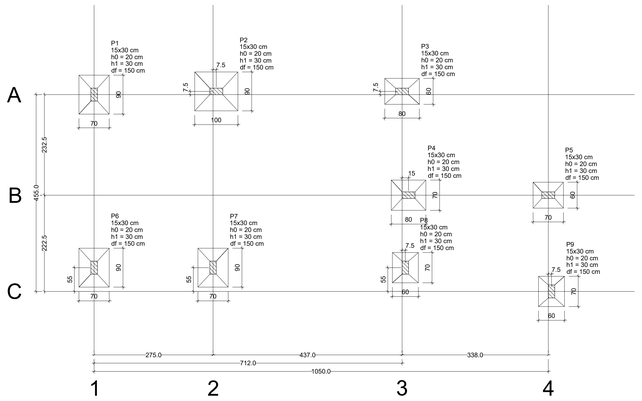
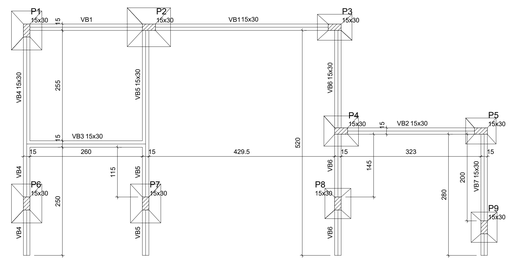



PLANTA DE LOCAÇÃO
escala 1:50




FORMA DO BALDRAME
escala 1:50

Vigas

| Nome | Seção (cm) | Elevação (cm) | Nível (cm) |
|---|---|---|---|
| VB1 | 15x30 | 0 | 0 |
| VB2 | 15x30 | 0 | 0 |
| VB3 | 15x30 | 0 | 0 |
| VB4 | 15x30 | 0 | 0 |
| VB5 | 15x30 | 0 | 0 |
| VB6 | 15x30 | 0 | 0 |
| VB7 | 15x30 | 0 | 0 |

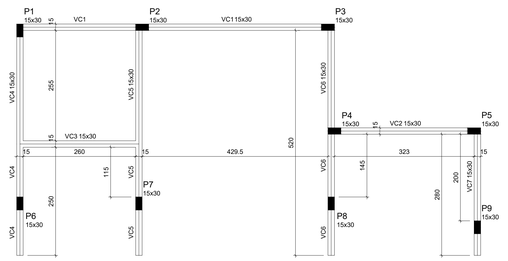
Características dos materiais

| fck (kgf/cm²) | Ecs (kgf/cm²) | Abatimento (cm) |
|---|---|---|
| 250 | 241500 | 5.00 |

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 | 15 x 30 | 0 | 0 |
| P5 | 15 x 30 | 0 | 0 |
| P6 | 15 x 30 | 0 | 0 |
| P7 | 15 x 30 | 0 | 0 |
| P8 | 15 x 30 | 0 | 0 |
| P9 | 15 x 30 | 0 | 0 |

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




FORMA DE COBERTURA
escala 1:50

Vigas

| Nome | Seção (cm) | Elevação (cm) | Nível (cm) |
|---|---|---|---|
| VC1 | 15x30 | 0 | 300 |
| VC2 | 15x30 | 0 | 300 |
| VC3 | 15x30 | 0 | 300 |
| VC4 | 15x30 | 0 | 300 |
| VC5 | 15x30 | 0 | 300 |
| VC6 | 15x30 | 0 | 300 |
| VC7 | 15x30 | 0 | 300 |

Características dos materiais

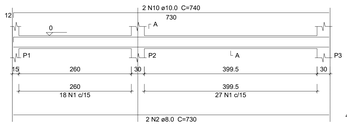
| fck (kgf/cm²) | Ecs (kgf/cm²) | Abatimento (cm) |
|---|---|---|
| 250 | 241500 | 5.00 |

Pilares

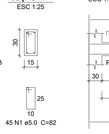
| Nome | Seção (cm) | Elevação (cm) | Nível (cm) |
|---|---|---|---|
| P1 | 15 x 30 | 0 | 300 |
| P2 | 15 x 30 | 0 | 300 |
| P3 | 15 x 30 | 0 | 300 |
| P4 | 15 x 30 | 0 | 300 |
| P5 | 15 x 30 | 0 | 300 |
| P6 | 15 x 30 | 0 | 300 |
| P7 | 15 x 30 | 0 | 300 |
| P8 | 15 x 30 | 0 | 300 |
| P9 | 15 x 30 | 0 | 300 |

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

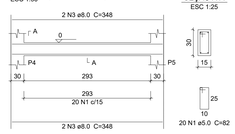
## VB1 (15 x 30)




SEÇÃO A-A
ESC 1:25



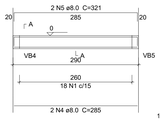

## VB2 (15 x 30)



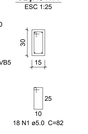

SEÇÃO A-A
ESC 1:25



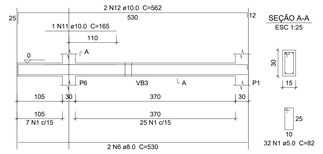

## VB3 (15 x 30)




SEÇÃO A-A
ESC 1:25



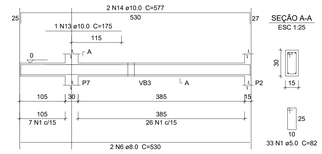

## VB4 (15 x 30)




SEÇÃO A-A
ESC 1:25



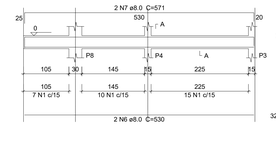

## VB5 (15 x 30)



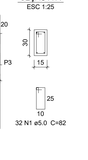

SEÇÃO A-A
ESC 1:25



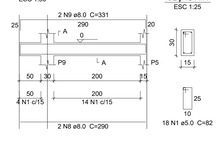

## VB6 (15 x 30)




SEÇÃO A-A
ESC 1:25




## VB7 (15 x 30)




SEÇÃO A-A
ESC 1:25




Relação do aço

VB1 VB2 VB3
VB4 VB5 VB6
VB7

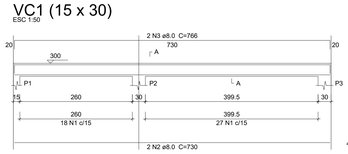
| AÇO | N | DIAM (mm) | QUANT | C.UNIT (cm) | C.TOTAL (cm) |
|---|---|---|---|---|---|
| CA60 | 1 | 5.0 | 198 | 82 | 16236 |
| CA50 | 2 | 8.0 | 2 | 730 | 1460 |
| | 3 | 8.0 | 4 | 348 | 1392 |
| | 4 | 8.0 | 2 | 285 | 570 |
| | 5 | 8.0 | 2 | 321 | 642 |
| | 6 | 8.0 | 6 | 530 | 3180 |
| | 7 | 8.0 | 2 | 571 | 1142 |
| | 8 | 8.0 | 2 | 290 | 580 |
| | 9 | 8.0 | 2 | 331 | 662 |
| | 10 | 10.0 | 2 | 740 | 1480 |
| | 11 | 10.0 | 1 | 165 | 165 |
| | 12 | 10.0 | 2 | 562 | 1124 |
| | 13 | 10.0 | 1 | 175 | 175 |
| | 14 | 10.0 | 2 | 577 | 1154 |

Resumo do aço

| AÇO | DIAM (mm) | C.TOTAL (m) | PESO + 10 % (kg) |
|---|---|---|---|
| CA50 | 8.0 | 96.3 | 41.8 |
| | 10.0 | 41 | 27.8 |
| CA60 | 5.0 | 162.4 | 27.5 |
| PESO TOTAL (kg) | | | |
| CA50 | 69.6 | | |
| CA60 | 27.5 | | |

Volume de concreto (C-25) = 1.47 m³
Área de forma = 24.58 m²

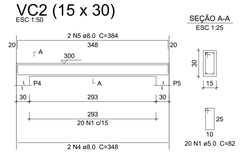
## VC1 (15 x 30)




SEÇÃO A-A
ESC 1:25



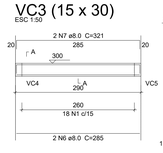

## VC2 (15 x 30)




SEÇÃO A-A
ESC 1:25



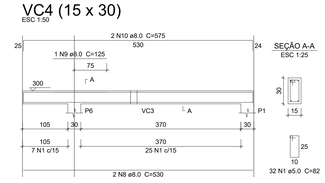

## VC3 (15 x 30)




SEÇÃO A-A
ESC 1:25



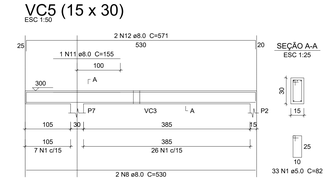

## VC4 (15 x 30)




SEÇÃO A-A
ESC 1:25



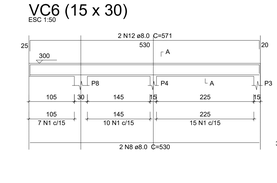

## VC5 (15 x 30)




SEÇÃO A-A
ESC 1:25



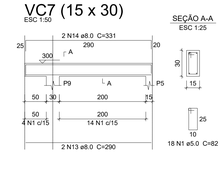

## VC6 (15 x 30)




SEÇÃO A-A
ESC 1:25




## VC7 (15 x 30)




SEÇÃO A-A
ESC 1:25




Relação do aço

VC1 VC2 VC3
VC4 VC5 VC6
VC7

| AÇO | N | DIAM (mm) | QUANT | C.UNIT (cm) | C.TOTAL (cm) |
|---|---|---|---|---|---|
| CA60 | 1 | 5.0 | 198 | 82 | 16236 |
| CA50 | 2 | 8.0 | 2 | 730 | 1460 |
| | 3 | 8.0 | 2 | 766 | 1532 |
| | 4 | 8.0 | 2 | 348 | 696 |
| | 5 | 8.0 | 2 | 384 | 768 |
| | 6 | 8.0 | 2 | 285 | 570 |
| | 7 | 8.0 | 2 | 321 | 642 |
| | 8 | 8.0 | 6 | 530 | 3180 |
| | 9 | 8.0 | 1 | 125 | 125 |
| | 10 | 8.0 | 2 | 575 | 1150 |
| | 11 | 8.0 | 1 | 155 | 155 |
| | 12 | 8.0 | 4 | 571 | 2284 |
| | 13 | 8.0 | 2 | 290 | 580 |
| | 14 | 8.0 | 2 | 331 | 662 |

Resumo do aço

| AÇO | DIAM (mm) | C.TOTAL (m) | PESO + 10 % (kg) |
|---|---|---|---|
| CA50 | 8.0 | 138.1 | 59.9 |
| CA60 | 5.0 | 162.4 | 27.5 |
| PESO TOTAL (kg) | | | |
| CA50 | 59.9 | | |
| CA60 | 27.5 | | |

Volume de concreto (C-25) = 1.47 m³
Área de forma = 24.58 m²

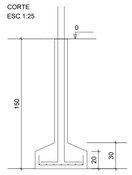
## S5=S8=S9

PLANTA
ESC 1:25



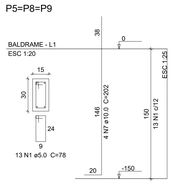

Solo compactado sobre a sapata
peso específico > 1600.00 kgf/m³

CORTE
ESC 1:25



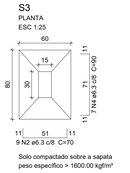

## P5=P8=P9

BALDRAME - L1
ESC 1:20



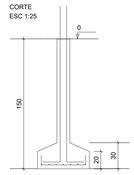

## S3

PLANTA
ESC 1:25



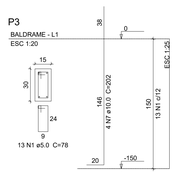

Solo compactado sobre a sapata
peso específico > 1600.00 kgf/m³

CORTE
ESC 1:25



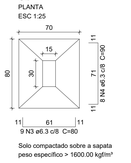

## P3

BALDRAME - L1
ESC 1:20



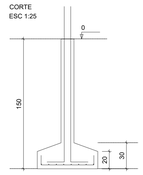

## S4

PLANTA
ESC 1:25



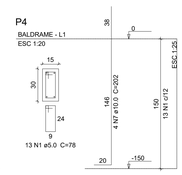

Solo compactado sobre a sapata
peso específico > 1600.00 kgf/m³

CORTE
ESC 1:25




## P4

BALDRAME - L1
ESC 1:20




## S1=S6=S7

PLANTA
ESC 1:25




Solo compactado sobre a sapata
peso específico > 1600.00 kgf/m³

CORTE
ESC 1:25




## P1=P6=P7

BALDRAME - L1
ESC 1:20




Relação do aço

3xS1 S2 S3
S4 3xS5

| AÇO | N | DIAM (mm) | QUANT | C.UNIT (cm) | C.TOTAL (cm) |
|---|---|---|---|---|---|
| CA60 | 1 | 5.0 | 117 | 78 | 9126 |
| CA50 | 2 | 6.3 | 33 | 70 | 2310 |
| | 3 | 6.3 | 63 | 80 | 5040 |
| | 4 | 6.3 | 15 | 90 | 1350 |
| | 5 | 6.3 | 36 | 100 | 3600 |
| | 6 | 6.3 | 11 | 110 | 1210 |
| | 7 | 10.0 | 36 | 202 | 7272 |

Resumo do aço

| AÇO | DIAM (mm) | C.TOTAL (m) | PESO + 10 % (kg) |
|---|---|---|---|
| CA50 | 6.3 | 135.1 | 36.4 |
| | 10.0 | 72.8 | 49.3 |
| CA60 | 5.0 | 91.3 | 15.5 |
| PESO TOTAL (kg) | | | |
| CA50 | 85.7 | | |
| CA60 | 15.5 | | |

Volume de concreto (C-25) = 1.86 m³
Área de forma = 17.55 m²

## S2

PLANTA
ESC 1:25




Solo compactado sobre a sapata
peso específico > 1600.00 kgf/m³

CORTE
ESC 1:25




## P2

BALDRAME - L1
ESC 1:20




## P1=P3=P4=P5=P6=P7=P8=P9

COBERTURA - L2
ESC 1:20




## P2

COBERTURA - L2
ESC 1:20




Relação do aço

8xP1 P2

| AÇO | N | DIAM (mm) | QUANT | C.UNIT (cm) | C.TOTAL (cm) |
|---|---|---|---|---|---|
| CA60 | 1 | 5.0 | 225 | 78 | 17550 |
| | 2 | 5.0 | 25 | 24 | 600 |
| CA50 | 3 | 10.0 | 38 | 297 | 11286 |

Resumo do aço

| AÇO | DIAM (mm) | C.TOTAL (m) | PESO + 10 % (kg) |
|---|---|---|---|
| CA50 | 10.0 | 112.9 | 76.5 |
| CA60 | 5.0 | 181.5 | 30.8 |
| PESO TOTAL (kg) | | | |
| CA50 | 76.5 | | |
| CA60 | 30.8 | | |

Volume de concreto (C-25) = 1.21 m³
Área de forma = 24.3 m²



APROVAÇÃO:

APROVAÇÃO:

Governo do Estado do Tocantins
Secretaria de Estado da Saúde

Diretoria de Arquitetura e Engenharia dos Estabelecimentos de Saúde

OBRA:
AMPLIAÇÃO DA AGÊNCIA TRANSFUSIONAL DO HOSPITAL E MATERNIDADE DONA REGINA SIQUEIRA CAMPOS

ENDEREÇO:
104N, RUA NE-5, CONJ. 4, LT. 32,34,36,38,40 E 42, PALMAS-TO

PROJETO:
ESTRUTURAL

CONTEÚDO:
PLANTAS DE FORMA, PLANTA DE LOCAÇÃO, DETALHAMENTO DE VIGAS E PILARES, DETALHAMENTO DAS SAPATAS, RELAÇÃO DO AÇO, NOTAS E LEGENDAS.

AUTOR(A) DO PROJETO:
PAULO CHIANCA SILVA
ANALISTA DE PROJETOS DE OBRAS CIVIS E ARQUITETÔNICAS
MAT. 1316506-3
CREA: 211436/D-TO

DIRETOR(A):
MARCELO LUIS GRATÃO CASTRO
DIRETOR DE ARQ E ENG. DOS ESTAB. DE SAÚDE
MAT. 1132598-0
CAU: TO A627/6-0

SECRETÁRIA(O):

| ÁREA EXISTENTE: | ÁREA A AMPLIAR: | ÁREA A REFORMAR: | ÁREA TOTAL: | |
|---|---|---|---|---|
| 5.835,48m² | 45,20 m² | 31,23 m² | 5892,86 m² | ÚNICA |
| TERRENO: 4.200,00 m² | NOME DO ARQUIVO: ECA-HMDR-AG.TRANS.-PLM-PB-00 | | DATA: Dezembro/2017 | A0 |