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04	05/2020	FERNANDO M.	REVISÃO GERAL
03	03/2020	FERNANDO M.	REVISÃO GERAL
02	02/2020	FERNANDO M.	REVISÃO GERAL
01	11/2019	FERNANDO M.	REVISÃO GERAL
00	11/2019	FERNANDO M.	EMIÇÃO INICIAL
Rev	Data	Revisado por	Alterações

ELEMENTOS GEOMÉTRICOS - RAMO 30														
Nº	DEFLEXÃO/ AZIMUTE	LC (m)	TT (m)	TL (m)	TC (m)	R (m)	D/L (m)	AC	TE-PC	ET-PT	PONTO	PI	TE-PC	ET-PT
TANGENTE 30	302° 33' 43.22"	-	-	-	-	-	67.506	-	29+15,497	33+3,004	N E	-	7424633,3573 399926,9444	7424669,6901 399870,0493
C-30	-	-	0.892	-	-	66.000	21.577	018° 43' 51.99"	33+3.004	34+4,580	N E	7424675,5488 399860,8750	7424669,6901 399870,0493	7424684,0433 399854,0679
C-31	-	-	0.427	-	-	22.000	8.599	022° 23' 40.35"	34+4,580	34+13,179	N E	7424687,4418 399851,3445	7424684,0433 399854,0679	7424691,6215 399850,1213
C-32	-	-	0.709	-	-	66.000	19,263	016° 43' 20.88"	34+13,179	35+12,442	N E	7424700,9314 399847,3967	7424691,6215 399850,1213	7424710,6316 399847,4661
TANGENTE 31	000° 24' 36.14"	-	-	-	-	-	55.000	-	35+12,442	38+7,443	N E	-	7424710,6316 399847,4661	7424765,6304 399847,8597
TANGENTE 32	355° 23' 14.02"	-	-	-	-	-	45,166	-	38+7,443	40+12,608	N E	-	7424765,6304 399847,8597	7424810,6496 399844,2275

ELEMENTOS GEOMÉTRICOS - RAMO 40														
Nº	DEFLEXÃO/ AZIMUTE	LC (m)	TT (m)	TL (m)	TC (m)	R (m)	D/L (m)	AC	TE-PC	ET-PT	PONTO	PI	TE-PC	ET-PT
TANGENTE 40	001° 02' 43.79"	-	-	-	-	-	39,024	-	40+16,084	42+15,108	N E	-	7424535,0235 399845,5883	7424574,0407 399846,3004
TANGENTE 41	000° 03' 00.10"	-	-	-	-	-	6,682	-	42+15,108	43+1,790	N E	-	7424574,0407 399846,3004	7424580,7227 399846,3062
C-40	-	-	50,734	-	-	47,000	100,497	122° 30' 43,12"	43+1,790	48+2,287	N E	7424666,4136 399846,3810	7424580,7227 399846,3062	7424620,2938 399918,6021

ELEMENTOS GEOMÉTRICOS - RAMO 50														
Nº	DEFLEXÃO/ AZIMUTE	LC (m)	TT (m)	TL (m)	TC (m)	R (m)	D/L (m)	AC	TE-PC	ET-PT	PONTO	PI	TE-PC	ET-PT
TANGENTE 50	122° 33' 43.22"	-	-	-	-	-	25,624	-	4+7,809	5+13,433	N E	-	7424626,8255 399922,7733	7424613,0344 399944,3694
C-50	-	-	1.895	-	-	207,750	55,911	015° 25' 11.44"	5+13,433	8+9,344	N E	7424597,8969 399968,0738	7424613,0344 399944,3694	7424589,6071 399994,9499
TANGENTE 51	107° 08' 31.79"	-	-	-	-	-	233,632	-	8+9,344	20+2,976	N E	-	7424589,6071 399994,9499	7424520,7456 400218,2031
C-51	-	-	22,451	-	-	300,000	225,220	043° 00' 50.16"	20+2,976	31+8,197	N E	7424485,9024 400331,1668	7424520,7456 400437,5337	7424537,4866 400437,5337
TANGENTE 52	064° 07' 41.62"	-	-	-	-	-	181,382	-	31+8,197	40+9,579	N E	-	7424537,4866 400437,5337	7424616,6343 400600,7364

ELEMENTOS GEOMÉTRICOS - RAMO 120														
Nº	DEFLEXÃO/ AZIMUTE	LC (m)	TT (m)	TL (m)	TC (m)	R (m)	D/L (m)	AC	TE-PC	ET-PT	PONTO	PI	TE-PC	ET-PT
C-120	-	-	15,048	-	-	100,000	103,442	059° 16' 04,13"	120+0,000	125+3,442	N E	7424634,4839 400655,3029	7424609,6611 400604,1182	7424603,1724 400702,7964
TANGENTE 120	123° 23' 46,55"	-	-	-	-	-	34,802	-	125+3,442	126+18,244	N E	-	7424603,1724 400702,7964	7424584,0165 400731,8519
C-121	-	-	3,278	-	-	45,000	33,357	042° 28' 17,88"	126+18,244	128+11,601	N E	7424574,3914 400746,4513	7424584,0165 400731,8519	7424557,4339 400750,7208

ELEMENTOS GEOMÉTRICOS - RAMO 140														
Nº	DEFLEXÃO/ AZIMUTE	LC (m)	TT (m)	TL (m)	TC (m)	R (m)	D/L (m)	AC	TE-PC	ET-PT	PONTO	PI	TE-PC	ET-PT
TANGENTE 110	160° 14' 39.11"	-	-	-	-	-	32.217	-	140+0.000	141+12.217	N E	-	7424786,8540 400676,2550	7424756,5331 400687,1448
C-110	-	-	30.981	-	-	90.000	131.739	083° 52' 04,16"	141+12.217	148+3.956	N E	7424680,4432 400714,4726	7424756,5331 400687,1448	7424645,1436 400641,7372
TANGENTE 111	244° 06' 43.27"	-	-	-	-	-	49.381	-	148+3,956	150+13,338	N E	-	7424645,1436 400641,7372	7424623,5832 400597,3114

ELEMENTOS GEOMÉTRICOS - RETORNO														
Nº	DEFLEXÃO/ AZIMUTE	LC (m)	TT (m)	TL (m)	TC (m)	R (m)	D/L (m)	AC	TE-PC	ET-PT	PONTO	PI	TE-PC	ET-PT
C-1	-	-	3,719	-	-	12,000	16,853	080° 28' 06,19"	0+0,000	0+16,853	N E	7424688,6260 400696,0548	7424685,9088 400705,8375	7424679,4283 400691,7552
C-2	-	-	2,816	-	-	47,000	31,760	038° 43' 01,51"	0+16,853	2+8,613	N E	7424664,4690 400684,7622	7424679,4283 400691,7552	7424648,4232 400688,6626
C-3	-	-	2,229	-	-	80,000	37,343	026° 44' 40,99"	2+8,613	4+5,956	N E	7424629,9434 400693,1546	7424648,4232 400688,6626	7424615,4621 400705,4823
C-4	-	-	10,114	-	-	14,500	27,285	107° 48' 48,71"	4+5,956	5+13,240	N E	7424600,3172 400718,3750	7424615,4621 400705,4823	7424617,2248 400728,8497

ELEMENTOS GEOMÉTRICOS - AV. MALEK ASSAD														
Nº	DEFLEXÃO/ AZIMUTE	LC (m)	TT (m)	TL (m)	TC (m)	R (m)	D/L (m)	AC	TE-PC	ET-PT	PONTO	PI	TE-PC	ET-PT
C-100	-	-	1,397	-	-	14,500	12,248	048° 23' 50,46"	100+0,000	100+12,248	N E	7424622,7641 400732,2814	7424617,2248 400728,8497	7424629,0081 400730,4178
C-101	-	-	0,331	-	-	794,500	45,891	003° 18' 34,09"	100+12,248	102+18,139	N E	7424651,0014 400723,8538	7424629,0081 400730,4178	7424672,5791 400716,0310
TANGENTE 100	340° 04' 20,87"	-	-	-	-	-	6,230	-	102+18,139	103+4,370	N E	-	7424672,5791 400716,0310	7424678,4365 400713,9075
C-102	-	-	1,501	-	-	12,000	11,425	054° 32' 58,05"	103+4,370	103+15,795	N E	7424684,2530 400711,7988	7424678,4365 400713,9075	7424685,9088 400705,8375

TABELA DE ALINHAMENTO HORIZONTAL - GUIA / BORDO										
CURVA Nº	CURVA CIRCULAR				COORDENADAS					
	R (m)	D (m)	F (m)	AC	PONTO	CC	PC	PI	PT	
1	0,750	2,103	4,407	160°14'00,00"	N	7424581,2832	7424581,466	7424577,190	7424580,870	
					E	400746,0247	400746,752	400747,824	400745,399	
2	51,500	20,867	10,579	23°12'57,00"	N	7424552,5208	7424556,528	7424589,703	7424580,970	
					E	400702,3979	400730,745	400735,577	400745,399	
3	1,000	2,203	1,973	126°13'59,21"	N	7424600,0185	7424599,184	7424600,269	7424600,956	
					E	400725,7479	400725,197	720723,551	400725,400	
4	0,500	1,161	1,150	132°59'58,49"	N	7424611,1683	7424611,432	7424612,409	7424612,409	
					E	400736,6256	400736,201	720736,806	400736,108	
5	1,000	2,190	1,940	125°27'1,95"	N	7424698,4346	7424697,471	7424696,952	7424698,775	
					E	400709,3166	400709,049	720710,918	400710,257	
6	0,500	1,088	0,955	124°43'17,59"	N	7424697,6890	7424697,213	7424696,923	7424697,836	
					E	400695,1843	400695,336	720694,426	400694,706	
7	1,000	2,776	5,403	159°146,46"	N	7424724,3375	7424724,678	7424725,758	7424724,356	
					E	400699,9259	400700,866	720699,024	400698,526	
8	22,935	13,117	6,743	32°46'7,39"	N	7424720,3802	7424716,406	7424725,126	7424731,091	
					E	400689,2623	400692,112	720692,694	400689,548	
9	5,000	7,041	4,247	60°40'58,08"	N	7424728,7618	7424733,505	7424734,849	7424731,091	
					E	400685,1238	400683,542	720687,570	400689,548	
10	4,000	6,872	4,637	98°29'54,13"	N	7424746,1467	7424742,162	7424742,569	7424747,079	
					E	400686,0758	400686,427	720691,046	400689,968	
11	0,500	1,329	2,030	152°19'31,54"	N	7424615,9756	7424615,528	7424614,629	7424616,269	
					E	400695,5463	400695,324	720697,142	400695,951	
12	1,000	2,593	3,556	148°39'14,16"	N	7424685,8105	7424686,426	7424686,229	7424685,696	
					E	400679,6830	400678,905	720681,093	400680,686	
13	20,000	4,900	2,462	142°10'48"	N	7424542,1735	7424557,515	7424559,095	7424560,169	
					E	400510,7925	400497,961	720499,850	400502,265	
14	20,000	3,948	1,860	11°18'35,76"	N	7424582,1272	7424572,770	7424573,268	7424574,132	
					E	400486,6082	400491,637	720493,553	400495,335	
15	3,948	1,980	1,860	11°18'35,76"	N	7424582,1272	7424582,127	7424582,127	7424582,127	
					E	400490,0408	400490,278	720492,000	400493,676	
16	20,000	4,900	2,462	142°10'48"	N	7424571,8616	7424553,866	7424554,940	7424556,520	
					E	400444,8205	400453,548	720455,763	400457,652	
17	1,000	2,605	4,026	126°12'36,23"	N	7424606,6370	7424606,165	7424602,615	7424606,642	
					E	399849,8567	399849,697	399843,797	399843,616	
18	31,990	10,420	5,257	18°39'27,41"	N	7424699,3359	7424672,387	7424675,198	7424679,294	
					E	399870,4754	399852,852	399848,422	399845,129	
19	0,500	1,229	1,465	140°48'37,89"	N	7424678,9804	7424678,984	7424680,388	7424679,294	
					E	399844,7306	399844,730	399844,250	399845,129	
20	7,000	6,476	5,625	77°33'53,70"	N	7424720,9217	7424720,922	7424726,596	7424727,768	
					E	399854,5400	399847,540	399847,686	399848,166	
21	7,000	10,785	6,793	88°16'54,51"	N	7424748,8004	7424739,814	7424740,007	7424746,859	
					E	399854,7252	399854,465	399847,677	399847,725	
22	10,000	4,267	2,167	24°26'56,34"	N	7424534,8410	7424536,023	7424532,657	7424530,869	
					E	399855,5866	399845,588	399845,549	399846,409	
23	200,000	3,888	1,949	17°02'22"	N	7424786,1267	7424716,596	7424616,517	7424617,500	
					E	399850,1829	399845,541	399850,183	399845,541	
24	118,000	11,264	5,036	5°29'8,91"	N	7424714,0749	7424610,455	7424610,484	7424610,700	
					E	400020,1020	399856,544	399863,353	399868,419	
25	207,000	4,035	2,017	17°02'22"	N	7424788,1261	7424613,667	7424612,681	7424611,528	
					E	400050,1829	399844,737	399846,473	399846,194	
26	125,000	11,932	5,970	5°29'8,91"	N	7424788,1261	7424613,667	7424612,681	7424611,528	
					E	400020,1020	399856,544	399863,353	399868,419	
27	200,000	15,895	7,952	4°13'30,12"	N	7424783,3240	7424614,763	7424610,483	7424606,749	
					E	400407,9120	399840,720	399846,971	399853,962	
28	200,000	16,451	8,230	4°13'30,12"	N	7424783,3240	7424614,763	7424610,483	7424606,749	
					E	400407,9120	399840,720	399846,971	399853,962	
29	193,000	16,751	8,881	5°48'22,26"	N	7424708,1748	7424513,913	7424516,646	7424510,899	
					E	400315,3339	400323,303	400340,552	400348,806	
30	200,000	17,359	8,885	5°48'22,26"	N	7424708,1748	7424508,940	7424509,699	7424511,205	
					E	400315,3339	400323,303	400341,466	400350,200	
31	200,000	17,261	8,636	5°46'14,97"	N	7424708,5571	7424512,306	7424510,642	7424509,714	
					E	400326,0420	400346,586	400356,111	400361,524	
32	207,000	17,865	8,938	5°46'14,97"	N	7424708,5571	7424505,437	7424503,716	7424502,755	
					E	400326,0420	400365,934	400357,163	400348,279	