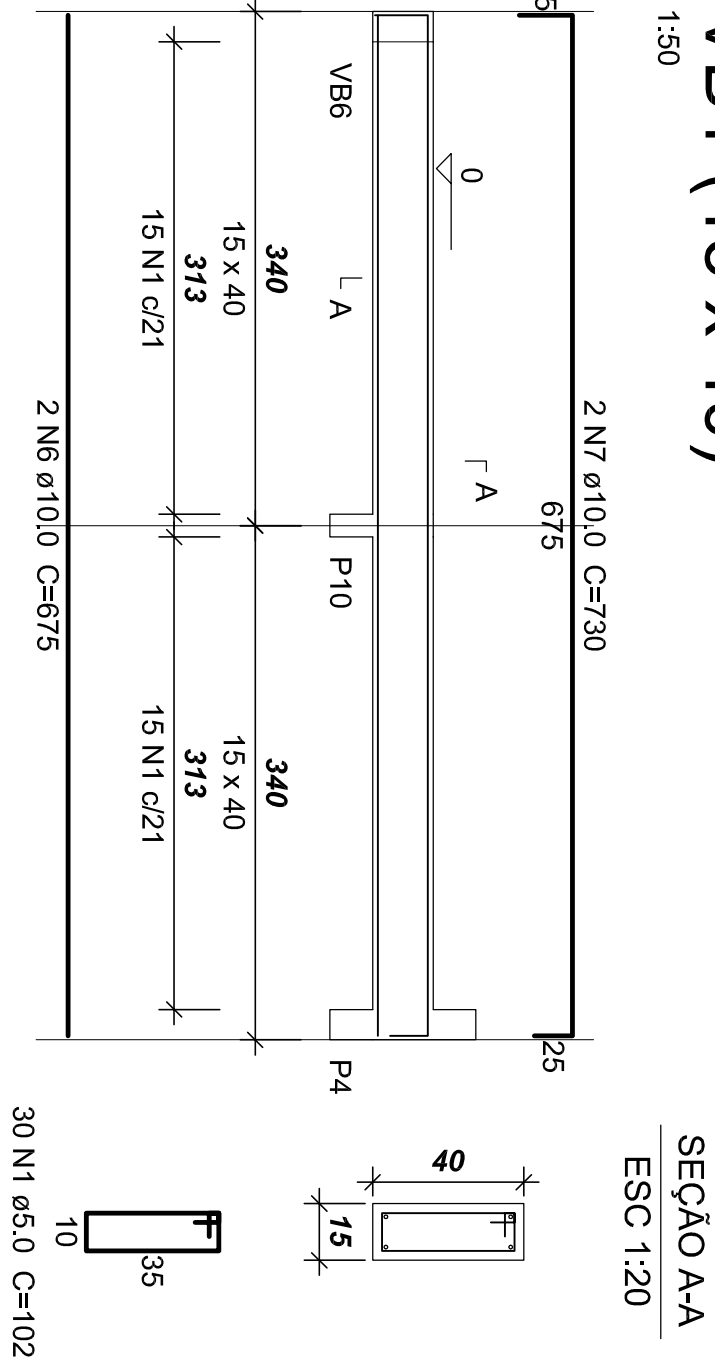
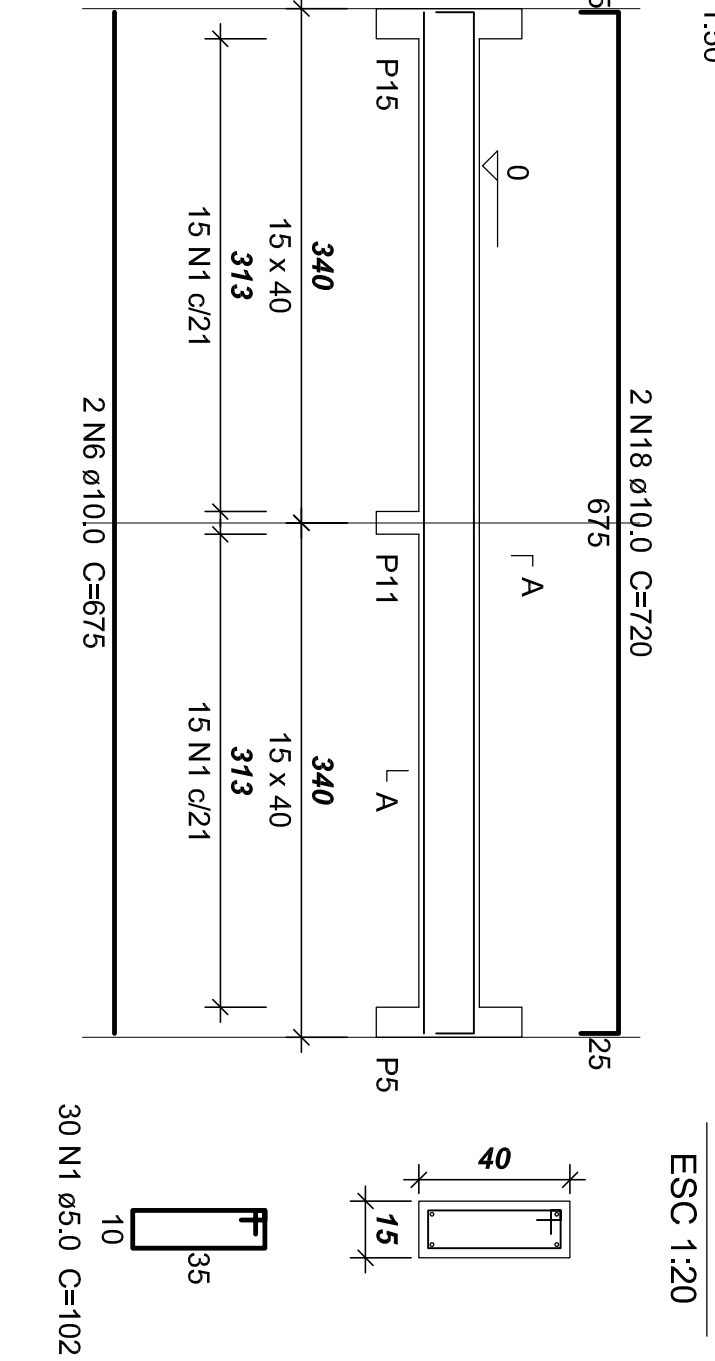


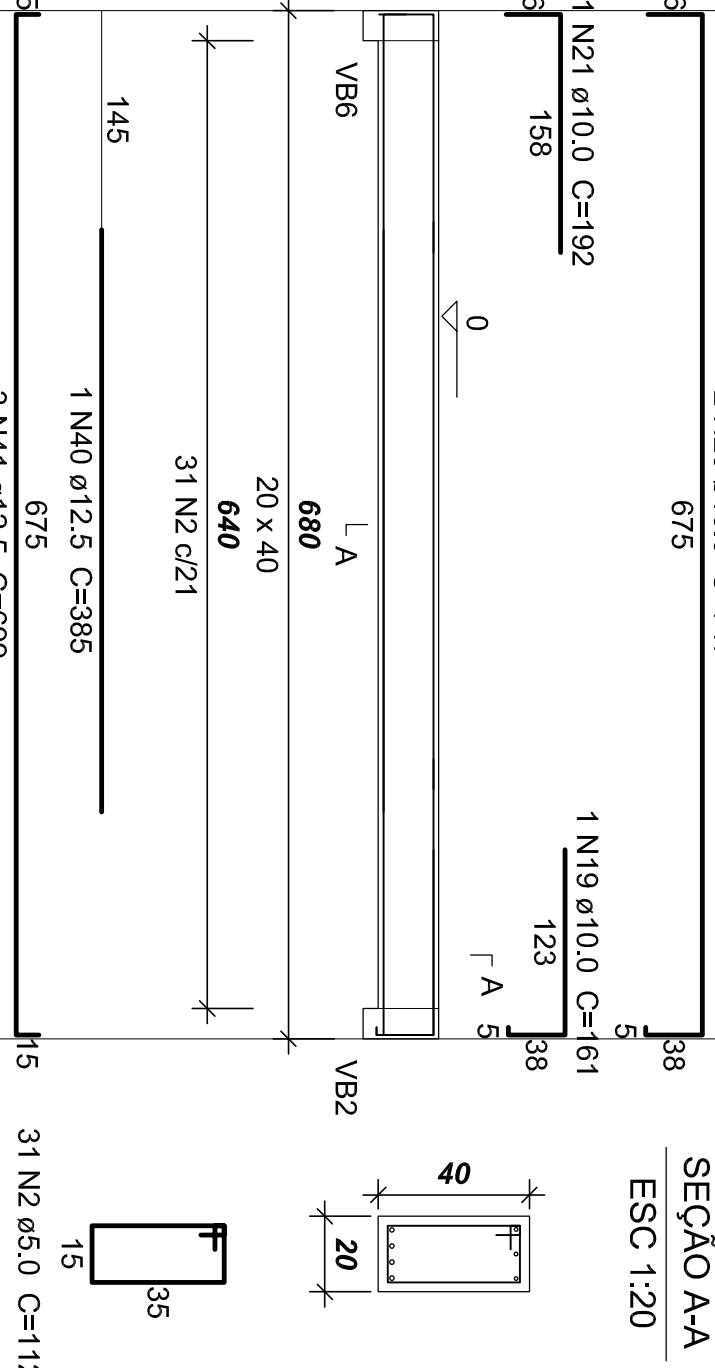
VB1 (15 x 40)



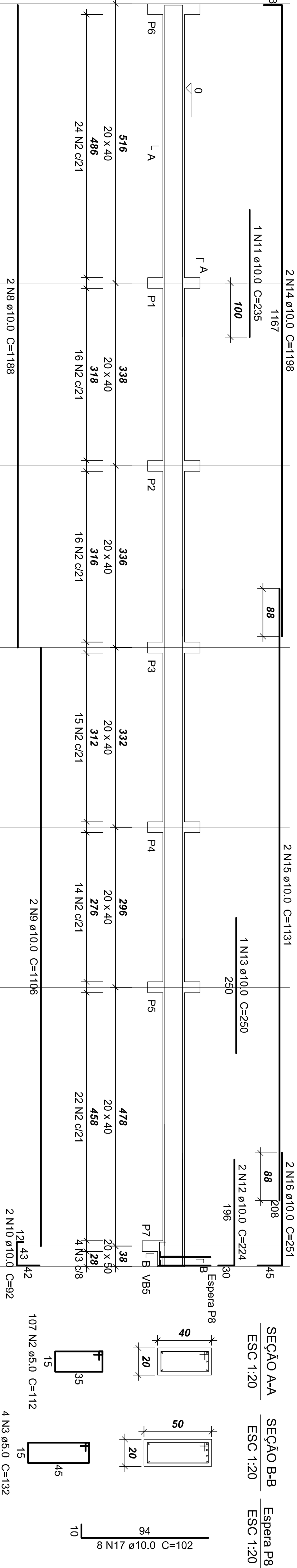
VB4 (15 x 40)



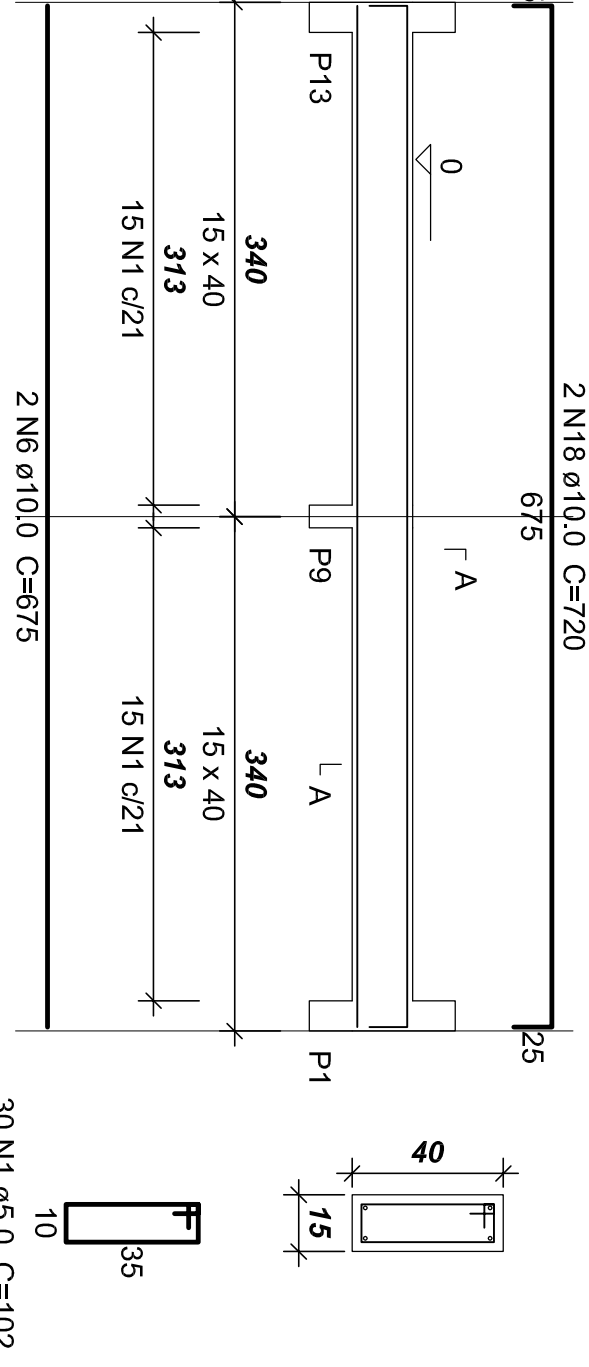
VB5 (20 x 40)



