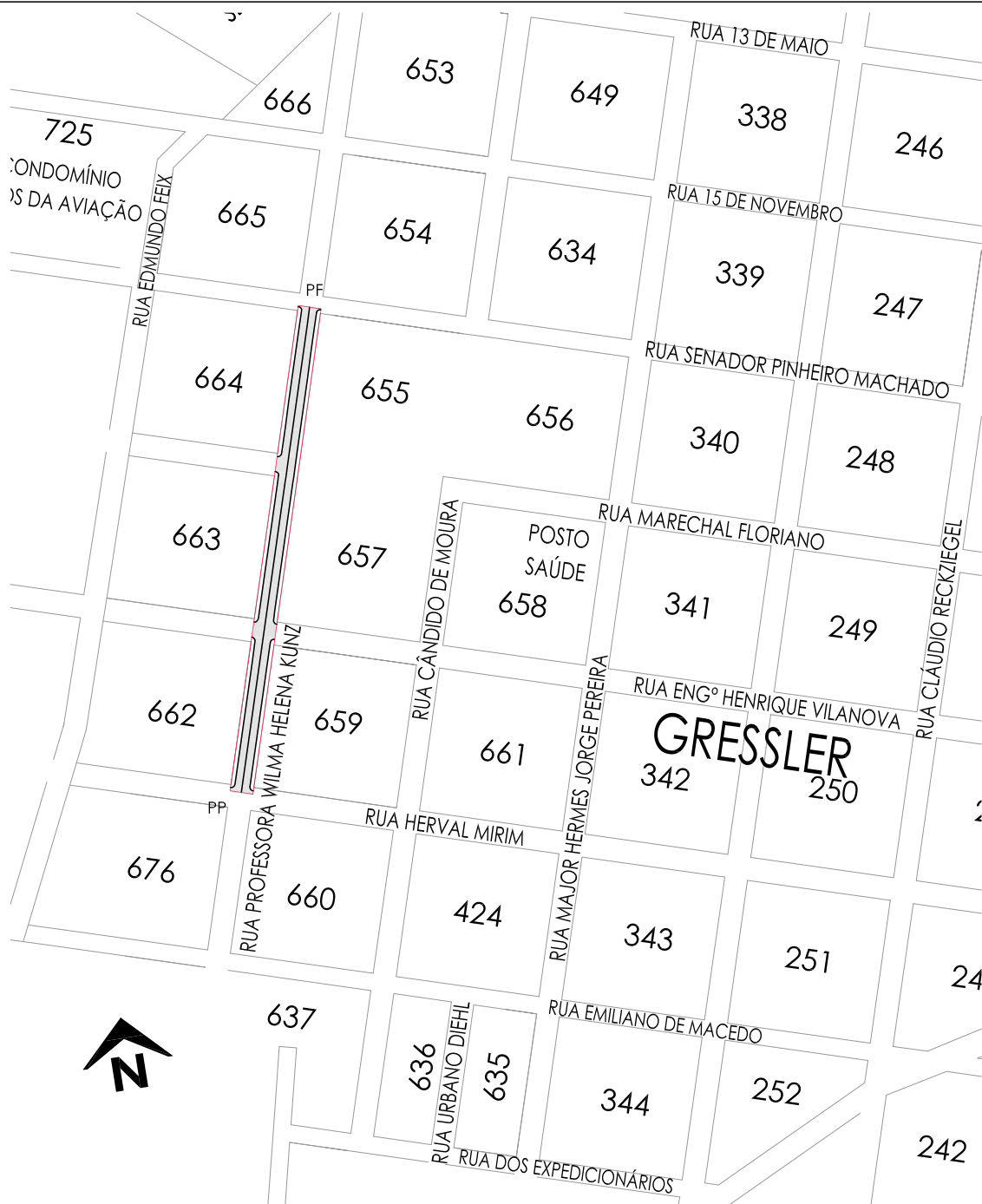




PLANTA DE SITUAÇÃO
SEM ESCALA



PLANTA DE LOCALIZAÇÃO
SEM ESCALA

MUNICÍPIO DE VENÂNCIO AIRES
PAVIMENTAÇÃO RUA PROFª WILMA HELENA KUNZ - BAIRRO GRESSLER

PROJETO

PAVIMENTAÇÃO ASFÁLTICA
SITUAÇÃO E LOCALIZAÇÃO

RESPONSÁVEL TÉCNICO: PROJETO

MARCOS H. FISCHER - Eng. Civil - CREA RS224881

ESCALA

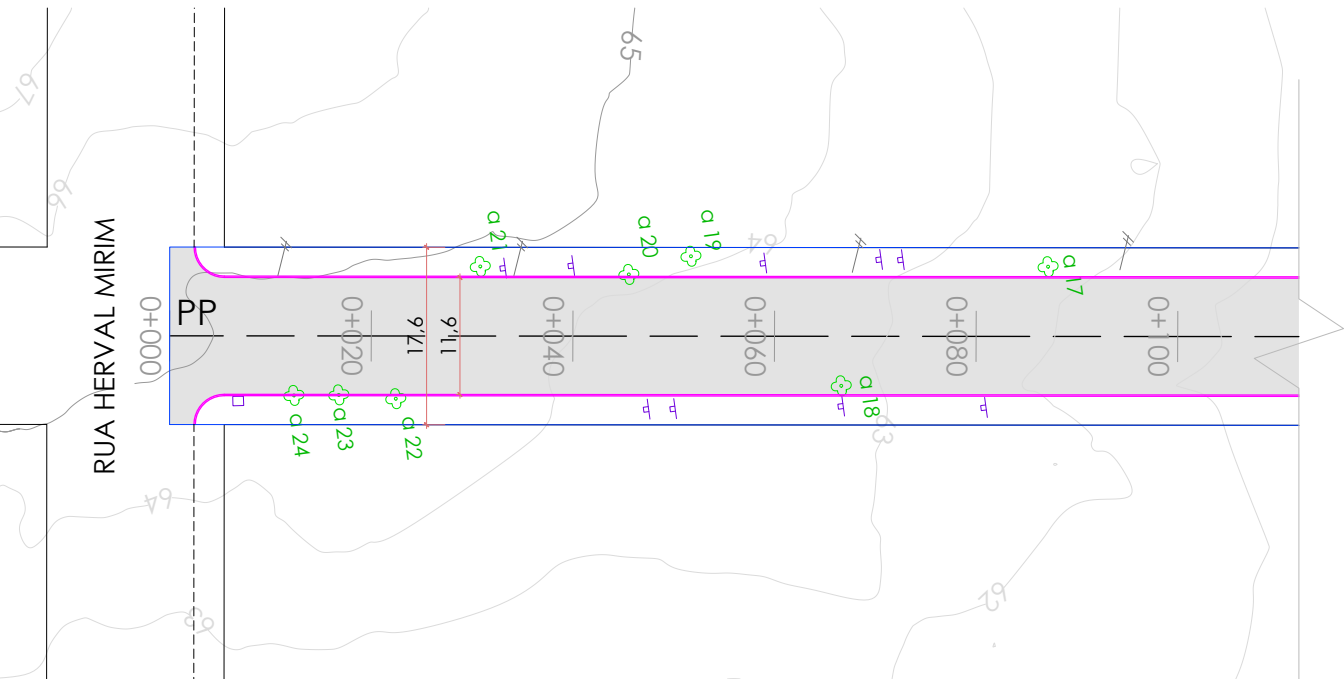
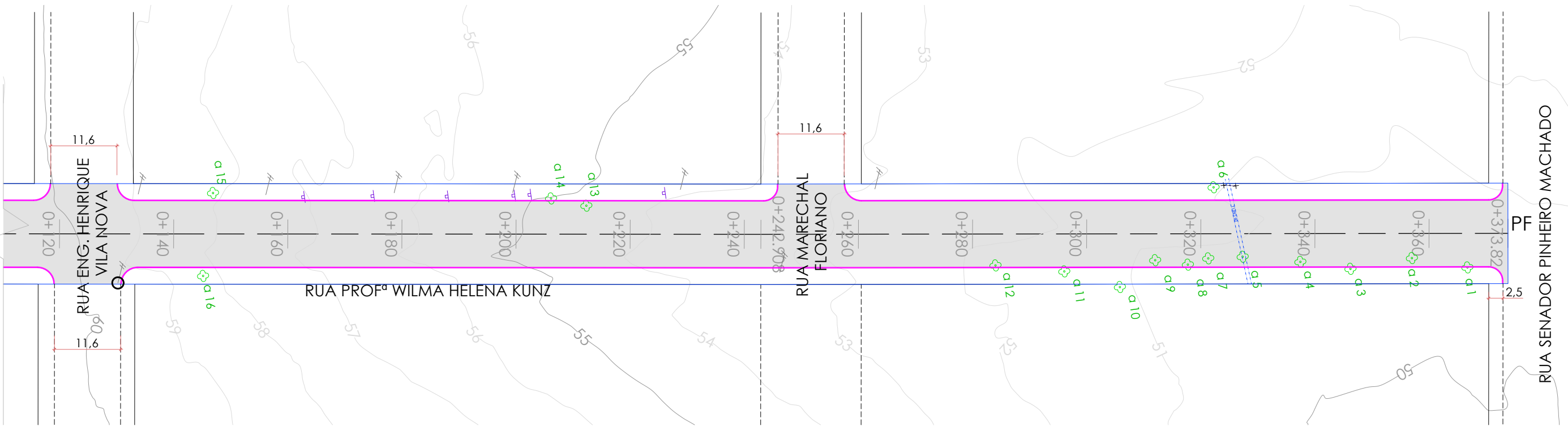
Indicada

DATA

FEV/2025

PRANCHA

01



LEGENDA

- EIXO VIA
- MEIO-FIO
- ÁRVORE (A SUPRIMIR)
24 unidades
- POÇO DE VISITA (PV)
CORSAN
- POSTE
- POSTE A REMANEJAR

MUNICÍPIO DE VENÂNCIO AIRES
PAVIMENTAÇÃO RUA PROFª WILMA HELENA KUNZ - BAIRRO GRESSLER

PROJETO

RESPONSÁVEL TÉCNICO: PROJETO

PAVIMENTAÇÃO ASFÁLTICA
- PROJETO GEOMÉTRICO

MARCOS H. FISCHER - Eng. Civil - CREA RS224881

ESCALA

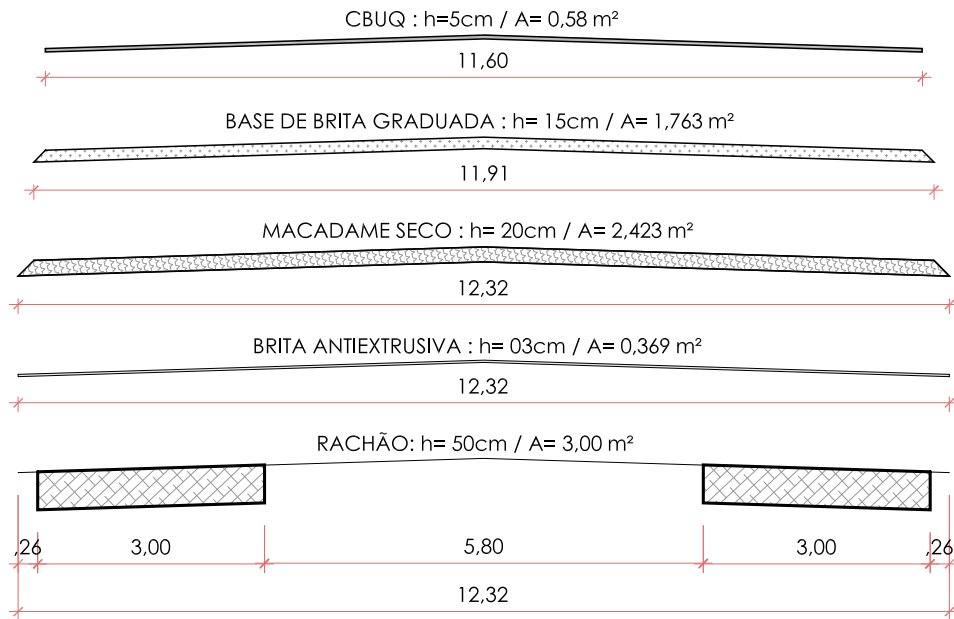
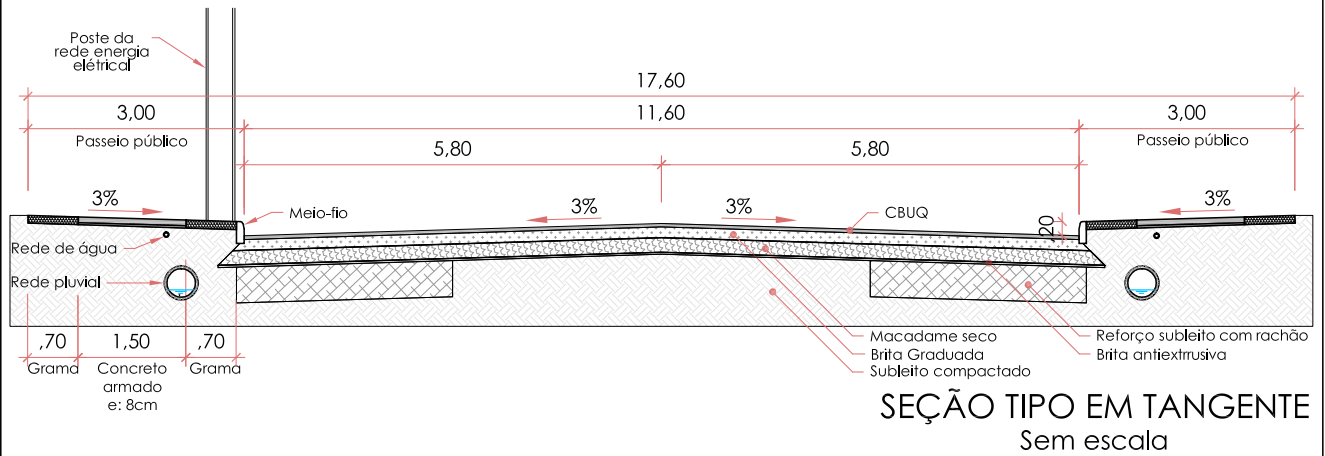
1/750

DATA

FEV/2025

PRANCHA

02



MUNICÍPIO DE VENÂNCIO AIRES

PAVIMENTAÇÃO RUA PROFª WILMA HELENA KUNZ - BAIRRO GRESSLER

PROJETO

PAVIMENTAÇÃO ASFÁLTICA
- SEÇÃO TIPO

RESPONSÁVEL TÉCNICO: PROJETO

MARCOS H. FISCHER - Eng. Civil - CREA RS224881

DATA

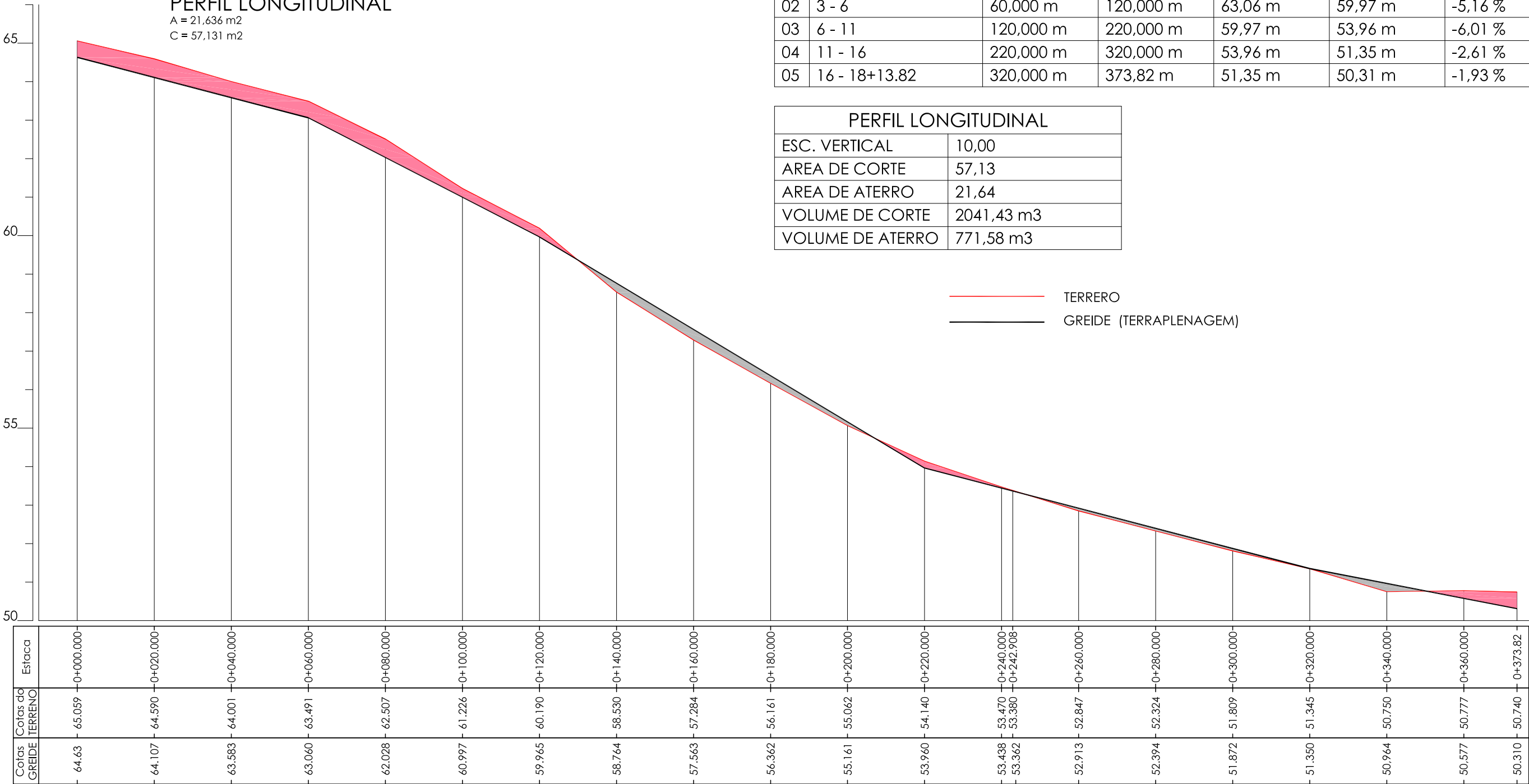
FEV/2025

PRANCHA

03

PERFIL LONGITUDINAL

A = 21,636 m2
C = 57,131 m2



LINHA DE PROJETO

	ESTACAS	DIST. INICIAL	DIST. FINAL	COTA INICIAL	COTA FINAL	DECLIVIDADE
01	0 - 3	0,000 m	60,000 m	64,63 m	63,06 m	-2,62 %
02	3 - 6	60,000 m	120,000 m	63,06 m	59,97 m	-5,16 %
03	6 - 11	120,000 m	220,000 m	59,97 m	53,96 m	-6,01 %
04	11 - 16	220,000 m	320,000 m	53,96 m	51,35 m	-2,61 %
05	16 - 18+13.82	320,000 m	373,82 m	51,35 m	50,31 m	-1,93 %

PERFIL LONGITUDINAL

ESC. VERTICAL	10,00
AREA DE CORTE	57,13
AREA DE ATERRO	21,64
VOLUME DE CORTE	2041,43 m3
VOLUME DE ATERRO	771,58 m3

TERRERO
GREIDE (TERRAPLENAGEM)

MUNICÍPIO DE VENÂNCIO AIRES

PAVIMENTAÇÃO RUA PROFª WILMA HELENA KUNZ - BAIRRO GRESSLER

PROJETO

PAVIMENTAÇÃO ASFÁLTICA

PROJETO GEOMÉTRICO

- PERFIL LONGITUDINAL

RESPONSÁVEL TÉCNICO: PROJETO

MARCOS H. FISCHER - Eng. Civil - CREA RS224881

ESCALA

Indicada

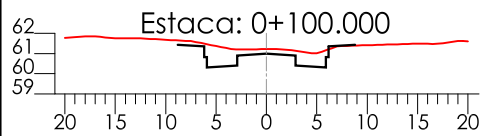
DATA

FEV/2025

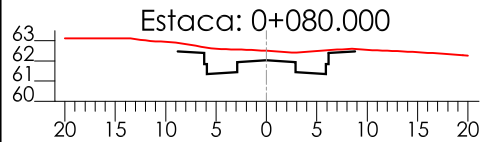
PRANCHA

04

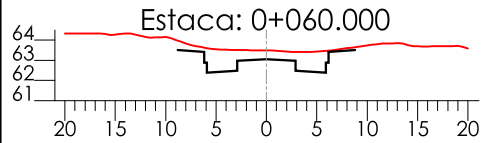
VC: 187,36 m3
VA: 1,27 m3
VAC: 1038,07 m3
VAA: 15,76 m3



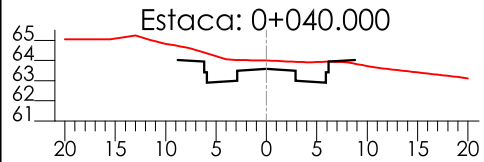
VC: 219,20 m3
VA: 0,00 m3
VAC: 850,70 m3
VAA: 14,49 m3



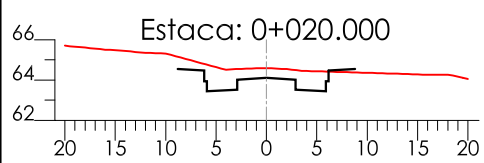
VC: 214,66 m3
VA: 1,83 m3
VAC: 631,50 m3
VAA: 14,49 m3



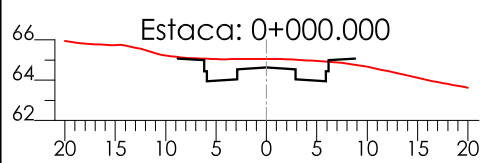
VC: 217,26 m3
VA: 4,91 m3
VAC: 416,84 m3
VAA: 12,67 m3



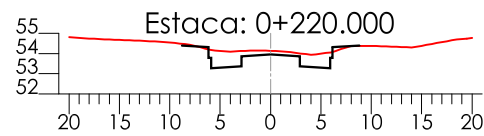
VC: 199,58 m3
VA: 7,75 m3
VAC: 199,58 m3
VAA: 7,75 m3



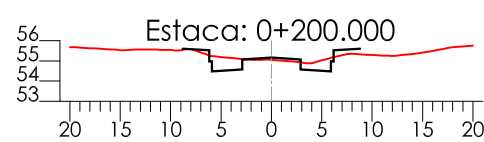
VC: 0,00 m3
VA: 0,00 m3
VAC: 0,00 m3
VAA: 0,00 m3



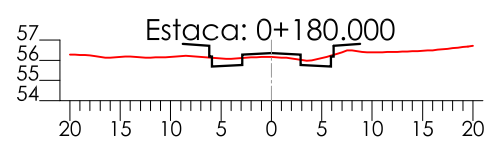
VC: 91,83 m3
VA: 16,77 m3
VAC: 1474,24 m3
VAA: 340,81 m3



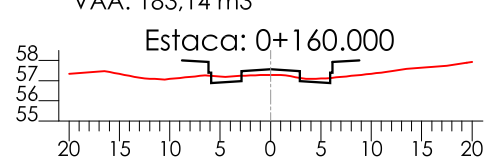
VC: 54,84 m3
VA: 49,21 m3
VAC: 1382,41 m3
VAA: 324,03 m3



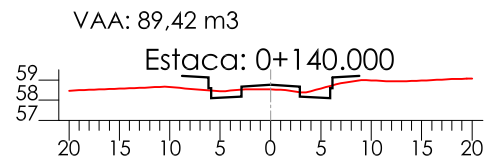
VC: 34,58 m3
VA: 91,68 m3
VAC: 1327,57 m3
VAA: 274,83 m3



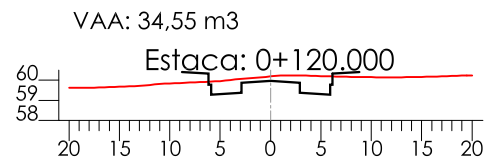
VC: 35,20 m3
VA: 93,73 m3
VAC: 1292,99 m3
VAA: 183,14 m3



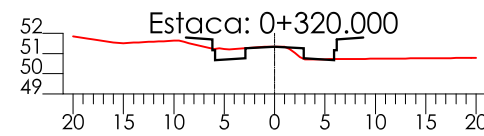
VC: 84,44 m3
VA: 54,86 m3
VAC: 1257,78 m3
VAA: 89,42 m3



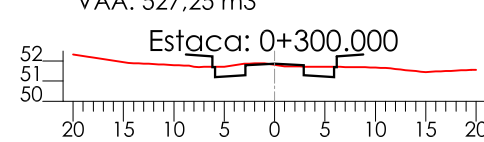
VC: 135,27 m3
VA: 18,79 m3
VAC: 1173,34 m3
VAA: 34,55 m3



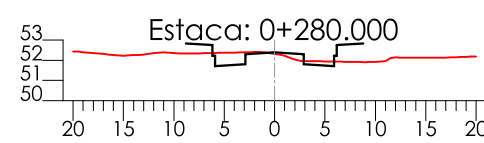
VC: 48,00 m3
VA: 75,17 m3
VAC: 1805,80 m3
VAA: 602,42 m3



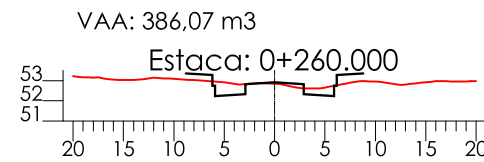
VC: 57,25 m3
VA: 74,81 m3
VAC: 1757,80 m3
VAA: 527,25 m3



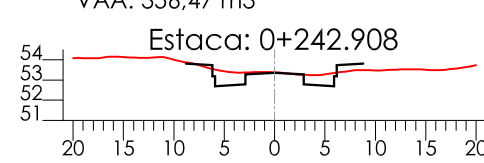
VC: 55,08 m3
VA: 66,37 m3
VAC: 1700,55 m3
VAA: 452,44 m3



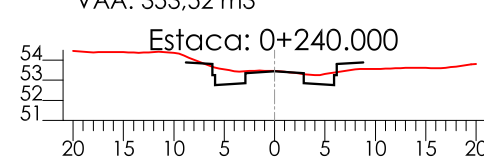
VC: 59,20 m3
VA: 29,60 m3
VAC: 1645,47 m3
VAA: 386,07 m3



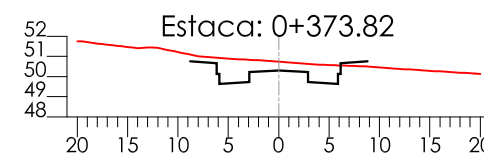
VC: 11,96 m3
VA: 2,95 m3
VAC: 1586,27 m3
VAA: 356,47 m3



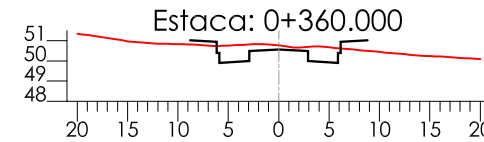
VC: 100,07 m3
VA: 12,71 m3
VAC: 1574,31 m3
VAA: 353,52 m3



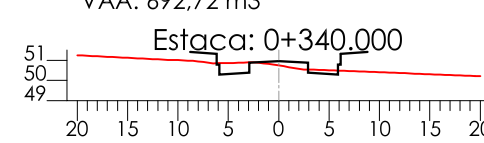
VC: 112,68 m3
VA: 14,71 m3
VAC: 2041,43 m3
VAA: 771,58 m3



VC: 84,14 m3
VA: 64,15 m3
VAC: 1928,76 m3
VAA: 756,87 m3



VC: 38,82 m3
VA: 90,30 m3
VAC: 1844,62 m3
VAA: 692,72 m3



MUNICÍPIO DE VENÂNCIO AIRES

PAVIMENTAÇÃO RUA PROFª WILMA HELENA KUNZ - BAIRRO GRESSLER

PROJETO

PAVIMENTAÇÃO ASFÁLTICA

PROJETO GEOMÉTRICO

SEÇÕES TRANSVERSAIS

RESPONSÁVEL TÉCNICO: PROJETO

MARCOS H. FISCHER - Eng. Civil - CREA RS224881

ESCALA

Indicada

DATA

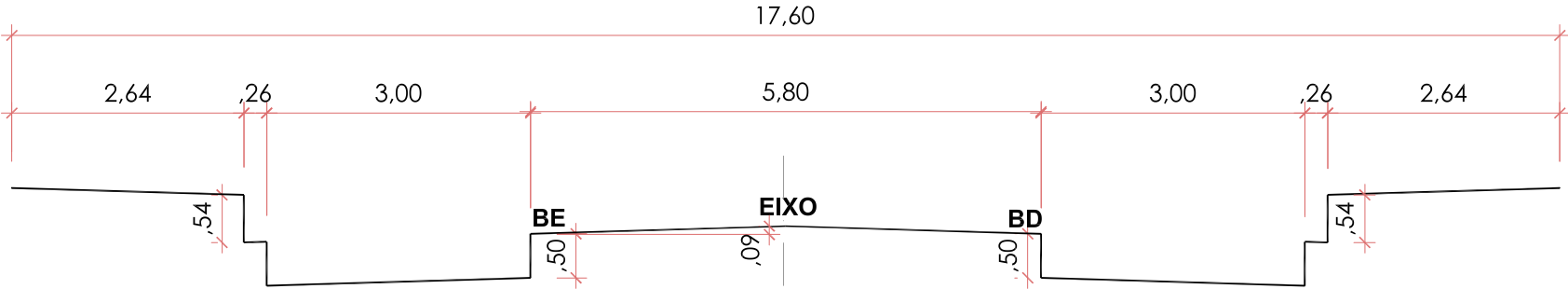
FEV/2025

PRANCHA

05

420x297mm

PEFIL TRANSVERSAL TERRAPLENAGEM



MUNICÍPIO DE VENÂNCIO AIRES

PAVIMENTAÇÃO RUA WILMA HELENA KUNZ - BAIRRO GRESSLER

PROJETO

PERFIL TRANSVERSAL TERRAPLENAGEM
RELATÓRIO DE LOCAÇÃO
NOTAS DE SERVIÇO

RESPONSÁVEL TÉCNICO: PROJETO

MARCOS H. FISCHER - Eng. Civil - CREA RS224881

DATA

FEV/2025

RELATÓRIO LOCAÇÃO/EIXO DO PROJETO

Ponto	Descrição	X	Y	Cota	Eixo
0+000,000		382830,989	6722934,301	64,630	
0+000,000-1	7	382822,270	6722935,495	65,073	
0+000,000-2	6	382824,885	6722935,137	64,993	
0+000,000-3	5	382824,885	6722935,137	64,453	
0+000,000-4	4	382825,143	6722935,102	64,453	
0+000,000-5	3	382825,143	6722935,102	63,953	
0+000,000-6	2	382828,115	6722934,695	64,043	
0+000,000-7	BE	382828,115	6722934,695	64,543	
0+000,000-8	BD	382833,862	6722933,908	64,543	
0+000,000-9	2	382833,862	6722933,908	64,043	
0+000,000-10	3	382836,834	6722933,501	63,953	
0+000,000-11	4	382836,834	6722933,501	64,453	
0+000,000-12	5	382837,092	6722933,466	64,453	
0+000,000-13	6	382837,092	6722933,466	64,993	
0+000,000-14	7	382839,707	6722933,108	65,073	
0+020,000		382833,701	6722954,117	64,107	
0+020,000-1	7	382824,982	6722955,310	64,550	
0+020,000-2	6	382827,598	6722954,952	64,470	
0+020,000-3	5	382827,598	6722954,952	63,930	
0+020,000-4	4	382827,856	6722954,917	63,930	
0+020,000-5	3	382827,856	6722954,917	63,430	
0+020,000-6	2	382830,828	6722954,510	63,520	
0+020,000-7	BE	382830,828	6722954,510	64,020	
0+020,000-8	BD	382836,574	6722953,723	64,020	
0+020,000-9	2	382836,574	6722953,723	63,520	
0+020,000-10	3	382839,547	6722953,316	63,430	
0+020,000-11	4	382839,547	6722953,316	63,930	
0+020,000-12	5	382839,804	6722953,281	63,930	
0+020,000-13	6	382839,804	6722953,281	64,470	
0+020,000-14	7	382842,420	6722952,823	64,550	
0+040,000		382836,414	6722973,932	63,583	
0+040,000-1	7	382827,695	6722975,125	64,026	
0+040,000-2	6	382830,310	6722974,767	63,946	
0+040,000-3	5	382830,310	6722974,767	63,406	
0+040,000-4	4	382830,568	6722974,732	63,406	
0+040,000-5	3	382830,568	6722974,732	62,906	
0+040,000-6	2	382833,540	6722974,325	62,996	
0+040,000-7	BE	382833,540	6722974,325	63,496	
0+040,000-8	BD	382839,287	6722973,538	63,496	
0+040,000-9	2	382839,287	6722973,538	62,996	
0+040,000-10	3	382842,259	6722973,132	62,906	
0+040,000-11	4	382842,259	6722973,132	63,406	
0+040,000-12	5	382842,517	6722973,096	63,406	
0+040,000-13	6	382842,517	6722973,096	63,946	
0+040,000-14	7	382845,132	6722972,738	64,026	
0+060,000		382839,126	6722993,747	63,060	
0+060,000-1	7	382830,407	6722994,940	63,503	
0+060,000-2	6	382833,023	6722994,582	63,423	
0+060,000-3	5	382833,023	6722994,582	62,883	
0+060,000-4	4	382833,281	6722994,547	62,883	
0+060,000-5	3	382833,281	6722994,547	62,383	
0+060,000-6	2	382836,253	6722994,140	62,473	
0+060,000-7	BE	382836,253	6722994,140	62,973	
0+060,000-8	BD	382841,999	6722993,354	62,973	
0+060,000-9	2	382841,999	6722993,354	62,473	
0+060,000-10	3	382844,972	6722992,947	62,383	
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0+060,000-12	5	382845,229	6722992,911	62,883	
0+060,000-13	6	382845,229	6722992,911	63,423	
0+060,000-14	7	382847,845	6722992,553	63,503	

0+080,000		382841,839	6723013,562	62,028	
0+080,000-1	7	382833,120	6723014,756	62,471	
0+080,000-2	6	382835,735	6723014,398	62,391	
0+080,000-3	5	382835,735	6723014,398	61,851	
0+080,000-4	4	382835,993	6723014,362	61,851	
0+080,000-5	3	382835,993	6723014,362	61,351	
0+080,000-6	2	382838,965	6723013,955	61,441	
0+080,000-7	BE	382838,965	6723013,955	61,941	
0+080,000-8	BD	382844,712	6723013,169	61,941	
0+080,000-9	2	382844,712	6723013,169	61,441	
0+080,000-10	3	382847,684	6723012,762	61,351	
0+080,000-11	4	382847,684	6723012,762	61,851	
0+080,000-12	5	382847,942	6723012,727	61,851	
0+080,000-13	6	382847,942	6723012,727	62,391	
0+080,000-14	7	382850,557	6723012,369	62,471	
0+100,000		382844,551	6723033,377	60,997	
0+100,000-1	7	382835,832	6723034,571	61,440	
0+100,000-2	6	382838,448	6723034,213	61,360	
0+100,000-3	5	382838,448	6723034,213	60,820	
0+100,000-4	4	382838,706	6723034,178	60,820	
0+100,000-5	3	382838,706	6723034,178	60,320	
0+100,000-6	2	382841,678	6723033,771	60,410	
0+100,000-7	BE	382841,678	6723033,771	60,910	
0+100,000-8	BD	382847,424	6723032,984	60,910	
0+100,000-9	2	382847,424	6723032,984	60,410	
0+100,000-10	3	382850,397	6723032,577	60,320	
0+100,000-11	4	382850,397	6723032,577	60,820	
0+100,000-12	5	382850,654	6723032,542	60,820	
0+100,000-13	6	382850,654	6723032,542	61,360	
0+100,000-14	7	382853,270	6723032,184	61,440	
0+120,000		382847,264	6723053,193	59,965	
0+120,000-1	7	382838,545	6723054,386	60,408	
0+120,000-2	6	382841,160	6723054,028	60,328	
0+120,000-3	5	382841,160	6723054,028	59,788	
0+120,000-4	4	382841,418	6723053,993	59,788	
0+120,000-5	3	382841,418	6723053,993	59,288	
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0+120,000-7	BE	382844,390	6723053,586	59,878	
0+120,000-8	BD	382850,137	6723052,799	59,878	
0+120,000-9	2	382850,137	6723052,799	59,378	
0+120,000-10	3	382853,109	6723052,392	59,288	
0+120,000-11	4	382853,109	6723052,392	59,788	
0+120,000-12	5	382853,367	6723052,357	59,788	
0+120,000-13	6	382853,367	6723052,357	60,328	
0+120,000-14	7	382855,982	6723051,999	60,408	
0+140,000		382849,976	6723073,008	58,764	
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0+140,000-2	6	382843,873	6723073,843	59,127	
0+140,000-3	5	382843,873	6723073,843	58,587	
0+140,000-4	4	382844,131	6723073,808	58,587	
0+140,000-5	3	382844,131	6723073,808	58,087	
0+140,000-6	2	382847,103	6723073,401	58,177	
0+140,000-7	BE	382847,103	6723073,401	58,677	
0+140,000-8	BD	382852,849	6723072,614	58,677	
0+140,000-9	2	382852,849	6723072,614	58,177	
0+140,000-10	3	382855,822	6723072,208	58,087	
0+140,000-11	4	382855,822	6723072,208	58,587	
0+140,000-12	5	382856,079	6723072,172	58,587	
0+140,000-13	6	382856,079	6723072,172	59,127	
0+140,000-14	7	382858,695	6723071,814	59,207	
0+160,000		382852,689	6723092,823	57,563	
0+160,000-1	7	382843,970	6723094,016	58,006	
0+160,000-2	6	382846,585	6723093,658	57,926	
0+160,000-3	5	382846,585	6723093,658	57,386	

Projeto: WILMA HELENA
KUNZ.geoproject

0+160.000-4	4	382846,843	6723093,623	57,386
0+160.000-5	3	382846,843	6723093,623	56,886
0+160.000-6	2	382849,815	6723093,216	56,976
0+160.000-7	BE	382849,815	6723093,216	57,476
0+160.000-8	BD	382855,562	6723092,430	57,476
0+160.000-9	2	382855,562	6723092,430	56,976
0+160.000-10	3	382858,534	6723092,023	56,886
0+160.000-11	4	382858,534	6723092,023	57,386
0+160.000-12	5	382858,792	6723091,988	57,386
0+160.000-13	6	382858,792	6723091,988	57,926
0+160.000-14	7	382861,407	6723091,629	58,006
0+180.000		382855,401	6723112,638	56,362
0+180.000-1	7	382846,682	6723113,832	56,805
0+180.000-2	6	382849,298	6723113,474	56,725
0+180.000-3	5	382849,298	6723113,474	56,185
0+180.000-4	4	382849,556	6723113,438	56,185
0+180.000-5	3	382849,556	6723113,438	55,685
0+180.000-6	2	382852,528	6723113,031	55,775
0+180.000-7	BE	382852,528	6723113,031	56,275
0+180.000-8	BD	382858,274	6723112,245	56,275
0+180.000-9	2	382858,274	6723112,245	55,775
0+180.000-10	3	382861,247	6723111,838	55,685
0+180.000-11	4	382861,247	6723111,838	56,185
0+180.000-12	5	382861,504	6723111,803	56,185
0+180.000-13	6	382861,504	6723111,803	56,725
0+180.000-14	7	382864,120	6723111,445	56,805
0+200.000		382858,114	6723132,453	55,161
0+200.000-1	7	382849,395	6723133,647	55,604
0+200.000-2	6	382852,010	6723133,289	55,524
0+200.000-3	5	382852,010	6723133,289	54,984
0+200.000-4	4	382852,268	6723133,254	54,984
0+200.000-5	3	382852,268	6723133,254	54,484
0+200.000-6	2	382855,240	6723132,847	54,574
0+200.000-7	BE	382855,240	6723132,847	55,074
0+200.000-8	BD	382860,987	6723132,060	55,074
0+200.000-9	2	382860,987	6723132,060	54,574
0+200.000-10	3	382863,959	6723131,653	54,484
0+200.000-11	4	382863,959	6723131,653	54,984
0+200.000-12	5	382864,217	6723131,618	54,984
0+200.000-13	6	382864,217	6723131,618	55,524
0+200.000-14	7	382866,832	6723131,260	55,604
0+220.000		382860,826	6723152,269	53,960
0+220.000-1	7	382852,107	6723153,462	54,403
0+220.000-2	6	382854,723	6723153,104	54,323
0+220.000-3	5	382854,723	6723153,104	53,783
0+220.000-4	4	382854,981	6723153,069	53,783
0+220.000-5	3	382854,981	6723153,069	53,283
0+220.000-6	2	382857,953	6723152,662	53,373
0+220.000-7	BE	382857,953	6723152,662	53,873
0+220.000-8	BD	382863,699	6723151,875	53,873
0+220.000-9	2	382863,699	6723151,875	53,373
0+220.000-10	3	382866,672	6723151,468	53,283
0+220.000-11	4	382866,672	6723151,468	53,783
0+220.000-12	5	382866,929	6723151,433	53,783
0+220.000-13	6	382866,929	6723151,433	54,323
0+220.000-14	7	382869,545	6723151,075	54,403
0+240.000		382863,539	6723172,084	53,438
0+240.000-1	7	382854,820	6723173,277	53,881
0+240.000-2	6	382857,435	6723172,919	53,801
0+240.000-3	5	382857,435	6723172,919	53,261
0+240.000-4	4	382857,693	6723172,884	53,261
0+240.000-5	3	382857,693	6723172,884	52,761
0+240.000-6	2	382860,665	6723172,477	52,851
0+240.000-7	BE	382860,665	6723172,477	53,351
0+240.000-8	BD	382866,412	6723171,690	53,351

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0+240.000-9	2	382866,412	6723171,690	52,851
0+240.000-10	3	382869,384	6723171,284	52,761
0+240.000-11	4	382869,384	6723171,284	53,261
0+240.000-12	5	382869,642	6723171,248	53,261
0+240.000-13	6	382869,642	6723171,248	53,801
0+240.000-14	7	382872,257	6723170,890	53,881
0+242.908		382863,933	6723174,965	53,362
0+242.908-1	7	382855,214	6723176,158	53,805
0+242.908-2	6	382857,830	6723175,800	53,725
0+242.908-3	5	382857,830	6723175,800	53,185
0+242.908-4	4	382858,087	6723175,765	53,185
0+242.908-5	3	382858,087	6723175,765	52,685
0+242.908-6	2	382861,060	6723175,358	52,775
0+242.908-7	BE	382861,060	6723175,358	53,275
0+242.908-8	BD	382866,806	6723174,572	53,275
0+242.908-9	2	382866,806	6723174,572	52,775
0+242.908-10	3	382869,778	6723174,165	52,685
0+242.908-11	4	382869,778	6723174,165	53,185
0+242.908-12	5	382870,036	6723174,129	53,185
0+242.908-13	6	382870,036	6723174,129	53,725
0+242.908-14	7	382872,652	6723173,771	53,805
0+260.000		382866,218	6723191,903	52,916
0+260.000-1	7	382857,497	6723193,080	53,359
0+260.000-2	6	382860,113	6723192,727	53,279
0+260.000-3	5	382860,113	6723192,727	52,739
0+260.000-4	4	382860,371	6723192,692	52,739
0+260.000-5	3	382860,371	6723192,692	52,239
0+260.000-6	2	382863,344	6723192,291	52,329
0+260.000-7	BE	382863,344	6723192,291	52,829
0+260.000-8	BD	382869,092	6723191,516	52,829
0+260.000-9	2	382869,092	6723191,516	52,329
0+260.000-10	3	382872,065	6723191,115	52,239
0+260.000-11	4	382872,065	6723191,115	52,739
0+260.000-12	5	382872,323	6723191,080	52,739
0+260.000-13	6	382872,323	6723191,080	53,279
0+260.000-14	7	382874,939	6723190,727	53,359
0+280.000		382868,892	6723211,724	52,394
0+280.000-1	7	382860,171	6723212,900	52,837
0+280.000-2	6	382862,787	6723212,547	52,757
0+280.000-3	5	382862,787	6723212,547	52,217
0+280.000-4	4	382863,045	6723212,513	52,217
0+280.000-5	3	382863,045	6723212,513	51,717
0+280.000-6	2	382866,018	6723212,112	51,807
0+280.000-7	BE	382866,018	6723212,112	52,307
0+280.000-8	BD	382871,766	6723211,336	52,307
0+280.000-9	2	382871,766	6723211,336	51,807
0+280.000-10	3	382874,739	6723210,935	51,717
0+280.000-11	4	382874,739	6723210,935	52,217
0+280.000-12	5	382874,997	6723210,900	52,217
0+280.000-13	6	382874,997	6723210,900	52,757
0+280.000-14	7	382877,613	6723210,547	52,837
0+300.000		382871,566	6723231,544	51,872
0+300.000-1	7	382862,845	6723232,721	52,315
0+300.000-2	6	382865,461	6723232,368	52,235
0+300.000-3	5	382865,461	6723232,368	51,695
0+300.000-4	4	382865,719	6723232,333	51,695
0+300.000-5	3	382865,719	6723232,333	51,195
0+300.000-6	2	382868,692	6723231,932	51,285
0+300.000-7	BE	382868,692	6723231,932	51,785
0+300.000-8	BD	382874,440	6723231,157	51,785
0+300.000-9	2	382874,440	6723231,157	51,285
0+300.000-10	3	382877,413	6723230,756	51,195
0+300.000-11	4	382877,413	6723230,756	51,695
0+300.000-12	5	382877,671	6723230,721	51,695
0+300.000-13	6	382877,671	6723230,721	52,235

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0+300.000-14	7	382880,287	6723230,368	52,315
0+320.000		382874,240	6723251,365	51,350
0+320.000-1	7	382865,519	6723252,541	51,793
0+320.000-2	6	382868,135	6723252,188	51,713
0+320.000-3	5	382868,135	6723252,188	51,173
0+320.000-4	4	382868,393	6723252,154	51,173
0+320.000-5	3	382868,393	6723252,154	50,673
0+320.000-6	2	382871,366	6723251,753	50,763
0+320.000-7	BE	382871,366	6723251,753	51,263
0+320.000-8	BD	382877,114	6723250,977	51,263
0+320.000-9	2	382877,114	6723250,977	50,763
0+320.000-10	3	382880,087	6723250,576	50,673
0+320.000-11	4	382880,087	6723250,576	51,173
0+320.000-12	5	382880,344	6723250,541	51,173
0+320.000-13	6	382880,344	6723250,541	51,713
0+320.000-14	7	382882,961	6723250,188	51,793
0+340.000		382876,914	6723271,185	50,964
0+340.000-1	7	382868,193	6723272,362	51,407
0+340.000-2	6	382870,809	6723272,009	51,327
0+340.000-3	5	382870,809	6723272,009	50,787
0+340.000-4	4	382871,067	6723271,974	50,787
0+340.000-5	3	382871,067	6723271,974	50,287
0+340.000-6	2	382874,040	6723271,573	50,377
0+340.000-7	BE	382874,040	6723271,573	50,877
0+340.000-8	BD	382879,788	6723270,798	50,877
0+340.000-9	2	382879,788	6723270,798	50,377
0+340.000-10	3	382882,761	6723270,396	50,287
0+340.000-11	4	382882,761	6723270,396	50,787
0+340.000-12	5	382883,018	6723270,362	50,787
0+340.000-13	6	382883,018	6723270,362	51,327
0+340.000-14	7	382885,635	6723270,009	51,407
0+360.000		382879,587	6723291,006	50,577
0+360.000-1	7	382870,866	6723292,182	51,020
0+360.000-2	6	382873,483	6723291,829	50,940
0+360.000-3	5	382873,483	6723291,829	50,400
0+360.000-4	4	382873,740	6723291,795	50,400
0+360.000-5	3	382873,740	6723291,795	49,900
0+360.000-6	2	382876,714	6723291,393	49,990
0+360.000-7	BE	382876,714	6723291,393	50,490
0+360.000-8	BD	382882,461	6723290,618	50,490
0+360.000-9	2	382882,461	6723290,618	49,990
0+360.000-10	3	382885,435	6723290,217	49,900
0+360.000-11	4	382885,435	6723290,217	50,400
0+360.000-12	5	382885,692	6723290,182	50,400
0+360.000-13	6	382885,692	6723290,182	50,940
0+360.000-14	7	382888,308	6723289,829	51,020
0+373.827		382881,436	6723304,709	50,310
0+373.827-1	7	382872,715	6723305,885	50,753
0+373.827-2	6	382875,331	6723305,532	50,673
0+373.827-3	5	382875,331	6723305,532	50,133
0+373.827-4	4	382875,589	6723305,498	50,133
0+373.827-5	3	382875,589	6723305,498	49,633
0+373.827-6	2	382878,562	6723305,096	49,723
0+373.827-7	BE	382878,562	6723305,096	50,223
0+373.827-8	BD	382884,310	6723304,321	50,223
0+373.827-9	2	382884,310	6723304,321	49,723
0+373.827-10	3	382887,283	6723303,920	49,633
0+373.827-11	4	382887,283	6723303,920	50,133
0+373.827-12	5	382887,541	6723303,885	50,133
0+373.827-13	6	382887,541	6723303,885	50,673
0+373.827-14	7	382890,157	6723303,532	50,753

NOTA DE SERVIÇO DE TERRAPLENAGEM

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Offset				Inic Talude				Bordo				Eixo				Bordo				Inicio Talude				Offset			
Est	Dist	Cota	Alt	Dist	Cota	Dist	Cota	%	Terr	Proj	Verm	Dist	Cota	%		Dist	Cota	%		Dist	Cota	Dist	Cota	Alt			
0+000.00 0	2,900	64,543	0,000	2,900	64,543	2,900	64,543	-3,0	65,059	64,630	0,429	2,900	64,543	-3,0	2,900	64,543	2,900	64,543	2,900	64,543	2,900	64,543	0,000				
0+020.00 0	2,900	64,020	0,000	2,900	64,020	2,900	64,020	-3,0	64,590	64,107	0,483	2,900	64,020	-3,0	2,900	64,020	2,900	64,020	2,900	64,020	2,900	64,020	0,000				
0+040.00 0	2,900	63,496	0,000	2,900	63,496	2,900	63,496	-3,0	64,001	63,583	0,417	2,900	63,496	-3,0	2,900	63,496	2,900	63,496	2,900	63,496	2,900	63,496	0,000				
0+060.00 0	2,900	62,973	0,000	2,900	62,973	2,900	62,973	-3,0	63,491	63,060	0,431	2,900	62,973	-3,0	2,900	62,973	2,900	62,973	2,900	62,973	2,900	62,973	0,000				
0+080.00 0	2,900	61,941	0,000	2,900	61,941	2,900	61,941	-3,0	62,507	62,028	0,479	2,900	61,941	-3,0	2,900	61,941	2,900	61,941	2,900	61,941	2,900	61,941	0,000				
0+100.00 0	2,900	60,910	0,000	2,900	60,910	2,900	60,910	-3,0	61,226	60,997	0,229	2,900	60,910	-3,0	2,900	60,910	2,900	60,910	2,900	60,910	2,900	60,910	0,000				
0+120.00 0	2,900	59,878	0,000	2,900	59,878	2,900	59,878	-3,0	60,190	59,965	0,225	2,900	59,878	-3,0	2,900	59,878	2,900	59,878	2,900	59,878	2,900	59,878	0,000				
0+140.00 0	2,900	58,677	0,000	2,900	58,677	2,900	58,677	-3,0	58,530	58,764	-0,234	2,900	58,677	-3,0	2,900	58,677	2,900	58,677	2,900	58,677	2,900	58,677	0,000				
0+160.00 0	2,900	57,476	0,000	2,900	57,476	2,900	57,476	-3,0	57,284	57,563	-0,279	2,900	57,476	-3,0	2,900	57,476	2,900	57,476	2,900	57,476	2,900	57,476	0,000				
0+180.00 0	2,900	56,275	0,000	2,900	56,275	2,900	56,275	-3,0	56,161	56,362	-0,201	2,900	56,275	-3,0	2,900	56,275	2,900	56,275	2,900	56,275	2,900	56,275	0,000				
0+200.00 0	2,900	55,074	0,000	2,900	55,074	2,900	55,074	-3,0	55,062	55,161	-0,099	2,900	55,074	-3,0	2,900	55,074	2,900	55,074	2,900	55,074	2,900	55,074	0,000				
0+220.00 0	2,900	53,873	0,000	2,900	53,873	2,900	53,873	-3,0	54,140	53,960	0,180	2,900	53,873	-3,0	2,900	53,873	2,900	53,873	2,900	53,873	2,900	53,873	0,000				
0+240.00 0	2,900	53,351	0,000	2,900	53,351	2,900	53,351	-3,0	53,470	53,438	0,032	2,900	53,351	-3,0	2,900	53,351	2,900	53,351	2,900	53,351	2,900	53,351	0,000				
0+242.90 8	2,900	53,275	0,000	2,900	53,275	2,900	53,275	-3,0	53,380	53,362	0,017	2,900	53,275	-3,0	2,900	53,275	2,900	53,275	2,900	53,275	2,900	53,275	0,000				
0+260.00 0	2,900	52,829	0,000	2,900	52,829	2,900	52,829	-3,0	52,847	52,916	-0,069	2,900	52,829	-3,0	2,900	52,829	2,900	52,829	2,900	52,829	2,900	52,829	0,000				
0+280.00 0	2,900	52,307	0,000	2,900	52,307	2,900	52,307	-3,0	52,324	52,394	-0,070	2,900	52,307	-3,0	2,900	52,307	2,900	52,307	2,900	52,307	2,900	52,307	0,000				
0+300.00 0	2,900	51,785	0,000	2,900	51,785	2,900	51,785	-3,0	51,809	51,872	-0,063	2,900	51,785	-3,0	2,900	51,785	2,900	51,785	2,900	51,785	2,900	51,785	0,000				
0+320.00 0	2,900	51,263	0,000	2,900	51,263	2,900	51,263	-3,0	51,345	51,350	-0,005	2,900	51,263	-3,0	2,900	51,263	2,900	51,263	2,900	51,263	2,900	51,263	0,000				
0+340.00 0	2,900	50,877	0,000	2,900	50,877	2,900	50,877	-3,0	50,750	50,964	-0,213	2,900	50,877	-3,0	2,900	50,877	2,900	50,877	2,900	50,877	2,900	50,877	0,000				
0+360.00 0	2,900	50,490	0,000	2,900	50,490	2,900	50,490	-3,0	50,777	50,577	0,199	2,900	50,490	-3,0	2,900	50,490	2,900	50,490	2,900	50,490	2,900	50,490	0,000				
0+373.82 7	2,900	50,223	0,000	2,900	50,223	2,900	50,223	-3,0	50,740	50,310	0,430	2,900	50,223	-3,0	2,900	50,223	2,900	50,223	2,900	50,223	2,900	50,223	0,000				

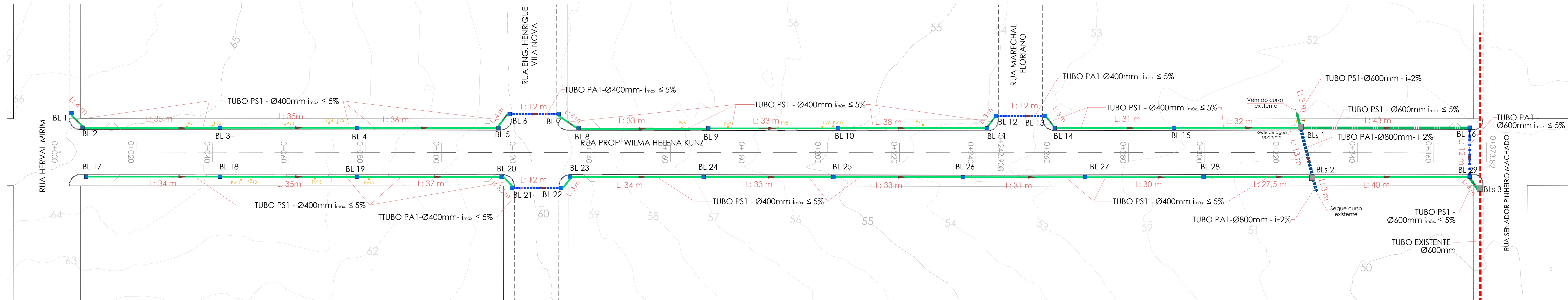
VOLUME POR SEÇÕES - VOLUME LAYER

Calculado pelo método da semi-distancia.

Estaca	m2 Corte	m2 Aterro	Acc m2 Corte	Acc m2 Aterro	m Semi-Dist	m3 Corte	m3 Aterro	Acc m3 Corte	Acc m3 Aterro
0+000.000	9,27	0,47	9,27	0,47					
0+020.000	10,69	0,31	19,96	0,78	10,00	199,58	7,75	199,58	7,75
0+040.000	11,03	0,18	30,99	0,96	10,00	217,26	4,91	416,84	12,67
0+060.000	10,43	0,00	41,42	0,96	10,00	214,66	1,83	631,50	14,49
0+080.000	11,49	0,00	52,91	0,96	10,00	219,20	0,00	850,70	14,49
0+100.000	7,25	0,13	60,16	1,09	10,00	187,36	1,27	1038,07	15,76
0+120.000	6,28	1,75	66,44	2,84	10,00	135,27	18,79	1173,34	34,55
0+140.000	2,16	3,73	68,60	6,57	10,00	84,44	54,86	1257,78	89,42
0+160.000	1,36	5,64	69,96	12,21	10,00	35,20	93,73	1292,99	183,14
0+180.000	2,10	3,53	72,06	15,74	10,00	34,58	91,68	1327,57	274,83
0+200.000	3,38	1,39	75,44	17,13	10,00	54,84	49,21	1382,41	324,03
0+220.000	5,80	0,29	81,25	17,42	10,00	91,83	16,77	1474,24	340,81
0+240.000	4,21	0,99	85,45	18,40	10,00	100,07	12,71	1574,31	353,52
0+242.908	4,02	1,04	89,47	19,45	1,45	11,96	2,95	1586,27	356,47
0+260.000	2,91	2,42	92,38	21,87	8,55	59,20	29,60	1645,47	386,07
0+280.000	2,60	4,22	94,98	26,08	10,00	55,08	66,37	1700,55	452,44
0+300.000	3,13	3,26	98,10	29,35	10,00	57,25	74,81	1757,80	527,25
0+320.000	1,67	4,25	99,78	33,60	10,00	48,00	75,17	1805,80	602,42
0+340.000	2,21	4,78	101,99	38,38	10,00	38,82	90,30	1844,62	692,72
0+360.000	6,21	1,64	108,19	40,01	10,00	84,14	64,15	1928,76	756,87
0+373.827	10,09	0,49	118,28	40,50	6,91	112,68	14,71	2041,43	771,58

Volume Total de Corte: 2041,43 m3

Volume Total de Aterro: 771,58 m3



	Boca de lobo (BL) - 0,9x0,9m interno
	Boca de lobo (BLs) - 1,1x1,1m interno
	Boca de lobo (BL) - existente
	Pv - Corsan (15 un.)
	Tubo PS1 - Ø400mm (PB)
	Tubo PS1 - Ø600mm (PB)
	Tubo PA1 - Ø400mm (PB)
	Tubo PA1 - Ø600mm (PB)
	Tubo PA1 - Ø800mm (PB)
	Rede existente

MUNICÍPIO DE VENÂNCIO AIRES

PAVIMENTAÇÃO RUA PROFª WILMA HELENA KUNZ - BAIRRO GRESSLER

PROJETO

PAVIMENTAÇÃO ASFÁLTICA
- PROJETO DE DRENAGEM

RESPONSÁVEL TÉCNICO: PROJETO

MARCOS H. FISCHER - Eng. Civil - CREA RS224881

ESCALA

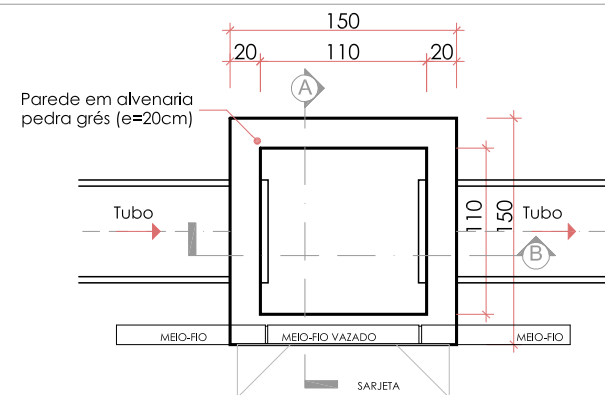
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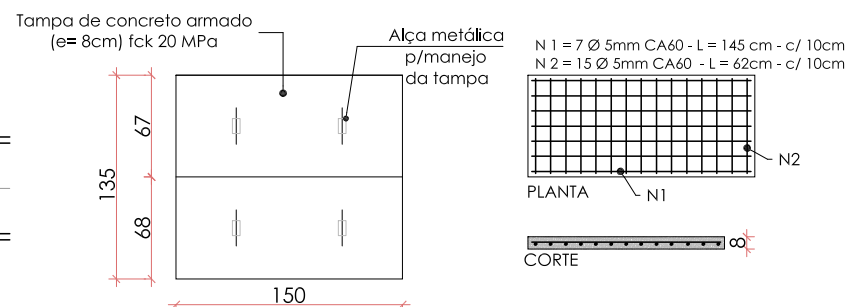
FEV/2025

PRANCHA

07

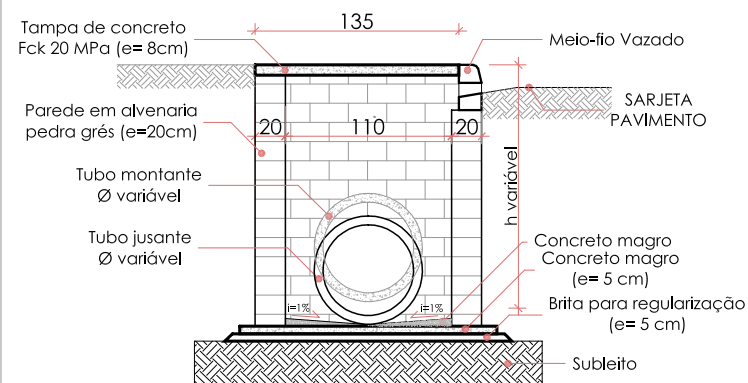


PLANTA BAIXA - BOCA DE LOBO - BLs (110x110 - int.)
ESCALA 1/50

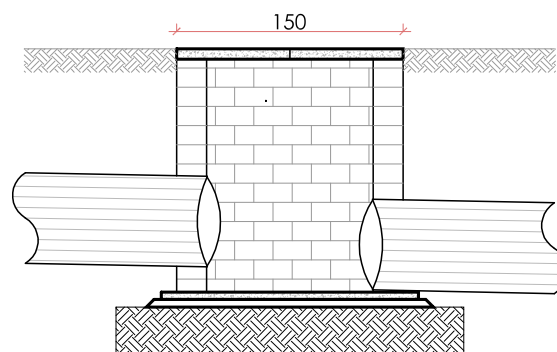


PLANTA BAIXA - TAMPA
ESCALA 1/50

DETALHES ARMADURA - TAMPA
ESCALA 1/50

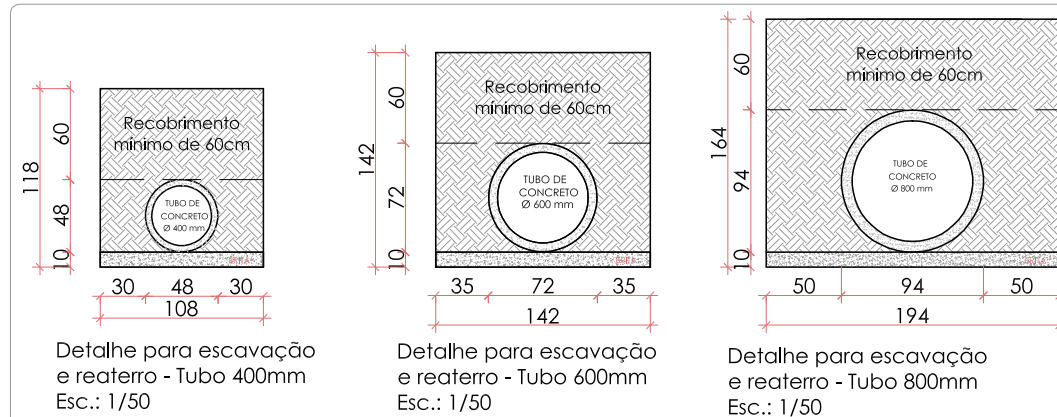


CORTE A - BLs
ESCALA 1/50

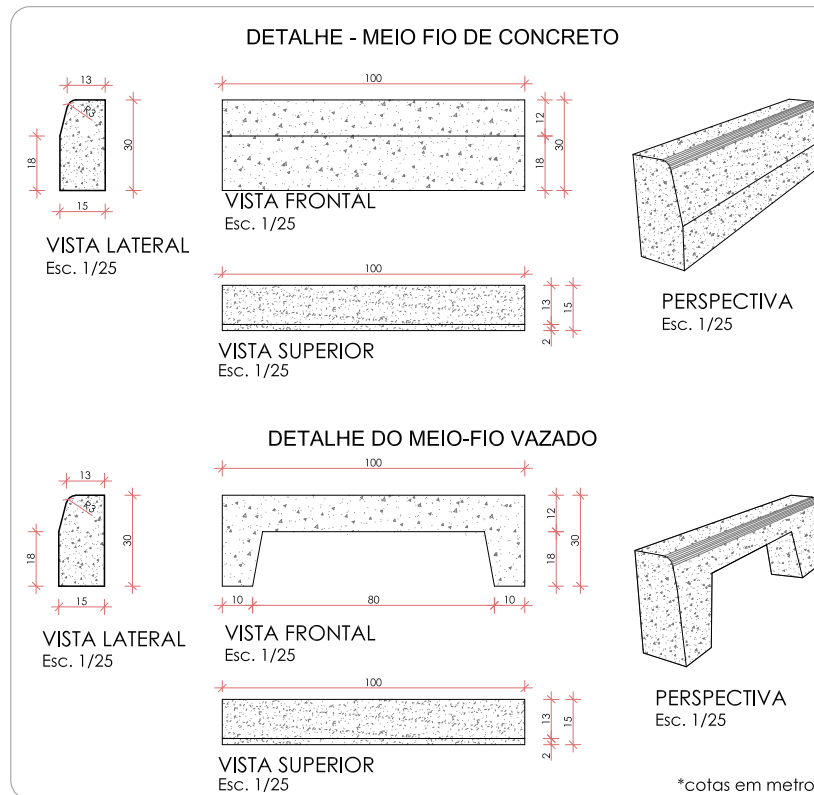


CORTE B - BLs
ESCALA 1/50

*Cotas em centímetros



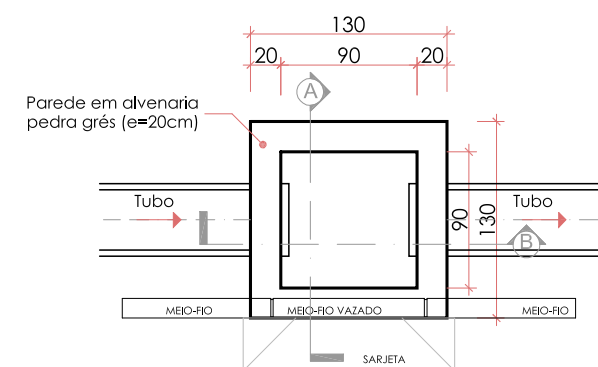
*Cotas em centímetros



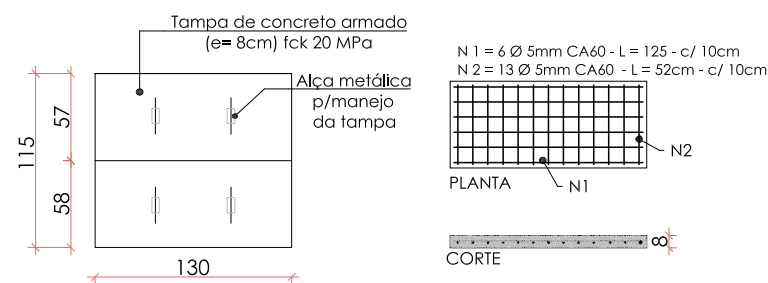
*cotas em metros

RELAÇÃO MATERIAIS

DESCRIÇÃO	QTD
Tubo PA1-PB Ø800mm	16 m
Tubo PA1-PB Ø600mm	12 m
Tubo PA1-PB Ø400mm	36 m
Tubo PS1-PB Ø600mm	50 m
Tubo PS1-PB Ø400mm	634 m
BL (90x90 cm interno)	29 un.
BLs (110x110 cm interno)	03 un.

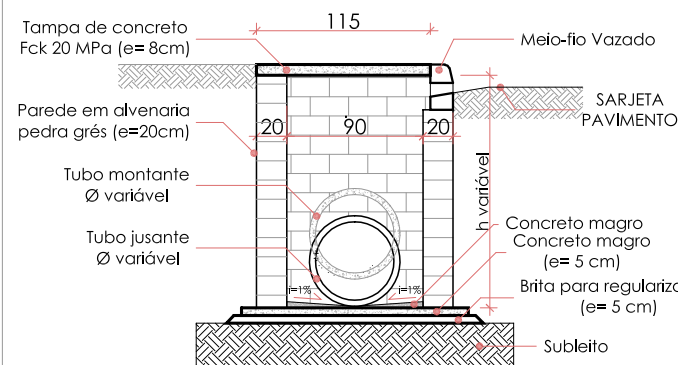


PLANTA BAIXA - BOCA DE LOBO - BL (90x90- int.)
ESCALA 1/50

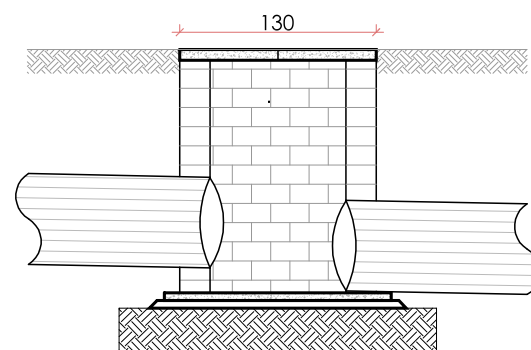


PLANTA BAIXA - TAMPA
ESCALA 1/50

DETALHES ARMADURA - TAMPA
ESCALA 1/50



CORTE A - BL
ESCALA 1/50



CORTE B - BL
ESCALA 1/50

*Cotas em centímetros

MUNICÍPIO DE VENÂNCIO AIRES

PAVIMENTAÇÃO RUA PROFª WILMA HELENA KUNZ - BAIRRO GRESSLER

PROJETO

PAVIMENTAÇÃO ASFÁLTICA - DETALHE DRENAGEM

RESPONSÁVEL TÉCNICO: PROJETO

MARCOS H. FISCHER - Eng. Civil - CREA RS224881

ESCALA

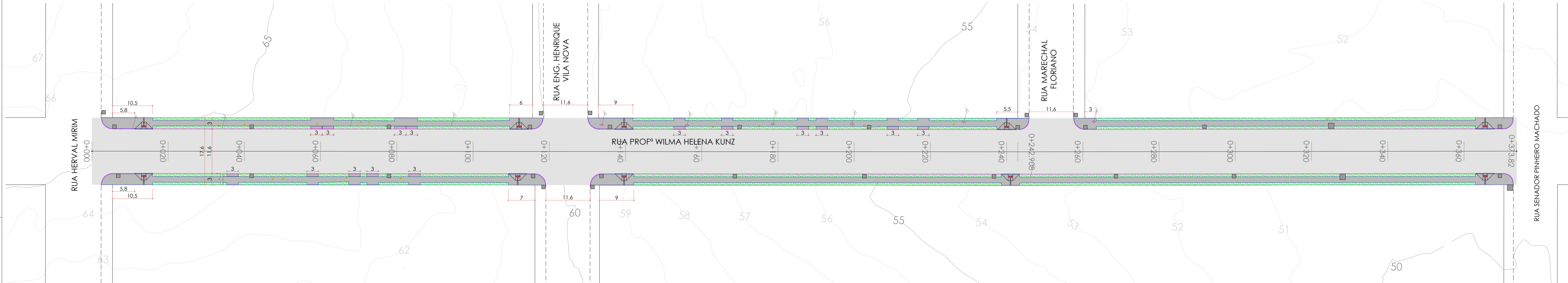
Indicada

DATA

FEV/2025

PRANCHA

08



	Área pavimentação CBUQ: 4.478,12 m²
	Área calçadas: 1.235,65 m²
	Área de grama 751,10 m²
	Área piso tátil: 10,05 m² alerta + direcional
	Meio-fio: 724 m Refo: 679,20 m/Curvo: 44,80 m

MUNICÍPIO DE VENÂNCIO AIRES

PAVIMENTAÇÃO RUA PROFª WILMA HELENA KUNZ - BAIRRO GRESSLER

PROJETO

PAVIMENTAÇÃO ASFÁLTICA
- PROJETO DE PAVIMENTAÇÃO E CALÇADA

RESPONSÁVEL TÉCNICO: PROJETO

MARCOS H. FISCHER - Eng. Civil - CREA RS224881

ESCALA

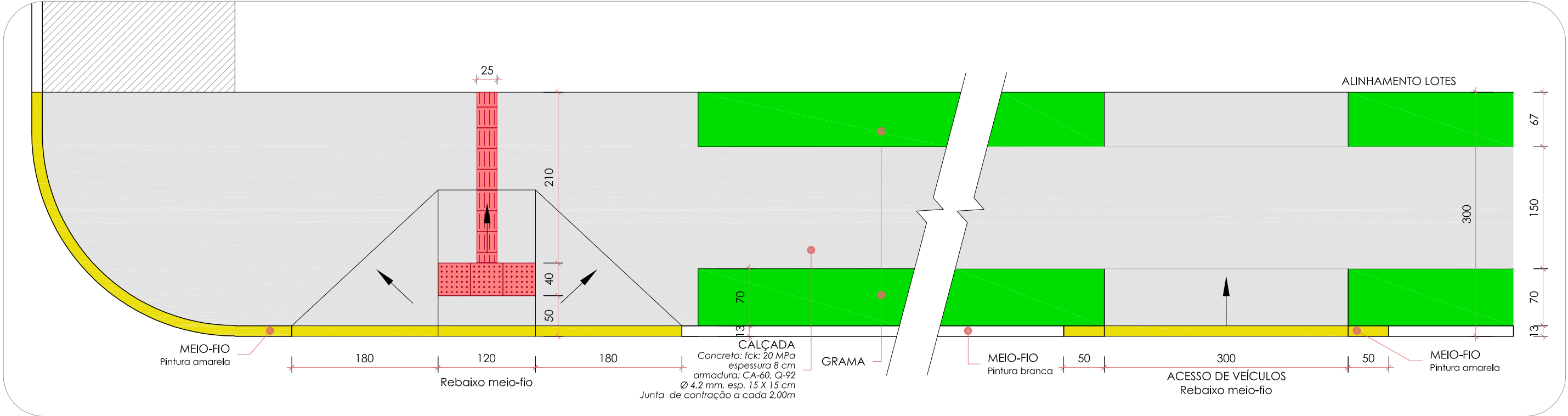
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DATA

