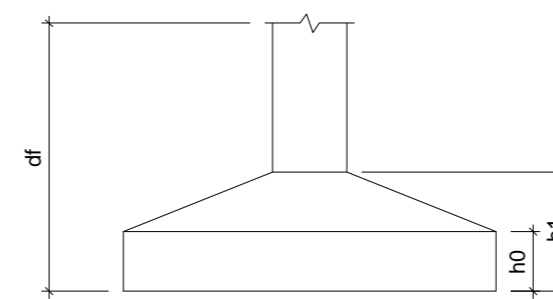


Planta de localização

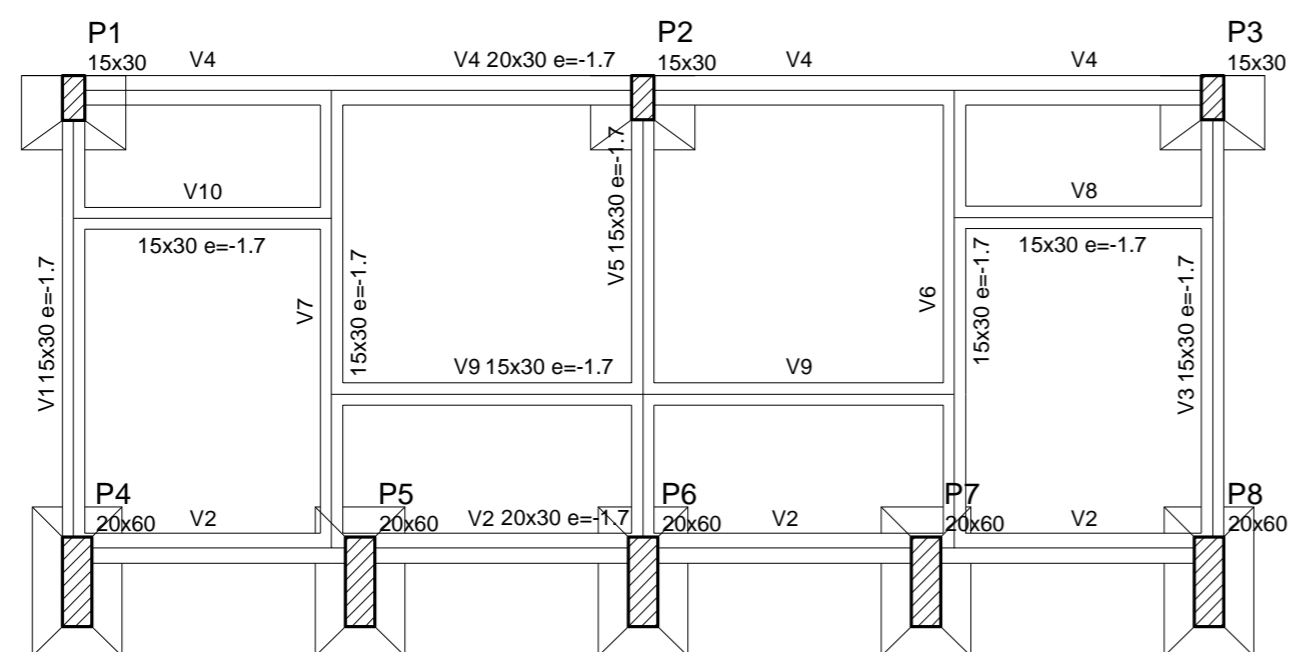
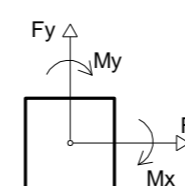
escala 1:50

| Nome | Seção (cm) | X (cm) | Y (cm) | Pilar | | Mx (kgf.m) | My (kgf.m) | Fx (tf) | Fy (tf) | Fundação | | | | |
|------|------------|--------|--------|-----------------|-----------------|------------|------------|---------|---------|-------------|-------------|--------------|--------------|---------|
| | | | | Carga Máx. (tf) | Carga Min. (tf) | | | | | Lado B (cm) | Lado H (cm) | h0 / ha (cm) | h1 / hb (cm) | df (cm) |
| P1 | 15x30 | 7.50 | 354.92 | 5.0 | 1.8 | 0 | 0 | 0.2 | 0.6 | 50 | 70 | 20 | 30 | 150 |
| P2 | 15x30 | 390.00 | 355.00 | 7.1 | 3.6 | 200 | 0 | 0.1 | 0.5 | 50 | 70 | 20 | 30 | 150 |
| P3 | 15x30 | 772.50 | 355.00 | 4.8 | 1.7 | 0 | 0 | 0.2 | 0.6 | 50 | 70 | 20 | 30 | 150 |
| P4 | 20x60 | 10.00 | 30.00 | 4.2 | 1.0 | 0 | 0 | 0.2 | 0.7 | 60 | 100 | 20 | 30 | 150 |
| P5 | 20x60 | 200.00 | 30.00 | 4.7 | 3.0 | 0 | 0 | 0.3 | 0.5 | 60 | 100 | 20 | 30 | 150 |
| P6 | 20x60 | 390.00 | 30.00 | 5.0 | 1.9 | 0 | 0 | 0.3 | 0.6 | 60 | 100 | 20 | 30 | 150 |
| P7 | 20x60 | 580.00 | 30.00 | 4.7 | 3.7 | 0 | 0 | 0.3 | 0.5 | 60 | 100 | 20 | 30 | 150 |
| P8 | 20x60 | 770.00 | 30.00 | 4.1 | 0.9 | 0 | 0 | 0.2 | 0.7 | 60 | 100 | 20 | 30 | 150 |



| Localção no eixo X | |
|--------------------|--------|
| Coordenadas (cm) | Nome |
| 7.50 | P1 |
| 10.00 | P4 |
| 200.00 | P5 |
| 390.00 | P2, P6 |
| 580.00 | P7 |
| 770.00 | P8 |
| 772.50 | P3 |

| Localção no eixo Y | |
|--------------------|--------------------|
| Coordenadas (cm) | Nome |
| 355.00 | P2, P3 |
| 354.92 | P1 |
| 30.00 | P4, P5, P6, P7, P8 |



Forma do pavimento FUNDAÇÃO (Nível 0)

escala 1:50

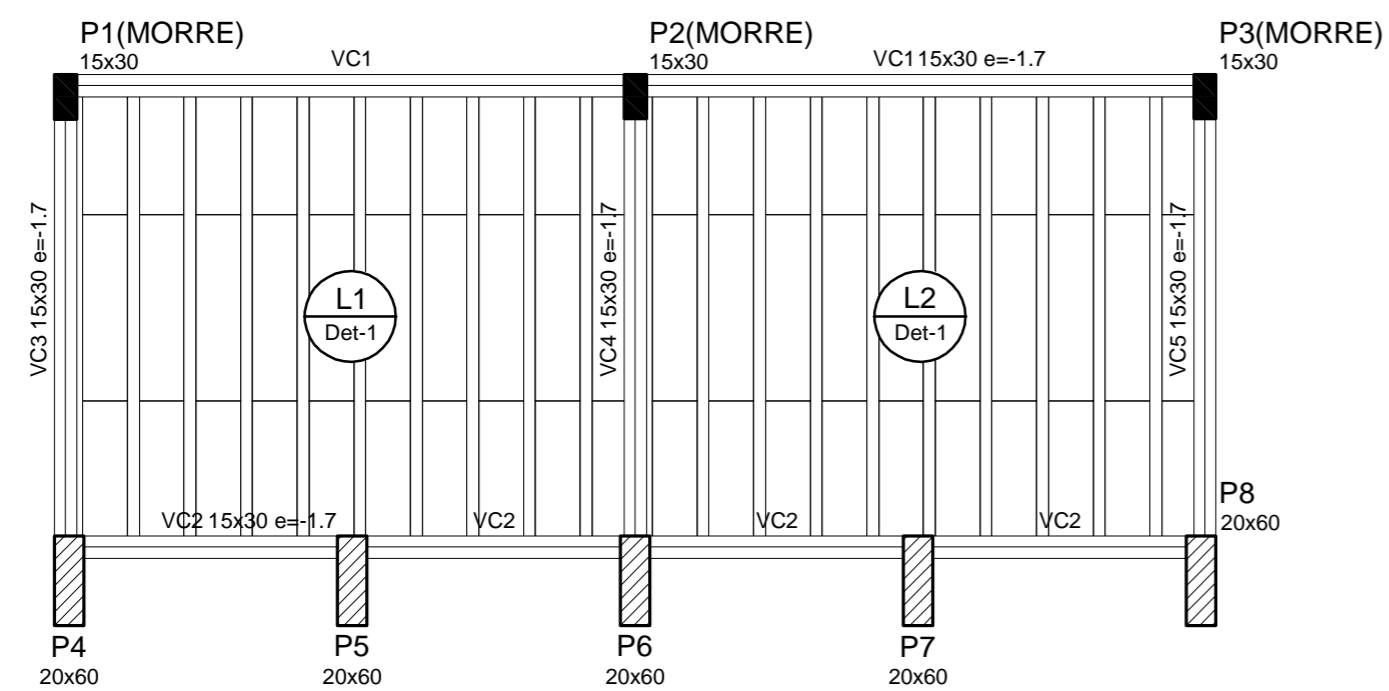
| Vigas | | | |
|-------|------------|---------------|------------|
| Nome | Seção (cm) | Elevação (cm) | Nível (cm) |
| V1 | 15x30 | -1.7 | -1.7 |
| V2 | 20x30 | -1.7 | -1.7 |
| V3 | 15x30 | -1.7 | -1.7 |
| V4 | 20x30 | -1.7 | -1.7 |
| V5 | 15x30 | -1.7 | -1.7 |
| V6 | 15x30 | -1.7 | -1.7 |
| V7 | 15x30 | -1.7 | -1.7 |
| V8 | 15x30 | -1.7 | -1.7 |
| V9 | 15x30 | -1.7 | -1.7 |
| V10 | 15x30 | -1.7 | -1.7 |

