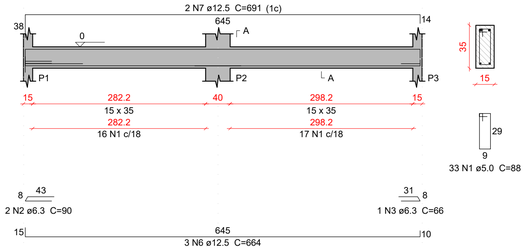
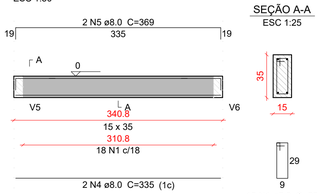
V1
ESC 1:50



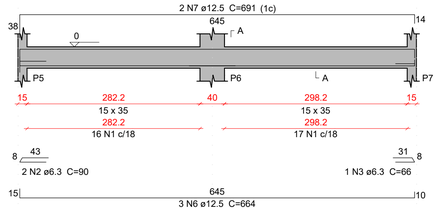
SEÇÃO A-A
ESC 1:25

V2
ESC 1:50

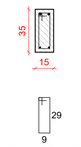


SEÇÃO A-A
ESC 1:25

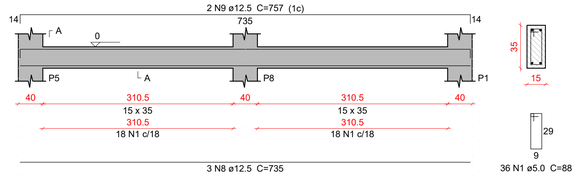
V3
ESC 1:50



SEÇÃO A-A
ESC 1:25



V4
ESC 1:50



SEÇÃO A-A
ESC 1:25

Relação do aço - Vigas Térreo

V1 V2 V3
V4 V5 V6

AÇO	N	DIAM (mm)	QUANT	C.UNIT (cm)	C.TOTAL (cm)
CA60	1	5.0	194	88	17072
CA50	2	6.3	4	90	360
	3	6.3	2	66	132
	4	8.0	2	335	670
	5	8.0	2	369	738
	6	12.5	6	664	3984
	7	12.5	4	691	2764
	8	12.5	6	735	4410
	9	12.5	4	757	3028
	10	12.5	3	759	2277
	11	12.5	2	805	1610

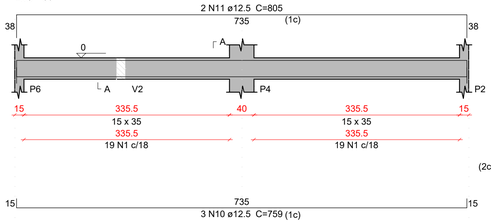
Resumo do aço

AÇO	DIAM (mm)	C.TOTAL (m)	PESO + 10 % (kg)
CA50	6.3	5	1.3
	8.0	14.1	6.1
	12.5	180.8	191.5
CA60	5.0	170.8	28.9

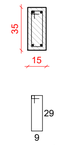
PESO TOTAL (kg)	
CA50	199
CA60	28.9

Volume de concreto (C-35) = 2.03 m³
Área de forma = 32.85 m²

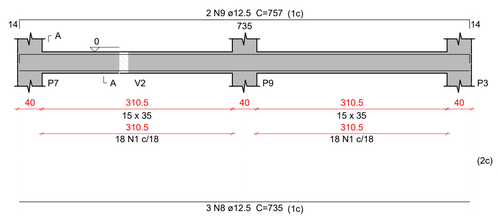
V5
ESC 1:50



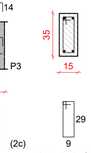
SEÇÃO A-A
ESC 1:25



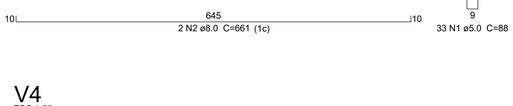
V6
ESC 1:50



SEÇÃO A-A
ESC 1:25

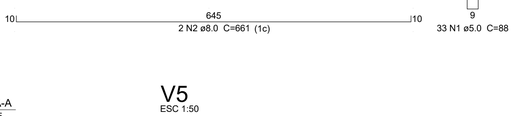


V1
ESC 1:50



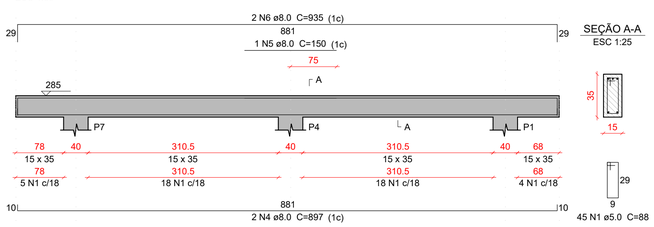
SEÇÃO A-A
ESC 1:25

V2
ESC 1:50



SEÇÃO A-A
ESC 1:25

V3
ESC 1:50



SEÇÃO A-A
ESC 1:25

Relação do aço - Vigas Cobertura

V1 V2 V3
V4 V5

AÇO	N	DIAM (mm)	QUANT	C.UNIT (cm)	C.TOTAL (cm)
CA60	1	5.0	203	88	17864
CA50	2	8.0	4	661	2644
	3	8.0	4	679	2716
	4	8.0	7	897	6279
	5	8.0	1	150	150
	6	8.0	2	935	1870
	7	10.0	1	170	170
	8	10.0	2	934	1868
	9	12.5	2	933	1866

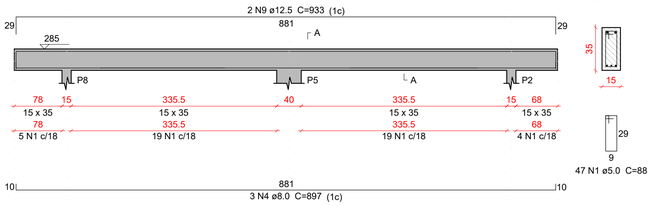
Resumo do aço

AÇO	DIAM (mm)	C.TOTAL (m)	PESO + 10 % (kg)
CA50	8.0	136.6	59.3
	10.0	20.4	13.8
	12.5	18.7	19.8
CA60	5.0	178.7	30.3

PESO TOTAL (kg)	
CA50	92.9
CA60	30.3

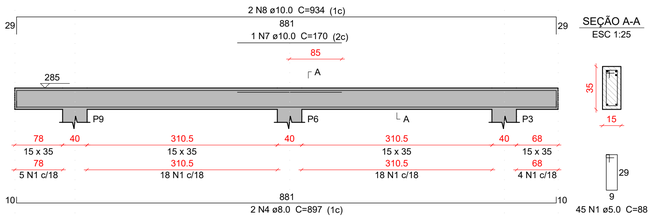
Volume de concreto (C-35) = 2.08 m³
Área de forma = 33.68 m²

V4
ESC 1:50



SEÇÃO A-A
ESC 1:25

V5
ESC 1:50



SEÇÃO A-A
ESC 1:25

RELAÇÃO DO AÇO - Sapatas

3xP1 6xP2 3xS1
6xS2

AÇO	N	DIAM (mm)	QUANT	C.UNIT (cm)	C.TOTAL (cm)
CA60	1	5.0	81	24	1944
CA50	2	5.0	81	97	7857
	3	8.0	18	64	1152
	4	8.0	18	89	1602
	5	8.0	36	74	2664
	6	8.0	36	99	3564
	7	10.0	18	VAR	VAR
	8	10.0	36	VAR	VAR

RESUMO DO AÇO

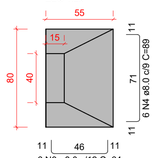
AÇO	DIAM (mm)	C.TOTAL (m)	PESO + 10% (kg)	PESO TOTAL (kg)
CA50	8.0	89.8	39	CA50 94
	10.0	81.2	55.1	CA60 16.6
CA60	5.0	98	16.6	

Volume de concreto (C-35) = 0.54 m³
Volume de concreto (C-25) = 0.99 m³
Área de forma = 15.81 m²

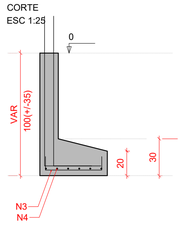
P1=P4=P7

S1=S4=S7

PLANTA
ESC 1:25



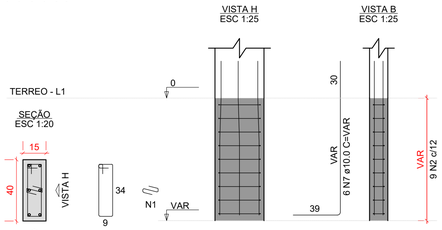
CORTE
ESC 1:25



Solo com capacidade de suporte > 3.00 kgf/cm²
Solo compactado sobre a sapata
peso específico > 1600.00 kgf/m³

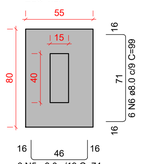
VISTA H
ESC 1:25

VISTA B
ESC 1:25

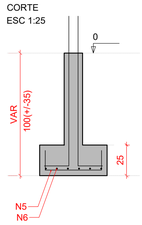


S2=S3=S5=S6=S8=S9

PLANTA
ESC 1:25



CORTE
ESC 1:25

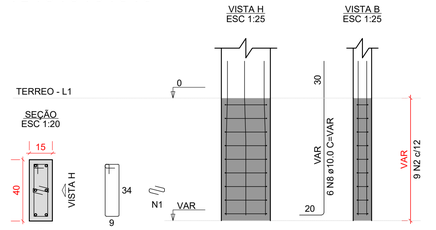


Solo com capacidade de suporte > 3.00 kgf/cm²
Solo compactado sobre a sapata
peso específico > 1600.00 kgf/m³

P2=P3=P5=P6=P8=P9

VISTA H
ESC 1:25

VISTA B
ESC 1:25



PREFEITURA MUNICIPAL DE PAULO LOPES
CNPJ nº 82.892.365/0001-32

VITOR MATEUS MACUGLIA
CREA/SC nº 152568-6

ENGENHARIA

PROJETO ESTRUTURAL - ESCOLA

CONTEÚDO: DETALHAMENTO DAS **SAPATAS** E **VIGAS**

PRANCHA: 02/03

ENDEREÇO: RUA RUTE JOVINA DOS SANTOS, Nº 286

BAIRRO: AREIAS

MUNICÍPIO: GAROPABA

ESTADO: SANTA CATARINA

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