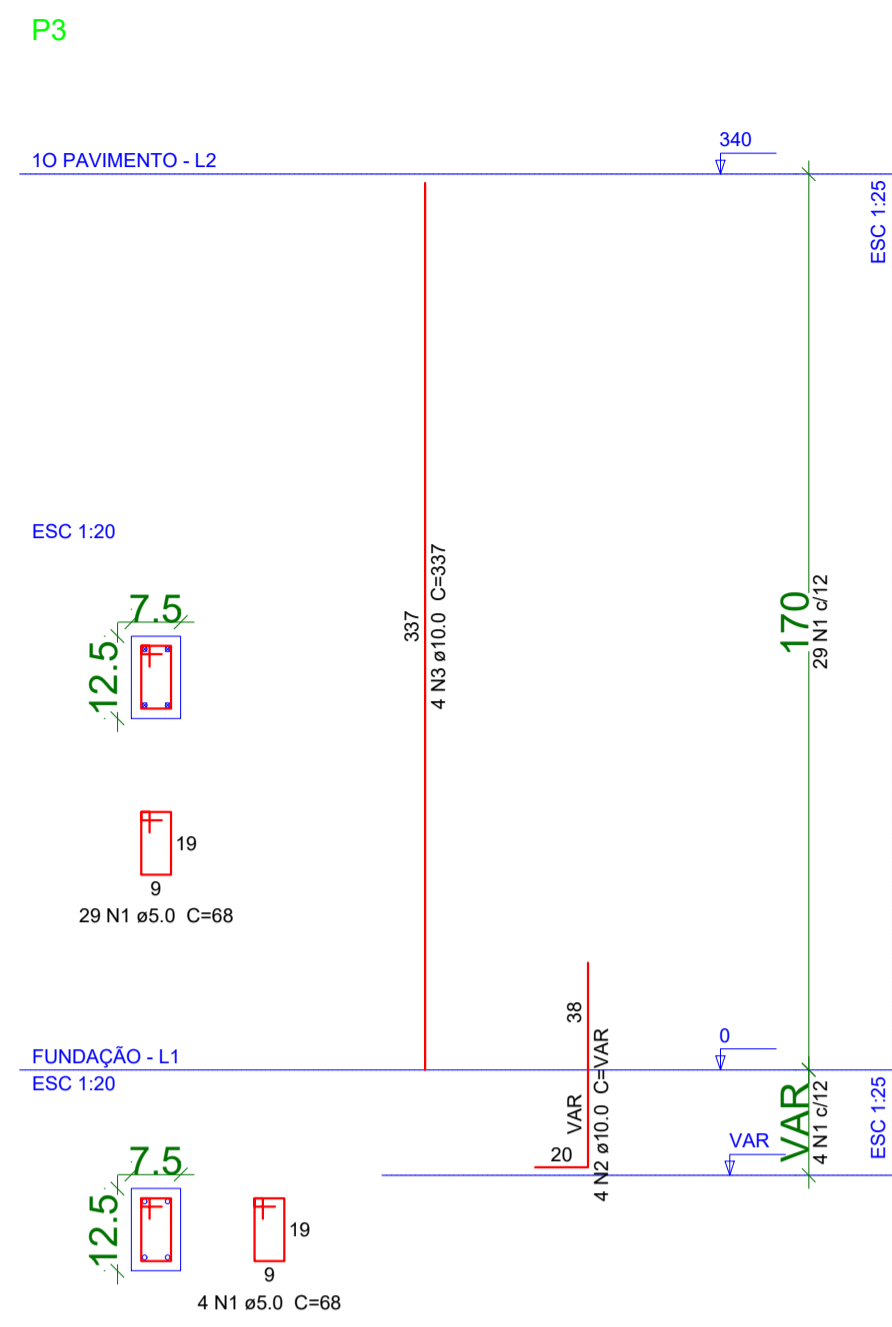
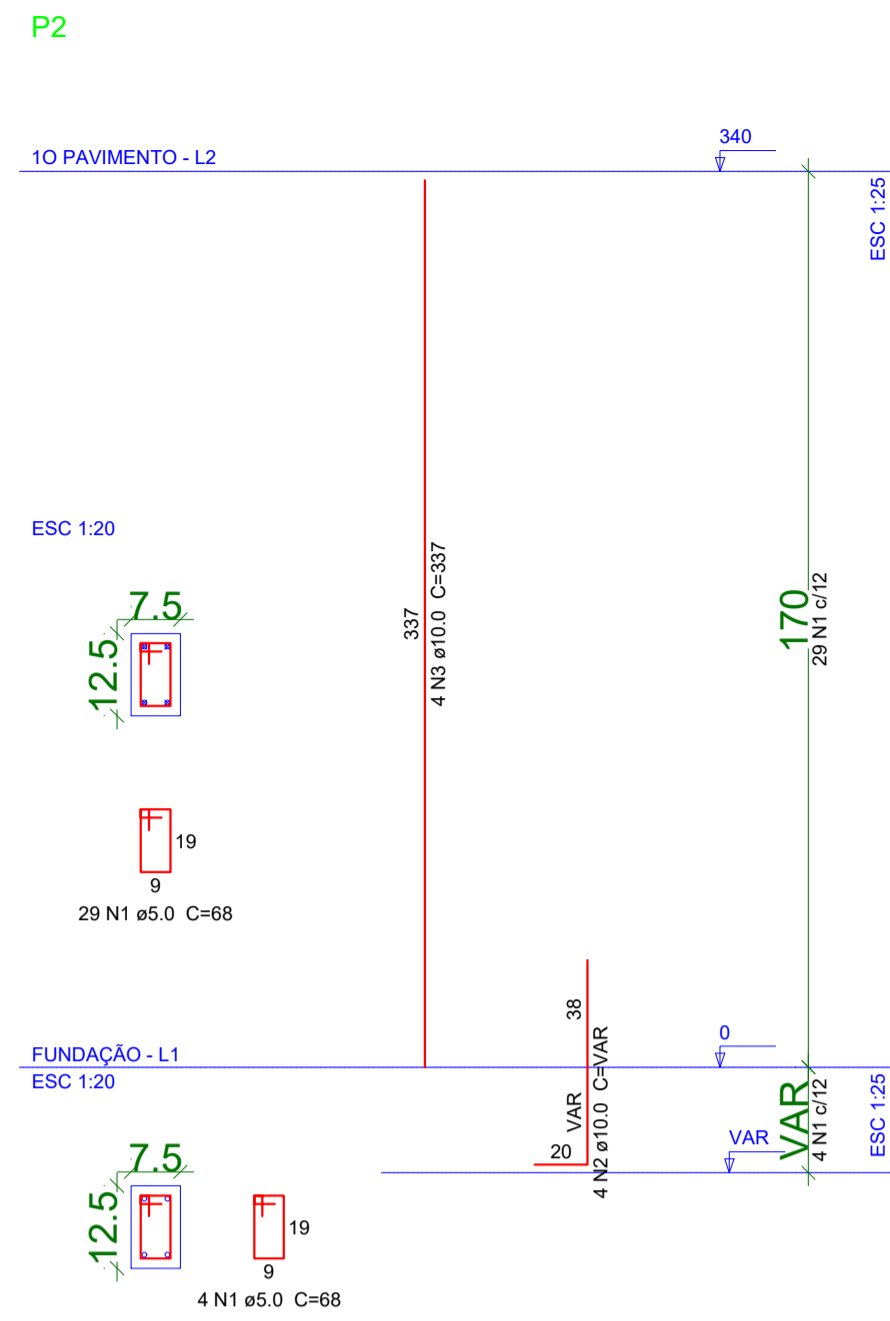
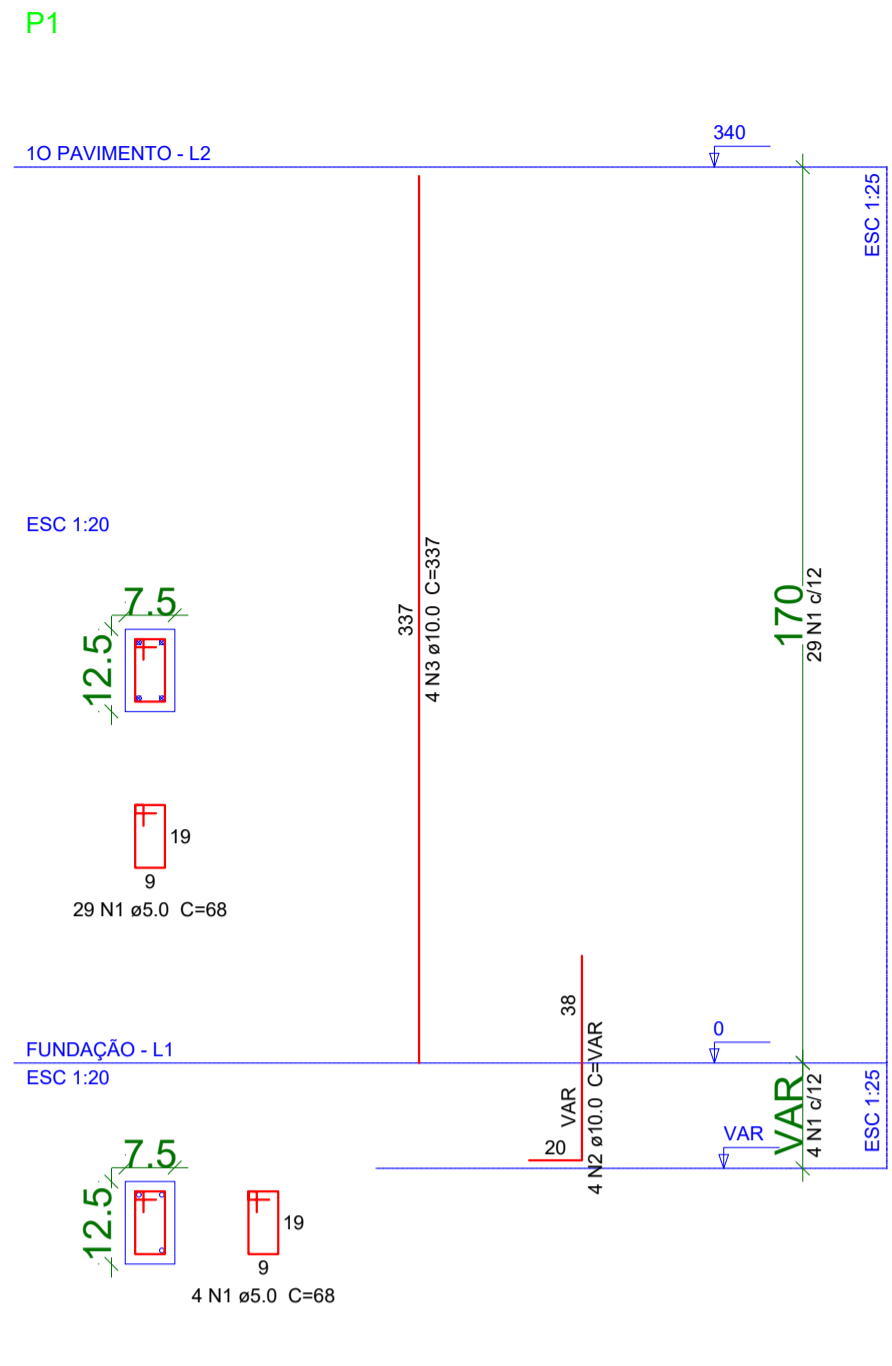
Piares			
Nome	Seção (cm)	Elevação (cm)	Nível (cm)
P1	15 x 25	0	340
P2	15 x 25	0	340
P3	15 x 25	0	340
P4	15 x 25	0	340
P5	15 x 25	0	340
P6	15 x 25	0	340
P7	15 x 25	0	340
P8	15 x 25	0	340
P9	15 x 25	0	340
P10	15 x 25	0	340
P11	15 x 25	0	340
P12	15 x 25	0	340
P13	15 x 25	0	340
P14	15 x 25	0	340
P15	15 x 25	0	340
P16	15 x 25	0	340
P17	15 x 25	0	340
P18	15 x 25	0	340
P19	15 x 25	0	340
P20	15 x 25	0	340
P21	15 x 25	0	340
P22	15 x 25	0	340
P23	15 x 25	0	340
P24	15 x 25	0	340
P25	18 x 25	0	340
P26	15 x 25	0	340
P27	15 x 25	0	340
P28	15 x 25	0	340
P29	15 x 25	0	340

Blocos de enchimento					
Detalhe	Tipo	Nome	Dimensões (cm)	Quantidade	
L3	EPS Unidirecional	B12/30/125	12 30 125	319	
L4	EPS Unidirecional	B6/30/125	6 30 125	257	

Lajes							
Nome	Tipo	Altura (cm)	Elevação (cm)	Nível (cm)	Peso próprio (kgf/m ²)	Adicional	Sobrecarga (kgf/m ²)
L1	Maioça	15	0	340	375	100	60
L2	Maioça	15	0	340	375	100	60
L3	Pré-moldada	16	0	340	165	100	60
L4	Pré-moldada	17	0	340	202	100	60
L5	Pré-moldada	13	0	340	176	100	60
L6	Pré-moldada	13	0	340	176	100	60
L7	Pré-moldada	16	0	340	165	100	60
L8	Pré-moldada	16	0	340	165	100	60
L9	Pré-moldada	16	0	340	165	100	60
L10	Pré-moldada	16	0	340	165	100	60
L11	Pré-moldada	16	0	340	165	100	60
L12	Pré-moldada	13	0	340	176	100	60
L13	Pré-moldada	13	0	340	176	100	60
L14	Pré-moldada	13	0	340	176	100	60
L15	Pré-moldada	13	0	340	176	100	60
L16	Pré-moldada	16	0	340	165	100	60



	CLIENTE	UNIVERSIDADE ESTADUAL DE MATO GROSSO DO SUL	
	TÍTULO	NÚCLEO DE PRÁTICAS JURÍDICAS	
LOCAL	UNIDADE UNIVERSITÁRIA DE NAVIRAÍ	PROPRIETÁRIO	ESTRUTURAL
AUTOR DO PROJETO:	WAGNER LUIZ MANARA - CREA 27.190/D	RESPONSÁVEL TÉCNICO:	
REFERÊNCIA	FORMAS DA FUNDAÇÃO E LAJE	UNIVERSIDADE ESTADUAL DE MATO GROSSO DO SUL	CPNJ: 06.691.363/0001-60
ESCALA	INDICADAS	UNIDADE	METRO
ARQUIVO		DATA	02/01/2022
DESENHADO	TIAGO	REVISÃO	
VISTO			



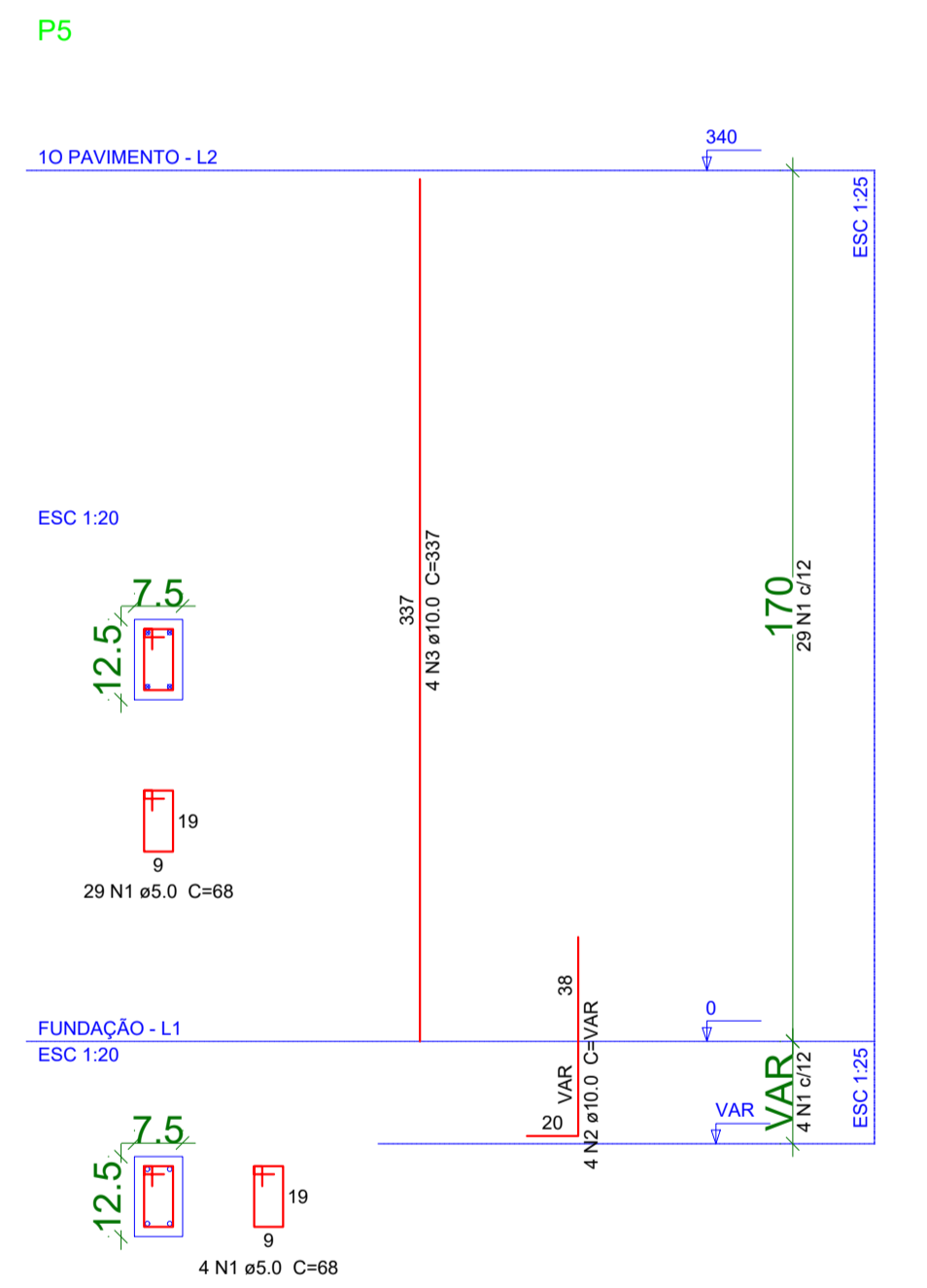
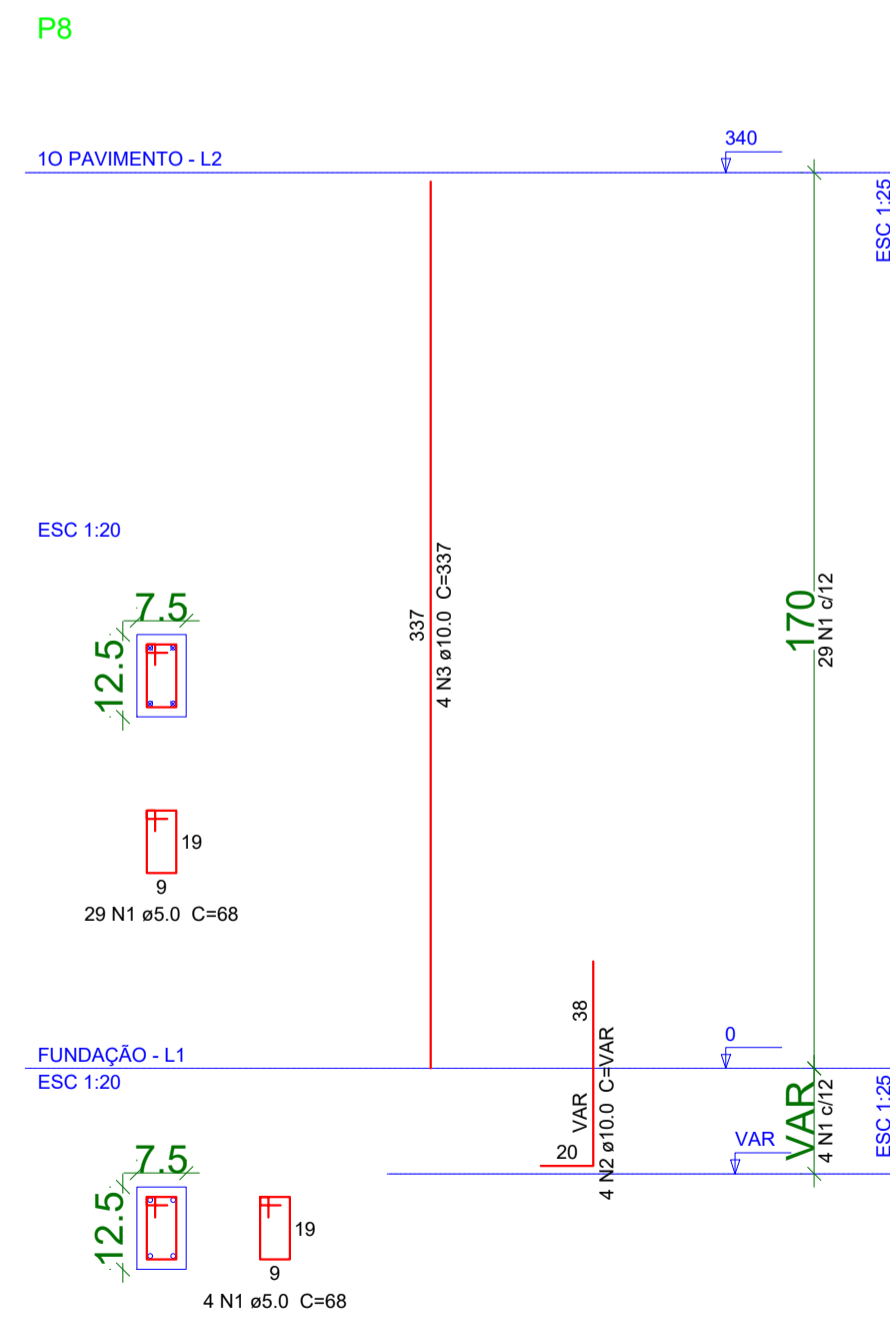
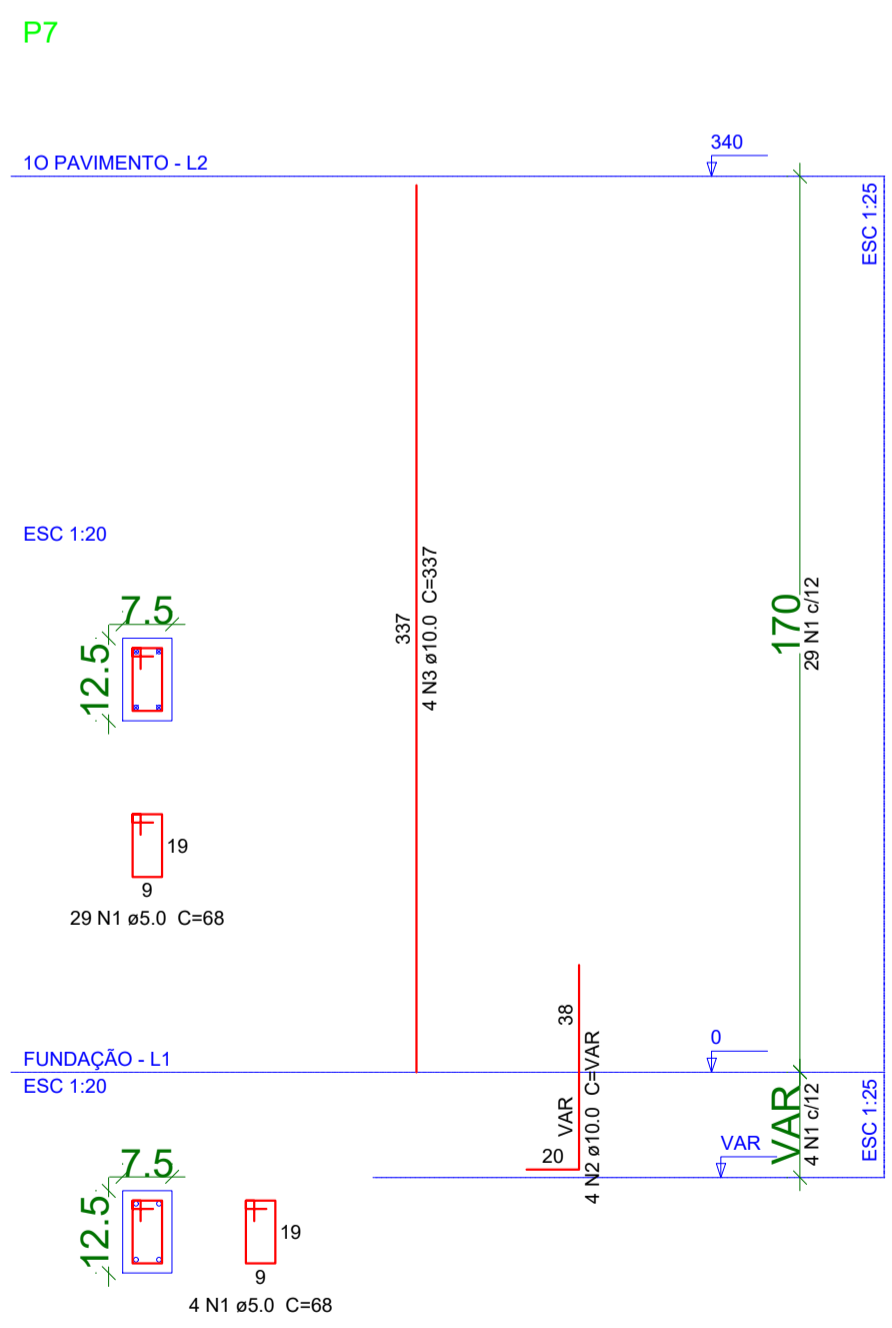
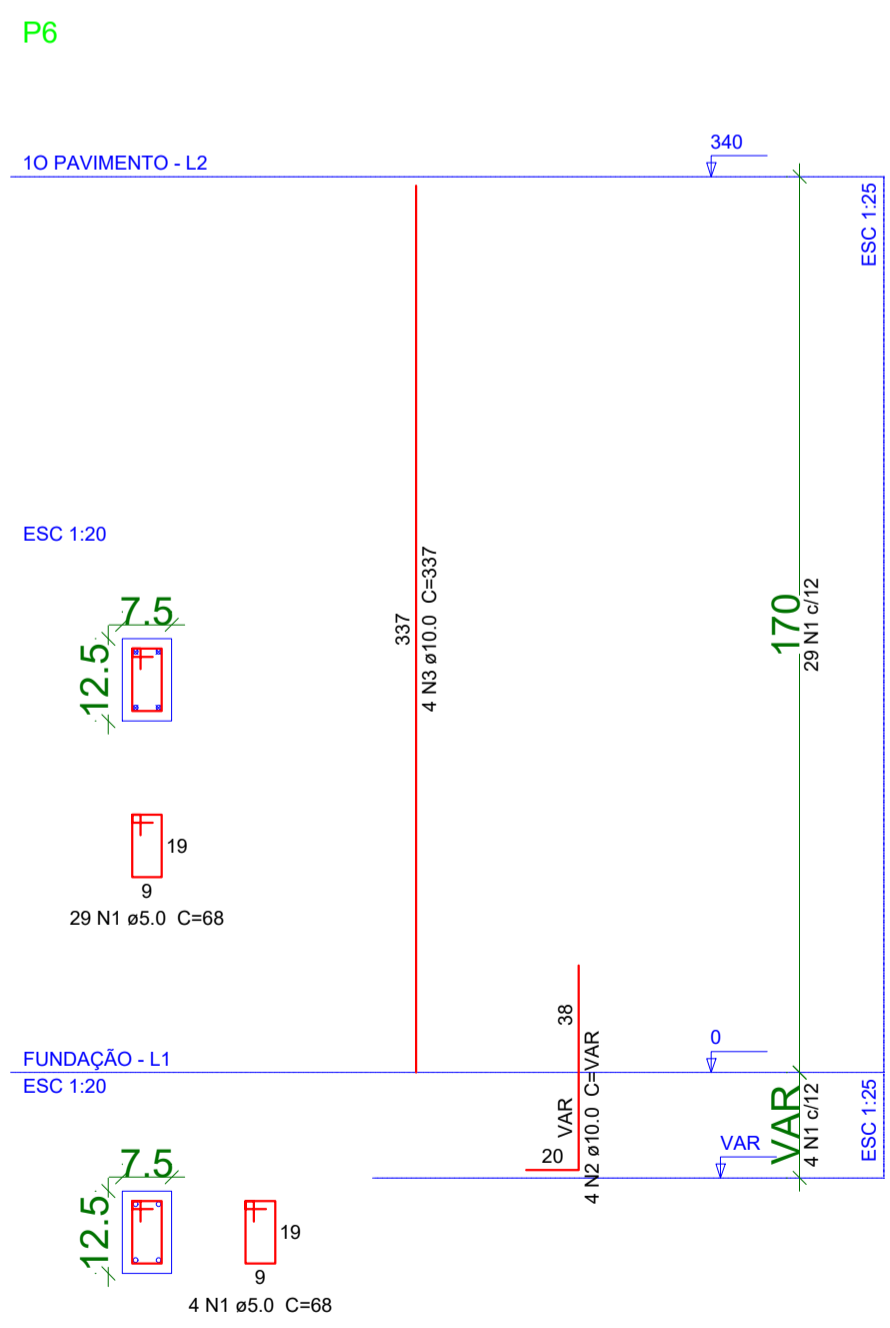
Relação do aço

