

ANEJO 21: REPLANTEO

ÍNDICE

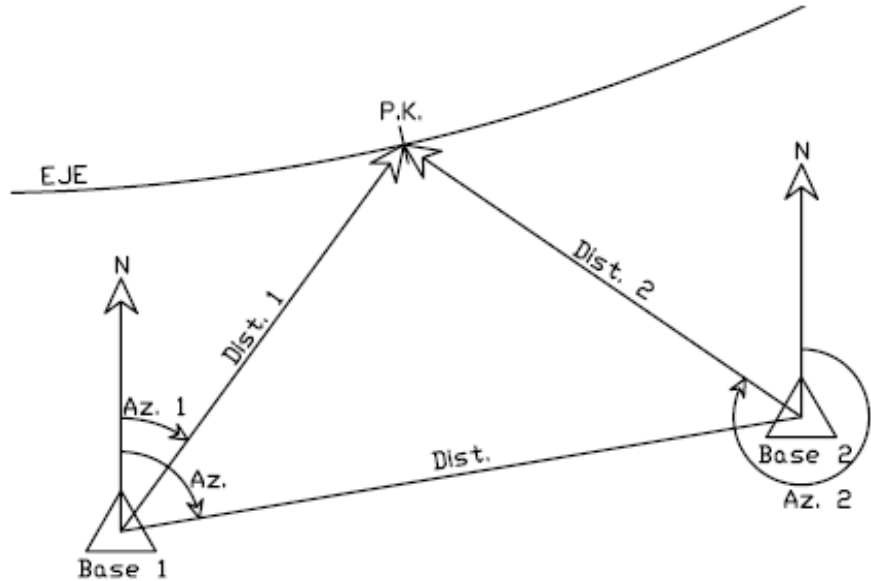
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1. OBJETO

El objeto del presente Anejo es incluir los listados para el replanteo de los ejes incluidos en el Proyecto, para los ramales del enlace y para los caminos proyectados.

A partir de la red de bases de replanteo implantada se realiza el replanteo de los ejes, cada veinte metros y desde las dos bases más próximas a cada punto.

El replanteo se ha realizado por el método de bisección, figurando en los listados las baseelegidas, sus coordenadas, azimuth del vector que une ambas bases y distancia entre ellas. De cada punto replanteado, aparece la distancia al origen, coordenadas, distancia al par de bases, azimuth del vector que une el punto con cada base y cota de rasante en el eje. En el croquis adjunto se muestra los distintos valores que aparecen en los listados de replanteo.



2. BASES DE REPLANTEO

Dado lo concentrado de la actuación proyectada, se han implantado19bases de replanteo.

Se incluye tabla compuesta por los nombres dados a las bases de replanteo y sus correspondientes coordenadas X,Y, Z.

DENOMINACIÓN	COORDENADA X	COORDENADA Y	ALTURA
ENLACE AP-46 CON MA-20			
CAM1	370244,033	4066916,456	116,211
CAM2	370172,278	4066797,334	116,104
CAM3	370715,115	4067108,237	121,082
FAR1	370591,742	4067063,549	120,717
FAR2	369913,742	4067448,643	158,111
HITO1	370628,878	4067301,318	147,174
HITO2	370174,113	4067371,739	158,111
PS1	370331,300	4067483,959	171,169
PS2	370320,367	4067461,063	167,915
PS3	370330,886	4067367,346	168,310
PS4	369668,339	4067483,212	196,762
VIA2	370676,871	4067439,149	123,586
ENLACE AP-46 CON MA-3404			
BR-1	370449,328	4085332,005	483,683
BR-2	370400,631	4085295,333	478,162
BR-3	370232,663	4085207,770	477,610
BR-4	370147,131	4085151,820	480,159
BR-5	369971,443	4084954,573	475,763
BR-6	370028,268	4084937,222	477,153
BR-7	370096,066	4085073,573	475,826

3. REPLANTEO DE EJES

En el Apéndice 4.1 se adjuntan los datos de replanteo de los ejes cada 20m.
En estos listados se recoge la siguiente información:

P.K.	Coordenadas (X,Y)	Ángulos	Distancias	Proyecciones
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P.K. = Punto kilométrico a replantear
Ang. = Ángulo desde la base de replanteo
Dist. = Distancia desde la base al punto de replanteo
X = Coordenada X del punto replanteado
Y = Coordenada Y del punto replanteado

4. APÉNDICES

- Apéndice 4.1: Listados de replanteo



4.1. LISTADOS DE REPLANTEO



ACTUACIONES DE MEJORA EN EL ENLACE AP-46 CON MA-20

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PROYECTO : 591 P_Trazado Enlace AP-46 con MA-20 29-01-2020

GRUPO : 1 : Ramales

EJE : 7 : Autovia MA-20 Carril de Deceleraci

REPLANTEO POR BISECCION						
PK	AZ1	d1	X	Y	AZ2	d2
*BASE 1: CAM1			370244.033	4066916.456	74.5222	377.615
*BASE 2: FAR1			370591.742	4067063.549		
200.000	80.2713	161.766	370398.063	4066965.779	270.2389	216.999
220.000	79.3704	181.621	370416.168	4066974.274	270.0531	197.006
240.000	78.8620	201.566	370434.553	4066982.147	269.5803	177.051
260.000	78.6160	221.552	370453.163	4066989.470	268.7473	157.167
280.000	78.5444	241.554	370471.954	4066996.318	267.4407	137.392
300.000	78.5860	261.557	370490.884	4067002.769	265.4730	117.779
320.000	78.6970	281.555	370509.920	4067008.905	262.5154	98.410
340.000	78.8450	301.547	370529.029	4067014.808	257.9393	79.443
360.000	79.0058	321.535	370548.184	4067020.559	250.4180	61.212
376.074	79.1316	337.599	370563.594	4067025.129	240.2525	47.637
380.000	79.1609	341.523	370567.359	4067026.243	236.8536	44.576
389.547	79.2294	351.064	370576.513	4067028.953	226.3982	37.807
400.000	79.3000	361.512	370586.536	4067031.921	210.3851	32.060
*BASE 1: FAR1			370591.742	4067063.549	9.8634	240.698
*BASE 2: HIT01		370628.878	4067301.318			
400.000	210.3851	32.060	370586.536	4067031.921	209.9247	272.757
420.000	168.5460	29.451	370605.706	4067037.625	205.5801	264.760
440.000	134.7962	38.764	370624.852	4067043.404	200.9936	257.995
460.000	116.9501	54.137	370643.961	4067049.307	196.1943	252.511
480.000	107.2624	71.754	370663.016	4067055.383	191.2192	248.341
500.000	101.3191	90.294	370681.999	4067061.679	186.1125	245.504
508.389	99.4505	98.216	370689.936	4067064.397	183.9429	244.710
520.000	97.2650	109.272	370700.892	4067068.241	180.9227	243.996
*BASE 1: HIT01			370628.878	4067301.318	173.2586	211.505
*BASE 2: CAM3			370715.115	4067108.237		
520.000	180.9227	243.996	370700.892	4067068.241	221.7515	42.458
540.000	175.7003	243.819	370719.682	4067075.090	191.2831	33.467
560.000	170.4969	244.975	370738.366	4067082.225	153.5645	34.896
573.465	167.0298	246.496	370750.883	4067087.188	133.8625	41.510

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PROYECTO : 591 P_Trazado Enlace AP-46 con MA-20 29-01-2020

GRUPO : 1 : Ramales

EJE : 8 : Autov MA-20. Carril de aceleraci

REPLANTEO POR BISECCION						
PK	AZ1	d1	X	Y	AZ2	d2
*BASE 1: CAM1			370244.033	4066916.456	74.5222	377.615
*BASE 2: FAR1			370591.742	4067063.549		
100.000	87.5758	48.322	370291.429	4066925.825	272.6264	330.452
120.000	78.4238	66.589	370306.822	4066938.591	273.6877	311.177
140.000	73.9685	85.879	370322.817	4066950.595	274.6851	291.740
158.132	71.8804	103.747	370337.805	4066960.797	275.5222	273.992
160.000	71.7325	105.599	370339.374	4066961.810	275.6043	272.157
180.000	70.6817	125.511	370356.446	4066972.225	276.4307	252.446
200.000	70.3033	145.497	370373.960	4066981.879	277.1596	232.637
220.000	70.3230	165.499	370391.845	4066990.828	277.7877	212.755
240.000	70.5841	185.489	370410.039	4066999.131	278.3103	192.821
260.000	70.9903	205.454	370428.487	4067006.854	278.7210	172.853
280.000	71.4799	225.388	370447.141	4067014.066	279.0098	152.863
300.000	72.0112	245.295	370465.959	4067020.838	279.1608	132.863
320.000	72.5552	265.180	370484.904	4067027.246	279.1473	112.859
340.000	73.0908	285.050	370503.945	4067033.365	278.9191	92.859
360.000	73.6028	304.912	370523.053	4067039.271	278.3715	72.867
380.000	74.0794	324.777	370542.202	4067045.044	277.2417	52.894
394.090	74.3890	338.777	370555.704	4067049.073	275.6836	38.844
400.000	74.5117	344.651	370561.367	4067050.761	274.6313	32.963
420.000	74.8977	364.539	370580.534	4067056.473	264.1488	13.257
435.403	75.1675	379.865	370595.296	4067060.872	141.0949	4.450
*BASE 1: FAR1			370591.742	4067063.549	9.8634	240.698
*BASE 2: HIT01		370628.878	4067301.318			
420.000	264.1488	13.257	370580.534	4067056.473	212.4102	249.620
435.403	141.0949	4.450	370595.296	4067060.872	208.8343	242.827
440.000	110.8020	8.077	370599.701	4067062.185	207.7293	240.953
460.000	89.8096	27.474	370618.859	4067067.927	202.7312	233.651
480.000	86.1292	47.368	370637.982	4067073.786	197.4542	227.758
497.645	84.5793	64.965	370654.798	4067079.129	192.6069	223.739
500.000	84.4179	67.314	370657.038	4067079.858	191.9483	223.287
520.000	83.2714	87.270	370676.000	4067086.214	186.2706	220.248
540.000	82.3675	107.227	370694.862	4067092.864	180.4836	218.691
*BASE 1: HIT01			370628.878	4067301.318	173.2586	211.505

*BASE 2: CAM3				370715.115	4067108.237		
540.000	180.4836	218.691	370694.862	4067092.864	258.6652	25.431	
560.000	174.6579	218.647	370713.619	4067099.806	211.1815	8.565	
580.000	168.8668	220.119	370732.265	4067107.038	104.4428	17.195	
586.066	167.1281	220.861	370737.898	4067109.289	97.0625	22.812	

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PROYECTO : 591 P_Trazado Enlace AP-46 con MA-20 29-01-2020

GRUPO : 1 : Ramales

EJE : 9 : Autov 倣 A-7 Carril de deceleraci 倣

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REPLANTEO POR BISECCION

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PK	AZ1	d1	X	Y	AZ2	d2
*BASE 1: PS4			369668.339	4067483.212	108.9092	247.873
*BASE 2: FAR2			369913.742	4067448.643		
20.000	86.3879	44.963	369712.270	4067492.751	313.7209	206.284
40.000	99.5704	61.742	369730.068	4067483.629	311.9825	187.013
60.000	106.5744	80.188	369748.085	4067474.947	310.0250	167.765
80.000	110.6219	99.370	369766.310	4067466.712	307.7637	148.564
100.000	113.0941	118.922	369784.733	4067458.929	305.0649	129.444
120.000	114.6427	138.680	369803.341	4067451.601	301.7054	110.461
140.000	115.6081	158.557	369822.125	4067444.734	297.2854	91.718
160.000	116.1831	178.502	369841.072	4067438.332	291.0268	73.412
180.000	116.4847	198.486	369860.171	4067432.398	281.2560	55.991
200.000	116.5876	218.486	369879.410	4067426.936	264.1071	40.626
220.000	116.5418	238.489	369898.778	4067421.950	232.5274	30.607
*BASE 1: FAR2			369913.742	4067448.643	118.2836	271.543
*BASE 2: HIT02		370174.113	4067371.739			
220.000	232.5274	30.607	369898.778	4067421.950	311.4835	279.930
240.000	190.8387	31.532	369918.263	4067417.443	311.2535	259.950
260.000	161.7890	42.696	369937.853	4067413.416	311.1159	239.954
280.000	146.1302	58.501	369957.536	4067409.874	311.0958	219.951
300.000	137.0531	76.101	369977.301	4067406.817	311.2285	199.952
320.000	131.1437	94.492	369997.135	4067404.248	311.5649	179.974
340.000	126.9185	113.280	370017.026	4067402.168	312.1808	160.038
360.000	123.6771	132.288	370036.962	4067400.578	313.1942	140.177
380.000	121.0549	151.423	370056.931	4067399.480	314.7987	120.444
400.000	118.8459	170.633	370076.922	4067398.875	317.3328	100.928
420.000	116.9255	189.885	370096.921	4067398.761	321.4370	81.801
435.780	115.5610	205.091	370112.698	4067399.019	326.6120	67.214
440.000	115.2145	209.158	370116.917	4067399.140	328.4422	63.433
460.000	113.6672	228.443	370136.898	4067399.985	341.3319	46.729
480.000	112.2663	247.750	370156.861	4067401.211	366.2843	34.157
*BASE 1: HIT02			370174.113	4067371.739	65.0952	171.407
*BASE 2: PS2			370320.367	4067461.063		
480.000	366.2843	34.157	370156.861	4067401.211	277.6607	174.150
500.000	5.5128	31.109	370176.803	4067402.726	275.4285	154.994



520.000	38.5218	39.766	370196.730	4067404.438	272.6586	136.014	1060.000	165.8210	103.304	370729.696	4067350.397	3.8287	242.645
540.000	56.5987	54.788	370216.647	4067406.257	269.0534	117.332	1080.000	156.9875	116.309	370749.596	4067348.410	9.0778	242.682
543.259	58.6047	57.527	370219.892	4067406.558	268.3568	114.329	1100.000	149.7433	130.580	370769.559	4067347.206	14.2605	245.140
560.000	66.4393	72.274	370236.562	4067408.092	264.1156	99.161	1120.000	143.7115	145.726	370789.553	4067346.787	19.2557	249.943
580.000	72.4058	90.782	370256.484	4067409.860	256.9863	81.886	1140.000	138.5959	161.482	370809.548	4067347.155	23.9629	256.953
600.000	76.4108	109.775	370276.418	4067411.483	246.1716	66.268	1160.000	134.1757	177.664	370829.514	4067348.307	28.3098	265.985
620.000	79.3351	129.017	370296.369	4067412.879	229.4172	53.840	1169.659	132.2402	185.591	370839.136	4067349.144	30.2664	271.009
640.000	81.6251	148.392	370316.339	4067413.969	205.4318	47.275							
*BASE 1: PS2			370320.367	4067461.063	192.8842	94.324							
*BASE 2: PS3			370330.886	4067367.346									
640.000	205.4318	47.275	370316.339	4067413.969	380.7461	48.849							
*BASE 1: PS3			370330.886	4067367.346	0.2260	116.636							
*BASE 2: PS1			370331.300	4067483.959									
640.000	380.7461	48.849	370316.339	4067413.969	213.4066	71.585							
*BASE 1: PS1			370331.300	4067483.959	135.0443	349.224							
*BASE 2: HIT01			370628.878	4067301.318									
640.000	213.4066	71.585	370316.339	4067413.969	322.0235	332.286							
660.000	195.3898	69.481	370336.326	4067414.674	323.5333	313.806							
668.492	187.7059	70.445	370344.817	4067414.837	324.2034	305.963							
680.000	177.8638	73.453	370356.324	4067414.915	325.1398	295.336							
700.000	163.3223	82.658	370376.322	4067414.657	326.8545	276.875							
720.000	152.3801	95.592	370396.307	4067413.900	328.7005	258.437							
740.000	144.4534	110.951	370416.267	4067412.643	330.7077	240.039							
760.000	138.7368	127.858	370436.189	4067410.887	332.9156	221.706							
780.000	134.5793	145.765	370456.062	4067408.634	335.3774	203.466							
800.000	131.5229	164.337	370475.871	4067405.885	338.1660	185.361							
820.000	129.2570	183.363	370495.606	4067402.642	341.3834	167.448							
822.755	128.9941	186.011	370498.318	4067402.157	341.8677	164.999							
840.000	127.5683	202.701	370515.255	4067398.915	345.1790	149.813							
860.000	126.2951	222.249	370534.820	4067394.766	349.7927	132.613							
880.000	125.3188	241.934	370554.309	4067390.275	355.5868	116.100							
900.000	124.5542	261.709	370573.736	4067385.522	363.0895	100.672							
920.000	123.9395	281.540	370593.117	4067380.586	373.0199	86.978							
940.000	123.4284	301.407	370612.471	4067375.545	386.1513	76.033							
946.826	123.2712	308.192	370619.074	4067373.815	391.4426	73.171							
960.000	122.9851	321.293	370631.820	4067370.482	2.7063	69.240							
*BASE 1: HIT01			370628.878	4067301.318	21.3313	145.976							
*BASE 2: VIA2			370676.871	4067439.149									
960.000	2.7063	69.240	370631.820	4067370.482	236.9647	82.142							
980.000	21.2957	68.000	370651.199	4067365.536	221.3624	77.976							
*BASE 1: VIA2			370676.871	4067439.149	192.6750	333.179							
*BASE 2: CAM3			370715.115	4067108.237									
980.000	221.3624	77.976	370651.199	4067365.536	384.4993	265.171							
1000.000	205.0502	78.529	370670.649	4067360.882	388.9090	256.578							
1020.000	189.7923	83.539	370690.206	4067356.698	393.6389	249.755							
1033.493	180.6742	89.003	370703.471	4067354.232	396.9889	246.318							
1040.000	176.6587	92.125	370709.890	4067353.164	398.6421	245.030							

PROYECTO : 591 P_Trazado Enlace AP-46 con MA-20 29-01-2020
GRUPO : 1 : Ramales
EJE : 10 : Autov^{da} A-7 Carril de Aceleraci³

PK	AZ1	d1	X	Y	AZ2	d2
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520.000	35.6942	70.704	370211.704	4067431.606	283.1474	112.607
527.713	40.8537	75.645	370219.384	4067432.323	282.3487	105.013
540.000	47.7473	84.377	370231.617	4067433.464	280.8062	92.960
560.000	56.2528	100.173	370251.535	4067435.272	277.1770	73.519
580.000	62.4267	117.197	370271.465	4067436.950	270.8359	54.535
600.000	67.0939	134.950	370291.411	4067438.415	257.7441	36.768
620.000	70.7743	153.146	370311.376	4067439.588	225.2414	23.285
*BASE 1: PS2			370320.367	4067461.063	192.8842	94.324
*BASE 2: PS3			370330.886	4067367.346		
620.000	225.2414	23.285	370311.376	4067439.588	383.2080	74.845
*BASE 1: PS3			370330.886	4067367.346	0.2260	116.636
*BASE 2: PS1			370331.300	4067483.959		
620.000	383.2080	74.845	370311.376	4067439.588	226.8682	48.648
640.000	0.4131	73.056	370331.360	4067440.387	199.9124	43.581
646.946	6.4281	73.604	370338.304	4067440.561	189.8134	43.968
*BASE 1: PS1			370331.300	4067483.959	135.0443	349.224
*BASE 2: HIT01			370628.878	4067301.318		
640.000	199.9124	43.581	370331.360	4067440.387	327.8364	328.480
646.946	189.8134	43.968	370338.304	4067440.561	328.4487	322.277
660.000	172.3435	47.662	370351.356	4067440.733	329.6367	310.632
680.000	152.5230	59.044	370371.356	4067440.596	331.5624	292.830
700.000	140.2486	74.446	370391.345	4067439.974	333.6374	275.094
720.000	132.6692	91.862	370411.314	4067438.869	335.8916	257.449
740.000	127.8147	110.334	370431.251	4067437.281	338.3633	239.926
760.000	124.5947	129.403	370451.143	4067435.210	341.1017	222.567
780.000	122.4078	148.830	370470.979	4067432.658	344.1707	205.424
800.000	120.9072	168.482	370490.747	4067429.627	347.6544	188.566
815.766	120.0674	184.079	370506.275	4067426.901	350.7645	175.541
820.000	119.8827	188.279	370510.437	4067426.119	351.6640	172.090
840.000	119.1933	208.168	370530.040	4067422.158	356.3548	156.143
860.000	118.7317	228.109	370549.563	4067417.818	361.9471	140.964
880.000	118.4229	248.079	370569.018	4067413.180	368.7196	126.896
900.000	118.2137	268.065	370588.419	4067408.322	376.9867	114.420
920.000	118.0657	288.058	370607.784	4067403.323	387.0182	104.184
936.174	117.9710	304.230	370623.432	4067399.231	396.4628	98.084
940.000	117.9503	308.055	370627.133	4067398.262	398.8542	96.978
960.000	117.8405	328.051	370646.493	4067393.242	12.0530	93.615
*BASE 1: HIT01			370628.878	4067301.318	21.3313	145.976
*BASE 2: VIA2			370676.871	4067439.149		
960.000	12.0530	93.615	370646.493	4067393.242	237.2157	55.058
*BASE 1: VIA2			370676.871	4067439.149	192.6750	333.179
*BASE 2: CAM3			370715.115	4067108.237		
960.000	237.2157	55.058	370646.493	4067393.242	384.9581	293.207
980.000	213.5556	51.899	370665.906	4067388.432	388.9322	284.539
1000.000	190.2197	55.809	370685.410	4067384.008	393.1688	277.420
1020.000	171.6493	65.390	370705.033	4067380.148	397.6405	272.151
1027.692	165.9336	70.108	370712.615	4067378.853	399.4119	270.680

1040.000	158.1730	78.468	370724.787	4067377.029	2.2897	269.018
1060.000	148.3821	93.529	370744.652	4067374.728	7.0275	268.175
1080.000	141.0145	109.740	370764.596	4067373.252	11.7511	269.647
1100.000	135.2315	126.637	370784.584	4067372.602	16.3591	273.393
1120.000	130.5109	143.955	370804.582	4067372.781	20.7614	279.317
1140.000	126.5258	161.533	370824.555	4067373.787	24.8865	287.273
1153.286	124.1788	173.303	370837.793	4067374.912	27.4486	293.597

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PROYECTO : 591 P_Trazado Enlace AP-46 con MA-20 29-01-2020

GRUPO : 1 : Ramales

EJE : 37 : Ramal 2 MA-20 a A-7_2 (2020-02)

REPLANTEO POR BISECCION

PK	AZ1	d1	X	Y	AZ2	d2
*BASE 1: FAR1			370591.742	4067063.549	77.8763	131.242
*BASE 2: CAM3			370715.115	4067108.237		
0.000	124.0291	46.360	370634.830	4067046.466	258.2506	101.318
20.000	111.3209	63.206	370653.939	4067052.371	252.8861	82.863
38.539	104.5377	80.129	370671.652	4067057.843	245.3078	66.560
40.000	104.1240	81.492	370673.047	4067058.275	244.5521	65.327
60.000	99.7116	100.487	370692.209	4067064.004	230.4197	49.822
80.000	97.2050	120.014	370711.617	4067068.815	205.6339	39.584
100.000	96.2316	139.909	370731.379	4067071.824	173.2581	39.887
107.962	96.2215	147.871	370739.324	4067072.319	162.2442	43.324
120.000	96.5710	159.877	370751.357	4067072.154	149.8599	51.151
138.011	97.7457	177.607	370769.203	4067069.836	139.3044	66.347
140.000	97.9146	179.539	370771.150	4067069.428	138.5620	68.175
160.000	100.1275	198.389	370790.092	4067063.152	134.4661	87.505
169.742	101.6253	206.875	370798.509	4067058.269	134.3658	97.237
180.000	103.5258	214.958	370806.329	4067051.652	135.3483	107.360
200.000	107.9644	227.532	370817.452	4067035.164	139.4762	125.773
220.000	113.0190	235.187	370821.984	4067015.797	145.3994	141.329
240.000	118.3462	237.423	370819.330	4066996.084	152.3343	153.128
260.000	123.6442	234.101	370809.840	4066978.605	159.8264	160.584
280.000	128.6072	225.429	370794.752	4066965.644	167.5744	163.356
300.000	132.8773	211.981	370776.042	4066958.897	175.3399	161.322
320.000	135.9900	194.744	370756.155	4066959.246	182.8886	154.570
340.000	137.3136	175.225	370737.692	4066966.645	189.9336	143.408
351.173	136.9744	164.105	370728.912	4066973.524	193.5025	135.444
360.000	136.0421	155.601	370723.040	4066980.103	196.0677	128.404
380.000	131.8081	138.189	370713.015	4066997.354	201.2057	110.924
400.000	125.0346	123.828	370706.097	4067016.109	206.2121	92.586
406.173	122.5274	119.944	370704.232	4067021.994	207.9909	86.944
420.000	116.3012	112.016	370700.085	4067035.184	212.9176	74.597
440.000	105.7604	102.784	370694.086	4067054.263	223.6518	57.937
460.000	93.5511	96.860	370688.087	4067073.342	241.9555	44.147
480.000	80.3082	94.865	370682.088	4067092.421	271.5685	36.626
*BASE 1: CAM3			370715.115	4067108.237	373.2586	211.505



*BASE 2: HIT01			370628.878	4067301.318		
480.000	271.5685	36.626	370682.088	4067092.421	184.1218	215.609
500.000	305.3110	39.170	370676.089	4067111.500	184.4811	195.639
507.491	315.7275	42.574	370673.842	4067118.646	184.6353	188.161
520.000	329.3365	50.263	370670.103	4067130.584	184.9169	175.675
540.000	343.6157	65.592	370664.334	4067149.733	185.3724	155.706
560.000	352.6194	82.675	370659.120	4067169.040	185.6911	135.717
577.803	358.3854	98.494	370655.231	4067186.412	185.6478	117.912
580.000	359.0064	100.466	370654.813	4067188.568	185.6066	115.716
600.000	364.0421	118.509	370651.693	4067208.320	184.6843	95.774
620.000	368.2710	136.637	370649.813	4067228.228	182.2409	76.043
623.745	368.9984	140.032	370649.599	4067231.967	181.5161	72.394
640.000	371.9633	154.773	370649.148	4067248.215	176.7864	56.851
660.000	375.2013	172.963	370649.443	4067268.211	164.6135	38.982
680.000	378.0051	191.292	370650.344	4067288.191	134.9420	25.167
694.057	379.7222	204.302	370651.147	4067302.225	97.4092	22.292
*BASE 1: HIT01			370628.878	4067301.318	21.3313	145.976
*BASE 2: VIA2			370676.871	4067439.149		
680.000	134.9420	25.167	370650.344	4067288.191	211.0739	153.301
694.057	97.4092	22.292	370651.147	4067302.225	211.8222	139.347
700.000	81.3018	23.630	370651.491	4067308.158	212.1836	133.453
720.000	45.7114	35.622	370652.309	4067328.140	213.8625	113.716
740.000	29.0400	52.151	370651.846	4067348.128	217.0807	94.417
756.365	20.4273	66.445	370649.830	4067364.360	222.0865	79.543
760.000	18.7874	69.631	370649.126	4067367.926	223.6482	76.451
780.000	10.7427	87.030	370643.491	4067387.095	236.3000	61.849
800.000	3.7398	104.056	370634.986	4067405.175	256.6147	53.942
*BASE 1: VIA2			370676.871	4067439.149	308.2092	348.532
*BASE 2: PS1			370331.300	4067483.959		
800.000	256.6147	53.942	370634.986	4067405.175	116.1594	313.800
820.000	279.8141	55.855	370623.810	4067421.737	113.3431	299.113
840.000	297.3674	66.712	370610.229	4067436.392	110.7532	283.010
860.000	307.4243	82.888	370594.562	4067448.792	108.4541	265.652
880.000	312.2946	101.599	370577.180	4067458.645	106.5313	247.228
900.000	314.0553	121.346	370558.494	4067465.717	105.1005	227.969
920.000	313.9402	141.329	370538.944	4067469.843	104.3211	208.163
925.098	313.7023	146.399	370533.878	4067470.410	104.2515	203.069
940.000	312.6705	161.088	370518.994	4067470.993	104.3909	188.177
960.000	310.8680	180.493	370499.036	4067469.806	105.3587	168.364
980.000	308.9971	199.702	370479.199	4067467.273	107.1522	148.866
987.406	308.3495	206.815	370471.872	4067466.190	108.0045	141.718
1000.000	307.3499	218.960	370459.411	4067464.367	109.6608	129.625
1020.000	306.0063	238.374	370439.603	4067461.601	112.9602	110.608
1040.000	304.9041	257.912	370419.774	4067458.993	117.5089	91.947
1060.000	303.9935	277.546	370399.925	4067456.544	124.1956	73.912
1080.000	303.2370	297.257	370380.056	4067454.254	134.8354	57.103
1100.000	302.6066	317.028	370360.170	4067452.123	153.1077	42.985

1120.000	302.0801	336.849	370340.268	4067450.151	183.4937	34.984
1136.358	301.7148	353.089	370323.978	4067448.657	213.0192	36.060
*BASE 1: PS1			370331.300	4067483.959	200.2260	116.636
*BASE 2: PS3			370330.886	4067367.346		
1120.000	183.4937	34.984	370340.268	4067450.151	7.1821	83.351
*BASE 1: PS3			370330.886	4067367.346	392.8842	94.324
*BASE 2: PS2			370320.367	4067461.063		
1120.000	7.1821	83.351	370340.268	4067450.151	131.9294	22.700
*BASE 1: PS2			370320.367	4067461.063	265.0952	171.407
*BASE 2: HIT02			370174.113	4067371.739		
1120.000	131.9294	22.700	370340.268	4067450.151	71.9292	183.763
1136.358	181.9676	12.924	370323.978	4067448.657	69.8122	168.484
1140.000	200.0842	12.729	370320.350	4067448.336	69.2834	165.115
1160.000	259.9950	24.652	370300.428	4067446.574	65.9505	146.847
1180.000	275.3554	43.055	370280.506	4067444.812	61.6864	129.095
1200.000	281.3692	62.450	370260.583	4067443.050	56.0978	112.104
1220.000	284.5181	82.138	370240.661	4067441.288	48.5965	96.277
1240.000	286.4465	101.949	370220.739	4067439.526	38.3571	82.290
1260.000	287.7466	121.823	370200.817	4067437.764	24.4676	71.234
1280.000	288.6817	141.733	370180.895	4067436.002	6.6933	64.632
*BASE 1: HIT02			370174.113	4067371.739	318.2836	271.543
*BASE 2: FAR2			369913.742	4067448.643		
1280.000	6.6933	64.632	370180.895	4067436.002	103.0101	267.503
1300.000	386.8074	63.880	370160.972	4067434.240	103.7046	247.697
1320.000	368.2651	69.168	370141.050	4067432.478	104.5197	227.926
1338.313	354.5013	78.297	370122.808	4067430.865	105.4006	209.861
1340.000	353.4038	79.298	370121.128	4067430.716	105.4894	208.199
1360.000	342.3890	92.735	370101.201	4067429.013	106.6424	188.520
1380.000	334.4807	108.395	370081.250	4067427.609	107.9526	168.856
1400.000	328.8905	125.577	370061.269	4067426.781	109.3661	149.166
1410.563	326.6610	135.106	370050.707	4067426.670	110.1269	138.743
1420.000	325.0151	143.830	370041.270	4067426.801	110.7986	129.410
1429.395	323.6512	152.674	370031.882	4067427.153	111.4551	120.102
1440.000	322.3875	162.808	370021.298	4067427.809	112.1808	109.576
1460.000	320.6089	182.223	370001.388	4067429.693	113.5557	89.688
1473.716	319.7198	195.686	369987.776	4067431.378	114.5853	76.035
1473.716	319.7198	195.686	369987.776	4067431.378	114.5853	76.035

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PROYECTO : 591 P_Trazado Enlace AP-46 con MA-20 29-01-2020

GRUPO : 1 : Ramales

EJE : 38 : Ramal 1 A-7 a MA-20 (2020-01)

REPLANTEO POR BISECCION						
PK	AZ1	d1	X	Y	AZ2	d2
*BASE 1: FAR2						
*BASE 2: HIT02						
0.000	158.5051	45.096	369941.093	4067412.799	311.1037	236.655
20.000	144.3229	61.327	369960.788	4067409.320	311.1012	216.652
40.000	136.0119	79.147	369980.547	4067406.230	311.2258	196.652
60.000	130.6282	97.718	370000.350	4067403.432	311.4852	176.663
80.000	126.8781	116.707	370020.180	4067400.829	311.8907	156.687
89.201	125.5169	125.538	370029.308	4067399.671	312.1310	147.503
97.341	124.4583	133.390	370037.385	4067398.657	312.3749	139.379
100.000	124.1382	135.962	370040.023	4067398.327	312.4618	136.727
120.000	122.0337	155.380	370059.880	4067395.943	313.2921	116.791
140.000	120.2737	174.858	370079.776	4067393.905	314.6919	96.925
160.000	118.6718	194.315	370099.724	4067392.476	317.3069	77.240
173.850	117.5906	207.740	370113.564	4067391.980	320.5383	63.855
178.448	117.2309	212.184	370118.162	4067391.922	322.0400	59.492
180.000	117.1092	213.682	370119.714	4067391.915	322.6107	58.032
200.000	115.5479	232.921	370139.708	4067392.332	334.3360	40.105
220.000	114.0460	252.090	370159.674	4067393.484	362.6833	26.108
*BASE 1: HIT02						
*BASE 2: PS2						
220.000	362.6833	26.108	370159.674	4067393.484	274.6567	174.359
240.000	14.7264	23.981	370179.610	4067395.077	272.0924	155.486
250.093	36.3419	28.786	370189.664	4067395.956	270.5784	146.049
260.000	50.4230	35.720	370199.534	4067396.824	268.8927	136.874
280.000	65.9772	52.701	370219.457	4067398.577	264.7037	118.713
300.000	73.7149	71.268	370239.380	4067400.330	259.0373	101.249
318.941	78.0260	89.425	370258.247	4067401.990	251.6003	85.740
320.000	78.2159	90.450	370259.303	4067402.083	251.1054	84.913
340.000	81.1650	109.913	370279.231	4067403.779	239.6476	70.538
360.000	83.3733	129.484	370299.182	4067405.167	223.0635	59.788
380.000	85.2537	149.061	370319.165	4067405.952	201.3879	55.135
392.522	86.3679	161.287	370331.686	4067406.006	187.0915	56.219
*BASE 1: PS2						
*BASE 2: PS1						