FEV/2025

PRANCHA

09



DETALHE CALÇADA
PISO TÁTIL E REBAIXAMENTOS DA CALÇADA
SEM ESCALA

LEGENDA



PISO TÁTIL ALERTA



PISO TÁTIL DIRECIONAL



CALÇADA



GRAMA

MUNICÍPIO DE VENÂNCIO AIRES

PAVIMENTAÇÃO RUA PROFª WILMA HELENA KUNZ - BAIRRO GRESSLER

PROJETO

PAVIMENTAÇÃO ASFÁLTICA
- DETALHE CALÇADA

RESPONSÁVEL TÉCNICO: PROJETO

MARCOS H. FISCHER - Eng. Civil - CREA RS224881

ESCALA

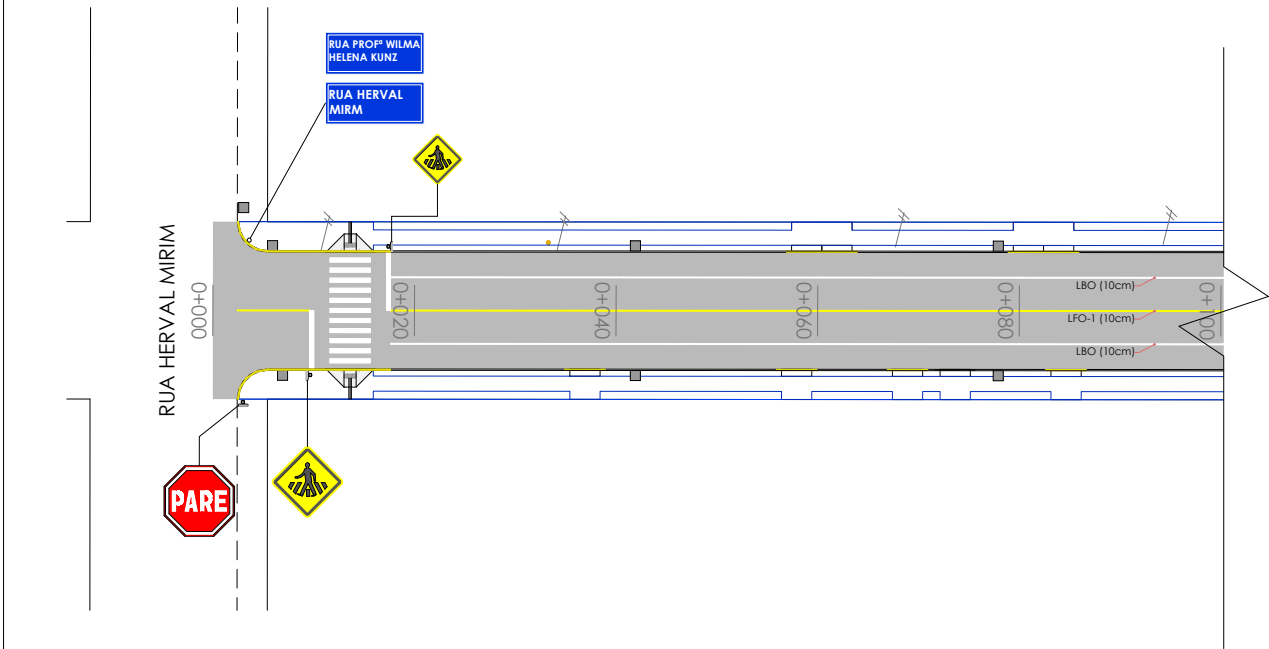
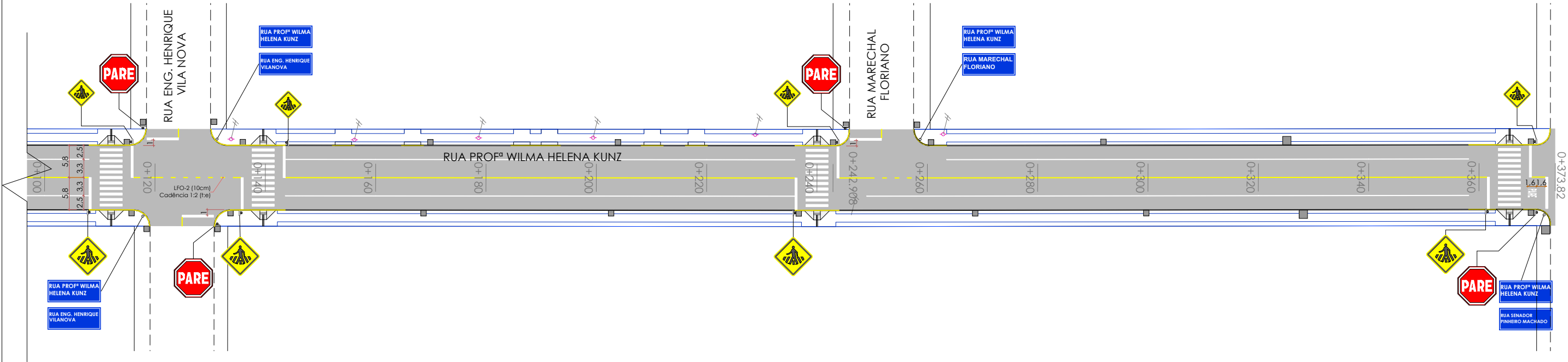
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DATA

FEV/2025

PRANCHA

10



SINALIZAÇÃO HORIZONTAL

DESCRIÇÃO	QTD
LINHAS	
LBO (0.10)	570 m
LFO-1 (0.10)	304 m
LFO-2 (1x2x0.10)	30,60 m
Cadência 1:2 (t:e) - total traço: 10,20 m	
DEMARCAÇÕES FAIXAS	
Faixa pedestre e de retenção	119,92 m²
INDICAÇÕES HORIZONTAIS	
PARE e SETAS	1,16 m²
MEIO FIO	724 m
- MEIO FIO - Pintura branca	517,50 m
- MEIO FIO - Pintura amarela	206,50 m

SINALIZAÇÃO VERTICAL - PLACAS

DESCRIÇÃO	QTD
 Placa R-1 (Parada obrigatória)	05
 Placa A-32b (Passagem sinalizada de pedestres)	10
 Placa de identificação de rua	10

MUNICÍPIO DE VENÂNCIO AIRES

PAVIMENTAÇÃO RUA PROFª WILMA HELENA KUNZ - BAIRRO GRESSLER

PROJETO

RESPONSÁVEL TÉCNICO: PROJETO

PAVIMENTAÇÃO ASFÁLTICA
- PROJETO DE SINALIZAÇÃO

MARCOS H. FISCHER - Eng. Civil - CREA RS224881

ESCALA

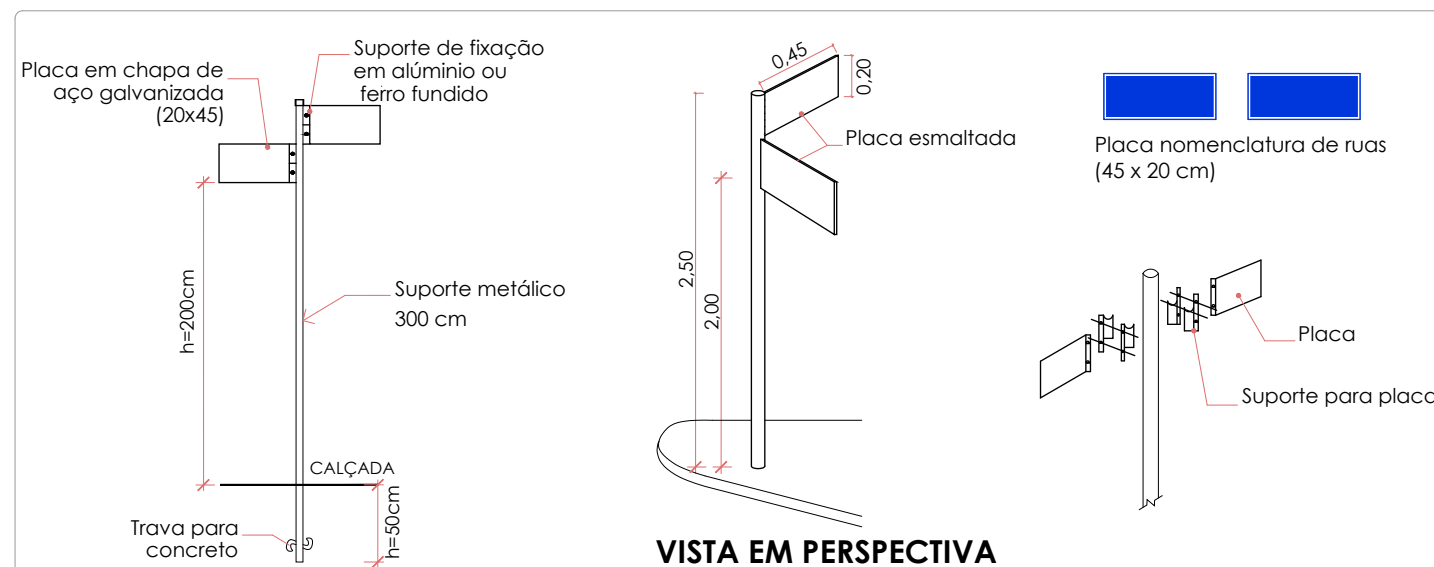
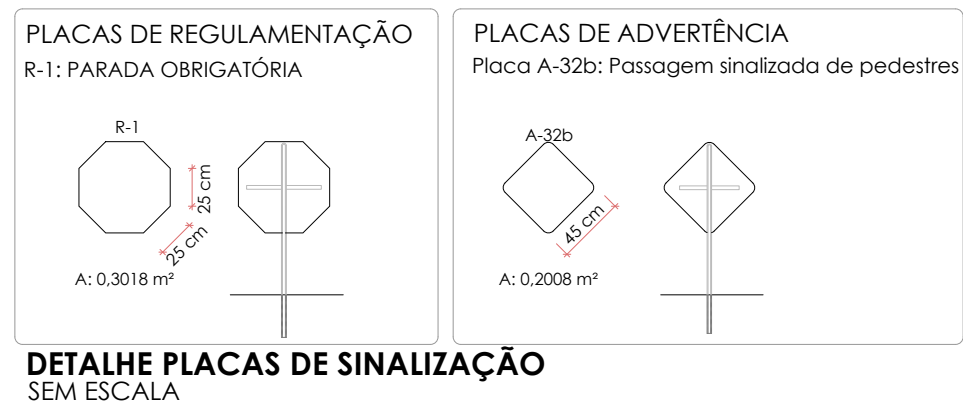
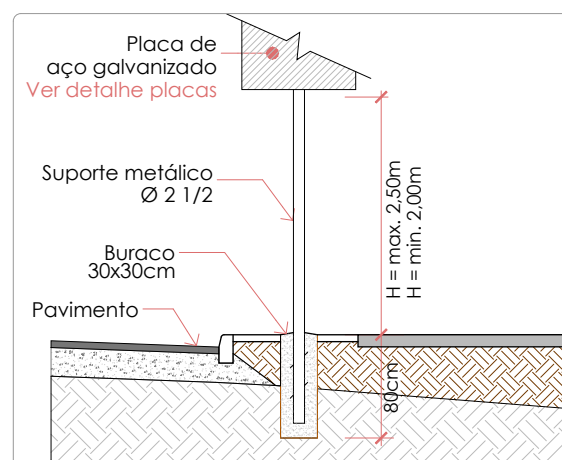
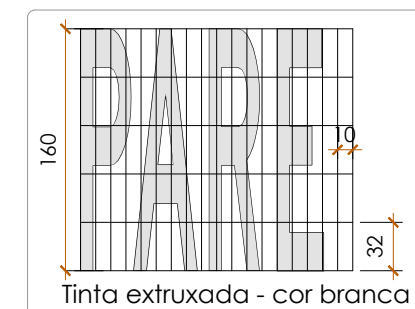
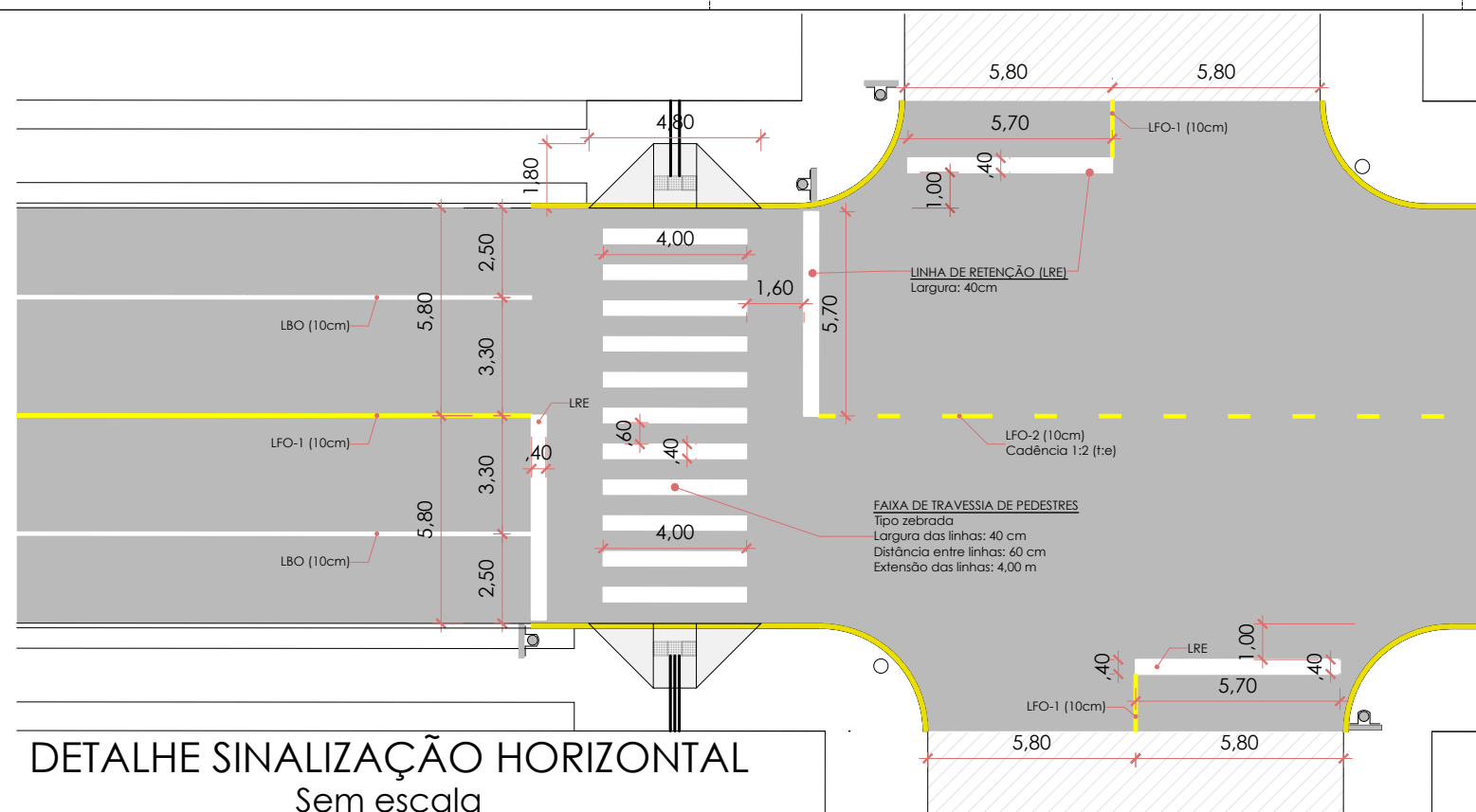
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DATA

FEV/2025

PRANCHA

11



MUNICÍPIO DE VENÂNCIO AIRES
PAVIMENTAÇÃO RUA PROFª WILMA HELENA KUNZ - BAIRRO GRESSLER

PROJETO

**PAVIMENTAÇÃO ASFÁLTICA
- DETALHE SINALIZAÇÃO**

RESPONSÁVEL TÉCNICO: PROJETO

MARCOS H. FISCHER - Eng. Civil - CREA RS224881

ESCALA

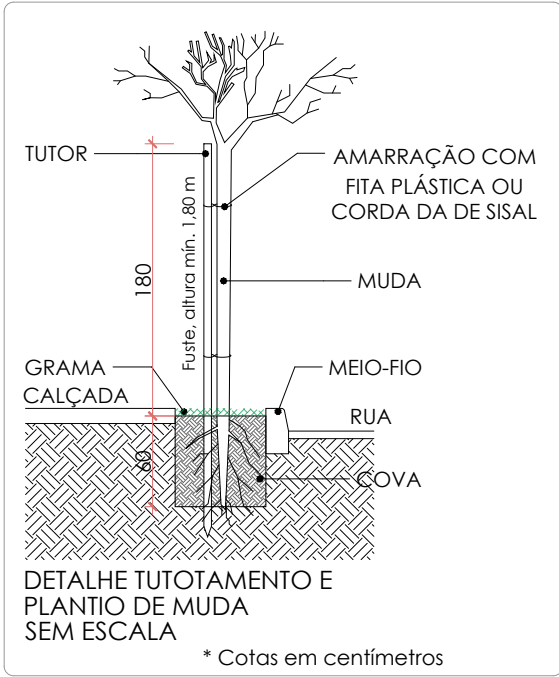
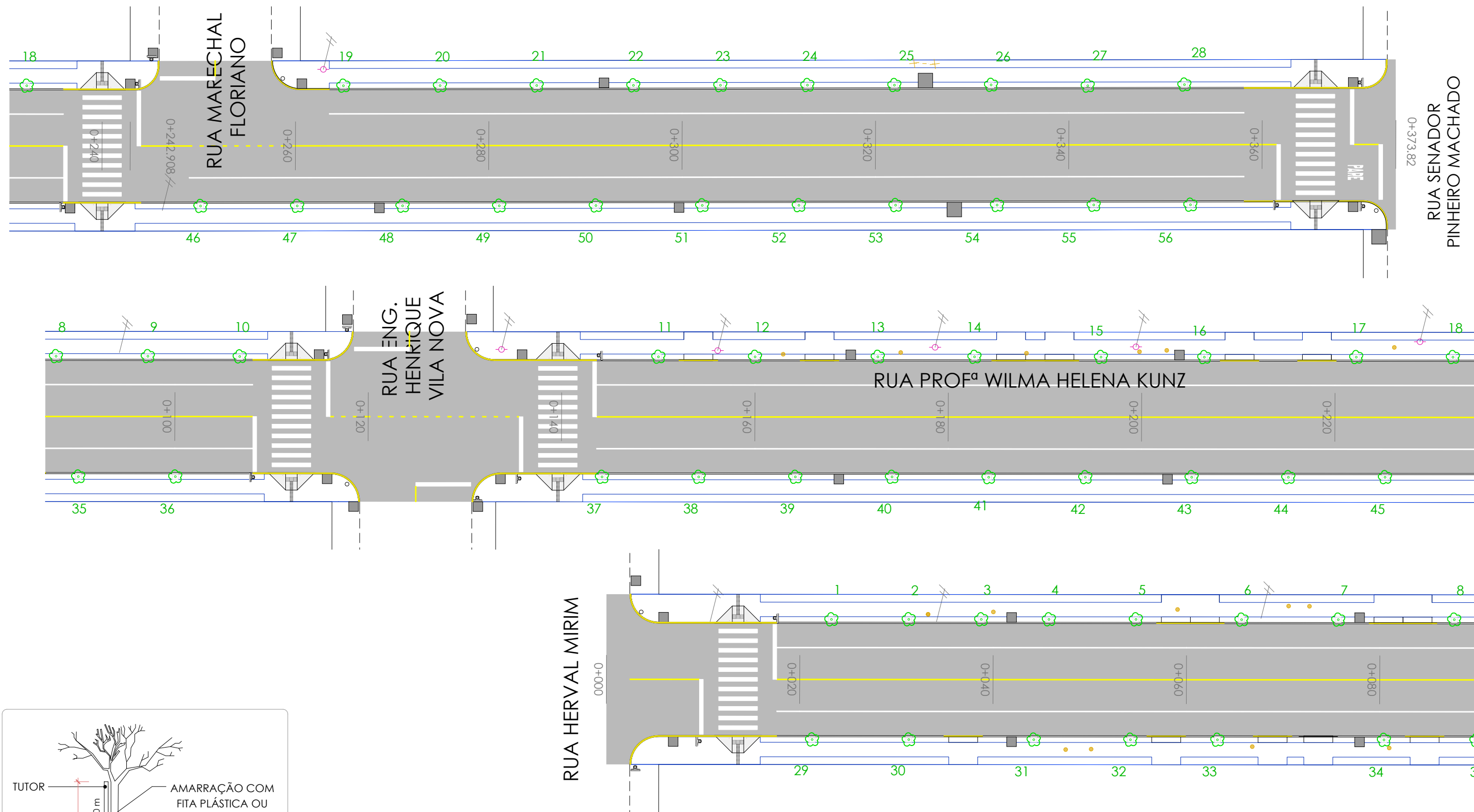
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	<i>DATA</i>
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FEV/2025

PRANCHA

12



DESCRIÇÃO	QTD
 MUDAS DE ÁRVORES	56

*Distâncias mínimas de plantio:

- 1,50 m de acessos a garagens, hidrantes e bocas-de-lobo;
- 5,00 m de placas de sinalização e esquinas.

MUNICÍPIO DE VENÂNCIO AIRES

PAVIMENTAÇÃO RUA PROFª WILMA HELENA KUNZ - BAIRRO GRESSLER

PROJETO

PAVIMENTAÇÃO

- PROJETO DE ARBORIZAÇÃO

RESPONSÁVEL TÉCNICO: PROJETO

MARCOS H. FISCHER - Eng. Civil - CREA RS224881

ESCALA

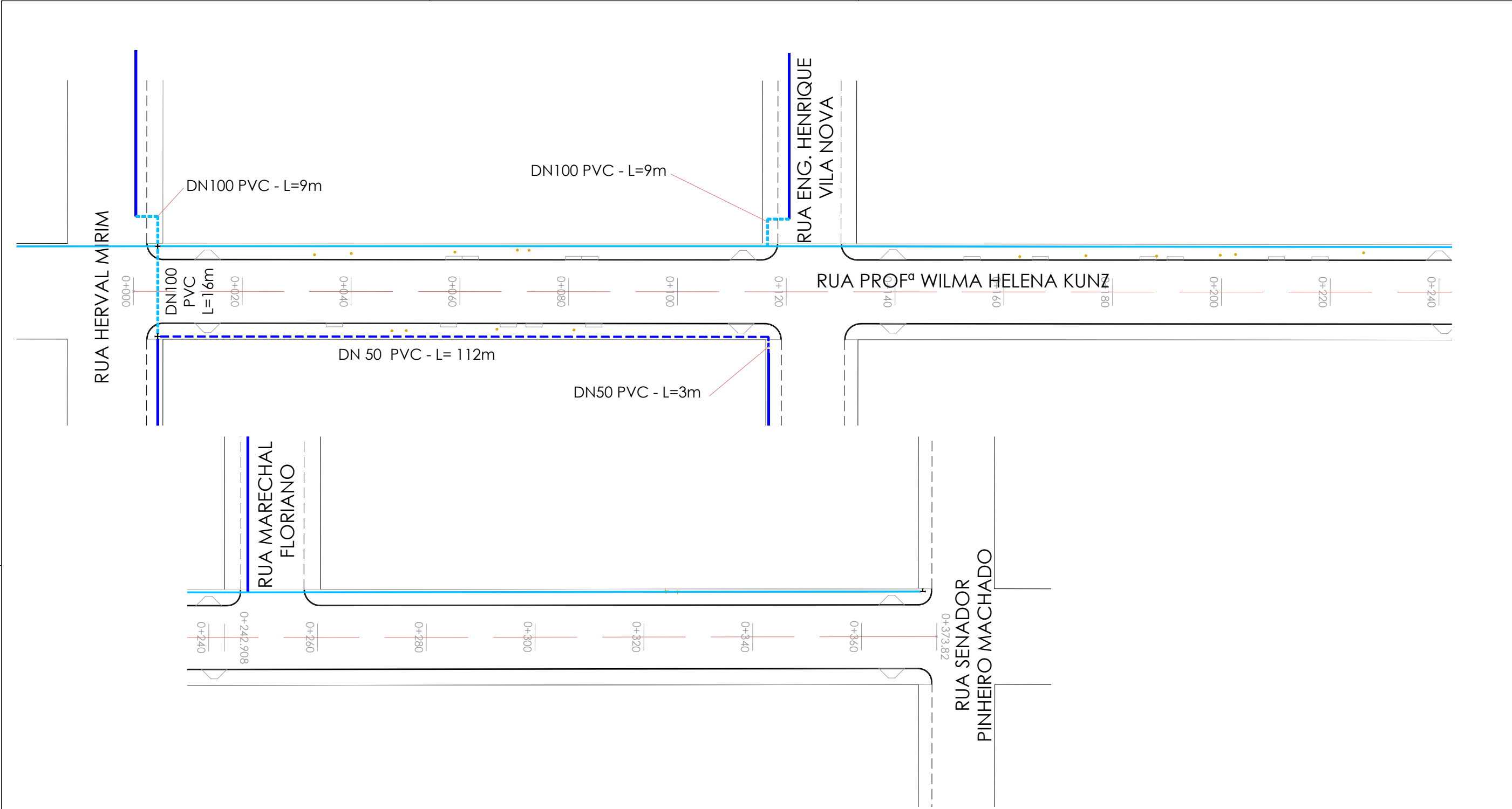
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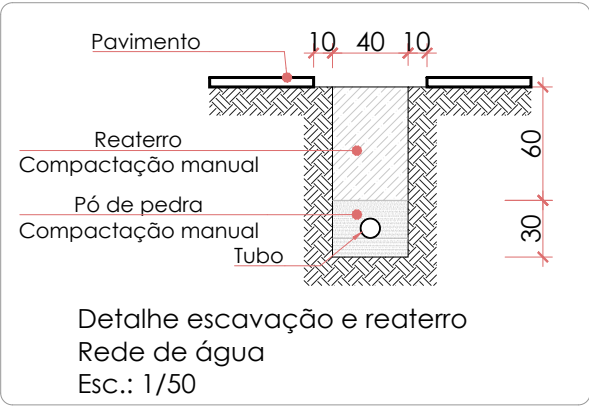
MAR/2025

PRANCHA

13



LEGENDA	QTD
DN 50 (a executar)	115m
DN 100 (a executar)	34m
DN 50 (existente)	-
DN 100 (existente)	-



MUNICÍPIO DE VENÂNCIO AIRES

PAVIMENTAÇÃO RUA PROFª WILMA HELENA KUNZ - BAIRRO GRESSLER

PROJETO

RESPONSÁVEL TÉCNICO: PROJETO

REMANEJO - REDE DE ÁGUA

MARCOS H. FISCHER - Eng. Civil - CREA RS224881

ESCALA

1/750

DATA

FEV/2025

PRANCHA

14



Estado do Rio Grande do Sul
Município de Venâncio Aires

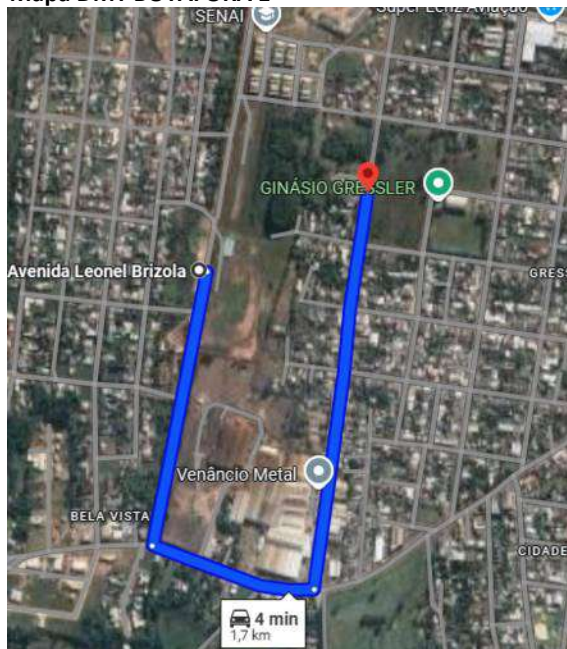
DISTÂNCIA MÉDIA DE TRANSPORTE - DMT BOTA-FORA - RUA PROFª WILMA HELENA KUNZ

O valor da DMT, foi atribuído através da cálculo da distância do bota-fora mais próximo a obra, conforme planilha e mapa abaixo.

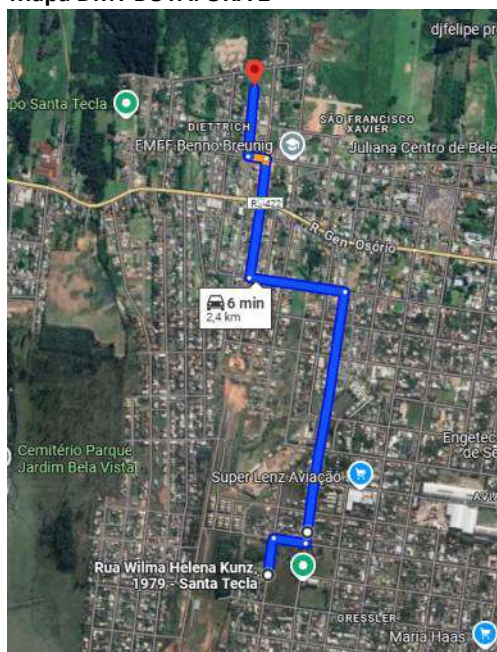
Cálculo da Distância Média de Transporte - DMT

Destino	Localização	Distância em Km	Média	Média Atribuída
BOTA-FORA 1	Av Leonel Brizola	1,70	2,05	2,00
BOTA-FORA 2	Rua Orestes Buzata	2,40		

Mapa DMT BOTA-FORA 1



Mapa DMT BOTA-FORA 2



Venâncio Aires, 15 de abril de 2025.



Estado do Rio Grande do Sul Município de Venâncio Aires

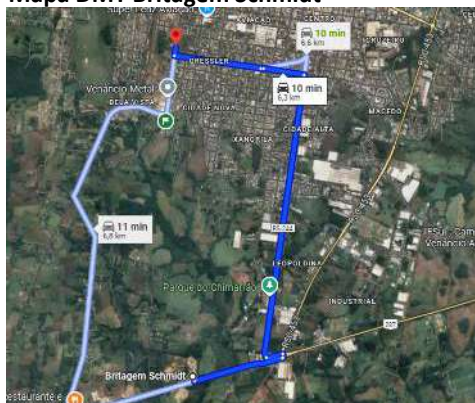
DISTÂNCIA MÉDIA DE TRANSPORTE - DMT MATERIAIS BRITADOS - RUA PROFª WILMA HELENA KUNZ

O valor da DMT, foi atribuído através do cálculo da média arredondada de pontos de britagem próximos à região de execução das obras, conforme planilha e mapas abaixo.

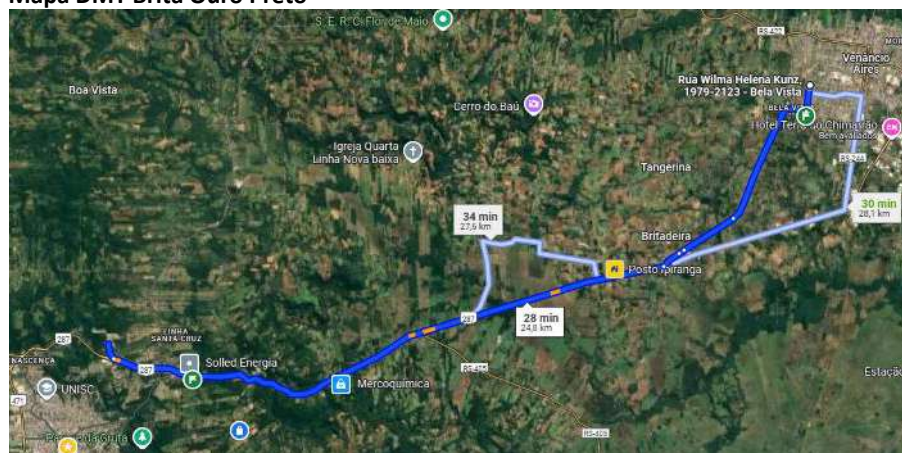
Cálculo da Distância Média de Transporte - DMT

Origem	Localização	Distância em Km	Média	Média Atribuída
Britagem Schmidt	Venâncio Aires/RS	6,30	22,73	22,00
Brita Ouro Preto	Santa Cruz do Sul/RS	24,80		
Britagem Cascalheira	Lajeado/RS	37,10		

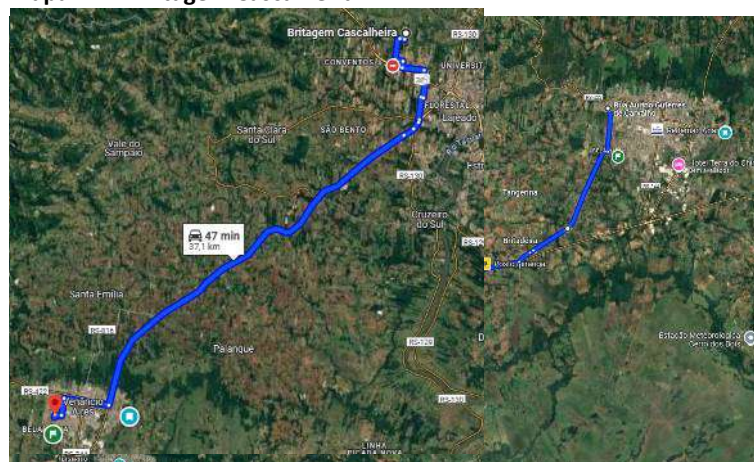
Mapa DMT Britagem Schmidt



Mapa DMT Brita Ouro Preto



Mapa DMT Britagem Cascalheira



Venâncio Aires, 15 de abril de 2025.



Estado do Rio Grande do Sul Município de Venâncio Aires

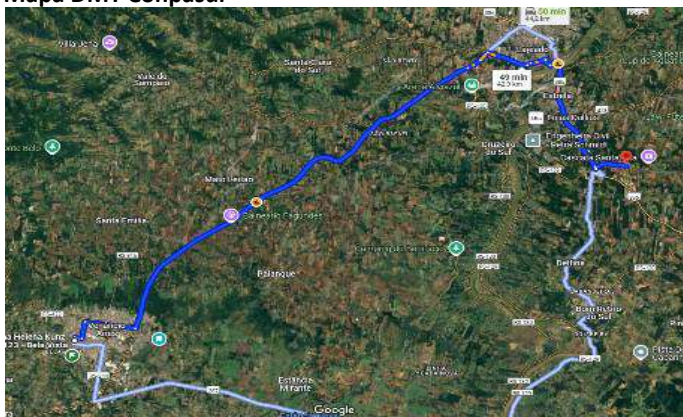
DISTÂNCIA MÉDIA DE TRANSPORTE - DMT USINA CBUQ - RUA PROFª WILMA HELENA KUNZ

O valor da DMT, foi atribuído através do cálculo da média arredondada das três principais usinas próximas à região de execução das obras, conforme planilha e mapas abaixo.

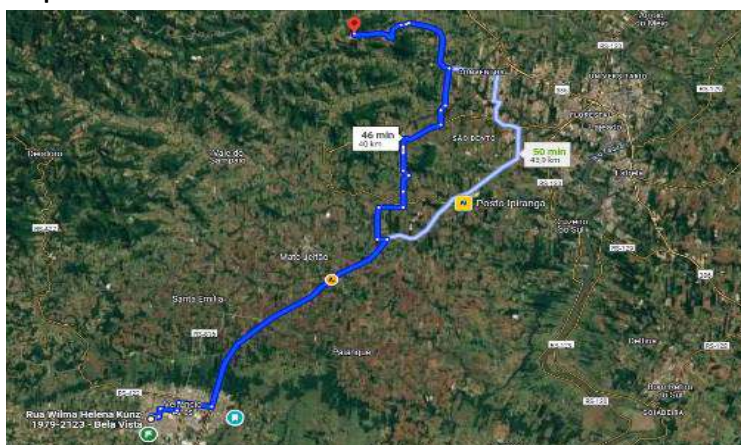
Cálculo da Distância Média de Transporte - DMT

Origem	Localização	Distância em Km	Média	Média Atribuída
Conpasul	Estrela/RS	42,90	38,17	38,00
Giovanella	Forquetinha/RS	46,80		
Avantte	Santa Cruz do Sul/RS	24,80		

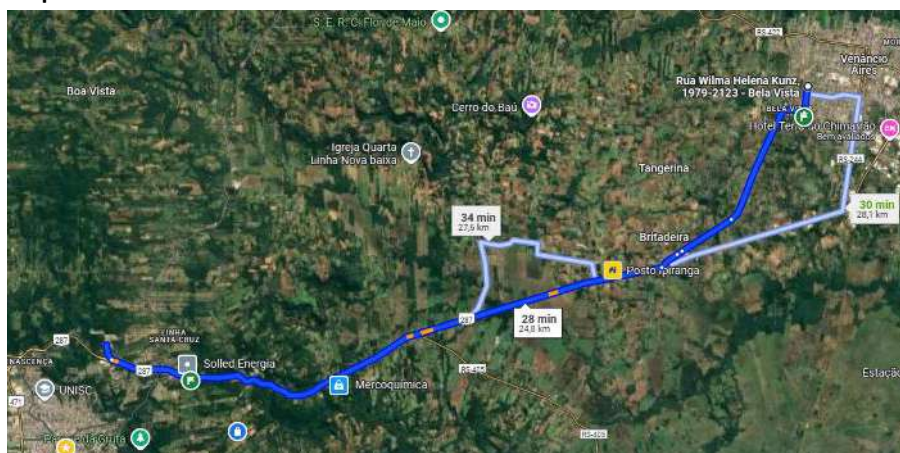
Mapa DMT Conpasul



Mapa DMT Giovanella



Mapa DMT Avantte



Venâncio Aires, 15 de abril de 2025.



Estado do Rio Grande do Sul
Município de Venâncio Aires

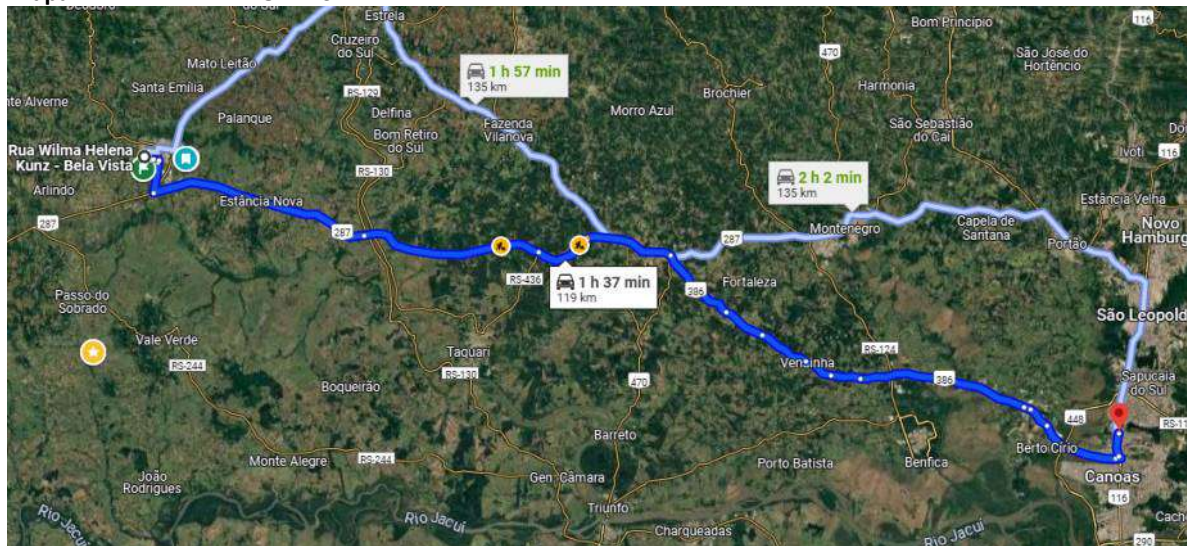
DISTÂNCIA MÉDIA DE TRANSPORTE - DMT INSUMOS ASFÁLTICOS - RUA PROFª WILMA HELENA KUNZ

O valor da DMT, foi atribuído através da cálculo da distância da refinaria mais próximas à região de execução das obras, conforme planilha e mapa abaixo.

Cálculo da Distância Média de Transporte - DMT

Origem	Localização	Distância em Km	Média	Média Atribuída
REFAP PETROBRAS	Canoas/RS	119,00	119,00	119,00

Mapa DMT REFAP PETROBRAS



Venâncio Aires, 15 de abril de 2025.



Estado do Rio Grande do Sul Município de Venâncio Aires

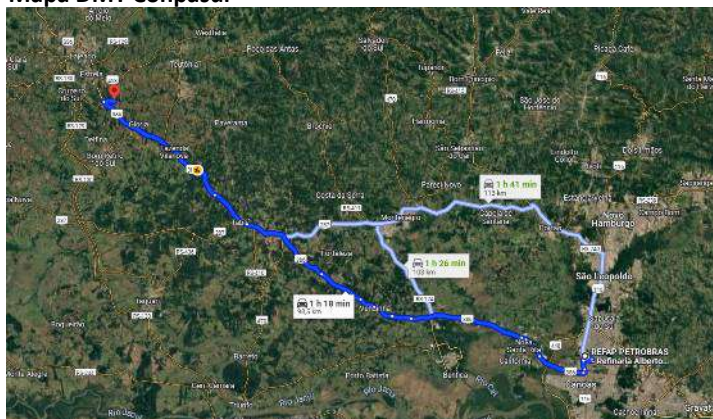
DISTÂNCIA MÉDIA DE TRANSPORTE - DMT REFINARIA-USINA - RUA PROFª WILMA HELENA KUNZ

O valor da DMT, foi atribuído através do cálculo da média arredondada da refinaria até três principais usinas próximas à região de execução das obras, conforme planilha e mapas abaixo.

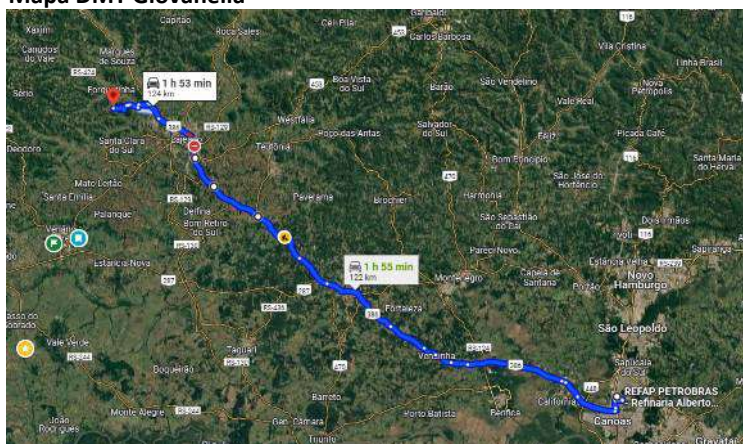
Cálculo da Distância Média de Transporte - DMT

DESTINO	Localização	Distância em Km	Média	Média Atribuída
Conpasul	Estrela/RS	98,50	120,83	120,00
Giovanella	Forquethina/RS	124,00		
Avantte	Santa Cruz do Sul/RS	140,00		

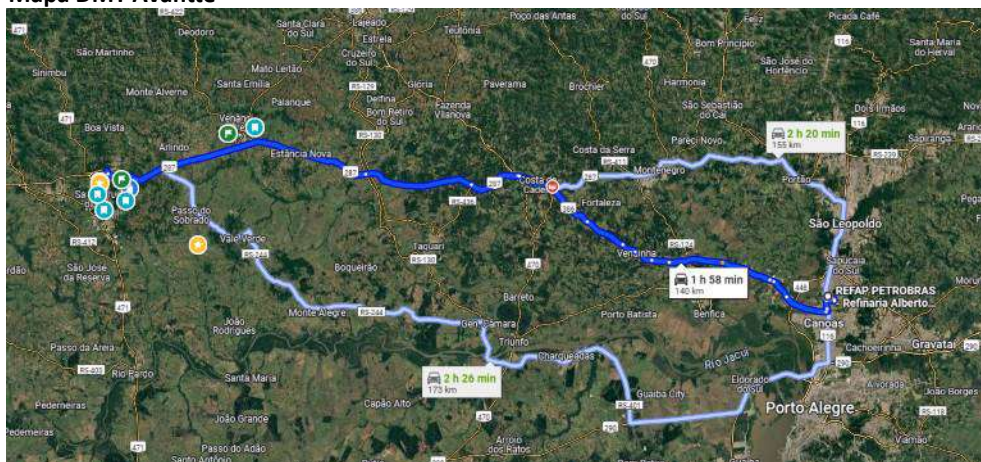
Mapa DMT Conpasul



Mapa DMT Giovanella



Mapa DMT Avantte



Venâncio Aires, 15 de abril de 2025.