ACO	N	DIAM	Q	UNIT (cm)	C.TOTAL (cm)
CA60	1	5.0	264	68	17952
CA60	2	10.0	32	VAR	VAR
CA60	3	10.0	32	337	10784

Resumo do aço

ACO	DIAM	C.TOTAL (m)	PESO + 10 % (kg)
CA60	10.0	138.6	94
CA60	5.0	179.6	30.4
PESO TOTAL			
CA60			94
CA60			30.4

Vol. de concreto total (C-25) = 1.14 m³
 Área de forma total = 24.32 m²



UEMS CLIENTE: **UNIVERSIDADE ESTADUAL DE MATO GROSSO DO SUL**

TÍTULO: **NÚCLEO DE PRÁTICAS JURÍDICAS** PROJETO: **ESTRUTURAL**

LOCAL: **UNIDADE UNIVERSITÁRIA DE NAVIRAÍ**

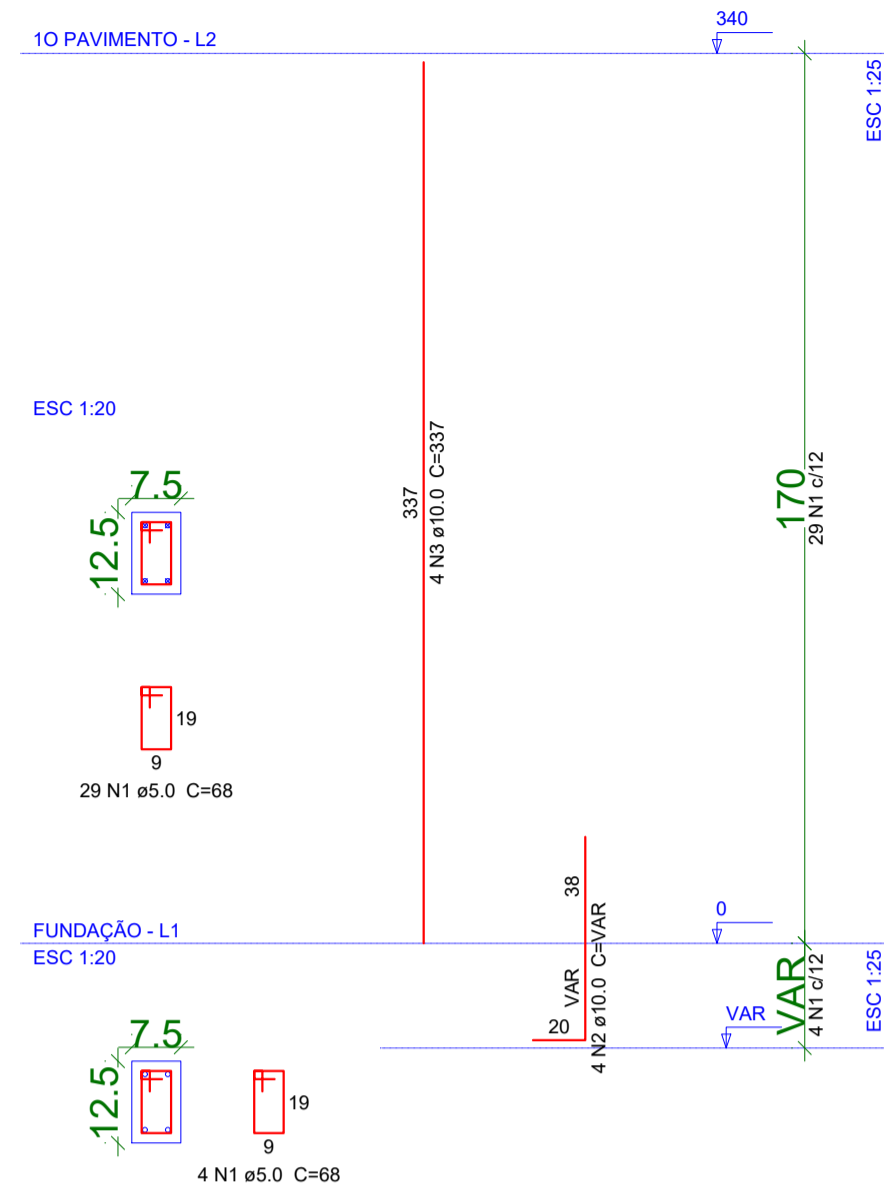
AUTOR DO PROJETO: **WAGNER LUIZ MANARA - CREA 27.190/D** PROPRIETÁRIO: **UNIVERSIDADE ESTADUAL DE MATO GROSSO DO SUL**

RESPONSÁVEL TÉCNICO: **UNIVERSIDADE ESTADUAL DE MATO GROSSO DO SUL**

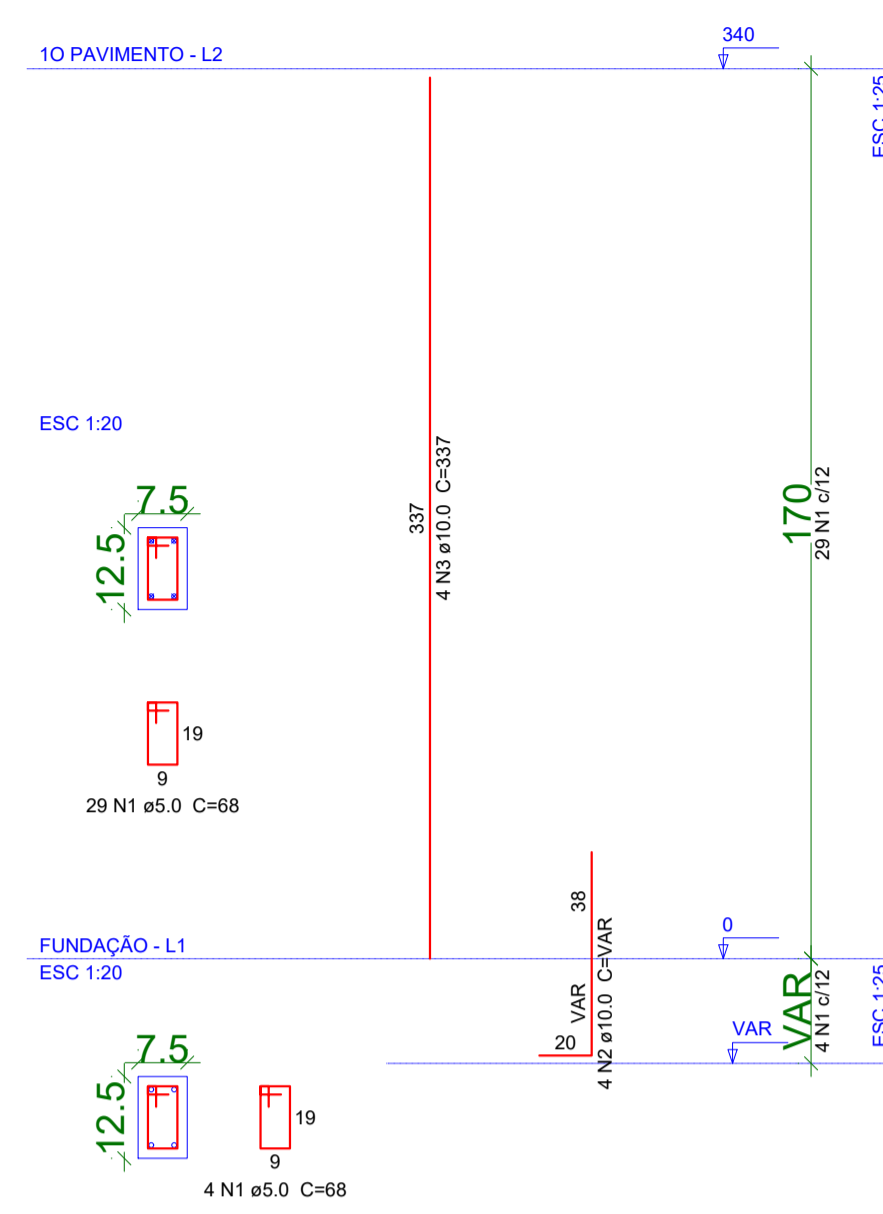
REFERÊNCIA: **PILARES 1/4** FOLHA Nº / AP: **ARQ-AP 03/13**

ESCALA: **INDICADAS** UNIDADE: **METRO** ARQUIVO: **DATA: 02/05/2022** DESENHO: **TIAGO** REVISÃO: **ROG** VISTO:

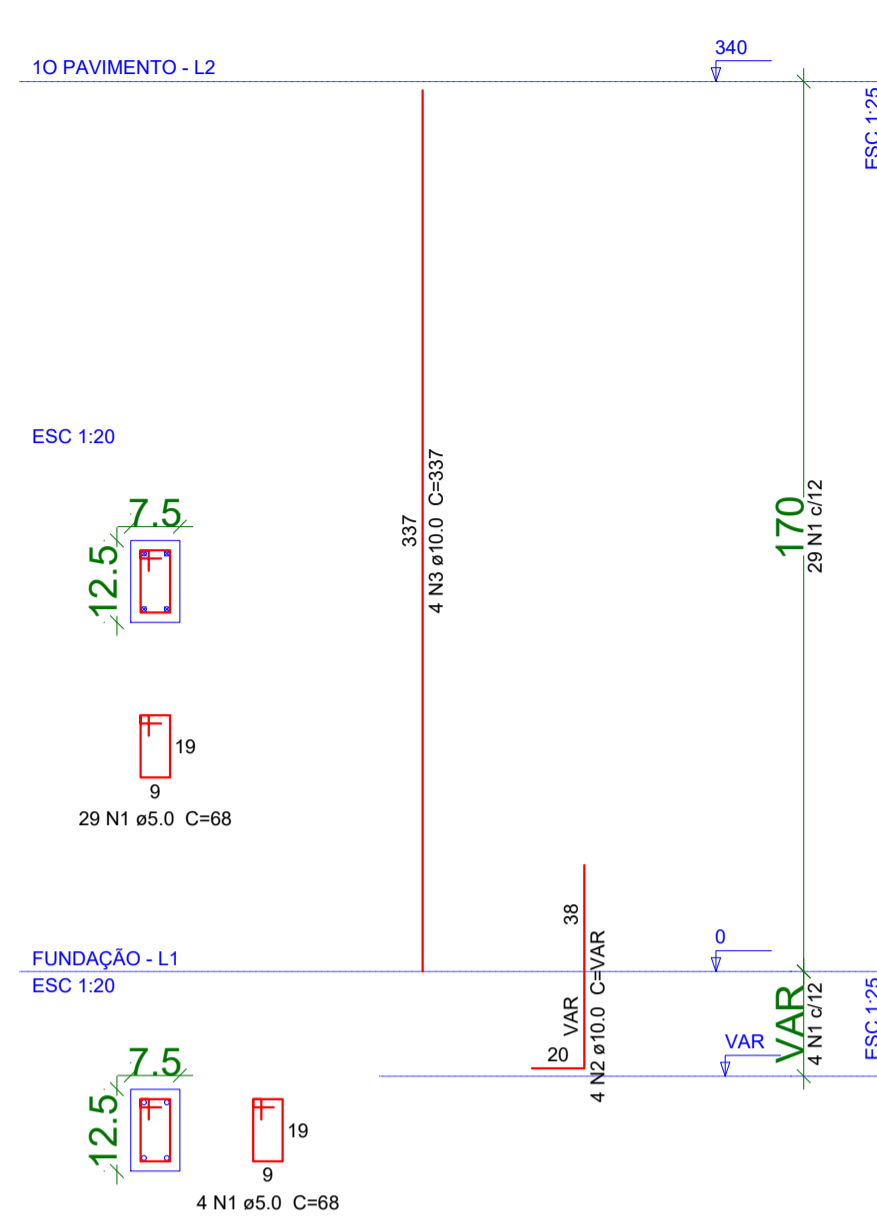
P9



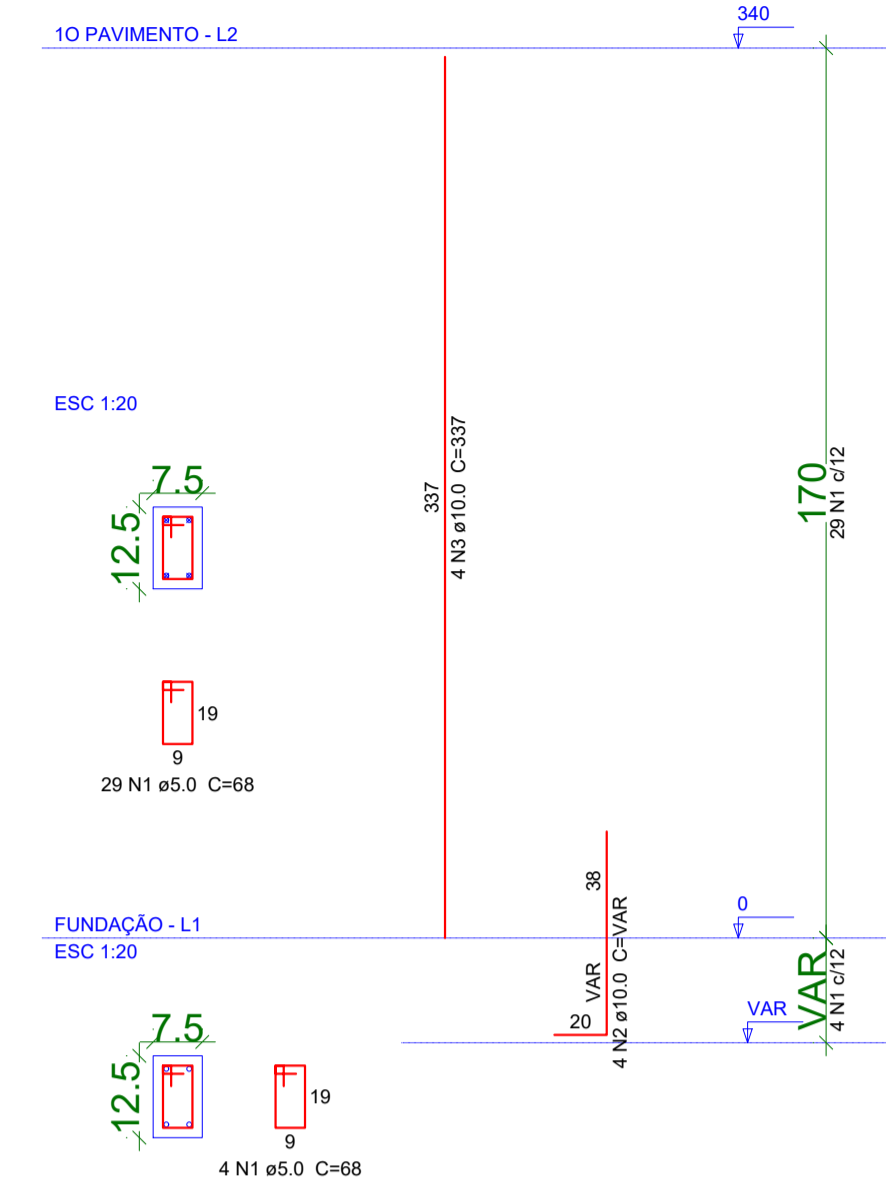
P10



P11



P12



Relação do aço

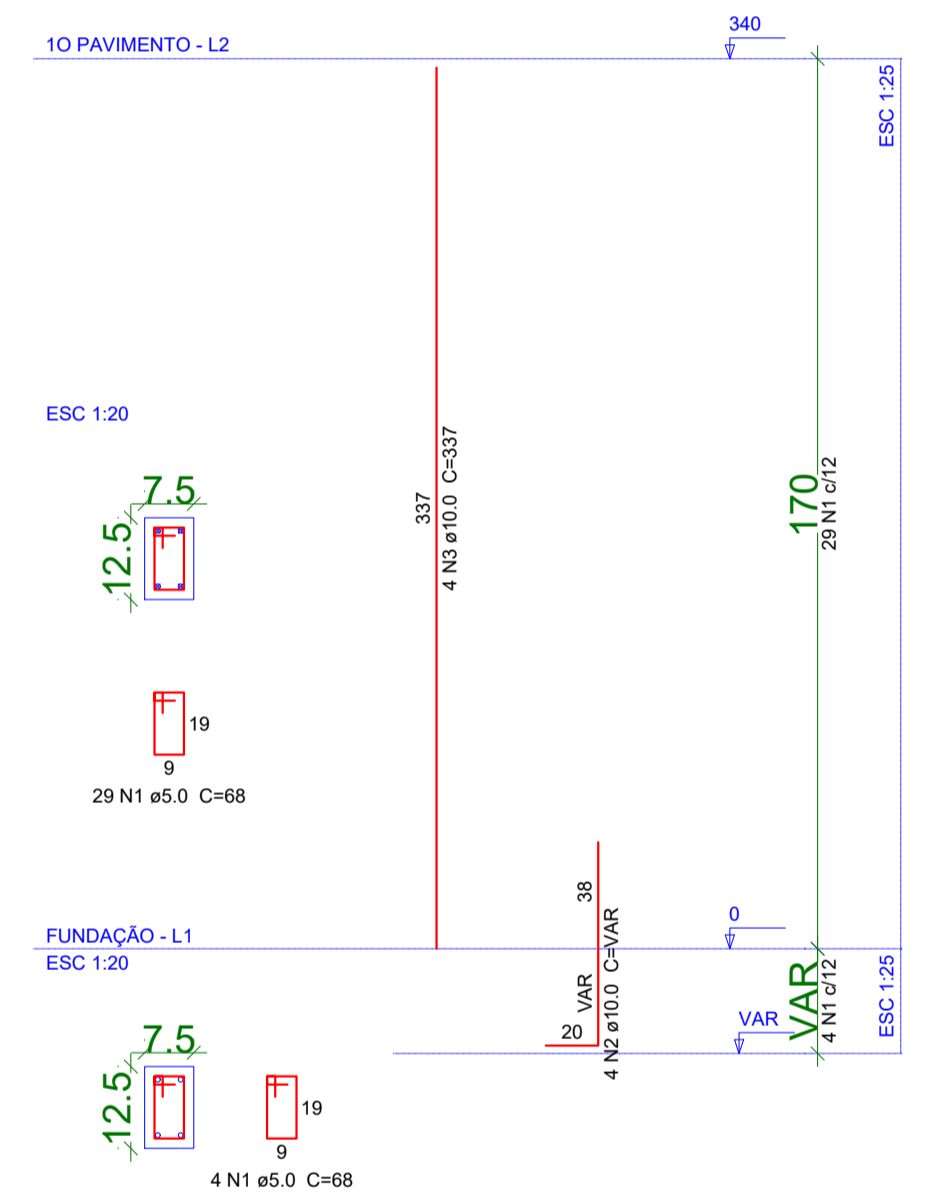
AÇO	N	DIAM	Q	UNIT	C.TOTAL
		(cm)		(m)	(cm)
CA60	1	5.0	264	68	17952
CA50	2	10.0	32	VAR	VAR
	3	10.0	32	337	10784

Resumo do aço

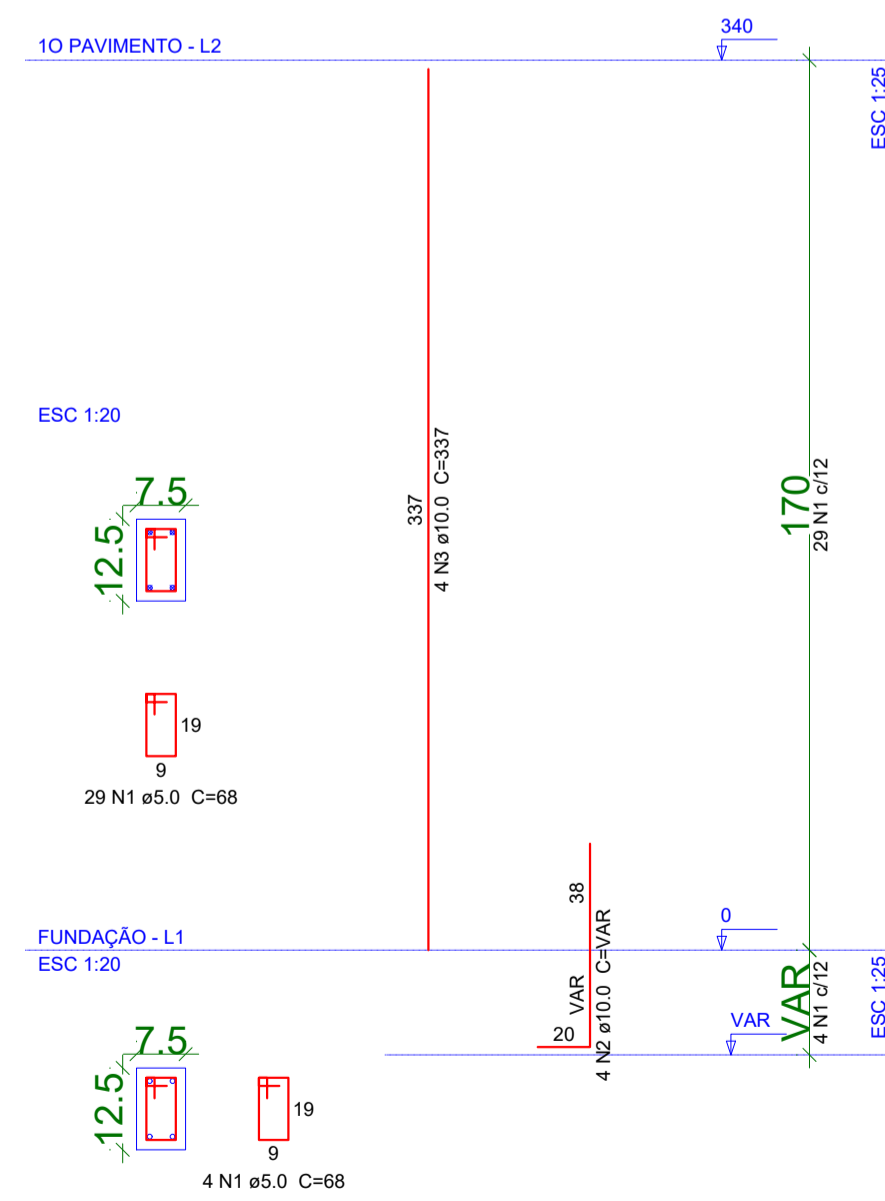
AÇO	DIAM	C.TOTAL	PESO + 10 %
	(m)	(kg)	(kg)
CA50	10.0	138.6	94
CA60	5.0	179.6	30.4
PESO TOTAL			
CA50		94	
CA60		30.4	