| Características dos materiais | |
|-------------------------------|---------------|
| fck (kgf/cm²) | Ecs (kgf/cm²) |
| 250 | 241500 |

| Pilares | | | |
|---------|------------|---------------|------------|
| Nome | Seção (cm) | Elevação (cm) | Nível (cm) |
| P1 | 15 x 30 | 0 | 0 |
| P2 | 15 x 30 | 0 | 0 |
| P3 | 15 x 30 | 0 | 0 |
| P4 | 20 x 60 | 0 | 0 |
| P5 | 20 x 60 | 0 | 0 |
| P6 | 20 x 60 | 0 | 0 |
| P7 | 20 x 60 | 0 | 0 |
| P8 | 20 x 60 | 0 | 0 |

| Legenda dos Pilares | |
|---------------------|----------------------------|
| | Pilar que morre |
| | Pilar que passa |
| | Pilar que nasce |
| | Pilar com mudança de seção |

| | | | |
|---|-----------------|--|--|
| TÍTULO | | FOLHA Nº | |
| PROJETO ESTRUTURAL | | 1/5 | |
| ENDEREÇO | | REVISÃO | |
| | | 000/2017 | |
| REV 0 | DATA 26/11/2017 | ESCALA INDICADA | |
| FCK 25MPa | CONTEÚDO | | |
| SOBRECARGA LAJE INDICADA | LOCAÇÃO E FORMA | | |
| ENG.: | PROP.: | | |
| ROGÉRIO EVANGELISTA JUSTINO ENG CIVIL CREA 173439-D | | PREFEITURA MUNICIPAL CNPJ.: 18.179.226/0001-67 | |



Forma do pavimento COBERTURA
escala 1:50

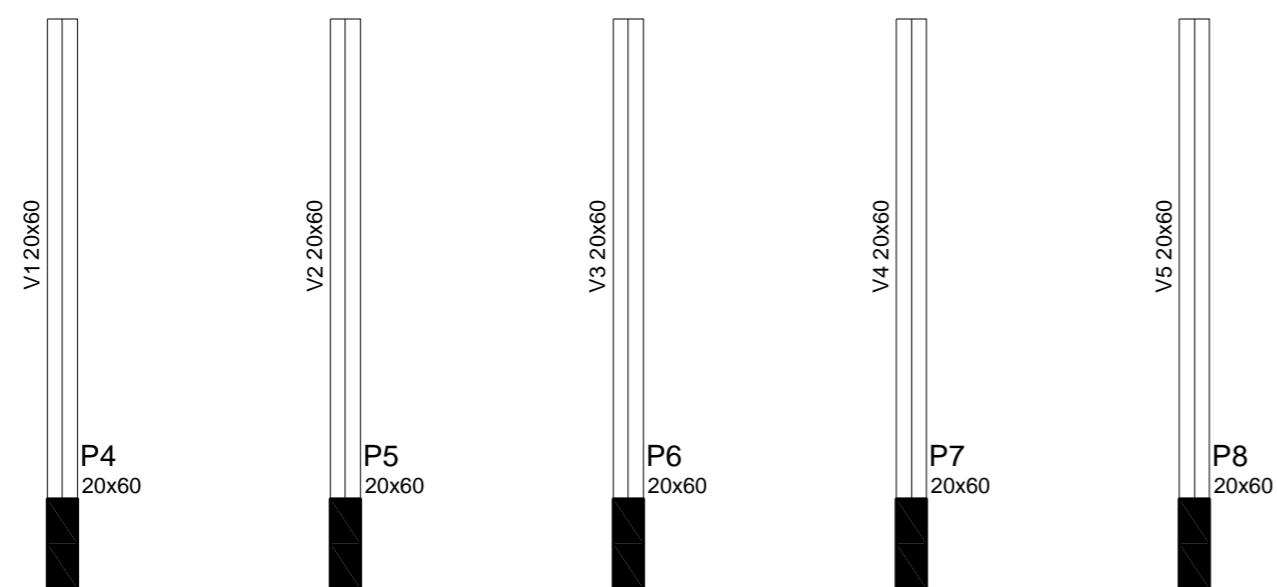
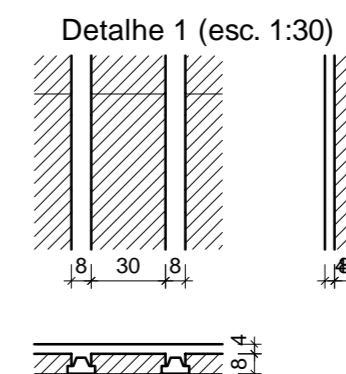
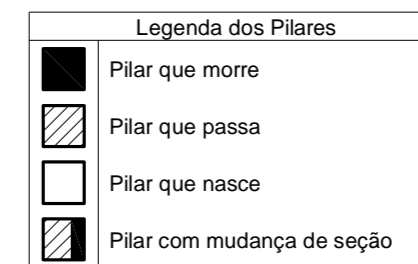
| Vigas | | | |
|-------|------------|---------------|------------|
| Nome | Seção (cm) | Elevação (cm) | Nível (cm) |
| VC1 | 15x30 | -1.7 | 298.3 |
| VC2 | 15x30 | -1.7 | 298.3 |
| VC3 | 15x30 | -1.7 | 298.3 |
| VC4 | 15x30 | -1.7 | 298.3 |
| VC5 | 15x30 | -1.7 | 298.3 |

| Lajes | | | | | | | | |
|-------|-------------|-------------|---------------|------------|-----------------------|---------------------|-----------|------------|
| Nome | Tipo | Altura (cm) | Elevação (cm) | Nível (cm) | Peso próprio (kgf/m²) | Sobrecarga (kgf/m²) | | |
| | | | | | | Adicional | Acidental | Localizada |
| L1 | Pré-moldada | 12 | 0 | 300 | 143 | 100 | 100 | - |
| L2 | Pré-moldada | 12 | 0 | 300 | 143 | 100 | 100 | - |

| Características dos materiais | |
|-------------------------------|---------------|
| fck (kgf/cm²) | Ecs (kgf/cm²) |
| 250 | 241500 |

| Pilares | | | |
|---------|------------|---------------|------------|
| Nome | Seção (cm) | Elevação (cm) | Nível (cm) |
| P1 | 15 x 30 | 0 | 300 |
| P2 | 15 x 30 | 0 | 300 |
| P3 | 15 x 30 | 0 | 300 |
| P4 | 20 x 60 | 0 | 300 |
| P5 | 20 x 60 | 0 | 300 |
| P6 | 20 x 60 | 0 | 300 |
| P7 | 20 x 60 | 0 | 300 |
| P8 | 20 x 60 | 0 | 300 |

| Blocos de enchimento | | | | | | |
|----------------------|-------------------|-----------|----------------|----|-----|------------|
| Detalhe | Tipo | Nome | Dimensões (cm) | | | Quantidade |
| | | | hb | bx | by | |
| 1 | EPS Unidirecional | B8/30/125 | 8 | 30 | 125 | 60 |

