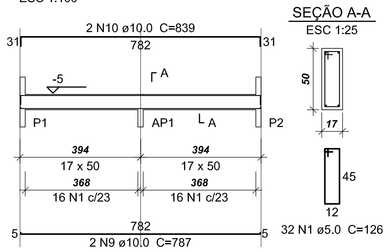
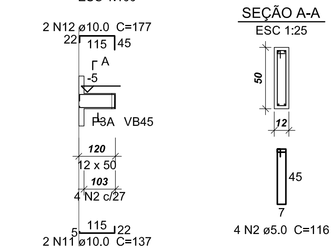
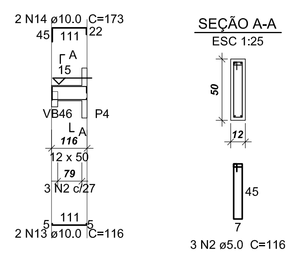
## VB1 (17 x 50)
ESC 1:100



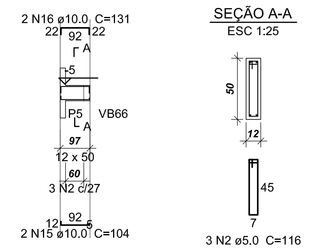

## VB2 (12 x 50)
ESC 1:100



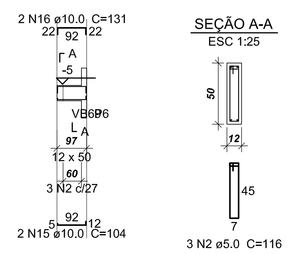

## VB3 (12 x 50)
ESC 1:100



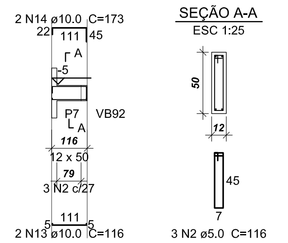

## VB4 (12 x 50)
ESC 1:100



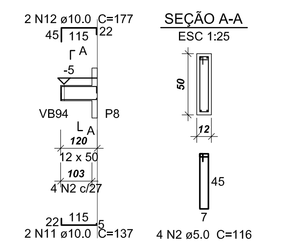

## VB5 (12 x 50)
ESC 1:100



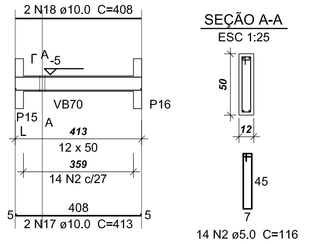

## VB6 (12 x 50)
ESC 1:100



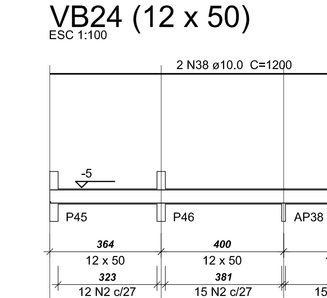

## VB7 (12 x 50)
ESC 1:100



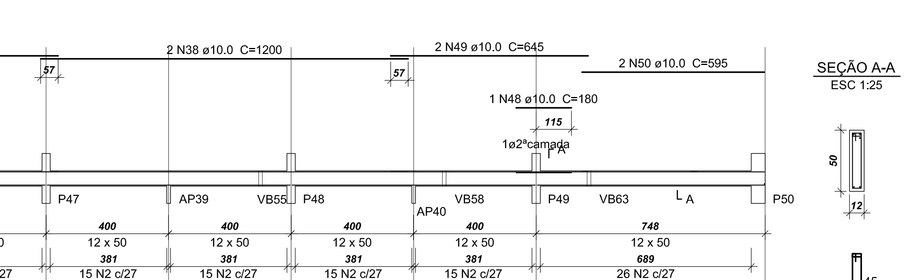

## VB8 (12 x 50)
ESC 1:100



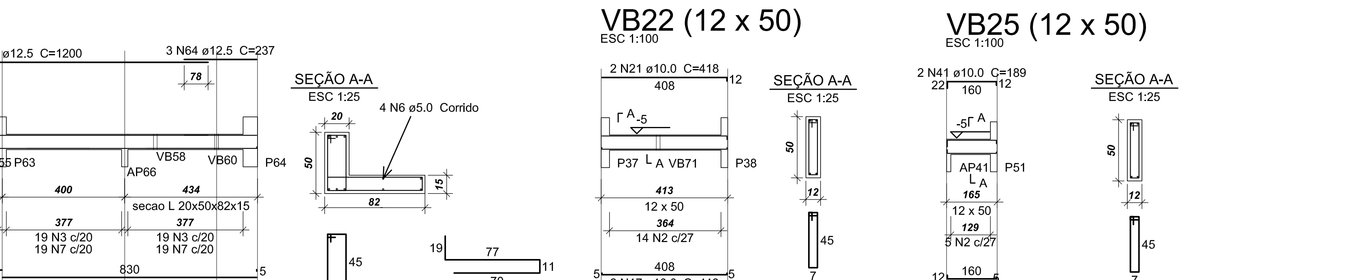

## VB9 (12 x 50)
ESC 1:100



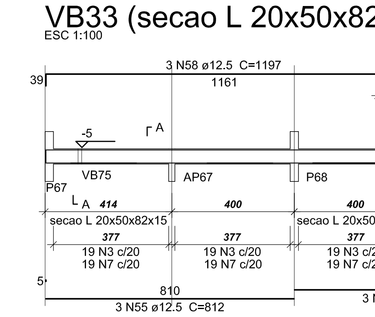

## VB10 (var)
ESC 1:100



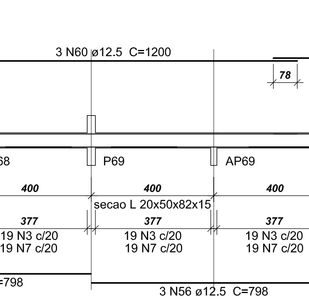

## VB11 (secao L 20x50x82x15)
ESC 1:100



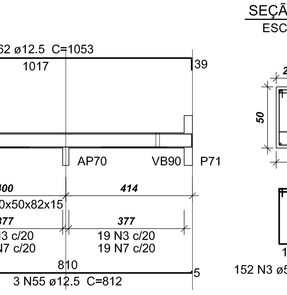

## VB12 (12 x 50)
ESC 1:100



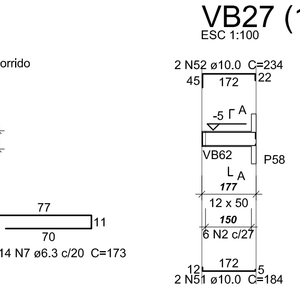

## VB14 (20 x 50)
ESC 1:100



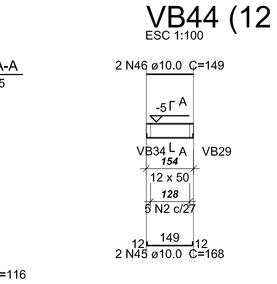

## VB15 (12 x 50)
ESC 1:100



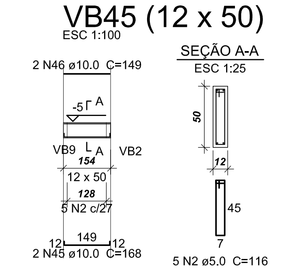

## VB16 (12 x 50)
ESC 1:100



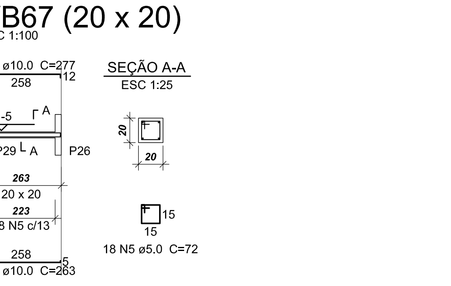

## VB17 (12 x 50)
ESC 1:100




## VB18 (12 x 50)
ESC 1:100




## VB19 (var)
ESC 1:100




## VB20 (12 x 50)
ESC 1:100




## VB21 (12 x 50)
ESC 1:100




## VB23 (12 x 50)
ESC 1:100




## VB24 (12 x 50)
ESC 1:100




## VB30 (secao L 20x50x82x15)
ESC 1:100




As costura 1.5 cm2/m

## VB22 (12 x 50)
ESC 1:100




## VB25 (12 x 50)
ESC 1:100




## VB33 (secao L 20x50x82x15)
ESC 1:100




## VB27 (12 x 50)
ESC 1:100




## VB44 (12 x 50)
ESC 1:100




## VB45 (12 x 50)
ESC 1:100




## VB67 (20 x 20)
ESC 1:100




## Relação do aço

| AÇO | N | DIAM | Q | UNIT (cm) | C.TOTAL (cm) |
|---|---|---|---|---|---|
| CA60 | 1 | 5.0 | 32 | 126 | 4032 |
| | 2 | 5.0 | 551 | 116 | 63916 |
| | 3 | 5.0 | 584 | 132 | 77088 |
| | 4 | 5.0 | 8 | corr | 4824 |
| | 5 | 5.0 | 18 | 72 | 1296 |
| | 6 | 5.0 | 4 | corrido | 12908 |
| CA50 | 7 | 6.3 | 532 | 173 | 92036 |
| | 8 | 6.3 | 1 | 92 | 92 |
| | 9 | 10.0 | 2 | 787 | 1574 |
| | 10 | 10.0 | 2 | 839 | 1678 |
| | 11 | 10.0 | 4 | 137 | 548 |
| | 12 | 10.0 | 4 | 177 | 708 |
| | 13 | 10.0 | 4 | 116 | 464 |
| | 14 | 10.0 | 4 | 173 | 692 |
| | 15 | 10.0 | 4 | 104 | 416 |
| | 16 | 10.0 | 4 | 131 | 524 |
| | 17 | 10.0 | 4 | 413 | 1652 |
| | 18 | 10.0 | 2 | 408 | 816 |
| | 19 | 10.0 | 4 | 479 | 1916 |
| | 20 | 10.0 | 4 | 500 | 2000 |
| | 21 | 10.0 | 2 | 418 | 836 |
| | 22 | 10.0 | 2 | 480 | 960 |
| | 23 | 10.0 | 2 | 513 | 1026 |
| | 24 | 10.0 | 2 | 221 | 442 |
| | 25 | 10.0 | 2 | 248 | 496 |
| | 26 | 10.0 | 4 | 194 | 776 |
| | 27 | 10.0 | 4 | 218 | 872 |
| | 28 | 10.0 | 2 | 226 | 452 |
| | 29 | 10.0 | 2 | 269 | 538 |
| | 30 | 10.0 | 4 | 202 | 808 |
| | 31 | 10.0 | 2 | 230 | 460 |
| | 32 | 10.0 | 2 | 668 | 1336 |
| | 33 | 10.0 | 2 | 926 | 1852 |
| | 34 | 10.0 | 2 | 946 | 1892 |
| | 35 | 10.0 | 6 | 1161 | 6966 |
| | 36 | 10.0 | 12 | 793 | 9516 |
| | 37 | 10.0 | 2 | 426 | 852 |
| | 38 | 10.0 | 12 | 1200 | 14400 |
| | 39 | 10.0 | 2 | 921 | 1842 |
| | 40 | 10.0 | 2 | 172 | 344 |
| | 41 | 10.0 | 2 | 189 | 378 |
| | 42 | 10.0 | 2 | 811 | 1622 |
| | 43 | 10.0 | 2 | 1140 | 2280 |
| | 44 | 10.0 | 2 | 164 | 328 |
| | 45 | 10.0 | 4 | 168 | 672 |
| | 46 | 10.0 | 4 | 149 | 596 |
| | 47 | 10.0 | 2 | 745 | 1490 |
| | 48 | 10.0 | 1 | 180 | 180 |
| | 49 | 10.0 | 2 | 645 | 1290 |
| | 50 | 10.0 | 2 | 595 | 1190 |