Vol. de concreto total (C-25) = 1.14 m³
Área de forma total = 24.32 m²

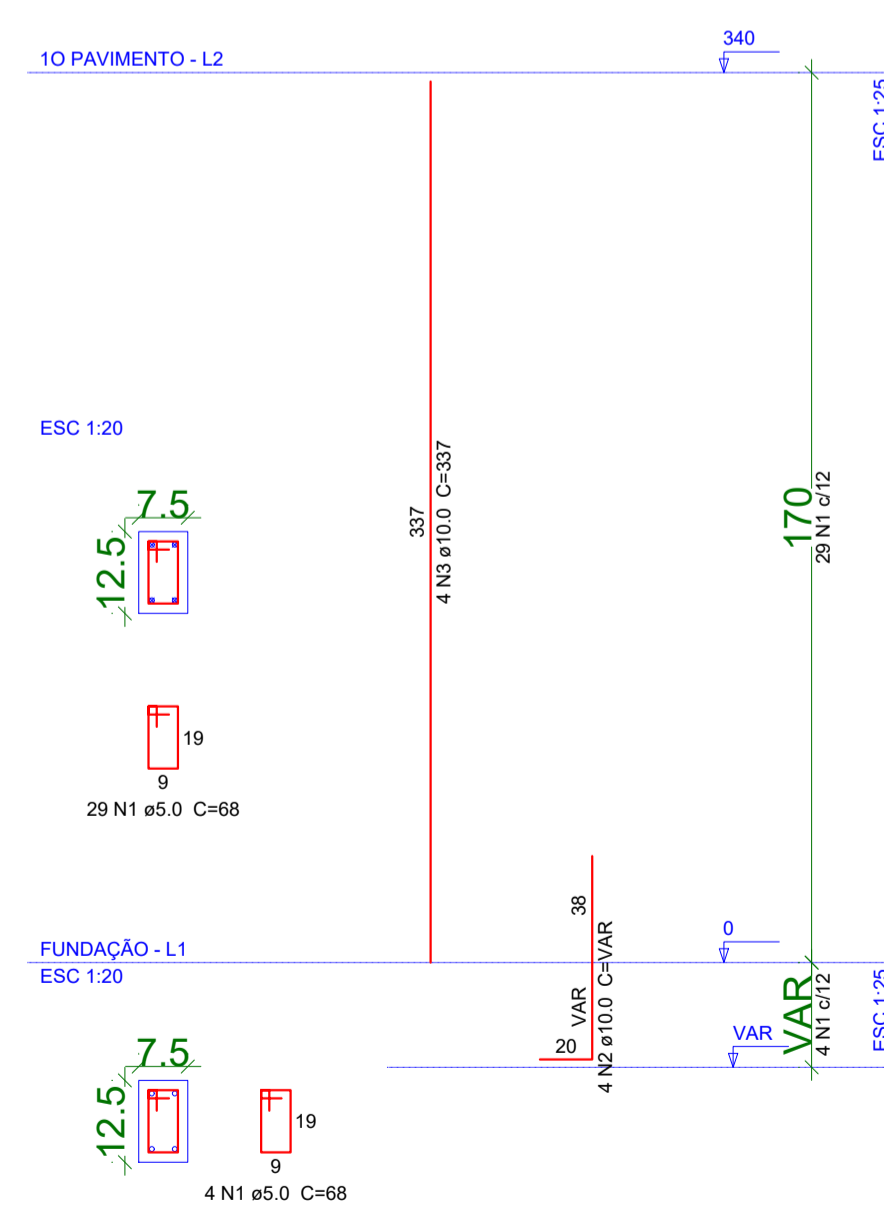
P13



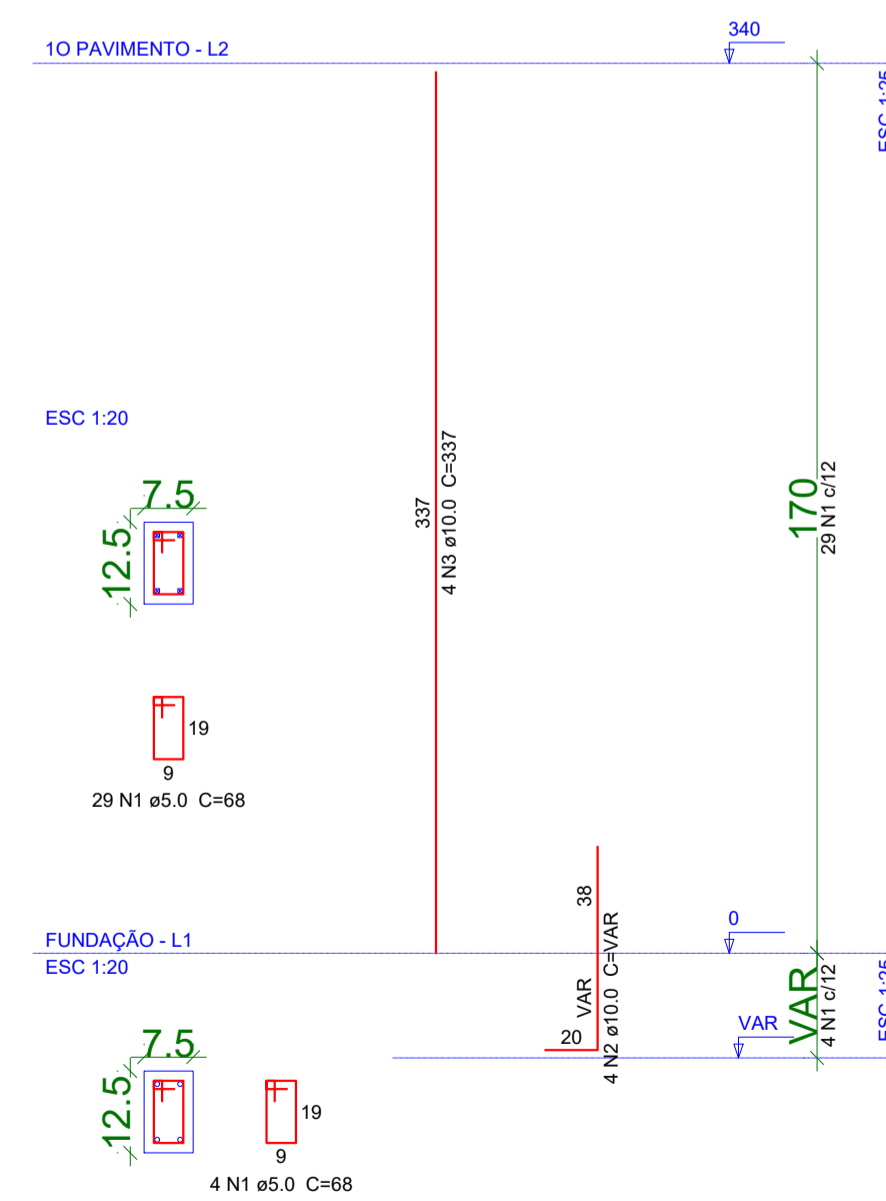
P14



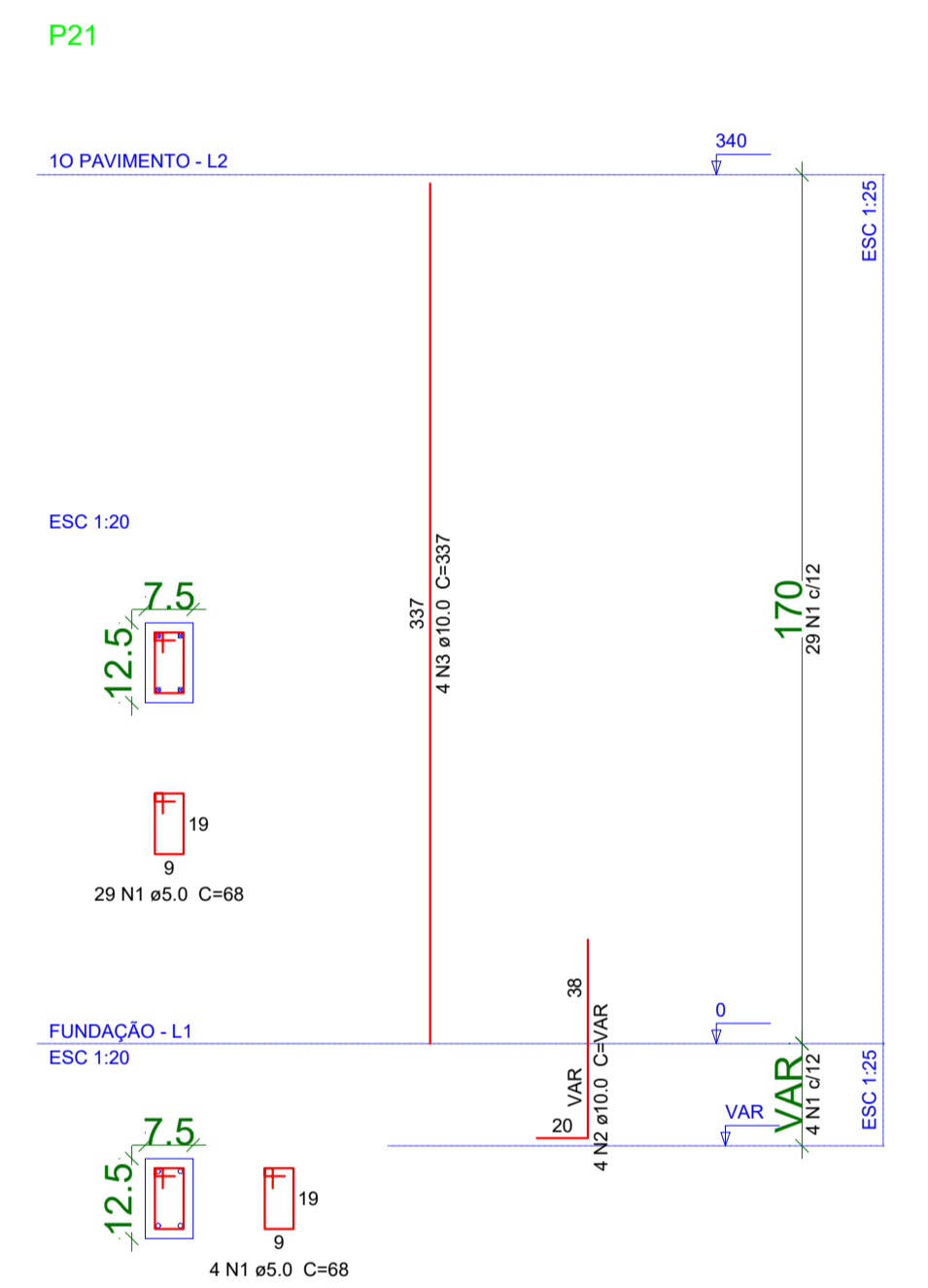
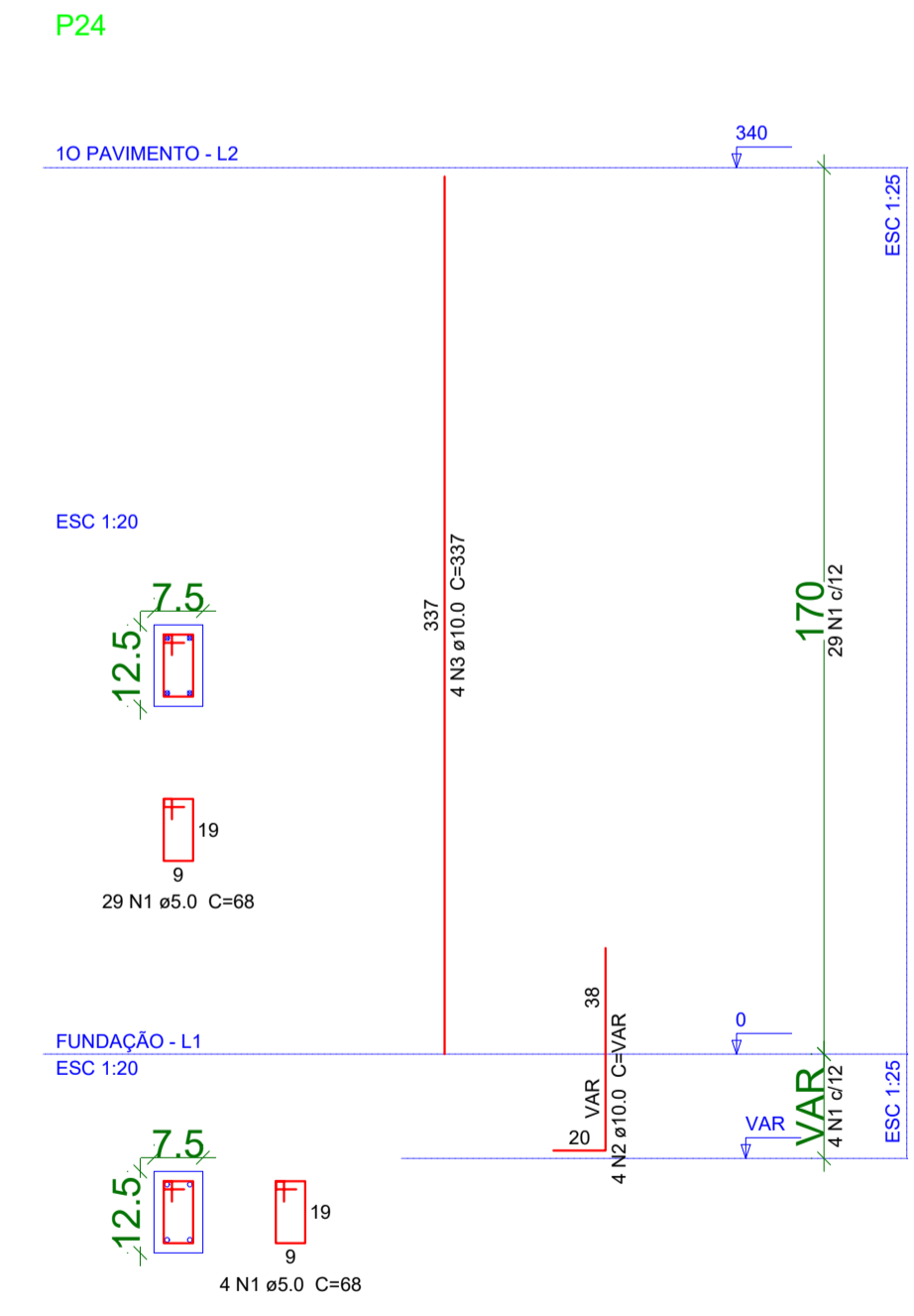
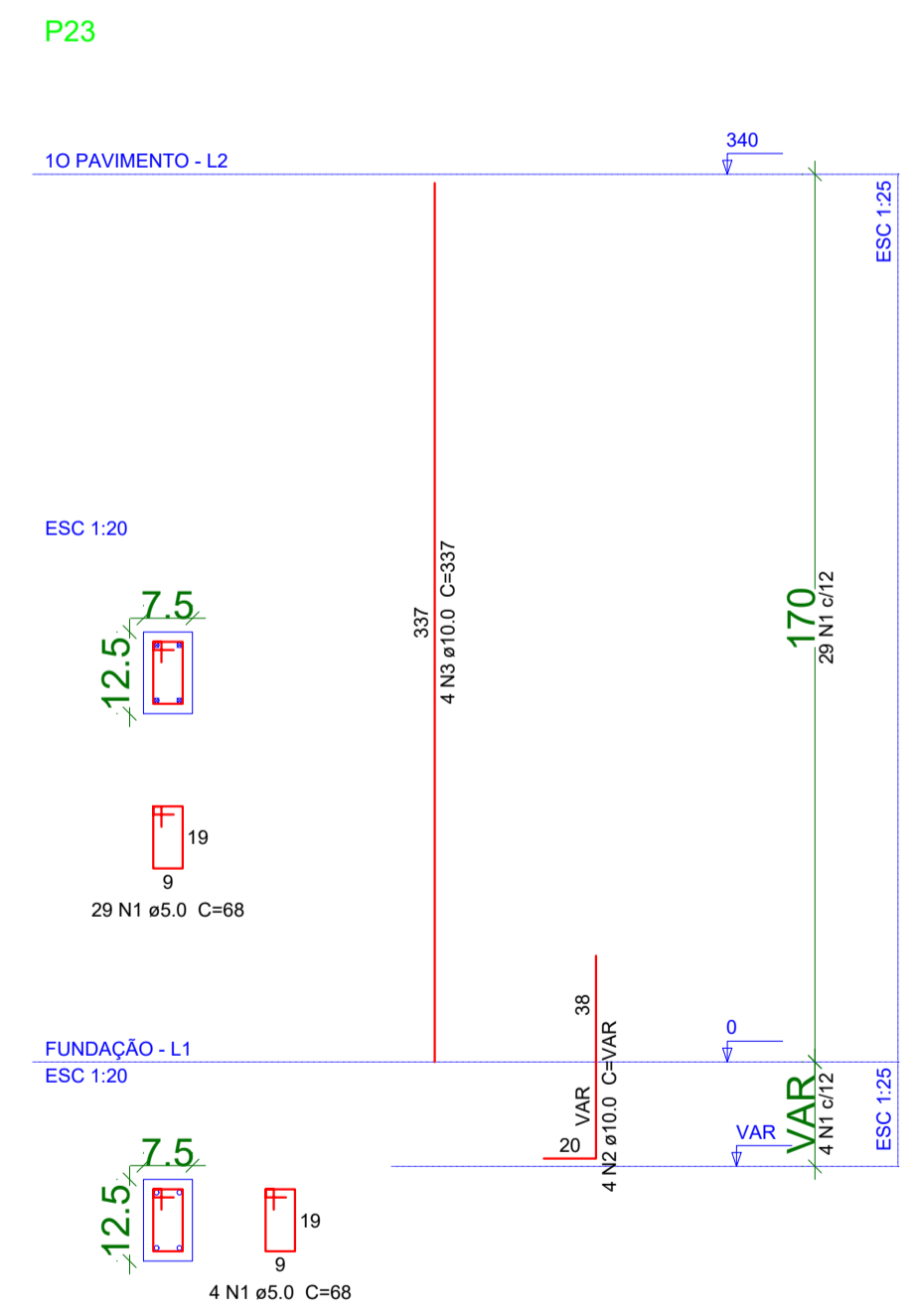
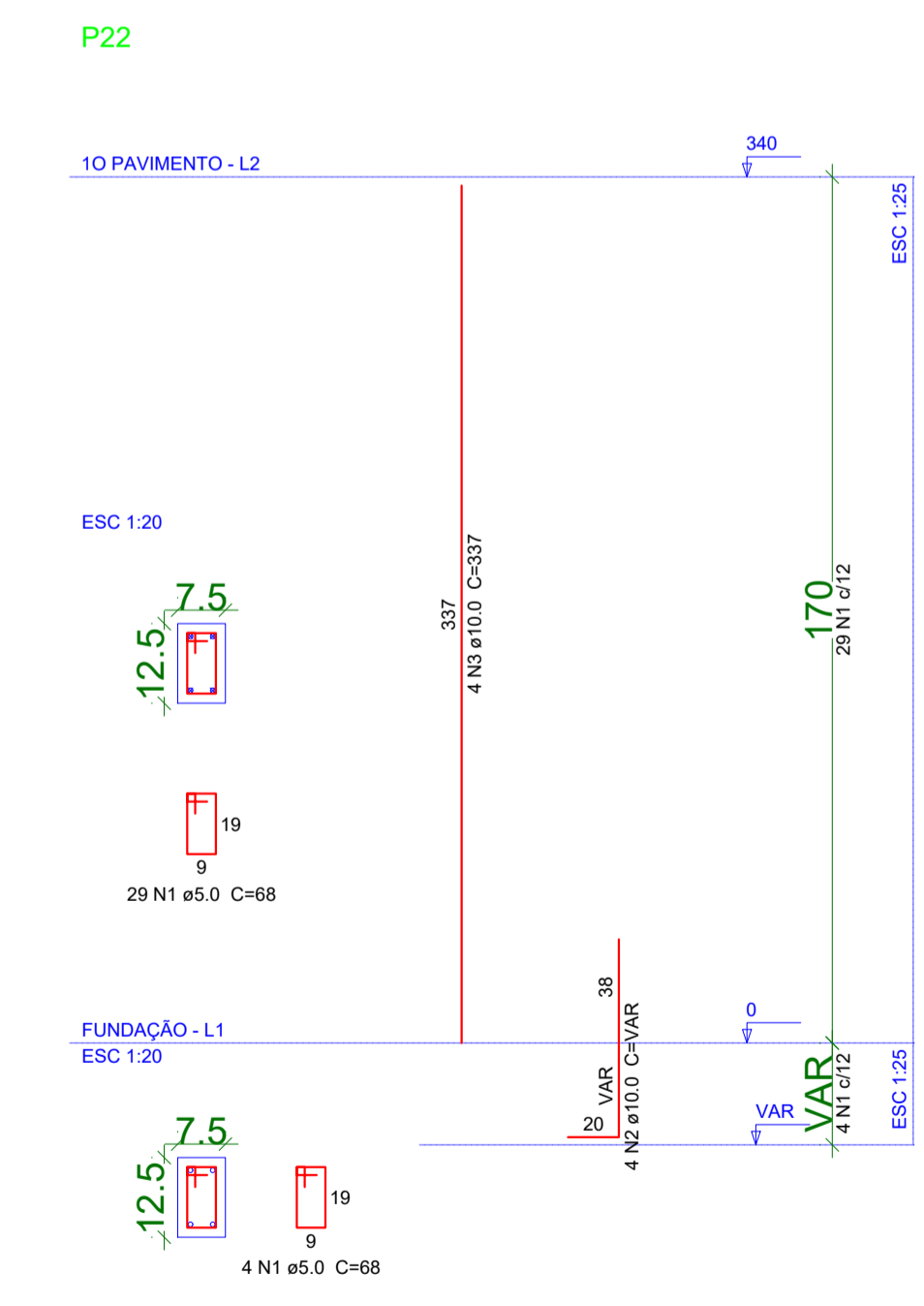
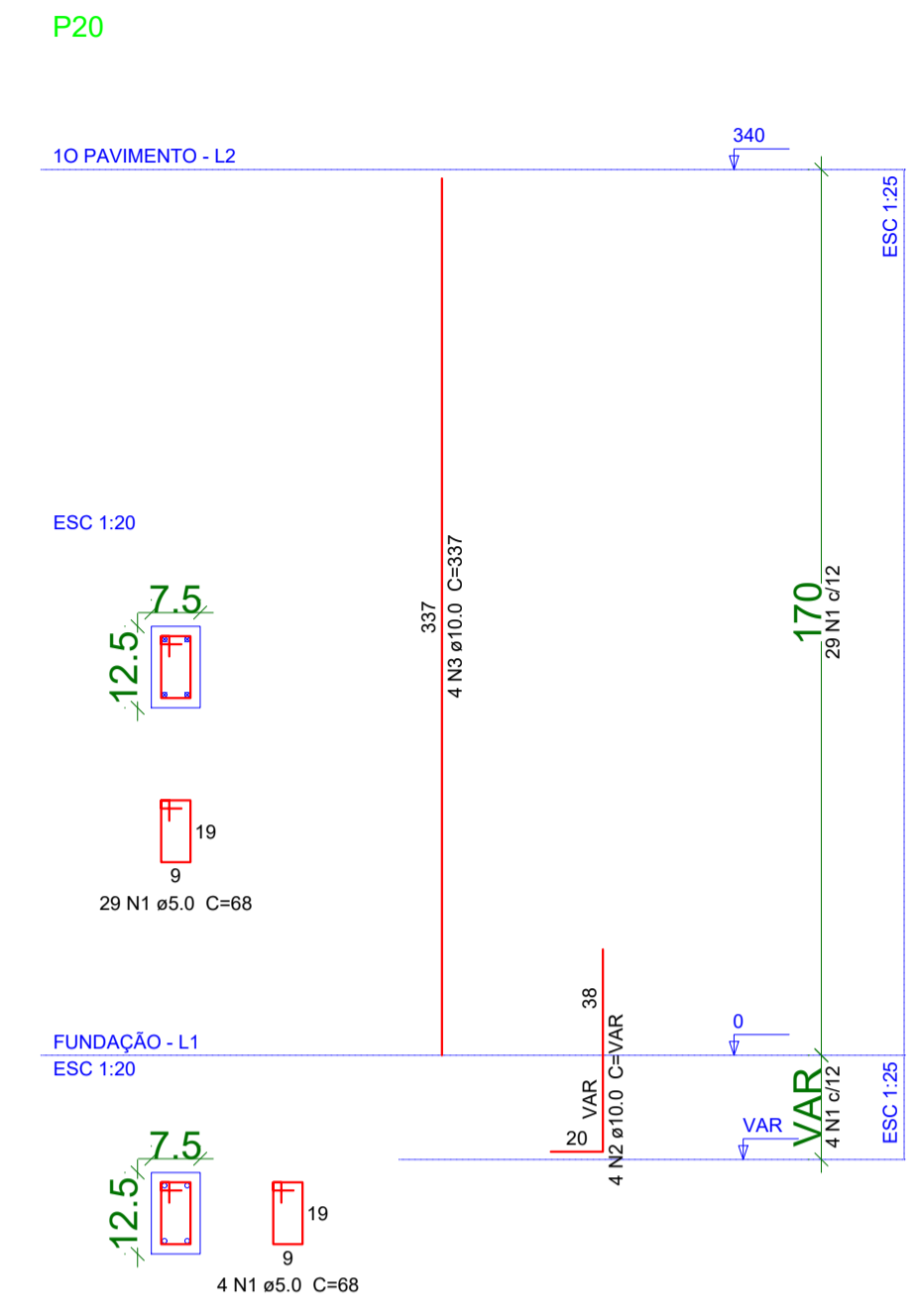
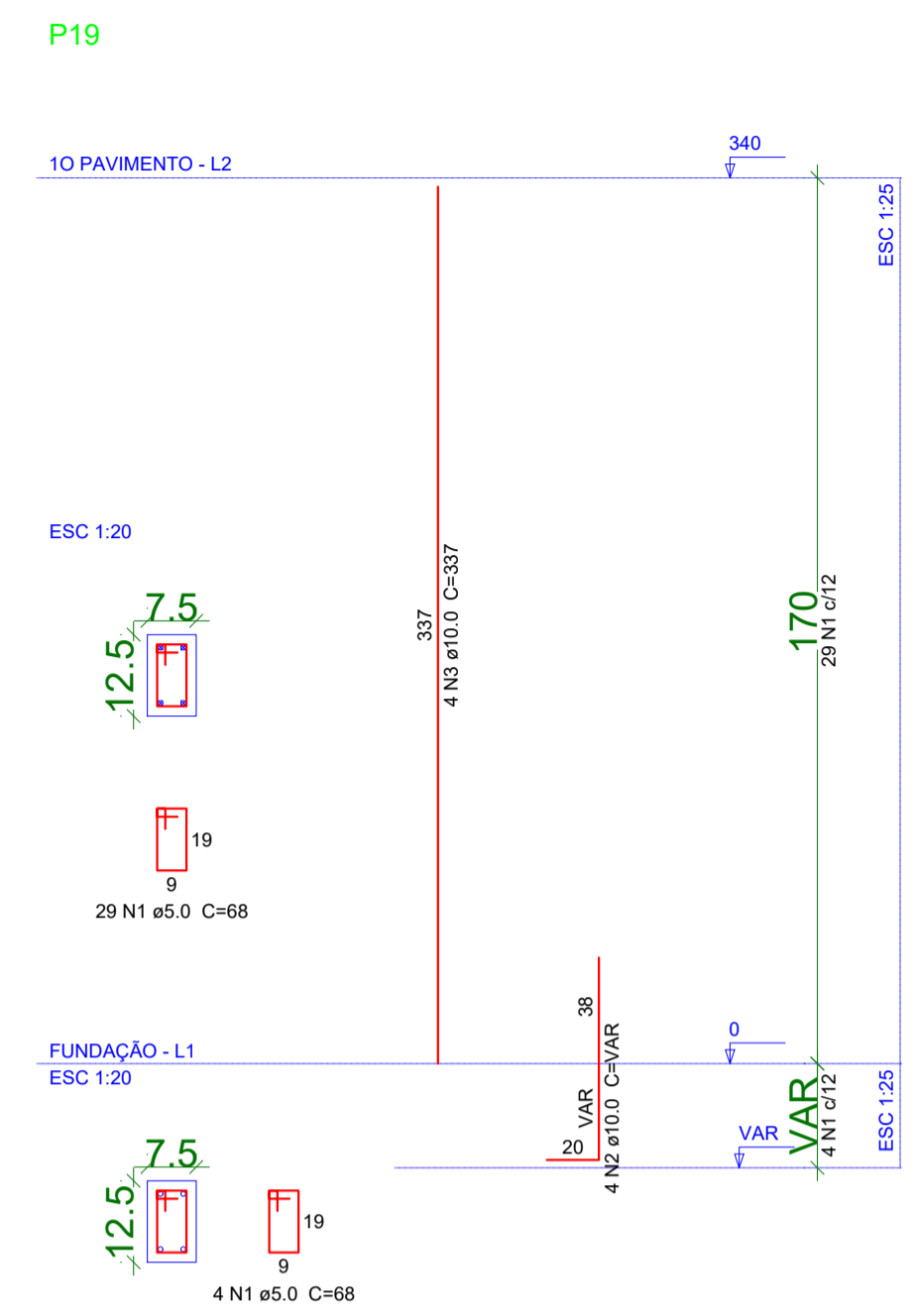
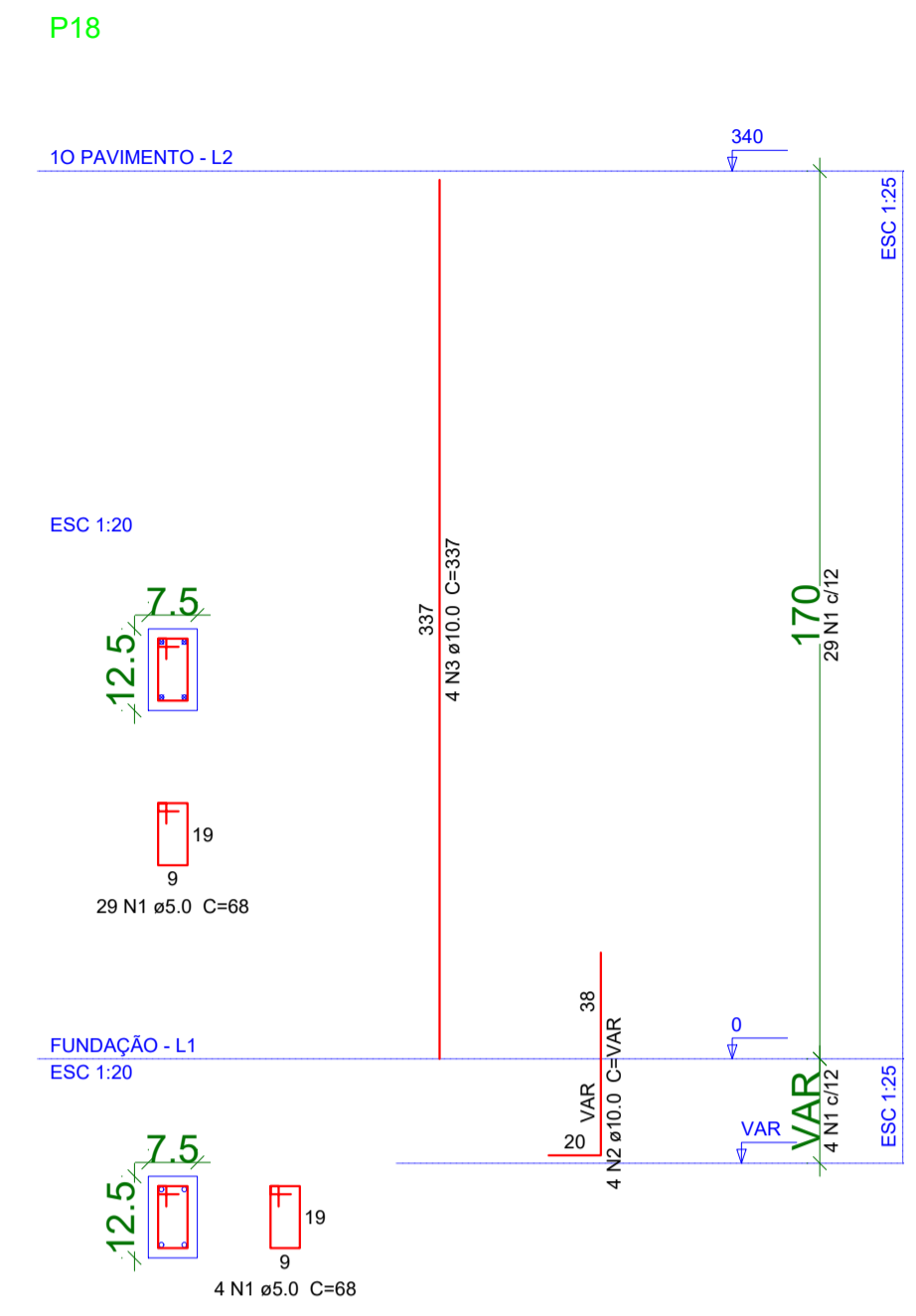
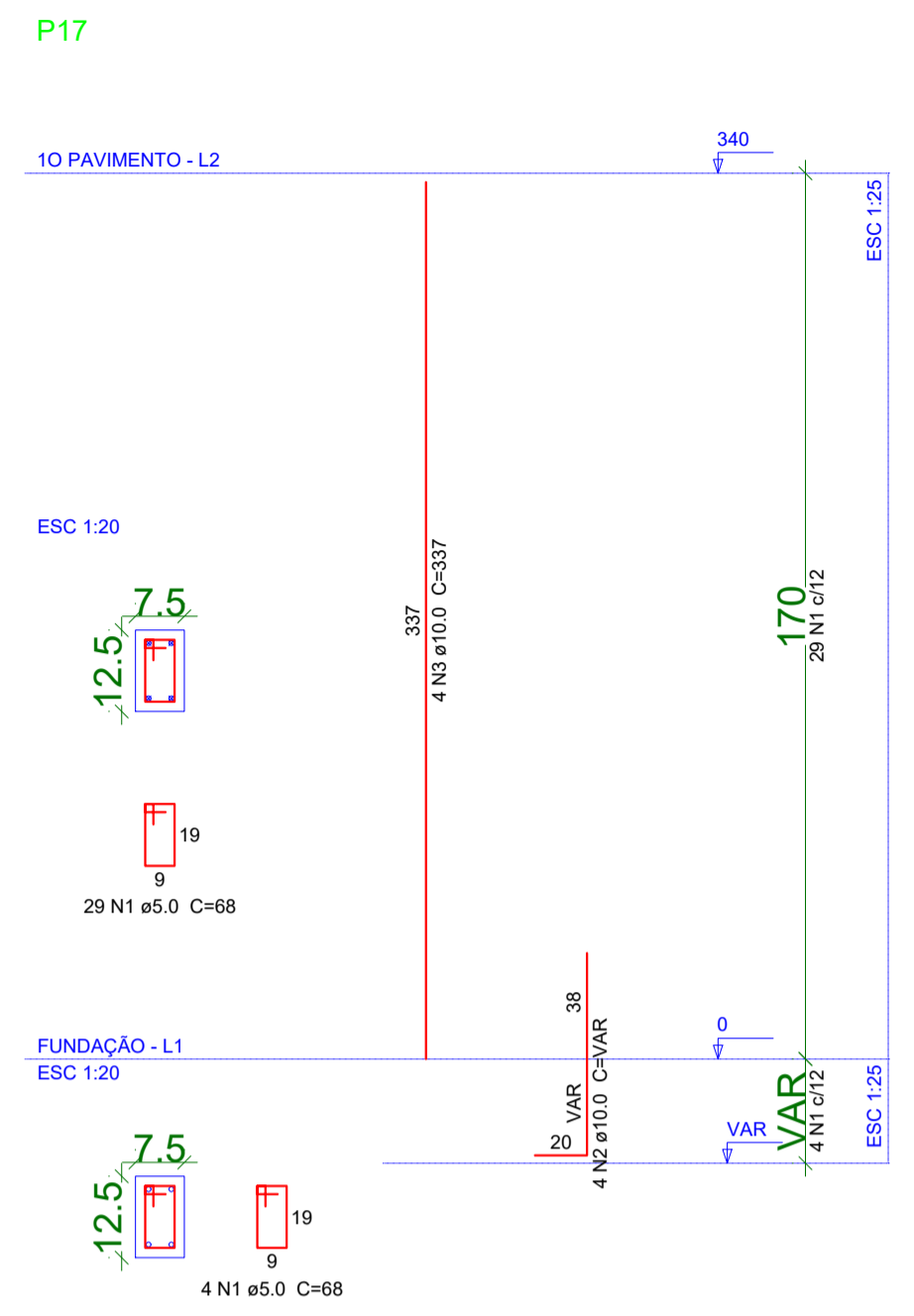
P15