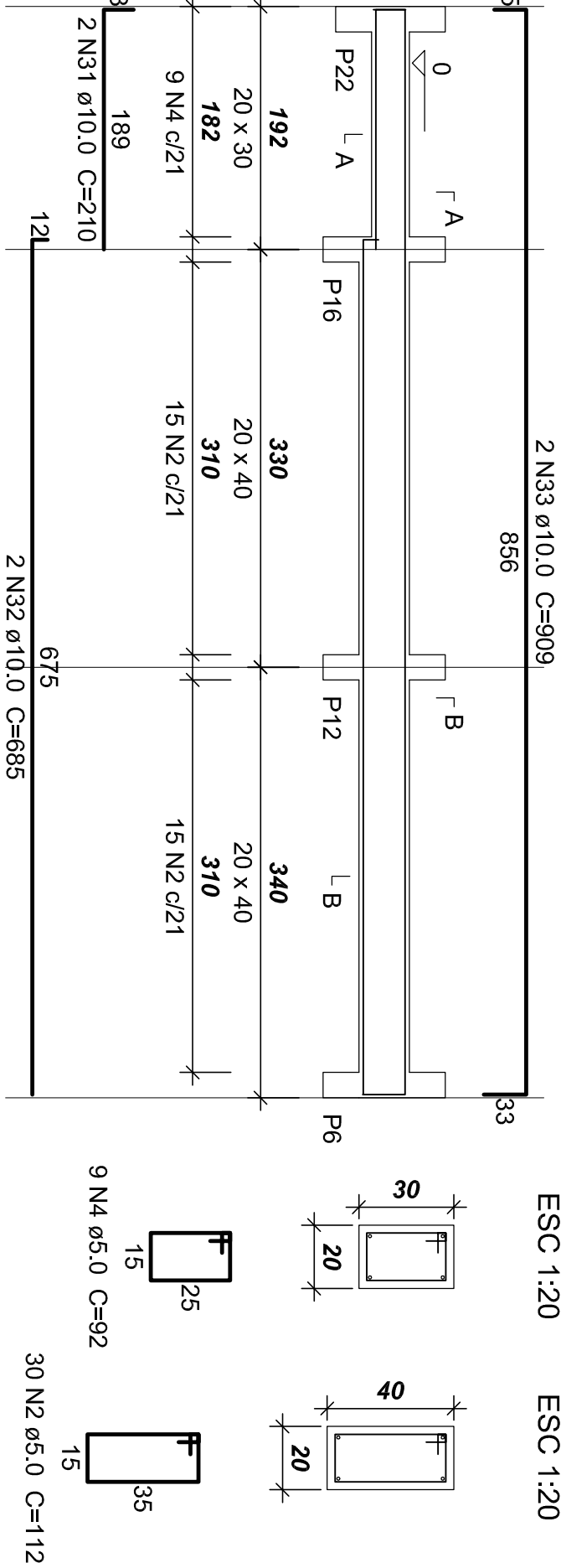
VB2 (var)



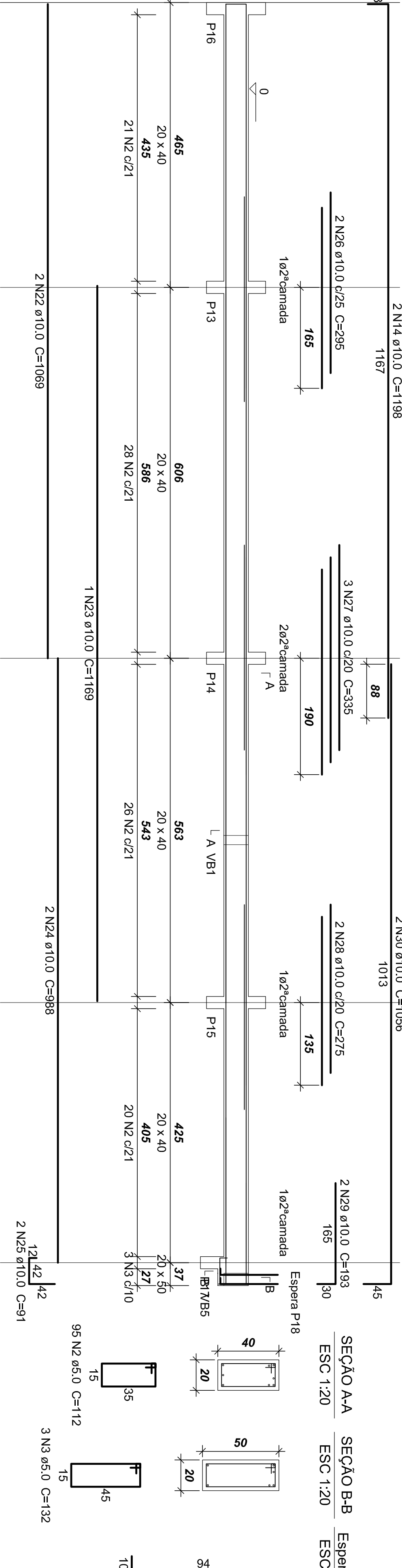
VB3 (15 x 40)



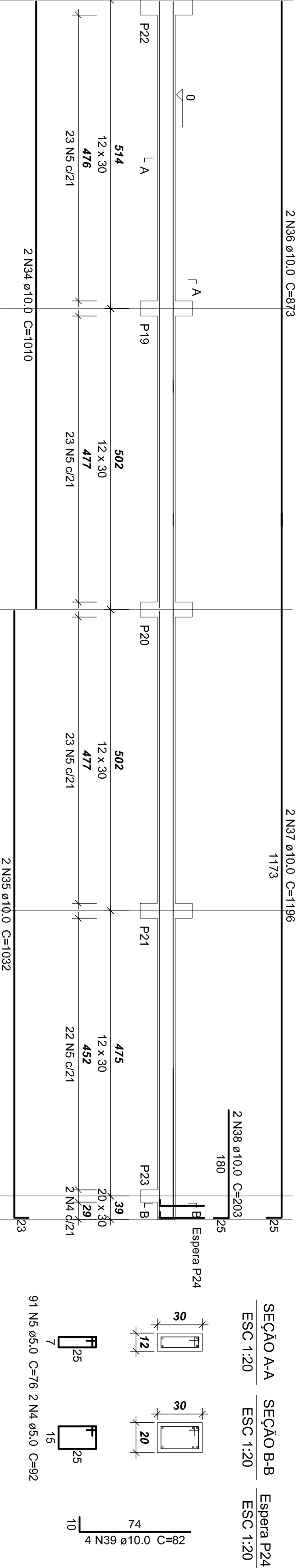
VB7 (var)



VB6 (var)



VB8 (var)



Relação do Aço


Baldrames

| AÇO | N | DIAM (mm) | Q | UNIT (cm) | C.TOTAL (cm) | PESO |
|------|----|-----------|-----|-----------|--------------|-------|
| CA60 | 1 | 5,0 | 283 | 102 | 9180 | 294,7 |
| CA50 | 2 | 5,0 | 7 | 132 | 924 | 24,9 |
| CA60 | 3 | 5,0 | 11 | 92 | 1012 | 23,9 |
| CA50 | 4 | 5,0 | 91 | 76 | 6916 | 182 |
| CA50 | 5 | 5,0 | 6 | 675 | 4050 | 1005 |
| CA50 | 6 | 10,0 | 2 | 730 | 1460 | 386 |
| CA50 | 7 | 10,0 | 2 | 1188 | 2376 | 605 |
| CA50 | 8 | 10,0 | 2 | 1106 | 2212 | 565 |
| CA50 | 9 | 10,0 | 2 | 1456 | 2944 | 75,2 |
| CA50 | 10 | 10,0 | 2 | 1456 | 2944 | 75,2 |
| CA50 | 11 | 10,0 | 2 | 224 | 448 | 11,6 |
| CA50 | 12 | 10,0 | 2 | 250 | 500 | 12,8 |
| CA50 | 13 | 10,0 | 4 | 1131 | 4792 | 122,8 |
| CA50 | 14 | 10,0 | 4 | 1198 | 4792 | 122,8 |
| CA50 | 15 | 10,0 | 2 | 251 | 502 | 12,8 |
| CA50 | 16 | 10,0 | 16 | 102 | 1632 | 41,6 |
| CA50 | 17 | 10,0 | 4 | 720 | 2880 | 73,6 |
| CA50 | 18 | 10,0 | 1 | 161 | 161 | 4,1 |
| CA50 | 19 | 10,0 | 2 | 1036 | 2072 | 53,6 |
| CA50 | 20 | 10,0 | 2 | 1456 | 2944 | 75,2 |
| CA50 | 21 | 10,0 | 2 | 1456 | 2944 | 75,2 |
| CA50 | 22 | 10,0 | 2 | 1089 | 2138 | 54,5 |
| CA50 | 23 | 10,0 | 2 | 1169 | 2338 | 59,7 |
| CA50 | 24 | 10,0 | 2 | 988 | 1976 | 50,4 |
| CA50 | 25 | 10,0 | 2 | 295 | 590 | 15,0 |
| CA50 | 26 | 10,0 | 2 | 335 | 670 | 17,2 |
| CA50 | 27 | 10,0 | 3 | 275 | 550 | 14,1 |
| CA50 | 28 | 10,0 | 2 | 193 | 386 | 9,9 |
| CA50 | 29 | 10,0 | 2 | 1036 | 2072 | 53,6 |
| CA50 | 30 | 10,0 | 2 | 1456 | 2944 | 75,2 |
| CA50 | 31 | 10,0 | 2 | 1456 | 2944 | 75,2 |
| CA50 | 32 | 10,0 | 2 | 695 | 1370 | 35,0 |
| CA50 | 33 | 10,0 | 2 | 909 | 1818 | 46,5 |
| CA50 | 34 | 10,0 | 2 | 1032 | 2064 | 52,6 |
| CA50 | 35 | 10,0 | 2 | 873 | 1746 | 44,6 |
| CA50 | 36 | 10,0 | 2 | 1196 | 2392 | 60,8 |
| CA50 | 37 | 10,0 | 2 | 203 | 406 | 10,4 |
| CA50 | 38 | 10,0 | 4 | 82 | 328 | 8,4 |
| CA50 | 39 | 10,0 | 4 | 385 | 1540 | 39,6 |
| CA50 | 40 | 12,5 | 3 | 699 | 2097 | 53,6 |

Resumo do Aço

| AÇO | DIAM (mm) | C.TOTAL (cm) | PESO |
|------|-----------|--------------|-------|
| CA50 | 10,0 | 478,1 | 294,7 |
| CA50 | 12,5 | 24,9 | 23,9 |
| CA50 | 5,0 | 474,9 | 73,2 |
| CA50 | 318,6 | 73,2 | 18,6 |

Vol. de concreto total (C=20) = 6,72 m³
Área de forma total = 93,53 m²



AS BUILT PROJETOS
Rue João de Resende, 1564 – Boa Vista
CEP 82260-435 – Curitiba – Paraná

COMP: AMPLIAÇÃO – EDITORA

PROJETO: UNIVERSIDADE DOS VALES DO JEQUITINHONHA E MUCURI – UFVJM

ENDEREÇO: RODOVA MG 367 – Km 583, N5000, ALTO DA JACUBA – DIAMANTINA/MG

PROJETO ESTRUTURAL

PROJETO: FERRAGEM DOS BALDRAMES

AUTOR DO PROJETO: ENG. CIVIL CARLOS HENRIQUE DE S. CONJÁLVES

DATA: 04/07/2012

INDICA: INDICA

EST

04/17

DATA: 04/07/2012

INDICA: INDICA