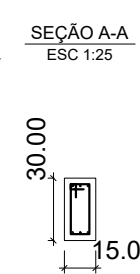
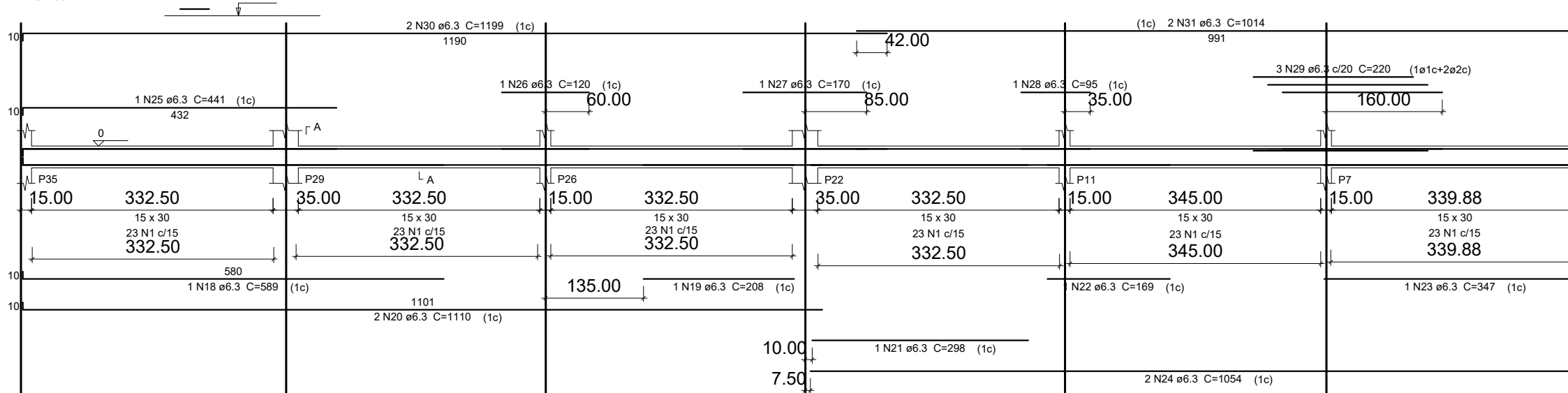


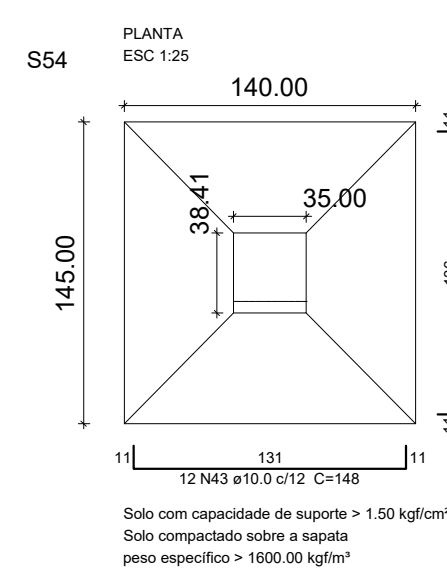
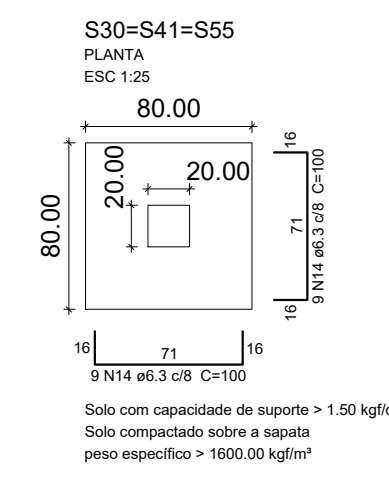
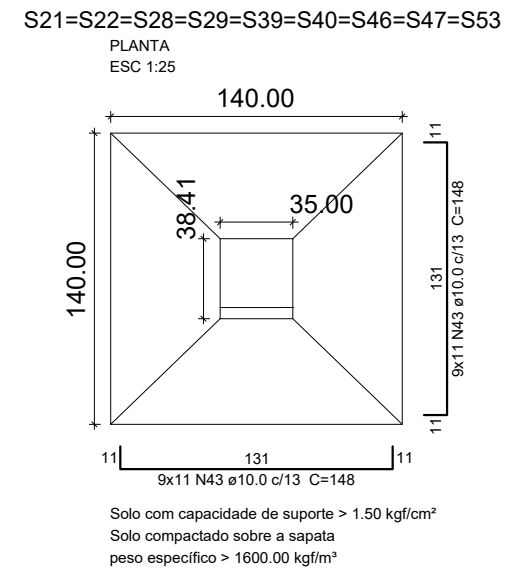
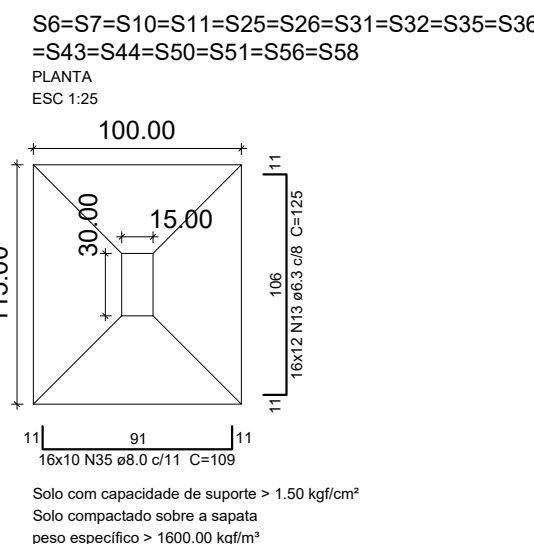
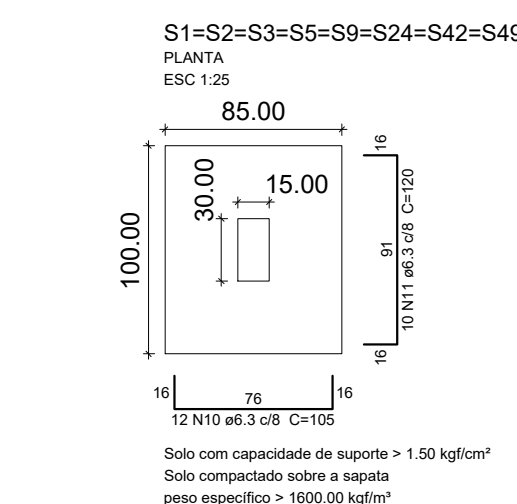
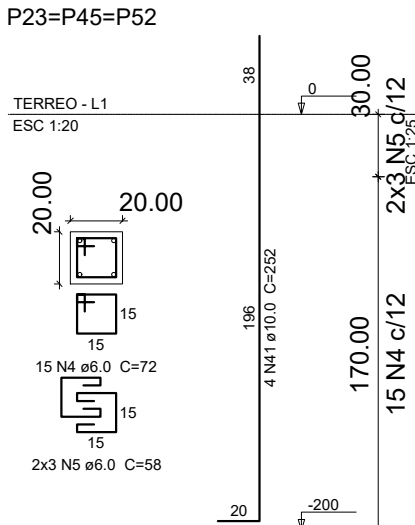
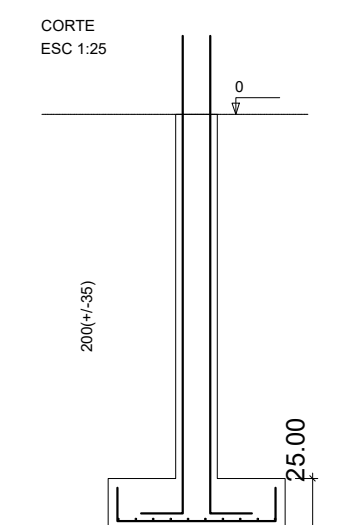
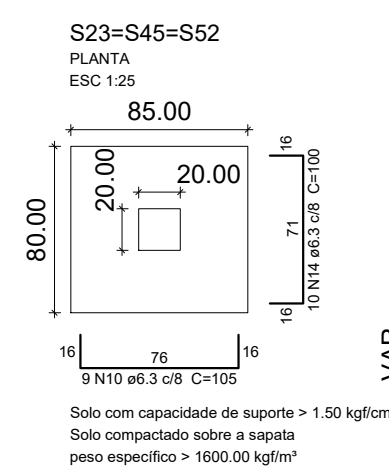
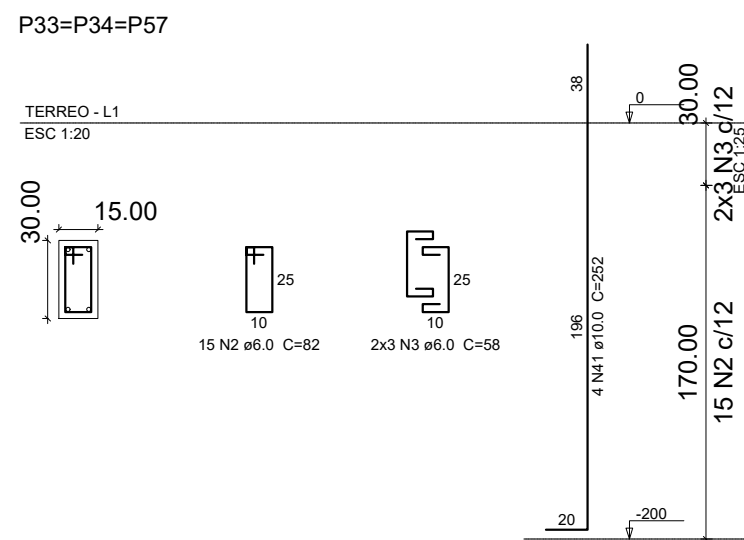
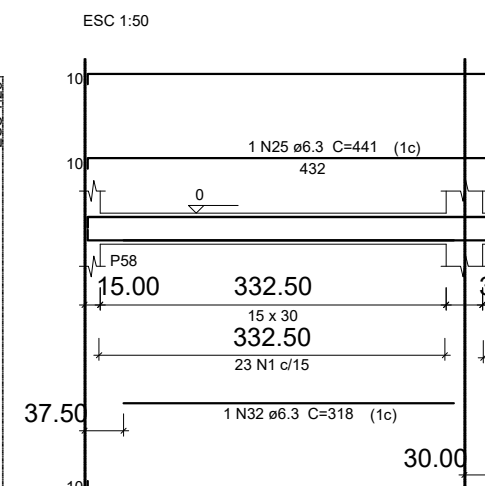
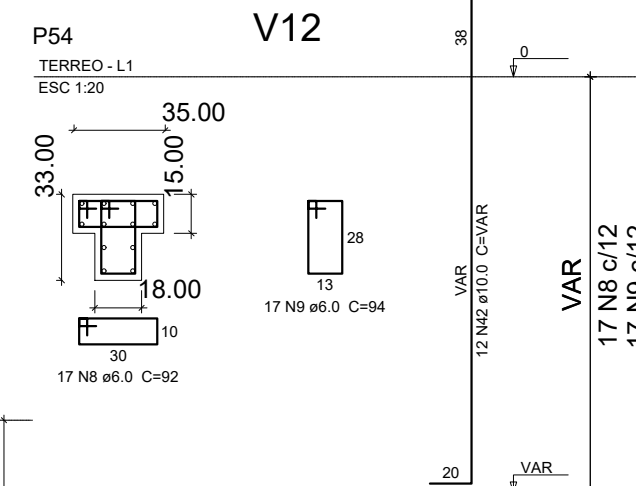
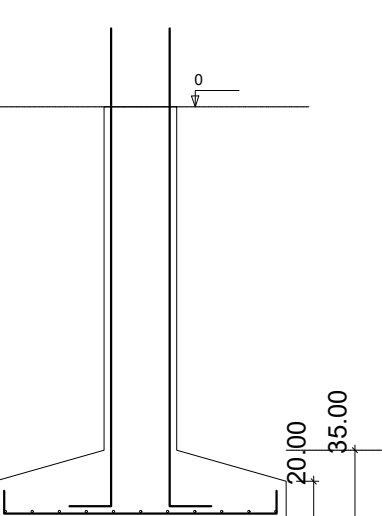
V13




| Relação do aço | | | | | |
|----------------|-------|-----------|-------|-------------|--------------|
| 8x52 | S10 | S13 | | | |
| 4x514 | S29 | 3x533 | | | |
| 3x541 | 3x545 | S54 | | | |
| V1 | | V12 | | | |
| V13 | | | | | |
| AÇO | N | DIAM (mm) | QUANT | C UNIT (cm) | C TOTAL (cm) |
| CA60 | 1 | 6.0 | 366 | 78 | 28548 |
| | 2 | 6.0 | 405 | 82 | 33210 |
| | 3 | 6.0 | 162 | 58 | 9396 |
| | 4 | 6.0 | 270 | 72 | 19440 |
| | 5 | 6.0 | 108 | 38 | 4094 |
| | 6 | 6.0 | 60 | 92 | 5520 |
| | 7 | 6.0 | 24 | 73 | 1752 |
| | 8 | 6.0 | 170 | 62 | 10560 |
| | 9 | 6.0 | 170 | 64 | 10890 |
| | 10 | 6.3 | 123 | 105 | 12915 |
| | 11 | 6.3 | 80 | 120 | 9600 |
| | 12 | 6.3 | 300 | 110 | 33000 |
| | 13 | 6.3 | 192 | 125 | 24000 |
| | 14 | 6.3 | 84 | 100 | 8400 |
| | 15 | 6.3 | 33 | 125 | 4125 |
| | 16 | 6.3 | 6 | 787 | 4722 |
| | 17 | 6.3 | 3 | 642 | 1926 |
| | 18 | 6.3 | 1 | 589 | 589 |
| | 19 | 6.3 | 1 | 236 | 236 |
| | 20 | 6.3 | 6 | 1110 | 6660 |
| | 21 | 6.3 | 1 | 288 | 288 |
| | 22 | 6.3 | 1 | 169 | 169 |
| | 23 | 6.3 | 1 | 347 | 347 |
| | 24 | 6.3 | 2 | 1054 | 2108 |
| | 25 | 6.3 | 3 | 441 | 1323 |
| | 26 | 6.3 | 130 | 360 | 4680 |
| | 27 | 6.3 | 2 | 170 | 340 |
| | 28 | 6.3 | 1 | 95 | 95 |
| | 29 | 6.3 | 3 | 220 | 660 |
| | 30 | 6.3 | 4 | 1199 | 4796 |
| | 31 | 6.3 | 2 | 1014 | 2028 |
| | 32 | 6.3 | 2 | 318 | 636 |
| | 33 | 6.3 | 4 | 198 | 792 |
| | 34 | 6.3 | 2 | 1008 | 2016 |
| | 35 | 8.0 | 160 | 109 | 17440 |
| | 36 | 8.0 | 36 | 124 | 4464 |
| | 37 | 8.0 | 40 | 119 | 4760 |
| | 38 | 8.0 | 2 | 235 | 470 |
| | 39 | 8.0 | 1 | 85 | 85 |
| | 40 | 8.0 | 2 | 787 | 1574 |
| | 41 | 10.0 | 204 | 252 | 51408 |
| | 42 | 10.0 | 116 | VAR | VAR |
| | 43 | 10.0 | 210 | 148 | 31080 |
| | 44 | 10.0 | 11 | 183 | 1993 |