P16



	CLIENTE	UNIVERSIDADE ESTADUAL DE MATO GROSSO DO SUL
	TÍTULO	NÚCLEO DE PRÁTICAS JURÍDICAS
LOCAL	UNIDADE UNIVERSITÁRIA DE NAVIRAÍ - NAVIRAÍ - MS	
AUTOR DO PROJETO	PROPRIETÁRIO	
RESPONSÁVEL TÉCNICO	UNIVERSIDADE ESTADUAL DE MATO GROSSO DO SUL CNPJ : 86.891.363/0001-80	
REFERÊNCIA	PILARES 2/4	FOLHA Nº 04/13
ESCALA	UNIDADE	ARQUIVO
INDICADAS	METRO	
DATA	DESENHO	REVISÃO
26/07/2022	TIAGO	ROD
		YBTO



Relação do aço

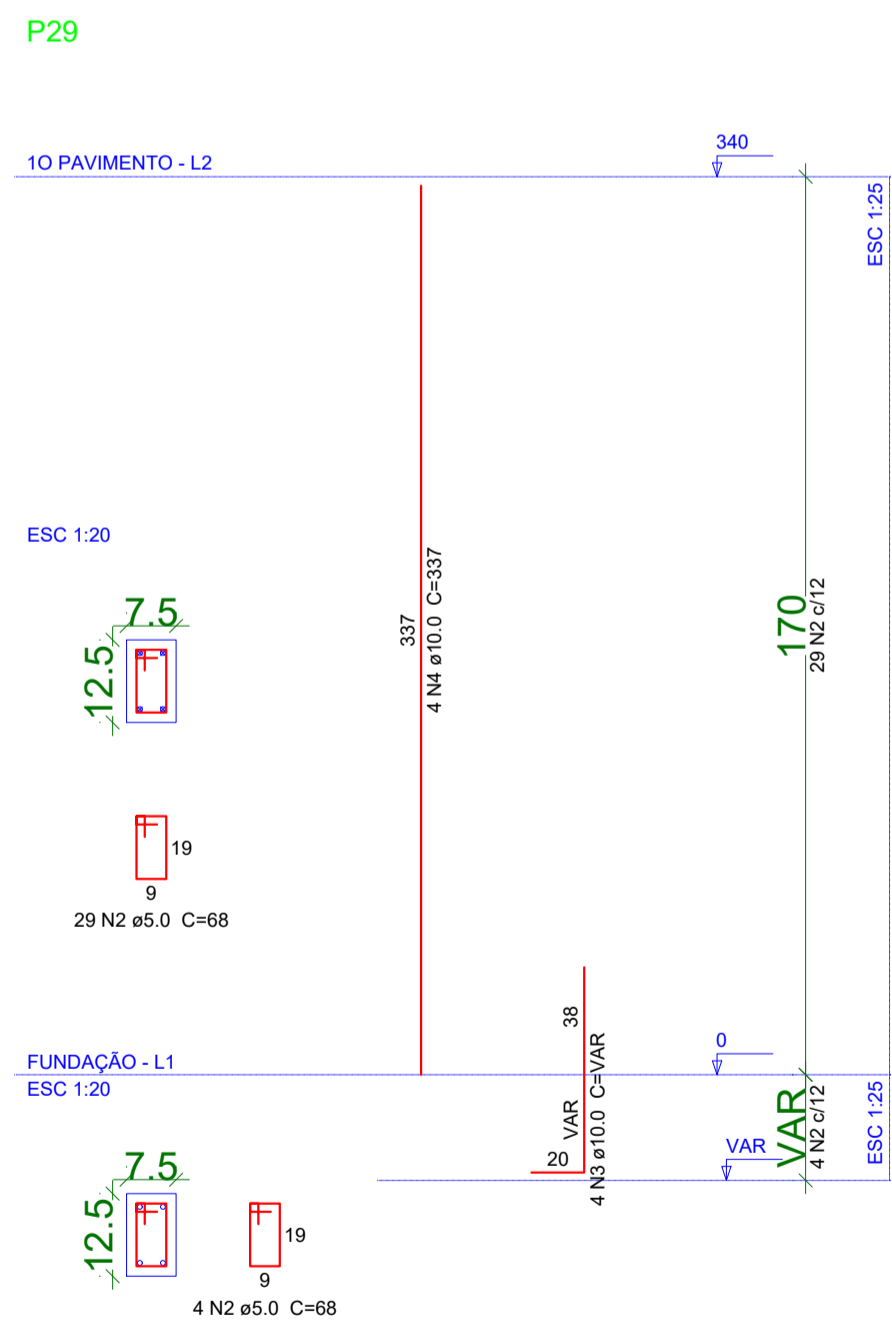
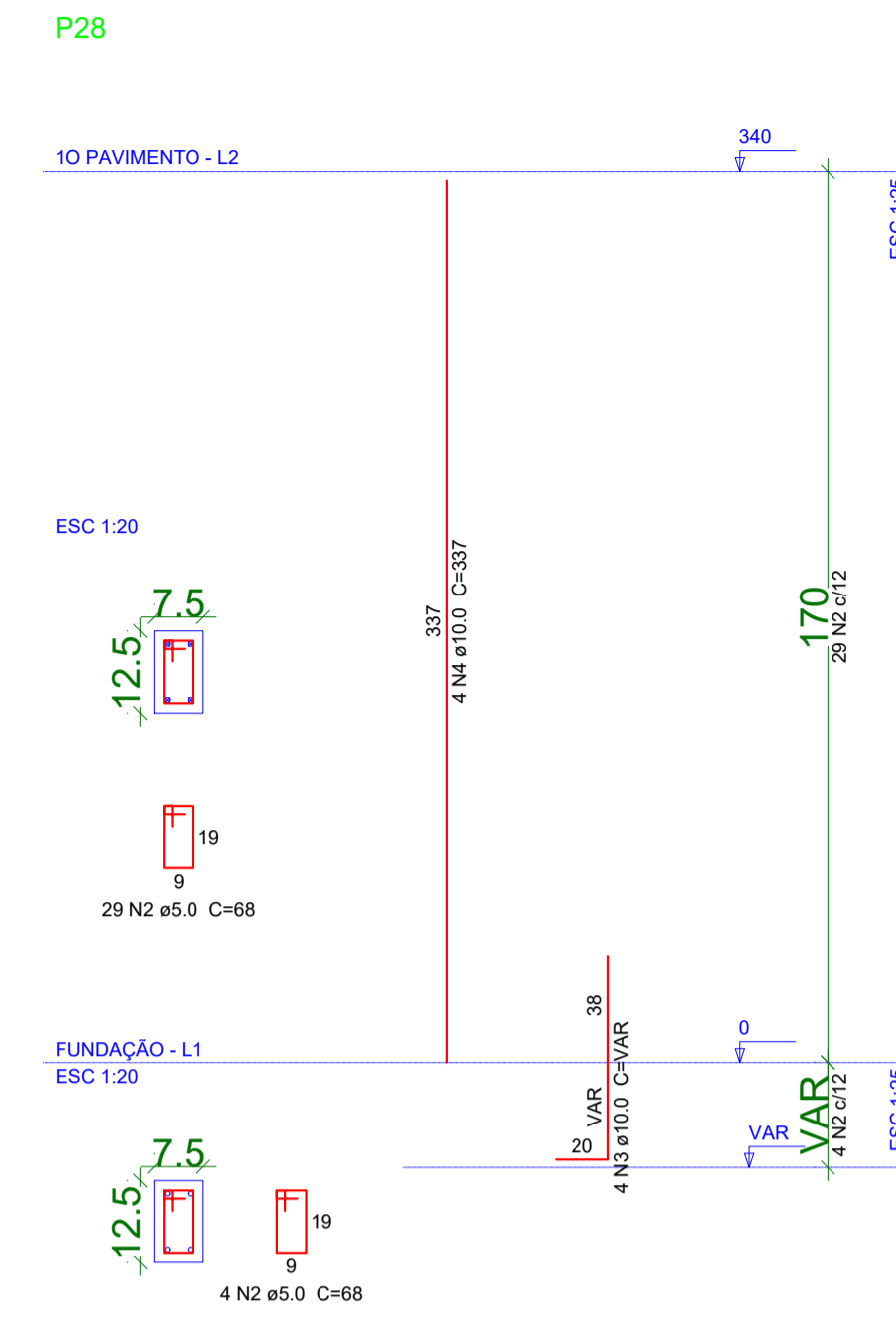
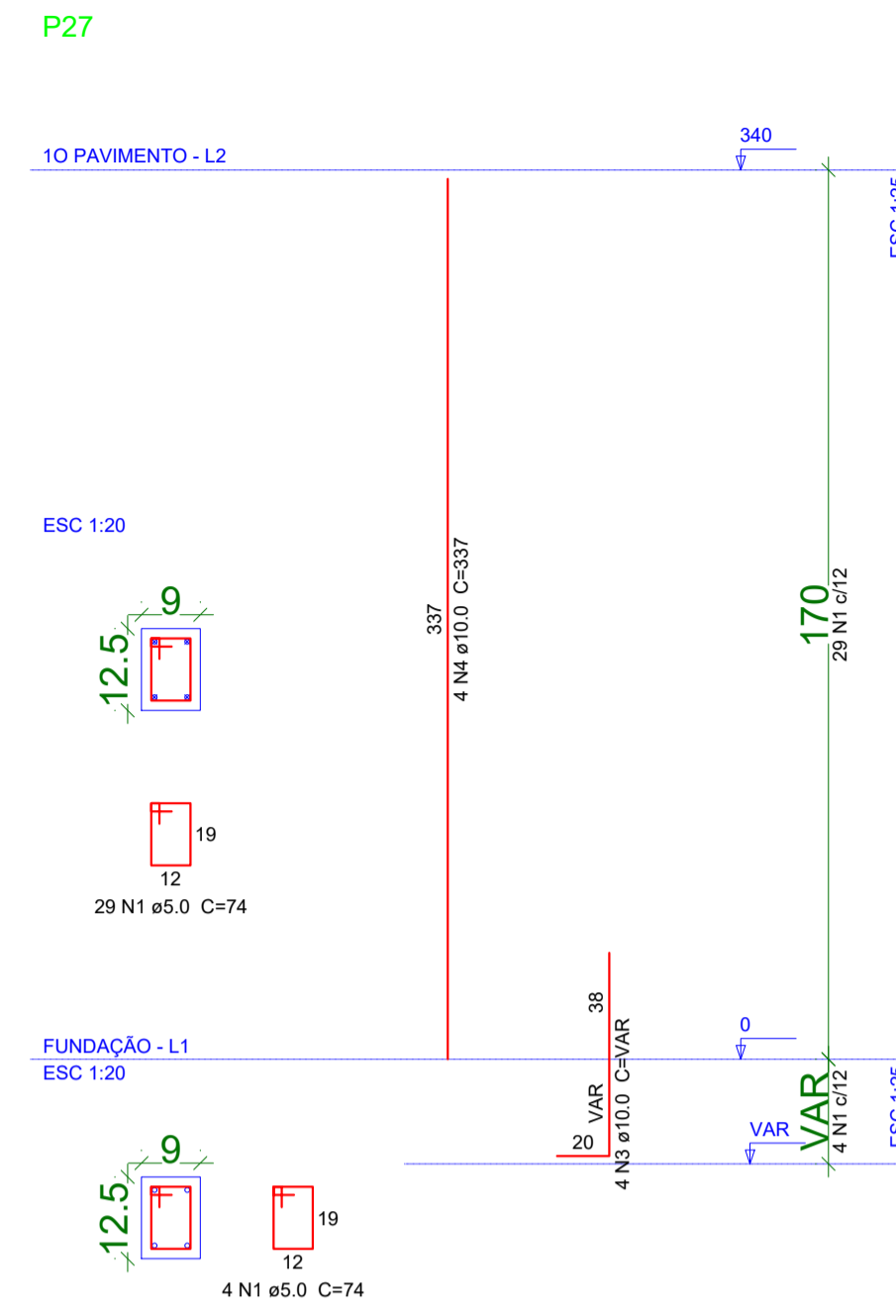
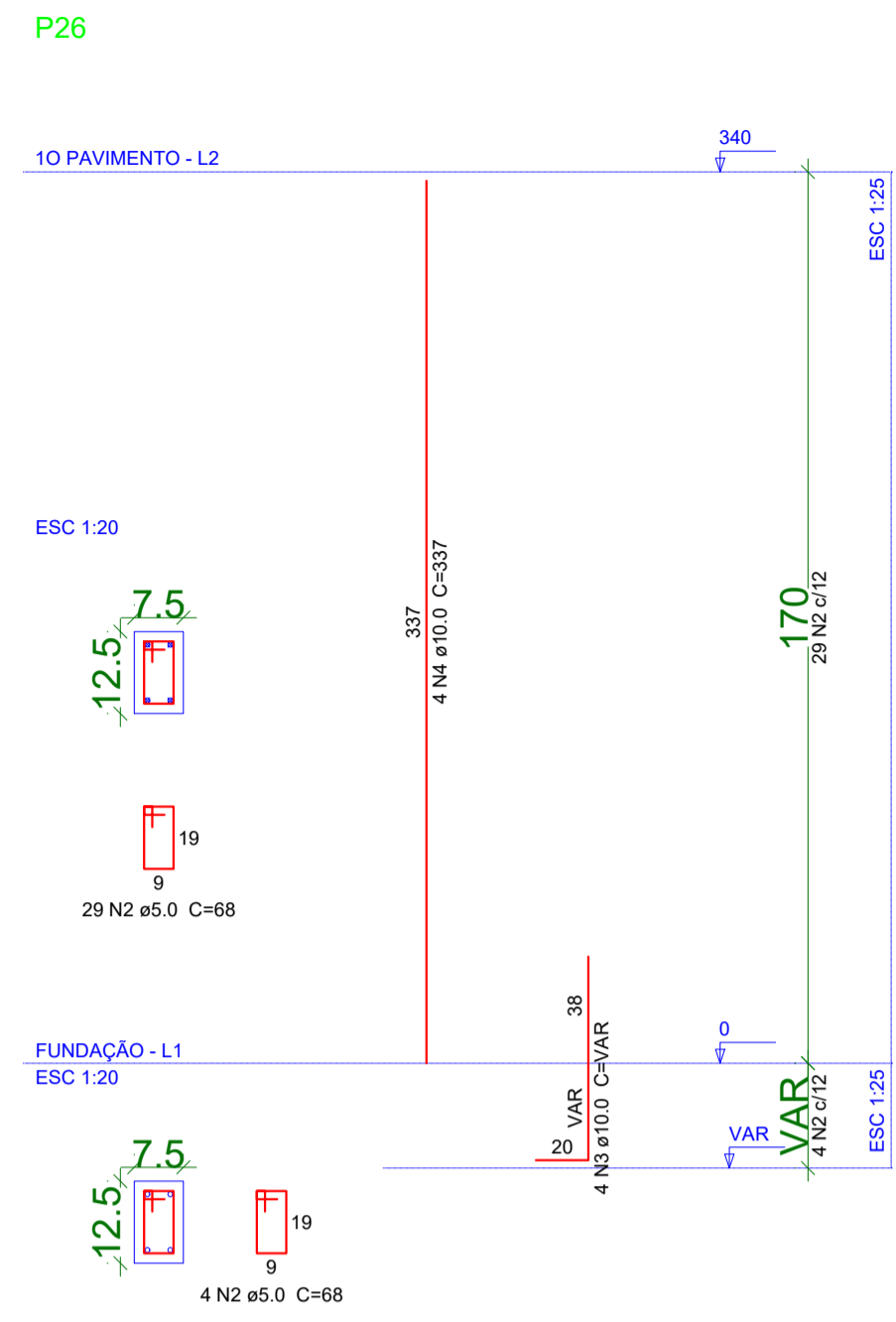
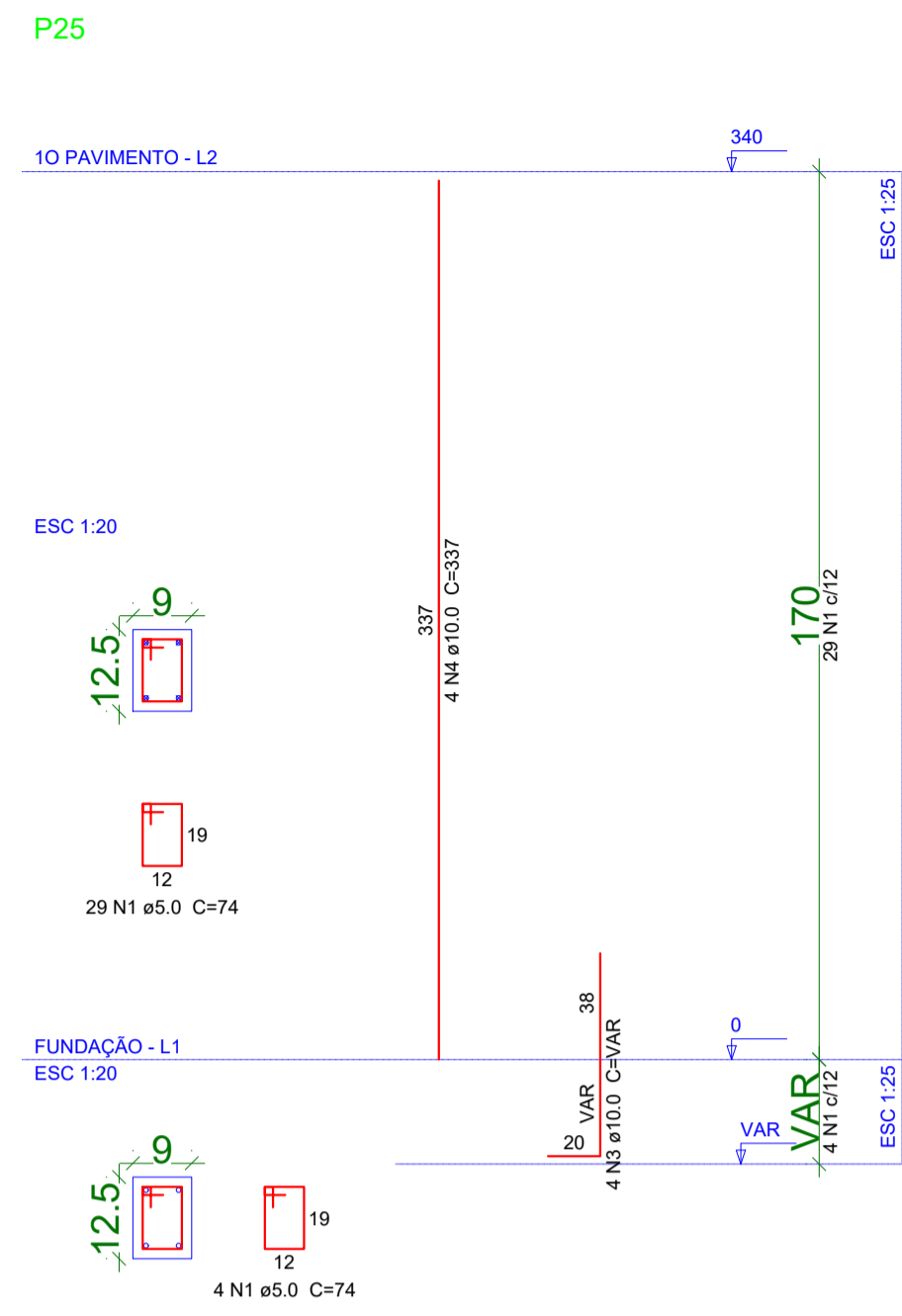
AÇO	N	DIAM	Q	UNIT (cm)	C.TOTAL (cm)
CA50	1	5.0	264	68	17952
CA50	2	10.0	32	VAR	VAR
CA50	3	10.0	32	337	10784

Resumo do aço

AÇO	DIAM	C.TOTAL (m)	PESO + 10% (kg)
CA50	10.0	138.6	94
CA50	5.0	179.6	30.4
PESO TOTAL:			124.4
CA50	94		
CA50	30.4		

Vol. de concreto total (C-25) = 1.14 m³
Área de forma total = 24.32 m²

	CLIENTE	UNIVERSIDADE ESTADUAL DE MATO GROSSO DO SUL	
	TÍTULO	NÚCLEO DE PRÁTICAS JURÍDICAS	
LOCAL	UNIDADE UNIVERSITÁRIA DE NAVIRAÍ		
AUTOR DO PROJETO	PROPRIETÁRIO	WAGNER LUIZ MANARA - CREA 27.190/D	
RESPONSÁVEL TÉCNICO	UNIVERSIDADE ESTADUAL DE MATO GROSSO DO SUL CNPJ : 86.891.363/0001-80		
REFERÊNCIA	PILARES 3/4		FORMA Nº 1 AP
		05/13	
ESCALA INDICADAS	UNIDADE METRO	ARQUIVO	DATA: 02/05/2022
		DESENHO TIAGO	REVISÃO ROO
			VISTO



Relação do aço

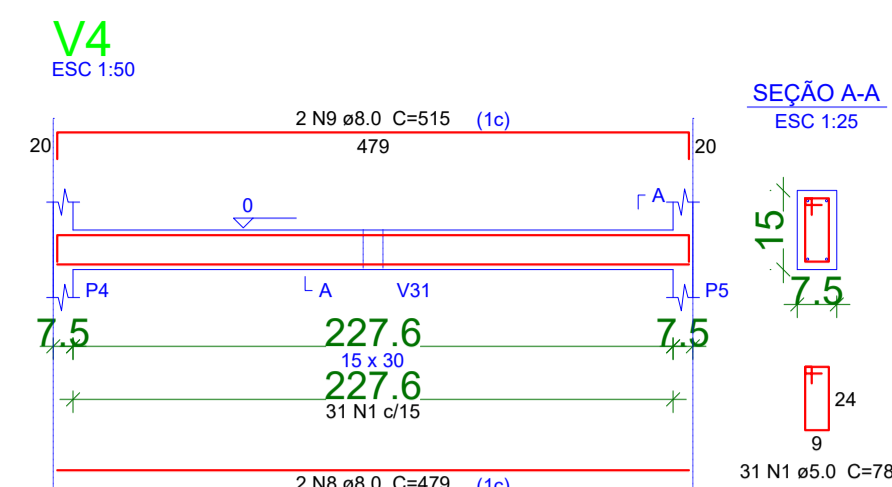
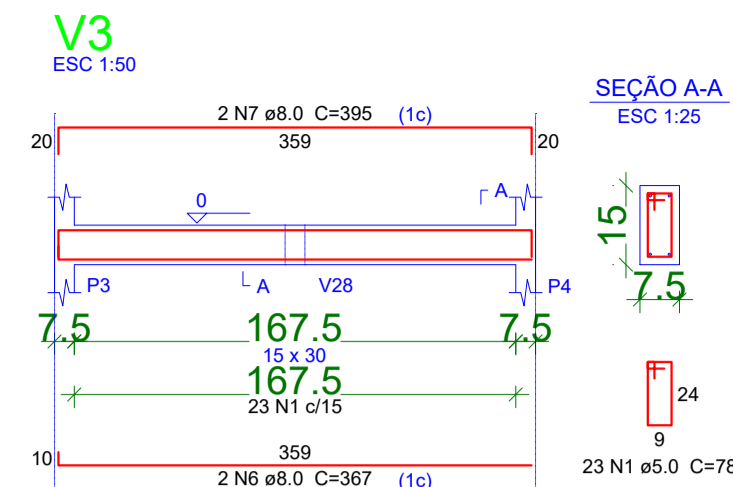
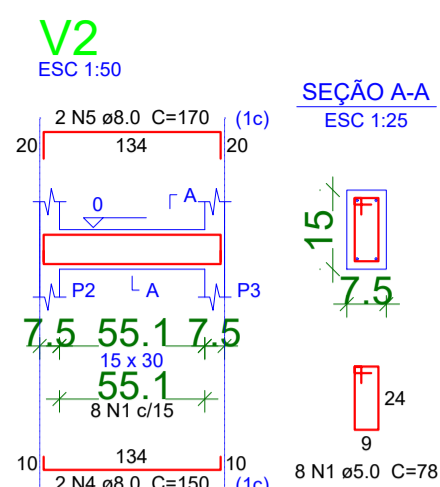
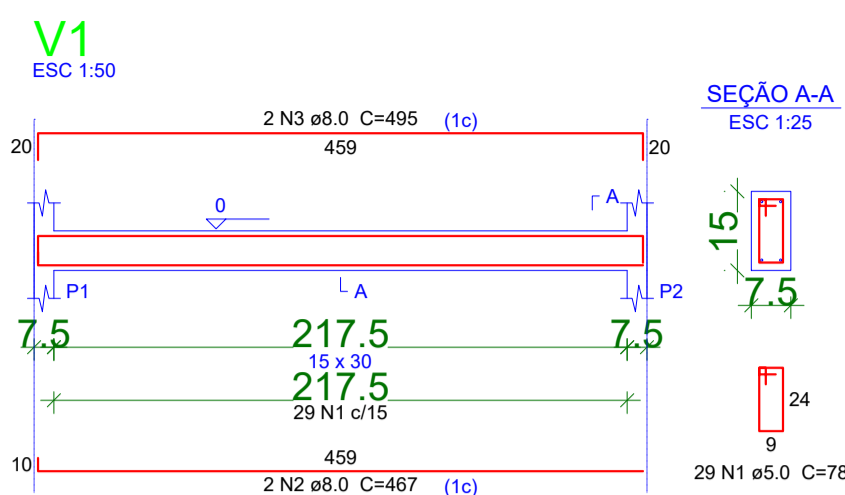
ACO	N	DIAM	Q	UNIT (cm)	C.TOTAL (cm)
CA60	1	5.0	66	74	4864
CA50	2	5.0	99	68	6732
	3	10.0	20	VAR	VAR
	4	10.0	20	337	6740

Resumo do aço

ACO	DIAM	C.TOTAL (m)	PESO + 10% (kg)
CA50	10.0	86.6	58.7
CA60	5.0	116.2	19.7
PESO TOTAL			
CA50		58.7	
CA60		19.7	

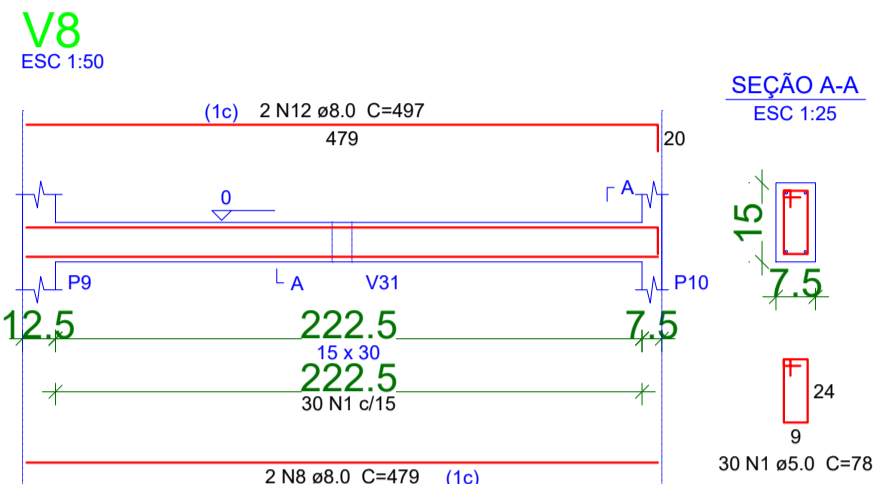
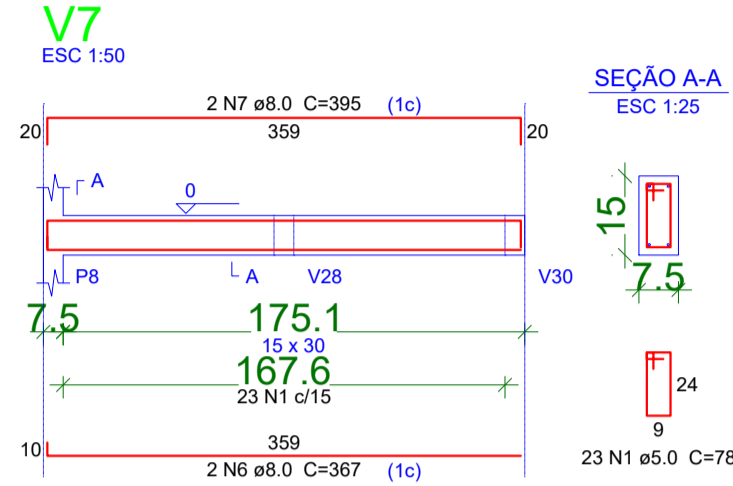
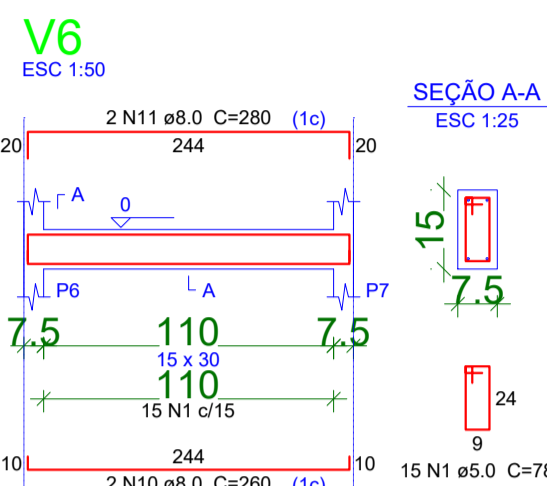
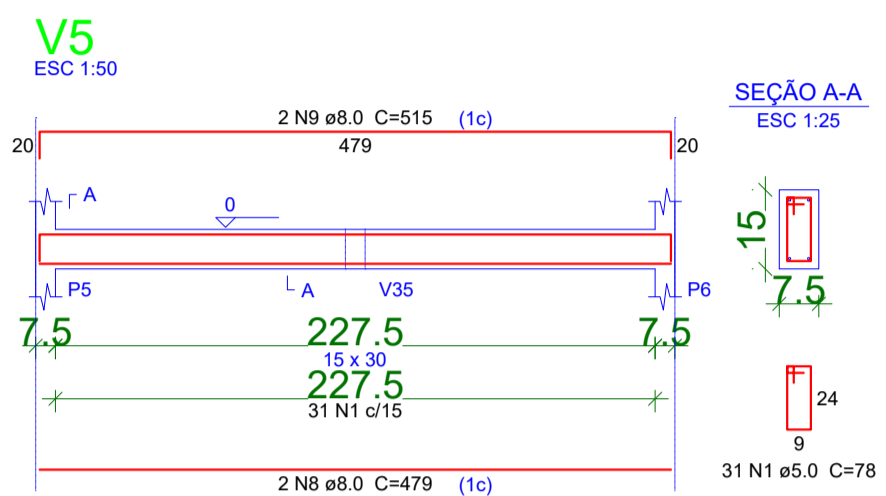
Vol. de concreto total (C-25) = 0.77 m³
Área de forma total = 15.66 m²

