SISTEMA DE COORDENADAS: BRASIL/SIRGAS 2000/UTM ZONA 23S
Elipsóide: GRS 1980

Declinação Magnética
Variação anual 9' Oeste

Eixo Semi-maior: 6378137.000 m
Achatamento Inverso: 298.257222101
Classe da Projeção: Transverse_Mercator

latitude_of_origin 0° 00' 00.00000"N
central_meridian 45° 00' 00.00000"W

CONVENÇÕES CARTOGRÁFICAS

ESTR. FERRO · HIDRANTE · POSTE/LUMINARIA · MARCO/PIQUETE · BOCA LOBO E LEÃO · POÇO DE VISITA · ESCADA · TUBO · MURO · ALINHAMENTO INDEFINIDO · EIXO · GUIA · ALVENARIA · MADEIRA · LAJE OU COBERT. · CAIXA DE INSPEÇÃO · TELEFONE PUBLICO · CURVAS DE NIVEL · PONTO DE DIVISA · ÁRVORE · CERCA DE MADEIRA · EST. LEVANTAMENTO · CERVA VIVA · CERCA DE ARAME · CAMINHO · BARRANCO · REF. DE NIVEL · LIM. VEGETAÇÃO · BREJO · CURSO D'AGUA · PONTO SONDAGEM · ALTA TENSÃO · PONTE · ROCHA · LAGOA · AREIA · ÁREA URBANA DIVISA ATUAL · EXPANSÃO URBANA PROPOSTA · EXPANSÃO URBANA · ÁREA DA APA · ÁREA AGRÍCOLA · ÁREA MANANCIAIS

ESCALA GRAFICA

Esc.1:1 0 — 5,0cm — 10,0cm
Esc.1:20.000 0 — 1000,00m — 2000,00m

Tabela de Coordenadas

Ponto	Azimute	Distância(m)	E(m)	N(m)
P00 – P01	105°35'50"	118,391	479337,709	7484456,099
P01 – P02	162°20'31"	215,256	479403,003	7484250,984
P02 – P03	131°31'13"	128,989	479499,580	7484165,479
P03 – P04	143°00'18"	468,954	479781,772	7483790,931
P04 – P05	122°52'53"	254,239	479995,281	7483652,905
P05 – P06	139°03'17"	200,989	480126,997	7483501,090
P06 – P07	166°13'56"	106,033	480152,231	7483398,104
P07 – P08	134°21'38"	176,495	480278,417	7483274,704
P08 – P09	149°14'22"	106,806	480333,043	7483182,924
P09 – P10	213°16'13"	177,128	480235,873	7483034,829
P10 – P11	197°13'56"	177,399	480183,319	7482865,393
P11 – P12	179°27'15"	432,177	480187,437	7482433,235
P12 – P13	191°05'03"	223,225	480144,522	7482214,175
P13 – P14	160°51'57"	137,598	480189,624	7482084,179
P14 – P15	109°13'38"	1412,302	481523,147	7481619,086
P15 – P16	170°30'36"	56,401	481532,446	7481563,456
P16 – P17	145°00'38"	159,209	481623,741	7481433,023
P17 – P18	158°09'07"	235,763	481711,479	7481214,194
P18 – P19	144°04'35"	437,894	481968,395	7480859,588
P19 – P20	143°42'50"	269,776	482128,053	7480642,129
P20 – P21	157°33'15"	160,251	482189,238	7480494,018
P21 – P22	194°12'15"	152,755	482151,756	7480345,933
P22 – P23	223°10'44"	207,552	482009,732	7480194,582
P23 – P24	218°23'38"	347,422	481793,961	7479922,286
P24 – P25	204°08'14"	275,164	481681,440	7479671,180
P25 – P26	109°09'43"	111,927	481787,166	7479634,441
P26 – P27	92°32'17"	457,830	482244,546	7479614,168
P27 – P28	87°11'59"	92,088	482336,524	7479618,667
P28 – P29	355°43'42"	355,286	482310,061	7479972,966
P29 – P30	61°24'53"	31,450	482337,678	7479988,014
P30 – P31	356°08'48"	179,572	482325,610	7480167,180
P31 – P32	345°17'26"	236,504	482265,557	7480395,932
P32 – P33	342°57'26"	114,398	482232,029	7480505,306
P33 – P34	334°15'03"	143,149	482169,840	7480634,241
P34 – P35	350°15'08"	143,403	482145,560	7480775,574
P35 – P36	7°00'42"	185,263	482168,175	7480959,451
P36 – P37	295°13'01"	311,228	481886,607	7481092,048
P37 – P38	326°07'47"	136,660	481810,444	7481205,518
P38 – P39	21°23'04"	1166,892	482235,922	7482292,075
P39 – P40	68°09'12"	292,721	482507,621	7482401,004
P40 – P41	325°15'20"	139,894	482427,893	7482515,955
P41 – P42	314°19'36"	309,927	482206,181	7482732,516
P42 – P43	66°48'22"	442,135	482612,581	7482906,649
P43 – P44	107°30'42"	473,707	483064,335	7482764,110
P44 – P45	151°53'57"	804,849	483443,440	7482054,137
P45 – P46	86°22'19"	293,830	483736,681	7482072,731
P46 – P47	50°59'22"	461,046	484094,927	7482362,943
P47 – P48	100°21'20"	646,411	484730,808	7482246,745
P48 – P49	100°45'16"	968,009	485681,815	7482066,115
P49 – P50	120°51'24"	425,190	486046,820	7481848,038
P50 – P51	169°02'28"	1236,158	486281,819	7480634,422
P51 – P52	193°37'46"	703,798	486115,974	7479950,443
P52 – P53	156°01'04"	157,254	486179,890	7479806,764
P53 – P54	235°16'47"	910,066	485431,869	7479288,417
P54 – P55	320°44'27"	111,923	485361,041	7479375,078
P55 – P56	240°34'29"	530,901	484898,627	7479114,254
P56 – P57	230°03'14"	280,556	484683,539	7478934,118
P57 – P58	148°01'35"	324,928	484855,598	7478658,484
P58 – P59	234°25'43"	355,930	484566,087	7478451,433
P59 – P60	234°28'34"	2951,308	482164,094	7476736,601
P60 – P61	219°09'05"	391,076	481917,179	7476433,330
P61 – P62	102°28'18"	193,816	482106,422	7476391,474
P62 – P63	78°39'49"	437,566	482535,451	7476477,486
P63 – P64	175°10'13"	702,496	482594,596	7475777,485
P64 – P65	217°16'45"	400,983	482351,721	7475458,425
P65 – P66	283°41'15"	237,877	482120,599	7475514,713
P66 – P67	252°46'38"	363,535	481773,365	7475407,074
P67 – P68	324°50'58"	292,534	481604,946	7475646,262
P68 – P69	243°09'31"	662,363	481013,946	7475347,191
P69 – P70	165°11'42"	213,151	481068,412	7475141,116
P70 – P71	80°05'11"	193,032	481258,562	7475174,349
P71 – P72	154°53'32"	513,574	481476,482	7474709,301
P72 – P73	248°14'19"	135,858	481350,306	7474658,933
P73 – P74	326°42'43"	436,697	481110,626	7475023,978
P74 – P75	282°11'32"	292,407	480824,814	7475085,732
P75 – P76	331°45'14"	90,000	480782,221	7475165,015
P76 – P77	231°01'12"	486,863	480403,750	7474858,754
P77 – P78	287°21'36"	587,770	479842,753	7475034,129
P78 – P79	227°01'16"	106,151	479765,092	7474961,762
P79 – P80	184°59'00"	121,087	479754,573	7474841,133
P80 – P81	235°12'22"	110,599	479663,748	7474778,022
P81 – P82	188°19'29"	739,200	479556,724	7474046,611
P82 – P83	259°56'04"	73,545	479484,311	7474033,757
P83 – P84	312°07'38"	1525,011	478353,274	7475056,701
P84 – P85	311°58'48"	452,171	478017,140	7475359,145
P85 – P86	16°04'09"	317,093	478104,910	7475663,849
P86 – P87	30°52'22"	167,122	478190,666	7475807,291
P87 – P88	67°51'29"	149,155	478328,821	7475863,508
P88 – P89	52°21'10"	476,579	478706,169	7476154,602
P89 – P90	24°08'51"	899,656	479074,207	7476975,534
P90 – P91	281°12'00"	99,521	478976,581	7476994,864
P91 – P92	295°43'09"	207,038	478790,054	7477084,710
P92 – P93	346°35'31"	194,250	478745,011	7477273,666
P93 – P94	328°05'30"	331,614	478569,733	7477555,171
P94 – P95	3°56'12"	116,085	478577,702	7477670,982
P95 – P96	261°11'01"	420,924	478161,752	7477606,468
P96 – P97	341°09'45"	260,638	478077,596	7477853,146
P97 – P98	252°08'26"	130,904	477953,000	7477813,000
P98 – P99	231°09'35"	162,438	477826,477	7477711,127
P99 – P100	226°49'17"	129,066	477732,359	7477622,810
P100 – P101	251°42'08"	1293,405	476504,352	7477216,737
P101 – P102	236°29'43"	395,959	476174,185	7476998,166
P102 – P103	217°56'26"	325,998	475973,748	7476741,068
P103 – P104	179°07'30"	287,554	475978,139	7476453,548
P104 – P105	196°43'33"	235,390	475910,395	7476228,116
P105 – P106	235°33'50"	423,320	475561,259	7475988,735
P106 – P107	297°14'38"	133,865	475442,244	7476050,015
P107 – P108	328°55'51"	187,178	475345,647	7476210,341
P108 – P109	332°09'23"	312,579	475199,655	7476486,731
P109 – P110	273°03'29"	243,496	474956,505	7476499,721

Ponto	Azimute	Distância(m)	E(m)	N(m)
P110 – P111	299°44'30"	351,126	474651,633	7476673,912
P111 – P112	268°45'54"	309,754	474341,951	7476667,236
P112 – P113	308°00'44"	130,385	474239,223	7476747,531
P113 – P114	261°31'53"	174,025	474067,096	7476721,903
P114 – P115	284°47'21"	296,859	473780,072	7476797,680
P115 – P116	262°37'21"	147,032	473634,257	7476778,800
P116 – P117	284°12'43"	210,949	473429,764	7476830,591
P117 – P118	299°59'46"	205,467	473251,817	7476933,313
P118 – P119	313°09'12"	189,381	473113,659	7477062,840
P119 – P120	318°24'55"	214,188	472971,496	7477223,047
P120 – P121	326°17'27"	202,878	472858,903	7477391,815
P121 – P122	252°51'55"	335,080	472538,696	7477293,093
P122 – P123	271°09'24"	396,209	472142,567	7477301,092
P123 – P124	260°56'07"	153,303	471991,179	7477276,939
P124 – P125	355°59'09"	1194,046	471907,590	7478468,055
P125 – P126	317°00'10"	918,374	471281,292	7479139,741
P126 – P127	307°00'26"	635,082	470774,141	7479522,007
P127 – P128	299°08'38"	789,500	470084,592	7479906,497
P128 – P129	308°46'06"	587,412	469626,595	7480274,318
P129 – P130	48°39'20"	2062,191	471174,790	7481636,567
P130 – P131	310°44'22"	85,065	471110,338	7481692,083
P131 – P132	32°35'31"	378,220	471314,067	7482010,743
P132 – P133	294°12'37"	244,905	471090,702	7482111,176
P133 – P134	281°22'22"	67,287	471024,737	7482124,444
P134 – P135	310°54'10"	273,566	470817,969	7482303,569
P135 – P136	320°34'19"	124,687	470738,779	7482399,880
P136 – P137	40°43'23"	816,241	471271,299	7483018,485
P137 – P138	98°27'57"	474,030	471740,164	7482948,699
P138 – P139	104°47'19"	439,426	472165,034	7482836,535
P139 – P140	113°03'36"	164,783	472316,650	7482771,990
P140 – P141	94°37'17"	75,090	472391,495	7482765,940
P141 – P142	129°33'24"	129,889	472491,639	7482683,222
P142 – P143	103°29'04"	187,517	472673,987	7482639,496
P143 – P144	185°49'17"	83,321	472665,536	7482556,605
P144 – P145	148°36'31"	134,340	472735,511	7482441,928
P145 – P146	154°41'56"	141,923	472796,166	7482313,619
P146 – P147	176°32'08"	279,227	472813,039	7482034,903
P147 – P148	191°35'34"	111,272	472790,679	7481925,901
P148 – P149	102°53'08"	180,371	472966,507	7481885,678
P149 – P150	100°05'03"	785,488	473739,861	7481748,141
P150 – P151	95°26'20"	292,077	474030,623	7481720,457
P151 – P152	85°31'00"	318,756	474348,404	7481745,374
P152 – P153	73°19'19"	240,907	474579,176	7481814,513
P153 – P154	63°34'11"	333,864	474878,143	7481963,119
P154 – P155	62°15'25"	343,632	475182,273	7482123,082
P155 – P156	328°37'24"	205,779	475075,132	7482298,768
P156 – P157	32°06'47"	889,797	475548,142	7483052,426
P157 – P158	41°50'03"	620,077	475961,718	7483514,433
P158 – P159	102°57'29"	264,650	476219,628	7483455,089
P159 – P160	168°59'22"	282,178	476273,522	7483178,106
P160 – P161	139°07'26"	894,130	476858,665	7482502,032
P161 – P162	237°11'35"	619,963	476337,586	7482166,129
P162 – P163	237°58'01"	630,183	475803,354	7481831,875
P163 – P164	245°00'33"	234,407	475590,893	7481732,844
P164 – P165	90°26'59"	288,882	475879,766	7481730,576
P165 – P166	123°16'53"	122,024	475981,777	7481663,615
P166 – P167	199°43'31"	47,801	475965,643	7481618,619
P167 – P168	136°23'46"	109,037	476040,842	7481539,663
P168 – P169	99°10'36"	254,838	476292,419	7481499,021
P169 – P170	168°57'29"	255,898	476341,430	7481247,860
P170 – P171	98°04'02"	165,681	476505,471	7481224,609
P171 – P172	79°46'39"	215,852	476717,897	7481262,916
P172 – P173	49°42'52"	70,695	476771,825	7481308,627
P173 – P174	104°43'03"	110,299	476878,505	7481280,606
P174 – P175	347°47'39"	280,814	476819,133	7481555,072
P175 – P176	345°01'33"	250,194	476754,487	7481796,771
P176 – P177	74°46'02"	305,563	477049,314	7481877,054
P177 – P178	163°07'40"	204,723	477108,733	7481681,144
P178 – P179	186°26'03"	125,398	477094,680	7481556,536
P179 – P180	159°24'55"	111,768	477133,977	7481451,904
P180 – P181	169°05'14"	339,526	477198,254	7481118,518
P181 – P182	146°52'24"	812,640	477642,355	7480437,961
P182 – P183	236°48'17"	341,618	477356,486	7480250,926
P183 – P184	159°52'44"	116,125	477396,434	7480141,889
P184 – P185	89°38'50"	82,045	477478,477	7480142,394
P185 – P186	73°48'27"	187,757	477658,786	7480194,752
P186 – P187	141°25'41"	90,011	477714,907	7480124,380
P187 – P188	173°17'53"	175,652	477735,407	7479949,928
P188 – P189	208°39'29"	44,673	477713,983	7479910,728
P189 – P190	155°08'26"	163,990	477782,923	7479761,933
P190 – P191	133°26'20"	460,312	478117,159	7479445,430
P191 – P192	32°13'54"	53,447	478145,664	7479490,641
P192 – P193	1°15'24"	346,485	478153,263	7479837,042
P193 – P194	66°37'31"	117,934	478261,519	7479883,832
P194 – P195	337°09'54"	188,477	478188,376	7480057,537
P195 – P196	18°53'22"	157,778	478239,455	7480206,818
P196 – P197	301°54'33"	159,760	478103,811	7480291,279
P197 – P198	2°48'15"	193,440	478113,275	7480484,487
P198 – P199	95°35'21"	261,966	478373,995	7480458,972
P199 – P200	333°32'26"	200,633	478284,600	7480638,589
P200 – P201	347°48'03"	202,349	478241,842	7480836,369
P201 – P202	328°17'26"	206,317	478133,399	7481011,888
P202 – P203	0°57'23"	209,487	478136,896	7481221,346
P203 – P204	343°34'49"	262,372	478062,731	7481473,018
P204 – P205	336°28'55"	204,772	477981,019	7481660,781
P205 – P206	357°21'57"	325,348	477966,067	7481985,786
P206 – P207	330°17'34"	220,616	477856,736	7482177,406
P207 – P208	354°15'11"	79,929	477848,733	7482256,933
P208 – P209	236°30'43"	145,995	477726,973	7482176,378
P209 – P210	325°48'55"	562,123	477411,137	7482641,384
P210 – P211	325°48'55"	562,123	477095,300	7483106,389
P211 – P212	336°03'41"	375,859	476942,793	7483449,917
P212 – P213	9°15'41"	93,858	476957,898	7483542,551
P213 – P214	52°16'32"	166,517	477089,607	7483644,437
P214 – P215	332°53'55"	196,077	477000,281	7483818,985
P215 – P216	306°35'23"	146,846	476882,375	7483906,517
P216 – P217	51°35'26"	898,611	477586,520	7484464,802
P217 – P218	145°57'42"	399,347	477810,053	7484133,877
P218 – P219	82°14'31"	1240,901	479039,595	7484301,388
P219 – P00	44°37'11"	262,077	479223,677	7484487,931

Area m2.	Area Ha.	Area Alq.	Perímetro m.
84.965.429,527	8.496,5429527	3.510,96816	75.810,126

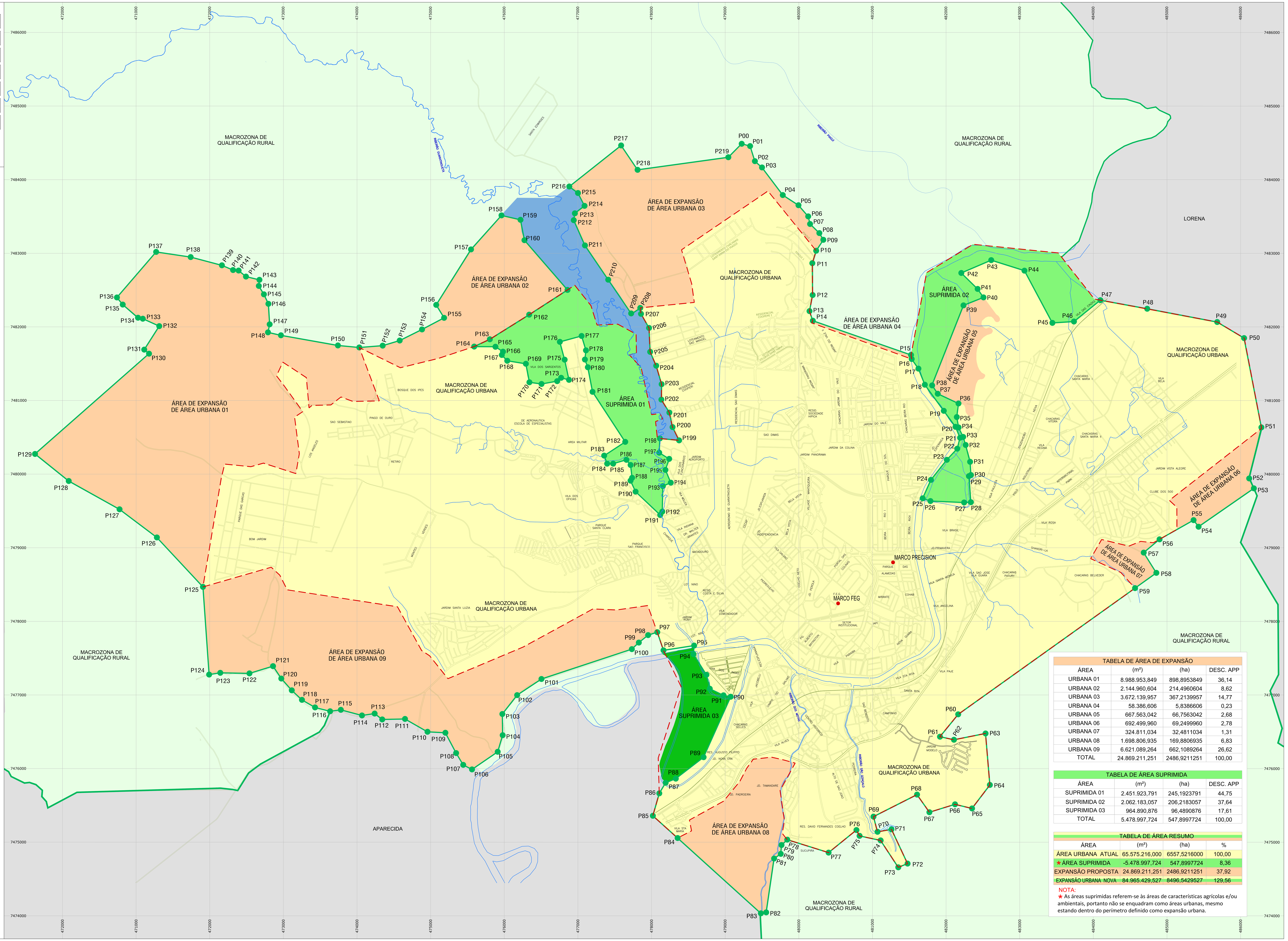


TABELA DE ÁREA DE EXPANSÃO

ÁREA	(m²)	(ha)	DESC. APP
URBANA 01	8.988.953,849	898,8953849	36,14
URBANA 02	2.144.960,604	214,4960604	8,62
URBANA 03	3.672.139,957	367,2139957	14,77
URBANA 04	58.386,606	5,8386606	0,23
URBANA 05	667.563,042	66,7563042	2,68
URBANA 06	692.499,960	69,2499960	2,78
URBANA 07	324.811,034	32,4811034	1,31
URBANA 08	1.698.806,935	169,8806935	6,83
URBANA 09	6.621.089,264	662,1089264	26,62
TOTAL	24.869.211,251	2486,9211251	100,00

TABELA DE ÁREA SUPRIMIDA

ÁREA	(m²)	(ha)	DESC. APP
SUPRIMIDA 01	2.451.923,791	245,1923791	44,75
SUPRIMIDA 02	2.062.183,057	206,2183057	37,64
SUPRIMIDA 03	964.890,876	96,4890876	17,61
TOTAL	5.478.997,724	547,8997724	100,00

TABELA DE ÁREA RESUMO

ÁREA	(m²)	(ha)	%
ÁREA URBANA ATUAL	65.575.216,000	6557,5216000	100,00
* ÁREA SUPRIMIDA	-5.478.997,724	547,8997724	8,36
EXPANSÃO PROPOSTA	24.869.211,251	2486,9211251	37,92
EXPANSÃO URBANA NOVA	84.965.429,527	8496,5429527	129,56

NOTA:
* As áreas suprimidas referem-se às áreas de características agrícolas e/ou ambientais, portanto não se enquadram como áreas urbanas, mesmo estando dentro do perímetro definido como expansão urbana.

PREFEITURA MUNICIPAL DE GUARATINGUETÁ

MONOGRAFIA DE MARCO DE APOIO

MARCO DE REFERENCIA PRECISION TOPOGRAFIA
Sistema UTM – BRASIL/SIRGAS 2000/UTM ZONA 23S
Origem SAT 91.500, SAT 91.682, SAT 91.607/1°Ordem/MC 45°/ZONA 23

Coordenada Este	Coordenada Norte	Altitude
481.250,997m	7.478.812,732m	527,032m

Coordenadas Geodésicas

Coordenada λ	Coordenada φ	Altitude
– 22°47'53" S	– 45°10'58" W	527,032m

Vértice

MARCO DE REFERENCIA FEG
Sistema UTM – BRASIL/SIRGAS 2000/UTM ZONA 23S
Origem SAT 91.500, SAT 91.682, SAT 91.607/1°Ordem/MC 45°/ZONA 23

Coordenada Este	Coordenada Norte	Altitude
480.560,270m	7.478.275,199m	560,382m

Coordenadas Geodésicas

Coordenada λ	Coordenada φ	Altitude
45°11'21,8979"W	22°48'10,8051"S	560,382m

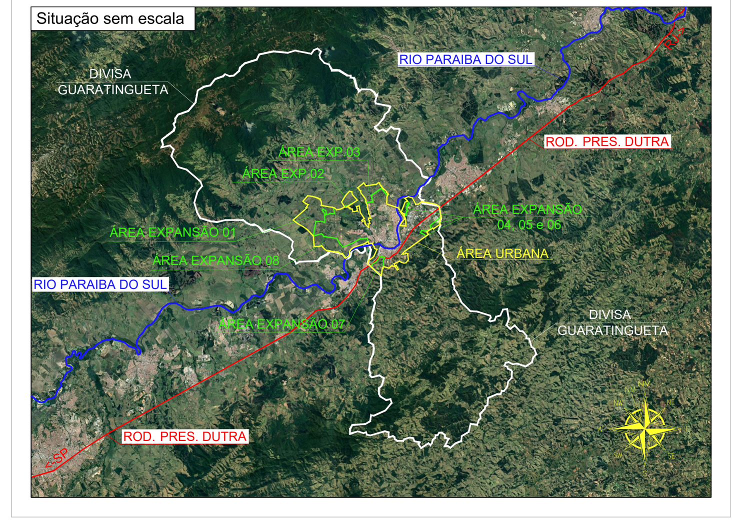
CONVENÇÕES

VÉRTICES TIPO M (OCUPADO E MATERIALIZADO) — XXX-M-0001
VÉRTICES TIPO P (OCUPADO, MAS NÃO MATERIALIZADO) — XXX-P-0001
VÉRTICES TIPO V (NÃO OCUPADO E NEM MATERIALIZADO) — XXX-V-0001
RIO (PROJEÇÃO DO FLUXO DO RIO)
DIVISA (PROJEÇÃO DO LIMITE DO TERRENO)

INFORMAÇÕES DE COORDENADAS

NM NG NQ
PROJEÇÃO UNIVERSAL TRANSVERSA DE MERCATOR - UTM
SGR: SIRGAS-2000
MC: 45°W
VÉRTICE: M01
Lat: 22°44'17"S
Long: 45°13'44"W
K: 0.99960508
CM: 0°04'34,7824"
Declinação Magnética de: -22°10'09"
na data: 01/10/2018
com variação anual de: -0°07'22"

Situação sem escala

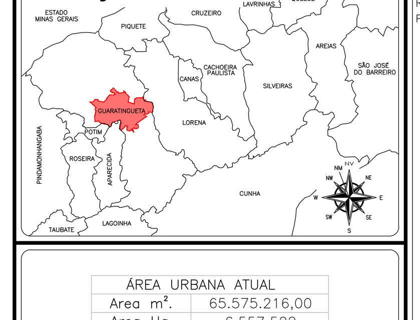


ANEXO I "EXPANSÃO DA ÁREA URBANA"

FOLHA UNICA

Imóvel: EXPANSÃO URBANA
Proprietário: PREF. MUNICIPAL DA ESTÂNCIA TURÍSTICA DE GUARATINGUETA
Município(s): GUARATINGUETA Estado/UF: SP
Cartório: CARTÓRIO DE REGISTRO DE GUARATINGUETÁ
CNS: 12.036-0
Área Total: 84.965.429,527m² Ha. Total: 8.496,5429527 Alq. Total: 3.510,96816
Data: 27/08/2021 Escala: 1:20000

SITUAÇÃO S/ ESCALA



DECLARO QUE A APROVAÇÃO DO PROJETO NÃO IMPLICA NO RECONHECIMENTO POR PARTE DA PREFEITURA DO DIREITO DE PROPRIEDADE DO TERRENO.

GUARATINGUETA, 27 DE AGOSTO DE 2021

Representante
PREF. MUNICIPAL DA ESTÂNCIA TURÍSTICA DE GUARATINGUETA
NOME:
CARGO:
RG:
CPF:

ÁREA URBANA ATUAL	
Area m².	65.575.216,00
Area Ha.	6.557,522
Area Alq.	2.709,71966
Perímetro m.	56.809,325
AREA RETIFICADA	
Area m².	84.965.429,527
Area Ha.	8.496,5429527
Area Alq.	3.510,96816
Perímetro m.	75.810,126

Responsável Técnico
NOME:
CARGO:
RG:
CPF:
CREA:
ART:

PRECISION TOPOGRAFIA, PROJETOS E CONSTRUÇÕES LTDA