| Resumo do aço | | | | |
|-----------------|-----------|-------------|------------------|--|
| AÇO | DIAM (mm) | C TOTAL (m) | PESO + 10 % (kg) | |
| CA50 | 6.3 | 1221.2 | 338.7 | |
| | 8.0 | 287.4 | 124.7 | |
| | 10.0 | 1134.1 | 769.1 | |
| CA60 | 6.0 | 286.5 | 48.4 | |
| | 6.0 | 1072.1 | 261.7 | |
| PESO TOTAL (kg) | | | | |
| CA50 | | 1222.5 | | |
| CA60 | | 319.1 | | |

Volume de concreto (C-25) = 25.45 m³
Área de forma = 211.23 m²



Obra:



AMPLIAÇÃO DA ESCOLA XV DE OUTUBRO
VIGAS, SAPATAS E PILARES PAVIMENTO TÉRREO.

PREFEITURA MUNICIPAL DE CAMPOS DE JÚLIO
CGC: 01.614.516/0001-99

AVENIDA ZELINO AGOSTINHO LORENZETTI
CAMPOS DE JÚLIO-MT CEP: 78307-000

Autor do Projeto:

Luiz Carlos Correia de Oliveira
Eng. Civil - CREA 1202470122

Responsável Técnico p/obra:

PROJETO ESTRUTURAL

DESENHO: Luiz Carlos

DATA: 20/06/2018

ESCALA: