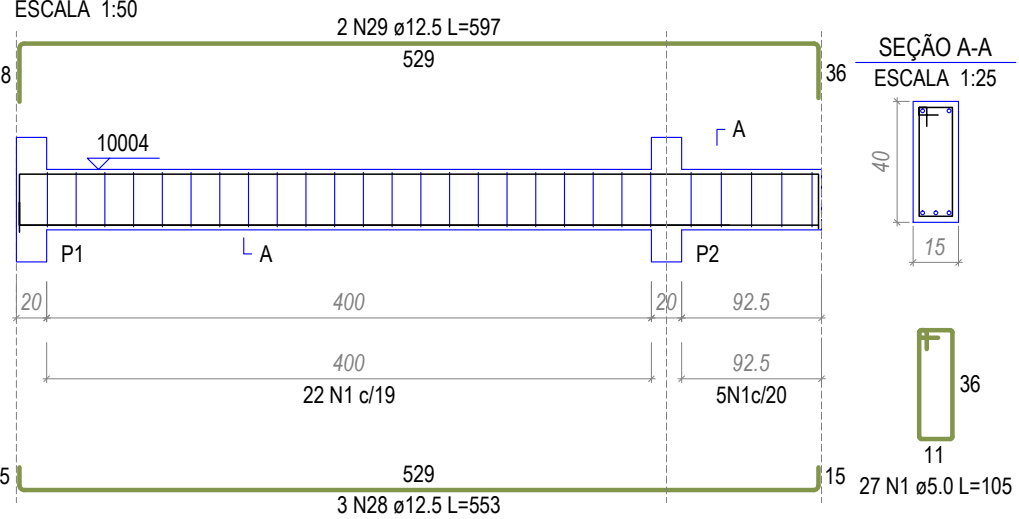
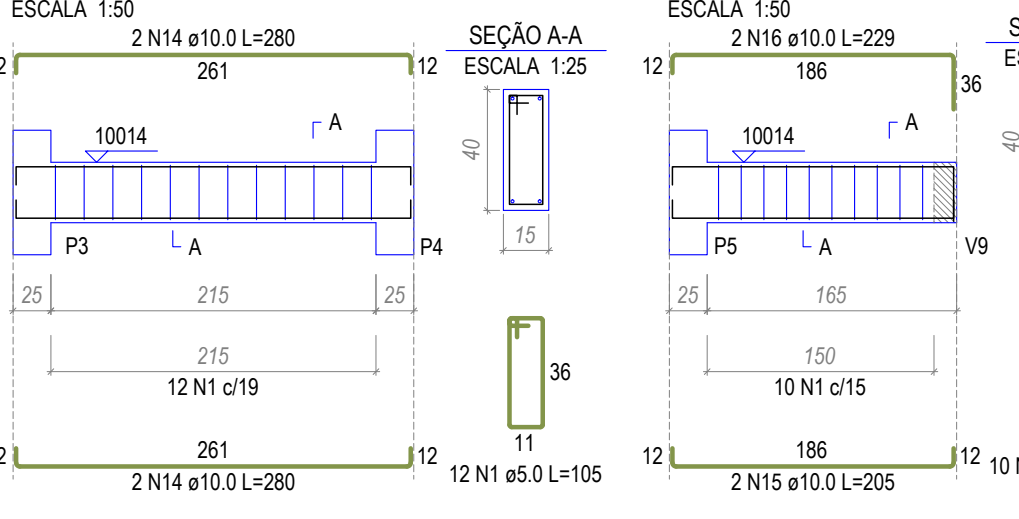


TÉRREO - DETALHAMENTO DAS VIGAS

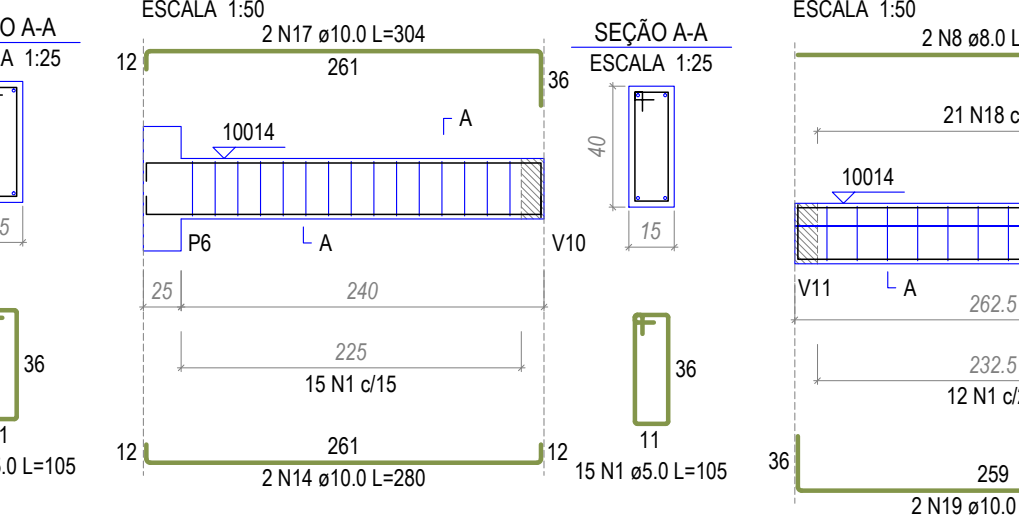
V1 (15 x 40)



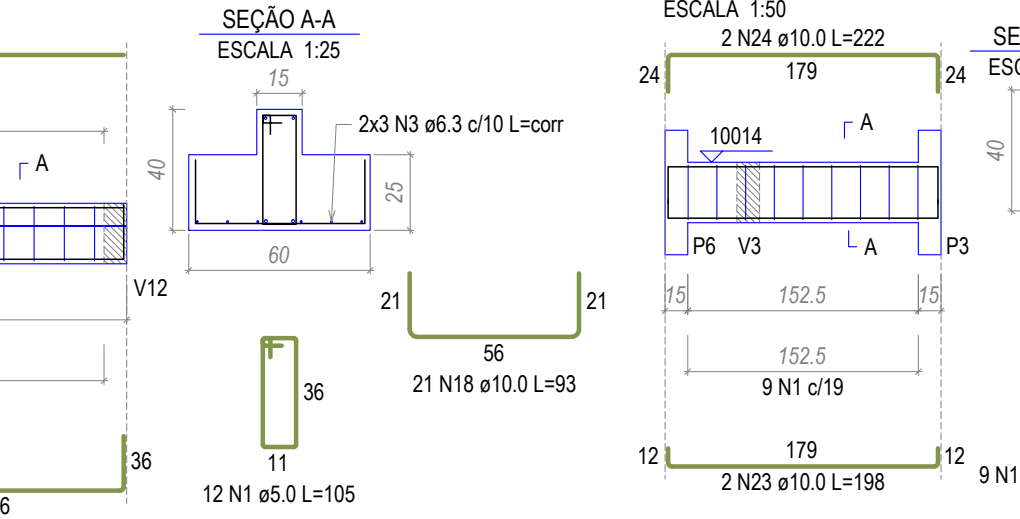
V2 (15 x 40)



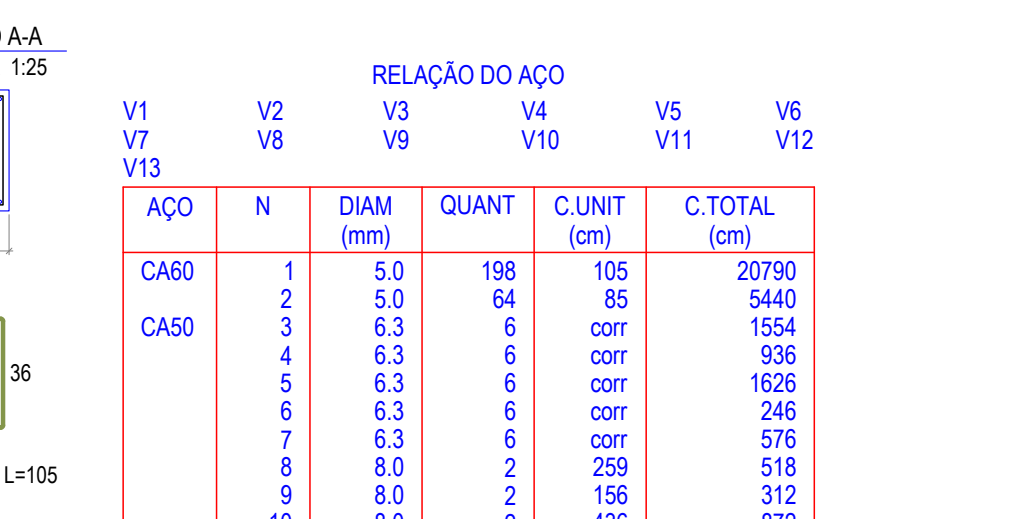
V3 (15 x 40)



V4 (15 x 40)



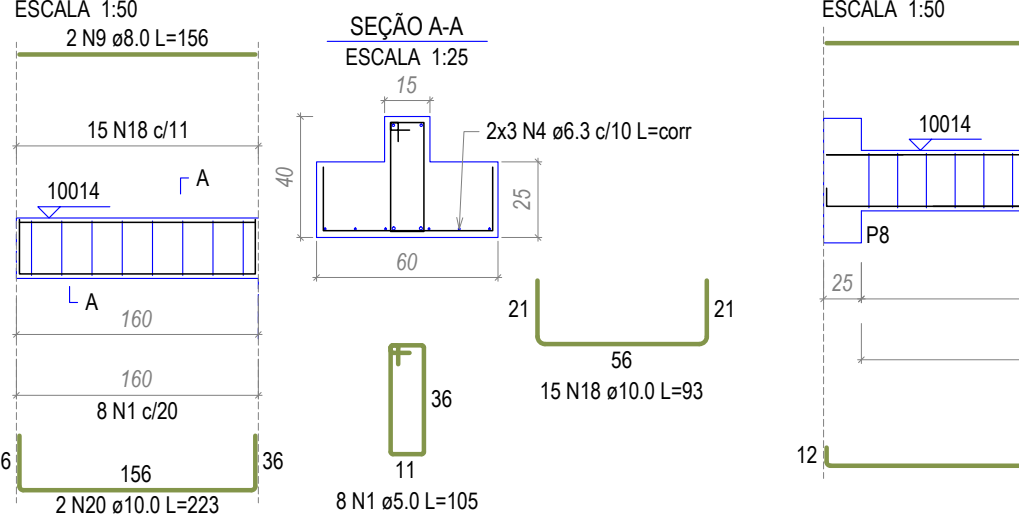
V5 (T inv. 15x40x60x25)



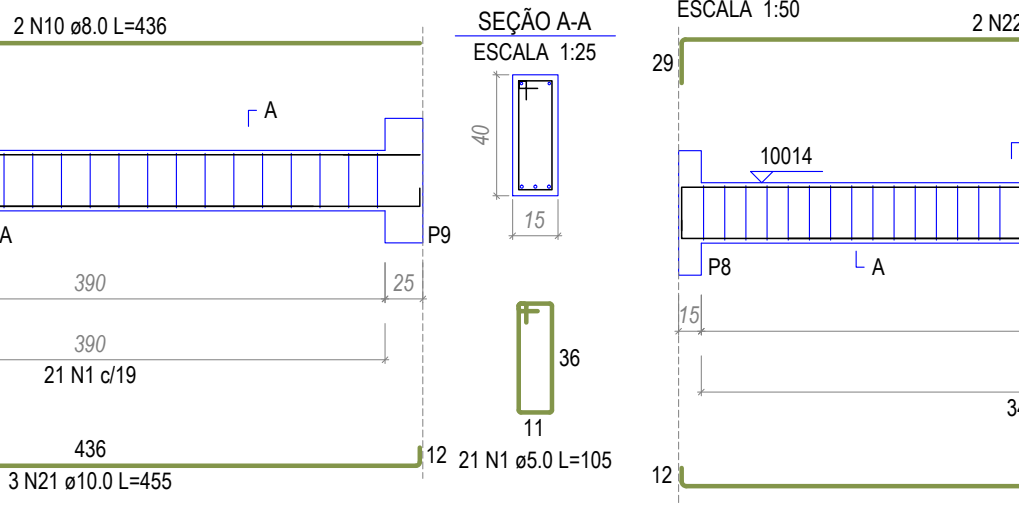
V9 (15 x 40)



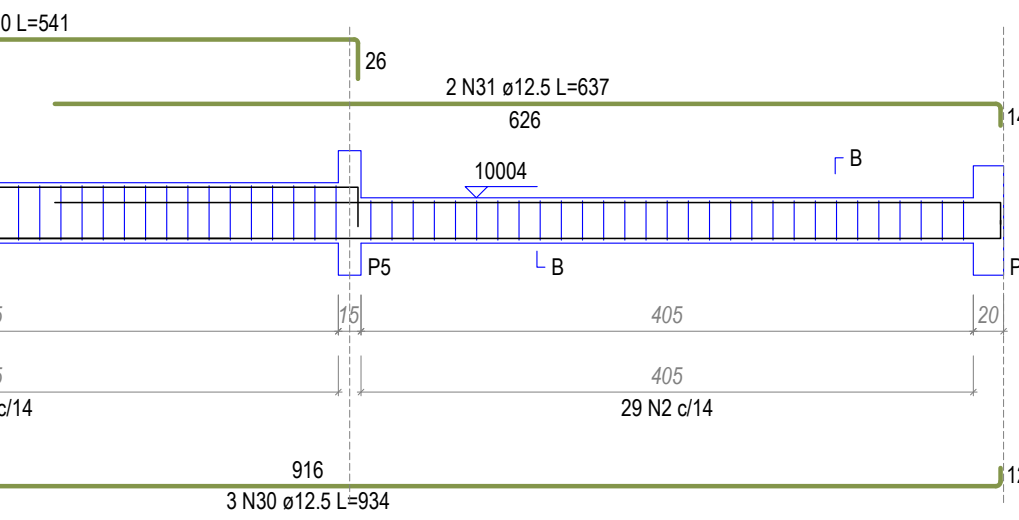
V6 (T inv. 15x40x60x25)



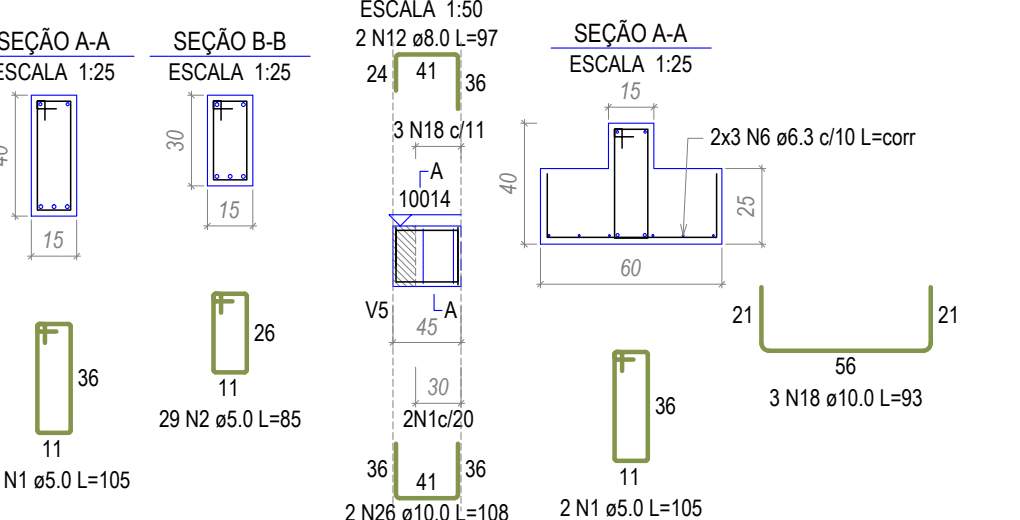
V7 (15 x 40)



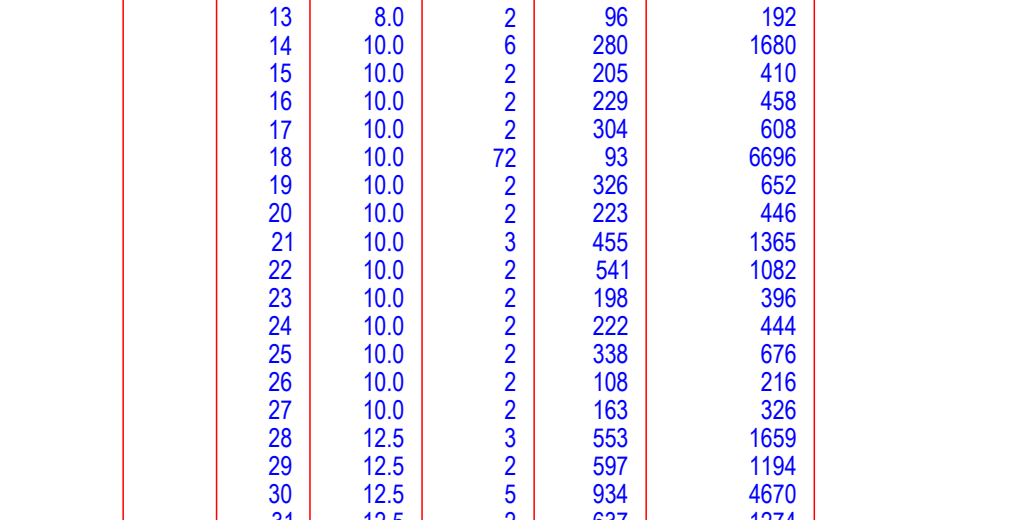
V8 (var)



V11 (T inv. 15x40x60x25)



V10 (var)



V12 (T inv. 15x40x60x25)

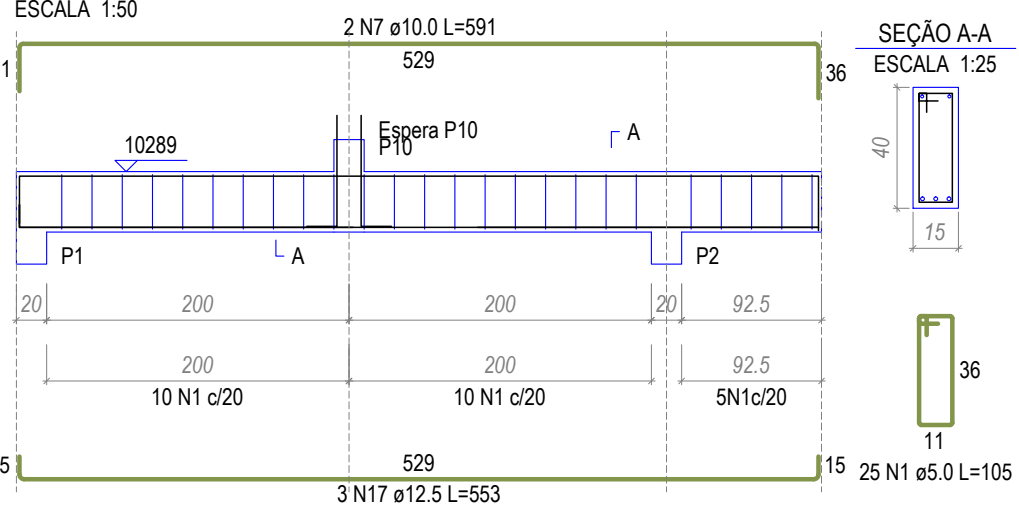


RELAÇÃO DO AÇO					
AÇO	N	DIAM (mm)	QUANT	C.UNIT (cm)	C.TOTAL (cm)
CA60	1	5.0	198	105	20790
CA50	2	5.0	64	85	5440
	3	6.3	6	corr	1554
	4	6.3	6	corr	936
	5	6.3	6	corr	1626
	6	6.3	6	corr	246
	7	6.3	6	corr	576
	8	8.0	2	259	518
	9	8.0	2	156	312
	10	8.0	2	436	872
	11	8.0	2	339	678
	12	8.0	2	97	194
	13	8.0	2	96	192
	14	10.0	6	280	1680
	15	10.0	2	205	410
	16	10.0	2	229	458
	17	10.0	2	304	608
	18	10.0	72	33	6696
	19	10.0	2	326	652
	20	10.0	2	223	446
	21	10.0	3	455	1365
	22	10.0	2	541	1082
	23	10.0	2	198	396
	24	10.0	2	222	444
	25	10.0	2	338	676
	26	10.0	2	108	216
	27	10.0	2	163	326
	28	12.5	3	553	1659
	29	12.5	2	597	1194
	30	12.5	5	934	4670
	31	12.5	2	637	1274
	32	12.5	2	488	976
	33	12.5	2	654	1308

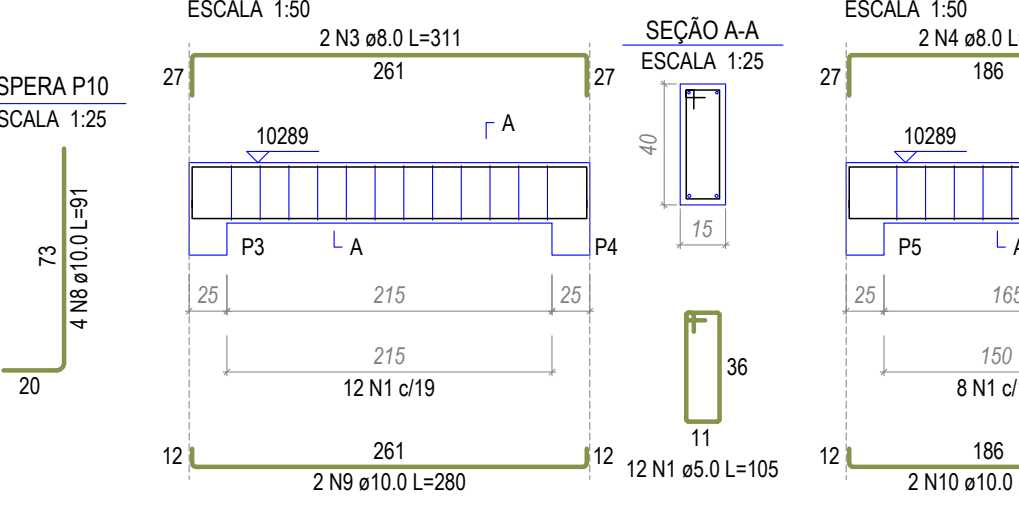
RESUMO DO AÇO				
AÇO	DIAM (mm)	C.TOTAL (m)	QUANT + 0% (Barras)	PESO + 0% (kg)
CA50	6.3	49.4	5	12.1
	8.0	27.7	3	10.9
	10.0	154.6	13	95.4
	12.5	110.8	10	106.7
	5.0	262.3	22	40.4
PESO TOTAL (kg)		Volume de concreto (C-30) = 3.55 m³		
CA50	225.1	Área de forma = 40.21 m²		
CA60	40.4			

COBERTURA - DETALHAMENTO DAS VIGAS

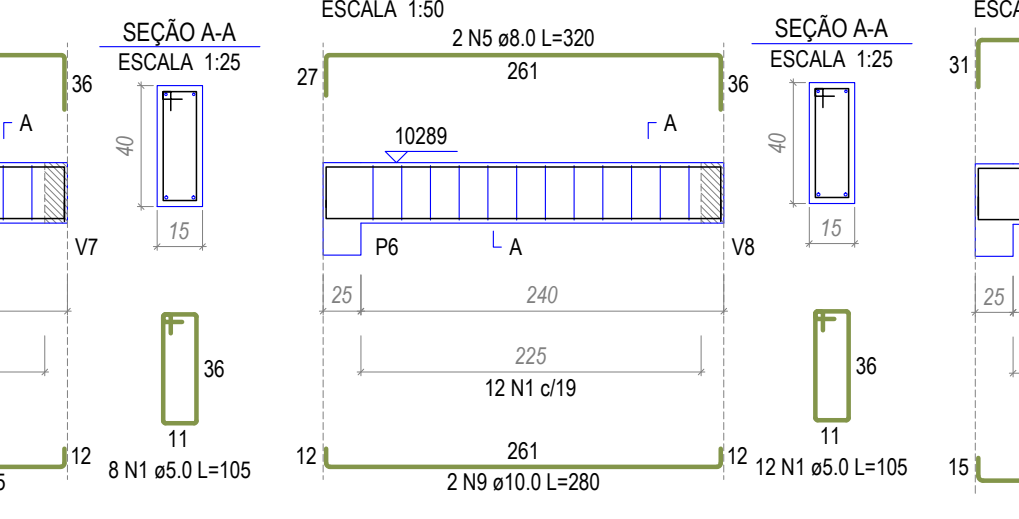
V1 (15 x 40)



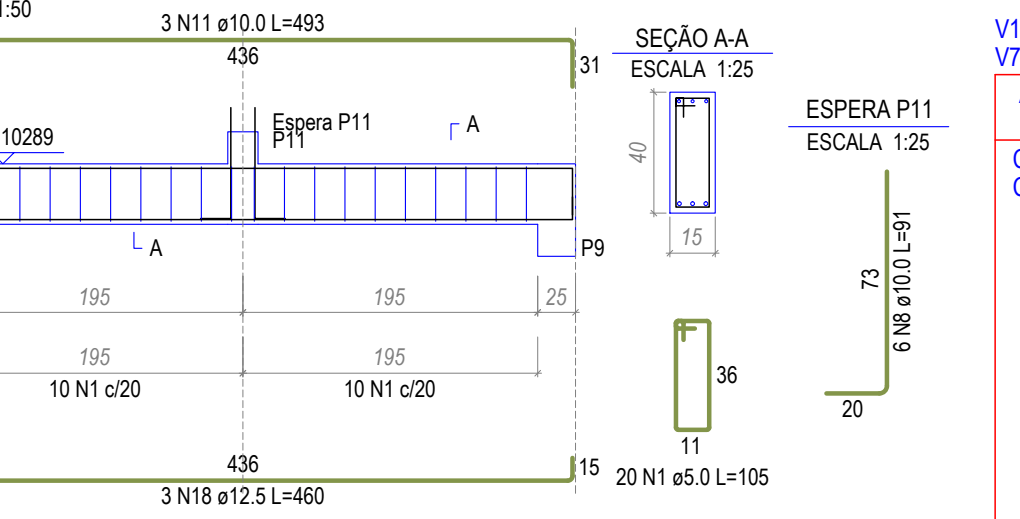
V2 (15 x 40)



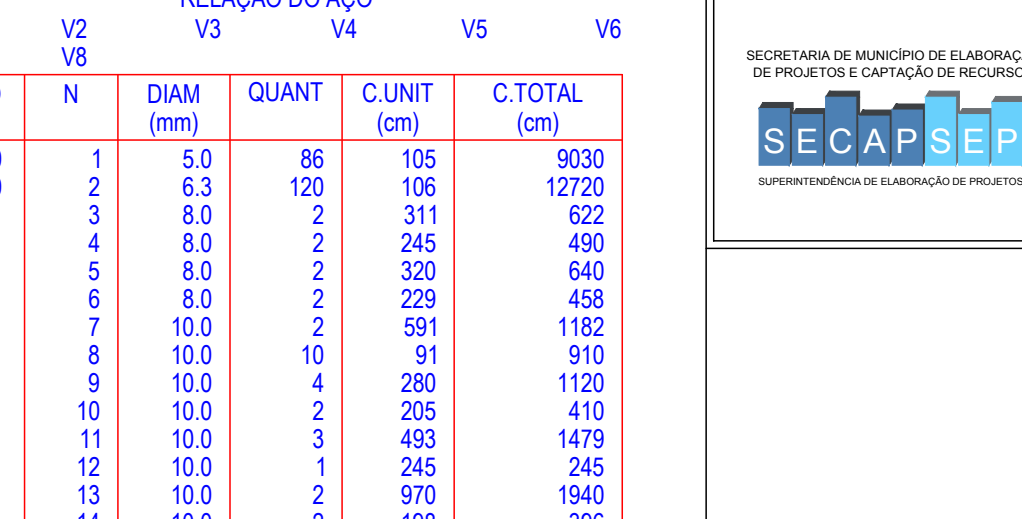
V3 (15 x 40)



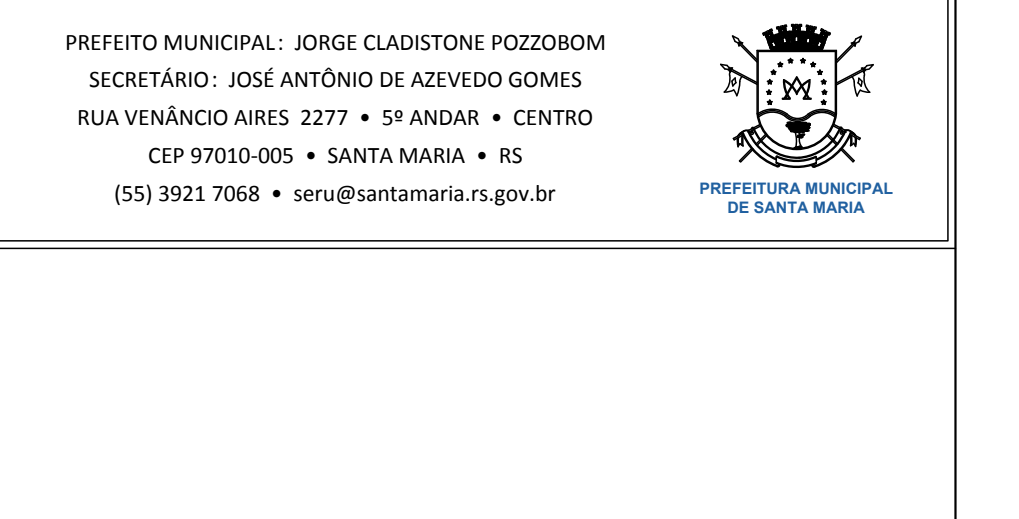
V4 (15 x 40)



V5 (15 x 40)



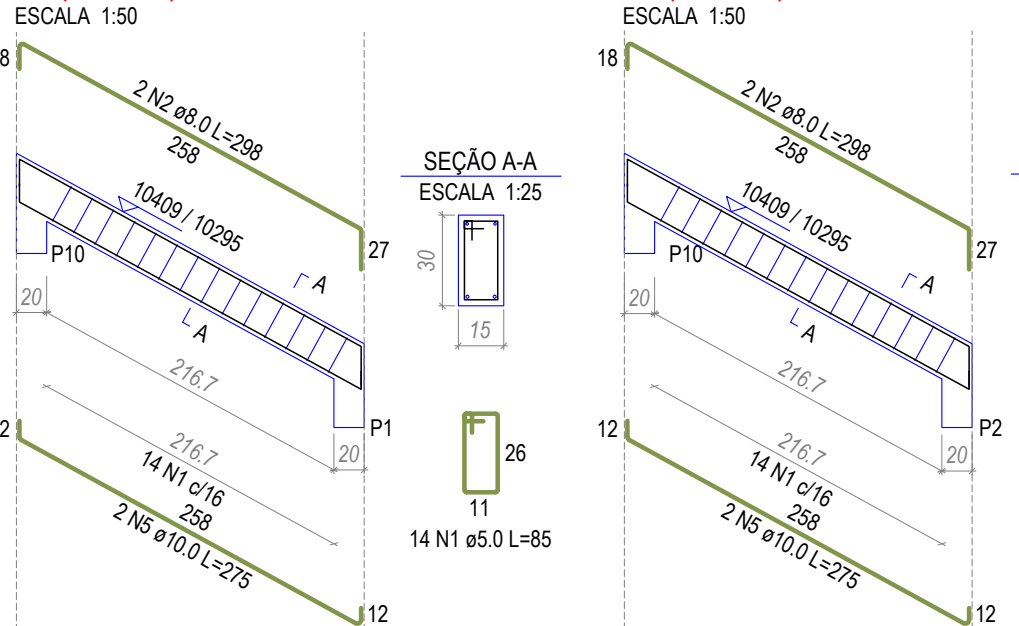
V6 (15 x 40)



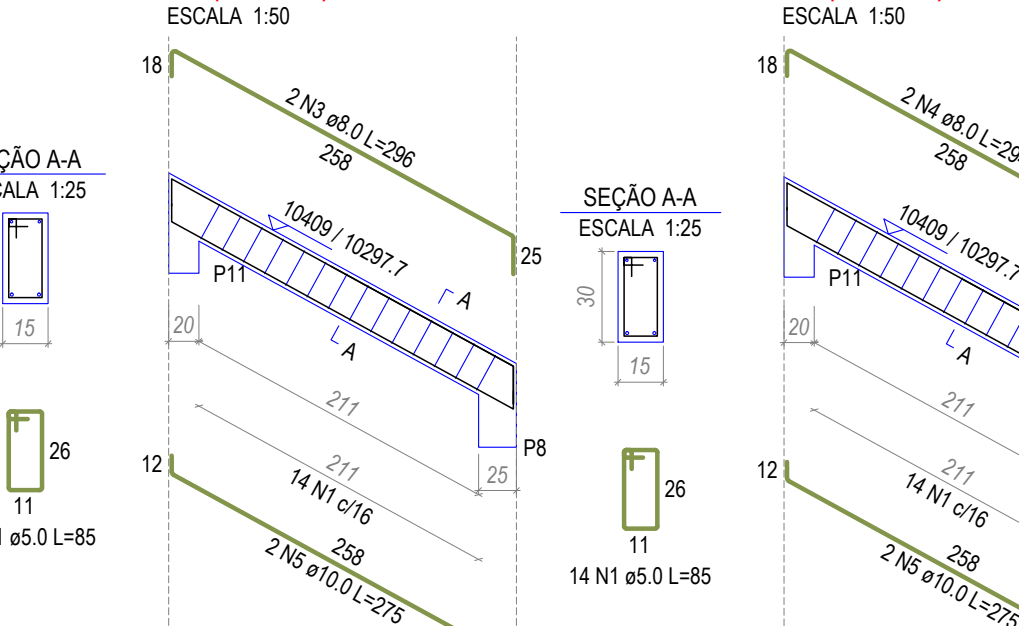
RELAÇÃO DO AÇO					
V3		V4		V5	V6
DIAM (mm)	QUANT	C.UNIT (cm)	C.TOTAL (cm)		
5.0	86	105	9030		
6.3	120	106	12720		
8.0	2	311	622		
8.0	2	245	490		
8.0	2	320	640		
8.0	2	229	458		
10.0	2	591	1182		
10.0	10	91	910		
10.0	4	280	1120		
10.0	2	205	410		
10.0	3	493	1479		
10.0	1	245	245		
10.0	2	970	1940		
10.0	2	198	396		
10.0	1	215	215		
10.0	2	969	1938		
12.5	3	553	1659		
12.5	3	460	1380		
12.5	3	934	2802		
12.5	3	937	2811		

TELHADO - DETALHAMENTO DAS VIGAS INCLINADAS

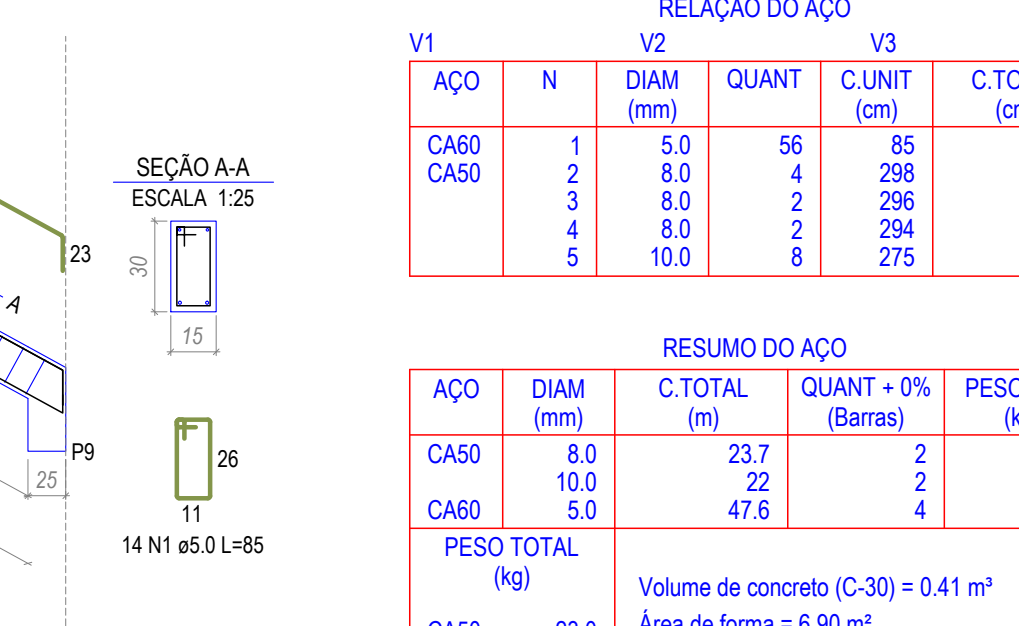
V1 (15 x 30)



V2 (15 x 30)



V3 (15 x 30)



V4 (15 x 30)



RELAÇÃO DO AÇO						
V1		V2		V3		V4
AÇO	N	DIAM (mm)	QUANT	C.UNIT (cm)	C.TOTAL (cm)	
CA60	1	5.0	56	85	4760	
CA50	2	8.0	4	298	1192	
	3	8.0	2	296	592	
	4	8.0	2	294	588	
	5	10.0	8	275	2200	
RESUMO DO AÇO						
AÇO	DIAM (mm)	C.TOTAL (m)	QUANT + 0% (Barras)	PESO + 0% (kg)		
CA50	8.0	23.7	2	9.4		
CA60	10.0	22	2	13.6		
	5.0	47.6	4	7.3		
PESO TOTAL (kg)		Volume de concreto (C-30) = 0.41 m³ Área de forma = 6.90 m²				
CA50	23.0					
CA60	7.3					

SECRETARIA DE MUNICÍPIO DE ELABORAÇÃO DE PROJETOS E CAPTAÇÃO DE RECURSOS

SECRETARIA DE ELABORAÇÃO DE PROJETOS

PREFEITO MUNICIPAL: JORGE CLADISTONE POZZOBOM

SECRETÁRIO: JOSÉ ANTÔNIO DE AZEVEDO GOMES

RUA VENÂNCIO AIRES 2277 • 5º ANDAR • CENTRO

CEP 97010-005 • SANTA MARIA • RS

(55) 3921 7068 • serui@santamaria.rs.gov.br

EMEF DOM LUIZ VICTOR SARTORI

Rua Tamanday, Nº 325 - Bairro Nonoai - Santa Maria - RS

PROJETO ESTRUTURAL - SANITÁRIO FEMININO

DETALHAMENTO DAS VIGAS

PROPRIETÁRIA / SECRETARIA GESTORA

PROJETISTA / RESPONSÁVEL TÉCNICO

PREFEITURA MUNICIPAL DE SANTA MARIA

Eng. Civil Regis C. Moraes  
CREA/RS 93.278

ÁREA

ESCALA

UNIDADES

ARQUIVO

DESENHO ORIGINAL

AJUSTES

Regis Moraes  
Engenheiro Civil

A.R.T.

BATA

DEZEMBRO/2021

PRINCHA

4/6