

GOVERNO DO ESTADO



CEARÁ
AVANÇANDO NAS MUDANÇAS



ELABORAÇÃO DO PROJETO TÉCNICO EXECUTIVO
DAS OBRAS DE ADUTORA PARA
TRANSFERÊNCIA À CAGECE / KFW

PROJETO DA ADUTORA DE SACO VERDE

VOLUME 17

AS BUILT

TOMO II - DESENHOS

CONTRATO N.º 20/2000/SRH

PESO

Projeto de Engenharia e
Supervisão de Obras

FORTALEZA NOVEMBRO DE 2000

GOVERNO DO ESTADO



Lote: 02690 - Prep () Scan () Index ()
Projeto Nº 269/02/14
Volume _____ / _____
Qtd A4 _____ Qtd A3 _____
Qtd A2 _____ Qtd A1 _____
Qtd A0 _____ Outros _____

ELABORAÇÃO DO PROJETO TÉCNICO EXECUTIVO DAS OBRAS DE ADUTORAS PARA TRANSFERÊNCIA À CAGECE/KFW

PROJETO DA ADUTORA DO SACO VERDE

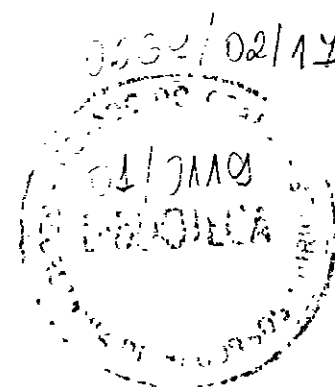
VOLUME 17

TOMO II - DESENHOS

CONTRATO Nº 20/2000/SRH

AS BUILT

APRESENTAÇÃO



APRESENTAÇÃO

O presente documento apresenta os serviços realizados no âmbito do Contrato N° 020/2000-SRH.firmado entre SRH - Secretaria dos Recursos Hídricos e a PESO - Projetos de Engenharia e Supervisão de Obras Ltda, para elaboração do projeto Técnico Executivo das Obras de Adutoras para Transferência à CAGECE/KFW

Os estudos realizados, conforme os termos de referência, são apresentados nos seguintes volumes, integrantes do acervo do projeto executivo

Vol.1 - Estudos Básicos.

Vol.2 - Projeto AS BUILT da adutora do Km 20

Tom I - texto

Tom II Desenhos

Vol.3 - Projeto AS BUILT da adutora Itacima Água verde

Tom I - texto

Tom II - Desenhos

Vol 4 - Projeto AS BUILT da adutora Santa Rosa, Tab. Grande, São Pedro e Primavera

Tom I - texto

Tom II - Desenhos

Vol 5 - Projeto ASBUILT da adutora São Miguel dos Amancios.

Tom I - texto

Tom II - Desenhos

Vol.6 - Projeto ASBUILT da adutoras de Palestina do Cariri.

Tom I - texto

Tom II - Desenhos

Vol.7 - Projeto ASBUILT da adutoras de Cuncas e Prazees.

Tom I - texto

Tom II - Desenhos

Vol.8 - Projeto ASBUILT da adutora de Iara.

Tom I - texto

Tom II - Desenhos

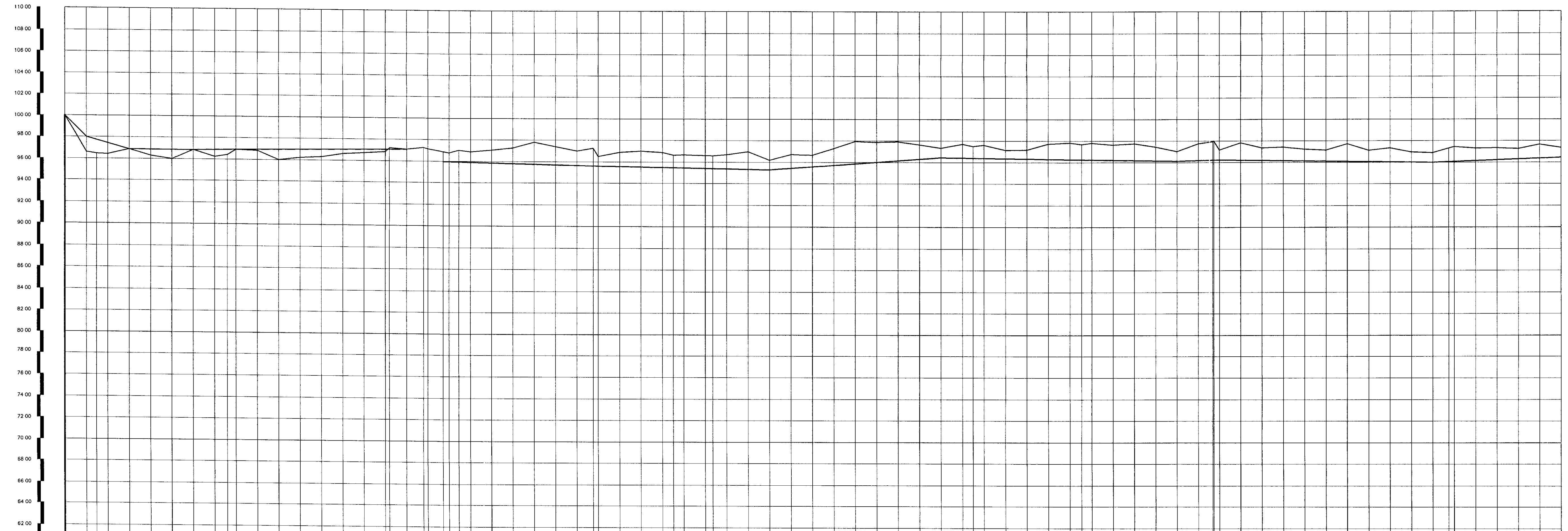
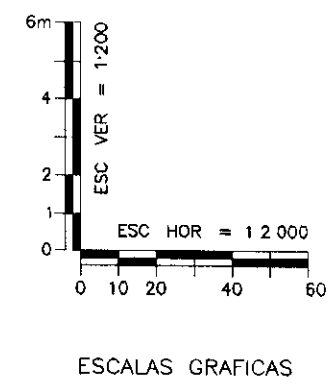
- Vol.9 - Projeto ASBUILT da adutora de Itagua.
 Tomo I - texto
 Tomo II - Desenhos
- Vol.10 - Projeto ASBUILT da adutora de Roldão.
 Tomo I - texto
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- Vol.11 - Projeto ASBUILT da adutora de S. J. do Aruaru.
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- Vol.12 - Projeto ASBUILT da adutora de Eng. João Tomé
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- Vol.13 - Projeto ASBUILT da adutora do Trapia.
 Tomo I - texto
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- Vol 14 - Projeto ASBUILT da adutora de Mumbaba.
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- Vol 15 - Projeto ASBUILT da adutora de Cabeça Preta.
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- Vol.16 - Projeto ASBUILT da adutora de Tomé.
 Tomo I - texto
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- Vol.17 - Projeto ASBUILT da adutora do Saco Verde.
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- Vol.18 - Projeto ASBUILT da adutora do Cauhipe.
 Tomo I - texto e desenhos
- Vol 19 - Projeto ASBUILT da adutora do Catolé da pista.**
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- Vol.20 - Projeto ASBUILT da adutora do Corrêgo do Machado.
 Tomo I - texto
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RELAÇÃO DE DESENHOS

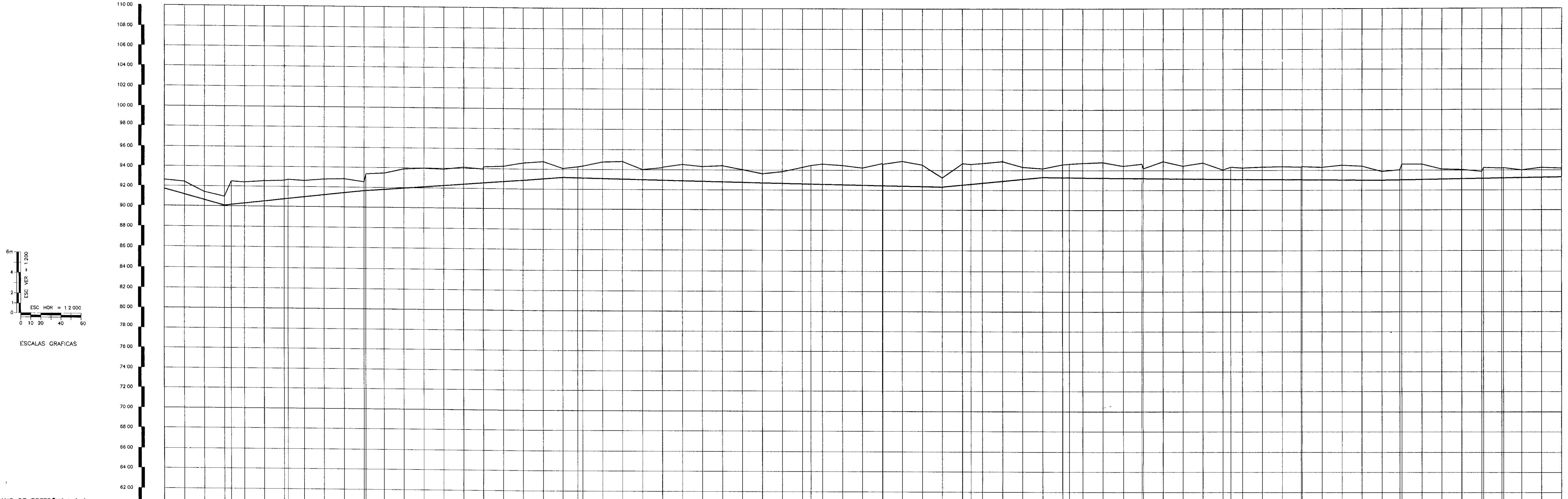
RELAÇÃO DE DESENHOS

| NÚMERO | DESENHO |
|--------|---|
| 01/12 | LOCAÇÃO CAMINHAMENTO E PERFIL LONGITUDINAL EST 0 A EST 70 |
| 02/12 | LOCAÇÃO CAMINHAMENTO E PERFIL LONGITUDINAL EST 70 A EST 140 |
| 03/12 | LOCAÇÃO CAMINHAMENTO E PERFIL LONGITUDINAL EST 140 A EST 210 |
| 04/12 | LOCAÇÃO CAMINHAMENTO E PERFIL LONGITUDINAL EST 210 A EST 280 |
| 05/12 | LOCAÇÃO CAMINHAMENTO E PERFIL LONGITUDINAL EST 280 A EST 350 |
| 06/12 | LOCAÇÃO CAMINHAMENTO E PERFIL LONGITUDINAL EST 350 A EST 420 |
| 07/12 | LOCAÇÃO CAMINHAMENTO E PERFIL LONGITUDINAL EST 420 A EST 490 |
| 08/12 | LOCAÇÃO CAMINHAMENTO E PERFIL LONGITUDINAL EST 490 A EST 560 |
| 09/12 | LOCAÇÃO CAMINHAMENTO E PERFIL LONGITUDINAL EST 560 A EST 580 |
| 10/12 | CAPTAÇÃO, PLANTA BAIXA E CORTES |
| 11/12 | LAY OUT DA ETA, FILTRO RESERV APOIADO, E ESTAÇÃO ELEVATÓRIA PLANTA BAIXA E CORTES |
| 12/12 | RESERV ELEVADO, EQUIPAMENTOS HDROMECÂNICOS PLANTA BAIXA E CORTES |



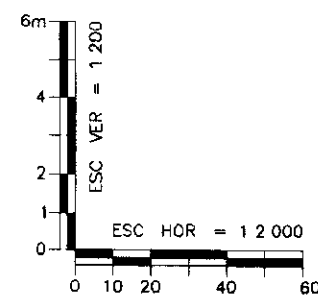
PLANO DE REFERÊNCIA (m) - 60.00

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| NÚMERO DAS ESTACAS | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 | 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| COTA DO TERRENO NATURAL (m) | 100.000 | 96.610 | 96.479 | 96.416 | 96.371 | 96.375 | 96.318 | 96.270 | 96.435 | 96.525 | 96.636 | 96.698 | 96.672 | 96.624 | 96.552 | 96.452 | 96.329 | 96.179 | 96.004 | 95.804 | 95.579 | 95.329 | 95.054 | 94.754 | 94.429 | 94.069 | 93.674 | 93.244 | 92.774 | 92.264 | 91.714 | 91.124 | 90.494 | 89.824 | 89.114 | 88.364 | 87.574 | 86.744 | 85.874 | 84.964 | 84.014 | 83.024 | 82.004 | 80.954 | 79.874 | 78.754 | 77.594 | 76.394 | 75.154 | 73.874 | 72.554 | 71.194 | 69.794 | 68.354 | 66.874 | 65.354 | 63.794 | 62.194 | 60.554 | 58.874 | 57.154 | 55.394 | 53.594 | 51.754 | 49.874 | 47.954 | 45.994 | 43.994 | 41.954 | 39.874 | 37.754 | 35.594 | 33.394 | 31.154 | 28.874 | 26.554 | 24.194 | 21.794 | 19.354 | 16.874 | 14.354 | 11.794 | 9.194 | 6.554 | 3.874 | 1.154 | -1.594 | -4.294 | -6.954 | -9.574 | -12.154 | -14.694 | -17.194 | -19.654 | -22.074 | -24.454 | -26.794 | -29.094 | -31.354 | -33.574 | -35.754 | -37.894 | -39.994 | -42.054 | -44.074 | -46.054 | 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-41.954 | -40.074 | -38.154 | -36.194 | -34.194 | -32.154 | -30.074 | -27.954 | -25.794 | -23.594 | -21.354 | -19.074 | -16.754 | -14.394 | -11.994 | -9.554 | -7.074 | -4.554 | -2.074 | 0.454 | 2.874 | 5.254 | 7.594 | 9.894 | 12.154 | 14.374 | 16.554 | 18.694 | 20.794 | 22.854 | 24.874 | 26.854 | 28.794 | 30.694 | 32.554 | 34.374 | 36.154 | 37.894 | 39.594 | 41.254 | 42.874 | 44.454 | 45.994 | 47.494 | 48.954 | 50.374 | 51.754 | 53.094 | 54.394 | 55.654 | 56.874 | 58.054 | 59.194 | 60.294 | 61.354 | 62.374 | 63.354 | 64.294 | 65.194 | 66.054 | 66.874 | 67.654 | 68.394 | 69.094 | 69.754 | 70.374 | 70.954 | 71.494 | 72.054 | 72.574 | 73.054 | 73.494 | 73.894 | 74.254 | 74.574 | 74.854 | 75.094 | 75.294 | 75.454 | 75.574 | 75.654 | 75.694 | 75.694 | 75.654 | 75.574 | 75.454 | 75.294 | 75.094 | 74.854 | 74.574 | 74.254 | 73.894 | 73.494 | 73.054 | 72.574 | 72.054 | 71.494 | 70.854 | 70.154 | 69.394 | 68.594 | 67.754 | 66.874 | 65.954 | 64.994 | 63.994 | 62.954 | 61.874 | 60.754 | 59.594 | 58.394 | 57.154 | 55.874 | 54.554 | 53.194 | 51.794 | 50.354 | 48.874 | 47.354 | 45.794 | 44.194 | 42.554 | 40.874 | 39.154 | 37.394 | 35.594 | 33.754 | 31.874 | 29.954 | 27.994 | 25.994 | 23.954 | 21.874 | 19.754 | 17.594 | 15.394 | 13.154 | 10.874 | 8.554 | 6.194 | 3.794 | 1.354 | -1.074 | -3.354 | -5.574 | -7.754 | -9.894 | -11.994 | -14.054 | -16.074 | -18.054 | -20.074 | -22.054 | -24.074 | -26.054 | -28.074 | -30.054 | -32.074 | -34.054 | -36.074 | -38.054 | -40.074 | -42.054 | -44.074 | -46.054 | -48.074 | -50.054 | -52.074 | -54.054 | -56.074 | -58.054 | -60.074 | -62.054 | -64.074 | -66.054 | -68.074 | -70.054 | -72.074 | -74.054 | -76.074 | -78.054 | -80.074 | -82.054 | -84.074 | -86.054 | -88.074 | -90.054 | -92.074 | -94.054 | -96.074 | -98.054 | -100.074 | -102.054 | -104.074 | -106.054 | -108.074 | -110.054 | -112.074 | -114.054 | -116.074 | -118.054 | -120.074 | -122.054 | -124.074 | -126.054 | -128.074 | -130.054 | -132.074 | -134.054 | -136.074 | -138.054 | -140.074 | -142.054 | -144.074 | -146.054 | -148.074 | -150.054 | -152.074 | -154.054 | -156.074 | -158.054 | -160.074 | -162.054 | -164.074 | -166.054 | -168.074 | -170.054 | -172.074 | -174.054 | -176.074 | -178.054 | -180.074 | -182.054 | -184.074 | -186.054 | -188.074 | -190.054 | -192.074 | -194.054 | -196.074 | -198.054 | -200.074 | -202.054 | -204.074 | -206.054 | -208.074 | -210.054 | -212.074 | -214.054 | -216.074 | -218.054 | -220.074 | -222.054 | -224.074 | -226.054 | -228.074 | -230.054 | -232.074 | -234.054 | -236.074 | -238.054 | -240.074 | -242.054 | -244.074 | -246.054 | -248.074 | -250.054 | -252.074 | -254.054 | -256.074 | -258.054 | -260.074 | -262.054 | -264.074 | -266.054 | -268.074 | -270.054 | -272.074 | -274.054 | -276.074 | -278.054 | -280.074 | -282.054 | -284.074 | -286.054 | -288.074 | -290.054 | -292.074 | -294.054 | -296.074 | -298.054 | -300.074 | -302.054 | -304.074 | -306.054 | -308.074 | -310.054 | -312.074 | -314.054 | -316.074 | -318.054 | -320.074 | -322.054 | -324.074 | -326.054 | -328.074 | -330.054 | -332.074 | -334.054 | -336.074 | -338.054 | -340.074 | -342.054 | -344.074 | -346.054 | -348.074 | -350.054 | -352.074 | -354.054 | -356.074 | -358.054 | -360.074 | -362.054 | -364.074 | -366.054 | -368.074 | -370.054 | -372.074 | -374.054 | -376.074 | -378.054 | -380.074 | -382.054 | -384.074 | -386.054 | -388.074 | -390.054 | -392.074 | -394.054 | -396.074 | -398.054 | -400.074 | -402.054 | -404.074 | -406.054 | -408.074 | -410.054 | -412.074 | -414.054 | -416.074 | -418.054 | -420.074 | -422.054 | -424.074 | -426.054 | -428.074 | -430.054 | -432.074 | -434.054 | -436.074 | -438.054 | -440.074 | -442.054 | -444.074 | -446.054 | -448.074 | -450.054 | -452.074 | -454.054 | -456.074 | -458.054 | -460.074 | -462.054 | -464.074 | -466.054 | -468.074 | -470.054 | -472.074 | -474.054 | -476.074 | -478.054 | -480.074 | -482.054 | -484.074 | -486.054 | -488.074 | -490.054 | -492.074 | -494.054 | -496.074 | -498.054 | -500.074 | -502.054 | -504.074 | -506.054 | -508.074 | -510.054 | -512.074 | -514.054 | -516.074 | -518.054 | -520.074 | -522.054 | -524.074 | -526.054 | -528.074 | -530.054 | -532.074 | -534.054 | -536.074 | -538.054 | -540.074 | -542.054 | -544.074 | -546.054 | -548.074 | -550.054 | -552.074 | -554.054 | -556.074 | -558.054 | -560.074 | -562.054 | -564.074 | -566.054 | -568.074 | -570.054 | -572.074 | -574.054 | -576.074 | -578.054 | -580.074 | -582.054 | -584.074 | -586.054 | -588.074 | -590.054 | -592.074 | -594.054 | -596.074 | -598.054 | -600.074 | -602.054 | -604.074 | -606.054 | -608.074 | -610.054 | -612.074 | -614.054 | -616.074 | -618.054 | -620.074 | -622.054 | -624.074 | -626.054 | -628.074 | -630.054 | -632.074 | -634.054 | -636.074 | -638.054 | -640.074 | -642.054 | -644.074 | -646.054 | -648.074 | -650.054 | -652.074 | -654.054 | -656.074 | -658.054 | -660.074 | -662.054 | -664.074 | -666.054 | -668.074 | -670.054 | -672.074 | -674.054 | -676.074 | -678.054 | -680.074 | -682.054 | -684.074 | -686.054 | -688.074 | -690.054 | -692.074 | -694.054 | -696.074 | -698.054 | -700.074 | -702.054 | -704.074 | -706.054 | -708.074 | -710.054 | -712.074 | -714.054 | -716.074 | -718.054 | -720.074 | -722.054 | -724.074 | -726.054 | -728.074 | -730.054 | -732.074 | -734.054 | -736.074 | -738.054 | -740.074 | -742.054 | -744.074 | -746.054 | -748.074 | -750.054 | -752.074 | -754.054 | -756.074 | -758.054 | -760.074 | -762.054 | -764.074 | -766.054 | -768.074 | -770.054 | -772.074 | -774.054 | -776.074 | -778.054 | -780.074 | -782.054 | -784.074 | -786.054 | -788.074 | -790.054 | -792.074 | -794.054 | -796.074 | -798.054 | -800.074 | -802.054 | -804.074 | -806.054 | -808.074 | -810.054 | -812.074 | -814.054 | -816.074 | -818.054 | -820.074 | -822.054 | -824.074 | -826.054 | -828.074 | -830.054 | -832.074 | -834.054 | -836.074 | -838.054 | -840.074 | -842.054 | -844.074 | -846.054 | -848.074 | -850.054 | -852.074 | -854.054 | -856.074 | -858.054 | -860.074 | -862.054 | -864.074 | -866.054 | -868.074 | -870.054 | -872.074 | -874.054 | -876.074 | -878.054 | -880.074 | -882.054 | -884.074 | -886.054 | -888.074 | -890.054 | -892.074 | -894.054 | -896.074 | -898.054 | -900.074 | -902.054 | -904.074 | -906.054 | -908.074 | -910.054 | -912.074 | -914.054 | -916.074 | -918.054 | -920.074 | -922.054 | -924.074 | -926.054 | -928.074 | -930.054 | -932.074 | -934.054 | -936.074 | -938.054 | -940.074 | -942.054 | -944.074 | -946.054 | -948.074 | -950.054 | -952.074 | -954.054 | -956.074 | -958.054 | -960.074 | -962.054 | -964.074 | -966.054 | -968.074 | -970.054 | -972.074 | -974.054 | -976.074 | -978.054 | -980.074 | -982.054 | -984.074 | -986.054 | -988.074 | -990.054 | -992.074 | -994.054 | -996.074 | -998.054 | -1000.074 | -1002.054 | -1004.074 | -1006.054 | -1008.074 | -1010.054 | -1012.074 | -1014.054 | -1016.074 | -1018.054 | -1020.074 | -1022.054 | -1024.074 | -1026.054 | -1028.074 | -1030.054 | -1032.074 | -1034.054 | -1036.074 | -1038.054 | -1040.074 | -1042.054 | -1044.074 | -1046.054 | -1048.074 | -1050.054 | -1052.074 | -1054.054 | -1056.074 | -1058.054 | -1060.074 | -1062.054 | -1064.074 | -1066.054 | -1068.074 | -1070.054 | -1072.074 | -1074.054 | -1076.074 | -1078.054 | -1080.074 | -1082.054 | -1084.074 | -1086.054 | -1088.074 | -1090.054 | -1092.074 | -1094.054 | -1096.074 | -1098.054 | -1100.074 | -1102.054 | -1104.074 | -1106.054 | -1108.074 | -1110.054 | -1112.074 | -1114.054 | -1116.074 | -1118.054 | -1120.074 | -1122.054 | -1124.074 | -1126.054 | -1128.074 | -1130.054 | -1132.074 | -1134.054 | -1136.074 | -1138.054 | -1140.074 | -1142.054 | -1144.074 | -1146.054 | -1148.074 | -1150.054 | -1152.074 | -1154.054 | -1156.074 | -1158.054 | -1160.074 | -1162.054 | -1164.074 | -1166.054 | -1168.074 | -1170.054 | -1172.074 | -1174.054 | -1176.074 | -1178.054 | -1180.074 | -1182.054 | -1184.074 | -1186.054 | -1188.074 | -1190.054 | -1192.074 | -1194.054 | -1196.074 | -1198.054 | -1200.074 | -1202.054 | -1204.074 | -1206.054 | -1208.074 | -1210.054 | -1212.074 | -1214.054 | -1216.074 | -1218.054 | -1220.074 | -1222.054 | -1224.074 | -1226.054 | -1228.074 | -1230.054 | -1232.074 | -1234.054 | -1236.074 | -1238.054 | -1240.074 | -1242.054 | -1244.074 | -1246.054 | -1248.074 | -1250.054 | -1252.074 | -1254.054 | -1256.074 | -1258.054 | -1260.074 | -1262.054 | -1264.074 | -1266.054 | -1268.074 | -1270.054 | -1272.074 | -1274.054 | -1276.074 | -1278.054 | -1280.074 | -1282.054 | -1284.074 | -1286.054 | -1288.074 |

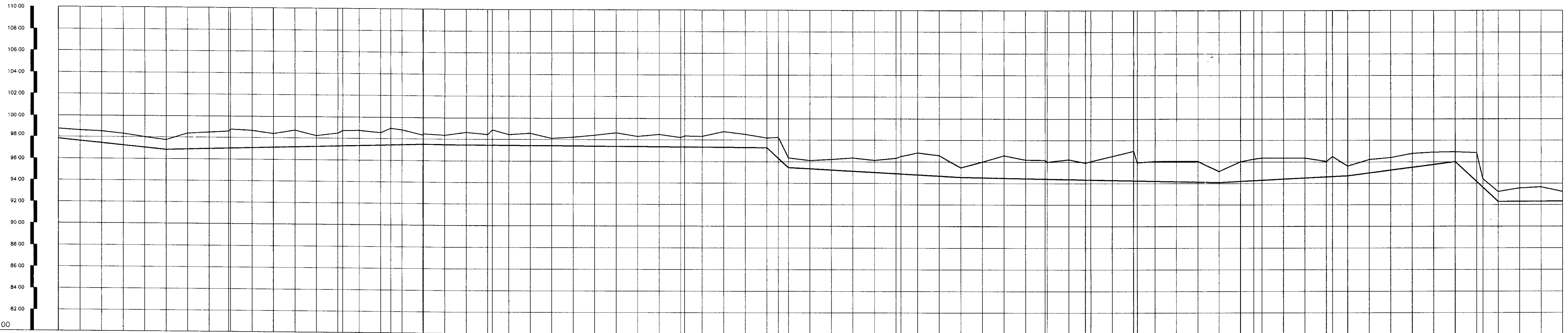


PLANO DE REFERÊNCIA (m) - 60,00

| NÚMERO DAS ESTACAS | 210 | 211 | 212 | 213 | 214 | 215 | 216 | 217 | 218 | 219 | 220 | 221 | 222 | 223 | 224 | 225 | 226 | 227 | 228 | 229 | 230 | 231 | 232 | 233 | 234 | 235 | 236 | 237 | 238 | 239 | 240 | 241 | 242 | 243 | 244 | 245 | 246 | 247 | 248 | 249 | 250 | 251 | 252 | 253 | 254 | 255 | 256 | 257 | 258 | 259 | 260 | 261 | 262 | 263 | 264 | 265 | 266 | 267 | 268 | 269 | 270 | 271 | 272 | 273 | 274 | 275 | 276 | 277 | 278 | 279 | 280 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------|--------|---------|--------|---------|--------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------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| COTA DO TERRENO NATURAL (m) | 91,200 | 92,668 | 92,143 | 91,296 | 90,960 | 90,960 | 91,350 | 92,420 | 92,000 | 92,580 | 92,250 | 92,830 | 92,400 | 92,980 | 92,550 | 93,130 | 92,700 | 93,280 | 92,850 | 93,430 | 93,000 | 93,580 | 93,150 | 93,730 | 93,300 | 93,880 | 93,450 | 94,030 | 93,600 | 94,180 | 93,750 | 94,330 | 93,900 | 94,450 | 94,020 | 94,570 | 94,140 | 94,690 | 94,260 | 94,810 | 94,380 | 94,930 | 94,500 | 95,050 | 94,620 | 95,170 | 94,740 | 95,290 | 94,860 | 95,410 | 94,980 | 95,530 | 95,080 | 95,630 | 95,200 | 95,750 | 95,320 | 95,870 | 95,440 | 95,990 | 95,560 | 96,110 | 95,680 | 96,230 | 95,800 | 96,350 | 95,920 | 96,470 | 96,040 | 96,590 | 96,160 | 96,710 | 96,280 | 96,830 | 96,400 | 96,950 | 96,520 | 97,070 | 96,640 | 97,190 | 96,760 | 97,310 | 96,880 | 97,430 | 97,000 | 97,550 | 97,120 | 97,670 | 97,240 | 97,790 | 97,360 | 97,910 | 97,480 | 98,030 | 97,600 | 98,150 | 97,720 | 98,270 | 97,840 | 98,390 | 97,960 | 98,510 | 98,080 | 98,630 | 98,200 | 98,750 | 98,320 | 98,870 | 98,440 | 98,990 | 98,560 | 99,110 | 98,680 | 99,230 | 98,800 | 99,350 | 98,920 | 99,470 | 99,040 | 99,590 | 99,160 | 99,710 | 99,280 | 99,830 | 99,400 | 99,950 | 99,520 | 100,070 | 99,640 | 100,190 | 99,760 | 100,310 | 99,880 | 100,430 | 100,000 | 100,550 | 100,120 | 100,670 | 100,240 | 100,790 | 100,360 | 100,910 | 100,480 | 101,030 | 100,600 | 101,150 | 100,720 | 101,270 | 100,840 | 101,390 | 100,960 | 101,510 | 101,080 | 101,630 | 101,200 | 101,750 | 101,320 | 101,870 | 101,440 | 101,990 | 101,560 | 102,110 | 101,680 | 102,230 | 101,800 | 102,350 | 101,920 | 102,470 | 102,040 | 102,590 | 102,160 | 102,710 | 102,280 | 102,830 | 102,400 | 102,950 | 102,520 | 103,070 | 102,640 | 103,190 | 102,760 | 103,310 | 102,880 | 103,430 | 102,960 | 103,570 | 103,040 | 103,690 | 103,160 | 103,810 | 103,280 | 103,930 | 103,400 | 104,050 | 103,520 | 104,170 | 103,640 | 104,310 | 103,760 | 104,430 | 103,880 | 104,590 | 103,960 | 104,710 | 104,040 | 104,830 | 104,120 | 104,950 | 104,200 | 105,070 | 104,280 | 105,190 | 104,360 | 105,310 | 104,440 | 105,430 | 104,520 | 105,590 | 104,600 | 105,710 | 104,680 | 105,830 | 104,760 | 105,950 | 104,840 | 106,070 | 104,920 | 106,190 | 105,000 | 106,310 | 105,080 | 106,430 | 105,160 | 106,550 | 105,240 | 106,670 | 105,320 | 106,790 | 105,400 | 106,910 | 105,480 | 107,030 | 105,560 | 107,150 | 105,640 | 107,270 | 105,720 | 107,390 | 105,800 | 107,510 | 105,880 | 107,630 | 105,960 | 107,750 | 106,040 | 107,870 | 106,120 | 107,990 | 106,200 | 108,110 | 106,280 | 108,230 | 106,360 | 108,350 | 106,440 | 108,470 | 106,520 | 108,590 | 106,600 | 108,710 | 106,680 | 108,830 | 106,760 | 108,950 | 106,840 | 109,070 | 106,920 | 109,190 | 107,000 | 109,310 | 107,080 | 109,430 | 107,160 | 109,550 | 107,240 | 109,670 | 107,320 | 109,790 | 107,400 | 109,910 | 107,480 | 110,030 | 107,560 | 110,150 | 107,640 | 110,270 | 107,720 | 110,390 | 107,800 | 110,510 | 107,880 | 110,630 | 107,960 | 110,750 | 108,040 | 110,870 | 108,120 | 110,990 | 108,200 | 111,110 | 108,280 | 111,230 | 108,360 | 111,350 | 108,440 | 111,470 | 108,520 | 111,590 | 108,600 | 111,710 | 108,680 | 111,830 | 108,760 | 111,950 | 108,840 | 112,070 | 108,920 | 112,190 | 109,000 | 112,310 | 109,080 | 112,430 | 109,160 | 112,550 | 109,240 | 112,670 | 109,320 | 112,790 | 109,400 | 112,910 | 109,480 | 113,030 | 109,560 | 113,150 | 109,640 | 113,270 | 109,720 | 113,390 | 109,800 | 113,510 | 109,880 | 113,630 | 109,960 | 113,750 | 110,040 | 113,870 | 110,120 | 113,990 | 110,200 | 114,110 | 110,280 | 114,230 | 110,360 | 114,350 | 110,440 | 114,470 | 110,520 | 114,590 | 110,600 | 114,710 | 110,680 | 114,830 | 110,760 | 114,950 | 110,840 | 115,070 | 110,920 | 115,190 | 111,000 | 115,310 | 111,080 | 115,430 | 111,160 | 115,550 | 111,240 | 115,670 | 111,320 | 115,790 | 111,400 | 115,910 | 111,480 | 116,030 | 111,560 | 116,150 | 111,640 | 116,270 | 111,720 | 116,390 | 111,800 | 116,510 | 111,880 | 116,630 | 111,960 | 116,750 | 112,040 | 116,870 | 112,120 | 116,990 | 112,200 | 117,110 | 112,280 | 117,230 | 112,360 | 117,350 | 112,440 | 117,470 | 112,520 | 117,590 | 112,600 | 117,710 | 112,680 | 117,830 | 112,760 | 117,950 | 112,840 | 118,070 | 112,920 | 118,190 | 113,000 | 118,310 | 113,080 | 118,430 | 113,160 | 118,550 | 113,240 | 118,670 | 113,320 | 118,790 | 113,400 | 118,910 | 113,480 | 119,030 | 113,560 | 119,150 | 113,640 | 119,270 | 113,720 | 119,390 | 113,800 | 119,510 | 113,880 | 119,630 | 113,960 | 119,750 | 114,040 | 119,870 | 114,120 | 119,990 | 114,200 | 120,110 | 114,280 | 120,230 | 114,360 | 120,350 | 114,440 | 120,470 | 114,520 | 120,590 | 114,600 | 120,710 | 114,680 | 120,830 | 114,760 | 120,950 | 114,840 | 121,070 | 114,920 | 121,190 | 115,000 | 121,310 | 115,080 | 121,430 | 115,160 | 121,550 | 115,240 | 121,670 | 115,320 | 121,790 | 115,400 | 121,910 | 115,480 | 122,030 | 115,560 | 122,150 | 115,640 | 122,270 | 115,720 | 122,390 | 115,800 | 122,510 | 115,880 | 122,630 | 115,960 | 122,750 | 116,040 | 122,870 | 116,120 | 122,990 | 116,200 | 123,110 | 116,280 | 123,230 | 116,360 | 123,350 | 116,440 | 123,470 | 116,520 | 123,590 | 116,600 | 123,710 | 116,680 | 123,830 | 116,760 | 123,950 | 116,840 | 124,070 | 116,920 | 124,190 | 117,000 | 124,310 | 117,080 | 124,430 | 117,160 | 124,550 | 117,240 | 124,670 | 117,320 | 124,790 | 117,400 | 124,910 | 117,480 | 125,030 | 117,560 | 125,150 | 117,640 | 125,270 | 117,720 | 125,390 | 117,800 | 125,510 | 117,880 | 125,630 | 117,960 | 125,750 | 118,040 | 125,870 | 118,120 | 125,990 | 118,200 | 126,110 | 118,280 | 126,230 | 118,360 | 126,350 | 118,440 | 126,470 | 118,520 | 126,590 | 118,600 | 126,710 | 118,680 | 126,830 | 118,760 | 126,950 | 118,840 | 127,070 | 118,920 | 127,190 | 119,000 | 127,310 | 119,080 | 127,430 | 119,160 | 127,550 | 119,240 | 127,670 | 119,320 | 127,790 | 119,400 | 127,910 | 119,480 | 128,030 | 119,560 | 128,150 | 119,640 | 128,270 | 119,720 | 128,390 | 119,800 | 128,510 | 119,880 | 128,630 | 119,960 | 128,750 | 120,040 | 128,870 | 120,120 | 128,990 | 120,200 | 129,110 | 120,280 | 129,230 | 120,360 | 129,350 | 120,440 | 129,470 | 120,520 | 129,590 | 120,600 | 129,710 | 120,680 | 129,830 | 120,760 | 129,950 | 120,840 | 130,070 | 120,920 | 130,190 | 121,000 | 130,310 | 121,080 | 130,430 | 121,160 | 130,550 | 121,240 | 130,670 | 121,320 | 130,790 | 121,400 | 130,910 | 121,480 | 131,030 | 121,560 | 131,150 | 121,640 | 131,270 | 121,720 | 131,390 | 121,800 | 131,510 | 121,880 | 131,630 | 121,960 | 131,750 | 122,040 | 131,870 | 122,120 | 131,990 | 122,200 | 132,110 | 122,280 | 132,230 | 122,360 | 132,350 | 122,440 | 132,470 | 122,520 | 132,590 | 122,600 | 132,710 | 122,680 | 132,830 | 122,760 | 132,950 | 122,840 | 133,070 | 122,920 | 133,190 | 123,000 | 133,310 | 123,080 | 133,430 | 123,160 | 133,550 | 123,240 | 133,670 | 123,320 | 133,790 | 123,400 | 133,910 | 123,480 | 134,030 | 123,560 | 134,150 | 123,640 | 134,270 | 123,720 | 134,390 | 123,800 | 134,510 | 123,880 | 134,630 | 123,960 | 134,750 | 124,040 | 134,870 | 124,120 | 134,990 | 124,200 | 135,110 | 124,280 | 135,230 | 124,360 | 135,350 | 124,440 | 135,470 | 124,520 | 135,590 | 124,600 | 135,710 | 124,680 | 135,830 | 124,760 | 135,950 | 124,840 | 136,070 | 124,920 | 136,190 | 125,000 | 136,310 | 125,080 | 136,430 | 125,160 | 136,550 | 125,240 | 136,670 | 125,320 | 136,790 | 125,400 | 136,910 | 125,480 | 137,030 | 125,560 | 137,150 | 125,640 | 137,270 | 125,720 | 137,390 | 125,800 | 137,510 | 125,880 | 137,630 | 125,960 | 137,750 | 126,040 | 137,870 | 126,120 | 137,990 | 126,200 | 138,110 | 126,280 | 138,230 | 126,360 | 138,350 | 126,440 | 138,470 | 126,520 | 138,590 | 126,600 | 138,710 | 126,680 | 138,830 | 126,760 | 138,950 | 126,840 | 139,070 | 126,920 | 139,190 | 127,000 | 139,310 | 127,080 | 139,430 | 127,160 | 139,550 | 127,240 | 139,670 | 127,320 | 139,790 | 127,400 | 139,910 | 127,480 | 140,030 | 127,560 | 140,150 | 127,640 | 140,270 | 127,720 | 140,390 | 127,800 | 140,510 | 127,880 | 140,630 | 127,960 | 140,750 | 128,040 | 140,870 | 128,120 | 140,990 | 128,200 | 141,110 | 128,280 | 141,230 | 128,360 | 141,350 | 128,440 | 141,470 | 128,520 | 141,590 | 128,600 | 141,710 | 128,680 | 141,830 | 128,760 | 141,950 | 128,840 | 142,070 | 128,920 | 142,190 | 129,000 | 142,310 | 129,080 | 142,430 | 129,160 | 142,550 | 129,240 | 142,670 | 129,320 | 142,790 | 129,400 | 142,910 | 129,480 | 143,030 | 129,560 | 143,150 | 129,640 | 143,270 | 129,720 | 143,390 | 129,800 | 143,510 | 129,880 | 143,630 | 129,960 | 143,750 | 130,040 | 143,870 | 130,120 | 143,990 | 130,200 | 144,110 | 130,280 | 144,230 | 130,360 | 144,350 | 130,440 | 144,470 | 130,520 | 144,590 | 130,600 | 144,710 | 130,680 | 144,830 | 130,760 | 144,950 | 130,840 | 145,070 | 130,920 | 145,190 | 131,000 | 145,310 | 131,080 | 145,430 | 131,160 | 145,550 | 131,240 | 145,670 | 131,320 | 145,790 | 131,400 | 145,910 | 131,480 | 146,030 | 131,560 | 146,150 | 131,640 | 146,270 | 131,720 | 146,390 | 131,800 | 146,510 | 131,880 | 146,630 | 131,960 | 146,750 | 132,040 | 146,870 | 132,120 | 146,990 | 132,200 | 147,110 | 132,280 | 147,230 | 132,360 | 147,350 | 132,440 | 147,470 | 132,520 | 147,590 | 132,600 | 147,710 | 132,680 | 147,830 | 132,760 | 147,950 | 132,840 | 148,070 | 132,920 | 148,190 | 133,000 | 148,310 | 133,080 | 148,430 | 133,160 | 148,550 | 133,240 | 148,670 | 133,320 | 148,790 | 133,400 | 148,910 | 133,480 | 149,030 | 133,560 | 149,150 | 133,640 | 149,270 | 133,720 | 149,390 | 133,800 | 149,510 | 133,880 | 149,630 | 133,960 | 149,750 | 134,040 | 149,870 | 134,120 | 149,990 | 134,200 | 150,110 | 134,280 | 150,230 | 134,360 | 150,350 | 134,440 | 150,470 | 134,520 | 150,590 | 134,600 | 150,710 | 134,680 | 150,830 | 134,760 | 150,950 | 134,840 | 151,070 | 134,920 | 151,190 | 135,000 | |

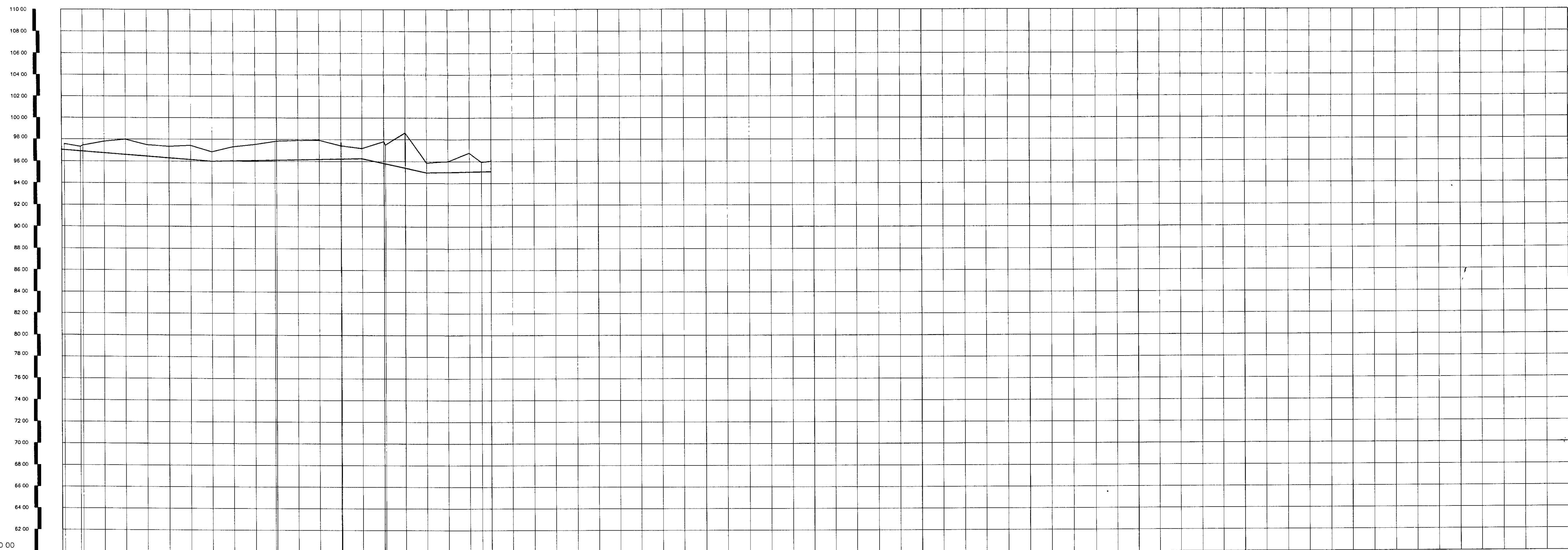
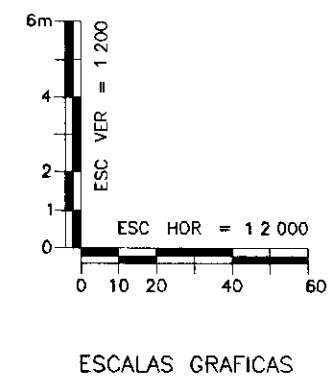


ESCALAS GRAFICAS

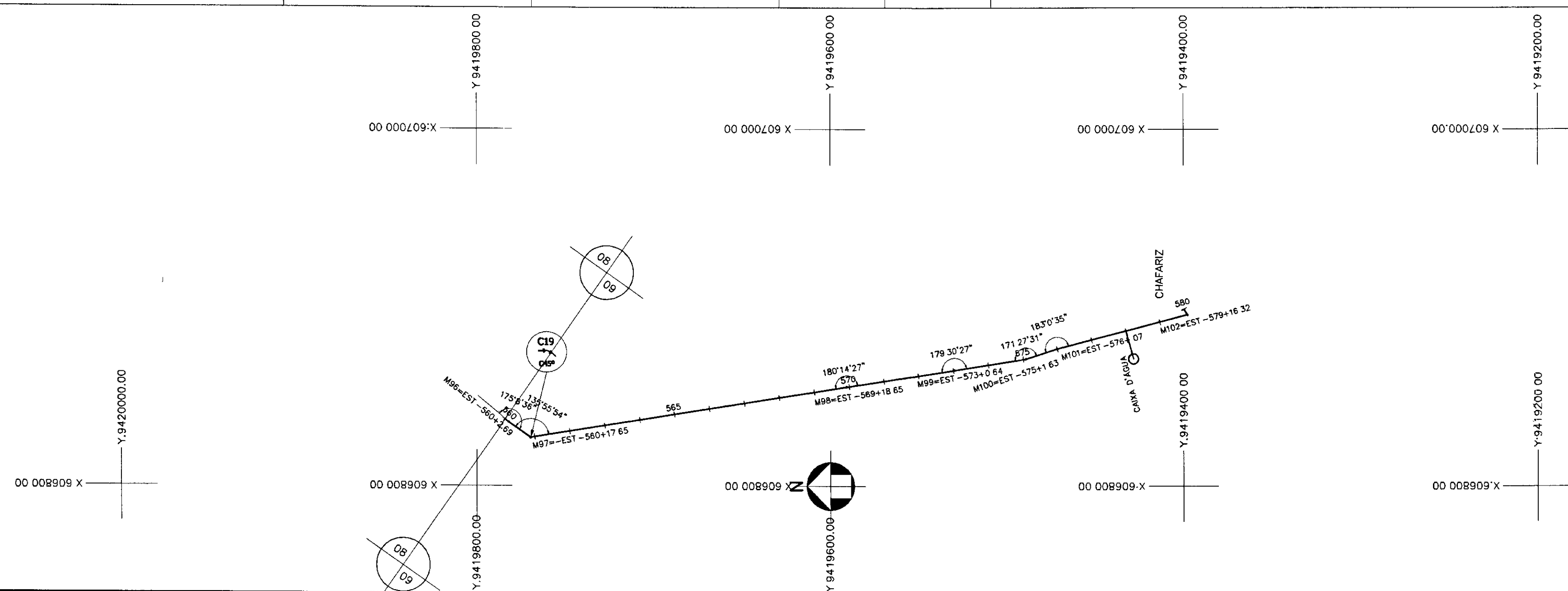


PLANO DE REFERÊNCIA (m) - 80 00

| NÚMERO DAS ESTACAS | 350 | 351 | 352 | 353 | 354 | 355 | 356 | 357 | 358 | 359 | 360 | 361 | 362 | 363 | 364 | 365 | 366 | 367 | 368 | 369 | 370 | 371 | 372 | 373 | 374 | 375 | 376 | 377 | 378 | 379 | 380 | 381 | 382 | 383 | 384 | 385 | 386 | 387 | 388 | 389 | 390 | 391 | 392 | 393 | 394 | 395 | 396 | 397 | 398 | 399 | 400 | 401 | 402 | 403 | 404 | 405 | 406 | 407 | 408 | 409 | 410 | 411 | 412 | 413 | 414 | 415 | 416 | 417 | 418 | 419 | 420 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| COTA DO TERRENO NATURAL (m) | 97,895 | 96,725 | 96,610 | 96,514 | 96,439 | 96,385 | 96,357 | 96,344 | 96,345 | 96,351 | 96,358 | 96,365 | 96,372 | 96,379 | 96,386 | 96,393 | 96,400 | 96,407 | 96,414 | 96,421 | 96,428 | 96,435 | 96,442 | 96,449 | 96,456 | 96,463 | 96,470 | 96,477 | 96,484 | 96,491 | 96,498 | 96,505 | 96,512 | 96,519 | 96,526 | 96,533 | 96,540 | 96,547 | 96,554 | 96,561 | 96,568 | 96,575 | 96,582 | 96,589 | 96,596 | 96,603 | 96,610 | 96,617 | 96,624 | 96,631 | 96,638 | 96,645 | 96,652 | 96,659 | 96,666 | 96,673 | 96,680 | 96,687 | 96,694 | 96,701 | 96,708 | 96,715 | 96,722 | 96,729 | 96,736 | 96,743 | 96,750 | 96,757 | 96,764 | 96,771 | 96,778 | 96,785 | 96,792 | 96,799 | 96,806 | 96,813 | 96,820 | 96,827 | 96,834 | 96,841 | 96,848 | 96,855 | 96,862 | 96,869 | 96,876 | 96,883 | 96,890 | 96,897 | 96,904 | 96,911 | 96,918 | 96,925 | 96,932 | 96,939 | 96,946 | 96,953 | 96,960 | 96,967 | 96,974 | 96,981 | 96,988 | 96,995 | 97,002 | 97,009 | 97,016 | 97,023 | 97,030 | 97,037 | 97,044 | 97,051 | 97,058 | 97,065 | 97,072 | 97,079 | 97,086 | 97,093 | 97,100 | 97,107 | 97,114 | 97,121 | 97,128 | 97,135 | 97,142 | 97,149 | 97,156 | 97,163 | 97,170 | 97,177 | 97,184 | 97,191 | 97,198 | 97,205 | 97,212 | 97,219 | 97,226 | 97,233 | 97,240 | 97,247 | 97,254 | 97,261 | 97,268 | 97,275 | 97,282 | 97,289 | 97,296 | 97,303 | 97,310 | 97,317 | 97,324 | 97,331 | 97,338 | 97,345 | 97,352 | 97,359 | 97,366 | 97,373 | 97,380 | 97,387 | 97,394 | 97,401 | 97,408 | 97,415 | 97,422 | 97,429 | 97,436 | 97,443 | 97,450 | 97,457 | 97,464 | 97,471 | 97,478 | 97,485 | 97,492 | 97,499 | 97,506 | 97,513 | 97,520 | 97,527 | 97,534 | 97,541 | 97,548 | 97,555 | 97,562 | 97,569 | 97,576 | 97,583 | 97,590 | 97,597 | 97,604 | 97,611 | 97,618 | 97,625 | 97,632 | 97,639 | 97,646 | 97,653 | 97,660 | 97,667 | 97,674 | 97,681 | 97,688 | 97,695 | 97,702 | 97,709 | 97,716 | 97,723 | 97,730 | 97,737 | 97,744 | 97,751 | 97,758 | 97,765 | 97,772 | 97,779 | 97,786 | 97,793 | 97,800 | 97,807 | 97,814 | 97,821 | 97,828 | 97,835 | 97,842 | 97,849 | 97,856 | 97,863 | 97,870 | 97,877 | 97,884 | 97,891 | 97,898 | 97,905 | 97,912 | 97,919 | 97,926 | 97,933 | 97,940 | 97,947 | 97,954 | 97,961 | 97,968 | 97,975 | 97,982 | 97,989 | 97,996 | 98,003 | 98,010 | 98,017 | 98,024 | 98,031 | 98,038 | 98,045 | 98,052 | 98,059 | 98,066 | 98,073 | 98,080 | 98,087 | 98,094 | 98,101 | 98,108 | 98,115 | 98,122 | 98,129 | 98,136 | 98,143 | 98,150 | 98,157 | 98,164 | 98,171 | 98,178 | 98,185 | 98,192 | 98,199 | 98,206 | 98,213 | 98,220 | 98,227 | 98,234 | 98,241 | 98,248 | 98,255 | 98,262 | 98,269 | 98,276 | 98,283 | 98,290 | 98,297 | 98,304 | 98,311 | 98,318 | 98,325 | 98,332 | 98,339 | 98,346 | 98,353 | 98,360 | 98,367 | 98,374 | 98,381 | 98,388 | 98,395 | 98,402 | 98,409 | 98,416 | 98,423 | 98,430 | 98,437 | 98,444 | 98,451 | 98,458 | 98,465 | 98,472 | 98,479 | 98,486 | 98,493 | 98,500 | 98,507 | 98,514 | 98,521 | 98,528 | 98,535 | 98,542 | 98,549 | 98,556 | 98,563 | 98,570 | 98,577 | 98,584 | 98,591 | 98,598 | 98,605 | 98,612 | 98,619 | 98,626 | 98,633 | 98,640 | 98,647 | 98,654 | 98,661 | 98,668 | 98,675 | 98,682 | 98,689 | 98,696 | 98,703 | 98,710 | 98,717 | 98,724 | 98,731 | 98,738 | 98,745 | 98,752 | 98,759 | 98,766 | 98,773 | 98,780 | 98,787 | 98,794 | 98,801 | 98,808 | 98,815 | 98,822 | 98,829 | 98,836 | 98,843 | 98,850 | 98,857 | 98,864 | 98,871 | 98,878 | 98,885 | 98,892 | 98,899 | 98,906 | 98,913 | 98,920 | 98,927 | 98,934 | 98,941 | 98,948 | 98,955 | 98,962 | 98,969 | 98,976 | 98,983 | 98,990 | 98,997 | 99,004 | 99,011 | 99,018 | 99,025 | 99,032 | 99,039 | 99,046 | 99,053 | 99,060 | 99,067 | 99,074 | 99,081 | 99,088 | 99,095 | 99,102 | 99,109 | 99,116 | 99,123 | 99,130 | 99,137 | 99,144 | 99,151 | 99,158 | 99,165 | 99,172 | 99,179 | 99,186 | 99,193 | 99,200 | 99,207 | 99,214 | 99,221 | 99,228 | 99,235 | 99,242 | 99,249 | 99,256 | 99,263 | 99,270 | 99,277 | 99,284 | 99,291 | 99,298 | 99,305 | 99,312 | 99,319 | 99,326 | 99,333 | 99,340 | 99,347 | 99,354 | 99,361 | 99,368 | 99,375 | 99,382 | 99,389 | 99,396 | 99,403 | 99,410 | 99,417 | 99,424 | 99,431 | 99,438 | 99,445 | 99,452 | 99,459 | 99,466 | 99,473 | 99,480 | 99,487 | 99,494 | 99,501 | 99,508 | 99,515 | 99,522 | 99,529 | 99,536 | 99,543 | 99,550 | 99,557 | 99,564 | 99,571 | 99,578 | 99,585 | 99,592 | 99,599 | 99,606 | 99,613 | 99,620 | 99,627 | 99,634 | 99,641 | 99,648 | 99,655 | 99,662 | 99,669 | 99,676 | 99,683 | 99,690 | 99,697 | 99,704 | 99,711 | 99,718 | 99,725 | 99,732 | 99,739 | 99,746 | 99,753 | 99,760 | 99,767 | 99,774 | 99,781 | 99,788 | 99,795 | 99,802 | 99,809 | 99,816 | 99,823 | 99,830 | 99,837 | 99,844 | 99,851 | 99,858 | 99,865 | 99,872 | 99,879 | 99,886 | 99,893 | 99,900 | 99,907 | 99,914 | 99,921 | 99,928 | 99,935 | 99,942 | 99,949 | 99,956 | 99,963 | 99,970 | 99,977 | 99,984 | 99,991 | 99,998 | 100,005 | 100,012 | 100,019 | 100,026 | 100,033 | 100,040 | 100,047 | 100,054 | 100,061 | 100,068 | 100,075 | 100,082 | 100,089 | 100,096 | 100,103 | 100,110 | 100,117 | 100,124 | 100,131 | 100,138 | 100,145 | 100,152 | 100,159 | 100,166 | 100,173 | 100,180 | 100,187 | 100,194 | 100,201 | 100,208 | 100,215 | 100,222 | 100,229 | 100,236 | 100,243 | 100,250 | 100,257 | 100,264 | 100,271 | 100,278 | 100,285 | 100,292 | 100,299 | 100,306 | 100,313 | 100,320 | 100,327 | 100,334 | 100,341 | 100,348 | 100,355 | 100,362 | 100,369 | 100,376 | 100,383 | 100,390 | 100,397 | 100,404 | 100,411 | 100,418 | 100,425 | 100,432 | 100,439 | 100,446 | 100,453 | 100,460 | 100,467 | 100,474 | 100,481 | 100,488 | 100,495 | 100,502 | 100,509 | 100,516 | 100,523 | 100,530 | 100,537 | 100,544 | 100,551 | 100,558 | 100,565 | 100,572 | 100,579 | 100,586 | 100,593 | 100,600 | 100,607 | 100,614 | 100,621 | 100,628 | 100,635 | 100,642 | 100,649 | 100,656 | 100,663 | 100,670 | 100,677 | 100,684 | 100,691 | 100,698 | 100,705 | 100,712 | 100,719 | 100,726 | 100,733 | 100,740 | 100,747 | 100,754 | 100,761 | 100,768 | 100,775 | 100,782 | 100,789 | 100,796 | 100,803 | 100,810 | 100,817 | 100,824 | 100,831 | 100,838 | 100,845 | 100,852 | 100,859 | 100,866 | 100,873 | 100,880 | 100,887 | 100,894 | 100,901 | 100,908 | 100,915 | 100,922 | 100,929 | 100,936 | 100,943 | 100,950 | 100,957 | 100,964 | 100,971 | 100,978 | 100,985 | 100,992 | 100,999 | 101,006 | 101,013 | 101,020 | 101,027 | 101,034 | 101,041 | 101,048 | 101,055 | 101,062 | 101,069 | 101,076 | 101,083 | 101,090 | 101,097 | 101,104 | 101,111 | 101,118 | 101,125 | 101,132 | 101,139 | 101,146 | 101,153 | 101,160 | 101,167 | 101,174 | 101,181 | 101,188 | 101,195 | 101,202 | 101,209 | 101,216 | 101,223 | 101,230 | 101,237 | 101,244 | 101,251 | 101,258 | 101,265 | 101,272 | 101,279 | 101,286 | 101,293 | 101,300 | 101,307 | 101,314 | 101,321 | 101,328 | 101,335 | 101,342 | 101,349 | 101,356 | 101,363 | 101,370 | 101,377 | 101,384 | 101,391 | 101,398 | 101,405 | 101,412 | 101,419 | 101,426 | 101,433 | 101,440 | 101,447 | 101,454 | 101,461 | 101,468 | 101,475 | 101,482 | 101,489 | 101,496 | 101,503 | 101,510 | 101,517 | 101,524 | 101,531 | 101,538 | 101,545 | 101,552 | 101,559 | 101,566 | 101,573 | 101,580 | 101,587 | 101,594 | 101,601 | 101,608 | 101,615 | 101,622 | 101,629 | 101,636 | 101,643 | 101,650 | 101,657 | 101,664 | 101,671 | 101,678 | 101,685 | 101,692 | 101,699 | 101,706 | 101,713 | 101,720 | 101,727 | 101,734 | 101,741 | 101,748 | 101,755 | 101,762 | 101,769 | 101,776 | 101,783 | 101,790 | 101,797 | 101,804 | 101,811 | 101,818 | 101,825 | 101,832 | 101,839 | 101,846 | 101,853 | 101,860 | 101,867 | 101,874 | 101,881 | 101,888 | 101,895 | 101,902 | 101,909 | 101,916 | 101,923 | 101,930 | 101,937 | 101,944 | 101,951 | 101,958 | 101,965 | 101,972 | 101,979 | 101,986 | 101,993 | 101,000 | 101,007 | 101,014 | 101,021 | 101,028 | 101,035 | 101,042 | 101,049 | 101,056 | 101,063 | 101,070 | 101,077 | 101,084 | 101,091 | 101,098 | 101,105 | 101,112 | 101,119 | 101,126 | 101,133 | 101,140 | 101,147 | 101,154 | 101,161 | 101,168 | 101,175 | 101,182 | 101,189 | 101,196 | 101,203 | 101,210 | 101,217 | 101,224 | 101,231 | 101,238 | 101,245 | 101,252 | 101,259 | 101,266 | 101,273 | 101,280 | 101,287 | 101,294 | 101,301 | 101,308 | 101,315 | 101,322 | 101,329 | 101,336 | 101,343 | 101,350 | 101,357 | 101,364 | 101,371 | 101,378 | 101,385 | 101,392 | 101,399 | 101,406 | 101,413 | 101,420 | 101,427 | 101,434 | 101,441 | 101,448 | 101,455 | 101,462 | 101,469 | 101,476 | 101,483 | 101,490 | 101,497 | 101,504 | 101,511 | 101,518 | 101,525 | 101,532 | 101,539 | 101,546 | 101,553 | 101,560 | 101,567 | 101,574 | 101,581 | 101,588 | 101,595 | 101,602 | 101,609 | 101,616 | 101,623 | 101,630 | 101,637 | 101,644 | 101,651 | 101,658 | 101,665 | 101,672 | 101,679 | 101,686 | 101,693 | 101,700 | 101,707 | 101,714 | 101,721 | 101,728 | 101,735 | 101,742 | 101,749 | 101,756 | 101,763 | 101,770 | 101,777 | 101,784 | 101,791 | 101,798 | 101,805 | 101,812 | 101,819 | 101,826 | 101,833 | 101,840 | 101,847 | 101,854 | 101,861 | 101,868 | 101,875 | 101,882 | 101,889 | 101,896 | 101,903 | 101,910 | 101,917 | 101,924 | 101,931 | 101,938 | 101,945 | 101,952 | 101,959 | 101,966 | 101,973 | 101,980 | 101,987 | 101,994 | 102,001 | 102,008 | 102,015 | 102,022 | 102,029 | 102,036 | 102,043 | 102,050 | 102,057 | 102,064 | 102,071 | 102,078 | 102,085 | 102,092 | 102,099 | 102,106 | 102,113 | 102,120 | 102,127 | 102,134 | 102,141 | 102,148 | 102,155 | 102,162 | 102,169 | 102,176 | 102,183 | 102,190 | 102,197 | 102,204 | 102,211 | 102,218 | 102,225 | 102,232 | 102,239 | 102,246 | 102,253 | 102,260 | 102,267 | 102,274 | 102,281 |



| NÚMERO DAS ESTACAS | 560 | 561 | 562 | 563 | 564 | 565 | 566 | 567 | 568 | 569 | 570 | 571 | 572 | 573 | 574 | 575 | 576 | 577 | 578 | 579 | 580 |
|--|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| COTA DO TERRENO NATURAL (m) | 97,246 | 97,242 | 97,234 | 97,225 | 97,216 | 97,207 | 97,198 | 97,189 | 97,180 | 97,171 | 97,162 | 97,153 | 97,144 | 97,135 | 97,126 | 97,117 | 97,108 | 97,099 | 97,090 | 97,081 | 97,072 |
| COTA DA GERATRIZ INFERIOR DA ADUTORA (m) | 97,246 | 97,242 | 97,234 | 97,225 | 97,216 | 97,207 | 97,198 | 97,189 | 97,180 | 97,171 | 97,162 | 97,153 | 97,144 | 97,135 | 97,126 | 97,117 | 97,108 | 97,099 | 97,090 | 97,081 | 97,072 |
| DISTÂNCIA PARCIAL (m) | 15,00 | 20,00 | 20,00 | 20,00 | 20,00 | 20,00 | 20,00 | 20,00 | 20,00 | 18,00 | 20,00 | 20,00 | 20,00 | 20,00 | 19,40 | 20,00 | 18,40 | 19,03 | 20,00 | 11,40 | 8,60 |
| EXTENSÃO DO TRECHO (m) | | | | 140,00 | | | | | | | 140,00 | | | | | 60,00 | | | | 60,00 | |
| DISTÂNCIA ACUMULADA (m) | 11200,000 | 11215,000 | 11235,000 | 11255,000 | 11275,000 | 11295,000 | 11315,000 | 11335,000 | 11355,000 | 11373,000 | 11393,000 | 11413,000 | 11433,000 | 11453,000 | 11472,400 | 11492,400 | 11510,800 | 11529,200 | 11548,200 | 11569,600 | 11581,000 |
| DECLIVIDADE(m/m) | | | | -0,0078 | | | | | | 0,0023 | | | | | | -0,0276 | | | | 0,0025 | |



000016



LEGENDA

- PERFIL DO TERRENO NATURAL
- TUBO DE PVC TIPO PBA CLASSE 12 DN 75 mm
- VENTOSA
- DESCARGA

NOTAS

DESENHOS DE REFERÊNCIA

REVISÕES

| Nº | NATUREZA DA REVISÃO | DATA | APROVO |
|----|---------------------|------|--------|
| | | | |
| | | | |
| | | | |

GOVERNO DO ESTADO DO CEARÁ
SECRETARIA DOS RECURSOS HÍDRICOS - SRH

PROJETO TÉCNICO EXECUTIVO DAS OBRAS DE ADUTORAS PARA TRANSFERÊNCIA À CAGECEE/KFW ADUTORA DE SACO VERDE

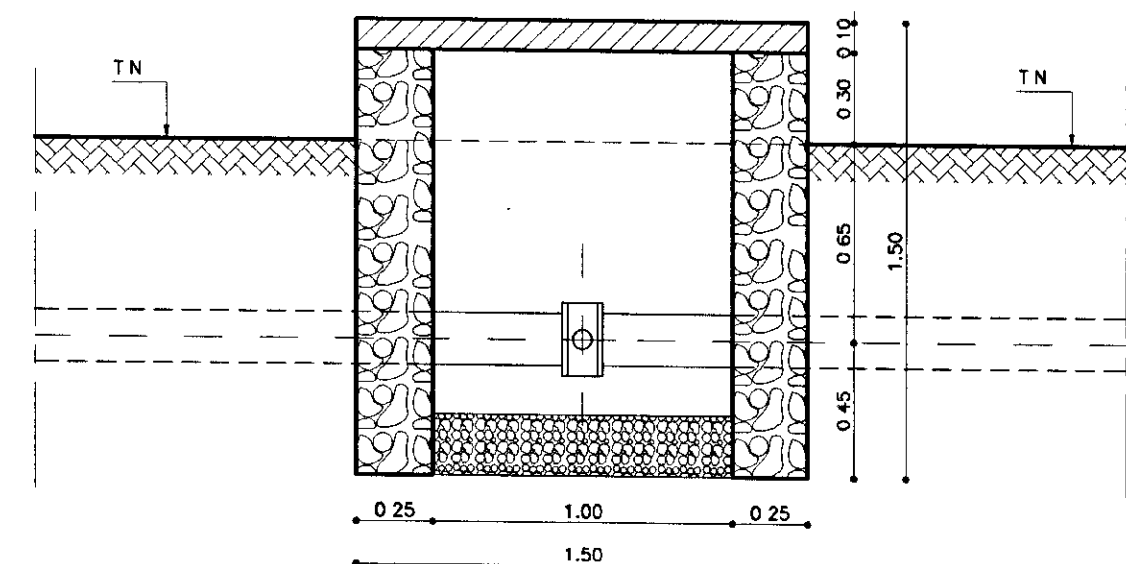
CAMINHAMENTO:
LOCAÇÃO E PERFIL
TRECHO: EST. 560 A EST. 580

PES PROJETOS DE ENGENHARIA E SUPERVISÃO DE OBRAS

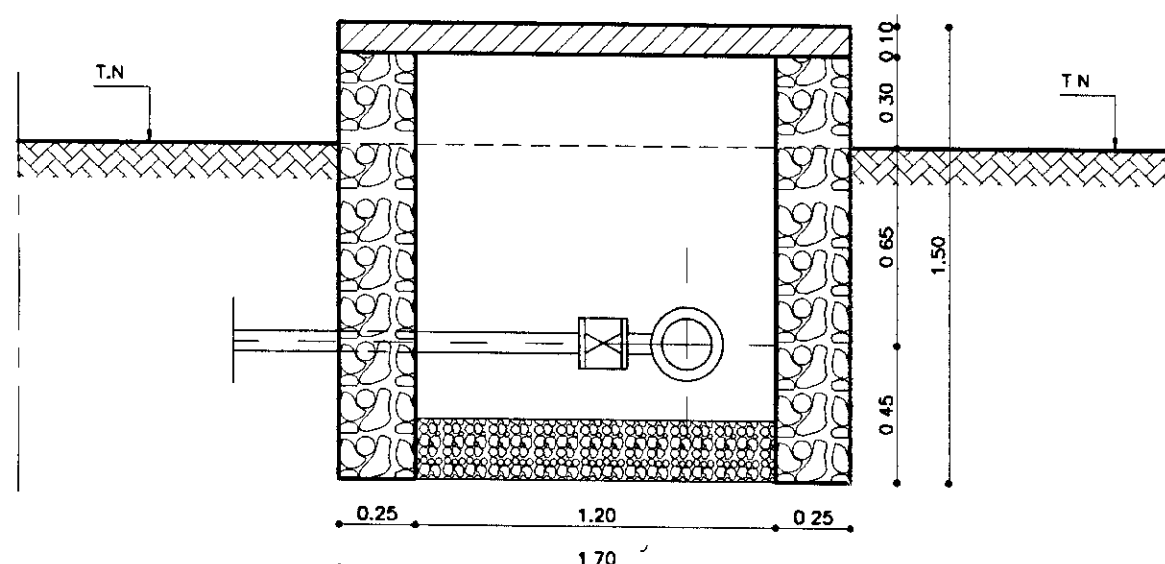
Projeto: **perficatole.dwg**
Visto: **FEVEREIRO/2001**
Verificado: **INDICADA**
Nº do Desenho: **09/12**

CAIXA DE REGISTRO DE DESCARGA

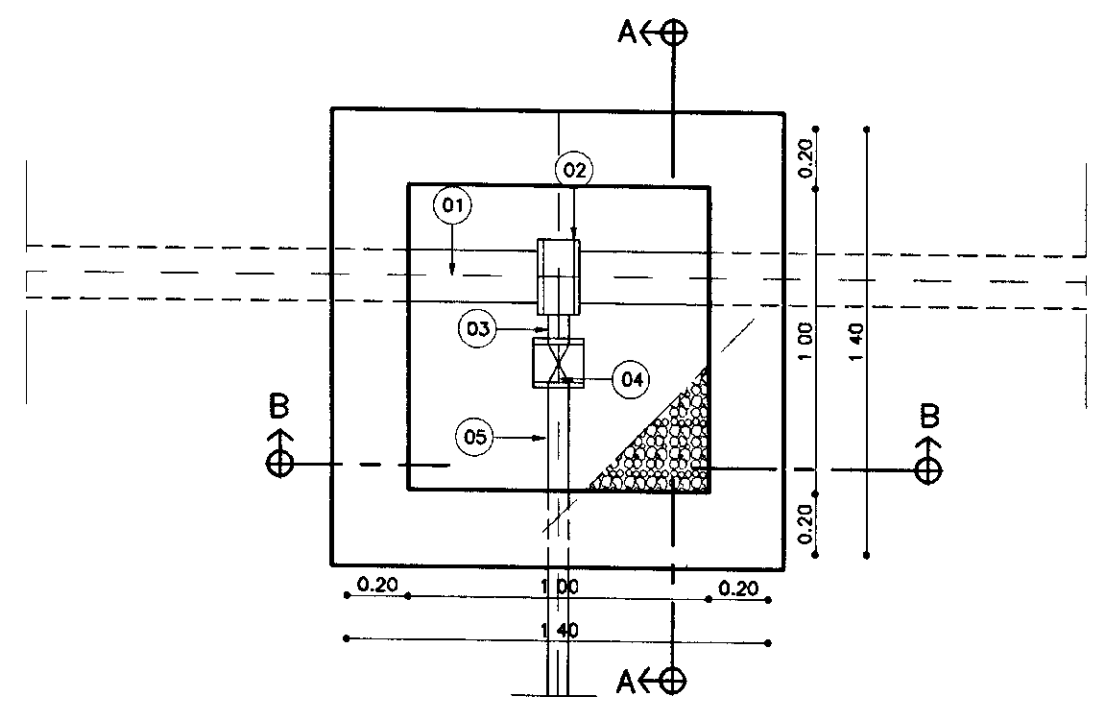
| Nº | DESCRIÇÃO | DIÂMETRO Ø (mm) | QUANTIDADE |
|----|---------------------------------------|-----------------|------------|
| 01 | TUBO DE AÇO | 150 | - |
| 02 | SOLAR DE TOMADA EM CHAPA DE AÇO | 150 x 2 x 2 | 01 |
| 03 | TUBO DE AÇO GALV. ROSCAVEL L = 0,30 m | 2 | 01 |
| 04 | REGISTRO DE GAETA ROSCAVEL | 2 | 01 |
| 05 | TUBO DE AÇO GALV. ROSCAVEL L = 2,00 m | 2 | 01 |



CORTE - BB
ESCALA - 1/25



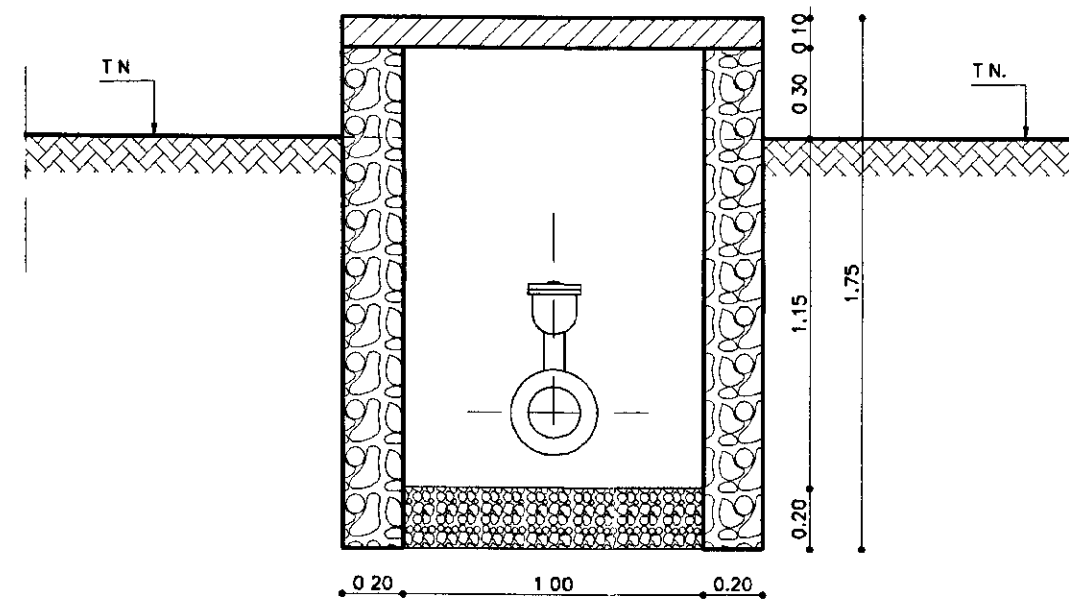
CORTE - AA
ESCALA - 1/25



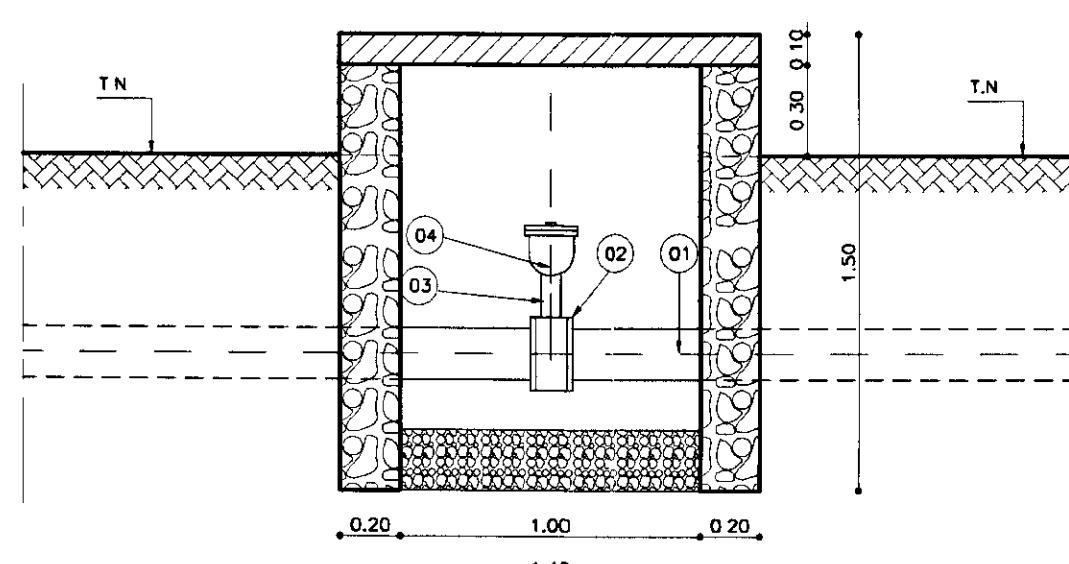
PLANTA BAIXA
ESCALA - 1/25

CAIXA DE INSPEÇÃO DE VENTOSA

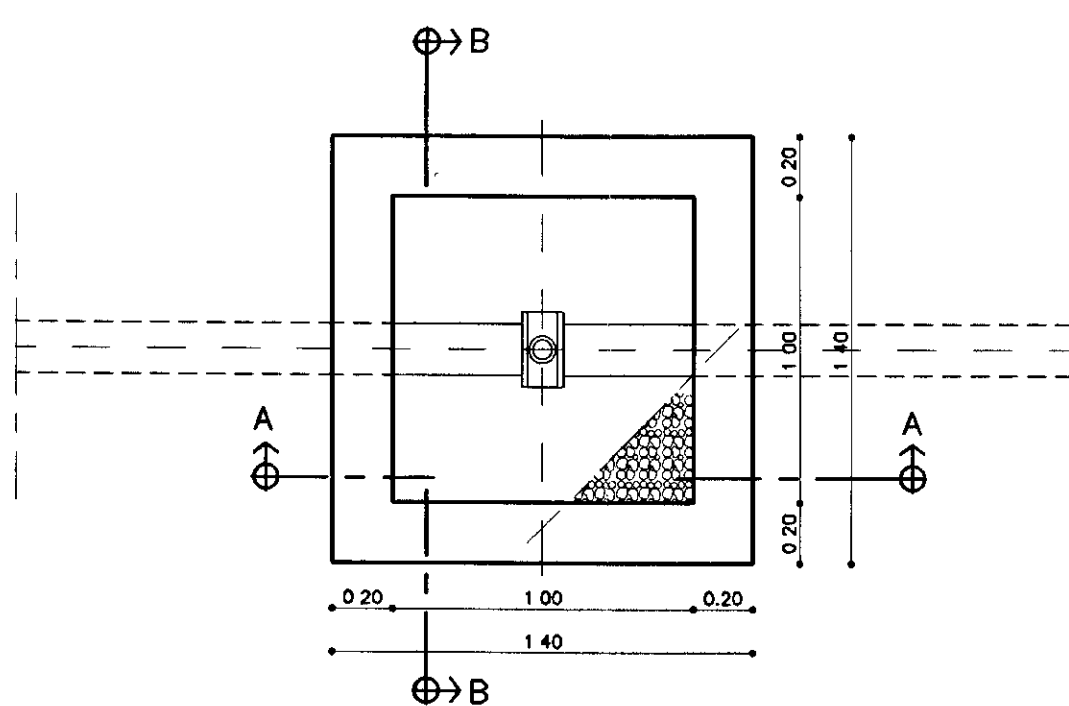
| Nº | DESCRIÇÃO | DIÂMETRO Ø (mm) | QUANTIDADE |
|----|---------------------------------------|-----------------|------------|
| 01 | TUBO DE AÇO | 150 | - |
| 02 | SOLAR DE TOMADA EM CHAPA DE AÇO | 150 x 2 | 01 |
| 03 | TUBO DE AÇO GALV. ROSCAVEL L = 0,30 m | 2 | 01 |
| 04 | VALVULA VENTOSA SIMPLES FUNDO | 2" | 01 |



CORTE - BB
ESCALA - 1/25



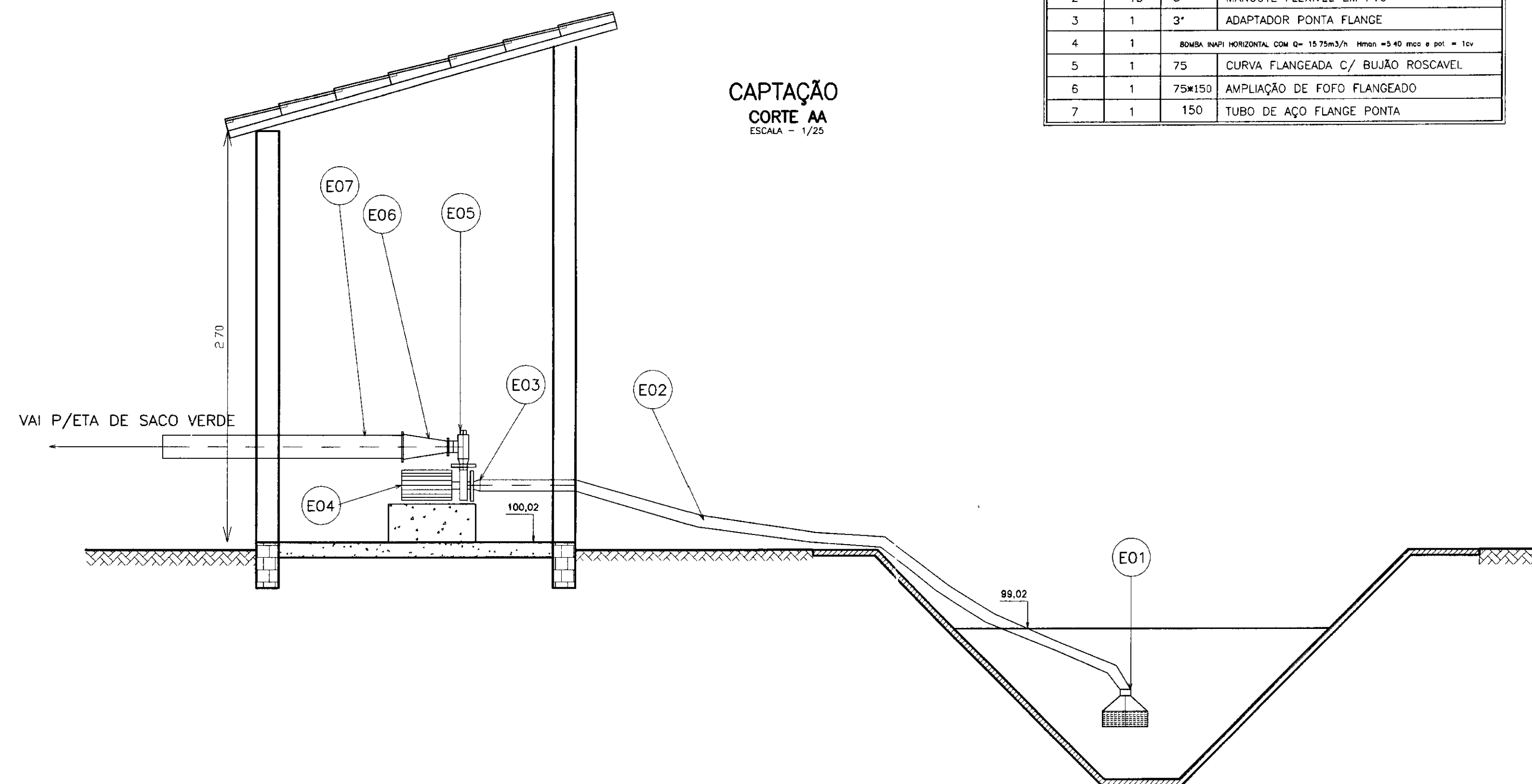
CORTE - AA
ESCALA - 1/25



PLANTA BAIXA
ESCALA - 1/25

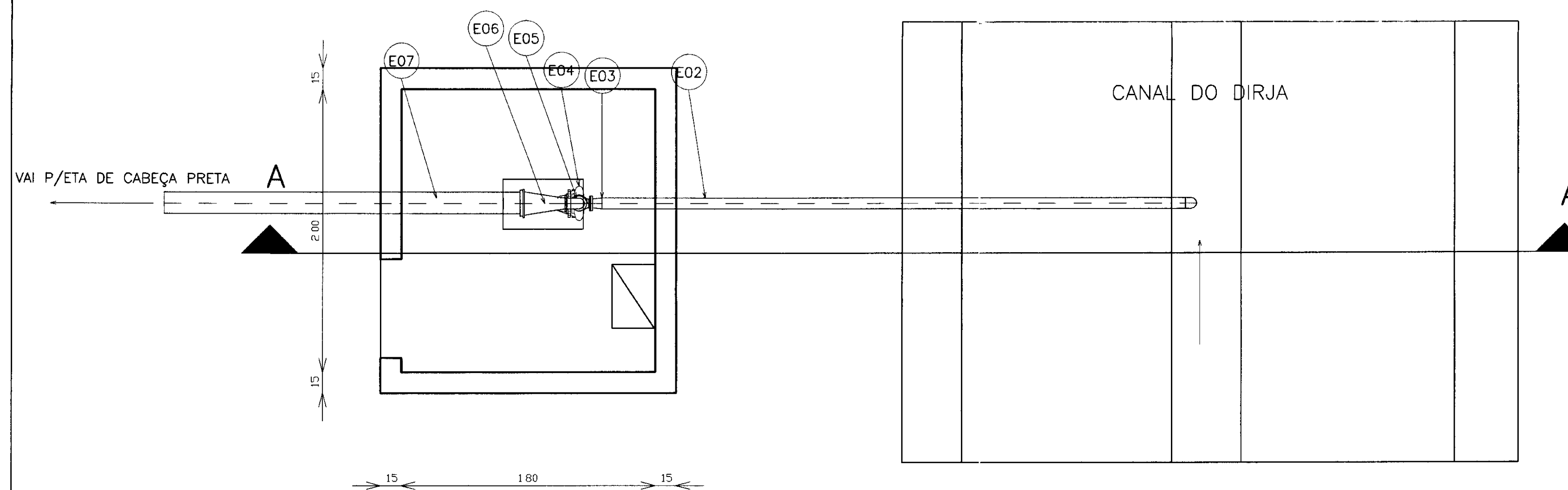
TABELA DE PECAS

| ITEM | Qt. | Ø (mm) | DISCRIMINACAO |
|------|-----|--------|---|
| 1 | 1 | 3" | VALVULA DE PE COM CRIVO |
| 2 | 15 | 3" | MANGOTE FLEXIVEL EM PVC |
| 3 | 1 | 2" | ADAPTADOR PONTA FLANGE |
| 4 | 1 | | BOMBA NAPI HORIZONTAL, COM Ø = 115,3x37/8 Hmax = 5,40 mca e pot = 1cv |
| 5 | 1 | 75 | CURVA FLANGEADA C/ BUJÃO ROSCAVEL |
| 6 | 1 | 75x150 | AMPLIAÇÃO DE FOFO FLANGEADO |
| 7 | 1 | 150 | TUBO DE AÇO FLANGE PONTA |



CAPTAÇÃO
CORTE AA
ESCALA - 1/25

CAPTAÇÃO
PLANTA BAIXA
ESCALA - 1/25



LEGENDA:

- TERRENO NATURAL
- ALVENARIA DE PEDRA
- CONCRETO SIMPLES
- CONCRETO ARMADO
- BRITA

NOTAS :

DESENHOS DE REFERENCIA :

REVISÕES

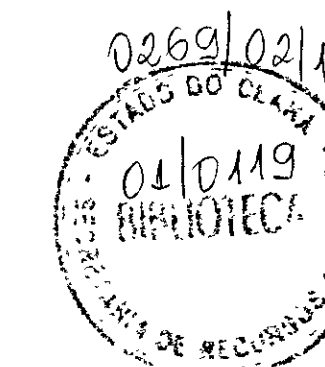
| Nº | NATUREZA DA REVISÃO | DATA | APROVO |
|----|---------------------|------|--------|
| | | | |
| | | | |
| | | | |
| | | | |

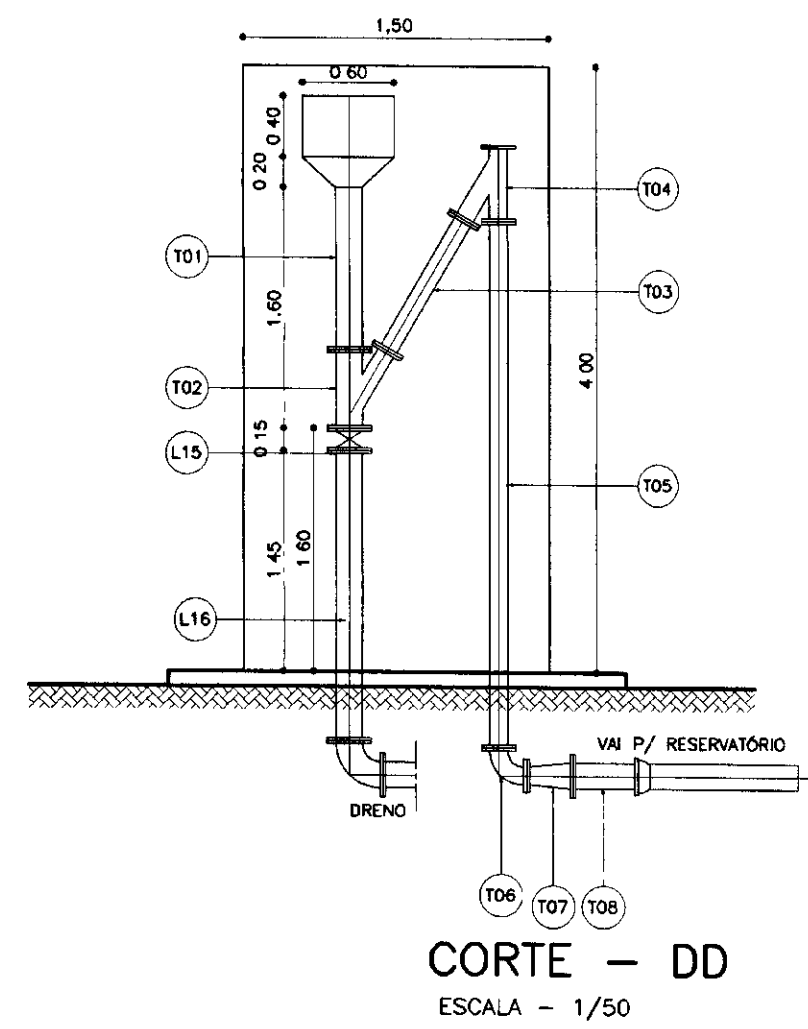
GOVERNO DO ESTADO DO CEARÁ
SECRETARIA DOS RECURSOS HIDRICOS - SRH

PROJETO TÉCNICO EXECUTIVO DAS OBRAS DE ADUTORAS
PARA TRANSFERENCIA À CAGECEE/KFW
ADUTORA DO SACO VERDE

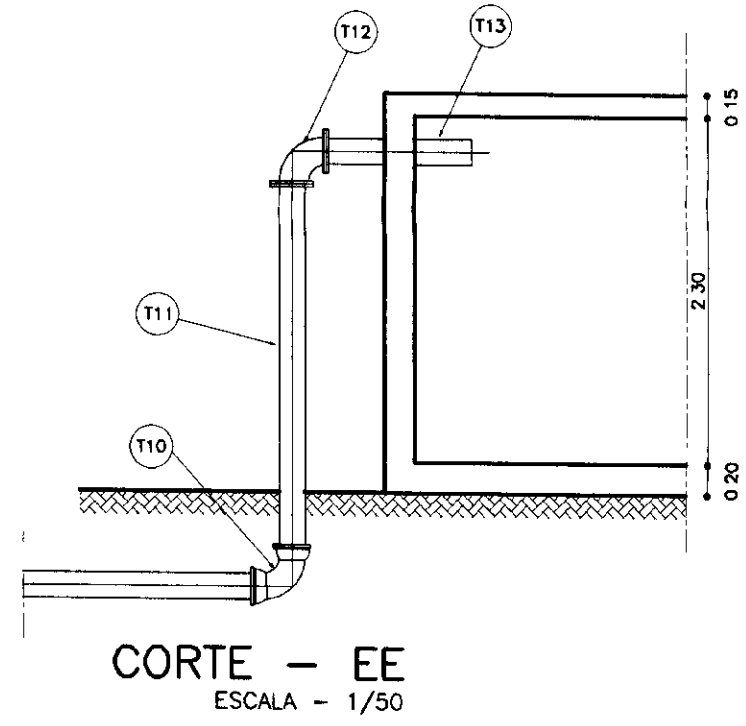
| | |
|------------|-----------------|
| Projeto | Desenho |
| Visto | Capaxrodad DWG |
| Verificado | Data de Emissão |
| | FEVEREIRO/2001 |
| | Estado |
| | INDICADA |
| | Rev |
| | Nº do Desenho |
| | 10/12 |

000017

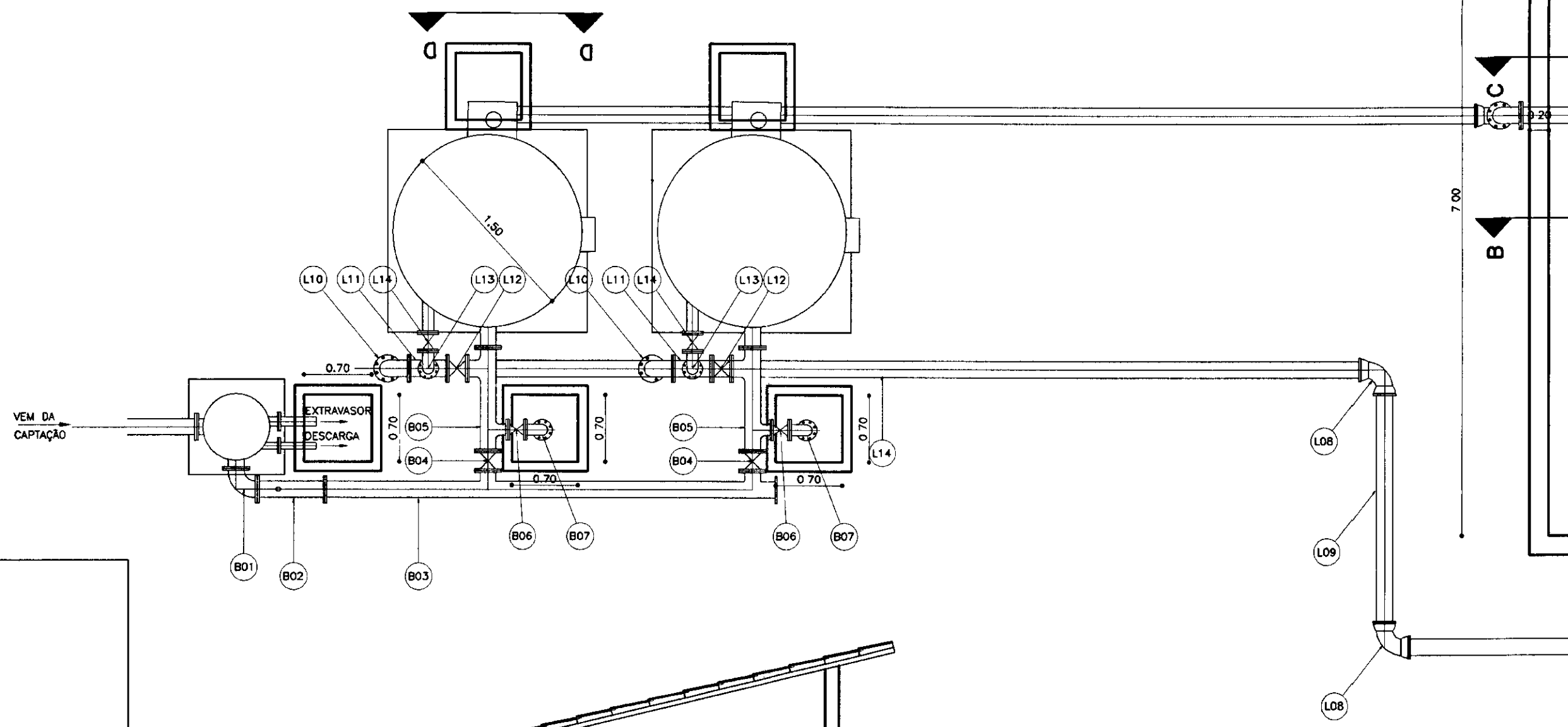




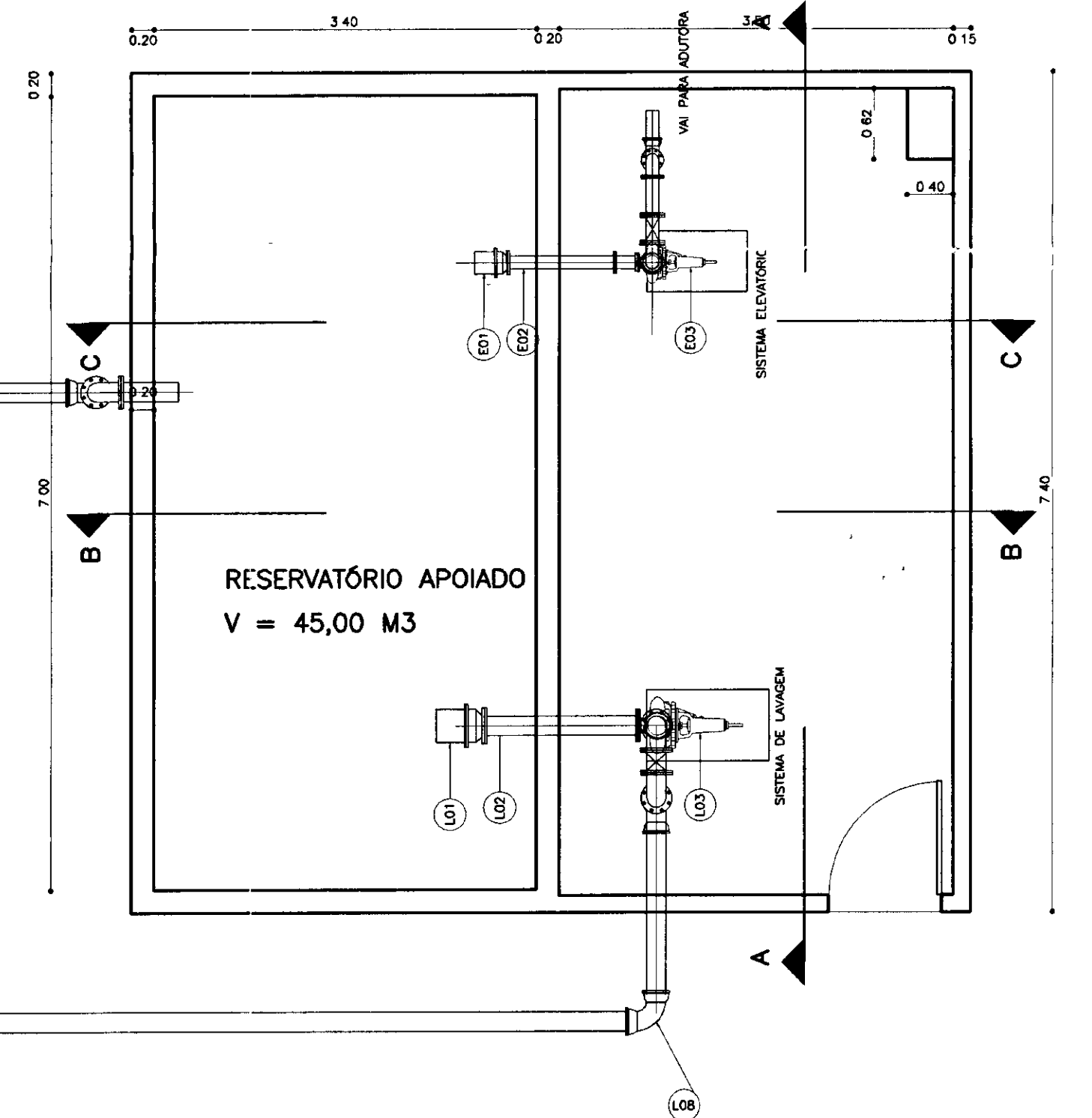
CORTE - DD
ESCALA - 1/50



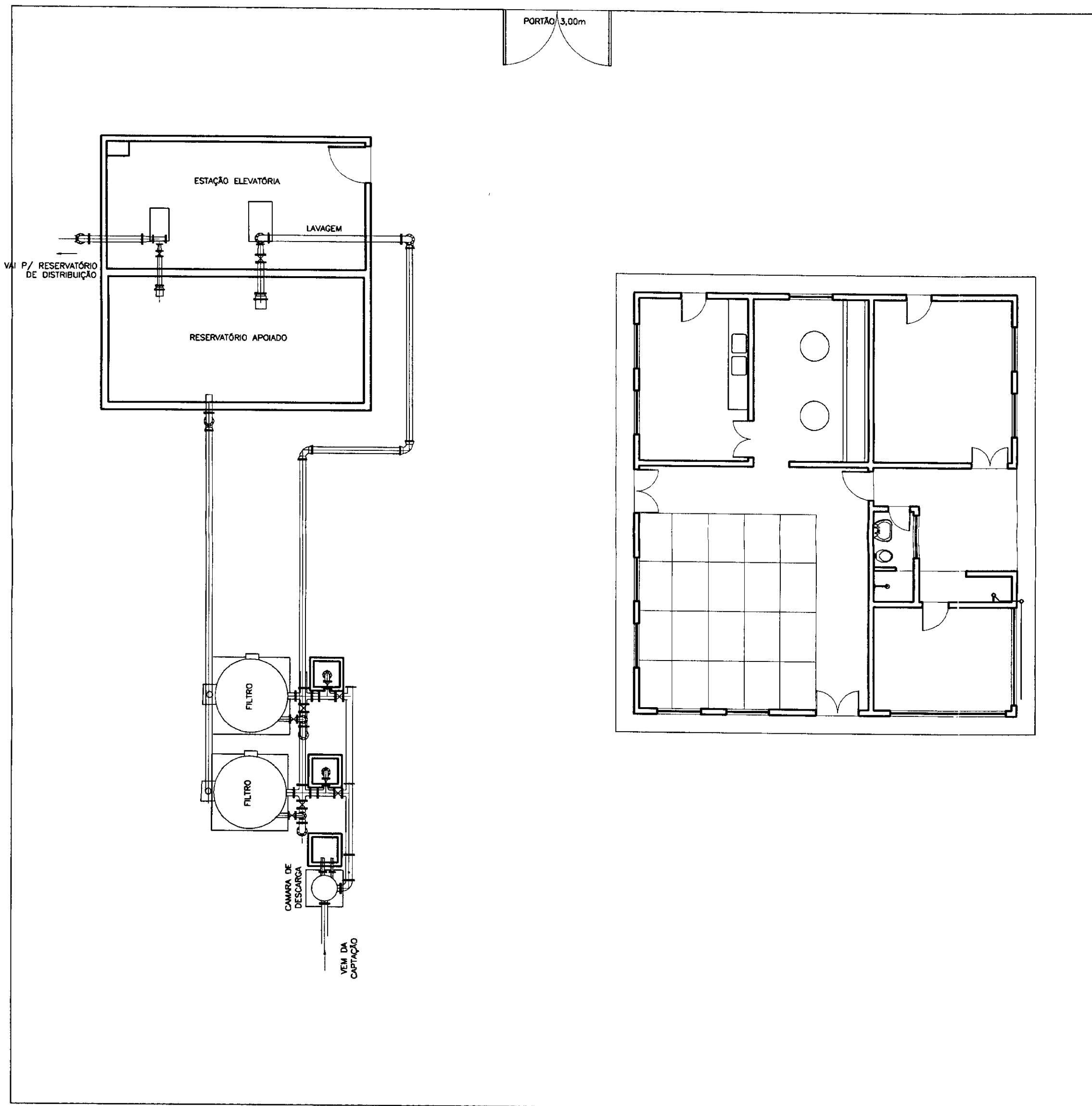
CORTE - EE
ESCALA - 1/50



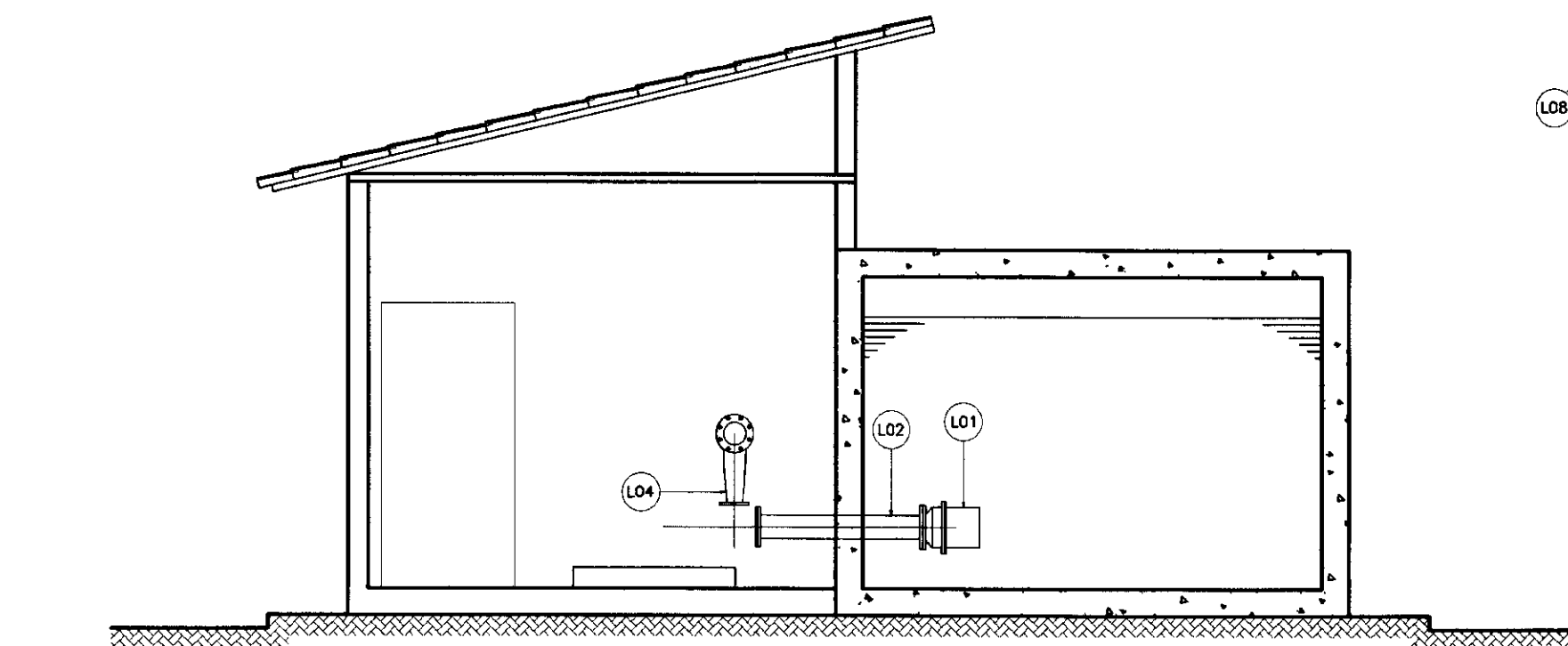
PLANTA BAIXA
ESCALA - 1/50



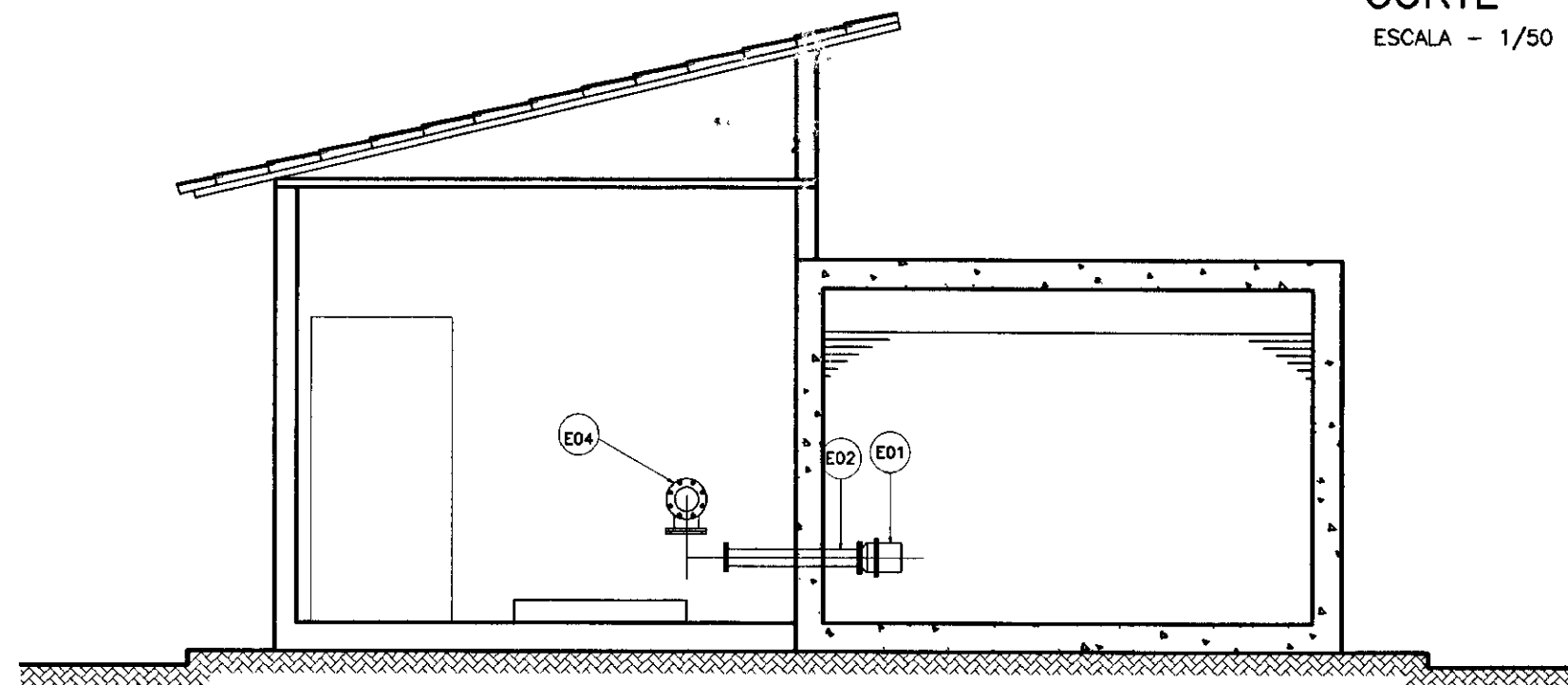
RESERVATÓRIO APOIADO
V = 45,00 M3



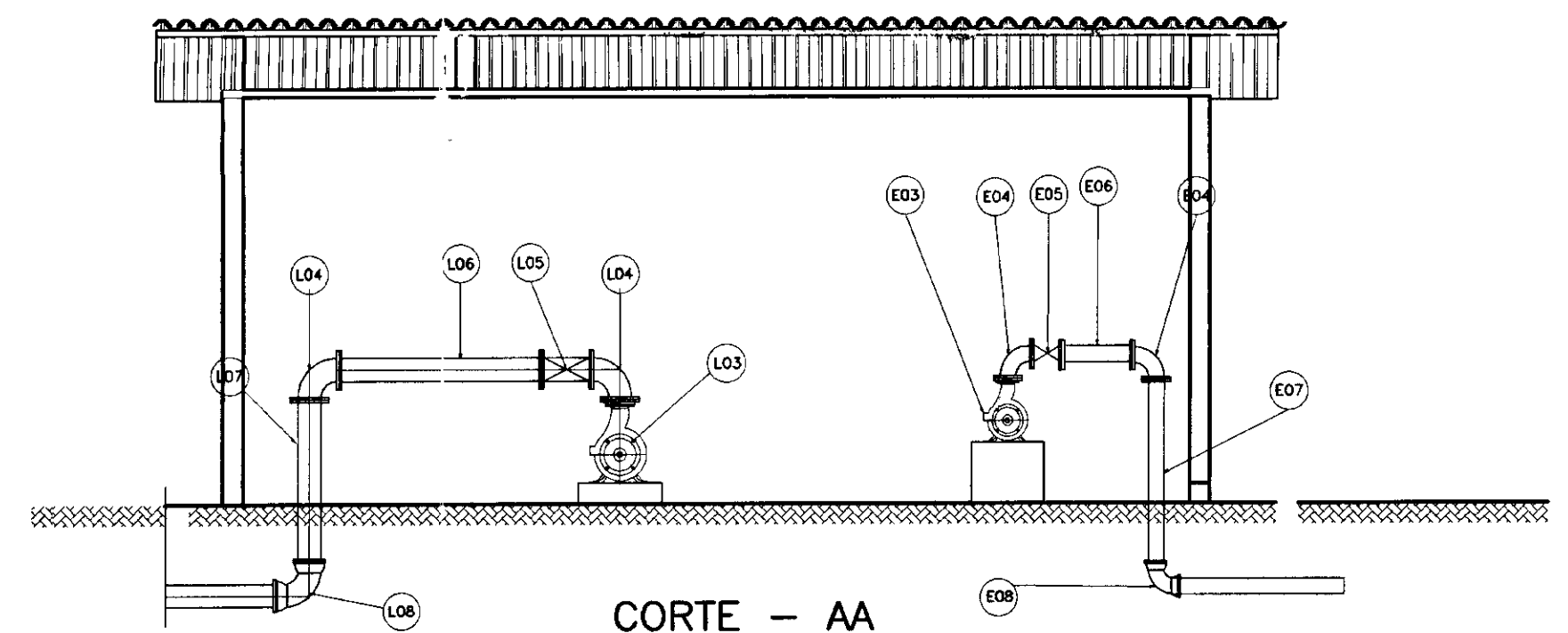
LAYOUT - ETA
ESCALA - 1/100



CORTE - BB
ESCALA - 1/50



CORTE - CC
ESCALA - 1/50



CORTE - AA
ESCALA - 1/50

| N° | DISCRIMINAÇÃO | # | QUANT |
|-----|---|--------|-------|
| T01 | TOCO COM FLANGEADO EM FIBRA L=1,00 | 100 | 01 |
| T02 | BIFURCAÇÃO EM "Y" FLANGEADA EM FIBRA 100*75 | 01 | 01 |
| T03 | TOCO COM FLANGEADO EM FIBRA L=1,00 | 75 | 01 |
| T04 | BIFURCAÇÃO EM "Y" FLANGEADA EM FIBRA | 75 | 01 |
| T05 | TOCO COM FLANGE EM FIBRA L=2,30 | 75 | 01 |
| T06 | CURVA DE 90° FLANGEADA EM FIBRA | 75 | 01 |
| T07 | AMPLIAÇÃO FLANGEADA EM Fofó | 75*100 | 01 |
| T08 | TOCO Fofó FLANGE PONTA L=0,8 | 100 | 01 |
| T09 | TUBO Fofó PONTA BOLSA | 100 | 12 |
| T10 | CURVA 90° Fofó BOLSA | 100 | 01 |
| T11 | TOCO Fofó FLANGE PONTA L=3,50m | 100 | 01 |
| T12 | CURVA 90° Fofó FLANGEADA | 100 | 01 |
| T13 | TOCO Fofó FLANGE PONTA L=1,00m | 100 | 01 |

| N° | DISCRIMINAÇÃO | # | QUANT |
|-----|--|-----|-------|
| E01 | VALVULA DE PE | 50 | 01 |
| E02 | TOCO DE Fofó FLANGEADO L=0,80m | 50 | 01 |
| E03 | BOMBA Q=15,75M3/H, P1 = 10CV Hman=22,04mca | 01 | 01 |
| E04 | CURVA DE 90° FLANGEADA | 50 | 02 |
| E05 | REGISTRO DE GAVETA FLANGEADO | 50 | 01 |
| E06 | TOCO DE Fofó FLANGEADO L=0,80m | 50 | 01 |
| E07 | TOCO DE Fofó FLANGE PONTA L=1,90m | 50 | 01 |
| E08 | CURVA DE 90° Fofó COM BOLSA | 100 | 02 |

| N° | DISCRIMINAÇÃO | # | QUANT |
|-----|---|-----|-------|
| B01 | CURVA DE 90° FLANGEADO EM FIBRA | 100 | 02 |
| B02 | MISTURADOR HIDRAULICO EM FIBRA | 100 | 02 |
| B03 | TE FLANGEADO EM FIBRA | 100 | 02 |
| B04 | REGISTRO DE GAVETA CHATO FLANGEADO | 100 | 01 |
| B05 | CRUZETA INVERTIDA DE SAÍDA 1/2" 100x150 EM FIBRA 150*150*75 | 01 | 01 |
| B06 | VALVULA BORBOLETA FLANGEADA | 75 | 01 |
| B07 | CURVA DE 90° FLANGEADO EM FIBRA | 75 | 01 |

| N° | DISCRIMINAÇÃO | # | QUANT |
|-----|------------------------------------|---------|-------|
| L01 | VALVULA DE PE COM CRIVO | 150 | 01 |
| L02 | TOCO DE Fofó FLANGEADO L=1,50m | 100 | 01 |
| L03 | BOMBA Q=95,41M3/H, P1=20 CV | - | 01 |
| L04 | CURVA DE 90° FLANGEADA | 100 | 02 |
| L05 | REGISTRO DE GAVETA FLANGEADO | 100 | 01 |
| L06 | TOCO DE Fofó FLANGEADO L=0,90m | 100 | 01 |
| L07 | TOCO DE Fofó FLANGE PONTA L=2,00m | 100 | 01 |
| L08 | CURVA DE 90° Fofó COM BOLSA | 100 | 05 |
| L09 | TUBO DE Fofó PONTA BOLSA | 100 | 01 |
| L10 | CURVA DE 90° FLANGEADA EM FIBRA | 150 | 01 |
| L11 | TE FLANGEADO EM FIBRA | 150*100 | 01 |
| L12 | REGISTRO DE GAVETA FLANGEADO | 150 | 12 |
| L13 | CURVA DE 90° FLANGEADA EM FIBRA | 100 | 01 |
| L14 | VALVULA BORBOLETA TIPO WAFLE | 100 | 01 |
| L15 | REGISTRO DE GAVETA FLANGEADO | 100 | 01 |
| L16 | TOCO DE FIBRA FLANGE PONTA L=2,00m | 100 | 01 |

- LEGENDA:
- ALVENARIA
 - CONCRETO SIMPLES
 - CONCRETO ARMADO
 - BRITA
 - TERRENO NATURAL

NOTAS :

DESENHOS DE REFERÊNCIA :

| REVISÕES | | | |
|----------|---------------------|------|--------|
| N° | NATUREZA DA REVISÃO | DATA | APROVO |
| | | | |
| | | | |
| | | | |
| | | | |

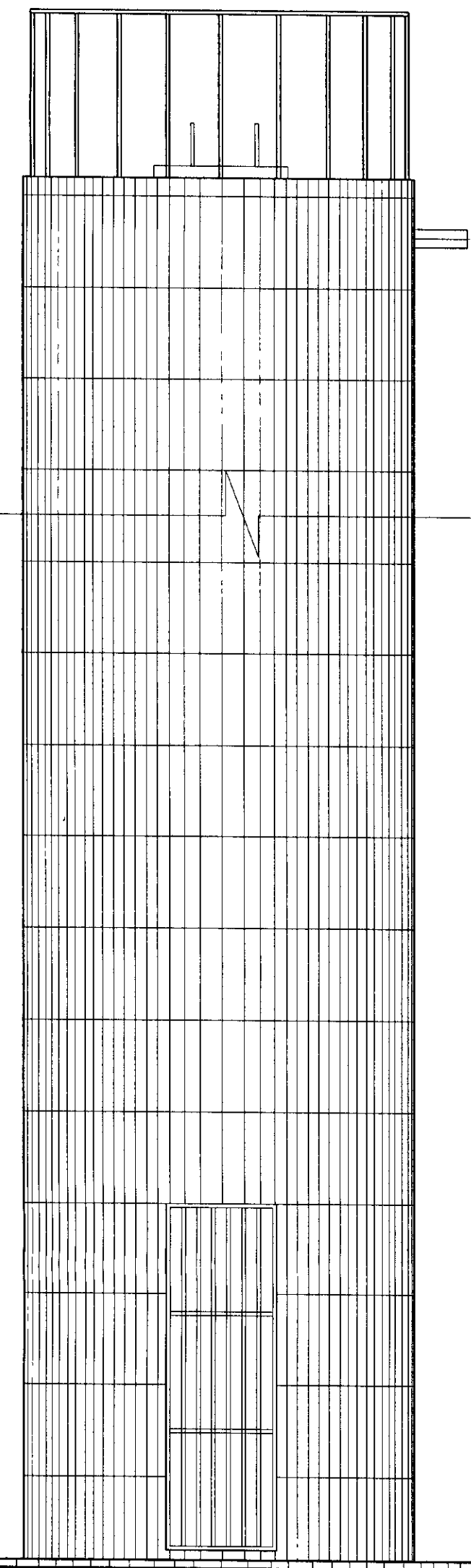
GOVERNO DO ESTADO DO CEARÁ
SECRETARIA DOS RECURSOS HÍDRICOS - SRH 000018

PROJETO TÉCNICO EXECUTIVO DAS OBRAS DE AUTODAS PARA TRANSFERÊNCIA À CAGECEE/KFW ADUTORA SACO VERDE

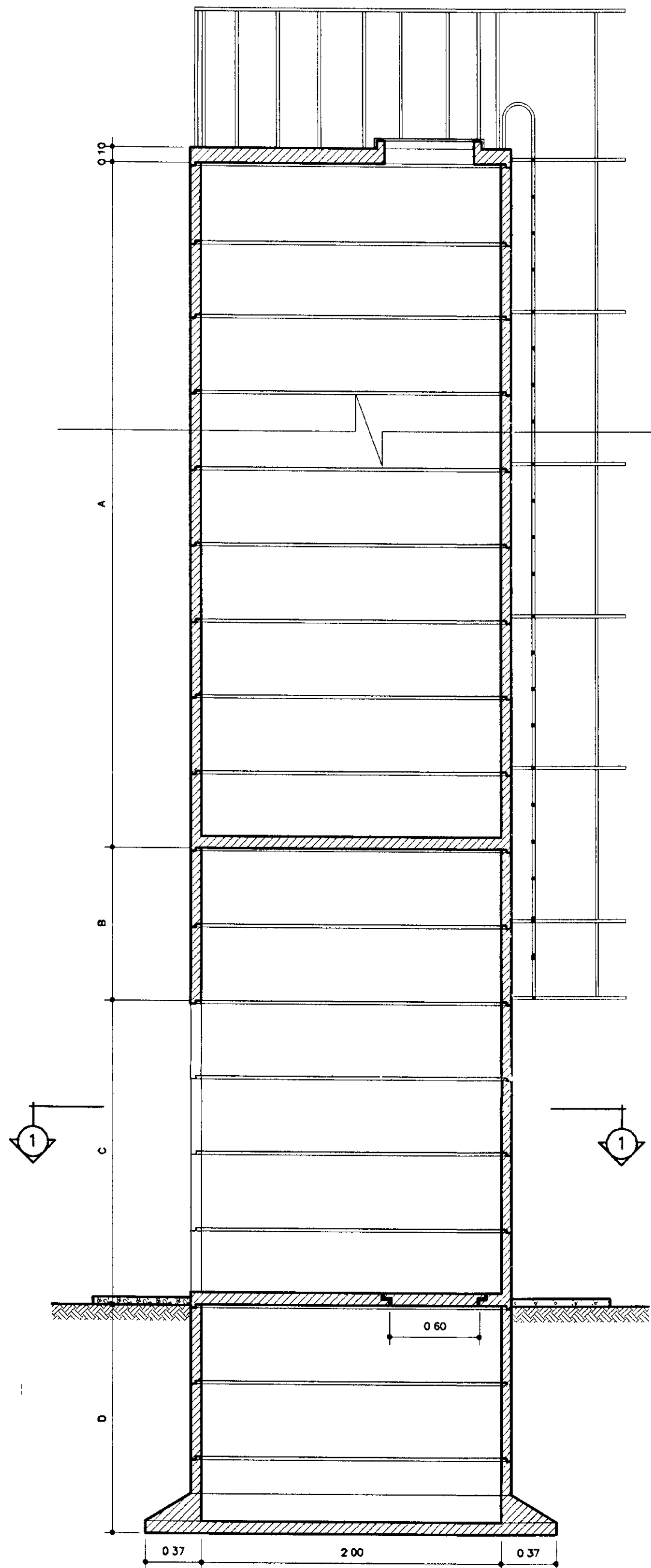
ETA - LAYOUT
RESERVATÓRIO APOIADO
ESTÁÇÃO ELEVATÓRIA
PLANTA BAIXA E CORTES

Desenho: eta-scco.dwg
Data de Emissão: FEVEREIRO/2001
Escala: INDICADA
Rev: 11/12

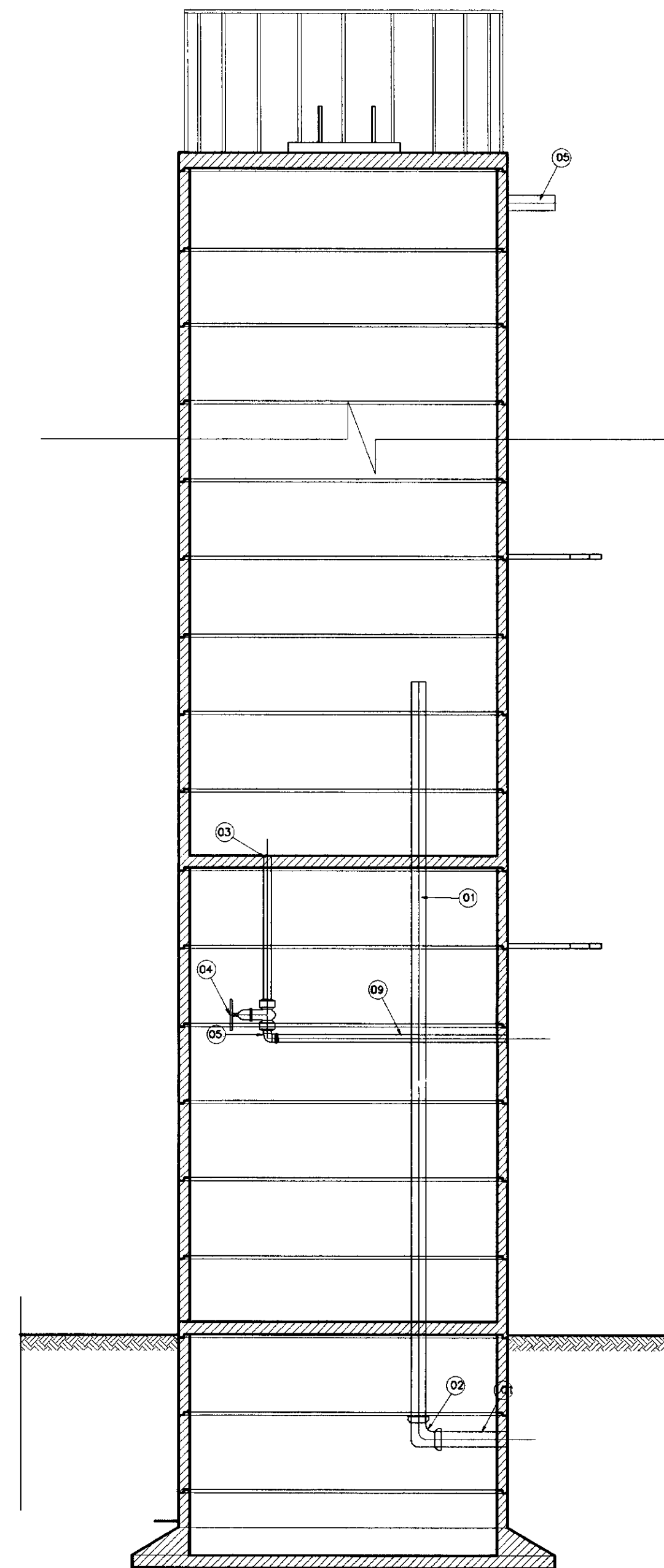
PES PROJETOS DE ENGENHARIA E SUPERVISÃO DE OBRAS



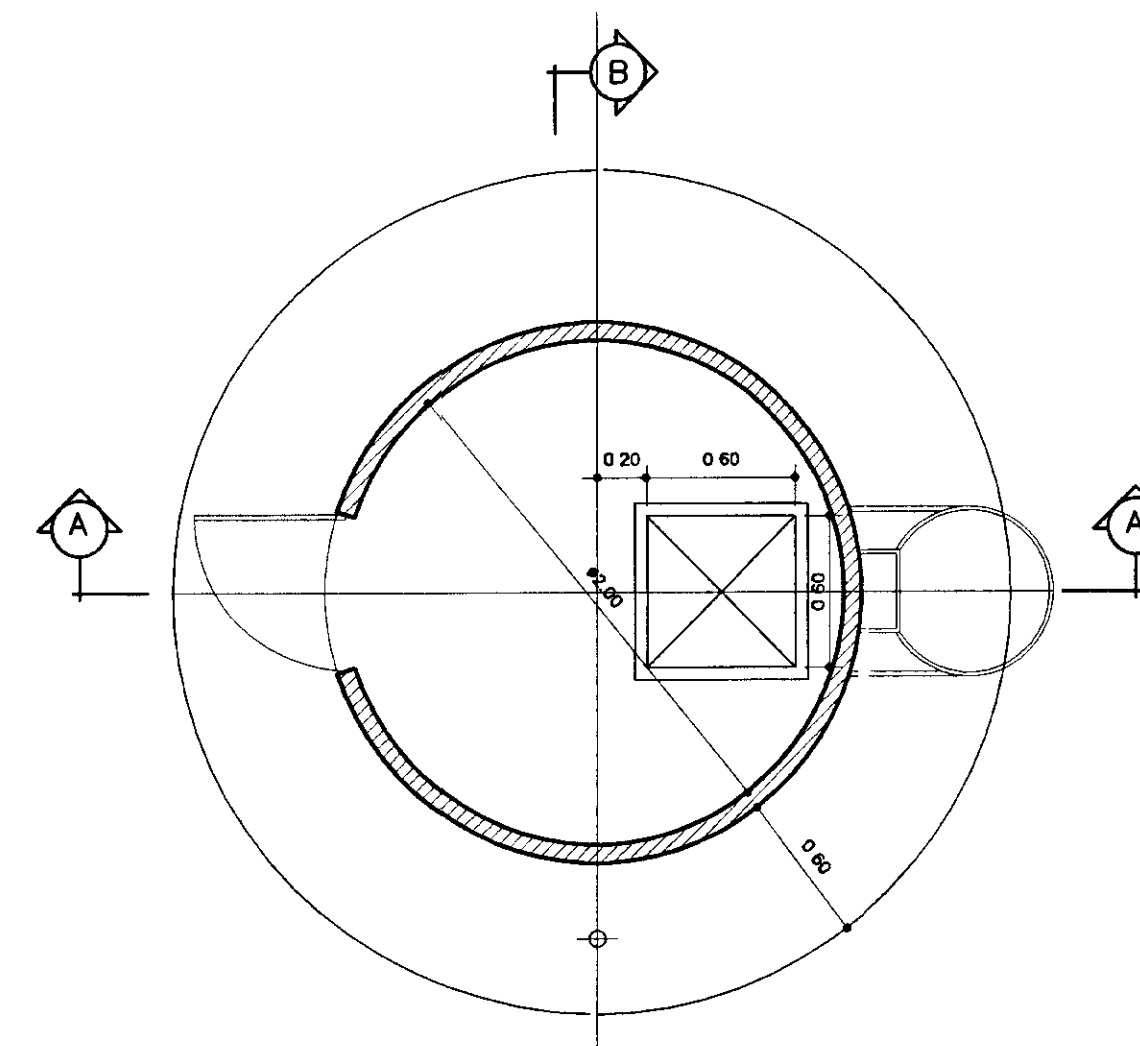
VISTA PRINCIPAL
SEM ESCALA



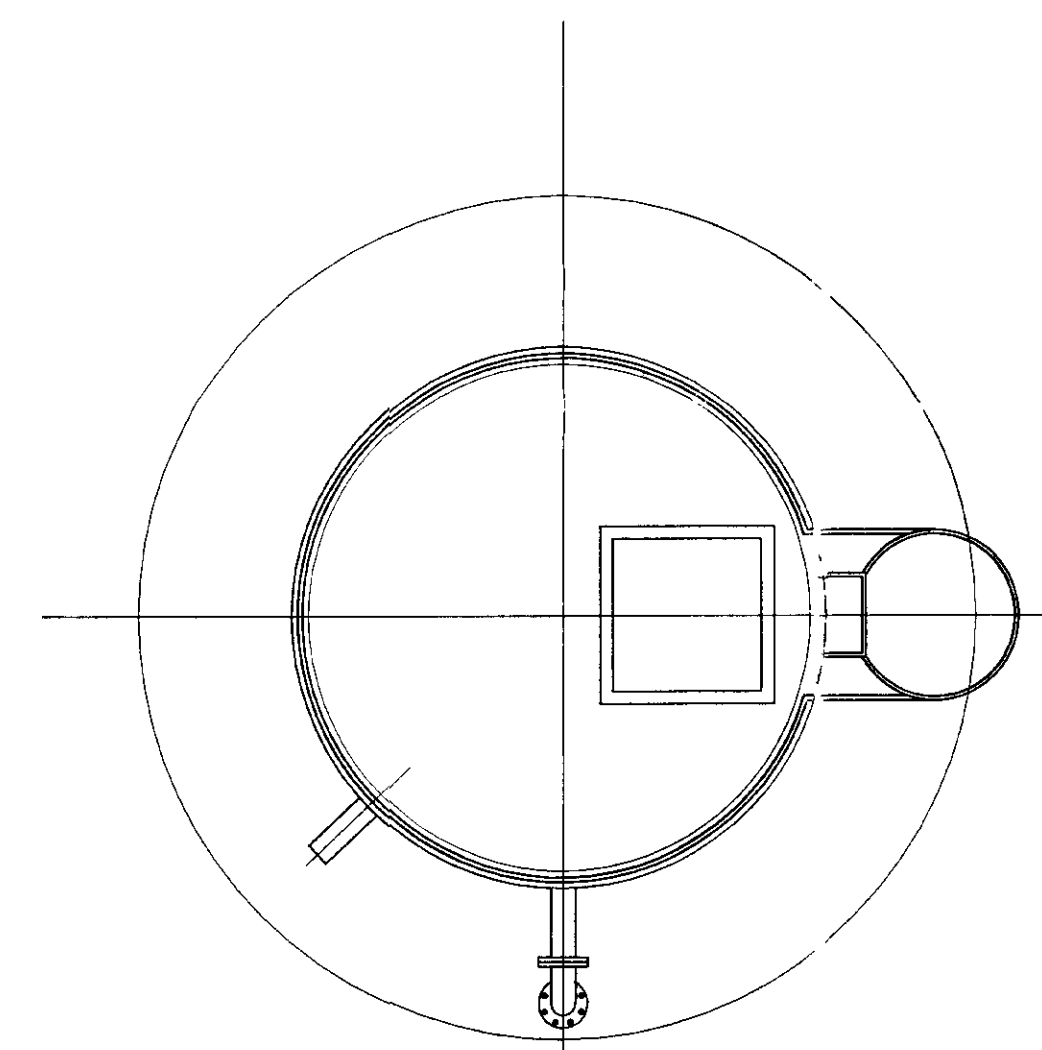
CORTE - AA
SEM ESCALA



CORTE - BB
SEM ESCALA



PLANTA BAIXA NÍVEL 1
ESCALA - 1/30



VISTA SUPERIOR
ESCALA - 1/30

| LEGENDA | | ADUTORA DE SACO VERDE | |
|---------|--------------------------|-----------------------|-------|
| A | | 10,00 | |
| B | | - | |
| C | | 2,00 | |
| D | | 1,50 | |
| N° | DISCRIMINAÇÃO | Ø | QUANT |
| 01 | TUBO DE PVC | 75 | 5M |
| 02 | CURVA DE 90º BOLSA PVC | 75 | 1 |
| 03 | TUBO PVC SOLDÁVEL | 50 | 5M |
| 04 | REGISTRO DE FECHO RÁPIDO | 50 | 1 |
| 05 | CURVA DE 90º BOLSA PVC | 50 | 1 |

LEGENDA:

| | |
|--|------------------|
| | ALVENARIA |
| | CONCRETO SIMPLES |
| | CONCRETO ARMADO |
| | BRITA |
| | TERRENO NATURAL |

NOTAS :

DESENHOS DE REFERÊNCIA :

REVISÕES

| N° | NATUREZA DA REVISÃO | DATA | APROVO |
|----|---------------------|------|--------|
| | | | |
| | | | |
| | | | |
| | | | |

GOVERNO DO ESTADO DO CEARÁ
SECRETARIA DOS RECURSOS HÍDRICOS - SRH

PROJETO TÉCNICO EXECUTIVO DAS OBRAS DE ADUTORAS
PARA TRANSFERÊNCIA À CAGECEE/KFW
ADUTORA SACO VERDE

| | | | |
|------------|----------------|-----------------|----------------|
| Projeto | RES-SACO.dwg | Desenho | RES-SACO.dwg |
| Visto | FEVEREIRO/2001 | Data de Emissão | FEVEREIRO/2001 |
| Verificado | INDICADA | Escala | INDICADA |
| Aprovado | 12/12 | N° do Desenho | 12/12 |

PES PROJETOS DE ENGENHARIA
E SUPERVISÃO DE OBRAS

