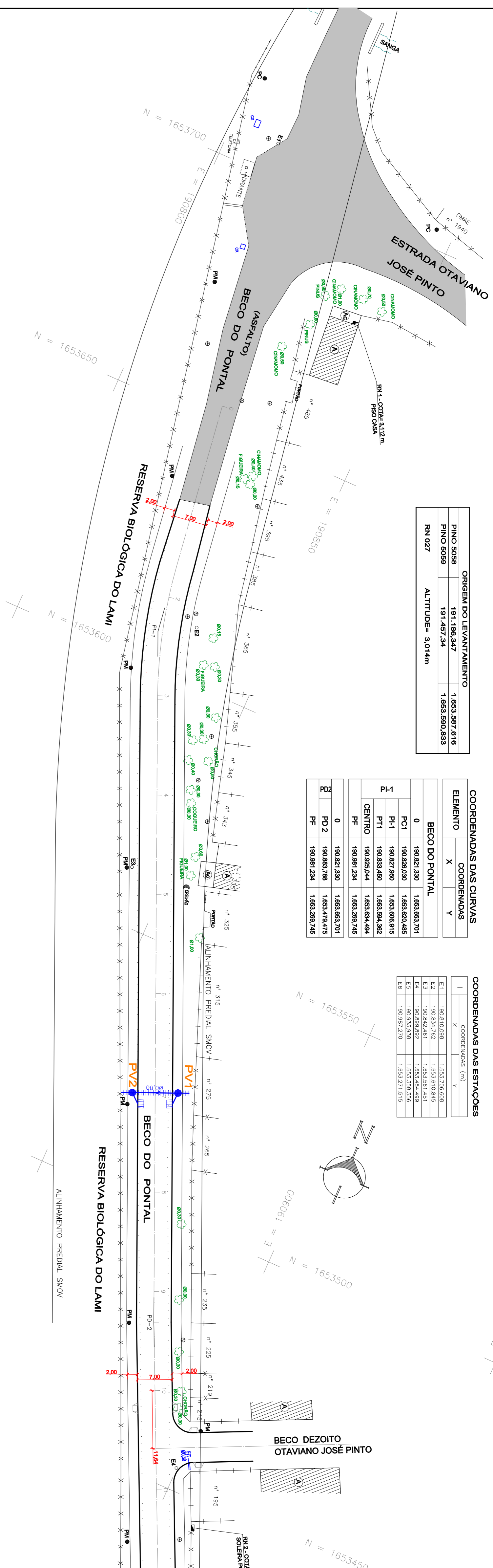


ORIGEM DO LEVANTAMENTO			
PINO 5656	191.186,347	1.653.587,619	
PINO 5659	191.457,334	1.653.590,633	
RN 027			ALTITUDE: 3,014m

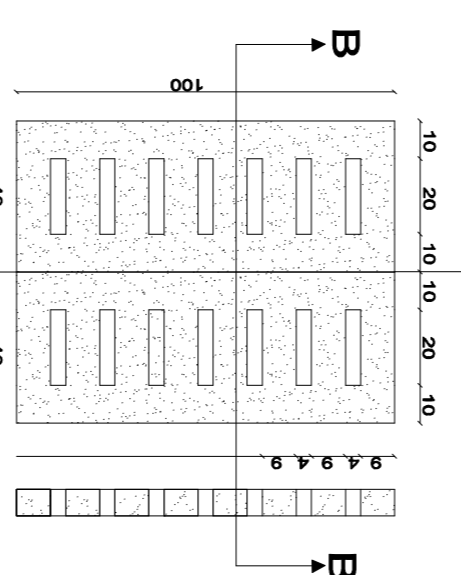
COORDENADAS DAS CURVAS			
ELEMENTO	X	Y	
<b>BECO DO PONTAL</b>			
0	160.827.330	1.653.653.701	
PC1	160.826.030	1.653.620.485	
PI-1	160.827.950	1.653.606.915	
PT1	160.833.490	1.653.594.382	
PC2	160.832.044	1.653.634.464	
PF	160.801.234	1.653.580.745	
0	160.827.330	1.653.653.701	
PC 2	160.863.799	1.653.479.475	
PF	160.801.234	1.653.580.745	

COORDENADAS DAS ESTAÇÕES			
I	X	Y	
E.1	190.813,098	1.653.706,698	
E.2	190.813,098	1.653.706,698	
E.3	190.842,481	1.653.561,451	
E.4	190.809,892	1.653.454,499	
E.5	190.833,938	1.653.598,598	
E.6	190.827,470	1.653.571,570	

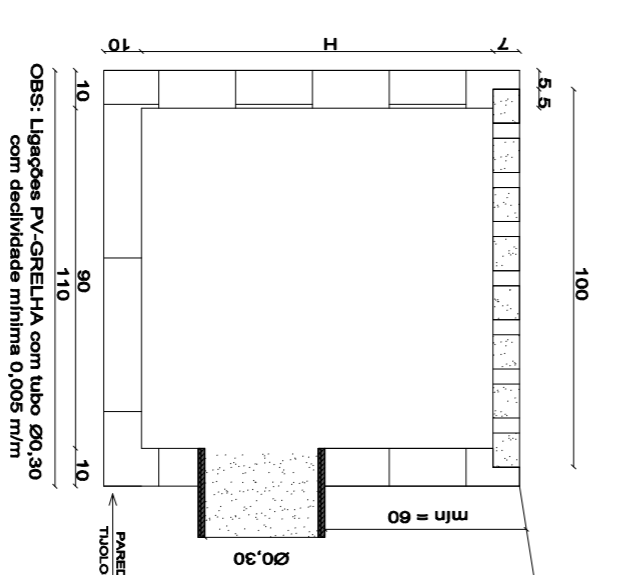


### GRELHA (GR) FARROUPILHA EM CONCRETO ARMADO (DIMENSÕES em cm)

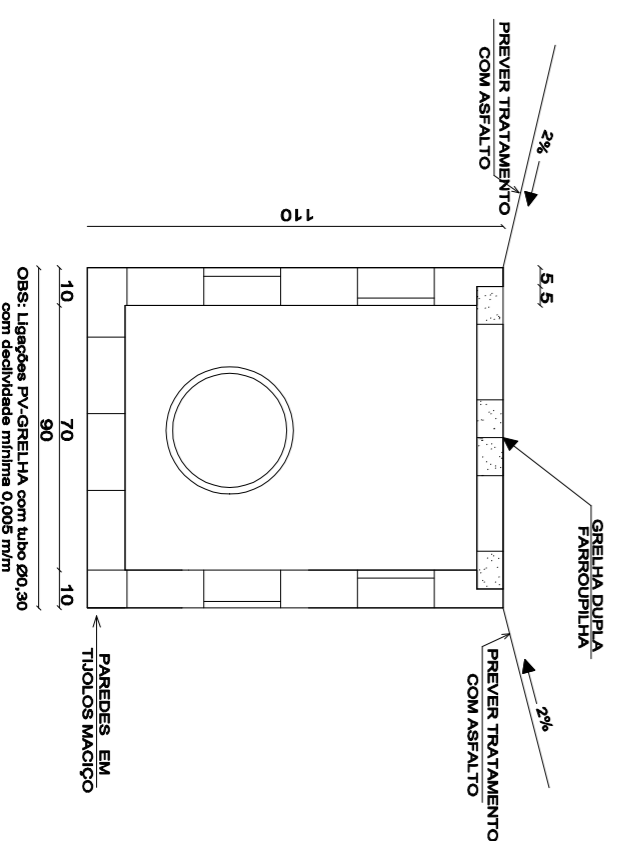
PLANTA BAIXA



CORTE AA'

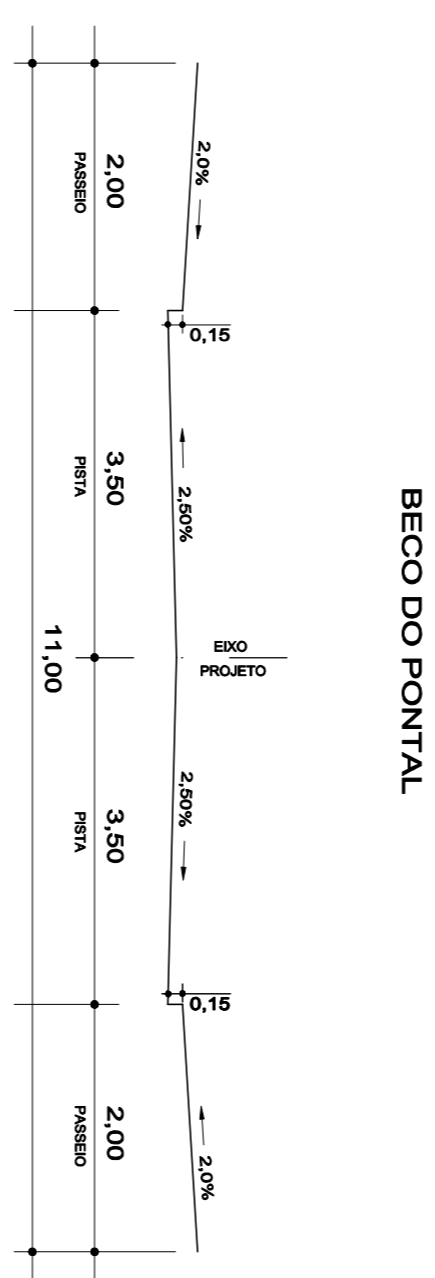


CORTE BB'

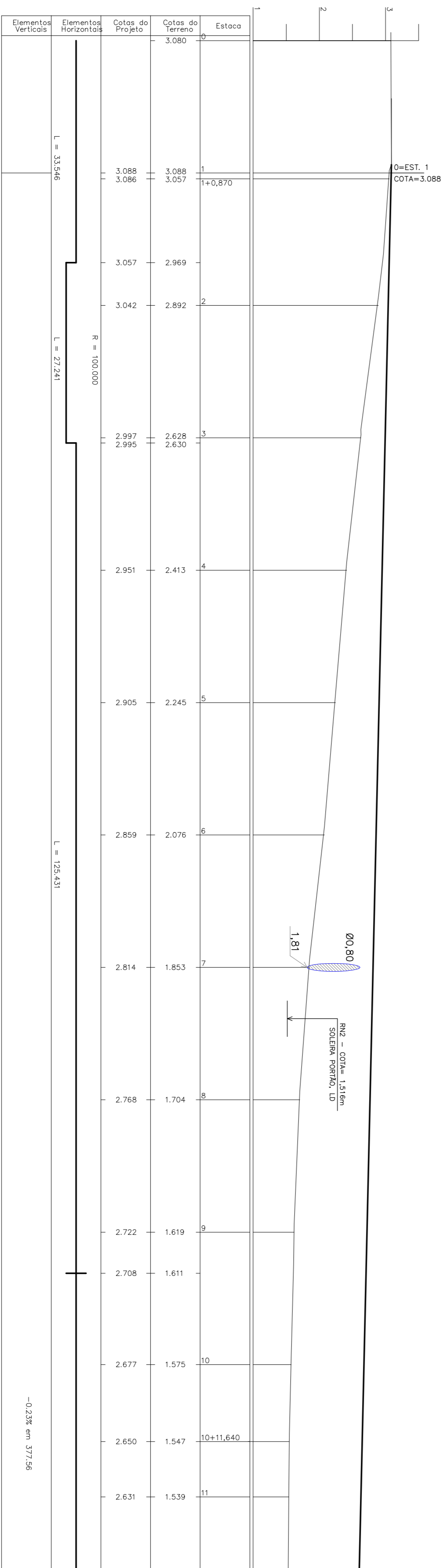
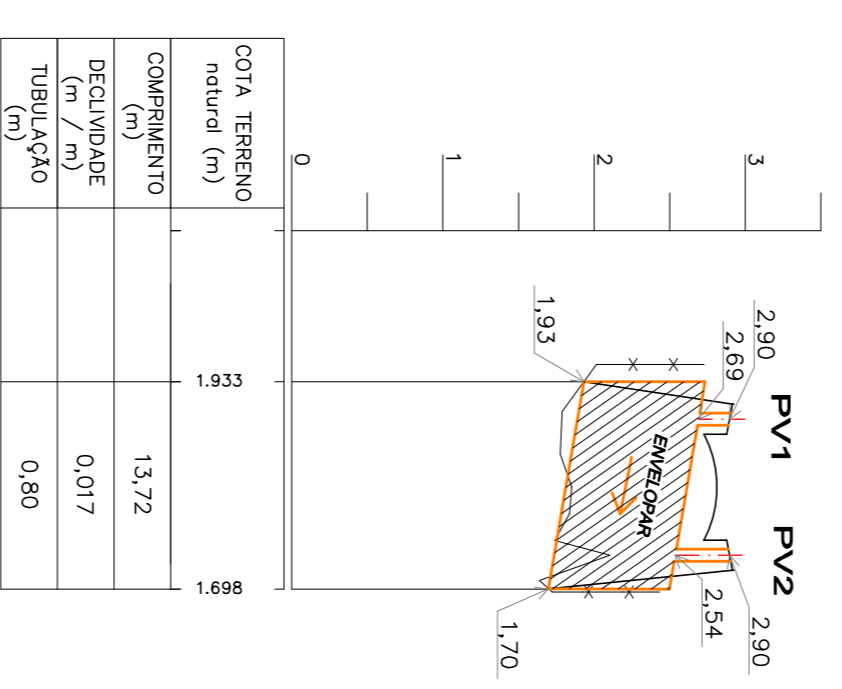


ESCALA: 1/20

### SEÇÃO TRANSVERSAL TIPO SEM ESCALA



### TRAVESSIA 1 EST. 7



**PREFEITURA MUNICIPAL DE PORTO ALEGRE**  
DEPARTAMENTO DE ESGOTOS PLUVIAIS

**PROJETO DE DRENAGEM SUPERFICIAL**  
BECO DO PONTAL

PERFIL 1/2

Eng° MILTON DUPONT - GRÉ/RS 29463

Eng° EDUARDO ZAMBRANO

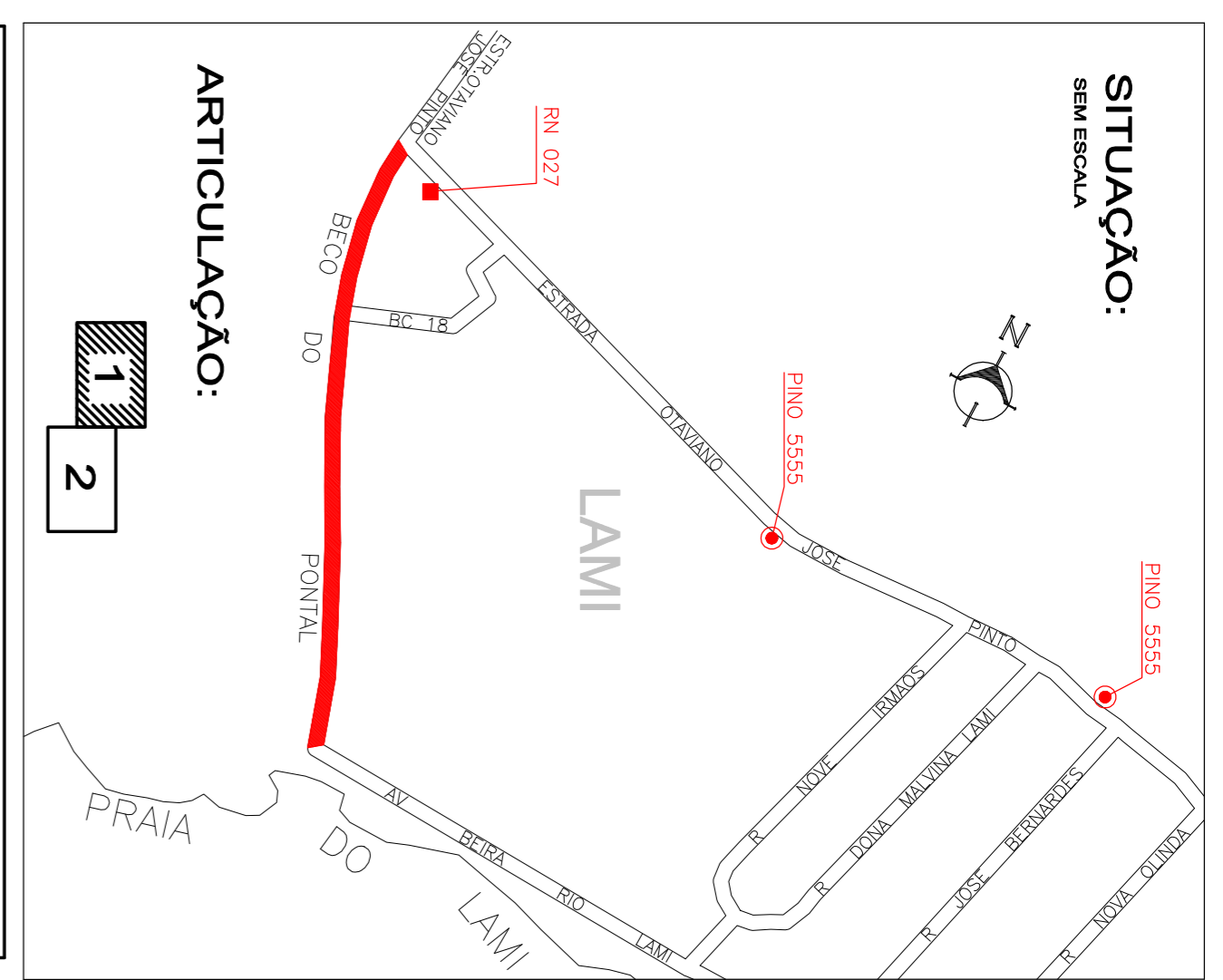
Eng° SÉRGIO L. D. ZIMMERMANN

RESUMO/PROPOSTA: Luf Fisp/Mack

ESCALAS: H=1:500 V=1:150

DATA: FEVEREIRO-2008

ARQUIVO: Beco do Pontal - DRENAGEM.dwg



**SITUAÇÃO:**

SEM ESCALA

**CONVENÇÕES:**

REDE PROJETADA

REDE EXISTENTE

ENVELOPAR REDE

GRELHA FARROUPILHA DUPLA

**OBS.:**

- REDE DEVERÁ SER IMPLANTADA CONFORME CE/DEP

- ENVELOPAR REDE COM RECOPRIMENTO MENOR QUE NA CALÇADA : 0,60 m

NA PISTA : 1,00 m