

PLANTA

PLANTA

ESC. 1: 75

672

101

15

10

300

PAR1

PAR1

400

1500

A

PEDRA: ARGAMASSADA

ESP=30cm

VIBE FOLHA 1

ESC. 1: 75

Technical drawing showing a cross-section of a concrete structure. The drawing includes dimensions and labels for various components:

- Dimensions:**
 - Vertical dimensions on the left: 20, 15, 185, 15, 10, 17.
 - Horizontal dimensions at the bottom: 5, 50, 150.
 - Horizontal dimension on the left: 1500.
- Labels:**
 - PAR1:** A diagonal line representing a structural element.
 - DEGRAU:** A label for a step or ledge.
 - CONCRETO MAGRO ESP. 5cm:** A label for a thin concrete layer.
 - BRITA 2 ESP. 15cm:** A label for a 15cm thick layer of bedding or gravel.
 - PEDRA ARGAMASSADA ESP=30cm VIDE FOLHA 1:** A label for a 30cm thick layer of mortared stone, with a reference to sheet 1.
 - V1:** A label for a vertical element at the top left.
 - V2:** A label for a vertical element at the bottom right.

ESC. 1: 50

ESC. 1: 30

Technical drawing of a bridge structure, showing various views and dimensions. The drawing includes a plan view at the bottom with dimensions 340 VAR 443 and 45 N4 ø 8 C/15 C=VAR (L MEDIO=407). It also shows a side elevation with dimensions 58 VAR 310 and 45 N2 ø 8 C/15 C=VAR (L MEDIO=290). A detailed view of the bridge deck shows a 2x20 N7 ø 6.3 C/20 C=VAR (L MEDIO=671) configuration. Other views show the bridge piers and the approach structure with dimensions 45 N3 ø 8 C/15 C=77 and 45 N1 ø 8 C/15 C=VAR (L MEDIO=290). The drawing is labeled "CARANGUEJO 19 N5 ø 8 C/15 C=88 1 POR M2".

ESC. 1: 20

15
20
8
13
14 N11 Ø 6.3
C/20 C=50

4 N10 Ø 8 C=293
293

ESC. 1: 20

23 N12 @ 6.3 C/20 C=120

ESC. 1: 30

The technical drawing illustrates a vertical section of a building facade. Two window units are depicted:

- Window N8:** A double-glazed unit with a height of 10 units and a width of 20 units. The total depth of the frame assembly is 343 units. It is shown in a closed position.
- Window N9:** A double-glazed unit with a height of 15 units and a width of 15 units. The total depth of the frame assembly is 176 units. It is shown in an open position, revealing the internal frame and glazing.

The drawing includes various dimension lines and labels such as TUBO, N8, N9, and NR, indicating specific components and measurements.

PLANTA

ESC. 1: 30

Planta baixa do sistema de drenagem do pavimento. O diagrama mostra um retângulo representando o pavimento com dimensões totais de 130 cm de largura e 20 cm de profundidade. No centro, há um círculo rotulado "EXTRAVASOR Ø 1000" com uma elevação de 825,70. À esquerda, há uma "LAJE TAMPA" com uma elevação de 827,36 e uma "LAJE FUNDO" com uma elevação de 825,03. À direita, há uma "CAIXA EXISTENTE" e uma "PAREDE A DEMOLIR". Um círculo de Ø 1000 existente é indicado com uma seta. O pavimento é feito de "CONCRETO MAGRO ESP. 5cm".

ESC. 1: 30

ESC. 1: 30

The drawing illustrates the structural reinforcement for two slabs:

- Laje do 1º Andar (First Floor Slab):** A cross-section showing a total width of 70 units and an effective depth of 14.5 units. The top reinforcement consists of N3 bars spaced at 40 units (N3 @ 40 C/15), with a total length of 239 units.
- LAJE DE FUNDO (Base Slab):** A cross-section showing a total width of 70 units and an effective depth of 14.5 units. The top reinforcement consists of N3 bars spaced at 40 units (N3 @ 40 C/15), with a total length of 182 units.

Additional details include:

- A vertical dimension of 13 units for the top reinforcement layer.
- A horizontal dimension of 14.5 units for the effective depth.
- A note indicating "2x2' N3 @ 6"/10S CORR (N TOTAL=900)" for the base slab.
- A label "VIDE ARMS LAJE DE FUNDO" pointing to the base slab reinforcement.

NOTA: CORTAR E DOBRAR A ARMADURA NA REGIÃO DO TUBO.

TABELA DE AÇO					
ELEMENTO	N	Ø	QUANT.	COMP. UNIT.	COMP. TOTAL
ESCALDA 5	1	8	90	VAR	26100
	2	8	90	VAR	19620
	3	8	90	77	6930
	4	8	90	VAR	36630
	5	8	19	88	1672
	6	6.3	36	VAR	23940
	7	6.3	40	VAR	26840
	8	8	20	176	3520
	9	8	20	144	2880
	10	8	4	293	1172
	11	6.3	14	50	700
	12	6.3	23	120	2760
	13	8	4	473	1892
	14	8	2	443	886
CX EXISTENTE	1	8	26	189	4914
	2	8	24	209	5016
	3	10	40	239	9560
	4	8	40	182	7280
	5	8	14	CORR	9016

RESUMO DO AÇO CA50		
Ø	COMP. TOTAL	PESO kgf.
6.3	542,40	133
8	1275,28	504
10	95,60	59
TOTAL		696 kg

NOTAS:

- 1 - DIMENSÕES EM CENTÍMETROS;
- 2 - CONCRETO ESTRUTURAL CLASSE C25 ($f_{ck}=25$ MPa);
- 3 - CONCRETO MAGRO CLASSE C10 ($f_{ck}=10$ MPa);
- 4 - AÇO CLASSE CA-50
- 5 - RECOBRIMENTO DA ARMADURA: 3,5cm;
- 6 - NO ENTORNO DO VERTEDOURO O ATERRIO/REATERRO, DEVE SER CUIDADOSAMENTE COMPACTADO (100% P.N.) EM CAMADAS DE 15cm ACABADA.

0	EMISSÃO INICIAL	20/05/2020
REVISÃO	MODIFICAÇÃO	DATA



ZACARIN

ENGENHARIA DE FUNDAÇÕES

S. J. RIO PRETO SP – FONE (17) 3222-7130

CLIENTE <div style="background-color: #f0f0f0; padding: 5px; text-align: center; font-weight: bold;">RUMO LOGÍSTICA S/A</div>	DATA <div style="background-color: #f0f0f0; padding: 5px; text-align: center;">MAI/2020</div>	FOLHA <div style="background-color: #f0f0f0; padding: 5px; text-align: center; font-size: 1.5em;">07</div>
OBRA <div style="background-color: #f0f0f0; padding: 5px;">SISTEMA DE DRENAGEM DE ÁGUAS PLUVIAIS</div>	ESCALA <div style="background-color: #f0f0f0; padding: 5px;">INDICADA</div>	
LOCAL <div style="background-color: #f0f0f0; padding: 5px;">ESTAÇÃO FERROVIÁRIA SÃO CARLOS – KM 205</div>	DESENHO <div style="background-color: #f0f0f0; padding: 5px;">ENG. BRUNO</div>	
ASSUNTO <div style="background-color: #f0f0f0; padding: 5px;">PROJETO EXECUTIVO – DETALHES DO VERTEDOURO</div>	REVISÃO/DATA <div style="background-color: #f0f0f0; padding: 5px;">0-20/05/2020</div>	
VISTO RESP. TEC.		