	CLIENTE	UNIVERSIDADE ESTADUAL DE MATO GROSSO DO SUL	
	TÍTULO	NÚCLEO DE PRÁTICAS JURÍDICAS	PROJETO
LOCAL		UNIDADE UNIVERSITÁRIA DE NAVIRAÍ	
AUTOR DO PROJETO:		PROPRIETÁRIO	
WAGNER LUIZ MANARA - CREA 27.190/D			
RESPONSÁVEL TÉCNICO:	UNIVERSIDADE ESTADUAL DE MATO GROSSO DO SUL CNPJ : 86.891.363/0001-80		
REFERÊNCIA	PILARES 4/4		FOLHA Nº / AP
			ARQ-AP
			06/13
ESCALA INDICADAS	UNIDADE: METRO	ARQUIVO:	DATA: 06/07/2022
	DESENHO: TIAGO	REVISÃO: R00	VISTO:



Relação do aço

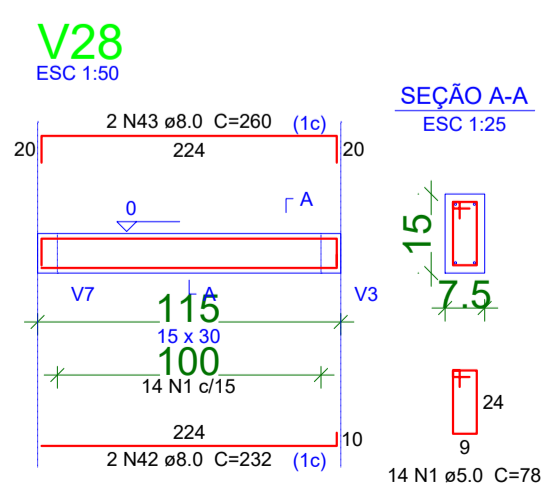
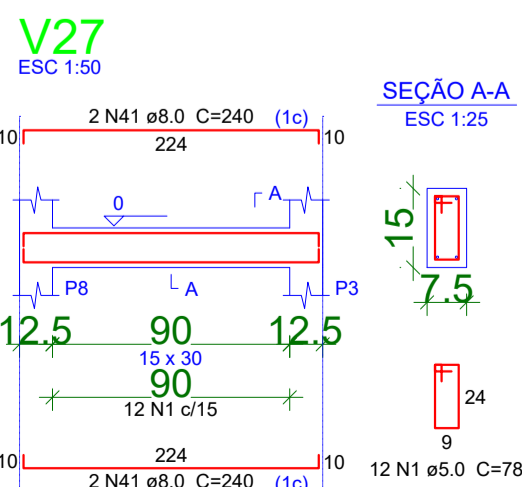
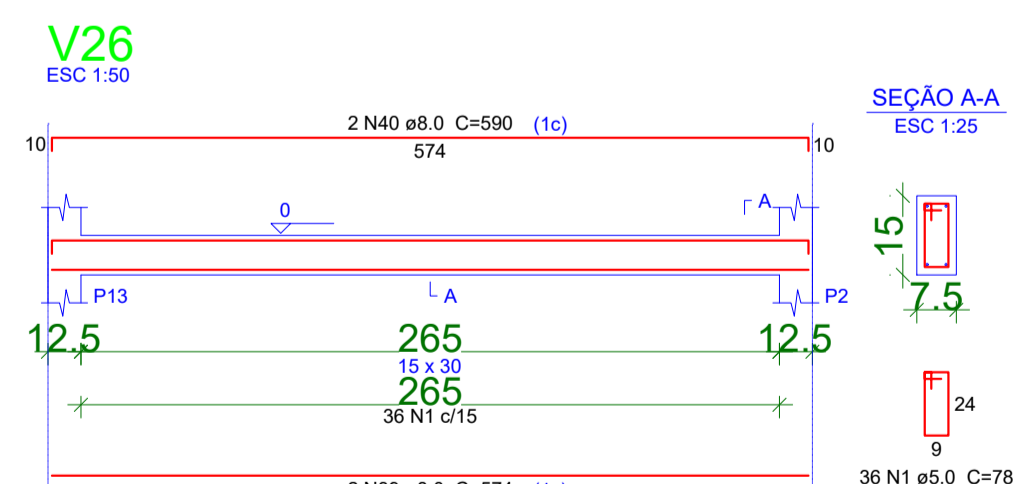
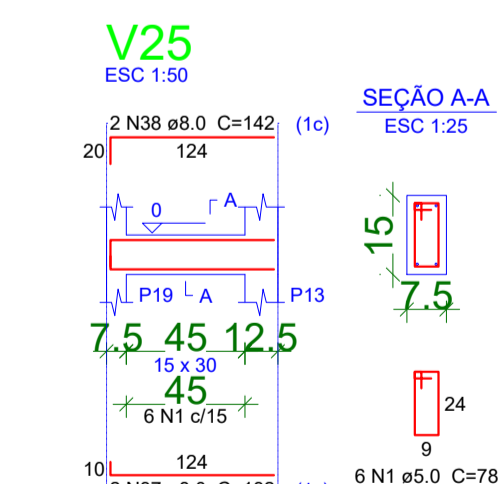
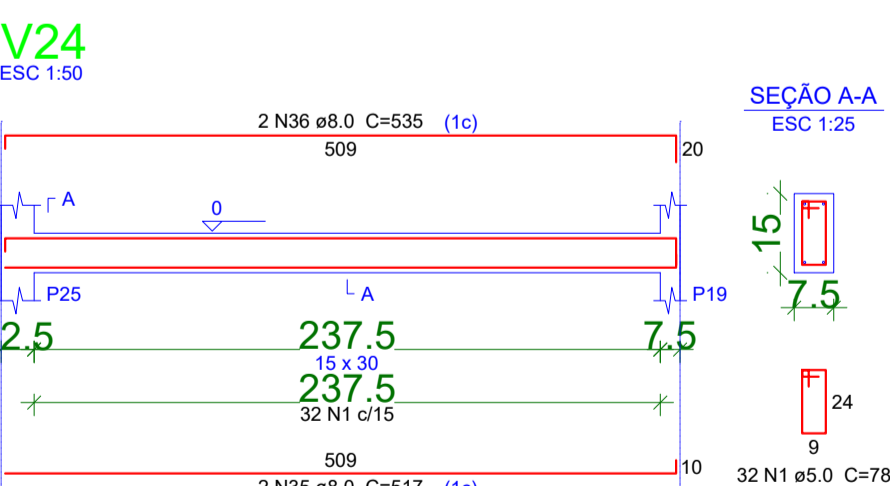
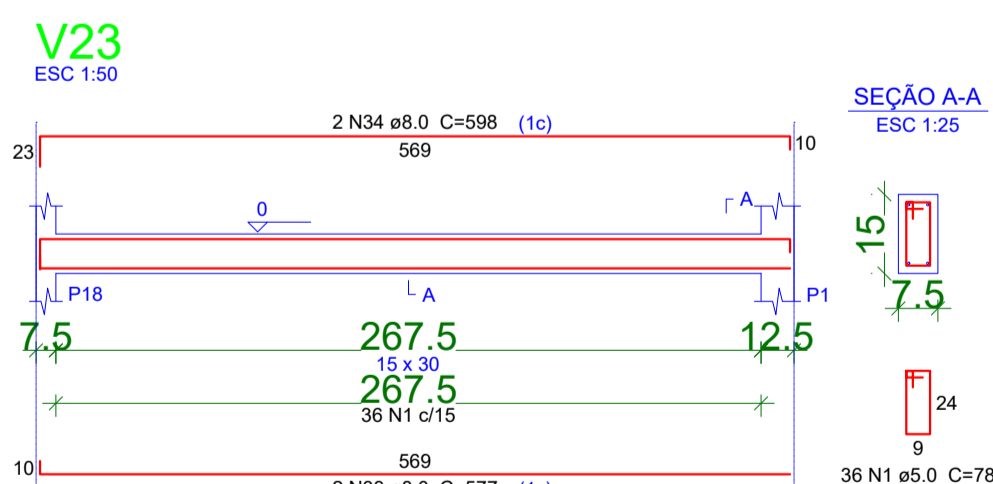
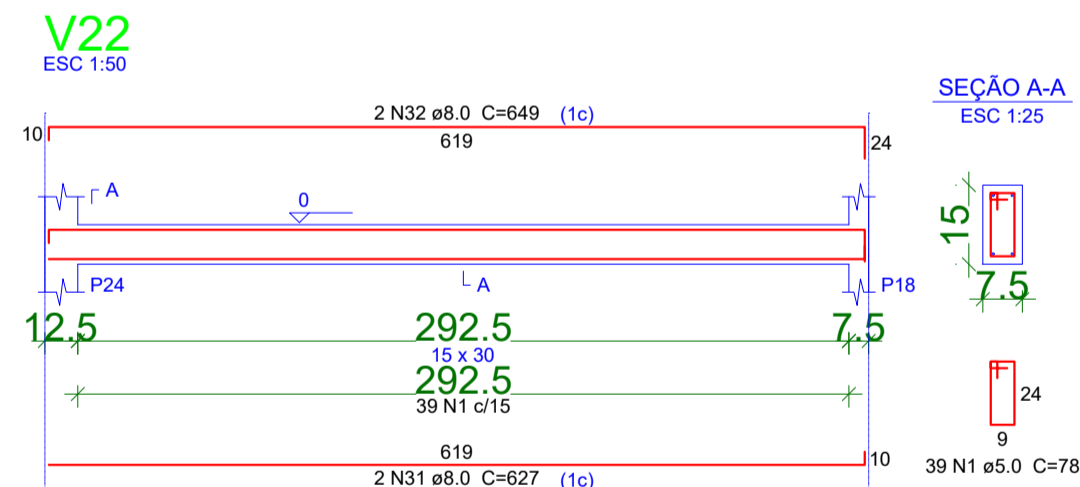
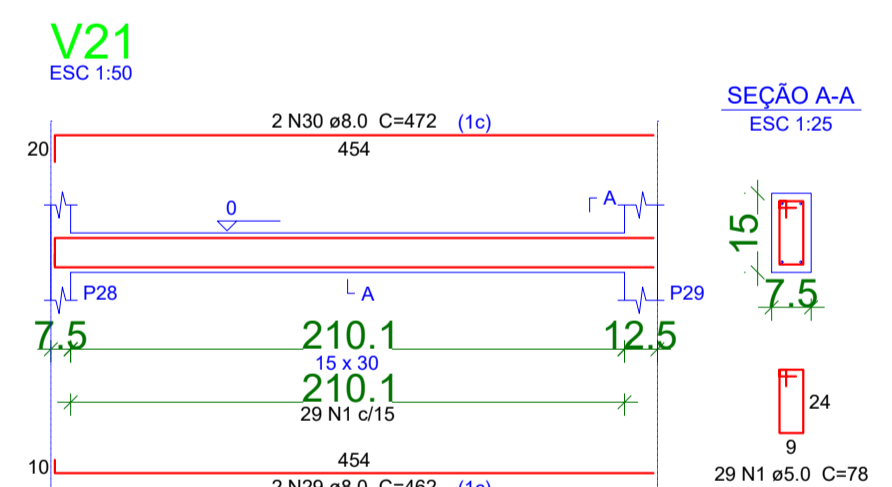
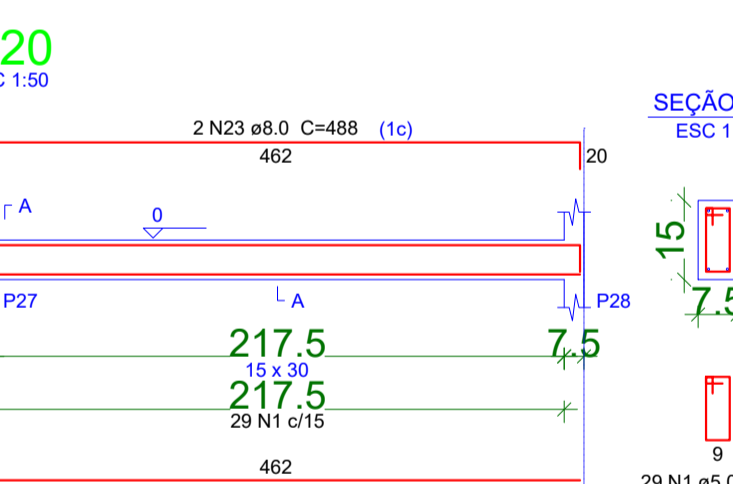
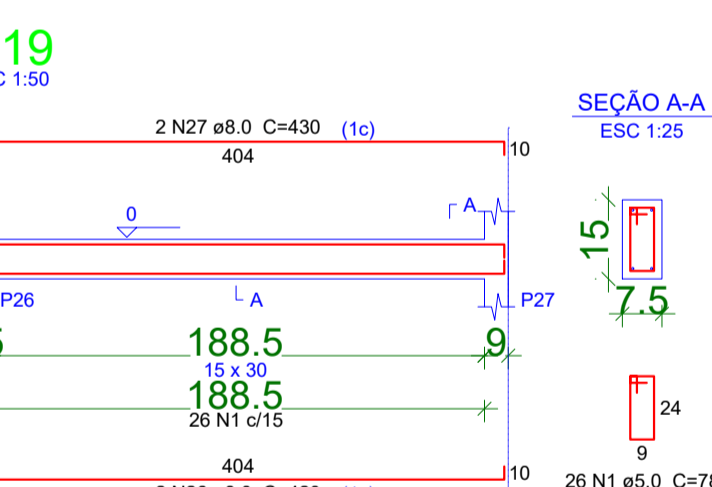
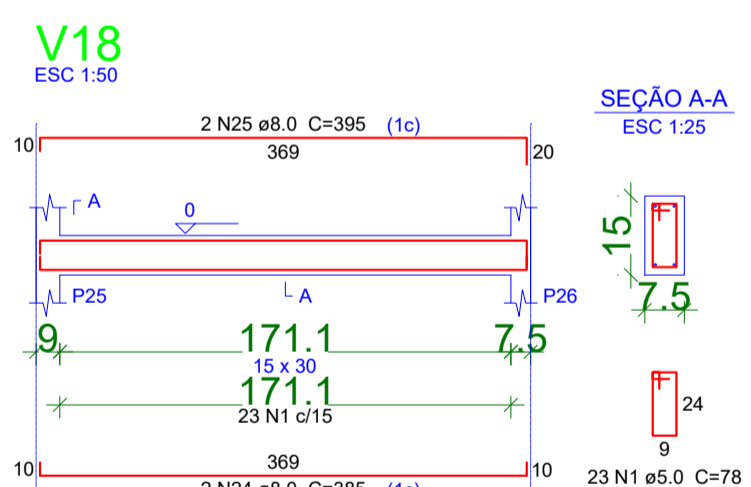
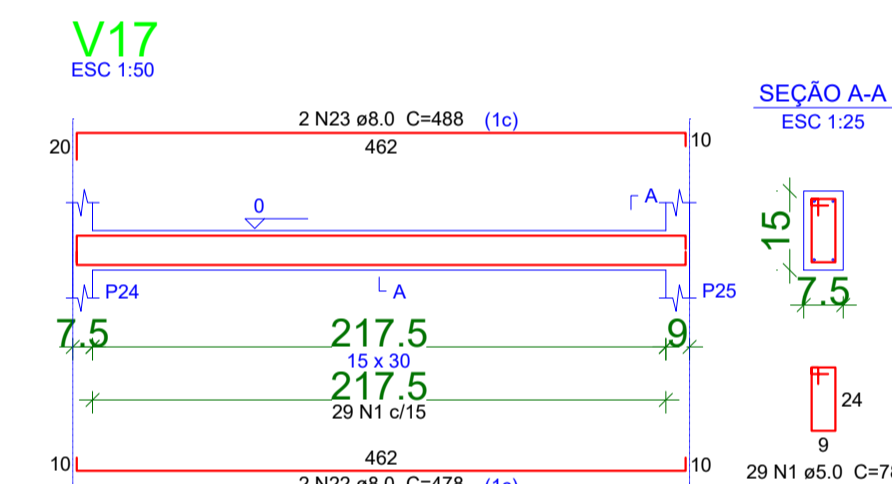
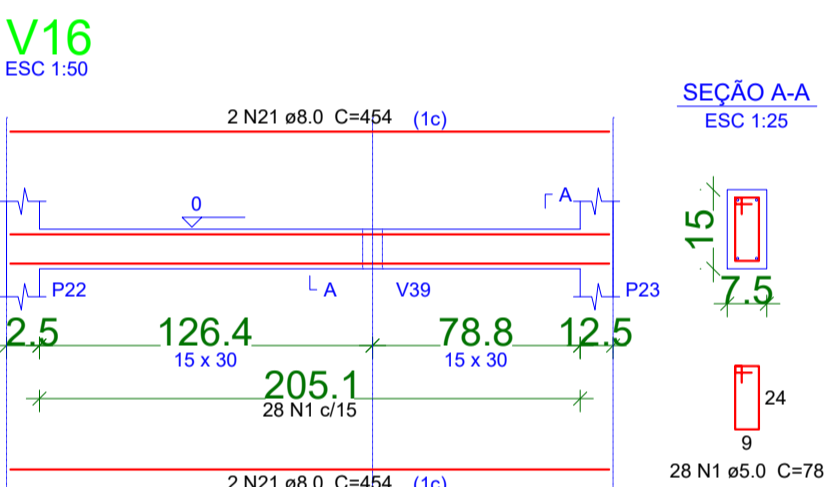
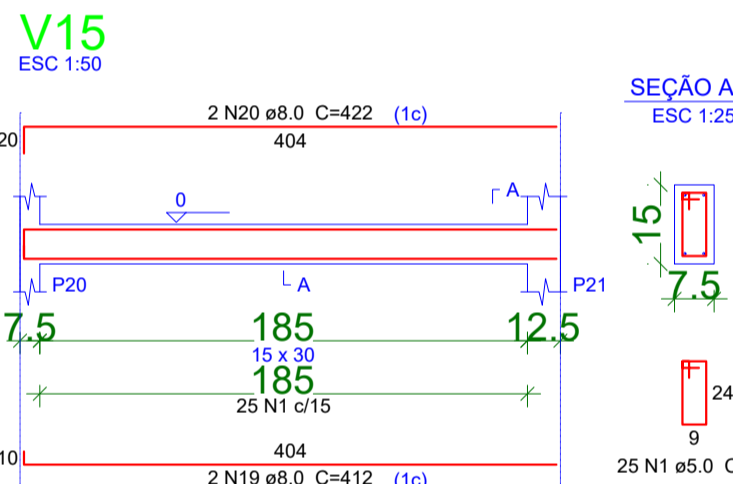
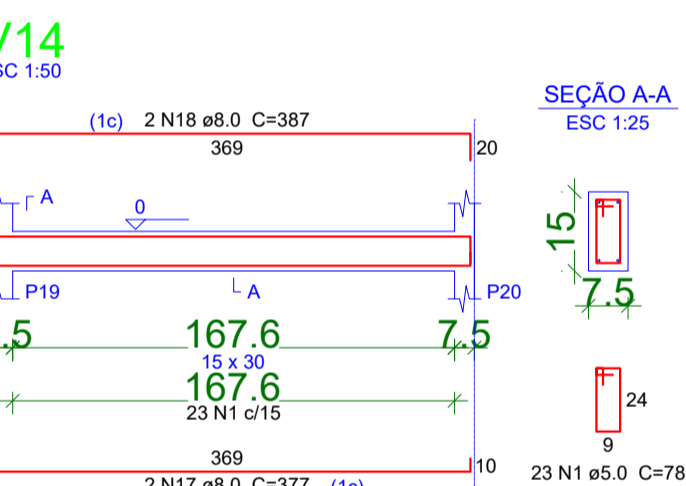
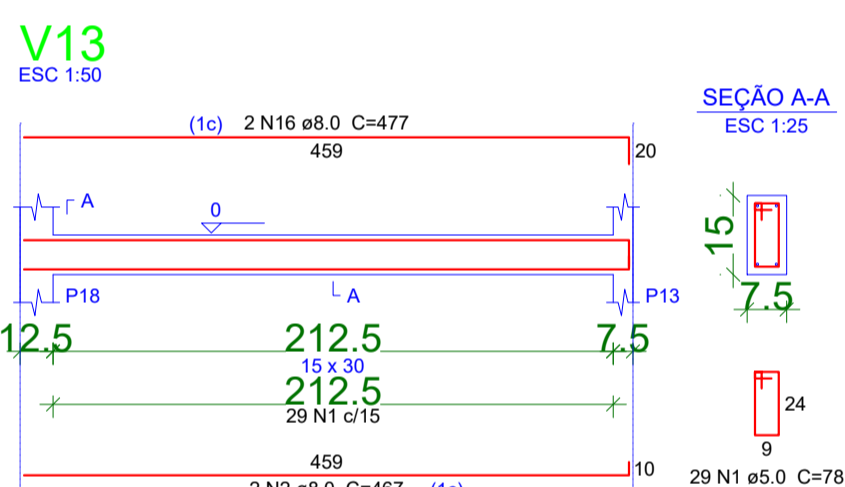
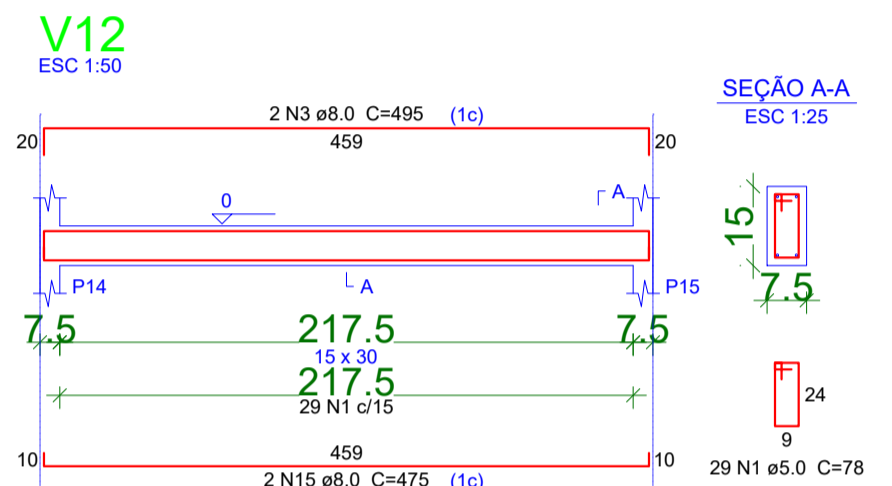
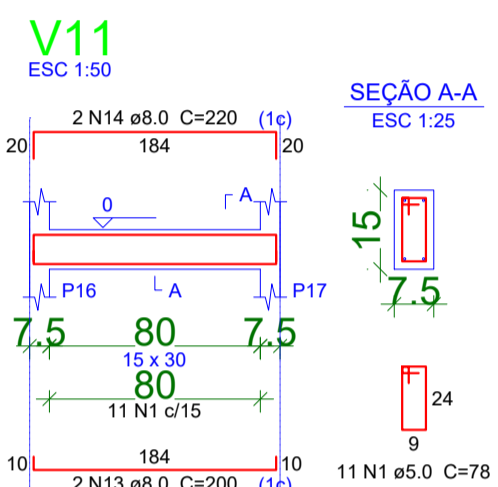
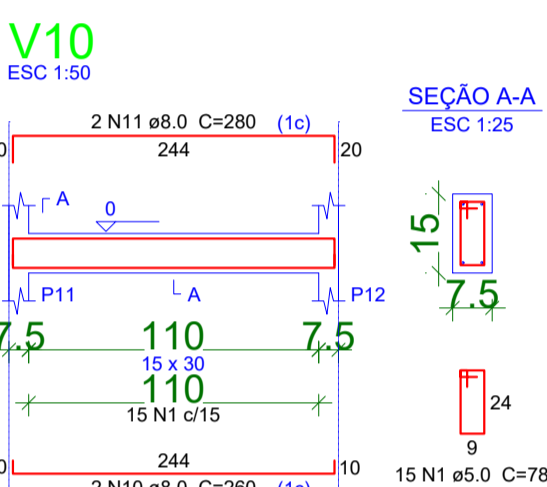
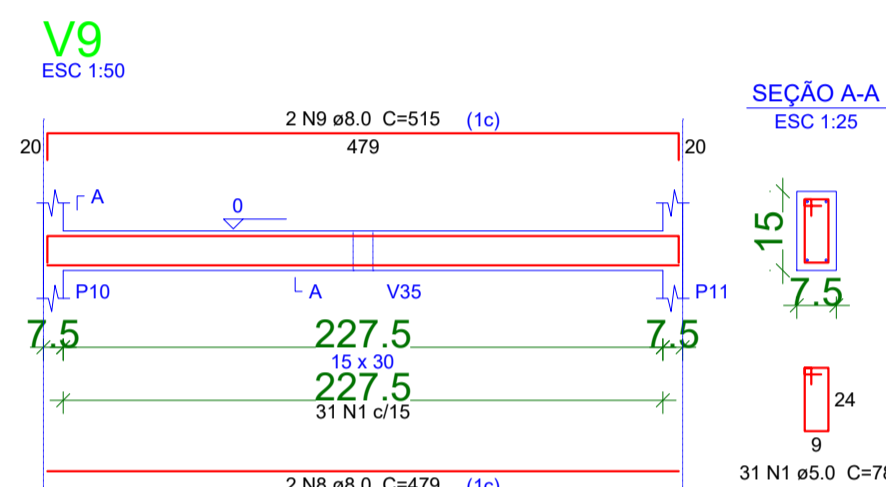
ACO	N	DIAM	Q	UNIT (cm)	C.TOTAL (cm)
CA60	1	5.0	692	78	53976
CA50	2	8.0	4	467	1868
	3	8.0	3	485	1980
	4	8.0	2	150	300
	5	8.0	2	170	340
	6	8.0	4	367	1468
	7	8.0	4	395	1580
	8	8.0	8	479	3832
	9	8.0	6	515	3090
	10	8.0	4	260	1040
	11	8.0	4	280	1120
	12	8.0	2	497	994
	13	8.0	2	200	400
	14	8.0	2	220	440
	15	8.0	2	475	950
	16	8.0	2	477	954
	17	8.0	2	377	754
	18	8.0	2	387	774
	19	8.0	2	412	824
	20	8.0	2	422	844
	21	8.0	4	454	1816
	22	8.0	2	478	956
	23	8.0	4	488	1952
	24	8.0	2	385	770
	25	8.0	2	395	790
	26	8.0	2	420	840
	27	8.0	2	430	860
	28	8.0	2	470	940
	29	8.0	2	462	924
	30	8.0	2	472	944
	31	8.0	2	627	1254
	32	8.0	2	649	1298
	33	8.0	4	577	1154
	34	8.0	2	598	1198
	35	8.0	2	517	1034
	36	8.0	2	535	1070
	37	8.0	2	132	264
	38	8.0	2	142	284
	39	8.0	2	574	1148
	40	8.0	2	590	1180
	41	8.0	4	240	960
	42	8.0	2	232	464
	43	8.0	2	280	520



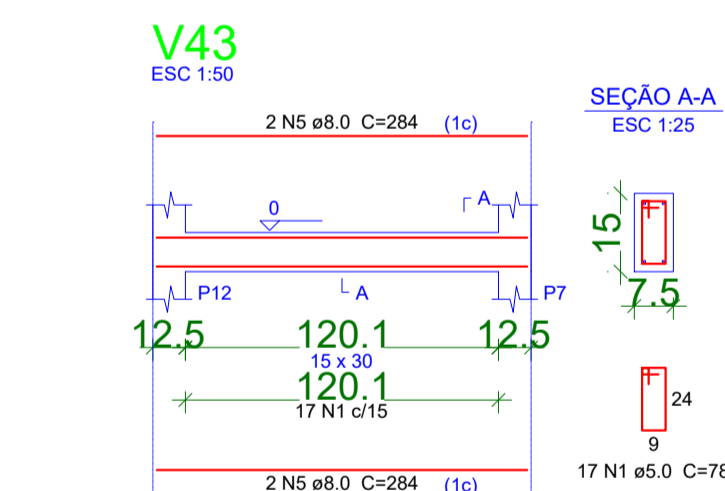
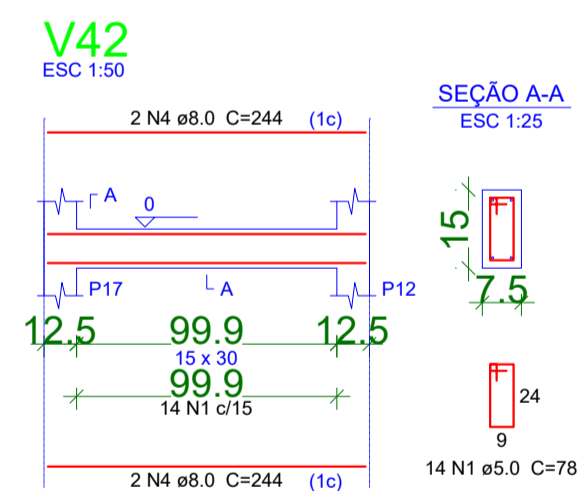
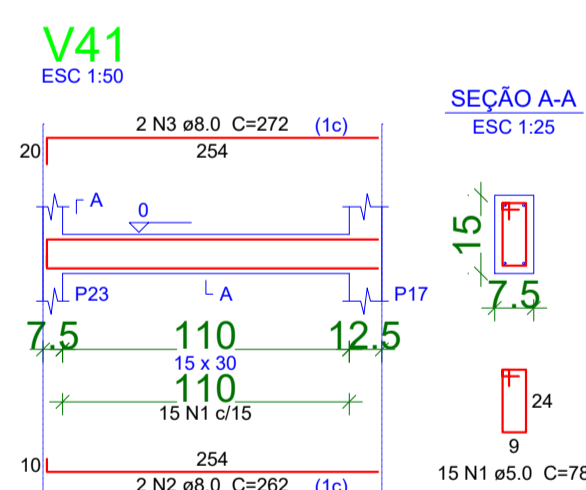
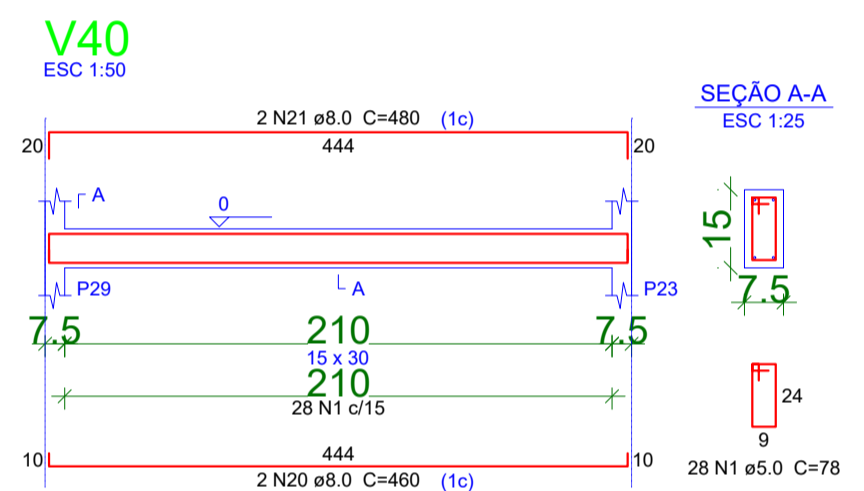
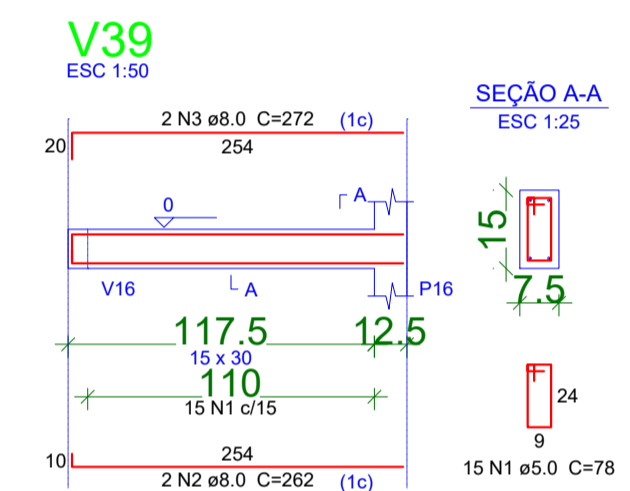
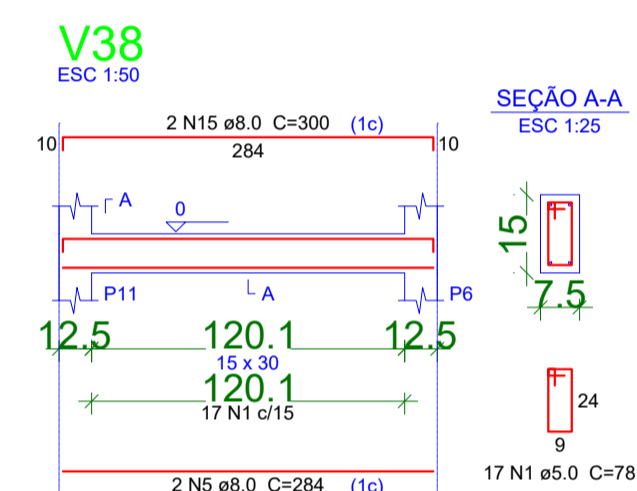
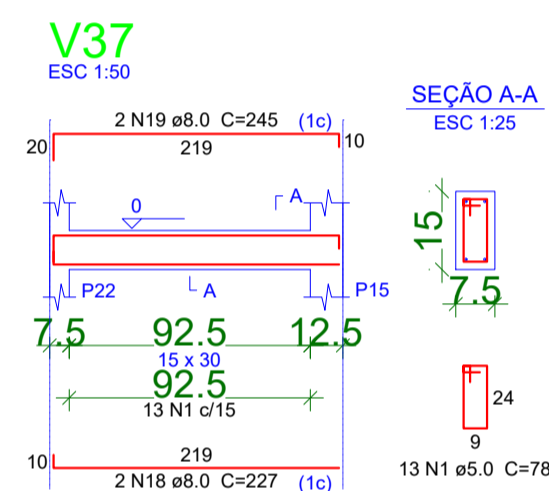
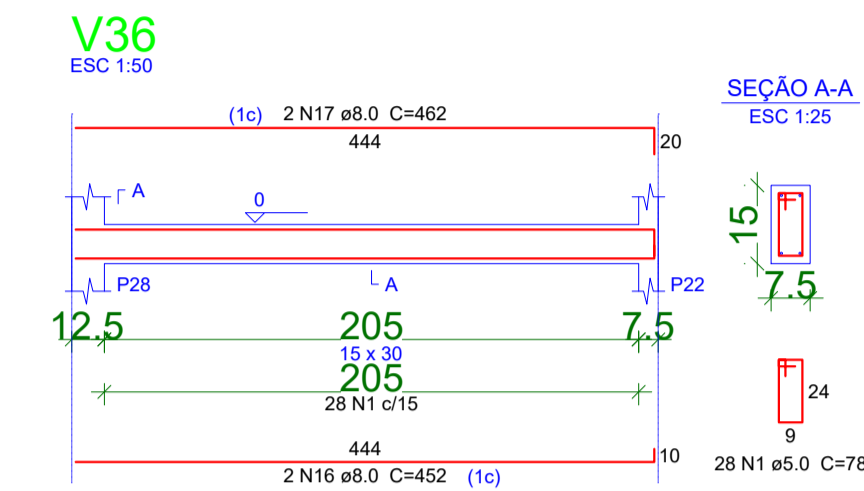
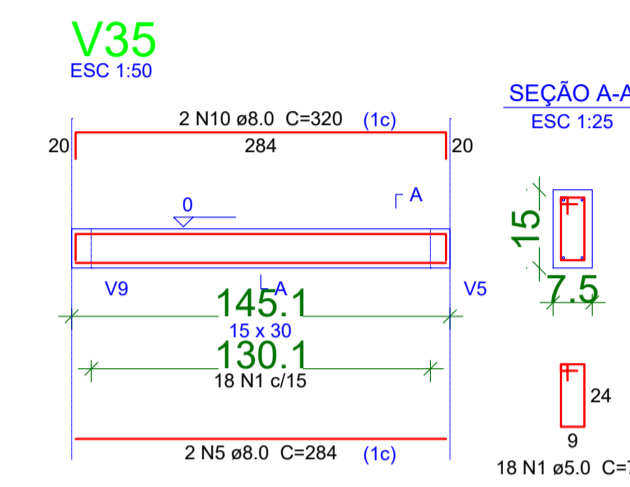
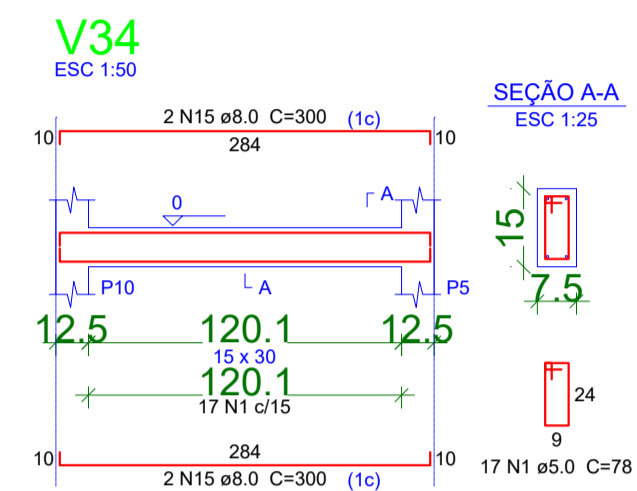
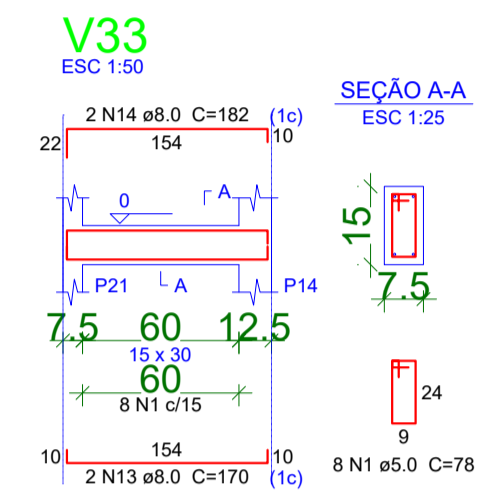
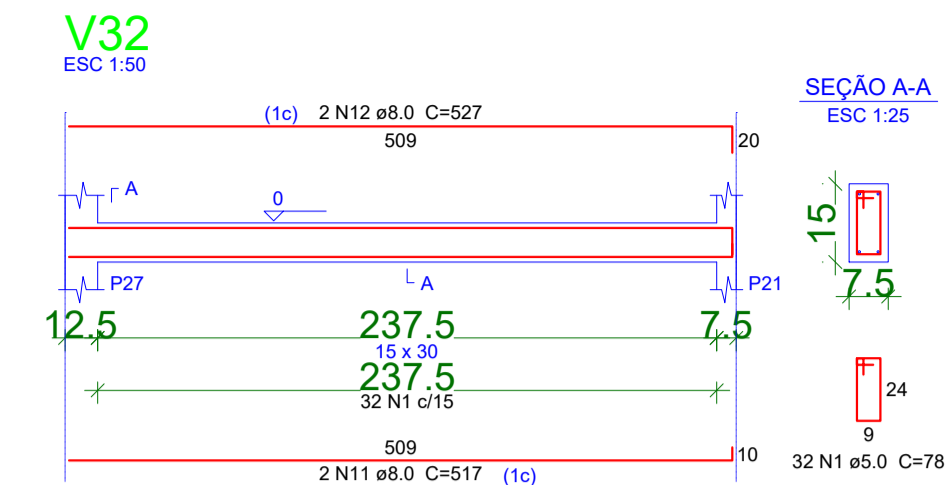
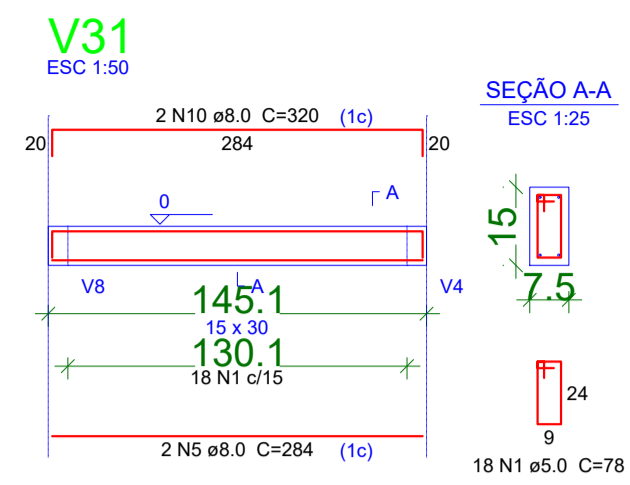
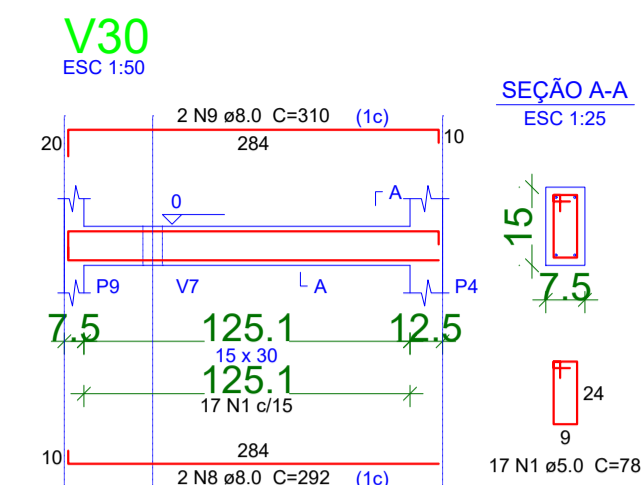
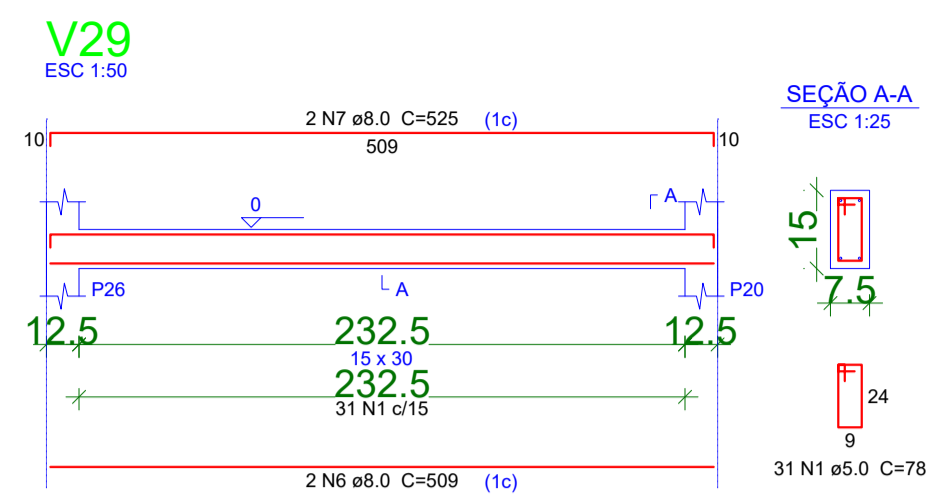
Resumo do aço

ACO	DIAM	C.TOTAL (m)	PESO + 10 % (kg)
CA50	8.0	461.7	200.4
CA60	5.0	539.8	91.5
PESO TOTAL			
CA50		200.4	
CA60		91.5	

Vol. de concreto total (C=25) = 5.04 m³
Área de forma total = 84.05 m²



	CLIENTE	UNIVERSIDADE ESTADUAL DE MATO GROSSO DO SUL	
	TÍTULO	NÚCLEO DE PRÁTICAS JURÍDICAS	
LOCAL	UNIDADE UNIVERSITÁRIA DE NAVIRAÍ		
AUTOR DO PROJETO:	WAGNER LUIZ MANARA - CREA 27.190/D		
RESPONSÁVEL TÉCNICO:	UNIVERSIDADE ESTADUAL DE MATO GROSSO DO SUL CNPJ : 86.891.363/0001-80		
REFERÊNCIA	VIGAS DA FUNDAÇÃO 1/2		FOLHA Nº/ARQ-AP
ESCALA	UNIDADE	ARQUIVO	DATA
INDICADAS	METRO	ROD	07/13



Relação do aço

AÇO	N	DIAM	Q	UNIT (cm)	C.TOTAL (cm)
V29					
V30					
V31					
V32					
V33					
V34					
V35					
V36					
V37					
V38					
V39					
V40					
V41					
V42					
V43					

Resumo do aço

AÇO	DIAM	C.TOTAL (m)	PESO + 10% (kg)
CA50	8.0	197.5	85.7
CA60	5.0	224.7	38.1
PESO TOTAL			
CA50		85.7	
CA60		38.1	

Vol. de concreto total (C-25) = 2.17 m³
Área de forma total = 36.2 m²

UNIVERSIDADE ESTADUAL DE MATO GROSSO DO SUL

CLIENTE: UNIVERSIDADE ESTADUAL DE MATO GROSSO DO SUL

TÍTULO: NÚCLEO DE PRÁTICAS JURÍDICAS

PROJETO: ESTRUTURAL

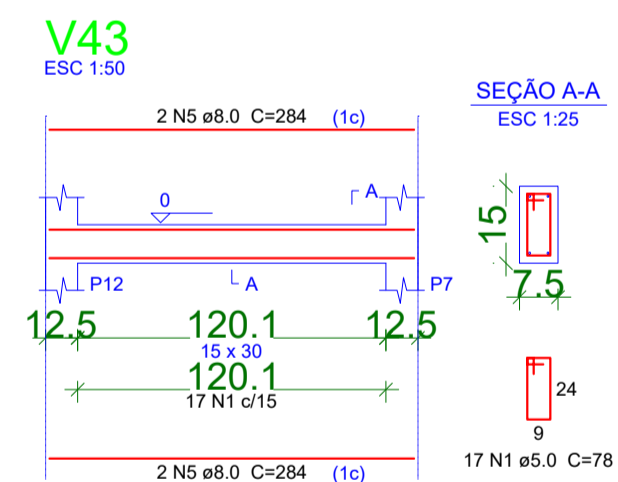
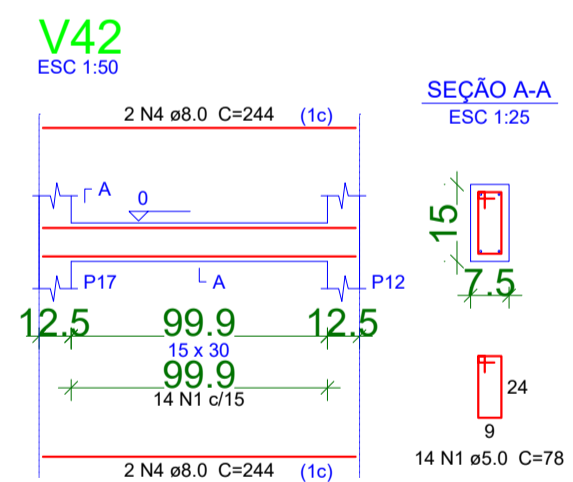
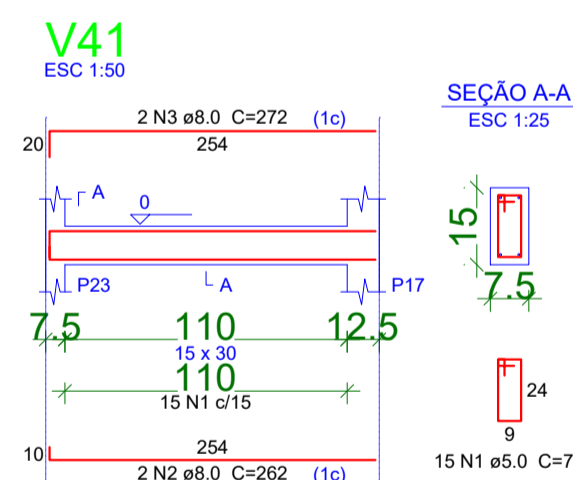
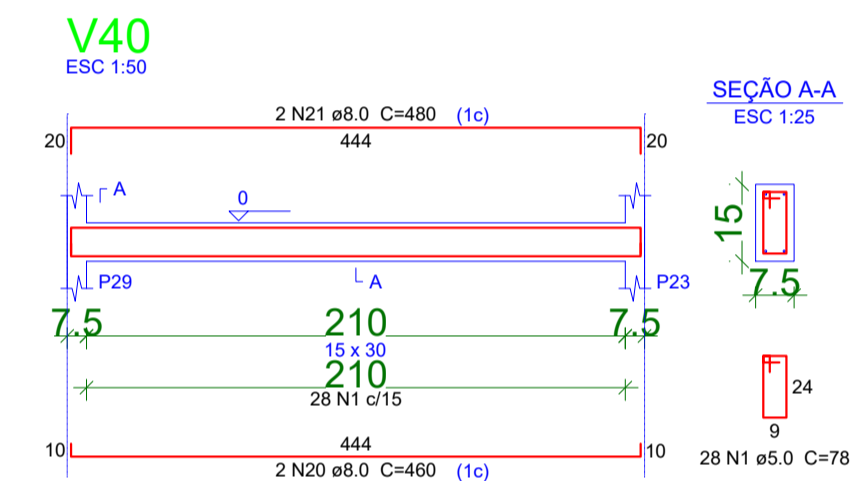
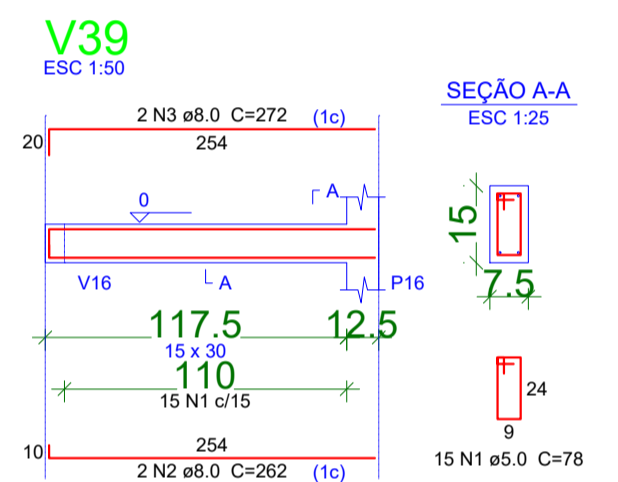
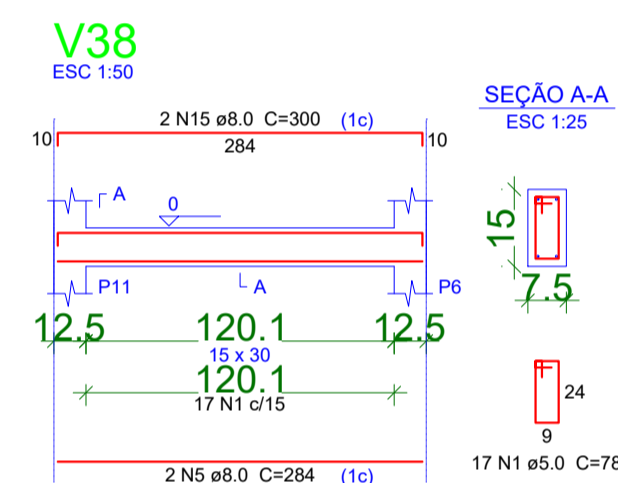
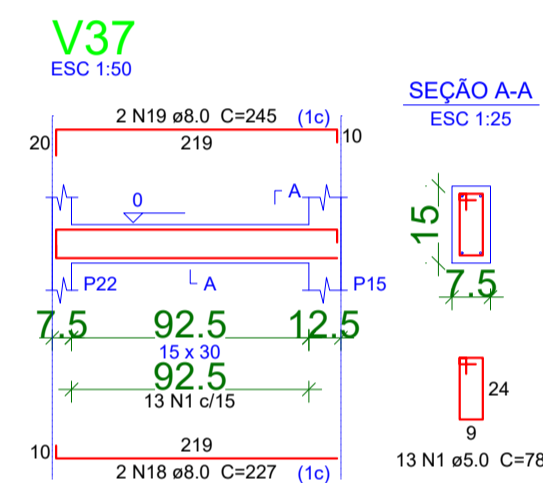
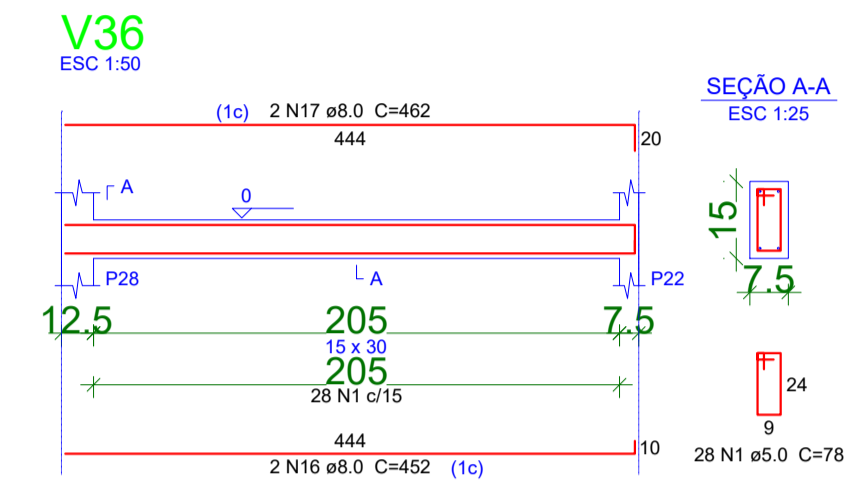
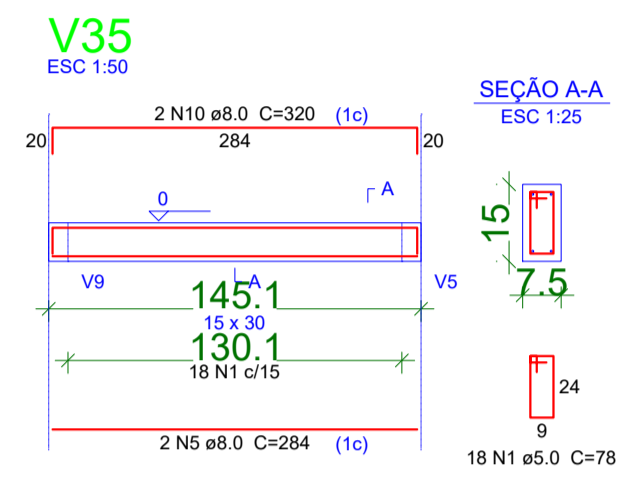
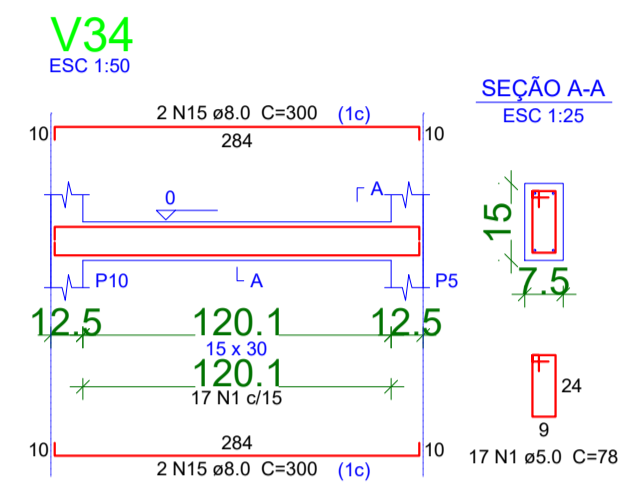
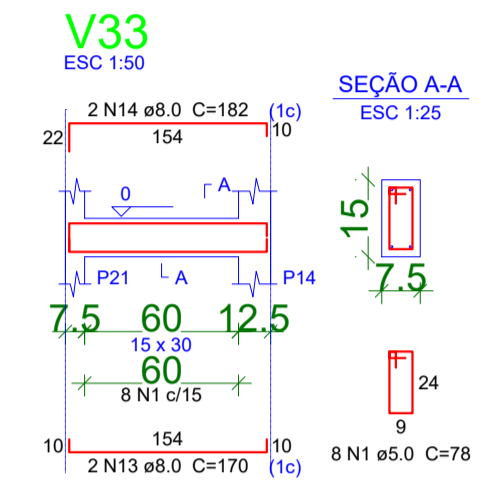
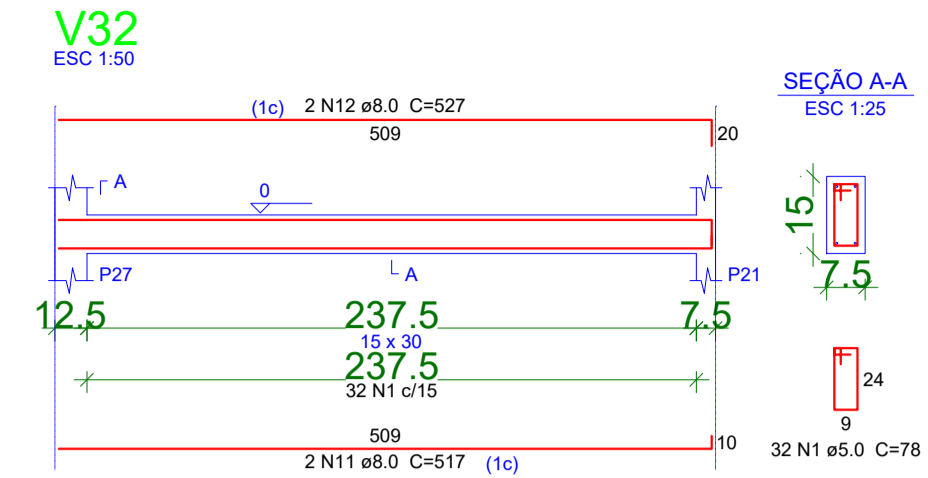
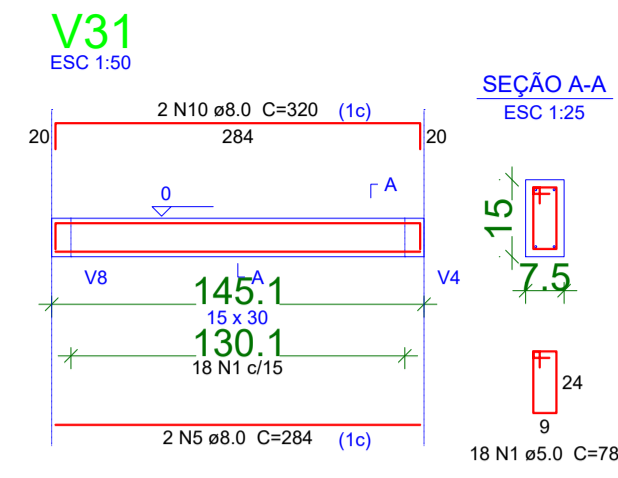
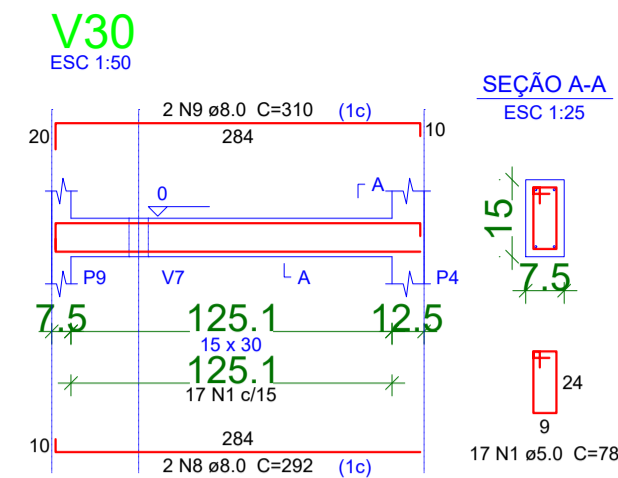
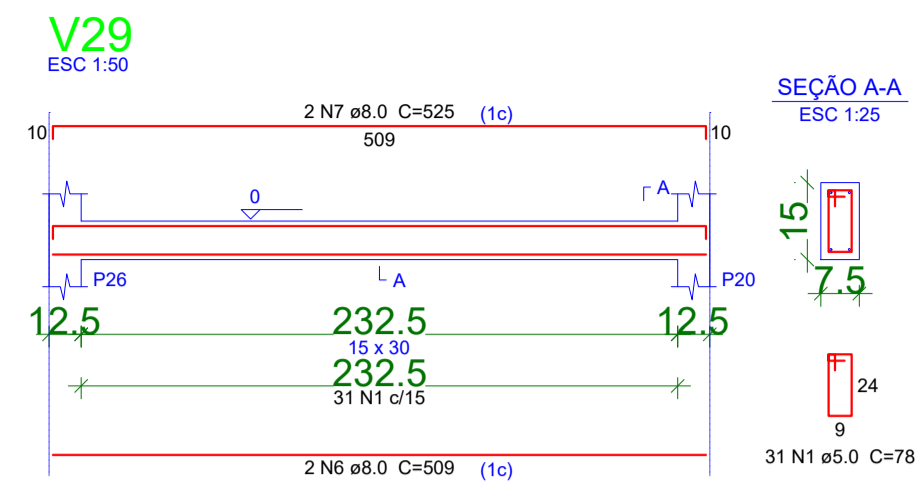
LOCAL: UNIDADE UNIVERSITÁRIA DE NAVIRAÍ, NAVIRAÍ - MS

AUTOR DO PROJETO: WAGNER LUIZ MANARA - CREA 27.190/D

RESPONSÁVEL TÉCNICO: UNIVERSIDADE ESTADUAL DE MATO GROSSO DO SUL, CNPJ: 86.891.363/0001-80

REFERÊNCIA: VIGAS DA FUNDAÇÃO 2/2

ESCALA: INDICADAS | UNIDADE: METRO | ARQUIVO: | DATA: 06/03/2022 | DESENHO: TIAGO | REVISÃO: R00 | VISTO: | FOLHA Nº: AP 08/13 | ARQ-AP



Relação do aço

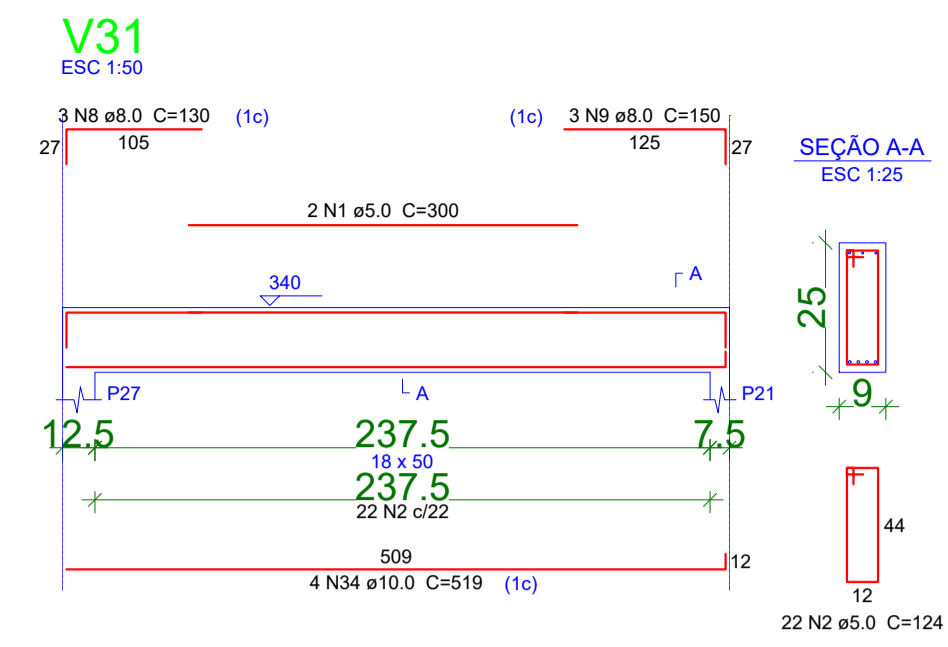
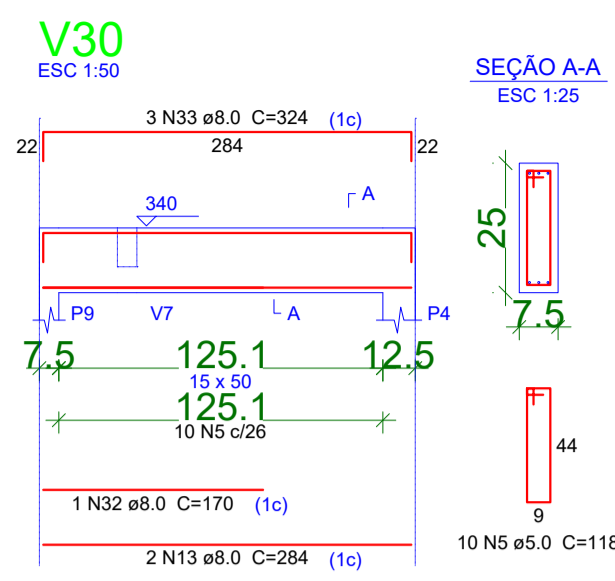
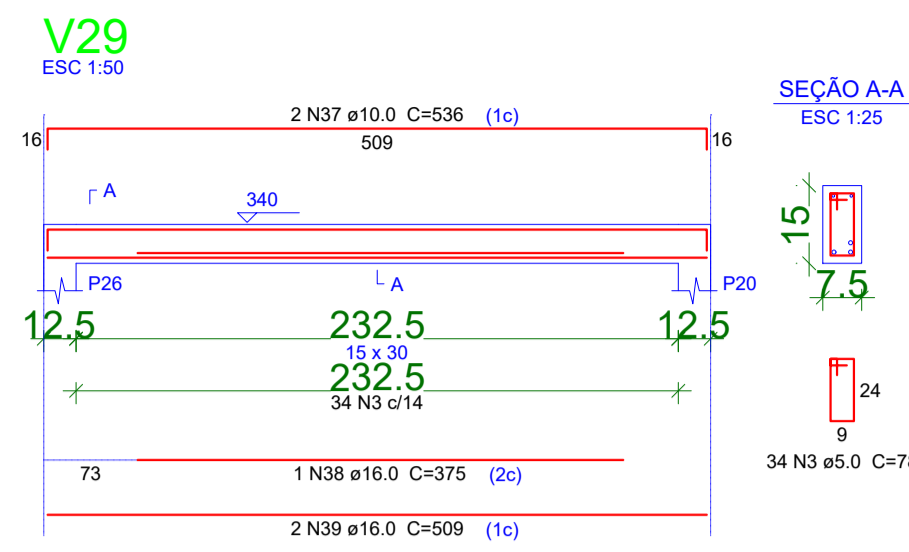
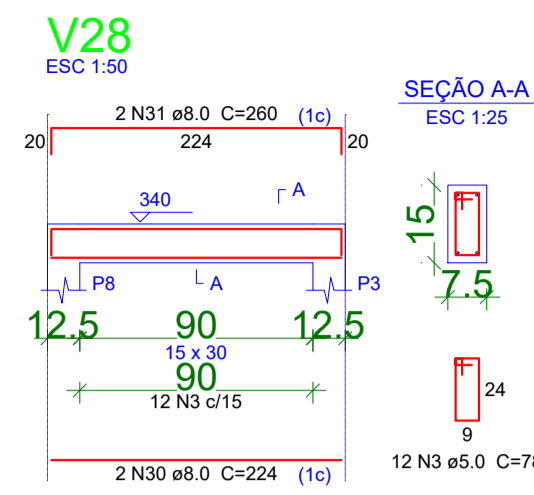
AÇO	N	DIAM	Q	UNIT (cm)	C.TOTAL (cm)
V29					
V32					
V35					
V38					
V41					
V30					
V33					
V36					
V39					
V40					
V43					
CA50	1	5.0	288	78	22464
CA50	2	8.0	4	252	1008
	3	8.0	4	272	1088
	4	8.0	4	244	976
	5	8.0	10	284	2840
	6	8.0	2	509	1018
	7	8.0	2	525	1050
	8	8.0	2	292	584
	9	8.0	2	310	620
	10	8.0	4	320	1280
	11	8.0	2	517	1034
	12	8.0	2	527	1054
	13	8.0	2	170	340
	14	8.0	2	182	364
	15	8.0	6	300	1800
	16	8.0	2	452	904
	17	8.0	2	462	924
	18	8.0	2	227	454
	19	8.0	2	245	490
	20	8.0	2	460	920
	21	8.0	2	480	960

Resumo do aço

AÇO	DIAM	C.TOTAL (m)	PESO + 10 % (kg)
CA50	8.0	197.5	85.7
CA60	5.0	224.7	38.1
PESO TOTAL			
CA50			85.7
CA60			38.1

Vol. de concreto total (C-25) = 2,17 m³
Área de forma total = 36,2 m²

	CLIENTE	UNIVERSIDADE ESTADUAL DE MATO GROSSO DO SUL	PROJETO	ESTRUTURAL
	TÍTULO	NÚCLEO DE PRÁTICAS JURÍDICAS		
LOCAL: UNIDADE UNIVERSITÁRIA DE NAVIRAÍ - MS				
AUTOR DO PROJETO:		PROPRIETÁRIO:		
WAGNER LUIZ MANARA - CREA 27.190/D				
RESPONSÁVEL TÉCNICO:		UNIVERSIDADE ESTADUAL DE MATO GROSSO DO SUL CNPJ: 86.891.363/0001-80		
REFERÊNCIA: VIGAS DA LAJE 1/2				FOLHA Nº 1/10 ARQ-AP 09/13
ESCALA: INDICADAS	UNIDADE: METRO	ARQUIVO:	DATA: 02/03/2022	DESENHO: TIAGO
			REVISÃO: R00	VISTO:



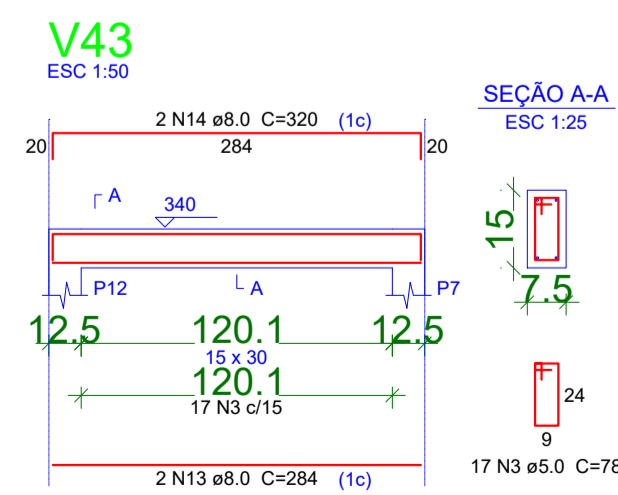
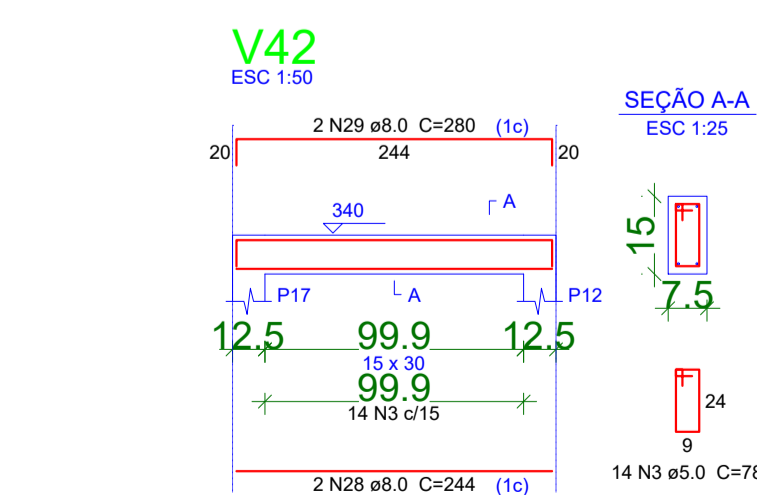
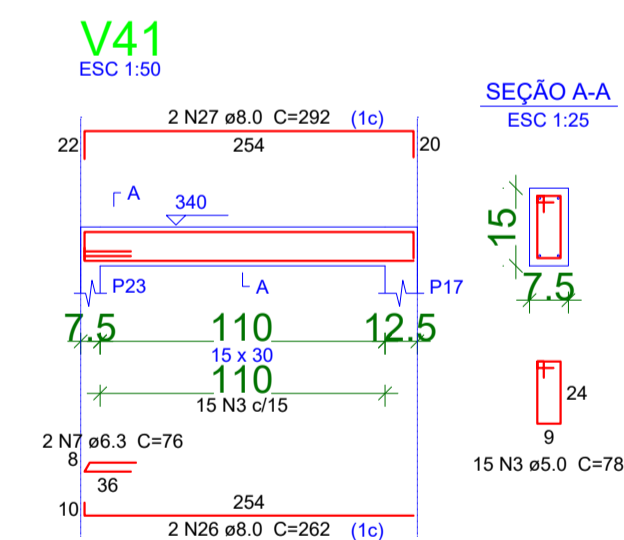
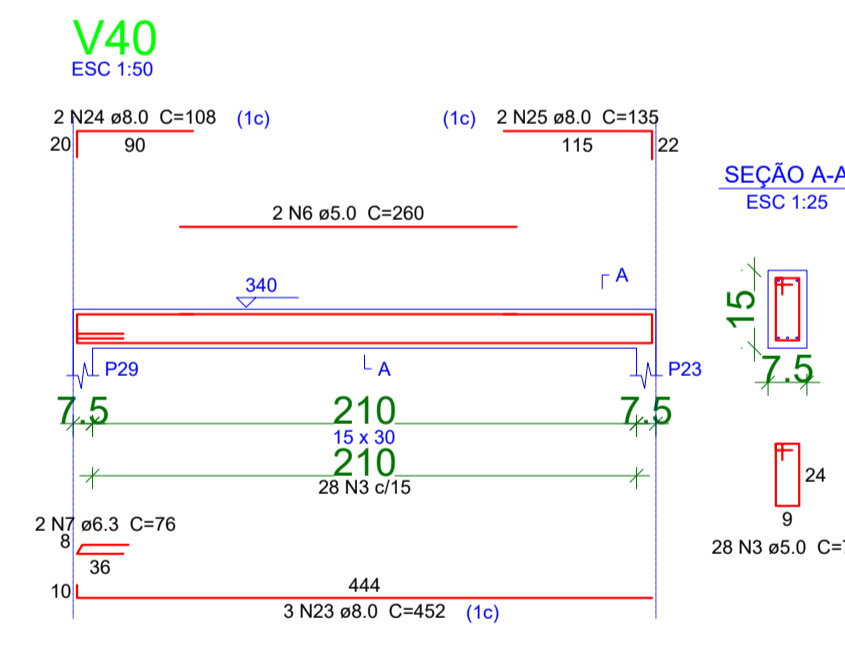
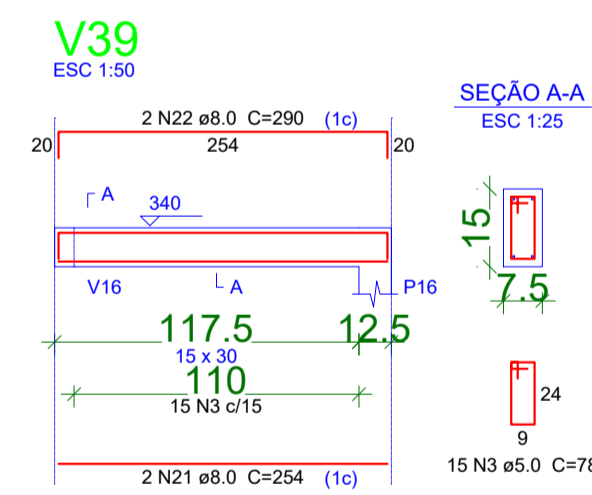
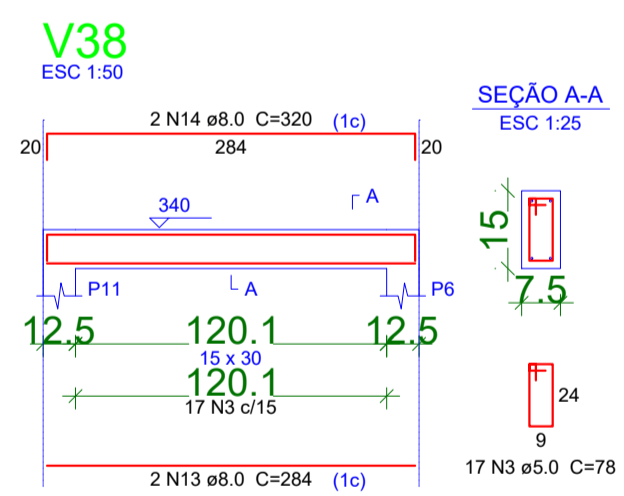
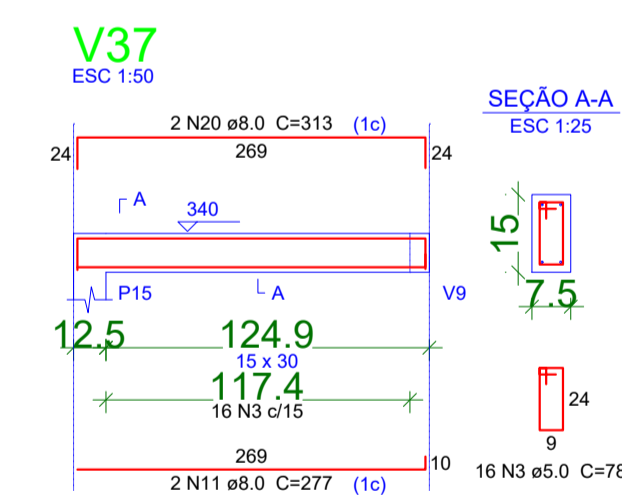
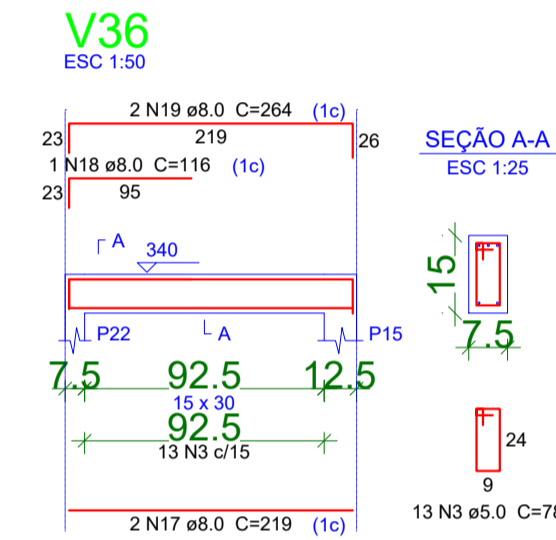
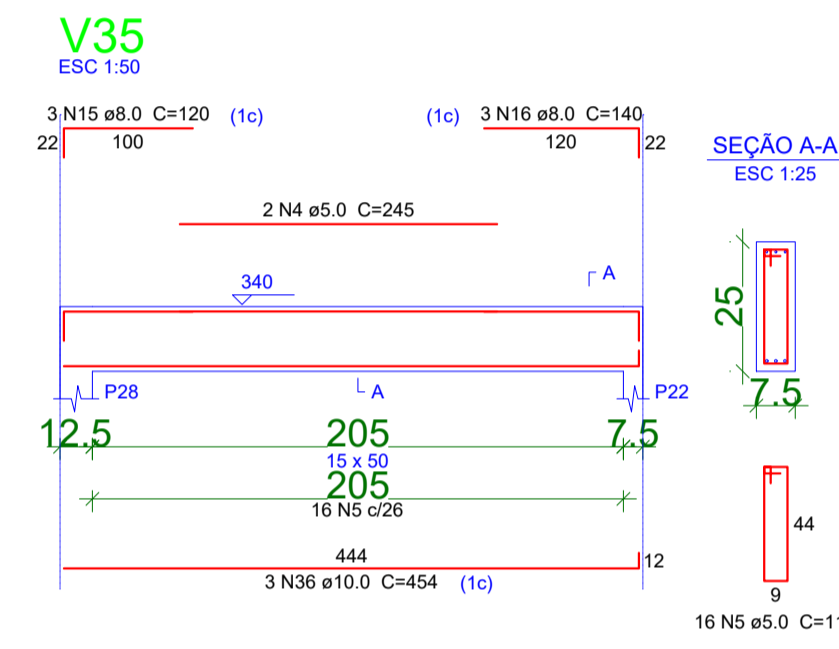
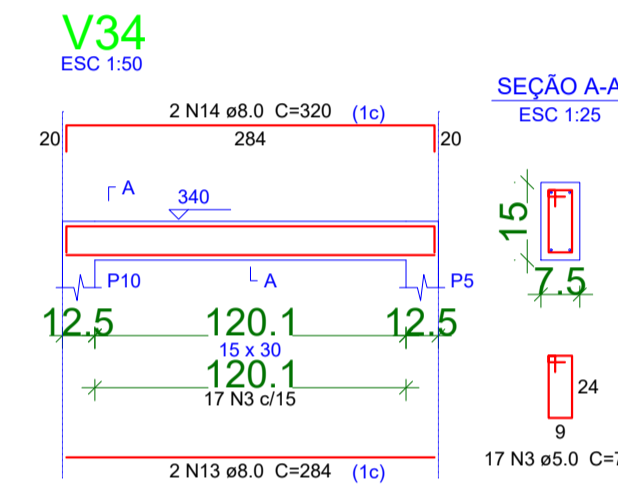
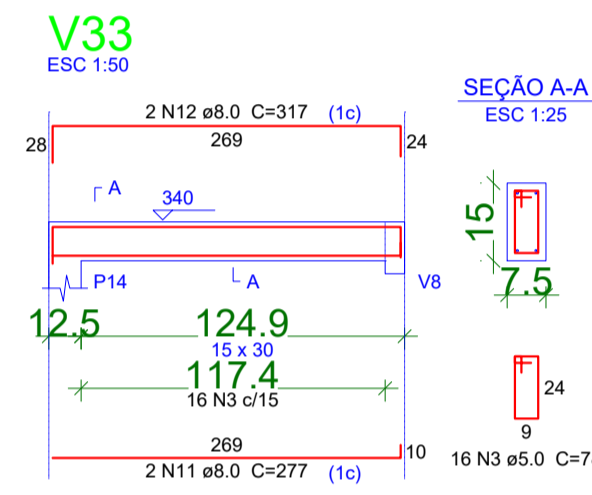
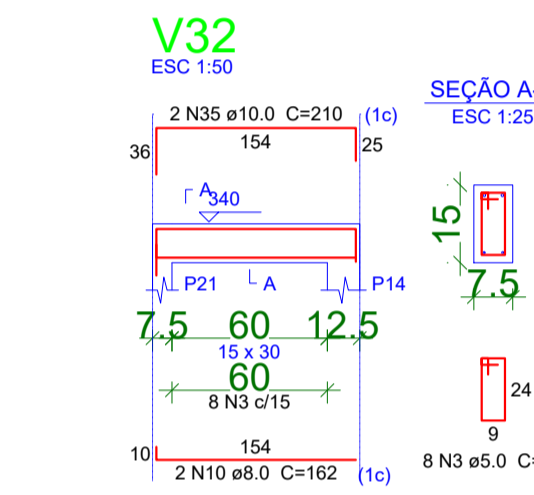
Relação do aço

AÇO	N	DIAM	Q	UNIT (cm)	C.TOTAL (cm)
CA60	1	5.0	2	300	600
	2	5.0	22	124	2728
	3	5.0	222	78	17316
	4	5.0	2	245	490
	5	5.0	26	118	3068
	6	5.0	2	260	520
	7	6.3	4	76	304
	8	8.0	3	130	390
	9	8.0	3	150	450
	10	8.0	2	162	324
	11	8.0	4	277	1108
	12	8.0	2	317	634
	13	8.0	8	284	2272
	14	8.0	6	320	1920
	15	8.0	3	120	360
	16	8.0	3	140	420
	17	8.0	2	219	438
	18	8.0	1	116	116
	19	8.0	2	264	528
	20	8.0	2	313	626
	21	8.0	2	254	508
	22	8.0	2	290	580
	23	8.0	3	452	1356
	24	8.0	2	108	216
	25	8.0	2	135	270
	26	8.0	2	262	524
	27	8.0	2	292	584
	28	8.0	2	244	488
	29	8.0	2	260	520
	30	8.0	2	224	448
	31	8.0	2	260	520
	32	8.0	1	170	170
	33	8.0	3	324	972
	34	10.0	4	519	2076
	35	10.0	2	210	420
	36	10.0	3	454	1362
	37	10.0	2	536	1072
	38	16.0	1	375	375
	39	16.0	2	509	1018

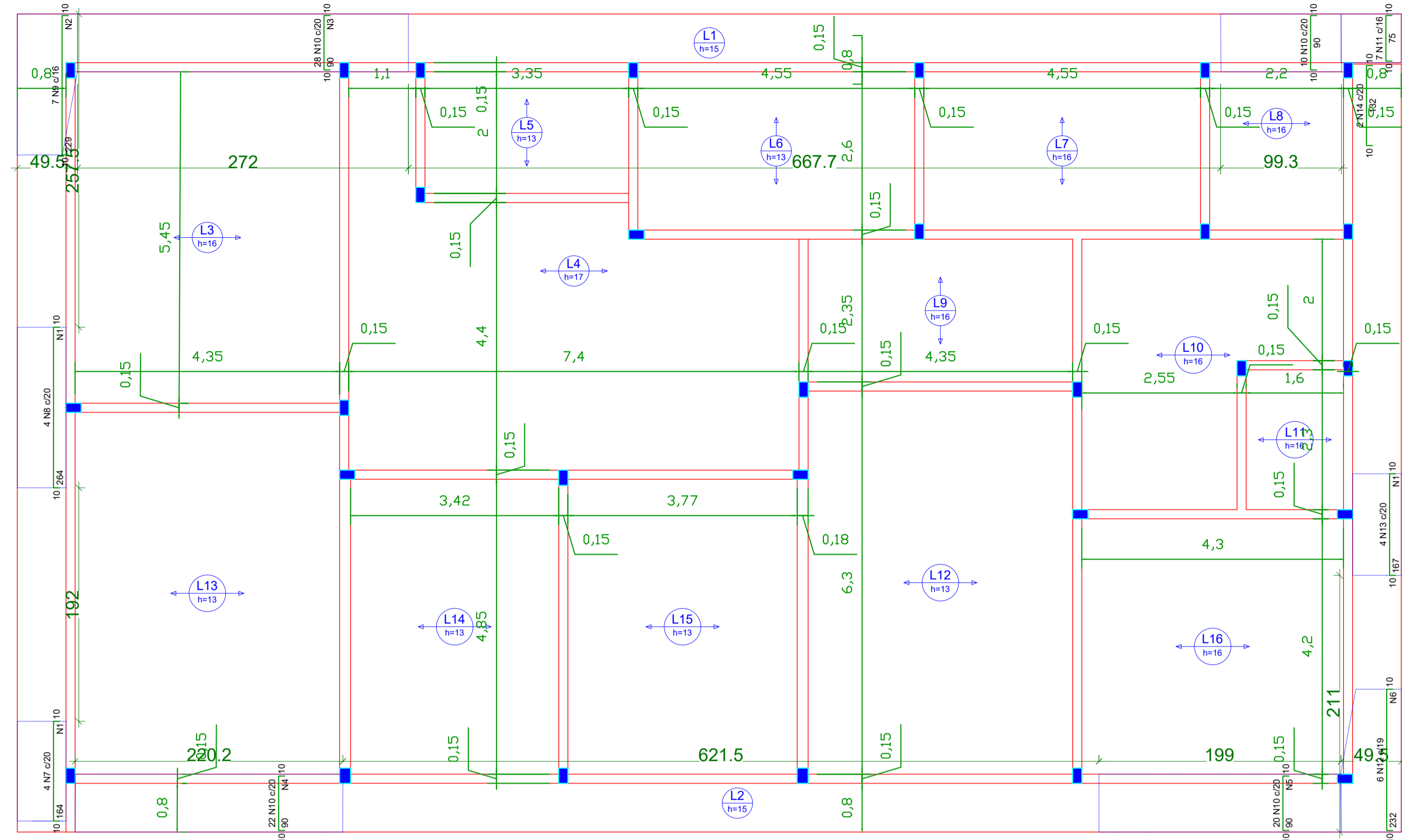
Resumo do aço

AÇO	DIAM	C-TOTAL (m)	PESO + 10% (kg)
CA50	6.3	3.1	0.8
	8.0	167.9	72.8
	10.0	49.3	33.4
	16.0	14	24.2
CA60	5.0	247.3	41.9
PESO TOTAL			
CA50		131.3	
CA60		41.9	

Vol. de concreto total (C-25) = 2.72 m³
Área de forma total = 42.86 m²



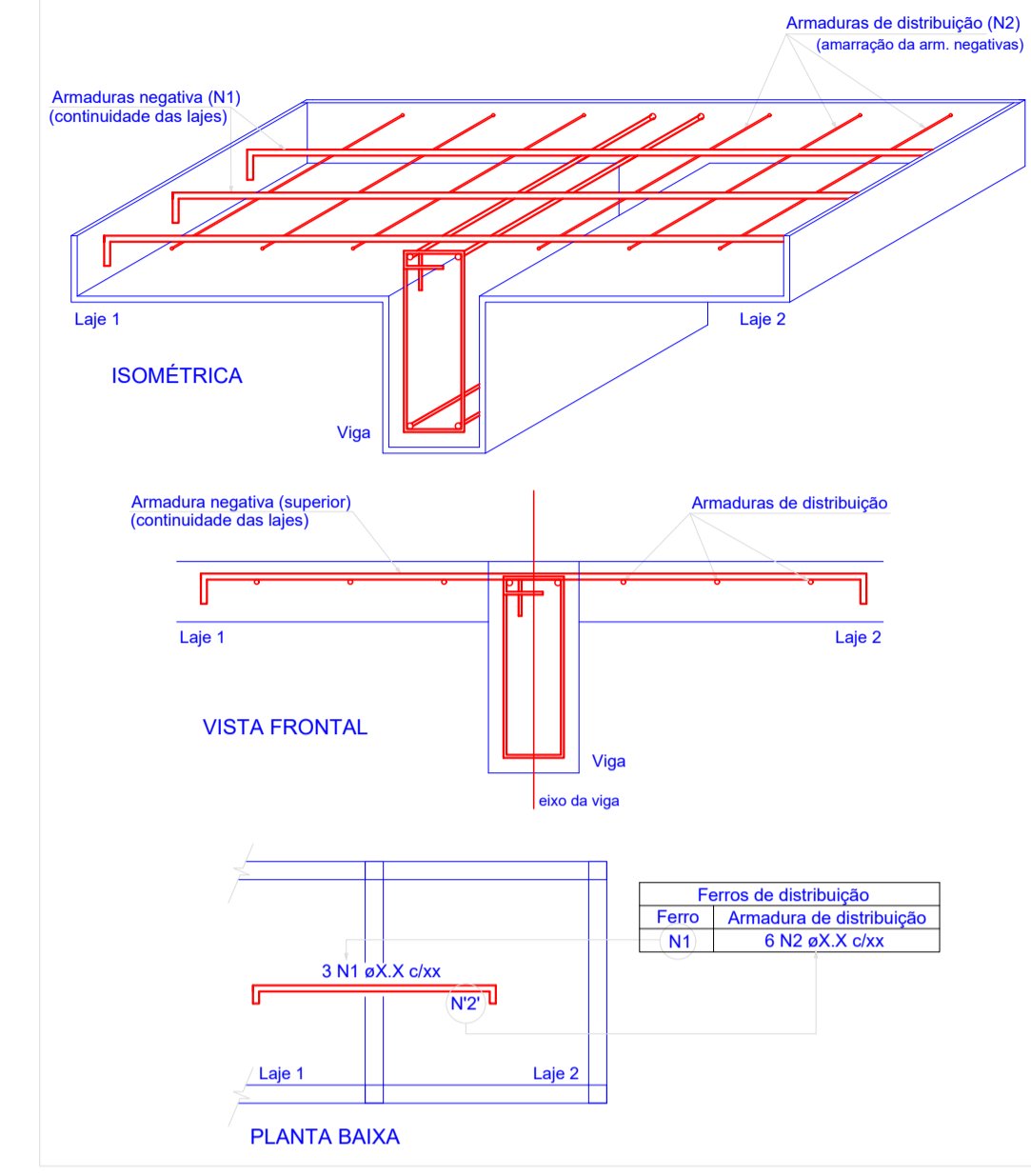
	CLIENTE	UNIVERSIDADE ESTADUAL DE MATO GROSSO DO SUL
	TÍTULO	NÚCLEO DE PRÁTICAS JURÍDICAS
LOCAL	UNIDADE UNIVERSITÁRIA DE NAVIRAÍ	PROJETO
AUTOR DO PROJETO	WAGNER LUIZ MANARA - CREA 27.190/D	ESTRUTURAL
PROPRIETÁRIO		
RESPONSÁVEL TÉCNICO		UNIVERSIDADE ESTADUAL DE MATO GROSSO DO SUL CNPJ : 86.891.363/0001-80
REFERÊNCIA	VIGAS DA LAJE 2/2	FOLHA Nº/TP
		ARQ-AP
ESCALA	INDICADAS	UNIDADE
		METRO
ARQUIVO	DATA	DESENHO
	06/07/2022	TIAGO
REVISÃO		ROD
		10/13



Armação negativa das lajes do pavimento 1o pavimento (Eixo Y)

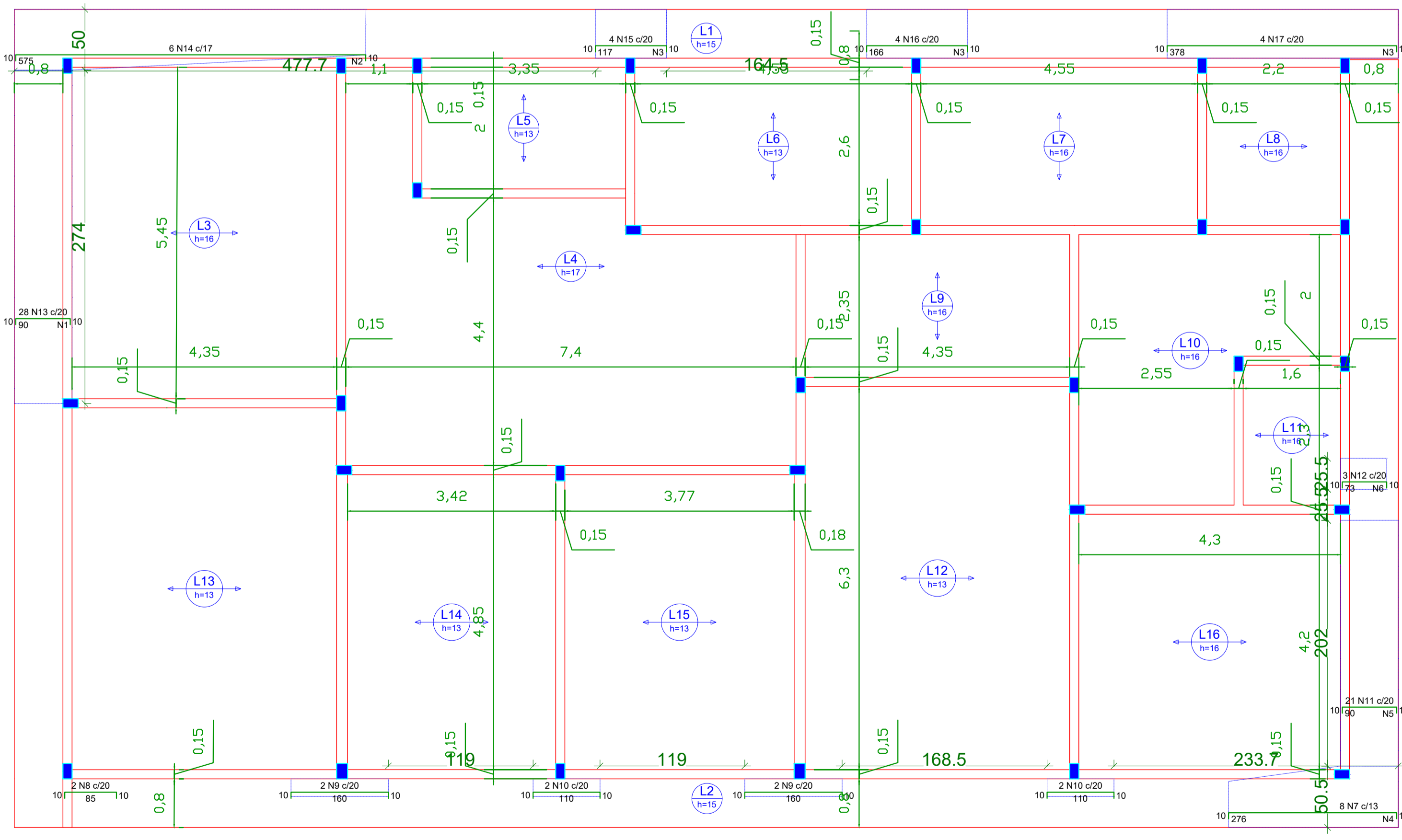
Ferro	Armadura de distribuição
N7	19 N1 ø5.0 c/9 C=80
N8	30 N1 ø5.0 c/9 C=80
N9	33 N2 ø5.0 c/7 C=85
N10	10 N3 ø5.0 c/9 C=44
N10	10 N4 ø5.0 c/9 C=440
N10	10 N5 ø5.0 c/9 C=398
N12	20 N6 ø5.0 c/9 C=99
N13	19 N1 ø5.0 c/9 C=80

DETALHE DA ARMADURA DE SUPERIOR DE CONTINUIDADE DA LAJE E MONTAGEM DA ARMADURA DE DISTRIBUIÇÃO



Relação do aço					
Negativos Y					
AÇO	N	DIAM	Q	UNIT (cm)	C.TOTAL (cm)
CA60	1	5.0	68	80	5440
	2	5.0	33	85	2805
	3	5.0	10	544	5440
	4	5.0	10	440	4400
	5	5.0	10	398	3980
CA50	6	5.0	26	99	2574
	7	16.0	4	177	708
	8	16.0	4	277	1108
	9	16.0	7	242	1694
	10	16.0	80	103	8240
	11	16.0	7	88	616
	12	16.0	6	245	1470
	13	16.0	4	190	720
	14	16.0	2	145	290

Resumo do aço			
AÇO	DIAM	C.TOTAL (m)	PESO + 10% (kg)
CA50	16.0	148.5	257.8
CA60	5.0	248.4	41.8
PESO TOTAL			
CA50		257.8	
CA60		41.8	



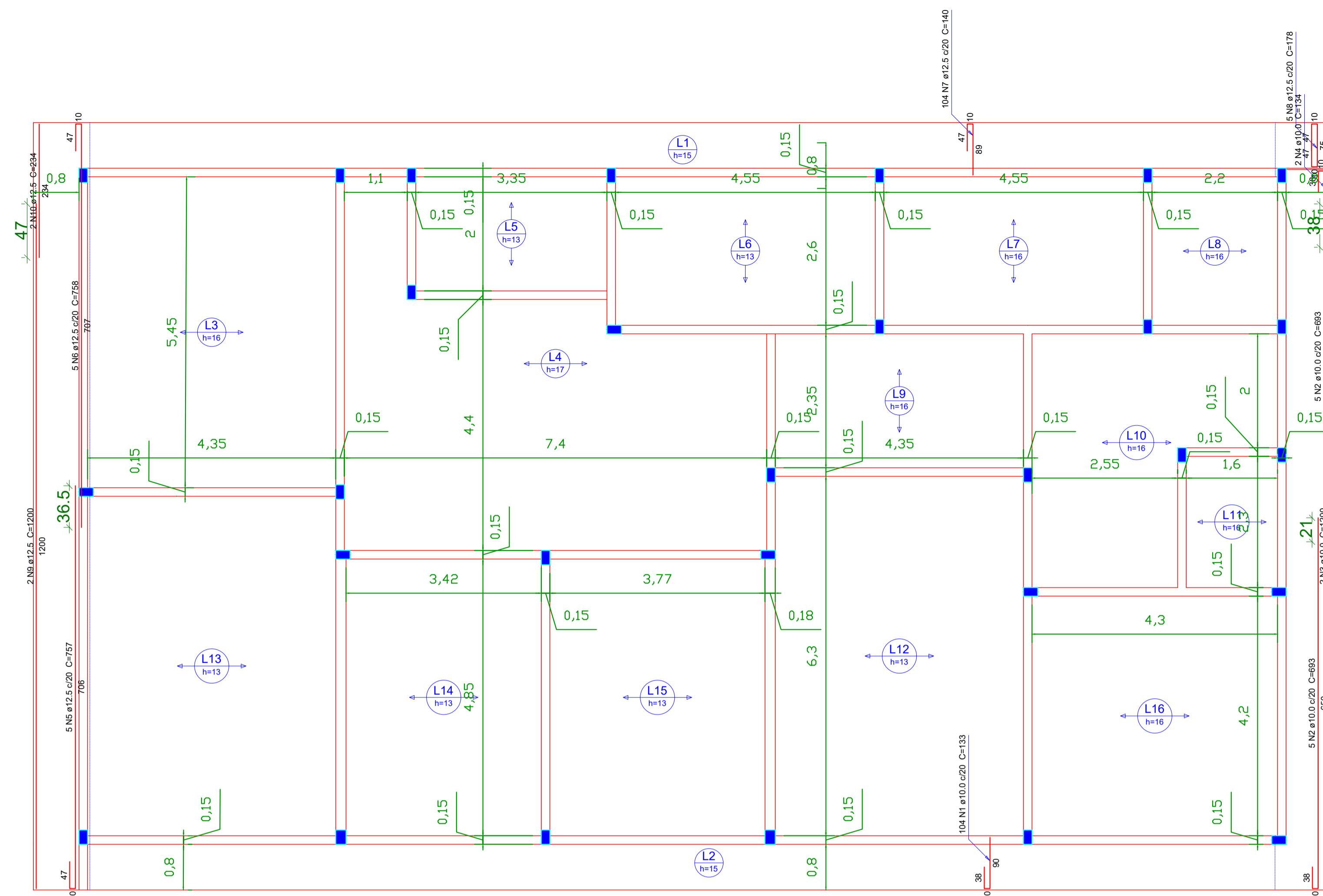
Armação negativa das lajes do pavimento 1o pavimento (Eixo X)

Ferro	Armadura de distribuição
N13	10 N1 ø5.0 c/9 C=548
N14	72 N2 ø5.0 c/8 C=82
N15	13 N3 ø5.0 c/9 C=80
N16	19 N3 ø5.0 c/9 C=80
N17	42 N3 ø5.0 c/9 C=80
N7	28 N4 ø5.0 c/10 C=101
N11	6 N5 ø5.0 c/16 C=404
N12	5 N6 ø5.0 c/18 C=51

Relação do aço					
Negativos X					
AÇO	N	DIAM	Q	UNIT (cm)	C.TOTAL (cm)
CA60	1	5.0	10	548	5480
	2	5.0	72	82	5904
	3	5.0	74	80	5920
	4	5.0	28	101	2928
	5	5.0	6	404	2424
CA50	6	5.0	5	51	255
	7	12.5	8	290	2320
	8	12.5	2	99	198
	9	12.5	4	174	696
	10	12.5	4	124	496
	11	12.5	21	104	2184
	12	12.5	3	87	261
	13	16.0	28	103	2884
	14	16.0	6	588	3528
	15	16.0	4	130	520
	16	16.0	4	179	716
	17	16.0	4	391	1564

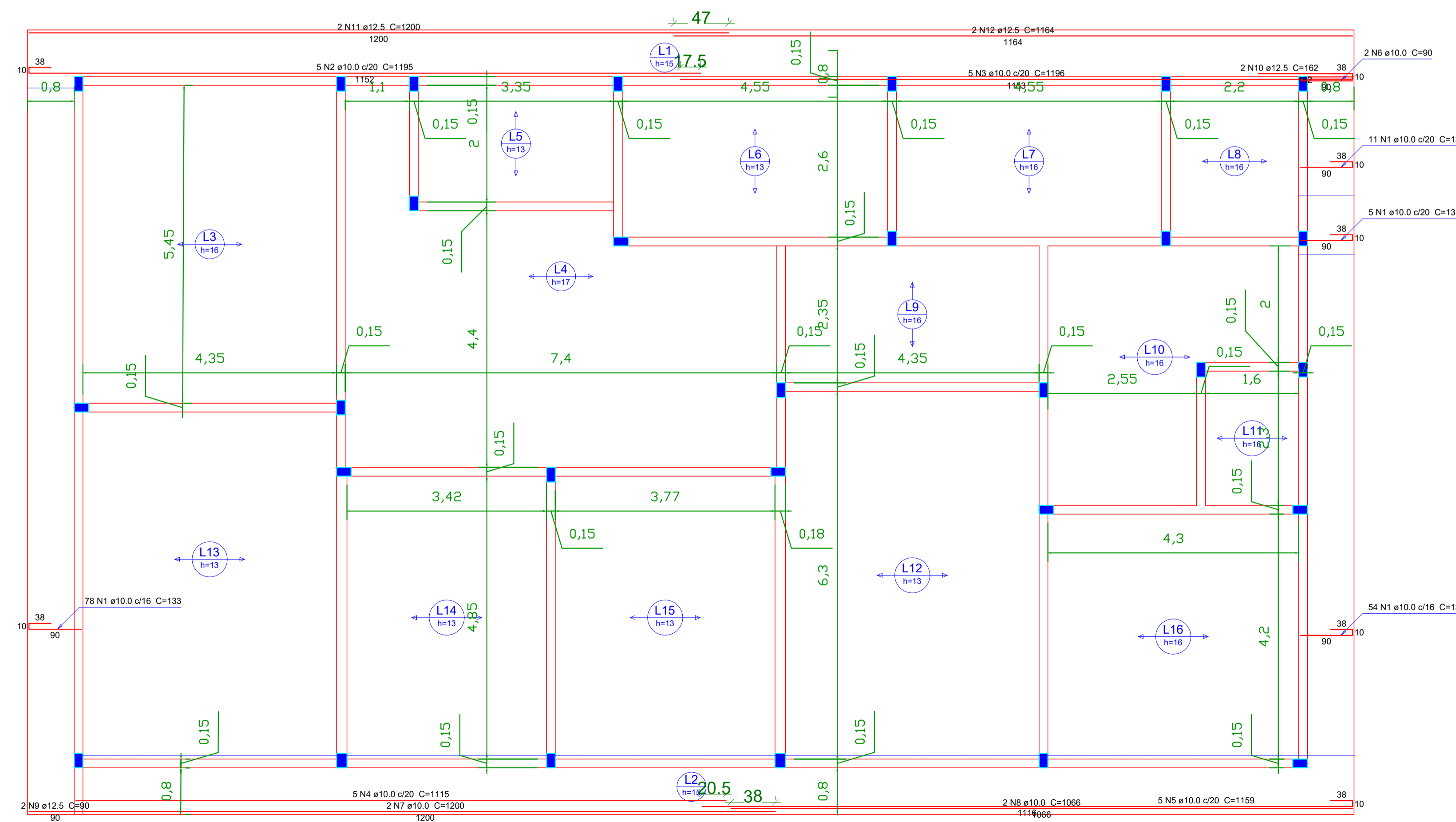
Resumo do aço			
AÇO	DIAM	C.TOTAL (m)	PESO + 10% (kg)
CA50	12.5	61.8	65.2
CA60	5.0	92.2	159.9
PESO TOTAL			
CA50		225.2	
CA60		38.7	

	CLIENTE	UNIVERSIDADE ESTADUAL DE MATO GROSSO DO SUL
	TÍTULO	NÚCLEO DE PRÁTICAS JURÍDICAS
PROJETO	ESTRUTURAL	
LOCAL	UNIDADE UNIVERSITÁRIA DE NAVIRAÍ NAVIRAÍ - MS	
AUTOR DO PROJETO	WAGNER LUIZ MANARA - CREA 27.190/D	
RESPONSÁVEL TÉCNICO	UNIVERSIDADE ESTADUAL DE MATO GROSSO DO SUL CNPJ : 86.891.363/0001-80	
REFERÊNCIA	ARMADURA NEGATIVA (X E Y)	FOLHA Nº 11/13
ESCALA	INDICADAS	UNIDADE METRO
ARQUIVO	DATA	DESENHO
REVISÃO	ROD	VERTO



Armação positiva das lajes do pavimento 1o pavimento (Eixo Y)

escala 1:50



Armação positiva das lajes do pavimento 1o pavimento (Eixo X)

escala 1:50

Relação do aço

Positivos Y					
AÇO	N	DIAM	Q	UNIT (cm)	C.TOTAL (cm)
CA50	1	10.0	104	133	13832
	2	10.0	10	693	6930
	3	10.0	2	1200	2400
	4	10.0	2	134	268
	5	12.5	5	757	3785
	6	12.5	5	758	3790
	7	12.5	104	140	14560
	8	12.5	5	178	890
	9	12.5	2	1200	2400
	10	12.5	2	234	468
	11	12.5	2	75	150

Resumo do aço

AÇO	DIAM	C.TOTAL (m)	PESO + 10% (kg)
CA50	10.0	234.3	158.9
CA50	12.5	280.5	276
PESO TOTAL			
CA50			434.9

Relação do aço

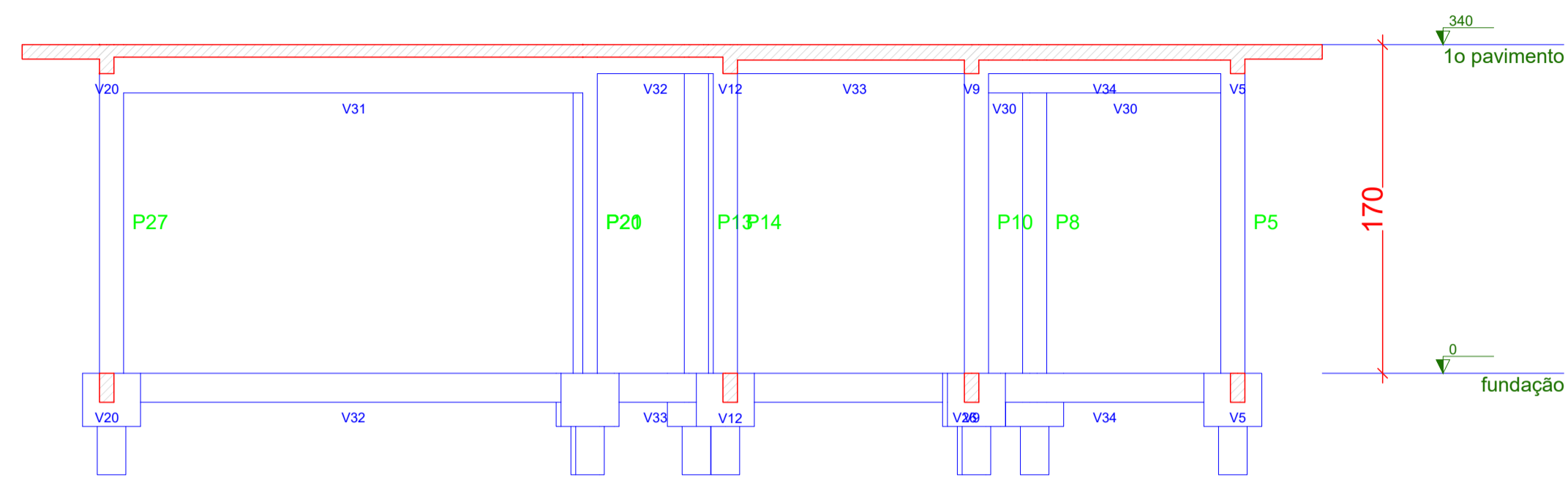
Positivos X					
AÇO	N	DIAM	Q	UNIT (cm)	C.TOTAL (cm)
CA50	1	10.0	148	133	19684
	2	10.0	5	1195	5975
	3	10.0	5	1196	5980
	4	10.0	5	1115	5575
	5	10.0	5	1159	5795
	6	10.0	2	90	180
	7	10.0	2	1200	2400
	8	10.0	2	1066	2132
	9	12.5	2	90	180
	10	12.5	2	162	324
	11	12.5	2	1200	2400
	12	12.5	2	1164	2328

Resumo do aço

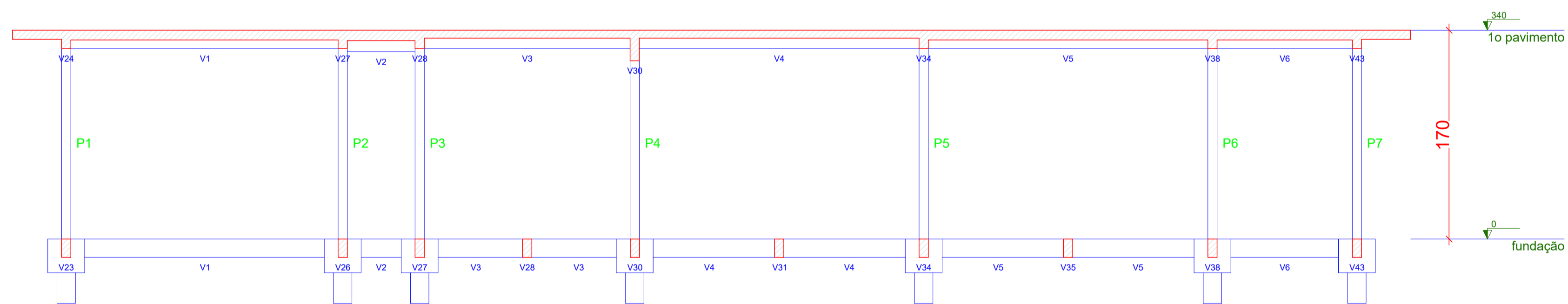
AÇO	DIAM	C.TOTAL (m)	PESO + 10% (kg)
CA50	10.0	477.3	323.6
CA50	12.5	52.4	35.4
PESO TOTAL			
CA50			379.1

Vol. de concreto total (C-25) = 18.84 m³
Área de forma total = 66.47 m²

	CLIENTE	UNIVERSIDADE ESTADUAL DE MATO GROSSO DO SUL
	TÍTULO	NÚCLEO DE PRÁTICAS JURÍDICAS
LOCAL	UNIDADE UNIVERSITÁRIA DE NAVIRAÍ	PROJETO
AUTOR DO PROJETO	WAGNER LUIZ MANARA - CREA 27.190/D	PROPRIETÁRIO
RESPONSÁVEL TÉCNICO		UNIVERSIDADE ESTADUAL DE MATO GROSSO DO SUL CNPJ : 86.891.363/0001-80
REFERÊNCIA	ARMADURA POSITIVA (X E Y)	FOLHA Nº / ARQ-AP
ESCALA	INDICADAS	12/13
UNIDADE	METRO	
ARQUIVO		
DATA	02/03/2022	DESENHO
TIPO	TIAGO	REVISÃO
		ROD
		VETO



Corte B-B
escala 1:50



Corte A-A
escala 1:50

	CLIENTE	UNIVERSIDADE ESTADUAL DE MATO GROSSO DO SUL	
	TÍTULO	NÚCLEO DE PRÁTICAS JURÍDICAS	PROJETO ESTRUTURAL
LOCAL UNIDADE UNIVERSITÁRIA DE NAVIRAÍ			
AUTOR DO PROJETO WAGNER LUIZ MANARA - CREA 27.190/D		PROPRIETÁRIO	
RESPONSÁVEL TÉCNICO		UNIVERSIDADE ESTADUAL DE MATO GROSSO DO SUL CNPJ : 86.891.363/0001-80	
REFERÊNCIA CORTES			FOLHA Nº/TP 13/13
ESCALA: INDICADAS	UNIDADE: METRO	ARQUIVO:	DATA: 02/07/2022
		DESENHO: TIAGO	REVISÃO: R00
			VISTO