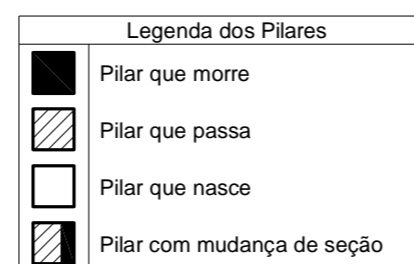


Forma do pavimento PERGOLADO
escala 1:50

| Vigas | | | |
|-------|------------|---------------|------------|
| Nome | Seção (cm) | Elevação (cm) | Nível (cm) |
| V1 | 20x60 | 0 | 460 |
| V2 | 20x60 | 0 | 460 |
| V3 | 20x60 | 0 | 460 |
| V4 | 20x60 | 0 | 460 |
| V5 | 20x60 | 0 | 460 |

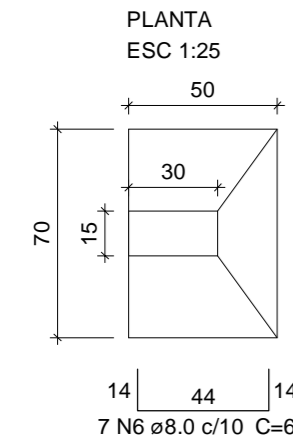
| Características dos materiais | |
|-------------------------------|---------------|
| fck (kgf/cm²) | Ecs (kgf/cm²) |
| 250 | 241500 |

| Pilares | | | |
|---------|------------|---------------|------------|
| Nome | Seção (cm) | Elevação (cm) | Nível (cm) |
| P4 | 20 x 60 | 0 | 460 |
| P5 | 20 x 60 | 0 | 460 |
| P6 | 20 x 60 | 0 | 460 |
| P7 | 20 x 60 | 0 | 460 |
| P8 | 20 x 60 | 0 | 460 |



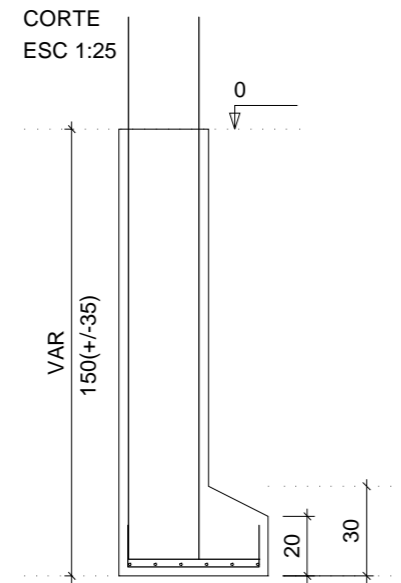
| | | | | | |
|-----------------|--|---|----------|---|-----|
| TÍTULO | | PROJETO ESTRUTURAL | | FOLHA Nº | 2/5 |
| ENDEREÇO | | | REVISÃO | | |
| | | | 000/2017 | | |
| REV | | DATA | | ESCALA | |
| 0 | | 26/11/2017 | | INDICADA | |
| FCK | | CONTEÚDO | | | |
| 25MPa | | LOCAÇÃO E FORMA | | | |
| SOBRECARGA LAJE | | ENG.: | | PROP.: | |
| INDICADA | | ROGÉRIO EVANGELISTA JUSTINO ENG CIVIL CREA 173439-D | | PREFEITURA MUNICIPAL CNPJ: 18.179.226/0001-67 | |

S1=S2=S3

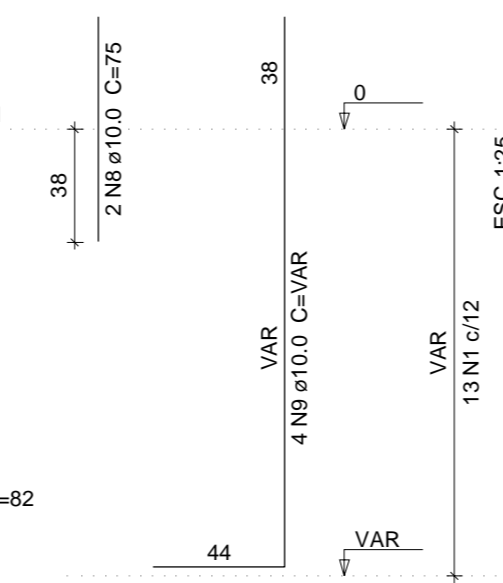
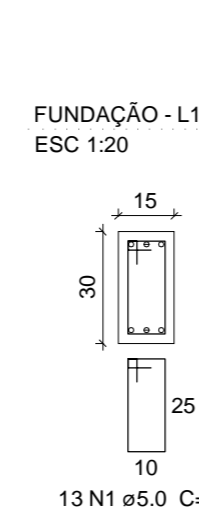


Solo com capacidade de suporte > 4.50 kgf/cm²
Solo compactado sobre a sapata
peso específico > 1600.00 kgf/m³

CORTE
ESC 1:25



P1=P2=P3



Relação do aço

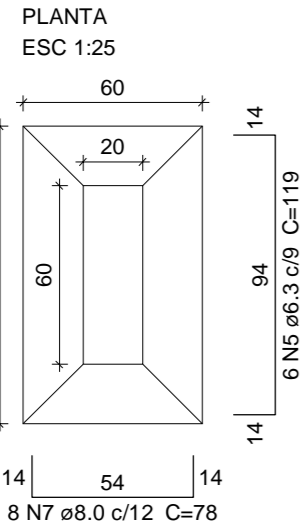
| AÇO | N | DIAM (mm) | QUANT | C.UNIT (cm) | C.TOTAL (cm) |
|------|----|-----------|-------|-------------|--------------|
| CA60 | 1 | 5.0 | 96 | 82 | 7872 |
| | 2 | 5.0 | 65 | 152 | 9880 |
| | 3 | 5.0 | 130 | 30 | 3900 |
| | 4 | 5.0 | 104 | 92 | 9568 |
| CA50 | 5 | 6.3 | 30 | 119 | 3570 |
| | 6 | 8.0 | 21 | 68 | 1428 |
| | 7 | 8.0 | 40 | 78 | 3120 |
| | 8 | 10.0 | 6 | 75 | 450 |
| | 9 | 10.0 | 12 | VAR | VAR |
| | 10 | 10.0 | 18 | 87 | 1566 |
| | 11 | 10.0 | 40 | VAR | VAR |
| | 12 | 10.0 | 2 | 164 | 328 |
| | 13 | 10.0 | 2 | 168 | 336 |
| | 14 | 10.0 | 6 | 375 | 2250 |
| | 15 | 10.0 | 4 | 775 | 3100 |
| | 16 | 10.0 | 2 | 826 | 1652 |
| | 17 | 10.0 | 2 | 814 | 1628 |
| | 18 | 10.0 | 1 | 139 | 139 |
| | 19 | 10.0 | 1 | 143 | 143 |
| | 20 | 12.5 | 6 | 365 | 2190 |

Resumo do aço

| AÇO | DIAM (mm) | C.TOTAL (m) | PESO + 10 % (kg) |
|------------------------|-----------|-------------|------------------|
| CA50 | 6.3 | 35.7 | 9.6 |
| | 8.0 | 45.5 | 19.7 |
| | 10.0 | 224.4 | 152.2 |
| | 12.5 | 21.9 | 23.2 |
| CA60 | 5.0 | 312.2 | 52.9 |
| PESO TOTAL (kg) | | | |
| CA50 | 204.7 | | |
| CA60 | 52.9 | | |

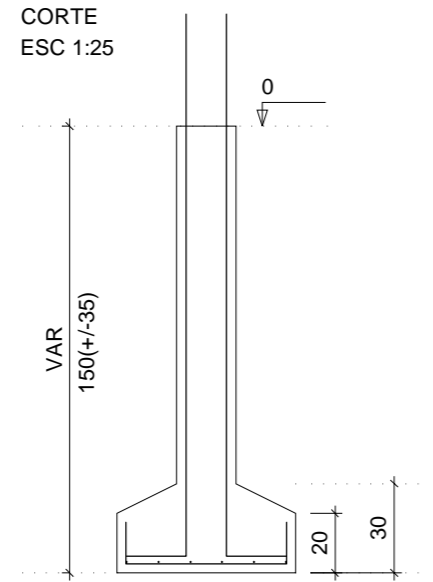
Volume de concreto (C-25) = 3.56 m³
Área de forma = 41.7 m²

S4=S5=S6=S7=S8

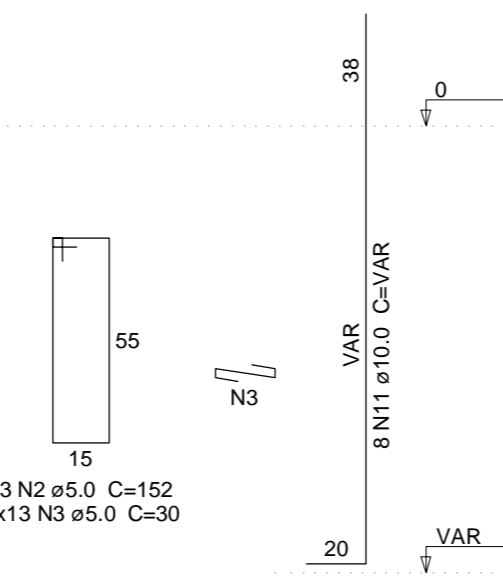
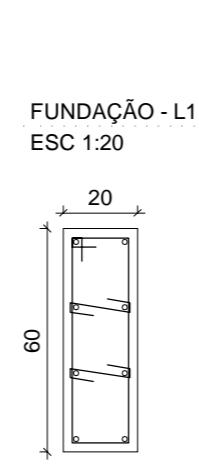


Solo com capacidade de suporte > 4.50 kgf/cm²
Solo compactado sobre a sapata
peso específico > 1600.00 kgf/m³

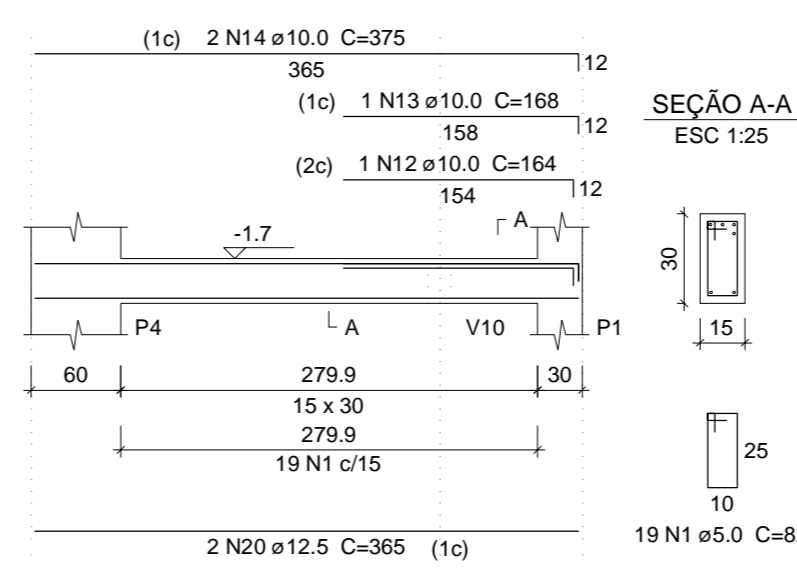
CORTE
ESC 1:25



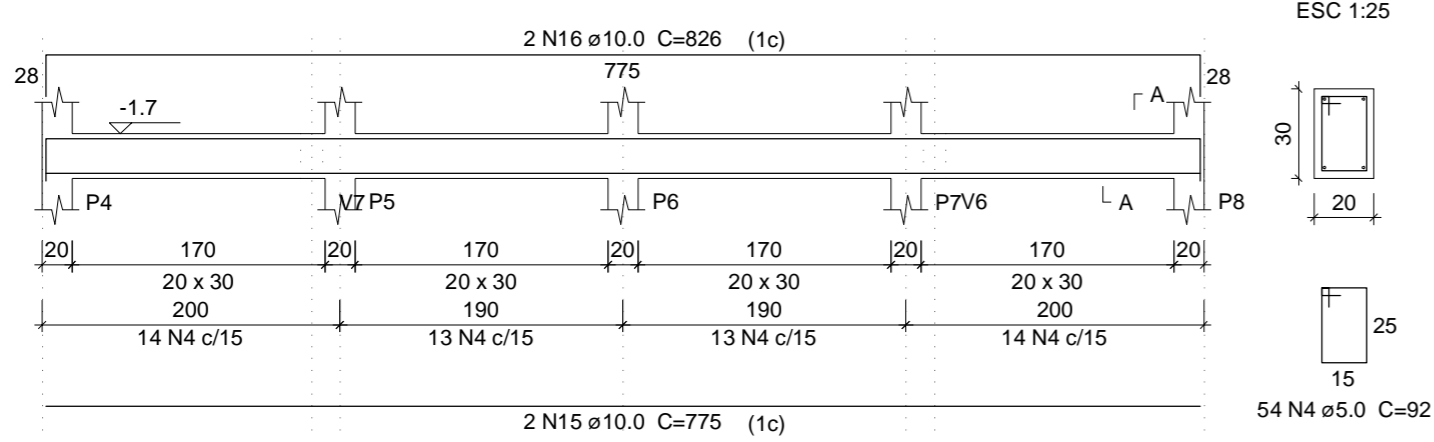
P4=P5=P6=P7=P8



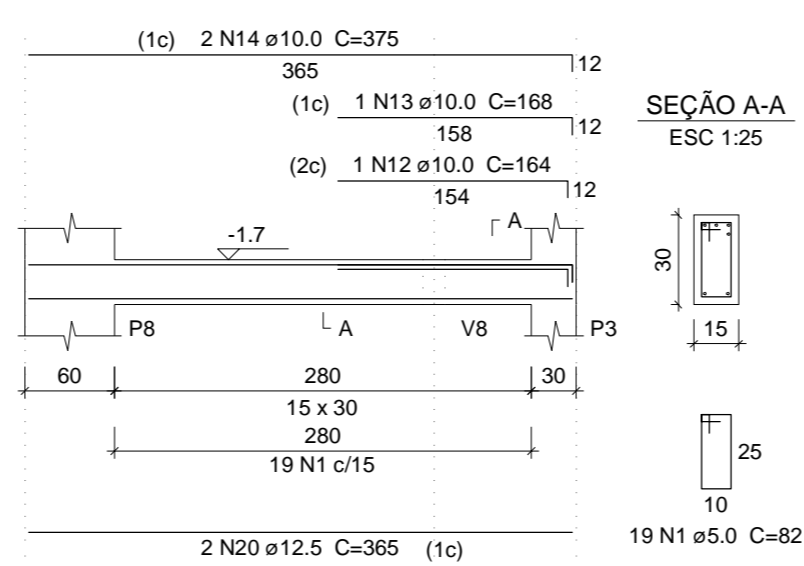
V1
ESC 1:50



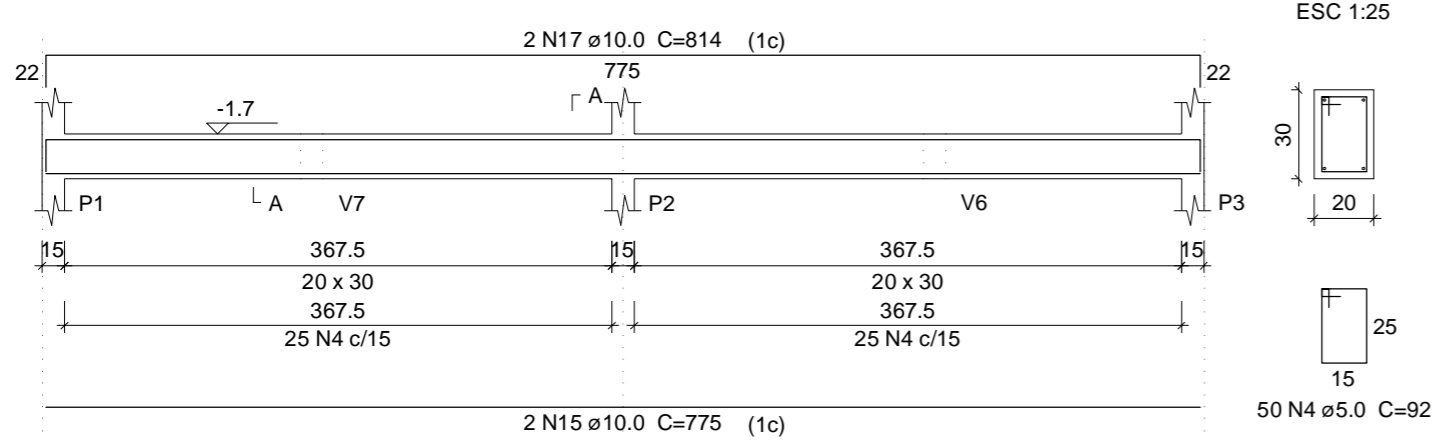
V2
ESC 1:50



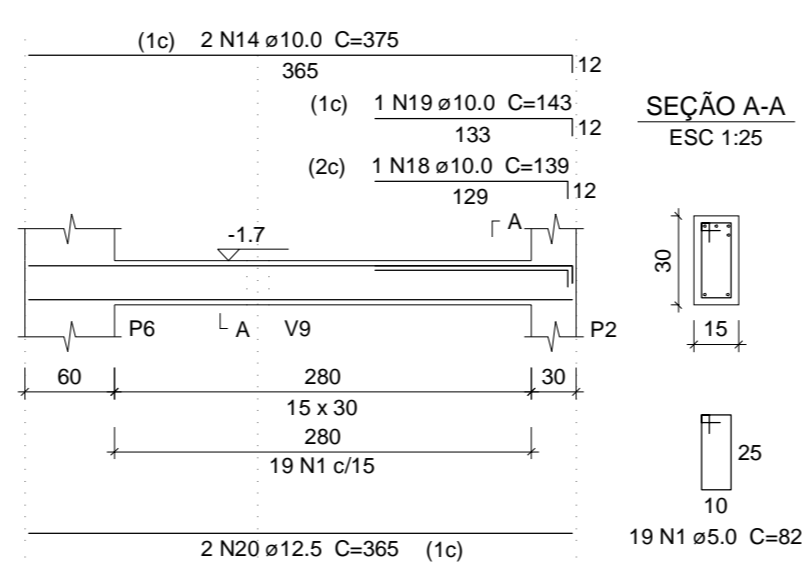
V3
ESC 1:50



V4
ESC 1:50

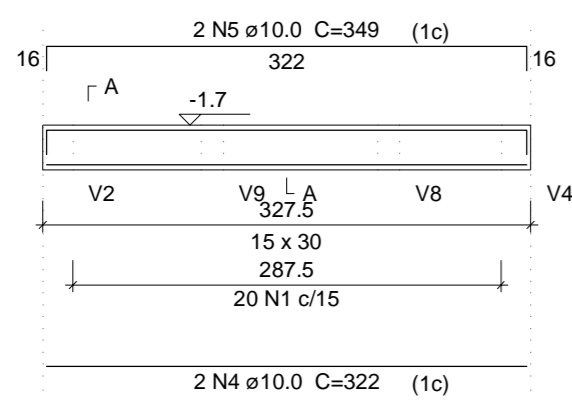


V5
ESC 1:50

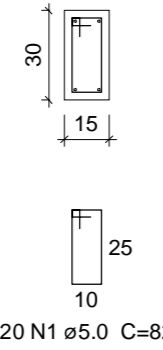


| | | | |
|---|-----------------|---|--|
| TÍTULO | | FOLHA Nº | |
| PROJETO ESTRUTURAL | | 3/5 | |
| ENDEREÇO | | REVISÃO | |
| | | 000/2017 | |
| REV 0 | DATA | ESCALA | |
| FCK | 26/11/2017 | INDICADA | |
| SOBRECARGA LAJE | CONTEÚDO | | |
| INDICADA | LOCAÇÃO E FORMA | | |
| ENG.: | PROP.: | | |
| ROGÉRIO EVANGELISTA JUSTINO - ENG CIVIL CREA 173439-D | | PREFEITURA MUNICIPAL - CNPJ: 18.179.226/0001-67 | |

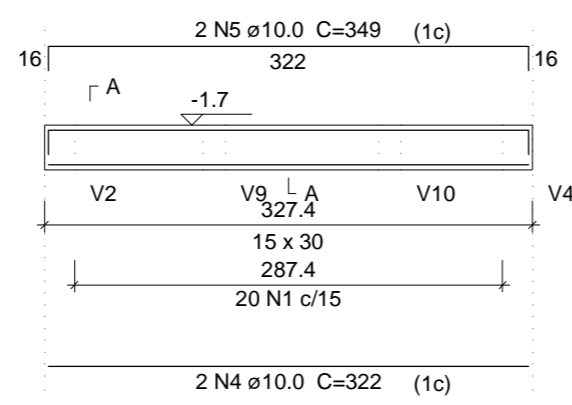
V6
ESC 1:50



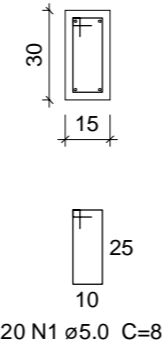
SEÇÃO A-A
ESC 1:25



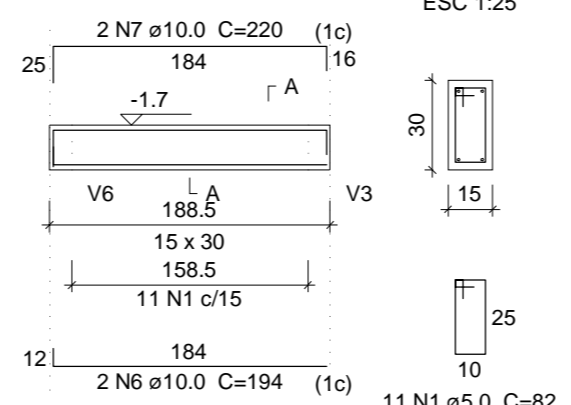
V7
ESC 1:50



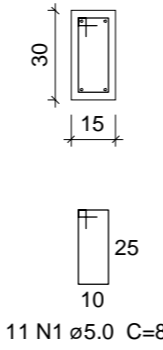
SEÇÃO A-A
ESC 1:25



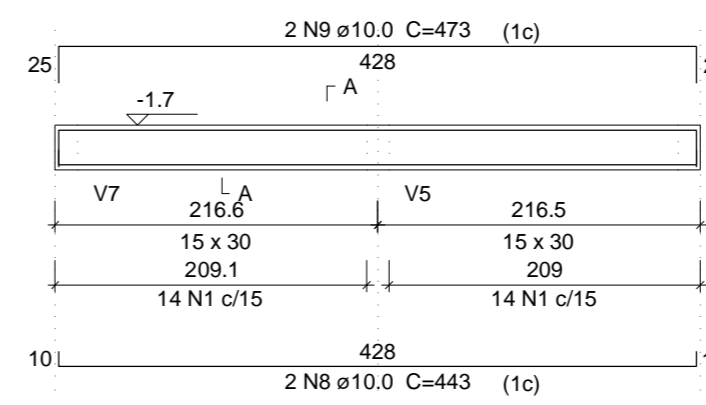
V8
ESC 1:50



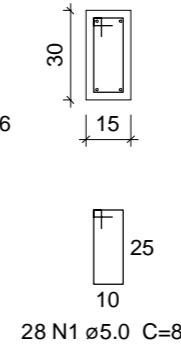
SEÇÃO A-A
ESC 1:25



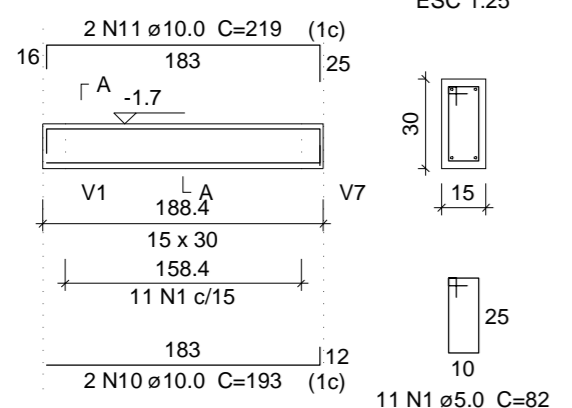
V9
ESC 1:50



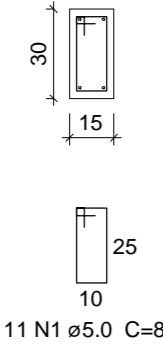
SEÇÃO A-A
ESC 1:25



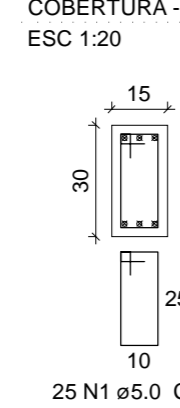
V10
ESC 1:50



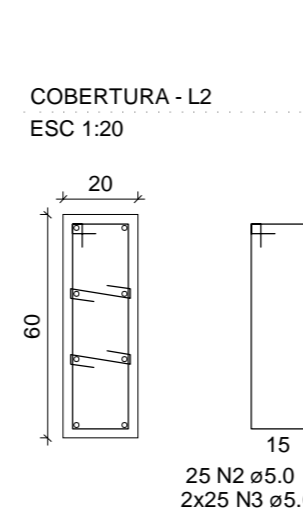
SEÇÃO A-A
ESC 1:25



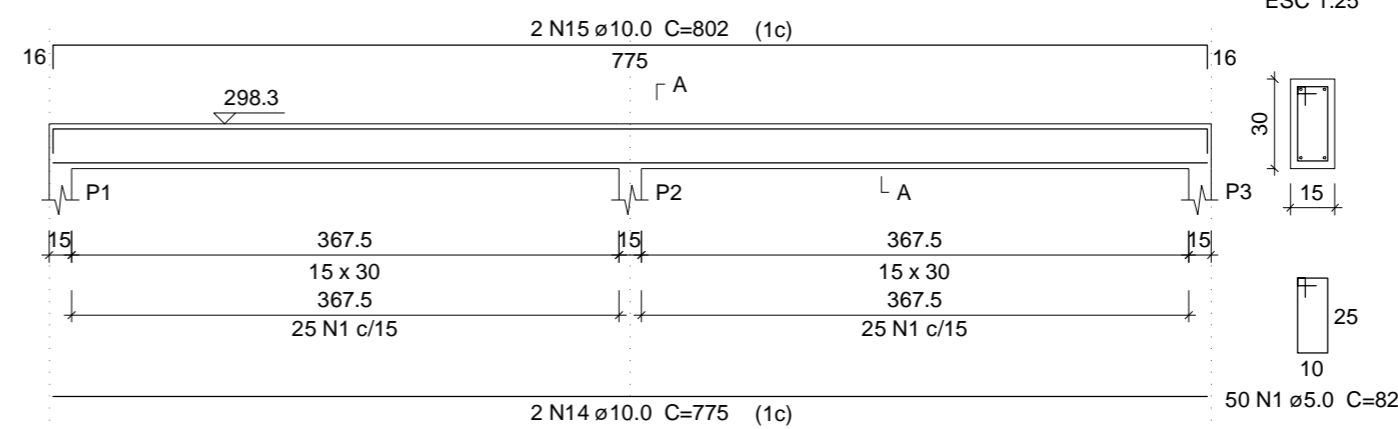
P1=P2=P3
COBERTURA - L2
ESC 1:20



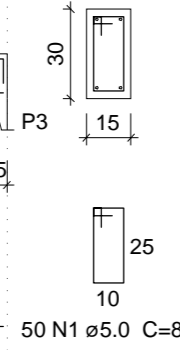
P4=P5=P6=P7=P8
COBERTURA - L2
ESC 1:20



VC1
ESC 1:50



SEÇÃO A-A
ESC 1:25



Relação do aço

| | | |
|------------|------|------|
| COBERTURA: | 3xP1 | 5xP4 |
| | VC1 | VC2 |
| | VC3 | VC4 |
| FUNDAÇÃO: | V6 | V7 |
| | V8 | V9 |
| | V10 | |

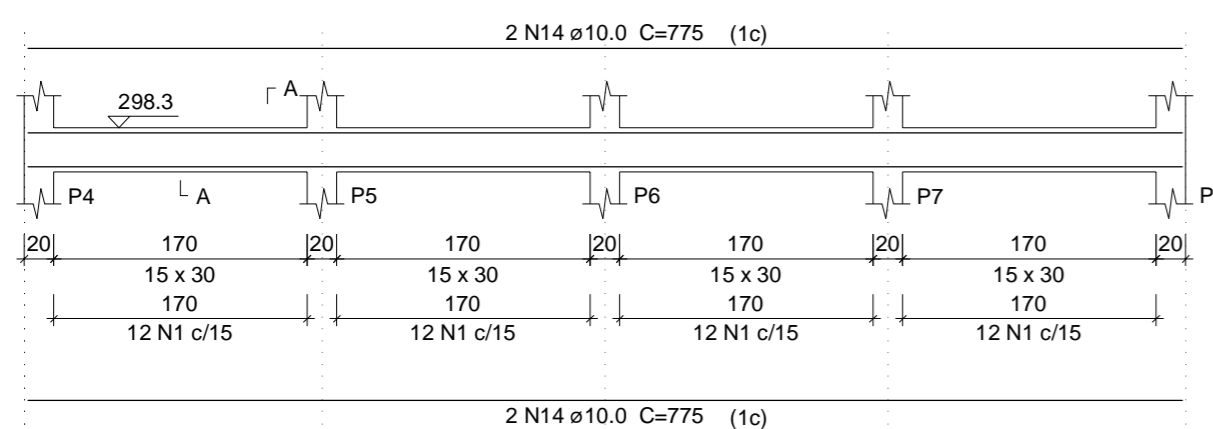
| AÇO | N | DIAM (mm) | QUANT | C.UNIT (cm) | C.TOTAL (cm) |
|------|----|-----------|-------|-------------|--------------|
| CA60 | 1 | 5.0 | 320 | 82 | 26240 |
| | 2 | 5.0 | 125 | 152 | 19000 |
| | 3 | 5.0 | 250 | 30 | 7500 |
| CA50 | 4 | 10.0 | 4 | 322 | 1288 |
| | 5 | 10.0 | 4 | 349 | 1396 |
| | 6 | 10.0 | 2 | 194 | 388 |
| | 7 | 10.0 | 2 | 220 | 440 |
| | 8 | 10.0 | 2 | 443 | 886 |
| | 9 | 10.0 | 2 | 473 | 946 |
| | 10 | 10.0 | 2 | 193 | 386 |
| | 11 | 10.0 | 2 | 219 | 438 |
| | 12 | 10.0 | 18 | 297 | 5346 |
| | 13 | 10.0 | 40 | 338 | 13520 |
| | 14 | 10.0 | 6 | 775 | 4650 |
| | 15 | 10.0 | 2 | 802 | 1604 |
| | 16 | 10.0 | 2 | 129 | 258 |
| | 17 | 10.0 | 4 | 396 | 1584 |
| | 18 | 10.0 | 1 | 160 | 160 |
| | 19 | 10.0 | 2 | 397 | 794 |
| | 20 | 12.5 | 6 | 365 | 2190 |

Resumo do aço

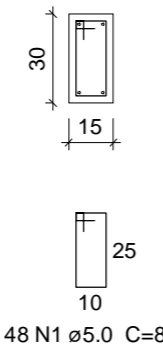
| AÇO | DIAM (mm) | C.TOTAL (m) | PESO + 10% (kg) |
|-----------------|-----------|-------------|-----------------|
| CA50 | 10.0 | 340.9 | 231.2 |
| CA50 | 12.5 | 21.9 | 23.2 |
| CA60 | 5.0 | 527.4 | 89.4 |
| PESO TOTAL (kg) | | | |
| CA50 | | 254.4 | |
| CA60 | | 89.4 | |

Volume de concreto (C-25) = 4.07 m³
Área de forma = 63.11 m²

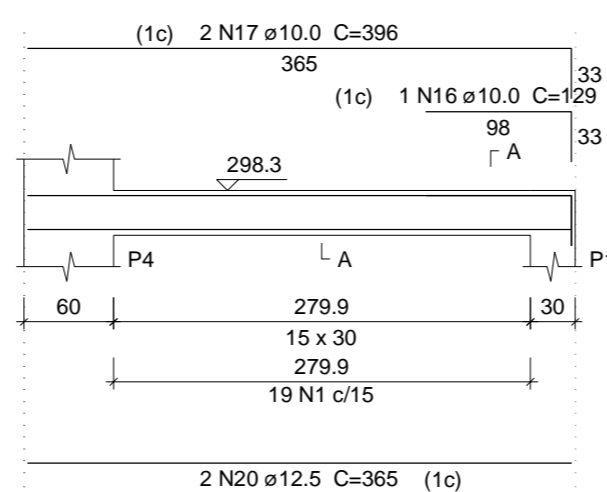
VC2
ESC 1:50



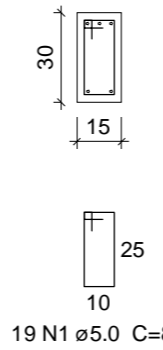
SEÇÃO A-A
ESC 1:25



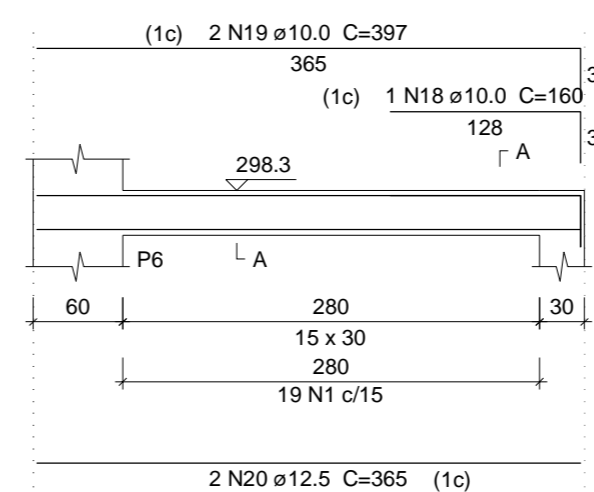
VC3
ESC 1:50



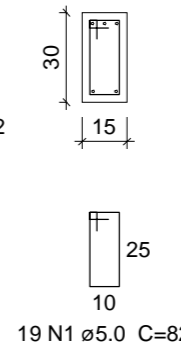
SEÇÃO A-A
ESC 1:25



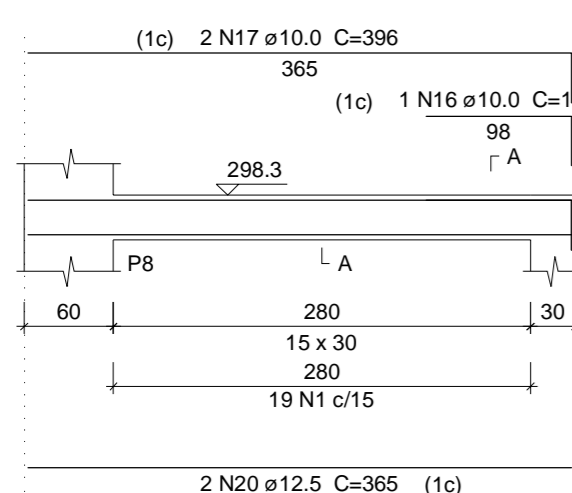
VC4
ESC 1:50



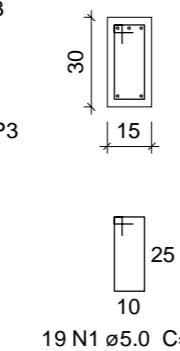
SEÇÃO A-A
ESC 1:25



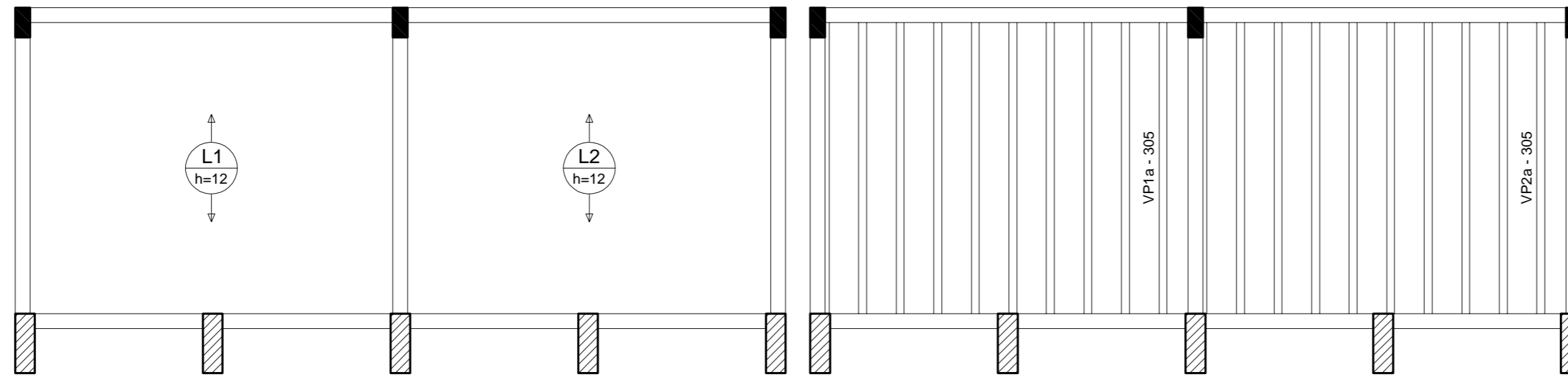
VC5
ESC 1:50



SEÇÃO A-A
ESC 1:25



| | | | |
|---|------------------------|---|--|
| TÍTULO | | FOLHA Nº | |
| PROJETO ESTRUTURAL | | 4/5 | |
| ENDEREÇO | | REVISÃO | |
| | | 000/2017 | |
| REV 0 | DATA 26/11/2017 | ESCALA INDICADA | |
| FCK 25MPa | CONTEÚDO | | |
| SOBRECARGA LAJE INDICADA | LOCAÇÃO E FORMA | | |
| ENG.: | PROP.: | | |
| ROGÉRIO EVANGELISTA JUSTINO - ENG CIVIL CREA 173439-D | | PREFEITURA MUNICIPAL - CNPJ: 18.179.226/0001-67 | |



Relação do aço

| AÇO | N | DIAM (mm) | QUANT | C.UNIT (cm) | C.TOTAL (cm) |
|------------|----|-----------|-------|-------------|--------------|
| 5xP4 V3 | V1 | 5.0 | 155 | 152 | 23560 |
| | V2 | 5.0 | 140 | 30 | 4200 |
| CA50 | 3 | 6.3 | 40 | 384 | 15360 |
| | 4 | 10.0 | 40 | 157 | 6280 |
| | 5 | 10.0 | 15 | 378 | 5670 |
| | 6 | 10.0 | 5 | 185 | 925 |
| | 7 | 10.0 | 10 | 457 | 4570 |

Resumo do aço

| AÇO | DIAM (mm) | C.TOTAL (m) | PESO + 10 % (kg) |
|-----------------|-----------|-------------|------------------|
| CA50 | 6.3 | 153.6 | 41.3 |
| | 10.0 | 174.5 | 118.3 |
| CA60 | 5.0 | 277.6 | 47.1 |
| PESO TOTAL (kg) | | | |
| CA50 | 159.7 | | |
| CA60 | 47.1 | | |

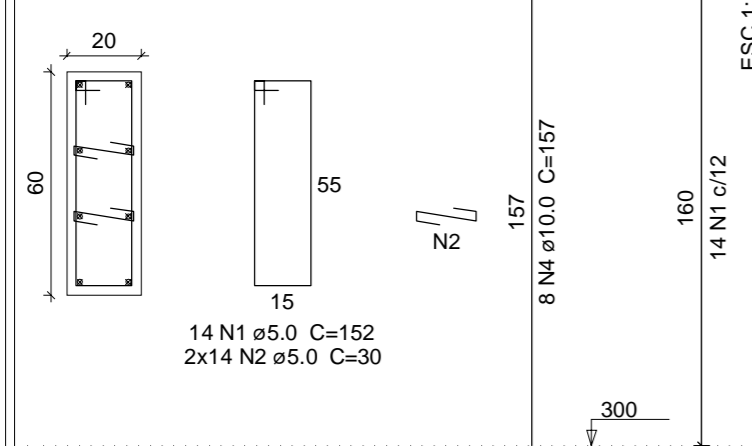
Volume de concreto (C-25) = 3.25 m³
Área de forma = 39.58 m²

Armação positiva das lajes do pavimento COBERTURA (Eixo Y) escala 1:50

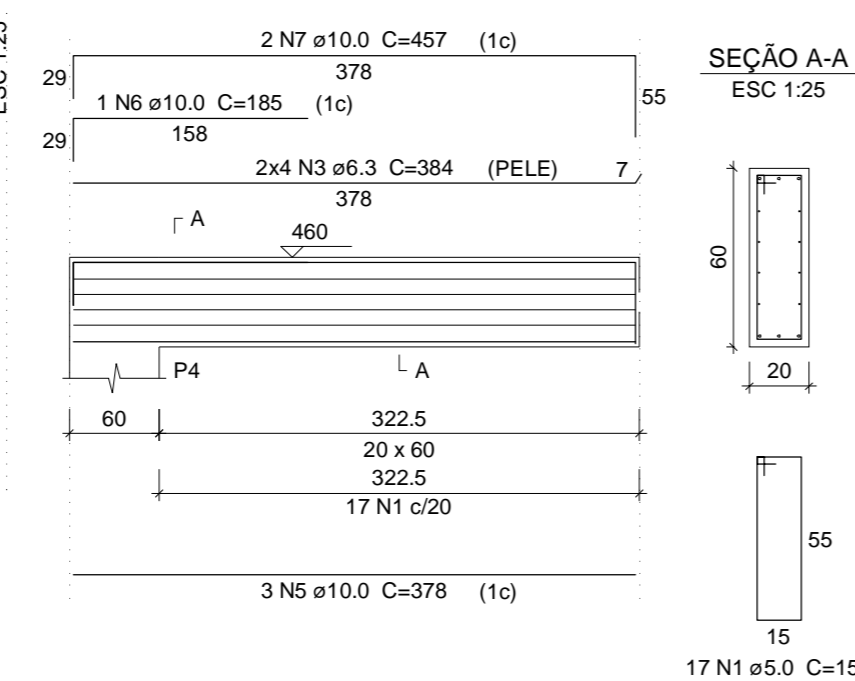
Planta de vigotas pré-moldadas escala 1:50

P4=P5=P6=P7=P8

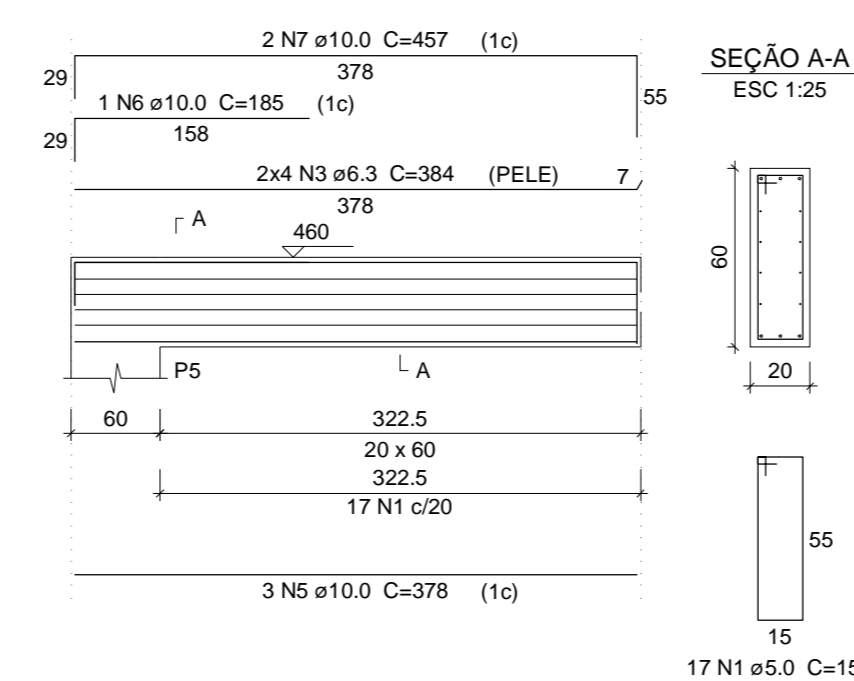
PERGOLADO - L3
ESC 1:20



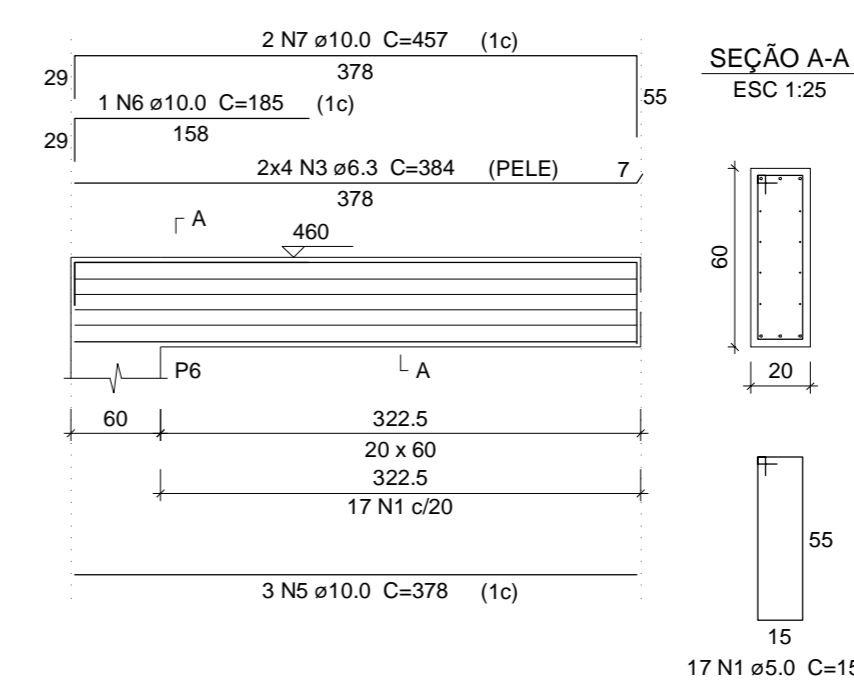
V1
ESC 1:50



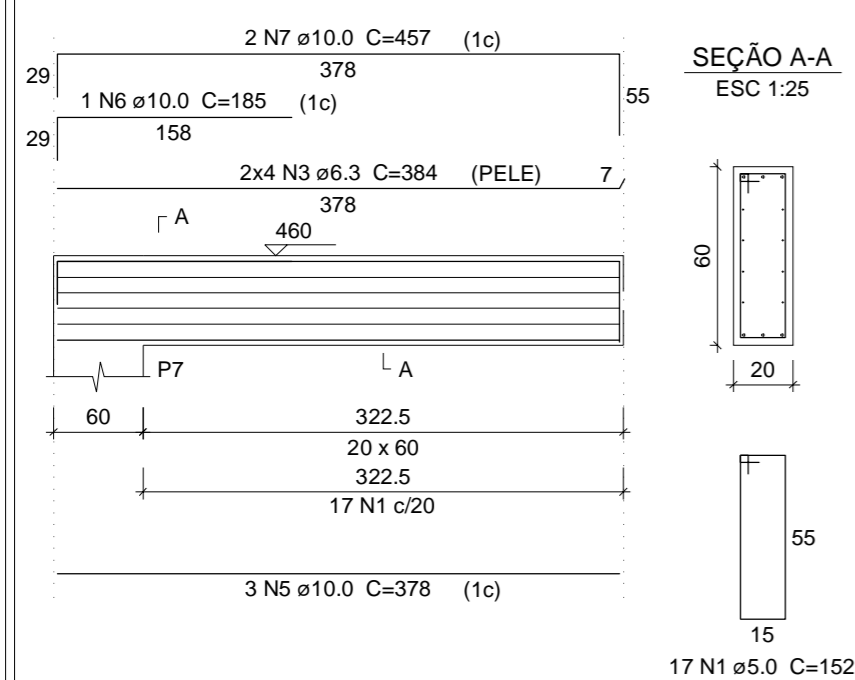
V2
ESC 1:50



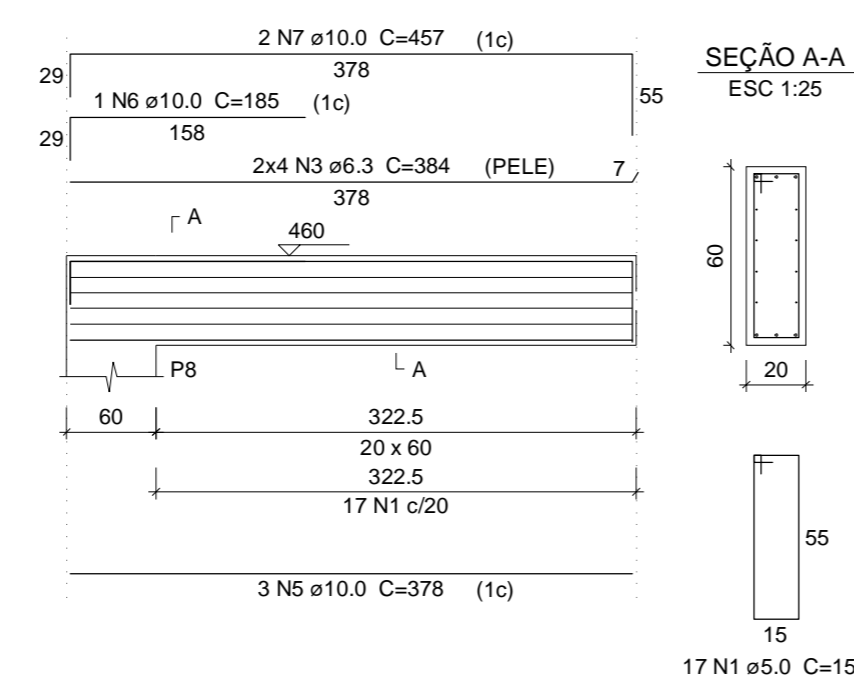
V3
ESC 1:50



V4
ESC 1:50



V5
ESC 1:50



| | | | | | |
|-----------------|---|--------------------|---|----------|-----|
| TÍTULO | | PROJETO ESTRUTURAL | | FOLHA Nº | 5/5 |
| ENDEREÇO | | | REVISÃO | | |
| | | | 000/2017 | | |
| REV | DATA | ESCALA | | | |
| 0 | 26/11/2017 | INDICADA | | | |
| FCK | CONTEÚDO | | | | |
| 25MPa | LOCAÇÃO E FORMA | | | | |
| SOBRECARGA LAJE | ENG.: | PROP.: | | | |
| INDICADA | ROGÉRIO EVANGELISTA JUSTINO ENG CIVIL CREA 173439-D | | PREFEITURA MUNICIPAL CNPJ: 18.179.226/0001-67 | | |