380.000	201.3879	55.135	370319.165	4067405.952	209.8245	78.960
*BASE 1: PS1			370331.300	4067483.959	200.2260	116.636
*BASE 2: PS3			370330.886	4067367.346		
380.000	209.8245	78.960	370319.165	4067405.952	381.2354	40.354
*BASE 1: PS3			370330.886	4067367.346	86.9730	353.425
*BASE 2: VIA2			370676.871	4067439.149		
380.000	381.2354	40.354	370319.165	4067405.952	294.1087	359.312
392.522	1.3177	38.676	370331.686	4067406.006	293.9061	346.839
400.000	13.4820	39.384	370339.163	4067405.843	293.7417	339.412
403.898	19.5644	40.245	370343.058	4067405.698	293.6418	335.550
420.000	41.2196	46.831	370359.128	4067404.691	293.1230	319.668
440.000	59.6762	59.739	370379.027	4067402.698	292.2474	300.124
459.329	71.0566	74.939	370398.200	4067400.249	291.1703	281.428
460.000	71.3718	75.498	370398.865	4067400.158	291.1290	280.782
480.000	79.0578	92.766	370418.661	4067397.309	289.7732	261.629
500.000	84.4219	110.854	370438.417	4067394.197	288.1380	242.701
520.000	88.3855	129.416	370458.130	4067390.822	286.1572	224.060
540.000	91.4552	148.272	370477.796	4067387.184	283.7448	205.786
560.000	93.9255	167.319	370497.412	4067383.284	280.7875	187.990
564.156	94.3816	171.295	370501.481	4067382.441	280.0918	184.365
580.000	96.0032	186.474	370516.956	4067379.043	277.1118	170.870
600.000	98.0052	205.502	370536.247	4067373.783	272.2996	155.103
618.756	100.0669	222.922	370553.765	4067367.112	266.2949	142.662
620.000	100.2142	224.054	370554.895	4067366.592	265.8376	141.952
640.000	102.7661	241.729	370572.340	4067356.848	257.5393	133.068
660.000	105.6051	258.320	370588.156	4067344.636	247.9862	129.652
*BASE 1: VIA2			370676.871	4067439.149	221.3313	145.976
*BASE 2: HIT01			370628.878	4067301.318		
660.000	247.9862	129.652	370588.156	4067344.636	351.9656	59.465
680.000	238.3384	132.205	370601.995	4067330.223	352.3066	39.481
700.000	229.8020	140.348	370613.556	4067313.925	343.8301	19.846
*BASE 1: HIT01			370628.878	4067301.318	173.2586	211.505
*BASE 2: CAM3			370715.115	4067108.237		
700.000	343.8301	19.846	370613.556	4067313.925	370.8022	229.439
720.000	255.9272	8.178	370622.584	4067296.099	370.8640	209.454
731.900	208.5224	16.542	370626.671	4067284.927	370.4546	197.628
740.000	199.9613	24.184	370628.893	4067277.139	369.9514	189.673
760.000	194.3682	43.973	370632.762	4067257.526	367.9082	170.530
780.000	193.8196	63.969	370635.077	4067237.663	364.7412	152.204
791.900	193.9175	75.871	370636.115	4067225.808	362.3348	141.675
800.000	193.9861	83.972	370636.797	4067217.737	360.4738	134.651
804.944	194.0219	88.916	370637.214	4067212.810	359.2400	130.426
820.000	194.1548	103.974	370638.409	4067197.802	354.9138	117.945
840.000	194.6697	123.953	370639.242	4067177.823	347.2502	102.971
860.000	195.8399	143.795	370638.266	4067157.858	336.5002	91.495
864.513	196.2120	148.227	370637.691	4067153.382	333.6065	89.642
880.000	197.7867	163.222	370634.550	4067138.226	322.6858	85.982

*BASE 1: CAM3	370715.115	4067108.237	277.8763	131.243
*BASE 2: FAR1	370591.742	4067063.549		
880.000 322.6858 85.982 370634.550	4067138.226	33.1371	86.094	
900.000 308.0982 87.970	370627.872	4067119.395	36.5570	66.527
920.000 295.7760 96.960	370618.387	4067101.810	38.7265	46.634
940.000 287.1005 111.089	370606.319	4067085.885	36.8106	26.678
960.000 281.7825 128.407	370591.954	4067071.999	1.5962	8.454
980.000 278.9986 147.464	370575.630	4067060.477	288.0065	16.405
981.481 278.8715 148.915	370574.354	4067059.726	286.2221	17.807
1000.000 277.9543 167.286	370557.790	4067051.469	278.2383	36.044
1020.000 277.8503 187.283	370539.088	4067044.396	277.7896	56.040
1040.000 278.1004 207.271	370520.025	4067038.348	278.4872	76.030
1041.050 278.1154 208.320	370519.021	4067038.040	278.5225	77.080
1041.050 278.1154 208.320	370519.021	4067038.040	278.5225	77.080

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PROYECTO : 591 P_Trazado Enlace AP-46 con MA-20 29-01-2020

GRUPO : 5 : Caminos

EJE : 23 : Rep. Camino-2

REPLANTEO POR BISECCION						
PK	AZ1	d1	X	Y	AZ2	d2
*BASE 1: CAM3			370715.115	4067108.237	277.8763	131.243
*BASE 2: FAR1			370591.742	4067063.549		
0.000	44.2280	18.613	370727.028	4067122.533	73.8256	147.614
6.733	28.5836	13.069	370720.786	4067120.008	73.7443	140.882
10.000	14.9545	11.053	370717.687	4067118.984	73.6035	137.632
20.000	360.2997	12.584	370707.768	4067118.450	71.8638	128.384
30.000	343.4896	21.524	370698.424	4067121.821	68.1729	121.583
39.954	344.7356	31.402	370691.157	4067128.528	63.1456	118.790
40.000	344.7579	31.446	370691.130	4067128.565	63.1210	118.788
*BASE 1: FAR1			370591.742	4067063.549	9.8634	240.698
*BASE 2: HIT01		370628.878	4067301.318			
40.000	63.1210	118.788	370691.130	4067128.565	177.9813	183.663
50.000	57.7906	119.456	370685.871	4067137.060	178.7385	173.898
60.000	52.7482	122.327	370681.875	4067146.218	179.0389	163.937
70.000	48.2934	127.196	370679.223	4067155.851	178.7884	153.963
80.000	44.6122	133.754	370677.970	4067165.764	177.8796	144.198
90.000	41.7743	141.642	370678.141	4067175.754	176.1980	134.909
100.000	39.7614	150.505	370679.733	4067185.617	173.6363	126.408
107.281	38.7762	157.383	370681.768	4067192.604	171.1743	120.920
110.000	38.5634	160.048	370682.853	4067195.095	170.0706	119.173
*BASE 1: HIT01			370628.878	4067301.318	21.3313	145.976
*BASE 2: VIA2			370676.871	4067439.149		
110.000	170.0706	119.173	370682.853	4067195.095	198.4399	244.175
120.000	164.9626	116.287	370689.684	4067202.222	196.5604	237.320
127.838	160.8961	118.373	370697.088	4067204.601	194.5262	235.463
130.000	159.8966	119.463	370699.240	4067204.803	193.9416	235.457
140.000	155.5108	124.873	370709.197	4067205.735	191.2392	235.688
144.653	153.6011	127.580	370713.829	4067206.168	189.9846	235.940

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PROYECTO : 591 P_Trazado Enlace AP-46 con MA-20 29-01-2020

GRUPO : 5 : Caminos

EJE : 24 : Rep. Camino 3

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REPLANTEO POR BISECCION

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PK	AZ1	d1	X	Y	AZ2	d2

*BASE 1: PS3			370330.886	4067367.346	392.8842	94.305
*BASE 2: PS2			370320.367	4067461.063		
0.000	9.2711	13.881	370332.900	4067381.081	190.1045	80.959
*BASE 1: PS2			370320.367	4067461.063	28.3609	25.372
*BASE 2: PS1			370331.300	4067483.959		
0.000	190.1045	80.959	370332.900	4067381.081	199.0097	102.891
*BASE 1: PS1			370331.300	4067483.959	135.0443	349.157
*BASE 2: HIT01			370628.878	4067301.318		
0.000	199.0097	102.891	370332.900	4067381.081	316.7581	306.537
10.000	192.9137	102.304	370342.664	4067382.288	317.5514	297.447
15.991	189.7295	105.228	370348.203	4067380.097	317.4203	291.522
20.000	187.9597	107.929	370351.591	4067377.955	317.1664	287.683
27.341	184.9429	113.076	370357.796	4067374.031	316.6835	280.665
30.000	183.8495	114.872	370360.130	4067372.763	316.5417	278.082
40.000	179.0583	119.377	370369.865	4067370.982	316.7267	268.218
48.793	174.4322	120.044	370378.226	4067373.467	317.8425	260.829
50.000	173.7943	119.939	370379.289	4067374.039	318.0491	259.967
60.000	168.5465	120.929	370388.646	4067377.492	319.5479	252.020
68.611	164.4455	124.320	370397.178	4067378.529	320.4776	244.226
70.000	163.8409	125.046	370398.567	4067378.547	320.5973	242.915
80.000	159.6941	130.590	370408.566	4067378.679	321.4983	233.500
90.000	155.8996	136.642	370418.565	4067378.812	322.4748	224.136
97.750	153.1891	141.640	370426.314	4067378.915	323.2894	216.918
100.000	152.4476	143.161	370428.564	4067378.913	323.5274	214.818
110.000	149.5790	150.650	370438.528	4067378.140	324.4202	205.268
120.000	147.3994	159.122	370448.317	4067376.132	325.0069	195.446
130.000	145.8677	168.307	370457.780	4067372.918	325.2312	185.475
130.598	145.7953	168.874	370458.333	4067372.689	325.2317	184.877
140.000	144.5437	177.631	370467.195	4067369.568	325.4285	175.497
147.258	143.4183	184.145	370474.253	4067367.882	325.8790	168.344
150.000	142.9756	186.565	370476.945	4067367.367	326.1063	165.668
160.000	141.4543	195.463	370486.767	4067365.487	327.0012	155.927
170.000	140.0662	204.463	370496.589	4067363.607	328.0151	146.220
180.000	138.7956	213.552	370506.411	4067361.727	329.1729	136.556
187.990	137.8559	220.870	370514.258	4067360.225	330.2224	128.871

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PROYECTO : 591 P_Trazado Enlace AP-46 con MA-20 29-01-2020

GRUPO : 5 : Caminos

EJE : 25 : Rep. Camino1

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REPLANTEO POR BISECCION

=====

PK	AZ1	d1	X	Y	AZ2	d2

*BASE 1: HIT01			370628.878	4067301.318	21.3313	145.976
*BASE 2: VIA2			370676.871	4067439.149		
0.000	69.7982	96.322	370714.546	4067345.310	175.6949	101.139
10.000	65.7359	88.232	370704.621	4067346.537	181.4663	96.698
20.000	60.8782	80.572	370694.697	4067347.764	187.7360	93.125
22.010	59.7900	79.096	370692.702	4067348.011	189.0511	92.521
30.000	54.0875	75.271	370685.397	4067351.008	193.8611	88.569
40.000	46.0538	77.249	370680.003	4067359.209	197.5072	80.017
43.315	44.0417	79.444	370679.548	4067362.486	197.7780	76.725
50.000	40.7248	84.589	370679.364	4067369.168	197.7328	70.039
59.770	36.5585	92.464	370679.096	4067378.935	197.6487	60.267
60.000	36.4686	92.653	370679.089	4067379.165	197.6476	60.037
70.000	31.8749	99.766	370676.760	4067388.821	200.1408	50.338
73.207	30.1820	101.530	370675.221	4067391.632	202.2096	47.555
80.000	26.6342	105.139	370671.584	4067397.370	208.0131	42.120
90.000	21.8549	110.995	370666.231	4067405.816	219.6707	34.996
95.040	19.6382	114.165	370663.533	4067410.073	227.3811	31.995
100.000	17.4113	117.026	370660.481	4067413.973	236.7391	30.047
102.138	16.3949	118.049	370658.938	4067415.452	241.2407	29.723
*BASE 1: VIA2			370676.871	4067439.149	308.2092	348.532
*BASE 2: PS1			370331.300	4067483.959		
100.000	236.7391	30.047	370660.481	4067413.973	113.3364	336.603
102.138	241.2407	29.723	370658.938	4067415.452	113.1222	334.789
110.000	257.9405	30.264	370652.980	4067420.581	112.3841	327.927
120.000	276.4978	33.925	370645.237	4067426.910	111.4439	319.140
130.000	290.2039	40.034	370637.317	4067433.014	110.5020	310.289
140.000	299.6536	47.655	370629.226	4067438.890	109.5581	301.374
150.000	306.1114	56.170	370620.970	4067444.532	108.6121	292.397
150.873	306.5689	56.943	370620.242	4067445.013	108.5295	291.611
160.000	311.5883	64.695	370613.258	4067450.858	107.4397	283.949
170.000	317.6105	72.291	370607.342	4067458.889	105.7660	277.232
171.045	318.2626	73.025	370606.844	4067459.807	105.5658	276.654
180.000	322.9087	80.017	370601.993	4067467.320	103.9082	271.256
190.000	326.0002	89.122	370595.095	4067474.537	102.2729	264.014
200.000	327.2739	98.929	370586.900	4067480.239	100.9264	255.677

210.000	327.1544	108.912	370577.736	4067484.200	99.9378	246.484
220.000	325.9928	118.680	370567.968	4067486.261	99.3808	236.725
223.492	325.3932	121.983	370564.486	4067486.516	99.3020	233.245
*BASE 1: VIA2			370676.871	4067439.149	308.2092	348.532
*BASE 2: PS1			370331.300	4067483.959		

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PROYECTO : 591 P_Trazado Enlace AP-46 con MA-20 29-01-2020

GRUPO : 5 : Caminos

EJE : 27 : Reo. Camino 4

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pagina 2

PROYECTO : 591 P_Trazado Enlace AP-46 con MA-20 29-01-2020

GRUPO : 5 : Caminos

EJE : 25 : Rep. Camino1

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REPLANTEO POR BISECCION

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PK	AZ1	d1	X	Y	AZ2	d2
230.000	324.2511	128.094	370557.983	4067486.764	99.2124	226.744
240.000	322.6949	137.555	370547.990	4067487.145	99.0642	216.755
250.000	321.3397	147.087	370537.997	4067487.526	98.9016	206.768
260.000	320.1499	156.678	370528.004	4067487.907	98.7226	196.782
270.000	319.0977	166.318	370518.012	4067488.287	98.5244	186.798
280.000	318.1610	175.998	370508.019	4067488.668	98.3038	176.816
290.000	317.3221	185.712	370498.026	4067489.049	98.0569	166.836
300.000	316.5668	195.455	370488.033	4067489.430	97.7785	156.859
303.572	316.3149	198.941	370484.464	4067489.566	97.6703	153.297
310.000	315.9620	205.271	370478.057	4067490.069	97.3511	146.913
320.000	315.7559	215.243	370468.227	4067491.868	96.3271	137.182
330.000	315.9210	225.222	370458.698	4067494.878	94.5571	127.890
340.000	316.4080	235.061	370449.618	4067499.052	91.9225	119.300
343.890	316.6746	238.823	370446.238	4067500.978	90.6416	116.214
348.064	316.9772	242.837	370442.663	4067503.131	89.1465	113.023

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REPLANTEO POR BISECCION

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PK	AZ1	d1	X	Y	AZ2	d2
*BASE 1: PS4			369668.339	4067483.212	108.9092	247.873
*BASE 2: FAR2			369913.742	4067448.643		
0.000	51.6767	165.061	369788.065	4067596.792	355.2128	194.312
10.000	55.5362	164.612	369794.383	4067589.041	355.1451	184.312
13.257	56.7961	164.597	369796.441	4067586.516	355.1214	181.056
20.000	59.3735	163.640	369799.749	4067580.677	354.6598	174.468
23.774	60.7437	162.260	369800.690	4067577.028	354.0375	171.099
30.000	62.9715	159.601	369801.670	4067570.879	352.7599	165.869
34.396	64.5884	157.844	369802.362	4067566.538	351.8084	162.219
40.000	66.8013	156.770	369804.245	4067561.295	350.9041	157.129
50.000	70.4736	160.343	369811.716	4067554.928	351.3013	147.357
52.263	71.0865	161.989	369813.878	4067554.266	351.7837	145.386
60.000	72.9198	168.096	369821.426	4067552.566	353.7608	139.031
70.000	75.0987	176.180	369831.181	4067550.368	356.5965	131.037
72.990	75.7117	178.635	369834.098	4067549.711	357.5122	128.702
80.000	76.5744	185.130	369841.044	4067549.794	360.3277	124.590
90.000	75.9019	194.741	369849.259	4067555.166	365.3465	124.544
100.000	73.5331	201.232	369852.394	4067564.468	368.9907	131.093
110.000	70.4492	202.196	369849.106	4067573.716	369.6343	140.815
116.948	68.4610	199.345	369843.684	4067577.962	368.3928	147.105
120.000	67.6402	197.686	369840.998	4067579.407	367.6810	149.664
130.000	64.5463	194.906	369833.762	4067586.212	366.4746	159.159
136.816	62.3398	195.547	369830.625	4067592.240	366.5966	165.949
140.000	61.3390	196.353	369829.553	4067595.238	366.8128	169.082
150.000	58.2518	199.196	369826.186	4067604.654	367.4423	178.935
155.078	56.7196	200.814	369824.476	4067609.435	367.7362	183.944

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PROYECTO : 591 P_Trazado Enlace AP-46 con MA-20 29-01-2020

GRUPO : 5 : Caminos

EJE : 36 : Rep-camino 5

REPLANTEO POR BISECCION						
PK	AZ1	d1	X	Y	AZ2	d2
*BASE 1: CAM3			370715.115	4067108.237	373.2586	211.505
*BASE 2: HIT01			370628.878	4067301.318		
0.000	381.6983	96.639	370687.719	4067200.892	166.2590	116.417
10.000	383.8254	106.052	370688.465	4067210.865	162.9166	108.337
20.000	385.6041	115.564	370689.210	4067220.837	159.0482	100.603
30.000	387.1113	125.152	370689.955	4067230.809	154.5555	93.302
30.263	387.1478	125.405	370689.974	4067231.072	154.4277	93.116
40.000	387.9648	134.984	370689.753	4067240.790	149.8178	85.862
47.055	387.9596	142.034	370688.417	4067247.712	146.6650	80.131

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pagina 1

PROYECTO : 591 P_Trazado Enlace AP-46 con MA-20 29-01-2020
GRUPO : 1 : Ramales
EJE : 7 : Autovia MA-20 Carril de Deceleración

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* * * DATOS PARA REPLANTEO DE PUNTOS * * *

=====

Compensaciones: Z : Esfericidad y Refraccion :NO
D : Reduccion al nivel del mar:NO
D : Paso de la cuerda al arco :NO
D : Paso al plano de la U.T.M. :SI K' POR ESTACION

BR : CAM1 X: 370244.033 Y: 4066916.456 Z: 116.211 PK: 54.981 Dis= -51.366 K : 0.999807404
Distancia: 377.615 Azimut: 74.522164
BO : FAR1 X: 370591.742 Y: 4067063.549 Z: 120.717 PK: 414.024 Dis= -28.835 K : 0.999806294

TIPO	PK Estac.	Azimut	Dis.Eje	X	Y	Ang. Azimu.	Dis.Redu	Angulo 1-2	Ang. Az (B0)	Dis. R (B0)	Ang1-2 (B0)	COTA
CLOT.	200.000	70.890064	0.000	370398.063	4066965.779	80.271327	161.766	5.749163	270.238939	216.999	395.716774	118.914
CLOT.	220.000	73.201820	0.000	370416.168	4066974.274	79.370450	181.621	4.848286	270.053136	197.006	395.530972	119.079
CLOT.	240.000	75.235176	0.000	370434.553	4066982.147	78.862027	201.566	4.339862	269.580253	177.051	395.058089	119.279
CLOT.	260.000	76.990130	0.000	370453.163	4066989.470	78.615964	221.552	4.093800	268.747346	157.167	394.225182	119.453
CLOT.	280.000	78.466683	0.000	370471.954	4066996.318	78.544387	241.554	4.022223	267.440657	137.392	392.918493	119.640
CLOT.	300.000	79.664836	0.000	370490.884	4067002.769	78.586035	261.557	4.063871	265.473012	117.779	390.950848	119.835
CLOT.	320.000	80.584587	0.000	370509.920	4067008.905	78.696991	281.555	4.174827	262.515352	98.410	387.993188	120.032
CLOT.	340.000	81.225937	0.000	370529.029	4067014.808	78.844990	301.547	4.322826	257.939329	79.443	383.417164	120.240
CLOT.	360.000	81.588887	0.000	370548.184	4067020.559	79.005807	321.535	4.483643	250.418001	61.212	375.895837	120.495
RECTA	376.074	81.678799	0.000	370563.594	4067025.129	79.131635	337.599	4.609471	240.252504	47.637	365.730340	120.748
RECTA	380.000	81.678799	0.000	370567.359	4067026.243	79.160915	341.523	4.638751	236.853616	44.576	362.331452	120.817
CLOT.	389.547	81.678799	0.000	370576.513	4067028.953	79.229380	351.064	4.707216	226.398227	37.807	351.876063	120.985
CLOT.	400.000	81.656500	0.000	370586.536	4067031.921	79.299988	361.512	4.777824	210.385075	32.060	335.862911	121.135

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pagina 2

PROYECTO : 591 P_Trazado Enlace AP-46 con MA-20 29-01-2020

GRUPO : 1 : Ramales

EJE : 7 : Autovia MA-20 Carril de Deceleración

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* * * DATOS PARA REPLANTEO DE PUNTOS * * *

=====

Compensaciones:

Z : Esfericidad y Refraccion :NO

D : Reduccion al nivel del mar:NO

D : Paso de la cuerda al arco :NO

D : Paso al plano de la U.T.M. :SI K' POR ESTACION

BR : FAR1 X: 370591.742 Y: 4067063.549 Z: 120.717 PK: 414.024 Dis= -28.835 K : 0.999806294

Distancia: 240.698 Azimut: 9.863372

BO : HIT01 X: 370628.878 Y: 4067301.318 Z: 147.174 PK: 532.651 Dis=-243.681 K : 0.999806176

TIPO	PK Estac.	Azimut	Dis.Eje	X	Y	Ang. Azimu.	Dis.Redu	Angulo 1-2	Ang. Az (B0)	Dis. R (B0)	Ang1-2 (B0)	COTA
CLOT.	400.000	81.656500	0.000	370586.536	4067031.921	210.385075	32.060	200.521703	209.924693	272.757	0.061320	121.135
CLOT.	420.000	81.489544	0.000	370605.706	4067037.625	168.545990	29.451	158.682618	205.580077	264.760	395.716705	121.366
CLOT.	440.000	81.159331	0.000	370624.852	4067043.404	134.796224	38.764	124.932852	200.993596	257.995	391.130224	121.542
CLOT.	460.000	80.665862	0.000	370643.961	4067049.307	116.950084	54.137	107.086711	196.194252	252.511	386.330880	121.679
CLOT.	480.000	80.009137	0.000	370663.016	4067055.383	107.262434	71.754	97.399061	191.219224	248.341	381.355852	121.777
CLOT.	500.000	79.189157	0.000	370681.999	4067061.679	101.319068	90.294	91.455696	186.112523	245.504	376.249151	121.904
CIRC.	508.389	78.796611	0.000	370689.936	4067064.397	99.450509	98.216	89.587136	183.942868	244.710	374.079495	121.965
CIRC.	520.000	78.233431	0.000	370700.892	4067068.241	97.264994	109.272	87.401621	180.922710	243.996	371.059337	122.076

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pagina 3

PROYECTO : 591 P_Trazado Enlace AP-46 con MA-20 29-01-2020

GRUPO : 1 : Ramales

EJE : 7 : Autovia MA-20 Carril de Deceleración

Compensaciones:

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* * * DATOS PARA REPLANTEO DE PUNTOS * * *

=====

Z : Esfericidad y Refraccion :NO

D : Reduccion al nivel del mar:NO

D : Paso de la cuerda al arco :NO

D : Paso al plano de la U.T.M.:SI K' POR ESTACION

BR : HIT01

X: 370628.878 Y: 4067301.318 Z: 147.174 PK: 532.651 Dis=-243.681 K : 0.999806176

Distancia: 211.505 Azimut: 173.258581

BO : CAM3

X: 370715.115 Y: 4067108.237 Z: 121.082 PK: 547.496 Dis= -32.631 K : 0.999805901

TIPO	PK Estac.	Azimut	Dis.Eje	X	Y	Ang. Azimu.	Dis.Redu	Angulo 1-2	Ang. Az (B0)	Dis. R (B0)	Ang1-2 (B0)	COTA
CIRC.	520.000	78.233431	0.000	370700.892	4067068.241	180.922710	243.996	7.664128	221.751526	42.458	248.492945	122.076
CIRC.	540.000	77.263344	0.000	370719.682	4067075.090	175.700306	243.819	2.441725	191.283121	33.467	218.024540	122.294
CIRC.	560.000	76.293256	0.000	370738.366	4067082.225	170.496879	244.975	397.238297	153.564472	34.896	180.305891	122.507
CIRC.	573.465	75.640143	0.000	370750.883	4067087.188	167.029752	246.496	393.771171	133.862505	41.510	160.603924	122.633

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PROYECTO : 591 P_Trazado Enlace AP-46 con MA-20 29-01-2020

GRUPO : 1 : Ramales

EJE : 8 : Autovía MA-20. Carril de aceleración

pagina 1

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* * * DATOS PARA REPLANTEO DE PUNTOS * * *

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Compensaciones:

Z : Esfericidad y Refraccion :NO

D : Reduccion al nivel del mar:NO

D : Paso de la cuerda al arco :NO

D : Paso al plano de la U.T.M. :SI K' POR ESTACION

BR : CAM1

X: 370244.033 Y: 4066916.456 Z: 116.211 PK: 60.537 Dis= -26.071 K : 0.999807404

Distancia: 377.615 Azimut: 74.522164

BO : FAR1

X: 370591.742 Y: 4067063.549 Z: 120.717 PK: 432.762 Dis= -3.580 K : 0.999806294

TIPO	PK Estac.	Azimut	Dis.Eje	X	Y	Ang. Azimu.	Dis.Redu	Angulo 1-2	Ang. Az (B0)	Dis. R (B0)	Ang1-2 (B0)	COTA
CIRC.	100.000	54.381038	0.000	370291.429	4066925.825	87.575756	48.322	13.053592	272.626393	330.452	398.104229	119.252
CIRC.	120.000	57.467680	0.000	370306.822	4066938.591	78.423793	66.589	3.901629	273.687746	311.177	399.165582	119.457
CIRC.	140.000	60.554321	0.000	370322.817	4066950.595	73.968497	85.879	399.446333	274.685144	291.740	0.162980	119.603
CLOT.	158.132	63.352672	0.000	370337.805	4066960.797	71.880445	103.747	397.358281	275.522203	273.992	1.000039	119.733
CLOT.	160.000	63.639821	0.000	370339.374	4066961.810	71.732536	105.599	397.210372	275.604270	272.157	1.082106	119.746
CLOT.	180.000	66.571214	0.000	370356.446	4066972.225	70.681731	125.511	396.159567	276.430673	252.446	1.908509	119.866
CLOT.	200.000	69.240981	0.000	370373.960	4066981.879	70.303260	145.497	395.781096	277.159596	232.637	2.637432	119.975
CLOT.	220.000	71.649122	0.000	370391.845	4066990.828	70.323033	165.499	395.800868	277.787682	212.755	3.265518	120.062
CLOT.	240.000	73.795637	0.000	370410.039	4066999.131	70.584063	185.489	396.061899	278.310344	192.821	3.788180	120.198
CLOT.	260.000	75.680526	0.000	370428.487	4067006.854	70.990336	205.454	396.468171	278.721005	172.853	4.198841	120.312
CLOT.	280.000	77.303790	0.000	370447.141	4067014.066	71.479949	225.388	396.957785	279.009757	152.863	4.487593	120.404
CLOT.	300.000	78.665427	0.000	370465.959	4067020.838	72.011247	245.295	397.489082	279.160813	132.863	4.638648	120.508
CLOT.	320.000	79.765439	0.000	370484.904	4067027.246	72.555169	265.180	398.033005	279.147267	112.859	4.625103	120.631
CLOT.	340.000	80.603825	0.000	370503.945	4067033.365	73.090821	285.050	398.568657	278.919110	92.859	4.396946	120.756
CLOT.	360.000	81.180585	0.000	370523.053	4067039.271	73.602776	304.912	399.080612	278.371546	72.867	3.849382	120.860
CLOT.	380.000	81.495719	0.000	370542.202	4067045.044	74.079383	324.777	399.557219	277.241720	52.894	2.719556	120.923
RECTA	394.090	81.560649	0.000	370555.704	4067049.073	74.388996	338.777	399.866831	275.683645	38.844	1.161481	120.913
RECTA	400.000	81.560649	0.000	370561.367	4067050.761	74.511728	344.651	399.989564	274.631283	32.963	0.109119	120.892
RECTA	420.000	81.560649	0.000	370580.534	4067056.473	74.897745	364.539	0.375581	264.148847	13.257	389.626683	120.880
CLOT.	435.403	81.560649	0.000	370595.296	4067060.872	75.167482	379.865	0.645318	141.094863	4.450	266.572699	120.927

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PROYECTO : 591 P_Trazado Enlace AP-46 con MA-20 29-01-2020

GRUPO : 1 : Ramales

EJE : 9 : Autovía A-7 Carril de deceleración

pagina 1

=====
* * * DATOS PARA REPLANTEO DE PUNTOS * * *
=====

Compensaciones: Z : Esfericidad y Refraccion :NO
D : Reduccion al nivel del mar:NO
D : Paso de la cuerda al arco :NO
D : Paso al plano de la U.T.M.:SI K' POR ESTACION

BR : PS4 X: 369668.339 Y: 4067483.212 Z: 196.762 PK: 0.000 Dis= 32.553 K : 0.999809249
Distancia: 247.873 Azimut: 108.909203

BO : FAR2 X: 369913.742 Y: 4067448.643 Z: 158.111 PK: 228.509 Dis= -29.439 K : 0.999808461

TIPO	PK Estac.	Azimut	Dis.Eje	X	Y	Ang.Azimu.	Dis.Redu	Angulo 1-2	Ang.Az (BO)	Dis.R(BO)	Ang1-2 (BO)	COTA
CIRC.	20.000	130.937183	0.000	369712.270	4067492.751	86.387891	44.963	377.478688	313.720938	206.284	4.811735	188.264
CIRC.	40.000	129.369154	0.000	369730.068	4067483.629	99.570371	61.742	390.661168	311.982543	187.013	3.073339	187.458
CIRC.	60.000	127.801125	0.000	369748.085	4067474.947	106.574392	80.188	397.665189	310.025000	167.765	1.115797	186.651
CIRC.	80.000	126.233096	0.000	369766.310	4067466.712	110.621923	99.370	1.712720	307.763694	148.564	398.854491	185.842
CIRC.	100.000	124.665067	0.000	369784.733	4067458.929	113.094055	118.922	4.184852	305.064923	129.444	396.155720	185.019
CIRC.	120.000	123.097038	0.000	369803.341	4067451.601	114.642694	138.680	5.733491	301.705366	110.461	392.796163	184.169
CIRC.	140.000	121.529009	0.000	369822.125	4067444.734	115.608070	158.557	6.698866	297.285447	91.718	388.376243	183.320
CIRC.	160.000	119.960980	0.000	369841.072	4067438.332	116.183106	178.502	7.273903	291.026790	73.412	382.117587	182.455
CIRC.	180.000	118.392951	0.000	369860.171	4067432.398	116.484716	198.486	7.575513	281.256038	55.991	372.346835	181.563
CIRC.	200.000	116.824922	0.000	369879.410	4067426.936	116.587638	218.486	7.678434	264.107090	40.626	355.197887	180.670
CIRC.	220.000	115.256893	0.000	369898.778	4067421.950	116.541781	238.489	7.632578	232.527360	30.607	323.618156	179.766

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PROYECTO : 591 P_Trazado Enlace AP-46 con MA-20 29-01-2020

GRUPO : 1 : Ramales

EJE : 9 : Autovía A-7 Carril de deceleración

pagina 2

Compensaciones:

Z : Esfericidad y Refraccion :NO
D : Reduccion al nivel del mar:NO
D : Paso de la cuerda al arco :NO
D : Paso al plano de la U.T.M.:SI K' POR ESTACION

BR : FAR2

X: 369913.742 Y: 4067448.643 Z: 158.111 PK: 228.509 Dis= -29.439 K : 0.999808461

Distancia: 271.543 Azimut: 118.283554

BO : HITO2

X: 370174.113 Y: 4067371.739 Z: 158.111 PK: 494.877 Dis= 30.672 K : 0.999807628

TIPO	PK Estac.	Azimut	Dis.Eje	X	Y	Ang.Azimu.	Dis.Redu	Angulo 1-2	Ang.Az (BO)	Dis.R(BO)	Ang1-2 (BO)	COTA
CIRC.	220.000	115.256893	0.000	369898.778	4067421.950	232.527360	30.607	114.243805	311.483484	279.930	393.199929	179.766
CIRC.	240.000	113.688864	0.000	369918.263	4067417.443	190.838685	31.532	72.555131	311.253531	259.950	392.969977	178.840
CIRC.	260.000	112.120835	0.000	369937.853	4067413.416	161.788964	42.696	43.505409	311.115887	239.954	392.832333	177.883
CIRC.	280.000	110.552806	0.000	369957.536	4067409.874	146.130208	58.501	27.846654	311.095795	219.951	392.812241	176.915
CIRC.	300.000	108.984777	0.000	369977.301	4067406.817	137.053072	76.101	18.769518	311.228540	199.952	392.944985	175.941
CIRC.	320.000	107.416748	0.000	369997.135	4067404.248	131.143694	94.492	12.860140	311.564939	179.974	393.281385	174.953
CIRC.	340.000	105.848719	0.000	370017.026	4067402.168	126.918525	113.280	8.634971	312.180814	160.038	393.897260	173.961
CIRC.	360.000	104.280690	0.000	370036.962	4067400.578	123.677116	132.288	5.393562	313.194215	140.177	394.910661	172.967
CIRC.	380.000	102.712661	0.000	370056.931	4067399.480	121.054915	151.423	2.771361	314.798733	120.444	396.515179	171.982
CIRC.	400.000	101.144632	0.000	370076.922	4067398.875	118.845876	170.633	0.562322	317.332844	100.928	399.049290	171.034
CIRC.	420.000	99.576603	0.000	370096.921	4067398.761	116.925519	189.885	398.641964	321.437025	81.801	3.153471	170.080
CLOT.	435.780	98.339451	0.000	370112.698	4067399.019	115.561032	205.091	397.277478	326.611991	67.214	8.328436	169.287
CLOT.	440.000	98.015070	0.000	370116.917	4067399.140	115.214525	209.158	396.930971	328.442174	63.433	10.158620	169.069
CLOT.	460.000	96.654502	0.000	370136.898	4067399.985	113.667205	228.443	395.383650	341.331893	46.729	23.048338	168.042
CLOT.	480.000	95.585716	0.000	370156.861	4067401.211	112.266302	247.750	393.982747	366.284335	34.157	48.000781	167.011

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PROYECTO : 591 P_Trazado Enlace AP-46 con MA-20 29-01-2020

GRUPO : 1 : Ramales

EJE : 9 : Autovía A-7 Carril de deceleración

pagina 3

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* * * DATOS PARA REPLANTEO DE PUNTOS * * *

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Compensaciones: Z : Esfericidad y Refraccion :NO

D : Reduccion al nivel del mar:NO

D : Paso de la cuerda al arco :NO

D : Paso al plano de la U.T.M.:SI K' POR ESTACION

BR : HITO2 X: 370174.113 Y: 4067371.739 Z: 158.111 PK: 494.877 Dis= 30.672 K : 0.999807628

Distancia: 171.407 Azimut: 65.095201

BO : PS2 X: 370320.367 Y: 4067461.063 Z: 167.915 PK: 645.894 Dis= -46.879 K : 0.999807160

TIPO	PK Estac.	Azimut	Dis.Eje	X	Y	Ang.Azimu.	Dis.Redu	Angulo 1-2	Ang.Az (BO)	Dis.R(BO)	Ang1-2 (BO)	COTA
CLOT.	480.000	95.585716	0.000	370156.861	4067401.211	366.284335	34.157	301.189134	277.660708	174.150	12.565507	167.011
CLOT.	500.000	94.808711	0.000	370176.803	4067402.726	5.512814	31.109	340.417613	275.428498	154.994	10.333297	165.960
CLOT.	520.000	94.323487	0.000	370196.730	4067404.438	38.521769	39.766	373.426568	272.658633	136.014	7.563432	164.899
CLOT.	540.000	94.130045	0.000	370216.647	4067406.257	56.598705	54.788	391.503504	269.053434	117.332	3.958232	163.855
CLOT.	543.259	94.126171	0.000	370219.892	4067406.558	58.604704	57.527	393.509503	268.356796	114.329	3.261595	163.683
CLOT.	560.000	94.215211	0.000	370236.562	4067408.092	66.439255	72.274	1.344054	264.115621	99.161	399.020420	162.820
CLOT.	580.000	94.555049	0.000	370256.484	4067409.860	72.405761	90.782	7.310559	256.986319	81.886	391.891117	161.801
CLOT.	600.000	95.149063	0.000	370276.418	4067411.483	76.410847	109.775	11.315645	246.171564	66.268	381.076362	160.757
CLOT.	620.000	95.997250	0.000	370296.369	4067412.879	79.335132	129.017	14.239931	229.417181	53.840	364.321980	159.700
CLOT.	640.000	97.099611	0.000	370316.339	4067413.969	81.625102	148.392	16.529901	205.431850	47.275	340.336649	158.681

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PROYECTO : 591 P_Trazado Enlace AP-46 con MA-20 29-01-2020

GRUPO : 1 : Ramales

EJE : 9 : Autovía A-7 Carril de deceleración

pagina 4

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* * * DATOS PARA REPLANTEO DE PUNTOS * * *													
=====													
Compensaciones:		Z : Esfericidad y Refraccion :NO											
		D : Reduccion al nivel del mar:NO											
		D : Paso de la cuerda al arco :NO											
		D : Paso al plano de la U.T.M.:SI K' POR ESTACION											
BR : PS2		X:	370320.367	Y:	4067461.063	Z:	167.915	PK:	645.894	Dis=	-46.879	K :	0.999807160
									Distancia:	94.324	Azimet:	192.884224	
BO : PS3		X:	370330.886	Y:	4067367.346	Z:	168.310	PK:	653.043	Dis=	47.156	K :	0.999807127
TIPO	PK Estac.	Azimet	Dis.Eje	X	Y	Ang.Azimu.	Dis.Redu	Angulo 1-2	Ang.Az (BO)	Dis.R (BO)	Ang1-2 (BO)	COTA	
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	
CLOT.	640.000	97.099611	0.000	370316.339	4067413.969	205.431850	47.275	12.547626	380.746130	48.849	387.861906	158.681	

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PROYECTO : 591 P_Trazado Enlace AP-46 con MA-20 29-01-2020

GRUPO : 1 : Ramales

EJE : 9 : Autovía A-7 Carril de deceleración

pagina 5

=====													
* * * DATOS PARA REPLANTEO DE PUNTOS * * *													
=====													
Compensaciones:													
Z : Esfericidad y Refraccion :NO													
D : Reduccion al nivel del mar:NO													
D : Paso de la cuerda al arco :NO													
D : Paso al plano de la U.T.M.:SI K' POR ESTACION													
BR : PS3 X: 370330.886 Y: 4067367.346 Z: 168.310 PK: 653.043 Dis= 47.156 K : 0.999807127													
Distancia: 116.636 Azimut: 0.226012													
BO : PS1 X: 370331.300 Y: 4067483.959 Z: 171.169 PK: 656.902 Dis= -69.393 K : 0.999807125													
TIPO	PK	Estac.	Azimut	Dis.Eje	X	Y	Ang.Azimu.	Dis.Redu	Angulo 1-2	Ang.Az (BO)	Dis.R (BO)	Ang1-2 (BO)	COTA
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
CLOT.	640.000		97.099611	0.000	370316.339	4067413.969	380.746130	48.849	380.520118	213.406591	71.585	13.180579	158.681

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PROYECTO : 591 P_Trazado Enlace AP-46 con MA-20 29-01-2020

GRUPO : 1 : Ramales

EJE : 9 : Autovía A-7 Carril de deceleración

pagina 6

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* * * DATOS PARA REPLANTEO DE PUNTOS * * *												
=====												
Compensaciones:												
Z : Esfericidad y Refraccion :NO												
D : Reduccion al nivel del mar:NO												
D : Paso de la cuerda al arco :NO												
D : Paso al plano de la U.T.M.:SI K' POR ESTACION												
BR : PS1 X: 370331.300 Y: 4067483.959 Z: 171.169 PK: 656.902 Dis= -69.393 K : 0.999807125												
Distancia: 349.224 Azimut: 135.044302												
BO : HIT01 X: 370628.878 Y: 4067301.318 Z: 147.174 PK: 974.121 Dis= 67.720 K : 0.999806176												
TIPO	PK Estac.	Azimut	Dis.Eje	X	Y	Ang.Azimu.	Dis.Redu	Angulo 1-2	Ang.Az (BO)	Dis.R(BO)	Ang1-2 (BO)	COTA
CLOT.	640.000	97.099611	0.000	370316.339	4067413.969	213.406591	71.585	78.362289	322.023500	332.286	386.979199	158.681
CLOT.	660.000	98.456146	0.000	370336.326	4067414.674	195.389766	69.481	60.345464	323.533335	313.806	388.489033	157.719
CIRC.	668.492	99.109033	0.000	370344.817	4067414.837	187.705907	70.445	52.661606	324.203381	305.963	389.159080	157.353
CIRC.	680.000	100.024782	0.000	370356.324	4067414.915	177.863850	73.453	42.819548	325.139755	295.336	390.095453	156.878
CIRC.	700.000	101.616331	0.000	370376.322	4067414.657	163.322324	82.658	28.278022	326.854524	276.875	391.810223	156.047
CIRC.	720.000	103.207881	0.000	370396.307	4067413.900	152.380122	95.592	17.335820	328.700519	258.437	393.656217	155.241
CIRC.	740.000	104.799430	0.000	370416.267	4067412.643	144.453367	110.951	9.409065	330.707696	240.039	395.663394	154.469
CIRC.	760.000	106.390980	0.000	370436.189	4067410.887	138.736850	127.858	3.692548	332.915604	221.706	397.871303	153.734
CIRC.	780.000	107.982529	0.000	370456.062	4067408.634	134.579343	145.765	399.535042	335.377402	203.466	0.333100	153.009
CIRC.	800.000	109.574079	0.000	370475.871	4067405.885	131.522906	164.337	396.478604	338.165961	185.361	3.121660	152.282
CIRC.	820.000	111.165628	0.000	370495.606	4067402.642	129.257034	183.363	394.212733	341.383354	167.448	6.339052	151.556
CLOT.	822.755	111.384904	0.000	370498.318	4067402.157	128.994136	186.011	393.949834	341.867723	164.999	6.823422	151.455
CLOT.	840.000	112.661811	0.000	370515.255	4067398.915	127.568347	202.701	392.524045	345.179003	149.813	10.134702	150.898
CLOT.	860.000	113.903873	0.000	370534.820	4067394.766	126.295135	222.249	391.250834	349.792696	132.613	14.748394	150.363
CLOT.	880.000	114.889378	0.000	370554.309	4067390.275	125.318757	241.934	390.274455	355.586823	116.100	20.542522	149.886
CLOT.	900.000	115.618326	0.000	370573.736	4067385.522	124.554240	261.709	389.509938	363.089521	100.672	28.045220	149.425
CLOT.	920.000	116.090718	0.000	370593.117	4067380.586	123.939530	281.540	388.895229	373.019895	86.978	37.975594	148.963
CLOT.	940.000	116.306553	0.000	370612.471	4067375.545	123.428448	301.407	388.384146	386.151266	76.033	51.106964	148.556
CLOT.	946.826	116.321494	0.000	370619.074	4067373.815	123.271237	308.192	388.226935	391.442627	73.171	56.398325	148.423
CLOT.	960.000	116.196254	0.000	370631.820	4067370.482	122.985074	321.293	387.940772	2.706281	69.240	67.661979	148.186

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PROYECTO : 591 P_Trazado Enlace AP-46 con MA-20 29-01-2020

GRUPO : 1 : Ramales

EJE : 9 : Autovía A-7 Carril de deceleración

pagina 7

=====
* * * DATOS PARA REPLANTEO DE PUNTOS * * *
=====

Compensaciones: Z : Esfericidad y Refraccion :NO
D : Reduccion al nivel del mar:NO
D : Paso de la cuerda al arco :NO
D : Paso al plano de la U.T.M.:SI K' POR ESTACION

BR : HIT01 X: 370628.878 Y: 4067301.318 Z: 147.174 PK: 974.121 Dis= 67.720 K : 0.999806176

BO : VIA2 X: 370676.871 Y: 4067439.149 Z: 123.586 PK: 987.632 Dis= -77.612 K : 0.999806023

TIPO	PK Estac.	Azimet	Dis.Eje	X	Y	Ang.Azimu.	Dis.Redu	Angulo 1-2	Ang.Az (BO)	Dis.R(BO)	Ang1-2 (BO)	COTA
CLOT.	960.000	116.196254	0.000	370631.820	4067370.482	2.706281	69.240	381.374938	236.964730	82.142	15.633388	148.186
CLOT.	980.000	115.527379	0.000	370651.199	4067365.536	21.295698	68.000	399.964355	221.362427	77.976	0.031084	147.777

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PROYECTO : 591 P_Trazado Enlace AP-46 con MA-20 29-01-2020

GRUPO : 1 : Ramales

EJE : 9 : Autovía A-7 Carril de deceleración

pagina 8

=====
* * * DATOS PARA REPLANTEO DE PUNTOS * * *
=====

Compensaciones: Z : Esfericidad y Refraccion :NO
D : Reduccion al nivel del mar:NO
D : Paso de la cuerda al arco :NO
D : Paso al plano de la U.T.M.:SI K' POR ESTACION

BR : VIA2 X: 370676.871 Y: 4067439.149 Z: 123.586 PK: 987.632 Dis= -77.612 K : 0.999806023

BO : CAM3 X: 370715.115 Y: 4067108.237 Z: 121.082 PK: 1069.696 Dis= 242.312 K : 0.999805901

Distancia: 333.179 Azimut: 192.674987

TIPO	PK Estac.	Azimut	Dis.Eje	X	Y	Ang.Azimu.	Dis.Redu	Angulo 1-2	Ang.Az (BO)	Dis.R(BO)	Ang1-2 (BO)	COTA
CLOT.	980.000	115.527379	0.000	370651.199	4067365.536	221.362427	77.976	28.687440	384.499299	265.171	391.824312	147.777
CLOT.	1000.000	114.281251	0.000	370670.649	4067360.882	205.050207	78.529	12.375221	388.908985	256.578	396.233998	147.367
CLOT.	1020.000	112.457871	0.000	370690.206	4067356.698	189.792293	83.539	397.117306	393.638906	249.755	0.963920	146.954
CIRC.	1033.493	110.901622	0.000	370703.471	4067354.232	180.674249	89.003	387.999262	396.988944	246.318	4.313958	146.651
CIRC.	1040.000	110.087789	0.000	370709.890	4067353.164	176.658665	92.125	383.983679	398.642111	245.030	5.967125	146.493
CIRC.	1060.000	107.586336	0.000	370729.696	4067350.397	165.821000	103.304	373.146014	3.828704	242.645	11.153718	145.942
CIRC.	1080.000	105.084883	0.000	370749.596	4067348.410	156.987506	116.309	364.312519	9.077789	242.682	16.402802	145.353
CIRC.	1100.000	102.583430	0.000	370769.559	4067347.206	149.743271	130.580	357.068285	14.260504	245.140	21.585517	144.758
CIRC.	1120.000	100.081977	0.000	370789.553	4067346.787	143.711490	145.726	351.036503	19.255721	249.943	26.580734	144.162
CIRC.	1140.000	97.580524	0.000	370809.548	4067347.155	138.595891	161.482	345.920904	23.962929	256.953	31.287942	143.556
CIRC.	1160.000	95.079071	0.000	370829.514	4067348.307	134.175692	177.664	341.500705	28.309845	265.985	35.634858	142.936
CIRC.	1169.659	93.871023	0.000	370839.136	4067349.144	132.240239	185.591	339.565253	30.266445	271.009	37.591458	142.639

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PROYECTO : 591 P_Trazado Enlace AP-46 con MA-20 29-01-2020

GRUPO : 1 : Ramales

EJE : 10 : Autovía A-7 Carril de Aceleración

pagina 1

=====
* * * DATOS PARA REPLANTEO DE PUNTOS * * *
=====

Compensaciones: Z : Esfericidad y Refraccion :NO
D : Reduccion al nivel del mar:NO
D : Paso de la cuerda al arco :NO
D : Paso al plano de la U.T.M.:SI K' POR ESTACION

BR : PS4 X: 369668.339 Y: 4067483.212 Z: 196.762 PK: 0.000 Dis= 57.585 K : 0.999809249

Distancia: 247.873 Azimut: 108.909203

BO : FAR2 X: 369913.742 Y: 4067448.643 Z: 158.111 PK: 219.367 Dis= -3.644 K : 0.999808461

TIPO	PK Estac.	Azimut	Dis.Eje	X	Y	Ang.Azimu.	Dis.Redu	Angulo 1-2	Ang.Az (BO)	Dis.R(BO)	Ang1-2 (BO)	COTA
CIRC.	20.000	130.767314	0.000	369726.579	4067514.481	68.632186	66.116	359.722983	321.533573	198.443	12.624370	186.323
CIRC.	40.000	129.147417	0.000	369744.405	4067505.413	81.921356	79.255	373.012153	320.592999	178.634	11.683796	185.517
CIRC.	60.000	127.527519	0.000	369762.456	4067496.802	90.870621	95.111	381.961418	319.619813	158.797	10.710610	184.697
CIRC.	80.000	125.907621	0.000	369780.720	4067488.653	96.920233	112.534	388.011030	318.599985	138.936	9.690782	183.867
CIRC.	100.000	124.287724	0.000	369799.185	4067480.971	101.090203	130.890	392.181000	317.510095	119.054	8.600891	183.008
CIRC.	120.000	122.667826	0.000	369817.840	4067473.762	104.018944	149.828	395.109740	316.307895	99.156	7.398692	182.159
CIRC.	140.000	121.047929	0.000	369836.672	4067467.029	106.101514	169.141	397.192311	314.908666	79.248	5.999462	181.256
CIRC.	160.000	119.428031	0.000	369855.669	4067460.778	107.587872	188.705	398.678669	313.113986	59.338	4.204783	180.357
CIRC.	180.000	117.808133	0.000	369874.820	4067455.012	108.641178	208.437	399.731975	310.325530	39.448	1.416327	179.433
CIRC.	200.000	116.188236	0.000	369894.110	4067449.735	109.371374	228.283	0.462171	303.537941	19.666	394.628738	178.522

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PROYECTO : 591 P_Trazado Enlace AP-46 con MA-20 29-01-2020

GRUPO : 1 : Ramales

EJE : 10 : Autovía A-7 Carril de Aceleración

pagina 2

=====
* * * DATOS PARA REPLANTEO DE PUNTOS * * *
=====

Compensaciones:

Z : Esfericidad y Refraccion :NO
D : Reduccion al nivel del mar:NO
D : Paso de la cuerda al arco :NO
D : Paso al plano de la U.T.M.:SI K' POR ESTACION

BR : FAR2

X: 369913.742 Y: 4067448.643 Z: 158.111 PK: 219.367 Dis= -3.644 K : 0.999808461

Distancia: 271.543 Azimut: 118.283554

BO : HITO2

X: 370174.113 Y: 4067371.739 Z: 158.111 PK: 477.816 Dis= 56.355 K : 0.999807628

TIPO	PK Estac.	Azimut	Dis.Eje	X	Y	Ang.Azimu.	Dis.Redu	Angulo 1-2	Ang.Az (BO)	Dis.R(BO)	Ang1-2 (BO)	COTA
CIRC.	200.000	116.188236	0.000	369894.110	4067449.735	303.537941	19.666	185.254387	317.294934	290.719	399.011380	178.522
CIRC.	220.000	114.568338	0.000	369913.529	4067444.951	203.667243	3.699	85.383689	317.436530	270.725	399.152975	177.553
CIRC.	240.000	112.948440	0.000	369933.063	4067440.662	124.937017	20.909	6.653463	317.729778	250.758	399.446224	176.578
CIRC.	260.000	111.328543	0.000	369952.700	4067436.872	118.679849	40.706	0.396295	318.213673	230.838	399.930119	175.602
CIRC.	280.000	109.708645	0.000	369972.427	4067433.583	115.992439	60.599	397.708885	318.941443	210.995	0.657889	174.592
CIRC.	300.000	108.088747	0.000	369992.232	4067430.796	114.233339	80.509	395.949785	319.987449	191.266	1.703894	173.591
CIRC.	320.000	106.468850	0.000	370012.101	4067428.514	112.850616	100.416	394.567062	321.458295	171.706	3.174741	172.569
CIRC.	340.000	104.848952	0.000	370032.021	4067426.739	111.657393	120.313	393.373839	323.511260	152.394	5.227705	171.551
CIRC.	360.000	103.229055	0.000	370051.980	4067425.471	110.572918	140.194	392.289364	326.385588	133.455	8.102033	170.551
CIRC.	380.000	101.609157	0.000	370071.965	4067424.711	109.556607	160.054	391.273052	330.456241	115.088	12.172687	169.555
CIRC.	400.000	99.989259	0.000	370091.963	4067424.460	108.585832	179.889	390.302278	336.323489	97.631	18.039935	168.583
CLOT.	418.563	98.485767	0.000	370110.524	4067424.683	107.713591	198.274	389.430037	344.200635	82.760	25.917081	167.750
CLOT.	420.000	98.370128	0.000	370111.961	4067424.718	107.646986	199.696	389.363432	344.938536	81.684	26.654982	167.693
CLOT.	440.000	96.919969	0.000	370131.947	4067425.465	106.736874	219.474	388.453320	357.637785	68.310	39.354231	166.892
CLOT.	460.000	95.766629	0.000	370151.913	4067426.621	105.869598	239.233	387.586044	375.529550	59.214	57.245996	166.106

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PROYECTO : 591 P_Trazado Enlace AP-46 con MA-20 29-01-2020

GRUPO : 1 : Ramales

EJE : 10 : Autovía A-7 Carril de Aceleración

pagina 3

=====
* * * DATOS PARA REPLANTEO DE PUNTOS * * *
=====

Compensaciones:

Z : Esfericidad y Refraccion :NO
D : Reduccion al nivel del mar:NO
D : Paso de la cuerda al arco :NO
D : Paso al plano de la U.T.M.:SI K' POR ESTACION

BR : HITO2

X: 370174.113 Y: 4067371.739 Z: 158.111 PK: 477.816 Dis= 56.355 K : 0.999807628

Distancia: 171.407 Azimut: 65.095201

BO : PS2

X: 370320.367 Y: 4067461.063 Z: 167.915 PK: 629.848 Dis= -21.047 K : 0.999807160

TIPO	PK Estac.	Azimut	Dis.Eje	X	Y	Ang.Azimu.	Dis.Redu	Angulo 1-2	Ang.Az (BO)	Dis.R(BO)	Ang1-2 (BO)	COTA
CLOT.	460.000	95.766629	0.000	370151.913	4067426.621	375.529550	59.214	310.434349	287.160789	171.972	22.065588	166.106
CLOT.	480.000	94.910107	0.000	370171.859	4067428.092	397.454687	56.409	332.359486	286.091808	152.154	20.996607	165.337
CLOT.	500.000	94.350403	0.000	370191.787	4067429.785	18.816095	60.689	353.720894	284.808815	132.355	19.713614	164.560
CLOT.	520.000	94.087519	0.000	370211.704	4067431.606	35.694152	70.704	370.598951	283.147404	112.607	18.052203	163.804
CLOT.	527.713	94.065443	0.000	370219.384	4067432.323	40.853746	75.645	375.758545	282.348664	105.013	17.253463	163.513
CLOT.	540.000	94.114233	0.000	370231.617	4067433.464	47.747288	84.377	382.652087	280.806226	92.960	15.711025	163.075
CLOT.	560.000	94.402355	0.000	370251.535	4067435.272	56.252826	100.173	391.157625	277.176987	73.519	12.081786	162.397
CLOT.	580.000	94.949039	0.000	370271.465	4067436.950	62.426727	117.197	397.331526	270.835946	54.535	5.740745	161.704
CLOT.	600.000	95.754285	0.000	370291.411	4067438.415	67.093927	134.950	1.998725	257.744137	36.768	392.648936	160.976
CLOT.	620.000	96.818093	0.000	370311.376	4067439.588	70.774253	153.146	5.679052	225.241448	23.285	360.146247	160.290

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PROYECTO : 591 P_Trazado Enlace AP-46 con MA-20 29-01-2020

GRUPO : 1 : Ramales

EJE : 10 : Autovía A-7 Carril de Aceleración

pagina 4

=====													
* * * DATOS PARA REPLANTEO DE PUNTOS * * *													
=====													
Compensaciones:		Z : Esfericidad y Refraccion :NO											
		D : Reduccion al nivel del mar:NO											
		D : Paso de la cuerda al arco :NO											
		D : Paso al plano de la U.T.M.:SI K' POR ESTACION											
BR : PS2		X: 370320.367 Y: 4067461.063 Z: 167.915 PK: 629.848 Dis= -21.047 K : 0.999807160											
		Distancia: 94.324 Azimut: 192.884224											
BO : PS3		X: 370330.886 Y: 4067367.346 Z: 168.310 PK: 637.160 Dis= 72.991 K : 0.999807127											
TIPO	PK Estac.	Azimut	Dis.Eje	X	Y	Ang.Azimu.	Dis.Redu	Angulo 1-2	Ang.Az (BO)	Dis.R (BO)	Ang1-2 (BO)	COTA	
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	
CLOT.	620.000	96.818093	0.000	370311.376	4067439.588	225.241448	23.285	32.357225	383.208021	74.845	390.323798	160.290	

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PROYECTO : 591 P_Trazado Enlace AP-46 con MA-20 29-01-2020

GRUPO : 1 : Ramales

EJE : 10 : Autovía A-7 Carril de Aceleración

pagina 5

=====													
* * * DATOS PARA REPLANTEO DE PUNTOS * * *													
=====													
Compensaciones:													
Z : Esfericidad y Refraccion :NO													
D : Reduccion al nivel del mar:NO													
D : Paso de la cuerda al arco :NO													
D : Paso al plano de la U.T.M.:SI K' POR ESTACION													
BR : PS3 X: 370330.886 Y: 4067367.346 Z: 168.310 PK: 637.160 Dis= 72.991 K : 0.999807127													
Distancia: 116.636 Azimut: 0.226012													
BO : PS1 X: 370331.300 Y: 4067483.959 Z: 171.169 PK: 641.155 Dis= -43.556 K : 0.999807125													
TIPO	PK Estac.	Azimut	Dis.Eje	X	Y	Ang.Azimu.	Dis.Redu	Angulo 1-2	Ang.Az (BO)	Dis.R(BO)	Ang1-2 (BO)	COTA	
CLOT.	620.000	96.818093	0.000	370311.376	4067439.588	383.208021	74.845	382.982009	226.868231	48.648	26.642219	160.290	
CLOT.	640.000	98.140463	0.000	370331.360	4067440.387	0.413102	73.056	0.187090	199.912384	43.581	399.686372	159.583	
CIRC.	646.946	98.660232	0.000	370338.304	4067440.561	6.428108	73.604	6.202095	189.813371	43.968	389.587359	159.328	

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PROYECTO : 591 P Trazado Enlace AP-46 con MA-20 29-01-2020

GRUPO : 1 : Ramales

EJE : 10 : Autovía A-7 Carril de Aceleración

pagina 6

* * * DATOS PARA REPLANTEO DE PUNTOS * * *												

Compensaciones:		Z : Esfericidad y Refraccion :NO D : Reduccion al nivel del mar:NO D : Paso de la cuerda al arco :NO D : Paso al plano de la U.T.M.:SI K' POR ESTACION										
BR : PS1		X:	370331.300	Y:	4067483.959	Z:	171.169	PK:	641.155	Dis=	-43.556	K : 0.999807125
		Distancia: 349.224 Azimut: 135.044302										
BO : HIT01		X:	370628.878	Y:	4067301.318	Z:	147.174	PK:	965.357	Dis=	93.435	K : 0.999806176
TIPO	PK Estac.	Azimut	Dis.Eje	X	Y	Ang.Azimu.	Dis.Redu	Angulo 1-2	Ang.Az (BO)	Dis.R(BO)	Ang1-2 (BO)	COTA
CLOT.	640.000	98.140463	0.000	370331.360	4067440.387	199.912384	43.581	64.868083	327.836404	328.480	392.792103	159.583
CIRC.	646.946	98.660232	0.000	370338.304	4067440.561	189.813371	43.968	54.769070	328.448667	322.277	393.404365	159.328
CIRC.	660.000	99.666321	0.000	370351.356	4067440.733	172.343455	47.662	37.299153	329.636676	310.632	394.592374	158.835
CIRC.	680.000	101.207773	0.000	370371.356	4067440.596	152.523035	59.044	17.478733	331.562408	292.830	396.518107	158.052
CIRC.	700.000	102.749225	0.000	370391.345	4067439.974	140.248563	74.446	5.204262	333.637370	275.094	398.593069	157.263
CIRC.	720.000	104.290677	0.000	370411.314	4067438.869	132.669213	91.862	397.624911	335.891603	257.449	0.847301	156.506
CIRC.	740.000	105.832130	0.000	370431.251	4067437.281	127.814697	110.334	392.770395	338.363330	239.926	3.319028	155.778
CIRC.	760.000	107.373582	0.000	370451.143	4067435.210	124.594696	129.403	389.550395	341.101725	222.567	6.057423	155.062
CIRC.	780.000	108.915034	0.000	370470.979	4067432.658	122.407793	148.830	387.363491	344.170742	205.424	9.126441	154.344
CIRC.	800.000	110.456486	0.000	370490.747	4067429.627	120.907241	168.482	385.862939	347.654404	188.566	12.610102	153.625
CLOT.	815.766	111.671596	0.000	370506.275	4067426.901	120.067383	184.079	385.023081	350.764504	175.541	15.720203	153.071
CLOT.	820.000	111.992201	0.000	370510.437	4067426.119	119.882677	188.279	384.838375	351.664008	172.090	16.619707	152.916
CLOT.	840.000	113.351428	0.000	370530.040	4067422.158	119.193266	208.168	384.148965	356.354796	156.143	21.310494	152.168
CLOT.	860.000	114.454619	0.000	370549.563	4067417.818	118.731742	228.109	383.687440	361.947144	140.964	26.902843	151.347
CLOT.	880.000	115.301772	0.000	370569.018	4067413.180	118.422919	248.079	383.378617	368.719556	126.896	33.675254	150.535
CLOT.	900.000	115.892888	0.000	370588.419	4067408.322	118.213725	268.065	383.169423	376.986659	114.420	41.942357	149.748
CLOT.	920.000	116.227966	0.000	370607.784	4067403.323	118.065701	288.058	383.021399	387.018218	104.184	51.973917	148.983
CLOT.	936.174	116.311692	0.000	370623.432	4067399.231	117.970960	304.230	382.926659	396.462797	98.084	61.418495	148.369
CLOT.	940.000	116.301152	0.000	370627.133	4067398.262	117.950308	308.055	382.906007	398.854243	96.978	63.809941	148.219
CLOT.	960.000	115.902911	0.000	370646.493	4067393.242	117.840547	328.051	382.796245	12.053040	93.615	77.008738	147.387

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PROYECTO : 591 P_Trazado Enlace AP-46 con MA-20 29-01-2020

GRUPO : 1 : Ramales

EJE : 10 : Autovía A-7 Carril de Aceleración

pagina 7

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* * * DATOS PARA REPLANTEO DE PUNTOS * * *													
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Compensaciones:		Z : Esfericidad y Refraccion :NO											
		D : Reduccion al nivel del mar:NO											
		D : Paso de la cuerda al arco :NO											
		D : Paso al plano de la U.T.M.:SI K' POR ESTACION											
BR : HIT01		X: 370628.878 Y: 4067301.318 Z: 147.174 PK: 965.357 Dis= 93.435 K : 0.999806176											
		Distancia: 145.976 Azimut: 21.331343											
BO : VIA2		X: 370676.871 Y: 4067439.149 Z: 123.586 PK: 978.821 Dis= -51.876 K : 0.999806023											
TIPO	PK Estac.	Azimut	Dis.Eje	X	Y	Ang.Azimu.	Dis.Redu	Angulo 1-2	Ang.Az (BO)	Dis.R (BO)	Ang1-2 (BO)	COTA	
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	
CLOT.	960.000	115.902911	0.000	370646.493	4067393.242	12.053040	93.615	390.721697	237.215676	55.058	15.884333	147.387	

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PROYECTO : 591 P_Trazado Enlace AP-46 con MA-20 29-01-2020

GRUPO : 1 : Ramales

EJE : 10 : Autovía A-7 Carril de Aceleración

pagina 8

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* * * DATOS PARA REPLANTEO DE PUNTOS * * *
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Compensaciones: Z : Esfericidad y Refraccion :NO
D : Reduccion al nivel del mar:NO
D : Paso de la cuerda al arco :NO
D : Paso al plano de la U.T.M.:SI K' POR ESTACION

BR : VIA2 X: 370676.871 Y: 4067439.149 Z: 123.586 PK: 978.821 Dis= -51.876 K : 0.999806023

BO : CAM3 X: 370715.115 Y: 4067108.237 Z: 121.082 PK: 1057.277 Dis= 268.102 K : 0.999805901

Distancia: 333.179 Azimut: 192.674987

TIPO	PK Estac.	Azimut	Dis.Eje	X	Y	Ang.Azimu.	Dis.Redu	Angulo 1-2	Ang.Az (BO)	Dis.R(BO)	Ang1-2 (BO)	COTA
CLOT.	960.000	115.902911	0.000	370646.493	4067393.242	237.215676	55.058	44.540689	384.958121	293.207	392.283134	147.387
CLOT.	980.000	114.928587	0.000	370665.906	4067388.432	213.555571	51.899	20.880585	388.932204	284.539	396.257218	146.559
CLOT.	1000.000	113.378178	0.000	370685.410	4067384.008	190.219732	55.809	397.544746	393.168801	277.420	0.493814	145.777
CLOT.	1020.000	111.251686	0.000	370705.033	4067380.148	171.649300	65.390	378.974314	397.640533	272.151	4.965547	145.029
CIRC.	1027.692	110.280401	0.000	370712.615	4067378.853	165.933574	70.108	373.258588	399.411922	270.680	6.736935	144.762
CIRC.	1040.000	108.658190	0.000	370724.787	4067377.029	158.173028	78.468	365.498041	2.289662	269.018	9.614675	144.336
CIRC.	1060.000	106.022083	0.000	370744.652	4067374.728	148.382148	93.529	355.707162	7.027474	268.175	14.352487	143.678
CIRC.	1080.000	103.385976	0.000	370764.596	4067373.252	141.014499	109.740	348.339512	11.751119	269.647	19.076133	143.056
CIRC.	1100.000	100.749870	0.000	370784.584	4067372.602	135.231488	126.637	342.556502	16.359107	273.393	23.684121	142.417
CIRC.	1120.000	98.113763	0.000	370804.582	4067372.781	130.510863	143.955	337.835877	20.761366	279.317	28.086379	141.788
CIRC.	1140.000	95.477656	0.000	370824.555	4067373.787	126.525797	161.533	333.850811	24.886550	287.273	32.211563	141.142
CIRC.	1153.286	93.726517	0.000	370837.793	4067374.912	124.178826	173.303	331.503840	27.448622	293.597	34.773636	140.705

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PROYECTO : 591 P_Trazado Enlace AP-46 con MA-20 29-01-2020

GRUPO : 1 : Ramales

EJE : 37 : Ramal 2 MA-20 a A-7_2 (2020-02)

pagina 1

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* * * DATOS PARA REPLANTEO DE PUNTOS * * *

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Compensaciones: Z : Esfericidad y Refraccion :NO

D : Reduccion al nivel del mar:NO

D : Paso de la cuerda al arco :NO

D : Paso al plano de la U.T.M.:SI K' POR ESTACION

BR : FAR1 X: 370591.742 Y: 4067063.549 Z: 120.717 PK: 0.000 Dis= -46.351 K : 0.999806294

Distancia: 131.242 Azimut: 77.876299

BO : CAM3 X: 370715.115 Y: 4067108.237 Z: 121.082 PK: 485.181 Dis= 36.250 K : 0.999805901

TIPO	PK Estac.	Azimut	Dis.Eje	X	Y	Ang.Azimu.	Dis.Redu	Angulo 1-2	Ang.Az (BO)	Dis.R(BO)	Ang1-2 (BO)	COTA
RECTA	0.000	80.922180	0.000	370634.830	4067046.466	124.029089	46.360	46.152790	258.250646	101.318	380.374347	121.627
RECTA	20.000	80.922180	0.000	370653.939	4067052.371	111.320881	63.206	33.444582	252.886129	82.863	375.009830	121.728
CLOT.	38.539	80.922180	0.000	370671.652	4067057.843	104.537729	80.129	26.661430	245.307849	66.560	367.431550	121.847
CLOT.	40.000	80.929707	0.000	370673.047	4067058.275	104.123983	81.492	26.247684	244.552101	65.327	366.675802	121.858
CLOT.	60.000	82.546599	0.000	370692.209	4067064.004	99.711607	100.487	21.835308	230.419701	49.822	352.543402	122.035
CLOT.	80.000	86.985074	0.000	370711.617	4067068.815	97.205035	120.014	19.328736	205.633903	39.584	327.757604	122.227
CLOT.	100.000	94.245132	0.000	370731.379	4067071.824	96.231552	139.909	18.355253	173.258130	39.887	295.381831	122.419
CIRC.	107.962	97.920682	0.000	370739.324	4067072.319	96.221541	147.871	18.345242	162.244200	43.324	284.367901	122.496
CIRC.	120.000	103.815684	0.000	370751.357	4067072.154	96.571039	159.877	18.694740	149.859948	51.151	271.983649	122.611
CLOT.	138.011	112.635737	0.000	370769.203	4067069.836	97.745687	177.607	19.869388	139.304366	66.347	261.428067	122.784
CLOT.	140.000	113.651469	0.000	370771.150	4067069.428	97.914581	179.539	20.038282	138.562038	68.175	260.685739	122.803
CLOT.	160.000	128.491916	0.000	370790.092	4067063.152	100.127499	198.389	22.251200	134.466075	87.505	256.589776	122.995
CIRC.	169.742	138.769167	0.000	370798.509	4067058.269	101.625337	206.875	23.749038	134.365780	97.237	256.489481	123.089
CIRC.	180.000	150.643135	0.000	370806.329	4067051.652	103.525800	214.958	25.649501	135.348276	107.360	257.471977	123.190
CIRC.	200.000	173.792945	0.000	370817.452	4067035.164	107.964361	227.532	30.088062	139.476169	125.773	261.599870	123.482
CIRC.	220.000	196.942755	0.000	370821.984	4067015.797	113.018994	235.187	35.142695	145.399431	141.329	267.523132	123.917
CIRC.	240.000	220.092564	0.000	370819.330	4066996.084	118.346156	237.423	40.469857	152.334304	153.128	274.458005	124.492
CIRC.	260.000	243.242374	0.000	370809.840	4066978.605	123.644238	234.101	45.767939	159.826363	160.584	281.950064	125.112
CIRC.	280.000	266.392184	0.000	370794.752	4066965.644	128.607177	225.429	50.730878	167.574378	163.356	289.698079	125.732
CIRC.	300.000	289.541994	0.000	370776.042	4066958.897	132.877258	211.981	55.000958	175.339908	161.322	297.463609	126.352
CIRC.	320.000	312.691804	0.000	370756.155	4066959.246	135.990011	194.744	58.113712	182.888627	154.570	305.012328	126.972
CIRC.	340.000	335.841614	0.000	370737.692	4066966.645	137.313581	175.225	59.437282	189.933632	143.408	312.057333	127.592
CLOT.	351.173	348.774670	0.000	370728.912	4066973.524	136.974384	164.105	59.098085	193.502545	135.444	315.626246	127.938
CLOT.	360.000	358.171609	0.000	370723.040	4066980.103	136.042056	155.601	58.165757	196.067712	128.404	318.191413	128.212
CLOT.	380.000	373.397179	0.000	370713.015	4066997.354	131.808095	138.189	53.931796	201.205672	110.924	323.329373	128.830
CLOT.	400.000	380.204637	0.000	370706.097	4067016.109	125.034610	123.828	47.158311	206.212091	92.586	328.335792	129.378
RECTA	406.173	380.605658	0.000	370704.232	4067021.994	122.527369	119.944	44.651070	207.990927	86.944	330.114628	129.526
RECTA	420.000	380.605658	0.000	370700.085	4067035.184	116.301238	112.016	38.424939	212.917557	74.597	335.041258	129.820
RECTA	440.000	380.605658	0.000	370694.086	4067054.263	105.760385	102.784	27.884086	223.651794	57.937	345.775495	130.156
RECTA	460.000	380.605658	0.000	370688.087	4067073.342	93.551065	96.860	15.674766	241.955481	44.147	364.079181	130.456
RECTA	480.000	380.605658	0.000	370682.088	4067092.421	80.308224	94.865	2.431925	271.568527	36.626	393.692228	130.756

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PROYECTO : 591 P_Trazado Enlace AP-46 con MA-20 29-01-2020

GRUPO : 1 : Ramales

EJE : 37 : Ramal 2 MA-20 a A-7_2 (2020-02)

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* * * DATOS PARA REPLANTEO DE PUNTOS * * *

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Compensaciones: Z : Esfericidad y Refraccion :NO

D : Reduccion al nivel del mar:NO

D : Paso de la cuerda al arco :NO

D : Paso al plano de la U.T.M.:SI K' POR ESTACION

BR : CAM3 X: 370715.115 Y: 4067108.237 Z: 121.082 PK: 485.181 Dis= 36.250 K : 0.999805901

Distancia: 211.505 Azimut: 373.258581

BO : HIT01 X: 370628.878 Y: 4067301.318 Z: 147.174 PK: 691.849 Dis= -22.178 K : 0.999806176

TIPO	PK Estac.	Azimut	Dis.Eje	X	Y	Ang.Azimu.	Dis.Redu	Angulo 1-2	Ang.Az (BO)	Dis.R(BO)	Ang1-2 (BO)	COTA
RECTA	480.000	380.605658	0.000	370682.088	4067092.421	271.568527	36.626	298.309946	184.121787	215.609	10.863206	130.756
RECTA	500.000	380.605658	0.000	370676.089	4067111.500	305.311020	39.170	332.052439	184.481128	195.639	11.222546	131.056
CLOT.	507.491	380.605658	0.000	370673.842	4067118.646	315.727521	42.574	342.468940	184.635343	188.161	11.376762	131.169
CLOT.	520.000	380.827039	0.000	370670.103	4067130.584	329.336533	50.263	356.077952	184.916907	175.675	11.658326	131.356
CLOT.	540.000	382.100809	0.000	370664.334	4067149.733	343.615724	65.592	370.357142	185.372395	155.706	12.113814	131.656
CLOT.	560.000	384.506349	0.000	370659.120	4067169.040	352.619409	82.675	379.360828	185.691149	135.717	12.432567	131.956
CIRC.	577.803	387.599772	0.000	370655.231	4067186.412	358.385376	98.494	385.126795	185.647785	117.912	12.389204	132.223
CIRC.	580.000	388.036828	0.000	370654.813	4067188.568	359.006430	100.466	385.747849	185.606578	115.716	12.347996	132.256
CIRC.	600.000	392.015702	0.000	370651.693	4067208.320	364.042137	118.509	390.783555	184.684317	95.774	11.425735	132.556
CIRC.	620.000	395.994576	0.000	370649.813	4067228.228	368.271034	136.637	395.012452	182.240940	76.043	8.982359	132.856
CLOT.	623.745	396.739561	0.000	370649.599	4067231.967	368.998369	140.032	395.739788	181.516075	72.394	8.257494	132.912
CLOT.	640.000	399.599634	0.000	370649.148	4067248.215	371.963295	154.773	398.704714	176.786449	56.851	3.527868	133.156
CLOT.	660.000	2.092762	0.000	370649.443	4067268.211	375.201291	172.963	1.942710	164.613541	38.982	391.354959	133.456
CLOT.	680.000	3.454121	0.000	370650.344	4067288.191	378.005077	191.292	4.746496	134.941954	25.167	361.683373	133.756
CLOT.	694.057	3.733675	0.000	370651.147	4067302.225	379.722204	204.302	6.463622	97.409207	22.292	324.150625	133.967

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PROYECTO : 591 P_Trazado Enlace AP-46 con MA-20 29-01-2020

GRUPO : 1 : Ramales

EJE : 37 : Ramal 2 MA-20 a A-7_2 (2020-02)

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* * * DATOS PARA REPLANTEO DE PUNTOS * * *
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Compensaciones: Z : Esfericidad y Refraccion :NO
D : Reduccion al nivel del mar:NO
D : Paso de la cuerda al arco :NO
D : Paso al plano de la U.T.M.:SI K' POR ESTACION

BR : HIT01 X: 370628.878 Y: 4067301.318 Z: 147.174 PK: 691.849 Dis= -22.178 K : 0.999806176
Distancia: 145.976 Azimut: 21.331343

BO : VIA2 X: 370676.871 Y: 4067439.149 Z: 123.586 PK: 806.275 Dis= 53.414 K : 0.999806023

TIPO	PK Estac.	Azimut	Dis.Eje	X	Y	Ang.Azimu.	Dis.Redu	Angulo 1-2	Ang.Az (BO)	Dis.R(BO)	Ang1-2 (BO)	COTA
CLOT.	680.000	3.454121	0.000	370650.344	4067288.191	134.941954	25.167	113.610612	211.073892	153.301	389.742550	133.756
CLOT.	694.057	3.733675	0.000	370651.147	4067302.225	97.409207	22.292	76.077864	211.822229	139.347	390.490886	133.967
CLOT.	700.000	3.594889	0.000	370651.491	4067308.158	81.301813	23.630	59.970470	212.183566	133.453	390.852223	134.056
CLOT.	720.000	1.088840	0.000	370652.309	4067328.140	45.711385	35.622	24.380042	213.862468	113.716	392.531125	134.489
CLOT.	740.000	395.438990	0.000	370651.846	4067348.128	29.039963	52.151	7.708620	217.080746	94.417	395.749403	135.163
CIRC.	756.365	388.477402	0.000	370649.830	4067364.360	20.427261	66.445	399.095918	222.086546	79.543	0.755203	135.896
CIRC.	760.000	386.697266	0.000	370649.126	4067367.926	18.787424	69.631	397.456081	223.648203	76.451	2.316861	136.081
CIRC.	780.000	376.903116	0.000	370643.491	4067387.095	10.742687	87.030	389.411344	236.299969	61.849	14.968626	137.240
CIRC.	800.000	367.108965	0.000	370634.986	4067405.175	3.739779	104.056	382.408436	256.614723	53.942	35.283380	138.598

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PROYECTO : 591 P_Trazado Enlace AP-46 con MA-20 29-01-2020

GRUPO : 1 : Ramales

EJE : 37 : Ramal 2 MA-20 a A-7_2 (2020-02)

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* * * DATOS PARA REPLANTEO DE PUNTOS * * *
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Compensaciones: Z : Esfericidad y Refraccion :NO
D : Reduccion al nivel del mar:NO
D : Paso de la cuerda al arco :NO
D : Paso al plano de la U.T.M.:SI K' POR ESTACION

BR : VIA2 X: 370676.871 Y: 4067439.149 Z: 123.586 PK: 806.275 Dis= 53.414 K : 0.999806023

BO : PS1 X: 370331.300 Y: 4067483.959 Z: 171.169 PK: 1125.809 Dis= 34.498 K : 0.999807125

TIPO	PK Estac.	Azimut	Dis.Eje	X	Y	Ang.Azimu.	Dis.Redu	Angulo 1-2	Ang.Az (BO)	Dis.R(BO)	Ang1-2 (BO)	COTA
CIRC.	800.000	367.108965	0.000	370634.986	4067405.175	256.614723	53.942	348.405516	116.159413	313.800	7.950206	138.598
CIRC.	820.000	357.314815	0.000	370623.810	4067421.737	279.814144	55.855	371.604937	113.343079	299.113	5.133871	139.974
CIRC.	840.000	347.520665	0.000	370610.229	4067436.392	297.367414	66.712	389.158206	110.753206	283.010	2.543998	141.350
CIRC.	860.000	337.726514	0.000	370594.562	4067448.792	307.424335	82.888	399.215128	108.454095	265.652	0.244888	142.726
CIRC.	880.000	327.932364	0.000	370577.180	4067458.645	312.294599	101.599	4.085392	106.531262	247.228	398.322054	144.102
CIRC.	900.000	318.138214	0.000	370558.494	4067465.717	314.055304	121.346	5.846096	105.100521	227.969	396.891313	145.478
CIRC.	920.000	308.344063	0.000	370538.944	4067469.843	313.940182	141.329	5.730974	104.321113	208.163	396.111905	146.855
CLOT.	925.098	305.847371	0.000	370533.878	4067470.410	313.702252	146.399	5.493044	104.251465	203.069	396.042258	147.205
CLOT.	940.000	299.422552	0.000	370518.994	4067470.993	312.670548	161.088	4.461341	104.390945	188.177	396.181737	148.231
CLOT.	960.000	293.542697	0.000	370499.036	4067469.806	310.868041	180.493	2.658833	105.358715	168.364	397.149507	149.607
CLOT.	980.000	290.806642	0.000	370479.199	4067467.273	308.997113	199.702	0.787906	107.152221	148.866	398.943013	150.983
CIRC.	987.406	290.591099	0.000	370471.872	4067466.190	308.349469	206.815	0.140262	108.004518	141.718	399.795311	151.493
CIRC.	1000.000	290.911802	0.000	370459.411	4067464.367	307.349887	218.960	399.140680	109.660830	129.625	1.451623	152.359
CIRC.	1020.000	291.421097	0.000	370439.603	4067461.601	306.006288	238.374	397.797081	112.960218	110.608	4.751011	153.735
CIRC.	1040.000	291.930393	0.000	370419.774	4067458.993	304.904109	257.912	396.694901	117.508924	91.947	9.299716	155.112
CIRC.	1060.000	292.439689	0.000	370399.925	4067456.544	303.993451	277.546	395.784244	124.195625	73.912	15.986418	156.488
CIRC.	1080.000	292.948985	0.000	370380.056	4067454.254	303.237048	297.257	395.027840	134.835430	57.103	26.626222	157.760
CIRC.	1100.000	293.458281	0.000	370360.170	4067452.123	302.606567	317.028	394.397359	153.107681	42.985	44.898474	158.811
CIRC.	1120.000	293.967576	0.000	370340.268	4067450.151	302.080126	336.849	393.870919	183.493653	34.984	75.284446	159.639
RECTA	1136.358	294.384125	0.000	370323.978	4067448.657	301.714807	353.089	393.505599	213.019232	36.060	104.810025	160.174

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PROYECTO : 591 P_Trazado Enlace AP-46 con MA-20 29-01-2020

GRUPO : 1 : Ramales

EJE : 37 : Ramal 2 MA-20 a A-7_2 (2020-02)

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* * * DATOS PARA REPLANTEO DE PUNTOS * * *												
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Compensaciones:		Z : Esfericidad y Refraccion :NO										
		D : Reduccion al nivel del mar:NO										
		D : Paso de la cuerda al arco :NO										
		D : Paso al plano de la U.T.M.:SI K' POR ESTACION										
BR : PS1		X: 370331.300 Y: 4067483.959 Z: 171.169 PK: 1125.809 Dis= 34.498 K : 0.999807125										
		Distancia: 116.636 Azimut: 200.226012										
BO : PS3		X: 370330.886 Y: 4067367.346 Z: 168.310 PK: 1136.640 Dis= -81.603 K : 0.999807127										
TIPO	PK Estac.	Azimut	Dis.Eje	X	Y	Ang.Azimu.	Dis.Redu	Angulo 1-2	Ang.Az (BO)	Dis.R (BO)	Ang1-2 (BO)	COTA
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
CIRC.	1120.000	293.967576	0.000	370340.268	4067450.151	183.493653	34.984	383.267641	7.182064	83.351	6.956052	159.639

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PROYECTO : 591 P_Trazado Enlace AP-46 con MA-20 29-01-2020

GRUPO : 1 : Ramales

EJE : 37 : Ramal 2 MA-20 a A-7_2 (2020-02)

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* * * DATOS PARA REPLANTEO DE PUNTOS * * *													
=====													
Compensaciones:													
Z : Esfericidad y Refraccion :NO													
D : Reduccion al nivel del mar:NO													
D : Paso de la cuerda al arco :NO													
D : Paso al plano de la U.T.M.:SI K' POR ESTACION													
BR : PS3 X: 370330.886 Y: 4067367.346 Z: 168.310 PK: 1136.640 Dis= -81.603 K : 0.999807127													
Distancia: 94.324 Azimut: 392.884224													
BO : PS2 X: 370320.367 Y: 4067461.063 Z: 167.915 PK: 1138.862 Dis= 12.676 K : 0.999807160													
TIPO	PK Estac.	Azimut	Dis.Eje	X	Y	Ang.Azimu.	Dis.Redu	Angulo 1-2	Ang.Az (BO)	Dis.R (BO)	Ang1-2 (BO)	COTA	
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	
CIRC.	1120.000	293.967576	0.000	370340.268	4067450.151	7.182064	83.351	14.297840	131.929435	22.700	339.045211	159.639	

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PROYECTO : 591 P_Trazado Enlace AP-46 con MA-20 29-01-2020

GRUPO : 1 : Ramales

EJE : 37 : Ramal 2 MA-20 a A-7_2 (2020-02)

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* * * DATOS PARA REPLANTEO DE PUNTOS * * *

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Compensaciones:

Z : Esfericidad y Refraccion :NO

D : Reduccion al nivel del mar:NO

D : Paso de la cuerda al arco :NO

D : Paso al plano de la U.T.M.:SI K' POR ESTACION

BR : PS2

X: 370320.367 Y: 4067461.063 Z: 167.915 PK: 1138.862 Dis= 12.676 K : 0.999807160

Distancia: 171.407 Azimut: 265.095201

BO : HITO2

X: 370174.113 Y: 4067371.739 Z: 158.111 PK: 1292.417 Dis= -63.416 K : 0.999807628

TIPO	PK Estac.	Azimut	Dis.Eje	X	Y	Ang.Azimu.	Dis.Redu	Angulo 1-2	Ang.Az (BO)	Dis.R(BO)	Ang1-2 (BO)	COTA
CIRC.	1120.000	293.967576	0.000	370340.268	4067450.151	131.929435	22.700	266.834234	71.929181	183.763	6.833980	159.639
RECTA	1136.358	294.384125	0.000	370323.978	4067448.657	181.967632	12.924	316.872431	69.812185	168.484	4.716984	160.174
RECTA	1140.000	294.384125	0.000	370320.350	4067448.336	200.084239	12.729	334.989038	69.283419	165.115	4.188218	160.289
RECTA	1160.000	294.384125	0.000	370300.428	4067446.574	259.994955	24.652	394.899754	65.950525	146.847	0.855323	160.923
RECTA	1180.000	294.384125	0.000	370280.506	4067444.812	275.355388	43.055	10.260187	61.686448	129.095	396.591246	161.557
RECTA	1200.000	294.384125	0.000	370260.583	4067443.050	281.369187	62.450	16.273986	56.097844	112.104	391.002643	162.191
RECTA	1220.000	294.384125	0.000	370240.661	4067441.288	284.518088	82.138	19.422887	48.596548	96.277	383.501347	162.825
RECTA	1240.000	294.384125	0.000	370220.739	4067439.526	286.446503	101.949	21.351301	38.357090	82.290	373.261889	163.459
RECTA	1260.000	294.384125	0.000	370200.817	4067437.764	287.746611	121.823	22.651410	24.467576	71.234	359.372375	164.093
RECTA	1280.000	294.384125	0.000	370180.895	4067436.002	288.681748	141.733	23.586547	6.693323	64.632	341.598122	164.727

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PROYECTO : 591 P_Trazado Enlace AP-46 con MA-20 29-01-2020

GRUPO : 1 : Ramales

EJE : 37 : Ramal 2 MA-20 a A-7_2 (2020-02)

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* * * DATOS PARA REPLANTEO DE PUNTOS * * *
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Compensaciones:

Z : Esfericidad y Refraccion :NO
D : Reduccion al nivel del mar:NO
D : Paso de la cuerda al arco :NO
D : Paso al plano de la U.T.M.:SI K' POR ESTACION

BR : HITO2

X: 370174.113 Y: 4067371.739 Z: 158.111 PK: 1292.417 Dis= -63.416 K : 0.999807628

Distancia: 271.543 Azimut: 318.283554

BO : FAR2

X: 369913.742 Y: 4067448.643 Z: 158.111 PK: 1473.716 Dis= 76.020 K : 0.999808461

TIPO	PK Estac.	Azimut	Dis.Eje	X	Y	Ang.Azimu.	Dis.Redu	Angulo 1-2	Ang.Az (BO)	Dis.R(BO)	Ang1-2 (BO)	COTA
RECTA	1280.000	294.384125	0.000	370180.895	4067436.002	6.693323	64.632	88.409769	103.010071	267.503	384.726517	164.727
RECTA	1300.000	294.384125	0.000	370160.972	4067434.240	386.807361	63.880	68.523807	103.704581	247.697	385.421026	165.361
RECTA	1320.000	294.384125	0.000	370141.050	4067432.478	368.265118	69.168	49.981564	104.519690	227.926	386.236136	166.044
CLOT.	1338.313	294.384125	0.000	370122.808	4067430.865	354.501331	78.297	36.217777	105.400599	209.861	387.117045	166.784
CLOT.	1340.000	294.387261	0.000	370121.128	4067430.716	353.403774	79.298	35.120219	105.489439	208.199	387.205885	166.858
CLOT.	1360.000	294.902161	0.000	370101.201	4067429.013	342.389003	92.735	24.105449	106.642354	188.520	388.358800	167.806
CLOT.	1380.000	296.298197	0.000	370081.250	4067427.609	334.480713	108.395	16.197158	107.952568	168.856	389.669014	168.858
CLOT.	1400.000	298.575367	0.000	370061.269	4067426.781	328.890525	125.577	10.606971	109.366129	149.166	391.082574	169.957
CIRC.	1410.563	300.133598	0.000	370050.707	4067426.670	326.661045	135.106	8.377491	110.126885	138.743	391.843331	170.532
CIRC.	1420.000	301.635578	0.000	370041.270	4067426.801	325.015124	143.830	6.731570	110.798638	129.410	392.515084	171.039
CLOT.	1429.395	303.130850	0.000	370031.882	4067427.153	323.651240	152.674	5.367686	111.455149	120.102	393.171595	171.533
CLOT.	1440.000	304.719512	0.000	370021.298	4067427.809	322.387527	162.808	4.103973	112.180759	109.576	393.897205	172.089
CLOT.	1460.000	307.175879	0.000	370001.388	4067429.693	320.608929	182.223	2.325375	113.555714	89.688	395.272160	173.120
CIRC.	1473.716	308.452720	0.000	369987.776	4067431.378	319.719849	195.686	1.436294	114.585291	76.035	396.301737	173.817
CIRC.	1473.716	308.452720	0.000	369987.776	4067431.378	319.719849	195.686	1.436294	114.585291	76.035	396.301737	173.817

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PROYECTO : 591 P_Trazado Enlace AP-46 con MA-20 29-01-2020

GRUPO : 1 : Ramales

EJE : 38 : Ramal 1 A-7 a MA-20 (2020-01)

pagina 1

***** * * * DATOS PARA REPLANTEO DE PUNTOS * * * *****												
Compensaciones:				Z : Esfericidad y Refraccion :NO D : Reduccion al nivel del mar:NO D : Paso de la cuerda al arco :NO D : Paso al plano de la U.T.M.:SI K' POR ESTACION								
BR : FAR2				X: 369913.742	Y: 4067448.643	Z: 158.111	PK: 0.000	Dis= -45.088 K : 0.999808461				
BO : HITO2				X: 370174.113	Y: 4067371.739	Z: 158.111	PK: 232.606	Distancia: 271.543 Azimut: 118.283554 Dis= 22.793 K : 0.999807628				
TIPO	PK Estac.	Azimut	Dis.Eje	X	Y	Ang.Azimu.	Dis.Redu	Angulo 1-2	Ang.Az (BO)	Dis.R(BO)	Ang1-2 (BO)	COTA
CLOT.	0.000	111.862258	0.000	369941.093	4067412.799	158.505141	45.096	40.221587	311.103682	236.655	392.820128	177.721
CLOT.	20.000	110.450984	0.000	369960.788	4067409.320	144.322940	61.327	26.039386	311.101206	216.652	392.817652	176.757
CLOT.	40.000	109.353219	0.000	369980.547	4067406.230	136.011880	79.147	17.728326	311.225830	196.652	392.942276	175.788
CLOT.	60.000	108.568963	0.000	370000.350	4067403.432	130.628180	97.718	12.344626	311.485171	176.663	393.201617	174.822
CLOT.	80.000	108.098216	0.000	370020.180	4067400.829	126.878099	116.707	8.594544	311.890694	156.687	393.607139	173.878
CIRC.	89.201	107.986943	0.000	370029.308	4067399.671	125.516927	125.538	7.233373	312.130972	147.503	393.847418	173.451
CLOT.	97.341	107.917845	0.000	370037.385	4067398.657	124.458325	133.390	6.174770	312.374891	139.379	394.091336	173.081
CLOT.	100.000	107.887928	0.000	370040.023	4067398.327	124.138162	135.962	5.854608	312.461778	136.727	394.178224	172.961
CLOT.	120.000	107.191867	0.000	370059.880	4067395.943	122.033658	155.380	3.750104	313.292139	116.791	395.008585	172.088
CLOT.	140.000	105.664303	0.000	370079.776	4067393.905	120.273705	174.858	1.990151	314.691893	96.925	396.408339	171.258
CLOT.	160.000	103.305236	0.000	370099.724	4067392.476	118.671760	194.315	0.388205	317.306906	77.240	399.023352	170.356
CIRC.	173.850	101.184317	0.000	370113.564	4067391.980	117.590631	207.740	399.307077	320.538279	63.855	2.254724	169.666
CLOT.	178.448	100.414000	0.000	370118.162	4067391.922	117.230894	212.184	398.947340	322.039976	59.492	3.756422	169.426
CLOT.	180.000	100.156795	0.000	370119.714	4067391.915	117.109232	213.682	398.825678	322.610680	58.032	4.327126	169.343
CLOT.	200.000	97.346424	0.000	370139.708	4067392.332	115.547946	232.921	397.264392	334.336003	40.105	16.052449	168.233
CLOT.	220.000	95.471399	0.000	370159.674	4067393.484	114.046008	252.090	395.762454	362.683256	26.108	44.399702	167.107

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PROYECTO : 591 P_Trazado Enlace AP-46 con MA-20 29-01-2020

GRUPO : 1 : Ramales

EJE : 38 : Ramal 1 A-7 a MA-20 (2020-01)

pagina 2

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* * * DATOS PARA REPLANTEO DE PUNTOS * * *
=====

Compensaciones:

Z : Esfericidad y Refraccion :NO
D : Reduccion al nivel del mar:NO
D : Paso de la cuerda al arco :NO
D : Paso al plano de la U.T.M.:SI K' POR ESTACION

BR : HITO2

X: 370174.113 Y: 4067371.739 Z: 158.111 PK: 232.606 Dis= 22.793 K : 0.999807628

Distancia: 171.407 Azimut: 65.095201

BO : PS2

X: 370320.367 Y: 4067461.063 Z: 167.915 PK: 382.012 Dis= -55.083 K : 0.999807160

TIPO	PK Estac.	Azimut	Dis.Eje	X	Y	Ang.Azimu.	Dis.Redu	Angulo 1-2	Ang.Az (BO)	Dis.R(BO)	Ang1-2 (BO)	COTA
CLOT.	220.000	95.471399	0.000	370159.674	4067393.484	362.683256	26.108	297.588055	274.656672	174.359	9.561470	167.107
CLOT.	240.000	94.531719	0.000	370179.610	4067395.077	14.726394	23.981	349.631193	272.092408	155.486	6.997207	165.982
RECTA	250.093	94.412624	0.000	370189.664	4067395.956	36.341945	28.786	371.246744	270.578377	146.049	5.483175	165.413
RECTA	260.000	94.412624	0.000	370199.534	4067396.824	50.423026	35.720	385.327825	268.892687	136.874	3.797486	164.856
RECTA	280.000	94.412624	0.000	370219.457	4067398.577	65.977204	52.701	0.882003	264.703659	118.713	399.608458	163.730
RECTA	300.000	94.412624	0.000	370239.380	4067400.330	73.714867	71.268	8.619665	259.037299	101.249	393.942098	162.604
CLOT.	318.941	94.412624	0.000	370258.247	4067401.990	78.026029	89.425	12.930828	251.600293	85.740	386.505092	161.538
CLOT.	320.000	94.413937	0.000	370259.303	4067402.083	78.215904	90.450	13.120703	251.105366	84.913	386.010165	161.478
CLOT.	340.000	94.931159	0.000	370279.231	4067403.779	81.165043	109.913	16.069842	239.647566	70.538	374.552365	160.353
CLOT.	360.000	96.383728	0.000	370299.182	4067405.167	83.373333	129.484	18.278132	223.063470	59.788	357.968269	159.227
CLOT.	380.000	98.771642	0.000	370319.165	4067405.952	85.253724	149.061	20.158523	201.387915	55.135	336.292714	158.101
CIRC.	392.522	100.742783	0.000	370331.686	4067406.006	86.367908	161.287	21.272707	187.091484	56.219	321.996283	157.396

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PROYECTO : 591 P_Trazado Enlace AP-46 con MA-20 29-01-2020

GRUPO : 1 : Ramales

EJE : 38 : Ramal 1 A-7 a MA-20 (2020-01)

pagina 3

Compensaciones:

Z : Esfericidad y Refraccion :NO

D : Reduccion al nivel del mar:NO

D : Paso de la cuerda al arco :NO

D : Paso al plano de la U.T.M.:SI K' POR ESTACION

BR : PS2

X: 370320.367 Y: 4067461.063 Z: 167.915 PK: 382.012 Dis= -55.083 K : 0.999807160

Distancia: 25.377 Azimut: 28.360890

BO : PS1

X: 370331.300 Y: 4067483.959 Z: 171.169 PK: 391.450 Dis= -77.945 K : 0.999807125

TIPO	PK Estac.	Azimut	Dis.Eje	X	Y	Ang.Azimu.	Dis.Redu	Angulo 1-2	Ang.Az (BO)	Dis.R (BO)	Ang1-2 (BO)	COTA
CLOT.	380.000	98.771642	0.000	370319.165	4067405.952	201.387915	55.135	173.027025	209.824461	78.960	381.463571	158.101

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PROYECTO : 591 P_Trazado Enlace AP-46 con MA-20 29-01-2020

GRUPO : 1 : Ramales

EJE : 38 : Ramal 1 A-7 a MA-20 (2020-01)

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Compensaciones:

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* * * DATOS PARA REPLANTEO DE PUNTOS * * *

=====

Z : Esfericidad y Refraccion :NO

D : Reduccion al nivel del mar:NO

D : Paso de la cuerda al arco :NO

D : Paso al plano de la U.T.M.:SI K' POR ESTACION

BR : PS1

X: 370331.300 Y: 4067483.959 Z: 171.169 PK: 391.450 Dis= -77.945 K : 0.999807125

Distancia: 116.636 Azimut: 200.226012

BO : PS3

X: 370330.886 Y: 4067367.346 Z: 168.310 PK: 392.132 Dis= 38.666 K : 0.999807127

TIPO	PK Estac.	Azimut	Dis.Eje	X	Y	Ang.Azimu.	Dis.Redu	Angulo 1-2	Ang.Az (BO)	Dis.R (BO)	Ang1-2 (BO)	COTA
CLOT.	380.000	98.771642	0.000	370319.165	4067405.952	209.824461	78.960	9.598449	381.235450	40.354	381.009438	158.101

Istram 19.10.10.31 19/02/20 19:45:49 772

PROYECTO : 591 P_Trazado Enlace AP-46 con MA-20 29-01-2020

GRUPO : 1 : Ramales

EJE : 38 : Ramal 1 A-7 a MA-20 (2020-01)

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* * * DATOS PARA REPLANTEO DE PUNTOS * * *
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Compensaciones:

Z : Esfericidad y Refraccion :NO
D : Reduccion al nivel del mar:NO
D : Paso de la cuerda al arco :NO
D : Paso al plano de la U.T.M.:SI K' POR ESTACION

BR : PS3

X: 370330.886 Y: 4067367.346 Z: 168.310 PK: 392.132 Dis= 38.666 K : 0.999807127

Distancia: 353.425 Azimut: 86.973016

BO : VIA2

X: 370676.871 Y: 4067439.149 Z: 123.586 PK: 661.465 Dis=-129.611 K : 0.999806023

TIPO	PK Estac.	Azimut	Dis.Eje	X	Y	Ang.Azimu.	Dis.Redu	Angulo 1-2	Ang.Az (BO)	Dis.R(BO)	Ang1-2 (BO)	COTA
CLOT.	380.000	98.771642	0.000	370319.165	4067405.952	381.235450	40.354	294.262433	294.108727	359.312	7.135711	158.101
CIRC.	392.522	100.742783	0.000	370331.686	4067406.006	1.317665	38.676	314.344649	293.906141	346.839	6.933124	157.396
CIRC.	400.000	102.029514	0.000	370339.163	4067405.843	13.481981	39.384	326.508964	293.741680	339.412	6.768664	156.973
CLOT.	403.898	102.700179	0.000	370343.058	4067405.698	19.564440	40.245	332.591424	293.641797	335.550	6.668781	156.749
CLOT.	420.000	105.167558	0.000	370359.128	4067404.691	41.219579	46.831	354.246562	293.123042	319.668	6.150025	155.788
CLOT.	440.000	107.388020	0.000	370379.027	4067402.698	59.676189	59.739	372.703173	292.247411	300.124	5.274395	154.522
CIRC.	459.329	108.645182	0.000	370398.200	4067400.249	71.056581	74.939	384.083564	291.170308	281.428	4.197291	153.222
CIRC.	460.000	108.673662	0.000	370398.865	4067400.158	71.371773	75.498	384.398756	291.129026	280.782	4.156009	153.176
CIRC.	480.000	109.522489	0.000	370418.661	4067397.309	79.057754	92.766	392.084738	289.773209	261.629	2.800192	151.806
CIRC.	500.000	110.371315	0.000	370438.417	4067394.197	84.421933	110.854	397.448917	288.137978	242.701	1.164962	150.436
CIRC.	520.000	111.220141	0.000	370458.130	4067390.822	88.385450	129.416	1.412434	286.157243	224.060	399.184227	149.066
CIRC.	540.000	112.068968	0.000	370477.796	4067387.184	91.455234	148.272	4.482218	283.744784	205.786	396.771768	147.696
CIRC.	560.000	112.917794	0.000	370497.412	4067383.284	93.925522	167.319	6.952506	280.787540	187.990	393.814523	146.326
CLOT.	564.156	113.094170	0.000	370501.481	4067382.441	94.381624	171.295	7.408607	280.091763	184.365	393.118747	146.042
CLOT.	580.000	114.753144	0.000	370516.956	4067379.043	96.003228	186.474	9.030212	277.111813	170.870	390.138796	144.956
CLOT.	600.000	119.664427	0.000	370536.247	4067373.783	98.005161	205.502	11.032145	272.299622	155.103	385.326605	143.586
CIRC.	618.756	127.126685	0.000	370553.765	4067367.112	100.066916	222.922	13.093899	266.294855	142.662	379.321838	142.301
CIRC.	620.000	127.713428	0.000	370554.895	4067366.592	100.214213	224.054	13.241196	265.837599	141.952	378.864583	142.216
CIRC.	640.000	137.144832	0.000	370572.340	4067356.848	102.766124	241.729	15.793107	257.539285	133.068	370.566269	140.846
CIRC.	660.000	146.576236	0.000	370588.156	4067344.636	105.605150	258.320	18.632134	247.986224	129.652	361.013208	139.476

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PROYECTO : 591 P_Trazado Enlace AP-46 con MA-20 29-01-2020

GRUPO : 1 : Ramales

EJE : 38 : Ramal 1 A-7 a MA-20 (2020-01)

pagina 6

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* * * DATOS PARA REPLANTEO DE PUNTOS * * *
=====

Compensaciones:

Z : Esfericidad y Refraccion :NO
D : Reduccion al nivel del mar:NO
D : Paso de la cuerda al arco :NO
D : Paso al plano de la U.T.M.:SI K' POR ESTACION

BR : VIA2

X: 370676.871 Y: 4067439.149 Z: 123.586 PK: 661.465 Dis=-129.611 K : 0.999806023

Distancia: 145.976 Azimut: 221.331343

BO : HIT01

X: 370628.878 Y: 4067301.318 Z: 147.174 PK: 717.734 Dis= -7.837 K : 0.999806176

TIPO	PK Estac.	Azimut	Dis.Eje	X	Y	Ang.Azimu.	Dis.Redu	Angulo 1-2	Ang.Az (BO)	Dis.R(BO)	Ang1-2 (BO)	COTA
CIRC.	660.000	146.576236	0.000	370588.156	4067344.636	247.986224	129.652	26.654882	351.965567	59.465	330.634225	139.476
CIRC.	680.000	156.007640	0.000	370601.995	4067330.223	238.338421	132.205	17.007079	352.306556	39.481	330.975214	138.106
CIRC.	700.000	165.439044	0.000	370613.556	4067313.925	229.802042	140.348	8.470700	343.830127	19.846	322.498784	136.736

Istram 19.10.10.31 19/02/20 19:45:49 772

PROYECTO : 591 P_Trazado Enlace AP-46 con MA-20 29-01-2020

GRUPO : 1 : Ramales

EJE : 38 : Ramal 1 A-7 a MA-20 (2020-01)

pagina 7

=====													
* * * DATOS PARA REPLANTEO DE PUNTOS * * *													
=====													
Compensaciones:													
Z : Esfericidad y Refraccion :NO													
D : Reduccion al nivel del mar:NO													
D : Paso de la cuerda al arco :NO													
D : Paso al plano de la U.T.M.:SI K' POR ESTACION													
BR : HIT01 X: 370628.878 Y: 4067301.318 Z: 147.174 PK: 717.734 Dis= -7.837 K : 0.999806176													
Distancia: 211.505 Azimut: 173.258581													
BO : CAM3 X: 370715.115 Y: 4067108.237 Z: 121.082 PK: 884.784 Dis= -85.744 K : 0.999805901													
TIPO	PK Estac.	Azimut	Dis.Eje	X	Y	Ang.Azimu.	Dis.Redu	Angulo 1-2	Ang.Az (BO)	Dis.R(BO)	Ang1-2 (BO)	COTA	
CIRC.	700.000	165.439044	0.000	370613.556	4067313.925	343.830127	19.846	170.571545	370.802188	229.439	397.543607	136.736	
CIRC.	720.000	174.870448	0.000	370622.584	4067296.099	255.927233	8.178	82.668651	370.863965	209.454	397.605383	135.366	
CLOT.	731.900	180.482070	0.000	370626.671	4067284.927	208.522413	16.542	35.263832	370.454606	197.628	397.196025	134.551	
CLOT.	740.000	184.044012	0.000	370628.893	4067277.139	199.961319	24.184	26.702738	369.951364	189.673	396.692783	133.996	
CLOT.	760.000	190.630255	0.000	370632.762	4067257.526	194.368167	43.973	21.109586	367.908177	170.530	394.649596	132.626	
CLOT.	780.000	194.072697	0.000	370635.077	4067237.663	193.819583	63.969	20.561002	364.741176	152.204	391.482595	131.256	
RECTA	791.900	194.629176	0.000	370636.115	4067225.808	193.917486	75.871	20.658905	362.334844	141.675	389.076263	130.441	
RECTA	800.000	194.629176	0.000	370636.797	4067217.737	193.986150	83.972	20.727569	360.473761	134.651	387.215179	129.886	
CLOT.	804.944	194.629176	0.000	370637.214	4067212.810	194.021910	88.916	20.763329	359.239958	130.426	385.981377	129.548	
CLOT.	820.000	195.560940	0.000	370638.409	4067197.802	194.154840	103.974	20.896259	354.913772	117.945	381.655190	128.516	
CLOT.	840.000	199.680559	0.000	370639.242	4067177.823	194.669650	123.953	21.411069	347.250242	102.971	373.991661	127.146	
CLOT.	860.000	207.088504	0.000	370638.266	4067157.858	195.839850	143.795	22.581269	336.500241	91.495	363.241660	125.776	
CIRC.	864.513	209.214926	0.000	370637.691	4067153.382	196.212028	148.227	22.953447	333.606498	89.642	360.347917	125.467	
CIRC.	880.000	216.798929	0.000	370634.550	4067138.226	197.786673	163.222	24.528092	322.685786	85.982	349.427205	124.414	

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PROYECTO : 591 P_Trazado Enlace AP-46 con MA-20 29-01-2020

GRUPO : 1 : Ramales

EJE : 38 : Ramal 1 A-7 a MA-20 (2020-01)

pagina 8

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* * * DATOS PARA REPLANTEO DE PUNTOS * * *
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Compensaciones: Z : Esfericidad y Refraccion :NO
D : Reduccion al nivel del mar:NO
D : Paso de la cuerda al arco :NO
D : Paso al plano de la U.T.M.:SI K' POR ESTACION

BR : CAM3 X: 370715.115 Y: 4067108.237 Z: 121.082 PK: 884.784 Dis= -85.744 K : 0.999805901

BO : FAR1 X: 370591.742 Y: 4067063.549 Z: 120.717 PK: 965.289 Dis= -6.486 K : 0.999806294

Distancia: 131.243 Azimut: 277.876299

TIPO	PK Estac.	Azimut	Dis.Eje	X	Y	Ang.Azimu.	Dis.Redu	Angulo 1-2	Ang.Az (BO)	Dis.R(BO)	Ang1-2 (BO)	COTA
CIRC.	880.000	216.798929	0.000	370634.550	4067138.226	322.685786	85.982	44.809487	33.137056	86.094	355.260757	124.414
CIRC.	900.000	226.593080	0.000	370627.872	4067119.395	308.098189	87.970	30.221890	36.557008	66.527	358.680709	123.227
CIRC.	920.000	236.387230	0.000	370618.387	4067101.810	295.776028	96.960	17.899729	38.726464	46.634	360.850165	122.283
CIRC.	940.000	246.181380	0.000	370606.319	4067085.885	287.100452	111.089	9.224153	36.810616	26.678	358.934317	121.581
CIRC.	960.000	255.975531	0.000	370591.954	4067071.999	281.782500	128.407	3.906201	1.596214	8.454	323.719915	121.122
CIRC.	980.000	265.769681	0.000	370575.630	4067060.477	278.998593	147.464	1.122294	288.006499	16.405	210.130200	120.905
CLOT.	981.481	266.495023	0.000	370574.354	4067059.726	278.871465	148.915	0.995166	286.222060	17.807	208.345761	120.898
CLOT.	1000.000	274.154180	0.000	370557.790	4067051.469	277.954286	167.286	0.077987	278.238251	36.044	200.361952	120.918
CLOT.	1020.000	279.259372	0.000	370539.088	4067044.396	277.850342	187.283	399.974043	277.789553	56.040	199.913254	120.921
CLOT.	1040.000	281.076238	0.000	370520.025	4067038.348	278.100372	207.271	0.224073	278.487165	76.030	200.610866	120.846
CIRC.	1041.050	281.080773	0.000	370519.021	4067038.040	278.115390	208.320	0.239091	278.522486	77.080	200.646187	120.841
CIRC.	1041.050	281.080773	0.000	370519.021	4067038.040	278.115390	208.320	0.239091	278.522486	77.080	200.646187	120.841

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PROYECTO : 591 P_Trazado Enlace AP-46 con MA-20 29-01-2020

GRUPO : 5 : Caminos

EJE : 23 : Rep. Camino-2

pagina 1

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* * * DATOS PARA REPLANTEO DE PUNTOS * * *
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Compensaciones:

Z : Esfericidad y Refraccion :NO
D : Reduccion al nivel del mar:NO
D : Paso de la cuerda al arco :NO
D : Paso al plano de la U.T.M.:SI K' POR ESTACION

BR : CAM3

X: 370715.115 Y: 4067108.237 Z: 121.082 PK: 13.704 Dis= -10.142 K : 0.999805901

Distancia: 131.243 Azimut: 277.876299

BO : FAR1

X: 370591.742 Y: 4067063.549 Z: 120.717 PK: 42.046 Dis=-118.717 K : 0.999806294

TIPO	PK Estac.	Azimut	Dis.Eje	X	Y	Ang.Azimu.	Dis.Redu	Angulo 1-2	Ang.Az (BO)	Dis.R(BO)	Ang1-2 (BO)	COTA
RECTA	0.000	275.526432	0.000	370727.028	4067122.533	44.227997	18.613	166.351698	73.825555	147.614	395.949256	117.991
CIRC.	6.733	275.526432	0.000	370720.786	4067120.008	28.583608	13.069	150.707309	73.744255	140.882	395.867956	119.049
CIRC.	10.000	283.844532	0.000	370717.687	4067118.984	14.954490	11.053	137.078191	73.603525	137.632	395.727226	119.563
CIRC.	20.000	309.309323	0.000	370707.768	4067118.450	360.299728	12.584	82.423429	71.863782	128.384	393.987483	121.274
CIRC.	30.000	334.774114	0.000	370698.424	4067121.821	343.489590	21.524	65.613291	68.172889	121.583	390.296590	123.236
CIRC.	39.954	360.122033	0.000	370691.157	4067128.528	344.735644	31.402	66.859344	63.145594	118.790	385.269295	125.227
CIRC.	40.000	360.163773	0.000	370691.130	4067128.565	344.757916	31.446	66.881617	63.121019	118.788	385.244720	125.236

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PROYECTO : 591 P_Trazado Enlace AP-46 con MA-20 29-01-2020

GRUPO : 5 : Caminos

EJE : 23 : Rep. Camino-2

pagina 2

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* * * DATOS PARA REPLANTEO DE PUNTOS * * *
=====

Compensaciones:

Z : Esfericidad y Refraccion :NO
D : Reduccion al nivel del mar:NO
D : Paso de la cuerda al arco :NO
D : Paso al plano de la U.T.M.:SI K' POR ESTACION

BR : FAR1

X: 370591.742 Y: 4067063.549 Z: 120.717 PK: 42.046 Dis=-118.717 K : 0.999806294

Distancia: 240.698 Azimut: 9.863372

BO : HIT01

X: 370628.878 Y: 4067301.318 Z: 147.174 PK: 119.663 Dis=-116.261 K : 0.999806176

TIPO	PK Estac.	Azimut	Dis.Eje	X	Y	Ang.Azimu.	Dis.Redu	Angulo 1-2	Ang.Az (BO)	Dis.R(BO)	Ang1-2 (BO)	COTA
CIRC.	40.000	360.163773	0.000	370691.130	4067128.565	63.121019	118.788	53.257647	177.981343	183.663	368.117971	125.236
CIRC.	50.000	369.258341	0.000	370685.871	4067137.060	57.790620	119.456	47.927247	178.738456	173.898	368.875083	127.236
CIRC.	60.000	378.352909	0.000	370681.875	4067146.218	52.748213	122.327	42.884840	179.038857	163.937	369.175485	129.236
CIRC.	70.000	387.447477	0.000	370679.223	4067155.851	48.293436	127.196	38.430064	178.788378	153.963	368.925006	131.236
CIRC.	80.000	396.542046	0.000	370677.970	4067165.764	44.612242	133.754	34.748869	177.879649	144.198	368.016277	133.236
CIRC.	90.000	5.636614	0.000	370678.141	4067175.754	41.774253	141.642	31.910881	176.198018	134.909	366.334645	135.236
CIRC.	100.000	14.731182	0.000	370679.733	4067185.617	39.761373	150.505	29.898000	173.636323	126.408	363.772950	137.236
CIRC.	107.281	21.352545	0.000	370681.768	4067192.604	38.776219	157.383	28.912846	171.174280	120.920	361.310908	138.692
CIRC.	110.000	30.970564	0.000	370682.853	4067195.095	38.563440	160.048	28.700068	170.070593	119.173	360.207221	139.236

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PROYECTO : 591 P_Trazado Enlace AP-46 con MA-20 29-01-2020

GRUPO : 5 : Caminos

EJE : 23 : Rep. Camino-2

pagina 3

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* * * DATOS PARA REPLANTEO DE PUNTOS * * *

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Compensaciones: Z : Esfericidad y Refraccion :NO

D : Reduccion al nivel del mar:NO

D : Paso de la cuerda al arco :NO

D : Paso al plano de la U.T.M.:SI K' POR ESTACION

BR : HIT01 X: 370628.878 Y: 4067301.318 Z: 147.174 PK: 119.663 Dis=-116.261 K : 0.999806176

Distancia: 145.976 Azimut: 21.331343

BO : VIA2 X: 370676.871 Y: 4067439.149 Z: 123.586 PK: 129.562 Dis=-235.411 K : 0.999806023

TIPO	PK Estac.	Azimut	Dis.Eje	X	Y	Ang.Azimu.	Dis.Redu	Angulo 1-2	Ang.Az (BO)	Dis.R(BO)	Ang1-2 (BO)	COTA
CIRC.	110.000	30.970564	0.000	370682.853	4067195.095	170.070593	119.173	148.739250	198.439903	244.175	377.108560	139.236
CIRC.	120.000	66.338330	0.000	370689.684	4067202.222	164.962647	116.287	143.631305	196.560422	237.320	375.229079	140.997
RECTA	127.838	94.060052	0.000	370697.088	4067204.601	160.896104	118.373	139.564761	194.526246	235.463	373.194904	142.012
RECTA	130.000	94.060052	0.000	370699.240	4067204.803	159.896629	119.463	138.565287	193.941623	235.457	372.610280	142.235
RECTA	140.000	94.060052	0.000	370709.197	4067205.735	155.510812	124.873	134.179469	191.239178	235.688	369.907836	142.951
RECTA	144.653	94.060052	0.000	370713.829	4067206.168	153.601143	127.580	132.269800	189.984603	235.940	368.653261	143.109

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PROYECTO : 591 P_Trazado Enlace AP-46 con MA-20 29-01-2020

GRUPO : 5 : Caminos

EJE : 24 : Rep. Camino 3

pagina 1

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* * * DATOS PARA REPLANTEO DE PUNTOS * * *												
=====												
BR : PS3 X: 370330.886 Y: 4067367.346 Z: 168.310 PK: 0.000 Dis= 13.881												
Distancia: 94.305 Azimut: 392.884224												
BO : PS2 X: 370320.367 Y: 4067461.063 Z: 167.915 PK: 3.748 Dis= -80.436												
TIPO	PK Estac.	Azimut	Dis.Eje	X	Y	Ang.Azimu.	Dis.Redu	Angulo 1-2	Ang.Az (BO)	Dis.R(BO)	Ang1-2 (BO)	COTA
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CIRC.	0.000	72.271199	0.000	370332.900	4067381.081	9.271056	13.881	16.386832	190.104514	80.959	397.220291	167.184

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PROYECTO : 591 P_Trazado Enlace AP-46 con MA-20 29-01-2020

GRUPO : 5 : Caminos

EJE : 24 : Rep. Camino 3

pagina 2

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* * * DATOS PARA REPLANTEO DE PUNTOS * * *												
=====												
BR : PS2												
X: 370320.367 Y: 4067461.063 Z: 167.915 PK: 3.748 Dis= -80.436												
Distancia: 25.372 Azimut: 28.360890												
BO : PS1												
X: 370331.300 Y: 4067483.959 Z: 171.169 PK: 5.833 Dis=-101.681												
TIPO	PK Estac.	Azimut	Dis.Eje	X	Y	Ang.Azimu.	Dis.Redu	Angulo 1-2	Ang.Az (BO)	Dis.R(BO)	Ang1-2 (BO)	COTA
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
CIRC.	0.000	72.271199	0.000	370332.900	4067381.081	190.104514	80.959	161.743624	199.009733	102.891	370.648842	167.184

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PROYECTO : 591 P_Trazado Enlace AP-46 con MA-20 29-01-2020

GRUPO : 5 : Caminos

EJE : 24 : Rep. Camino 3

pagina 3

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* * * DATOS PARA REPLANTEO DE PUNTOS * * *

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BR : PS1

X: 370331.300 Y: 4067483.959 Z: 171.169 PK: 5.833 Dis=-101.681

Distancia: 349.157 Azimut: 135.044302

BO : HITO1

X: 370628.878 Y: 4067301.318 Z: 147.174 PK: 187.990 Dis= 128.871

TIPO	PK Estac.	Azimut	Dis.Eje	X	Y	Ang.Azimu.	Dis.Redu	Angulo 1-2	Ang.Az (BO)	Dis.R(BO)	Ang1-2 (BO)	COTA
CIRC.	0.000	72.271199	0.000	370332.900	4067381.081	199.009733	102.891	63.965431	316.758057	306.537	381.713755	167.184
CIRC.	10.000	112.059934	0.000	370342.664	4067382.288	192.913729	102.304	57.869427	317.551393	297.447	382.507091	167.051
RECTA	15.991	135.898002	0.000	370348.203	4067380.097	189.729519	105.228	54.685218	317.420291	291.522	382.375989	166.869
RECTA	20.000	135.898002	0.000	370351.591	4067377.955	187.959708	107.929	52.915406	317.166404	287.683	382.122103	166.713
CIRC.	27.341	135.898002	0.000	370357.796	4067374.031	184.942874	113.076	49.898573	316.683477	280.665	381.639175	166.330
CIRC.	30.000	127.435229	0.000	370360.130	4067372.763	183.849545	114.872	48.805243	316.541651	278.082	381.497349	166.112
CIRC.	40.000	95.604240	0.000	370369.865	4067370.982	179.058264	119.377	44.013963	316.726748	268.218	381.682446	164.897
CIRC.	48.793	67.615112	0.000	370378.226	4067373.467	174.432220	120.044	39.387919	317.842499	260.829	382.798198	163.317
CIRC.	50.000	69.536043	0.000	370379.289	4067374.039	173.794307	119.939	38.750005	318.049067	259.967	383.004766	163.075
CIRC.	60.000	85.451537	0.000	370388.646	4067377.492	168.546509	120.929	33.502208	319.547853	252.020	384.503551	161.075
RECTA	68.611	99.156462	0.000	370397.178	4067378.529	164.445536	124.320	29.401234	320.477614	244.226	385.433312	159.353
RECTA	70.000	99.156462	0.000	370398.567	4067378.547	163.840935	125.046	28.796633	320.597258	242.915	385.552956	159.075
RECTA	80.000	99.156462	0.000	370408.566	4067378.679	159.694104	130.590	24.649802	321.498262	233.500	386.453961	157.075
RECTA	90.000	99.156462	0.000	370418.565	4067378.812	155.899629	136.642	20.855328	322.474762	224.136	387.430460	155.075
CIRC.	97.750	99.156462	0.000	370426.314	4067378.915	153.189099	141.640	18.144797	323.289399	216.918	388.245097	153.525
CIRC.	100.000	100.946898	0.000	370428.564	4067378.913	152.447641	143.161	17.403339	323.527407	214.818	388.483106	153.075
CIRC.	110.000	108.904646	0.000	370438.528	4067378.140	149.578979	150.650	14.534677	324.420228	205.268	389.375926	151.075
CIRC.	120.000	116.862393	0.000	370448.317	4067376.132	147.399446	159.122	12.355144	325.006903	195.446	389.962601	149.075



CIRC.	130.000	124.820140	0.000	370457.780	4067372.918	145.867708	168.307	10.823407	325.231190	185.475	390.186888	147.075
CIRC.	130.598	125.296350	0.000	370458.333	4067372.689	145.795274	168.874	10.750972	325.231750	184.877	390.187448	146.956
CIRC.	140.000	117.814812	0.000	370467.195	4067369.568	144.543744	177.631	9.499442	325.428463	175.497	390.384162	145.075
RECTA	147.258	112.038835	0.000	370474.253	4067367.882	143.418339	184.145	8.374037	325.879049	168.344	390.834747	143.699
RECTA	150.000	112.038835	0.000	370476.945	4067367.367	142.975640	186.565	7.931338	326.106296	165.668	391.061994	143.245
RECTA	160.000	112.038835	0.000	370486.767	4067365.487	141.454312	195.463	6.410010	327.001185	155.927	391.956884	141.906
RECTA	170.000	112.038835	0.000	370496.589	4067363.607	140.066179	204.463	5.021877	328.015109	146.220	392.970807	140.898
RECTA	180.000	112.038835	0.000	370506.411	4067361.727	138.795644	213.552	3.751342	329.172875	136.556	394.128573	140.129
RECTA	187.990	112.038835	0.000	370514.258	4067360.225	137.855931	220.870	2.811630	330.222448	128.871	395.178146	139.830

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PROYECTO : 591 P_Trazado Enlace AP-46 con MA-20 29-01-2020

GRUPO : 5 : Caminos

EJE : 25 : Rep. Camino1

pagina 1

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* * * DATOS PARA REPLANTEO DE PUNTOS * * *

=====

Compensaciones: Z : Esfericidad y Refraccion :NO

D :Reduccion al nivel del mar:NO

D : Paso de la cuerda al arco :NO

D : Paso al plano de la U.T.M.:SI K' POR ESTACION

BR : HITO1 X: 370628.878 Y: 4067301.318 Z: 147.174 PK: 32.427 Dis= -75.021 K : 0.999806176

BO : VIA2 X: 370676.871 Y: 4067439.149 Z: 123.586 PK: 104.168 Dis= 29.642 K : 0.999806023

Distancia: 145.976 Azimut: 21.331343

TIPO	PK Estac.	Azimut	Dis.Eje	X	Y	Ang.Azimu.	Dis.Redu	Angulo 1-2	Ang.Az (BO)	Dis.R(BO)	Ang1-2 (BO)	COTA
RECTA	0.000	307.831195	0.000	370714.546	4067345.310	69.798181	96.322	48.466839	175.694906	101.139	354.363563	115.693
RECTA	10.000	307.831195	0.000	370704.621	4067346.537	65.735933	88.232	44.404591	181.466337	96.698	360.134994	114.748
RECTA	20.000	307.831195	0.000	370694.697	4067347.764	60.878224	80.572	39.546881	187.735964	93.125	366.404621	113.840
CIRC.	22.010	307.831195	0.000	370692.702	4067348.011	59.789966	79.096	38.458624	189.051131	92.521	367.719789	113.840
CIRC.	30.000	341.741159	0.000	370685.397	4067351.008	54.087525	75.271	32.756182	193.861064	88.569	372.529721	113.840
CIRC.	40.000	384.182478	0.000	370680.003	4067359.209	46.053784	77.249	24.722441	197.507162	80.017	376.175820	115.039
RECTA	43.315	398.251250	0.000	370679.548	4067362.486	44.041679	79.444	22.710336	197.777993	76.725	376.446650	115.667
RECTA	50.000	398.251250	0.000	370679.364	4067369.168	40.724757	84.589	19.393414	197.732812	70.039	376.401470	117.004
CIRC.	59.770	398.251250	0.000	370679.096	4067378.935	36.558532	92.464	15.227189	197.648748	60.267	376.317405	118.958
CIRC.	60.000	397.666635	0.000	370679.089	4067379.165	36.468625	92.653	15.137282	197.647561	60.037	376.316219	119.004
CIRC.	70.000	372.201844	0.000	370676.760	4067388.821	31.874929	99.766	10.543586	200.140843	50.338	378.809500	120.956
RECTA	73.207	364.036068	0.000	370675.221	4067391.632	30.182030	101.530	8.850687	202.209572	47.555	380.878229	121.538
RECTA	80.000	364.036068	0.000	370671.584	4067397.370	26.634150	105.139	5.302808	208.013114	42.120	386.681771	122.695
RECTA	90.000	364.036068	0.000	370666.231	4067405.816	21.854884	110.995	0.523541	219.670705	34.996	398.339362	124.348
CIRC.	95.040	364.036068	0.000	370663.533	4067410.073	19.638213	114.165	398.306870	227.381128	31.995	6.049785	125.181
CIRC.	100.000	351.405594	0.000	370660.481	4067413.973	17.411309	117.026	396.079966	236.739112	30.047	15.407770	126.001
CIRC.	102.138	345.961917	0.000	370658.938	4067415.452	16.394857	118.049	395.063514	241.240690	29.723	19.909348	126.354

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PROYECTO : 591 P_Trazado Enlace AP-46 con MA-20 29-01-2020

GRUPO : 5 : Caminos

EJE : 25 : Rep. Camino1

pagina 2

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* * * DATOS PARA REPLANTEO DE PUNTOS * * *

=====

Compensaciones: Z : Esfericidad y Refraccion :NO

D :Reduccion al nivel del mar:NO

D : Paso de la cuerda al arco :NO

D : Paso al plano de la U.T.M.:SI K' POR ESTACION

BR : VIA2 X: 370676.871 Y: 4067439.149 Z: 123.586 PK: 104.168 Dis= 29.642 K : 0.999806023

BO : PS1 X: 370331.300 Y: 4067483.959 Z: 171.169 PK: Distancia: 348.532 Azimut: 308.209207

348.064 Dis=-113.001 K : 0.999807125

TIPO	PK Estac.	Azimut	Dis.Eje	X	Y	Ang.Azimu.	Dis.Redu	Angulo 1-2	Ang.Az (BO)	Dis.R(BO)	Ang1-2 (BO)	COTA
CIRC.	100.000	351.405594	0.000	370660.481	4067413.973	236.739112	30.047	328.529905	113.336449	336.603	5.127242	126.001
CIRC.	102.138	345.961917	0.000	370658.938	4067415.452	241.240690	29.723	333.031483	113.122189	334.789	4.912981	126.354
CIRC.	110.000	344.531838	0.000	370652.980	4067420.581	257.940549	30.264	349.731341	112.384108	327.927	4.174900	127.654
CIRC.	120.000	342.712924	0.000	370645.237	4067426.910	276.497827	33.925	368.288619	111.443908	319.140	3.234701	129.146
CIRC.	130.000	340.894010	0.000	370637.317	4067433.014	290.203874	40.034	381.994667	110.501961	310.289	2.292754	130.304
CIRC.	140.000	339.075097	0.000	370629.226	4067438.890	299.653626	47.655	391.444419	109.558099	301.374	1.348891	131.129
CIRC.	150.000	337.256183	0.000	370620.970	4067444.532	306.111405	56.170	397.902197	108.612131	292.397	0.402924	131.621
CIRC.	150.873	337.097448	0.000	370620.242	4067445.013	306.568927	56.943	398.359719	108.529471	291.611	0.320263	131.652
CIRC.	160.000	351.624010	0.000	370613.258	4067450.858	311.588299	64.695	3.379091	107.439661	283.949	399.230453	131.975
CIRC.	170.000	367.539505	0.000	370607.342	4067458.889	317.610482	72.291	9.401275	105.766042	277.232	397.556834	132.329
CIRC.	171.045	369.203075	0.000	370606.844	4067459.807	318.262596	73.025	10.053389	105.565796	276.654	397.356589	132.367
CIRC.	180.000	357.801536	0.000	370601.993	4067467.320	322.908711	80.017	14.699503	103.908189	271.256	395.698981	132.826
CIRC.	190.000	345.069140	0.000	370595.095	4067474.537	326.000176	89.122	17.790969	102.272867	264.014	394.063660	133.654
CIRC.	200.000	332.336745	0.000	370586.900	4067480.239	327.273909	98.929	19.064702	100.926404	255.677	392.717197	134.816
CIRC.	210.000	319.604349	0.000	370577.736	4067484.200	327.154423	108.912	18.945215	99.937772	246.484	391.728565	136.311
CIRC.	220.000	306.871954	0.000	370567.968	4067486.261	325.992797	118.680	17.783589	99.380815	236.725	391.171608	138.139
RECTA	223.492	302.425923	0.000	370564.486	4067486.516	325.393181	121.983	17.183974	99.302037	233.245	391.092830	138.851



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PROYECTO : 591 P_Trazado Enlace AP-46 con MA-20 29-01-2020

GRUPO : 5 : Caminos

EJE : 25 : Rep. Camino1

pagina 3

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* * * DATOS PARA REPLANTEO DE PUNTOS * * *												
=====												
Compensaciones: Z : Esfericidad y Refraccion :NO												
D :Reduccion al nivel del mar:NO												
D : Paso de la cuerda al arco :NO												
D : Paso al plano de la U.T.M.:SI K' POR ESTACION												
BR : VIA2 X: 370676.871 Y: 4067439.149 Z: 123.586 PK: 104.168 Dis= 29.642 K : 0.999806023												
Distancia: 348.532 Azimut: 308.209207												
BO : PS1 X: 370331.300 Y: 4067483.959 Z: 171.169 PK: 348.064 Dis=-113.001 K : 0.999807125												
TIPO	PK Estac.	Azimut	Dis.Eje	X	Y	Ang.Azimu.	Dis.Redu	Angulo 1-2	Ang.Az (BO)	Dis.R(BO)	Ang1-2 (BO)	COTA
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
RECTA	230.000	302.425923	0.000	370557.983	4067486.764	324.251141	128.094	16.041933	99.212393	226.744	391.003185	140.185
RECTA	240.000	302.425923	0.000	370547.990	4067487.145	322.694923	137.555	14.485716	99.064171	216.755	390.854963	142.235
RECTA	250.000	302.425923	0.000	370537.997	4067487.526	321.339695	147.087	13.130487	98.901629	206.768	390.692421	144.285
RECTA	260.000	302.425923	0.000	370528.004	4067487.907	320.149902	156.678	11.940695	98.722589	196.782	390.513382	146.335
RECTA	270.000	302.425923	0.000	370518.012	4067488.287	319.097694	166.318	10.888487	98.524409	186.798	390.315201	148.385
RECTA	280.000	302.425923	0.000	370508.019	4067488.668	318.160997	175.998	9.951790	98.303850	176.816	390.094642	150.435
RECTA	290.000	302.425923	0.000	370498.026	4067489.049	317.322126	185.712	9.112919	98.056901	166.836	389.847693	152.485
RECTA	300.000	302.425923	0.000	370488.033	4067489.430	316.566768	195.455	8.357560	97.778533	156.859	389.569326	154.535
CIRC.	303.572	302.425923	0.000	370484.464	4067489.566	316.314925	198.941	8.105718	97.670329	153.297	389.461122	155.267
CIRC.	310.000	307.541436	0.000	370478.057	4067490.069	315.961967	205.271	7.752759	97.351052	146.913	389.141844	156.585
CIRC.	320.000	315.499183	0.000	370468.227	4067491.868	315.755872	215.243	7.546665	96.327102	137.182	388.117894	158.635
CIRC.	330.000	323.456930	0.000	370458.698	4067494.878	315.920970	225.222	7.711763	94.557090	127.890	386.347883	160.685
CIRC.	340.000	331.414677	0.000	370449.618	4067499.052	316.407951	235.061	8.198744	91.922466	119.300	383.713259	162.735
RECTA	343.890	334.510452	0.000	370446.238	4067500.978	316.674612	238.823	8.465404	90.641635	116.214	382.432427	163.510
RECTA	348.064	334.510452	0.000	370442.663	4067503.131	316.977219	242.837	8.768011	89.146456	113.023	380.937248	164.269

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PROYECTO : 591 P_Trazado Enlace AP-46 con MA-20 29-01-2020

GRUPO : 5 : Caminos

EJE : 27 : Reo. Camino 4

pagina 1

=====
* * * DATOS PARA REPLANTEO DE PUNTOS * * *
=====

Compensaciones:

Z : Esfericidad y Refraccion :NO
D : Reduccion al nivel del mar:NO
D : Paso de la cuerda al arco :NO
D : Paso al plano de la U.T.M.:SI K' POR ESTACION

BR : PS4

X: 369668.339 Y: 4067483.212 Z: 196.762 PK: 39.861 Dis= 156.739 K : 0.999809249

Distancia: 247.873 Azimut: 108.909203

BO : FAR2

X: 369913.742 Y: 4067448.643 Z: 158.111 PK: 85.063 Dis= 123.620 K : 0.999808461

TIPO	PK Estac.	Azimut	Dis.Eje	X	Y	Ang.Azimu.	Dis.Redu	Angulo 1-2	Ang.Az (BO)	Dis.R(BO)	Ang1-2 (BO)	COTA
RECTA	0.000	156.460457	0.000	369788.065	4067596.792	51.676662	165.061	342.767458	355.212802	194.312	46.303599	219.422
RECTA	10.000	156.460457	0.000	369794.383	4067589.041	55.536234	164.612	346.627031	355.145102	184.312	46.235898	220.773
CIRC.	13.257	156.460457	0.000	369796.441	4067586.516	56.796143	164.597	347.886940	355.121437	181.056	46.212234	221.115
CIRC.	20.000	177.924129	0.000	369799.749	4067580.677	59.373473	163.640	350.464270	354.659802	174.468	45.750599	221.670
RECTA	23.774	189.936997	0.000	369800.690	4067577.028	60.743701	162.260	351.834498	354.037475	171.099	45.128271	221.891
RECTA	30.000	189.936997	0.000	369801.670	4067570.879	62.971470	159.601	354.062267	352.759912	165.869	43.850708	222.113
CIRC.	34.396	189.936997	0.000	369802.362	4067566.538	64.588386	157.844	355.679183	351.808446	162.219	42.899243	222.218
CIRC.	40.000	166.154276	0.000	369804.245	4067561.295	66.801256	156.770	357.892053	350.904091	157.129	41.994888	222.352
CIRC.	50.000	123.712957	0.000	369811.716	4067554.928	70.473572	160.343	361.564368	351.301296	147.357	42.392093	222.592
RECTA	52.263	114.106702	0.000	369813.878	4067554.266	71.086471	161.989	362.177268	351.783739	145.386	42.874535	222.646
RECTA	60.000	114.106702	0.000	369821.426	4067552.566	72.919782	168.096	364.010579	353.760760	139.031	44.851556	222.904
RECTA	70.000	114.106702	0.000	369831.181	4067550.368	75.098698	176.180	366.189495	356.596479	131.037	47.687275	223.530
CIRC.	72.990	114.106702	0.000	369834.098	4067549.711	75.711709	178.635	366.802506	357.512229	128.702	48.603026	223.782
CIRC.	80.000	84.356623	0.000	369841.044	4067549.794	76.574430	185.130	367.665227	360.327715	124.590	51.418512	224.490
CIRC.	90.000	41.915304	0.000	369849.259	4067555.166	75.901948	194.741	366.992745	365.346481	124.544	56.437278	225.782
CIRC.	100.000	399.473986	0.000	369852.394	4067564.468	73.533068	201.232	364.623865	368.990746	131.093	60.081543	227.409
CIRC.	110.000	357.032668	0.000	369849.106	4067573.716	70.449228	202.196	361.540025	369.634276	140.815	60.725073	229.344
CIRC.	116.948	327.542388	0.000	369843.684	4067577.962	68.460971	199.345	359.551768	368.392765	147.105	59.483562	230.734
CIRC.	120.000	335.313011	0.000	369840.998	4067579.407	67.640236	197.686	358.731033	367.681015	149.664	58.771812	231.344
CIRC.	130.000	360.777802	0.000	369833.762	4067586.212	64.546346	194.906	355.637143	366.474552	159.159	57.565348	233.243
RECTA	136.816	378.135348	0.000	369830.625	4067592.240	62.339826	195.547	353.430622	366.596637	165.949	57.687434	234.320
RECTA	140.000	378.135348	0.000	369829.553	4067595.238	61.338976	196.353	352.429773	366.812758	169.082	57.903555	234.759
RECTA	150.000	378.135348	0.000	369826.186	4067604.654	58.251817	199.196	349.342614	367.442335	178.935	58.533132	235.874
RECTA	155.078	378.135348	0.000	369824.476	4067609.435	56.719564	200.814	347.810360	367.736177	183.944	58.826973	236.289

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PROYECTO : 591 P_Trazado Enlace AP-46 con MA-20 29-01-2020

GRUPO : 5 : Caminos

EJE : 36 : Rep-camino 5

pagina 1

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* * * DATOS PARA REPLANTEO DE PUNTOS * * *
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Compensaciones: Z : Esfericidad y Refraccion :NO
D : Reduccion al nivel del mar:NO
D : Paso de la cuerda al arco :NO
D : Paso al plano de la U.T.M.:SI K' POR ESTACION

BR : CAM3 X: 370715.115 Y: 4067108.237 Z: 121.082 PK: 0.000 Dis= 96.621 K : 0.999805901

BO : HIT01 X: 370628.878 Y: 4067301.318 Z: 147.174 PK: 47.055 Dis= -80.116 K : 0.999806176

TIPO	PK Estac.	Azimut	Dis.Eje	X	Y	Ang.Azimu.	Dis.Redu	Angulo 1-2	Ang.Az (BO)	Dis.R(BO)	Ang1-2 (BO)	COTA
RECTA	0.000	4.748307	0.000	370687.719	4067200.892	381.698350	96.639	8.439769	166.258998	116.417	393.000417	140.625
RECTA	10.000	4.748307	0.000	370688.465	4067210.865	383.825437	106.052	10.566855	162.916592	108.337	389.658011	141.384
RECTA	20.000	4.748307	0.000	370689.210	4067220.837	385.604099	115.564	12.345517	159.048209	100.603	385.789628	142.391
RECTA	30.000	4.748307	0.000	370689.955	4067230.809	387.111257	125.152	13.852676	154.555498	93.302	381.296917	143.571
CIRC.	30.263	4.748307	0.000	370689.974	4067231.072	387.147847	125.405	13.889265	154.427718	93.116	381.169137	143.598
CIRC.	40.000	392.351370	0.000	370689.753	4067240.790	387.964782	134.984	14.706201	149.817769	85.862	376.559187	144.279
CIRC.	47.055	383.368907	0.000	370688.417	4067247.712	387.959588	142.034	14.701007	146.665012	80.131	373.406431	144.444



ACTUACIONES DE MEJORA EN EL ENLACE AP-46 CON MA-3404

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PROYECTO : Proyecto de Trazado. Enlace AP-46 con MA-3404

GRUPO : 0 : Vial de Acceso

EJE : 1 : Vial de Acceso

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REPLANTEO POR BISECCION

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PK	AZ1	d1	X	Y	AZ2	d2

*BASE 1: BR-6			370028.268	4084937.222	318.8662	59.426
*BASE 2: BR-5			369971.443	4084954.573		
0.000	124.1879	238.965	370250.149	4084848.614	123.1287	298.226
4.584	123.4774	235.221	370247.632	4084852.446	122.5478	294.522
20.000	120.4295	224.505	370241.271	4084866.421	120.1023	283.917
40.000	115.0562	217.653	370239.822	4084886.235	115.8731	276.996
48.169	112.6686	217.579	370241.513	4084894.218	113.9972	276.785
*BASE 1: BR-5			369971.443	4084954.573	51.4691	172.346
*BASE 2: BR-7			370096.066	4085073.573		
40.000	115.8731	276.996	370239.822	4084886.235	158.3320	236.184
48.169	113.9972	276.785	370241.513	4084894.218	156.6222	230.962
60.000	111.2920	277.869	370244.900	4084905.553	153.8500	224.503
80.000	106.7825	280.829	370250.627	4084924.716	148.8034	214.628
100.000	102.3885	285.166	370256.353	4084943.879	143.3084	206.225
120.000	98.1456	290.816	370262.080	4084963.041	137.3951	199.482
140.000	94.0817	297.706	370267.806	4084982.204	131.1265	194.570
160.000	90.2165	305.751	370273.533	4085001.367	124.6001	191.631
174.740	87.5025	312.369	370277.753	4085015.490	119.6984	190.782
*BASE 1: BR-7			370096.066	4085073.573	36.8100	93.454
*BASE 2: BR-4			370147.131	4085151.820		
160.000	124.6001	191.631	370273.533	4085001.367	155.5167	196.541
174.740	119.6984	190.782	370277.753	4085015.490	151.3611	188.843
180.000	117.9427	190.759	370279.263	4085020.528	149.7970	186.305
200.000	111.3148	192.387	370285.386	4085039.566	143.4160	178.123
220.000	105.0068	197.571	370292.988	4085058.054	136.3728	173.430
228.073	102.6515	200.867	370296.720	4085065.211	133.4110	172.886
*BASE 1: BR-4			370147.131	4085151.820	63.1218	102.226
*BASE 2: BR-3			370232.663	4085207.770		
220.000	136.3728	173.430	370292.988	4085058.054	175.6156	161.444
228.073	133.4110	172.886	370296.720	4085065.211	173.1152	156.320
240.000	129.0415	173.742	370303.076	4085075.297	168.8977	150.053
258.965	122.4793	179.102	370315.151	4085089.896	161.1287	143.897
260.000	122.1443	179.528	370315.874	4085090.636	160.6780	143.710
*BASE 1: BR-3			370232.663	4085207.770	69.4074	189.458
*BASE 2: BR-2			370400.631	4085295.333		

260.000	160.6780	143.710	370315.874	4085090.636	224.9916	221.593
280.000	151.8000	143.038	370330.888	4085103.828	222.2343	203.849
300.000	143.2003	147.112	370347.162	4085115.446	218.3932	187.702
312.298	138.2665	151.316	370357.432	4085122.211	215.5675	178.465
320.000	135.3296	154.417	370363.881	4085126.422	213.6385	172.896
340.000	128.2762	163.894	370380.626	4085137.358	208.0191	159.267
344.781	126.7149	166.436	370384.629	4085139.972	206.5341	156.213
360.000	121.6208	173.179	370395.919	4085150.091	202.0647	145.347
380.000	114.5459	177.207	370405.232	4085167.640	197.7074	127.801
395.454	109.0082	176.412	370407.278	4085182.896	196.2409	112.656
397.635	108.2299	176.072	370407.232	4085185.076	196.1933	110.476

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PROYECTO : Proyecto de Trazado. Enlace AP-46 con MA-3404
GRUPO : 1 : Glorietta 1 (MA-3404)
EJE : 6 : Inter. MA-3404 1

REPLANTEO POR BISECCION

PK	AZ1	d1	X	Y	AZ2	d2
*BASE 1: BR-6			370028.268	4084937.222	29.3756	152.306
*BASE 2: BR-7			370096.066	4085073.573		
0.000	139.9960	255.099	370234.617	4084787.320	171.3025	318.082
7.907	138.1112	252.640	370236.933	4084794.880	170.2060	312.331
15.823	136.2184	250.030	370238.874	4084802.552	169.1268	306.403
20.000	135.2210	248.547	370239.697	4084806.647	168.5730	303.174
40.000	130.2883	242.322	370243.637	4084826.255	165.7513	288.054
54.010	126.6945	238.864	370246.397	4084839.990	163.5946	277.831

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PROYECTO : Proyecto de Trazado. Enlace AP-46 con MA-3404

GRUPO : 1 : Glorieta 1 (MA-3404)

EJE : 7 : Inter. MA-3404 2

REPLANTEO POR BISECCION						
PK	AZ1	d1	X	Y	AZ2	d2
*BASE 1: BR-6			370028.268	4084937.222	29.3756	152.306
*BASE 2: BR-7			370096.066	4085073.573		
0.000	113.9687	278.995	370300.521	4084876.507	148.8286	284.021
8.396	115.2244	272.599	370293.058	4084872.663	150.6267	281.427
20.000	117.1225	264.191	370282.912	4084867.032	153.1845	278.568
40.000	120.6866	250.300	370265.424	4084857.327	157.7031	274.724
45.850	121.8039	246.396	370260.309	4084854.489	159.0465	273.866

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PROYECTO : Proyecto de Trazado. Enlace AP-46 con MA-3404

GRUPO : 2 : Glorieta 2

EJE : 3 : Glorieta 2

REPLANTEO POR BISECCION						
PK	AZ1	d1	X	Y	AZ2	d2
*BASE 1: BR-1			370449.328	4085332.005	258.9088	60.973
*BASE 2: BR-2			370400.631	4085295.333		
0.000	209.5028	148.610	370427.232	4085185.076	184.9288	113.442
10.000	211.2584	139.543	370424.783	4085194.665	185.0095	103.545
20.000	215.0260	133.835	370418.038	4085201.906	188.2734	95.054
30.000	219.7382	133.362	370408.646	4085205.026	194.3643	90.680
*BASE 1: BR-2			370400.631	4085295.333	269.4074	189.458
*BASE 2: BR-3			370232.663	4085207.770		
30.000	194.3643	90.680	370408.646	4085205.026	100.9926	176.039
40.000	201.1907	92.105	370398.909	4085203.262	101.7258	166.339
50.000	206.0843	98.757	370391.209	4085197.046	104.2997	158.939
60.000	207.7824	108.263	370387.432	4085187.899	108.1294	156.069
*BASE 1: BR-3			370232.663	4085207.770	263.1218	102.226
*BASE 2: BR-4			370147.131	4085151.820		
60.000	108.1294	156.069	370387.432	4085187.899	90.5127	243.041
70.000	111.9927	158.677	370388.503	4085178.060	93.1061	242.840
80.000	114.6485	165.899	370394.159	4085169.940	95.3386	247.739
90.000	115.4749	175.546	370403.016	4085165.526	96.5934	256.301
100.000	114.5317	185.077	370412.905	4085165.898	96.6311	266.198
110.000	112.2602	192.334	370421.405	4085170.965	95.5634	274.994
120.000	109.2267	195.863	370426.435	4085179.488	93.7142	280.725
125.664	107.3919	195.925	370427.232	4085185.076	92.4767	282.122

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PROYECTO : Proyecto de Trazado. Enlace AP-46 con MA-3404

GRUPO : 3 : Ramales

EJE : 4 : Ramal-2

REPLANTEO POR BISECCION						
PK	AZ1	d1	X	Y	AZ2	d2
*BASE 1: BR-2			370400.631	4085295.333	58.9088	60.973
*BASE 2: BR-1			370449.328	4085332.005		
0.000	188.5452	106.150	370419.624	4085190.917	213.2101	144.209
0.000	188.5452	106.150	370419.624	4085190.917	213.2101	144.209
20.000	188.1792	86.425	370416.583	4085210.410	216.7465	125.951
27.670	185.6441	79.516	370418.407	4085217.845	216.8393	118.296
40.000	180.7932	68.585	370421.007	4085229.858	217.2184	106.021
60.000	176.8025	49.082	370418.119	4085249.483	223.0177	88.244
68.197	178.0104	40.938	370414.489	4085256.820	227.6241	82.880
80.000	183.2075	29.479	370408.316	4085266.879	235.7781	76.979
100.000	215.2025	11.744	370397.854	4085283.924	252.1694	70.450
112.043	292.0116	9.150	370391.554	4085294.188	263.1027	69.064
*BASE 1: BR-1			370449.328	4085332.005	266.8558	249.804
*BASE 2: BR-3			370232.663	4085207.770		
100.000	252.1694	70.450	370397.854	4085283.924	72.4998	181.935
112.043	263.1027	69.064	370391.554	4085294.188	68.2878	180.906
120.000	270.2291	70.462	370386.443	4085300.248	65.5319	179.480
140.000	280.8637	85.110	370368.050	4085306.810	59.7926	167.778
160.000	279.5408	104.544	370350.156	4085298.989	57.9721	148.775
164.893	278.0196	108.715	370347.049	4085295.218	58.4469	144.011
180.000	273.5687	121.508	370338.164	4085283.003	60.5635	129.603
200.000	269.5876	139.771	370325.229	4085267.757	63.3941	110.325
220.000	267.1867	158.962	370311.044	4085253.666	66.2766	90.848
232.710	266.2626	171.445	370301.428	4085245.358	68.1533	78.383
240.000	265.8601	178.652	370295.784	4085240.743	69.3536	71.229
260.000	264.9062	198.456	370280.302	4085228.083	74.3413	51.799
280.000	264.1255	218.297	370264.819	4085215.422	85.1275	33.061
300.000	263.4750	238.164	370249.337	4085202.761	118.5776	17.413
*BASE 1: BR-3			370232.663	4085207.770	263.1218	102.226
*BASE 2: BR-4			370147.131	4085151.820		
300.000	118.5776	17.413	370249.337	4085202.761	70.5639	114.219
320.000	195.7135	17.713	370233.855	4085190.101	73.5365	94.815
340.000	228.0321	33.535	370218.372	4085177.440	78.0225	75.722
360.000	238.5607	52.304	370202.890	4085164.779	85.4621	57.256
380.000	243.4645	71.744	370187.407	4085152.118	99.5283	40.285
384.826	244.2729	76.478	370183.671	4085149.064	104.7932	36.651

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PROYECTO : Proyecto de Trazado. Enlace AP-46 con MA-3404

GRUPO : 3 : Ramales

EJE : 5 : Ramal-1

REPLANTEO POR BISECCION						
PK	AZ1	d1	X	Y	AZ2	d2
*BASE 1: BR-4			370147.131	4085151.820	63.1218	102.226
*BASE 2: BR-3			370232.663	4085207.770		
0.000	153.3067	83.614	370203.095	4085089.718	215.6239	121.722
20.000	138.8142	88.094	370219.339	4085101.386	207.9321	107.236
40.000	126.2966	96.593	370235.583	4085113.053	198.0381	94.780
60.000	116.1243	108.167	370251.827	4085124.721	185.5624	85.248
79.815	108.1453	121.809	370267.921	4085136.280	170.8310	79.727
80.000	108.0796	121.944	370268.071	4085136.388	170.6854	79.697
*BASE 1: BR-3			370232.663	4085207.770	69.4074	189.458
*BASE 2: BR-2			370400.631	4085295.333		
80.000	170.6854	79.697	370268.071	4085136.388	244.2534	207.008
100.000	154.6456	79.489	370284.612	4085147.626	242.3871	187.860
120.000	139.7604	85.129	370301.708	4085158.002	239.7401	169.283
140.000	127.7036	95.574	370319.313	4085167.487	236.0654	151.545
160.000	118.7201	109.436	370337.381	4085176.058	231.0403	135.034
180.000	112.2874	125.557	370355.865	4085183.691	224.2774	120.306
180.626	112.1200	126.089	370356.450	4085183.915	224.0333	119.882
197.675	109.1758	141.819	370372.985	4085187.404	215.9638	111.435
200.000	109.1734	144.143	370375.285	4085187.075	214.6412	111.207
*BASE 1: BR-2			370400.631	4085295.333	58.9088	60.973
*BASE 2: BR-1			370449.328	4085332.005		
200.000	214.6412	111.207	370375.285	4085187.075	230.0689	162.780
218.304	206.0553	119.622	370389.272	4085176.275	223.4318	166.941

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PROYECTO : Proyecto de Trazado. Enlace AP-46 con MA-3404

GRUPO : 3 : Ramales

EJE : 13 : Ramal-3

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REPLANTEO POR BISECCION

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PK	AZ1	d1	X	Y	AZ2	d2
*BASE 1: BR-7			370096.066	4085073.573	36.8100	93.454
*BASE 2: BR-4			370147.131	4085151.820		
0.000	119.5941	99.493	370190.865	4085043.438	175.5833	116.896
20.000	107.3424	103.824	370199.180	4085061.627	166.6791	104.154
40.000	96.4364	111.625	370207.495	4085079.817	155.5834	93.977
53.415	90.0463	118.474	370213.072	4085092.018	146.8943	89.037
60.000	87.4278	122.786	370216.443	4085097.659	142.2270	87.980
68.990	85.0479	130.394	370222.856	4085103.912	135.9113	89.624
*BASE 1: BR-4			370147.131	4085151.820	63.1218	102.226
*BASE 2: BR-3			370232.663	4085207.770		
60.000	142.2270	87.980	370216.443	4085097.659	209.3111	111.320
68.990	135.9113	89.624	370222.856	4085103.912	205.9939	104.341
68.990	135.9113	89.624	370222.856	4085103.912	205.9939	104.341

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PROYECTO : Proyecto de Trazado. Enlace AP-46 con MA-3404

GRUPO : 4 : Vía de servicio

EJE : 8 : Camino de Servicio (COEX)

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REPLANTEO POR BISECCION

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PK	AZ1	d1	X	Y	AZ2	d2
*BASE 1: BR-7			370096.066	4085073.573	229.3756	152.306
*BASE 2: BR-6			370028.268	4084937.222		
0.000	249.5054	122.599	370010.068	4084986.228	377.3623	52.287
10.000	249.9999	132.552	370002.356	4084979.863	365.2373	49.906
*BASE 1: BR-6			370028.268	4084937.222	318.8662	59.426
*BASE 2: BR-5			369971.443	4084954.573		
10.000	365.2373	49.906	370002.356	4084979.863	56.3484	39.947
20.000	352.4130	49.471	369994.644	4084973.497	56.4412	29.946
30.000	339.8754	51.032	369986.931	4084967.131	56.6270	19.944
40.000	328.4903	54.417	369979.219	4084960.766	57.1866	9.943
50.000	318.7086	59.315	369971.507	4084954.400	177.4238	0.185
57.110	312.7659	63.530	369966.023	4084949.874	254.5243	7.175
60.000	310.5789	65.387	369963.794	4084948.036	254.9789	10.064
70.000	303.9380	72.359	369956.062	4084941.694	255.6233	20.065
80.000	298.5369	80.000	369948.304	4084935.384	255.9237	30.066
90.000	294.1275	88.138	369940.521	4084929.105	256.1376	40.067
100.000	290.5004	96.647	369932.713	4084922.857	256.3170	50.069
110.000	287.4899	105.436	369924.881	4084916.640	256.4791	60.070
120.000	284.9675	114.442	369917.023	4084910.454	256.6312	70.070
130.000	282.8351	123.616	369909.141	4084904.301	256.7771	80.071
140.000	281.0169	132.924	369901.234	4084898.178	256.9189	90.071
150.000	279.4547	142.339	369893.303	4084892.088	257.0578	100.071
160.000	278.1030	151.842	369885.348	4084886.029	257.1946	110.070
170.000	276.9262	161.416	369877.368	4084880.002	257.3298	120.069
180.000	275.8958	171.049	369869.364	4084874.007	257.4639	130.067
190.000	274.9892	180.733	369861.337	4084868.044	257.5969	140.065
200.000	274.1879	190.458	369853.285	4084862.113	257.7292	150.063
203.375	273.9386	193.748	369850.563	4084860.119	257.7737	153.436
210.000	273.4649	200.211	369845.233	4084856.183	257.8453	160.060
220.000	272.6865	209.891	369837.437	4084849.924	257.7921	170.059
230.000	271.6882	219.302	369830.335	4084842.895	257.3785	179.989
240.000	270.3472	228.107	369824.501	4084834.793	256.4610	189.613
243.375	269.8030	230.852	369822.942	4084831.801	256.0201	192.717
250.000	268.5978	235.782	369820.633	4084825.599	254.9587	198.477
260.000	266.4944	241.887	369819.156	4084815.735	252.9390	206.115

270.000	264.1434	246.168	369820.165	4084805.813	250.5342	212.207
280.000	261.6438	248.457	369823.598	4084796.448	247.8619	216.517
282.409	261.0301	248.699	369824.766	4084794.342	247.1903	217.270
290.000	259.0889	248.704	369829.213	4084788.202	245.0299	218.923
300.000	256.5526	247.235	369836.446	4084781.318	242.1388	219.681
300.372	256.4590	247.154	369836.739	4084781.087	242.0309	219.684
310.000	254.0652	244.486	369844.746	4084775.759	239.2435	219.192
320.000	251.6510	240.582	369853.830	4084771.605	236.3701	217.550
330.000	249.3398	235.568	369863.464	4084768.964	233.5432	214.774
340.000	247.1650	229.507	369873.397	4084767.904	230.7892	210.891
350.000	245.1644	222.479	369883.371	4084768.454	228.1373	205.945
360.000	243.3819	214.579	369893.127	4084770.598	225.6208	199.989
370.000	241.8692	205.927	369902.413	4084774.280	223.2786	193.093
375.835	241.1347	200.584	369907.517	4084777.104	222.0105	188.667
380.000	240.6857	196.662	369910.988	4084779.404	221.1562	185.344
390.000	239.8594	186.982	369918.718	4084785.737	219.2699	176.911
400.000	239.3613	177.087	369925.641	4084792.946	217.5797	168.023
410.000	239.1427	167.105	369931.894	4084800.747	216.0206	158.859
420.000	239.1381	157.104	369937.671	4084808.908	214.5035	149.557
430.000	239.2628	147.106	369943.201	4084817.240	212.9117	140.234
430.094	239.2642	147.013	369943.253	4084817.318	212.8960	140.147
440.000	239.3992	137.109	369948.743	4084825.564	211.0883	131.016
450.000	239.3586	127.109	369954.609	4084833.661	208.8067	122.102
460.000	238.8792	117.154	369961.099	4084841.263	205.7957	113.803
468.555	237.8600	108.795	369967.326	4084847.123	202.4382	107.550
470.000	237.6125	107.412	369968.447	4084848.035	201.7900	106.601
478.013	235.7692	99.987	369975.009	4084852.623	197.7741	102.032
480.000	235.1796	98.224	369976.720	4084853.634	196.6747	101.096
490.000	231.3853	89.945	369985.708	4084858.003	190.6637	97.637
500.000	226.2444	82.772	369995.110	4084861.399	184.1640	96.151
510.000	219.8529	76.770	370004.718	4084864.169	177.5476	96.352
516.474	215.1183	73.493	370010.982	4084865.805	173.3232	97.194
520.000	212.3870	71.845	370014.380	4084866.747	171.0521	97.779
530.000	204.2195	67.322	370023.810	4084870.061	164.6844	99.440
540.000	195.3598	63.101	370032.862	4084874.300	158.4213	101.094
542.541	192.9887	62.090	370035.091	4084875.520	156.8461	101.511
550.000	185.6894	59.403	370041.507	4084879.324	152.2706	102.836
560.000	175.1288	56.640	370049.833	4084884.859	146.2746	104.925
570.000	163.8639	54.978	370057.820	4084890.874	140.4520	107.345
580.000	152.2315	54.523	370065.440	4084897.349	134.8141	110.067
590.000	140.6576	55.307	370072.665	4084904.259	129.3668	113.059
597.450	132.3211	56.667	370077.778	4084909.678	125.4331	115.446
600.000	129.5588	57.294	370079.487	4084911.570	124.1146	116.309
600.301	129.2373	57.375	370079.688	4084911.793	123.9605	116.414

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pagina 1

PROYECTO : Proyecto de Trazado. Enlace AP-46 con MA-3404

GRUPO : 5 : Caminos

EJE : 9 : Camino 1

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REPLANTEO POR BISECCION

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PK	AZ1	d1	X	Y	AZ2	d2
-----	-----	-----	-----	-----	-----	-----
*BASE 1: BR-7			370096.066	4085073.573	229.3756	152.306
*BASE 2: BR-6			370028.268	4084937.222		
0.000	257.7229	146.096	369981.040	4084983.545	349.3846	66.166
10.000	256.3923	155.589	369975.597	4084975.157	339.7357	64.922
11.150	256.2497	156.684	369974.971	4084974.192	338.6085	64.877
*BASE 1: BR-6			370028.268	4084937.222	318.8662	59.426
*BASE 2: BR-5			369971.443	4084954.573		
10.000	339.7357	64.922	369975.597	4084975.157	12.6774	21.003
11.150	338.6085	64.877	369974.971	4084974.192	11.3274	19.938
20.000	330.1111	66.169	369969.375	4084967.359	389.7909	12.955
22.415	327.9601	67.044	369967.598	4084965.725	378.8631	11.798
30.000	321.6859	70.466	369961.863	4084960.760	336.5055	11.406
40.000	314.3759	75.906	369954.303	4084954.214	298.6680	17.147
45.052	311.0871	78.995	369950.483	4084950.907	288.9777	21.282
50.000	308.0823	82.162	369946.783	4084947.623	282.5116	25.625
56.027	304.6458	86.126	369942.388	4084943.500	276.8209	31.100
60.000	302.5217	88.824	369939.531	4084940.739	273.9588	34.789
62.209	301.3962	90.365	369937.942	4084939.203	272.6166	36.865
70.000	297.7828	96.087	369932.257	4084933.877	269.0654	44.324
80.000	293.9207	104.040	369924.722	4084927.304	266.3664	54.107
90.000	290.8103	112.530	369916.930	4084921.038	264.8901	64.015
97.731	288.8423	119.383	369910.737	4084916.409	264.2711	71.719
100.000	288.3237	121.429	369908.899	4084915.079	264.1440	73.984
110.000	286.2326	130.536	369900.797	4084909.218	263.6656	83.968
*BASE 1: BR-6			370028.268	4084937.222	318.8662	59.426
*BASE 2: BR-5			369971.443	4084954.573		
120.000	284.4160	139.765	369892.696	4084903.356	263.2889	93.956
130.000	282.8255	149.094	369884.594	4084897.494	262.9846	103.947
140.000	281.4232	158.506	369876.492	4084891.632	262.7337	113.940
150.000	280.1785	167.985	369868.390	4084885.770	262.5232	123.934
160.000	279.0672	177.522	369860.289	4084879.908	262.3442	133.929
170.000	278.0695	187.107	369852.187	4084874.046	262.1900	143.926
180.000	277.1692	196.734	369844.085	4084868.184	262.0558	153.923
190.000	276.3531	206.397	369835.984	4084862.322	261.9381	163.920
190.754	276.2946	207.126	369835.373	4084861.880	261.9298	164.674

200.000	275.4091	215.885	369828.328	4084855.905	261.5739	173.864
210.000	274.1088	224.804	369821.840	4084848.311	260.6823	183.536
220.000	272.5142	232.986	369816.702	4084839.746	259.3582	192.729
230.000	270.6802	240.290	369813.056	4084830.447	257.6829	201.270

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PROYECTO : Proyecto de Trazado. Enlace AP-46 con MA-3404

GRUPO : 5 : Caminos

EJE : 9 : Camino 1

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REPLANTEO POR BISECCION

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PK	AZ1	d1	X	Y	AZ2	d2
231.478	270.3917	241.288	369812.650	4084829.025	257.4097	202.468
240.000	268.9277	247.673	369809.557	4084821.102	256.1059	209.854
243.504	268.4548	250.649	369807.808	4084818.066	255.7385	213.138

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PROYECTO : Proyecto de Trazado. Enlace AP-46 con MA-3404

GRUPO : 8 : Reposición Vía Pecuaria

EJE : 20 : Camino2 Rep. Vía Pecuaria

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REPLANTEO POR BISECCION

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PK	AZ1	d1	X	Y	AZ2	d2
*BASE 1: BR-3			370232.663	4085207.770	263.1218	102.226
*BASE 2: BR-4			370147.131	4085151.820		
0.000	191.5731	342.667	370277.881	4084868.166	172.5031	312.398
10.000	193.2968	338.803	370268.264	4084870.909	174.0817	305.975
11.171	193.5011	338.367	370267.138	4084871.230	174.2709	305.235
20.000	194.7129	332.556	370260.245	4084876.424	175.1895	297.778
29.140	194.8764	323.673	370258.680	4084885.207	174.7733	289.064
30.000	194.8287	322.848	370258.854	4084886.048	174.6660	288.355
40.000	194.2558	313.265	370260.885	4084895.840	173.3781	280.171
50.000	193.6467	303.708	370262.916	4084905.632	172.0133	272.109
54.588	193.3543	299.333	370263.848	4084910.124	171.3598	268.454
60.000	193.3100	293.990	370263.495	4084915.458	170.8760	263.503
68.393	194.4039	287.550	370257.902	4084921.386	171.4735	255.725
70.000	194.7199	286.807	370256.419	4084922.004	171.7409	254.528
80.000	196.7229	282.349	370247.188	4084925.850	173.4631	247.179
83.060	197.3483	281.041	370244.364	4084927.026	174.0106	244.968
90.000	198.8862	280.516	370237.570	4084927.351	175.6172	242.049
94.923	199.8335	283.002	370233.403	4084924.823	176.8781	242.885
*BASE 1: BR-4			370147.131	4085151.820	236.8100	93.454
*BASE 2: BR-7			370096.066	4085073.573		
90.000	175.6172	242.049	370237.570	4084927.351	151.0438	203.519
*BASE 1: BR-7			370096.066	4085073.573	251.4691	172.346
*BASE 2: BR-5			369971.443	4084954.573		
90.000	151.0438	203.519	370237.570	4084927.351	106.4893	267.567
94.923	152.5383	202.494	370233.403	4084924.823	107.1990	263.695
100.000	154.1309	202.791	370229.835	4084921.211	108.1744	260.587
106.774	156.2468	203.384	370225.075	4084916.392	109.5122	256.539
110.000	157.2389	203.951	370222.962	4084913.957	110.1923	254.826
120.000	159.9734	208.454	370218.639	4084905.013	112.5964	252.164
120.180	160.0156	208.570	370218.595	4084904.839	112.6418	252.155
130.000	162.2407	215.026	370216.232	4084895.307	115.1221	251.910
139.351	164.2367	221.405	370213.982	4084886.231	117.4851	252.032
*BASE 1: BR-5			369971.443	4084954.573	118.8662	59.426
*BASE 2: BR-6			370028.268	4084937.222		
130.000	115.1221	251.910	370216.232	4084895.307	113.9676	192.618

139.351	117.4851	252.032	370213.982	4084886.231	117.0591	192.624
140.000	117.6489	252.062	370213.834	4084885.599	117.2734	192.650
150.000	120.0483	254.799	370213.665	4084875.667	120.4078	195.386
151.658	120.4043	255.642	370214.020	4084874.048	120.8700	196.238

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PROYECTO : Proyecto de Trazado. Enlace AP-46 con MA-3404

GRUPO : 8 : Reposición Vía Pecuaria

EJE : 20 : Camino2 Rep. Vía Pecuaria

REPLANTEO POR BISECCION						
PK	AZ1	d1	X	Y	AZ2	d2
160.000	122.1232	260.238	370216.078	4084865.964	123.0861	200.912
170.000	124.1036	265.987	370218.545	4084856.273	125.6069	206.820
180.000	125.9985	271.983	370221.011	4084846.582	127.9842	213.033
190.000	127.8101	278.209	370223.478	4084836.891	130.2239	219.526
199.400	129.4394	284.258	370225.797	4084827.782	132.2094	225.864
200.000	129.5415	284.649	370225.942	4084827.199	132.3330	226.273
210.000	131.3233	290.567	370227.493	4084817.332	134.4875	232.562
211.132	131.5336	291.165	370227.565	4084816.203	134.7417	233.207
220.000	133.1617	295.891	370228.041	4084807.347	136.6982	238.324
230.000	134.9350	301.444	370228.578	4084797.362	138.8040	244.352
240.000	136.6429	307.222	370229.114	4084787.376	140.8062	250.634
247.286	137.8468	311.568	370229.506	4084780.100	142.2021	255.360

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PROYECTO : Proyecto de Trazado. Enlace AP-46 con MA-3404

GRUPO : 5 : Caminos

EJE : 11 : Camino 3 Acceso

REPLANTEO POR BISECCION						
PK	AZ1	d1	X	Y	AZ2	d2
*BASE 1: BR-4			370147.131	4085151.820	63.1218	102.226
*BASE 2: BR-3			370232.663	4085207.770		
0.000	137.1941	145.742	370268.676	4085071.449	183.5577	141.025
10.000	138.0192	155.552	370275.734	4085064.365	181.4251	149.762
20.000	138.7463	165.385	370282.792	4085057.281	179.5295	158.649
29.612	139.3680	174.854	370289.577	4085050.472	177.8986	167.310

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PROYECTO : Proyecto de Trazado. Enlace AP-46 con MA-3404

GRUPO : 6 : Muro 2X2

EJE : 12 : Muro de Escollera 2x2

REPLANTEO POR BISECCION						
PK	AZ1	d1	X	Y	AZ2	d2
*BASE 1: BR-6			370028.268	4084937.222	29.3756	152.306
*BASE 2: BR-7			370096.066	4085073.573		
0.000	136.8064	114.487	370124.130	4084874.669	191.0767	200.913
7.558	134.1505	120.191	370131.556	4084875.807	188.6958	200.964
20.000	129.4044	128.501	370143.282	4084879.969	184.7716	199.317
24.066	127.9866	131.358	370147.113	4084881.328	183.4770	198.945
40.000	122.7127	142.553	370161.819	4084887.445	178.3816	197.439
47.143	120.4411	147.479	370168.183	4084890.687	176.0881	196.630
60.000	116.5764	156.443	370179.409	4084896.953	171.9316	195.333
80.000	111.1937	170.902	370196.503	4084907.333	165.4012	194.262
100.000	106.4391	185.836	370213.119	4084918.461	158.8450	194.359
107.669	104.7551	191.659	370219.356	4084922.922	156.3374	194.707
120.000	102.2285	201.218	370229.325	4084930.181	152.3308	195.790
137.494	99.0366	215.264	370243.466	4084940.479	146.7558	198.635
137.972	98.9098	215.451	370243.646	4084940.911	146.6144	198.480
140.000	98.3540	216.202	370244.356	4084942.810	146.0067	197.747
156.565	93.9624	222.928	370250.152	4084958.328	140.8818	192.453
160.000	92.9986	223.545	370250.420	4084961.753	139.9123	190.638
179.916	87.5308	228.111	370251.975	4084981.608	133.9277	181.046
180.000	87.5134	228.054	370251.907	4084981.658	133.9247	180.962
187.337	85.9642	223.184	370246.008	4084986.021	133.6454	173.665
200.000	82.6171	218.097	370238.245	4084996.025	131.7881	161.983
202.146	82.0347	217.296	370236.929	4084997.720	131.4465	160.018
216.512	78.4796	209.252	370225.640	4085006.605	130.3682	145.884
220.000	77.4461	208.430	370223.717	4085009.515	129.6095	142.850
225.080	75.9269	207.333	370220.916	4085013.753	128.4452	138.468
231.062	74.0928	207.616	370218.892	4085019.383	126.4520	134.275
240.000	71.4496	209.814	370217.298	4085028.177	122.8096	129.477
244.277	70.2053	210.992	370216.535	4085032.385	120.9725	127.340
255.095	67.3410	215.976	370216.406	4085043.202	115.7380	124.137

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pagina 1

PROYECTO : Proyecto de Trazado. Enlace AP-46 con MA-3404

GRUPO : 0 : Vial de Acceso

EJE : 1 : Vial de Acceso

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* * * DATOS PARA REPLANTEO DE PUNTOS * * *

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Compensaciones:

Z : Esfericidad y Refraccion :NO

D : Reduccion al nivel del mar:NO

D : Paso de la cuerda al arco :NO

D : Paso al plano de la U.T.M. :SI K' POR ESTACION

BR : BR-6 X: 370028.268 Y: 4084937.222 Z: 477.153 PK: 44.453 Dis=-217.368 K : 0.999808087

Distancia: 59.426 Azimut: 318.866197

BO : BR-5 X: 369971.443 Y: 4084954.573 Z: 475.763 PK: 45.182 Dis=-276.626 K : 0.999808269

TIPO	PK	Estac.	Azimut	Dis.Eje	X	Y	Ang. Azimu.	Dis.Redu	Angulo 1-2	Ang. Az (B0)	Dis. R (B0)	Ang1-2 (B0)	COTA
RECTA		0.000	362.993322	0.000	370250.149	4084848.614	124.187941	238.965	205.321744	123.128681	298.226	4.262485	450.004
CIRC.		4.584	362.993322	0.000	370247.632	4084852.446	123.477438	235.221	204.611242	122.547799	294.522	3.681603	450.081
CIRC.		20.000	382.620948	0.000	370241.271	4084866.421	120.429515	224.505	201.563318	120.102330	283.917	1.236133	450.323
CIRC.		40.000	8.085739	0.000	370239.822	4084886.235	115.056172	217.653	196.189975	115.873104	276.996	397.006907	450.665
RECTA		48.169	18.486766	0.000	370241.513	4084894.218	112.668567	217.579	193.802370	113.997209	276.785	395.131012	450.839

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pagina 2

PROYECTO : Proyecto de Trazado. Enlace AP-46 con MA-3404
GRUPO : 0 : Vial de Acceso
EJE : 1 : Vial de Acceso

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* * * DATOS PARA REPLANTEO DE PUNTOS * * *

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Compensaciones: Z : Esfericidad y Refraccion :NO
D : Reduccion al nivel del mar:NO
D : Paso de la cuerda al arco :NO
D : Paso al plano de la U.T.M. :SI K’ POR ESTACION

BR : BR-5 X: 369971.443 Y: 4084954.573 Z: 475.763 PK: 45.182 Dis=-276.626 K : 0.999808269
Distancia: 172.346 Azimut: 51.469105
BO : BR-7 X: 370096.066 Y: 4085073.573 Z: 475.826 PK: 178.192 Dis=-190.712 K : 0.999807870

TIPO	PK Estac.	Azimut	Dis.Eje	X	Y	Ang. Azimu.	Dis.Redu	Angulo 1-2	Ang. Az (B0)	Dis. R (B0)	Ang1-2 (B0)	COTA
CIRC.	40.000	8.085739	0.000	370239.822	4084886.235	115.873104	276.996	64.403999	158.331956	236.184	306.862851	450.665
RECTA	48.169	18.486766	0.000	370241.513	4084894.218	113.997209	276.785	62.528104	156.622189	230.962	305.153084	450.839
RECTA	60.000	18.486766	0.000	370244.900	4084905.553	111.292030	277.869	59.822925	153.850013	224.503	302.380908	451.247
RECTA	80.000	18.486766	0.000	370250.627	4084924.716	106.782466	280.829	55.313361	148.803399	214.628	297.334294	452.354
RECTA	100.000	18.486766	0.000	370256.353	4084943.879	102.388469	285.166	50.919364	143.308442	206.225	291.839337	453.815
RECTA	120.000	18.486766	0.000	370262.080	4084963.041	98.145585	290.816	46.676480	137.395118	199.482	285.926013	455.285
RECTA	140.000	18.486766	0.000	370267.806	4084982.204	94.081670	297.706	42.612565	131.126451	194.570	279.657346	456.755
RECTA	160.000	18.486766	0.000	370273.533	4085001.367	90.216518	305.751	38.747413	124.600063	191.631	273.130958	458.224
CLOT.	174.740	18.486766	0.000	370277.753	4085015.490	87.502469	312.369	36.033364	119.698370	190.782	268.229265	459.308

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pagina 3

PROYECTO : Proyecto de Trazado. Enlace AP-46 con MA-3404

GRUPO : 0 : Vial de Acceso

EJE : 1 : Vial de Acceso

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* * * DATOS PARA REPLANTEO DE PUNTOS * * *

=====

Compensaciones:

Z : Esfericidad y Refraccion :NO

D : Reduccion al nivel del mar:NO

D : Paso de la cuerda al arco :NO

D : Paso al plano de la U.T.M.:SI K' POR ESTACION

BR : BR-7 X: 370096.066 Y: 4085073.573 Z: 475.826 PK: 178.192 Dis=-190.712 K : 0.999807870

Distancia: 93.454 Azimut: 36.809982

BO : BR-4 X: 370147.131 Y: 4085151.820 Z: 480.159 PK: 228.938 Dis=-172.848 K : 0.999807707

TIPO	PK Estac.	Azimut	Dis.Eje	X	Y	Ang. Azimu.	Dis.Redu	Angulo 1-2	Ang. Az (B0)	Dis. R (B0)	Ang1-2 (B0)	COTA
RECTA	160.000	18.486766	0.000	370273.533	4085001.367	124.600063	191.631	87.790080	155.516745	196.541	318.706763	458.224
CLOT.	174.740	18.486766	0.000	370277.753	4085015.490	119.698370	190.782	82.888388	151.361097	188.843	314.551114	459.308
CLOT.	180.000	18.624374	0.000	370279.263	4085020.528	117.942674	190.759	81.132692	149.796976	186.305	312.986994	459.694
CLOT.	200.000	21.660259	0.000	370285.386	4085039.566	111.314816	192.387	74.504834	143.415981	178.123	306.605998	461.164
CLOT.	220.000	28.675017	0.000	370292.988	4085058.054	105.006827	197.571	68.196844	136.372790	173.430	299.562808	462.634
CIRC.	228.073	32.633872	0.000	370296.720	4085065.211	102.651500	200.867	65.841517	133.411001	172.886	296.601018	463.228

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pagina 4

PROYECTO : Proyecto de Trazado. Enlace AP-46 con MA-3404
GRUPO : 0 : Vial de Acceso
EJE : 1 : Vial de Acceso

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* * * DATOS PARA REPLANTEO DE PUNTOS * * *

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Compensaciones: Z : Esfericidad y Refraccion :NO
D : Reduccion al nivel del mar:NO
D : Paso de la cuerda al arco :NO
D : Paso al plano de la U.T.M.:SI K' POR ESTACION

BR : BR-4 X: 370147.131 Y: 4085151.820 Z: 480.159 PK: 228.938 Dis=-172.848 K : 0.999807707
Distancia: 102.226 Azimut: 63.121834
BO : BR-3 X: 370232.663 Y: 4085207.770 Z: 477.610 PK: 272.319 Dis=-142.632 K : 0.999807433

TIPO	PK Estac.	Azimut	Dis.Eje	X	Y	Ang. Azimu.	Dis.Redu	Angulo 1-2	Ang. Az (B0)	Dis. R (B0)	Ang1-2 (B0)	COTA
CLOT.	220.000	28.675017	0.000	370292.988	4085058.054	136.372790	173.430	73.250956	175.615582	161.444	312.493748	462.634
CIRC.	228.073	32.633872	0.000	370296.720	4085065.211	133.411001	172.886	70.289167	173.115233	156.320	309.993399	463.228
CIRC.	240.000	38.961176	0.000	370303.076	4085075.297	129.041465	173.742	65.919631	168.897746	150.053	305.775912	464.104
CLOT.	258.965	49.022380	0.000	370315.151	4085089.896	122.479340	179.102	59.357506	161.128671	143.897	298.006837	465.498
CLOT.	260.000	49.566177	0.000	370315.874	4085090.636	122.144312	179.528	59.022479	160.677951	143.710	297.556118	465.574

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pagina 5

PROYECTO : Proyecto de Trazado. Enlace AP-46 con MA-3404
GRUPO : 0 : Vial de Acceso
EJE : 1 : Vial de Acceso

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* * * DATOS PARA REPLANTEO DE PUNTOS * * *

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Compensaciones: Z : Esfericidad y Refraccion :NO
D : Reduccion al nivel del mar:NO
D : Paso de la cuerda al arco :NO
D : Paso al plano de la U.T.M.:SI K' POR ESTACION

BR : BR-3 X: 370232.663 Y: 4085207.770 Z: 477.610 PK: 272.319 Dis=-142.632 K : 0.999807433
Distancia: 189.458 Azimut: 69.407361
BO : BR-2 X: 370400.631 Y: 4085295.333 Z: 478.162 PK: 397.635 Dis=-110.454 K : 0.999806897

TIPO	PK Estac.	Azimut	Dis.Eje	X	Y	Ang. Azimu.	Dis.Redu	Angulo 1-2	Ang. Az (B0)	Dis. R (B0)	Ang1-2 (B0)	COTA
CLOT.	260.000	49.566177	0.000	370315.874	4085090.636	160.677951	143.710	91.270590	224.991603	221.593	355.584242	465.574
CLOT.	280.000	57.981147	0.000	370330.888	4085103.828	151.799963	143.038	82.392602	222.234350	203.849	352.826989	467.044
CLOT.	300.000	62.417245	0.000	370347.162	4085115.446	143.200334	147.112	73.792973	218.393192	187.702	348.985831	468.514
RECTA	312.298	63.169486	0.000	370357.432	4085122.211	138.266546	151.316	68.859185	215.567524	178.465	346.160162	469.418
RECTA	320.000	63.169486	0.000	370363.881	4085126.422	135.329574	154.417	65.922213	213.638539	172.896	344.231178	469.970
RECTA	340.000	63.169486	0.000	370380.626	4085137.358	128.276188	163.894	58.868827	208.019095	159.267	338.611733	471.049
CIRC.	344.781	63.169486	0.000	370384.629	4085139.972	126.714874	166.436	57.307513	206.534099	156.213	337.126738	471.228
CIRC.	360.000	43.792047	0.000	370395.919	4085150.091	121.620755	173.179	52.213393	202.064728	145.347	332.657367	471.608
CIRC.	380.000	18.327256	0.000	370405.232	4085167.640	114.545923	177.207	45.138562	197.707385	127.801	328.300023	472.008
RECTA	395.454	398.650556	0.000	370407.278	4085182.896	109.008248	176.412	39.600886	196.240878	112.656	326.833517	472.462
RECTA	397.635	398.650556	0.000	370407.232	4085185.076	108.229881	176.072	38.822520	196.193307	110.476	326.785946	472.527

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pagina1

PROYECTO : Proyecto de Trazado. Enlace AP-46 con MA-3404

GRUPO : 1 : Glorieta 1 (MA-3404)

EJE : 2 : Glorietal (MA-3404)

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* * * DATOS PARA REPLANTEO DE PUNTOS * * *

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Compensaciones:

Z : Esfericidad y Refraccion :NO

D : Reduccion al nivel del mar:NO

D : Paso de la cuerda al arco :NO

D : Paso al plano de la U.T.M. :SI K' POR ESTACION

BR : BR-7

X: 370096.066 Y: 4085073.573 Z: 475.826 PK: 39.128 Dis= 253.167 K : 0.999807870

Distancia: 152.306 Azimut: 229.375564

BO : BR-6

X: 370028.268 Y: 4084937.222 Z: 477.153 PK: 49.814 Dis= 220.042 K : 0.999808087

TIPO	PK Estac.	Azimut	Dis.Eje	X	Y	Ang. Azimu.	Dis.Redu	Angulo 1-2	Ang. Az (B0)	Dis. R (B0)	Ang1-2 (B0)	COTA
CIRC.	0.000	0.000000	0.000	370267.844	4084850.225	158.262171	281.820	328.886606	122.174873	254.931	92.799309	449.916
CIRC.	10.000	364.632235	0.000	370265.137	4084859.719	157.411683	272.667	328.036118	120.131168	249.274	90.755603	450.089
CIRC.	20.000	329.264470	0.000	370257.830	4084866.357	157.802846	262.931	328.427281	119.061501	240.297	89.685937	450.243
CIRC.	30.000	293.896705	0.000	370248.121	4084868.143	159.435588	255.631	330.060024	119.381229	230.494	90.005665	450.317
CIRC.	40.000	258.528939	0.000	370238.930	4084864.539	161.832641	253.239	332.457077	121.150550	222.891	91.774985	450.306

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pagina 2

PROYECTO : Proyecto de Trazado. Enlace AP-46 con MA-3404

GRUPO : 1 : Glorieta 1 (MA-3404)

EJE : 2 : Glorietal (MA-3404)

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* * * DATOS PARA REPLANTEO DE PUNTOS * * *

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Compensaciones:

Z : Esfericidad y Refraccion :NO

D : Reduccion al nivel del mar:NO

D : Paso de la cuerda al arco :NO

D : Paso al plano de la U.T.M. :SI K' POR ESTACION

BR : BR-6 X: 370028.268 Y: 4084937.222 Z: 477.153 PK: 49.814 Dis= 220.042 K : 0.999808087

Distancia: 59.426 Azimut: 318.866197

BO : BR-5 X: 369971.443 Y: 4084954.573 Z: 475.763 PK: 50.094 Dis= 279.314 K : 0.999808269

TIPO	PK Estac.	Azimut	Dis.Eje	X	Y	Ang. Azimu.	Dis.Redu	Angulo 1-2	Ang. Az (B0)	Dis. R (B0)	Ang1-2 (B0)	COTA
CIRC.	40.000	258.528939	0.000	370238.930	4084864.539	121.150550	222.891	202.284353	120.669752	282.287	1.803555	450.306
CIRC.	50.000	223.161174	0.000	370233.022	4084856.630	123.871886	220.086	205.005689	122.808136	279.367	3.941939	450.211
CIRC.	60.000	187.793409	0.000	370232.174	4084846.795	126.573403	223.100	207.707206	124.954089	282.183	6.087892	450.046
CIRC.	70.000	152.425644	0.000	370236.640	4084837.991	128.294021	230.838	209.427824	126.367161	289.746	7.500964	449.873
CIRC.	80.000	117.057879	0.000	370245.078	4084832.868	128.558104	240.663	209.691907	126.642422	299.538	7.776225	449.744
CIRC.	90.000	81.690114	0.000	370254.950	4084832.965	127.443384	249.556	208.577187	125.796220	308.547	6.930024	449.699
CIRC.	100.000	46.322349	0.000	370263.285	4084838.253	125.373920	255.055	206.507724	124.145260	314.229	5.279063	449.739
CIRC.	110.000	10.954584	0.000	370267.578	4084847.143	122.918741	255.751	204.052544	122.154898	315.079	3.288702	449.863
CIRC.	113.097	0.000005	0.000	370267.844	4084850.225	122.174873	254.931	203.308677	121.549541	314.292	2.683344	449.916

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pagina 1

PROYECTO : Proyecto de Trazado. Enlace AP-46 con MA-3404

GRUPO : 1 : Glorieta 1 (MA-3404)

EJE : 6 : Inter. MA-3404 1

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* * * DATOS PARA REPLANTEO DE PUNTOS * * *

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Compensaciones: Z : Esfericidad y Refraccion :NO

D :Reduccion al nivel del mar:NO

D : Paso de la cuerda al arco :NO

D : Paso al plano de la U.T.M. :SI K' POR ESTACION

BR : BR-6 X: 370028.268 Y: 4084937.222 Z: 477.153 PK: 54.010 Dis=-238.818 K : 0.999808087

Distancia: 152.306 Azimut: 29.375564

BO : BR-7 X: 370096.066 Y: 4085073.573 Z: 475.826 PK: 54.010 Dis=-277.777 K : 0.999807870

TIPO	PK Estac.	Azimut	Dis.Eje	X	Y	Ang. Azimu.	Dis.Redu	Angulo 1-2	Ang. Az (B0)	Dis. R (B0)	Ang1-2 (B0)	COTA
RECTA	0.000	18.924351	0.000	370234.617	4084787.320	139.996011	255.099	110.620446	171.302480	318.082	341.926915	449.163
CIRC.	7.907	18.924351	0.000	370236.933	4084794.880	138.111159	252.640	108.735595	170.206004	312.331	340.830440	449.218
RECTA	15.823	12.624428	0.000	370238.874	4084802.552	136.218360	250.030	106.842796	169.126801	306.403	339.751236	449.293
RECTA	20.000	12.624428	0.000	370239.697	4084806.647	135.220958	248.547	105.845394	168.572990	303.174	339.197425	449.344
RECTA	40.000	12.624428	0.000	370243.637	4084826.255	130.288276	242.322	100.912712	165.751272	288.054	336.375707	449.641
RECTA	54.010	12.624428	0.000	370246.397	4084839.990	126.694550	238.864	97.318986	163.594646	277.831	334.219082	449.854

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PROYECTO : Proyecto de Trazado. Enlace AP-46 con MA-3404

GRUPO : 1 : Glorieta 1 (MA-3404)

EJE : 7 : Inter. MA-3404 2

pagina 1

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* * * DATOS PARA REPLANTEO DE PUNTOS * * *

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Compensaciones: Z : Esfericidad y Refraccion :NO

D :Reduccion al nivel del mar:NO

D : Paso de la cuerda al arco :NO

D : Paso al plano de la U.T.M. :SI K' POR ESTACION

BR : BR-6 X: 370028.268 Y: 4084937.222 Z: 477.153 PK: 45.850 Dis= 246.349 K : 0.999808087

Distancia: 152.306 Azimut: 29.375564

BO : BR-7 X: 370096.066 Y: 4085073.573 Z: 475.826 PK: 45.850 Dis= 273.813 K : 0.999807870

TIPO	PK Estac.	Azimut	Dis.Eje	X	Y	Ang. Azimu.	Dis.Redu	Angulo 1-2	Ang. Az (B0)	Dis. R (B0)	Ang1-2 (B0)	COTA
CIRC.	0.000	271.704681	0.000	370300.521	4084876.507	113.968697	278.995	84.593133	148.828600	284.021	319.453036	450.663
RECTA	8.396	267.745428	0.000	370293.058	4084872.663	115.224421	272.599	85.848857	150.626744	281.427	321.251180	450.445
RECTA	20.000	267.745428	0.000	370282.912	4084867.032	117.122477	264.191	87.746912	153.184544	278.568	323.808980	450.197
RECTA	40.000	267.745428	0.000	370265.424	4084857.327	120.686595	250.300	91.311031	157.703115	274.724	328.327551	450.047
RECTA	45.850	267.745428	0.000	370260.309	4084854.489	121.803889	246.396	92.428324	159.046493	273.866	329.670929	450.027

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pagina 1

PROYECTO : Proyecto de Trazado. Enlace AP-46 con MA-3404

GRUPO : 2 : Glorieta 2

EJE : 3 : Glorieta 2

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* * * DATOS PARA REPLANTEO DE PUNTOS * * *

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Compensaciones:

Z : Esfericidad y Refraccion :NO

D : Reduccion al nivel del mar:NO

D : Paso de la cuerda al arco :NO

D : Paso al plano de la U.T.M.:SI K' POR ESTACION

BR : BR-1 X: 370449.328 Y: 4085332.005 Z: 483.683 PK: 25.835 Dis= 132.840 K : 0.999806741

Distancia: 60.973 Azimut: 258.908757

BO : BR-2 X: 370400.631 Y: 4085295.333 Z: 478.162 PK: 32.612 Dis= 90.454 K : 0.999806897

TIPO	PK	Estac.	Azimut	Dis.Eje	X	Y	Ang. Azimu.	Dis.Redu	Angulo 1-2	Ang. Az (B0)	Dis. R (B0)	Ang1-2 (B0)	COTA
CIRC.		0.000	0.000000	0.000	370427.232	4085185.076	209.502758	148.610	350.594002	184.928836	113.442	126.020080	472.457
CIRC.		10.000	368.169011	0.000	370424.783	4085194.665	211.258422	139.543	352.349666	185.009545	103.545	126.100788	472.677
CIRC.		20.000	336.338023	0.000	370418.038	4085201.906	215.025960	133.835	356.117204	188.273387	95.054	129.364630	472.818
CIRC.		30.000	304.507034	0.000	370408.646	4085205.026	219.738248	133.362	360.829492	194.364259	90.680	135.455502	472.860

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PROYECTO : Proyecto de Trazado. Enlace AP-46 con MA-3404

GRUPO : 2 : Glorieta 2

EJE : 3 : Glorieta 2

pagina 2

Compensaciones:

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* * * DATOS PARA REPLANTEO DE PUNTOS * * *

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Z : Esfericidad y Refraccion :NO

D : Reduccion al nivel del mar:NO

D : Paso de la cuerda al arco :NO

D : Paso al plano de la U.T.M.:SI K' POR ESTACION

BR : BR-2

X: 370400.631 Y: 4085295.333 Z: 478.162 PK: 32.612 Dis= 90.454 K : 0.999806897

Distancia: 189.458 Azimut: 269.407361

BO : BR-3

X: 370232.663 Y: 4085207.770 Z: 477.610 PK: 60.246 Dis= 156.038 K : 0.999807433

TIPO	PK Estac.	Azimut	Dis.Eje	X	Y	Ang. Azimu.	Dis.Redu	Angulo 1-2	Ang. Az (B0)	Dis. R (B0)	Ang1-2 (B0)	COTA
CIRC.	30.000	304.507034	0.000	370408.646	4085205.026	194.364259	90.680	324.956898	100.992552	176.039	31.585191	472.860
CIRC.	40.000	272.676046	0.000	370398.909	4085203.262	201.190678	92.105	331.783317	101.725837	166.339	32.318476	472.803
CIRC.	50.000	240.845057	0.000	370391.209	4085197.046	206.084250	98.757	336.676889	104.299703	158.939	34.892342	472.647
CIRC.	60.000	209.014068	0.000	370387.432	4085187.899	207.782350	108.263	338.374989	108.129372	156.069	38.722011	472.424

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pagina 3

PROYECTO : Proyecto de Trazado. Enlace AP-46 con MA-3404

GRUPO : 2 : Glorieta 2

EJE : 3 : Glorieta 2

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* * * DATOS PARA REPLANTEO DE PUNTOS * * *

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Compensaciones:

Z : Esfericidad y Refraccion :NO

D : Reduccion al nivel del mar:NO

D : Paso de la cuerda al arco :NO

D : Paso al plano de la U.T.M. :SI K' POR ESTACION

BR : BR-3 X: 370232.663 Y: 4085207.770 Z: 477.610 PK: 60.246 Dis= 156.038 K : 0.999807433

Distancia: 102.226 Azimut: 263.121834

BO : BR-4 X: 370147.131 Y: 4085151.820 Z: 480.159 PK: 65.375 Dis= 242.218 K : 0.999807707

TIPO	PK Estac.	Azimut	Dis.Eje	X	Y	Ang. Azimu.	Dis.Redu	Angulo 1-2	Ang. Az (B0)	Dis. R (B0)	Ang1-2 (B0)	COTA
CIRC.	60.000	209.014068	0.000	370387.432	4085187.899	108.129372	156.069	245.007539	90.512719	243.041	27.390886	472.424
CIRC.	70.000	177.183080	0.000	370388.503	4085178.060	111.992727	158.677	248.870893	93.106128	242.840	29.984295	472.198
CIRC.	80.000	145.352091	0.000	370394.159	4085169.940	114.648512	165.899	251.526678	95.338592	247.739	32.216759	472.029
CIRC.	90.000	113.521102	0.000	370403.016	4085165.526	115.474873	175.546	252.353039	96.593437	256.301	33.471603	471.959
CIRC.	100.000	81.690114	0.000	370412.905	4085165.898	114.531678	185.077	251.409844	96.631071	266.198	33.509237	471.987
CIRC.	110.000	49.859125	0.000	370421.405	4085170.965	112.260222	192.334	249.138389	95.563362	274.994	32.441528	472.115
CIRC.	120.000	18.028137	0.000	370426.435	4085179.488	109.226690	195.863	246.104857	93.714163	280.725	30.592330	472.329
CIRC.	125.664	0.000000	0.000	370427.232	4085185.076	107.391930	195.925	244.270097	92.476686	282.122	29.354852	472.457

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pagina 1

PROYECTO : Proyecto de Trazado. Enlace AP-46 con MA-3404
GRUPO : 3 : Ramales
EJE : 4 : Ramal-2

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* * * DATOS PARA REPLANTEO DE PUNTOS * * *

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Compensaciones: Z : Esfericidad y Refraccion :NO
D : Reduccion al nivel del mar:NO
D : Paso de la cuerda al arco :NO
D : Paso al plano de la U.T.M. :SI K' POR ESTACION

BR : BR-2 X: 370400.631 Y: 4085295.333 Z: 478.162 PK: 108.270 Dis= 8.335 K : 0.999806897
Distancia: 60.973 Azimut: 58.908757
BO : BR-1 X: 370449.328 Y: 4085332.005 Z: 483.683 PK: 112.600 Dis= 69.042 K : 0.999806741

TIPO	PK Estac.	Azimut	Dis.Eje	X	Y	Ang. Azimu.	Dis.Redu	Angulo 1-2	Ang. Az (B0)	Dis. R (B0)	Ang1-2 (B0)	COTA
CIRC.	0.000	371.959332	0.000	370419.624	4085190.917	188.545192	106.150	129.636435	213.210132	144.209	354.301376	472.779
CIRC.	0.000	371.959332	0.000	370419.624	4085190.917	188.545192	106.150	129.636435	213.210132	144.209	354.301376	472.779
CIRC.	20.000	8.337605	0.000	370416.583	4085210.410	188.179161	86.425	129.270405	216.746538	125.951	357.837781	472.826
CIRC.	27.670	22.289455	0.000	370418.407	4085217.845	185.644126	79.516	126.735370	216.839280	118.296	357.930523	472.853
CIRC.	40.000	4.846682	0.000	370421.007	4085229.858	180.793232	68.585	121.884475	217.218421	106.021	358.309664	472.833
CIRC.	60.000	376.552470	0.000	370418.119	4085249.483	176.802463	49.082	117.893706	223.017676	88.244	364.108920	472.662
RECTA	68.197	364.955401	0.000	370414.489	4085256.820	178.010430	40.938	119.101674	227.624085	82.880	368.715329	472.580
RECTA	80.000	364.955401	0.000	370408.316	4085266.879	183.207471	29.479	124.298715	235.778066	76.979	376.869310	472.462
RECTA	100.000	364.955401	0.000	370397.854	4085283.924	215.202536	11.744	156.293779	252.169402	70.450	393.260646	472.262
CIRC.	112.043	364.955401	0.000	370391.554	4085294.188	292.011647	9.150	233.102891	263.102717	69.064	4.193961	472.142

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PROYECTO : Proyecto de Trazado. Enlace AP-46 con MA-3404

GRUPO : 3 : Ramales

EJE : 4 : Ramal-2

pagina 2

* * * DATOS PARA REPLANTEO DE PUNTOS * * *												
Compensaciones:		Z : Esfericidad y Refraccion :NO D : Reduccion al nivel del mar:NO D : Paso de la cuerda al arco :NO D : Paso al plano de la U.T.M. :SI K' POR ESTACION										
BR : BR-1		X:	370449.328	Y:	4085332.005	Z:	483.683	PK:	112.600	Dis=	69.042	K : 0.999806741
		Distancia: 249.804 Azimut: 266.855758										
BO : BR-3		X:	370232.663	Y:	4085207.770	Z:	477.610	PK:	309.737	Dis=	14.433	K : 0.999807433
TIPO	PK Estac.	Azimut	Dis.Eje	X	Y	Ang. Azimu.	Dis. Redu	Angulo 1-2	Ang. Az (BO)	Dis. R (BO)	Ang1-2 (BO)	COTA
RECTA	100.000	364.955401	0.000	370397.854	4085283.924	252.169402	70.450	385.313644	72.499827	181.935	5.644069	472.262
CIRC.	112.043	364.955401	0.000	370391.554	4085294.188	263.102717	69.064	396.246959	68.287825	180.906	1.432067	472.142
CIRC.	120.000	345.838911	0.000	370386.443	4085300.248	270.229092	70.462	3.373334	65.531947	179.480	398.676189	472.062
CIRC.	140.000	297.792136	0.000	370368.050	4085306.810	280.863705	85.110	14.007947	59.792580	167.778	392.936822	471.922
CIRC.	160.000	249.745361	0.000	370350.156	4085298.989	279.540762	104.544	12.685004	57.972125	148.775	391.116367	471.979
CIRC.	164.893	237.990156	0.000	370347.049	4085295.218	278.019564	108.715	11.163806	58.446875	144.011	391.591117	472.024
CIRC.	180.000	242.082610	0.000	370338.164	4085283.003	273.568742	121.508	6.712984	60.563479	129.603	393.707721	472.239
CIRC.	200.000	247.500651	0.000	370325.229	4085267.757	269.587630	139.771	2.731872	63.394105	110.325	396.538347	472.702
CIRC.	220.000	252.918691	0.000	370311.044	4085253.666	267.186742	158.962	0.330984	66.276608	90.848	399.420850	473.369
RECTA	232.710	256.361748	0.000	370301.428	4085245.358	266.262551	171.445	399.406793	68.153336	78.383	1.297578	473.898
RECTA	240.000	256.361748	0.000	370295.784	4085240.743	265.860068	178.652	399.004310	69.353644	71.229	2.497886	474.238
RECTA	260.000	256.361748	0.000	370280.302	4085228.083	264.906175	198.456	398.050417	74.341263	51.799	7.485505	475.229
RECTA	280.000	256.361748	0.000	370264.819	4085215.422	264.125525	218.297	397.269767	85.127519	33.061	18.271761	476.066
RECTA	300.000	256.361748	0.000	370249.337	4085202.761	263.475035	238.164	396.619277	118.577606	17.413	51.721848	476.681

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pagina 3

PROYECTO : Proyecto de Trazado. Enlace AP-46 con MA-3404

GRUPO : 3 : Ramales

EJE : 4 : Ramal-2

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* * * DATOS PARA REPLANTEO DE PUNTOS * * *

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Compensaciones:

Z : Esfericidad y Refraccion :NO

D : Reduccion al nivel del mar:NO

D : Paso de la cuerda al arco :NO

D : Paso al plano de la U.T.M.:SI K' POR ESTACION

BR : BR-3 X: 370232.663 Y: 4085207.770 Z: 477.610 PK: 309.737 Dis= 14.433 K : 0.999807433

Distancia: 102.226 Azimut: 263.121834

BO : BR-4 X: 370147.131 Y: 4085151.820 Z: 480.159 PK: 384.826 Dis= 36.644 K : 0.999807707

TIPO	PK Estac.	Azimut	Dis.Eje	X	Y	Ang. Azimu.	Dis.Redu	Angulo 1-2	Ang. Az (B0)	Dis. R (B0)	Ang1-2 (B0)	COTA
RECTA	300.000	256.361748	0.000	370249.337	4085202.761	118.577606	17.413	255.455773	70.563907	114.219	7.442074	476.681
RECTA	320.000	256.361748	0.000	370233.855	4085190.101	195.713549	17.713	332.591716	73.536543	94.815	10.414710	477.073
RECTA	340.000	256.361748	0.000	370218.372	4085177.440	228.032070	33.535	364.910236	78.022548	75.722	14.900714	477.244
RECTA	360.000	256.361748	0.000	370202.890	4085164.779	238.560689	52.304	375.438855	85.462080	57.256	22.340247	477.192
RECTA	380.000	256.361748	0.000	370187.407	4085152.118	243.464464	71.744	380.342631	99.528281	40.285	36.406447	477.014
RECTA	384.826	256.361748	0.000	370183.671	4085149.064	244.272901	76.478	381.151067	104.793247	36.651	41.671413	476.971

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pagina 1

PROYECTO : Proyecto de Trazado. Enlace AP-46 con MA-3404

GRUPO : 3 : Ramales

EJE : 5 : Ramal-1

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* * * DATOS PARA REPLANTEO DE PUNTOS * * *

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Compensaciones:

Z : Esfericidad y Refraccion :NO

D : Reduccion al nivel del mar:NO

D : Paso de la cuerda al arco :NO

D : Paso al plano de la U.T.M. :SI K' POR ESTACION

BR : BR-4 X: 370147.131 Y: 4085151.820 Z: 480.159 PK: 0.000 Dis= -83.598 K : 0.999807707

Distancia: 102.226 Azimut: 63.121834

BO : BR-3 X: 370232.663 Y: 4085207.770 Z: 477.610 PK: 90.688 Dis= -78.815 K : 0.999807433

TIPO	PK Estac.	Azimut	Dis.Eje	X	Y	Ang. Azimu.	Dis.Redu	Angulo 1-2	Ang. Az (B0)	Dis. R (B0)	Ang1-2 (B0)	COTA
RECTA	0.000	60.346397	0.000	370203.095	4085089.718	153.306685	83.614	90.184851	215.623871	121.722	352.502037	476.585
RECTA	20.000	60.346397	0.000	370219.339	4085101.386	138.814176	88.094	75.692343	207.932067	107.236	344.810233	476.840
RECTA	40.000	60.346397	0.000	370235.583	4085113.053	126.296591	96.593	63.174758	198.038056	94.780	334.916222	476.935
RECTA	60.000	60.346397	0.000	370251.827	4085124.721	116.124273	108.167	53.002439	185.562440	85.248	322.440606	476.750
CIRC.	79.815	60.346397	0.000	370267.921	4085136.280	108.145348	121.809	45.023515	170.831002	79.727	307.709169	476.290
CIRC.	80.000	60.376551	0.000	370268.071	4085136.388	108.079559	121.944	44.957726	170.685407	79.697	307.563573	476.285

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pagina 2

PROYECTO : Proyecto de Trazado. Enlace AP-46 con MA-3404

GRUPO : 3 : Ramales

EJE : 5 : Ramal-1

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* * * DATOS PARA REPLANTEO DE PUNTOS * * *													
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Compensaciones:		Z : Esfericidad y Refraccion :NO											
		D : Reduccion al nivel del mar:NO											
		D : Paso de la cuerda al arco :NO											
		D : Paso al plano de la U.T.M. :SI K' POR ESTACION											
BR : BR-3		X: 370232.663 Y: 4085207.770 Z: 477.610 PK: 90.688 Dis= -78.815 K : 0.999807433											
		Distancia: 189.458 Azimut: 69.407361											
BO : BR-2		X: 370400.631 Y: 4085295.333 Z: 478.162 PK: 200.509 Dis=-111.177 K : 0.999806897											
TIPO	PK	Estac.	Azimut	Dis.Eje	X	Y	Ang. Azimu.	Dis.Redu	Angulo 1-2	Ang. Az (B0)	Dis. R(B0)	Ang1-2 (B0)	COTA

CIRC.		80.000	60.376551	0.000	370268.071	4085136.388	170.685407	79.697	101.278046	244.253430	207.008	374.846069	476.285
CIRC.		100.000	63.641268	0.000	370284.612	4085147.626	154.645586	79.489	85.238224	242.387125	187.860	372.979764	475.540
CIRC.		120.000	66.905984	0.000	370301.708	4085158.002	139.760412	85.129	70.353051	239.740073	169.283	370.332712	474.575
CIRC.		140.000	70.170701	0.000	370319.313	4085167.487	127.703609	95.574	58.296248	236.065414	151.545	366.658053	473.674
CIRC.		160.000	73.435418	0.000	370337.381	4085176.058	118.720083	109.436	49.312722	231.040298	135.034	361.632936	473.020
CIRC.		180.000	76.700135	0.000	370355.865	4085183.691	112.287446	125.557	42.880085	224.277426	120.306	354.870064	472.618
CLOT.		180.626	76.802354	0.000	370356.450	4085183.915	112.119950	126.089	42.712589	224.033278	119.882	354.625916	472.610
CIRC.		197.675	105.328207	0.000	370372.985	4085187.404	109.175772	141.819	39.768411	215.963801	111.435	346.556440	472.413
CIRC.		200.000	112.728206	0.000	370375.285	4085187.075	109.173393	144.143	39.766032	214.641229	111.207	345.233868	472.387

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pagina 3

PROYECTO : Proyecto de Trazado. Enlace AP-46 con MA-3404

GRUPO : 3 : Ramales

EJE : 5 : Ramal-1

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* * * DATOS PARA REPLANTEO DE PUNTOS * * *													
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Compensaciones:		Z : Esfericidad y Refraccion :NO											
		D : Reduccion al nivel del mar:NO											
		D : Paso de la cuerda al arco :NO											
		D : Paso al plano de la U.T.M. :SI K' POR ESTACION											
BR : BR-2		X: 370400.631 Y: 4085295.333 Z: 478.162 PK: 200.509 Dis=-111.177 K : 0.999806897											
		Distancia: 60.973 Azimut: 58.908757											
BO : BR-1		X: 370449.328 Y: 4085332.005 Z: 483.683 PK: 204.857 Dis=-162.090 K : 0.999806741											
TIPO	PK Estac.	Azimut	Dis.Eje	X	Y	Ang. Azimu.	Dis. Redu	Angulo 1-2	Ang. Az (B0)	Dis. R (B0)	Ang1-2 (B0)	COTA	
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CIRC.	200.000	112.728206	0.000	370375.285	4085187.075	214.641229	111.207	155.732472	230.068884	162.780	371.160127	472.387	
CIRC.	218.304	170.991584	0.000	370389.272	4085176.275	206.055309	119.622	147.146552	223.431793	166.941	364.523037	472.158	

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pagina 1

PROYECTO : Proyecto de Trazado. Enlace AP-46 con MA-3404
GRUPO : 3 : Ramales
EJE : 13 : Ramal-3

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* * * DATOS PARA REPLANTEO DE PUNTOS * * *

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Compensaciones: Z : Esfericidad y Refraccion :NO
D : Reduccion al nivel del mar:NO
D : Paso de la cuerda al arco :NO
D : Paso al plano de la U.T.M.:SI K' POR ESTACION

BR : BR-7 X: 370096.066 Y: 4085073.573 Z: 475.826 PK: 0.000 Dis= -99.474 K : 0.999807870
Distancia: 93.454 Azimut: 36.809982
BO : BR-4 X: 370147.131 Y: 4085151.820 Z: 480.159 PK: 60.337 Dis= -87.960 K : 0.999807707

TIPO	PK Estac.	Azimut	Dis.Eje	X	Y	Ang. Azimu.	Dis.Redu	Angulo 1-2	Ang. Az (B0)	Dis. R (B0)	Ang1-2 (B0)	COTA
RECTA	0.000	27.295777	0.000	370190.865	4085043.438	119.594064	99.493	82.784081	175.583316	116.896	338.773334	476.317
RECTA	20.000	27.295777	0.000	370199.180	4085061.627	107.342402	103.824	70.532419	166.679129	104.154	329.869146	476.481
RECTA	40.000	27.295777	0.000	370207.495	4085079.817	96.436371	111.625	59.626389	155.583374	93.977	318.773391	476.620
CIRC.	53.415	27.295777	0.000	370213.072	4085092.018	90.046261	118.474	53.236279	146.894300	89.037	310.084318	476.626
CIRC.	60.000	41.269316	0.000	370216.443	4085097.659	87.427759	122.786	50.617777	142.226990	87.980	305.417007	476.755
RECTA	68.990	60.346397	0.000	370222.856	4085103.912	85.047898	130.394	48.237915	135.911305	89.624	299.101322	476.885

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PROYECTO : Proyecto de Trazado. Enlace AP-46 con MA-3404

GRUPO : 3 : Ramales

EJE : 13 : Ramal-3

pagina 2

Compensaciones:

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* * * DATOS PARA REPLANTEO DE PUNTOS * * *

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Z : Esfericidad y Refraccion :NO

D : Reduccion al nivel del mar:NO

D : Paso de la cuerda al arco :NO

D : Paso al plano de la U.T.M.:SI K' POR ESTACION

BR : BR-4

X: 370147.131 Y: 4085151.820 Z: 480.159 PK: 60.337 Dis= -87.960 K : 0.999807707

Distancia: 102.226 Azimut: 63.121834

BO : BR-3

X: 370232.663 Y: 4085207.770 Z: 477.610 PK: 68.990 Dis=-104.320 K : 0.999807433

TIPO	PK Estac.	Azimut	Dis.Eje	X	Y	Ang. Azimu.	Dis.Redu	Angulo 1-2	Ang. Az (B0)	Dis. R (B0)	Ang1-2 (B0)	COTA
CIRC.	60.000	41.269316	0.000	370216.443	4085097.659	142.226990	87.980	79.105156	209.311057	111.320	346.189223	476.755
RECTA	68.990	60.346397	0.000	370222.856	4085103.912	135.911305	89.624	72.789471	205.993893	104.341	342.872059	476.885
RECTA	68.990	60.346397	0.000	370222.856	4085103.912	135.911303	89.624	72.789469	205.993891	104.341	342.872058	476.885

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pagina 1

PROYECTO : Proyecto de Trazado. Enlace AP-46 con MA-3404

GRUPO : 4 : Vía de servicio

EJE : 8 : Camino de Servicio (COEX)

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* * * DATOS PARA REPLANTEO DE PUNTOS * * *

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Compensaciones:

Z : Esfericidad y Refraccion :NO

D : Reduccion al nivel del mar:NO

D : Paso de la cuerda al arco :NO

D : Paso al plano de la U.T.M. :SI K' POR ESTACION

BR : BR-7 X: 370096.066 Y: 4085073.573 Z: 475.826 PK: 0.000 Dis= 122.575 K : 0.999807870

Distancia: 152.306 Azimut: 229.375564

BO : BR-6 X: 370028.268 Y: 4084937.222 Z: 477.153 PK: 17.160 Dis= -49.380 K : 0.999808087

TIPO	PK Estac.	Azimut	Dis.Eje	X	Y	Ang. Azimu.	Dis.Redu	Angulo 1-2	Ang. Az (B0)	Dis. R (B0)	Ang1-2 (B0)	COTA
RECTA	0.000	256.070720	0.000	370010.068	4084986.228	249.505398	122.599	20.129834	377.362338	52.287	347.986774	474.874
RECTA	10.000	256.070720	0.000	370002.356	4084979.863	249.999923	132.552	20.624359	365.237312	49.906	335.861748	474.774

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pagina 2

PROYECTO : Proyecto de Trazado. Enlace AP-46 con MA-3404
GRUPO : 4 : Vía de servicio
EJE : 8 : Camino de Servicio (COEX)

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* * * DATOS PARA REPLANTEO DE PUNTOS * * *

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Compensaciones: Z : Esfericidad y Refraccion :NO
D : Reduccion al nivel del mar:NO
D : Paso de la cuerda al arco :NO
D : Paso al plano de la U.T.M. :SI K’ POR ESTACION

BR : BR-6 X: 370028.268 Y: 4084937.222 Z: 477.153 PK: 17.160 Dis= -49.380 K : 0.999808087
Distancia: 59.426 Azimut: 318.866197
BO : BR-5 X: 369971.443 Y: 4084954.573 Z: 475.763 PK: 49.939 Dis= 0.174 K : 0.999808269

TIPO	PK Estac.	Azimut	Dis.Eje	X	Y	Ang. Azimu.	Dis.Redu	Angulo 1-2	Ang. Az (B0)	Dis. R (B0)	Ang1-2 (B0)	COTA
RECTA	10.000	256.070720	0.000	370002.356	4084979.863	365.237312	49.906	46.371115	56.348432	39.947	337.482235	474.774
RECTA	20.000	256.070720	0.000	369994.644	4084973.497	352.413010	49.471	33.546813	56.441189	29.946	337.574992	474.668
RECTA	30.000	256.070720	0.000	369986.931	4084967.131	339.875425	51.032	21.009228	56.626979	19.944	337.760783	474.496
RECTA	40.000	256.070720	0.000	369979.219	4084960.766	328.490282	54.417	9.624085	57.186552	9.943	338.320355	474.240
RECTA	50.000	256.070720	0.000	369971.507	4084954.400	318.708633	59.315	399.842436	177.423849	0.185	58.557652	473.901
CIRC.	57.110	256.070720	0.000	369966.023	4084949.874	312.765890	63.530	393.899694	254.524314	7.175	135.658118	473.609
CIRC.	60.000	256.144303	0.000	369963.794	4084948.036	310.578896	65.387	391.712699	254.978921	10.064	136.112724	473.479
CIRC.	70.000	256.398950	0.000	369956.062	4084941.694	303.938027	72.359	385.071830	255.623269	20.065	136.757072	472.973
CIRC.	80.000	256.653598	0.000	369948.304	4084935.384	298.536932	80.000	379.670735	255.923656	30.066	137.057459	472.384
CIRC.	90.000	256.908246	0.000	369940.521	4084929.105	294.127466	88.138	375.261269	256.137646	40.067	137.271450	471.712
CIRC.	100.000	257.162894	0.000	369932.713	4084922.857	290.500415	96.647	371.634219	256.317014	50.069	137.450817	470.956
CIRC.	110.000	257.417542	0.000	369924.881	4084916.640	287.489860	105.436	368.623663	256.479051	60.070	137.612855	470.117
CIRC.	120.000	257.672190	0.000	369917.023	4084910.454	284.967532	114.442	366.101335	256.631180	70.070	137.764983	469.195
CIRC.	130.000	257.926838	0.000	369909.141	4084904.301	282.835055	123.616	363.968859	256.777113	80.071	137.910916	468.203
CIRC.	140.000	258.181486	0.000	369901.234	4084898.178	281.016894	132.924	362.150697	256.918913	90.071	138.052717	467.203
CIRC.	150.000	258.436134	0.000	369893.303	4084892.088	279.454703	142.339	360.588506	257.057821	100.071	138.191624	466.203
CIRC.	160.000	258.690782	0.000	369885.348	4084886.029	278.103046	151.842	359.236849	257.194623	110.070	138.328426	465.203
CIRC.	170.000	258.945430	0.000	369877.368	4084880.002	276.926205	161.416	358.060008	257.329847	120.069	138.463650	464.203
CIRC.	180.000	259.200077	0.000	369869.364	4084874.007	275.895829	171.049	357.029632	257.463856	130.067	138.597660	463.203
CIRC.	190.000	259.454725	0.000	369861.337	4084868.044	274.989202	180.733	356.123005	257.596911	140.065	138.730714	462.203
CIRC.	200.000	259.709373	0.000	369853.285	4084862.113	274.187949	190.458	355.321752	257.729202	150.063	138.863006	461.203
CLOT.	203.375	259.795306	0.000	369850.563	4084860.119	273.938622	193.748	355.072425	257.773699	153.436	138.907502	460.865
CLOT.	210.000	258.922011	0.000	369845.233	4084856.183	273.464945	200.211	354.598748	257.845335	160.060	138.979138	460.203
CLOT.	220.000	254.296391	0.000	369837.437	4084849.924	272.686488	209.891	353.820292	257.792149	170.059	138.925952	459.203
CLOT.	230.000	245.691898	0.000	369830.335	4084842.895	271.688228	219.302	352.822031	257.378511	179.989	138.512314	458.203
CLOT.	240.000	233.108532	0.000	369824.501	4084834.793	270.347224	228.107	351.481027	256.461012	189.613	137.594816	457.209



CIRC.	243.375	227.964317	0.000	369822.942	4084831.801	269.802956	230.852	350.936760	256.020144	192.717	137.153947	456.895
CIRC.	250.000	217.419586	0.000	369820.633	4084825.599	268.597780	235.782	349.731583	254.958688	198.477	136.092491	456.330
CIRC.	260.000	201.504092	0.000	369819.156	4084815.735	266.494429	241.887	347.628232	252.939038	206.115	134.072841	455.605
CIRC.	270.000	185.588598	0.000	369820.165	4084805.813	264.143441	246.168	345.277245	250.534164	212.207	131.667967	455.034
CIRC.	280.000	169.673103	0.000	369823.598	4084796.448	261.643831	248.457	342.777634	247.861898	216.517	128.995701	454.617
CLOT.	282.409	165.839732	0.000	369824.766	4084794.342	261.030089	248.699	342.163892	247.190304	217.270	128.324107	454.540
CLOT.	290.000	154.663490	0.000	369829.213	4084788.202	259.088906	248.704	340.222709	245.029932	218.923	126.163735	454.354
CLOT.	300.000	142.706489	0.000	369836.446	4084781.318	256.552578	247.235	337.686382	242.138832	219.681	123.272635	454.244
CIRC.	300.372	142.322043	0.000	369836.739	4084781.087	256.458989	247.154	337.592792	242.030929	219.684	123.164732	454.243
CIRC.	310.000	132.436249	0.000	369844.746	4084775.759	254.065156	244.486	335.198959	239.243496	219.192	120.377300	454.289
CIRC.	320.000	122.168189	0.000	369853.830	4084771.605	251.650967	240.582	332.784771	236.370101	217.550	117.503904	454.487
CIRC.	330.000	111.900128	0.000	369863.464	4084768.964	249.339815	235.568	330.473618	233.543228	214.774	114.677031	454.839
CIRC.	340.000	101.632067	0.000	369873.397	4084767.904	247.164970	229.507	328.298773	230.789235	210.891	111.923038	455.345
CIRC.	350.000	91.364006	0.000	369883.371	4084768.454	245.164359	222.479	326.298163	228.137323	205.945	109.271126	456.005
CIRC.	360.000	81.095945	0.000	369893.127	4084770.598	243.381931	214.579	324.515734	225.620798	199.989	106.754601	456.818
CIRC.	370.000	70.827884	0.000	369902.413	4084774.280	241.869184	205.927	323.002987	223.278599	193.093	104.412403	457.786
CLOT.	375.835	64.836023	0.000	369907.517	4084777.104	241.134747	200.584	322.268550	222.010481	188.667	103.144285	458.421
CLOT.	380.000	60.723933	0.000	369910.988	4084779.404	240.685697	196.662	321.819500	221.156211	185.344	102.290014	458.907
CLOT.	390.000	52.190219	0.000	369918.718	4084785.737	239.859449	186.982	320.993252	219.269870	176.911	100.403673	460.107
CLOT.	400.000	45.548954	0.000	369925.641	4084792.946	239.361294	177.087	320.495097	217.579658	168.023	98.713461	461.307
CLOT.	410.000	40.800137	0.000	369931.894	4084800.747	239.142666	167.105	320.276469	216.020593	158.859	97.154396	462.507
CLOT.	420.000	37.943770	0.000	369937.671	4084808.908	239.138109	157.104	320.271912	214.503543	149.557	95.637346	463.707
CLOT.	430.000	36.979851	0.000	369943.201	4084817.240	239.262787	147.106	320.396590	212.911726	140.234	94.045530	464.907
CLOT.	430.094	36.979768	0.000	369943.253	4084817.318	239.264239	147.013	320.398042	212.896046	140.147	94.029849	464.918
CLOT.	440.000	38.229309	0.000	369948.743	4084825.564	239.399208	137.109	320.533011	211.088345	131.016	92.222149	466.107
CLOT.	450.000	42.025218	0.000	369954.609	4084833.661	239.358624	127.109	320.492427	208.806740	122.102	89.940543	467.307
CLOT.	460.000	48.367606	0.000	369961.099	4084841.263	238.879167	117.154	320.012970	205.795684	113.803	86.929487	468.507
CIRC.	468.555	55.814672	0.000	369967.326	4084847.123	237.859993	108.795	318.993796	202.438176	107.550	83.571979	469.533
CIRC.	470.000	57.229889	0.000	369968.447	4084848.035	237.612476	107.412	318.746279	201.790008	106.601	82.923811	469.707
CLOT.	478.013	65.077479	0.000	369975.009	4084852.623	235.769236	99.987	316.903040	197.774130	102.032	78.907934	470.649
CLOT.	480.000	66.973746	0.000	369976.720	4084853.634	235.179562	98.224	316.313365	196.674719	101.096	77.808523	470.869
CLOT.	490.000	74.988551	0.000	369985.708	4084858.003	231.385286	89.945	312.519090	190.663682	97.637	71.797485	471.884
CLOT.	500.000	80.456877	0.000	369995.110	4084861.399	226.244366	82.772	307.378169	184.164046	96.151	65.297849	472.746
CLOT.	510.000	83.378724	0.000	370004.718	4084864.169	219.852943	76.770	300.986746	177.547595	96.352	58.681398	473.453
CIRC.	516.474	83.912383	0.000	370010.982	4084865.805	215.118273	73.493	296.252076	173.323204	97.194	54.457008	473.829
CIRC.	520.000	81.667704	0.000	370014.380	4084866.747	212.386955	71.845	293.520758	171.052068	97.779	52.185871	474.007
CIRC.	530.000	75.301506	0.000	370023.810	4084870.061	204.219526	67.322	285.353329	164.684441	99.440	45.818245	474.407
CIRC.	540.000	68.935308	0.000	370032.862	4084874.300	195.359766	63.101	276.493569	158.421330	101.094	39.555133	474.652
CIRC.	542.541	67.317968	0.000	370035.091	4084875.520	192.988731	62.090	274.122534	156.846121	101.511	37.979924	474.690
CIRC.	550.000	64.524522	0.000	370041.507	4084879.324	185.689420	59.403	266.823223	152.270634	102.836	33.404437	474.749
CIRC.	560.000	60.779700	0.000	370049.833	4084884.859	175.128787	56.640	256.262590	146.274599	104.925	27.408402	474.799
CIRC.	570.000	57.034878	0.000	370057.820	4084890.874	163.863927	54.978	244.997730	140.451993	107.345	21.585796	474.849
CIRC.	580.000	53.290056	0.000	370065.440	4084897.349	152.231513	54.523	233.365316	134.814141	110.067	15.947944	474.899
CIRC.	590.000	49.545234	0.000	370072.665	4084904.259	140.657555	55.307	221.791358	129.366799	113.059	10.500603	474.949
RECTA	597.450	46.755335	0.000	370077.778	4084909.678	132.321057	56.667	213.454860	125.433120	115.446	6.566923	474.986
RECTA	600.000	46.755335	0.000	370079.487	4084911.570	129.558781	57.294	210.692584	124.114593	116.309	5.248396	474.999
RECTA	600.301	46.755335	0.000	370079.688	4084911.793	129.237307	57.375	210.371111	123.960481	116.414	5.094284	475.000

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PROYECTO : Proyecto de Trazado. Enlace AP-46 con MA-3404

GRUPO : 5 : Caminos

EJE : 9 : Camino 1

pagina 1

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* * * DATOS PARA REPLANTEO DE PUNTOS * * *

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Compensaciones:

Z : Esfericidad y Refraccion :NO

D :Reduccion al nivel del mar:NO

D : Paso de la cuerda al arco :NO

D : Paso al plano de la U.T.M. :SI K' POR ESTACION

BR : BR-7

X: 370096.066 Y: 4085073.573 Z: 475.826 PK: 0.000 Dis=-146.068 K : 0.999807870

Distancia: 152.306 Azimut: 229.375564

BO : BR-6

X: 370028.268 Y: 4084937.222 Z: 477.153 PK: 11.913 Dis= -64.852 K : 0.999808087

TIPO	PK Estac.	Azimut	Dis.Eje	X	Y	Ang. Azimu.	Dis.Redu	Angulo 1-2	Ang. Az (B0)	Dis. R (B0)	Ang1-2 (B0)	COTA
RECTA	0.000	236.644169	0.000	369981.040	4084983.545	257.722851	146.096	28.347287	349.384611	66.166	320.009047	476.656
RECTA	10.000	236.644169	0.000	369975.597	4084975.157	256.392348	155.589	27.016784	339.735684	64.922	310.360120	475.798
CIRC.	11.150	236.644169	0.000	369974.971	4084974.192	256.249725	156.684	26.874161	338.608543	64.877	309.232979	475.715

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pagina 2

PROYECTO : Proyecto de Trazado. Enlace AP-46 con MA-3404

GRUPO : 5 : Caminos

EJE : 9 : Camino 1

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* * * DATOS PARA REPLANTEO DE PUNTOS * * *

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Compensaciones: Z : Esfericidad y Refraccion :NO

D :Reduccion al nivel del mar:NO

D : Paso de la cuerda al arco :NO

D : Paso al plano de la U.T.M. :SI K' POR ESTACION

BR : BR-6 X: 370028.268 Y: 4084937.222 Z: 477.153 PK: 11.913 Dis= -64.852 K : 0.999808087

Distancia: 59.426 Azimut: 318.866197

BO : BR-5 X: 369971.443 Y: 4084954.573 Z: 475.763 PK: 26.807 Dis= -10.948 K : 0.999808269

TIPO	PK Estac.	Azimut	Dis.Eje	X	Y	Ang. Azimu.	Dis.Redu	Angulo 1-2	Ang. Az (B0)	Dis. R (B0)	Ang1-2 (B0)	COTA
RECTA	10.000	236.644169	0.000	369975.597	4084975.157	339.735684	64.922	20.869488	12.677401	21.003	293.811204	475.798
CIRC.	11.150	236.644169	0.000	369974.971	4084974.192	338.608543	64.877	19.742346	11.327398	19.938	292.461201	475.715
CIRC.	20.000	250.729828	0.000	369969.375	4084967.359	330.111133	66.169	11.244936	389.790941	12.955	270.924744	475.181
RECTA	22.415	254.572713	0.000	369967.598	4084965.725	327.960112	67.044	9.093915	378.863086	11.798	259.996889	475.068
RECTA	30.000	254.572713	0.000	369961.863	4084960.760	321.685890	70.466	2.819693	336.505490	11.406	217.639294	474.722
RECTA	40.000	254.572713	0.000	369954.303	4084954.214	314.375926	75.906	395.509729	298.668034	17.147	179.801837	474.148
CIRC.	45.052	254.572713	0.000	369950.483	4084950.907	311.087143	78.995	392.220946	288.977667	21.282	170.111470	473.749
CIRC.	50.000	252.997840	0.000	369946.783	4084947.623	308.082346	82.162	389.216149	282.511559	25.625	163.645362	473.287
RECTA	56.027	251.079510	0.000	369942.388	4084943.500	304.645796	86.126	385.779599	276.820894	31.100	157.954698	472.668
RECTA	60.000	251.079510	0.000	369939.531	4084940.739	302.521701	88.824	383.655504	273.958779	34.789	155.092583	472.259
CIRC.	62.209	251.079510	0.000	369937.942	4084939.203	301.396230	90.365	382.530033	272.616649	36.865	153.750453	472.031
CIRC.	70.000	253.063410	0.000	369932.257	4084933.877	297.782780	96.087	378.916584	269.065422	44.324	150.199226	471.229
CIRC.	80.000	255.609889	0.000	369924.722	4084927.304	293.920704	104.040	375.054508	266.366351	54.107	147.500155	470.199
CIRC.	90.000	258.156368	0.000	369916.930	4084921.038	290.810287	112.530	371.944090	264.890099	64.015	146.023903	469.169
RECTA	97.731	260.125152	0.000	369910.737	4084916.409	288.842259	119.383	369.976063	264.271055	71.719	145.404859	468.373
RECTA	100.000	260.125152	0.000	369908.899	4084915.079	288.323655	121.429	369.457458	264.143993	73.984	145.277796	468.139
RECTA	110.000	260.125152	0.000	369900.797	4084909.218	286.232613	130.536	367.366416	263.665599	83.968	144.799403	467.064

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PROYECTO : Proyecto de Trazado. Enlace AP-46 con MA-3404

GRUPO : 5 : Caminos

EJE : 9 : Camino 1

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pagina 1

PROYECTO : Proyecto de Trazado. Enlace AP-46 con MA-3404

GRUPO : 8 : Reposición Vía Pecuaria

EJE : 20 : Camino2 Rep. Vía Pecuaria

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* * * DATOS PARA REPLANTEO DE PUNTOS * * *

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Compensaciones: Z : Esfericidad y Refraccion :NO

D :Reduccion al nivel del mar:NO

D : Paso de la cuerda al arco :NO

D : Paso al plano de la U.T.M. :SI K' POR ESTACION

BR : BR-3 X: 370232.663 Y: 4085207.770 Z: 477.610 PK: 87.278 Dis= 280.081 K : 0.999807433

Distancia: 102.226 Azimut: 263.121834

BO : BR-4 X: 370147.131 Y: 4085151.820 Z: 480.159 PK: 90.804 Dis= 241.969 K : 0.999807707

TIPO	PK Estac.	Azimut	Dis.Eje	X	Y	Ang. Azimu.	Dis.Redu	Angulo 1-2	Ang. Az (B0)	Dis. R (B0)	Ang1-2 (B0)	COTA
RECTA	0.000	317.687533	0.000	370277.881	4084868.166	191.573075	342.667	328.451242	172.503070	312.398	109.381236	450.314
RECTA	10.000	317.687533	0.000	370268.264	4084870.909	193.296760	338.803	330.174927	174.081736	305.975	110.959903	450.220
CIRC.	11.171	317.687533	0.000	370267.138	4084871.230	193.501109	338.367	330.379275	174.270884	305.235	111.149051	450.254
CIRC.	20.000	364.527920	0.000	370260.245	4084876.424	194.712876	332.556	331.591043	175.189470	297.778	112.067637	451.159
RECTA	29.140	13.019194	0.000	370258.680	4084885.207	194.876369	323.673	331.754536	174.773332	289.064	111.651499	452.799
RECTA	30.000	13.019194	0.000	370258.854	4084886.048	194.828704	322.848	331.706871	174.666033	288.355	111.544200	452.954
RECTA	40.000	13.019194	0.000	370260.885	4084895.840	194.255781	313.265	331.133947	173.378097	280.171	110.256264	453.916
RECTA	50.000	13.019194	0.000	370262.916	4084905.632	193.646749	303.708	330.524915	172.013255	272.109	108.891421	452.933
CIRC.	54.588	13.019194	0.000	370263.848	4084910.124	193.354323	299.333	330.232489	171.359771	268.454	108.237937	452.486
CIRC.	60.000	378.565375	0.000	370263.495	4084915.458	193.309991	293.990	330.188157	170.876044	263.503	107.754211	452.168
RECTA	68.393	325.132357	0.000	370257.902	4084921.386	194.403927	287.550	331.282093	171.473508	255.725	108.351675	452.120
RECTA	70.000	325.132357	0.000	370256.419	4084922.004	194.719892	286.807	331.598059	171.740940	254.528	108.619107	452.164
RECTA	80.000	325.132357	0.000	370247.188	4084925.850	196.722912	282.349	333.601078	173.463107	247.179	110.341273	452.329
CIRC.	83.060	325.132357	0.000	370244.364	4084927.026	197.348285	281.041	334.226452	174.010566	244.968	110.888732	452.324
CIRC.	90.000	280.949936	0.000	370237.570	4084927.351	198.886186	280.516	335.764352	175.617179	242.049	112.495346	452.824
RECTA	94.923	249.608865	0.000	370233.403	4084924.823	199.833463	283.002	336.711629	176.878074	242.885	113.756241	453.633

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PROYECTO : Proyecto de Trazado. Enlace AP-46 con MA-3404

GRUPO : 8 : Reposición Vía Pecuaria

EJE : 20 : Camino2 Rep. Vía Pecuaria

pagina 2

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* * * DATOS PARA REPLANTEO DE PUNTOS * * *

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Compensaciones: Z : Esfericidad y Refraccion :NO

D :Reduccion al nivel del mar:NO

D : Paso de la cuerda al arco :NO

D : Paso al plano de la U.T.M. :SI K' POR ESTACION

BR : BR-4 X: 370147.131 Y: 4085151.820 Z: 480.159 PK: 90.804 Dis= 241.969 K : 0.999807707

Distancia: 93.454 Azimut: 236.809982

BO : BR-7 X: 370096.066 Y: 4085073.573 Z: 475.826 PK: 94.485 Dis= 202.445 K : 0.999807870

TIPO	PK Estac.	Azimut	Dis.Eje	X	Y	Ang. Azimu.	Dis.Redu	Angulo 1-2	Ang. Az (B0)	Dis. R (B0)	Ang1-2 (B0)	COTA
CIRC.	90.000	280.949936	0.000	370237.570	4084927.351	175.617179	242.049	338.807197	151.043849	203.519	114.233866	452.824

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PROYECTO : Proyecto de Trazado. Enlace AP-46 con MA-3404
GRUPO : 8 : Reposición Vía Pecuaria
EJE : 20 : Camino2 Rep. Vía Pecuaria

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* * * DATOS PARA REPLANTEO DE PUNTOS * * *

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Compensaciones: Z : Esfericidad y Refraccion :NO
D :Reduccion al nivel del mar:NO
D : Paso de la cuerda al arco :NO
D : Paso al plano de la U.T.M. :SI K' POR ESTACION

BR : BR-7 X: 370096.066 Y: 4085073.573 Z: 475.826 PK: 94.485 Dis= 202.445 K : 0.999807870
Distancia: 172.346 Azimut: 251.469105
BO : BR-5 X: 369971.443 Y: 4084954.573 Z: 475.763 PK: 131.381 Dis= 251.858 K : 0.999808269

TIPO	PK Estac.	Azimut	Dis.Eje	X	Y	Ang. Azimu.	Dis.Redu	Angulo 1-2	Ang. Az (B0)	Dis. R (B0)	Ang1-2 (B0)	COTA
CIRC.	90.000	280.949936	0.000	370237.570	4084927.351	151.043849	203.519	299.574744	106.489348	267.567	55.020243	452.824
RECTA	94.923	249.608865	0.000	370233.403	4084924.823	152.538297	202.494	301.069192	107.199035	263.695	55.729930	453.633
RECTA	100.000	249.608865	0.000	370229.835	4084921.211	154.130886	202.791	302.661781	108.174383	260.587	56.705278	454.648
CIRC.	106.774	249.608865	0.000	370225.075	4084916.392	156.246778	203.384	304.777673	109.512160	256.539	58.043055	455.982
CIRC.	110.000	241.394657	0.000	370222.962	4084913.957	157.238900	203.951	305.769795	110.192315	254.826	58.723210	456.499
CIRC.	120.000	215.929866	0.000	370218.639	4084905.013	159.973411	208.454	308.504306	112.596372	252.164	61.127267	457.366
RECTA	120.180	215.471145	0.000	370218.595	4084904.839	160.015634	208.570	308.546529	112.641807	252.155	61.172702	457.372
RECTA	130.000	215.471145	0.000	370216.232	4084895.307	162.240717	215.026	310.771612	115.122109	251.910	63.653004	457.447
CIRC.	139.351	215.471145	0.000	370213.982	4084886.231	164.236670	221.405	312.767565	117.485104	252.032	66.015999	457.493

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PROYECTO : Proyecto de Trazado. Enlace AP-46 con MA-3404

GRUPO : 8 : Reposición Vía Pecuaria

EJE : 20 : Camino2 Rep. Vía Pecuaria

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* * * DATOS PARA REPLANTEO DE PUNTOS * * *

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Compensaciones: Z : Esfericidad y Refraccion :NO

D :Reduccion al nivel del mar:NO

D : Paso de la cuerda al arco :NO

D : Paso al plano de la U.T.M. :SI K' POR ESTACION

BR : BR-5 X: 369971.443 Y: 4084954.573 Z: 475.763 PK: 131.381 Dis= 251.858 K : 0.999808269

Distancia: 59.426 Azimut: 118.866197

BO : BR-6 X: 370028.268 Y: 4084937.222 Z: 477.153 PK: 134.548 Dis= 192.527 K : 0.999808087

TIPO	PK Estac.	Azimut	Dis.Eje	X	Y	Ang. Azimu.	Dis.Redu	Angulo 1-2	Ang. Az (B0)	Dis. R(B0)	Ang1-2 (B0)	COTA
RECTA	130.000	215.471145	0.000	370216.232	4084895.307	115.122109	251.910	396.255912	113.967587	192.618	195.101391	457.447
CIRC.	139.351	215.471145	0.000	370213.982	4084886.231	117.485104	252.032	398.618907	117.059053	192.624	198.192857	457.493
CIRC.	140.000	213.818693	0.000	370213.834	4084885.599	117.648861	252.062	398.782664	117.273372	192.650	198.407175	457.496
CIRC.	150.000	188.353902	0.000	370213.665	4084875.667	120.048266	254.799	1.182069	120.407772	195.386	201.541576	457.333
RECTA	151.658	184.132097	0.000	370214.020	4084874.048	120.404280	255.642	1.538083	120.870013	196.238	202.003816	457.244
RECTA	160.000	184.132097	0.000	370216.078	4084865.964	122.123171	260.238	3.256974	123.086144	200.912	204.219948	456.518
RECTA	170.000	184.132097	0.000	370218.545	4084856.273	124.103611	265.987	5.237415	125.606943	206.820	206.740746	455.037
RECTA	180.000	184.132097	0.000	370221.011	4084846.582	125.998503	271.983	7.132306	127.984249	213.033	209.118053	453.679
RECTA	190.000	184.132097	0.000	370223.478	4084836.891	127.810126	278.209	8.943929	130.223893	219.526	211.357696	453.167
CIRC.	199.400	184.132097	0.000	370225.797	4084827.782	129.439401	284.258	10.573204	132.209390	225.864	213.343194	452.531
CIRC.	200.000	184.769146	0.000	370225.942	4084827.199	129.541544	284.649	10.675347	132.332991	226.273	213.466794	452.477
CIRC.	210.000	195.379476	0.000	370227.493	4084817.332	131.323292	290.567	12.457095	134.487473	232.562	215.621276	451.486
RECTA	211.132	196.580419	0.000	370227.565	4084816.203	131.533637	291.165	12.667441	134.741678	233.207	215.875481	451.373
RECTA	220.000	196.580419	0.000	370228.041	4084807.347	133.161707	295.891	14.295510	136.698243	238.324	217.832047	450.487
RECTA	230.000	196.580419	0.000	370228.578	4084797.362	134.935006	301.444	16.068809	138.803959	244.352	219.937762	449.490
RECTA	240.000	196.580419	0.000	370229.114	4084787.376	136.642883	307.222	17.776686	140.806221	250.634	221.940024	449.168
RECTA	247.286	196.580419	0.000	370229.506	4084780.100	137.846791	311.568	18.980594	142.202121	255.360	223.335924	449.131

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PROYECTO : Proyecto de Trazado. Enlace AP-46 con MA-3404

GRUPO : 5 : Caminos

EJE : 11 : Camino 3 Acceso

pagina 1

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* * * DATOS PARA REPLANTEO DE PUNTOS * * *												
=====												
Compensaciones:		Z : Esfericidad y Refraccion :NO										
		D : Reduccion al nivel del mar:NO										
		D : Paso de la cuerda al arco :NO										
		D : Paso al plano de la U.T.M.:SI K' POR ESTACION										
BR : BR-4		X: 370147.131 Y: 4085151.820 Z: 480.159 PK: 0.000 Dis= 145.714 K : 0.999807707										
		Distancia: 102.226 Azimut: 63.121834										
BO : BR-3		X: 370232.663 Y: 4085207.770 Z: 477.610 PK: 0.000 Dis=-140.998 K : 0.999807433										
TIPO	PK Estac.	Azimut	Dis.Eje	X	Y	Ang. Azimu.	Dis. Redu	Angulo 1-2	Ang. Az (BO)	Dis. R (BO)	Ang1-2 (BO)	COTA

RECTA	0.000	150.114443	0.000	370268.676	4085071.449	137.194064	145.742	74.072230	183.557736	141.025	320.435902	463.631
RECTA	10.000	150.114443	0.000	370275.734	4085064.365	138.019170	155.552	74.897336	181.425139	149.762	318.303305	463.159
RECTA	20.000	150.114443	0.000	370282.792	4085057.281	138.746275	165.385	75.624441	179.529522	158.649	316.407688	462.688
RECTA	29.612	150.114443	0.000	370289.577	4085050.472	139.368012	174.854	76.246178	177.898621	167.310	314.776788	462.023

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pagina 1

PROYECTO : Proyecto de Trazado. Enlace AP-46 con MA-3404
GRUPO : 6 : Muro 2X2
EJE : 12 : Muro de Escollera 2x2

* * * DATOS PARA REPLANTEO DE PUNTOS * * *

Compensaciones: Z : Esfericidad y Refraccion :NO
D : Reduccion al nivel del mar:NO
D : Paso de la cuerda al arco :NO
D : Paso al plano de la U.T.M. :SI K' POR ESTACION

BR : BR-6 X: 370028.268 Y: 4084937.222 Z: 477.153 PK: 0.000 Dis=-114.465 K : 0.999808087
Distancia: 152.306 Azimut: 29.375564
BO : BR-7 X: 370096.066 Y: 4085073.573 Z: 475.826 PK: 255.095 Dis=-124.113 K : 0.999807870

TIPO	PK Estac.	Azimut	Dis.Eje	X	Y	Ang. Azimu.	Dis.Redu	Angulo 1-2	Ang. Az (B0)	Dis. R (B0)	Ang1-2 (B0)	COTA
CIRC.	0.000	102.347280	0.000	370124.130	4084874.669	136.806419	114.487	107.430855	191.076706	200.913	361.701141	470.142
RECTA	7.558	78.288646	0.000	370131.556	4084875.807	134.150536	120.191	104.774972	188.695757	200.964	359.320193	468.868
RECTA	20.000	78.288646	0.000	370143.282	4084879.969	129.404387	128.501	100.028823	184.771592	199.317	355.396028	466.725
CIRC.	24.066	78.288646	0.000	370147.113	4084881.328	127.986561	131.358	98.610997	183.477039	198.945	354.101475	465.986
CIRC.	40.000	71.525835	0.000	370161.819	4084887.445	122.712742	142.553	93.337178	178.381592	197.439	349.006028	463.277
CIRC.	47.143	68.494159	0.000	370168.183	4084890.687	120.441108	147.479	91.065544	176.088110	196.630	346.712545	462.353
CIRC.	60.000	66.675297	0.000	370179.409	4084896.953	116.576434	156.443	87.200869	171.931611	195.333	342.556047	461.116
CIRC.	80.000	63.845875	0.000	370196.503	4084907.333	111.193653	170.902	81.818089	165.401174	194.262	336.025609	459.676
CIRC.	100.000	61.016454	0.000	370213.119	4084918.461	106.439116	185.836	77.063551	158.845042	194.359	329.469478	457.752
RECTA	107.669	59.931549	0.000	370219.356	4084922.922	104.755126	191.659	75.379561	156.337362	194.707	326.961798	457.179
RECTA	120.000	59.931549	0.000	370229.325	4084930.181	102.228457	201.218	72.852892	152.330777	195.790	322.955213	456.137
RECTA	137.494	59.931549	0.000	370243.466	4084940.479	99.036568	215.264	69.661004	146.755837	198.635	317.380273	454.389
RECTA	137.972	22.757189	0.000	370243.646	4084940.911	98.909843	215.451	69.534279	146.614376	198.480	317.238812	454.407
RECTA	140.000	22.757189	0.000	370244.356	4084942.810	98.353990	216.202	68.978426	146.006683	197.747	316.631119	454.485
RECTA	156.565	4.973810	0.000	370250.152	4084958.328	93.962396	222.928	64.586832	140.881849	192.453	311.506285	455.118
RECTA	160.000	4.973810	0.000	370250.420	4084961.753	92.998635	223.545	63.623070	139.912315	190.638	310.536751	455.049
RECTA	179.916	340.545665	0.000	370251.975	4084981.608	87.530761	228.111	58.155197	133.927740	181.046	304.552176	454.499
RECTA	180.000	340.545665	0.000	370251.907	4084981.658	87.513358	228.054	58.137793	133.924664	180.962	304.549099	454.497
RECTA	187.337	357.984934	0.000	370246.008	4084986.021	85.964206	223.184	56.588642	133.645378	173.665	304.269814	455.617
RECTA	200.000	357.984934	0.000	370238.245	4084996.025	82.617071	218.097	53.241507	131.788077	161.983	302.412512	457.207
RECTA	202.146	342.448136	0.000	370236.929	4084997.720	82.034716	217.296	52.659151	131.446520	160.018	302.070956	457.423
RECTA	216.512	362.825962	0.000	370225.640	4085006.605	78.479580	209.252	49.104016	130.368239	145.884	300.992674	459.923
RECTA	220.000	362.825962	0.000	370223.717	4085009.515	77.446088	208.430	48.070524	129.609485	142.850	300.233921	460.635
RECTA	225.080	378.026891	0.000	370220.916	4085013.753	75.926927	207.333	46.551363	128.445237	138.468	299.069673	461.671
RECTA	231.062	388.582803	0.000	370218.892	4085019.383	74.092791	207.616	44.717227	126.452008	134.275	297.076444	462.892
RECTA	240.000	388.582803	0.000	370217.298	4085028.177	71.449591	209.814	42.074027	122.809637	129.477	293.434073	464.962
RECTA	244.277	399.241723	0.000	370216.535	4085032.385	70.205259	210.992	40.829695	120.972479	127.340	291.596914	466.237
RECTA	255.095	399.241723	0.000	370216.406	4085043.202	67.341045	215.976	37.965481	115.737967	124.137	286.362403	469.460