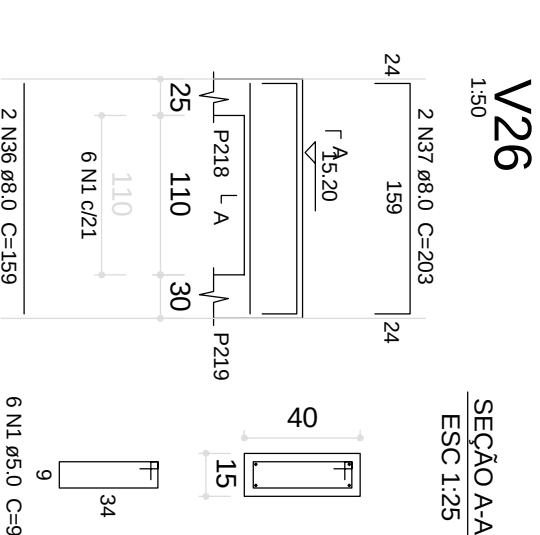
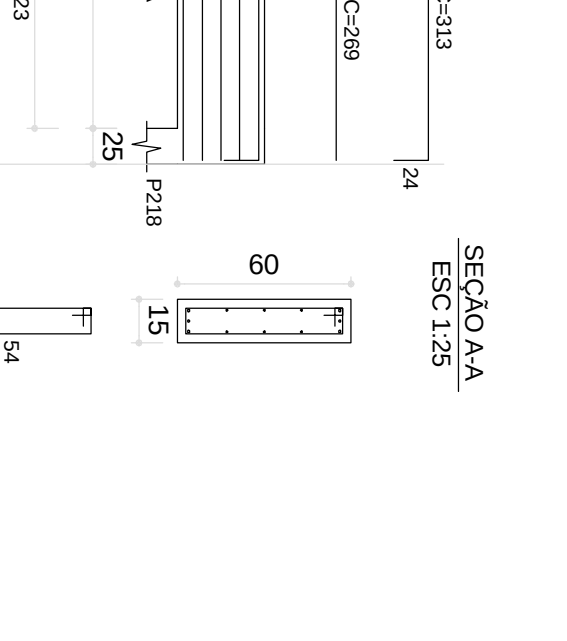
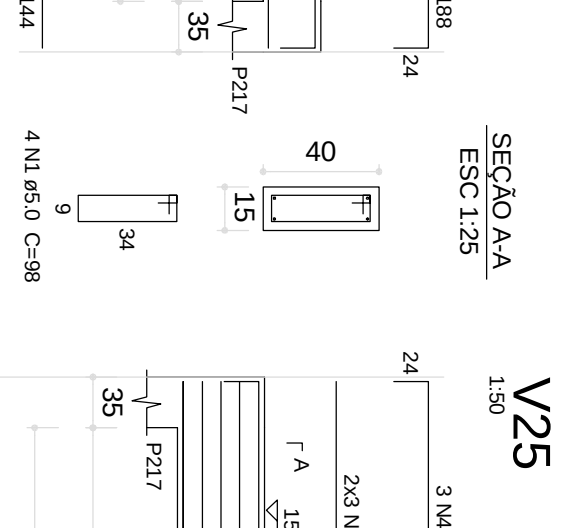
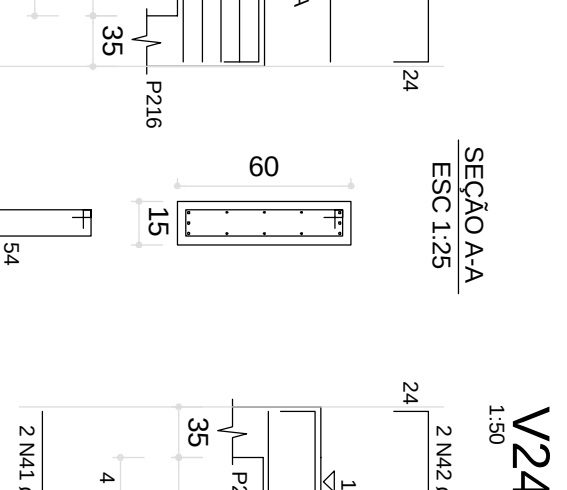
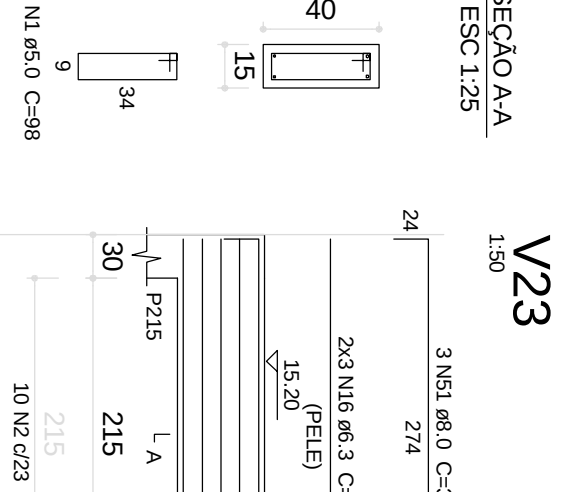
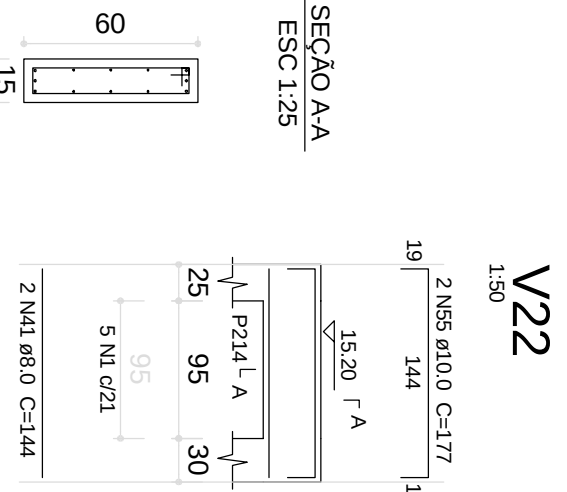
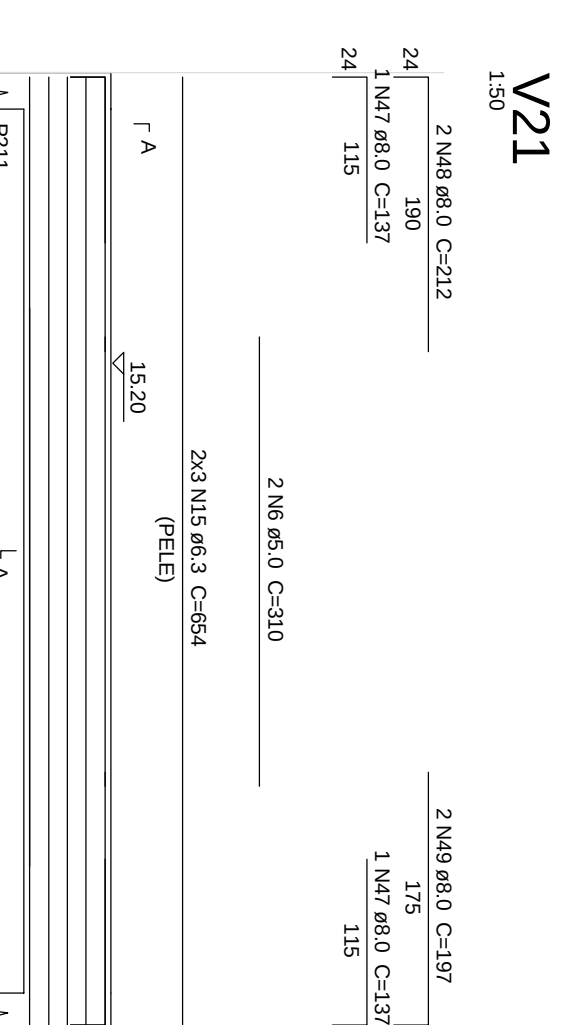
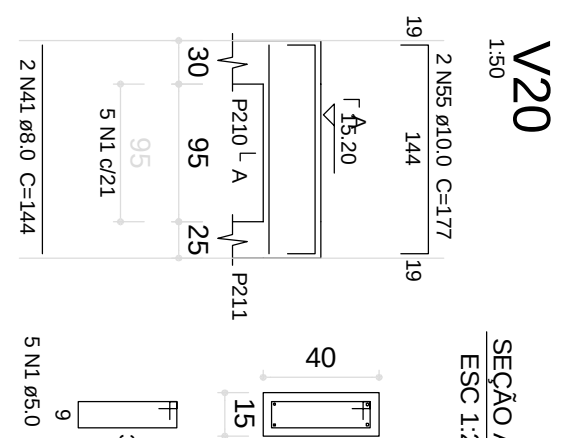
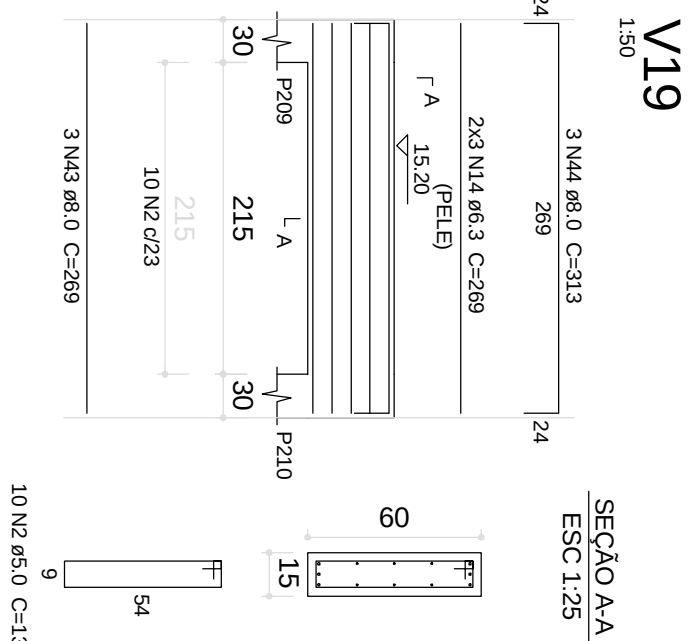
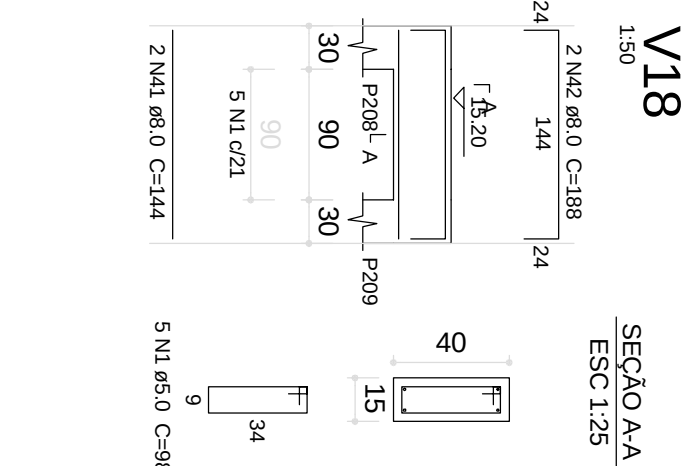
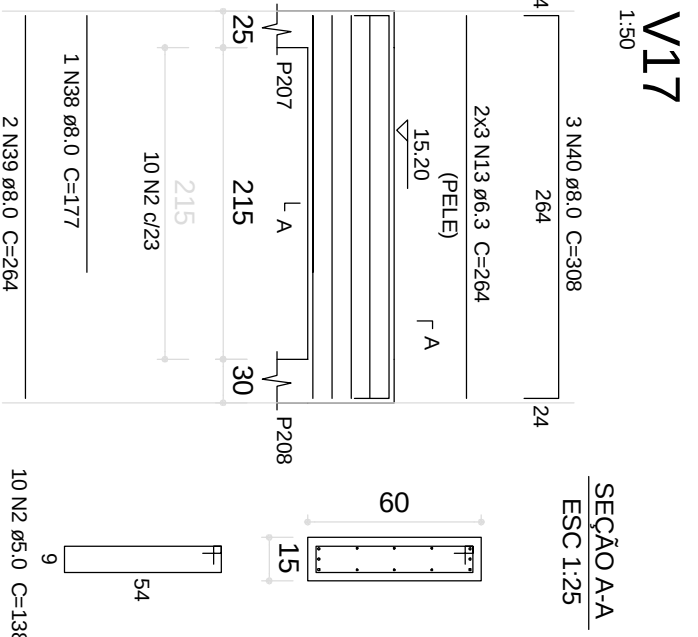
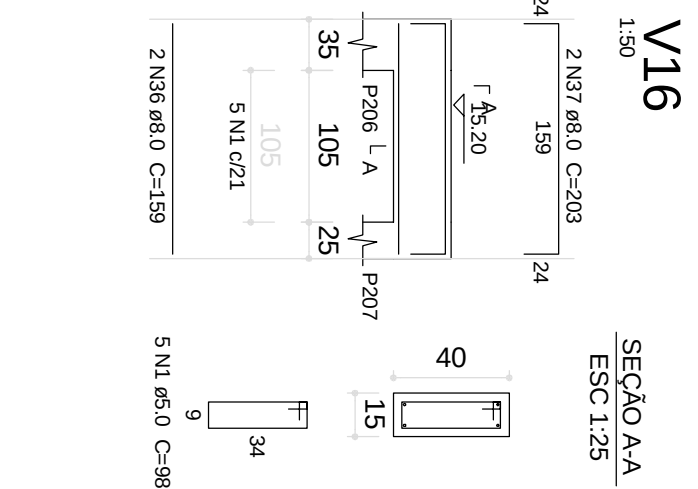
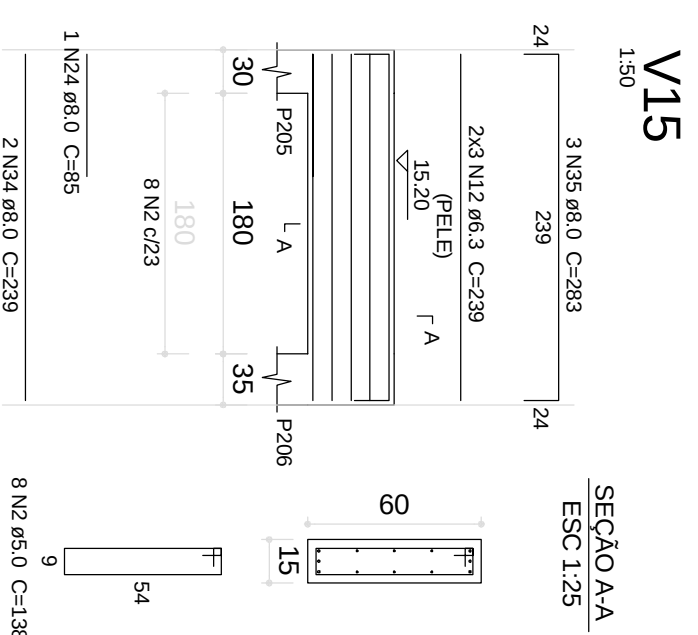
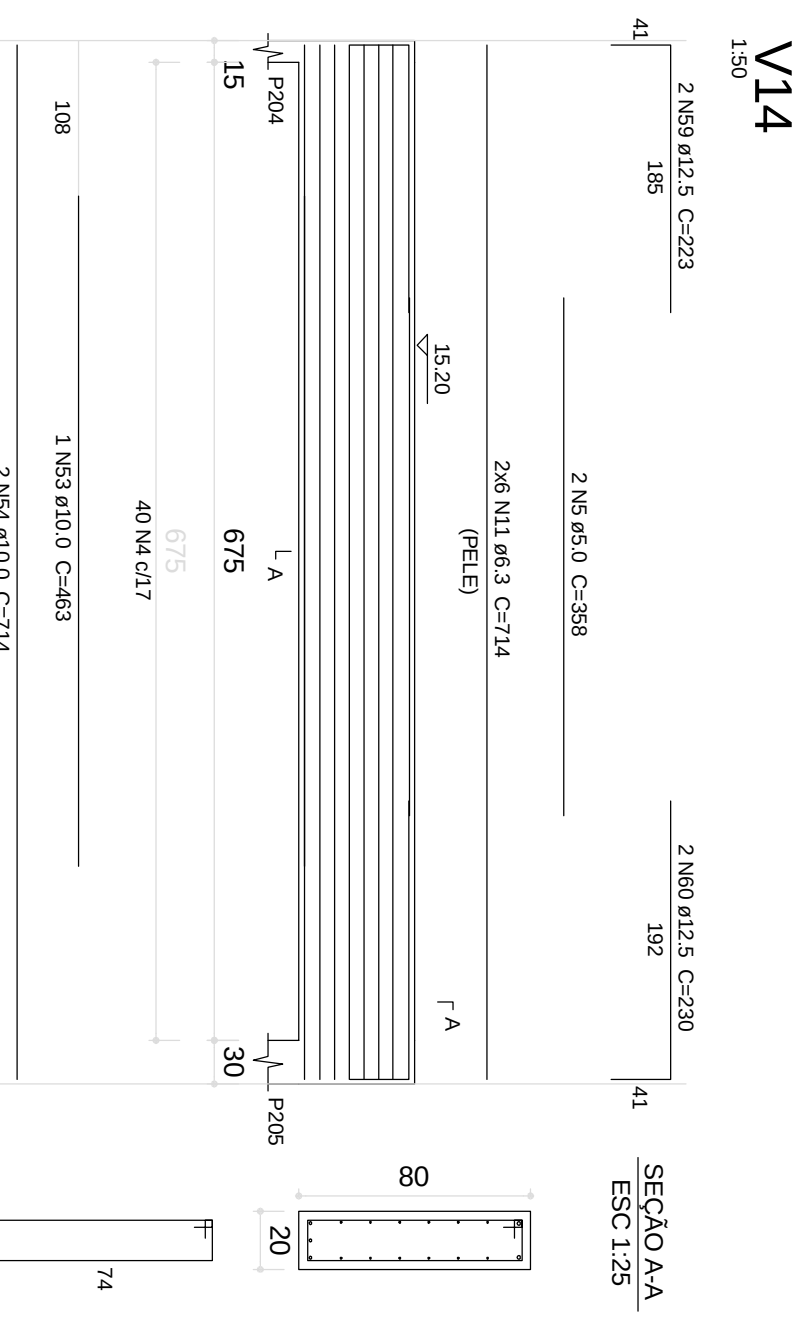
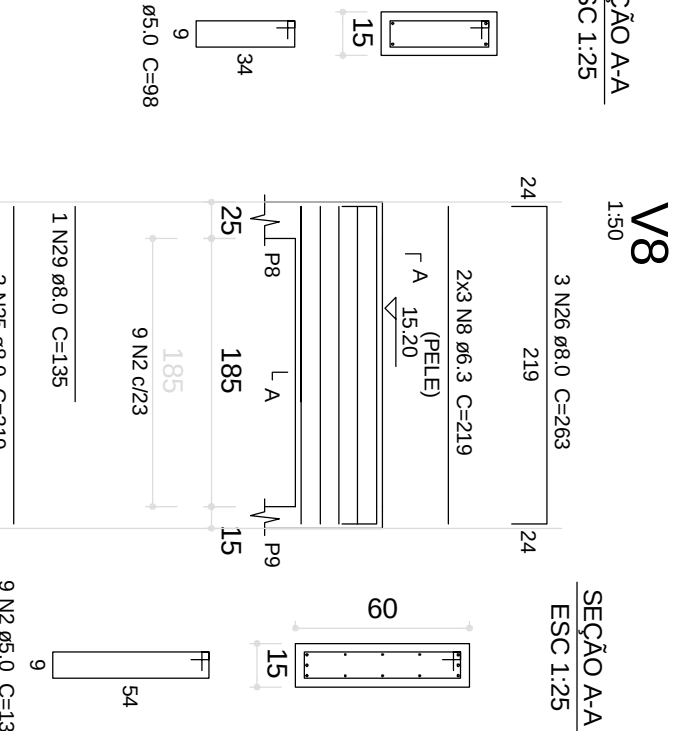
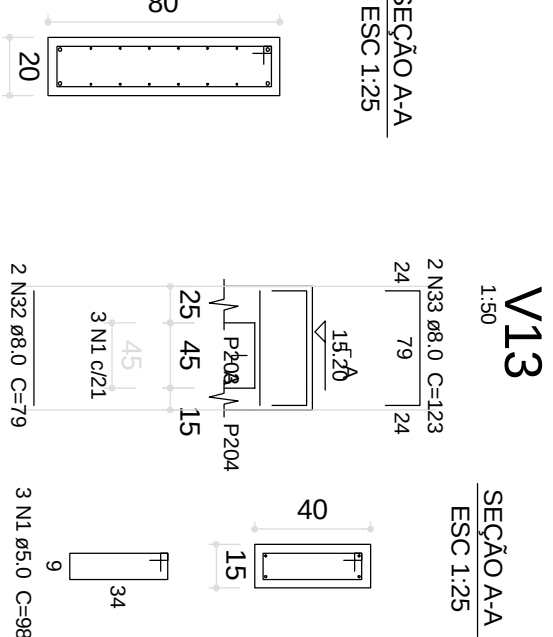
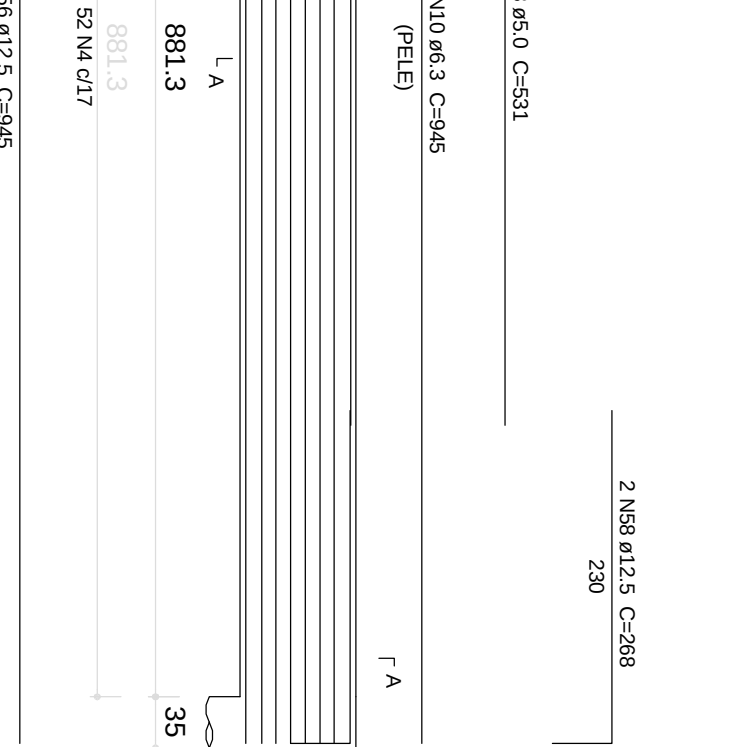
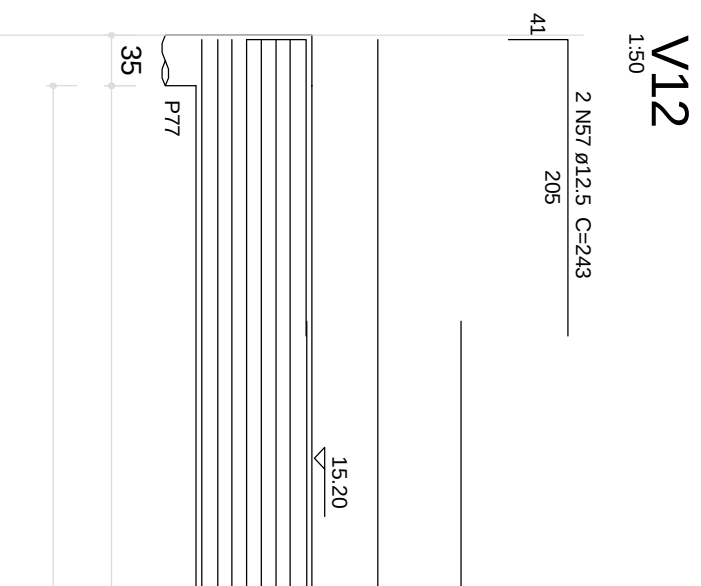
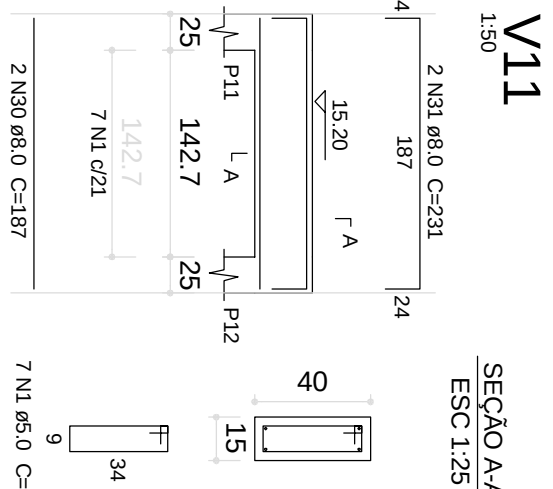
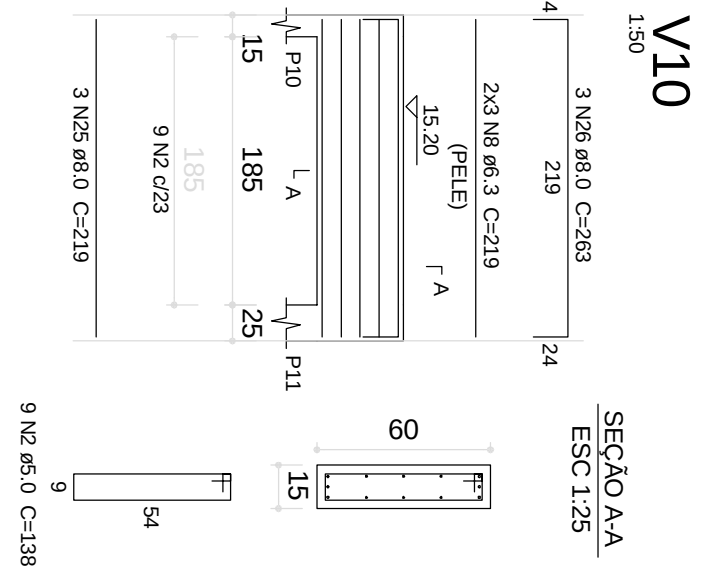
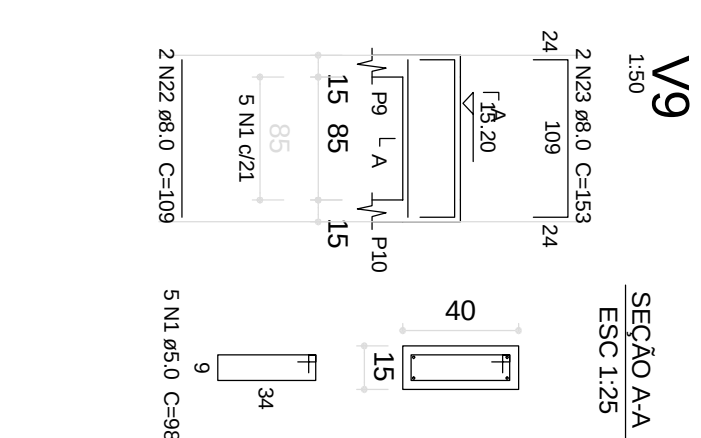
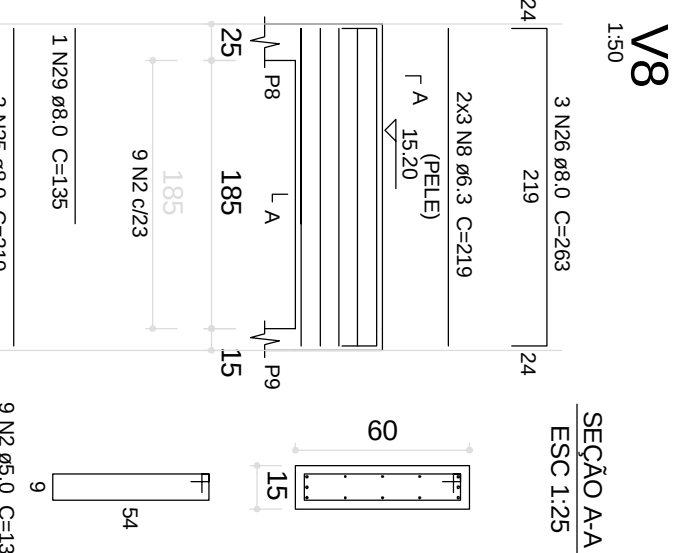
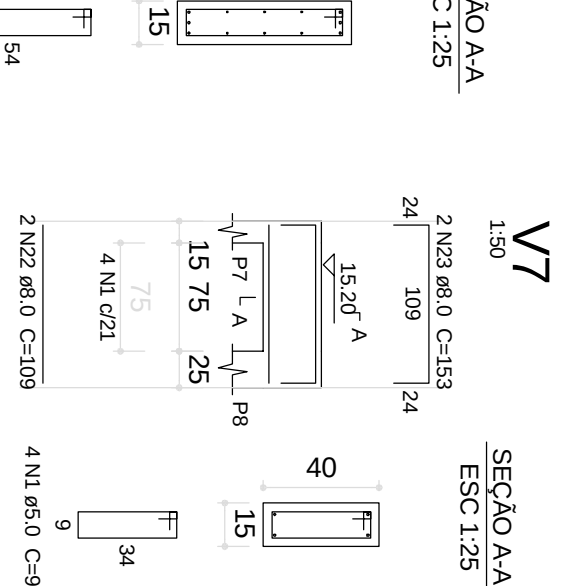
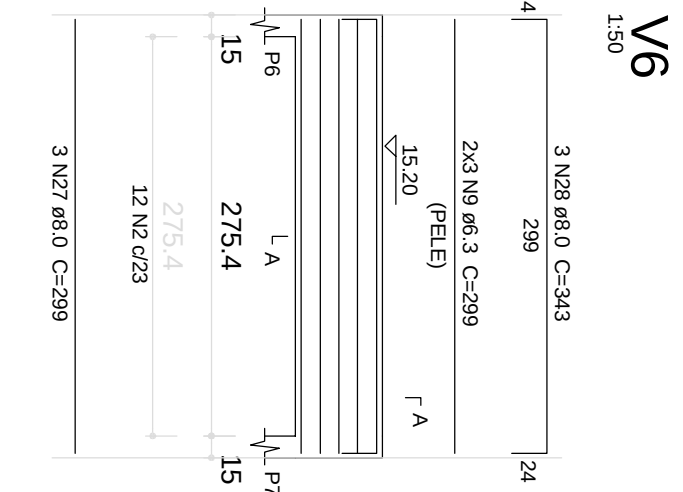
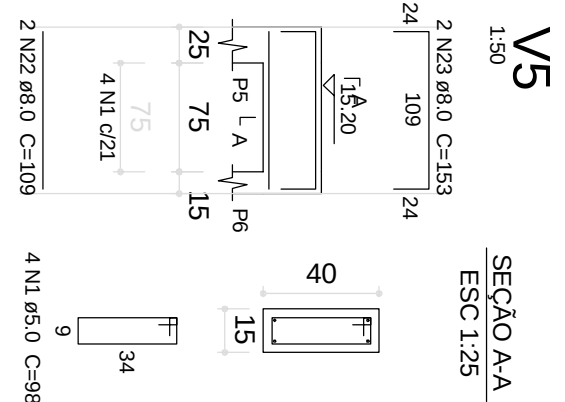
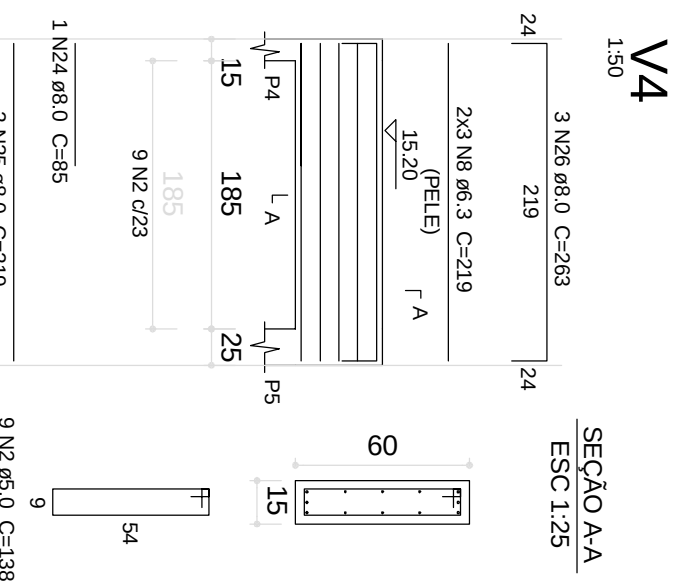
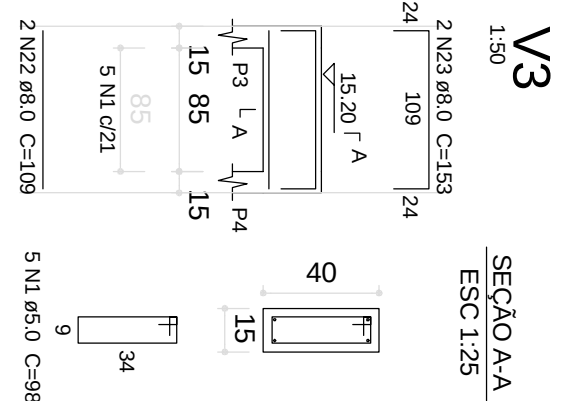
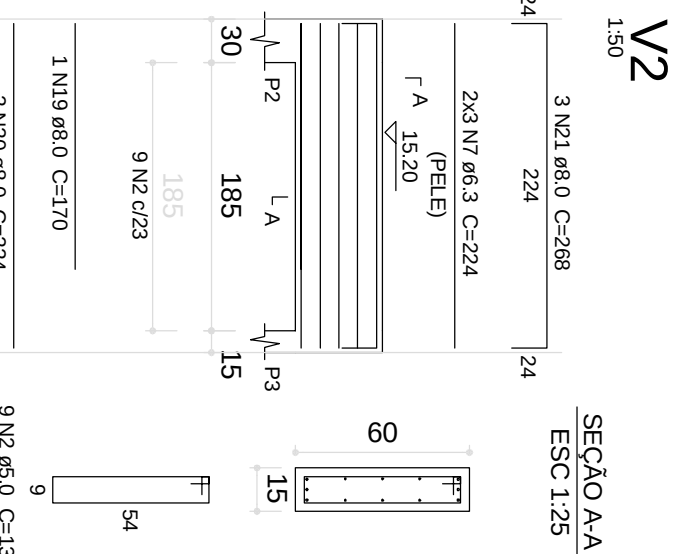
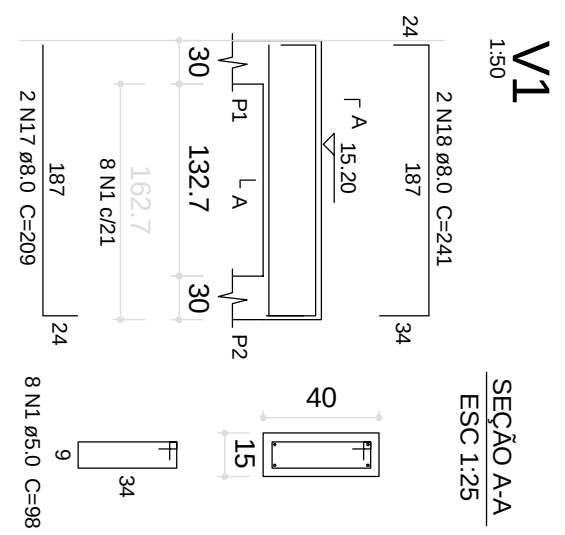




| Relatório do aço |      |     |      |        |       |     |     |     |     |
|------------------|------|-----|------|--------|-------|-----|-----|-----|-----|
| V1               | V2   | V3  | V4   | V5     | V6    | V7  | V8  | V9  | V10 |
| V11              | V12  | V13 | V14  | V15    | V16   | V17 | V18 | V19 | V20 |
| V21              | V22  | V23 | V24  | V25    | V26   | V27 | V28 | V29 | V30 |
| CA60             | N    | DIM | Q    | UNIT   | TOTAL |     |     |     |     |
|                  |      |     |      | (cm)   | (cm)  |     |     |     |     |
| 1                | 5,0  | 66  |      |        |       |     |     |     |     |
| 2                | 5,0  | 123 | 1    | 1694,4 |       |     |     |     |     |
| 3                | 5,0  | 2   | 531  | 1062   |       |     |     |     |     |
| 4                | 5,0  | 92  | 1286 | 17296  |       |     |     |     |     |
| 5                | 5,0  | 2   | 388  | 716    |       |     |     |     |     |
| 6                | 6,3  | 6   | 22   | 344    |       |     |     |     |     |
| 7                | 6,3  | 2   | 22   | 344    |       |     |     |     |     |
| 8                | 6,3  | 18  | 219  | 3942   |       |     |     |     |     |
| 9                | 6,3  | 6   | 96   | 1794   |       |     |     |     |     |
| 10               | 6,3  | 12  | 246  | 31340  |       |     |     |     |     |
| 11               | 6,3  | 12  | 246  | 35056  |       |     |     |     |     |
| 12               | 6,3  | 12  | 246  | 35056  |       |     |     |     |     |
| 13               | 6,3  | 6   | 264  | 1584   |       |     |     |     |     |
| 14               | 6,3  | 6   | 264  | 1584   |       |     |     |     |     |
| 15               | 6,3  | 12  | 246  | 35056  |       |     |     |     |     |
| 16               | 6,3  | 6   | 96   | 3824   |       |     |     |     |     |
| 17               | 6,3  | 6   | 264  | 1584   |       |     |     |     |     |
| 18               | 8,0  | 1   | 170  | 170    |       |     |     |     |     |