| | 51 | 10.0 | 2 | 184 | 368 |
| | 52 | 10.0 | 2 | 234 | 468 |
| | 53 | 10.0 | 2 | 263 | 526 |
| | 54 | 10.0 | 2 | 277 | 554 |
| | 55 | 12.5 | 18 | 812 | 14616 |
| | 56 | 12.5 | 21 | 798 | 16758 |
| | 57 | 12.5 | 2 | 427 | 854 |
| | 58 | 12.5 | 12 | 1197 | 14364 |
| | 59 | 12.5 | 1 | 1058 | 1058 |
| | 60 | 12.5 | 11 | 1200 | 13200 |
| | 61 | 12.5 | 2 | 643 | 1286 |
| | 62 | 12.5 | 6 | 1053 | 6318 |
| | 63 | 12.5 | 3 | 832 | 2496 |
| | 64 | 12.5 | 3 | 237 | 711 |

## Resumo do aço

| AÇO | DIAM | C.TOTAL (m) | PESO (kg) |
|---|---|---|---|
| CA50 | 6.3 | 921.3 | 225.4 |
| | 10.0 | 716 | 441.4 |
| | 12.5 | 716.7 | 690.3 |
| CA60 | 5.0 | 1640.7 | 261.6 |
| PESO TOTAL | | | |
| CA50 | 1357.2 | | |
| CA60 | 261.6 | | |

Vol. de concreto total (C-25) = 22.47 m³
Área de forma total = 293.46 m²

| | | |
|---|---|---|
| VB1 | VB2 | VB3 |
| VB4 | VB5 | VB6 |
| VB7 | VB8 | VB9 |
| VB10 | VB11 | VB12 |
| VB14 | VB15 | VB16 |
| VB17 | VB18 | VB19 |
| VB20 | VB21 | VB22 |
| VB23 | VB24 | VB25 |
| VB27 | VB30 | VB33 |
| VB44 | VB45 | VB67 |

| Nº | DATA | RESPONSÁVEL | DESCRIÇÃO DA REVISÃO: |
|---|---|---|---|
| 01 | 18.06.2013 | | PROJETO ESTRUTURAL |

AS BUILT ENGENHARIA DE PROJETOS LTDA
Rua Jovino do Rosário, 1564 - Boa Vista
CEP 82560-435 - Curitiba - Paraná
asbuiltprojetos@gmail.com - (41)3068-4949

FASE: PROJETO ESTRUTURAL

CONFERIR MEDIDAS NA OBRA

OBRA: ADMINISTRAÇÃO
CAMPUS JANAÚBA

PROPRIETÁRIO: UNIVERSIDADE FEDERAL DOS VALES DO JEQUITINHONHA E MUCURI — CNPJ: 16.888.315/0001-57

PRANCHA: FERRAGENS DAS VIGAS: BALDRAMES (1)

AUTOR PROJETO: CARLOS HENRIQUE DE SOUZA GONÇALVES
CREA 79820/D - Pr

ESCALA: INDICADA — DESENHO: EQUIPE

VERSÃO: VERSAO 1 — DATA: 18/06/2013 — ÁREA CONSTRUÍDA: 3056,63m² — FOLHA: EST 05/22

ARQUIVO: