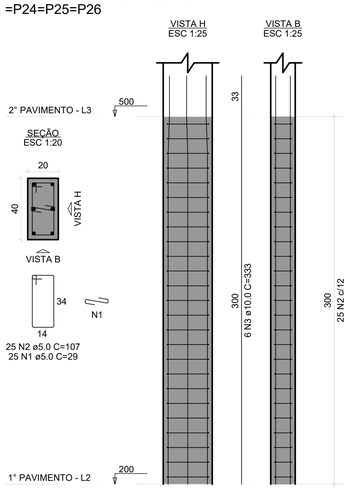
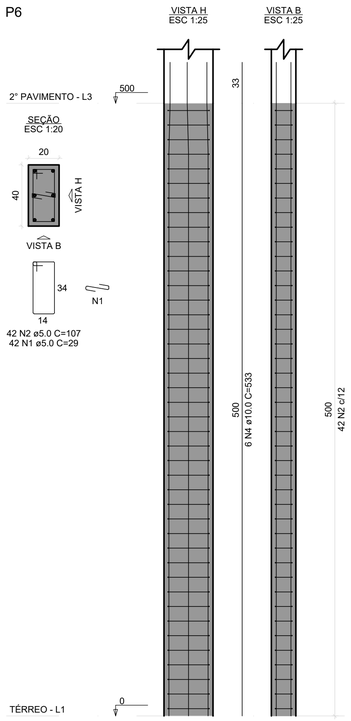
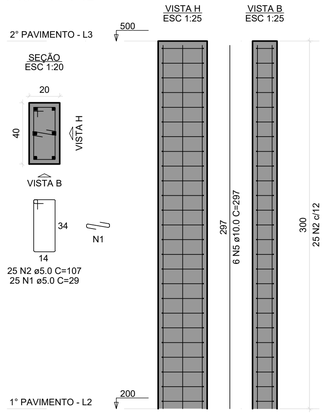
## P1=P2=P3=P4=P5=P7=P8=P9= =P18=P19=P20=P21=P22=P23= =P24=P25=P26



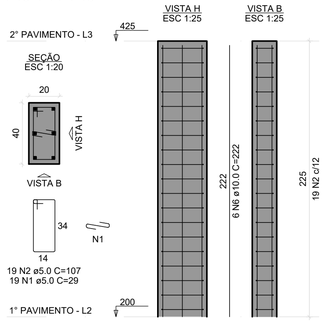

## P6



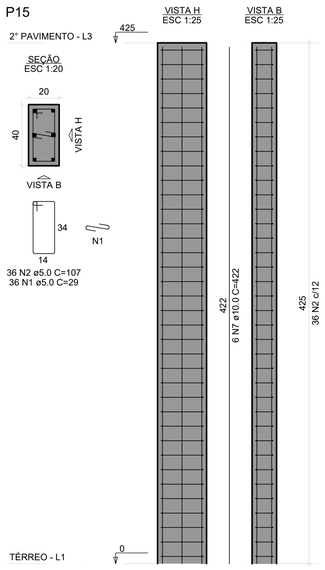

## P10=P11=P12



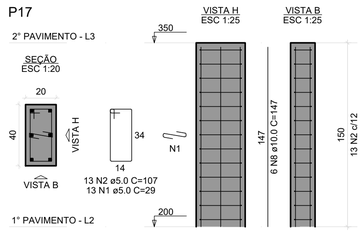

## P13=P14=P16




## P15




## P17




### RELAÇÃO DO AÇO

17xP1
3xP13

P6
P15

3xP10
P17

| AÇO | N | DIAM (mm) | QUANT | C.UNIT (cm) | C.TOTAL (cm) |
|---|---|---|---|---|---|
| CA60 | 1 | 5.0 | 648 | 29 | 18792 |
| | 2 | 5.0 | 648 | 107 | 69336 |
| CA50 | 3 | 10.0 | 102 | 333 | 33966 |
| | 4 | 10.0 | 6 | 533 | 3198 |
| | 5 | 10.0 | 18 | 297 | 5346 |
| | 6 | 10.0 | 18 | 222 | 3996 |
| | 7 | 10.0 | 6 | 422 | 2532 |
| | 8 | 10.0 | 6 | 147 | 882 |

### RESUMO DO AÇO

| AÇO | DIAM (mm) | C.TOTAL (m) | PESO + 10% (kg) |
|---|---|---|---|
| CA50 | 10.0 | 499.2 | 338.6 |
| CA60 | 5.0 | 881.3 | 149.4 |

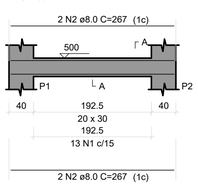
| PESO TOTAL (kg) | |
|---|---|
| CA50 | 338.6 |
| CA60 | 149.4 |

Volume de concreto (C-30) = 6.20 m³
Área de forma = 93.00 m²

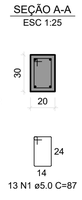
# DETALHES DAS ARMADURAS DOS PILARES ATÉ O 2° PAVIMENTO

Escala 1:50

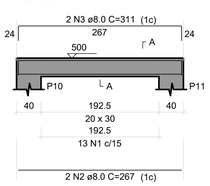
## V1



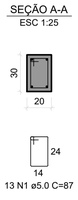

SEÇÃO A-A
ESC 1:25



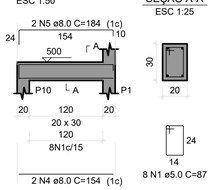

## V2




SEÇÃO A-A
ESC 1:25



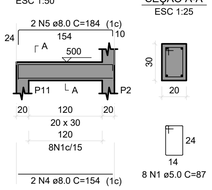

## V3




SEÇÃO A-A
ESC 1:25



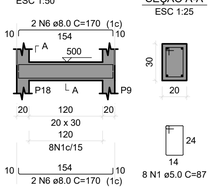

## V4




SEÇÃO A-A
ESC 1:25



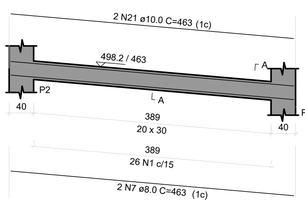

## V5



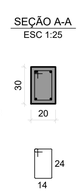

SEÇÃO A-A
ESC 1:25



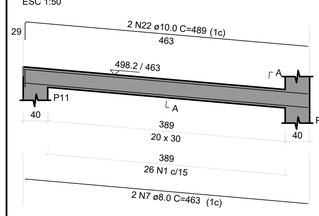

## V6



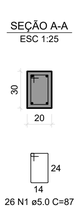

SEÇÃO A-A
ESC 1:25



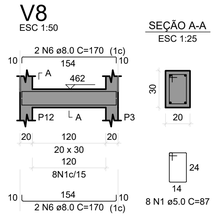

## V7




SEÇÃO A-A
ESC 1:25



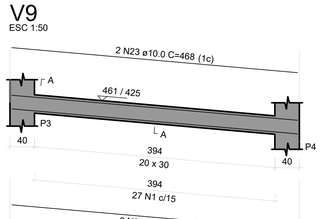

## V8



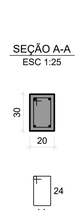

SEÇÃO A-A
ESC 1:25



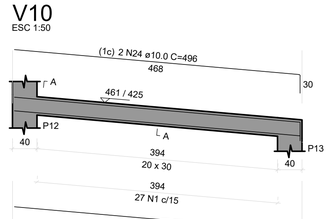

## V9



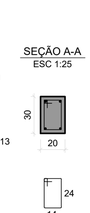

SEÇÃO A-A
ESC 1:25



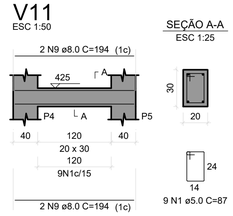

## V10



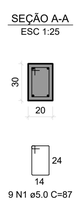

SEÇÃO A-A
ESC 1:25



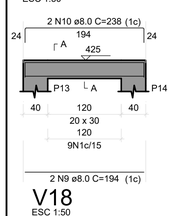

## V11



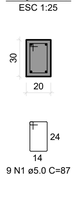

SEÇÃO A-A
ESC 1:25



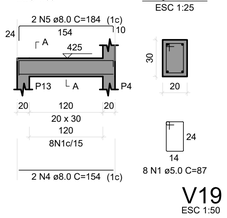

## V12




SEÇÃO A-A
ESC 1:25



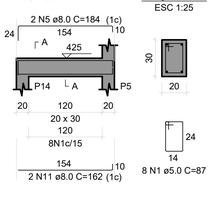

## V13




SEÇÃO A-A
ESC 1:25



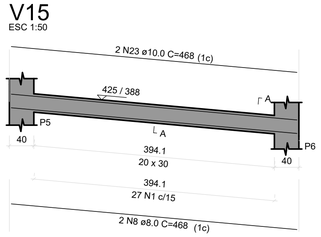

## V14



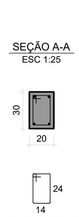

SEÇÃO A-A
ESC 1:25



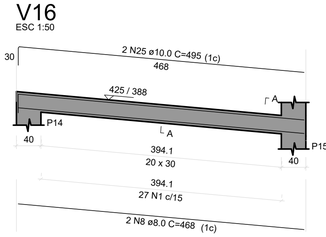

## V15



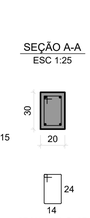

SEÇÃO A-A
ESC 1:25



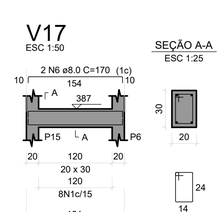

## V16




SEÇÃO A-A
ESC 1:25



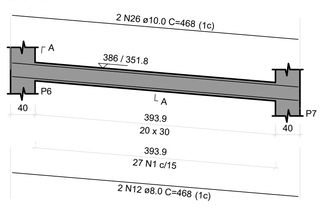

## V17



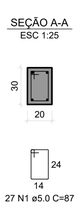

SEÇÃO A-A
ESC 1:25



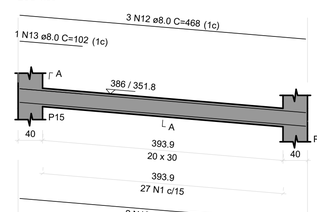

## V18



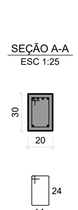

SEÇÃO A-A
ESC 1:25




## V19




SEÇÃO A-A
ESC 1:25




# DETALHES DAS ARMADURAS VIGAS ATÉ O 2° PAVIMENTO

Escala 1:50

| REV. | T.E. | DESCRIÇÃO DA REVISÃO | DES. | VER. | APR. | DATA |
|---|---|---|---|---|---|---|
| R00 | (B) | EMISSÃO INICIAL | M.C.A | B.C.F.D | P.M.B | 18/09/2025 |

T.E. TIPO DE EMISSÃO
(A) PRELIMINAR (B) PARA APROVAÇÃO (C) PARA CONHECIMENTO
(D) PARA COTAÇÃO (E) PARA CONSTRUÇÃO (F) CONFORME COMPRADO
(G) CONFORME CONSTRUÍDO (H) CANCELADO

DATA DA PRIMEIRA EMISSÃO: 18/09/2025

RESPONSÁVEIS TÉCNICOS E DADOS DE CONTRATO

**R.T. DO PROJETO:**
MATEUS COELHO ALVES:09902614680
Assinado de forma digital por MATEUS COELHO ALVES:09902614680 Dados: 2025.09.24 19:36:26 -03'00'
ENG.: MATEUS COELHO ALVES - CREA - MG: 226772/D

**PROJETISTA:** ENG.: MATEUS COELHO ALVES - CREA - MG: 226772/D

**DESENHISTA:** ENG.: MATEUS COELHO ALVES - CREA - MG: 226772/D

**COORDENAÇÃO:**
BRUNA COELHO FONSECA DUTRA
ENG.: BRUNA COELHO FONSECA CUTRA-CREA/MG:239.444/D

**RESPONSÁVEL DA PREFEITURA PELA APROVAÇÃO:**
PREFEITURA MUNICIPAL DE BELO ORIENTE

**R.T. DO CONTRATO COM A PREFEITURA:**
FABIOLA BATISTA PIRES
ENG. FABÍOLA BATISTA PIRES - CREA:MG-78.851/D

**Nº DE CONTRATO COM A PREFEITURA:**
032/2025

**Nº DE CONVÊNIO/ OPERAÇÃO (CEF/BDMG/SES OU OUTRO):**
CONVÊNIO: 00000/0000 / OPERAÇÃO: 0000000-00

**NÚMERO DA A.R.T. OU R.R.T.:**
ART: MG20254113868

**NÚMERO DA 'OS' (ORDEM DE SERVIÇO/ DEMANDA):**
OS: BO-25_005

ENDEREÇO DA OBRA/SERVIÇO:

**NOME DO LOGRADOURO:** RODOVIA LMG 758
**NÚMERO DO LOGRADOURO:** S/N
**BAIRRO:** COMUNIDADE ESPERANÇA
**C.E.P:** 35.195.000
**CIDADE/UF:** BELO ORIENTE/MG
**COMPLEMENTO:** --
**PROPRIETÁRIO:** PREFEITURA MUNICIPAL DE BELO ORIENTE
**CPF/CNPJ:** 17.005.653/0001-66

PREFEITURA MUNICIPAL DE BELO ORIENTE

RAMPA DE ACESSO DA ESCOLA MUNICIPAL ESPERANÇA

PROJETO EXECUTIVO

PROJETO ESTRUTURAL

PLANTA DE DETALHAMENTO DOS PILARES E VIGAS 2° PAVIMENTO

FORMATO: A1 (841x594mm)
ESCALA: INDICADA

| REVISÃO: | NOME DO ARQUIVO: | FOLHA |
|---|---|---|
| R00 | BO_25_005_PE_10.01-EST_05_DIV_R00 | 05 |