| 19               | 8,0  | 1   | 170  | 170    |       |     |     |     |     |
| 20               | 8,0  | 2   | 224  | 448    |       |     |     |     |     |
| 21               | 8,0  | 8   | 896  | 1792   |       |     |     |     |     |
| 22               | 8,0  | 8   | 153  | 306    |       |     |     |     |     |
| 23               | 8,0  | 8   | 153  | 306    |       |     |     |     |     |
| 24               | 8,0  | 2   | 85   | 170    |       |     |     |     |     |
| 25               | 8,0  | 7   | 219  | 1553   |       |     |     |     |     |
| 26               | 8,0  | 9   | 264  | 2307   |       |     |     |     |     |
| 27               | 8,0  | 9   | 264  | 2307   |       |     |     |     |     |
| 28               | 8,0  | 3   | 343  | 1059   |       |     |     |     |     |
| 29               | 8,0  | 1   | 135  | 135    |       |     |     |     |     |
| 30               | 8,0  | 2   | 187  | 374    |       |     |     |     |     |
| 31               | 8,0  | 2   | 231  | 462    |       |     |     |     |     |
| 32               | 8,0  | 2   | 231  | 462    |       |     |     |     |     |
| 33               | 8,0  | 2   | 226  | 446    |       |     |     |     |     |
| 34               | 8,0  | 2   | 283  | 849    |       |     |     |     |     |
| 35               | 8,0  | 2   | 283  | 849    |       |     |     |     |     |
| 36               | 8,0  | 4   | 159  | 658    |       |     |     |     |     |
| 37               | 8,0  | 4   | 159  | 658    |       |     |     |     |     |
| 38               | 8,0  | 1   | 177  | 177    |       |     |     |     |     |
| 39               | 8,0  | 2   | 264  | 528    |       |     |     |     |     |
| 40               | 8,0  | 3   | 308  | 924    |       |     |     |     |     |
| 41               | 8,0  | 8   | 144  | 1152   |       |     |     |     |     |
| 42               | 8,0  | 8   | 144  | 1152   |       |     |     |     |     |
| 43               | 8,0  | 8   | 144  | 1152   |       |     |     |     |     |
| 44               | 8,0  | 6   | 313  | 1878   |       |     |     |     |     |
| 45               | 8,0  | 3   | 385  | 305    |       |     |     |     |     |
| 46               | 8,0  | 2   | 654  | 1308   |       |     |     |     |     |
| 47               | 8,0  | 2   | 654  | 1308   |       |     |     |     |     |
| 48               | 8,0  | 2   | 654  | 1308   |       |     |     |     |     |
| 49               | 8,0  | 2   | 654  | 1308   |       |     |     |     |     |
| 50               | 8,0  | 3   | 274  | 822    |       |     |     |     |     |
| 51               | 8,0  | 3   | 318  | 954    |       |     |     |     |     |
| 52               | 8,0  | 1   | 155  | 155    |       |     |     |     |     |
| 53               | 8,0  | 1   | 155  | 155    |       |     |     |     |     |
| 54               | 10,0 | 2   | 714  | 1428   |       |     |     |     |     |
| 55               | 10,0 | 4   | 177  | 708    |       |     |     |     |     |
| 56               | 12,5 | 2   | 945  | 1890   |       |     |     |     |     |
| 57               | 12,5 | 2   | 945  | 1890   |       |     |     |     |     |
| 58               | 12,5 | 2   | 945  | 1890   |       |     |     |     |     |
| 59               | 12,5 | 2   | 945  | 1890   |       |     |     |     |     |
| 60               | 12,5 | 2   | 230  | 460    |       |     |     |     |     |

|            | DIAM  | C.TOTAL<br>(m) | PESO + 10 %<br>(kg) |
|------------|-------|----------------|---------------------|
| CA50       | 6,3   | 389,1          | 104,4               |
|            | 8,0   | 260,4          | 113                 |
|            | 10,0  | 26             | 17,6                |
|            | 12,5  | 38,2           | 40,5                |
| CA60       | 5,0   | 431,4          | 73,1                |
| PESO TOTAL |       |                |                     |
| CA50       | 275,5 |                |                     |
| CA60       | 73,1  |                |                     |

Vol. de concreto total (C-30) = 6.68 m<sup>3</sup>  
Área de forma total = 91.17 m<sup>2</sup>

|                                                                                                                                                                                                                                                                                                         |                          |              |                       |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|--------------|-----------------------|
| NR:                                                                                                                                                                                                                                                                                                     | DATA:                    | RESPONSÁVEL: | DESCRIÇÃO DA REVISÃO: |
| FASE:                                                                                                                                                                                                                                                                                                   | PROJETO ESTRUTURAL       |              |                       |
| OBSERVAÇÕES:                                                                                                                                                                                                                                                                                            | CONFERIR MEDIDAS NA OBRA |              |                       |
| <p><b>NUGEU - NÚCLEO DE GEOCIÊNCIAS</b><br/> <b>CAMPUS DIAMANTINA</b><br/>         RODOVIA MG 367, KM 553, N° 5000 - ALTO DA JACIBA - DIAMANTINAMG<br/>         MINÉRIO DO JACUÍ<br/>         UNIVERSIDADE FEDERAL DOS VALES DO JEQUITINHONHA E MUCURI<br/>         CxP 16.886/3.150001-1/57</p>        |                          |              |                       |
| <p><b>UFVJM</b></p>                                                                                                                                                                                                                                                                                     |                          |              |                       |
| TÍTULO                                                                                                                                                                                                                                                                                                  |                          |              |                       |
| DEFINIÇÃO DAS VIGAS DA PLATBAUDA-1/3                                                                                                                                                                                                                                                                    |                          |              |                       |
| AUTOR: PROJETO ESTRUTURAL, RTI:                                                                                                                                                                                                                                                                         |                          |              |                       |
| <p><b>MACEDO SIOLEIRA, PROJETOS &amp; ENGENHARIA LTDA-ME</b><br/>         CNPJ: 09.856.856/0001-57    C/EEA: 41.746.046<br/>         RT: 016    CREA: 0486787-7    CREA: 0486787-7<br/>         Rua Maranhão, Caixa 9789, Coimbra, Sítio Jd. José/MS<br/>         Fones: (61) 3771-0534 / 3779-3184</p> |                          |              |                       |
|  <p><b>A.MACEDO</b><br/>         Projetos e Engenharia<br/> <a href="http://www.amacedoengenharia.com.br">www.amacedoengenharia.com.br</a><br/>         Fones: (61) 3771-0534 / 3779-3184</p>                        |                          |              |                       |
| VERSÃO:                                                                                                                                                                                                                                                                                                 | DATA:                    | AUTOCAD:     |                       |
| VERSÃO 1                                                                                                                                                                                                                                                                                                | 22.06.2011               |              |                       |
| FOLHA:                                                                                                                                                                                                                                                                                                  |                          |              |                       |
| 69/71                                                                                                                                                                                                                                                                                                   |                          |              |                       |